

Hydrauliek

- slangen
- snijring koppelingen & adapters
- hogedruk buis
- flenzen
- pijpbeugels
- snelkoppelingen
- kogelkranen & ventielen

HCU



DYNAMIEK IN HYDRAULIEK

Hydrauliekslangen

 **ALFAGOMMA**



HYDRAULIEKSLANGEN

HCU IS **ERKEND LEVERANCIER** VAN ALFAGOMMA HYDRAULIEKSLANGEN, WERELDWIJD BEKEND OM HUN **TOPKWALITEIT** EN **BETROUWBAARHEID** IN DE ZWAARSTE OMSTANDIGHEDEN. OF HET NU GAAT OM INDUSTRIE, MARITIEM OF OFFSHORE. BIJ HCU VIND JE ALTIJD DE JUISTE OPLOSSING.

DE VOORDELEN VAN ALFAGOMMA:

- RUIM ASSORTIMENT TYPE SLANGEN, ZODAT ER VOOR IEDERE OMSTANDIGHEID EEN GESCHIKTE SLANG IS.
- ERKENDE KWALITEIT VOLGENS INTERNATIONALE NORMEN.
- TOEPASBAAR IN ELKE SECTOR, VAN OFFSHORE TOT INDUSTRIE.
- HOGE KWALITEIT KOPPELINGEN VOOR SLANGMONTAGE VOOR DE PERFECTE COMBINATIE.
- VOLLEDIGE CONTROLE OVER PRODUCTIE.

ALFAGOMMA STAAT VOOR BETROUWBAARHEID, VEILIGHEID EN INNOVATIE. SAMEN MET HCU – JOUW ERKENDE PARTNER – BEN JE VERZEKERD VAN EEN DUURZAME OPLOSSING DIE VOLDOET AAN ALLE NORMEN EN VERWACHTINGEN.

ALFAGOMMA X HCU:

- OFFICIEEL ALFAGOMMA-DEALER
- **DNV-GECEERTIFICEERDE SLANGASSEMBLAGE**
- PROFESSIONELE TEST- EN KEURDIENST
- SNELLE LEVERTIJDEN & TECHNISCHE ONDERSTEUNING

DAT IS DE DYNAMIEK VAN HYDRAULIEK

INHOUDSOPGAVE

THERMOPLASTIC	pagina 4
TEXTILE BRAID	pagina 7
WIRE BRAID	pagina 9
WIRE SPIRAL	
Alfabiotech Evolution	pagina 16
Alfabiotech	pagina 19
SUPERTUFF	pagina 22
HIGH TEMPERATURE	pagina 26
LOW TEMPERATURE	pagina 28
OIL RETURN LINES	pagina 31
PRESSURE WASH	pagina 33
PTFE	pagina 34

Design and dimensions shown may be changed without prior notice

Thermoplastic

Minimess



Pressure test point

Tube: polyester.

Reinforcement: one braid of aramid fiber.

Cover: abrasion, ozone and hydrocarbon resistant polyurethane, pin-pricked.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Specially designed for pressure gauges and transducers connections.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1000310	1	2,0	5/64"	5,0	0,20	63,0	9100	190,0	27300	20	0,79	0,020	0,02

Flexor 7



SAE 100 R7 - EN 855 R7

Tube: polyester. Reinforcement: one/two high tensile textile braids. Cover: abrasion, ozone and hydrocarbon resistant polyurethane, pin-pricked. Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water. Temperature: -40 °C +100 °C (-40 °F +212 °F) air max T = +70 °C (+160 °F) Length: random DH SCAN crimp short code: TP066

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1000290	3	5,0	3/16"	9,6	0,38	21,0	3000	84,0	12000	25	0,98	0,060	0,05
1000291	4	6,0	1/4"	12,2	0,48	21,0	3000	84,0	12000	35	1,38	0,100	0,07
1000292	5	8,0	5/16"	14,3	0,56	19,0	2750	76,0	11000	45	1,77	0,130	0,09
1000293	6	10,0	3/8"	16,0	0,63	16,0	2320	64,0	9280	55	2,17	0,145	0,10
1000294	8	13,0	1/2"	20,3	0,80	14,0	2000	56,0	8000	75	2,95	0,220	0,15

Flexor 7 Twin



SAE 100 R7 - EN 855 R7

Tube: polyester. **Reinforcement:** one/two high tensile textile braids. **Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, pin-pricked. **Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water. **Temperature:** -40 °C +100 °C (-40 °F +212 °F) **air max T = +70 °C (+160 °F)** **Length:** random DH **SCAN crimp short code:** TP063

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1000298	4	6,0	1/4"	12,2	0,48	21,0	3000	84,0	12000	35	1,38	0,200	0,14
1000299	5	8,0	5/16"	14,3	0,56	19,0	2750	76,0	11000	45	1,77	0,260	0,18
1000300	6	10,0	3/8"	16,0	0,63	16,0	2320	64,0	9280	55	2,17	0,290	0,20
1000301	8	13,0	1/2"	20,3	0,80	14,0	2000	56,0	8000	75	2,95	0,440	0,30

Flexor 8



SAE 100 R8 - EN 855 R8

Tube: polyester. **Reinforcement:** one/two braids of aramid fiber. **Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, pin-pricked. **Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water. **Temperature:** -40 °C +100 °C (-40 °F +212 °F) **air max T = +70 °C (+160 °F)** **Length:** random **DH SCAN crimp short code:** TP075

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1000295	4	6,0	1/4"	11,5	0,45	35,0	5000	140,0	20000	50	1,97	0,085	0,06
1000483	5	8,0	5/16"	13,4	0,53	30,0	4300	120,0	17450	55	2,17	0,105	0,08
1000296	6	10,0	3/8"	15,5	0,61	28,0	4000	112,0	16000	60	2,36	0,135	0,10
1000416	8	13,0	1/2"	19,9	0,78	24,5	3500	98,0	14000	80	3,15	0,200	0,14

Flexor TWB1



One wire braid

Tube: polyester. **Reinforcement:** one high tensile steel braid. **Cover:** abrasion, ozone and hydrocarbon resistant polyurethane, non pin-pricked. **Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water. **Temperature:** -40 °C +100 °C (-40 °F +212 °F) **air max T = +70 °C (+160 °F)** **Length:** random **DH SCAN crimp short code:** TP087

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1000283	4	6,0	1/4"	11,7	0,46	31,0	4500	124,0	18000	40	1,57	0,165	0,12
1000284	5	8,0	5/16"	13,2	0,52	25,0	3630	100,0	14500	55	2,17	0,190	0,13
1000285	6	10,0	3/8"	15,5	0,61	22,5	3250	90,0	13000	65	2,56	0,230	0,16
1000286	8	13,0	1/2"	18,8	0,74	19,0	2750	76,0	11000	85	3,35	0,300	0,21

Design and dimensions shown may be changed without prior notice

Flexor TWB1-Twin



One wire braid - Twin

Tube: polyester.

Reinforcement: one high tensile steel braid.

Cover: abrasion, ozone and hydrocarbon resistant polyurethane, non pin-pricked.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

DH SCAN crimp short code: TP088

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1000289	4	6,0	1/4"	11,7	0,46	31,0	4500	124,0	18000	40	1,57	0,330	0,23
1000288	5	8,0	5/16"	13,2	0,52	25,0	3630	100,0	14500	55	2,17	0,380	0,26
1000287	6	10,0	3/8"	15,5	0,61	22,5	3250	90,0	13000	65	2,56	0,460	0,31

Flexor VHP700 Red



Tube: polyester.

Reinforcement: one/two braids of aramid fiber plus one steel wire braid.

Cover: red abrasion, ozone and hydrocarbon resistant polyurethane, non pin-pricked.

Application: high pressure systems and pumps; rescue, safety, jacking and rerailling equipments; bolt tensioning tools.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	Constr.	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1004553	1TB+1WB	4	6,0	1/4"	12,7	0,50	70,0	10000	280,0	40600	35	1,38	0,180	0,13

Design and dimensions shown may be changed without prior notice

Textile Braid

Argus 1TE/R6



exceeds SAE J517 100 R6 - EN 854 1TE

Tube: oilresistant synthetic rubber.

Reinforcement: one high tensile textile braid.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: low pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1001385	4	6,0	1/4"	11,9	0,47	2,8	400	11,2	1620	64	2,52	0,110	0,08
1001386	5	8,0	5/16"	13,6	0,54	2,8	400	11,2	1620	76	2,99	0,130	0,09
1001387	6	10,0	3/8"	15,0	0,59	2,8	400	11,2	1620	76	2,99	0,160	0,11
1001388	8	13,0	1/2"	18,4	0,72	2,8	400	11,2	1620	102	4,02	0,220	0,15
1001389	10	16,0	5/8"	22,5	0,89	2,4	350	9,6	1400	107	4,21	0,270	0,19
1001390	12	19,0	3/4"	26,4	1,04	2,1	300	8,4	1200	152	5,98	0,367	0,25
1001391	16	25,0	1"	33,1	1,30	1,7	250	7,0	1000	203	7,99	0,476	0,32

Argus 2TE



EN 854 2TE

Tube: oilresistant synthetic rubber.

Reinforcement: one high tensile textile braid.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: medium pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

DH SCAN crimp short code: 2TE

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
10 01398	4	6,0	1/4"	13,1	0,52	7,5	1100	30,0	4300	40	1,57	0,112	0,08
1001399	5	8,0	5/16"	14,9	0,59	6,8	986	27,0	3945	50	1,97	0,14 8	0,10
1001400	6	10,0	3/8"	16,5	0,65	6,3	920	25,2	3680	60	2,36	0,16 3	0,11
1001401	8	13,0	1/2"	19,7	0,78	5,8	840	23,2	3360	70	2,76	0,216	0,15
1001402	10	16,0	5/8"	23,9	0,94	5,0	730	20,0	2900	90	3,54	0,281	0,19
1001761	12	19,0	3/4"	27,0	1,06	4,5	650	18,0	2610	110	4,33	0,350	0,24
1001404	16	25,0	1"	34,4	1,35	4,0	600	16,0	2320	150	5,91	0,497	0,34

Design and dimensions shown may be changed without prior notice

Argus 3TE/R3



EN 854 3TE - exceeds SAE J517 100 R3

Tube: oilresistant synthetic rubber.

