

**‘Stainless Steel’ ISO Cylinders - Clean line
Magnetic Piston
Double Acting
Ø 32 to 125 mm**

- Clean line design
- High corrosion and acid resistance
- Magnetic piston as standard
- Conforming to ISO 6431
- Suitable for applications in the Food Industry
- Adjustable cushioning
- Nose mounting nut and piston rod locknut as standard
- Special wiper/seal as standard



Technical Data

Medium:

Compressed air, filtered, lubricated or non-lubricated

Standard:

Main dimensions conforming to ISO 6431

Operation:

Double acting with magnetic piston, adjustable cushioning

Operating Pressure:

1 to 10 bar

Operating Temperature:

- 20°C* to +80°C

Max. 150°C with heat resistant seals

*Consult our Technical Service for use below +2°C

Cylinder Diameters:

32, 40, 50, 63, 80, 100, 125 mm

Strokes:

Non-standard strokes (1600 mm max.) available

Materials:

Barrel: X5 Cr Ni 18 10 (1.4301; AISI 304)

End covers: X10 Cr Ni S 18 9 (1.4305; AISI 303)

Piston rod: X10 Cr Ni S 18 9 (1.4305; AISI 303)

‘O’-rings: FPM

Piston seals: Polyurethane

Cushion seals: Nitrile rubber (NBR)

Attention:

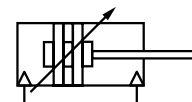
These cylinders are also available in
Stainless Steel 1.4571 - AISI 316 upon request

Ordering Examples

See page N 1.5.077.04

Mountings and Switches

See page N 1.5.077.03 and 04





Cylinder Variants

Symbol	Model magnetic piston	Description	Dimensions Page
	KM/55001/M	Standard clean line cylinder	05
	KM/55001/MF	Cylinder with threaded front end cover	05
	TKM/55001/M	Cylinder with heat resistant seals (150°C max)	05
	TKM/55001/MF	Cylinder with threaded front end cover and heat resistant seals (150°C max)	05
	KM/55001/MU	Cylinder with extended piston rod	05
	KM/55001/JM	Cylinder with double ended piston rod (Ø 32 to 63 mm)	05

For combinations of cylinder variants consult our Technical Service

Model Codes

KM/55*/**/*******

Special Variants	Substitute
Heat resistant seals, 150°C max.	T

Material
Stainless steel

Threads
Metric Ports: ISO 228

Series
55001

Cylinder Diameters (mm)	Substitute
Ø32	033
Ø40	041
Ø50	051
Ø63	064
Ø80	081
Ø100	101
Ø125	126

Strokes (mm)
1600 max.

Variants (magnetic piston)	Substitute
Standard	M
Double ended piston rod	JM
Threaded front end cover	MF
Extended piston rod *KM/55***MU/***/****	MU
Extension (mm)	

Note: If option is not required, disregard option position within part number eg. KM/55081/M/100.

For combinations of cylinder variants consult our Technical Service.

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



Mountings

	Style 'G'	Style 'C'	Style 'F'	Style 'L'
				
Cylinder Ø	Page 06	Page 06	Page 07	Page 07
32	M/P 34297	KQM/55433/21	KQM/55433/25	KQM/55032/24
40	M/P 34298	KQM/55441/21	KQM/55441/25	KQM/55040/24
50	M/P 34299	KQM/55451/21	KQM/55451/25	KQM/55050/24
63	M/P 34300	KQM/55464/21	KQM/55451/25	KQM/55063/24
80	-	-	KQA/8080/25	KQM/55080/24
100	-	-	KQA/8080/25	KQM/55100/24
125	-	-	KQA/8125/25	KQM/55125/24
	Style 'N'	Style 'H'	Switch Mounting Brackets #	Switch Mounting Brackets #
				
