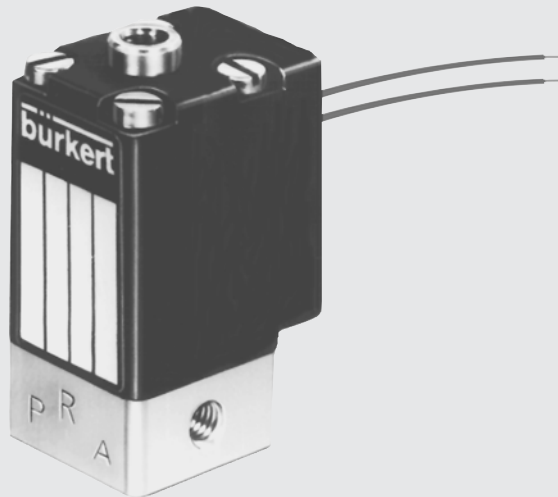


3/2-Way, Direct Acting, NPT 1/8"**Advantages/Benefits**

- ▶ **Compact design**
- ▶ **Specific testing and cleaning available**
- ▶ **Short response times**
- ▶ **Electrical connection: DIN-plug or leads**
- ▶ **Manual override**
- ▶ **When de-energized, outlet port exhausted or pressurized, mixer valve**
- ▶ **Body materials: brass (stainless steel on request)**
- ▶ **CE Approvals**

Design/Function

Type 300 is a direct-acting plunger-type solenoid valve available in a variety of different circuit functions, to suit many applications.

When energized, the solenoid armature is drawn against a spring. The solenoid epoxy encapsulation efficiently dissipates the heat generated by the coil.

The valve is available in brass (stainless steel on request). Electrical connections are DIN-plug or leads. Specific testing and cleaning and low power versions are available on request.

Applications

- Neutral gases and liquids
- Pneumatic control equipment
- Vacuum
- Shut-off, dosing, filling and ventilating
- Gas control, welding technology
- Small-scale instruments, laboratory and measuring technology

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

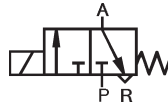
Burkert Contromatic Inc.
760 Pacific Road, Unit 3
Oakville, Ontario, Canada
L6L 6M5
Tel. 905.847.5566
Fax 905.847.9006

burkert
Fluid Control Systems

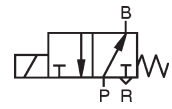
Technical Data

Circuit Function

C 3/2-way valve, when de-energized, outlet A exhausted (normally closed)



D 3/2-way valve, when de-energized, outlet B pressurized (normally open)



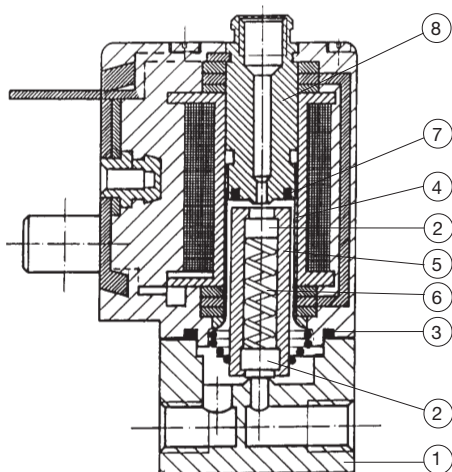
Operating Data (Valve)

Pressure range max.	0-145 PSI (see specifications)
Port connection	NPT 1/8", Subbase on request.
Orifice	3/64" - 1/16" mm >1/16" on request.
Fluid	Neutral gases and liquids, e.g. compressed air, town gas, natural gas, water, hydraulic oil, petrol. Stainless steel version: Slightly aggressive media. Suitable for techn. vacuum.
Medium temperature	14°F to +212°F
Max. ambient temperature	+130°F
Max. viscosity	21 cSt
Response times	
opening	12 ms
closing	8 ms
Installation	as required, preferably with solenoid system upright

Operating Data (Actuator)

Operating voltages	AC 24, 120, 240 V/60 Hz, DC 24 VDC						
Voltage tolerance	± 10 %						
Power consumption	<table border="1"> <tr> <th>AC inrush</th> <th>AC hold</th> <th>DC</th> </tr> <tr> <td>9 VA</td> <td>6 VA/4 W</td> <td>4 W¹⁾</td> </tr> </table>	AC inrush	AC hold	DC	9 VA	6 VA/4 W	4 W ¹⁾
AC inrush	AC hold	DC					
9 VA	6 VA/4 W	4 W ¹⁾					
	¹⁾ Power consumption DC 2 W on request						
Duty cycle	100% continuously rated						
Duty cycle for multiple manifolds	60% for manifold mounting (30 min) or use 2W-version (on request)						
Cycling rate	up to 1 000 c.p.m.						
Protection class with cable plug	NEMA 4 (IP 65)						
Electr. connection	Delivery standard: Cable plug DIN 43 650 B, 0-250 V. Flying leads						

