

580 CHARM Node

The 580 CHARM node provides direct connectivity of pneumatic manifolds to DeltaV with Electronic Marshalling. The node connects directly to the CHARM I/O baseplate via 2 cables which attach to CHARM column extender. The cables provide redundant communication and power to the pneumatic manifold and allow the 580 CHARM node to be directly controlled by DeltaV Explorer. The 580 CHARM node configures the same as a DO CHARM.



Description	Replacement Part Number
580 CHARM Module (node)	P580AECH1010A00

Technical Data

Electrical Data	Voltage	Current
Bus Power	6.3 V	100 mA
Valve Power	24 V	1.07 Amps
Power and Bus Connector	A-Coded 5 Pin M12 Male	
LEDs	Module Status and Network Status	

Operating Data	
Temperature Range	-23 °C to 46 °C (-10 °F to 115 °F)
Humidity	95% Relative Humidity, Non-condensing
Vibration/Shock	IEC 60068-2-27, IEC 60068-2-6
Moisture	IP65

Configuration Data	
Graphic Display	Display used for setting CHARM address and other system settings
Maximum Valve Solenoid Outputs	48 for 501/502/503

Network Data	
Power and Bus Connector	A-Coded 5 Pin M12 Male
Diagnostics	Power, short, open load conditions are monitored

Weight	
CHARM Communications Module	320g/11.3 oz

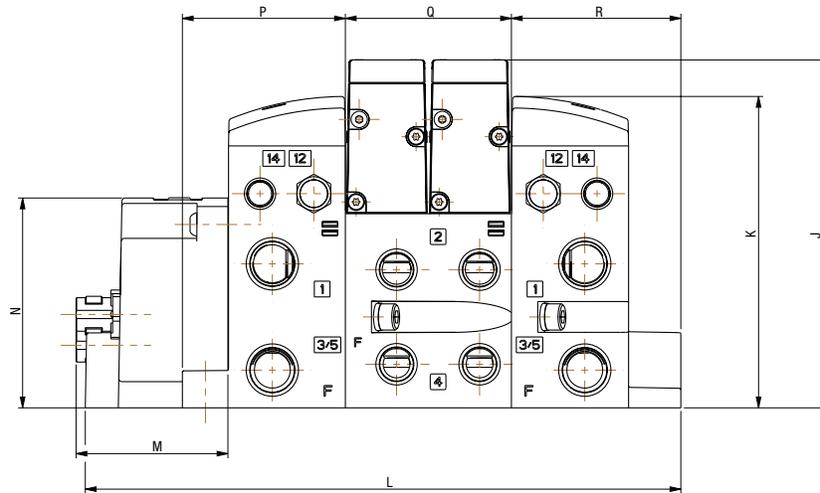
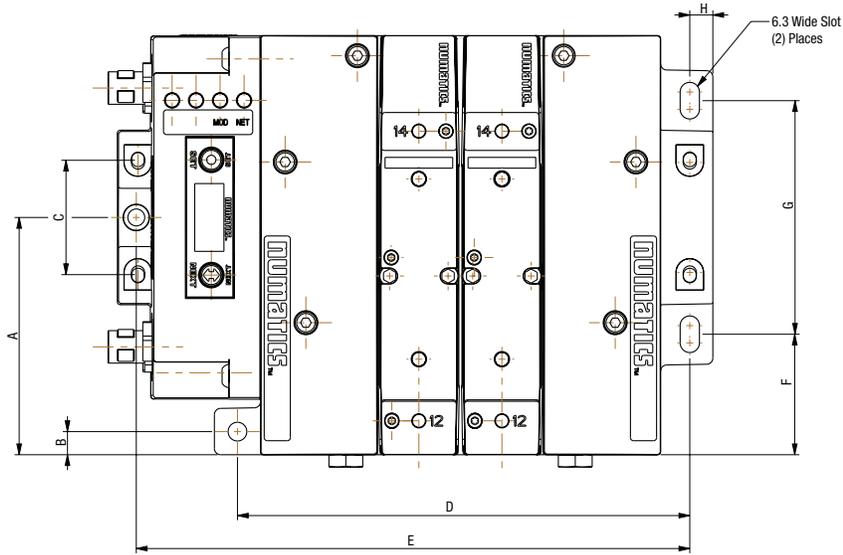
580 CHARM Power and Communication Cables and Accessories	Replacement Part Number
1.5 Meter Cables with M12 and Sub-D Connectors	P599AF519387001
0.5 Meter Cables with M12 and Sub-D Connectors	P599AF519387002
Valve Power Isolator	P599AF516881001

NOTE: Cables are not included with node and must be ordered separately.