Cylinder Ø	Page 06	Page 07	Page 08	Page 08
32	M/P 34276	QM/55232/28	QM/33/432/22	-
40	M/P 34277	QM/55240/28	QM/33/440/22	-
50	M/P 34278	QM/55250/28	QM/33/450/22	-
63	M/P 34278	QM/55263/28	QM/33/463/22	-
80	-	QM/55480/28	QM/33/480/22	-
100	-	QM/55410/28	-	QM/33/100/22
125	-	QM/55125/28	-	QM/33/125/22

M/50, QM/33, QM/34, QM/134

Materials of Mountings

Style 'G'	Front mounting: X 5 Cr Ni 18 10 (1.4301; AISI 304)
Style 'C'	Foot mounting: X 5 Cr Ni 18 10 (1.4301; AISI 304)
Style 'F'	Piston rod clevis mounting: X 10 Cr Ni S 18 9 (1.4305; AISI 303), bolt: X 10 Cr Ni S 18 9 (1.4305; AISI 303), eyebolt: X 10 Cr Ni S 18 9 (1.4305; AISI 303)
Style 'L'	Rear hinge mounting: X 5 Cr Ni 18 10 (1.4301; AISI 304), bolt: X 10 Cr Ni S 18 9 (1.4305; AISI 303)
Style 'N'	Nose nut: X 10 Cr Ni S 18 9 (1.4305; AISI 303)
Style 'H'	End cover trunnion mountig bolt: X 10 Cr Ni S 18 9 (1.4305; AISI 303)
Bracket for switches:	Body POM, holding strap 1.4301



Switches

Model	With cable		With plug	
	Ø 6,5 / 5 mm	Ø 8 mm	Ø 6,5 / 5 mm	Ø 8 mm
Reed without LED	-	QM/33	-	-
Reed with LED	M/50/LSU/..	QM/34	M/50/LSU/CP	QM/34/P
Solid state PNP	M/50/EAP/..	QM/134	M/50/EAP/CP	QM/134/P
Solid state NPN	M/50/EAN/..	QM/134/N	M/50/EAN/CP	QM/134/N/P

Model	Reed	Solid state	Voltage		Current Max.	Temperature °C	LED	Output	Cable/ Plug	Cable Type	Plug in cable		Catalogue Page
			V a.c.	V d.c.							Straight	90°	
M/50/LSU/**	-	-	10 to 240	10 to 170	180 mA	-20° to +80°	●	PNP, NPN	2; 5; 10m	PVC 2 x 0,25	-	-	N 4.3.005
M/50/LSU/5U	-	-	10 to 240	10 to 170	180 mA	-20° to +80°	●	PNP, NPN	5 m	PU 2 x 0,25	-	-	N 4.3.005
M/50/LSU/CP	-	-	10 to 240	10 to 170	180 mA	-20° to +80°	●	PNP, NPN	Plug M8x1		M/P73001/5	-	N 4.3.005
QM/33/**	-	-	10 to 240	10 to 240	1,5 A	-20° to +80°	-	NO contact	2; 5; 10m	PVC 2 x 0,34	-	-	N 4.3.051
QM/33/C/**	-	-	10 to 110	10 to 175	250 mA	-20° to +80°	-	Changeover cont.	5 m	PVC 2 x 0,34	-	-	N 4.3.051
QM/34/**	-	-	-	10 to 30	1 A	-20° to +80°	●	PNP	2; 5; 10m	PVC 3 x 0,34	-	-	N 4.3.051
QM/34/P	-	-	-	10 to 30	1 A	-20° to +80°	●	PNP	Plug		M/P34614/5	M/P34615/5	N 4.3.051
QM/34/S/**	-	-	10 to 240	10 to 240	500 mA	-20° to +80°	●	PNP, NPN	2; 5; 10m	PVC 2 x 0,34	-	-	N 4.3.051
QM/34/N/**	-	-	-	10 to 30	1 A	-20° to +80°	●	NPN	2; 5m	PVC 3 x 0,34	-	-	N 4.3.051
	M/50/EAP/**	-	-	10 to 30	150 mA	-20° to +80°	●	PNP	2; 5; 10m	PVC 3 x 0,25	-	-	N 4.3.007
	M/50/EAP/CP	-	-	10 to 30	150 mA	-20° to +80°	●	PNP	Plug M8x1		M/P73001/5	-	N 4.3.007
	M/50/EAN/**	-	-	10 to 30	150 mA	-20° to +80°	●	NPN	2; 5; 10m	PVC 3 x 0,25	-	-	N 4.3.007
	M/50/EAN/CP	-	-	10 to 30	150 mA	-20° to +80°	●	NPN	Plug M8x1		M/P73001/5	-	N 4.3.007
	QM/134/**	-	-	10 to 30	200 mA	-20° to +80°	●	PNP	2; 5 m	PVC 3 x 0,34	-	-	N 4.3.055
	QM/134/P	-	-	10 to 30	200 mA	-20° to +80°	●	PNP	Plug		M/P34614/5	M/P34615/5	N 4.3.055
	QM/134/E/**	-	-	10 to 30	200 mA	-20° to +80°	●	PNP, Pulse stretcher	5 m	PVC 3 x 0,34	-	-	N 4.3.055
	QM/134/N/**	-	-	10 to 30	200 mA	-20° to +80°	●	NPN	2; 5 m	PVC 3 x 0,34	-	-	N 4.3.055
	QM/134/N/P	-	-	10 to 30	200 mA	-20° to +80°	●	NPN	Plug		M/P34614/5	M/P34615/5	N 4.3.505
	QM/134/X/**	-	-	8,2	2,2/1 mA	-20° to +75°	●	NAMUR	5 m	PVC 2 x 0,34	-	-	N 4.3.055

