

Cylinders and mountings conform to ISO 15552

Complete functional unit

Integrated 5/2 or 5/3 valve

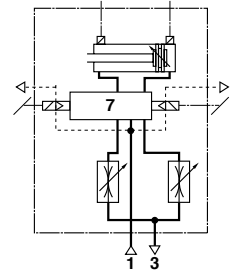
Additional output cylinder ports (2 & 4)

Integrated flow regulator for speed control

Reed or solid state switches can be mounted flush with the profile barrel

Protection class IP65

Energy efficient



Technical features

Medium:

Compressed air, filtered, lubricated or non-lubricated
 Particles size: Class 7, ISO 8573 – 1 (dated 2001)
 Humidity and water content: Air supply must be dry. Corresponding of the application and working conditions the air must be dry enough to avoid condensate. The pressure dewpoint must be minimum 15° under the application and working conditions. Oil: Class 4, ISO 8573 – 1 (dated 2001)

Standard:

Based on ISO 15552 (length, mounting pitch and thread dimensions according to ISO 15552. Some outside dimensions different to ISO 15552)

Operation:

Double acting, magnetic piston, adjustable cushioning

Operating pressure:

29 to 116 psig (2 to 8 bar)

Port size:

G1/8, G1/4, G3/8

Cylinder diameters:

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

Standard strokes:
See below

Non-standard strokes:

Available
25 to 1000 mm

Operating temperature:

14° to 176°F (-10C to 80°C) max.

Supply voltage:

24 VDC

Power consumption:

2 W max

Electrical connection:

DIN EN175301-803, form C

Manual override:

Push and lock

Rating:

100 % continuous duty

Protection class:

IP 65

Materials:

Profile barrel: anodised aluminum,
 End covers: pressure diecast anodised aluminum
 Piston rod: stainless steel, see page 2
 Piston rod seals: polyurethane
 Piston seals: polyurethane
 O-rings: nitrile rubber

Technical data

Cylinder Ø mm	32	40	50	63	80	100
Air ports	G 1/8	G 1/8	G 1/8	G 1/4	G 1/4	G 3/8
Piston rod Ø mm	12	16	20	20	25	25
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
Cushion length mm	19	22	24	24	27	34
Theoretical thrusts at 87 psig (6 bar) extended (N)	482	754	1178	1870	3016	4710
Theoretical thrusts at 87 psig (6 bar) retracted (N)	414	633	990	1680	2722	4416
Air consumption at 87 psig (6 bar) extended cu l/cm	0.056	0.088	0.137	0.218	0.350	0.550
Air consumption at 87 psig (6 bar) retracted cu l/cm	0.050	0.076	0.117	0.198	0.324	0.514

Standard strokes

All Bores

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

Cylinder variants

Symbol	R	S	C	D	Model with magnetic piston	Description	Dimensions Page
	•	•	•	•	PRA/862000/M	Standard cylinder	4
	•	•	•	•	PRA/862000/W2	Cylinder with special wiper/seal (suitable for appl. with cement, plaster (stucco), arizona sand, hoar-frost or ice)	4
	•	•	•	•	PRA/862000/MU	Cylinder with extended piston rod	

For the cylinder models style C, D and S see options selector

Option selector

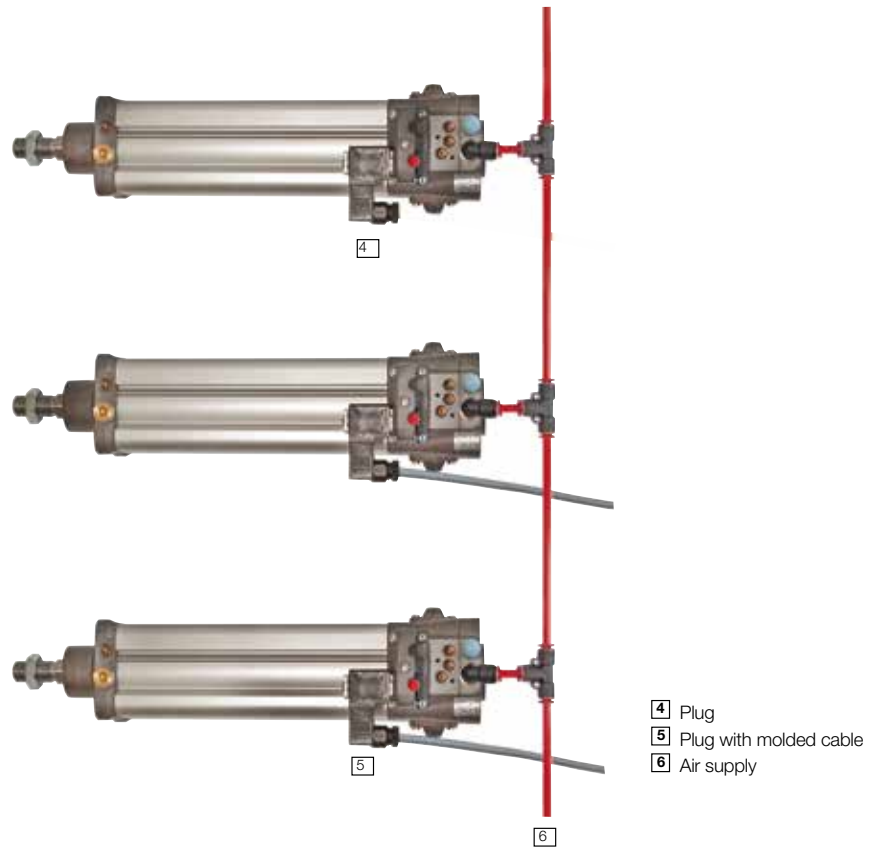
P**A/862***/***/213A/***

Piston rod material	Substitute	Strokes (mm)
Stainless steel (martensitic); Standard wiper seal	R	1000 max.
Stainless steel (austenitic); Standard wiper seal	S	Valve function
Hard chromium plated; Standard wiper seal	C	5/2 way solenoid operated, spring return, cylinder retracted
Stainless steel (austenitic); hard chromium plated; Standard wiper seal	D	
Cylinder Ø (mm)	Substitute	5/2 way solenoid operated, spring return, cylinder extended
032, 040, 050, 063, 080, 100		
Variants (magnetic piston)	Substitute	5/2 way solenoid operated, solenoid return
Standard	MI	
Piston rod bellow	MG	5/3 way solenoid operated, solenoid return, all ports blocked (APB)
Special wiper seal	W2	
Extended piston rod	MU	5/3 way solenoid operated, solenoid return, central open exhaust (COE)
P**/862***/MU/***/***/ → Extension (mm)		

