



Series 2400

General

This solenoid valves series has been developed to meet requirements for electronically controlled pneumatic systems and / or serial control systems already used in all manufacturing sectors.
They have been designed to be easily assembled into groups or manifolds and include integral electrical connection to facilitate simple and speedy integration into a control system.
The 2400 series comprises a range of products classified according to the body size of 18mm divided into 3 types "LINE", "FLAT" and "VDMA".
The 10mm. and 18 mm. 24 VDC range of valves includes a range of accessories for the production of manifolded valve assemblies with integral electrical connections.
Modules are available in two or four station variants for flexibility and are supplied to IP40 or alternatively IP65 environmental protection.

Construction characteristics

Central body	Extruded aluminium bar with chemical nickel treatment and PTFE (polytetrafluorethylene)
Connection plates	Zincalloy
Operators	Technopolymer
Spool seals	Oil resistant nitrile rubber - HNBR
Spools	Aluminium 2011
Springs	AISI 302 stainless steel
Pistons	Technopolymer
Piston seals	Oil resistant nitrile rubber - NBR

Use and maintenance

The average life of the solenoid valve exceeds 50.000.000 cycles when used under optimum conditions.
Adequate lubrication reduces seals wear, just as proper filtering of supply air prevents the build-up of dirt that can cause malfunction.
Ensure the valve is used within our recommended criteria for pressure and temperature.
In dirty or dusty environments, the exhaust ports should be protected.
A seal kit including the spool is available for overhauling the valve. This operation does not require a skilled worker, although a particular care should be taken when reassembling the valve.

Ordering codes for miniature solenoid valves

The 15 mm. miniature solenoid valve with 1,1 mm. orifice has been selected for piloting this series of valves (see Series 300).
This results in low response times and reduced power consumption.
The valve can be supplied with the coil upward or downward (multipolar connections) depending on the application.

Codes are as follows:

Coil upward code

- 01 = miniature solenoid 12 VDC
- 02 = miniature solenoid 24 VDC
- 05 = miniature solenoid 24 VAC
- 06 = miniature solenoid 110 VAC
- 07 = miniature sol. 230 VAC
- 08 = miniature sol. 24 VDC 1W
- 09 = miniature sol. 24 VDC Earth faston

Coil downward code

- 11 = miniature solenoid 12 VDC
- 12 = miniature solenoid 24 VDC
- 15 = miniature solenoid 24 VAC
- 16 = miniature solenoid 110 VAC
- 17 = miniature sol. 230 VAC
- 18 = miniature sol. 24 VDC 1W Downward
- 19 = miniature sol. 24 VDC Earth faston Downward

	Well-tried component	<ul style="list-style-type: none"> - The product is a well-tried product for a safety-related application according to ISO 13849-1. - The relevant basic and well-tried safety principles according ISO 13849-2 for this product are fulfilled. - The suitability of the product for a precise application must be verified and confirmed by the user.
B_{10d}	50.000.000	

Miniature solenoid valves  homologated are available (see Series 300).



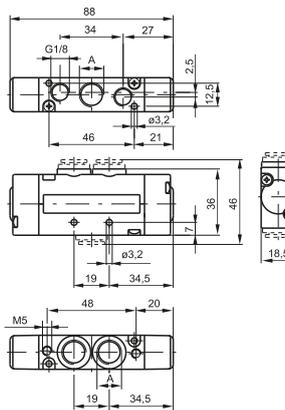
1
AIR DISTRIBUTION

Pneumatic - Spring

Coding: 241A.52.00.19

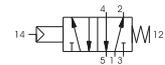
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	800
Orifice size (mm)	7
Pilot ports size	M5

WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8



Weight 155 g

For dimension "A" see ordering code

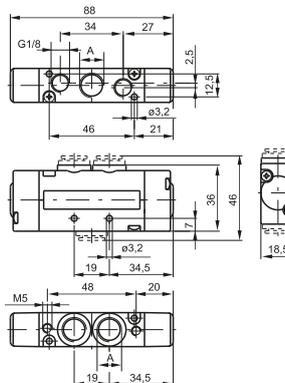


Pneumatic - Differential

Coding: 241A.52.00.16

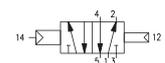
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	800
Orifice size (mm)	7
Pilot ports size	M5

WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8



Weight 155 g

For dimension "A" see ordering code

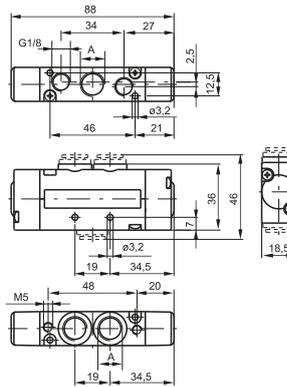


Pneumatic - Differential (External)

Coding: 241 **A**.52.00.17

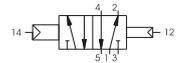
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	800
Orifice size (mm)	7
Pilot ports size	M5

WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8



Weight 155 g

For dimension "A" see ordering code



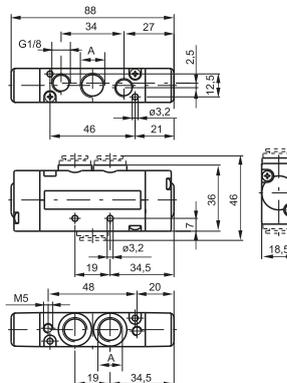
1
AIR DISTRIBUTION

Pneumatic - Pneumatic

Coding: 241 **A**.52.00.18

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	1.5
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	800
Orifice size (mm)	7
Pilot ports size	M5

WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8



Weight 155 g

For dimension "A" see ordering code





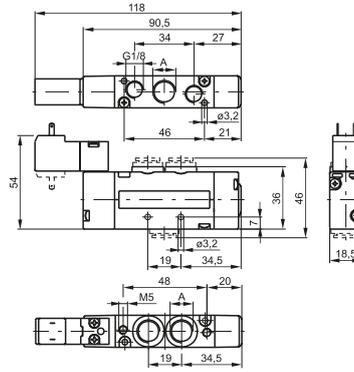
Spool valves and solenoid valves Series 2400 - Size 18mm LINE

Solenoid-Spring / Differential

Coding: 241A.52.00.V.T

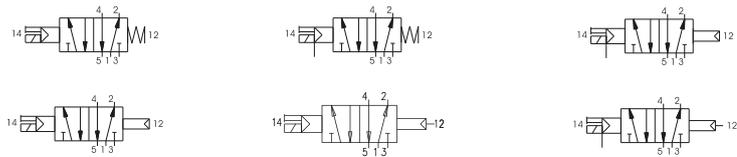
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	800
Orifice size (mm)	7
Pilot ports size	M5

WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8
VERSION	
39	= Solenoid - Spring
29	= Solenoid external-Spring
36	= Solenoid-Differential
37	= Solenoid-Differential external
26	= Solenoid external-Differential
27	= Solenoid external-Differential external
VOLTAGE	
01	= 12V DC
02	= 24V DC
05	= 24V AC
06	= 110V AC
07	= 230 V AC
08	= 24V DC 1W
09	= 24V DC downward
11	= 12V DC downward
12	= 24V DC downward
15	= 24V AC downward
16	= 110V AC downward
17	= 230 V AC downward
18	= 24V DC 1W downward
19	= 24V DC Earth faston downward



For dimension "A" see ordering code

Weight 195 g

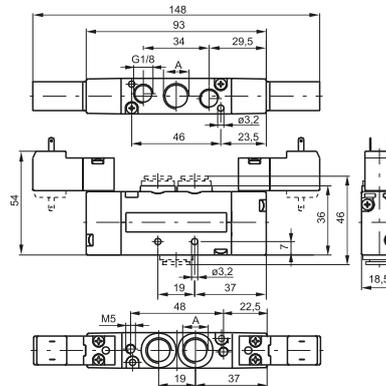


Solenoid - Solenoid

Coding: 241A.52.00.V.T

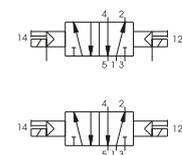
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	1.5
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	800
Orifice size (mm)	7
Pilot ports size	M5

WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8
VERSION	
35	= Solenoid-Solenoid
24	= Solenoid external-Solenoid external
VOLTAGE	
01	= 12V DC
02	= 24V DC
05	= 24V AC
06	= 110V AC
07	= 230 V AC
08	= 24V DC 1W
09	= 24V DC downward
11	= 12V DC downward
12	= 24V DC downward
15	= 24V AC downward
16	= 110V AC downward
17	= 230 V AC downward
18	= 24V DC 1W downward
19	= 24V DC Earth faston downward



For dimension "A" see ordering code

Weight 225 g



AIR DISTRIBUTION



Spool valves and solenoid valves Series 2400 - Size 18mm LINE

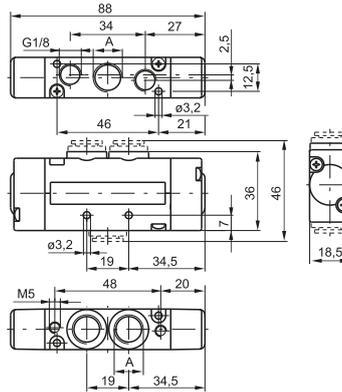
Pneumatic-Pneumatic 2 x 3/2

Coding: 241A.62.F.18

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	$\geq 1,5 + (0,2 \times \text{Inlet pressure})$
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	450
Orifice size (mm)	7

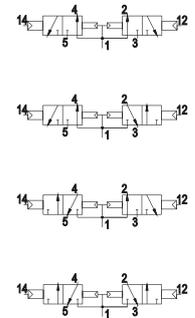
Example: if inlet pressure is set at 5bar then pilot pressure must be at least $Pp=1,5+(0,2*5)=2,5bar$

WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8
FUNCTION	
44	= 2 Coils 3/2 NC
45	= 1 Coil 3/2 NC (14) + 1 Coil 3/2
F	
NO (12)	
55	= 2 Coils 3/2 NO
54	= 1 Coil 3/2 NO (14) + 1 Coil 3/2 NC (12)



Weight 170 g

For dimension "A" see ordering code



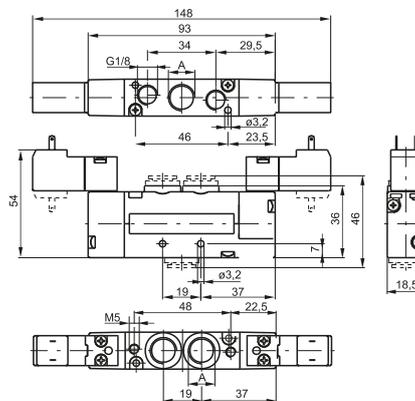
Solenoid - Solenoid 2 x 3/2

Coding: 241A.62.F.35.T

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	$\geq 1,5 + (0,2 \times \text{Inlet pressure})$
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	450
Orifice size (mm)	7

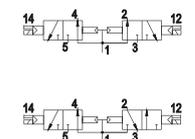
Example: if inlet pressure is set at 5bar then pilot pressure must be at least $Pp=1,5+(0,2*5)=2,5bar$

WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8
FUNCTION	
44	= 2 Coils 3/2 NC
45	= 1 Coil 3/2 NC (14) + 1 Coil 3/2
F	
NO (12)	
55	= 2 Coils 3/2 NO
54	= 1 Coil 3/2 NO (14) + 1 Coil 3/2 NC (12)
VOLTAGE	
01	= 12V DC
02	= 24V DC
05	= 24V AC
06	= 110V AC
07	= 230 V AC
08	= 24V DC 1 Watt
T	
09	= 24V DC downward
11	= 12V DC downward
12	= 24V DC downward
15	= 24V AC downward
16	= 110V AC downward
17	= 230 V AC downward
18	= 24V DC 1 Watt downward
19	= 24V DC Earth faston downward



Weight 250 g

For dimension "A" see ordering code



Pneumatic - Spring

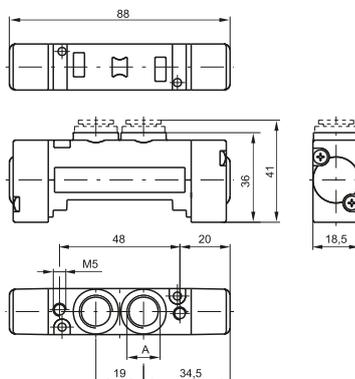
Coding: 243 **A**.52.00.19

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	800
Orifice size (mm)	7
Pilot ports size	M5

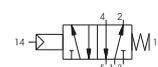
WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8



Weight 105 g



For dimension "A" see ordering code



Pneumatic - Differential

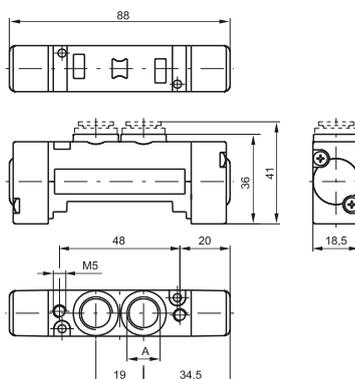
Coding: 243 **A**.52.00.16

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	800
Orifice size (mm)	7
Pilot ports size	M5

