

# VALVE ISLANDS, MULTIPOLE AND FIELDBUS

## SERIES 3 PLUG-IN

Plug-In system for Series 3 solenoid valves, G1/8 port.  
 Valve functions: 2x3/2, 5/2 and 5/3-way CO CC CP.  
 Multipole with a 25-pin Sub-D connector.  
 It can interface with all major serial communication protocols.



- Flexible assembly through monostable and bistable 2 and 3 position modules
- Electrical connection and front pneumatic outputs
- Available protocols:
  - PROFIBUS-DP
  - DeviceNet
  - CANopen
  - EtherNet/IP
  - EtherCAT
  - PROFINET

The Multipole version of Series 3 Plug-In valve island can be easily installed thanks to the front position of the Sub-D connector. The accessories of the new connection system to the Series CX serial nets enable to handle up a multipole valve island by means of a Sub-D connector or through a node integrated in the island.  
 The modularity of the electric and pneumatic parts allows to install up to a maximum of 22 solenoids on 22 valve positions.

The electric and pneumatic modules have 2- and 3-position modularity. To optimize the signals distribution, electric modules are available for monostable and bistable valves. The pneumatic modularity enables the creation of zones with differentiated pressure.

### GENERAL DATA

<b>PNEUMATIC SECTION</b>	
<b>Valve construction</b>	Spool type with seals
<b>Valve functions</b>	5/2 - 5/3 CC - 5/3 CO - 5/3 CP - 2x3/2 NO - 2x3/2 NC - 1 3/2 NO + 1 3/2 NC
<b>Materials</b>	AL body, stainless steel spool, NBR seals, technopolymer
<b>Mounting</b>	Through-out holes in the manifold
<b>Ports</b>	Valve = G1/8 - manifold = G3/8
<b>Installation</b>	In any position
<b>Operating temperature</b>	from 0°C to 60°C (with dry air at -20°C)
<b>Nominal flow rate</b>	Qn 700 NL/min
<b>Nominal diameter</b>	7 mm
<b>Fluid</b>	Filtered air, class 7.4.4 according to ISO 8573-1-2010, without lubrication. If lubricated air is used, it is recommended to use ISO VG32 oil, and to never interrupt the lubrication.
<b>ELECTRICAL SECTION - MULTIPOLE VERSION</b>	
<b>Type of connection</b>	Multipole 25-pin male Sub-D
<b>Supply voltage</b>	24 V DC +/- 10%
<b>Max number of solenoids</b>	22 on 22 valve positions
<b>Signalling</b>	Yellow LED
<b>Duty cycle</b>	ED 100%
<b>Protection class</b>	IP65
<b>ELECTRICAL SECTION - FIELDBUS VERSION</b>	
<b>General characteristics</b>	See the section about the Series CX multi-serial module
<b>Max. absorption</b>	Digital outputs/analogic inputs and outputs 3A digital/analogic inputs 3 A
<b>Voltage tolerances</b>	Logic supply 24 V DC +/- 10% power supply 24 V DC +/- 10%

## Multipole version and multipole with sub-d adapter



In the Multipole version the front position of the 25 pin Sub-D connector makes the connection easier. The connectors with prewired cable, which are available in different lengths and with axial or radial orientation, simplify the electrical connection. The Island can be configured up to a max. of 22 solenoids, using monostable and bistable electrical modules, on 22 valve positions, for example 22 monostable solenoid valves.



Thanks to the 2- or 3-position pneumatic modularity, diaphragms and plates of supplementary supply, it is possible to create zones with differentiated pressure. The Multipole version of Series 3 valve island can be connected by means of a Sub-D adapter. In this way a standard Multipole Island can be inserted as expansion in the subnet of the Fieldbus version.

## Versions: Fieldbus with CPU module and expansion fieldbus



The Individual Fieldbus version of Series 3 can be interfaced through a specific module with the Series CX multi-serial module according to the different communication protocols (PROFIBUS-DP, DeviceNet, CANopen, EtherNet/IP, EtherCAT, PROFINET). Like the Multipole one, the Fieldbus version is able to create islands with 22 coils on 22 valve positions adding a wide range of electrical modules like digital/analog inputs/outputs of 0-10 V and 4-20 mA.



It is possible to insert Initial Subnet Modules in the version with CPU module. These Modules enable to create a subnet with tree structure or in series. On the subnet you can connect Expansion Islands. These expansions have the same possibilities to use the different electric modules, like digital and analog inputs and outputs and further Initial Subnet Modules. Also with this version the same rules as the CPU module and Multipole apply.

