

Compact cylinder, Series KPZ

- NFE 49004
- Ø 16-100 mm
- Ports M5 G 1/8
- Single-acting, extended without pressure
- with magnetic piston
- Cushioning elastic
- Piston rod Internal thread
- Piston rod Optionally heat-resistant



Standards	NFE 49004
Compressed air connection	Internal thread
Ambient temperature min./max.	-20 ... 80 °C
Medium temperature min./max.	-20 ... 80 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m ³
Pressure for determining piston forces	6.3 bar



Technical data

Piston Ø Piston rod thread Ports	16 mm M4 M5	20 mm M6 M5	25 mm M6 M5	32 mm M8 G 1/8	40 mm M8 G 1/8	50 mm M10 G 1/8
Stroke 5	0822490100	0822491100	0822492100	0822493100	0822494100	0822495100
10	0822490101	R480660211	0822492101	0822493101	0822494101	0822495101
15	0822490102	0822491102	0822492102	0822493102	0822494102	0822495102
20	0822490103	0822491103	0822492103	0822493103	0822494103	0822495103
25	0822490104	0822491104	0822492104	0822493104	0822494104	0822495104

Piston Ø Piston rod thread Ports	63 mm M10 G 1/8	80 mm M12 G 1/8	100 mm M16 G 1/8
Stroke 5	0822496100	0822497100	0822498100
10	0822496101	0822497101	0822498101
15	0822496102	0822497102	0822498102
20	0822496103	0822497103	0822498103
25	0822496104	0822497104	0822498104

Technical data

Piston Ø	16 mm	20 mm
Retracting piston force	127 N	198 N
Extracting piston force	12 N	13 N
Impact energy	0,11 J	0,15 J
Weight 0 mm stroke	0,07 kg	0,098 kg
Weight +10 mm stroke	0,014 kg	0,02 kg
Working pressure min./max.	1,5 ... 10 bar	1,5 ... 10 bar
Scraper material	-	Polyurethane
Sealing material	Nitrile butadiene rubber	Nitrile butadiene rubber
Stroke max.	25 mm	25 mm

Piston Ø	25 mm	32 mm	40 mm
Retracting piston force	309 N	507 N	792 N
Extracting piston force	25 N	35 N	43 N
Impact energy	0,2 J	0,4 J	0,52 J
Weight 0 mm stroke	0,143 kg	0,223 kg	0,333 kg
Weight +10 mm stroke	0,02 kg	0,03 kg	0,04 kg
Working pressure min./max.	1,5 ... 10 bar	1,3 ... 10 bar	1,3 ... 10 bar
Scraper material	Polyurethane	Polyurethane	Polyurethane
Sealing material	Nitrile butadiene rubber	Polyurethane	Polyurethane
Stroke max.	25 mm	25 mm	25 mm

Piston Ø	50 mm	63 mm	80 mm	100 mm
Retracting piston force	1237 N	1964 N	3167 N	4948 N
Extracting piston force	82 N	82 N	105 N	215 N
Impact energy	0,64 J	0,75 J	0,75 J	1 J
Weight 0 mm stroke	0,446 kg	0,757 kg	1,32 kg	2,28 kg
Weight +10 mm stroke	0,05 kg	0,08 kg	0,11 kg	0,14 kg
Working pressure min./max.	1 ... 10 bar	1 ... 10 bar	1 ... 10 bar	1 ... 10 bar
Scraper material	Polyurethane	Polyurethane	Polyurethane	Polyurethane
Sealing material	Polyurethane	Polyurethane	Polyurethane	Polyurethane
Stroke max.	25 mm	25 mm	25 mm	25 mm

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

The material for heat-resistant scraper and seal variants (ambient temperature: -10 °C ... 120 °C) is fluorocautchouc.

