INDUSTRIAL HOSE & FITTINGS

ALFAGOMMA

INDEX

General Index

Note

Since ALFAGOMMA continually examines ways to improve products, we reserve the right to alter specifications without prior notice.

Weights and dimensions are nominal.

Working pressures and vacuum ratings for hose are based at ambient temperature of 20 °C (68 °F)

Pictures shown are for illustration purpose only. Actual hose construction might be different.

Refer to local price list for items available in the different sales area, included available lengths and stock lengths.

SYMBOL

- Internal Diameter
- Outside Diameter
- Maximum Working Pressure
- Minimum Bend Radius
- Vacuum
- Weight

- Minimum Bend Radius= 2 x Internal Diameter
- Minimum Bend Radius= 3 x Internal Diameter
- Tube abrasion resistance
- Tube abrasion resistance
- Low temperature resistance
- High temperature resistance
- Oil resistance
- Conductive tube & cover

- High performance product
- 2004/1935 EC
- DNV approved
- IANESCO approved
- LLOYD'S approved
- Matérieles Sapeurs-Pompiers Approved
- MSHA approved

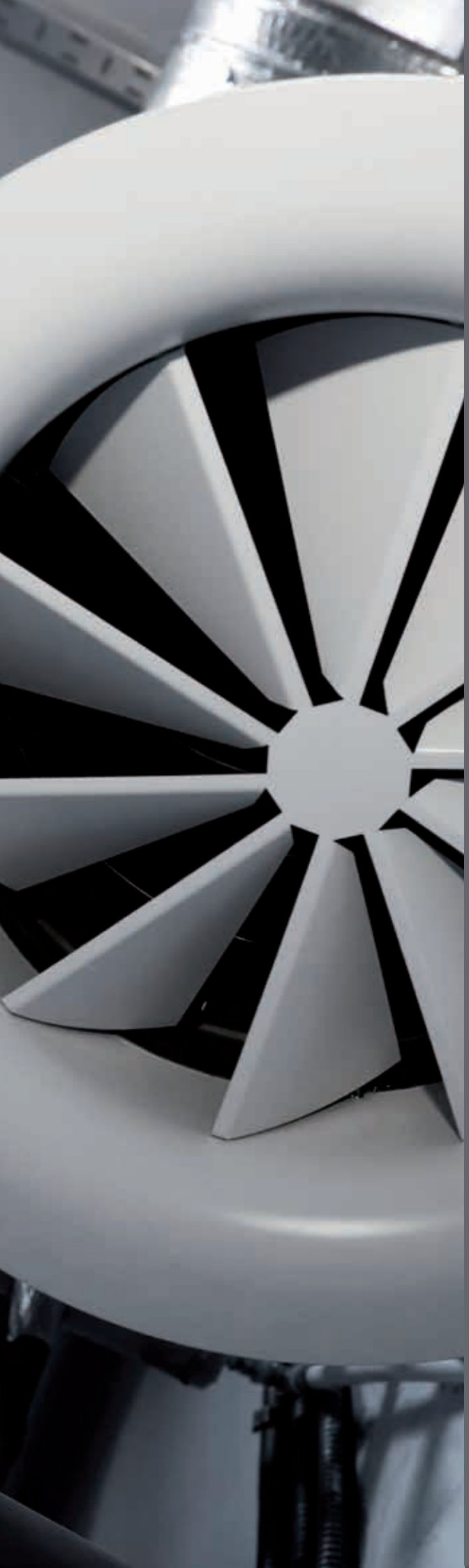
SALES AREA

- NA North America
- LA Latin America
- NEU North Europe
- EMEA Center Europe, Middle East, North Africa
- SA South Africa
- AP Asia Pacific
- AU Australia

INDEX

INDEX BY FAMILY

ALFAGOMMA



DUCTING & VENTILATION

HOSE

FITTINGS

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
20	13/16					20	0,75	50	0,130	0,087
25	1					25	1,00	50	0,170	0,115
32	1 1/4					32	1,25	50	0,230	0,155
35	1 3/8					35	1,50	50	0,250	0,170
40	1 9/16					40	1,50	40	0,300	0,200
45	1 3/4					45	1,75	40	0,350	0,235
51	2					51	2,00	40	0,440	0,300
63	2 1/2					63	2,50	40	0,560	0,380
70	2 3/4					70	2,75	40	0,630	0,425
76	3					76	3,00	40	0,700	0,475
80	3 1/8					80	3,00	40	0,760	0,515
90	3 1/2					90	3,50	40	0,850	0,575
102	4					102	4,00	40	0,990	0,670
110	4 5/16					110	4,25	40	1,100	0,740
120	4 3/4					120	4,75	40	1,200	0,810
127	5					127	5,00	40	1,270	0,855
140	5 1/2					140	5,50	35	1,450	0,975
152	6					152	6,00	35	1,700	1,145
160	6 5/16					160	6,25	35	1,850	1,245
180	7 1/16					180	7,00	30	2,200	1,480
203	8					203	8,00	30	2,450	1,650
254	10					254	10,00	10	3,600	2,420
305	12					305	12,00	10	4,500	3,025

NA | LA | NEU | EMEA | SA | AP | AU

161BL

Air ducting

Construction: Grey PVC - abrasion and ozone resistant
Reinforcement: White shock resistant rigid PVC
Use: Air, gas, fumes extraction. Air conditioning-ventilation
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
20	13/16					20	0,75	50	0,180	0,120
25	1					25	1,00	50	0,230	0,155
28	1 1/8					28	1,25	50	0,250	0,170
32	1 1/4					32	1,25	50	0,300	0,200
38	1 1/2					38	1,50	50	0,380	0,255
51	2					102	4,00	50	0,700	0,475

NA | LA | NEU | EMEA | SA | AP | AU

163AL

General purpose

Construction: Black PVC - abrasion and ozone resistant
Reinforcement: White shock resistant rigid PVC
Use: General purpose designed for gas vent, air seeder and marine bilge pump applications - ID 51 mm according to AS 1425/2.22
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
40	1 9/16					20	0,75		0,110	0,075
51	2					25	1,00		0,135	0,095
63	2 1/2					32	1,25		0,170	0,115
70	2 3/4					35	1,50		0,185	0,125
76	3					40	1,50		0,200	0,135
80	3 1/8					40	1,50		0,210	0,145
90	3 1/2					45	1,75		0,240	0,165
102	4					50	2,00		0,280	0,190
120	4 3/4					60	2,50		0,325	0,220
127	5					63	2,50		0,345	0,235
140	5 1/2					70	2,75		0,380	0,260
152	6					75	3,00		0,410	0,280
160	6 5/16					80	3,00		0,425	0,290
180	7 1/16					90	3,50		0,475	0,320
203	8					100	4,00		0,535	0,360
254	10					125	5,00		0,845	0,570
305	12					150	6,00		1,010	0,680

NA | LA | NEU | EMEA | SA | AP | AU

174BB

Air ducting - high temperature +100 °C (+212 °F) UL 94 V0

Construction: Textile fabric coated with flame resistant PVC
Reinforcement: Steel helix wire
Use: Hot air, gas, fumes extraction. Air conditioning-ventilation
Temperature: -20 °C +100 °C (-4 °F +212 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
40	1 9/16					34	1,50	20	0,175	0,120
51	2					43	1,75	20	0,225	0,150
63	2 1/2					54	2,25	20	0,275	0,185
70	2 3/4					60	2,50	20	0,425	0,285
76	3					65	2,50	20	0,460	0,310
80	3 1/8					68	2,75	20	0,485	0,330
90	3 1/2					77	3,00	20	0,550	0,370
102	4					85	3,25	15	0,580	0,390
110	4 5/16					94	3,75	15	0,615	0,415
120	4 3/4					102	4,00	10	0,680	0,460
127	5					108	4,25	10	0,765	0,515
140	5 1/2					119	4,75	10	0,860	0,580
152	6					129	5,00	10	0,930	0,625
160	6 5/16					136	5,25	10	1,025	0,690
180	7 1/16					153	6,00	5	1,310	0,885
203	8					173	6,75	5	1,485	1,000
254	10					216	8,50	5	1,940	1,305
305	12					259	10,25	5	2,390	1,610
355	14					303	12,00	5	2,790	1,875
406	16					345	14,00	5	3,195	2,150

NA | LA | NEU | EMEA | SA | AP | AU

178AA

Air ducting - high temperature +120 °C (+248 °F)

Construction: Black EPDM/PP fully recyclable and halogens/ phthalates free
Reinforcement: Steel helix wire
Use: Hot air, gas, fumes extraction-ventilation where high temperature resistance is required
Temperature: -40 °C +120 °C (-40 °F +248 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
40	1 9/16					44	1,75	35	0,170	0,115
45	1 3/4					49	2,00	35	0,190	0,130
51	2					55	2,25	25	0,220	0,150
63	2 1/2					67	2,75	25	0,270	0,180
70	2 3/4					74	3,00	25	0,330	0,225
76	3					80	3,00	25	0,350	0,235
80	3 1/8					84	3,25	20	0,370	0,250
90	3 1/2					94	3,75	20	0,420	0,285
102	4					106	4,25	10	0,470	0,320
110	4 5/16					114	4,50	10	0,510	0,345
120	4 3/4					124	5,00	10	0,550	0,370
127	5					132	5,25	10	0,780	0,525
140	5 1/2					145	5,75	10	0,860	0,580
152	6					157	6,25	10	0,930	0,625
160	6 5/16					165	6,50	6	0,980	0,660
180	7 1/16					185	7,25	6	1,100	0,740
203	8					209	8,25	6	1,240	0,835
254	10					260	10,25	2	1,740	1,170
305	12					311	12,25	2	2,090	1,405
355	14					362	14,25	2	2,440	1,640
406	16					412	16,25	2	2,780	1,870

NA | LA | NEU | EMEA | SA | AP | AU

17100

Air ducting - polyurethane - gauge 0,4 mm

Construction: Transparent polyurethane - abrasion and ozone resistant
Reinforcement: Copper plated steel helix wire
Use: Air, gas, fumes extraction - ventilation. Also suitable for abrasive material suction - good oil mist resistance
Temperature: -40 °C +85 °C (-40 °F +185 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
40	1 9/16					46	1,75	55	0,310	0,210
51	2					57	2,25	40	0,390	0,265
63	2 1/2					69	2,75	40	0,480	0,325
76	3					82	3,25	40	0,560	0,380
80	3 1/8					88	3,50	35	0,610	0,410
102	4					109	4,25	30	0,910	0,615
120	4 3/4					127	5,00	30	1,070	0,720
127	5					134	5,25	30	1,130	0,760
140	5 1/2					147	5,75	30	1,240	0,835
152	6					160	6,25	30	1,440	0,970
160	6 5/16					168	6,75	25	1,520	1,025
180	7 1/16					188	7,50	25	1,710	1,150
203	8					210	8,25	25	1,920	1,295
254	10					262	10,25	15	2,400	1,615
305	12					313	12,25	15	2,870	1,930
315	12 3/8					323	12,75	15	2,970	2,000

NA | LA | NEU | EMEA | SA | AP | AU

17200

Air ducting - polyurethane - gauge 0,8 mm

Construction: Transparent polyurethane - abrasion and ozone resistant
Reinforcement: Copper plated steel helix wire
Use: Air, gas, fumes extraction - ventilation. Also suitable for abrasive material suction - good oil mist resistance
Temperature: -40 °C +85 °C (-40 °F +185 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2					59	2,25	60	0,630	0,425
63	2 1/2					71	2,75	60	0,770	0,520
76	3					86	3,50	60	0,930	0,625
80	3 1/8					90	3,50	50	0,980	0,660
102	4					112	4,50	40	1,240	0,835
152	6					162	6,50	40	1,840	1,240
203	8					213	8,50	30	2,440	1,640
254	10					265	10,50	25	3,940	2,650
305	12					316	12,50	25	4,720	3,175
355	14					373	14,75	25	5,500	3,700

NA | LA | NEU | EMEA | SA | AP | AU

17300

Air ducting - polyurethane - gauge 1,2 mm

Construction: Transparent polyurethane - abrasion and ozone resistant
Reinforcement: Copper plated steel helix wire
Use: Air, gas, fumes extraction - ventilation. Also suitable for abrasive material suction - good oil mist resistance
Temperature: -40 °C +85 °C (-40 °F +185 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
40	1 9/16					52	2,00	75	0,580	0,390
51	2					63	2,50	65	0,730	0,495
63	2 1/2					75	3,00	65	0,890	0,600
76	3					88	3,50	65	1,190	0,800
102	4					114	4,50	45	1,580	1,065
127	5					139	5,50	45	1,950	1,315
152	6					164	6,50	45	2,330	1,570

NA | LA | NEU | EMEA | SA | AP | AU

17700

Air ducting - polyurethane - gauge 1,7 mm

Construction: Transparent polyurethane - abrasion and ozone resistant
Reinforcement: Copper plated steel helix wire
Use: Air, gas, fumes extraction - ventilation. Also suitable for abrasive material suction - good oil mist resistance
Temperature: -40 °C +85 °C (-40 °F +185 °F)

GAS & WELDING

HOSE

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	13	0,51	20	300	48	2,00		0,145	0,097
8	5/16	15	0,59	20	300	64	2,50		0,175	0,120
10	3/8	17	0,67	20	300	80	3,00		0,210	0,140

NA | **LA** | NEU | **EMEA** | **SA** | **AP** | AU

081AE

Oxygen 20 bar (300 psi)

Tube: Black synthetic elastomer
Reinforcement: High tensile textile cords
Cover: Blue synthetic elastomer - abrasion and ozone resistant
Use: Oxygen
Safety factor: 3:1
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	13	0,51	20	300	48	2,00		0,145	0,097
8	5/16	15	0,59	20	300	64	2,50		0,175	0,120
10	3/8	17	0,67	20	300	80	3,00		0,210	0,140

NA | **LA** | NEU | **EMEA** | **SA** | **AP** | AU

081AH

Acetylene 20 bar (300 psi)

Tube: Black synthetic elastomer
Reinforcement: High tensile textile cords
Cover: Red synthetic elastomer - abrasion and ozone resistant
Use: Acetylene
Safety factor: 3:1
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
8	5/16	15	0,59	25	375	64	2,50		0,170	0,115
10	3/8	17	0,67	25	375	80	3,00		0,200	0,135

NA | LA | NEU | **EMEA** | **SA** | AP | AU

088AI

LPG-natural gas 25 bar (375 psi)

Tube: Black synthetic elastomer
Reinforcement: High tensile textile cords
Cover: Orange synthetic elastomer - abrasion and ozone resistant
Use: LPG-natural gas
Safety factor: 3:1
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	13	0,51	20	300	60	2,50		0,150	0,100
8	5/16	15	0,59	20	300	80	3,00		0,180	0,120
10	3/8	17	0,67	20	300	100	4,00		0,210	0,140

NA | LA | **NEU** | **EMEA** | SA | AP | AU

076AE
Oxygen welding 20 bar (300 psi) EN ISO 3821

Tube: Black SBR
Reinforcement: High tensile textile cords
Cover: Blue SBR/EPDM - abrasion and ozone resistant
Use: Oxygen welding
Safety factor: 3:1
Temperature: -25 °C +80 °C (-13 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	13	0,51	20	300	60	2,50		0,150	0,100
8	5/16	15	0,59	20	300	80	3,00		0,180	0,120
10	3/8	17	0,67	20	300	100	4,00		0,210	0,140

NA | LA | **NEU** | **EMEA** | SA | AP | AU

076AH
Acetylene welding 20 bar (300 psi) EN ISO 3821

Tube: Black SBR
Reinforcement: High tensile textile cords
Cover: Red SBR/EPDM - abrasion and ozone resistant
Use: Acetylene welding
Safety factor: 3:1
Temperature: -25 °C +80 °C (-13 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	13	0,51	20	300	60	2,50		0,150	0,100
8	5/16	15	0,59	20	300	80	3,00		0,180	0,120
10	3/8	17	0,67	20	300	100	4,00		0,210	0,140

NA | LA | **NEU** | **EMEA** | SA | AP | AU

076AI
LPG welding 20 bar (300 psi) EN ISO 3821

Tube: Black NBR
Reinforcement: High tensile textile cords
Cover: Orange SBR/EPDM - abrasion and ozone resistant
Use: LPG welding
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	13	0,51	20	300	60	2,50		0,300	0,200
6+9	1/4+23/64	16	0,63	20	300	100	3,50		0,420	0,285
8	5/16	15	0,59	20	300	80	3,00		0,360	0,245
10	3/8	17	0,67	20	300	100	4,00		0,420	0,285

NA | LA | **NEU** | **EMEA** | SA | AP | AU

076EH
Oxygen/acetylene twin welding 20 bar (300 psi) EN ISO 3821

Tube: Black SBR
Reinforcement: High tensile textile cords
Cover: Blue, red SBR/EPDM - abrasion and ozone resistant
Use: Oxygen/Acetylene twin welding
Safety factor: 3:1
Temperature: -25 °C +80 °C (-13 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
8	5/16	15	0,59	20	300	80	3,00		0,360	0,245

NA | LA | **NEU** | **EMEA** | SA | AP | AU

076EI
Oxygen/LPG twin welding 20 bar (300 psi) EN ISO 3821

Tube: Black SBR
Reinforcement: High tensile textile cords
Cover: Blue, orange SBR/EPDM - abrasion and ozone resistant
Use: Oxygen/LPG twin welding
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
5	3/16	12	0,47	12	180	50	2,00		0,140	0,095

NA	LA	NEU	EMEA	SA	AP	AU
	■				■	■

071AI

LPG welding 12 bar (180 psi) AS 1335

Tube: Black NBR
Reinforcement: High tensile textile cords
Cover: Orange SBR/EPDM - abrasion and ozone resistant
Use: LPG-natural gas
Safety factor: 4:1
Temperature: -25 °C +80 °C (-13 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
5	3/16	12	0,47	12	180	50	2,00		0,280	0,190

NA	LA	NEU	EMEA	SA	AP	AU
	■			■	■	■

071EH

Oxygen/acetylene twin welding 12 bar (180 psi) AS 1335

Tube: Black SBR
Reinforcement: High tensile textile cords
Cover: Blue, red SBR/EPDM - abrasion and ozone resistant
Use: Oxygen/Acetylene twin welding
Safety factor: 3:1
Temperature: -25 °C +80 °C (-13 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
5	3/16	12	0,47	12	180	50	2,00		0,280	0,190

NA	LA	NEU	EMEA	SA	AP	AU
						■

071EI

Oxygen/LPG twin welding 12 bar (180 psi) AS 1335

Tube: Black SBR-NBR
Reinforcement: High tensile textile cords
Cover: Blue, orange SBR/EPDM - abrasion and ozone resistant
Use: Oxygen/LPG twin welding
Safety factor: 4:1
Temperature: -25 °C +80 °C (-13 °F +176 °F)

COMPRESSED AIR

HOSE

FITTINGS

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	10	0,39	20	300	24	1,00		0,065	0,044
8	5/16	12	0,47	20	300	32	1,25		0,080	0,055
10	3/8	15	0,59	20	300	40	1,50		0,110	0,075
13	1/2	19	0,75	20	300	52	2,00		0,180	0,120
16	5/8	23	0,91	20	300	64	2,50		0,260	0,175
19	3/4	26	1,02	20	300	76	3,00		0,300	0,200
25	1	33	1,30	20	300	100	4,00		0,440	0,300

NA	LA	NEU	EMEA	SA	AP	AU
	■	■	■		■	■

195AT

Compressed air 20 bar (300 psi) - polyurethane pneumatic tools

Tube: Black polyurethane - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Light blue synthetic elastomer - abrasion and ozone resistant
Use: Compressed air. Specially designed for pneumatic tools and paint spray
Safety factor: 3:1
Temperature: -20 °C +60 °C (-4 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
10	3/8	16	0,63	16	240	50	2,00		0,170	0,115

NA	LA	NEU	EMEA	SA	AP	AU
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192AE

Compressed air 16 bar (240 psi) - PVC AS/NZS 2554/B

Tube: Black PVC - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Blue PVC - abrasion and ozone resistant
Use: Compressed air and general industrial applications. Good flexibility at low temperature
Safety factor: 4:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
10	3/8	16	0,63	20	300	80	3,00		0,170	0,115
13	1/2	19	0,75	20	300	104	4,00		0,205	0,140
19	3/4	27	1,06	20	300	152	6,00		0,370	0,250
25	1	34	1,34	20	300	200	8,00		0,530	0,360

NA	LA	NEU	EMEA	SA	AP	AU
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191AK

Compressed air 20 bar (300 psi) - PVC exceeds AS/NZS 2554/B

Tube: Black PVC - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Yellow ribbed PVC with longitudinal blue stripes - abrasion and ozone resistant
Use: Compressed air and general industrial applications. Also suitable for crop spraying of fertilizers, pesticides and weed killers
Safety factor: 3,2:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	19	0,75	20	300	104	4,00		0,210	0,140
19	3/4	27	1,06	20	300	152	6,00		0,410	0,275
25	1	34	1,34	20	300	200	8,00		0,580	0,390

NA | LA | NEU | **EMEA** | SA | AP | AU

180AA

Compressed air 20 bar (300 psi)

Tube: Black synthetic elastomer - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Black synthetic elastomer - abrasion and ozone resistant
Use: Compressed air and general industrial applications.
Safety factor: 3:1
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	12	0,51	20	300	48	2,00		0,120	0,085
8	5/16	14	0,59	20	300	64	2,50		0,140	0,095
10	3/8	17	0,67	20	300	80	3,00		0,205	0,140
13	1/2	21	0,83	20	300	104	4,00		0,280	0,190
16	5/8	24	0,98	20	300	128	5,00		0,355	0,240
19	3/4	28	1,10	20	300	152	6,00		0,460	0,310
25	1	35	1,38	20	300	200	8,00		0,640	0,435

NA | **LA** | NEU | **EMEA** | **SA** | **AP** | AU

185AA

Compressed air 20 bar (300 psi) - standard duty exceeds DIN 20018/1

Tube: Black synthetic elastomer - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Black synthetic elastomer with longitudinal yellow stripes - abrasion and ozone resistant
Use: Compressed air and general industrial applications
Safety factor: 3:1
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	12	0,51	20	300	48	2,00		0,120	0,085
8	5/16	14	0,59	20	300	64	2,50		0,140	0,095
10	3/8	17	0,67	20	300	80	3,00		0,210	0,140
13	1/2	21	0,83	20	300	104	4,00		0,285	0,190
16	5/8	24	0,98	20	300	128	5,00		0,355	0,240
19	3/4	28	1,10	20	300	152	6,00		0,465	0,315
25	1	35	1,38	20	300	200	8,00		0,640	0,435

NA | **LA** | NEU | EMEA | SA | AP | AU

185AH

Compressed air 20 bar (300 psi) - standard duty

Tube: Black synthetic elastomer - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Red synthetic elastomer - abrasion and ozone resistant
Use: Compressed air and general industrial applications
Safety factor: 3:1
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	21	0,83	20	300	104	4,00		0,285	0,190
19	3/4	28	1,10	20	300	152	6,00		0,465	0,315
25	1	35	1,38	20	300	200	8,00		0,640	0,435

NA | **LA** | NEU | EMEA | SA | **AP** | AU

185AK

Compressed air 20 bar (300 psi) - standard duty

Tube: Black synthetic elastomer - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Yellow synthetic elastomer - abrasion and ozone resistant
Use: Compressed air and general industrial applications
Safety factor: 3:1
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	14	0,55	20	300	48	2,00		0,185	0,125
8	5/16	17	0,67	20	300	64	2,50		0,260	0,175
10	3/8	19	0,75	20	300	80	3,00		0,300	0,200
13	1/2	23	0,91	20	300	104	4,00		0,415	0,280
19	3/4	30	1,18	20	300	152	6,00		0,575	0,390
25	1	37	1,46	20	300	200	8,00		0,775	0,525

NA | LA | NEU | **EMEA** | SA | AP | AU

186AA

Compressed air 20 bar (300 psi) - heavy duty

Tube: Black synthetic elastomer - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Black synthetic elastomer - abrasion and ozone resistant
Use: Compressed air and general industrial applications
Safety factor: 3:1
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	12	0,51	20	300	48	2,00		0,160	0,110
8	5/16	14	0,59	20	300	64	2,50		0,190	0,130
10	3/8	17	0,67	20	300	80	3,00		0,220	0,150
13	1/2	21	0,83	20	300	104	4,00		0,310	0,210
16	5/8	24	0,98	20	300	128	5,00		0,430	0,290
19	3/4	28	1,14	20	300	152	6,00		0,550	0,370
25	1	35	1,38	20	300	200	8,00		0,690	0,465

NA	LA	NEU	EMEA	SA	AP	AU

175AA

Compressed air 20 bar (300 psi) - standard duty

Tube: Black SBR/NBR - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Black SBR - abrasion and ozone resistant
Use: Compressed air and general industrial applications
Safety factor: 3:1
Temperature: -25 °C +80 °C (-13 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	16	0,63	20	300	48	2,00		0,240	0,160
8	5/16	16	0,63	20	300	64	2,50		0,210	0,140
10	3/8	18	0,71	20	300	80	3,00		0,270	0,180
13	1/2	22	0,87	20	300	104	4,00		0,370	0,250
16	5/8	25	0,98	17	250	128	5,00		0,450	0,305
19	3/4	29	1,14	17	250	152	6,00		0,570	0,385
25	1	36	1,42	14	200	200	8,00		0,760	0,515

NA	LA	NEU	EMEA	SA	AP	AU

175AH

Compressed air 20 bar (300 psi) - standard duty

Tube: Black EPDM - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Red EPDM - abrasion and ozone resistant
Use: Compressed air and general industrial applications
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
10	3/8	17	0,67	20	300	80	3,00		0,220	0,150
13	1/2	21	0,83	20	300	104	4,00		0,260	0,175
19	3/4	29	1,14	20	300	152	6,00		0,510	0,345
25	1	35	1,38	20	300	200	8,00		0,610	0,410

NA	LA	NEU	EMEA	SA	AP	AU

175AK

Compressed air 20 bar (300 psi) - standard duty

Tube: Black SBR/NBR - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Yellow SBR - abrasion and ozone resistant
Use: Compressed air and general industrial applications
Safety factor: 3:1
Temperature: -25 °C +80 °C (-13 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	29	1,14	20	300				0,550	0,370
22	7/8	32	1,26	20	300				0,620	0,420
25	1	35	1,38	20	300				0,690	0,465
28	1 1/8	38	1,50	20	300				0,790	0,535
30	1 3/16	42	1,65	20	300				0,840	0,565
32	1 1/4	44	1,73	20	300				0,880	0,595
35	1 3/8	47	1,85	20	300				0,940	0,635
38	1 1/2	50	1,97	20	300				1,020	0,690
40	1 9/16	52	2,05	20	300				1,070	0,720
45	1 3/4	57	2,24	20	300				1,190	0,800
48	1 7/8	60	2,36	20	300				1,260	0,850
51	2	63	2,48	20	300				1,320	0,890
51	2	65	2,56	20	300				1,650	1,110
55	2 1/6	69	2,72	20	300				1,750	1,180
60	2 3/8	76	2,99	20	300				2,180	1,470
63	2 1/2	79	3,11	20	300				2,280	1,535
76	3	92	3,62	20	300				2,780	1,870
90	3 1/2	106	4,17	20	300				3,210	2,160
102	4	118	4,65	20	300				3,630	2,440
152	6	170	6,69	20	300				6,160	4,140

NA | LA | NEU | EMEA | SA | AP | AU

155AA

Compressed air 20 bar (300 psi) - heavy duty

Tube: Black SBR/NBR - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Black SBR - abrasion and ozone resistant
Use: Compressed air designed for heavy duty applications
Safety factor: <= 51 mm 3:1 >= 55 mm 2,5:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	21	0,83	20	300				0,320	0,215
19	3/4	29	1,14	20	300				0,560	0,380
25	1	35	1,38	20	300				0,700	0,475
32	1 1/4	44	1,73	20	300				0,890	0,600
38	1 1/2	50	1,97	20	300				1,040	0,700
51	2	65	2,56	20	300				1,660	1,120
63	2 1/2	79	3,11	20	300				2,300	1,550
76	3	92	3,62	20	300				2,810	1,890
102	4	118	4,65	20	300				3,670	2,470

NA | LA | NEU | EMEA | SA | AP | AU

155AK

Compressed air 20 bar (300 psi) - heavy duty

Tube: Black SBR/NBR - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Yellow SBR - abrasion and ozone resistant
Use: Compressed air designed for heavy duty applications
Safety factor: <= 51 mm 3:1 >=63 mm 2,5:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	22	0,87	40	600	65	2,50		0,410	0,280
19	3/4	28	1,10	40	600	95	4,00		0,540	0,365
25	1	34	1,34	40	600	125	5,00		0,690	0,465
32	1 1/4	42	1,65	40	600	160	6,50		1,070	0,720
38	1 1/2	48	1,89	40	600	190	7,50		1,270	0,855
51	2	64	2,52	40	600	255	10,00		1,990	1,340
63	2 1/2	77	3,03	30	450	315	12,50		2,430	1,635
76	3	90	3,54	30	450	380	15,00		2,900	1,950
102	4	116	4,57	30	450	510	20,00		4,100	2,751

NA | LA | NEU | EMEA | SA | AP | AU

140AK

Compressed air 40 bar (600 psi) steel braided

Tube: Black SBR - oil mist resistant
Reinforcement: High tensile steel wire braids
Cover: Yellow SBR - abrasion, ozone, hydrocarbon resistant - pin pricked
Use: High pressure compressed air designed for heavy duty mine and quarry applications where long service life and maximum safety is required
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	64	2,52	40	600	255	10,00		2,270	1,530
63	2 1/2	79	3,11	40	600	315	12,50		2,870	1,930
76	3	92	3,62	40	600	380	15,00		3,540	2,380

NA | LA | NEU | EMEA | SA | AP | AU

142AK

Compressed air 40 bar (600 psi) high temperature - oil resistant steel braided

Tube: Black NBR (RMA Class A) - oil mist resistant
Reinforcement: High tensile steel wire braids
Cover: Yellow SBR/NBR - abrasion, ozone, hydrocarbon and flame resistant - pin pricked
Use: High pressure compressed air designed for heavy duty mine and quarry applications where long service life and maximum safety is required
Safety factor: 4:1
Temperature: -40 °C +120 °C (-40 °F +248 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
38	1 1/2	54	2,13	90	1350	190	7,50		2,090	1,405
51	2	67	2,64	80	1200	255	10,00		2,860	1,925

NA | LA | NEU | EMEA | SA | AP | AU

132AE

Compressed air 80 bar (1200 psi) high temperature - steel braided

Tube: Black chlorobutyl - oil mist * and high temperature resistant
Reinforcement: High tensile steel wire braids
Cover: Blue EPDM - abrasion and ozone resistant - pin pricked
Use: High pressure compressed air designed for heavy duty mine and quarry applications where long service life and maximum safety is required. Designed for use of EN 853 2ST fittings
Safety factor: 4:1
Temperature: -40 °C +150 °C (-40 °F +300 °F)
with peaks of 232 °C (450 °F)

* maximum oil mist: six parts per million

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	12	0,47	20	300	36	1,50		0,140	0,095
10	3/8	16	0,63	20	300	60	2,50		0,185	0,125
13	1/2	19	0,75	20	300	78	3,00		0,235	0,160
16	5/8	23	0,91	20	300	96	3,75		0,325	0,220
19	3/4	26	1,02	20	300	114	4,50		0,370	0,250

NA | LA | NEU | EMEA | **SA** | AP | AU

179AA
Push-loc/push-on

Tube: Black NBR/SBR - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Black SBR/CR - oil, abrasion and ozone resistant
Use: "Push-on" compressed air in automotive assembly lines and general industrial applications
Safety factor: 4:1
Temperature: -20 °C +70 °C (-4 °F +158 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	12	0,47	20	300	36	1,50		0,140	0,095
10	3/8	16	0,63	20	300	60	2,50		0,185	0,125
13	1/2	19	0,75	20	300	78	3,00		0,235	0,160
16	5/8	23	0,91	20	300	96	4,00		0,325	0,220

NA | LA | NEU | EMEA | **SA** | AP | AU

179AB
Push-loc/push-on

Tube: Black NBR/SBR - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Grey SBR/CR - oil, abrasion and ozone resistant
Use: "Push-on" compressed air in automotive assembly lines and general industrial applications
Safety factor: 4:1
Temperature: -20 °C +70 °C (-4 °F +158 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
11	7/16	18	0,71	10	150	70	2,75		0,210	0,140
13	1/2	25	0,98	10	150	100	4,00		0,470	0,320

NA | LA | **NEU** | EMEA | SA | AP | AU

165AA
Air brake 10 bar (150 psi)
DIN 74310

Tube: Black EPDM
Reinforcement: High tensile textile cords
Cover: Black EPDM - abrasion and ozone resistant
Use: Air brake hose
Safety factor: 2,5:1
Temperature: -40 °C +70 °C (-40 °F +158 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
10	3/8	19	0,75	20	300	90	3,50		0,280	0,190
14,5	37/64	25,5	1,00	20	300	115	4,50		0,450	0,305

NA | LA | **NEU** | EMEA | SA | AP | AU

166AA
Air brake 20 bar (300 psi)
SAE J1402

Tube: Black NBR
Reinforcement: High tensile textile cords
Cover: Black NBR - abrasion and ozone resistant
Use: Air brake hose
Safety factor: 3:1
Temperature: -40 °C +70 °C (-40 °F +158 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	25	0,98	20	300				0,460	0,310
20	13/16	34	1,34	20	300				0,810	0,545
22	7/8	36	1,42	20	300				0,880	0,595
28	1 1/8	44	1,73	20	300				1,040	0,700
30	1 3/16	46	1,81	20	300				1,100	0,740
35	1 3/8	53	2,09	20	300				1,440	0,970

NA | LA | **NEU** | **EMEA** | SA | AP | **AU**

160AA
Railway air brake 20 bar (300 psi)
BS 3682/1 AS 2435 UIC 830-1/V

Tube: Black SBR/NBR - oil mist resistant
Reinforcement: High tensile textile braids
Cover: Black SBR/NBR - abrasion and ozone resistant
Use: Railway air brake
Safety factor: 4:1
Temperature: -25 °C +65 °C (-13 °F +150 °F)

HOT AIR

HOSE

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	67	2,64	10	150	255	10,00		1,510	1,015
63	2 1/2	79	3,11	10	150	315	12,50		1,880	1,265
76	3	92	3,62	10	150	380	15,00		2,340	1,575

NA	LA	NEU	EMEA	SA	AP	AU

952AA

Hot air blower 10 bar (150 psi) - soft wall external textile braid

Tube: Black EPDM - heat resistant
Reinforcement: High tensile textile braids
Use: Hot air connection from volumetric compressor to bulk food/ material road tanker
Safety factor: 3:1
Temperature: -40 °C +180 °C (-40 °F +356 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	67	2,64	10	150	255	10,00		1,630	1,100
60	2 3/8	76	2,99	10	150	300	12,00		1,960	1,320
76	3	92	3,62	10	150	380	15,00		2,520	1,695

NA	LA	NEU	EMEA	SA	AP	AU

952LA

Hot air blower 10 bar (150 psi) - soft wall external textile braid

Tube: White EPDM - heat resistant
Reinforcement: High tensile textile braids
Use: Hot air connection from volumetric compressor to bulk food/ material road tanker
Safety factor: 3:1
Temperature: -40 °C +180 °C (-40 °F +356 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	63	2,48	10	150	153	6,00	100	1,500	1,010
63	2 1/2	77	3,03	10	150	189	7,50	100	1,990	1,340
76	3	90	3,54	10	150	228	9,00	90	2,380	1,600
102	4	116	4,57	10	150	306	12,00	90	3,310	2,225

NA | LA | NEU | EMEA | SA | AP | AU

902AA

Hot air blower 10 bar (150 psi) - hard wall

Tube: Black EPDM - heat resistant
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black EPDM - heat, abrasion and ozone resistant
Use: Hot air connection from volumetric compressor to bulk food/ material road tanker. Special light weight and flexible construction
Safety factor: 3:1
Temperature: -40 °C +180 °C (-40 °F +356 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
76	3	90	3,54	10	150	228	9,00	90	2,310	1,555

NA | LA | NEU | EMEA | SA | AP | AU

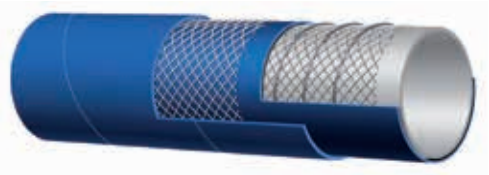
902AE

Hot air blower 10 bar (150 psi) - hard wall

Tube: Black EPDM - heat resistant
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Blue EPDM - heat, abrasion and ozone resistant
Use: Hot air connection from volumetric compressor to bulk food/ material road tanker. Special light weight and flexible construction
Safety factor: 3:1
Temperature: -40 °C +180 °C (-40 °F +356 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	63	2,48	10	150	153	6,00	100	1,540	1,035
53	2 1/16	65	2,56	10	150	159	6,25	100	1,590	1,070
63	2 1/2	77	3,03	10	150	189	7,50	90	2,340	1,575
76	3	90	3,54	10	150	228	9,00	90	2,800	1,885
90	3 1/2	104	4,09	10	150	270	10,50	90	3,470	2,335

NA | LA | NEU | EMEA | SA | AP | AU



902LE

Hot air blower 10 bar (150 psi) - hard wall

Tube: White EPDM - heat resistant
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Blue EPDM - heat, abrasion and ozone resistant
Use: Hot air connection from volumetric compressor to bulk food/ material road tanker. Special light weight and flexible construction
Safety factor: 3:1
Temperature: -40 °C +180 °C (-40 °F +356 °F)

WATER & LIQUIDS

HOSE

FITTINGS

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	17	0,67	4	60				0,100	0,067
16	5/8	20	0,79	4	60				0,130	0,087
19	3/4	24	0,94	4	60				0,200	0,135
25	1	31	1,22	4	60				0,325	0,220

NA | LA | NEU | **EMEA** | SA | AP | AU

292GG

Garden irrigation - PVC

Tube: Green transparent PVC
Reinforcement: High tensile textile cords
Cover: Green transparent PVC - abrasion and ozone resistant
Use: General purpose irrigation
Safety factor: 3:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
12,5	1/2	17,5	0,68	12	180				0,140	0,095
15	19/32	20	0,79	10	150				0,175	0,118
19	3/4	25	0,98	9	135				0,270	0,180
25	1	32	1,26	8	120				0,420	0,280

NA | LA | **NEU** | **EMEA** | SA | AP | AU

TOP

294LG

Premium antitorsion garden irrigation - PVC

Tube: white non-toxic PVC. Blue intermediate layer
Reinforcement: high tensile knitted textile cords
Cover: green PVC – abrasion and ozone resistant
Use: General purpose irrigation
Special heavy duty knitted construction
Safety factor: 2,5:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
3	1/8	5	0,20						0,020	0,013
4	5/32	6	0,24						0,020	0,013
5	3/16	8	0,31						0,040	0,027
6	1/4	9	0,35						0,045	0,030
7	9/32	11	0,43						0,060	0,040
8	5/16	12	0,47						0,070	0,047
10	3/8	14	0,55						0,080	0,055
12	15/32	16	0,63						0,110	0,075
14	9/16	19	0,75						0,140	0,095
16	5/8	22	0,87						0,200	0,135
18	23/32	24	0,94						0,245	0,165
20	13/16	26	1,02						0,265	0,180
22	7/8	28	1,10						0,290	0,195
25	1	32	1,26						0,415	0,280

NA | LA | NEU | EMEA | SA | AP | AU

49000
General purpose tubing - PVC
FDA

Tube: Transparent PVC
Use: General purpose.
Sterilize with 5% soda solution
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	11	0,43	20	300				0,080	0,055
8	5/16	13	0,51	15	225				0,095	0,065
10	3/8	15	0,59	15	225				0,115	0,077
13	1/2	19	0,75	10	150				0,165	0,110
19	3/4	25	1,00	10	150				0,260	0,175
25	1	32	1,25	10	150				0,390	0,265
30	1 3/16	38	1,50	7	100				0,520	0,350
32	1 1/4	42	1,65	7	100				0,690	0,465
38	1 1/2	48	1,89	7	100				0,820	0,555

NA | LA | NEU | EMEA | SA | AP | AU

49100
General purpose - PVC
FDA

Tube: Transparent PVC
Reinforcement: High tensile textile cords
Cover: Transparent PVC with longitudinal red stripes - abrasion and ozone resistant
Use: General purpose. Also suitable for compressed air.
Oil mist resistant.
Sterilize with 5% soda solution
Safety factor: 3:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	19	0,75	10	150	104	4,00		0,205	0,140
16	5/8	22	0,87	10	150	128	5,00		0,245	0,165
19	3/4	26	1,02	10	150	152	6,00		0,345	0,235
25	1	33	1,30	10	150	200	8,00		0,510	0,345
32	1 1/4	44	1,73	7	100	256	10,00		0,960	0,650

NA | LA | NEU | EMEA | SA | AP | AU

284AA
Water delivery 10 bar (150 psi)

Tube: Black synthetic elastomer - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Black synthetic elastomer with longitudinal green stripes - abrasion and ozone resistant
Use: Air and water delivery
Safety factor: 3:1
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	19	0,75	10	150	104	4,00		0,205	0,140
19	3/4	26	1,02	10	150	152	6,00		0,345	0,235
25	1	33	1,30	10	150	200	8,00		0,510	0,345

NA | LA | NEU | EMEA | SA | AP | AU

284AH
Water delivery 10 bar (150 psi)

Tube: Black synthetic elastomer - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Red synthetic elastomer - abrasion and ozone resistant
Use: Air and water delivery
Safety factor: 3:1
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
38	1 1/2			5	75				0,210	0,140
51	2			5	75				0,270	0,180
63	2 1/2			4	60				0,380	0,255
76	3			4	60				0,530	0,360
102	4			4	60				0,710	0,480
152	6			3	45				1,180	0,795
203	8			3	45				1,800	1,210

NA | LA | NEU | EMEA | SA | AP | AU

286EE

Water discharge - PVC - lay flat - standard duty

Tube: Blue PVC
Reinforcement: High tensile textile cords
Cover: Blue PVC - abrasion and ozone resistant
Use: Lay flat water discharge
Safety factor: 3:1
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1			10	150				0,190	0,130
32	1 1/4			9	135				0,240	0,160
38	1 1/2			8	120				0,300	0,200
45	1 3/4			8	120				0,350	0,235
51	2			8	120				0,410	0,275
63	2 1/2			8	120				0,560	0,380
76	3			8	120				0,680	0,460
102	4			7	100				1,000	0,675
152	6			4	60				1,600	1,080

NA | LA | NEU | EMEA | SA | AP | AU

288HH

Water discharge - PVC - lay flat - heavy duty

Tube: Red PVC
Reinforcement: High tensile textile cords
Cover: Red PVC - abrasion and ozone resistant
Use: Lay flat water discharge
Safety factor: 3:1
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
102	4	110	4,33	5	75				1,660	1,120
152	6	160	6,30	5	75				2,410	1,620
203	8	213	8,39	5	75				3,230	2,175
254	10	264	10,39	5	75				3,980	2,675

NA | LA | NEU | EMEA | SA | AP | AU

250AA

Water discharge 5 bar (75 psi) - lay flat

Tube: Black EPDM
Reinforcement: High tensile textile cords
Cover: Black EPDM - abrasion and ozone resistant
Use: Lay flat water discharge
Safety factor: <= 102 mm 3:1 >=152 mm 2:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
32	1 1/4	40	1,57	10	150				0,460	0,310
38	1 1/2	46	1,81	10	150				0,540	0,365
40	1 9/16	48	1,89	10	150				0,570	0,385
45	1 3/4	53	2,09	10	150				0,660	0,445
51	2	59	2,32	10	150				0,730	0,495
60	2 3/8	68	2,68	10	150				0,860	0,580
63	2 1/2	71	2,80	10	150				0,890	0,600
70	2 3/4	78	3,07	10	150				1,190	0,800
76	3	84	3,31	10	150				1,280	0,865
90	3 1/2	98	3,86	10	150				1,480	0,995
102	4	110	4,33	10	150				1,770	1,190
127	5	137	5,39	10	150				2,400	1,615
152	6	162	6,38	10	150				2,970	2,000
168	6 5/8	178	7,01	10	150				3,220	2,165
203	8	215	8,46	10	150				4,190	2,820
254	10	270	10,63	10	150				7,600	5,110
305	12	319	12,56	10	150				8,810	5,925

NA | LA | NEU | EMEA | SA | AP | AU

253AA

Water discharge 10 bar (150 psi) - lay flat

Tube: Black EPDM
Reinforcement: High tensile textile cords
Cover: Black EPDM - abrasion and ozone resistant
Use: Lay flat water discharge
Safety factor: 3:1 >= 203 mm 2:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	21	0,83	10	150				0,320	0,215
19	3/4	27	1,06	10	150				0,430	0,290
25	1	33	1,30	10	150				0,540	0,365
32	1 1/4	42	1,65	10	150				0,830	0,560
38	1 1/2	48	1,89	10	150				0,970	0,655
51	2	61	2,40	10	150				1,290	0,870
63	2 1/2	75	2,95	10	150				1,910	1,285
76	3	88	3,46	10	150				2,290	1,540
102	4	114	4,49	10	150				3,090	2,080
115	4 1/2	127	5,00	10	150				3,440	2,315
152	6	166	6,54	10	150				4,650	3,125
203	8	219	8,62	10	150				6,890	4,635

NA | LA | NEU | EMEA | SA | AP | AU

254AA

Air-water delivery 10 bar (150 psi)

Tube: Black SBR
Reinforcement: High tensile textile cords
Cover: Black SBR - abrasion and ozone resistant
Use: Air and water delivery
Safety factor: 3:1 = 203 mm 2:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
32	1 1/4	42	1,65	10	150				0,840	0,565
38	1 1/2	48	1,89	10	150				0,980	0,660
45	1 3/4	55	2,17	10	150				1,140	0,770
51	2	61	2,40	10	150				1,300	0,875
63	2 1/2	75	2,95	10	150				1,920	1,295
76	3	88	3,46	10	150				2,310	1,555
102	4	114	4,49	10	150				3,110	2,095

NA | LA | NEU | EMEA | SA | AP | AU

254AH

Air-water delivery 10 bar (150 psi)

Tube: Black SBR
Reinforcement: High tensile textile cords
Cover: Red SBR - abrasion and ozone resistant
Use: Air and water delivery
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	61	2,40	18	270				1,060	0,715
60	2 3/8	72	2,83	18	270				1,380	0,930
70	2 3/4	82	3,23	18	270				1,600	1,080
76	3	88	3,46	18	270				1,720	1,160
80	3 1/8	92	3,62	18	270				1,870	1,260
90	3 1/2	102	4,02	18	270				2,060	1,385
102	4	114	4,49	18	270				2,350	1,580
120	4 3/4	132	5,20	18	270				2,850	1,920
152	6	168	6,61	18	270				4,750	3,195

NA | LA | NEU | EMEA | SA | AP | AU

256AA

Water-irrigation 18 bar (270 psi) - heavy duty

Tube: Black EPDM
Reinforcement: High tensile textile cords
Cover: Black EPDM - abrasion and ozone resistant
Use: Heavy duty water discharge.
Specially designed for high pressure irrigation systems
Safety factor: 2,5:1 152 mm 2:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
20	13/16			7	100	110	4,25	60	0,200	0,135
25	1			7	100	138	5,50	60	0,250	0,170
32	1 1/4			6	90	176	7,00	60	0,340	0,230
38	1 1/2			5	75	209	8,25	60	0,440	0,300
51	2			5	75	281	11,00	60	0,650	0,440

NA | LA | **NEU** | **EMEA** | SA | AP | **AU**

264GL

Water S&D - PVC - light duty

Construction: Green transparent PVC - abrasion and ozone resistant
Reinforcement: White shock resistant rigid PVC
Use: Water suction and delivery
Safety factor: 3:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1			7	100	113	4,50	70	0,290	0,195
32	1 1/4			6	90	144	5,75	70	0,390	0,265
38	1 1/2			5	75	171	6,75	70	0,510	0,345
45	1 3/4			5	75	203	8,00	70	0,670	0,455
51	2			5	75	230	9,00	70	0,760	0,515
63	2 1/2			5	75	284	11,25	70	0,970	0,655
76	3			5	75	342	13,50	70	1,330	0,895
90	3 1/2			4	60	405	16,00	70	1,800	1,210
102	4			4	60	459	18,00	70	2,190	1,475
127	5			3	45	597	23,50	50	2,900	1,950
152	6			3	45	714	28,25	50	4,000	2,690
203	8			2	30	954	37,50	40	6,200	4,170

NA | **LA** | **NEU** | **EMEA** | SA | **AP** | **AU**

266GL

Water S&D - PVC - standard duty

Construction: Green transparent PVC - abrasion and ozone resistant
Reinforcement: White shock resistant rigid PVC
Use: Water suction and delivery
Safety factor: 3:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
20	13/16			7	100	90	3,50	70	0,230	0,155
25	1			7	100	113	4,50	70	0,290	0,195
30	1 3/16			6	90	135	5,25	70	0,360	0,245
32	1 1/4			6	90	144	5,75	70	0,390	0,265
35	1 3/8			6	90	158	6,25	70	0,440	0,300
38	1 1/2			5	75	171	6,75	70	0,510	0,345
40	1 9/16			5	75	180	7,00	70	0,540	0,365
45	1 3/4			5	75	203	8,00	70	0,670	0,455
51	2			5	75	230	9,00	70	0,760	0,515
60	2 3/8			5	75	270	10,50	70	0,920	0,620
63	2 1/2			5	75	284	11,25	70	0,970	0,655
76	3			5	75	342	13,50	70	1,330	0,895
80	3 1/8			4	60	360	14,00	70	1,450	0,975
102	4			4	60	459	18,00	70	2,190	1,475

NA | **LA** | **NEU** | **EMEA** | **SA** | **AP** | **AU**

266KL

Water S&D - PVC - standard duty

Construction: Yellow transparent PVC - abrasion and ozone resistant
Reinforcement: White shock resistant rigid PVC
Use: Water suction and delivery.
Safety factor: 3:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
38	1 1/2			5	75	152	6,00	60	0,510	0,345
45	1 3/4			5	75	180	7,00	60	0,670	0,455
51	2			5	75	204	8,00	60	0,760	0,515

NA | LA | **NEU** | **EMEA** | SA | AP | AU

266OL

Water S&D - PVC - standard duty - super elastic

Construction: Transparent PVC - abrasion and ozone resistant
Reinforcement: White shock resistant rigid PVC
Use: Water suction and delivery. Good flexibility at low temperature
Safety factor: 3:1
Temperature: -20 °C +60 °C (-4 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2			5	75	204	8,0	90	0,850	0,575
63	2 1/2			4	60	252	10,0	90	1,250	0,845
76	3			4	60	304	12,0	90	1,500	1,010
102	4			3	45	408	16,0	90	2,200	1,480
127	5			3	45	508	20,0	90	3,200	2,155
152	6			2	30	608	24,0	90	4,100	2,760

NA | LA | NEU | EMEA | SA | AP | AU

265TH

Water-slurry S&D - PVC - standard duty super elastic

Construction: Light blue PVC with helical red stripe - abrasion and ozone resistant
Reinforcement: White shock resistant rigid PVC
Use: Water suction and delivery.
Special light weight construction for slurry tankers.
Good flexibility at low temperature
Safety factor: 3:1
Temperature: -20 °C +60 °C (-4 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1			7	100	100	4,00	90	0,410	0,275
32	1 1/4			7	100	128	5,00	90	0,600	0,405
38	1 1/2			7	100	152	6,00	90	0,700	0,475
51	2			5	75	204	8,00	90	1,000	0,675
60	2 3/8			5	75	240	9,50	90	1,280	0,865
63	2 1/2			5	75	252	10,00	90	1,340	0,905
76	3			5	75	304	12,00	90	1,750	1,180
80	3 1/8			5	75	320	12,50	90	1,840	1,240
90	3 1/2			4	60	360	14,00	90	2,260	1,520
102	4			4	60	408	16,00	90	2,700	1,815
110	4 5/16			4	60	440	17,50	90	3,100	2,085
120	4 3/4			4	60	480	19,00	90	3,600	2,420
127	5			4	60	508	20,00	90	3,800	2,555
152	6			3	45	608	24,00	90	4,850	3,260
203	8			3	45	812	32,00	90	9,100	6,120

NA | LA | NEU | EMEA | SA | AP | AU

267BE

Water-slurry S&D - PVC - medium duty super elastic

Construction: Grey PVC with helical blue stripe - abrasion and ozone resistant
Reinforcement: White shock resistant rigid PVC
Use: Water suction and delivery.
Special construction for slurry tankers.
Good flexibility at low temperature
Safety factor: 3:1
Temperature: -20 °C +60 °C (-4 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2			5	75	178	7,00	90	1,000	0,675
63	2 1/2			5	75	220	8,75	90	1,350	0,910
76	3			5	75	266	10,50	90	1,750	1,180
90	3 1/2			4	60	315	12,50	90	2,250	1,515
102	4			4	60	357	14,00	90	2,700	1,815
127	5			3	45	444	17,50	90	3,800	2,555
152	6			3	45	532	21,00	90	4,900	3,295

NA | LA | NEU | EMEA | SA | AP | AU

269BA

Water-slurry S&D - PVC/NBR - medium duty superior flexibility

Construction: Grey PVC/NBR - abrasion and ozone resistant
Reinforcement: Black shock resistant rigid PVC
Use: Water suction and delivery.
Special construction for slurry tankers and general applications.
Superior flexibility at low temperature
Safety factor: 3:1
Temperature: -30 °C +60 °C (-22 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1			7	100	150	6,00	90	0,520	0,350
32	1 1/4			6	90	192	7,50	90	0,650	0,440
38	1 1/2			6	90	228	9,00	90	0,760	0,515
51	2			5	75	306	12,00	90	1,100	0,740
63	2 1/2			4	60	378	15,00	90	1,550	1,045
76	3			4	60	456	18,00	90	1,900	1,280
80	3 1/8			4	60	480	19,00	90	2,100	1,415
90	3 1/2			4	60	540	21,00	90	2,500	1,685
102	4			3	45	612	24,00	90	3,200	2,155
127	5			3	45	762	30,00	90	4,200	2,825
152	6			2	30	912	36,00	90	6,000	4,035
203	8			2	30	1218	48,00	60	10,000	6,725

NA | LA | NEU | EMEA | SA | AP | AU

268BL

Water-abrasive slurry S&D - PVC - heavy duty

Construction: Grey PVC - abrasion and ozone resistant
Reinforcement: White shock resistant rigid PVC
Use: Heavy duty water suction and delivery.
Also suitable for abrasive slurries transfer
Safety factor: 3:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
20	13/16			8	120	90	3,50	70	0,230	0,155
25	1			8	120	113	4,50	70	0,290	0,195
30	1 3/16			7	100	135	5,25	70	0,360	0,245
32	1 1/4			7	100	144	5,75	70	0,390	0,265
35	1 3/8			7	100	158	6,25	70	0,440	0,300
38	1 1/2			6	90	171	6,75	70	0,510	0,345
40	1 9/16			6	90	180	7,00	70	0,540	0,365
45	1 3/4			6	90	203	8,00	70	0,670	0,455
51	2			5	75	230	9,00	70	0,760	0,515
55	2 1/6			5	75	247	9,75	70	0,810	0,545
60	2 3/8			5	75	270	10,50	70	0,920	0,620
63	2 1/2			5	75	284	11,25	70	0,970	0,655
70	2 3/4			5	75	315	12,50	70	1,160	0,780
76	3			5	75	342	13,50	70	1,330	0,895
80	3 1/8			4	60	360	14,00	70	1,450	0,975
90	3 1/2			4	60	405	16,00	70	1,800	1,210
102	4			4	60	459	18,00	70	2,190	1,475
120	4 3/4			3	45	540	21,00	50	2,700	1,815

NA | LA | NEU | CEU | SA | AP | AU

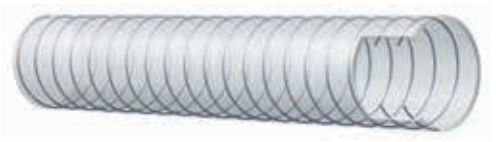
4660L

General purpose S&D - PVC - standard duty FDA

Construction: Transparent PVC - abrasion and ozone resistant
Reinforcement: White shock resistant rigid PVC
Use: General purpose water and liquids suction and delivery. Sterilize with 5% soda solution
Safety factor: 3:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
10	3/8	16	0,63	15	225	40	1,50	90	0,170	0,115
13	1/2	19	0,75	7	100	52	2,00	85	0,205	0,140
14	9/16	20	0,79	6	90	56	2,25	85	0,220	0,150
16	5/8	22	0,87	6	90	64	2,50	85	0,250	0,170
18	23/32	26	1,02	6	90	72	2,75	85	0,320	0,215
20	13/16	28	1,10	5	75	80	3,00	85	0,340	0,230
22	7/8	30	1,18	5	75	88	3,50	85	0,380	0,255
25	1	33	1,30	5	75	100	4,00	85	0,530	0,360
30	1 3/16	38	1,50	4	60	120	4,75	85	0,620	0,420
32	1 1/4	40	1,57	4	60	128	5,00	85	0,655	0,445
35	1 3/8	45	1,77	4	60	140	5,50	85	0,800	0,540
38	1 1/2	48	1,89	4	60	152	6,00	80	0,855	0,575
45	1 3/4	55	2,17	3	45	180	7,00	80	1,100	0,740
51	2	61	2,40	3	45	204	8,00	80	1,230	0,830
60	2 3/8	72	2,83	2	30	240	9,50	80	1,700	1,145
63	2 1/2	75	2,95	2	30	252	10,00	80	1,775	1,195
76	3	90	3,54	2	30	304	12,00	70	2,450	1,650
80	3 1/8	94	3,70	2	30	320	12,50	70	2,565	1,725
90	3 1/2	104	4,09	2	30	360	14,00	70	3,000	2,020
102	4	116	4,57	2	30	408	16,00	70	3,480	2,340
105	4	121	4,76	3	45	420	16,50	90	4,250	2,860
152	6	172	6,77	2	30	608	24,00	70	7,300	4,910

NA | LA | NEU | EMEA | SA | AP | AU



4700O

General purpose S&D - PVC FDA

Construction: Transparent PVC - abrasion and ozone resistant
Reinforcement: Steel helix wire
Use: General purpose water and liquids suction and delivery. Sterilize with 5% soda solution
Safety factor: 3:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
152	6	166	6,54	5	75	760	30,00	80	6,140	4,130
203	8	221	8,70	5	75	1015	40,00	70	10,500	7,060

NA | LA | NEU | EMEA | SA | AP | AU

204AA
Water S&D 5 bar (75 psi)

Tube: Black SBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black SBR - abrasion and ozone resistant
Use: Water suction and delivery
Safety factor: 3:1 254 mm 2:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	35	1,38	10	150	100	4,00	100	0,690	0,465
30	1 3/16	40	1,57	10	150	120	4,75	100	0,780	0,525
32	1 1/4	42	1,65	10	150	128	5,00	100	0,820	0,555
38	1 1/2	48	1,89	10	150	152	6,00	100	0,950	0,640
40	1 9/16	50	1,97	10	150	160	6,25	100	1,000	0,675
45	1 3/4	55	2,17	10	150	180	7,00	100	1,110	0,750
51	2	61	2,40	10	150	204	8,00	100	1,240	0,835
60	2 3/8	72	2,83	10	150	240	9,50	100	1,710	1,150
63	2 1/2	75	2,95	10	150	252	10,00	90	1,780	1,200
70	2 3/4	82	3,23	10	150	280	11,00	90	1,990	1,340
76	3	88	3,46	10	150	304	12,00	90	2,140	1,440
80	3 1/8	92	3,62	10	150	320	12,50	90	2,300	1,550
90	3 1/2	102	4,02	10	150	360	14,00	90	2,700	1,815
102	4	114	4,49	10	150	408	16,00	90	3,010	2,025
110	4 5/16	122	4,80	10	150	440	7,25	80	3,210	2,160
115	4 1/2	127	5,00	10	150	460	18,00	80	3,340	2,245
120	4 3/4	134	5,28	10	150	600	24,00	80	4,500	3,025
127	5	141	5,55	10	150	635	25,00	80	4,730	3,180
152	6	166	6,54	10	150	760	30,00	80	5,960	4,010
203	8	221	8,70	10	150	1015	40,00	70	9,810	6,595
254	10	272	10,71	10	150	1270	50,00	60	13,430	9,030

NA | LA | NEU | EMEA | SA | AP | AU

202AA
General purpose S&D 10 bar (150 psi) - EPDM

Tube: Black EPDM
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black EPDM - abrasion and ozone resistant
Use: Water suction and delivery. Also suitable for mild chemicals and fertilizers in general industrial and agricultural applications
Safety factor: <= 127 mm 3:1 >=152 mm 2,5:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
76	3			5	75	190	7,50	90	1,940	1,305
80	3 1/8			5	75	200	8,00	90	2,030	1,365
102	4			5	75	255	10,00	90	2,550	1,715
120	4 3/4			5	75	300	12,00	70	3,260	2,195
152	6			3	45	380	15,00	70	4,090	2,750
203	8			3	45	510	20,00	60	5,620	3,780

NA | LA | NEU | EMEA | SA | AP | AU

220AA
Water-slurry S&D corrugated - soft ends

Tube: Black SBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black SBR - abrasion and ozone resistant
Use: Water suction and delivery.
Special light weight and flexible construction for slurry tankers
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
152	6			10	150	608	24,00	100	6,650	4,470
203	8			10	150	812	32,00	100	8,850	5,950
254	10			10	150	1016	40,00	100	12,530	8,425
300	12			10	150	1200	48,00	100	17,380	11,685

NA | LA | NEU | EMEA | SA | AP | AU

222AA
Heavy duty dewatering - EPDM corrugated - soft ends

Tube: Black EPDM
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black EPDM - abrasion and ozone resistant
Use: Heavy duty suction. Specially designed for full vacuum dewatering applications. Also suitable for mild chemicals.
Safety factor: 3:1
Temperature: -50 °C +80 °C (-58 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
28	1 1/8	32	1,26	6	90	168	6,75	90	0,250	0,170
32	1 1/4	40	1,57	6	90	192	7,50	90	0,540	0,365
42	1 5/8	50	1,97	6	90	252	10,00	90	0,780	0,525
55	2 1/6	63	2,48	5	75	330	13,00	90	0,840	0,565

NA | LA | NEU | EMEA | SA | AP | AU

268LL

Pools-SPA water circulation

Construction: White PVC - abrasion and ozone resistant
Reinforcement: White shock resistant rigid PVC
Use: Water circulation systems for pools and SPA.
Hose outside diameters made to fit rigid PVC pipe fittings
Safety factor: 3:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	36	1,42	100	1500				0,930	0,625
38	1 1/2	50	1,97	100	1500				1,650	1,110

NA | LA | NEU | EMEA | SA | AP | AU

248AE

High pressure water delivery 100 bar (1500 psi) snow maker - steel braided

Tube: Black SBR
Reinforcement: High tensile steel wire braids
Cover: Blue hypalon - abrasion and ozone resistant
Use: High pressure water delivery.
Specially designed for artificial snow makers.
Designed for use of EN 853 1SN fittings
Safety factor: 2:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

AGRICULTURE

HOSE

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
8	5/16	14	0,55	50	730	64	2,50		0,135	0,090
10	3/8	16	0,63	50	730	80	3,00		0,160	0,110
13	1/2	20	0,79	40	600	104	4,00		0,225	0,150
19	3/4	27	1,06	40	600	152	6,00		0,370	0,250

NA	LA	NEU	EMEA	SA	AP	AU

591AE

Crop spraying 40 bar (600 psi) - PVC

Tube: Black PVC
Reinforcement: High tensile textile cords
Cover: Blue PVC - abrasion and ozone resistant.
Use: Crop spraying of fertilizers, pesticides and weed-killers
Safety factor: <=10 mm and 25 mm 2,5:1 >10 mm 3:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
8	5/16	15	0,59	80	1200	64	2,50		0,160	0,110
10	3/8	18	0,71	80	1200	80	3,00		0,230	0,155
13	1/2	22	0,87	80	1200	104	4,00		0,320	0,215

NA	LA	NEU	EMEA	SA	AP	AU

593AK

Crop spraying 80 bar (1200 psi) - PVC

Tube: Black PVC
Reinforcement: High tensile textile cords
Cover: Yellow ribbed PVC with longitudinal black stripe - abrasion and ozone resistant.
Use: Crop spraying of fertilizers, pesticides and weed-killers
Safety factor: 2,5:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1			8	120	113	4,50	70	0,290	0,195
32	1 1/4			6	90	144	5,75	70	0,390	0,265
38	1 1/2			6	90	171	6,75	70	0,510	0,345
45	1 3/4			6	90	203	8,00	70	0,670	0,455
51	2			5	75	230	9,00	70	0,760	0,515
63	2 1/2			5	75	284	11,25	70	1,180	0,795
76	3			5	75	342	13,50	70	1,510	1,015

NA	LA	NEU	EMEA	SA	AP	AU

266OA

Air seeder - PVC

Construction: Transparent PVC - abrasion and ozone resistant
Reinforcement: Black shock resistant rigid PVC
Use: Agricultural seed transfer in “Air-Flo” seeding equipments
Safety factor: 3:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
32	1 1/4	42	1,65	10	150	128	5,00	100	0,870	0,585
38	1 1/2	48	1,89	10	150	152	6,00	100	1,020	0,690
45	1 3/4	55	2,17	10	150	180	7,00	100	1,190	0,800
51	2	61	2,40	10	150	204	8,00	100	1,320	0,890
63	2 1/2	75	2,95	10	150	252	10,00	90	2,050	1,380
76	3	88	3,46	10	150	304	12,00	90	2,460	1,655

NA	LA	NEU	EMEA	SA	AP	AU

702AA

Air seeder

Tube: Black conductive NR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black NBR/PVC - oil, heat, abrasion and ozone resistant
Use: Agricultural seed transfer in “Air-Flo” seeding equipments
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

FIRE FIGHTING

HOSE

FITTINGS

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	34	1,34	12	180	200	8,00		0,575	0,390

NA | LA | NEU | **EMEA** | SA | AP | AU

283AA

Fire reel 12 bar (180 psi) EN 694/A2

Tube: Black synthetic elastomer
Reinforcement: High tensile textile cords
Cover: Black synthetic elastomer - abrasion and ozone resistant
Use: Fire reels
Safety factor: 4:1
Temperature: -20 °C +60 °C (-4 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	31	1,22	15	225	152	6,00		0,610	0,410
25	1	37	1,46	15	225	200	8,00		0,760	0,515

NA | LA | NEU | **EMEA** | SA | AP | **AU**

257AA

Fire reel 15 bar (225 psi) exceeds BS 3169/A1

Tube: Black SBR
Reinforcement: High tensile textile cords
Cover: Black SBR - abrasion and ozone resistant
Use: Hose reels on fire fighting vehicles
Safety factor: 4:1
Temperature: -20 °C +70 °C (-4 °F +158 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	36	1,42	40	600	100	4,00		0,680	0,460

NA | LA | NEU | **EMEA** | SA | AP | AU

251AA

Fire reel 40 bar (600 psi) - textile braided NF EN 1947/C/1/II

Tube: Black SBR
Reinforcement: High tensile textile braids
Cover: Black SBR - abrasion and ozone resistant
Use: Hose reels on fire fighting vehicles
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
45	1 3/4	55	2,17	5	75	180	7,00	100	1,270	0,855
70	2 3/4	82	3,23	5	75	280	11,00	90	2,640	1,775
110	4 5/16	122	4,80	5	75	440	17,25	80	4,020	2,705

