

Actuators

Roundline cylinders (ISO)

RM/28000

Single acting, ISO 6432

Ø 10 to 25 mm



Magnetic piston as standard

Generally conforms to ISO 6432

High strength, double crimped end cap design

Corrosion resistant

Nose mounting nut and piston rod locknut as standard

Optional port arrangement for compact installation

Technical data

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Single acting (sprung in), magnetic piston, buffer cushioning

Operating pressure: 2 to 10 bar

Operating temperature: -10°C to +80°C max.

Consult our Technical Service for use below +2°C

Strokes:

Standard, see table

Non-standard up to 50 mm maximum

Materials

Barrel: stainless steel (Austenitic)

End covers: clear anodised aluminium alloy

Piston rod: stainless steel (Austenitic)

Buffer: polyurethane

Seals: nitrile rubber

Standard models

Ø	Piston rod Ø	Port size	Model Magnetic
10	4	M5	RM/28010/M/*
12	6	M5	RM/28012/M/*
16	6	M5	RM/28016/M/*
20	8	G1/8	RM/28020/M/*
25	10	G1/8	RM/28025/M/*

* Insert stroke length in mm

Standard strokes

Ø	10	25	50
10	○	○	○
12	○	○	○
16	○	○	○
20	○	○	○
25	○	○	○

● Indicates stocked stroke lengths of standard models.

Ø	Theoretical forces (N) at 6 bar	
	Outstroke	Instroke F1 (spring force)
10	40,7	3,70
12	57,7	4,80
16	102	10,50
20	165	16,10
25	260	21,60

Cylinder sizing and speed control see page 6.

Options selector

RM/28***/**/***			
Cylinder diameters (mm)	Substitute	Strokes (mm)	
10	010	50 max.	
12	012		
16	016		
20	020		
25	025		
		Variants	Substitute
		Standard with integral eye mounting	M
		Central rear port	MC
		Flat rear cover	MF
		Extended piston rod	MU
		RM/28***/MU**/**	Extension (mm)

Note: Disregard option positions not used.

For combinations of cylinder variants consult our Technical Service.

Switches

With integral cable



With plug-in cable



	Model		Plug-in cable
Reed	M/50/LSU/*V	M/50/LSU/CP	M/P73001/5 (5 m)
Solid state	M/50/EAP/*V	M/50/EAP/CP	M/P73001/5 (5 m)

*Insert cable length – 2, 5 or 10 m. For details see page 198

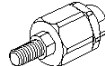
Roundline cylinders (ISO)

RM/28000

Single acting, ISO 6432

Ø 10 to 25 mm

Mountings

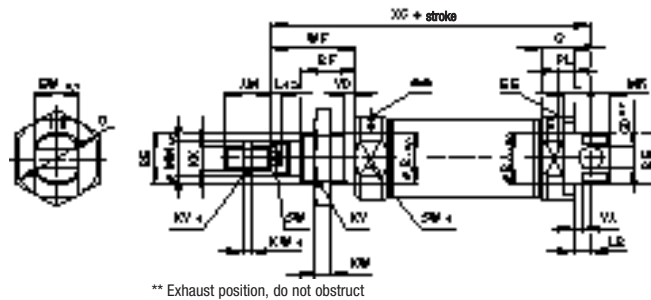
Ø	AK	B, G	C	F	FH	L	L2
							
10	QM/8010/38	M/P19407	M/P19369	QM/8010/25	–	QM/947	QM/8010/44
12	QM/8012/38	M/P19408	M/P19389	QM/8012/25	QM/8012/34	QM/8012/24	QM/8012/44
16	QM/8012/38	M/P19408	M/P19389	QM/8012/25	QM/8012/34	QM/8012/24	QM/8012/44
20	QM/8020/38	M/P19409	M/P19406	QM/8020/25	QM/8020/34	QM/8020/24	QM/8020/44
25	QM/8025/38	M/P19409	M/P19406	QM/8025/25	QM/8020/34	QM/8020/24	QM/8020/44
Ø	N	UF	Switch mounting brackets # ≥ 15 mm stroke		Switch mounting brackets # < 15 mm stroke		
							
10	M/P1501/90	QM/8010/32	QM/33/010/22	QM/33/010/23			
12	M/P13834	QM/8012/32	QM/33/012/22	QM/33/010/23			
16	M/P13834	QM/8012/32	QM/33/016/22	QM/33/016/23			
20	M/P13615	QM/8020/32	QM/33/020/22	QM/33/020/23			
25	M/P13615	QM/8025/32	QM/33/025/22	QM/33/025/23			

