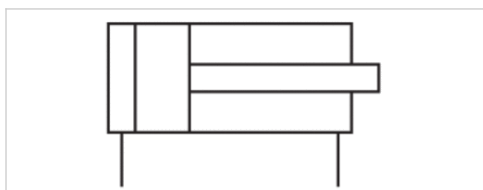


# Short-stroke cylinder, Series KHZ

- Ø 12-100 mm
- Ports M5 G 1/8 G 1/4
- double-acting
- Cushioning elastic
- Piston rod External thread Internal thread



Ambient temperature min./max.	-25 ... 80 °C
Medium temperature min./max.	-25 ... 80 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m <sup>3</sup>
Pressure for determining piston forces	6.3 bar



## Technical data

Piston Ø Piston rod thread Ports	12 mm M5 M5	16 mm M5 M5	20 mm M5 M5	25 mm M5 G 1/8	32 mm M6 G 1/8	40 mm M6 G 1/8
Stroke 5	0822010500	0822010510	0822010520	0822010530	0822010540	0822010550
10	0822010501	0822010511	0822010521	0822010531	0822010541	0822010551
15	0822010502	0822010512	0822010522	0822010532	0822010542	0822010552
20	0822010503	0822010513	0822010523	0822010533	0822010543	0822010553
25	0822010504	0822010514	0822010524	0822010534	0822010544	0822010554
30	0822010505	0822010515	0822010525	0822010535	0822010545	0822010555
40	0822010506	0822010516	0822010526	0822010536	0822010546	0822010556
50	-	-	0822010527	0822010537	0822010547	0822010557

Piston Ø Piston rod thread Ports	50 mm M8 G 1/8	63 mm M8 G 1/8	80 mm M10 G 1/4	100 mm M12 G 1/4
Stroke 5	-	0822010570	-	-
10	0822010561	0822010571	R402005784	-
15	0822010562	0822010572	-	-
20	0822010563	0822010573	-	-
25	0822010564	0822010574	R402005787	R402005833
30	0822010565	0822010575	-	-

Piston Ø Piston rod thread Ports	50 mm M8 G 1/8	63 mm M8 G 1/8	80 mm M10 G 1/4	100 mm M12 G 1/4
40	0822010566	0822010576	-	-
50	0822010567	0822010577	R402005790	R402005836

Other versions can be ordered from AVENTICS sales offices.

## Technical data

Piston Ø	12 mm	16 mm	20 mm	25 mm
Retracting piston force	53 N	95 N	148 N	260 N
Extracting piston force	71 N	127 N	198 N	309 N
Impact energy	0,03 J	0,06 J	0,08 J	0,1 J
Weight 0 mm stroke	0,036 kg	0,063 kg	0,082 kg	0,164 kg
Weight +10 mm stroke	0,013 kg	0,016 kg	0,021 kg	0,03 kg
Working pressure min./max.	1 ... 10 bar	1 ... 10 bar	1 ... 10 bar	1 ... 10 bar
Material, front cover	Brass	Brass	Brass	Brass

Piston Ø	32 mm	40 mm	50 mm	63 mm
Retracting piston force	435 N	720 N	1110 N	1837 N
Extracting piston force	507 N	792 N	1237 N	1964 N
Impact energy	0,16 J	0,24 J	0,32 J	0,38 J
Weight 0 mm stroke	0,195 kg	0,285 kg	0,388 kg	0,636 kg
Weight +10 mm stroke	0,042 kg	0,052 kg	0,074 kg	0,096 kg
Working pressure min./max.	0,6 ... 10 bar	0,6 ... 10 bar	0,6 ... 10 bar	0,6 ... 10 bar
Material, front cover	Aluminum	Aluminum	Aluminum	Aluminum

