

LRA/8000/M

Double acting cylinders

Ø 32 ... 200 mm

High performance, stability and reliability

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

Comprehensive range of mountings

Wide temperature range

Shock and vibration tested to EN 61373,
Category 1, class A and B

Technical features

Medium:

Compressed air, filtered,
lubricated or non-lubricated

Standard:

ISO 15552

Operation:

Double acting, magnetic piston,
adjustable cushioning

Operating pressure:

1 ... 16 bar (14 ... 232 psi)

Operating temperature:

-40 ... +80°C (-40 ... +176°F) max.

Air supply must be dry enough
to avoid ice formation at
temperatures below
+2°C (+35°F).

Air ports:

ISO G parallel or NPT

Cylinder diameters:

32, 40, 50, 63, 80, 100,
125, 160, 200 mm

Strokes:

Standard: see page below

Non-standard strokes:

Available (10 ... 3000 mm)

Materials:

Barrel: anodised aluminium

End covers: pressure diecast
aluminium (Ø 200 mm gravity
cast aluminium)

Piston rod: stainless steel
(martensitic)

Piston rod seals: polyurethane

(Ø 125 ... 200 mm nitrile rubber)

Piston seals: polyurethane

(Ø 125 ... 200 mm nitrile rubber)

O-rings: nitrile rubber

Technical data

Cylinder Ø mm	32	40	50	63	80	100	125	160	200
Air ports	1/8"	1/4"	1/4"	3/8"	3/8"	1/2"	1/2"	3/4"	3/4"
Piston rod Ø mm	12	16	20	20	25	25	32	40	40
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	M27 x 2	M36 x 2	M36 x 2
Cushion length mm (inch)	19 (.75)	22 (.87)	24 (.94)	24 (.94)	27 (1.06)	34 (1.34)	41 (1.61)	45 (1.77)	45 (1.77)
Theoretical thrusts at 6 bar (87 psi) outstroke N (lb)	482 (108)	754 (169)	1178 (265)	1870 (420)	3016 (678)	4710 (1059)	7363 (1656)	12064 (2713)	18840 (4236)
Theoretical thrusts at 6 bar (87 psi) instroke N (lb)	414 (93)	633 (142)	990 (222)	1680 (378)	2722 (612)	4416 (993)	6882 (1547)	11310 (2543)	18090 (4068)
Air consumption at 6 bar (87 psi) outstroke l/cm (inch ³ /inch)	0,056 (8.7)	0,088 (13.7)	0,137 (21.3)	0,218 (33.9)	0,35 (54.4)	0,55 (85.5)	0,86 (133.7)	1,41 (219.3)	2,20 (342.1)
Air consumption at 6 bar (87 psi) instroke l/cm (inch ³ /inch)	0,048 (7.5)	0,074 (11.5)	0,114 (17.7)	0,195 (30.3)	0,32 (49.8)	0,51 (79.3)	0,79 (122.9)	1,32 (205.3)	2,10 (326.6)

