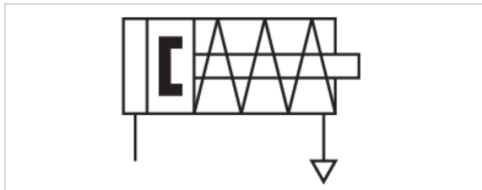


# Short-stroke cylinder, Series KHZ

- Ø 12-100 mm
- Ports M5 G 1/8 G 1/4
- Single-acting, retracted without pressure
- with magnetic piston
- Cushioning elastic
- Piston rod Internal thread



Compressed air connection	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
Weight	See table below



## Technical data

Piston Ø Piston rod thread Ports	12 mm M3 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 4	0822406400	0822406410	0822406420	-	-	-
5	-	-	-	0822406430	0822406440	0822406450
10	0822406401	0822406411	0822406421	0822406431	0822406441	0822406451
25	-	0822406412	0822406422	0822406432	0822406442	0822406452

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 4	-	-	-	-
5	-	-	-	-
10	0822406461	0822406471	0822406481	0822406491
25	0822406462	0822406472	0822406482	0822406492

Other versions can be ordered from AVENTICS sales offices.

## Technical data

Piston Ø	12 mm	16 mm	20 mm	25 mm
Retracting piston force	6,8 N	8 N	6,5 N	15,5 N
Extracting piston force	71 N	127 N	198 N	309 N
Working pressure min./max.	1,7 ... 10 bar	1,5 ... 10 bar	1,5 ... 10 bar	1,5 ... 10 bar
Material, front cover	Brass	Brass	Brass	Brass

Piston Ø	32 mm	40 mm	50 mm	63 mm
Retracting piston force	18,5 N	26 N	39 N	48 N
Extracting piston force	507 N	792 N	1237 N	1964 N
Working pressure min./max.	1,3 ... 10 bar	1,3 ... 10 bar	1 ... 10 bar	1 ... 10 bar
Material, front cover	Aluminum	Aluminum	Aluminum	Aluminum

Piston Ø	80 mm	100 mm
Retracting piston force	63,5 N	95,5 N
Extracting piston force	3267 N	4948 N
Working pressure min./max.	1 ... 10 bar	1 ... 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.

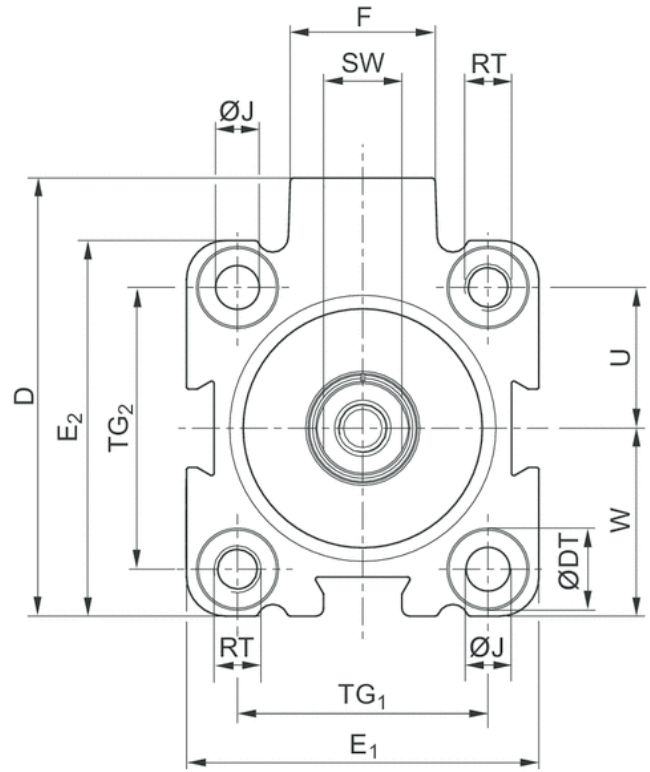
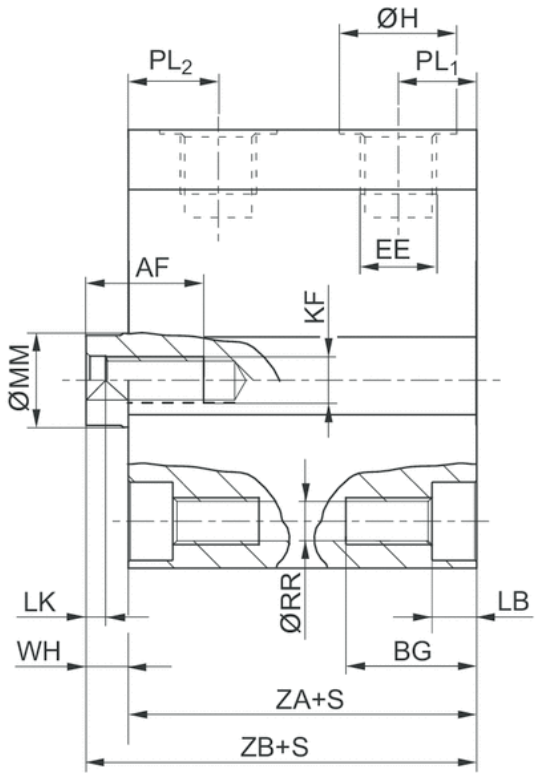
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