Reinforcement: two high tensile textile braids.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: medium pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1001405	4	6,0	1/4"	14,2	0,56	14,5	2100	58,0	8400	45	1,77	0,174	0,12
1001406	5	8,0	5/16"	16,4	0,65	13,0	1900	52,0	7560	55	2,17	0,223	0,15
1001407	6	10,0	3/8"	17,8	0,70	11,0	1600	44,0	6400	70	2,76	0,243	0,17
1001408	8	13,0	1/2"	21,2	0,83	9,3	1350	37,2	5400	85	3,35	0,294	0,20
1001409	10	16,0	5/8"	25,2	0,99	8,0	1200	32,0	4640	105	4,13	0,399	0,27
1001410	12	19,0	3/4"	28,6	1,13	7,0	1000	28,0	4000	130	5,12	0,455	0,31
1001411	16	25,0	1"	35,3	1,39	5,5	800	22,0	3200	150	5,91	0,612	0,42
1001412	20	32,0	1 1/4"	42,7	1,68	4,5	650	18,0	2610	190	7,48	0,737	0,50
1001531	24	38,0	1 1/2"	49,4	1,94	4,0	600	16,0	2320	240	9,45	1,150	0,78
1001532	32	51,0	2"	62,6	2,46	3,3	470	13,2	1900	300	11,81	1,500	1,01

2TE Railway



EN 854 2TE - EN 45545-2

Tube: oilresistant synthetic rubber.

Reinforcement: one high tensile textile braid.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: medium pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Specially designed for railway applications.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1002680	4	6,0	1/4"	13,1	0,52	7,5	1100	30,0	4300	40	1,57	0,112	0,08
1002681	5	8,0	5/16"	14,9	0,59	6,8	986	27,0	3945	50	1,97	0,14 8	0,10
1002682	6	10,0	3/8"	16,5	0,65	6,3	920	25,2	3680	60	2,36	0,16 3	0,11
1002683	8	13,0	1/2"	19,7	0,78	5,8	840	23,2	3360	70	2,76	0,206	0,14
1002684	10	16,0	5/8"	23,9	0,94	5,0	730	20,0	2900	90	3,54	0,281	0,19
1002685	12	19,0	3/4"	27,0	1,06	4,5	650	18,0	2610	110	4,33	0,350	0,24
1002686	16	25,0	1"	34,4	1,35	4,0	600	16,0	2320	150	5,91	0,497	0,34

Design and dimensions shown may be changed without prior notice

Wire Braid

Flexopak PLT



Tube: oil resistant synthetic rubber.

Reinforcement: one high tensile steel braid.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: medium pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Specially designed for hydraulic pilot lines.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1000274	3	5,0	3/16"	9,6	0,38	12,0	1750	48,0	7000	20	0,79	0,111	0,08
1000097	4	6,0	1/4"	11,4	0,45	12,0	1750	48,0	7000	30	1,18	0,150	0,11
1000475	5	8,0	5/16"	13,0	0,51	12,0	1750	48,0	7000	40	1,57	0,180	0,13
1000476	6	10,0	3/8"	14,7	0,58	12,0	1750	48,0	7000	60	2,36	0,220	0,15
1000347	8	13,0	1/2"	17,8	0,70	12,0	1750	48,0	7000	80	3,15	0,230	0,16

Flexopak 1SC



EN 857 1SC - ISO 11237

Tube: oil resistant synthetic rubber.

Reinforcement: one high tensile steel braid.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1000305	8	13,0	1/2"	19,5	0,77	16,0	2320	64,0	9280	90	3,54	0,410	0,28
1000280	10	16,0	5/8"	23,0	0,91	13,0	1900	52,0	7560	100	3,94	0,440	0,30
1000251	12	19,0	3/4"	26,7	1,05	10,5	1530	42,0	6000	125	4,92	0,570	0,39
1000252	16	25,0	1"	34,9	1,37	8,8	1280	35,2	5100	150	5,91	0,740	0,50

Design and dimensions shown may be changed without prior notice

AT3K - Minetuff



MSHA

SAE 100 R17 - EN 857 1SC - ISO 11237

Tube: oilresistant synthetic rubber.

Reinforcement: one high tensile steel braid.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1000167	4	6,0	1/4"	12,0	0,47	22,5	3250	90,0	13000	50	1,97	0,167	0,12
1000178	5	8,0	5/16"	13,3	0,52	21,5	3120	86,0	12500	55	2,17	0,190	0,13
1000106	6	10,0	3/8"	15,4	0,61	21,0	3000	84,0	12000	65	2,56	0,256	0,18
1000105	8	13,0	1/2"	19,2	0,76	21,0	3000	84,0	12000	90	3,54	0,360	0,25

Specification reference EN 857 1SC for 1/4", 5/16", 3/8" only

Flexor 1SN/R1AT



SAE 100 R1AT - ISO 1436-1 - UNI EN 853 1SN

Tube: oilresistant synthetic rubber.

Reinforcement: one high tensile steel braid.

Cover: smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random up to 1" - 61 m max over 1 1/4"

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1001331	4	6,0	1/4"	12,7	0,50	22,5	3250	90,0	13000	100	3,94	0,209	0,15
1001332	5	8,0	5/16"	14,2	0,56	21,5	3120	86,0	12500	115	4,53	0,240	0,17
1001333	6	10,0	3/8"	16,5	0,65	18,0	2610	72,0	10500	130	5,12	0,313	0,22
1001334	8	13,0	1/2"	19,9	0,78	16,0	2320	64,0	9280	180	7,09	0,372	0,26
1001335	10	16,0	5/8"	23,0	0,91	13,0	1900	52,0	7560	200	7,87	0,466	0,32
1001336	12	19,0	3/4"	27,0	1,06	10,5	1530	42,0	6000	240	9,45	0,560	0,38
1001337	16	25,0	1" 1	35,0	1,38	8,8	1280	35,2	5100	300	11,81	0,950	0,64
1001338	20	32,0	1 1/4"	42,1	1,66	6,3	920	25,2	3680	420	16,54	1,095	0,74
1001339	24	38,0	1 1/2"	49,2	1,94	5,0	730	20,0	2900	500	19,69	1,411	0,95
1001340	32	51,0	2"	62,4	2,46	4,0	600	16,0	2320	630	24,80	1,864	1,26

Design and dimensions shown may be changed without prior notice

Flexor 1sn/r1at - Minetuff**MSHA****SAE 100 R1AT - ISO 1436-1 - UNI EN 853 1SN****Tube:** oilresistant synthetic rubber.**Reinforcement:** one high tensile steel braid.**Cover:** smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)**air max T = +70 °C (+160 °F)****Length:** random up to 1" - 61 m max over 1 1"/4

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1002311	4	6,0	1/4"	12,7	0,50	22,5	3250	90,0	13000	100	3,94	0,19 2	0,13
1002312	5	8,0	5/16"	14,2	0,56	21,5	3120	86,0	12500	115	4,53	0,228	0,16
1002313	6	10,0	3/8"	16,5	0,65	18,0	2610	72,0	10500	130	5,12	0,287	0,20
1002314	8	13,0	1/2"	19,9	0,78	16,0	2320	64,0	9280	180	7,09	0,372	0,26
1002315	10	16,0	5/8"	23,0	0,91	13,0	1900	52,0	7560	200	7,87	0,420	0,29
1002316	12	19,0	3/4"	27,0	1,06	10,5	1530	42,0	6000	240	9,45	0,543	0,37
1002317	16	25,0	1" 1	35,0	1,38	8,8	1280	35,2	5100	300	11,81	0,864	0,59
1002497	20	32,0	1 1/4" 1	42,1	1,66	6,3	920	25,2	3680	420	16,54	1,042	0,71
1002319	24	38,0	1/2"	49,2	1,94	5,0	730	20,0	2900	500	19,69	1,330	0,90
1002321	32	51,0	2"	62,4	2,46	4,0	600	16,0	2320	630	24,80	1,835	1,24

Flexor 5**SAE 100 R5 - J1402 DOT All FM VSS 106****Tube:** oilresistant synthetic rubber.**Reinforcement:** one high tensile steel braid.**Cover:** braided high tensile textile cord.**Application:** medium pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)**air max T = +70 °C (+160 °F)****Length:** random

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1000054	4	5,0	3/16"	13,2	0,52	20,7	3000	82,8	12000	76	2,99	0,230	0,16
1000055	5	6,3	1/4"	14,8	0,58	20,7	3000	82,8	12000	86	3,39	0,270	0,19
1000056	6	8,0	5/16"	17,3	0,68	15,5	2250	62,0	9000	102	4,02	0,350	0,24
1000049	7	10,3	13/32"	19,5	0,77	13,8	2000	55,2	8000	117	4,61	0,404	0,28
1000050	10	12,5	1/2"	23,4	0,92	12,1	1750	48,4	7000	140	5,51	0,560	0,38
1000051	12	16,0	5/8"	27,4	1,08	10,3	1500	41,4	6000	165	6,50	0,670	0,46
1000052	16	22,0	7/8"	31,4	1,24	5,5	800	22,0	3200	187	7,36	0,690	0,47
1000053	20	29,0	1 1/8"	38,1	1,50	4,3	625	17,2	2500	229	9,02	0,850	0,58
1000326	24	35,0	1 3/8"	44,5	1,75	3,4	525	13,8	2000	267	10,51	1,060	0,72
1000203	32	46,0	1 13/16"	56,4	2,22	2,4	350	9,6	1400	337	13,27	1,350	0,91

Design and dimensions shown may be changed without prior notice

Flexopak 2sc



EN 857 2SC - ISO 11237

Tube: oilresistant synthetic rubber.

