- **ø 32 ... 125 mm**
- **High performance adaptive cushioning system “ACS”**
- **Low temperature version down to -40°C**
- **These cylinder are applicable in zone 1 & 2 (gas), 21 & 22 (dust), ATEX Cat. II 2 GD (II 3 GD, cylinder with bellows)**

Technical features

Medium:
Compressed air, filtered, lubricated or non-lubricated
Standard:
ISO 15552
Operation:
Double acting, adjustable cushioning
Operating pressure:
ø 32 ... 125 mm (Profile barrel)
1 ... 10 bar (14 ... 145 psi)
ø 32 ... 125 mm (Round barrel)
1 ... 10 bar (14 ... 145 psi)

Ports:
G1/8 ... 1/2
Cylinder diameters:
32, 40, 50, 63, 80, 100, 125 mm
Standard strokes:
25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500 mm
Non-standard strokes:
Available (5 ... 2800 mm)
ATEX marking:
II 2GD c T4 120°C
II 3GD c T4 120°C
(cylinder with bellows)

Operating temperature:
“Standard version”
Ambient temperature:
-20 ... +60°C max. (-4 ... +140°F)
Operating temperature:
-20 ... +80°C max. (-4 ... +176°F)
“Low temperature version” (L)
Ambient temperature:
-40 ... +60°C max. (-40 ... +140°F)
Operating temperature:
-40 ... +80°C max. (-40 ... +176°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

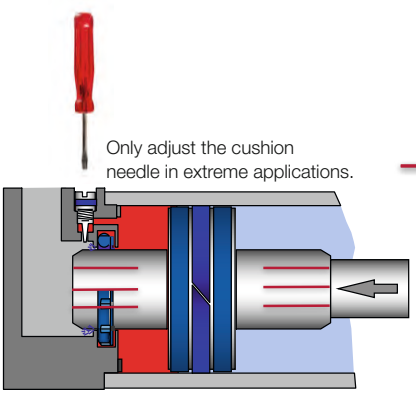
Standard Materials:
Barrel: Anodised aluminium
End covers: Pressure diecast aluminium
Piston rod: Stainless steel (martensitic)
Piston rod seals: PUR
Piston seals: PUR
‘O’-rings: NBR

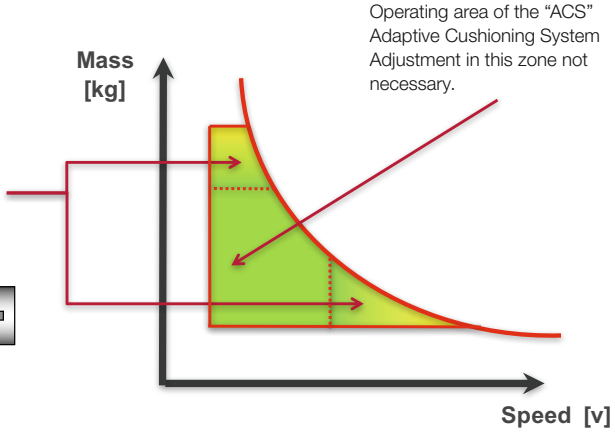
Technical data

Cylinder ø (mm)	32	40	50	63	80	100	125
Profile barrel	•	•	•	•	•	•	•
Round barrel	•	•	•	•	•	•	•
Port size	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2	G1/2
Piston rod ø (mm)	12	16	20	20	25	25	32
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
Cushion length mm	20	22	24	24	26	33	39
Cushioning Adaptive cushioning systems “ACS”	•	•	•	•	•	•	•
Cushioning: (adjustable cushion)							
Initial cushion volume (cm³)	12,8	20,2	36	64	111	235	427
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

The function

The new “ACS” Adaptive Cushioning System provides a high performance pneumatic damping function. The system will automatically cushion for a wide range of general applications as delivered. Manual adjustment is still possible for extreme applications.





Design and sizing in pneumatics

Golden Rules

Design and sizing in pneumatics is often based upon experience coupled with an element of fear of under specifying crucial equipment. In an attempt to ensure enough power, engineers may select over sized cylinders and then select over sized valves to supply them with enough air. The same uncertainty can also lead to over sized specification of air line equipment, fittings and tubing.
The outcome is components larger than necessary that use too much compressed air and waste energy and money.
However when following some well proven golden rules and a few laws of pneumatics it is easy to achieve correctly sized pneumatic installations.

Basics to Consider

The force required, the pressure available, the speed of movement and air consumption. ISO and VDMA standard or compact style also cushioning and sensors. Cylinders are greased on assembly and operate under normal conditions without additional lubrication. However using a lubricator will extend the life of these products.

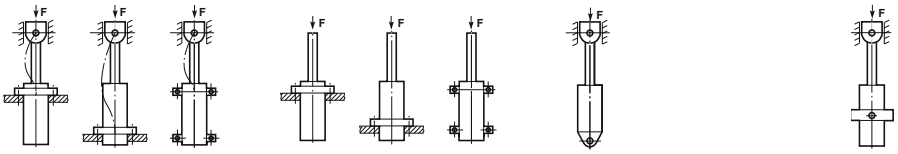
Golden Rule:

The theoretical force of the cylinder should be 25% extra for high speed, 50% extra for low speed and 100% extra for ultra low speed (positioning) applications.

The correct sizing is based upon the required force and applied pressure.
Go to page 1 for more information on cylinder sizing and air consumption.

Load and Buckling

For applications with high side loading, use pneumatic slide actators or standard cylinders fitted with guide units.
Alternatively external guide bearings should be installed. When a long stroke length is specified, care must be taken to ensure the rod length is within the limits for prevention of buckling. The table shows the maximum stroke length for a variety of installation arrangements.



Cylinder ø (mm)	Piston rod ø (mm)	Load case 1 Pressure (bar)				Load case 2 Pressure (bar)				Load case 3 Pressure (bar)				Load case 4 Pressure (bar)			
		4	6	10	16	4	6	10	16	4	6	10	16	6	6	10	16
32	12	1100	860	650	500	500	390	290	210	650	520	380	290	760	600	450	340
40	16	1600	1200	950	730	730	580	430	320	940	750	560	430	1100	880	660	500
50	20	2000	1600	1200	930	930	740	550	420	1200	960	720	550	1400	1100	840	640
63	20	1500	1200	930	720	720	570	420	310	930	740	550	420	1100	860	650	490
80	25	1900	1500	1100	880	880	700	510	380	1100	910	680	510	1300	1100	800	600
100	25	1500	1200	880	670	670	520	380	270	880	690	510	370	1000	820	600	450
125	32	2000	1600	1200	910	910	710	520	380	1200	940	690	520	1400	1100	820	620

Explosion protection according ATEX directive 2014/34/EU
EN 13463-1 Non-electrical equipment for potentally explosive atmospheres

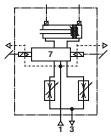
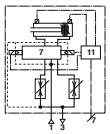
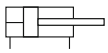
Range of application		**All range of application other than mines**		
Equipment group		**II**		
Potentially explosive atmosphere		Mixture of air and gases, vapours, mists ➔ G (gas)		
(compustible materials)		Dust/air - mixture ➔ D (dust)		
Proability risk for a potentially explosive atmosphere		**Continuous or long-term or frequent**	**Occasional**	**Rarely and briefly**
Equipment categories		**1**	**2**	**3**
Equipment safety		**very high**	**high**	**normal**
Gas	Equipment-identification Ex…	Ⓔx II 1G	Ⓔx II 2G	Ⓔx II 3G
	ATEX-zone	Zone 0	Zone 1	Zone 2
Dust	Equipment-identification Ex…	Ⓔx II 1D	Ⓔx II 2D	Ⓔx II 3D
	ATEX-zone	Zone 20	Zone 21	Zone 22

Equipment identification for IMI Norgren pneumatic cylinder: (Example for standard cylinder)

II 2GD c T4 120°C

Equipment group:	II	All application other than mines
Equipment categorie:	2	High level of equipment safety
Usability for zones:	GD	Gas and dust
Ignition protection categ.:	c	Constructional safety EN 13463-5
Temperature class for gas:	T4	Max. surface temperature 135°C
Temperature data for dust:	120°C	Max. surface temperature

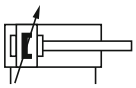
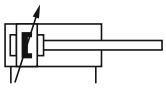
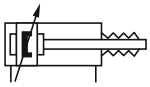
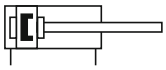
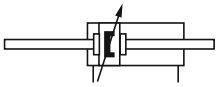
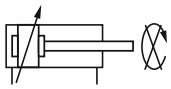
Additional ISO 15552 Cylinder ranges

