P64F - Olympian Plus plug-in system Soft start/dump valves

- **Port size: 1/4" ... 3/4" (ISO G/PTF)**
- **Assists machine designers in complying with the European Machineries Directive**
- **Controlled increase of downstream pressure on start up**
- **Solenoid, air pilot or manual operator**
- **High forward flow and capacity dump facility**

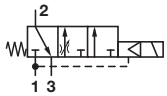
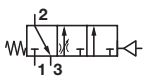
Technical features

Medium:
Compressed air only
Operating pressure:
3 bar (43 psi) minimum
10 bar (145 psi) (Solenoid operated)
17 bar (246 psi) (Pilot operated)
Snap pressure:
Full flow when downstream pressure reaches 50 ... 80% of inlet pressure
Charge time:
For 2 litre downstream volume and 6,3 bar (90 psi) inlet pressure
0,2 sec. minimum
75 sec. maximum
Flow:
57 dm^3/s
Operating pressure: 6,3 bar (91 psi) Δp: 0,5 bar (7 psi)
Port sizes:
1/4", 3/8", 1/2" or 3/4"
Air pilot port:
1/4 PTF with PTF main ports
Rc1/4 with ISO G main ports
Exhaust port:
1/2 PTF with PTF main ports
G1/2 with ISO G main ports
Gauge port:
1/8 PTF with PTF main ports
Rc1/8 with ISO G main ports
Standard compliances:
II 2G Ex h IIC T6 Gb
II 2D Ex h IIIC T85° Db
Ambient/Media temperature:
Solenoid actuated:
-20° ... +50°C (-4° ... +122°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: Zinc alloy
Intermediate body: Aluminium
Top plate: Zinc
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
	G1/4	–	Solenoid/spring	24 V d.c.	–	2,07	P64F-2GC-PFN *1)
	G3/8	–	Solenoid/spring	24 V d.c.	–	2,05	P64F-3GC-PFN *1)
	G1/2	Basic	Solenoid/spring	24 V d.c.	–	2,02	P64F-4GC-PFN *1)
	G3/4	–	Solenoid/spring	24 V d.c.	–	2,38	P64F-6GC-PFN *1)
	Without yoke		Solenoid/spring	24 V d.c.	–	1,59	P64F-NNC-PFN *1)
	G1/4	–	Air/spring	–	Rc1/4	1,69	P64F-2GA-NNN
	G3/8	–	Air/spring	–	Rc1/4	1,94	P64F-3GA-NNN
	G1/2	Basic	Air/spring	–	Rc1/4	1,91	P64F-4GA-NNN
	G3/4	–	Air/spring	–	Rc1/4	2,27	P64F-6GA-NNN
	Without yoke		Air/spring	–	Rc1/4	1,45	P64F-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

Industrial standard
22 mm 2-pole + PE

0657868

Option selector

P64F-★★★-★★★

Port size	Substitute
1/4"	2
3/8"	3
1/2"	4
3/4"	6
No yoke	N

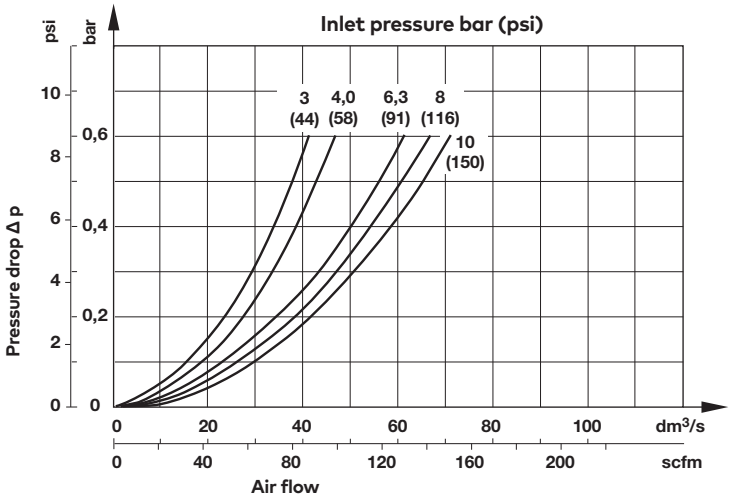
Threads	Substitute
PTF	A
ISO G parallel (standard)	G
No yoke (standard)	N