Reinforcement: two high tensile steel braids.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1000365	4	6,0	1/4"	13,0	0,51	40,0	5850	160,0	23200	75	2,95	0,255	0,18
1000366	5	8,0	5/16"	14,7	0,58	35,0	5000	140,0	20000	85	3,35	0,300	0,21
1000367	6	10,0	3/8"	16,5	0,65	33,0	4800	132,0	19200	90	3,54	0,370	0,25
1000368	8	13,0	1/2"	19,9	0,78	27,5	4000	110,0	16000	130	5,12	0,470	0,32
1000369	10	16,0	5/8"	23,4	0,92	25,0	3630	100,0	14500	170	6,69	0,596	0,41
1000370	12	19,0	3/4"	27,9	1,10	21,5	3120	86,0	12500	200	7,87	0,789	0,54
1000371	16	25,0	1"	34,9	1,37	16,5	2400	66,0	9600	250	9,84	1,155	0,78

Flexopak 2 - Minetuff



MSHA

EN 857 2SC (up to 1") - ISO 11237 - SAE 100 R16

Tube: oilresistant synthetic rubber.

Reinforcement: two high tensile steel braids.

Cover: smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random up to 1" - 61 m max over 1 1/4"

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1000146	4	6,0	1/4"	13,0	0,51	42,0	6000	168,0	24000	50	1,97	0,259	0,18
1000174	5	8,0	5/16"	14,5	0,57	37,5	5500	150,0	22000	55	2,17	0,313	0,22
1000147	6	10,0	3/8"	16,8	0,66	35,0	5000	140,0	20000	65	2,56	0,373	0,26
1000171	8	13,0	1/2"	20,6	0,81	31,0	4500	124,0	18000	90	3,54	0,502	0,34
1000104	10	16,0	5/8"	23,2	0,91	28,0	4000	112,0	16000	100	3,94	0,598	0,41
1000172	12	19,0	3/4"	27,9	1,10	24,0	3500	96,0	14000	120	4,72	0,821	0,56
1000173	16	25,0	1"	35,5	1,40	21,0	3000	84,0	12000	150	5,91	1,266	0,86
1001533	20	32,0	1 1/4"	42,2	1,66	14,0	2000	58,0	8400	210	8,27	1,367	0,92
1001728	24	38,0	1 1/2"	49,9	1,96	12,5	1820	50,0	7280	430	16,93	1,864	1,26
1001729	32	51,0	2"	63,0	2,48	10,0	1500	40,0	5850	550	21,65	2,462	1,66
1001945	40	63,0	2 1/2"	76,4	3,01	7,5	1100	30,0	4300	720	28,35	3,300	2,22
1001994	48	76,0	3"	90,0	3,54	7,0	1000	28,0	4000	880	34,65	3,850	2,59

Flexopak 2 Twin - Minetuff



MSHA

EN 857 2SC - ISO 11237 - SAE 100 R16

Tube: oilresistant synthetic rubber.

Reinforcement: two high tensile steel braids.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1003610	6	10,0	3/8"	16,8	0,66	35,0	5000	140,0	20000	64	2,52	0,780	0,53
1003767	8	13,0	1/2"	20,6	0,81	31,0	4500	124,0	18000	90	3,54	1,056	0,71

Flexor 2SN/R2AT



HF

SAE 100 R2AT - ISO 1436-1 - UNI EN 853 2SN

Tube: oilresistant synthetic rubber.

Reinforcement: two high tensile steel braids.

Cover: smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random up to 1" - 61 m max over 1 1/4"

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1001341	3	5,0	3/16"	13,0	0,51	42,0	6000	168,0	24000	90	3,54	0,282	0,19
1001342	4	6,0	1/4"	14,2	0,56	40,0	5850	160,0	23200	100	3,94	0,330	0,23
1001343	5	8,0	5/16"	15,8	0,62	35,0	5000	140,0	20000	115	4,53	0,357	0,24
1001344	6	10,0	3/8"	18,2	0,72	33,0	4800	132,0	19200	125	4,92	0,460	0,31
1001345	8	13,0	1/2"	21,3	0,84	27,5	4000	110,0	16000	175	6,89	0,534	0,36
1001346	10	16,0	5/8"	24,5	0,96	25,0	3630	100,0	14500	200	7,87	0,670	0,46
1001347	12	19,0	3/4"	28,6	1,13	21,5	3120	86,0	12500	240	9,45	0,895	0,61
1001348	16	25,0	1"	36,6	1,44	16,5	2400	66,0	9600	300	11,81	1,250	0,85
1001349	20	32,0	1 1/4"	46,4	1,83	12,5	1820	50,0	7280	420	16,54	1,852	1,25
1001350	24	38,0	1 1/2"	52,8	2,08	9,0	1310	36,0	5240	500	19,69	2,086	1,41
1001351	32	51,0	2"	65,6	2,58	8,0	1200	32,0	4640	630	24,80	2,748	1,85

Design and dimensions shown may be changed without prior notice

Flexor 2SN/R2AT - Minetuff



MSHA

SAE 100 R2AT - ISO 1436-1 - UNI EN 853 2SN

Tube: oilresistant synthetic rubber.

Reinforcement: two high tensile steel braids.

Cover: smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random up to 1" - 61 m max over 1 1/4"

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1002467	4	6,0	1/4"	14,2	0,56	40,0	5850	160,0	23200	100	3,94	0,330	0,23
1002468	5	8,0	5/16"	15,8	0,62	35,0	5000	140,0	20000	115	4,53	0,353	0,24
1002469	6	10,0	3/8"	18,2	0,72	33,0	4800	132,0	19200	125	4,92	0,463	0,32
1002470	8	13,0	1/2"	21,3	0,84	27,5	4000	110,0	16000	175	6,89	0,530	0,36
1002471	10	16,0	5/8"	24,5	0,96	25,0	3630	100,0	14500	200	7,87	0,663	0,45
1002472	12	19,0	3/4"	28,6	1,13	21,5	3120	86,0	12500	240	9,45	0,852	0,58
1002473	16	25,0	1"	36,6	1,44	16,5	2400	66,0	9600	300	11,81	1,224	0,83
1002498	20	32,0	1 1/4"	46,0	1,81	12,5	1820	50,0	7280	420	16,54	1,769	1,19
1002474	24	38,0	1 1/2"	52,8	2,08	9,0	1310	36,0	5240	500	19,69	2,030	1,37
1002475	32	51,0	2"	65,6	2,58	8,0	1200	32,0	4640	630	24,80	2,760	1,86

Flexor Elevator



EN 81.20

Tube: oilresistant synthetic rubber.

Reinforcement: one/two high tensile steel braids.

Cover: smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: medium pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	Constr.	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1001782	1WB	12	19,0	3/4"	25,8	1,02	5,0	730	40,0	5850	240	9,45	0,490	0,33
1000941	1WB	16	25,0	1"	32,1	1,26	5,0	730	40,0	5850	300	11,81	0,650	0,44
1000943	1WB	20	32,0	1 1/4"	39,5	1,56	5,0	730	40,0	5850	420	16,54	1,000	0,68
1000972	2WB	24	38,0	1 1/2"	48,8	1,92	5,0	730	40,0	5850	500	19,69	1,530	1,03
1001781	2WB	32	51,0	2"	62,8	2,47	5,0	730	40,0	5850	630	24,80	2,220	1,50

Design and dimensions shown may be changed without prior notice

Alfaforest

**Tube:** oil resistant synthetic rubber.**Reinforcement:** three high tensile steel braids.**Cover:** smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Temperature:** -40 °C +100 °C (-40 °F +212 °F)**air max T = +70 °C (+160 °F)****Length:** random

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1003316	10	16,0	5/8"	27,8	1,09	41,4	6000	164,0	23500	210	8,27	1,084	0,73
1003317	12	19,0	3/4"	32,2	1,27	37,5	5500	150,0	22000	260	10,24	1,380	0,93
1003318	16	25,0	1"	39,2	1,54	33,0	4800	130,8	19000	310	12,0	1,882	1,27
1003804	20	32,0	1 1/4"	45,9	1,81	24,0	3500	96,0	14000	410	16,14	2,310	1,56

2sc Railway



MSHA

EN 857 2SC - ISO 11237 - EN 45545-2**Tube:** oil resistant synthetic rubber.**Reinforcement:** two high tensile steel braids.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.**Specially designed for railway applications.****Temperature:** -40 °C +100 °C (-40 °F +212 °F)**air max T = +70 °C (+160 °F)****Length:** random**DH SCAN crimp short code: 221T**

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1002687	4	6,0	1/4"	13,2	0,52	40,0	5850	160,0	23200	50	1,97	0,270	0,19
1002689	5	8,0	5/16"	14,5	0,57	35,0	5000	140,0	20000	55	2,17	0,310	0,21
1002690	6	10,0	3/8"	17,0	0,67	33,0	4800	132,0	19200	65	2,56	0,360	0,25
1002691	8	13,0	1/2"	20,3	0,80	27,5	4000	110,0	16000	90	3,54	0,470	0,32
1002692	10	16,0	5/8"	23,9	0,94	25,0	3630	100,0	14500	100	3,94	0,570	0,39
1002693	12	19,0	3/4"	27,7	1,09	21,5	3120	86,0	12500	120	4,72	0,760	0,52
1002694	16	25,0	1"	34,6	1,36	16,5	2400	66,0	9600	150	5,91	1,130	0,76

Wire Spiral - Alfabiotech Evolution

Alfabiotech Evolution 3000- Minetuff

MSHA



ISO 18752 - exceeds SAE 100 R12

Tube: petroleum and biodegradable hydraulic fluid resistant synthetic rubber.

