

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 External thread
- Piston rod Optionally through (hollow)
- 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 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	0822490200	0822491200	0822492200	0822493200	0822494200	0822495200
10	0822490201	0822491201	0822492201	0822493201	0822494201	0822495201
15	0822490202	0822491202	0822492202	0822493202	0822494202	0822495202
20	0822490203	0822491203	0822492203	0822493203	0822494203	0822495203
25	0822490204	0822491204	0822492204	0822493204	0822494204	0822495204

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	0822496200	0822497200	0822498200
10	0822496201	0822497201	0822498201
15	0822496202	0822497202	0822498202
20	0822496203	0822497203	0822498203
25	0822496204	0822497204	0822498204

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	0,083 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	25 N	35 N	43 N
Extracting piston force	284 N	472 N	749 N
Impact energy	0,2 J	0,4 J	0,705 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	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	0,468 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.

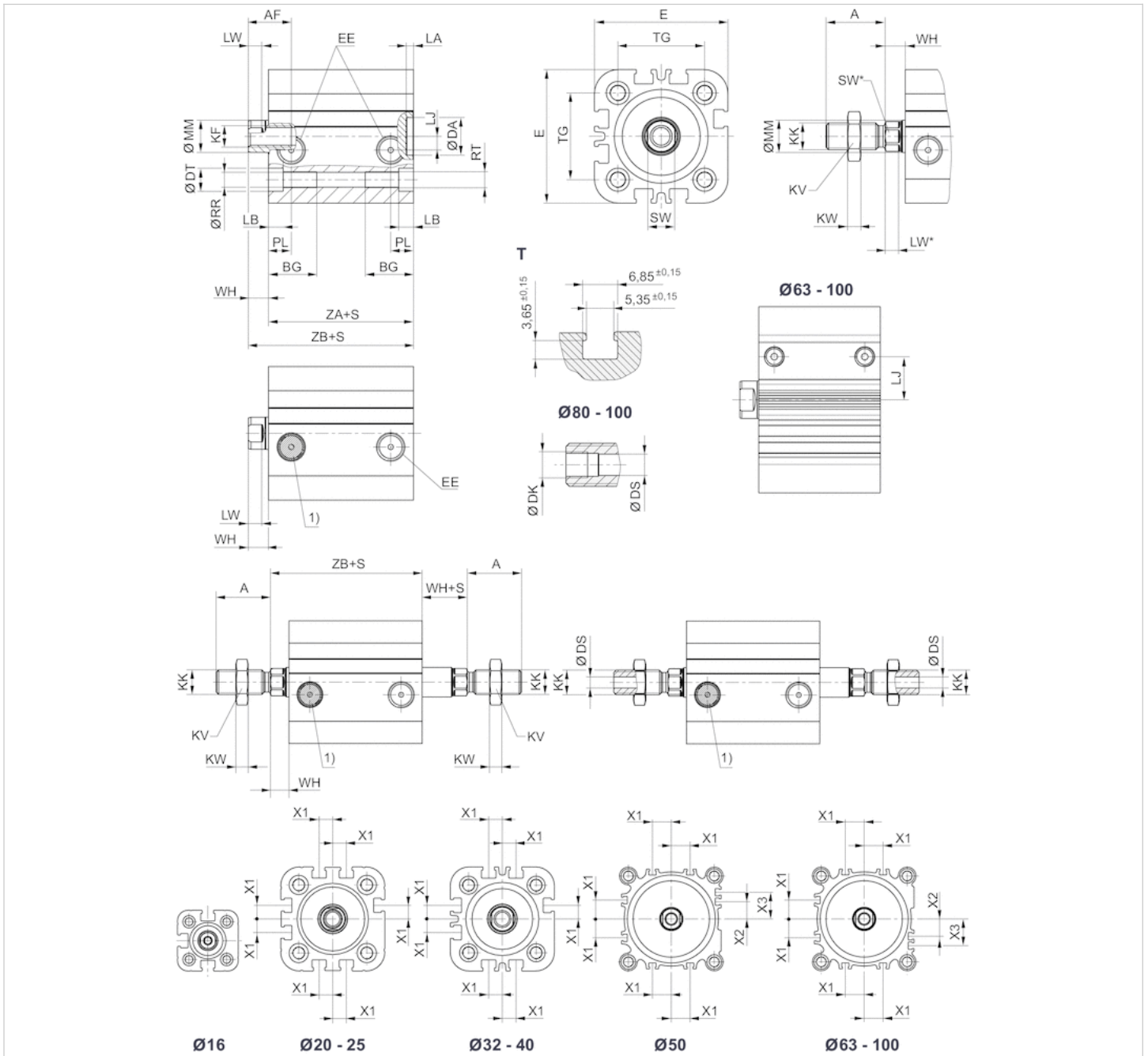
LW*/SW* Hexagonal key required

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

1) Filter

Dimensions

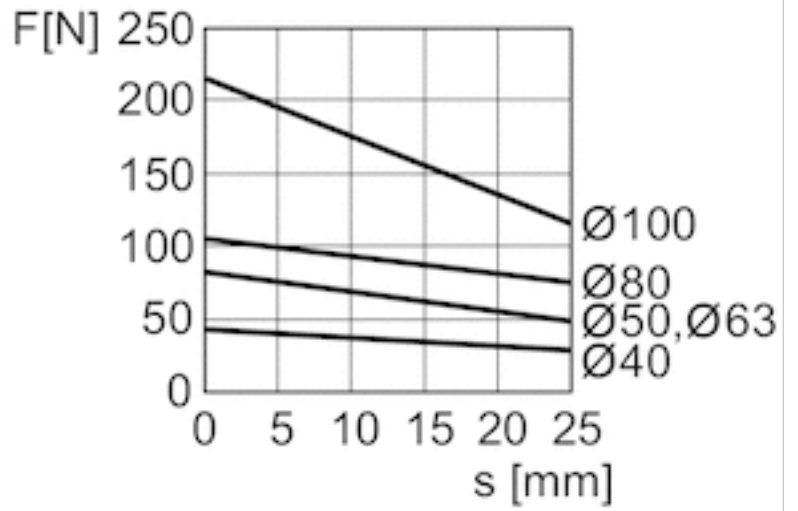
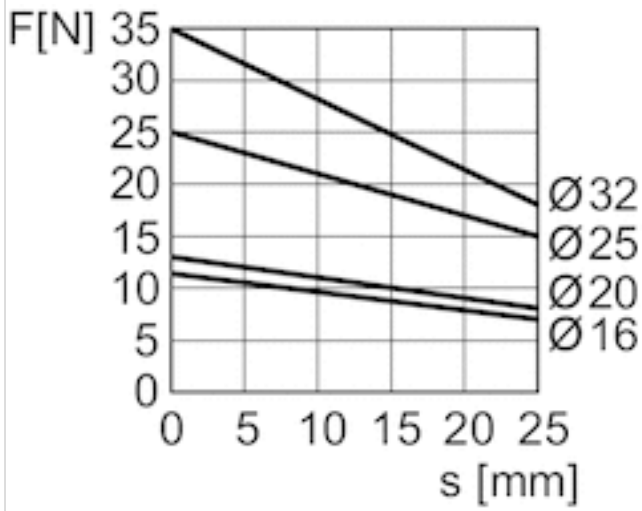
Piston Ø	A	BG min.	DA H11	Ø DK	Ø DS	DT H13	E	EE	KK	KV	KW	LA	LB	LJ
16 mm	20	14.5	10	-	-	6	29.5	M5	M8x1,25	13	4	2.5	3.5	2.5
20 mm	22	15.5	12	-	3	7.5	36	M5	M10x1,25	16	5	2.5	4.5	4.5
25 mm	22	15.5	12	-	3	8	40	M5	M10x1,25	16	5	2.5	4.4	5
32 mm	22	18	14	-	4.5	8.6	50	G 1/8	M10x1,25	16	5	2.5	5.5	5.1
40 mm	22	18	14	-	4.5	9	58	G 1/8	M10x1,25	16	5	2.5	5.5	9.6
50 mm	24	24	18	-	6	11	68	G 1/8	M12x1,25	18	6	2.5	2	8.5
63 mm	24	24	18	-	6	11	80	G 1/8	M12x1,25	18	6	2.5	2	17.8
80 mm	32	28	23	G 1/8	8	14	99	G 1/8	M16x1,5	24	8	3	1	22.9
100 mm	40	27.5	28	G 1/4	11.5	15	120	G 1/8	M20x1,5	30	10	3	3.5	26.5

