

series MNI

Brochure



★ series MNI

	Ø 10 - 25 mm, single-acting, spring retracted, magnetic piston, without cushioning	5
	Ø 10 - 25 mm, single-acting, spring retracted, without cushioning	7
	Ø 10 - 25 mm, double-acting, without cushioning, piston rod, with external thread, optionally in ATEX	9
	Ø 16 - 25 mm, double-acting, adjustable cushioning, optionally in ATEX	11
	Ø 10 - 25 mm, double-acting, magnetic piston, without cushioning, optionally in ATEX	13
	Ø 10 - 25 mm, double-acting, magnetic piston, without cushioning, heat resistant up to 120°C	15
	Ø 16 - 25 mm, double-acting, magnetic piston, adjustable cushioning, heat resistant up to 120°C	17
	Ø 16 - 25 mm, double-acting, magnetic piston, adjustable cushioning, optionally in ATEX	19
	Ø 10 - 25 mm, double-acting, without cushioning, piston rod, through, optionally in ATEX	21
	Ø 16 - 25 mm, double-acting, magnetic piston, without cushioning, piston rod, through, ATEX	23

★ series MNI

Accessories

Cylinder mountings

	foot mounting MS3	25
	Flange mounting MF8	25
	Clevis mounting AB3	26
	MR3 nut for cylinder mounting	26
	Mounting flange, 'U' version galvanized steel	27

piston rod mountings

	MR9 nut for piston rod	28
	Rod clevis AP2, with internal thread	28
	Ball eye rod end AP6, with internal thread and spherical bearing	29
	Flexible coupling PM5, spherical	30
	Guide unit, 'U' version Ø 12 - 25 mm, with sintered friction bearing	30

★ core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

★ series MNI

	Guide unit, 'H' version Ø 12 - 25 mm, with long guide, with sintered friction bearing	33
	Guide unit, 'H' version Ø 12 - 25 mm, with long guide, with linear ball bearings	36
Sensors and sensor mountings, accessories		
	Sensor, series ST6 cable connection	39
	Sensor, series ST6 plug M8x1 with knurled screw	40
	Sensor, series ST6 push-in fitting M8x1	41
	Sensor, series ST6 push-in fitting M12x1	42
	Sensor mounting for mini cylinder, series MNI, for sensor, series ST6	43
	Sensor, series SN1 cable connection	44
	Sensor, series SN1 push-in fitting M8x1	45
	Sensor, series SN1 push-in fitting M12x1	46
	Sensor mounting for mini cylinder, series MNI, for sensor series SN1 and series SN2	47

★ core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

Piston rod cylinders

● Mini cylinder, series MNI

Ø 10 - 25 mm, single-acting, spring retracted, magnetic piston, without cushioning



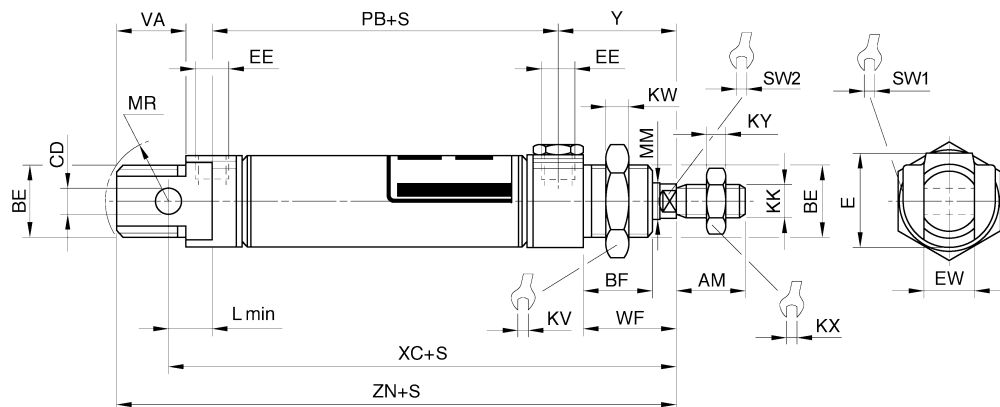
00106466

Standards	ISO 6432:1985
Working pressure min/max	1.5 / 10 bar
Ambient temperature min./max.	-25°C / +80°C
Medium temperature	-25°C / +80°C
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3, class 5-4-4
Pressure for determining piston forces	6
materials:	
cylinder tube	stainless steel
piston rod	stainless steel, cold hardened
End covers	aluminum, anodized
Seal	acrylonitrile butadiene caoutchouc

Piston Ø	[mm]	10	12	16	20	25
Extended piston force	[N]	37,5	54,3	88,3	143,4	234
Spring force min. - max.	[N]	3,4 - 5,1	4,6 - 6,8	11,8 - 18,7	17,8 - 26,1	23,2 - 31,4
Weight	0 mm stroke	[kg]	0,03	0,06	0,075	0,14
	+10 mm stroke	[kg]	0,005	0,006	0,007	0,016

	Piston Ø Piston rod thread Ports	10 M4 M5	12 M6 M5	16 M6 M5	20 M8 G 1/8	25 M10x1.25 G 1/8
	Stroke max.	40	50	50	50	50
	Stroke 10	0822430301	0822431301	0822432301	0822433301	0822434301
	25	0822430302	0822431302	0822432302	0822433302	0822434302
	40	0822430303	-	-	-	-
	50	-	0822431303	0822432303	0822433303	0822434303

piston Ø 10 - 25



00106425_a

S = stroke

Ø	AM -2	BE	BF	CD H9	E	EE	EW d13	KK	KV	KW	KX	KY
10	12	M12x1,25	11	4	14	M5	8	M4	17	5.5	7	2.2
12	16	M16x1,5	16	6	19	M5	12	M6	22	6	10	3.2
16	16	M16x1,5	16	6	19	M5	12	M6	22	6	10	3.2
20	20	M22x1,5	18	8	28	G1/8	16	M8	30	7	13	4

* core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

Piston rod cylinders

● Mini cylinder, series MNI

Ø 10 - 25 mm, single-acting, spring retracted, magnetic piston, without cushioning



Ø	AM -2	BE	BF	CD H9	E	EE	EW d13	KK	KV	KW	KX	KY
25	22	M22x1,5	21	8	28	G1/8	16	M10x1,25	30	7	17	6

Ø	L	MM f8	MR	PB ±1	VA	WF ±1,2	XC ±1	Y ± 1	ZN ± 1,4	SW 1	SW 2
10	6	4	12	37	11	16	64	21	73.5	13	3
12	9	6	16	41	16	22	6	24	88.5	19	5
16	9	6	16	47	17	22	82	27	95.5	19	5
20	12	8	18	51	19	24	95	32	109.5	28	6
25	12	10	19	55	21	28	104	36	119.5	28	8

Piston rod cylinders: Mini cylinder

● Mini cylinder, series MNI

Ø 10 - 25 mm, single-acting, spring retracted, without cushioning



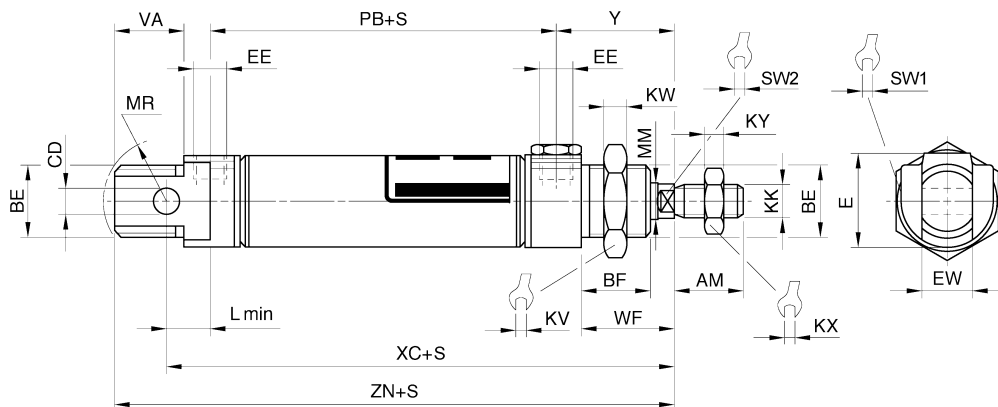
00106381

Standards	ISO 6432:1985
Working pressure min/max	1.5 / 10 bar
Ambient temperature min./max.	-25°C / +80°C
Medium temperature	-25°C / +80°C
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3, class 5-4-4
Pressure for determining piston forces	6
materials:	
cylinder tube	stainless steel
piston rod	stainless steel, cold hardened
End covers	aluminum, anodized
Seal	acrylonitrile butadiene caoutchouc

Piston Ø	[mm]	10	12	16	20	25
Extended piston force	[N]	37,5	54,3	88,3	143,4	234
Spring force min. - max.	[N]	3,4 - 5,1	4,6 - 6,8	11,8 - 18,7	17,8 - 26,1	23,2 - 31,4
Weight	0 mm stroke	[kg]	0,03	0,06	0,075	0,14
	+10 mm stroke	[kg]	0,005	0,006	0,007	0,016

	Piston Ø Piston rod thread Ports	10 M4 M5	12 M6 M5	16 M6 M5	20 M8 G 1/8	25 M10x1.25 G 1/8
	Stroke max.	40	50	50	50	50
	Stroke 10	0822430201	0822431201	0822432201	0822433201	0822434201
	25	0822430202	0822431202	0822432202	0822433202	0822434202
	40	0822430203	-	-	-	-
	50	-	0822431203	0822432203	0822433203	0822434203

piston Ø 10 - 25



00106425

S = stroke

Ø	AM -2	BE	BF	CD H9	E	EE	EW d13	KK	KV	KW	KX	KY
10	12	M12x1,25	11	4	14	M5	8	M4	17	5.5	7	2.2
12	16	M16x1,5	16	6	19	M5	12	M6	22	6	10	3.2
16	16	M16x1,5	16	6	19	M5	12	M6	22	6	10	3.2
20	20	M22x1,5	18	8	28	G1/8	16	M8	30	7	13	4

* core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

Piston rod cylinders: Mini cylinder

● Mini cylinder, series MNI

Ø 10 - 25 mm, single-acting, spring retracted, without cushioning



Ø	AM -2	BE	BF	CD H9	E	EE	EW d13	KK	KV	KW	KX	KY
25	22	M22x1,5	21	8	28	G1/8	16	M10x1,25	30	7	17	6

Ø	L	MM f8	MR	PB ±1	VA	WF ±1,2	XC ±1	Y ± 1	ZN ± 1,4	SW 1	SW 2
10	6	4	12	37	11	16	64	21	73.5	13	3
12	9	6	16	41	16	22	75	24	88.5	19	5
16	9	6	16	47	17	22	82	27	99.5	19	5
20	12	8	18	51	19	24	95	32	109.5	28	6
25	12	10	19	55	21	28	104	36	119.5	28	8

Piston rod cylinders

● Mini cylinder, series MNI

Ø 10 - 25 mm, double-acting, without cushioning, piston rod, with external thread, optionally in ATEX



00106378

Standards	ISO 6432:1985
ATEX	II 2G2D c IIB T4 X -25 °C ≤ Ta ≤ 50 °C
Working pressure min./max	1.5 / 10 bar
Ambient temperature min./max.	-25°C / +80°C
Medium temperature	-25°C / +80°C
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3, class 5-4-4
Pressure for determining piston forces	6
materials:	
cylinder tube	stainless steel
piston rod	stainless steel, cold hardened
End covers	aluminum, anodized
Seal	acrylonitrile butadiene caoutchouc

Piston Ø		[mm]	10	12	16	20	25
Retracted piston force		[N]	35	45	91	137	216
Extended piston force		[N]	42	58	106	164	259
Weight	0 mm stroke	[kg]	0,034	0,063	0,082	0,135	0,233
	+10 mm stroke	[kg]	0,024	0,046	0,055	0,09	0,13

	Piston Ø Piston rod thread Ports	10 M4 M5	12 M6 M5	16 M6 M5	20 M8 G 1/8	25 M10x1.25 G 1/8
	Stroke max.	250	600	800	1300	1300
	Stroke 10	0822030201	0822031201	0822032201	0822033201	0822034201
	25	0822030202	0822031202	0822032202	0822033202	0822034202
	50	0822030203	0822031203	0822032203	0822033203	0822034203
	80	0822030204	0822031204	0822032204	0822033204	0822034204
	100	0822030205	0822031205	0822032205	0822033205	0822034205
	125	-	0822031206	0822032206	0822033206	0822034206
	160	-	0822031207	0822032207	0822033207	0822034207
	200	-	-	0822032208	0822033208	0822034208
	250	-	-	-	0822033209	0822034209
	320	-	-	-	0822033210	0822034210
	400	-	-	-	-	0822034211
	500	-	-	-	-	0822034212

