



580 Electronics

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580 Fieldbus - Electronics Made Easy!

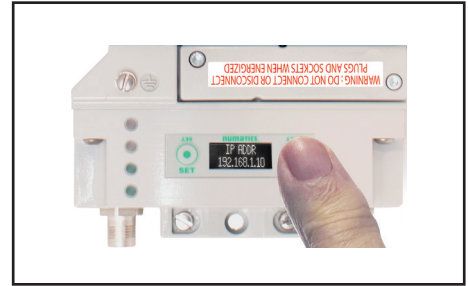
**Innovative Graphic Display is used for easy
 commissioning, visual status & diagnostics**

**Commissioning
 Capabilities**

- Set network address
 (including IP & Subnet mask
 for Ethernet)
- Set baud rate
- Set factory defaults

Visual Diagnostics

- Shorted and open load
 detection
- Shorted sensor/cable
 detection
- Low & missing power
 detection
- Self-tests activation
- Log of network errors



*Graphic Display for
 configuration & diagnostics*



Compact Electronic Module

580 Fieldbus Communications Electronics

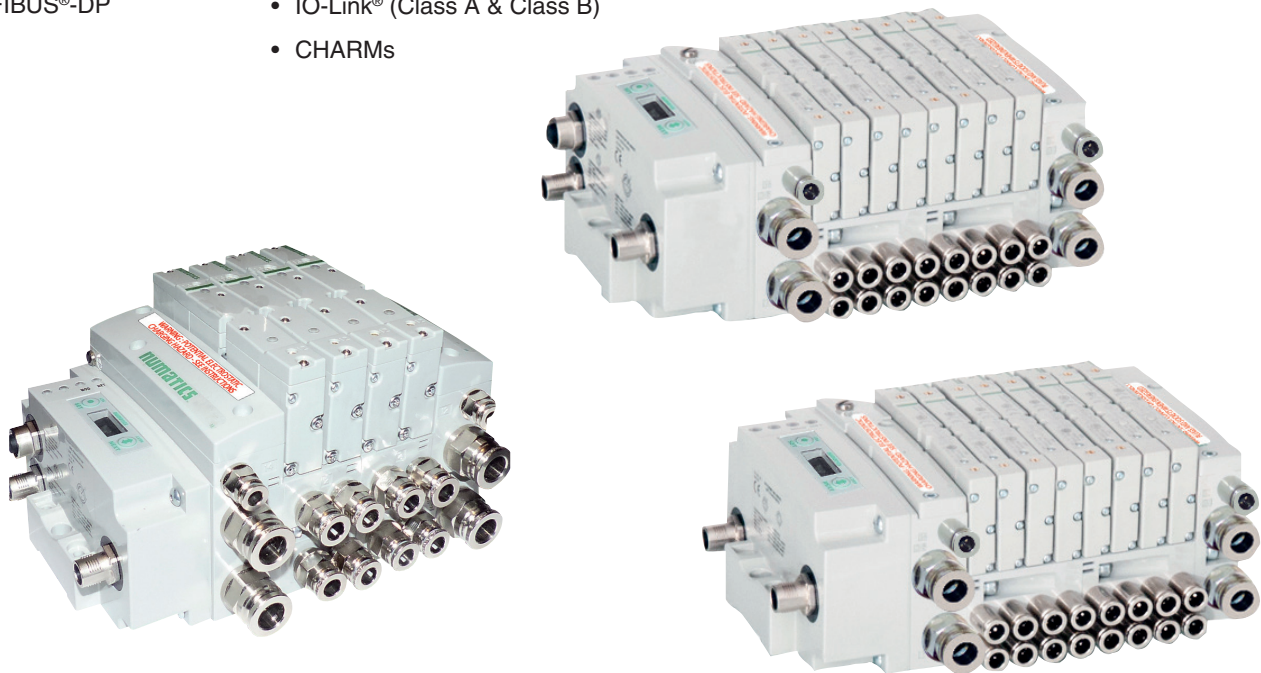
Why use Numatics Fieldbus communication electronics?

Modular Reality...

- No internal wiring simplifies assembly
- Power connector allows output power to be removed while inputs
 and communication are left active
- IP65 protection

Supported Protocols

- DeviceNet™
- Ethernet/IP™
- PROFIBUS®-DP
- PROFINET®
- EtherNET/IP™ DLR
- IO-Link® (Class A & Class B)
- CHARMs



DeviceNet™ is a trademark of ODVA.
 PROFIBUS and PROFINET are registered trademarks of Profibus International.



