Series HN valve islands, **Multipole and Fieldbus**

Multipole connection with 25 or 37 pins

Valve functions: 2x2/2; 2x3/2; 5/2; 5/3 CC

Serial connection with the most common communication protocols

New versions

K :AMOZZI

2

CONTROL

10.5mm, single position » Subbases for monostable

» Protocols available: PROFIBUS-DP, CANopen, DeviceNet, EtherNet/IP, PROFINET, EtherCAT

Valve flow: 400 and

» Modular subbases: 2 positions for valve size

for valve size 21mm

and bistable valves (size 10.5mm)

700 NI/min

>>

Thanks to the large range of options available, the Series HN valve islands represent an excellent solution for different applications, particularly in automation systems.

Small dimensions, high flow, pneumatic and electric modularity, electric connections on boards, possibility to interface with the multi-serial node Series CX, optimization of the signal distribution thanks to subbases for monostable and bistable solenoid valves are only some of the features that make this series a particularly innovative product.

Manuals, instruction sheets and configuration files are available on the site http://catalogue.camozzi.com or by means of the QR code indicated on the lable of the product.

GENERAL DATA

	Valve functions	
2		
CONTROL	Materials Connections	
	Temperature	
	Air specifications	
		The se

rate functions 5/2 monetable and bistable 5/3 CC 2 x 22 NO 2 x 22 NO 2 x 22 NO 1 x 32 NO 1	PNEUMATIC SECTION	
Signed Source 2 x 22 NO 2 x 22 NO 1 x 322 NO Mederials spool seals in NBR control with momentance on where subbases in Aluminium Connections Initist 2 and 4, size 21 mm. G16, tube 04, tube 06 Supply 12/14: MJ Supply 12/14: MJ Tempendure 0 + 50°C Tempendure 0 + 50°C Morking pressure	Valve construction	spool with seals
spool seals in HNBR other seals in NBR actridges in NBR actridges in NBR actridges in brass body and end covers in technopolymer subbases in aluminum Connections Piets 2 and 4, size 10, 5m: W7, tube 06, tube 06 in test 2 and 4, size 10, 5m: W7, tube 06, tube 07 in test 2 and 4, size 10, 5m: W7, tube 06, tube 07 in test 2 and 4, size 10, 5m: W7, tube 06, tube 07 in test 2 and 4, size 10, 5m: W7, tube 06, tube 07 in test 2 and 4, size 10, 5m: W7, tube 06, tube 07 in test 2 and 4, size 10, 5m: W7, tube 06, tube 07 in test 2 and 4, size 10, 5m: W7, tube 06, tube 07 in test 2 and 4, size 10, 5m: W7, tube 06, tube 07 in test 2 and 4, size 10, 5m: W7, tube 06, tube 07 in test 2 and 4, size 10, 5m: W7, tube 06, tube 07 in test 2 and 4, size 10, 5m: W7, tube 06, tube 07 in test 2 and	Valve functions	5/2 monostable and bistable 5/3 CC 2 x 2/2 NO 2 x 2/2 NC 1 x 2/2 NC 2 x 3/2 NC 2 x 3/2 NC 1 x 3/2 NC+ 1 x 3/2 NO
Inlets 2 and 4, size 21 mm: G10, bub 0 6, tube 0 6, Supply 12/14: M7 Supply 12/14: M7 Exhausts 3 and 5: G14 or with integrated silencer Exhausts 28/24: M7 Temperature 0 • 6 90°C All specifications filtered compressed air, non lubricated, class 6 4.4 according to ISO 8573-1:2010. If Jubrication is necessary, please only use olis with maximum viscosity of 32 Cst and the version with ordernal serve pilot 300 973-1:2010. If Jubrication is necessary, please only use olis with maximum viscosity of 32 Cst and the version with ordernal serve pilot 300 973-1:2010 (do not lubricate). Valve sizes 10.5mm (2 valves for each subbase) 21mm (1 valve for each subbase) 21mm (2 valves for each subbase) 21mm (1 valve for each subbase) 21mm (2 valves for each subbase) 21mm (1 valve for each subbase) 21mm (1 valve for each subbase) 21mm (2 valves for each subbase) 21mm (2 valves for each subbase) 21mm (1 valve for each subbase) 21mm (2 valves for each subbase) 21mm (1 valve for each subbase) 21mm (2 valves for each subbase) 21mm (2 v		spool seals in HNBR other seals in NBR cartridges in brass body and end covers in technopolymer
Air specifications Filtered compressed air, non lubricated, class 6.4.4 according to ISO 8573-1:2010. Air specifications If lubrication is necessary, please only use oils with maximum viscosity of 32 Cst and the version with external service point supply. The servic-pilot supply air quality class must be 6.4.4 according to ISO 8573-1:2010 (do not lubricate). Valve sizes 10.5mm (2 valves for each subbase) Working pressure -0.9 + 10 bar Pilot pressure 3 + 7 bar Pilot pressure 3 + 7 bar Pilot pressure 3 + 7 bar Pilot pressure -0.9 + 10 bar Pilot pressure -0.9 + 10 bar Pilot pressure -0.0 N/min (10.5mm) Advecting position any position Protection class IP 65 ELECTRICAL SECTION - MULTIPOLE VERSION 25 or 37 pins Max. absorption 0.8 A (with Sub-D connector 25 pins) 1 A (with Sub-D connector 7 pins) 24 V D C + 10% Max. number of colls to operate 24 on 20 valve positions (with Sub-D connector 25 pins) 32 on 28 valve positions (with Sub-D connector 37 pins) 32 on 28 valve positions (with Sub-D connector 25 pins) 32 on 28 valve positions (with Sub-D connector 37 pins) 32 on 28 valve positions (with Sub-D connector 37 pins)	Connections	Inlets 2 and 4, size 21 mm: G1/8, tube Ø 6, tube Ø 8 Supply 1: G1/4, tube Ø 8, tube Ø 10 Supply 12/14: M7 Exhausts 3 and 5: G1/4 or with integrated silencer Exhausts 82/84: M7
If tubrication is necessary, please only use oils with maximum viscosity of 32 Cst and the version with external servo-pilot supply. The servo-pilot supply air quality class must be 6.4.4 according to 180 6873-1:2010 (do not lubricate). Valve sizes 10 5mm (2 valves for each subbase) 2 1mm (1 valve for each subbase) Working pressure - 0.9 + 10 bar Pilot pressure 3 + 7 bar 4.5 + 7 bar (with working pressure exceeding 6 bar for the versions 2x22 and 2x32) Flow rate 400 NUmin (21mm) Mounting position any position Protection class IP 65 ELECTRICAL SECTION - MULTIPOLE VERSION 25 or 37 pins Max. absorption 0.8 A (with Sub-D connector 37 pins) Supply voltage 24 v DC +/- 10% Max. number of coils to operate 24 on 20 valve positions (with Sub-D connector 25 pins) 32 on 28 valve positions (with Sub-D connector 37 pins) Valve signalling yellow led ELECTRICAL SECTION - FIELDBUS VERSION 24 on 20 valve positions (with Sub-D connector 25 pins) 32 on 28 valve positions (with Sub-D connector 25 pins) Valve signalling yellow led ELECTRICAL SECTION - FIELDBUS VERSION see the CX section (2.3.50) Max. absorption digital outputs / analog outputs and inputs 3A digital/analog inputs 3A Supply voltage begic supply 24 V D C+/- 10%, power s	Temperature	0 ÷ 50°C
21mm (1 valve for each subbase) Working pressure - 0,9 + 10 bar Pilot pressure 3 + 7 bar Pilot pressure 4.5 + 7 bar (with working pressure exceeding 6 bar for the versions 2x2/2 and 2x3/2) Flow rate 400 N/min (10.5mm) Mounting position any position Protection class IP 65 ELECTRICAL SECTION - MULTIPOLE VERSION 25 or 37 pins Max. absorption 0.8 A (with Sub-D connector 25 pins) 1 A (with Sub-D connector 37 pins) Supply voltage 24 V DC +/- 10% Max. number of coils to operate 24 on 20 valve position (with Sub-D connector 37 pins) Valve signalling yellow led ELECTRICAL SECTION - FIELDBUS VERSION Supply voltage Supply voltage 24 V DC +/- 10% Max. absorption 32 on 28 valve positions (with Sub-D connector 37 pins) Valve signalling yellow led ELECTRICAL SECTION - FIELDBUS VERSION Supply voltage General data see the CX section (2.3.50) Max. absorption digital outputs / analog outputs and inputs 3A digital/analog inputs 3A Supply voltage logic supply 24 V DC +/- 10% power supply 24 V DC +/- 10%	Air specifications	If lubrication is necessary, please only use oils with maximum viscosity of 32 Cst and the version with external servo-pilot supply.
Pilot pressure 3 + 7 bar 4.5 + 7 bar (with working pressure exceeding 6 bar for the versions 2x2/2 and 2x3/2) Flow rate 400 N/min (10.6mm) 700 N/min (21mm) Mounting position any position Protection class IP 65 ELECTRICAL SECTION - MULTIPOLE VERSION Type of Sub-D connector 25 or 37 pins Max. absorption 0.8 A (with Sub-D connector 25 pins) 1 A (with Sub-D connector 37 pins) Supply voltage 24 V DC +/- 10% Max. number of colls to operate 24 on 20 valve positions (with Sub-D connector 37 pins) Valve signalling yellow led ELECTRICAL SECTION - FIELDBUS VERSION are the CX section (2.3.50) Max. absorption digital outputs / analog outputs and inputs 3A digital/analog inputs 3A Supply voltage logic supply 24 V DC +/- 10%	Valve sizes	
4.5 + 7 bar (with working pressure exceeding 6 bar for the versions 2x2/2 and 2x3/2) Flow rate 400 N/min (10.5mm) 700 N/min (21mm) Mounting position any position Protection class IP 65 ELECTRICAL SECTION - MULTIPOLE VERSION 25 or 37 pins Max. absorption 0.8 A (with Sub-D connector 25 pins) 1 A (with Sub-D connector 37 pins) Supply voltage 24 v DC +/- 10% Max. number of colls to operate 24 on 20 valve positions (with Sub-D connector 25 pins) 32 on 28 valve positions (with Sub-D connector 37 pins) Valve signalling yellow led ELECTRICAL SECTION - FIELDBUS VERSION general data Supply voltage 24 or 20 valve positions (with Sub-D connector 25 pins) 32 on 28 valve positions (with Sub-D connector 37 pins) Valve signalling yellow led ELECTRICAL SECTION - FIELDBUS VERSION general data General data see the CX section (2.3.50) Max. absorption digital outputs / analog outputs and inputs 3A digital/analog inputs 3A Supply voltage logic supply 24 V DC +/- 10% power supply 24 V DC +/- 10%	Working pressure	- 0,9 ÷ 10 bar
Mounting position any position Protection class IP 65 ELECTRICAL SECTION - MULTIPOLE VERSION 25 or 37 pins Max. absorption 0.8 A (with Sub-D connector 25 pins) 1 A (with Sub-D connector 37 pins) Supply voltage 24 V DC +/- 10% Max. number of colls to operate 24 on 20 valve positions (with Sub-D connector 25 pins) 32 on 28 valve positions (with Sub-D connector 37 pins) Valve signalling yellow led ELECTRICAL SECTION - FIELDBUS VERSION See the CX section (2.3.50) Max. absorption digital outputs / analog outputs and inputs 3A digital/analog inputs 3A Supply voltage logic supply 24 V DC +/- 10%	Pilot pressure	
Protection class IP 65 ELECTRICAL SECTION - MULTIPOLE VERSION Type of Sub-D connector 25 or 37 pins Max. absorption 0.8 A (with Sub-D connector 25 pins) 1 A (with Sub-D connector 37 pins) Supply vottage 24 V DC +/- 10% Max. number of coils to operate 24 on 20 valve positions (with Sub-D connector 25 pins) 32 on 28 valve positions (with Sub-D connector 37 pins) Valve signalling yellow led ELECTRICAL SECTION - FIELDBUS VERSION see the CX section (2.3.50) Max. absorption digital outputs / analog outputs and inputs 3A digital/analog inputs 3A Supply vottage logic supply 24 V DC +/- 10% power supply 24 V DC +/- 10%	Flow rate	
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Type of Sub-D connector 25 or 37 pins Max. absorption 0.8 A (with Sub-D connector 25 pins) 1 A (with Sub-D connector 37 pins) Supply voltage 24 V DC +/- 10% Max. number of colls to operate 24 on 20 valve positions (with Sub-D connector 25 pins) 32 on 28 valve positions (with Sub-D connector 37 pins) Valve signalling yellow led ELECTRICAL SECTION - FIELDBUS VERSION general data General data see the CX section (2.3.50) Max. absorption digital outputs / analog outputs and inputs 3A digital/analog inputs 3A Supply voltage logic supply 24 V DC +/- 10% power supply 24 V DC +/- 10%	Protection class	IP 65
Max. absorption 0.8 A (with Sub-D connector 25 pins) 1 A (with Sub-D connector 37 pins) Supply voltage 24 V DC +/- 10% Max. number of coils to operate 24 on 20 valve positions (with Sub-D connector 25 pins) 32 on 28 valve positions (with Sub-D connector 37 pins) Valve signalling yellow led ELECTRICAL SECTION - FIELDBUS VERSION general data General data see the CX section (2.3.50) Max. absorption digital outputs / analog outputs and inputs 3A digital/analog inputs 3A Supply voltage logic supply 24 V DC +/- 10% power supply 24 V DC +/- 10%		25 or 37 pins
Max. number of colls to operate 24 on 20 valve positions (with Sub-D connector 25 pins) 32 on 28 valve positions (with Sub-D connector 37 pins) Valve signalling yellow led ELECTRICAL SECTION - FIELDBUS VERSION Electrate General data see the CX section (2.3.50) Max. absorption digital outputs / analog outputs and inputs 3A digital/analog inputs 3A Supply voltage logic supply 24 V DC +/- 10% power supply 24 V DC +/- 10%		0.8 A (with Sub-D connector 25 pins)
32 on 28 valve positions (with Sub-D connector 37 pins) Valve signalling yellow led ELECTRICAL SECTION - FIELDBUS VERSION General data see the CX section (2.3.50) Max. absorption digital outputs / analog outputs and inputs 3A digital/analog inputs 3A Supply voltage logic supply 24 V DC +/- 10% power supply 24 V DC +/- 10%	Supply voltage	24 V DC +/- 10%
ELECTRICAL SECTION - FIELDBUS VERSION General data see the CX section (2.3.50) Max. absorption digital outputs / analog outputs and inputs 3A digital/analog inputs 3A Supply voltage logic supply 24 V DC +/- 10% power supply 24 V DC +/- 10%	Max. number of coils to operate	
General data see the CX section (2.3.50) Max. absorption digital outputs / analog outputs and inputs 3A digital/analog inputs 3A Supply voltage logic supply 24 V DC +/- 10% power supply 24 V DC +/- 10%	Valve signalling	yellow led
General data see the CX section (2.3.50) Max. absorption digital outputs / analog outputs and inputs 3A digital/analog inputs 3A Supply voltage logic supply 24 V DC +/- 10% power supply 24 V DC +/- 10%	ELECTRICAL SECTION - FIELDBUS VERSION	
Supply voltage logic supply 24 V DC +/- 10% power supply 24 V DC +/- 10%		see the CX section (2.3.50)
power supply 24 V DC +/- 10%	Max. absorption	
Max. number of coils to operate 32 on 28 valve positions	Supply voltage	
	Max. number of coils to operate	32 on 28 valve positions

