

- > Port size: G1/2 ... G2
- > High flow rate
- > Optionally air pilot operated
- > High repeatability of switching time
- > Variable valve solenoid combination



Technical features

Medium:
Compressed air, filtered, lubricated or non-lubricated

Operation:
Indirect solenoid operated poppet valve

Operating pressure:
-1 ... 10 bar (-14 ... 145 psi)

Orifice:
15 ... 50 mm

Port size:
G1/2, G3/4, G1, G1 1/2, G2

Flow direction:
Fixed

Mounting position:
Any, but preferably with solenoid vertical
In severe shocks solenoid vertical perpendicular to the axis of oscillation

Ambient/Media temperature:
-10 ... +60°C (+14 ... +140°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F)

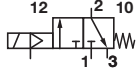
Material:
Body: Aluminium
Seals: PUR
Inner parts: POM

Technical data

Symbol	Port size			Orifice (mm)	Pilot supply	Flow (l/min)	Operating pressure		Pilot pressure		Weight (kg)	Model *1)
	1	2	3				(bar)	(psi)	(bar)	(psi)		
	G1/2	G1/2	G3/4	15	Internal	5500	2 ... 10	29 ... 145	—	—	1,3	8026570
	G3/4	G3/4	G1	20	Internal	8000	2 ... 10	29 ... 145	—	—	1,5	8026670
	G1	G1	G1	25	Internal	9000	2 ... 10	29 ... 145	—	—	1,5	8026770
	G1	G1 1/4	G1 1/4	32	Internal	14000	2 ... 10	29 ... 145	—	—	3,0	8026870
	G1 1/2	G1 1/2	G1 1/2	40	Internal	21000	2 ... 10	29 ... 145	—	—	3,8	8026970
	G2	G2	G2	50	Internal	31000	2 ... 10	29 ... 145	—	—	6,8	8027070
	G1/2	G1/2	G3/4	15	Internal	5500	2 ... 10	29 ... 145	—	—	1,3	8028570
	G3/4	G3/4	G1	20	Internal	8000	2 ... 10	29 ... 145	—	—	1,5	8028670
	G1	G1	1	25	Internal	9000	2 ... 10	29 ... 145	—	—	1,5	8028770
	G1	G1 1/4	G1 1/4	32	Internal	14000	2 ... 10	29 ... 145	—	—	3,0	8028870
	G1 1/2	G1 1/2	G1 1/2	40	Internal	21000	2 ... 10	29 ... 145	—	—	3,8	8028970
	G2	G2	G2	50	Internal	31000	2 ... 10	29 ... 145	—	—	6,8	8029070
	G1/2	G1 1/2	G3/4	15	External	5500	0 ... 10	0 ... 145	2 ... 10	29 ... 145	1,3	8026571
	G3/4	G3/4	G1	20	External	8000	0 ... 10	0 ... 145	2 ... 10	29 ... 145	1,5	8026671
	G1	G1	G1	25	External	9000	0 ... 10	0 ... 145	2 ... 10	29 ... 145	1,5	8026771
	G1	G1 1/4	G1 1/4	32	External	14000	0 ... 10	0 ... 145	2 ... 10	29 ... 145	3,0	8026871
	G1 1/2	G1 1/2	G1 1/2	40	External	21000	0 ... 10	0 ... 145	2 ... 10	29 ... 145	3,8	8026971
	G2	G2	G2	50	External	31000	0 ... 10	0 ... 145	2 ... 10	29 ... 145	6,8	8027071
	G1/2	G1/2	G3/4	15	External	5500	2 ... 10	29 ... 145	2 ... 10	29 ... 145	1,3	8028571
	G3/4	G3/4	G1	20	External	8000	2 ... 10	29 ... 145	2 ... 10	29 ... 145	1,5	8028671
	G1	G1	G1	25	External	9000	2 ... 10	29 ... 145	2 ... 10	29 ... 145	1,5	8028771
	G1	G1 1/4	G1 1/4	32	External	14000	2 ... 10	29 ... 145	2 ... 10	29 ... 145	3,0	8028871
	G1 1/2	G1 1/2	G1 1/2	40	External	21000	2 ... 10	29 ... 145	2 ... 10	29 ... 145	3,8	8028971
	G2	G2	G2	50	External	31000	2 ... 10	29 ... 145	2 ... 10	29 ... 145	6,8	8029071