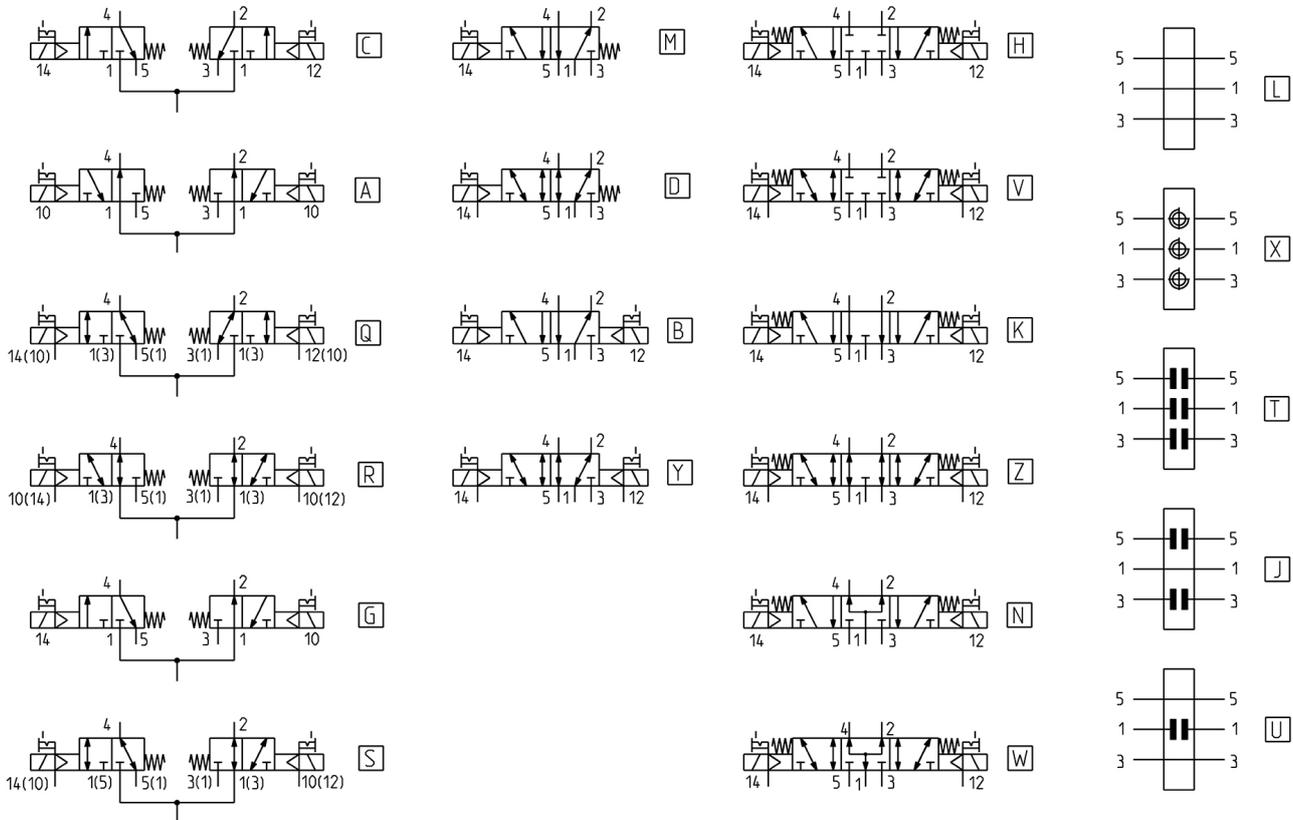
## CODING EXAMPLE - MULTIPOLE VERSION

<b>3</b>	<b>P</b>	<b>8</b>	<b>-</b>	<b>03A</b>	<b>-</b>	<b>BDACAC</b>	<b>-</b>	<b>2BC3MU2BMXU2B2M</b>	<b>-</b>	<b>G77</b>
<b>3</b>	SERIES									
<b>P</b>	TYPE P = Plug-In									
<b>8</b>	SIZE 8 = 1/8									
<b>03A</b>	CONNECTION: 000 = no connector/cable  CONNECTOR WITH CABLE AXIAL OUTPUT: 03A = 3 m 05A = 5 m 10A = 10 m 15A = 15 m 20A = 20 m 25A = 25 m  CONNECTOR WITH CABLE RADIAL OUTPUT: 03R = 3 m 05R = 5 m 10R = 10 m 15R = 15 m 20R = 20 m 25R = 25 m  CONNECTOR WITHOUT CABLE: 4XA = 25-pin axial 4XR = 25-pin radial									
<b>BDACAC</b>	CONFIGURATION OF SUBBASE A = 2 positions with bistable board B = 3 positions with bistable board C = 2 positions with monostable board D = 3 positions with monostable board									
<b>2BC3MU2BMXU2B2M</b>	VALVE FUNCTION E = empty position  M = 5/2 Monostable, internal servo-pilot supply B = 5/2 Bistable, internal servo-pilot supply C = 2 x 3/2 NC, internal servo-pilot supply A = 2 x 3/2 NO, internal servo-pilot supply G = 1 x 3/2 NC + 1 x 3/2 NO, internal servo-pilot supply H = 5/3 Closed Centres, internal servo-pilot supply K = 5/3 Exhaust Centres, internal servo-pilot supply N = 5/3 Pressure Centres, internal servo-pilot supply  D = 5/2 Monostable, external servo-pilot supply Y = 5/2 Bistable, external servo-pilot supply Q = 2 x 3/2 NC, external servo-pilot supply R = 2 x 3/2 NO, external servo-pilot supply S = 1 x 3/2 NC + 1 x 3/2 NO, external servo-pilot supply V = 5/3 Closed Centres, external servo-pilot supply Z = 5/3 Exhaust Centres, external servo-pilot supply W = 5/3 Pressure Centres, external servo-pilot supply  L = plate with closed free position X = supply plate and supplementary exhausts  T = diaphragm on channels 1, 3, 5 U = diaphragm in supply 1 J = diaphragm exhausts 3 and 5									
<b>G77</b>	SOLENOID MATERIAL G = PA U = PET									

VALVE ISLANDS, MULTIPOLE AND FIELDBUS  
**SERIES 3 PLUG-IN - CODING EXAMPLE**
**CODING EXAMPLE - FIELDBUS VERSION**
**3 S 8 - 01 - 2AQRS - BDACAC - 2BC3MU2BMXU2B2M - G77**

<b>3</b>	SERIES
<b>S</b>	CONNECTION S = Fieldbus
<b>8</b>	SIZE 8 = 1/8
<b>01</b>	PROTOCOL 01 = PROFIBUS-DP 02 = DeviceNet 03 = CANopen 04 = EtherNet/IP 05 = EtherCAT 06 = PROFINET 99 = Expansion Module
<b>2AQRS</b>	INPUT / OUTPUT MODULES 0 = no module A = 8 digital inputs M8 B = 4 digital inputs M8 C = 2 analog inputs 4-20 mA D = 2 analog inputs 0-10 V E = 1 analog input 4-20 mA + 1 input 0-10 V Q = 4 M12 duo digital outputs R = 2 analog outputs 4-20 mA T = 2 analog outputs 0-10 V U = 1 analog output 4-20 mA + 1 output 0-10 V V = 1 analog output 4-20 mA + 1 input 0-10 V Z = 1 analog output 4-20 mA + 1 input 4-20 mA K = 1 analog output 0-10 V + 1 input 0-10 V Y = 1 analog output 0-10 V + 1 input 4-20 mA S = Initial subnet module
<b>BDACAC</b>	CONFIGURATION OF SUBBASE A = 2 positions with bistable board B = 3 positions with bistable board C = 2 positions with monostable board D = 3 positions with monostable board
<b>2BC3MU2BMXU2B2M</b>	VALVE FUNCTION E = empty position  M = 5/2 Monostable, internal servo-pilot supply B = 5/2 Bistable, internal servo-pilot supply C = 2 x 3/2 NC, internal servo-pilot supply A = 2 x 3/2 NO, internal servo-pilot supply G = 1 x 3/2 NC + 1 x 3/2 NO, internal servo-pilot supply H = 5/3 Closed Centres, internal servo-pilot supply K = 5/3 Exhaust Centres, internal servo-pilot supply N = 5/3 Pressure Centres, internal servo-pilot supply  D = 5/2 Monostable, external servo-pilot supply Y = 5/2 Bistable, external servo-pilot supply Q = 2 x 3/2 NC, external servo-pilot supply R = 2 x 3/2 NO, external servo-pilot supply S = 1 x 3/2 NC + 1 x 3/2 NO, external servo-pilot supply V = 5/3 Closed Centres, external servo-pilot supply Z = 5/3 Exhaust Centres, external servo-pilot supply W = 5/3 Pressure Centres, external servo-pilot supply  L = plate with closed free position X = supply plate and supplementary exhausts  T = diaphragm on channels 1, 3, 5 U = diaphragm in supply 1 J = diaphragm exhausts 3 and 5
<b>G77</b>	SOLENOID MATERIAL G = PA U = PET

**FUNCTIONS OF SOLENOID VALVES SERIES 3**



FIELDBUS AND MULTIPLES SYSTEMS

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Mod.	Function	Actuation/return	Servo-pilot	Working pressure (bar)	Pilot pressure (bar)	Code
338D-015-02	2 x 3/2 NC	solenoid/spring	internal	2,5 ÷ 10	-	C
348D-015-02	2 x 3/2 NO	solenoid/spring	internal	2,5 ÷ 10	-	A
398D-015-02	1 x 3/2 NC + 1 x 3/2 NO	solenoid/spring	internal	2,5 ÷ 10	-	G
358-015-02	5/2 monostable	solenoid/spring	internal	2,5 ÷ 10	-	M
358-011-02	5/2 bistable	solenoid/solenoid	internal	1,5 ÷ 10	-	B
368-011-02	5/3 CC	solenoid/solenoid	internal	2 ÷ 10	-	H
378-011-02	5/3 CO	solenoid/solenoid	internal	2 ÷ 10	-	K
388-011-02	5/3 CP	solenoid/solenoid	internal	2 ÷ 10	-	N
338D-E15-02	2 x 3/2 NC	solenoid/spring	external	-0,9 ÷ 10	2,5 ÷ 10	Q
348D-E15-02	2 x 3/2 NO	solenoid/spring	external	-0,9 ÷ 10	2,5 ÷ 10	R
398D-E15-02	1 x 3/2 NC + 1 x 3/2 NO	solenoid/spring	external	-0,9 ÷ 10	2,5 ÷ 10	S
358-E15-02	5/2 monostable	solenoid/spring	external	-0,9 ÷ 10	2,5 ÷ 10	D
358-E11-02	5/2 bistable	solenoid/solenoid	external	-0,9 ÷ 10	1,5 ÷ 10	Y
368-E11-02	5/3 CC	solenoid/solenoid	external	-0,9 ÷ 10	2 ÷ 10	V
378-E11-02	5/3 CO	solenoid/solenoid	external	-0,9 ÷ 10	2 ÷ 10	Z
388-E11-02	5/3 CP	solenoid/solenoid	external	-0,9 ÷ 10	2 ÷ 10	W
CNVL/1L	free position (electrical and pneumatic cover)	-	-	-	-	L
CNVL-3P1	plate for supply and outlets	-	-	-	-	X
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)	-	-	-	-	T

## MODIFICATION OF A VALVE FUNCTION

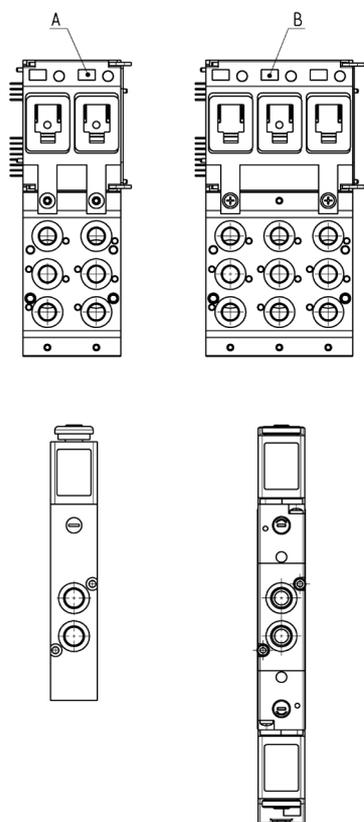
In case a solenoid valve type M is inserted in a free position and a monostable or bistable electrical conveyor is already available, the following components must be ordered:

- 2x screws Cod. CNVL/21
- 3x interface seals Cod. CNVL-3H/7N
- 1x solenoid valve 358-015-02-(G77-U77)

In case a solenoid valve type B is inserted in a free position and a bistable electrical conveyor is already available\*, the following components must be ordered:

