Series 888

Competitively priced, good performance and versatility combined with a compact design are the main characteristics of this new series of valves.
The aluminium valve body and spool/seal arrangement optimize both the flow rate and the valve switching time.
This series of valves are available with G1/8" and G1/4" ports in 3/2, 5/2 and 5/3 versions.
Monostable or bistable versions are available and include an integrated technopolymer solenoid operator with 9mm stem and built in manual override.
Solenoid valves series 888 are available in point-to-point and serial configurations.
For serial system specifications, see Optyma-F series.
The valves can be supplied with or without the solenoid coil, however, if the solenoid coil is required please refer to the following table:

Voltages		Coil Code	Voltage Code
Direct current DC	12V (3,5W)	MF4	F04
	24V (3,5W)	MF5	F05
Alternating current AC 50 - 60 Hz	24V (3,7W)	MF56	F56
	110V (3,7W)	MF57	F57
	230V (3,7W)	MF58	F58

Connectors Coding		
Voltages		Kit 100 pieces
DC/AC	24V	888.11.01L-K
Alternating current AC 50 - 60 Hz	110V	888.11.02L-K
	230V	888.11.03L-K

Construction characteristics

Body	Aluminium
Seals	NBR
Springs	Spring steel
Operators	Technopolymer Aluminium for spring bottom plates
Pistons	Technopolymer
Spools	Aluminium

Use and maintenance

These valves have an average life of 15 million cycles
depending on the application and air quality, filtered and lubricated air using specified lubricants will dramatically 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 ports 3 and 5 must be protected against the possible ingress of dirt or debris.
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.

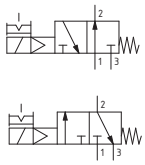
Solenoid - Spring - 3/2 (Self feeding)

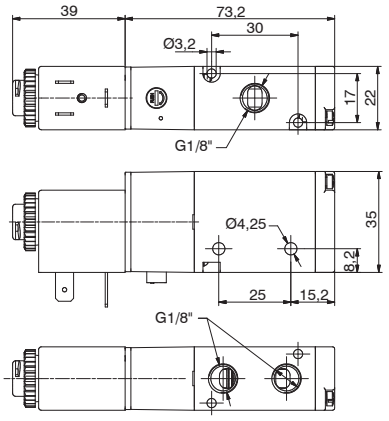
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	8
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (Nl/min)	790
Orifice size (mm)	5.8
Working ports size	G 1/8"

Coding: 8880.32.Ⓕ.39.Ⓥ

Ⓕ	FUNCTION
	A = Normally Open
	C = Normally Closed

Ⓥ	VOLTAGE
	F04 = 12 V DC
	F05 = 24 V DC
	F56 = 24 V (50-60 Hz)
	F57 = 110 V (50-60 Hz)
	F58 = 230 V (50-60 Hz)
	F00 = Without coil





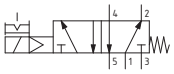
Weight 210 g
Minimum working pressure 2 bar

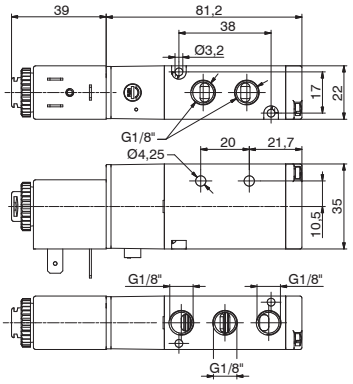
Solenoid - Spring - 5/2 (Self feeding)

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	8
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (Nl/min)	790
Orifice size (mm)	5.8
Working ports size	G 1/8"

Coding: 8880.52.00.39.Ⓥ

Ⓥ	VOLTAGE
	F04 = 12 V DC
	F05 = 24 V DC
	F56 = 24 V (50-60 Hz)
	F57 = 110 V (50-60 Hz)
	F58 = 230 V (50-60 Hz)
	F00 = Without coil





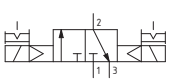
Weight 220 g
Minimum working pressure 2 bar

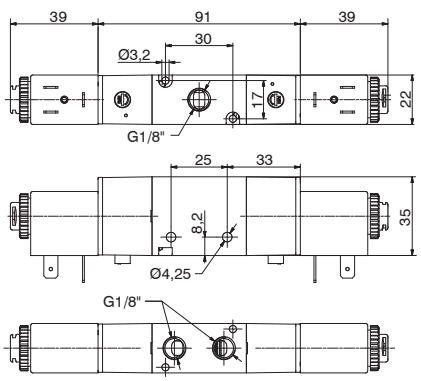
Solenoid - Solenoid - 3/2 (Self feeding)

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	8
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (Nl/min)	790
Orifice size (mm)	5.8
Working ports size	G 1/8"

Coding: 8880.32.00.35.Ⓥ

Ⓥ	VOLTAGE
	F04 = 12 V DC
	F05 = 24 V DC
	F56 = 24 V (50-60 Hz)
	F57 = 110 V (50-60 Hz)
	F58 = 230 V (50-60 Hz)
	F00 = Without coil





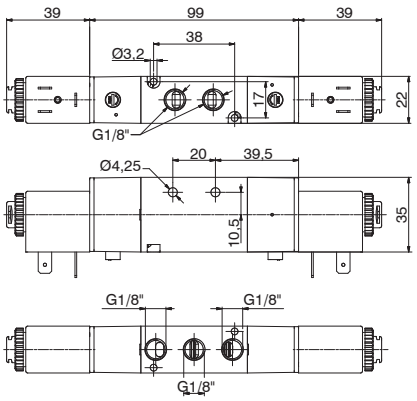
Weight 310 g
Minimum working pressure 2 bar