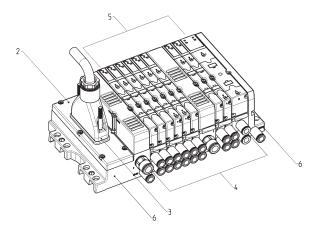


CONTROL

HN 5	M - 03A -	2Q4AZ2A - 2B	8M4C - A				
HN	SERIES						
5	SIZE: 1 = 10.5 2 = 21 5 = Mixed						
Μ	ELECTRICAL CONNECTION: M = Multipole 25 pin PNP N = Multipole 35 pin NPN H = Multipole 37 pin PNP L = Multipole 37 pin NPN						
03A	CONNECTION: 000 = without connector/cable	CONNECTOR WITH CABLE AXIAL OUTPUT: 03A = 3m 05A = 5m 10A = 10m 15A = 15m 20A = 20m 25A = 25m	CONNECTOR WITHOUT CABLE: 4XA = 25 pins axial 4XR = 25 pins radial 9XA = 37 pins axial 9XR = 37 pins radial				
		CONNECTOR WITH CABLE RADIAL OUTPUT: 03R = 3m 05R = 5m 10R = 10m 15R = 15m 20R = 20m 25R = 25m					
2Q4AZ2A	SUBBASES FOR 2 SOLENOID VALVES SIZE 1 (*): A (AZ) = M7 threads B (BZ) = 4 fittings for tube Ø4 C (CZ) = 4 fittings for tube Ø6 D (DZ) = channel 1, 3, 5 closed; M7 threads E (EZ) = channel 1, 3, 5 closed; cartridges tube Ø6 G (GZ) = channel 3, 5 closed; cartridges tube Ø6 H (HZ) = channel 3, 5 closed; cartridges tube Ø6 L (LZ) = channel 1 closed; cartridges tube Ø6 L (LZ) = channel 1 closed; M7 threads M (MZ) = channel 1 closed; cartridges tube Ø6 K (NZ) = channel 1 closed; cartridges tube Ø6 FOR SOLENOID VALVES SIZE 2:	SUBBASES FOR PNEUMATIC SUPPLY: X = supplementary supply and exhaust with integrated silencer W = supply from the exhausts FOR ELECTRICAL SUPPLY: K = separation of electrical supply	SEALS: T = diaphragm on channels 1, 3, 5 U = diaphragm on channel 1 V = diaphragm on channels 3, 5				
2B8M4C	Q = G 1/8 threads R = cartridges for tube $Ø6$ S = cartridges for tube $Ø8$ SOLENOID VALVES Size 1 and 2: 0 = island without solenoid valves M = 5/2 Monostable B = 5/2 Bistable V = 5/3 Centres Closed C = 2 x 3/2 NC A = 2 x 3/2 NC G = 1 x 3/2 NC + 1 x 3/2 NO E = 2 x 2/2 NC	SOLENOID VALVE + PRESSURE REGULATOR on channel 1 (size 2 only): N = $5/2$ Monostable P = $5/2$ Bistable Q = $5/3$ Centres Closed R = $2 \times 3/2$ NC S = $2 \times 3/2$ NC T = $1 \times 3/2$ NC + $1 \times 3/2$ NO U = $2 \times 2/2$ NC X = $2 \times 2/2$ NC					
A	$F = 2 \times 2/2 \text{ NO}$ $I = 1 \times 2/2 \text{ NO}$ $I = 1 \times 2/2 \text{ NO} + 1 \times 2/2 \text{ NO}$ $L = \text{free position}$ THREADED TERMINAL PLATES: A = 1, 12/14 in common 3/5, 82/84 threaded ports B = 1, 12/14 separated 3/5, 82/84 with integrated silencer D = 1, 12/14 separated 3/5, 82/84 with integrated silencer	Y = 1 x 2/2 NC + 1 x 2/2 NO TERMINAL PLATES with FITTINGS FOR TUBE Ø 8 on PORT 1: E = 1, 12/14 in common 3/5, 82/84 conveyable F = 1, 12/14 separated 3/5, 82/84 with integrated silencer H = 1, 12/14 separated 3/5, 82/84 with integrated silencer	TERMINAL PLATES with FITTINGS FOR TUBE Ø 10 on PORT I = 1, 12/14 in common 3/5, 82/84 conveyable L = 1, 12/14 separated 3/5, 82/84 with integrated silencer N = 1, 12/14 separated 3/5, 82/84 with integrated silencer				