NA | LA | NEU | **EMEA** | SA | AP | AU

212AA

Fire engine water S&D 5 bar (75 psi) NF EN ISO 14557/A

Tube: Black SBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black SBR - abrasion and ozone resistant
Use: Water suction and delivery on fire fighting vehicles
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
50	2			5	75	125	5,00	100	1,230	0,830
75	3			5	75	190	7,50	90	1,910	1,285
100	4			5	75	250	10,00	90	2,500	1,685
110	4 5/16			5	75	275	11,00	80	2,740	1,845
125	5			5	75	315	12,50	70	3,390	2,280

NA | LA | NEU | **EMEA** | SA | AP | AU

210AA

Fire engine water S&D 5 bar (75 psi) corrugated - soft ends EN ISO 14557/A

Tube: Black SBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black SBR - abrasion and ozone resistant
Use: Water suction and delivery on fire fighting vehicles.
Special light weight and flexible construction
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

FURNACE & CABLE COOLING

HOSE

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	31	1,22	10	150				0,600	0,405
25	1	37	1,46	10	150				0,750	0,505
32	1 1/4	46	1,81	10	150				1,120	0,755
38	1 1/2	52	2,05	10	150				1,300	0,875
51	2	65	2,56	10	150				1,710	1,150

NA | LA | NEU | EMEA | SA | AP | AU

254AL

Furnace cooling 10 bar (150 psi) - soft wall

Tube: Black SBR
Reinforcement: High tensile textile cords
Cover: Black SBR - resin coated dust free fibreglass cover
Use: General purpose water delivery in furnace cooling applications.
Specially designed to withstand heat, splashes of molten metal and open flame
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)
Cover resistant up to 540 °C (1000 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	63	2,48	10	150	255	10,00	100	1,840	1,240
60	2 3/8	72	2,83	10	150	300	12,00	100	2,270	1,530
63	2 1/2	75	2,95	10	150	300	12,00	90	2,370	1,595
76	3	88	3,46	10	150	330	13,00	90	2,820	1,900
80	3 1/8	92	3,62	10	150	400	16,00	90	2,950	1,985
90	3 1/2	102	4,02	10	150	450	17,50	90	3,380	2,275
102	4	114	4,49	10	150	510	20,00	90	3,800	2,555

NA | LA | NEU | EMEA | SA | AP | AU

203AL

Furnace cooling 10 bar (150 psi) - hard wall

Tube: Black SBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black SBR - resin coated dust free fibreglass cover
Use: General purpose water suction and delivery in furnace cooling applications.
Specially designed to withstand heat, splashes of molten metal and open flame
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)
Cover resistant up to 540 °C (1000 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	25	0,98	10	150				0,440	0,300
19	3/4	33	1,30	10	150				0,710	0,480
25	1	39	1,54	10	150				0,870	0,585
32	1 1/4	48	1,89	10	150				1,250	0,845
38	1 1/2	54	2,13	10	150				1,460	0,985
51	2	67	2,64	10	150				1,870	1,260
63	2 1/2	81	3,19	10	150				2,300	1,550
76	3	96	3,78	10	150				3,190	2,145

NA | LA | NEU | EMEA | SA | AP | AU

957LL

Cable cooling 10 bar (150 psi) non conductive

Tube: White EPDM
Reinforcement: High tensile textile cords
Cover: White non conductive EPDM, heat resistant - resin coated dust free fibreglass cover
Use: Non conductive cable cooling in electric furnaces.
Specially designed to withstand heat, splashes of molten metal and open flame
Safety factor: 4:1
Temperature: -40 °C +120 °C (-40 °F +248 °F)
Cover resistant up to 540 °C (1000 °F)

HOT WATER & STEAM

HOSE

FITTINGS

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	19	0,75	10	150	130	5,00		0,240	0,160
16	5/8	22	0,87	10	150	160	6,25		0,280	0,190
19	3/4	27	1,06	10	150	190	7,50		0,450	0,305
25	1	33	1,30	10	150	250	10,00		0,570	0,385

NA | LA | NEU | EMEA | SA | AP | AU

375AA

Hot water-car heater 10 bar (150 psi)

Tube: Black EPDM
Reinforcement: High tensile textile cords
Cover: Black EPDM - heat, abrasion and ozone resistant
Use: General purpose-hot water.
Specially designed for automotive heating systems
Safety factor: 3:1
Temperature: -35 °C +100 °C (-31 °F +212 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	21	0,83	5	75				0,280	0,190
16	5/8	24	0,94	5	75				0,330	0,225
18	23/32	26	1,02	5	75				0,360	0,245
20	13/16	28	1,10	5	75				0,390	0,265
22	7/8	30	1,18	5	75				0,420	0,285
25	1	33	1,30	5	75				0,470	0,320
28	1 1/8	36	1,42	5	75				0,510	0,345
30	1 3/16	38	1,50	5	75				0,540	0,365
32	1 1/4	40	1,57	5	75				0,570	0,385
35	1 3/8	43	1,69	5	75				0,620	0,420
38	1 1/2	48	1,89	5	75				0,850	0,575
40	1 9/16	50	1,97	5	75				0,890	0,600
42	1 5/8	52	2,05	5	75				0,930	0,625
45	1 3/4	55	2,17	5	75				0,980	0,660
48	1 7/8	58	2,28	5	75				1,040	0,700
51	2	61	2,40	5	75				1,110	0,750
55	2 1/6	65	2,56	5	75				1,180	0,795
57	2 1/4	67	2,64	5	75				1,220	0,820
60	2 3/8	70	2,76	5	75				1,280	0,865
63	2 1/2	73	2,87	5	75				1,340	0,905
70	2 3/4	80	3,15	5	75				1,440	0,970
76	3	86	3,39	5	75				1,550	1,045
80	3 1/8	90	3,54	5	75				1,630	1,100
90	3 1/2	102	4,02	5	75				2,010	1,355
102	4	114	4,49	5	75				2,250	1,515
110	4 5/16	122	4,80	5	75				2,410	1,620
115	4 1/2	127	5,00	5	75				2,510	1,690
127	5	141	5,55	5	75				3,200	2,155

NA | LA | NEU | EMEA | SA | AP | AU

352AA

Radiator 5 bar (75 psi)
exceeds DIN 73411 SAE 20R1 D-2

Tube: Black EPDM
Reinforcement: High tensile textile cords
Cover: Black EPDM - heat, abrasion and ozone resistant
Use: Radiator
Safety factor: 3:1
Temperature: -40 °C +120 °C (-40 °F +248 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
12	15/32	22	0,87	50	750	84	3,25		0,325	0,220

NA | LA | **NEU** | EMEA | SA | AP | AU

395BT

Hot water wash down 50 bar (750 psi)

Tube: Grey non-toxic PVC
Reinforcement: High tensile textile cords
Cover: Light blue synthetic elastomer - abrasion and ozone resistant
Use: Hot water wash down.
Specially designed for the food and dairy industry.
Designed for 50 bar at 70° C continuous use. Food grade
Safety factor: 3:1
Temperature: -10 °C +70 °C (+14 °F +158 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	31	1,22	10	150				0,640	0,435
25	1	37	1,46	10	150				0,790	0,535
32	1 1/4	46	1,81	10	150				1,150	0,775
38	1 1/2	52	2,05	10	150				1,350	0,910

NA | LA | **NEU** | **EMEA** | SA | AP | **AU**

351LL

Hot water wash down 10 bar (150 psi) built in nozzle

Tube: White EPDM
Reinforcement: High tensile textile cords
Cover: White EPDM - heat, abrasion and ozone resistant
Use: Hot and cold water wash down in paper mills and the food industry where a built in rubber nozzle is required to avoid floor and equipment damage
Safety factor: 4:1
Temperature: -40 °C +120 °C (-40 °F +248 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	31	1,22	10	150				0,610	0,410
25	1	37	1,46	10	150				0,750	0,505
32	1 1/4	46	1,81	10	150				1,110	0,750
38	1 1/2	52	2,05	10	150				1,300	0,875

NA | LA | NEU | EMEA | SA | AP | AU

351LG

Hot water wash down 10 bar (150 psi) built in nozzle

Tube: White EPDM
Reinforcement: High tensile textile cords
Cover: Green EPDM - heat, abrasion and ozone resistant
Use: Hot and cold water wash down in paper mills and the food industry where a built in rubber nozzle is required to avoid floor and equipment damage
Safety factor: 4:1
Temperature: -40 °C +120 °C (-40 °F +248 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	23	0,91	6	90				0,370	0,250
16	5/8	26	1,02	6	90				0,420	0,285
19	3/4	29	1,14	6	90				0,470	0,320
25	1	35	1,38	6	90				0,580	0,390
30	1 3/16	44	1,73	6	90				0,900	0,605
32	1 1/4	46	1,81	6	90				0,950	0,640
38	1 1/2	52	2,05	6	90				1,100	0,740
40	1 9/16	54	2,13	6	90				1,150	0,775
51	2	67	2,64	6	90				1,700	1,145

NA | **LA** | **NEU** | **EMEA** | **SA** | **AP** | **AU**

350AA

Steam 6 bar (90 psi)-hot water 15 bar (225 psi)

Tube: Black conductive EPDM
Reinforcement: High tensile textile cords
Cover: Black conductive EPDM - heat, abrasion and ozone resistant
Use: Saturated steam and hot water delivery in general industrial applications
Safety factor: Steam 10:1 - Water 4:1
Temperature: -40 °C +165 °C (-40 °F +330 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	25	0,98	6	90				0,430	0,290
16	5/8	30	1,18	6	90				0,600	0,405
19	3/4	33	1,30	6	90				0,680	0,460
25	1	40	1,57	6	90				0,900	0,605

NA | LA | **NEU** | **EMEA** | SA | AP | AU

354AA

Steam 6 bar (90 psi)
EN ISO 6134/1A

Tube: Black conductive EPDM
Reinforcement: High tensile textile cords
Cover: Black conductive EPDM - heat, abrasion and ozone resistant
Use: Saturated steam
Safety factor: 10:1
Temperature: -40 °C +165 °C (-40 °F +330 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	23	0,91	6	90				0,390	0,265
16	5/8	26	1,02	6	90				0,450	0,305
19	3/4	31	1,22	6	90				0,640	0,435
25	1	37	1,46	6	90				0,800	0,540

NA | **LA** | **NEU** | **EMEA** | **SA** | **AP** | **AU**

350LL

Steam 6 bar (90 psi)-hot water 15 bar (225 psi)
FDA

Tube: White food grade EPDM
Reinforcement: High tensile textile cords
Cover: White EPDM - heat, abrasion and ozone resistant
Use: Saturated steam and hot water delivery in general industrial applications.
Specially designed for wash down use in the food and dairy industry
Safety factor: Steam 10:1 - Water 4:1
Temperature: -40 °C +165 °C (-40 °F +330 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	23	0,91	6	90				0,370	0,250
16	5/8	26	1,02	6	90				0,430	0,290
19	3/4	31	1,22	6	90				0,600	0,405
25	1	37	1,46	6	90				0,740	0,500

NA | LA | **NEU** | **EMEA** | SA | AP | AU

350LE

Steam 6 bar (90 psi)-hot water 15 bar (225 psi)
FDA

Tube: White food grade EPDM
Reinforcement: High tensile textile cords
Cover: Blue EPDM - heat, abrasion and ozone resistant
Use: Saturated steam and hot water delivery in general industrial applications.
Specially designed for wash down use in the food and dairy industry
Safety factor: Steam 10:1 - Water 4:1
Temperature: -40 °C +165 °C (-40 °F +330 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	23	0,91	18	270	130	5,00		0,410	0,280
19	3/4	31	1,22	18	270	190	7,50		0,760	0,515
25	1	38	1,50	18	270	250	10,00		0,890	0,600

NA | LA | NEU | EMEA | SA | AP | AU

EXTRUDED TUBE

340AA
Steam 18 bar (270 psi) steel braided

Tube: Black conductive EPDM
Reinforcement: High tensile steel wire braids
Cover: Black conductive EPDM - heat, abrasion and ozone resistant - pin pricked
Use: Saturated and superheated steam
Safety factor: 10:1
Temperature: -40 °C +220 °C (-40 °F +430 °F)
intermittent to 232 °C (450 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	23	0,98	18	270	130	5,00		0,420	0,285
16	5/8	26	1,02	18	270	160	6,50		0,460	0,309
19	3/4	31	1,26	18	270	190	7,50		0,770	0,520
25	1	38	1,50	18	270	250	10,00		0,900	0,605
32	1 1/4	46	1,81	18	270	320	12,50		1,270	0,855
38	1 1/2	52	2,05	18	270	380	15,00		1,370	0,925
51	2	67	2,64	18	270	510	20,00		2,050	1,380
63	2 1/2	81	3,19	18	270	630	25,00		2,960	1,986
76	3	94	3,70	18	270	760	30,00		3,720	2,496

NA | LA | NEU | EMEA | SA | AP | AU

EXTRUDED TUBE

340AH
Steam 18 bar (270 psi) steel braided

Tube: Black conductive EPDM
Reinforcement: High tensile steel wire braids
Cover: Red EPDM - heat, abrasion and ozone resistant - pin pricked
Use: Saturated and superheated steam
Safety factor: 10:1
Temperature: -40 °C +220 °C (-40 °F +430 °F)
intermittent to 232 °C (450 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	25	0,98	18	270	130	5,00		0,470	0,320
19	3/4	33	1,30	18	270	190	7,50		0,870	0,585
25	1	40	1,57	18	270	250	10,00		0,990	0,670
32	1 1/4	48	1,89	18	270	320	12,50		1,470	0,990
38	1 1/2	54	2,13	18	270	380	15,00		1,600	1,080
51	2	69	2,72	18	270	510	20,00		2,290	1,540

NA | LA | NEU | EMEA | SA | AP | AU

EXTRUDED TUBE

344AH
Steam 18 bar (270 psi) steel braided EN ISO 6134/2A

Tube: Black conductive EPDM
Reinforcement: High tensile steel wire braids
Cover: Red EPDM - heat, abrasion and ozone resistant - pin pricked
Use: Saturated and superheated steam
Safety factor: 10:1
Temperature: -40 °C +220 °C (-40 °F +430 °F)
intermittent to 232 °C (450 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	23	0,91	18	270	130	5,00		0,430	0,290
19	3/4	31	1,22	18	270	190	7,50		0,780	0,525
25	1	38	1,50	18	270	250	10,00		0,920	0,620
32	1 1/4	46	1,81	18	270	320	12,50		1,320	0,890
38	1 1/2	52	2,05	18	270	380	15,00		1,430	0,965
51	2	67	2,64	18	270	510	20,00		2,150	1,445

NA | LA | NEU | EMEA | SA | AP | AU

EXTRUDED TUBE

341AA

Steam 18 bar (270 psi) - CIIR steel braided

Tube: Black conductive chlorobutyl
Reinforcement: High tensile steel wire braids
Cover: Black conductive EPDM - heat, abrasion and ozone resistant - pin pricked
Use: Saturated and superheated steam
Safety factor: 10:1
Temperature: -40 °C +220 °C (-40 °F +430 °F)
intermittent to 232 °C (450 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	23	0,91	18	270	130	5,00		0,430	0,290
19	3/4	31	1,22	18	270	190	7,50		0,790	0,535
25	1	38	1,50	18	270	250	10,00		0,930	0,625
32	1 1/4	46	1,81	18	270	320	12,50		1,340	0,905
38	1 1/2	52	2,05	18	270	380	15,00		1,460	0,985
51	2	67	2,64	18	270	510	20,00		2,130	1,435

NA | LA | NEU | EMEA | SA | AP | AU

EXTRUDED TUBE

341AH

Steam 18 bar (270 psi) - CIIR steel braided

Tube: Black conductive chlorobutyl
Reinforcement: High tensile steel wire braids
Cover: Red EPDM - heat, abrasion and ozone resistant - pin pricked
Use: Saturated and superheated steam
Safety factor: 10:1
Temperature: -40 °C +220 °C (-40 °F +430 °F)
intermittent to 232 °C (450 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	25	0,98	18	270	130	5,00		0,490	0,330
19	3/4	33	1,30	18	270	190	7,50		0,890	0,600
25	1	40	1,57	18	270	250	10,00		1,050	0,710

NA | LA | NEU | EMEA | SA | AP | AU

EXTRUDED TUBE

345AH

Steam 18 bar (270 psi) - CIIR steel braided EN ISO 6134/2A

Tube: Black conductive chlorobutyl
Reinforcement: High tensile steel wire braids
Cover: Red EPDM - heat, abrasion and ozone resistant - pin pricked
Use: Saturated and superheated steam
Safety factor: 10:1
Temperature: -40 °C +220 °C (-40 °F +430 °F)
intermittent to 232 °C (450 °F)

(Reprinted from RMA IP-11-1 Steam Hose)

Handling steam is a very hazardous situation. Using care and some safety precaution can minimise or eliminate personal or property damage.

SELECTING AND USING STEAM HOSE

1. Make sure steam hose is identified as a steam hose. It should be branded as such, stating working pressure and temperature rating
2. Make sure working pressure and temperature is not exceeded.
3. Do not allow hose to remain under pressure when not in use.
4. Avoid excess bending or flexing of hose near the coupling. Straight line operation is preferred. If bends are necessary as part of operation, spring guards may help.
5. Be sure and use recommended steam hose couplings and clamps on hose.

MAINTENANCE OF STEAM HOSE

1. Periodic inspection of hose should include looking for cover blisters and lumps.
2. Check for kinked areas that could damage hose.
3. Drain hose after each use to avoid tube damage before hose is put back in operation, to avoid “popcorning” of the tube.
4. Check tightness of clamps bolts after each use.
5. Check to see if clamps halves are touching. If they are, recouple hose with smaller clamps to insure proper tightness or grip around hose.
6. Do not store hose over hooks.
7. Steam hose lying on metal racks or installed around steel piping will dry out the hose, causing tube and cover cracking.
8. For service in sub-zero application, use only chlorobuthyl hose.

CORROSIVE STEAM

When the water used to generate steam contains dissolved air, oxygen or carbon dioxide, then these gases end up as contaminants in the steam. At high temperatures of steam both oxygen and carbon dioxide are extremely corrosive.

Carbon dioxide is acidic and therefore attacks metals whereas the oxygen corrodes metals and oxidises rubbers. Corrosion of metals in the presence of both oxygen and acids is forty times faster than with either alone. Boiler water is therefore normally treated not only to remove the “hardness” which would cause “furring” of the boiler but also to remove dissolved oxygen and carbon dioxide and to ensure that the steam is not only not acidic but even slightly alkaline. Boiler water treatment is a specialised subject beyond the scope of this technical sheet but correct steam generation is important.

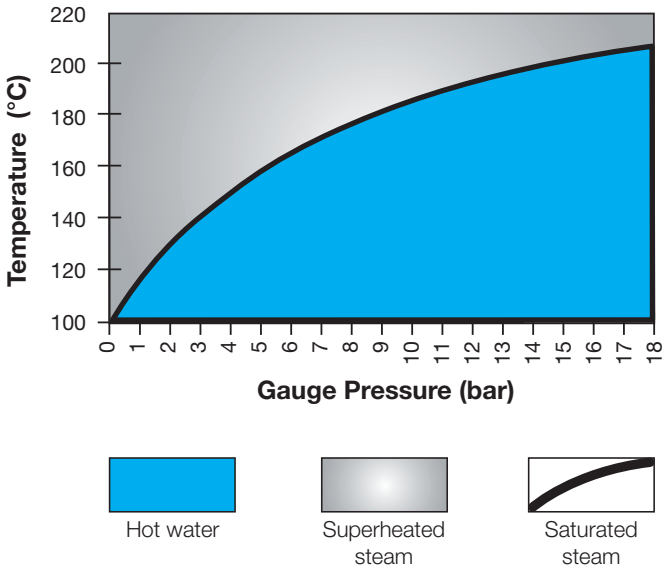
DETERIORATION OF STEAM HOSE

Like all rubber products steam hoses have a finite life and are subject to gradual deterioration with use. However, it sometimes happens that hoses which have been giving a good life suddenly start failing without apparent reason. In such cases it is often a change in the steam conditions causing a rapid acceleration of a normal failure mode. It is therefore useful to consider how steam hoses normally last and thus how the condition of the steam affects hose life.

TEMPERATURE OF SATURATED STEAM

Gauge Pressure		Temperature	
psi	bar	°C	°F
25	1.73	130	267
30	2.07	134	274
35	2.42	138	281
40	2.76	141	287
45	3.11	144	292
50	3.45	148	298
60	4.14	153	307
70	4.83	158	316
80	5.52	162	324
90	6.21	166	330
100	6.90	170	338
120	8.28	177	350
140	9.66	182	361
160	11.04	188	371
180	12.42	193	379
200	13.80	198	388
225	15.53	203	397
250	17.25	208	406
275	18.98	212	414
300	20.70	216	422
325	22.43	221	429
350	24.15	225	437

The chart represents the three forms of water when subjected to heat and pressure. Use only hoses specifically designed for the application.



LIQUID FOOD

HOSE

FITTINGS

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	12	0,47	15	225				0,100	0,067
8	5/16	14	0,55	15	225				0,115	0,077
10	3/8	16	0,63	15	225				0,135	0,090
13	1/2	19	0,75	10	150				0,165	0,110
16	5/8	22	0,87	10	150				0,215	0,145
19	3/4	26	1,06	10	150				0,300	0,205
25	1	33	1,34	10	150				0,430	0,290

NA | LA | **NEU** | **EMEA** | SA | AP | **AU**

2004/1935 EC

4920O

General purpose food quality - PVC
FDA 2007/19/EC A+B+C AS 2070

Tube: Transparent PVC
Reinforcement: High tensile textile cords
Cover: Transparent PVC - abrasion and ozone resistant
Use: General purpose food quality.
Sterilize with 5% soda solution
Safety factor: 3:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1			7	100	125	5,00	90	0,400	0,270
32	1 1/4			7	100	160	6,25	90	0,520	0,350
38	1 1/2			7	100	190	7,50	90	0,730	0,495
40	1 9/16			7	100	200	8,00	90	0,750	0,505
51	2			7	100	255	10,00	90	1,000	0,675
60	2 3/8			7	100	300	12,00	90	1,450	0,975
63	2 1/2			6	90	315	12,50	90	1,500	1,010
76	3			5	75	380	15,00	90	1,900	1,280
80	3 1/8			5	75	400	16,00	90	2,100	1,415
102	4			4	60	510	20,00	90	3,300	2,220
120	4 3/4			3	45	600	24,00	80	3,600	2,420

NA | **LA** | NEU | **EMEA** | **SA** | **AP** | **AU**

2004/1935 EC

4680H

Liquid food S&D - PVC - heavy duty
FDA 2007/19/EC A+B+C AS 2070

Construction: Transparent PVC - abrasion and ozone resistant
Reinforcement: Red shock resistant rigid PVC
Use: Liquid food and alcoholic beverages suction and delivery - max 28%
Sterilize with 5% soda solution
Safety factor: 3:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
20	13/16	28	1,10	5	75	80	3,00	85	0,340	0,230
25	1	33	1,30	5	75	100	4,00	85	0,530	0,360
32	1 1/4	40	1,57	4	60	128	5,00	85	0,655	0,445
38	1 1/2	48	1,89	4	60	152	6,00	85	0,855	0,575
40	1 9/16	50	1,97	3	45	160	6,25	85	0,895	0,605
51	2	61	2,40	3	45	204	8,00	80	1,230	0,830
63	2 1/2	75	2,95	2	30	252	10,00	80	1,775	1,195
70	2 3/4	84	3,31	2	30	280	11,00	80	2,030	1,365
76	3	90	3,54	2	30	304	12,00	70	2,450	1,650
102	4	116	0,63	2	30	408	16,00	70	3,480	2,340

NA | LA | **NEU** | **EMEA** | SA | AP | **AU**

2004/1935 EC

4720O

General purpose food quality S&D - PVC
FDA 2007/19/EC A+B+C AS 2070

Construction: Transparent PVC - abrasion and ozone resistant
Reinforcement: Steel helix wire
Use: General purpose liquid food and alcoholic beverages suction and delivery - max 28%
Sterilize with 5% soda solution
Safety factor: 3:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	23	0,91	10	150				0,380	0,255
19	3/4	31	1,22	10	150				0,610	0,410
25	1	37	1,46	10	150				0,760	0,515
32	1 1/4	44	1,73	10	150				0,930	0,625
38	1 1/2	50	1,97	10	150				1,080	0,730
51	2	65	2,56	10	150				1,680	1,130
63	2 1/2	77	3,03	10	150				2,020	1,360
76	3	92	3,62	10	150				2,800	1,885

NA | LA | NEU | EMEA | SA | AP | AU

452LH

Liquid food delivery 10 bar (150 psi)
FDA arrêté du 09/11/94 A

Tube: White NR
Reinforcement: High tensile textile cords
Cover: Red SBR/EPDM - abrasion and ozone resistant
Use: Liquid food and alcoholic beverages delivery - max 50%. Sterilize with 5% soda solution
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	37	1,46	10	150	75	3,00	100	0,910	0,615
38	1 1/2	50	1,97	10	150	114	4,50	100	1,250	0,845
40	1 9/16	52	2,05	10	150	120	4,75	100	1,300	0,875
51	2	63	2,48	10	150	153	6,00	100	1,610	1,085
76	3	88	3,46	10	150	228	9,00	90	2,530	1,705
102	4	116	4,57	10	150	306	12,00	90	3,510	2,360

NA | LA | NEU | EMEA | SA | AP | AU

402LH

Liquid food S&D 10 bar (150 psi)
FDA arrêté du 09/11/94 A

Tube: White NR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Red SBR/EPDM - abrasion and ozone resistant
Use: Liquid food and alcoholic beverages suction and delivery - max 50%. Special construction for maximum flexibility. Sterilize with 5% soda solution
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	37	1,46	16	240	125	5,00	100	0,890	0,600
38	1 1/2	52	2,05	16	240	190	7,50	100	1,500	1,010
51	2	67	2,64	16	240	255	10,00	100	2,250	1,515
76	3	94	3,70	16	240	380	15,00	100	3,400	2,285

NA | LA | NEU | EMEA | SA | AP | AU

408LL

Alcoholic beverages S&D 16 bar (240 psi) crush resistant
FDA arrêté du 09/11/94 A

Tube: White chlorobutyl
Reinforcement: High tensile textile cords with embedded nylon helix
Cover: White EPDM - abrasion and ozone resistant
Use: Liquid food and alcoholic beverages suction and delivery - max 95%. Special crush resistant construction. Sterilize with 130 °C (226 °F) steam for 30 minutes or with 5% soda solution
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	35	1,38	10	150	50	2,00	100	0,730	0,495
32	1 1/4	42	1,65	10	150	64	2,50	100	0,900	0,605
38	1 1/2	48	1,89	10	150	76	3,00	100	1,040	0,700
40	1 9/16	50	1,97	10	150	80	3,00	100	1,090	0,735
42	1 5/8	52	2,05	10	150	88	3,50	100	1,130	0,760
51	2	61	2,40	10	150	100	4,00	100	1,420	0,955
63	2 1/2	75	2,95	10	150	126	5,00	100	2,010	1,355
76	3	88	3,46	10	150	228	9,00	90	2,590	1,745
102	4	116	4,57	10	150	306	12,00	90	3,850	2,590

NA | LA | NEU | EMEA | SA | AP | AU

2004/1935 EC

IANESCO

2 x ID

412LE

Milk tanker 10 bar (150 psi) - hard wall FDA arrêté du 09/11/94 A

Tube: White NR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Blue NR/EPDM - abrasion and ozone resistant
Use: Liquid food suction and delivery.
Special construction for maximum flexibility in milk tanker applications.
Sterilize with 5% soda solution
Safety factor: 3:1
Temperature: -40 °C +80 °C (-40 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
40	1 9/16	53	2,09	10	150	120	5,00	70	1,040	0,700
45	1 3/4	58	2,28	10	150	135	5,50	70	1,150	0,770
51	2	64	2,52	10	150	153	6,00	70	1,290	0,870
63	2 1/2	76	3,00	10	150	189	7,50	70	1,750	1,180
76	3	92	3,62	10	150	228	9,00	70	2,400	1,615

NA | LA | NEU | EMEA | SA | AP | AU

2004/1935 EC

IANESCO

3 x ID

418LE

Milk tanker 10 bar (150 psi) - hard wall crush resistant FDA arrêté du 09/11/94 A

Tube: White NR
Reinforcement: High tensile textile cords with embedded pet helix
Cover: Blue NR/EPDM - abrasion and ozone resistant
Use: Liquid food suction and delivery.
Special lightweight construction for maximum flexibility and crush resistance in milk tanker applications.
Sterilize with 5% soda solution
Safety factor: 3:1
Temperature: -40 °C +80 °C (-40 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	23	0,91	10	150				0,380	0,255
19	3/4	31	1,22	10	150				0,620	0,420
25	1	37	1,46	10	150				0,770	0,520
32	1 1/4	44	1,73	10	150				0,940	0,635
38	1 1/2	50	1,97	10	150				1,100	0,740
51	2	65	2,56	10	150				1,700	1,145

NA | **LA** | **NEU** | **EMEA** | SA | **AP** | AU

2004/1935 EC

455LE

Fat food delivery 10 bar (150 psi)
FDA D.M. 21/03/73

Tube: White NBR
Reinforcement: High tensile textile cords
Cover: Blue NBR/PVC - abrasion, ozone and oil resistant
Use: Liquid and fat food-alcoholic beverages delivery - max 75%. Sterilize with 130 °C (266 °F) steam for 30 minutes or with 5% soda solution
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
38	1 1/2	48	1,89	10	150				0,880	0,595
51	2	63	2,48	10	150				1,410	0,950
76	3	88	3,46	10	150				2,050	1,380

NA | LA | NEU | EMEA | SA | AP | AU

2004/1935 EC

455LL

Fat food delivery 10 bar (150 psi)
FDA D.M. 21/03/73

Tube: White NBR
Reinforcement: High tensile textile cords
Cover: White NBR/PVC - abrasion, ozone and oil resistant
Use: Liquid and fat food-alcoholic beverages delivery - max 75%. Sterilize with 130 °C (266 °F) steam for 30 minutes or with 5% soda solution
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	31	1,22	10	150	57	2,25	100	0,740	0,500
25	1	37	1,46	10	150	75	3,00	100	0,920	0,620
32	1 1/4	44	1,73	10	150	96	3,75	100	1,090	0,735
38	1 1/2	50	1,97	10	150	114	4,50	100	1,270	0,855
51	2	63	2,48	10	150	153	6,00	100	1,640	1,105
63	2 1/2	75	2,95	10	150	189	7,50	90	2,150	1,445
76	3	88	3,46	10	150	228	9,00	90	2,580	1,735
102	4	116	4,57	10	150	306	12,00	90	3,580	2,410

NA | **LA** | **NEU** | **EMEA** | **SA** | **AP** | AU

2004/1935 EC

405LE

Fat food S&D 10 bar (150 psi)
FDA D.M. 21/03/73

Tube: White NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Blue NBR/PVC - abrasion, ozone and oil resistant
Use: Liquid and fat food-alcoholic beverages suction and delivery - max 75%.
Sterilize with 130 °C (266 °F) steam for 30 minutes or with 5% soda solution
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	37	1,46	10	150	75	3,00	100	0,900	0,605
38	1 1/2	50	1,97	10	150	114	4,50	100	1,240	0,835
51	2	63	2,48	10	150	153	6,00	100	1,600	1,080
76	3	88	3,46	10	150	228	9,00	90	2,530	1,705
102	4	116	4,57	10	150	306	12,00	90	3,510	2,360

NA | LA | NEU | EMEA | SA | AP | AU

2004/1935 EC

405LL

Fat food S&D 10 bar (150 psi)
FDA D.M. 21/03/73

Tube: White NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: White NBR/PVC - abrasion, ozone and oil resistant
Use: Liquid and fat food-alcoholic beverages suction and delivery - max 75%.
Sterilize with 130 °C (266 °F) steam for 30 minutes or with 5% soda solution
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
38	1 1/2	50	1,97	10	150	114	4,50	100	1,270	0,855
51	2	63	2,48	10	150	153	6,00	100	1,640	1,105
63	2 1/2	75	2,95	10	150	189	7,50	90	2,160	1,455
76	3	88	3,46	10	150	228	9,00	90	2,580	1,735

NA | LA | NEU | **EMEA** | SA | AP | AU

2004/1935 EC

405LH

Fat food S&D 10 bar (150 psi)
FDA D.M. 21/03/73

Tube: White NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Red NBR/PVC - abrasion, ozone and oil resistant
Use: Liquid and fat food-alcoholic beverages suction and delivery - max 75%.
Sterilize with 130 °C (266 °F) steam for 30 minutes or with 5% soda solution
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
38	1 1/2	52	2,05	16	240	190	7,50	100	1,480	0,995
51	2	67	2,64	16	240	255	10,00	100	2,210	1,490
63	2 1/2	79	3,11	16	240	315	12,50	100	2,810	1,890
76	3	94	3,70	16	240	380	15,00	100	3,740	2,515

NA | **LA** | NEU | **EMEA** | **SA** | **AP** | AU

2004/1935 EC

407LE

Fat food S&D 16 bar (240 psi)
crush resistant
FDA D.M. 21/03/73

Tube: White NBR
Reinforcement: High tensile textile cords with embedded nylon helix
Cover: Blue NBR/PVC - abrasion, ozone and oil resistant
Use: Liquid and fat food-alcoholic beverages suction and delivery - max 75%. Special crush resistant construction.
Sterilize with 130 °C (266 °F) steam for 30 minutes or with 5% soda solution
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

BULK FOOD

HOSE

HOSE & RECOMMENDED FITTING TABLE A.44

FITTINGS

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
90	3 1/2	102	4,02	5	75				2,130	1,435
110	4 5/16	122	4,80	5	75				2,550	1,715
102	4	118	4,65	5	75				2,760	1,855
102	4	120	4,72	5	75				3,180	2,140
75	3	93	3,66	5	75				2,380	1,600
100	4	120	4,72	5	75				3,550	2,390

NA | LA | NEU | EMEA | SA | AP | AU

760LA

Bulk food delivery 5 bar (75 psi)
FDA

Tube: White NR - abrasion resistant
Reinforcement: High tensile textile cords - antistatic wire
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Bulk food and material delivery.
Specially designed for grain, flour and plastic pellets transfer
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
102	4	118	4,65	5	75				3,140	2,115

NA | LA | NEU | EMEA | SA | AP | AU

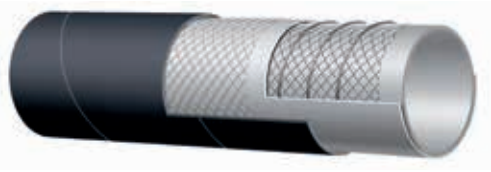
760LB

Bulk food delivery 5 bar (75 psi)
FDA

Tube: White NR - abrasion resistant
Reinforcement: High tensile textile cords - antistatic wire
Cover: Grey SBR/EPDM - abrasion and ozone resistant
Use: Bulk food and material delivery.
Specially designed for grain, flour and plastic pellets transfer
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
76	3	92	3,62	10	150	228	9,00	90	2,680	1,805
90	3 1/2	106	4,17	10	150	270	10,50	90	3,320	2,235
102	4	118	4,65	10	150	306	12,00	90	3,700	2,490

NA | **LA** | **NEU** | **EMEA** | **SA** | **AP** | AU



720LA

Bulk food S&D 10 bar (150 psi)
FDA

Tube: White NR - abrasion resistant
Reinforcement: High tensile textile cords with embedded steel helix wire - antistatic wire
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Bulk food and material suction and delivery.
Specially designed for grain, flour and plastic pellets transfer
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	67	2,64	10	150	153	6,00	100	1,830	1,230
76	3	92	3,62	10	150	228	9,00	90	2,840	1,910
102	4	118	4,65	10	150	306	12,00	90	3,900	2,625
127	5	145	5,71	5	75	508	20,00	80	5,660	3,805
152	6	170	6,69	5	75	608	24,00	80	7,020	4,720
203	8	223	8,78	5	75	812	32,00	70	10,430	7,010

NA | LA | NEU | EMEA | SA | AP | AU

720LG

Bulk food S&D 10 bar (150 psi)
FDA

Tube: White NR - abrasion resistant
Reinforcement: High tensile textile cords with embedded steel helix wire - antistatic wire
Cover: Green SBR/EPDM - abrasion and ozone resistant
Use: Bulk food and material suction and delivery.
Specially designed for grain, flour and plastic pellets transfer
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
152	6			2	30	380	15,00	95	5,600	3,765
160	6 5/16			2	30	400	16,00	95	6,450	4,335
203	8			2	30	609	24,00	95	9,200	6,185
254	10			2	30	1016	40,00	95	14,500	9,745
305	12			1	15	1525	60,00	95	19,000	12,770

NA | LA | **NEU** | **EMEA** | SA | AP | AU

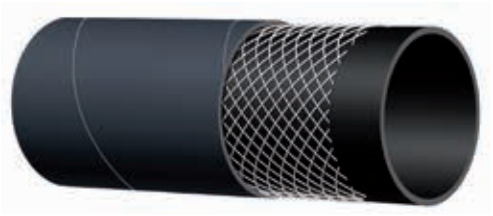
967OL

Fish handling - PVC - super elastic

Construction: Transparent PVC - abrasion and ozone resistant
Reinforcement: White shock resistant rigid PVC
Use: Fish transfer on fish farms
Safety factor: 3:1
Temperature: -20 °C +60 °C (-4 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
254	10	262	10,31	3	45				5,100	3,430
305	12	313	12,32	3	45				6,100	4,100
355	14	367	14,45	3	45				8,910	5,990
406	16	418	16,46	3	45				11,020	7,410
457	18	469	18,46	3	45				12,380	8,320

NA | **LA** | **NEU** | **EMEA** | **SA** | **AP** | AU



949AA

Fish pump 3 bar (45 psi)

Tube: Black NBR - oil, abrasion and sea water resistant
Reinforcement: High tensile textile cords
Cover: Black conductive NBR/PVC - oil, abrasion, ozone and sea water resistant
Use: Fish transfer from fishing net to ship deck
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

BULK MATERIAL

HOSE

HOSE & RECOMMENDED FITTING TABLE A.44

FITTINGS

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
90	3 1/2	102	4,02	5	75				2,100	1,415
110	4 5/16	122	4,80	5	75				2,510	1,690
102	4	114	4,49	5	75				2,350	1,580
102	4	118	4,65	5	75				2,760	1,855
102	4	120	4,72	5	75				3,180	2,140
127	5	145	5,71	5	75				3,860	2,595
75	3	93	3,66	5	75				2,350	1,580
90	3 1/2	110	4,33	5	75				3,200	2,155
100	4	120	4,72	5	75				3,510	2,360

NA LA NEU EMEA SA AP AU

760AA

Bulk material delivery 5 bar (75 psi)

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Bulk material delivery.
Specially designed for dry cement, grain and animal feed transfer
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
76	3	92	3,62	10	150				2,160	1,455
102	4	118	4,65	10	150				2,910	1,960
127	5	143	5,63	10	150				3,580	2,410

NA LA NEU EMEA SA AP AU

766AA

Bulk material delivery 10 bar (150 psi)

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Bulk material delivery in heavy duty applications.
Specially designed for dry cement, grain and animal feed transfer
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	65	2,56	10	150	153	6,00	100	1,430	0,965
63	2 1/2	77	3,03	10	150	189	7,50	90	1,900	1,280
76	3	90	3,54	10	150	228	9,00	90	2,280	1,535
102	4	116	4,57	10	150	306	12,00	90	3,190	2,145
127	5	143	5,63	5	75	508	20,00	80	4,750	3,195
152	6	168	6,61	5	75	608	24,00	80	5,960	4,010
203	8	221	8,70	5	75	812	32,00	70	8,990	6,045
76	3	92	3,62	10	150	228	9,00	90	2,600	1,750
90	3 1/2	106	4,17	10	150	270	10,50	90	3,230	2,175
102	4	118	4,65	10	150	306	12,00	90	3,600	2,420
127	5	145	5,71	5	75	508	20,00	80	5,270	3,545

NA LA NEU EMEA SA AP AU

720AA

Bulk material S&D 10 bar (150 psi)

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Bulk material suction and delivery in heavy duty applications.
Specially designed for dry cement, grain and animal feed transfer
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
102	4			5	75	306	12,00	90	3,000	2,020

NA LA NEU EMEA SA AP AU

713AA

Bulk material S&D 5 bar (75 psi) corrugated - soft ends

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Bulk material suction and delivery in heavy duty applications.
Specially designed for dry cement, grain and animal feed transfer.
Corrugated construction for maximum flexibility
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2			3	45	102	4,00	90	0,900	0,605
63	2 1/2			3	45	126	5,00	90	1,470	0,990
76	3			3	45	152	6,00	90	1,830	1,230
102	4			2	30	204	8,00	90	2,980	2,005
127	5			2	30	254	10,00	90	4,200	2,825
152	6			2	30	304	12,00	90	5,150	3,465

NA | LA | NEU | EMEA | SA | AP | AU

767AA

Bulk material S&D - PVC - polyurethane lined

Construction: Black polyurethane coextruded with black PVC - abrasion and ozone resistant
Reinforcement: Black shock resistant rigid PVC
Use: Bulk material suction and low pressure delivery-gravity feed. Specially designed for gravel, cement and iron ore transfer
Safety factor: 3:1
Temperature: -20 °C +60 °C (-4 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
38	1 1/2	47	1,85	2	30	80	3,00	100	0,570	0,380
51	2	61	2,40	2	30	120	4,75	100	0,860	0,580
63	2 1/2	75	2,95	2	30	200	8,00	100	1,090	0,730
76	3	90	3,54	1	15	240	9,50	100	1,390	0,930
102	4	119	4,69	1	15	320	12,50	100	2,560	1,720
127	5	146	5,75	1	15	480	19,00	100	3,320	2,230
152	6	175	6,89	1	15	720	28,50	100	4,890	3,290

NA | LA | NEU | EMEA | SA | AP | AU

780AA

Bulk material S&D - PVC

Construction: Black antistatic synthetic elastomer
Reinforcement: Black shock resistant thermoplastic elastomer
Use: Bulk material suction and low pressure delivery-gravity feed. Specially designed for gravel, cement and iron ore transfer
Safety factor: 4:1
Temperature: -15 °C +60 °C (+5 °F +140 °F)

SANDBLAST

HOSE

FITTINGS

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	33	1,30	10	150				0,710	0,480
19	3/4	35	1,38	10	150				0,830	0,560
25	1	40	1,57	10	150				0,870	0,585
32	1 1/4	48	1,89	10	150				1,240	0,835
38	1 1/2	55	2,17	10	150				1,650	1,110
40	1 9/16	60	2,36	10	150				1,930	1,300
51	2	71	2,80	10	150				2,400	1,615
19	3/4	38	1,50	10	150				1,000	0,675
25	1	48	1,89	10	150				1,540	1,035
32	1 1/4	55	2,17	10	150				1,830	1,230
38	1 1/2	60	2,36	10	150				2,080	1,400
51	2	73	2,87	10	150				2,630	1,770

NA | LA | NEU | EMEA | SA | AP | AU

65 mm³

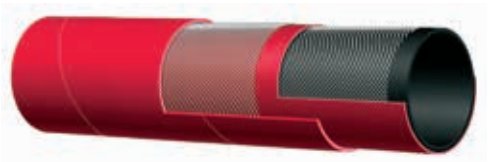
750AA

Sandblast 10 bar (150 psi)

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords
Cover: Black conductive SBR/NR - abrasion and ozone resistant - pin pricked
Use: Abrasive material blasting
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	27	1,06	10	150				0,560	0,380
19	3/4	33	1,30	10	150				0,710	0,480
25	1	40	1,57	10	150				0,880	0,595
32	1 1/4	48	1,89	10	150				1,240	0,835
38	1 1/2	55	2,17	10	150				1,660	1,120
51	2	71	2,80	10	150				2,420	1,630

NA | LA | NEU | EMEA | SA | AP | AU



65 mm³

750AH

Sandblast 10 bar (150 psi)

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords
Cover: Red SBR/EPDM - abrasion and ozone resistant - pin pricked
Use: Abrasive material blasting
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	38	1,50	10	150				1,010	0,680
25	1	48	1,89	10	150				1,540	1,035
32	1 1/4	55	2,17	10	150				1,840	1,240
38	1 1/2	60	2,36	10	150				2,090	1,405

NA | LA | NEU | EMEA | SA | AP | AU

65 mm³

750AG

Sandblast 10 bar (150 psi)

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords
Cover: Green SBR/EPDM - abrasion and ozone resistant - pin pricked
Use: Abrasive material blasting
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	27	1,06	10	150				0,500	0,340
19	3/4	33	1,30	10	150				0,640	0,435
25	1	40	1,57	10	150				0,790	0,535
32	1 1/4	48	1,89	10	150				1,140	0,770
38	1 1/2	55	2,17	10	150				1,490	1,005
51	2	71	2,80	10	150				2,140	1,440
25	1	48	1,89	10	150				1,400	0,945
32	1 1/4	55	2,17	10	150				1,670	1,125
38	1 1/2	60	2,36	10	150				1,900	1,280
51	2	73	2,87	10	150				2,410	1,620
19	3/4	40	1,57	10	150				1,030	0,695
38	1 1/2	62	2,44	10	150				2,100	1,415
51	2	76	2,99	10	150				2,650	1,785

NA | LA | NEU | EMEA | SA | AP | AU

TOP

50 mm³

753AA

Sandblast 10 bar (150 psi) premium quality

Tube: Premium black conductive NR - abrasion resistance 50 mm³ (ISO 4649/A)
Reinforcement: High tensile textile cords
Cover: Black conductive SBR/NR - abrasion and ozone resistant - pin pricked
Use: Abrasive material blasting. Designed for long service life in heavy duty applications
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

PLASTER

HOSE

FITTINGS

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
45	1 3/4					203	8,00	60	0,680	0,460

NA | LA | NEU | **EMEA** | SA | AP | AU

7640L

Plaster conveyance - polyurethane

Construction: Transparent polyurethane - abrasion and ozone resistant
Reinforcement: White shock resistant rigid PVC
Use: Pneumatic conveyance of pre-mixed synthetic plaster from silo to plaster pumping machine.
Assembly complete with fittings also available
Safety factor: 3:1
Temperature: -20 °C + 60 °C (-4 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
60	2 3/8	80	3,15	10	150				2,350	1,580
65	2 9/16	85	3,35	10	150				2,560	1,725
90	3 1/2	113	4,45	10	150				4,180	2,810
102	4	127	5,00	10	150				4,750	3,195

NA | LA | **NEU** | **EMEA** | SA | AP | AU

752AA

Plaster 10 bar (150 psi)

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords
Cover: Black conductive SBR/NR - abrasion and ozone resistant - pin pricked
Use: Plaster and sand/cement mix pumping.
Also suitable for heavy duty sandblast
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	38	1,50	40	600				0,710	0,480
32	1 1/4	46	1,81	40	600				0,890	0,600
35	1 3/8	49	1,93	40	600				0,980	0,660
38	1 1/2	54	2,13	40	600				1,210	0,815
51	2	67	2,64	40	600				1,620	1,090

NA | **LA** | **NEU** | **EMEA** | **SA** | **AP** | **AU**

757AA

Plaster 40 bar (600 psi)

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Plaster pumping
Safety factor: 2,5:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	40	1,57	55	825				0,890	0,600
32	1 1/4	49	1,93	55	800				1,250	0,845
38	1 1/2	58	2,28	55	800				1,700	1,145
51	2	71	2,80	55	800				2,210	1,490

NA | LA | NEU | EMEA | SA | AP | AU

758AA

Plaster 55 bar (800 psi)

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Plaster pumping
Safety factor: <= 38 mm 2,5:1 51 mm 2:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	40	1,57	55	825				0,950	0,640
32	1 1/4	49	1,93	55	800				1,430	0,965
38	1 1/2	58	2,28	55	800				1,960	1,320
51	2	71	2,80	55	800				2,550	1,715

NA | LA | NEU | EMEA | SA | AP | AU

758AE

Plaster 55 bar (800 psi)

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords
Cover: Blue SBR/EPDM - abrasion and ozone resistant
Use: Plaster pumping
Safety factor: <= 38 mm 2,5:1 51 mm 2:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

CONCRETE

HOSE

HOSE & RECOMMENDED FITTING TABLE A.45

FITTINGS

Chapter CONCRETEC F.58-59

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	31	1,22	10	150				0,690	0,465
25	1	39	1,54	10	150				1,020	0,690

NA | LA | NEU | **EMEA** | SA | AP | AU

754AA

Concrete vibrator 10 bar (150 psi)

Tube: Black SBR
Reinforcement: High tensile textile cords
Cover: Black SBR - abrasion and ozone resistant
Use: Pneumatic concrete vibrators
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	69	2,72	40	600				1,840	1,240
76	3	104	4,09	40	600				4,390	2,955
90	3 1/2	118	4,65	40	600				5,150	3,465
102	4	130	5,12	40	600				5,830	3,920

NA | LA | NEU | EMEA | SA | AP | **AU**

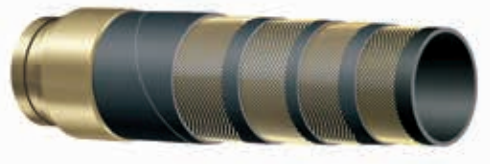
737AA

Concrete pumping 40 bar (600 psi)

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Concrete pumping
Safety factor: 2,5:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	69	2,72	85	1275	255	10,00		2,130	1,435
63	2 1/2	85	3,35	85	1275	265	10,50		3,340	2,245
76	3	100	3,94	85	1275	380	15,00		4,540	3,055
90	3 1/2	116	4,57	85	1275	450	17,50		5,490	3,690
102	4	128	5,04	85	1275	510	20,00		7,020	4,720
127	5	155	6,10	85	1275	635	25,00		10,340	6,950
152	6	184	7,24	85	1275	760	30,00		13,780	9,265

NA | **LA** | **NEU** | **EMEA** | **SA** | **AP** | **AU**



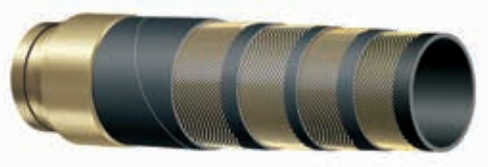
740AA

Concrete pumping 85 bar (1275 psi) heavy duty - steel reinforced

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile steel cords
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: High pressure concrete pumping
Safety factor: 2:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	69	2,72	85	1275	255	10,00		2,590	1,745
63	2 1/2	85	3,35	85	1275	325	13,00		3,770	2,535
76	3	100	3,94	85	1275	380	15,00		4,970	3,345
90	3 1/2	116	4,57	85	1275	450	17,50		7,220	4,855
102	4	128	5,04	85	1275	510	20,00		7,660	5,150
127	5	155	6,10	85	1275	635	25,00		10,250	6,890

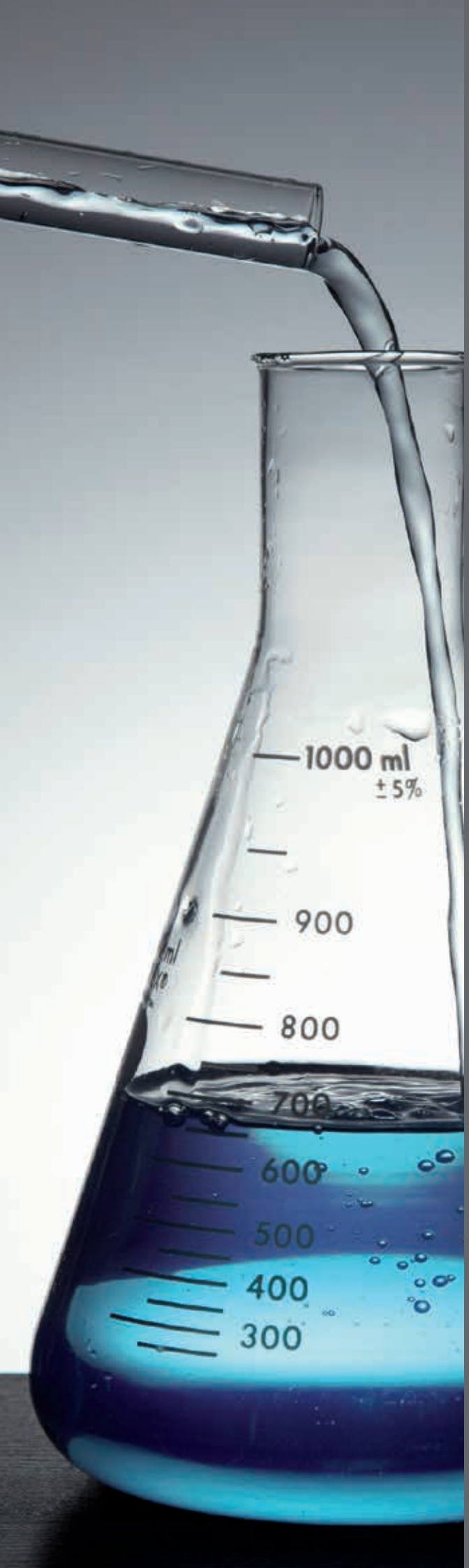
NA | **LA** | **NEU** | **EMEA** | SA | **AP** | **AU**



741AA

Concrete pumping 85 bar (1275 psi) extra service - steel reinforced

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile steel cords
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: High pressure concrete pumping.
Designed for long service life in heavy duty applications
Safety factor: <= 127 mm 2,5:1 152 mm 2:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)



ACID, CHEMICAL & MULTIPURPOSE

HOSE

FITTINGS

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	13	0,51	20	300	48	2,00		0,140	0,095
8	5/16	15	0,59	20	300	64	2,50		0,170	0,115
10	3/8	17	0,67	20	300	80	3,00		0,205	0,140
13	1/2	21	0,83	20	300	104	4,00		0,275	0,185
16	5/8	25	0,98	20	300	128	5,00		0,375	0,255
19	3/4	29	1,14	20	300	152	6,00		0,505	0,340
25	1	35	1,38	20	300	200	8,00		0,627	0,421

NA	LA	NEU	EMEA	SA	AP	AU

984AH

Multipurpose 20 bar (300 psi)

Tube: Black synthetic elastomer
Reinforcement: High tensile textile cords
Cover: Red synthetic elastomer with longitudinal blue stripes - abrasion, ozone and hydrocarbon resistant
Use: Compressed air, water, fuel and oil delivery in general industrial applications
Safety factor: 3:1
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	13	0,51	17	255	48	2,00		0,120	0,080
10	3/8	17	0,67	17	255	64	2,50		0,250	0,170
13	1/2	21	0,83	17	255	104	4,00		0,360	0,245
16	5/8	25	0,98	17	255	128	5,00		0,420	0,285
19	3/4	29	1,14	17	255	152	6,00		0,540	0,365
25	1	35	1,38	17	255	200	8,00		0,730	0,495

NA	LA	NEU	EMEA	SA	AP	AU

974AH

Multipurpose 17 bar (250 psi) - non conductive

Tube: Black non conductive NBR (RMA Class A)
Reinforcement: High tensile textile cords
Cover: Red NBR/PVC (RMA Class B) - abrasion, ozone and hydrocarbon resistant
Use: Premium quality compressed air, water, fuel and oil delivery in general industrial applications
Safety factor: 4:1
Temperature: -25 °C +80 °C (-13 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	16	0,63	20	300	48	2,00		0,240	0,160
10	3/8	18	0,71	20	300	80	3,00		0,270	0,180
13	1/2	21	0,83	20	300	104	4,00		0,370	0,250
19	3/4	29	1,14	20	300	152	6,00		0,620	0,420
25	1	36	1,42	20	300	200	8,00		0,940	0,635

NA	LA	NEU	EMEA	SA	AP	AU

975AH

Multipurpose 20 bar (300 psi) - non conductive

Tube: Black non conductive NBR (RMA Class A)
Reinforcement: High tensile textile cords
Cover: Red NBR/PVC (RMA Class A) - abrasion, ozone and hydrocarbon resistant
Use: Premium quality compressed air, water, fuel and oil delivery in general industrial applications
Safety factor: 4:1
Temperature: -25 °C +80 °C (-13 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
32	1 1/4	44	1,73	20	300				0,990	0,670
38	1 1/2	50	1,97	20	300				1,150	0,775
51	2	65	2,56	20	300				1,510	1,015

NA	LA	NEU	EMEA	SA	AP	AU

954AH

Multipurpose 20 bar (300 psi) - non conductive

Tube: Black non conductive NBR
Reinforcement: High tensile textile cords
Cover: Red NBR/PVC - abrasion, ozone and hydrocarbon resistant
Use: Premium quality compressed air, water, fuel and oil delivery in general industrial applications
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	13	0,51	20	300				0,130	0,087
8	5/16	15	0,59	20	300				0,160	0,110
10	3/8	17	0,67	20	300				0,190	0,130
13	1/2	21	0,83	20	300				0,270	0,180
16	5/8	25	0,98	20	300				0,360	0,245
19	3/4	29	1,14	20	300				0,460	0,310
25	1	35	1,38	20	300				0,580	0,390

NA | LA | **NEU** | EMEA | SA | AP | AU

976AB

General purpose 20 bar (300 psi) - EPDM

Tube: Black EPDM
Reinforcement: High tensile textile cords
Cover: Grey EPDM - abrasion and ozone resistant
Use: Air, water and mild chemicals delivery in general industrial applications
Safety factor: 3:1
Temperature: -40 °C +100 °C (-40 °F +212 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
32	1 1/4	44	1,73	20	300				0,930	0,625
38	1 1/2	52	2,05	20	300				1,080	0,730
51	2	66	2,60	20	300				1,650	1,110

NA | LA | **NEU** | EMEA | SA | AP | AU

956AB

General purpose 20 bar (300 psi) - EPDM

Tube: Black EPDM
Reinforcement: High tensile textile cords
Cover: Grey EPDM - abrasion and ozone resistant
Use: Air, water and mild chemicals delivery in general industrial applications
Safety factor: 3:1
Temperature: -40 °C +100 °C (-40 °F +212 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	23	0,91	20	300				0,350	0,235
19	3/4	31	1,22	20	300				0,580	0,390
25	1	37	1,46	20	300				0,730	0,495
38	1 1/2	52	2,05	20	300				1,070	0,720
51	2	67	2,64	20	300				1,880	1,265
76	3	94	3,70	20	300				2,800	1,885

NA | LA | **NEU** | **EMEA** | SA | **AP** | **AU**

953AE

General purpose 20 bar (300 psi) - EPDM

Tube: Black EPDM
Reinforcement: High tensile textile cords
Cover: Blue EPDM - abrasion and ozone resistant
Use: Air, water and mild chemicals delivery
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	31	1,22	16	240	125	5,00	90	0,670	0,455
25	1	37	1,46	16	240	150	6,00	90	0,830	0,560
32	1 1/4	44	1,73	16	240	175	7,00	90	0,990	0,670
38	1 1/2	51	2,01	16	240	225	9,00	90	1,140	0,770
50	2	66	2,60	16	240	275	11,00	90	1,670	1,125
51	2	67	2,64	16	240	275	11,00	90	1,690	1,140
63	2 1/2	79	3,11	16	240	300	12,00	90	2,240	1,510
75	3	91	3,58	16	240	350	14,00	80	2,660	1,790
76	3	92	3,62	16	240	350	14,00	80	2,690	1,810
100	4	116	4,57	16	240	450	17,50	80	3,610	2,430
102	4	118	4,65	16	240	450	17,50	80	3,680	2,475

NA | LA | NEU | EMEA | SA | AP | AU

503AA

Acid-chemical S&D 16 bar (240 psi) - EPDM exceeds EN 12115

Tube: Black conductive EPDM
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black conductive EPDM - abrasion, ozone and fire resistant
Use: Acid and chemical suction and delivery
Safety factor: 3:1
Temperature: -20 °C +65 °C (-4 °F +150 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	31	1,22	16	240	188	7,50	90	0,670	0,455
25	1	37	1,46	16	240	225	9,00	90	0,820	0,555
32	1 1/4	44	1,73	16	240	263	10,25	90	0,980	0,660
38	1 1/2	50	1,97	16	240	338	13,25	90	1,130	0,760
51	2	63	2,48	16	240	413	16,25	90	1,480	0,995
63	2 1/2	77	3,03	16	240	450	17,50	90	2,270	1,530
76	3	92	3,62	16	240	525	20,75	80	2,720	1,830
102	4	118	4,65	16	240	675	26,50	80	3,710	2,495

NA | LA | NEU | EMEA | SA | AP | AU

505OG

Acid-chemical S&D 16 bar (240 psi) - XLPE

Tube: Transparent XLPE (Cross Linked Polyethylene)
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Green EPDM - abrasion and ozone resistant
Use: Acid and chemical suction and delivery.
Suitable for 90% of existing chemicals
Safety factor: 3:1
Temperature: -20 °C +65 °C (-4 °F +150 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	31	1,22	10	150	188	7,50	90	0,600	0,405
25	1	37	1,46	10	150	225	9,00	90	0,730	0,495
32	1 1/4	44	1,73	10	150	263	10,25	90	0,880	0,595
38	1 1/2	51	2,01	10	150	338	13,25	90	1,010	0,680
50	2	66	2,60	10	150	413	16,50	90	1,750	1,180
51	2	67	2,64	10	150	413	16,21	90	1,780	1,200
75	3	91	3,58	10	150	525	20,75	90	2,780	1,870
76	3	92	3,62	10	150	525	20,75	80	2,810	1,890

NA | LA | **NEU** | **EMEA** | SA | AP | AU

509AA

Acid-chemical S&D 10 bar (150 psi) - UHMWPE EN 12115

Tube: Black conductive UHMWPE (Ultra High Molecular Weight Polyethylene)
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black conductive EPDM - abrasion, ozone and fire resistant
Use: Acid and chemical suction and delivery.
Suitable for 98% of existing chemicals
Safety factor: 4:1
Temperature: -20 °C +65 °C (-4 °F +150 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	31	1,22	16	240	188	7,50	90	0,600	0,405
25	1	37	1,46	16	240	225	9,00	90	0,730	0,495
32	1 1/4	44	1,73	16	240	263	10,25	90	0,880	0,595
38	1 1/2	50	1,97	16	240	338	13,25	90	1,010	0,680
40	1 9/16	52	2,05	16	240	338	13,25	90	1,060	0,715
51	2	63	2,48	16	240	413	16,25	90	1,340	0,905
63	2 1/2	77	3,03	16	240	450	17,50	90	2,090	1,405
76	3	92	3,62	16	240	525	20,75	80	2,840	1,910
102	4	118	4,65	16	240	675	26,50	80	3,870	2,605

NA | **LA** | **NEU** | **EMEA** | **SA** | **AP** | **AU**

509OE

Acid-chemical S&D 16 bar (240 psi) - UHMWPE FDA

Tube: Transparent UHMWPE (Ultra High Molecular Weight Polyethylene)
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Blue EPDM - abrasion and ozone resistant
Use: Acid and chemical suction and delivery.
Suitable for 98% of existing chemicals.
Safety factor: 3:1
Temperature: -20 °C +65 °C (-4 °F +150 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2			16	240	153	6,00		1,390	0,935
76	3			16	240	228	9,00		2,500	1,685
102	4			16	240	306	12,00		4,090	2,750

NA | LA | NEU | EMEA | SA | AP | AU

519OE

Acid-chemical S&D 16 bar (240 psi) - UHMWPE corrugated - FDA

Tube: Transparent UHMWPE (Ultra High Molecular Weight Polyethylene)
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Blue EPDM - abrasion and ozone resistant
Use: Acid and chemical suction and delivery.
Suitable for 98% of existing chemicals.
Special construction for maximum flexibility
Safety factor: 3:1
Temperature: -20 °C +65 °C (-4 °F +150 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
38	1 1/2	54	2,13	20	300	304	12,00		1,380	0,930
51	2	67	2,68	20	300	408	16,00		1,730	1,160

NA | LA | NEU | **EMEA** | SA | AP | AU

538AA

Tank cleaning 20 bar (300 psi) - EPDM textile braided

Tube: Black conductive EPDM
Reinforcement: High tensile textile braids - stainless steel antistatic wires
Cover: Black conductive EPDM - abrasion and ozone resistant
Use: Acid and chemical delivery in storage tanks cleaning applications.
Safety factor: 3:1
Temperature: -30 °C +100 °C (-22 °F +212 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	37	1,46	10	150	100	4,00	90	0,940	0,630
40	1 1/2	52	2,05	10	150	140	5,50	90	1,100	0,740
50	2	62	2,44	10	150	150	6,00	90	1,450	0,970
63*	2 1/2	77	3,03	10	150	175	7,00	90	2,050	1,380
65	2 5/8	77	3,03	10	150	175	7,00	90	2,250	1,510
75	3	89	3,50	10	150	250	10,00	90	2,400	1,610
80	3 1/8	93	3,66	10	150	250	10,00	90	3,100	2,080
100	4	121	4,76	10	150	350	14,00	90	4,400	2,950

NA | LA | NEU | EMEA | SA | AP | AU

* Pitch for UK market

5J551

Acid-chemical S&D 10 bar (150 psi) - standard duty BS 5842 arrêté ADR annexe 1

Inner wire: Polypropylene coated steel wire
Tube: Polypropylene film
Cover: Grey PVC coated fabric
Outer wire: Galvanised steel wire
Use: Acid and chemical suction and delivery. Specially designed for tank truck applications
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
40	1 1/2	52	2,05	10	150	140	5,50	90	1,100	0,740
50	2	62	2,44	10	150	150	6,00	90	1,450	0,970
65	2 1/2	77	3,03	10	150	175	7,00	90	2,250	1,510
80	3 1/8	93	3,66	10	150	250	10,00	90	3,100	2,080
100	4	121	4,76	10	150	350	14,00	90	5,300	3,560

NA | LA | NEU | EMEA | SA | AP | AU

5J553

Acid-chemical S&D 10 bar (150 psi) - standard duty BS 5842 arrêté ADR annexe 1

Inner wire: Polypropylene coated steel wire
Tube: Polypropylene film
Cover: Grey PVC coated fabric
Outer wire: Stainless steel wire
Use: Acid and chemical suction and delivery. Specially designed for tank truck applications
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	37	1,46	14	200	100	4,00	90	0,940	0,630
40	1 1/2	53	2,09	14	200	140	5,50	90	1,150	0,770
50	2	63	2,48	14	200	150	6,00	90	1,500	1,010
63*	2 1/2	78	3,07	14	200	175	7,00	90	2,100	1,410
65	2 5/8	78	3,07	14	200	175	7,00	90	2,300	1,540
75	3	90	3,54	14	200	250	10,00	90	2,500	1,680
80	3 1/8	94	3,70	14	200	250	10,00	90	3,150	2,110
100	4	122	4,80	14	200	350	14,00	90	5,400	3,620

NA | LA | NEU | EMEA | SA | AP | AU

* Pitch for UK market

5N551

Acid-chemical S&D 14 bar (200 psi) - heavy duty
BS 5842 arrêté ADR annexe 1

Inner wire: Polypropylene coated steel wire
Tube: Polypropylene film
Cover: Grey PVC coated fabric
Outer wire: Galvanised steel wire
Use: Acid and chemical suction and delivery. Specially designed for tank truck applications
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
40	1 1/2	53	2,09	14	200	140	5,50	90	1,300	0,870
50	2	63	2,48	14	200	150	6,00	90	1,700	1,140
63*	2 1/2	78	3,07	14	200	175	7,00	90	2,300	1,540
65	2 5/8	78	3,07	14	200	175	7,00	90	2,500	1,680
75	3	90	3,54	14	200	250	10,00	90	2,700	1,810
80	3 1/8	94	3,70	14	200	250	10,00	90	3,500	2,350
100	4	122	4,80	14	200	350	14,00	90	6,200	4,160

