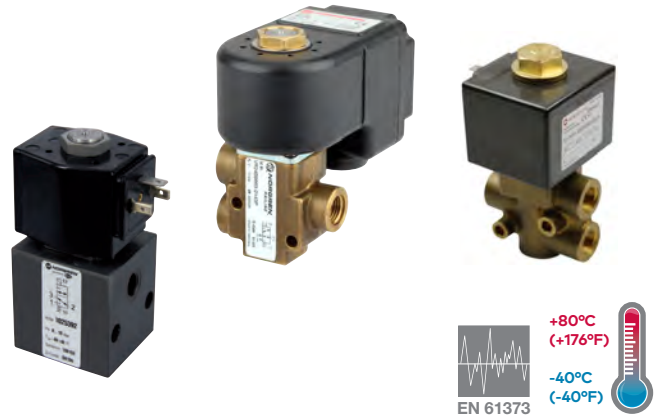


VR24 series, 3/2

Direct solenoid actuated poppet valve

- Port size: 1/4" (ISO G/ NPT or flanged with NAMUR interface)
- Valve switches at power failure into starting position (mechanical spring return)
- Add-on manual override optional
- Suited for outdoor use under critical environment conditions (see solenoid list)
- Wide temperature range
- Shock vibration tested to EN 61373, Category 1, class A and B
- Fire & Smoke (F&S) tested to EN 45545-2 HL3 (optional versions)



Technical features

Medium:

Compressed air, filtered, non-lubricated and dry
Other gase and liquid fluids on request

Operation:

Direct solenoid operated poppet valves

Flow direction:

Optional

Mounting position:

Any, but preferably with solenoid vertical

Flow:

Gaseous fluids: 340 l/min
Liquid fluids: Kv 0,34

Port size:

G 1/4, 1/4 NPT or flanged with NAMUR Interface

Orifice:

5 mm

Operating pressure:

0 ... 10 bar (0 ... 145 psi)

Ambient/Media temperature:

-40 ... +80°C (-40 ... +176°F)
depending on solenoid system.
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Temperature solenoid:

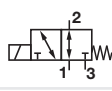
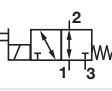
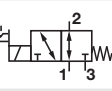
See table

Material:

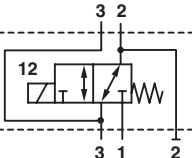
Housing: brass (standard), hard anodized aluminium (NAMUR)
Seal: NBR
Inner parts: stainless steel, brass

Technical data

With threaded connection, brass valves

Symbol	Port size	Operating pressure (bar)	Material Seat seal	Temperature*2) (°C)	Manual override	Weight (kg)	Dimension No.	Solenoid group	Model *1)
	G 1/4	0 ... 10	NBR	-40 ... +80	without	0,65	See below	0800, 5270 or 9318 (F&S)	VR24B9665-01XXP
	1/4 NPT	0 ... 10	NBR	-40 ... +80	without	0,65	See below	0800, 5270 or 9318 (F&S)	VR24R9665-01XXP
	G 1/4	0 ... 10	NBR	-40 ... +80	push only	0,70	See below	0800, 5270 or 9318 (F&S)	VR24B9665-03XXP
	1/4 NPT	0 ... 10	NBR	-40 ... +80	push only	0,70	See below	0800, 5270 or 9318 (F&S)	VR24R9665-03XXP
	G 1/4	0 ... 10	NBR	-40 ... +80	turn & lock	0,70	See below	0800, 5270 or 9318 (F&S)	VR24B9665-02XXP
	1/4 NPT	0 ... 10	NBR	-40 ... +80	turn & lock	0,70	See below	0800, 5270 or 9318 (F&S)	VR24R9665-02XXP

Namur version, hard anodized aluminium valves

Symbol	Port size	Operating pressure (bar)	Material Seat seal	Temperature*2) (°C)	Manual override *3)	Weight (kg)	Dimension No.	Solenoid group	Model *1)
	G 1/4	0 ... 10	NBR	-40 ... +80	without	0,65	4	0800, 5270 or 9318 (F&S)	VR24U9565-01XXP
	1/4 NPT	0 ... 10	NBR	-40 ... +80	without	0,65	4	0800, 5270 or 9318 (F&S)	VR24R9565-01XXP

*1) xx = Insert solenoid code on 13th digit and voltage code on 14th digit, see page 2!

*2) Depending on solenoid system, see page 2!

