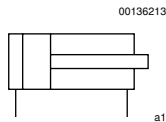


## Piston rod cylinder ▶ Short-stroke and compact cylinders

### Series KHZ

▶ Ø 12 - 100 mm ▶ Ports: M5 - G 1/4 ▶ double-acting ▶ cushioning: elastic



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/m³ - 5 mg/m³
Pressure for determining piston forces	6,3 bar

<b>Materials:</b>	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Piston	Nitrile rubber
Front cover	Aluminum
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“.

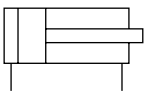
Piston Ø		[mm]	12	16	20	25	32
Retracting piston force		[N]	53	95	148	260	435
Extracting piston force		[N]	71	127	198	309	507
Impact energy		[J]	0.03	0.06	0.08	0.1	0.16
Weight	0 mm stroke	[kg]	0.036	0.063	0.082	0.164	0.195
	+10 mm stroke	[kg]	0.048	0.083	0.108	0.198	0.249
Working pressure min./max.		[bar]	1 - 10	1 - 10	1 - 10	1 - 10	0.6 - 10
Material, front cover			Brass	Brass	Brass	Brass	Aluminum

Piston Ø		[mm]	40	50	63	80	100
Retracting piston force		[N]	720	1110	1837	2857	4639
Extracting piston force		[N]	792	1237	1964	3167	4948
Impact energy		[J]	0.24	0.32	0.38	0.38	0.5
Weight	0 mm stroke	[kg]	0.285	0.388	0.636	1.222	2.385
	+10 mm stroke	[kg]	0.337	0.458	0.726	1.442	2.631
Working pressure min./max.		[bar]	0.6 - 10	0.6 - 10	0.6 - 10	0.6 - 10	0.6 - 10
Material, front cover			Aluminum	Aluminum	Aluminum	Aluminum	Aluminum

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

### Series KHZ

▶ Ø 12 - 100 mm ▶ Ports: M5 - G 1/4 ▶ double-acting ▶ cushioning: elastic

	Piston Ø Piston rod thread Ports Piston rod thread - type	12	16	20	25	32	
		M5 external thread	M5 internal thread	M5 internal thread	M5 G 1/8 internal thread	M6 G 1/8 internal thread	
	Stroke 5	<b>0822010500</b>	<b>0822010510</b>	<b>0822010520</b>	<b>0822010530</b>	<b>0822010540</b>	
	10	<b>0822010501</b>	<b>0822010511</b>	<b>0822010521</b>	<b>0822010531</b>	<b>0822010541</b>	
	15	<b>0822010502</b>	<b>0822010512</b>	<b>0822010522</b>	<b>0822010532</b>	<b>0822010542</b>	
	20	<b>0822010503</b>	<b>0822010513</b>	<b>0822010523</b>	<b>0822010533</b>	<b>0822010543</b>	
	25	<b>0822010504</b>	<b>0822010514</b>	<b>0822010524</b>	<b>0822010534</b>	<b>0822010544</b>	
	30	<b>0822010505</b>	<b>0822010515</b>	<b>0822010525</b>	<b>0822010535</b>	<b>0822010545</b>	
	40	<b>0822010506</b>	<b>0822010516</b>	<b>0822010526</b>	<b>0822010536</b>	<b>0822010546</b>	
	50	-	-	<b>0822010527</b>	<b>0822010537</b>	<b>0822010547</b>	
		Piston Ø Piston rod thread Ports Piston rod thread - type	40 M6 G 1/8 internal thread	50 M8 G 1/8 internal thread	63 M8 G 1/8 internal thread	80 M10 G 1/4 internal thread	100 M12 G 1/4 internal thread
	Stroke 5	<b>0822010550</b>	-	<b>0822010570</b>	-	-	
	10	<b>0822010551</b>	<b>0822010561</b>	<b>0822010571</b>	R402005784	-	
	15	<b>0822010552</b>	<b>0822010562</b>	<b>0822010572</b>	-	-	
	20	<b>0822010553</b>	<b>0822010563</b>	0822010573	-	-	
	25	<b>0822010554</b>	<b>0822010564</b>	<b>0822010574</b>	<b>R402005787</b>	<b>R402005833</b>	
30	<b>0822010555</b>	<b>0822010565</b>	<b>0822010575</b>	-	-		
40	<b>0822010556</b>	<b>0822010566</b>	<b>0822010576</b>	-	-		
50	<b>0822010557</b>	<b>0822010567</b>	<b>0822010577</b>	R402005790	<b>R402005836</b>		

