PRA/181000; .../M, PRA/183000; .../M
Pneumatic cylinder, ISO 15552
Non-magnetic & magnetic piston, single acting
Ø 32 ... 100 mm

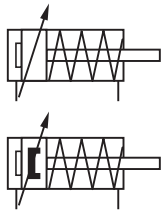
High performance, stability and reliability

M/50 switches (solid state) can be mounted flush with the profile

Cylinders and mountings conform to ISO 15552 (ISO 6431, VDMA 24562 and NFE 49-003-1)

Comprehensive range of mountings

Polyurethane seals ensure efficient low friction operation and long life



Technical features

Medium:
Compressed air, filtered, lubricated or non-lubricated
Standard:
ISO 15552
Note: all models conform to the mentioned standards except the cylinder size
Operation:
PRA/181000: Single acting, sprung in, non-magnetic piston and adjustable cushioning
PRA/181000/M: Ssingle acting, sprung in, magnetic piston and adjustable cushioning
PRA/183000: Single acting, sprung out, non-magnetic piston and adjustable cushioning
PRA/183000/M: Single acting, sprung out, magnetic piston and adjustable cushioning
Operating pressure:
2 ... 10 bar
Air ports:
G1/8 ... G1/2
Cylinder diameters:
32, 40, 50, 63, 80, 100 mm
Strokes:
See table below

Non-standard strokes:
Available 250 mm max.
Operating temperature:
-20 ... +80°C max.
Air supply must be dry enough to avoid ice formation at temperatures below +2°C.

Materials:
Profile barrel: anodised aluminium,
End covers: pressure diecast aluminium
Piston rod: stainless steel (martensitic)
Piston rod seals: PUR
Piston seals: PUR
O-rings: NBR

Technical data

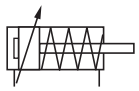
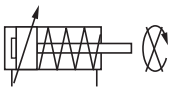
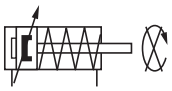
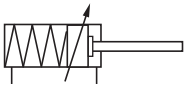
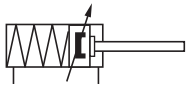
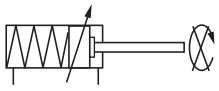
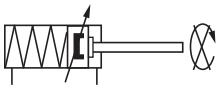
Cylinder Ø (mm)	32	40	50	63	80	100
Air ports	G 1/8	G 1/4	G 1/4	G 3/8	G 3/8	G 1/2
Piston rod Ø (mm)	12	16	20	20	25	25
Piston rod thread	M10 x 1,25	M12 x 1,25	M16 x 1,5	M16 x 1,5	M20 x 1,5	M20 x 1,5
Cushion length (mm)	19	22	24	24	27	34
Initial cushion volume (cm^3)	12,3	20,7	36	64	116	242
Air consumption at 6 bar outstroke (l/cm)	0,056	0,088	0,137	0,218	0,35	0,55
Air consumption at 6 bar instroke (l/cm)	0,048	0,074	0,114	0,195	0,32	0,51
PRA/181000/M, PRA/181000						
Theoretical thrusts at 6 bar outstroke (N)	392	648	1043	1735	2795	4492
F1 (N)	50	60	75	75	130	130
PRA/183000/M, PRA/183000						
Theoretical thrusts at 6 bar instroke (N)	324	528	854	1546	2501	4197
F1 (N)	50	60	75	75	130	130

F1 = Final return force of spring

Standard strokes

Cylinder Ø (mm)	Stroke length (mm) 25	50	80	100
32	•	•	•	•
40	•	•	•	•
50	•	•	•	•
63	•	•	•	•
80	•	•	•	•
100	•	•	•	•

Cylinder variants

Symbol	C	S	Model Non-magnetic piston	Symbol	C	S	Model magnetic piston	Description	Dimensions Page
	•	•	PRA/181000		•	•	PRA/181000/M	Standard cylinder, sprung in	4
			PRA/181000/W1				PRA/181000/W2	Cylinder with special wiper/seal, suitable for applications with arizona sand, cement, plaster (stucco), hoar-frost or ice	
			PRA/181000/N1				PRA/181000/N2	Cylinder with non-rotating piston rod	5
	•	•	PRA/183000		•	•	PRA/183000/M	Standard cylinder, sprung out	4
			PRA/183000/W1				PRA/183000/W2	Cylinder with special wiper/seal, suitable for applications with arizona sand, cement, plaster (stucco), hoar-frost or ice	
			PRA/183000/N1				PRA/183000/N2	Cylinder with non-rotating piston rod	4

