

- > **Port size: 3/4" ... 1 1/2" (ISO G/PTF)**
- > **Assists machine designers in complying with the European Machineries Directive**
- > **Can help existing machinery to comply with PUWER (Provision and Use of Work Equipment Regulations)**
- > **Controlled increase of downstream pressure on start up**
- > **Solenoid, air pilot or manual operator**
- > **High forward flow capacity**
- > **High flow dump facility**



Technical features

Medium:

Compressed air only

Operating pressure:

3 bar (43 psi) minimum

Solenoid actuated:

10 bar (145 psi) maximum

Pilot actuated:

17 bar (246 psi) maximum

Snap pressure:

Full flow when downstream pressure reaches 50 ... 80% of inlet pressure

Charge time:

For 25 litre (845 fluid oz) downstream volume and 6,3 bar (90 psi) inlet pressure 6,4 sec. minimum 115 sec. maximum

Flow:

147 dm³/s (312 scfm)

(P1 » P2 = Cv 11,2)

(P2 » P3 = Cv >11)

Operating pressure: 6,3 bar (91 psi)

Δp: 0,5 bar (7 psi)

Port sizes:

3/4", 1", 1 1/4" or 1 1/2"

Air pilot port:

G1/4 with ISO G main ports

1/4 PTF with PTF main ports

Exhaust port:

G1 with ISO G main ports

1" PTF with PTF main ports

Gauge port:

1/8 PTF with PTF main ports

Rc1/8 with ISO G main ports

Ambient/Media temperature:

Solenoid actuated:

-20° ... +50°C (-4 ... +149°F)

Pilot actuated:

-20° ... +80°C (-4 ... +176°F)

Version with gauge:

-20° ... +65°C (-4° ... +149°F)

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

Materials:

Body, yoke, top and bottom plate:

Aluminium

Filter discs: Sintered plastic

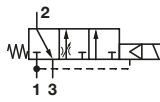
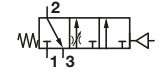
Internal components: Brass/steel

Elastomers: NBR

Electrical details for solenoid operators


Voltage tolerance	± 10%
Rating	100% continuous duty
Inlet orifice	1,0 mm
Electrical connection	Industrial Standard, 22 mm
Solenoid coil mounting	Four positions x 90°
Protection class	IP 65 (with sealed plug)

Technical data - standard models

Symbol	Port size	Size	Actuation/return	Voltage	Pilot port	Weight (kg)	Typ
	G3/4	—	Solenoid/spring	24 V d.c.	—	2,95	P68F-6GC-PFA *1)
	G1	—	Solenoid/spring	24 V d.c.	—	2,93	P68F-8GC-PFA *1)
	G1 1/4	Basic	Solenoid/spring	24 V d.c.	—	2,90	P68F-AGC-PFA *1)
	G1 1/2	—	Solenoid/spring	24 V d.c.	—	2,92	P68F-BGC-PFA *1)
	Without yoke	—	Solenoid/spring	24 V d.c.	—	—	P68F-BGC-PFA *1)
	G3/4	—	Air/spring	—	1/4"	2,77	P68F-6GA-NNN
	G1	—	Air/spring	—	1/4	2,75	P68F-8GA-NNN
	G1 1/4	Basic	Air/spring	—	1/4	2,72	P68F-AGA-NNN
	G1 1/2	—	Air/spring	—	1/4	2,74	P68F-BGA-NNN
	Without yoke	—	Air/spring	—	1/4	—	P68F-NNA-NNN

*1) To select other solenoid type and coil voltage refer to option selector on page 2

Voltage codes and spare coils

22 mm coil for connector interface acc. to industrial standard				
	Voltage	Power Inrush/Hold	Model	Code
	12 V d.c.	2 W	QM/48/12J/21	12J
	24 V d.c.	2 W	QM/48/13J/21	13J
	110/120 V 50/60 Hz	4/2,5 VA	QM/48/18J/21	18J
	220/240 V 50/60 Hz	6/5,0 VA	QM/48/19J/21	19J