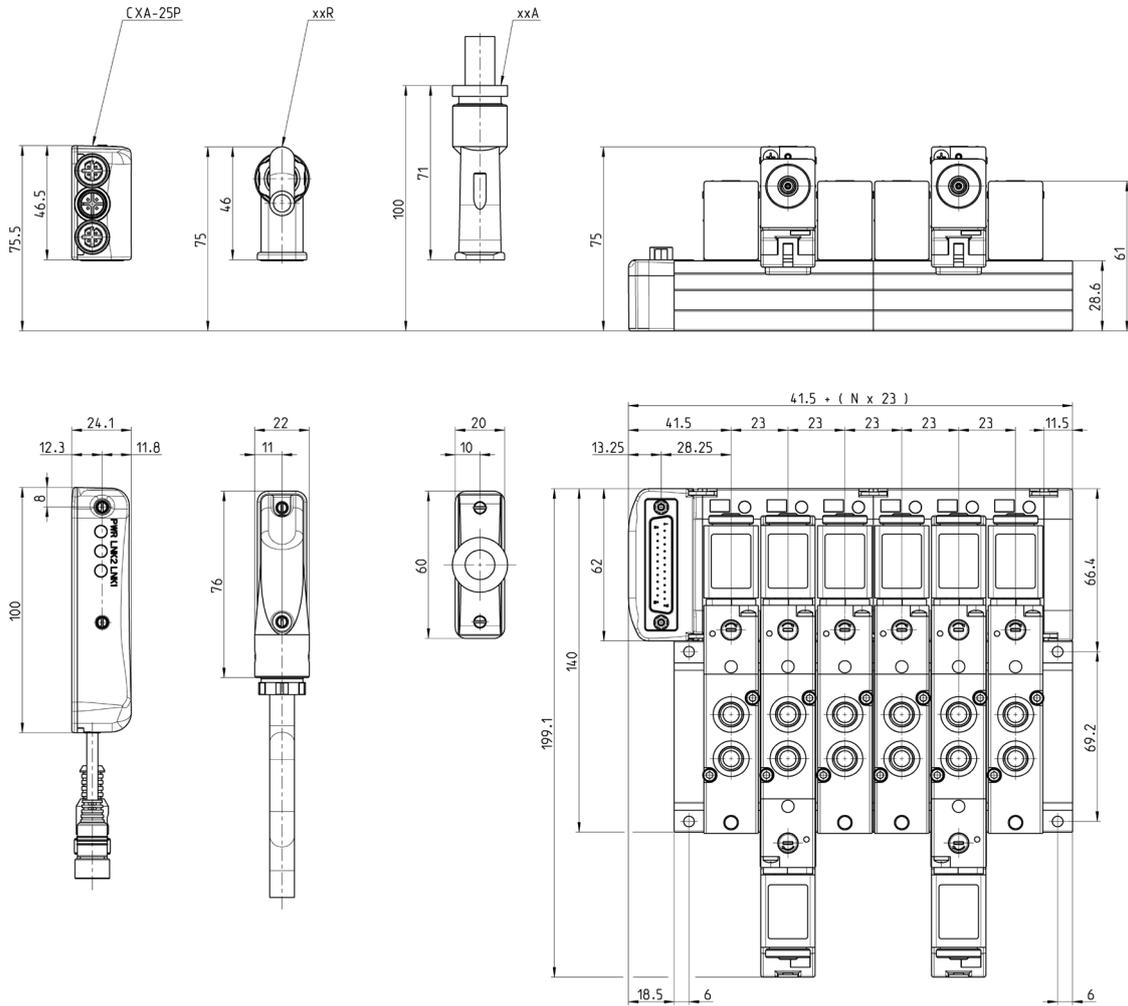
- 1x electrical module with bistable solenoid valve Cod. 3PAC-R-IF1
- 1x solenoid valve 358-015-02-(G77-U77)

\* In case a monostable conveyor has been already mounted, it must be replaced by a bistable one, provided that the maximum number of 22 signals is not exceeded.