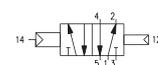
WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8



Weight 105 g



For dimension "A" see ordering code



Pneumatic - Differential (External)

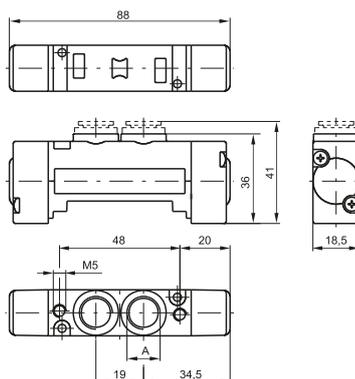
Coding: 243 **A**.52.00.17

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	800
Orifice size (mm)	7
Pilot ports size	M5

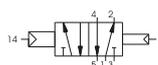
WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8



Weight 105 g



For dimension "A" see ordering code





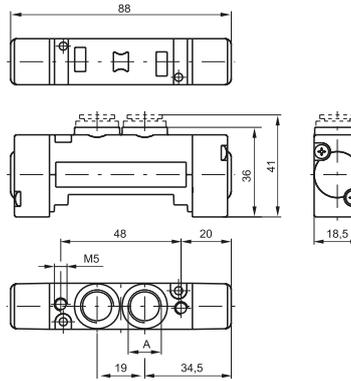
Spool valves and solenoid valves Series 2400 - Size 18mm FLAT

Pneumatic - Pneumatic

Coding: 243^A.52.00.18

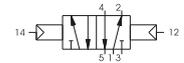
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	1,5
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	800
Orifice size (mm)	7
Pilot ports size	M5

WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8



Weight 105 g

For dimension "A" see ordering code

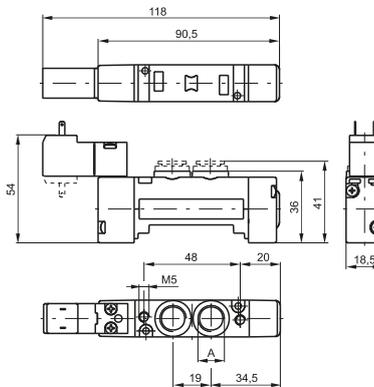


Solenoid-Spring / Differential

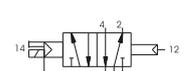
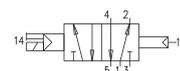
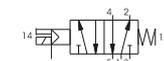
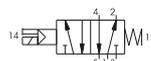
Coding: 243^A.52.00.^V.^T

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	800
Orifice size (mm)	7
Pilot ports size	M5

WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8
VERSION	
39	= Solenoid - Spring
29	= Solenoid external-Spring
36	= Solenoid-Differential
37	= Solenoid-Differential external
26	= Solenoid external-Differential
27	= Solenoid external-Differential external
VOLTAGE	
01	= 12V DC
02	= 24V DC
05	= 24V AC
06	= 110V AC
07	= 230 V AC
08	= 24V DC 1W
09	= 24V DC downward
11	= 12V DC downward
12	= 24V DC downward
15	= 24V AC downward
16	= 110V AC downward
17	= 230 V AC downward
18	= 24V DC 1W downward
19	= 24V DC Earth faston downward



For dimension "A" see ordering code



Weight 140 g

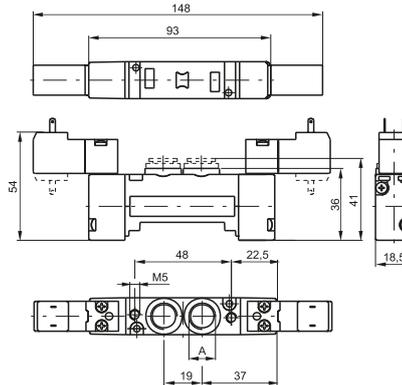
AIR DISTRIBUTION

Solenoid - Solenoid

Coding: 243 **A**.52.00. **V**. **T**

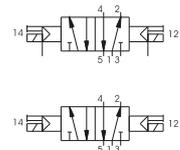
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	1.5
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	800
Orifice size (mm)	7
Pilot ports size	M5

WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8
VERSION	
35	= Solenoid-Solenoid
24	= Solenoid external-Solenoid external
VOLTAGE	
01	= 12V DC
02	= 24V DC
05	= 24V AC
06	= 110V AC
07	= 230 V AC
08	= 24V DC 1W
09	= 24V DC downward
11	= 12V DC downward
12	= 24V DC downward
15	= 24V AC downward
16	= 110V AC downward
17	= 230 V AC downward
18	= 24V DC 1W downward
19	= 24V DC Earth faston downward



Weight 175 g

For dimension "A" see ordering code



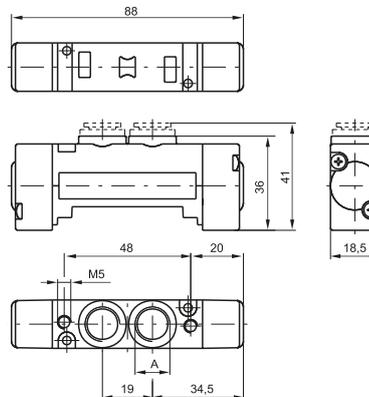
1
AIR DISTRIBUTION

Pneumatic - Pneumatic 5 ways 3 connections

Coding: 243 **A**.53. **F**.18

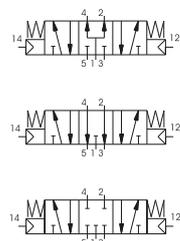
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	3
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	650
Orifice size (mm)	7
Pilot ports size	M5

WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8
FUNCTION	
31	= Closed centres
32	= Open centres
33	= Pressured centres



Weight 115 g

For dimension "A" see ordering code





Spool valves and solenoid valves Series 2400 - Size 18mm FLAT

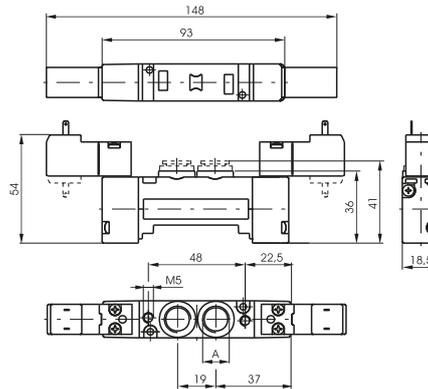
1 AIR DISTRIBUTION

Solenoid - Solenoid 5/3

Coding: 243A.53.F.V.T

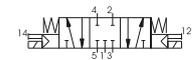
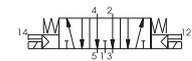
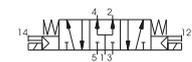
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	3
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	650
Orifice size (mm)	7
Pilot ports size	M5

WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8
FUNCTION	
31	= Closed centres
32	= Open centres
33	= Pressured centres
VERSION	
24	= Solenoid external-Solenoid external
35	= Solenoid-Solenoid
VOLTAGE	
01	= 12V DC
02	= 24V DC
05	= 24V AC
06	= 110V AC
07	= 230 V AC
08	= 24V DC 1W
09	= 24V DC downward
11	= 12V DC downward
12	= 24V DC downward
15	= 24V AC downward
16	= 110V AC downward
17	= 230 V AC downward
18	= 24V DC 1W downward
19	= 24V DC Earth faston downward



Weight 185 g

For dimension "A" see ordering code



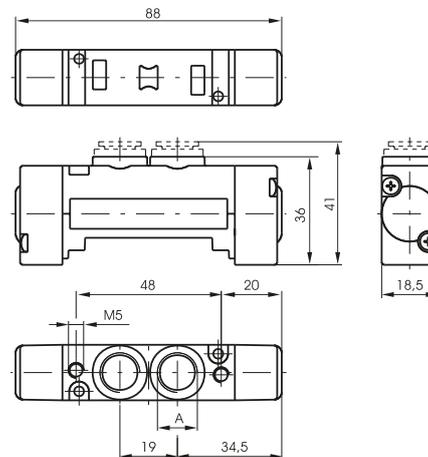
Pneumatic-Pneumatic 2 x 3/2

Coding: 243A.62.F.18

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	≥ 1,5 + (0,2 x Inlet pressure)
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	450
Orifice size (mm)	7

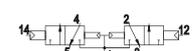
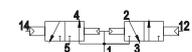
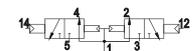
WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8
FUNCTION	
44	= 2 Coils 3/2 NC
45	= 1 Coil 3/2 NC (14) + 1 Coil 3/2 NO (12)
55	= 2 Coils 3/2 NO
54	= 1 Coil 3/2 NO (14) + 1 Coil 3/2 NC (12)

Example: if inlet pressure is set at 5bar then pilot pressure must be at least $P_p = 1,5 + (0,2 * 5) = 2,5$ bar



Weight 110 g

For dimension "A" see ordering code



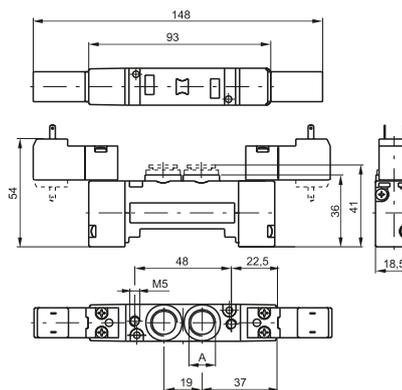


Solenoid - Solenoid 2 x 3/2

Coding: 243 **A**.62. **F**.35. **T**

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	$\geq 1,5 + (0,2 \times \text{Inlet pressure})$
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with $\Delta p = 1$ (l/min)	450
Orifice size (mm)	7

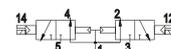
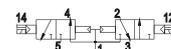
Example: if inlet pressure is set at 5bar then pilot pressure must be at least $P_p = 1,5 + (0,2 \times 5) = 2,5 \text{ bar}$



Weight 190 g

For dimension 'A' see ordering code

WORKING PORTS SIZE	
1	= G1/4"
5	= G1/8"
6	= Quick fitting tube Ø6
8	= Quick fitting tube Ø8
FUNCTION	
44	= 2 Coils 3/2 NC
45	= 1 Coil 3/2 NC (14) + 1 Coil 3/2 NO (12)
55	= 2 Coils 3/2 NO
54	= 1 Coil 3/2 NO (14) + 1 Coil 3/2 NC (12)
VOLTAGE	
01	= 12V DC
02	= 24V DC
05	= 24V AC
06	= 110V AC
07	= 230 V AC
08	= 24V DC 1 Watt
09	= 24V DC downward
11	= 12V DC downward
12	= 24V DC downward
15	= 24V AC downward
16	= 110V AC downward
17	= 230 V AC downward
18	= 24V DC 1 Watt downward
19	= 24V DC Earth faston downward

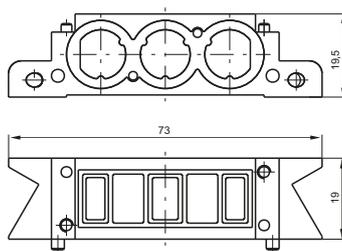


1
AIR DISTRIBUTION

► Modular base



Weight 85 g



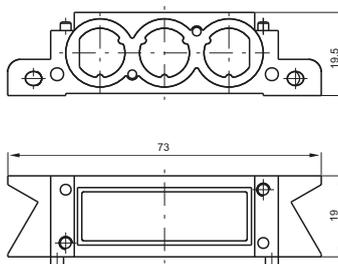
Coding: 2430.▼

VERSION	
01	Modular base
▼ 06	Supply and exhaust closed
07	Supply closed
08	Exhaust closed

► Blank base



Weight 85 g

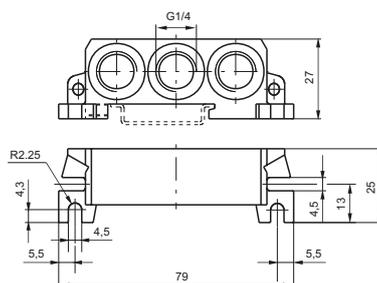


Coding: 2430.05

► Inlet base

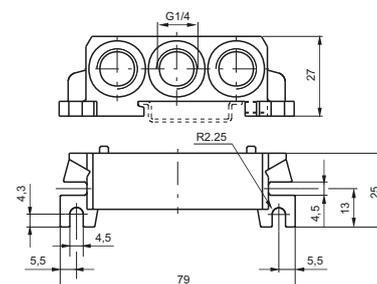


Coding: 2430.▼



VERSION	
▼ 02	Right
03	Left

Weight 120 g



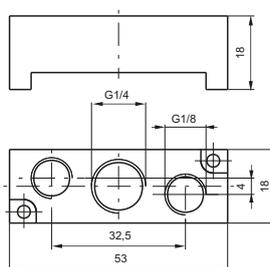
Weight 125 g

► Intermediate air intake



Weight 30 g
to be assembled instead of a valve

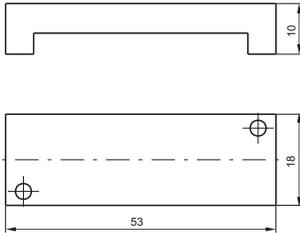
Coding: 2430.10





► Closing plate

Coding: 2430.00



Weight 20 g

► Diaphragm plug

Coding: 2430.17



Weight 5 g



1
AIR DISTRIBUTION

Pneumatic - Spring

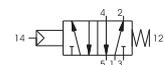
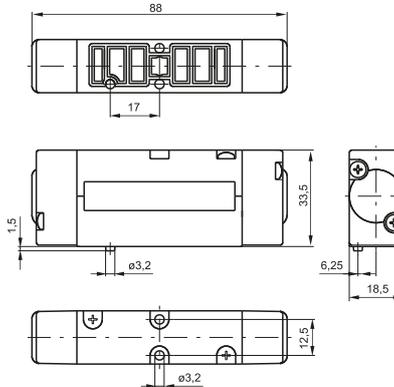
Coding: 2445.52.00.19

