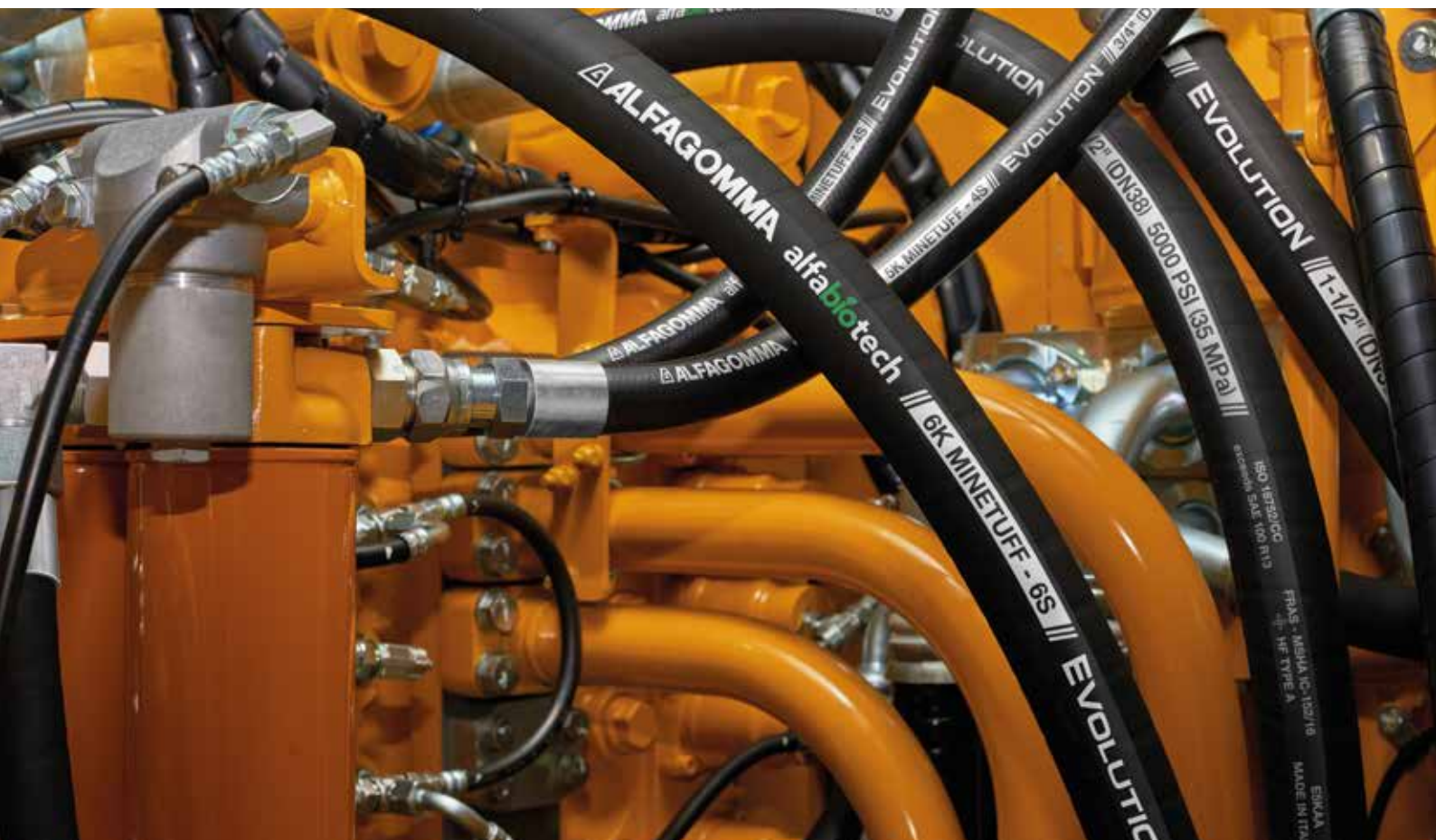


ALFAGOMMA



ALFABIOTECH EVOLUTION



alfabiotech EVOLUTION

SPECIALLY DESIGNED FOR TOP PERFORMANCE AND COMPATIBILITY WITH BIODEGRADABLE HYDRAULIC OILS

Suitable for applications using conventional hydraulic oils, lubricants, antifreeze solutions air and water.

