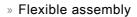
### CONTROL > Valve Island Series 3 Fieldbus

# Valve Island Series 3 Fieldbus

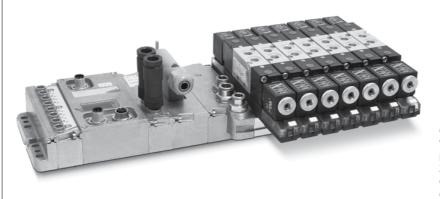
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Fieldbus system combined with electro-pneumatically operated valves Series 3 ports G1/8. Interface with: Profibus-DP, CANopen, DeviceNet. Valve functions: 2x3/2, 5/2 and 5/3 way C.O. C.C. C.P.



- » Easy installation
- » Conform with standards EN-61326-1 and EN-61010-1



It is possible to combine the pneumatic electric modules by simply attaching them to each other up to a maximum of 9 valve positions. The pneumatic modularity of 2 and 3 positions offers the possibility to create manifolds with different pressure/ exhaust supplies.

This Fieldbus system, realized with the electropneumatically operated valves Series 3 (G1/8 ports), is delivered completely assembled and tested and it can accomodate up to 9 valve positions. Moreover, it offers the possibility to manage up to 64 I/O.

#### **GENERAL DATA AND ELECTRIC CHARACTERISTICS**

Valve construction	spool type
Valve functions	5/2 - 5/3 C.C. C.O. C.P 2x3/2 N.O 2x3/2 N.C 1 3/2 N.O.+1 3/2 N.C.
Materials	AL body, stainless steel spool, NBR seals, technopolymer
Ports Mounting Installation	valve = G1/8 - manifold = G3/8 through holes in the valve body in any position
Operating temperature	0-50 °C
Nominal flow rate	Qn 700 Nl/min
Nominal diameter	7 mm
Fluid	Filtered air, without lubrication. If lubricated air is used, it is recommended to use ISO VG32 oil and to never interrupt the lubrication.
FieldBus protocol	3F8: Profibus-DP - 3R8: DeviceNet - 3G8: CANopen
Fieldbus signalling Led	3F8: 1 led green RUN, 1 led red DIA, 1 led red BF 3R8: 1 led green IO, 1 led red NS, 1 led red MS 3G8: 1 led green RUN, 1 led red DIA, 1 led red BF
Valve signalling Led	yellow led
Logical supply voltage	24VDC (-15% / + 20% with no connected inputs, or consider the connected inputs supply range)
Power supply voltage	24VDC (for the tolerance, consider the total loads of the connected inputs)
Duty cycle	ED 100%
Maximum number of nodes	3F8: 32/127 - 3D8: 64 - 3C8: 127
Maximum Baud rate	3F8: 12 Mbit/sec - 3D8: 500 Kbit/sec - 3C8: 1 Mbit/sec
Solenoid power consumption	3W
Electric power supply connector	M12
Number of digital input / output	64 / 64
Maximum input / output absorption	1,5 A / 3 A (the total absorption must never exceed 3,5 A)
Protections	against overload and reverse polarity
Protection class	IP65



CONTROL

CODING EXAMPLE - FIELDBUS VERSION				
3F 8 -	2A - BC - EBB - BCT2M2B - U77			
3F	Connection: 3F = Profibus-DP 3R = DeviceNet 3G = CANopen			
8	Solenoid valves ports: 8 = 1/8			
2A	Electric inputs modules: 0 = no module A = module 8 input M8			
BC	Electric outputs modules: 0 = no module B = 4 outputs M12 duo C = 8 outputs SUB-D 37 pin D = 16 outputs SUB-D 37 pin E = 24 outputs SUB-D 37 pin F = 32 outputs SUB-D 37 pin			
EBB	Sub-bases composition: see page 2.3.07.03			
BCT2M2B	Valves functions: see page 2.3.07.04			
U77	Solenoid type: Material Dimension Voltage G = PA 7 = 22 x 22 7 = 24V DC U = PET			
	Versions: = standard S = special (to be specified)			

3F8-2A-BC-EBB-BCT2M2B-U77 = Valve Island with Fieldbus node Profibus-DP, n°2 inlet mod., n°1 outlet B mod. + n°1 outlet C mod., subbase of 6 pos., valve composed by n°3 mod. of 2 pos., n°1 solenoid valve (SV) mod. B, n°1 SV mod. C, separation channels 1/3/5, n°2 SV mod. M, n°2 SV mod. B, solenoids mod. U77.



