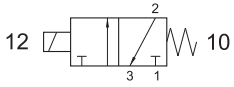




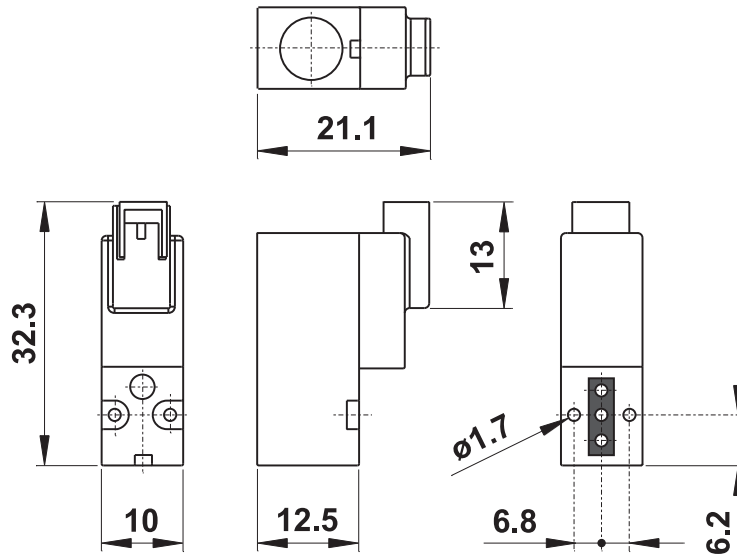
# 10 mm solenoids



## Solenoid valve 10 mm **CE**



**00.441.0**

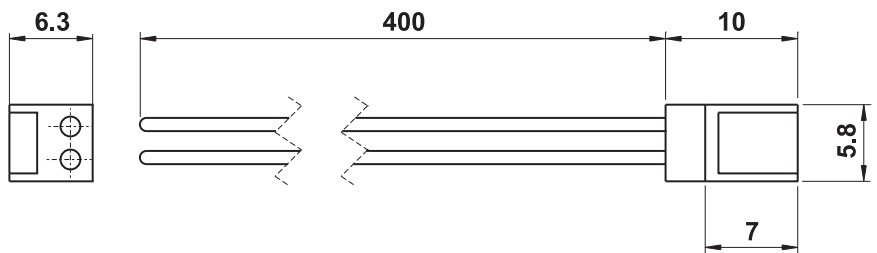
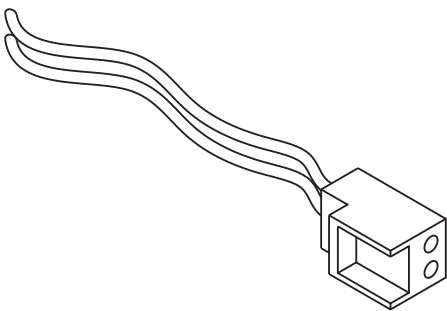


Tension	24V DC $\pm$ 10%
Power	0.5 ... 1 W
Nominal flow rate at 6 bar (87 PSI), $\Delta$ p 1 bar (14 PSI)	15 NI/min (0.01 Cv)

Temperature range	-5°C ... +60°C (23°F ... 140 ° F)
Operating pressure	0 ... 7 bar (0 ... 101 PSI) 0 ... 0.7 MPa
Fluid	5 $\mu$ filtered, lubricated or non lubricated air

## ACCESSORIES

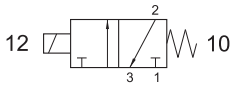
**07.049.0** Connector for 10 mm solenoid with cable red/black, length 400 mm



# 15 mm solenoids and connectors





15 mm **CE**

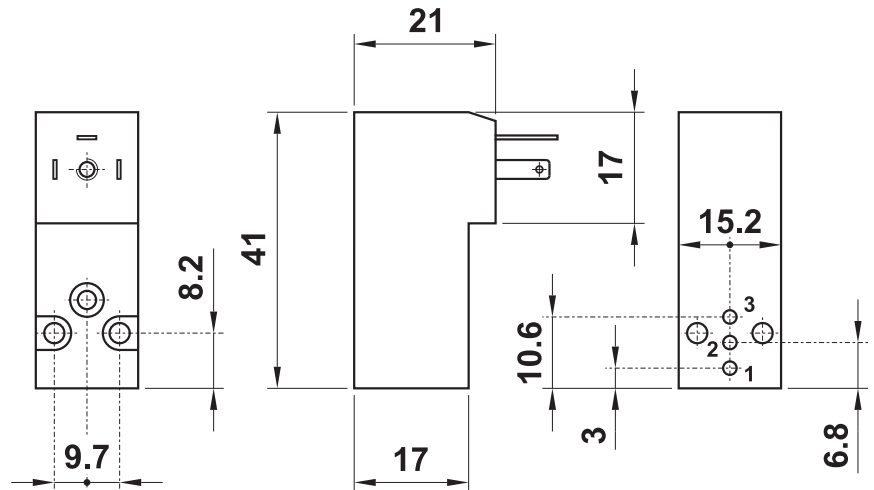


valve function	3/2 NC
nominal diameter	1.1 mm
flow rate 1-2	30 NI/min (0.032 Cv)
flow rate 2-3	35 NI/min (0.038 Cv)
operating pressure	max 10 bar (145 PSI)
lifetime (cycles)	100x10 <sup>6</sup>
response time	10 ms
max operating temperature	+50 °C (122 °F)
duty cycle	ED 100%
rated power consumption	DC: 2W
	AC: 1.3VA
protection	IP 51
tension tolerance	-10%; +15%

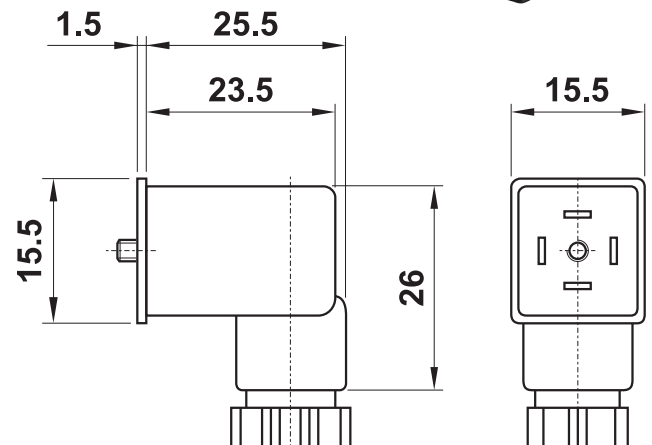
- Electrical connection: DIN 43650, C form
- With non-detented manual override

ACCESSORIES	
mounting plate with gasket	
<b>00.414.0</b>	
mounting screw (2 screws are necessary)	
<b>00.413.0</b>	

code	tension
00.253.0	12V DC
00.254.0	24V DC
00.255.0	24V 50/60Hz
00.256.0	110V 50/60Hz
00.257.0	220V 50/60Hz



code	colour	cable	type
00.252.0	black	PG07	standard
00.340.0	transparent	PG07	with LED 24V
00.341.0	transparent	PG07	with LED 24V and VDR
00.342.0	transparent	PG07	with LED 115V
00.343.0	transparent	PG07	with LED 115V and VDR
00.398.0	transparent	PG07	with LED 230V
00.399.0	transparent	PG07	with LED 230V and VDR



# 22 mm coils and connectors



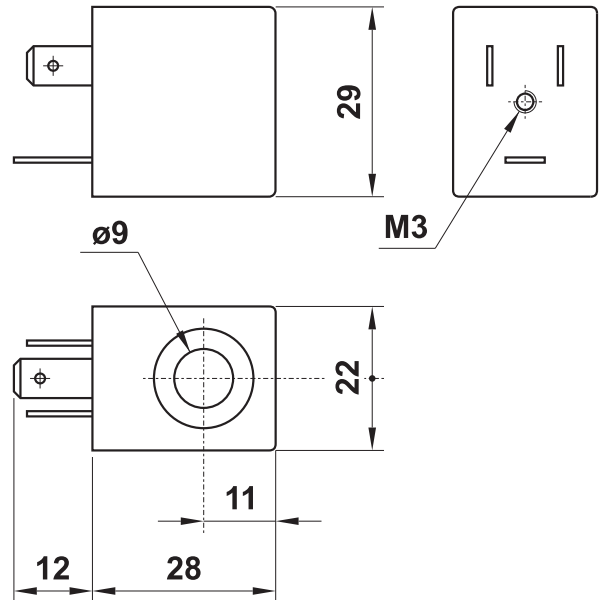
22 mm c **RU** US



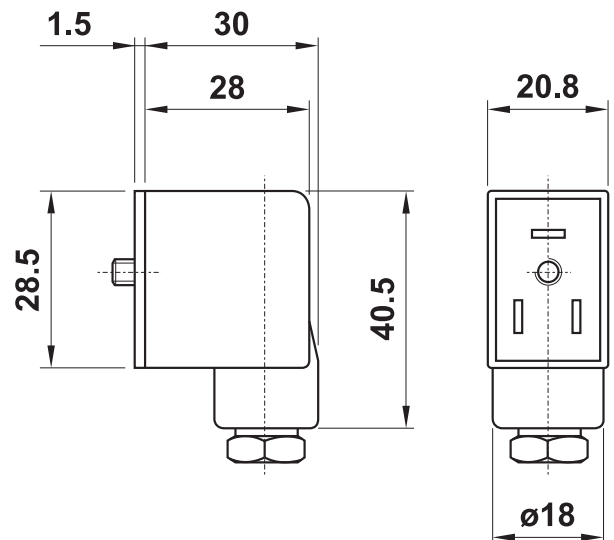
max working temperature	+50°C (122 °F)
duty cycle	ED 100%
protection with connector correctly mounted	IP 65
tension tolerance	± 10%

- low consumption (1.5W) on request

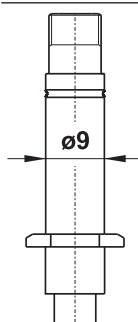
code	tension	power	
		rated	inrush
00.486.0	24V DC	3W	
00.487.0	24V 50/60Hz	5VA	7.5VA
00.488.0	110V 50/60Hz	5VA	7.5VA



code	colour	cable	type
00.197.0	black	PG09	standard
00.344.0	transparent	PG09	with LED 24V
00.345.0	transparent	PG09	with LED 24V and VDR
00.346.0	transparent	PG09	with LED 115V
00.347.0	transparent	PG09	with LED 115V and VDR
00.394.0	transparent	PG09	with LED 230V
00.395.0	transparent	PG09	with LED 230V and VDR



## SPARE PARTS



armature for solenoid pilot

N/C : 00.088.0  
N/O : 00.306.0



aluminium nut and elastic ring

00.125.2

# 30 mm coils and connectors

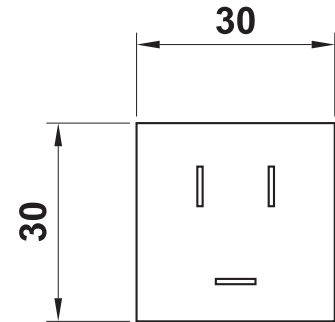


30 mm **CE**

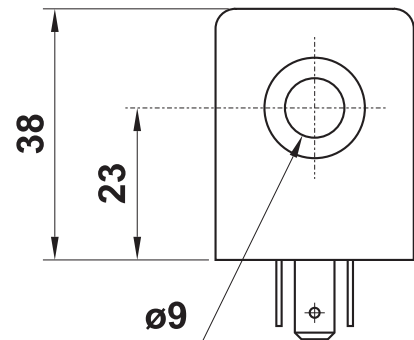
max working temperature	+50°C (122°F)
duty cycle	ED 100%
protection with connector correctly mounted	IP 65
tension tolerance	±10%



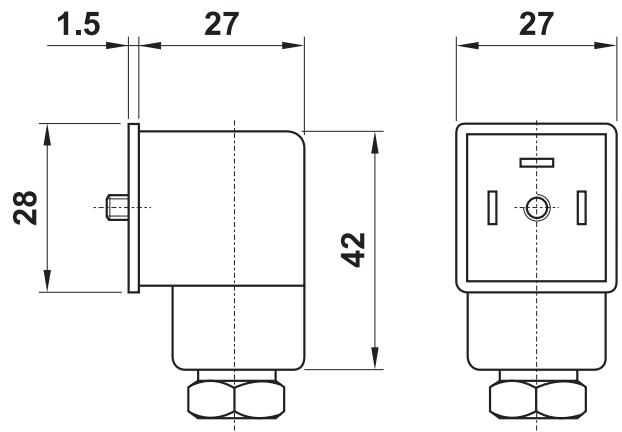
**CE**



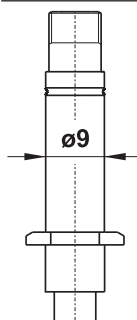
code	tension	power	
		rated	inrush
00.258.0	24V DC	2W	
00.259.0	24V 50/60Hz	5VA	9VA
00.260.0	110V 50/60Hz	5VA	9VA
00.261.0	220V 50/60Hz	5VA	9VA



code	colour	cable	type
00.251.0	black	PG09	standard
00.348.0	transparent	PG09	with LED 24V
00.349.0	transparent	PG09	with LED 24V and VDR
00.350.0	transparent	PG09	with LED 115V
00.351.0	transparent	PG09	with LED 115V and VDR
00.396.0	transparent	PG09	with LED 230V
00.397.0	transparent	PG09	with LED 230V and VDR



## SPARE PARTS



armature for solenoid pilot

N/C : 00.088.0  
N/O : 00.306.0



aluminium nut and elastic ring

00.125.2

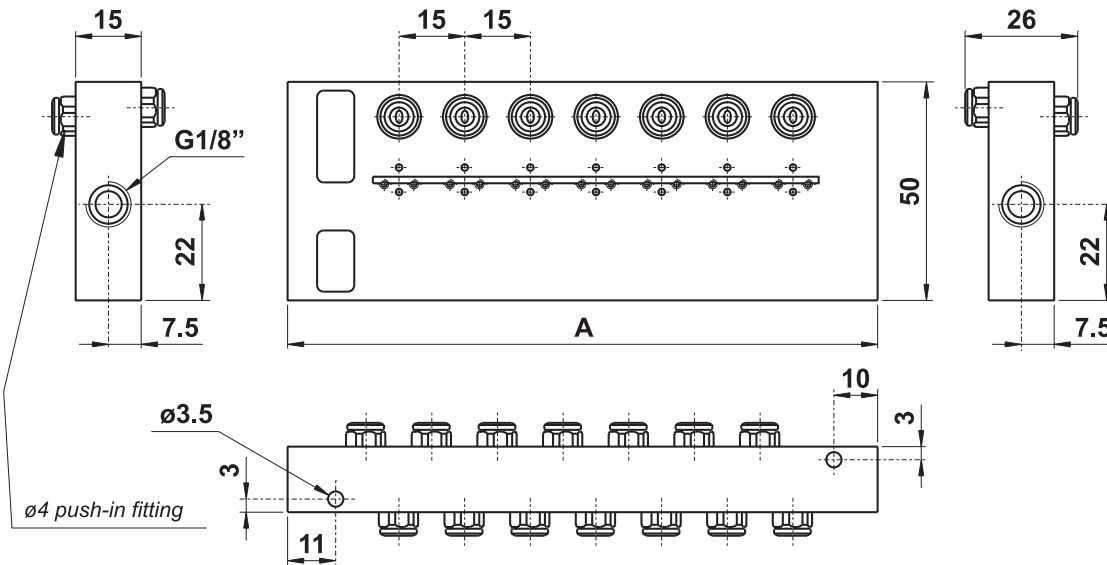
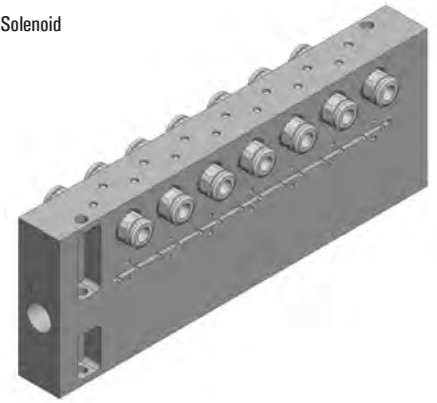
# 10 mm solenoids



## manifolds for 10 mm solenoid valves

The following codes refers only to manifolds. Solenoid valves can be bought separately (see above).

- These manifolds can be used independently or mounted in multiconnection systems (refer to pages 209-211)
- Attention: maximum torque for mounting screws of the solenoid valves: 0.25 Nm



model	no. stations	A
07.090.2	4	60
07.091.2	6	75
07.092.2	8	90
07.093.2	10	105
07.094.2	12	120
07.095.2	14	135
07.096.2	16	150
07.097.2	18	165
07.098.2	20	180
07.099.2	22	195
07.100.2	24	210

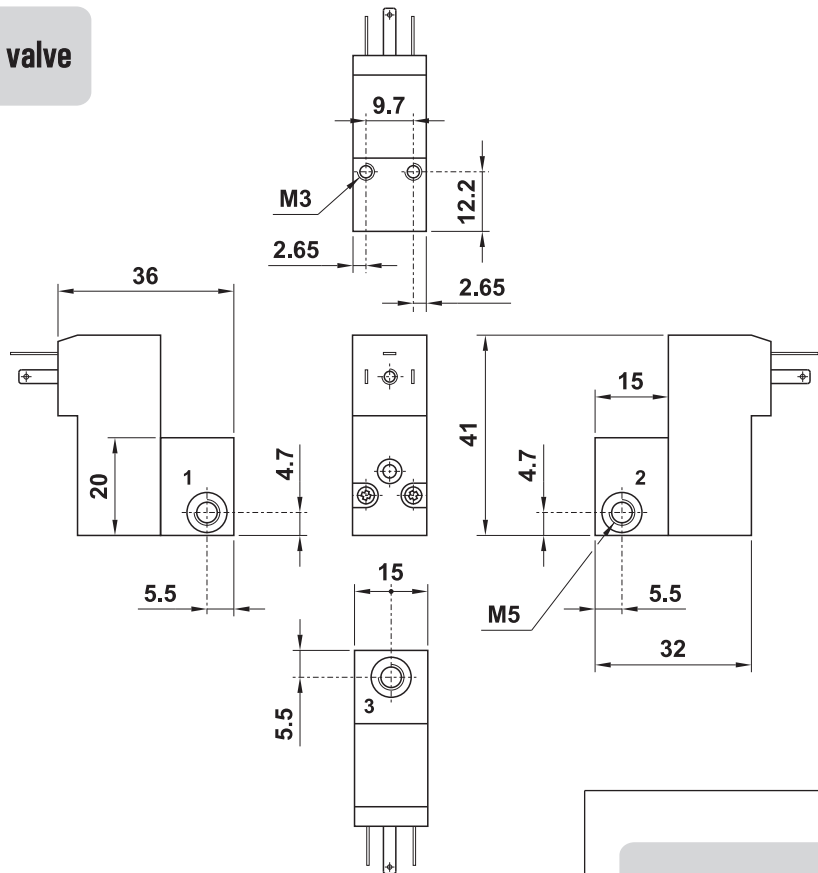
# Manifolds for 15 mm solenoid valves



The following codes refers only to manifolds. Solenoid valves can be bought separately

## single manifold for 15 mm N/C solenoid valve

**AU.061.1**



blanking plate

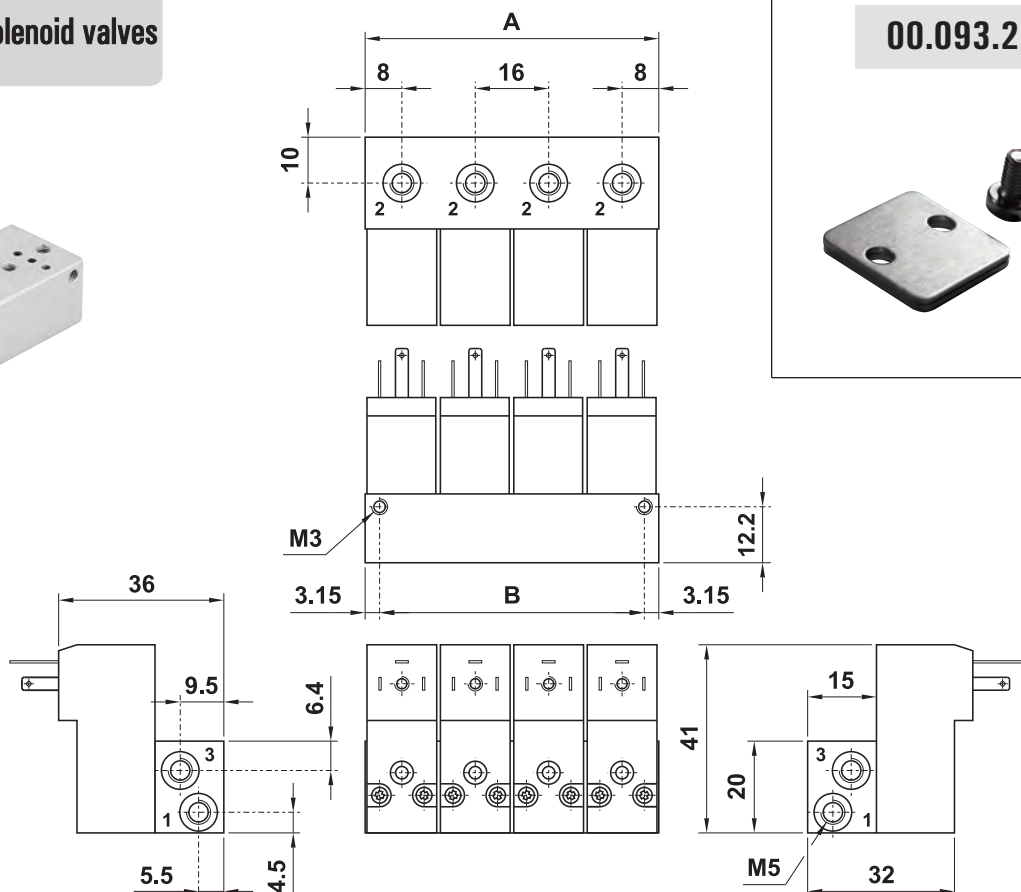
**00.093.2**



## manifolds for 15 mm N/C solenoid valves



model	no. stations	A	B
AU.062.1	2	32	25.7
AU.063.1	3	48	41.7
AU.064.1	4	64	57.7
AU.065.1	5	80	73.7
AU.066.1	6	96	89.7
AU.067.1	7	112	105.7
AU.068.1	8	128	121.7
AU.069.1	9	144	137.7
AU.070.1	10	160	153.7



# Solenoid valves on manifold



The following products are sold without coils. These can be bought separately

To use these products as 2/2 valves, for each solenoid valve it is necessary to order the aluminium nut (code 00.125.2) with M5 plug (code 36.643.0).

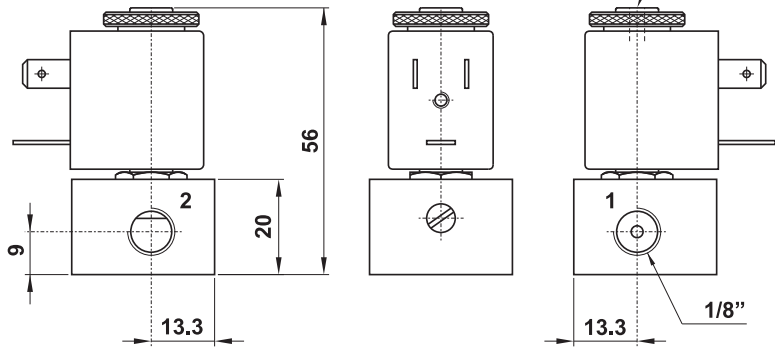
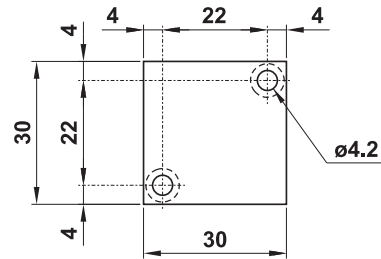
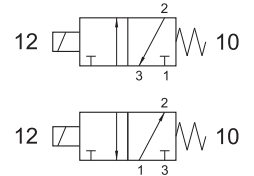
## 3/2 single solenoid valve with or without detented manual override

1/8" NPT

coil 22 mm

	ORDER CODES	
	N/C	N/O
without manual override	<b>US00.071.3</b>	<b>US00.088.3</b>
with manual override	<b>US00.051.3</b>	

Temperature range	max +60°C (140°F)
Operating pressure	-0.7 ... 10 bar (Vacuum ... 145 PSI) -0.07 ... 1 MPa
Nominal diameter	1.1 mm
Nominal flow rate 1-2	30 NI/min (0.03 Cv)
Fluid	50µ filtered, lubricated or non lubricated air



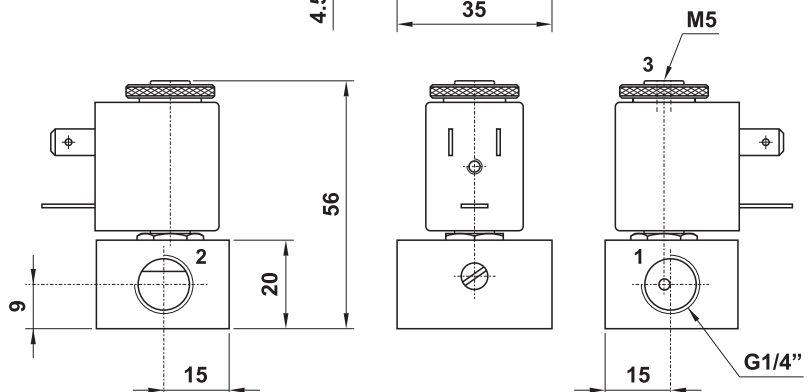
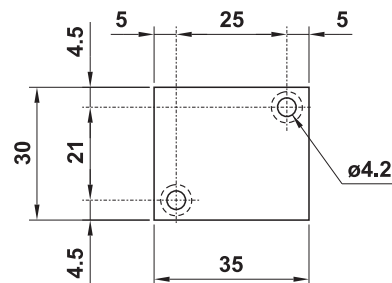
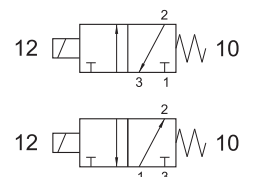
## 3/2 single solenoid valve with or without detented manual override

1/4" NPT

coil 22 mm

	ORDER CODES	
	N/C	N/O
without manual override	<b>US01.068.3</b>	<b>US01.066.3</b>
with manual override	<b>US01.005.3</b>	

Temperature range	max +60°C (140 °F)
Operating pressure	-0.7 ... 10 bar (Vacuum ... 145 PSI) 0.07 ... 1 MPa
Nominal diameter	1.1 mm
Nominal flow rate 1-2	30 NI/min (0.03 Cv)
Fluid	50µ filtered, lubricated or non lubricated air





# Solenoid valves on manifold



The following products are sold without coils. These can be bought separately

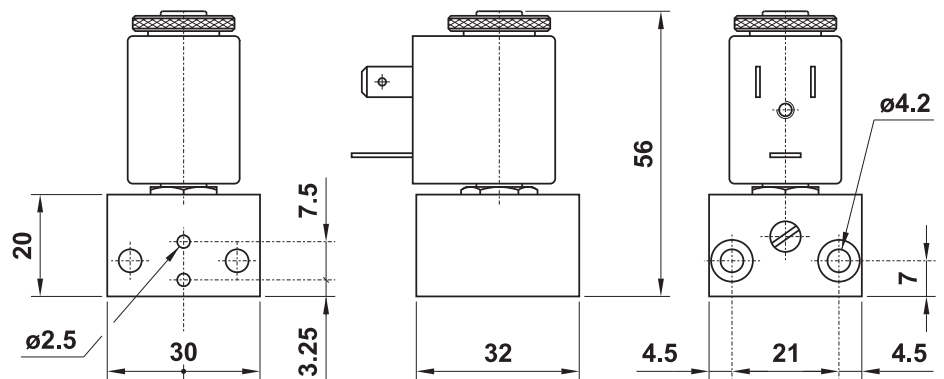
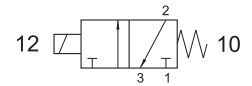
To use these products as 2/2 valves, for each solenoid valve it is necessary to order the aluminium nut (code 00.125.2) with M5 plug (code 36.643.0).