* core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

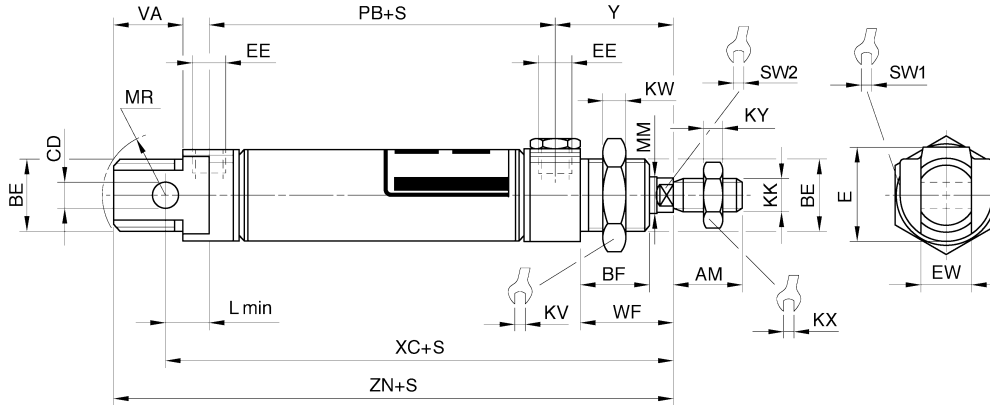
Piston rod cylinders

● Mini cylinder, series MNI

Ø 10 - 25 mm, double-acting, without cushioning, piston rod, with external thread, optionally in ATEX



piston Ø 10 - 25



S = stroke

Ø	AM -2	BE	BF	CD H9	E	EE	EW d13	KK	KV	KW	KX	KY	L
10	12	M12x1,25	11	4	14	M5	8	M4	17	5.5	7	2.2	6
12	16	M16x1,5	16	6	19	M5	12	M6	22	6	10	3.2	9
16	16	M16x1,5	16	6	19	M5	12	M6	22	6	10	3.2	9
20	20	M22x1,5	18	8	28	G 1/8	16	M8	30	7	13	4	12
25	22	M22x1,5	21	8	28	G 1/8	16	M10x1,25	30	7	17	6	12

Ø	MM f8	MR	PB ±1	VA	WF ±1,2	XC ±1	Y ± 1	ZN ± 1,4	SW 1	SW 2		
10	4	12	37	11	16	64	21	73.5	13	3		
12	6	16	41	16	22	75	27	88.5	19	5		
16	6	16	47	17	22	82	27	95.5	19	5		
20	8	18	51	19	24	95	32	109.5	28	6		
25	10	19	55	21	28	104	36	119.5	28	8		

* core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

Piston rod cylinders: Mini cylinder

● Mini cylinder, series MNI

Ø 16 - 25 mm, double-acting, adjustable cushioning, optionally in ATEX



00106378

Standards	ISO 6432:1985
ATEX	II 2G2D c IIB T4 X -25 °C ≤ Ta ≤ 50 °C
Working pressure min/max	1.5 / 10 bar
Ambient temperature min./max.	-25°C / +80°C
Medium temperature	-25°C / +80°C
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3, class 5-4-4
Pressure for determining piston forces	6
materials:	
cylinder tube	stainless steel
piston rod	stainless steel, cold hardened
End covers	aluminum, anodized
Seal	acrylonitrile butadiene caoutchouc

Piston Ø	[mm]	16	20	25		
Retracted piston force	[N]	91	137	216		
Extended piston force	[N]	106	164	259		
Cushioning length	[mm]	9	13	17,5		
Cushioning energy	[J]	0,58	1,35	2,1		
Weight	0 mm stroke	[kg]	0,09	0,146	0,25	
	+10 mm stroke	[kg]	0,005	0,009	0,013	

	Piston Ø Piston rod thread Ports	16 M6 M5	20 M8 G 1/8	25 M10x1.25 G 1/8		
	Stroke max.	800	1300	1300		
	Stroke 10	0822232001	0822233001	0822234001		
	25	0822232002	0822233002	0822234002		
	50	0822232003	0822233003	0822234003		
	80	0822232004	0822233004	0822234004		
	100	0822232005	0822233005	0822234005		
	125	0822232006	0822233006	0822234006		
	160	0822232007	0822233007	0822234007		
	200	-	0822233008	0822234008		
	250	-	0822233009	0822234009		
	320	-	0822233010	0822234010		
	400	-	-	0822234011		
	500	-	-	0822234012		

* core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

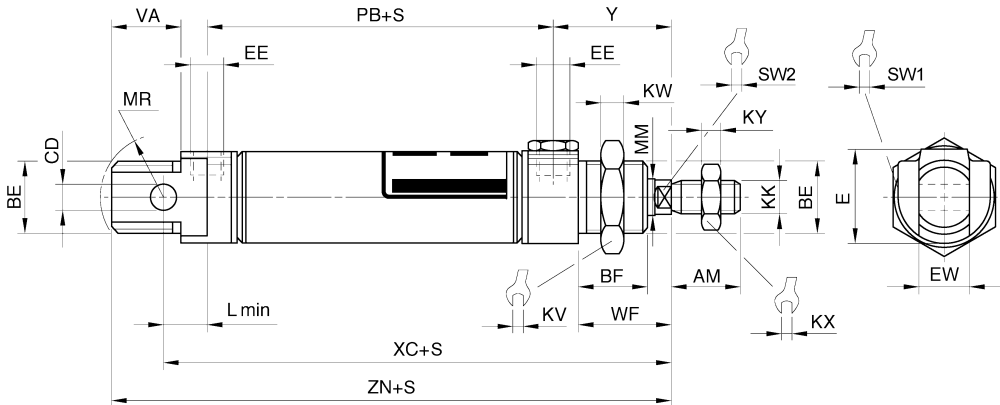
pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

Piston rod cylinders: Mini cylinder

● Mini cylinder, series MNI
 Ø 16 - 25 mm, double-acting, adjustable cushioning, optionally in ATEX



piston Ø 16 - 25



00106425_c

S = stroke

Ø	AM -2	BE	BF	CD H9	E	EE	EW d13	KK	KV	KW	KX	KY
16	16	M16x1,5	16	6	19	M5	12	M6	22	6	10	3.2
20	20	M22x1,5	18	8	28	G1/8	16	M8	30	7	13	4
25	22	M22x1,5	21	8	28	G1/8	16	M10x1,25	30	7	17	6

Ø	L	MM f8	MR	PB ±1	SW 1	SW 2	VA	WF ±1,2	XC ±1	Y ± 1	ZN ± 1,4	
16	9	6	16	47	19	5	17	22	82	27	95.5	
20	12	8	18	51	28	6	19	24	95	32	109.5	
25	12	10	19	55	28	8	21	28	104	36	119.5	

Piston rod cylinders

● Mini cylinder, series MNI

Ø 10 - 25 mm, double-acting, magnetic piston, without cushioning, optionally in ATEX



00106379

Standards	ISO 6432:1985
ATEX	II 2G2D c IIB T4 X -25 °C ≤ Ta ≤ 50 °C
Working pressure min./max	1.5 / 10 bar
Ambient temperature min./max.	-25°C / +80°C
Medium temperature	-25°C / +80°C
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3, class 5-4-4
Pressure for determining piston forces	6
materials:	
cylinder tube	stainless steel
piston rod	stainless steel, cold hardened
End covers	aluminum, anodized
Seal	acrylonitrile butadiene caoutchouc

Piston Ø	[mm]	10	12	16	20	25
Retracted piston force	[N]	35	45	91	137	216
Extended piston force	[N]	42	58	106	164	259
Weight	0 mm stroke	[kg]	0,042	0,073	0,091	0,149
	+10 mm stroke	[kg]	0,002	0,004	0,005	0,009

	Piston Ø Piston rod thread Ports	10 M4 M5	12 M6 M5	16 M6 M5	20 M8 G 1/8	25 M10x1.25 G 1/8
	Stroke max.	250	600	800	1300	1300
	Stroke 10	0822330201	0822331201	0822332201	0822333201	0822334201
	25	0822330202	0822331202	0822332202	0822333202	0822334202
	50	0822330203	0822331203	0822332203	0822333203	0822334203
	80	0822330204	0822331204	0822332204	0822333204	0822334204
	100	0822330205	0822331205	0822332205	0822333205	0822334205
	125	-	0822331206	0822332206	0822333206	0822334206
	160	-	0822331207	0822332207	0822333207	0822334207
	200	-	-	0822332208	0822333208	0822334208
	250	-	-	-	0822333209	0822334209
	320	-	-	-	0822333210	0822334210
	400	-	-	-	-	0822334211
	500	-	-	-	-	0822334212

* core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

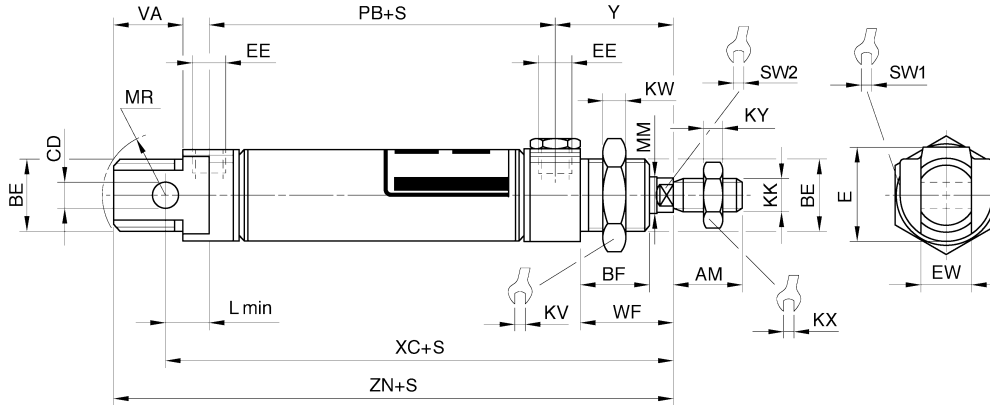
Piston rod cylinders

● Mini cylinder, series MNI

Ø 10 - 25 mm, double-acting, magnetic piston, without cushioning, optionally in ATEX



piston Ø 10 - 25



00106425_d

S = stroke

Ø	AM-2	BE	BF	CD H9	E	EE	EW d13	KK	KV	KW	KX	KY
10	12	M12x1,25	11	4	14	M5	8	M4	17	5.5	7	2.2
12	16	M16x1,5	16	6	19	M5	12	M6	22	6	10	3.2
16	16	M16x1,5	16	6	19	M5	12	M6	22	6	10	3.2
20	20	M22x1,5	18	8	28	G 1/8	16	M8	30	7	13	4
25	22	M22x1,5	21	8	28	G 1/8	16	M10x1,25	30	7	17	6

Ø	L	MM f8	MR	PB ±1	SW 1	SW 2	VA	WF ±1,2	XC ±1	Y ± 1	ZN ± 1,4		
10	6	4	12	37	13	3	11	16	74	21	83.5		
12	9	6	16	41	19	5	16	22	75	24	88.5		
16	9	6	16	47	19	5	17	22	82	27	95.5		
20	12	8	18	51	28	6	19	24	95	32	109.5		
25	12	10	19	55	28	8	21	28	104	36	119.5		

* core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

Piston rod cylinders: Mini cylinder

● Mini cylinder, series MNI

Ø 10 - 25 mm, double-acting, magnetic piston, without cushioning, heat resistant up to 120°C



00106378

Standards	ISO 6432:1985
Working pressure min/max	1.5 / 10 bar
Ambient temperature min./max.	-20°C / +120°C
Medium temperature	-20°C / +120°C
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3, class 5-4-4
Pressure for determining piston forces	6
materials:	
cylinder tube	stainless steel
piston rod	stainless steel, cold hardened
End covers	aluminum, anodized
Seal	fluorocarbon

Piston Ø	[mm]	10	12	16	20	25
Retracted piston force	[N]	35	45	91	137	216
Extended piston force	[N]	42	58	106	164	259
Weight	0 mm stroke	[kg]	0,042	0,073	0,091	0,149
	+10 mm stroke	[kg]	0,002	0,004	0,005	0,009

	Piston Ø Piston rod thread Ports	10 M4 M5	12 M6 M5	16 M6 M5	20 M8 G 1/8	25 M10x1.25 G 1/8
	Stroke max.	250	600	800	1300	1300
	Stroke 10	0822330401	0822331401	0822332401	0822333401	0822334401
	25	0822330402	0822331402	0822332402	0822333402	0822334402
	50	0822330403	0822331403	0822332403	0822333403	0822334403
	80	0822330404	0822331404	0822332404	0822333404	0822334404
	100	0822330405	0822331405	0822332405	0822333405	0822334405
	125	-	0822331406	0822332406	0822333406	0822334406
	160	-	0822331407	0822332407	0822333407	0822334407
	200	-	-	0822332408	0822333408	0822334408
	250	-	-	-	0822333409	0822334409
	320	-	-	-	0822333410	0822334410
	400	-	-	-	-	0822334411
	500	-	-	-	-	0822334412

For ordering, contact the nearest Bosch Rexroth sales office.