Reinforcement: four high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: very high pressure hydraulic lines, fuel, oil, lubricants, antifreeze solution, air and water.

Specially designed for long service life in very demanding applications where compact design, high pulsating pressure and tight bend radius are required.

Temperature: -40 °C +121 °C (-40 °F +250 °F)

Length: 61 m max

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1004782	20	32,0	1 1/4"	44,9	1,77	21,0	3000	84,0	12000	210	8,27	1,876	1,27
1004783	24	38,0	1 1/2"	50,6	1,99	21,0	3000	84,0	12000	250	9,84	2,357	1,59
1004784	32	51,0	2"	64,7	2,55	21,0	3000	84,0	12000	318	12,52	3,537	2,38

Alfabiotech Evolution 4000- Minetuff

MSHA



ISO 18752

Tube: petroleum and biodegradable hydraulic fluid resistant synthetic rubber.

Reinforcement: four high tensile steel spirals.

Cover: smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: very high pressure hydraulic lines, fuel, oil, lubricants, antifreeze solution, air and water.

Specially designed for long service life in very demanding applications where compact design, high pulsating pressure and tight bend radius are required.

Temperature: -40 °C +121 °C (-40 °F +250 °F)

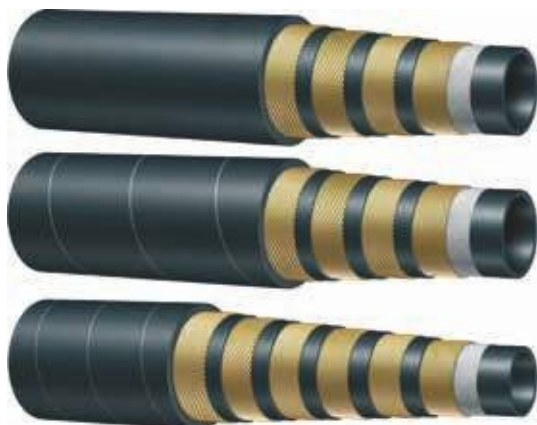
Length: random up to 1" - 61 m max over 1 1/4"

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1004894	8	13,0	1/2"	22,6	0,89	28,0	4000	112,0	16000	90	3,54	0,624	0,42
1004754	12	19,0	3/4"	29,0	1,14	28,0	4000	112,0	16000	120	4,72	0,978	0,66
1004755	16	25,0	1"	37,2	1,46	28,0	4000	112,0	16000	150	5,91	1,479	1,00
1004773	20	32,0	1 1/4"	44,2	1,74	28,0	4000	112,0	16000	210	8,27	2,214	1,49
1004756	24	38,0	1 1/2"	50,6	1,99	29,0	4200	116,0	16800	250	9,84	2,610	1,76
1004757	32	51,0	2"	64,7	2,55	28,0	4000	112,0	16000	318	12,52	4,001	2,69

Design and dimensions shown may be changed without prior notice

Alfabiotech Evolution 5000- Minetuff

MSHA



exceeds ISO 18752

Tube: petroleum and biodegradable hydraulic fluid resistant synthetic rubber.

Reinforcement: four/six high tensile steel spirals.

Cover: smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: very high pressure hydraulic lines, fuel, oil, lubricants, antifreeze solution, air and water.

Specially designed for long service life in very demanding applications where compact design, high pulsating pressure and tight bend radius are required.

Temperature: -40 °C +121 °C (-40 °F +250 °F)

Length: random up to 1" - 61 m max over 1 1/4"

Item Code	Constr.	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1004743	4WS	10	16,0	5/8"	25,4	1,00	35,0	5000	140,0	20000	100	3,94	0,845	0,57
1004744	4WS	12	19,0	3/4"	29,4	1,16	35,0	5000	140,0	20000	120	4,72	1,166	0,79
1004745	4WS	16	25,0	1"	37,4	1,47	35,0	5000	140,0	20000	150	5,91	1,634	1,10
1004746	4WS	20	32,0	1 1/4"	44,0	1,73	35,0	5000	140,0	20000	210	8,27	2,214	1,49
1004747	6WS	24	38,0	1 1/2"	54,8	2,16	35,0	5000	140,0	20000	250	9,84	3,924	2,64
1004748	6WS	32	51,0	2"	68,7	2,70	35,0	5000	140,0	20000	318	12,52	5,787	3,89

Alfabiotech Evolution 5000 Plus -

Minetuff

MSHA



ISO 18752

Tube: petroleum and biodegradable hydraulic fluid resistant synthetic rubber.

Reinforcement: four high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: very high pressure hydraulic lines, fuel, oil, lubricants, antifreeze solution, air and water.

Specially designed for long service life in very demanding applications where compact design, high pulsating pressure and tight bend radius are required.

Temperature: -40 °C +121 °C (-40 °F +250 °F)

Length: random

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1004749	12	19,0	3/4"	30,2	1,9	38,0	5500	152,0	22040	120	4,72	1,276	0,86
1004750	16	25,0	1"	37,4	1,7	38,0	5500	152,0	22040	150	5,91	1,817	1,23

Design and dimensions shown may be changed without prior notice

Alfabiotech Evolution 6000- Minetuff

MSHA



ISO 18752 - exceeds SAE 100 R15

Tube: petroleum and biodegradable hydraulic fluid resistant synthetic rubber.

Reinforcement: four/six high tensile steel spirals.

Cover: smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: very high pressure hydraulic lines, fuel, oil, lubricants, antifreeze solution, air and water.

Specially designed for long service life in very demanding applications where compact design, high pulsating pressure and tight bend radius are required.

Temperature: -40 °C +121 °C (-40 °F +250 °F)

Length: random up to 1" - 61 m max over 1 1/4"

Item Code	Constr.	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1004774	4WS	4	6,0	1/4"	17,0	0,67	45,0	6550	180,0	26200	60	2,36	0,510	0,35
1004775	4WS	6	10,0	3/8"	19,8	0,78	44,5	6450	178,0	25800	75	2,95	0,615	0,42
1004776	4WS	8	13,0	1/2"	22,5	0,89	42,0	6000	168,0	24000	90	3,54	0,710	0,48
1004777	4WS	10	16,0	5/8"	27,8	1,09	42,0	6000	168,0	24000	100	3,94	1,190	0,80
1004778	4WS	12	19,0	3/4"	30,6	1,20	42,0	6000	168,0	24000	120	4,72	1,371	0,93
1004779	4WS	16	25,0	1"	38,0	1,50	42,0	6000	168,0	24000	150	5,91	1,926	1,30
1004780	6WS	20	32,0	1 1/4"	47,6	1,87	42,0	6000	168,0	24000	225	8,86	2,982	2,01
1004781	6WS	24	38,0	1 1/2"	54,4	2,14	42,0	6000	168,0	24000	305	12,01	4,155	2,80
1004818	6WS	32	51,0	2"	68,7	2,70	42,0	6000	168,0	24000	380	14,96	6,031	4,06

Design and dimensions shown may be changed without prior notice

Wire Spiral - Alfabiotech

Alfabiotech 2000 - Minetuff



MSHA

ISO 18752

Tube: oilresistant synthetic rubber and biodegradable hydraulic fluids.

Reinforcement: four high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

Temperature: -40 °C +121 °C (-40 °F +250 °F)

Length: 61 m

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1002575	40	63,0	2 1/2"	79,0	3,11	14,0	2000	56,0	8000	720	28,35	4,897	3,30
1002576	48	76,0	3"	92,5	3,64	14,0	2000	56,0	8000	840	33,07	5,760	3,88

Alfabiotech 3000- Minetuff



MSHA

ISO 18752 - exceeds SAE 100 R12

Tube: oilresistant syntheticrubber andbiodegradable hydraulic fluids.

Reinforcement: four/six high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

Temperature: -40 °C +121 °C (-40 °F +250 °F)

Length: 61 m from 1 1/4" to 3"

Item Code	Constr.	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1001690	4WS	20	32,0	1 1/4"	45,7	1,80	21,0	3000	84,0	12000	230	9,06	2,18 4	1,47
1002574	4WS	24	38,0	1 1/2"	51,8	2,04	21,0	3000	84,0	12000	420	16,54	2,730	1,84
1003035	4WS	32	51,0	2"	66,8	2,63	21,0	3000	84,0	12000	560	22,05	3,940	2,65
1003036	6WS	48	76,0	3"	95,6	3,76	21,0	3000	84,0	12000	900	35,43	7,935	5,34

Alfabiotech 4000- Minetuff



MSHA

ISO 18752

Tube: oilresistant synthetic rubber and biodegradable hydraulic fluids.

Reinforcement: four high tensile steel spirals.

Cover: smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.

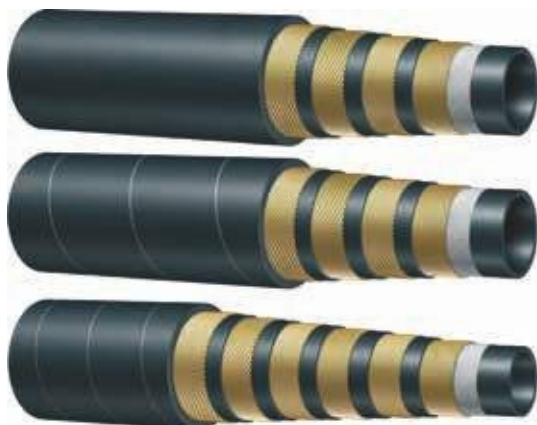
Application: developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

Temperature: -40 °C +121 °C (-40 °F +250 °F)

Length: random up to 1" - 61 m max over 1 1/4"

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1004313	6	10,0	3/8"	20,1	0,79	28,0	4000	112,0	16000	75	2,95	0,648	0,44
1003797	8	13,0	1/2"	23,0	0,91	28,0	4000	112,0	16000	90	3,54	0,747	0,51
1004314	10	16,0	5/8"	26,3	1,04	28,0	4000	112,0	16000	140	5,51	0,905	0,61
1001691	12	19,0	3/4"	29,5	1,16	28,0	4000	112,0	16000	120	4,72	1,002	0,68
1001692	16	25,0	1"	37,5	1,48	28,0	4000	112,0	16000	150	5,91	1,509	1,02
1002484	20	32,0	1 1/4"	45,7	1,80	28,0	4000	112,0	16000	260	10,24	2,231	1,50
1002502	24	38,0	1 1/2"	51,8	2,04	29,0	4200	116,0	16800	420	16,54	2,907	1,96
1002483	32	51,0	2"	66,8	2,63	28,0	4000	112,0	16000	530	20,87	4,383	2,95

Alfabiotech 5000- Minetuff



MSHA

ISO 18752

Tube: oilresistant synthetic rubber and biodegradable hydraulic fluids.