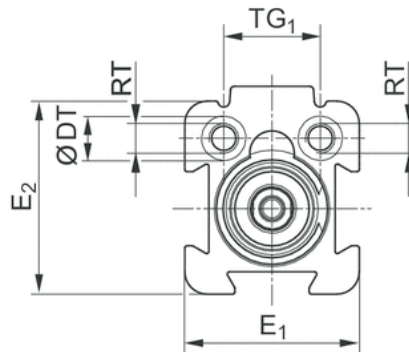
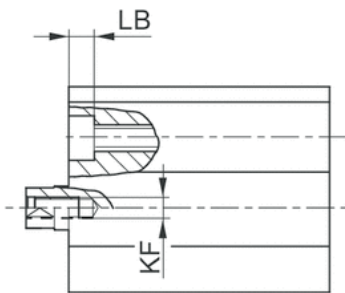
Material	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Piston	Nitrile rubber
Front cover	Brass Aluminum
End cover	Aluminum

# Dimensions

## Dimensions



**Ø16-Ø100**



**Ø12**

S = stroke

## Dimensions

Piston Ø	Part No.	S	AF +1	BG min.	D JS15	ØDT H13	E1 JS15	E2 JS15	EE	F	ØH
0822406400	12 mm	4	8	12.4	28	6	23.5	26	M 5	11	8
0822406401	12 mm	10	8	12.4	28	6	23.5	26	M 5	11	8
0822406410	16 mm	4	10	12.4	33	6	28	28	M 5	11.5	8
0822406411	16 mm	10	10	12.4	33	6	28	28	M 5	11.5	8
0822406412	16 mm	25	10	17.5	33	6	28	28	M 5	11.5	8
0822406420	20 mm	4	10	13.6	37	7.5	32	32	M 5	11	8
0822406421	20 mm	10	10	13.6	37	7.5	32	32	M 5	11	8
0822406422	20 mm	25	10	13.6	37	7.5	32	32	M 5	11	8
0822406430	25 mm	5	10	13.6	47.5	8	37	39	G 1/8	17.5	15
0822406431	25 mm	10	10	13.6	47.5	8	37	39	G 1/8	17.5	15
0822406432	25 mm	25	10	13.6	47.5	8	37	39	G 1/8	17.5	15
0822406440	32 mm	5	15	16.7	56	10	45	48	G 1/8	18.5	15
0822406441	32 mm	10	15	16.7	56	10	45	48	G 1/8	18.5	15
0822406442	32 mm	25	15	16.7	56	10	45	48	G 1/8	18.5	15
0822406450	40 mm	5	15	16.7	62.5	10	54.5	54.5	G 1/8	18.5	15
0822406451	40 mm	10	15	16.7	62.5	10	54.5	54.5	G 1/8	18.5	15
0822406452	40 mm	25	15	16.7	62.5	10	54.5	54.5	G 1/8	18.5	15
0822406461	50 mm	10	18	19.8	73	11	66	66	G 1/8	18	15
0822406462	50 mm	25	18	19.8	73	11	66	66	G 1/8	18	15
0822406471	63 mm	10	18	25	88	15	80	80	G 1/8	23	15
0822406472	63 mm	25	18	25	88	15	80	80	G 1/8	23	15
0822406481	80 mm	10	18	25	110	15	100	100	G 1/4	27	19
0822406482	80 mm	25	18	25	110	15	100	100	G 1/4	27	19
0822406491	100 mm	10	20	30	132	17.5	124	124	G 1/4	28	19
0822406492	100 mm	25	20	30	132	17.5	124	124	G 1/4	28	19