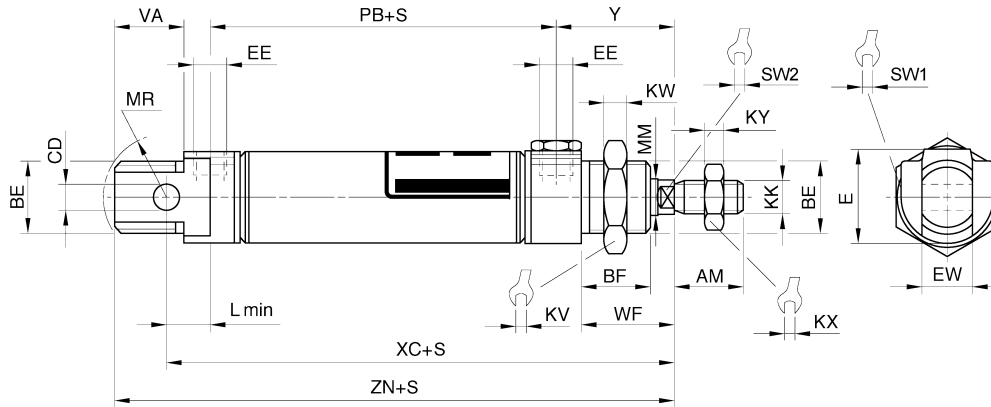
* core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

Piston rod cylinders: Mini cylinder● **Mini cylinder, series MNI**

Ø 10 - 25 mm, double-acting, magnetic piston, without cushioning, heat resistant up to 120 °C

**piston Ø 10 - 25**

00106425_e

S = stroke

Ø	AM-2	BE	BF	CD H9	E	EE	EW d13	KK	KV	KW	KX	KY
10	12	M12x1,25	11	4	14	M5	8	M4	17	5.5	7	2.2
12	16	M16x1,5	16	6	19	M5	12	M6	22	6	10	3.2
16	16	M16x1,5	16	6	19	M5	12	M6	22	6	10	3.2
20	20	M22x1,5	18	8	28	G1/8	16	M8	30	7	13	4
25	22	M22x1,5	21	8	28	G1/8	16	M10x1,25	30	7	17	6

Ø	L	MM f8	MR	PB ±1	SW 1	SW 2	VA	WF ±1,2	XC ±1	Y ± 1	ZN ± 1,4		
10	6	4	12	37	13	3	11	16	74	21	83.5		
12	9	6	16	41	19	5	16	22	75	24	88.5		
16	9	6	16	47	19	5	17	22	82	27	95.5		
20	12	8	18	51	28	6	19	24	95	32	109.5		
25	12	10	19	55	28	8	21	28	104	36	119.5		

* core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

Piston rod cylinders: Mini cylinder

● Mini cylinder, series MNI

Ø 16 - 25 mm, double-acting, magnetic piston, adjustable cushioning, heat resistant up to 120°C



00106465

Standards	ISO 6432:1985
Working pressure min/max	1.5 / 10 bar
Ambient temperature min./max.	-25°C / +120°C
Medium temperature	-25°C / +120°C
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3, class 5-4-4
Pressure for determining piston forces	6
materials:	
cylinder tube	stainless steel
piston rod	stainless steel, cold hardened
End covers	aluminum, anodized
Seal	fluorocarbon

Piston Ø	[mm]	16	20	25		
Retracted piston force	[N]	91	137	216		
Extended piston force	[N]	106	164	259		
Cushioning length	[mm]	9	13	17,5		
Cushioning energy	[J]	0,58	1,35	2,1		
Weight	0 mm stroke	[kg]	0,16	0,265		
	+10 mm stroke	[kg]	0,009	0,013		

	Piston Ø Piston rod thread Ports	16 M6 M5	20 M8 G 1/8	25 M10x1.25 G 1/8		
	Stroke max.	800	1300	1300		
	Stroke 10	0822332451	0822333451	0822334451		
	25	0822332452	0822333452	0822334452		
	50	0822332453	0822333453	0822334453		
	80	0822332454	0822333454	0822334454		
	100	0822332455	0822333455	0822334455		
	125	0822332456	0822333456	0822334456		
	160	0822332457	0822333457	0822334457		
	200	0822332458	0822333458	0822334458		
	250	-	0822333459	0822334459		
	320	-	0822333460	0822334460		
	400	-	-	0822334461		
	500	-	-	0822334462		

* core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

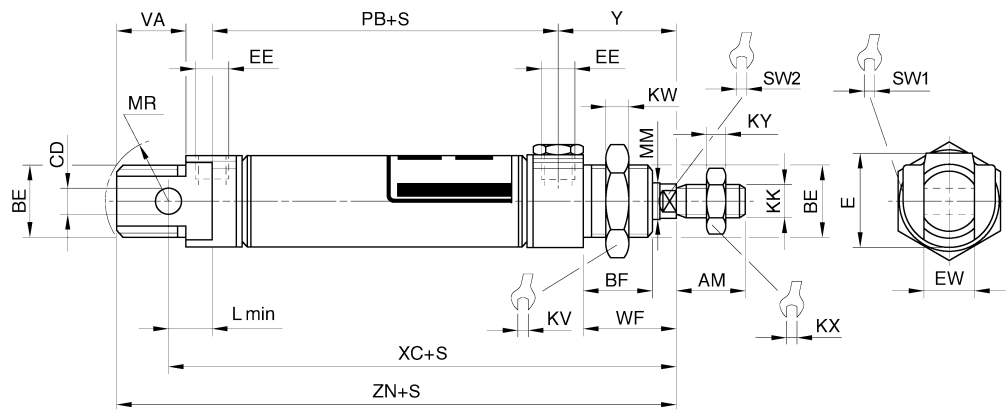
pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

Piston rod cylinders: Mini cylinder

● Mini cylinder, series MNI
Ø 16 - 25 mm, double-acting, magnetic piston, adjustable cushioning, heat resistant up to 120°C



piston Ø 16 - 25



00106425_g

S = stroke

Ø	AM-2	BE	BF	CD H9	E	EE	EW d13	KK	KV	KW	KX	KY
16	16	M16x1,5	16	6	19	M5	12	M6	22	6	10	3.2
20	20	M22x1,5	18	8	28	G1/8	16	M8	30	7	13	4
25	22	M22x1,5	21	8	28	G1/8	16	M10x1,25	30	7	17	6

Ø	L min.	MM f8	MR	PB ±1	SW 1	SW 2	VA	WF ±1,2	XC ±1	Y ± 1	ZN ± 1,4		
16	9	6	16	47	19	5	17	22	82	27	95.5		
20	12	8	18	51	28	6	19	24	95	32	109.5		
25	12	10	19	55	28	8	21	28	104	36	119.5		

Piston rod cylinders

● Mini cylinder, series MNI

Ø 16 - 25 mm, double-acting, magnetic piston, adjustable cushioning, optionally in ATEX



00106465

Standards	ISO 6432:1985
ATEX	II 2G2D c IIB T4 X -25 °C ≤ Ta ≤ 50 °C
Working pressure min/max	1.5 / 10 bar
Ambient temperature min./max.	-25°C / +80°C
Medium temperature	-25°C / +80°C
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3, class 5-4-4
Pressure for determining piston forces	6
materials:	
cylinder tube	stainless steel
piston rod	stainless steel, cold hardened
End covers	aluminum, anodized
Seal	acrylonitrile butadiene caoutchouc

Piston Ø	[mm]	16	20	25		
Retracted piston force	[N]	91	137	216		
Extended piston force	[N]	106	164	259		
Cushioning length	[mm]	9	13	17,5		
Cushioning energy	[J]	0,58	1,35	2,1		
Weight	0 mm stroke	[kg]	0,1	0,16	0,265	
	+10 mm stroke	[kg]	0,005	0,009	0,013	

	Piston Ø Piston rod thread Ports	16 M6 M5	20 M8 G 1/8	25 M10x1.25 G 1/8		
	Stroke max.	800	1300	1300		
	Stroke 10	0822332501	0822333501	0822334501		
	25	0822332502	0822333502	0822334502		
	50	0822332503	0822333503	0822334503		
	80	0822332504	0822333504	0822334504		
	100	0822332505	0822333505	0822334505		
	125	0822332506	0822333506	0822334506		
	160	0822332507	0822333507	0822334507		
	200	0822332508	0822333508	0822334508		
	250	-	0822333509	0822334509		
	320	-	0822333510	0822334510		
	400	-	-	0822334511		
	500	-	-	0822334512		

* core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

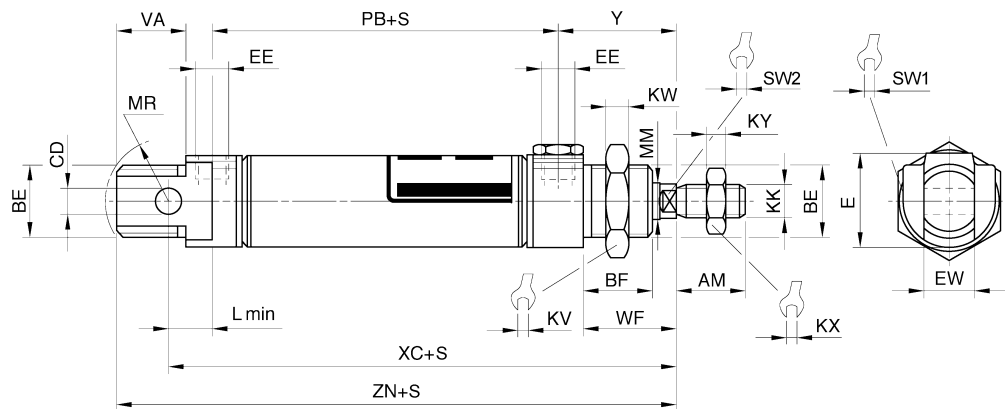
pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

Piston rod cylinders

● Mini cylinder, series MNI
Ø 16 - 25 mm, double-acting, magnetic piston, adjustable cushioning, optionally in ATEX



piston Ø 16 - 25



00106425_f

S = stroke

Ø	AM-2	BE	BF	CD H9	E	EE	EW d13	KK	KV	KW	KX	KY
16	16	M16x1,5	16	6	19	M5	12	M6	22	6	10	3.2
20	20	M22x1,5	18	8	28	G1/8	16	M8	30	7	13	4
25	22	M22x1,5	21	8	28	G1/8	16	M10x1,25	30	7	17	6

Ø	L	MM f8	MR	PB ±1	SW 1	SW 2	VA	WF ±1,2	XC ±1	Y ± 1	ZN ± 1,4		
16	9	6	16	47	19	5	17	22	82	27	95.5		
20	12	8	18	51	28	6	19	24	95	32	109.5		
25	12	10	19	55	28	8	21	28	104	36	119.5		

Piston rod cylinders

● Mini cylinder, series MNI

Ø 10 - 25 mm, double-acting, without cushioning, piston rod: through, optionally in ATEX



00106382

Standards	ISO 6432:1985
ATEX	II 2G2D c IIB T4 X -25 °C ≤ Ta ≤ 50 °C
Working pressure min./max	1.5 / 10 bar
Ambient temperature min./max.	-25°C / +80°C
Medium temperature	-25°C / +80°C
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3, class 5-4-4
Pressure for determining piston forces	6
materials:	
cylinder tube	stainless steel
piston rod	stainless steel, cold hardened
End covers	aluminum, anodized
Seal	acrylonitrile butadiene caoutchouc

Piston Ø	[mm]	10	12	16	20	25
Retracted piston force	[N]	35	45	91	137	216
Extended piston force	[N]	35	45	91	137	216
Weight	0 mm stroke	[kg]	0,039	0,073	0,091	0,182
	+10 mm stroke	[kg]	0,029	0,05	0,063	0,102

	Piston Ø Piston rod thread Ports	10 M4 M5	12 M6 M5	16 M6 M5	20 M8 G 1/8	25 M10x1.25 G 1/8
	Stroke max.	250	600	600	800	800
	Stroke 10	0822080201	0822081201	0822082201	0822083201	0822084201
	25	0822080202	0822081202	0822082202	0822083202	0822084202
	50	0822080203	0822081203	0822082203	0822083203	0822084203
	80	0822080204	0822081204	0822082204	0822083204	0822084204
	100	0822080205	0822081205	0822082205	0822083205	0822084205
	125	-	0822081206	0822082206	0822083206	0822084206
	160	-	0822081207	0822082207	0822083207	0822084207
	200	-	-	0822082208	0822083208	0822084208
	250	-	-	-	0822083209	0822084209
	320	-	-	-	0822083210	0822084210
	400	-	-	-	-	0822084211
	500	-	-	-	-	0822084212

* core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

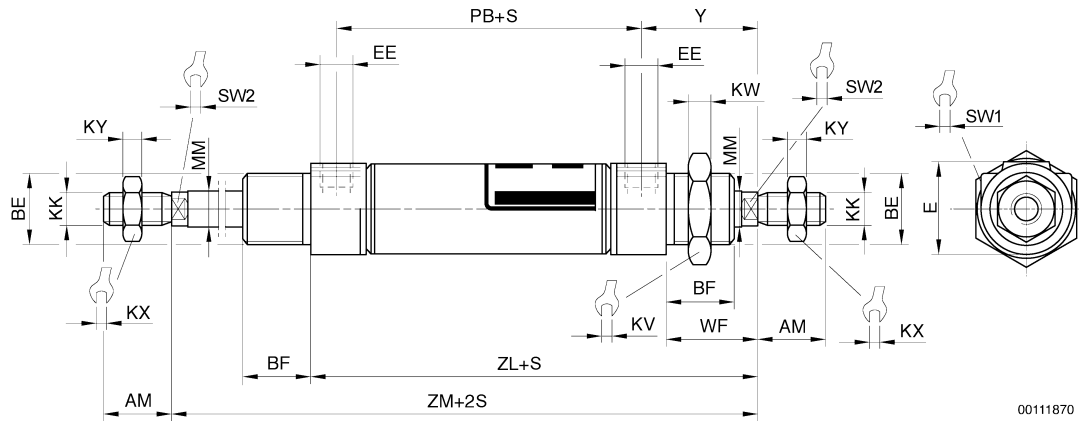
pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