Reinforcement: four/six high tensile steel spirals.

Cover: smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

Temperature: -40 °C +121 °C (-40 °F +250 °F)

Length: random up to 1" - 61 m max over 1 1/4"

Item Code	Constr.	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1001693	4WS	10	16,0	5/8"	26,3	1,04	35,0	5000	140,0	20000	140	5,51	0,905	0,61
1001694	4WS	12	19,0	3/4"	31,0	1,22	35,0	5000	140,0	20000	150	5,91	1,230	0,83
1001695	4WS	16	25,0	1"	38,0	1,50	35,0	5000	140,0	20000	180	7,09	1,679	1,13
1001696	4WS	20	32,0	1 1/4"	45,8	1,80	35,0	5000	140,0	20000	280	11,02	2,463	1,66
1001780	6WS	24	38,0	1 1/2"	54,8	2,16	35,0	5000	140,0	20000	500	19,69	3,924	2,64
1001779	6WS	32	51,0	2"	70,2	2,76	35,0	5000	140,0	20000	550	21,65	6,174	4,15
1003076	6WS	40	63,0	2 1/2"	82,8	3,26	35,0	5000	140,0	20000	820	32,28	7,567	5,09

Design and dimensions shown may be changed without prior notice

Alfabiotech 5000 Plus - Minetuff



MSHA

ISO 18752

Tube: oilresistant synthetic rubber and biodegradable hydraulic fluids.

Reinforcement: four high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

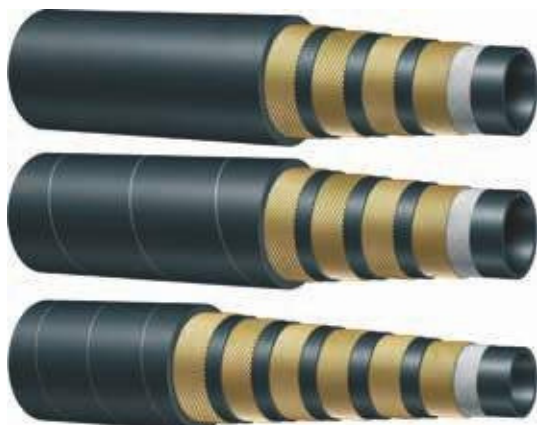
Application: developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

Temperature: -40 °C +121 °C (-40 °F +250 °F)

Length: random

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
100172	12	19,0	3/4"	31,0	1,22	38,0	5500	152,0	22040	180	7,09	1,266	0,86
100173	16	25,0	1"	38,3	1,51	38,0	5500	152,0	22040	210	8,27	1,895	1,28

Alfabiotech 6000 - Minetuff



MSHA

ISO 18752 - exceeds SAE 100 R15

Tube: oilresistant syntheticrubber andbiodegradable hydraulic fluids.

Reinforcement: four/six high tensile steel spirals.

Cover: smooth up to 1", wrapped over 1". Abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

Temperature: -40 °C +121 °C (-40 °F +250 °F)

Length: random up to 1" - 61 m max over 1 1/4"

Item Code	Constr.	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1001697	4WS	4	6,0	1/4"	17,3	0,68	45,0	6550	180,0	26200	60	2,36	0,518	0,35
1001698	4WS	6	10,0	3/8"	20,1	0,79	44,5	6450	178,0	25800	75	2,95	0,630	0,43
1001699	4WS	8	13,0	1/2"	23,0	0,91	42,0	6000	168,0	24000	90	3,54	0,745	0,51
1001700	4WS	10	16,0	5/8"	28,2	1,11	42,0	6000	168,0	24000	180	7,09	1,260	0,85
1001701	4WS	12	19,0	3/4"	31,4	1,24	42,0	6000	168,0	24000	210	8,27	1,417	0,96
1001702	4WS	16	25,0	1"	38,6	1,52	42,0	6000	168,0	24000	250	9,84	1,991	1,34
1002485	6WS	20	32,0	1 1/4"	49,3	1,94	42,0	6000	168,0	24000	445	17,52	3,415	2,30
1002486	6WS	24	38,0	1 1/2"	56,5	2,22	42,0	6000	168,0	24000	530	20,87	4,476	3,01
1003505	6WS	32	51,0	2"	71,0	2,80	42,0	6000	168,0	24000	650	25,59	6,398	4,30

Supertuff

AT3K-Supertuff



MSHA

SAE 100 R17 - EN 857 1SC - ISO 11237

Tube: oil resistant synthetic rubber.

Reinforcement: one high tensile steel braid.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber. Special "supertuff" cover for excellent abrasion resistance and long service life in heavy duty applications.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1000195	4	6,0	1/4"	12,1	0,48	22,5	3250	90,0	13000	50	1,97	0,170	0,12
1000405	5	8,0	5/16"	14,0	0,55	21,5	3120	86,0	12500	55	2,17	0,180	0,13
1000209	6	10,0	3/8"	15,6	0,61	21,0	3000	84,0	12000	65	2,56	0,260	0,18
1000197	8	13,0	1/2"	19,5	0,77	21,0	3000	84,0	12000	90	3,54	0,410	0,28

Flexopak 2 - Supertuff



MSHA

EN 857 2SC - ISO 11237 - SAE 100 R16

Tube: oil resistant synthetic rubber.

Reinforcement: two high tensile steel braids.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber. Special "supertuff" cover for excellent abrasion resistance and long service life in heavy duty applications.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1000228	4	6,0	1/4"	13,0	0,51	42,0	6000	168,0	24000	50	1,97	0,275	0,19
1000213	5	8,0	5/16"	14,5	0,57	37,5	5500	150,0	22000	55	2,17	0,328	0,23
1000224	6	10,0	3/8"	16,8	0,66	35,0	5000	140,0	20000	65	2,56	0,393	0,27
1000225	8	13,0	1/2"	20,6	0,81	31,0	4500	124,0	18000	90	3,54	0,528	0,36
1000226	10	16,0	5/8"	23,2	0,91	28,0	4000	112,0	16000	100	3,94	0,622	0,42
1000227	12	19,0	3/4"	27,6	1,09	24,0	3500	96,0	14000	120	4,72	0,830	0,56
1000348	16	25,0	1"	35,5	1,40	21,0	3000	84,0	12000	150	5,91	1,300	0,88

Design and dimensions shown may be changed without prior notice

Alfabiotech 5000 - Supertuff



MSHA

ISO 18752

Tube: oil resistant synthetic rubber and biodegradable hydraulic fluids.

Reinforcement: four/six high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber. Special "supertuff" cover for excellent abrasion resistance and long service life in heavy duty applications.

Application: developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

Temperature: -40 °C +121 °C (-40 °F +250 °F)

Length: random up to 1" - 61 m max over 1 1/4"

Item Code	Constr.	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1003045	4WS	10	16,0	5/8"	26,0	1,02	35,0	5000	140,0	20000	140	5,51	0,945	0,64
1003037	4WS	12	19,0	3/4"	31,6	1,24	35,0	5000	140,0	20000	150	5,91	1,304	0,88
1003038	4WS	16	25,0	1"	38,0	1,50	35,0	5000	140,0	20000	180	7,09	1,720	1,16
1003046	4WS	20	32,0	1 1/4"	44,4	1,75	35,0	5000	140,0	20000	280	11,02	2,553	1,72
1003047	6WS	24	38,0	1 1/2"	56,5	2,22	35,0	5000	140,0	20000	500	19,69	4,016	2,70
1003048	6WS	32	51,0	2"	70,2	2,76	35,0	5000	140,0	20000	550	21,65	6,275	4,22

Alfabiotech 6000 - Supertuff



MSHA

ISO 18752 - exceeds SAE 100 R15

Tube: oil resistant synthetic rubber and biodegradable hydraulic fluids.

Reinforcement: four/six high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber. Special "supertuff" cover for excellent abrasion resistance and long service life in heavy duty applications.

Application: developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

Temperature: -40 °C +121 °C (-40 °F +250 °F)

Length: random up to 1" - 61 m max over 1 1/4"

Item Code	Constr.	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1003295	4WS	4	6,0	1/4"	17,3	0,68	45,0	6550	180,0	26200	60	2,36	0,470	0,32
1003296	4WS	6	10,0	3/8"	20,1	0,79	44,5	6450	178,0	25800	75	2,95	0,674	0,46
1003233	4WS	8	13,0	1/2"	23,0	0,91	42,0	6000	168,0	24000	90	3,54	0,750	0,51
1002464	4WS	10	16,0	5/8"	28,2	1,11	42,0	6000	168,0	24000	180	7,09	1,198	0,81
1003297	4WS	12	19,0	3/4"	31,4	1,24	42,0	6000	168,0	24000	210	8,27	1,470	0,99
1002572	4WS	16	25,0	1"	38,2	1,50	42,0	6000	168,0	24000	250	9,84	1,998	1,35
1003298	6WS	20	32,0	1 1/4"	49,3	1,94	42,0	6000	168,0	24000	445	17,52	3,470	2,34
1003299	6WS	24	38,0	1 1/2"	56,5	2,22	42,0	6000	168,0	24000	530	20,87	4,554	3,07
1004485	6WS	32	51,0	2"	71,0	2,80	42,0	6000	168,0	24000	650	25,59	6,499	4,37

Alfabiotech Evolution 4000 - Supertuff



ISO 18752

Tube: petroleum and biodegradable hydraulic fluid resistant synthetic rubber.

