

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 External 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 M8 M5	20 mm M10x1,25 M5	25 mm M10x1,25 M5	32 mm M10x1,25 G 1/8	40 mm M10x1,25 G 1/8	50 mm M12x1,25 G 1/8
Stroke 5	0822490300	0822491300	0822492300	0822493300	0822494300	0822495300
10	0822490301	0822491301	0822492301	0822493301	0822494301	0822495301
15	0822490302	0822491302	0822492302	0822493302	0822494302	0822495302
20	0822490303	0822491303	0822492303	0822493303	0822494303	0822495303
25	0822490304	0822491304	0822492304	0822493304	0822494304	0822495304

Piston Ø Piston rod thread Ports	63 mm M12x1,25 G 1/8	80 mm M16x1,5 G 1/8	100 mm M20x1,5 G 1/8
Stroke 5	0822496300	0822497300	0822498300
10	0822496301	0822497301	0822498301
15	0822496302	0822497302	0822498302
20	0822496303	0822497303	0822498303
25	0822496304	0822497304	0822498304

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	0,083 kg	0,112 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	0,157 kg	0,237 kg	0,347 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	0,468 kg	0,779 kg	1,37 kg	2,38 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.

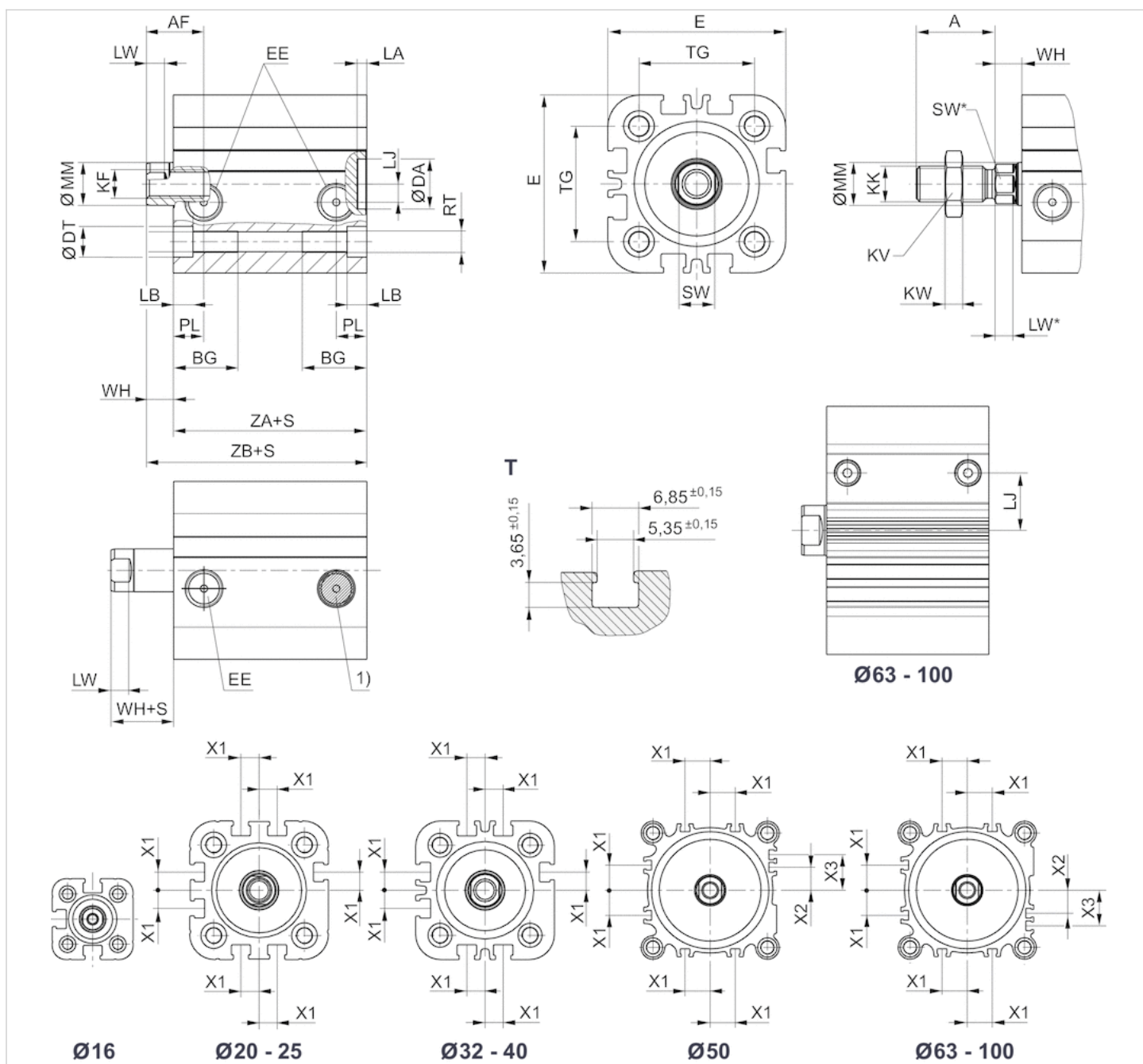
LW*/SW* Hexagonal key required

Technical information

Material	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Nitrile butadiene rubber Polyurethane
Nut for piston rod	Steel, galvanized
Scraper	Polyurethane