Piston rod cylinders

● Mini cylinder, series MNI
 Ø 10 - 25 mm, double-acting, without cushioning, piston rod: through, optionally in ATEX



piston Ø 10 - 25



00111870

00111870

S = stroke

Ø	AM -2	BE	BF	E	EE	KK	KV	KW	KX	KY	MM f8	MR	PB ±1
10	12	M12x1,25	11	14	M5	M4	17	5.5	7	2.2	4	12	37
12	16	M16x1,5	16	19	M5	M6	22	6	10	3.2	6	16	41
16	16	M16x1,5	16	19	M5	M6	22	6	10	3.2	6	16	47
20	20	M22x1,5	18	28	G1/8	M8	30	7	13	4	8	18	51
25	22	M22x1,5	21	28	G1/8	M10x1,25	30	7	17	6	10	19	55

Ø	SW 1	SW 2	WF	Y ± 1	ZL ± 1,7	ZM -1							
10	13	3	16	21	62.5	80							
12	19	5	22	27	72.5	96							
16	19	5	22	27	78.5	102							
20	28	6	24	32	90.5	116							
25	28	8	28	36	98.5	128							

Piston rod cylinders

● Mini cylinder, series MNI

Ø 16 - 25 mm, double-acting, magnetic piston, without cushioning, piston rod: through, ATEX



00106464

Standards	ISO 6432:1985
ATEX	2G2D c IIB T4 X -25 °C ≤ Ta ≤ 50 °C
Working pressure min/max	1.5 / 10 bar
Ambient temperature min./max.	-25°C / +80°C
Medium temperature	-25°C / +80°C
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3, class 5-4-4
Pressure for determining piston forces	6
materials:	
cylinder tube	stainless steel
piston rod	stainless steel, cold hardened
End covers	aluminum, anodized
Seal	acrylonitrile butadiene caoutchouc

Piston Ø	[mm]	16	20	25		
Retracted piston force	[N]	91	137	216		
Extended piston force	[N]	106	164	259		
Weight	0 mm stroke	[kg]	0,091	0,182	0,317	
	+10 mm stroke	[kg]	0,006	0,01	0,016	

	Piston Ø Piston rod thread Ports	16 M6 M5	20 M8 G 1/8	25 M10x1.25 G 1/8		
	Stroke max.	600	800	800		
	Stroke 10	0822382001	0822383001	0822384001		
	25	0822382002	0822383002	0822384002		
	50	0822382003	0822383003	0822384003		
	80	0822382004	0822383004	0822384004		
	100	0822382005	0822383005	0822384005		
	125	0822382006	0822383006	0822384006		
	160	0822382007	0822383007	0822384007		
	200	0822382008	0822383008	0822384008		
	250	-	0822383009	0822384009		
	320	-	0822383010	0822384010		
	400	-	-	0822384011		
	500	-	-	0822384012		

* core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

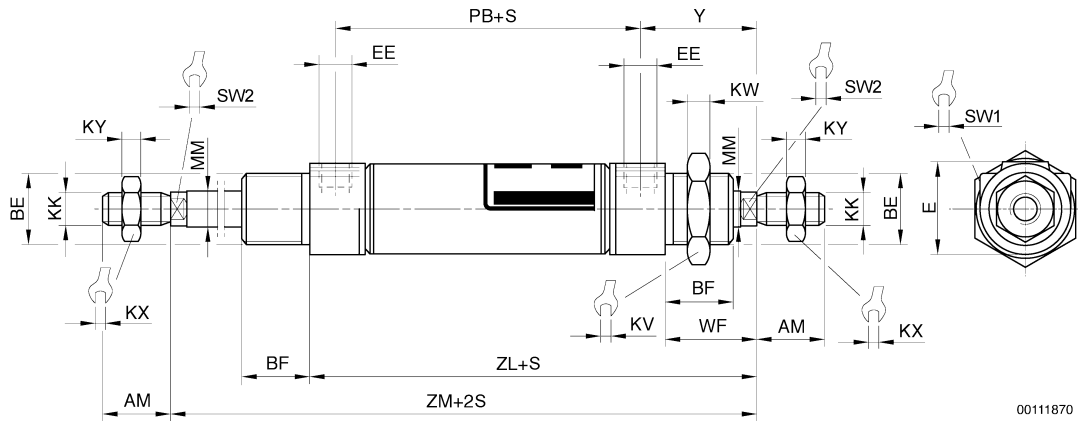
pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

Piston rod cylinders

● **Mini cylinder, series MNI**
 Ø 16 - 25 mm, double-acting, magnetic piston, without cushioning, piston rod: through, ATEX



piston Ø 16 - 25



00111870
 00111870_a

S = stroke

Ø	AM -2	BE	BF	E	EE	KK	KV	KW	KX	KY	MM f8	MR	PB ±1
16	16	M16x1,5	16	19	M5	M6	22	6	10	3.2	6	16	47
20	20	M22x1,5	18	28	G1/8	M8	30	7	13	4	8	18	51
25	22	M22x1,5	21	28	G1/8	M10x1,25	30	7	17	6	10	19	55

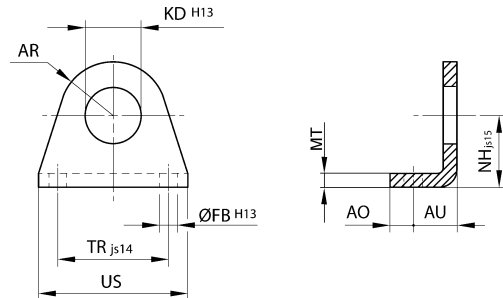
Ø	SW 1	SW 2	WF	Y ± 1	ZL ± 1,7	ZM -1							
16	19	5	22	27	78.5	102							
20	28	6	24	32	90.5	116							
25	28	8	28	36	98.5	128							

★ **series MNI**
Accessories

★ **foot mounting MS3**



00106404



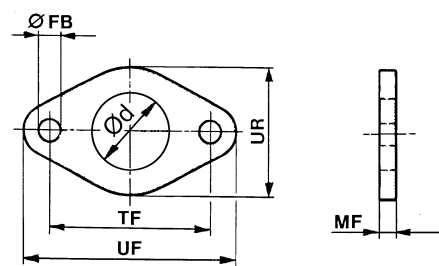
00126389_a

Part No.	Ø	AO	AR	AU	Ø FB H13	KD H13	MT	NH ±0,3 js15	TR js14	US	Weight kg
1821332029	10	5	10	11	4.5	12.1	3	16	25	35	0,022
1821332028	12, 16	6	13	14	5.5	16.1	4	20	32	42	0,045
1821332027	20, 25	8	20	17	6.6	22.1	5	25	40	54	0,075
Part No.	Material										
1821332029	galvanized steel										
1821332028	galvanized steel										
1821332027	galvanized steel										

★ **Flange mounting MF8**



00106405



D132_007

Part No.	Ød	ØFB	MF	TF js14	UF	UR	Weight kg	Material			
1821036012	10	4.5	3	30	40	25	0,012	galvanized steel			
1821036011	12, 16	5.5	4	40	53	30	0,025	galvanized steel			
1821036010	20, 25	6.6	5	50	66	40	0,045	galvanized steel			

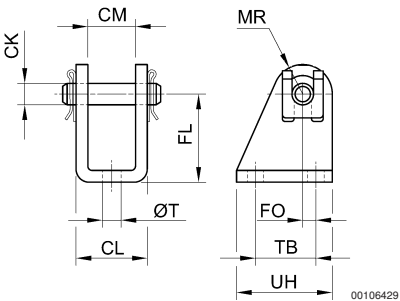
★ series MNI

Accessories

★ Clevis mounting AB3



00105159



00106429

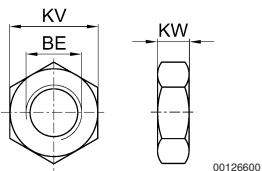
Part No.	Ø	CM	CK	CL	FL	FO	MR	T	TB	UH	Weight kg
1827001447	10	8,1	4	13,1	24	1,5	5	4,5	12,5	20	0,16
1827001446	12/16	12,1	6	18,1	27	2,0	7	5,5	15	25	0,4
1827001445	20/25	16,1	8	24,1	30	4,0	10	6,6	20	32	0,7

Part No.	Material										
1827001447	galvanized steel										
1827001446	galvanized steel										
1827001445	galvanized steel										

★ MR3 nut for cylinder mounting



00106400



00126600

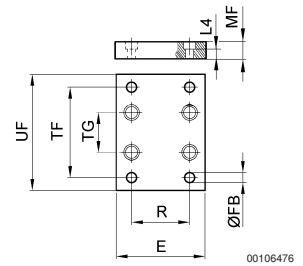
Part No.	BE	KV	KW	Weight kg	Material						
1823300024	M12x1,25	17	5.5	0,008	aluminum						
1823300005	M16x1,5	22	6	0,01	aluminum						
2915051207	M22x1,5	30	7	0,02	galvanized steel						

★ **series MNI**
Accessories

★ **Mounting flange, 'U' version**
galvanized steel



00106444



00106476

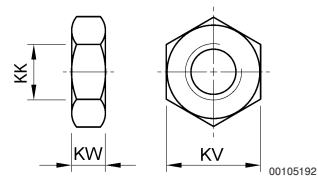
Part No.	Ø	E	FB	G	L4	MF	TF	UF	R	Weight kg		
1821038162	12/16	40	5.5	–	4,6 +0,2	10	46	60	25	0,263		
1827010489	20/25	50	7	25	4,5 -0,2	10	56	70	32	0,263		

★ series MNI Accessories

★ MR9 nut for piston rod



00105168



00105192

Part No.	KK	KV	KW	Weight kg	Material						
1823300032	M4	7	2.2	0,001	galvanized steel						
1823300033	M6	10	3.2	0,004	galvanized steel						
1823300034	M8	13	4	0,005	galvanized steel						
1823300020	M10x1,25	17	6	0,01	galvanized steel						

★ Rod clevis AP2, with internal thread



00105171

Fig.1

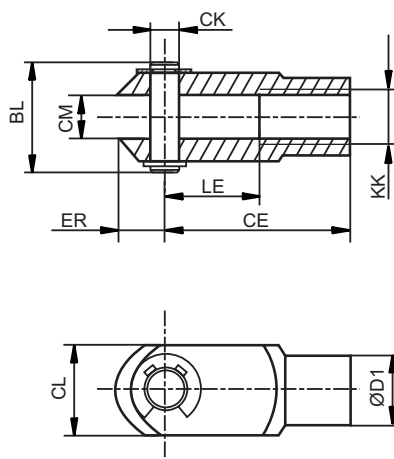
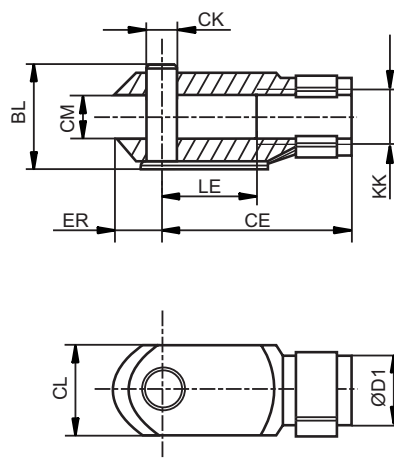


Fig. 2



00126410

Part No.	Fig.	KK	BL	CE	Ø CK	CL	CM	Ø D1	ER	L1	LE
1822122028	2	M4	11,5	16	4	8	4	8	5	6	8
1822122009	2	M6	17,5	24	6	12	6	10	7	9	12
1822122010	2	M8	22	32	8	16	8	14	10	12	16
1822122024	2	M10x1,25	26	40	10	20	10	18	12	15	20
Part No.	Weight kg	Material									
1822122028	0,007	galvanized steel									

★ core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

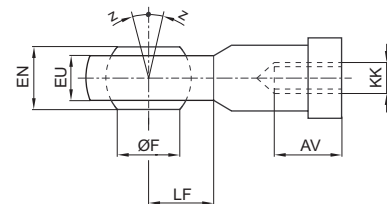
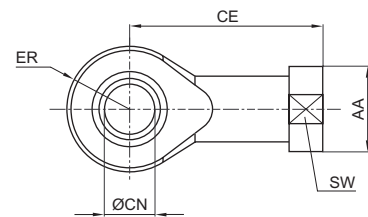
★ **series MNI**
Accessories

Part No.	Weight kg	Material									
1822122009	0,02	galvanized steel									
1822122010	0,047	galvanized steel									
1822122024	0,1	galvanized steel									

★ **Ball eye rod end AP6, with internal thread and spherical bearing**



00105172



00126602

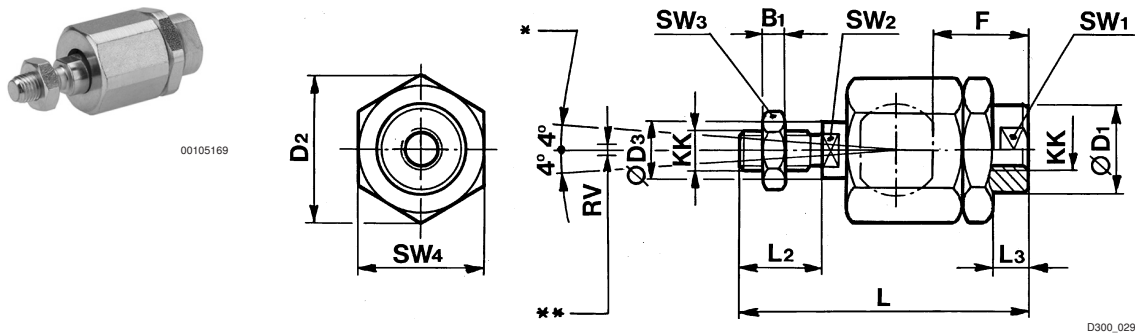
Part No.	KK	AA	AV	CE	ØCN H7	EN +0/- 0,1	ER	EU	ØF	LF	SW	Z [°]
1822124000	M4	11	10	27	5	8	9	6	7.7	10	9	4
1822124001	M6	13	12	30	6	9	10	6.75	8.9	11	11	4
1822124002	M8	16	16	36	8	12	12	9	10.4	13	14	4
1822124003	M10x1,25	19	20	43	10	14	14	10.5	12.9	16	17	4

