

Series 514/N

General

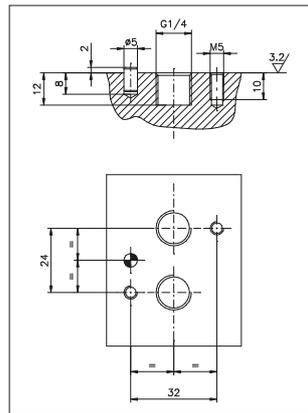
The **514/N** Solenoid valves, are 2 stage valves actuated electro-pneumatically. A series 300 directly operated solenoid valve actuates pneumatically the principal power distributor.

Everything is well integrated in a practical configuration that also permits applications where there is limited space. Used primarily to operate rotary actuators and wherever there is a **NAMUR** standard installation plan.

The pilot air is normally taken from the inlet port (autofeed) and the only actuating signal is electric.

The range of the solenoid valves, as far as dimensions and mechanical construction, is similar to series 200. We have therefore solenoid valves G 1/4" with identical pneumatic characteristics that are, however, actuated electrically. They have a balanced spool, insensitive to presence or absence of pressure. They are constructed in 3 and 5 way with 1 solenoid (monostable) or 2 solenoids (bistable).

“NAMUR” interface dimensions:
according to standard (VDI/VDE 3847 July 2003)



Construction characteristics

Body	Aluminium
Spacer	Technopolymer
Seals	NBR
Springs	Spring steel
Operators	Aluminium
Spools	Nickel plated steel
Screws	Zinc coated Steel

Use and maintenance

This valves have an average life of 15 million cycles depending on the application and air quality.

Filtered and lubricated air using specified lubricants will reduce the wear of the seals and ensures long and trouble free operation.

Please ensure that the valve is being used according with the manufacturers specification, such as air pressure and temperature.

The exhaust port of the distributor has to be protected in a dusty and dirty environment.

Repair kits including the spool complete with seals are available for overhauling the valves.

However, although this is a simple operation it should be carried out by a competent person.

ATTENTION: use hydraulic oil class H for lubrication such as MAGNA GC 32 (Castrol).



AIR DISTRIBUTION

Solenoid - Spring

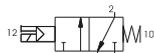
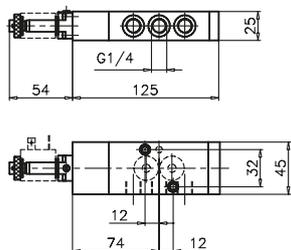
Coding: 514/N.ⓕ.0.1.M2

Operational characteristics

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Temperature °C	-10 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	1030
Orifice size (mm)	7
Working ports size	G 1/4"

FUNCTION
ⓕ 32 = 3 ways
52 = 5 ways

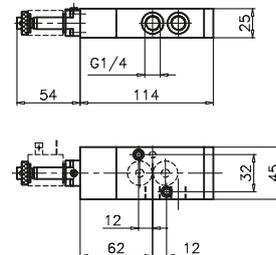
5 ways



Weight 450 g
Minimum working pressure 2,5 bar

514/N.52.0.1.M2

3 ways



Weight 390 g
Minimum working pressure 2,5 bar

514/N.32.0.1.M2

Solenoid-Differential

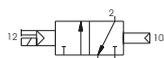
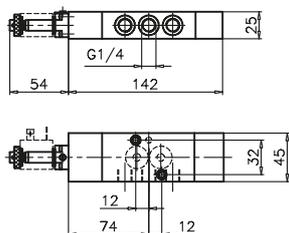
Coding: 514/N.ⓕ.0.12.M2

Operational characteristics

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Temperature °C	-10 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	1030
Orifice size (mm)	7
Working ports size	G 1/4"

FUNCTION
ⓕ 32 = 3 ways
52 = 5 ways

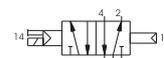
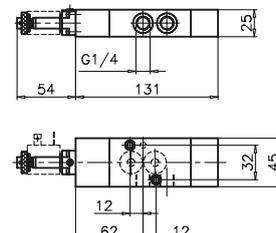
5 ways



Weight 450 g
Minimum working pressure 2,5 bar

514/N.52.0.12.M2

3 ways



Weight 390 g
Minimum working pressure 2,5 bar

514/N.32.0.12.M2

Solenoid-Solenoid

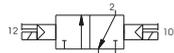
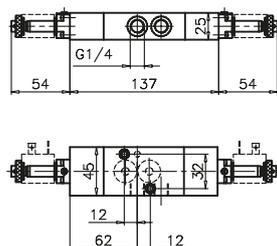
Coding: 514/N.ⓕ.0.0.M2

Operational characteristics

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Temperature °C	-10 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	1030
Orifice size (mm)	7
Working ports size	G 1/4"

FUNCTION
ⓕ 32 = 3 ways
52 = 5 ways

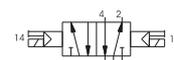
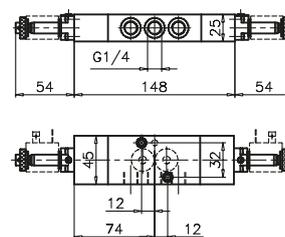
3 ways



Weight 390 g
Minimum working pressure 2,5 bar

514/N.32.0.0.M2

5 ways



Weight 450 g
Minimum working pressure 2,5 bar

514/N.52.0.0.M2



Series T514

General

TECNO-NAMUR are 5/2 and 4/2 valves are solenoid valves pneumatically or electrically actuated. They are used in industrial automation applications or whenever a **NAMUR** mounting plane is available.