Materials



- | | |
|------------------------|---------------------------------------|
| 1 Valve body: | Brass
(Stainless steel on request) |
| 2 Plunger-seal: | FKM |
| 3 O-rings: | FKM |
| 4 Armature guide tube: | 305 Stainless Steel |
| 5 Plunger: | 430 Stainless Steel |
| 6 Spring: | 301 Stainless Steel |
| 7 Shading ring: | Cu (brass version) |
| 8 Stopper: | 430 Stainless Steel |

DTS 1000082551 EN Version: A Status: RL (released | freigegeben | validé) printed: 22.09.2017

Specifications - Ordering Chart (Other Versions on Request)



Valve Body Brass, Manual Override Standard, Cable Plug DIN 43 650 Form B

Port connection	Orifice [inch]	C _v	Pressure Range (AC) and (DC)		Seal material	Weight [oz]	ITEM - No.		
							Voltage / Frequency [V/Hz]		
							24/DC	120/60	240/60
NPT 1/8"	3/64	0.053	0 - 145	0 - 10	FKM	4.2	457 658 P	450 990 E	457 660 M
NPT 1/8"	1/16	0.070	0 - 87	0 - 6	FKM	4.2	457 661 A	451 035 L	457 663 C

Valve Body Brass, without Manual Override, Cable Plug DIN 43 650 Form B

NPT 1/8"	3/64	0.053	0 - 145	0 - 10	FKM	4.2	450 227 C	450 229 N	457 672 D
NPT 1/8"	1/16	0.070	0 - 87	0 - 6	FKM	4.2	453 706 C	450 236 D	451 041 S

Valve Body Brass, Manual Override Standard, Coil with Two Flying Leads

NPT 1/8"	3/64	0.053	0 - 145	0 - 10	FKM	4.2	457 664 D	---	---
NPT 1/8"	1/16	0.070	0 - 87	0 - 6	FKM	4.2	457 667 G	---	---

Valve Body Brass, without Manual Override, Coil with Two Flying Leads

NPT 1/8"	3/64	0.053	0 - 145	0 - 10	FKM	4.2	457 675 G	---	---
NPT 1/8"	1/16	0.070	0 - 87	0 - 6	FKM	4.2	457 678 K	---	---

Valve Body Brass, Manual Override Standard, Coil with Three Flying Leads

NPT 1/8"	3/64	0.053	0 - 145	0 - 10	FKM	4.2	---	457 665 E	457 666 F
NPT 1/8"	1/16	0.070	0 - 87	0 - 6	FKM	4.2	---	457 668 R	457 669 J

Valve Body Brass, without Manual Override, Coil with Three Flying Leads

NPT 1/8"	3/64	0.053	0 - 145	0 - 10	FKM	4.2	---	457 676 H	457 677 A
NPT 1/8"	1/16	0.070	0 - 87	0 - 6	FKM	4.2	---	457 679 L	457 680 A



Valve Body Brass, without Manual Override, Cable Plug DIN 43 650 Form B

Port connection	Orifice [inch]	C _v	Pressure Range (AC) and (DC)		Seal material	Weight [oz]	ITEM - No.		
							Voltage / Frequency [V/Hz]		
							24/DC	120/60	240/60
NPT 1/8"	3/64	0.053	0 - 145	0 - 10	FKM	4.2	457 708 N	451 081 K	457 648 M
NPT 1/8"	1/16	0.070	0 - 87	0 - 6	FKM	4.2	4570649 N	450 238 P	457 651 G