In presence of identical consequent codes both for the subbases as for the valves you need to substitute the letter with the number. Ex: HN5M-03A-ABCS-MMCCBBB-A is converted to HN5M-03A-ABCS-2M2C3B-A.

CODING - MULTIPOLE VERSION



(1)	SIZE	(2)	ELECTRICAL CONNECTION	(3)	CONNECTION	(4)	SUBBASES for 2 SOLENOID VALVES, size 1	(5)	SOLENOID VALVES Size 1 and 2	(6)	THREADED TERMINAL PLATES
1	10.5	М	Multipole 25 pin PNP	000	without connector/cable	A (AZ)	M7 threads	0	island without solenoid valves	A	1, 12/14 in common 3/5, 82/84 with thread
2	21	N	Multipole 25 pin NPN	03A	connector with axial output cable 3 m	B (BZ)	4 fittings tube Ø4	М	5/2 Monostable	в	1, 12/14 separated 3/5, 82/84 with thread
5	Mixed	Η	Multipole 37 pin PNP	05A	connector with axial output cable 5 m	C (CZ)	4 fittings tube Ø6	В	5/2 Bistable	С	1, 12/14 in common 3/5, 82/84 with silencer
		L	Multipole 37 pin NPN	10A	connector with axial output cable 10 m	D (DZ)	channel 1, 3, 5 closed M7 threads	v	5/3 Centres Closed	D	1, 12/14 separated 3/5, 82/84 with silencer
				15A	connector with axial output cable 15 m	E (EZ)	channel 1, 3, 5 closed cartridges Ø4	с	2x 3/2 NC		TERMINAL PLATES fittings for tube Ø8, on port
				20A	connector with axial output cable 20 m	F (FZ)	channel 1, 3, 5 closed cartridges Ø6	Α	2x 3/2 NO	Е	1, 12/14 in common 3/5, 82/84 conveyable
				25A	connector with axial output cable 25 m	G (GZ)	channel 3, 5 closed M7 threads	G	1x 3/2 NC + 1x 3/2 NO	F	1, 12/14 separated 3/5, 82/84 conveyable
				03R	connector with radial output cable 3 m	H (HZ)	channel 3, 5 closed cartridges Ø4	E	2x 2/2 NC	G	1, 12/14 in common 3/5, 82/84 with silencer
				05R	connector with radial output cable 5 m	I (IZ)	channel 3, 5 closed cartridges Ø6	F	2x 2/2 NO	н	1, 12/14 separated 3/5, 82/84 with silencer
				10R	connector with radial output cable 10 m	L (LZ)	channel 1 closed M7 threads	I	1x 2/2 NC + 1x 2/2 NO		TERMINAL PLATES fittings for tube Ø10, on port
				15R	connector with radial output cable 15 m	M (MZ)	channel 1 closed cartridges Ø4	L	Free position	I	1, 12/14 in common 3/5, 82/84 conveyable
				20R	connector with radial output cable 20 m	N (NZ)	channel 1 closed cartridges Ø6		SOL. VALVE + PRESS. REG. channel 1 - size 2 only	L	1, 12/14 separated 3/5, 82/84 conveyable
				25R	connector with radial output cable 25 m		SUBBASES for SOLENOID VALVES, size 2	N	5/2 Monostable	М	1, 12/14 in common 3/5, 82/84 with silencer
				4XA	25 pin axial connector	Q	G1/8 threads	Р	5/2 Bistable	N	1, 12/14 separated 3/5, 82/84 with silencer
				4XR	25 pin radial connector	R	cartridges for tube Ø6	Q	5/3 Centres Closed		
				9XA	37 pin axial connector	S	cartridges for tube Ø8	R	2x 3/2 NC		
				9XR	37 pin radial connector		SUBBASES FOR PNEUMATIC SUPPLY	s	2x 3/2 NO		
						x	supplem. supply and exhaust	т	1x 3/2 NC + 1x 3/2 NO		
						Y	supplem. supply and exhaust with silencer	U	2x 2/2 NC		
						w	supply from exhausts	Х	2x 2/2 NO		
							SUBBASES FOR ELECTRICAL SUPPLY	Y	1x 2/2 NC + 1x 2/2 NO		
						к	separation of electrical supply				
							SEALS				
						т	Diaphragm on channels 1, 3, 5				
						U	Diaphragm on channel 1				
						v					



HN...

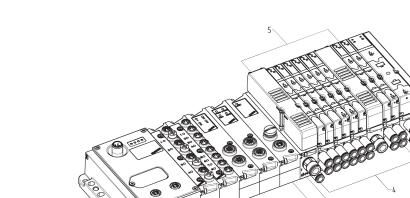


CONTROL

	01 - ABCD -	2Q4AZ2A - 2	B8M4C - A
HN	SERIES		
5	SIZE: 1 = 10.5 2 = 21 5 = Mixed		
01	PROTOCOL: 01 = PROFIBUS-DP 02 = DeviceNet 03 = CANopen 04 = EtherNet/IP 05 = EtherCAT 06 = PROFINET 99 = Expansion module		
ABCD	INPUT / OUTPUT MODULES: 0 = no module	$\label{eq:spectral_states} \begin{array}{l} \mbox{INPUT} / \mbox{OUTPUT} \mbox{MODULES:} \\ A = 8 \mbox{Digital Inputs} \mbox{M8} \\ B = 4 \mbox{Digital Inputs} \mbox{M8} \\ C = 2 \mbox{Analog Inputs} \mbox{A-20mA} \\ D = 2 \mbox{Analog Inputs} \mbox{A-10V} \\ E = 1 \mbox{Analog Input} \mbox{A-20mA} + 1 \mbox{Input} \mbox{O-10V} \\ C = 4 \mbox{Digital Outputs} \mbox{M12} \mbox{dup} \\ A \mbox{Digital Output} \mbox{A-20mA} \\ T = 2 \mbox{Analog Output} \mbox{A-20mA} + 1 \mbox{Output} \mbox{O-10V} \\ U = 1 \mbox{Analog Output} \mbox{A-20mA} + 1 \mbox{Input} \mbox{O-10V} \\ Z = 1 \mbox{Analog Output} \mbox{A-20mA} + 1 \mbox{Input} \mbox{A-20mA} \\ K = 1 \mbox{Analog Output} \mbox{O-10V} \\ Y = 1 \mbox{Analog Output} \mbox{O-10V} + 1 \mbox{Input} \mbox{A-20mA} \\ Y = 1 \mbox{Analog Output} \mbox{O-10V} + 1 \mbox{Input} \mbox{A-20mA} \\ \end{array}$	INPUT / OUTPUT MODULES: S = Initial subnet module
2Q4AZ2A	SUBBASES FOR 2 SOLENOID VALVES SIZE 1 (*): A (AZ) = M7 threads B (BZ) = 4 fittings for tube Ø4 C (CZ) = 4 fittings for tube Ø6 D (DZ) = channel 1, 3, 5 closed; M7 threads E (EZ) = channel 1, 3, 5 closed; cartridges tube Ø4 F (FZ) = channel 3, 5 closed; cartridges tube Ø6 G (GZ) = channel 3, 5 closed; cartridges tube Ø6 L (LZ) = channel 3, 5 closed; cartridges tube Ø6 L (LZ) = channel 1 closed; M7 threads M (MZ) = channel 1 closed; cartridges tube Ø4 N (NZ) = channel 1 closed; cartridges tube Ø6 (*) Subbases with "Z" at the end of their code are used with monostable solenoid valves FOR SOLENOID VALVES SIZE 2: Q = G 1/8 threads R = cartridges for tube Ø6 S = cartridges for tube Ø8	SUBBASES FOR PNEUMATIC SUPPLY: X = supplementary supply and exhaust y = supplementary supply and exhaust with integrated silencer W = supply from the exhausts FOR ELECTRICAL SUPPLY: K = separation of electrical supply	SEALS: T = diaphragm on channels 1, 3, 5 U = diaphragm seal on channel 1 V = diaphragm seal on channels 3, 5
2B8M4C	SOLENOID VALVES Size 1 and 2: 0 = island without solenoid valves M = 5/2 Monostable B = 5/2 Bistable V = 5/3 Centres Closed C = 2 x 3/2 NC A = 2 x 3/2 NC G = 1 x 3/2 NC + 1 x 3/2 NO E = 2 x 2/2 NC F = 2 x 2/2 NC I = 1 x 2/2 NC + 1 x 2/2 NO L = free position	SOLENOID VALVE + PRESSURE REGULATOR on channel 1 (size 2 only): N = 5/2 Monostable P = 5/2 Bistable Q = 5/3 Centres Closed R = 2 x 3/2 NC S = 2 x 3/2 NC T = 1 x 3/2 NC + 1 x 3/2 NO U = 2 x 2/2 NC X = 2 x 2/2 NC Y = 1 x 2/2 NC + 1 x 2/2 NO	
A	THREADED TERMINAL PLATES: A = 1, 12/14 in common 3/5, 82/84 threaded ports B = 1, 12/14 separated 3/5, 82/84 threaded ports C = 1, 12/14 in common 3/5, 82/84 with integrated silencer D = 1, 12/14 separated 3/5, 82/84 with integrated silencer	TERMINAL PLATES with CARTRIDGES Ø 8: E = 1, 12/14 in common 3/5, 82/84 conveyable F = 1, 12/14 separated 3/5, 82/84 conveyable G = 1, 12/14 in common 3/5, 82/84 with integrated silencer H = 1, 12/14 separated 3/5, 82/84 with integrated silencer	TERMINAL PLATES with CARTRIDGES Ø 10: I = 1, 12/14 in common 3/5, 82/84 conveyable L = 1, 12/14 separated 3/5, 82/84 conveyable M = 1, 12/14 in common 3/5, 82/84 with integrated silencer N = 1, 12/14 separated 3/5, 82/84 with integrated silencer

