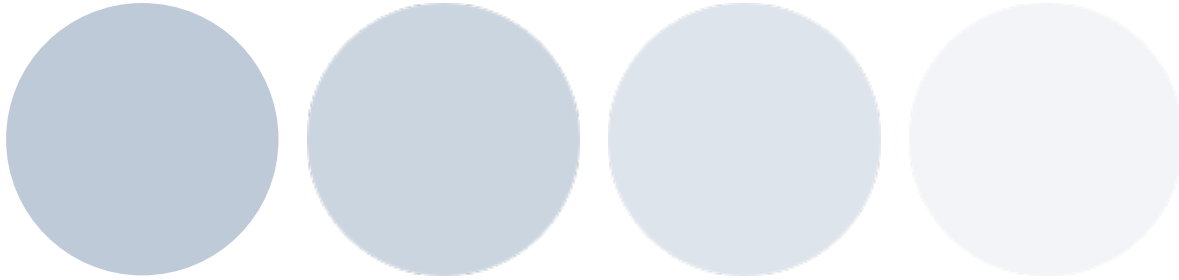


VA Series Direct Acting Solenoid Valves

TecnaAir[®]



- Sub-base mounted
- Threaded connections on the body
- CNOMO interface
- Versions: 2/2 3/2 NC - NO

www.tecnair.co.uk

VA Series Direct Acting Solenoid Valves

U1 Coil

- Sub-base mounted or threaded ports
- CNOMO interface
- Versions: 2/2 3/2 NC - NO
- Modular sub-bases
- Orientable coil (360°)



VA series valves are Direct Acting solenoid valves using coil, armature and plunger principles to open and close a flat poppet seal. Valves are available in all commonly used voltages and can be sub-base mounted or directly ported into threaded connections. Coils can be orientated through 360° and various valve options available, configured 2/2, 3/2 and normally closed or normally open.

TECHNICAL DATA

Ambient temperature	-10 to +50 °C			
Fluid temperature	max +95 °C			
Fluid	filtered air 10 µm, with or without lubrication, neutral gasses (upon request other fluids can be used)			
Mechanical system	self cushioning poppets			
Pneumatic function	2/2 NC, 3/2 NC, 3/2 NO ^(a)			
Pressure	2/2, 3/2 NC = 0 to 10 bar 3/2 NO = 3 to 10 bar			
Control	electric			
Return	mechanical spring			
Connections	sub-base mounted or threaded connections			
	sub-base	G 1/8	M5	CNOMO
Nominal Ø (mm)	1.2 to 1.5	1 to 1.5	1 to 1.5	1.2 to 1.5
Nominal flow rate (NI/min)	30 to 60	28 to 60	30 to 60	33 to 45

CONSTRUCTION DATA

Materials	see features below
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ELECTRICAL DATA

Series	U1	U3
Coil	EA	EC
Power consumption	3,5 W (DC) - 5 VA (AC)	2,5 W (DC) - 3,3 VA (AC)
Connector	XM 5110	XM 5111
Voltage	12 V DC - 24 V DC - 24 V AC - 110 V AC - 230 V AC	
Protection degree	IP65	

For other electric features see section **"Accessories>Coils"**

(a) = Mechanical part designed to keep the air supply always from the body
(Useful in case of assembly of more NC-NO pilots in series to have a unique supply port)

SOLENOID STEM U1



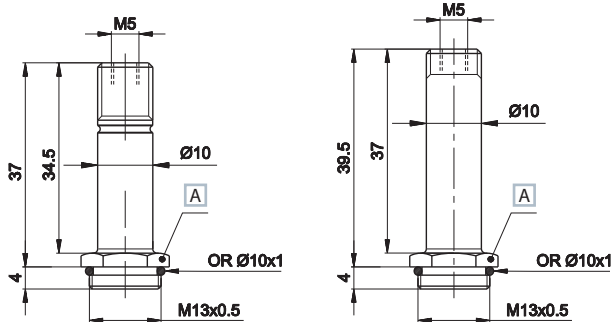
Material:	
sleeve	treated brass
cores and spring	stainless steel
seals	nitrile rubber

	Exhaust Ø mm	Pressure bar	Weight Kg	Part no.
3/2 NO	1.2	3 to 10	0.024	VA-0150
3/2 NC	1.5	0 to 10	0.022	VA-0157
2/2 NC	-	0 to 10	0.022	VA-0170

Upon request viton seals and stainless steel sleeves (only NC versions)