Operator	Substitute
Air pilot (standard)	A
Air pilot with manual lockout	B
22 mm solenoid (standard)	C
22 mm solenoid with manual lockout	D

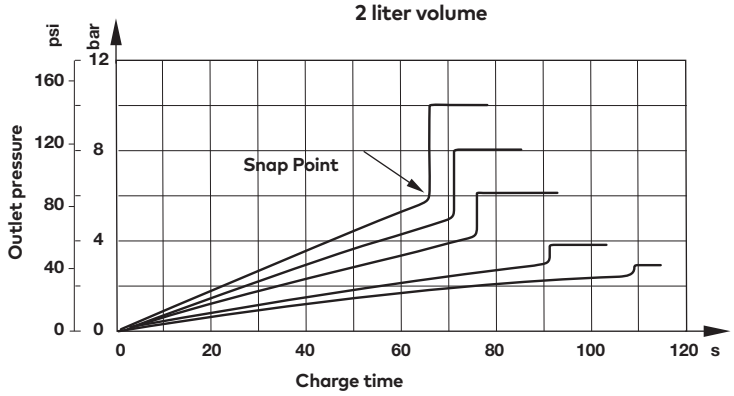
Connector		Substitute
With		A
Without		N
Voltage	**Watts**	**Substitute**
24 V d.c.	2 W	F
12 V d.c.	2 W	E
6 V d.c.	2 W	D
220/240 V, 50/60 Hz	6/5,0 VA	B
110/120 V, 50/60 Hz	4/2,5 VA	A
No coil	–	Z
No solenoid	–	N

Solenoid manual operator	Substitute
Non-locking, shrouded push button	P
None	N

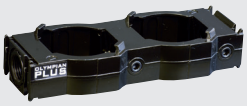
Flow characteristics



Maximum charge time



Accessories

Thread	Models with G-thread Single yoke	Double yoke	3/2 Shut-off valve Threaded inlet only	Threaded outlet only	End connector kit	Rear entry bracket kit
						
G1/4	Y64A-2GA-N1N	Y64A-2GA-N2N	T64T-2GB-P1N	T64T-2GC-P1N	–	–
G3/8	Y64A-3GA-N1N	Y64A-3GA-N2N	T64T-3GB-P1N	T64T-3GC-P1N	–	–
G1/2	Y64A-4GA-N1N	Y64A-4GA-N2N	T64T-4GB-P1N	T64T-4GC-P1N	74505-50	–
G3/4	Y64A-6GA-N1N*	Y64A-6GA-N2N*	T64T-6GB-P1N	T64T-6GC-P1N	74505-53	18-026-981
1/4 PTF	Y64A-2AA-N1N	Y64A-2AA-N2N	T64T-2AB-P1N	T64T-2AC-P1N	–	–
3/8 PTF	Y64A-3AA-N1N	Y64A-3AA-N2N	T64T-3AB-P1N	T64T-3AC-P1N	–	–
1/2 PTF	Y64A-4AA-N1N	Y64A-4AA-N2N	T64T-4AB-P1N	T64T-4AC-P1N	74505-52	–
3/4 PTF	Y64A-6AA-N1N*	Y64A-6AA-N2N*	T64T-6AB-P1N	T64T-6AC-P1N	74505-55	–

*These yokes are supplied with two end connenctor kits as standard.

Bracket mounting	Nut	Silencer	Yoke connector kit	Porting block	Padlock with two keys
					
74504-50	74502-89	MB004B (R1/2)	74503-51	74507-50	0613633 (brass)
		MB004A (1/2 NPT)			

Gauges

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

6

Pressure range bar *1	MPa	psi	Ø	Thread size	Model
0 ... 10	0 ... 1	0 ... 145	50 mm	R1/8	18-015-013
0 ... 25	0 ... 2,5	0 ... 362	50 mm	R1/8	18-015-014

*1) primary scale

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

6

Pressure range psig *1	bar	MPa	Ø	Thread size	Model
0 ... 160	0 ... 11	0 ... 1.1	2" (50 mm)	1/8 NPT	18-015-204
0 ... 400	0 ... 28	0 ... 2.8	2" (50 mm)	1/8 NPT	18-015-206