X, Y and K sub-bases will be equipped with threads or cartridges of the same size of port 1, see the choice "Type of terminal plates". In presence of identical consequent codes both for sub-bases and for valves, you need to substitute the letter with the number. Ex: HN501-ABCD-ABCS-MMCCBBB-A is converted to HN501- ABCD-ABCS-2M2C3B-A.

CODING - FIELDBUS VERSION



000

1 2 3 4 5 6 H N 1 01 - A B Q R S - 3 B X B R - 3 M 2 B M X M V C - D

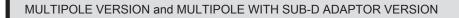
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(1)	SIZE	(2)	PROTOCOL	(3)	INPUT / OUTPUT MODULES	(4)	SUBBASES FOR 2 SOLENOID VALVES, size 1	(5)	SOLENOID VALVES Size 1 and 2	(6)	THREADED TERMINAL PLATES
1	10.5	01	PROFIBUS-DP	0	no module	A (AZ)	M7 threads	0	island without solenoid valves	A	1, 12/14 in common 3/5, 82/84 threaded
2	21	02	DeviceNet	Α	8 Digital IN M8	B (BZ)	fittings tube Ø4	М	5/2 Monostable	В	1, 12/14 separated 3/5, 82/84 threaded
5	Mixed	03	CANopen	В	4 Digital IN M8	C (CZ)	fittings tube Ø6	В	5/2 Bistable	С	1, 12/14 in common 3/5, 82/84 with silence
		04	EtherNet/IP	С	2 Analog IN 4-20mA	D (DZ)	channel 1, 3, 5 closed; M7 threads	V	5/3 Centres Closed	D	1, 12/14 separated 3/5, 82/84 with silence
		05	EtherCAT	D	2 Analog IN 0-10V	E (EZ)	channel 1, 3, 5 closed; cartridges Ø4	С	2x 3/2 NC		TERMINAL PLATES cartridges Ø8
		06	PROFINET	Е	1 Analog IN 4-20mA + 1 IN 0-10V	F (FZ)	channel 1, 3, 5 closed; cartridges Ø6	Α	2x 3/2 NO	Е	1, 12/14 in common 3/5, 82/84 conveyabl
		99	Expansion module	Q	4 Digital OUT M12 duo	G (GZ)	channel 3, 5 closed; M7 threads	G	1x 3/2 NC + 1x 3/2 NO	F	1, 12/14 separated 3/5, 82/84 conveyabl
				R	2 Analog OUT 4-20mA	H (HZ)	channel 3, 5 closed; cartridges Ø4	Е	2 x 3/2 NC	G	1, 12/14 in common 3/5, 82/84 with silence
				Т	2 Analog OUT 0-10V	I (IZ)	channel 3, 5 closed; cartridges Ø6	F	2x 3/2 NO	н	1, 12/14 separated 3/5, 82/84 with silenc
				U	1 Analog OUT 4-20mA + 1 OUT 0-10V	L (LZ)	channel 1 closed; M7 threads	I	1x 2/2 NC + 1x 2/2 NO		TERMINAL PLATES cartridges Ø10
				v	1 Analog OUT 4-20mA + 1 IN 0-10V	M (MZ)	channel 1 closed; cartridges Ø4	L	Free position	I	1, 12/14 in common 3/5, 82/84 conveyabl
				z	1 Analog OUT 4-20mA + 1 IN 4-20mA	N (NZ)	channel 1 closed, cartridges Ø6		SOL. VALVE + PRESS. REG. channel 1 - size 2 only	L	1, 12/14 separated 3/5, 82/84 conveyable
				К	1 Analog OUT 0-10V + 1 Input 0-10V		SUBBASES for SOLENOID VALVES, size 2	N	5/2 Monostable	м	1, 12/14 in common 3/5, 82/84 with silence
				Y	1 Analog OUT 0-10V + 1 IN 4-20mA	Q	G1/8 threads	Ρ	5/2 Bistable	N	1, 12/14 separated 3/5, 82/84 with silenc
				S	Initial subnet module	R	cartridges for tube Ø6	Q	5/3 Centres Closed		
						S	cartridges for tube Ø8	R	2x 3/2 NC		
							SUBBASES FOR PNEUMATIC SUPPLY	s	2x 3/2 NO		
						x	supplem. supply and exhaust	т	1x 3/2 NC + 1x 3/2 NO		
						Y	supplem. supply and exhaust with silencer	U	2x 2/2 NC		
						W	supply from exhausts	Х	2x 2/2 NO		
							SUBBASES FOR ELECTRICAL SUPPLY	Y	1x 2/2 NC + 1x 2/2 NO		
						к	separation of electrical supply				
							SEALS				
						т	diaphragm on channels 1, 3, 5				
						U	diaphragm on channel 1				
						v	diaphragm on channels 3, 5				

2

HN...

2/3.40.06



CONTROL

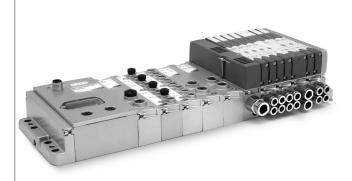




The Multipole version can be connected in a quick and secure way thanks to the electrical connection by means of a pre-wired cable with 25 or 37 pins with in-line or angular connection. It is possible to create zones with differentiated power supply and with separate pressure/exhaust. Thanks to the subbases with monostable board, islands can be realized up to maximum of 24 coils on 20 valve positions with the 25 pin connection and 32 coils on 28 valve positions with the 37 pin connection.

The Multipole Island of both 25 pins and 37 pins can be connected by means of a Sub-D adaptor, also of 25 or 37 pins. In this way a standard Multipole Island can be inserted as expansion in the subnet of the Serial version.

VERSIONS: FIELDBUS WITH CPU MODULE AND EXPANSION FIELDBUS

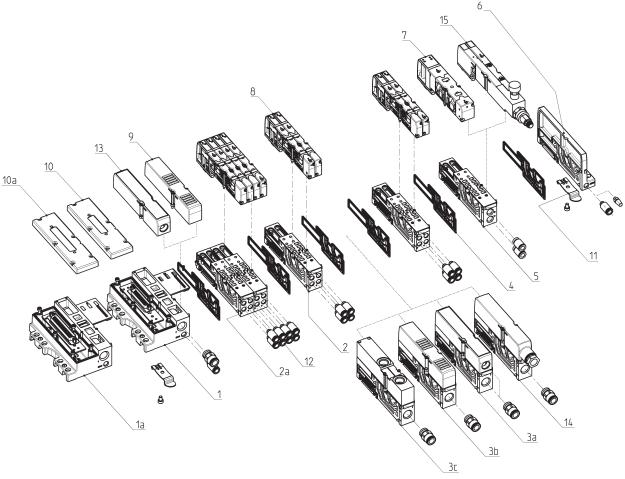




Thanks to the Series CX Multi-serial node and a special direct interface module with the pneumatic part of the island, it is possible to interface the Series HN with the PROFIBUS-DP, DeviceNet, CANopen, PROFINET, EtherCAT and EtherNet/IP serial protocols. The Fieldbus version with CPU has the same configuration rules of a Multipole island and can be equipped with different electric modules like digital/analog inputs/outputs of 0-10V and 4-20mA, as well as initial subnet Modules.

