AA

Miniature electropilots U1

Direct intervention electropilots with poppet valve system and cushioned bottom seals
- Assembly on sub-base
- Threaded connections on the body
- CNOMO interface
- Orientable coil (360°) separated from mechanical part
- Versions: 2/2 3/2 NC - NO
- Original Univer SPEED modular sub-bases

TECHNICAL FEATURES

Ambient temperature	-10 ÷ +50 °C
Fluid temperature	max +95 °C
Fluid	10 µm filtered air, lubricated or not, neutral gases
	(upon request other fluids can be used)
Commutation system	direct intervention poppet valve system with cushioned seals
Ways/Positions	**2/2 NC, 3/2 NC, 3/2 NO**[(a)]
Pressure	**2/2, 3/2 NC** = 0 ÷ 10
	3/2 NO = 3 ÷ 10
Control	electric
Return	mechanical spring
Connections	on sub-base or with threaded connections on the body

	sub-base	**G 1/8**	**M5**	**CNOMO**
Nominal Ø (mm)	1,2 ÷ 1,5	1 ÷ 1,5	1 ÷ 1,5	1,2 ÷ 1,5
Nominal flow rate (Nl/min)	30 ÷ 60	28 ÷ 60	30 ÷ 60	33 ÷ 45

CONSTRUCTIVE FEATURES

Materials	see features below

ELECTRIC FEATURES

Series	U1	U3
Coil	DA	DC
Power consumption	3,5 W (DC) - 5 VA (AC)	2,5 W (DC) - 3,3 VA (AC)
Connector	AM 5110	AM 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)

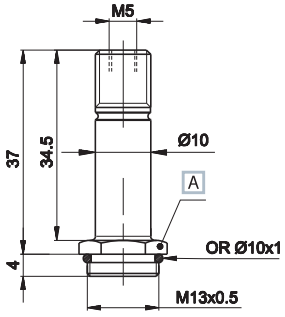
U1 Sleeves - with moving core

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

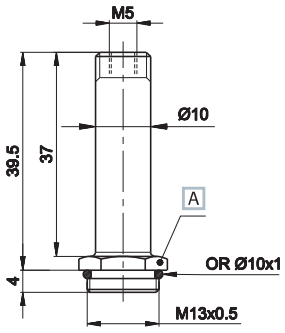
	Exhaust Ø mm	Pressure bar	Weight Kg	Part no.
3/2 NO	1,2	3÷10	0,030	**AA-0150**
3/2 NC	1,5	0÷10	0,030	**AA-0157**
2/2 NC	-	0÷10	0,030	**AA-0170**

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

■ NC

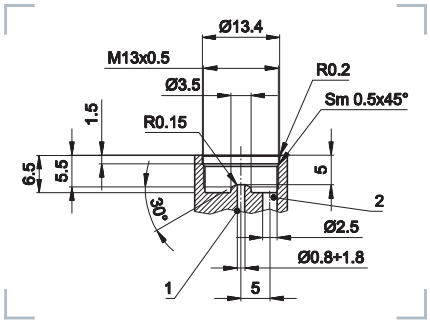


■ NO



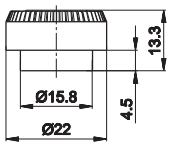
A Wrench 14

■ Particolare lavorazione sede

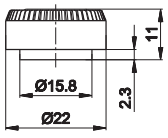


1 = Supply port
2 = Use

Locking rings for coils on sleeves



1



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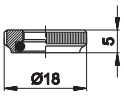


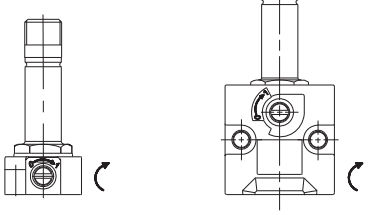
3

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

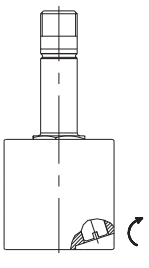
In order to convey exhausts, use version 3