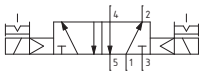
Solenoid - Solenoid - 5/2 (Self feeding)

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	8
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (Nl/min)	790
Orifice size (mm)	5.8
Working ports size	G 1/8"

Coding: 8880.52.00.35.Ⓥ

Ⓥ	VOLTAGE
	F04 = 12 V DC
	F05 = 24 V DC
	F56 = 24 V (50-60 Hz)
	F57 = 110 V (50-60 Hz)
	F58 = 230 V (50-60 Hz)
	F00 = Without coil





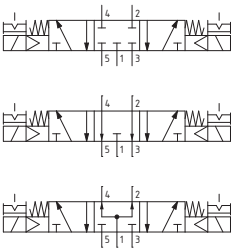
Weight 320 g
Minimum working pressure 2 bar

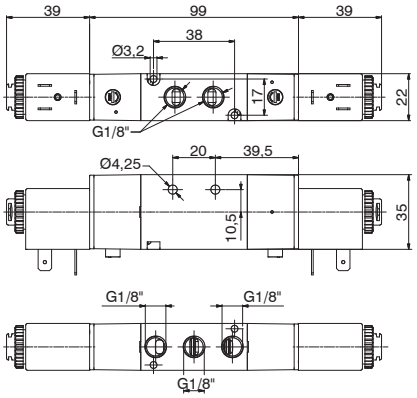
Solenoid - Solenoid - 5/3 (Self feeding)

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	8
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (Nl/min)	440
Orifice size (mm)	5.8
Working ports size	G 1/8"

Coding: 8880.53.Ⓕ.35.Ⓥ

Ⓕ	FUNCTION	Ⓥ	VOLTAGE
	31 = Closed Centres		**F04** = 12 V DC
	32 = Open Centres		**F05** = 24 V DC
	33 = Pressured centres		**F56** = 24 V (50-60 Hz)
			F57 = 110 V (50-60 Hz)
			F58 = 230 V (50-60 Hz)
			F00 = Without coil





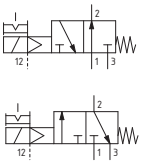
Weight 330 g
Minimum working pressure 2,5 bar

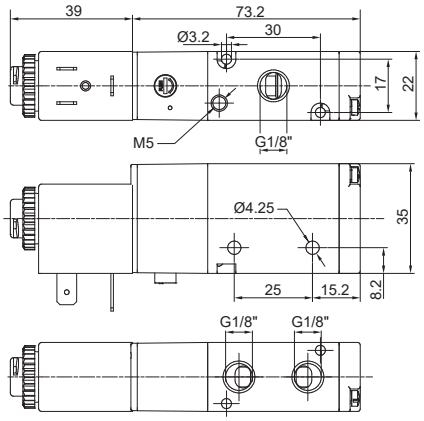
Solenoid - Spring - 3/2 (External feeding)

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	8
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (Nl/min)	790
Orifice size (mm)	5.8
Working ports size	G 1/8"

Coding: 8880E.32.Ⓕ.39.Ⓥ

Ⓕ	FUNCTION	Ⓥ	VOLTAGE
	A = Normally open		**F04** = 12 V DC
	C = Normally Closed		**F05** = 24 V DC
			F56 = 24 V (50-60 Hz)
			F57 = 110 V (50-60 Hz)
			F58 = 230 V (50-60 Hz)
			F00 = Without coil





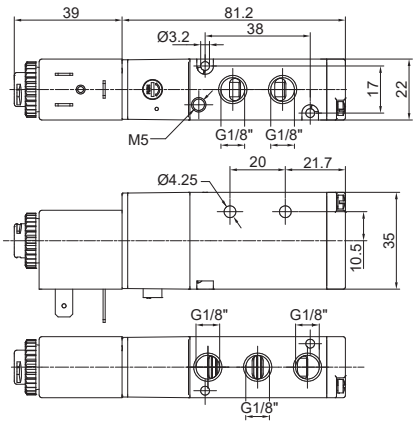
Weight 210 g
Minimum working pressure 2 bar

Solenoid - Spring - 5/2 (External feeding)

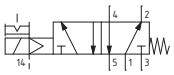
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	8
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (Nl/min)	790
Orifice size (mm)	5.8
Working ports size	G 1/8"

Coding: 8880E.52.00.39.Ⓥ

Ⓥ	VOLTAGE
	F04 = 12 V DC
	F05 = 24 V DC
	F56 = 24 V (50-60 Hz)
	F57 = 110 V (50-60 Hz)
	F58 = 230 V (50-60 Hz)
	F00 = Without coil



Weight 220 g
Minimum working pressure 2 bar

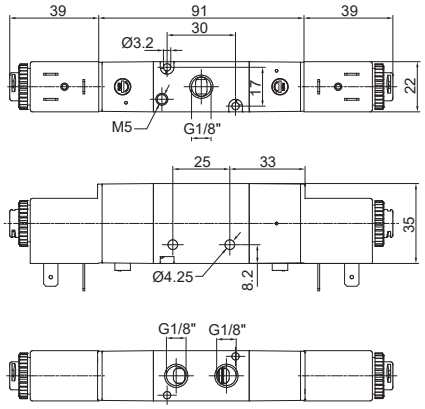


Solenoid - Solenoid - 3/2 (External feeding)