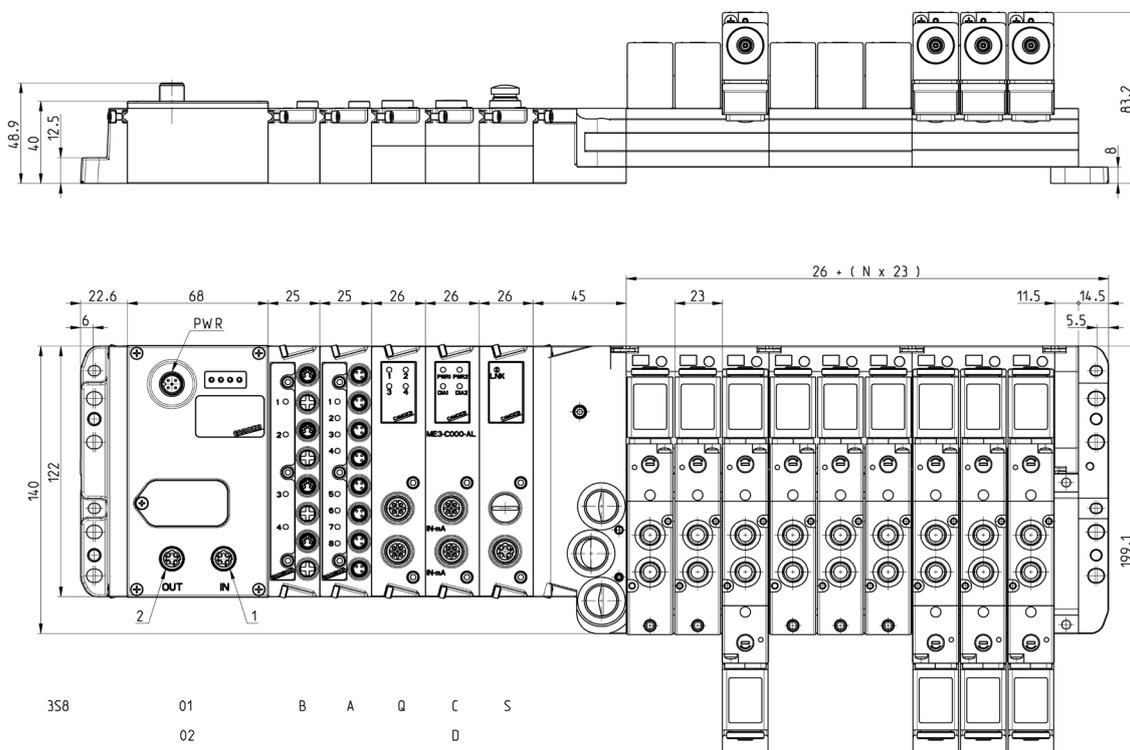


**A = grey label (monostable)**  
**B = white label (bistable)**

**MULTIPOLE version - DIMENSIONS**



**FIELDBUS version with CPU MODULE - DIMENSIONS**

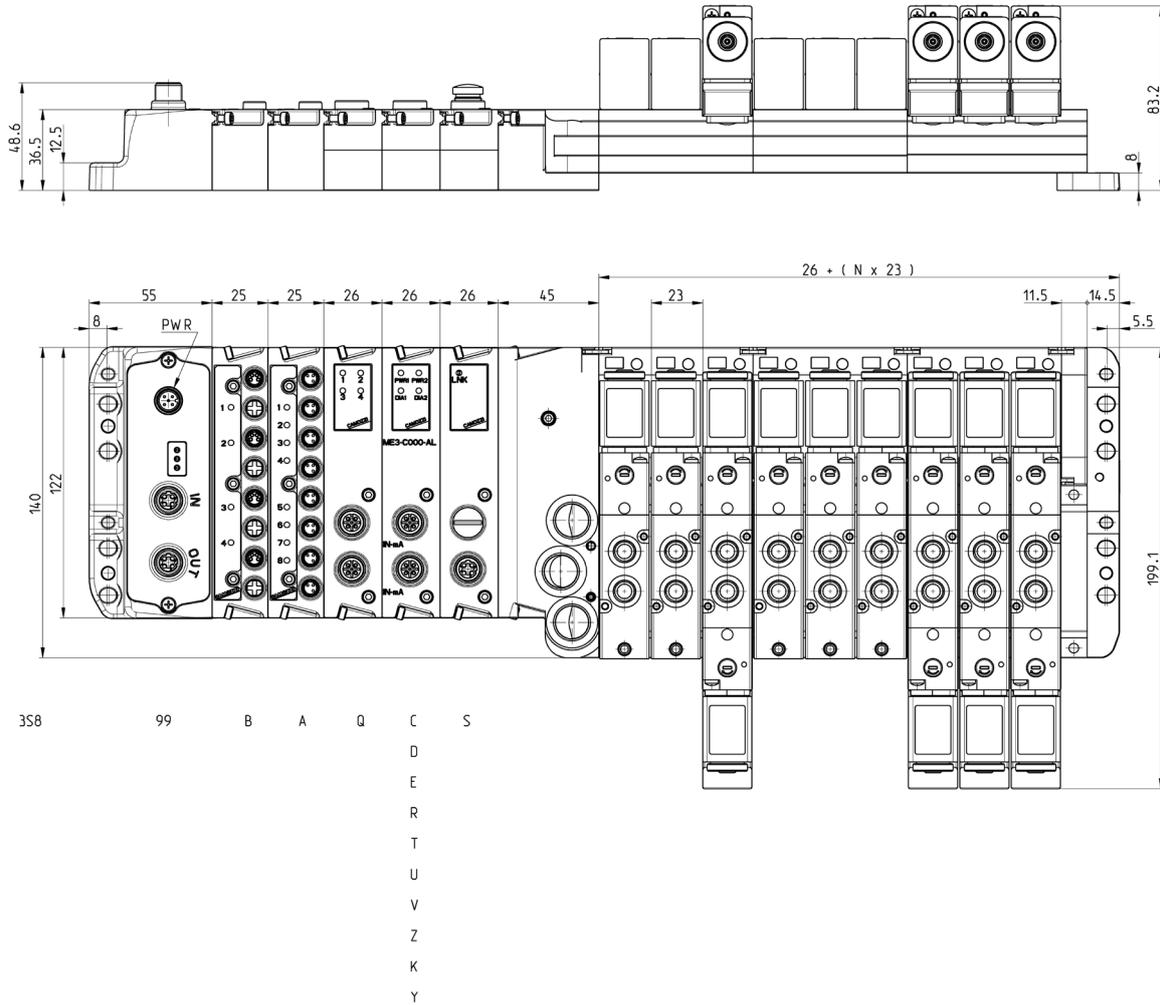


FIELDBUS AND MULTIPOLES SYSTEMS

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1. Letters and numbers refer to the details which are reported in the Coding example  
 2. N = number of valve positions

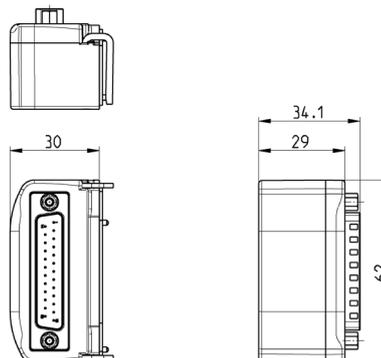
**FIELDBUS version with EXPANSION MODULE - DIMENSIONS**



- 1. Letters and numbers refer to the details which are reported in the Coding example
- 2. N = number of valve positions

## 25-pin Sub-D connector module

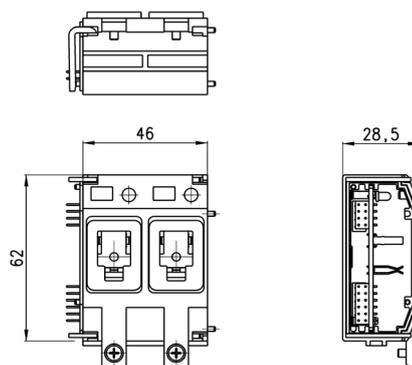
Initial module to connect the Intermediate Electrical Modules



Mod.
3PBC-N-XS0

## Intermediate electrical module - 2 positions, mono and bistable

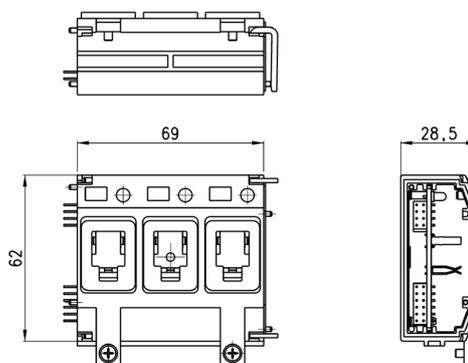
To be mounted with subbases with 2 positions.  
 The type label in correspondence of LEDs is:  
 - grey in monostable intermediate modules  
 - white in bistable intermediate modules



Mod.	
3PAC-M-XI2	Monostable module
3PAC-R-XI2	Bistable module

## Intermediate electrical module - 3 positions, mono and bistable Intermediate electrical module

To be mounted with subbases with 3 positions.  
 The type label in correspondence of LEDs is:  
 - grey in monostable intermediate modules  
 - white in bistable intermediate modules

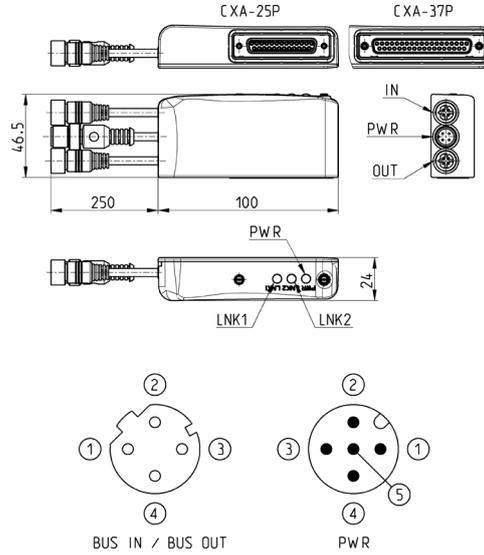


Mod.	
3PAC-M-XI3	Monostable module
3PAC-R-XI3	Bistable module

### Sub-D adaptor module 25 pin Mod. CXA-25P



It is an Expansion module of the subnet and can be connected to all valve islands with Sub-D 25 pin connection. It can manage up to a maximum of 24 Output. It has its own M12 A 4 pin male connection for the supply of the valves connected, distinguishing both logic supply and power supply and two M12 D 4 pin female connections for the Bus-IN and Bus-OUT of the subnet. The subnet can have a length of maximum 100 metres. The power of a single Output is 3 W to 24 V DC. Thanks to the PWM technique it is possible to set a power reduction to only maintain operation.

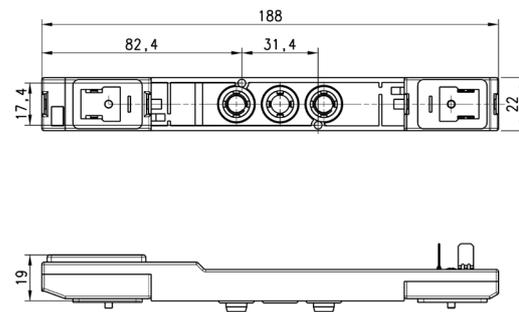


Mod.	Interface	Digital Outs	Bus-IN connection	Bus-OUT connection	PWR connection	Supply	Power for every Output
CXA-25P	Sub-D 25 pin	24	M12D 4 pin female	M12D 4 pin female	M12A 4 pin male	24 V DC	3 W

### Electrical Module for a bistable solenoid valve

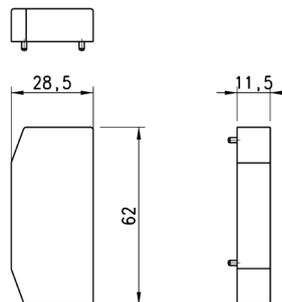


**Supplied with:**  
 2x screws for valve mounting  
 2x screws for solenoid mounting  
 1x interface seal  
 2x interface seals for solenoid



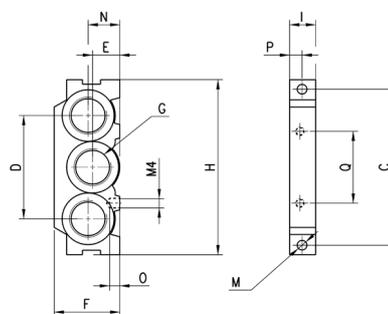
<b>Mod.</b>	
3PAC-R-IF1	

## End cap for electric module



<b>Mod.</b>
3PAC-R-TP1

## Terminal module Mod. CNVL-∗H

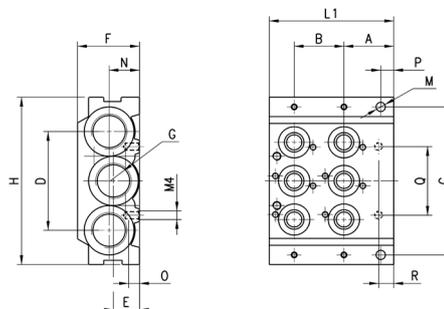


The following is supplied:  
2x fixing nuts

CNVL-3H: for Series 3, G1/8  
CNVL-4H: for Series 3, G1/4

Mod.	C	D	E	F	H	I	M	N	O	P	Q	G
CNVL-3H	69.5	46	12	29	78	11.5	4.3	14	5	6	32	3/8

## Initial/terminal Module with 2 positions



The following is supplied:  
3x interface O-Rings  
manifold/manifold  
2x fixing nuts  
2x junction plugs  
6x interface seals valve/  
manifold (CNVL-3H2)  
or 2x interface seals valve/  
manif. (CNVL-4H2)  
4x fixing screws for valves