**3/2 N/C single solenoid valve on CNOMO-base with manual override**

coil **22 mm**

**US00.004.3** with detented manual override

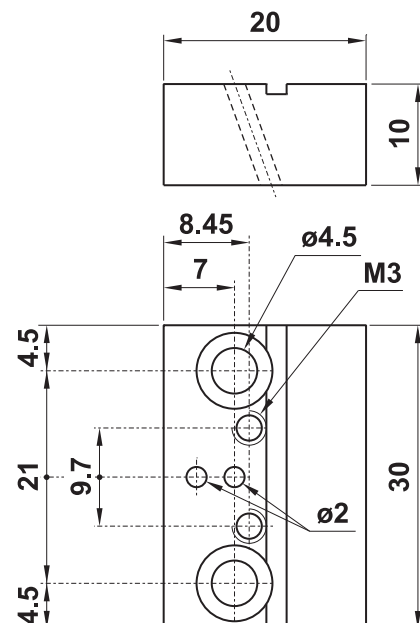
**US00.064.3** with non-detented manual override



Temperature range	max +60°C (140°F)
Operating pressure	-0.7 ... 10 bar (Vacuum... 145 PSI) -0.07 ... 1 MPa
Nominal diameter	1.1 mm
Nominal flow rate 1-2	30 NI/min (0.03 Cv)
Fluid	50µ filtered, lubricated or non lubricated air

**interface for 15 mm solenoid valve on CNOMO-base**

**00.441.1**



# Solenoid valves on manifold



The following products are sold without coils. These can be bought separately

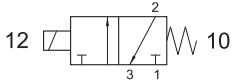
To use these products as 2/2 valves, for each solenoid valve it is necessary to order the aluminium nut (code 00.125.2) with M5 plug (code 36.643.0).



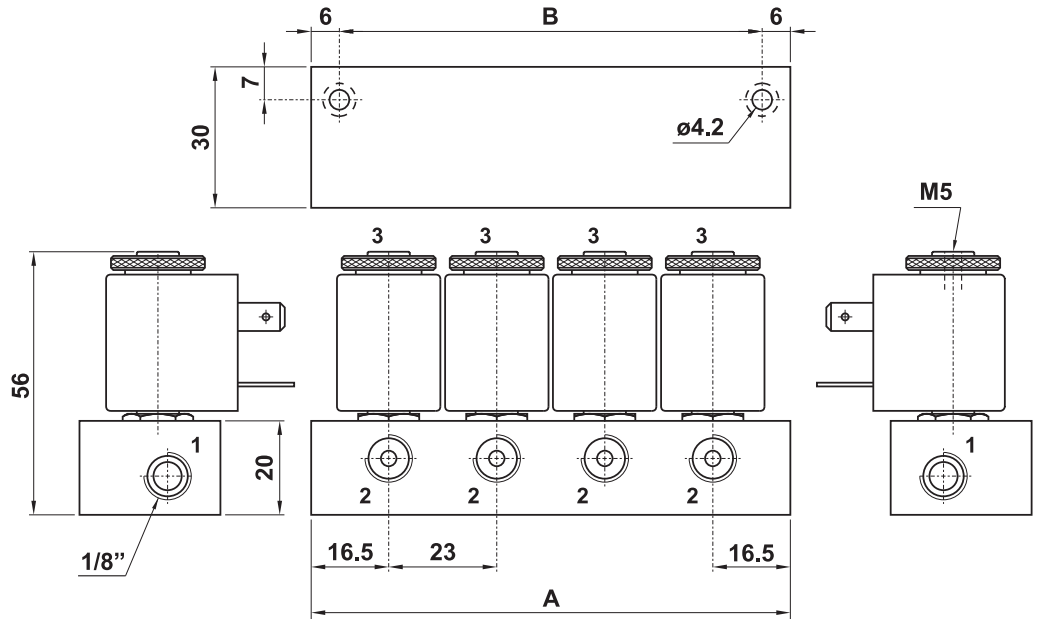
## 3/2 N/C solenoid valves on manifold without manual override

22 mm

- nominal diameter 1.1 mm (0.04 in)



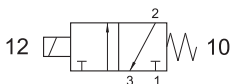
model	no. stations	A	B
US00.072.3	2	56	44
US00.073.3	3	79	67
US00.074.3	4	102	90
US00.075.3	5	125	113
US00.076.3	6	148	136
US00.077.3	7	171	159
US00.078.3	8	194	182
US00.079.3	9	217	205
US00.080.3	10	240	228



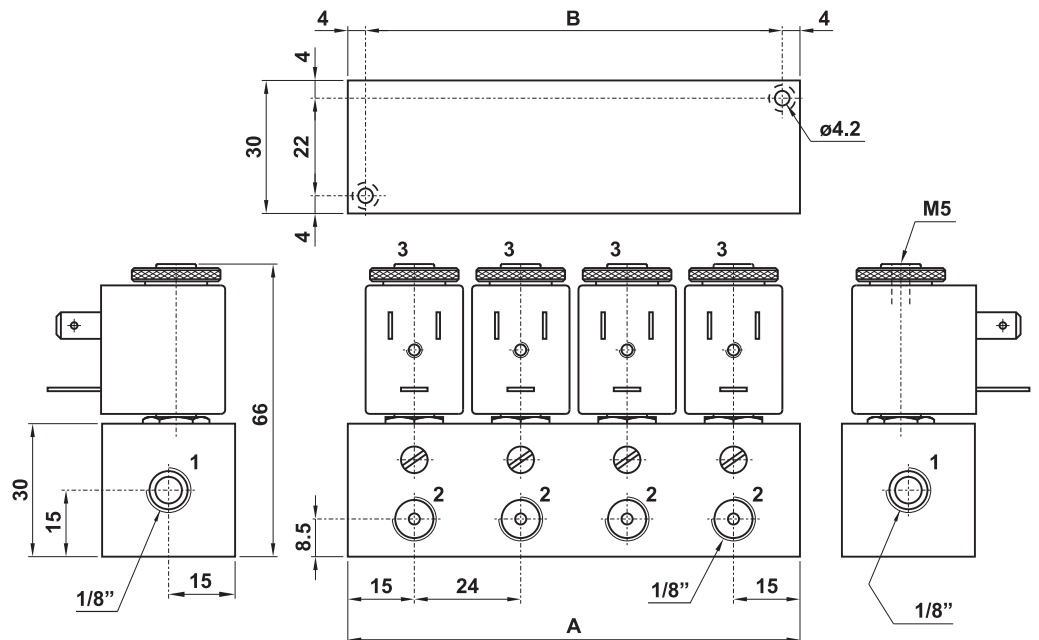
## 3/2 N/C solenoid valves on manifold with detented manual override

22 mm

- nominal diameter 1.1 mm (0.04 in)



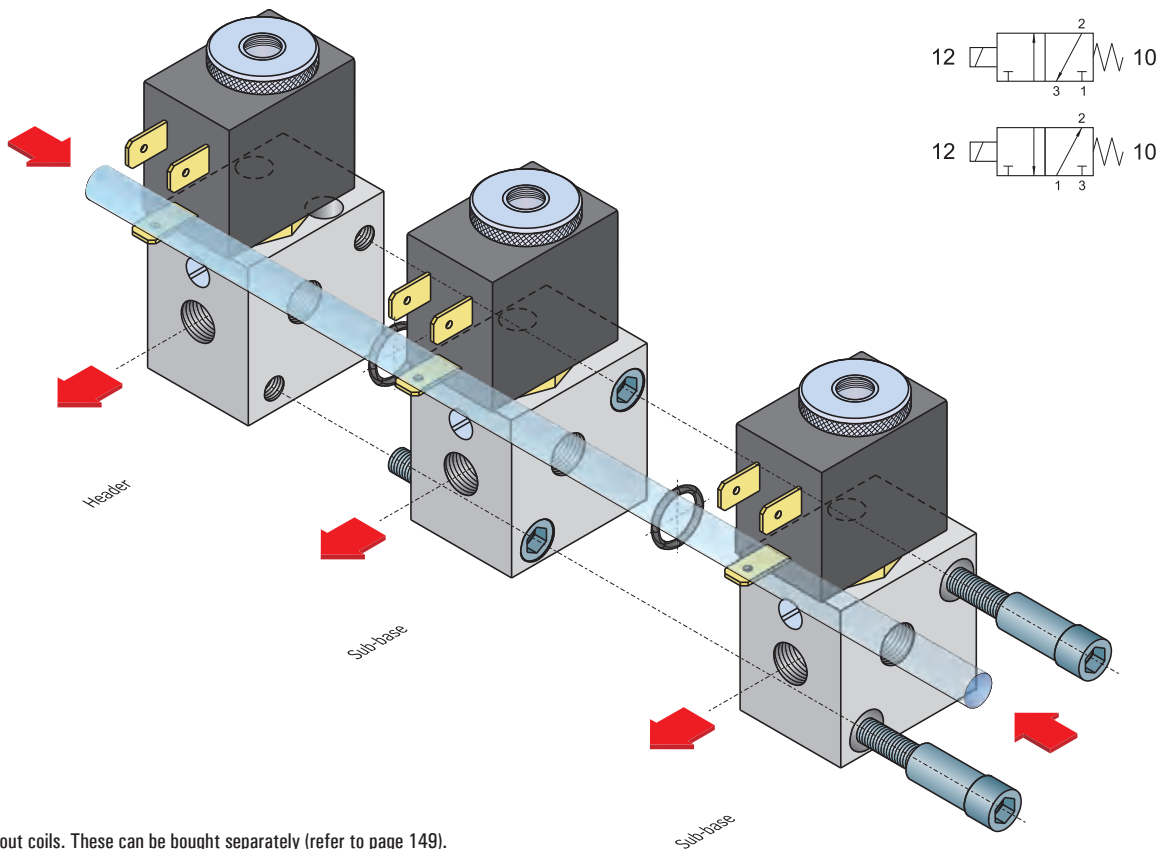
model	no. stations	A	B
US00.052.3	2	54	46
US00.053.3	3	78	70
US00.054.3	4	102	94
US00.055.3	5	126	118
US00.056.3	6	150	142



# Solenoid valves on multiple sub-bases



- User ports: 1/8" NPT (BSP version available on request) or push-in fittings for 5/32" or ø4 mm tube
- Headers can be used also as bases for standing-alone solenoid valves
- With or without detented manual override
- Normally closed and normally open 3/2 version
- For 22 mm coils



The following products are sold without coils. These can be bought separately (refer to page 149).

Temperature range	max +60°C (140°F)
Operating pressure	-0.7 ... 10 bar (Vacuum ... 145 PSI) -0.07 ... 1 MPa
Nominal diameter	1.1 mm (0.04 in)
Fluid	50µ filtered, lubricated or non lubricated air

To use these products as 2/2 valves, for each solenoid valve it is necessary to order the aluminium nut (code **00.125.2**) with M5 plug (code **36.643.0**).

Sub-bases and headers are sold with all necessary pieces for installation.

