

Compact cylinder, Series KPZ

- NFE 49004
- Ø 16-100 mm
- Ports M5 G 1/8
- Single-acting, retracted without pressure
- with magnetic piston
- Cushioning elastic
- Piston rod Internal thread
- Piston rod Optionally through
- 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	50 µm
Oil content of compressed air	0 ... 5 mg/m³
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	0822490000	0822491000	0822492000	0822493000	0822494000	0822495000
10	0822490001	0822491001	0822492001	0822493001	0822494001	0822495001
15	0822490002	0822491002	0822492002	0822493002	0822494002	0822495002
20	0822490003	0822491003	0822492003	0822493003	0822494003	0822495003
25	0822490004	0822491004	0822492004	0822493004	0822494004	0822495004

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	0822496000	0822497000	0822498000
10	0822496001	0822497001	0822498001
15	0822496002	0822497002	0822498002
20	0822496003	0822497003	0822498003
25	0822496004	0822497004	0822498004

Technical data

Piston Ø	16 mm	20 mm
Retracting piston force	12 N	13 N
Extracting piston force	115 N	185 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	25 N	35 N	43 N
Extracting piston force	284 N	472 N	749 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	82 N	82 N	105 N	215 N
Extracting piston force	1155 N	1882 N	3062 N	4733 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).

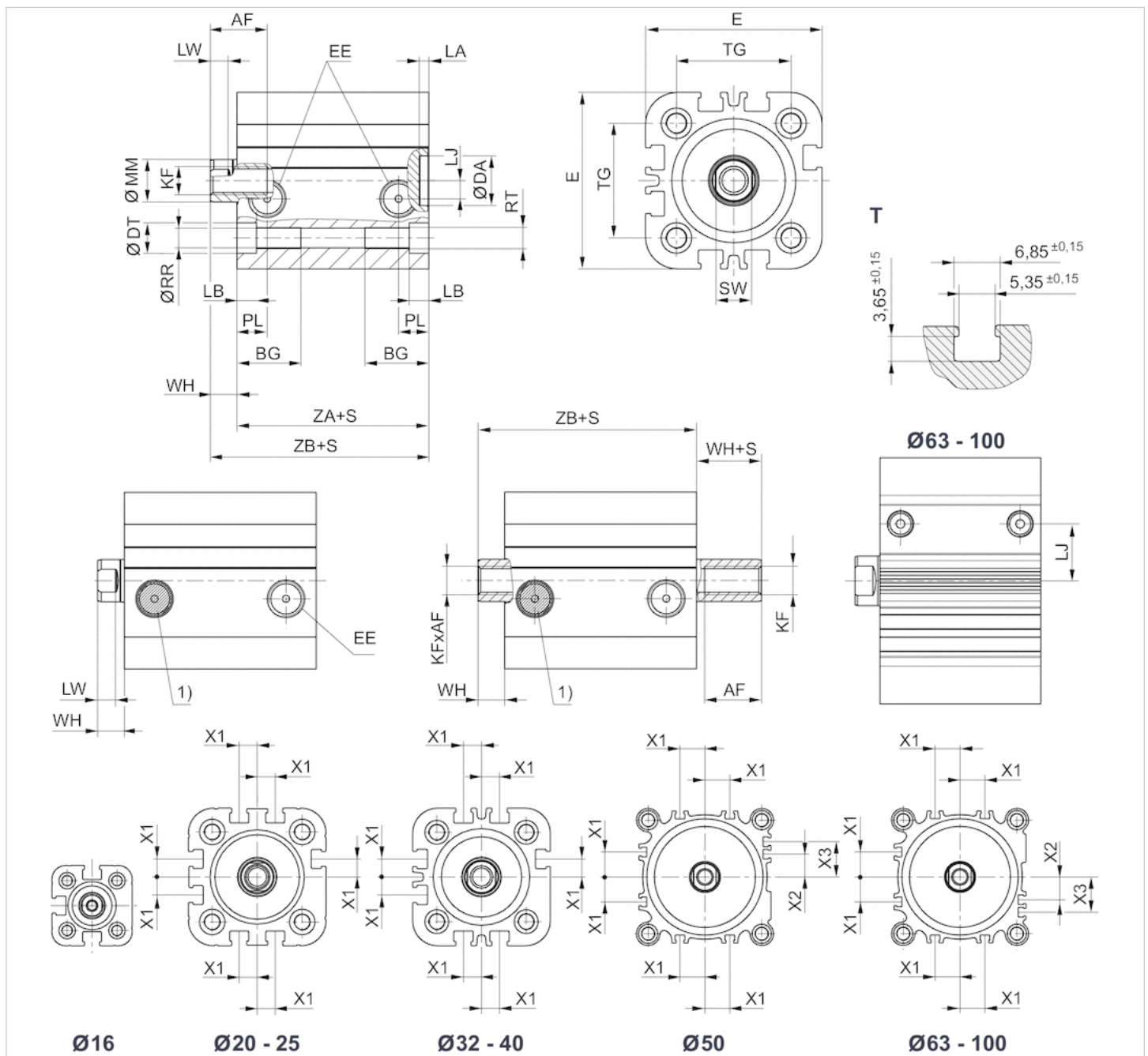
The material for heat-resistant scraper and seal variants (ambient temperature: -10 °C ... 120 °C) is fluorocautchouc. Further options can be generated in the Internet configurator.

