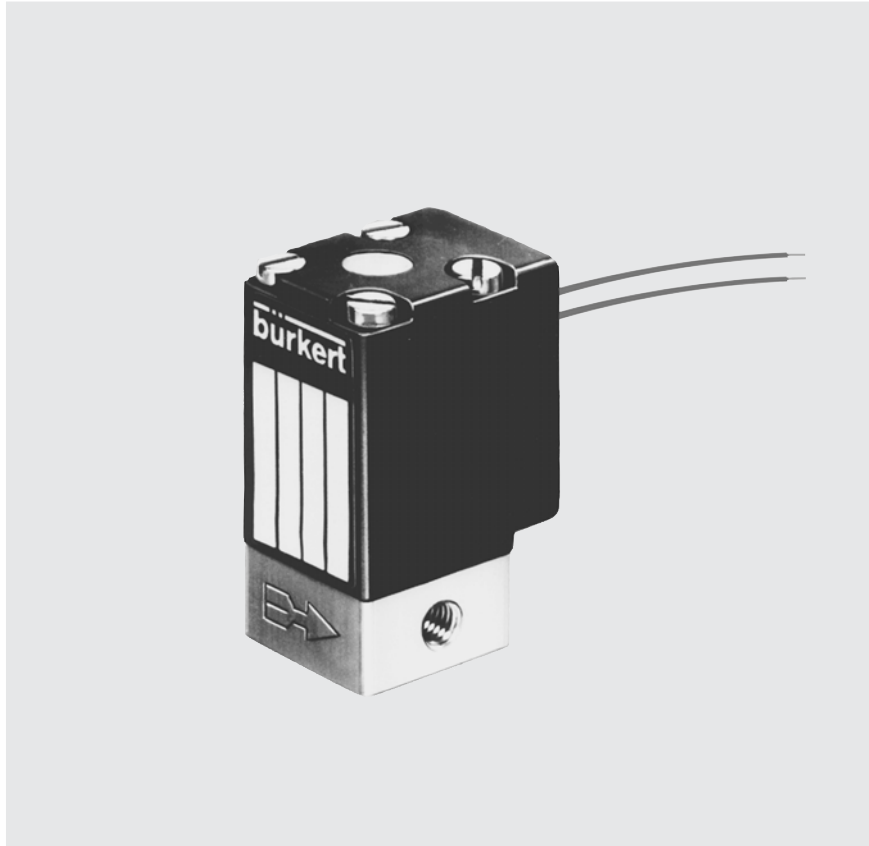


2/2-Way, Direct-acting, NPT 1/8"

Advantages/Benefits



- ▶ **FKM or EPDM**  
Separating diaphragm isolates solenoid system from operating fluid
- ▶ **Compact design**
- ▶ **Specific testing and cleaning available**
- ▶ **Short response time**
- ▶ **Electrical connection:**  
DIN-plug or leads
- ▶ **Body material:**  
Stainless steel

## Design/Function

Type 200 is a direct-acting plunger-type solenoid valve normally closed by spring action (circuit function A).

A diaphragm isolates the fluid from the solenoid system.

When energized, the solenoid armature is drawn against a spring to open the valve.

The solenoid epoxy encapsulation efficiently dissipates the heat generated by the coil.

Specific testing and cleaning and low power versions are available according to application requirements.

## Applications

- Laboratory instruments
- Small-scale instrument
- Gas control instruments
- Shut-off, dosing, filling, ventilating
- Welding technology
- Difficult and slightly aggressive media

**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  
www.burkert.ca

**burkert**  
Fluid Control Systems

# Miniature Solenoid Valve with Isolating Diaphragm

## For Analytical Applications

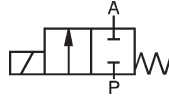
# Type 200

## Isolating Diaphragm

### Technical Data

#### Circuit Function

A 2/2-way valve,  
normally closed



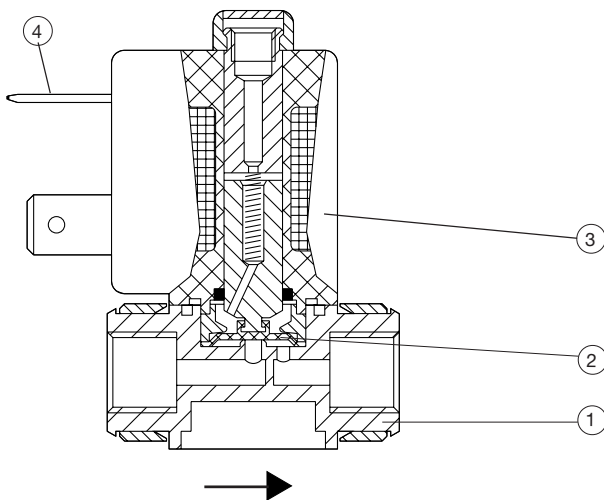
#### Operating Data (Valve)