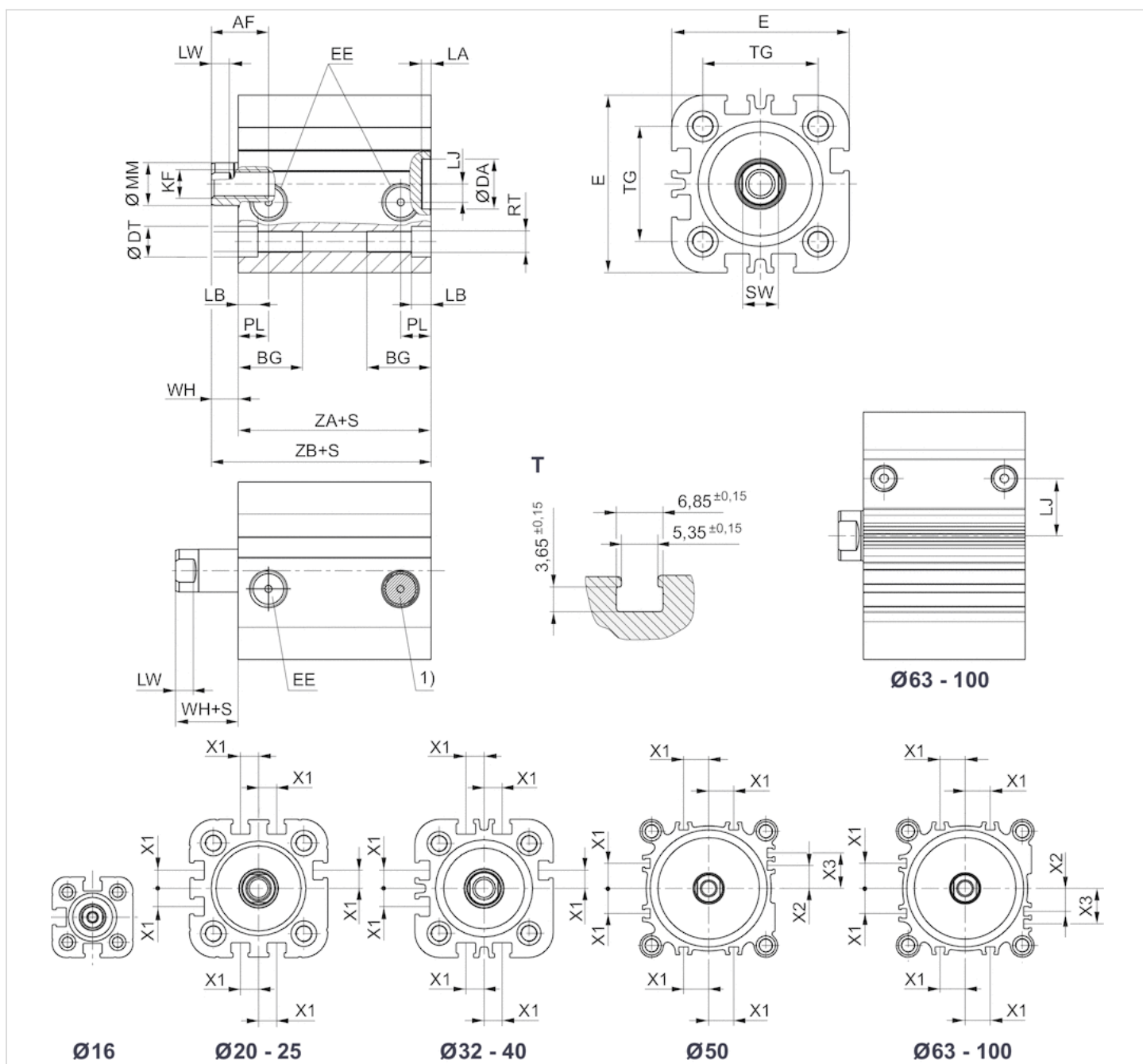
Further options can be generated in the Internet configurator.

Technical information

Material	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Nitrile butadiene rubber Polyurethane
Scraper	Polyurethane

