

# 97300 NAMUR, 3/2 & 5/2

## Indirect solenoid actuated spool valve



- > Port size: G1/4, 1/4 NPT, NAMUR Interface
- > Main application: Single and double acting actuators
- > 5/2 way valve usable as 3/2 way valve
- > Crossover-free switching
- > Manual override with detent
- > Variable valve solenoid combination



### Technical features

**Medium:** Filtered, lubricated or non-lubricated and dry compressed air

**Operation:** Indirect solenoid operated spool valve

**Operating pressure:** 2 ... 8 bar (29 ... 116 psi)  
Below -10°C (14°F) must be

> 2,5 bar (> 36 psi)

**Port size:** NAMUR G1/4, NAMUR 1/4 NPT  
NAMUR Interface with integrated recirculation from the exhaust air to the acutator sping chamber

**Flow direction:** Fixed

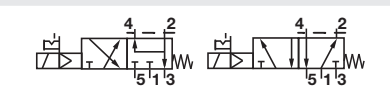
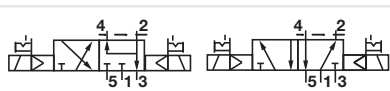
**Mounting position:** Optional

**Ambient/Media temperature:** -15 ... +50°C (+5 ... +122°F)  
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (35°F).

**Materials:**  
Housing: Aluminium anodized  
Pilot flange: Plastic (PBT)  
Flange plate: Aluminium  
Seals: NBR

### Technical data

**Housing: Aluminium anodized, Sealing: NBR -15 ... +50°C (+5 ... 122°F)**

Symbol	Port size	Actuation/Return	Flow (l/min)	Weight (kg)	(lbs)	Drawing No.	Model *1)
	NAMUR G1/4	Solenoid/Spring	1230	0,42	0.9	1	9730000
	NAMUR 1/4 NPT	Solenoid/Spring	1230	0,42	0.9	1	9730010
	NAMUR G1/4	Solenoid/Solenoid	1250	0,50	1.1	2	9731000
	NAMUR 1/4 NPT	Solenoid/Solenoid	1250	0,50	1.1	2	9731010






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

### Option selector

Function)	Substitute	Voltage	Substitute
5/2 way, spring return (3/2 way spare adaptor plate supplied)	0	24 V d.c.	02400
5/2 way, solenoid return (3/2 way spare adaptor plate supplied)	1	230 V a.c.	23050
<b>Ports size</b>	<b>Substitute</b>	<b>Solenoid actuators</b>	<b>Substitute</b>
G1/4	0	See table on page 2	
1/4 NPT	1		

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**Solenoids, 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. (mA)	230 V a.c. (mA)								
	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
	2	—	85	—	IP65 (with connector)	II 3 G Ex nA IIC T5 Gc II 3 D Ex tc IIIC T95° Dc IP65	-15 ... +50	Connector DIN EN 175301-803, form A *1)	0,3	5	1	3046
	—	2	—	18	IP65 (with connector)	II 3 G Ex nA IIC T5 Gc II 3 D Ex tc IIIC T95° Dc IP65	-15 ... +50	Connector DIN EN 175301-803, form A *1)	0,3	5	1	3047
	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	Cable length 3 m	0,3	13	14	3062
	—	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	Cable length 3 m	0,3	13	15	3063
	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 (±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«

**Approvals**

Model	Approvals ATEX	Data- sheet
3046, 3047	Declaration by the Manufacturer	N/en 7.1.555
306x	PTB 03 ATEX 2015	N/en 7.1.560

**Electrical connection M12 x 1**

Model	Pin	Cable
	1	brown
	2	white
	3	blue
	4	black

### Accessories

Connector DIN EN 175301-803	4-pin, 90°	4-pin, 90°	4-pin, straight	4-pin, straight
0570275, form A	0523058 (2 m cable, 4-core)	0523056 (without cable)	0523057 (2 m cable, 4-core)	0523055 (without cable)
0680003, form B	0523053 (5 m cable, 4-core)		0523052 (5 m cable, 4-core)	

Silencer
Page 7
C/S2 (1/4 NPT)
M/S2 (G1/4)

### NAMUR accessories

Throttle control plate *1)	Flange plate	Yoke	Distance plate for pressure switches	Mounting plate	Quick exhaust module *2)
Page 6	Page 5	Page 6	Page 6	Page 6	
4040239	0612790 (NAMUR single connection plate) 0612791 (NAMUR-rip use in combination with 0612790)	0540593	0540109	0613453 (90°) 0612631 (180°)	4050218

\*1) The throttle control plate 4040239 has a minimum flow rate for safety reason.