Pressure range max.	0-29 PSI (see specifications)
Port connection	Threaded port NPT 1/8" (M5, sub base on request)
Orifice	3/64" - 3/32" >3/32" on request.
Fluid	Difficult and slightly aggressive media. Suitable for techn. vacuum.
Medium temperature max.	14°F to +158°F
Max. ambient temperature	+130°F
Max. viscosity	21 cSt
Response times	
opening	5-18 ms
closing	ca. 8 ms
Installation	as required, preferably with solenoid system upright

#### Operating Data (Actuator)

Operating voltages	AC 24, 120, 240 V/60 Hz, DC 12, 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 W<sup>1)</sup></td> </tr> </table>	AC inrush	AC hold	DC	9 VA	6 VA/4 W	4 W <sup>1)</sup>
AC inrush	AC hold	DC					
9 VA	6 VA/4 W	4 W <sup>1)</sup>					
	<sup>1)</sup> Power consumption DC 2 W on request						
Duty cycle	100% continuously rated 60% for manifold mounting (30 min) or use 2W-version (on request)						
Duty cycle for multiple manifolds							
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 12 in. length						

#### Materials



- |   |                      |                     |
|---|----------------------|---------------------|
| 1 | Valve body:          | 301 Stainless steel |
| 2 | Isolating diaphragm: | FKM , EPDM          |
| 3 | Coil body:           | Epoxy               |
| 4 | Cable plug:          | PA (Polyamide)      |

**Specifications - Ordering Chart (Other Versions on Request)**



**Stainless steel valve body, cable plug DIN 43 650 form B**

Port Connection	Orifice [inch]	C <sub>v</sub>	Pressure Range (AC) and (DC)		Seal Material	Weight [oz]	ITEM No. Voltage/Frequency [V/Hz]			
			[PSI]	[bar]			12/DC	24/DC	120/60	240/60
NPT 1/8"	3/64	0.053	0 - 29.0	0 - 2.0	EPDM	4.2	457 607 D	457 609 P	—	—
NPT 1/8"	3/64	0.053	0 - 29.0	0 - 2.0	FKM	4.2	457 627 Y	457 629 A	—	—
NPT 1/8"	1/16	0.070	0 - 22.0	0 - 1.5	EPDM	4.2	457 611 Y	457 613 S	457 623 U	457 624 V
NPT 1/8"	1/16	0.070	0 - 22.0	0 - 1.5	FKM	4.2	457 631 U	457 633 W	457 643 G	457 644 H
NPT 1/8"	5/64	0.130	0 - 14.5	0 - 1.0	EPDM	4.2	457 615 U	457 617 W	457 625 W	457 626 X
NPT 1/8"	5/64	0.130	0 - 14.5	0 - 1.0	FKM	4.2	457 635 Y	457 637 S	457 645 A	457 646 B
NPT 1/8"	3/32	0.150	0 - 14.5	0 - 1.0	EPDM	4.2	457 619 G	457 621 S	—	—
NPT 1/8"	3/32	0.150	0 - 14.5	0 - 1.0	FKM	4.2	457 639 C	457 641 E	—	—

