

## Series HC

Valve island -  
Cabinet version

In applications which are subject to washing or operate in particularly dirty environments, having a specific solution represents a distinct advantage. With the **Series HC** it is possible to exploit the subbase and relative perimetric seal to close the passage window of all tubings. In this way the external environment is isolated from the internal part

of the cabinet, guaranteeing a high protection level against solid and liquid particles that, upon entering, may damage the components. All pneumatic connections are immediately available avoiding operations for the installation of panel mount fittings. **Series HC** uses the same valve functions as those available in Series HN.

SIZES 10.5 mm and 21 mm

FLOWRATES of 400 NI/min and 700 NI/min

SUBBASES UP TO A MAXIMUM OF 32 VALVE POSITIONS (10.5 mm)

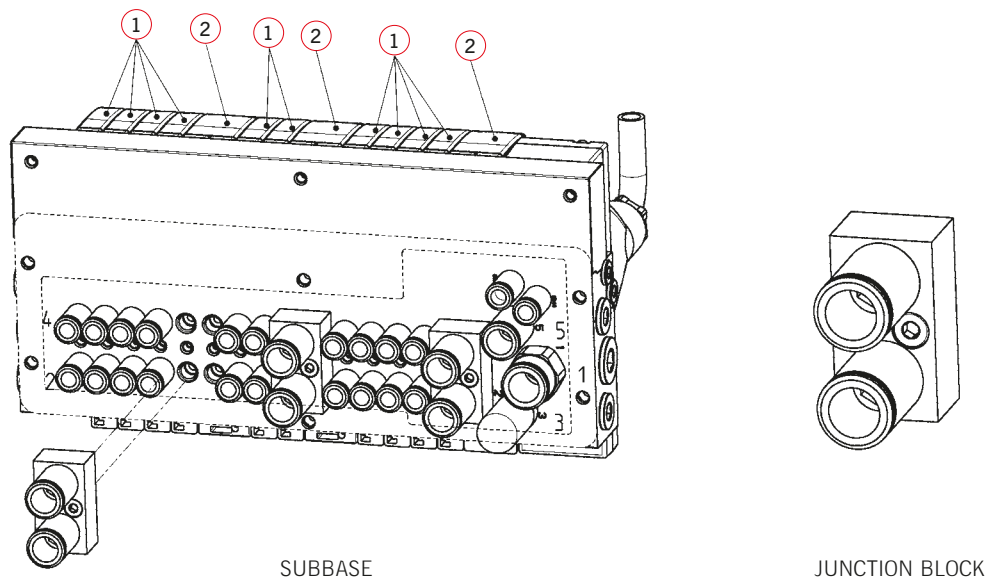
SAME SUBBASE FOR VALVES WITH A DIFFERENT SIZE

ELECTRIC CONNECTION WITH A 25 OR 37 PIN SUB-D CONNECTOR

## General data

PNEUMATIC SECTION	
Valve construction	spool with seals
Valve functions	5/2 monostable and bistable    2 x 2/2 NC    2 x 3/2 NO 5/3 CC    1 x 2/2 NC + 1 x 2/2 NO    1 x 3/2 NC + 1 x 3/2 NO 2 x 2/2 NO    2 x 3/2 NC
Materials	Spool: AL - spool seals: HNBR - other seals: NBR - cartridges: brass - body and end covers: technopolymer - subbase: AL
Connections	Inlets 2 and 4 Size 10.5 mm: M7; tube $\varnothing$ 4; tube $\varnothing$ 6 Size 21 mm: G1/4; tube $\varnothing$ 6; tube $\varnothing$ 8; tube $\varnothing$ 10  Supply 1: G3/8; tube $\varnothing$ 8; tube $\varnothing$ 10; tube $\varnothing$ 12 Supply 12/14: M7; tube $\varnothing$ 6 (6512 6-M7-M) Exhausts 3 and 5: G1/4; tube $\varnothing$ 10 (6512 10-1/4-M) Exhausts 82/84: M7, silencer (2931 M7)
Temperature	0 ÷ 50 °C
Air specifications	Filtered compressed air, non lubricated, class 6.4.4 according to ISO 8573-1:2010. If lubrication 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 ISO 8573-1:2010 (do not lubricate).
Valve sizes	10.5 mm 21 mm
Working pressure	-0.9 ÷ 10 bar
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 NI/min (10.5 mm) 700 NI/min (21 mm)
Mounting position	any position
Protection class	IP65
ELECTRICAL SECTION	
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 coils to operate	Size 10.5mm: 24 coils on 24 valve positions (with Sub-D connector 25 pins) 32 coils on 32 valve positions (with Sub-D connector 37 pins)  Size 21 mm: 24 coils on 12 valve positions (with Sub-D connector 25 pins) 32 coils on 16 valve positions (with Sub-D connector Sub-D 37 pins)  Sizes 10.5 mm and 21 mm simultaneously (for further details see the complete catalogue of Series HC)
Valve signalling	yellow led