Dimensions

Dimensions



S = stroke

T = View for sensor groove

Dimensions

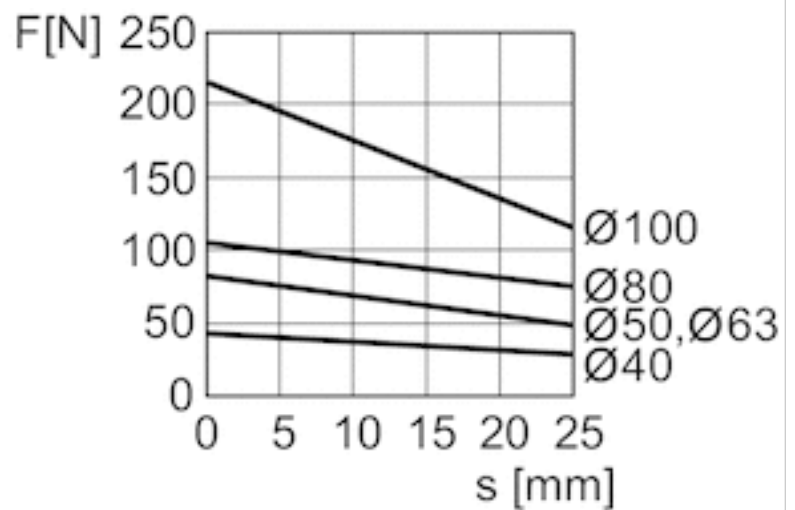
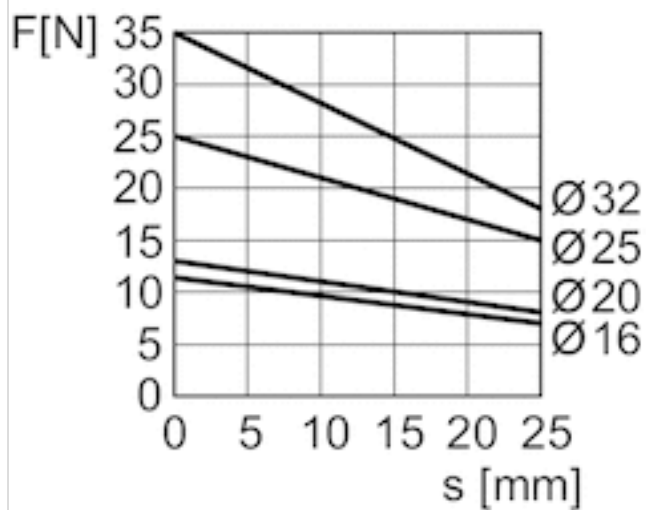
Piston Ø	A	BG min.	DA H11	DT H13	E	EE	KK	KV	KW	LA	LB	LJ	LW	MM f8	PL
16 mm	20	14.5	10	6	29.5	M5	M8x1,25	13	4	2.5	3.5	2.5	2.8	8	7.5
20 mm	22	15.5	12	7.5	36	M5	M10x1,25	16	5	2.5	4.5	4.5	3.7	10	7.5
25 mm	22	15.5	12	8	40	M5	M10x1,25	16	5	2.5	4.4	5	3.7	10	7.5
32 mm	22	18	14	8.6	50	G 1/8	M10x1,25	16	5	2.5	5.5	5.1	5*	12	8.5
40 mm	22	18	14	9	58	G 1/8	M10x1,25	16	5	2.5	5.5	9.6	5*	12	8.5

Piston Ø	A	BG min.	DA H11	DT H13	E	EE	KK	KV	KW	LA	LB	LJ	LW	MM f8	PL
50 mm	24	24	18	11	68	G 1/8	M12x1,25	18	6	2.5	2	8.5	4,8*	16	8.5
63 mm	24	24	18	11	80	G 1/8	M12x1,25	18	6	2.5	2	17.8	4,8*	16	8.5
80 mm	32	28	23	14	99	G 1/8	M16x1,5	24	8	3	1	22.9	6,4*	20	8.3
100 mm	40	27.5	28	15	120	G 1/8	M20x1,5	30	10	3	3.5	26.5	6,4*	25	9.7