NA | LA | NEU | EMEA | SA | AP | AU

* Pitch for UK market

5N331

Acid-chemical S&D 14 bar (200 psi) - heavy duty PTFE
BS 5842 arrêté ADR annexe 1

Inner wire: Stainless steel wire
Tube: PTFE film
Cover: Grey PVC coated fabric
Outer wire: Galvanised steel wire
Use: Acid, chemical, fuel and solvents suction and delivery. Specially designed for long service life in heavy duty applications requiring resistance to high temperature
Safety factor: 4:1
Temperature: -30 °C +120 °C (-22 °F +248 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	37	1,46	14	200	100	4,00	90	1,000	0,670
40	1 1/2	53	2,09	14	200	140	5,50	90	1,300	0,870
50	2	63	2,48	14	200	150	6,00	90	1,700	1,140
63	2 1/2	78	3,07	14	200	175	7,00	90	2,300	1,540
65	2 5/8	78	3,07	14	200	175	7,00	90	2,800	1,680
75	3	90	3,54	14	200	250	10,00	90	2,700	1,810
80	3 1/8	94	3,70	14	200	250	10,00	90	3,500	2,350
100	4	122	4,80	14	200	350	14,00	90	6,200	4,160

NA | LA | NEU | EMEA | SA | AP | AU

* Pitch for UK market

5N333

Acid-chemical S&D 14 bar (200 psi) - heavy duty PTFE
BS 5842 arrêté ADR annexe 1

Inner wire: Stainless steel wire
Tube: PTFE film
Cover: Grey PVC coated fabric
Outer wire: Stainless steel wire
Use: Acid, chemical, fuel and solvents suction and delivery. Specially designed for long service life in heavy duty applications requiring resistance to high temperature
Safety factor: 4:1
Temperature: -30 °C +120 °C (-22 °F +248 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
50	2			10	150	150	6,00	90	1,680	1,130
80	3 1/8			10	150	250	10,00	90	3,400	2,280

NA | LA | NEU | EMEA | SA | AP | AU

5J533

Tank cleaning 10 bar (150 psi)
BS 5842 arrêté ADR annexe 1

Inner wire: Stainless steel wire
Tube: Polypropylene film
Cover: Grey PVC coated fabric
Outer wire: Stainless steel wire
Use: Tank cleaning
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

HYDROCARBONS

HOSE

FITTINGS

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
3,5	9/64	9,5	0,37	7	100	35	1,50		0,090	0,060
4,5	11/64	10,5	0,41	7	100	45	1,75		0,100	0,067
5	3/16	11	0,43	7	100	50	2,00		0,110	0,075
5,5	7/32	11,5	0,45	7	100	55	2,25		0,120	0,080
6	1/4	12	0,47	7	100	60	2,50		0,120	0,080
7,5	19/64	13,5	0,53	7	100	75	3,00		0,140	0,095
9,5	3/8	15,5	0,61	7	100	95	3,75		0,170	0,115

NA | LA | **NEU** | EMEA | SA | AP | AU

687AA

Automotive fuel 7 bar (100 psi) DIN 73379/2A

Tube: Black NBR
Reinforcement: High tensile textile cords
Cover: Black CR - abrasion, ozone and hydrocarbon resistant
Use: Petrol and diesel transfer in automotive applications. Also suitable for ecodiesel
Safety factor: 4:1
Temperature: -40 °C +85 °C (-40 °F +185 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
3,2	1/8	7	0,28	10	150				0,040	0,027
3,5	9/64	7,5	0,30	10	150				0,045	0,030
4	5/32	8	0,31	10	150				0,050	0,034
4,5	11/64	9,5	0,37	10	150				0,060	0,040
5	3/16	10	0,39	10	150				0,065	0,044
5,5	7/32	10,5	0,41	10	150				0,070	0,047
6	1/4	11	0,43	10	150				0,075	0,050
7,5	19/64	12,5	0,49	10	150				0,080	0,055
7,5	19/64	14,5	0,57	10	150				0,130	0,087
8	5/16	13	0,51	10	150				0,090	0,060
9	23/64	14	0,55	10	150				0,105	0,070
10	3/8	15	0,59	8	120				0,110	0,075
12	15/32	17	0,67	7	100				0,135	0,090

NA | **LA** | **NEU** | **EMEA** | **SA** | **AP** | AU

689AA

Automotive fuel 10 bar (150 psi) external textile braid

Tube: Black NBR
Reinforcement: High tensile textile braid
Use: Petrol and diesel transfer in automotive applications. Also suitable for unleaded fuel and ecodiesel
Safety factor: 3:1
Temperature: -20 °C +100 °C (-4 °F +212 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	11	0,43	15	225				0,100	0,067
8	5/16	13	0,51	15	225				0,155	0,105
10	3/8	15	0,59	15	225				0,190	0,130
12	15/32	17	0,67	15	225				0,230	0,155

NA | LA | **NEU** | **EMEA** | SA | AP | AU

688AA

Diesel oil delivery 15 bar (225 psi) external steel braid

Tube: Black NBR
Reinforcement: Plated steel braid
Use: Diesel oil delivery. Specially designed for burner feed line
Safety factor: 4:1
Temperature: -20 °C +100 °C (-4 °F +212 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
6	1/4	13	0,51	10	150	48	2,00		0,140	0,095
8	5/16	15	0,59	10	150	64	2,50		0,170	0,115
10	3/8	17	0,67	10	150	80	3,00		0,205	0,140
13	1/2	20	0,79	10	150	104	4,00		0,250	0,170
19	3/4	27	1,06	10	150	152	6,00		0,400	0,270
25	1	35	1,38	10	150	200	8,00		0,630	0,425

NA | **LA** | NEU | **EMEA** | **SA** | **AP** | AU

680AA

Fuel-oil delivery 10 bar (150 psi)

Tube: Black synthetic elastomer
Reinforcement: High tensile textile cords - antistatic wire ID >= 13 mm
Cover: Black synthetic elastomer - abrasion, ozone and hydrocarbon resistant
Use: General purpose fuel and oil delivery
Safety factor: 3:1
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
5	3/16	12	0,47	16	240	50	2,00		0,130	0,087
6	1/4	13	0,51	16	240	60	2,50		0,150	0,100
7	9/32	13	0,51	16	240	70	2,75		0,150	0,100
8	5/16	15	0,59	16	240	80	3,00		0,170	0,115
10	3/8	17	0,67	16	240	100	4,00		0,210	0,140
13	1/2	20	0,79	16	240	120	4,75		0,250	0,170
16	5/8	24	0,94	16	240	160	6,25		0,350	0,235
19	3/4	27	1,06	16	240	190	7,50		0,400	0,270
25	1	35	1,38	16	240	250	10,00		0,730	0,495

NA | **LA** | **NEU** | **EMEA** | **SA** | **AP** | AU

671AA

Fuel-oil delivery 16 bar (240 psi)

Tube: Black NBR
Reinforcement: High tensile textile cords
Cover: Black synthetic rubber - abrasion, ozone and hydrocarbon resistant
Use: General purpose fuel and oil delivery
Safety factor: 3:1
Temperature: -25 °C +80 °C (-13 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	23	0,91	10	150				0,350	0,235
16	5/8	26	1,02	10	150				0,410	0,275
19	3/4	29	1,14	10	150				0,470	0,320
25	1	35	1,38	10	150				0,580	0,390
32	1 1/4	42	1,65	10	150				0,710	0,480
38	1 1/2	48	1,89	10	150				0,840	0,565
51	2	61	2,40	10	150				1,110	0,750
63	2 1/2	75	2,95	10	150				1,630	1,100
76	3	88	3,46	10	150				1,960	1,320
102	4	114	4,49	10	150				2,650	1,785
32	1 1/4	44	1,73	10	150				0,880	0,595
35	1 3/8	47	1,85	10	150				0,960	0,650
38	1 1/2	50	1,97	10	150				1,030	0,695
40	1 9/16	52	2,05	10	150				1,070	0,720
45	1 3/4	57	2,24	10	150				1,190	0,800
51	2	63	2,48	10	150				1,350	0,910

NA | **LA** | **NEU** | **EMEA** | **SA** | **AP** | **AU**

650AA

Fuel-oil delivery 10 bar (150 psi)

Tube: Black conductive NBR
Reinforcement: High tensile textile cords
Cover: Black conductive CR - abrasion, ozone, hydrocarbon and fire resistant
Use: General purpose fuel and oil delivery
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
38	1 1/2	48	1,89	10	150				0,920	0,620
51	2	61	2,40	10	150				1,220	0,820
76	3	88	3,46	10	150				2,120	1,425
102	4	114	4,49	10	150				2,850	1,920
19	3/4	29	1,14	10	150				0,520	0,350
22	7/8	32	1,26	10	150				0,580	0,390
25	1	35	1,38	10	150				0,650	0,440
32	1 1/4	44	1,73	10	150				0,960	0,650
38	1 1/2	51	2,01	10	150				1,150	0,775
51	2	63	2,48	10	150				1,460	0,985
63	2 1/2	77	3,03	10	150				2,080	1,400
76	3	92	3,62	10	150				2,550	1,715

NA | **LA** | **NEU** | EMEA | SA | **AP** | AU

650AH

Fuel-oil delivery 10 bar (150 psi)

Tube: Black conductive NBR
Reinforcement: High tensile textile cords - antistatic wire
Cover: Red CR - abrasion, ozone and hydrocarbon resistant
Use: General purpose fuel and oil delivery
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	35	1,38	10	150				0,650	0,440
32	1 1/4	42	1,65	10	150				0,790	0,535
38	1 1/2	48	1,89	10	150				0,920	0,620
32	1 1/4	44	1,73	10	150				0,960	0,650
38	1 1/2	50	1,97	10	150				1,110	0,750

NA | LA | NEU | **EMEA** | SA | AP | AU

650AB

Fuel-oil delivery 10 bar (150 psi)

Tube: Black conductive NBR
Reinforcement: High tensile textile cords - antistatic wire
Cover: Grey CR - abrasion, ozone and hydrocarbon resistant
Use: General purpose fuel and oil delivery
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1			7	100	150	6,00	90	0,540	0,365
32	1 1/4			6	90	192	7,50	90	0,680	0,460
38	1 1/2			6	90	228	9,00	90	0,760	0,515
40	1 9/16			6	90	240	9,50	90	0,800	0,540
51	2			5	75	306	12,00	90	1,150	0,775
60	2 3/8			4	60	360	14,00	90	1,550	1,045
63	2 1/2			4	60	378	15,00	90	1,600	1,080
76	3			4	60	456	18,00	90	2,000	1,345
80	3 1/8			4	60	480	19,00	90	2,100	1,415
102	4			3	45	612	24,00	90	3,100	2,085

NA | **LA** | **NEU** | **EMEA** | SA | **AP** | **AU**

668EL

Fuel-oil S&D - PVC - heavy duty

Construction: Blue PVC - abrasion, ozone and hydrocarbon resistant
Reinforcement: White shock resistant rigid PVC
Use: General purpose fuel and oil suction and delivery
Safety factor: 3:1
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	61	2,40	10	150	255	10,00	100	1,380	0,930
76	3	88	3,46	10	150	380	15,00	90	2,570	1,730
102	4	116	4,57	10	150	510	20,00	90	3,560	2,395
152	6	168	6,61	10	150	760	30,00	80	6,820	4,585

NA | LA | NEU | EMEA | SA | AP | AU

601AA

Oil rigger S&D 10 bar (150 psi)

Tube: Black NBR/PVC
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black SBR - abrasion and ozone resistant
Use: Oilfield vacuum tank service for crude oil mud handling
Safety factor: <= 102 mm 3:1 152 mm 2,5:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	29	1,14	10	150	76	3,00	100	0,610	0,410
25	1	35	1,38	10	150	100	4,00	100	0,760	0,515
30	1 3/16	40	1,57	10	150	120	4,75	100	0,850	0,575
32	1 1/4	42	1,65	10	150	128	5,00	100	0,900	0,605
35	1 3/8	45	1,77	10	150	140	5,50	100	0,980	0,660
38	1 1/2	48	1,89	10	150	152	6,00	100	1,050	0,710
40	1 9/16	50	1,97	10	150	160	6,25	100	1,090	0,735
42	1 5/8	52	2,05	10	150	168	6,75	100	1,150	0,775
45	1 3/4	55	2,17	10	150	180	7,00	100	1,220	0,820
48	1 7/8	58	2,28	10	150	192	7,50	100	1,280	0,865
51	2	61	2,40	10	150	204	8,00	100	1,350	0,910
57	2 1/4	67	2,64	10	150	228	9,00	100	1,510	1,015
60	2 3/8	72	2,83	10	150	240	9,50	100	2,020	1,360
63	2 1/2	75	2,95	10	150	252	10,00	90	2,110	1,420
70	2 3/4	82	3,23	10	150	280	11,00	90	2,350	1,580
76	3	88	3,46	10	150	304	12,00	90	2,520	1,695
80	3 1/8	94	3,70	10	150	320	12,50	90	2,700	1,815
90	3 1/2	104	4,09	10	150	360	14,00	90	3,140	2,115
102	4	116	4,57	10	150	408	16,00	90	3,500	2,355
110	4 5/16	124	4,88	10	150	440	17,25	90	4,240	2,850
115	4 1/2	129	5,08	10	150	460	18,00	90	4,410	2,965
120	4 3/4	138	5,43	10	150	480	19,00	80	5,640	3,795
127	5	145	5,71	10	150	508	20,00	80	5,930	3,990
133	5 1/4	151	5,94	10	150	532	21,00	80	6,170	4,150
152	6	170	6,69	10	150	608	24,00	80	7,360	4,950
203	8	225	8,86	10	150	812	32,00	70	11,700	7,865

NA | LA | NEU | EMEA | SA | AP | AU

605AA

Fuel-oil S&D 10 bar (150 psi)

Tube: Black conductive NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black CR - abrasion, ozone and hydrocarbon resistant
Use: Fuel and oil suction and delivery. Specially designed for tank truck and general industrial applications
Safety factor: <= 127 mm 3:1 133-254 mm 2,5:1 305 mm 1,5:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
38	1 1/2	48	1,89	10	150	152	6,00	100	1,080	0,730
51	2	61	2,40	10	150	204	8,00	100	1,390	0,935
76	3	88	3,46	10	150	304	12,00	90	2,580	1,735
102	4	116	4,57	10	150	408	16,00	90	3,580	2,410

NA | LA | NEU | EMEA | SA | AP | AU

605AH

Fuel-oil S&D 10 bar (150 psi)

Tube: Black conductive NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Red CR - abrasion, ozone and hydrocarbon resistant
Use: Fuel and oil suction and delivery. Specially designed for tank truck and general industrial applications
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	29	1,14	10	150	76	3,00	100	0,610	0,410
25	1	35	1,38	10	150	100	4,00	100	0,760	0,515
32	1 1/4	42	1,65	10	150	128	5,00	100	0,900	0,605
38	1 1/2	48	1,89	10	150	152	6,00	100	1,050	0,710
51	2	61	2,40	10	150	204	8,00	100	1,360	0,915
76	3	88	3,46	10	150	304	12,00	90	2,540	1,710
102	4	116	4,57	10	150	408	16,00	90	3,530	2,375

NA | LA | NEU | EMEA | SA | AP | AU

629AA

Biofuel S&D 10 bar (150 psi)

Tube: Black conductive NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: black CR - abrasion, ozone and hydrocarbon resistant
Use: Fuel and oil suction and delivery. Specially designed for biofuel and ethanol
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2			10	150	76	3,00	100	1,570	1,060
76	3			10	150	114	4,50	100	2,730	1,835
102	4			10	150	153	6,00	100	3,970	2,670

NA | LA | NEU | EMEA | SA | AP | AU

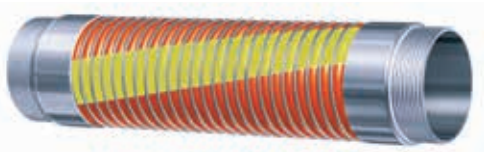
606AE

Tank truck 10 bar (150 psi) corrugated - low temperature

Tube: Black conductive NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Blue CR - abrasion, ozone and hydrocarbon resistant
Use: Fuel, oil and hydraulic fluids suction and delivery.
Specially designed for tank truck applications where extreme flexibility at low temperatures is required
Safety factor: 3:1
Temperature: -54 °C +82 °C (-65 °F +180 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
50	2	61	2,40	10	150	150	6,00	90	0,970	0,650
65	2 5/8	75	2,95	10	150	175	7,00	90	1,210	0,810
75	3	88	3,46	10	150	250	10,00	90	1,400	0,940
80	3 1/8	93	3,66	10	150	250	10,00	90	1,680	1,130
100	4	119	4,69	10	150	350	14,00	90	2,250	1,510

NA | LA | NEU | EMEA | SA | AP | AU



6J544

Fuel-oil S&D 10 bar (150 psi) - light duty light weight

Inner wire: Aluminium wire
Tube: Polypropylene film
Cover: Orange PVC with longitudinal yellow stripe coated fabric
Outer wire: Aluminium wire
Use: Fuel and oil suction and delivery.
Specially designed for tank truck applications.
Light weight construction
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
40	1 1/2	50	2,05	10	150	140	5,50	90	1,100	0,740
50	2	61	2,40	10	150	150	6,00	90	1,190	0,800
65	2 5/8	75	2,95	10	150	175	7,00	90	1,700	1,140
75	3	88	3,46	10	150	250	10,00	90	2,000	1,340
80	3 1/8	93	3,66	10	150	250	10,00	90	2,500	1,680
100	4	119	4,69	10	150	350	14,00	90	3,200	2,150

NA | LA | NEU | EMEA | SA | AP | AU

6J541

Fuel-oil S&D 10 bar (150 psi) - light duty BS 3492/BX BS 5842 arrêté ADR annexe 1

Inner wire: Aluminium wire
Tube: Polypropylene film
Cover: Orange PVC coated fabric
Outer wire: Galvanised steel wire
Use: Fuel and oil suction and delivery.
Specially designed for tank truck applications.
Light weight construction
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
50	2	61	2,40	10	150	150	6,00	90	1,680	1,130
63*	2 1/2	75	2,95	10	150	175	7,00	90	2,200	1,480
65	2 5/8	88	3,46	10	150	175	7,00	90	2,450	1,650
75	3	88	3,46	10	150	250	10,00	90	2,600	1,750
80	3 1/8	93	3,66	10	150	250	10,00	90	2,600	1,750
100	4	119	4,69	10	150	350	14,00	90	4,200	2,820

NA | LA | NEU | EMEA | SA | AP | AU

* Pitch for UK market

6J511

Fuel-oil S&D 10 bar (150 psi) - standard duty BS 3492/BX BS 5842 arrêté ADR annexe 1

Inner wire: Galvanised steel wire
Tube: Polypropylene film
Cover: Grey PVC with longitudinal yellow stripe coated fabric
Outer wire: Galvanised steel wire
Use: Fuel and oil suction and delivery.
Specially designed for tank truck applications
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	31	1,22	16	240	125	5,00		0,590	0,400
25	1	37	1,46	16	240	150	6,00		0,720	0,485
32	1 1/4	44	1,73	16	240	175	7,00		0,900	0,605
38	1 1/2	51	2,01	16	240	225	9,00		1,060	0,715
51	2	67	2,64	16	240	275	11,00		1,630	1,100
63	2 1/2	79	3,11	16	240	300	12,00		1,980	1,335
76	3	92	3,62	16	240	350	14,00		2,430	1,635
102	4	118	4,65	16	240	450	17,50		3,100	2,085
152	6	170	6,69	16	240	750	30,00		5,440	3,660

NA | LA | NEU | EMEA | SA | AP | AU

655AA

Fuel-oil delivery 16 bar (240 psi) exceeds EN 1761 TRbf 131/2

Tube: Black conductive NBR
Reinforcement: High tensile textile cords
Cover: Black conductive CR - abrasion, ozone, hydrocarbon and fire resistant
Use: Fuel and oil delivery.
Designed for long service life in heavy duty applications
Safety factor: 3:1
Temperature: -30 °C +70 °C (-22 °F +158 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	37	1,46	16	240	150	6,00	100	0,860	0,580
32	1 1/4	44	1,73	16	240	175	7,00	100	1,030	0,695
38	1 1/2	51	2,01	16	240	225	9,00	100	1,190	0,800
51	2	67	2,64	16	240	275	11,00	100	1,820	1,225
63	2 1/2	79	3,11	16	240	300	12,00	90	2,380	1,600
76	3	92	3,62	16	240	350	14,00	90	2,860	1,925
102	4	118	4,65	16	240	450	17,50	90	3,900	2,625
152	6	170	6,69	16	240	760	30,00	80	7,620	5,125

NA | LA | NEU | EMEA | SA | AP | AU

609AA

Fuel-oil S&D 16 bar (240 psi) exceeds EN 1761 TRbf 131/2

Tube: Black conductive NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black conductive CR - abrasion, ozone, hydrocarbon and fire resistant
Use: Fuel and oil suction and delivery.
Designed for long service life in heavy duty applications
Safety factor: 3:1
Temperature: -30 °C +70 °C (-22 °F +158 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	63	2,48	20	300	204	8,00	100	1,640	1,105
63	2 1/2	77	3,03	20	300	252	10,00	90	2,160	1,455
76	3	90	3,54	20	300	304	12,00	90	2,640	1,775
102	4	116	4,57	20	300	408	16,00	90	3,610	2,430
127	5	145	5,71	20	300	508	20,00	80	6,080	4,090
152	6	170	6,69	20	300	608	24,00	80	8,320	5,595
203	8	225	8,86	20	300	812	32,00	70	13,740	9,235

NA | LA | NEU | EMEA | SA | AP | AU

620AA

Fuel-oil S&D 20 bar (300 psi)

Tube: Black conductive NBR
Reinforcement: High tensile textile cords with embedded steel helix wire - antistatic wire
Cover: Black CR - abrasion, ozone and hydrocarbon resistant
Use: Fuel and oil suction and delivery.
Designed for long service life in heavy duty applications
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	37	1,46	14	200	100	4,00	90	0,900	0,600
40	1 1/2	53	2,09	14	200	140	5,50	90	1,250	0,840
50	2	63	2,48	14	200	150	6,00	90	1,700	1,140
63*	2 1/2	78	3,07	14	200	175	7,00	90	2,250	1,510
65	2 5/8	78	3,07	14	200	175	7,00	90	2,500	1,680
75	3	90	3,54	14	200	250	10,00	90	2,700	1,810
80	3 1/8	94	3,70	14	200	250	10,00	90	3,400	2,280
100	4	122	4,80	14	200	350	14,00	90	4,600	3,090

NA | LA | NEU | EMEA | SA | AP | AU

* Pitch for UK market

6N111

Fuel-oil S&D 14 bar (200 psi) - heavy duty high temperature +100 °C (+212 °F) BS 3492/BX BS 5842 arrêté ADR annexe 1

Inner wire: Galvanised steel wire
Tube: Polyester film
Cover: Grey PVC with longitudinal yellow stripe coated fabric
Outer wire: Galvanised steel wire
Use: Fuel and oil suction and delivery.
Specially designed for long service life in heavy duty applications requiring resistance to high temperature
Safety factor: 4:1
Temperature: -30 °C +100 °C (-22 °F +212 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	37	1,46	16	240	125	5,00		0,810	0,545
32	1 1/4	44	1,73	16	240	160	6,25		0,970	0,655
35	1 3/8	47	1,85	16	240	175	7,00		1,040	0,700
38	1 1/2	51	2,01	16	240	190	7,50		1,130	0,760
51	2	67	2,64	16	240	255	10,00		1,660	1,120

NA | LA | **NEU** | **EMEA** | SA | AP | **AU**

658AA

Domestic fuel reeling 16 bar (240 psi) textile braided
EN 1360/1 TRbf 131/2

Tube: Black conductive NBR
Reinforcement: High tensile textile braids
Cover: Black conductive CR - abrasion, ozone, hydrocarbon and fire resistant
Use: Fuel and oil delivery in heavy duty reeling applications.
Also suitable for tank cleaning.
Antistatic wire available on request
Safety factor: 3:1
Temperature: -30 °C +70 °C (-22 °F +158 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	31	1,22	25	375	160	6,25		0,630	0,425
25	1	38	1,50	25	375	200	8,00		0,810	0,545
32	1 1/4	45	1,77	25	375	250	10,00		0,950	0,640
38	1 1/2	52	2,05	25	375	320	12,50		1,350	0,910
51	2	67	2,64	25	375	400	16,00		2,030	1,365

NA | **LA** | **NEU** | **EMEA** | **SA** | **AP** | **AU**

659AA

LPG delivery 25 bar (375 psi) - textile braided
EN 1762/DM

Tube: Black NBR
Reinforcement: High tensile textile braids - antistatic wire
Cover: Black CR - abrasion, ozone, hydrocarbon and fire resistant - pin pricked
Use: LPG delivery in heavy duty reeling applications
Safety factor: 4:1
Temperature: -30 °C +70 °C (-22 °F +158 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	37	1,46	20	300	150	6,00		0,820	0,555
32	1 1/4	44	1,73	20	300	190	7,50		0,970	0,655
38	1 1/2	51	2,01	20	300	225	9,00		1,160	0,780
50	2	66	2,60	20	300	275	11,00		1,670	1,125
63	2 1/2	79	3,11	20	300	300	12,00		2,000	1,345
75	3	91	3,58	20	300	300	12,00		2,390	1,610
100	4	116	4,57	20	300	450	17,50		3,670	2,470

NA | LA | NEU | EMEA | SA | AP | AU

656AA

Aircraft ground fuelling 20 bar (300 psi) EN 1361/C

Tube: Black NBR
Reinforcement: High tensile textile braids.
ID >= 75 mm high tensile textile cords
Cover: Black conductive CR - abrasion, ozone and hydrocarbon resistant
Use: Aircraft ground fuelling
Safety factor: 4:1
Temperature: -30 °C +55 °C (-22 °F +131 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	41	1,61	20	300	150	6,00	65	0,840	0,565
32	1 1/4	48	1,89	20	300	190	7,50	65	1,050	0,710
38	1 1/2	54	2,13	20	300	225	9,00	65	1,220	0,820
50	2	67	2,64	20	300	275	11,00	65	1,850	1,245
63	2 1/2	81	3,19	20	300	300	12,00	65	2,370	1,595
75	3	93	3,66	20	300	300	12,00	65	2,820	1,900

NA | LA | NEU | EMEA | SA | AP | AU

611AA

Aircraft ground fuelling-defuelling 20 bar (300 psi) EN 1361/F

Tube: Black NBR
Reinforcement: High tensile textile cords with embedded nylon helix
Cover: Black conductive CR - abrasion, ozone and hydrocarbon resistant
Use: Aircraft ground fuelling and defuelling
Safety factor: 4:1
Temperature: -30 °C +55 °C (-22 °F +131 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	69	2,72	10	150	255	10,00	100	2,430	1,635
76	3	96	3,78	10	150	380	15,00	90	3,990	2,685
102	4	122	4,80	10	150	510	20,00	90	5,300	3,565

NA | LA | NEU | EMEA | SA | AP | AU

614AA

Hot tar 10 bar (150 psi)

Tube: Black NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black CSM - abrasion and ozone resistant
Use: Hot tar, asphalt and bitumen suction and delivery
Safety factor: 4:1
Temperature: -20 °C +180 °C (-4 °F +356 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	29	1,14	21	300	57	2,25	100	0,610	0,410
25	1	35	1,38	17	250	75	3,00	100	0,760	0,515
32	1 1/4	42	1,65	14	200	96	3,75	100	0,900	0,605
38	1 1/2	48	1,89	10	150	114	4,50	100	1,030	0,695
51	2	61	2,40	7	100	153	6,00	100	1,330	0,895
63	2 1/2	75	2,95	4	60	189	7,50	100	2,080	1,400
76	3	88	3,46	4	60	228	9,00	100	2,480	1,670
90	3 1/2	104	4,09	3	45	270	10,50	100	3,050	2,050
102	4	116	4,57	2	30	306	12,00	100	3,410	2,295

NA | LA | NEU | EMEA | SA | AP | AU

3 x ID

604AA

Oil suction & return exceeds SAE 100R4

Tube: Black conductive NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black CR - abrasion, ozone and hydrocarbon resistant
Use: Hydraulic oil suction and return lines
Safety factor: 4:1
Temperature: -40 °C +100 °C (-40 °F +212 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	29	1,14	25	375	38	1,50	100	0,580	0,390
25	1	35	1,38	20	300	50	2,00	100	0,750	0,505
32	1 1/4	42	1,65	17	250	64	2,50	100	0,920	0,620
38	1 1/2	48	1,89	10	150	76	3,00	100	1,070	0,720
51	2	61	2,40	7	100	102	4,00	100	1,390	0,935
63	2 1/2	75	2,95	5	75	126	5,00	100	2,100	1,415
76	3	88	3,46	5	75	152	6,00	100	2,600	1,750
102	4	116	4,57	5	75	204	8,00	100	3,410	2,295

NA | LA | NEU | EMEA | SA | AP | AU

2 x ID

634AA

Oil suction & return - extra flexible exceeds SAE 100R4

Tube: Black conductive NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black CR - abrasion, ozone, hydrocarbon and flame resistant
Use: Hydraulic oil suction and return lines requiring tight bend radius
Safety factor: 4:1
Temperature: -40 °C +100 °C (-40 °F +212 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	29	1,14	25	375	38	1,50	100	0,630	0,425
25	1	35	1,38	20	300	50	2,00	100	0,810	0,545
32	1 1/4	42	1,65	17	250	64	2,50	100	0,990	0,670
38	1 1/2	48	1,89	10	150	76	3,00	100	1,150	0,775
51	2	61	2,40	7	100	102	4,00	100	1,490	1,005
63	2 1/2	75	2,95	5	75	126	5,00	100	2,230	1,500
76	3	88	3,46	5	75	152	6,00	100	2,750	1,850
102	4	116	4,57	5	75	204	8,00	100	3,610	2,430

NA | LA | NEU | EMEA | SA | AP | AU

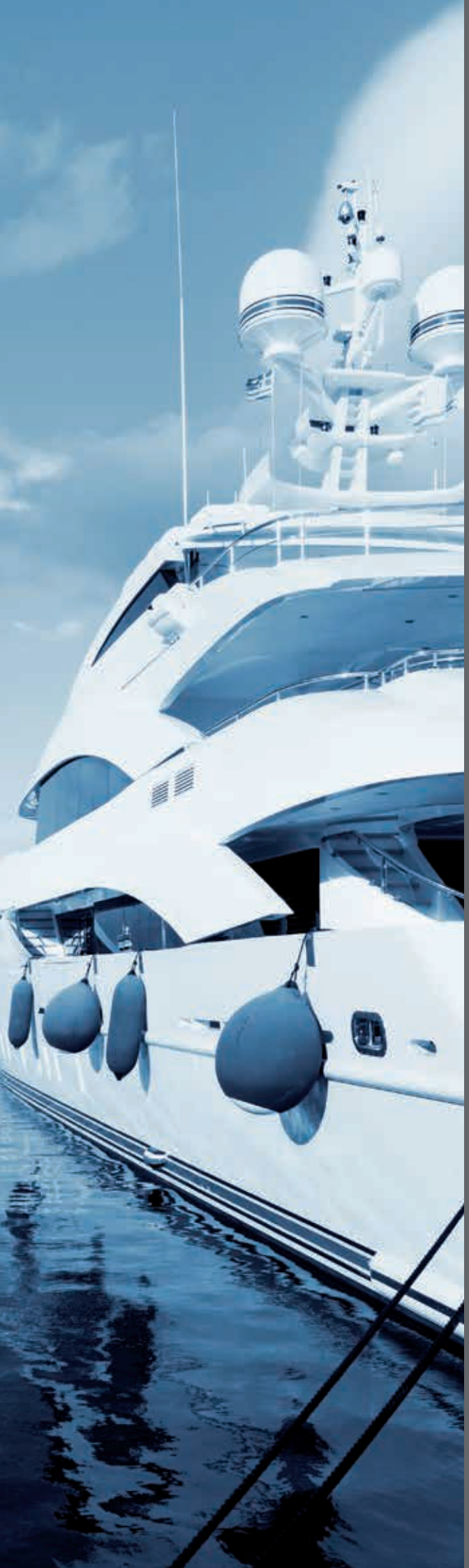
MSHA

2 x ID

644AA

Oil suction & return - extra flexible high temperature exceeds SAE 100R4

Tube: Black conductive NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black CR - abrasion, ozone, hydrocarbon and flame resistant
Use: Hydraulic oil suction and return lines requiring tight bend radius and resistance to high temperature
Safety factor: 4:1
Temperature: -40 °C +135 °C (-40 °F +275 °F)



MARINE

HOSE

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4			8	120	75	3,00	70	0,300	0,200
25	1			8	120	120	4,75	70	0,380	0,255
38	1 1/2			6	90	170	6,75	70	0,580	0,390

NA | **LA** | **NEU** | **EMEA** | **SA** | **AP** | **AU**

266LL

Marine sanitary hose - PVC

Construction: White thermoplastic elastomer
Reinforcement: White shock resistant rigid PVC
Use: Sanitary hose for marine installations
Safety factor: 3:1
Temperature: -5 °C +60 °C (+23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	29	1,14	10	150	76	3,00	100	0,580	0,390
25	1	35	1,38	10	150	100	4,00	100	0,720	0,485
38	1 1/2	48	1,89	10	150	152	6,00	100	0,990	0,670

NA | **LA** | **NEU** | **EMEA** | SA | **AP** | AU

202AL

Marine sanitary hose 10 bar (150 psi)

Tube: Black chlorobutyl
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: White EPDM - abrasion and ozone resistant
Use: Sanitary hose for marine installations. Designed for excellent kink resistance at tight bend radius and maximum flexibility.
Top permeability resistance
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	35	1,38	3	45				0,630	0,425
28	1 1/8	38	1,50	3	45				0,690	0,465
32	1 1/4	42	1,65	3	45				0,770	0,520
35	1 3/8	45	1,77	3	45				0,830	0,560
38	1 1/2	48	1,89	3	45				0,900	0,605
42	1 5/8	52	2,05	3	45				0,980	0,660
45	1 3/4	55	2,17	3	45				1,040	0,700
48	1 7/8	58	2,28	3	45				1,110	0,750
51	2	63	2,48	3	45				1,430	0,965
57	2 1/4	69	2,72	3	45				1,580	1,065
60	2 3/8	74	2,91	3	45				1,940	1,305
63	2 1/2	77	3,03	3	45				2,030	1,365
76	3	90	3,54	3	45				2,430	1,635
90	3 1/2	104	4,09	3	45				2,890	1,945
102	4	116	4,57	3	45				3,240	2,180
115	4 1/2	129	5,08	3	45				3,610	2,430
127	5	141	5,55	3	45				3,980	2,675
152	6	168	6,61	3	45				4,850	3,260
168	6 5/8	184	7,24	3	45				5,310	3,570
203	8	221	8,70	3	45				7,380	4,960

NA | LA | NEU | EMEA | SA | AP | AU

LLOYD'S

653AA

Marine exhaust - soft wall
SAE J2006/R1 ISO 13363/1/A+B

Tube: Black NBR
Reinforcement: High tensile textile cords
Cover: Black NBR/PVC - abrasion, ozone and hydrocarbon resistant
Use: Marine wet exhaust. Also suitable for bilge pump connection
Safety factor: 5:1
Temperature: -30 °C +100 °C (-22 °F +212 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
25	1	35	1,38	3	45	75	3,00	100	0,770	0,520
28	1 1/8	38	1,50	3	45	84	3,25	100	0,840	0,565
30	1 3/16	40	1,57	3	45	90	3,50	100	0,870	0,585
32	1 1/4	42	1,65	3	45	96	3,75	100	0,920	0,620
35	1 3/8	45	1,77	3	45	105	4,25	100	0,990	0,670
38	1 1/2	48	1,89	3	45	114	4,50	100	1,060	0,715
40	1 9/16	50	1,97	3	45	120	4,75	100	1,110	0,750
42	1 5/8	52	2,05	3	45	126	5,00	100	1,160	0,780
45	1 3/4	55	2,17	3	45	135	5,25	100	1,230	0,830
48	1 7/8	58	2,28	3	45	144	5,75	100	1,300	0,875
51	2	61	2,40	3	45	153	6,00	100	1,370	0,925
57	2 1/4	67	2,64	3	45	171	6,75	100	1,510	1,015
60	2 3/8	70	2,76	3	45	180	7,00	100	1,750	1,180
63	2 1/2	73	2,87	3	45	189	7,50	90	1,820	1,225
70	2 3/4	80	3,15	3	45	210	8,25	90	2,030	1,365
76	3	86	3,39	3	45	228	9,00	90	2,180	1,470
80	3 1/8	90	3,54	3	45	240	9,50	90	2,290	1,540
90	3 1/2	100	3,94	3	45	270	10,50	90	2,660	1,790
102	4	112	4,41	3	45	306	12,00	90	3,030	2,040
115	4 1/2	127	5,00	3	45	345	13,50	90	3,900	2,625
127	5	141	5,55	3	45	381	15,00	80	5,320	3,580
152	6	166	6,54	3	45	456	18,00	80	6,570	4,420
203	8	221	8,70	3	45	609	24,00	70	10,080	6,775

NA | LA | NEU | EMEA | SA | AP | AU

LLOYD'S

621AA

Marine exhaust - hard wall
SAE J2006/R2 ISO 13363/2/A+B

Tube: Black NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black NBR/PVC - abrasion, ozone and hydrocarbon resistant
Use: Marine wet exhaust. Also suitable for bilge pump connection. Designed for excellent kink resistance at tight bend radius and maximum flexibility
Safety factor: 5:1
Temperature: -30 °C +100 °C (-22 °F +212 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
20	13/16	30	1,18	2	30	60	2,50	100	0,680	0,460
22	7/8	32	1,26	2	30	66	2,75	100	0,730	0,495
25	1	35	1,38	2	30	75	3,00	100	0,820	0,555
28	1 1/8	38	1,50	2	30	84	3,25	100	0,880	0,595
35	1 3/8	45	1,77	2	30	105	4,25	100	1,040	0,700
38	1 1/2	48	1,89	2	30	114	4,50	100	1,120	0,755
40	1 9/16	50	1,97	2	30	120	4,75	100	1,170	0,790
42	1 5/8	52	2,05	2	30	126	5,00	100	1,210	0,815
45	1 3/4	55	2,17	2	30	135	5,25	100	1,290	0,870
48	1 7/8	58	2,28	2	30	144	5,75	100	1,360	0,915
51	2	61	2,40	2	30	153	6,00	100	1,460	0,985
57	2 1/4	67	2,64	2	30	171	6,75	100	1,610	1,085
60	2 3/8	70	2,76	2	30	180	7,00	90	1,860	1,250
63	2 1/2	73	2,87	2	30	189	7,50	90	1,940	1,305
76	3	86	3,39	2	30	228	9,00	90	2,270	1,530
90	3 1/2	100	3,94	2	30	270	10,50	90	2,840	1,910
102	4	112	4,41	2	30	306	12,00	90	3,140	2,115
115	4 1/2	127	5,00	2	30	345	13,50	90	4,040	2,720
127	5	141	5,55	2	30	381	15,00	80	4,520	3,040

NA | LA | NEU | EMEA | SA | AP | AU

616AA

Marine fuel-exhaust - hard wall
ISO 7840/A2 94/25/CE 2003/44/EC

Tube: Black NBR - fuel and fire resistant
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black NBR/PVC - abrasion, ozone, hydrocarbon and fire resistant
Use: Marine fuel transfer. Designed for excellent kink resistance at tight bend radius and maximum flexibility.
Also suitable for marine wet exhaust applications
Safety factor: 5:1
Temperature: -20 °C +100 °C (-4 °F +212 °F)

DOCK

HOSE

FITTINGS

Built-in Fittings with flange PN16/ASA150 - available on request

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
75	3	98	3,86	7	100	450	18,00	85	4,700	3,160
100	4	124	4,88	7	100	600	24,00	85	6,100	4,100
150	6	180	7,09	7	100	850	34,00	85	12,200	8,200
200	8	233	9,17	7	100	1100	44,00	85	16,300	10,950

NA | LA | NEU | EMEA | SA | AP | AU

60LAA

Fuel-oil S&D 7 bar (100 psi)
EN 1765/S7

Tube: Black NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black CR- abrasion, ozone, sea water and hydrocarbon resistant
Use: Crude oil and liquid petroleum products suction and delivery to/ from tankers and bunkering vessels.
Max 55% aromatic content resistance.
Electrically continuous (discontinuous on request)
Available with swaged fittings
Safety factor: 4:1
Temperature: -20 °C +82 °C (-4 °F +180 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
100	4			7	100	500	20,00	100	10,200	6,850
150	6			7	100	750	30,00	100	15,900	10,690
200	8			7	100	1000	40,00	100	24,300	16,330
250	10			7	100	1250	50,00	100	33,900	22,780
300	12			7	100	1500	60,00	100	45,800	30,780

NA | LA | NEU | EMEA | SA | AP | AU

60AAA

Fuel-oil S&D 7 bar (100 psi)
EN 1765/S7

Tube: Black NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black CR- abrasion, ozone, sea water and hydrocarbon resistant
Use: Crude oil and liquid petroleum products suction and delivery to/ from tankers and bunkering vessels.
Max 55% aromatic content resistance.
Electrically continuous (discontinuous on request)
Built-in fittings
Also available:
• 60BAA 100% aromatic content
• 60CAA biofuel
Safety factor: 4:1
Temperature: -20 °C +82 °C (-4 °F +180 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
75	3	100	3,94	10	150	450	18,00	85	4,660	3,130
100	4	126	4,96	10	150	600	24,00	85	6,100	4,100
150	6	182	7,17	10	150	850	34,00	85	12,200	8,200
200	8	235	9,25	10	150	1100	44,00	85	17,300	11,630

NA | LA | NEU | EMEA | SA | AP | AU

60MAA
Fuel-oil S&D 10 bar (150 psi)
EN 1765/S10

Tube: Black NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black CR- abrasion, ozone, sea water and hydrocarbon resistant
Use: Crude oil and liquid petroleum products suction and delivery to/ from tankers and bunkering vessels.
Max 55% aromatic content resistance.
Electrically continuous (discontinuous on request)
Available with swaged fittings
Safety factor: 4:1
Temperature: -20 °C +82 °C (-4 °F +180 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
100	4			10	150	500	20,00	100	10,200	6,850
150	6			10	150	750	30,00	100	15,900	10,690
200	8			10	150	1000	40,00	100	24,300	16,330
250	10			10	150	1250	50,00	100	33,900	22,780
300	12			10	150	1500	60,00	100	45,800	30,780

NA | LA | NEU | EMEA | SA | AP | AU

60DAA
Fuel-oil S&D 10 bar (150 psi)
EN 1765/S10

Tube: Black NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black CR- abrasion, ozone, sea water and hydrocarbon resistant
Use: Crude oil and liquid petroleum products suction and delivery to/ from tankers and bunkering vessels.
Max 55% aromatic content resistance.
Electrically continuous (discontinuous on request)
Built-in fittings
Also available:
• 60EAA 100% aromatic content
• 60FAA biofuel
Safety factor: 4:1
Temperature: -20 °C +82 °C (-4 °F +180 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
100	4			10	150	600	24,00		6,700	4,500
150	6			10	150	900	36,00		11,000	7,390
200	8			10	150	1200	48,00		16,100	10,820
250	10			10	150	1500	60,00		20,100	13,510
300	12			10	150	1800	72,00		25,000	16,800

NA | LA | NEU | EMEA | SA | AP | AU

64AAA
Fuel-oil delivery 10 bar (150 psi)
EN 1765/L10

Tube: Black NBR
Reinforcement: High tensile textile cords
Cover: Black CR- abrasion, ozone, sea water and hydrocarbon resistant
Use: Crude oil and liquid petroleum products delivery to/from tankers and bunkering vessels.
Max 55% aromatic content resistance.
Electrically continuous (discontinuous on request)
Built-in fittings
Also available:
• 64BAA 100% aromatic content
• 64CAA biofuel
Safety factor: 4:1
Temperature: -20 °C +82 °C (-4 °F +180 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
75	3	100	3,94	15	225	375	15,00	85	4,710	3,170
100	4	126	4,96	15	225	500	20,00	85	6,250	4,200
150	6	184	7,24	15	225	750	30,00	85	12,400	8,330

NA | LA | NEU | EMEA | SA | AP | AU

60NAA

Fuel-oil S&D 15 bar (225 psi)
EN 1765/S15

Tube: Black NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black CR- abrasion, ozone, sea water and hydrocarbon resistant
Use: Crude oil and liquid petroleum products suction and delivery to/ from tankers and bunkering vessels.
Max 55% aromatic content resistance.
Electrically continuous (discontinuous on request)
Available with swaged fittings
Safety factor: 4:1
Temperature: -20 °C +82 °C (-4 °F +180 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
100	4			15	225	500	20,00	100	11,000	7,390
150	6			15	225	750	30,00	100	17,100	11,490
200	8			15	225	1000	40,00	100	26,500	17,810
250	10			15	225	1250	50,00	100	36,600	24,600
300	12			15	225	1500	60,00	100	51,400	34,540

NA | LA | NEU | EMEA | SA | AP | AU

60GAA

Fuel-oil S&D 15 bar (225 psi)
EN 1765/S15

Tube: Black NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black CR- abrasion, ozone, sea water and hydrocarbon resistant
Use: Crude oil and liquid petroleum products suction and delivery to/ from tankers and bunkering vessels.
Max 55% aromatic content resistance.
Electrically continuous (discontinuous on request)
Built-in fittings
Also available:
• 60HAA 100% aromatic content
• 60IAA biofuel
Safety factor: 4:1
Temperature: -20 °C +82 °C (-4 °F +180 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
100	4			15	225	600	24,00		7,500	5,040
150	6			15	225	900	36,00		13,400	9,010
200	8			15	225	1200	48,00		18,100	12,160
250	10			15	225	1500	60,00		24,700	16,600
300	12			15	225	1800	72,00		31,400	21,100

NA | LA | NEU | EMEA | SA | AP | AU

64DAA

Fuel-oil delivery 15 bar (225 psi)
EN 1765/L15

Tube: Black NBR
Reinforcement: High tensile textile cords
Cover: Black CR- abrasion, ozone, sea water and hydrocarbon resistant
Use: Crude oil and liquid petroleum products delivery to/from tankers and bunkering vessels.
Max 55% aromatic content resistance.
Electrically continuous (discontinuous on request)
Built-in fittings
Also available:
• 64EAA 100% aromatic content
• 64FAA biofuel
Safety factor: 4:1
Temperature: -20 °C +82 °C (-4 °F +180 °F)

FLOATING ROOF DRAIN

HOSE

906AA Roof drain 10 bar (150 psi).....H.100

FITTINGS

Fittings with Flange ASA150 and lead ballast - available on request

Floating roof drain

ALFAGOMMA

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
76	3	102	4,02	10	150	380	15,00	90	4,780	3,210
102	4	128	5,04	10	150	510	20,00	90	6,340	4,260
152	6	180	7,09	10	150	760	30,00	80	10,550	7,090

NA | LA | NEU | EMEA | SA | AP | AU

906AA

Roof drain 10 bar (150 psi)

Tube: Black conductive NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black conductive NBR- abrasion, ozone and hydrocarbon resistant
Use: Rain water drainage in floating petrochemical storage tank roofs. 80% max aromatic content resistance
Also available:
• 905AA 100% aromatic
Available with swaged fittings
Safety factor: 3:1
Temperature: -20 °C +82 °C (-4 °F +180 °F)

RIG SUPPLY

HOSE

FITTINGS

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
76	3	94	3,70	10	150				2,760	1,855
102	4	120	4,72	10	150				3,740	2,515
127	5	145	5,71	10	150				4,630	3,115
152	6	170	6,69	10	150				5,510	3,705

NA | LA | NEU | EMEA | SA | AP | AU

DNV

642AA

Rig supply soft wall fuel-liquid mud 10 bar (150 psi)

Tube: Black conductive NBR
Reinforcement: High tensile textile cords
Cover: Black conductive CR - abrasion, ozone, hydrocarbon and fire resistant
Use: Fuel, oil and liquid mud transfer from supply vessels to offshore platforms. Also suitable for sea water pumping and barite transfer
Safety factor: 4:1
Temperature: -30 °C +70 °C (-22 °F +158 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
76	3	94	3,70	16	240				2,590	1,745
102	4	120	4,72	16	240				3,380	2,275

NA | LA | NEU | EMEA | SA | AP | AU

DNV

646AA

Rig supply soft wall fuel-liquid mud 16 bar (240 psi) end load resistance 6.000 kg

Tube: Black conductive NBR
Reinforcement: High tensile textile cords
Cover: Black conductive CR - abrasion, ozone, hydrocarbon and fire resistant
Use: Fuel, oil and liquid mud transfer from supply vessels to offshore platforms. Also suitable for sea water pumping and barite transfer. Specially designed for reeling applications and weak link couplings use. Max utilized load 4.000 kg
Safety factor: 4:1
Temperature: -30 °C +70 °C (-22 °F +158 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
76	3	94	3,70	20	300				2,590	1,745
102	4	120	4,72	20	300				3,520	2,370

NA | LA | NEU | EMEA | SA | AP | AU

DNV

648AA

Rig supply soft wall fuel-liquid mud 20 bar (300 psi) end load resistance 8.000 kg

Tube: Black conductive NBR
Reinforcement: High tensile textile cords
Cover: Black conductive CR - abrasion, ozone, hydrocarbon and fire resistant
Use: Fuel, oil and liquid mud transfer from supply vessels to offshore platforms. Also suitable for sea water pumping and barite transfer. Specially designed for reeling applications and weak link couplings use Max utilized load 5.333 kg
Safety factor: 4:1
Temperature: -30 °C +70 °C (-22 °F +158 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
76	3	100	3,94	40	600				3,910	2,630
102	4	126	4,96	35	525				4,700	3,160

NA | LA | NEU | EMEA | SA | AP | AU

DNV

652AA

Rig supply soft wall fuel-liquid mud end load resistance 10.000 kg

Tube: Black conductive NBR
Reinforcement: High tensile textile cords
Cover: Black conductive CR - abrasion, ozone, hydrocarbon and fire resistant
Use: Fuel, oil and liquid mud transfer from supply vessels to offshore platforms. Also suitable for sea water pumping and barite transfer. Specially designed for reeling applications and weak link couplings use Max utilized load 6.667 kg
Safety factor: 4:1
Temperature: -30 °C +70 °C (-22 °F +158 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
76	3	92	3,62	16	240	380	15,00	90	3,300	2,220
102	4	120	4,72	16	240	510	20,00	90	4,840	3,255
127	5	147	5,79	10	150	635	25,00	80	6,930	4,660
152	6	172	6,77	10	150	760	30,00	80	8,240	5,540

NA | LA | NEU | EMEA | SA | AP | AU

DNV

615AA

Rig supply hard wall fuel-liquid mud

Tube: Black conductive NBR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black conductive CR - abrasion, ozone, hydrocarbon and fire resistant
Use: Fuel, oil and liquid mud transfer from supply vessels to offshore platforms. Also suitable for sea water pumping and barite transfer
Safety factor: 4:1
Temperature: -30 °C +70 °C (-22 °F +158 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
102	4	122	4,80	10	150				3,950	2,655
127	5	147	5,79	10	150				4,870	3,275

NA	LA	NEU	EMEA	SA	AP	AU

DNV

742AA

Rig supply soft wall bulk material 10 bar (150 psi)

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Bulk material, barite and dry cement transfer from supply vessels to offshore platforms
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
102	4	122	4,80	20	300				4,150	2,790
127	5	151	5,94	20	300				5,120	3,445

NA	LA	NEU	EMEA	SA	AP	AU

DNV

748AA

Rig supply soft wall bulk material 20 bar (300 psi) end load resistance 8.000 kg

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Bulk material, barite and dry cement transfer from supply vessels to offshore platforms.
Specially designed for reeling applications and weak link couplings use Max utilized load 5.333 kg
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
102	4	122	4,80	10	150	408	16,00	90	4,770	3,210
127	5	149	5,87	10	150	635	25,00	80	6,940	4,665

NA	LA	NEU	EMEA	SA	AP	AU

DNV

715AA

Rig supply hard wall bulk material 10 bar (150 psi)

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Bulk material, barite and dry cement transfer from supply vessels to offshore platforms
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
152	6	188	7,40	10	150			80	17,770	11,945

NA	LA	NEU	EMEA	SA	AP	AU

DNV

727AA

Drilling waste - hard wall 10 bar (150 psi) end load resistance 26.000 kg

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords with embedded steel helix wire - boot straps
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Dumpline for drill cuttings containing sand, sea water and abrasive material. Also suitable for barite transfer.
Heavy duty construction and high end load resistance.
Not to be used with oil based mud
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
76	3	94	3,70	10	150				2,890	1,945
102	4	120	4,72	10	150				3,910	2,630

NA | LA | NEU | EMEA | SA | AP | AU

DNV

442LI

Rig supply soft wall potable water 10 bar (150 psi) FDA

Tube: White NR
Reinforcement: High tensile textile cords
Cover: Orange NBR/PVC - abrasion, ozone and hydrocarbon resistant
Use: Potable water transfer from supply vessels to offshore platforms. Sterilize with 5% soda solution
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
102	4	120	4,72	20	300				4,230	2,845

NA | LA | NEU | EMEA | SA | AP | AU

DNV

448LI

Rig supply soft wall potable water 20 bar (300 psi) end load resistance 8.000 kg FDA

Tube: White NR
Reinforcement: High tensile textile cords
Cover: Orange NBR/PVC - abrasion, ozone and hydrocarbon resistant
Use: Potable water transfer from supply vessels to offshore platforms. Specially designed for reeling applications and weak link couplings use. Sterilize with 5% soda solution
Max utilized load 5.333 kg
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
76	3	92	3,62	10	150	304	12,00	90	3,690	2,480
102	4	120	4,72	10	150	408	16,00	90	4,860	3,270

NA | LA | NEU | EMEA | SA | AP | AU

DNV

415LI

Rig supply hard wall potable water 10 bar (150 psi) FDA

Tube: White NR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Orange NBR/PVC - abrasion, ozone and hydrocarbon resistant
Use: Potable water transfer from supply vessel to offshore platforms. Sterilize with 5% soda solution
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	23	0,91	20	300				0,350	0,235
19	3/4	31	1,22	20	300				0,580	0,390
25	1	37	1,46	20	300				0,730	0,495
38	1 1/2	52	2,05	20	300				1,070	0,720
51	2	67	2,64	20	300				1,880	1,265
76	3	94	3,70	20	300				2,800	1,885

NA | LA | **NEU** | **EMEA** | SA | **AP** | **AU**

953AE

General purpose 20 bar (300 psi) - EPDM

Tube: Black EPDM
Reinforcement: High tensile textile cords
Cover: Blue EPDM - abrasion and ozone resistant
Use: Air, water and mild chemicals delivery
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

MINING

HOSE

FITTINGS

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	23	0,91	20	300				0,420	0,285
19	3/4	31	1,22	20	300				0,690	0,465
25	1	37	1,46	20	300				0,850	0,575
38	1 1/2	52	2,05	20	300				1,250	0,845
51	2	67	2,64	20	300				2,140	1,440

NA	LA	NEU	EMEA	SA	AP	AU
		■	■			■

151AA

Compressed air 20 bar (300 psi) heavy duty mining

Tube: Black SBR/NBR - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Black SBR - abrasion and ozone resistant
Use: Compressed air designed for heavy duty mining applications
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	23	0,91	20	300				0,430	0,290
19	3/4	31	1,22	20	300				0,700	0,475
25	1	37	1,46	20	300				0,860	0,580
38	1 1/2	52	2,05	20	300				1,260	0,850
51	2	67	2,64	20	300				1,930	1,300

NA	LA	NEU	EMEA	SA	AP	AU
			■			■

151AK

Compressed air 20 bar (300 psi) heavy duty mining

Tube: Black SBR/NBR - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Yellow SBR - abrasion and ozone resistant
Use: Compressed air designed for heavy duty mining applications
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	31	1,22	27	400	190	7,50		0,670	0,455
25	1	37	1,46	27	400	250	10,00		0,850	0,575
32	1 1/4	46	1,81	27	400	320	12,50		1,120	0,755
38	1 1/2	52	2,05	27	400	380	15,00		1,280	0,865
51	2	67	2,64	27	400	510	20,00		2,230	1,500

NA	LA	NEU	EMEA	SA	AP	AU
	■	■	■	■	■	

157AA

Compressed air 27 bar (400 psi) heavy duty mining

Tube: Black SBR/NBR - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Black SBR/NBR - oil, abrasion and ozone resistant
Use: Compressed air designed for heavy duty mining applications
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	29	1,14	27	400	190	7,50		0,560	0,380
25	1	35	1,38	27	400	250	10,00		0,710	0,480
32	1 1/4	44	1,73	27	400	320	12,50		0,920	0,620
38	1 1/2	50	1,97	27	400	380	15,00		1,050	0,710
51	2	65	2,56	27	400	510	20,00		1,690	1,140

NA	LA	NEU	EMEA	SA	AP	AU
■	■			■	■	

157AK

Compressed air 27 bar (400 psi) heavy duty mining

Tube: Black SBR/NBR - oil mist resistant
Reinforcement: High tensile textile cords
Cover: Yellow SBR - abrasion and ozone resistant
Use: Compressed air designed for heavy duty mining applications
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	21	0,83	20	300	104	4,00		0,275	0,185
19	3/4	29	1,14	20	300	152	6,00		0,485	0,330
25	1	35	1,38	35	525	200	8,00		0,565	0,380

NA	LA	NEU	EMEA	SA	AP	AU
						■

189AK

Air-water delivery - PVC - FRAS AS 2660/A AS/NZS 2554/A

Tube: Black antistatic PVC
Reinforcement: High tensile textile cords
Cover: Yellow ribbed PVC with longitudinal antistatic stripes - abrasion and ozone resistant
Use: Compressed air in underground mining applications. Specially designed for roof bolting applications
Safety factor: <= 19 mm 3,5:1 25 mm 2:1
Temperature: -5 °C +60 °C (-23 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	29	1,14	70	1000	95	3,75		0,700	0,475
25	1	35	1,38	70	1000	125	5,00		0,910	0,615
32	1 1/4	42	1,65	70	1000	160	6,25		1,190	0,800
38	1 1/2	50	1,97	70	1000	190	7,50		1,830	1,230
51	2	65	2,56	70	1000	255	10,00		2,300	1,550

NA | LA | NEU | EMEA | SA | AP | AU

MSHA

136AK

Compressed air-water 70 bar (1000 psi) steel reinforced

Tube: Black SBR/NBR - oil mist resistant
Reinforcement: High tensile steel cords
Cover: Yellow SBR/NBR - abrasion, ozone, hydrocarbon and flame resistant - pin pricked
Use: High pressure compressed air and water in heavy duty mining where long service life and maximum safety is required.
Ideal for water spraying in mining dust control operation
Safety factor: <= 51 mm 4:1 >= 63 mm 3:1
Temperature: -30 °C +90 °C (-22 °F +200 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
38	1 1/2	52	2,05	70	1000	190	7,50		1,450	0,975
51	2	65	2,56	70	1000	255	10,00		2,170	1,460
63	2 1/2	83	3,27	70	1000	315	12,50		3,790	2,550
76	3	96	3,78	40	600	380	15,00		3,470	2,335
102	4	122	4,80	40	600	510	20,00		5,150	3,465

NA | LA | NEU | EMEA | SA | AP | AU

131AA

Compressed air 70 bar (1000 psi) steel reinforced - FRAS exceeds AS 2660/B

Tube: Black conductive SBR/NBR - oil mist resistant
Reinforcement: High tensile steel cords
Cover: Black conductive SBR - abrasion, ozone and fire resistant
Use: High pressure compressed air and water in heavy duty "long wall" mining where long service life and maximum safety is required
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
63	2 1/2	86	3,39	100	1500	760	30,00		5,230	3,510
63	2 1/2	93	3,66	100	1500	760	30,00		6,650	4,470
76	3	100	3,94	100	1500	910	36,00		6,700	4,500
76	3	105	4,13	100	1500	910	36,00		7,780	5,230

NA | LA | NEU | EMEA | SA | AP | AU

170AA

Compressed air 100 bar (1500 psi) steel braided

Tube: Black NBR
Reinforcement: High tensile steel braids
Cover: Black CR/SBR - abrasion, ozone and hydrocarbon resistant
Use: Heavy duty high pressure compressed air.
Specially designed for mobile drilling rigs
Safety factor: 4:1
Temperature: -40 °C +90 °C (-40 °F +200 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
105	4	113	4,45	14	200				1,740	1,170
157	6	167	6,57	10	150				3,300	2,220
208	8	220	8,66	10	150				5,140	3,455

NA | LA | NEU | EMEA | SA | AP | **AU**

289GG

Mine dewatering - PVC - lay flat

Tube: Green PVC
Reinforcement: High tensile textile cords
Cover: Green PVC - abrasion, ozone and cut resistant
Use: Lay flat water discharge for heavy duty applications. Specially designed for mine and construction sites dewatering. High end load resistance
Safety factor: 4:1
Temperature: -10 °C +60 °C (+14 °F +140 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	23	0,91	20	300	78	3,00		0,390	0,265
19	3/4	31	1,22	20	300	114	4,50		0,520	0,350
25	1	37	1,46	20	300	150	6,00		0,660	0,445
32	1 1/4	46	1,81	20	300	192	7,50		1,000	0,675
38	1 1/2	52	2,05	20	300	228	9,00		1,140	0,770
51	2	67	2,64	20	300	306	12,00		1,720	1,160
63	2 1/2	79	3,11	20	300	378	15,00		2,180	1,470
76	3	92	3,62	20	300	456	18,00		2,520	1,695
102	4	118	4,65	20	300	612	24,00		3,380	2,275

NA | LA | NEU | EMEA | SA | AP | **AU**

240AA

Air-water delivery 20 bar (300 psi) - FRAS exceeds AS 2660/B

Tube: Black conductive SBR/NR
Reinforcement: High tensile textile cords
Cover: Black conductive SBR - abrasion, ozone and fire resistant
Use: Air, water and stone dust delivery in underground mines
Safety factor: <= 63 mm 4:1 76 mm-102 mm 3,5:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	23	0,91	35	525	78	3,00		0,390	0,265
19	3/4	31	1,22	35	525	114	4,50		0,520	0,350
25	1	37	1,46	35	525	150	6,00		0,660	0,445

NA | LA | NEU | EMEA | SA | AP | **AU**

241AA

Air-water delivery 35 bar (525 psi) AS 2660/B

Tube: Black conductive SBR/NR
Reinforcement: High tensile textile cords
Cover: Black conductive SBR - abrasion, ozone and fire resistant
Use: Air, water and stone dust delivery in underground mines
Safety factor: 2,5:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	61	2,40	10	150	204	8,00	100	1,190	0,800
76	3	88	3,46	10	150	304	12,00	90	2,260	1,520
102	4	116	4,57	10	150	408	16,00	90	3,490	2,350
152	6	170	6,69	10	150	760	30,00	80	6,620	4,450

NA | LA | NEU | EMEA | SA | AP | **AU**

225AA

General purpose S&D 10 bar (150 psi) - FRAS exceeds AS 2660/C

Tube: Black conductive SBR/NR
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black conductive SBR - abrasion, ozone and fire resistant
Use: Water and stone dust suction and delivery.
Also suitable for methane drainage/extraction in underground coal mines
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	73	2,87	27	400			60	2,350	1,580

NA | LA | NEU | EMEA | SA | AP | **AU**

245AA

General purpose delivery & light suction 27 bar (400 psi) - crush resistant - FRAS exceeds AS 2660/B

Tube: Black conductive SBR/NR
Reinforcement: High tensile textile braids
Cover: Black conductive SBR - abrasion, ozone and fire resistant
Use: Air and water delivery-light suction.
Special heavy wall braided construction for vacuum, crush and kink resistance.
Ideal for methane drainage/extraction in underground coal mines.
Vacuum resistance 60%
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
38	1 1/2	62	2,44	14	200				2,210	1,490
51	2	75	2,95	14	200				2,840	1,910

NA | LA | NEU | EMEA | SA | AP | **AU**

756AA

Gunite 14 bar (200 psi) - FRAS exceeds AS 2660/C

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords
Cover: Black conductive SBR - abrasion, ozone and fire resistant
Use: Gunite
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
32	1 1/4	46	1,81	7	100				0,920	0,620
38	1 1/2	52	2,05	7	100				1,070	0,720
51	2	65	2,56	7	100				1,410	0,950

NA | LA | NEU | EMEA | SA | AP | **AU**

765AA

Stone dust 7 bar (100 psi) - FRAS AS 2660/C

Tube: Black conductive SBR/NR - abrasion resistant
Reinforcement: High tensile textile cords
Cover: Black conductive SBR - abrasion, ozone and fire resistant
Use: "Stone dusting" in underground mines.
Also suitable for air and water delivery
Safety factor: 4:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	69	2,72	10	150	204	8,00	90	2,090	1,405
76	3	98	3,86	10	150	304	12,00	90	3,880	2,610
102	4	124	4,88	10	150	408	16,00	90	5,230	3,515
152	6	178	7,01	10	150	760	30,00	80	9,070	6,100
203	8	237	9,33	10	150	1015	40,00	70	15,350	10,320
254	10	292	11,50	10	150	1270	50,00	70	23,530	15,815

NA | **LA** | **NEU** | EMEA | **SA** | **AP** | **AU**

707AA

Abrasive slurry S&D 10 bar (150 psi) muff couplings

Tube: Black conductive NR
Abrasion resistance 50 mm³ (ISO 4649/A)
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Bulk material and abrasive slurries suction and delivery in heavy duty mining. Designed for muff coupling use
Safety factor: <= 127 mm 3:1 >152 mm 2,5:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
76	3	102	4,02	10	150	304	12,00	90	4,600	3,095
102	4	128	5,04	10	150	408	16,00	90	6,130	4,120
127	5	159	6,26	10	150	635	25,00	80	9,020	6,065
152	6	184	7,24	10	150	760	30,00	80	10,970	7,375
203	8	235	9,25	10	150	1015	40,00	70	14,510	9,755
254	10	286	11,26	10	150	1270	50,00	60	20,480	13,765
300	12	344	13,54	10	150	1500	60,00	60	32,730	22,000

NA | **LA** | NEU | EMEA | **SA** | **AP** | **AU**

706AA

Abrasive slurry S&D 10 bar (150 psi) muff couplings

Tube: Black conductive NR
Abrasion resistance 50 mm³ (ISO 4649/A)
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Bulk material and abrasive slurries suction and delivery in heavy duty mining. Designed for muff coupling use
Safety factor: <= 127 mm 3:1 >152 mm 2,5:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	77	3,03	35	525	204	8,00	100	3,020	2,030
76	3	106	4,17	35	525	304	12,00	90	4,890	3,290
102	4	134	5,28	35	525	408	16,00	90	7,250	4,875

NA	LA	NEU	EMEA	SA	AP	AU
NA	**LA**	NEU	EMEA	**SA**	**AP**	**AU**

776AA

Mineral sampling 35 bar (525 psi)

Tube: Black conductive NR - abrasion resistant
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Mineral recovery in sampling operations
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
76	3	106	4,17	35	525	304	12,00	90	4,850	3,260

NA	LA	NEU	EMEA	SA	AP	AU
NA	LA	NEU	EMEA	SA	AP	**AU**

776HA

Mineral sampling 35 bar (525 psi)

Tube: Red NR - abrasion resistant
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Mineral recovery in sampling operations
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	61	2,4	5	75	204	8,00	90	1,180	0,795
63	2 1/2	75	2,95	5	75	252	10,00	90	1,850	1,245
76	3	90	3,54	5	75	304	12,00	90	2,550	1,715
102	4	116	4,57	5	75	408	16,00	90	3,560	2,395
115	4 1/2	129	5,08	5	75	460	18,00	90	4,050	2,725
127	5	141	5,55	5	75	635	25,00	80	4,680	3,150
152	6	166	6,54	5	75	760	30,00	80	5,550	3,730

NA	LA	NEU	EMEA	SA	AP	AU
NA	LA	**NEU**	**EMEA**	SA	AP	**AU**

714HA

Drill cutting suction 5 bar (75 psi) - corrugated

Tube: Red NR - abrasion resistant
Reinforcement: High tensile textile cords with embedded steel helix wire - antistatic wire
Cover: Black conductive SBR/NR - abrasion and ozone resistant
Use: Bulk material suction and delivery.
Specially designed for drill cutting suction in mobile drilling rigs.
Corrugated construction for maximum flexibility
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
19	3/4	25	0,98						0,200	0,135