*3) Push only and turn & lock on request

Option selector

VR24★9★65-0★ ★ ★ P

Port size	Substitute
G 1/4	B
1/4 NPT	R
G 1/4 Namur	U
1/4 NPT Namur	W
Housing material	Substitute
Aluminium anodized, Namur only	5
Brass , G1/4, 1/4 NPT only	6
Stainless steel (optional)	7

Additional versions on request

Voltage	Substitute
24 V d.c.	3
36 V d.c.	4
72 V d.c.	A
110 V d.c.	7
Solenoids	Substitute
5270	2
0800	4
9318 (Fire & Smoke)	8
Manual override	Substitute
None (Namur standard)	1
Push and turn	2
Push only	3

Solenoid parameters

	Power consumption 24 V d.c. (W)	Rated current 24 V d.c. (m A)	Temperature range (°C)	Voltage tolerance (%)	Protection class *6)	Electrical connection	Weight (kg)	Dimension No.	Circuit diagram No.	Model	Code
	16,9	703 (24 V d.c.) 425 (36 V d.c.) *8) 193 (72 V d.c.) *8) 139 (110 V d.c.)	-25 ... +40 -25 ... +60	+20/-30 (+15/-32) +10/-30 (+6/-32) () for 37,5 & 74 V d.c. only	IP 65 (with Connector *4)	Connector DIN EN 175301-803 Form A *5)	0,26	1	1	0800	4
	8,9	369 (24 V d.c.) 222 (36 V d.c.) *8) 120 (72 V d.c.) *8) 69 (110 V d.c.)	-40 ... +60 -40 ... +80	+/-30 (+25/-32) +30/-20 (+25/-22) () for 37,5 & 74 V d.c. only	IP 65	M20 x 1,5 *5)	0,5	2	2	5270 *7)	2
	14	1165 (12 V d.c.) 584 (24 V d.c.) 389 (36 V d.c.) 194 (72 V d.c.) 165 (85 V d.c.) 127 (110 V d.c.)	-40 ... +70	+/- 30%	IP 65	Connector DIN EN 175301-803 Form A *9)	0,41	3	1	9318	8

*4) Required connector: type 0570275
*5) Connector cable gland not supplied, see table »Accessories«
*6) IP-Protection class according to EN60529
*7) Suitable for outdoor installation
*8) Voltage range: 36 ... 37,5 d.c. and 72 ... 74 V d.c.
*9) Fire & Smoke tested to EN 45545-2 HL3

Spare coils

	Voltage	Power consumption	Model
	24 V d.c.	16,9 W	0000000.0800.0240R
	36 V d.c.	16,9 W	0000000.0800.0360R
	72 V d.c.	16,9 W	0000000.0800.0720R
	110 V d.c.	16,9 W	0000000.0800.1100R

	Voltage	Power consumption	Model
	24 V d.c.	8,9 W	0000000.5270.0240R
	36 V d.c.	8,9 W	0000000.5270.0360R
	72 V d.c.	8,9 W	0000000.5270.0720R
	110 V d.c.	8,9 W	0000000.5270.1100R

	Voltage	Power consumption	Model
	24 V d.c.	14,0 W	0000000.9318.0240R
	36 V d.c.	14,0 W	0000000.9318.0360R
	72 V d.c.	14,0 W	0000000.9318.0720R
	110 V d.c.	14,0 W	0000000.9318.1100R

Accessories

Cable gland				Connector DIN EN 175301-803	
					
Page 5				0570275 (form A)	
Thread	Cable ø	Material	Model	SPC/991500/5 (form A, F&S*1))	
M 20x1,5	5,0...9,0 mm	PA, UL94 V0	0110854	SPC/991500/12 (form A, F&S*1), with anti-surge diode)	
M 20x1,5	6,0...12 mm	PA, UL94 V0	0110855		

*1) Fire & Smoke tested according to EN 45545-2

Silencer *1)	Exhaust guard *2)	Manual override (without detent)	Manual override (with detent)
			
Page 5	Page 5	Page 3	Page 3
T40C2800 (G1/4)	0613422 (G1/4, 1/4 NPT)	0600205	0601765
MS002A (1/4 NPT)			