New

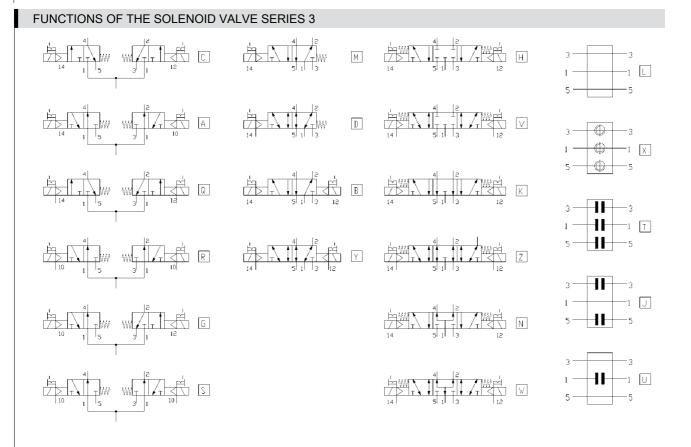
#### TABLE FOR THE CONFIGURATION OF VALVE ISLAND SERIES 3 FIELDBUS

The valve island code is always read from left to right, the electrical module is positioned to the side of the pneumatic manifold, as on the photo on page 2.3.07.01. It is also possible to create 2 or more pressure/exhaust zones in the valve island by inserting the diaphragm Mod. CNVL-TP between the modules.

The letter represents the number of valve positions	Number of valve positions, showing the combination of the modules from which the valve island is built.	Configuration code n° of positions	Configuration code of the sub-base
A = 2 pos.	(2)	Α	A - B
B = 3 pos.	(3)	В	A - B
C = 4 pos.	(2) (2)	С	A - B
D = 5 pos.	(3) (2) (2) (3)	D D	A - B A - D
E = 6 pos.	(3) (3) (2) (2) (2)	E	A - B B - B
F = 7 pos.	(2) (3) (2) (2) (2) (3) (3) (2) (2)	F F F	A - B B - B B - D
G = 8 pos.	(3) (3) (2) (2) (3) (3) (2) (2) (2) (2) (3) (2) (3)	G G G G	A - B A - D B - B B - D
H = 9 pos.	(3) (3) (3) (3) (2) (2) (2) (2) (3) (2)(2) (2) (2) (3) (2) (2) (2) (3) (2) (2) (2) (2) (3)	Н Н Н Н	A - B B - B B - D B - F B - F B - H