NA | LA | NEU | EMEA | SA | AP | **AU**

660AA

Nitro blast loading
AS 2187.2

Tube: Black conductive NBR - abrasion resistant
Reinforcement: High tensile textile fabric
Cover: Black conductive CR - abrasion, ozone, hydrocarbon and fire resistant
Use: Explosive loading in blasting holes
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
51	2	71	2,80	20	300	255	10,00	70	2,840	1,910
63	2 1/2	83	3,27	20	300	315	12,50	70	3,320	2,230

NA | **LA** | NEU | EMEA | **SA** | **AP** | **AU**

612AA

Nitro blast handling 20 bar (300 psi)

Tube: Black conductive NBR - abrasion resistant
Reinforcement: High tensile textile cords with embedded steel helix wire
Cover: Black conductive CR - abrasion, ozone, hydrocarbon and fire resistant
Use: Explosive handling in mobile delivery units.
Specially designed for heavy duty reeling applications
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

mm	inch	mm	inch	bar	psi	mm	inch	%	kg/m	lb/ft
13	1/2	21	0,83	5	75				0,250	0,170
16	5/8	24	0,94	5	75				0,290	0,195
19	3/4	29	1,14	5	75				0,420	0,280
25	1	35	1,38	5	75				0,520	0,350
32	1 1/4	42	1,65	5	75				0,650	0,440
38	1 1/2	48	1,89	5	75				0,750	0,500
45	1 3/4	55	2,17	5	75				0,870	0,580
51	2	61	2,40	5	75				0,980	0,660

NA | LA | NEU | EMEA | SA | AP | **AU**

964AA

Cable protection - FRAS
AS 1802 AS 2660

Tube: Black conductive SBR/NR
Reinforcement: High tensile textile cords
Cover: Black conductive SBR - abrasion, ozone and fire resistant
Use: Cable protection in underground mines.
Also suitable for light duty air and water delivery max 5 bar (75 psi)
Safety factor: 3:1
Temperature: -30 °C +80 °C (-22 °F +176 °F)

FITTINGS

EXPRESS (NF E 29.573)

Hose Shank - Gasket Included

Item Code	Part Number	Hose ID in	Hose ID mm	Claw Distance Internal mm	Claw Distance External mm	Material
2300699	I819E300-010041	3/8	10	41	57	BRASS
2300701	I819E300-013041	1/2	13	41	57	BRASS
2300702	I819E300-016041	5/8	16	41	57	BRASS
2300703	I819E300-019041	3/4	19	41	57	BRASS
2300704	I819E300-025041	1	25	41	57	BRASS

TO ASSEMBLY THE INSERT WITH **CRIMPING RING**, CONSULT CHAPTER “CLAMPS & FERRULES”

EXPRESS (NF E 29.573)

Male BSP - Gasket Included

Item Code	Part Number	Thread in	Thread type	Claw Distance Internal mm	Claw Distance External mm	Material
2300334	I8A9E206-041017	3/8	BSP	41	57	BRASS
2300335	I8A9E206-041021	1/2	BSP	41	57	BRASS
2300336	I8A9E206-041027	3/4	BSP	41	57	BRASS
2300337	I8A9E206-041034	1	BSP	41	57	BRASS

EXPRESS (NF E 29.573)

Female BSP - Gasket Included

Item Code	Part Number	Thread in	Thread type	Claw Distance Internal mm	Claw Distance External mm	Material
2300340	I8A9E306-041017	3/8	BSP	41	57	BRASS
2300341	I8A9E306-041021	1/2	BSP	41	57	BRASS
2300342	I8A9E306-041027	3/4	BSP	41	57	BRASS
2300343	I8A9E306-041034	1	BSP	41	57	BRASS

EXPRESS (NF E 29.573)

Blank cap

Item Code	Part Number	Claw Distance Internal mm	Claw Distance External mm	Material
2301099	I8A9E400-041000	41	57	BRASS

EXPRESS (NF E 29.573)

Gasket

Item Code	Part Number	Material
2301807	INJM9E-041	NBR

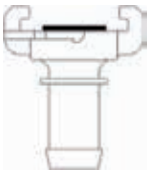
EXPRESS (NF E 29.573)

Clamps - 2 Gripping Finger Type

Item Code	Part Number	Hose ID in	Hose ID mm	Hose OD min mm	Hose OD max mm	Material
2302138	I1LG2E-013020	1/2	13	19	21	PLATED STEEL
2302139	I1LG2E-016026	5/8	16	25	27	PLATED STEEL
2302140	I1LG2E-019029	3/4	19	28	30	PLATED STEEL
2302141	I1LG2E-025035	1	25	34	36	PLATED STEEL

TYPE A CLAW COUPLING (EUROPEAN TYPE)

Hose shank with safety collar - Gasket Included



Australian version

Item Code	Part Number	Hose ID in	Hose ID mm	Claw Distance Internal mm	Claw Distance External mm	Material
2303049	I919L300-010042	3/8	10	42	63	MALLEABLE IRON
2302816	I919L300-013042	1/2	13	42	63	MALLEABLE IRON
2302069	I919L300-019042	3/4	19	42	63	MALLEABLE IRON
2302817	I919L300-025042	1	25	42	63	MALLEABLE IRON
2304840	I919L300-032042	1 1/4	32*	42	63	MALLEABLE IRON

Australian version - PLATED STEEL
* Without safety collar

TO ASSEMBLY THE INSERT WITH **CRIMPING RING**, CONSULT CHAPTER “CLAMPS & FERRULES”

TYPE A CLAW COUPLING (EUROPEAN TYPE)

Male BSPT (DIN 3489-Formerly DIN 3481) - Gasket Included

Item Code	Part Number	Thread in	Thread type	Claw Distance Internal mm	Claw Distance External mm	Material
2303050	I9A9L206-042017	3/8	BSPT	42	63	MALLEABLE IRON
2302074	I9A9L206-042021	1/2	BSPT	42	63	MALLEABLE IRON
2302075	I9A9L206-042027	3/4	BSPT	42	63	MALLEABLE IRON
2302825	I9A9L206-042034	1	BSPT	42	63	MALLEABLE IRON
2304842	I9A9L206-042042	1 1/4	BSPT	42	63	MALLEABLE IRON

Australian version - PLATED STEEL

TYPE A CLAW COUPLING (EUROPEAN TYPE)

Female BSP (DIN 3489-Formerly DIN 3482) - Gasket Included

Item Code	Part Number	Thread in	Thread type	Claw Distance Internal mm	Claw Distance External mm	Material
2303051	I9A9L306-042017	3/8	BSP	42	63	MALLEABLE IRON
2302826	I9A9L306-042021	1/2	BSP	42	63	MALLEABLE IRON
2302076	I9A9L306-042027	3/4	BSP	42	63	MALLEABLE IRON
2302827	I9A9L306-042034	1	BSP	42	63	MALLEABLE IRON
2304841	I9A9L306-042042	1 1/4	BSPT	42	63	MALLEABLE IRON

Australian version - PLATED STEEL

TYPE A CLAW COUPLING (EUROPEAN TYPE)

Hose Mender DIN 20038 - Hose shank without safety collar

Item Code	Part Number	Hose ID in	Hose ID mm	Material
2305004		3/8	10	PLATED STEEL
2305001		1/2	13	PLATED STEEL
2305005		5/8	16	PLATED STEEL
2305003		3/4	19	PLATED STEEL
2305000		1	25	PLATED STEEL
2304999		1 1/4	32	PLATED STEEL
2304998		1 1/2	38	PLATED STEEL
2305002		2	51	PLATED STEEL

TO ASSEMBLY THE HOSE MENDERS, USE CLAMP DIN 20039 A “DOUBLE BOLT CLAMP WITH TWO SADDLE - DIN 20039 A”: CONSULT CHAPTER “CLAMPS & FERRULES”

TYPE A CLAW COUPLING (EUROPEAN TYPE)

Three way connector - Gasket Included

Australian version

Item Code	Part Number	Claw Distance Internal mm	Claw Distance External mm	Material
2303054	I9Y9L001	42	63	MALLEABLE IRON

Australian version - PLATED STEEL

TYPE A CLAW COUPLING (EUROPEAN TYPE)

Blank cap

Item Code	Part Number	Claw Distance Internal mm	Claw Distance External mm	Material
2303055	I9A9L400-042000	42	63	MALLEABLE IRON

TYPE A CLAW COUPLING (EUROPEAN TYPE)

Gasket

Item Code	Part Number	Material
2303056	INJM9L-042	NBR
2304439	IOJM9L-042	OHASIL

TYPE A CLAW COUPLING (EUROPEAN TYPE)

Claw clamps - DIN 20 039 B

Item Code	Part Number	Hose ID in	Hose ID mm	Hose OD min mm	Hose OD max mm	Material
2302828	I9LG2A-013026	1/2	13	22	29	MALLEABLE IRON
2302829	I9LG2A-019030	3/4	19	28	32	MALLEABLE IRON
2302830	I9LG2A-025039	1	25	35	42	MALLEABLE IRON
2303974	I9LG2A-035049	1 3/8	35	45	53	MALLEABLE IRON

TYPE B CLAW COUPLING (U.S. TYPE)

Hose shank - Gasket Included

Item Code	Part Number	Hose ID in	Hose ID mm	Claw Distance Internal mm	Claw Distance External mm	Material	Note
2303335	I919K300-010041	3/8	10	41	62	MALLEABLE IRON	
2302919	I919K300-013041	1/2	13	41	62	MALLEABLE IRON	
2302920	I919K300-019041	3/4	19	41	62	MALLEABLE IRON	
2302921	I919K300-025041	1	25	41	62	MALLEABLE IRON	
2303366	I919K300-032041	1 1/4	32	41	62	MALLEABLE IRON	4 LUG TYPE
2303367	I919K300-038041	1 1/2	38	41	62	MALLEABLE IRON	4 LUG TYPE
2303368	I919K300-051041	2	51	41	62	MALLEABLE IRON	4 LUG TYPE

TO ASSEMBLY THE INSERT WITH **CRIMPING RING**, CONSULT CHAPTER “CLAMPS & FERRULES”

TYPE B CLAW COUPLING (U.S. TYPE)

Male NPT - Gasket Included

Item Code	Part Number	Thread in	Thread type	Claw Distance Internal mm	Claw Distance External mm	Material
2303344	I9A9K228-041013	1/4	NPT	41	62	MALLEABLE IRON
2303345	I9A9K228-041017	3/8	NPT	41	62	MALLEABLE IRON
2302922	I9A9K228-041021	1/2	NPT	41	62	MALLEABLE IRON
2302923	I9A9K228-041027	3/4	NPT	41	62	MALLEABLE IRON
2302924	I9A9K228-041034	1	NPT	41	62	MALLEABLE IRON

TYPE B CLAW COUPLING (U.S. TYPE)

Female NPT - Gasket Included

Item Code	Part Number	Thread in	Thread type	Claw Distance Internal mm	Claw Distance External mm	Material	Note
2303354	I9A9K328-041013	1/4	NPT	41	62	MALLEABLE IRON	
2303355	I9A9K328-041017	3/8	NPT	41	62	MALLEABLE IRON	
2302925	I9A9K328-041021	1/2	NPT	41	62	MALLEABLE IRON	
2302926	I9A9K328-041027	3/4	NPT	41	62	MALLEABLE IRON	
2302927	I9A9K328-041034	1	NPT	41	62	MALLEABLE IRON	
2303372	I9A9K328-041042	1 1/4	NPT	41	62	MALLEABLE IRON	4 LUG TYPE
2303373	I9A9K328-041049	1 1/2	NPT	41	62	MALLEABLE IRON	4 LUG TYPE
2303374	I9A9K328-041060	2	NPT	41	62	MALLEABLE IRON	4 LUG TYPE

TYPE B CLAW COUPLING (U.S. TYPE)

Three way connector - Gasket Included

Item Code	Part Number	Claw Distance Internal mm	Claw Distance External mm	Material
I9Y9K003*	2303052	41	62	MALLEABLE IRON

TYPE B CLAW COUPLING (U.S. TYPE)

Blank cap

Item Code	Part Number	Claw Distance Internal mm	Claw Distance External mm	Material
2303362	I9A9K400-041000	41	62	MALLEABLE IRON

TYPE B CLAW COUPLING (U.S. TYPE)

Gasket

Item Code	Part Number	Material
2303379	INJM9K-041	NBR

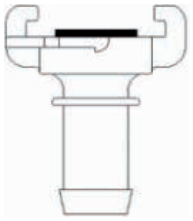
TYPE B CLAW COUPLING (U.S. TYPE)

Claw clamps

Item Code	Part Number	Hose ID in	Hose ID mm	Hose OD min mm	Hose OD max mm	Material
2304357		3/8	10	17,5	22,2	MALLEABLE IRON
2305068	I9LG2B-013027	1/2	13	21,0	27,0	MALLEABLE IRON
2302928	I9LG2B-013028	1/2	13	25,0	30,0	MALLEABLE IRON
2302929	I9LG2B-019031	3/4	19	30,0	33,0	MALLEABLE IRON
2304358		1	25	33,0	38,0	MALLEABLE IRON
2302930	I9LG2B-025042	1	25	35,0	45,0	MALLEABLE IRON

TYPE S CLAW COUPLING (AUSTRALIAN TYPE)

Hose shank - Gasket Included

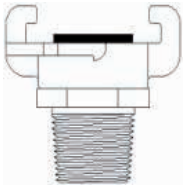


AU

Item Code	Part Number	Hose ID in	Hose ID mm	Claw Distance Internal mm	Claw Distance External mm	Material
2303057	I919N300-010045	3/8	10	45	68	PLATED STEEL
2302931	I919N300-013045	1/2	13	45	68	PLATED STEEL
2302932	I919N300-019045	3/4	19	45	68	PLATED STEEL
2302933	I919N300-025045	1	25	45	68	PLATED STEEL
2302934	I919N300-032045	1 1/4	32	45	68	PLATED STEEL
2302935	I919N300-038074	1 1/2	38	74	115	PLATED STEEL
2302936	I919N300-051074	2	51	74	115	PLATED STEEL
2302937	I919N300-076117	3	76	117	174	PLATED STEEL

TYPE S CLAW COUPLING (AUSTRALIAN TYPE)

Male BSPT - Gasket Included

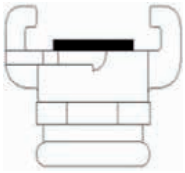


AU

Item Code	Part Number	Thread in	Thread type	Claw Distance Internal mm	Claw Distance External mm	Material
2303058	I9A9N207-045017	3/8	BSPT	45	68	PLATED STEEL
2302938	I9A9N207-045021	1/2	BSPT	45	68	PLATED STEEL
2302939	I9A9N207-045027	3/4	BSPT	45	68	PLATED STEEL
2302940	I9A9N207-045034	1	BSPT	45	68	PLATED STEEL
2302941	I9A9N207-045042	1 1/4	BSPT	45	68	PLATED STEEL
2302942	I9A9N207-074049	1 1/2	BSPT	74	115	PLATED STEEL
2302943	I9A9N207-074060	2	BSPT	74	115	PLATED STEEL
2302944	I9A9N207-117090	3	BSPT	117	174	PLATED STEEL

TYPE S CLAW COUPLING (AUSTRALIAN TYPE)

Female BSP - Gasket Included

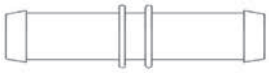


AU

Item Code	Part Number	Thread in	Thread type	Claw Distance Internal mm	Claw Distance External mm	Material
2303059	I9A9N306-045017	3/8	BSP	45	68	PLATED STEEL
2302945	I9A9N306-045021	1/2	BSP	45	68	PLATED STEEL
2302946	I9A9N306-045027	3/4	BSP	45	68	PLATED STEEL
2302947	I9A9N306-045034	1	BSP	45	68	PLATED STEEL
2302948	I9A9N306-045042	1 1/4	BSP	45	68	PLATED STEEL
2302949	I9A9N306-074049	1 1/2	BSP	74	115	PLATED STEEL
2302950	I9A9N306-074060	2	BSP	74	115	PLATED STEEL
2302951	I9A9N306-117090	3	BSP	117	174	PLATED STEEL

TYPE S CLAW COUPLING (AUSTRALIAN TYPE)

Hose Mender - Hose shank for claw clamps

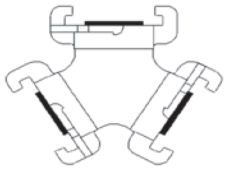


AU

Item Code	Part Number	Hose ID in	Hose ID mm	Material
2303062	I1156100-013013	1/2	13	PLATED STEEL
2303063	I1156100-019019	3/4	19	PLATED STEEL
2303064	I1156100-025025	1	25	PLATED STEEL
2303065	I1156100-038038	1 1/2	38	PLATED STEEL
2303066	I1156100-051051	2	51	PLATED STEEL
	I1156100-076076	3	76	PLATED STEEL

TYPE S CLAW COUPLING (AUSTRALIAN TYPE)

Three way connector - Gasket Included



AU

Item Code	Part Number	Claw Distance Internal mm	Claw Distance External mm	Material
2303060	I9Y9N001	45	68	PLATED STEEL
2303061	I9Y9N002	74	115	PLATED STEEL

TYPE S CLAW COUPLING (AUSTRALIAN TYPE)

Gasket

AU

Item Code	Part Number	Claw Distance Internal mm	Claw Distance External mm	Material
2303085	INJM9N-045	45	68	NBR
2303086	INJM9N-074	74	115	NBR
2306583	INJM9N-117	117	174	NBR

TYPE S CLAW COUPLING (AUSTRALIAN TYPE)

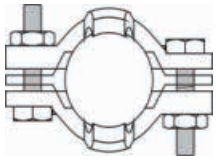
Safety pin

AU

Item Code	Part Number	Material
2303084	I1Y9N003	PLATED STEEL

TYPE S CLAW COUPLING (AUSTRALIAN TYPE)

Claw clamps



AU

Item Code	Part Number	Hose ID in	Hose ID mm	Hose OD min mm	Hose OD max mm	Material	Note
2303069	I1LG2M-013022	1/2	13	19	24	PLATED STEEL	
2303071	I1LG2M-013026	1/2	13	22	28	PLATED STEEL	
2303072	I1LG2M-019030	3/4	19	29	31	PLATED STEEL	
2303070	I1LG2M-025034	1	25	31	36	PLATED STEEL	
2303073	I1LG2M-025038	1	25	35	40	PLATED STEEL	
2303074	I1LG2M-038052	1 1/2	38	50	54	PLATED STEEL	
2303075	I1LG2M-051065	2	51	63	67	PLATED STEEL	
	I1LG2M-038Z52	1 1/2	38	50	54	PLATED STEEL	WITH SAFETY CHAIN
2303076	I1LG2M-051Z65	2	51	63	67	PLATED STEEL	WITH SAFETY CHAIN
2303077	I1LG2M-051Z68	2	51	66	70	PLATED STEEL	WITH SAFETY CHAIN

TYPE S CLAW COUPLING (AUSTRALIAN TYPE)

Serrated Ferrule

AU

Item Code	Part Number	Hose ID in	Hose ID mm	Hose OD min mm	Hose OD max mm	Material
2303078	I101U013-020023	1/2	13	20	23	PLATED STEEL
2303079	I101U019-029032	3/4	19	29	32	PLATED STEEL
2303080	I101U025-034038	1	25	34	38	PLATED STEEL
2303081	I101U032-044048	1 1/4	32	44	48	PLATED STEEL
2303082	I101U038-048054	1 1/2	38	48	54	PLATED STEEL
2303083	I101U051-062067	2	51	62	67	PLATED STEEL

GEKA

Hose Shank - Gasket Included

Item Code	Part Number	Hose ID in	Hose ID mm	Claw Distance Internal mm	Claw Distance External mm	Material
2304856		3/8	10	40	54	BRASS
2301796	I818A300-013040	1/2	13	40	54	BRASS
2304857		5/8	16	40	54	BRASS
2301797	I818A300-019040	3/4	19	40	54	BRASS
2301798	I818A300-025040	1	25	40	54	BRASS
2304859		1 1/4	32	40	54	BRASS
2304858		1 1/2	38	40	54	BRASS

TO ASSEMBLY THE INSERT WITH **CRIMPING RING**, CONSULT CHAPTER “CLAMPS & FERRULES”

GEKA

Male BSP - Gasket Included

Item Code	Part Number	Thread in	Thread type	Claw Distance Internal mm	Claw Distance External mm	Material
2305651		3/8	BSP	40	54	BRASS
2305648		1/2	BSP	40	54	BRASS
2305650		3/4	BSP	40	54	BRASS
2305647		1	BSP	40	54	BRASS
2305652		1 1/4	BSP	40	54	BRASS

GEKA

Female BSP - Gasket Included

Item Code	Part Number	Thread in	Thread type	Claw Distance Internal mm	Claw Distance External mm	Material
2305658		3/8	BSP	40	54	BRASS
2305654		1/2	BSP	40	54	BRASS
2305657		3/4	BSP	40	54	BRASS
2305653		1	BSP	40	54	BRASS
2305659		1 1/4	BSP	40	54	BRASS

GEKA

Blank cap

Item Code	Part Number	Claw Distance Internal mm	Claw Distance External mm	Material
2305660		40	54	BRASS

GEKA

Gasket

Item Code	Part Number	Material
2304440		NBR

TYPE B - BAUER COMPATIBLE

Male - Hose shank

Item Code	Part Number	Hose ID in	Hose ID mm	Coupling size mm	Material
2301799	I119B100-050050	2	50	50	PLATED STEEL
2302221	I119B100-076076	3	76	76	PLATED STEEL
2301800	I119B100-076089	3	76	89	PLATED STEEL
2301801	I119B100-102108	4	102	108	PLATED STEEL
2302268	I119B100-125133	5	125	133	PLATED STEEL
2301802	I119B100-152159	6	152	159	PLATED STEEL
2302269	I119B100-203194	8	203	194	PLATED STEEL

TYPE B - BAUER COMPATIBLE

Female - Hose shank - Gasket Included

Item Code	Part Number	Hose ID in	Hose ID mm	Coupling size mm	Material
2301803	I119B200-050050	2	50	50	PLATED STEEL
2302222	I119B200-076076	3	76	76	PLATED STEEL
2301804	I119B200-076089	3	76	89	PLATED STEEL
2301805	I119B200-102108	4	102	108	PLATED STEEL
2302270	I119B200-125133	5	125	133	PLATED STEEL
2301806	I119B200-152159	6	152	159	PLATED STEEL
2302271	I119B200-203194	8	203	194	PLATED STEEL

TYPE B - BAUER COMPATIBLE

Female - Hose shank heavy duty - Gasket not included

AU

Item Code	Part Number	Hose ID in	Hose ID mm	Coupling size mm	Material
2303120	I119B20H-102108	4	102	108	PLATED STEEL
2303121	I119B20H-152159	6	152	159	PLATED STEEL
2303122	I119B20H-203194	8	203	194	PLATED STEEL

TYPE B - BAUER COMPATIBLE

Male without closure lever - Hose shank

Item Code	Part Number	Hose ID in	Hose ID mm	Coupling size mm	Material
2303103	I11SB100-050050	2	50	50	PLATED STEEL
2303104	I11SB100-076076	3	76	76	PLATED STEEL
2303105	I11SB100-076089	3	76	89	PLATED STEEL
2303106	I11SB100-102108	4	102	108	PLATED STEEL
	I11SB100-125133	5	127	133	PLATED STEEL
2303107	I11SB100-152159	6	152	159	PLATED STEEL
2303108	I11SB100-203194	8	203	194	PLATED STEEL

TYPE B - BAUER COMPATIBLE

Male without closure lever - Hose shank heavy duty

AU

Item Code	Part Number	Hose ID in	Hose ID mm	Coupling size mm	Material
2303113	I11SB10H-102108	4	102	108	PLATED STEEL
2303114	I11SB10H-152159	6	152	159	PLATED STEEL
2303115	I11SB10H-203194	8	203	194	PLATED STEEL

TYPE B - BAUER COMPATIBLE

Closure lever

Item Code	Part Number	Coupling size mm	Material
2303127	I1Y9B050	50	PLATED STEEL
2303128	I1Y9B076	76	PLATED STEEL
2303129	I1Y9B089	89	PLATED STEEL
2303130	I1Y9B108	108	PLATED STEEL
2305904	I1Y9B133	133	PLATED STEEL
2303131	I1Y9B159	159	PLATED STEEL
2303132	I1Y9B194	194	PLATED STEEL

AU

Item Code	Part Number	Coupling size mm	Material
2303123	I0Y9B089	89	UNPLATED STEEL
2303124	I0Y9B108	108	UNPLATED STEEL
2303125	I0Y9B159	159	UNPLATED STEEL
2303126	I0Y9B194	194	UNPLATED STEEL

TYPE B - BAUER COMPATIBLE

Male without closure lever - Black weld on

AU

Item Code	Part Number	Coupling size mm	Material
2303095	I0BSB100-089	89	UNPLATED STEEL
2303096	I0BSB100-108	108	UNPLATED STEEL
2303097	I0BSB100-159	159	UNPLATED STEEL
2303098	I0BSB100-194	194	UNPLATED STEEL

TYPE B - BAUER COMPATIBLE

Female - Black weld on - Gasket included

AU

Item Code	Part Number	Coupling size mm	Material
2303087	I0B9B200-089	89	UNPLATED STEEL
2303088	I0B9B200-108	108	UNPLATED STEEL
2303089	I0B9B200-159	159	UNPLATED STEEL
2303090	I0B9B200-194	194	UNPLATED STEEL

TYPE B - BAUER COMPATIBLE

Male without closure lever - Male BSPT

Item Code	Part Number	Head DN mm	Thread in	Thread type	Material
2303139	I1ASB507-050060	50	2	BSPT	PLATED STEEL
2303140	I1ASB507-076090	76	3	BSPT	PLATED STEEL
2303141	I1ASB507-089090	89	3	BSPT	PLATED STEEL
2303142	I1ASB507-108114	108	4	BSPT	PLATED STEEL
2303143	I1ASB507-159165	159	6	BSPT	PLATED STEEL
2303144	I1ASB507-194219	194	8	BSPT	PLATED STEEL

TYPE B - BAUER COMPATIBLE

Female - Male BSPT - Gasket included

Item Code	Part Number	Head DN mm	Thread in	Thread type	Material
2303133	I1A9B007-050060	50	2	BSPT	PLATED STEEL
2303134	I1A9B007-076090	76	3	BSPT	PLATED STEEL
2303135	I1A9B007-089090	89	3	BSPT	PLATED STEEL
2303136	I1A9B007-108114	108	4	BSPT	PLATED STEEL
2303137	I1A9B007-159165	159	6	BSPT	PLATED STEEL
2303138	I1A9B007-194219	194	8	BSPT	PLATED STEEL

TYPE B - BAUER COMPATIBLE

Male - Fixed flange table D PN10

AU

Item Code	Part Number	Head DN mm	Flange type	Head size mm	Material
2303145	I1ABZ29B-102108	108	TABLE D - PN 10	102	PLATED STEEL
2303146	I1ABZ29B-152159	159	TABLE D - PN 10	152	PLATED STEEL
2303147	I1ABZ29B-203194	194	TABLE D - PN 10	203	PLATED STEEL

TYPE B - BAUER COMPATIBLE

Female - Fixed flange table D PN10 - Gasket included

AU

Item Code	Part Number	Head DN mm	Flange type	Head size mm	Material
2303148	I1ABZ39B-102108	108	TABLE D - PN 10	102	PLATED STEEL
2303149	I1ABZ39B-152159	159	TABLE D - PN 10	152	PLATED STEEL
2303150	I1ABZ39B-203194	194	TABLE D - PN 10	203	PLATED STEEL

TYPE B - BAUER COMPATIBLE

Gasket

Item Code	Part Number	Coupling size mm	Material
2302959	ISJM9B-050	50	SBR
2302960	ISJM9B-076	76	SBR
2302961	ISJM9B-089	89	SBR
2302962	ISJM9B-108	108	SBR
2302963	ISJM9B-133	133	SBR
2302964	ISJM9B-159	159	SBR
2302965	ISJM9B-194	194	SBR

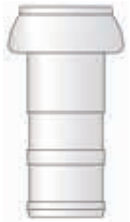
TYPE B - BAUER COMPATIBLE

Antioil Rubber Gasket

Item Code	Part Number	Coupling size mm	Material
2302869	INJM9B-050	50	NBR
2302870	INJM9B-076	76	NBR
2302871	INJM9B-089	89	NBR
2302872	INJM9B-108	108	NBR
2302873	INJM9B-133	133	NBR
2302874	INJM9B-159	159	NBR
2302875	INJM9B-194	194	NBR

TYPE C - CARDAN/PERROT COMPATIBLE

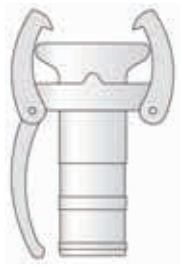
Male - Hose shank



Item Code	Part Number	Hose ID in	Hose ID mm	Coupling size mm	Material
2302272	I119P100-050050	2	50	50	PLATED STEEL
2302273	I119P100-076070	3	76	70	PLATED STEEL
2306072	I119P100-076089	3	76	89	PLATED STEEL
2301791	I119P100-102108	4	102	108	PLATED STEEL
2301792	I119P100-125133	5	125	133	PLATED STEEL
2302275	I119P100-152159	6	152	159	PLATED STEEL

TYPE C - CARDAN/PERROT COMPATIBLE

Female - Hose shank - Gasket Included



Item Code	Part Number	Hose ID in	Hose ID mm	Coupling size mm	Material
2302276	I119P200-050050	2	50	50	PLATED STEEL
2302277	I119P200-076070	3	76	70	PLATED STEEL
2306071	I119P200-076089	3	76	89	PLATED STEEL
2306128	I119P200-090089	3 1/2	90	89	PLATED STEEL
2301793	I119P200-102108	4	102	108	PLATED STEEL
2301794	I119P200-125133	5	125	133	PLATED STEEL
2302279	I119P200-152159	6	152	159	PLATED STEEL

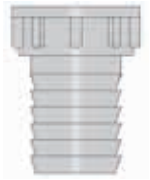
VIDANGE

Male

Item Code	Part Number	Hose DN mm	Head size mm	Material
2301557	I819A200-105100	105	100	BRASS

VIDANGE

Female - Gasket Included



Item Code	Part Number	Hose DN mm	Head size mm	Material
2301558	I819A100-105100	105	100	BRASS

TYPE 42

Male - Hose shank

Item code	Part Number	Hose ID mm	Coupling size mm	Material
2305186		51	48	PLATED STEEL
2304741		51	76	PLATED STEEL
2305275		63	76	PLATED STEEL
2305187		76	76	PLATED STEEL
2304736		76	102	PLATED STEEL
2305188		102	102	PLATED STEEL
2305189		127	133	PLATED STEEL
2305190		152	152	PLATED STEEL

TYPE 42

Female with closure lever - Hose shank - Gasket included

Item code	Part Number	Hose ID mm	Coupling size mm	Material
2305199		51	48	PLATED STEEL
2304749		51	76	PLATED STEEL
2305278		63	76	PLATED STEEL
2305200		76	76	PLATED STEEL
2305576		76	102	PLATED STEEL
2305201		102	102	PLATED STEEL
2305202		127	133	PLATED STEEL
2305203		152	152	PLATED STEEL

TYPE 42

Male - Weld on

Item code	Part Number	Coupling size mm	Head DN mm	Material
2305569		48	51	PLATED STEEL
2305180		76	76	PLATED STEEL
2305181		102	102	PLATED STEEL
2304737		133	133	PLATED STEEL
2305272		152	152	PLATED STEEL

TYPE 42

Female with closure lever - Weld on - Gasket included

Item code	Part Number	Coupling size mm	Head DN mm	Material
2305193		76	76	PLATED STEEL
2305194		102	102	PLATED STEEL

TYPE 42

Male - Male BSP

Item code	Part Number	Coupling size mm	Thread in	Thread type	Material
2305183		48	2	BSP	PLATED STEEL
2304739		76	3	BSP	PLATED STEEL
2305273		102	4	BSP	PLATED STEEL

TYPE 42

Female with closure lever - Male BSP - Gasket included

Item code	Part Number	Coupling size mm	Thread in	Thread type	Material
2305196		48	2	BSP	PLATED STEEL
2304747		76	3	BSP	PLATED STEEL
2305277		102	4	BSP	PLATED STEEL

TYPE 42

Male Plug

Item code	Part Number	Coupling size mm	Material
2305573		48	PLATED STEEL
2304742		76	PLATED STEEL
2304743		102	PLATED STEEL

TYPE 42

Female Cap with closure lever - Gasket included

Item code	Part Number	Coupling size mm	Material
2304750		48	PLATED STEEL
2304751		76	PLATED STEEL
2304752		102	PLATED STEEL
2305571		133	PLATED STEEL

TYPE 42

Gasket

Item code	Part Number	Coupling size mm	Material
2305588		48	EPDM
2304418		60	EPDM
2304419		76	EPDM
2304420		102	EPDM
2304421		133	EPDM
2304422		152	EPDM

Item code	Part Number	Coupling size mm	Material
2304424		76	NBR
2304425		102	NBR

SMS

Male - Serrated hose shank - Gasket Included

Item Code	Part Number	Hose ID in	Hose ID mm	Head DN mm	Thread Type	Material
2301811	I389S100-025025	1	25	25	40 x 1/6	S/S 316
2301812	I389S100-038040	1 1/2	38	40	60 x 1/6	S/S 316
2301611	I389S100-051050	2	51	50	70 x 1/6	S/S 316
2301638	I389S100-063065	2 1/2	63	65	85 x 1/6	S/S 316
2301737	I389S100-076080	3	76	80	98 x 1/6	S/S 316
2302567	I389S100-102100	4	102	100	132 x 1/6	S/S 316

SMS

Female - Serrated hose shank

Item Code	Part Number	Hose ID in	Hose ID mm	Head DN mm	Thread Type	Material
2301612	I389S200-025025	1	25	25	40 x 1/6	S/S 316
2301813	I389S200-038040	1 1/2	38	40	60 x 1/6	S/S 316
2301276	I389S200-051050	2	51	50	70 x 1/6	S/S 316
2301637	I389S200-063065	2 1/2	63	65	85 x 1/6	S/S 316
2301814	I389S200-076080	3	76	80	98 x 1/6	S/S 316
2302568	I389S200-102100	4	102	100	132 x 1/6	S/S 316

DIN 11851

Male - EN 14 420-2 / DIN 2817 hose shank - Gasket Included

Item Code	Part Number	Hose ID in	Hose ID mm	Head DN mm	Thread Type	Material
2302529	I349Q100-025025	1	25	25	52 x 1/6	S/S 316
2302530	I349Q100-032032	1 1/4	32	32	58 x 1/6	S/S 316
2302531	I349Q100-038040	1 1/2	38	40	65 x 1/6	S/S 316
2302532	I349Q100-051050	2	51	50	78 x 1/6	S/S 316
2302533	I349Q100-063065	2 1/2	63	65	95 x 1/6	S/S 316
2302534	I349Q100-076080	3	76	80	110 x 1/4	S/S 316
2302535	I349Q100-102100	4	102	100	130 x 1/4	S/S 316

TO ASSEMBLY THE INSERT, USE SAFETY CLAMPS EN 14 420-3 / DIN 2817 AND SAFETY CLAMPS FLEXOLINE: CONSULT CHAPTER “CLAMPS & FERRULES”

DIN 11851

Female - EN 14 420-2 / DIN 2817 hose shank

Item Code	Part Number	Hose ID in	Hose ID mm	Head DN mm	Thread Type	Material
2302536	I349Q200-025025	1	25	25	52 x 1/6	S/S 316
2302537	I349Q200-032032	1 1/4	32	32	58 x 1/6	S/S 316
2302538	I349Q200-038040	1 1/2	38	40	65 x 1/6	S/S 316
2302539	I349Q200-051050	2	51	50	78 x 1/6	S/S 316
2302540	I349Q200-063065	2 1/2	63	65	95 x 1/6	S/S 316
2302541	I349Q200-076080	3	76	80	110 x 1/4	S/S 316
2302542	I349Q200-102100	4	102	100	130 x 1/4	S/S 316

TO ASSEMBLY THE INSERT, USE SAFETY CLAMPS EN 14 420-3 / DIN 2817 AND SAFETY CLAMPS FLEXOLINE: CONSULT CHAPTER “CLAMPS & FERRULES”

DIN 11851

Male - Serrated hose shank - Gasket Included

Item Code	Part Number	Hose ID in	Hose ID mm	Head DN mm	Thread Type	Material
2302561	I389Q100-025025	1	25	25	52 x 1/6	S/S 316
2302562	I389Q100-032032	1 1/4	32	32	58 x 1/6	S/S 316
2302563	I389Q100-038040	1 1/2	38	40	65 x 1/6	S/S 316
2301713	I389Q100-051050	2	51	50	78 x 1/6	S/S 316
2301642	I389Q100-063065	2 1/2	63	65	95 x 1/6	S/S 316
2301643	I389Q100-076080	3	76	80	110 x 1/4	S/S 316
2302564	I389Q100-102100	4	102	100	130 x 1/4	S/S 316

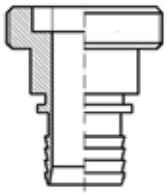
DIN 11851

Female with round Nut - Serrated hose shank

Item Code	Part Number	Hose ID in	Hose ID mm	Head DN mm	Thread Type	Material
2301816	I389Q200-025025	1	25	25	52 x 1/6	S/S 316
2302565	I389Q200-032032	1 1/4	32	32	58 x 1/6	S/S 316
2301741	I389Q200-038040	1 1/2	38	40	65 x 1/6	S/S 316
2301639	I389Q200-051050	2	51	50	78 x 1/6	S/S 316
2301640	I389Q200-063065	2 1/2	63	65	95 x 1/6	S/S 316
2301641	I389Q200-076080	3	76	80	110 x 1/4	S/S 316
2302566	I389Q200-102100	4	102	100	130 x 1/4	S/S 316

MACON

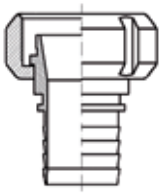
Male - Serrated hose shank



Item Code	Part Number	Hose ID in	Hose ID mm	Head DN mm	Material
2301635	I389M100-040040		40	40	S/S 316
2301636	I389M100-050050		50	50	S/S 316
2301817	I389M100-070070		70	70	S/S 316

MACON

Female with round nut - Serrated hose shank - Gasket Included



Item Code	Part Number	Hose ID in	Hose ID mm	Head DN mm	Material
2301633	I389M200-040040		40	40	S/S 316
2301634	I389M200-050050		50	50	S/S 316
2301818	I389M200-070070		70	70	S/S 316

SERRATED FERRULE FOR HYGIENIC COUPLING

Item Code	Part Number	Hose ID in	Hose ID mm	Hose OD Min mm	Hose OD Max mm	Material
2301526	I208U040-047053	1 1/2	38	47	53	S/S 304
2301527	I208U051-060065	2	51	60	65	S/S 304
2301528	I208U063-074078	2 1/2	63	74	78	S/S 304
2301529	I208U070-081086	2 7/8	70	81	86	S/S 304
2301530	I208U076-087092	3	76	87	92	S/S 304

TO ASSEMBLY WITH “SERRATED FERRULE S/S316” CONSULT CHAPTER “CLAMPS & FERRULES”

EN 14 423 / DIN 2826

Male BSPT - Hose shank

Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread Type	Material
2302755	I8107100-013021	1/2	13	1/2	BSPT	BRASS
2302218	I8107100-019027	3/4	19	3/4	BSPT	BRASS
2301718	I8107100-025034	1	25	1	BSPT	BRASS
2301819	I8107100-038049	1 1/2	38	1 1/2	BSPT	BRASS
2301820	I8107100-051060	2	50	2	BSPT	BRASS

Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread Type	Material
2302433	I3107100-013021	1/2	13	1/2	BSPT	S/S 316
2302434	I3107100-019027	3/4	19	3/4	BSPT	S/S 316
2302435	I3107100-025034	1	25	1	BSPT	S/S 316
2302436	I3107100-038049	1 1/2	38	1 1/2	BSPT	S/S 316
2302437	I3107100-051060	2	50	2	BSPT	S/S 316

EN 14 423 / DIN 2826

Female BSP - Hose shank

Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread Type	Material
2302754	I8106200-013021	1/2	13	1/2	BSP	BRASS
2301821	I8106200-019027	3/4	19	3/4	BSP	BRASS
2301822	I8106200-025034	1	25	1	BSP	BRASS
2301823	I8106200-038049	1 1/2	38	1 1/2	BSP	BRASS
2301824	I8106200-051060	2	50	2	BSP	BRASS

Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread Type	Material
2302428	I3106200-013021	1/2	13	1/2	BSP	S/S 316
2302429	I3106200-019027	3/4	19	3/4	BSP	S/S 316
2302430	I3106200-025034	1	25	1	BSP	S/S 316
2302431	I3106200-038049	1 1/2	38	1 1/2	BSP	S/S 316
2302432	I3106200-051060	2	50	2	BSP	S/S 316

EN 14 423 / DIN 2826

Swivel flange - Hose shank

Item Code	Part Number	Hose ID in	Hose ID mm	Flange type	Material Hose Shank	Material Flange
2302371	I17BG74A-019020	3/4	19	PN 40	PLATED STEEL	PLATED STEEL
2302372	I17BG74A-025025	1	25	PN 40	PLATED STEEL	PLATED STEEL
2302373	I17BG74A-038040	1 1/2	38	PN 40	PLATED STEEL	PLATED STEEL
2302374	I17BG74A-051050	2	50	PN 40	PLATED STEEL	PLATED STEEL

Item Code	Part Number	Hose ID in	Hose ID mm	Flange type	Material Hose Shank	Material Flange
2302555	I37BG74A-019020	3/4	19	PN 40	S/S 316	S/S 316
2302556	I37BG74A-025025	1	25	PN 40	S/S 316	S/S 316
2302557	I37BG74A-038040	1 1/2	38	PN 40	S/S 316	S/S 316
2302558	I37BG74A-051050	2	50	PN 40	S/S 316	S/S 316

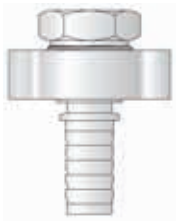
EN 14 423 / DIN 2826

Safety Clamps

Item Code	Part Number	Hose ID in	Hose ID mm	Hose OD Min mm	Hose OD Max mm	Material
2302810	I8LG4C-013025	1/2	13 x 6.0	24	26	BRASS
2302223	I8LG4C-019033	3/4	19 x 7.0	32	34	BRASS
2302811	I8LG4C-025040	1	25 x 7.5	39	41	BRASS
2302812	I8LG4C-038054	1 1/2	38 X 8.0	53	56	BRASS
2302813	I8LG4C-050068	2	50 x 9.0	67	69	BRASS

GROUND JOINT SEAL

Complete coupling BSP

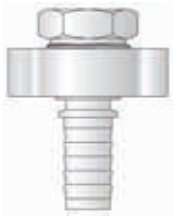


Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread Type	Material
2302966	I918B206-013021	1/2	13	1/2	BSP	MALLEABLE IRON
2302967	I918B206-019027	3/4	19	3/4	BSP	MALLEABLE IRON
2302968	I918B206-025034	1	25	1	BSP	MALLEABLE IRON
2302969	I918B206-032042	1 1/4	32	1 1/4	BSP	MALLEABLE IRON
2302970	I918B206-038049	1 1/2	38	1 1/2	BSP	MALLEABLE IRON
2302971	I918B206-051060	2	51	2	BSP	MALLEABLE IRON
2302972	I918B206-063076	2 1/2	63	2 1/2	BSP	MALLEABLE IRON
2302973	I918B206-076090	3	76	3	BSP	MALLEABLE IRON
2302974	I918B206-102114	4	102	4	BSP	MALLEABLE IRON

GROUND JOINT SEAL

Complete coupling NPT

NA



Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread Type	Material
2303386	I918B228-013021	1/2	13	1/2	NPT	MALLEABLE IRON
2303387	I918B228-019027	3/4	19	3/4	NPT	MALLEABLE IRON
2303388	I918B228-025034	1	25	1	NPT	MALLEABLE IRON
2303389	I918B228-032042	1 1/4	32	1 1/4	NPT	MALLEABLE IRON
2303390	I918B228-038049	1 1/2	38	1 1/2	NPT	MALLEABLE IRON
2303391	I918B228-051060	2	51	2	NPT	MALLEABLE IRON
2303392	I918B228-063076	2 1/2	63	2 1/2	NPT	MALLEABLE IRON
2303393	I918B228-076090	3	76	3	NPT	MALLEABLE IRON
2303394	I918B228-102114	4	102	4	NPT	MALLEABLE IRON

GROUND JOINT SEAL

Male BSP - Hose shank

Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread Type	Material
2302983	I118B107-013021	1/2	13	1/2	BSP	PLATED STEEL
2302984	I118B107-019027	3/4	19	3/4	BSP	PLATED STEEL
2302985	I118B107-025034	1	25	1	BSP	PLATED STEEL
2302986	I918B107-032042	1 1/4	32	1 1/4	BSP	MALLEABLE IRON
2302987	I918B107-038049	1 1/2	38	1 1/2	BSP	MALLEABLE IRON
2302988	I918B107-051060	2	51	2	BSP	MALLEABLE IRON
2302989	I918B107-063076	2 1/2	63	2 1/2	BSP	MALLEABLE IRON
2302990	I918B107-076090	3	76	3	BSP	MALLEABLE IRON
2302991	I918B107-102114	4	102	4	BSP	MALLEABLE IRON

GROUND JOINT SEAL

Male NPT - Hose shank

NA

Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread Type	Material
2303428	I918B128-013021	1/2	13	1/2	NPT	MALLEABLE IRON
2303429	I918B128-019027	3/4	19	3/4	NPT	MALLEABLE IRON
2303430	I918B128-025034	1	25	1	NPT	MALLEABLE IRON
2303431	I918B128-032042	1 1/4	32	1 1/4	NPT	MALLEABLE IRON
2303432	I918B128-038049	1 1/2	38	1 1/2	NPT	MALLEABLE IRON
2303433	I918B128-051060	2	51	2	NPT	MALLEABLE IRON
2303434	I918B128-063076	2 1/2	63	2 1/2	NPT	MALLEABLE IRON
2303435	I918B128-076090	3	76	3	NPT	MALLEABLE IRON
2303436	I918B128-102114	4	102	4	NPT	MALLEABLE IRON

GROUND JOINT SEAL

Clamps - 2 Bolt - 2 Gripping finger type

Item Code	Part Number	Hose ID in	Hose ID mm	Hose OD Min mm	Hose OD Max mm	Material
2302992	I9LG2F-013026	1/2	13	24	27	MALLEABLE IRON
2302993	I9LG2F-019032	3/4	19	30	33	MALLEABLE IRON
2303440	I9LG2F-019036	3/4	19	33	38	MALLEABLE IRON

GROUND JOINT SEAL

Clamps - 4 Bolt - 2 Gripping finger type

Item Code	Part Number	Hose ID in	Hose ID mm	Hose OD Min mm	Hose OD Max mm	Material
2303443	I9LG4F-025038	1	25	35,5	40	MALLEABLE IRON
2302994	I9LG4F-025041	1	25	39	43,5	MALLEABLE IRON
2302995■	I9LG4F-032046	1 1/4	32	43	47,5	MALLEABLE IRON
2302996	I9LG4F-038049	1 1/4	32	45	53	MALLEABLE IRON
2303448	I9LG4F-038060	1 1/2	38	55,5	60	MALLEABLE IRON
2302997	I9LG4F-051067	2	51	63	71	MALLEABLE IRON
	I9LG4F-063083	2 1/2	63	78,5	87,5	MALLEABLE IRON
2302998	I9LG4F-076094	3	76	89	100	MALLEABLE IRON

■ 4 GRIPPING FINGER

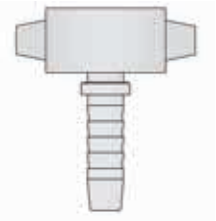
GROUND JOINT SEAL

Clamps - 6 Bolt - 3 Gripping finger type

Item Code	Part Number	Hose ID in	Hose ID mm	Hose OD Min mm	Hose OD Max mm	Material
2302999	I9LG6F-102123	4	102	117,5	127	MALLEABLE IRON
	I9LG6F-102142	4	102	133,5	142	MALLEABLE IRON

TURNEX P

Complete Coupling

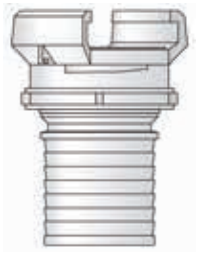


Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Material
2300617	I119X200-019027	3/4	19	3/4	PLATED STEEL
2302280	I119X200-025034	1	25	1	PLATED STEEL
2302281	I119X200-025049	1	25	1 1/2	PLATED STEEL

TO ASSEMBLY THE INSERT USE HYDRAULIC ALFACRIMP SERRATED FERRULE (H1200004-120000 AND H1200004-160000). CONSULT ALFAGOMMA HYDRAULIC CATALOGUE

SYMMETRIC GUILLEMIN NF E 29.572

Hose shank - With locking ring - Gasket Included



Item Code	Part Number	Head DN mm	Hose Shank DN mm	Material	Note
2300648	I5191300-025020	20	25	ALUMINIUM	
2300649	I5191300-030025	25	30	ALUMINIUM	
2302106	I5191300-035032	32	35	ALUMINIUM	
2300653	I5191300-045040	40	45	ALUMINIUM	
2300655	I5191300-055050	50	55	ALUMINIUM	
2300656	I5191300-070065	65	70	ALUMINIUM	
2300658	I5191300-090080	80	90	ALUMINIUM	
2300660	I5191300-110100	100	110	ALUMINIUM	
2302105	I5191300-030032	32	30	ALUMINIUM	HOSE SHANK WITH COLLAR
2300652	I5191300-040040	40	40	ALUMINIUM	HOSE SHANK WITH COLLAR
2300654	I5191300-051050	50	51	ALUMINIUM	HOSE SHANK WITH COLLAR
2302107	I5191300-065065	65	65	ALUMINIUM	HOSE SHANK WITH COLLAR
2300657	I5191300-076080	80	76	ALUMINIUM	HOSE SHANK WITH COLLAR
2302108	I5191300-081080	80	81	ALUMINIUM	HOSE SHANK WITH COLLAR
2302109	I5191300-102100	100	102	ALUMINIUM	HOSE SHANK WITH COLLAR
2300659	I5191300-105100	100	105	ALUMINIUM	HOSE SHANK WITH COLLAR
2300661	I5191300-152150	150	152	ALUMINIUM	HOSE SHANK WITH COLLAR

Item Code	Part Number	Head DN mm	Hose Shank DN mm	Material	Note
2302438	I3191300-025020	20	25	S/S 316	
2302439	I3191300-030025	25	30	S/S 316	
2302101	I3191300-035032	32	35	S/S 316	
2300624	I3191300-045040	40	45	S/S 316	
2300625	I3191300-055050	50	55	S/S 316	
2301044	I3191300-070065	65	70	S/S 316	
2300627	I3191300-090080	80	90	S/S 316	
2302442	I3191300-110100	100	110	S/S 316	
2302440	I3191300-040040	40	40	S/S 316	HOSE SHANK WITH COLLAR
2302102	I3191300-051050	50	51	S/S 316	HOSE SHANK WITH COLLAR
2302103	I3191300-065065	65	65	S/S 316	HOSE SHANK WITH COLLAR
2300626	I3191300-076080	80	76	S/S 316	HOSE SHANK WITH COLLAR
2302441	I3191300-080080	80	80	S/S 316	HOSE SHANK WITH COLLAR
2302104	I3191300-102100	100	102	S/S 316	HOSE SHANK WITH COLLAR

Item Code	Part Number	Head DN mm	Hose Shank DN mm	Material	Note
2300679	I7191300-025020	20	25	BRONZE	
2300680	I7191300-030025	25	30	BRONZE	
2302111	I7191300-035032	32	35	BRONZE	
2300682	I7191300-045040	40	45	BRONZE	
2300684	I7191300-055050	50	55	BRONZE	
2300685	I7191300-070065	65	70	BRONZE	
2300687	I7191300-090080	80	90	BRONZE	
2300688	I7191300-110100	100	110	BRONZE	
2300958	I7191300-040040	40	40	BRONZE	HOSE SHANK WITH COLLAR
2300683	I7191300-051050	50	51	BRONZE	HOSE SHANK WITH COLLAR
2300938	I7191300-065065	65	65	BRONZE	HOSE SHANK WITH COLLAR
2302066	I7191300-076080	80	76	BRONZE	HOSE SHANK WITH COLLAR
2300686	I7191300-080080	80	80	BRONZE	HOSE SHANK WITH COLLAR
2302068	I7191300-102100	100	102	BRONZE	HOSE SHANK WITH COLLAR

SYMMETRIC GUILLEMIN NF E 29.572

Male BSP - With locking ring - Gasket Included

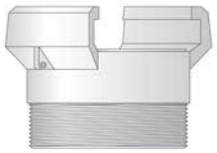
Item Code	Part Number	Head DN mm	Thread in	Thread type	Material
2300221	I5A91206-020027	20	3/4	BSP	ALUMINIUM
2300222	I5A91206-025034	25	1	BSP	ALUMINIUM
2302077	I5A91206-032042	32	1 1/4	BSP	ALUMINIUM
2300224	I5A91206-040049	40	1 1/2	BSP	ALUMINIUM
2300225	I5A91206-050060	50	2	BSP	ALUMINIUM
2300226	I5A91206-065076	65	2 1/2	BSP	ALUMINIUM
2300227	I5A91206-080090	80	3	BSP	ALUMINIUM
2300228	I5A91206-100114	100	4	BSP	ALUMINIUM
2302695	I5A91206-150165	150	6	BSP	ALUMINIUM

Item Code	Part Number	Head DN mm	Thread in	Thread type	Material
2302569	I3A91206-020027	20	3/4	BSP	S/S 316
2302570	I3A91206-025034	25	1	BSP	S/S 316
2302571	I3A91206-032042	32	1 1/4	BSP	S/S 316
2302064	I3A91206-040049	40	1 1/2	BSP	S/S 316
2300982	I3A91206-050060	50	2	BSP	S/S 316
2302572	I3A91206-065076	65	2 1/2	BSP	S/S 316
2301660	I3A91206-080090	80	3	BSP	S/S 316
2301251	I3A91206-100114	100	4	BSP	S/S 316

Item Code	Part Number	Head DN mm	Thread in	Thread type	Material
2300296	I7A91206-020027	20	3/4	BSP	BRONZE
2300297	I7A91206-025034	25	1	BSP	BRONZE
2302072	I7A91206-032042	32	1 1/4	BSP	BRONZE
2300299	I7A91206-040049	40	1 1/2	BSP	BRONZE
2300300	I7A91206-050060	50	2	BSP	BRONZE
2300301	I7A91206-065076	65	2 1/2	BSP	BRONZE
2300302	I7A91206-080090	80	3	BSP	BRONZE
2300303	I7A91206-100114	100	4	BSP	BRONZE

SYMMETRIC GUILLEMIN NF E 29.572

Male BSP - Without locking ring - Gasket Included



Item Code	Part Number	Head DN mm	Thread in	Thread type	Material
2300247	I5A94206-020027	20	3/4	BSP	ALUMINIUM
2300248	I5A94206-025034	25	1	BSP	ALUMINIUM
2302153	I5A94206-032042	32	1 1/4	BSP	ALUMINIUM
2300250	I5A94206-040049	40	1 1/2	BSP	ALUMINIUM
2300251	I5A94206-050060	50	2	BSP	ALUMINIUM
2300252	I5A94206-065076	65	2 1/2	BSP	ALUMINIUM
2300253	I5A94206-080090	80	3	BSP	ALUMINIUM
2300254	I5A94206-100114	100	4	BSP	ALUMINIUM

Item Code	Part Number	Head DN mm	Thread in	Thread type	Material
2302579	I3A94206-020027	20	3/4	BSP	S/S 316
2302580	I3A94206-025034	25	1	BSP	S/S 316
2302581	I3A94206-032042	32	1 1/4	BSP	S/S 316
2302582	I3A94206-040049	40	1 1/2	BSP	S/S 316
2302583	I3A94206-050060	50	2	BSP	S/S 316
2302584	I3A94206-065076	65	2 1/2	BSP	S/S 316
2302065	I3A94206-080090	80	3	BSP	S/S 316
2302585	I3A94206-100114	100	4	BSP	S/S 316

Item Code	Part Number	Head DN mm	Thread in	Thread type	Material
2302750	I7A94206-020027	20	3/4	BSP	BRONZE
2302751	I7A94206-025034	25	1	BSP	BRONZE
2302752	I7A94206-032042	32	1 1/4	BSP	BRONZE
2300320	I7A94206-040049	40	1 1/2	BSP	BRONZE
2300321	I7A94206-050060	50	2	BSP	BRONZE
2300322	I7A94206-065076	65	2 1/2	BSP	BRONZE
2300323	I7A94206-080090	80	3	BSP	BRONZE
2300324	I7A94206-100114	100	4	BSP	BRONZE

SYMMETRIC GUILLEMIN NF E 29.572

Female BSP - With locking ring - Gasket Included

Item Code	Part Number	Head DN mm	Thread in	Thread type	Material
2300229	I5A91306-020027	20	3/4	BSP	ALUMINIUM
2300230	I5A91306-025034	25	1	BSP	ALUMINIUM
2302078	I5A91306-032042	32	1 1/4	BSP	ALUMINIUM
2300232	I5A91306-040049	40	1 1/2	BSP	ALUMINIUM
2300233	I5A91306-050060	50	2	BSP	ALUMINIUM
2300234	I5A91306-065076	65	2 1/2	BSP	ALUMINIUM
2300235	I5A91306-080090	80	3	BSP	ALUMINIUM
2300236	I5A91306-100114	100	4	BSP	ALUMINIUM
2300237	I5A91306-150165	150	6	BSP	ALUMINIUM

Item Code	Part Number	Head DN mm	Thread in	Thread type	Material
2302573	I3A91306-020027	20	3/4	BSP	S/S 316
2300161	I3A91306-025034	25	1	BSP	S/S 316
2302574	I3A91306-032042	32	1 1/4	BSP	S/S 316
2300163	I3A91306-040049	40	1 1/2	BSP	S/S 316
2300164	I3A91306-050060	50	2	BSP	S/S 316
2300165	I3A91306-065076	65	2 1/2	BSP	S/S 316
2300166	I3A91306-080090	80	3	BSP	S/S 316
2300167	I3A91306-100114	100	4	BSP	S/S 316

Item Code	Part Number	Head DN mm	Thread in	Thread type	Material
2300304	I7A91306-020027	20	3/4	BSP	BRONZE
2300305	I7A91306-025034	25	1	BSP	BRONZE
2302073	I7A91306-032042	32	1 1/4	BSP	BRONZE
2300307	I7A91306-040049	40	1 1/2	BSP	BRONZE
2300308	I7A91306-050060	50	2	BSP	BRONZE
2300309	I7A91306-065076	65	2 1/2	BSP	BRONZE
2300310	I7A91306-080090	80	3	BSP	BRONZE
2300311	I7A91306-100114	100	4	BSP	BRONZE

SYMMETRIC GUILLEMIN NF E 29.572

Female BSP - Without locking ring - Gasket Included

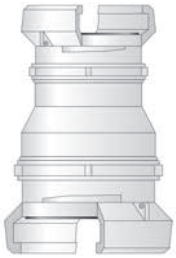
Item Code	Part Number	Head DN mm	Thread in	Thread type	Material
2300255	I5A94306-020027	20	3/4	BSP	ALUMINIUM
2300256	I5A94306-025034	25	1	BSP	ALUMINIUM
2302697	I5A94306-032042	32	1 1/4	BSP	ALUMINIUM
2300258	I5A94306-040049	40	1 1/2	BSP	ALUMINIUM
2300259	I5A94306-050060	50	2	BSP	ALUMINIUM
2300260	I5A94306-065076	65	2 1/2	BSP	ALUMINIUM
2300261	I5A94306-080090	80	3	BSP	ALUMINIUM
2300262	I5A94306-100114	100	4	BSP	ALUMINIUM

Item Code	Part Number	Head DN mm	Thread in	Thread type	Material
2302586	I3A94306-020027	20	3/4	BSP	S/S 316
2302587	I3A94306-025034	25	1	BSP	S/S 316
2302588	I3A94306-032042	32	1 1/4	BSP	S/S 316
2302589	I3A94306-040049	40	1 1/2	BSP	S/S 316
2302067	I3A94306-050060	50	2	BSP	S/S 316
2302590	I3A94306-065076	65	2 1/2	BSP	S/S 316
2302591	I3A94306-080090	80	3	BSP	S/S 316
2302592	I3A94306-100114	100	4	BSP	S/S 316

Item Code	Part Number	Head DN mm	Thread in	Thread type	Material
2300325	I7A94306-020027	20	3/4	BSP	BRONZE
2300326	I7A94306-025034	25	1	BSP	BRONZE
2302753	I7A94306-032042	32	1 1/4	BSP	BRONZE
2300328	I7A94306-040049	40	1 1/2	BSP	BRONZE
2300329	I7A94306-050060	50	2	BSP	BRONZE
2300330	I7A94306-065076	65	2 1/2	BSP	BRONZE
2300331	I7A94306-080090	80	3	BSP	BRONZE
2300332	I7A94306-100114	100	4	BSP	BRONZE

SYMMETRIC GUILLEMIN NF E 29.572

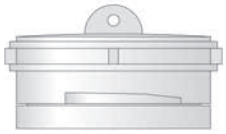
Reducing adapter with locking rings - Gasket Included



Item Code	Part Number	Head DN mm	Head DN mm	Material
2300212	I5A91191-050040	40	50	ALUMINIUM
2300214	I5A91191-065050	65	50	ALUMINIUM
2300216	I5A91191-080050	80	50	ALUMINIUM
2300217	I5A91191-080065	80	65	ALUMINIUM
2300220	I5A91191-100080	100	80	ALUMINIUM

SYMMETRIC GUILLEMIN NF E 29.572

Male plug with locking ring and chain



Item Code	Part Number	Head DN mm	Material	Note
2300238	I5A91400-020	20	ALUMINIUM	FIXED LOCKING RING
2300239	I5A91400-025	25	ALUMINIUM	FIXED LOCKING RING
2302696	I5A91400-032	32	ALUMINIUM	FIXED LOCKING RING
2300241	I5A91400-040	40	ALUMINIUM	FIXED LOCKING RING
2300242	I5A91400-050	50		
2300243	I5A91400-065	65		
2300244	I5A91400-080	80		
2300245	I5A91400-100	100		
2300246	I5A91400-150	150		

Item Code	Part Number	Head DN mm	Material	Note
2302575	I3A91400-020	20	S/S 316	
2302576	I3A91400-025	25	S/S 316	
2302577	I3A91400-032	32	S/S 316	
2300168	I3A91400-040	40	S/S 316	
2301038	I3A91400-050	50	S/S 316	
2300169	I3A91400-065	65	S/S 316	
2300096	I3A91400-080	80	S/S 316	
2302578	I3A91400-100	100	S/S 316	

Item Code	Part Number	Head DN mm	Material	Note
2300312	I7A91400-020	20	BRONZE	FIXED LOCKING RING
2300313	I7A91400-025	25	BRONZE	FIXED LOCKING RING
2302149	I7A91400-032	32	BRONZE	FIXED LOCKING RING
2300315	I7A91400-040	40	BRONZE	FIXED LOCKING RING
2300316	I7A91400-050	50	BRONZE	
2300317	I7A91400-065	65	BRONZE	
2300318	I7A91400-080	80	BRONZE	
2300319	I7A91400-100	100	BRONZE	

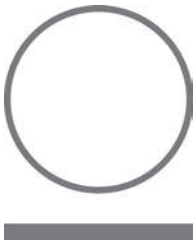
SYMMETRIC GUILLEMIN NF E 29.572

Handled male plug without locking ring - With chain

Item Code	Part Number	Head DN mm	Material
2300263	I5A94400-040	40	ALUMINIUM
2300264	I5A94400-050	50	ALUMINIUM
2300265	I5A94400-065	65	ALUMINIUM
2300266	I5A94400-080	80	ALUMINIUM
2300267	I5A94400-100	100	ALUMINIUM

SYMMETRIC GUILLEMIN NF E 29.572

Gasket



Item Code	Part Number	Head DN mm	Material
2300497	INJ091-020	20	NBR
2300498	INJ091-025	25	NBR
2301659	INJ091-032	32	NBR
2300500	INJ091-040	40	NBR
2300501	INJ091-050	50	NBR
2300502	INJ091-065	65	NBR
2300503	INJ091-080	80	NBR
2300504	INJ091-100	100	NBR
2302862	INJ091-150	150	NBR

Item Code	Part Number	Head DN mm	Material
2300988	IBJ091-050	50	FOOD GRADE RUBBER
2300456	IBJ091-080	80	FOOD GRADE RUBBER
2300457	IBJ091-100	100	FOOD GRADE RUBBER

Item Code	Part Number	Head DN mm	Material
2302884	ITJ091-020	20	PTFE
2302885	ITJ091-025	25	PTFE
2300514	ITJ091-032	32	PTFE
2300515	ITJ091-040	40	PTFE
2300516	ITJ091-050	50	PTFE
2300517	ITJ091-065	65	PTFE
2300518	ITJ091-080	80	PTFE
2300987	ITJ091-100	100	PTFE

SYMMETRIC

Wrenches

Item Code	Part Number	Fitting Head DN mm	Material	Model
2301057		20 - 115	PLATED STEEL	Clé Tricoise Universelle
2300588		20 - 115	BRASS	Clé Universelle*

* NO- SPARKLING

SYMMETRIC DSP & AR (NF S 61.704 - NF S 61.705)

Hose shank - With locking ring - Gasket Included

Item Code	Part Number	Head DN mm	Hose Shank DN mm	Material	Note
2300663	I5193300-045040	40	45	ALUMINIUM	DSP (DELIVERY)
2300664	I5193300-070065	65	70	ALUMINIUM	DSP (DELIVERY)
2300662	I5192300-110100	100	110	ALUMINIUM	AR (SUCTION & DELIVERY)

GRF - ROUND THREAD COUPLING NF E 29.579

Male - Hose shank

Item Code	Part Number	Hose ID mm	Head DN mm	Thread Type	Material
2300674	I7190100-025025	25	20	GFR	BRONZE

FOR HOSE 251AA

GRF - ROUND THREAD COUPLING NF E 29.579

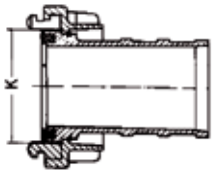
Female - Hose shank - Gasket included

Item Code	Part Number	Hose ID mm	Head DN mm	Thread Type	Material
2300675	I7190200-025025	25	20	GFR	BRONZE

FOR HOSE 251AA

STORZ

Suction & delivery hose shank - Gasket Included



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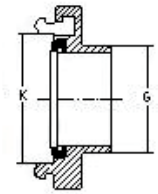
Item Code	Part Number	Hose ID mm	Head DN mm	K mm	Material
	I519Z300-012025*	13	25 - D - DS	31	ALUMINIUM
2306056	I519Z300-019025	19	25 - D - DS	31	ALUMINIUM
2305397	I519Z300-025025	25	25 - D - DS	31	ALUMINIUM
2306058	I519Z300-025052	25	52 - C - DS	66	ALUMINIUM
2302681	I519Z300-032032	32	32 - DS	44	ALUMINIUM
2306057	I519Z300-032052	32	52 - C - DS	66	ALUMINIUM
2302682	I519Z300-038038	38	38 - DS	51	ALUMINIUM
2305089	I519Z300-038052	38	52 - C - DS	66	ALUMINIUM
	I519Z300-038065*	38	65 - DS	81	ALUMINIUM
2303000	I519Z300-045052	45	52 - C	66	ALUMINIUM
2301825	I519Z300-051052	51	52 - C - DS	66	ALUMINIUM
2306193	I519Z300-063075	63	75 - B - DS	89	ALUMINIUM
2301764	I519Z300-076075	76	75 - B - DS	89	ALUMINIUM
2302684	I519Z300-102100	102	100 - DS	115	ALUMINIUM
2305301	I519Z300-102110	102	110 - A - DS	133	ALUMINIUM
2300647	I519Z300-110110	110	110 - A-DS	133	ALUMINIUM
2306192	I519Z300-125125	127	125 - DS	148	ALUMINIUM
2306059	I519Z300-150150	152	150 - DS	160	ALUMINIUM