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

Models for vacuum

Symbol	Port size			Orifice (mm)	Pilot supply	Flow (l/min)	Operating pressure (bar)		Pilot pressure (bar)		Weight (kg)	Model *1)
	1	2	3				(bar)	(psi)	(bar)	(psi)		
	G1/2	G1/2	G3/4	15	External	5500	-1 ... 6	-14 ... 87	4 ... 10	58 ... 145	1,3	8026572
	G3/4	G3/4	G1	20	External	8000	-1 ... 6	-14 ... 87	4 ... 10	58 ... 145	1,5	8026672
	G1	G1	G1	25	External	9000	-1 ... 6	-14 ... 87	4 ... 10	58 ... 145	1,5	8026772
	G1	G1 1/4	G1 1/4	32	External	14000	-1 ... 6	-14 ... 87	4 ... 10	58 ... 145	3,0	8026872
	G1 1/2	G1 1/2	G1 1/2	40	External	21000	-1 ... 6	-14 ... 87	4 ... 10	58 ... 145	3,8	8026972
	G 2	G 2	G 2	50	External	31000	-1 ... 6	-14 ... 87	4 ... 10	58 ... 145	6,8	8027072

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

Solenoids group 16D, standard voltages

	Power consumption		Rated current		Protection class IP/NEMA	Ex-Protection (ATEX-Category)	Temperature Ambient/Media (°C)	Electrical connection	Weight (kg)	Drawing No.	Circuit diagram No.	Model
	24 V d.c. (W)	230 V a.c. (VA)	24 V d.c. (m A)	230 V a.c. (m A)								
	16,9	—	703	—	IP65 (with connector)	—	-25 ... +60 Media: +80 max	Connector DIN EN 175301-803, form A *1)	0,26	3	1	0800
	—	17,3	—	75	IP65 (with connector)	—	-25 ... +60 Media: +80 max	Connector DIN EN 175301-803, form A *1)	0,35	4	6	3803
	11,4	—	475	—	IP66 (with cable gland)	II 2 G Ex e mb IIC T4/ T5 Gb II 2 D Ex tb IIIC T130°C Db IP66	T4: -40 ... +50 T5: -40 ... +40 -40 ... +50	M20 x 1,5 *1)	0,5	6	4	4280
	—	15,2	—	66	IP66 (with cable gland)	II 2 G Ex e mb IIC T4/ T5 Gb II 2 D Ex tb IIIC T130°C Db IP66	T4: -40 ... +50 T5: -40 ... +40 -40 ... +50	M20 x 1,5 *1)	0,5	6	7	4281
	13,6	—	567	—	NEMA 4, 4X, 6, 6P, 7, 9	XP/DIP, Div. 1 & 2 Cl. I, Gr. A-D Cl. II/III, Gr. E-G T3 (160°C)	-20 ... +60	Flying leads 450 mm	0,5	8	1	3826
	—	15,7	—	68	NEMA 4, 4X, 6, 6P, 7, 9	XP/DIP, Div. 1 & 2 Cl. I, Gr. A-D Cl. II/III, Gr. E-G T3 (160°C)	-20 ... +60	Flying leads 450 mm	0,5	8	5	3827

Standard voltages (±10%) 24 V d.c., 230 V a.c., other voltages on request. Design according to VDE 0580, EN 50014/50028. 100% duty cycle.

