# Solenoid Valve for Neutral Media and Steam up to 356°F

## 3/2-Way, NPT 1/4"



## Advantages/Benefits

- Body material: brass
- Metal-sealed pressurized parts
- High sealing capacity, even with large temperature fluctuations

## **Design/Function**

Type 355 is a direct-acting solenoid valve. The circuit functions A, B or F can be developed from the valve in circuit function C, by inter-changing the port connections.

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

The flow path through the valve is dependent on the chosen circuit function.

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

## **Applications**

- Neutral gases and liquids
- High temperatures, such as hot water, steam, hot air, thermal oils
- Heating
- Sterilizing
- Impregnating

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

Oakville, Ontario, Canac L6L 6M5 Tel. 905.847.5566 Fax 905.847.9006



DTS 1000082399 EN Version: - Status: RL (released | freigegeben | validé) printed: 20.01.2015

# Solenoid Valve for Neutral Media and Steam up to 356°F

#### **Technical Data**

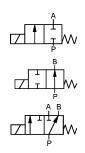
### **Circuit Function**

C-3/2-way valve, when deenergized, outlet A exhaused.



- A-2/2-way valve, normally closed.
- **B-**2/2-way valve, normally open.
- **F-** 3/2-way distributor valve, when de-energized, pressure port P connected to outlet B.

**Operating Data (Actuator)** 



#### **Body Material**

Brass, seat 1.4305 Valve internals 1.4305, 14571

#### Specifications

Orifice	Cv	QNn-Value	Pressure Range <sup>1)</sup>		Weight
DN		Air	Seal Material		
			NBR, EPDM PTFE		
[mm]		[SCFM]	[PSI]	[lb]	[lb]
2	.13	3.53	230	0-196	1.32
3	.23	7.06	140	0-112	1.32
4	.47	14.12	N/A	0- 70	1.32

<sup>1)</sup> Also suitable for technical vacuum.

All pressures quoted are gauge pressures with respect to the prevailing atmospheric pressure.

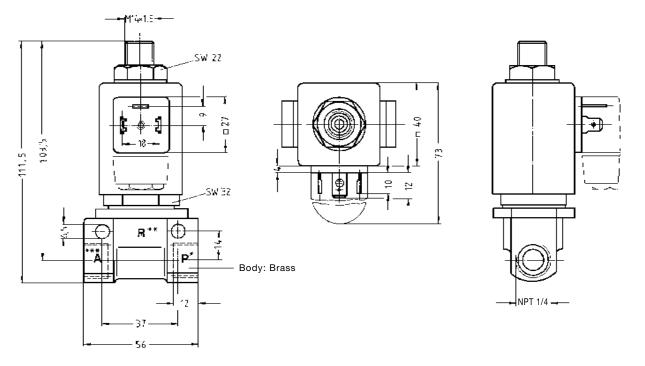
#### **Operating Data (Valve)**

Seal Materials/Fluids Handle NBR Neutral fluids, e.g. comp hydraulic oil, oils and fat	ressed air, water,	Operating voltages	24, 110, 220 V/60 Hz 220 V/UC (universal current) 24 VDC		
town gas	+14°F to +194°F	Voltage tolerance	±10 %		
EPDM Oils and fat-free fluids, e alkaline washing and ble	0	Duty cycle	100% continuously rated		
	-40°F to +266°F	Power consumption	AC 35 up to 40 VA DC 12 W		
PTFE As required, as long as b	-40°F to +356°F 4)	Rating plug	with NEMA 4 (IP 65) cable		
<sup>4)</sup> higher temperatures on reques	st.				
For more detailed information p chart (Leaflet-No. 1896009).	lease refer to resistance	Installation / Accessories			
Max. ambient temperature	131°F	Installation	as required, but preferably with solenoid system upright		
Max. viscosity	approx. 21 cSt				
Response times [ms] opening closing	AC DC 10-20 20-80 20-30 20-30	Electrical connection	<ul> <li>cable plug for 6-7 mm ø cable (supplied as standard)</li> </ul>		

The springs of each valve have been rated for a specific circuit function. If used for another circuit function, the recommended operating pressures will vary according to the following chart:

Valve Version		Max. operating pressure (PSI) used in circuit function						
Orifice	Circuit							
[mm]	Function	А	В	С	D	E	F	
2	С	230	350	230	28	28	350	
3	С	140	230	140	14	14	230	
4	С	85	140	85	7	7	140	

### Dimensions in mm



### **Port Connections**

The adjacent chart shows the port connections for the chosen circuit function. Plug unused connections for circuit functions A and B using a G 1/4 (Order-No. 605 900 L) blanking plug.

Circuit Function	*	**	***
А	Р	-	A
В	-	В	Р
С	Р	R	A
D	R	Р	В
E	P1	P2	A
F	A	В	Р

# Solenoid Valve for Neutral Media and Steam up to 356°F

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

<u>.</u>					<b>–</b> 01					
Circuit	Orifice	Flow Rate		Port	Pressure <sup>1)</sup>	Body	Seal	Weight	Voltage/	Item-No.
Function		Water	Air	Connection	Range	Material	Material		Frequency	
	DN	Cv	Q/Nn							
	[mm]		[SCFM]	[NPT]	[PSI]			[lbs]	[V/Hz]	
С	02.0	.13	3.53	1/4	0-230	Brass	NBR	1.32	024/60	480 656 H
									024/DC	480 655 G
									110/60	480 657 A
									220/60	480 658 K
					0-196	Brass	PTFE	1.32	024/60	480 664 H
									024/DC	480 663 G
									110/60	480 665 A
									220/60	480 666 B
	03.0	.23	7.06	1/4	0-140	Brass	NBR	1.32	024/60	480 660 R
									024/DC	480 659 L
									110/60	480 661 E
									220/60	480 662 F
					0-112	Brass	PTFE	1.32	024/60	480 668 M
									024/DC	480 667 C
									110/60	480 669 N
									220/60	480 670 K
	04.0	.47	14.12	1/4	0- 70	Brass	PTFE	1.32	024/60	480 672 H
									024/DC	480 671 G
									110/60	480 673 A
									220/60	480 674 B

<sup>1)</sup> Also suitable for technical vacuum