Connector plugs



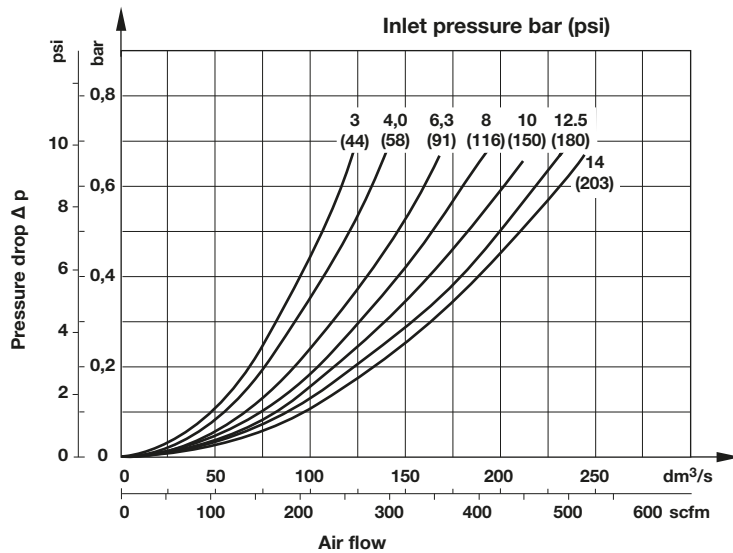
Option selector

P68F-★-★-★-★-★-★-★-★

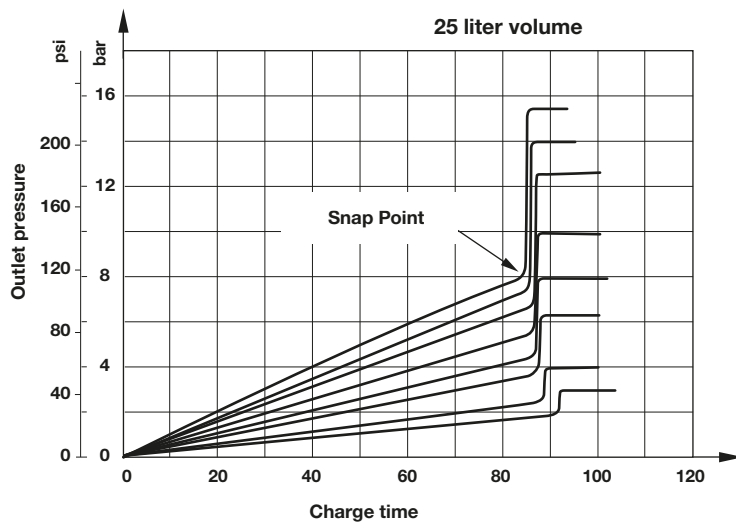
Port size	Substitute
3/4"	6
1"	8
1 1/4"	A
1 1/2"	B
Without yoke	N
Threads	Substitute
PTF	A
ISO G parallel (standard)	G
No yoke (standard)	N
Operator	Substitute
Air pilot (standard)	A
Air pilot with manual lockout	B
22 mm solenoid (standard)	C
22 mm solenoid with manual lockout	D

Connector	Substitute	
3 pin plug with cable gland	A	
Without	N	
Voltage	Watts	Substitute
24 V d.c.	2 W	F
12 V d.c.	2 W	E
6 V d.c.	2 W	D
220/240 V, 50/60 Hz	4/2,5 VA	B
110/120 V, 50/60 Hz	4/2,5 VA	A
No coil	-	Z
No solenoid	-	N
Manual override	Substitute	
Non-locking, shrouded push button	P	
None	N	

Flow characteristics



Maximum charge time



Accessories

	Single yoke	Double yoke	End connector kit	Single yoke non threads	3/2 Shut-off valve Threaded inlet only	Threaded outlet only	Bracket mounting
Thread							
G3/4	Y68A-6GN-N1N	Y68A-6GN-N2N	5524-55	74785-98	T68H-6GB-B2N	T68H-6GC-B2N	18-001-979
G1	Y68A-8GN-N1N	Y68A-8GN-N2N	5524-52		T68H-8GB-B2N	T68H-8GC-B2N	18-001-979
G1 1/4	Y68A-AGN-N1N	Y68A-AGN-N2N	5523-52		T68H-AGB-B2N	T68H-AGC-B2N	18-001-978
G1 1/2	Y68A-BGN-N1N	Y68A-BGN-N2N	5523-93		T68H-BGB-B2N	T68H-BGC-B2N	18-001-972
3/4 PTF	Y68A-6AN-N1N	Y68A-6AN-N2N	5524-53		T68H-6AB-B2N	T68H-6AC-B2N	18-001-979
1 PTF	Y68A-8AN-N1N	Y68A-8AN-N2N	5524-50		T68H-8AB-B2N	T68H-8AC-B2N	18-001-979
1 1/4 PTF	Y68A-AAN-N1N	Y68A-AAN-N2N	5523-50		T68H-AAB-B2N	T68H-AAC-B2N	18-001-978
1 1/2 PTF	Y68A-BAN-N1N	Y68A-BAN-N2N	5523-95		T68H-BAB-B2N	T68H-BAC-B2N	18-001-972