Is available in 5/2, 4/2 and all-purposes versions. The final user can switch from one version to another by simply changing interface plate and adding/removing a plug.

TECNO-NAMUR valves are produced using the most up to date technical features, granting flexible design and elevated characteristics over standard products. Superior performance is further enhanced by the use of innovative materials of construction.

Construction characteristics

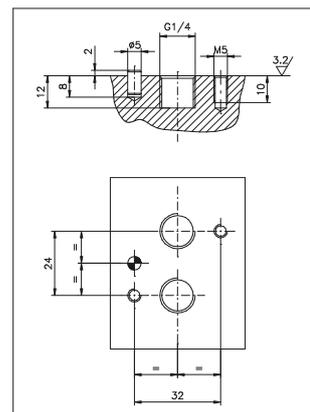
Body	Technopolymer
Spacer	Technopolymer
Seals	Nitrile rubber
Springs	Stainless Steel
Operators	Technopolymer
Spools	Nickel plated steel
Screws	Zinc coated Steel

Note:

"Although accurately described, the 4/2 valve actually functions as a 3/2 normally closed valve and should be used as such."

“NAMUR” interface dimensions:

according to standard (VDI/VDE 3847 July 2003)



1
AIR DISTRIBUTION

Pneumatic - Differential

Coding: T514.Ⓢ.00.16

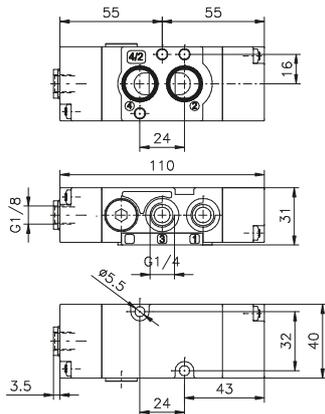
Operational characteristics

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Temperature °C	-10 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	1100
Orifice size (mm)	8
Working ports size	G 1/4"

FUNCTION	
Ⓢ	42 = 4 ways
	52 = 5 ways

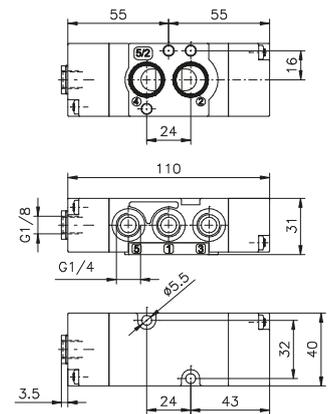
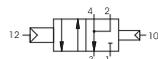
4 ways

5 ways



Weight 140 g
Minimum working pressure 2,5 bar
Maximum fitting torque 9 N/m

T514.42.00.16



Weight 140 g
Minimum working pressure 2,5 bar
Maximum fitting torque 9 N/m

T514.52.00.16



Pneumatic - Pneumatic

Coding: T514.Ⓢ.00.18

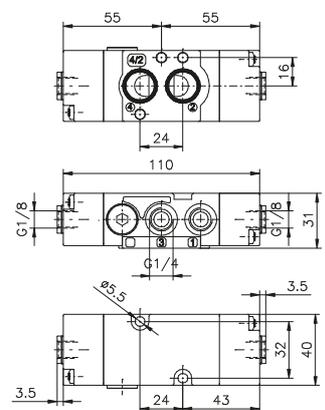
Operational characteristics

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Temperature °C	-10 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	1100
Orifice size (mm)	8
Working ports size	G 1/4"

FUNCTION	
Ⓢ	42 = 4 ways
	52 = 5 ways

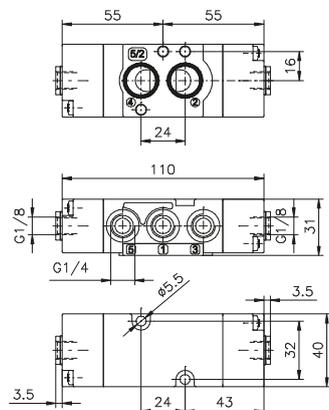
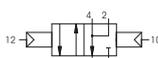
4 ways

5 ways



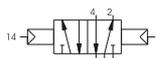
Weight 140 g
Minimum working pressure 2,5 bar
Maximum fitting torque 9 N/m

