

**3/2 Directional Control Valves  
Actuation: Electromagnetic  
Indirectly-controlled poppet valves  
Connections G 1/2 to G 2**

- **High flow rate**
- **Optionally pilot-operated by foreign pilot source**
- **High repeatability of switching time**
- **Easily interchangeable solenoid system**



#### Technical data

##### Operating medium:

For filtered, lubricated or non-lubricated air

##### Mode of operation:

Solenoid operated, indirectly controlled

##### Mounting position:

Optional, preferably vertical; with strong vibration vertical to axis of vibration

##### Flow direction:

Fixed

##### Nominal sizes:

15 to 50 mm

##### Connection:

G 1/2 to G 2

##### Operating pressure:

max. 10 bar

##### Temperature range:

-10\* to +60 °C

\*With minus temperatures, use conditioned dry air. If installed in the open protect all connections against the penetration of moisture!

##### Material:

Housing: Aluminium

Seat seal: AU (polyurethane)

Inner part: POM

#### Ordering example

3/2 directional control valve, nominal size 25, connection G 1, solenoid 24 V DC, electrical connection DIN 43650 form A, protection class IP 00

**Type: 8026770.0800.024.00**

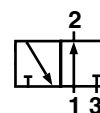
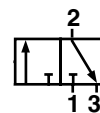
#### Further versions

With manual override

Design bistable

#### Connectors

See data sheet 7503364





### General information

Symbol	Type Valve . Solenoid	Connection			Nominal size	Operation pressure		Control. pressure		Flow (l/min)	Switching time (ms)	Weight (kg)
		1	2	3		Min. (bar)	Max. (bar)	Min. <sup>1)</sup>	Max. <sup>1)</sup>			
	8026570.0800 *	G 1/2	G 1/2	G 3/4	15	2	10	–	–	5000	10	1.3
	8026670.0800 *	G 3/4	G 3/4	G 1	20	2	10	–	–	8000	10	1.5
	8026770.0800 *	G 1	G 1	G 1	25	2	10	–	–	12000	10	1.5
	8026870.0800 *	G 1	G 1 1/4	G 1 1/4	32	2	10	–	–	18000	12	3.0
	8026970.0800 *	G 1 1/2	G 1 1/2	G 1 1/2	40	2	10	–	–	25000	15	3.8
	8027070.0800 *	G 2	G 2	G 2	50	2	10	–	–	35000	20	6.8
	8028570.0800 *	G 1/2	G 1/2	G 3/4	15	2	10	–	–	5000	10	1.3
	8028670.0800 *	G 3/4	G 3/4	G 1	20	2	10	–	–	8000	10	1.5
	8028770.0800 *	G 1	G 1	G 1	25	2	10	–	–	12000	10	1.5
	8028870.0800 *	G 1	G 1 1/4	G 1 1/4	32	2	10	–	–	18000	12	3.0
	8028970.0800 *	G 1 1/2	G 1 1/2	G 1 1/2	40	2	10	–	–	25000	15	3.8
	8029070.0800 *	G 2	G 2	G 2	50	2	10	–	–	35000	20	6.8
	8026571.0800 *	G 1/2	G 1/2	G 3/4	15	0	10	2	10	5000	10	1.3
	8026671.0800 *	G 3/4	G 3/4	G 1	20	0	10	2	10	8000	10	1.5
	8026771.0800 *	G 1	G 1	G 1	25	0	10	2	10	12000	10	1.5
	8026871.0800 *	G 1	G 1 1/4	G 1 1/4	32	0	10	2	10	18000	12	3.0
	8026971.0800 *	G 1 1/2	G 1 1/2	G 1 1/2	40	0	10	2	10	25000	15	3.8
	8027071.0800 *	G 2	G 2	G 2	50	0	10	2	10	35000	20	6.8
	8028571.0800 *	G 1/2	G 1/2	G 3/4	15	2	10	2	10	5000	10	1.3
	8028671.0800 *	G 3/4	G 3/4	G 1	20	2	10	2	10	8000	10	1.5
	8028771.0800 *	G 1	G 1	G 1	25	2	10	2	10	12000	10	1.5
	8028871.0800 *	G 1	G 1 1/4	G 1 1/4	32	2	10	2	10	18000	12	3.0
	8028971.0800 *	G 1 1/2	G 1 1/2	G 1 1/2	40	2	10	2	10	25000	15	3.8
	8029071.0800 *	G 2	G 2	G 2	50	2	10	2	10	35000	20	6.8