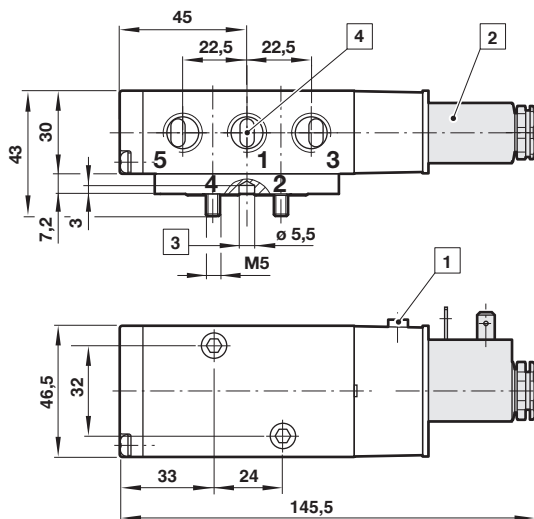
\*2) Technical details see catalogue page en 5.4.820.

### Drawings Valves

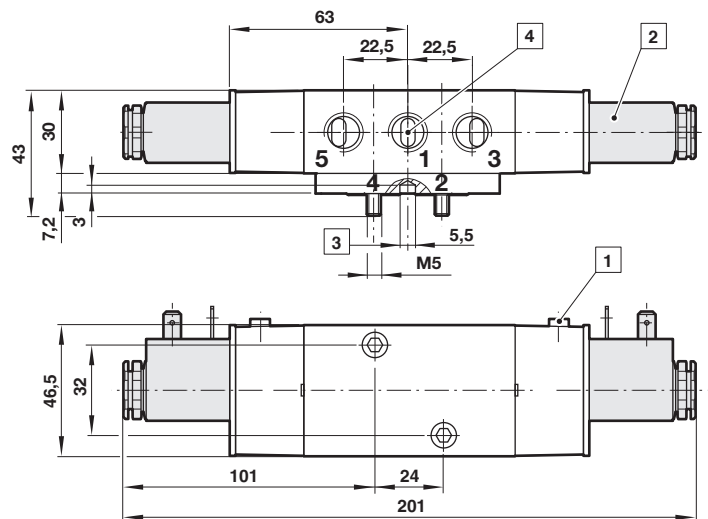
Dimensions in mm  
Projection/First angle



①



②



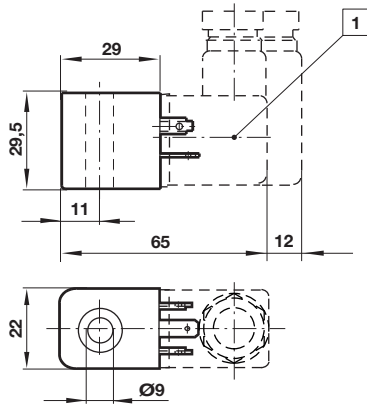
- ① Manual override
- ② Solenoid operator
- ③ Coding stud
- ④ Port size G1/4 or 1/4 NPT

**Solenoids**

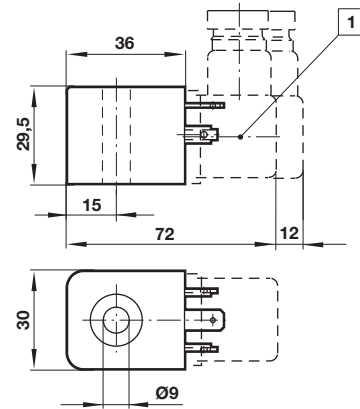
Dimensions in mm  
Projection/First angle



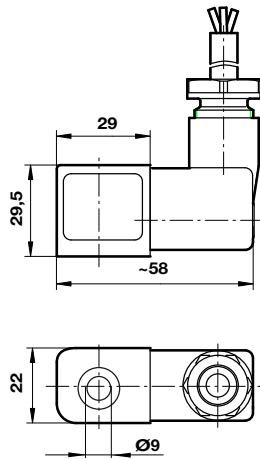
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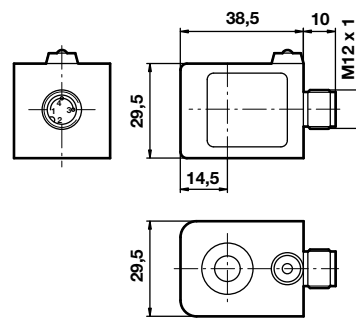
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13



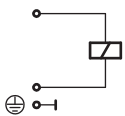
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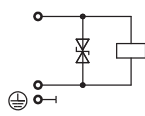
1 Connector 4 x 90° turnable