Standard manual overrides

Functionig	Suitable for sleeves	Symbol/Part no.
1 = with 2 position screw	all NC U1 electropilots that can use manual override	⊖
2 = with impulse 1-2 position screw	only CNOMO NC U1 electropilots	⊖
3 = with button with tool	only CNOMO NC U1 electropilots	→
4 = with button, 1 position	U1 3/2 NO electropilots	**AM-5201** (a)



1



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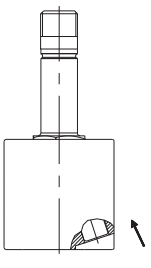

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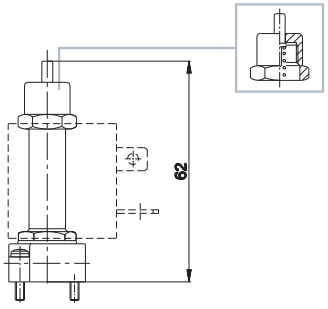

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(a) = Mounted on the 3/2 NO sleeve

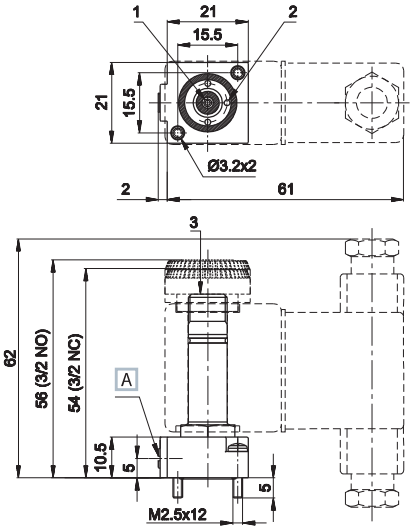
⊖ = with 2 position screw
→ = with button with tool

U1 2/2 - 3/2 Electropilot for assembling on sub-base

Material:	
valve body	technopolymer
sleeve	treated brass
core and spring	stainless steel
seals	nitrile rubber
Weight (Kg):	0,036

Symbol	Ø (d) mm	Flow rate (Nl/min) 1→2	2→3	Times (ms) En.	De-en.	Manual override	Part no.
3/2 NC	1,5	60	80	12	12	⊖	AA-0184
2/2 NC	1,3	50	-	16	-	⊖	AA-0186
3/2 NO (b)	1,2	30	70	11	10	(c)	AA-0188

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



A Manual override

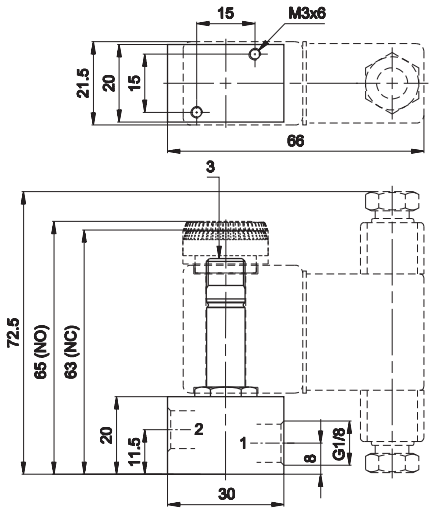
1 = Supply port
2 = Use
3 = Exhaust

U1 2/2 - 3/2 G1/8 Electropilot

Material:	
valve body	brass
sleeve	treated brass
core and spring	stainless steel
seals	nitrile rubber
Weight (Kg):	0,105

Symbol	Ø (d) mm	Flow rate (Nl/min) 1→2	2→3	Times (ms) En.	De-en.	Manual override	Part no.
3/2 NC	1,5	60	85	12	12	-	AA-0211
2/2 NC	1,3	60	-	16	-	-	AA-0219
3/2 NO (b)	1	28	75	11	9	(c)	AA-0213

Electropilot to be used done.
Brass body suitable for use with non-aggressive luiquids. No manual override.
Available upon request: stainless steel sleeve - other inner diameters.



