

3/2-Way; Sub-Base Connection; 1/16" - 5/64"



### Advantages/Benefits

- ▶ Coil can be changed easy with valve in place
- ▶ Coil can be locked in 4x 90° positions or move freely between, as required
- ▶ Medium is only in contact with the valve internals and body
- ▶ High-quality seal material FPM (Viton) standard
- ▶ Wide range of cable plug options Type 2508
- ▶ Approvals



### Design/Function

The valves are based on a modular concept comprising three basic elements; Valve assembly, push-over coil and standard cable plug. The valve assembly consists of a body to which the armature guide tube containing the plunger, seals and springs is attached. The coil is pushed over the guide tube and thus isolated from the medium. The medium is only in contact with the valve internals and body.

A wide selection of pipe and orifice sizes is offered. Valves are available in brass. All valves have high quality FPM (Viton) seals as standard.

To simplify ordering, a wide selection of standard combinations of valve body, push over coil and standard cable plug can be ordered with one item number.

Cable plug options of the Type 2508 are available to suit special electrical application requirements.

- The modular concept provides flexibility to meet application requirements.
- The valves are interchangeable with the Type 312.

### Applications

#### Fluids

Neutral gases and liquids, e.g. compressed air, town gas, natural gas, water, hydraulic oil, petrol.

Suitable for technical vacuum

#### Applications

- Pneumatic control
- Shut-off, dosing, filling and ventilating
- Small-scale instruments, laboratory and measuring technology
- Welding technology



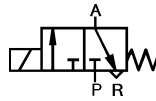
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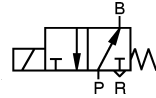
### Technical Data Type 6014

#### Circuit Function

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



**D** 3/2-way valve,  
when de-energized, outlet B  
pressurized



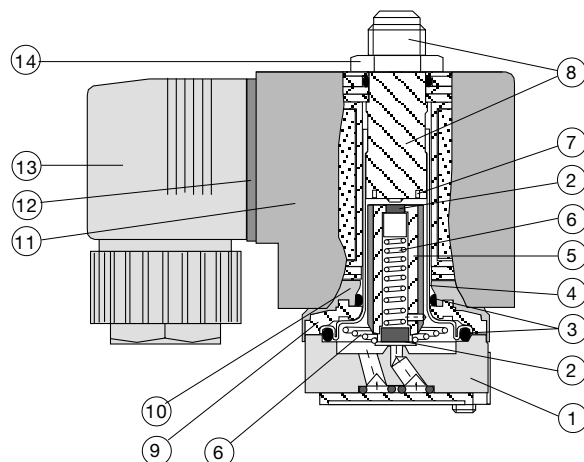
#### Operating Data (Valve)

Pressure range	0-72 PSI (see specifications)
Port connection	Sub-base connection
Orifice	1/16" - 5/64"
Fluid	Neutral gases and liquids, e.g. compressed air, town gas, neutral gas, water, hydraulic oil, petrol.  Suitable for techn. vacuum.
Medium temperature	14°F +212°F
Max. ambient temperature	131°F
Max. viscosity	21 cSt
Response times opening closing	AC 10-15 ms; DC 15-20 ms AC 15-20 ms; DC 10-22 ms
Installation	as required, but preferably with solenoid system upright

#### Operating Data (Actuator)

Operating voltages	AC 24, 110, 230 V/50 Hz, DC 12, 24 VDC
Voltage tolerance	±10 %
Power consumption 32 mm-coil	AC inrush   AC hold   DC 24 VA   17 VA/8 W   8 W
Duty cycle Duty cycle for multiple manifolds	100% continuously rated 60% for manifold mounting (30 min) or use 5W-version (on request)
Cycling rate	up to 1 200 c.p.m.
Coil Insulation Class U.L. Recognized U.L. Listed	Class B Molded Class H Molded
Rating with cable plug	NEMA (IP 65)
Electr. connection	Delivery standard: Cable plug DIN 43 650 A, 0-250 V. (Other versions see accessories)
Agency approval	U.L. Recognized, U.L. Listed FM Class I, Div 2, Group A, B, C, D