For the cylinder models style C and S see options selector

Option selector

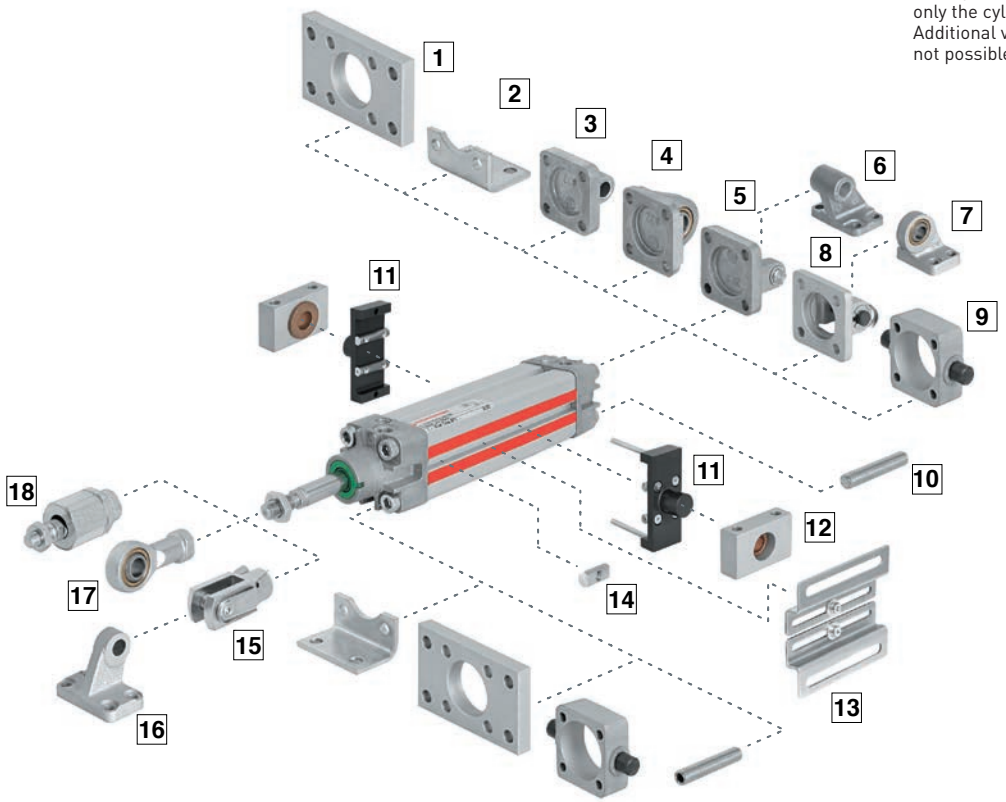
P★A/18★★★★/★★/★★★

Piston rod material	Substitute
Stainless steel martensitic	R
Hard chromium plated	C
Stainless steel austenitic	S
Operation	**Substitute**
Sprung in	1
Sprung out	3
Cylinder Ø	**Substitute**
32	032
40	040
50	050
63	063
80	080
100	100

Strokes (mm)	
250 max.	
Variants (magnetic piston)	**Substitute**
Standard	M
Non-rotating oiston rod	N2
Special wiper/seal	W2
Variants (non-magnetic piston)	**Substitute**
Standard	None
Non-rotating piston rod	N1
Special wiper/seal	W1

Note: If option is not required, disregard option position within part number eg. PRA/181100/M/50. For combinations of cylinder variants consult our Technical Service. This options selector explains only the cylinder variants. Additional variants/options are not possible.

Mountings



Position	Style	Standard	Position	Style	Standard
1	B, G	Clear anodised aluminium	10	A	Galvanized steel
2	C	Galvanized steel (ø 32 ... 63 mm), Painted steel (ø 80 & 100 mm)	11	UH	Black anodised aluminium bar stock Groove key and bolt: Galvanized steel
3	R	Die-cast aluminium	12	S	Clear anodised aluminium Bearing: brass
4	UR	Galvanized aluminium Inner ring: steel Outer ring: brass	13	Valve mounting kit	Galvanized steel
5	D	Die-cast aluminium Bolt: galvanized steel (martensitic) Circlip: galvanized steel	15	F	Galvanized steel Bolt: galvanized steel Circlip: Galvanized steel
6	SW	Die-cast aluminium	16	SS	Painted cast iron
7	US	Galvanized aluminium. Inner ring: steel Outer ring: brass	17	UF	Galvanized steel. Inner ring: steel Outer ring: brass
8	D2	Painted cast iron. Bolt: stainless steel (martensitic) Circlip: galvanized steel	18	AK	Galvanized steel
9	FH	Cast iron			

Mountings

Model	A	AK	B, G	C	D	D2	F	FH
								
	10	18	1	2	5	8	15	9
Ø	Page 7	Page 7	Page 7	Page 7	Page 7	Page 7	Page 8	Page 8
32	QM/8032/35	QM/8025/38	QA/8032/22	QA/8032/21	QA/8032/23	QA/8032/42	QM/8025/25	QA/8032/34
40	QM/8032/35	QM/8040/38	QA/8040/22	QA/8040/21	QA/8040/23	QA/8040/42	QM/8040/25	QA/8040/34
50	QM/8050/35	QM/8050/38	QA/8050/22	QA/8050/21	QA/8050/23	QA/8050/42	QM/8050/25	QA/8050/34
63	QM/8050/35	QM/8050/38	QA/8063/22	QA/8063/21	QA/8063/23	QA/8063/42	QM/8050/25	QA/8063/34
80	QM/8080/35	QM/8080/38	QA/8080/22	QA/8080/21	QA/8080/23	QA/8080/42	QM/8080/25	QA/8080/34
100	QM/8080/35	QM/8080/38	QA/8100/22	QA/8100/21	QA/8100/23	QA/8100/42	QM/8080/25	QA/8100/34

Model	R	S	SS	SW	UF	UH	UR	US
								
	3	12	16	6	17	11	4	7
Ø	Page 8	Page 8	Page 9	Page 9	Page 8	Page 8	Page 9	Page 10
32	QA/8032/27	QA/8032/41	M/P19931	M/P19493	QM/8025/32	PQA/182032/40	QA/8032/33	M/P40310
40	QA/8040/27	QA/8040/41	M/P19932	M/P19494	QM/8040/32	PQA/182040/40	QA/8040/33	M/P40311
50	QA/8050/27	QA/8040/41	M/P19933	M/P19495	QM/8050/32	PQA/182050/40	QA/8050/33	M/P40312
63	QA/8063/27	QA/8063/41	M/P19934	M/P19496	QM/8050/32	PQA/182063/40	QA/8063/33	M/P40313
80	QA/8080/27	QA/8063/41	M/P19935	M/P19497	QM/8080/32	PQA/182080/40	QA/8080/33	M/P40314
100	QA/8100/27	QA/8100/41	M/P19936	M/P19498	QM/8080/32	PQA/182100/40	QA/8100/33	M/P40315