** Insert cable length

Full information on switches (technical data, cable materials, dimensions etc.) please refer to relevant catalogue pages

Ordering Examples

Cylinders

To order a standard 80 mm bore cylinder with a 50 mm stroke quote: **KM/55081/M/50**

Mountings

To order a front flange mounting style 'G' for a 63 mm bore cylinder quote: **M/P 34300**

Switches

To order a reed switch with LED and 2 m cable length quote: **M/50/LSU/2**

Switch Mounting Brackets

To order a bracket for magnetically operated switches QM/34; 50 mm bore cylinder quote: **QM/33/450/22**

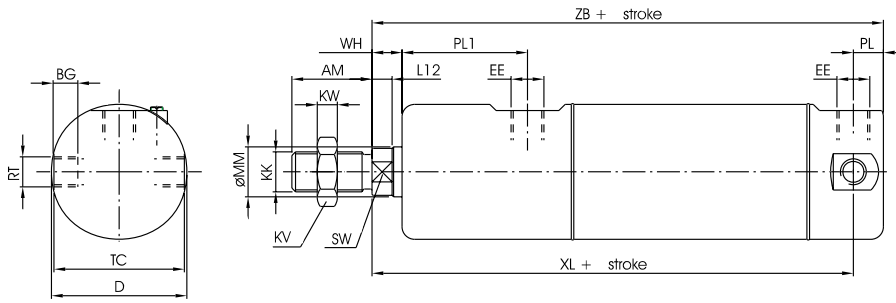
Theoretical Forces • Air Consumption • Cushioning

Cylinder Ø	Theoretical forces (N) at 6 bar		Air consumption (l/cm stroke) at 6 bar		Cushion length (mm)	Initial volume (cm ³)
	Outstroke	Instroke	Outstroke	Instroke		
32	482	414	0,056	0,048	19	12,3
40	754	633	0,088	0,074	22	20,7
50	1178	990	0,137	0,114	24	36
63	1870	1680	0,218	0,195	24	64
80	3016	2722	0,35	0,32	27	116
100	4710	4416	0,55	0,51	34	242
125	7363	6882	0,86	0,79	41	451



BASIC DIMENSIONS

KM/55 . . . /M — Standard Cylinder
(Ø 32 to 125 mm)