2





Mod

Mod.	Function	Actuation	Pilot supply	Working pressure (bar)	Pilot pressure (bar)	Code
338D-015-02	2 x 3/2 N.C.	solenoid/spring	Internal	2,5 ÷ 10	-	С
348D-015-02	2 x 3/2 N.O.	solenoid/spring	Internal	2,5 ÷ 10	-	Α
398D-015-02	1 3/2 NC + 1 3/2 NO	solenoid/spring	Internal	2,5 ÷ 10	-	G
358-015-02	5/2	solenoid/spring	Internal	2,5 ÷ 10	-	М
358-011-02	5/2	solenoid/solenoid	Internal	1,5 ÷ 10	-	В
368-011-02	5/3	solenoid/solenoid	Internal	2 ÷ 10	-	н
378-011-02	5/3	solenoid/solenoid	Internal	2 ÷ 10	-	к
388-011-02	5/3	solenoid/solenoid	Internal	2 ÷ 10	-	N
338D-E15-02	2 x 3/2 N.C.	solenoid/spring	External	-0,9 ÷ 10	2,5 ÷ 10	Q
348D-E15-02	2 x 3/2 N.O.	solenoid/spring	External	-0,9 ÷ 10	2,5 ÷ 10	R
398D-E15-02	1 3/2 NC + 1 3/2 NO	solenoid/spring	External	-0,9 ÷ 10	2,5 ÷ 10	S
358-E15-02	5/2	solenoid/spring	External	-0,9 ÷ 10	2,5 ÷ 10	D
358-E11-02	5/2	solenoid/solenoid	External	-0,9 ÷ 10	1,5 ÷ 10	Y
368-E11-02	5/3	solenoid/solenoid	External	-0,9 ÷ 10	2 ÷ 10	v
378-E11-02	5/3	solenoid/solenoid	External	-0,9 ÷ 10	2 ÷ 10	z
388-E11-02	5/3	solenoid/solenoid	External	-0,9 ÷ 10	2 ÷ 10	w
CNVL/1L	free position	-	-	-	-	L
CNVL-3P1	plate for supply and outlets	-	-	-	-	х
CNVL-3H-TP (x1)	diaphragm for supply (1)	-	-	-	-	U
CNVL-3H-TP (x2)	diaphragm for outlets (3-5)	-	-	-	-	J
CNVL-3H-TP (x3)	diaphragm for supply (1)and outlets (3-5)	-	-	-	-	т

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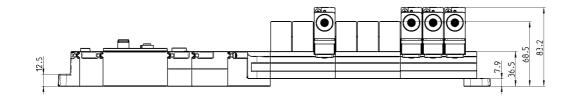
Valve Island - characteristics

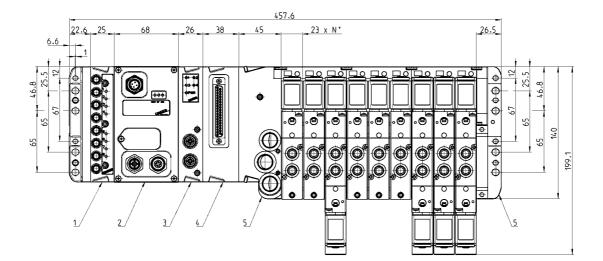
Bus-In Bus-Out system for connection to the Fieldbus network. Double electrical supplies (1 for control and 1 for power). Addressing of every node via rotary switches. Leds indicating the working state. Handling of a max n° of 64 inputs and 64 outputs (I/O). Electric outputs mod. on the right side of the node are available with connection M12 duo and/or Sub-D a 37 poles and connected to pneumatic sub-bases (max 9 pos. mono/bistable valves). It's possible to pilot other multipole island valves and/or systems, managed through digital signals, using connection cables 37/25 pin. Similarly, on the left side of the node it's possible to connect Input Mod. 8 (8 connections M8 every Mod.). All Mod. I/O can be easily inserted thanks to their direct connection to the plate. Manuals and configuration files are available on our website: www.camozzi.com in the Section Products/Download.

DRAWING LEGEND:

1 = digital inputs module 2 = Fieldbus module

- 3 = digital outputs module M12 connector
- 4 = digital outputs module connector 37 poles
- 5 = penumatic/electric interface module + foot







Digital output module (D-SUB - 37 pin) Mod. ME-xxxx-DD

# 2



GENERAL DATA

	ME-0032-DD	ME-0024-DD	ME-0016-DD	ME-0008-DD
Number of digital outputs	32	24	16	8
Connection	female D-SUB 37 poles			
Number of connectors	1	1	1	1
Dimensions	130 x 38 mm			
Type of signal	24 V DC PNP			
Overload protection	1 A every 8 outputs			
Power consumption without load	5 mA	5 mA	5 mA	5 mA
Protection class	IP65	IP65	IP65	IP65
Operating temperature	0°C ÷ 50 °C			
Material	Aluminium	Aluminium	Aluminium	Aluminium
Weight	100 g	100 g	100 g	100 g

