Piston rod cylinders → Short-stroke and compact cylinders

Series KHZ

► Ø 12 - 100 mm ► Ports: M5 - G 1/4 ► double-acting ► with magnetic piston ► cushioning: elastic ► Piston rod: internal thread

00136212

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

Materials:	
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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, 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]	0.05	0.065	0.092	0.178	0.195
	+10 mm stroke	[kg]	0.07	0.085	0.111	0.201	0.281
Working pressure min./max.		[bar]	1 - 10	1 - 10	1 - 10	1 - 10	0.6 - 10
Note			1)	1)	1)	1)	2)

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]	0.367	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
Note			2)	2)	2)	2)	2)

1) Material front cover: Brass
2) Material front cover: Aluminum

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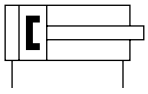
	Piston Ø **Piston rod thread** **Ports**	**12** **M3** **M5**	**16** **M5** **M5**	**20** **M5** **M5**	**25** **M5** **G 1/8**	**32** **M6** **G 1/8**
	Stroke 5	**0822010600**	**0822010610**	**0822010620**	**0822010630**	**0822010640**
	10	**0822010601**	**0822010611**	**0822010621**	**0822010631**	**0822010641**
	15	**0822010602**	**0822010612**	**0822010622**	**0822010632**	**0822010642**
	20	**0822010603**	**0822010613**	**0822010623**	**0822010633**	**0822010643**
	25	**0822010604**	**0822010614**	**0822010624**	**0822010634**	**0822010644**
	30	**0822010605**	**0822010615**	**0822010625**	**0822010635**	**0822010645**
	40	**0822010606**	**0822010616**	**0822010626**	**0822010636**	**0822010646**
	50	-	-	**0822010627**	**0822010637**	**0822010647**
	80	-	-	-	-	**0822010648**
	100	-	-	-	-	**0822010649**
	Piston Ø **Piston rod thread** **Ports**	**40** **M6** **G 1/8**	**50** **M8** **G 1/8**	**63** **M8** **G 1/8**	**80** **M10** **G 1/4**	**100** **M12** **G 1/4**
	Stroke 5	**0822010650**	-	-	-	-
	10	**0822010651**	**0822010661**	**0822010671**	**0822010681**	**0822010691**
	15	**0822010652**	**0822010662**	**0822010672**	**R402005794**	-
	20	**0822010653**	**0822010663**	**0822010673**	-	-
	25	**0822010654**	**0822010664**	**0822010674**	**0822010684**	**0822010694**
	30	**0822010655**	**0822010665**	**0822010675**	-	-
	40	**0822010656**	**0822010666**	**0822010676**	R402005797	**R402005844**
	50	**0822010657**	**0822010667**	**0822010677**	**0822010687**	**0822010697**
	80	**0822010658**	**0822010668**	**0822010678**	**0822010688**	**0822010698**
	100	**0822010659**	**0822010669**	**0822010679**	**0822010689**	0822010699
other versions can be ordered from Bosch Rexroth sales offices						

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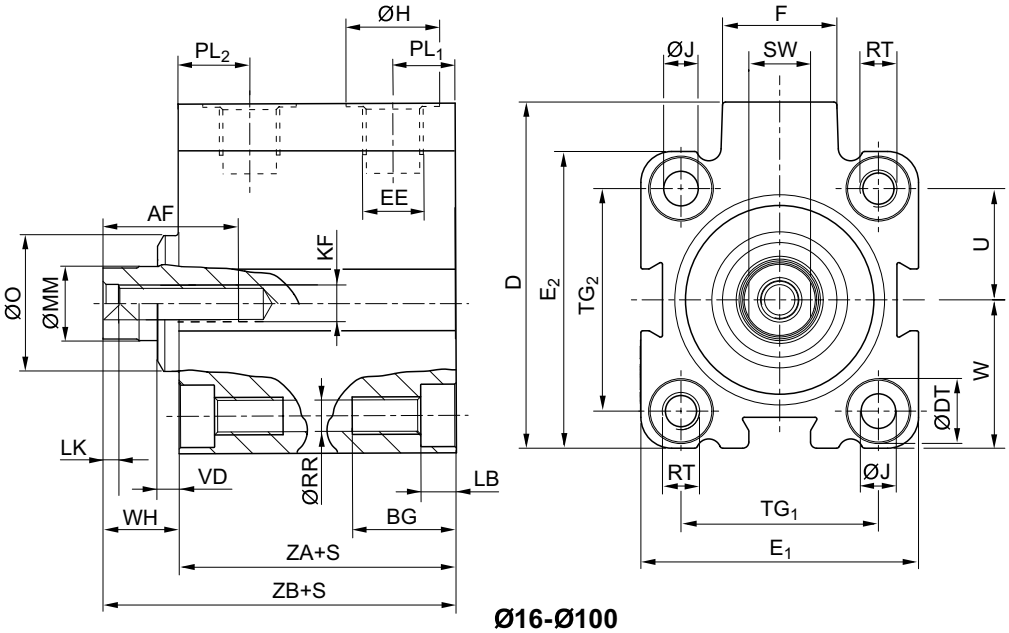
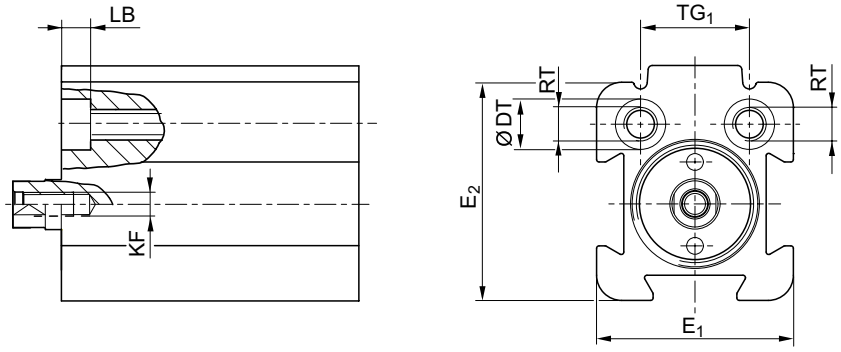
Dimensions