# Solenoid valves on multiple sub-bases

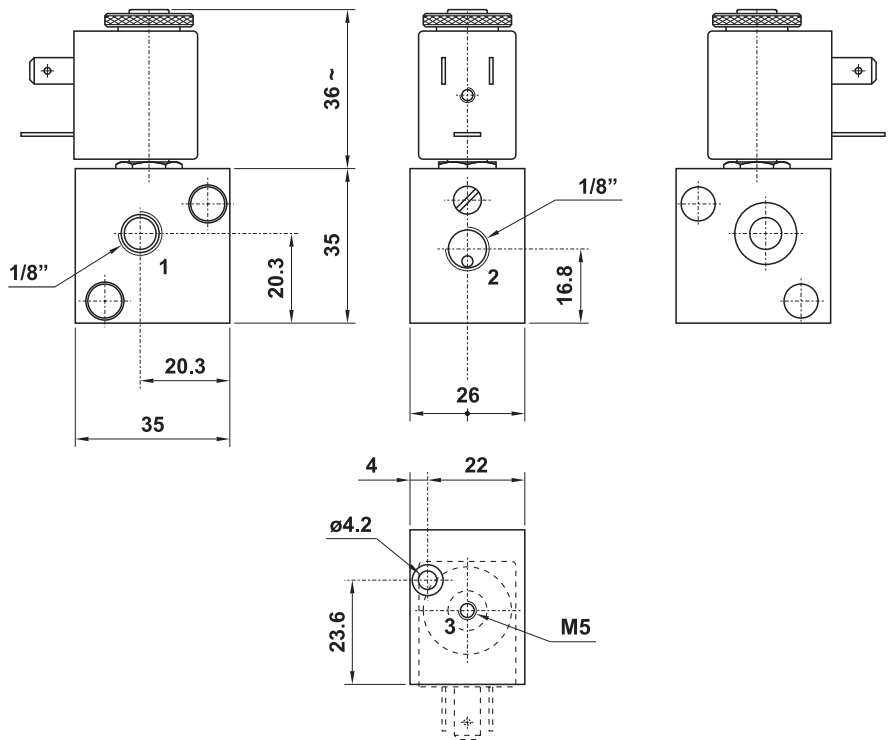


sub-base

with detented manual override

1/8" NPT

ORDER CODE
N/C
<b>US00.094.3</b>

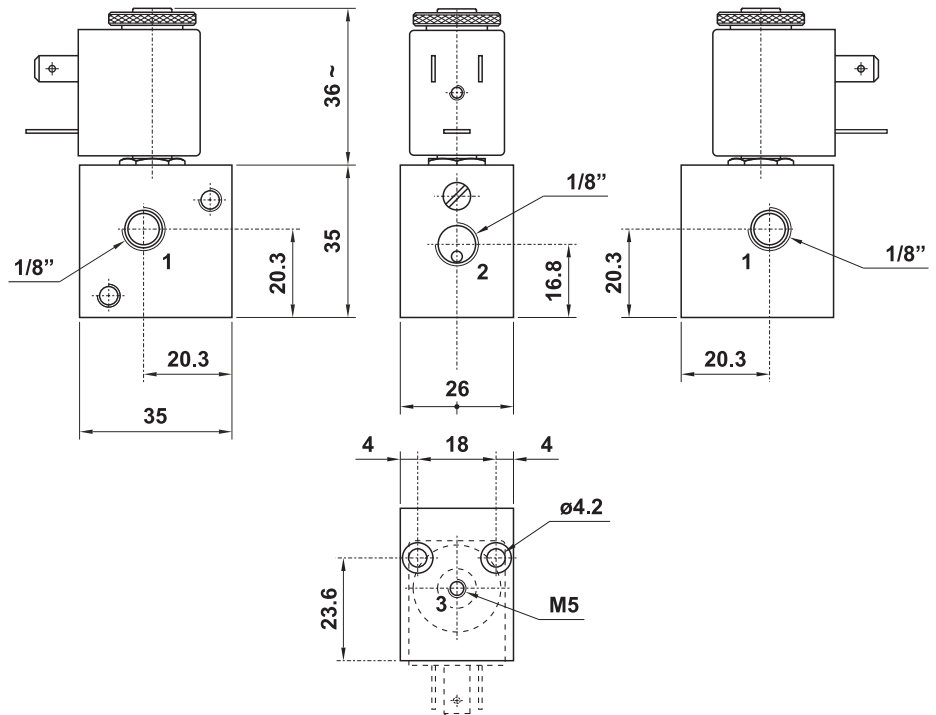


header

with detented manual override

1/8" NPT

ORDER CODE
N/C
<b>US00.095.3</b>



# Solenoid valves on multiple sub-bases

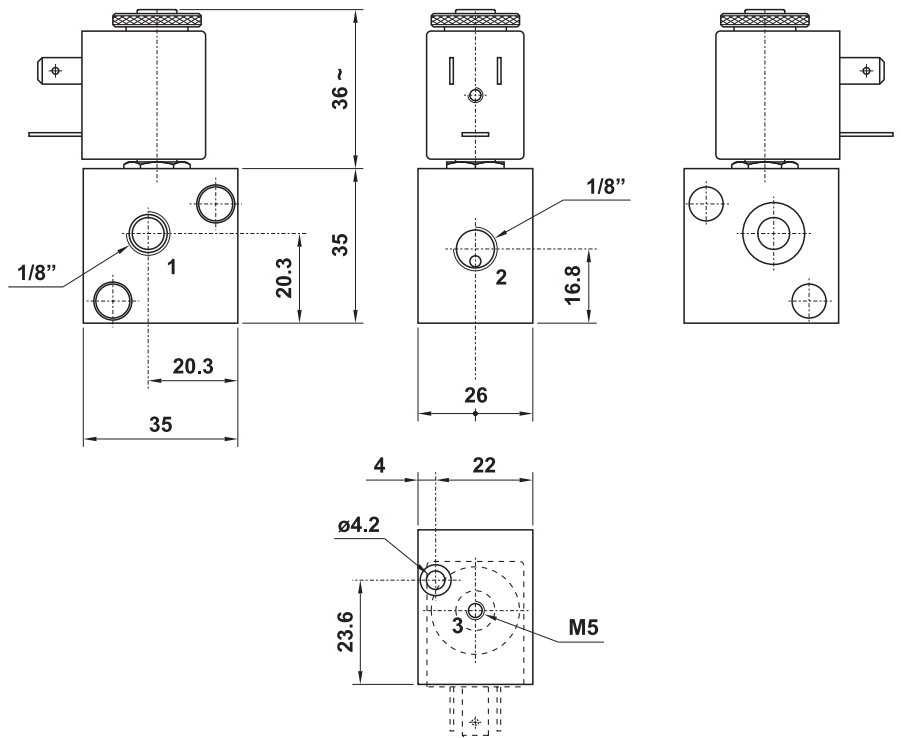


sub-base

without manual override

1/8" NPT

ORDER CODES	
N/C	N/O
<b>US00.096.3</b>	<b>US00.130.3</b>

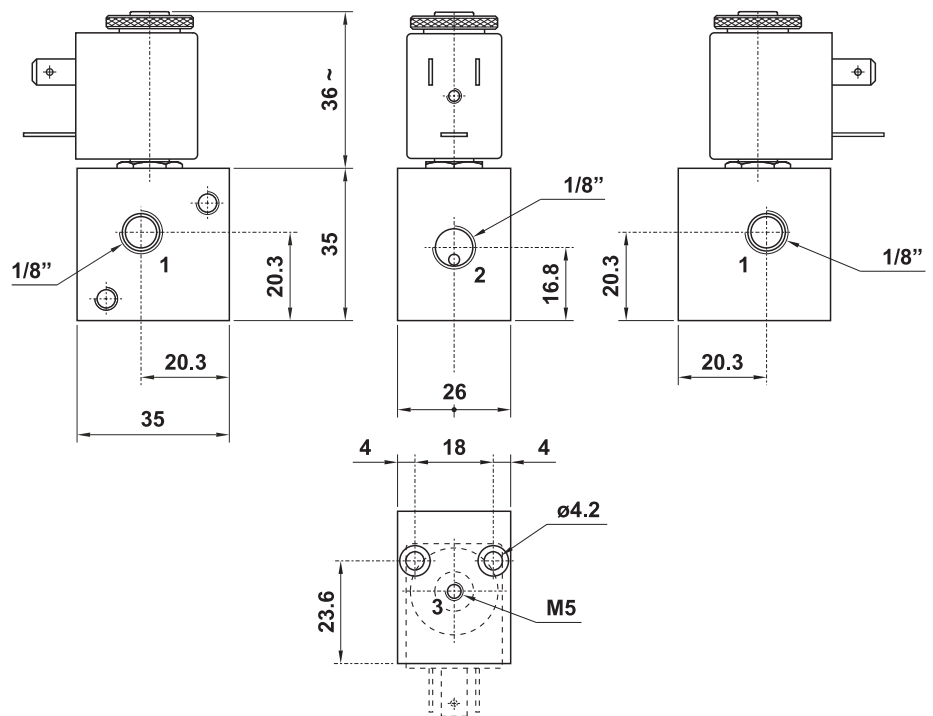


header

without manual override

1/8" NPT

ORDER CODES	
N/C	N/O
<b>US00.097.3</b>	<b>US00.131.3</b>



# Solenoid valves on multiple sub-bases

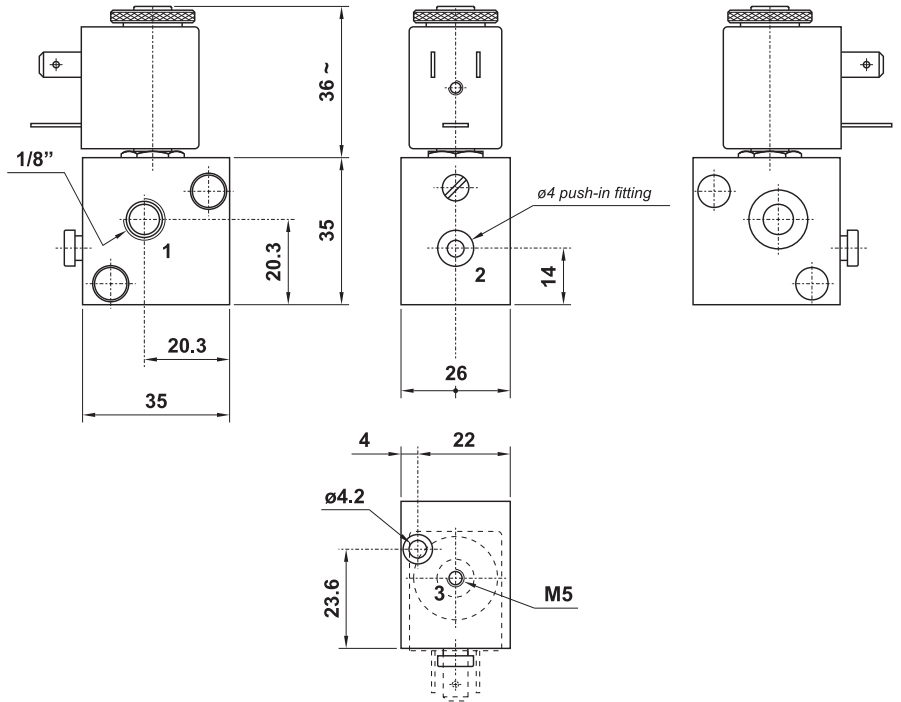


sub-base

with detented manual override

ø4

ORDER CODE
N/C
<b>US00.098.3</b>

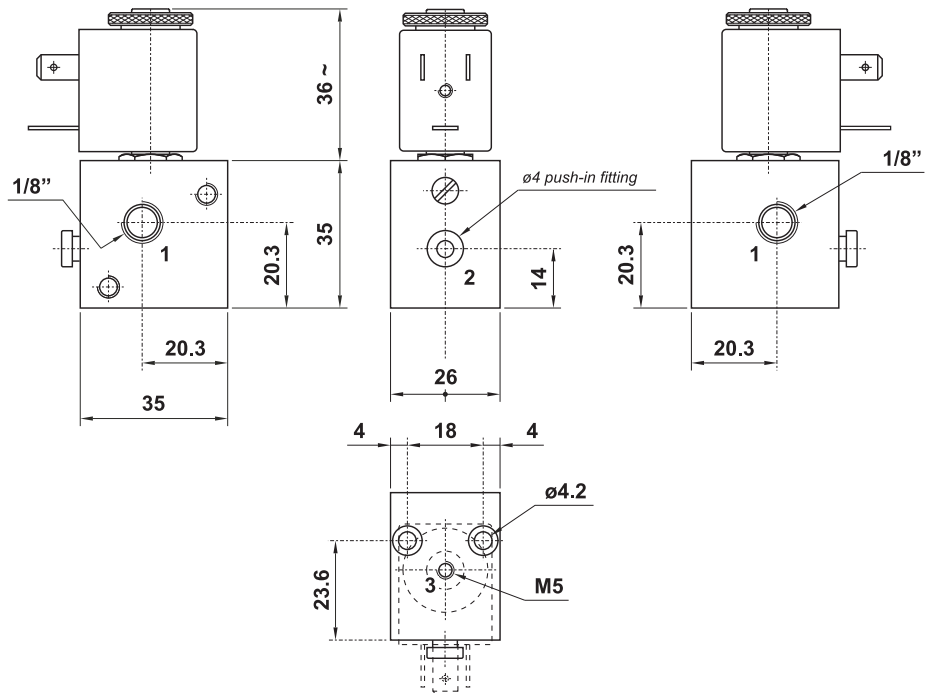


header

with detented manual override

ø4

ORDER CODE
N/C
<b>US00.099.3</b>



# Solenoid valves on multiple sub-bases

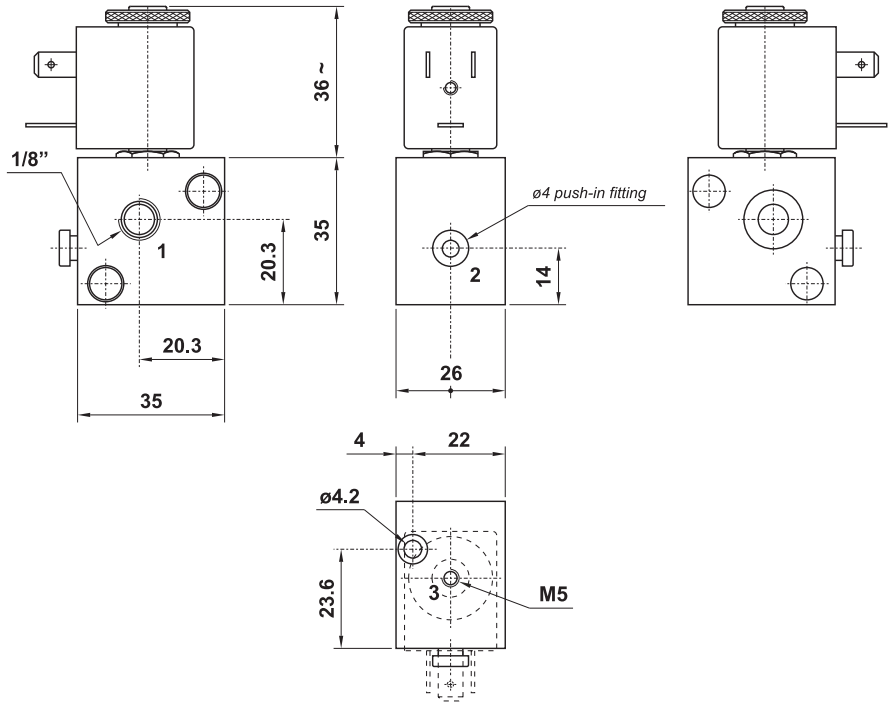


sub-base

without manual override

ø4

ORDER CODES	
N/C	N/O
<b>US00.100.3</b>	<b>US00.134.3</b>

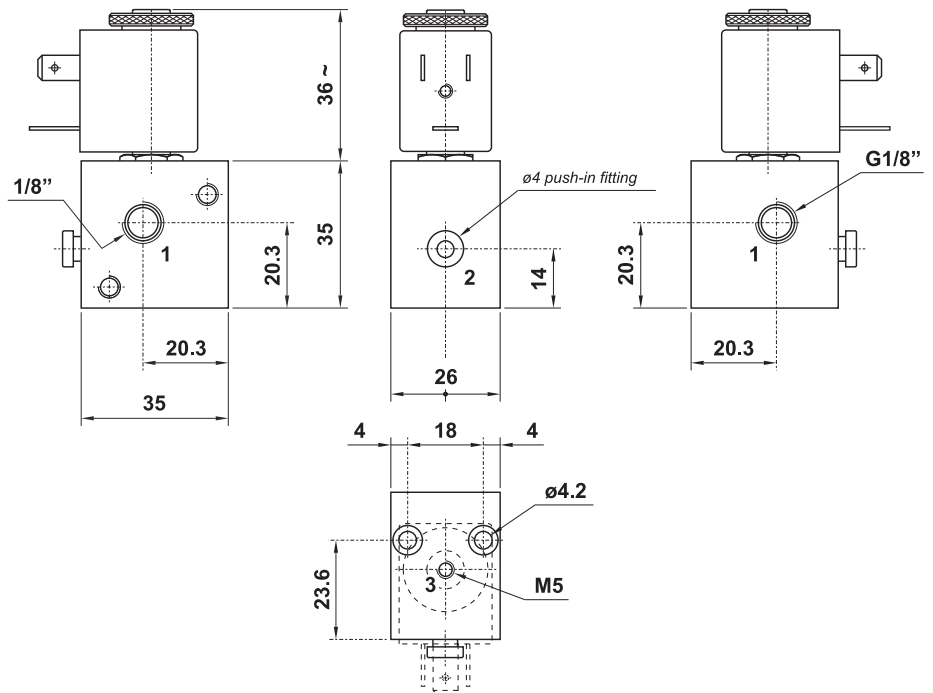


header

without manual override

ø4

ORDER CODES	
N/C	N/O
<b>US00.101.3</b>	<b>US00.135.3</b>



# Solenoid valves on multiple sub-bases

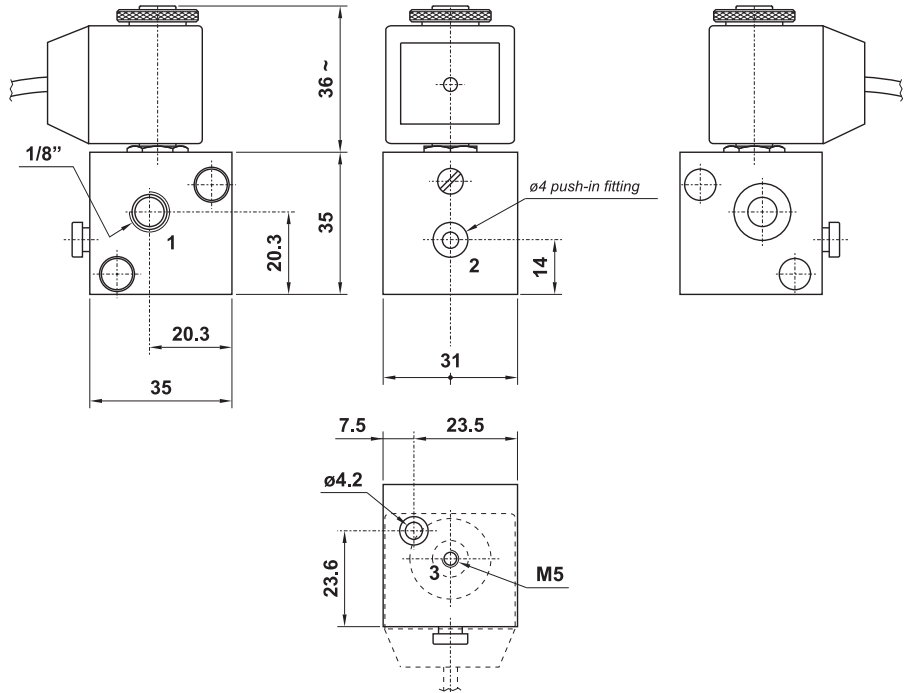
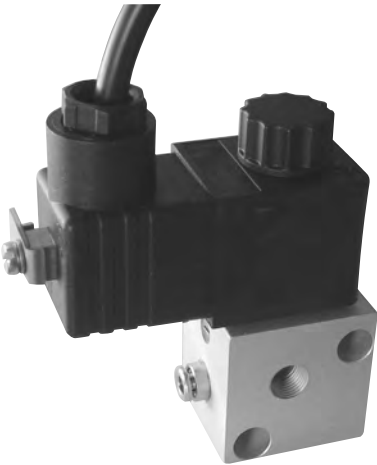


sub-base

with manual override

ø4

ORDER CODE
N/C
<b>US00.104.3X</b>

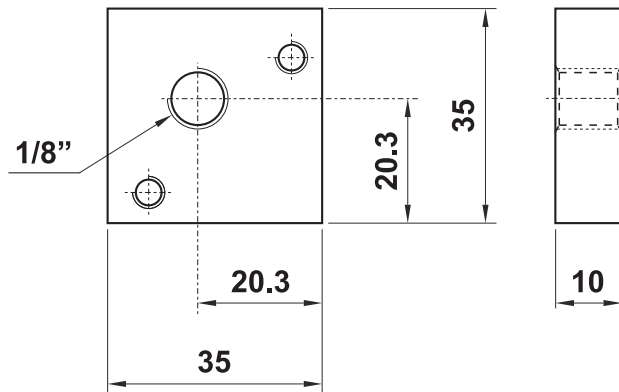


**ATEX version on request**

The following products are sold without coils. These can be bought separately (refer to page 151: ATEX 30 mm coils). They can be used only as 3/2 NC valve.

closed header

US00.360.1

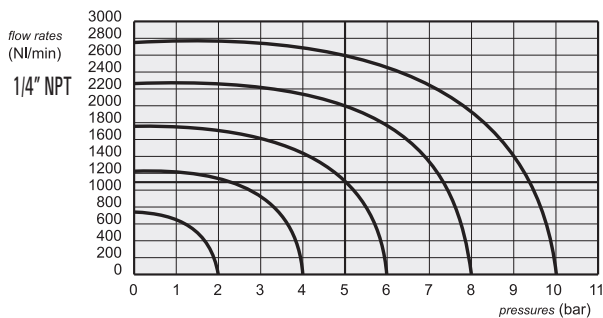
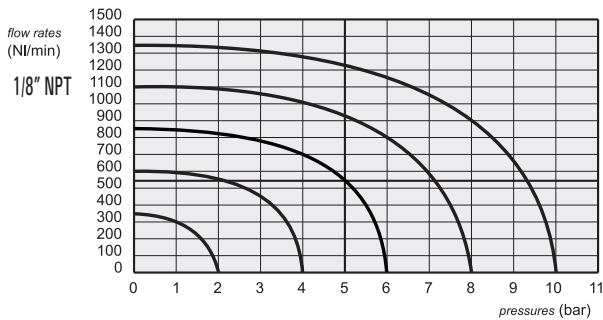
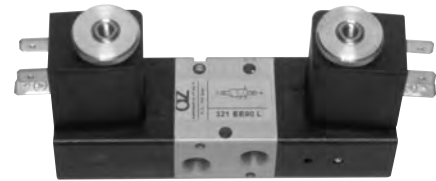




# Solenoid actuated valves



- 3/2-5/2-5/3 spool valves with 1/8" - 1/4" - 1/2" NPT threaded ports, BSP version available on request
- Installation in-line, on gang or modular manifolds
- Solenoid pilots with detented manual override as standard
- On request with low consumption 1.5W
- Special versions on request
- **Coil sold separately on request**



The following products are sold without coils. These can be bought separately (refer to page 185).

## Materials

**Body:** aluminium 11S

**End cups:** aluminium 11s

**Springs:** stainless steel

**Seals:** NBR

**Spool:** nickel plated aluminium

**Internal parts:** brass OT58

## Response times

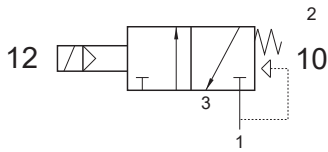
	1/8" NPT	1/4" NPT
mono-stable	TRA (14): 15 ms TRR (12): 35 ms	TRA (14): 19 ms TRR (12): 45 ms
bi-stable	TRA (14): 20 ms TRR (12): 20 ms	TRA (14): 22 ms TRR (12): 22 ms

Nominal diameter	1/8" NPT: 5 mm 1/4" NPT: 7.5 mm		
Temperature range	max +60°C (140 °F)		
Operating pressure	mono-stable internal air supply	bi-stable internal air supply	separate air supply
	2.5 ... 10 bar (36 ... 145 PSI) 0.25 ... 1 MPa	1 ... 10 bar (14 ... 145 PSI) 0.1 ... 1 MPa	-0.9 ... 10 bar (Vacuum ... 145 PSI) -0.09 ... 1 MPa
Actuating pressure (for separate air supply)	mono-stable		bi-stable
	2.5 ... 10 bar (36 ... 145 PSI) 0.25 ... 1 MPa		1 ... 10 bar (14 ... 145 PSI) 0.1 ... 1 MPa
Fluid	50µ filtered, lubricated or non lubricated air		

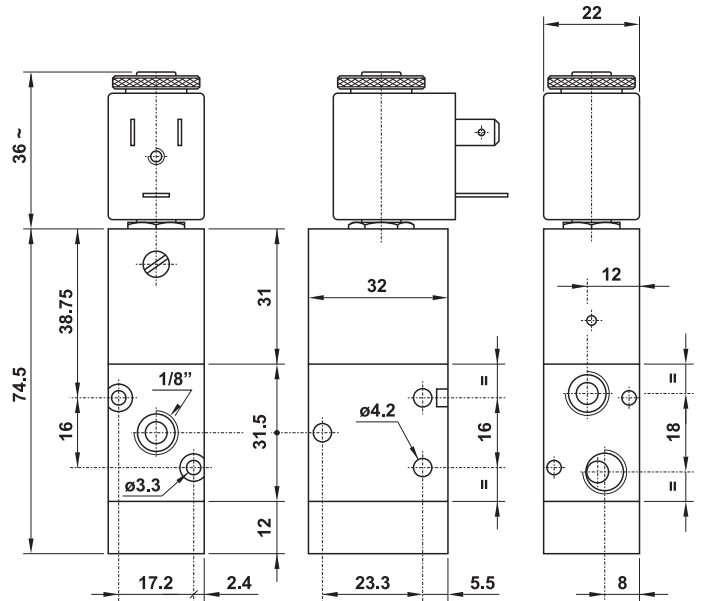


## US321 ME

3/2 1/8" NPT N/C solenoid pilot - air and spring return

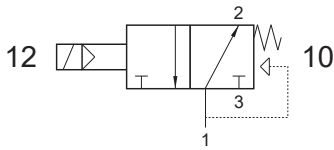


It cannot be used as normally open valve.

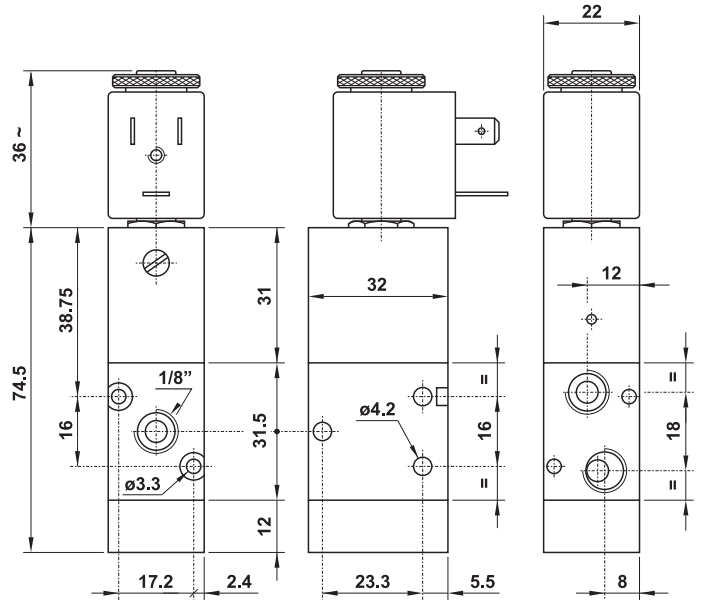


## US321 MEA

3/2 1/8" NPT N/O solenoid pilot - air and spring return

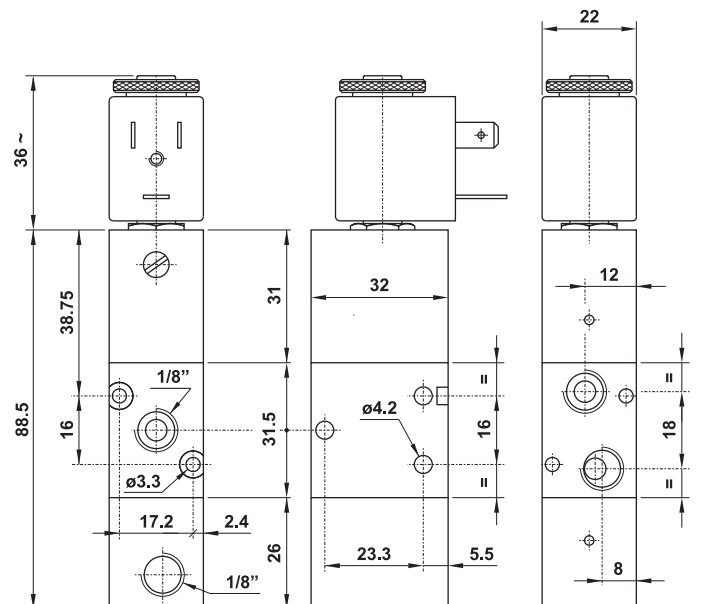
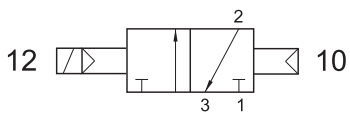


It cannot be used as normally closed valve.



## US321 CE

3/2 1/8" NPT solenoid pilot - separate pneumatically piloted return

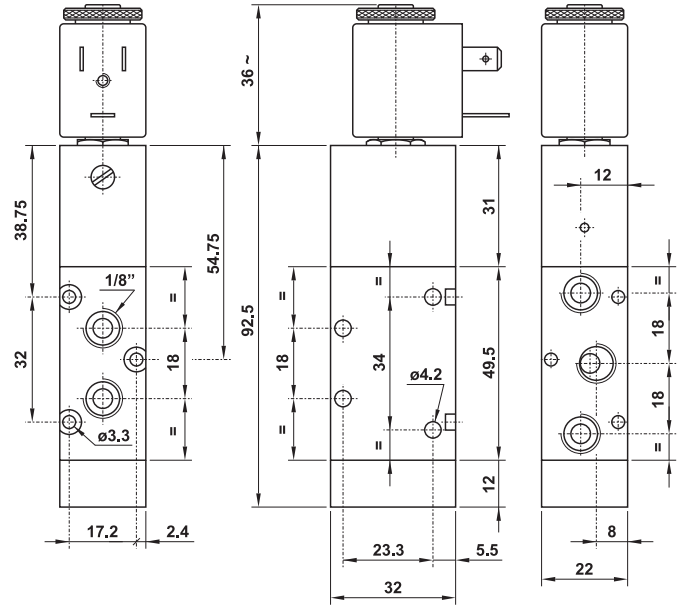
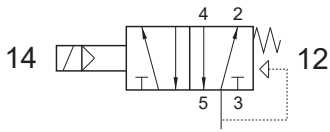


# Solenoid actuated valves - 1/8"



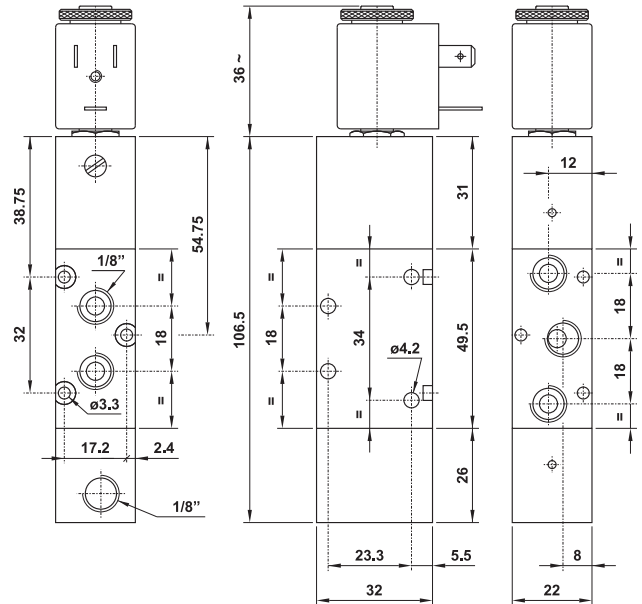
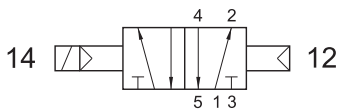
## US521 ME

5/2 1/8" NPT solenoid pilot - air and spring return



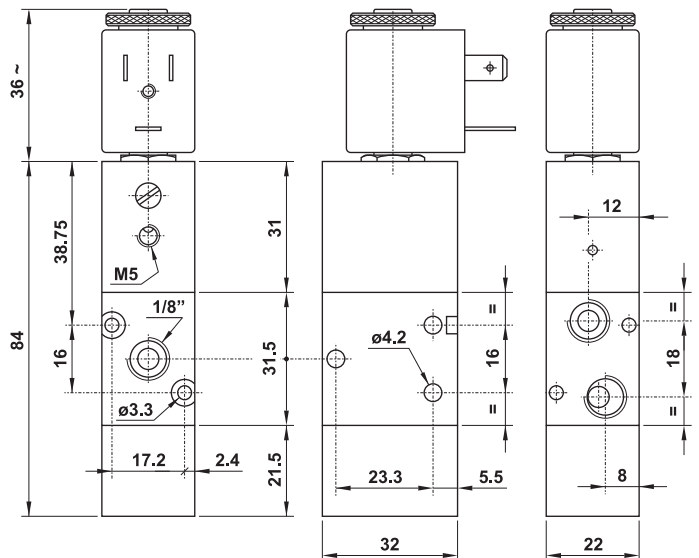
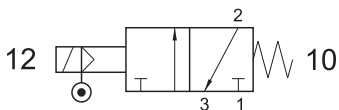
## US521 CE

5/2 1/8" NPT solenoid pilot - separate pneumatically piloted return



## US321 ME AS

3/2 1/8" NPT solenoid pilot with separate air supply - spring return

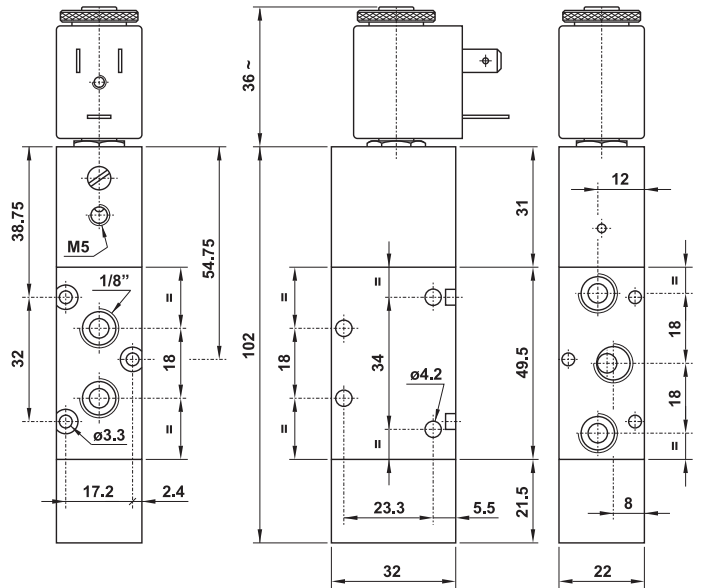
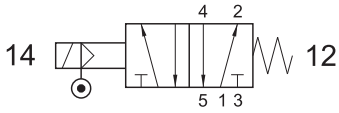


# Solenoid actuated valves - 1/8"



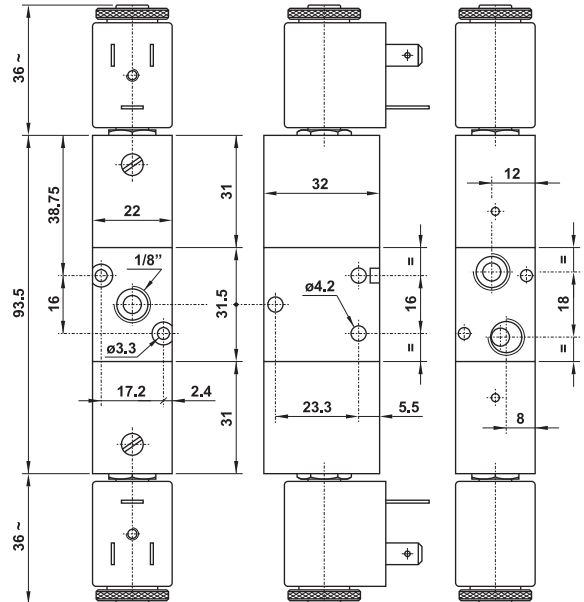
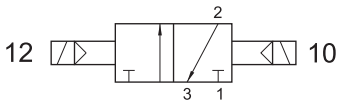
## US521 ME AS

5/2 1/8" NPT solenoid pilot with separate air supply - spring return



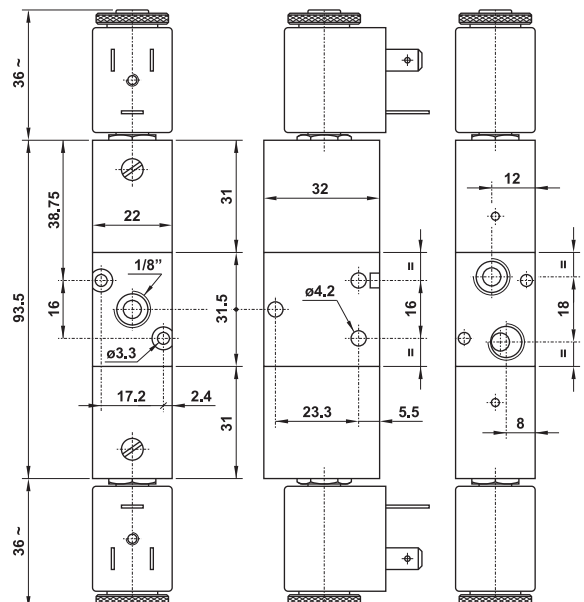
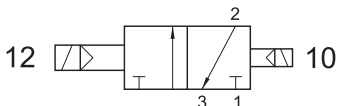
## US321 EE

3/2 1/8" NPT double solenoid pilot



## US321 EED

3/2 1/8" NPT double solenoid pilot - with differential

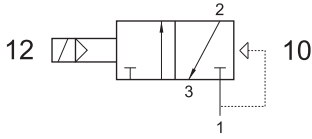


# Solenoid actuated valves - 1/8"

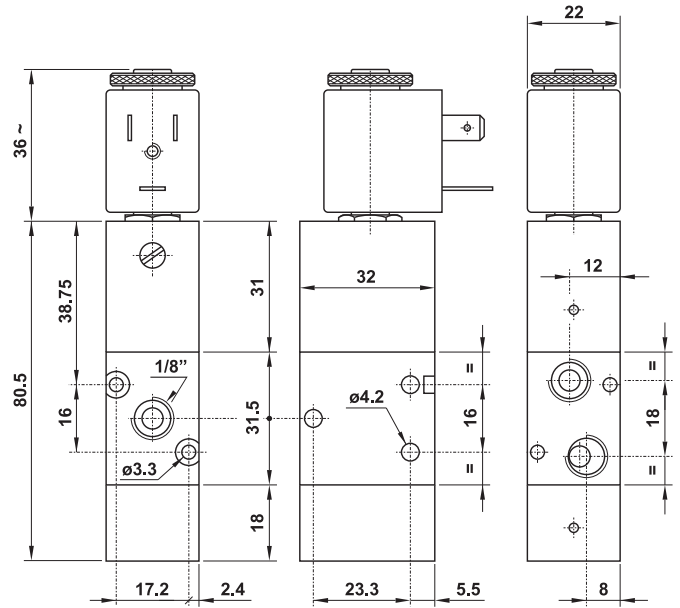


## US321 EFP

3/2 1/8" NPT N/C solenoid pilot - pneumatic spring return

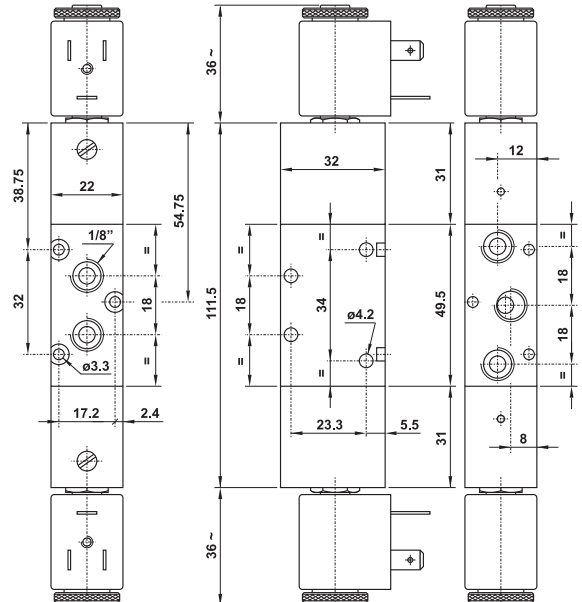
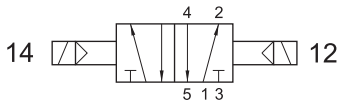


It cannot be used as normally open valve.



