3/2-Way; 1/8˝ and 1/4˝ NPT Connection

Advantages/Benefits

- **Lower cost of ownership**
- **Quick and direct mounting to process valves**
- **Low power consumption, direct connection to PLC possible**
- **Any desired mounting position**
- **Coil can be changed easily with valve in place**
- **Coil can be locked every 90° or move freely between, as required**
- **Compact design**
- **Wide range of cable plugs and options**

Design/Function

The banjo valve concept offers a unique, quick method of mounting single pilot valves directly to pneumatic actuators. The banjo assembly threads directly into the supply pressure port of the actuator utilizing a gasket seal. This permits mounting of the pilots in any position while eliminating the need for extra fittings and tubing.

When used with banjo assemblies, valve Types 6012 and 6014 provide increased serviceability with their modular, pushover coil, and can be locked in any position. The banjo valve design offers flexibility to satisfy many application requirements, C_v values to .13 and pressures to 230 PSI.

Power is connected via three standard cable plugs, DIN 43 650 forms A, B and C. Valve type 6014 is also available with 1/2˝ conduit connection and EEx m II T6 (See separate data sheet for EEx valves).

Applications

Fluids

Neutral gases and compressed air

Applications

- Pneumatic control
- Pilot control valve for pneumatic controlled process valves

Burkert Contromatic USA
2602 McGaw Avenue
Irvine, CA 92614
Tel. 949.223.3100
Fax 949.223.3198
www.burkert-usa.com

Burkert Contromatic Inc.
760 Pacific Road, Unit 3
Oakville, Ontario, Canada
L6L 6M5
Tel. (905) 847-5566
Fax (905) 847-9006

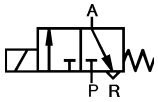
bürkert
Easy Fluid Control Solutions

Technical Data Type 6012

Circuit Function

C – 3/2-way valve,
when de-energized, outlet A
pressure relieved

Symbol



Operating Data (Valve) - Type 300, 6012

Pressure range	0-145 PSI max. (see specifications)
Port connection	see specifications
Orifice	3/64″
Material:	
Valve body	Polyamide (PA)
Banjo bolt	Brass, nickel plated
Seal material	NBR
Fluid	Neutral gases and compressed air
Medium temperature	14°F to 212°F (–10°C to 100°C)
Max. ambient temperature	130°F (55°C)
Response times	
opening	7-10 ms (AC), 7-12 ms (DC)
closing	9-12 ms (AC), 7-12 ms (DC)

Operating Data (Actuator) - Type 300, 6012

Operating voltages	AC: 24, 120, 240 V/60 Hz, DC: 24
Voltage tolerance	±10%
Power consumption	AC inrush: 9 VA; AC hold: 6 VA/4 W; DC: 4 W
Duty cycle	100% continuously rated
Protection class with cable plug	NEMA 4 (IP 65)
Electrical connection	Type 300: Cable plug DIN 43 650, Form B Type 6012: Cable plug DIN 43 650, Form C