*1) For indoor use, *2) For outdoor use

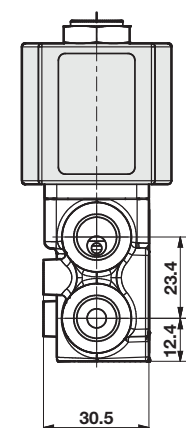
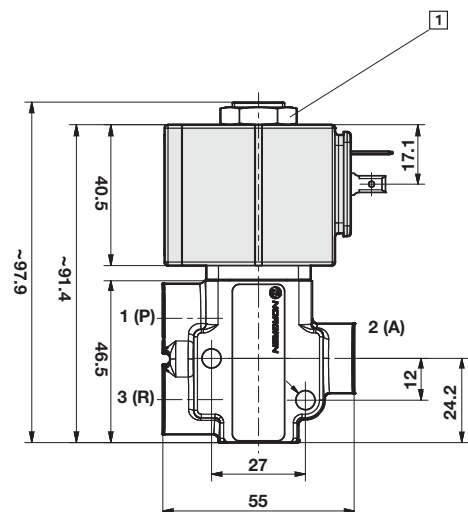
Flange plate	Yoke
	
Page 5	Page 5
0612790 (NAMUR single connection plate)	0540593
0612791 (NAMUR-rip use in combination with 0612790, Alu)	

Drawings - Valve

1/4" ISO G and NPT versions (VR24B ... & VR24R ...)

VR24B9665-014xP / VR24R9665-014xP

(solenoid .0800 / MOR: none)

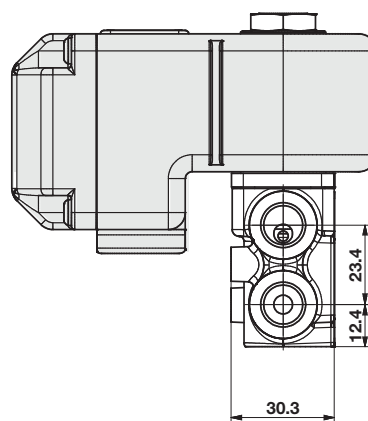
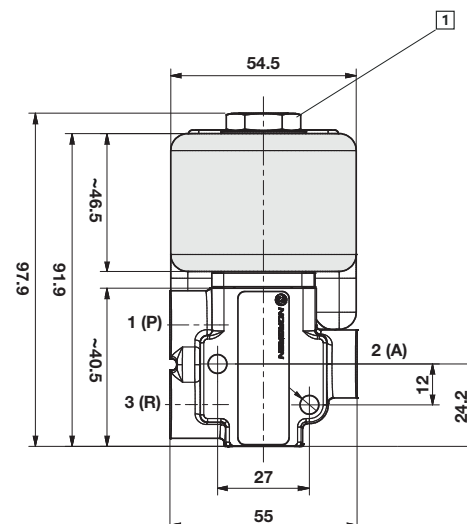


Dimensions in mm
Projection/First angle



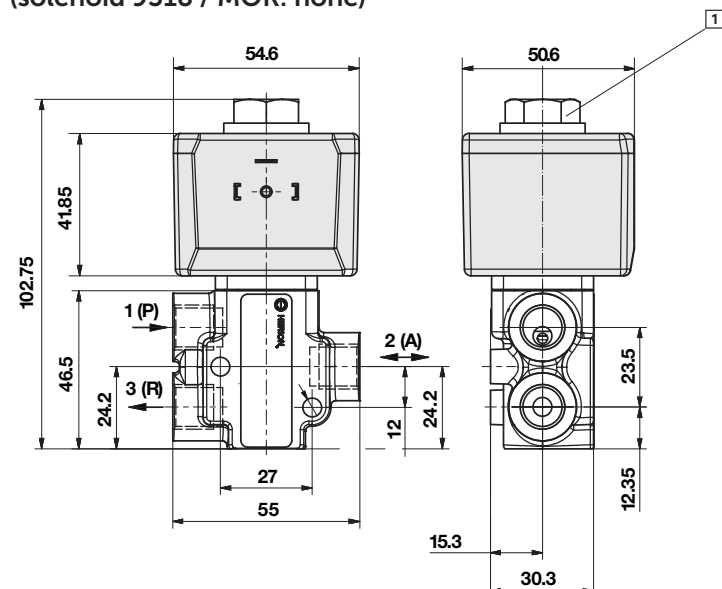
VR24B9665-012xP / VR24R9665-012xP

(solenoid .5270 / MOR: none)