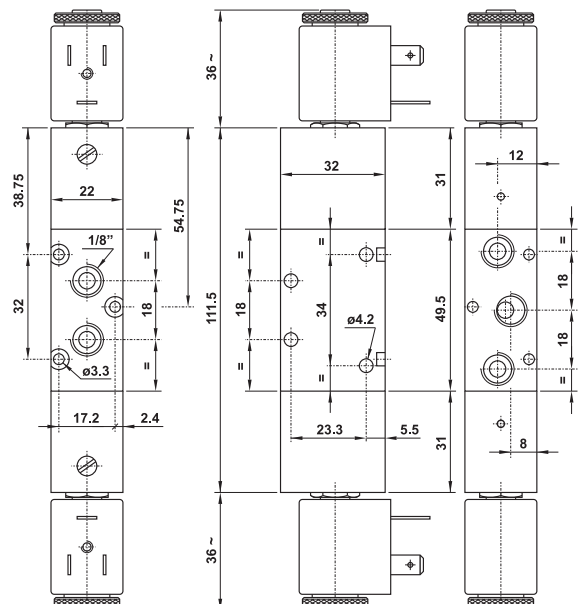
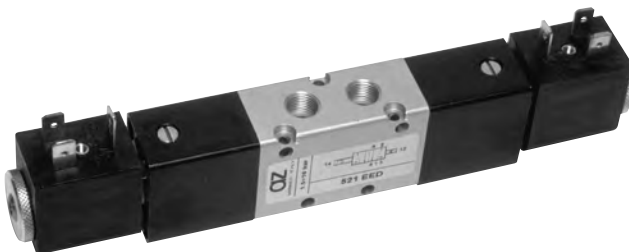
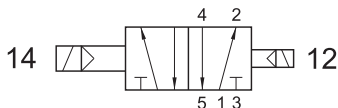
## US521 EE

5/2 1/8" NPT double solenoid pilot



## US521 EED

5/2 1/8" NPT double solenoid pilot - with differential

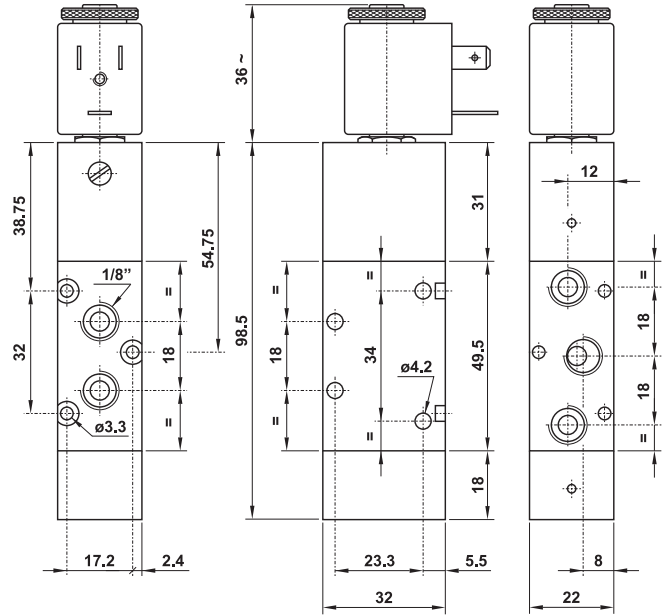
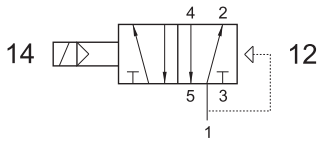


# Solenoid actuated valves - 1/8"



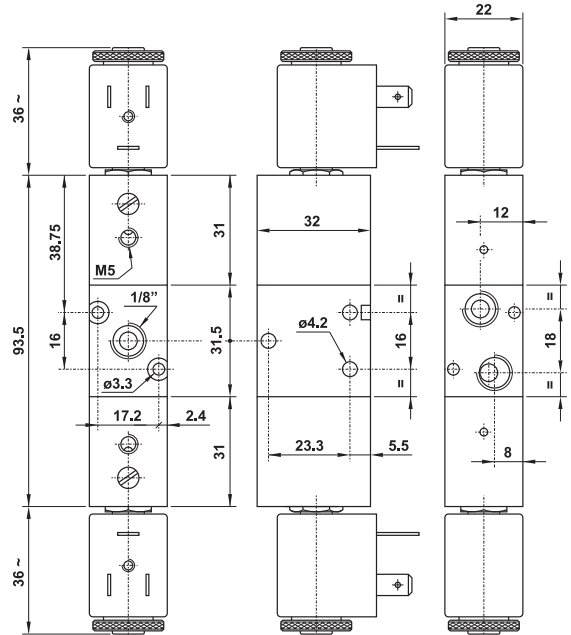
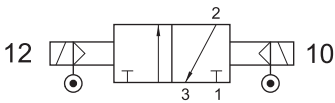
## US521 EFP

5/2 1/8" NPT solenoid pilot - pneumatic spring return



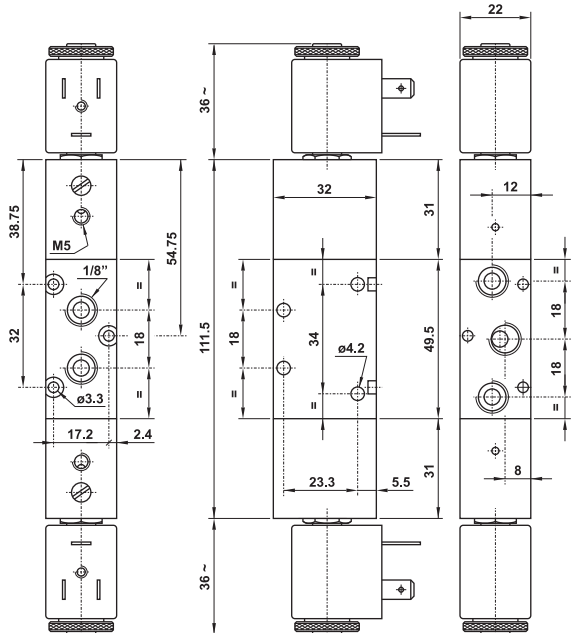
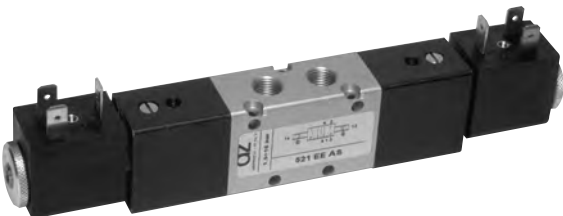
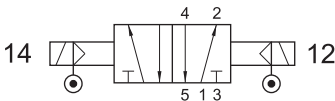
## US321 EE AS

3/2 1/8" NPT double solenoid pilot with separate air supply



## US521 EE AS

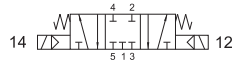
5/2 1/8" NPT double solenoid pilot with separate air supply



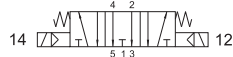
# Solenoid actuated valves - 1/8"



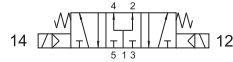
**US5213C EE** closed centers



**US5213A EE** open centers

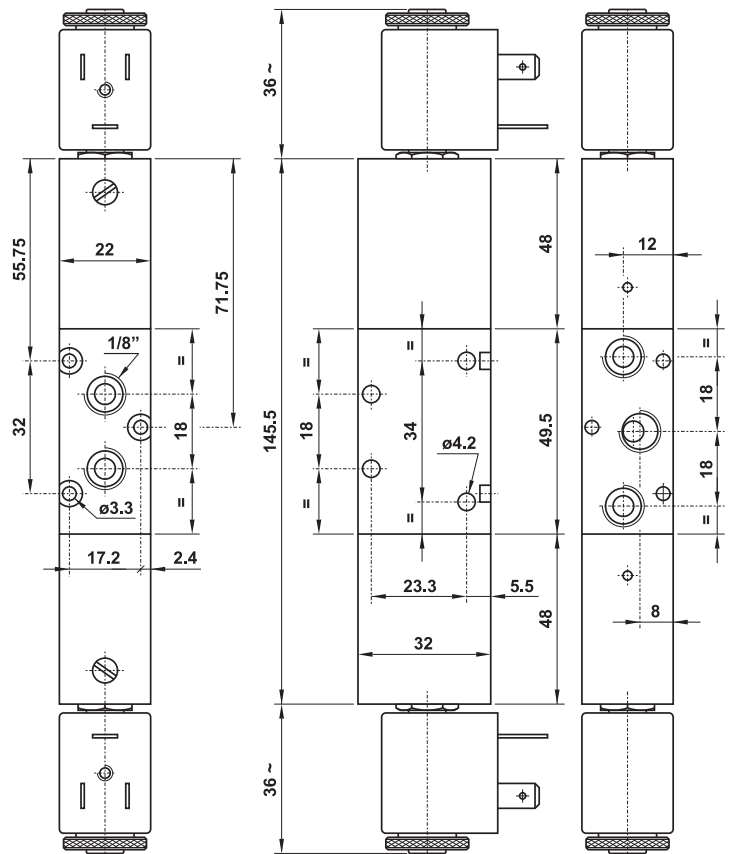
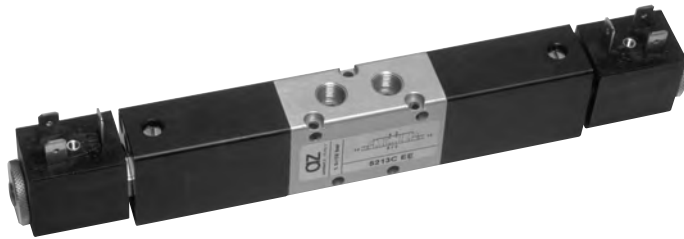


**US5213P EE** pressurized centers

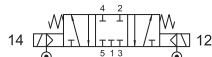


5/3 1/8" NPT double solenoid pilot

ONLY ALUMINIUM VERSION



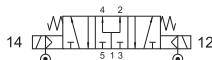
**US5213C EE AS** closed centers



**US5213A EE AS** open centers

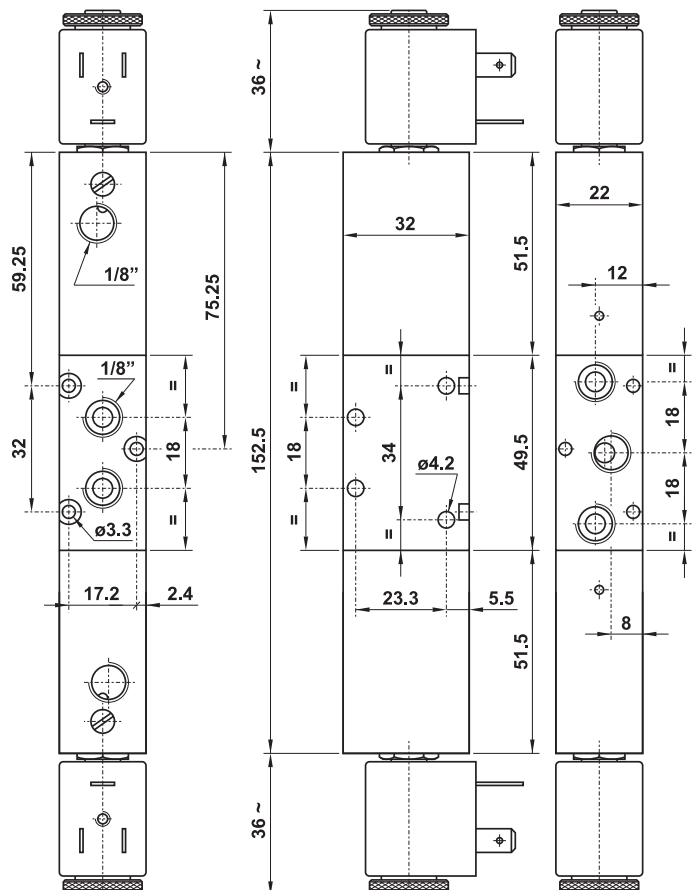
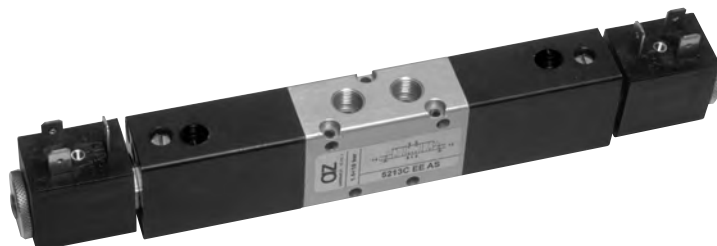


**US5213P EE AS** pressurized centers



5/3 1/8" NPT double solenoid pilot with separate air supply

ONLY ALUMINIUM VERSION

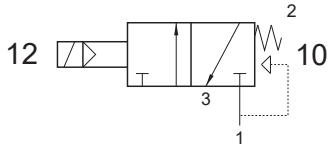




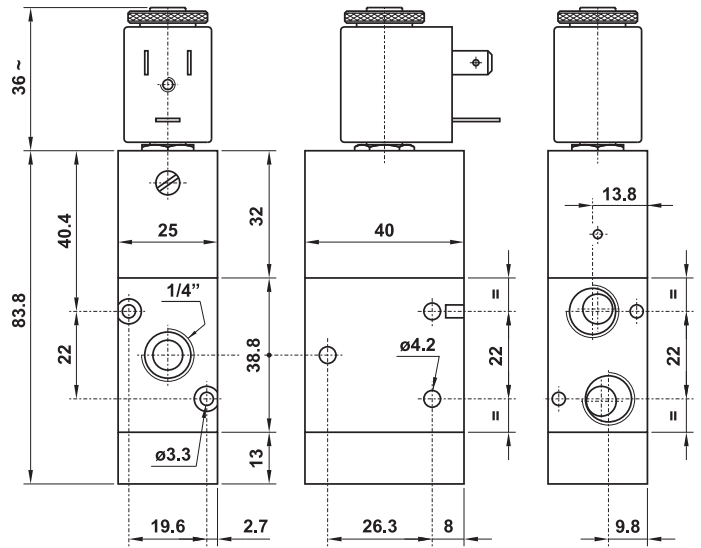


## US322 ME

3/2 1/4" NPT NC solenoid pilot - spring and air return

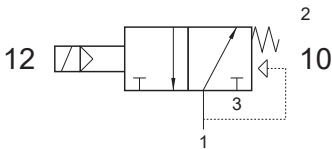


It cannot be used as normally open valve.

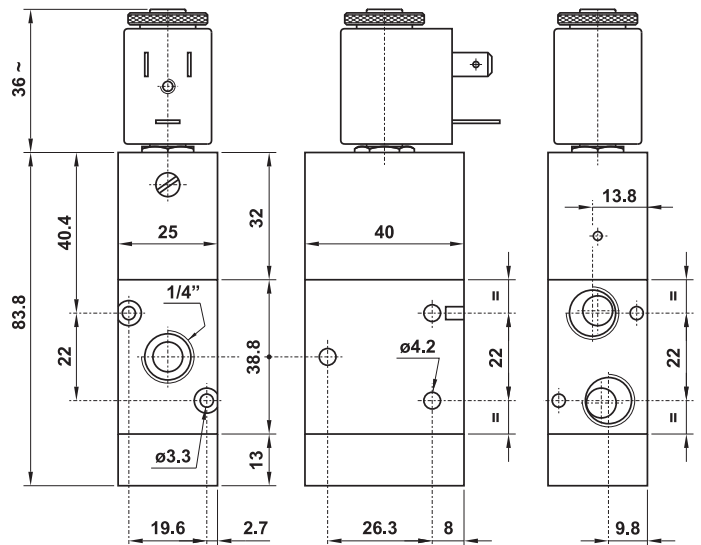


## US322 MEA

3/2 1/4" NPT NO solenoid pilot - spring and air return

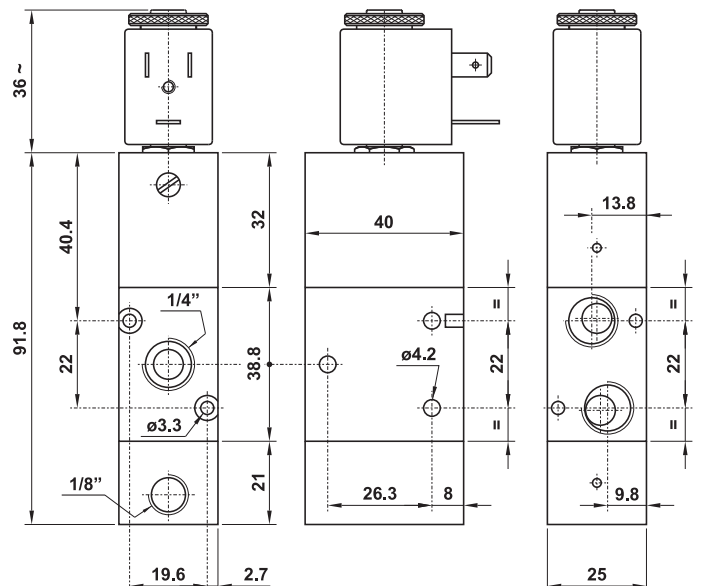
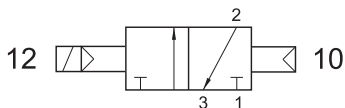


It cannot be used as normally closed valve.



## US322 CE

3/2 1/4" NPT solenoid pilot - separate pneumatically piloted return



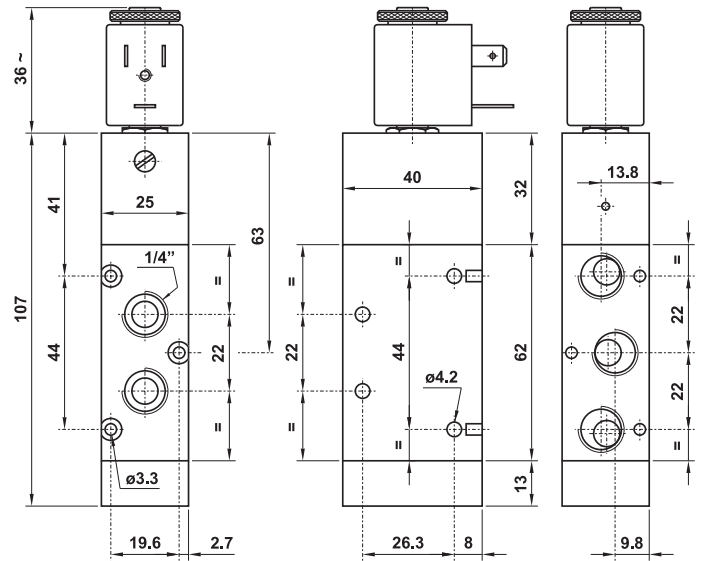
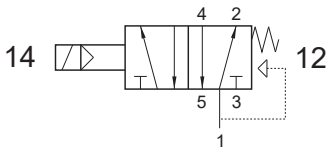


# Solenoid actuated valves - 1/4"



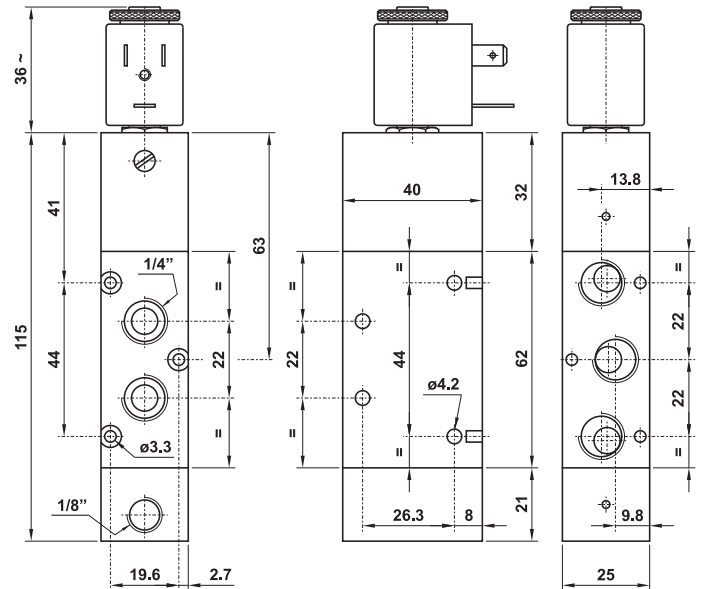
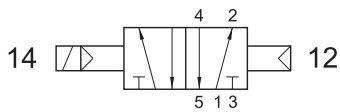
## US522 ME

5/2 1/4" NPT solenoid pilot - spring and air return



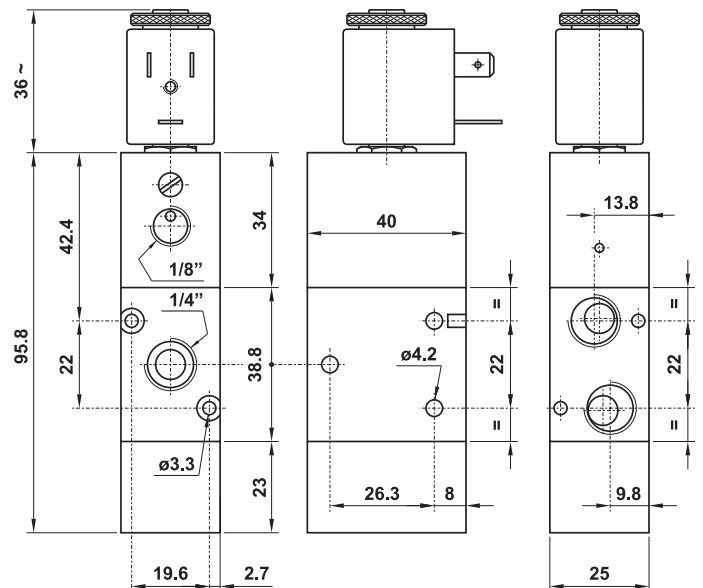
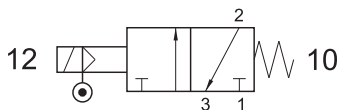
## US522 CE