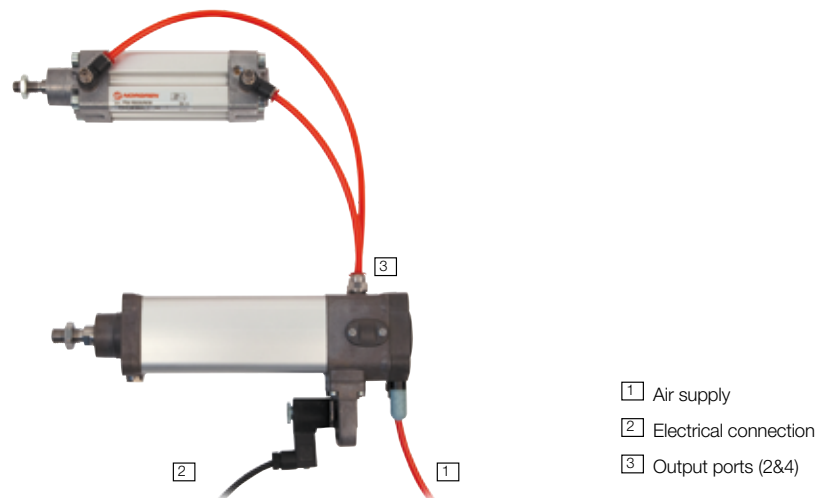
For combinations of cylinder variants contact our technical service

Reduced Installation Time & Cost

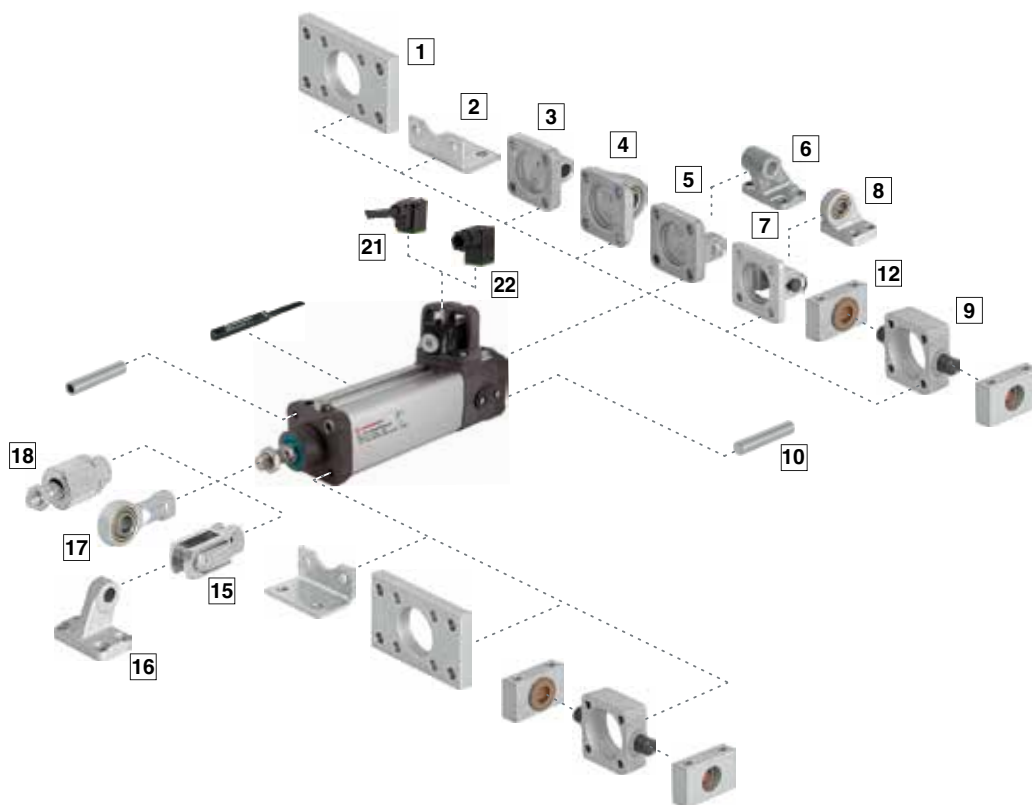
To connect the IVAC simply run a single supply line to provide an air supply to each unit. There is no mounting of valve islands to the machine framework or inside a cabinet and there is no pipework to run around the machine to connect each valve to each actuator.



One of the advantages of the IVAC cylinders is to use the output cylinder ports (2 & 4) from the main valve to operate an additional cylinder.











Mountings



Position	Style	Standard	Corrosion protected
1	B, G	Clear anodised aluminum	Clear anodised aluminum. Screws: A2
2	C	Galvanized steel (Ø 32 ... 63 mm) Painted steel (Ø 80 & 100 mm)	—
3	R	Diecast aluminum	Black corrosion protected diecast aluminum. Certified for the food industry. Screws: A2
4	UR	Galvanized aluminum Inner ring: steel Outer ring: brass	Black corrosion protected diecast aluminum Certified for the food industry Inner ring: stainless Steel (austenitic) Outer ring: nickel plated hardened steel
5	D	Diecast aluminum Bolt: galvanized steel (martensitic) Circlip: galvanized steel	Black corrosion protected diecast aluminum Certified for the food industry Bolt: X 10 chloroprene Ni S 18 9 (1.4305, AISI 303) Circlip: Stainless steel (martensitic). Screws: A2
6	SW	Diecast aluminum	Black corrosion protected diecast aluminum Certified for the food industry
7	US	Galvanized aluminum. Inner ring: steel Outer ring: brass	—
8	D2	Painted cast iron. Bolt: stainless steel (martensitic) Circlip: galvanized steel	—
9	FH	Cast iron	—
10	A	Galvanized steel	—
11	Screw	—	—
12	S	Clear anodised aluminum Bearing: brass	—
15	F	Galvanized steel Bolt: galvanized steel Circlip: Galvanized steel	Nickel plated steel Circlip: X 10 Cr Ni S 18 9 (1.4305, AISI 303) Bolt: X 10 Cr Ni S 18 9 (1.4305, AISI 303)
16	SS	Painted cast iron	—
17	UF	Galvanized steel. Inner ring: steel Outer ring: brass	Nickel plated steel. Inner ring: stainless steel (austenitic) Outer ring: nickel plated hardened steel.
18	AK	Galvanized steel	—

Mountings and service kits

Model	A	AK	B, G	C	D	D2	F	FH
								
	10	18	1	2	5	7	15	9
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
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
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
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
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
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
Corrosion protected								
32	—	—	PVQA/8032/22	—	PVQA/8032/23	—	PVQM/8025/25	—
40	—	—	PVQA/8040/22	—	PVQA/8040/23	—	PVQM/8040/25	—
50	—	—	PVQA/8050/22	—	PVQA/8050/23	—	PVQM/8050/25	—
63	—	—	PVQA/8063/22	—	PVQA/8063/23	—	PVQM/8050/25	—
80	—	—	PVQA/8080/22	—	PVQA/8080/23	—	PVQM/8080/25	—
100	—	—	PVQA/8100/22	—	PVQA/8100/23	—	PVQM/8080/25	—
Model	R	S	SS	SW	UF	UR	US	Service kit
								