STORZ

Male - Gasket Included



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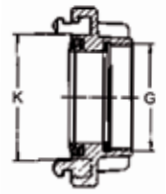
Item Code	Part Number	Head DN mm	K mm	Thread type	Material
2306195	I5A9Z206-025027	25 - D - DS	31	G 3/4"	ALUMINIUM
2302714	I5A9Z206-025034	25 - D - DS	31	G 1"	ALUMINIUM
2302715	I5A9Z206-032042	32 - DS	44	G 1 1/4"	ALUMINIUM
	I5A9Z206-038042*	38 - DS	51	G 1 1/4"	ALUMINIUM
2302716	I5A9Z206-038049	38 - DS	51	G 1 1/2"	ALUMINIUM
	I5A9Z206-038060*	38 - DS	51	G 2"	ALUMINIUM
2305920	I5A9Z206-052034	52 - C - DS	66	G 1"	ALUMINIUM
2305922	I5A9Z206-052042	52 - C - DS	66	G 1 1/4"	ALUMINIUM
2305090	I5A9Z206-052049	52 - C - DS	66	G 1 1/2"	ALUMINIUM
2300208	I5A9Z206-052060	52 - C - DS	66	G 2"	ALUMINIUM
	I5A9Z206-065049*	65 - DS	81	G 1 1/2"	ALUMINIUM
	I5A9Z206-065060*	65 - DS	81	G 2"	ALUMINIUM
	I5A9Z206-065076*	65 - DS	81	G 2 1/2"	ALUMINIUM
2305925	I5A9Z206-075076	75 - B - DS	89	G 2 1/2"	ALUMINIUM
2301743	I5A9Z206-075090	75 - B - DS	89	G 3"	ALUMINIUM
2302717	I5A9Z206-100114	100 - DS	115	G 4"	ALUMINIUM
2302718	I5A9Z206-110114	110 - A - DS	133	G 4"	ALUMINIUM

STORZ

Female - Gasket Included

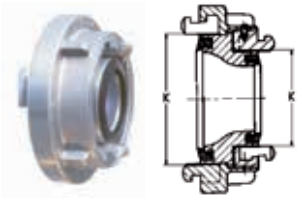
* AU



Item Code	Part Number	Head DN mm	K mm	Thread type	Material
2306194	I5A9Z306-025021	25 - D - DS	31	G 1/2"	ALUMINIUM
2305918	I5A9Z306-025027	25 - D - DS	31	G 3/4"	ALUMINIUM
2305400	I5A9Z306-025034	25 - D - DS	31	G 1"	ALUMINIUM
2302719	I5A9Z306-032042	32 - DS	44	G 1 1/4"	ALUMINIUM
	I5A9Z306-038049*	38 - DS	51	G 1 1/2"	ALUMINIUM
2301717	I5A9Z306-038060*	38 - DS	51	G 2"	ALUMINIUM
2305919	I5A9Z306-052034	52 - C - DS	66	G 1"	ALUMINIUM
2305921	I5A9Z306-052042	52 - C - DS	66	G 1 1/4"	ALUMINIUM
2305086	I5A9Z306-052049	52 - C - DS	66	G 1 1/2"	ALUMINIUM
2302720	I5A9Z306-052060	52 - C - DS	66	G 2"	ALUMINIUM
2305923	I5A9Z306-052076	52 - C - DS	66	G 2 1/2"	ALUMINIUM
	I5A9Z306-065060*	65 - DS	81	G 2"	ALUMINIUM
2305087	I5A9Z306-065076*	65 - DS	81	G 2 1/2"	ALUMINIUM
2305403	I5A9Z306-075060	75 - B - DS	89	G 2"	ALUMINIUM
2305924	I5A9Z306-075076	75 - B - DS	89	G 2 1/2"	ALUMINIUM
2301688	I5A9Z306-075090	75 - B - DS	89	G 3"	ALUMINIUM
2302721	I5A9Z306-100114	100 - DS	115	G 4"	ALUMINIUM
2302722	I5A9Z306-110114	110 - A - DS	133	G 4"	ALUMINIUM
	I5A9Z306-125114*	125 - DS	148	G 4"	ALUMINIUM
2306196	I5A9Z306-125140*	125 - DS	148	G 5"	ALUMINIUM
2305404	I5A9Z306-150165*	150 - DS	160	G 6"	ALUMINIUM

STORZ

Reducer adapter - Gasket included

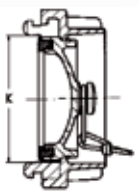


Item Code	Part Number	Head DN mm	K mm	Head DN mm	K mm	Material
2305091	I5A9Z19Z-075052	75 - B - DS	89	52 - C - DS	66	ALLUMINIUM
2305092	I5A9Z19Z-110075	110 - A - DS	133	75 - B - DS	89	ALLUMINIUM
2305927	I5A9Z19Z-052025	52 - C - DS	66	25 - D - DS	31	ALLUMINIUM
2305928	I5A9Z19Z-100075	100 - DS	115	75 - B - DS	89	ALLUMINIUM
2305929	I5A9Z19Z-110100	110 - A - DS	133	100 - DS	115	ALLUMINIUM

STORZ

Blank cap with chain - Gasket Included

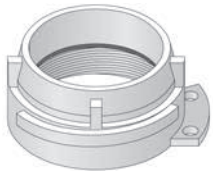
* AU



Item Code	Part Number	Head DN mm	K mm	Material
2302723	I5A9Z400-025	25 - D - DS	31	ALUMINIUM
2302724	I5A9Z400-032	32 - DS	44	ALUMINIUM
2302725	I5A9Z400-038	38 - DS	51	ALUMINIUM
2302726	I5A9Z400-052	52 - C - DS	66	ALUMINIUM
2305088	I5A9Z400-065*	65 - DS	81	ALUMINIUM
2301742	I5A9Z400-075	75 - B - DS	89	ALUMINIUM
2302727	I5A9Z400-100	100 - DS	115	ALUMINIUM
2302728	I5A9Z400-110	110 - A - DS	133	ALUMINIUM
	I5A9Z400-125*	125 - DS	148	ALUMINIUM
2305399	I5A9Z400-150*	150 - DS	160	ALUMINIUM

TANKWAGEN EN 14 420-6 / DIN 28 450

Type VK - Male part with female Thread

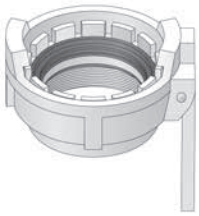


Item Code	Part Number	Head DN in	Head DN mm	Thread in	Thread type	Material
2302636	I3A9T606-050060	2	50	2	BSP	S/S 316
2301815	I3A9T606-080090	3	80	3	BSP	S/S 316

Item Code	Part Number	Head DN in	Head DN mm	Thread in	Thread type	Material
2302803	I8A9T606-050060	2	50	2	BSP	BRASS
2302804	I8A9T606-080090	3	80	3	BSP	BRASS
2301395	I8A9T606-100114	4	100	4	BSP	BRASS

TANKWAGEN EN 14 420-6 / DIN 28 450

Type MK - Female part with female Thread and locking handle



Item Code	Part Number	Head DN in	Head DN mm	Thread in	Thread type	Material
2302638	I3A9T806-050060	2	50	2	BSP	S/S 316
2302639	I3A9T806-080090	3	80	3	BSP	S/S 316

Item Code	Part Number	Head DN in	Head DN mm	Thread in	Thread type	Material
2302807	I8A9T806-050060	2	50	2	BSP	BRASS
2301827	I8A9T806-080090	3	80	3	BSP	BRASS
2301394	I8A9T806-100114	4	100	4	BSP	BRASS

TANKWAGEN EN 14 420-6 / DIN 28 450

Type VB - Male plug

Item Code	Part Number	Head DN in	Head DN mm	Material
2302637	I3A9T700-050	2	50	S/S 316
2301537	I3A9T700-080	3	80	S/S 316
2306089	I3A9T700-100	4	100	S/S 316

Item Code	Part Number	Head DN in	Head DN mm	Material
2302805	I8A9T700-050	2	50	BRASS
2301828	I8A9T700-080	3	80	BRASS

TANKWAGEN EN 14 420-6 / DIN 28 450

Type MB - Female Cap

Item Code	Part Number	Head DN in	Head DN mm	Material
2302640	I3A9T900-050	2	50	S/S 316
2301538	I3A9T900-080	3	80	S/S 316
2302809	I3A9T900-100	4	100	S/S 316

Item Code	Part Number	Head DN in	Head DN mm	Material
2302808	I8A9T900-050	2	50	BRASS
2301829	I8A9T900-080	3	80	BRASS

TANKWAGEN EN 14 420-6 / DIN 28 450

Profiled gasket for type MK

Item Code	Part Number	Head DN in	Head DN mm	Material
2302860	IHJM9T-050	2	50	HYPALON
2302861	IHJM9T-080	3	80	HYPALON

Item Code	Part Number	Head DN in	Head DN mm	Material
2302876	INJM9T-050	2	50	NBR
2302877	INJM9T-080	3	80	NBR
2302878	INJM9T-100	4	100	NBR

TANKWAGEN EN 14 420-6 / DIN 28 450

Flat gasket for type MK and VK Thread end

Item Code	Part Number	Head DN in	Head DN mm	Material
2302886	ITJ09T-050	2	50	PTFE
2302887	ITJ09T-080	3	80	PTFE

TANKWAGEN EN 14 420-6 / DIN 28 450

Flat gasket for type MB

Item Code	Part Number	Head DN in	Head DN mm	Material
2302858	IHJ09T-050	2	50	HYPALON
2302859	IHJ09T-080	3	80	HYPALON

Item Code	Part Number	Head DN in	Head DN mm	Material
2302866	INJ09T-050	2	50	NBR
2302867	INJ09T-080	3	80	NBR
2302868	INJ09T-100	4	100	NBR

CAM & GROOVE MIL C - 27.487

Type A - Adapter, female BSP

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303234	I5A9C606-013021	1/2	BSP	1/2	13	ALUMINIUM
2301830	I5A9C606-019027	3/4	BSP	3/4	19	ALUMINIUM
2300182	I5A9C606-025034	1	BSP	1	25	ALUMINIUM
2300183	I5A9C606-032042	1 1/4	BSP	1 1/4	32	ALUMINIUM
2301831	I5A9C606-038049	1 1/2	BSP	1 1/2	38	ALUMINIUM
2301832	I5A9C606-051060	2	BSP	2	51	ALUMINIUM
2301833	I5A9C606-063076	2 1/2	BSP	2 1/2	63	ALUMINIUM
2301834	I5A9C606-076090	3	BSP	3	76	ALUMINIUM
2301835	I5A9C606-102114	4	BSP	4	102	ALUMINIUM
2302706	I5A9C606-127140	5	BSP	5	127	ALUMINIUM
2301836	I5A9C606-152165	6	BSP	6	152	ALUMINIUM

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303236	I3A9C606-013021	1/2	BSP	1/2	13	S/S 316
2301837	I3A9C606-019027	3/4	BSP	3/4	19	S/S 316
2300148	I3A9C606-025034	1	BSP	1	25	S/S 316
2300149	I3A9C606-032042	1 1/4	BSP	1 1/4	32	S/S 316
2301838	I3A9C606-038049	1 1/2	BSP	1 1/2	38	S/S 316
2301839	I3A9C606-051060	2	BSP	2	51	S/S 316
2301840	I3A9C606-063076	2 1/2	BSP	2 1/2	63	S/S 316
2302602	I3A9C606-076090	3	BSP	3	76	S/S 316
2302603	I3A9C606-102114	4	BSP	4	102	S/S 316
2302604	I3A9C606-152165	6	BSP	6	152	S/S 316

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303235	I8A9C606-013021	1/2	BSP	1/2	13	BRASS
2301841	I8A9C606-019027	3/4	BSP	3/4	19	BRASS
2301842	I8A9C606-025034	1	BSP	1	25	BRASS
2302789	I8A9C606-032042	1 1/4	BSP	1 1/4	32	BRASS
2302790	I8A9C606-038049	1 1/2	BSP	1 1/2	38	BRASS
2301843	I8A9C606-051060	2	BSP	2	51	BRASS
2301844	I8A9C606-063076	2 1/2	BSP	2 1/2	63	BRASS
2301845	I8A9C606-076090	3	BSP	3	76	BRASS
2301846	I8A9C606-102114	4	BSP	4	102	BRASS

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303259	IPA9C606-013021	1/2	BSP	1/2	13	PP
2303260	IPA9C606-019027	3/4	BSP	3/4	19	PP
2303261	IPA9C606-025034	1	BSP	1	25	PP
2303262	IPA9C606-032042	1 1/4	BSP	1 1/4	32	PP
2303263	IPA9C606-038049	1 1/2	BSP	1 1/2	38	PP
2303264	IPA9C606-051060	2	BSP	2	51	PP
2303266	IPA9C606-076090	3	BSP	3	76	PP
2303267	IPA9C606-102114	4	BSP	4	102	PP

CAM & GROOVE MIL C - 27.487

Type A - Adapter, female NPT

NA

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303469	I5A9C628-013021	1/2	NPT	1/2	13	ALUMINIUM
2303470	I5A9C628-019027	3/4	NPT	3/4	19	ALUMINIUM
2303471	I5A9C628-025034	1	NPT	1	25	ALUMINIUM
2303472	I5A9C628-032042	1 1/4	NPT	1 1/4	32	ALUMINIUM
2303473	I5A9C628-038049	1 1/2	NPT	1 1/2	38	ALUMINIUM
2303474	I5A9C628-051060	2	NPT	2	51	ALUMINIUM
2303475	I5A9C628-063076	2 1/2	NPT	2 1/2	63	ALUMINIUM
2303476	I5A9C628-076090	3	NPT	3	76	ALUMINIUM
2303477	I5A9C628-102114	4	NPT	4	102	ALUMINIUM
2303478	I5A9C628-127140	5	NPT	5	127	ALUMINIUM
2303479	I5A9C628-152165	6	NPT	6	152	ALUMINIUM
2303480	I5A9C628-203219	8	NPT	8	203	ALUMINIUM

NA

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303492	I3A9C628-013021	1/2	NPT	1/2	13	S/S 316
2303493	I3A9C628-019027	3/4	NPT	3/4	19	S/S 316
2303494	I3A9C628-025034	1	NPT	1	25	S/S 316
2303495	I3A9C628-032042	1 1/4	NPT	1 1/4	32	S/S 316
2303496	I3A9C628-038049	1 1/2	NPT	1 1/2	38	S/S 316
2303497	I3A9C628-051060	2	NPT	2	51	S/S 316
2303498	I3A9C628-063076	2 1/2	NPT	2 1/2	63	S/S 316
2303499	I3A9C628-076090	3	NPT	3	76	S/S 316
2303500	I3A9C628-102114	4	NPT	4	102	S/S 316
2303501	I3A9C628-127140	5	NPT	5	127	S/S 316
2303502	I3A9C628-152165	6	NPT	6	152	S/S 316
2303503	I3A9C628-203219	8	NPT	8	203	S/S 316

NA

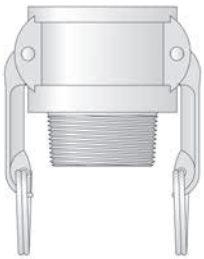
Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303481	I8A9C628-013021	1/2	NPT	1/2	13	BRASS
2303482	I8A9C628-019027	3/4	NPT	3/4	19	BRASS
2303483	I8A9C628-025034	1	NPT	1	25	BRASS
2303484	I8A9C628-032042	1 1/4	NPT	1 1/4	32	BRASS
2303485	I8A9C628-038049	1 1/2	NPT	1 1/2	38	BRASS
2303486	I8A9C628-051060	2	NPT	2	51	BRASS
2303487	I8A9C628-063076	2 1/2	NPT	2 1/2	63	BRASS
2303488	I8A9C628-076090	3	NPT	3	76	BRASS
2303489	I8A9C628-102114	4	NPT	4	102	BRASS
2303490	I8A9C628-127140	5	NPT	5	127	BRASS
2303491	I8A9C628-152165	6	NPT	6	152	BRASS

NA

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303504	IPA9C628-013021	1/2	NPT	1/2	13	PP
2303505	IPA9C628-019027	3/4	NPT	3/4	19	PP
2303506	IPA9C628-025034	1	NPT	1	25	PP
2303507	IPA9C628-032042	1 1/4	NPT	1 1/4	32	PP
2303508	IPA9C628-038049	1 1/2	NPT	1 1/2	38	PP
2303509	IPA9C628-051060	2	NPT	2	51	PP
2303511	IPA9C628-076090	3	NPT	3	76	PP
2303512	IPA9C628-102114	4	NPT	4	102	PP

CAM & GROOVE MIL C - 27.487

Type B - Coupler, male BSPT



Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303239	I5A9C007-013021	1/2	BSPT	1/2	13	ALUMINIUM
2301847	I5A9C007-019027	3/4	BSPT	3/4	19	ALUMINIUM
2301848	I5A9C007-025034	1	BSPT	1	25	ALUMINIUM
2301849	I5A9C007-032042	1 1/4	BSPT	1 1/4	32	ALUMINIUM
2301850	I5A9C007-038049	1 1/2	BSPT	1 1/2	38	ALUMINIUM
2301851	I5A9C007-051060	2	BSPT	2	51	ALUMINIUM
2301852	I5A9C007-063076	2 1/2	BSPT	2 1/2	63	ALUMINIUM
2301853	I5A9C007-076090	3	BSPT	3	76	ALUMINIUM
2302699	I5A9C007-102114	4	BSPT	4	102	ALUMINIUM
2302700	I5A9C007-127140	5	BSPT	5	127	ALUMINIUM
2302701	I5A9C007-152165	6	BSPT	6	152	ALUMINIUM

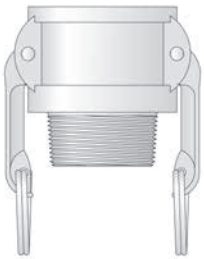
Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303241	I3A9C007-013021	1/2	BSPT	1/2	13	S/S 316
2301765	I3A9C007-019027	3/4	BSPT	3/4	19	S/S 316
2301854	I3A9C007-025034	1	BSPT	1	25	S/S 316
2302593	I3A9C007-032042	1 1/4	BSPT	1 1/4	32	S/S 316
2301855	I3A9C007-038049	1 1/2	BSPT	1 1/2	38	S/S 316
2301856	I3A9C007-051060	2	BSPT	2	51	S/S 316
2302594	I3A9C007-063076	2 1/2	BSPT	2 1/2	63	S/S 316
2302595	I3A9C007-076090	3	BSPT	3	76	S/S 316
2302596	I3A9C007-102114	4	BSPT	4	102	S/S 316
2302597	I3A9C007-152165	6	BSPP	6	152	S/S 316

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303240	I8A9C007-013021	1/2	BSPT	1/2	13	BRASS
2302779	I8A9C007-019027	3/4	BSPP	3/4	19	BRASS
2302780	I8A9C007-025034	1	BSPT	1	25	BRASS
2301857	I8A9C007-032042	1 1/4	BSPT	1 1/4	32	BRASS
2301858	I8A9C007-038049	1 1/2	BSPT	1 1/2	38	BRASS
2302781	I8A9C007-051060	2	BSPT	2	51	BRASS
2302782	I8A9C007-063076	2 1/2	BSPT	2 1/2	63	BRASS
2302783	I8A9C007-076090	3	BSPT	3	76	BRASS
2302784	I8A9C007-102114	4	BSPT	4	102	BRASS

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303268	IPA9C007-013021	1/2	BSPP	1/2	13	PP
2303269	IPA9C007-019027	3/4	BSPT	3/4	19	PP
2303270	IPA9C007-025034	1	BSPT	1	25	PP
2303271	IPA9C007-032042	1 1/4	BSPT	1 1/4	32	PP
2303272	IPA9C007-038049	1 1/2	BSPT	1 1/2	38	PP
2303273	IPA9C007-051060	2	BSPT	2	51	PP
2303275	IPA9C007-076090	3	BSPT	3	76	PP
2303276	IPA9C007-102114	4	BSPT	4	102	PP

CAM & GROOVE MIL C - 27.487

Type B - Coupler, male NPT



NA

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303522	I5A9C028-013021	1/2	NPT	1/2	13	ALUMINIUM
2303523	I5A9C028-019027	3/4	NPT	3/4	19	ALUMINIUM
2303524	I5A9C028-025034	1	NPT	1	25	ALUMINIUM
2303525	I5A9C028-032042	1 1/4	NPT	1 1/4	32	ALUMINIUM
2303526	I5A9C028-038049	1 1/2	NPT	1 1/2	38	ALUMINIUM
2303527	I5A9C028-051060	2	NPT	2	51	ALUMINIUM
2303528	I5A9C028-063076	2 1/2	NPT	2 1/2	63	ALUMINIUM
2303529	I5A9C028-076090	3	NPT	3	76	ALUMINIUM
2303530	I5A9C028-102114	4	NPT	4	102	ALUMINIUM
2303531	I5A9C028-127140	5	NPT	5	127	ALUMINIUM
2303532	I5A9C028-152165	6	NPT	6	152	ALUMINIUM

NA

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303544	I3A9C028-013021	1/2	NPT	1/2	13	S/S 316
2303545	I3A9C028-019027	3/4	NPT	3/4	19	S/S 316
2303546	I3A9C028-025034	1	NPT	1	25	S/S 316
2303547	I3A9C028-032042	1 1/4	NPT	1 1/4	32	S/S 316
2303548	I3A9C028-038049	1 1/2	NPT	1 1/2	38	S/S 316
2303549	I3A9C028-051060	2	NPT	2	51	S/S 316
2303550	I3A9C028-063076	2 1/2	NPT	2 1/2	63	S/S 316
2303551	I3A9C028-076090	3	NPT	3	76	S/S 316
2303552	I3A9C028-102114	4	NPT	4	102	S/S 316
2303553	I3A9C028-127140	5	NPT	5	127	S/S 316
2303554	I3A9C028-152165	6	NPT	6	152	S/S 316

NA

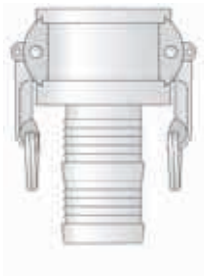
Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303533	I8A9C028-013021	1/2	NPT	1/2	13	BRASS
2303534	I8A9C028-019027	3/4	NPT	3/4	19	BRASS
2303535	I8A9C028-025034	1	NPT	1	25	BRASS
2303536	I8A9C028-032042	1 1/4	NPT	1 1/4	32	BRASS
2303537	I8A9C028-038049	1 1/2	NPT	1 1/2	38	BRASS
2303538	I8A9C028-051060	2	NPT	2	51	BRASS
2303539	I8A9C028-063076	2 1/2	NPT	2 1/2	63	BRASS
2303540	I8A9C028-076090	3	NPT	3	76	BRASS
2303541	I8A9C028-102114	4	NPT	4	102	BRASS
2303542	I8A9C028-127140	5	NPT	5	127	BRASS
2303543	I8A9C028-152165	6	NPT	6	152	BRASS

NA

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303555	IPA9C028-013021	1/2	NPT	1/2	13	PP
2303556	IPA9C028-019027	3/4	NPT	3/4	19	PP
2303557	IPA9C028-025034	1	NPT	1	25	PP
2303558	IPA9C028-032042	1 1/4	NPT	1 1/4	32	PP
2303559	IPA9C028-038049	1 1/2	NPT	1 1/2	38	PP
2303560	IPA9C028-051060	2	NPT	2	51	PP
2303561	IPA9C028-063076	2 1/2	NPT	2 1/2	63	PP
2303562	IPA9C028-076090	3	NPT	3	76	PP
2303563	IPA9C028-102114	4	NPT	4	102	PP

CAM & GROOVE MIL C - 27.487

Type C - Coupler, hose shank



Item Code	Part Number	Hose ID in	Hose ID mm	Head DN in	Head DN mm	Material
2303242	I519C200-013013	1/2	13	1/2	13	ALUMINIUM
2301859	I519C200-019019	3/4	19	3/4	19	ALUMINIUM
2300640	I519C200-025025	1	25	1	25	ALUMINIUM
2300641	I519C200-032032	1 1/4	32	1 1/4	32	ALUMINIUM
2301860	I519C200-038038	1 1/2	38	1 1/2	38	ALUMINIUM
2301861	I519C200-051051	2	51	2	51	ALUMINIUM
2301862	I519C200-063063	2 1/2	63	2 1/2	63	ALUMINIUM
2301863	I519C200-076076	3	76	3	76	ALUMINIUM
2301864	I519C200-102102	4	102	4	102	ALUMINIUM
2302679	I519C200-127127	5	127	5	127	ALUMINIUM
2301865	I519C200-152152	6	152	6	152	ALUMINIUM
2303584	I569C200-203203	8	203	8	203	ALUMINIUM

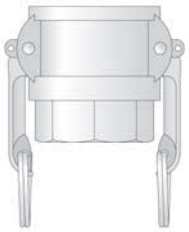
Item Code	Part Number	Hose ID in	Hose ID mm	Head DN in	Head DN mm	Material
2303244	I319C200-013013	1/2	13	1/2	13	S/S 316
2301866	I319C200-019019	3/4	19	3/4	19	S/S 316
2300620	I319C200-025025	1	25	1	25	S/S 316
2300621	I319C200-032032	1 1/4	32	1 1/4	32	S/S 316
2301867	I319C200-038038	1 1/2	38	1 1/2	38	S/S 316
2302448	I319C200-051051	2	51	2	51	S/S 316
2301868	I319C200-063063	2 1/2	63	2 1/2	63	S/S 316
2301869	I319C200-076076	3	76	3	76	S/S 316
2301870	I319C200-102102	4	102	4	102	S/S 316
2303605	I319C200-127127	5	127	5	127	S/S 316
2302449	I319C200-152152	6	152	6	152	S/S 316

Item Code	Part Number	Hose ID in	Hose ID mm	Head DN in	Head DN mm	Material
2303243	I819C200-013013	1/2	13	1/2	13	BRASS
2301871	I819C200-019019	3/4	19	3/4	19	BRASS
2302759	I819C200-025025	1	25	1	25	BRASS
2302760	I819C200-032032	1 1/4	32	1 1/4	32	BRASS
2301872	I819C200-038038	1 1/2	38	1 1/2	38	BRASS
2301750	I819C200-051051	2	51	2	51	BRASS
2301873	I819C200-063063	2 1/2	63	2 1/2	63	BRASS
2301874	I819C200-076076	3	76	3	76	BRASS
2301875	I819C200-102102	4	102	4	102	BRASS
2303594	I819C200-127127	5	127	5	127	BRASS

Item Code	Part Number	Hose ID in	Hose ID mm	Head DN in	Head DN mm	Material
2303277	IP19C200-013013	1/2	13	1/2	13	PP
2303278	IP19C200-019019	3/4	19	3/4	19	PP
2303279	IP19C200-025025	1	25	1	25	PP
2303280	IP19C200-032032	1 1/4	32	1 1/4	32	PP
2303281	IP19C200-038038	1 1/2	38	1 1/2	38	PP
2303282	IP19C200-051051	2	51	2	51	PP
2303284	IP19C200-076076	3	76	3	76	PP
2303285	IP19C200-102102	4	102	4	102	PP

CAM & GROOVE MIL C - 27.487

Type D - Coupler, female BSP



Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303245	I5A9C806-013021	1/2	BSP	1/2	13	ALUMINIUM
2301876	I5A9C806-019027	3/4	BSP	3/4	19	ALUMINIUM
2300193	I5A9C806-025034	1	BSP	1	25	ALUMINIUM
2300194	I5A9C806-032042	1 1/4	BSP	1 1/4	32	ALUMINIUM
2301877	I5A9C806-038049	1 1/2	BSP	1 1/2	38	ALUMINIUM
2301878	I5A9C806-051060	2	BSP	2	51	ALUMINIUM
2301879	I5A9C806-063076	2 1/2	BSP	2 1/2	63	ALUMINIUM
2301880	I5A9C806-076090	3	BSP	3	76	ALUMINIUM
2301881	I5A9C806-102114	4	BSP	4	102	ALUMINIUM
2302711	I5A9C806-127140	5	BSP	5	127	ALUMINIUM
2301882	I5A9C806-152165	6	BSP	6	152	ALUMINIUM

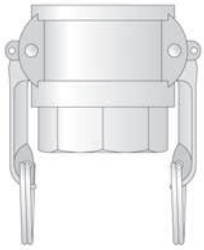
Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303247	I3A9C806-013021	1/2	BSP	1/2	13	S/S 316
2301883	I3A9C806-019027	3/4	BSP	3/4	19	S/S 316
2300155	I3A9C806-025034	1	BSP	1	25	S/S 316
2300156	I3A9C806-032042	1 1/4	BSP	1 1/4	32	S/S 316
2301884	I3A9C806-038049	1 1/2	BSP	1 1/2	38	S/S 316
2301885	I3A9C806-051060	2	BSP	2	51	S/S 316
2301886	I3A9C806-063076	2 1/2	BSP	2 1/2	63	S/S 316
2301887	I3A9C806-076090	3	BSP	3	76	S/S 316
2302224	I3A9C806-102114	4	BSP	4	102	S/S 316
2302611	I3A9C806-152165	6	BSP	6	152	S/S 316

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303246	I8A9C806-013021	1/2	BSP	1/2	13	BRASS
2301888	I8A9C806-019027	3/4	BSP	3/4	19	BRASS
2301889	I8A9C806-025034	1	BSP	1	25	BRASS
2301890	I8A9C806-032042	1 1/4	BSP	1 1/4	32	BRASS
2301891	I8A9C806-038049	1 1/2	BSP	1 1/2	38	BRASS
2301892	I8A9C806-051060	2	BSP	2	51	BRASS
2301893	I8A9C806-063076	2 1/2	BSP	2 1/2	63	BRASS
2301894	I8A9C806-076090	3	BSP	3	76	BRASS
2301895	I8A9C806-102114	4	BSP	4	102	BRASS

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303286	IPA9C806-013021	1/2	BSP	1/2	13	PP
2303287	IPA9C806-019027	1/4	BSP	1/4	19	PP
2303288	IPA9C806-025034	1	BSP	1	25	PP
2303289	IPA9C806-032042	1 1/4	BSP	1 1/4	32	PP
2303290	IPA9C806-038049	1 1/2	BSP	1 1/2	38	PP
2303291	IPA9C806-051060	2	BSP	2	51	PP
2303293	IPA9C806-076090	3	BSP	3	76	PP
2303294	IPA9C806-102114	4	BSP	4	102	PP

CAM & GROOVE MIL C - 27.487

Type D - Coupler, female NPT



NA

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303626	I5A9C828-013021	1/2	NPT	1/2	13	ALUMINIUM
2303627	I5A9C828-019027	3/4	NPT	3/4	19	ALUMINIUM
2303628	I5A9C828-025034	1	NPT	1	25	ALUMINIUM
2303629	I5A9C828-032042	1 1/4	NPT	1 1/4	32	ALUMINIUM
2303630	I5A9C828-038049	1 1/2	NPT	1 1/2	38	ALUMINIUM
2303631	I5A9C828-051060	2	NPT	2	51	ALUMINIUM
2303632	I5A9C828-063076	2 1/2	NPT	2 1/2	63	ALUMINIUM
2303633	I5A9C828-076090	3	NPT	3	76	ALUMINIUM
2303634	I5A9C828-102114	4	NPT	4	102	ALUMINIUM
2303635	I5A9C828-127140	5	NPT	5	127	ALUMINIUM
2303636	I5A9C828-152165	6	NPT	6	152	ALUMINIUM
2303637	I5A9C828-203219	8	NPT	8	203	ALUMINIUM

NA

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303649	I3A9C828-013021	1/2	NPT	1/2	13	S/S 316
2303650	I3A9C828-019027	3/4	NPT	3/4	19	S/S 316
2303651	I3A9C828-025034	1	NPT	1	25	S/S 316
2303652	I3A9C828-032042	1 1/4	NPT	1 1/4	32	S/S 316
2303653	I3A9C828-038049	1 1/2	NPT	1 1/2	38	S/S 316
2303654	I3A9C828-051060	2	NPT	2	51	S/S 316
2303655	I3A9C828-063076	2 1/2	NPT	2 1/2	63	S/S 316
2303656	I3A9C828-076090	3	NPT	3	76	S/S 316
2303657	I3A9C828-102114	4	NPT	4	102	S/S 316
2303658	I3A9C828-127140	5	NPT	5	127	S/S 316
2303659	I3A9C828-152165	6	NPT	6	152	S/S 316

NA

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303638	I8A9C828-013021	1/2	NPT	1/2	13	BRASS
2303639	I8A9C828-019027	3/4	NPT	3/4	19	BRASS
2303640	I8A9C828-025034	1	NPT	1	25	BRASS
2303641	I8A9C828-032042	1 1/4	NPT	1 1/4	32	BRASS
2303642	I8A9C828-038049	1 1/2	NPT	1 1/2	38	BRASS
2303643	I8A9C828-051060	2	NPT	2	51	BRASS
2303644	I8A9C828-063076	2 1/2	NPT	2 1/2	63	BRASS
2303645	I8A9C828-076090	3	NPT	3	76	BRASS
2303646	I8A9C828-102114	4	NPT	4	102	BRASS
2303647	I8A9C828-127140	5	NPT	5	127	BRASS
2303648	I8A9C828-152165	6	NPT	6	152	BRASS

NA

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303660	IPA9C828-013021	1/2	NPT	1/2	13	PP
2303661	IPA9C828-019027	1/4	NPT	1/4	19	PP
2303662	IPA9C828-025034	1	NPT	1	25	PP
2303663	IPA9C828-032042	1 1/4	NPT	1 1/4	32	PP
2303664	IPA9C828-038049	1 1/2	NPT	1 1/2	38	PP
2303665	IPA9C828-051060	2	NPT	2	51	PP
2303667	IPA9C828-076090	3	NPT	3	76	PP
2303668	IPA9C828-102114	4	NPT	4	102	PP

CAM & GROOVE MIL C - 27.487

Type E - Adapter, hose shank

Item Code	Part Number	Hose ID in	Hose ID mm	Head DN in	Head DN mm	Material
2303248	I519C100-013013	1/2	13	1/2	13	ALUMINIUM
2302675	I519C100-019019	3/4	19	3/4	19	ALUMINIUM
2300633	I519C100-025025	1	25	1	25	ALUMINIUM
2301736	I519C100-032032	1 1/4	32	1 1/4	32	ALUMINIUM
2301915	I519C100-038038	1 1/2	38	1 1/2	38	ALUMINIUM
2301916	I519C100-051051	2	51	2	51	ALUMINIUM
2302676	I519C100-063063	2 1/2	63	2 1/2	63	ALUMINIUM
2301918	I519C100-076076	3	76	3	76	ALUMINIUM
2302677	I519C100-102102	4	102	4	102	ALUMINIUM
2302678	I519C100-127127	5	127	5	127	ALUMINIUM
2301920	I519C100-152152	6	152	6	152	ALUMINIUM
2303679	I519C100-203203	8	203	8	203	ALUMINIUM

Item Code	Part Number	Hose ID in	Hose ID mm	Head DN in	Head DN mm	Material
2303250	I319C100-013013	1/2	13	1/2	13	S/S 316
2301927	I319C100-019019	3/4	19	3/4	19	S/S 316
2300618	I319C100-025025	1	25	1	25	S/S 316
2301929	I319C100-032032	1 1/4	32	1 1/4	32	S/S 316
2302443	I319C100-038038	1 1/2	38	1 1/2	28	S/S 316
2302444	I319C100-051051	2	51	2	51	S/S 316
2302445	I319C100-063063	2 1/2	63	2 1/2	63	S/S 316
2301931	I319C100-076076	3	76	3	76	S/S 316
2302446	I319C100-102102	4	102	4	102	S/S 316
2303683	I319C100-127127	5	127	5	127	S/S 316
2302447	I319C100-152152	6	152	6	152	S/S 316

Item Code	Part Number	Hose ID in	Hose ID mm	Head DN in	Head DN mm	Material
2303249	I819C100-013013	1/2	13	1/2	13	BRASS
2302756	I819C100-019019	3/4	19	3/4	19	BRASS
2302757	I819C100-025025	1	25	1	25	BRASS
2301943	I819C100-032032	1 1/4	32	1 1/4	32	BRASS
2301944	I819C100-038038	1 1/2	38	1 1/2	38	BRASS
2301749	I819C100-051051	2	51	2	51	BRASS
2301945	I819C100-063063	2 1/2	63	2 1/2	63	BRASS
2301946	I819C100-076076	3	76	3	76	BRASS
2301947	I819C100-102102	4	102	4	102	BRASS
2303681	I819C100-127127	5	127	5	127	BRASS
2302758	I819C100-152152	6	152	6	152	BRASS

Item Code	Part Number	Hose ID in	Hose ID mm	Head DN in	Head DN mm	Material
2303295	IP19C100-013013	1/2	13	1/2	13	PP
2303296	IP19C100-019019	3/4	19	3/4	19	PP
2303297	IP19C100-025025	1	25	1	25	PP
2303298	IP19C100-032032	1 1/4	32	1 1/4	32	PP
2303299	IP19C100-038038	1 1/2	38	1 1/2	38	PP
2303300	IP19C100-051051	2	51	2	51	PP
2303302	IP19C100-076076	3	76	3	76	PP
2303303	IP19C100-102102	4	102	4	102	PP

CAM & GROOVE MIL C - 27.487

Type F - Adapter, male BSPT

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303251	I5A9C507-013021	1/2	BSPT	1/2	13	ALUMINIUM
2301948	I5A9C507-019027	3/4	BSPT	3/4	19	ALUMINIUM
2301949	I5A9C507-025034	1	BSPT	1	25	ALUMINIUM
2301950	I5A9C507-032042	1 1/4	BSPT	1 1/4	32	ALUMINIUM
2301951	I5A9C507-038049	1 1/2	BSPT	1 1/2	38	ALUMINIUM
2301952	I5A9C507-051060	2	BSPT	2	51	ALUMINIUM
2301953	I5A9C507-063076	2 1/2	BSPT	2 1/2	63	ALUMINIUM
2301954	I5A9C507-076090	3	BSPT	3	76	ALUMINIUM
2301955	I5A9C507-102114	4	BSPT	4	102	ALUMINIUM
2302703	I5A9C507-127140	5	BSPT	5	127	ALUMINIUM
2302704	I5A9C507-152165	6	BSPT	6	152	ALUMINIUM

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303253	I3A9C507-013021	1/2	BSPT	1/2	13	S/S 316
2301956	I3A9C507-019027	3/4	BSPT	3/4	19	S/S 316
2301957	I3A9C507-025034	1	BSPT	1	25	S/S 316
2301958	I3A9C507-032042	1 1/4	BSPT	1 1/4	32	S/S 316
2302598	I3A9C507-038049	1 1/2	BSPT	1 1/2	38	S/S 316
2301960	I3A9C507-051060	2	BSPT	2	51	S/S 316
2301961	I3A9C507-063076	2 1/2	BSPT	2 1/2	63	S/S 316
2302599	I3A9C507-076090	3	BSPT	3	76	S/S 316
2302600	I3A9C507-102114	4	BSPT	4	102	S/S 316
2302601	I3A9C507-152165	6	BSPT	6	152	S/S 316

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303252	I8A9C507-013021	1/2	BSPT	1/2	13	BRASS
2302785	I8A9C507-019027	3/4	BSPT	3/4	19	BRASS
2302786	I8A9C507-025034	1	BSPT	1	25	BRASS
2302787	I8A9C507-032042	1 1/4	BSPT	1 1/4	32	BRASS
2301962	I8A9C507-038049	1 1/2	BSPT	1 1/2	38	BRASS
2301963	I8A9C507-051060	2	BSPT	2	51	BRASS
2301964	I8A9C507-063076	2 1/2	BSPT	2 1/2	63	BRASS
2301965	I8A9C507-076090	3	BSPT	3	76	BRASS
2302788	I8A9C507-102114	4	BSPT	4	102	BRASS

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303304	IPA9C507-013021	1/2	BSPT	1/2	13	PP
2303305	IPA9C507-019027	3/4	BSPT	3/4	19	PP
2303306	IPA9C507-025034	1	BSPT	1	25	PP
2303307	IPA9C507-032042	1 1/4	BSPT	1 1/4	32	PP
2303308	IPA9C507-038049	1 1/2	BSPT	1 1/2	38	PP
2303309	IPA9C507-051060	2	BSPT	2	51	PP
2303311	IPA9C507-076090	3	BSPT	3	76	PP
2303312	IPA9C507-102114	4	BSPT	4	102	PP

CAM & GROOVE MIL C - 27.487

Type F - Adapter, male NPT

NA

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303702	I5A9C528-013021	1/2	NPT	1/2	13	ALUMINIUM
2303703	I5A9C528-019027	3/4	NPT	3/4	19	ALUMINIUM
2303704	I5A9C528-025034	1	NPT	1	25	ALUMINIUM
2303705	I5A9C528-032042	1 1/4	NPT	1 1/4	32	ALUMINIUM
2303706	I5A9C528-038049	1 1/2	NPT	1 1/2	38	ALUMINIUM
2303707	I5A9C528-051060	2	NPT	2	51	ALUMINIUM
2303708	I5A9C528-063076	2 1/2	NPT	2 1/2	63	ALUMINIUM
2303709	I5A9C528-076090	3	NPT	3	76	ALUMINIUM
2303710	I5A9C528-102114	4	NPT	4	102	ALUMINIUM
2303711	I5A9C528-127140	5	NPT	5	127	ALUMINIUM
2303712	I5A9C528-152165	6	NPT	6	152	ALUMINIUM
2303713	I5A9C528-203219	8	NPT	8	203	ALUMINIUM

NA

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303725	I3A9C528-013021	1/2	NPT	1/2	13	S/S 316
2303726	I3A9C528-019027	3/4	NPT	3/4	19	S/S 316
2303727	I3A9C528-025034	1	NPT	1	25	S/S 316
2303728	I3A9C528-032042	1 1/4	NPT	1 1/4	32	S/S 316
2303729	I3A9C528-038049	1 1/2	NPT	1 1/2	38	S/S 316
2303730	I3A9C528-051060	2	NPT	2	51	S/S 316
2303731	I3A9C528-063076	2 1/2	NPT	2 1/2	63	S/S 316
2303732	I3A9C528-076090	3	NPT	3	76	S/S 316
2303733	I3A9C528-102114	4	NPT	4	102	S/S 316
2303734	I3A9C528-127140	5	NPT	5	127	S/S 316
2303735	I3A9C528-152165	6	NPT	6	152	S/S 316

NA

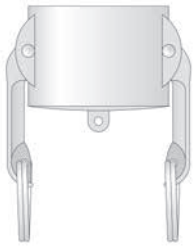
Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303714	I8A9C528-013021	1/2	NPT	1/2	13	BRASS
2303715	I8A9C528-019027	3/4	NPT	3/4	19	BRASS
2303716	I8A9C528-025034	1	NPT	1	25	BRASS
2303717	I8A9C528-032042	1 1/4	NPT	1 1/4	32	BRASS
2303718	I8A9C528-038049	1 1/2	NPT	1 1/2	38	BRASS
2303719	I8A9C528-051060	2	NPT	2	51	BRASS
2303720	I8A9C528-063076	2 1/2	NPT	2 1/2	63	BRASS
2303721	I8A9C528-076090	3	NPT	3	76	BRASS
2303722	I8A9C528-102114	4	NPT	4	102	BRASS
2303723	I8A9C528-127140	5	NPT	5	127	BRASS
2303724	I8A9C528-152165	6	NPT	6	152	BRASS

NA

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2303736	IPA9C528-013021	1/2	NPT	1/2	13	PP
2303737	IPA9C528-019027	3/4	NPT	3/4	19	PP
2303738	IPA9C528-025034	1	NPT	1	25	PP
2303739	IPA9C528-032042	1 1/4	NPT	1 1/4	32	PP
2303740	IPA9C528-038049	1 1/2	NPT	1 1/2	38	PP
2303741	IPA9C528-051060	2	NPT	2	51	PP
2303743	IPA9C528-076090	3	NPT	3	76	PP
2303744	IPA9C528-102114	4	NPT	4	102	PP

CAM & GROOVE MIL C - 27.487

Type DC - Female dust cap for adapter



Item Code	Part Number	Head DN in	Head DN mm	Material
2303254	I5A9C900-013	1/2	13	ALUMINIUM
2301967	I5A9C900-019	3/4	19	ALUMINIUM
2300200	I5A9C900-025	1	25	ALUMINIUM
2300201	I5A9C900-032	1 1/4	32	ALUMINIUM
2301968	I5A9C900-038	1 1/2	38	ALUMINIUM
2301969	I5A9C900-051	2	51	ALUMINIUM
2301970	I5A9C900-063	2 1/2	63	ALUMINIUM
2301971	I5A9C900-076	3	76	ALUMINIUM
2301972	I5A9C900-102	4	102	ALUMINIUM
2302712	I5A9C900-127	5	127	ALUMINIUM
2302713	I5A9C900-152	6	152	ALUMINIUM
2303756	I5A9C900-203	8	203	ALUMINIUM

Item Code	Part Number	Head DN in	Head DN mm	Material
2303256	I3A9C900-013	1/2	13	S/S 316
2301973	I3A9C900-019	3/4	19	S/S 316
2301546	I3A9C900-025	1	25	S/S 316
2302612	I3A9C900-032	1 1/4	32	S/S 316
2302613	I3A9C900-038	1 1/2	38	S/S 316
2302225	I3A9C900-051	2	51	S/S 316
2302614	I3A9C900-063	2 1/2	63	S/S 316
2302615	I3A9C900-076	3	76	S/S 316
2302616	I3A9C900-102	4	102	S/S 316
2303761	I3A9C900-127	5	127	S/S 316
2302617	I3A9C900-152	6	152	S/S 316

Item Code	Part Number	Head DN in	Head DN mm	Material
2303255	I8A9C900-013	1/2	13	BRASS
2302797	I8A9C900-019	3/4	19	BRASS
2302798	I8A9C900-025	1	25	BRASS
2302799	I8A9C900-032	1 1/4	32	BRASS
2302800	I8A9C900-038	1 1/2	38	BRASS
2302226	I8A9C900-051	2	51	BRASS
2302801	I8A9C900-063	2 1/2	63	BRASS
2302227	I8A9C900-076	3	76	BRASS
2302802	I8A9C900-102	4	102	BRASS
2303758	I8A9C900-127	5	127	BRASS
2303759	I8A9C900-152	6	152	BRASS

Item Code	Part Number	Head DN in	Head DN mm	Material
2303313	IPA9C900-013	1/2	13	PP
2303314	IPA9C900-019	3/4	19	PP
2303315	IPA9C900-025	1	25	PP
2303316	IPA9C900-032	1 1/4	32	PP
2303317	IPA9C900-038	1 1/2	38	PP
2303318	IPA9C900-051	2	51	PP
2303320	IPA9C900-076	3	76	PP
2303321	IPA9C900-102	4	102	PP

CAM & GROOVE MIL C - 27.487

Type DP - Male dust plug for coupler

Item Code	Part Number	Head DN in	Head DN mm	Material
2303257	I5A9C700-013	1/2	13	ALUMINIUM
2301979	I5A9C700-019	3/4	19	ALUMINIUM
2300967	I5A9C700-025	1	25	ALUMINIUM
2302707	I5A9C700-032	1 1/4	32	ALUMINIUM
2301982	I5A9C700-038	1 1/2	38	ALUMINIUM
2301983	I5A9C700-051	2	51	ALUMINIUM
2301985	I5A9C700-063	2 1/2	63	ALUMINIUM
2301986	I5A9C700-076	3	76	ALUMINIUM
2302708	I5A9C700-102	4	102	ALUMINIUM
2302709	I5A9C700-127	5	127	ALUMINIUM
2301988	I5A9C700-152	6	152	ALUMINIUM

Item Code	Part Number	Head DN in	Head DN mm	Material
2303237	I3A9C700-013	1/2	13	S/S 316
2302605	I3A9C700-019	3/4	19	S/S 316
2302606	I3A9C700-025	1	25	S/S 316
2302607	I3A9C700-032	1 1/4	32	S/S 316
2301746	I3A9C700-038	1 1/2	38	S/S 316
2302608	I3A9C700-051	2	51	S/S 316
2301989	I3A9C700-063	2 1/2	63	S/S 316
2301747	I3A9C700-076	3	76	S/S 316
2302609	I3A9C700-102	4	102	S/S 316
2302610	I3A9C700-152	6	152	S/S 316

Item Code	Part Number	Head DN in	Head DN mm	Material
2303258	I8A9C700-013	1/2	13	BRASS
2302792	I8A9C700-019	3/4	19	BRASS
2302793	I8A9C700-025	1	25	BRASS
2302794	I8A9C700-032	1 1/4	32	BRASS
2302795	I8A9C700-038	1 1/2	38	BRASS
2302228	I8A9C700-051	2	51	BRASS
2302229	I8A9C700-063	2 1/2	63	BRASS
2302230	I8A9C700-076	3	76	BRASS
2302231	I8A9C700-102	4	102	BRASS
2302796	I8A9C700-127	5	127	BRASS
2303782	I8A9C700-152	6	152	BRASS

Item Code	Part Number	Head DN in	Head DN mm	Material
2303322	IPA9C700-013	1/2	13	PP
2303323	IPA9C700-019	3/4	19	PP
2303324	IPA9C700-025	1	25	PP
2303325	IPA9C700-032	1 1/4	32	PP
2303326	IPA9C700-038	1 1/2	38	PP
2303327	IPA9C700-051	2	51	PP
2303329	IPA9C700-076	3	76	PP
2303330	IPA9C700-102	4	102	PP

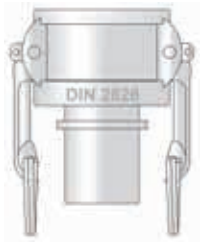
CAM & GROOVE EN 14 420-7 / DIN 2828

Type A - Adapter, female BSP - PTFE Seal

Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2302618	I3A9G606-020027	3/4	BSP	3/4	20	S/S 316
2302619	I3A9G606-025034	1	BSP	1	25	S/S 316
2302620	I3A9G606-032042	1 1/4	BSP	1 1/4	32	S/S 316
2302621	I3A9G606-040049	1 1/2	BSP	1 1/2	40	S/S 316
2302622	I3A9G606-050060	2	BSP	2	50	S/S 316
2302623	I3A9G606-065076	2 1/2	BSP	2 1/2	65	S/S 316
2302624	I3A9G606-080090	3	BSP	3	80	S/S 316
2302625	I3A9G606-100114	4	BSP	4	100	S/S 316

CAM & GROOVE EN 14 420-7 / DIN 2828

Type C - Coupler, EN 14 420-2 / DIN 2817 hose shank

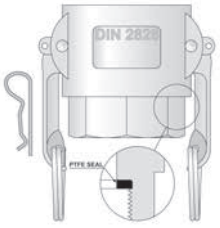


Item Code	Part Number	Hose ID in	Hose ID mm	Head DN in	Head DN mm	Material
2302522	I349G200-020020	3/4	20	3/4	20	S/S 316
2302523	I349G200-025025	1	25	1	25	S/S 316
2302524	I349G200-032032	1 1/4	32	1 1/4	32	S/S 316
2302525	I349G200-038040	1 1/2	38	1 1/2	40	S/S 316
2302099	I349G200-051050	2	51	2	50	S/S 316
2302526	I349G200-065065	2 1/2	65	2 1/2	65	S/S 316
2302527	I349G200-076080	3	76	3	80	S/S 316
2302528	I349G200-102100	4	102	4	100	S/S 316

TO ASSEMBLY THE INSERT, USE SAFETY CLAMPS EN 14 420-3 / DIN 2817: CONSULT CHAPTER “CLAMPS & FERRULES”
TYPE C IN BRASS AVAILABLE ON REQUEST

CAM & GROOVE EN 14 420-7 / DIN 2828

Type D - Coupler, female BSP - PTFE Seal



Item Code	Part Number	Thread in	Thread type	Head DN in	Head DN mm	Material
2302626	I3A9G806-020027	3/4	BSP	3/4	20	S/S 316
2302627	I3A9G806-025034	1	BSP	1	25	S/S 316
2302628	I3A9G806-032042	1 1/4	BSP	1 1/4	32	S/S 316
2302629	I3A9G806-040049	1 1/2	BSP	1 1/2	40	S/S 316
2302630	I3A9G806-050060	2	BSP	2	50	S/S 316
2302631	I3A9G806-065076	2 1/2	BSP	2 1/2	65	S/S 316
2302632	I3A9G806-080090	3	BSP	3	80	S/S 316
2302633	I3A9G806-100114	4	BSP	4	100	S/S 316

CAM & GROOVE EN 14 420-7 / DIN 2828

Type E - Adapter, EN 14 420-2 / DIN 2817 hose shank

Item Code	Part Number	Hose ID in	Hose ID mm	Head DN in	Head DN mm	Material
2302514	I349G100-020020	3/4	20	3/4	20	S/S 316
2302515	I349G100-025025	1	25	1	25	S/S 316
2302516	I349G100-032032	1 1/4	32	1 1/4	32	S/S 316
2302517	I349G100-038040	1 1/2	38	1 1/2	40	S/S 316
2302518	I349G100-051050	2	51	2	50	S/S 316
2302519	I349G100-065065	2 1/2	65	2 1/2	65	S/S 316
2302520	I349G100-076080	3	76	3	80	S/S 316
2302521	I349G100-102100	4	102	4	100	S/S 316

TO ASSEMBLY THE INSERT, USE SAFETY CLAMPS EN 14 420-3 / DIN 2817: CONSULT CHAPTER “CLAMPS & FERRULES”
TYPE E IN BRASS AVAILABLE ON REQUEST

CAM & GROOVE

Gasket

Item Code	Part Number	Head DN in	Head DN mm	Material
2303238	INJ09C-013	1/2	13	NBR
2301991	INJ09C-019	3/4	19	NBR
2300492	INJ09C-025	1	25	NBR
2300493	INJ09C-032	1 1/4	32	NBR
2302863	INJ09C-038	1 1/2	38	NBR
2301993	INJ09C-051	2	51	NBR
2302864	INJ09C-063	2 1/2	63	NBR
2301995	INJ09C-076	3	76	NBR
2301997	INJ09C-102	4	102	NBR
2302865	INJ09C-127	5	127	NBR
2301998	INJ09C-152	6	152	NBR

Item Code	Part Number	Head DN in	Head DN mm	Material
2305621	IIJ09C-019	3/4	19	VITON®
2300470	IIJ09C-025	1	25	VITON®
2306105	IIJ09C-032	1 1/4	32	VITON®
2303152	IIJ09C-038	1 1/2	38	VITON®
2303153	IIJ09C-051	2	51	VITON®
2303154	IIJ09C-063	2 1/2	63	VITON®
2303155	IIJ09C-076	3	76	VITON®
2303156	IIJ09C-102	4	102	VITON®

CAM & GROOVE

Gasket - Closed envelope

Item Code	Part Number	Head DN in	Head DN mm	Material
2302004	ITJM9C-038	1 1/2	38	PTFE
2302005	ITJM9C-051	2	51	PTFE
2302888	ITJM9C-076	3	76	PTFE
2302889	ITJM9C-102	4	100	PTFE

CAM & GROOVE

Handle, Ring & Pin

Item Code	Part Number	Head DN in	Head DN mm	Material
2302672	I3Y9C001	1/2 - 3/4	13 - 19	S/S 316
2302673	I3Y9C002	1	25	S/S 316
2302232	I3Y9C003	1 1/4 - 2 1/2	32 - 63	S/S 316
2301677	I3Y9C004	3 - 5	76 - 127	S/S 316
2302674	I3Y9C005	6	152	S/S 316

COMBINATION NIPPLE

Male BSPT - Hose shank for clamps

Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread type	Material
2303820	I1607100-013021	1/2	13	1/2	BSPT	PLATED STEEL
2303821	I1607100-019027	3/4	19	3/4	BSPT	PLATED STEEL
2303822	I1607100-025034	1	25	1	BSPT	PLATED STEEL
2303823	I1607100-032042	1 1/4	32	1 1/4	BSPT	PLATED STEEL
2303824	I1607100-038049	1 1/2	38	1 1/2	BSPT	PLATED STEEL
2303825	I1607100-051060	2	51	2	BSPT	PLATED STEEL
2303827	I1607100-076090	3	76	3	BSPT	PLATED STEEL
2303828	I1607100-102114	4	102	4	BSPT	PLATED STEEL
2306051	I1607100-127140	5	127	5	BSPT	PLATED STEEL
2303829	I1607100-152165	6	152	6	BSPT	PLATED STEEL

COMBINATION NIPPLE IN S/S AVAILABLE ON REQUEST

COMBINATION NIPPLE

Male NPT - Hose shank for clamps

NA

Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread type	Material
2303830	I1628100-013021	1/2	13	1/2	NPT	PLATED STEEL
2303831	I1628100-019027	3/4	19	3/4	NPT	PLATED STEEL
2303832	I1628100-025034	1	25	1	NPT	PLATED STEEL
2303833	I1628100-032042	1 1/4	32	1 1/4	NPT	PLATED STEEL
2303834	I1628100-038049	1 1/2	38	1 1/2	NPT	PLATED STEEL
2303835	I1628100-051060	2	51	2	NPT	PLATED STEEL
2303836	I1628100-063076	2 1/2	63	2 1/2	NPT	PLATED STEEL
2303837	I1628100-076090	3	76	3	NPT	PLATED STEEL
2303838	I1628100-102114	4	102	4	NPT	PLATED STEEL
2303839	I1628100-127140	5	127	5	NPT	PLATED STEEL
2303840	I1628100-152165	6	152	6	NPT	PLATED STEEL
2303841	I1628100-203219	8	203	8	NPT	PLATED STEEL

COMBINATION NIPPLE IN S/S AVAILABLE ON REQUEST

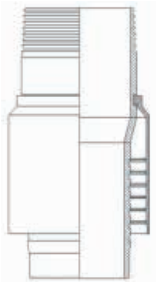
COMBINATION NIPPLE

Hose mender - Hose shank for clamps

Item Code	Part Number	Hose ID in	Hose ID mm	Material
2303876	I1656100-006006	1/4	6	PLATED STEEL
2303877	I1656100-010010	3/8	10	PLATED STEEL
2303878	I1656100-013013	1/2	13	PLATED STEEL
2303879	I1656100-019019	3/4	19	PLATED STEEL
2303880	I1656100-025025	1	25	PLATED STEEL
2303881	I1656100-032032	1 1/4	32	PLATED STEEL
2303882	I1656100-038038	1 1/2	38	PLATED STEEL
2303883	I1656100-051051	2	51	PLATED STEEL
2303884	I1656100-063063	2 1/2	63	PLATED STEEL
2303885	I1656100-076076	3	76	PLATED STEEL
2303886	I1656100-102102	4	102	PLATED STEEL
2303887	I1656100-127127	5	127	PLATED STEEL
2303888	I1656100-152152	6	152	PLATED STEEL
2303889	I1656100-203203	8	203	PLATED STEEL

COMBINATION NIPPLE

Male BSPT complete with pre-crimped ferrule - heavy duty

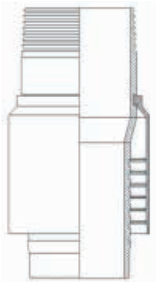


Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread type	Hose OD min-MAX mm	Material
2302324	I1707M00-076090	3	76	3	BSPT	88-102	PLATED STEEL
2302325	I1707M00-102114	4	102	4	BSPT	114-128	PLATED STEEL
2302326	I1707M00-127140	5	127	5	BSPT	139-153	PLATED STEEL
2302007	I1707M00-152165	6	152	6	BSPT	166-184	PLATED STEEL

FOR MALE BSPT WITH SERRATED HOSE SHANK FOR CRIMPING FERRULE AND DN<76 mm
CONSULT AG HYDRAULIC CATALOGUE
(RECOMMENDED HYDRAULIC FERRULE H1200203)

COMBINATION NIPPLE

Male NPT complete with pre-crimped ferrule - heavy duty



Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread type	Hose OD min-MAX mm	Material
2302332	I1728M00-076090	3	76	3	NPT	88-102	PLATED STEEL
2302333	I1728M00-102114	4	102	4	NPT	114-128	PLATED STEEL
2302334	I1728M00-127140	5	127	5	NPT	139-153	PLATED STEEL
2302335	I1728M00-152165	6	152	6	NPT	166-184	PLATED STEEL

FOR MALE NPT WITH SERRATED HOSE SHANK FOR CRIMPING FERRULE AND DN<76 mm
CONSULT AG HYDRAULIC CATALOGUE
(RECOMMENDED HYDRAULIC FERRULE H1200203)

EN 14 420-5 / DIN 2817

Male BSP - EN 14 420-2 / DIN 2817 hose shank

Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread type	Material	Note
2302501	I3406100-013021	1/2	13	1/2	BSP	S/S 316	FULL HEXAGONE
2302502	I3406100-019027	3/4	19	3/4	BSP	S/S 316	FULL HEXAGONE
2302503	I3406100-025034	1	25	1	BSP	S/S 316	FULL HEXAGONE
2301771	I3406100-032042	1 1/4	32	1 1/4	BSP	S/S 316	FULL HEXAGONE
2302504	I3406100-038049	1 1/2	38	1 1/2	BSP	S/S 316	FULL HEXAGONE
2301772	I3406100-051060	2	50	2	BSP	S/S 316	FULL HEXAGONE
2301773	I3406100-063076	2 1/2	63	2 1/2	BSP	S/S 316	FULL HEXAGONE
2301770	I3406100-076090	3	75	3	BSP	S/S 316	FULL HEXAGONE
2302505	I3406100-102114	4	100	4	BSP	S/S 316	FULL HEXAGONE

TO ASSEMBLY THE INSERT, USE SAFETY CLAMPS EN 14 420-3 / DIN 2817 AND SAFETY CLAMPS FLEXOLINE: CONSULT CHAPTER “CLAMPS & FERRULES”

Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread type	Material	Note
2302761	I8406100-013021	1/2	13	1/2	BSP	BRASS	FULL HEXAGONE
2302762	I8406100-019027	3/4	19	3/4	BSP	BRASS	FULL HEXAGONE
2301774	I8406100-025034	1	25	1	BSP	BRASS	FULL HEXAGONE
2302763	I8406100-032042	1 1/4	32	1 1/4	BSP	BRASS	GROOVED HEXAGONE
2301775	I8406100-038049	1 1/2	38	1 1/2	BSP	BRASS	GROOVED HEXAGONE
2301776	I8406100-051060	2	50	2	BSP	BRASS	GROOVED HEXAGONE
2301777	I8406100-063076	2 1/2	63	2 1/2	BSP	BRASS	GROOVED HEXAGONE
2301778	I8406100-076090	3	75	3	BSP	BRASS	GROOVED HEXAGONE
2301779	I8406100-102114	4	100	4	BSP	BRASS	GROOVED HEXAGONE

TO ASSEMBLY THE INSERT, USE SAFETY CLAMPS EN 14 420-3 / DIN 2817 AND SAFETY CLAMPS FLEXOLINE: CONSULT CHAPTER “CLAMPS & FERRULES”

EN 14 420-5 / DIN 2817

Female BSP with swivel nut - EN 14 420-2 / DIN 2817 hose shank

Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread type	Material	Note
2302506	I3406200-013021	1/2	13	1/2	BSP	S/S 316	FULL HEXAGONE
2302507	I3406200-019027	3/4	19	3/4	BSP	S/S 316	FULL HEXAGONE
2302508	I3406200-025034	1	25	1	BSP	S/S 316	FULL HEXAGONE
2301734	I3406200-032042	1 1/4	32	1 1/4	BSP	S/S 316	FULL HEXAGONE
2302509	I3406200-038049	1 1/2	38	1 1/2	BSP	S/S 316	FULL HEXAGONE
2302510	I3406200-051060	2	50	2	BSP	S/S 316	FULL HEXAGONE
2302511	I3406200-063076	2 1/2	63	2 1/2	BSP	S/S 316	FULL HEXAGONE
2302512	I3406200-076090	3	75	3	BSP	S/S 316	FULL HEXAGONE
2302513	I3406200-102114	4	100	4	BSP	S/S 316	FULL HEXAGONE

TO ASSEMBLY THE INSERT, USE SAFETY CLAMPS EN 14 420-3 / DIN 2817 AND SAFETY CLAMPS FLEXOLINE: CONSULT CHAPTER “CLAMPS & FERRULES”

Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread type	Material	Note
2302771	I8406200-013021	1/2	13	1/2	BSP	BRASS	FULL HEXAGONE
2302772	I8406200-019027	3/4	19	3/4	BSP	BRASS	FULL HEXAGONE
2301598	I8406200-025034	1	25	1	BSP	BRASS	FULL HEXAGONE
2301599	I8406200-032042	1 1/4	32	1 1/4	BSP	BRASS	GROOVED HEXAGONE
2301600	I8406200-038049	1 1/2	38	1 1/2	BSP	BRASS	GROOVED HEXAGONE
2301780	I8406200-051060	2	50	2	BSP	BRASS	GROOVED HEXAGONE
2301781	I8406200-063076	2 1/2	63	2 1/2	BSP	BRASS	GROOVED HEXAGONE
2301782	I8406200-076090	3	75	3	BSP	BRASS	GROOVED HEXAGONE
2301783	I8406200-102114	4	100	4	BSP	BRASS	GROOVED HEXAGONE

TO ASSEMBLY THE INSERT, USE SAFETY CLAMPS EN 14 420-3 / DIN 2817 AND SAFETY CLAMPS FLEXOLINE: CONSULT CHAPTER “CLAMPS & FERRULES”

EN 14 420-5 / DIN 2817

Male BSP - EN 14 420-2 / DIN 2817 hose shank
Aviation refuelling service approved

Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread type	Material
2302764	I840610A-025034	1	25	1	BSP	TINNED BRASS
2302765	I840610A-032042	1 1/4	32	1 1/4	BSP	TINNED BRASS
2302766	I840610A-038049	1 1/2	38	1 1/2	BSP	TINNED BRASS
2302767	I840610A-051060	2	51	2	BSP	TINNED BRASS
2302768	I840610A-063076	2 1/2	63	2 1/2	BSP	TINNED BRASS
2302769	I840610A-076090	3	76	3	BSP	TINNED BRASS
2302770	I840610A-102114	4	102	4	BSP	TINNED BRASS

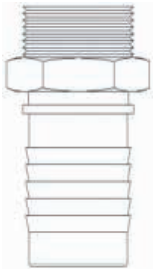
EN 14 420-5 / DIN 2817

Female BSP with swivel nut - EN 14 420-2 / DIN 2817 hose shank
Aviation refuelling service approved

Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread type	Material
2302100	I840620A-025034	1	25	1	BSP	TINNED BRASS
2302773	I840620A-032042	1 1/4	32	1 1/4	BSP	TINNED BRASS
2302774	I840620A-038049	1 1/2	38	1 1/2	BSP	TINNED BRASS
2302775	I840620A-051060	2	51	2	BSP	TINNED BRASS
2302776	I840620A-063076	2 1/2	63	2 1/2	BSP	TINNED BRASS
2302777	I840620A-076090	3	76	3	BSP	TINNED BRASS
2302778	I840620A-102114	4	102	4	BSP	TINNED BRASS

MALE BSPP - SERRATED HOSE SHANK

Aviation refuelling service approved



Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread type	Material
2302690	I5906100-025034	1	25	1	BSPP	ALUMINIUM
2302079	I5906100-032042	1 1/4	32	1 1/4	BSPP	ALUMINIUM
2302080	I5906100-038049	1 1/2	38	1 1/2	BSPP	ALUMINIUM
2302081	I5906100-051060	2	51	2	BSPP	ALUMINIUM
2302082	I5906100-063076	2 1/2	63	2 1/2	BSPP	ALUMINIUM
2302691	I5906100-076090	3	76	3	BSPP	ALUMINIUM
2302692	I5906100-102114	4	102	4	BSPP	ALUMINIUM