Part No.	Weight kg	Material										
1822124000	0,02	galvanized steel										
1822124001	0,03	galvanized steel										
1822124002	0,05	galvanized steel										
1822124003	0,07	galvanized steel										

¹⁾ narrow version

★ series MNI
Accessories

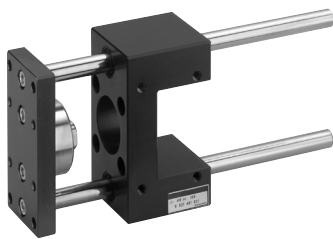
★ Flexible coupling PM5, spherical



Part No.	KK	B1	ØD1	D2	ØD3	F	L ±2	L2	L3 ±1	SW1	SW2	SW3
1826409008	M4	2.2	12	13.5	4	12	33	8	–	11	3.2	7
1826409000	M6	3.2	8.5	15	6	11.5	39	12	3.5	7	5	10
1826409001	M8	4	12.5	20	8	14	55	15	5	10	7	13
1826409002	M10x1,25	6	21.5	34	14	23	73	20	7.5	19	12	17

Part No.	SW4	RV	Weight kg	Material								
1826409008	11	–	-	galvanized steel								
1826409000	13	0.5	-	galvanized steel								
1826409001	17	0.5	0,05	galvanized steel								
1826409002	30	0.7	0,21	galvanized steel								

★ Guide unit, 'U' version
Ø 12 - 25 mm, with sintered friction bearing



Version	U
Bearing type	friction bearing
Ambient temperature min./max.	-20 °C / +80 °C
for standard cylinder materials:	ISO 6432
Bearing housings	aluminum, anodized black
Bearing	sintered bronze
Carrying plate	aluminum, anodized black
Guide rods	stainless steel, smooth rolled

Piston Ø		[mm]	12	16	20	25	
Weight	0 mm stroke	[kg]	0,247	0,247	0,66	0,66	
	+10 mm stroke	[kg]	0,0078	0,0078	0,0122	0,0122	

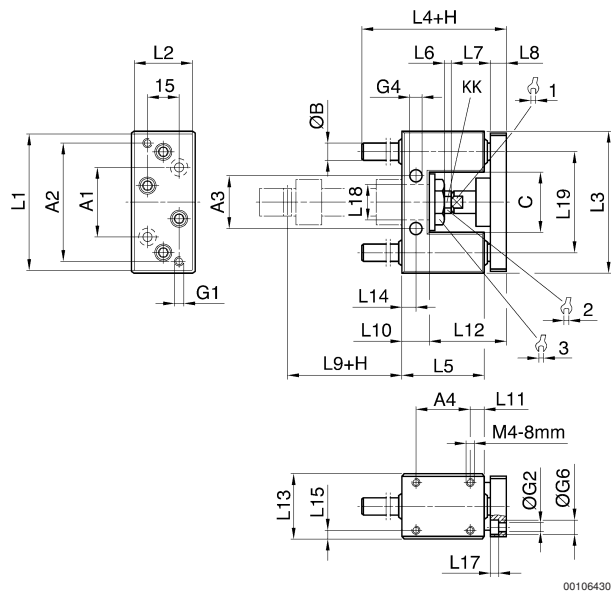
★ core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service
● service products - existing standard program, worldwide service
pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

★ **series MNI**
Accessories

	Piston Ø	12	20	25		
	Stroke 50	0821401095	0821401070	0821401080		
	100	0821401096	0821401071	0821401081		
	160	-	0821401072	0821401082		
	200	0821401097	0821401073	0821401083		
	250	-	0821401074	0821401084		
	400	-	-	0821401085		
	600	-	-	0821401086		
	800	-	0821401077	0821401087		

guide units for cylinder Ø 12 also fit on cylinder Ø 16

Ø 12 - 16 mm

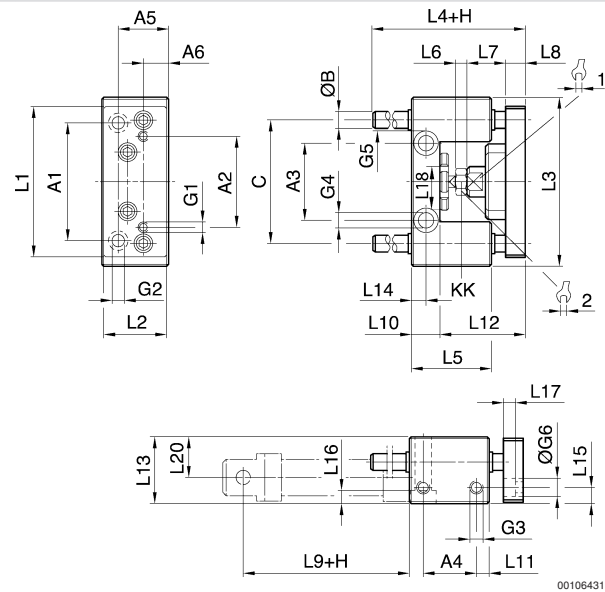


H = stroke

* core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service
● service products - existing standard program, worldwide service
pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

★ series MNI
Accessories

Ø 20 - 25 mm



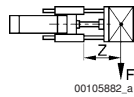
H = stroke

Ø	KK	L18	A1	A2	A3	A4	A5	A6	B	C	G1	G2	G3	G4
12	M6	16 H7	54	32	24	25	–	–	8	46	M4	4.5	M4	5.5
16	M6	16 H7	54	32	24	25	–	–	8	46	M4	4.5	M4	5.5
20	M8	22 H7	70	55	46.5	32	30	15	10	48	M6	6.6	M8	9
25	M10	22 H7	70	55	46.5	32	30	15	10	48	M6	6.6	M8	9

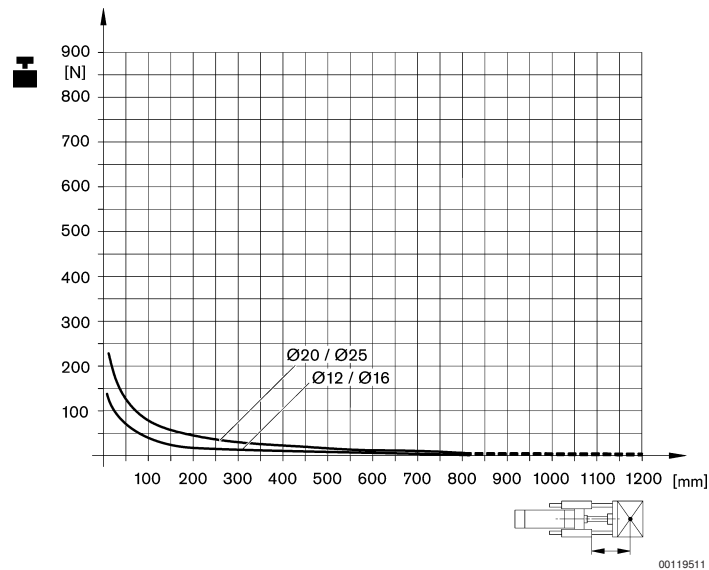
Ø	G5	G6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12
12	–	8	63	27	65	73	38	3.2	18	10	53	13	6.5	40 +4
16	–	8	63	27	65	73	38	3.2	18	10	53	13	6.5	40 +4
20	15	11	90	38	100	77	48	4	22	12	71	17	8	48 +2
25	15	11	90	38	100	77	48	6	22	12	76	17	8	54 +2

Ø	L13	L14	L15	L16	L17	L19	L20	SW1	SW2	SW3				
12	30	6.5	4	–	4.6	27	16	8	10	19				
16	30	6.5	4	–	4.6	27	16	8	10	19				
20	40	8.5	10	9	7	74	24	15	13	–				
25	40	8.5	10	9	7	74	24	15	17	–				

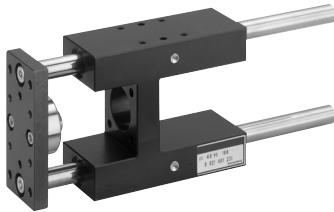
useful load



★ series MNI Accessories



★ Guide unit, 'H' version Ø 12 - 25 mm, with long guide, with sintered friction bearing



00105863

Version	H
Bearing type	friction bearing
Ambient temperature min./max.	-20°C / +80°C
for standard cylinder	ISO 6432
materials:	
Bearing housings	aluminum, anodized black
Bearing	sintered bronze
Carrying plate	aluminum, anodized black
Guide rods	stainless steel, smooth rolled

Piston Ø		[mm]	12	16	20	25	
Weight	0 mm stroke	[kg]	0,395	0,395	0,73	0,73	
	+10 mm stroke	[kg]	0,0078	0,0078	0,0122	0,0122	

	Piston Ø	12	20	25		
	Stroke 50	0821401295	0821401200	0821401210		
	100	0821401296	0821401201	0821401211		
	160	-	0821401202	0821401212		
	200	0821401297	0821401203	0821401213		
	250	-	0821401204	0821401214		
	400	-	0821401205	0821401215		
	600	-	0821401206	0821401216		
	800	-	0821401207	0821401217		

guide units for cylinder Ø 12 also fit on cylinder Ø 16

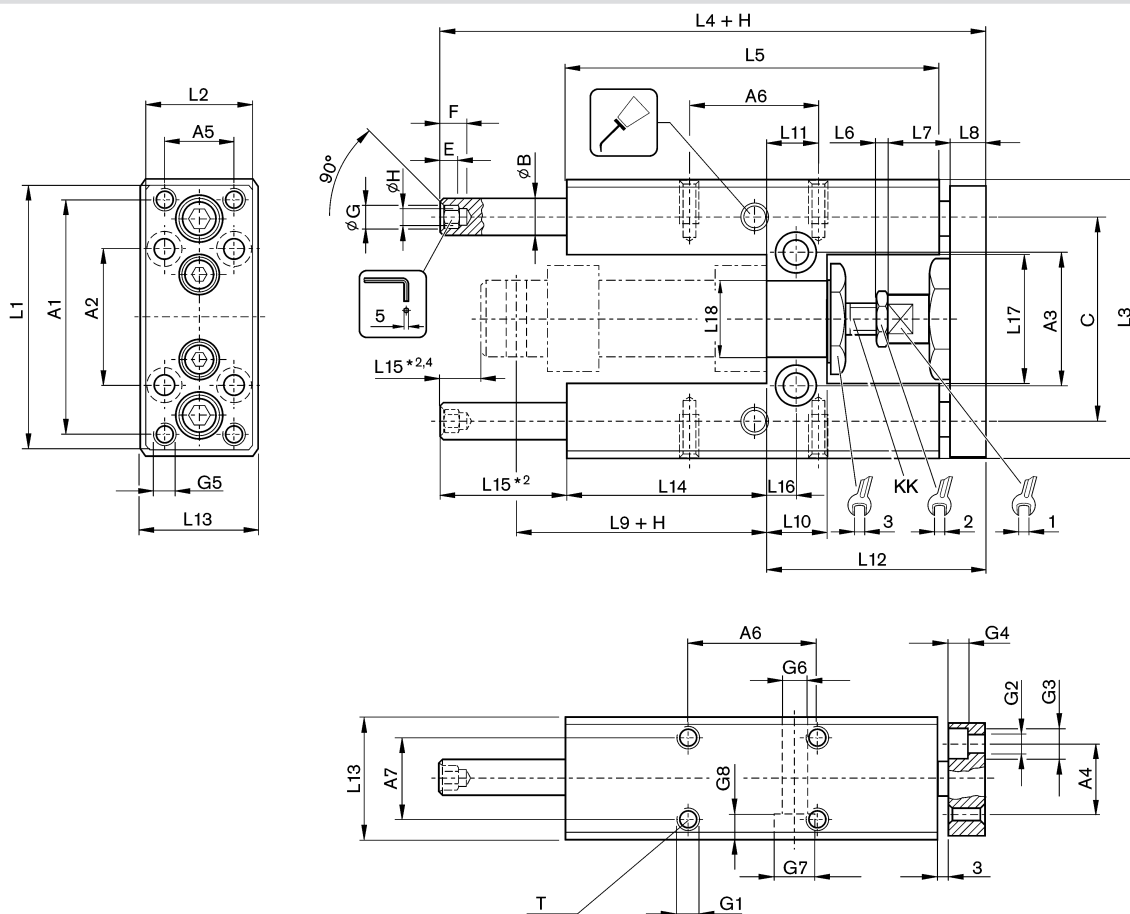
★ core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

