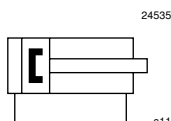


Piston rod cylinders ▶ Short-stroke and compact cylinders

Compact cylinder, Series KPZ

▶ Ports: M5 - G 1/8 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: external thread, Optionally through (hollow) ▶ ATEX optional ▶ optionally heat-resistant



Standards	NFE 49004
Compressed air connection	Internal thread
Ambient temperature min./max.	-4 °F / +176 °F
Medium temperature min./max.	-4 °F / +176 °F
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Pressure for determining piston forces	91.35 psi

Materials:	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Nut for piston rod	Steel, galvanized

Technical Remarks

- The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 37 °F.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.
- ATEX-certified cylinders can be generated in the Internet configurator.
- ATEX ID: II 2G c IIB T4 II 2D c IP65 T125°C X
- The operating temperature range for ATEX-certified cylinders is - 68 °F ... 122 °F.
- The material for heat-resistant scraper and seal variants (ambient temperature: - 50 °F/248 °F) is fluorocarbon.
- Further options can be generated in the Internet configurator.

Piston Ø	[mm]	16	20	25	32	40
Retracting piston force	[lbf]	21.36	33.27	58.45	97.79	161.86
Extracting piston force	[lbf]	28.55	44.51	69.46	113.97	178.04
Impact energy	[in.lbs.]	0.1106	0.1475	0.2212	0.3687	0.5162
Stroke max.	[inch]	11.81	11.81	11.81	11.81	11.81
Working pressure min./max.	[psi]	15 - 145	15 - 145	15 - 145	9 - 145	9 - 145
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	[lbf]	249.53	412.96	667.43	1042.85
Extracting piston force	[lbf]	278.08	441.51	711.94	1112.31
Impact energy	[in.lbs.]	0.7375	0.9588	1.33	1.84
Stroke max.	[inch]	11.81	11.81	19.68	19.68
Working pressure min./max.	[psi]	9 - 145	9 - 145	9 - 145	9 - 145
Scraper material		Polyurethane	Polyurethane	Polyurethane	Polyurethane
Sealing material		Polyurethane	Polyurethane	Polyurethane	Polyurethane

All dimensions in mm, unless specified otherwise.

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

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Compact cylinder, Series KPZ

▶ Ports: M5 - G 1/8 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: external thread, Optionally through (hollow) ▶ ATEX optional ▶ optionally heat-resistant

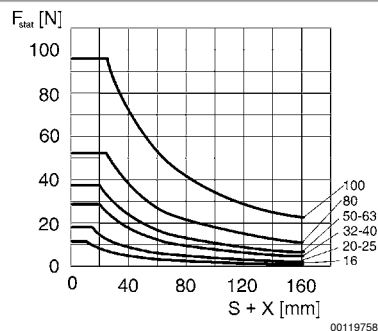
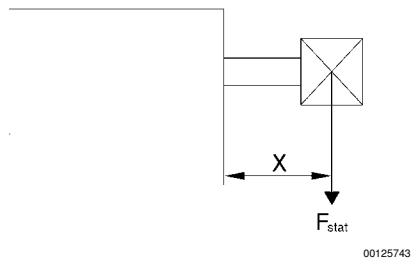
	Piston Ø Piston rod thread Ports	16 M8 M5	20 M10x1,25 M5	25 M10x1,25 M5	32 M10x1,25 G 1/8	40 M10x1,25 G 1/8
	Stroke 0.2	0822390200	0822391200	0822392200	0822393200	0822394200
	0.39	0822390201	0822391201	0822392201	0822393201	0822394201
	0.59	0822390202	0822391202	0822392202	0822393202	0822394202
	0.79	0822390203	0822391203	0822392203	0822393203	0822394203
	0.98	0822390204	0822391204	0822392204	0822393204	0822394204
	1.18	0822390205	0822391205	0822392205	0822393205	0822394205
	1.57	0822390206	0822391206	0822392206	0822393206	0822394206
	1.97	0822390207	0822391207	0822392207	0822393207	0822394207
	2.36	0822390208	0822391208	0822392208	0822393208	0822394208
	3.15	-	-	-	0822393209	0822394209
	3.94	-	-	-	0822393210	0822394210
	Piston Ø Piston rod thread Ports	50 M12x1,25 G 1/8	63 M12x1,25 G 1/8	80 M16x1,5 G 1/8	100 M20x1,5 G 1/8	
	Stroke 0.2	0822395200	0822396200	0822397200	0822398200	
	0.39	0822395201	0822396201	0822397201	0822398201	
	0.59	0822395202	0822396202	0822397202	0822398202	
	0.79	0822395203	0822396203	0822397203	0822398203	
	0.98	0822395204	0822396204	0822397204	0822398204	
	1.18	0822395205	0822396205	0822397205	0822398205	
	1.57	0822395206	0822396206	0822397206	0822398206	
	1.97	0822395207	0822396207	0822397207	0822398207	
	2.36	0822395208	0822396208	0822397208	0822398208	
	3.15	0822395209	0822396209	0822397209	0822398209	
	3.94	0822395210	0822396210	0822397210	0822398210	