	3	12	16	6	17	4	8	
Ø								
32	QA/8032/27	QA/8032/41	M/P19931	M/P19493	QM/8025/32	QA/8032/33	M/P40310	PRQA/862032/00
40	QA/8040/27	QA/8040/41	M/P19932	M/P19494	QM/8040/32	QA/8040/33	M/P40311	PRQA/862040/00
50	QA/8050/27	QA/8040/41	M/P19933	M/P19495	QM/8050/32	QA/8050/33	M/P40312	PRQA/862050/00
63	QA/8063/27	QA/8063/41	M/P19934	M/P19496	QM/8050/32	QA/8063/33	M/P40313	PRQA/862063/00
80	QA/8080/27	QA/8063/41	M/P19935	M/P19497	QM/8080/32	QA/8080/33	M/P40314	PRQA/862080/00
100	QA/8100/27	QA/8100/41	M/P19936	M/P19498	QM/8080/32	QA/8100/33	M/P40315	PRQA/862100/00
Corrosion protected								
32	PVQA/8032/27	—	—	M/P40459	PVQM/8025/32	PVQA/8032/33	—	—
40	PVQA/8040/27	—	—	M/P40460	PVQM/8040/32	PVQA/8040/33	—	—
50	PVQA/8050/27	—	—	M/P40461	PVQM/8050/32	PVQA/8050/33	—	—
63	PVQA/8063/27	—	—	M/P40462	PVQM/8050/32	PVQA/8063/33	—	—
80	PVQA/8080/27	—	—	M/P40463	PVQM/8080/32	PVQA/8080/33	—	—
100	PVQA/8100/27	—	—	M/P40464	PVQM/8080/32	PVQA/8100/33	—	—

For mounting dimensions see ISO Mountings and Accessories section

Connectors
Plug with cable gland


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V10027-D00

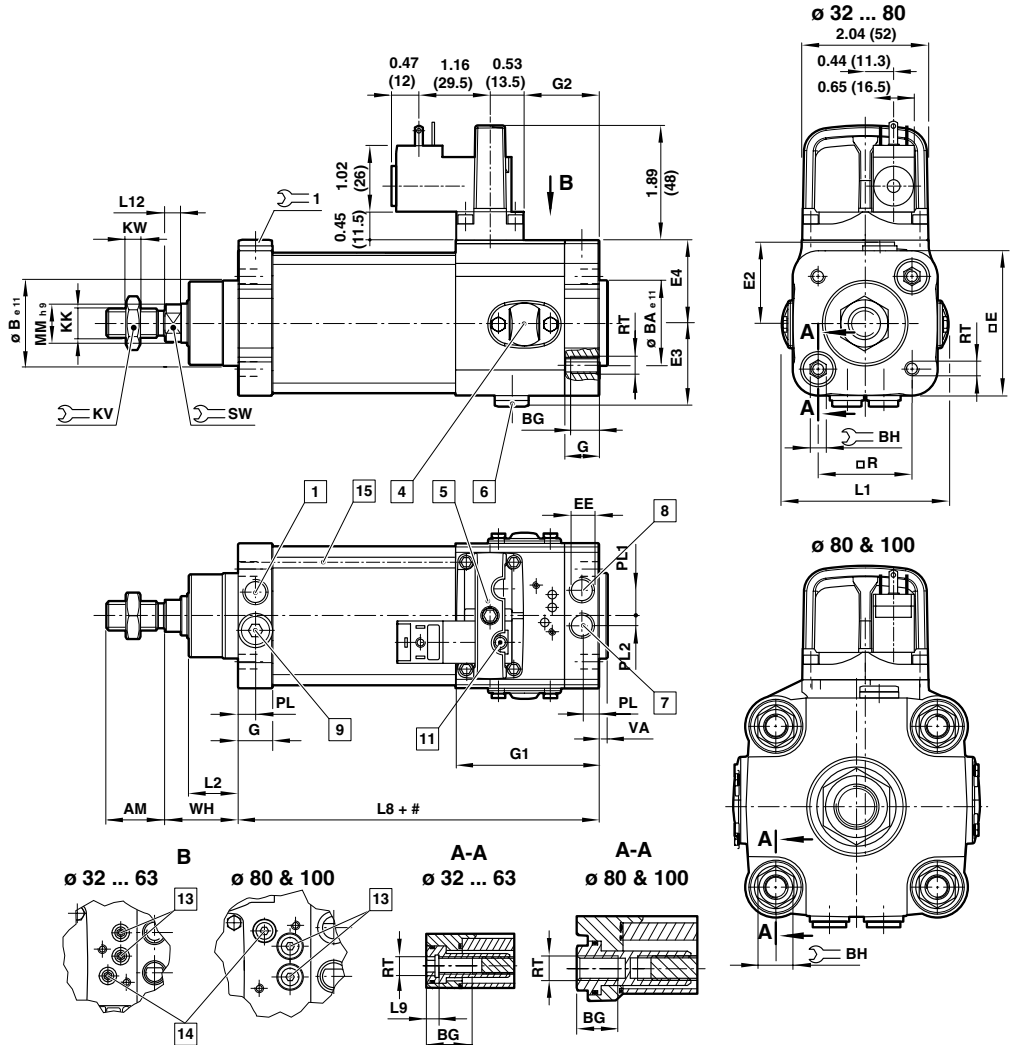
V10012-D13 (LED and VDR)

Plug with molded cable


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V10014-D01 (LED and VDR, cable length 1 m)

V10014-D03 (LED and varistor, cable length 3 m)



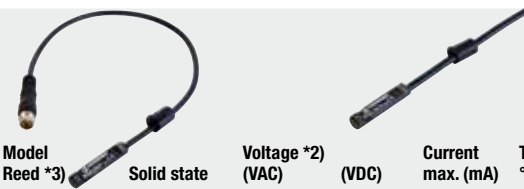
- 1 Cushion adjustment front end cover
- 4 Main valve
- 5 Pilot block
- 6 Output ports (2&4)
- 7 Air supply
- 8 Exhaust position, do not obstruct
- 9 Without function - do not use
- 11 Manual override
- 13 Speed control adjustment
- 14 Cushion adjustment rear end cover
- 15 M/50 switches can be mounted flush with the profile

Ø	AM	Ø B e11	Ø BA e11	BG	BH	□ E	E2	E3	E4	EE	G	G1	G2	KK	KW	L1	L2	L8	L9	L12
32	22.0	30.0	30.0	16.0	6.0	47.0	27.5	27.5	27.5	G1/8	14.0	59.0	30.5	M10x1.25	5.0	68.5	20.0	94.0	4.0	6.0
40	24.0	35.0	35.0	16.0	6.0	60.0	34.5	34.0	34.0	G1/8	14.0	59.0	30.5	M12x1.25	6.0	68.5	21.0	105.0	4.0	6.5
50	32.0	40.0	40.0	16.0	8.0	71.5	40.0	39.0	39.0	G1/8	14.0	63.0	34.5	M16x1.5	8.0	92.5	28.0	106.0	5.0	6.5
63	32.0	45.0	45.0	16.0	8.0	82.0	46.0	45.5	45.5	G1/4	19.0	66.0	38.0	M16x1.5	8.0	91.5	28.0	121.0	5.0	6.5
80	40.0	45.0	45.0	17.0	16.0	99.0	54.0	54.0	57.0	G1/4	19.0	74.5	46.5	M20x1.5	10.0	110.0	35.0	128.0	-	7.5
100	40.0	55.0	55.0	17.0	16.0	119.0	65.0	65.0	65.0	G3/8	24.5	81.0	53.0	M20x1.5	10.0	144.5	38.0	138.0	-	10.0