Operational characteristics

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Pressure range (bar)	2
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	550
Orifice size (mm)	5



Weight 155 g



Pneumatic - Differential

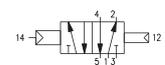
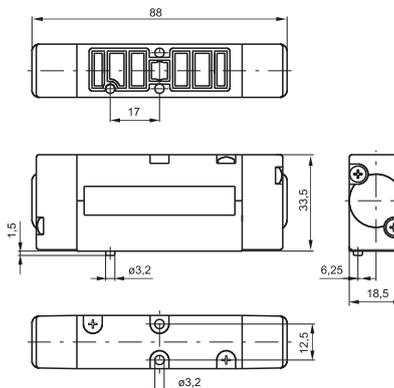
Coding: 2445.52.00.16

Operational characteristics

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	550
Orifice size (mm)	5



Weight 155 g



Pneumatic - Differential (External)

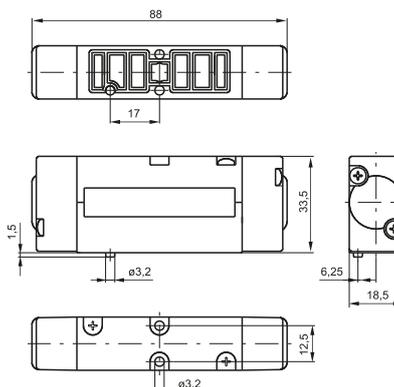
Coding: 2445.52.00.17

Operational characteristics

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	550
Orifice size (mm)	5



Weight 155 g



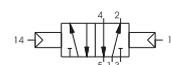
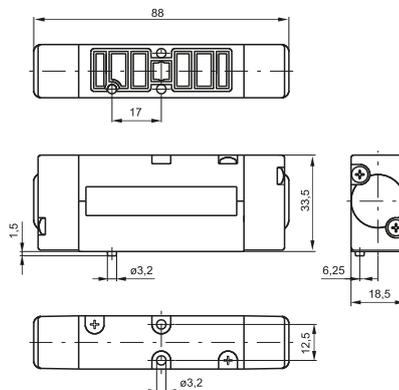
Pneumatic - Pneumatic

Coding: 2445.52.00.18

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	1.5
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	550
Orifice size (mm)	5



Weight 155 g



1
AIR DISTRIBUTION

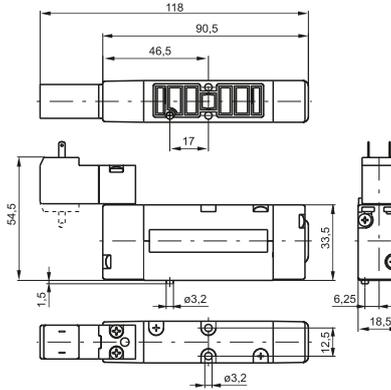


1 AIR DISTRIBUTION

Solenoid-Spring / Differential

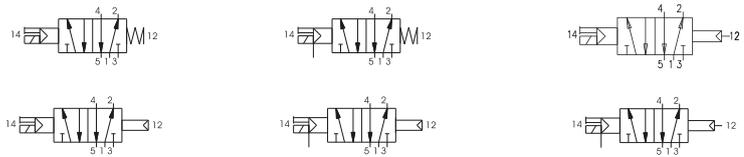
Coding: 244C.52.00.V.T

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	550
Orifice size (mm)	5



C	TYPE ELECTROPILOT EXHAUST
	1 = on base (only for self feeding valves)
	5 = on pilot (for all version)
V	VERSION
	39 = Solenoid - Spring
	29 = Solenoid external-Spring
	36 = Solenoid-Differential
	37 = Solenoid-Differential external
T	VOLTAGE
	01 = 12V DC
	02 = 24V DC
	05 = 24V AC
	06 = 110V AC
	07 = 230 V AC
	08 = 24V DC 1W
	09 = 24V DC downward
	11 = 12V DC downward
	12 = 24V DC downward
15 = 24V AC downward	
16 = 110V AC downward	
17 = 230 V AC downward	
18 = 24V DC 1W downward	
19 = 24V DC Earth faston downward	

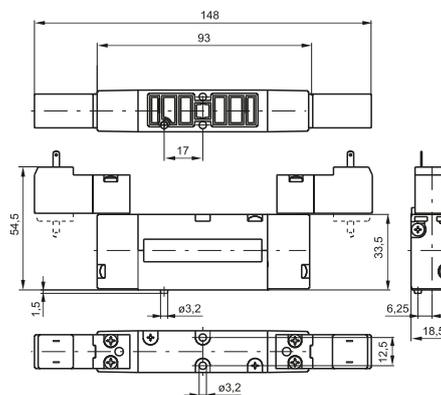
Weight 190 g



Solenoid - Solenoid

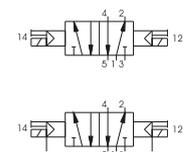
Coding: 244C.52.00.V.T

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	1.5
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	550
Orifice size (mm)	5



C	TYPE ELECTROPILOT EXHAUST
	1 = on base (only for self feeding valves)
	5 = on pilot (for all version)
V	VERSION
	24 = Solenoid external-Solenoid external
	35 = Solenoid-Solenoid
T	VOLTAGE
	01 = 12V DC
	02 = 24V DC
	05 = 24V AC
	06 = 110V AC
	07 = 230 V AC
	08 = 24V DC 1W
	09 = 24V DC downward
	11 = 12V DC downward
	12 = 24V DC downward
15 = 24V AC downward	
16 = 110V AC downward	
17 = 230 V AC downward	
18 = 24V DC 1W downward	
19 = 24V DC Earth faston downward	

