

**Roundline cylinder
Magnetic piston
Double acting
Ø 32 to 100 mm**

Standard magnetic piston for full control system versatility

Threaded rear end covers on Ø 32 mm to Ø 63 mm simplify mounting

High performance and reliability - ideal for the demands of today



Technical data

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Double acting with magnetic piston and adjustable cushioning

Operating pressure:

1 to 10 bar

Operating temperature:

-20 to +80°C max.

(consult our technical service for use below +2°C)

Cylinder diameter:

32, 40, 50, 63, 80, 100 mm

Strokes:

Standard see page 2

Non-standard (10 to 3000 mm) on request

Materials:

Barrel: anodised aluminium

End covers: anodised aluminium

Piston rods: stainless steel (martensitic)

Piston rod seals: polyurethane

Piston seals: polyurethane

'O'-rings: nitrile rubber

Ordering examples

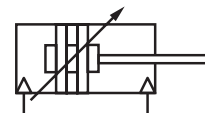
See page 2

Mountings and switches

See page 3 und 4

Alternative variants

Stainless steel cylinder see page N/UK 1.5.077



Alternative variants

Symbol	C	S	With magnetic piston	Description	Seite
	•	•	RM/55401/M	Standard	5
			RM/55401/W2	Cylinder with special wiper/seal for applications with arizona sand, cement, plaster (stucco), hoar-frost or ice	
	•	•	RM/55401/MU	Cylinder with extended piston rod	5
			RM/55401/W6	Cylinder with extended piston rod and special wiper/seal for applications with arizona sand, cement, plaster (stucco), hoar-frost or ice	
	•	•	RM/55401/JM	Cylinder with double ended piston rod	5
			RM/55401/W4	Cylinder with double ended piston rod and special wiper/seal for applications with arizona sand, cement, plaster (stucco), hoar-frost or ice	5

For combinations of alternative cylinders consult our technical service.

Options selection

★M/554★*/★*/★*★*

Piston rod material	Substitute
Stainless steel (martensitic)	R
Hard chromium plated	C
Stainless steel (austenitic)	S

Cylinder diameter (mm)	Substitute
Ø 32	33
Ø 40	41
Ø 50	51
Ø 63	64
Ø 80	81
Ø 100	11

Strokes (mm)
3000 max.

Variants (magnetic piston)	Substitute
Standard	M
Special wiper/seal	W2
Double ended piston rod	JM
Double ended piston rod, special wiper/seal	W4
Extended piston rod	MU
Extended piston rod, special wiper/seal	W6
*M/554**/MU/***/***	
*M/554**/W6/***/***	

Extension (mm)

Standard strokes

Cylinder Ø	Strokes (mm)								
	25	50	80	100	125	160	200	250	300
32	•	•	•	•	•	•	•	•	•
40	•	•	•	•	•	•	•	•	•
50	•	•	•	•	•	•	•	•	•
63	•	•	•	•	•	•	•	•	•
80	•	•	•	•	•	•	•	•	•
100	•	•	•	•	•	•	•	•	•

Ordering examples

Cylinder

To order a basic 80 mm bore magnetic piston cylinder with a 50 mm stroke
quote: **RM/55481/M/50**

Mounting

To order a front flange mounting style 'B' for 80 mm bore cylinder
quote: **QM/55480/22**

Switch

Magnetically operated switch with reed, LED, cable length 2 m
quote: **M/50/LSU/2V**

Brackets for switches

To order a bracket for magnetically operated switches QM/34; 80 mm bore cylinder
quote: **QM/33/480/22**

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under 'Technical 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.

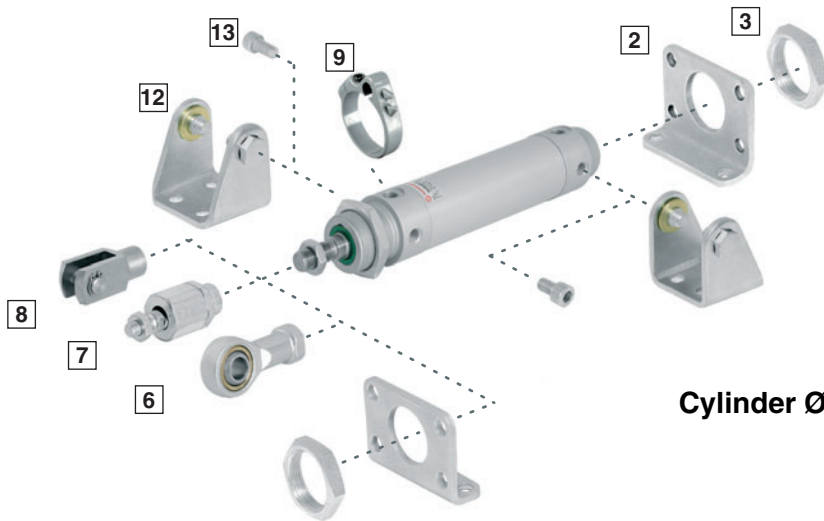
System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