T514.42.00.18



Weight 140 g
Minimum working pressure 2,5 bar
Maximum fitting torque 9 N/m

T514.52.00.18





Solenoid-Differential

Coding: T514.ⓕ.00.36.Ⓣ

Operational characteristics

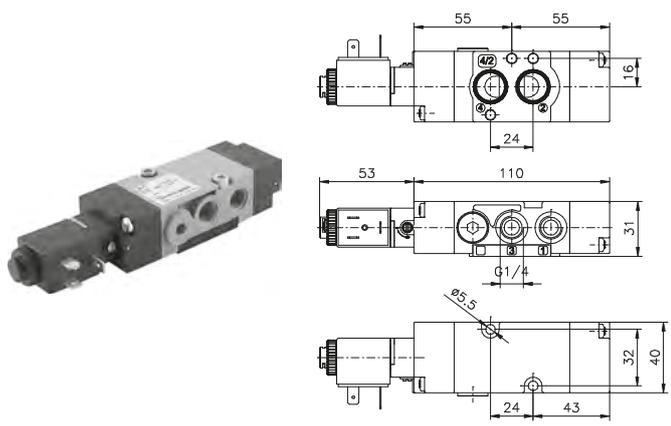
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Temperature °C	-10 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	1100
Orifice size (mm)	8
Working ports size	G 1/4"

FUNCTION		VOLTAGE	
ⓕ	42 = 4 ways	Ⓣ	B04 = 12VDC
	52 = 5 ways		B05 = 24VDC
			B09 = 24VDC (2W)
			B56 = 24V (50-60 Hz)
			B57 = 110V (50-60 Hz)
			B58 = 230V (50-60 Hz)

1
AIR DISTRIBUTION

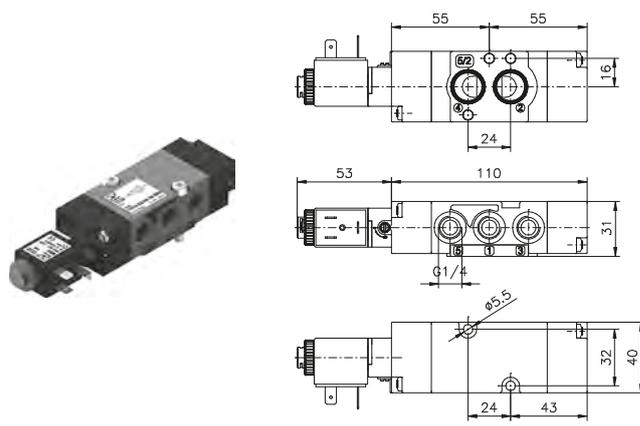
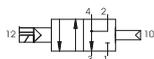
4 ways

5 ways



Weight 200 g
Minimum working pressure 2,5 bar
Maximum fitting torque 9 N/m

T514.42.00.36.Ⓣ



Weight 200 g
Minimum working pressure 2,5 bar
Maximum fitting torque 9 N/m

T514.52.00.36.Ⓣ



Solenoid - Spring

Coding: T514.ⓕ.00.39.Ⓣ

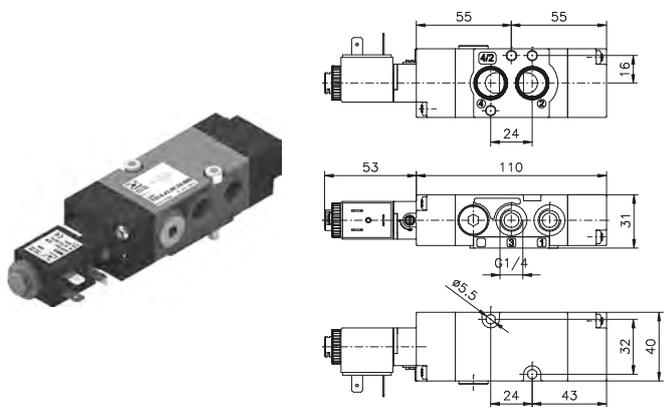
Operational characteristics

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Temperature °C	-10 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	1100
Orifice size (mm)	8
Working ports size	G 1/4"

FUNCTION		VOLTAGE	
ⓕ	42 = 4 ways	Ⓣ	B04 = 12VDC
	52 = 5 ways		B05 = 24VDC
			B09 = 24VDC (2W)
			B56 = 24V (50-60 Hz)
			B57 = 110V (50-60 Hz)
			B58 = 230V (50-60 Hz)