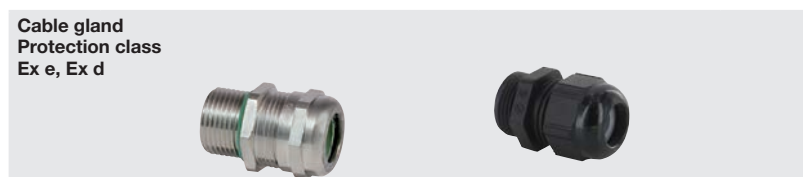
*1) Connector/cable gland is not scope of delivery, see table »Accessories«

Attention: The protection class for coil series 46xx and 48xx is determined by the choice of cable gland.

Example: if an ATEX-certified cable gland is used that has Ex d type of protection, the solenoid will have the protection class Ex d mb; if a cable gland with Ex e type of protection is used, the solenoid will have protection class Ex e mb.

Accessories

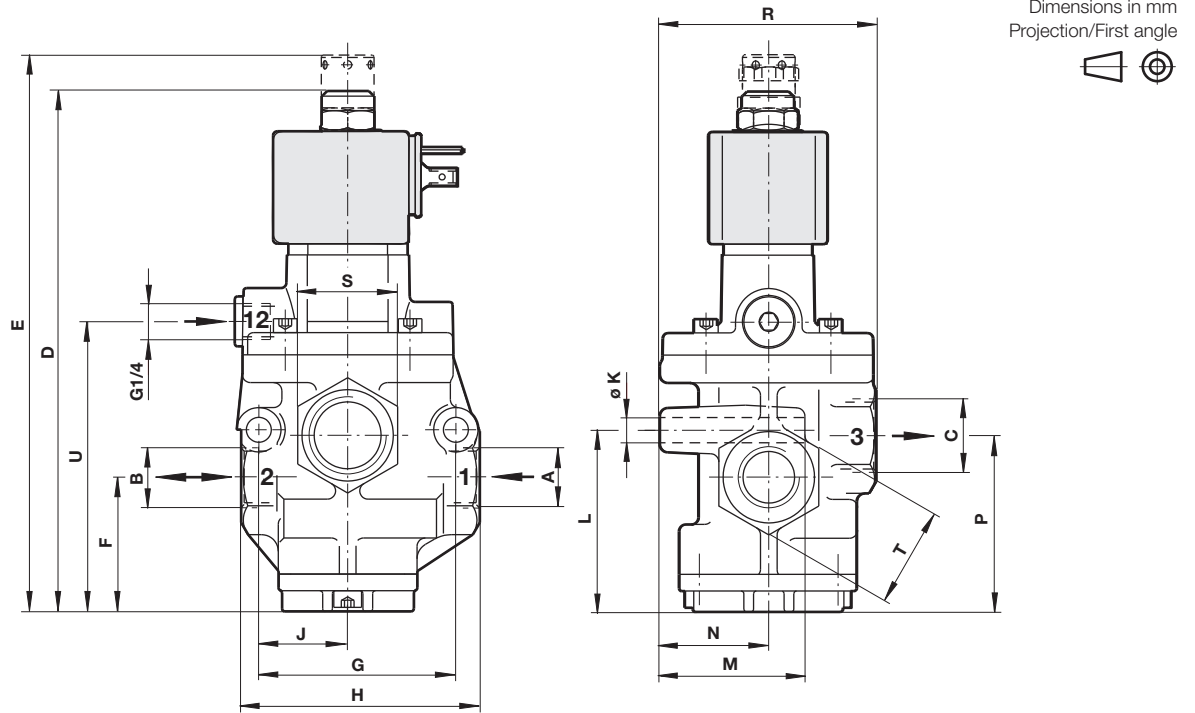
Electrical connection



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Thread	Cable Ø (mm)	Materials	Protection class (ATEX)	Model
M20 x 1,5	5 ... 8	Nickel plated brass	II 2 GD Ex e	0588819
M20 x 1,5	10 ... 14	Nickel plated brass	II 2 GD Ex d	0588851
M20 x 1,5	9 ... 13	Stainless steel 1.4571 (316 Ti)	II 2 GD Ex e	0589385
M20 x 1,5	7 ... 12	Stainless steel 1.4404 (316 L)	II 2 GD Ex d	0589395
M20 x 1,5	10 ... 14	Stainless steel 1.4404 (316 L)	II 2 GD Ex d	0589387
M20 x 1,5	5 ... 9	Plastic (PA)	—	0110854
M20 x 1,5	6 ... 12	Plastic (PA)	—	0110855