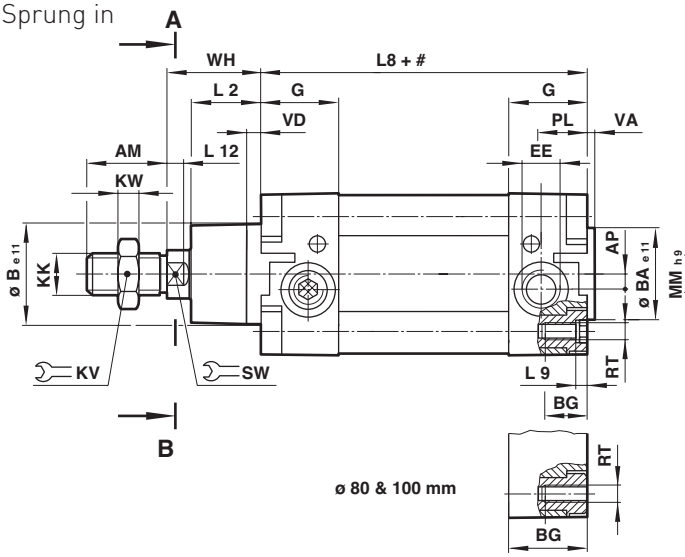
Accessories

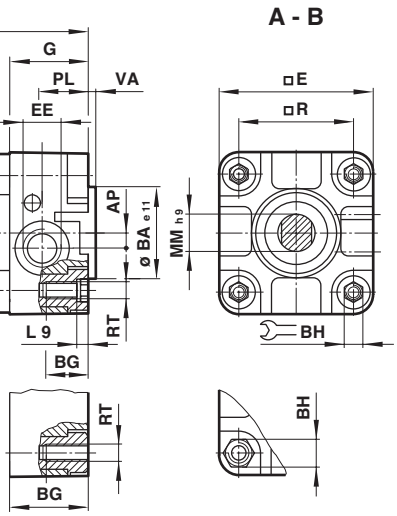
Model	Groove cover	Magnetically operated switches	Groove key	Valve mounting kit
				
			14	13
Ø	Page 10	Page 16 & 17	Page 9	Page 9
32	M/P72725/1000		M/P72816	–
40	M/P72725/1000		M/P72816	–
50	M/P72725/1000		M/P72816	QA/180050/22/54
63	M/P72725/1000		M/P72816	QA/180050/22/54
80	M/P72725/1000		M/P72816	QA/180080/22/54
100	M/P72725/1000		M/P72816	QA/180080/22/54
125	M/P72725/1000		M/P72816	QA/180080/22/54

Sevice kit

Service kit	
	
Ø	
32	QA/8032/00
40	QA/8040/00
50	QA/8050/00
63	QA/8063/00
80	QA/8080/00
100	QA/8100/00
125	QA/8125/00

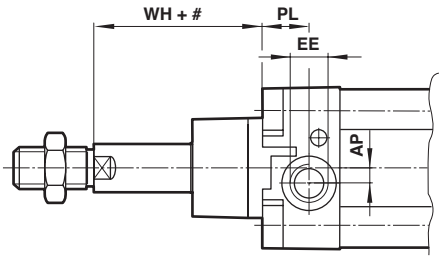
Basic dimensions
PRA/181000, PRA/181000/M
Standard cylinder
Sprung in



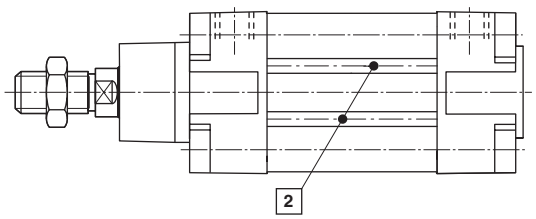


ø 80 & 100 mm

PRA/183000, PRA/183000/M
Standard cylinder
Sprung out



stroke



[2] M/50 switches can be mounted flush with the profile

Ø	AM	AP	Ø Be 11	Ø BAe [11]	BG	BH	q E	EE	G	KK	KV
32	22	3,5	30	30	16	6	47	G 1/8	27,5	M10x1,25	17
40	24	4,5	35	35	16	6	53	G 1/4	32	M12x1,25	19
50	32	6	40	40	16	8	65	G 1/4	31	M16x1,5	24
63	32	10	45	45	16	8	75	G 3/8	33	M16x1,5	24
80	40	8,5	45	45	17	19	95	G 3/8	33	M20x1,5	30
100	40	9	55	55	17	19	115	G 1/2	37	M20x1,5	30

Ø	KW	L2	L8	L9	L12	Ø MMh [9]	PL	q R	RT	SW	VA
32	5	20	94	4	6	12	13	32,5	M 6	10	3
40	6	22	105	4	6,5	16	15	38	M 6	13	3,5
50	8	27	106	5	8	20	18,5	46,5	M 8	17	3,5
63	8	29	121	5	8	20	19	56,5	M 8	17	4
80	10	33	128	–	10	25	19	72	M 10	22	4
100	10	36	138	–	10	25	18	89	M 10	22	4

Ø	VD	WH			Model	Model
			at 0 mm	per 25 mm	Non-magnetic piston	Magnetic piston
32	6	26	0,51 kg	0,06 kg	PRA/18#032/*	PRA/18#032/M/*
40	6	30	0,80 kg	0,08 kg	PRA/18#040/*	PRA/18#040/M/*
50	6	37	1,33 kg	0,12 kg	PRA/18#050/*	PRA/18#050/M/*
63	6	37	1,80 kg	0,13 kg	PRA/18#063/*	PRA/18#063/M/*
80	6	46	3,25 kg	0,20 kg	PRA/18#080/*	PRA/18#080/M/*
100	6	51	4,81 kg	0,23 kg	PRA/18#100/*	PRA/18#100/M/*