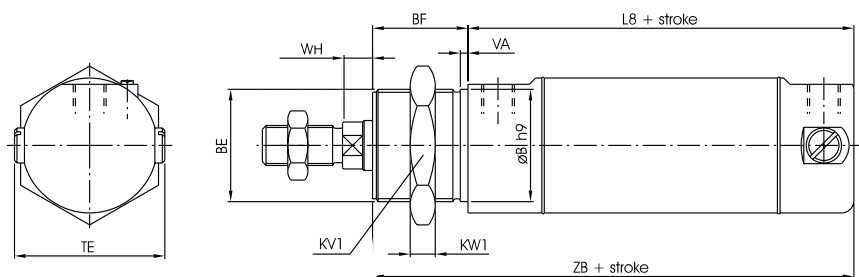


Cylinder Ø	AM	Ø B _{h9}	BE	BF	BG	Ø D	EE	KK	KV	KV1	KW	KW1	L8	L12
32	22	30	M30x1.5	30	6	36	G1/8	M10x1.25	17	36	5	8	94	6
40	24	38	M38x1.5	35	8	44	G1/4	M12x1.25	19	46	6	10	109	6.5
50	32	45	M45x1.5	38	9.5	54	G1/4	M16x1.5	24	55	8	10	114	8
63	32	45	M45x1.5	38	10	68	G3/8	M16x1.5	24	55	8	10	121	8
80	40	-	-	-	18	86	G3/8	M20x1.5	30	-	10	-	-	10
100	40	-	-	-	22	106	G1/2	M20x1.5	30	-	10	-	-	10
125	54	-	-	-	29	133	G1/2	M27x2	41	-	13.5	-	-	13

Cylinder Ø	Ø MM	PL	PL1	RT	SW	TC	TE	VA	WH	XL	ZB	at 0mm	per 25mm
32	12	9	39	M8x1	10	34.5	42.5	3	8	124.5	132	0.78 kg	0.06 kg
40	16	15	50	M10x1	13	42	50	3	10	142	154	1.36 kg	0.09 kg
50	20	12	50	M12x1.5	17	52	60	3	12	152	164	2.25 kg	0.13 kg
63	20	13	51	M14x1.5	17	66	74	3	13	159	172	3.78 kg	0.16 kg
80	25	16	47	M16x1.5	22	83.5	-	-	13	160	176	5.99 kg	0.25 kg
100	25	19	47	M20x1.5	22	102.5	-	-	15	178	197	10.36 kg	0.29 kg
125	32	17.5	62.5	M24x1.5	27	128.5	-	-	20	207.5	225	22.97 kg	0.48 kg

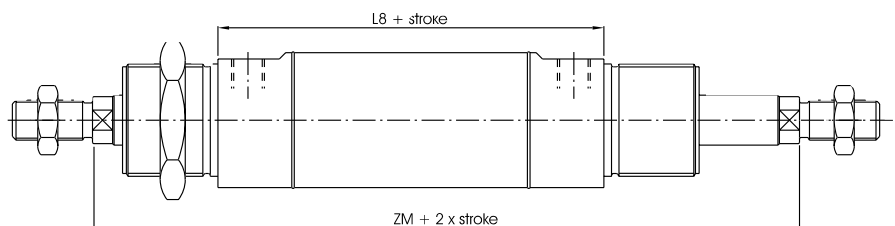
CYLINDER VARIANTS

KM/55 . . . /MF — Cylinder with Threaded Front End Cover
(Ø 32 to 63 mm)



KM/55 . . . /JM — Cylinder with Double Ended Piston Rod
(Ø 32 to 63 mm)