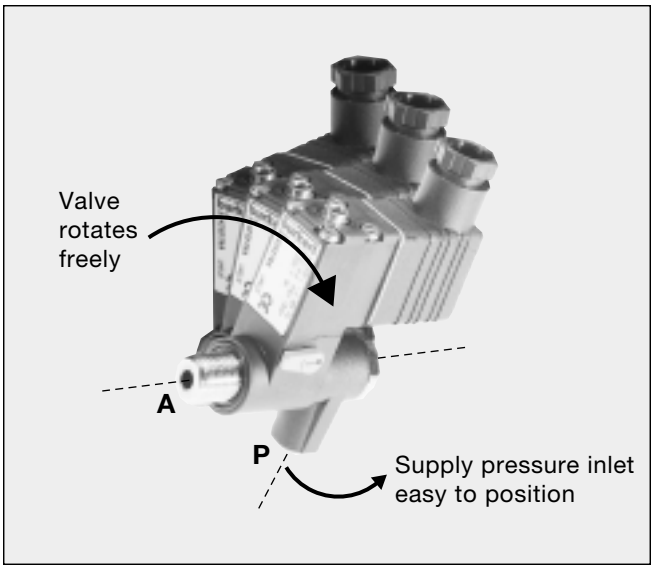
Operating Data (Valve) - Type 6014

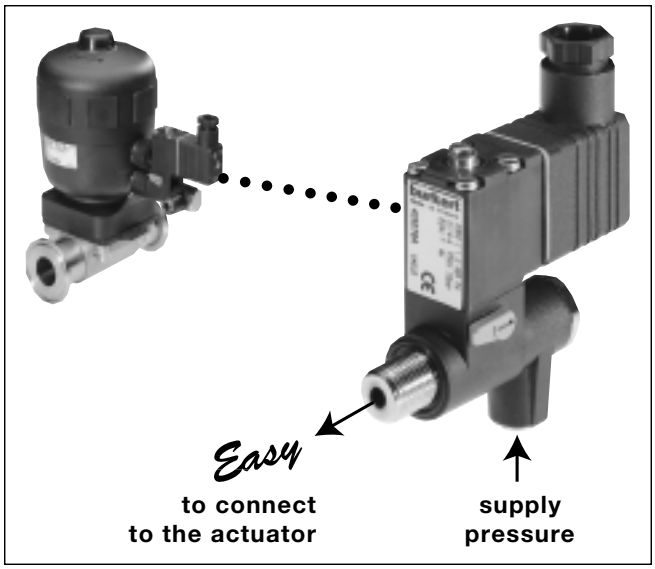
Pressure range	230 PSI max. (see specifications)
Port connection	See specifications
Orifice	1/16″ to 5/64″
Material:	
Valve body	Polyamide (PA) or brass
Banjo coupler	Aluminum, anodized
Banjo bolt	Brass, nickel plated
Seal material	FPM (Viton)
Fluid	Neutral gases and compressed air
Medium temperature	14°F to 212°F (–10°C to 100°C)
Max. ambient temperature	130°F (+55°C)
Response times	
opening	1/16″ orifice (25 ms) 5/64″ orifice (18 ms)
closing	1/16″ orifice (35 ms) 5/64″ orifice (22 ms)

Operating Data (Actuator) - Type 6014

Operating voltages	AC: 24, 110, 230 V/60 Hz, DC: 24
Voltage tolerance	±10%
Power consumption	AC inrush / AC hold / DC
(0-85 PSI)	11 VA / 6 VA/ 2W / 2W
(0-145 PSI)	24 VA / 17VA/ 8W / 8W
Duty cycle	100% continuously rated
Protection class with cable plug	NEMA 4 (IP 65)
Electrical connection	Type 6014: Cable plug DIN 43 650, Form A

Installation





Specifications - Ordering Chart (Other Versions on Request)

Type 6012, Seal Material NBR, Cable Plug DIN 43 650 Form C, Manual Override Standard

Port connection (P)	Port connection (A)	Orifice [inch]	Pressure Range [PSI]	Body-material	Seal-material	Cable-plug Form	ITEM-NO. Voltage / Frequency [V/Hz] 24/DC	24/50-60	120/60	240/60
NPT 1/4	G 1/8	3/64	0-145	PA	NBR	C	427 923 B	427 924 C	428 551 X	428 552 Y
NPT 1/4	G 1/8	3/64	0-145	PA	NBR	C	428 565 V	428 566 W	428 567 X	428 568 G

Type 300, Seal Material NBR, Cable Plug DIN 43 650 Form B, Manual Override Standard

Port connection (P)	Port connection (A)	Orifice [inch]	Pressure Range [PSI]	Body-material	Seal-material	Cable-plug Form	ITEM-NO. Voltage / Frequency [V/Hz] 24/DC	24/50-60	120/60	240/60
NPT 1/4	G 1/8	3/64	0-145	PA	NBR	B	429 122 J	429 123 K	429 124 L	429 125 M
NPT 1/4	G 1/4	3/64	0-145	PA	NBR	B	429 118 W	429 119 X	429 120 U	429 121 R

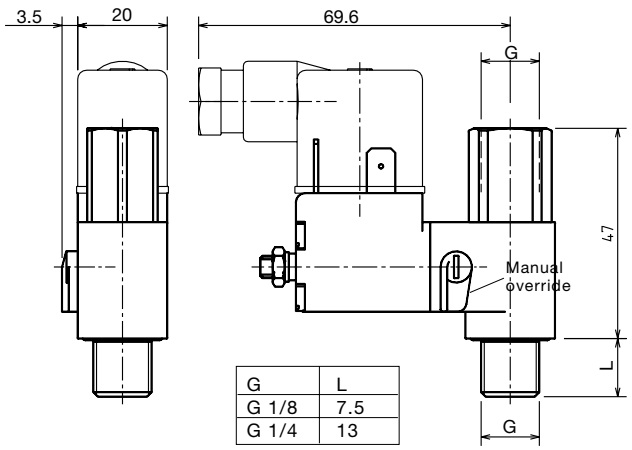
Type 6014, Seal Material FPM (Viton), Cable Plug DIN 43 650 Form A, Manual Override Standard

Port connection (P)	Port connection (A)	Orifice [inch]	Pressure Range [PSI]	Body-material	Seal-material	Cable-plug Form*	ITEM-NO. Voltage / Frequency [V/Hz] 24/DC	24/60	120/60	240/60
NPT 1/4	G 1/4	1/16	0-230	PA	FPM	A	429 138 S	429 139 T	429 140 G	429 141 V
NPT 1/4	G 1/4	5/64	0-145	Brass	FPM	A	429 134 N	429 135 P	429 136 Q	429 137 R

* Also Available with "H" plug for UL Listed and FM Approved
CL.I Div 2 Groups A,B,C & D
**2 Watt Coil