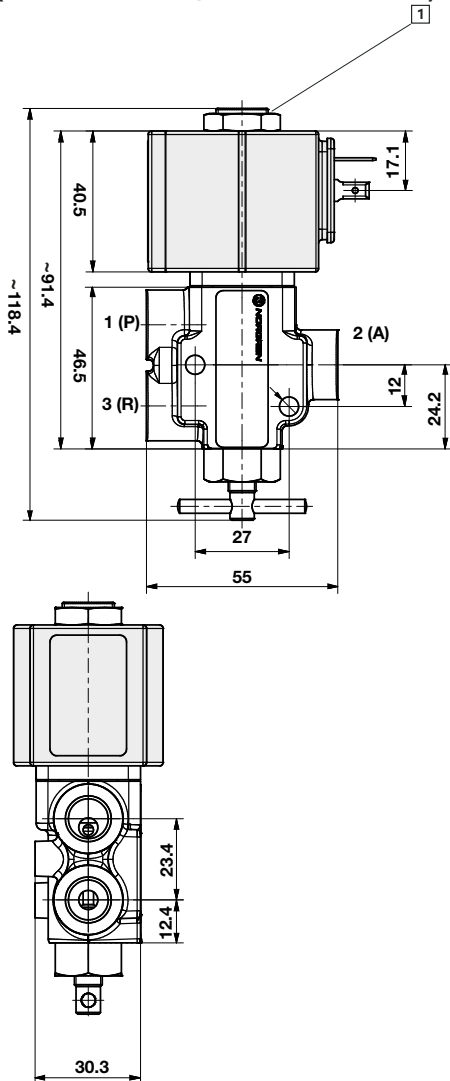
VR24B9665-018xP / VR24R9665-018xP

(solenoid 9318 / MOR: none)

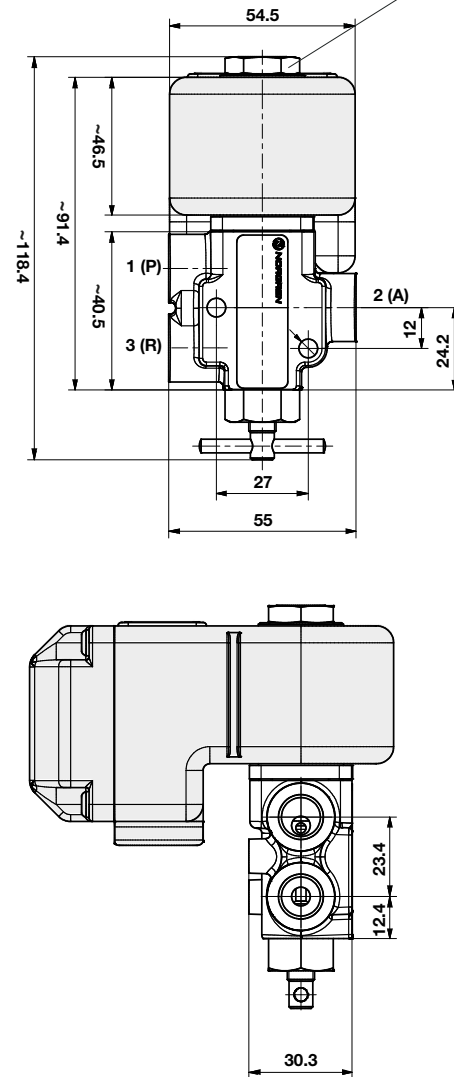


1 Tightening torque 5±1 Nm

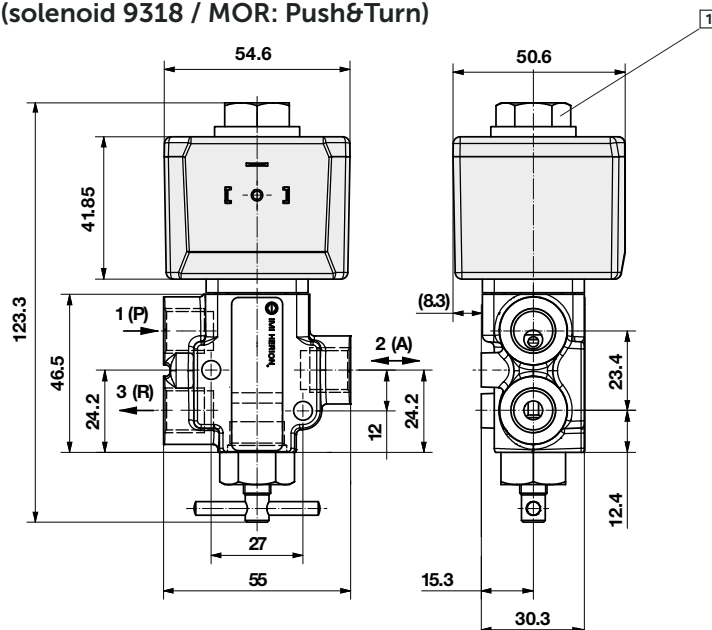
VR24B9665-024xP / VR24R9665-024xP
(solenoid .0800 / MOR: Push&Turn)