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.





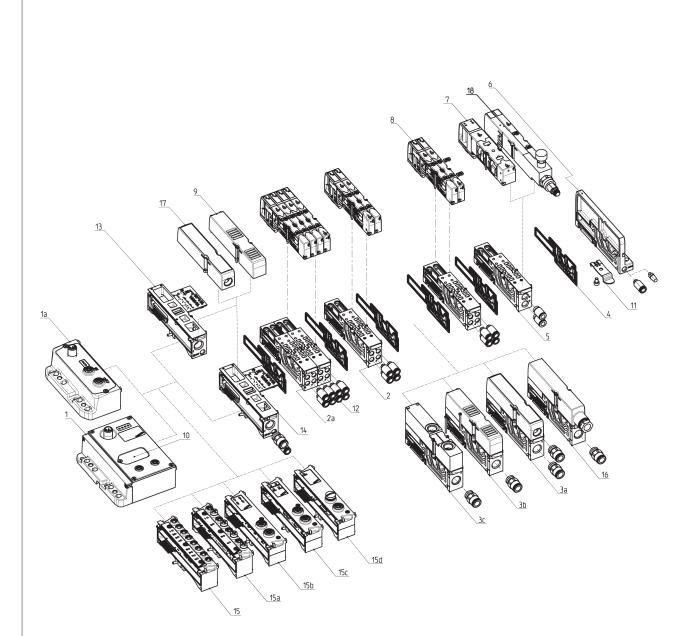
COMPONENTS

1	Electric interface group Multipole 25 pin	7	Solenoid valve, size 2
1a	Electric interface group Multipole 37 pin	8	Solenoid valve, size 1
2	Threaded subbase, size 10.5 - modularity 2	9	Cover with silencer
2a	Subbases without electric board	10	Multipole electric cover 25 pins
3a	Conveyable plate for supply and supplementary exhaust	10a	Multipole electric cover 37 pins
3b	Plate for supply and exhaust with silencer	11	Mounting bracket for DIN rail
3c	Plate for supply from exhausts	12	Quick-release fittings
4	Interface seals	13	Cover to convey exhausts 3 and 5
5	Threaded subbase, size 21 - modularity 1	14	Module to separate electrical supply and supplementary pneumatic supply
6	Right terminal (HA0T-H)	15	Valve size 10.5 with incorporated pressure regulator



CONTROL

INDIVIDUAL FIELDBUS version - COMPONENTS

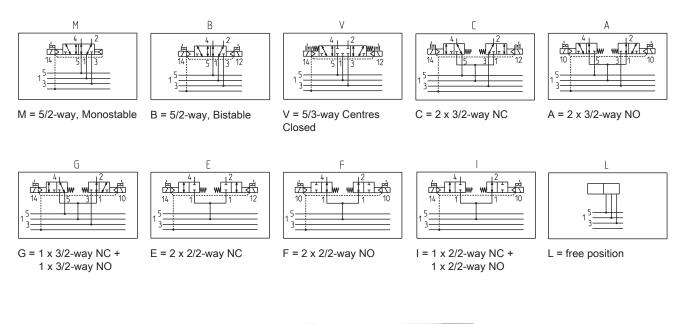


COMPONENTS

1	Multi-serial Module CX	11	Mounting bracket for DIN rail
1a	Expansion Module		
2	Threaded subbase, size 10.5 - modularity 2	12	Quick-release fittings
2a	Subbases without electric board		
3a	Conveyable plate for supply and supplementary exhaust	13	Direct interface module with Series HN with internal pilot supply
3b	Plate for supply and exhaust with silencer		
3c	Plate for supply from exhausts		
4	Interface seals	14	Direct interface module with Series HN with external pilot supply
5	Threaded subbase, size 21 - modularity 1	15	8 Digital Inputs module
		15a	4 Digital Inputs module
6	Right terminal (HA0T-H)	15b	4 Digital Outputs module
		15c	IN/OUT analog module
		15d	Initial subnet module
7	Solenoid valve size 2	16	Cover to convey exhausts 3 and 5
8	Solenoid valve size 1	17	Module to separate electrical supply and supplementary pneumatic supply
9	Cover with silencer	18	Valve size 10,5 with integrated pressure regulator
10	Cover for the access to rotary switches and for programming		

CONTROL

AVAILABLE FUNCTION - SYMBOLS FOR SOLENOID VALVES

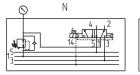




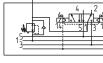
AVAILABLE FUNCTIONS - SYMBOLS FOR SOLENOID VALVES WITH PRESSURE REGULATOR

 \bigcirc

Closed



N = 5/2-way, Monostable



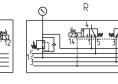
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Ρ

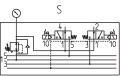
P = 5/2-way, Bistable



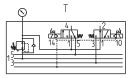
Q



R = 2 x 3/2-way NC



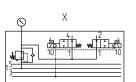
S = 2 x 3/2-way NO



T = 1 x 3/2-way NC + 1 x 3/2-way NO

U Q ₽<u>₽</u>₽<u>1</u>0 MC A

U = 2 x 2/2-way NC



X = 2 x 2/2-way NO

Q ***__**___

 $Y = 1 \times 2/2$ -way NC + 1 x 2/2-way NO



It can be assembled on subbase size 21 only.



AVAILABLE FUNCTIONS - SUBBASE TYPES



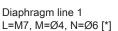
Through-subbase s. 10.5 A=M7, B=Ø4, C=Ø6 [*]

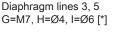


X = supplementary supply and exhaust



Diaphragm line 1 Diaphragm lines 1, 3 5 D=M7, E=Ø4, F=Ø6 [*]



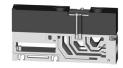




Z = electro-pneum. interface for HP...F/G/R



Through-subbase s. 21 Q = 1/8, R = Ø6, S = Ø8



W = plate for supply from exhausts



Line 1



K = interm. plate to sep.

elec. and suppl. supply



P = Through seal

Y = supplem. supply +

exhaust with silencer

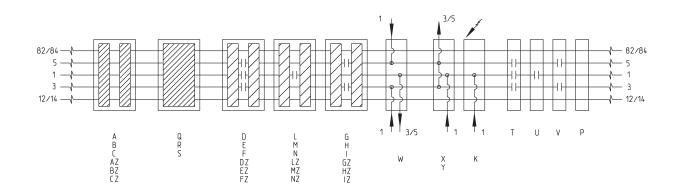


U = Diaphragm seal -V = Diaphragm seal -Lines 3, 5





T = Diaphragm seal -Lines 1, 3, 5



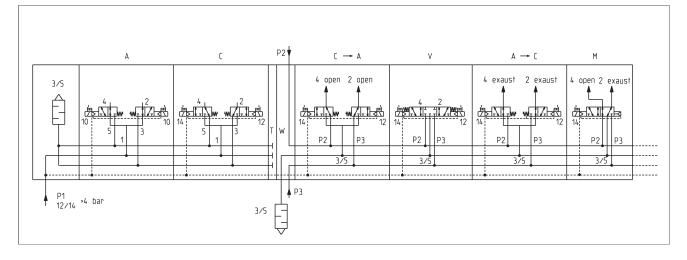
[*] The subbases A, B, C, D, E, F, G, H, I, L, M, N are available also with a board to be used with monostable solenoid valves. To order this version it is necessary to add Z at the end of the code of the standard subbase. Example: AZ instead of A. For further details we suggest you to see the coding example.

CONTROL

PROPER USE OF VALVE FUNCTIONS WITH INTERMEDIATE PLATE TYPE W

The intermediate plate cod. W is composed by a subbase which is equipped with a upper connection bracket. On this bracket there are two connections on which it is possible to apply two different pressures (ex. P2 and P3). In this configuration, the connection 1 on the subbase represents the exhaust 3/5. With this plate it is possible to supply the valves positioned downstream through the exhausts 3 and 5. When supplied from the exhausts, these valves have a different function compared with the ones supplied in the standard way. Some examples:

Solenoid valve mod. C at rest has outlets 2 and 4 active and corresponds to model "A", in presence of electrical inputs 12 and 14 outlets 2 (P3) and 4 (P2) close respectively; the configuration of solenoid valve mod. V at rest doesn't change, in presence of electrical input 12 outlet 4 (P2) is activated, in presence of electrical input 14 outlet 2 (P3) is activated; outlets 2 and 4 are closed in solenoid valve mod. A at rest which corresponds to model "C", in presence of electrical inputs 12 and 14 outlets 2 (P3) and 4 (P2) open respectively; outlet 4 (P2) is active in solenoid valve mod. M at rest, in presence of electrical input 14 the active outlet becomes outlet 2 (P3). All the valve functions, both 10.5 and 21 sizes, have this different operation. Solenoid valves with an integrated pressure regulator can't be used after an intermediate plate W. This plate requires in the initial part of the valve island a supply pressure of 4 bar at least. Otherwise, it is necessary to use the version with external servo pilot supply and apply a pressure of at least 4 bar on the connection 12/14. It is necessary to insert a seal type T before plate W.