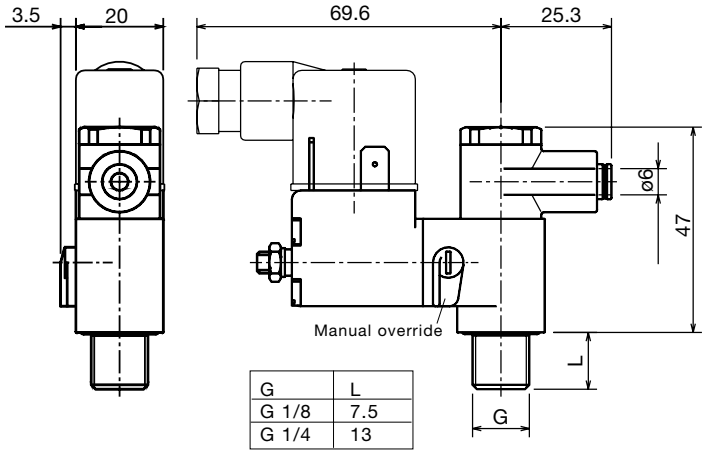
Dimensions [mm]

Type 300, G-Port Connection



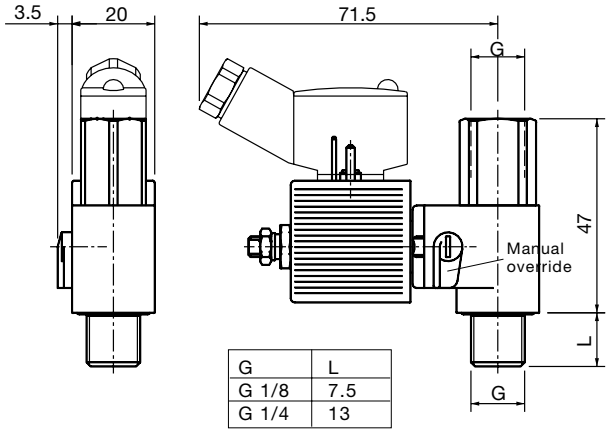
G	L
G 1/8	7.5
G 1/4	13

Type 300, Tube Push-In Connection



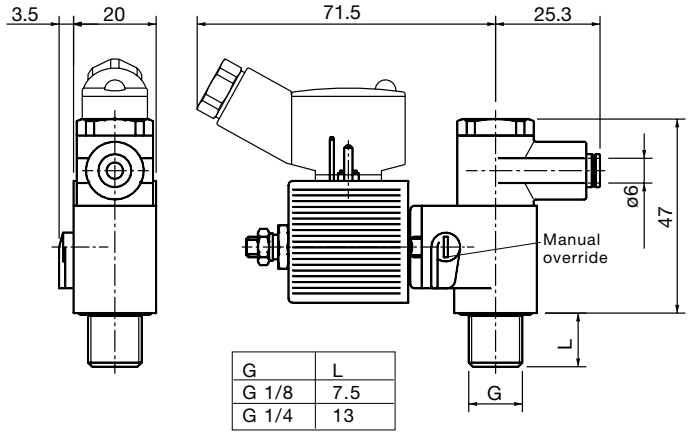
G	L
G 1/8	7.5
G 1/4	13

Type 6012, G-Port Connection



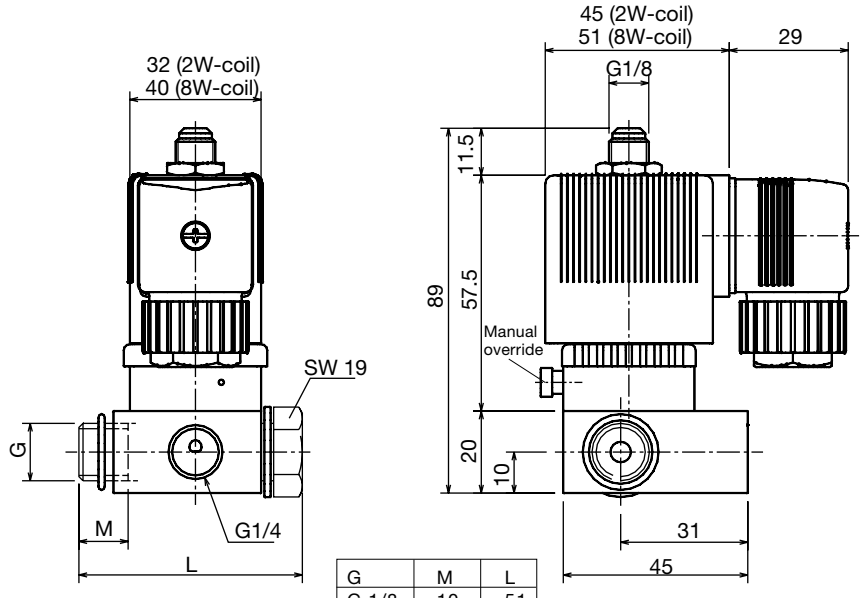
G	L
G 1/8	7.5
G 1/4	13

Type 6012, Tube Push-In Connection



G	L
G 1/8	7.5
G 1/4	13

Type 6014, G-Port Connection



G	M	L
G 1/8	10	51
G 1/4	12	54

In case of special requirements please consult for advice.

We reserve the right to make technical changes without notice.

US_Banjo_10/00