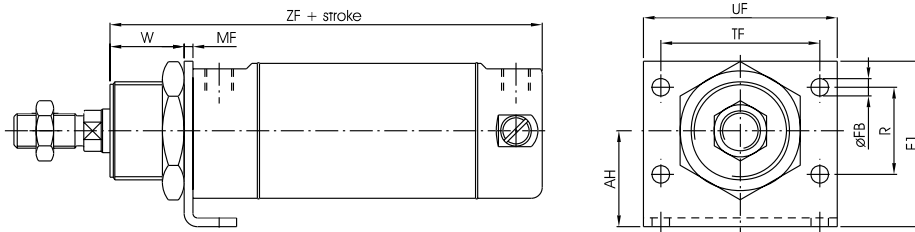
Cylinder Ø	L8	ZM
32	94	170
40	109	199
50	114	214
63	121	223



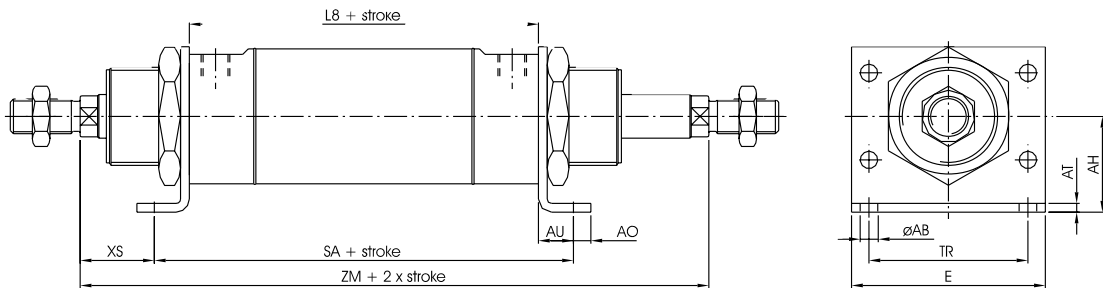


MOUNTINGS

Style 'G' — Front Flange Mounting — M/P34 ...



Style 'C' — Foot Mounting — KQM/554 ... /21

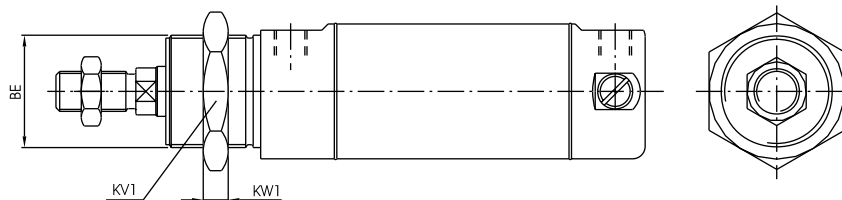


Cylinder Ø	Ø AB	AH	AO	AT	AU	E	E1	Ø FB	MF
32	7	28	7	4	14	66	49	7	4
40	9	33	10	5	20	80	58	9	5
50	9	40	10	5	20	90	70	9	5
63	9	45	10	5	20	96	80	9	5

Cylinder Ø	SA	TF	TR	UF	W	XS	ZF	Style 'G'	Style 'C'
32	122	52	52	66	34	24	136	0,11 kg	0,25 kg
40	149	60	60	80	40	25	159	0,19 kg	0,44 kg
50	154	70	70	90	45	30	169	0,25 kg	0,59 kg
63	161	76	76	96	46	31	177	0,33 kg	0,74 kg

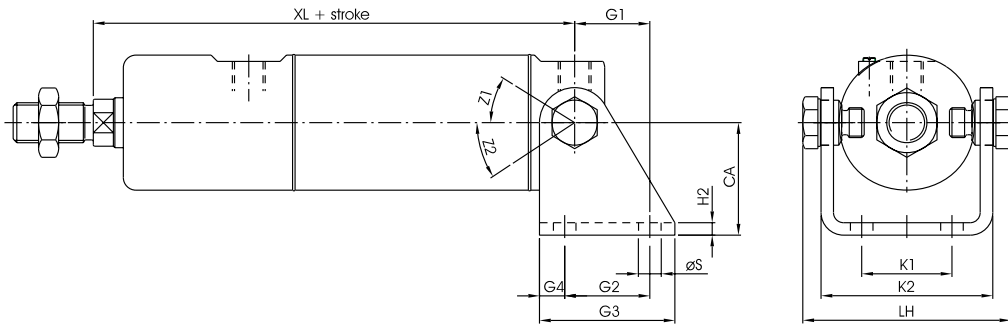
Style 'N' — Nose Nut — M/P3427 .

