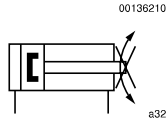


## Piston rod cylinders ▶ Short-stroke and compact cylinders

### Short-stroke cylinder, Series KHZ

▶ Ports: M5 - G 1/4 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: Internal thread, non-rotating



Compressed air connection

Internal thread

Ambient temperature min./max.

-25 °C / +80 °C

Medium temperature min./max.

-25 °C / +80 °C

Medium

Compressed air

Max. particle size

50 μm

Oil content of compressed air

0 mg/m<sup>3</sup> - 5 mg/m<sup>3</sup>

Pressure for determining piston forces

6,3 bar

Materials:

Cylinder tube

Aluminum, anodized

Piston rod

Stainless steel

Piston

Nitrile rubber

End cover

Aluminum

Scraper

Polyurethane

#### 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“.

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]	0.06	0.08	0.1	0.16	0.24
Weight	0 mm stroke	[kg]	0.084	0.092	0.178	0.195	0.285
	+10 mm stroke	[kg]	0.018	0.024	0.034	0.05	0.06
Working pressure min./max.		[bar]	1 - 10	1 - 10	1 - 10	0.6 - 10	0.6 - 10
Material, front cover			Brass	Brass	Brass	Aluminum	Aluminum

Piston Ø		[mm]	50	63	80	100
Retracting piston force		[N]	1110	1766	2857	4639
Extracting piston force		[N]	1237	1964	3167	4948
Impact energy		[J]	0.32	0.38	0.38	0.5
Weight	0 mm stroke	[kg]	0.388	0.636	1.222	2.385
	+10 mm stroke	[kg]	0.086	0.114	0.167	0.242
Working pressure min./max.		[bar]	0.6 - 10	0.6 - 10	0.6 - 10	0.6 - 10
Material, front cover			Aluminum	Aluminum	Aluminum	Aluminum

Piston rod cylinders ▶ Short-stroke and compact cylinders

**Short-stroke cylinder, Series KHZ**

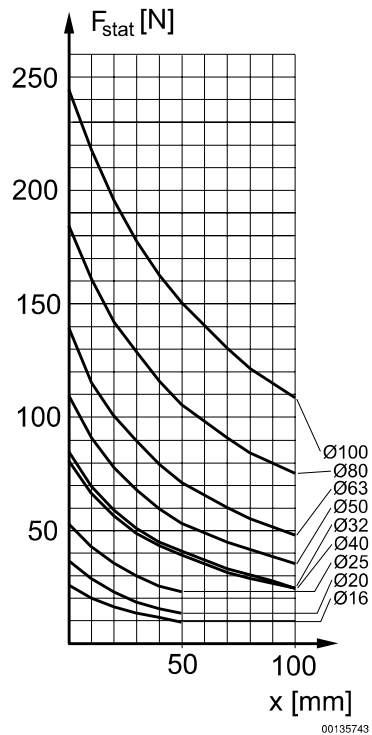
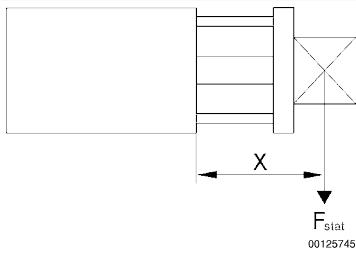
▶ Ports: M5 - G 1/4 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: Internal thread, non-rotating

Piston Ø Ports	16	20	25	32	40
	M5	M5	G 1/8	G 1/8	G 1/8
Stroke 10	0822010811	0822010821	0822010831	0822010841	0822010851
15	0822010812	0822010822	0822010832	0822010842	0822010852
20	0822010813	0822010823	0822010833	0822010843	0822010853
25	0822010814	0822010824	0822010834	0822010844	0822010854
30	0822010815	0822010825	0822010835	0822010845	0822010855
40	0822010816	0822010826	0822010836	0822010846	0822010856
50	0822010817	0822010827	0822010837	0822010847	0822010857
80	-	-	-	0822010848	0822010858
100	-	-	-	0822010849	0822010859
Piston Ø Ports	50	63	80	100	
	G 1/8	G 1/8	G 1/4	G 1/4	
Stroke 10	0822010861	0822010871	0822010881	0822010891	
15	0822010862	0822010872	-	-	
20	0822010863	0822010873	-	-	
25	0822010864	0822010874	0822010884	0822010894	
30	0822010865	0822010875	-	-	
40	0822010866	0822010876	-	-	
50	0822010867	0822010877	0822010887	0822010897	
80	0822010868	0822010878	0822010888	0822010898	
100	0822010869	0822010879	0822010889	0822010899	



Other versions can be ordered from AVENTICS sales offices.