Piston Ø	80 mm	100 mm
Retracting piston force	2857 N	4939 N
Extracting piston force	3167 N	4948 N
Impact energy	0,38 J	0,5 J
Weight 0 mm stroke	1,22 kg	2,38 kg
Weight +10 mm stroke	0,149 kg	0,218 kg
Working pressure min./max.	0,6 ... 10 bar	0,6 ... 10 bar
Material, front cover	Aluminum	Aluminum

## 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).

## Technical information

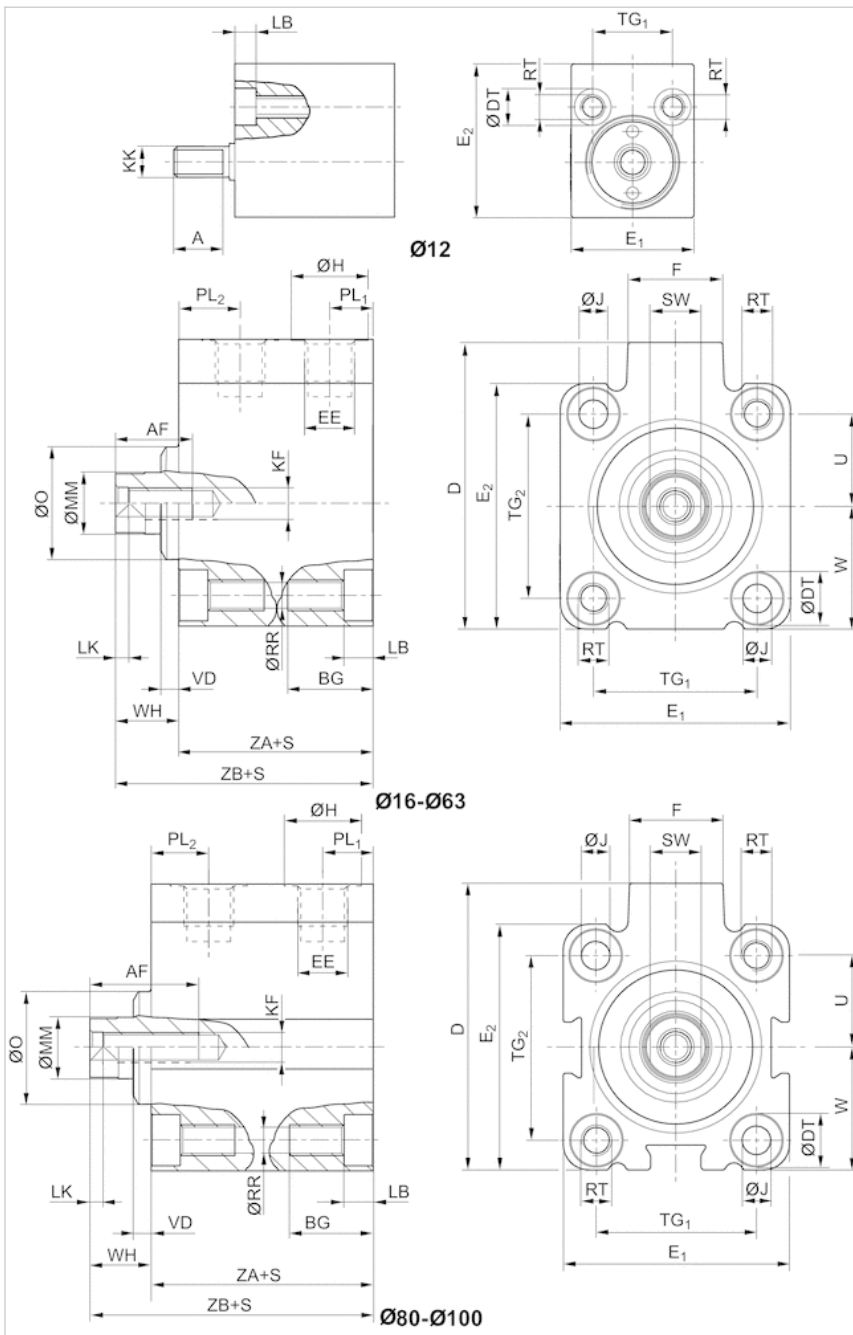
### Material

Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel

Material	
Piston	Nitrile rubber
Front cover	Brass Aluminum
End cover	Aluminum
Scraper	Polyurethane