EXTREME BEND RADIUS & FLEXIBILITY

Alfabiotech Evolution features unprecedented bend radius - **up to 60%** improvement on ISO 18752 and SAE 100 requirements.

COMPACT DESIGN

Compact and extremely flexible construction will allow effortless flexing in operation and during installation.

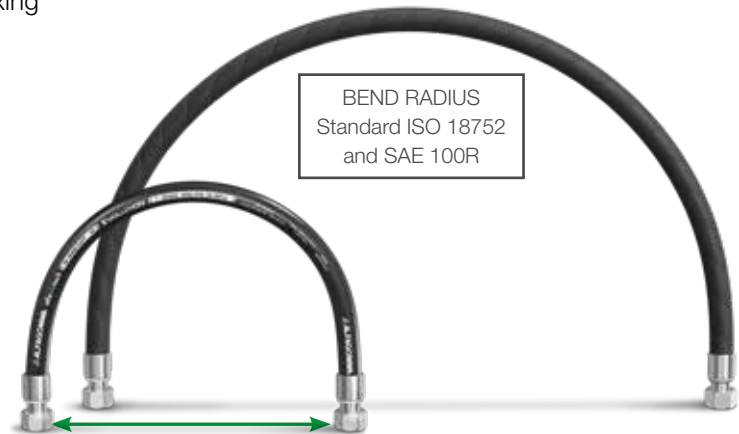
Specially designed for long service life in very demanding applications where a compact design and high pulsating pressure and tight bend radius are required.

HIGH ABRASION & FIRE RESISTANCE

Alfagomma minetuff cover is specially designed for **heavy duty mining, forestry, construction, oil & gas applications** where MSHA fire resistance, long service life and best performance are fundamental.

alfabiotech EVOLUTION

**COMPACT DESIGN
EXTREME BEND RADIUS
AND FLEXIBILITY**



// ALFABIOTECH EVOLUTION 3K - MINETUFF NEW



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 +120 °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)	Tech. Note
1004782	20	32,0	1 1/4"	44,9	1,77	21,0	3000	84,0	12000	210	8,27	1,917	1,29	ISO CC
1004783	24	38,0	1 1/2"	50,6	1,99	21,0	3000	84,0	12000	250	9,84	2,445	1,65	ISO CC
1004784	32	51,0	2"	64,7	2,55	21,0	3000	84,0	12000	318	12,52	4,080	2,75	ISO CC

// ALFABIOTECH EVOLUTION 4K - MINETUFF **NEW**



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 +120 °C (-40 °F +250 °F)

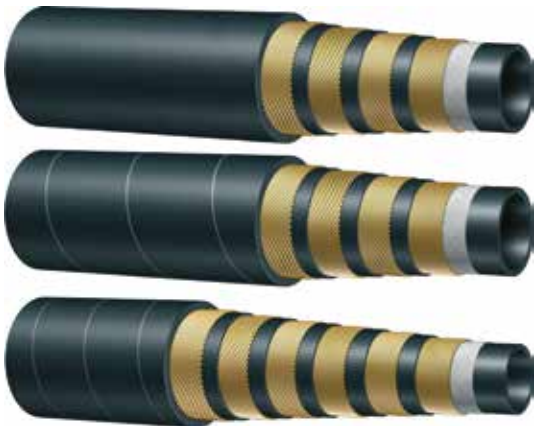
Length: random up to 1" - 61 m max over 1 1/4"

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)	Tech. Note
1004894	8	13,0	1/2"	22,6	0,89	28,0	4000	112,0	16000	90	3,54	0,624	0,42	ISO CC
1004754	12	19,0	3/4"	29,0	1,14	28,0	4000	112,0	16000	120	4,72	0,978	0,66	ISO CC
1004755	16	25,0	1"	37,2	1,46	28,0	4000	112,0	16000	150	5,91	1,479	1,00	ISO CC
1004773	20	32,0	1 1/4"	44,2	1,74	28,0	4000	112,0	16000	210	8,27	2,400	1,62	ISO CC
1004756	24	38,0	1 1/2"	50,6	1,99	29,0	4200	116,0	16800	250	9,84	2,802	1,89	ISO CC
1004757	32	51,0	2"	64,7	2,55	28,0	4000	112,0	16000	318	12,52	4,001	2,69	ISO CC

Supertuff version available on request: the Ultra High Molecular Weight Polyetilene (UHMWPE) cover is specially designed for extreme applications where low friction and very high abrasion or underwater resistance are necessary.

