KM/55001/M
'Stainless steel' Double acting roundline cylinders
Ø 32 ... 125 mm

Clean line design

High corrosion and acid resistance

Magnetic piston as standard

Conforms to ISO 6431

Suitable for applications in the food industry

Special wiper/seal as standard

Technical features

Medium:
Compressed air, filtered, lubricated or non-lubricated

Operation:
Double acting, magnetic piston, adjustable cushioning

Operating pressure:
1 ... 10 bar

Operating temperature:
-20°C ... +80°C
Maximum 150°C heat resistant seals
Air supply must be dry enough to avoid ice formation at temperatures below +2°C

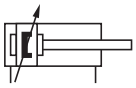
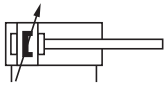
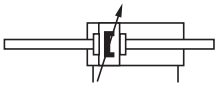
Strokes:
Non-standard strokes (1600 mm max. available)

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 seal: PUR
Cushion seal: NBR

Technical data

Cylinder Ø mm	32	40	50	63	80	100	125
Air ports	G 1/8	G 1/4	G 1/4	G 3/8	G 3/8	G 1/2	G 1/2
Piston rod Ø mm	12	16	20	20	25	25	32
Piston rod thread mm	M10x1,25	M12x1,25	M16x1,5	M16x1,5	M20x1,5	M20x1,5	M27x2
Cushion length mm (inch)	19	22	24	24	27	34	41
Theoretical thrusts at 6 bar outstroke (N)	482	754	1178	1870	3016	4710	7363
Theoretical thrusts at 6 bar instroke (N)	414	633	990	1680	2722	4416	6882
Air consumption at 6 bar outstroke (l/cm)	0,056	0,088	0,137	0,218	0,35	0,55	0,86
Air consumption at 6 bar instroke (l/cm)	0,048	0,074	0,114	0,195	0,32	0,51	0,79

Cylinder variants

Symbol	Model magnetic piston	Description	Dimensions Page
	KM/55000/M	Standard cylinders with female threads on rear end cover for trunning mounting	4
	KM/55000/MF	Cylinders with threaded front end cover	4
	KM/55000/MFT	Standard cylinders with female threads on front end cover for trunning mounting	4
	KM/55000/M/D2	Cylinders with integral clevis mounting	5
	KM/55000/M/R	Cylinders with integral rear eye mounting	5
	KM/55000/M/UR	Cylinders with integral universal rear eye mounting	5
	TKM/55000/M	High temperature cylinders, 150°C max.	4
	KM/55000/MU	Standard cylinders with extended piston rod and female threads on rear end cover for trunning mounting	4
	KM/55000/JM	Cylinders with double ended piston rod and threaded front end covers (Ø 32 to 63 mm)	4

For the cylinder of alternative options consult our technical service

Option selector

★KM/55★★★/★★/★★/★★★★

Special variants	Substitute
High temperature version: 150°C max.	T

Cylinder Ø (mm)	Substitute
32	033
40	041
50	051
63	064
80	081
100	101
125	126

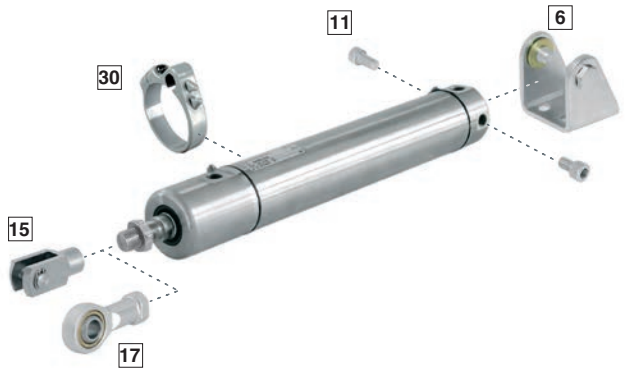
Strokes (mm)	
1600 max.	