Piston Ø	ØJ H14	KF	LB +0,4	LK +0,5	ØMM f8	PL1	PL2	ØRR	RT	SW -0,3	TG1
0822406400	–	M 3	3.4	2	6	6	10.5	3.3	M 4	5	13 ±0,2
0822406401	–	M 3	3.4	2	6	6	10.5	3.3	M 4	5	13 ±0,2
0822406410	3.55	M 5	3.4	2	8	6.5	12.5	3.3	M 4	7	20 ±0,2
0822406411	3.55	M 5	3.4	2	8	6.5	12.5	3.3	M 4	7	20 ±0,2
0822406412	3.55	M 5	8.5	2	8	6.5	12.5	3.3	M 4	7	20 ±0,2
0822406420	4.55	M 5	4.6	2	10	6.5	12	4.2	M 5	8	22 ±0,2
0822406421	4.55	M 5	4.6	2	10	6.5	12	4.2	M 5	8	22 ±0,2
0822406422	4.55	M 5	4.6	2	10	6.5	12	4.2	M 5	8	22 ±0,2
0822406430	4.55	M 5	4.6	2	10	9.5	11.5	4.2	M 5	8	26 ±0,25
0822406431	4.55	M 5	4.6	2	10	9.5	11.5	4.2	M 5	8	26 ±0,25
0822406432	4.55	M 5	4.6	2	10	9.5	11.5	4.2	M 5	8	26 ±0,25
0822406440	5.5	M 6	5.7	2.5	12	10	11.5	5.05	M 6	10	32 ±0,25
0822406441	5.5	M 6	5.7	2.5	12	10	11.5	5.05	M 6	10	32 ±0,25
0822406442	5.5	M 6	5.7	2.5	12	10	11.5	5.05	M 6	10	32 ±0,25
0822406450	5.5	M 6	5.7	2.5	12	10	13.5	5.05	M 6	10	40 ±0,25
0822406451	5.5	M 6	5.7	2.5	12	10	13.5	5.05	M 6	10	40 ±0,25
0822406452	5.5	M 6	5.7	2.5	12	10	13.5	5.05	M 6	10	40 ±0,25
0822406461	7.3	M 8	6.8	3.5	16	10	14	6.8	M 8	13	50 ±0,25
0822406462	7.3	M 8	6.8	3.5	16	10	14	6.8	M 8	13	50 ±0,25

Piston Ø	ØJ H14	KF	LB +0,4	LK +0,5	ØMM f8	PL1	PL2	ØRR	RT	SW -0,3	TG1
0822406471	9.2	M 8	9	3.5	16	11.5	14	8.5	M 10	13	62 ±0,25
0822406472	9.2	M 8	9	3.5	16	11.5	14	8.5	M 10	13	62 ±0,25
0822406481	9.2	M 10	9	4	20	12	18	8.5	M 10	17	82 ±0,3
0822406482	9.2	M 10	9	4	20	12	18	8.5	M 10	17	82 ±0,3
0822406491	11	M 12	11	4	25	12	20.5	10.2	M 12	22	103 ±0,3
0822406492	11	M 12	11	4	25	12	20.5	10.2	M 12	22	103 ±0,3

Piston Ø	TG2 ±0,2	U	W	WH	ZA ±0,2	ZB ±0,8
0822406400	–	9.5	11,5 ±0,2	4.5	30.5	35
0822406401	–	9.5	11,5 ±0,2	4.5	30.5	35
0822406410	20 ±0,2	10	14 ±0,2	3	32	35
0822406411	20 ±0,2	10	14 ±0,2	3	32	35
0822406412	20 ±0,2	10	14 ±0,2	4	38	42
0822406420	22 ±0,2	11	16 ±0,2	4.5	32	36.5
0822406421	22 ±0,2	11	16 ±0,2	4.5	32	36.5
0822406422	22 ±0,2	11	16 ±0,2	4.5	38	42.5
0822406430	28 ±0,25	14	19,5 ±0,2	5	39	44
0822406431	28 ±0,25	14	19,5 ±0,2	5	39	44
0822406432	28 ±0,25	14	19,5 ±0,2	5	39	44
0822406440	36 ±0,25	18	24 ±0,2	5.5	39.5	45
0822406441	36 ±0,25	18	24 ±0,2	5.5	39.5	45
0822406442	36 ±0,25	18	24 ±0,2	5.5	39.5	45
0822406450	40 ±0,25	20	27,3 ±0,2	7	39.5	46.5
0822406451	40 ±0,25	20	27,3 ±0,2	7	39.5	46.5
0822406452	40 ±0,25	20	27,3 ±0,2	7	39.5	46.5
0822406461	50 ±0,25	25	33 ±0,2	7.5	39.5	47
0822406462	50 ±0,25	25	33 ±0,2	7.5	39.5	47
0822406471	62 ±0,25	31	40 ±0,2	6.5	42	48.5
0822406472	62 ±0,25	31	40 ±0,2	6.5	42	48.5
0822406481	82 ±0,3	41	50 ±0,3	8	46	54
0822406482	82 ±0,3	41	50 ±0,3	8	46	54
0822406491	103 ±0,3	51.5	62 ±0,3	10	56	66
0822406492	103 ±0,3	51.5	62 ±0,3	10	56	66