VR24B9665-022xP / VR24R9665-022xP Dimensions in mm
(solenoid .5270 / MOR: Push&Turn) Projection/First angle

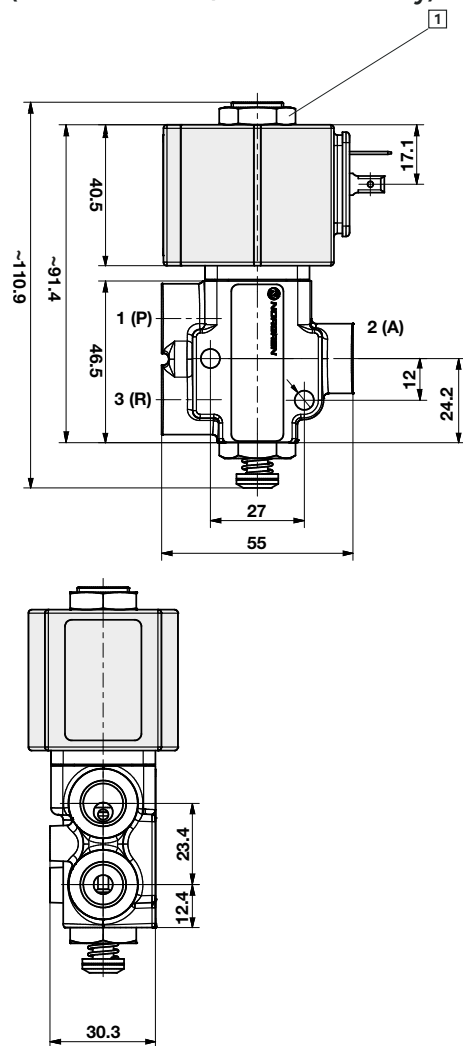


VR24B9665-028xP / VR24R9665-028xP
(solenoid 9318 / MOR: Push&Turn)