## Dimensions

### Dimensions



S = stroke

## Dimensions

Piston Ø	S	A	AF +1	BG 1)	D JS15	ØDT H13	E1 JS15	E2 JS15	EE	F	ØH	ØJ	KF
12 mm	5 - 20	8	-	12.4	-	6	20	25	M 5	-	8	-	-
12 mm	25 - 40	8	-	17.5	-	6	20	25	M 5	-	8	-	-
16 mm	5 - 15	-	10	12.4	33	6	28	28	M 5	11.5	8	3.55	M5
16 mm	20 - 40	-	10	17.5	33	6	28	28	M 5	11.5	8	3.55	M5
20 mm	5 - 50	-	10	13.6	37	7.5	32	32	M 5	11	8	4.55	M5
25 mm	5 - 50	-	10	13.6	47.5	8	37	39	G 1/8	17.5	15	4.55	M5
32 mm	5 - 50	-	15	16.7	56	10	45	48	G 1/8	18.5	15	5.5	M6
40 mm	5 - 50	-	15	16.7	62.5	10	54.5	54.5	G 1/8	18.5	15	5.5	M6
50 mm	10 - 50	-	18	19.8	72	11	64	64	G 1/8	18	15	7.3	M8
63 mm	5 - 50	-	18	25	88	15	80	80	G 1/8	23	15	9.2	M8
80 mm	10 - 50	-	18	25	110	15	100	100	G 1/4	27	19	9.2	M10
100 mm	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 mm	M 5	3.4	-	6	-	6	9.5	3.3	M4	-	13 ±0,2	-
12 mm	M 5	8.5	-	6	-	6	9.5	3.3	M4	-	13 ±0,2	-
16 mm	-	3.4	2	8	-	6	11.3	3.3	M4	7	20 ±0,2	20 ±0,2
16 mm	-	8.5	2	8	-	6	11.3	3.3	M4	7	20 ±0,2	20 ±0,2
20 mm	-	4.6	2	10	-	5	8	4.2	M5	8	22 ±0,2	22 ±0,2
25 mm	-	4.6	2	10	20	9	11	4.2	M5	8	26 ±0,25	28 ±0,25
32 mm	-	5.7	2.5	12	22	8.5	12	5.05	M6	10	32 ±0,25	36 ±0,25
40 mm	-	5.7	2.5	12	30	9	11	5.05	M6	10	40 ±0,25	40 ±0,25
50 mm	-	6.8	3.5	16	35	8.5	11	6.8	M8	13	50 ±0,25	50 ±0,25
63 mm	-	9	3.5	16	35	8.5	12.5	8.5	M10	13	62 ±0,25	62 ±0,25
80 mm	-	9	4	20	46	13	16	8.8	M10	17	82 ±0,3	82 ±0,3
100 mm	-	11	4	25	56	15.5	15.5	10.2	M12	22	103 ±0,3	103 ±0,3