Cylinder with integral mountings	Substitute
Integral clevis mounting	D2
Integral rear eye mounting	R
Integral universal rear eye mounting	UR

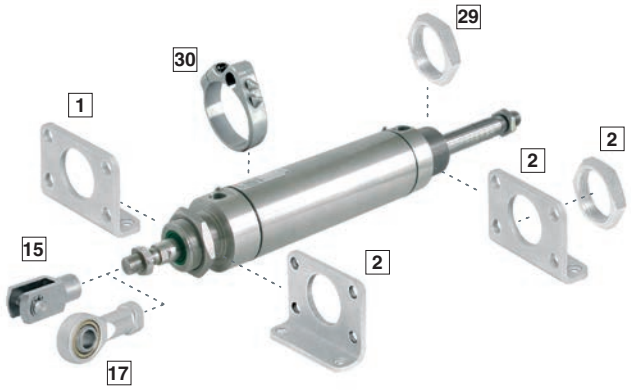
Variants	Substitute
Standard, female threads on rear end cover for trunning mounting	M
Threaded front end cover	MF
Standard, female threads on front end cover for trunning trounting	MFT
Double ended piston rod (ø 32 to 63 mm),threaded front end cover	JM
*KM/55****/MU/****/***	MU

Extension (mm)

Materials of mountings and accessories
Standard cylinders



Cylinder variant

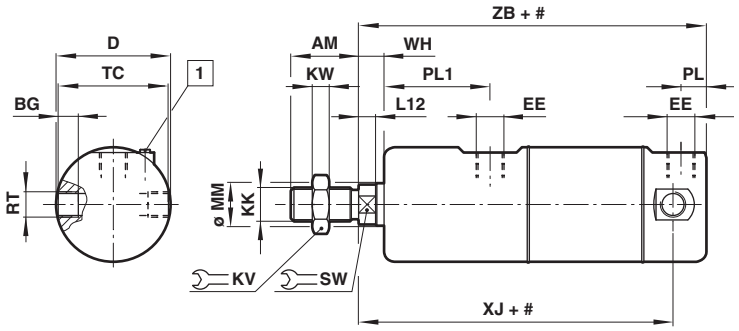


Position	Style	Stainless steel	Position	Style	Stainless steel
1	B/G	Flange mounting: X 5 Cr Ni 18 10 (1.4301; AISI 304)	15	F	Piston rod clevis mounting: X 10 Cr Ni S 18 9 (1.4305; AISI
2	C	Foot mounting: X 5 Cr Ni 18 10 (1.4301; AISI 304)	17	UF	Body: X 5 Cr Ni 18 10 (1.4301; AISI 304), Inner ring: X 105 Cr Co 18-2 (1.4528), Outer ring: X 10 Cr Ni S 18 9 (1.4305; AISI 303)
6	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), eyebolt: X 10 Cr Ni S 18 9 (1.4305; AISI 303)	29	Nose nut	X 10 Cr Ni S 18 9 (1.4305; AISI 303)
11	H	Central trunnion: X 10 Cr Ni S 18 9 (1.4305; AISI 303)	30	Bracket for switches	Body ø 32 ... 80 mm POM, ø 100 & 125 mm stainless steel Screws stainless steel

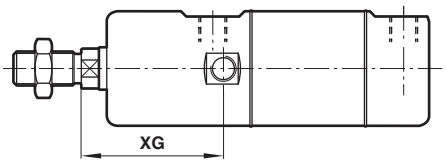
Cylinder	B, G	C	F	H	L	N	UF
							
	1	2	8	13	12	3	6
Ø (mm)	Page 6	Page 6	Page 6	Page 6	Page 6	Page 6	Page 6
32	M/P34297	KQM/55433/21	KQM/55433/25	QM/55232/28	KQM/55032/24	M/P34276	KQM/8025/32
40	M/P34298	KQM/55441/21	KQM/55441/25	QM/55240/28	KQM/55040/24	M/P34277	KQM/8040/32
50	M/P34299	KQM/55451/21	KQM/55451/25	QM/55250/28	KQM/55050/24	M/P34278	KQM/8050/32
63	M/P34300	KQM/55464/21	KQM/55451/25	QM/55263/28	KQM/55063/24	M/P34278	KQM/8050/32
80	–	–	KQA/8080/25	QM/55480/28	KQM/55080/24	–	KQM/8080/32
100	–	–	KQA/8080/25	QM/55410/28	KQM/55100/24	–	KQM/8080/32
125	–	–	KQA/8125/25	QM/55125/28	KQM/55125/24	–	KQM/8125/32

Cylinder	Switch mounting	Magnetically operated switches	Service kit
			
	9		
Ø (mm)	Page 7	Page 7 & 8	
32	QM/33/432/22		KQM/55032/00
40	QM/33/440/22		KQM/55040/00
50	QM/33/450/22		KQM/55050/00
63	QM/33/463/22		KQM/55063/00
80	QM/33/480/22		KQM/55080/00
100	QM/33/100/22		KQM/55100/00
	QM/33/125/22		KQM/55125/00