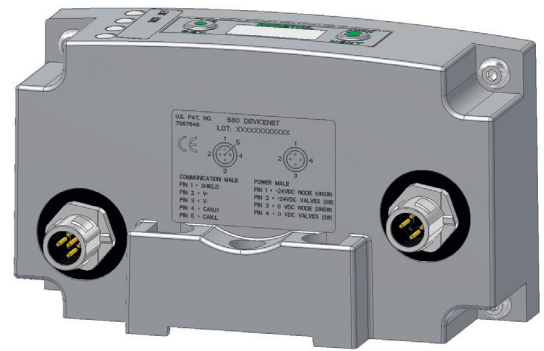
DeviceNet™

DeviceNet™ is an open bus fieldbus communication system developed by Allen-Bradley based on Controller Area Network (CAN) technology. The governing body for DeviceNet™ is the Open DeviceNet™ Vendors Association (ODVA). The ODVA controls the DeviceNet™ specification and oversees product conformance testing.

Numatics' 580 nodes for DeviceNet™ have an integrated graphic display.

They have been tested and approved for conformance by the ODVA.

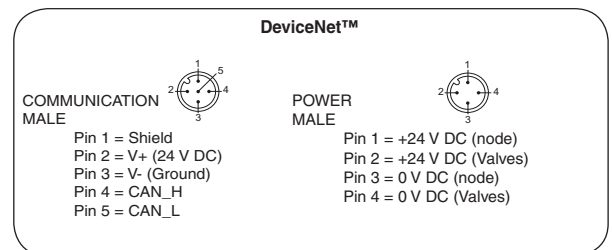
More information about DeviceNet™ and the ODVA can be obtained from the following WEB site: www.odva.org



Description	ATEX
DeviceNet™ communications module (node)	2-22 (3GD) IP65X
	2-22 (3GD) IP54X
	2 (3G) IP54X

HOW TO ORDER

Consult the online configurator - CAD files on: www.asco.com



Technical Data

Electrical Data	Voltage	Current
Node Power at Max. Brightness	24 V DC +/- 10%	0,070 A
BUS Power	11-25 V DC	
Valves	24 V DC +/- 10%	8 A Maximum
Power Connector	Single key 4 pin M12 (male)	
Communication Connector	Single key 5 pin M12 (male)	
LED's	Module Status and Network Status	

Operating Data	
Temperature Range (ambient)	-10°C to +50°C
Humidity	95% relative humidity, non-condensing
Vibration / Shock	IEC 60068-2-27, IEC60068-2-6
Moisture Protection	IP65

Configuration Data	
Graphic Display	Display used for setting Node Address, Baud Rate, Fault / Idle Actions, and all other system settings.
Maximum Valve-Solenoid Outputs	18 (501) / 13 (502)

Network Data	
Supported Baud Rates	125K Baud, 250K Baud, 500K Baud, with Auto-Baud detection
Supported Connection Type	Polled, Cyclic, Change of State (COS) and combination Message Capability
Bus Connector	Single key 5 pin M12 (male)
Diagnostics	Power, short, open load conditions are monitored
Special Features	Supports Auto-Device Replacement (ADR) and fail-safe device settings

Weight	
DeviceNet™ Communication Module	252 g

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DeviceNet™ bus connection

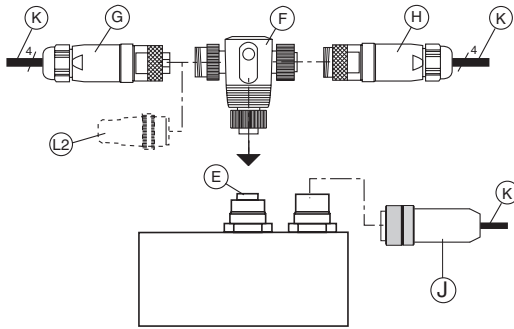
the front panel of the communication module for DeviceNet™ is equipped with a 5 pin 7/8 - 16 UN male socket (E).