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



S = stroke

T = View for sensor groove

1) Filter

Dimensions

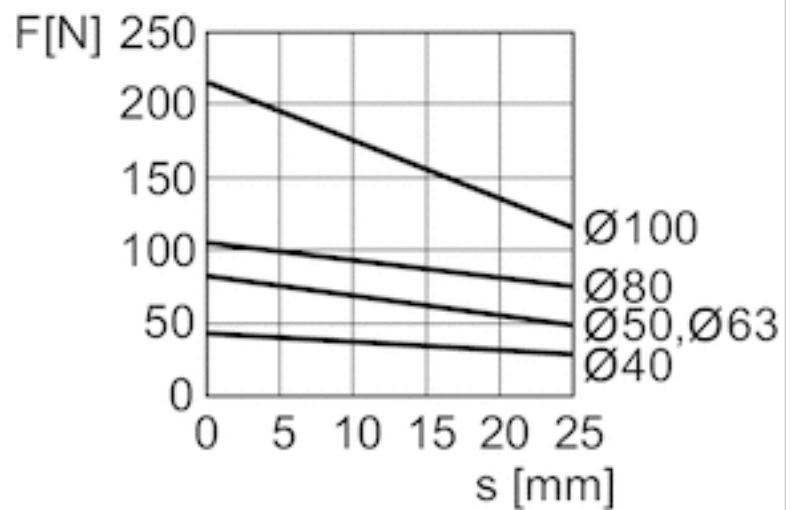
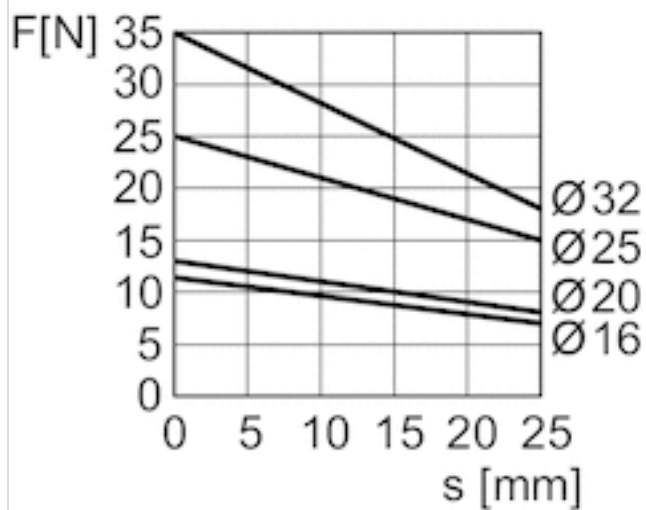
Piston Ø	AF min. Option: through piston rod	BG min.	DA H11	DT H13	E	EE	KF	LA	LB
16 mm	10	14.5	10	6	29.5	M5	M4	2.5	3.5
20 mm	12 10: S3 mm 2)	15.5	12	7.5	36	M5	M6	2.5	4.5
25 mm	12 10: S3 mm 2)	15.5	12	8	40	M5	M6	2.5	4.4
32 mm	12	18	14	8.6	50	G 1/8	M8	2.5	5.5
40 mm	12	18	14	9	58	G 1/8	M8	2.5	5.5
50 mm	16 12: S4 mm 2)	24	18	11	68	G 1/8	M10	2.5	2
63 mm	16 12: S4 mm 2)	24	18	11	80	G 1/8	M10	2.5	2
80 mm	20 15: S3 mm 2)	28	23	14	99	G 1/8	M12	3	1
100 mm	26 21: S5 mm 2)	27.5	28	15	120	G 1/8	M16	3	3.5

Piston Ø	LJ	LW	MM f8	PL	Ø RR	RT	SW	TG	WH	X1	X2	X3	ZA + Stroke
16 mm	2.5	2.8	8	7.5	3.3	M4	7	18 ±0,4	4.5	–	–	–	38
20 mm	4.5	3.7	10	7.5	4.2	M5	8	22 ±0,4	5	4.2	–	–	38
25 mm	5	3.7	10	7.5	4.2	M5	8	26 ±0,4	5.5	4.5	–	–	39
32 mm	5.1	5	12	8.5	5.1	M6	10	32 ±0,5	7	6.5	–	–	44
40 mm	9.6	5	12	8.5	5.1	M6	10	42 ±0,5	7	11	–	–	45
50 mm	8.5	5.7	16	8.5	6.7	M8	13	50 ±0,6	7.5	13	4	13	45.5
63 mm	17.8	5.7	16	8.5	6.7	M8	13	62 ±0,7	8	18	12	21	49
80 mm	22.9	7	20	8.3	8.5	M10	16	82 ±0,7	9.5	18	16.5	25.5	54.5
100 mm	26.5	7.5	25	9.7	8.5	M10	21	103 ±0,7	10.5	20	20	29	66.5