Piston Ø	RT	SW	TG	WH	X1	X2	X4	ZA +S	ZB +S
16 mm	M4	7	18 ±0.4	4.5	–	–	–	38	42,5 0/+1,4
20 mm	M5	8	22 ±0.4	5	4.2	–	–	38	43 0/+1,4
25 mm	M5	8	26 ±0,4	5.5	4.5	–	–	39	44,5 0/+1,4
32 mm	M6	10*	32 ±0,5	7	6.5	–	–	44	51 0/+1,6
40 mm	M6	10*	42 ±0,5	7	11	–	–	45	52 0/+1,6
50 mm	M8	13*	50 ±0,6	7.5	13	4	13	45.5	53 0/+1,6
63 mm	M8	13*	62 ±0,7	8	18	12	21	49	57 0/+2
80 mm	M10	16*	82 ±0,7	9.5	18	16.5	25.5	54.5	64 0/+2
100 mm	M10	21*	103 ±0,7	10.5	20	20	20	66.5	77 0/+2

Diagrams

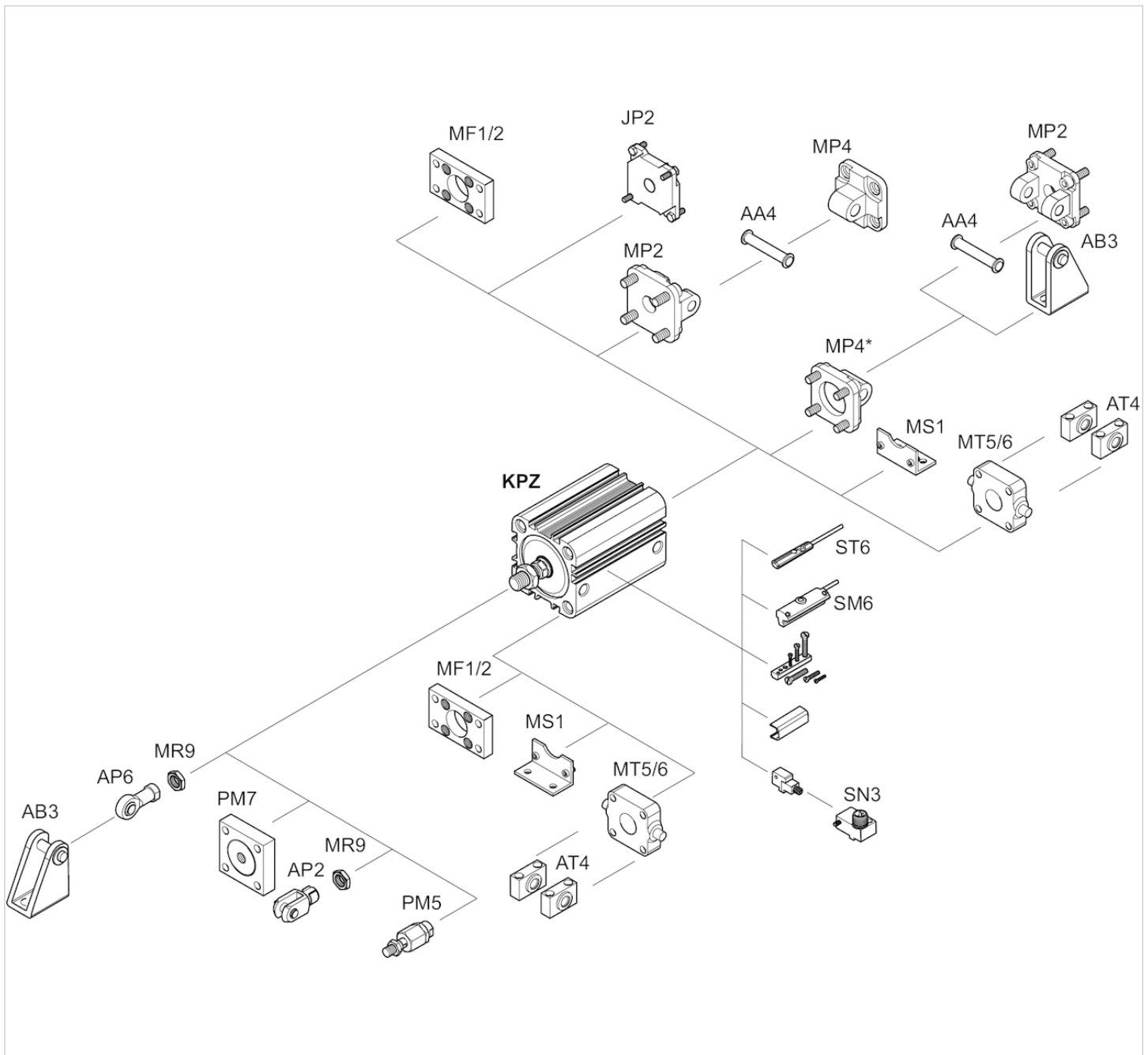
Extracting piston force



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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