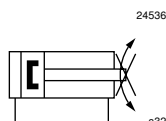


Piston rod cylinders ▶ Short-stroke and compact cylinders

Compact cylinder, Series KPZ

▶ Ports: M5 - G 1/8 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: non-rotating, with front plate, Optionally through ▶ optionally heat-resistant



Standards	NFE 49004
Compressed air connection	Internal thread
Ambient temperature min./max.	-20 °C / +80 °C
Medium temperature min./max.	-20 °C / +80 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Pressure for determining piston forces	6,3 bar

Materials:	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Front plate	Aluminum

Technical Remarks

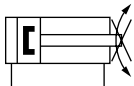
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.
- The material for heat-resistant scraper and seal variants (ambient temperature: -10 °C/120 °C) is fluorocautchouc.
- Further options can be generated in the Internet configurator.

Piston Ø	[mm]	16	20	25	32	40
Retracting piston force	[N]	95	148	260	435	720
Extracting piston force	[N]	127	198	309	507	792
Impact energy	[J]	0.15	0.2	0.3	0.5	0.7
Stroke max.	[mm]	300	300	300	300	300
Working pressure min./max.	[bar]	1 - 10	1 - 10	1 - 10	0.6 - 10	0.6 - 10
Scraper material		Polyurethane	Polyurethane	Polyurethane	Polyurethane	Polyurethane
Sealing material		Nitrile butadiene rubber	Nitrile butadiene rubber	Nitrile butadiene rubber	Polyurethane	Polyurethane

Piston Ø	[mm]	50	63	80	100	
Retracting piston force	[N]	1110	1837	2969	4639	
Extracting piston force	[N]	1237	1964	3167	4948	
Impact energy	[J]	1	1.3	1.8	2.5	
Stroke max.	[mm]	300	300	300	300	
Working pressure min./max.	[bar]	0.6 - 10	0.6 - 10	0.6 - 10	0.6 - 10	
Scraper material		Polyurethane	Polyurethane	Polyurethane	Polyurethane	
Sealing material		Polyurethane	Polyurethane	Polyurethane	Polyurethane	

Compact cylinder, Series KPZ

▶ Ports: M5 - G 1/8 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: non-rotating, with front plate, Optionally through ▶ optionally heat-resistant

	Piston Ø Ports	16 M5	20 M5	25 M5	32 G 1/8	40 G 1/8
	Stroke 5	0822390600	0822391600	0822392600	0822393600	0822394600
	10	0822390601	0822391601	0822392601	0822393601	0822394601
	15	0822390602	0822391602	0822392602	0822393602	0822394602
	20	0822390603	0822391603	0822392603	0822393603	0822394603
	25	0822390604	0822391604	0822392604	0822393604	0822394604
	30	0822390605	0822391605	0822392605	0822393605	0822394605
	40	0822390606	0822391606	0822392606	0822393606	0822394606
	50	0822390607	0822391607	0822392607	0822393607	0822394607
	60	0822390608	0822391608	0822392608	0822393608	0822394608
	80	-	-	-	0822393609	0822394609
	100	-	-	-	0822393610	0822394610
	Piston Ø Ports	50 G 1/8	63 G 1/8	80 G 1/8	100 G 1/8	
	Stroke 5	0822395600	0822396600	0822397600	0822398600	
	10	0822395601	0822396601	0822397601	0822398601	
	15	0822395602	0822396602	0822397602	0822398602	
	20	0822395603	0822396603	0822397603	0822398603	
	25	0822395604	0822396604	0822397604	0822398604	
	30	0822395605	0822396605	0822397605	0822398605	
	40	0822395606	0822396606	0822397606	0822398606	
	50	0822395607	0822396607	0822397607	0822398607	
	60	0822395608	0822396608	0822397608	0822398608	
	80	0822395609	0822396609	0822397609	0822398609	
	100	0822395610	0822396610	0822397610	0822398610	

Configurable product

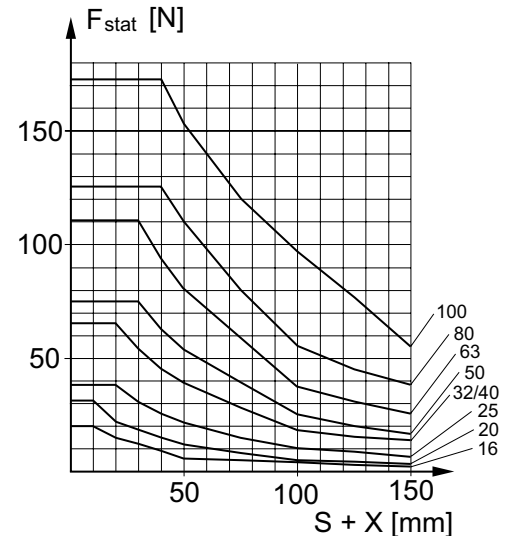
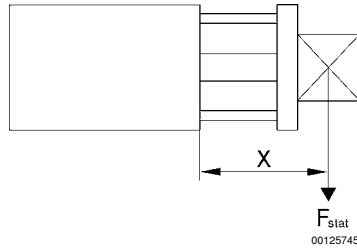

This product is configurable. Please use our Internet configurator at <http://www.aventics.com> or contact the nearest AVENTICS sales office.