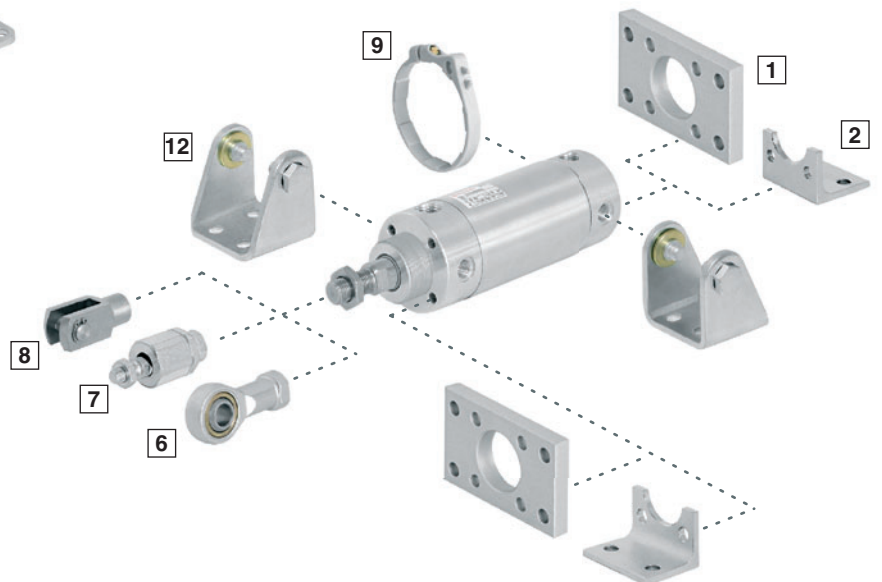
Mountings

	Style AK	Style B, G	Style C	Style F	Style H	Style L
						
	7	1	2	8	13	12
Cylinder Ø	Page 6	Page 6	Page 6	Page 6	Page 6	Page 6
32	QM/8025/38	QM/55232/22	QM/55232/21	QM/8025/25	QM/55232/28	QM/55232/24
40	QM/8040/38	QM/55240/22	QM/55240/21	QM/8040/25	QM/55240/28	QM/55240/24
50	QM/8050/38	QM/55250/22	QM/55250/21	QM/8050/25	QM/55250/28	QM/55250/24
63	QM/8050/38	QM/55263/22	QM/55263/21	QM/8050/25	QM/55263/28	QM/55263/24
80	QM/8080/38	QM/55480/22	QM/55480/21	QM/8080/25	QM/55480/28	QM/55480/24
100	QM/8080/38	QM/55410/22	QM/55410/21	QM/8080/25	QM/55410/28	QM/55410/24
	Style N	Style UF	Brackets for switch			
						
	3	6	9			
Cylinder Ø	Page 7	Page 7	Page 7			
32	M/P29254	QM/8025/32	QM/33/432/22			
40	M/P29255	QM/8040/32	QM/33/440/22			
50	M/P29256	QM/8050/32	QM/33/450/22			
63	M/P29256	QM/8050/32	QM/33/463/22			
80	M/P34806	QM/8080/32	QM/33/480/22			
100	M/P34806	QM/8080/32	QM/33/410/22			

Cylinder Ø 32 to 63 mm



Cylinder Ø 80 and 100 mm



Theoretical forces, air consumption, cushioning

Type	Theoretical forces (N) at 6 bar		Air consumption (l/cm Hub) at 6 bar		Cushion length (mm)	Initial cushion volume (cm ³)
	outstroke	instroke	outstroke	instroke		
55433	482	414	0,056	0,048	19	12,3
55441	754	633	0,088	0,074	22	20,7
55451	1178	990	0,137	0,114	24	36
55464	1870	1680	0,218	0,195	24	64
55481	3016	2722	0,35	0,320	27	116
55411	4710	4416	0,55	0,510	34	242