The bus can be connected in the two following ways:

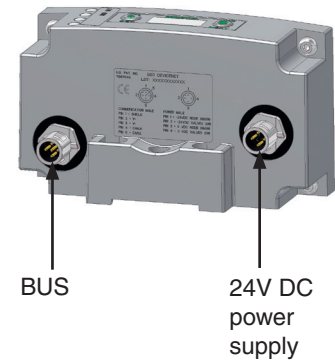
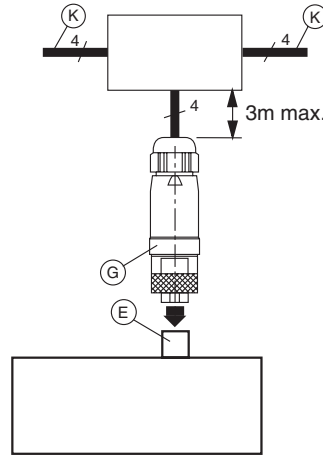
- directly to the module with a T-connector;
- with a straight connector, cable (max. length: 3 m) and a DeviceNet distributor box.

The modules on either side of the system must be provided with terminating resistors (L1 or L2).

■ Wiring with T-connector



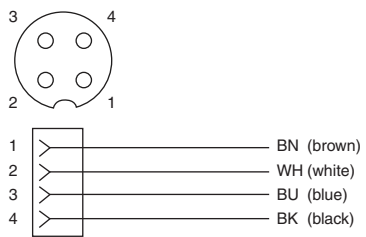
■ Connection with DeviceNet™ distributor box (X)



Accessories for DeviceNet™

The modules on either side of the system must be provided with terminating resistors (H)

	Accessory	Description	Order Code
G		M12 90° 5 Pin Female Field Wireable network Connector – Spring Cage (A coded) PG9 cable gland	TD05F2000000071V
		M12 Straight 5 Pin Female Field Wireable network Connector – Spring Cage PG9 cable gland	TC05F2000000071V
H		M12 Straight 5 Pin Male Field Wireable network Connector – Spring Cage PG9 cable gland	TA05F2000000071V
F		3 Way M12 "T" (T-connector M12, 5 male / female / female pins)	TC0500000TT05000
L2		Terminating resistor male plug	TA05TR0000000000
		Terminating resistor female plug	88157770
J		M12 90° 4 Pin Female Field Wireable Connector (PG 9 Cable Gland) (4 pin elbow female cable connector 7/8") - 24 V DC power supply	TD04F20000000000
		M12 90° 4 Pin Female Single Ended Cable, Euro Color Code (4 pin elbow female cable connector 90° with 10 m cable) 24 V DC power supply	TD0410MAE0000000



(K) Cable to be ordered separately.



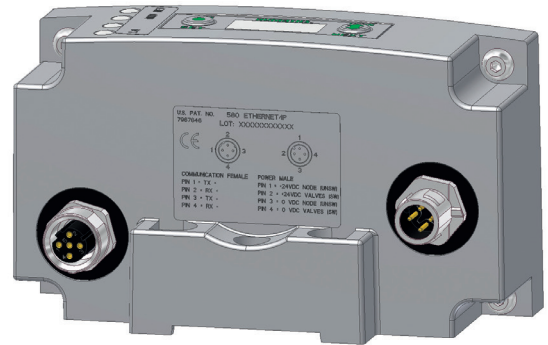
Ethernet/IP™

Ethernet™ used throughout the world to network millions of PC's has now evolved into a viable industrial network. Ethernet™ is an open architecture high-level communication network that meets the demands of today's industrial applications requiring high-speed (10/100 Mbit/s), high-throughput and flexibility. Additionally, Ethernet™ technology can integrate an on-board Web server, which can make the node readily accessible for configuration, testing and even retrieval of technical documentation.

Numatics' 580 nodes for Ethernet™ have an integrated graphic display.

The 580 Ethernet/IP™ nodes have been tested and approved for conformance by the ODVA.

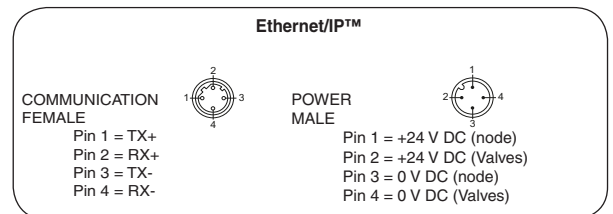
More information about Ethernet/IP™ and the ODVA can be obtained from the following WEB site: www.odva.org



Description	ATEX
Ethernet/IP™ communications module (node)	2-22 (3GD) IP65X
	2-22 (3GD) IP54X
	2 (3G) IP54X