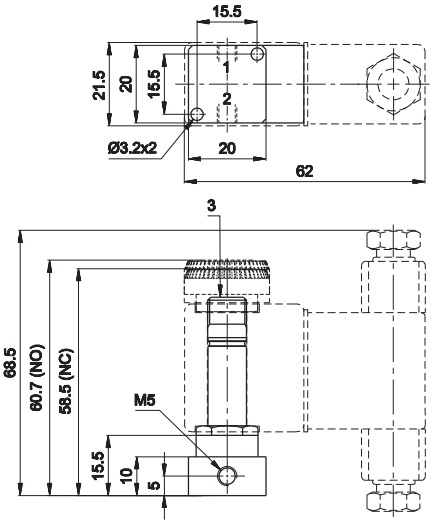
1 = Supply port
2 = Use
3 = Exhaust

U1 2/2 - 3/2 M5 Electropilot

Material:	
valve body	brass
sleeve	treated brass
core and spring	stainless steel
seals	nitrile rubber
Weight (Kg):	0,065

Symbol	Ø (d) mm	Flow rate (Nl/min) 1→2	2→3	Times (ms) En.	De-en.	Manual override	Part no.
3/2 NC	1,5	60	80	12	12	-	AA-0231
2/2 NC	1,3	50	-	16	-	-	AA-0239
3/2 NO (b)	1	30	70	11	10	(c)	AA-0233

Electropilot to be used done.
Brass body suitable for use with non-aggressive luiquids. No manual override.
Available upon request: stainless steel sleeve - other inner diameters.



1 = Supply port
2 = Use
3 = Exhaust

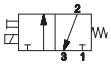
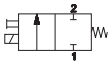
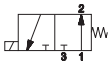
(b) = close the exhaust of the 3/2 NO electropilot to get the 2/2 NO one
(c) = manual override on AM-5201 ring nut
⊖ = with 2 position screw
(d) = the Ø shown on the 3/2 valves refers to the exhhaust

Electropiltots are supplied without coil, connector and locking ring

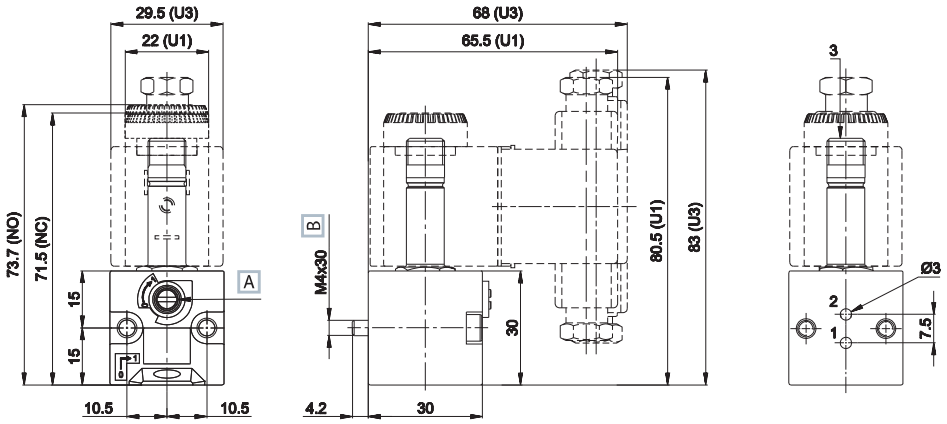
U1 CNOMO **2/2 - 3/2** Electropilot for mounting on sub-bases SPEED U2

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

Weight (Kg):	0,155

	Symbol	Ø (d) mm	Flow rate (Nl/min) 1→2	2→3	Times (ms) En.	De-en.	Manual override	Part no.
3/2 NC		1,5	45	77	12	12	⊖	**AA-0400**
		1,5	45	77	12	12	→	**AA-0400U**
2/2 NC		1,3	42	-	-	-	⊖	**AA-0402**
3/2 NO (b)		1,2	33	77	11	10	(c)	**AA-0404**

Sub-base: SPEED U2. Available upon request: brass valve body (without manual override). Zamak valve body. Stainless steel sleeve - other inner diameters.