181032	183032	181040	183040	181050	183050	181063	183063	181080	183080	181100	183100	Model
25, 50	80, 100	25, 50	80, 100	25, 50	80, 100	25, 50	80, 100	25, 50	80, 100	25, 50	80, 100	Standard strokes
119	147	130	158	131	159	146	174	153	181	163	191	L8
119 + (N * x 28)	130 + (N * x 28)	131 + (N * x 28)	146 + (N * x 28)	153 + (N * x 28)	163 + (N * x 28)							L8
					250 mm max.							non-standard strokes

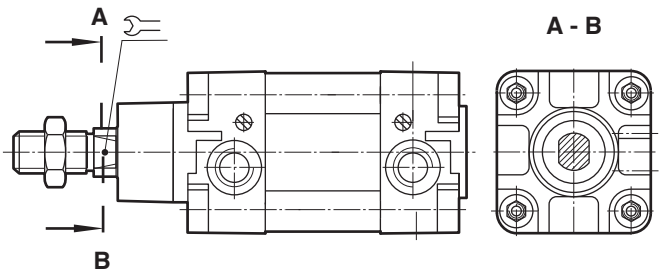
* Stroke < 50 mm N = 0
Stroke > 50 mm N = $\frac{\text{Stroke} - 1}{50}$ (round up to integer)

Please insert number of spring in (1) or spring out (3).

Cylinder variants
PRA/18.000/N1, PRA/18.000/N2 – Cylinder with non-rotating piston rod

Ø		Torque max (Nm)	Model Non-magnetic piston	Model Magnetic piston
32	10	0,5	PRA/18#032/N1/*	PRA/18#032/N2/*
40	13	1	PRA/18#040/N1/*	PRA/18#040/N2/*
50	16	1,5	PRA/18#050/N1/*	PRA/18#050/N2/*
63	16	1,5	PRA/18#063/N1/*	PRA/18#063/N2/*
80	16	2,5	PRA/18#080/N1/*	PRA/18#080/N2/*
100	21	2,5	PRA/18#100/N1/*	PRA/18#100/N2/*

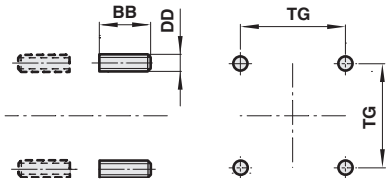
* Please insert standard stroke length.
# Please insert number of spring in (1) or spring out (3).



Mountings

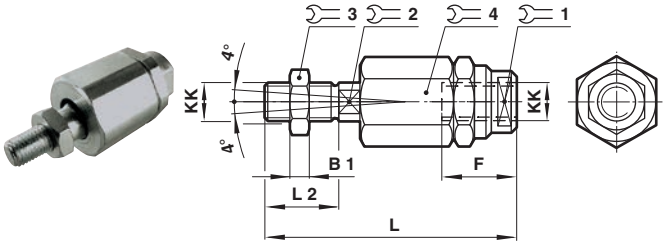
Front or rear stud mounting A

Conforms to ISO 15552, type MX1



Ø	BB	DD	TG	kg	Model (A)
32/40	17	M6	32,5/38	0,02	QM/8032/35
50/63	23	M8	46,5/56,5	0,05	QM/8050/35
80/100	28	M10	72/89	0,08	QM/8080/35

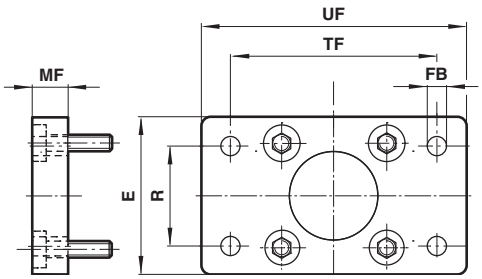
Piston rod swivel AK



Ø	KK	B1	F	L	L2	1	2	3	4	kg	Model (AK)
32	M10x1,25	5	26	73	20	19	12	17	30	0,20	QM/8025/38
40	M12x1,25	6	26	77	24	19	12	19	30	0,20	QM/8040/38
50/63	M16x1,5	8	34	106	32	30	19	24	42	0,65	QM/8050/38
80/100	M20x1,5	10	42	122	40	30	19	30	42	0,72	QM/8080/38

Front flange B, G

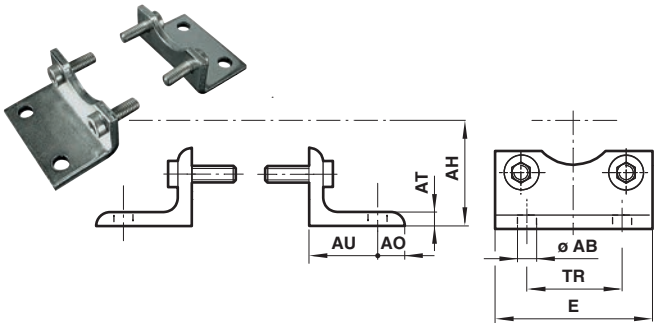
Conforms to ISO 15552, type MF1 and MF2



Ø	E	Ø FB	MF	R	TF	UF	kg	Model (B, G)
32	50	7	10	32	64	80	0,25	QA/8032/22
40	55	9	10	36	72	90	0,35	QA/8040/22
50	65	9	12	45	90	110	0,70	QA/8050/22
63	75	9	12	50	100	125	0,80	QA/8063/22
80	100	12	16	63	126	154	1,35	QA/8080/22
100	120	14	16	75	150	186	2,20	QA/8100/22

Foot mounting C

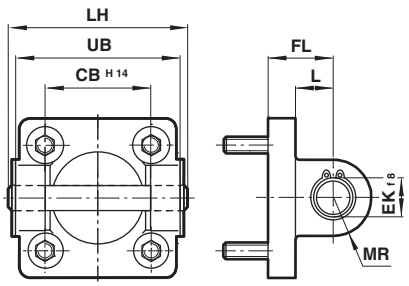
Conforms to ISO 15552, type MS1



Ø	Ø AB	AH	AO	AT	AU	E	TR	kg	Model (C)
32	7	32	8	4	24	48	32	0,15	QA/8032/21
40	10	36	9	4	28	53	36	0,18	QA/8040/21
50	10	45	10	5	32	64	45	0,30	QA/8050/21
63	10	50	12	5	32	74	50	0,39	QA/8063/21
80	12	63	19	5	41	98	63	0,80	QA/8080/21
100	14	71	19	5	41	115	75	0,95	QA/8100/21