SAFETY CLAMP EN 14 420-3 / DIN 2817

Aviation refuelling service approved

Item Code	Part Number	Hose ID mm	Hose OD min mm	Hose OD MAX mm	Material
2301784	I5LG4D-025041	25 x 8	40	43	ALUMINIUM
	I5LG4D-032045	32 x 6	43	46	ALUMINIUM
2301785	I5LG4D-032048	32 x 8	47	50	ALUMINIUM
2306262	I5LG4D-038052	38 x 6,5	50	52	ALUMINIUM
2301786	I5LG4D-038054	38 x 8	53	56	ALUMINIUM
2304563	I5LG4D-050066	50 x 8	64	67	ALUMINIUM
2301787	I5LG4D-051070	50 x 10	69	71	ALUMINIUM
2301788	I5LG4D-063081	63 x 8	78	81	ALUMINIUM
2304564	I5LG4D-075091	75 x8	89	93	ALUMINIUM
2301789	I5LG4D-076096	75 x 10	94	97	ALUMINIUM
	I5LG4D-100117	100 x 8	114	119	ALUMINIUM
2303001	I5LG4D-102120	100 x 10	118	122	ALUMINIUM
2301790	I5LG4D-102124	100 x 12	122	126	ALUMINIUM

SERRATED FERRULE

Aviation refuelling service approved

Item Code	Part Number	Hose ID in	Hose ID mm	Hose OD min mm	Hose OD MAX mm	Material
2302264	I109U025-037042	1	25	37	42	PLATED STEEL
2302265	I109U032-044048	1 1/4	32	44	48	PLATED STEEL
2302112	I109U038-050054	1 1/2	38	50	54	PLATED STEEL
2302266	I109U051-065071	2	51	65	71	PLATED STEEL
2302113	I109U063-077083	2 1/2	63	77	83	PLATED STEEL
2302114	I109U076-090096	3	76	90	96	PLATED STEEL
2302267	I109U102-116124	4	102	116	124	PLATED STEEL

SANDBLAST

Quick coupling

Item Code	Part Number	Hose ID mm	Head DN mm	Claw Distance Internal mm	Material
2304636	IRC9I300-019027	19	3/4	58	NYLON
2305641	IRC9I300-025034	25	1	58	NYLON
5304637	IRC9I300-032042	32	1 1/4	58	NYLON
2305642	IRC9I300-038049	38	1 1/2	58	NYLON
	I9C9I300-019027	19	3/4	58	MALLEABLE IRON
2305689	I9C9I300-025034	25	1	58	MALLEABLE IRON
2305690	I9C9I300-032042	32	1 1/4	58	MALLEABLE IRON
	I9C9I300-038049	38	1 1/2	58	MALLEABLE IRON

SANDBLAST

Nozzle holder - Female BSP

Item Code	Part Number	Hose ID mm	Hose ID in	Thread in	Thread type	Material
	I5C9I06D-032042	32	1 1/4	1 1/4	BSP	ALUMINIUM
	IRC9I06D-019042	19	3/4	1 1/4	BSP	NYLON
	IRC9I06D-025042	25	1	1 1/4	BSP	NYLON
	IRC9I06D-032042	32	1 1/4	1 1/4	BSP	NYLON
	IRC9I06D-038042	38	1 1/2	1 1/4	BSP	NYLON

SANDBLAST

Nozzle holder - Female coarse Thread

Item Code	Part Number	Hose ID mm	Hose ID in	Thread mm	Thread type	Material
2303915	I5C50200-032060	32	1 1/4	50	COARSE Thread	ALUMINIUM
2303917	IRC50200-019060	19	3/4	50	COARSE Thread	NYLON
2303918	IRC50200-025060	25	1	50	COARSE Thread	NYLON
2303919	IRC50200-032060	32	1 1/4	50	COARSE Thread	NYLON
2303920	IRC50200-038060	38	1 1/2	50	COARSE Thread	NYLON

SANDBLAST

Female BSP

Item Code	Part Number	Thread in	Thread type	Material
	IRA9I306-000042	1 1/4	BSP	NYLON
2304638	I9A9I306-000049	1 1/2	BSP	MALLEABLE IRON

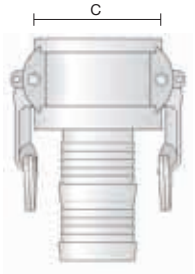
MORTAR

Adapter - Hose shank

Item Code	Part Number	Hose ID in	Hose ID mm	Coupling Size C mm	Coupling Size D mm	Material
2302084	I938C100-025025	1	25	35	22	MALLEABLE IRON
2302085	I938C100-025035	1	25	49,5	22	MALLEABLE IRON
2301758	I938C100-025X25	1	25	41	22	MALLEABLE IRON
2302086	I938C100-035035	1 3/8	35	49,5	22	MALLEABLE IRON
2302087	I938C100-035050	1 3/8	35	63	22	MALLEABLE IRON
2302088	I938C100-050050	2	50	63	22	MALLEABLE IRON
2302089	I938C101-025035	1	25	49,5	23,5	MALLEABLE IRON
2302090	I938C101-035035	1 3/8	35	49,5	23,5	MALLEABLE IRON
2301757	I938C101-035050	1 3/8	35	63	23,5	MALLEABLE IRON
2302091	I938C101-050050	2	50	63	23,5	MALLEABLE IRON

MORTAR

Coupler - Hose shank



Item Code	Part Number	Hose ID in	Hose ID mm	Coupling Size C mm	Coupling Size D mm	Material
2302092	I938C200-025025	1	25	35,5	22	MALLEABLE IRON
2302818	I938C200-025035	1	25	51	22	MALLEABLE IRON
2302093	I938C200-025X25	1	25	42	22	MALLEABLE IRON
2302094	I938C200-035035	1 3/8	35	51	22	MALLEABLE IRON
2302819	I938C200-035050	1 3/8	35	64	22	MALLEABLE IRON
2302095	I938C200-050050	2	50	64	22	MALLEABLE IRON
2302096	I938C201-025035	1	25	51	23,5	MALLEABLE IRON
2302097	I938C201-035035	1 3/8	35	51	23,5	MALLEABLE IRON
2302820	I938C201-035050	1 3/8	35	64	23,5	MALLEABLE IRON
2302098	I938C201-050050	2	50	64	23,5	MALLEABLE IRON

MORTAR

Male BSP - Hose shank

Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread type	Material
2302310	I1306100-025034	1	25	1	BSP	PLATED STEEL
2302311	I1306100-035042	1 3/8	35	1 1/4	BSP	PLATED STEEL
2302083	I1306100-050060	2	50	2	BSP	PLATED STEEL

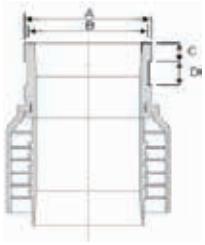
MORTAR

Crimping Ring

Item Code	Part Number	Hose ID in	Hose ID mm	ID Ring mm	OD Ring mm	L mm	Material
2303031	R5YBFF0-0452550	1	25	45	50	50	ALUMINIUM
2303032	R5YBFF0-0552555	1 3/8	35	55	60	55	ALUMINIUM
1900418	R5YBFF0-0752555	2	51	75	80	55	ALUMINIUM

CONCRETE COUPLING COMPLETE WITH PRE-CRIMPED FERRULE

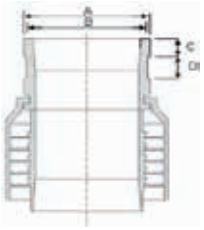
Victaulic style - Hardened insert



Item Code	Part Number	Hose ID in	Hose ID mm	Head DN in	Head A mm	Head B mm	Head C mm	Head D mm	Material
2301752	IV39VL00-051089	2	51	3	88,9	84,9	16	20	HARDENED STEEL
2301753	IV39VL00-063089	2 1/2	63	3	88,9	84,9	16	20	HARDENED STEEL
2301754	IV39VL00-076089	3	76	3	88,9	84,9	16	20	HARDENED STEEL
2302892	IV39VL00-076097	3	76	3 1/4	97	88,5	16	20	HARDENED STEEL
2302217	IV39VL00-102114	4	102	4	114,3	108,3	17	20	HARDENED STEEL
2302216	IV39VL00-102127	4	102	4 1/2	127	115	17	20	HARDENED STEEL
2302219	IV39VL00-127142	5	127	5	142	133	17	20	HARDENED STEEL
2302220	IV39VL00-127148	5	127	5 1/2	148	139	17	20	HARDENED STEEL
2302893	IV39VL00-152168	6	152	6	168,3	159	17	20	HARDENED STEEL

CONCRETE COUPLING COMPLETE WITH PRE-CRIMPED FERRULE

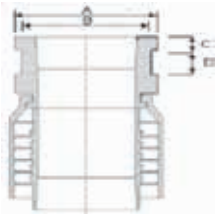
Shouldered style - Hardened insert



Item Code	Part Number	Hose ID in	Hose ID mm	Head DN in	Head A mm	Head B mm	Head C mm	Head D mm	Material
2303021	IV39RL00-051067	2	51	2	66,5	59,5	16	20	HARDENED STEEL
2303022	IV39RL00-063097	2 1/2	63	3	97	88,5	16	20	HARDENED STEEL
2303023	IV39RL00-076097	3	76	3	97	88,5	16	20	HARDENED STEEL
2303024	IV39RL00-090122	3 1/2	90	4	122	115	17,5	20	HARDENED STEEL
2306505	IV39RL00-090127	3 1/2	90	4 1/2	127	115	17	20	HARDENED STEEL
2303025	IV39RL00-102122	4	102	4	122	115	17,5	20	HARDENED STEEL

CONCRETE COUPLING COMPLETE WITH PRE-CRIMPED FERRULE

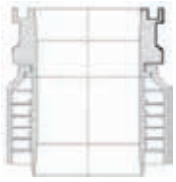
Heavy duty raised end - California style - Hardened insert



Item Code	Part Number	Hose ID in	Hose ID mm	Head DN in	Head A mm	Head B mm	Head C mm	Head D mm	Material
2303026	IV39JL00-051078	2	51	2	77,7	69,9	12,7	20	HARDENED STEEL
2303027	IV39JL00-063082	2 1/2	63	2 1/2	82,3	73,2	12,3	20	HARDENED STEEL
2303028	IV39JL00-076106	3	76	3	106,2	97	12,7	20	HARDENED STEEL
2303029	IV39JL00-102132	4	102	4	131,6	122	15,2	20	HARDENED STEEL
2303030	IV39JL00-127157	5	127	5	157	147,3	15,2	20	HARDENED STEEL

CONCRETE COUPLING COMPLETE WITH PRE-CRIMPED FERRULE

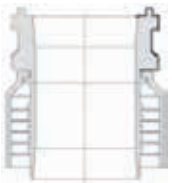
Schwing style - Female - Hardened insert



Item Code	Part Number	Hose ID in	Hose ID mm	Head DN in	Head A mm	Material
2302894	IV39WF00-102102	4	102	4	148	HARDENED STEEL
2302895	IV39WF00-127127	5	127	5	166	HARDENED STEEL
2306524	IV39WF00-152152	6	152	6	195	HARDENED STEEL

CONCRETE COUPLING COMPLETE WITH PRE-CRIMPED FERRULE

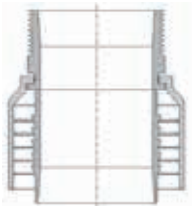
Schwing style - Male - Hardened insert



Item Code	Part Number	Hose ID in	Hose ID mm	Head DN in	Head A mm	Material
2302896	IV39WM00-102102	4	102	4	148	HARDENED STEEL
2302897	IV39WM00-127127	5	127	5	166	HARDENED STEEL
2306525	IV39WM00-152152	6	152	6	195	HARDENED STEEL

CONCRETE COUPLING COMPLETE WITH PRE-CRIMPED FERRULE

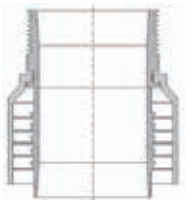
Male BSPT - Hardened insert



Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread type	Material
2301755	IV307M00-051060	2	51	2	BSPT	HARDENED STEEL
2301756	IV307M00-076090	3	76	3	BSPT	HARDENED STEEL

CONCRETE COUPLING COMPLETE WITH PRE-CRIMPED FERRULE

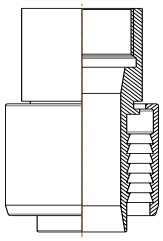
Male NPT - Hardened insert



Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread type	Material
2302890	IV328M00-051060	2	51	2	NPT	HARDENED STEEL
2302891	IV328M00-076090	3	76	3	NPT	HARDENED STEEL

CONCRETE COUPLING COMPLETE WITH PRE-CRIMPED FERRULE

Female BSPP - Hardened insert



Item Code	Part Number	Hose ID in	Hose ID mm	Thread in	Thread type	Material
2306526	IV306F00-051060	2	51	2	BSPP	HARDENED STEEL

SWIVEL FLANGE

EN 14 420-2 / DIN 2817 hose shank

Item Code	Part Number	Hose ID in	Hose ID mm	Flange type	Material Hose shank	Material Flange
2306420	I14BD74A-032032	1 1/4	32	PN 10/16	PLATED STEEL	PLATED STEEL
2302312	I14BD74A-038038	1 1/2	40	PN 10/16	PLATED STEEL	PLATED STEEL
2302313	I14BD74A-051051	2	50	PN 10/16	PLATED STEEL	PLATED STEEL
2302314	I14BD74A-063063	2 1/2	63	PN 10/16	PLATED STEEL	PLATED STEEL
2302315	I14BD74A-076076	3	75	PN 10/16	PLATED STEEL	PLATED STEEL
2302316	I14BD74A-080080		80	PN 10/16	PLATED STEEL	PLATED STEEL
2302317	I14BD74A-102102	4	100	PN 10/16	PLATED STEEL	PLATED STEEL
2302318	I14BD74A-127127	5	125	PN 10/16	PLATED STEEL	PLATED STEEL
2302319	I14BD74A-152152	6	150	PN 10/16	PLATED STEEL	PLATED STEEL
2302009	I14BD74A-203203	8	200	PN 16	PLATED STEEL	PLATED STEEL

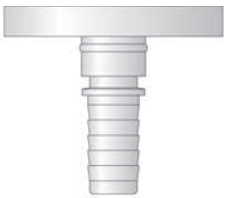
TO ASSEMBLY THE INSERT, USE SAFETY CLAMPS EN 14 420-3 / DIN 2817 AND SAFETY CLAMPS FLEXOLINE: CONSULT CHAPTER “CLAMPS & FERRULES”

Item Code	Part Number	Hose ID in	Hose ID mm	Flange type	Material Hose shank	Material Flange
2304871	I34BD74A-025025	1	25	PN 10/16	S/S 316	S/S 316
2304870	I34BD74A-038038	1 1/2	40	PN 10/16	S/S 316	S/S 316
2302543	I34BD74A-051051	2	50	PN 10/16	S/S 316	S/S 316
2304872	I34BD74A-063063	2 1/2	63	PN 10/16	S/S 316	S/S 316
2302544	I34BD74A-076076	3	75	PN 10/16	S/S 316	S/S 316
2302010	I34BD74A-102102	4	100	PN 10/16	S/S 316	S/S 316
2304873	I34BD74A-152152	6	150	PN 10/16	S/S 316	S/S 316

TO ASSEMBLY THE INSERT, USE SAFETY CLAMPS EN 14 420-3 / DIN 2817 AND SAFETY CLAMPS FLEXOLINE: CONSULT CHAPTER “CLAMPS & FERRULES”

FIXED FLANGE

Serrated hose shank



Item Code	Part Number	Hose ID in	Hose ID mm	Flange type	Material Hose shank	Material Flange
2302340	I17BD61A-038038	1 1/2	38	PN 16	PLATED STEEL	PLATED STEEL
2302341	I17BD61A-051051	2	51	PN 16	PLATED STEEL	PLATED STEEL
2302011	I17BD61A-063063	2 1/2	63	PN 16	PLATED STEEL	PLATED STEEL
2303002	I17BD61A-075075	3	76	PN 16	PLATED STEEL	PLATED STEEL
2303003	I17BD61A-100100	4	102	PN 16	PLATED STEEL	PLATED STEEL
2303004	I17BD61A-125125	5	127	PN 16	PLATED STEEL	PLATED STEEL
2303005	I17BD61A-150150	6	152	PN 16	PLATED STEEL	PLATED STEEL
2304547	I17BD61A-200200	8	203	PN 16	PLATED STEEL	PLATED STEEL

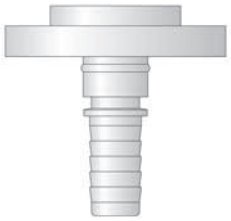
TO ASSEMBLY THE INSERT, USE SERRATED FERRULE: CONSULT CHAPTER “CLAMPS & FERRULES”

Item Code	Part Number	Hose ID in	Hose ID mm	Flange type	Material Hose shank	Material Flange
2302353	I17BE67B-038038	1 1/2	38	ASA 150	PLATED STEEL	PLATED STEEL
2302354	I17BE67B-051051	2	51	ASA 150	PLATED STEEL	PLATED STEEL
2302355	I17BE67B-063063	2 1/2	63	ASA 150	PLATED STEEL	PLATED STEEL
2303006	I17BE67B-075075	3	76	ASA 150	PLATED STEEL	PLATED STEEL
2303007	I17BE67B-100100	4	102	ASA 150	PLATED STEEL	PLATED STEEL
2303008	I17BE67B-125125	5	127	ASA 150	PLATED STEEL	PLATED STEEL
2303009	I17BE67B-150150	6	152	ASA 150	PLATED STEEL	PLATED STEEL
	I17BE67B-200200	8	203	ASA 150	PLATED STEEL	PLATED STEEL

TO ASSEMBLY THE INSERT, USE SERRATED FERRULE: CONSULT CHAPTER “CLAMPS & FERRULES”

SWIVEL FLANGE

Serrated hose shank



Item Code	Part Number	Hose ID in	Hose ID mm	Flange type	Material Hose shank	Material Flange
2301291	I17BD72A-038038	1 1/2	38	PN 16	PLATED STEEL	PLATED STEEL
2302014	I17BD72A-051051	2	51	PN 16	PLATED STEEL	PLATED STEEL
2301135	I17BD72A-063063	2 1/2	63	PN 16	PLATED STEEL	PLATED STEEL
2301136	I17BD72A-075075	3	76	PN 16	PLATED STEEL	PLATED STEEL
2301137	I17BD72A-100100	4	102	PN 16	PLATED STEEL	PLATED STEEL
2303011	I17BD72A-125125	5	127	PN 16	PLATED STEEL	PLATED STEEL
2301138	I17BD72A-150150	6	152	PN 16	PLATED STEEL	PLATED STEEL
2301166	I17BD72A-200200	8	203	PN 16	PLATED STEEL	PLATED STEEL

TO ASSEMBLY THE INSERT, USE SERRATED FERRULE: CONSULT CHAPTER “CLAMPS & FERRULES”

Item Code	Part Number	Hose ID in	Hose ID mm	Flange type	Material Hose shank	Material Flange
2304578	I37BD72A-032032	1 1/4	32	PN 16	S/S 316	S/S 316
	I37BD72A-038038	1 1/2	38	PN 16	S/S 316	S/S 316
2302549	I37BD72A-051051	2	51	PN 16	S/S 316	S/S 316
2303010	I37BD72A-063063	2 1/2	63	PN 16	S/S 316	S/S 316
2303012	I37BD72A-075075	3	76	PN 16	S/S 316	S/S 316
2303013	I37BD72A-100100	4	102	PN 16	S/S 316	S/S 316
2306495	I37BD72A-150150	6	152	PN 16	S/S 316	S/S 316

TO ASSEMBLY THE INSERT, USE SERRATED FERRULE: CONSULT CHAPTER “CLAMPS & FERRULES”

Item Code	Part Number	Hose ID in	Hose ID mm	Flange type	Material Hose shank	Material Flange
2302356	I17BE79A-038038	1 1/2	38	ASA 150	PLATED STEEL	PLATED STEEL
2302357	I17BE79A-051051	2	51	ASA 150	PLATED STEEL	PLATED STEEL
2302358	I17BE79A-063063	2 1/2	63	ASA 150	PLATED STEEL	PLATED STEEL
2303014	I17BE79A-075075	3	76	ASA 150	PLATED STEEL	PLATED STEEL
2303015	I17BE79A-100100	4	102	ASA 150	PLATED STEEL	PLATED STEEL
2303016	I17BE79A-125125	5	127	ASA 150	PLATED STEEL	PLATED STEEL
2303017	I17BE79A-150150	6	152	ASA 150	PLATED STEEL	PLATED STEEL
	I17BE79A-200200	8	203	ASA 150	PLATED STEEL	PLATED STEEL

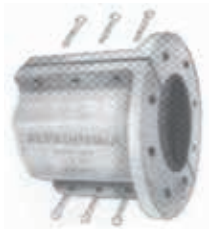
TO ASSEMBLY THE INSERT, USE SERRATED FERRULE: CONSULT CHAPTER “CLAMPS & FERRULES”

Item Code	Part Number	Hose ID in	Hose ID mm	Flange type	Material Hose shank	Material Flange
2302552	I37BE79A-051051	2	51	ASA 150	S/S 316	S/S 316
2303018	I37BE79A-063063	2 1/2	63	ASA 150	S/S 316	S/S 316
2303019	I37BE79A-075075	3	76	ASA 150	S/S 316	S/S 316
2303020	I37BE79A-100100	4	102	ASA 150	S/S 316	S/S 316
2304557	I37BE79A-150150	6	152	ASA 150	S/S 316	S/S 316

TO ASSEMBLY THE INSERT, USE SERRATED FERRULE: CONSULT CHAPTER “CLAMPS & FERRULES”

MUFF COUPLING

Coupling for 706AA Hose - Fixed flange



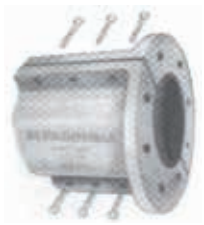
AU

Item Code	Part Number	Hose ID in	Hose ID mm	Hose OD MAX mm	Flange type	Material
2303187	I5MBZ61A-076102	3	76	102	TABLE D	ALUMINIUM
2303188	I5MBZ61A-102128	4	102	128	TABLE D	ALUMINIUM
2303189	I5MBZ61A-127159	5	127	159	TABLE D	ALUMINIUM
2303190	I5MBZ61A-152184	6	152	184	TABLE D	ALUMINIUM
2303191	I5MBZ61A-203235	8	203	235	TABLE D	ALUMINIUM
2303192	I5MBZ61A-254286	10	254	286	TABLE D	ALUMINIUM
2303193	I5MBZ61A-300344	12	300	344	TABLE D	ALUMINIUM

FLANGE ASA 150 AVAILABLE ON REQUEST

MUFF COUPLING

Coupling for 707AA Hose - Fixed flange



AU

Item Code	Part Number	Hose ID in	Hose ID mm	Hose OD MAX mm	Flange type	Material
2303194	I5MBZ61A-051069	2	51	69	TABLE D	ALUMINIUM
2303195	I5MBZ61A-076098	3	76	98	TABLE D	ALUMINIUM
2303196	I5MBZ61A-102124	4	102	124	TABLE D	ALUMINIUM
2303197	I5MBZ61A-152178	6	152	178	TABLE D	ALUMINIUM
2303198	I5MBZ61A-203237	8	203	237	TABLE D	ALUMINIUM
2303199	I5MBZ61A-254292	10	254	292	TABLE D	ALUMINIUM

EAR PINCH ON CLAMP

1-EAR WITH INNER RING

Item Code	Part Number	Hose OD min-MAX mm	Material
2306009		7,5 - 8,5	W1 (PLATED STEEL)
2306011		9 - 10,5	W1 (PLATED STEEL)
2306013		10 - 11,5	W1 (PLATED STEEL)
2306014		10,5 - 12,5	W1 (PLATED STEEL)
2306019		13 - 15,3	W1 (PLATED STEEL)
2304309		14 - 16	W1 (PLATED STEEL)
2306021		15 - 17,3	W1 (PLATED STEEL)

2304911		7,5 - 8,5	W4 (S/S 304)
2304306		8 - 9,5	W4 (S/S 304)
2306028		10,5 - 12,5	W4 (S/S 304)
2306030		11,5 - 13,5	W4 (S/S 304)
2304918		12,5 - 14,5	W4 (S/S 304)
2306031		13 - 15,3	W4 (S/S 304)
2304310		14 - 16,3	W4 (S/S 304)
2304311		15 - 17,3	W4 (S/S 304)
2305292		16 - 18,3	W4 (S/S 304)
2306033		17 - 19,3	W4 (S/S 304)

EAR PINCH ON CLAMP

2-EARS

Item Code	Part Number	Hose OD min-MAX mm	Material
2304286		7 - 9	W1 (PLATED STEEL)
2304287		9 - 11	W1 (PLATED STEEL)
2304289		11 - 13	W1 (PLATED STEEL)
2304290		13 - 15	W1 (PLATED STEEL)
2304293		15 - 18	W1 (PLATED STEEL)
2304294		17 - 20	W1 (PLATED STEEL)
2304296		20 - 23	W1 (PLATED STEEL)
2304298		23 - 27	W1 (PLATED STEEL)

2304924		7 - 9	W4 (S/S 304)
2304288		9 - 11	W4 (S/S 304)
2304908		11 - 13	W4 (S/S 304)
2304291		13 - 15	W4 (S/S 304)
2305998		15 - 18	W4 (S/S 304)
2305999		17 - 20	W4 (S/S 304)
2306001		20 - 23	W4 (S/S 304)
2306003		23 - 27	W4 (S/S 304)
2304922		27 - 31	W4 (S/S 304)
2306005		31 - 34	W4 (S/S 304)
2306006		34 - 37	W4 (S/S 304)

MINICLAMP

Clamps - 1 bolt

Item Code	Part Number	Hose OD min-MAX mm	Clamp width mm	Material
2304140		8	9	W1 (PLATED STEEL)
2304142		9	10	W1 (PLATED STEEL)
2304143		9,5 - 10	10	W1 (PLATED STEEL)
2304144		10 - 11	10	W1 (PLATED STEEL)
2304147		12 - 13	10	W1 (PLATED STEEL)
2304148		13 - 14	10	W1 (PLATED STEEL)
2304150		14 - 15	10	W1 (PLATED STEEL)
2304154		15 - 17	10	W1 (PLATED STEEL)

WORM GEAR CLAMP

Clamps - 1 bolt - DIN 3017

Item Code	Part Number	Hose OD min-MAX mm	Clamp width mm	Material
2304156		8-16	9	W1 (PLATED STEEL)
2304157		12-22	9	W1 (PLATED STEEL)
2304159		16-27	12	W1 (PLATED STEEL)
2304162		20-32	12	W1 (PLATED STEEL)
2304163		25-40	12	W1 (PLATED STEEL)
2304164		30-45	12	W1 (PLATED STEEL)
2304165		32-50	12	W1 (PLATED STEEL)
2304166		40-60	12	W1 (PLATED STEEL)
2304167		50-70	12	W1 (PLATED STEEL)
2304169		70-90	12	W1 (PLATED STEEL)
2304170		80-100	12	W1 (PLATED STEEL)
2304172		90-110	12	W1 (PLATED STEEL)
2304173		110-130	12	W1 (PLATED STEEL)
2304174		130-150	12	W1 (PLATED STEEL)
2306217		140-160	12	W1 (PLATED STEEL)
2304175		160-180	12	W1 (PLATED STEEL)
2304176		180-200	12	W1 (PLATED STEEL)
2304177		200-220	12	W1 (PLATED STEEL)
2304178		220-240	12	W1 (PLATED STEEL)

2304181		8-16	9	W5 (S/S 316)
2304182		12-22	9	W5 (S/S 316)
2304030		16-27	12	W5 (S/S 316)
2304032		20-32	12	W5 (S/S 316)
2304033		25-40	12	W5 (S/S 316)
2304034		30-45	12	W5 (S/S 316)
2304035		32-50	12	W5 (S/S 316)
2304036		40-60	12	W5 (S/S 316)
2304037		50-70	12	W5 (S/S 316)
2304038		60-80	12	W5 (S/S 316)
2304039		70-90	12	W5 (S/S 316)
2304040		80-100	12	W5 (S/S 316)
2304041		90-110	12	W5 (S/S 316)
2304042		110-130	12	W5 (S/S 316)
2304043		140-160	12	W5 (S/S 316)
2304044		160-180	12	W5 (S/S 316)
2304045		180-200	12	W5 (S/S 316)
2304046		200-220	12	W5 (S/S 316)
2304047		220-240	12	W5 (S/S 316)

RUBBER LINED CLIPS

DIN 3016

Item Code	Part Number	Application diameter mm	Band width mm	Material
2304065		10	12	EPDM / W1 (PLATED STEEL)
2304066		12	12	EPDM / W1 (PLATED STEEL)
2305178		15	12	EPDM / W1 (PLATED STEEL)
2304068		6	15	EPDM / W1 (PLATED STEEL)
2304069		8	15	EPDM / W1 (PLATED STEEL)
2304070		10	15	EPDM / W1 (PLATED STEEL)
2304071		13	15	EPDM / W1 (PLATED STEEL)
2304072		16	15	EPDM / W1 (PLATED STEEL)
2304073		18	15	EPDM / W1 (PLATED STEEL)
2304079		25	20	EPDM / W1 (PLATED STEEL)
2304080		30	20	EPDM / W1 (PLATED STEEL)
2304083		35	25	EPDM / W1 (PLATED STEEL)
2304084		40	25	EPDM / W1 (PLATED STEEL)
2304086		50	25	EPDM / W1 (PLATED STEEL)

RUBBER LINED CLIPS IN EPDM / W4 (S/S 304) AVAILABLE ON REQUEST

RUBBER LINED CLIPS

SMS

Item Code	Part Number	Application diameter mm	Band width mm	Material
2304702		6,4	12,7	EPDM / PLATED STEEL
2304703		7,9	12,7	EPDM / PLATED STEEL
2304704		9,5	12,7	EPDM / PLATED STEEL
2304707		11,1	12,7	EPDM / PLATED STEEL
2304708		12,7	12,7	EPDM / PLATED STEEL
2304050		15,9	12,7	EPDM / PLATED STEEL
2304051		19	12,7	EPDM / PLATED STEEL
2305951		20,6	12,7	EPDM / PLATED STEEL
2304716		25,4	12,7	EPDM / PLATED STEEL
2304719		28,6	12,7	EPDM / PLATED STEEL
2304723		34,9	12,7	EPDM / PLATED STEEL
2304725		38,1	12,7	EPDM / PLATED STEEL
2304729		51	12,7	EPDM / PLATED STEEL
2304730		65	12,7	EPDM / PLATED STEEL

BAND-IT SYSTEM

Banding tools, bands and buckles

Item Code	Part Number	Item
2300912	I0LLT0	BANDING TOOL

Item Code	Part Number	Item	Width in	Width mm	Thickness mm	Roll	Material
2302154	I2LLF0-013	BAND	1/2	12,7	0,76	30	S/S 304
2302155	I2LLF0-019	BAND	3/4	19	0,76	30	S/S 304

Item Code	Part Number	Item	Width in	Width mm	Thickness mm	Box n° pcs/box	Material
2302157	I2LLB0-013	BUCKLES	1/2	12,7	0,76	100	S/S 304
2302156	I2LLB0-019	BUCKLES	3/4	19	0,76	100	S/S 304

PW-CLAMP

Clamps - 1 bolt

Item Code	Part Number	Hose OD min-MAX mm	Clamp width mm	Material
2304220		31 - 35	20	W1 (PLATED STEEL)
2304222		35 - 40	20	W1 (PLATED STEEL)
2304224		40 - 45	20	W1 (PLATED STEEL)
2304225		44 - 50	20	W1 (PLATED STEEL)
2304226		49 - 55	20	W1 (PLATED STEEL)
2304227		54 - 60	20	W1 (PLATED STEEL)
2304229		59 - 65	20	W1 (PLATED STEEL)
2304230		64 - 70	20	W1 (PLATED STEEL)
2304231		69 - 75	20	W1 (PLATED STEEL)

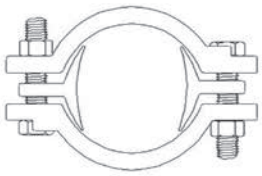
2304098		31 - 35	20	W5 (S/S 316)
2304099		35 - 40	20	W5 (S/S 316)
2304100		40 - 45	20	W5 (S/S 316)
2304101		44 - 50	20	W5 (S/S 316)
2304102		49 - 55	20	W5 (S/S 316)
2304767		54 - 60	20	W5 (S/S 316)

PW-CLAMP

Clamps - 2 bolts

Item Code	Part Number	Hose OD min-MAX mm	Clamp width mm	Material
2304240		40 - 50	20	W1 (PLATED STEEL)
2304242		50 - 60	20	W1 (PLATED STEEL)
2304243		55 - 65	20	W1 (PLATED STEEL)
2304244		60 - 70	20	W1 (PLATED STEEL)
2304245		65 - 75	20	W1 (PLATED STEEL)
2304246		70 - 80	20	W1 (PLATED STEEL)
2304248		80 - 90	20	W1 (PLATED STEEL)
2304251		90 - 100	25	W1 (PLATED STEEL)
2304252		95 - 105	25	W1 (PLATED STEEL)
2304253		100 - 110	25	W1 (PLATED STEEL)
2304254		105 - 115	25	W1 (PLATED STEEL)
2304255		110 - 120	25	W1 (PLATED STEEL)
2304257		120 - 130	25	W1 (PLATED STEEL)
2304259		130 - 140	25	W1 (PLATED STEEL)
2304260		140 - 150	25	W1 (PLATED STEEL)
2304261		150 - 160	25	W1 (PLATED STEEL)
2304262		160 - 170	25	W1 (PLATED STEEL)
2304263		170 - 180	25	W1 (PLATED STEEL)
2304264		180 - 190	25	W1 (PLATED STEEL)
2304265		190 - 200	25	W1 (PLATED STEEL)
2304266		200 - 210	25	W1 (PLATED STEEL)
2304267		210 - 220	25	W1 (PLATED STEEL)
2304268		220 - 230	25	W1 (PLATED STEEL)
2304107		40 - 50	20	W5 (S/S 316)
2304109		50 - 60	20	W5 (S/S 316)
2304110		55 - 65	20	W5 (S/S 316)
2304111		60 - 70	20	W5 (S/S 316)
2304112		65 - 75	20	W5 (S/S 316)
2304113		70 - 80	20	W5 (S/S 316)
2304114		75 - 85	20	W5 (S/S 316)
2304115		80 - 90	20	W5 (S/S 316)
2304117		90 - 100	25	W5 (S/S 316)
2304119		100 - 110	25	W5 (S/S 316)
2304121		110 - 120	25	W5 (S/S 316)
2304123		120 - 130	25	W5 (S/S 316)
2304125		130 - 140	25	W5 (S/S 316)
2304126		140 - 150	25	W5 (S/S 316)
2304128		150 - 160	25	W5 (S/S 316)
2304130		160 - 170	25	W5 (S/S 316)
2304131		170 - 180	25	W5 (S/S 316)
2304772		180 - 190	25	W5 (S/S 316)
2304344		190 - 200	25	W5 (S/S 316)
2304132		200 - 210	25	W5 (S/S 316)
2304133		210 - 220	25	W5 (S/S 316)
2304134		220 - 230	25	W5 (S/S 316)

DOUBLE BOLT CLAMP WITH TWO SADDLES



Item Code	Part Number	Hose OD min mm	Hose OD MAX mm	Note	Material
2303169	I9LP20-02200	17	22		MALLEABLE IRON
2303170	I9LP20-02900	22	29	DIN 20039 A	MALLEABLE IRON
2303171	I9LP20-03400	28	34	DIN 20039 A	MALLEABLE IRON
2303172	I9LP20-04000	32	40	DIN 20039 A	MALLEABLE IRON
2303173	I9LP20-04900	39	49	DIN 20039 A	MALLEABLE IRON
2303174	I9LP20-06000	48	60	DIN 20039 A	MALLEABLE IRON
2302152	I9LP20-07200	56	72		MALLEABLE IRON
2303175	I9LP20-07600	60	76	DIN 20039 A	MALLEABLE IRON
2303176	I9LP20-X9400	77	94	DIN 20039 A	MALLEABLE IRON
2303177	I9LP20-10200	89	101		MALLEABLE IRON
2303178	I9LP20-11400	95,2	114,3		MALLEABLE IRON
2303180	I9LP20-12800	114	128		MALLEABLE IRON
2303938	I9LP20-14000	127	139,7		MALLEABLE IRON
2303182	I9LP20-15500	135	155		MALLEABLE IRON
2303184	I9LP20-17500	155	175		MALLEABLE IRON
2303940	I9LP20-19400	175	195		MALLEABLE IRON
2303941	I9LP20-20800	195,3	208		MALLEABLE IRON
2303186	I9LP20-22500	210	225		MALLEABLE IRON
2303942	I9LP20-25100	227	250		MALLEABLE IRON
2303943	I9LP20-28900	252,4	288,9		MALLEABLE IRON

SAFETY CLAMPS EN 14 420-3 / DIN 2817

Item Code	Part Number	Hose ID mm	Hose OD min mm	Hose OD MAX mm	Material
2302729	I5LG4D-013023	13 x 5	22	24	ALUMINIUM
2302730	I5LG4D-019031	19 x 6	30	33	ALUMINIUM
2302731	I5LG4D-025037	25 x 6	36	39	ALUMINIUM
2302015	I5LG4D-032044	32 x 6	43	46	ALUMINIUM
2302016	I5LG4D-038051	38 x 6,5	50	52	ALUMINIUM
2304819	I5LG4D-038055	38 x 8	53	56	ALUMINIUM
2302017	I5LG4D-051066	50 x 8	64	67	ALUMINIUM
2304095	I5LG4D-051069	50 x 10	69	71	ALUMINIUM
2301675	I5LG4D-063080	63 x 7	78	82	ALUMINIUM
2302018	I5LG4D-076091	75 x 8	89	93	ALUMINIUM
2302732	I5LG4D-080096	75 x 10	94	97	ALUMINIUM
2304096	I5LG4D-076099	75 x 12	98	101	ALUMINIUM
2302019	I5LG4D-102117	100 x 8	114	119	ALUMINIUM
2304097	I5LG4D-100120	100 x 10	118	122	ALUMINIUM
2302233	I5LG4D-127146	125 x 10	143	148	ALUMINIUM
2302020	I5LG4D-152171	150 x 10	168	174	ALUMINIUM
2302021	I5LG4D-203226	200 x 12	222	229	ALUMINIUM

Item Code	Part Number	Hose ID mm	Hose OD min mm	Hose OD MAX mm	Material
2304094	I3LG4D-019031	19 x 6	30	33	S/S 316
2302660	I3LG4D-025037	25 x 6	36	39	S/S 316
2302022	I3LG4D-032044	32 x 6	43	46	S/S 316
2302023	I3LG4D-038051	38 x 6,5	50	52	S/S 316
2302024	I3LG4D-051066	50 x 8	64	67	S/S 316
2301676	I3LG4D-063080	65 x 7	78	82	S/S 316
2301759	I3LG4D-076091	75 x 8	89	93	S/S 316
2302025	I3LG4D-102117	100 x 8	114	119	S/S 316

SAFETY CLAMPS FLEXOLINE®

Item Code	Part Number	Hose ID mm	Hose OD min mm	Hose OD MAX mm	Material
2306570	I5LG4N-025035	25 x 5	34	36	ALUMINIUM
	I5LG4N-032042	32 x 5	41	43	ALUMINIUM
	I5LG4N-038048	38 x 5	47	49	ALUMINIUM
2304822	I5LG4N-051060	50 x 5	59	61	ALUMINIUM
2304823	I5LG4N-063075	63 x 6	74	76	ALUMINIUM
2304824	I5LG4N-076087	75 x 6	86	88	ALUMINIUM
2305871	I5LG4N-102114	100 x 6,5	112	114	ALUMINIUM

TO BE USED WITH THIN-WALL HOSES FOR WHICH SAFETY CLAMPS EN 14 420-3 / DIN 2817 ARE TOO BIG AND NOT SUITABLE

CRIMPING RING

Item Code	Part Number	Hose ID mm	Ring ID mm	Ring OD mm	Ring L mm	Material	Note
2303033	R5YBFF0-0242020	13	24	28	20	ALUMINIUM	
2303034	R5YBFF0-0312020	19	31	35	20	ALUMINIUM	
2303035	R5YBFF0-0402520	25	40	45	20	ALUMINIUM	
2306680	R5YBFF0-0552530	45	55	60	30	ALUMINIUM	
2304550	R5YBFF0-0602535	45	60	65	35	ALUMINIUM	
2304551	R5YBFF0-0902540	70-76	90	95	40	ALUMINIUM	
2303040	R5YBFF0-1102560	90	110	115	60	ALUMINIUM	
2304552	R5YBFF0-1252580	102-105-110	125	130	80	ALUMINIUM	
2303031	R5YBFF0-0452550	25	45	50	50	ALUMINIUM	FOR MORTAR 757AA
2303032	R5YBFF0-0552555	35	55	60	55	ALUMINIUM	FOR MORTAR 757AA
1900418	R5YBFF0-0752555	51	75	80	55	ALUMINIUM	FOR MORTAR 757AA

CRIMPING RING Code	Hose family	Hose ID mm	Hose OD mm	Ring ID mm	INSERT Code
R5YBFF0-0242020	180AA	13	19	24	I818A300-013040 GEKA INSERT ID13 I819E300-013041 EXPRESS-INSERT-ID13
	284AA	13	19		
	185AA	13	21		
R5YBFF0-0312020	180AA	19	27	31	I818A300-019040 GEKA INSERT ID19 I819E300-019041 EXPRESS-INSERT-ID19
	284AA	19	26		
	185AA	19	28		
R5YBFF0-0402520	180AA	25	34	40	I818A300-025040 GEKA INSERT ID25 I819E300-025041 EXPRESS-INSERT-ID25
	284AA	25	33		
	185AA	25	35		
	175AA	25	35		
R5YBFF0-0452550	757AA	25	38	45	Ix38Cxxx-025xxx INN.MORTAR I1306100-025034 INS.MORTAR DN25 BSPP 1” P24
R5YBFF0-0552555	757AA	35	49	55	Ix38Cxxx-035xxx INN.MORTAR I1306100-035042 INS.MORTAR DN35 BSPP 1”1/4 P34
R5YBFF0-0552530	764OL	45	54	55	I519Z300-045052 STORZ ALU 52-C ID45
R5YBFF0-0602535	212AA	45	55	60	I5191300-045040 SYMMETRIC INSERT AL ID45 DN40
R5YBFF0-0752555	757AA	51	67	75	Ix38Cxxx-05xxxx INN.MORTAR I1306100-051060 INS.MORTAR DN51 BSPP 2” P47
	737AA	51	69		
R5YBFF0-0902540	212AA	70	82	90	I5191300-070065 SYMMETRIC INSERT AL ID70 DN65
R5YBFF0-1102560	760AA	90	102	110	I5191300-090080 SYMMETRIC INSERT AL ID90 DN80
	760LA	90	102		
	470OO	90	104		
R5YBFF0-1252580	470OO	105	121	125	I5191300-105100 SYMMETRIC INSERT AL ID105 DN100
	212AA	110	122		I5192300-110100 SYMMETRIC INSERT AR AL 100X110

SMOOTH FERRULE

Ferrule for composite hose suitable also for industrial hose

Item Code	Part Number	Hose ID in	Hose ID mm	Hose OD min mm	Hose OD MAX mm	Material
2300847	I205C5-020	3/4	19-20	27	33	S/S 304
2300848	I205C5-025	1	25	33	39	S/S 304
2300849	I205C5-032	1 1/4	32	40	48	S/S 304
2300850	I205C5-040	1 1/2	38-40	46	54	S/S 304
2300851	I205C5-050	2	50-51	61	65	S/S 304
2300852	I205C5-065	2 1/2	63-65	73	81	S/S 304
2300853	I205C5-080	3	76-80	86	94	S/S 304
2300854	I205C5-100	4	100-102	112	118	S/S 304
2300891	I505C5-040	1 1/2	38-40	46	54	ALUMINIUM
2301751	I505C5-050	2	50-51	61	64	ALUMINIUM
2300099	I505C5-065	2 1/2	63-65	73	81	ALUMINIUM
2300917	I505C5-080	3	76-80	86	94	ALUMINIUM
2300892	I505C5-100	4	100-102	112	120	ALUMINIUM

FOR SMOOTH FERRULE IN PLATED STEEL, CONSULT CHAPTER “COMPOSITE HOSE FITTINGS”

SERRATED FERRULE

Item Code	Part Number	Hose ID in	Hose ID mm	Hose OD min-MAX mm	Material
2301159	I10609-075	3	76	88-92	PLATED STEEL
2301160	I10609-100	4	102	116-119	PLATED STEEL
2304574	I10609-125	5	125	138-147	PLATED STEEL
2301161	I10609-150	6	150	160-174	PLATED STEEL
2301162	I10202-200	8	203	217-225	PLATED STEEL

SERRATED FERRULE WITH DN< 76 mm:CONSULT AG HYDRAULIC CATALOGUE (RECOMMENDED FERRULE H1200203)

Item Code	Part Number	Hose ID in	Hose ID mm	Hose OD min-MAX mm	Material
2303961	I307U038-049053	1 1/2	38	48,5-53	S/S 316
2303962	I307U051-064067	2	51	64-67	S/S 316
2303963	I307U051-068074	2	51	68-74	S/S 316
2304503	I307U063-079082	2 1/2	63	79-82	S/S 316
2303964	I307U063-087091	2 1/2	63	87-91	S/S 316
2304504	I307U076-089092	3	76	88,5-92,5	S/S 316
2303965	I307U076-099000	3	76	95-101,5	S/S 316
2304556	I307U102-117122	4	102	117-122	S/S 316
2303966	I307U102-128135	4	102	128-135	S/S 316

COMBINATION NIPPLE

Male BSPP - Helical hose shank for composite hose

Item Code	Part Number	Hose ID mm	Thread in	Thread type	Material
2304567	I5206100-025034	25	1	BSPP	ALUMINIUM
2300740	I5206100-040049	40	1 1/2	BSPP	ALUMINIUM
2300741	I5206100-050060	50	2	BSPP	ALUMINIUM
2300742	I5206100-065076	65	2 1/2	BSPP	ALUMINIUM
2300743	I5206100-080090	80	3	BSPP	ALUMINIUM
2300744	I5206100-100114	100	4	BSPP	ALUMINIUM

Item Code	Part Number	Hose ID mm	Thread in	Thread type	Material
	I1206100-150165	150	6	BSPP	PLATED STEEL
	I1206100-200219	200	8	BSPP	PLATED STEEL

Item Code	Part Number	Hose ID mm	Thread in	Thread type	Material
2300729	I3206100-025034	25	1	BSPP	S/S 316
2300730	I3206100-032042	32	1 1/4	BSPP	S/S 316
2300731	I3206100-040049	40	1 1/2	BSPP	S/S 316
2300732	I3206100-050060	50	2	BSPP	S/S 316
2300733	I3206100-065076	65	2 1/2	BSPP	S/S 316
2300734	I3206100-080090	80	3	BSPP	S/S 316
2300735	I3206100-100114	100	4	BSPP	S/S 316
	I3206100-150165	150	6	BSPP	S/S 316
	I3206100-200219	200	8	BSPP	S/S 316

Item Code	Part Number	Hose ID mm	Thread in	Thread type	Material
	I7206100-025034	25	1	BSPP	BRONZE
	I7206100-032042	32	1 1/4	BSPP	BRONZE
	I7206100-040049	40	1 1/2	BSPP	BRONZE
	I7206100-050060	50	2	BSPP	BRONZE
	I7206100-065076	65	2 1/2	BSPP	BRONZE
	I7206100-080090	80	3	BSPP	BRONZE
	I7206100-100114	100	4	BSPP	BRONZE

Item Code	Part Number	Hose ID mm	Thread in	Thread type	Material
2300711	IP206100-040049	40	1 1/2	BSPP	PP
2300712	IP206100-050060	50	2	BSPP	PP
	IP206100-065076	65	2 1/2	BSPP	PP
2300713	IP206100-080090	80	3	BSPP	PP
2300714	IP206100-100114	100	4	BSPP	PP

COMBINATION NIPPLE

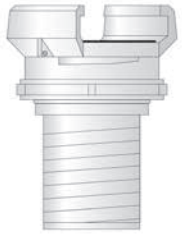
Male NPT - Helical hose shank for composite hose

Item Code	Part Number	Hose ID mm	Thread in	Thread type	Material
	I1228100-050060	50	2	NPT	PLATED STEEL
	I1228100-080090	80	3	NPT	PLATED STEEL
	I1228100-100114	100	4	NPT	PLATED STEEL

Item Code	Part Number	Hose ID mm	Thread in	Thread type	Material
	I3228100-050060	50	2	NPT	S/S 316
	I3228100-080090	80	3	NPT	S/S 316
2306670	I3228100-100114	100	4	NPT	S/S 316

SYMMETRIC GUILLEMIN NF E 29.572

Helical hose shank with locking ring for composite hose



Item Code	Part Number	Hose shank DN mm	Head DN mm	Material
2300753	I5291300-040040	40	40	ALUMINIUM
2300754	I5291300-050050	50	50	ALUMINIUM
2300755	I5291300-065065	65	65	ALUMINIUM
2300756	I5291300-080080	80	80	ALUMINIUM
2300757	I5291300-100100	100	100	ALUMINIUM

Item Code	Part Number	Hose shank DN mm	Head DN mm	Material
2302462	I3291300-040040	40	40	S/S 316
2300736	I3291300-050050	50	50	S/S 316
2300737	I3291300-065065	65	65	S/S 316
2300738	I3291300-080080	80	80	S/S 316
2300739	I3291300-100100	100	100	S/S 316

Item Code	Part Number	Hose shank DN mm	Head DN mm	Material
2300763	I7291300-040040	40	40	BRONZE
2300764	I7291300-050050	50	50	BRONZE
2300765	I7291300-065065	65	65	BRONZE
2300766	I7291300-080080	80	80	BRONZE
2300767	I7291300-100100	100	100	BRONZE

COUPLING API (API RF 1004) - DEVICES FOR TANKS

Gravity coupler API 4” - Symmetric Guillemin coupling DN80 without locking ring - Gasked included

Item Code	Part Number	Head DN mm	Head DN mm	Material	Note
2302201		100	SYM 80	ALUMINIUM	FITTING WITH SIGHTGLASS
2302202		100	SYM 80	ALUMINIUM	FITTING WITHOUT SIGHTGLASS

COUPLING API (API RF 1004) - DEVICES FOR TANKS

Vapor recovery coupler - Female BSP - Gasked included

Item Code	Part Number	Head DN mm	Thread in	Thread type	Material
2302186	I5AC3806-080090	80	3	BSP	ALUMINIUM
2302187	I5AC3806-080114	100	3	BSP	ALUMINIUM

COUPLING API (API RF 1004) - DEVICES FOR TANKS

Vapor recovery coupler - Symmetric Guillemin coupling DN80 - Gasked included

Item Code	Part Number	Head DN mm	Head DN mm	Material	Note
2301027		80	SYM 80	ALUMINIUM	SYM. WITHOUT LOCKING RING
2301028		100	SYM 80	ALUMINIUM	SYM. WITH LOCKING RING

FIXED FLANGE

Helical hose shank for composite hose

Item Code	Part Number	Hose ID in	Hose ID mm	Flange type	Material Hose Shank	Material flange
2301253	I12BD66B-040040	1 1/2	40	PN 10/16	PLATED STEEL	PLATED STEEL
2301254	I12BD66B-050050	2	50	PN 10/16	PLATED STEEL	PLATED STEEL
2301256	I12BD66B-080080	3	80	PN 10/16	PLATED STEEL	PLATED STEEL
2301257	I12BD66B-100100	4	100	PN 10/16	PLATED STEEL	PLATED STEEL
	I12BD66B-150150	6	150	PN 10/16	PLATED STEEL	PLATED STEEL
	I12BD66B-200200	8	200	PN 10/16	PLATED STEEL	PLATED STEEL
	I12BD66B-250250	10	250	PN 10/16	PLATED STEEL	PLATED STEEL
	I32BD66B-040040	1 1/2	40	PN 10/16	S/S 316	S/S 316
	I32BD66B-050050	2	50	PN 10/16	S/S 316	S/S 316
	I32BD66B-080080	3	80	PN 10/16	S/S 316	S/S 316
2304576	I32BD66B-100100	4	100	PN 10/16	S/S 316	S/S 316
	I32BD66B-150150	6	150	PN 10/16	S/S 316	S/S 316
	I32BD66B-200200	8	200	PN 10/16	S/S 316	S/S 316
	I32BD66B-250250	10	250	PN 10/16	S/S 316	S/S 316

Item Code	Part Number	Hose ID in	Hose ID mm	Flange type	Material Hose Shank	Material flange
	I12BE66B-040040	1 1/2	40	ASA 150	PLATED STEEL	PLATED STEEL
2300062	I12BE66B-050050	2	50	ASA 150	PLATED STEEL	PLATED STEEL
2300064	I12BE66B-080080	3	80	ASA 150	PLATED STEEL	PLATED STEEL
2300065	I12BE66B-100100	4	100	ASA 150	PLATED STEEL	PLATED STEEL
	I12BE66B-150150	6	150	ASA 150	PLATED STEEL	PLATED STEEL
	I12BE66B-200200	8	200	ASA 150	PLATED STEEL	PLATED STEEL
	I12BE66B-250250	10	250	ASA 150	PLATED STEEL	PLATED STEEL
	I32BE66B-040040	1 1/2	40	ASA 150	S/S 316	S/S 316
	I32BE66B-050050	2	50	ASA 150	S/S 316	S/S 316
	I32BE66B-080080	3	80	ASA 150	S/S 316	S/S 316
2301308	I32BE66B-100100	4	100	ASA 150	S/S 316	S/S 316
	I32BE66B-150150	6	150	ASA 150	S/S 316	S/S 316
	I32BE66B-200200	8	200	ASA 150	S/S 316	S/S 316
	I32BE66B-250250	10	250	ASA 150	S/S 316	S/S 316

SWIVEL FLANGE

Helical hose shank for composite hose

Item Code	Part Number	Hose ID in	Hose ID mm	Flange type	Material Hose Shank	Material flange
2300000	I12BD72A-040040	1 1/2	40	PN 10/16	PLATED STEEL	PLATED STEEL
2300001	I12BD72A-050050	2	50	PN 10/16	PLATED STEEL	PLATED STEEL
2300003	I12BD72A-080080	3	80	PN 10/16	PLATED STEEL	PLATED STEEL
2300004	I12BD72A-100100	4	100	PN 10/16	PLATED STEEL	PLATED STEEL
	I12BD72A-150150	6	150	PN 10/16	PLATED STEEL	PLATED STEEL
	I12BD72A-200200	8	200	PN 10/16	PLATED STEEL	PLATED STEEL
	I12BD72A-250250	10	250	PN 10/16	PLATED STEEL	PLATED STEEL
	IA2BD72A-040040	1 1/2	40	PN 10/16	S/S 316	PLATED STEEL
	IA2BD72A-050050	2	50	PN 10/16	S/S 316	PLATED STEEL
	IA2BD72A-080080	3	80	PN 10/16	S/S 316	PLATED STEEL
	IA2BD72A-100100	4	100	PN 10/16	S/S 316	PLATED STEEL
	IA2BD72A-150150	6	150	PN 10/16	S/S 316	PLATED STEEL
	IA2BD72A-200200	8	200	PN 10/16	S/S 316	PLATED STEEL
	IA2BD72A-250250	10	250	PN 10/16	S/S 316	PLATED STEEL
	I32BD72A-040040	1 1/2	40	PN 10/16	S/S 316	S/S 316
	I32BD72A-050050	2	50	PN 10/16	S/S 316	S/S 316
	I32BD72A-080080	3	80	PN 10/16	S/S 316	S/S 316
	I32BD72A-100100	4	100	PN 10/16	S/S 316	S/S 316
	I32BD72A-150150	6	150	PN 10/16	S/S 316	S/S 316
	I32BD72A-200200	8	200	PN 10/16	S/S 316	S/S 316
	I32BD72A-250250	10	250	PN 10/16	S/S 316	S/S 316

Item Code	Part Number	Hose ID in	Hose ID mm	Flange type	Material Hose Shank	Material flange
	IP2BC72A-050050	2	50	PN 10	PP	PP
	IP2BC72A-080080	3	80	PN 10	PP	PP
	IP2BC72A-100100	4	100	PN 10	PP	PP

Item Code	Part Number	Hose ID in	Hose ID mm	Flange type	Material Hose Shank	Material flange
	I12BE77A-040040	1 1/2	40	ASA 150	PLATED STEEL	PLATED STEEL
	I12BE77A-050050	2	50	ASA 150	PLATED STEEL	PLATED STEEL
	I12BE77A-080080	3	80	ASA 150	PLATED STEEL	PLATED STEEL
	I12BE77A-100100	4	100	ASA 150	PLATED STEEL	PLATED STEEL
	I12BE77A-150150	6	150	ASA 150	PLATED STEEL	PLATED STEEL
	I12BE77A-200200	8	200	ASA 150	PLATED STEEL	PLATED STEEL
	I12BE77A-250250	10	250	ASA 150	PLATED STEEL	PLATED STEEL
	IA2BE77A-040040	1 1/2	40	ASA 150	S/S 316	PLATED STEEL
	IA2BE77A-050050	2	50	ASA 150	S/S 316	PLATED STEEL
	IA2BE77A-080080	3	80	ASA 150	S/S 316	PLATED STEEL
	IA2BE77A-100100	4	100	ASA 150	S/S 316	PLATED STEEL
	IA2BE77A-150150	6	150	ASA 150	S/S 316	PLATED STEEL
	IA2BE77A-200200	8	200	ASA 150	S/S 316	PLATED STEEL
	IA2BE77A-250250	10	250	ASA 150	S/S 316	PLATED STEEL
	I32BE77A-040040	1 1/2	40	ASA 150	S/S 316	S/S 316
	I32BE77A-050050	2	50	ASA 150	S/S 316	S/S 316
	I32BE77A-080080	3	80	ASA 150	S/S 316	S/S 316
	I32BE77A-100100	4	100	ASA 150	S/S 316	S/S 316
	I32BE77A-150150	6	150	ASA 150	S/S 316	S/S 316
	I32BE77A-200200	8	200	ASA 150	S/S 316	S/S 316
	I32BE77A-250250	10	250	ASA 150	S/S 316	S/S 316

SMOOTH FERRULE FOR COMPOSITE HOSE

Item Code	Part Number	Hose ID mm	Material
2304568	I105C5-040	40	PLATED STEEL
2300824	I105C5-050	50	PLATED STEEL
2300896	I105C5-065	65	PLATED STEEL
2300825	I105C5-080	80	PLATED STEEL
2304569	I105C5-100	100	PLATED STEEL
	I105C5-150	150	PLATED STEEL
	I105C5-200	200	PLATED STEEL

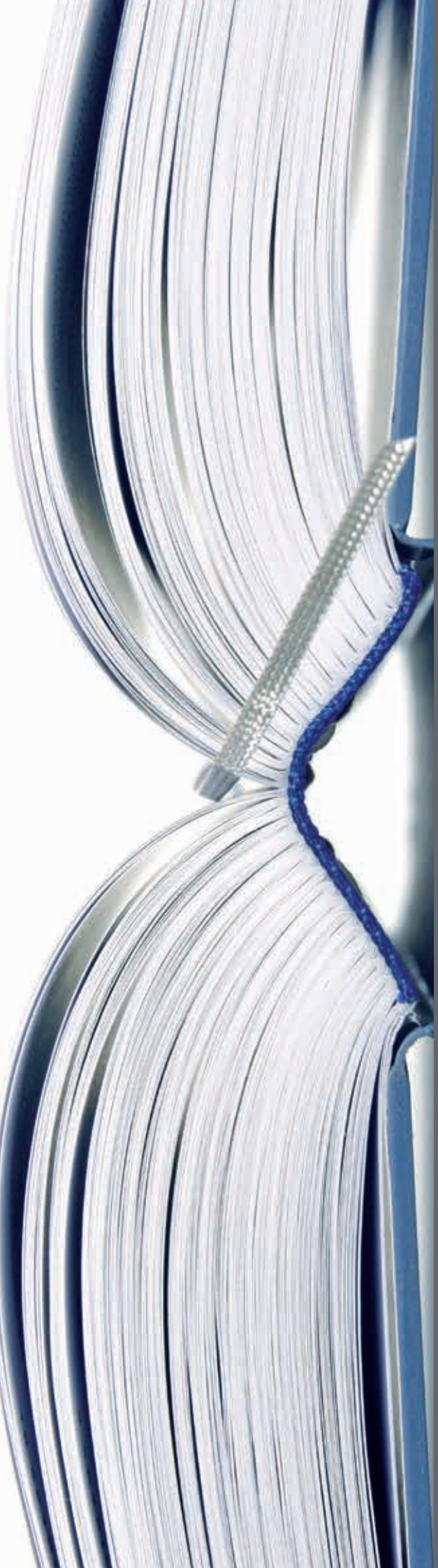
Item Code	Part Number	Hose ID mm	Material
2300848	I205C5-025	25	S/S 304
2300849	I205C5-032	32	S/S 304
2300850	I205C5-040	40	S/S 304
2300851	I205C5-050	50	S/S 304
2300852	I205C5-065	65	S/S 304
2300853	I205C5-080	80	S/S 304
2300854	I205C5-100	100	S/S 304
	I205C5-150	150	S/S 304
	I205C5-200	200	S/S 304

Item Code	Part Number	Hose ID mm	Material
2300891	I505C5-040	40	ALUMINIUM
2301751	I505C5-050	50	ALUMINIUM
2300099	I505C5-065	65	ALUMINIUM
2300917	I505C5-080	80	ALUMINIUM
2300892	I505C5-100	100	ALUMINIUM

CRIMPING GASKET FOR COMPOSITE HOSE

Item Code	Part Number	Hose ID mm	Material
2300484	INJS00-025	25	NBR
2300485	INJS00-032	32	NBR
2300486	INJS00-040	40	NBR
2300487	INJS00-050	50	NBR
2300488	INJS00-065	65	NBR
2300489	INJS00-080	80	NBR
2300490	INJS00-100	100	NBR
	INJS00-150	150	NBR
	INJS00-200	200	NBR

GASKETS IN VITON® ARE AVAILABLE ON REQUEST



APPENDIX

(Reprinted from Assogomma "Recommendation regarding choice, storing, use and maintenance of rubber hoses" June 2004.)

1. CHOICE CRITERIA

In order to choose a hose suitable for a specific use it is necessary to determine at least the following basic points:

1.1 Pressure - suction

It is necessary to determine the maximum working pressure or suction values. It should be taken into consideration that the normal life of the hose will be prejudiced in the case of a sudden pressure variation or pressure peaks exceeding the maximum allowed.

1.2 Compatibility of conveyed substances

The nature, designation, concentration, temperature and state (liquid, solid, gaseous) must be determined. In the case of solid substances conveyed, it is necessary to indicate granulometry, density, quantity of the solid substance conveyed as well as the nature, speed and flow of the fluid carrying it.

1.3 Environment

It is necessary to know the place of usage, ambient temperature, hygrometric conditions and exposure to atmospheric agents. Specific environment conditions such as ultraviolet rays, ozone, sea water, chemical agents and other aggressive elements could cause early degeneration of the hose.

1.4 Mechanical stress

The minimum bend radius* must be established as well as any stress related to traction, torsion, bending, vibration, compression, deflection and longitudinal or transversal loads.

1.5 Cover abrasion

Even though the hoses are manufactured to guarantee good resistance to abrasion, it is advisable to use further protection when damage to the hose may be caused by shock, corrosion and/or dragging.

1.6 Working position

Indicate if the hose is either placed on the ground, suspended or immersed.

1.7 Used or foreseen couplings

This must be selected according to:
- couplings and flanges: type, dimension, type of thread, standard references and kind of application;
- hose shank: internal and external diameter and length;
- ferrules/clumps: type and dimension.

In order to guarantee good performance the compatibility between the hose and type of coupling must be ensured. The assembly must guarantee the working pressure suggested by the manufacturer.

1.8 Technical standards

National, European and International technical standards and rules must always be adhered to. In the case of hoses for peculiar purposes it is advisable to establish proper specification with the manufacturer.

1.9 Marking

Manufacturers must mark hoses at regular intervals with the information necessary for the proper use of the product.
When interpretation is not clear or information is insufficient, user should apply to the manufacturer.

2. RECOMMENDATION FOR CORRECT STORAGE

Rubber is subject, by nature, to changes in physical properties. These changes, which normally occur over the course of time, according to the kind of rubber used, can be accelerated by one particular factor or by a combination of these.
Reinforcement materials are also adversely affected by unsuitable conditions of storage. The following recommendations give some precautions to be taken to ensure the minimum deterioration to stored articles.

2.1 Storage life

Storage time should be reduced to the minimum through programme rotation.
When it is not possible to avoid long term storage, it is necessary that the user, as indicated in ISO 8331, carries out a complete check of the hose before its use according to the following criteria:
- maximum two years storage for assembly;
- maximum four years storage for hoses.

2.2 Temperature and humidity

The best temperature for the storage of rubber hoses varies from 10 to 25 degrees centigrade. Hoses should not be stored at temperature above 40 °C or below 0 °C. When the temperature is below –15 °C it is necessary to take precautions when handling.
Hoses should not be stored near sources of heat nor in conditions of high or low humidity. A humidity level of a maximum of 65% is recommended.

2.3 Light

Hoses must be stored in dark places, avoiding direct sun light or strong artificial light. Should store rooms have windows or glass openings, these must be screened.

2.4 Oxygen and ozone

Hoses should be protected from circulating air by suitable packing or by storage in air-tight containers. As ozone has a particularly aggressive action on all rubber products, the store house must not contain material producing ozone like devices under high electrical tension, electric engines or other materials provoking sparks or electric arcs.

2.5 Contact with other materials

Hoses should not come into contact with solvents, fuels, oils, greases, volatile chemical mixtures, acids, disinfectants and other organic liquids in general.
Furthermore direct contact with some metals (for example manganese, iron, copper and its alloys) and relative mixture exercise harmful effects on some types of rubber.
Contact with PVC and creosote impregnated timber or fabrics should be avoided.

2.6 Heat sources

The temperature limits given in point 2.2 must be respected. When this is impossible, it is necessary to use a thermic shield at a distance not less than one meter.

2.7 Electric or magnetic field

Variation in electric or magnetic fields must be eliminated in store houses as these could provoke currents in metal coupling, heating them. Similar fields could be caused by high-tension cables or high frequency generators.

* The **minimum bend radius** is the radius to which the hose can be bent in service without damage or appreciably shortening its life. The radius is measured to the inside of the curvature. **Formula to determine minimum hose length given bend radius and degree of bend required:**

$$L = \frac{A}{360°} \times 2\pi B$$

Where:
- L = Minimum length of hose to make bend (Bend must be made equally along this portion of hose length).
- A = Angle of bend
- B = Given bend radius of hose
- π = 3.14

Example: To make a 60° bend at the hose's rated minimum bend radius of 15 cm

$$L = \frac{60}{360°} \times 2 \times 3.14 \times 15 = 15.7 \text{ cm} \cong 16 \text{ cm}$$

Thus, the bend must be made over approximately 16 cm of hose length. The bend radius used must be equal to or greater than the rated minimum bend radius. Bending the hose to a smaller bend radius than minimum may kink the hose and result in damage and early failure.