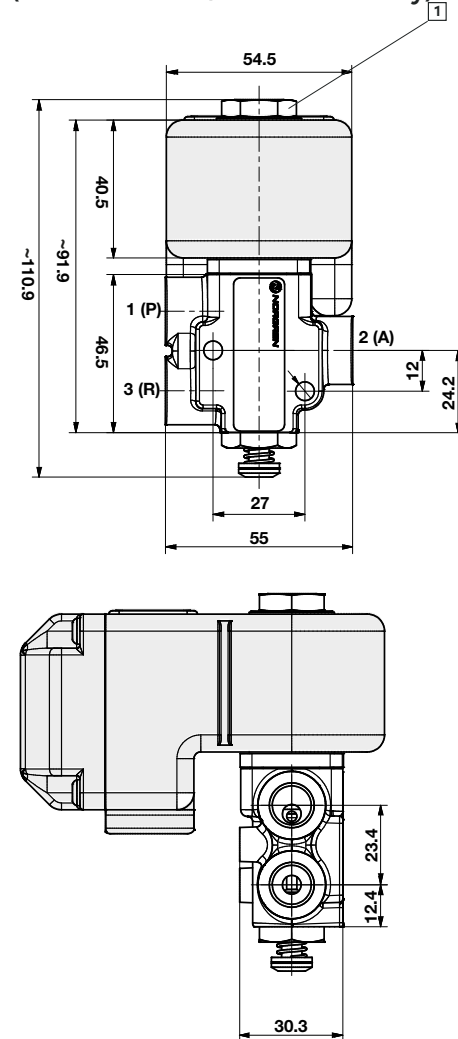


1 Tightening torque 5±1 Nm

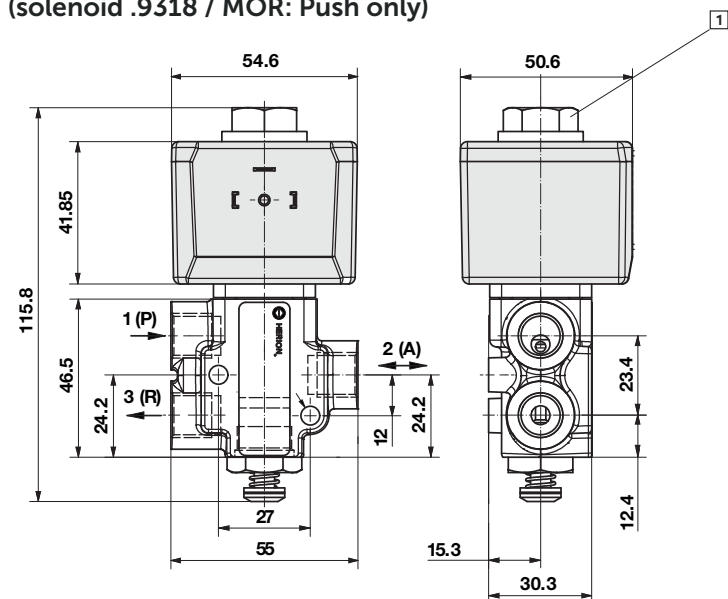
VR24B9665-034xP / VR24R9665-034xP
(solenoid .0800 / MOR: Push only)



VR24B9665-032xP / VR24R9665-032xP Dimensions in mm
(solenoid .5270 / MOR: Push only) Projection/First angle



VR24B9665-038xP / VR24R9665-038xP
(solenoid .9318 / MOR: Push only)

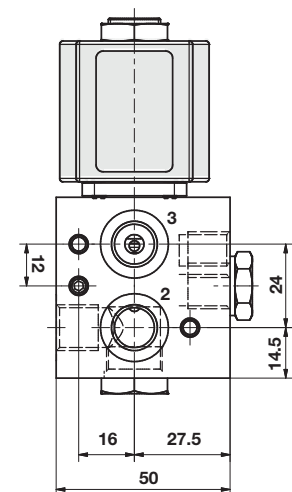
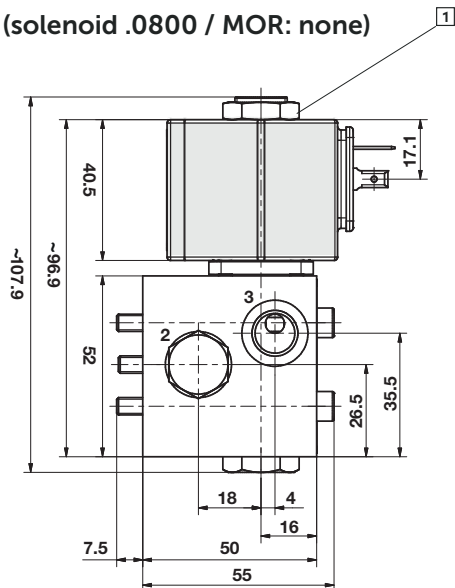


1 Tightening torque 5±1 Nm

1/4" NAMUR G and NPT versions (VR24U ... and VR24W ...)

VR24U9565-014xP / VR24W9565-014xP

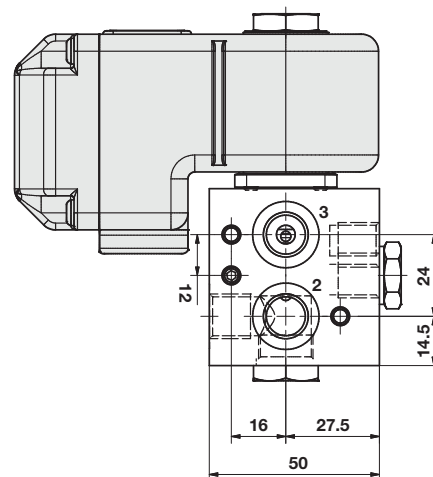
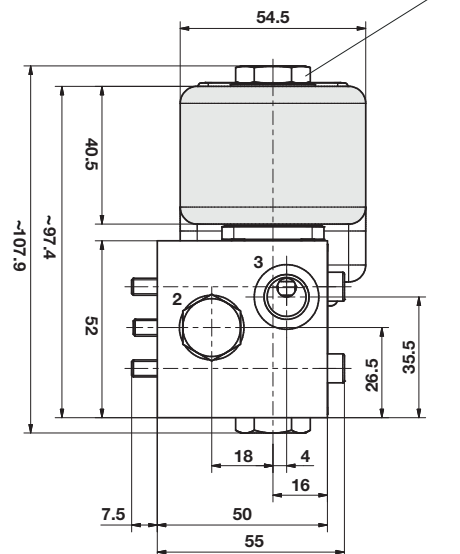
(solenoid .0800 / MOR: none)



