

## AT3K - Supertuff



### 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

## Alfabiotech 5000 - Supertuff

MSHA



### ISO 18752

**Tube:** oilresistant 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:** oilresistant 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

## 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