<sup>1)</sup> Pressure range against arrow direction = 0-0.3 PSI

**Stainless steel valve body, coil with two flying leads, 300 mm length**

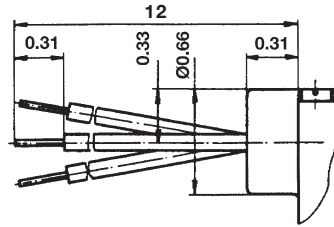
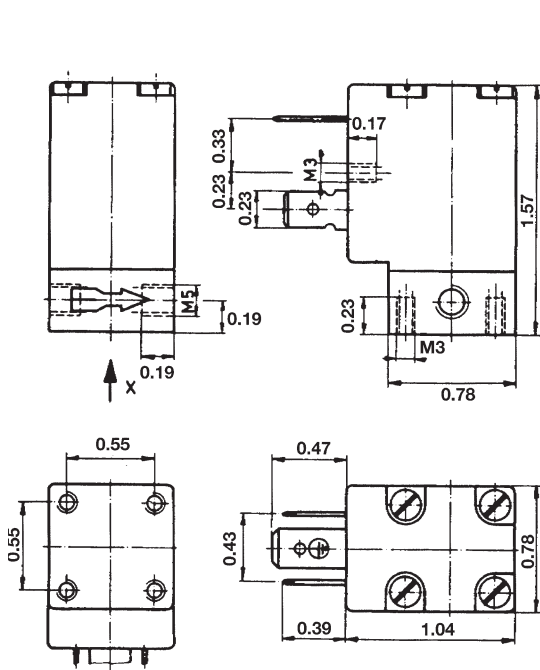
Port Connection	Orifice [inch]	C <sub>v</sub>	Pressure Range (AC) and (DC)		Seal Material	Weight [oz]	ITEM No. Voltage/Frequency [V/Hz]			
			[PSI]	[bar]			12/DC	24/DC	120/60	240/60
NPT 1/8"	3/64	0.053	0 - 29.0	0 - 2.0	EPDM	4.2	457 608 N	457 610 B	—	—
NPT 1/8"	3/64	0.053	0 - 29.0	0 - 2.0	FKM	4.2	457 628 H	457 630 F	—	—
NPT 1/8"	1/16	0.070	0 - 22.0	0 - 1.5	EPDM	4.2	457 612 Z	457 614 T	—	—
NPT 1/8"	1/16	0.070	0 - 22.0	0 - 1.5	FKM	4.2	457 632 V	457 634 X	—	—
NPT 1/8"	5/64	0.130	0 - 14.5	0 - 1.0	EPDM	4.2	457 616 V	457 618 F	—	—
NPT 1/8"	5/64	0.130	0 - 14.5	0 - 1.0	FKM	4.2	457 636 Z	457 638 B	—	—
NPT 1/8"	3/32	0.150	0 - 14.5	0 - 1.0	EPDM	4.2	457 620 D	457 622 T	—	—
NPT 1/8"	3/32	0.150	0 - 14.5	0 - 1.0	FKM	4.2	457 640 R	457 642 F	—	—

<sup>1)</sup> Pressure range against arrow direction = 0-4.35 PSI

**Options**

- PTFE/EPDM diaphragm
- Sub-base versions for manifold mounting
- Specific clean and testing
- AC coils
- 3/64" orifice (up to 29 PSI)

**Dimensions Solenoid Valve [inch]**



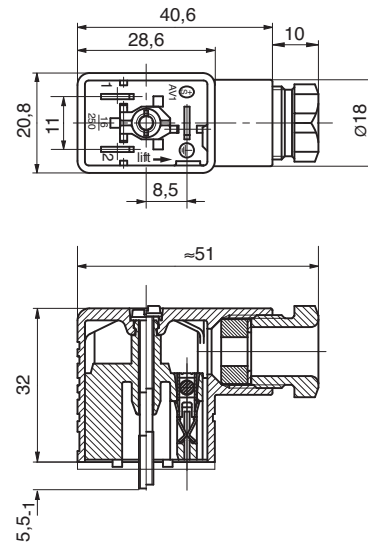
**Please note for NPT 1/8" port connection:**

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

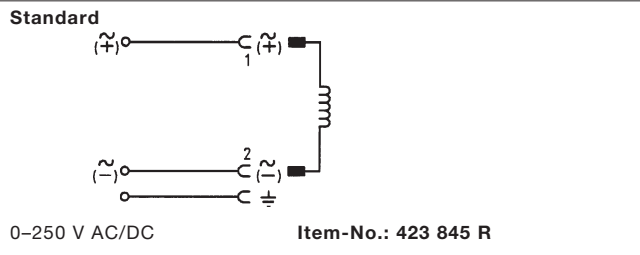
**Technical Data Cable Plug**

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. 1/61"²
Poles	2 pole + 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**



DTS 1000082550 EN Version: A Status: RL (released | freigegeben | validé) printed: 09.05.2016