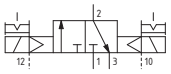
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	8
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (Nl/min)	790
Orifice size (mm)	5.8
Working ports size	G 1/8"

Coding: 8880E.32.00.35.Ⓥ

Ⓥ	VOLTAGE
	F04 = 12 V DC
	F05 = 24 V DC
	F56 = 24 V (50-60 Hz)
	F57 = 110 V (50-60 Hz)
	F58 = 230 V (50-60 Hz)
	F00 = Without coil



Weight 310 g
Minimum working pressure 2 bar

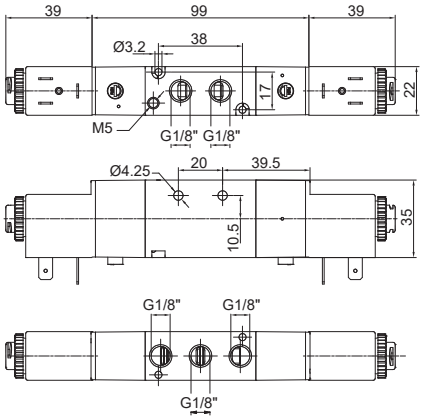


Solenoid - Solenoid - 5/2 (External feeding)

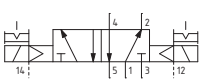
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	8
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (Nl/min)	790
Orifice size (mm)	5.8
Working ports size	G 1/8"

Coding: 8880E.52.00.35.Ⓥ

Ⓥ	VOLTAGE
	F04 = 12 V DC
	F05 = 24 V DC
	F56 = 24 V (50-60 Hz)
	F57 = 110 V (50-60 Hz)
	F58 = 230 V (50-60 Hz)
	F00 = Without coil



Weight 320 g
Minimum working pressure 2 bar



Solenoid - Solenoid - 5/3 (External feeding)

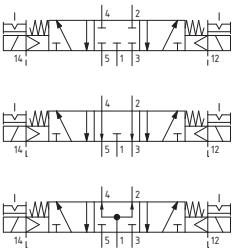
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	8
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (Nl/min)	440
Orifice size (mm)	5.8
Working ports size	G 1/8"

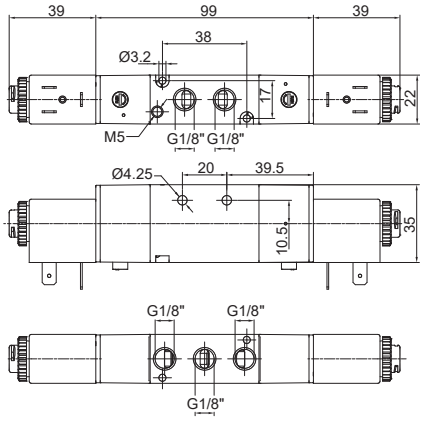
Coding: 8880E.53.Ⓕ.35.Ⓥ

Ⓕ	FUNCTION
	31 = Closed Centres
	32 = Open Centres
	33 = Pressured centres

Ⓥ	VOLTAGE
	F04 = 12 V DC
	F05 = 24 V DC
	F56 = 24 V (50-60 Hz)
	F57 = 110 V (50-60 Hz)
	F58 = 230 V (50-60 Hz)
	F00 = Without coil

Weight 330 g
Minimum working pressure 2,5 bar





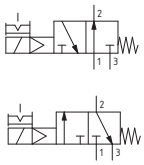
Solenoid - Spring - 3/2 (Self feeding)

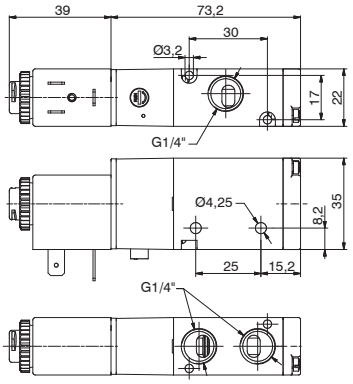
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	8
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (Nl/min)	890
Orifice size (mm)	6.5
Working ports size	G 1/4"

Coding: 8884.32.Ⓕ.39.Ⓥ

Ⓕ	FUNCTION
	A = Normally open
	C = Normally Closed

Ⓥ	VOLTAGE
	F04 = 12 V DC
	F05 = 24 V DC
	F56 = 24 V (50-60 Hz)
	F57 = 110 V (50-60 Hz)
	F58 = 230 V (50-60 Hz)
	F00 = Without coil





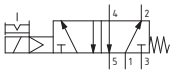
Weight 210 g
Minimum working pressure 2 bar

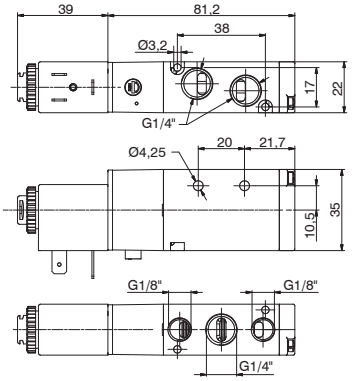
Solenoid - Spring - 5/2 (Self feeding)

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	8
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (Nl/min)	890
Orifice size (mm)	6.5
Working ports size	G 1/4"

Coding: 8884.52.00.39.Ⓥ

Ⓥ	VOLTAGE
	F04 = 12 V DC
	F05 = 24 V DC
	F56 = 24 V (50-60 Hz)
	F57 = 110 V (50-60 Hz)
	F58 = 230 V (50-60 Hz)
	F00 = Without coil