Rear clevis D

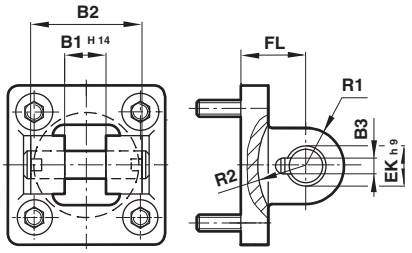
Conforms to ISO 15552, type MP2



Ø	CB H14	Ø EK f8	FL	L	LH	MR	UB	kg	Model (D)
32	26	10	22	13	52	9	45	0,11	QA/8032/23
40	28	12	25	16	60	12	52	0,16	QA/8040/23
50	32	12	27	17	68	12	60	0,22	QA/8050/23
63	40	16	32	22	79	15	70	0,34	QA/8063/23
80	50	16	36	22	99	15	90	0,54	QA/8080/23
100	60	20	41	27	119	20	110	0,90	QA/8100/23

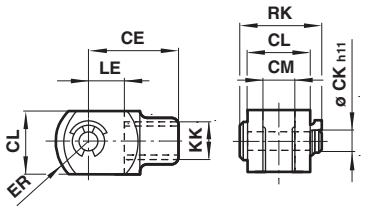
Rear clevis D2

Conforms to ISO 15552, type AB6



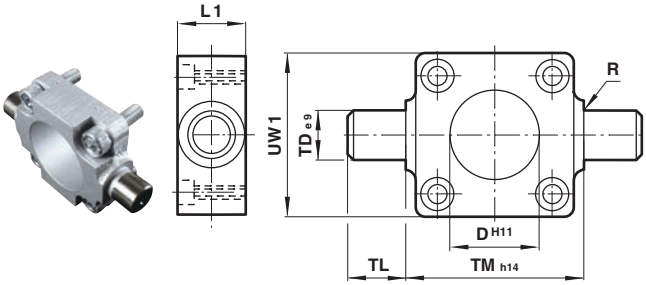
Ø	B1 H14	B2	B3	Ø EK h9	FL	R1	R2	kg	Model (D2)
32	14	34	3,3	10	22	11	17	0,20	QA/8032/42
40	16	40	4,3	12	25	12	20	0,23	QA/8040/42
50	21	45	4,3	16	27	14,5	22	0,36	QA/8050/42
63	21	51	4,3	16	32	18	25	0,55	QA/8063/42
80	25	65	4,3	20	36	22	30	0,90	QA/8080/42
100	25	75	4,3	20	41	22	32	1,45	QA/8100/42

Piston rod clevis F
Conforms to DIN ISO 8140



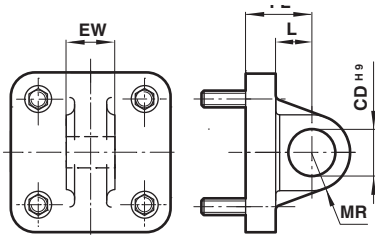
Ø	KK	CE	Ø CK_{h11}	CL	CM	ER	LE	RK	kg	Model (F)
32	M10x1,25	40	10	20	10	16	20	28	0,09	QM/8025/25
40	M12x1,25	48	12	24	12	19	24	32	0,13	QM/8040/25
50/63	M16x1,5	64	16	32	16	25	32	41,5	0,33	QM/8050/25
80/100	M20x1,5	80	20	40	20	32	40	50	0,67	QM/8080/25

Front or rear detachable trunnion FH
Conforms to VDMA 24562 part 2,
type MT 5/6



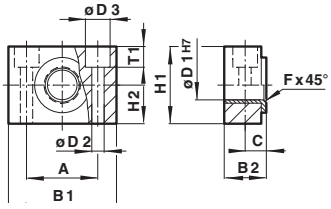
Ø	Ø Dh11	L1	R	Ø TDe9	TL	TMh14	UW1	kg	Model (FH)
32	30	16	1	12	12	50	45	0,20	QA/8032/34
40	35	20	1,6	16	16	63	55	0,38	QA/8040/34
50	40	24	1,6	16	16	75	65	0,60	QA/8050/34
63	45	24	1,6	20	20	90	75	1,10	QA/8063/34
80	45	28	1,6	20	20	110	100	1,90	QA/8080/34
100	55	38	2	25	25	132	120	3,50	QA/8100/34

Rear eye R
Conforms to ISO 15552, type MP4



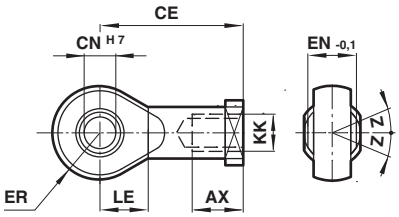
Ø	Ø CD_{H9}	EW	FL	L	MR	kg	Model (R)
32	10	25,8	22	13	9	0,09	QA/8032/27
40	12	27,8	25	16	12	0,11	QA/8040/27
50	12	31,7	27	17	12	0,17	QA/8050/27
63	16	39,7	32	22	15	0,24	QA/8063/27
80	16	49,7	36	22	15	0,37	QA/8080/27
100	20	59,7	41	27	20	0,59	QA/8100/27