### Valves for vacuum

	Type	Connection	Nominal size	Operation pressure (bar)	Control. pressure (bar)	Flow (l/min)	Switching time (ms)	Weight (kg)
	8026572.0800 *	G 1/2	15	0,01 mbar	4	5000	20	1.3
	8026672.0800 *	G 3/4	20	0,01 mbar	4	8000	20	1.5
	8026772.0800 *	G 1	25	0,01 mbar	4	12000	20	1.5
	8026872.0800 *	G 1	32	0,01 mbar	4	18000	25	3.0
	8026972.0800 *	G 1 1/2	40	0,01 mbar	4	25000	30	3.8
	8027072.0800 *	G 2	50	0,01 mbar	4	35000	35	6.8

\* When ordering please indicate solenoid, voltage and current type (frequency).

<sup>1)</sup> Required pilot pressure ≥ operating pressure, min. 2 bar; with vacuum operating pressure + 1 bar, min. 4 bar.

### Parameters for solenoids

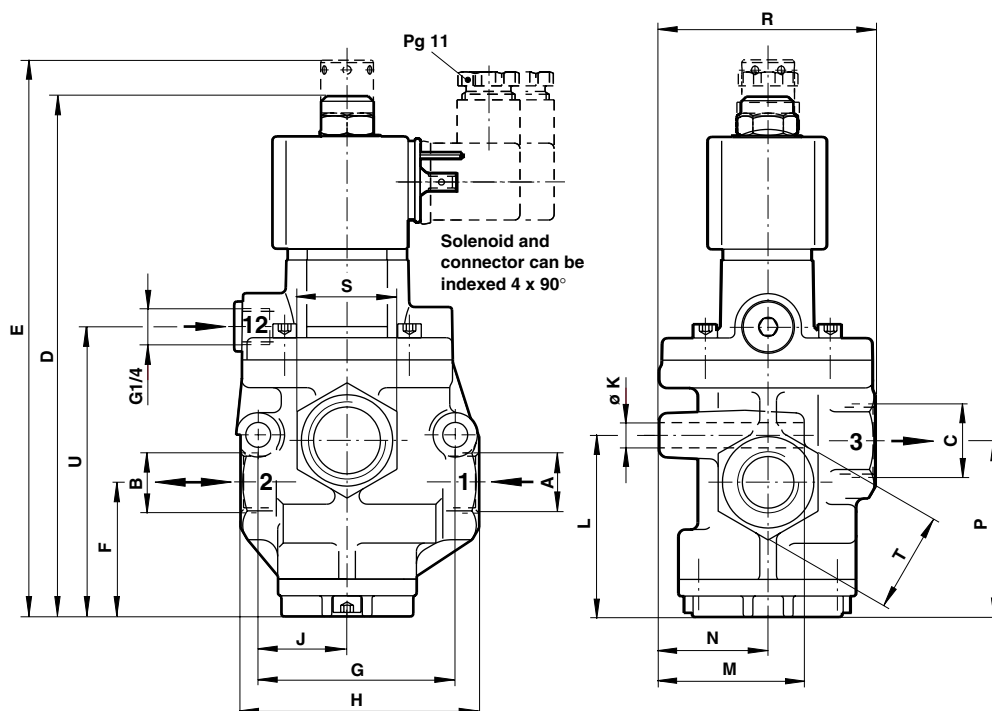
Image	Type	Current draw		Protection class	Temperature		Weight (kg)	Dimensional drawing No.	Circuit diagram No.
		24 V DC (W)	230 V AC (VA)		fluid max. (°C)	Ambient (°C)			
	0800	16	27	IP 00 without Connector	+80	-25 to +60	0.14	M02	SB01
	0801	16	27	IP 65 with Connect. DIN 43650 form A	+80	-25 to +60	0.14	M02	SB01
	3980	12	–	EEx me II T5 EEx me II T6	+60 +45	-20 to +60 -20 to +45	0.3	M03	SB04
	3981	–	13	EEx me II T5 EEx me II T6	+60 +45	-20 to +60 -20 to +45	0.3	M03	SB07

Standard voltages: 24 V DC; 24 V, 110 V, 230 V 50 Hz; 120 V, 220 V 60 Hz.



