

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 NI/min for size 1 up to the 3600 NI/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.

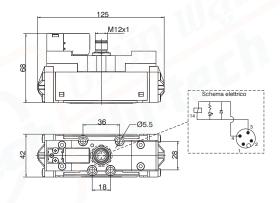
All version are supplied with LED indicators

"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"

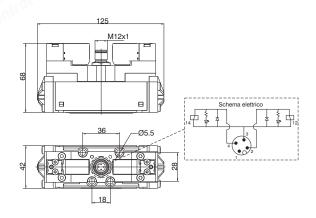
Electrical characteristics

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

Monostable version



Bistable version



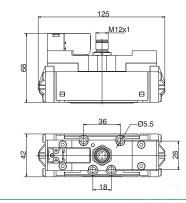


Solenoid - Spring

Operatio	onal characteristics	COI	L VOLT	AGE
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous	12P	=	24VDC
Max working pressure (bar)	10			
Minimum piloting pressure (bar)	2.5			
Temperature °C	-5 ÷ +50			
Flow rate at 6 bar with $\Delta p=1$ (NI/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





Weight 350 g

Solenoid-Differential

Operati	onal 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	- <mark>5 ÷ +</mark> 50	
Flow rate at 6 bar with $\Delta p=1$ (NI/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



1111.52.3.5.

Coding:

Solenoid-Solenoid 5/2

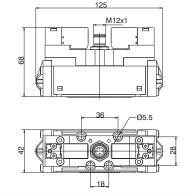
Weight 356 g

			-			
Operatio	onal characteristics	0	COI	VOLT	AGE	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous	•	12P	=	24VDC	
Max working pressure (bar)	10					
Minimum piloting pressure (bar)	1.5					
Temperature °C	-5 ÷ +50					
Flow rate at 6 bar with $\Delta p=1$ (NI/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



Weight 390 g



. 18.



M12

1111.52.3.6.

24VDC

Coding:

12P =

COIL VOLTAGE



Fluid

Solenoid-Solenoid 5/3

Max working pressure (bar)

Temperature °C

Minimum piloting pressure (bar)

Flow rate at 6 bar with $\Delta p=1$ (NI/min)

Responce time according to ISO 12238, activation time (ms)

Responce time according to ISO 12238, deactivation time (ms)

Coding: 1111.53.

 FUNCTION

 31 = Closed centres

 32 = Open centres

 33 = Pressured centres

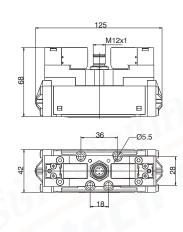
 COIL VOLTAGE

 12P = 24VDC

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

Operational characteristics





Filtered air. No lubrication needed, if applied it shall be continuous

10

3 -5 ÷ +50

900

18 (Closed centres) 18 (Open centres) 19 (Pressured centres)

19 (Closed centres)

20 (Open centres) 18 (Pressured centres)

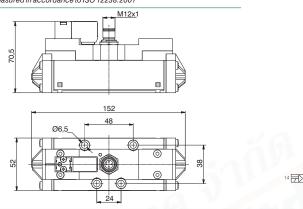
Weight 392 g



1112.52.3.9. Coding:

Solenoid - Spring COIL VOLTAGE **Operational characteristics** Û 12P = 24VDC Fluid Filtered air. No lubrication needed, if applied it shall be continuous Max working pressure (bar) 10 Minimum piloting pressure (bar) 2.5 -5 ÷ +50 Temperature °C Flow rate at 6 bar with $\Delta p=1$ (NI/min) 1600 Responce time according to ISO 12238, activation time (ms) 24 124 Responce time according to ISO 12238, deactivation time (ms) Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001 M12x1





Weight 510 g

Solenoid-Differential

Coding: 1112.52.3.6.

24VDC

COIL VOLTAGE

14

Coding:

d1:

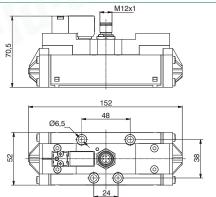
1112.52.3.5.