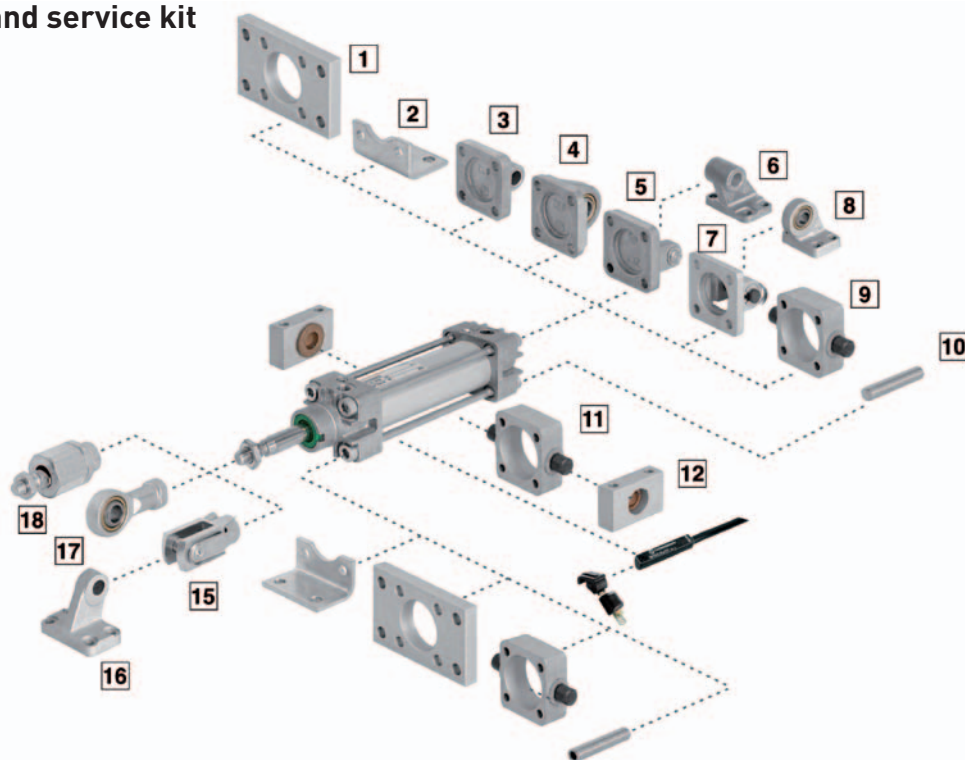
Option selector

Piston rod material		Substitute		Strokes (mm)	
Stainless steel martensitic (standard)		R		3000 max.	
Hard chromium plated		C		Variants (magnetic piston)	
Stainless steel austenitic		S		Standard	
Thread form (air ports only)		Substitute		Piston rod bellow	
ISO G parallel		A		Without cushion	
NPT		C		Double ended piston rod	
Cylinder Ø (mm)		Substitute		Four-position cylinder	
032, 040, 050, 063, 080, 100, 125, 160, 200				Extended piston rod	
				L **/*8****/MU****/****	
				↳ Extension (mm)	

Standard strokes

Cylinder Ø (mm)	Strokes (mm)											
	25	50	80	100	125	160	200	250	320	400	500	
32	•	•	•	•	•	•	•	•	•	•	•	
40	•	•	•	•	•	•	•	•	•	•	•	
50	•	•	•	•	•	•	•	•	•	•	•	
63	•	•	•	•	•	•	•	•	•	•	•	
80	•	•	•	•	•	•	•	•	•	•	•	
100	•	•	•	•	•	•	•	•	•	•	•	
125	•	•	•	•	•	•	•	•	•	•	•	
160	•	•	•	•	•	•	•	•	•	•	•	
200	•	•	•	•	•	•	•	•	•	•	•	

Mountings and service kit



Model	A	AK	B, G	C	D	D2	F	FH	H
	10	18	1	2	5	7	15	9	11
	Page 5	Page 5	Page 6	Page 6	Page 6	Page 6	Page 7	Page 7	Page 7
Ø									
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	QA/8032/28
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	QA/8040/28
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	QA/8050/28
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	QA/8063/28
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	QA/8080/28
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	QA/8100/28
125	QM/8125/35	QM/8125/38	QM/8125/22	QM/8125/21	QM/8125/23	QA/8125/42	QM/8125/25	QA/8125/34	QA/8125/28
160	QM/8160/35	QM/8160/38	QM/8160/22	QM/8160/21	QM/8160/23	QA/8160/42	QM/8160/25	–	QA/8160/28
200	QM/8200/35	QM/8160/38	QM/8200/22	QM/8200/21	QM/8200/23	QA/8200/42	QM/8160/25	–	QA/8200/28
Model	R	S	SS	SW	UF	UR	US	Switch mounting	Service kit
	3	12	16	6	17	4	8	23	
	Page 8	Page 8	Page 9	Page 8	Page 8	Page 9	Page 9	Page 10	
Ø									
32	QA/8032/27	QA/8032/41	M/P19931	M/P19493	QM/8025/32	QA/8032/33	M/P40310	QM/27/2/1	LQA/8032/00
40	QA/8040/27	QA/8040/41	M/P19932	M/P19494	QM/8040/32	QA/8040/33	M/P40311	QM/27/2/1	LQA/8040/00
50	QA/8050/27	QA/8040/41	M/P19933	M/P19495	QM/8050/32	QA/8050/33	M/P40312	QM/27/2/1	LQA/8050/00
63	QA/8063/27	QA/8063/41	M/P19934	M/P19496	QM/8050/32	QA/8063/33	M/P40313	QM/27/2/1	LQA/8063/00
80	QA/8080/27	QA/8063/41	M/P19935	M/P19497	QM/8080/32	QA/8080/33	M/P40314	QM/27/2/1	LQA/8080/00
100	QA/8100/27	QA/8100/41	M/P19936	M/P19498	QM/8080/32	QA/8100/33	M/P40315	QM/27/2/1	LQA/8100/00
125	QM/8125/27	QA/8100/41	M/P19937	M/P19499	QM/8125/32	QM/8125/33	M/P71355	QM/27/2/1	LQA/8125/00
160	QM/8160/27	QA/8160/41	M/P19938	M/P19679	QM/8160/32	QM/8160/33	M/P71356	QM/27/2/1	LQA/8160/00
200	QM/8200/27	QA/8160/41	M/P19939	M/P19683	QM/8160/32	QM/8200/33	M/P71357	QM/27/2/1	LQA/8200/00