## Subbase characteristics



All the pneumatic connections are available on the lower side. This surface allows, by means of a specific seal, to isolate the internal part of the cabinet as well as the components inside from the external environment. The solution is thus particularly useful in presence of liquid substances, as for example in the Food & Beverage sector and in the process industry. The subbase allows the simultaneous mounting of the Series HN valves of size 1 (10.5 mm) and 2 (21 mm). Valve size 2 occupies the space of two valve positions size 1. The two outlets "2" and the two outlets "4" of these positions are conveyed, by means of a junction block, to one outlet "2" and one outlet "4" of bigger dimensions. In this way it is possible to use the major flow of valve size 2 with the same subbase. The valves can be placed as desired in any position. In case it is necessary to optimize the electric signals, we would recommend initially installing valves size 1 with two solenoids.

Coding example

HC	5	H	-	03A	-	4L3T2P	-	2C2B3VMB	-	G
----	---	---	---	-----	---	--------	---	----------	---	---

<b>HC</b>	SERIES						
<b>5</b>	SIZE: 1 = 10.5 2 = 21 5 = Mixed (10.5 and 21 mm)						
<b>H</b>	ELECTRICAL CONNECTION: M = Multipole 25 pin PNP H = Multipole 37 pin PNP						
<b>03A</b>	<table border="0"> <tr> <td>CONNECTION: 000 = without connector/cable CXA = Adapter module for fieldbus subnet</td> <td>CONNECTOR WITH CABLE AXIAL OUTPUT: 03A = 3 m 05A = 5 m 10A = 10 m 15A = 15 m 20A = 20 m 25A = 25 m</td> <td>CONNECTOR WITHOUT CABLE: 4XA = 25 pins axial 4XR = 25 pins axial 9XA = 37 pins axial 9XR = 37 pins axial</td> </tr> <tr> <td></td> <td>CONNECTOR WITH CABLE RADIAL OUTPUT: 03R = 3 m 05R = 5 m 10R = 10 m 15R = 15 m 20R = 20 m 25R = 25 m</td> <td></td> </tr> </table>	CONNECTION: 000 = without connector/cable CXA = Adapter module for fieldbus subnet	CONNECTOR WITH CABLE AXIAL OUTPUT: 03A = 3 m 05A = 5 m 10A = 10 m 15A = 15 m 20A = 20 m 25A = 25 m	CONNECTOR WITHOUT CABLE: 4XA = 25 pins axial 4XR = 25 pins axial 9XA = 37 pins axial 9XR = 37 pins axial		CONNECTOR WITH CABLE RADIAL OUTPUT: 03R = 3 m 05R = 5 m 10R = 10 m 15R = 15 m 20R = 20 m 25R = 25 m	
CONNECTION: 000 = without connector/cable CXA = Adapter module for fieldbus subnet	CONNECTOR WITH CABLE AXIAL OUTPUT: 03A = 3 m 05A = 5 m 10A = 10 m 15A = 15 m 20A = 20 m 25A = 25 m	CONNECTOR WITHOUT CABLE: 4XA = 25 pins axial 4XR = 25 pins axial 9XA = 37 pins axial 9XR = 37 pins axial					
	CONNECTOR WITH CABLE RADIAL OUTPUT: 03R = 3 m 05R = 5 m 10R = 10 m 15R = 15 m 20R = 20 m 25R = 25 m						