CNVL-3H2: for Series 3, G1/8  
CNVL-4H2: for Series 3, G1/4

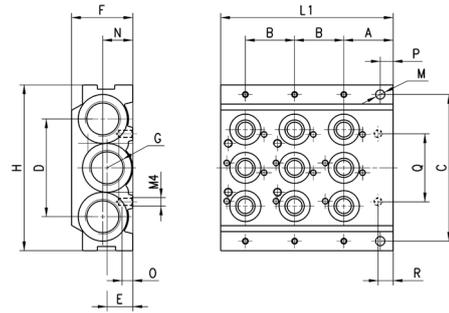
Mod.	A	B	C	D	E	F	G	H	L1	M	N	O	P	Q	R
CNVL-3H2	23	23	69,5	46	12	29	3/8	78	57,5	4,3	14	5	6	32	7

### Initial/terminal Module with three positions



**The following is supplied:**

- 3x interface O-Rings manifold/manifold;
- 2x fixing nuts;
- 2x junction plugs;
- 9x interface seals valve/manifold (CNVL-3H3) or 3x interface seals valve/manif. (CNVL-4H3);
- 6x fixing screws for valves



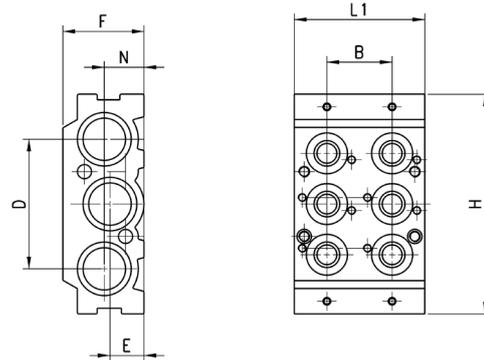
CNVL-3H3: for Series 3, G1/8  
 CNVL-4H3: for Series 3, G1/4

Mod.	A	B	C	D	E	F	G	H	L1	M	N	O	P	Q	R
CNVL-3H3	23	23	69,5	46	12	29	3/8	78	80,5	4,3	14	5	6	32	7

### Intermediate module with 2 positions



- The following is supplied:
- 3x interface O-Rings manifold/manifold
  - 2x fixing nuts
  - 2x junction plugs
  - 6x interface seals valve/manifold (CNVL-3I2) or 2x interface seals valve/manif. (CNVL-4I2)
  - 4x fixing screws for valves

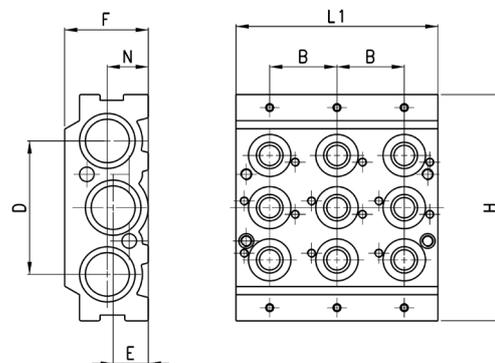


Mod.	B	D	E	F	H	L1	N
CNVL-3I2	23	46	12	29	78	46	14

### Intermediate module with 3 positions



- The following is supplied:
- 3x interface O-Rings manifold/manifold
  - 2x fixing nuts
  - 2x junction plugs
  - 9x interface seals valve/manifold (CNVL-3I3) or 3x interface seals valve/manif. (CNVL-4I3)
  - 6x fixing screws for valves

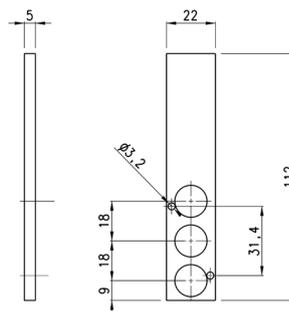


CNVL-3I3: for Series 3, G1/8  
 CNVL-4I3: for Series 3, G1/4

Mod.	B	D	E	F	H	L1	N
CNVL-3I3	23	46	12	29	78	69	14

**Excluder tap for free position (cod. L)**

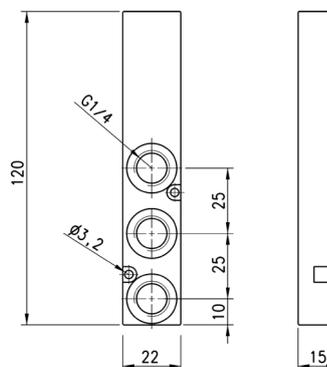

Supplied with:  
 3x O-rings  
 2x screws



<b>Mod.</b>
CNVL/1L

**Intermediate plate for manifolds with outlets (cod. X)**


Supplied with:  
 3x O-rings  
 2x screws



<b>Mod.</b>
CNVL-3P1

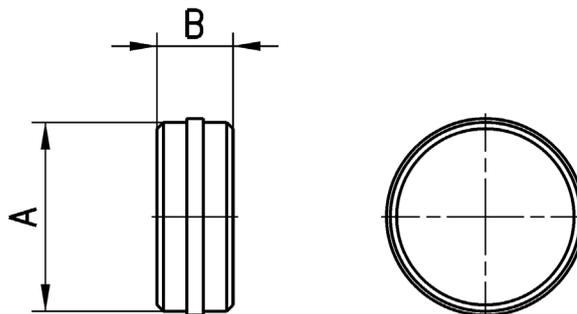
**Diaphragm for separation**

For separation of channel: 1 - 3 - 5.



Supplied with:  
 1x diaphragm.

If you need cod. U, please order N° 1 piece.  
 If you need cod. J, please order N° 2 pieces.  
 If you need cod. T, please order N° 3 pieces.

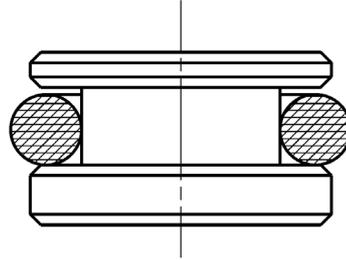


Mod.	A	B
CNVL-3H-TP	15,6	6

## Blanking plug Mod. TCNVL for manifolds



The following is supplied:  
 1x blanking plug  
 1x O-Ring



Mod.
TCNVL/3
TCNVL/5
TCNVL/6

## CPU Module - Characteristics

It is a slave node of the main PROFIBUS, CANopen, DeviceNet, EtherNet/IP, EtherCAT, PROFINET network and the Master module of the subnet. All modules provided can be connected only on the right side of the CPU module, like the digital/analog inputs/outputs, direct interface modules for the valve islands (Series F, HN and 3) and the initial module of the subnet.

It has its own M12A 4 pin Male connection to supply the modules connected, distinguishing both logic supply and power supply.

Two M12 connections for Bus IN and Bus OUT of the main network, which M12 connection will take over the relative specifications according to the chosen protocol.

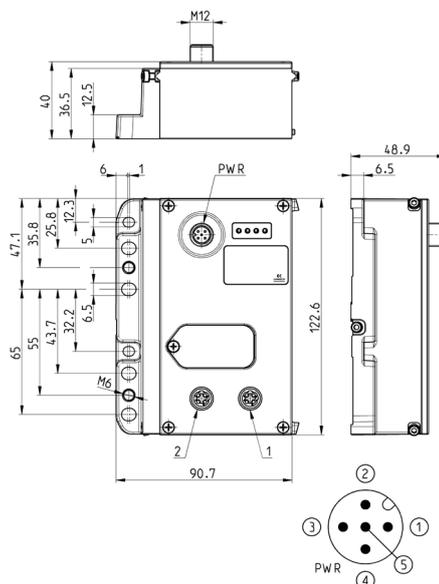
The addressing is performed by means of the Rotary Switch for the protocols with this feature, while for Ethernet protocols, addressing is performed by means of the protocol itself. Leds indicating the working state. A maximum number of 1024 inputs and 1024 outputs can be managed.



The Individual Fieldbus version of Series 3 can be interfaced through a specific module with the Series CX multi-serial module according to the different communication protocols (PROFIBUS-DP, DeviceNet, CANopen, EtherNet/IP, EtherCAT, PROFINET).