Dimensions in mm
Projection/First angle

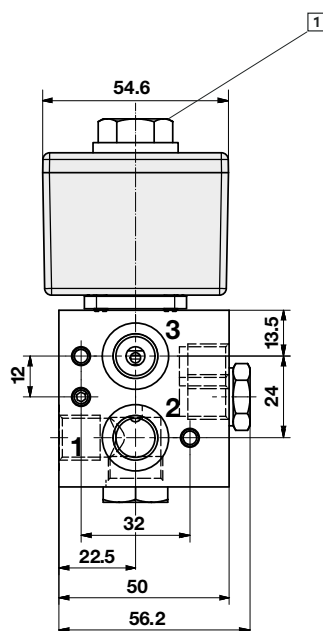
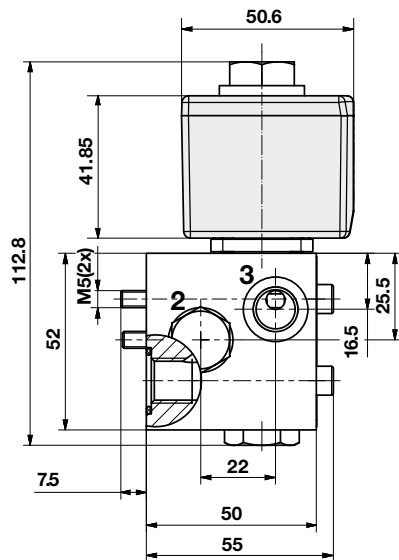
VR24U9565-012xP / VR24W9565-012xP

(solenoid .5270 / MOR: none)



VR24U9565-018xP / VR24W9565-018xP

(solenoid 9318 / MOR: none)



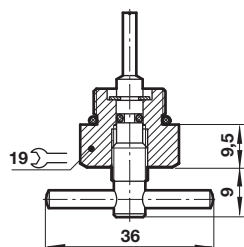
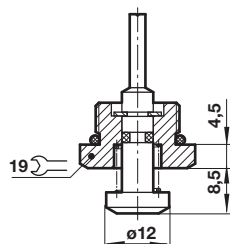
1 Tightening torque 5±1 Nm

Add-on manual override

Without detent
Model: 0600205

With detent
Model: 0601765

Dimensions in mm
Projection/First angle

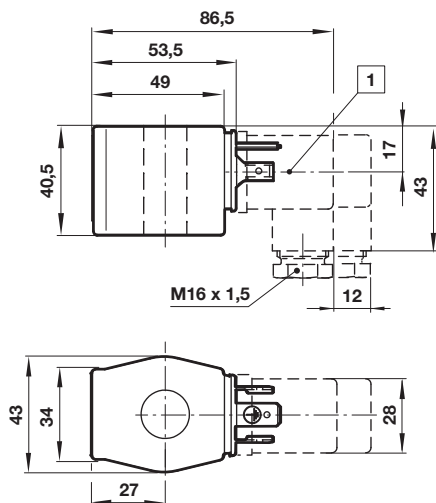


Solenoids

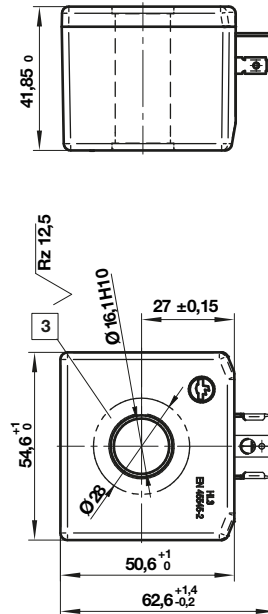
Dimensions in mm
Projection/First angle



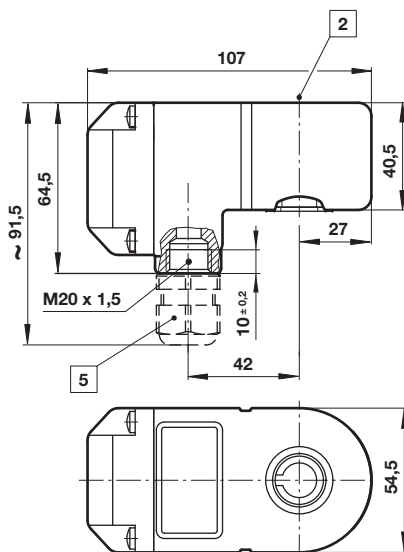
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3