5/2 1/4" NPT solenoid pilot - separate pneumatically piloted return



## US322 ME AS

3/2 1/4" NPT solenoid pilot with separate air supply - spring return

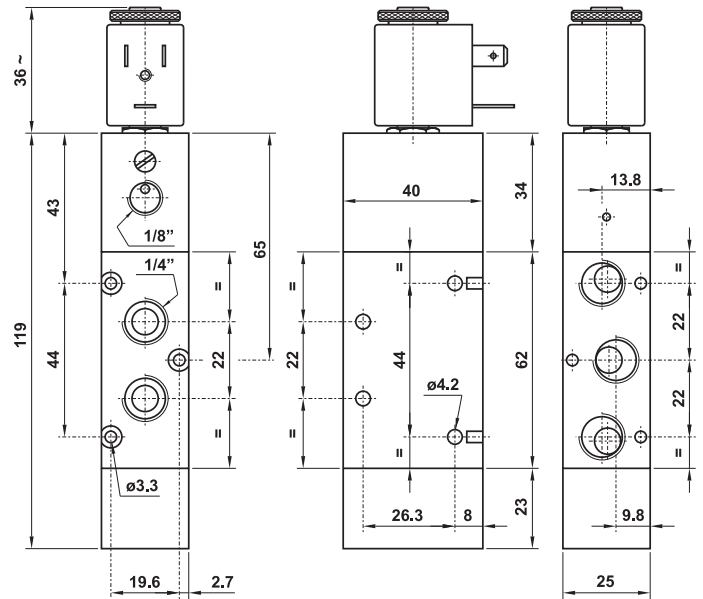
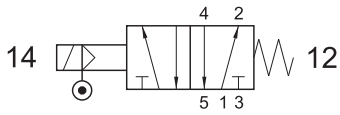


# Solenoid actuated valves - 1/4"



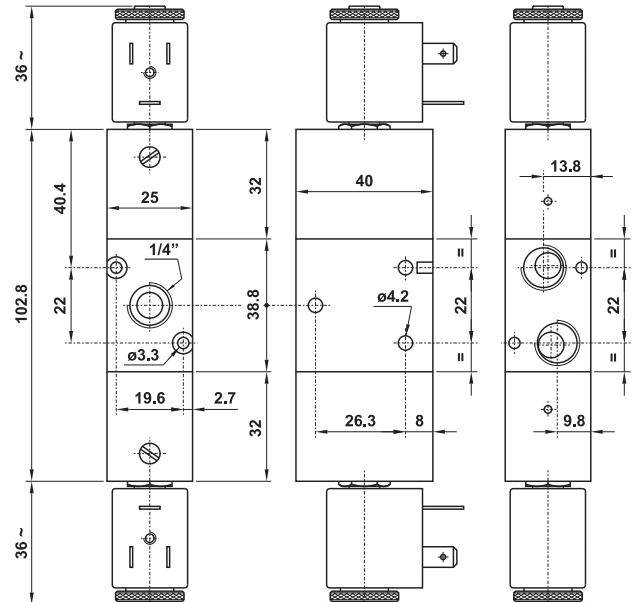
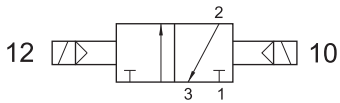
## US522 ME AS

5/2 1/4" NPT solenoid pilot with separate air supply - spring return



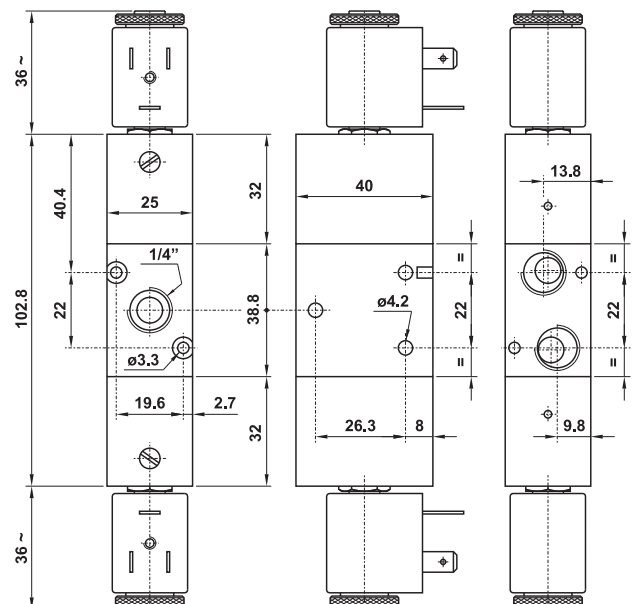
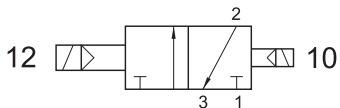
## US322 EE

3/2 1/4" NPT double solenoid pilot



## US322 EED

3/2 1/4" NPT double solenoid pilot - with differential

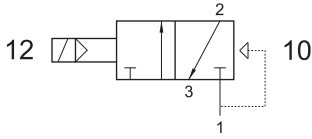


# Solenoid actuated valves - 1/4"

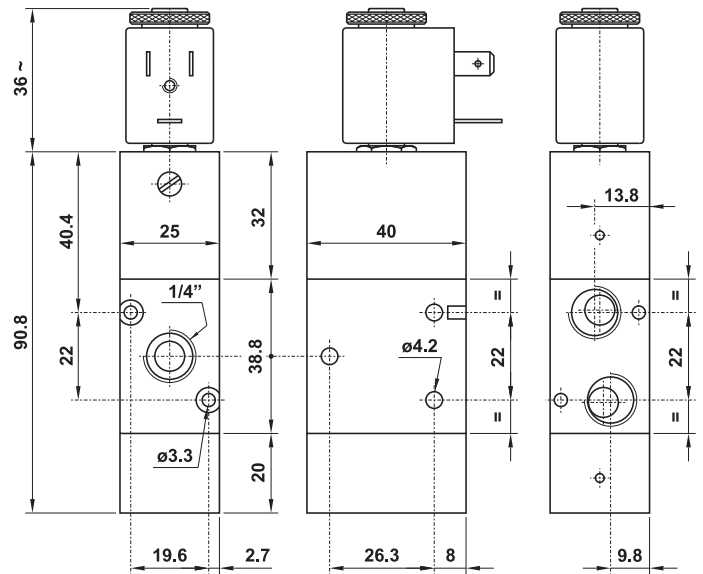


## US322 EFP

3/2 1/4" NPT N/C solenoid pilot - pneumatic spring return

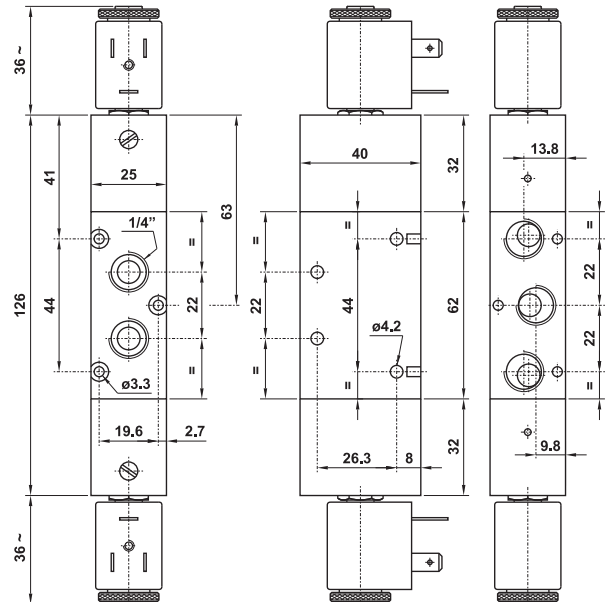
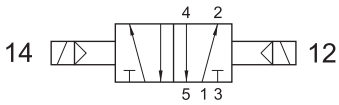


It cannot be used as normally open valve.



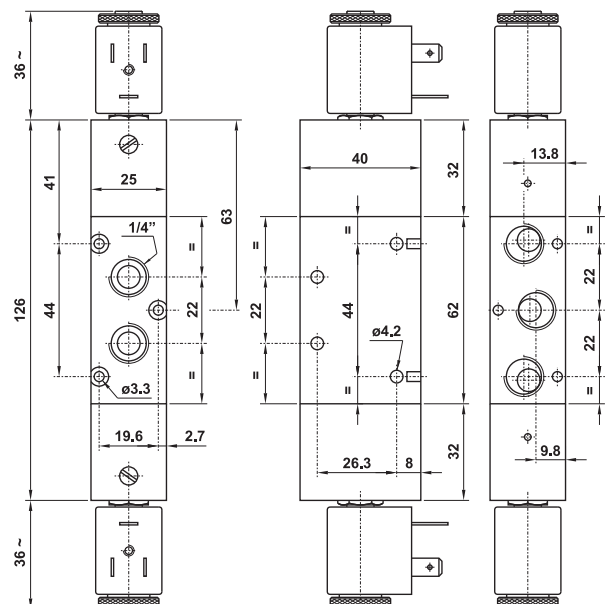
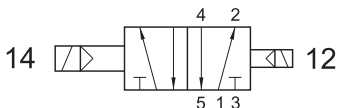
## US522 EE

5/2 1/4" NPT double solenoid pilot



## US522 EED

5/2 1/4" NPT double solenoid pilot - with differential

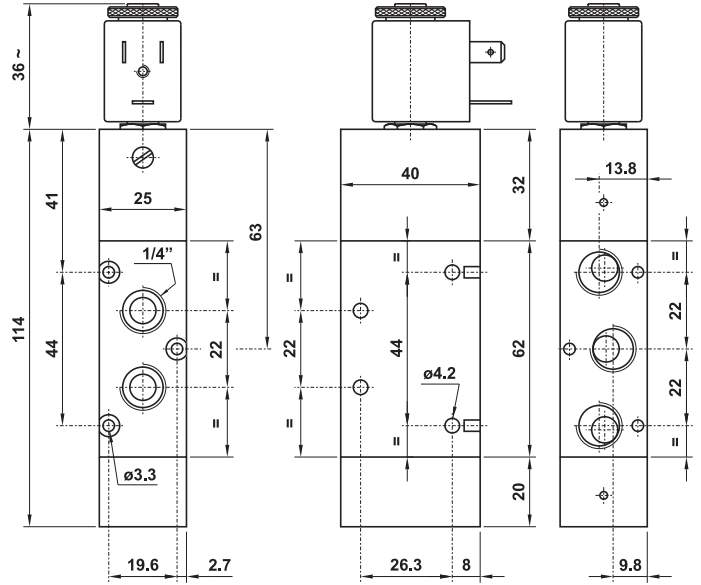
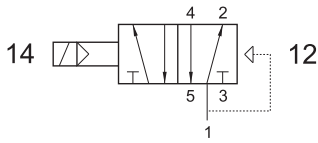


# Solenoid actuated valves



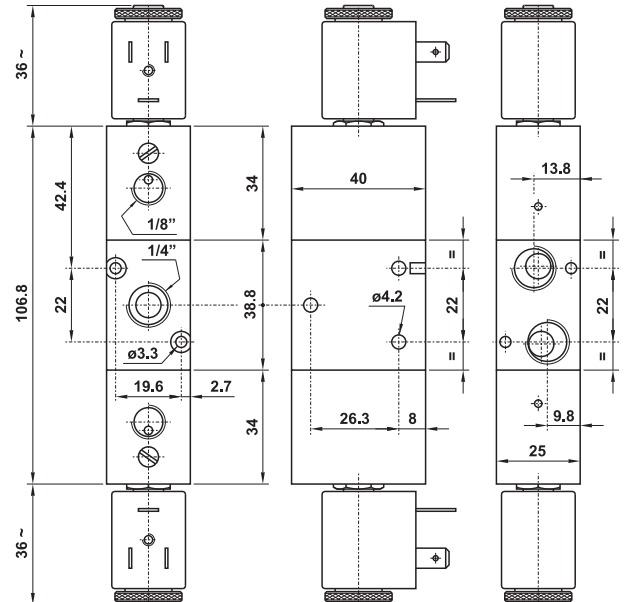
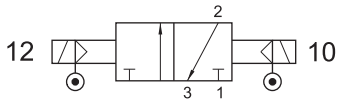
## US522 EFP

5/2 1/4" NPT solenoid pilot - pneumatic spring return



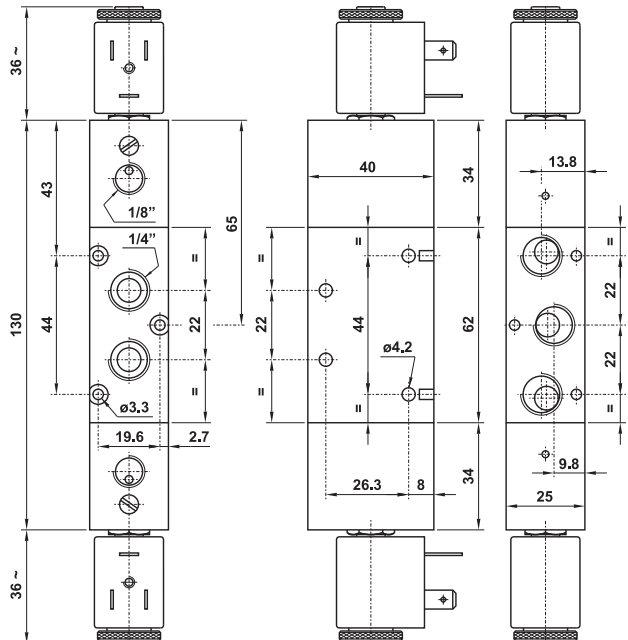
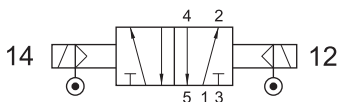
## US322 EE AS

3/2 1/4" NPT double solenoid pilot with separate air supply



## US522 EE AS

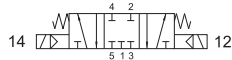
5/2 1/4" NPT double solenoid pilot with separate air supply



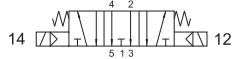
# Solenoid actuated valves



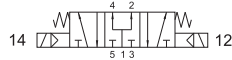
**US5223C EE** closed centers



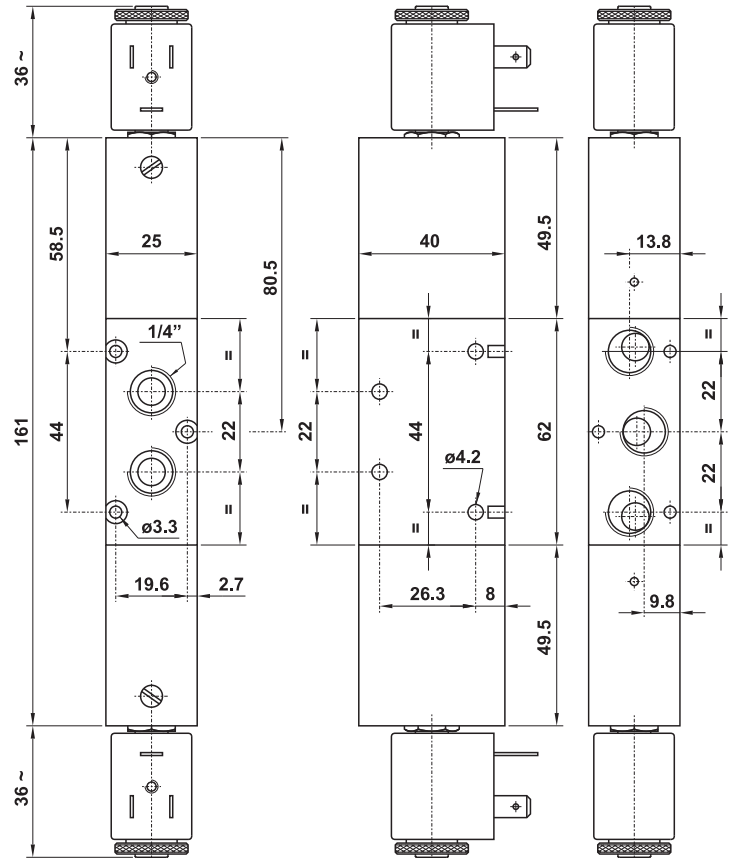
**US5223A EE** open centers



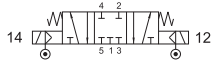
**US5223P EE** pressurized centers



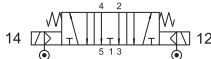
5/3 1/4" NPT double solenoid pilot



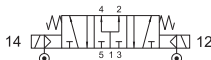
**US5223C EE AS** closed centers



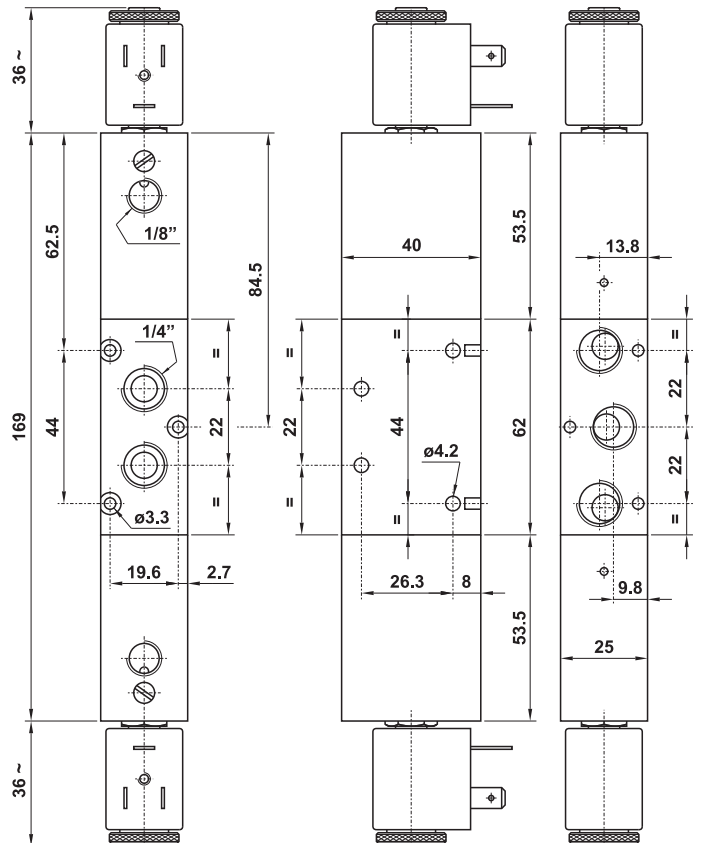
**US5223A EE AS** open centers

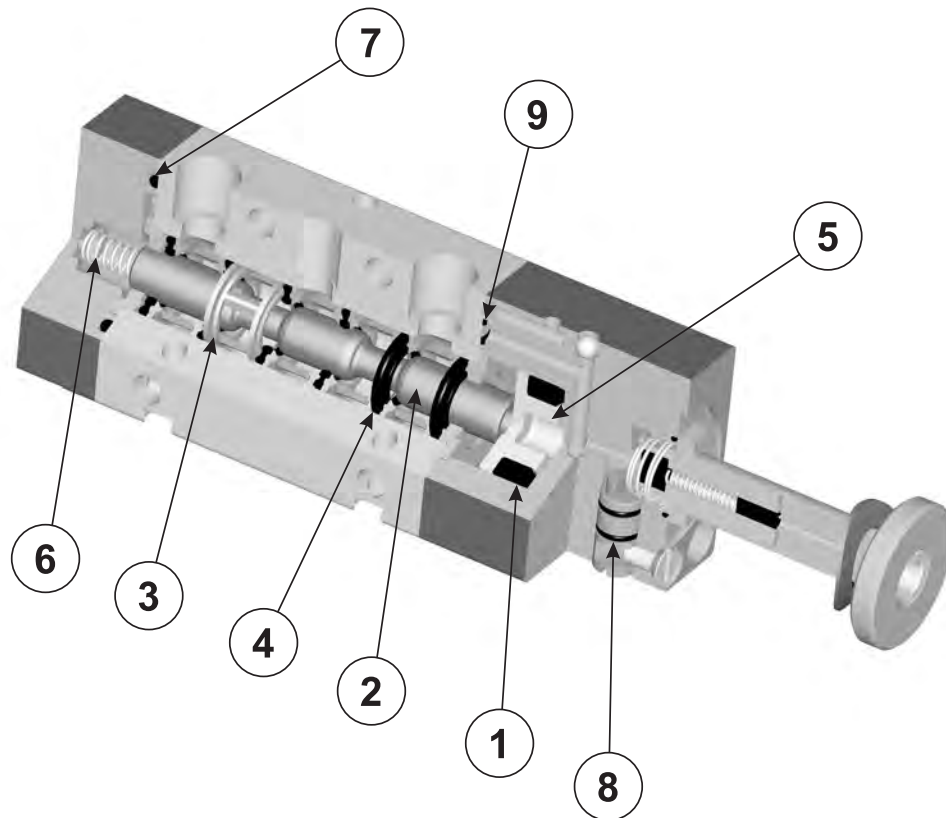


**US5223P EE AS** pressurized centers



5/3 1/4" NPT double solenoid pilot with separate air supply





- 1. DE seal for piston: NBR
- 2. Spool: aluminium 11S, nickered
- 3. Spacer for spool: brass
- 4. Seal for spool: NBR
- 5. Piston to actuate the spool: delrin
- 6. Spring: steel
- 7. O-Ring seal: NBR
- 8. O-Ring seal 4x1: NBR
- 9. Shaped O-Ring: NBR

code of kit	suitable for		
00.036.2	US321 MC	US321 MCA	US321 ME
	US321 MEA		
00.039.2	US521 MC	US521 ME	
00.037.2	US321 CC	US321 EE	US321 CE
	US321 EE AS		
00.040.2	US521 CC	US521 EE	US521 CE
	US521 EE AS		
01.014.2	US322 MC	US 322 MC SUP	US 322 MCA
	US322 ME	US322 MEA	
01.020.2	US522 MC	US522 MC SUP	US522 ME
01.015.2	US322 CC	US322 CC SUP	US322 CE
	US322 EE	US322 EE AS	
01.021.2	US522 CC	US522 CC SUP	US522 CE
	US522 EE	US522 EE AS	

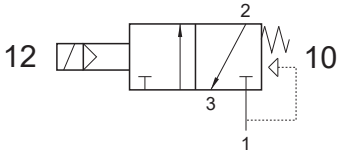
code of kit	suitable for		
00.038.2	US321 EED	US321 EFP	US321 CCD
	US321 CFP		
00.041.2	US521 EED	US521 EFP	US521 CCD
	US521 CFP		
01.019.2	US322 EED	US322 EFP	US322 CCD
	US322 CFP		
01.022.2	US522 EED	US522 EFP	US522 CCD
	US522 CFP		
00.050.2	US321 ME AS		
01.035.2	US322 ME AS		
00.051.2	US521 ME AS		
01.036.2	US522 ME AS		
00.108.2	US5213C CC	US5213A CC	US5213P CC
	US5213C EE	US5213A EE	US5213P EE
	US5213C EE AS	US5213A EE AS	US5213P EE AS
01.061.2	US5223C CC	US5223A CC	US5223P CC
	US5223C EE	US5223A EE	US5223P EE
	US5223C EE AS	US5223A EE AS	US5223P EE AS



## US321 ME MIC xx

3/2 1/8" NPT N/C with 15 mm solenoid pilot

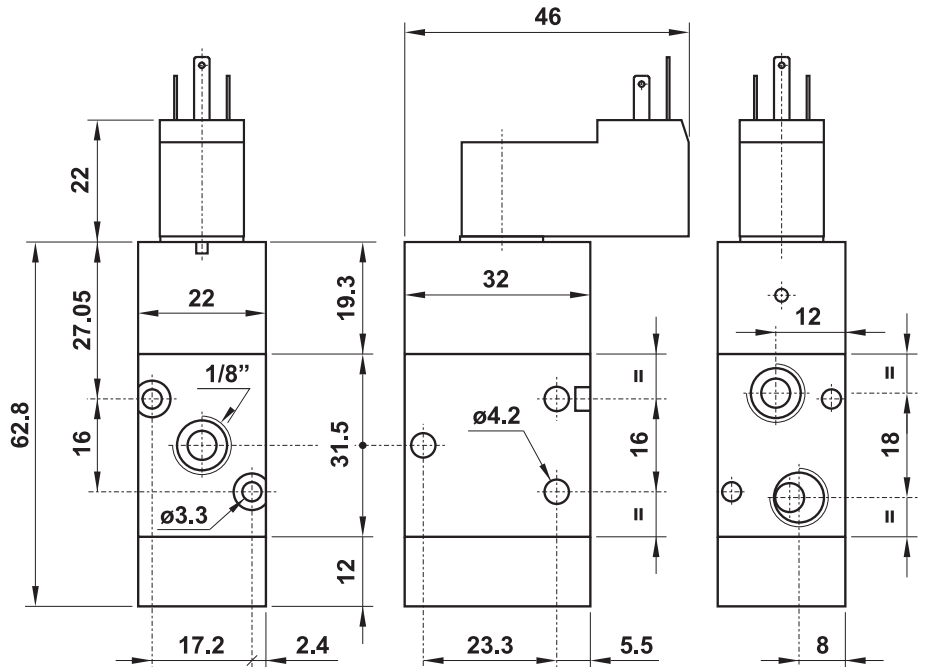
The valve is sold with mounted solenoid pilot(s); for technical data refer to page 191.



It cannot be used as normally open valve.

In the part number replace "xx" with the reference of the solenoid tension.