Ø	Ø MM h9	PL	PL1	PL2	□ R	RT	VA	VD	WH	X1	KV	SW	1	2	at 0 mm	per 25 mm	Model
32	12.0	7.0	10.0	3.5	32.5	M6	3.0	6.0	26.0	0.0	17.0	10.0	5.0	12.0	1.46 lb	0.15 lb	PRA/862032/MI+/213A/*
40	16.0	7.0	10.5	4.0	38.0	M6	3.5	6.0	30.0	0.0	19.0	13.0	5.0	12.0	2.27 lb	0.24 lb	PRA/862040/MI+/213A/*
50	20.0	7.0	12.5	4.0	46.5	M8	3.5	6.0	37.0	1.5	24.0	17.0	5.0	12.0	3.48 lb	0.40 lb	PRA/862050/MI+/213A/*
63	20.0	9.5	14.5	6.0	56.5	M8	4.0	6.0	37.0	0.0	24.0	17.0	6.0	15.0	5.34 lb	0.42 lb	PRA/862063/MI+/213A/*
80	25.0	9.5	14.0	6.0	72.0	M10	4.0	6.0	46.0	6.0	30.0	22.0	6.0	15.0	9.08 lb	0.64 lb	PRA/862080/MI+/213A/*
100	25.0	12.0	16.5	8.5	89.0	M10	4.0	6.0	51.0	6.5	30.0	22.0	8.0	19.0	30.9 lb	0.77 lb	PRA/862100/MI+/213A/*

* Please insert standard stroke length (mm)
 + Please insert valve function

Dimensions Inches (mm)

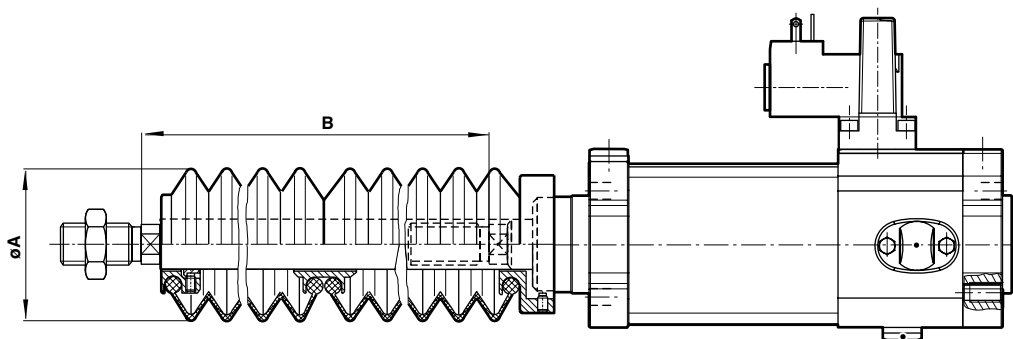
Magnetically operated switches


Model	Reed *3)	Solid state	Voltage *2) (VAC)	Voltage (VDC)	Current max. (mA)	Temperature °F (°C)	LED	Features	Cable length (m)	Cable type	Cable with connector	Data sheet
M/50/LSU*V	–	–	10 ... 240	10 ... 170	180	-4° to 176° (-20° to 80°)	•	–	2, 5 or 10	PVC 2 x 0.25	–	N/en 4.3.005
M/50/LSU/5U	–	–	10 ... 240	10 ... 170	180	-4° to 176° (-20° to 80°)	•	–	5	PUR 2 x 0.25	–	N/en 4.3.005
TM/50/RAU/2S	–	–	10 ... 240	10 ... 170	180	-4° to 302° (-20° to 150°)	–	–	2	Silicone 2 x 0.25	–	N/en 4.3.005
M/50/RAC/5V	–	–	10 ... 240	10 ... 170	180	-4° to 176° (-20° to 80°)	–	Changeover	5	PVC 3 x 0.25	–	N/en 4.3.005
M/50/LSU/CP	–	–	10 ... 60	10 ... 75	180	-4° to 176° (-20° to 80°)	•	Plug M8x1	5	PVC 3 x 0.25	M/P73001/5	N/en 4.3.005
–	M/50/EAP*V	–	10 ... 30	150	150	-40° to 176° (-40° to 80°) *1)	•	PNP	2, 5 or 10	PVC 3 x 0.25	–	N/en 4.3.007
–	M/50/EAP/CP	–	10 ... 30	150	150	-40° to 176° (-40° to 80°) *1)	•	PNP, Plug M8x1	5	PVC 3 x 0.25	M/P73001/5	N/en 4.3.007
–	M/50/EAP/CC	–	10 ... 30	150	150	-40° to 176° (-40° to 80°) *1)	•	PNP, Plug M12x1	5	PVC 3 x 0.25	M/P34614/5	N/en 4.3.007
–	M/50/EAN*V	–	10 ... 30	150	150	-40° to 176° (-40° to 80°) *1)	•	NPN	2, 5 or 10	PVC 3 x 0.25	–	N/en 4.3.007
–	M/50/EAN/CP	–	10 ... 30	150	150	-40° to 176° (-40° to 80°) *1)	•	NPN, Plug M8x1	5	PVC 3 x 0.25	M/P73001/5	N/en 4.3.007

* Please insert cable length

*1) -40°F to 176°F (-40°C to 80°C) protection class IP65; -4°F to 176°F (-20°C to 80°C) protection class IP67 and IP68, details see data sheet

*2) Supply voltage 24 VDC (± 10%) max for P.A/86200/M only *3) For use with 32 mm bore - consult factory.

P*A/862000/MG*/213A/* Cylinder with piston rod bellow


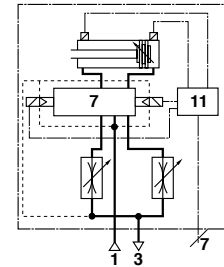
Cyl. Ø	Ø A	Stroke max per bellow	Piston rod extension B		Model
			for first bellow	for further bellows	
32	40	60	30	25	P#A/862032/MG+/213A/*
40	63	145	50	32	P#A/862040/MG+/213A/*
50	63	145	40	32	P#A/862050/MG+/213A/*
63	63	145	40	32	P#A/862063/MG+/213A/*
80	80	250	50	45	P#A/862080/MG+/213A/*
100	80	250	50	45	P#A/862100/MG+/213A/*

* Standard stroke length

Piston rod material

+ Valve function

- Cylinders and mountings conform to ISO 15552**
- Complete functional unit with LED display**
- Central electrical connector, polarity-safe**
- Integrated 5/2 or 5/3 valve**
- Additional output cylinder ports (2 & 4)**
- Integrated flow regulator for speed control**
- Integrated reed or solid state switches**
- Protection class IP67, suitable for food and beverage sector**
- Energy efficient**



Technical features

Medium:

Compressed air, filtered, lubricated or non-lubricated
 Particles size: Class 7, ISO 8573 – 1 (dated 2001)
 Humidity and water content: Air supply must be dry.
 Corresponding of the application and working conditions the air must be dry enough to avoid condensate. The pressure dewpoint must be minimum 15° under the application and working conditions. Oil: Class 4, ISO 8573 – 1 (dated 2001)

Standard:

Based on ISO 15552 (length, mounting pitch and thread dimensions according to ISO 15552. Some outside dimensions different to ISO 15552)

Operation:

Double acting, magnetic piston, adjustable cushioning

Operating pressure:

29 to 116 psig (2 to 8 bar)

Port size:

G1/8, G1/4, G3/8

Cylinder diameters:

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

Standard strokes:

See below

Non-standard strokes:

25 to 1000 mm

Operating temperature:

23° to 122°F (-5°C to 50°C) max.