**Circuit diagrams**

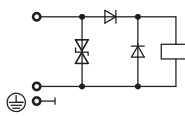
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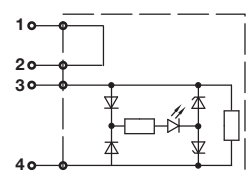
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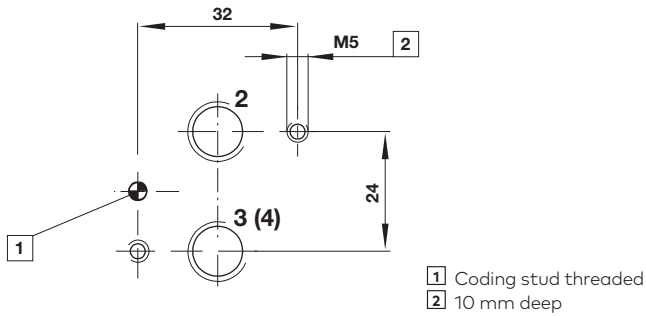
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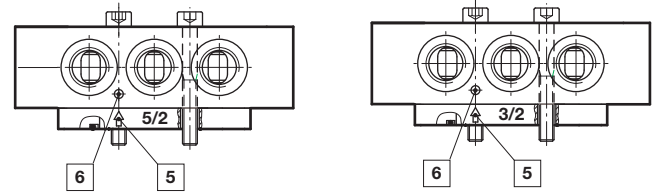
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### NAMUR hole pattern (actuator side)



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



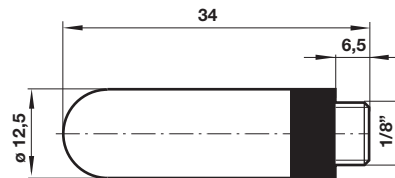
3/2 resp. 5/2 way function can be achieved just by swapping enclosed adaptor plates. Make sure marker and arrow do match as shown on above drawing. Original mode of supply: 5/2 function.