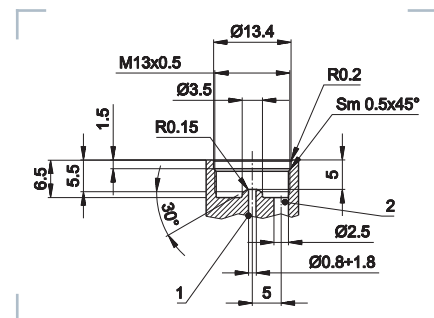
■ NC

■ NO



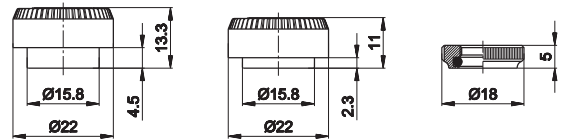
A Wrench 14mm

■ Detail of machining



1 = Inlet
2 = Outlet

COIL RETAINING CAPS

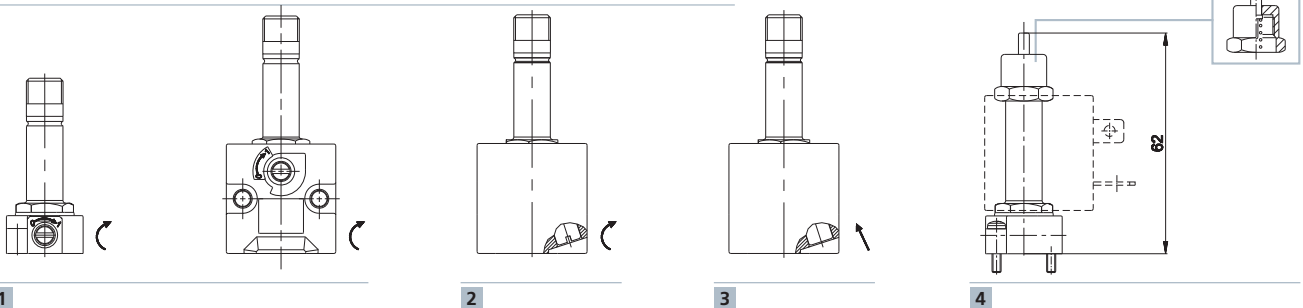


Version	Suitable for sleeves	Material	Coil	Part no.
1 = radial exhausts	3/2 NO	technopolymer	U1	XM-5213A
2 = radial exhausts	3/2 NC	technopolymer	U1	XM-5211A
3 = open exhausts	2/2 NC	brass	U1	XM-5211B

In order to convey exhausts, use version 3

MANUAL OVERRIDES

Function	Suitable for Sleeve Type	Symbol/Part no.
1 = 2 position screw	all NC U1 solenoid valves available with manual override	⊖
2 = impulse 1-2 position screw	only CNOMO NC U1 solenoid valves	⊖
3 = button with tool	only CNOMO NC U1 solenoid valves	→
4 = button, 1 position	U1 3/2 NO solenoid valves	XM-5201(a)



(a) = Mounted on the 3/2 NO sleeve

⊖ = 2 position screwdriver operation
→ = push button operation

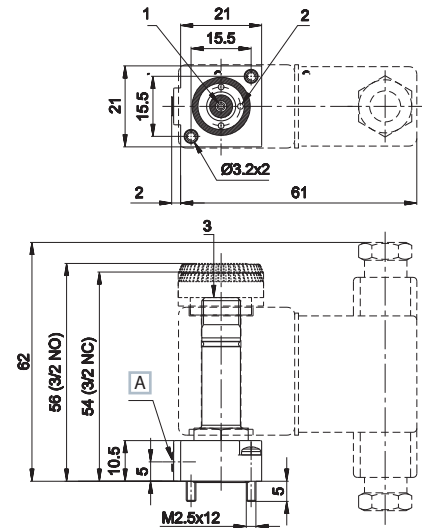
SOLENOID VALVES 2/2 - 3/2 SUB BASE MOUNTED



Material:
 valve body Aluminium
 sleeve treated brass
 core and spring stainless steel
 seals nitrile rubber

Symbol	Ø (d) mm	Flowrate (NI/min)		Resp. Time (ms)		Manual override	Weight Kg	Part no.
		1 → 2	2 → 3	En.	De-en.			
3/2 NC 	1,5	60	80	12	12	⊖	0,027	VA-0184
2/2 NC 	1,3	50	-	16	-	⊖	0,027	VA-0186
3/2 NO (b) 	1,2	30	70	11	10	(c)	0,030	VA-0188

Use SPEED subbase to build Manifolds, see following pages.
 Available upon request: brass valve body (without manual override), zinc alloy valve body, stainless steel sleeve, other inner diameters.



A Manual override
 1 = Inlet
 2 = Outlet
 3 = Exhaust

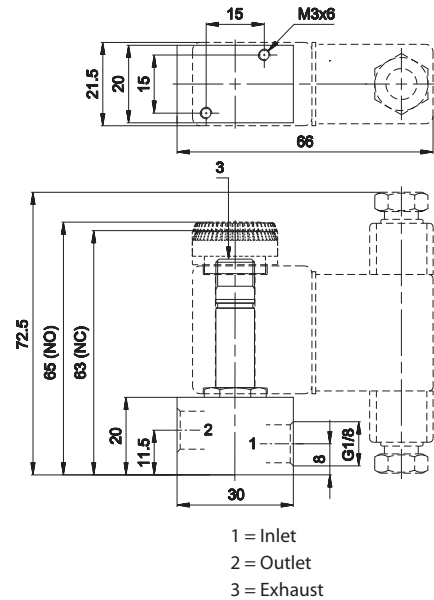
MINIATURE SOLENOID VALVES 2/2 - 3/2 G1/8



Material:
 valve body brass
 sleeve treated brass
 core and spring stainless steel
 seals nitrile rubber

Symbol	Ø (d) mm	Flowrate (NI/min)		Resp. Time (ms)		Manual override	Weight Kg	Part no.
		1 → 2	2 → 3	En.	De-en.			
3/2 NC 	1,5	60	85	12	12	-	0,105	VA-0211
2/2 NC 	1,3	60	-	16	-	-	0,105	VA-0219
3/2 NO (b) 	1,2	28	75	11	9	(c)	0,105	VA-0213

Brass body suitable for use with non-aggressive liquids. No manual override.
 Stainless steel versions available upon request.