For details of mountings please see page 18

For use with switches M/50, see page 198

Standard cylinders

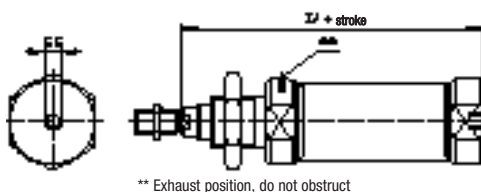
RM/28000/M



Ø	AM	Ø B/B _{-0,1}	BE	BF	Ø CD _{h9}	Ø D	EE	EW _{-0,1}	G	KK	KV (A/F)	KV1 (A/F)	KW	KW1
10	12	12	M12x1,25	12	4	16,5	M5	7,9	9	M4	19	7	6	2
12	16	16	M16x1,5	17	6	21	M5	11,9	9,5	M6	22	10	5	3
16	16	16	M16x1,5	17	6	21	M5	11,9	9,5	M6	22	10	5	3
20	20	22	M22x1,5	20	8	30	G1/8	15,9	15	M8	27	13	8	4
25	22	22	M22x1,5	22	8	30	G1/8	15,9	15	M10x1,25	27	17	8	5
Ø	L	L12	LB	Ø MM _{h9}	MR	PL	SW (A/F)	SW1 (A/F)	WF	VA/VD	XC	kg at 0 mm		kg per 25 mm
10	6	—	2	4	8	5,5	—	14	16	1,5	64	0,034		0,007
12	9	3	3	6	8	5,5	5	19	22	2	75	0,058		0,011
16	9	3	4	6	7	5,5	5	19	22	2	82	0,070		0,012
20	12	3	3	8	11	8	7	27	24	2	95	0,145		0,018
25	12	4	7	10	9	8	9	27	28	2	104	0,200		0,028

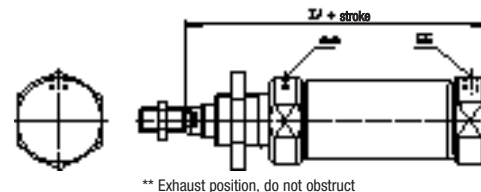
Cylinder variants

RM/28000/MC – Cylinders with central rear port



Ø	EE	ZJ	kg at 0 mm	kg per 25 mm
10	M5	62	0,031	0,007
12	M5	72	0,052	0,011
16	M5	78	0,064	0,012
20	G1/8	92	0,130	0,018
25	G1/8	97	0,185	0,028

RM/28000/MF – Cylinders with flat rear cover

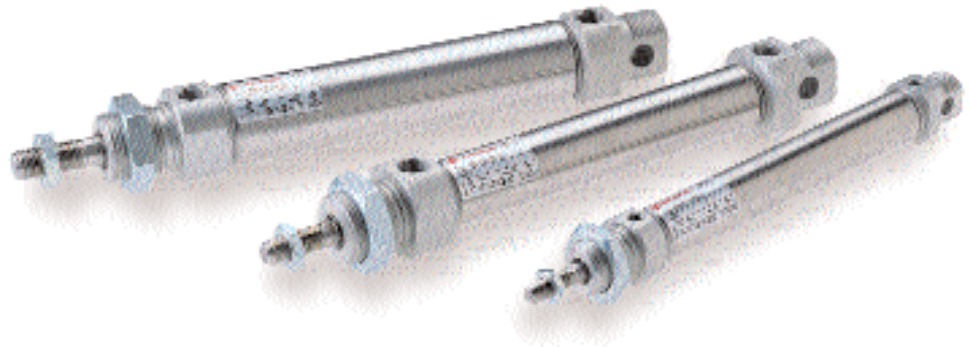
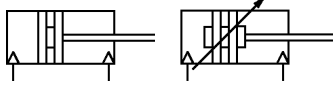


Roundline cylinders (ISO)

RM/8000

Double acting, ISO 6432

Ø 10 to 25 mm



Magnetic piston as standard
 Conforms to ISO 6432
 High strength, double crimped end cap design
 Corrosion resistant
 Buffer or adjustable cushioning
 Nose mounting nut and piston rod locknut as standard
 Optional port arrangement for compact installation

Technical data

Medium:
 Compressed air, filtered, lubricated or non-lubricated
 Operation:
 Double acting, magnetic piston with buffer or adjustable cushioning

Operating pressure:
 1 to 10 bar

Operating temperature:
 -10°C to +80°C max.