Piston rod cylinders ▶ Short-stroke and compact cylinders

Compact cylinder, Series KPZ

▶ Ports: M5 - G 1/8 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: non-rotating, with front plate, Optionally through ▶ optionally heat-resistant

Maximum permissible lateral force, Static

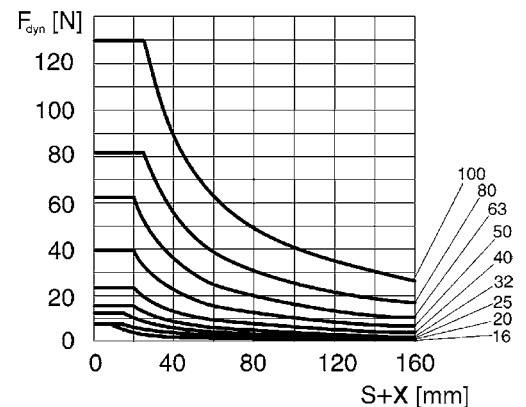
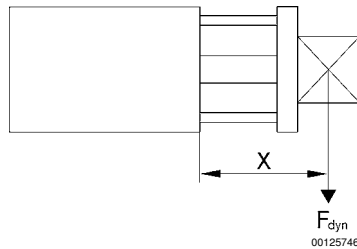


F_{stat} = static lateral force

X = spacing between force application point and cylinder cover

S = stroke

Maximum permissible lateral force, Dynamic



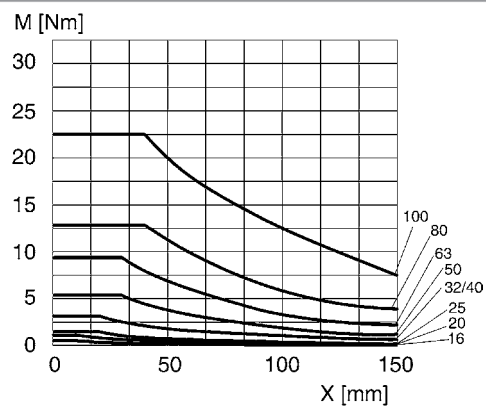
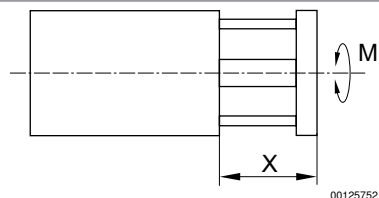
F_{dyn} = dynamic lateral force

X = spacing between force application point and cylinder cover

S = stroke

Compact cylinder, Series KPZ

▶ Ports: M5 - G 1/8 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: non-rotating, with front plate, Optionally through ▶ optionally heat-resistant

Max. permissible torque


M = max. permissible torque

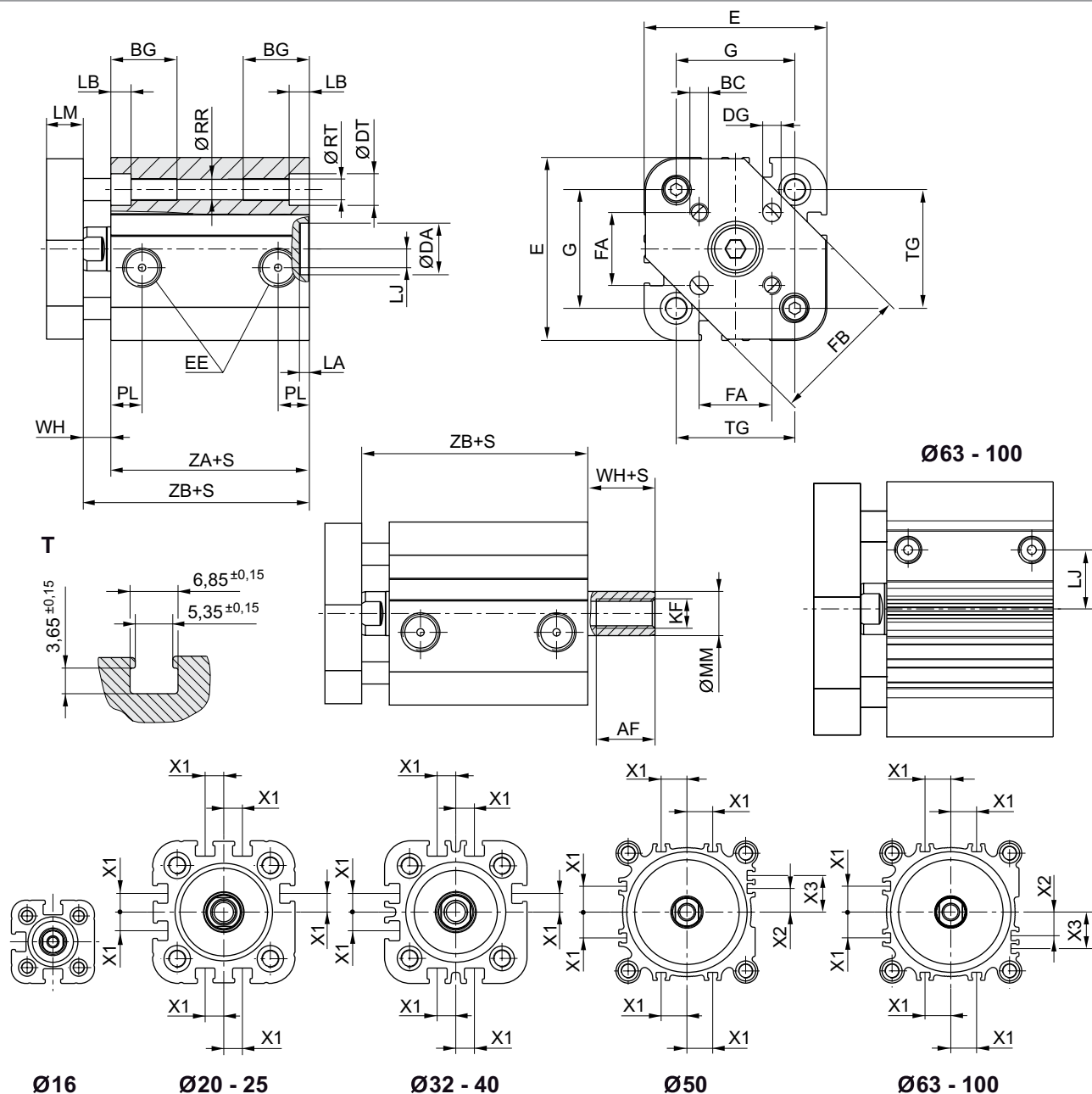
X = spacing between force application point and cylinder cover