HOW TO ORDER

Consult the online configurator - CAD files on: www.asco.com



Technical Data

Electrical Data	Voltage	Current
Node Power at Max. Brightness	24 VDC +/- 10%	0,091 A
Valves	24 VDC +/- 10%	8 A maximum
Power Connector	Single key 4 pin M12 (male)	
Communication Connector	D-coded 5 pin M12 (female)	
LED's	Module Status, Network Status and Activity/Link	

Operating Data	
Temperature Range (ambient)	-10°C to +50°C
Humidity	95% relative humidity, non-condensing
Vibration / Shock	IEC 60068-2-27, IEC60068-2-6
Moisture Protection	IP65

Configuration Data	
Graphic Display	Display used for setting Subnet mask, Fault / Idle Actions, DHCP / BootP and all other system settings.
Maximum Valve-Solenoid Outputs	18 (501) / 13 (502)





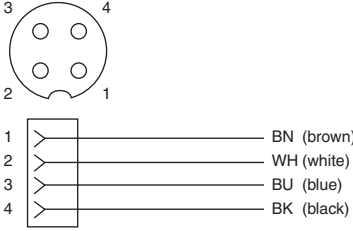
Network Data	
Supported Baud Rates	10 Mbit / 100 Mbit
Bus Connector	D-coded 5 pin M12 (female)
Diagnostics	Power, short, open load conditions and module health are monitored
Special Features	Integrated web server, fail-safe device settings, HTTP, FTP, and UNICAST (for EtherNet/IP)

Weight	
Ethernet Communication Module	336 g

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Accessories for EtherNet/IP™

Accessory	Description		Order Code
	M12 Straight 4 Pin Male D-Coded to Male RJ45 network Cable - Shielded	5 m	QA0405MK0VA04000
		10 m	QA0410MK0VA04000
	M12 elbow 4 Pin Male D-Coded Field Wireable network Connector PG 9 Cable Gland – Screw Terminal		QB04F2000000071N
	M12 90° 4 Pin Female Field Wireable Connector (PG 9 Cable Gland) (4 pin elbow female cable connector 7/8") - 24 V DC power supply		TD04F20000000000
	M12 90° 4 Pin Female Single Ended Cable, Euro Color Code (4 pin elbow female cable connector 90° with 10 m cable) 24 V DC power supply		TD0410MAE0000000



PROFIBUS-DP®

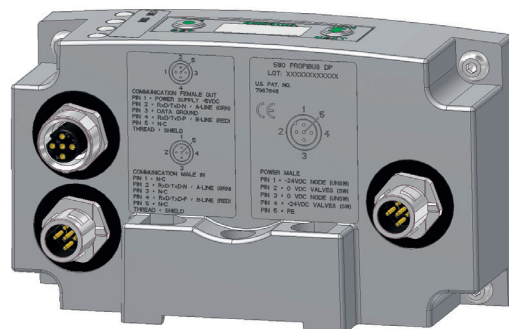
PROFIBUS-DP® is a vendor-independent, open fieldbus protocol designed for communication between automation control systems and distributed I/O at the device level.

Numatics' 580 nodes for PROFIBUS-DP® have an integrated graphic display.

The 580 nodes for PROFIBUS-DP® have been designed and tested to conform to the PROFIBUS® standard EN50170. Certification has been done by the PROFIBUS® Interface Center (PIC) according to the guidelines determined by the PROFIBUS® Trade Organization (PTO). The certification process ensures interoperability for all PROFIBUS® devices.

More information regarding PROFIBUS® can be obtained from the following WEB site:

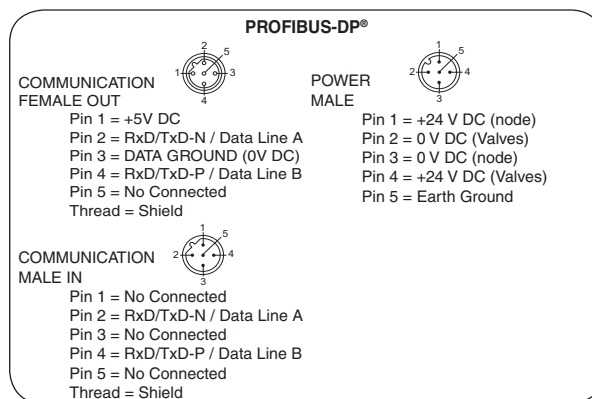
www.profibus.com



Description	ATEX
PROFIBUS-DP® communications module DPV0/DPV1	2-22 (3GD) IP65X
	2-22 (3GD) IP54X
	2 (3G) IP54X