Weight 225 g

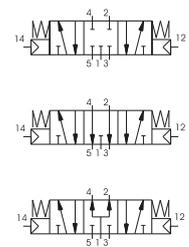
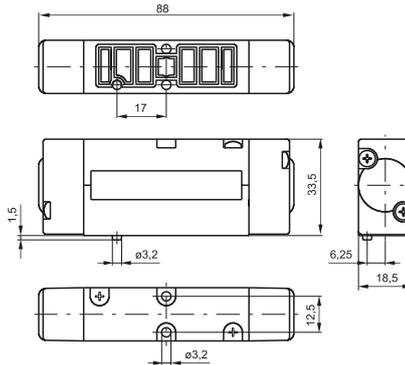


Pneumatic - Pneumatic 5 ways 3 connections

Coding: 244 **C**.53. **F**.18

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	3
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	550
Orifice size (mm)	5

C	TYPE ELECTROPILOT EXHAUST 1 = on base (only for self feeding valves) 5 = on pilot (for all version)
F	FUNCTION 31 = Closed centres 32 = Open centres 33 = Pressured centres



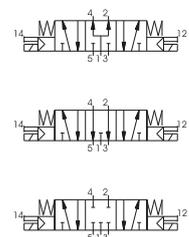
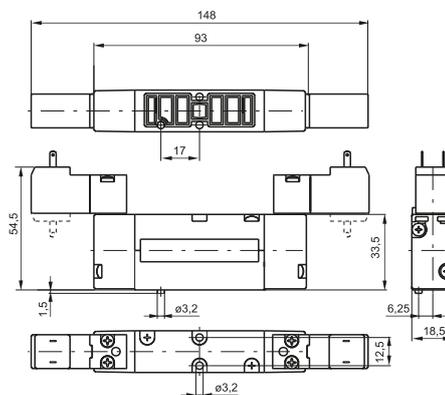
Weight 165 g

Solenoid - Solenoid 5 ways 3 connections

Coding: 244 **C**.53. **F**.**V**.**T**

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	3
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	550
Orifice size (mm)	5

C	TYPE ELECTROPILOT EXHAUST 1 = on base (only for self feeding valves) 5 = on pilot (for all version)
F	FUNCTION 31 = Closed centres 32 = Open centres 33 = Pressured centres
V	VERSION 24 = Solenoid external-Solenoid external 35 = Solenoid-Solenoid
T	VOLTAGE 01 = 12V DC 02 = 24V DC 05 = 24V AC 06 = 110V AC 07 = 230 V AC 08 = 24V DC 1W 09 = 24V DC downward 11 = 12V DC downward 12 = 24V DC downward 15 = 24V AC downward 16 = 110V AC downward 17 = 230 V AC downward 18 = 24V DC 1W downward 19 = 24V DC Earth faston downward



Weight 235 g

1
AIR DISTRIBUTION



Spool valves and solenoid valves Series 2400 - Size 18mm VDMA

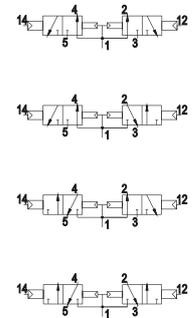
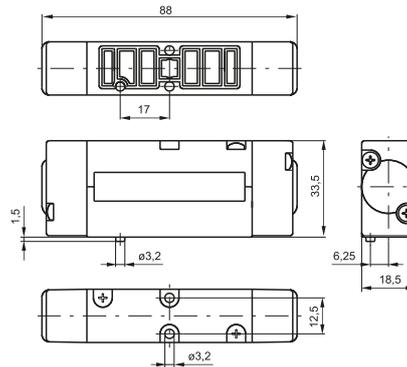
Pneumatic-Pneumatic 2 x 3/2

Coding: 2445.62.Ⓕ.18

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	$\geq 1,5 + (0,2 \times \text{Inlet pressure})$
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	450
Orifice size (mm)	5

FUNCTION	
44	= 2 Coils 3/2 NC
45	= 1 Coil 3/2 NC (14) + 1 Coil 3/2 NO (12)
55	= 2 Coils 3/2 NO
54	= 1 Coil 3/2 NO (14) + 1 Coil 3/2 NC (12)

Example: if inlet pressure is set at 5bar then pilot pressure must be at least $P_p = 1,5 + (0,2 \times 5) = 2,5 \text{ bar}$



Weight 170 g

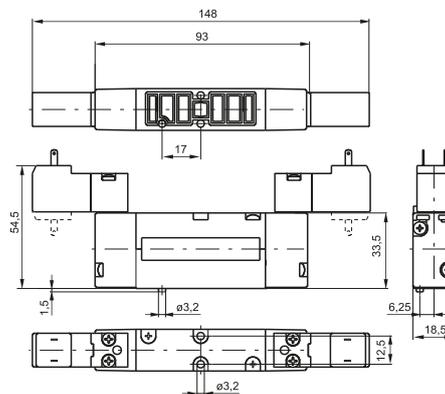
Solenoid - Solenoid 2 x 3/2

Coding: 2445.62.Ⓕ.35.Ⓘ

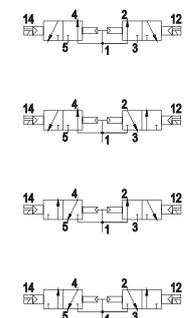
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Maximum piloting pressure (bar)	$\geq 1,5 + (0,2 \times \text{Inlet pressure})$
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	450
Orifice size (mm)	5

FUNCTION	
44	= 2 Coils 3/2 NC
45	= 1 Coil 3/2 NC (14) + 1 Coil 3/2 NO (12)
55	= 2 Coils 3/2 NO
54	= 1 Coil 3/2 NO (14) + 1 Coil 3/2 NC (12)

Example: if inlet pressure is set at 5bar then pilot pressure must be at least $P_p = 1,5 + (0,2 \times 5) = 2,5 \text{ bar}$

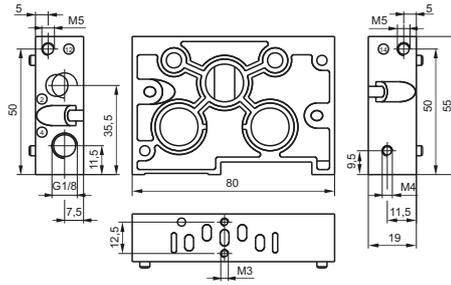


VOLTAGE	
01	= 12V DC
02	= 24V DC
05	= 24V AC
06	= 110V AC
07	= 230 V AC
08	= 24V DC 1 Watt
09	= 24V DC downward
11	= 12V DC downward
12	= 24V DC downward
15	= 24V AC downward
16	= 110V AC downward
17	= 230 V AC downward
18	= 24V DC 1 Watt downward
19	= 24V DC Earth faston downward