Switches



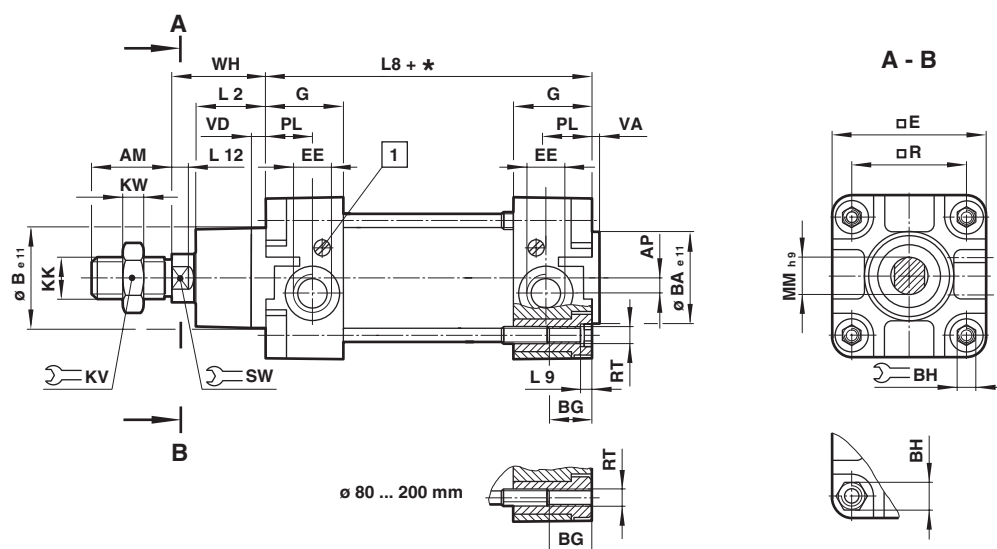
Voltage V d.c.	Current max.	Temperature	LED	Features	Cable length	Cable type	Protection class	Model
10 ... 30	150 mA	-40 ... +80°C (-40 ... 176°F)	•	PNP	2, 5, 10 m	PVC 3 x 0,25	IP65	M/50/EAP/*V
10 ... 30	150 mA	-40 ... +80°C (-40 ... 176°F)	•	NPN	2, 5, 10 m	PVC 3 x 0,25	IP65	M/50/EAN/*V

* Please insert the cable length 2, 5 or 10 m.

Basic dimensions

Dimensions shown in mm

Projection/First angle



* stroke

1 cushion screw

Ø	AM	AP	Ø B e11	Ø BA e11	BG	BH	□ E	EE	G	KK	KV	KW	L2	
32	22	3,5	30	30	18	6	47	1/8"	27,5	M10x1,25	17	5	20	
40	24	4,5	35	35	18	6	53	1/4"	32	M12x1,25	19	6	22	
50	32	6	40	40	18	8	65	1/4"	31	M16x1,5	24	8	27	
63	32	10	45	45	17,5	8	75	3/8"	33	M16x1,5	24	8	29	
80	40	8,5	45	45	21,5	19	95	3/8"	33	M20x1,5	30	10	33	
100	40	9	55	55	21,5	19	115	1/2"	37	M20x1,5	30	10	36	
125	54	10	60	60	30	24	140	1/2"	46	M27x2	41	13,5	45	
160	72	19	65	65	28,5	32	183,5	3/4"	50	M36x2	55	18	58	
200	72	19	75	75	28,5	32	224	3/4"	50	M36x2	55	18	67	
Ø	L8	L9	L12	Ø MM h9	PL	□ R	RT	SW	VA	VD	WH	at 0 mm	per 25 mm	Model
32	94	4	6	12	13	32,5	M 6	10	3	6	26	0,51 kg	0,06 kg	LR#/8032/M/*
40	105	4	6,5	16	15	38	M 6	13	3,5	6	30	0,80 kg	0,08 kg	LR#/8040/M/*
50	106	5	8	20	18,5	46,5	M 8	17	3,5	6	37	1,33 kg	0,12 kg	LR#/8050/M/*
63	121	5	8	20	19	56,5	M 8	17	4	6	37	1,80 kg	0,13 kg	LR#/8063/M/*
80	128	-	10	25	19	72	M 10	22	4	6	46	3,25 kg	0,20 kg	LR#/8080/M/*
100	138	-	10	25	18	89	M 10	22	4	6	51	4,81 kg	0,23 kg	LR#/8100/M/*
125	160	-	13	32	22,5	110	M 12	27	6	15,5	65	8,00 kg	0,33 kg	LR#/8125/M/*
160	180	-	16	40	25	140	M 16	36	5	15	80	14,9 kg	0,55 kg	LR#/8160/M/*
200	180	-	16	40	25	175	M 16	36	5	15	95	21,7 kq	0,60 kq	LR#/8200/M/*

* Please insert standard stroke length.