Switches

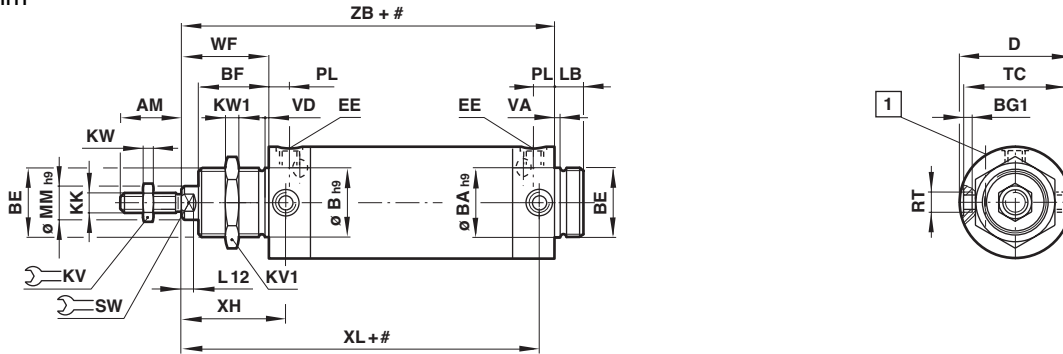
Type Reed	With cable		With connector		Current max.	Temperature °C	LED	Features	Cable/ Connector length	Cable type	Cable with Connector	Datasheet
	Solid state	Voltage V a.c.	V d.c.	Voltage V a.c.								
M/50/LSU/*V	–	10 to 240	10 to 170	180 mA	-20 to +80	•	–	–	2, 5, 10 m	PVC 2 x 0,25	–	N/UK 4.3.005
M/50/LSU/5U	–	10 to 240	10 to 170	180 mA	-20 to +80	•	–	–	5 m	PUR 2 x 0,25	–	N/UK 4.3.005
TM/50/RAU/2S	–	10 to 240	10 to 170	180 mA	-20 to +150	–	–	–	2 m	Silikon 2 x 0,25	–	N/UK 4.3.005
M/50/RAC/5V	–	10 to 240	10 to 170	180 mA	-20 to +80	–	Changeover	–	5 m	PVC 3 x 0,25	–	N/UK 4.3.005
M/50/LSU/CP	–	10 to 60	10 to 75	180 mA	-20 to +80	•	Plug M8x1	–	5 m	PVC 3 x 0,25	M/P73001/5	N/UK 4.3.005
–	M/50/EAP/*V	–	10 to 30	150 mA	-20 to +80	•	PNP	–	2, 5, 10 m	PVC 3 x 0,25	–	N/UK 4.3.007
–	M/50/EAP/CP	–	10 to 30	150 mA	-20 to +80	•	PNP, Plug M8x1	–	5 m	PVC 3 x 0,25	M/P73001/5	N/UK 4.3.007
–	M/50/EAP/CC	–	10 to 30	150 mA	-20 to +80	•	PNP, Plug M12x1	–	5 m	PVC 3 x 0,25	M/P34614/5	N/UK 4.3.007
–	M/50/EAN/*V	–	10 to 30	150 mA	-20 to +80	•	NPN	–	2, 5, 10 m	PVC 3 x 0,25	–	N/UK 4.3.007
–	M/50/EAN/CP	–	10 to 30	150 mA	-20 to +80	•	NPN, Plug M8x1	–	5 m	PVC 3 x 0,25	M/P73001/5	N/UK 4.3.007

* Please insert cable length
Further information (technical data, cable material, dimensions) see datasheet.