Standard cylinders
KM/55001/M – Standard cylinders with female threads on rear end cover for trunning mounting



Cylinder variant
KM/55001/MFT – Standard cylinders with female threads on front end cover for trunning mounting



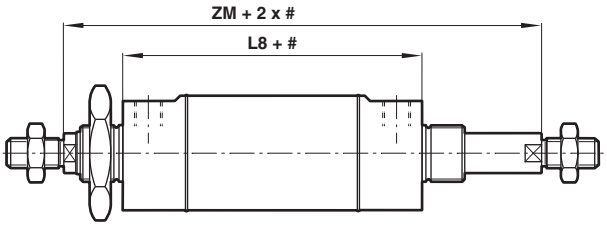
* stroke

1 Cushion screw

Ø	AM	BG	Ø D	EE	KK	KV	KW	L12	Ø MM	PL	PL1	RT	SW	TC	WH	XL	XG	ZB	kg at 0 mm	kg per 25 mm	Model
32	22	6	36	G 1/8	M10 x 1,25	17	5	6	12	9	39	M8 x 1	10	34,5	8	124,5	47	132	0,78	0,06	KM/55033/M/*
40	24	8	44	G 1/4	M12 x 1,25	19	6	6,5	16	15	50	M10 x 1	13	42	10	142	57	154	1,36	0,09	KM/55041/M/*
50	32	9,5	54	G 1/4	M16 x 1,5	24	8	8	20	12	50	M12 x 1,5	17	52	12	152	62	164	2,25	0,13	KM/55051/M/*
63	32	10	68	G 3/8	M16 x 1,5	24	8	8	20	13	51	M14 x 1,5	17	66	13	159	64	172	3,78	0,16	KM/55064/M/*
80	40	18	86	G 3/8	M20 x 1,5	30	10	10	25	16	47	M16 x 1,5	22	83,5	13	160	60	176	5,99	0,25	KM/55081/M/*
100	40	22	106	G 1/2	M20 x 1,5	30	10	10	25	19	47	M20 x 1,5	22	102,5	15	178	62	197	10,36	0,29	KM/55101/M/*
125	54	29	133	G 1/2	M27 x 2	41	13,5	13	32	17,5	62,5	M24 x 1,5	27	128,5	20	207,5	82,5	225	22,97	0,48	KM/55126/M/*

* Please insert stroke length.

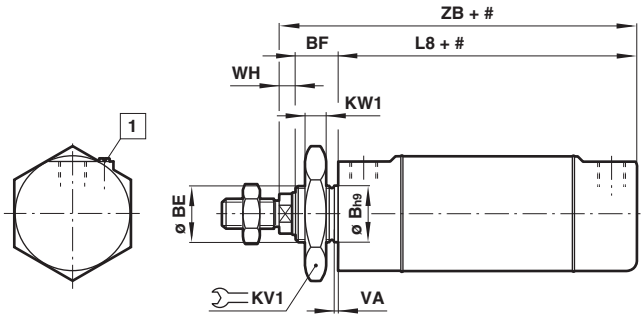
Cylinder variants
KM/55001/JM – Cylinders with double ended piston rod and threaded front end covers



Ø	L8	ZM	Model
32	94	170	KM/55033/JM/*
40	109	199	KM/55041/JM/*
50	114	214	KM/55051/JM/*
63	121	223	KM/55064/JM/*

* Please insert stroke length.

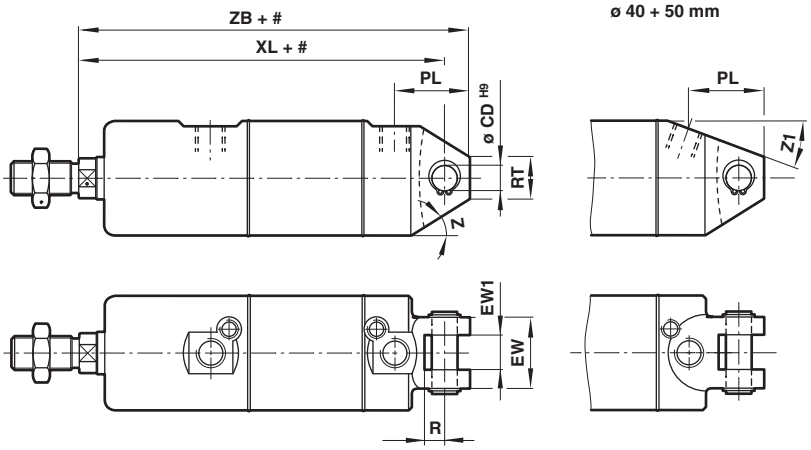
KM/55001/MF – Cylinders with threaded front end cover