*1) primary scale

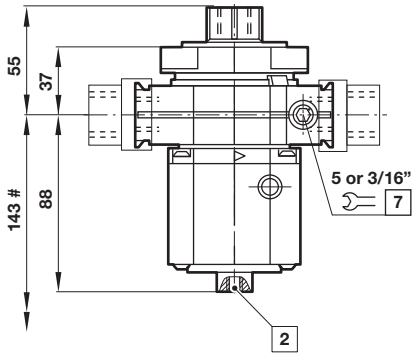
NORGREN

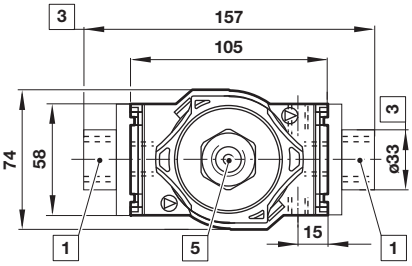
Dimensions

Dimensions in mm
Projection/First angle

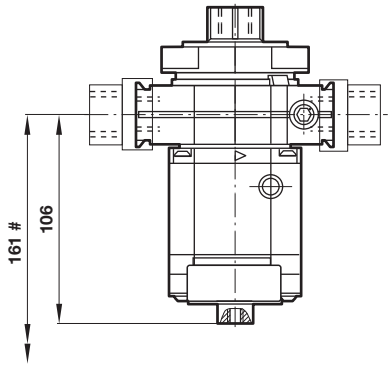
Pilot actuated

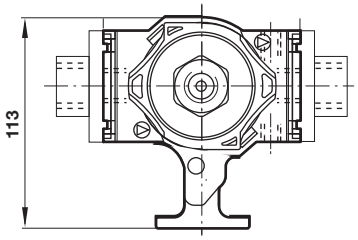
Standard





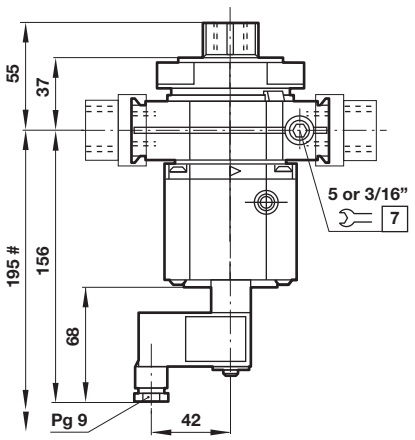
With manual lockout

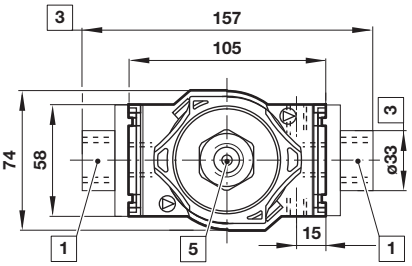




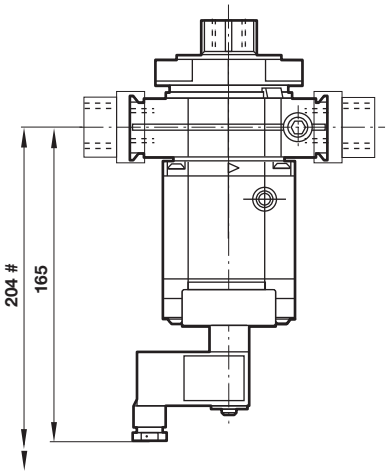
Solenoid actuated

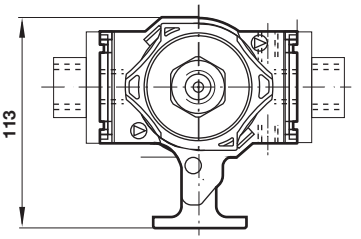
Standard





With manual lockout

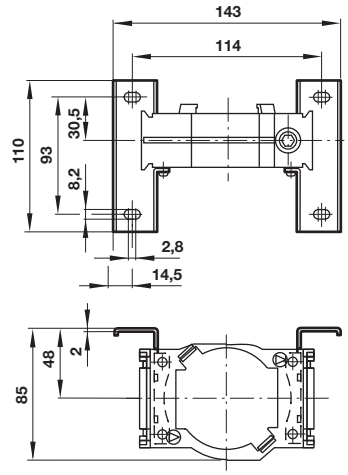




Minimum clearance required to remove unit from yoke

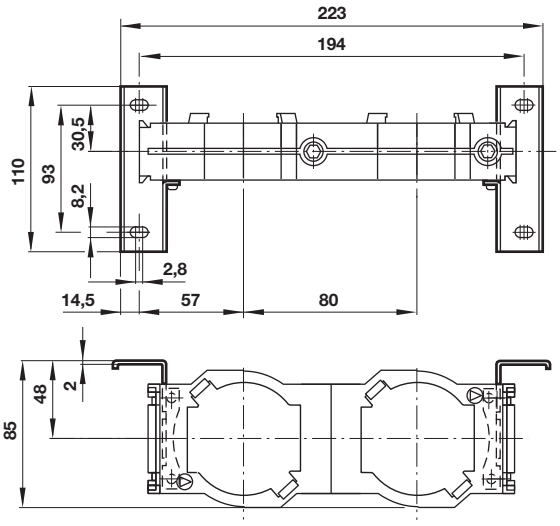
1 Main ports 1/4", 3/8", 1/2" or 3/4"
2 Pilot port Rc1/4
3 For main ports 3/4" only
5 Exhaust port 1/2"
7 Gauge port 1/8"

Single yoke with bracket mounting