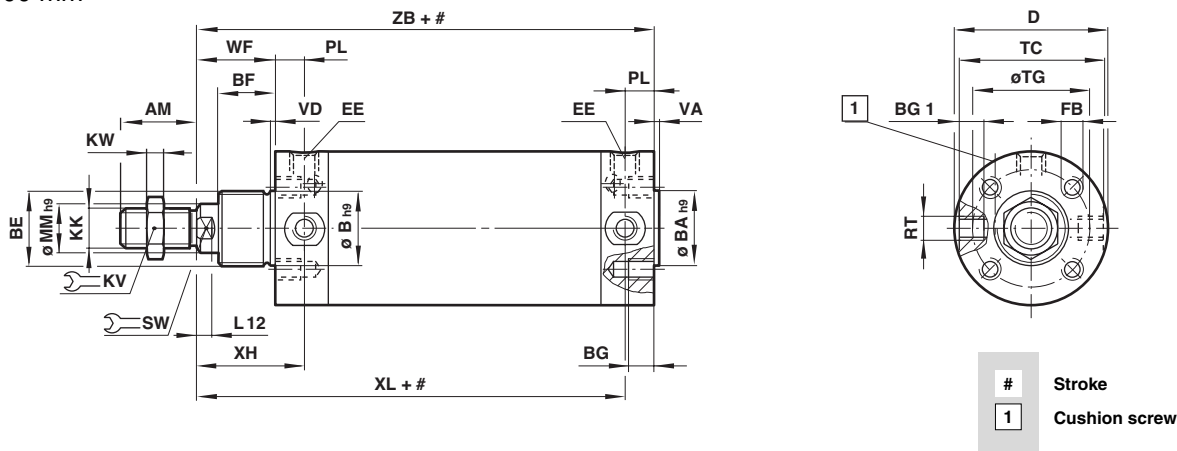
Basic dimensions

RM/55401/M – Standard cylinder

Ø 32 to 63 mm



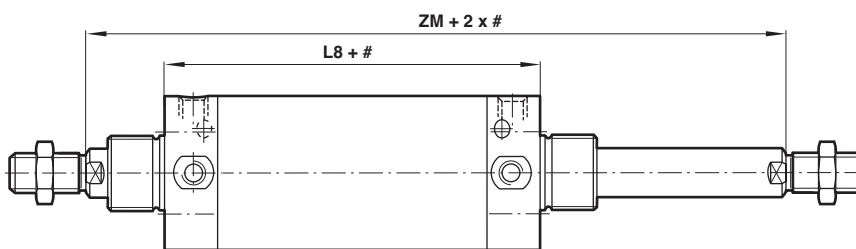
Ø 80 and 100 mm



Model	Ø	AM	Ø B/BA h9	BE	BF	BG	BG1	D	EE	FB	KK	KV	KV1	KW	KW1	LB
RM/55433	32	22	30	M 30 x 1,5	30	-	6	36,5	G 1/8	-	M 10 x 1,25	17	36	5	8	14
RM/55441	40	24	38	M 38 x 1,5	35	-	8	45,5	G 1/4	-	M 12 x 1,25	19	46	6	10	16
RM/55451	50	32	45	M 45 x 1,5	38	-	9,5	55,5	G 1/4	-	M 16 x 1,5	24	55	8	10	18
RM/55464	63	32	45	M 45 x 1,5	38	-	10	69,5	G 3/8	-	M 16 x 1,5	24	55	8	10	18
RM/55481	80	40	55	M 55 x 1,5	45	14	17,5	87,5	G 3/8	M8	M 20 x 1,5	30	-	10	-	-
RM/55411	100	40	55	M 55 x 1,5	45	14	21,5	107,5	G 1/2	M10	M 20 x 1,5	30	-	10	-	-
Model	Ø	L12	Ø MM h9	PL	RT	SW	Ø TC	TG	VA/VD	WF	XH	XL	ZB	kg at 0 mm	kg per 100 mm	
RM/55433	32	5,5	12	9	M 8 x 1	10	35	-	3	38	47	123	132	0,40	0,14	
RM/55441	40	7,5	16	12	M 10 x 1	13	44	-	3	45	57	142	154	0,83	0,27	
RM/55451	50	8,5	20	12	M 12 x 1,5	17	54	-	3	50	62	152	164	1,30	0,32	
RM/55464	63	8,5	20	13	M 14 x 1,5	17	67	-	3	51	64	159	172	1,60	0,38	
RM/55481	80	11,5	25	15	M 16 x 1,5	22	85,5	70	5	61	76	196	211	3,10	0,59	
RM/55411	100	11,5	25	18,5	M 20 x 1,5	22	105,5	80	5	61	79,5	200,5	219	4,60	0,68	

Alternative variants

RM/55401/JM – Cylinder with double ended piston rod

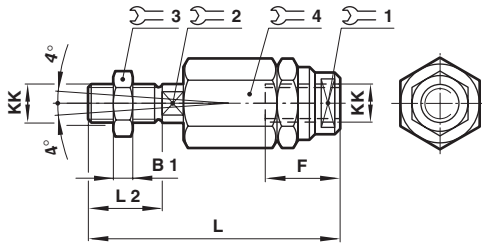


Model	Ø	L8	ZM
RM/55433/5M/.	32	94	170
RM/55441/5M/.	40	109	199
RM/55451/5M/.	50	114	214
RM/55461/5M/.	63	121	223
RM/55481/5M/.	80	150	272
RM/55411/5M/.	100	158	280