Trunnion support S
Conforms to ISO 15552, type AT4



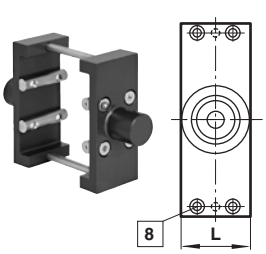
Ø	A	B1	B2	C	Ø D1H7	Ø D2	Ø D3	F x 45°	H1	H2	T1	kg	Model (S)
32	32	46	18	10,5	12	6,6	11	1	30	15	6,8	0,10	QA/8032/41
40/50	36	55	21	12	16	9	15	1,6	36	18	9	0,14	QA/8040/41
63/80	42	65	23	13	20	11	18	1,6	40	20	11	0,18	QA/8063/41
100	50	75	28,5	16	25	14	20	2	50	25	13	0,34	QA/8100/41

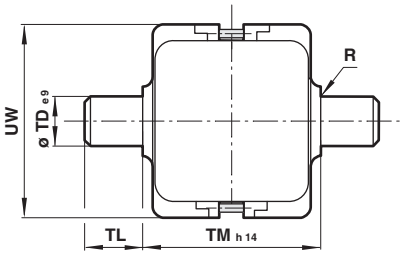
Universal piston rod eye UF
Conforms to DIN ISO 8139



Ø	Thread KK	AX	CE	Ø CN_{H7}	EN-0,1	ER	LE	Z	kg	Model (UF)
32	M10x1,25	20	43	10	14	14	15	13°	0,09	QM/8025/32
40	M12x1,25	22	50	12	16	16	17	13°	0,13	QM/8040/32
50/63	M16x1,5	28	64	16	21	21	22	15°	0,33	QM/8050/32
80/100	M20x1,5	33	77	20	25	25	26	15°	0,67	QM/8080/32

Adjustable trunnion mounting UH
Conforms to ISO 15552, type MT4





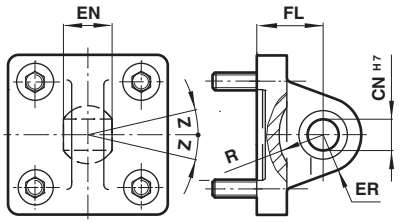
8 locking screw

Ø	L	R	Ø TD e9	TL	TM h14	UW	Torqu max. (Nm)	kg	Model (UH)
32	25	1	12	12	50	58	2	0,16	PQA/182032/40
40	28	1,6	16	16	63	65	3,5	0,35	PQA/182040/40
50	28	1,6	16	16	75	80	3,5	0,65	PQA/182050/40
63	36	1,6	20	20	90	96	5	0,85	PQA/182063/40
80	36	1,6	20	20	110	116	6	1,2	PQA/182080/40
100	48	2	25	25	132	140	6	2,3	PQA/182100/40

Note: Style UH: It is most important that the locking screws which secure the mounting to the cylinder barrel are tightened to the torque figures shown in the table. For maximum energy input, consult our Technical Service.

Universal rear eye UR

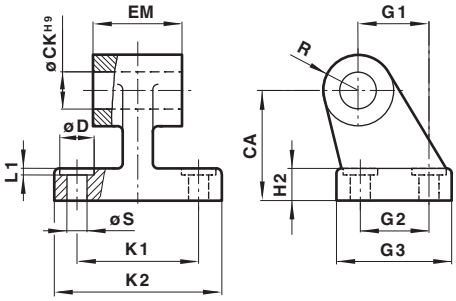
Conforms to ISO 15552, type MP6



Ø	Ø CN_{H7}	EN	ER	FL	R	Z	kg	Model (UR)
32	10	14	16	22	14,5	13°	0,15	QA/8032/33
40	12	16	18	25	18	13°	0,25	QA/8040/33
50	16	21	21	27	19	15°	0,40	QA/8050/33
63	16	21	23	32	24	15°	0,55	QA/8063/33
80	20	25	28	36	24	15°	0,90	QA/8080/33
100	20	25	30	41	29	15°	1,50	QA/8100/33

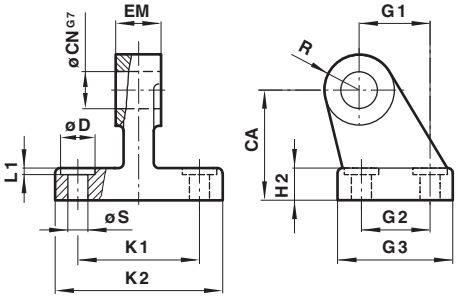
Wide hinge SW

Conforms to ISO 15552, type AB7



Ø	CA	Ø CK_{H9}	Ø D	H2	EM	G1	G2	G3	K1	K2	L1	R	Ø S	kg	Model (SW)
32	32	10	11	7	25,5	21	18	31	38	50	1,6	10	6,6	0,05	M/P19493
40	36	12	11	9	27,5	24	22	35	41	54	1,6	11	6,6	0,07	M/P19494
50	45	12	15	11	31,5	33	30	45	50	65	1,6	13	9	0,14	M/P19495
63	50	16	15	12	39,5	37	35	50	52	67	1,6	15	9	0,18	M/P19496
80	63	16	18	14	49,5	47	40	60	66	84	2,5	15	11	0,28	M/P19497
100	71	20	18	15	59,5	55	50	70	76	94	2,5	19	11	0,42	M/P19498

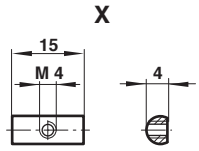
Narrow hinge SS



Ø	CA	Ø CN_{G7}	Ø D	H2	EM	G1	G2	G3	K1	K2	L1	R	Ø S	kg	Model (SS)
32	32	10	11	8	10	21	18	31	38	51	1,6	10	6,6	0,15	M/P19931
40	36	12	11	10	12	24	22	35	41	54	1,6	11	6,6	0,20	M/P19932
50	45	16	15	12	16	33	30	45	50	65	1,6	13	9	0,48	M/P19933
63	50	16	15	12	16	37	35	50	52	67	1,6	15	9	0,50	M/P19934
80	63	20	18	14	20	47	40	60	66	86	2,5	15	11	0,75	M/P19935
100	71	20	18	15	20	55	50	70	76	96	2,5	19	11	1,20	M/P19936