Like the Multipole one, the Fieldbus version is able to create islands with 22 coils on 22 valve positions adding a wide range of electrical modules like digital/analog inputs/outputs of 0-10 V and 4-20 mA.

## CPU Module - pin configuration



NO WLAN / WITH WLAN	Fieldbus Protocol	1	2	Bus-IN connector	Bus-OUT connector
CX01-0-0	PROFIBUS	Bus-OUT	Bus-IN	M12 B 5 pin male	M12 B 5 pin female
CX02-0-0	DeviceNet	Bus-OUT	Bus-IN	M12 A 5 pin male	M12 A 5 pin female
CX03-0-0	CANopen	Bus-OUT	Bus-IN	M12 A 5 pin male	M12 A 5 pin female
CX04-0-0	EtherNet/IP	Bus-IN	Bus-OUT	M12 D 5 pin female	M12 D 5 pin female
CX05-0-0	EtherCAT	Bus-IN	Bus-OUT	M12 D 5 pin female	M12 D 5 pin female
CX06-0-0	PROFINET	Bus-IN	Bus-OUT	M12 D 5 pin female	M12 D 5 pin female

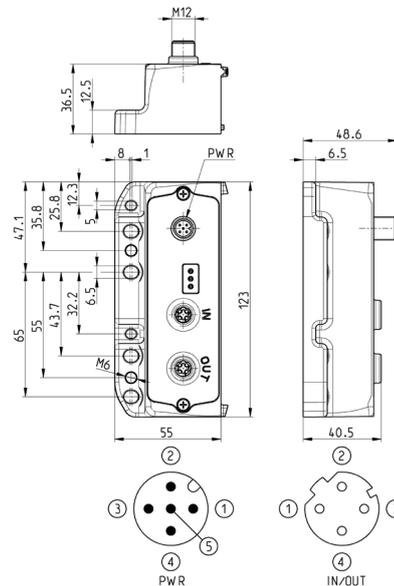
### Expansion Module - Characteristics

At its right side, different modules can be connected like the digital/analog inputs/outputs, the direct interface modules for the valve islands (Series F, HN and 3) and the initial module of the subnet to re-amplify it or to create new branches. It has its own M12 A 4 pin male connection to supply the devices connected, distinguishing both logic supply and power supply. It has two M12 D 5 pin female connections for Bus-IN and Bus-OUT connection of the subnet. Leds indicate the working state. The valve island equipped with the Expansion Module can be used only in presence of a subnet.



It is possible to insert Initial Subnet Modules in the version with CPU module. These Modules enable to create a subnet with tree structure or in series. On the subnet you can connect Expansion Islands. These expansions have the same possibilities to use the different electric modules, like digital and analog inputs and outputs and further Initial Subnet Modules. Also with this version the same rules as the CPU module and Multipole apply.

### Expansion Module - pin configuration

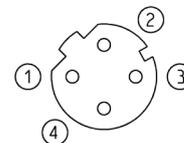


Mod.	Coding reference	Fieldbus Protocol	Bus-IN and Bus-OUT connector
CX99-0-0	99	Subnet expansion	M12 D 5 pin female

### Initial subnet module Mod. ME3-0000-SL



This module can be connected only in presence of a CPU or Expansion module and can be mixed with other either digital or analog Input and Output devices. Every subnet can have an extension of maximum 100 metres, with a maximum of 8 interruptions. Up to maximum 5 initial modules can be connected, one aside another or along the subnet in order to create a tree structure, in series or both, in order to optimize the length of the cables and the topology of the subnet in different applications. The module is equipped with the Bus-OUT connection only of subnet type M12 D 4 pin female.

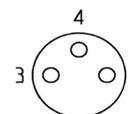


Mod.	Coding reference	Bus-OUT connection	Max number of modules for subnet	Max extension of subnet per module
ME3-0000-SL	S	M12D 4 pin female	5	100 m

### Digital input Module Mod. ME3-0800-DC and ME3-0400-DC



The Digital input module can be connected only in presence of a CPU or Expansion module and can be mixed with other either digital or analog Input and Output devices and with the initial module of the subnet. It has 8 or 4 M8 3 pin connections.



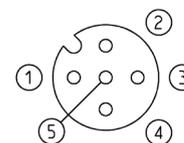
Mod.	Coding reference	Number of digital inputs	Connection	Number of connectors	Dimensions	Signalling	Sensor supply	Overvoltage protection	Absorption	Type of signal	Protection class	Operating temperature	Weight
ME3-0800-DC	A	8	M8 3 pin female	8	122 x 25 mm	1 yellow led for each input	24 V DC	400 mA for 4 sensors	10 mA	PNP	IP65	0 + 50°C	110 g
ME3-0400-DC	B	4	M8 3 pin female	4	122 x 25 mm	1 yellow led for each input	24 V DC	400 mA for 4 sensors	10 mA	PNP	IP65	0 + 50°C	110 g

### Analog input/output module Mod. ME3-\*\*\*\*-AL



The analog input/output module can be connected only in presence of a CPU or Expansion module and can be mixed with other either digital or analog Input and Output devices and with the initial module of the subnet. It has two M12 A 5 female pin connections and it can be configured as 2 analog Outputs or 2 Inputs or 1 Input + 1 Output. Every output or input occupies 12 digital I/O, in order to create a 12 bit digital/analogic conversion, for both inputs and outputs available in the versions from 0-10 V DC and from 4-20mA.

The refreshment time of the analog devices is submitted to the delay of the subnet and therefore to its topology. An average delay is less than 6 ms, to which the delay of the main network managed by the PLC has to be added.

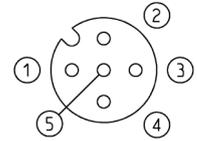


Mod.	Coding reference	Number of analog inputs	Number of analog outputs	Connection
ME3-C000-AL	C	2 inputs 4-20 mA	-	2x M12 A 5 pin female
ME3-D000-AL	D	2 inputs 0-10 V	-	2x M12 A 5 pin female
ME3-E000-AL	E	1 input 4-20 mA + 1 input 0-10 V	-	2x M12 A 5 pin female
ME3-00U0-AL	U	-	1 output 4-20 mA + 1 output 0-10 V	2x M12 A 5 pin female
ME3-00R0-AL	R	-	2 outputs 4-20 mA	2x M12 A 5 pin female
ME3-00T0-AL	T	-	2 outputs 0-10 V	2x M12 A 5 pin female
ME3-00Z0-AL	Z	1 input 4-20 mA	1 output 4-20 mA	2x M12 A 5 pin female
ME3-00K0-AL	K	1 input 0-10 V	1 output 0-10 V	2x M12 A 5 pin female
ME3-00V0-AL	V	1 input 0-10 V	1 output 4-20 mA	2x M12 A 5 pin female
ME3-00Y0-AL	Y	1 input 4-20 mA	1 output 0-10 V	2x M12 A 5 pin female

## Digital power output module Mod. ME3-0004-DL



The digital output module can be connected only in presence of a CPU or Expansion module and can be mixed with other either digital or analog Input and Output devices and with the initial module of the subnet. It has two M12 A 5 pin female connections, each connection can manage 2 digital outputs and can provide a maximum of 10 W to 24 V DC. The device is useful to pilot a bistable valve or two monostable valves for each connector, or to activate the electric coils or other electric devices with maximum absorption of 10 W to 24 V DC. Connecting two outputs to one electric device only and activating them simultaneously, it is possible to provide maximum 20 W to 24 V DC.

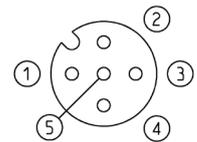


Mod.	Coding reference	Number of digital outputs	Connection	Number of connectors	Dimensions	Signalling	Sensor supply	Max power for M12 connector	Max power for digital output	Type of signal	Protection class	Operating temperature	Weight
ME3-0004-DL	Q	4	M12 A 5 pin female	2	122 x 25 mm	1 yellow led for each output	24 V DC	20 W	10 W	NPN	IP65	0 ÷ 50°C	100 g

## Pneumatic/electric interface Module for Fieldbus version



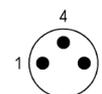
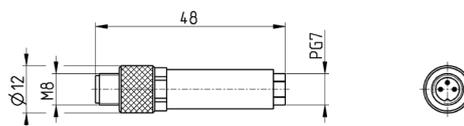
Supplied with:  
1x module with card  
1x foot for manifold



Mod.