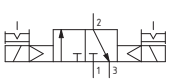
Weight 220 g
Minimum working pressure 2 bar

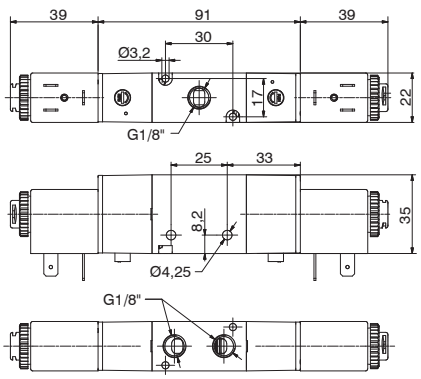
Solenoid - Solenoid - 3/2 (Self feeding)

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	8
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (Nl/min)	890
Orifice size (mm)	6.5
Working ports size	G 1/4"

Coding: 8884.32.00.35.Ⓥ

Ⓥ	VOLTAGE
	F04 = 12 V DC
	F05 = 24 V DC
	F56 = 24 V (50-60 Hz)
	F57 = 110 V (50-60 Hz)
	F58 = 230 V (50-60 Hz)
	F00 = Without coil





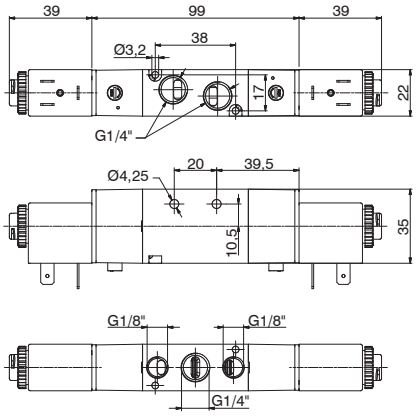
Weight 310 g
Minimum working pressure 2 bar

Solenoid - Solenoid - 5/2 (Self feeding)

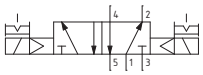
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	8
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (Nl/min)	890
Orifice size (mm)	6.5
Working ports size	G 1/4"

Coding: 8884.52.00.35.Ⓥ

Ⓥ	VOLTAGE
	F04 = 12 V DC
	F05 = 24 V DC
	F56 = 24 V (50-60 Hz)
	F57 = 110 V (50-60 Hz)
	F58 = 230 V (50-60 Hz)
	F00 = Without coil



Weight 320 g
Minimum working pressure 2 bar



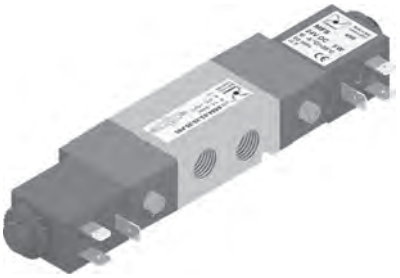
Solenoid - Solenoid - 5/3 (Self feeding)

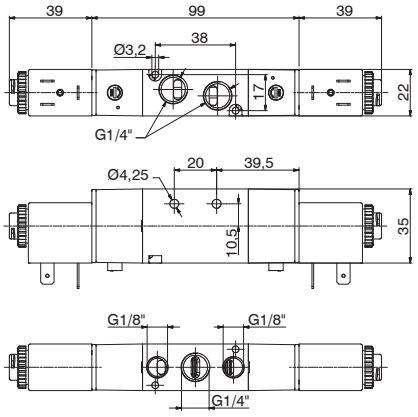
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	8
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (Nl/min)	540
Orifice size (mm)	6.5
Working ports size	G 1/4"

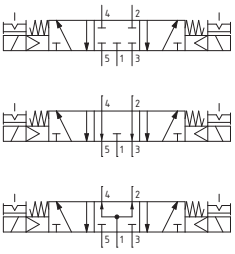
Coding: 8884.53.Ⓕ.35.Ⓥ

Ⓕ	FUNCTION
	31 = Closed Centres
	32 = Open Centres
	33 = Pressured centres

Ⓥ	VOLTAGE
	F04 = 12 V DC
	F05 = 24 V DC
	F56 = 24 V (50-60 Hz)
	F57 = 110 V (50-60 Hz)
	F58 = 230 V (50-60 Hz)
	F00 = Without coil