Consult our Technical Service for use below +2°C

Strokes:

Standard, see table
 Non-standard up to 500 mm max.

Materials

Barrel: stainless steel (Austenitic)
 End covers: clear anodised aluminium alloy
 Piston rod: stainless steel (Austenitic)
 Buffer: polyurethane
 Wiper: polyurethane
 Seals: nitrile rubber

Standard models

Ø	Piston rod Ø	Port size	Model Magnetic
10	4	M5	RM/8010/M*
12	6	M5	RM/8012/M*
16	6	M5	RM/8016/M*
20	8	G1/8	RM/8020/M*
25	10	G1/8	RM/8025/M*

* Insert stroke length in mm. Cylinder sizing and speed control see page 6

Standard strokes

(buffer cushioning)

Ø	10	25	40	50	80	100	125	160	200	250
10	○	●	○	●	●	●				
12	○	●	○	●	●	●	○	○	○	
16	○	●	○	●	●	●	○	○	○	○
20	○	●	○	●	●	●	○	○	○	○
25	○	●	○	●	●	●	○	○	○	○

● Indicates stocked stroke lengths of standard models.

Standard strokes

(adjustable cushioning)

Ø	25	40	50	80	100	125	160	200	250
16	○	○	○	○	○	○	○	○	
20	○	○	○	○	○	○	○	○	○
25	○	○	○	○	○	○	○	○	○

Options selector

★RM/8★/★/★/★

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

Cylinder diameters (mm)	Substitute
10	010
12	012
16	016
20	020
25	025

Cylinder diameters (mm)	Substitute
16	017
20	021
25	026

Strokes (mm)
500 max.

Variants ##	Substitute
Standard	M
Central rear port	MC
Flat rear cover	MF
Non-rotating piston rod	N2
Double ended piston rod	JM
Locking unit	L4
Extended piston rod	MU
RM/8**/MU/**/****	Extension (mm)

Note: Disregard option positions not used.
 For combinations of cylinder variants consult our Technical Service.
 ## For magnetic piston

Switches

With integral cable



With plug-in cable



	Model	Plug-in cable
Reed	M/50/LSU/*V	M/50/LSU/CP
Solid state	M/50/EAP/*V	M/50/EAP/CP

*Insert cable length – 2, 5 or 10 m. For details see page 198

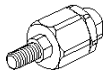
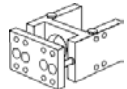
Roundline cylinders (ISO)

RM/8000

Double acting, ISO 6432

Ø 10 to 25 mm

Mountings

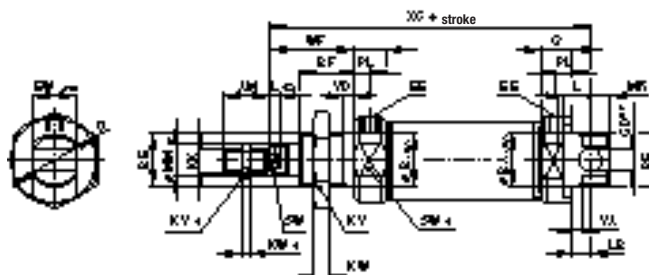
	AK	B, G	C	F	FH	L	L2
							
10	QM/8010/38	M/P19407	M/P19369	QM/8010/25	—	QM/947	QM/8010/44
12	QM/8012/38	M/P19408	M/P19389	QM/8012/25	QM/8012/34	QM/8012/24	QM/8012/44
16	QM/8012/38	M/P19408	M/P19389	QM/8012/25	QM/8012/34	QM/8012/24	QM/8012/44
20	QM/8020/38	M/P19409	M/P19406	QM/8020/25	QM/8020/34	QM/8020/24	QM/8020/44
25	QM/8025/38	M/P19409	M/P19406	QM/8025/25	QM/8020/34	QM/8020/24	QM/8020/44
	N	UF	Guide block	Locking units (passive)	Switch mounting brackets # ≥ 15 mm stroke	Switch mounting brackets # < 15 mm stroke	
							
10	M/P1501/90	QM/8010/32	—	—	QM/33/010/22	QM/33/010/23	
12	M/P13834	QM/8012/32	QM/8012/61/*	QM/8012/59	QM/33/012/22	QM/33/010/23	
16	M/P13834	QM/8012/32	QM/8012/61/*	QM/8012/59	QM/33/016/22	QM/33/016/23	
20	M/P13615	QM/8020/32	QM/8020/61/*	QM/8020/59	QM/33/020/22	QM/33/020/23	
25	M/P13615	QM/8025/32	QM/8025/61/*	QM/8025/59	QM/33/025/22	QM/33/025/23	

Please see page 18 for details of mountings.