2.8 Storage conditions
Hoses must be stored in a relaxed condition free from tension, compression or other deformation and contact with objects that could pierce or cut must be avoided. It is preferable to store hoses on special shelves or on dry surfaces.
Coiled hoses must be stored horizontally avoiding piling. When this is not possible the height of the piles must be such to avoid permanent deformation of hoses stored underneath.
The inside diameter of the coil, during the storage, must be such as to not compromise the performances of the products. In particular, this diameter must not have value less than those indicated by the manufacturers.
It is advisable to avoid storing coiled hoses on poles or hooks. Furthermore it is advisable to store hoses to be delivered straight, horizontally, without bending.

2.9 Rodents and insects
Hoses must be protected from rodents and insects. When such a risk is probable adeguate precautions must be taken.

2.10 Marking or packaged items
It is advisable that hoses are always easy to identify even if packaged.

2.11 Exit from storage
Prior to delivery hoses must be checked for integrity and must correspond to the required use. After long storage if couplings are not clipped, swaged or built-in, it is necessary to check that locking collars are tight.

2.12 Return to storage
Hoses that have been used must be free from all substances prior to storage. Particular attention must be paid when chemical, explosive, inflammable, abrasive and corrosive substances have been conveyed. After cleaning, check whether the hose is suitable to use again.

3. NORMS AND METHOD OF USE
After having chosen the type of hose, the users must keep in mind the following hose installation criteria:

3.1 Preassembly checks
Prior to installation it is necessary to check the characteristics of the hose carefully to verify that type, diameter and length conform with the required specifications. Moreover a visual check must be effected to make sure that there are no obstructions, cuts, damaged cover or any other evident imperfections.

3.2 Handling
Hoses must be moved with care avoiding knocks, dragging over abrasive surfaces and compression. Hoses must not be pulled violently when twisted or knotted. Heavy hoses, normally delivered in a straight line, must be laid on special supports for transport (see attachment). Should wood supports be used these must not be treated with creosote or painted with substances which could damage the rubber.

3.3 Pressure and seal test
The working pressure generally indicated by manufacturer must be respected. Following installation, when air bubbles have been eliminated, increase the pressure to test the assembly and check possible leaks. This test must be carried out in a place free from danger.

3.4 Temperature
Hoses must always be used within the temperature limits generally indicated. In case of doubt apply to manufacturers.

3.5 Conveyed products
Hoses must be used exclusively to convey substances for which they were manufactured. In case of doubt it is always advisable to contact manufacturer. As far as possible, hoses must be empty after usage. Where any risks are involved special precautions must be taken to avoid bursts.

3.6 Environment
Hoses must be used exclusively in the environment conditions for which they were manufactured.

3.7 Bending radius
Installation underneath the minimum bending radius reduces the life of the hose considerably. Morover it is necessary to avoid bending at fitting ends. *(See attached 1).

3.8 Torsion
Hoses are not manufactured to work in torsion, except for specific purposes.

3.9 Traction
Traction must be within limits specified by manufacturer. In case of doubts it's advisable to get in touch with manufacturers.

3.10 Vibration
Vibrations subject hoses to stress from heat and fatigue above all near couplings and premature bursting may occur. It is therefore advisable to check that hoses have been manufactured to resist such stress.

3.11 Kinking
Some users tend to obstruct the flow of liquids by kinking the hose. This system is not advised by manufacturers because the reinforcement is subjected to eccessive stress and could lead to bursting.

3.12 Choice and application of couplings
Provided that the manufacturers instructions are met it is always necessary to check the compatibility between the working pressure of couplings and hoses. Couplings with too large diameters cause abnormal stress which can split the hose reinforcement, whilst too small dimensions can create clumping difficulties and leakage.
Furthermore couplings must be free from sharp and cutting edges which could damage the hose.
Water or soap and water can be used to fit couplings. Do not use products containing oils or solvents except for the kind of hoses destined to be used with the latter.
Softening hoses with mallet or similar tools is forbidden.
Take care to avoid external collars or other tightening tools. The use of makeshift collars (for example wire) with sharp edges or too tight clumping leads to damage of cover and reinforcement.

3.13 Electrical properties
Electrical properties of hoses and assemblies, are measured between couplings and/or the end of the hose and are expressed in Ohm.
The hoses are divided into three grade:
a) continuous (M grade)
   they contain little ropes or wire helix.
   Resistance < of 10^2 ohm
b) Conductive or antistatic (Ω grade)
   They contain rubber or plastic conductive sheets
   Resistance > 10^3 ohm < 10^6 ohm
c) Insulating or discontinuous
   They contain rubber or plastic insulating sheets
   Resistance > 10^6 ohm

3.14 Installation between two points
The hoses must be supported in a suitable way, so as the normal movement when the hose is under pressure (variations in length, diameter, twisting, etc.) are allowed.

3.15 Mobile pieces
When hoses link mobile pieces, it is necessary to check that the length of the hose is suitable and that the movement does not subject the hose to shock or chafing and that abnormal stress, bending, traction or torsion do not occur.

3.16 Identification
If further marking is necessary, self-adhesive tape may be used. When the use of paint is unavoidable check compatibility of cover with manufacturer.

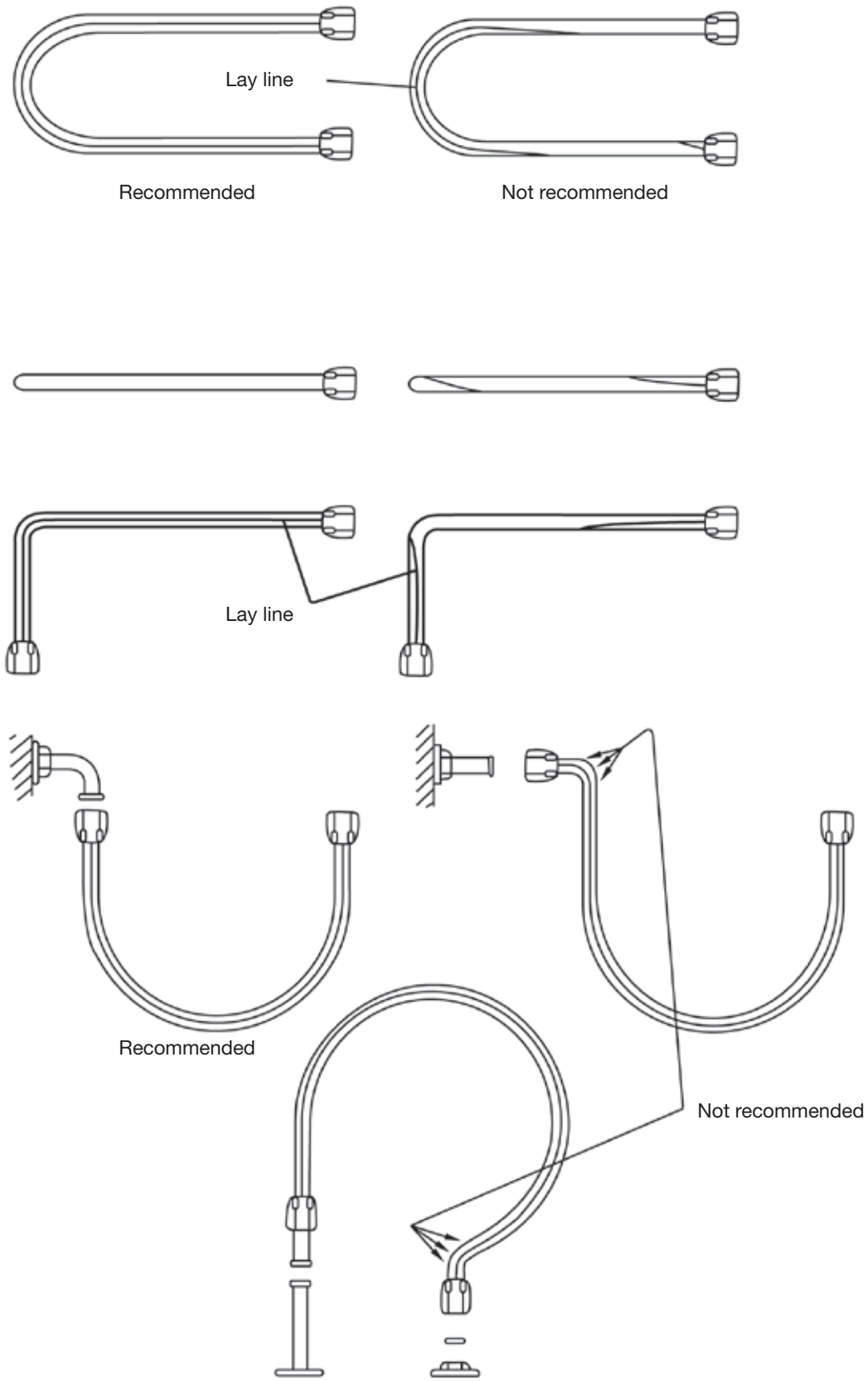
4. MAINTENANCE
Even though choice, storage and installation have been carried out correctly regular maintenance is necessary.
Frequency of the latter is determined according to use involved. During regular check special attention must be paid to couplings and to the appearance of the following irregularities which show deterioration of hose:
- Cracks, cuts, abrasions, unsticking, tears in cover revealing reinforcement;
- Deformity, bubbles, local swelling under pressure;
- Sticky or soft areas;
- Leaks.

Such irregularities justify hose substitutions. When cover bears date of expiry this must be kept to even if the hose shows no apparent signs of wear.

4.1 Repairs
Hose repairs are not advisable. However when deterioration occurs at an end section, and if the full length allows for such, the worn section may be eliminated.

4.2 Cleaning
If cleaning instructions are not supplied by the manufacturer clean, if necessary, with soap and water avoiding use of solvents (petrol, paraffin, etc) or detergents. Never use abrasive, pointed or cutting tools (wire brushes).

***(Attached 1)**



This drawings refer to assembly installed in real conditions. Some of these may request layouts violating such recommendations. It is necessary to point out that such cases are only applicable in test conditions and cannot be used for general use.

The chemical guide in this section is offered as a general indication of the compatibility of the various materials used in ALFAGOMMA hose with the chemicals and fluids listed. The basis for the ratings in this guide include actual service experience, the advice of various polymer suppliers, and the considered opinion of our rubber chemists. When in doubt, a sample of the compound should always be tested with the particular chemical it is to handle. Some of the variables that come into play in the resistance of a compound to chemical attack are:

1. **Temperature of the Material Transmitted:**
Higher temperatures increase the effect of chemicals on rubber compounds. The increase varies with the polymer and the chemical. A compound quite suitable at room temperature might fail very quickly at higher temperatures.

2. **Service Conditions:**
A rubber compound usually swells when exposed to a chemical. With a given percent of swell, a hose tube may function satisfactorily if the hose is in a static condition, but fail quickly if the hose is subject to flexing.

3. **The Grade or Blend of the Rubber Compound:**
Basic rubber polymers are sometimes mixed or blended together to enhance a particular property for a specific service. The reaction to a particular chemical blend of polymers may, therefore, be somewhat different from the reaction to the single ones. When in doubt, a sample of the compound should always be tested with the particular chemical it is to handle.

GENERAL CHEMICAL RESISTANCE OF ALFAGOMMA HOSE COMPOUNDS

COMMON NAME	ASTM Designation D1418-93	COMPOSITION	GENERAL PROPERTIES
Natural rubber	NR	Isoprene rubber	Excellent physical properties, including abrasion resistance. Not oil resistant.
SBR	SBR	Styrene-butadiene rubber	Good physical properties, including abrasion resistance. Not oil resistant.
Butyl rubber	IIR	Isobutene-isoprene rubber	Very good weathering resistance. Low permeability to air. Good physical properties. Poor resistance to petroleum based fluids.
EPDM	EPDM	Ethylene-propylene-diene-terpolymer	Good general purpose polymer. Excellent heat, ozone and weathering resistance. Not oil resistant.
Cross linked polyethylene	XLPE	Cross linked polyethylene	Excellent resistance to most solvents, oils and chemicals. Do not confuse with chemical properties of standard polyethylene.
Ultra high molecular weight polyethylene	UHMWPE	Ultra high molecular weight polyethylene	Excellent resistance to most solvents, chemicals and hydrocarbons. Excellent abrasion and wear resistance. Inert and suitable for food contact. Do not confuse with chemical properties of standard polyethylene.
Teflon/Fluorocarbon resin	PTFE	Polytetra-fluoroethylene	Excellent chemical and solvent resistance. Inert to most materials. Smooth anti-adhesive surface, easy to clean.
Nitrile rubber	NBR	Acrylonitrile-butadiene rubber	Excellent oil resistance. Good physical properties.
Neoprene	CR	Chloroprene rubber	Excellent weathering resistance. Flame retardant. Good oil resistance. Good physical properties.
Hypalon®	CSM	Chloro-sulfonated polyethylene	Excellent ozone, weathering and acid resistance. Good abrasion and heat resistance. Can be compounded for good oil resistance.
Polyurethane	AU	Polyester urethane	Excellent abrasion and wear resistance. Not resistant to hydrolysis.
Viton	FKM	Fluorocarbon rubber	Excellent high temperature resistance, particularly in air or oil. Very good resistance to chemicals.

Chemical resistance chart

The following data is based on tests and believed to be reliable; however, we emphasise that the tabulation should be used as a guide only, since it does not take into consideration all variables such as elevated temperatures, fluid contamination, concentration, etc. that may be encountered in actual use. All critical applications should be tested. Contact ALFAGOMMA for recommendation and assistance.

Note : All data based on 20 °C (68 °F) unless otherwise noted.

Key:

Blank = No Data
E = Excellent
G = Good
F = Fair
C = Conditional
X = Unsatisfactory

CHEMICAL OR MATERIAL CONVEYED	COMPOUND											
	NR	SBR	IIR	EPDM	XLPE	UHMWPE	PTFE	NBR	CR	CSM	AU	FKM
ACETALDEHYDE	F	X	E	E	E	E	C	X	C	F	X	X
ACETIC ACID, GLACIAL	C	X	G	G	E	E	C	X	F	C	C	X
ACETIC ACID, 10%	G	F	G	E	E	E	C	E	E	E	X	G
ACETIC ACID, 50%	X	F	G	E	E	E	C	F	F	E	X	F
ACETIC ANHYDRIDE	F	X	C	G	E	E	F	X	G	E	F	X
ACETIC OXIDE	F	X	G	G	E	E	F	X	G	E	F	X
ACETONE	C	C	E	E	E	E	X	X	C	X	X	X
ACETONE CYANOHYDRIN	F		E	E				X	G	F	X	X
ACETONITRILE	G		E	E			E	X	E	G		X
ACETOPHENONE	C	X	G	E	E	E	X	X	X	X	X	X
ACETYL ACETONE	X	X	E	E			X	X	X	X	C	X
ACETYL CHLORIDE	X	X	X	X			E	X	X	C	X	G
ACETYL OXIDE	F		G	G	E	E	F	X	G	E	F	X
ACETYLENE	C	F	E	E	E	E	E	E	E	C	C	E
ACETYLENE DICHLORIDE	X	X	F	C			E	X	X	X		G
ACETYLENE TERACHLORIDE	X		X	C			X	X	C	X	X	
ACROLEIN	G	F	E	E				F	G	G	X	C
ACRYLONITRILE	C	F	X	E	E	E	G	X	X	C	X	X
ACRYLIC ACID	X			X			X	X	X	G	C	
ADIPIC ACID	E		X	C	E	E	G	E	E	G	E	E
AIR, +300°F	X	X	G	G			E	G	G	G	C	E
ALK-TRI	X		X	X			X	X	X	X	X	E
ALLYL ALCOHOL	E		E	E	E	E		E	E	E		E
ALLYL BROMIDE	X		X	X				X	X	X		G
ALLYL CHLORIDE	X	E	C	X	E	F	G	G	X	X		E
ALUM	E		E	G	E	E	C	C	E	E	G	E
ALUMINIUM ACETATE	E	X	G	E			E	C	C	F	X	C
ALUMINIUM CHLORIDE	E	E	E	E	E	E	E	E	E	E	C	E
ALUMINIUM FLUORIDE	E	E	E	E	E	E	E	E	E	E	C	E
ALUMINIUM FORMATE	X		G	E				X	E	X	X	X
ALUMINIUM HYDROXIDE	E	G	E	E	E	E	E	E	E	E	G	E
ALUMINIUM NITRATE	E	E	E	E			E	E	E	E	C	E
ALUMINIUM SULFATE	E	G	A	E	E	E	C	E	G	E	C	E
AMINES-MIXED	C	G		G			G	X	C	X	X	X
AMINOBENZENE	X	X	E	C	E	E	E	X	X	C	X	E
AMINODIMETHILBENZENE	X		G	C				C	X	F		X
AMINOETHANE	C	X	G	E	E	E	E	C	C	F	X	X
AMINOXYLENE	X		G	E			G	C	X	X	X	F
AMMONIUM CARBONATE	E	E	E	E			C	C	E	C	C	E
AMMONIUM CHLORIDE	E	E	E	E	E	E	E	G	E	E	G	E
AMMONIUM HYDROXIDE	G	X	G	E	E	E	E	C	E	E	C	G
AMMONIUM NITRATE	E	E	E	E	E	E	C	E	E	E	C	E
AMMONIUM PHOSPHATE, DIBASIC	E	E	E	E	E	E	C	E	E	E		E
AMMONIUM SULFATE	E	G	E	E	E	E	C	E	E	E	E	E
AMMONIUM SULFIDE	E	G	E	E	E	E	C	C	E	E		X
AMMONIUM THIOSULFATE	E		E	E				C	E	E	X	E
AMYL ACETATE	C	X	G	C	E	E	X	X	X	X	X	X
AMYL ACETONE	X		G	G				X	X	X		X
AMYL ALCOHOL	C	G	E	E	E	E	E	C	C	E	X	E
AMYL BROMIDE	X		X	C				X	X	X		G
AMYL CHLORIDE	X	X	X	X	E	E	E	X	X	X	F	E
AMYL ETHER	X		X	X				C	X	F		
AMYLAMINE	F		G	X				F	C	F		C
ANETHOLE	X		X	X				X	X	X		G
ANILINE	X	X	E	C	E	E	E	X	X	C	X	E
ANILINE DYES	C	G	G	C	E	E	C	X	C	G	X	G

Chemical resistance chart

ALFAGOMMA

CHEMICAL OR MATERIAL CONVEYED	COMPOUND											
	NR	SBR	IIR	EPDM	XLPE	UHMWPE	PTFE	NBR	CR	CSM	AU	FKM
ANILINE OIL	X	X	G	C	E	E	G	X	X	C	X	F
ANIMAL FATS	X	X	C	C	E	E	E	E	C	F	F	E
ANTIMONY PENTACHLORIDE	X			C	E	E		X	C	X	E	
AQUA REGIA	X	X	C	C	X	X	C	X	X	C	X	E
ARGON	X	C	G	E			E	E	G	X	C	E
ARSENIC ACID	E	E	E	E	E	E	E	E	E	E	C	E
ASPHALT	X	X	X	X	E	E	E	C	C	F	C	E
ASTM FUEL A	X	X	X	X			F	E	C	C	E	E
ASTM FUEL B	X	X	X	X			X	C	X	X	C	E
ASTM FUEL C	X	X	X	X			X	C	X	X	X	E
ASTM OIL NO.1	X	X	X	X	E	E	E	E	E	C	E	E
ASTM OIL NO.2	X	X	X	X	E	E	G	E	C	X	C	E
ASTM OIL NO.3	X	X	X	X	E	E	G	E	C	C	C	E
ASTM OIL NO.4	X	X	X	X			G	C	X	X	X	E
AUTOMATIC TRASMISSION FLUID	X	X	X	X			C	E	C	C	C	E
BANANA OIL	X		C	C			X	X	X	C	X	X
BARIUM CHLORIDE	E	E	E	E	E	E	E	E	E	E	E	E
BARIUM HYDROXIDE	E	E	E	E	E	E	E	E	E	E	E	E
BARIUM SULPHIDE	E	G	E	E	E	E	E	E	E	E	E	E
BEER	E	E	E	E	E	E	E	E	E	E	C	E
BEET SUGAR LIQUORS	E	E	E	E	E	E	E	E	C	E	X	E
BENZAL CHLORIDE			G					X				
BENZALDEHYDE	X	X	G	E	E	E	C	X	X	X	X	X
BENZENE	X	X	X	C	E	F	C	X	C	C	X	E
BENZENE CARBOXYLIC ACID	X		E	C			E	X	E	C	X	E
BENZINE		X	X	X	E	E	F	E	C	C	F	E
BENZOIC ACID	X	X	C	C			C	X	E	C	X	E
BENZOL	X	X	X	C	E	F	C	X	C	C	X	E
BENZOTRICHLORIDE	X			E			E	X	X	X		
BENZYL ACETATE	X		E	E				X	E	G	X	X
BENZYL ALCOHOL	X	X	E	C			E	X	C	C	X	E
BENZYL CHLORIDE	X	X	X	X			E	X	X	X	X	C
BENZYL ETHER	X	X	G	C			F	X	X	X	C	X
BLACK SULFATE LIQUOR	G	G	G	G	E	E		G	G	G	X	E
BLEACH	C	X	E	E	G	F	E	X	C	E	C	G
BORAX SOLUTION	C	G	E	E	E	E	E	C	E	E	E	E
BORIC ACID	E	E	E	E	E	E	E	E	E	E	E	E
BRAKE FLUID (HD-557)12 DAYS	X	E	E	E			E	C	C	C	X	X
BRINE	E		E	E	E	E	E	E	E	E	G	E
BROMACIL												
BROMOBENZENE	X	X	X	X			X	X	X	X	X	E
BROMOCHLOROMETANE	X		C	G	F	F		X	X	X		F
BROMOETHANE	C	X	C	X	E	E	E	C	X	X	X	E
BROMOTOLUENE	X		X					X		X		G
BUNKER OIL	X	X	X	X			E	E	G	C	C	E
BUTADIENE	X	X	X	X	E	E	C	X	X	G	X	E
BUTANE	X	X	X	X	E	E	C	E	E	C	E	E
BUTANOIC ACID	C		X	C			E	C	X	C	C	E
BUTANOL	E	E	C	C	E	E	E	E	E	E	X	E
BUTANONE	X	X	E	E	E	E	X	X	X	X	X	X
BUTOXYETHANOL	X		C	E			F	C	X	G	X	X
BUTYL ACETATE	X	X	C	C	E	E	X	X	X	X	X	X
BUTYL ACRYLATE	X	X	X	C	E	E	X	X	X	X		X
BUTYL ALCOHOL	E	E	C	C	E	E	E	E	E	E	X	E
BUTYL ALDEHYDE	X	X	C	C	E	E	X	X	X	X	C	X
BUTYL BENZYL PHTHALATE	X		E	E	E	E		X	E	X	X	F
BUTYL CARBITOL	X	X	E	E			C	X	X	C	X	F
BUTYL CELLOSOLVE	X	X	C	C	E	E	F	C	X	G	X	X
BUTYL CHLORIDE	X		F	X				X	X	X	E	E
BUTYL ETHER	X	X	C	C	E	E	X	X	C	X	C	X
BUTYL ETHER ACETALDEHYDE	X		G	X				X	X	X		X
BUTYL ETHYL ETHER	X		X	F				G	X	C		
BUTYL OLEATE	X	X	C	C			C	X	X	X		E
BUTYL PHTHALATE	X	X	G	E	E	E	C	X	X	X	X	F
BUTYL STEARATE	X	X	C	X	E	E	C	C	X	X	G	E
BUTYLENE	X	X	X	X			C	C	C	C	C	E
BUTYRALDEHYDE	X	X	C	C	E	E	X	X	X	X	C	X
BUTYRIC ACID	C	X	X	C	E	E	E	C	X	C	C	G
BUTYRIC ANHYDRIDE	F		F	E				C	G	G	X	
CADMIUM ACETATE	X		E					X		E		X
CALCIUM ALUMINATE	E		E					E		E		E
CALCIUM BICHROMATE			E	E				C	E	F		
CALCIUM BISULFIDE	X	G	X	E			E	C	E	F	C	E

CHEMICAL OR MATERIAL CONVEYED	COMPOUND											
	NR	SBR	IIR	EPDM	XLPE	UHMWPE	PTFE	NBR	CR	CSM	AU	FKM
CALCIUM CHLORIDE	E	E	E	E	E	E	E	E	E	E	E	E
CALCIUM HYDROXIDE	E	E	E	E	E	E	E	E	E	E	C	E
CALCIUM HYPOCHLORITE	C	X	E	E	E	E	E	C	C	E	C	E
CALCIUM NITRATE	E	E	E	E			E	E	E	E	E	E
CALCIUM SULFIDE	C	X	E	E			E	E	E	E	C	E
CALCIUM ACETATE	E	X	E	E			C	C	C	C	X	E
CAPRYLIC ACID	C		F					F		G		
CARBAMIDE	E		E	E	E	E	F	G	G	E	G	E
CARBITOL	C	E	C	C	E	E	E	C	C	C	X	E
CARBOLIC ACID PHENOL	C		C				E			C	C	
CARBON DIOXIDE	G	G	E	G	E	E	E	E	G	E	E	E
CARBON DISULFIDE	X		X	X	C	C	C	X	X	X	C	E
CARBON MONOXIDE	C	G	E	E	E	E	E	E	C	C	E	E
CARBON TETRACHLORIDE	X		X	X	E	E	X	X	X	X	C	E
CARBONIC ACID	E	G	E	E	E	E	E	C	E	E	E	E
CASTOR OIL	E	E	C	C	E	E	E	E	E	E	E	E
CAUSTIC SODA	E	E	E	G	E	E	E	C	G	E	C	E
CELLOSOLVE ACETATE	C	X	C	G	E	E	C	X	X	X	C	X
CELLUGUARD	E	E	E	E			E	E	E	E	X	E
CETYLIC ACID	C	G	C	C	E	E	E	E	G	C	C	E
CHINA WOOD OIL	X	X	C	X	E	E	E	E	C	C	C	E
CHLORINATED SOLVENTS	X	X	X	X	E	E	C	X	X	X	X	E
CHLORO-2-PROPANONE	X		C				C			X	X	
CHLOROACETIC ACID	X	X	C	C	E	E	C	X	X	G	X	G
CHLOROACETONE	X	X	C	E	E	E	C	X	X	X	X	X
CHLOROBENZENE	X	X	X	X	E	E	C	X	X	X	X	E
CHLOROBUTANE	X		F	X				X	X	X	E	E
CHLORODANE	X	X	X	X			C	C	C	C	C	E
CHLOROETHYL BENZENE	X		X	X				C	X	X	C	
CHLOROFORM	X	X	X	X	F	F	E	X	X	X	X	E
CHLOROPENTANE	X		X	X			C	X	X	X	F	E
CHLOROSULFONIC ACID	X	X	X	X	F	X	C	X	X	X	X	X
CHLOROTOLUENE	X	X	X	X			C	X	X	X	X	E
CHLOROX	X	X	C	G			E	C	C	C	X	E
CHROME PLATING SOLUTIONS	X	X	C	C			E	X	X	X	X	E
CHROMIC ACID	C	X	C	C	E	E	E	X	X	E	C	E
CHROMIUM TRIOXIDE	X	X	G	C			E	X	X	E	X	C
CINNAMENE	X	X	X	X			X	C	X	X	C	G
CIS-9-OCTADECENOIC ACID	X	X	X	C	E	E	E	G	C	C	C	E
CITRIC ACID	E	E	E	E	E	E	E	E	E	E	E	E
COAL TAR OIL	X	X	X	X	E	E	E	E	G	F	F	E
COAL TAR	X	X	X	X	E	E	C	C	C	C	C	E
COAL TAR NAPHTHA	X		X	X	E	E	E	X	X	X	G	E
COCONUT OIL	X	X	C	C	E	E	C	E	C	C	C	E
COKE OVEN GAS	C	X	C	X	E	E	C	X	X	C	X	E
COOLANOL	X	X	X	X			E	E	C	C	X	E
COPPER CHLORIDE	E	E	E	E	E	E	E	E	C	C	E	E
COPPER CYANIDE	E	E	E	E	E	E	G	E	E	E	E	E
COPPER HYDRATE	F		E					G		G		F
COPPER HYDROXIDE	F		E					G		G		F
COPPER SULFATE	C	G	C	E	E	E	E	E	E	E	C	E
CORN OIL	X	X	C	C	E	E	E	E	C	C	E	E
COTTONSEED OIL	X	X	C	C	E	E	C	E	C	C	E	E
CREOSOTE	X	X	X	X	E	E	C	C	C	X	C	E
CRESOLS	X	X	X	X	E	E	E	X	X	X	X	E
CRESYLIC ACID	X	X	X	X	E	E	C	X	X	X	X	E
CROTONALDEHYDE	X	F	E	E	E	E		X	X	X	X	X
CRUDE OIL	X	X	X	X	E	E	C	C	C	C	E	E
CUMENE	X	X	X	X			C	X	X	X	X	E
CUPRIC CARBONATE												E
CUPRIC HYDROXIDE	F		E					G		G		F
CUPRIC NITRATE	G		E	C	E	E	G	C	E	E	G	E
CUPRIC SULFATE	C	G	C	E	E	E	E	E	E	E	C	E
CUTTING OIL	C	X	X	X			C	E	C	C	E	E
CYCLOHEXANE	X	X	X	X	E	E	C	E	X	C	C	E
CYCLOHEXANOL	C	X	X	X	E	E	C	G	C	C	F	E
CYCLOHEXANONE	X	X	C	C	E	E	C	X	X	X	X	X
CYCLOPENTANE	X		X	X			C	G	C	X	E	E
CYCLOPENTANOL												G
CYCLOPENTANONE	X		X					X		X		X
CYCLOPENTIL ALCOHOL				C				X	F			
D-FURALDEHYDE	X		C	E			C	G	F	C	C	

Chemical resistance chart

ALFAGOMMA

CHEMICAL OR MATERIAL CONVEYED	COMPOUND											
	NR	SBR	IIR	EPDM	XLPE	UHMWPE	PTFE	NBR	CR	CSM	AU	FKM
DDT IN KEROSENE	X	X	X	X			X	E	C	C	G	E
DECAHYDRONAPHTHALENE	X	E	X	X	E	E	C	X	X	X	X	X
DECALIN	X	E	X	X	E	E	C	X	X	X	X	X
DECYL ALCOHOL	X		X	X				E	X	C	E	G
DECYL ALDEHYDE	X		F	X				X		X		X
DECYL BUTYL PHTHALATE	X		E					X		X		F
DETERGENT, WATER SOLUTION	E	G	E	E	E	E	E	E	C	C	G	E
DEVELOPING FLUID	E	G	C	C			E	E	E	E	E	E
DEXTRON	X	X	X	X			E	E	C	X	C	E
DI (2ETHYLHEXYL) ADIPATE	X		E	G	G	G		X	X	X		F
DI (2ETHYLHEXYL) PHTHALATE	X	X	C	C	E	E	C	X	X	X	C	G
DI-ISO-BUTYLENE	X	X	X	X	E		C	C	C	X	X	E
DI-ISO-DECYL PHTHALATE	X		E	E				X	X	X		F
DI-ISO-PROPANOLAMINE	G		E	E				G	G	F		
DI-ISO-PROPYL ETHER	X		X	X	E	E	X	G	C	C	G	X
DI-ISO-PROPYL KETONE	X	X	E	E	E		C	X	X	X	X	X
DI-P-MENTHA-1,8-DIENE	X		X	X				C	X	X		E
DIACETONE ALCOHOL	X	X	E	E	E	E	X	X	F	C	X	X
DIACETYLMETHANE		X	E	E			X	X	X	X	F	X
DIAMMONIUM ORTHOPHOSPHATE				E				E	E			
DIAMYL NAPHTHALENE	X		E		E	E				X		
DIAMYLAMINE	G	X	E	E			E	G	C	C	E	X
DIAMYLENE	X		X	X					X	X		E
DIAMYLPHENOL	X		X		E	E		X		X		E
DIBENZYL ETHER	X	X	C	C			C	X	X	X	C	X
DIBROMOBENZENE	X		X	X				X	X	X		E
DIBROMOMETHANE	X		X	C			G	X	X	X	C	E
DIBUTYL ETHER	X	X	C	C	E	E	X	X	C	X	C	X
DIBUTYL PHTHALATE	X	X	C	C	E	E	C	X	X	X	C	C
DIBUTYL SEBACATE	X	X	C	C	E	E	C	X	X	X	X	E
DIBUTYLAMINE	X	X	X	F			C	X	C	C	X	X
DICALCIUM PHOSPHATE	E		E	E				E	E	E		E
DICHLOROETHYLENE	X		C	C	F	F	C	X	X	X	X	E
DICHLOROACETIC ACID	X	X	C	X	E	E		X	X	X	C	X
DICHLOROBENZENE	X	X	X	X			X	X	X	X	X	E
DICHLOROBUTANE	X	X	X	X			C	C	X	X	X	E
DICHLORODIFLUOROMETHANE	C	E	C	C	E	G	X	C	C	C	C	G
DICHLOROETHANE	X	X	C	X	E	E	C	X	X	X	X	E
DICHLOROETHYL ETHER	X		X	X			E	X	X	X		
DICHLOROHEXANE	X		X	X				X	X	X		E
DICHLOROMETHANE	X	X	X	X			C	X	X	X	X	G
DICHLOROPENTANE	X	X	X	X				X	X	X	X	E
DICHLOROPROPANE	X		X	X	G	G		F	X	X	C	E
DICHLOROPROPENE	X		X	X	G	G		C	X	X	C	
DIESEL OIL	X	X	X	X	E	E	E	E	C	C	C	E
DIETHANOL AMINE	G	X	E	G			E	C	G	F	C	X
DIETHYLBENZENE	X	X	X				C			X	X	E
DIETHYL ETHER	X	X	X	X	E	E	X	X	X	X	C	X
DIETHYL KETONE	X		G	G	E	E		X	X	X		X
DIETHYL OXALATE	F		X	X				X	X	X		
DIETHYL PHTHALATE	X		X	F	E	E		X	X	X	C	F
DIETHYL SEBACATE	X	X	G	F			C	C	X	F	X	G
DIETHYL SULFATE	X	E	C	E			C	X	E	X	X	X
DIETHYL AMINE	C	G	C	C	E	E	C	C	C	C	C	X
DIETHYLENE GLYCOL	E	E	E	E	E	E	E	E	E	E	X	E
DIETHYLENE OXIDE	X		X	E			X	X	X	X	C	X
DIETHYLENETRIAMINE	G	X	E	E			E	G	X	F		X
DIHYDROXY SUCCINIC ACID	E		G	G			E	G	G	E	E	E
DIHYDROXYDIETHYL ETHER	E		E	E	E	E	E	E	E	E	X	E
DIISOBUTYL KETONE	X	X	G	E	E	E	C	X	X	X	X	E
DIISODECYL PHTHALATE	X		E	E	E	E		X	X	X		F
DIISOOCTYL ADIPATE	X		E	E				X	X	X		F
DIISOOCTYL PHTHALATE	X		E	G	E	E		X	X	X		F
DIMETHYL CARBINOL	E		E	E	E	E	E	C	G	E	X	E
DIMETHYL KETONE	C	F	E	E	E	E	X	X	C	X	C	X
DIMETHYL PHTHALATE	X	X	C	C	E	E	C	X	X	X	X	E
DIMETHYL SULFATE	X		G	X	E	E		X	X	X	G	X
DIMETHYL SULFIDE	X		F	X				X	X	X		
DIMETHYLAMINE	G	X	G	E	E	E		F	X	X	X	X
DIMETHYLANILINE	X	X	G	E			G	X	X	X	X	X
DIMETHYLBENZENE	X	X	X	X			X	X	X	X	C	E
DIMETHYLBUTANE	X		X				X			X	G	

CHEMICAL OR MATERIAL CONVEYED	COMPOUND											
	NR	SBR	IIR	EPDM	XLPE	UHMWPE	PTFE	NBR	CR	CSM	AU	FKM
DIOXANE	X	X	C	C	E	E	X	X	X	X	X	X
DIPENTENE	X	X	X	X			C	C	X	X	X	E
DIPENTYLAMINE	G	X	E	E			E	G	C	C	E	X
DIPROPYLAMINEOLAMINE												
DIPROPYLENE GLYCOL	E		E	E				E	E	E		E
DISODIUM PHOSPHATE	E		E	E				E	E	E	E	E
DIVINYL BENZENE	X	X	X	X				X	X	X	X	E
DOWTHERMN, A AND E	X	X	X	X			C	X	X	C	X	E
DRY CLEANING FLUIDS	X	X	X	X			G	C	X	X	X	E
ETHANOIC ACID		G		C	E	E		C	C			X
ETHANOL	E	E	E	E	E	E	E	C	E	E	C	E
ETHANOLAMINE	C	X	C	E			E	C	C	C	C	X
ETHERS	X	X	X	X	E	E	X	F	X	X	C	X
ETHYL ACETATE	X	X	C	C	E	E	X	X	X	X	C	X
ETHYL ACETOACETATE	C	F	C	C			X	X	X	X	C	X
ETHYL ACETONE	X		G	G				X	X	X		X
ETHYL ACRYLATE	X	X	C	C			C	X	X	X	X	X
ETHYL ALCOHOL	E	E	E	E	E	E	E	C	E	E	C	E
ETHYL ALDEHYDE	C		E	E	E	E	C	X	X	F	F	X
ETHYL ALUMINIUM DICHLORIDE	X		X					X		X		G
ETHYL BENZENE	X	X	X	X	E	E	F	X	X	X	X	E
ETHYL BROMIDE	C	X	X	X	E	E	E	C	X	X	X	E
ETHYL BUTYL ACETATE	X		E					X		G		X
ETHYL BUTYL ALCOHOL	E		E							E		G
ETHYL CELLULOSE	C	G	C	C	E	E	E	C	C	C	C	X
ETHYL CHLORIDE	C	G	E	C	E	E	G	E	X	C	C	E
ETHYL DICHLORIDE	X	X	F	X	E	E	E	X	X	X	X	G
ETHYL ETHER	X	X	X	X	E	E	X	X	X	X	C	X
ETHYL FORMATE	X	X	C	C			E	X	C	C		E
ETHYL IODIDE	X		F	F	E	E		X	X	X		G
ETHYL OXALATE	E	X	X	E			E	X	X	X	E	E
ETHYL PHTHALATE	X		X	F	E	E		X	X	X	C	F
ETHYL SILICATE	C	G	E	E			E	E	E	C	X	E
ETHYL-N-BUTYL KETONE	X		G	G				X	X	X		X
ETHYL-1-BUTANOL	E		E	E				E	E	E		
ETHYLAMINE	C	X	C	E			E	C	C	F	X	X
ETHYLENE CHLOROHYDRIN	C	G	C	C			E	X	C	C	X	E
ETHYLENE DIAMINE	C	G	E	E	E	E	G	C	E	C	X	X
ETHYLENE DIBROMIDE	X	X	C	C	F	F	G	X	X	X	X	G
ETHYLENE DICHLORIDE	X	X	C	X	F	F	C	X	X	X	X	E
ETHYLENE GLYCOL MONOETHYL ACETATE												E
ETHYLENE GLYCOL MONOBUTYL ETHER	X	X	E	E	E	E	G	F	X	C	X	X
ETHYLENE GLYCOL MONOETHYL ETHER	X		C	C	E	E	C	C	X	X	X	X
ETHYLENE GLYCOL	E	E	E	E	E	E	E	E	E	E	C	E
ETHYLENE OXIDE	X	X	C	C	E	E	X	X	X	X	X	X
FATTY ACIDS	X	X	C	X	E	G	E	C	C	C	G	E
FERRIC BROMIDE	E		E					E		E		E
FERRIC CHLORIDE	E	E	E	E		E	E	E	C	C	E	E
FERRIC NITRATE	E	E	E	E		E	E	E	E	E	E	E
FERRIC SULFATE	E	E	E	E		E	E	E	E	E	E	E
FERROUS ACETATE	X		E	G				X	X	E		X
FERROUS CHLORIDE	E		E	E		E	E	E	E	E	E	E
FERROUS SULFATE	E	E	E	E		E	E	E	E	E	E	E
FLUOROBORIC ACID	E	E	C	E	E	E		E	E	E	X	E
FLUORINE	X		X	E	G	G		X	X	X	X	E
FLUOROSILICIC ACID	E	G	E	E	E	E	E	E	E	E	C	E
FORMALDEHYDE	C	G	C	C	E	E	C	C	C	C	C	E
FORMALIN	C	G	C	E	E	E	C	G	G	C	C	E
FORMIC ACID	C	E	E	E	E	E	C	C	C	E	X	C
FREON 113	C	G	X	X			X	E	E	C	C	E
FREON 12	X	E	X	C	F	G	X	C	C	E	E	E
FREON 22	C	E	C	C	F	E	X	X	E	E	X	X
FUEL A	X		X	X			F	E	C	C	E	
FUEL B	X		X	X			X	C	X	X	C	
FUEL OIL	X	X	X	X	E	E	C	E	C	C	C	E
FURAN	X	X	X	X	E	E	C	X	X	X	X	X
FURFURAL	X	X	C	C	E	E	C	X	X	C	C	X
FUEL A (ASTM)	X	X	X	X				E	C	X		E
FUEL B (ASTM)	X	X	X	X				C	X	X		E
FUEL OIL	X	X	X	X	E	E	E	E	C	C	X	E
FURAN	X	X	X	X	E	E		X	X	X		
FURFURAL	X	X	E	C	E	E	E	X	X	X		X

CHEMICAL OR MATERIAL CONVEYED	COMPOUND											
	NR	SBR	IIR	EPDM	XLPE	UHMWPE	PTFE	NBR	CR	CSM	AU	FKM
FURFURAN	X	X	X	X	E	E	C	X	X	X	X	X
FURFURYL ALCOHOL	X	X	C	C	E	E	G	X	X	X	X	X
GALLIC ACID	E	G	C	C	E	E	E	C	C	C	X	E
GALLOTANNIC ACID	E		G	E			E		E	E	E	E
GAS, COAL											G	
GASOLINE	C	X	C	X	E	E	C	E	X	C	C	E
GLACIAL ACRYLIC ACID	X		X	X			X	X	X	G	C	
GLUCONIC ACID	X		F	E				C	E	G		
GLUCOSE	E	E	E	E	E	E	E	E	C	E	E	E
GLYCERINE	E	E	E	E	E	E	E	E	E	E	G	E
GLYCEROL	E	E	E	E	E	E	E	E	E	E	G	E
GLYCOGENIC ACID	X		F	E				F	E	G		
GLYCOLS	E	E	E	E	E	E	E	E	E	E	C	E
GLYCONIC ACID	X		F	E				F	E	G		
GLYCLYL ALCOHOL												
GREASE	X	X	X	X			G	E	F	C	E	E
GREEN SULPHATE LIQUOR	C	G	E	E			E	C	C	G	E	E
HELIUM	E	E	E	E			E	E	E	E	E	E
HEPTALDEHYDE	X	X	C	C			C	E	C	X	C	
HEPTANAL	X	X	C	C			C	E	C	X	C	
HEPTANE	X	X	X	X		E	C	E	C	C	C	E
HEPTANOIC ACID	X		X	X				E	C	C	E	
HEXADECANOIC ACID	E	G	G	G	E	E		E	X	X	E	E
HEXALDEHYDE	X	X	C	C	E	E	C	X	C	C	C	X
HEXANE	X	X	X	X	E	E	C	E	C	C	C	E
HEXANOL	E	E	C	C	E	E	E	C	C	C	C	E
HEXENE	X	X	X	X			X	C	C	C	C	E
HEXYL ALCOHOL	E	E	C	C	E	E	E	C	C	C	C	E
HEXYL METHYL KETONE	X		G	G				X	C	X	X	X
HEXYLAMINE	F		G	G				F	G	F		X
HEXYLENE GLYCOL	E		E	F				C	E	E	X	E
HISTOWAX	X		X							C	E	
HYDRAULIC & MOTOR OIL	X	X	C	C	E	E	E	C	C	C	C	E
HYDRAZINE	C	G	C	E			E	C	C	C	X	X
HYDROBROMIC ACID	E	X	E	E	E	E	E	X	C	E	X	E
HYDROCLORIC ACID	C	X	C	C	C	C	E	C	C	C	C	E
HYDROCYANIC ACID	C	G	C	E			E	C	C	E	C	E
HYDROFLUORIC ACID	C	X	C	C	E	E	E	C	C	E	C	G
HYDROFLUOSILICIC ACID	E	G	E	E	E	E	E	X	C	E	F	E
HYDROGEN CHLORIDE ANHYDROUS	X	X	E	E			E	X	C	E		E
HYDROGEN DIOXIDE	G		G	G			E	F	F	C	G	E
HYDROGEN GAS	C	G	E	E	E	E	E	E	E	E	E	E
HYDROGEN PEROXIDE OVER 10%	C	X	C	C	C	F	C	X	X	C	C	E
HYDROGEN PEROXIDE 10%	G	X	G	G	E	E	E	F	F	C	G	E
HYDROGEN SULFIDE	X	X	E	E	E	E	E	X	E	G	C	X
HYDROXY BENZENE	C		C	C			E	X	X	C	X	E
HYDROXYISOBUTYRONIRILE	C		E	E				C	G	F	X	
HYDROXYTOLUENE	X	X	C	C			E	X	C	C	X	E
IMINODI-2-PROPANOL	G		E	E				G	G	F		
IMINODIETHANOL	C	X	C	G			E	C	G	F	C	X
IODINE	X	G	C	C	E	E	E	C	C	C	C	E
IODINE PENTAFLUORIDE	X	X	X	X			X	X	X	X	X	X
IODOFORM	X		X	E			X	E	X	X	C	
ISO-BUTANAL	X	G		G	E	E	X	X	F		X	X
ISO-BUTYLAMINE	F		E	G				X	X	F		X
ISO-BUTYLBROMIDE	X		X	X				X	X	X		G
ISO-BUTYLCARBINOL	X		E	E			E	E	E	E	F	E
ISOCYANATES	F		G	G	E	E	F	C	X	F	G	G
ISOOCTANE	X	X	X	X	E	E	F	E	C	C	C	E
ISOPROPYL ACETATE	X	X	C	C	E	E	X	X	X	X	X	X
ISOPROPYL ALCOHOL	E	E	E	E	E	E	E	C	C	E	X	E
ISOPROPYL ETHER	X	X	X	X	E	E	X	G	X	C	G	X
JET FUELS	X	X	X	X	E	E	C	C	C	X	C	E
JP-4 OIL	X	X	X	X			C	E	X	X	C	E
KEROSENE	X	X	X	X	E	E	C	E	C	C	E	E
KETONES	C	E	G	E	E	E	X	C	C	C	C	X
LACQUER SOLVENTS	X		X	X	E	E	X	X	X	X	X	X
LACTIC ACID - COLD	E	G	E	C	G	G	E	C	C	E	C	E
LACTIC ACID - HOT	E	X	E	C	G	G	E	C	C	E	C	E
LARD	X	X	C	C	E	E	E	E	C	C	E	E
LAVENDER OIL	X	X	X	X			E	C	X	X	X	E
LEAD ACETATE	E	X	E	E	E	E	X	C	C	X	C	E

CHEMICAL OR MATERIAL CONVEYED	COMPOUND											
	NR	SBR	IIR	EPDM	XLPE	UHMWPE	PTFE	NBR	CR	CSM	AU	FKM
LEAD NITRATE	E	E	E	E			G	E	E	E		E
LEAD SULFATE	E		E	E	E	E		E	E	E	G	E
LIME	E		E	E	E	E		G	G	G	E	E
LIME BLEACH	C	E	E	E			E	C	C	E	C	E
LIME SULFUR	C	X	E	E	E	E	E	E	E	E	C	E
LIMONENE	X		X	X			C	C	X	X	X	E
LINOLEIC ACID	X	X	X	X			E	C	C	X	F	G
LINSEED OIL	X	X	C	C	E	E	E	E	C	C	E	E
LIQUID PETROLEUM GAS	X	X	X	X	E	E	G	E	G	C	E	E
LUBRICATING OIL	X	X	X	X	E	E	E	C	C	C	C	E
LYE SOLUTIONS	E	G	E	G			E	C	G	E	C	G
MEK	X	X	E	E	E	E	X	X	X	X	X	X
MAGNESIUM ACETATE	X	X	E	G				X	X	E	X	X
MAGNESIUM CHLORIDE	E	E	E	E	E	E	E	E	E	E	E	E
MAGNESIUM HYDRATE	C	G	E	E	E	E	G	C	C	E	C	G
MAGNESIUM HYDROXYDE	C	G	E	E	E	E	G	C	C	E	C	G
MAGNESIUM SULFATE	C	G	E	E	E	E	E	E	E	E	G	E
MALEIC ACID	X	X	X	C	E	E	E	X	X	X	C	E
MALEIC ANHYDRIDE	X	X	C	C			E	X	X	X		G
MALIC ACID	E	G	X	C	C	C	E	E	C	C	C	E
MANGANOUS SULFATE	G		G	E			E	E	E	E	X	
MERCURY	E	E	E	E	E	E	E	E	E	E	E	E
MERCURY VAPORS	G	E	E	E			E	E	G	E		E
MESITYL OXIDE	X	X	F	C			X	X	X	X	X	X
METHALLYL ALCOHOL	E		E	E				E	E	E		G
METHALLYL CHLORIDE	X		X						X	X	C	
METHANE CARBOXYLIC ACID see Acetic Acid					E	E						
METHANOIC ACID	C	E	E	E	E	E	C	G	E	E	X	C
METHANOL	E	E	C	E	E	E	E	C	E	E	C	F
METHOXY ETHANOL	E		E	E	E	E		C	E	E	X	
METHYL ACETATE	C	X	C	C			X	X	C	X	X	X
METHYL ACETOACETATE	X	X	C	C			X	X	X	X	X	
METHYL ACETONE	X	X	E	E	E	E	X	X	X	X	X	
METHYL ALLYL CHLORIDE	X		X						X	X	C	F
METHYL AMYL CARBINOL	G		G	E			C	E	G	E	X	G
METHYL BENZENE	X	X	X	X	F	F	X	X	X	X	X	E
METHYL BROMIDE	X	X	C	X	F	F	G	C	X	X	X	E
METHYL BUTANE	X		X	X			X	E	X	X	G	
METHYL BUTYL KETONE	X	X	E	E	E	E	X	X	X	X	X	X
METHYL CARBITOL				G			E	F	F			
METHYL CELLOSOLVE	X	X	C	C	E	E	E	C	C	C	X	X
METHYL CHLORIDE	X	X	C	C	F	F	X	X	X	X	X	E
METHYL CYANIDE	G		E	E			E	C	E	G	X	X
METHYL ETHYL KETONE	X	X	E	E	E	E	X	X	X	X	X	X
METHYL HEXANOL	E		E	E				E	E	E		G
METHYL METHACRILATE	X	X	X	X	E	E	X	X	X	X	X	X
METHYL NORMAL AMYL KETONE	X			E				C	E	X		X
METHYL PROPYL ETHER	X		X	X				X	X	C	X	
METHYL SALYCILATE	X		C	C	E	E	F	X	X	X		
METHYL STYRENE	X		X	X				X	X	X		
METHYL SULFIDE	X		F	X				X	X	X		
METHYL-ISO-AMYL-KETONE	X		G							X		
METHYL-2-BUTANONE	X	X	C	C			X	X	X	X	X	X
METHYL-2-HEXANONE	X		G							X		
METHYL-2-PENTANOL	G		E	E				G	G	E		C
METHYL-2-PENTANONE	X		C	C			X	X	X	X	X	
METHYL-4-ISOPROPYL BENZENE	X		X	X			F	X	X	X	X	E
METHYL AMYL ACETATE	X									X		X
METHYL AMYL ALCOHOL	G		E	E				G	G	E		C
METHYLCYCLOHEXANE	X		X	X				X	X	C		G
METHYLENE BROMIDE	X		X	X	E	E	G	C	X	X	C	G
METHYLENE CHLORIDE	X	X	X	C	F	F	C	X	X	X	X	G
METHYLETHYL KETONE	X	X	E	E			X	X	X	X	X	X
METHYL HEXYL KETONE	X		G	G	E			X	C	X	X	X
METHYL ISOBUTYL CARBINOL	G		E	C				X	X	E		C
METHYLISOBUTYL KETONE	X	X	C	C	E	E	X	X	X	X	X	X
METHYLISOPROPYL KETONE	X	X	C	C			X	X	X	X	X	X
METHYLLACTONITRILE	F		E	E				X	G	F	X	
METHYLPROPYL CARBINOL	E		E					E		E		G
METHYLPROPYL KETONE	X		G	G	E	E		X	X	X		X
MIL-A-6091	E		E	E				C	E	E	X	
MIL-C-4339	X		X	X				E	X	X	E	

Chemical resistance chart

ALFAGOMMA

CHEMICAL OR MATERIAL CONVEYED	COMPOUND											
	NR	SBR	IIR	EPDM	XLPE	UHMWPE	PTFE	NBR	CR	CSM	AU	FKM
MIL-C-7024	X		X	X				E	C	X	E	
MIL-E-9500	E	E	E	E				E	E	E	X	E
MIL-F-16884	X	X	X	X				E	C	C	C	E
MIL-F-17111	X	X	X	X				E	C	X	C	E
MIL-F-25558	X	X	X	X			E	E	C	C	G	
MIL-G-10924	X	X	X	X				E	C	C	G	E
MIL-G-25013	C	X	X	E				E	C	C	C	
MIL-G-25537	X	X	X	X				E	C	C	G	
MIL-G-3545	X		X	X				E	C	C	E	
MIL-G-5572	X	X	X	X				E	X	X	C	E
MIL-G-7711	X	X	X	X				E	X	X	E	E
MIL-H-05606	X		X	C				E	C	C	C	E
MIL-H-13910	E	E	G	E				E	E	G	X	E
MIL-H-19457	X	X	E	C				X	X	X	X	C
MIL-H-22251		G	E	E				C	C	C		
MIL-H-27601	X		X	X				G	C	C	C	X
MIL-H-5606	X		X	C			E	E	C	C	C	E
MIL-H-6083	C	X	X	X				E	E	C	G	E
MIL-H-8446	X	X	X	X			E	G	E	C	C	E
MIL-J-5161	X	X	X	X				C	X	X	C	E
MIL-J-5624	X	X	X	X			C	E	X	X	C	E
MIL-L-15016	X	X	X							C	E	E
MIL-L-17331	X	X	X							G	E	E
MIL-L-2104	X		X	X				E	C	C	E	
MIL-L-21260	X	X	X	X				E	C	C	E	
MIL-L-23699	X	X	X	X			E	C	C	C	C	
MIL-L-25681	C	G	E	E				C	C	C	C	
MIL-L-3150	X	X	X	X				E	C	C	C	E
MIL-L-4343		X										E
MIL-L-6082		X										E
MIL-L-6085	X	X	X	X				C	X	X	C	E
MIL-L-7808	X	X	X	X			E	G	X	X	X	E
MIL-L-7870	X	X	X	X				E	C	X	C	E
MIL-L-9000	X	X	X	X				E	C	C	C	E
MIL-L-9236	X	X	X	X				C	X	X	X	E
MIL-P-27402		G	E	E				C	C	C		
MIL-R-25576	X		X				E			C	E	
MIL-S-3136 TYPE 1 FUEL	X	X	X	X				E	C	C	G	E
MIL-S-3136 TYPE 2 FUEL	X	X	X	X				C	X	X	C	E
MIL-S-3136 TYPE 3 FUEL	X	X	X	X				G	X	X	C	E
MIL-S-3136 TYPE 4 OIL, LOWSWELL	X	X	X	X				E	X	C	E	E
MIL-S-3136 TYPE 5 OIL, MEDSWELL	X	X	X	X				E	G	G	E	E
MIL-S-3136 TYPE 6 OIL, HI SWELL	X	X	X	X			E	E	X	C	E	E
MIL-S-81087	E	E	E	E				E	E	E	E	
MINERAL OIL	X	X	C	X	E	E	E	E	C	C	E	E
MINERAL SPIRITS	X	X	X	X				C	C	G	C	E
MOBILE HF A	X	X	X	X			E	E	C	X	G	E
MOLTEN SULFUR	G		G	E				G	E	E	G	E
MONO-CHLOROACETIC ACID	C	X	G	G	E	E	X	X	C	G	X	C
MONOBUTYL ETHER	X	X	C	C				G	C	C	C	X
MONOCHLOROBENZENE	X	X	X	X	F	F	C	X	X	X	X	E
MONOCHLORODIFLUOROMETHANE	C	E	C	C	E	E	X	X	C	E	X	C
MONOETHANOL AMINE	C	G	C	C			E	G	G	C	C	X
MONOETHYL AMINE	C	F	C	E			E	C	C	F	X	X
MORPHOLINE	X		C	C				X	X	X	C	
MOTOR OIL, 40W	X		X	X				E	C	C	G	E
MTBE			G				G	X	X			
MURIATIC ACID	C	X	C	F				C	C	C	C	E
N-BUTANAL	X	X	C	C	E	E	X	X	X	X	C	X
N-BUTYLAMINE	X	X	C	C			C	C	X	X	X	X
N-BUTYLBENZENE	X		X	X				X	X	X		E
N-BUTYLBROMIDE	X		X	X				X	X	X		G
N-BUTYLBUTYRATE	X	X	E	E			E	X	X	X		E
N-BUTYLCARBINOL	E		E	E	E	E	E	E	E	E	X	G
N-NONYL ALCOHOL	E		E	E				E	E	E		G
N-OCTANE	X	X	X	X	E	E	C	C	G	X	X	E
NAPHTHA	X	X	X	X	E	E	E	C	X	C	F	E
NAPHTHALENE	X	X	X	X	E	E	F	X	X	X	C	E
NAPHTHENIC ACID	X	X	X	X			E	C	X	X		E
NATURAL GAS	C	F	X	X	E	E	E	E	E	E	F	E
NEOHEXANE	X		X	X				E	G	X	X	E
NEON GAS	E	E	E	E			E	E	E	E	E	E

CHEMICAL OR MATERIAL CONVEYED	COMPOUND											
	NR	SBR	IIR	EPDM	XLPE	UHMWPE	PTFE	NBR	CR	CSM	AU	FKM
NEU-TRI	X		X					X		X		E
NICKEL ACETATE	E	X	E	E			X	C	G	X	X	X
NICKEL CHLORIDE	E	E	E	E	E	E	E	E	C	E	C	E
NICKEL NITRATE	E		E	E	E	E		E	E	E	C	E
NICKEL SULFATE	C	G	E	E	E	E	E	E	E	E	E	E
NITRIC ACID, CONC	X		X	X			C	X	X	X	X	
NITRIC ACID, RED FUMING	X	X	X	X	X	X	F	X	X	X	X	E
NITRIC ACID, 10%	X	X	E	E	E	E	E	X	G	E	X	E
NITRIC ACID, 13N	X						C	X	X		X	
NITRIC ACID, 13N +5%	X						C	X	X		X	
NITRIC ACID, 20%	X	X	G	E	E	E	E	X	X	E	X	E
NITRIC ACID, 30%	X	X	F	F	G	G	E	X	X	E	X	E
NITRIC ACID, 30% - 70%	X	X	F	X	F	F	G	X	X	C	X	E
NITRILOTRIETHANOL	C	G	E	E	E	E	E	F	C	C	X	X
NITROBENZENE	X	X	F	C	E	E	E	X	X	X	X	G
NITROETHANE	G	G	G	C			C	X	C	G	X	X
NITROGEN	E	E	E	E	E	E	E	E	E	E	E	E
NITROMETHANE	G	C	G	C			C	X	C	C	X	X
NITROUS OXIDE GAS				E			F	E	G			E
NONANOIC ACID	X		E		E	E		E		X		
NONANOL	E		E	E				E	E	E		
OCTANOIC ACID	F		F				G	F		G		
OCTANOL	C	E	C	C			E	C	C	C	X	E
OCTYL ACETATE	C	X	E	G	E	E		C	C	E	X	
OCTYL ALCOHOL	C	E	C	C			E	C	C	C	X	G
OCTYL ALDEHYDE	X		F		E	E		X		X		X
OCTYL AMINE	F		E	G				F	G	F		X
OCTYL CARBINOL	E		E	E				E	E	E		G
OCTYLENE GLYCOL	E		E	E				E	E	E		E
OIL-PETROLEUM		X			G	G						E
OLEIC ACID	X	X	X	X	E	E	E	G	F	C	C	E
OLEUM	X	X	X	X	X	X	E	X	X	X	X	G
OLIVE OIL	X	X	C	G			E	E	G	C	E	E
ORTHO-DICHLOROBENZENE	X	X	X	X			X	X	X	X	X	E
ORTHO-DICHLOROBENZOL	X	X	X	X			X	X	X	X	X	E
ORTHOXYLENE	X	X	X	X			X	X	X	X	C	E
OXALIC ACID	C	G	E	E	E	E	E	G	G	E	C	E
OXYDIETHANOL												
OZONE	X	X	G	E	E	E	E	X	F	G	G	E
P-CYMENE	X		X	X			F	X	X	X	X	E
PAINT THINNER	X	X	X	X			F	X	X	X	C	E
PALMITIC ACID	C	G	C	C	E	E	E	E	G	C	C	E
PAPERMAKERS ALUM												E
PARA-DICHLOROBENZENE	X	X	X	X			C	X	X	X	X	E
PARAFFIN WAX	X		X	X				E	G	E	E	E
PARALDEHYDE	F		E	E				C	G	X	X	X
PARAXYLENE	X		X	X			X	X	X	X	C	E
PELARGONIC ALCOHOL	E		E	E	E	E		E	E	E		G
PENTACHLOROETHANE	X		X					X	X	X	C	E
PENTADIONE												
PENTAMETHYLENE	X		X	X			C	G	C	X	E	E
PENTANE	X	X	X	X	E	E	E	E	E	C	X	E
PENTANOL	E		E		E	E	E			E	X	G
PENTANONE	X		G	G				X	X	X		X
PENTASOL	X	G	E	G	E	E	E	C	G	E	X	G
PENTYL ACETATE	C	X	X	C	E	E	X	X	X	X	X	X
PENTYL ALCOHOL	C	G	C	E	E	E	E	C	C	E	X	E
PENTYL BROMIDE	X		X	C				X	X	X		G
PENTYL CHLORIDE	X	X	X	X	E	E	E	X	X	X	F	E
PENTYL ETHER	X		X	X				C	X	F		
PENTYLAMINE	F		G	X				F	F	F		X
PERCHLORIC ACID	C	X	C	G	E	E	E	X	E	C	C	E
PERCHLOROETHYLENE	X	X	X	X	E	E	X	F	X	X	X	E
PERCHLOROMETHANE	X		X	X			X	X	X	X	X	
PETROLEUM CRUDE	X	X	X	X	E	E	E	G	G	E	G	E
PETROLEUM ETHER	X	X	X	X			G	E	X	C	G	E
PETROLEUM OILS	X	X	X	X	E	E		X	G	G	G	E
PHENBO												
PHENOL	C	X	C	X	E	E	E	X	X	C	X	E
PHENOLSULFONIC ACID	C	X	G	E				C	C	C	X	C
PHENYLAMINE	X		E	C	E	E		X	X	C	X	E
PHENYLBROMIDE	X		X				X			X	X	G

Chemical resistance chart

ALFAGOMMA

CHEMICAL OR MATERIAL CONVEYED	COMPOUND											
	NR	SBR	IIR	EPDM	XLPE	UHMWPE	PTFE	NBR	CR	CSM	AU	FKM
PHENYLMETHANE	X		X	X	E	E	X	X	X	X	X	E
PHENYLMETHANOL	X		E	C			E	X	C	C	X	E
PHENYLMETHYL ACETATE												X
PHOSPHATE ESTERS	X	X	E	E			E	X	X	X	X	C
PHOSPHORIC ACID 10%	E	E	E	E	E	E	E	E	E	E	E	E
PHOSFORIC ACID 10% - 85%	G	G	E	E	E	E	E	G	G	E	G	E
PHOSPHORUS TRICHLORIDE	X	X	E	E	E	E	E	X	X	X		E
PICRIC ACID, H20 SOLUTION	C	G	G	E			G	E	E	E	G	E
PINE OIL	X	X	X	X	E	E	E	E	X	X	E	E
PINENE	X	X	X	X			E	C	C	X	C	E
POLYETHYLENE GLYCOL E-400	E		E	E			E	C	G	E		E
POLYOL ESTER				X				G	X			
POLYPROPYLENE GLYCOL	E		E		E	E	E	E	E	E		E
POTASSIUM ACETATE	E	X	E	E			E	C	E	E	X	C
POTASSIUM BISULFATE	E	G	E	E				E	E	E	X	E
POTASSIUM BISULFITE	E	G	E	E				E	E	E	E	E
POTASSIUM CARBONATE	E	E	E	E	E	E	E	E	E	E	X	E
POTASSIUM CHLORIDE	E	E	E	E	E	E	E	E	E	G	E	E
POTASSIUM CHROMATE	G	G	E	E				G	E	F	C	E
POTASSIUM CYANIDE	E	E	E	E	E	E	E	E	E	E	E	E
POTASSIUM DICHROMATE	C	G	E	E	E	E	E	E	E	G	G	E
POTASSIUM HYDRATE	C	G	E		E	E	E			E	C	F
POTASSIUM HYDROXYDE	C	G	E	E	E	E	E	G	G	E	C	F
POTASSIUM NITRATE	E	E	E	E	E	E	E	E	E	E	E	E
POTASSIUM PERMANGANATE, 5%	E	G	E	E	E	E	E	F	E	G	X	E
POTASSIUM SILICATE	E	E	E	E				E	E	E	E	E
POTASSIUM SULFATE	C	G	E	E	E	E	E	E	E	E	E	E
POTASSIUM SULFIDE	G	G	E	E				C	E	E	C	E
POTASSIUM SULFITE	C	G	E	E	E	E		E	E	C	E	E
PRESTONE ANTIFREEZE	E	E	E	E			G	E	E	E	X	E
PRODUCER GAS	X	X	X	X			E	E	G	C	E	E
PROPANE	X	X	X	X	E	E	E	E	E	C	G	E
PROPANEDIOL	E	E	E	E	E	E	E	E	G	E	G	E
PROPANETRIOL	E	E	E	E	E	E	E	E	E	E	C	E
PROPANOL	E	E	E	E	E	E	E	E	E	E	X	E
PROPANOLAMINE												
PROPANONE	C	G	E	E	E	E	X	X	X	C	X	X
PROPENOL	E		E							E		E
PROPANEDIAMINE	G		E					G		F		
PROPENE NITRILE	G		X		E	E		X	X			
PROPENYL ALCOHOL	E		E	E	E	E		E	E	E		E
PROPENYL ANISOLE	X		X		E	E		X		X		G
PROPIONIC ACID	E	X	E	E			E	C	C	G	X	X
PROPIONITRILE	E		E	C			E	E	C			X
PROPYL ACETATE	X	X	C	C	E	E	X	X	X	X	X	X
PROPYL ALCOHOL	E	E	E	E	E	E	E	E	E	E	X	E
PROPYL ALDEHYDE	F		G	G				X	X	X		X
PROPYL BENZENE	X		X						X	X	C	
PROPYL CHLORIDE	X		F	F				X	F	X		G
PROPYL NITRATE	X	X	C	C			F	X	X	X	X	X
PROPYLENE	X	X	X	X			E	X	X	X	X	E
PROPYLENE DIAMINE	G		E					G		F		
PROPYLENE GLYCOL	E	E	E	E	E	E	E	E	E	E	G	E
PYDRAUL, 'E' SERIES	X	X	C	C			E	X	X	X	X	X
PYDRAULIC 'C'	X	X	X	X			E	X	X	X	X	E
RED OIL	X	X	X	F	E	E	E	E	F	C	C	E
REFRIGERANT 11	X	X	X		E	E	X			E	X	C
REFRIGERANT 12	X	E	X		E	E	X			E	E	G
REFRIGERANT 22	C	E	X		E	E	X			E	X	C
RESORCINOL	E	G	E	G			E	C	A	G	X	E
SAE NO. 10 OIL	X	X	X	X			E	E	C	X	E	E
SAL AMMONIAC	E	E	E	E	E	E	E	E	E	E	G	E
SEA WATER	E	E	E	E	E	E	E	E	E	E	G	E
SEWAGE	G	G	G	G	E	E	E	E	C	E	X	E
SILICATE ESTERS	X	C	X	X			E	G	E	G	E	E
SILICATE OF SODA	E	E	E	E			E	E	E	E	G	E
SILICONE GREASE	E	E	E	E	E	E	E	E	E	E	E	E
SILICONE OIL	E	E	E	E	E	E	E	E	E	E	E	E
SILVER NITRATE	E	G	E	E	E	E	E	C	E	E	E	E
SKYDROL 500 TYPE 2	X	X	G	E			X	X	X	X	X	G
SKYDROL 500B	X	X	G	E			X	X	X	X	X	G
SKYDROL 500C	X	X	G	E			X	X	X	X	X	G