Supply voltage:

24 VDC

Power consumption:

2 W max

Electrical connection:

DIN EN175301-803, form C

Manual override:

Push and lock

Rating:

100% continuous duty

Protection class:

IP 67

Hygienic standard:

Conforms to EN1672-2

Materials:

Profile barrel: anodised aluminum,
 End covers: pressure diecast anodised aluminum
 Piston rod: stainless steel, see page 2
 Piston rod seals: polyurethane
 Piston seals: polyurethane
 O-rings: nitrile rubber

Technical data

Cylinder Ø (mm)	32	40	50	63	80	100
Air ports	G 1/8	G 1/8	G 1/8	G 1/4	G 1/4	G 3/8
Piston rod Ø (mm)	12	16	20	20	25	25
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
Cushion length inch (mm)	19	22	24	24	27	34
Theoretical thrusts at 87 psig (6 bar extended) (N)	482	754	1178	1870	3016	4710
Theoretical thrusts at 87 psig (6 bar retracted) (N)	414	633	990	1680	2722	4416
Air consumption at 87 psig (6 bar extended) cu ft/in (l/cm)	0.056	0.088	0.137	0.218	0.350	0.550
Air consumption at 87 psig (6 bar retracted) cu ft/in (l/cm)	0.050	0.076	0.117	0.198	0.324	0.514

Standard strokes

All Bores

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

Cylinder variants

Symbol	R	S	C	D	E	V	Model with magnetic piston	Description	Dimensions page
	•	•	•	•	•	•	PRA/882000/MI	Standard cylinder	6
	•	•	•	•	•	•	PRA/882000/W2	Cylinder with special wiper/seal (suitable for appl. with cement, plaster (stucco), arizona sand, hoar-frost or ice)	6
	•	•	•	•	•	•	PRA/882000/MU	Cylinder with extended piston rod	

For the cylinder models style C, D, E, S and V see options selector

Option selector

P★A/882★/★/★/★/★/★/★/★

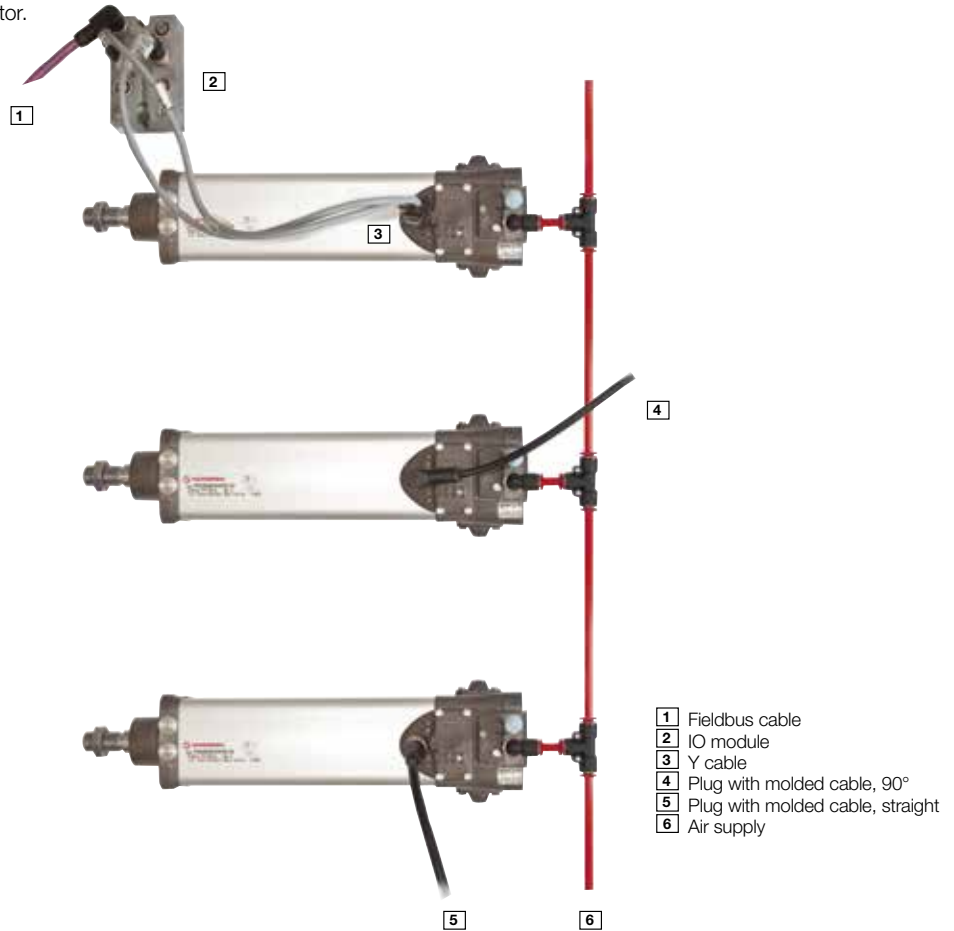
Piston rod material	Substitute	Strokes (mm)
Stainless steel (martensitic); Standard wiper seal	R	1000 max.
Stainless steel (austenitic); Standard wiper seal	S	Switch variants
Hard chromium plated; Standard wiper seal	C	Without 0
Stainless steel (austenitic); hard chromium plated; Standard wiper seal	D	Adjustable Reed switches *2) 3
Stainless steel (austenitic); Smooth wiper seal (orange)	V	Adjustable solid state switches 4
Stainless steel (austenitic); hard chromium plated; Smooth wiper seal (orange)	E	Valve function *1)
Cylinder Ø (mm)	Substitute	5/2 way solenoid operated, spring return, cylinder retracted R
032, 040, 050, 063, 080, 100		
Variants (magnetic piston)	Substitute	5/2 way solenoid operated, spring return, cylinder extended E
Standard MI		
Piston rod bellow MG		5/2 way solenoid operated, solenoid return B
Special wiper seal W2		
Extended piston rod MU		5/3 way solenoid operated, solenoid return, all ports blocked (APB) A
P**/882***/MU/****/****	→ Extension (mm)	
		5/3 way solenoid operated, solenoid return, central open exhaust (COE) C