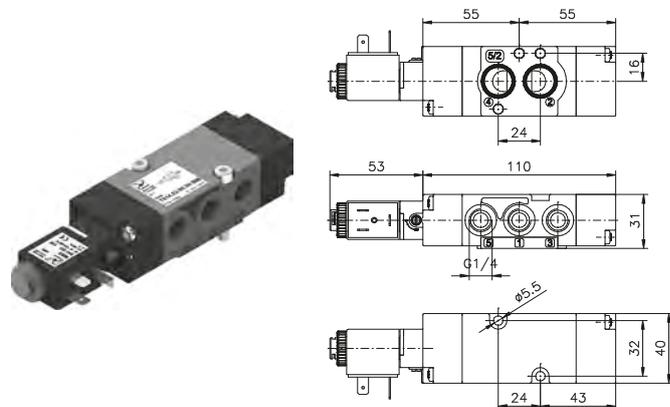
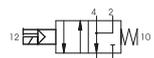
4 ways

5 ways



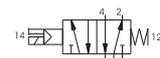
Weight 200 g
Minimum working pressure 2,5 bar
Maximum fitting torque 9 N/m

T514.42.00.39.Ⓣ



Weight 200 g
Minimum working pressure 2,5 bar
Maximum fitting torque 9 N/m

T514.52.00.39.Ⓣ





► **Universal kit**

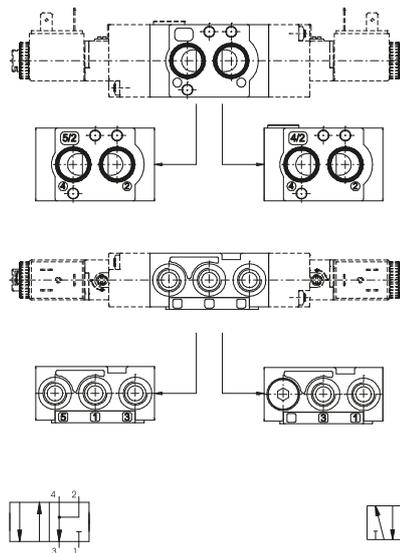
Coding: T514.92.00.V.T

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Temperature °C	-10 ÷ +50
Flow rate at 6 bar with Δp=1 (l/min)	1100
Orifice size (mm)	8
Working ports size	G 1/4"

VERSION		VOLTAGE	
16	= Pneumatic - Differential	B04	= 12 VDC
18	= Pneumatic - Pneumatic	B05	= 24 VDC
19	= Pneumatic - Spring	B09	= 24 VDC (2W)
35	= Solenoid - Solenoid	B56	= 24V (50-60 Hz)
36	= Solenoid - Differential	B57	= 110V (50-60 Hz)
39	= Solenoid - Spring	B58	= 230 V (50-60 Hz)



Weight 170 g
Minimum working pressure 2,5 bar
Maximum fitting torque 9 N/m



1
AIR DISTRIBUTION

Series 514

General

NAMUR valves are 5/2 and 4/2 valves and electrovalves, piloted electrically or pneumatically, utilised primarily to operate rotary actuators and wherever there is a NAMUR standard installation plan.

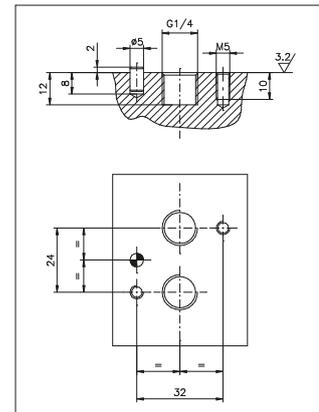
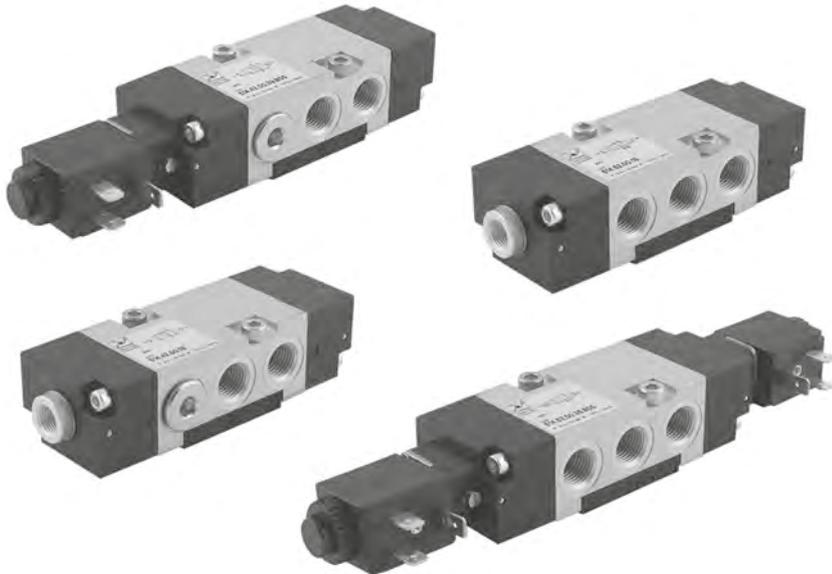
The product is classified for use in potentially explosive atmospheres (Directive 2014/34/EU).