Symbols		Profile barrel	Round Barel	Industrial Automation	Food & Beverage	Rail	Automotive	ATEX II 2GD	CE-marked	ø (mm)	Range	Discription	Datasheet
		•		•	•	•	•	•	•	32 ... 125	PRA/802000	Double Acting Cylinder	1_5_220_PRA_802000_M_RA_8000_M 1_5_225_PRA_802000_M_EX
			•	•		•	•	•	•	32 ... 125	RA/802000	Double Acting Cylinder	1_5_220_PRA_802000_M_RA_8000_M 1_5_225_PRA_802000_M_EX
			•	•		•	•	•	•	160 ... 320	RA/8000	Double Acting Cylinder	1_5_220_PRA_802000_M_RA_8000_M 1_5_126_RA_8000_M_EX
			•	•	•	•	•	•	•	32 ... 200	KA/8000	Stainless steel Cylinder	1_5_127_KA_8000_M 1_5_128_KA_8000_M_EX
			•	•	•			•	•	32 ... 100	PRA/822000	Smooth Line Cylinder	1_5_230_PRA_822000_M 1_5_235_PRA_822000_M_EX
			•	•	•			•	•	32 ... 100	PRA/842000	Clean Line Cylinder	1_5_240_PRA_842000_M 1_5_245_PRA_842000_M_EX
			•	•			•	•	•	32 ... 100	PRA/862000	IVAC Industrial Cylinder	1_5_250_PRA_862000_M 1_5_255_PRA_862000_M_EX
			•	•	•		•	•	•	32 ... 100	PRA/882000	IVAC Clean Line Cylinder	1_5_260_PRA_882000_M 1_5_265_PRA_882000_M_EX
			•	•	•		•	•	•	40 ... 125	PSA/182000/F1	Cylinder with position sensor	1_9_051_PSA_182000_F1 1_9_052_PSA_182000_F1_EX
			•	•			•	•	•	160 ... 320	SA/8000/F1	Cylinder with position sensor	Datasheet (standard) 1_9_062_SA_8000_F1_EX
			•	•	•	•	•			32 ... 100	"PRA/801000, PRA/803000"	Standard Single Acting Cylinder	1_4_101_PRA_801000_803000 -
			•	•		•	•			32 ... 100	"RA/801000, RA/803000"	Standard Single Acting Cylinder	1_4_101_PRA_801000_803000 -

• Range available

For additional information please contact the technical service or http://www.imi-precision.com

Cylinder variants

Symbol	Version	Piston Rod Material				Standard Model with		ø	Description	Page
Please see the description below	L	R	S	C	D	Male Piston Rod Thread	Female Piston Rod Thread	(mm)		8, 9
	•	X	•	•	•	.PRA/802000/M/EX	.PRA/802000/MX/EX	32 ... 125	Standard Cylinder (Profile Barrel)	8, 9
	•	X	•	•	•	.RA/802000/M/EX	.RA/802000/MX/EX	32 ... 125	Standard Cylinder (Round Barrel)	
		X	•	•	•	PRA/802000/W2/EX	PRA/802000/W2X/EX	32 ... 125	"Cylinder with Special Wiper - Seal (suitable for appl. with cement, plaster (stucco), arizona sand, hoar-frost or ice)"	8, 9
		X	•	•	•	RA/802000/W2/EX	RA/802000/W2X/EX	32 ... 125		
		X	•	•	•	PRA/802000/X2/EX	PRA/802000/X2X/EX	32 ... 125	"Low Friction Cylinder Operating pressure: 1 … 10 bar, Medium: Compressed air, filtered and non-lubricated recommmended	8, 9
		X	•	•	•	RA/802000/X2/EX	RA/802000/X2X/EX	32 ... 125		
	•	X	•	•	•	.PRA/802000/MU/EX	.PRA/802000/MUX/EX	32 ... 125	"Cylinder with Extended Piston Rod Maximal stroke: 2000 mm"	8, 9
	•	X	•	•	•	.RA/802000/MU/EX	.RA/802000/MUX/EX	32 ... 125		
		X	•	•	•	PRA/802000/W6/EX	PRA/802000/W6X/EX	32 ... 125	"Cylinder with Extended Piston Rod and Special Wiper - Seal Maximal stroke: 2000 mm suitable for appl. with cement, plaster (stucco), arizona sand, hoar-frost or ice"	8, 9
		X	•	•	•	RA/802000/W6/EX	RA/802000/W6X/EX	32 ... 125		
		X	•	•	•	.PRA/802000/MG/EX	.PRA/802000/MGX/EX	32 ... 125	"Cylinder with Piston Rod Bellows (3GD, zone 2 and 22) Maximal stroke: Ø 32= 1860 mm, Ø 40 - 125= 2000 mm"	10
		X	•	•	•	.RA/802000/MG/EX	.RA/802000/MGX/EX	32 ... 125		
		X	•	•	•	.PRA/802000/MW/EX	.PRA/802000/MWX/EX	32 ... 125	Cylinder without Cushioning	8
		X	•	•	•	.RA/802000/MW/EX	.RA/802000/MWX/EX	32 ... 125		
		X	•	•	•	PRA/802000/X4/EX	PRA/802000/X4X/EX	32 ... 125	"Low Friction Cylinder without Cushioning Operating pressure: 1 … 10 bar, Medium: Compressed air, filtered and non-lubricated recommmended	8
		X	•	•	•	RA/802000/X4/EX	RA/802000/X4X/EX	32 ... 125		
	•	X	•	•	•	.PRA/802000/JM/EX	.PRA/802000/JMX/EX	32 ... 125	" Cylinder with Double Ended Piston Rod	9
	•	X	•	•	•	.RA/802000/JM/EX	.RA/802000/JMX/EX	32 ... 125		
		X	•	•	•	PRA/802000/W4/EX	PRA/802000/W4X/EX	32 ... 125	"Cylinder with Double Ended Piston Rod and Special Wiper - Seal (suitable for appl. with cement, plaster (stucco), arizona sand, hoar-frost or ice)"	8
		X	•	•	•	RA/802000/W4/EX	RA/802000/W4X/EX	32 ... 125		
	•	X	•	•	•	.PRA/802000/MT/EX	.PRA/802000/MTX/EX	32 ... 125	"Four Position Cylinder Maximal stroke = stroke 1 + stroke 2 Ø 32= 700 mm, Ø 40= 1000 mm, Ø 50= 1000 mm, Ø 63= 900 mm, Ø 80= 1200 mm, Ø 100= 1100 mm, Ø 125= 1200 mm"	10
	•	X	•	•	•	.RA/802000/MT/EX	.RA/802000/MTX/EX	32 ... 125		
		X				PRA/802000/N2/EX	PRA/802000/N2X/EX	32 ... 100	"Cylinder with Non-Rotating Piston Rod Maximal stroke: 1000 mm"	9
		X				RA/802000/N2/EX	RA/802000/N2X/EX	32 ... 100		
						-	-			

Note: Version: L = Low temperature -40°C (-40°F);
Piston Rod Material: C = Hard chromium plated; D = Stainless steel austenitic & hard chromium plated; R = Stainless steel martensitic; S = Stainless steel austenitic; X = Standard; • = Option

Option selector

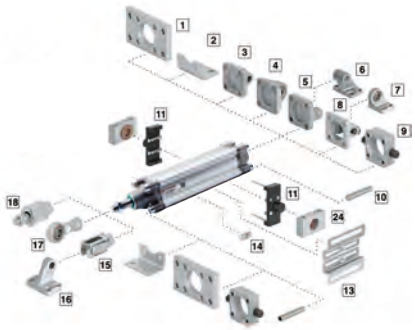
★★★A/802★★★/★★★/EX/★★★★

Non-standard variants	Substitute
Standard	None
Low temperature version -40°C (-40°F)	L
Standard	**Substitute**
Round barrel	None
Profile barrel	P
Piston rod material	**Substitute**
Stainless steel martensitic	R
Stainless steel austenitic	S
Hard chromium plated	C
Stainless steel austenitic & hard chromium plated	D
Cylinder ø (mm)	**Substitute**
032, 040, 050, 063, 080, 100, 125	
Variants ø 32 ... 125 mm (magnetic piston)	**Substitute**
Standard	M
Special wiper/seal	W2
Low fiction	X2
Piston rod bellow	MG
Without cushion	MW
Without cushion, low fiction	X4
Double ended piston rod	JM
Double ended piston rod, special wiper/seal	W4
Four-positon cylinder	MT
Non-rotating piston rod (internal)	N2
Extended piston rod	MU
A/802*/MU/EX/****/***	Extension (mm)
Extended piston rod, special wiper/seal	W6
A/802*/W6/EX/****/***	Extension (mm)

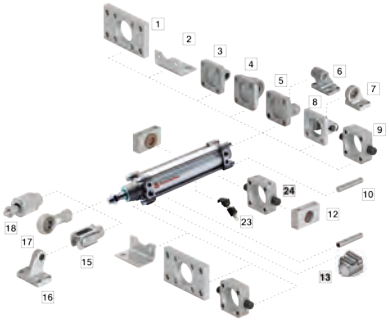
Strokes (mm)	Substitute
5 ... 2800	
Piston rod thread	**Substitute**
Male	None
Female	X

Note: If postion ist not required, disregard option position within part number e.g. RA/802100/M/EX/100. For combinations of cylinder variants consult our technical service. For example:
Please note that heat resistant seals are not available for all variants. This option selector explains only the cylinder variants. Additional variants/options are not possible. Detail's see table on page 4.