★ series MNI Accessories

Ø 12 - 25 mm



000113315

*2) for retracted cylinder
H = stroke

Ø	KK	L18	A1	A2	A3	A4	A5	A6	A7	B	C	E	F	G
12	M6	16 H7	54	32	24	15	22	32.5	—	8	46	4 +1	6 +1	5 +0,5
16	M6	16 H7	54	32	24	15	22	32.5	—	8	46	4 +1	6 +1	5 +0,5
20	M8	22 H7	68	40	38	—	20	32.5	23	10	58	5 +1	7 +1	6 +0,5
25	M10	22 H7	68	40	38	—	20	32.5	23	10	58	5 +1	7 +1	6 +0,5

Ø	G1	G2	G3	G4	G5	G6	G7	G8	H	L1	L2	L3	L4	L5
12	M4	4.5	8	4.6	M4	5.5	—	—	4	63	27	65	133	75
16	M4	4.5	8	4.6	M4	5.5	—	—	4	63	27	65	133	75
20	M6	5.5	10	5.7	M5	6.6	11	7	5	76	32	79	160	108
25	M6	5.5	10	5.7	M5	6.6	11	7	5	76	32	79	160	108

Ø	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L17	L19	L19A
12	3.2	18	10	53	13	11	51 +4	30	37	45 +4	6.5	27 ±0,3	15 +4	—
16	3.2	18	10	80	13	11	51 +4	30	37	45 +4	6.5	27 ±0,3	8	—
20	4	22	12	71	17	15	65 +5	34	58	37	8.5	37 ±0,3	12.5	—9,5
25	6	17	12	76	17	15	65 +5	34	58	37	8.5	37 ±0,3	5.5	—5,5

Ø	SW	SW1	SW2	SW3	T									
12	4	8	10	19	8									
16	4	8	10	19	8									

★ core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

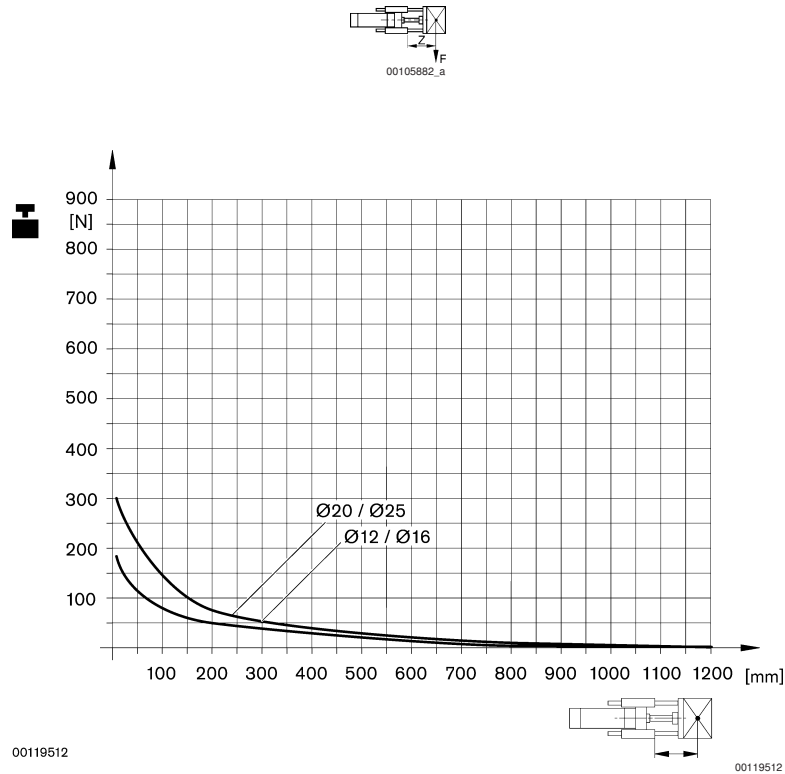
● service products - existing standard program, worldwide service

pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

★ series MNI Accessories

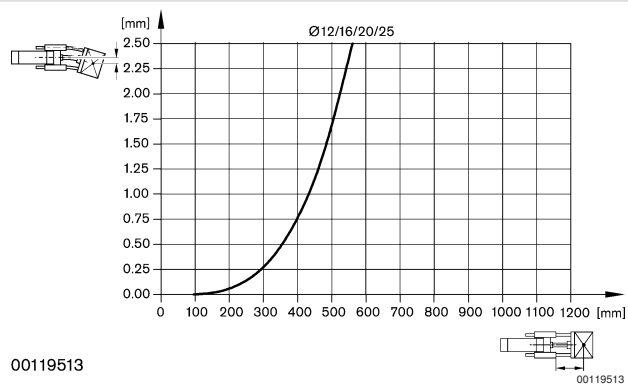
Ø	SW	SW1	SW2	SW3	T									
20	5	13	13	27	14									
25	5	13	17	27	14									

useful load



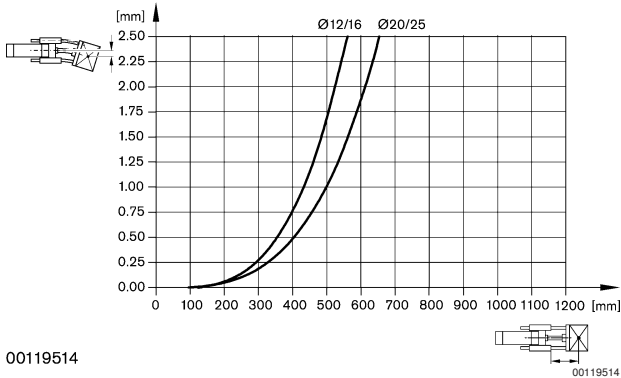
F = useful load, SF = bending, Z = projection

bending due to own load

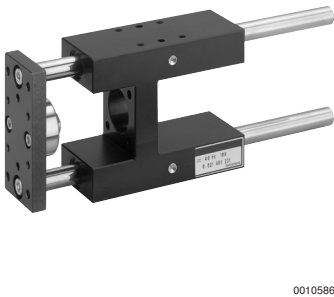


★ series MNI
 Accessories

bending due to 10 N load



★ Guide unit, 'H' version
 Ø 12 - 25 mm, with long guide, with linear ball bearings



Version	H
Bearing type	Linear ball bearing
Ambient temperature min./max.	-20 °C / +80 °C
for standard cylinder	ISO 6432
materials:	
Bearing housings	aluminum, anodized black
Bearing	steel
Carrying plate	aluminum, anodized black
Guide rods	stainless steel, smooth rolled

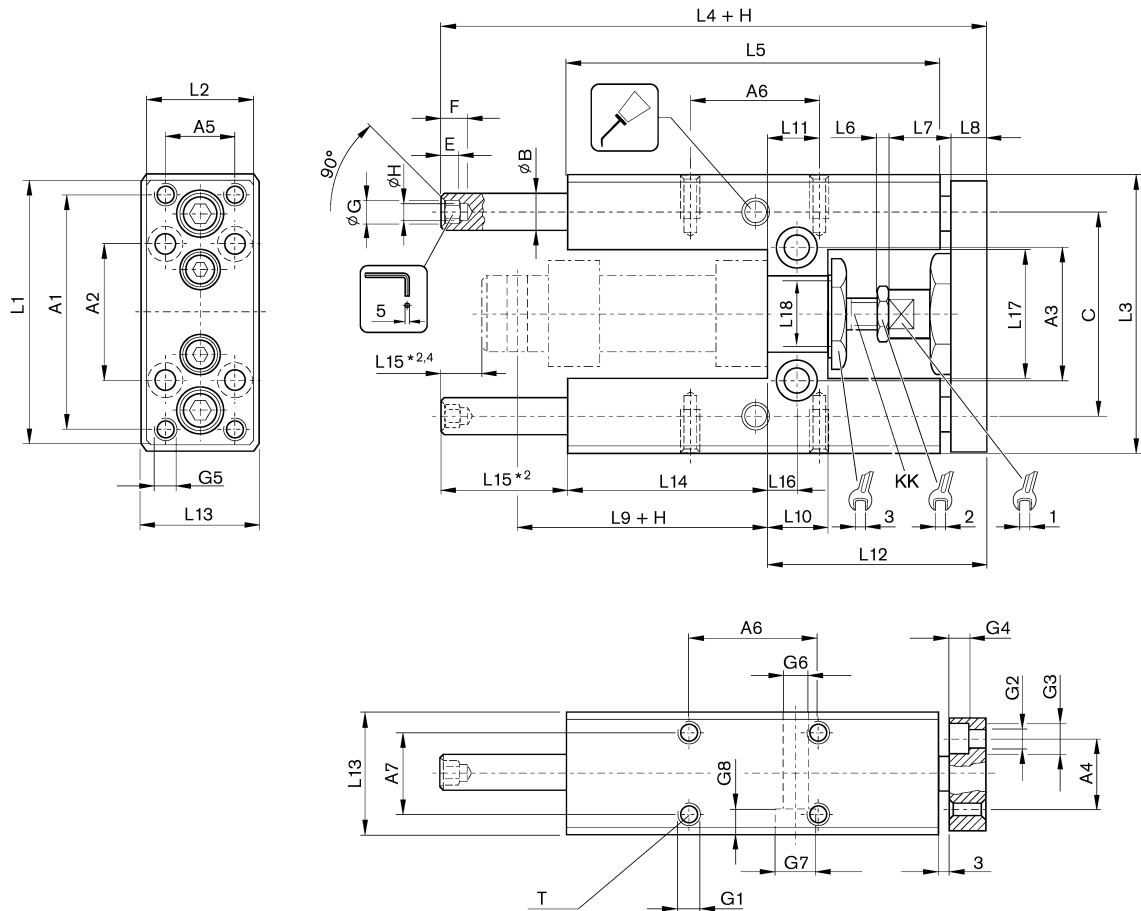
Piston Ø		[mm]	12	16	20	25
Weight	0 mm stroke	[kg]	0,395	0,395	0,73	0,73
	+10 mm stroke	[kg]	0,0078	0,0078	0,012	0,012

Piston Ø		12	20	25
Stroke	50	0821401395	0821401300	0821401310
	100	0821401396	0821401301	0821401311
	200	0821401397	-	-
	250	-	0821401302	0821401312
	400	-	0821401303	0821401313
	600	-	0821401304	0821401314
	800	-	0821401305	0821401315

guide units for cylinder Ø 12 also fit on cylinder Ø 16

★ **series MNI**
Accessories

Ø 12 - 25 mm



000113315_a

*2) for retracted cylinder
H = stroke

Ø	KK	L18	A1	A2	A3	A4	A5	A6	A7	B	C	E	F	G
12	M6	16 H7	54	32	24	15	22	32.5	—	8	46	4 +1	6 +1	5 +0,5
16	M6	16 H7	54	32	24	15	22	32.5	—	8	46	4 +1	6 +1	5 +0,5
20	M8	22 H7	68	40	38	—	20	32.5	23	10	58	5 +1	7 +1	6 +0,5
25	M10	22 H7	68	40	38	—	20	32.5	23	10	58	5 +1	7 +1	6 +0,5
Ø	G1	G2	G3	G4	G5	G6	G7	G8	H	L1	L2	L3	L4	L5
12	M4	4.5	8	4.6	M4	5.5	—	—	4	63	27	65	133	75
16	M4	4.5	8	4.6	M4	5.5	—	—	4	63	27	65	133	75
20	M6	5.5	10	5.7	M5	6.6	11	7	5	76	32	79	160	108
25	M6	5.5	10	5.7	M5	6.6	11	7	5	76	32	79	160	108
Ø	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L17	L19	L19A
12	3.2	18	10	53	13	11	51 +4	30	37	45 +4	6.5	27 ±0,3	15 +4	—
16	3.2	18	10	60	13	11	51 +4	30	37	45 +4	6.5	27 ±0,3	8	—
20	4	22	12	71	17	15	65 +5	34	58	37	8.5	37 ±0,3	12.5	—9,5
25	6	17	12	76	17	15	65 +5	34	58	37	8.5	37 ±0,3	5.5	—5,5
Ø	SW	SW1	SW2	SW3	T									
12	4	8	10	19	8									
16	4	8	10	19	8									

★ core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

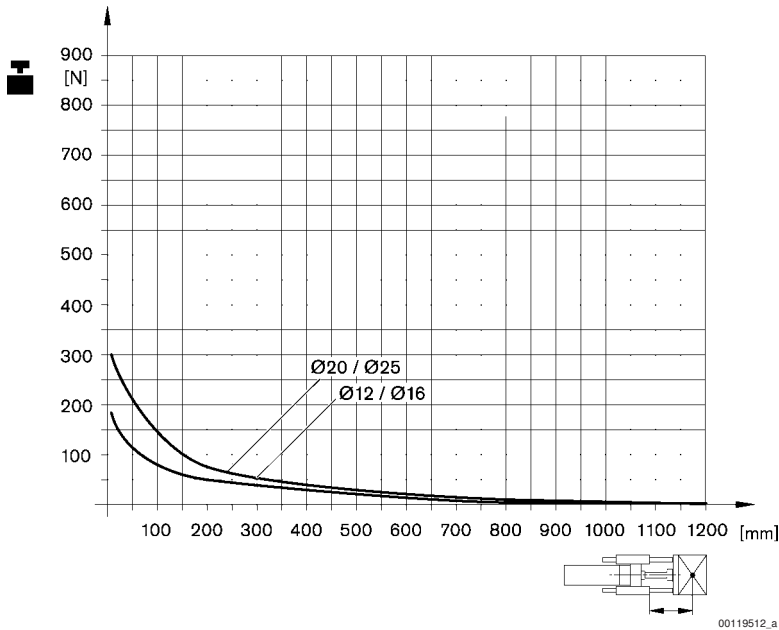
pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