Ø	Ø Bh9	BE	BF	KV1	KW1	L8	VA	WH	ZB	Model
32	30	M30x1,5	30	36	8	94	3	8	132	KM/55033/MF/*
40	38	M38x1,5	35	46	10	109	3	10	154	KM/55041/MF/*
50	45	M45x1,5	38	55	10	114	3	12	164	KM/55051/MF/*
63	45	M45x1,5	38	55	10	121	3	13	172	KM/55064/MF/*

* Please insert stroke length.

Cylinder variant
KM/55001/M/D2 – cylinder with integral clevis mounting



stroke

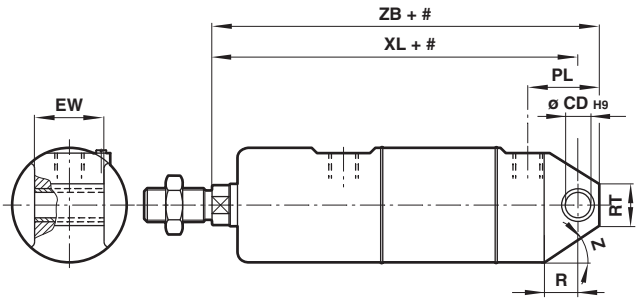
Ø	Ø CDH9	EW	$EW_{1+0,2}$	PL	R	RT	XL	Z	Z1	ZB	kg at 0 mm	kg per 25 mm	Model
32	10	26	14	30,5	16,5	19	142	20°	–	151	0,78	0,06	KM/55033/M/D2/*
40	12	32	16	36,5	19,5	18	160	25°	15°	172	1,35	0,09	KM/55041/M/D2/*
50	12	41	21	36,5	21,5	24	170	30°	20°	182	2,24	0,13	KM/55051/M/D2/*
63	16	41	21	46	23,5	25,5	190	30°	–	205	3,74	0,16	KM/55064/M/D2/*

* Please insert stroke length.

KM/55001/M/R – cylinder with integral rear eye mounting

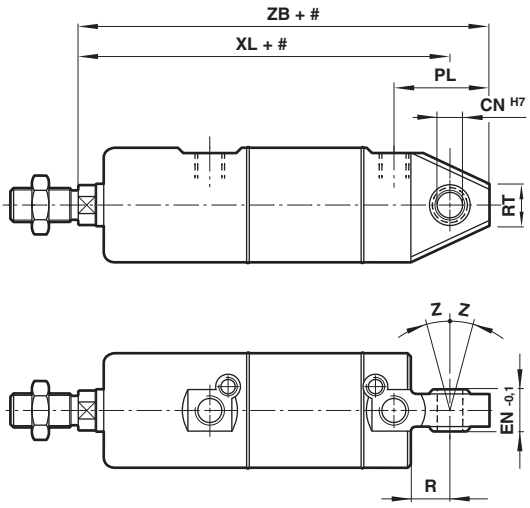
Ø	Ø CDH9	EW	PL	R	RT	XL	Z	ZB	kg at 0 mm	kg per 25 mm	Model
32	10	25,8	29	14,5	19	142	20°	151	0,94	0,06	KM/55033/M/R/*
40	12	27,8	34	16	18	160	25°	172	1,47	0,09	KM/55041/M/R/*
50	12	31,7	33,5	19	24	170	30°	182	2,32	0,13	KM/55051/M/R/*
63	16	39,7	46	22	25,5	190	30°	205	3,98	0,16	KM/55064/M/R/*
80	16	49,7	65	24	41	210	30°	225	7,40	0,25	KM/55081/M/R/*
100	20	59,7	71	27	51	230	30°	250	12,54	0,29	KM/55101/M/R/*

* Please insert stroke length.