Cylinder with Profile barrel ø 32 ... 125 mm



Cylinder with Round barrel ø 32 ... 125 mm



Mountings

Model	A	AK	B, G	C	D	D2	F	FH	H	UH
										
ø	10 Page 14	18 Page 14	1 Page 14	2 Page 14	5 Page 15	8 Page 15	15 Page 15	9 Page 15	11 Page 16	20 Page 16
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	QA/8032/40
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	QA/8040/40
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	QA/8050/40
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	QA/8063/40
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	QA/8080/40
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	QA/8100/40
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	QM/8125/28	QA/8125/40

	UH	S	SW	UF	UR	R	SS	US	Groove key
									
ø	24 Page 16	12 Page 16	6 Page 17	17 Page 17	4 Page 17	3 Page 17	16 Page 18	7 Page 18	14 Page 18
32	PQA/802032/40	QA/8032/41	M/P19493	QM/8025/32	QA/8032/33	QA/8032/27	M/P19931	M/P40310	M/P72816
40	PQA/802040/40	QA/8040/41	M/P19494	QM/8040/32	QA/8040/33	QA/8040/27	M/P19932	M/P40311	M/P72816
50	PQA/802050/40	QA/8040/41	M/P19495	QM/8050/32	QA/8050/33	QA/8050/27	M/P19933	M/P40312	M/P72816
63	PQA/802063/40	QA/8063/41	M/P19496	QM/8050/32	QA/8063/33	QA/8063/27	M/P19934	M/P40313	M/P72816
80	PQA/802080/40	QA/8063/41	M/P19497	QM/8080/32	QA/8080/33	QA/8080/27	M/P19935	M/P40314	M/P72816
100	PQA/802100/40	QA/8100/41	M/P19498	QM/8080/32	QA/8100/33	QA/8100/27	M/P19936	M/P40315	M/P72816
125	PQA/802125/40	QA/8100/41	M/P19499	QM/8125/32	QM/8125/33	QM/8125/27	M/P19937	M/P71355	M/P72816

Pos.	Style	Standard
1	B, G	Clear anodised aluminium
2	C	Galvanized steel (ø 32 ... 100 mm), Painted steel (ø 125 mm)
3	R	Die-cast aluminium
4	UR	Galvanized aluminium Inner ring: steel, Outer ring: brass
5	D	Die-cast aluminium Bolt: galvanized steel (martensitic) Circlip: galvanized steel
6	SW	Die-cast aluminium
7	US	Galvanized aluminium Inner ring: steel, Outer ring: brass

Pos.	Style	Standard
8	D2	Painted cast iron, Bolt: stainless steel (martensitic), Circlip: galvanized steel
9	FH	Cast iron
10	A	Galvanized steel
11	H	Cast iron
12	S	Clear anodised aluminium Bearing: brass
13	Valve mounting kit	Galvanized steel
14	Groove key	Steel

Pos.	Style	Standard
15	F	Galvanized steel, Bolt: galvanized steel, Circlip: Galvanized steel
16	SS	Painted cast iron
17	UF	Galvanized steel, Inner ring: steel, Outer ring: brass
18	AK	Galvanized steel
20	UH	Cast iron
24	UH	Anodised aluminium

Accessories for Profile (ø 32 ... 125 mm) & Round barrel (ø 32 ... 125 mm)

Model Profile barrel	Model Round barrel	ø	Port size	Banjo flow control	Straight fitting	Elbow fitting
						
PRA/802032/M/EX/*	RA/802032/M/EX/*	32	G1/8	C0K510618	C02250618	C02470618
PRA/802040/M/EX/*	RA/802040/M/EX/*	40	G1/4	C0K510628	C02250628	C02470628
PRA/802050/M/EX/*	RA/802050/M/EX/*	50	G1/4	C0K510828	C02250828	C02470828
PRA/802063/M/EX/*	RA/802063/M/EX/*	63	G3/8	C0K510838	C02250838	C02470838
PRA/802080/M/EX/*	RA/802080/M/EX/*	80	G3/8	C0K511038	C02251038	C02471038
PRA/802100/M/EX/*	RA/802100/M/EX/*	100	G1/2	C0K511248	C02251248	C02471248
PRA/802125/M/EX/*	RA/802125/M/EX/*	125	G1/2	C0K511248	C02251248	C02471248

For alternative fitting types please contact the technical service.

Sevice kit

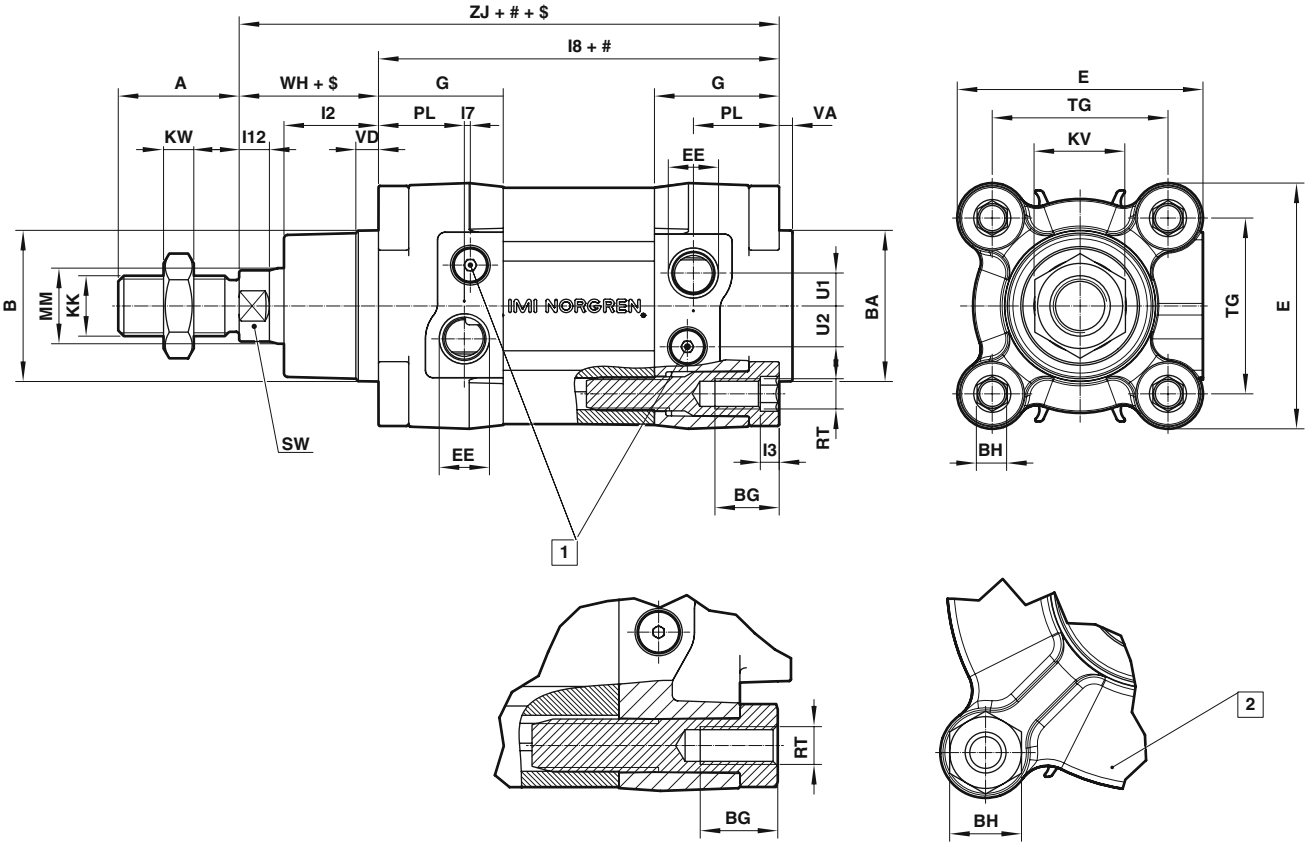
ø	Service kit for Round and Profile barrel
	
32	QA/8032/00
40	QA/8040/00
50	QA/8050/00
63	QA/8063/00
80	QA/8080/00
100	QA/8100/00
125	QA/8125/00

Magnetically operated switches

	M/50/**	Switch mounting brackets for M/50
		
ø	Page 19 & 20	23 Page 21
32		QM/27/2/1
40		QM/27/2/1
50		QM/27/2/1
63		QM/27/2/1
80		QM/27/2/1
100		QM/27/2/1
125		QM/27/2/1

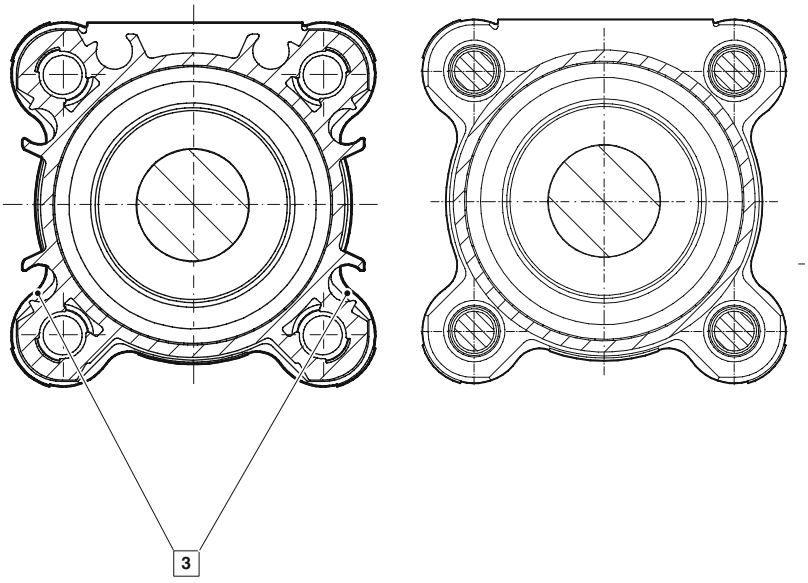
Basic dimensions
PRA/802000/M/EX, RA/802000/M/EX
Standard Cylinder

Dimensions in mm
Projection/First angle



Model Profile barrel
ø 32 ... 125 mm

Model Round barrel
ø 32 ... 125 mm



Stroke
1 Cushion screw
2 ø 80 ... 125 mm
3 M/50 switches can be mounted flush with the profile