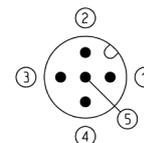
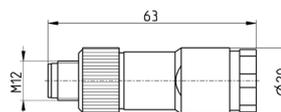
ME3-003P-DI

### 3 pin male M8 wiring connector for digital input modules



Mod.	Description	Type of connector	Connection	Cable length (m)
CS-DM03HB	for wiring	straight	M8 3 pin male	-

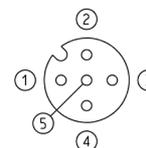
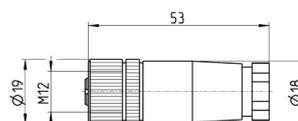
### 5 pin male straight M12 DUO connector



For the connection of the digital output modules and analog input/output modules.

Mod.	Description	Type of connector	Connection	Cable length (m)
CS-LD05HF	for wiring	straight	M12 A 5 pin male	-

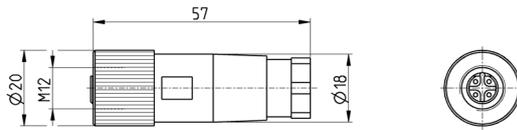
### Connector M12, 5 pin, female, straight



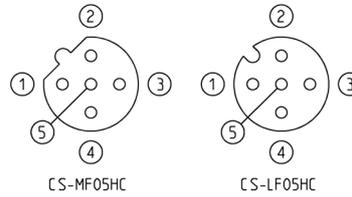
Connector for power supplies (PWR)

Mod.	Description	Type of connector	Connection	Cable length (m)
CS-LF04HB	for wiring	straight	M12 A 4 pin female - Pin 5 is not connected	-

### Straight female M12 connectors for Bus-IN



CANopen bus IN

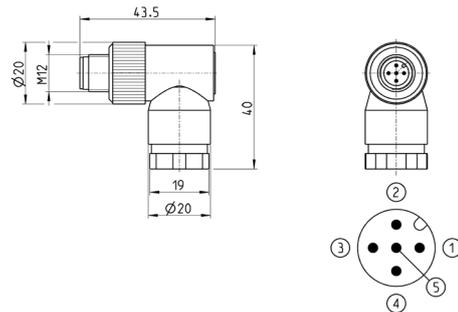


Mod.	Description	Type of connector	Connection	Fieldbus
CS-LF05HC	for wiring	straight	M12 A 5 pin female	CANopen
CS-MF05HC	for wiring	straight	M12 B 5 pin female	PROFIBUS

### 5 pin, male, angular, M12, DUO connector



For the connection of the digital output modules ME3-0004-DL

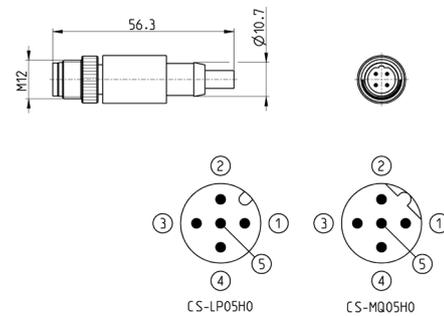


Mod.	Description	Type of connector	Connection	Cable length (m)
CS-LH05HF	for wiring	90°	M12 A 5 pin male	-

### M12 male terminating resistor

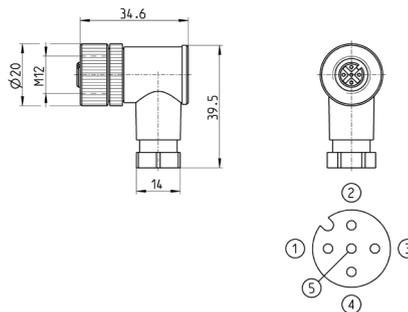


For PROFIBUS, CANopen



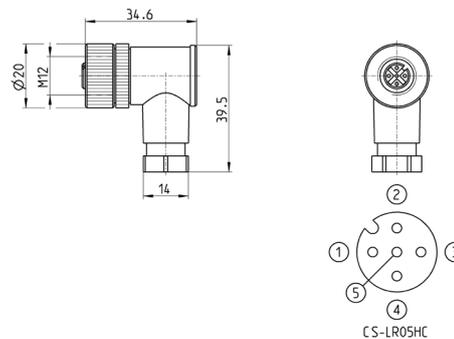
Mod.	Description	Type of connector	Connection	Fieldbus
CS-MQ05HO	moulded terminating resistor	straight	M12 B 4 pin male - Pin 5 is not connected	PROFIBUS
CS-LP05HO	moulded terminating resistor	straight	M12 A 5 pin male - Pin 5 is connected	CANopen

## Angular connector for power supply



Mod.	Description	Type of connector	Connection	Cable length (m)
CS-LR04HB	for wiring	90°	M12 A 4 pin female - Pin 5 is not connected	-

## Connector M12, 5 pin, female, angular

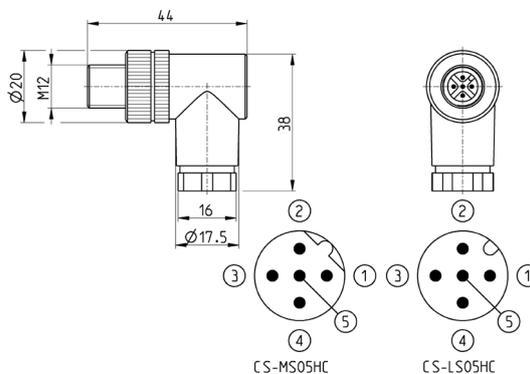


Mod.	Description	Type of connector	Connection	Fieldbus
CS-LR05HC	for wiring	90°	M12 A 5 pin female	CANopen / DeviceNet
CS-MR05HC	for wiring	90°	M12 B 5 pin female	PROFIBUS

## Connector M12, 5 pin, male, angular

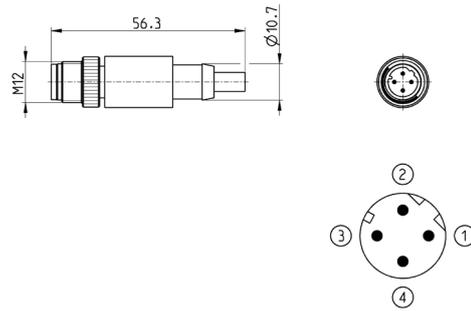


CANopen bus OUT



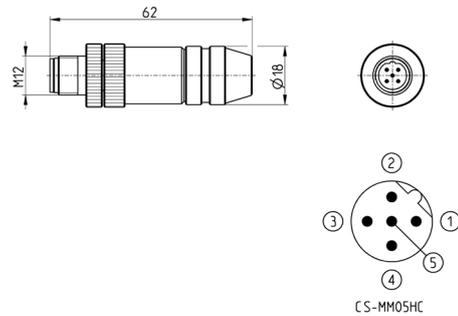
Mod.	Description	Type of connector	Connection	Fieldbus
CS-LS05HC	for wiring	90°	M12 A 5 pin male	CANopen / DeviceNet
CS-MS05HC	for wiring	90°	M12 B 5 pin male	PROFIBUS

### Subnet terminating resistor



Mod.	Description	Type of connector	Connection	Fieldbus
CS-SU04H0	moulded terminating resistor	straight	M12 D 4 pin	subnet

### Straight male M12 connectors for Bus-OUT PROFIBUS

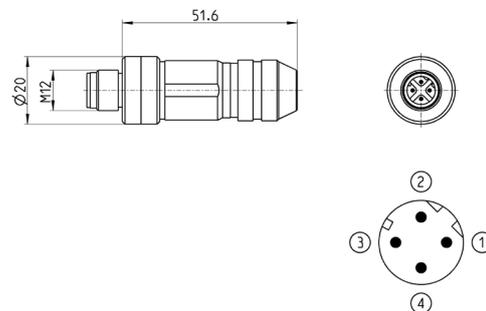


Mod.	Description	Type of connector	Connection	Fieldbus
CS-LM05HC	for metal wiring	straight	M12 A 5 pin male	CANopen / DeviceNet
CS-MM05HC	for metal wiring	straight	M12 B 5 pin male	PROFIBUS

### Male wiring connector for Bus-IN and Bus-OUT



For PROFINET, EtherCAT, EtherNet/IP

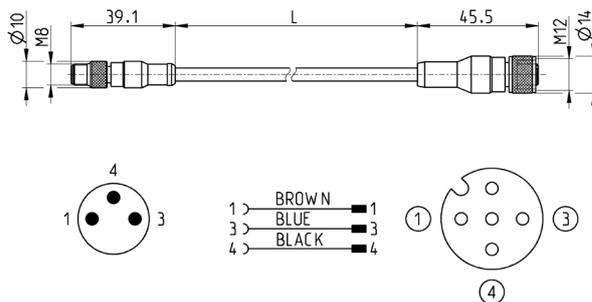


Mod.	Description	Type of connector	Connection	Cable length (m)
CS-SM04H0	For metal wiring	Straight	M12 D 4 pin	-