CHEMICAL OR MATERIAL CONVEYED	COMPOUND											
	NR	SBR	IIR	EPDM	XLPE	UHMWPE	PTFE	NBR	CR	CSM	AU	FKM
SKYDROL 7000 TYPE 2	E	X	E	E			E	X	X	X	X	F
SOAP SOLUTIONS	F	X	E	E	E	E	E	E	G	E	G	E
SODA ASH	E	X	E	E	E	E	E	E	E	E	G	E
SODA LIME	E		E	E			G	G	G	G	F	G
SODA NITER	G	G	E	E	E	E	E	E	G	E	E	E
SODIUM ACETATE	F	X	F	E	E	E	C	G	C	G	C	X
SODIUM ALUMINATE	E	G	E	E			E	E	E	E	X	E
SODIUM BICARBONATE	E	E	E	E	E	E	E	E	E	E	E	E
SODIUM BISULFATE	E	G	E	E	E	E	E	E	E	E	E	E
SODIUM BISULFITE	E	G	E	E	E	E	E	E	E	E	G	E
SODIUM BORATE	E	E	E	E	E	E	E	E	E	E	E	E
SODIUM CARBONATE	E	E	E	E	E	E	E	E	E	E	C	E
SODIUM CHLORIDE	E	E	E	E	E	E	E	E	E	E	E	E
SODIUM CYANIDE	E	E	E	E	E	E	E	E	E	E	E	E
SODIUM DICHROMATE	X	G	E	E			E	E	F	G	G	E
SODIUM HYDRATE	E	G	E	E	E	E	E	X	G	C	C	G
SODIUM HYDROCHLORITE	F	G	G	G			E	F	F	E	C	E
SODIUM HYDROXIDE	E	G	E	E	E	E	E	X	G	C	C	G
SODIUM HYPOCHLORITE	X	F	C	E	E	E	E	C	C	G	X	E
SODIUM METAPHOSPHATE	E	E	G	E	E	E	E	E	E	C	C	E
SODIUM NITRATE	G	G	E	E	E	E	C	C	G	E	E	E
SODIUM PERBORATE	G	G	E	E			E	C	G	E	G	E
SODIUM PEROXIDE	C	G	E	E	E	E	E	C	G	G	X	E
SODIUM PHOSPHATE	E	E	E	E	E	E	E	E	G	E	E	E
SODIUM SILICATE	E	E	E	E	E	E	E	E	E	E	G	E
SODIUM SULFATE	C	G	E	E	E	E	E	E	E	E	E	E
SODIUM SULFIDE	G	G	E	E	E	E	E	E	E	E	E	E
SODIUM SULFITE	G	G	E	E	E	E	E	E	E	E	E	E
SODIUM THIOSULFATE	G		E	E	E	E	E	C	E	E	E	
SOYBEAN OIL	X	X	G	C			E	E	E	G	C	E
STANNIC CHLORIDE	E	E	E	E	E	E	E	E	G	E	E	E
STANNIC SULFIDE	E		E	E				E	E	E		
STANNOUS CHLORIDE	E	E	E	G	E	E	E	E	E	E	G	E
STANNOUS SULFIDE	E		E	E				E	E	E		
STEAM, BELOW 350 DEG F	C	X	G	E	X	X	E	X	X	C	X	C
STEARIC ACID	C	G	C	G	E	E	E	G	G	G	E	E
STODDARD SOLVENT	X	X	X	X	E	E	G	E	G	X	E	E
STYRENE	X	X	X	X	F	F	X	X	X	X	X	E
SULFAMIC ACID	G		E	E				C	G	E	X	E
SULFUR	X	X	E	E	E	E	E	X	E	E	X	E
SULFUR CHLORIDE	X	X	X	E			E	C	E		C	E
SULFUR DIOXIDE	C	G	C	E		G	G	X	C	C	C	E
SULFUR TRIOXIDE, DRY	C	X	G	E	X	X	G	X	X	X	X	E
SULFURIC ACID 60%	X	X	E	E	X	X	E	G	X	G	X	E
SULFURIC ACID, CONC.	X	X	X	X	F	F	E	X	X	X	X	E
SULFURIC ACID, FUMING	X	X	X	X	X	X	E	X	X	X	X	E
SULFURIC ACID, 25%	E	F	G	E	E	E	E	C	C	E	X	E
SULFURIC ACID, 25%-50%	G	F	G	E	E	E	E	C	X	G	X	E
SULFURIC ACID, 50%-96%	C	X	C	X	G	G	E	X	X	C	X	E
SULFUROUS ACID, 10%	G	G	E	E	E	E	E	E	C	E	X	E
SULFUROUS ACID, 10%-75%	G	G	E	E	E	E	E	F	C	E	X	E
T-BUTYL AMINE	X		C	C			G	C	X	X	X	
TALL OIL	X	X	X	X			E	E	C	F	E	E
TALLOW	X	X	X	E	E	E	E	E	G	F	E	E
TANNIC ACID	E	G	E	E	E	E	E	E	E	E	E	E
TAR	X	X	X	X	X	F	E	X	X		G	E
TAR BITUMINOUS	X	X	X	X			E	G	C	X	G	E
TARTARIC ACID	E	G	G	G	E	E	E	E	E	E	E	E
TELLONE 2	C											
TERTIARY BUTYL ALCOHOL	C	G	C	C			E	C	C	C	X	E
TERPINEOL	X	X	C				E			X	C	E
TERTIARY BUTYL AMINE	X		C	C			G	C	X	X	X	
TERTIARY BUTYL MERCAPTAN	X	X	X	X			E	X	X	X	X	E
TETRACHLOROBENZENE	X		X	X				X	X	X		G
TETRACHLOROETHANE	X	X	X	X	F	F	X	X	X	X	X	E
TETRACHLOROETHYLENE	X	X	X	X	F	F	X	C	X	X	X	E
TETRACHLOROMETHANE	X		X	X	E	E	E	X	X	X	F	E
TETRACHLORONAPHTHALENE	X		X	X	E	E		X	X	X		G
TETRAETHYLENE GLYCOL	E		E	E				E	E	E		E
TETRAETHYLORTHOSILICATE	X		E	E				E	E			
TETRAHYDROFURAN	X	X	C	X			X	X	X	X	X	X
TIN CHLORIDE	E		E	E	E	E	E	E	C	C	G	E

Chemical resistance chart

ALFAGOMMA

CHEMICAL OR MATERIAL CONVEYED	COMPOUND											
	NR	SBR	IIR	EPDM	XLPE	UHMWPE	PTFE	NBR	CR	CSM	AU	FKM
TITANIUM TETRACHLORIDE	X	X	X	X			G	C	C	X	X	E
TOLUENE	X	X	X	X	E	E	X	X	X	X	X	E
TOLUIDINE	X		X	X	E	F		C	X	X	C	G
TOLUOL	X	X	X	X	E	E	X	X	X	X	X	E
TRANSFORMER OIL	X	X	X	X	E	E	E	C	C	C	C	E
TRANSMISSION 'A' OIL	X		X	X			E	E	C	C	E	
TRI-AMINE	C		E	E			E	G	C	C	X	
TRIBUTYL PHOSPHATE	C	X	G	G			G	F		X	X	X
TRIBUTYLAMINE	G		E					G		F		
TRICHLOROACETIC ACID	C	X	C	C			F	C	C	X	X	X
TRICHLOROBENZENE	X	X	X	X	F	F	C	C	X	X	C	G
TRICHLOROETHANE	X	X	X	X			X	X	X	X	X	E
TRICHLOROETHYLENE	X	X	X	X	F	F	X	X	X	X	X	E
TRICHLOROMETHANE	X	X	X	X	F	F	X	X	X	X	X	E
TRICHLOROTOLUENE	X			E			E	X	X	X		
TRICRESYL PHOSPHATE	X	X	E	E			E	X	X	X	X	E
TRIETHANOLAMINE	C	G	E	E	E	E	E	C	C	C	X	X
TRIETHYLAMINE	G	X	G	E			E	E	G	E	X	E
TRIETHYLENE GLYCOL	E		E	E	E	E		C	E	E	X	E
TRIHYDROXYBENZOIC ACID	E		C	C			E	C	C	G	X	
TRIMETHYL PENTANE	X	X	X	X			F	E	G	C	G	E
TRIMETHYLAMINE	E		E	C				C	E	E	X	
TRISODIUM PHOSPHATE	E	E	E	E	E	E	E	E	E	E	E	E
TRITOYL PHOSPHATE	X	X	E	E			E	X	C	C	C	E
TUNG OIL	X	X	C	X	E	E	E	E	C	C	F	E
TUNG OIL	X	X	C	X	E	E	E	E	C	C	F	E
TURPENTINE	X	X	X	X	E	E	E	E	X	X	G	E
UNSYMETRICAL DIMETHYL HYDRAZINE	E	X	E	E			F	C	C	E	X	X
UNDECYL ALCOHOL	E		E	E				E	E	E		G
UREA	E		E	E	E	E	F	G	G	E	G	E
URIC ACID	E		E	E				C	E	E	X	
VARNISH	X	X	X	X	E	E	C	G	X	X	G	E
VEGETABLE OILS	X	X	C	F	E	E	E	E	C	G	E	E
VERSILUBE F44	E	E	E	E			E	E	E	E	E	E
VERSILUBE F55	E	E	E	X			E	E	E	E	E	E
VINEGAR	G	G	E	E	E	E	E	G	G	E	C	E
VINEGAR ACID	G		E		E	E	E			E	C	
VINYL ACETATE	X	X	E	G	E	E	X	C	C	F	X	E
VINYL BENZENE	X	X	X	X	F	F	X	C	X	X	C	G
VINYL CHLORIDE	X		X	C	E	E	E	X	X	X	C	E
VINYL CYANIDE	G	F	X	X	E	E	G	X	X	G	X	X
VINYL ETHER	X		X				X	G		G		X
VINYL STYRENE												
VINYL TOLUENE	X		X	X				X	X	X		E
VINYL TRICHLORIDE	X		X	X			X	X	X	X	X	E
VM & NAPHTHA	X	X	X	X				G	F	X		E
WATER	E	C	E	E	E	E	E	E	G	E	E	E
WATER, BOILING	E		E	E			E	G	G	E	E	
WATER, SODA					E	E						
WEMCO C	X	X	X	X			E	E	C	X	E	E
WHISKEY	E	E	E	E	E	E	E	E	E	E	X	E
WHITE OIL	X	X	X	X	E	E	E	E	G	C	E	E
WHITE PINE OIL	X	X	X	X			E	C	X	X		E
WINES	E	E	E	E	E	E	E	E	E	E	X	E
WOOD ALCOHOL	E	E	C	E	E	E	E	C	E	E	C	F
WOOD OIL	X	X	C	X	E	E	E	E	C	C	C	E
XENON	E	E	E	E			E	E	E	E	E	E
XYLENE, XYLON	X	X	X	X	F	F	X	X	X	X	X	E
XYLIDINE	X	X	G	G			G	C	X	X	X	X
ZEOLITES	E	E	E	E			E	E	E	E	E	E
ZINC ACETATE	E	X	E	E			F	G	C		X	C
ZINC CARBONATE	E		E	E				E	E	E	E	E
ZINC CHLORIDE	E	E	E	E	E	E	E	E	E	E	E	E
ZINC CHROMATE	E		E	E				C	E	G	X	
ZINC SULFATE	E	G	E	E	E	E	E	E	E	E	X	E
O-AMINOTOLUENE	X		C	C			C	X	X	X	X	
1 UNDECANOL	E	E	E	E	E	G		E	E	E		G
1-AMINO-2-PROPANOL	G		E	E				C	E	F		X
1-AMINOBUTANE	X	X	C	C			G	C	X	X	X	X
1-AMINOPENTANE	F		G	X				F	C	F		X
1-BROMO-2-METHYL PROPANE	X		X	X				X	X	X		G
1-BROMO-3-METHYL BUTANE	X		X	X				X	X	X		G

CHEMICAL OR MATERIAL CONVEYED	COMPOUND											
	NR	SBR	IIR	EPDM	XLPE	UHMWPE	PTFE	NBR	CR	CSM	AU	FKM
1-BROMOBUTANE	X		X	X				X	X	X		
1-CHLORO-2-METHYL PROPANE	X		X	X				X	X	X		G
1-CHLORO-3-METHYL BUTANE	X		X	X			X	X	X	X	X	E
1-DECANOL	X		X	X	E	E		E	X	C	E	G
1-HENDECANOL	E		E	E				E	E	E		
1,4-DIOXANE	X		C	C	E		X	X	X	X	X	
2(2AMINOETHYLAMINO) ETHANOL	G		E							G		
2(2ETHOXYETHOXY) ETHANOL	C	G	C	C			E	C	C	C	X	G
2(2ETHOXYETHOXY) ETHYL ACETATE	X	X	G	X			E	X	X	G	X	G
2-AMINOETHANOL	C	F	C	E			E	C	C	C	X	X
2-CHLORO-1-HYDROXY-BENZENE	X		X	X			E	X	X	X	X	
2-CHLOROPHENOL	X	X	X	X			E	X	X	X	X	G
2-CHLOROPROPANE	X	X	X	X			X	X	X	X	X	E
2-ETHOXYETHANOL	X	X	C	C	E	E	C	C	X	X	X	X
2-ETHOXYETHYL ACETATE	C		C	G	E	E	C	X	X	X	C	
2-ETHYL	X		G					X		X		X
2-ETHYL-1-HEXANOL	G	G	C	C	E	E	E	C	C	C	X	G
2-ETHYLHEXANOIC ACID	F		F					F		G		
2-ETHYLHEXYL ACETATE	X		E		C	C		X		G		
2-OCTANONE	X		G	G				X	C		X	X
3-BROMOPROPENE	X		X	X				X	X	X		G
3-CHLOROPROPENE	X	E	C	X	E	G	G	C	X	X		E
3-COAL OIL	X		X	X			E	E	G	F	F	
4-HYDROXY-4-METHYL-2-PENTANONE	X	X	E	E	E	E	X	X	F	C	X	X

PVC chemical resistance chart

ALFAGOMMA

A: Satisfactory
C: Questionable - Suggest testing
U: Unsatisfactory
Blank: No data available

Chemical	Concentration	Temperature 20 °C 68 °F	60 °C 140 °F
Acetate Solvents		U	U
Acetic Acid	10%	A	C
Acetic Acid	Glacial	C	U
Acetone		U	U
Acrylonitrile		A	C
Adipic Acid		A	C
Alcohol Butyl		A	C
Alcohol Ethyl		A	C
Alcohol Isopropyl		A	C
Alcohol Methyl		A	C
Aluminum Acetate		A	
Aluminum Chloride		A	A
Aluminum Hydroxide		A	
Aluminum Sulfate		A	A
Allyl Chloride			
Ammonia	0.88 S.G. (Aqueous)	A	A
Ammonia	Dry Gas	A	
Ammonia	Liquid	U	U
Ammonium Chloride		A	A
Ammonium Hydroxide		A	
Animal Oils			
Amyl Acetate		U	U
Aniline Oils			
Aromatic Hydrocarbons		U	U
Asphalt		U	U
ASTM Fuel A		A	A
ASTM Fuel B		U	U
ASTM 1 Oil			
ASTM 3 Oil			
Barium Chloride		A	A
Barium Hydroxide		A	A
Barium Sulfide		A	A
Benzene		U	U
Benzine		C	C
Bordeaux Mixture		A	A
Borax		A	A
Boric Acid		A	A
Brine		A	A
Bromine Traces		U	U
Butyl Acetate		U	U
Calcium Hydroxide		A	A
Calcium Hypochlorite		A	A
Carbonic Acid		C	U
Carbon Dioxide		A	A
Carbon Disulphite		U	U
Carbon Monoxide		A	A
Carbon Tetrachloride		U	U
Casein		A	C
Chlorine	Dry gas	A	A
Chlorine	Wet Gas	C	U
Chlorine	Water	U	U
Chlorobenzene		U	U
Chlorinated Hydrocarbons		U	U
Chloroform		U	U
Chromic Acid	10%	A	C
Citric Acid		A	A
Coal Tar		U	U
Copper Chloride		A	A
Copper Nitrate		A	A
Copper Sulphate		A	A
Cottonseed Oil			
Creosote		U	U
Cresol		A	C

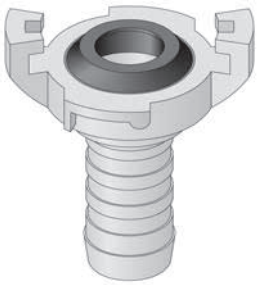
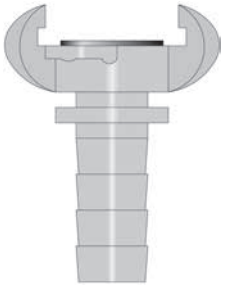
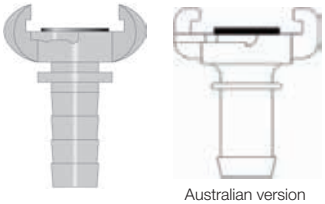
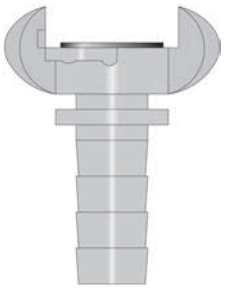
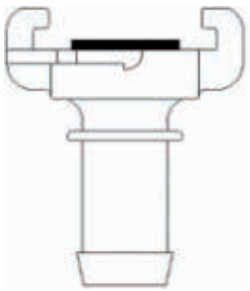
Chemical	Concentration	Temperature 20 °C 68 °F	60 °C 140 °F
Cresylic Acid		U	U
Cyclohexane		A	C
Cyclohexanone		U	U
DDT Weed Killer		A	C
Detergent Synthetic		A	A
Developers Photographic		A	A
Dextrin		A	A
Dextrose		A	A
Dibutyl Phthalate		U	U
Dichlorobenzene		U	U
Diesel Oil			
Diethylene Glycol		A	A
Diethyl Ether		U	U
Di-isodecyl Phthalate		U	U
Dicotyl Phthalate		U	U
Emulsifiers		A	A
Emulsions Photographic		A	A
Ethyl Acetate		U	U
Ethylene Dichloride		U	U
Ethylene Glycol		A	A
Fatty Acid		A	A
Ferric Chloride		A	A
Ferric Sulphate		A	A
Ferrous Chloride		A	A
Ferrous Sulphate		A	A
Fixing Solution Photographic	A	A	
Fluorine		U	U
Formaldehyde	40%	U	U
Formic Acid	40%	A	A
Formic Acid	50%	C	U
Formic Acid	100%	U	U
Fuel Oil			
Glacial Acetic Acid		C	U
Glucose		A	A
Glycerine		A	A
Grape Sugar		A	A
Grease			
Heptane		C	U
Hexane		C	U
Hydrobromic Acid		A	A
Hydrochloric Acid	10%	A	A
Hydrochloric Acid	40%	A	U
Hydrofluoric Acid	10%	A	C
Hydrofluoric Acid	40%	A	U
Hydrofluoboric Acid		A	A
Hydrofluosilicic Acid		A	A
Hydrogen Peroxide		A	
Hydrogen Sulphide		A	
Iso-octan		A	C
Isopropyl Acetate		U	U
Kerosene		C	C
Ketones		U	U
Lactic Acid	10%	A	
Lactic Acid	100%	U	U
Lacquer Solvents		C	U
Linseed Oil			
Lubricating Oils			
Magnesium Chloride		A	A
Magnesium Hydroxide		A	A
Magnesium Sulphate		A	A
Malic Acid		A	A
Methyl Acetate		U	U
Methyl Bromide		U	U

Chemical	Concentration	Temperature 20 °C 68 °F	60 °C 140 °F
Methyl Ethyl Ketone		U	U
Methylene Chloride		U	U
Mineral Oils			
Monochlorobenzene		U	U
Naphtha		C	U
Napthalene		C	U
Nitric Acid	10%	A	A
Nitric Acid	40%	A	C
Nitric Acid	70%	U	U
Nitrobenzene		U	U
Nitrogen Fertilizers		A	
Oleic Acid		A	C
Oxalic Acid		A	A
Palmitic Acid		A	A
Paraffin		A	A
Pentane		C	U
Perchloroethylene		U	U
Phenol		C	U
Phosphoric Acid		A	A
Pitch		A	C
Potassium Hydroxide		A	A
Propane		A	A
Sea Water		A	A
Sodium Hydroxide (caustic soda)	10%	A	A
Sodium Hydroxide (caustic soda)	50%	A	U
Sodium Cyanide		A	A

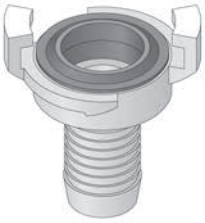
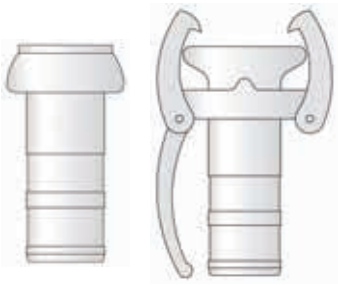
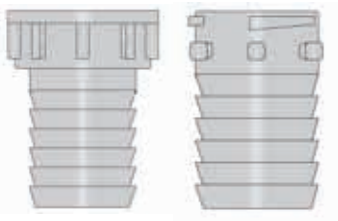
Chemical	Concentration	Temperature 20 °C 68 °F	60 °C 140 °F
Soybean Oil			
Stearic Acid		A	A
Styrene		U	U
Sulphur Dioxide	Dry	A	A
Sulphur Dioxide	Moist	C	U
Sulphur Dioxide	Liquid	U	U
Sulphuric Acid	45%	A	A
Sulphuric Acid	60%	C	C
Sulphuric Acid	98%	U	U
Sulphurous Acid	30%	A	
Tannic Acid		A	A
Tartaric Acid		A	A
Tetrahydrofuran		U	U
Toluene		U	U
Trichlorethylene		U	U
Triethanolamine		A	A
Tricresyl Phosphate		U	U
Turpentine		C	U
Urea		A	A
Vinegar		A	A
Vinyl Acetate		U	U
Vinyl Chloride		U	U
Water		A	A
Xylene		U	U
Zinc Chloride		A	A
Zinc Sulphate		A	A

Formulas and conversion factors

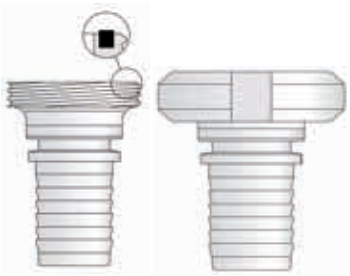
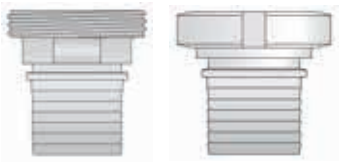
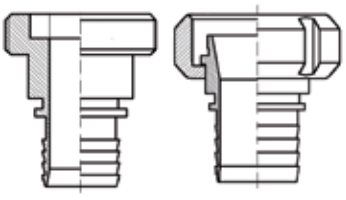
LENGTH	mm	in	mm x 0,03937 = in
	in	mm	in x 25,4001 = mm
	m	ft	m x 3,2808 = ft
	ft	m	ft x 0,3048 = m
WEIGHT	kg	lb	kg x 2,20462 = lb
	lb	kg	lb x 0,45359 = kg
	kg/m	lb/ft	kg/m x 0,672 = lb/ft
	lb/ft	kg/m	lb/ft x 1,488 = kg/m
PRESSURE	bar	MPa	bar x 10-1 = MPa
	MPa	bar	MPa x 10 = bar
	bar	psi	bar x 14,504 = psi
	psi	bar	psi x 0,068948 = bar
	mm Hg	bar	mm Hg x 1,33322 x 10^{-3} = bar
TEMPERATURE	°C	°F	9/5 °C + 32 = °F
	°F	°C	5/9 x (°F - 32) = °C

CHAPTER	FITTING	FITTING	WP	RECOMENDED FERRULE/CLAMPS (see Table A-B-C)
COMPRESSED AIR	**EXPRESS NF E 29.573**		WP = 10 bar	EXPRESS CLAMPS - 2 GRIPPING FINGER TYPE WORM GEAR CLAMP CRIMPING RING
COMPRESSED AIR	**TYPE A CLAW COUPLING (EUROPEAN TYPE)**		WP = 10 bar	CLAW CLAMPS TYPE A - DIN20039B WORM GEAR CLAMP TWO BOLT SADDLE CLAMP CRIMPING RING
COMPRESSED AIR	**TYPE A CLAW COUPLING (EUROPEAN TYPE) WITH DRILLED HOLE FOR SAFETY PINS**	 Australian version	WP = 10 bar Australian version: WP = 17.5 bar as per AS 2660/A requirements for air and water	CLAW CLAMPS TYPE A - DIN20039B WORM GEAR CLAMP TWO BOLT SADDLE CLAMP CRIMPING RING AUSTRALIAN VERSION: SERRATED FERRULE FOR COMPR. AIR TYPE S
COMPRESSED AIR	**TYPE B CLAW COUPLING (U.S. TYPE)**		WP = 10 bar	CLAW CLAMPS TYPE B CRIMPING RING
COMPRESSED AIR	**SAFETY LOCK CLAW COUPLING (AUSTRALIAN TYPE)**		WP = 17.5 bar as per AS 2660/A requirements for air and water	CLAW CLAMPS TYPE S - AUSTRALIAN TYPE CLAW CLAMPS TYPE S - AUSTRALIAN TYPE - WITH SAFETY CHAIN SERRATED FERRULE FOR COMPR. AIR TYPE S

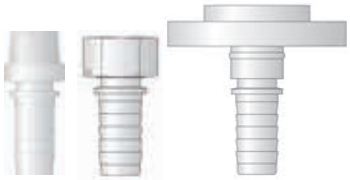
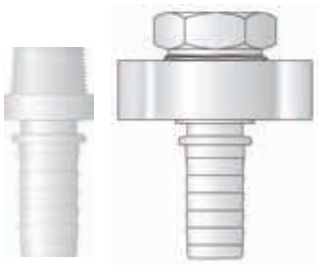
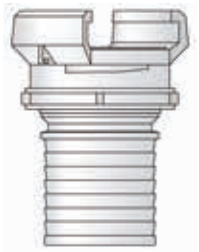
INSERT TYPE	CONNECTION TYPE	APPLICATION	WARNING & NOTE
serrated insert without locking collar	**symmetric coupling system.** The two symmetrical half-couplings have two claws each, which are connected by pushing them together and rotating the two claws to be 45° apart to form a seal.	For air compressed and water applications	Internal claw distance = 41 mm Not interchangeable with Geka couplings and with other compressed air claw couplings (type A, type B, type S) Not to be used for steam application As the connecting heads are the same on all parts, hose and threads of all dimensions can be connected together with no adaptors being required.
serrated insert with safety collar	**symmetric coupling system.** The two symmetrical half-couplings have two claws each, which are connected by pushing them together and rotating the two claws to form a seal.	For air compressed and water applications	Internal claw distance = 42 mm Not interchangeable with Express, Geka couplings and with other compressed air claw couplings (type B, type S) Not to be used for steam application As the connecting heads are the same on all parts, hose and threads of all dimensions can be connected together with no adaptors being required.
serrated insert with safety collar	**symmetric coupling system.** The two symmetrical half-couplings have two claws each, which are connected by pushing them together and rotating the two claws to form a seal.	For air compressed and water applications	Internal claw distance = 42 mm Not interchangeable with Express, Geka couplings and with other compressed air claw couplings (type B, type S) Not to be used for steam application As the connecting heads are the same on all parts, hose and threads of all dimensions can be connected together with no adaptors being required.
serrated insert with safety collar	**symmetric coupling system.** The two symmetrical half-couplings have two claws each, which are connected by pushing them together and rotating the two claws to form a seal.	For air compressed and water applications	Internal claw distance = 41 mm Not interchangeable with Express, Geka couplings and with other compressed air claw couplings (type A, type S) Not to be used for steam application As the connecting heads are the same on all parts, hose and threads of all dimensions can be connected together with no adaptors being required.
serrated insert with safety collar	**symmetric coupling system.** The two symmetrical half-couplings have two claws each, which are connected by pushing them together and rotating the two claws to form a seal.	For air compressed and water applications	Internal claw distance = 45-74-117 mm (different for each DN) Not interchangeable with Express, Geka couplings and with other compressed air claw couplings (type A, type B)

CHAPTER	FITTING	FITTING	WP	RECOMENDED FERRULE/CLAMPS (see Table A-B-C)
WATER	**GEKA**		WP = 10 bar	BAND-IT SYSTEM CLAMPS WORM GEAR CLAMP CRIMPING RING SMOOTH FERRULE
WATER	**TYPE B - BAUER COMPATIBLE**		WP = 20 bar (DN 50mm --> 89mm) WP = 12 bar (DN 108mm --> 300mm)	BAND-IT SYSTEM CLAMPS PW-CLAMP
WATER	**TYPE C - CARDAN / PERROT COMPATIBLE**		WP = 12 bar	BAND-IT SYSTEM CLAMPS PW-CLAMP
WATER	**VIDANGE**		WP = 6 bar	BAND-IT SYSTEM CLAMPS PW-CLAMP SMOOTH FERRULE
WATER	**TYPE 42**		WP = 12 bar (liquids)	CLAMPS

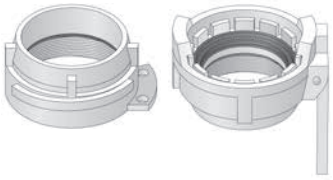
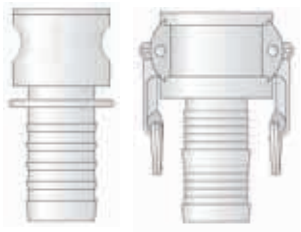
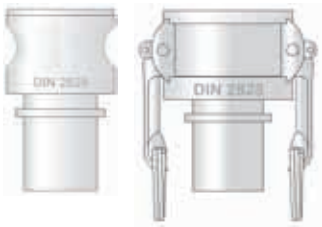
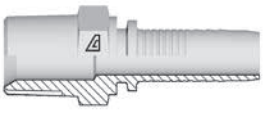
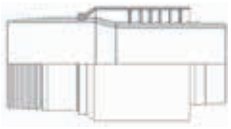
INSERT TYPE	CONNECTION TYPE	APPLICATION	WARNING & NOTE
serrated insert without locking collar	**symmetric coupling system.** The two symmetrical half-couplings have two claws each, which are connected by pushing them together and rotating the two claws to form a seal.	For agricultural, gardening, irrigation, construction and public service applications	Internal claw distance = 40 mm Not interchangeable with Express couplings and with other compressed air claw couplings (type A, type B, type S) Not to be used for steam application As the connecting heads are the same on all parts, hose and threads of all dimensions can be connected together with no adaptors being required.
ridged insert for clamps	**asymmetric coupling system: male & female part** The male fitting has a double pin closure lever for smoother closing action. The male fitting is inserted into the female fitting and the joint closed by latching the lever over the head of the female fitting.	For different applications like: agriculture, irrigation, road construction, water delivery in the mines, suction line, civil projects, dewatering, by pass lines, chemical and food industry. Used in a wide range of water related applications and activities such as gulley emptiers, sewage systems, fertiliser spraying and general water pumping.	Not interchangeable with type C - Cardan / Perrot compatible couplings
ridged insert for clamps	**asymmetric coupling system: male & female part** The female fitting incorporates a thick o-ring seal and a closure lever with two-claws. The male fitting is inserted into the female fitting and the joint closed by latching the lever over the conical head of the male fitting.	For agricultural, irrigation, cleaning and construction applications. Most commonly used with systems carrying water, mortar, bitumen, bulk products. They assure the delivery of several media like: potable drinking water, waste water, sludge, bentonite, cement, compressed air in the most various applications like the food, pharmaceutical and chemical industries, irrigation, mining and tunneling, civil projects and dewatering.	Not interchangeable with type B - Bauer compatible couplings
serrated insert without locking collar	**asymmetric coupling system: male & female part**	For water applications	
ridged insert for clamps	**asymmetric coupling system: male & female part**	For water applications (irrigation systems) For different applications iike: chemical industry, paper industry, process industry, for mobile water pipes in mining, steel and heavy industry. On sewage vehicles, on trucks for bulk transport of granulates (grain, flour, feed, pellets), concrete and minerals.	Not interchangeable with type B - Bauer compatible couplings Not interchangeable with type C - Cardan / Perrot compatible couplings

CHAPTER	FITTING	FITTING	WP	RECOMENDED FERRULE/CLAMPS (see Table A-B-C)
HYGIENIC - FOOD	**SMS**		WP = 6 bar	SERRATED FERRULE FOR HYGIENIC COUPLING
HYGIENIC - FOOD	**DIN 11851**		WP = 40 bar --> 25 bar (DN 15 mm --> 100 mm)	SAFETY CLAMPS EN 14 420-3 / DIN 2817 SAFETY CLAMPS FLEXOLINE® SERRATED FERRULE FOR HYGIENIC COUPLING
HYGIENIC - FOOD	**DIN 11851**		WP = 40 bar --> 25 bar (DN 15 mm --> 100 mm)	SERRATED FERRULE FOR HYGIENIC COUPLING
HYGIENIC - FOOD	**MACON**		WP = 10 bar	SERRATED FERRULE FOR HYGIENIC COUPLING

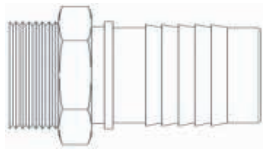
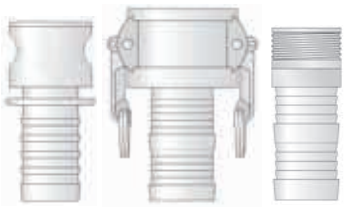
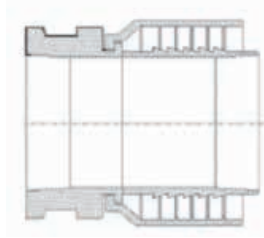
INSERT TYPE	CONNECTION TYPE	APPLICATION	WARNING & NOTE
serrated insert with EN 14 420-2 / DIN 2817 collar	**asymmetric coupling system: male & female threaded end** SMS food couplings are connected in the same way as DIN 11851 food couplings. The nut is slid across the head of the female coupling and onto the male coupling. The flat face of the female coupling is brought into contact with the turned-up seal of the male coupling. The nut is then tightened by hand or using a wrench. Threaded food couplings complying with SMS have a rounded thread complying with DIN 405/1. This rounded thread ensures that SMS food couplings are easy to connect by hand or using a wrench.	Used in food, beverage, chemical and pharmaceutical industries.	Supplied in Stainless Steel in order to meet the specifications of the Food Processing, Brewing, Dairy and Pharmaceutical industries. Food couplings complying with SMS (Swedish Manufacturing Standard) are not interchangeable with DIN 11851 food couplings. Although the threads of both couplings comply with DIN 405/1, precise dimensions vary, making them non-interchangeable. Female coupling = flat face Male coupling = turned-up seal Seal = square seal
EN 14 420-2 / DIN 2817 smooth insert with collar	**asymmetric coupling system: male & female threaded end** The seal must be inserted correctly into the seal sitting of the male coupling before connection. The conical female coupling is then pushed onto the male threaded coupling. The two are secured by sliding the nut across the conical head of the female coupling and onto the thread of the male coupling. The flanged seal enables easy assembly and prevents any displacement by vacuum or pressure. Threaded food couplings complying with DIN 11851 have a rounded thread complying with DIN 405/1. This rounded thread ensures that DIN 11851 compliant food couplings are easy to connect by hand or using a wrench.	Used in food, beverage, pharmaceutical and chemical industries.	Food couplings complying with DIN 11851 are not interchangeable with SMS food couplings. Although the threads of both couplings comply with DIN 405/1, precise dimensions vary, making them non-interchangeable. Female coupling = conical face Male coupling = deep seal Seal = U-shape seal
serrated insert with EN 14 420-2 / DIN 2817 collar	**asymmetric coupling system: male & female threaded end** The seal must be inserted correctly into the seal sitting of the male coupling before connection. The conical female coupling is then pushed onto the male threaded coupling. The two are secured by sliding the nut across the conical head of the female coupling and onto the thread of the male coupling. The flanged seal enables easy assembly and prevents any displacement by vacuum or pressure. Threaded food couplings complying with DIN 11851 have a rounded thread complying with DIN 405/1. This rounded thread ensures that DIN 11851 food couplings are easy to connect by hand or using a wrench.	Used in food, beverage, pharmaceutical and chemical industries.	Supplied in Stainless Steel in order to meet the specifications of the Food Processing, Brewing, Dairy and Pharmaceutical industries. Food couplings complying with DIN 11851 are not interchangeable with SMS food couplings. Although the threads of both couplings comply with DIN 405/1, precise dimensions vary, making them non-interchangeable. Female coupling = conical face Male coupling = deep seal Seal = U-shape seal
serrated insert with locking collar	**asymmetric coupling system: male & female threaded end**	Especially designed for wine industry in France	

CHAPTER	FITTING	FITTING	WP	RECOMENDED FERRULE/CLAMPS (see Table A-B-C)
STEAM	**EN 14 423 / DIN 2826**		WP max = 100 bar	SAFETY CLAMPS EN 14 423 / DIN 2826
STEAM	**GROUND JOINT SEAL**		WP max = 41 bar	CLAMPS - 2 BOLT - 2 GRIPPING FINGER TYPE CLAMPS - 4 BOLT - 2 GRIPPING FINGER TYPE CLAMPS - 6 BOLT - 3 GRIPPING FINGER TYPE
STEAM	**TURNEX P**		WP = 25 bar	ALFACRIMP HYDRAULIC SERRATED FERRULE (H1200004-xx0000)
SYMMETRIC GUILLEMIN	**SYMMETRIC GUILLEMIN EN 14 420-8 / NF E 29.572**		WP = 16 bar	BAND-IT SYSTEM CLAMPS CRIMPING RING SMOOTH FERRULE
SYMMETRIC	**SYMMETRIC DPS & AR NF S 61.704 - NF S 61.705**		WP = 16 bar	BAND-IT SYSTEM WORM GEAR CLAMP CLAMPS CRIMPING RING SMOOTH FERRULE
GROS FILET ROND	**GROS FILET ROND NF E 29-579**		WP = 16 bar WP = 25 bar (DN20mm)	BAND-IT SYSTEM CLAMPS CRIMPING RING SMOOTH FERRULE

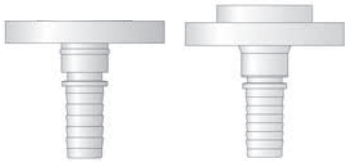
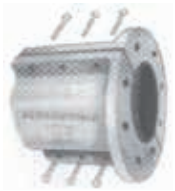
INSERT TYPE	CONNECTION TYPE	APPLICATION	WARNING & NOTE
EN 14 423 / DIN 2826 serrated insert with collar	**asymmetric coupling system: male & female threaded end** **symmetric coupling system: flanged end** Steam couplings complying with EN 14423/ DIN 2826 are available in female and male threaded screw couplings and in flanged couplings.	To be used for saturated steam up to +210°C, resp. hot water up to +120°C and up to 18 bar working pressure	Steam couplings complying with EN 14423 / DIN 2826 are used to assemble steam hoses complying with EN ISO 6134. The serrated hose shank with collar is designed to be assembled with steam clamps complying with EN 14423 / DIN 2826. Under no circumstances safety clamps EN 14420-3 / DIN 2817 shall be used. Compared with EN 14420-2 / DIN 2817 smooth hose shanks, steam hose shanks complying with EN 14423 / DIN 2826 are serrated and are physically longer and larger.
serrated insert with safety collar	**asymmetric coupling system: male & female threaded end** The coupling system consists of a male threaded insert (with a serrated hose shank with safety collar for safety clamps) and a female threaded complete coupling composed by 3 elements: a female stem (with a serrated hose shank with safety collar for safety clamps), a female threaded spud and a swivel nut.	Designed for steam and high pressure compressed air and other high pressure or hazardous applications requiring a safety coupling and clamp assembly. This reusable, rugged coupling can be fitted or re-attached in the field without special equipment. Widely used in oil refineries, chemical plants and other factories using steam as an essential service. Used for compressed air (especially in larger sizes), in quarrying, mining, pile driving, as well as other service duties. Also used for LPG, grouting, volatile liquids and similar applications.	
serrated insert with locking collar / serrated insert without locking collar	**asymmetric coupling system: female threaded end**	Used in petrochemical plants in France	
serrated insert with locking collar / serrated insert without locking collar	**symmetric coupling system.** A coupling system in which both halves are identical. Couplings have locking rings to connect and secure the other half. This is the French standard tanker connection. The coupling is connected by simply putting the two halves together and turning a tapered locking ring which tightens into a tapered channel on the other half of the coupling making a tight, secure connection. Couplings can be connected by hand or with the aid of spanners designed for the purpose.	For pressure and suction delivery of liquid (general industrial, water, hydrocarbons, chemicals) and soilds (powders, granules)	Symmetric Guillemin Couplings are not interchangeable with DSP/AR couplings Not to be used for steam or liquid gas application.
serrated insert without locking collar	**symmetric coupling system.** These French hose couplings are symmetrical, clamp fitting and hose tail are one piece fitted with a locking ring. By turning the locking ring the bosses are pushed underneath the two strips of the mating coupling.	For fire fighting application. DSP couplings are used for pressure (delivery) purposes in the fire fighting field. AR couplings are used for suction & delivery purposes in the fire fighting field.	Symmetric DSP/AR Couplings are not interchangeable with Symmetric Guillemin Couplings They differ from Guillemin Couplings by the preformed bosses on the locking ring respect the strips on the lugs.
serrated insert without locking collar	**asymmetric coupling system: male & female threaded end**	For air, nitrogen and water in petrochemical plants and refineries in France.	

CHAPTER	FITTING	FITTING	WP	RECOMENDED FERRULE/CLAMPS (see Table A-B-C)
STORZ	**STORZ**		WP = 16 bar	BAND-IT SYSTEM CLAMPS CRIMPING RING SMOOTH FERRULE
TANKWAGEN	**TANKWAGEN** **EN 14 420-6 / DIN 28 450**		WP = 25 bar	
CAM & GROOVE	**CAM & GROOVE MIL C - 27.487**		WP = 11 bar --> 3 bar (DN 1/2" --> 8")	BAND-IT SYSTEM WORM GEAR CLAMP CLAMPS SMOOTH FERRULE
CAM & GROOVE	**CAM & GROOVE** **EN 14420-7 / DIN 2828**		WP = 18 bar --> 7 bar (DN 3/4" --> 4")	SAFETY CLAMPS EN 14 420-3 / DIN 2817 SAFETY CLAMPS FLEXOLINE®
COMBINATION NIPPLE	**COMBINATION NIPPLE - INSERT FOR CLAMPS**		WP max = 10 bar the WP varies with size of the comb.nipple, the size and construction of the hose and the type of clamping system used	BAND-IT SYSTEM WORM GEAR CLAMP CLAMPS SMOOTH FERRULE
COMBINATION NIPPLE	**COMBINATION NIPPLE - THREADED SERRATED INSERT**			DN < 3": H1200203-xxxxxx hydraulic serrated ferrule
COMBINATION NIPPLE	**COMBINATION NIPPLE - MALE THREADED INSERT COMPLETE WITH PRE CRIMPED FERRULE - HEAVY DUTY**		WP = 25 bar	DN > = 3": INDUSTRIAL PRECRIMPED FERRULE

INSERT TYPE	CONNECTION TYPE	APPLICATION	WARNING & NOTE
ridged insert for clamps	**symmetric coupling system.** A straight through coupling in which both halves are identical. Each half has forward projecting lugs and mating recesses. Any two parts with the same lug dimensions will connect together. This is the standard German tanker connection. The coupling is connected by simply locating the lugs into the recesses of each half and turning clockwise up to the stop (a 120° rotation). One half of the coupling normally has a swivel head which prevents hose / pipe twists when connecting. Couplings can be connected by hand or with the aid of spanners designed for the purpose.	Used for liquids, powders and granulates. The storz system was originally designed for fire fighting equipment. it is suitable for water and a wide range of other fluids. It has also been adopted for use with powder blowing systems.	Different lug spaced units can be used to prevent accidental cross line contamination.
	asymmetric coupling system: male & female part. To be screwed on BSPP male fittings The locking lever fitted to the female (MK) coupling engages in the rim of the male (VK) part. It's turned until both halves are tightly compressed. The locking lever is then pushed downwards.	Used for trasport of liquids, solids and gases, with exception of liquiefied gas and steam. Potential areas of application are stationary and mobile tanking facilities, forwarding/ tanking and silo vehicles, chemical industry, food industry, plant and power station construction and shipbuilding.	
ridged insert for clamps / serrated insert without locking collar	**asymmetric coupling system: male adapter & female coupler** The coupling is connected by simply opening the coupler arms and inserting the adapter into the coupler. The cam arms are then closed under normal hand pressure to complete joint.	Used for trasfer of liquid or dry bulk products with exception of liquid gas or steam. For pipe, hose, tubing and tanks conveying liquids, powders, vapours & gases including cooling water, fuels, chemicals, cosmetics, foodstuffs, offshore, pumps, adhesives, dyes, pharmaceuticals, pellets and many more. Couplings applicable to almost any industry that uses liquids, powders and gases.	Not to be used for compressed air and steam application
EN 14 420-2 / DIN 2817 smooth insert with collar	**asymmetric coupling system: male adapter & female coupler** The coupling is connected by simply opening the coupler arms and inserting the adaptor into the coupler. The cam arms are then closed under normal hand pressure to complete joint.	Used for trasfer of liquid or dry bulk products with exception of liquid gas or steam. For pipe, hose, tubing and tanks conveying liquids, powders, vapours & gases including cooling water, fuels, chemicals, cosmetics, foodstuffs, offshore, pumps, adhesives, dyes, pharmaceuticals, pellets and many more. Couplings applicable to almost any industry that uses liquids, powders and gases.	Not to be used for compressed air and steam application Couplings CAM & GROOVE (EN 14420-7 / DIN 2828) are interchangeable with couplings CAM & GROOVE (MIL C - 27.487) as coupling side but differ in term of hose shank design and thread side. A flat PTFE thread seal has been added to the female threaded parts compared to Cam & Groove (MIL C - 27.487)
serrated insert without locking collar	**asymmetric coupling system: male threaded end** **symmetric coupling system: plain end**	For all suction and discharge hose applications at low pressure. For oil, petroleum, water (widely used in offshore rig operations by oil companies) , volatile fluids, abrasives and dry products.	Not to be used for compressed air application Hose nipples made from tubular stock; threaded male end, in all style, has the same size as hose
hydraulic serrated insert	**asymmetric coupling system: male & female threaded end**		DN < 3": male and female threaded hydraulic fittings to be used. (CONSULT AG HYDRAULIC CATALOGUE)
industrial "one-piece" (precrimped serrated insert)	**asymmetric coupling system: male threaded end**	For all suction and discharge hose applications at low pressure. For oil, petroleum, water (widely used in offshore rig operations by oil companies) , volatile fluids, abrasives and dry products.	

CHAPTER	FITTING	FITTING	WP	RECOMENDED FERRULE/CLAMPS (see Table A-B-C)
EN 14420-5 / DIN 2817	**EN 14420-5 / DIN 2817**		WP = 25 bar	SAFETY CLAMPS EN 14 420-3 / DIN 2817 SAFETY CLAMPS FLEXOLINE® SERRATED FERRULE SUITABLE TO EN 14 420-2 / DIN 2817
AVIATION	**SCREW HOSE COUPLINGS EN 14420-5 / DIN 2817 - aviation refuelling service approved**		WP = 25 bar	(aviation refuelling service approved) SAFETY CLAMPS EN 14 420-3 / DIN 2817 SAFETY CLAMPS FLEXOLINE® SERRATED FERRULE
AVIATION	**SCREW HOSE COUPLINGS MALE BSPP - SERRATED INSERT WITH COLLAR - aviation refuelling service approved**		WP = 25 bar	(aviation refuelling service approved) SAFETY CLAMPS EN 14 420-3 / DIN 2817 SERRATED FERRULE
SANDBLAST	**SANDBLAST**		WP = 12 bar	
MORTAR	**MORTAR - INSERT FOR CLAMPS**		WP max = 50 bar	BAND-IT SYSTEM CRIMPING RING SMOOTH FERRULE
MORTAR	**MORTAR - INSERT FOR SERRATED FERRULE**		WP max = 50 bar	SERRATED FERRULE
CONCRETE	**CONCRETE - HARDENED INSERT COMPLETE WITH PRECRIMPED FERRULE**		WP = 85 bar	CONCRETE PRECRIMPED FERRULE

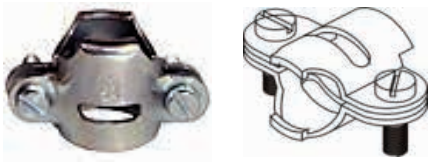
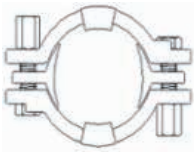
INSERT TYPE	CONNECTION TYPE	APPLICATION	WARNING & NOTE
EN 14 420-2 / DIN 2817 smooth insert with collar	**asymmetric coupling system: male & female threaded end**	Potential Areas of Application are chemical, petrochemical, pharmaceutical industry, food industry and blast furnaces.	Screw hose couplings EN 14420-5 / DIN 2817 are not interchangeable with steam hose couplings EN 14 423 / DIN 2826, due to differences in application and overall dimensions.
EN 14 420-2 / DIN 2817 smooth insert with collar	**asymmetric coupling system: male & female threaded end**	For aircraft ground fuelling and defuelling application.	Different from the standard screw hose couplings EN 14420-5 / DIN 2817 for the material: produced in tinned brass for aviation refuelling service.
serrated insert with EN 14 420-2 / DIN 2817 collar	**asymmetric coupling system: male threaded end**	For aircraft ground fuelling and defuelling application.	
external insert secured with screws on the hose external diameter	**symmetric coupling system.** A coupling system related to claw couplings, always identical head dimensions and therefore always interchangeable	Used on all stationary and mobile blasting machines and plants.	Internal claw distance = 58 mm
serrated insert without locking collar	**asymmetric coupling system: male adapter & female coupler** **asymmetric coupling system: male threaded end** The principle of the Mortar coupling is similar to Cam & Groove Coupling, but both are not interchangeable.	For mortar and concrete lines on pumps, spraying-devices, plastering machine, ect..	Note that there are two different Systems used in the market: System 22 and System 23,5 Attention: only fittings with same coupling-size and same system are interchangeable
serrated insert with locking collar	**asymmetric coupling system: male adapter & female coupler** **asymmetric coupling system: male threaded end** The principle of the Mortar coupling is similar to Cam & Groove Coupling, but both are not interchangeable.	For mortar and concrete lines on pumps, spraying-devices, plastering machine, ect..	Note that there are two different Systems used in the market: System 22 and System 23,5 Attention: only fittings with same coupling-size and same system are interchangeable Not present in AG catalogue
concrete “one-piece” (precrimped serrated insert)	**symmetric coupling system: grooved end - indirect connection through joint clamps** **asymmetric coupling system: male & female threaded end** **asymmetric coupling system: male & female part**	For high pressure concrete pumping.	

CHAPTER	FITTING	FITTING	WP	RECOMENDED FERRULE/CLAMPS (see Table A-B-C)
FLANGE	**SWIVEL FLANGE - EN 14 420-2 / DIN 2817 INSERT**		WP = 25 bar	SAFETY CLAMPS EN 14 420-3 / DIN 2817 SAFETY CLAMPS FLEXOLINE®
FLANGE	**FIXED FLANGE - SERRATED INSERT** **SWIVEL FLANGE - SERRATED INSERT**		WP = 16 / 25 bar	SERRATED FERRULE
MUFF COUPLING	**MUFF COUPLING - FIXE FLANGED COUPLING FOR 706AA & 707AA HOSE**		WP = 10 bar	
COMPOSITE HOSE FITTINGS			WP = 10 / 25 bar The WP varies with the type of fittings	SMOOTH FERRULE FOR COMPOSITE HOSE

INSERT TYPE	CONNECTION TYPE	APPLICATION	WARNING & NOTE
EN 14 420-2 / DIN 2817 smooth insert with collar	**symmetric coupling system: flanged end**	For all suction and discharge hose applications at low pressure. For oil, petroleum, water and other fluids (chemicals included).	
serrated insert with locking collar	**symmetric coupling system: flanged end**	For all suction and discharge hose applications at low pressure. For oil, petroleum, water and other fluids (chemicals included).	
muff coupling with external insert clamped with screwed bolts on hose external diameter	**symmetric coupling system: flanged end**	For bulk material and abrasive slurries suction and delivery in heavy duty mining.	
Helical insert for composite hose		For acid, chemical, fuel, oil and solvents suction and delivery	

CLAMPS & FERRULES FOR ASSEMBLY

TABLE A

CLAMP FAMILY	CLAMPS DRAWING
EXPRESS CLAMPS	
TYPE A CLAW CLAMPS - DIN20039B	
TYPE B CLAW CLAMPS	
TYPE S (AUSTRALIAN TYPE) CLAW CLAMPS	
LOOSE SADDLE&SAF.CLAW CLAMPS	
BOSS CLAMPS - GROUND JOINT	
SAFETY CLAMPS EN 14 423 / DIN 2826	
SAFETY CLAMPS EN 14 420-3 / DIN 2817	
LOOSE SADDLE CLAMPS	
LOOSE SADDLE CLAMPS - DIN20039A	

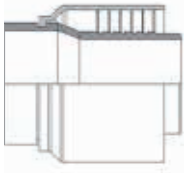
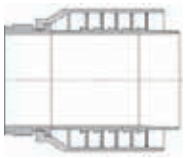
CLAMPS & FERRULES FOR ASSEMBLY

TABLE B

CLAMP FAMILY	CLAMPS DRAWING
EAR PINCH ON CLAMP	
MINICLAMP	
WORM GEAR CLAMP	
BOLT SUPERCLAMP	
POWER CLAMP	
BAND-IT BAND & BAND-IT BUCKLES	
PREFORMED BAND CLAMP	
RUBBER LINED CLIPS	
EXHAUST PIPE CLAMP	

CLAMPS & FERRULES FOR ASSEMBLY

TABLE C

FERRULE TYPE (IND)	FERRULE DRAWING
CRIMPING RING	
SMOOTH FERRULE X COMPOSITE HOSE (SUITABLE FOR INDUSTRIAL HOSE)	
SERRATED FERRULE	
INDUSTRIAL PRECRIMPED SERRATED FERRULE	
CONCRETE PRECRIMPED SERRATED FERRULE	
SERR.FERRULE X INTERNAL SWAGE	

COMPRESSED AIR

Hose chapter

		195AT	191AK	180AA	185AA/AH/AK	186AA	175AA/AH/AK	155AA/AK	140AK	132AE
	Express	X	X	X	X	X	X			
	Claw Couplings EU	X	X	X	X	X	X	X		
	Claw Couplings USA	X	X	X	X	X	X	X		
	Claw Couplings AUS	X	X	X	X	X	X	X		
	Geka	X	X	X	X	X	X			
	Ground Joint Seal							X	X	
	Combination nipples precrimped ferrule							X	X	
	Hydraulic Fittings	X	X	X	X	X	X	X	X	X

WATER & LIQUIDS

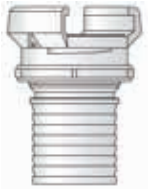
Hose chapter

		292GG/294LG	490OO	491OO	284AA/AH	286EE/288HH	250AA	253AA	254AA/AH	256AA	264GL	266GL/KL/OL	265TH	267BE	269BA	268BL	466OL	470OO	204AA	202AA	220AA	248AE
	Geka	X	X	X	X				X													
	Bauer					X	X	X	X				X		X				X	X	X	
	Cardan-Perrot					X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
	Type 42										X	X	X	X	X	X						
	Symmetric										X	X		X	X	X	X	X		X		
	Storz					X		X	X		X	X	X	X	X	X	X	X		X	X	
	Cam & Groove			X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
	Comb. Nipples		X	X	X		X	X	X				X		X		X	X	X		X	
	Comb. nipples precrimped ferrule								X	X									X	X		
	Flange PN10/16 ASA150					X	X	X	X	X								X	X	X	X	
	Hydraulic Fittings								X	X												X

The match hose/fittings is just an indication and needs checking depending on the actual application. The final choice is on Customer's responsibility

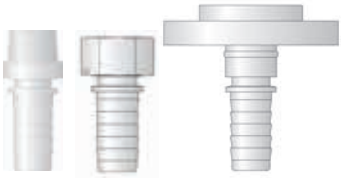
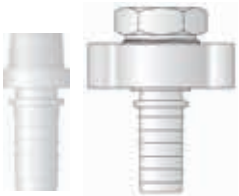
FIRE FIGHTING

Hose chapter

					
	Gros filet rond couplings	**Symmetric Guillemin**	**Symmetric DSP & AR**	**Storz**	**Fire fighting couplings**
283AA				X	X
257AA				X	X
251AA	X				X
212AA		X	X	X	X
210AA				X	X

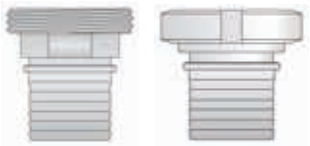
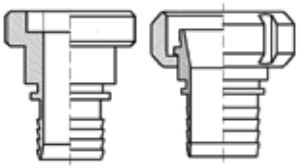
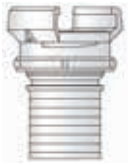
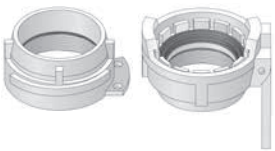
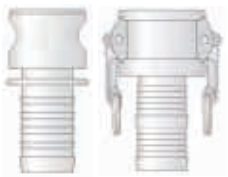
HOT WATER & STEAM

Hose chapter

		350AA	354AA	350LL/LE	340AA/AH	344AH	341AA/AH	345AH
	EN 14 423 - DIN 2826 couplings		X			X		X
	Ground Joint Seal	X		X	X		X	
	Turnexp						X	
	Comb. nipples	X		X				
	Hydraulic Fittings	X		X	X		X	

LIQUID FOOD

Hose chapter

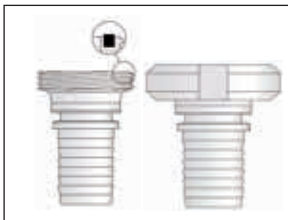
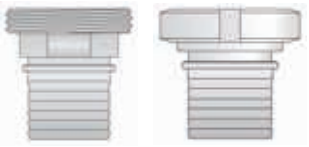
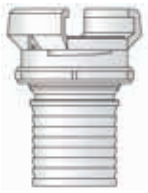
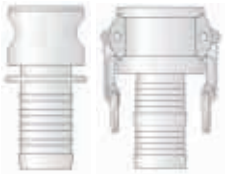
FITTINGS IN STAINLESS STEEL		492OO	468OH	472OO	452LH	402LH	408LL	412LE	418LE	455LE/LL	405LE/LL/LH	407LE
	SMS	X	X	X	X	X	X	X	X	X	X	X
	DIN 11851	X	X	X	X	X	X	X	X	X	X	X
	Macon		X	X		X						
	Symmetric	X	X	X	X	X	X	X	X	X	X	X
	Storz		X	X								
	TW Couplings							X	X	X	X	X
	Cam & Groove						X			X	X	
	EN14 420-5 DIN 2817							X	X	X	X	X

The match hose/fittings is just an indication and needs checking depending on the actual application. The final choice is on Customer's responsibility

BULK FOOD

Hose chapter

FITTINGS IN STAINLESS STEEL

	 SMS	 DIN 11851	 Symmetric	 Cam & Groove
760LA	X	X	X	X
760LB				X
720LA	X	X	X	X
720LG				X

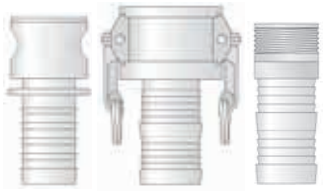
BULK MATERIALS

Hose chapter

	 Bauer	 Cardan-Perrot	 Type 42	 Symmetric	 Storz	 Cam & Groove	 Comb. nipples	 Flange PN10/16 ASA150
760AA		X	X	X	X	X		
766AA	X	X	X	X	X	X	X	
720AA		X	X	X	X	X		X
713AA	X	X	X			X	X	
767AA	X					X	X	
780AA	X					X		

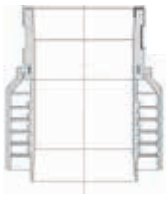
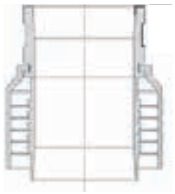
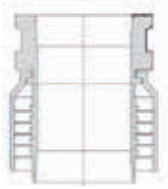
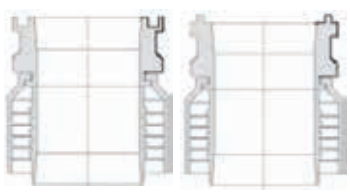
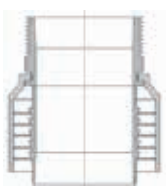
PLASTER

Hose chapter

			
	Cardan-Perrot	**Storz (hose ID 45 mm)**	**Mortar Couplings**
764OL		X	
752AA	X		
757AA			X
758AA			X
758AE			X

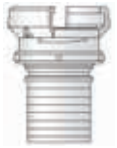
CONCRETE

Hose chapter

					
	Victaulic style	**Shouldered style**	**California style**	**Schwing style**	**Male & Female threaded Fittings**
737AA		X			X
740AA	X	X	X	X	X
741AA	X	X	X	X	X

ACID, CHEMICAL & MULTIPURPOSE

Hose chapter

							
	Symmetric	**Cam & Groove**	**TW Couplings**	**EN 14 420-5 DIN 2817**	**Comb. nipple precrimped Ferrule**	**Flange PN10/16 ASA150**	**Hydraulic Fittings**
984AH							X
974AH							X
975AH							X
954AH							X
976AB							X
956AB			X	X			X
953AE	X		X	X	X		X
503AA	X		X	X	X	X	X
505OG	X		X	X	X	X	X
509AA	X	X	X	X		X	X
509OE	X		X	X	X	X	X
538AA			X	X			X

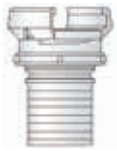
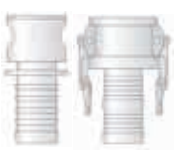
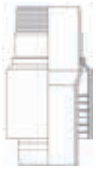
COMPOSITE HOSE FITTINGS

			
	Comb. nipple	**Symmetric**	**Flange PN10/16 ASA150**
5J551	X	X	X
5J553	X	X	X
5N551	X	X	X
5N331	X	X	X
5N333	X	X	X
5J533	X	X	X

POSSIBLE TO SCREW CAM & GROOVE ADAPTER/COUPLER ON COMBINATION NIPPLE

HYDROCARBONS

Hose chapter

								
	Symmetric	Cam & Groove	TW Couplings EN 14 420-6 DIN 28 450	EN14 420-5 DIN 2817	Comb. nipples	Comb. nipples precrimped ferrule	Flange PN10/16 ASA150	Hydraulic Fittings
650AA/AH		X	X	X	X	X	X	X
650AB		X	X	X	X		X	X
668EL		X			X			X
601AA		X				X	X	
605AA	X	X	X	X	X	X	X	X
605AH	X	X			X	X	X	X
629AA	X	X	X	X	X	X	X	X
655AA		X	X			X	X	X
609AA		X	X	X		X	X	X
620AA			X	X		X	X	X
604AA	X	X	X		X	X	X	X
634AA	X	X	X		X	X	X	X
644AA	X	X	X		X	X	X	X

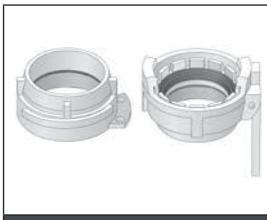
COMPOSITE HOSE FITTINGS

			
	Comb. nipple	Symmetric	Flange PN10/16 ASA150
6J544	X	X	X
6J541	X	X	X
6J511	X	X	X
6N111	X	X	X

POSSIBLE TO SCREW CAM & GROOVE ADAPTER/COUPLER ON COMBINATION NIPPLE

HYDROCARBONS

Hose chapter

	 TW Couplings	 EN 14 420-5 DIN 2817	 Hydraulic Fittings	 Volucompteur*
658AA		X	X	X
659AA	X	X	X	

* AVAILABLE ON REQUEST

	 EN14 420-5 DIN 2817 AVIATION	 Male AVIATION
656AA	X	X
611AA	X	X

DOCK

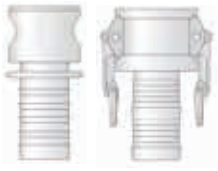
Hose chapter

			
	Comb. nipple precrimped ferrule	**Crimped fittings with flange PN10/16 - ASA150**	**Built-in Fittings * with flange PN10/16 - ASA150**
60LAA	X	X	
60AAA			X
60MAA	X	X	
60DAA			X
64AAA			X
60NAA	X	X	
60GAA			X
6ADAA			X

* AVAILABLE ON REQUEST

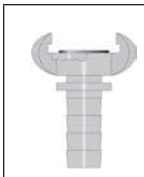
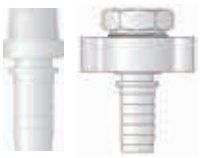
RIG SUPPLY

Hose chapter

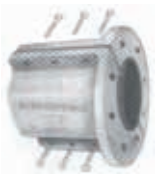
				
	Cam & Groove	**Comb. nipples precrimped ferrule**	**Flange PN10/16 ASA150**	**Hydraulic Fittings**
642AA	X (adapter)	X	X	
646AA		X	X	
648AA		X	X	
652AA		X	X	
615AA		X	X	
742AA	X (adapter)	X	X	
748AA		X	X	
715AA	X (adapter)	X	X	
727AA		X	X	
953AE		X	X	X

MINING

Hose chapter

						
	Compr. Air Claw coupling	**Bauer**	**Ground Joint Seal**	**Cam & Groove**	**Comb. nipples precrimped ferrule**	**Hydraulic Fittings**
151AA	X					X
151AK	X					X
157AA			X			X
157AK			X			X
189AK	X					X
136AK						X
131AA			X*		X	X
170AA						X
289GG		X		X		
240AA	X				X	X
241AA	X*					X
225AA				X (Brass)	X	X
245AA				X*		
226AA				X	X	X
242AA					X	X
765AA				X (Brass)		
776AA/HA			X			

* PAY ATTENTION:
HOSE WP HIGHER THAN FITTING WP
HOSE ASSEMBLY MUST BE USED AT FITTING WORKING PRESSURE

	
	Muff coupling with flanges table D - E - ASA150
706AA	X
707AA	X

INDUSTRIAL HOSE CATALOGUE

INDUSTRIAL FITTINGS CATALOGUE

COMPRESSED AIR

WATER

STORZ

STORZ

TANKWAGEN

TANKWAGEN EN 14 420-6 / DIN 28 450

CAM & GROOVE

CAM & GROOVE MIL C - 27.487

CAM & GROOVE EN 14 420-7 / DIN 2828

CAM & GROOVE

COMBINATION NIPPLE

COMBINATION NIPPLE

EN 14 420-5 / DIN 2817

EN 14 420-5 / DIN 2817

AVIATION

EN 14 420-5 / DIN 2817

MALE BSPP - SERRATED HOSE SHANK

SAFETY CLAMP EN 14 420-3 / DIN 2817

COMPOSITE HOSE FITTINGS

APPENDIX

ALFAGOMMA

www.alfagomma.com