For additional information please contact the technical service or http://www.imi-precision.com

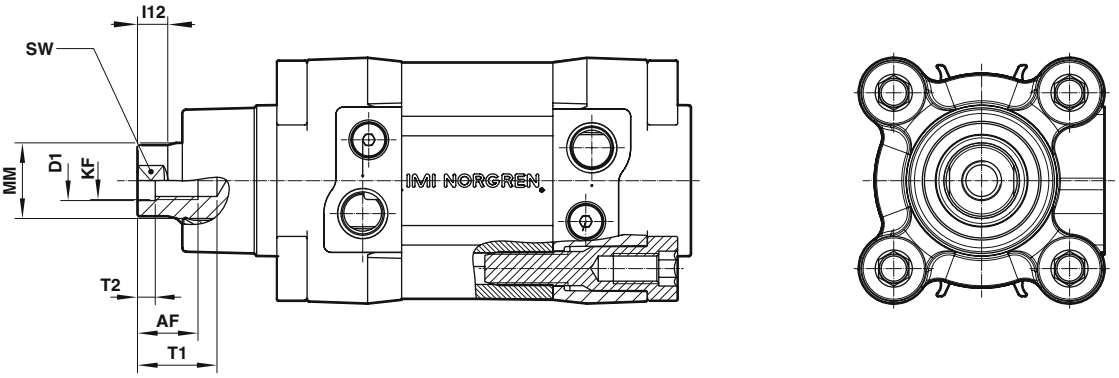
ø	A -0,5	ø B d11	ø BA d11	BG min	BH	□ E	EE	G	KK	KV	KW	L2	L3	L7	L8	L12	ø MM h9	PL	TG
32	22	30	30	16	6	47	G1/8	29	M10 x 1,25	17	5	19,5	4	6,6	94	5,5	12	15	32,5
40	24	35	35	16	6	53	G1/4	34,5	M12 x 1,25	19	6	22	4	5,6	105	6,5	16	21,5	38
50	32	40	40	16	8	65	G1/4	33	M16 x 1,5	24	8	25	5	1,6	106	8	20	22,7	46,5
63	32	45	45	16	8	75	G3/8	36,5	M16 x 1,5	24	8	25	5	3,6	121	8	20	24,2	56,5
80	40	45	45	17	19	95	G3/8	42	M20 x 1,5	30	10	33	-	1,8	128	10	25	29,7	72
100	40	55	55	17	19	113	G1/2	42	M20 x 1,5	30	10	35	-	3,8	138	10	25	27,7	89
125	54	60	60	20	24	140	G1/2	54	M27 x 2	41	13,5	44	-	1,8	160	13	32	39,7	110

ø	RT	SW	U1	U2	VA	VD	WH	ZJ	Model Profile barrel	at 0 mm	per 25 mm	Model Round barrel	at 0 mm	per 25 mm
32	M 6	10	4,6	6,3	3,5	6	26	120	PRA/802032/M/EX/*	0,49 (kg)	0,06 (kg)	RA/802032/M/EX/*	0,46 (kg)	0,06 (kg)
40	M 6	13	5,8	9,2	3,5	6	30	135	PRA/802040/M/EX/*	0,69 (kg)	0,08 (kg)	RA/802040/M/EX/*	0,65 (kg)	0,08 (kg)
50	M 8	17	8,7	10,8	3,5	6	37	143	PRA/802050/M/EX/*	1,09 (kg)	0,12 (kg)	RA/802050/M/EX/*	1,02 (kg)	0,12 (kg)
63	M 8	17	10	12,8	3,5	6	37	158	PRA/802063/M/EX/*	1,54 (kg)	0,13 (kg)	RA/802063/M/EX/*	1,46 (kg)	0,14 (kg)
80	M 10	22	12	14,5	3,5	6	46	174	PRA/802080/M/EX/*	2,64 (kg)	0,20 (kg)	RA/802080/M/EX/*	2,54 (kg)	0,21 (kg)
100	M 10	22	9	14,5	3,5	6	51	189	PRA/802100/M/EX/*	3,66 (kg)	0,23 (kg)	RA/802100/M/EX/*	3,50 (kg)	0,23 (kg)
125	M 12	27	12	17	5,5	8	65	225	PRA/802125/M/EX/*	6,16 (kg)	0,45 (kg)	RA/802125/M/EX/*	5,92 (kg)	0,34 (kg)

* Please insert stroke length.
Basic Dimension are also for cylinder varinats or for different piston rod material
LPRA/802000/M/EX, LRA/802000/M/EX - Low Temperature Cylinder
PRA/802000/W2/EX, RA/802000/W2/EX - Cylinder with Special Wiper - Seal
PRA/802000/X2/EX, RA/802000/X2/EX - Low Friction Cylinder
PRA/802000/MU/EX, RA/802000/MU/EX - Cylinder with Extended Piston Rod
PRA/802000/W6/EX, RA/802000/W6/EX - Cylinder with Extended Piston Rod and Special Wiper - Seal
PRA/802000/MW/EX, RA/802000/MW/EX - Cylinder without Cushioning
PRA/802000/X4/EX, RA/802000/X4/EX - Low Friction Cylinder without Cushioning

Cylinder variants
..../802000/MX/EX; /MUX/EX; /MWX/EX; /W2X/EX; /W6X/EX; /X2X/EX; X4X/EX
Cylinder with Female Piston Rod Thread

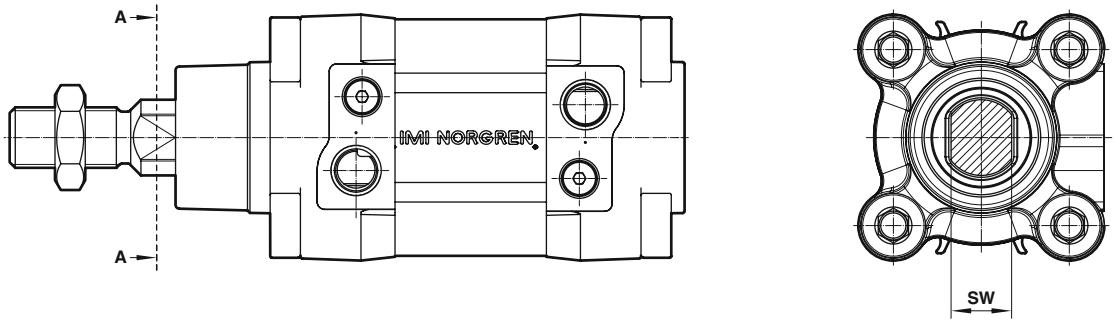
Dimensions in mm
Projection/First angle



ø	AF	ø D1	KF	l12	ø MM h9	SW	T1	T2
32	12	6,4	M6	5,5	12	10	16	2,6
40	12	8,4	M8	6,5	16	13	16	3,3
50	16	10,5	M10	8	20	17	21	4,7
63	16	10,5	M10	8	20	17	21	4,7
80	20	13	M12	10	25	22	25	6,1
100	20	13	M12	10	25	22	25	6,1
125	32	17	M16	13	32	27	38	8

For missing dimensions please see page 8 and 9

Cylinder variants
PRA/802000/N2/EX, RA/802000/N2/EX – Cylinder with Non-Rotating Piston Rod
PRA/802000/N2X/EX, RA/802000/N2X/EX – Cylinder with Non-Rotating Piston Rod and Female Piston Rod Thread

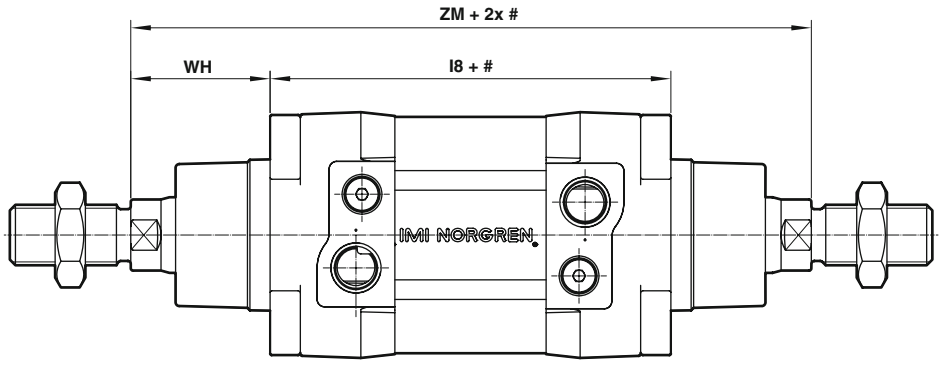


ø	SW	max. Torque (Nm)	Model Profile barrel	Model Round barrel
32	10	0,5	PRA/802032/N2/EX/*	RA/802032/N2/EX/*
40	13	1	PRA/802040/N2/EX/*	RA/802040/N2/EX/*
50	16	1,5	PRA/802050/N2/EX/*	RA/802050/N2/EX/*
63	16	1,5	PRA/802063/N2/EX/*	RA/802063/N2/EX/*
80	21	2,5	PRA/802080/N2/EX/*	RA/802080/N2/EX/*
100	21	2,5	PRA/802100/N2/EX/*	RA/802100/N2/EX/*

* Please insert stroke length; Maximum stroke: 1000 mm; For missing dimensions please see page 8 and 9