Cylinder Ø	BE	KV1	KW1	Style 'N'
32	M30x1,5	36	8	0,03kg
40	M38x1,5	46	10	0,06kg
50	M45x1,5	55	10	0,08kg
63	M45x1,5	55	10	0,08kg



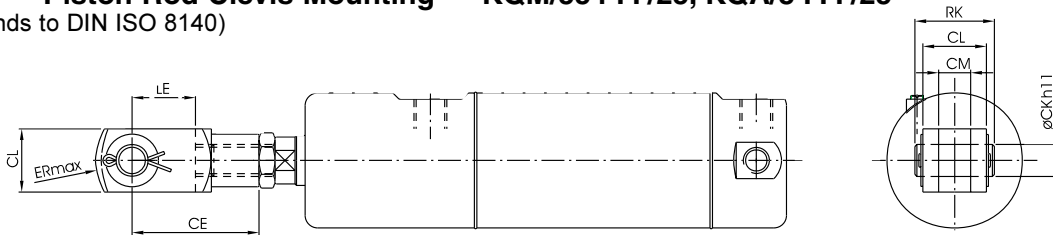


Style 'L' — Rear Hinge Mounting — KQM/55 ... /24



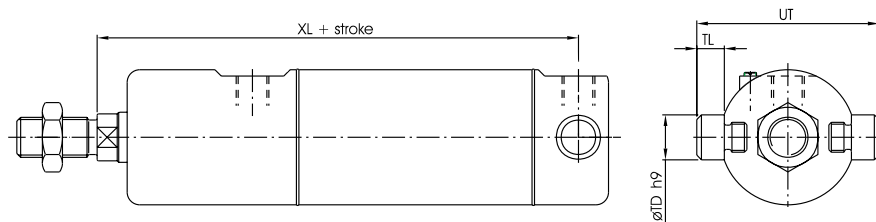
Cylinder Ø	CA	G1	G2	G3	G4	H2	K1	K2	LH	Ø S	XL	Z1	Z2	Style 'L'
32	35	20	24	40	8	4	20	46.5	59.5	7	124.5	202	36	0.157 kg
40	40	27	30	50	10	5	28	56.5	71	9	142	197	33	0.255 kg
50	45	30	34	54	10	5	36	68.5	83	9	152	196	31	0.331 kg
63	50	34	35	65	15	5	42	82.5	99	9	159	191	25	0.504 kg
80	65	47.5	55	80	12.5	6	55	102.5	125.5	11	160	193	27	0.955 kg
100	77	63	70	100	15	6	70	122.5	145.5	11	178	192	27	1.370 kg
125	90	82.5	90	125	17.5	8	90	152.5	175.5	13.5	207.5	188	22	2.503 kg

Style 'F' — Piston Rod Clevis Mounting — KQM/554 ... /25, KQA/8 ... /25
(Corresponds to DIN ISO 8140)



Cylinder Ø	CE	Ø CK _{h11}	CL	CM	ER	KK	LE	RK	Style 'F'
32	40	10	20	10	16	M10x1.25	20	28	0.09 kg
40	48	12	24	12	19	M12x1.25	24	32	0.13 kg
50	64	16	32	16	25	M16x1.5	32	41.5	0.33 kg
63	64	16	32	16	25	M16x1.5	32	41.5	0.33 kg
80	80	20	40	20	32	M20x1.5	40	58	0.67 kg
100	80	20	40	20	32	M20x1.5	40	58	0.67 kg
125	110	30	50	30	45	M27x2	54	72	1.35 kg