1 = Inlet
 2 = Outlet
 3 = Exhaust

MINIATURE SOLENOID VALVES 2/2 - 3/2 M5

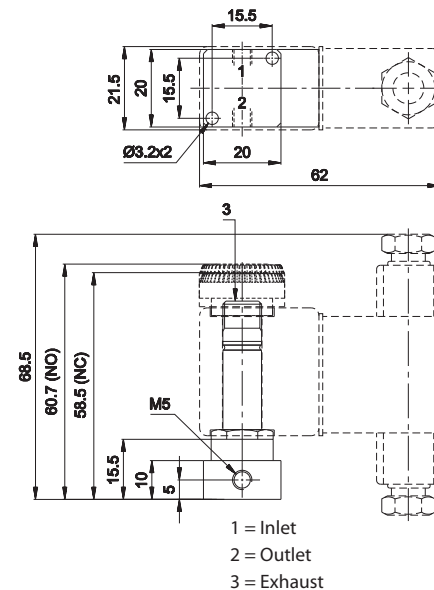


Material:
 valve body brass
 sleeve treated brass
 core and spring stainless steel
 seals nitrile rubber

Symbol	Ø (d) mm	Flowrate (NI/min)		Resp. Time (ms)		Manual override	Weight Kg	Part no.
		1 → 2	2 → 3	En.	De-en.			
3/2 NC 	1,5	60	80	12	12	-	0,065	VA-0231
2/2 NC 	1,3	50	-	16	-	-	0,065	VA-0239
3/2 NO (b) 	1,2	30	70	11	10	(c)	0,065	VA-0233

Brass body suitable for use with non-aggressive liquids. No manual override.
 Stainless steel versions available upon request.

(b) = plug exhaust of 3/2 NO solenoid valve to achieve 2/2 NO function (c) = manual override on XM-5201 ring nut
 (d) = the Ø shown on the 3/2 valves refers to the exhaust

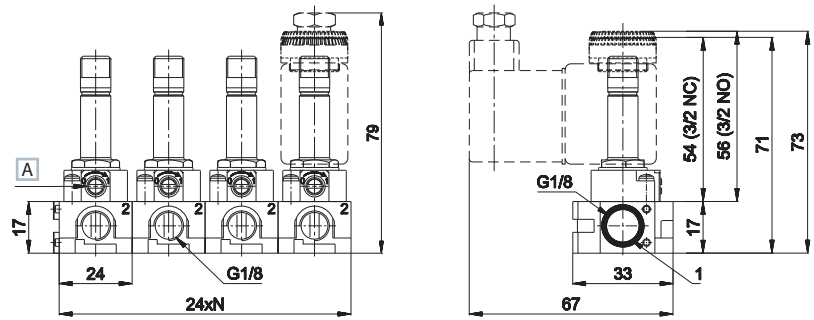


1 = Inlet
 2 = Outlet
 3 = Exhaust

⊖ = 2 position screwdriver operation

Solenoid valves are supplied without coil, connector and locking ring

SUB-BASE U1 **G1/8**

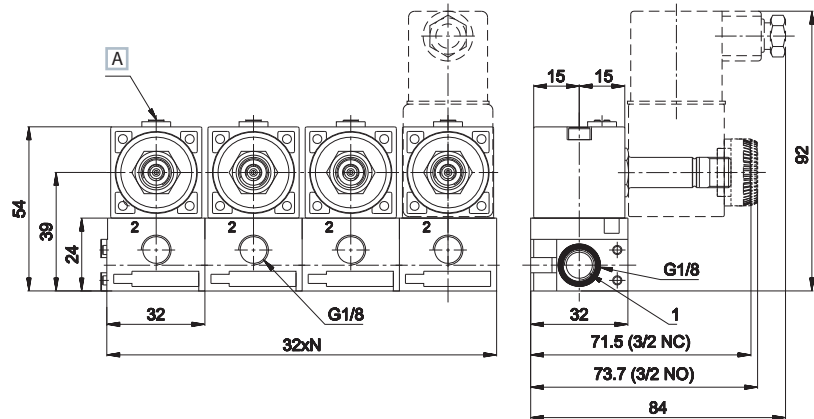


A Manual override

- 1 = Inlet
- 2 = Outlet
- 3 = Exhaust
- N = Number of valve positions

CNOMOSUB-BASE U2 **G1/8**

Coming Soon



A Manual override

- 1 = Inlet
- 2 = Outlet
- 3 = Exhaust
- N = Number of valve positions

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