Nut	Silencer	Porting block
5520-89	MB008B (R1) MB008A (1 NPT)	18-026-986 (G1/4 & G1/2) 18-026-983 (1/4 & 1/2 NPT)

Gauges

Center back connection, white face (full technical specification see datasheet 8.900.900)



Pressure range bar *1	Mpa	psi	Ø	Thread size	Model
0 ... 4	0 ... 0,4	0 ... 58	50 mm	R1/8	18-013-011
0 ... 10	0 ... 1	0 ... 145	50 mm	R1/8	18-013-013
0 ... 25	0 ... 2,5	0 ... 362	50 mm	R1/8	18-013-014

*1) primary scale

Center back connection, black face for North America (full technical specification see datasheet 8.900.900)



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Pressure range psig *1	bar	Mpa	Ø	Thread size	Model
0 ... 60	0 ... 4	0 ... 0,4	2" (50 mm)	1/8 NPT	18-013-202
0 ... 160	0 ... 11	0 ... 1,1	2" (50 mm)	1/8 NPT	18-013-204
0 ... 400	0 ... 28	0 ... 2,8	2" (50 mm)	1/8 NPT	18-013-206

*1) primary scale

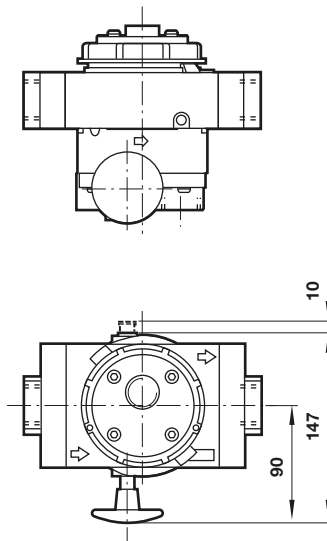
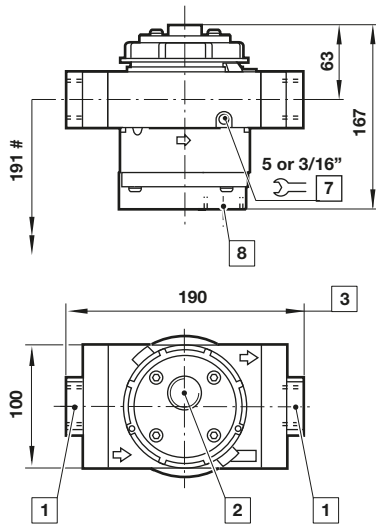
Dimensions

**Pilot actuated
Standard**

Dimensions in mm
Projection/First angle

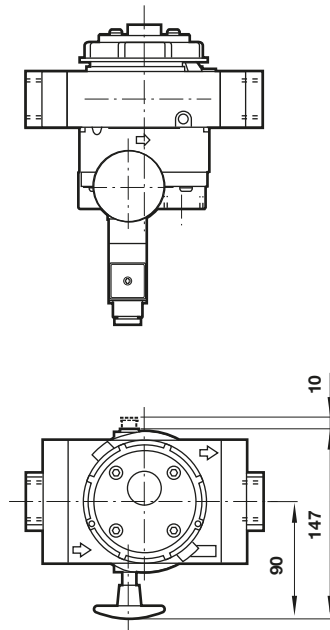
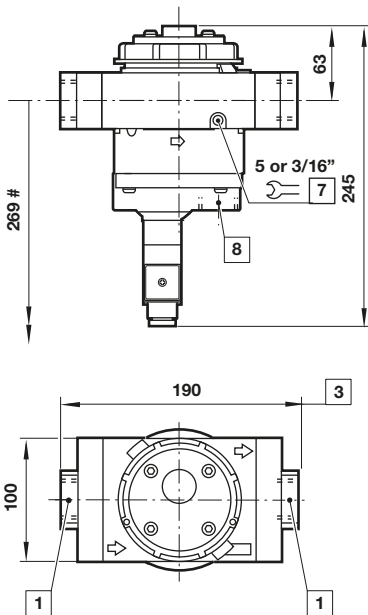