Please insert 'A' for ISO G parallel or 'C' for NPT threads.

Cylinder variants

LR./8000/JM – Double ended piston rod

Dimensions shown in mm

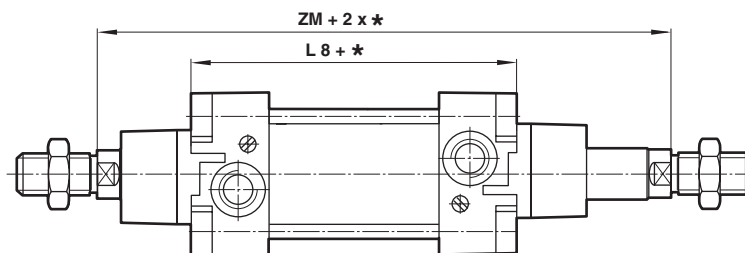
Projection/First angle



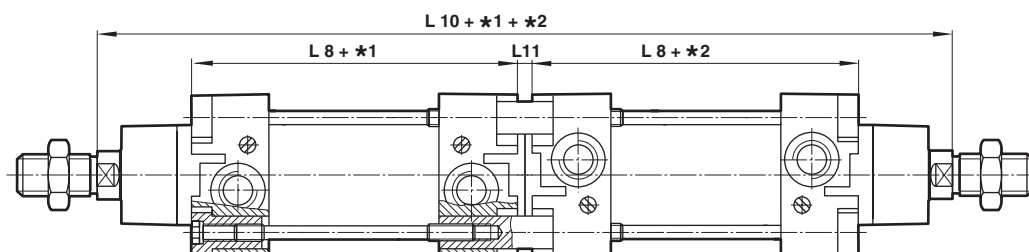
Ø	ZM	L8	Model
32	146	94	LR#/8032/JM/*
40	165	105	LR#/8040/JM/*
50	180	106	LR#/8050/JM/*
63	195	121	LR#/8063/JM/*
80	220	128	LR#/8080/JM/*
100	240	138	LR#/8100/JM/*
125	290	160	LR#/8125/JM/*
160	340	180	LR#/8160/JM/*
200	370	180	LR#/8200/JM/*

* Please insert standard stroke length.

Please insert 'A' for ISO G parallel or 'C' for NPT threads.



LR./8000/MT – Four-position cylinder



Ø	L 8	L 10	L 11	Model
32	94	247	7	LR#/8032/MT/*/**
40	105	278	8	LR#/8040/MT/*/**
50	106	294	8	LR#/8050/MT/*/**
63	121	325	9	LR#/8063/MT/*/**
80	128	357	9	LR#/8080/MT/*/**
100	138	387	9	LR#/8100/MT/*/**
125	160	462	12	LR#/8125/MT/*/**
160	180	532	12	LR#/8160/MT/*/**
200	180	560	10	LR#/8200/MT/*/**

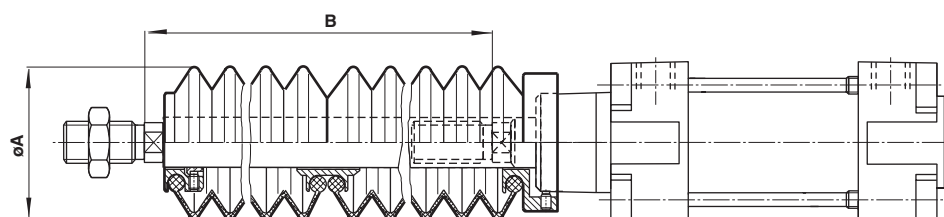
* Please insert standard stroke length.

** Please insert standard stroke length 1 and stroke length 2

Please insert 'A' for ISO G parallel or 'C' for NPT threads.

LR./8000/MG – Piston rod bellow

Dimensions shown in mm
Projection/First angle



Ø	Ø A	Max. stroke per bellow	Piston rod extension B		Model
			for first bellow	for further bellow	
32	40	60	30	25	LR#/8032/MG/*
40	63	145	50	32	LR#/8040/MG/*
50	63	145	40	32	LR#/8050/MG/*
63	63	145	40	32	LR#/8063/MG/*
80	80	250	50	45	LR#/8080/MG/*
100	80	250	50	45	LR#/8100/MG/*
125	80	250	50	45	LR#/8125/MG/*
160	116	350	70	60	LR#/8160/MG/*
200	116	350	70	60	LR#/8200/MG/*

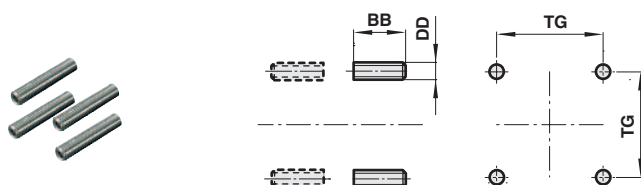
* Please insert standard stroke length.