A Manual override
B ISO 4762

1 = Supply port
2 = Use
3 = Exhaust

Modular sub-base "SPEED" series U1/U2 **G1/8**

Electropilot	Connections	Material	Weight Kg	Part no.
U1 for base	G 1/8	zamak	0,037	**AA-0450**
U2 for base	G 1/8	zamak	0,075	**AB-0900**

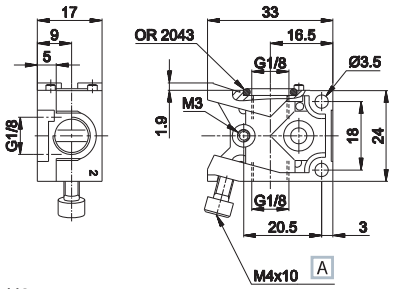
Advantages
The original UNIVER "Speed" series was designed to solve some operational problems

- Possibility of defining the number of sub-bases at the moment of use
- Possibility of freely increasing or reducing the number of elements
- Quick assembly with special screw (built-in) standard supplied
- Reduction of stock holding
- Easy technical intervention

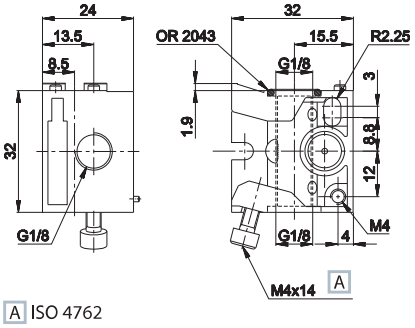
Air supply is rotated by 90° in comparison with side consumption
Standard (built-in) screw and O-Ring

When assembling the manifold, put the bases on a flat surface and tighten the screw until the manifold is perfecty aligned.

U1



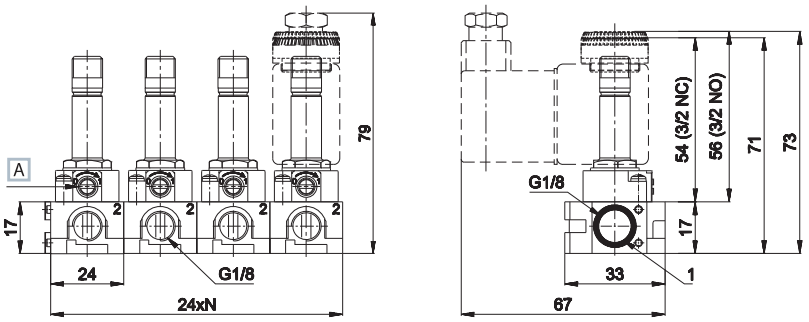
U2



A ISO 4762

(b) = close the exhaust of the 3/2 NO electropilot to get the 2/2 NO one
(c) = manual override on ring nut AM-5201
⊖ = with 2 position screw
→ = with button with tool
(d) = the Ø shown on the 3/2 valves refers to the exhhaust
Electropiltots are supplied without coil, connector and locking ring

U1 **G1/8** sub-base

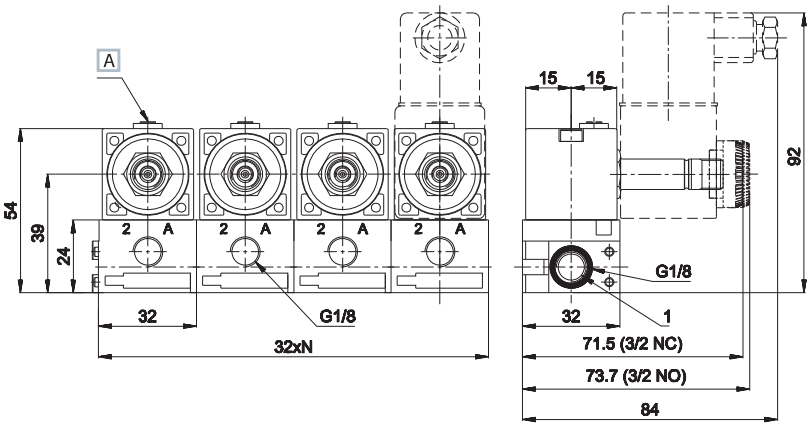


A Manual override

1 = Supply port
2 = Use

N = Number of valve positions

U2 **G1/8 CNOMO** sub-base



A Manual override

1 = Supply port
2 - A = Use

N = Number of valve positions