Dimensions

Dimensions



Dimensions

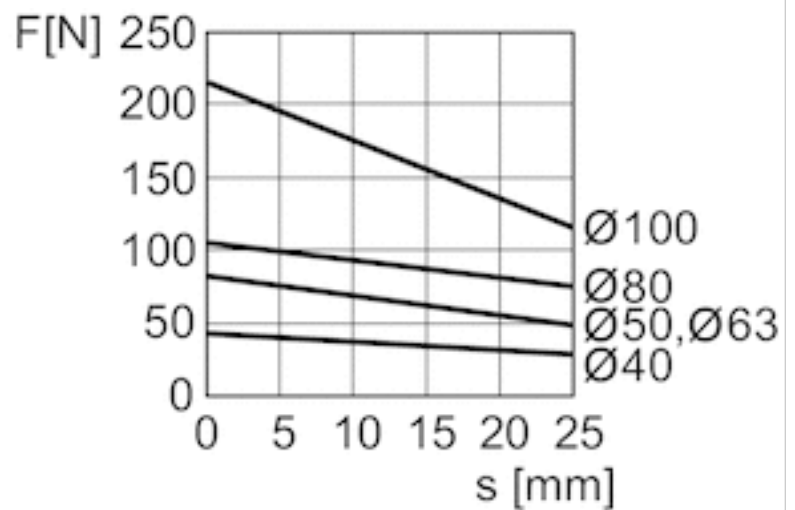
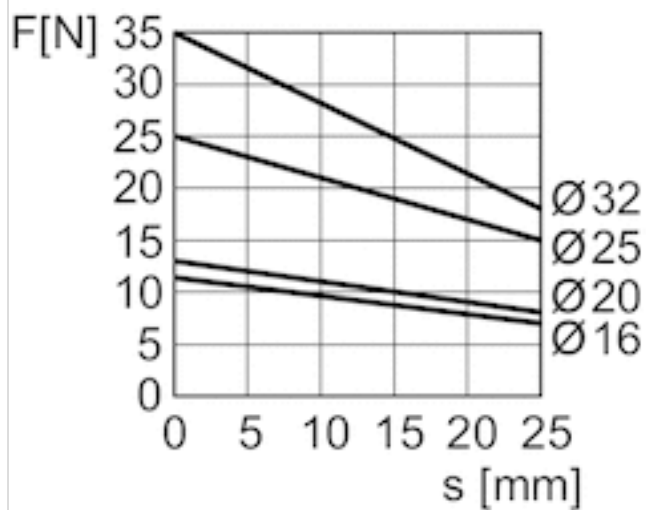
Piston Ø	AF	BG min.	DA H11	DT H13	E	EE	KF	LA	LB	LJ	LW	MM f8	PL	RT	SW
16 mm	10	14.5	10	6	29.5	M5	M4	2.5	3.5	2.5	2.8	8	7.5	M4	7
20 mm	12	15.5	12	7.5	36	M5	M6	2.5	4.5	4.5	3.7	10	7.5	M5	8
25 mm	12	15.5	12	8	40	M5	M6	2.5	4.4	5	3.7	10	7.5	M5	8
32 mm	12	18	14	8.6	50	G 1/8	M8	2.5	5.5	5.1	5	12	8.5	M6	10
40 mm	12	18	14	9	58	G 1/8	M8	2.5	5.5	9.6	5	12	8.5	M6	10

Piston Ø	AF	BG min.	DA H11	DT H13	E	EE	KF	LA	LB	LJ	LW	MM f8	PL	RT	SW
50 mm	16	24	18	11	68	G 1/8	M10	2.5	2	8.5	5.7	16	8.5	M8	13
63 mm	16	24	18	11	80	G 1/8	M10	2.5	2	17.8	5.7	16	8.5	M8	13
80 mm	20	28	23	14	99	G 1/8	M12	3	1	22.9	7	20	8.3	M10	16
100 mm	26	27.5	28	15	120	G 1/8	M16	3	3.5	26.5	7.5	25	9.7	M10	21

Piston Ø	TG	WH	X1	X2	X3	ZA + Stroke	ZB + Stroke
16 mm	18 ±0,4	4.5	–	–	–	38	42,5 0/+1,2
20 mm	22 ±0,4	5	4.2	–	–	38	43 0/+1,4
25 mm	26 ±0,4	5.5	4.5	–	–	38	44,5 0/+1,4
32 mm	32 ±0,5	7	6.5	–	–	44	51 0/+1,6
40 mm	42 ±0,5	7	11	–	–	45	52 0/+1,6
50 mm	50 ±0,6	7.5	13	4	13	45.5	53 0/+1,6
63 mm	62 ±0,7	8	18	12	21	49	57 0/+2
80 mm	82 ±0,7	9.5	18	16.5	25.5	54.5	64 0/+2
100 mm	103 ±0,7	10.5	20	20	29	66.5	77 0/+2