Cylinder variants
PRA/802000/JM/EX, RA/802000/JM/EX, PRA/802000/W4/EX, RA/802000/W4/EX – Cylinder with Double Ended Piston Rod
PRA/802000/JMX/EX, RA/802000/JMX/EX, PRA/802000/W4X/EX, RA/802000/W4X/EX – Cylinder with Double Ended Piston Rod and Female Piston Rod Thread

Dimensions in mm
Projection/First angle

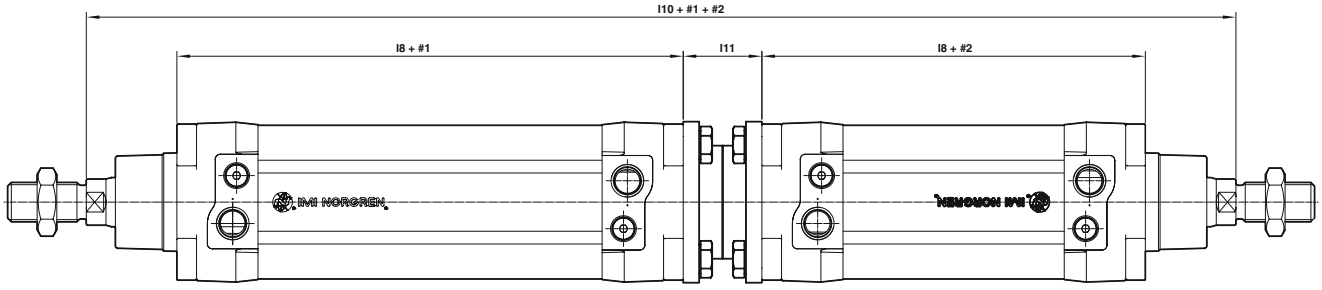


Stroke

ø	L8	WH	ZM	Model Profile barrel	Model Round barrel
32	94	26	146	PRA/802032/JM/EX/*	RA/802032/JM/EX/*
40	105	30	165	PRA/802040/JM/EX/*	RA/802040/JM/EX/*
50	106	37	180	PRA/802050/JM/EX/*	RA/802050/JM/EX/*
63	121	37	195	PRA/802063/JM/EX/*	RA/802063/JM/EX/*
80	128	46	220	PRA/802080/JM/EX/*	RA/802080/JM/EX/*
100	138	51	240	PRA/802100/JM/EX/*	RA/802100/JM/EX/*
125	160	65	290	PRA/802125/JM/EX/*	RA/802125/JM/EX/*

* Please insert stroke length; For missing dimensions please see page 8 and 9

Cylinder variants
PRA/802000/MT/EX, RA/802000/MT/EX – Four Position Cylinder
PRA/802000/MTX/EX, RA/802000/MTX/EX – Four Position Cylinder and Female Piston Rod Thread



Stroke

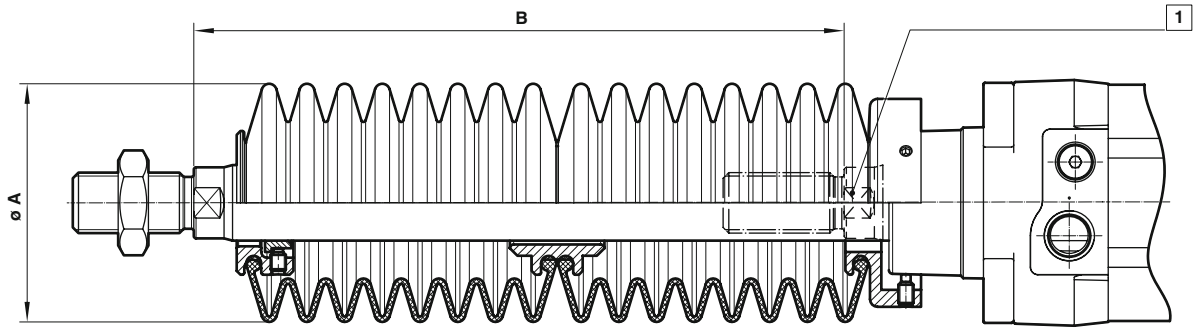
ø	l8	l10	l11	WH	Model Profile barrel	Model Round barrel
32	94	247	27	26	PRA/802032/MT/EX/*/**	RA/802032/MT/EX/*/**
40	105	278	27	30	PRA/802040/MT/EX/*/**	RA/802040/MT/EX/*/**
50	106	294	32	37	PRA/802050/MT/EX/*/**	RA/802050/MT/EX/*/**
63	121	325	28	37	PRA/802063/MT/EX/*/**	RA/802063/MT/EX/*/**
80	128	357	38	46	PRA/802080/MT/EX/*/**	RA/802080/MT/EX/*/**
100	138	387	38	51	PRA/802100/MT/EX/*/**	RA/802100/MT/EX/*/**
125	160	462	44	65	PRA/802125/MT/EX/*/**	RA/802125/MT/EX/*/**

* Please insert stroke length 1; ** Please insert stroke length 2
Maximum stroke = stroke 1 + stroke 2; ø 32 = 700 mm, ø 40 = 1000 mm, ø 50 = 1000 mm, ø 63 = 900 mm, ø 80 = 1200 mm, ø 100 = 1100 mm, ø 125 = 1200 mm,
For missing dimensions please see page 8 and 9

Cylinder variants

PRA/802000/MG/EX, RA/802000/MG/EX – Cylinder with Piston Rod Bellows
PRA/802000/MGX/EX, RA/802000/MGX/EX – Cylinder with Piston Rod Bellows and Female Piston Rod Thread

Dimensions in mm
Projection/First angle



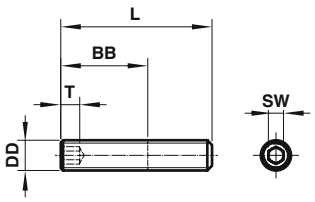
1 Piston rod without bellows

ø	ø A	Max. stroke per bellow	Piston rod extention B for first bellow	for further bellows	Model Profile barrel	Model Round barrel
32	40	60	30	25	PRA/802032/MG/EX/*	RA/802032/MG/EX/*
40	63	145	50	32	PRA/802040/MG/EX/*	RA/802040/MG/EX/*
50	63	145	40	32	PRA/802050/MG/EX/*	RA/802050/MG/EX/*
63	63	145	40	32	PRA/802063/MG/EX/*	RA/802063/MG/EX/*
80	80	250	50	45	PRA/802080/MG/EX/*	RA/802080/MG/EX/*
100	80	250	50	45	PRA/802100/MG/EX/*	RA/802100/MG/EX/*
125	80	250	50	45	PRA/802125/MG/EX/*	RA/802125/MG/EX/*

* Please insert stroke length; Maximum stroke: ø 32 = 1860 mm, ø 40 ... 125 = 2000 mm

For missing dimensions please see page 8 and 9

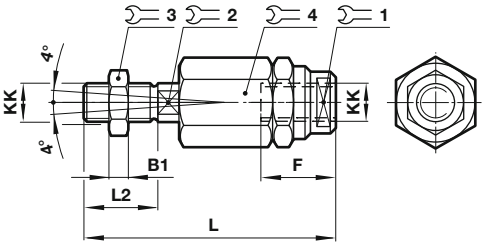
Mountings
Front or rear stud mounting A



ø	BB	DD	L	SW	T (min)	(kg)	Model (A)
32/40	17	M6	30	3	3,5	0,02	QM/8032/35
50/63	23	M8	40	4	5	0,05	QM/8050/35
80/100	28	M10	45	5	6	0,08	QM/8080/35
125	34	M12	60	6	8	0,14	QM/8125/35

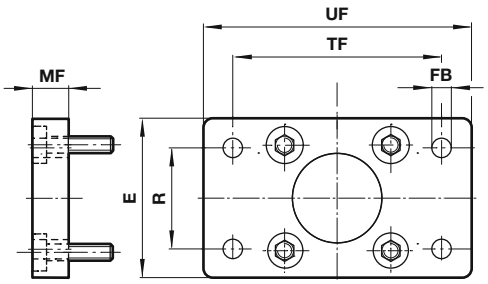
Piston rod swivel AK

Dimensions in mm
Projection/First angle



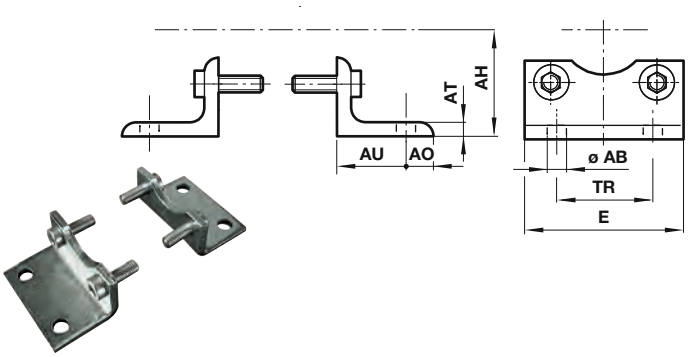
ø	KK	B1	F	L	L2	SW 1	SW 2	SW 3	SW 4	(kg)	Model (AK)
32	M10 x 1,25	5	26	73	20	19	12	17	30	0,20	QM/8025/38
40	M12 x 1,25	6	26	77	24	19	12	19	30	0,20	QM/8040/38
50/63	M16 x 1,5	8	34	106	32	30	19	24	42	0,65	QM/8050/38
80/100	M20 x 1,5	10	42	122	40	30	19	30	42	0,72	QM/8080/38
125	M27 x 2	13,5	40	147	54	40	24	41	55	1,70	QM/8125/38