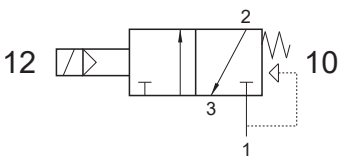
24V DC	01	
24V 50/60Hz	02	



## US322 ME MIC xx

3/2 1/4" NPT N/C with 15 mm solenoid pilot

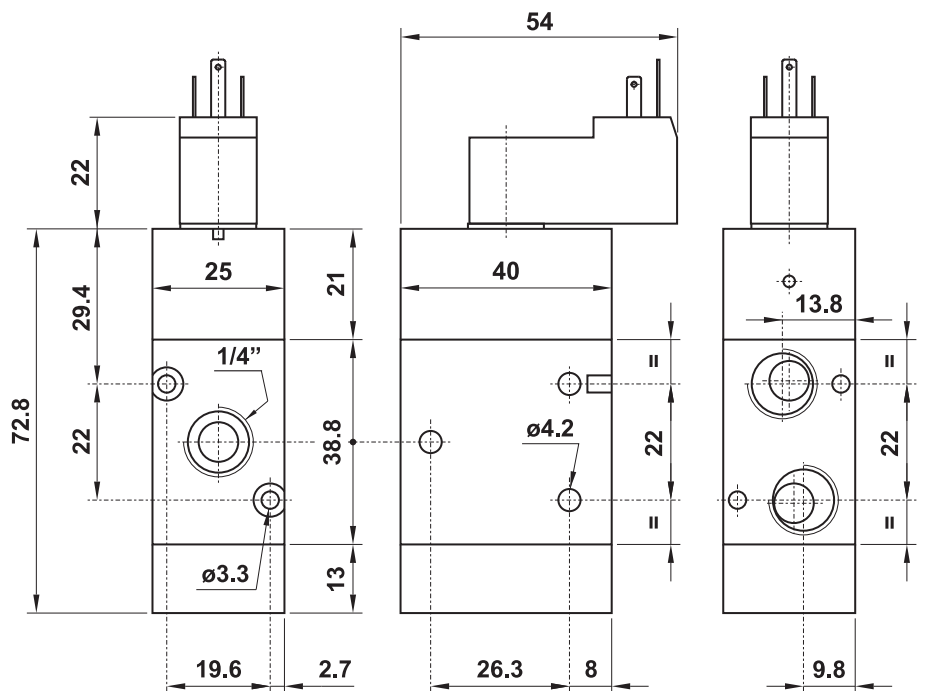
The valve is sold with mounted solenoid pilot(s); for technical data refer to page 191.



It cannot be used as normally open valve.

In the part number replace "xx" with the reference of the solenoid tension.

24V DC	01	
24V 50/60Hz	02	

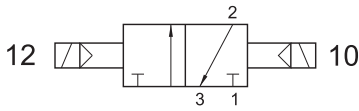




## US321 EE MIC xx

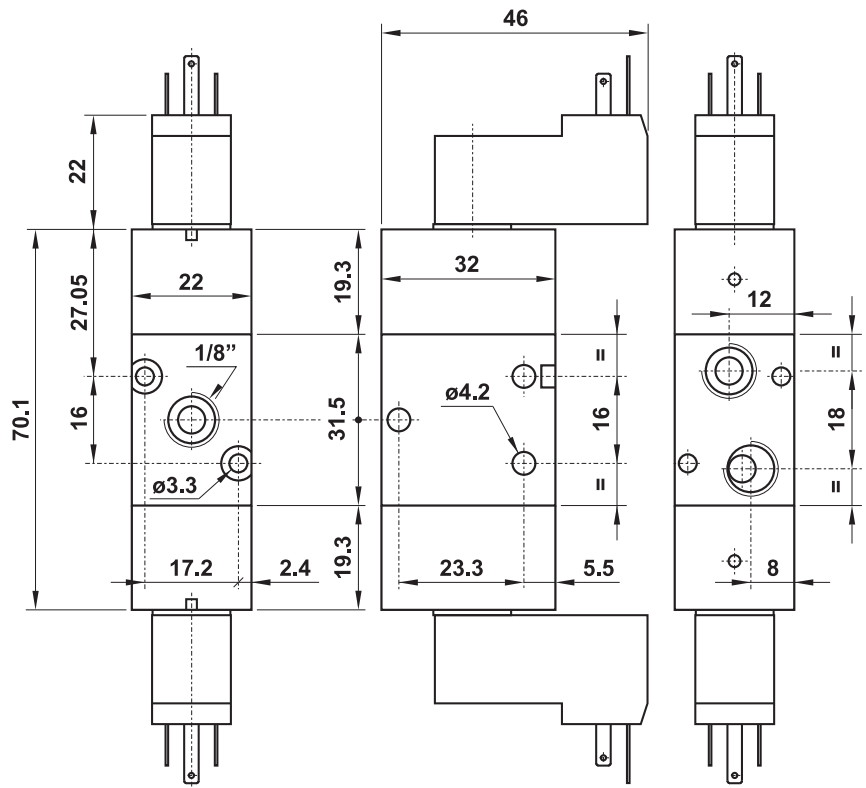
3/2 1/8" NPT with double 15 mm solenoid pilot

The valve is sold with mounted solenoid pilot(s); for technical data refer to page 191.



In the part number replace "xx" with the reference of the solenoid tension.

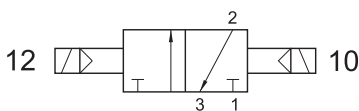
24V DC	01	
24V 50/60Hz	02	



## US322 EE MIC xx

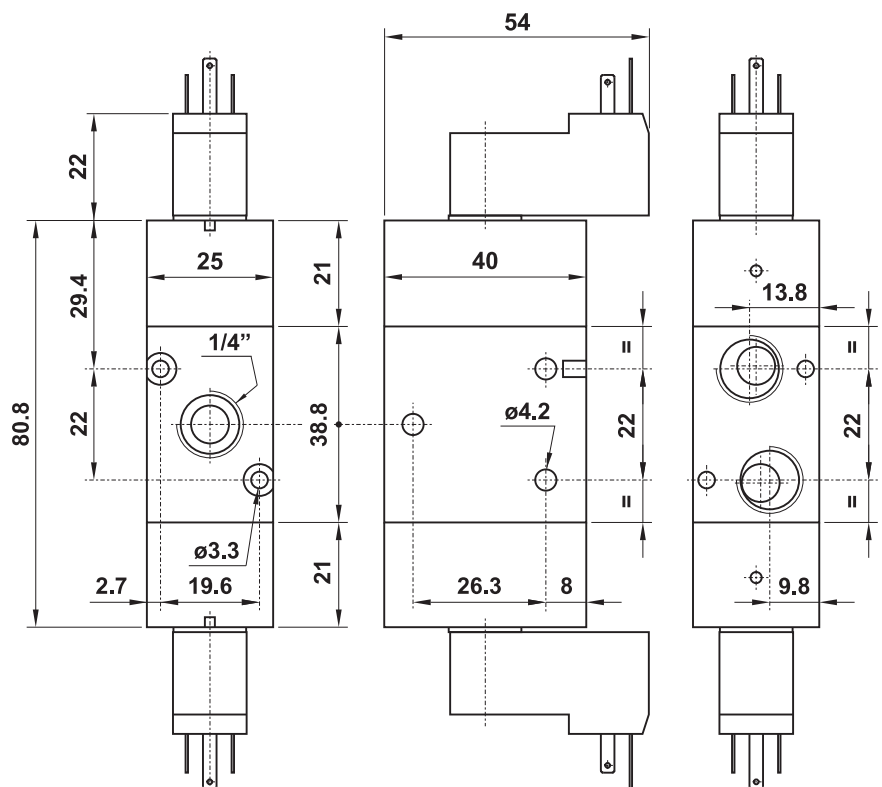
3/2 1/4" NPT with double 15 mm solenoid pilot

The valve is sold with mounted solenoid pilot(s); for technical data refer to page 191.



In the part number replace "xx" with the reference of the solenoid tension.

24V DC	01	
24V 50/60Hz	02	

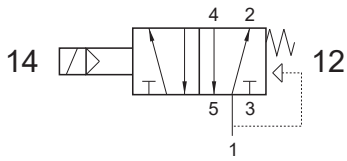




## US521 ME MIC xx

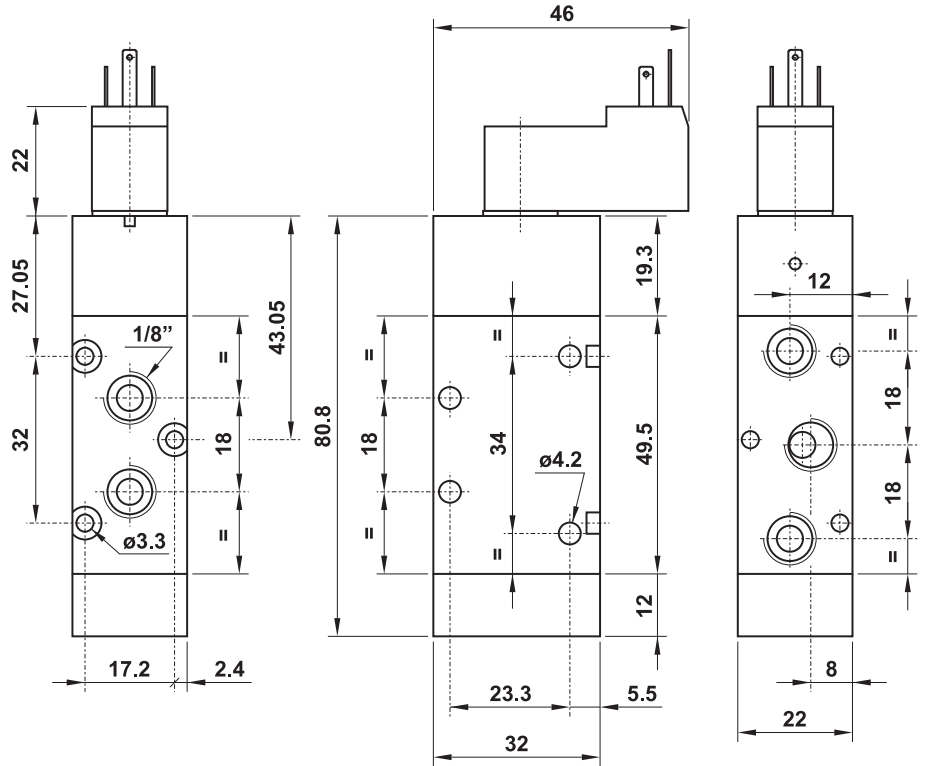
5/2 1/8" NPT with 15 mm solenoid pilot

The valve is sold with mounted solenoid pilot(s); for technical data refer to page 191.



In the part number replace "xx" with the reference of the solenoid tension.

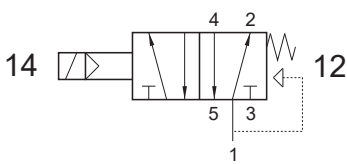
24V DC	01	
24V 50/60Hz	02	



## US522 ME MIC xx

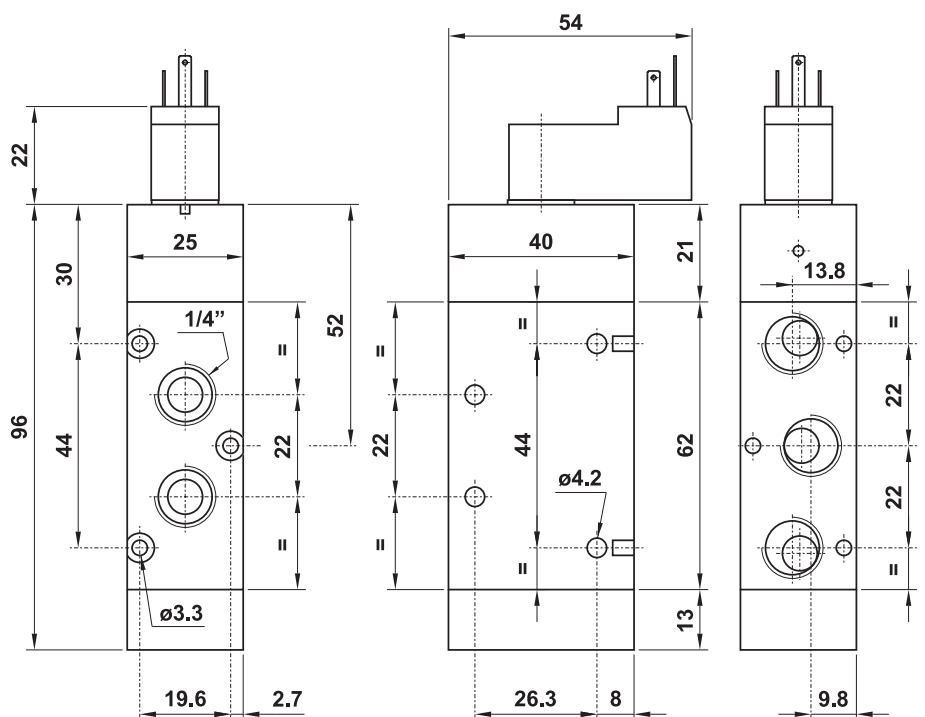
5/2 1/4" NPT with 15 mm solenoid pilot

The valve is sold with mounted solenoid pilot(s); for technical data refer to page 191.



In the part number replace "xx" with the reference of the solenoid tension.

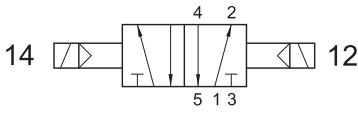
24V DC	01	
24V 50/60Hz	02	



## US521 EE MIC xx

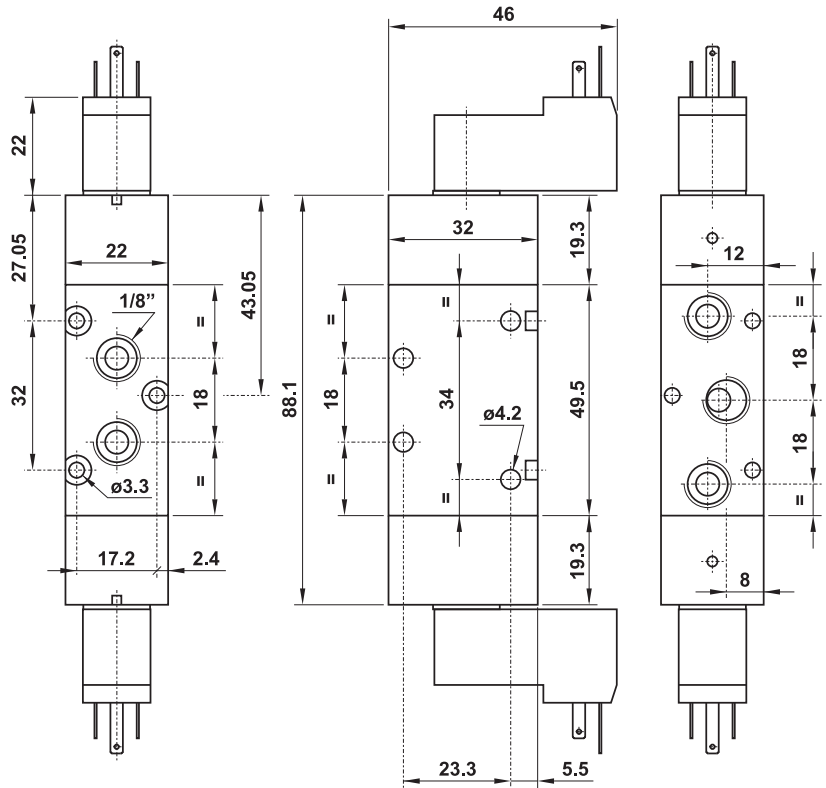
5/2 1/8" NPT with double 15 mm solenoid pilot

The valve is sold with mounted solenoid pilot(s); for technical data refer to page 191.



In the part number replace "xx" with the reference of the solenoid tension.

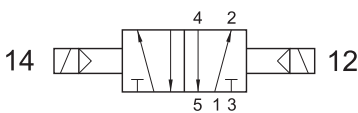
24V DC	01	
24V 50/60Hz	02	



## US522 EE MIC xx

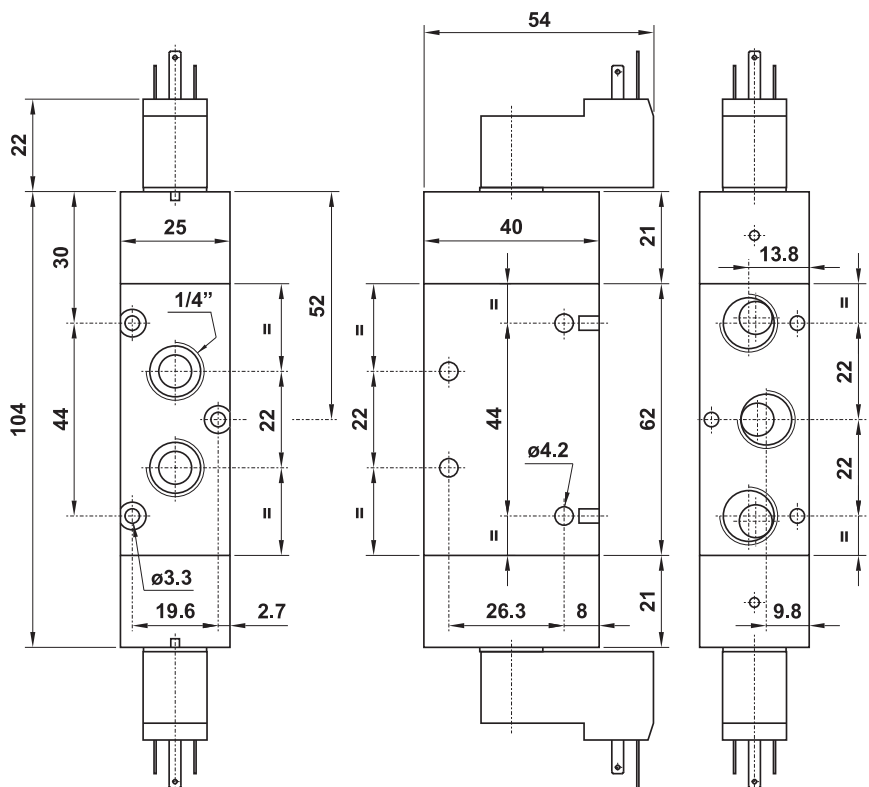
5/2 1/4" NPT with double 15 mm solenoid pilot

The valve is sold with mounted solenoid pilot(s); for technical data refer to page 191.



In the part number replace "xx" with the reference of the solenoid tension.

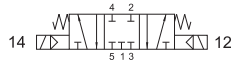
24V DC	01	
24V 50/60Hz	02	



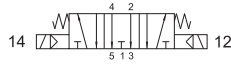
# Solenoid actuated valves



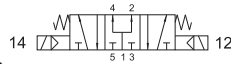
**US5213C EE MIC xx** closed centers



**US5213A EE MIC xx** open centers



**US5213P EE MIC xx** pressurized centers



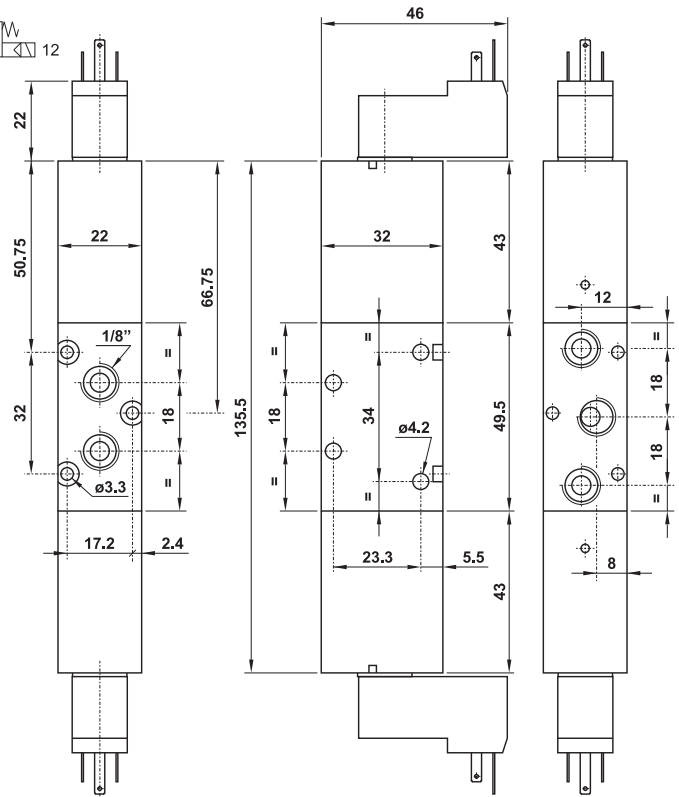
5/3 1/8" NPT with double 15 mm solenoid pilot

In the part number replace "xx" with the reference of the solenoid tension.

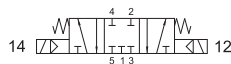
24V DC 01  
24V 50/60Hz 02



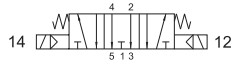
The valve is sold with mounted solenoid pilot(s); for technical data refer to page 191.



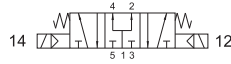
**US5223C EE MIC xx** closed centers



**US5223A EE MIC xx** open centers



**US5223P EE MIC xx** pressurized centers



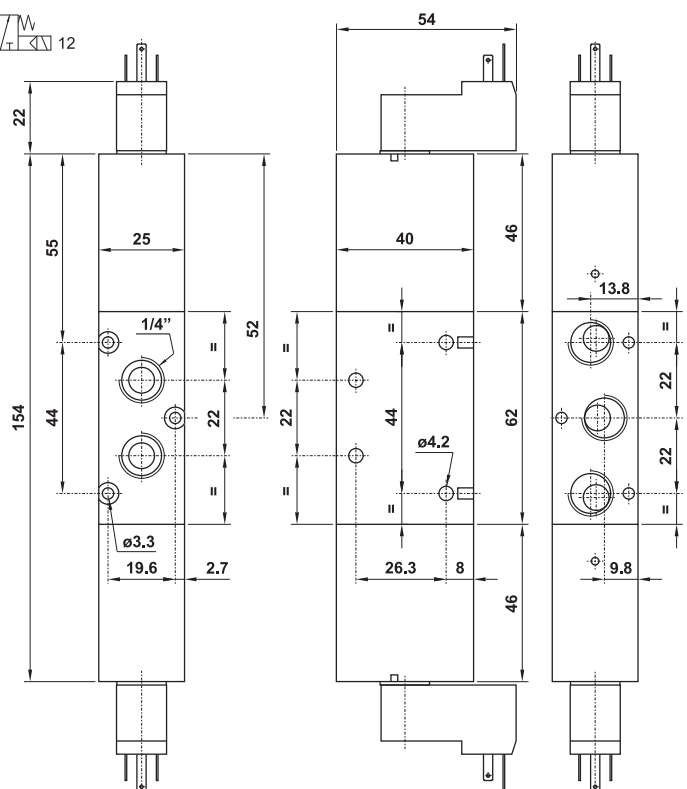
5/3 1/4" NPT with double 15 mm solenoid pilot

In the part number replace "xx" with the reference of the solenoid tension.

24V DC 01  
24V 50/60Hz 02



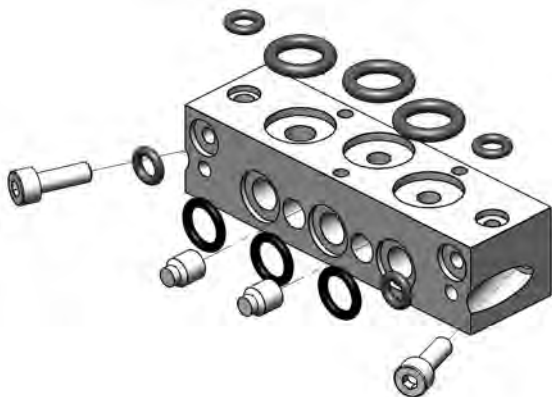
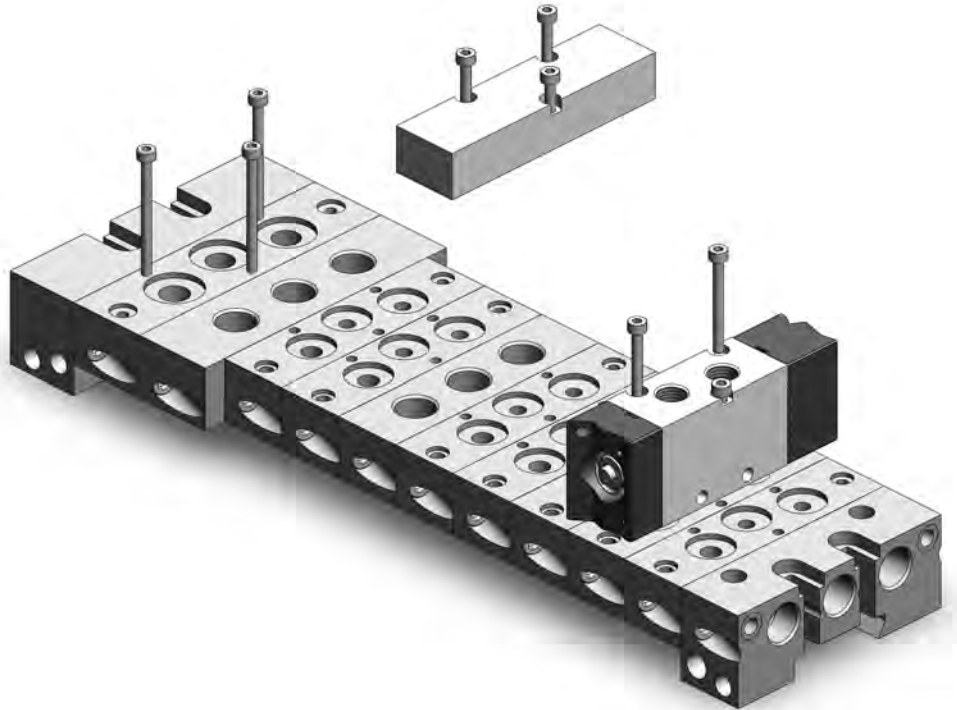
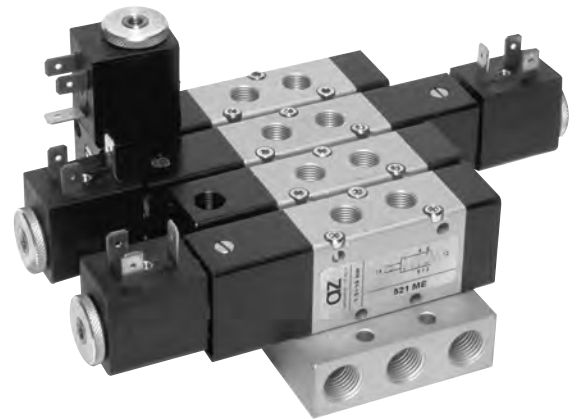
The valve is sold with mounted solenoid pilot(s); for technical data refer to page 191.



