



Advantages/Benefits

- ▶ Namur interface - G 1/4
- ▶ When de-energized, pressure port connected to outlet 2 outlet 4 exhausted.
- ▶ High flow rate
- ▶ Long service life
- ▶ Applications with lubricated or unlubricated air
- ▶ Lockable manual override standard
- ▶ No "stick-slip-effect"
- ▶ EEx ib IIC T6 (Type 550)
EEx ed IIC T5 (Type 650)

Design/Function

The Type 450 is a high-quality spool valve, combining the advantages of elastomeric and metal-to-metal sealed valves.

The valve has a long and reliable service life on lubricated and unlubricated air. The self-cleaning action on the seal makes it insensitive to dirt particles in compressed air.

There is no stiction with intermittent use.

Due to the low power consumption, the epoxy-encapsulated solenoid can be controlled via a PLC. All of the solenoid actuators are available in wide-band voltage ranges, with combined 50 and 60Hz operation for AC versions.

Applications

- Pneumatic control
- Cylinder control in machine engineering
- Actuated valve control
- Safety interlocks

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Easy Fluid Control Systems

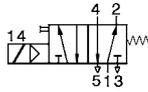
5/2-Way Spool Valve with Namur Interface

Type 450
Type 550 
Type 650 

Technical Data

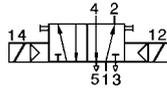
Circuit Function

H 5/2-way valve,
when de-energized, pressure port 1
connected to outlet 2, outlet 4
exhausted.



Spring return

5/2-way valve,
when de-energized, pressure port 1
connected to outlet 2, outlet 4
exhausted.



Impulse valve

Body Materials

Aluminium,
Internal parts aluminium and stainless steel

Specifications

Orifice 6 mm
Flow 750 l/min.

Operating Data (Valve)

Seal Materials / Fluids Handled / Temp.-Range

POM/ lubricated or unlubricated air -10 to
NBR +70 °C¹⁾

¹⁾ for Types 550 and 650: to +60 °C

For more detailed information please refer to resistance
chart (Leaflet-No. 1896009).

Max. ambient temperature Type 450: +55 °C
Type 550,650: +40 °C

Port connection Namur sub-base - G 1/4

Operating Data (Actuator)

Operating voltages

Type 450 24-28, 230-250 V/ 50, 60 Hz
Type 550 24 V/=
Type 650 24, 110, 220, 240 V/UC (universal
current)

Note for Type 650 A bridge rectifier has been incorpo-
rated in the solenoid system, which
makes it suitable for both AC and DC
operation. (Universal current to DIN
40700).

Voltage tolerance ±10 %

Power consumption Type 450: 2,5 to 4 Watt
Type 650: 5 Watt

Duty cycle 100% continuously rated

Rating with cable plug, cable or
junction box IP 65

Installation / Accessories

Installation as required

Electrical connection

- Type 450, 550 • cable plug for 6-7 mm ø cable
(supplied as standard)
- Type 650 • moulded-in cable H05RN-F3
G, 3 x 0,75 mm², length 3 m, with
tension relieving cable gland
- junction box without safety fuse

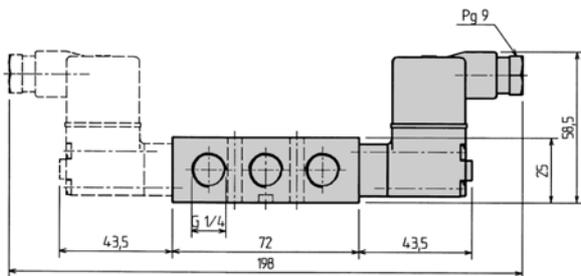
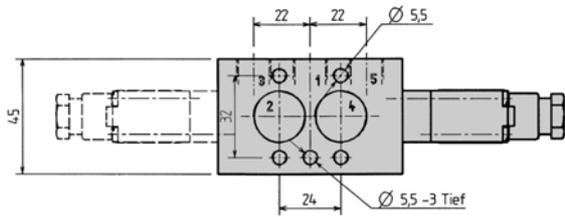
Safety fuse A safety fuse with a medium
response time and rated according to
the nominal current should be incorpo-
rated in the circuit.