Front flange B, G
Conforms to ISO 15552, type MF1 and MF2



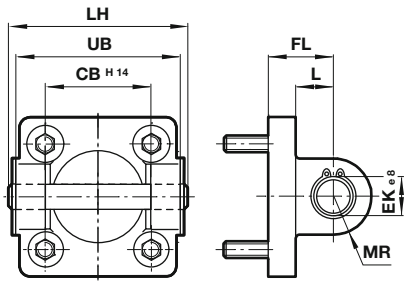
ø	E	ø FB	MF	R	TF	UF	(kg)	Model (B, G)
32	50	7	10	32	64	80	0,10	QA/8032/22
40	55	9	10	36	72	90	0,12	QA/8040/22
50	65	9	12	45	90	110	0,21	QA/8050/22
63	75	9	12	50	100	125	0,27	QA/8063/22
80	100	12	16	63	126	154	0,63	QA/8080/22
100	120	14	16	75	150	186	0,89	QA/8100/22
125	140	16	20	90	180	224	1,59	QM/8125/22

Foot mounting C
Conforms to ISO 15552, type MS1



ø	ø AB	AH	AO	AT	AU	E	TR	(kg)	Model (C)
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	6	41	98	63	0,80	QA/8080/21
100	14,5	71	19	6	41	115	75	0,95	QA/8100/21
125	16	90	20	9	45	140	90	2,40	QM/8125/21

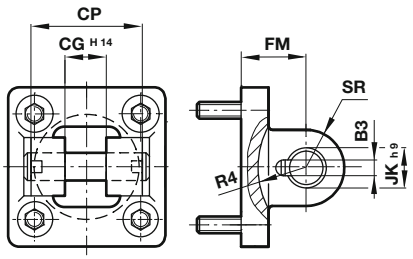
Rear clevis D
Conforms to ISO 15552, type MP2



ø	CB H14	ø EK e8	FL	L	LH	MR	UB	(kg)	Model (D)
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	29	140	25	130	2,70	QM/8125/23

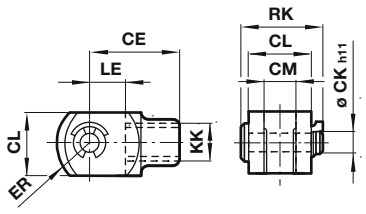
Rear clevis D2
Conforms to ISO 15552, type AB6

Dimensions in mm
Projection/First angle



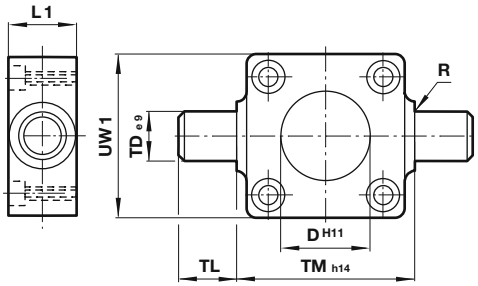
ø	CG H14	CP	B3	ø JK h9	FM	SR	R4	(kg)	Model (D2)
32	14	34	3,3	10	22	11	17	0,20	QA/8032/42
40	16	40	4,3	12	25	12	20	0,23	QA/8040/42
50	21	45	4,3	16	27	14,5	22	0,36	QA/8050/42
63	21	51	4,3	16	32	18	25	0,55	QA/8063/42
80	25	65	4,3	20	36	22	30	0,90	QA/8080/42
100	25	75	4,3	20	41	22	32	1,45	QA/8100/42
125	37	97	6,3	30	50	30	42	2,7	QA/8125/42

Piston rod clevis F
Conforms to DIN ISO 8140



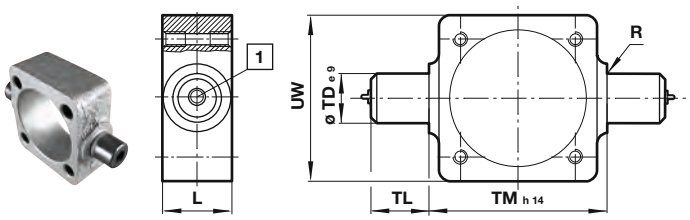
ø	KK	CE	ø CK h11	CL	CM	ER	LE	RK	(kg)	Model (F)
32	M10 x 1,25	40	10	20	10	16	20	27,5	0,09	QM/8025/25
40	M12 x 1,25	48	12	24	12	19	24	33,5	0,13	QM/8040/25
50/63	M16 x 1,5	64	16	32	16	25	32	42	0,33	QM/8050/25
80/100	M20 x 1,5	80	20	40	20	32	40	51	0,67	QM/8080/25
125	M27 x 2	110	30	55	30	45	54	73,5	1,35	QM/8125/25

Front or rear detachable trunnion FH
Conforms to VDMA 24562 part 2, type MT 5/6



ø	ø D H11	L1	R	ø TD e9	TL	TM h14	UW1	(kg)	Model (FH)
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
Conforms to ISO 15552, type MT4
Used for cylinder model with round barrel



1 Grease nipple from ø 125 mm

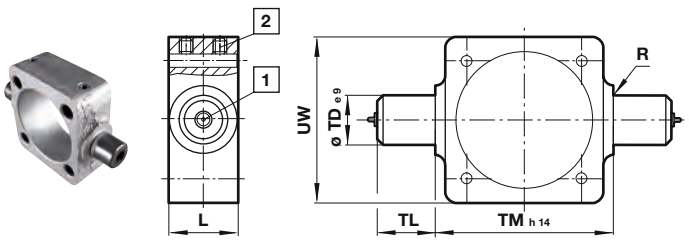
ø	L	R max.	ø TD e9	TL	TM h14	UW	XV min.	XV max. + #	(kg)	Model (H)
32	20	1	12	12	50	50	66	80	0,16	QA/8032/28
40	24	1,6	16	16	63	58	76	89	0,35	QA/8040/28
50	28	1,6	16	16	75	70	82	98	0,65	QA/8050/28
63	28	1,6	20	20	90	80	88	107	0,85	QA/8063/28
80	28	1,6	20	20	110	100	97	123	1,2	QA/8080/28
100	38	2	25	25	132	126	107	128	2,3	QA/8100/28
125	50	2	25	25	160	152	136	154	3,3	QM/8125/28

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

Not for use on profile options.
This item is suited to all loads including heavy duty loads.
This item is for replacement only
H mounting must be initially ordered with the cylinder.

Adjustable trunnion mounting UH
Conforms to ISO 15552, type MT4
Used for cylinder model with round barrel

Dimensions in mm
Projection/First angle



1 Grease nipple from ø 125 mm
2 Locking screws
Torque max: ø 32 & 40 mm = 6 Nm; ø 50 & 63 mm = 10 Nm;
ø 80 & 100 mm = 15 Nm; ø 125 mm = 25 Nm

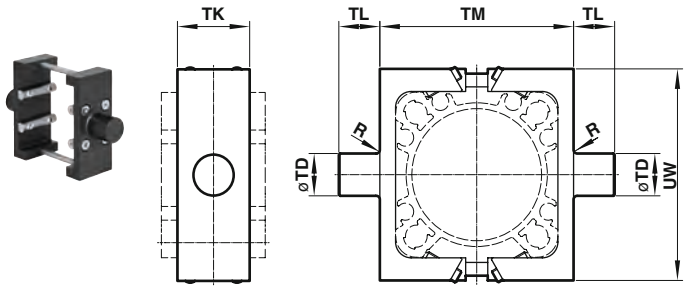
ø	L	R max.	ø TD e9	TL	TM h14	UW	XV min.	XV max. + #	(kg)	Model (UH)
32	20	1	12	12	50	50	65	81	0,16	QA/8032/40
40	24	1,6	16	16	63	58	76,5	88,5	0,35	QA/8040/40
50	28	1,6	16	16	75	70	84	96	0,65	QA/8050/40
63	28	1,6	20	20	90	80	87,5	107,5	0,85	QA/8063/40
80	28	1,6	20	20	110	100	102	118	1,2	QA/8080/40
100	38	2	25	25	132	126	112	128	2,3	QA/8100/40
125	50	2	25	25	160	152	144	146	3,3	QM/8125/40

Style 'UH': It is most important that the locking screws which secure the mounting to the tie rod are tightened to the torque figures shown in the table below.
For maximum energy input, consult our Technical Service.

Unless otherwise specified, units will be supplied with dimension 'XV min' plus half the stroke length. 'XV' = Distance from the piston rod shoulder to the centre of the mounting (Please see drawing).

Not for use on profile options.
This item is adjustable and suited to normal loads.

Adjustable trunnion mounting UH
Conforms to ISO 15552, type MT4
Used for cylinder model with profile barrel



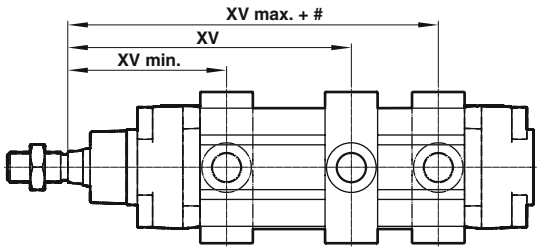
ø	R	ø TD e9	TK max.	TL h14	TM h14	UW	XV min.	XV max. + #	(kg)	Torque (Nm)	Model (UH)
32	1	12	25	12	50	58	67,5	78,5	0,06	1,3	QA/802032/40
40	1,6	16	28	16	63	65	78,5	86,5	0,11	1,3	QA/802040/40
50	1,6	16	28	16	75	80	84	96	0,16	4	QA/802050/40
63	1,6	20	36	20	90	96	91,5	103,5	0,32	4	QA/802063/40
80	1,6	20	36	20	110	116	106	114	0,37	6,5	QA/802080/40
100	2	25	48	25	132	140	117	123	0,72	6,5	QA/802100/40
125	2	25	50	25	160	163	144	146	0,96	14	QA/802125/40

Style 'UH': It is most important that the locking screws which secure the mounting to the tie rod are tightened to the torque figures shown in the table below.
For maximum energy input, consult our Technical Service.

