

A

ISO 15218 - 15 mm Microvalves

- Flow rate max 38 NI/min
- ISO 15218 interface
- 2/2-3/2 versions - normally open (NO) and normally closed (NC)
- Interchangeable coil - 90° orientation
- Single and multiple sub-bases - single and multipolar electric connection

ATEX version available upon request

CE II 3 GD c nA II T5-10°C ≤ Ta ≤ 45°C

TECHNICAL CHARACTERISTICS

Ambient temperature	-5 ÷ +50 °C	
Fluid temperature	Max +50 °C	
Fluid	10 µm filtered air, with or without lubrication	
Commutation system	poppet	
Ways/Positions	2/2 NC, 3/2 NC, 2/2 NO, 3/2 NO	
Pressure	Max 9 bar	
Control	electric	
Return	mechanical spring	
Connections	ISO 15218 interface	
Nominal Ø	1,2	1,5
Nominal flow rate	26	38
Max frequency	2700 cycles/min	

CONSTRUCTIVE CHARACTERISTICS

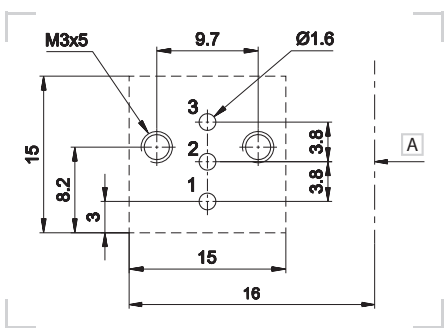
Valve body	technopolymer (aluminium external cover)
Seals	nitrile rubber
Components	stainless steel, brass

ELECTRIC CHARACTERISTICS

Coil	U05 DD series	
Power consumption	2 W DC / 2,3 VA AC (Ø 1,2) - 2,5 W DC / 3,5 VA AC (Ø 1,5)	
Electrical connection	15 mm connector - Molex bipolar connector or loose cables	
Voltage	24 V DC - 12 V DC - 24 V AC - 110 V AC - 230 V AC	
Manual override	recessed button - 1 position (other manual overrides upon request)	
Protection degree with connector	IP65	



ISO 15218 Substructure



A Pitch

3/2 NC

- 1 = Supply port
- 2 = Use
- 3 = Exhaust

3/2 NO

- 1 = Exhaust
- 2 = Use
- 3 = Supply port

2/2 NO

- 1 = Exhaust
- 3 = Supply port

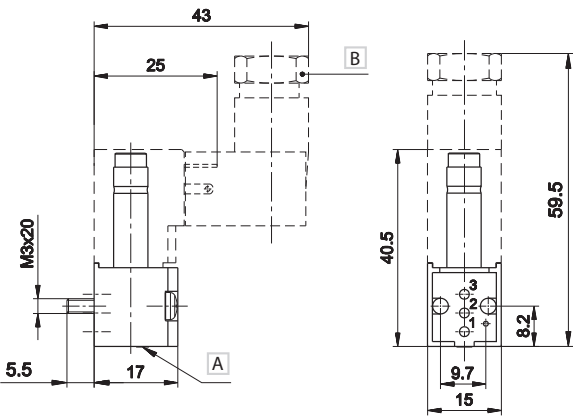
Drilling jig to assemble the valve on a smooth surface with a sealing plate in between. Part no. A-299-11.

15 mm Microvalves



- A Manual override
B Possible rotation by 180°

3/2 NC 3/2 NO 2/2 NO
1 = Supply port 1 = Exhaust 1 = Exhaust
2 = Use 2 = Use 3 = Supply port
3 = Exhaust 3 = Supply port



Microvalves Ø 1,2 for direct current coils 2 W

Symbol	Pressure bar	Ø mm	Flow rate Nl/min.	Current	Response Time (ms)		Weight (b) Kg	Part no.
					En.	De-en.		
	0÷9	1,2	26	DC	11	11	0,018 (0,037)	A-141N
	0÷9	1,2	26	DC	11	11	0,018 (0,037)	A-161N
	0÷9	1,2	26	DC	11	11	0,018 (0,037)	A-101N
	0÷9	1,2	26	DC	11	11	0,018 (0,037)	A-121N