HOW TO ORDER

Consult the online configurator - CAD files on: www.asco.com



Technical Data

Electrical Data	Voltage	Current
Node Power at Max. Brightness	24 VDC +/- 10%	0,094 A
Valves	24 VDC +/- 10%	4 A Maximum
Power Connector	Single key 5 pin M12 (male)	
Communication Connector	Single reverse key (B-Coded) 5 pin M12 (1 male and 1 female)	
LED's	Module Status and Network Status	

Operating Data	
Temperature Range (ambient)	-10°C to +50°C
Humidity	95% relative humidity, non-condensing
Vibration / Shock	IEC 60068-2-27, IEC60068-2-6
Moisture Protection	IP65

Configuration Data	
Graphic Display	Display used for setting Node Address, Baud Rate, Fault / Idle Actions, Diagnostics and all other system settings.
Maximum Valve-Solenoid Outputs	18 (501) / 13 (502)

Network Data	
Supported Baud Rates	Auto-Baud
Bus Connector	Single reverse key (B-coded) 5 pin M12 (1 male and 1 female)
Diagnostics	Power, short, open load conditions and module health are monitored
Special Features	Supports Auto-Device Replacement (ADR) and fail-safe device settings

Weight	
PROFIBUS-DP® Communication Module	342 g

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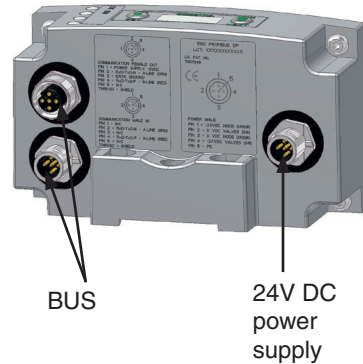
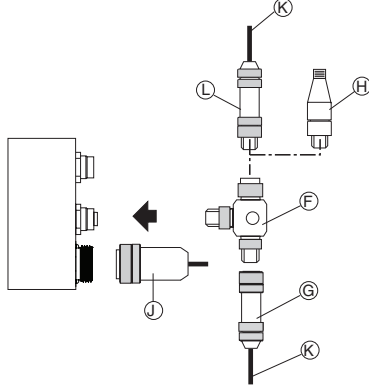
PROFIBUS-DP® bus connection

The front panel of the communication module for Profibus-DP® is equipped with:

- a 5 pin male 7/8" socket for power supply
- a 5 pin male M12-B socket or 5 pin female M12-A socket for the bus cable (with a T-connector on integrated M12 COM-IN/COM-OUT connector)

Fieldbus connection

Wiring with T-connector



Accessories for PROFIBUS-DP®

The modules on either side of the system must be provided with terminating resistors (H)

	Accessory	Description	Order Code
F		T-connector M12-B, 5 female / male / male pins (Profibus 12Mb max)	88100712
G		M12-B network connector , 5 female pins - for cable dia. 6 - 8 mm (Profibus 12Mb max)	88100713
		M12 90° 5 Pin Male & Female Field Wireable network Connectors, w/IDC PG9 Cable Gland – IDC FEMALE	RD05F200P000071V
L		M12-B network connector , 5 male pins - for cable dia. 6 - 8 mm (Profibus 12Mb max)	88100714
		M12 90° 5 Pin Male & Female Field Wireable network Connectors, w/IDC PG9 Cable Gland – IDC MALE	RB05F200P000071V
H		Terminating resistor M12-B - male plug	88100716
J		M 12 90° 5 Pin Female Field Wireable Connector (24 V DC supply, PG 9 Cable Gland)	TD05F2000000000
		M12 90° 5 Pin Female Single Ended Cable, Euro Color Code (5 pin elbow female cable connector, 24 V DC supply, with 10 m cable)	 1 ————— BN (brown) 2 ————— WH (white) 4 ————— BK (black) 3 ————— BU (blue) 5 ————— GN/YE (green/yellow)
		Dust cover - M12 female	88157773

(K) Cable to be ordered separately.



