

Industrial Automation

IMI Norgren

26230, 80107 NAMUR 3/2 & 5/2 Indirect solenoid actuated spool valves

- Port size: G1/4 and NAMUR interface
- For single and double operated actuators
- Standard manual override with detent
- Simple design of soft spool seal system
- Compact design, high flow rate

- Easily interchangeable solenoid system
- Maintenance-free
- Valves and solenoids are ATEX approved (see table)



Technical features

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Solenoid, indirectly controlled

Operating pressure:

2 ... 8 bar (29 ... 116 psi)

Orifize:

6 mm

Port size:

NAMUR Interface with integrated exhaust air

Mounting position:

Optional, preferably with solenoid

Flow direction:

Fixed

Electrical connection:

See solenoid table

Ambient/Media temperature:

-10° ... +50°C (+14° ... +122°F) Solenoid: see solenoid table Air supply must be dry enough to avoid ice formation at temperatures below 2°C (+35°F).

Materials:

Housing: Aluminium Pilot flange: Plastic Seat seal: NBR

Technical data

Symbol	Ports *2 1, 3 (5)	2 (4)	Actuation	Nominal size	Operating pressure (bar)	kv-value $(Cv (US) \approx kv \times 1,2)$	Weight (kg)	Dimension No.	Model *1)
2 3	G 1/4	Flange	Solenoid indirectly controlled	6	28	1,2	0,4	1	8010777
13	G 1/4	Flange	Solenoid indirectly controlled	6	2 8	1,2	0,55	2	2623077
315	G 1/4	Flange	Solenoid indirectly controlled	6	28	1,2	0,9	3	2623177
3 1 5									

3/2 or 5/2 way function (conversion instruction see page 6)

Symbol	Ports *2 1, 3 (5)	2 (4)	Actuation	Nominal size	Operating pressure (bar)	kv-value (Cv (US) \approx kv x 1,2)	Weight (kg)	Dimension No.	Model *1)
2 3	G 1/4	Flange	Solenoid indirectly controlled	6	28	1,2	0,4	4	2623079
1 3	G 1/4	Flange	Solenoid indirectly controlled	6	28	1,2	0,9	5	2623179

^{*1)} When ordering please indicate solenoid, voltage and current type (frequency).

^{*2)} Port 5 is not throttleable



Solenoid actuators

	Power consumption	on	Rated curr	ent	Protection class	Ex-Protection (ATEX-Category)	Temperature Ambient/Media	Electrical connection	Weight	Drawing	Circuit diagram	Model
	24 V d.c. 23 (W) (V/		24 V d.c. 2 (m A) (r	30 V a.c. n A)	IP/NEMA		(°C)		(kg)	No.	No.	
© (i	1,8	-	70	-	IP65 (with connector)	_	-15 +50	Connector DIN EN 175301-803, form B *1)	0,1	11	1	3050
	1,6	-	30	-	IP65 (with connector)	_	-15 +50	Connector DIN EN 175301-803, form A *1)	0,1	12	1	3036
1	2,7	_	115	-	IP65 (with connector)	II 2 G Ex mb IIC T5 Gb II 2 D Ex mb tb T95°C Db	-20 +50 *2)	Cable length 3 m	0,3	13	14	3062
Elizabeth Aller State of the St	-	2,1	-	9	IP65 (with connector)	II 2 G Ex mb IIC T5 Gb II 2 D Ex mb tb T95°C Db	-20 +50 *2)	Cable length 3 m	0,3	13	15	3063
in an and	2,7	_	115	_	IP66 (with connector)	_	-10 +50	Connector *1) M12x1, DIN IEC 61076-2-101 Solenoid with yellow LED	0,1	14	17	3071

Standard voltages ($\pm 10\%$) 24 V d.c., 230 V a.c., other voltages on request. *1) Connector is not scope of delivery, see table »Accessories«

Approvals

Model	Approvals ATEX	IECEx	FM			Datasheet
306x	PTB 03 ATE	X 2015		_	_	N/en 7.1.560

Accessories

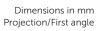




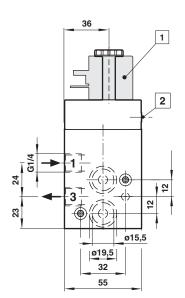
Dimensions Valves

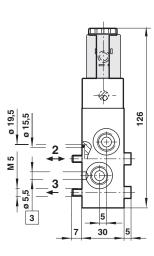


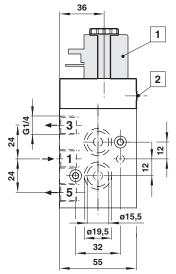


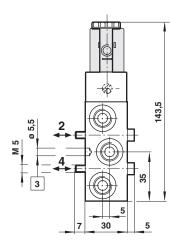






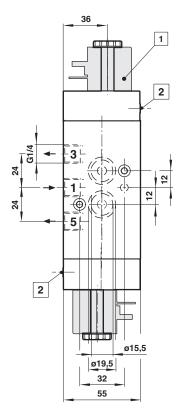


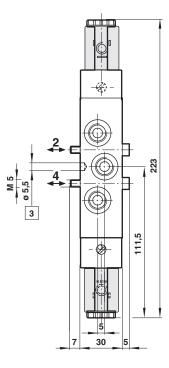




3

- 1 Solenoid 90° turnable
- 2 Manual override with detent
- 3 NAMUR centering hole