Digital output module 2xM12 DUO, (4 outputs), Mod. ME-0004-DL



#### GENERAL DATA

Server British			
	ME-0004-DL		
Number of digital outputs	4		
Connection	M12 5 Poles Duo		
Number of connectors	2		
Dimensions	130 x 25 mm		
Signalling	1 Yellow Led for each single outlet 1 Green Led for power supply presence on the module		
Outlet voltage	24 V DC		
Type of signal	24 V DC PNP		
Overload protection - Supply voltage	total 900 mA		
Power consumption without load	10 mA		
Protection class	IP65		
Temperature	0°C ÷ 50 °C		
Material	Aluminium		
Weight	100 g		

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## Digital input Module Mod. ME-0800-DC\*

\* Not for DeviceNet

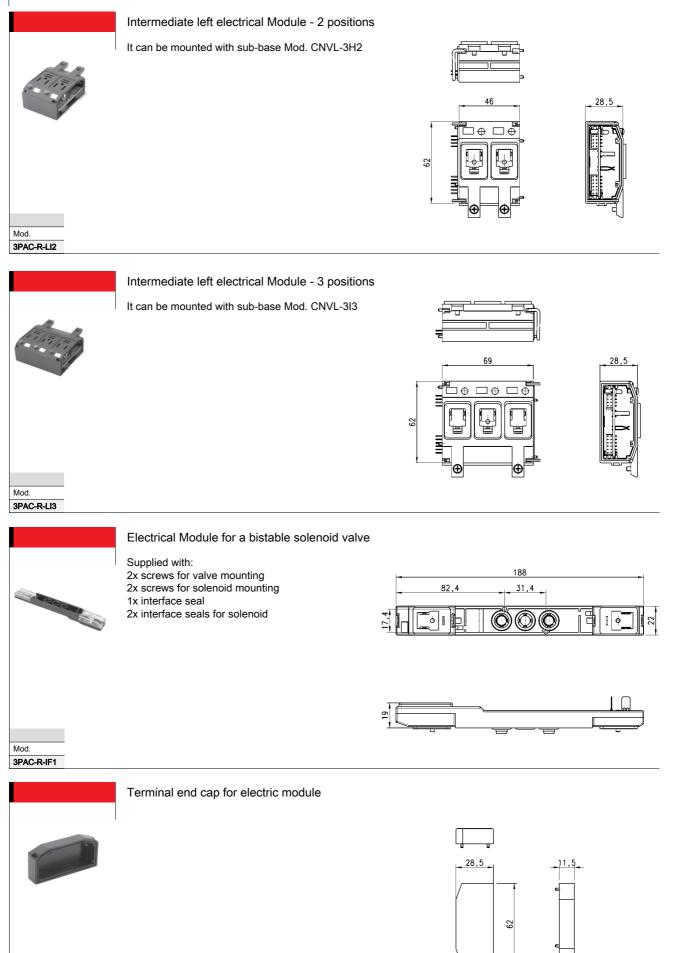


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GENERAL DATA		
Number of digital inputs	8	
Connection	M8 - 3 pin female	
Number of connectors	8	
Dimensions	130 x 25 mm	
Signalling	1 yellow led for each inlet	
Sensors supply	24VDC	
Overloaded protection	400 mA every 4 sensors	
Power consumption	10 mA	
Type of signal	PNP	
Protection class	IP65	
Operating temperature	0-50°C	
Material	Aluminium	
Weight	110 g	