Piston Ø	LW	MM f8	PL	Ø RR	RT	SW	TG	WH	X1	X2	X4	ZA + Stroke
16 mm	2.8	8	7.5	3.3	M4	7	18 ±0,4	4.5	-	-	-	38
20 mm	3.7	10	7.5	4.2	M5	8	22 ±0,4	5	4.2	-	-	38
25 mm	3.7	10	7.5	4.2	M5	8	26 ±0,4	5.5	4.5	-	-	39
32 mm	5*	12	8.5	5.1	M6	10*	32 ±0,5	7	6.5	-	-	44
40 mm	5*	12	8.5	5.1	M6	10*	42 ±0,5	7	11	-	-	45
50 mm	4,8*	16	8.5	6.7	M8	13*	50 ±0,6	7.5	13	4	13	45.5
63 mm	4,8*	16	8.5	6.7	M8	13*	62 ±0,7	8	18	12	21	49
80 mm	6,4*	20	8.3	8.5	M10	16*	82 ±0,7	9.5	18	16.5	25.5	54.5
100 mm	6,4*	25	9.7	8.5	M10	21*	103 ±0,7	10.5	20	20	20	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

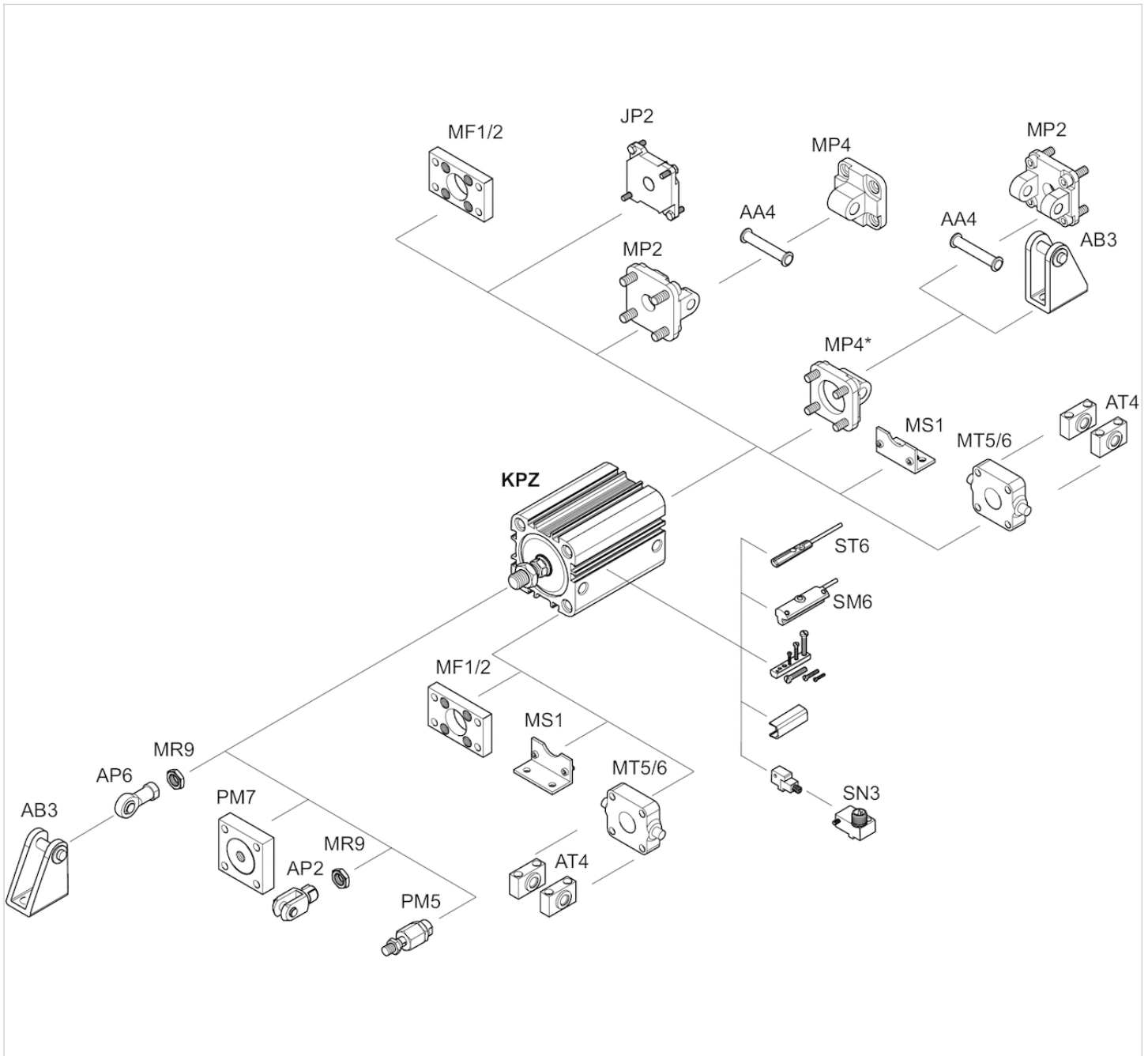
Extracting piston force



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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