Piston rod cylinders ▶ Short-stroke and compact cylinders

Compact cylinder, Series KPZ

▶ Ports: M5 - G 1/8 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: non-rotating, with front plate, Optionally through ▶ optionally heat-resistant

Dimensions



S = stroke

T = View for sensor groove without guide plate

24277

Piston Ø	AF 1)	BC	BG 1)	DA H11	DG H13	DT H13	E	EE	FA ±0,1	FB	G	KF
16	10	M3	14.5	10	3	6	29.5	M5	9.9	20	19	M4
20	12	M4	15.5	12	4	7.5	36	M5	12	24	25	M6
	10: S<3 mm 2)											
25	12	M5	15.5	12	5	8	40	M5	15.6	30	27	M6
	10: S<3 mm 2)											

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

Pneumatics catalog, online PDF, as of 2017-05-04, ©AVENTICS S.à r.l., subject to change

Compact cylinder, Series KPZ

► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► Cushioning: elastic ► Piston rod: non-rotating, with front plate, Optionally through ► optionally heat-resistant

Piston Ø	AF 1)	BC	BG 1)	DA H11	DG H13	DT H13	E	EE	FA ±0,1	FB	G	KF
32	12	M5	18	14	5	8.6	50	G 1/8	19.8	38	32	M8
40	12	M5	18	14	5	9	58	G 1/8	23.3	44	42	M8
50	16 12: S<4 mm 2)	M6	24	18	6	11	68	G 1/8	29.7	54	50	M10
63	16 12: S<4 mm 2)	M6	24	18	6	11	80	G 1/8	35.4	62	62	M10
80	20 15: S<3 mm 2)	M8	28	23	8	14	99	G 1/8	46	80	82	M12
100	26 21: S<5 mm 2)	M10	27.5	28	10	15	120	G 1/8	56.6	100	103	M16

Piston Ø	LA	LB	LJ	LM	MM f8	PL	Ø RR	RT	TG	WH	X1	X2	X3
16	2.5	3.5	2.5	6	8	7.5	3.3	M4	18 ±0,4	4.5	–	–	–
20	2.5	4.5	4.5	8	10	7.5	4.2	M5	22 ±0,4	5	4.2	–	–
25	2.5	4.4	5	8	10	7.5	4.2	M5	26 ±0,4	5.5	4.5	–	–
32	2.5	5.5	5.1	10	12	8.5	5.1	M6	32 ±0,5	7	6.5	–	–
40	2.5	5.5	9.6	10	12	8.5	5.1	M6	42 ±0,5	7	11	–	–
50	2.5	2	8.5	12	16	8.5	6.7	M8	50 ±0,6	7.5	13	4	13
63	2.5	2	17.8	12	16	8.5	6.7	M8	62 ±0,7	8	18	12	21
80	3	1	22.9	14	20	8.3	8.5	M10	82 ±0,7	9.5	18	16.5	25.5
100	3	3.5	26.5	14	25	9.7	8.5	M10	103 ±0,7	10.5	20	20	29

Piston Ø	ZA +S	ZB +S											
16	38	42,5 0/+1,4											
20	38	43 0/+1,4											
25	39	44,5 0/+1,4											
32	44	51 0/+1,6											
40	45	52 0/+1,6											
50	45.5	53 0/+1,6											
63	49	57 0/+2											
80	54.5	64 0/+2											
100	66.5	77 0/+2											

1) Min.

2) Option: through piston rod

S = stroke