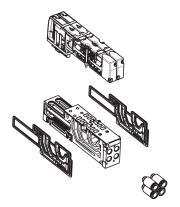
SUBBASES WITH MONOSTABLE BOARD

The subbases for valves Size 1 (10.5 mm) are set for housing 2 solenoid valves that may be both with double solenoid. Each subbase uses 4 electric signals. Even in case of monostable solenoid valves the subbase uses 4 electrical signals.

To increase the number of valve positions that can be connected with a single Sub-D connector, all the subbases Size 1 can add "Z" at the end of their code thus using 2 electrical signals. They are, therefore, suitable for the connection of monostable solenoid valves.

Examples:

Code A ---> AZ with board for monostable solenoid valves Code N ---> NZ with board for monostable solenoid valves



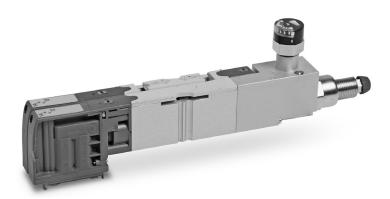
MODULE TO SEPARATE ELECTRIC AND PNEUMATIC SUPPLY HA0M-K



Connection	3 poles terminal block to be wired					
Dimensions	130 x 20 mm					
Signalling	None					
Supply	24 V DC (+/- 10%)					
Electrical protection	Fuse 2 A					
Protection class	IP 65					
Temperature	0°C ÷ 50°C					
Material	Plastics - Aluminium					
Weight	100 g					

VALVE WITH INTEGRATED PRESSURE REGULATOR HP2V

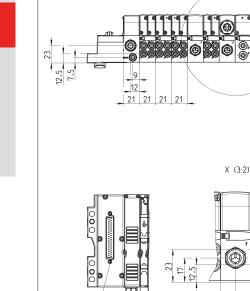
This solution has the advantage of reducing the valve island's overall height compared to traditional "sandwich" solutions. The pressure regulator allows to set the supply pressure of the lateral valve.

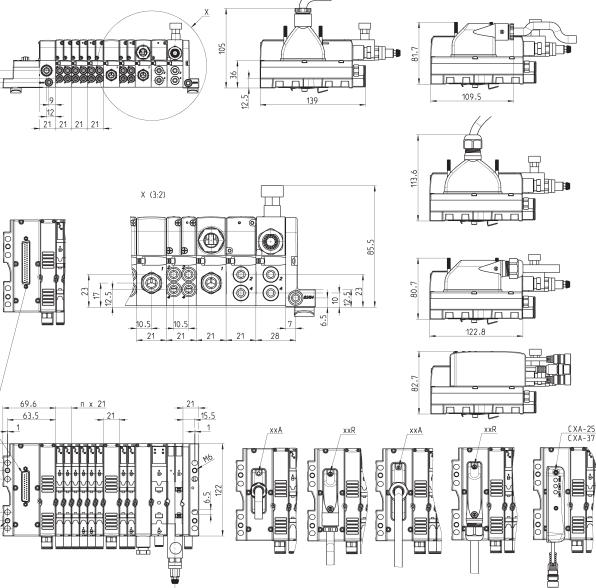






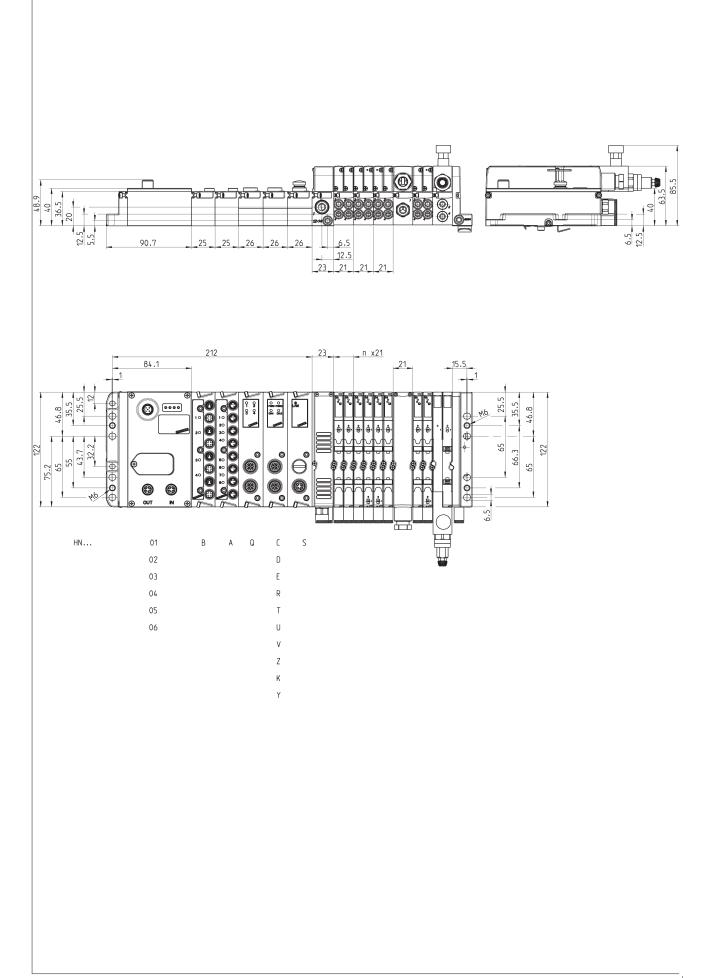
MULTIPOLE version 25 and 37 pin - DIMENSIONS





46.8

INDIVIDUAL FIELDBUS version - DIMENSIONS



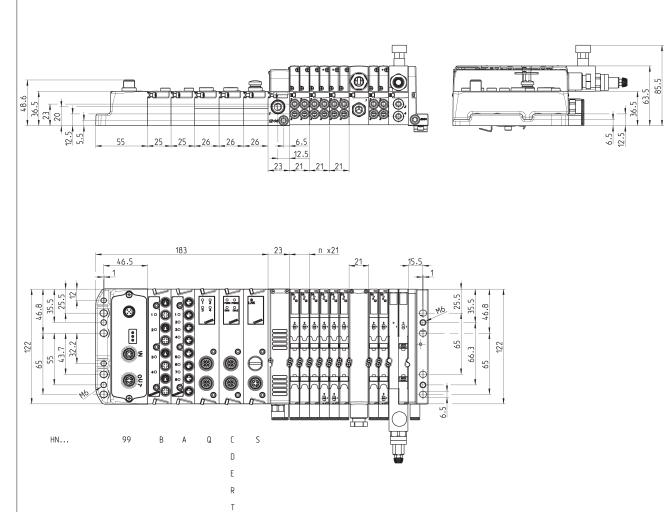
2

CONTROL



EXPANSION of the FIELDBUS version - DIMENSIONS

2



U V Z K Y



CONTROL

CPU Module - pin configuration

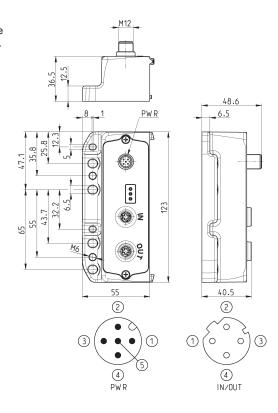


40 36.5	M12	 I	48.	0
0 55 55 43.7 43.7 25.8 43.7 5 25.8 5 25.8 5 5 25.8 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 6 6 5 5 5 5 5 5 5 6 6 5 5 5 5 5 5 5 6 6 6 5		122.6		

Mod.	Coding reference	Fieldbus Protocol	2	1	Bus-IN connector	Bus-OUT connector
CX01-0-0	01	PROFIBUS	Bus-IN	Bus-OUT	M12 B 5 pin male	M12 B 5 pin female
CX02-0-0	02	DeviceNet	Bus-IN	Bus-OUT	M12 A 5 pin male	M12 A 5 pin female
CX03-0-0	03	CANopen	Bus-IN	Bus-OUT	M12 A 5 pin male	M12 A 5 pin female
CX04-0-0	04	EtherNet/IP	Bus-OUT	Bus-IN	M12 D 5 pin female	M12 D 5 pin female
CX05-0-0	05	EtherCAT	Bus-OUT	Bus-IN	M12 D 5 pin female	M12 D 5 pin female
CX06-0-0	06	PROFINET	Bus-OUT	Bus-IN	M12 D 5 pin female	M12 D 5 pin female
-						

Expansion Module - pin configuration

Note: to connect the Expansion with the subnet, we recommend the use of cables Mod. CS-SB04HB-... or CS-SC04HB-...



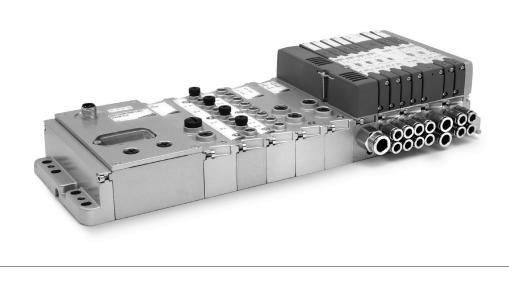
Mod.	Coding reference	Fieldbus Protocol	Bus-IN and Bus-OUT connector
CX99-0-0	99	Subnet expansion	M12 D 5 pin female

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 M12 A 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 choosen 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 indicate the working state. A maximum number of 1024 inputs and 1024 outputs can be managed.