Weight 250 g

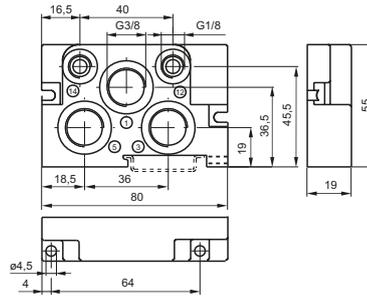
Modular base



Coding: 2440.0

VERSION	
01	Modular base
06	Supply and exhaust closed
07	Supply closed
08	Exhaust closed

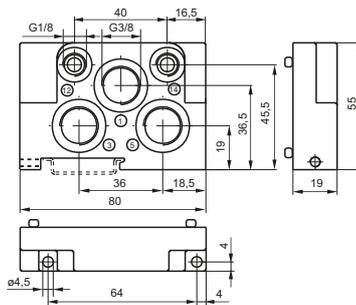
Inlet base



Coding: 2440.0

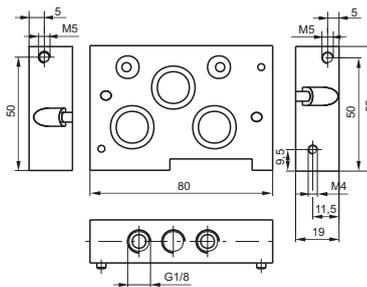
VERSION	
02	Right
03	Left

Weight 110 g



Weight 110 g

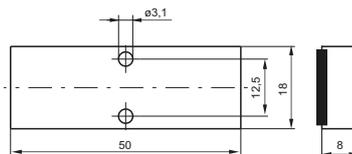
Intermediate air intake



Coding: 2440.10

Weight 185 g

Closing plate



Coding: 2440.00

Weight 25 g

Diaphragm plug



Coding: 2440.17

The integral electrical design for the series 2400 valve is extremely flexible, allowing the production of pre-wired solenoid valve manifolds, the configuration of which can be determined at the point of assembly. The 24 VDC, 12 VDC (equivalent PNP) and 24 VAC* modules are available with 2 or 4 positions. The system assembled is designed for an IP40 protection. IP65 is available on request.

* Attention : If the working tension is 24 VAC DO NOT using modules with protection diode

1
AIR DISTRIBUTION

Support plates are supplied to mount the electrical connection elements to the manifold modules. Individual valves can still be removed from the manifold even after assembly is complete. One support plate is required per element.

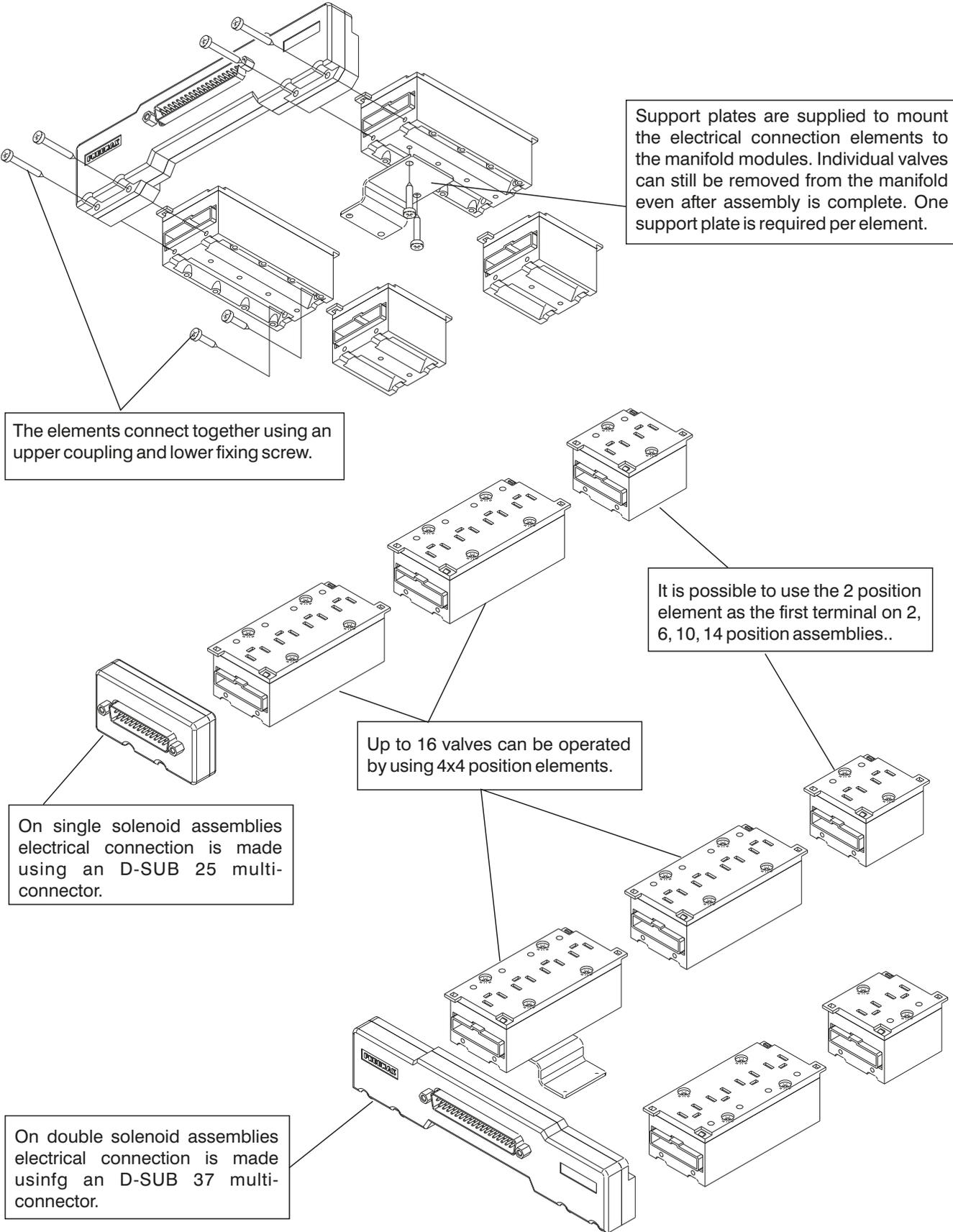
The elements connect together using an upper coupling and lower fixing screw.

It is possible to use the 2 position element as the first terminal on 2, 6, 10, 14 position assemblies..

Up to 16 valves can be operated by using 4x4 position elements.

On single solenoid assemblies electrical connection is made using an D-SUB 25 multi-connector.

On double solenoid assemblies electrical connection is made using an D-SUB 37 multi-connector.