Piston Ø	ZB + Stroke
16 mm	42,5 0/+1,4
20 mm	43 0/+1,4
25 mm	44,5 0/+1,4
32 mm	51 0/+1,6
40 mm	52 0/+1,6
50 mm	53 0/+1,6
63 mm	57 0/+2
80 mm	64 0/+2
100 mm	77 0/+2

Diagrams

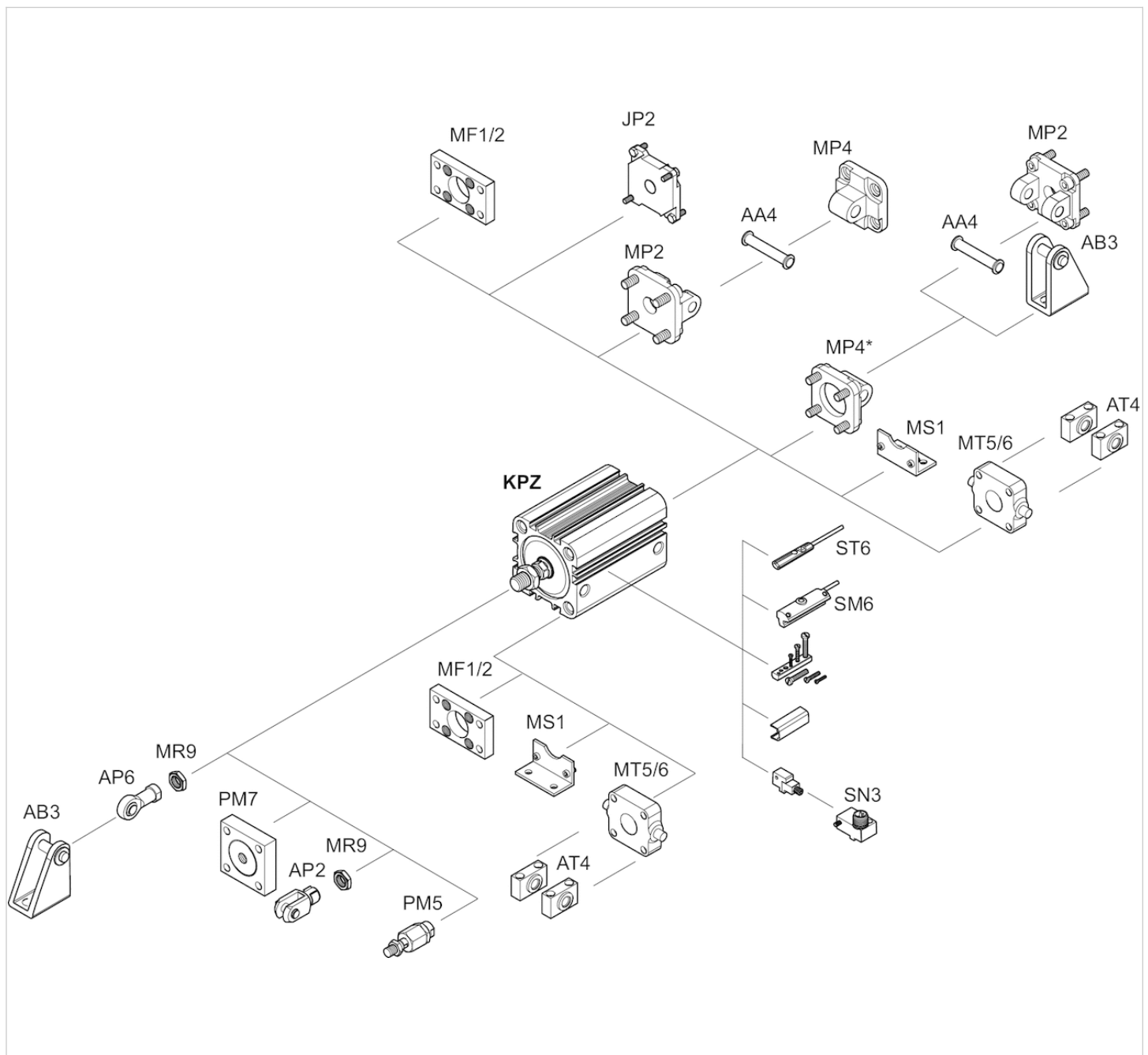
Extracting piston force



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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2020-12



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