Series 1000 M12 - Size 1, 2 & 3

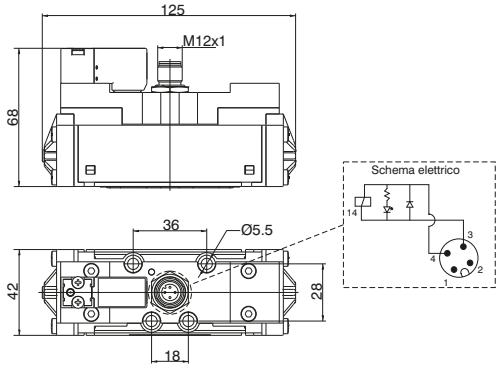
General

The ISO 5599/1 Solenoid valves Series 1000 M12 are available in three sizes with flow rates from 900 Nl/min for size 1 up to the 3600 Nl/min for size 3.
The standard features of the ISO valves are still included, however, they are now combined with a M12 electrical connector located in the middle of the valve to manage the electrical signals.
Versions are available to suit valves with both single and double 24VDC solenoids complete with IP65 protection.
All version are supplied with LED indicators
"Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power-Directional control valves-Measurement of shifting time"

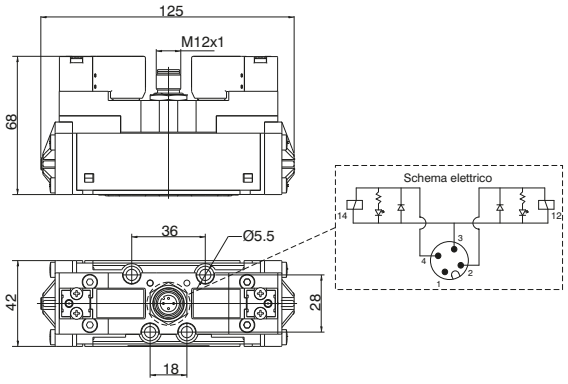
Electrical characteristics

Electrical connector M12x1
Protection degree IP65
Input voltage 24VDC
Nominal power 2,3W
LED indentification

Monostable version



Bistable version



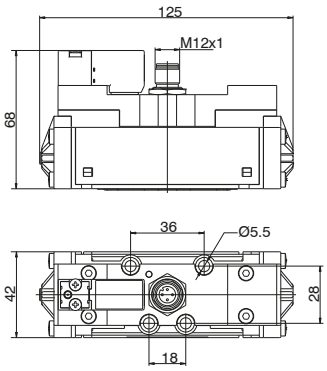
Solenoid - Spring

Coding: 1111.52.3.9.T

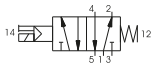
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2.5
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	900
Responce time according to ISO 12238, activation time (ms)	16
Responce time according to ISO 12238, deactivation time (ms)	122

Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001

T	COIL VOLTAGE
	12P = 24VDC



Weight 350 g



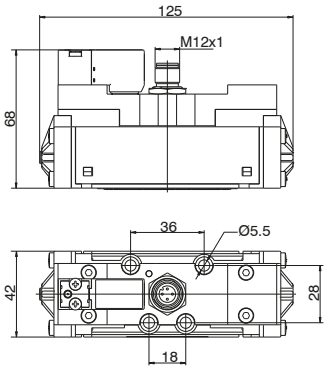
Solenoid-Differential

Coding: 1111.52.3.6.T

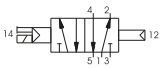
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	900
Responce time according to ISO 12238, activation time (ms)	32
Responce time according to ISO 12238, deactivation time (ms)	51

Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001

T	COIL VOLTAGE
	12P = 24VDC



Weight 356 g



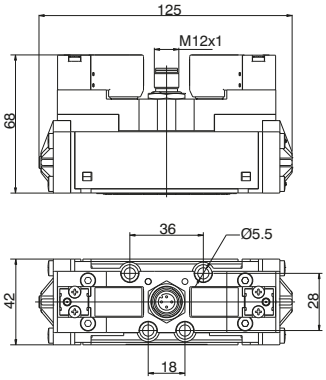
Solenoid-Solenoid 5/2

Coding: 1111.52.3.5.T

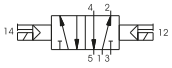
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	1.5
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	900
Responce time according to ISO 12238, activation time (ms)	13
Responce time according to ISO 12238, deactivation time (ms)	14

Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001

T	COIL VOLTAGE
	12P = 24VDC



Weight 390 g



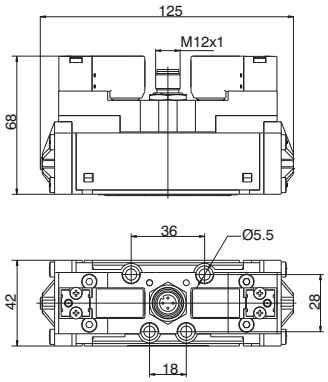
Solenoid-Solenoid 5/3

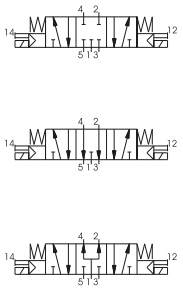
Coding: 1111.53.Ⓕ.3.5.Ⓣ

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	3
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	900
Responce time according to ISO 12238, activation time (ms)	18 (Closed centres) 18 (Open centres) 19 (Pressured centres)
Responce time according to ISO 12238, deactivation time (ms)	19 (Closed centres) 20 (Open centres) 18 (Pressured centres)

Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001

Ⓕ	FUNCTION
	31 = Closed centres
	32 = Open centres
	33 = Pressured centres
Ⓣ	COIL VOLTAGE
	12P = 24VDC





Weight 392 g

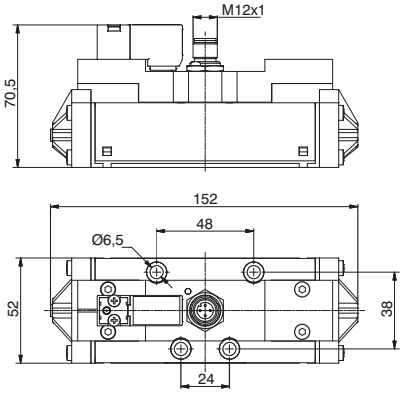
Solenoid - Spring

Coding: 1112.52.3.9.Ⓣ

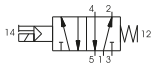
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2.5
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	1600
Responce time according to ISO 12238, activation time (ms)	24
Responce time according to ISO 12238, deactivation time (ms)	124

Ⓣ	COIL VOLTAGE
	12P = 24VDC

Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001



Weight 510 g



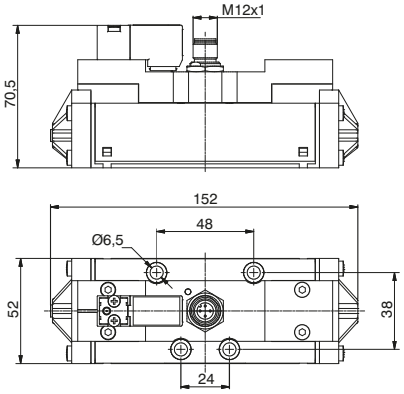
Solenoid-Differential

Coding: 1112.52.3.6.Ⓣ

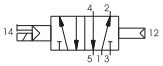
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	1600
Responce time according to ISO 12238, activation time (ms)	37
Responce time according to ISO 12238, deactivation time (ms)	90

Ⓣ	COIL VOLTAGE
	12P = 24VDC

Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001



Weight 515 g



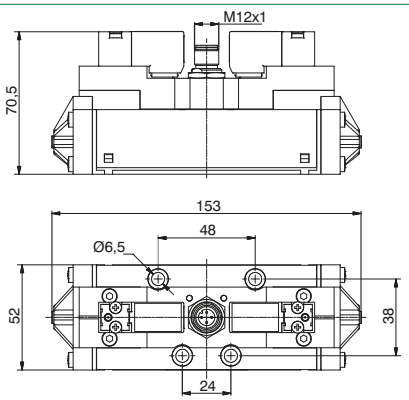
Solenoid-Solenoid 5/2

Coding: 1112.52.3.5.Ⓣ

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	1.5
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	1600
Responce time according to ISO 12238, activation time (ms)	17
Responce time according to ISO 12238, deactivation time (ms)	20

Ⓣ	COIL VOLTAGE
	12P = 24VDC

Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001



Weight 550 g

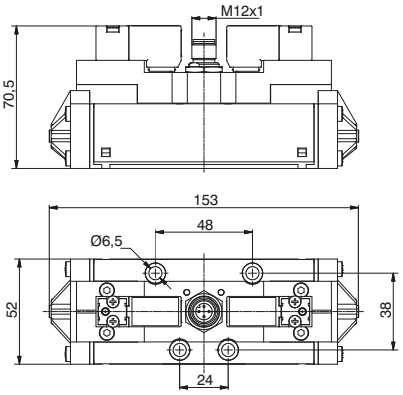
Solenoid-Solenoid 5/3

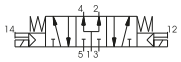
Coding: 1112.53.Ⓕ.3.5.Ⓣ

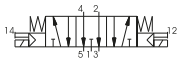
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	3
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	1600
Responce time according to ISO 12238, activation time (ms)	18 (Closed centres) 18 (Open centres) 20 (Pressured centres)
Responce time according to ISO 12238, deactivation time (ms)	112 (Closed centres) 106 (Open centres) 118 (Pressured centres)

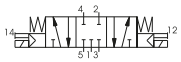
Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001

Ⓕ	FUNCTION
	31 = Closed centres
	32 = Open centres
	33 = Pressured centres
Ⓣ	COIL VOLTAGE
	12P = 24VDC