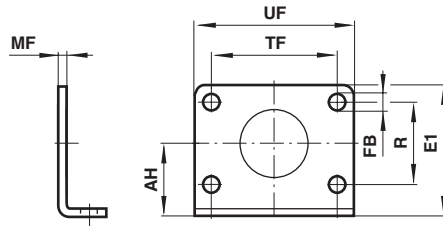
Mountings

Piston rod swivel AK



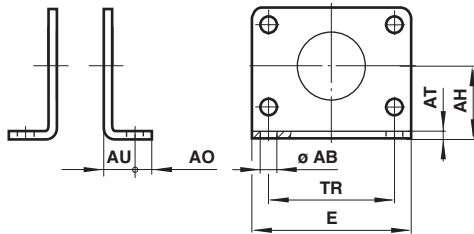
Type	Ø	KK	B1	F	L	L2	1	2	3	4	kg
QM/8025/38	32	M10x1,25	5	26	73	20	19	12	17	30	0,20
QM/8040/38	40	M12x1,25	6	26	77	24	19	12	19	30	0,20
QM/8050/38	50/63	M16x1,5	8	34	106	32	30	19	24	42	0,65
QM/8080/38	80/100	M20x1,5	10	42	122	40	30	19	30	42	0,72

Rear flange B, front flange G



Type	Ø	AH	E1	Ø FB	MF	R	TF	UF	kg
QM/55232/22	32	28	49	7	4	28	52	66	0,11
QM/55240/22	40	33	58	9	5	30	60	80	0,19
QM/55250/22	50	40	70	9	5	40	70	90	0,25
QM/55263/22	63	45	80	9	5	50	76	96	0,33
QM/55480/22	80	56	100	12	8	-	120	150	0,81
QM/55410/22	100	66	120	14	8	-	130	170	1,10

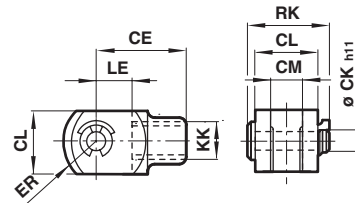
Foot C



Type	Ø	Ø AB	AH	AO	AT	AU	E	TR	kg
QM/55232/21	32	7	28	7	4	14	66	52	0,25
QM/55240/21	40	9	33	10	5	20	80	60	0,44
QM/55250/21	50	9	40	10	5	20	90	70	0,59
QM/55263/21	63	9	45	10	5	20	96	76	0,73
QM/55480/21	80	12	56	15	5	45	90	63	0,67
QM/55410/21	100	14	66	20	5	45	113	75	1,00

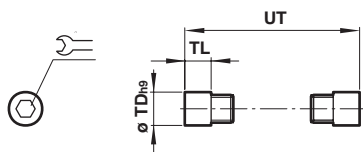
Piston rod clevis F

Corresponds to DIN ISO 8140



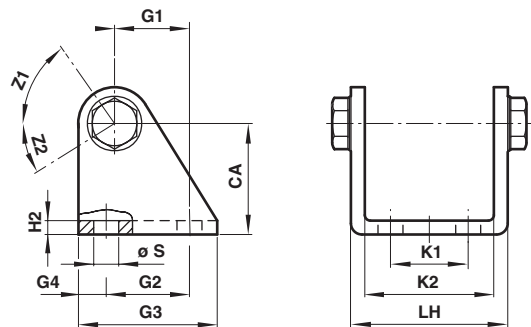
Type	Ø	KK	CE	Ø CK _{h11}	CL	CM	ER	LE	RK	kg
QM/8025/25	32	M10x1,25	40	10	20	10	16	20	28	0,09
QM/8040/25	40	M12x1,25	48	12	24	12	19	24	32	0,13
QM/8050/25	50/63	M16x1,5	64	16	32	16	25	32	41,5	0,33
QM/8080/25	80/100	M20x1,5	80	20	40	20	32	40	50	0,67