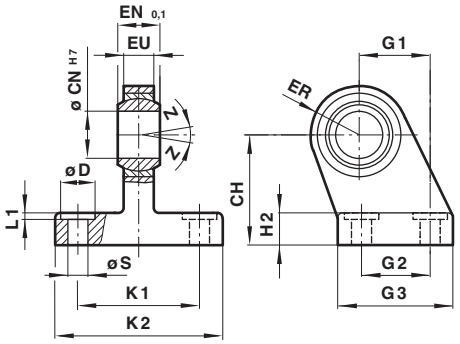
Groove key M/P72816

Weight: 0,01 kg



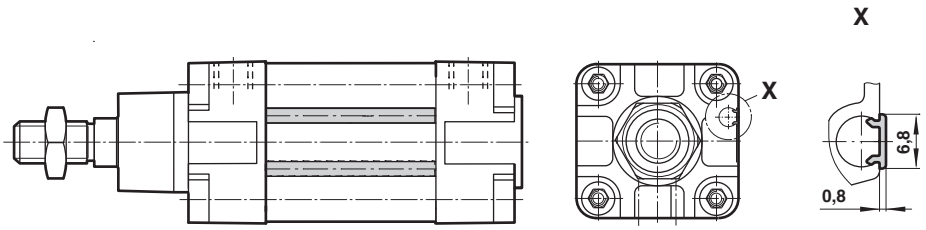
Swivel hinge US

Conforms to VDMA 24562 part 2

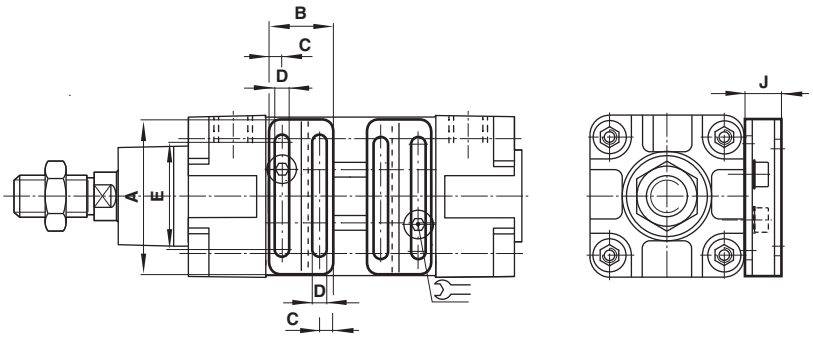


Ø	CH	Ø CN_{H7}	Ø D	EN -0,1	ER	EU	G1	G2	G3	H2	K1	K2	L1	Ø S	Z	kg	Model (US)
32	32	10	11	14	16	10,5	21	18	31	10	38	51	1,6	6,6	13°	0,19	M/P40310
40	36	12	11	16	18	12	24	22	35	10	41	54	1,6	6,6	13°	0,24	M/P40311
50	45	16	15	21	21	15	33	30	45	12	50	65	1,6	9	13°	0,46	M/P40312
63	50	16	15	21	23	15	37	35	50	12	52	67	1,6	9	15°	0,59	M/P40313
80	63	20	18	25	28	18	47	40	60	14	66	86	2,5	11	15°	1,03	M/P40314
100	71	20	18	25	30	18	55	50	70	15	76	96	2,5	11	15°	1,40	M/P40315
125	90	30	20	37	40	25	70	60	90	20	94	124	3,2	14	15°	3,10	M/P71355

Groove cover M/P72725/1000

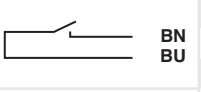
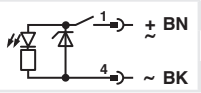


Valve mounting kit



Ø	A	B	C	D	E	F	G	H	J	⌲	kg	Model
50/63	60	37	7	4,5	46	8,5	5,5	2	12	3	0,02	QA/180050/22/54
80/100	90	37	7	4,5	76	8,5	6,5	2	12	3	0,02	QA/180080/22/54

Technical data - Reed switches - additional informations see data sheet N/en 4.3.005

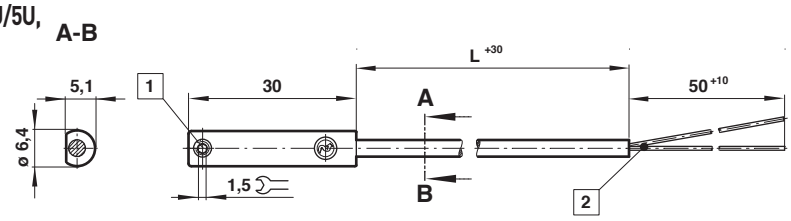
Symbol	Voltage (V a.c.)	(V d.c.)	Current max. (mA)	Function	Temperature (°C)	LED	Protection class	Features	Cable length (m)	Cable type	Weight (g)	Model
	10 ... 240	10 ... 170	180	Closer	-25 ... +80	•	IP66	–	2, 5 or 10	PVC 2 x 0,25	37	M/50/LSU/*V
	10 ... 240	10 ... 170	180	Closer	-25 ... +80	•	IP66	–	5	PUR 2 x 0,25	37	M/50/LSU/5U
	10 ... 240	10 ... 170	180	Closer	-25 ... +150	–	IP66	–	2	Silicon 2 x 0,25	37	TM/50/RAU/2S
	10 ... 240	10 ... 170	180	Changeover	-25 ... +80	–	IP66	–	5	PVC 3 x 0,25	37	M/50/RAC/5V
	10 ... 60	10 ... 60	180	Closer	-25 ... +80	•	IP66	Plug M8 x 1	0,3	PVC 3 x 0,25	16	M/50/LSU/CP *1)

* Insert cable length; *1) Plug-in connector see Page 9; Color code: BK = black, BN = brown, BU = blue