For combinations of cylinder variants contact our technical service

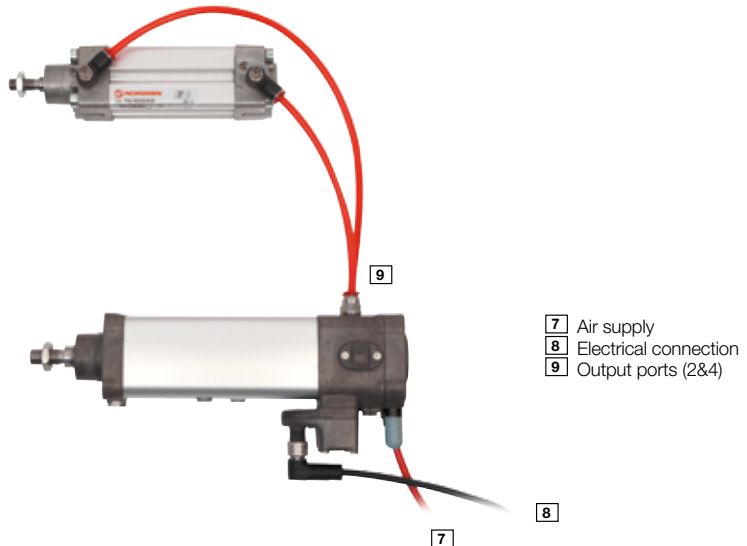
*1) Version with pilot operated valves on request.
 *2) For use with 32 mm bore - consult factory.

Reduced Installation Time & Cost

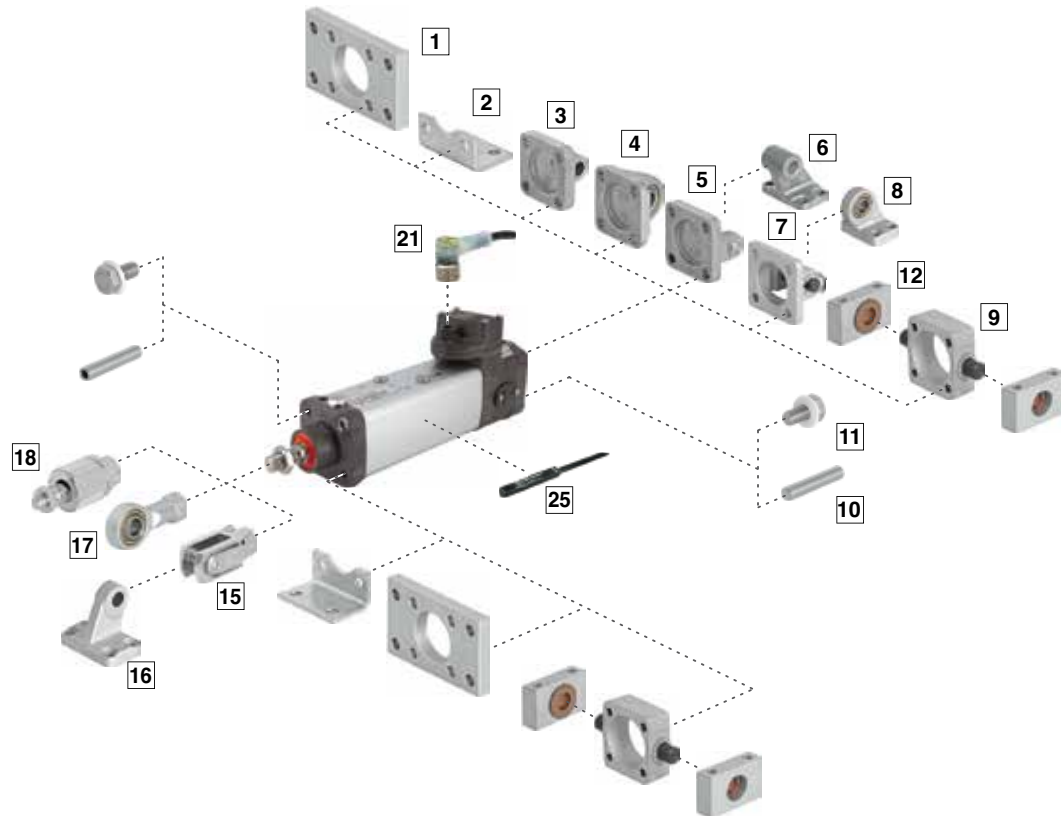
To connect the IVAC simply run a single supply line to provide an air supply to each unit. There is no mounting of valve islands to the machine framework or inside a cabinet and there is no pipework to run around the machine to connect each valve to each actuator.



One of the advantages of the IVAC cylinders is to use the output cylinder ports (2 & 4) from the main valve to operate an additional cylinder.




