Suggested coils	
DD-051 24 V DC - 2 W	Coil with Faston
DD-051L030 24 V DC - 2 W	Coil with flying cables

Upon request 12 V DC

Microvalves Ø 1,5 for direct current coils 2,5 W

Symbol	Pressure bar	Ø mm	Flow rate Nl/min.	Current	Response Time (ms)		Weight (b) Kg	Part no.
					En.	De-en.		
	0÷8	1,5	38	DC	11	11	0,018 (0,037)	A-142N
	0÷8	1,5	38	DC	11	11	0,018 (0,037)	A-162N
	0÷8	1,5	38	DC	11	11	0,018 (0,037)	A-102N
	0÷8	1,5	38	DC	11	11	0,018 (0,037)	A-122N

Suggested coils	
DD-052 24 V DC - 2,5 W	Coil with Faston
DD-052L030 24 V DC - 2,5 W	Coil with flying cables

Upon request 12 V DC

Microvalves Ø 1,2 for direct or alternate current

Symbol	Pressure bar	Ø mm	Flow rate Nl/min.	Current	Response Time (ms)		Weight (b) Kg	Part no.
					En.	De-en.		
	0÷9	1,2	26	DC/AC	11	11	0,018 (0,037)	A-151N
	0÷9	1,2	26	DC/AC	11	11	0,018 (0,037)	A-171N
	0÷9	1,2	26	DC/AC	11	11	0,018 (0,037)	A-111N
	0÷9	1,2	26	DC/AC	11	11	0,018 (0,037)	A-131N

Suggested coils	
DD-040 24 V AC - 50/60 Hz -2,3 VA	Coil with Faston
DD-041 12 V DC - 2 W	
DD-050 48 V AC - 50/60 Hz - 2,3 VA	
DD-051 24 V DC - 2 W	
DD-070 230 V AC - 50/60 Hz - 2,3 VA	Coil with flying cables
DD-051L030 24 V DC - 2 W	

Upon request 12 V DC

(b) = the weight in brackets refers to coil with faston
For technical data of coils see "Accessories>Coils"
Microvalves are supplied without coil and connector

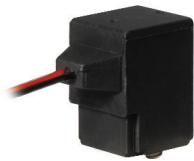
Microvalves Ø 1,5 for direct or alternate current

	Symbol	Pressure	Ø	Flow rate	Current	Response Time (ms)		Weight (b)	Part no.
		bar	mm	l/min.		En.	De-en.	Kg	
2/2 NC		0÷8	1,5	38	DC/AC	11	11	0,018 (0,037)	A-152N
3/2 NC		0÷8	1,5	38	DC/AC	11	11	0,018 (0,037)	A-112N

Suggested coils	
DD-011 24 V AC - 50/60 Hz - 3,5 VA DD-013 230 V AC - 50/60 Hz - 3,5 VA DD-040 24 V AC - 50/60 Hz - 2,3 VA DD-042 12 V DC - 2,5 W DD-052 24 V DC - 2,5 W DD-060 48 V AC - 50/60 Hz - 3,5 VA	Coil with Faston
DD-052L030 24 V DC - 2,5 W	Coil with flying cables

Upon request 12 V DC

>> Coils



U5 flying cables
weight: 0,019 Kg
DD-051L030
DD-052L030

U05 15 mm
weight: 0,019 Kg
DD-011 **DD-050**
DD-013 **DD-051**
DD-040 **DD-052**
DD-041 **DD-060**
DD-042 **DD-070**

Standard manual override

Operation	Notes	Symbol
1 = with button with tool, 1 position (standard)	metallic	→
2 = with button, 1-2 positions (upon request)	technopolymer red colour	⊖
3 = with front button, 1 position (upon request)	technopolymer red colour	→
4 = with button, 1 position (upon request)	metallic	→