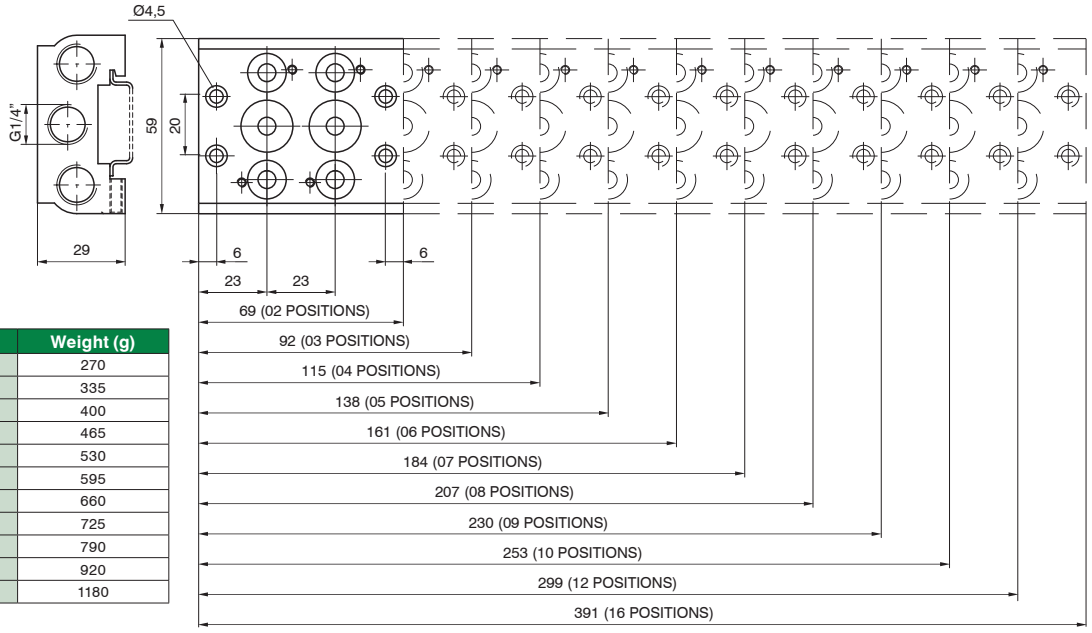


Weight 330 g
Minimum working pressure 2,5 bar

Manifold (Valves 5/2 - 5/3)

Coding: 888.Ⓝ

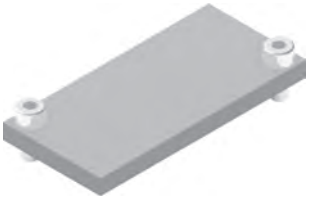
Ⓝ	NO. POSITIONS
	02 = 2 positions
	03 = 3 positions
	04 = 4 positions
	05 = 5 positions
	06 = 6 positions
	07 = 7 positions
	08 = 8 positions
	09 = 9 positions
	10 = 10 positions
	12 = 12 positions
	16 = 16 positions

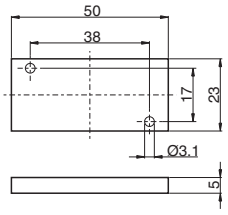


No. positions	Weight (g)
02	270
03	335
04	400
05	465
06	530
07	595
08	660
09	725
10	790
12	920
16	1180

Closing plate

Coding: 888.00



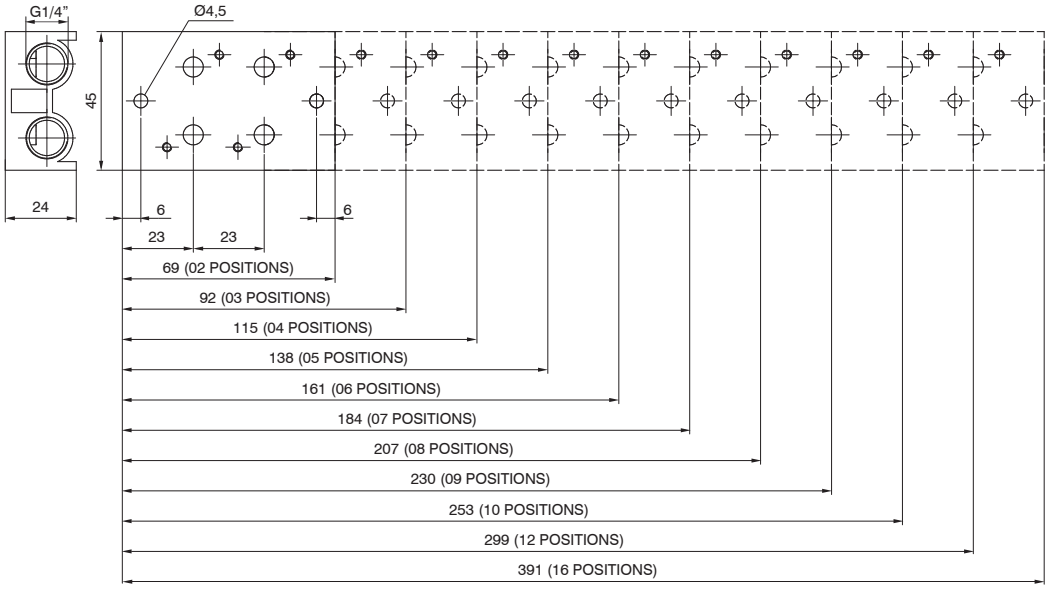


Weight 18 g
Closing plate supplied complete with 2 fixing screws to the manifold and 2 fixing screws to the multi-pin base

Manifold (Valves 3/2)

Coding: 8883.Ⓝ

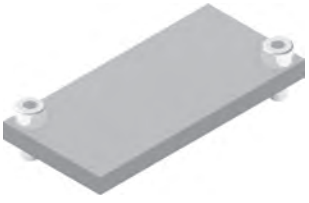
Ⓝ	NO. POSITIONS
	02 = 2 positions
	03 = 3 positions
	04 = 4 positions
	05 = 5 positions
	06 = 6 positions
	07 = 7 positions
	08 = 8 positions
	09 = 9 positions
	10 = 10 positions
	12 = 12 positions
	16 = 16 positions

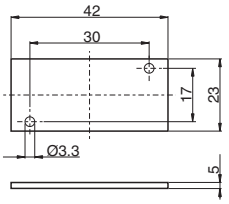


No. positions	Weight (g)
02	270
03	335
04	400
05	465
06	530
07	595
08	660
09	725
10	790
12	920
16	1180

Closing plate (Valves 3/2)