Dimensions: mm (inches)

580 Fieldbus Manifold Assembly

503 Series Valve Manifold Assembly with 580 Electronics



A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
77 (3.032)	7.5 (0.295)	38 (1.5)	147.1 (5.79)	180 (7.087)	39.1 (1.539)	75.8 (2.984)	7.5 (0.295)	113 (4.449)	101 (3.976)	194 (7.638)	49.4 (1.945)	68.1 (2.681)	53 (2.087)	54 (2.13)	55.1 (2.169)

* For valve manifold dimensions refer to Valve Series product catalogs

How to Order

Manifold Assembly

K 501 A V 8 D 2 0 0 V A00

Port Type

- ¹ 8 = NPTF
- ¹ G = ISO 228/1-G
- K = Push-In Fittings

Product Series

- 501 = 11mm Valve
- 502 = 18mm Valve
- 503 = 22mm Valve

Revision

- A = Initial Release

Product Type

- V = Valve Manifold Assembly

Electronics

- 8 = 580 Fieldbus Electronics
- D = CHARMs Electronics

² Number of Valve Stations

- | | |
|------------------|------------------|
| A = NA/33/65/97 | Q = 17/49/81/113 |
| B = 2/34/66/98 | R = 18/50/82/114 |
| C = 3/35/67/99 | S = 19/51/83/115 |
| D = 4/36/68/100 | T = 20/52/84/116 |
| E = NA/37/69/101 | U = 21/53/85/117 |
| F = 6/38/70/102 | V = 22/54/86/118 |
| G = 7/39/71/103 | W = 23/55/87/119 |
| H = 8/40/72/104 | X = 24/56/88/120 |
| I = 9/41/73/105 | Y = 25/57/89/121 |
| J = 10/42/74/106 | Z = 26/58/90/122 |
| K = 11/43/75/107 | 2 = 27/59/91/123 |
| L = 12/44/76/108 | 3 = 28/60/92/124 |
| M = 13/45/77/109 | 4 = 29/61/93/125 |
| N = 14/46/78/110 | 5 = 30/62/94/126 |
| O = 15/47/79/111 | 6 = 31/63/95/127 |
| P = 16/48/80/112 | 7 = 32/64/96/128 |

Options

- A00 = Standard (No Options)
- MUF = Muffler in End Plates
- DRM = DIN Rail Mount
- DWM = DIN Rail with (MUF) Muffler in End Plates
- 14X = External Pilot Supply from Port #14
- D12 = (14X) External Pilot Supply from Port #14 and (MUF) Muffler in End Plates
- D14 = (14X) External Pilot Supply from Port #14 and (DRM) DIN Rail Mount
- F06 = (14X) External Pilot Supply from Port #14, (MUF) Muffler in End Plates, and (DRM) DIN Rail Mount

End Plate Style

- V = Vertical

³ Second Valve Series

- 0 = No Second Valve Series
- 1 = 501
- 2 = 502

Valve Station Adder

- 0 = No Adder
- 1 = 32+
- 2 = 64+
- 3 = 96+

⁴ Port Size

- 1 = 1/8
- 2 = 1/4
- G = 5/16
- 3 = 3/8
- 4 = 1/2
- H = 8mm
- K = 10mm
- M = 12mm

¹ Port Type 8 & G only available in Port Size 3/8 for 502 & 503 and 1/8 for 501

² 501 not available with 2 stations, 502 and 503 only available with an even number of stations and with up to 80 valve solenoids

³ With 502 11mm (501) valve available, with 503 18mm (502) valve available

⁴ 501 Port Sizes 1/8, 1/4, 5/16, 8mm, 502 and 530 Port Sizes 3/8, 1/2, 10 and 12mm

How to Order

Electronics

P 580 A E DN1 0 1 0 A00

Product Series

- 580 = 580 Series Electronics

Revision

- A = Initial Release

Product Type

- E = Electronics

Options

- A00 = Standard (No Options)
- DRM = DIN Rail Mount

Connector Type

- 1 = M12 Connector

Protocol

- CO1 = CANopen
- DN1 = DeviceNet
- EC1 = EtherCAT
- EP1 = EtherNet/IP
- PN1 = PROFINET™
- PT1 = PROFIBUS™ DP
- PL1 = Ethernet POWERLINK
- LM1 = IO-Link Class A (4 Pin)
- LM2 = IO-Link Class B (5 Pin)
- CH1 = CHARM