(b) = the weight in brackets refers to coil with faston

For technical data of coils see “Accessories>Coils”

Microvalves are supplied without coil and connector

Subject to change

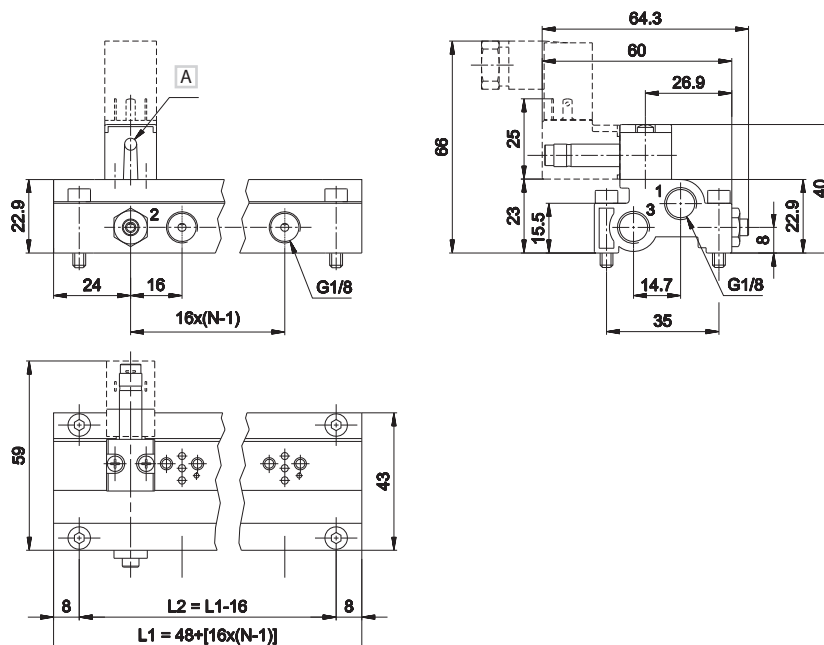
Sub-base for external electric connection

Sub-base in extruded anodized aluminium with conveyed supplies and exhausts for assembling NC or NO valves. If NC and NO valves are assembled on just one base, it is necessary to insert the inverter part A-350 for NO valves.

A - 326A - (b) G1/8 threaded connections (standard)

A - 326B - (b) M5 threaded connections (upon request)

A - 326D- (b) push-in connections tube 4 (upon request)



☐ A Manual override

N = Number of valve positions
(b) = Number of positions

3/2 NC

1 = Supply port

2 = Use

3 = Exhaust

3/2 NO

1 = Exhaust

2 = Use
3 = Supply port

2/2 NO

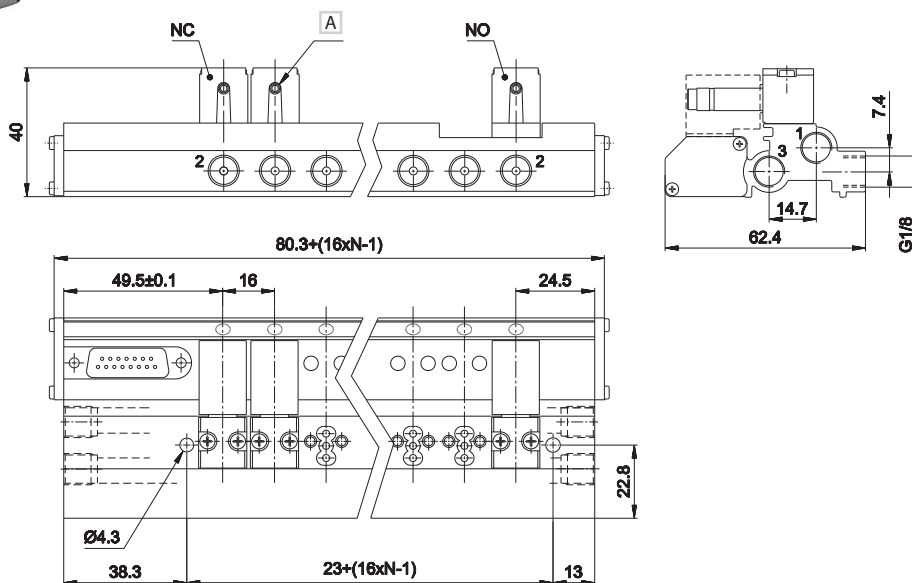
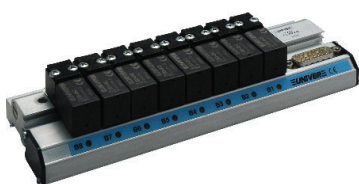
1 = Exhaust