Note: minimum order quantity could apply on specific part numbers.

// ALFABIOTECH EVOLUTION 5K - MINETUFF **NEW**



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 +120 °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)	Tech. Note
1004743	4WS	10	16,0	5/8"	25,2	0,99	35,0	5000	140,0	20000	100	3,94	0,890	0,60	ISO CC
1004744	4WS	12	19,0	3/4"	29,4	1,16	35,0	5000	140,0	20000	120	4,72	1,166	0,79	ISO CC
1004745	4WS	16	25,0	1"	37,4	1,47	35,0	5000	140,0	20000	150	5,91	1,730	1,17	ISO CC
1004746	4WS	20	32,0	1 1/4"	44,0	1,73	35,0	5000	140,0	20000	210	8,27	2,400	1,62	ISO CC
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	ISO CC
1004748	6WS	32	51,0	2"	68,7	2,70	35,0	5000	140,0	20000	318	12,52	5,787	3,89	ISO CC

Supertuff version available on request: the Ultra High Molecular Weight Polyetilene (UHMWPE) cover is specially designed for extreme applications where low friction and very high abrasion or underwater resistance are necessary.

Note: minimum order quantity could apply on specific part numbers.

// ALFABIOTECH EVOLUTION 5K PLUS - MINETUFF **NEW**



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 +120 °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)	Tech. Note
1004749	12	19,0	3/4"	30,2	1,19	38,0	5500	152,0	22040	120	4,72	1,276	0,86	ISO CC
1004750	16	25,0	1"	37,4	1,47	38,0	5500	152,0	22040	150	5,91	1,817	1,23	ISO CC

Supertuff version available on request: the Ultra High Molecular Weight Polyethylene (UHMWPE) cover is specially designed for extreme applications where low friction and very high abrasion or underwater resistance are necessary.

Note: minimum order quantity could apply on specific part numbers.

// ALFABIOTECH EVOLUTION 6K - MINETUFF **NEW**



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 +120 °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)	Tech. Note
1004774	4WS	4	6,0	1/4"	17,0	0,67	45,0	6550	180,0	26200	60	2,36	0,510	0,35	ISO CC
1004775	4WS	6	10,0	3/8"	19,8	0,78	44,5	6450	178,0	25800	75	2,95	0,601	0,41	ISO CC
1004776	4WS	8	13,0	1/2"	22,5	0,89	42,0	6000	168,0	24000	90	3,54	0,710	0,48	ISO CC
1004777	4WS	10	16,0	5/8"	27,8	1,09	42,0	6000	168,0	24000	100	3,94	1,190	0,80	ISO CC
1004778	4WS	12	19,0	3/4"	30,6	1,20	42,0	6000	168,0	24000	120	4,72	1,371	0,93	ISO CC
1004779	4WS	16	25,0	1"	38,0	1,50	42,0	6000	168,0	24000	150	5,91	2,017	1,36	ISO CC
1004780	6WS	20	32,0	1 1/4"	47,6	1,87	42,0	6000	168,0	24000	225	8,86	3,071	2,07	ISO CC
1004781	6WS	24	38,0	1 1/2"	54,4	2,14	42,0	6000	168,0	24000	305	12,01	4,144	2,79	ISO CC
1004818	6WS	32	51,0	2"	68,7	2,70	42,0	6000	168,0	24000	380	14,96	6,031	4,06	ISO CC

Supertuff version available on request: the Ultra High Molecular Weight Polyethylene (UHMWPE) cover is specially designed for extreme applications where low friction and very high abrasion or underwater resistance are necessary.

Note: minimum order quantity could apply on specific part numbers.