PROFINET®

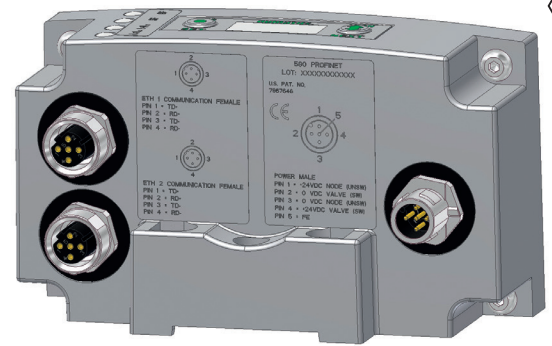
PROFINET® is the innovative open standard for Industrial Ethernet, development by Siemens and the Profibus® User Organization (PNO). PROFINET® complies to IEC 61158 and IEC 61784 standards. PROFINET® products are certified by the PNO user organization, guaranteeing worldwide compatibility.

Numatics' 580 nodes for PROFINET IO (PROFINET RT) have an integrated graphic display.

PROFINET® is based on Ethernet and uses TCP/IP and IT standards and complements them with specific protocols and mechanisms to achieve Real Time performance. Additionally, the 580 node PROFINET® can integrate an on-board Web server, which can make the node readily accessible for configuration, testing and even retrieval of technical documentation.

More information regarding PROFINET® can be obtained from the following WEB site:
www.profibus.com

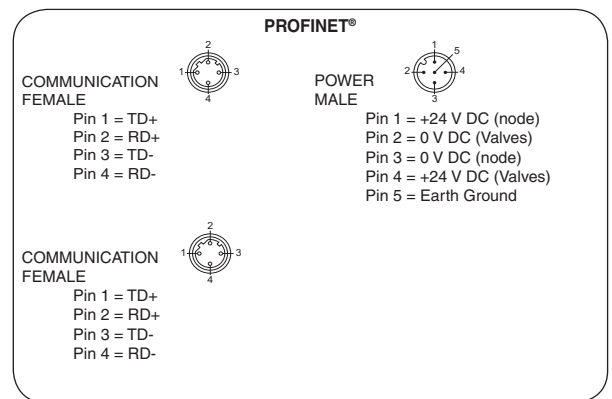
Remark: Compatibility with MRP functionalities.



Description	ATEX
PROFINET® communications module (node)	2-22 (3GD) IP65X
	2-22 (3GD) IP54X
	2 (3G) IP54X

HOW TO ORDER

Consult the online configurator - CAD files on: www.asco.com



Technical Data

Electrical Data	Voltage	Current
Node Power at Max. Brightness	24 VDC +/- 10%	4 A Maximum
Valves	24 VDC +/- 10%	
Power Connector	Single key 5 pin M12 (male)	
Communication Connector	Two D-coded 4 pin M12 (female)	
LED's	Module Status, Network Status and Activity/Link	

Operating Data	
Temperature Range (ambient)	-10°C to +50°C
Humidity	95% relative humidity, non-condensing
Vibration / Shock	IEC 60068-2-27, IEC60068-2-6
Moisture Protection	IP65

Configuration Data	
Graphic Display	Display used for setting IP Address, Subnet Mask, Fault / Idle Actions, Diagnostics and all other system settings.
Maximum Valve-Solenoid Outputs	18 (501) / 13 (502)





Network Data	
Supported Baud Rates	10 Mbit / 100 Mbit
Bus Connector	Two D-coded 4 pin M12 (2-Female)
Diagnostics	Power, short, open load conditions and module health and configuration are monitored
Special Features	Integrated web server, Integrated 2 port switch, fail-safe device settings

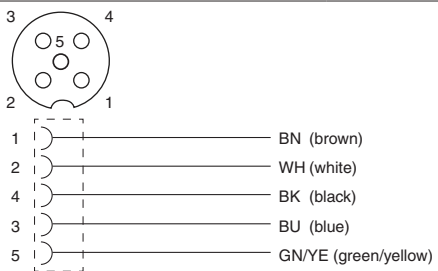
Weight	
PROFINET® Communication Module	342 g

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Accessories for PROFINET®

Accessory	Description		Order Code
	M12 Straight 4 Pin Male D-Coded to Male RJ45 network Cable - Shielded	5 m	QA0405MK0VA04000
		10 m	QA0410MK0VA04000
	M12 elbow 4 Pin Male D-Coded Field Wireable network Connector PG 9 Cable Gland – Screw Terminal		QB04F200000071N
	M 12 90° 5 Pin Female Field Wireable Connector (24 V DC supply, PG 9 Cable Gland)		TD05F20000000000
	M12 90° 5 Pin Female Single Ended Cable, Euro Color Code (5 pin elbow female cable connector, 24 V DC supply, with 10 m cable)		TD0510MAE0000000