- 5 Arrow
- 6 Marker

### Accessories

#### Silencer

Model: M/S1, C/S1

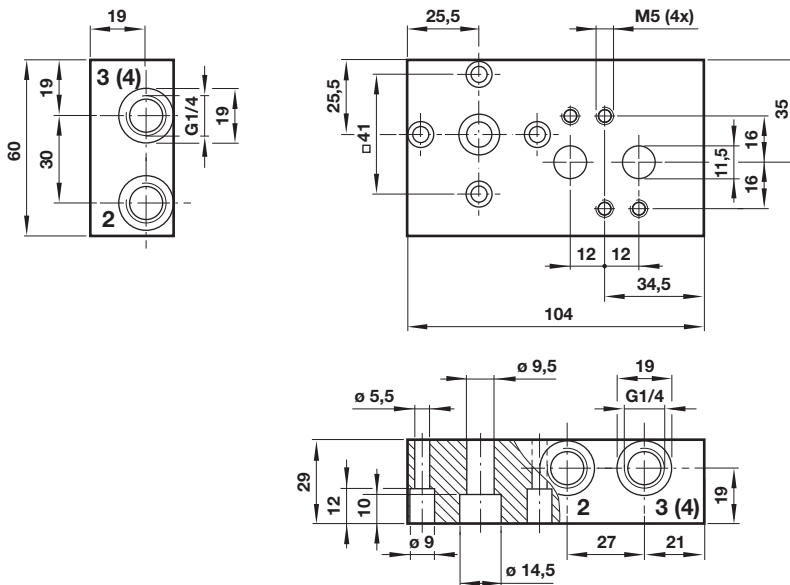


Dimensions in mm  
Projection/First angle



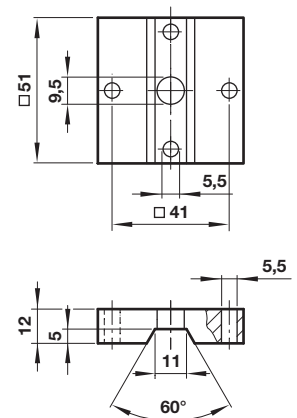
### Single connection plate

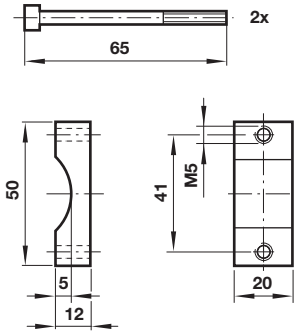
Model: O612790

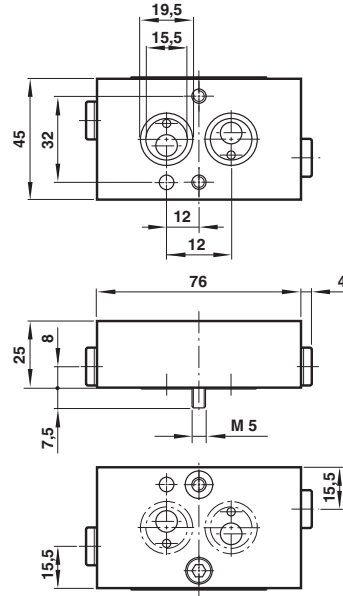
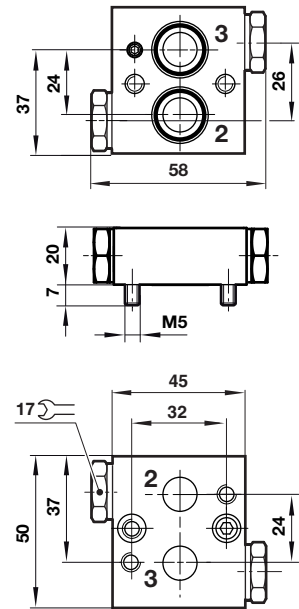
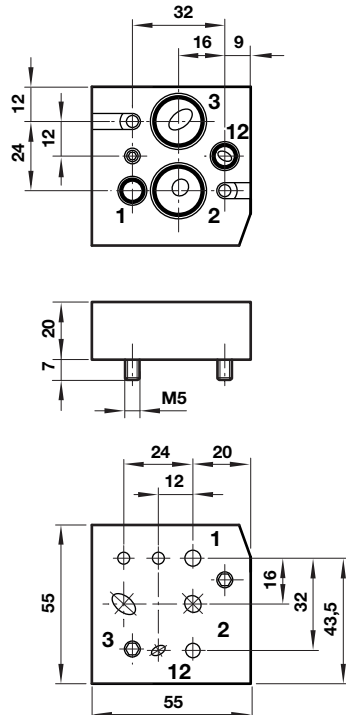


### NAMUR slot

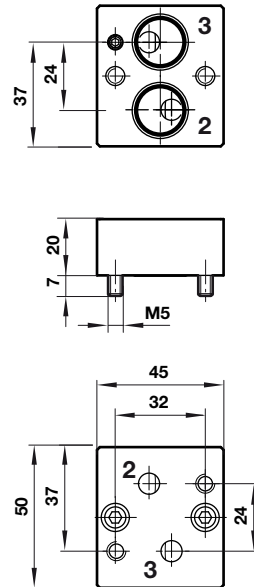
Model: O612791

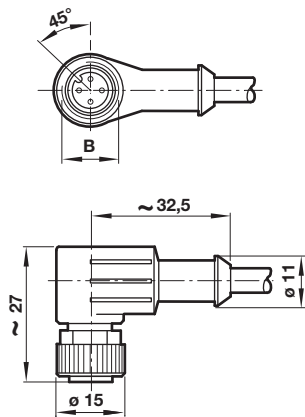


**Yoke**  
 Model: 0540593

**Throttle control plate**  
 Model: 4040239

 Dimensions in mm  
 Projection/First angle

**Distance plate for pressure switches**  
 Model: 0540109

**Mounting plate**  
 Model: 0613453 (90°)


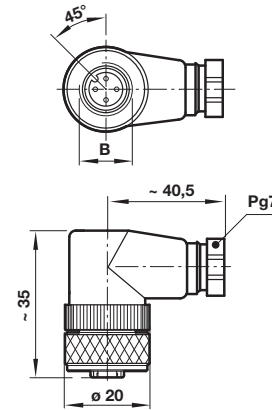
Model: 0612631 (180°)



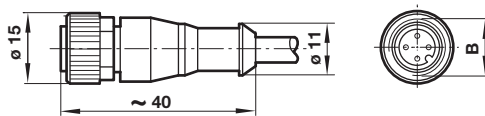
**Connector  
90°, 4 pin, with PUR cable**


B	C	øD	øD1	F	Wire x dim.	Cable length (m)	Weight (g)	Model
M12 x 1,5	32,5	15	11	27	4 x 0,34 mm <sup>2</sup>	2	90	0523058
M12 x 1,5	32,5	15	11	27	4 x 0,34 mm <sup>2</sup>	5	180	0523053

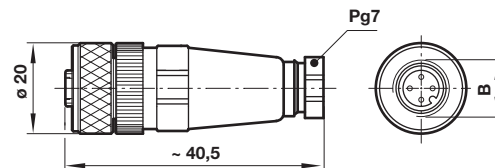
**4 pin, without cable**

 Dimensions in mm  
Projection/First angle


B	C	øD	E	F	Weight (g)	Model
M12 x 1,5	40,5	20	Pg 7	35	30	0523056

**Straight, 4 pin, with PUR cable**


B	C	øD	øD1	Wire x dim.	Cable length (m)	Weight (g)	Model
M12 x 1,5	40	15	11	4 x 0,34 mm <sup>2</sup>	2	80	0523057
M12 x 1,5	40	15	11	4 x 0,34 mm <sup>2</sup>	5	200	0523052

**Straight, 4 pin, without cable**


B	C	øD	E	Weight (g)	Model
M12 x 1,5	40,5	20	Pg 7	26	0523055

**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.

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.