5/2-Way Spool Valve with Namur Interface

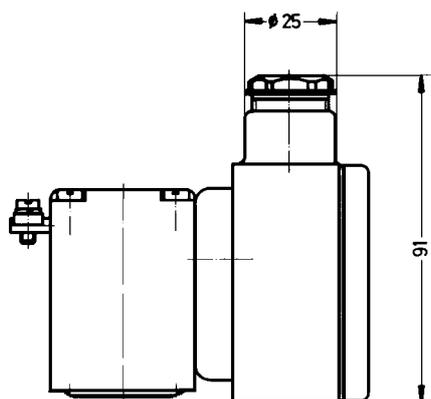
Type 450
Type 550 
Type 650 

Dimensions in mm

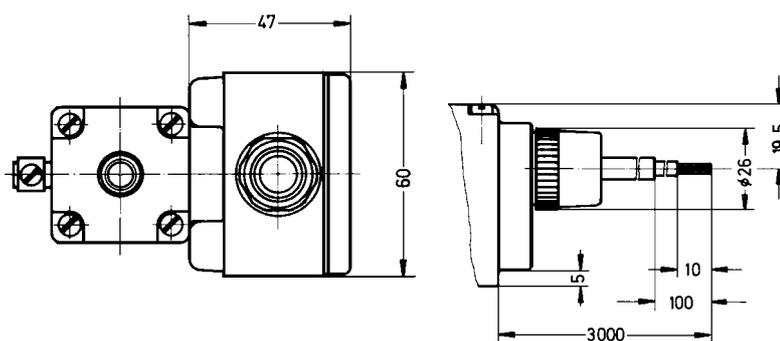
Version with M5 Mounting screws



Ex-version with junction box



With moulded-in cable



Note

The solenoid systems of the Types 550 and 650 are mounted vertically to the spool valve body.

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5/2-Way Spool Valve with Namur Interface

Type 450
Type 550 
Type 650 

Ordering Chart (Other Versions on Request)

Circuit Function	Orifice DN [mm]	Flow Rate Air QNn [l/min]	Port Connection	Pressure Range [bar]	Approval PTB.-No.		Weight [kg]	Voltage/Frequency [V/Hz]	Order-No.
					Type 550: Ex-87.B.2023	Type 650: Ex-89.C.1034			
H ¹⁾	6,0	750	Namur	2-8	-	Type 450	0,32	024-30/=	031 455 L
					-	Type 450	0,32	24-28/50,60	031 456 M
					-	Type 450	0,32	230-250/50,60	031 458 X
H ¹⁾	6,0	750	Namur	2-8	Ex ed	Type 650	0,62	024/UC	031 649 E
					Ex ed	Type 650	0,62	024/UC	031 688 N ³⁾
					Ex ed	Type 650	0,62	110/UC	031 650 B
					Ex ed	Type 650	0,62	110/UC	031 489 P ³⁾
					Ex ed	Type 650	0,62	220/UC	031 651 Y
					Ex ed	Type 650	0,62	220/UC	031 490 L ³⁾
					Ex ed	Type 650	0,62	240/UC	031 652 Z
H ¹⁾	6,0	750	Namur	2-7	Ex ib	Type 550	0,32	24/=	031 614 K
H ²⁾	6,0	750	Namur	2-7	Ex ed	Type 650	0,62	24/UC	031 484 A
								110/UC	031 485 B
								220/UC	031 593 F
								220/UC	031 486 C ³⁾

¹⁾ With spring return, ²⁾ Impulse operated, ³⁾ With junction box without safety fuse

Accessories

Code	Order-No.
Rubber blanking gasket for 3/2-way Version (for conversion from 5/2- to 3/2-way)	015 411 G

Accessories for Type 650

Safety Fuses	[mA]	Order-No.
24 V	400	007 073 Z
110 V	100	007 068 C
220/240 V	63	007 067 T

Electrical Accessories for Type 550

Code / Specification Version	Explosion Group	Max. Safety Values		Nominal Voltage [V]	Nom. Curr. [mA]	Polarity	Approval No.	Order-No.		
		Voltage [V]	Current [mA]							
Safety barrier Coil version	IIC	28	110	24	40	negative polarity	Ex-78/2007X	006 562 X		
						positive polarity			Ex-78/2007X	006 700 N
						positive polarity				
Installation accessory for barrier								007 152 V		

In case of special requirements
please consult for advice.

We reserve the right to make technical
changes without notice.

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