NAMUR valves have been developed using the latest, technical design solutions which guarantee flexibility and an increased flow rate capacity exceeding that of traditional, spool valves.

In addition, they have been produced with innovative materials which guarantee increased performance.

Note:
"Although accurately described, the 4/2 valve actually functions as a 3/2 normally closed valve and should be used as such."

“NAMUR” interface dimensions:
according to standard (VDI/VDE 3847 July 2003)



Construction characteristics

Body	Aluminium
Spacer	Technopolymer
Seals	Nitrile rubber
Springs	Stainless Steel
Operators	Technopolymer
Spools	Steel
Screws	Zinc coated Steel / Stainless steel

Certifications available:

SOLENOID VALVES WITH XMB OR XMC 3GD COIL

: CE II 3G Ex h IIB T4 Gc X
CE II 3D Ex h IIIC T120°C Dc X IP65

MECHANICAL AND PNEUMATIC VALVES WITHOUT COILS

: CE II 2G Ex h IIB T5 Gc X
CE II 2D Ex h IIIC T96°C Dc X IP65

AIR DISTRIBUTION

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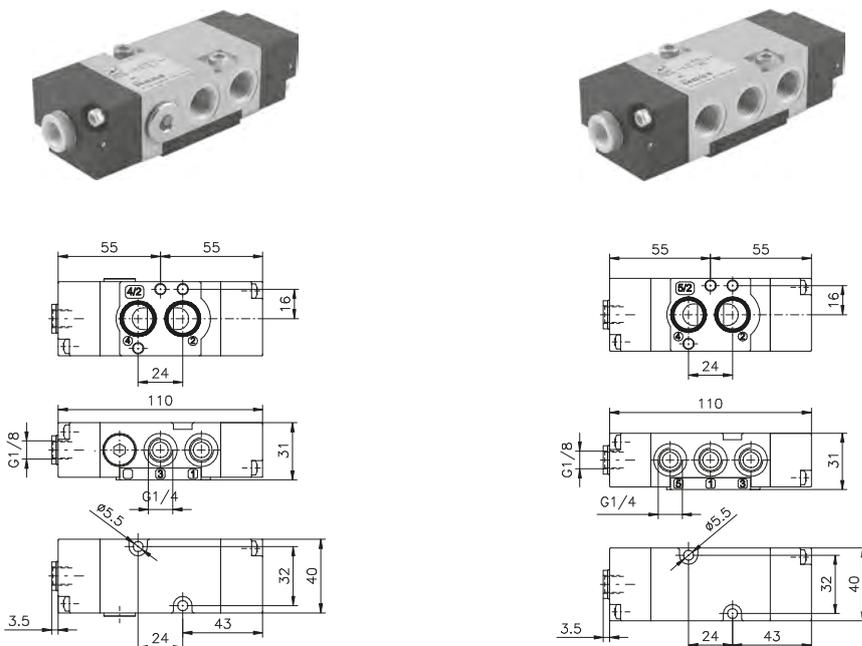
Pneumatic - Differential

Coding: **M514.F.00.16**Ⓞ

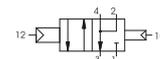
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10 Standard valves (-10 ... +50) Low temperature valves (-30 ... +50) ATEX valves (-20 ... +40)
Temperature °C	1100 Standard valves (-10 ... +50) Low temperature valves (-30 ... +50) ATEX valves (-20 ... +40)
Flow rate at 6 bar with Δp=1 (NI/min)	1100
Orifice size (mm)	8
Working ports size	G 1/4"

M	MODEL = Standard valve X = ATEX valve
F	FUNCTION 42 = 4 ways 52 = 5 ways
Ⓞ	TEMPERATURE OPTIONS = Standard valves (-10 ... +50) LT = Low temperature valves (-30 ... +50) = ATEX valves (-20 ... +40)

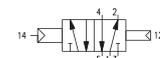
Minimum pilot pressure 2,5 bar
Maximum fitting torque 9 N/m