Reinforcement: four high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber. Special "supertuff" cover for long service life in extreme applications where low friction and very high abrasion or underwater resistance are required.

Application: very high pressure hydraulic lines, fuel, oil, lubricants, antifreeze solution, air and water.

Specially designed for long service life in very demanding applications where compact design, high pulsating pressure and tight bend radius are required.

Temperature: -40 °C +121 °C (-40 °F +250 °F)

Length: random up to 1" - 61 m max over 1 1/4"

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1005145	12	19,0	3/4"	29,0	1,14	28,0	4000	112,0	16000	120	4,72	0,995	0,67
1005146	16	25,0	1"	37,4	1,47	28,0	4000	112,0	16000	150	5,91	1,495	1,01
1005147	20	32,0	1 1/4"	44,2	1,74	28,0	4000	112,0	16000	210	8,27	2, 214	1,49
1005149	24	38,0	1 1/2"	50,6	1,99	29,0	4200	116,0	16800	250	9,84	2,610	1,76
1005150	32	51,0	2"	64,7	2,55	28,0	4000	112,0	16000	318	12,52	4,001	2,69

Alfabiotech Evolution 5000 - Supertuff



Tube: petroleum and biodegradable hydraulic fluid resistant synthetic rubber.

Reinforcement: four/six high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber. Special "supertuff" cover for long service life in extreme applications where low friction and very high abrasion or underwater resistance are required.

Application: very high pressure hydraulic lines, fuel, oil, lubricants, antifreeze solution, air and water.

Specially designed for long service life in very demanding applications where compact design, high pulsating pressure and tight bend radius are required.

Temperature: -40 °C +121 °C (-40 °F +250 °F)

Length: random up to 1" - 61 m max over 1 1/4"

Item Code	Constr.	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1005152	4WS	10	16,0	5/8"	25,4	1,00	35,0	5000	140,0	20000	100	3,94	0, 878	0,60
1005151	4WS	12	19,0	3/4"	29,4	1,16	35,0	5000	140,0	20000	120	4,72	1,166	0,79
1005153	4WS	16	25,0	1"	37,4	1,47	35,0	5000	140,0	20000	150	5,91	1,702	1,15
1005154	4WS	20	32,0	1 1/4"	44,0	1,73	35,0	5000	140,0	20000	210	8,27	2, 214	1,49
1005155	6WS	24	38,0	1 1/2"	54,8	2,16	35,0	5000	140,0	20000	250	9,84	3,924	2,64
1005156	6WS	32	51,0	2"	68,7	2,70	35,0	5000	140,0	20000	318	12,52	5,787	3,89

Design and dimensions shown may be changed without prior notice

Alfabiotech Evolution 5000 Plus -

Supertuff



Tube: petroleum and biodegradable hydraulic fluid resistant synthetic rubber.

Reinforcement: four high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber. Special "supertuff" cover for long service life in extreme applications where low friction and very high abrasion or underwater resistance are required.

Application: very high pressure hydraulic lines, fuel, oil, lubricants, antifreeze solution, air and water.

Specially designed for long service life in very demanding applications where compact design, high pulsating pressure and tight bend radius are required.

Temperature: -40 °C +121 °C (-40 °F +250 °F)

Length: random

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1005157	12	19,0	3/4"	30,2	1,19	38,0	5500	152,0	22040	120	4,72	1,276	0,86
1005158	16	25,0	1"	37,4	1,47	38,0	5500	152,0	22040	150	5,91	1,841	1,24

Alfabiotech Evolution 6000 - Supertuff



ISO 18752 - exceeds SAE 100 R15

Tube: petroleum and biodegradable hydraulic fluid resistant synthetic rubber.

Reinforcement: four/six high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber. Special "supertuff" cover for long service life in extreme applications where low friction and very high abrasion or underwater resistance are required.

Application: very high pressure hydraulic lines, fuel, oil, lubricants, antifreeze solution, air and water.

Specially designed for long service life in very demanding applications where compact design, high pulsating pressure and tight bend radius are required.

Temperature: -40 °C +121 °C (-40 °F +250 °F)

Length: random up to 1" - 61 m max over 1 1/4"

Item Code	Constr.	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1005159	4WS	4	6,0	1/4"	17,0	0,67	45,0	6550	180,0	26200	60	2,36	0,510	0,35
1005160	4WS	6	10,0	3/8"	19,8	0,78	44,5	6450	178,0	25800	75	2,95	0,615	0,42
1005161	4WS	8	13,0	1/2"	22,5	0,89	42,0	6000	168,0	24000	90	3,54	0,710	0,48
1005162	4WS	10	16,0	5/8"	27,8	1,09	42,0	6000	168,0	24000	100	3,94	1,190	0,80
1005163	4WS	12	19,0	3/4"	30,6	1,20	42,0	6000	168,0	24000	120	4,72	1,371	0,93
1005164	4WS	16	25,0	1"	38,0	1,50	42,0	6000	168,0	24000	150	5,91	1,961	1,32
1005165	6WS	20	32,0	1 1/4"	47,6	1,87	42,0	6000	168,0	24000	225	8,86	2,982	2,01
1005166	6WS	24	38,0	1 1/2"	54,4	2,14	42,0	6000	168,0	24000	305	12,01	4,155	2,80

High Temperature

R5 Evolution HT 150



SAE 100 R5

Tube: oilresistant synthetic rubber.

Reinforcement: one high tensile steel braid. Cover: braided high tensile textile blue cord. Application: medium pressure hydraulic lines, fuel oil, antifreeze solutions, air and water. Specially designed for high temperature applications. Temperature: -40 °C +150 °C (-40 °F +300 °F) air max T up to 5/8" = +85 °C (+185 °F) air max T over 3/4" = +110 °C (+230 °F) Length: random up to 5/8" - 61 m max over 3/4"

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1004577	4		3/16"	13,5	0,53	21,0	3000	84,0	12000	75	2,95	0,355	0,24
1004578	5	5,0	1/4"	15,1	0,59	21,0	3000	84,0	12000	85	3,35	0,382	0,26
1004579	6	6,3	5/16"	17,3	0,68	15,7	2270	62,8	9080	100	3,94	0,501	0,34
1004580	7	8,0	13/32"	19,7	0,78	14,0	2000	56,0	8000	115	4,53	0,586	0,40
1004581	10	10,3	1/2"	23,5	0,93	12,2	1760	48,8	7000	140	5,51	0,752	0,51
1004582	12	12,5	5/8"	27,4	1,08	10,5	1530	42,0	6000	165	6,50	0,871	0,59
1004583	16	16,0	7/8"	31,4	1,24	5,6	800	22,4	3250	185	7,28	0,706	0,48
1004585	20	22,0	1 1/8"	37,6	1,48	4,3	625	17,2	2500	229	9,02	0,924	0,63
1004586	24	29,0	1 3/8"	44,0	1,73	3,5	525	14,0	2000	265	10,43	1,055	0,71
1004587	32	35,0	1 13/16"	56,4	2,22	2,4	350	9,6	1400	335	13,19	1,431	0,97

1SN Evolution HT 150



MSHA

SAE 100 R1AT - ISO 1436-1 - UNI EN 853 1SN

Tube: oilresistant synthetic rubber.

Reinforcement: one high tensile steel braid.

Cover: smooth up to 5/8", wrapped over 3/4". Abrasion, ozone and hydrocarbon resistant blue synthetic rubber.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Specially designed for high temperature applications.

Not recommended for steam service.

Temperature: -40 °C +150 °C (-40 °F +300 °F)

air max T up to 5/8" = +85 °C (+185 °F),

air max T over 3/4" = +110 °C (+230 °F)

Length: random up to 5/8" - 61 m max over 3/4"

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1004518	4	6,0	1/4"	12,7	0,50	22,5	3250	90,0	13000	100	3,94	0,206	0,14
1004519	6	10,0	3/8"	16,5	0,65	18,0	2610	72,0	10500	130	5,12	0,307	0,21
1004520	8	13,0	1/2"	19,9	0,78	16,0	2320	64,0	9280	180	7,09	0,379	0,26
1004521	10	16,0	5/8"	22,7	0,89	13,0	1900	52,0	7560	200	7,87	0,436	0,30
1004522	12	19,0	3/4"	27,0	1,06	10,5	1530	42,0	6000	240	9,45	0,565	0,38
1004523	16	25,0	1"	35,8	1,41	8,8	1280	35,2	5100	300	11,81	0,976	0,66
1004530	20	32,0	1 1/4"	42,1	1,66	6,3	920	25,2	3680	420	16,54	1,121	0,76
1004531	24	38,0	1 1/2"	49,2	1,94	5,0	730	20,0	2900	500	19,69	1,443	0,97
1004532	32	51,0	2"	62,4	2,46	4,0	600	16,0	2320	630	24,80	1,911	1,29

Design and dimensions shown may be changed without prior notice

2SN Evolution HT 150



MSHA

SAE 100 R2AT - ISO 1436-1 - UNI EN 853 2SN

Tube: oilresistant synthetic rubber.

Reinforcement: two high tensile steel braids.

Cover: smooth up to 5/8", wrapped over 3/4". Abrasion, ozone and hydrocarbon resistant blue synthetic rubber.