Please insert 'A' for ISO G parallel or 'C' for NPT threads.

Mountings

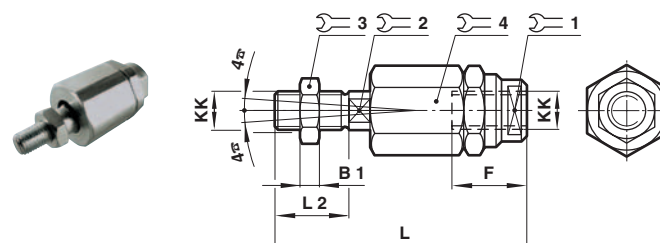
Front or rear stud mounting A

Conforms to ISO 15552, type MX1



Ø	BB	DD	TG	kg	Model
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
125	34	M12	110	0,14	QM/8125/35
160/200	42	M16	140/175	0,31	QM/8160/35

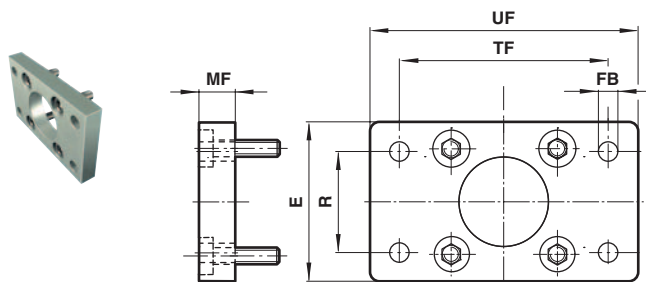
Piston rod swivel AK



Ø	KK	B1	F	L	L2	1	2	3	4	kg	Model
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
125	M27x2	13,5	40	147	54	40	24	41	55	1,70	QM/8125/38

Front flange B, G

Conforms to ISO 15552, type MF1 and MF2



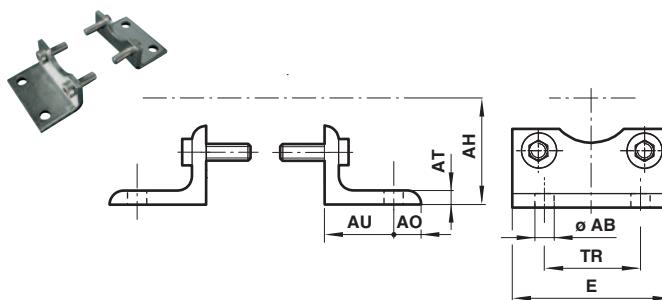
Ø	E	Ø FB	MF	R	TF	UF	kg	Model
32	50	7	10	32	64	80	0,25	QA/8032/22
40	55	9	10	36	72	90	0,35	QA/8040/22
50	65	9	12	45	90	110	0,70	QA/8050/22
63	75	9	12	50	100	125	0,80	QA/8063/22
80	100	12	16	63	126	154	1,35	QA/8080/22
100	120	14	16	75	150	186	2,20	QA/8100/22
125	140	16	20	90	180	224	2,70	QM/8125/22
160	180	18	20	115	230	280	3,10	QM/8160/22
200	220	22	25	135	270	320	4,60	QM/8200/22

Foot mounting C

Conforms to ISO 15552, type MS1

Dimensions shown in mm

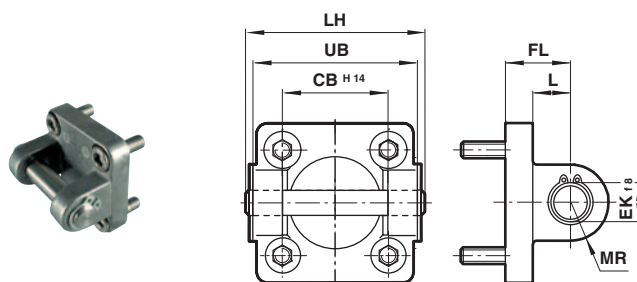
Projection/First angle



Ø	Ø AB	AH	AO	AT	AU	E	TR	kg	Model
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
125	16	90	20	9	45	140	90	2,40	QM/8125/21
160	18	115	20	8	60	180	115	3,50	QM/8160/21
200	22	135	30	9	70	220	135	5,25	QM/8200/21