Dimensions

M/50/LSU/*V, M/50/LSU/5U, TM/50/RAU/2S

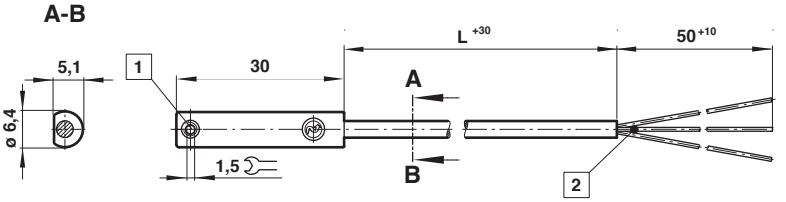
Cable length L = 2, 5 or 10 m



1 Fixing screw
2 + BN = brown
- BU = blue (output)

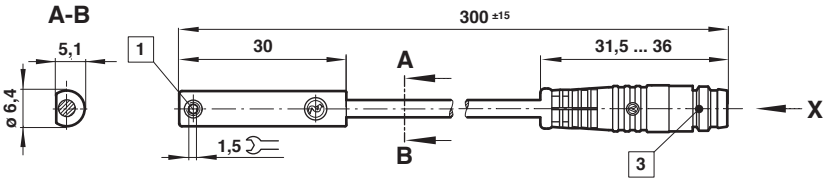
M/50/RAC/5V

Cable length L = 5 m



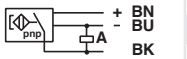
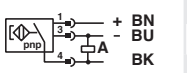
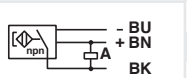
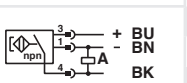
1 Fixing screw
2 - BK = black
+ BN = brown
- ≠BU = blue

M/50/LSU/CP



1 Fixing screw
3 Plug M8x1
Color code
BK = black
BN = brown
BU = blue

Technical data - Solid state - additional informations see data sheet N/en 4.3.007

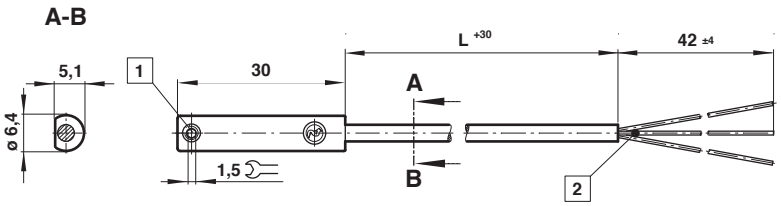
Symbol	Voltage (V d.c.)	Current max. (mA)	Function	Temperature (°C)	LED	Protection class	Features	Cable length (m)	Cable type	Weight (g)	Model
	10 ... 30	150	PNP	-40 ... +80	•	IP67	–	2, 5 or 10	PVC 3 x 0,12	37	M/50/EAP/*V
	10 ... 30	150	PNP	-40 ... +80	•	IP68	–	5	PUR 3 x 0,14	37	M/50/EAP/5U
	10 ... 30	150	PNP	-40 ... +80	•	IP67	Plug M8 x 1	0,3	PVC 3 x 0,14	16	M/50/EAP/CP *1)
	10 ... 30	150	PNP	-40 ... +80	•	IP67	Plug M12 x 1	0,3	PVC 3 x 0,14	16	M/50/EAP/CC *1)
	10 ... 30	150	NPN	-40 ... +80	•	IP67	–	2, 5 or 10	PVC 3 x 0,12	37	M/50/EAN/*V
	10 ... 30	150	Closer	-40 ... +80	•	IP67	Plug M8 x 1	0,3	PVC 3 x 0,14	16	M/50/EAN/CP *1)

* Insert cable length; *1) Plug-in connector below; Color code: BK = black, BN = brown, BU = blue

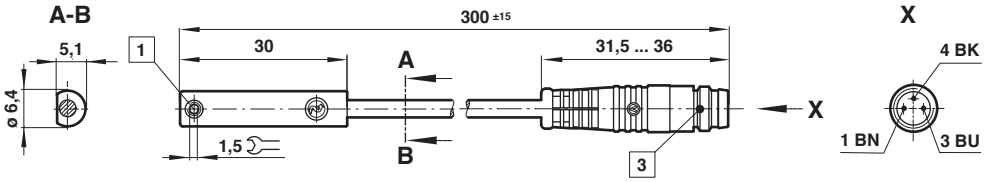
Dimensions

M/50/EAP/*V, M/50/EAN/*V

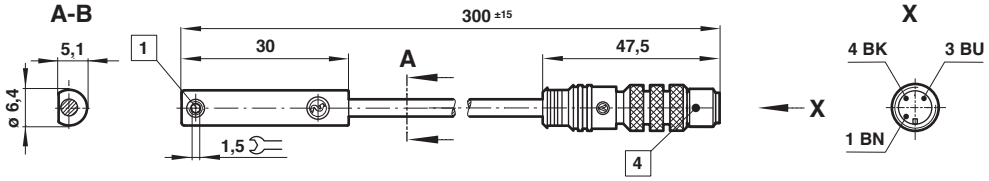
Cable length L = 2, 5 or 10 m



M/50/EAP/CP, M/50/EAN/CP



M/50/EAP/CC



1 Fixing screw
2 Color code
BK = black
BN = brown
BU = blue
3 Plug M8 x 1
4 Plug M12 x 1

Accessories

Plug-in connector cable with nut

Outer cover	Cable length	Weight (kg)	Connector	Model
PVC 3 x 0,25	5 m	0,18	M8 x 1	M/P73001/5
PUR 3 x 0,25	5 m	0,18	M8 x 1	M/P73002/5
PUR 3 x 0,34	5 m	0,21	M12 x 1	M/P34594/5

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where values can exceed those listed under **»Technical features/data«**.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.
System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.
System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.