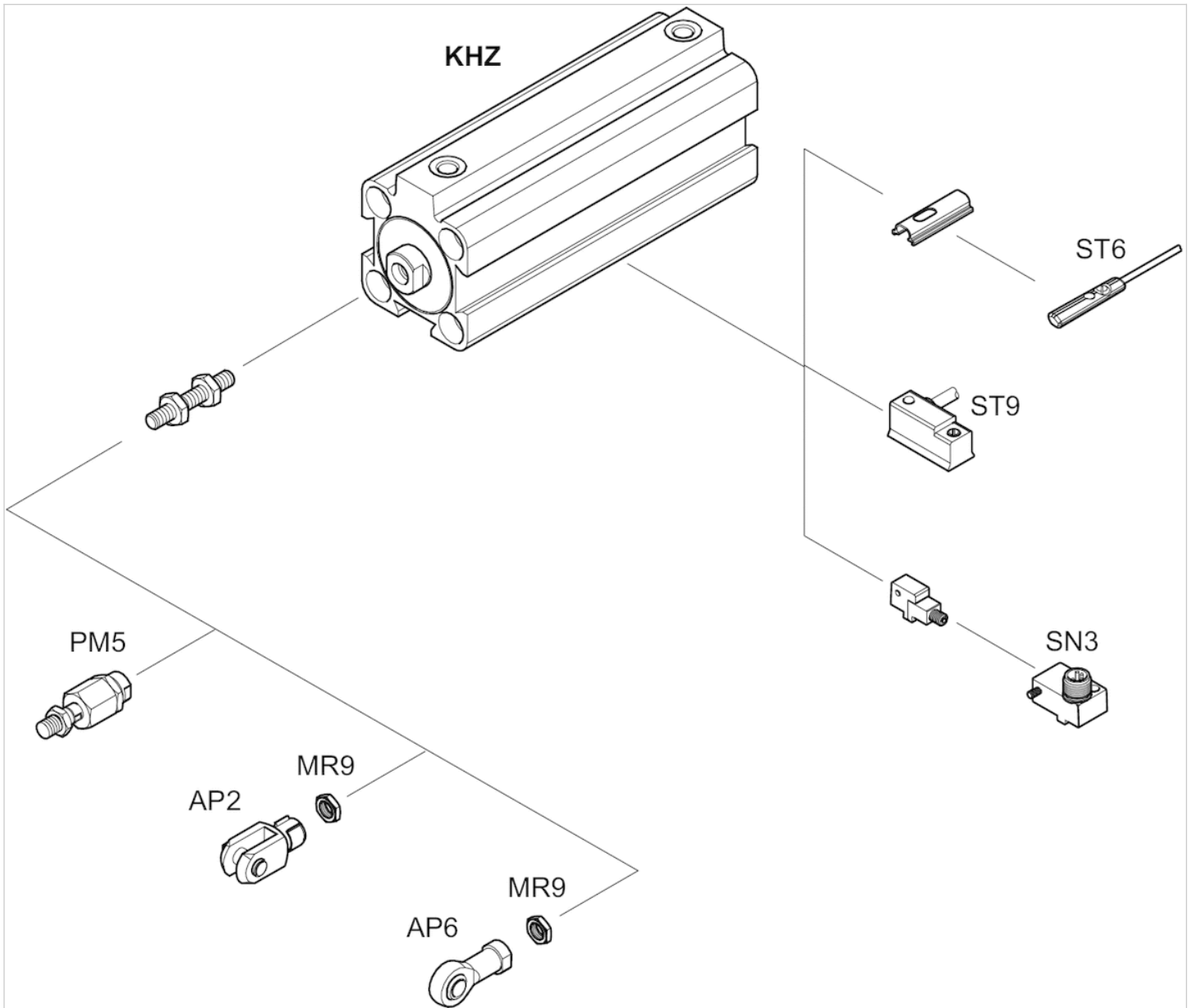
Piston Ø	U	W	VD -1	WH	ZA ±0,2	ZB ±0,8
12 mm	9	9 ±0,2	-	-	21	31
12 mm	9	9 ±0,2	-	-	21	31
16 mm	10	14 ±0,2	-	6	25	31
16 mm	10	14 ±0,2	-	6	25	31
20 mm	11	16 ±0,2	-	9.5	24.5	34
25 mm	14	19,5 ±0,2	3.5	11.5	31	42.5
32 mm	18	24 ±0,2	3.5	12.5	33	45.5
40 mm	20	27,3 ±0,2	4.5	15	33	48
50 mm	25	32 ±0,2	6	17	32.5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

1) Min.

S = stroke

## Accessories overview

### Overview drawing



**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.