Mountings

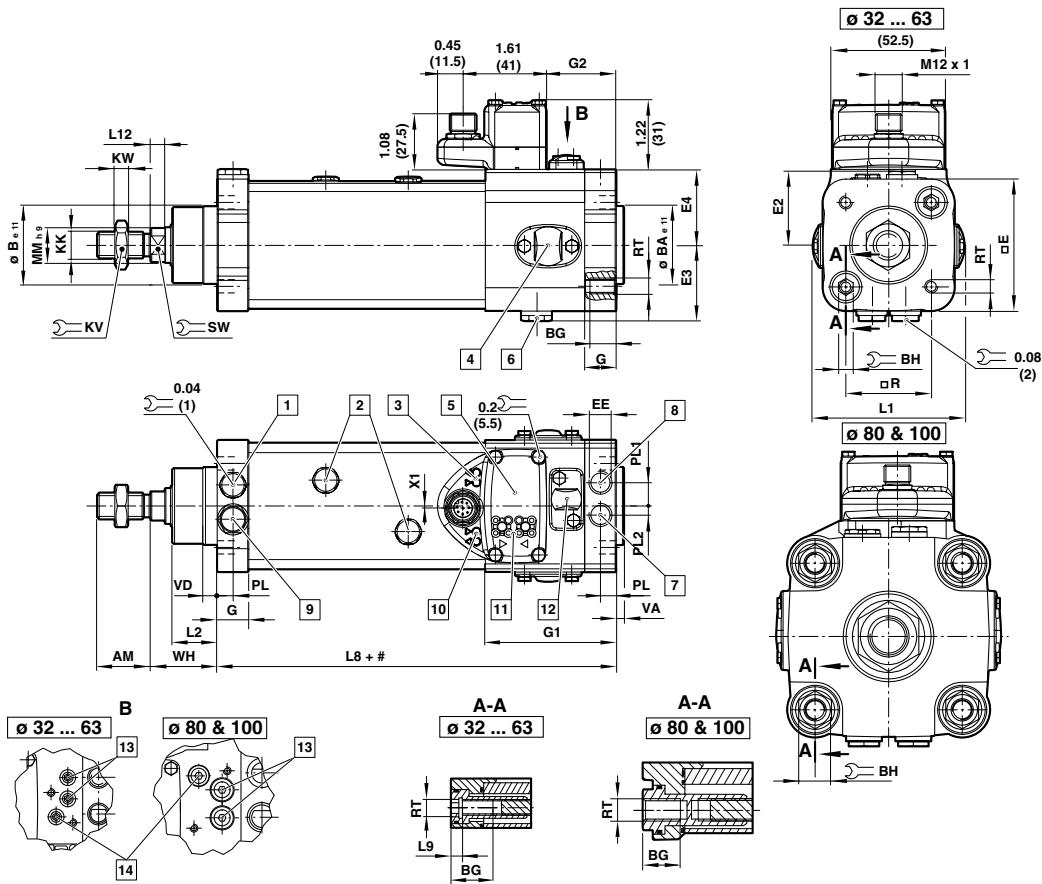


Position	Style	Standard	Corrosion protected	Stainless steel
1	B, G	Clear anodised aluminum	Clear anodised aluminum. Screws: A2	X 5 Cr Ni 18 10 (1.4301; AISI 304). Screws: A2
2	C	Galvanized steel (Ø 32 ... 63 mm) Painted steel (Ø 80 & 100 mm)	—	X 5 Cr Ni 18 10 (1.4301; AISI 304). Screws: A2
3	R	Diecast aluminum	Black corrosion protected diecast aluminum. Certified for the food industry. Screws: A2	—
4	UR	Galvanized aluminum Inner ring: steel Outer ring: brass	Black corrosion protected diecast aluminum Certified for the food industry Inner ring: stainless Steel (austenitic) Outer ring: nickel plated hardened steel	—
5	D	Diecast aluminum Bolt: galvanized steel (martensitic) Circlip: galvanized steel	Black corrosion protected diecast aluminum Certified for the food industry Bolt: X 10 Cr Ni S 18 9 (1.4305, AISI 303) Circlip: Stainless steel (martensitic). Screws: A2	X 5 Cr Ni 18 10 (1.4301; AISI 304). Screws: A2 Bolt: X 10 Cr Ni S 18 9 (1.4305; AISI 303)
6	SW	Diecast aluminum	Black corrosion protected diecast aluminum Certified for the food industry	X 6 Cr Ni 18 9 (1.4308; AISI 304)
7	US	Galvanized aluminum. Inner ring: steel Outer ring: brass	—	—
8	D2	Painted cast iron. Bolt: stainless steel (martensitic) Circlip: galvanized steel	—	—
9	FH	Cast iron	—	—
10	A	Galvanized steel	—	—
11	Screw	—	—	X 10 Cr Ni S 18 9 (1.4305, AISI 303)
12	S	Clear anodised aluminum Bearing: brass	—	—
15	F	Galvanized steel Bolt: galvanized steel Circlip: Galvanized steel	Nickel plated steel Circlip: X 10 Cr Ni S 18 9 (1.4305, AISI 303) Bolt: X 10 Cr Ni S 18 9 (1.4305, AISI 303)	X 10 Cr Ni S 18 9 (1.4305; AISI 303) Bolt: X 10 Cr Ni S 18 9 (1.4305; AISI 303) Eyebolt: X 10 Cr Ni S 18 9 (1.4305; AISI 303)
16	SS	Painted cast iron	—	—
17	UF	Galvanized steel. Inner ring: steel Outer ring: brass	Nickel plated steel. Inner ring: stainless steel (austenitic) Outer ring: nickel plated hardened steel.	—
18	AK	Galvanized steel	—	—

Mountings and service kits

Model	A	AK	B, G	C	D	D2	F	FH	R
									
	10	18	1	2	5	7	15	9	3
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/8032/27
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/8040/27
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/8050/27
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/8063/27
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/8080/27
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/8100/27
Corrosion protected									
32	—	—	PVQA/8032/22	—	PVQA/8032/23	—	PVQM/8025/25	—	PVQA/8032/27
40	—	—	PVQA/8040/22	—	PVQA/8040/23	—	PVQM/8040/25	—	PVQA/8040/27
50	—	—	PVQA/8050/22	—	PVQA/8050/23	—	PVQM/8050/25	—	PVQA/8050/27
63	—	—	PVQA/8063/22	—	PVQA/8063/23	—	PVQM/8050/25	—	PVQA/8063/27
80	—	—	PVQA/8080/22	—	PVQA/8080/23	—	PVQM/8080/25	—	PVQA/8080/27
100	—	—	PVQA/8100/22	—	PVQA/8100/23	—	PVQM/8080/25	—	PVQA/8100/27
Stainless steel									
32	—	—	KQA/8032/22	KQA/8032/21	KQA/8032/23	—	KQM/55433/25	—	—
40	—	—	KQA/8040/22	KQA/8040/21	KQA/8040/23	—	KQM/55441/25	—	—
50	—	—	KQA/8050/22	KQA/8050/21	KQA/8050/23	—	KQM/55451/25	—	—
63	—	—	KQA/8063/22	KQA/8063/21	KQA/8063/23	—	KQM/55451/25	—	—
80	—	—	KQA/8080/22	KQA/8080/21	KQA/8080/23	—	KQA/8080/25	—	—
100	—	—	KQA/8100/22	KQA/8100/21	KQA/8100/23	—	KQA/8080/25	—	—
Model	S	SS	SW	UF	UR	US	Cover screws	Service kit	
									
	12	16	6	17	4	8	11		
Ø									
32	QA/8032/41	M/P19931	M/P19493	QM/8025/32	QA/8032/33	M/P40310	—	PRQA/882032/00	
40	QA/8040/41	M/P19932	M/P19494	QM/8040/32	QA/8040/33	M/P40311	—	PRQA/882040/00	
50	QA/8040/41	M/P19933	M/P19495	QM/8050/32	QA/8050/33	M/P40312	—	PRQA/882050/00	
63	QA/8063/41	M/P19934	M/P19496	QM/8050/32	QA/8063/33	M/P40313	—	PRQA/882063/00	
80	QA/8063/41	M/P19935	M/P19497	QM/8080/32	QA/8080/33	M/P40314	—	PRQA/882080/00	
100	QA/8100/41	M/P19936	M/P19498	QM/8080/32	QA/8100/33	M/P40315	—	PRQA/882100/00	
Corrosion protected									
32	—	—	M/P40459	PVQM/8025/32	PVQA/8032/33	—	—	—	
40	—	—	M/P40460	PVQM/8040/32	PVQA/8040/33	—	—	—	
50	—	—	M/P40461	PVQM/8050/32	PVQA/8050/33	—	—	—	
63	—	—	M/P40462	PVQM/8050/32	PVQA/8063/33	—	—	—	
80	—	—	M/P40463	PVQM/8080/32	PVQA/8080/33	—	—	—	
100	—	—	M/P40464	PVQM/8080/32	PVQA/8100/33	—	—	—	
Stainless steel									
32	—	—	M/P72288	KQM/8032/32	—	—	PVQA/882032/88	—	
40	—	—	M/P72289	KQM/8040/32	—	—	PVQA/882032/88	—	
50	—	—	M/P72290	KQM/8050/32	—	—	PVQA/882050/88	—	
63	—	—	M/P72291	KQM/8050/32	—	—	PVQA/882050/88	—	
80	—	—	M/P72292	KQM/8080/32	—	—	PVQA/882080/88	—	
100	—	—	M/P72293	KQM/8080/32	—	—	PVQA/882080/88	—	