Diagrams

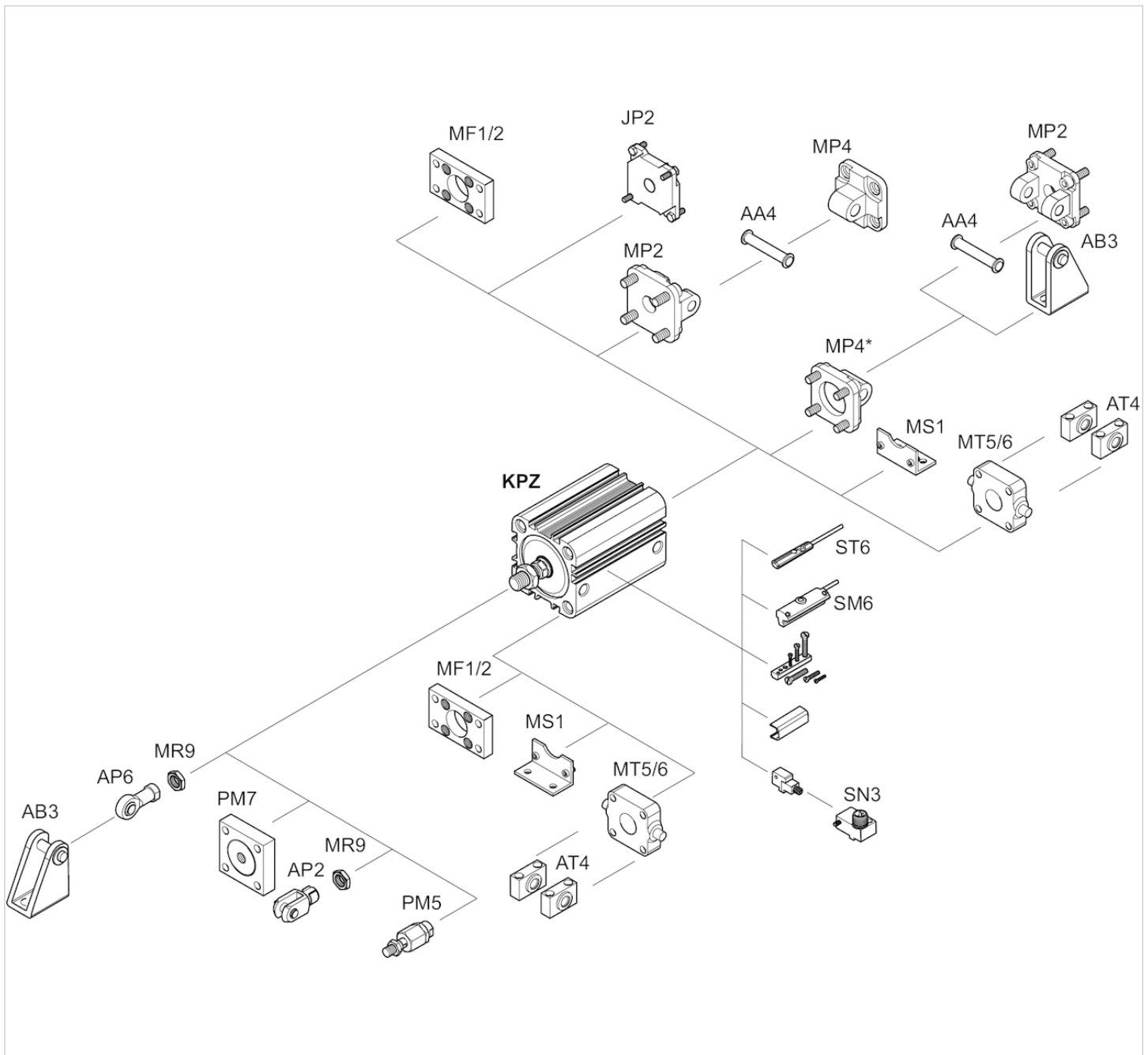
Extracting piston force



F = spring return force, s = return stroke

Accessories overview

Overview drawing



* Available for installation on KPZ for cylinder diameters 16 - 25 mm

NOTE:

This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.

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