With manual lockout



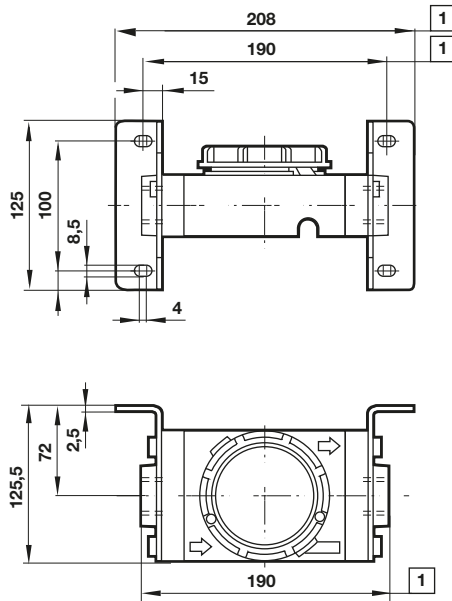
**Solenoid actuated
Standard**

With manual lockout



Minimum clearance required to remove unit from yoke

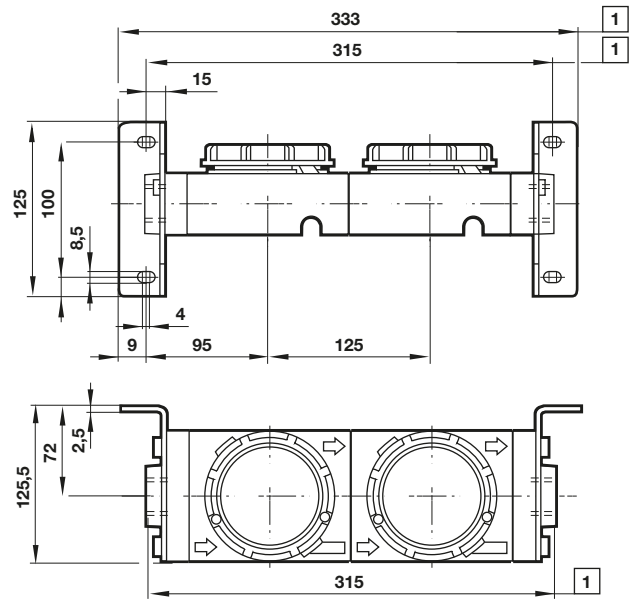
- 1 Main ports 3/4", 1", 1 1/4" or 1 1/2"
- 2 Pilot port 1/4"
- 3 Plus 10 mm for ports 1 1/4" or 1 1/2"
- 7 Gauge port 1/8"
- 8 Exhaust port 1"

Single yoke with bracket


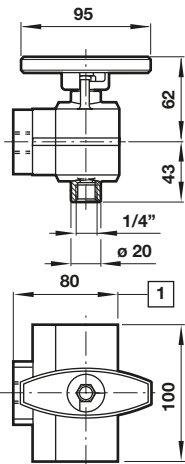
1 For 1 1/4" and 1 1/2" ported yokes add 10 mm

Double yoke with bracket

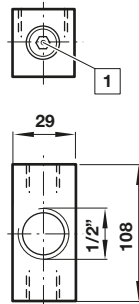
Dimensions in mm
Projection/First angle



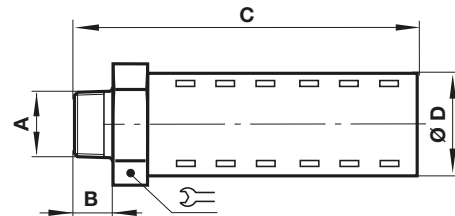
1 For 1 1/4" and 1 1/2" ported yokes add 10 mm

3/2 Shut-off valve


1 For 1 1/2" ported yokes add 5 mm

Porting block


1 Two additional plugged G1/4 ports

Silencer


A	B	C	D		Model
R1	23	138	51	51	MB008B
1 NPT	23	138	51	51	MB008A

Warning

EN

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, IMI International s.r.o.

Through misuse, age, or malfunction, components used in fluid

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