Rear clevis D

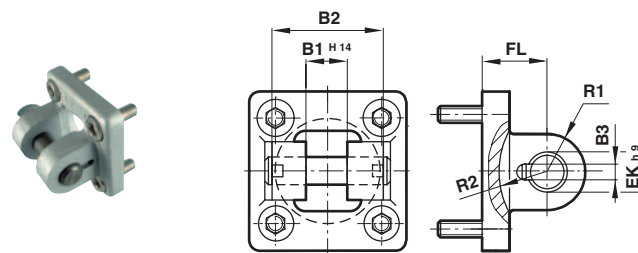
Conforms to ISO 15552, type MP2



Ø	CB H14	Ø EK h9	FL	L	LH	MR	UB	kg	Model
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
125	70	25	50	36	139	25	130	2,70	QM/8125/23
160	90	30	55	37	182	30	170	4,30	QM/8160/23
200	90	30	60	40	182	30	170	6,10	QM/8200/23

Rear clevis D2

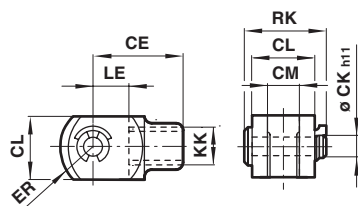
Conforms to ISO 15552, type AB6



Ø	B1 H14	B2	B3	Ø EK h9	FL	R1	R2	kg	Model
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
125	37	97	6,3	30	50	30	42	2,70	QA/8125/42
160	43	122	6,3	35	55	36	46	4,30	QA/8160/42
200	43	122	6,3	35	60	38	49	6,10	QA/8200/42

Piston rod clevis F

Conforms to DIN ISO 8140

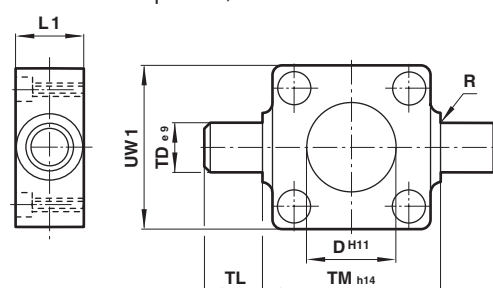


Ø	KK	CE	Ø CK h11	CL	CM	ER	LE	RK	kg	Model
32	M10x1,25	40	10	20	10	16	20	28	0,09	QM/8025/25
40	M12x1,25	48	12	24	12	19	24	32	0,13	QM/8040/25
50/63	M16x1,5	64	16	32	16	25	32	41,5	0,33	QM/8050/25
80/100	M20x1,5	80	20	40	20	32	40	50	0,67	QM/8080/25
125	M27x2	110	30	55	30	45	54	62	1,35	QM/8125/25
160	M36x2	144	35	70	35	57	72	95	3,00	QM/8160/25
200	M36x2	144	35	70	35	57	72	95	3,00	QM/8160/25

Front or rear detachable trunnion FH

Conforms to VDMA 24562 part 2, type MT 5/6

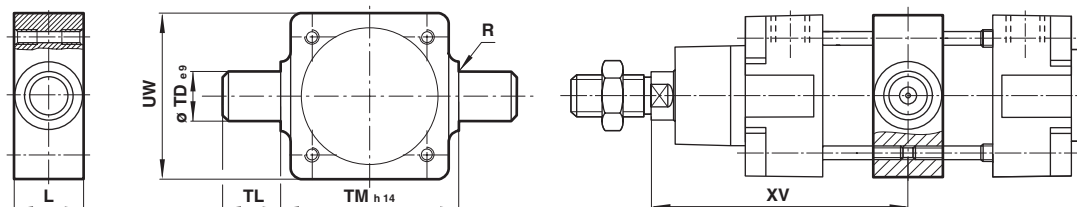
Dimensions shown in mm
Projection/First angle



Ø	Ø D h11	L1	R	Ø TD e9	TL	TM h14	UW1	kg	Model
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
125	60	50	2	25	25	160	145	6,50	QA/8125/34