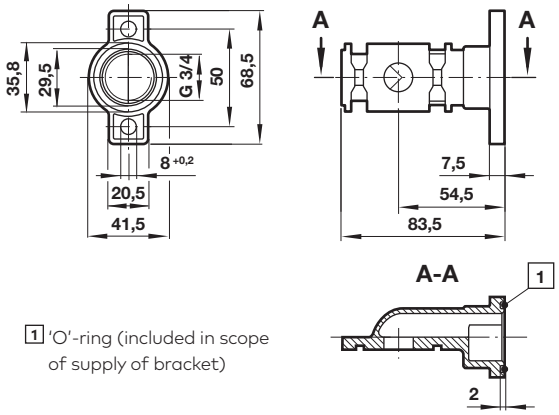


Double yoke with bracket mounting

Dimensions in mm
Projection/First angle

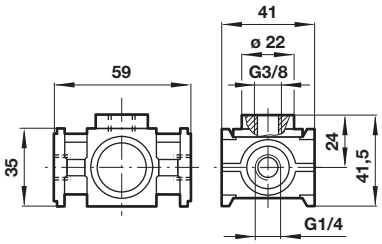


Rear entry bracket
18-026-981

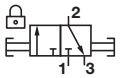


1 'O'-ring (included in scope of supply of bracket)

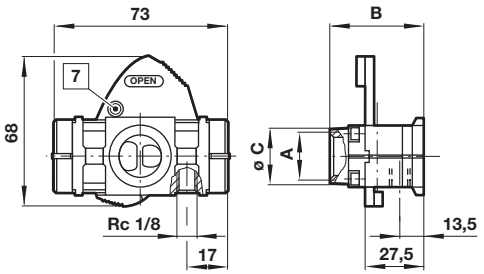
Porting block
74507-50



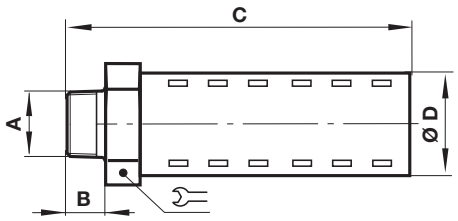
3/2 Shut-off valve

Symbol	A	B	ø C	Model
	G1/4	48	27	T64T-2G*-P1N
	G3/8	48	27	T64T-3G*-P1N
	G1/2	48	27	T64T-4G*-P1N
	G3/4	51	33	T64T-6G*-P1N

* B = Threaded inlet only, C = Threaded outlet only



Silencer



Dimensions in mm
Projection/First angle

A	B	C	D	⌯	Model
R1/2	17	92	32	32	MB004B
1/2 NPT	17	92	32	32	MB004A

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.
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.