M514.42.00.16Ⓞ Weight 240 g



M514.52.00.16Ⓞ Weight 235 g



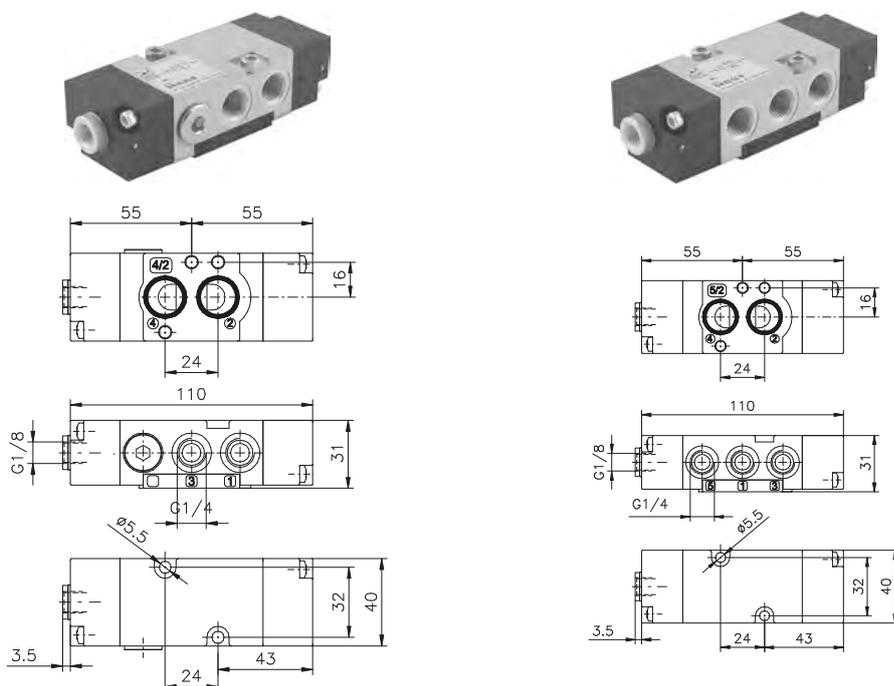
Pneumatic - Pneumatic

Coding: **M514.F.00.18**Ⓞ

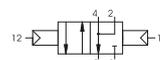
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10 Standard valves (-10 ... +50) Low temperature valves (-30 ... +50) ATEX valves (-20 ... +40)
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Flow rate at 6 bar with Δp=1 (NI/min)	1100
Orifice size (mm)	8
Working ports size	G 1/4"

M	MODEL = Standard valve X = ATEX valve
F	FUNCTION 42 = 4 ways 52 = 5 ways
Ⓞ	TEMPERATURE OPTIONS = Standard valves (-10 ... +50) LT = Low temperature valves (-30 ... +50) = ATEX valves (-20 ... +40)

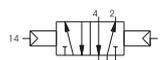
Minimum pilot pressure 2,5 bar
Maximum fitting torque 9 N/m



M514.42.00.18Ⓞ Weight 240 g



M514.52.00.18Ⓞ Weight 235 g



Pneumatic - Spring

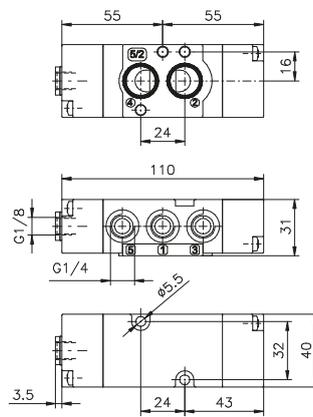
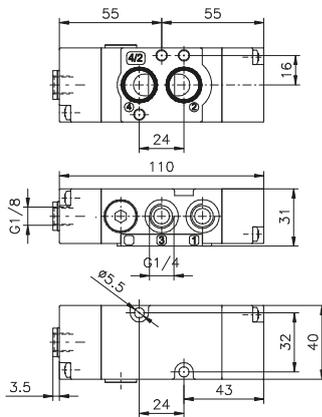
Coding: **M514.F.00.19**

Operational characteristics

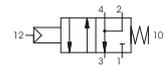
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Temperature °C	Standard valves (-10 ... +50) Low temperature valves (-30 ... +50) ATEX valves (-20 ... +40)
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	1100
Orifice size (mm)	8
Working ports size	G 1/4"

MODEL	M = Standard valve X = ATEX valve
FUNCTION	F 42 = 4 ways 52 = 5 ways
TEMPERATURE OPTIONS	= Standard valves (-10 ... +50) LT = Low temperature valves (-30 ... +50) = ATEX valves (-20 ... +40)

Minimum pilot pressure 2,5 bar
Maximum fitting torque 9 N/m



M514.42.00.19 Weight 240 g



M514.52.00.19 Weight 235 g



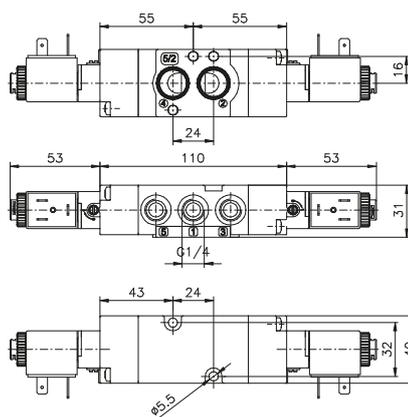
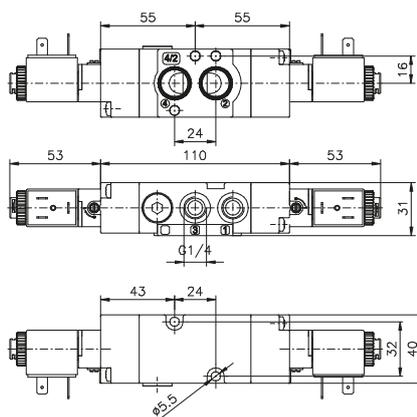
1 AIR DISTRIBUTION