Centre trunnion H for LR/8000/M series only

Conforms to ISO 15552, type MT4

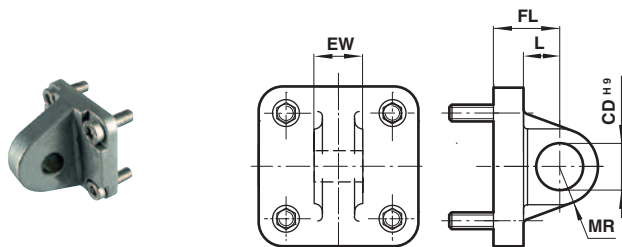


Ø	L	R	Ø TD e9	TL	TM h14	UW	XV min.	XV max.	kg	Model
32	20	1	12	12	50	50	63,5	82,5	0,16	QA/8032/28
40	24	1,6	16	16	63	58	74	91	0,35	QA/8040/28
50	28	1,6	16	16	75	70	82	98	0,65	QA/8050/28
63	28	1,6	20	20	90	80	84	111	0,85	QA/8063/28
80	28	1,6	20	20	110	100	93	127	1,20	QA/8080/28
100	38	2	25	25	132	126	107	133	2,30	QA/8100/28
125	50	2	25	25	160	152	136	154	3,30	QM/8125/28
160	50	2,5	32	32	200	192	155	185	5,30	QM/8160/28
200	50	2,5	32	32	250	240	170	200	9,40	QM/8200/28

Note: Style 'H': These mountings are only supplied assembled complete with the cylinder. Unless otherwise specified, units will be supplied with dimension 'XV' plus half the stroke length. 'XV' = Distance from the piston rod shoulder to the centre of the mounting.

Rear eye R

Conforms to ISO 15552, type MP4



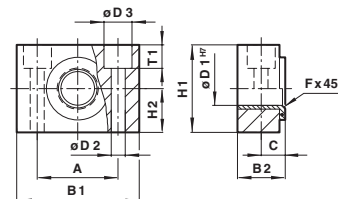
Ø	Ø CDH9	EW	FL	L	MR	kg	Model
32	10	25,8	22	13	9	0,09	QA/8032/27
40	12	27,8	25	16	12	0,11	QA/8040/27
50	12	31,7	27	17	12	0,17	QA/8050/27
63	16	39,7	32	22	15	0,24	QA/8063/27
80	16	49,7	36	22	15	0,37	QA/8080/27
100	20	59,7	41	27	20	0,59	QA/8100/27
125	25	69,7	50	36	25	3,20	QM/8125/27
160	30	89,7	55	37	30	6,10	QM/8160/27
200	30	89,7	60	40	30	6,80	QM/8200/27

Trunnion support S

Conforms to ISO 15552, type AT4

Dimensions shown in mm

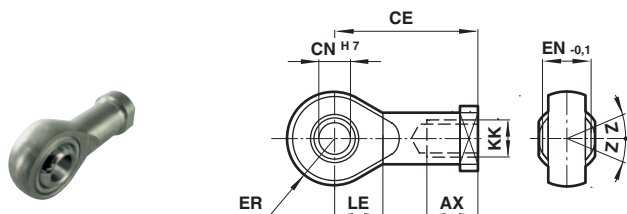
Projection/First angle



Ø	A	B1	B2	C	Ø D1H7	Ø D2	Ø D3	Fx 45°	H1	H2	T1	kg	Model
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
100/125	50	75	28,5	16	25	14	20	2	50	25	13	0,34	QA/8100/41
160/200	60	92	40	22,5	32	18	26	2,5	60	30	17,5	1,90	QA/8160/41

Universal piston rod eye UF

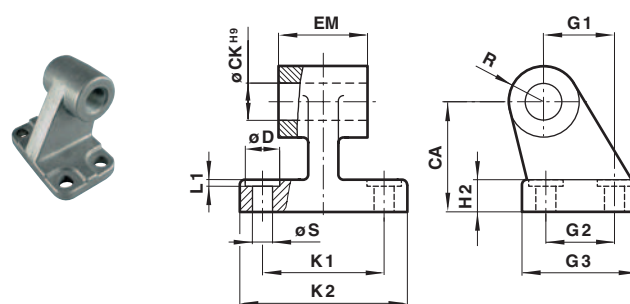
Conforms to DIN ISO 8139



Ø	Gewinde KK	AX	CE	Ø CN H7	EN -0,1	ER	LE	Z	kg	Model
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
125	M27x2	51	110	30	37	35	36	15°	1,35	QM/8125/32
160/200	M36x2	56	125	35	43	40	41	16°	3,00	QM/8160/32

Wide hinge SW

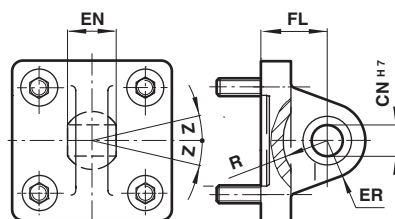
Conforms to ISO 15552, type AB7



Ø	CA	Ø CK H9	Ø D	H2	EM	G1	G2	G3	K1	K2	L1	R	Ø S	kg	Model
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	53	1,6	11	6,6	0,07	M/P19494
50	45	12	15	11	31,5	33	30	44,5	50	65	1,6	13	9	0,14	M/P19495
63	50	16	15	11	39,5	37	35	49,5	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	18	11	0,42	M/P19498
125	90	25	20	20	69,5	70	60	90	94	124	3,2	22	14	2,70	M/P19499
160	115	30	20	25	89,5	97	88	126	118	156	4	31	14	6,30	M/P19679
200	135	30	26	30	89,5	105	90	130	122	162	4	31	18	8,00	M/P19683