Drawing - Valve



Dimensions in mm
Projection/First angle

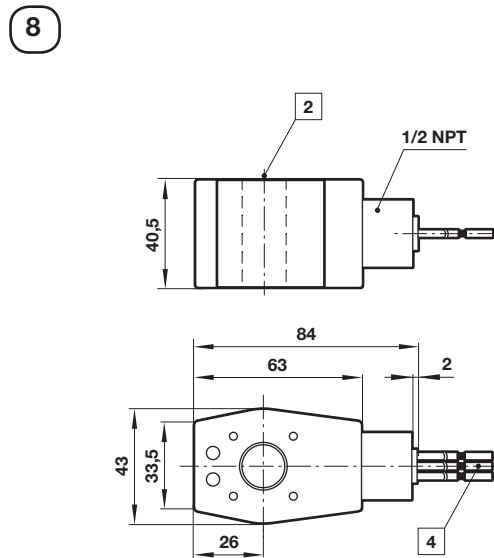
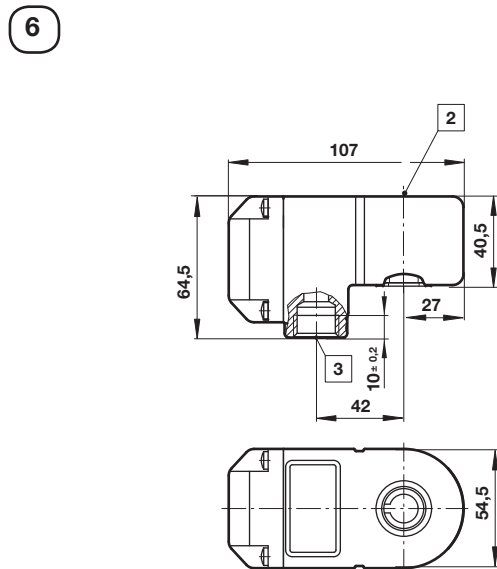
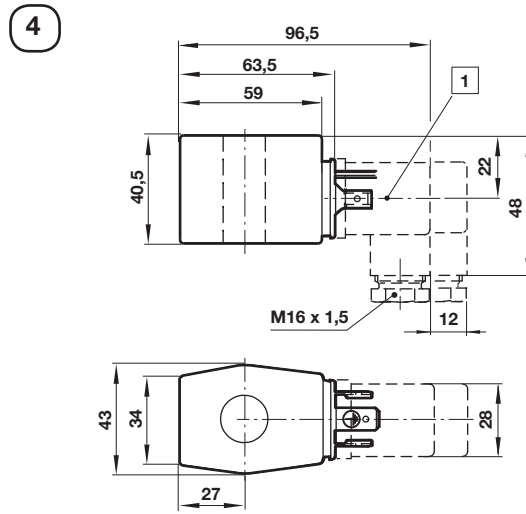
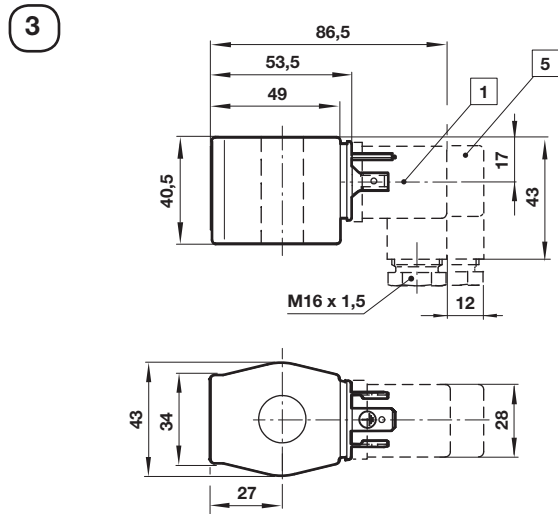