Maximum permissible lateral force, Static



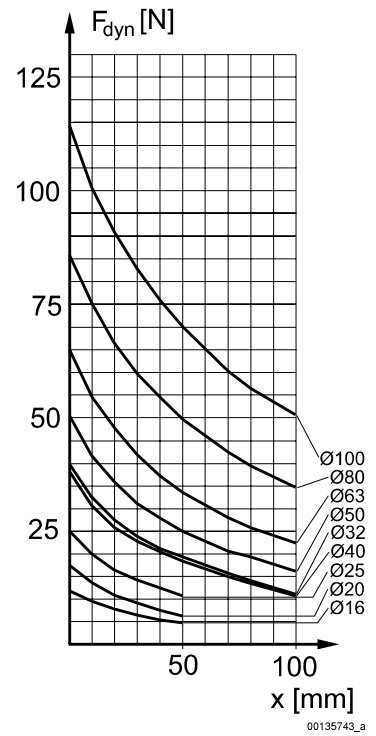
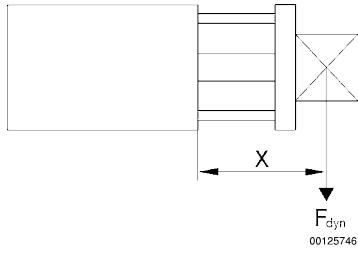
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Piston rod cylinders ▶ Short-stroke and compact cylinders

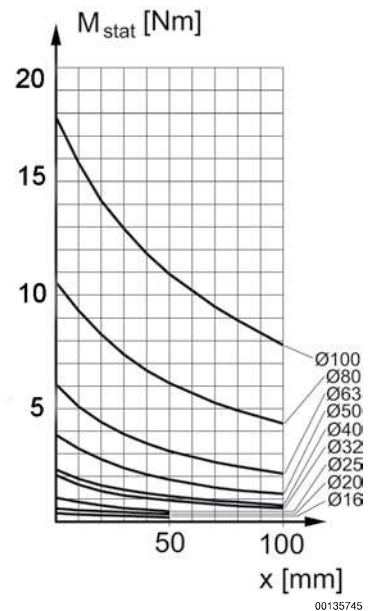
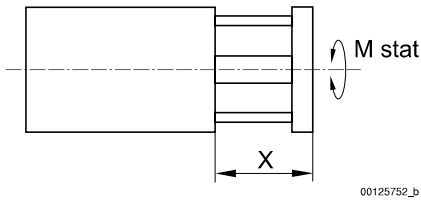
**Short-stroke cylinder, Series KHZ**

▶ Ports: M5 - G 1/4 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: Internal thread, non-rotating

Maximum permissible lateral force, Dynamic

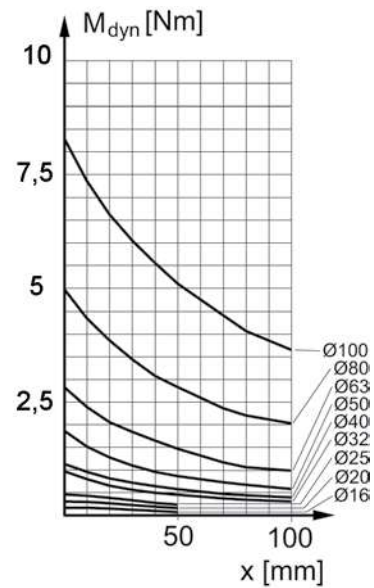
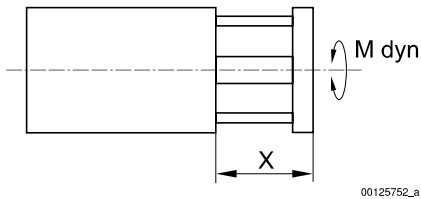
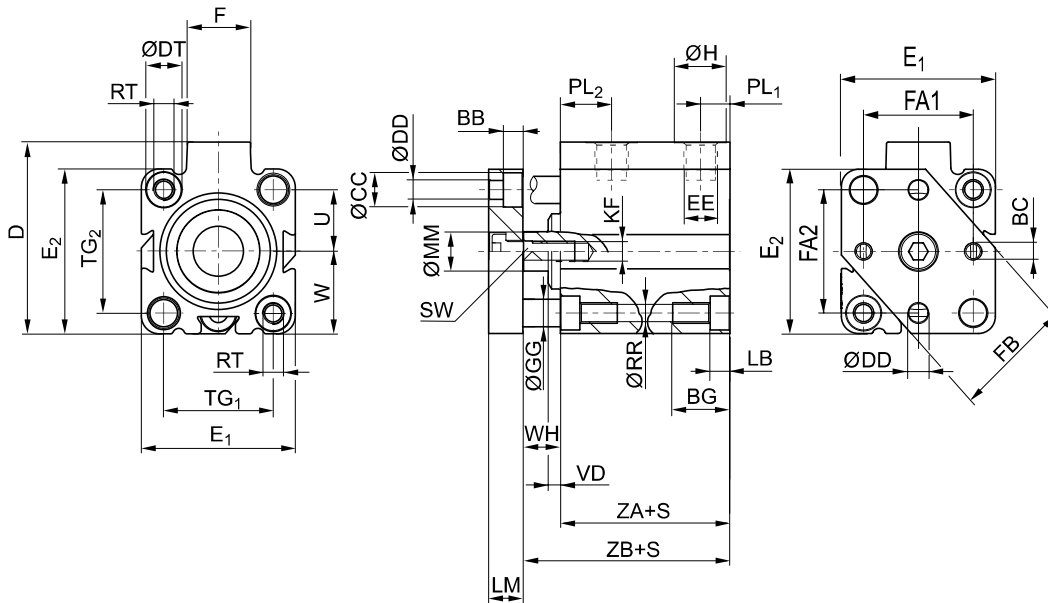