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.





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 5 pin female.

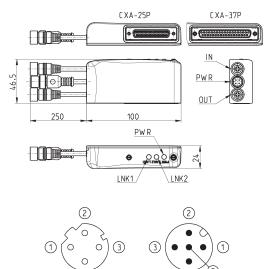
Mod.	Coding reference	Bus-OUT connection	Max number of modules for subnet	Max extension of subnet per module
ME3-0000-SL	S	M12D 5 pin female	5	100 m

Sub-D adaptor module 25 and 37 pin Mod. CXA-25P and CXA-37P



Led 1 = Yellow LNK1 Led 2 = Yellow LNK2 Led 3 = Green PWR, supply present and OK

It is an Expansion module of the subnet and can be connected to all valve islands with Sub-D connection. In the 25 pin version, it can manage up to a maximum of 24 outputs, while with 37 pin version, the outputs become 32. 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 5 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.



(4) BUS IN ≠ BUS OUT (4)

PWR

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 5 pin female	M12D 5 pin female	M12A 4 pin male	24 V DC	3 W
CXA-37P	Sub-D 37 broches	32	M12D 5 pin female	M12D 5 pin female	M12A 4 pin male	24 V DC	3 W

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.



2

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		400 mA for 4 sensors	10 mA	PNP	IP65	0 ÷ 50°C	110 g
ME3-0400-DC	В	4	M8 3 pin female	4	122 x 25 mm	1 yellow led for each input		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 pin female connections and it can be configured as 2 analog Outputs or 2 Inputs or 1 Input + 1 Output. Every analog output has a 12 bit resolution 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	С	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	Т	-	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	К	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	

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CONTROL

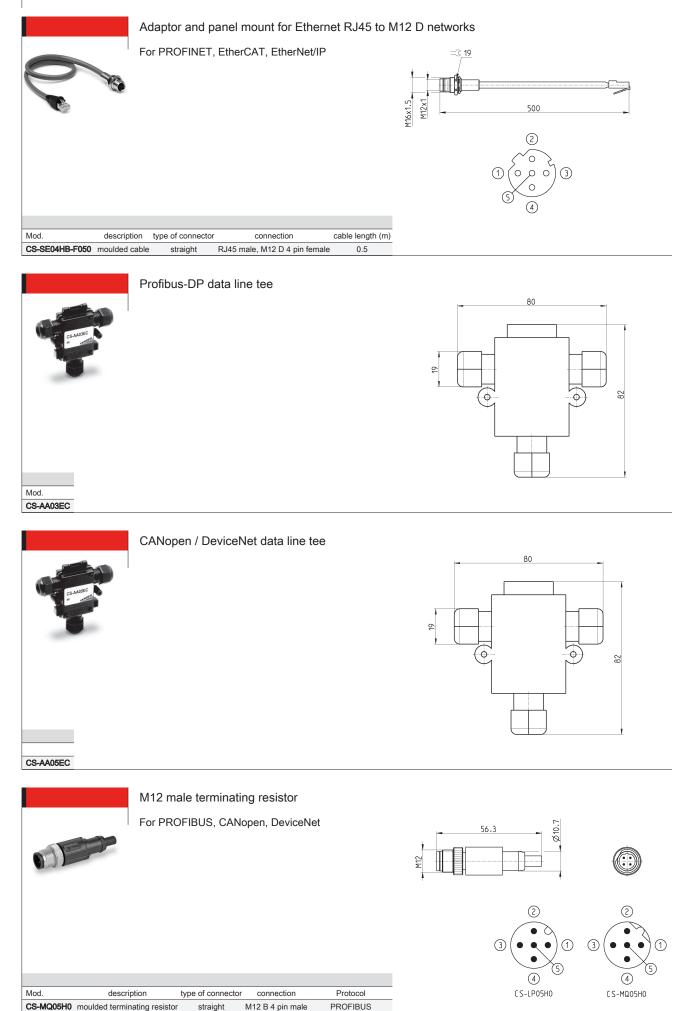
Digital power output module Mod. ME3-0004-DL

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	Number of	Connection	Number of	Dimensions	Signalling	Sensor	Max power for	Max power for	Type of	Protection	Operating	Weight
	reference	digital outputs		connectors			supply	M12 connector	digital output	signal	class	temperature	
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



CONTROL



M12 A 5 pin male CANOpen / DeviceNet

straight

CS-LP05H0 moulded terminating resistor

CATALOGUE > Release 8.8

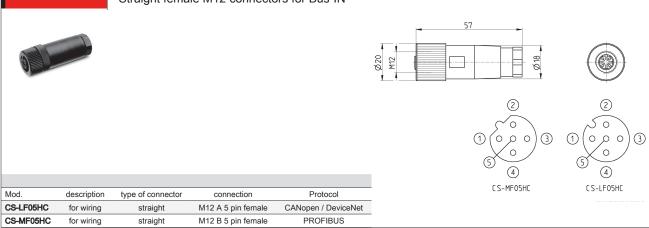
Subnet terminating resistor



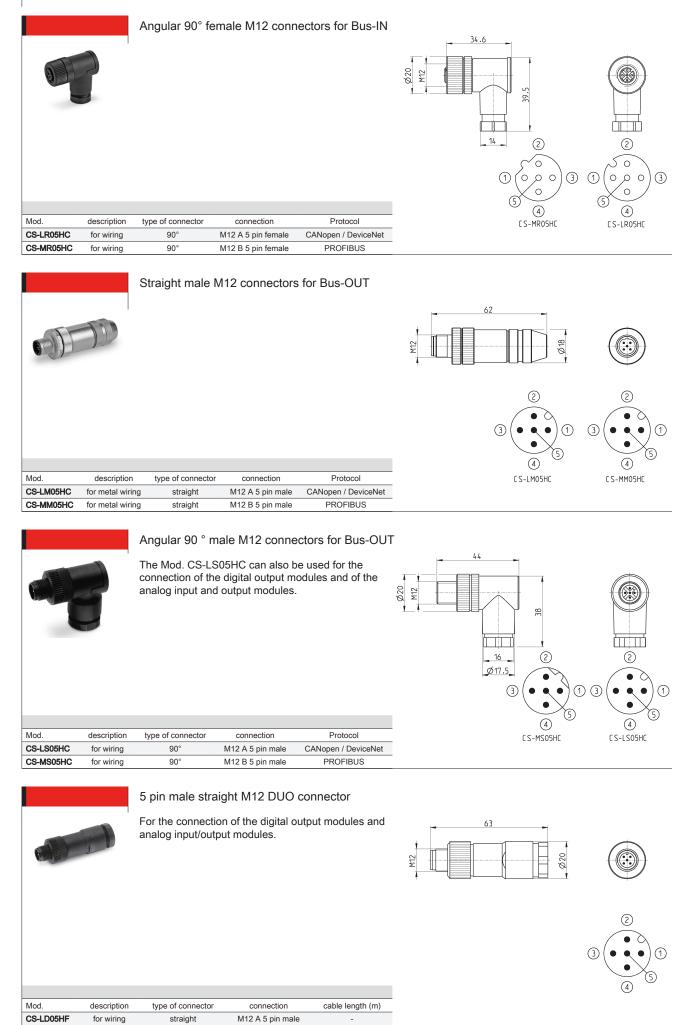
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CONTROL

						61M		56.3	Ø10.7	
Mod.	descr	ription	type of connector	connection	n Protoco	1				
CS-SU04H0	moulded termi	inating resistor	straight	M12 D 4 pi	in subnet					
0		Straight con	nector for pow	er supply	/	Ø19 M12		53	Ø18	
Mod. CS-LF04HB	description for wiring	type of connect straight	or connectic M12 A 4 pin fi		cable length (m)	_				
			nector for powe			_	-	34.6		÷
	8					Ø20			5.95	
Mod.	description	type of connect	or connectic	on c	cable length (m)				ſ	
CS-LR04HB	for wiring	90°	M12 A 4 pin f	emale	-					
	in		ale M12 conne							