★ series MNI

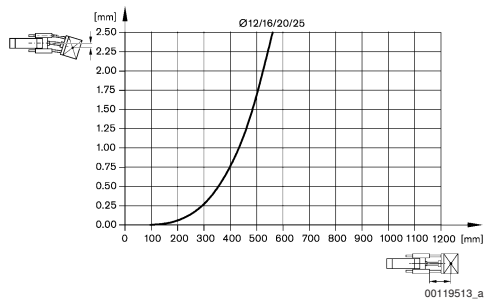
Accessories

Ø	SW	SW1	SW2	SW3	T									
20	5	13	13	27	14									
25	5	13	17	27	14									

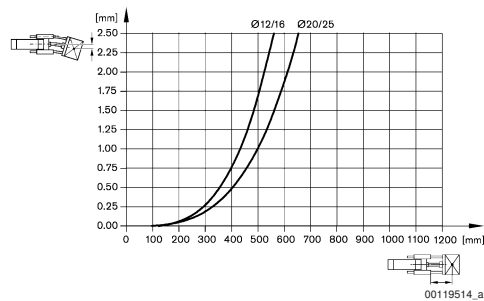
useful load



bending due to own load



bending due to 10 N load



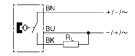
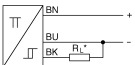
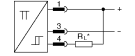
★ series MNI Accessories

★ Sensor, series ST6 cable connection



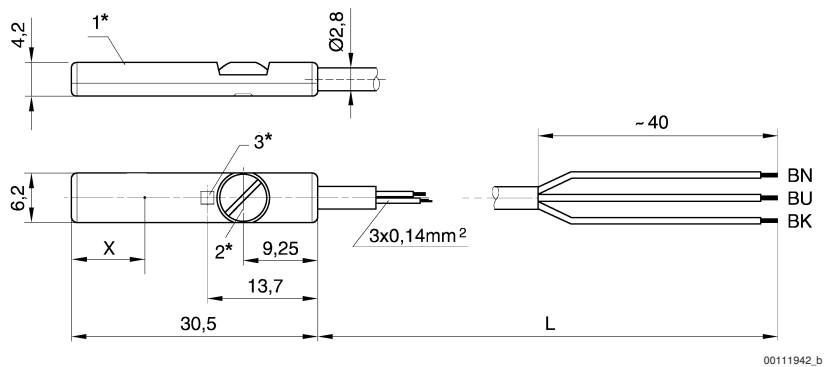
00112027_2

Ambient temperature min./max.	-25 °C / +70 °C
Protection class according to DIN EN 60529:2000	IP68, IP69K
Switching point precision	±0,1
Switching time on	0,5 ms
Switching time off	0,1 ms
LED	yellow
Shock resistance	30 g / 11 ms
Vibration resistance	10-55 Hz, 1 mm
materials:	
Sensor	polyamide
Cable	polyurethane

	type of contact	cable length L [m]	Operational voltage AC [V]	DC operating voltage [V]	DC switching current [A]	Switching capacity	protective resistor [Ω]	Voltage drop [V]	Part No.
	Reed	3 5 10	10 - 30	10 - 30	0,13	3 W / 5 VA	15	<= 3,6 <= 3,6 -	0830100629 0830100630 R412004575
	PNP solid-state	3 5 10	-	10 - 30	0,1	-	-	<= 2,5	0830100631 0830100632 R412004576
	NPN solid-state	3 5	-	10 - 30	0,1	-	-	<= 2,5	0830100633 0830100634
Part No.	operating current, not switched [mA]	operating current, switched [mA]	Max. switching frequency [kHz]		Short circuit-proof		Short-circuit protected		
0830100629 0830100630 R412004575	-	-	< 0,3 < 0,3 -		-		+		
0830100631 0830100632 R412004576	< 20	< 30	< 1,0		+		+		
0830100633 0830100634	< 20	< 30	< 1,0		+		+		

★ series MNI
Accessories

dimensions



1* = sensor element 2* = clamping screw 3* = LED
X = PNP, 6 mm, Reed, 10 mm
L = cable length
BN=brown, BK=black, BU=blue

★ Sensor, series ST6
plug M8x1 with knurled screw



Ambient temperature min./max.	-25°C / +70°C
Protection class according to DIN EN 60529:2000	IP67
Switching point precision	±0,1
Switching time on	0,5 ms
Switching time off	0,1 ms
LED	yellow
Shock resistance	30 g / 11 ms
Vibration resistance	10-55 Hz, 1 mm
materials:	
Sensor	polyamide

00112027_5

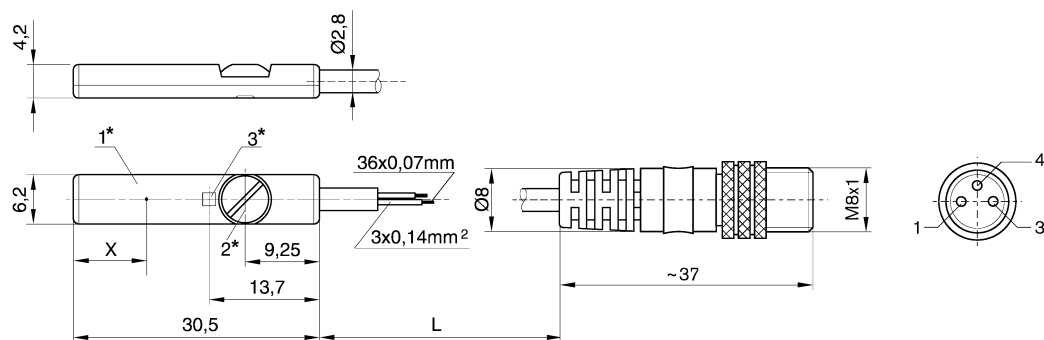
	type of contact	cable length L [m]	Cable	Operational voltage AC [V]	DC operating voltage [V]	DC switching current [A]	Switching capacity [VA]	protective resistor [Ω]	Part No.
	Reed	0,3 0,5	PUR	10 - 30	10 - 30	0,13	3 W / 5 VA	15	0830100434 0830100436
	PNP solid-state	0,3 0,5 0,3	PUR PUR PVC	-	10 - 30	0,1	-	-	0830100435 0830100437 R412004762
	NPN solid-state	0,3	PUR	-	10 - 30	0,1	-	-	0830100431
Part No.	Voltage drop [V]	operating current, not switched [mA]	operating current, switched [mA]	Max. switching frequency [kHz]	Short circuit-proof	Short-circuit protected			
0830100434 0830100436	<= 3,6	-	-	< 0,3	-	+			

★ core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service
● service products - existing standard program, worldwide service
pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

★ series MNI Accessories

Part No.	Voltage drop [V]	operating current, not switched [mA]	operating current, switched [mA]	Max. switching frequency [kHz]	Short circuit-proof	Short-circuit protected
0830100435 0830100437 R412004762	$\leq 2,5$	< 20	< 30	$< 1,0$	+	+
0830100431	$\leq 2,5$	< 20	< 30	$< 1,0$	+	+

dimensions



00111942_d

1* = sensor element 2* = clamping screw 3* = LED
 X = PNP, 6 mm, Reed, 10 mm
 L = cable length

★ Sensor, series ST6 push-in fitting M8x1

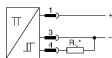
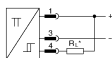


00112027_3

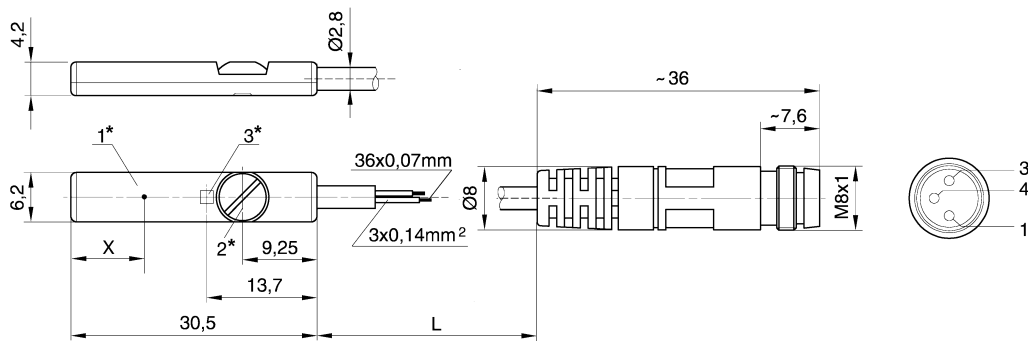
Ambient temperature min./max.	-25°C / +70°C
Protection class according to DIN EN 60529:2000	IP67
Switching point precision	$\pm 0,1$
Switching time on	0,5 ms
Switching time off	0,1 ms
LED	yellow
Shock resistance	30 g / 11 ms
Vibration resistance	10-55 Hz, 1 mm
materials:	
Sensor	polyamide
Cable	polyurethane

	type of contact	cable length L [m]	Operational voltage AC [V]	DC operating voltage [V]	DC switching current [A]	AC switching current [A]	Switching capacity	protective resistor [Ω]	Part No.
	Reed	0,3	10 - 30	10 - 30	0,13	0,13	3 W / 5 VA	15	0830100488

★ series MNI
Accessories

	type of contact	cable length L [m]	Operational voltage AC [V]	DC operating voltage [V]	DC switching current [A]	AC switching current [A]	Switching capacity	protective resistor [Ω]	Part No.
	PNP solid-state	0,3	-	10 - 30	0,1	-	-	-	0830100489
	NPN solid-state	0,3	-	10 - 30	0,1	-	-	-	0830100430
Part No.	Voltage drop [V]	operating current, not switched [mA]	operating current, switched [mA]	Max. switching frequency [kHz]	Short circuit-proof	Short-circuit protected			
0830100488	<= 3,6	-	-	< 0,3	-	+			
0830100489	<= 2,5	< 20	< 30	< 1,0	+	+			
0830100430	<= 2,5	< 20	< 30	< 1,0	+	+			

dimensions



1* = sensor element 2* = clamping screw 3* = LED
X = PNP, 6 mm, Reed, 10 mm
L = cable length

00111942_a

★ Sensor, series ST6
push-in fitting M12x1

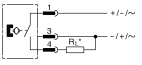
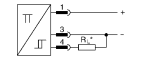


00112027_4

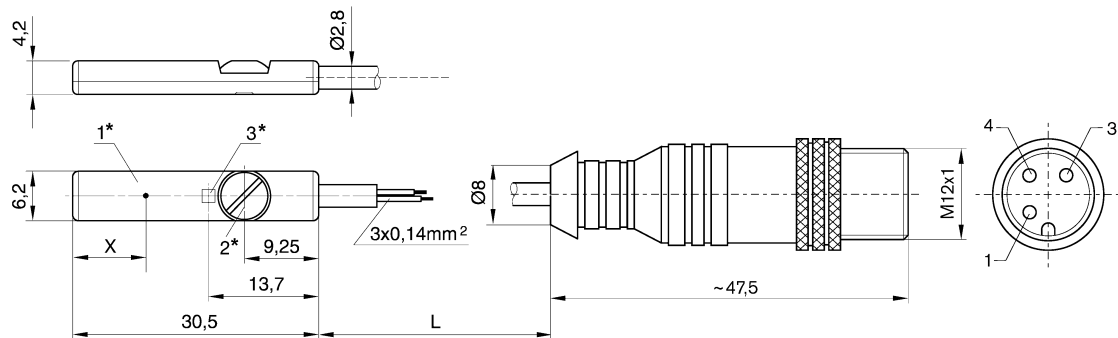
Ambient temperature min./max.	-25°C / +70°C
Protection class according to DIN EN 60529:2000	IP67
Switching point precision	±0,1
Switching time on	0,5 ms
Switching time off	0,1 ms
LED	yellow
Shock resistance	30 g / 11 ms
Vibration resistance	10-55 Hz, 1 mm
materials:	
Sensor	polyamide
Cable	polyurethane

★ core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service
● service products - existing standard program, worldwide service
pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

★ series MNI Accessories

	type of contact	cable length L [m]	Operational voltage AC [V]	DC operating voltage [V]	DC switching current [A]	AC switching current [A]	Switching capacity	protective resistor [Ω]	Part No.
	Reed	0,3	10 - 30	10 - 30	0,13	0,13	3 W / 5 VA	15	0830100432
	PNP solid-state	0,3	-	10 - 30	0,1	-	-	-	0830100433
Part No.	Voltage drop [V]	operating current, not switched [mA]	operating current, switched [mA]	Max. switching frequency [kHz]	Short circuit-proof	Short-circuit protected			
0830100432	<= 3,6	-	-	< 0,3	-	+			
0830100433	<= 2,5	< 20	< 30	< 1,0	+	+			