Style 'H' — Rear End Cover Trunnion Mounting — QM/55 ... /28



Cylinder Ø	Ø TD _{h9}	TL	UT	XL	Style 'H'
32	10	8	51	124.5	0.02 kg
40	12	9.5	63	142	0.03 kg
50	14	11	76	152	0.05 kg
63	16	13	93	159	0.07 kg
80	18	13	111.5	160	0.09 kg
100	20	13	131.5	178	0.25 kg
125	25	20	168.5	207.5	0.32 kg

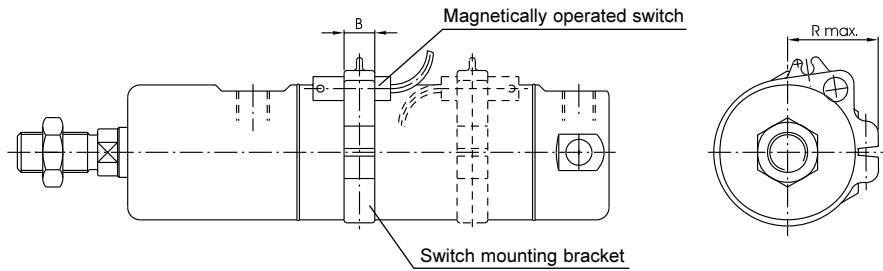


SWITCH MOUNTING BRACKETS

QM/33/4 . . /22 — Bracket (Ø 32 to 80mm)

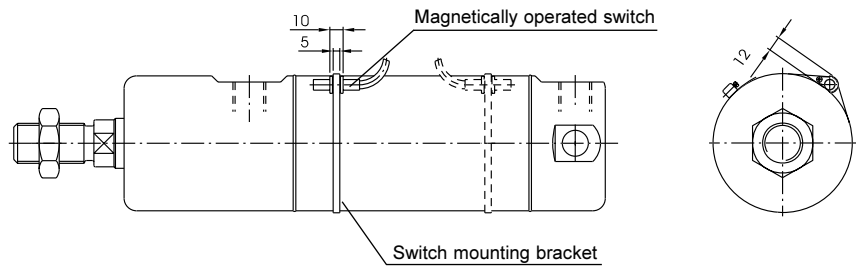
Switches: M/50, QM/33, QM/34, QM/134

Cylinder Ø	B	R max.	Weight
32	10	29	0,004 kg
40	10	32	0,006 kg
50	10	38	0,006 kg
63	10	46	0,007 kg
80	12	54	0,015 kg



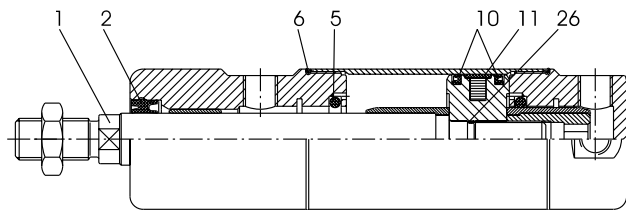
QM/33/1 . . /22 — Bracket with holding strap (Ø 100, 125mm)

Switches: M/50, QM/33, QM/34, QM/134





SPARES



Cylinder Ø	Model	Spares kit	Comprising Item	Description	Quantity	Piston rod Item 1
32	KM/55033/M, KM/55033/MF	KQM/55032/00	2	Piston rod seal	1	SM/P30207/*
40	KM/55041/M, KM/55041/MF	KQM/55040/00	5	Cushion seal	2	SM/P30208/*
50	KM/55051/M, KM/55051/MF	KQM/55050/00	6	'O' -ring	2	SM/P30209/*
63	KM/55064/M, KM/55064/MF	KQM/55063/00	10	Piston seal	2	SM/P30210/*
80	KM/55081/M	KQM/55080/00	11	Wear ring	1	SM/P19970/*
100	KM/55101/M	KQM/55100/00	26	'O' -ring	1	SM/P19971/*
125	KM/55126/M	KQM/55125/00				SM/P30988/*

* Insert stroke length

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

Spares for cylinder variants please consult our Technical Service