Universal rear eye UR

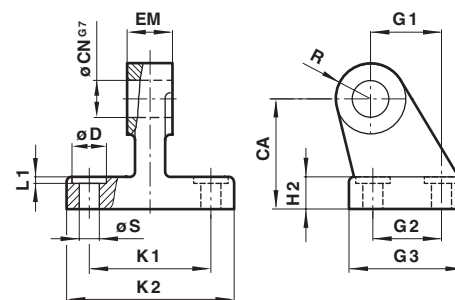
Conforms to ISO 15552, type MP6



Ø	Ø CN H7	EN	ER	FL	R	Z	kg	Model
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	24	32	23	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
125	30	37	40	50	36	15°	2,70	QM/8125/33
160	35	43	44	55	41	16°	4,6	QM/8160/33
200	35	43	48	60	42	16°	7,3	QM/8200/33

Narrow hinge SS

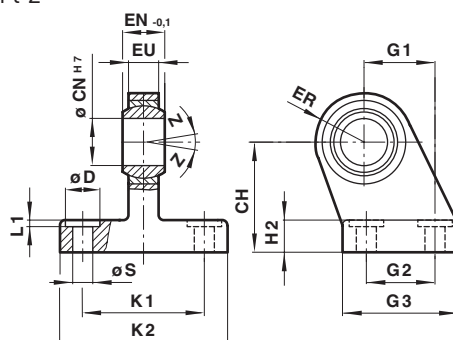
Dimensions shown in mm
Projection/First angle



Ø	CA	Ø CN G7	Ø D	H2	EM	G1	G2	G3	K1	K2	L1	R	Ø S	kg	Model
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	10	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
125	90	30	20	20	30	70	60	90	94	124	3,2	22	14	2,50	M/P19937
160	115	35	20	25	35	97	88	126	118	156	4	31	14	6,00	M/P19938
200	135	35	26	30	35	105	90	130	122	162	4	31	18	7,60	M/P19939

Swivel hinge US

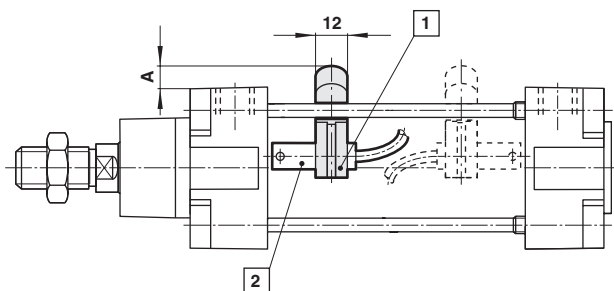
Conforms to VDMA 24562 part 2



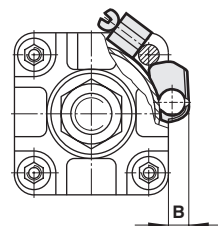
Ø	CH	Ø CN H7	Ø D	EN -0,1	ER	EU	G1	G2	G3	H2	K1	K2	L1	Ø S	Z	kg	Model
32	32	10	11	14	16	10,5	21	18	31	10	38	51	1,6	6,6	13°	0,19	M/P40310
40	36	12	11	16	18	12	24	22	35	10	41	54	1,6	6,6	13°	0,24	M/P40311
50	45	16	15	21	21	15	33	30	45	12	50	65	1,6	9	13°	0,46	M/P40312
63	50	16	15	21	23	15	37	35	50	12	52	67	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
160	115	35	20	43	44	28	97	88	126	25	118	156	4	14	15°	6,40	M/P71356
200	135	35	26	43	47	28	105	90	130	30	122	162	4	18	15°	9,10	M/P71357

Switch mounting

QM/27/2/1, switch: M/50



Dimensions shown in mm
Projection/First angle



Cylinder Ø	A	B	Weight
32	9	7	0,010 kg
40	8	8	0,010 kg
50	7	5	0,010 kg
63	7	7	0,010 kg
80	7	4	0,010 kg
100	2	2	0,010 kg
125	- 4	- 3	0,010 kg
160	- 10	- 9	0,010 kg
200	- 17	- 14	0,010 kg

1 Bracket

2 Switch

Warning

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

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.