Valve Body Brass, without Manual Override, Coil with Two Flying Leads

NPT 1/8"	3/64	0.053	0 - 145	0 - 10	FKM	4.2	457 652 H	---	---
NPT 1/8"	1/16	0.070	0 - 87	0 - 6	FKM	4.2	457 655 C	---	---

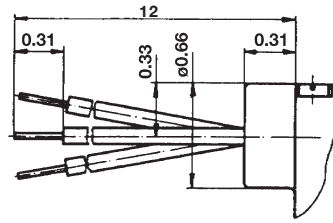
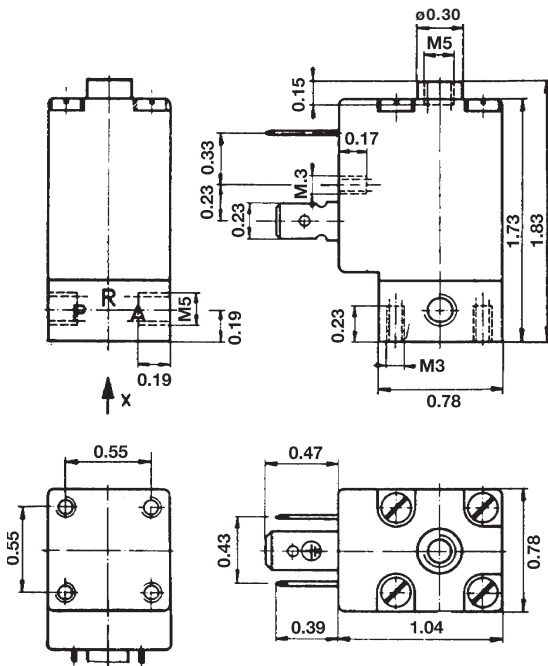
Valve Body Brass, without Manual Override, Coil with Three Flying Leads

NPT 1/8"	3/64	0.053	0 - 145	0 - 10	FKM	4.2	---	457 653 A	457 654 B
NPT 1/8"	1/16	0.070	0 - 87	0 - 6	FKM	4.2	---	457 656 D	457 657 E

Options

- 2W-version
- Stainless steel body
- Specific testing and cleaning
- Manual override

Dimensions Solenoid Valve [inch]



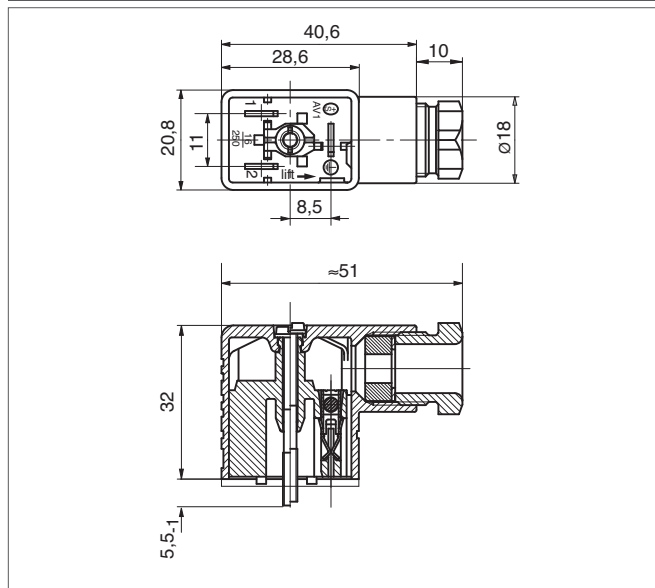
Please note for NPT 1/8" port connection:

Body length 1", overall height 1.89",
M5 connection is retained at R port

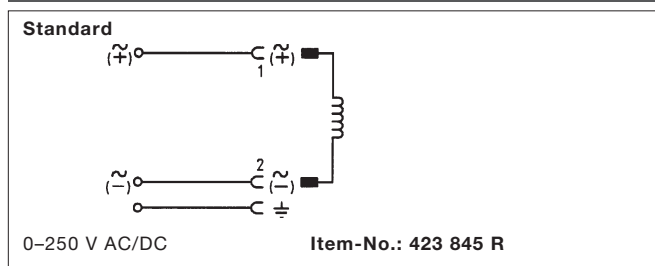
Technical Data Cable Plug

Body material	PA (polyamide)
Contact material	brass, tinned
Cable outlet	vertically to the plug bottom
Isolation between cable plug and coil	Gasket (NBR)
Temperature range	-22°F to +194°F
Cable diameter	11/64" to 9/32"
Electr. connection	terminal screws max. 1/16"²
Poles	2 pole + protective ground
Nominal voltage	0-250 V (Standard)
Isolation group	3
Rating	NEMA 4 (IP 65)
Max. continuous current	16 A without wiring
Contact resistance	≤ 4 mΩ
Options	LED display Rectifier Varistor

Dimensions Cable Plug [mm]



Wiring Diagrams/Connection Specifications



Cable plug Type 2507

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