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Specially designed for high temperature applications.

Not recommended for steam service.

Temperature: -40 °C +150 °C (-40 °F +300 °F)

air max T up to 5/8" = +85 °C (+185 °F),

air max T over 3/4" = +110 °C (+230 °F)

Length: random up to 5/8" - 61 m max over 3/4"

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1004524	4	6,0	1/4"	14,2	0,56	40,0	5850	160,0	23200	100	3,94	0,339	0,23
1004525	6	10,0	3/8"	18,4	0,72	33,0	4800	132,0	19200	125	4,92	0,480	0,33
1004526	8	13,0	1/2"	21,1	0,83	27,5	4000	110,0	16000	175	6,89	0,549	0,37
1004527	10	16,0	5/8"	24,5	0,96	25,0	3630	100,0	14500	200	7,87	0,689	0,47
1004528	12	19,0	3/4"	29,0	1,14	21,5	3120	86,0	12500	240	9,45	0,881	0,60
1004529	16	25,0	1"	37,4	1,47	16,5	2400	66,0	9600	300	11,81	1,364	0,92
1004533	20	32,0	1 1/4"	46,4	1,83	12,5	1820	50,0	7280	420	16,54	1,894	1,28
1004534	24	38,0	1 1/2"	52,8	2,08	9,0	1310	36,0	5240	500	19,69	2,129	1,44
1004535	32	51,0	2"	65,6	2,58	8,0	1200	32,0	4640	630	24,80	2,815	1,90

Low Temperature

Flexopak 2 LT



Tube: oil resistant ultra low temperature synthetic rubber.
Reinforcement: two high tensile steel braids.
Cover: smooth up to 1", wrapped over 1". Oil, water, ozone and ultra low temperature resistant synthetic rubber.
Application: hydraulic system with petroleum or water/glycol based fluids, fuel, lubricating oils.
Specially designed for ultra low temperature applications.
Temperature: -55 °C +100 °C (-67 °F +212 °F)
air max T = +70 °C (+160 °F)
Length: random up to 1" - 61 m over 1"

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1003221	4	6,0	1/4"	13,0	0,51	42,0	6000	168,0	24000	50	1,97	0,280	0,19
1003283	5	8,0	5/16"	14,5	0,57	37,5	5500	150,0	22000	55	2,17	0,310	0,21
1003222	6	10,0	3/8"	16,8	0,66	35,0	5000	140,0	20000	65	2,56	0,390	0,27
1003226	8	13,0	1/2"	20,6	0,81	31,0	4500	124,0	18000	90	3,54	0,520	0,35
1003223	10	16,0	5/8"	23,4	0,92	28,0	4000	112,0	16000	100	3,94	0,600	0,41
1003224	12	19,0	3/4"	27,6	1,09	24,0	3500	96,0	14000	120	4,72	0,810	0,55
1003225	16	25,0	1"	35,5	1,40	21,0	3000	84,0	12000	150	5,91	1,220	0,82
1003304	20	32,0	1 1/4"	43,3	1,70	14,0	2000	58,0	8400	210	8,27	1,390	0,94

Alfaforest LT



Tube: oil resistant ultra low temperature synthetic rubber.
Reinforcement: three high tensile steel braids.
Cover: oil, water, ozone and ultra low temperature resistant synthetic rubber.
Application: hydraulic system with petroleum or water/glycol based fluids, fuel, lubricating oils.
Specially designed for ultra low temperature applications.
Temperature: -55 °C +100 °C (-67 °F +212 °F)
air max T = +70 °C (+160 °F)
Length: random

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1003305	6	10,0	3/8"	21,1	0,83	50,0	7280	196,0	28000	120	4,72	0,756	0,51
1003292	8	13,0	1/2"	24,1	0,95	46,9	6800	188,0	27200	160	6,30	0,892	0,60
1003293	10	16,0	5/8"	27,8	1,09	41,0	6000	164,0	23500	210	8,27	1,121	0,76
1003230	12	19,0	3/4"	32,2	1,27	37,5	5500	150,0	22000	260	10,24	1,430	0,97
1003294	16	25,0	1"	39,2	1,54	32,7	4750	130,8	19000	310	12,20	1,940	1,31

Design and dimensions shown may be changed without prior notice

Alfaforest 4000 LT



ISO 18752

Tube: oil resistant ultra low temperature synthetic rubber.

Reinforcement: four high tensile steel spirals.

Cover: abrasion, ozone, hydrocarbon and ultra low temperature resistant synthetic rubber.

Application: very high pressure hydraulic lines, fuel, oil, lubricants, antifreeze solution, air and water.

Specially designed for long service life in ultra low temperature applications.

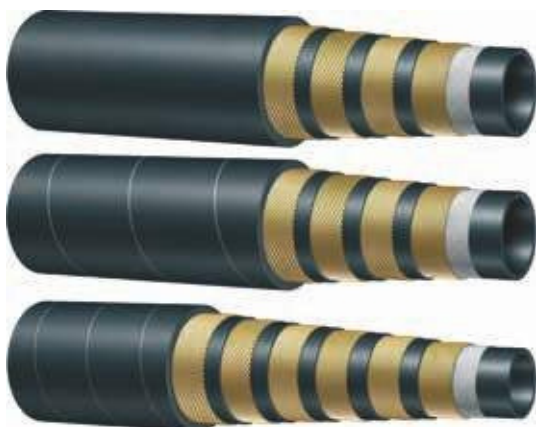
Temperature: -55 °C +100 °C (-67 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: 61 m

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1004944	24	38,0	1 1/2"	50,6	1,99	29,0	4200	116,0	16800	250	9,84	2,659	1,79
1004945	32	51,0	2"	64,7	2,55	28,0	4000	112,0	16000	318	12,52	4,062	2,73

Alfaforest 5000 LT



exceeds ISO 18752

Tube: oilresistant ultra low temperature synthetic rubber.

Reinforcement: four/six high tensile steel spirals.

Cover: smooth up to 1", wrapped over 1". Abrasion, ozone, hydrocarbon and ultra low temperature resistant synthetic rubber.

Application: very high pressure hydraulic lines, fuel, oil, lubricants, antifreeze solution, air and water.

Specially designed for long service life in ultra low temperature applications.

Temperature: -55 °C +100 °C (-67 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random up to 1" - 61 m max over 1 1/4"

Item Code	Constr.	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1004929	4WS	10	16,0	5/8"	25,4	1,00	35,0	5000	140,0	20000	100	3,94	0,898	0,61
1004930	4WS	12	19,0	3/4"	30,2	1,19	38,0	5500	152,0	22040	120	4,72	1,300	0,88
1004931	4WS	16	25,0	1"	37,4	1,47	38,0	5500	152,0	22040	150	5,91	1,874	1,26
1004932	4WS	20	32,0	1 1/4"	44,2	1,74	35,0	5000	140,0	20000	210	8,27	2,223	1,50
1004933	6WS	24	38,0	1 1/2"	54,8	2,16	35,0	5000	140,0	20000	250	9,84	4,051	2,73
1004934	6WS	32	51,0	2"	68,7	2,70	35,0	5000	140,0	20000	318	12,52	5,922	3,98

Alfaforest 6000 LT



ISO 18752 - exceeds SAE 100 R15

Tube: oilresistant ultra low temperature synthetic rubber.

Reinforcement: four/six high tensile steel spirals.

Cover: smooth up to 1", wrapped over 1". Abrasion, ozone, hydrocarbon and ultra low temperature resistant synthetic rubber.

Application: very high pressure hydraulic lines, fuel, oil, lubricants, antifreeze solution, air and water.

Specially designed for long service life in ultra low temperature applications.

Temperature: -55 °C +100 °C (-67 °F +212 °F)

air max T = +70 °C (+160 °F)

Length: random up to 1" - 61 m max over 1 1/4"

Item Code	Constr.	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1004935	4WS	4	6,0	1/4"	17,2	0,68	45,0	6550	180,0	26200	60	2,36	0,552	0,38
1004936	4WS	6	10,0	3/8"	20,2	0,80	44,5	6450	178,0	25800	75	2,95	0,685	0,47
1004937	4WS	8	13,0	1/2"	22,6	0,89	42,0	6000	168,0	24000	90	3,54	0,784	0,53
1004938	4WS	10	16,0	5/8"	27,8	1,09	42,0	6000	168,0	24000	100	3,94	1,277	0,86
1004939	4WS	12	19,0	3/4"	30,6	1,20	42,0	6000	168,0	24000	120	4,72	1,418	0,96
1004940	4WS	16	25,0	1"	38,0	1,50	42,0	6000	168,0	24000	150	5,91	1,995	1,35
1004941	6WS	20	32,0	1 1/4"	47,6	1,87	42,0	6000	168,0	24000	225	8,86	3,135	2,11
1004942	6WS	24	38,0	1 1/2"	54,4	2,14	42,0	6000	168,0	24000	305	12,01	4,192	2,82
1004943	6WS	32	51,0	2"	68,9	2,71	42,0	6000	168,0	24000	380	14,96	6,148	4,14

Design and dimensions shown may be changed without prior notice

Oil Return Lines

Flexor R4 604



MSHA

SAE 100 R4

Tube: oilresistant synthetic rubber.