1 Solenoid can be indexed by 4 x 90°

A	B	C	D	E	F	G	H	J	Ø K	L	M	P	R	S	T	U	Model
G1/2	G1/2	G3/4	187,5	—	48	71	86	32	9	65,5	52	63,5	78	36	36	104,5	802657
G3/4	G3/4	G1	197,5	—	51,5	82,5	112	39	9	74,5	54	73	92	46	46	114,5	802667
G1	G1	G1	197,5	—	51,5	82,5	112	39	9	74,5	54	73	92	46	46	114,5	802677
G1	G1 1/4	G1 1/4	239	—	70	104	142	48	11	108	64	98	108	60	60	148	802687
G1 1/2	G1 1/2	G1 1/2	265	—	85	118	164	50,5	14	121,5	70	115,5	123	60	68	168	802697
G2	G2	G2	304	—	98	148	200	66	18	144	85	137	153	90	90	204	802707
G1/2	G1/2	G3/4	—	200,5	48	71	86	32	9	65,5	52	63,5	78	36	36	104,5	802857
G3/4	G3/4	G1	—	210,5	51,5	82,5	112	39	9	74,5	54	73	92	46	46	114,5	802867
G1	G1	G1	—	210,5	51,5	82,5	112	39	9	74,5	54	73	92	46	46	114,5	802877
G1	G1 1/4	G1 1/4	—	252	70	104	142	48	11	108	64	98	108	60	60	148	802887
G1 1/2	G1 1/2	G1 1/2	—	279	85	118	164	50,5	14	121,5	70	115,5	123	60	68	168	802897
G2	G2	G2	—	317	98	148	200	66	18	144	85	137	153	90	90	204	802907

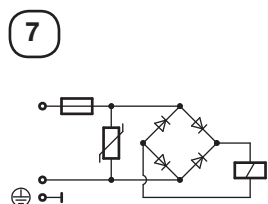
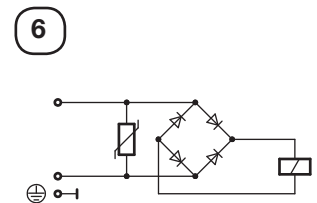
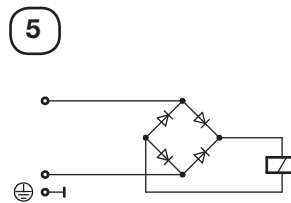
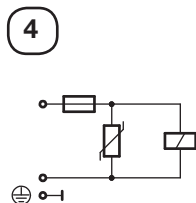
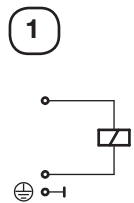
Drawings - Solenoids

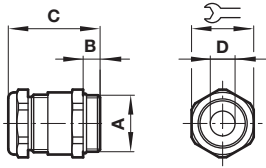
Dimensions in mm
Projection/First angle




- 1 Connector can be indexed by 4x90°
- 2 Ø 16 or 13 (with spacer tube)
- 4 Flying leads AWG 18 (450 mm long)

Circuit diagrams



Cable gland


A	B	C	ø D		Model
M20 x 1,5	9	36	5 ... 8	22	0588819
M20 x 1,5	6,5	27,5	9 ... 13	22	0589385
M20 x 1,5	14	39	10 ... 14	24	0588851
M20 x 1,5	14	39	7 ... 12	24	0589395
M20 x 1,5	10	34	10 ... 14	24	0589387
M20 x 1,5	9	36	5 ... 9	24	0110854
M20 x 1,5	9	36	6 ... 12	24	0110855

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 features/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 IMI 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.