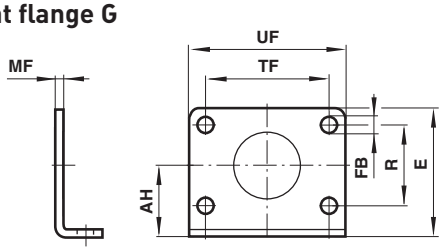
KM/55001/M/UR – cylinder with integral universal rear eye mounting

Ø	Ø CN^{H7}	EN-$_{0,1}$	PL	R	RT	XL	Z	ZB	kg at 0 mm	kg per 25 mm	Model
32	10	14	36	14,5	17,5	142	13°	158	0,84 kg	0,06	KM/55033/M/UR/*
40	12	16	41	16	28,5	160	13°	178	1,41 kg	0,09	KM/55041/M/UR/*
50	16	21	42,5	19	34	170	13°	191	2,31 kg	0,13	KM/55051/M/UR/*
63	16	21	55	22	35,5	190	15°	213	3,82 kg	0,16	KM/55064/M/UR/*
80	20	25	78	24	37,5	210	15°	238	7,32 kg	0,25	KM/55081/M/UR/*
100	20	25	81	27	40,5	230	15°	260	12,26 kg	0,29	KM/55101/M/UR/*



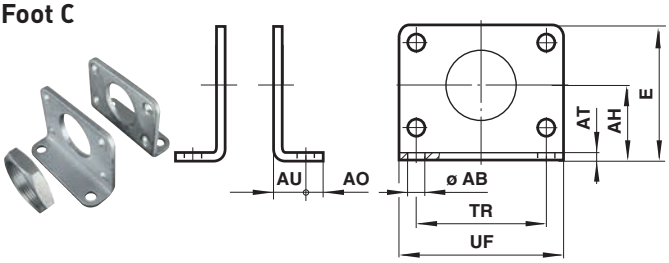
Mountings

Rear flange B, front flange G



Ø	AH	E	Ø FB	MF	R	TF	UF	kg	Model
32	28	49	7	4	28	52	66	0,11	M/P34297
40	33	58	9	5	30	60	80	0,19	M/P34298
50	40	70	9	5	40	70	90	0,25	M/P34299
63	45	80	9	5	50	76	96	0,33	M/P34300

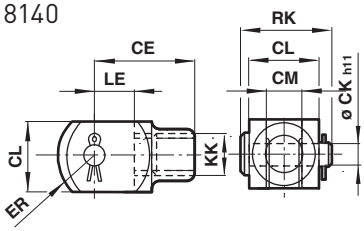
Foot C



Ø	Ø AB	AH	AO	AT	AU	E	TR	UF	kg	Model
32	7	28	7	4	14	49	52	66	0,25	KQM/55433/21
40	9	33	10	5	20	58	60	80	0,44	KQM/55441/21
50	9	40	10	5	20	70	70	90	0,59	KQM/55451/21
63	9	45	10	5	20	80	76	96	0,73	KQM/55464/21

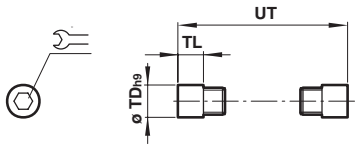
Piston rod clevis F

Conforms to DIN ISO 8140



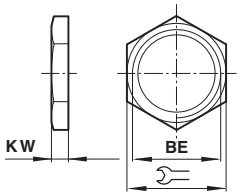
Ø	KK	CE	Ø CKh11	CL	CM	ER	LE	RK	kg	Model
32	M10x1,25	40	10	20	10	16	20	28	0,09	KQM/55433/25
40	M12x1,25	48	12	24	12	19	24	32	0,13	KQM/55441/25
50/63	M16x1,5	64	16	32	16	25	32	41,5	0,33	KQM/55451/25
80/100	M20x1,5	80	20	40	20	32	40	50	0,67	KQA/8080/25
125	M27 x 2	110	30	55	30	45	54	72	1,35	KQA/8125/25

End cover trunnion H



Ø	Ø TDh9	TL	UT	⌯	kg	Model
32	10	8	51	5	0,02	QM/55232/28
40	12	9,5	63	6	0,03	QM/55240/28
50	14	11	76	6	0,05	QM/55250/28
63	16	13	93	8	0,07	QM/55263/28
80	18	13	111,5	8	0,09	QM/55480/28
100	20	14	131,5	10	0,25	QM/55410/28
125	25	20	168,5	10	0,32	QM/55125/28