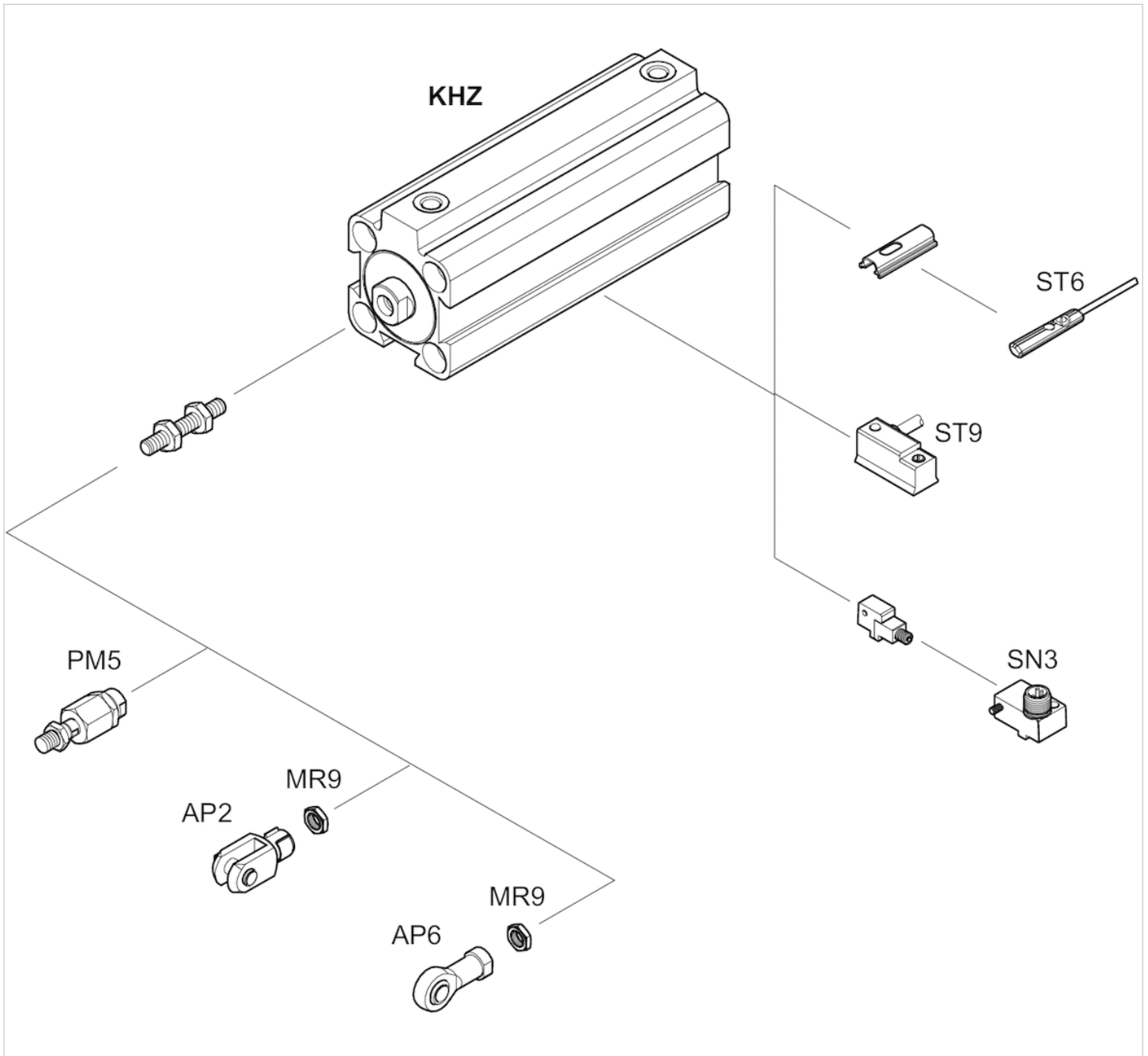
## Weight [kg]

Piston Ø	Stroke	Weight kg
12 mm	4	0,051 kg
16 mm	10	0,075 kg
16 mm	25	0,085 kg
20 mm	4	0,095 kg
20 mm	10	0,095 kg
20 mm	25	0,105 kg
25 mm	5	0,175 kg
25 mm	10	0,175 kg
25 mm	25	0,175 kg
32 mm	5	0,226 kg
32 mm	10	0,226 kg
32 mm	25	0,226 kg

Piston Ø	Stroke	Weight kg
40 mm	5	0,318 kg
40 mm	10	0,318 kg
40 mm	25	0,318 kg
50 mm	10	0,49 kg
50 mm	25	0,49 kg
63 mm	10	0,732 kg
63 mm	25	0,732 kg
80 mm	10	1,29 kg
80 mm	25	1,29 kg
100 mm	10	2,3 kg
100 mm	25	2,3 kg

# 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.

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