For use with switches M/50, see page 198. Refer to page 16 for details of piston rod guide blocks and page 15 for passive locking units.

Standard cylinders

RM/8000/M

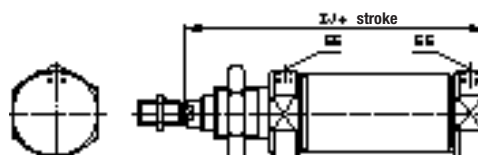
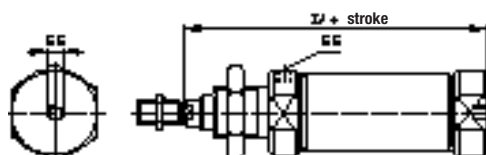


Ø	AM	Ø B/A -0,1	BE	BF	Ø CD H9	Ø D	EE	EW -0,1	G	KK	KV (A/F)	KV1 (A/F)	KW	KW1
10	12	12	M12x1,25	12	4	16,5	M5	7,9	9	M4	19	7	6	2
12	16	16	M16x1,5	17	6	21	M5	11,9	9,5	M6	22	10	5	3
16	16	16	M16x1,5	17	6	21	M5	11,9	9,5	M6	22	10	5	3
20	20	22	M22x1,5	20	8	30	G1/8	15,9	15	M8	27	13	8	4
25	22	22	M22x1,5	22	8	30	G1/8	15,9	15	M10x1,25	27	17	8	5
Ø	L	L12	LB	Ø MM H9	MR	PL	SW (A/F)	SW1 (A/F)	WF	VAVD	XC	kg at 0 mm	kg per 100 mm	
10	6	—	2	4	8	5,5	—	14	16	1,5	64	0,034	0,007	
12	9	3	3	6	8	5,5	5	19	22	2	75	0,058	0,011	
16	9	3	4	6	7	5,5	5	19	22	2	82	0,070	0,012	
20	12	3	3	8	11	8	7	27	24	2	95	0,145	0,018	
25	12	4	7	10	9	8	9	27	28	2	104	0,200	0,028	

Cylinder variants

RM/8000/MC – Cylinders with central rear port

RM/8000/MF – Cylinders with flat rear cover



Ø	EE	ZJ	kg at 0 mm	kg per 100 mm
10	M5	62	0,031	0,007
12	M5	72	0,052	0,011
16	M5	78	0,064	0,012
20	G1/8	92	0,130	0,018
25	G1/8	97	0,185	0,028

Roundline cylinders (ISO)

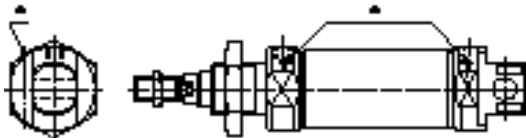
RM/8000

Double acting, ISO 6432

Ø 10 to 25 mm

Cylinder variants

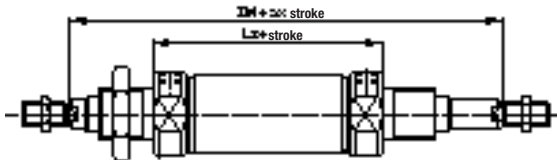
RM/8017/M, RM/8021/M, RM/8026/M
Cylinders with adjustable cushioning



* Cushion screws

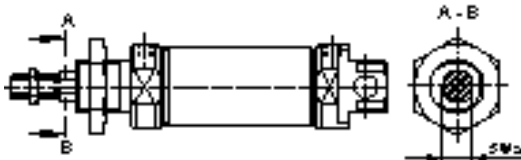
Ø	kg at 0 mm	kg per 100 mm
16	0,070	0,012
20	0,145	0,018
25	0,195	0,028

RM/8000/JM – Cylinders with double ended piston rod



Ø	L8	ZM	kg at 0 mm	kg per 100 mm
16	56	100	0,080	0,017
20	68	116	0,165	0,028
25	69	125	0,250	0,043

RM/8000/N2 – Cylinders with non-rotating piston rod



Ø	SW2 (A/F)	Torque max. (Nm)	kg at 0 mm	kg per 100 mm
12	5	0,04	0,058	0,011
16	5	0,04	0,070	0,012
20	6	0,15	0,145	0,018
25	8	0,25	0,200	0,028