Solenoid-Solenoid

Coding: M514.F.00.35.T.O

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Temperature °C	Standard valves (-10 ... +50) Low temperature valves (-30 ... +50) ATEX valves (-20 ... +40)
Flow rate at 6 bar with Δp=1 (NI/min)	1100
Orifice size (mm)	8
Working ports size	G 1/4"



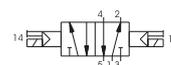
MODEL	
M	= Standard valve
X	= ATEX valve
FUNCTION	
F	42 = 4 ways
52	= 5 ways
VOLTAGE	
B04	= 12 VDC
B05	= 24 VDC
B09	= 24 VDC (2W)
B56	= 24V (50-60 Hz)
B57	= 110V (50-60 Hz)
B58	= 230 V (50-60 Hz)
C04	= 12 VDC
C05	= 24 VDC
T	
C09	= 24 VDC (2W)
C56	= 24 V (50-60 Hz)
C57	= 110 V (50-60 Hz)
C58	= 230 V (50-60 Hz)
F04	= 12 VDC
F05	= 24 VDC
F56	= 24 V (50-60 Hz)
F57	= 110 V (50-60 Hz)
F58	= 230 V (50-60 Hz)
TEMPERATURE OPTIONS	
	= Standard valves (-10 ... +50)
LT	= Low temperature valves (-30 ... +50)
O	= ATEX valves (-20 ... +40)

Minimum pilot pressure 2,5 bar
Maximum fitting torque 9 N/m
“LT” and “ATEX” versions are not available with MF coils

M514.42.00.35.O Weight 410 g



M514.52.00.35.O Weight 405 g

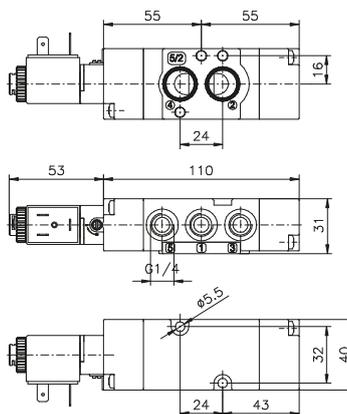
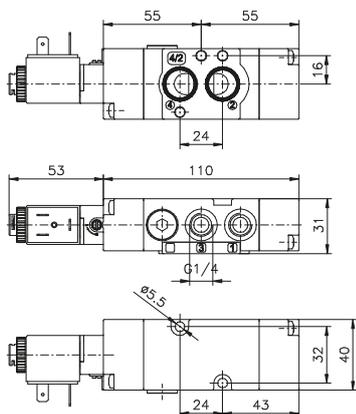


1
AIR DISTRIBUTION

Solenoid-Differential

Coding: **M**514.**F**.00.36**T****⊙**

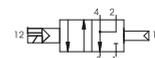
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Temperature °C	Standard valves (-10 ... +50) Low temperature valves (-30 ... +50) ATEX valves (-20 ... +40)
Flow rate at 6 bar with Δp=1 (NI/min)	1100
Orifice size (mm)	8
Working ports size	G 1/4"



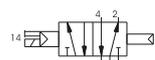
M	MODEL	= Standard valve
X	= ATEX valve	
F	FUNCTION	42 = 4 ways 52 = 5 ways
T	VOLTAGE	B04 = 12 VDC B05 = 24 VDC B09 = 24 VDC (2W) B56 = 24V (50-60 Hz) B57 = 110V (50-60 Hz) B58 = 230 V (50-60 Hz) C04 = 12 VDC C05 = 24 VDC C09 = 24 VDC (2W) C56 = 24 V (50-60 Hz) C57 = 110 V (50-60 Hz) C58 = 230 V (50-60 Hz) F04 = 12 VDC F05 = 24 VDC F56 = 24 V (50-60 Hz) F57 = 110 V (50-60 Hz) F58 = 230 V (50-60 Hz)
⊙	TEMPERATURE OPTIONS	= Standard valves (-10 ... +50) LT = Low temperature valves (-30 ... +50) = ATEX valves (-20 ... +40)

Minimum pilot pressure 2.5 bar
Maximum fitting torque 9 N/m
“LT” and “ATEX” versions are not available with MF coils