3 = Supply port

Sub-base for integrated electric connection

Sub-base in extruded anodized aluminium up to Max 13 stations with sub-D connector 15 pin (upon request up to 23 with connector 25 pin) and G1/8 threaded standard connections, with conveyed supplies and exhausts for assembling NC or NO valves, with integrated coil connection and optical indication of the valve working status.

If both NO and NC valves are assembled on just one sub-base, NC valves are always mounted on the connector side and afterwards the NO valves. The invert plate (part no. A-350) must be installed for NO valves.



☐ A Manual override

N = Number of valve positions

3/2 NC

1 = Supply port

2 = Use

3 = Exhaust

3/2 NO

1 = Exhaust

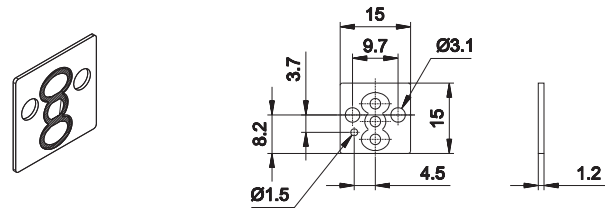
2 = Use
3 = Supply port

2/2 NO

1 = Exhaust

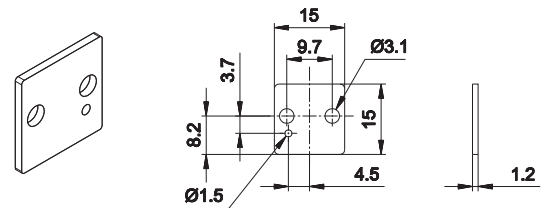
3 = Supply port

A-299-11



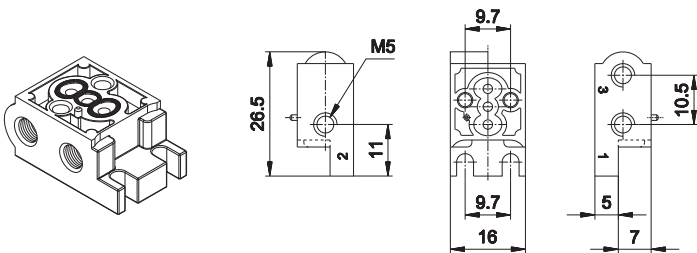
Sealing plate
It blocks the seal in place when the valve is mounted on a smooth surface without a seal housing
material: aluminium
weight: 0,003 Kg

A-301



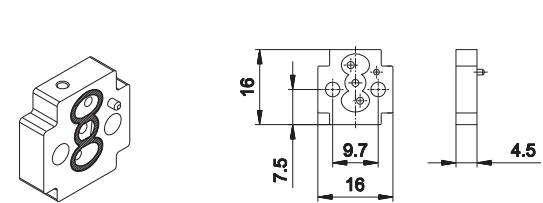
Blank plate
Unused valve stations must be closed with the blank plate
material: aluminium
weight: 0,002 Kg

A-305



Single base
material: zamak
connection: M5
weight: 0,012 Kg

A-350



Inverter plate
NO and NC valves can be mounted on a single block inserting this device between the NO valve and the sub-base.
If all installed valves are NO versions, just invert air supply without using the inverter plate.
material: plastic
weight: 0,002 Kg