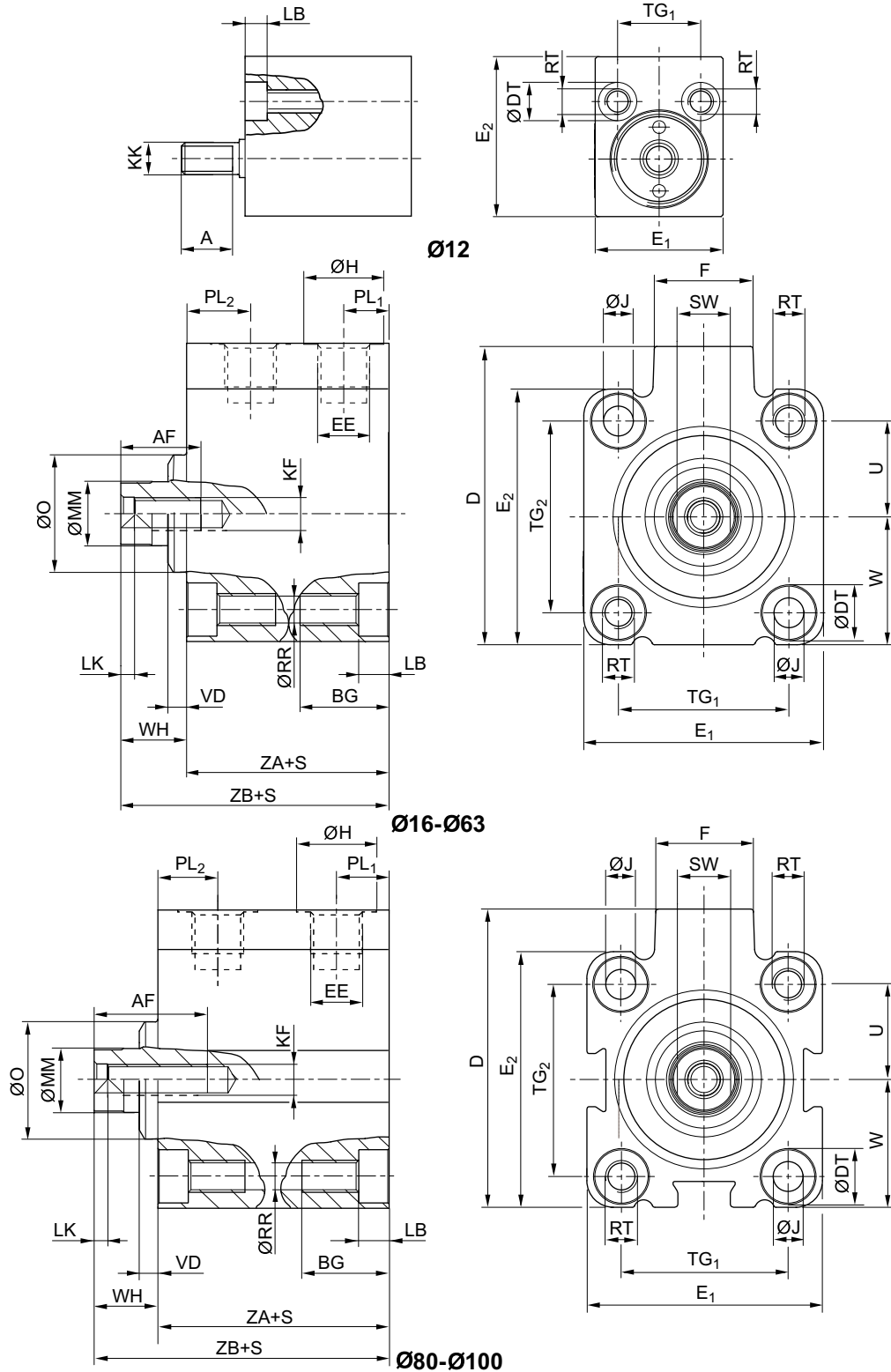
other versions can be ordered from AVENTICS sales offices