# Manifolds for spool valves



- Multiple sub-bases for 1/8" NPT and 1/4" NPT spool valves, BSP version available on request
- Manifolds for 1/8" NPT and 1/4" NPT spool valves
- Special manifolds on request
- Material: aluminium (anodize treatment)



**ASSEMBLY EXAMPLE**

# Multiple sub-bases for spool valves



## sub-base

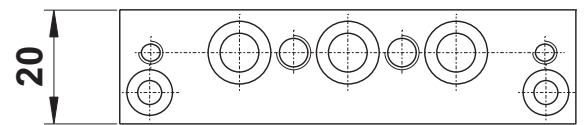
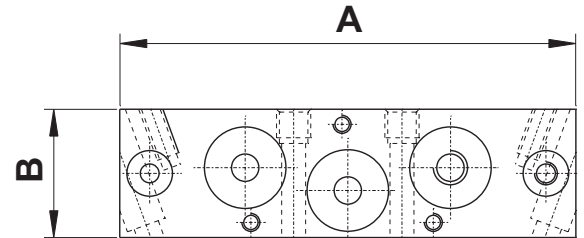


	1/8" NPT	1/8" NPT ATEX	1/4" NPT	1/4" NPT ATEX
<b>A</b>	80	80	95	95
<b>B</b>	22.5	31	26	31

Each sub-base is sold with all necessary components to install 1/8" NPT or 1/4" NPT valves.

### ORDER CODES

- 07.039.2** for 1/8" NPT valves
- 07.008.2** for 1/8" NPT valves ATEX
- 07.052.2** for 1/4" NPT valves
- 07.060.2** for 1/4" NPT valves ATEX

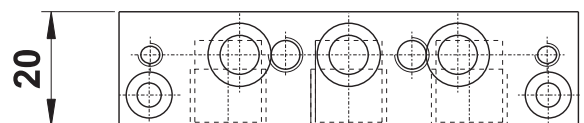
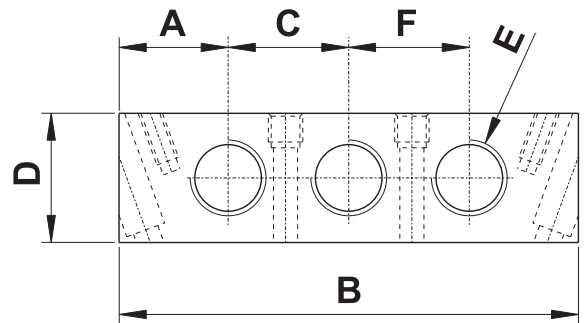


## intermediate header



An intermediate header with separate air supply is available to be installed in a manifold system which requires mixed operating pressures. It can be used also to divide the common exhausts. It is sold with all necessary components for installation.

	1/8" NPT	1/4" NPT
<b>A</b>	19	20
<b>B</b>	80	95
<b>C</b>	21	24
<b>D</b>	22.5	26
<b>E</b>	1/4" NPT	3/8" NPT
<b>F</b>	21	23



### ORDER CODES

- US07.040.2** for 1/8" NPT manifolds
- US07.053.2** for 1/4" NPT manifolds

## blanking plate

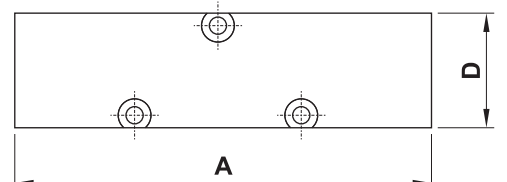
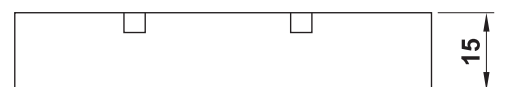
	1/8" NPT 00.011.3	1/8" NPT 00.078.2	1/4" NPT 01.007.3	1/4" NPT 01.078.2
<b>A</b>	80	60	95	70
<b>D</b>	22	22	25	25



The blanking plate with screws is available to close manifold stations not in use.

### ORDER CODES

- 00.011.3** for 1/8" NPT multiple sub-bases
- 00.078.2** for 1/8" NPT manifolds
- 01.007.3** for 1/4" NPT multiple sub-bases
- 01.078.2** for 1/4" NPT manifolds



# Multiple sub-bases for spool valves



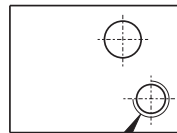
## 1/8" NPT right inlet header



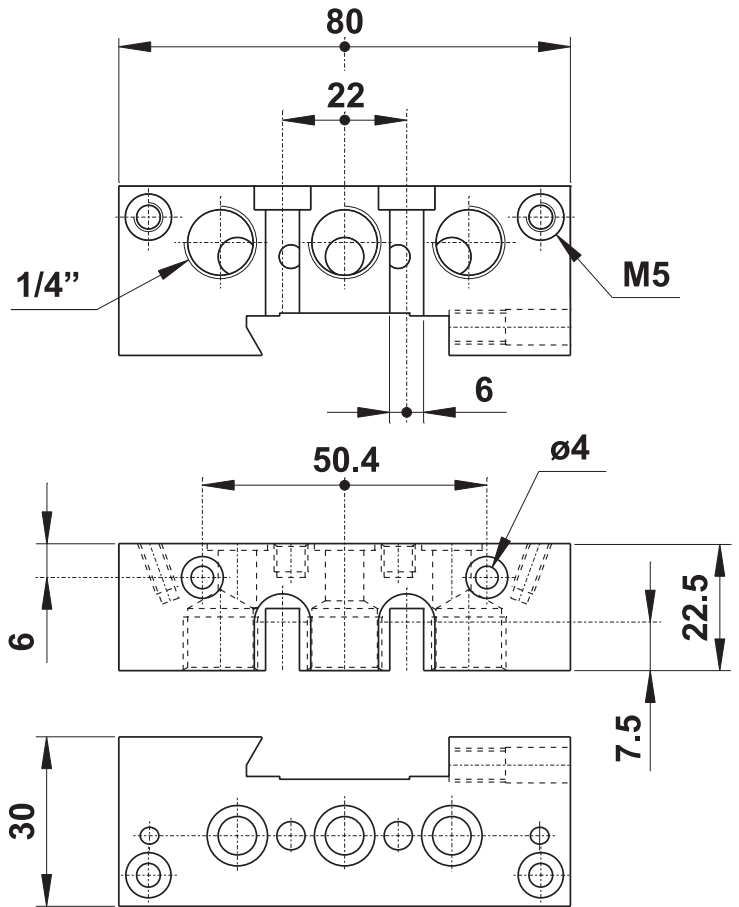
Each manifold assembly requires a right and a left hand inlet header kit. Each inlet header is sold with all necessary components.

### ORDER CODE

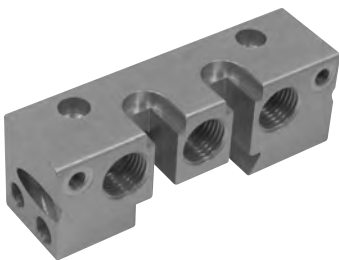
**US07.009.2** right hand header for 1/8" NPT manifolds



**M6**  
mounting hole for omega-profile



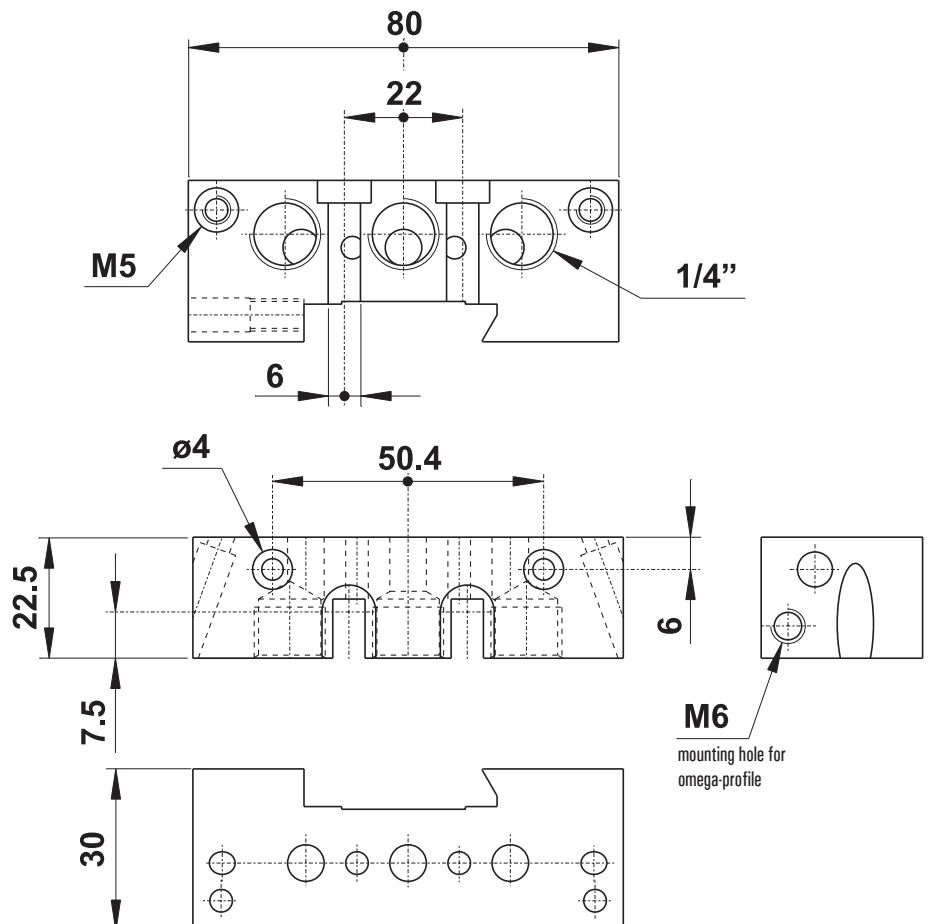
## 1/8" NPT left inlet header



Each manifold assembly requires a right and a left hand inlet header kit. Each inlet header is sold with all necessary components.

### ORDER CODE

**US07.010.2** left hand header for 1/8" NPT manifolds

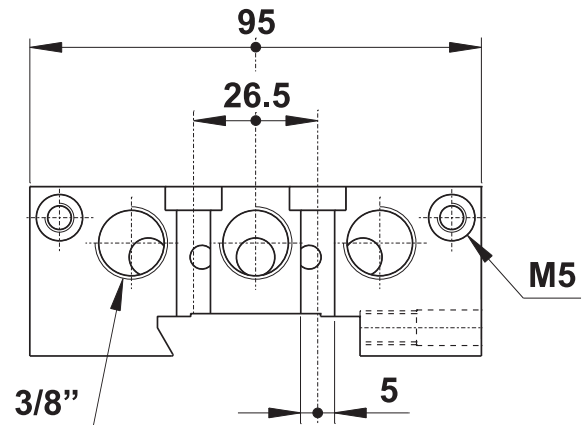
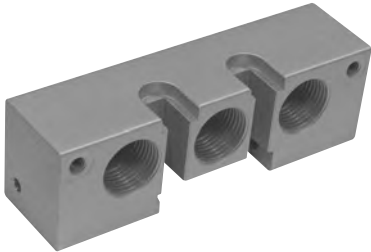


**M6**  
mounting hole for omega-profile

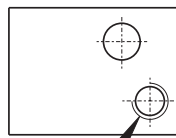
# Multiple sub-bases for spool valves



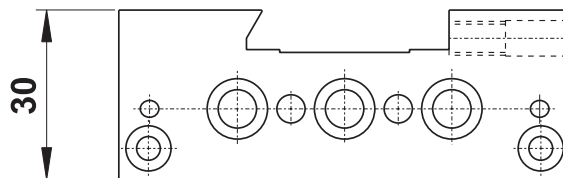
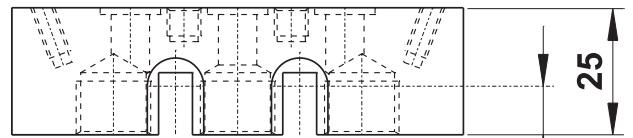
## 1/4" NPT right inlet header



Each manifold assembly requires a right and a left hand inlet header kit. Each inlet header is sold with all necessary components.



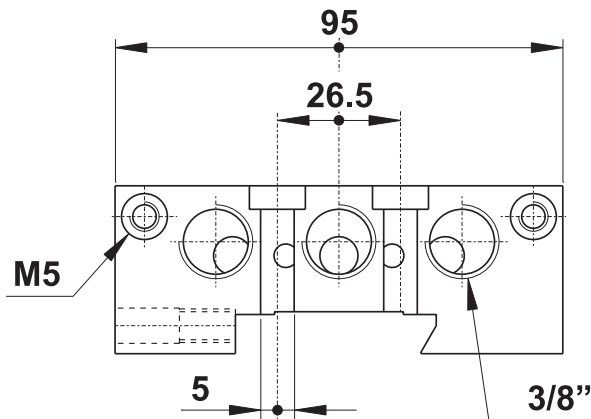
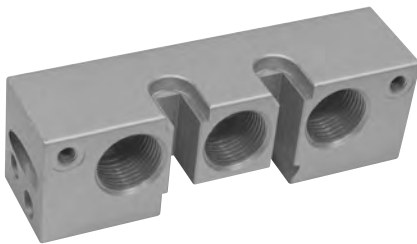
**M6**  
mounting hole for  
omega-profile



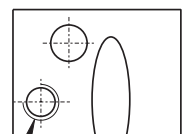
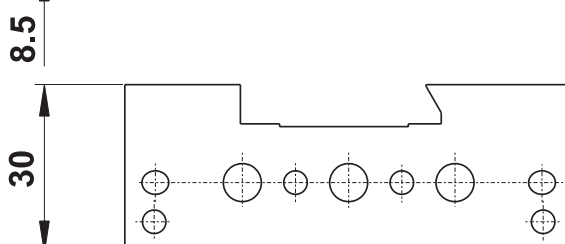
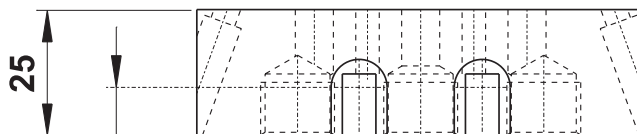
### ORDER CODE

**US07.054.2** right hand header for 1/4" NPT manifolds

## 1/4" NPT left inlet header



Each manifold assembly requires a right and a left hand inlet header kit. Each inlet header is sold with all necessary components.



**M6**  
mounting hole for  
omega-profile

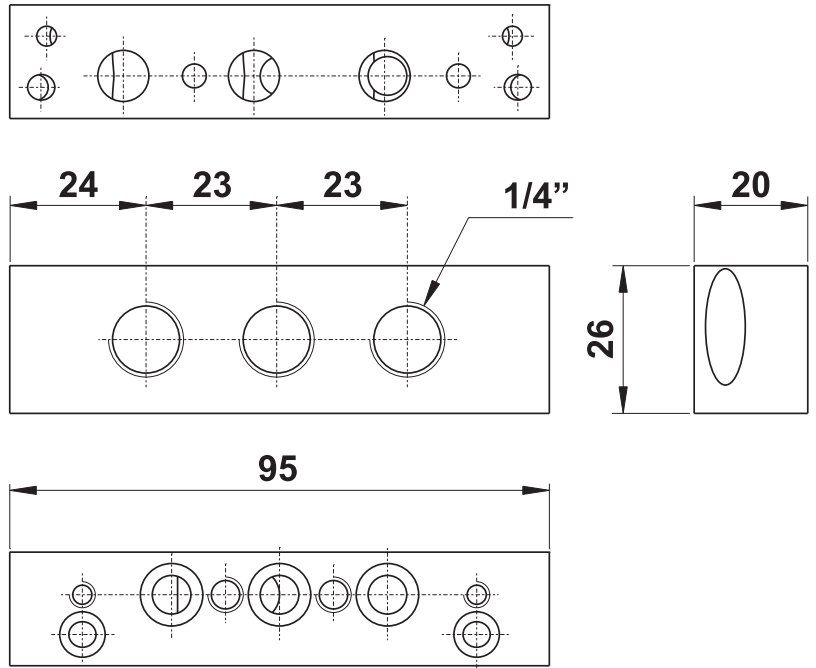
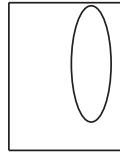
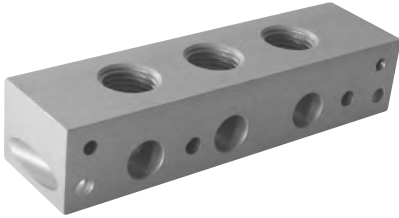
### ORDER CODE

**US07.055.2** left hand header for 1/4" NPT manifolds

# Multiple sub-bases for spool valves



## 1/4"-1/8" NPT interface



This reduction sub-base is used to assemble 1/8" NPT valves on a 1/4" NPT manifold, creating a hybrid manifold. It provides extra 1/4" NPT-connections (close them by a plug if they are not necessary). It is sold in kit with all necessary components.

**ORDER CODE**  
US07.081.2

## internal diaphragm

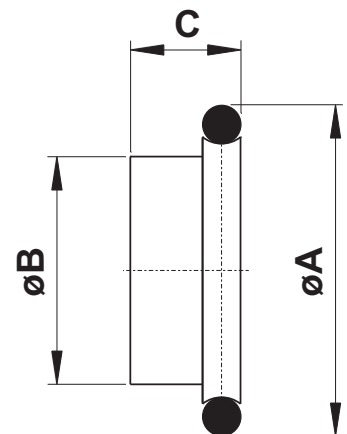
This diaphragm must be inserted between two elements of the manifold to interrupt the air flow and divide the manifold into two or more parts. It can be used to interrupt only the supply air flow, only the exhausts or both air supply and exhausts.

**ORDER CODE**

07.011.2 for 1/8" NPT manifolds  
07.057.2 for 1/4" NPT manifolds



	1/8" NPT	1/4" NPT
<b>A</b>	10	12
<b>B</b>	6.6	8.8
<b>C</b>	3.2	3.2





# Manifolds for pool valves

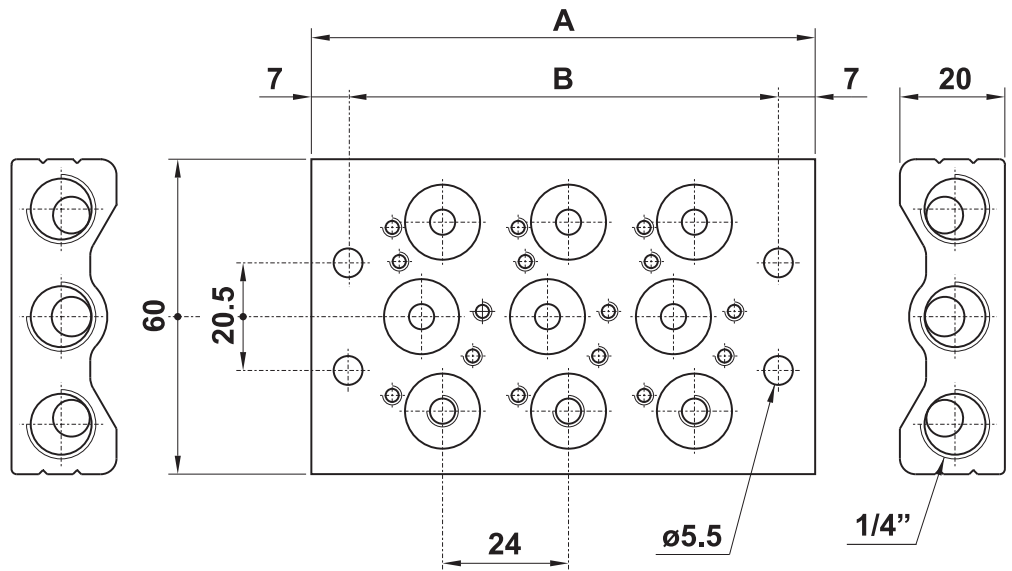


These manifolds can be used for the installation of three and five way valves, 1/8" NPT or 1/4" NPT. Each manifold is sold with all necessary pieces for installation. Unused stations can be closed with a blanking plate. Accessories (see next page) are available to obtain a separate air inlet or exhaust for certain valves.



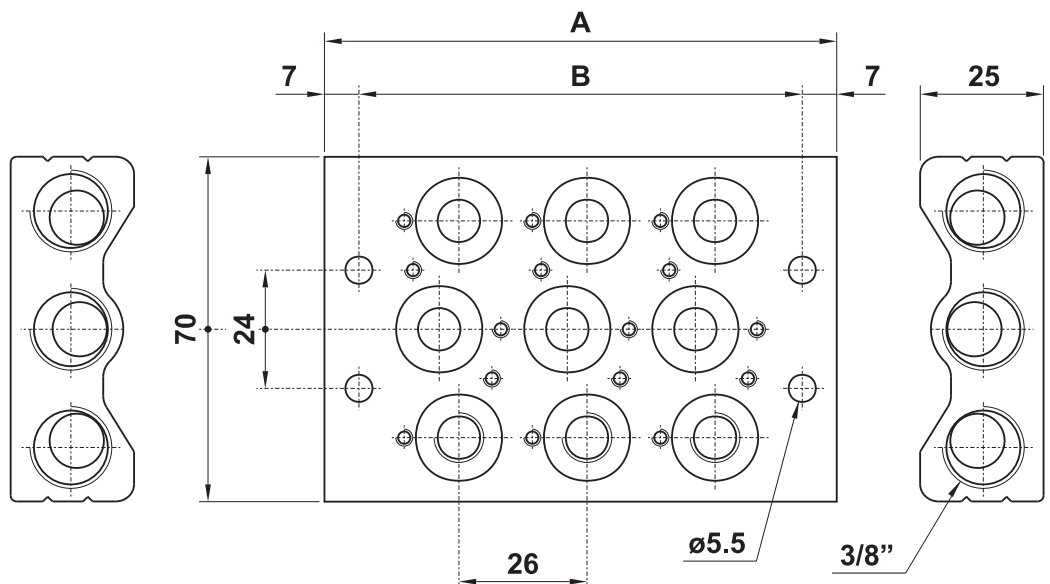
## 1/8" NPT

model	no. stations	A	B
US00.052.2	2	72	58
US00.053.2	3	96	82
US00.054.2	4	120	106
US00.055.2	5	144	130
US00.056.2	6	168	154
US00.057.2	7	192	178
US00.058.2	8	216	202
US00.059.2	9	240	226
US00.060.2	10	264	250
US00.081.2	11	288	274
US00.097.2	12	312	298



## 1/4" NPT

model	no. stations	A	B
US01.042.2	2	78	64
US01.043.2	3	104	90
US01.044.2	4	130	116
US01.045.2	5	156	142
US01.046.2	6	182	168
US01.047.2	7	208	194
US01.048.2	8	234	220
US01.051.2	9	260	246
US01.052.2	10	286	272





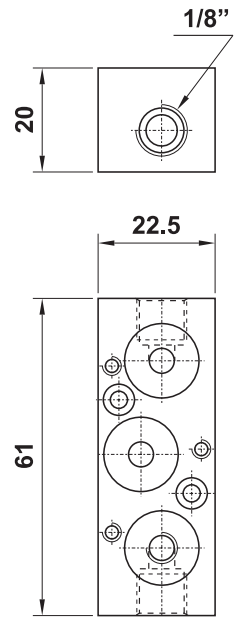
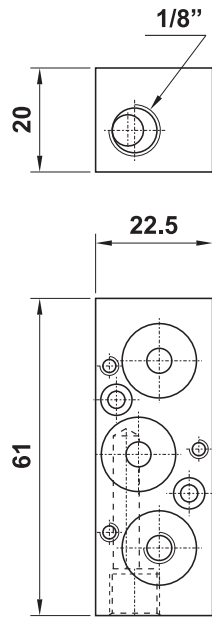
adapting plate for separate air inlet

adapting plate for separate air exhaust

1/8" NPT

US00.064.2

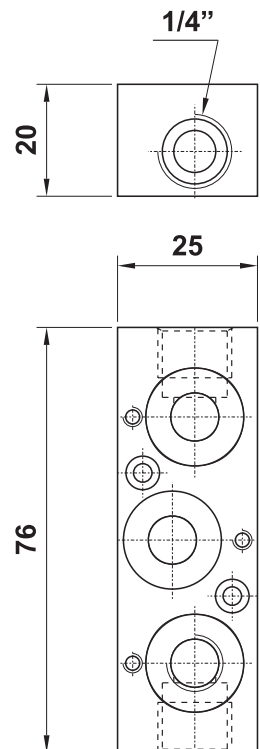
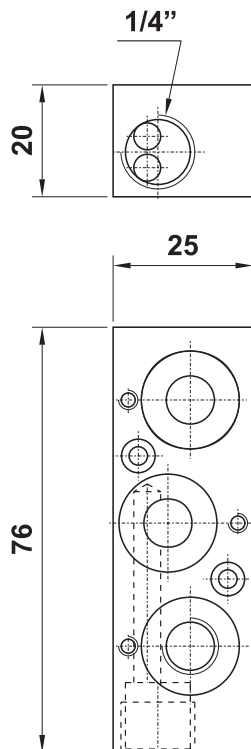
US00.080.2



1/4" NPT

US01.049.2

US01.050.2

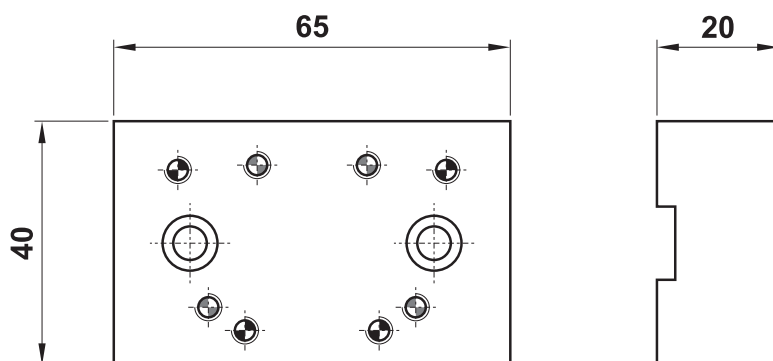


Each element is sold in kit with all necessary pieces for installation.