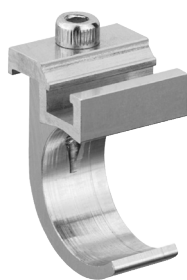
dimensions



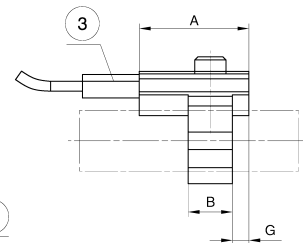
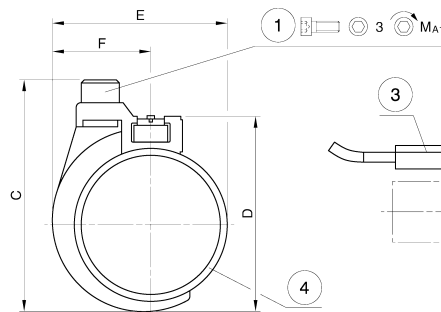
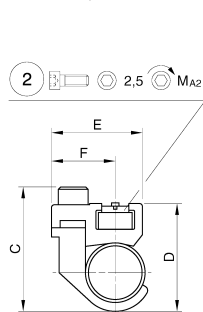
00111942_c

1* = sensor element 2* = clamping screw 3* = LED
 X = PNP, 6 mm, Reed, 10 mm
 L = cable length

★ Sensor mounting for mini cylinder, series MNI, for sensor, series ST6



00110587



00111947

1) mounting screw 2) mounting screw for sensor 3) sensor 4) cylinder pipe

★ series MNI

Accessories

Part No.	Ø	A	B	C	D	E	F	G	1)	MA1[Nm]	MA2[Nm]
1827020296	10	20	8	24	19	17.5	11.8	3	M 3x8	1+0,2	0,15+0,1
1827020297	12	20	8	26	22	19	11.8	3	M 3x8	1+0,2	0,15+0,1
1827020298	16	20	12	34	30	23	13.8	4	M 4x10	2+0,3	0,15+0,1
1827020299	20	20	12	38	32	26	13.8	4	M 4x10	2+0,3	0,15+0,1
1827020300	25	20	12	43	37	31	13.8	4	M 4x10	2+0,3	0,15+0,1
Part No.	Weight [kg]										
1827020296	0,009										
1827020297	0,01										
1827020298	0,014										
1827020299	0,014										
1827020300	0,015										

★ Sensor, series SN1

cable connection



00106972_2

Protection class according to DIN EN 60529:2000	IP67
Switching point precision	±0,1
Switching time on	0,6 ms
Switching time off	0,2 ms
LED	yellow
Shock resistance	50 g / 11 ms
Vibration resistance	30 g (50 - 2000 Hz)
materials:	
Sensor	polyamide
Cable	polyurethane

	type of contact	Ambient temperature min./max. [°C]	cable length L [m]	n-Wire	Operational voltage AC [V]	DC operating voltage [V]	DC switching current [A]	Part No.
	Reed	-20 / 80	3 5 10	2	12 - 240	12 - 60	0,13	0830100606 0830100607 0830100608
	Reed	-20 / 80	3 5 5	3	10 - 30	10 - 30	0,13	0830100609 0830100610 0830100611
	PNP solid-state	-10 / 70	3 5 10	3	-	10 - 30	0,13	0830100612 0830100613 0830100614
Part No.	Switching capacity	protective resistor [Ω]	Voltage drop [V]	operating current, not switched [mA]	operating current, switched [mA]	Max. switching frequency [kHz]	Short circuit-proof	Short-circuit protected
0830100606 0830100607 0830100608	10 W / 10 VA	27	2,1 + Rs*I _{max.}	-	-	< 0,3	-	+
0830100609 0830100610 0830100611	5,5 W / 5,5 VA	27	Rs*I _{max.}	-	-	< 0,3	-	+

★ core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

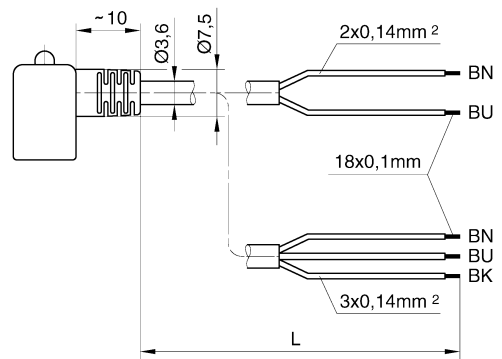
pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

★ series MNI

Accessories

Part No.	Switching capacity	protective resistor [Ω]	Voltage drop [V]	operating current, not switched [mA]	operating current, switched [mA]	Max. switching frequency [kHz]	Short circuit-proof	Short-circuit protected
0830100612 0830100613 0830100614	-	-	≤ 2,0	< 10	< 15	< 2,0	+	+

dimensions



00111945_b

L = cable length
BN=brown, BK=black, BU=blue

★ Sensor, series SN1

push-in fitting M8x1



00106972_4

Protection class according to DIN EN 60529:2000

IP67

Switching point precision

±0,1

Switching time on

0,6 ms

Switching time off

0,2 ms

LED

yellow

Shock resistance

50 g / 11 ms

Vibration resistance

30 g (50 - 2000 Hz)

materials:

Sensor

polyamide

	type of contact	Ambient temperature min./max. [°C]	Operational voltage AC [V]	DC operating voltage [V]	DC switching current [A]	Switching capacity	protective resistor [Ω]	Voltage drop [V]	Part No.
	Reed	-20 / 80	10 - 30	10 - 30	0,13	5,5 W / 5,5 VA	27	Rs*I _{max} .	0830100482
	PNP solid-state	-10 / 70	-	10 - 30	0,13	-	-	≤ 2,0	0830100483

★ core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

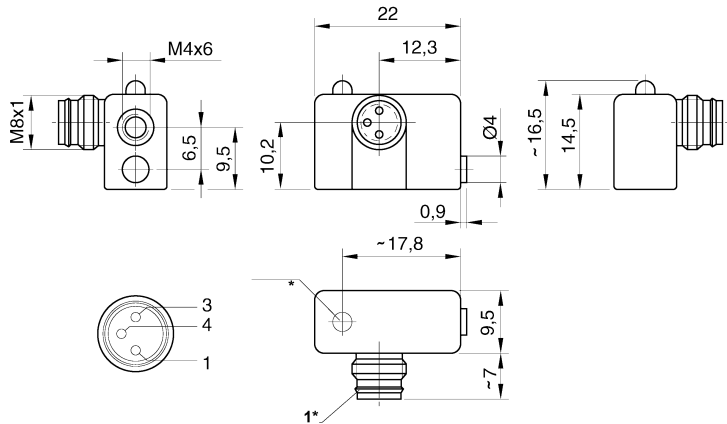
● service products - existing standard program, worldwide service

pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

★ series MNI
Accessories

Part No.	operating current, not switched [mA]	operating current, switched [mA]	Max. switching frequency [kHz]	Short circuit-proof	Short-circuit protected
0830100482	-	-	< 0,3	-	+
0830100483	< 10	< 15	< 2,0	+	+

dimensions



00111945_a

1* combination plug can be combined with electrical connectors Ø6.5 mm and M8x1.
* = LED

★ Sensor, series SN1
push-in fitting M12x1



00106972_3

Protection class according to DIN EN 60529:2000	IP67
Switching point precision	±0,1
Switching time on	0,6 ms
Switching time off	0,2 ms
LED	yellow
Shock resistance	50 g / 11 ms
Vibration resistance	30 g (50 - 2000 Hz)
materials:	
Sensor	polyamide

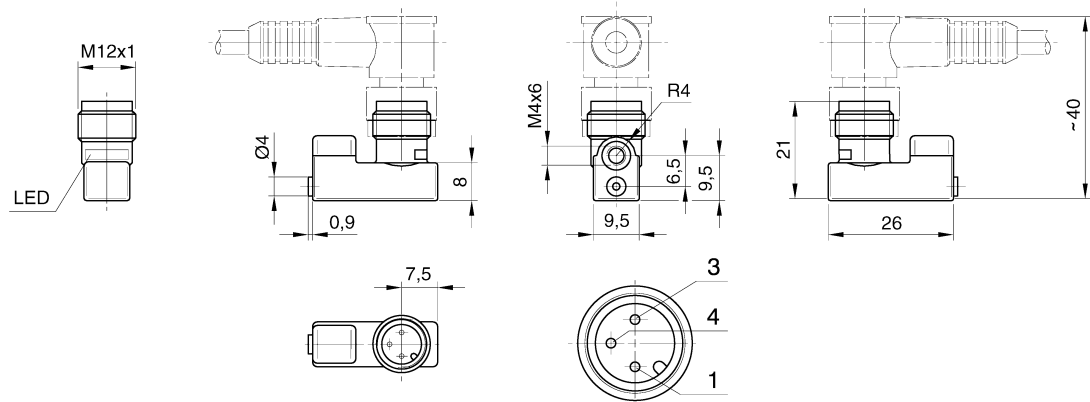
	type of contact	Ambient temperature min./max. [°C]	Opera- tional voltage AC [V]	DC operating voltage [V]	DC switching current [A]	Swit- ching capacity	pro- tective resistor [Ω]	Voltage drop [V]	Part No.
	Reed	-20 / 80	10 - 30	10 - 30	0,13	5,5 W / 5,5 VA	27	Rs*I _{max} .	0830100496
	PNP solid- state	-10 / 70	-	10 - 30	0,13	-	-	<= 2,0	0830100497

★ core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service
● service products - existing standard program, worldwide service
pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

★ series MNI Accessories

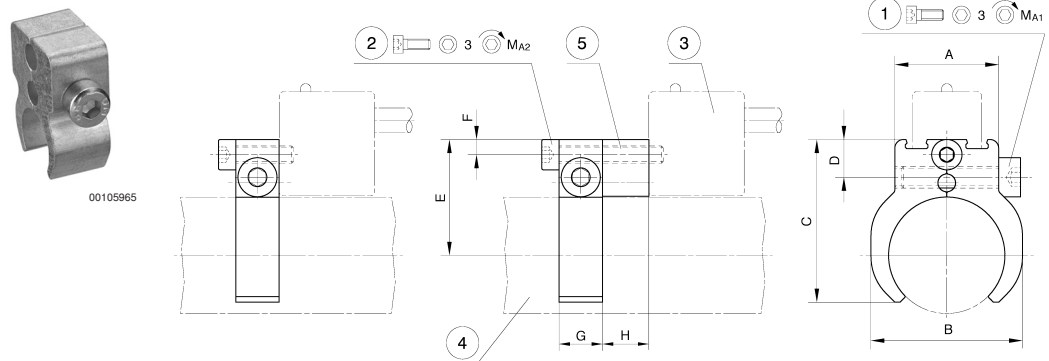
Part No.	operating current, not switched [mA]	operating current, switched [mA]	Max. switching frequency [kHz]	Short circuit-proof	Short-circuit protected
0830100496	-	-	< 0,3	-	+
0830100497	< 10	< 15	< 2,0	+	+

dimensions



00111945_c

★ Sensor mounting for mini cylinder, series MNI, for sensor series SN1 and series SN2



00104949

1) clamping screw 2) mounting screw for sensor 3) sensor 4) cylinder profile 5) insert (on request)

Part No.	Ø	A	B	C	D	E	F	G	H	2)	MA2[Nm]
1827020065	10	16	16	23.5	8.2	18.7	3.5	10	10.7	M4x16	2,4+0,6
1827020066	12	16	20	25.5	8.2	19.9	3.5	10	10.7	M4x16	2,4+0,6
1827020067	16	20	24	29.7	8.7	21.9	3.5	10	10.7	M5x20	3+1
1827020068	20	20	28	33	8.7	24.1	3.5	10	10.7	M5x20	3+1
1827020069	25	24	35	37.5	8.7	26.6	3.5	10	10.7	M5x22	3+1

Part No.	1)	MA1[Nm]	Weight [kg]								
1827020065	M 4x14	1+0,3	0,016								
1827020066	M 4x14	1+0,3	0,018								
1827020067	M 4x25	1+0,3	0,02								

★ core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

★ series MNI

Accessories

Part No.	¹⁾	MA1[Nm]	Weight [kg]						
1827020068	M 4x25	1+0,3	0,021						
1827020069	M 4x25	1+0,3	0,025						

★ core products - preferably for new constructions, stockpiling in Laatzen central warehouse, worldwide service

● service products - existing standard program, worldwide service

pneumatics catalog, online pdf, as of 2007-06-07, © Bosch Rexroth AG

Bosch Rexroth AG
Pneumatics
Ulmer Straße 4
D - 30880 Laatzen
Phone +49 511 2136-0
Fax +49 511 2136-2 69
sales-pneumatics@boschrexroth.de
www.boschrexroth.com/pneumatics

Your contact:

Canada

Bosch Rexroth Canada Corp.
3426 Mainway Drive
Burlington, Ontario L7M 1A8
Tel. +1 905 335-5511
Fax +1 905 335-4184

Australia

Bosch Rexroth Pty. Ltd.
3 Valediction Road
Kings Park NSW 2148
Sydney
Tel. +61 2 9831-7788
Fax +61 2 9831-5553

U.S.A.

Bosch Rexroth Corp.
1953 Mercer Road
Lexington, KY 40511-1021
Kentucky
Tel. +1 859 254-8031
Fax +1 859 254-4188

Great Britain

Bosch Rexroth Ltd.
Broadway Lane
South Cerney
Cirencester, GL7 5UH
Gloucestershire
Tel. +44 1285 86-3000
Fax +44 1285 86-3003

further contacts:
www.boschrexroth.com/addresses

The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.

© This document, as well as the data, specifications and other informations set forth in it, are the exclusive property of Bosch Rexroth AG. Without their consent it may not be reproduced or given to third parties.

Subject to modifications.
Printed in Germany.
Order no.
000-000-000-0/JJJJ-MM/EN