M514.42.00.36**T****⊙** Weight 330 g



M514.52.00.36**T****⊙** Weight 325 g

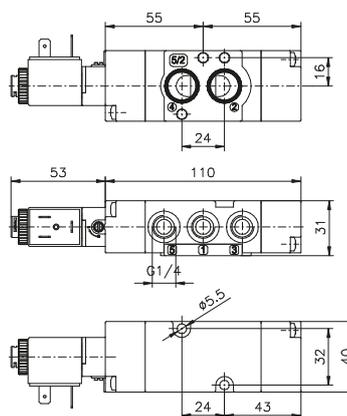
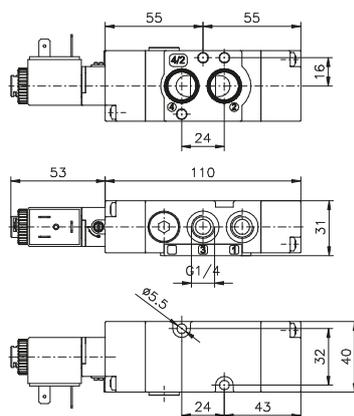


1 AIR DISTRIBUTION

Solenoid - Spring

Coding: **M**514.**F**.00.39**T****O**

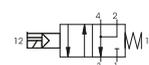
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Temperature °C	Standard valves (-10 ... +50) Low temperature valves (-30 ... +50) ATEX valves (-20 ... +40)
Flow rate at 6 bar with Δp=1 (NI/min)	1100
Orifice size (mm)	8
Working ports size	G 1/4"



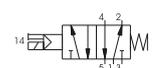
M	MODEL
	= Standard valve
X	= ATEX valve
	FUNCTION
F	42 = 4 ways
	52 = 5 ways
	VOLTAGE
B04	= 12 VDC
B05	= 24 VDC
B09	= 24 VDC (2W)
B56	= 24V (50-60 Hz)
B57	= 110V (50-60 Hz)
B58	= 230 V (50-60 Hz)
C04	= 12 VDC
C05	= 24 VDC
T	C09 = 24 VDC (2W)
	C56 = 24 V (50-60 Hz)
	C57 = 110 V (50-60 Hz)
	C58 = 230 V (50-60 Hz)
	F04 = 12 VDC
	F05 = 24 VDC
	F56 = 24 V (50-60 Hz)
	F57 = 110 V (50-60 Hz)
	F58 = 230 V (50-60 Hz)
	TEMPERATURE OPTIONS
	= Standard valves (-10 ... +50)
O	LT = Low temperature valves (-30 ... +50)
	= ATEX valves (-20 ... +40)

Minimum pilot pressure 2,5 bar
Maximum fitting torque 9 N/m
“LT” and “ATEX” versions are not available with MF coils

M514.42.00.39**T****O** Weight 330 g



M514.52.00.39**T****O** Weight 325 g



1
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Universal kit

Operational characteristics

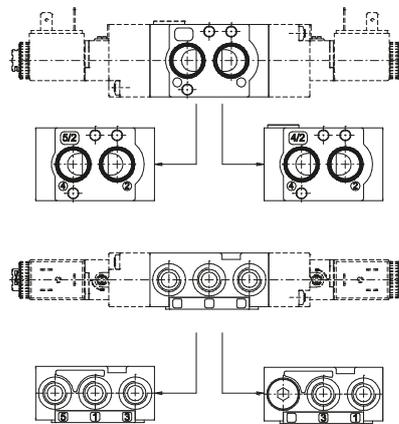
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Temperature °C	Standard valves (-10 ... +50) Low temperature valves (-30 ... +50) ATEX valves (-20 ... +40)
Flow rate at 6 bar with Δp=1 (NI/min)	1100
Orifice size (mm)	8
Working ports size	G 1/4"

MODEL	
M	= Standard valve
X	= ATEX valve
VERSION	
16	= Pneumatic - Differential
18	= Pneumatic - Pneumatic
V	19 = Pneumatic - Spring
35	= Solenoid - Solenoid
36	= Solenoid - Differential
39	= Solenoid - Spring
VOLTAGE	
B04	= 12 VDC
B05	= 24 VDC
B09	= 24 VDC (2W)
B56	= 24V (50-60 Hz)
B57	= 110V (50-60 Hz)
B58	= 230V (50-60 Hz)
C04	= 12 VDC
C05	= 24 VDC
T	C09 = 24 VDC (2W)
C56	= 24 V (50-60 Hz)
C57	= 110 V (50-60 Hz)
C58	= 230 V (50-60 Hz)
F04	= 12 VDC
F05	= 24 VDC
F56	= 24 V (50-60 Hz)
F57	= 110 V (50-60 Hz)
F58	= 230 V (50-60 Hz)
TEMPERATURE OPTIONS	
O	= Standard valves (-10 ... +50)
LT	= Low temperature valves (-30 ... +50)
	= ATEX valves (-20 ... +40)

Minimum pilot pressure 2,5 bar
Maximum fitting torque 9 N/m
“LT” and “ATEX” versions are not available with MF coils

To change a 5/2 valve into a 4/2:
Simply replace the bottom plate with the one included in the universal kit (cod. 514.92....) and by plugging port 5

Weight 405 g



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