Configurable product



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

Maximum permissible lateral force, Static



F stat. = static lateral force

X = spacing between force application point and cylinder cover

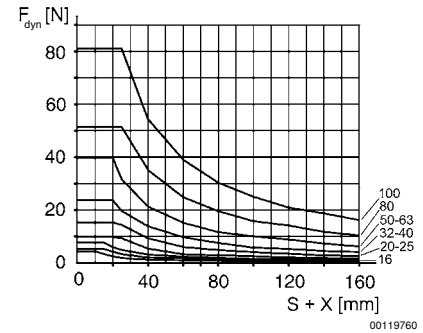
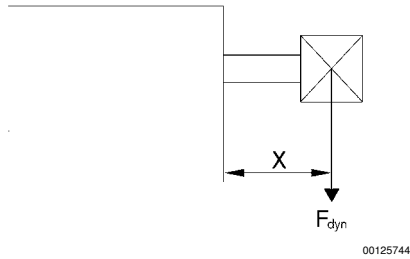
S = stroke

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: external thread, Optionally through (hollow) ▶ ATEX optional ▶ optionally heat-resistant

Maximum permissible lateral force, Dynamic



F_{dyn} = dynamic lateral force

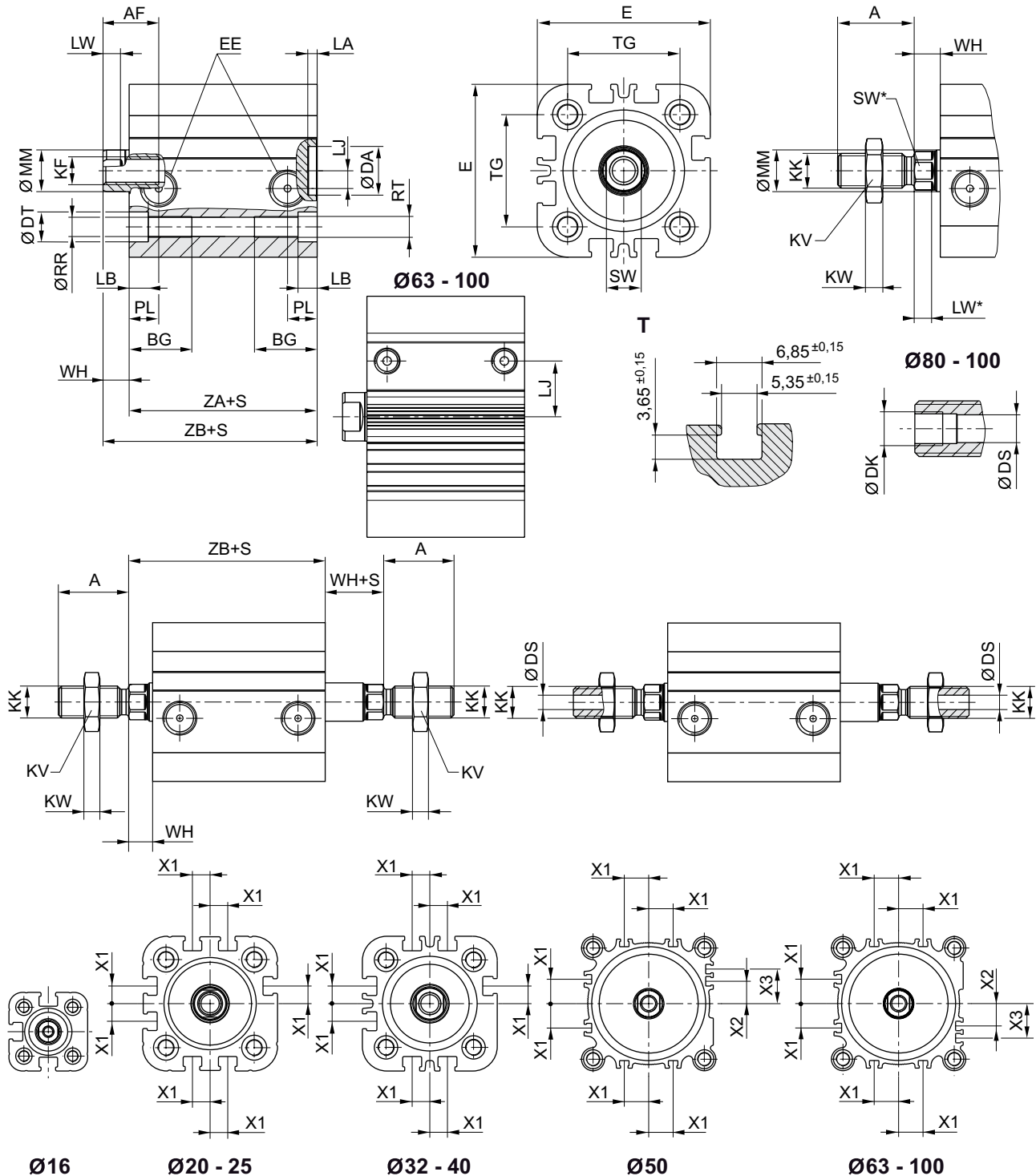
X = spacing between force application point and cylinder cover

S = stroke

Compact cylinder, Series KPZ

▶ Ports: M5 - G 1/8 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: external thread, Optionally through (hollow) ▶ ATEX optional ▶ optionally heat-resistant

Dimensions



S = stroke
T = View for sensor groove

24276

All dimensions in mm, unless specified otherwise.

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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: external thread, Optionally through (hollow) ▶ ATEX optional ▶ optionally heat-resistant

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

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

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

1) Min.

S = stroke

* Hexagonal wrench flats