Piston rod cylinder ▶ Short-stroke and compact cylinders

**Series KHZ**

▶ Ø 12 - 100 mm ▶ Ports: M5 - G 1/4 ▶ double-acting ▶ cushioning: elastic

**Dimensions**



00106561

S = stroke

**Piston rod cylinder ▶ Short-stroke and compact cylinders**
**Series KHZ**
**▶ Ø 12 - 100 mm ▶ Ports: M5 - G 1/4 ▶ double-acting ▶ cushioning: elastic**

Piston Ø	S	A	AF +1	BG 1)	D JS15	ØDT H13	E1 JS15	E2 JS15	EE	F	ØH	ØJ	KF
12	5 - 20	8	-	12.4	-	6	20	25	M 5	-	8	-	-
12	25 - 40	8	-	17.5	-	6	20	25	M 5	-	8	-	-
16	5 - 15	-	10	12.4	33	6	28	28	M 5	11.5	8	3.55	M5
16	20 - 40	-	10	17.5	33	6	28	28	M 5	11.5	8	3.55	M5
16	20 - 40	-	10	17.5	33	6	28	28	M 5	11.5	8	3.55	M 5
20	5 - 50	-	10	13.6	37	7.5	32	32	M 5	11	8	4.55	M5
25	5 - 50	-	10	13.6	47.5	8	37	39	G 1/8	17.5	15	4.55	M5
32	5 - 50	-	15	16.7	56	10	45	48	G 1/8	18.5	15	5.5	M6
40	5 - 50	-	15	16.7	62.5	10	54.5	54.5	G 1/8	18.5	15	5.5	M6
50	10 - 50	-	18	19.8	72	11	64	64	G 1/8	18	15	7.3	M8
63	5 - 50	-	18	25	88	15	80	80	G 1/8	23	15	9.2	M8
80	10 - 50	-	18	25	110	15	100	100	G 1/4	27	19	9.2	M10
100	25 - 50	-	20	30	132	17.5	124	124	G 1/4	28	19	11	M12

Piston Ø	KK	LB +0,4	LK +0,5	ØMM f8	ØO	PL1	PL2	ØRR	RT	SW -0,3	TG1	TG2
12	M 5	3.4	-	6	-	6	9.5	3.3	M4	-	13 ±0,2	-
12	M 5	8.5	-	6	-	6	9.5	3.3	M4	-	13 ±0,2	-
16	-	3.4	2	8	-	6	11.3	3.3	M4	7	20 ±0,2	20 ±0,2
16	-	8.5	2	8	-	6	11.3	3.3	M4	7	20 ±0,2	20 ±0,2
16	-	8.5	2	8	-	6	11.3	3.3	M4	7	20 ±0,2	20 ±0,2
20	-	4.6	2	10	-	5	8	4.2	M5	8	22 ±0,2	22 ±0,2
25	-	4.6	2	10	20	9	11	4.2	M5	8	26 ±0,25	28 ±0,25
32	-	5.7	2.5	12	22	8.5	12	5.05	M6	10	32 ±0,25	36 ±0,25
40	-	5.7	2.5	12	30	9	11	5.05	M6	10	40 ±0,25	40 ±0,25
50	-	6.8	3.5	16	35	8.5	11	6.8	M8	13	50 ±0,25	50 ±0,25
63	-	9	3.5	16	35	8.5	12.5	8.5	M10	13	62 ±0,25	62 ±0,25
80	-	9	4	20	46	13	16	8.8	M10	17	82 ±0,3	82 ±0,3
100	-	11	4	25	56	15.5	15.5	10.2	M12	22	103 ±0,3	103 ±0,3

Piston Ø	U	W	VD -1	WH	ZA ±0,2	ZB ±0,8						
12	9	9 ±0,2	-	-	21	31						
12	9	9 ±0,2	-	-	21	31						
16	10	14 ±0,2	-	6	25	31						
16	10	14 ±0,2	-	6	25	31						
16	10	14 ±0,2	-	6	25	31						
20	11	16 ±0,2	-	9.5	24.5	34						
25	14	19,5 ±0,2	3.5	11.5	31	42.5						
32	18	24 ±0,2	3.5	12.5	33	45.5						
40	20	27,3 ±0,2	4.5	15	33	48						
50	25	32 ±0,2	6	17	32.5	49.5						
63	31	40 ±0,2	6.5	17	35.5	52.5						
80	41	50 ±0,3	8.5	18	42	60						
100	51.5	62 ±0,3	7	20	49.5	69.5						

1) Min.