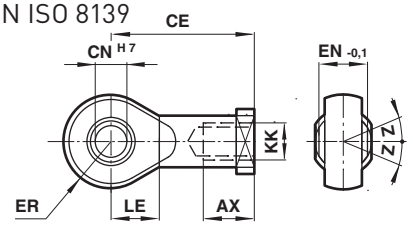
Nose nut N



Ø	BE	⌯	KW	kg	Model
32	M30 x 1,5	36	8	0,03	M/P34276
40	M38 x 1,5	46	10	0,06	M/P34277
50/63	M45 x 1,5	55	10	0,08	M/P34278

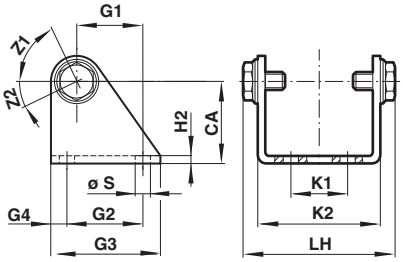
Universal piston rod eye UF

Conforms to DIN ISO 8139



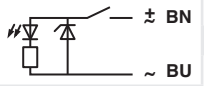
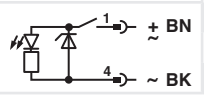
Ø	Thread KK	AX	CE	Ø CNH7	EN-0,1	ER	LE	Z	kg	Model
32	M10x1,25	20	43	10	14	14,5	15	13°	0,09	KQM/8032/32
40	M12x1,25	22	50	12	16	16,5	17	13°	0,13	KQM/8040/32
50/63	M16x1,5	28	64	16	21	21,5	22	15°	0,33	KQM/8050/32
80/100	M20x1,5	33	77	20	25	25,5	26	15°	0,67	KQM/8080/32
125	M27x2	51	110	30	37	35	35	15°	1,15	KQM/8125/32

Rear hinge L



Ø	CA	G1	G2	G3	G4	Ø S	H2	K1	K2	LH	Z1	Z2	kg	Model
32	35	20	24	40	8	7	4	20	46,5	59,5	202°	36°	0,15	KQM/55032/24
40	40	27	30	50	10	9	5	28	56,5	71	197°	33°	0,26	KQM/55040/24
50	45	30	34	54	10	9	5	36	68,5	83	196°	31°	0,33	KQM/55050/24
63	50	34	35	65	15	9	5	42	82,5	99	191°	25°	0,51	KQM/55063/24
80	65	47,5	55	80	12,5	11	6	55	102,5	125,5	193°	27°	0,96	KQM/55080/24
100	77	63	70	100	15	11	6	70	122,5	145,5	192°	27°	1,37	KQM/55100/24
125	90	82,5	90	125	17,5	13,5	8	90	152,5	175,5	188°	22°	2,51	KQM/55125/24

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

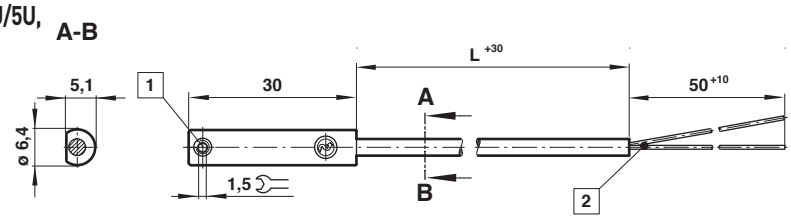
Symbol	Voltage (V a.c.)	(V d.c.)	Current max. (mA)	Function	Temperature (°C)	LED	Protection class	Features	Cable length (m)	Cable type	Weight (g)	Model
	10 ... 240	10 ... 170	180	Closer	-25 ... +80	•	IP66	–	2, 5 or 10	PVC 2 x 0,25	37	M/50/LSU/*V
	10 ... 240	10 ... 170	180	Closer	-25 ... +80	•	IP66	–	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 11; Color code: BK = black, BN = brown, BU = blue