12P = 1 / W12

Operati	onal characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous	
Max working pressure (bar)	10	
Minimum piloting pressure (bar)	2	7
Temperature °C	-5 ÷ +50	1
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	1600	1
Responce time according to ISO 12238, activation time (ms)	37	1
Responce time according to ISO 12238, deactivation time (ms)	90	1

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







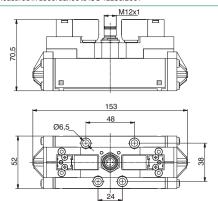
Solenoid-Solenoid 5/2

			-		
Operatio	onal characteristics	0	CC	DIL VOL	TAGE
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous		12	P =	24VDC
Max working pressure (bar)	10	1			
Minimum piloting pressure (bar)	1.5]			
Temperature °C	-5 ÷ +50]			
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	1600]			
Responce time according to ISO 12238, activation time (ms)	17				
Responce time according to ISO 12238, deactivation time (ms)	20]			

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



Weight 550 g







Fluid

Solenoid-Solenoid 5/3

Max working pressure (bar)

Temperature °C

Minimum piloting pressure (bar)

Flow rate at 6 bar with $\Delta p=1$ (NI/min)

Responce time according to ISO 12238, activation time (ms)

Responce time according to ISO 12238, deactivation time (ms)

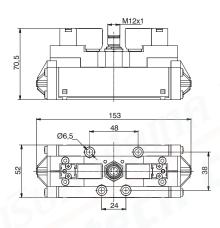
1112.53. 🗗 .3.5. 🛈 Coding:

FUNCTION 31 = Closed centres 6 32 = Open centres 33 = Pressured centres COIL VOLTAGE Ū 12P = 24VDC

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

Operational characteristics





Filtered air. No lubrication needed, if applied it shall be continuous

10

3 -5 ÷ +50

1600

18 (Closed centres) 18 (Open centres) 20 (Pressured centres)

112 (Closed centres)

Weight 560 g

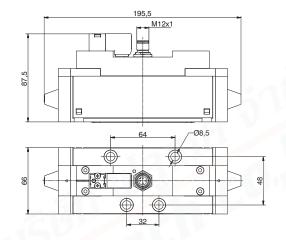


Coding: 1113.52.3.9.

Operati	onal characteristics	0	COI	L VOLT/	AGE
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous		12P	=	24VDC
Max working pressure (bar)	10				
Minimum piloting pressure (bar)	2.5				
Temperature °C	-5 ÷ +50				
Flow rate at 6 bar with $\Delta p=1$ (NI/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





Weight 1360 g

Solenoid - Spring

1113.52.3.6.

24VDC

14

12

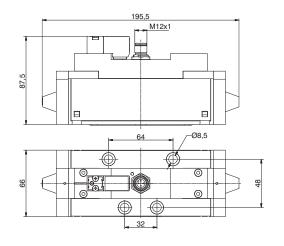
Coding:

Solenoid-Differential

Operational	characteristics	0	COIL	VOLT/	AGE
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous		12P	=	24V
Max working pressure (bar)	10				
Minimum piloting pressure (bar)	2				
Temperature °C	-5 ÷ +50				
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	3600				
Responce time according to ISO 12238, activation time (ms)	78				
Responce time according to ISO 12238, deactivation time (ms)	180				







Weight 1360 g

AIR DISTRIBUTION



Fluid

Temperature °C

Solenoid-Solenoid 5/2

Flow rate at 6 bar with $\Delta p=1$ (NI/min)

Responce time according to ISO 12238, activation time (ms)

Responce time according to ISO 12238, deactivation time (ms)

Max working pressure (bar) Minimum piloting pressure (bar) Coding: 1113.52.3.5.

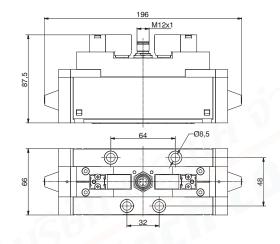
	•	COIL	VOLTA	GE	
eeded, if applied it shall be continuous		12P	=	24VDC	
10					
15					

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

Operational characteristics

Filtered air. No lubrication ne





-5 ÷ +50

3600

32

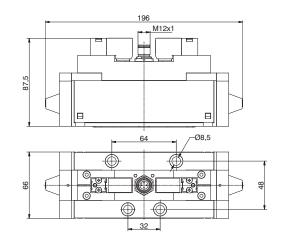
37

Weight 1370 g

Solenoid-Solenoid 5/3		Cod	ling:	1113.53.	5.0
Operatio	onal characteristics	A	COIL	VOLTAGE	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous		12P	= 24VDC	
Max working pressure (bar)	10				
Minimum piloting pressure (bar)	3				
Temperature °C	-5 ÷ +50				
Flow rate at 6 bar with $\Delta p=1$ (NI/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







Weight 1380 g



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