Coding: 8883.00



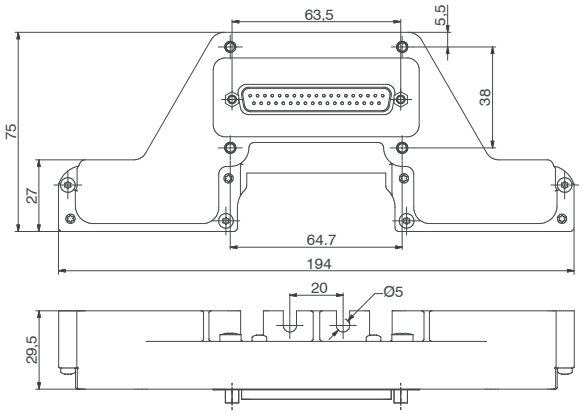


Weight 10 g
Closing plate supplied complete with 2 fixing screws to the manifold

Endplate, 37 Poles IP65

Coding: 888M.37.10

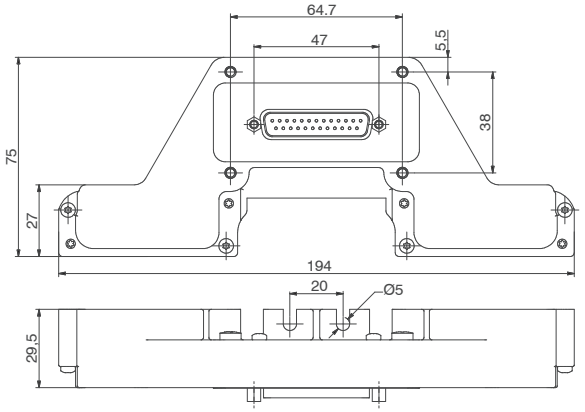
Weight 186 g
The IP65 protection is obtained by IP65 Pneumax cable.
Code complete with assembled endplate and 4 manifold fixing screws, previously mounted on the Manifold.



Endplate, 25 Poles IP65

Coding: 888M.25.10

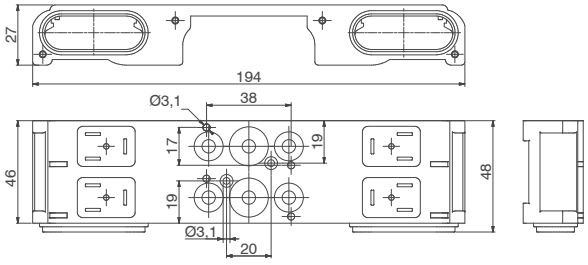
Weight 181 g
The IP65 protection is obtained by IP65 Pneumax cable.
Code complete with assembled endplate and 4 manifold fixing screws, previously mounted on the Manifold.



Modular base, 2 positions IP65

Coding: 888M.02.BM

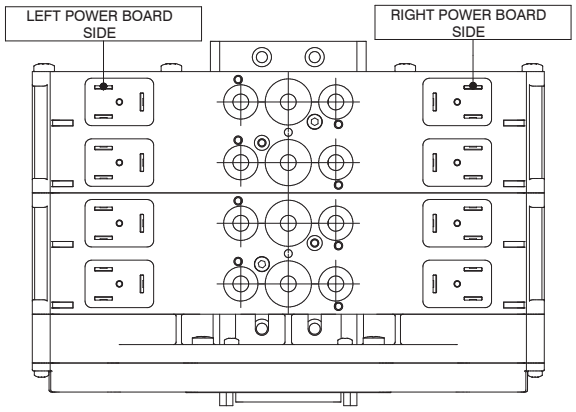
Weight 220 g
Complete with seals and fixing screws
Usable only for 5/2 and 5/3 Distributors



Left and Right Power board PNP 24 VDC

Coding: 888M.Ⓝ.Ⓣ

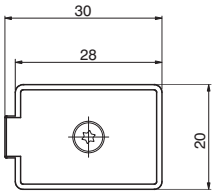
Ⓝ	NO. POSITIONS
	04 = 4 positions
	08 = 8 positions
	12 = 12 positions
	16 = 16 positions
Ⓣ	TYPE
	00 = Left
	01 = Right



No. positions	Weight (g)
04	11.2
08	22.4
12	33.6
16	44.8

Closing plate

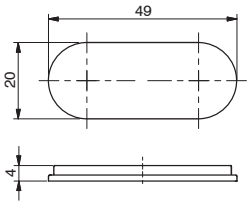
Coding: 888M.22.PC



Weight 3 g
Closing plate supplied complete with 1 Seal and fixing screw with O ring
Maximum fixing torque for fittings: 0,35Nm

Multi-pin base plug

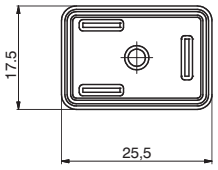
Coding: 888M.T



Weight 2,6 g
Complete with: Nr. 1 Plug, Nr. 2 Fixing screws

Seals

Coding: 888M.22.G



Weight 0,52 g

In line cable complete with connector, IP40

Coding: 2400.Ⓒ.Ⓛ.00

Ⓒ	CONNECTOR
	25 = 25 poles
	37 = 37 poles
Ⓛ	CABLE LENGTH
	03 = 3 meters
	05 = 5 meters
	10 = 10 meters

Cable complete with connector, 25 Poles, IP65

Coding: 2300.25.Ⓛ.Ⓒ

Ⓛ	CABLE LENGTH
	03 = 3 meters
	05 = 5 meters
	10 = 10 meters
Ⓒ	CONNECTOR
	10 = Stand alone
	90 = 90° Angle

Cable complete with connector, 37 Poles, IP65

Coding: 2400.37.Ⓛ.Ⓒ

Ⓛ	CABLE LENGTH
	03 = 3 meters
	05 = 5 meters
	10 = 10 meters
Ⓒ	CONNECTOR
	10 = Stand alone
	90 = 90° Angle

Manifold layout Configuration Point to Point

3/2 valves

V22	P (point to point)	–	–	...