Ø16-Ø100



Ø12

00106563

S = stroke

Piston Ø	S	AF +1	BG [1])	D JS15	ØDT H13	E1 JS15	E2 JS15	EE	F	ØH	ØJ	KF	LB +0,4
12	5 - 10	8	12.4	28	6	23.5	26	M 5	11	8	3.3	M3	3.4
12	15 - 40	8	17.5	28	6	23.5	26	M 5	11	8	3.3	M3	8.5
16	5 - 10	10	12.4	33	6	28	28	M 5	11.5	8	3.55	M5	3.4
16	15 - 40	10	17.5	33	6	28	28	M 5	11.5	8	3.55	M5	8.5
20	5 - 10	10	13.6	37	7.5	32	32	M 5	11	8	4.55	M5	4.6
20	15 - 50	10	13.6	37	7.5	32	32	M 5	11	8	4.55	M5	4.6
25	5 - 50	10	13.6	47.5	8	37	39	G 1/8	17.5	15	4.55	M5	4.6
32	5 - 100	15	16.7	56	10	45	48	G 1/8	18.5	15	5.5	M6	5.7
40	5 - 100	15	16.7	62.5	10	54.5	54	G 1/8	18.5	15	5.5	M6	5.7
50	10 - 100	18	19.8	73	11	66	66	G 1/8	18	15	7.3	M8	6.8
63	10 - 100	18	25	88	15	80	80	G 1/8	23	15	9.2	M8	9
80	10 - 100	18	25	110	15	100	100	G 1/4	27	19	9.2	M10	9
100	10 - 100	20	30	132	17.5	124	124	G 1/4	28	19	11	M12	11

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Piston Ø	LK +0,5	ØMM f8	ØO	PL1	PL2	ØRR	RT	SW -0,3	TG1	TG2	U	W
12	2	6	–	6	10.5	3.3	M4	5	13 ±0,2	–	9.5	11,5 ±0,2
12	2	6	–	6	10.5	3.3	M4	5	13 ±0,2	–	9.5	11,5 ±0,2
16	2	8	–	6.5	11.3	3.3	M4	7	20 ±0,2	20 ±0,2	10	14 ±0,2
16	2	8	–	6.5	11.3	3.3	M4	7	20 ±0,2	20 ±0,2	10	14 ±0,2
20	2	10	–	6.5	10	4.2	M5	8	22 ±0,2	22 ±0,2	11	16 ±0,2
20	2	10	–	6.5	10	4.2	M5	8	22 ±0,2	22 ±0,2	11	16 ±0,2
25	2	10	20	9.5	11.5	4.2	M5	8	26 ±0,25	28 ±0,25	14	19,5 ±0,2
32	2.5	12	22	8.5	15	5.05	M6	10	32 ±0,25	36 ±0,25	18	24 ±0,2
40	2.5	12	30	10	13.5	5.05	M6	10	40 ±0,25	40 ±0,25	20	27,3 ±0,2
50	3.5	16	35	10	14	6.8	M8	13	50 ±0,25	50 ±0,25	25	33 ±0,2
63	3.5	16	35	11.5	14	8.5	M10	13	62 ±0,25	62 ±0,25	31	40 ±0,2
80	4	20	46	12	15.5	8.5	M10	17	82 ±0,3	82 ±0,3	41	50 ±0,3
100	4	25	56	12	18.5	10.2	M12	22	103 ±0,3	103 ±0,3	51.5	62 ±0,3

Piston Ø	VD -1	WH	ZA ±0,2	ZB ±0,8									
12	–	5.5	30.5	36									
12	–	5.5	30.5	36									
16	–	4.5	32	36.5									
16	–	4.5	38	42.5									
20	–	4.5	32	36.5									
20	–	4.5	38	42.5									
25	3.5	9.5	39	48.5									
32	3.5	11	39.5	50.5									
40	4.5	13.5	39.5	53									
50	6	13.5	39.5	53									
63	6.5	15.5	42	57.5									
80	8.5	18	46	64									
100	7	20	56	76									

1) Min.