Max. permissible torque, Static



**Short-stroke cylinder, Series KHZ**

▶ Ports: M5 - G 1/4 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: Internal thread, non-rotating

**Max. permissible torque, Dynamic****Dimensions**

Piston Ø	S	BB	BC	BG 1)	ØCC	D JS15	ØDD	ØDT H13	E1 JS15	E2 JS15	EE	F	FB
16	10	3.5	M3	12.4	6	33	3.5	6	28	28	M5	11.5	20
16	15 - 50	3.5	M3	17.5	6	33	3.5	6	28	28	M5	11.5	20
20	10	5	M4	13.6	7.5	37	4.5	7.5	32	32	M5	11	25
20	15 - 50	5	M4	13.6	7.5	37	4.5	7.5	32	32	M5	11	25
25	10 - 50	5	M4	13.6	8	47.5	4.5	8	37	39	G 1/8	17.5	30
32	10 - 100	5.7	M5	16.7	10	56	5.5	10	45	48	G 1/8	18.5	35

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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**Piston rod cylinders ▶ Short-stroke and compact cylinders**
**Short-stroke cylinder, Series KHZ**

▶ Ports: M5 - G 1/4 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: Internal thread, non-rotating

Piston Ø	S	BB	BC	BG 1)	ØCC	D JS15	ØDD	ØDT H13	E1 JS15	E2 JS15	EE	F	FB
40	10 - 100	5.7	M5	16.7	10	62.5	5.5	10	54.5	54.5	G 1/8	18.5	40
50	10 - 100	6.8	M6	19.8	11	73	6.5	11	66	66	G 1/8	18	50
63	10 - 100	9	M6	25	14	88	9	15	80	80	G 1/8	23	60
80	10/25/50 /80/100	9	M8	25	14	110	9	15	100	100	G 1/4	27	75
100	10/25/50 /80/100	9	M8	30	14	132	9	17.5	124	124	G 1/4	28	90

Piston Ø	ØGG -0,005/ -0,025	ØH	KF	LB +0,4	LM	ØMM f8	PL1	PL2	ØRR	RT	SW -0,3	TG1
16	4	8	M 5	3,4	6	8	6,5	11,3	3,3	M4	7	20 ±0,2
16	4	8	M 5	8,5	6	8	6,5	11,3	3,3	M4	7	20 ±0,2
20	5	8	M 5	4,6	8	10	6,5	10	4,2	M5	8	22 ±0,2
20	5	8	M 5	4,6	8	10	6,5	10	4,2	M5	8	22 ±0,2
25	6	15	M 5	4,6	8	10	9,5	11,5	4,2	M5	8	26 ±0,25
32	8	15	M 6	5,7	10	12	8,5	15	5,05	M6	10	32 ±0,25
40	8	15	M 6	5,7	10	12	10	13,5	5,05	M6	10	40 ±0,25
50	10	15	M 8	6,8	12	16	10	14	6,8	M8	13	50 ±0,25
63	12	15	M 8	9	12	16	11,5	14	8,5	M10	13	62 ±0,25
80	12	19	M 10	9	15	20	12	15,5	8,5	M10	17	82 ±0,3
100	14	19	M 12	11	15	25	12	18,5	10,2	M12	22	103 ±0,3

Piston Ø	TG2	U	VD -1	W	WH	FA1 ±0,1	FA2 ±0,1	ZA ±0,2	ZB ±0,8			
16	20 ±0,2	10	-	14 ±0,2	4,5	20	20	32	36,5			
16	20 ±0,2	10	-	14 ±0,2	4,5	20	20	38	42,5			
20	22 ±0,2	11	-	16 ±0,2	4,5	22	22	32	36,5			
20	22 ±0,2	11	-	16 ±0,2	4,5	22	22	38	42,5			
25	28 ±0,25	14	3,5	19,5 ±0,2	9,5	26	28	39	48,5			
32	36 ±0,25	18	3,5	24 ±0,2	11	32	36	39,5	50,5			
40	40 ±0,25	20	4,5	27,3 ±0,2	13,5	40	40	39,5	53			
50	50 ±0,25	25	6	33 ±0,2	13,5	50	50	39,5	53			
63	62 ±0,25	31	6,5	40 ±0,2	15,5	62	62	42	57,5			
80	82 ±0,3	41	8,5	50 ±0,3	18	82	82	46	64			
100	103 ±0,3	51,5	7	62 ±0,3	20	103	103	56	76			