End cover trunnion H



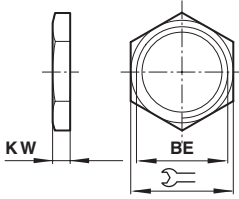
Type	Ø	Ø TD h9	TL	UT	1	kg
QM/55232/28	32	10	8	51	5	0,02
QM/55240/28	40	12	9,5	63	6	0,03
QM/55250/28	50	14	11	76	6	0,05
QM/55263/28	63	16	13	93	8	0,07
QM/55480/28	80	18	13	111,5	8	0,09
QM/55410/28	100	20	13	131,5	10	0,25

Rear hinge L



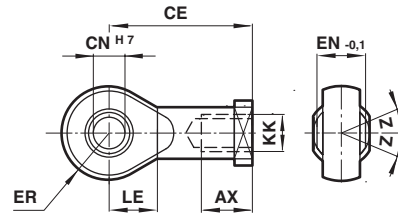
Type	Ø	CA	G1	G2	G3	G4	Ø S	H2	K1	K2	LH	Z1	Z2
QM/55232/24	32	35	20	24	40	8	7	4	20	46,5	59,5	65°	36°
QM/55240/24	40	40	27	30	50	10	9	5	28	56,5	71	55°	32°
QM/55250/24	50	45	30	34	54	10	9	5	36	68,5	83	60°	30°
QM/55263/24	63	50	34	35	65	15	9	5	42	82,5	99	189°	25°
QM/55480/24	80	65	47,5	55	80	12,5	11	6	55	102,5	125,5	193°	27°
QM/55410/24	100	77	63	70	100	15	11	6	70	122,5	145,5	191°	25°

Nut N



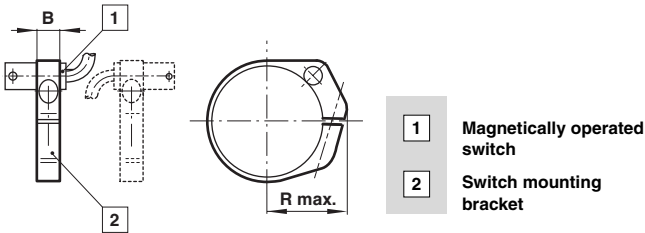
Type	Ø	BE		KW	kg
M/P29254	32	M30 x 1,5	36	8	0,03
M/P29255	40	M38 x 1,5	46	10	0,06
M/P29256	50/63	M45 x 1,5	55	10	0,08
M/P34806	80/100	M55 x 1,5	60	13	0,25

Universal piston rod eye UF
Corresponds to DIN ISO 8139



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

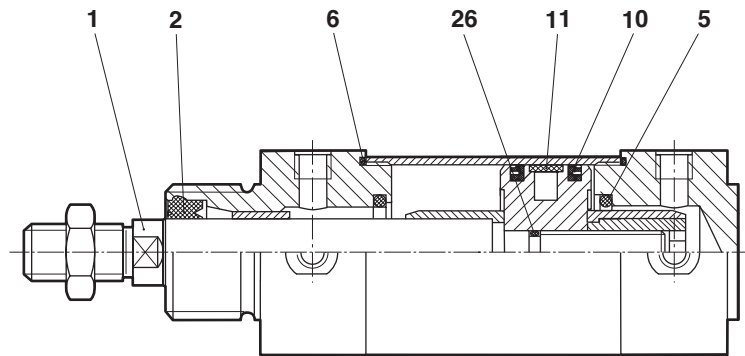
QM/33/xxx/22 – Brackets for switches



For switches M/50

Type	Ø	B	R max.
QM/33/432/22	32	10	29
QM/33/440/22	40	10	32
QM/33/450/22	50	10	38
QM/33/463/22	63	10	46
QM/33/480/22	80	12	54
QM/33/410/22	100	10	59

Spares



Type	Spares kit	Comprising item	Description	Quantity	Piston rod Item 1
RM/55433/M	QM/55433/00	2	Piston rod seal	1	SM/P30207/*
RM/55441/M	QM/55441/00	5	Cushion seal	2	RM/P30208/*
RM/55451/M	QM/55451/00	6	'O'-ring	2	RM/P30209/*
RM/55464/M	QM/55464/00	10	Piston seal	2	RM/P30210/*
RM/55481/M	QM/55481/00	11	Wear ring	1	RM/P34626/*
RM/55411/M	QM/55411/00	26	'O'-ring	1	RM/P34663/*
			Grease		

* Insert stroke length

Note: Please quote the cylinder type number when ordering spare parts