For mounting dimensions see ISO Mountings and Accessories section



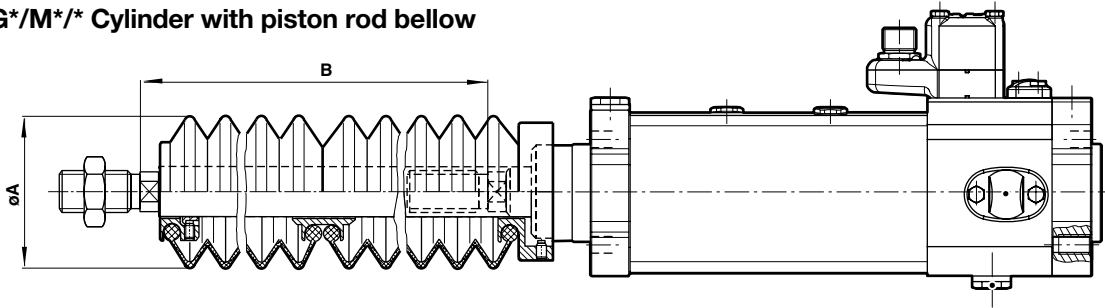
- # Stroke
- 1 Cushion adjustment front end cover
- 2 Magnetically operated switches (AF 11)
- 3 LED - magnetically operated switches
- 4 Main valve
- 5 Pilot block
- 6 Output ports (2&4)
- 7 Air supply
- 8 Exhaust position, do not obstruct
- 9 Without function - do not use
- 10 LED - pilot valve
- 11 Manual override
- 12 Cover for cushion and Speed control adjustment
- 13 Speed control adjustment
- 14 Cushion adjustment rear end cover

Ø	AM	Ø B e11	Ø BA e11	BG	BH	□ E	E2	E3	E4	EE	G	G1	G2	KK	KW	L1	L2	L8	L9	L12
32	22	30	30	16	6	47	27.5	27.5	27.5		14	59	30.5	M10x1.25	5	68.5	20	94	4	6
40	24	35	35	16	6	60	34.5	34	34		14	59	30.5	M12x1.25	6	68.5	21	105	4	6.5
50	32	40	40	16	8	71.5	40	39	39		14	63	34.5	M16x1.5	8	92.5	28	106	5	6.5
63	32	45	45	16	8	82	46	45.5	45.5		19	66	38	M16x1.5	8	91.5	28	121	5	6.5
80	1.57	1.77	1.77	0.67	0.63	3.90	2.13	2.13	2.24	G1/4	0.75	2.93	1.83	M20x1.5	0.39	4.33	1.38	5.04		0.30
80	40	45	45	17	16	99	54	54	57		19	74.5	46.5	M20x1.5	10	110	35	128	-	7.5
100	40	55	55	17	16	119	65	65	65		24.5	81	53	M20x1.5v	10	144.5	38	138	-	10
Ø	Ø MM h9	PL	PL1	PL2	□ R	RT	VA	VD	WH	X1	KV	SW	1	2	at 0 mm lb. kg	per 25 mm lb. kg	Model			
32	12	7	10	3.5	32.5	M6	3	6	26	0	17	10	11	12	0.66	0.07	PRA/882032/MI+/M-/*			
40	16	7	10.5	4	38	M6	3.5	6	30	0	19	13	11	12	1.03	0.11	PRA/882040/MI+/M-/*			
50	20	7	12.5	4	46.5	M8	3.5	6	37	1.5	24	17	13	12	1.58	0.18	PRA/882050/MI+/M-/*			
63	20	9.5	14.5	6	56.5	M8	4	6	37	0	24	17	13	15	2.42	0.19	PRA/882063/MI+/M-/*			
80	25	9.5	14	6	72	M10	4	6	46	6	30	22	17	15	4.12	0.29	PRA/882080/MI+/M-/*			
100	25	12	16.5	8.5	89	M10	4	6	51	6.5	30	22	17	19	6.34	0.35	PRA/882100/MI+/M-/*			

* Please insert standard stroke length mm
+ Please insert valve function
- Please insert switch variants

Dimensions in mm

P*A/882000/MG*/M*/* Cylinder with piston rod bellow



Cyl. Ø	Ø A	Stroke max per bellow	Piston rod extension B		Model
			for first bellow	for further bellows	
32	40	60	30	25	P#A/882032/MG+/M./*
40	63	145	50	32	P#A/882040/MG+/M./*
50	63	145	40	32	P#A/882050/MG+/M./*
63	63	145	40	32	P#A/882063/MG+/M./*
80	80	250	50	45	P#A/882080/MG+/M./*
100	80	250	50	45	P#A/882100/MG+/M./*

* Standard stroke length
 # Piston rod material
 + Valve function

Magnetically operated switches with LED

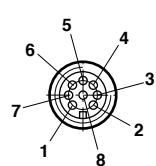
Model	Reed *3)	Solid state	Voltage *2) (VAC)	Voltage (VDC)	Current max. (mA)	Temperature °F (°C)	Features	Cable length (m)	Cable type	Data sheet
M/50/LSU/2V	-	-	10 to 240	10 to 170	180	-4°F to 176°F (-20°C to 80°C)	-	2	PVC 2 x 0.25	N/en 4.3.005
-	-	M/50/EAP/2V	-	10 to 30	150	-40°F to 176°F (-40°C to 80°C)	PNP	2	PVC 3 x 0.25	N/en 4.3.007

*2) Supply voltage 24 VDC (± 10%) max for P.A/88200/M only.
 *3) For use with 32 mm bore - consult factory.

M12 cables

Cable length (m)	Plug with moulded cable IP 67	Y-cable, M12 female 8 pin, 2 x M12 male 4 pin IP67
2	M/P74581/2 (straight)	M/P73201 (0.45 m)
5	M/P74581/5 (straight)	
10	M/P74581/10 (straight)	
2	M/P74582/2 (90°)	
5	M/P74582/5 (90°)	
10	M/P74582/10 (90°)	

Wiring diagram for M12 male connector



Valves		Wiring diagram for connector cable M/P74581/., M/P74582/.		Switches		Wiring diagram for connector cable M/P74581/., M/P74582/.	
Pin 1	Not used	White		Pin 5	+ 24 VDC	Grey	
Pin 2	Solenoid 2 (instroke)	Brown		Pin 6	Switch 2 (rear end cover)	Pink	
Pin 3	0 V	Green		Pin 7	0 V	Blue	
Pin 4	Solenoid 1 (outstroke)	Yellow		Pin 8	Switch 1 (front end cover)	Red	

Dimensions in mm