Nr. POSITIONS:

A= 02 positions
B= 03 positions
C= 04 positions
D= 05 positions
E= 06 positions
F= 07 positions
G= 08 positions
H= 09 positions
I= 10 positions
M= 12 positions
Q= 16 positions

VOLTAGE:

A= 12 V DC
B= 24 V DC
C= 24 V (50-60 Hz)
D= 110 V (50-60 Hz)
E= 230 V (50-60 Hz)
Z= without coil

SHORT CODE FUNCTION / CONNECTION :

G1= EV 3/2 SOL.-SPRING G1/8" N.O.
G2= EV 3/2 SOL.-SPRING G1/4" N.O.
H1= EV 3/2 SOL.-SPRING G1/8" N.C.
H2= EV 3/2 SOL.-SPRING G1/4" N.C.

L1= EV 3/2 SOL.-SPRING G1/8" N.O. EXT. FEED.
M1= EV 3/2 SOL.-SPRING G1/8" N.C. EXT. FEED.

N1= EV 3/2 SOL.-SOL. G1/8"
N2= EV 3/2 SOL.-SOL. G1/4"
P1= EV 3/2 SOL.-SOL. G1/8" EXT. FEEDING

T4= VALVE SPACE PLUG 3/2

5/2 valves

V22	P (point to point)	–	–	...

Nr. POSITIONS:

A= 02 positions
B= 03 positions
C= 04 positions
D= 05 positions
E= 06 positions
F= 07 positions
G= 08 positions
H= 09 positions
I= 10 positions
M= 12 positions
Q= 16 positions

VOLTAGE:

A= 12 V DC
B= 24 V DC
C= 24 V (50-60 Hz)
D= 110 V (50-60 Hz)
E= 230 V (50-60 Hz)
Z= without coil

SHORT CODE FUNCTION / CONNECTION :

A1= S.V. 5/2 SOL.-SPRING G1/8"
A2= S.V. 5/2 SOL.-SPRING G1/4"
D1= S.V. 5/2 SOL.-SPRING G1/8" EXT. FEED.
B1= S.V. 5/2 SOL.-SOL. G1/8"
B2= S.V. 5/2 SOL.-SOL. G1/4"
E1= S.V. 5/2 SOL.-SOL. G1/8" EXT. FEED.
C1= S.V. 5/3 CC SOL.-SOL. G1/8"
C2= S.V. 5/3 CC SOL.-SOL. G1/4"
F1= S.V. 5/3 CC SOL.-SOL. G1/8" EXT. FEED.
C3= S.V. 5/3 OC SOL.-SOL. G1/8"
C4= S.V. 5/3 OC SOL.-SOL. G1/4"
F3= S.V. 5/3 OC SOL.-SOL. G1/8" EXT. FEED.
C5= S.V. 5/3 PC SOL.-SOL. G1/8"
C6= S.V. 5/3 PC SOL.-SOL. G1/4"
F5= S.V. 5/3 PC SOL.-SOL. G1/8" EXT. FEED.
T3= VALVE SPACE PLUG

Manifold layout Configuration Multi-pin

V22	M (Multi-pin)	– –	–	–	...

LEFT ENDPLATES

P2= 25 poles (max. 11 S.E.)
P3= 37 poles (max. 16 S.E.)

LEFT BOARD SIGNALS

C= 04 positions
G= 08 positions
M= 12 positions
Q= 16 positions

RIGHT BOARD SIGNALS

C= 04 positions
G= 08 positions
M= 12 positions
Q= 16 positions
00= no board

SHORT CODE FUNCTION / CONNECTION :

A1= S.V. 5/2 SOL.-SPRING G1/8"
A2= S.V. 5/2 SOL.-SPRING G1/4"
D1= S.V. 5/2 SOL.-SPRING G1/8" EXT. FEEDING
B1= S.V. 5/2 SOL.-SOL. G1/8"
B2= S.V. 5/2 SOL.-SOL. G1/4"
E1= S.V. 5/2 SOL.-SOL. G1/8" EXT. FEEDING
C1= S.V. 5/3 CC SOL.-SOL. G1/8"
C2= S.V. 5/3 CC SOL.-SOL. G1/4"
F1= S.V. 5/3 CC SOL.-SOL. G1/8" EXT. FEEDING
C3= S.V. 5/3 OC SOL.-SOL. G1/8"
C4= S.V. 5/3 OC SOL.-SOL. G1/4"
F3= S.V. 5/3 OC SOL.-SOL. G1/8" EXT. FEEDING
C5= S.V. 5/3 PC SOL.-SOL. G1/8"
C6= S.V. 5/3 PC SOL.-SOL. G1/4"
F5= S.V. 5/3 PC SOL.-SOL. G1/8" EXT. FEEDING
T1= VALVE SPACE PLUG
+ Nr. 2 ELECTRICAL SPACE PLUGS

Serial manifold layout (for the serial system node, see the Optyma-F Series)

V22	S (Serial)	– –	–	– –	–	–	...