#### Materials



1 Valve body:	Brass
2 Plunger seal:	FPM (Viton)
3 O-rings:	FPM (Viton)
4 Armature guide tube:	308 SS
5 Plunger:	430F SS
6 Spring:	301 SS
7 Shading ring:	Cu (copper)
8 Stopper:	430F SS
9 Flange:	Zn3 gl cC (surface)
10 Bonnet:	Durethan BKV30H
11 Coil:	PA (Polyamide)
12 Flat seal:	NBR
13 Cable plug:	PA (Polyamide)
14 Locknut:	Zinc plated steel

Specifications - Ordering Chart

Type 6014; Sub-Base Connection Versions

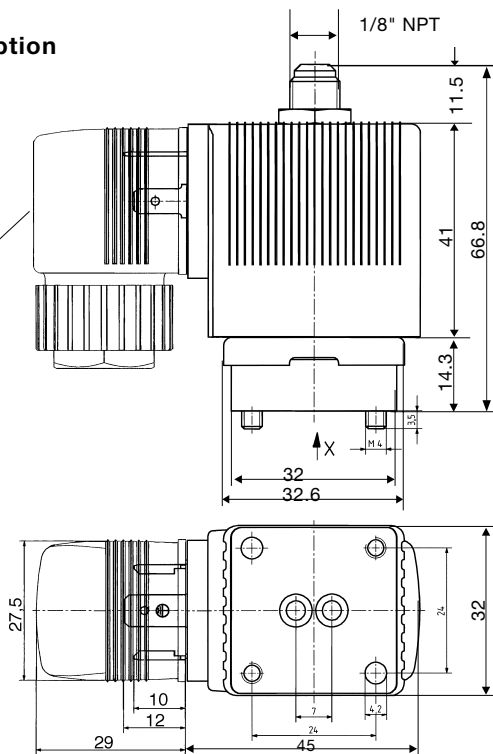
Circuit Function	Orifice [inch]	C <sub>v</sub>	Pressure Range [PSI]	Voltage/ Frequency [V/Hz]	Weight [oz.]	Item Number			
						U.L. Recognized with Cable Plug		U.L. Listed with Conduit Plug	
						Brass	Stainless	Brass	Stainless
C	1/16	0.08	0-232	24DC	12	456 408 D	456 396 Y	456 622 S	*
				24/60		456 409 E	456 397 Z	456 623 T	*
				120/60		456 410 S	456 398 A	456 624 U	*
				240/60		456 411 P	456 418 W	456 625 V	*
	5/64	0.13	0-145	24DC	12	456 412 Q	*	456 626 W	*
				24/60		456 413 R	*	456 627 X	*
				120/60		456 414 J	*	456 628 G	*
				240/60		456 415 K	*	456 629 H	*
C w/manual override	1/16	0.08	0-232	24DC	12	456 416 L	456 419 X	456 630 E	*
				24/60		456 417 M	456 420 U	456 631 T	*
				120/60		456 382 S	456 421 R	456 632 U	*
				240/60		456 383 T	456 422 J	456 633 V	*
	5/64	0.13	0-145	24DC	12	456 384 U	*	456 634 W	*
				24/60		456 385 V	*	456 635 X	*
				120/60		456 386 W	*	456 636 Y	*
				240/60		456 387 X	*	456 637 Z	*
D	1/16	0.08	0-232	24DC	12	456 388 G	*	456 638 A	*
				24/50		456 389 H	*	456 639 B	*
				120/60		456 390 E	*	456 640 Q	*
				240/60		456 391 T	*	456 641 D	*
	5/64	0.13	0-145	24DC	12	456 392 U	*	456 642 E	*
				24/60		456 393 V	*	456 643 F	*
				120/60		456 394 W	*	456 644 G	*
				240/60		456 395 X	*	456 645 H	*

<sup>1)</sup> Pressure reduced to 0-87 PSI due to 2 watt coil supplied as standard with the Polyamide body.  
\* Please contact Burkert for these configurations.