Weight 560 g

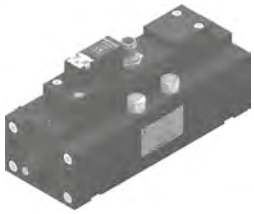
Solenoid - Spring

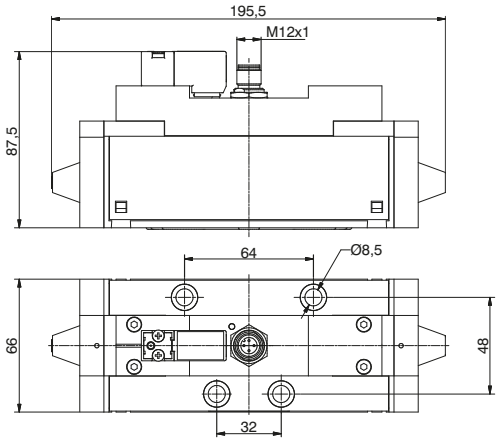
Coding: 1113.52.3.9.Ⓣ

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2.5
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	3600
Responce time according to ISO 12238, activation time (ms)	46
Responce time according to ISO 12238, deactivation time (ms)	254

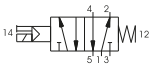
Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001

Ⓣ	COIL VOLTAGE
	12P = 24VDC





Weight 1360 g



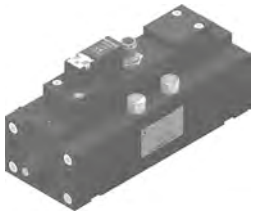
Solenoid-Differential

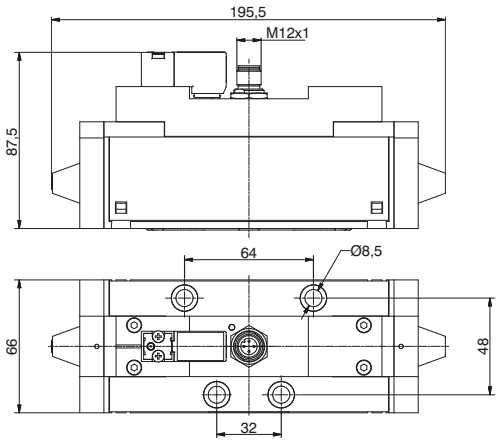
Coding: 1113.52.3.6.Ⓣ

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	3600
Responce time according to ISO 12238, activation time (ms)	78
Responce time according to ISO 12238, deactivation time (ms)	180

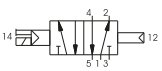
Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001

Ⓣ	COIL VOLTAGE
	12P = 24VDC





Weight 1360 g



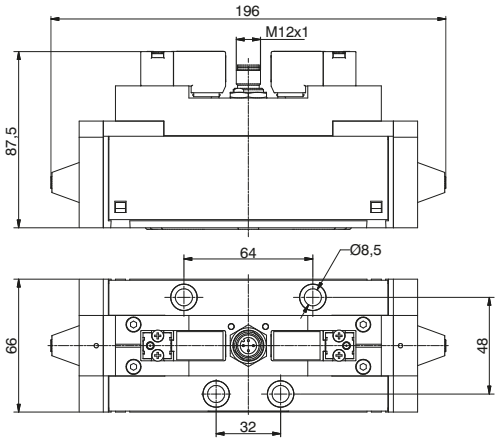
Solenoid-Solenoid 5/2

Coding: 1113.52.3.5.T

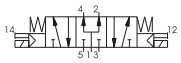
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	1.5
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	3600
Responce time according to ISO 12238, activation time (ms)	32
Responce time according to ISO 12238, deactivation time (ms)	37

Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001

T	COIL VOLTAGE
	12P = 24VDC



Weight 1370 g



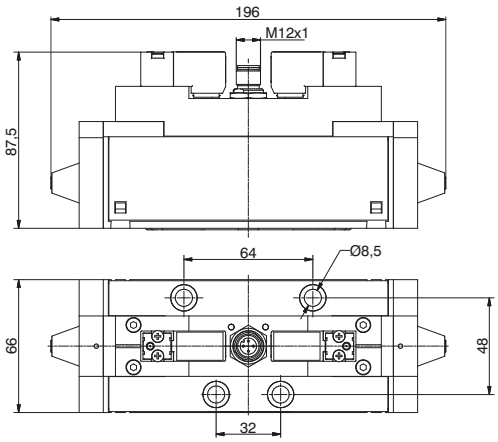
Solenoid-Solenoid 5/3

Coding: 1113.53.F.3.5.T

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	3
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	3600
Responce time according to ISO 12238, activation time (ms)	30 (Closed centres) 30 (Open centres) 32 (Pressured centres)
Responce time according to ISO 12238, deactivation time (ms)	305 (Closed centres) 230 (Open centres) 270 (Pressured centres)

Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001

T	COIL VOLTAGE
	12P = 24VDC



Weight 1380 g