INPUT MODULE

A= None
D1= 8IN DIGITAL MODULE M8
D2= 16IN DIGITAL MODULE D-SUB 25 P
T1= 2IN ANALOG MODULE 0-5V
T2= 2IN ANALOG MODULE 0-10V
C1= 2IN ANALOG MODULE 0-20mA
C1= 2IN ANALOG MODULE 4-20mA

SERIAL NODE

C3= CANopen® 32 OUT
D3= DeviceNet 32 OUT
P3= PROFIBUS DP 32 OUT
A3= EtherCAT® 32 OUT
I3= EtherNet/IP 32 OUT
N3= PROFINET IO RT 32 OUT

LEFT BOARD SIGNALS

C= 04 positions
G= 08 positions
M= 12 positions
Q= 16 positions

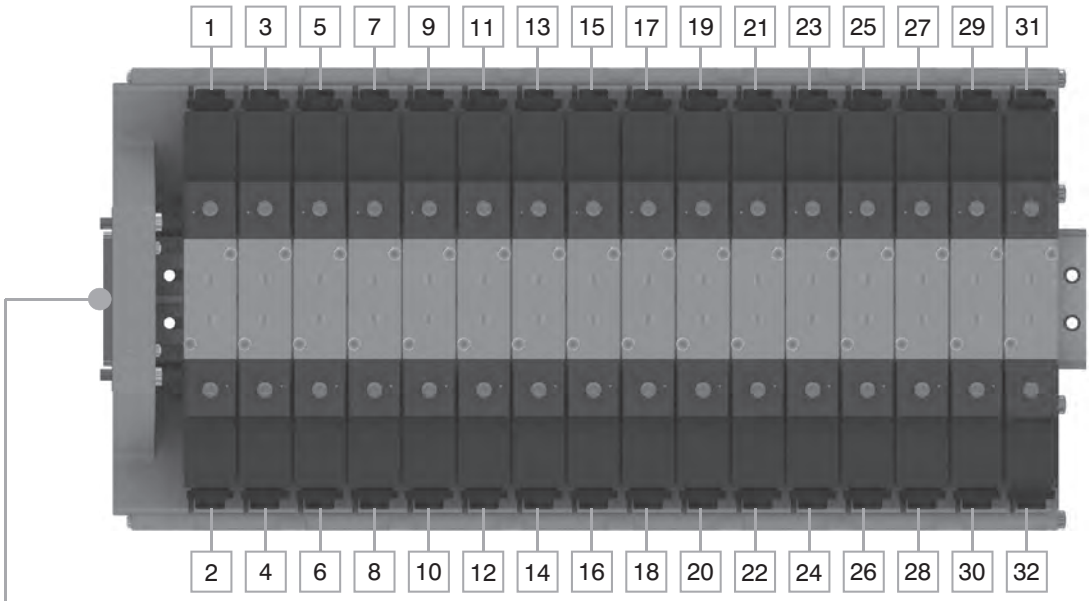
RIGHT BOARD SIGNALS

C= 04 positions
G= 08 positions
M= 12 positions
Q= 16 positions
00= no board

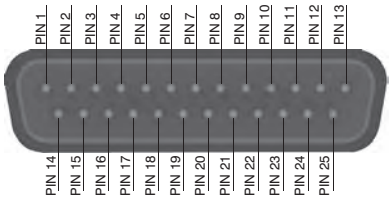
SHORT CODE FUNCTION / CONNECTION :

A1= S.V. 5/2 SOL.-SPRING G1/8"
A2= S.V. 5/2 SOL.-SPRING G1/4"
D1= S.V. 5/2 SOL.-SPRING G1/8" EXT. FEED.
B1= S.V. 5/2 SOL.-SOL. G1/8"
B2= S.V. 5/2 SOL.-SOL. G1/4"
E1= S.V. 5/2 SOL.-SOL. G1/8" EXT. FEED.
C1= S.V. 5/3 CC SOL.-SOL. G1/8"
C2= S.V. 5/3 CC SOL.-SOL. G1/4"
F1= S.V. 5/3 CC SOL.-SOL. G1/8" EXT. FEED.
C3= S.V. 5/3 OC SOL.-SOL. G1/8"
C4= S.V. 5/3 OC SOL.-SOL. G1/4"
F3= S.V. 5/3 OC SOL.-SOL. G1/8" EXT. FEED.
C5= S.V. 5/3 PC SOL.-SOL. G1/8"
C6= S.V. 5/3 PC SOL.-SOL. G1/4"
F5= S.V. 5/3 PC SOL.-SOL. G1/8" EXT. FEED.
T1= VALVE SPACE PLUG
+ Nr. 2 ELECTRICAL SPACE PLUGS

NOTE:
When constructing the configuration, please consider that the maximum number of valves that can be mounted on the manifold is 16, regardless of the valve type.
Any valve position presents two electrical connections: in case of use of monostable valves(A1-A2) it will be necessary to assemble a plug to protect the unused electrical connection.
The correspondence between the electrical signal and its location on the manifold is showed in the following diagrams.

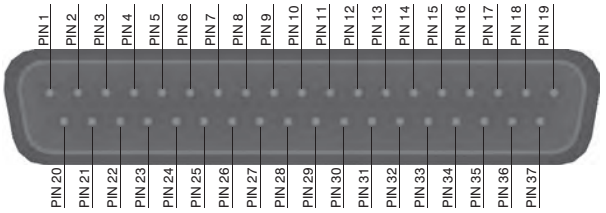


Connector 25 Poles from 1 to 11
Positions E.V. Bistable / Monostable



1 - 22 = SIGNALS
23 - 24 = GND
25 = NC

Connector 37 Poles from 1 to 16
Positions E.V. Bistable / Monostable



1 - 32 = SIGNALS
33 - 35 = GND
36 - 37 = NC

Assembly sequence