Dimensions (in mm)

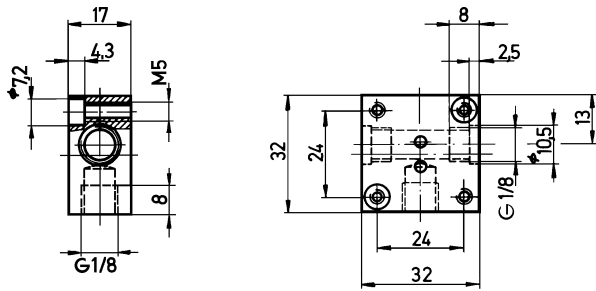
Solenoid coil, 8W power consumption

Cable plug DIN 43650,  
form A (0-250 V AC/DC)  
delivery standard



Dimensions Accessories (in mm)

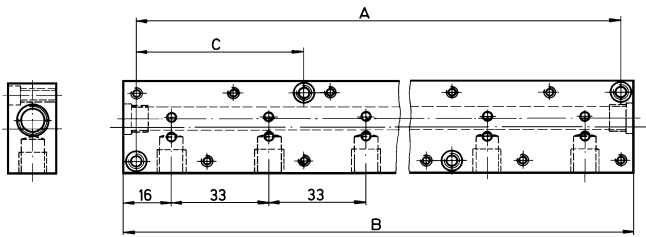
Single Manifold



Multiple Manifold

Manifolds mounted 5W-versions should be 100% continuously rated. 8W-versions should be limited to 60% duty cycle, 30 min switch-on time. The pressure port of the manifold is marked with P (R), the outlet port with A (B). Only similar ports can be coupled together. 3/2-way valves Type 6014 in circuit function C (not D and T) can be used with 2/2-way valve Type 6013, if the applied pressure corresponds to the valve. Unused connections to be plugged (see accessories). Manifolds may be coupled together using special push-fit O-ring connection nipples for linking the pressure inlets P (R). Manifolds joined together in this way should be securely mounted.

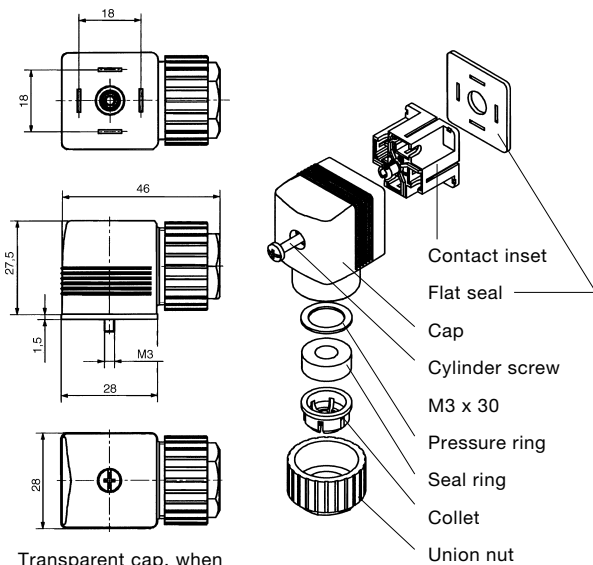
Multiple Manifold



Ordering Chart for Manifolds [inch (mm)]

Version	Hole Spacing A	Overall Length B	Hole Spacing C	Item Number
1 valve	0.94 (24)	1.26 (32)	—	613 827 M
2 valves	2.24 (57)	2.56 (65)	—	006 104 V
3 valves	3.54 (90)	3.86 (98)	—	613 828 W
4 valves	4.84 (123)	5.16 (131)	—	006 106 X
5 valves	6.14 (156)	6.46 (164)	2.24 (57)	613 829 X
6 valves	7.44 (189)	7.75 (197)	2.24 (57)	613 598 Y
8 valves	10.04 (255)	10.35 (263)	2.24 (57)	613 831 R

Standard Cable Plug



Transparent cap, when wired with LED

Ordering Chart Accessories

Accessory	Features	Order-No.
Cable-plugs <sup>1)</sup> Type 2508	Standard cable plug, 0–250 V AC/DC (standard-delivery) <sup>1)</sup>	008 376 N
	with LED, 12–24 V AC/DC	008 360 S
	with LED, 100–120 V AC/DC	008 361 P
	with LED + Varistor, 12–24 V AC/DC	008 367 M
	with LED + Varistor, 100–120 V AC/DC	008 368 W
	with LED + Varistor, 200–240 V AC/DC	008 369 X

<sup>1)</sup> The standard cable plug (0–250 V AC/DC), Order-No. 008 376 N is part of the standard delivery. Ordering of optional cable plugs with separate ordering number.

A wide selection of further cable plugs is available (see special datasheet Type 2508)



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