<b>4L3T2P</b>	<p>VALVE DIMENSION AND TYPE OF CONNECTION:</p> <p>Size 1 F = M7 threads G = with fittings for tube <math>\varnothing</math> 4 L = with fittings for tube <math>\varnothing</math> 6</p> <p>Size 2 M = G1/4 threads N = with fittings for tube <math>\varnothing</math> 6 P = with fittings for tube <math>\varnothing</math> 8 T = with fittings for tube <math>\varnothing</math> 10</p>
---------------	---

<b>2C2B3VMB</b>	<p>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 NO G = 1 x 3/2 NC + 1 x 3/2 NO E = 2x 2/2 NC F = 2 x 2/2 NO I = 1 x 2/2 NC + 1 x 2/2 NO L = free position</p> <p>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 NO T = 1 x 3/2 NC + 1 x 3/2 NO U = 2 x 2/2 NC X = 2 x 2/2 NO Y = 1 x 2/2 NC + 1 x 2/2 NO</p>
-----------------	---

<b>G</b>	<p>CONNECTIONS:</p> <table border="0"> <tr> <td></td> <td></td> <td colspan="2">Supply fitting (1)</td> <td></td> </tr> <tr> <td></td> <td><b>Thread</b></td> <td><b><math>\varnothing</math> 8</b></td> <td><b><math>\varnothing</math> 10</b></td> <td><b><math>\varnothing</math> 12</b></td> </tr> <tr> <td>Internal servo-pilot</td> <td>A</td> <td>E</td> <td>I</td> <td>P</td> </tr> <tr> <td>Internal servo-pilot and silencers</td> <td>-</td> <td>G</td> <td>M</td> <td>R</td> </tr> <tr> <td>External servo-pilot</td> <td>B</td> <td>F</td> <td>L</td> <td>Q</td> </tr> <tr> <td>External servo-pilot and silencers</td> <td>-</td> <td>H</td> <td>N</td> <td>S</td> </tr> </table> <p>Fitting <math>\varnothing</math> 10 on exhausts 3/5 Fitting <math>\varnothing</math> 6 on servo-pilot 12/14</p> <p>If the connection on the right side only, add X at the end of the code. For example: GX (Internal servo-pilot, silencers, fitting tube <math>\varnothing</math> 8) If the connection on the left side only, add K at the end of the code. For example: GK If the connection is on both sides (right and left), add W at the end of the code. For example: GW</p> <p>The connections on the sides that are not used are equipped with closing taps A and B versions are equipped with taps on the left side and on the right one</p>			Supply fitting (1)				<b>Thread</b>	<b><math>\varnothing</math> 8</b>	<b><math>\varnothing</math> 10</b>	<b><math>\varnothing</math> 12</b>	Internal servo-pilot	A	E	I	P	Internal servo-pilot and silencers	-	G	M	R	External servo-pilot	B	F	L	Q	External servo-pilot and silencers	-	H	N	S
		Supply fitting (1)																													
	<b>Thread</b>	<b><math>\varnothing</math> 8</b>	<b><math>\varnothing</math> 10</b>	<b><math>\varnothing</math> 12</b>																											
Internal servo-pilot	A	E	I	P																											
Internal servo-pilot and silencers	-	G	M	R																											
External servo-pilot	B	F	L	Q																											
External servo-pilot and silencers	-	H	N	S																											

In presence of identical consequent codes both for the subbases as for the valves you need to substitute the letter with the number.  
Ex: HC5H-03A-LLLLTTTPP-CCBBVVVMB-G is converted to HC5H-03A-4L3T2P-2C2B3VMB-G.



## *Contacts*

**Camozzi Automation spa**  
Società Unipersonale  
Via Eritrea, 20/I  
25126 Brescia - Italy  
Tel. +39 030 37921  
info@camozzi.com  
www.camozzi.com

## *Worldwide sales network*

**Camozzi Automation Subsidiaries  
and Exclusive Distributors**  
To check our sales network,  
visit the Camozzi Automation website at  
Contacts / Camozzi Worldwide