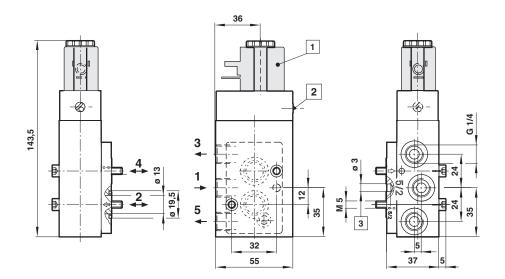




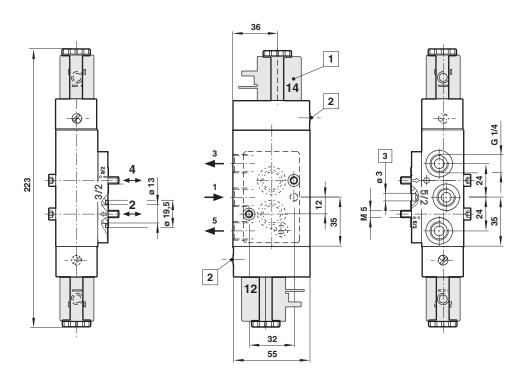
Dimensions in mm Projection/First angle







5



- Solenoid 90° turnable
- 2 Manual override with detent
- 3 NAMUR centering hole



Dimensions

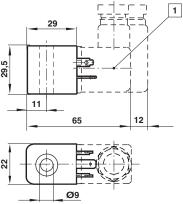
Dimensions in mm Projection/First angle

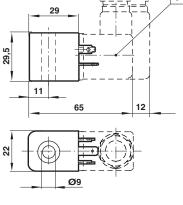


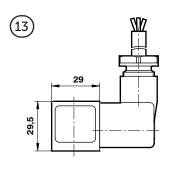


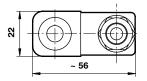
Solenoid operators





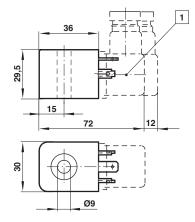




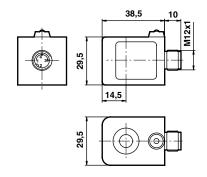


1 Connector 4 x 90° turnable









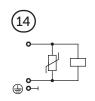
Electrical connection M 12 x 1

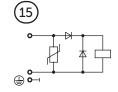


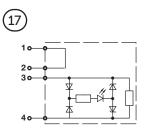
Pin	Signal	Cable
1	+ UB	brown
2	Out 2 (PNP) / analogue 4 to 20 mA	white
3	0 Volt	blue
4	Out 1 (PNP)	black

Circuit diagrams







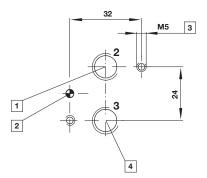




NAMUR hole pattern (actuator side)

Dimensions in mm Projection/First angle





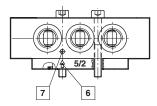
Coding stud threaded 10 mm deep

NAMUR quick exhaust module for a better kv-value by exhaust see data sheet 5.4.820

NAMUR interlinking plates in redundancy design for »safety exhausting« and »safety ventilating« see data sheet 5.4.830

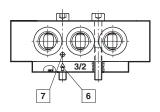
Conversion instructions of 5/2 into 3/2 way function

5/2 way function (original mode of supply)



3/2 resp. 5/2 way function can be achieved just by swapping enclosed adaptor plates. Make sure Marker and Arrow do match as shown on above drawing. Original mode of supply: 5/2 function.

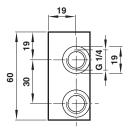
3/2 way function

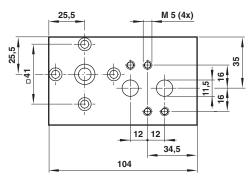


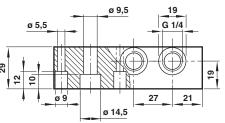
6 Arrow 7 Marker



Single connection plate Model: 0612790





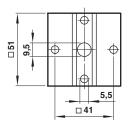


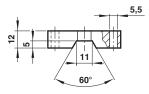
NAMUR slot Model: 0612791

Dimensions in mm Projection/First angle

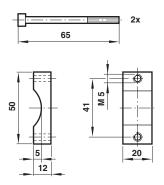




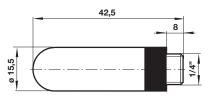




Yoke Model: 0540593



Silencer Model: M/S2



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 Norgren Ltd.

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.