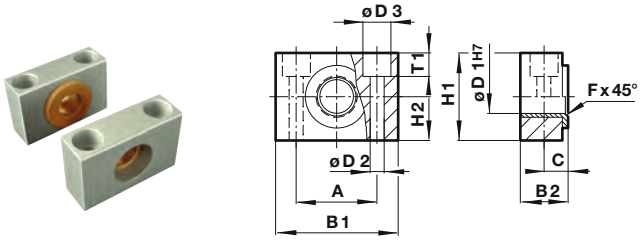
Unless otherwise specified, units will be supplied with dimension 'XV min'. plus half the stroke length. 'XV' = Distance from the piston rod shoulder to the centre of the mounting (Please see drawing).

This item is adjustable and suited to normal loads.

Stroke

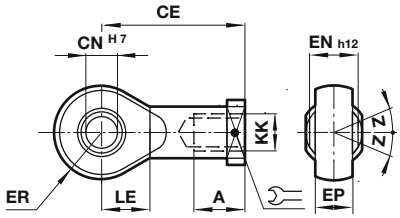


Trunnion support S
Conforms to ISO 15552, type AT4



ø	A	B 1	B 2	C	ø D1H7	ø D2	ø D3	F x 45°	H 1	H 2	T1	(kg)	Model (S)
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	16,5	25	14	20	2	50	25	13	0,34	QA/8100/41

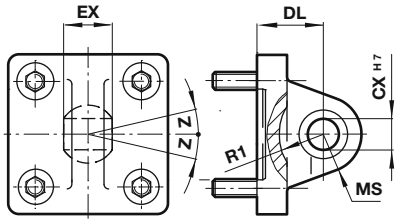
Universal piston rod eye UF
Conforms to DIN ISO 8139



ø	Thread KK	A	CE	ø CN H7	EN h12	ER	LE	Z	(kg)	Model (UF)
32	M10 x 1,25	20	43	10	14	14	15	9°	0,09	QM/8025/32
40	M12 x 1,25	22	50	12	16	16	17	13°	0,13	QM/8040/32
50/63	M16 x 1,5	28	64	16	21	21	22	15°	0,33	QM/8050/32
80/100	M20 x 1,5	33	77	20	25	25	26	15°	0,67	QM/8080/32
125	M27 x 2	51	110	30	37	35	36	15°	1,35	QM/8125/32

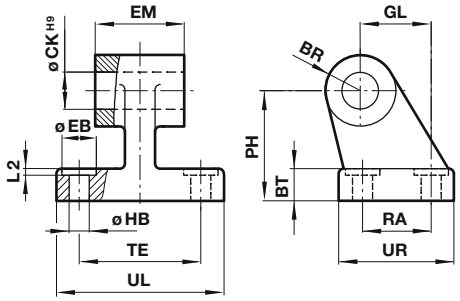
Universal rear eye UR
Conforms to ISO 15552, type MP6

Dimensions in mm
Projection/First angle



ø	ø CX H7	EX	MS	DL	R1	Z	(kg)	Model (UR)
32	10	14	16	22	13	13°	0,15	QA/8032/33
40	12	16	18	25	16	13°	0,25	QA/8040/33
50	16	21	21	27	19	15°	0,40	QA/8050/33
63	16	21	23	32	22	15°	0,55	QA/8063/33
80	20	25	28	36	24	14°	0,90	QA/8080/33
100	20	25	30	41	27	14°	1,50	QA/8100/33
125	30	37	40	50	36	17°	2,70	QM/8125/33

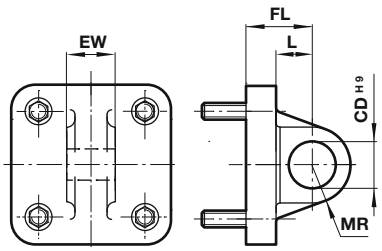
Wide hinge SW
Conforms to ISO 15552, type AB7



ø	BR	BT	PH	ø CK H9	ø EB	EM	GL
32	10	7	32	10	12	25,6	21
40	11	9	36	12	12	37,6	24
50	13	11	45	12	15	31,6	33
63	15	11	50	16	15	39,6	37
80	15	14	63	16	18	49,6	47
100	18	15	71	20	18	59,6	55
125	22	20	90	25	20	69	70

ø	ø HB	L2	RA	TE	UL	UR	(kg)	Model (SW)
32	6,6	1,6	18	38	50	31	0,05	M/P19493
40	6,6	1,6	22	41	53	35	0,07	M/P19494
50	9	1,6	30	50	65	45	0,14	M/P19495
63	9	1,6	35	52	67	50	0,18	M/P19496
80	11	2,5	40	66	84	60	0,28	M/P19497
100	11	2,5	50	76	94	70	0,42	M/P19498
125	14	3,2	60	94	124	90	2,70	M/P19499

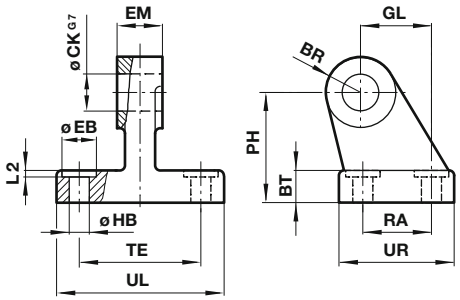
Rear eye R
Conforms to ISO 15552, type MP4



ø	ø CD H9	EW	FL	L	MR	(kg)	Model (R)
32	10	25,6	22	13	9	0,09	QA/8032/27
40	12	27,6	25	16	12	0,11	QA/8040/27
50	12	31,6	27	17	12	0,17	QA/8050/27
63	16	39,6	32	22	15	0,24	QA/8063/27
80	16	49,6	36	22	15	0,37	QA/8080/27
100	20	59,6	41	27	20	0,59	QA/8100/27
125	25	69,6	50	33	25	3,20	QM/8125/27

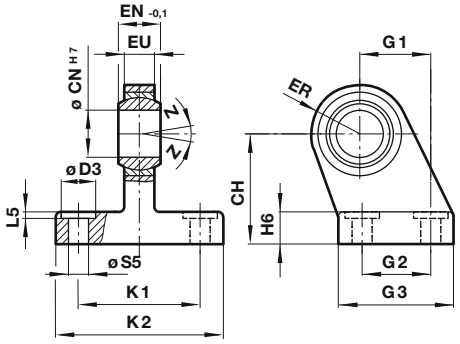
Narrow hinge SS

Dimensions in mm
Projection/First angle

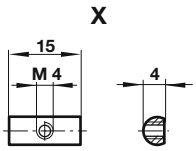


ø	BR	BT	ø CK G7	ø EB	EM	GL	ø HB	L2	PH	RA	TE	UL	UR	(kg)	Model (SS)
32	10	8	10	11	10	21	6,6	1,6	32	18	38	51	31	0,15	M/P19931
40	11	10	12	11	12	24	6,6	1,6	36	22	41	54	35	0,20	M/P19932
50	13	12	16	15	16	33	9	1,6	45	30	50	65	45	0,48	M/P19933
63	15	12	16	15	16	37	9	1,6	50	35	52	67	50	0,50	M/P19934
80	15	14	20	18	20	47	11	2,5	63	40	66	86	60	0,75	M/P19935
100	19	15	20	18	20	55	11	2,5	71	50	76	96	70	1,20	M/P19936
125	22	20	30	20	30	70	14	3,2	90	60	94	124	90	2,50	M/P19937

Swivel hinge US
Conforms to VDMA 24562 part 2

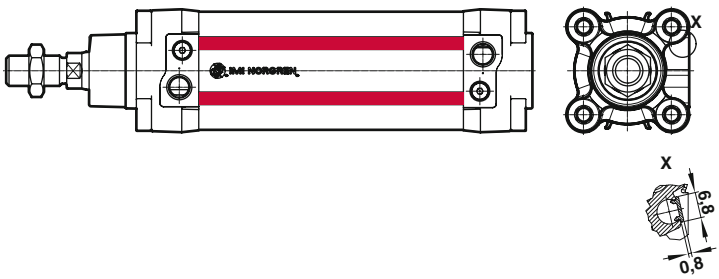


Groove key M/P72816
Weight: 0,01 (kg)



ø	CH	ø CN H7	ø D3	EN -0,1	ER	EU	G1	G2	G3	H6	K1	K2	L5	S5	Z	(kg)	Model (US)
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	15°	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	14°	1,03	M/P40314
100	71	20	18	25	30	18	55	50	70	15	76	96	2,5	11	14°	1,40	M/P40315
125	90	30	20	37	40	25	70	60	90	20	94	124	3,2	14	17°	3,10	M/P71355

Groove cover M/P72725/1000



- **ATEX - Magnetically operating switch, reed contact**
- **Suitable for all cylinder ranges with magnetic piston**
- **Switches can be mounted flush with the delivered special adaptor**
- **LED indicator**
- **CE verificated**

Technical features

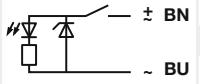
Operation:
Normal open with LED (yellow)
Switching voltage (Ub):
10 ... 240 V a.c./170 V d.c.
Switching voltage output:
Ub - 2,7 V
Switching current (see graph overleaf):
0,18 A max.
Switching power:
10 W/10 VA max.