Module for connections



Weight 30 g
* only for VDC

2400.02.Ⓟ



Weight 50 g
* only for VDC

2400.04.Ⓟ

Coding: 2400.Ⓟ.Ⓟ.Ⓟ

	POSITIONS
Ⓟ	04 = 4 positions
	02 = 2 positions
	TYPE
	00 = Left IP40-PNP
	02 = Left IP40-PNP with protection diode
	10 = Left IP65-PNP
	12 = Left IP65-PNP with protection diode
Ⓟ	01 = Right IP40-PNP
	03 = Right IP40-PNP with protection diode
	11 = Right IP65-PNP
	13 = Right IP65-PNP with protection diode

Front connector IP65



Weight 120 g
The IP65 protection is obtained by IP65 Pneumax cable

2400.37.10



Weight 40 g
The IP65 protection is obtained by IP65 Pneumax cable

2400.25.10

Coding: 2400.Ⓟ.10

	POLES
Ⓟ	37 = 37 poles
	25 = 25 poles

Plug



Coding: 2400.00

Weight 5 g

Closing plate electrical positions



Coding: 2400.15.00

Weight 2 g

VDMA support plate



Coding: 2440.50

Weight 20 g

FLAT support plate



Coding: 2430.50

Weight 20 g

1
AIR DISTRIBUTION



1
AIR DISTRIBUTION

▶ 4 positions box with 25 contacts connector

Coding: 2400.04.25



Weight 65 g

▶ 15mm male connector with 2 metres cable

Coding: 2400.15.02



Weight 98 g

▶ In line cable complete with connector IP40

Coding: 2400.**T**.**L**.00



	CONNECTORS
T	25 = 25 poles
	37 = 37 poles
	CABLE LENGTH
L	03 = 3 meters
	05 = 5 meters
	10 = 10 meters

2400.**T**.**L**.00

▶ Cable complete with connector, 25 Poles IP65

Coding: 2300.25.**L**.**C**



	CABLE LENGTH
L	03 = 3 meters
	05 = 5 meters
	10 = 10 meters
	FUNCTION
F	31 = Closed centres
	32 = Open centres
	33 = Pressured centres

▶ Cable complete with connector, 37 Poles IP65

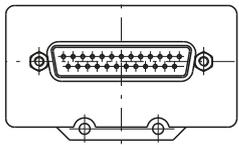
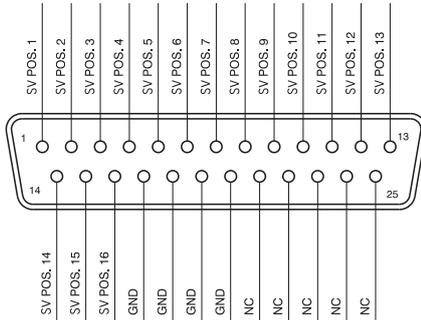
Coding: 2400.37.**L**.**C**



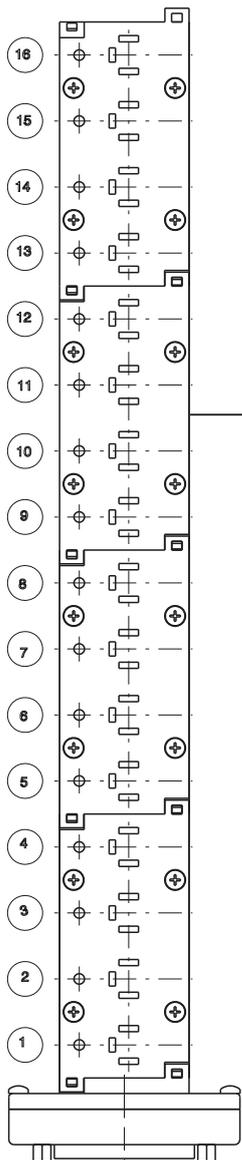
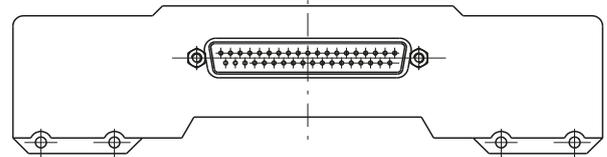
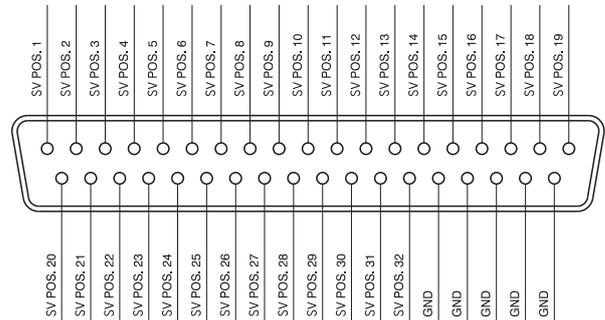
	CABLE LENGTH
L	03 = 3 meters
	05 = 5 meters
	10 = 10 meters
	FUNCTION
F	31 = Closed centres
	32 = Open centres
	33 = Pressured centres



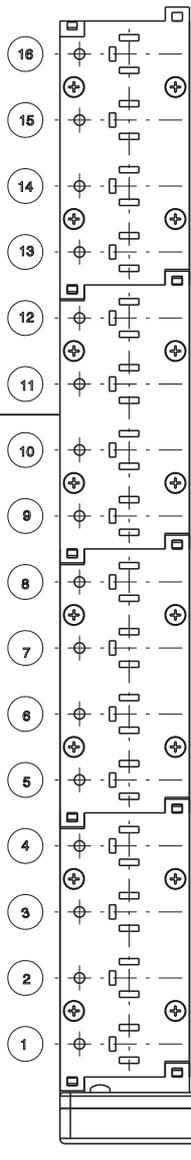
**SUB-D 25 CONTACTS
CONNECTOR**



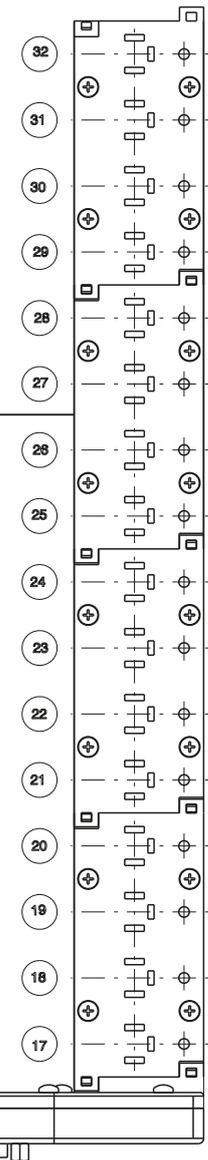
**SUB-D 37 CONTACTS
CONNECTOR**



Left modules



Right modules



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AIR DISTRIBUTION