Dimensions

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

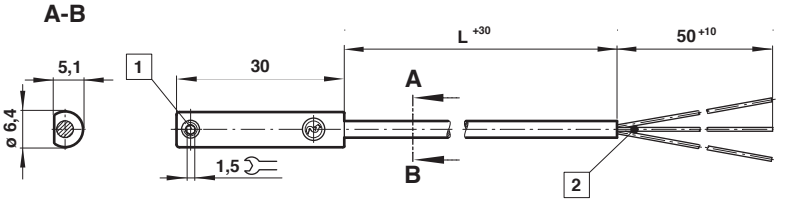
Cable length L = 2, 5 or 10 m



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

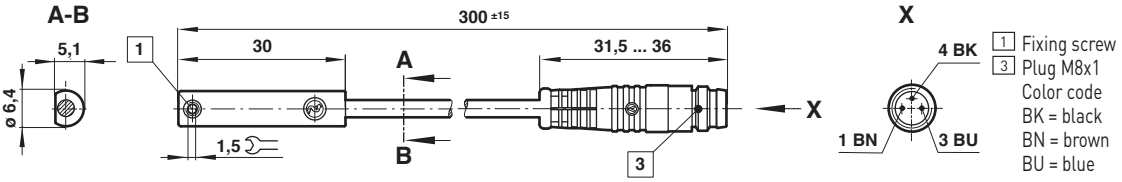
M/50/RAC/5V

Cable length L = 5 m



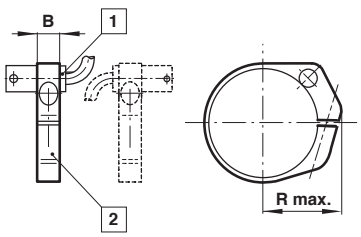
1 Fixing screw
2 - BK = black
+ BN = brown
- ≠BU = blue

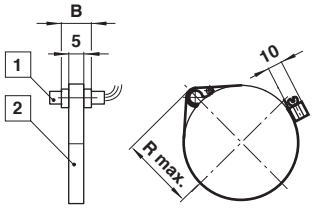
M/50/LSU/CP



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

Switch mounting bracket QM/33/XXX/22



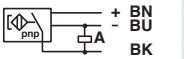
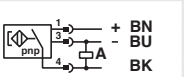
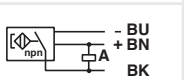
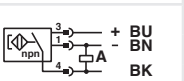


1 Magnetically operated switch
2 Switch mounting bracket

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

Ø	B	R max.	Model
100	10	59	QM/33/100/22
125	10	72,5	QM/33/125/22

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

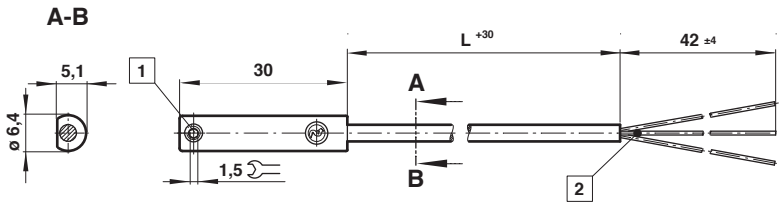
Symbol	Voltage (V d.c.)	Current max. (mA)	Function	Temperature (°C)	LED	Protection class	Features	Cable length (m)	Cable type	Weight (g)	Model
	10 ... 30	150	PNP	-40 ... +80	•	IP67	–	2, 5 or 10	PVC 3 x 0,12	37	M/50/EAP/*V
	10 ... 30	150	PNP	-40 ... +80	•	IP68	–	5	PUR 3 x 0,14	37	M/50/EAP/5U
	10 ... 30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

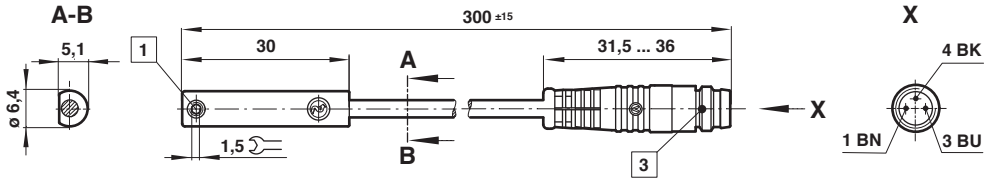
Dimensions

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

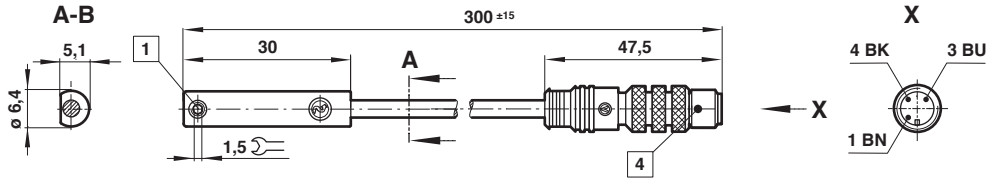
Cable length L = 2, 5 or 10 m



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.