## Dimensional drawings

### M01

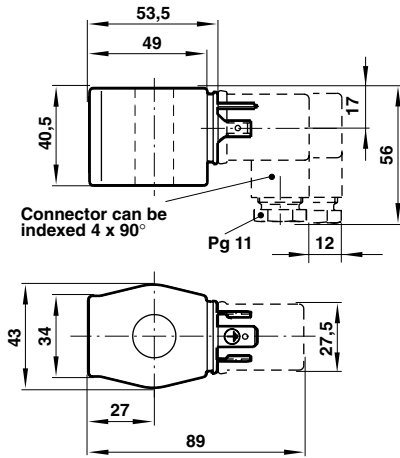


Type	A	B	C	D	E	F	G	H	J	Ø K	L	M	N	P	R	S	T	U
80265XX	G1/2	G1/2	G3/4	187.5	-	48	71	86	32	9	65.5	52	39	63.5	78	36	36	104.5
80266XX	G3/4	G3/4	G1	197.5	-	51.5	82.5	112	39	9	74.5	54	40	73	92	46	46	114.5
80267XX	G1	G1	G1	197.5	-	51.5	82.5	112	39	9	74.5	54	40	73	92	46	46	114.5
80268XX	G1	G1 1/4	G1 1/4	239	-	70	104	142	48	11	108	64	42	98	108	60	60	148
80269XX	G1 1/2	G1 1/2	G1 1/2	265	-	85	118	164	50,5	14	121.5	70	46	115.5	123	60	68	168
80270XX	G2	G2	G2	304	-	98	148	200	66	18	144	85	56	137	153	90	90	204
80285XX	G1/2	G1/2	G3/4	-	200.5	48	71	86	32	9	65.5	52	39	63.5	78	36	36	104.5
80286XX	G3/4	G3/4	G1	-	210.5	51.5	82.5	112	39	9	74.5	54	40	73	92	46	46	114.5
80287XX	G1	G1	G1	-	210.5	51.5	82.5	112	39	9	74.5	54	40	73	92	46	46	114.5
80288XX	G1	G1 1/4	G1 1/4	-	252	70	104	142	48	11	108	64	42	98	108	60	60	148
80289XX	G1 1/2	G1 1/2	G1 1/2	-	279	85	118	164	50,5	14	121.5	70	46	115.5	123	60	68	168
80290XX	G2	G2	G2	-	317	98	148	200	66	18	144	85	56	137	153	90	90	204

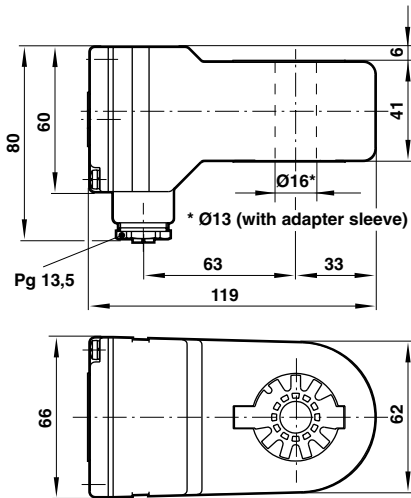


## Dimensional drawings solenoids

### M02

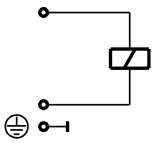


### M03

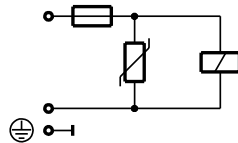


## Electrical circuit diagrams

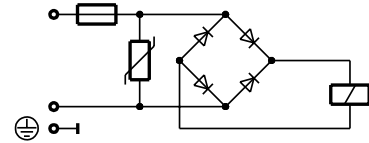
### SB01



### SB04



### SB07



## Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under 'Technical Data'.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of

all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

**System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.**

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products where applicable.