## interface for cylinder ISO 6431

ORDER CODE

00.095.2



Mounting holes for valves 521



Mounting holes for valves 522

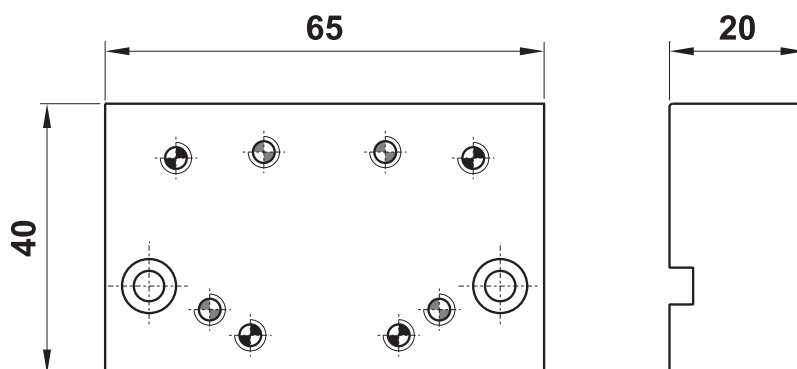
It can be used to install a valve 521 or 522 on a cylinder ISO 6431 from bore 32 to bore 100 (series N).  
It is sold with all necessary pieces for installation.

For the installation on the cylinder it is necessary to remove one end cap.

interface for cylinder ISO 6431  
profile EASY

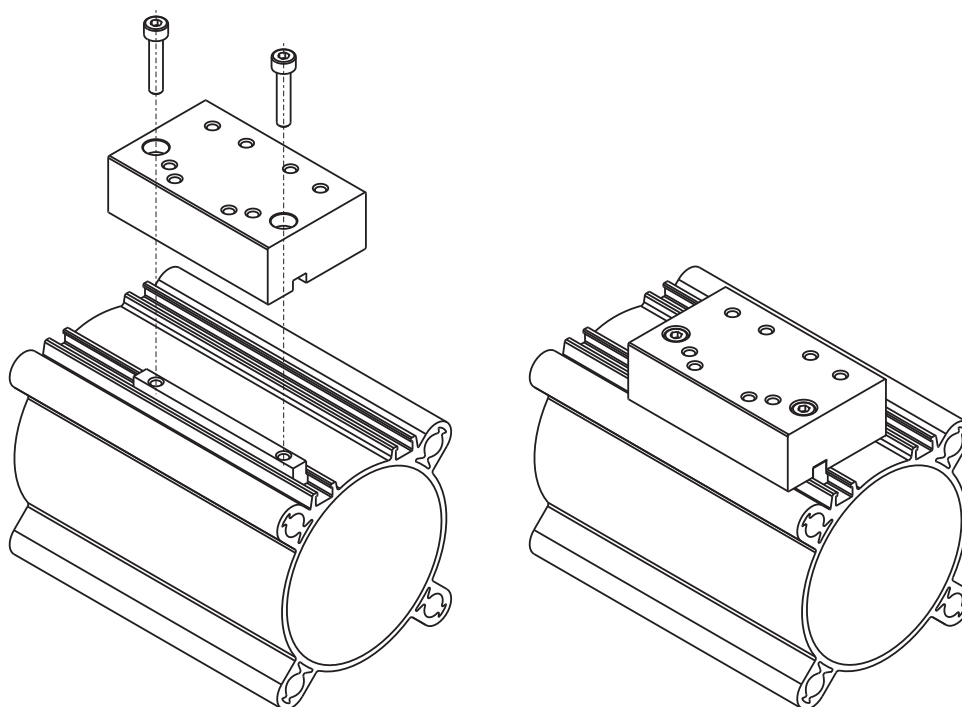
ORDER CODE

00.131.2



 Mounting holes for valves 521

 Mounting holes for valves 522



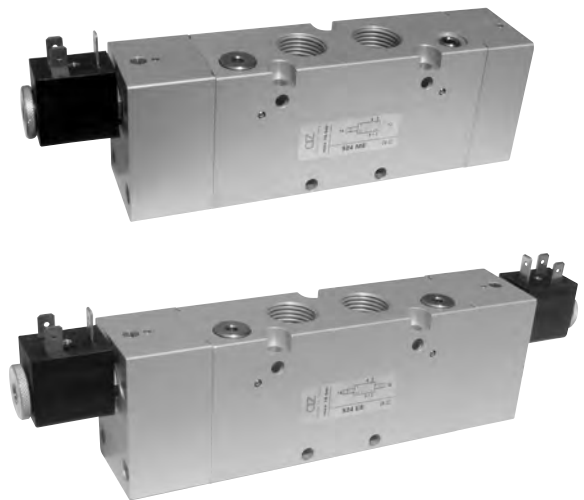
It can be used to install a valve 521 or 522 on a cylinder ISO 6431 from bore 32 to bore 125, PROFILE EASY (series E).  
It is sold with all necessary pieces for installation.

For the installation on the cylinder it is necessary to remove one end cap.

# Solenoid actuated valves - 1/2" NPT



- 3/2-5/2-5/3 spool valves with 1/2" NPT threaded ports, BSP version available on request
- Very high flow rate
- Installation in-line
- Solenoid pilots with detented manual override as standard
- Multifunction feature
- Coils sold separately upon request



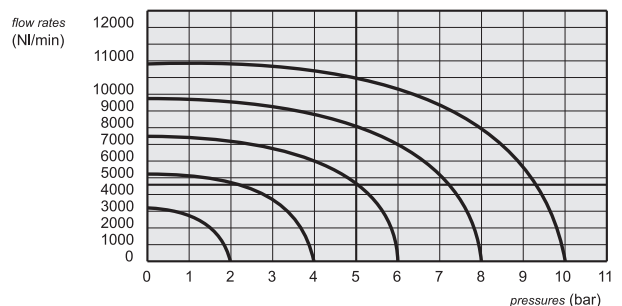
The following products are sold without coils. These can be bought separately (refer to page 208).

## Spare parts

- 02.030.2** : for 3/2 way valves ME - ME AS - MC
- 02.031.2** : for 5/2 way valves ME - ME AS - MC
- 02.032.2** : for 3/2 way valves EE - EE AS - CC
- 02.033.2** : for 5/2 way valves EE - EE AS - CC
- 02.034.2** : for 5/3 way valves EE - EE AS - CC

## Response times

mono-stable	TRA (14): 39 ms TRR (12): 60 ms
bi-stable	TRA (14): 90 ms TRR (12): 90 ms



## Materials

**Body:** aluminium 11S

**Springs:** stainless steel

**Seals:** NBR

**Spool:** stainless steel

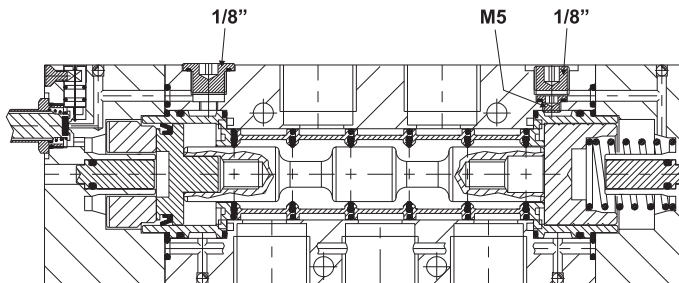
**Internal parts:** brass OT58

Nominal diameter		13 mm (0.5 in)	
Nominal flow rate at 6 bar (87 PSI), $\Delta p$ 1 bar (14 PSI)		4600 NI/min (4.87 Cv)	
Temperature range		-15 +60°C (5-140°F)	
Operating pressure	mono-stable internal air supply	bi-stable internal air supply	separate air supply
	2.5 ... 10 bar (36 ... 145 PSI) 0.25 ... 1 MPa	1 ... 10 bar (14 ... 145 PSI) 0.1 ... 1 MPa	-0.9 ... 10 bar (Vacuum ... 145 PSI) -0.09 ... 1 MPa
Actuating pressure (for separate air supply)	mono-stable		bi-stable
	2.5 ... 10 bar (36 ... 145 PSI) 0.25 ... 1 MPa		1 ... 10 bar (14 ... 145 PSI) 0.1 ... 1 MPa
Fluid		50 $\mu$ filtered, lubricated or non lubricated air	

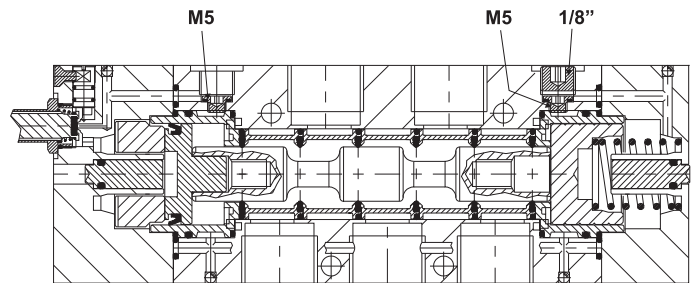
## Multifunction feature of the valve

Valve functionality can be changed at any time. To do so, please re-collocate from its position either the M5 or 1/8" NPT plugs, which are inserted into the body according to the scheme. The valve is supplied according to the clients' needs on order. Interchangeable plugs must be ordered separately.

**US324 ME**  
**US524 ME**

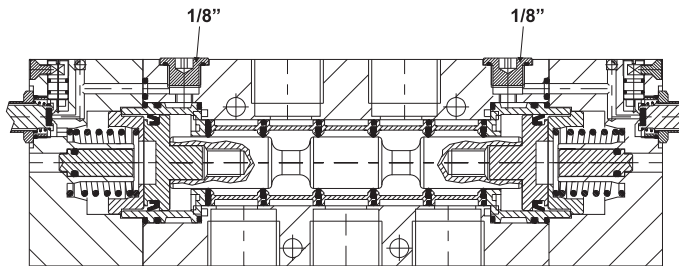


**US324 ME AS**  
**US524 ME AS**



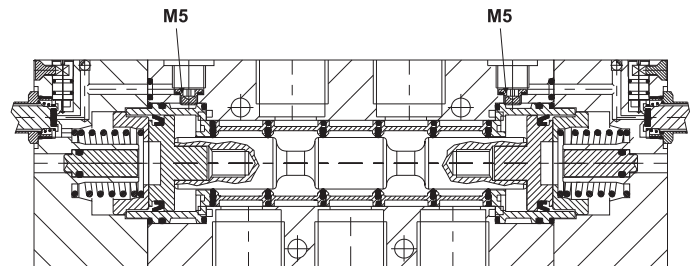
**US324 EE**  
**US524 EE**

**US5243C EE**  
**US5243A EE**  
**US5243P EE**



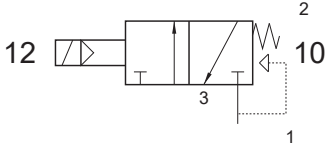
**US324 EE AS**  
**US524 EE AS**

**US5243C EE AS**  
**US5243A EE AS**  
**US5243P EE AS**



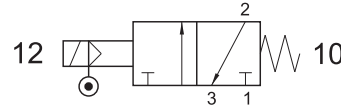
## US324 ME

3/2 1/2" NPT N/C solenoid pilot - air and spring return



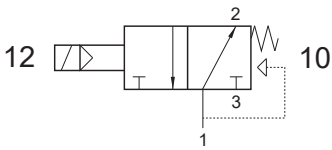
## US324 ME AS

3/2 1/2" NPT solenoid pilot with separate air supply - spring return



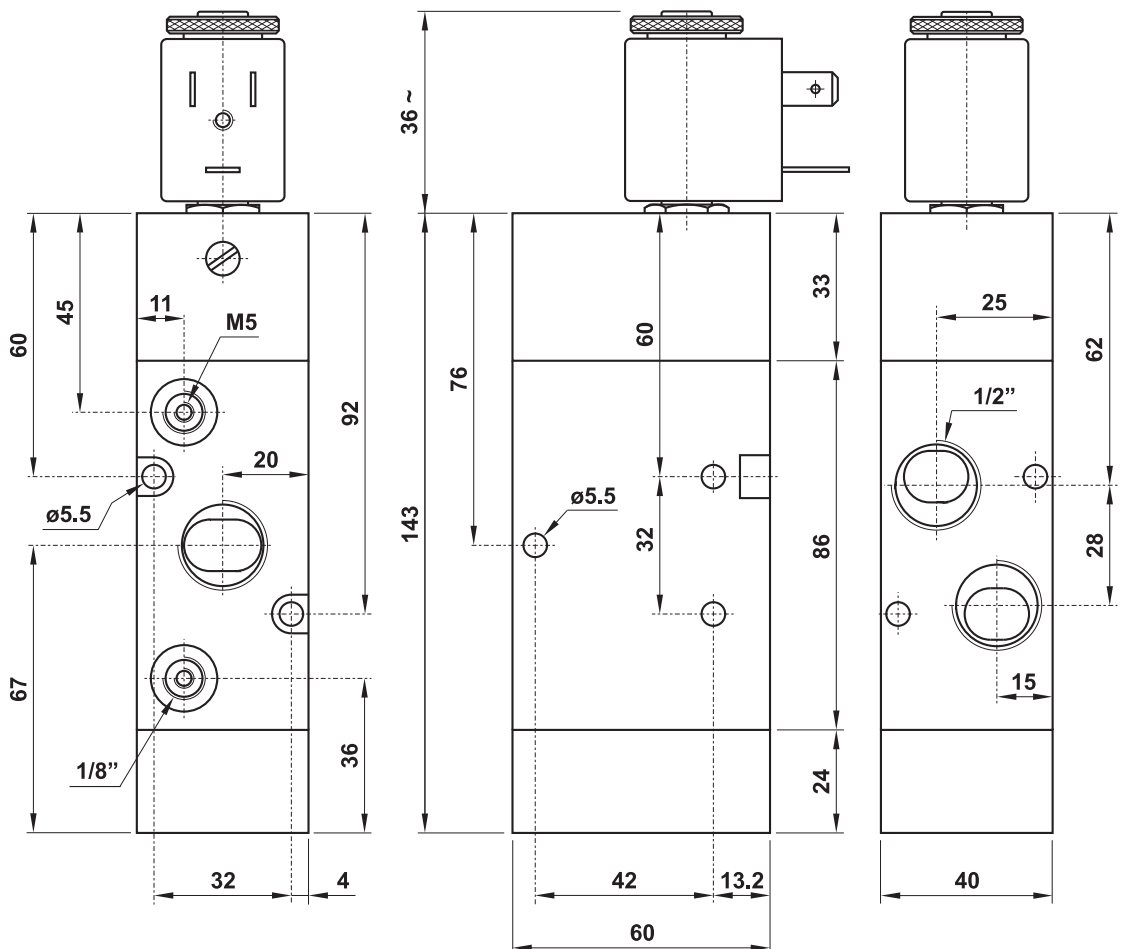
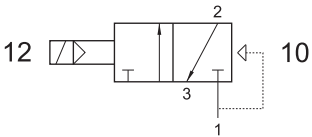
## US324 MEA

3/2 1/2" NPT N/O solenoid pilot - air and spring return



## US324 EFP

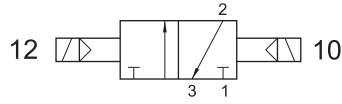
3/2 1/2" NPT N/C solenoid pilot - pneumatic spring return





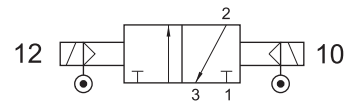
## US324 EE

3/2 1/2" NPT double solenoid pilot



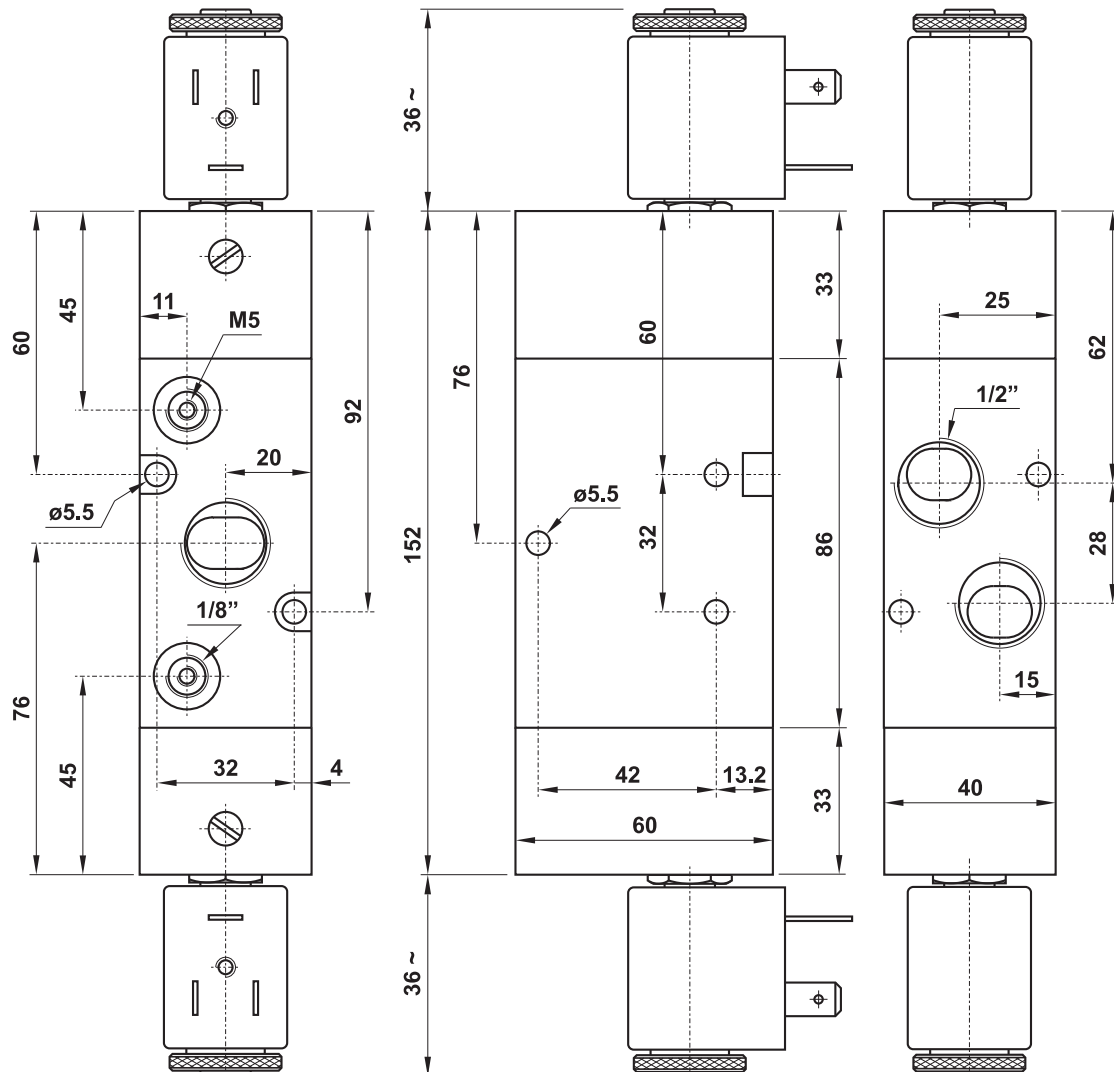
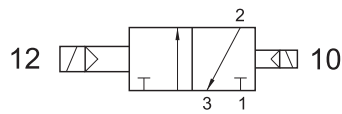
## US324 EE AS

3/2 1/2" NPT double solenoid pilot with separate air supply



## US324 EED

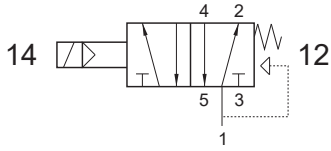
3/2 1/2" NPT double solenoid pilot - with differential





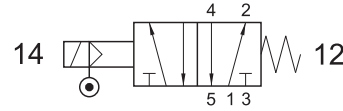
## US524 ME

5/2 1/2" NPT solenoid pilot - air and spring return



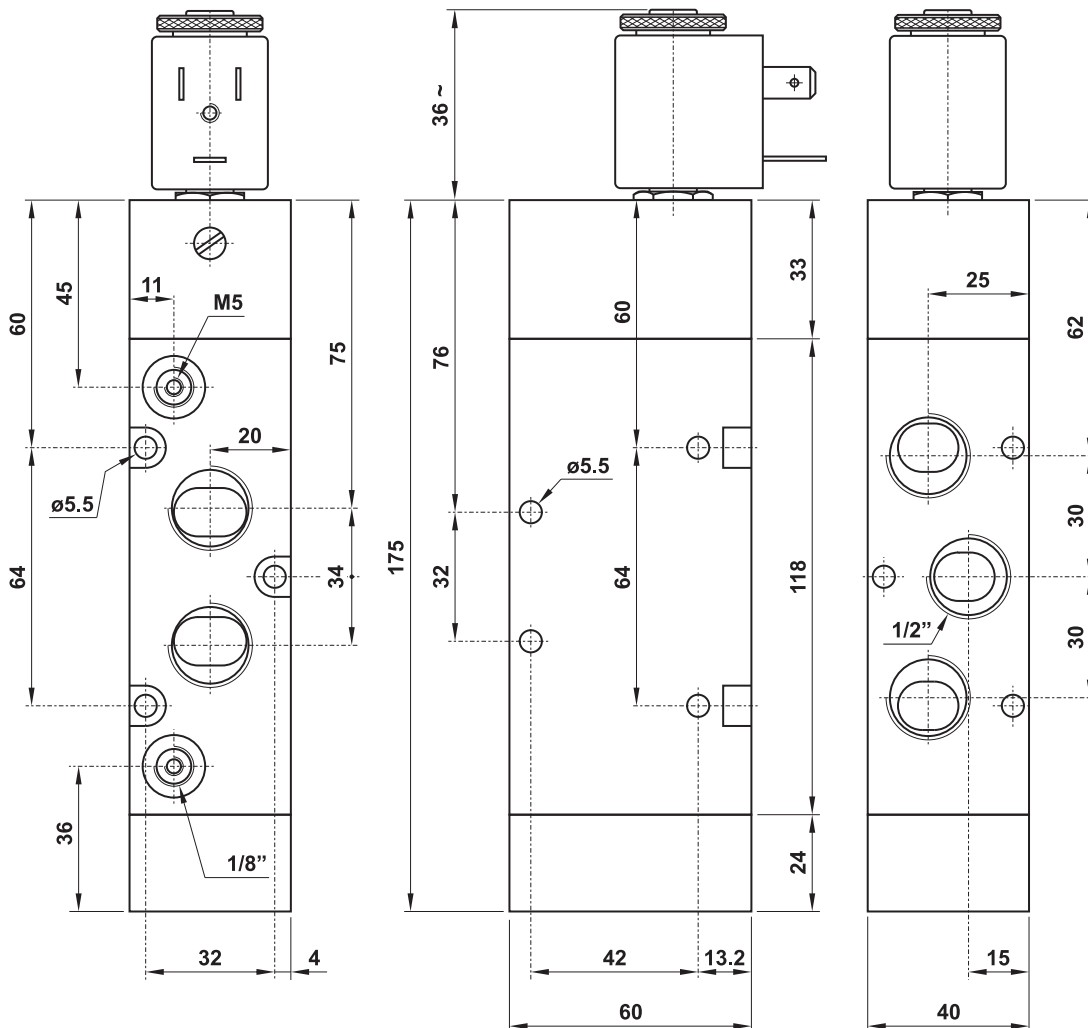
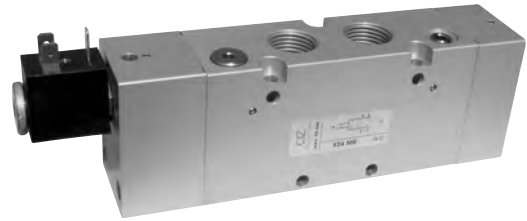
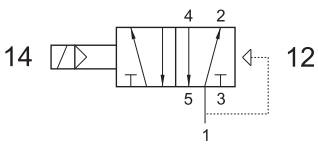
## US524 ME AS

5/2 1/2" NPT solenoid pilot with separate air supply - spring return



## US524 EFP

5/2 1/2" NPT solenoid pilot - pneumatic spring return

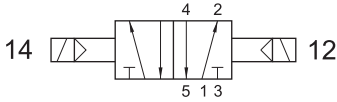


# Solenoid actuated valves - 1/2" NPT



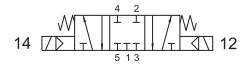
## US524 EE

5/2 1/2" NPT double solenoid pilot



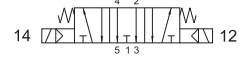
## US5243C EE

closed centers



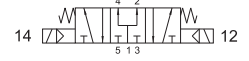
## US5243A EE

open centers



## US5243P EE

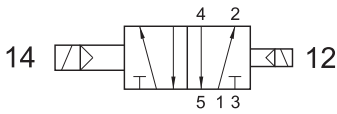
pressurized centers



5/3 1/2" NPT double solenoid pilot

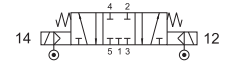
## US524 EED

5/2 1/2" NPT double solenoid pilot - with differential



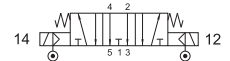
## US5243C EE AS

closed centers



## US5243A EE AS

open centers



## US5243P EE AS

pressurized centers



5/3 1/2" NPT double solenoid pilot with separate air supply

## US524 EE AS

5/2 1/2" NPT double solenoid pilot with separate air supply