Reinforcement: high tensile textile cords with embedded steel helix wire. Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber. Application: fuel, oil and hydraulic fluids with 50% max aromatic content suction and delivery. Specially designed for hydraulic oil return lines. Temperature: -40 °C +100 °C (-40 °F +212 °F) Length: 61 m max

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)
1001123	12	19,0	3/4"	30,0	1,18	2,1	300	8,4	1200	57	2,24	0,610	0,41
1001124	16	25,0	1"	36,0	1,42	1,7	250	6,8	986	75	2,95	0,760	0,52
10011261	20	32,0	1 1/4"	43,0	1,69	1,4	200	5,6	800	96	3,78	0,990	0,67
1001127	24	38,0	1 1/2"	49,0	1,93	1,0	150	4,2	620	114	4,49	1,140	0,77
1001128	32	51,0	2"	62,0	2,44	0,7	100	2,8	400	152	5,98	1,480	1,00
1001129	40	63,0	2 1/2"	76,0	2,99	0,4	60	1,6	240	189	7,44	2,100	1,42
1001130	48	76,0	3"	89,0	3,50	0,4	60	1,6	240	228	8,98	2,520	1,70
1001131	56	90,0	3 1/2"	104,0	4,09	0,3	45	1,2	180	270	10,63	3,080	2,07
1001232	64	102,0	4"	116,0	4,57	0,2	30	0,8	120	306	12,05	3,440	2,32

Flexor R4 634



Extra flexible

SAE 100 R4

Tube: oilresistant synthetic rubber.

Reinforcement: high tensile textile cords with embedded steel helix wire.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

Application: fuel, oil and hydraulic fluids with 50% max aromatic content suction and delivery.

Specially designed for hydraulic oil return lines requiring tight bend radius.

Temperature: -40 °C +100 °C (-40 °F +212 °F)

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)	Length (m)
1001272	12	19,0	3/4"	30,0	1,18	2,1	300	8,4	1200	38	1,50	0,610	0,41	30,500
1001273	16	25,0	1"	36,0	1,42	1,7	250	6,8	986	50	1,97	0,760	0,52	30,500
1001275	20	32,0	1 1/4"	43,0	1,69	1,4	200	5,6	800	64	2,52	0,930	0,63	30,500
1001278	24	38,0	1 1/2"	49,0	1,93	1,0	150	4,0	600	76	2,99	1,080	0,73	30,500
1001280	32	51,0	2"	62,0	2,44	0,7	100	2,8	400	102	4,02	1,400	0,95	30,500
1001282	40	63,0	2 1/2"	76,0	2,99	0,4	60	1,6	240	125	4,92	2,220	1,50	30,500
1001284	48	76,0	3"	89,0	3,50	0,4	60	1,6	240	152	5,98	2,630	1,77	30,500
1001288	64	102,0	4"	116,0	4,57	0,2	30	0,8	120	204	8,03	3,910	2,63	30,500

Design and dimensions shown may be changed without prior notice

Flexor R4 644 HT**MSHA****Extra flexible - High temperature****SAE 100 R4****Tube:** oilresistant synthetic rubber.**Reinforcement:** high tensile textile cords with embedded steel helix wire.**Cover:** abrasion, ozone and hydrocarbon resistant synthetic rubber.**Application:** fuel, oil and hydraulic fluids with 50% max aromatic content suction and delivery.**Specially designed for high temperature applications and hydraulic oil return lines requiring tight bend radius.****Temperature:** -40 °C +135 °C (-40 °F +275 °F)

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)	Length (m)
1001277	12	19,0	3/4"	30,0	1,18	2,1	300	8,4	1200	38	1,50	0,620	0,42	30,500
1001274	16	25,0	1"	36,0	1,42	1,7	250	6,8	986	50	1,97	0,770	0,52	30,500
1001196	20	32,0	1 1/4"	43,0	1,69	1,4	200	5,6	800	64	2,52	0,950	0,64	30,500
1001279	24	38,0	1 1/2"	49,0	1,93	1,0	150	4,0	600	76	2,99	1,100	0,74	30,500
1001281	32	51,0	2"	62,0	2,44	0,7	100	2,8	400	102	4,02	1,430	0,97	30,500
1001283	40	63,0	2 1/2"	76,0	2,99	0,4	60	1,6	240	126	4,96	2,170	1,46	30,500
1001285	48	76,0	3"	89,0	3,50	0,4	60	1,6	240	152	5,98	2,690	1,81	30,500
1001290	64	102,0	4"	116,0	4,57	0,2	30	0,8	120	204	8,03	3,530	2,38	30,500

Design and dimensions shown may be changed without prior notice

Pressure wash

Alfajet 210



Tube: oil, detergents and hot water resistant synthetic rubber.
Reinforcement: one high tensile steel braid.
Cover: abrasion, ozone and hydrocarbon resistant blue synthetic rubber. Black cover also available.
Application: high pressure power cleaners.
Specially designed for hot water applications.
Not recommended for steam service.
Length: random
DH SCAN crimp short code: AJ210

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)	Tech. Note
1000925	4	6,0	1/4"	12,1	0,48	21,0	3000	84,0	12000	50	1,97	0,161	0,11	NO PIN-PRICKED
1000926	5	8,0	5/16"	14,1	0,56	21,0	3000	84,0	12000	60	2,36	0,184	0,13	NO PIN-PRICKED
1000927	6	10,0	3/8"	15,6	0,61	21,0	3000	73,0	10588	65	2,56	0,250	0,17	NO PIN-PRICKED
1000928	8	13,0	1/2"	19,5	0,77	21,0	3000	73,0	10588	90	3,54	0,359	0,25	NO PIN-PRICKED

Item codes: blue cover hose.

Alfajet 400



Tube: oil, detergents and hot water resistant synthetic rubber.
Reinforcement: two high tensile steel braids.
Cover: abrasion, ozone and hydrocarbon resistant blue synthetic rubber. Black cover also available.
Application: high pressure power cleaners.
Specially designed for hot water applications.
Not recommended for steam service.
Length: random
DH SCAN crimp short code: AJ400

Item Code	ID (Dash)	ID (mm)	ID (in)	OD (mm)	OD (in)	WP (Mpa)	WP (psi)	BP (Mpa)	BP (psi)	BR (mm)	BR (in)	Weight (kg/m)	Weight (lb/ft)	Tech. Note
1001293	4	6,0	1/4"	13,2	0,52	40,0	5850	140,0	20000	70	2,76	0,250	0,17	NO PIN-PRICKED
1000935	5	8,0	5/16"	14,9	0,59	40,0	5850	140,0	20000	76	2,99	0,293	0,20	NO PIN-PRICKED
1000936	6	10,0	3/8"	16,7	0,66	40,0	5850	130,0	18900	90	3,54	0,363	0,25	NO PIN-PRICKED
1000937	8	13,0	1/2"	20,1	0,79	40,0	5850	120,0	17450	115	4,53	0,477	0,33	NO PIN-PRICKED

Item codes: blue cover hose.

PTFE

9TS OM



Smooth PTFE Stainless Steel braid - Standard duty

Tube: smooth PTFE - high mechanical and vibration resistance, low permeability, dielectrical, fire resistant, food grade (FDA, DVGW, BFR compliant). Chemically inert, non sticking, ozone and weather resistant.

Reinforcement: high tensile stainless steel braid AISI 304.

Application: compressed air, gas, steam, fuel, oil, chemical and pharmaceutical products, particularly suitable for steam piping on injection moulding machines, diathermic oil installations, charging lines for cryogenic gas, compressor discharge lines, automotive, pharmaceutical and food sectors. Solvents, pigments and paint transfer lines. Hydraulic lines in power steering marine applications.

Not suitable for molten alkali metals and halogens at high temperature.

Temperature: -60 °C +260 °C (-76 °F +500 °F)

DH SCAN crimp short code: 9TS

Item Code	ID (mm)	ID (in)	OD (mm)	Innertube T (mm)	WP (Mpa)	WP (psi)	BR (mm)	BR (in)	Weight (kg/m)
2600557	5,0	3/16"	7,9	1	27,6	4000	51	2,01	0,090
2600558	6,0	1/4"	8,6	1	24,1	3500	76	2,99	0,090
2600559	8,0	5/16"	11,1	1	20,7	3000	102	4,02	0,130
2600560	10,0	3/8"	12,7	1	18,3	2600	127	5,00	0,150
2600561	13,0	1/2"	15,4	1	16,1	2300	140	5,51	0,200
2600562	16,0	5/8"	18,4	1	13,8	2000	165	6,50	0,270
2600563	19,0	3/4"	22,1	1	11,4	1600	203	7,99	0,330
2600564	25,0	1"	29,8	1	6,9	1000	305	12,01	0,520

Design and dimensions shown may be changed without prior notice

9TC OM



Convoluted PTFE Stainless Steel braid

Tube: convoluted PTFE - high mechanical and vibration resistance, low permeability, dielectrical, fire resistant, food grade (FDA, DVGW, BFR compliant). Chemically inert, non sticking, ozone and weather resistant.

Reinforcement: high tensile stainless steel braid AISI 304.

Application: compressed air, gas, steam, fuel, oil, chemical and pharmaceutical products, particularly suitable for steam piping on injection moulding machines, diathermic oil installations, charging lines for cryogenic gas, compressor discharge lines, automotive, pharmaceutical and food sectors. Solvents, pigments and paint transfer lines. Hydraulic lines in power steering marine applications.

Not suitable for molten alkali metals and halogens at high temperature.

Temperature: -60 °C +260 °C (-76 °F +500 °F)

DH SCAN crimp short code: 9TC

Item Code	ID (mm)	ID (in)	OD (mm)	Innertube T (mm)	WP (Mpa)	WP (psi)	BR (mm)	BR (in)	Weight (kg/m)
2600573	10,0	3/8"	14,8		13,8	2000	20	0,79	0,220
2600574	13,0	1/2"	18,8	1	10,3	1500	25	0,98	0,280
2600575	16,0	5/8"	22,1	1	8,3	1200	51	2,01	0,330
2600576	19,0	3/4"	24,6	1	6,9	1000	64	2,52	0,400
2600577	25,0	1"	32,8	1	4,6	670	89	3,50	0,550
2600578	32,0	1 1/4"	40,7	1	3,4	525	127	5,00	0,690
2600579	38,0	1 1/2"	48,2	1	3,0	450	152	5,98	0,890
2600580	51,0	2"	61,5	1	2,3	345	200	7,87	1,240



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