## Adapter cable, M8 3-pin male - M12 4-pin female



Protection class: IP69K

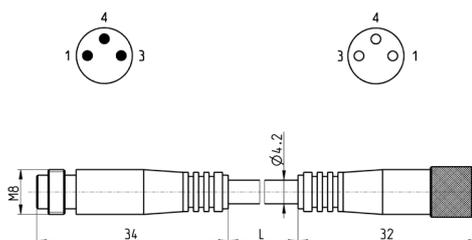


Mod.	Description	Max. voltage	Max. current	Nr conn. wires	Connections	Outer sheath	Cable "L" (m)
CS-AG03HB-C250	3-pin cable 24 AWG, high flexibility	50V AC / 60V DC	3 A	3	M8 3-pin male - M12 4-pin fem.	PUR black	2,5
CS-AG03HB-C500	3-pin cable 24 AWG, high flexibility	50V AC / 60V DC	3 A	3	M8 3-pin male - M12 4-pin fem.	PUR black	5

## Extension with M8 connector, 3 pin male/female

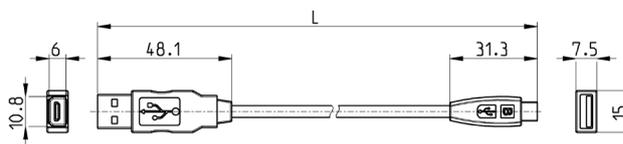
 For the connection of the digital input modules  
 ME3-0008 and ME3-0004


Non shielded

 General Purpose Input/  
 Output (GPIO)


Mod.	Description	Type of connector	Connection	L [cable length] (m)
CS-DW03HB-C250	moulded cable	Straight	M8 3 pin male / female	2,5
CS-DW03HB-C500	moulded cable	Straight	M8 3 pin male / female	5

## USB to Micro USB cable Mod. G11W-G12W-2

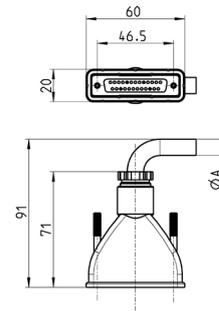

 For the hardware  
 configuration of the  
 Camozzi products


Mod.	Description	Connections	Material for outer sheath	Cable length "L" (m)
G11W-G12W-2	Black shielded cable 28 AWG	Standard USB to Micro USB	PVC	2

## Straight Sub-D 25 pin female connector with axial cable



Protection class IP65

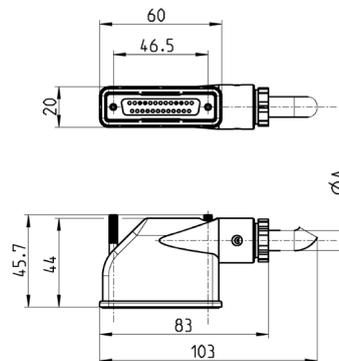


Mod.	øA	PIN	Cable length (m)
G3X-3	7,7	16	3
G3X-5	7,7	16	5
G3X-10	7,7	16	10
G3X-15	7,7	16	15
G3X-20	7,7	16	20
G3X-25	7,7	16	25
G4X-3	9	25	3
G4X-5	9	25	5
G4X-10	9	25	10
G4X-15	9	25	15
G4X-20	9	25	20
G4X-25	9	25	25

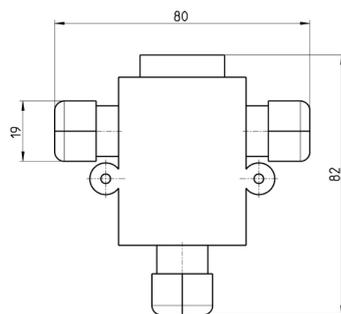
## Right angle Sub-D 25 pin female connector with axial cable



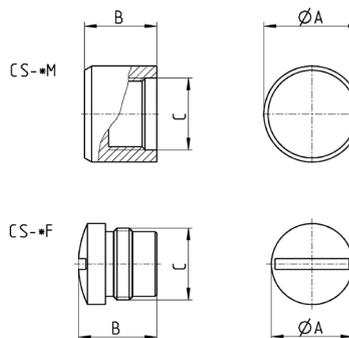
Protection class IP65



Mod.	øA	PIN	Cable length (m)
G3X1-3	7,7	16	3
G3X1-5	7,7	16	5
G3X1-10	7,7	16	10
G3X1-15	7,7	16	15
G3X1-20	7,7	16	20
G3X1-25	7,7	16	25
G4X1-3	10	25	3
G4X1-5	10	25	5
G4X1-10	10	25	10
G4X1-15	10	25	15
G4X1-20	10	25	20
G4X1-25	10	25	25

**CANopen / DeviceNet / Profibus-DP data line tee**


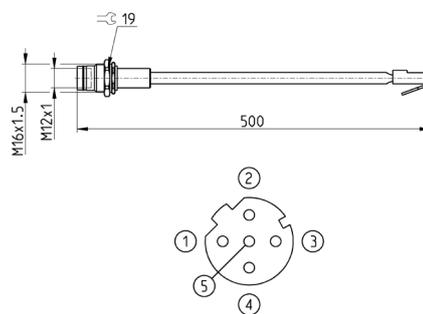
Mod.	Fieldbus
CS-AA03EC	Profibus-DP
CS-AA05EC	CANopen / DeviceNet

**M8 and M12 connector cover caps**


For digital and analog input/output modules and subnet

Mod.	ØA	B	C [Connection]
CS-DFTP	10	11	M8
CS-LFTP	13,5	13	M12

**Adaptor and panel mount for Ethernet RJ45 to M12 D networks**

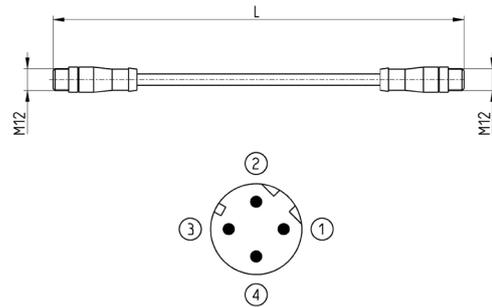
 Profinet, EtherCAT,  
 EtherNet/IP


Mod.	Description	Type of connector	Connection	Cable length (m)
CS-SE04HB-F050	Moulded cable	Straight	RJ45 male, M12 D 4 pin female - Pin 5 is not connected	0,5

### Cables with straight connectors

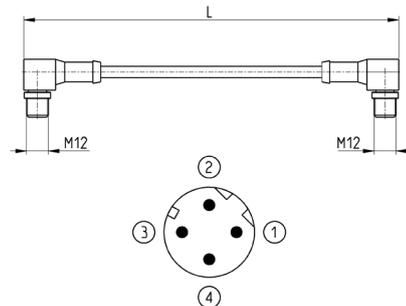


Profinet, EtherCAT,  
 EtherNet/IP



Mod.	Description	Type of connector	Connection	L [cable length] (m)
CS-SB04HB-D100	moulded cable	straight	2x M12 D 4 pin male	1
CS-SB04HB-D500	moulded cable	straight	2x M12 D 4 pin male	5
CS-SB04HB-DA00	moulded cable	straight	2x M12 D 4 pin male	10
CS-SB04HB-DD00	moulded cable	straight	2x M12 D 4 pin male	15
CS-SB04HB-DG00	moulded cable	straight	2x M12 D 4 pin male	20
CS-SB04HB-DJ00	moulded cable	straight	2x M12 D 4 pin male	25

### Cable with 90° angular connectors



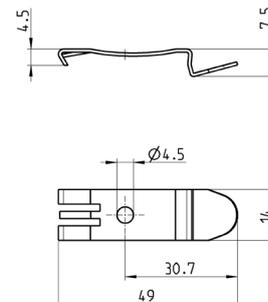
Mod.	Description	Type of connector	Connection	L [cable length] (m)
CS-SC04HB-D100	moulded cable	90°	2x M12 D 4 pin male	1
CS-SC04HB-D500	moulded cable	90°	2x M12 D 4 pin male	5
CS-SC04HB-DA00	moulded cable	90°	2x M12 D 4 pin male	10
CS-SC04HB-DD00	moulded cable	90°	2x M12 D 4 pin male	15
CS-SC04HB-DG00	moulded cable	90°	2x M12 D 4 pin male	20
CS-SC04HB-DJ00	moulded cable	90°	2x M12 D 4 pin male	25

### Mounting brackets for DIN rail



DIN EN 50022 (7,5mm x  
 35mm - width 1)  
 Suitable for all manifolds.

Supplied with:  
 2x plates  
 2x screws M4x6 UNI 5931



Mod.
PCF-E520