2

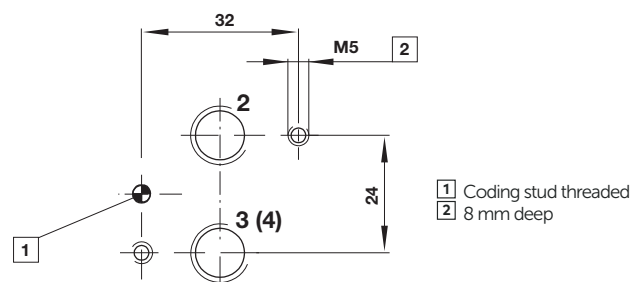


- 1 Connector can be indexed by 4x90°
- 2 Ø 16 or 13 (with spacer tube)
- 3 Seal face
- 5 With cable gland, Pg 13,5

Circuit diagrams



NAMUR hole pattern (actuator side)

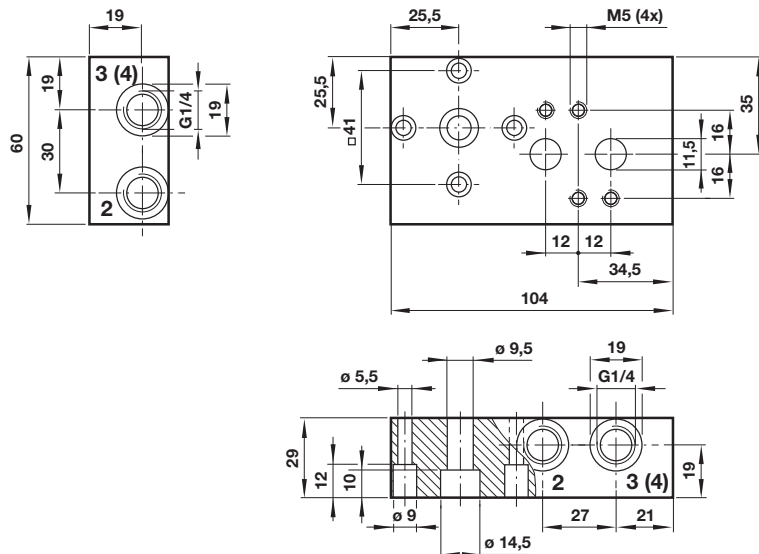


NAMUR quick exhaust module for a better kv-value by exhaust see data sheet 7502144

NAMUR interlinking plates in redundancy design for »safety exhausting« and »safety ventilating« see data sheet 5.15.300 (7503386)

Single connection plate

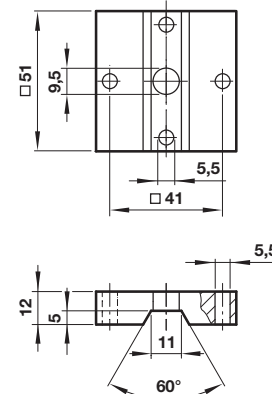
Type: 0612790



NAMUR slot

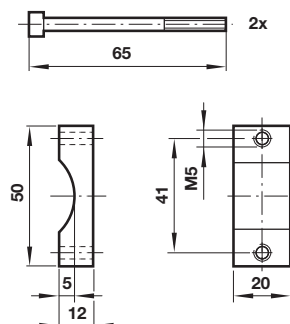
Type: 0612791

Dimensions in mm
Projection/First angle



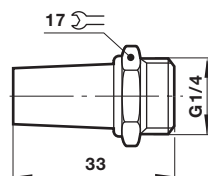
Yoke

Type: 0540593

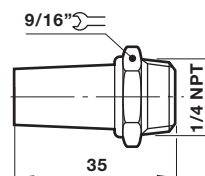


Silencer

Model: T40C2800

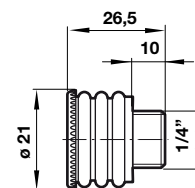


MS002A

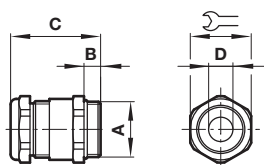


Exhaust guard

Model: 0613422



Cable gland



For cable ø	A	B	C		Model
5 ... 9	M20 x 1,5	9	36	24	0110854
6 ... 12	M20 x 1,5	9	36	24	0110855

Connector

Type	Model
EN 175301-803-A	0570275
EN 175301-803-A (Fire & Smoke)	SPC/991500/5
EN 175301-803-A (Fire & Smoke, with anti-surge diode)	SPC/991500/12

Warning

These products are intended for use in industrial compressed air and fluid 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 GmbH.

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.