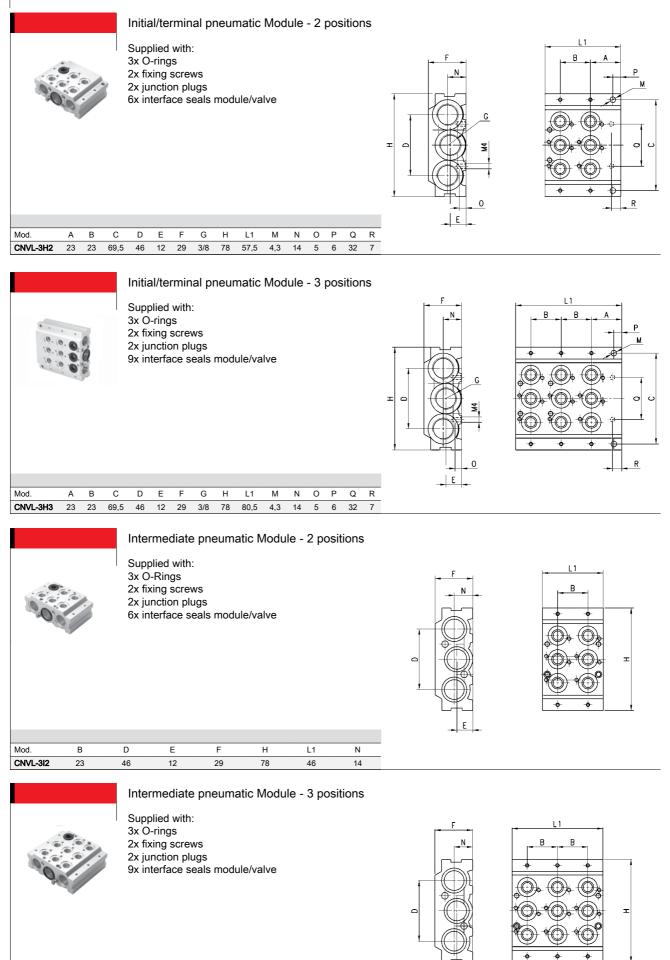
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Mod. 3PAC-R-TP1





Mod.

CNVL-3I3

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В

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L1

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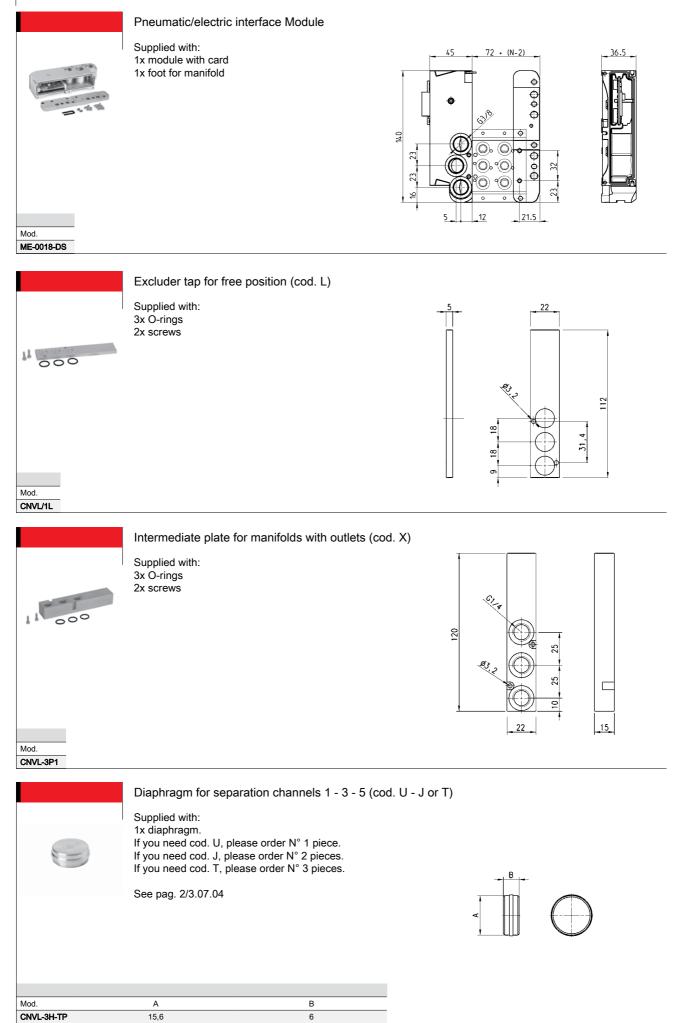
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