Contact resistance:
150 mΩ
Response time:
1,8 ms
Operating temperatur:
-20 ... +50°C (-4 ... +122°F)
Ex-Identification:
II 3G Ex nc IIC T5 Gc X
II 3D Ex tc IIIC T120°C Dc IP67 X
Protection rating (EN 60529):
IP 67

Cable type:
PVC 2 x 0,25 mm2
Cable length:
5 m
Electromagnetic compatibility according to:
EN 60947-5-2

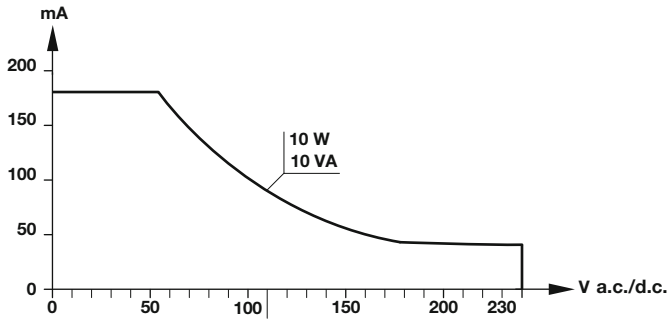
Materials:
Body: plastic
Cable: see table below

Technical data - Reed switches - additional informations see data sheet en 4.3.015

Symbol	Voltage (V a.c.)	Voltage (V d.c.)	Current maximum (mA)	Function	Operating temperature (°C)	LED	Protection class	Cable length (m)	Cable type	Weight (g)	Model
	10 ... 240	10 ... 170	180	Closer	-20 ... +50	•	IP67	5	PVC 2 x 0,25	40	M/50/LXU/5V

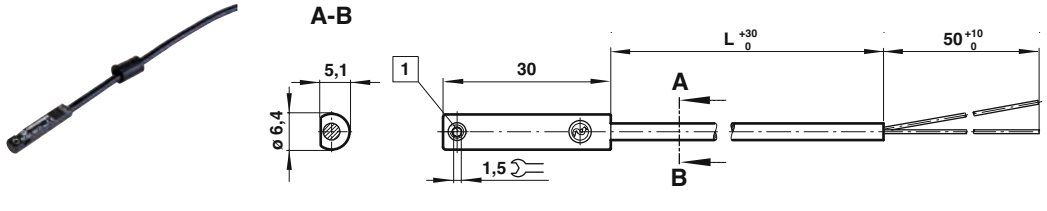
Color code: BK = black, BN = brown, BU = blue

Switching current and switching voltage



Dimensions
Cable length L = 5 m

Dimensions in mm
Projection/First angle



1 Fixing screw

- **ATEX - Magnetically operating switch, solid state**
- **Suitable for all cylinder ranges with magnetic piston**
- **Switches can be mounted flush with the delivered special adaptor**
- **LED indicator**
- **Resistant, reliable switching with a very fast response time**
- **Particularly suited for use in high levels of vibration**
- **CE verificated**

Technical features

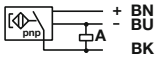
Operation:
PNP-output with LED (yellow)
Switching voltage (Ub):
10 ... 30 V d.c.
Switching voltage output:
Ub - 2 V
Switching current (see graph)
150 mA max.
Switching power:
4,5 W max.

Response time:
< 0,5 ms
Switching frequency:
1 kHz
Operating temperatur:
-20 ... +50°C (-4 ... +122°F)
Ex-Identification:
II 3G Ex nA op is IIC T4 Gc X
II 3D Ex tc IIIC T110°C Dc IP67 X

Protection rating (EN 60529):
IP 67
Cable type:
PVC 3 x 0,25 mm2
Cable length:
5 m
Electromagnetic compatibility according to:
EN 60947-5-2

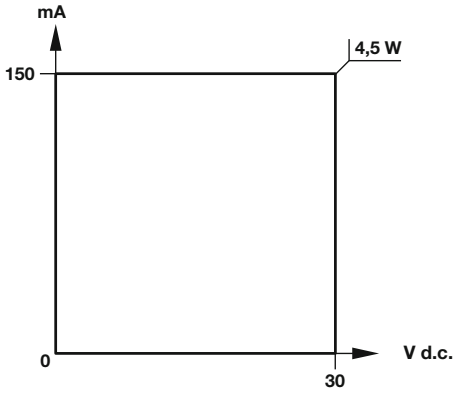
Materials:
Body: plastic
Cable: see table below

Technical data - Reed switches - additional informations see data sheet en 4.3.017

Symbol	Voltage (V d.c.)	Current maximum (mA)	Function	Operating temperature (°C)	LED	Protection class	Cable length (m)	Cable type	Weight (g)	Model
	10 ... 30	150	PNP	-20 ... +50	•	IP67	5	PVC 3 x 0,25	40	M/50/EXP/5V

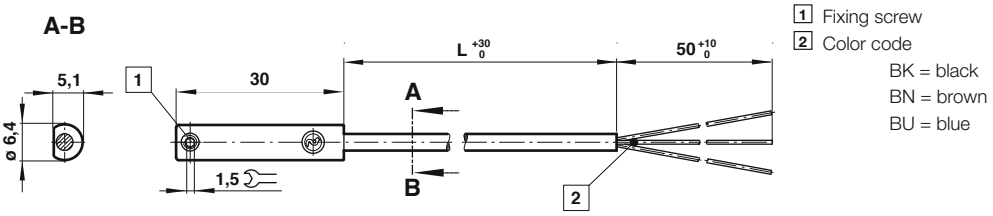
Color code: BK = black, BN = brown, BU = blue

Switching current and switching voltage



Dimensions
Cable length L = 5 m

Dimensions in mm
Projection/First angle



1 Fixing screw
2 Color code
BK = black
BN = brown
BU = blue

Protection against mechanical impacts on the magnetic switch:

1. Protection through profile groove

For cylinders with profile barrel, the magnetic switch is well protected in the profile groove. No additional impact protection is required.

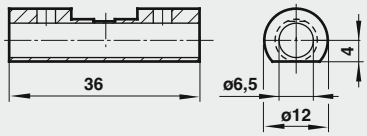
2. Protection through measures by customer

The customer can, for example, install a protection plate or the magnet switch has a position that it protects against damages.

3. Protection through a separate protection element

For an open installation of a magnetic switch onto a cylinder barrel with external tie rods, an additional protection element for the magnetic switch has to be installed with the mounting element. A separate order for the protection element M/P73668 is required!

Cylinder with external tie rods	Mounting element for magnetic switch	Protection unit ATEX
		
Cylinder Ø (mm)	**Model**	**Model**
32 ... 125	QM/27/2/1	M/P73668

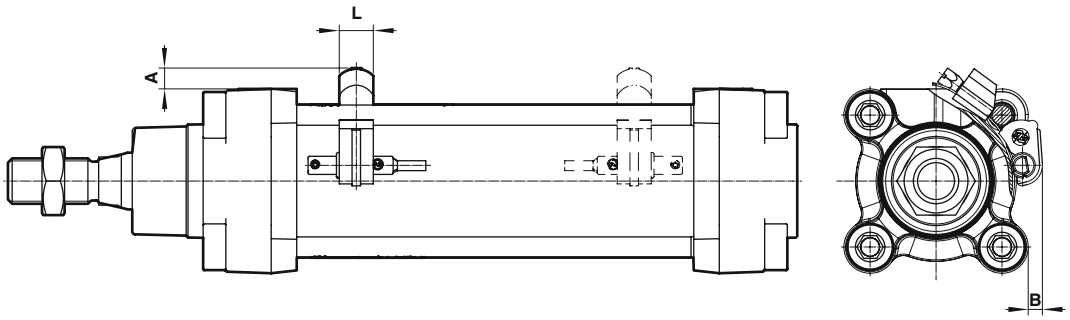


QM/27/2/1 – Switch mounting brackets for Round barrel

Switch: M/50

ø	A	B	L	Weight (kg)	Model
32	9	6	12	0,010	QM/27/2/1
40	9	7	12	0,010	QM/27/2/1
50	7	5	12	0,010	QM/27/2/1
63	7	6	12	0,010	QM/27/2/1

ø	A	B	L	Weight (kg)	Model
80	4	4	12	0,010	QM/27/2/1
100	3	2	12	0,010	QM/27/2/1
125	-2	-2	12	0,010	QM/27/2/1



Recommended Valves

			Recommended Valve Range		
Cylinder	**Tubing**	**Valve**	**Inline Valve 26230**	**ISO Star**	
					
ø	**Port size**	**ø**	**Flow l/min**	**Valve port size**	
32	G1/8	6/4	1200	1/4"	26230	ISO Star
40	G1/4	6/4	1200	1/4"	26230	ISO Star
50	G1/4	6/4	1200	1/4"	26230	ISO Star
63	G3/8	8/6	1200	1/4"	26230	ISO Star
80	G3/8	10/7	1200	1/4"	26230	ISO Star
100	G1/2	10/7	1200	1/4"	26230	ISO Star
125	G1/2	12/8,5	3000	1/2 "	26230	ISO Star

Customer Solution Cylinder valve unit
For additional information please contact the 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 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
IMI Precision Engineering, Norgren GmbH.

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.