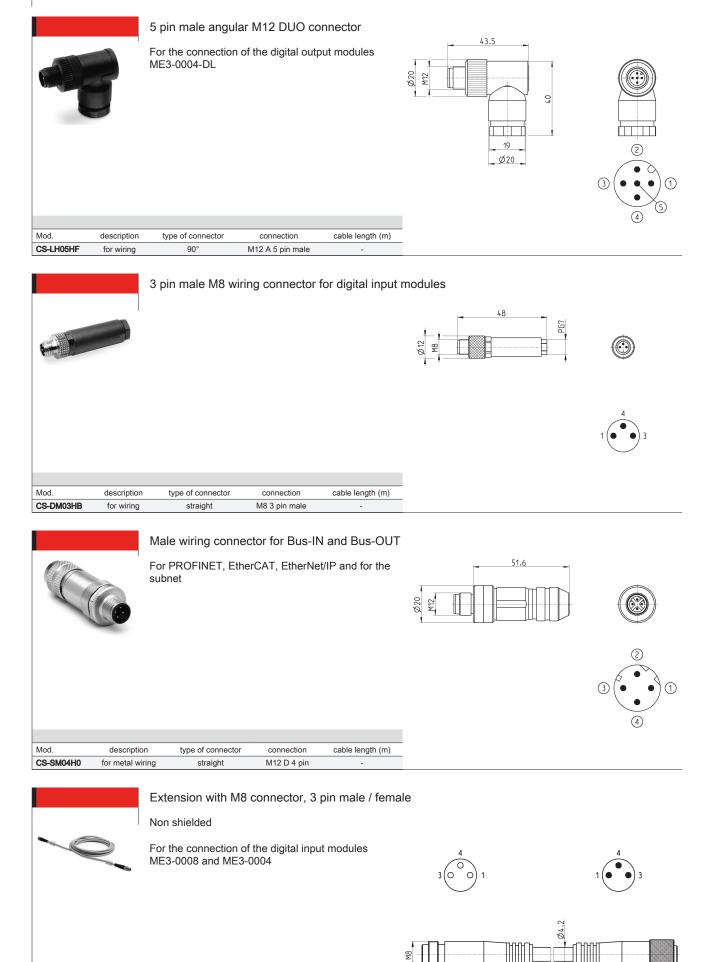
CONTROL



2/3.40.24



CONTROL



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

Products designed for industrial applications. General terms and conditions for sale are available on www.camozzi.com. 32



CONTROL

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

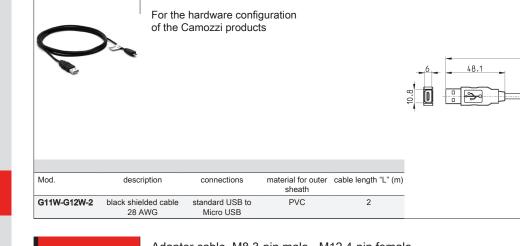
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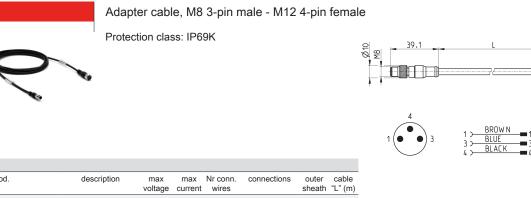
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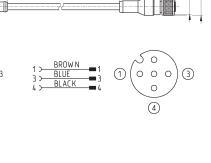
45.5

7.5

б



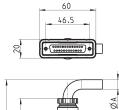


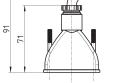


Mod.	description	max voltage	max current	Nr conn. wires	connections	outer sheath	cable "L" (m)
CS-AG03HB-C250	3-pin cable 24 AWG, high flexibility	50V AC / 60V DC	3 A	3	M8 3-pin male - M12 4-pin fem.		2.5
CS-AG03HB-C500	3-pin cable 24 AWG, high flexibility	50V AC / 60V DC	3 A	3	M8 3-pin male - M12 4-pin fem.		5

Straight Sub-D 25 pin female connector with axial cable

Protection class IP65



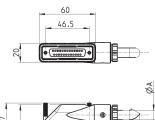


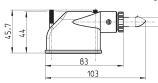
Mod.	øA	PIN	cable length (m)
G3X-3	7.7	16	3
G3X-5	7.7	16	5
G3X-10	7.7	16	10
G3X-15	7.7	16	15
G3X-20	7.7	16	20
G3X-25	7.7	16	25
G4X-3	9	25	3
G4X-5	9	25	5
G4X-10	9	25	10
G4X-15	9	25	15
G4X-20	9	25	20
G4X-25	9	25	25

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

Protection class IP65







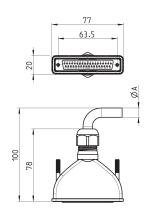
Mod.	A	PIN	cable length (m)
G3X1-3	7.7	16	3
G3X1-5	7.7	16	5
G3X1-10	7.7	16	10
G3X1-15	7.7	16	15
G3X1-20	7.7	16	20
G3X1-25	7.7	16	25
G4X1-3	10	25	3
G4X1-5	10	25	5
G4X1-10	10	25	10
G4X1-15	10	25	15
G4X1-20	10	25	20
G4X1-25	10	25	25

Straight Sub-D 37 pin female connector with axial cable



Protection class IP65

Mod.	A	PIN	cable length (m)
G9X-3	12	37	3
G9X-5	12	37	5
G9X-10	12	37	10
G9X-15	12	37	15
G9X-20	12	37	20
G9X-25	12	37	25

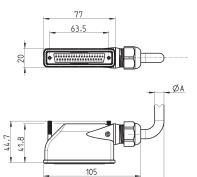




Right angle Sub-D 37 pin female connector with radial cable

Protection class IP65

Mod.	A	PIN	cable length (m)
G9X1-3	12	37	3
G9X1-5	12	37	5
G9X1-10	12	37	10
G9X1-15	12	37	15
G9X1-20	12	37	20
G9X1-25	12	37	25



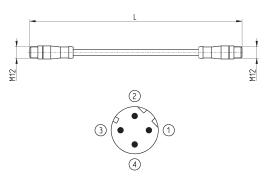
130

2

Cables with straight connectors

For PROFINET, EtherCAT, EtherNet/IP and for the subnet





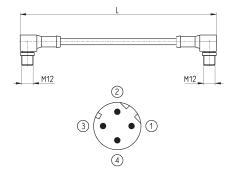
Mod.	description	type of connector	connection	L [cable length] (m)
CS-SB04HB-D100 moulded cable		straight	2x M12 D 4 pin male	1
CS-SB04HB-D500	moulded cable	straight	2x M12 D 4 pin male	5
CS-SB04HB-DA00	moulded cable	straight	2x M12 D 4 pin male	10
CS-SB04HB-DD00	moulded cable	straight	2x M12 D 4 pin 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



Cables with 90° angular connectors

For PROFINET, EtherCAT, EtherNet/IP and for the subnet

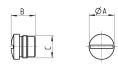
Mod.	description	type of connector	connection	L [cable length] (m)
CS-SC04HB-D100	moulded cable	90°	2x M12 D 4 pin male	1
CS-SC04HB-D500	moulded cable	90°	2x M12 D 4 pin male	5
CS-SC04HB-DA00	moulded cable	90°	2x M12 D 4 pin male	10
CS-SC04HB-DD00	moulded cable	90°	2x M12 D 4 pin male	15
CS-SC04HB-DG00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





M8 and M12 connector cover caps

For digital and analog input/output modules and subnet



Mod.	A	В	C [Connection]
CS-DFTP	10	11	M8
CS-LFTP	13.5	13	M12

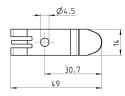


Mounting brackets for DIN rail

DIN EN 50022 (mm 7,5 x 35 - width 1)

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





Mod. PCF-E520



CODING EXAMPLE OF MULTIPOLE AND FIELDBUS INTERFACES - Accessories HN 0 Α Μ Α -SERIES HN TYPE: Α A = Accessory SIZE: 0 0 = not defined ELECTRICAL CONNECTION: M = 25 pin PNP Multipole N = 25 pin NPN Multipole H = 37 pin PNP Multipole L = 37 pin NPN Multipole Μ I = HN interface with Series CX TERMINALS: Α A = 1, 12/14 in common - 3/5, 82/84 with thread B = 1, 12/14 separated - 3/5, 82/84 with thread C = 1, 12/14 in common - 3/5, 82/84 with silencer D = 1, 12/14 separated - 3/5, 82/84 with silencer NOTE: The Right Terminal is supplied with seals and fixing screws and available as accessory with the commercial code HA0T-H Detailed descriptions of the available accessories can be found in the components list on page 2/3.40.08 (Multipole version) e 2/3.40.09 (Fieldbus version)

	Р	1	V	-	M
	SERIES				
)	TYPE: P = pneumatic				
1	SIZE: 1 = 10.5 2 = 21				
V	TYPE OF ACCESSORY: V = Solenoid valve				
Μ		$\begin{array}{c} R = 2 \times 3/2 \text{ NC} \\ S = 2 \times 3/2 \text{ NO} \\ 3/2 \text{ NO} \\ T = 1 \times 3/2 \text{ NC} + 1 \times 3/2 \text{ NO} \\ U = 2 \times 2/2 \text{ NC} \\ X = 2 \times 2/2 \text{ NO} \end{array}$			

Detailed descriptions of the available accessories can be found in the components list on page 2/3.40.08 (Multipole version) e 2/3.40.09 (Fieldbus version)

CODING EXAMPLE OF SUBBASES - Accessories

1	A	1	R		-		Α
1	SERIES						
4	TYPE: A = accessories						
1	SIZE: 0 = for X-Y-K-T-U-V-Z 1 = 10.5 2 = 21						
S	TYPE OF ACCESSORY: R = subbase for multipole connection G = seal W = subbase without electronic board (option valid only for position 2a. See the components list on page 2 and 2/3.40.09 - Fieldbus version)	/3.40.08 - Multipole version -					
Α	,			SEAL: T = diaphragm seal for the closure of channels 1, 3, 5 U = diaphragm seal for the closure of channel 1 V = diaphragm seal for the closure of channels 3, 5 P = through			

Detailed descriptions of the available accessories can be found in the components list on page 2/3.40.08 (Multipole version) e 2/3.40.09 (Fieldbus version) NOTE: subbases are always supplied without connection fittings.