EtherNet/IP™ DLR

EtherNet/IP™ used throughout the world to network millions of PC's has now evolved into a viable industry network. EtherNet/IP is an open architecture high-level communication network that meets the demands of today's industrial applications requiring high-speed (10/100 Mbit/s), high-throughput and flexibility. Additionally, EtherNet/IP™ technology can integrate an on-board Web server, which can make the node readily accessible to any standard Web browser for configuration, testing and even retrieval of technical documentation.

Numatics' 580 EtherNet/IP™ DLR (Device Level Ring) node with integrated display, has an embedded switch which allows the unit to be used in simplified networks with linear topology configurations (daisy chain). Additionally, the DLR compatibility allows the node to be used in a fault tolerant "ring" network, when using appropriate EtherNet/IP™ DLR scanners. DLR configuration allows communication recovery from a single point failure on the network ring (e.g. failed network connection or cable).

The 580 EtherNet/IP™ nodes have been tested and approved for conformance by the ODVA

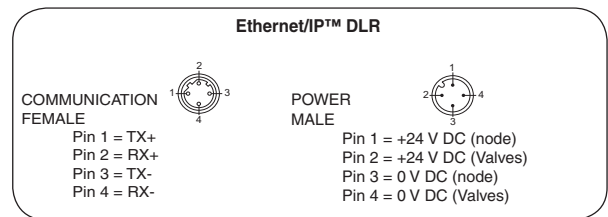
More information about EtherNet™ and the ODVA can be obtained from the following WEB site: Open Device Vendors Association (ODVA) www.odva.org



Description	ATEX
EtherNet/IP™ DLR communications module (node)	2-22 (3GD) IP65X
	2-22 (3GD) IP54X
	2 (3G) IP54X

HOW TO ORDER

Consult the online configurator - CAD files on: www.asco.com



Technical Data

Electrical Data	Voltage	Current
Node Power at Max. Brightness Valves	24 VDC +/- 10%	4 A Maximum
Power Connector	Single key 4 pin M12 (male)	
Communication Connector	Two D-coded 4 pin M12 (female)	
LED's	Module Status, Network Status and Activity / Link	

Operating Data	
Temperature Range	-10°C to +50°C
Humidity	95% relative humidity, non-condensing
Vibration / Shock	IEC 60068-2-27, IEC 60068-2-6
Moisture	IP65 Certified

Configuration Data	
Graphic Display	Display used for setting IP address, Subnet Mask, Fault / Idle Actions, Diagnostics and all other system settings.
Maximum Valve Solenoid Outputs	18 (501) / 13 (502)





Network Data	
Supported Baud Rates	10 Mbit / 100 Mbit
Bus Connector	Two D-coded 4 pin M12 (female)
Diagnostics	Power, short, open load conditions and module health and configuration are monitored
Special Features	Embedded two port switch, Device Level Ring (DLR) compatibility, fail-safe device settings, integrated web server, HTTP, TFTP, UNICAST

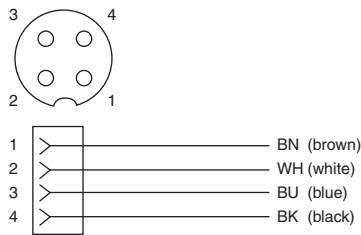
Weight	
EtherCAT® communications module	342 g

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Accessories for EtherNET/IP™ DLR

Accessory	Description		Order Code
	M12 Straight 4 Pin Male D-Coded to Male RJ45 network Cable - Shielded	5 m	QA0405MK0VA04000
		10 m	QA0410MK0VA04000
	M12 elbow 4 Pin Male D-Coded Field Wireable network Connector PG 9 Cable Gland – Screw Terminal		QB04F200000071N
	M12 90° 4 Pin Female Field Wireable Connector (PG 9 Cable Gland) (4 pin elbow female cable connector 7/8") - 24 V DC power supply		TD04F20000000000
	M12 90° 4 Pin Female Single Ended Cable, Euro Color Code (4 pin elbow female cable connector 90° with 10 m cable) 24 V DC power supply		TD0410MAE0000000



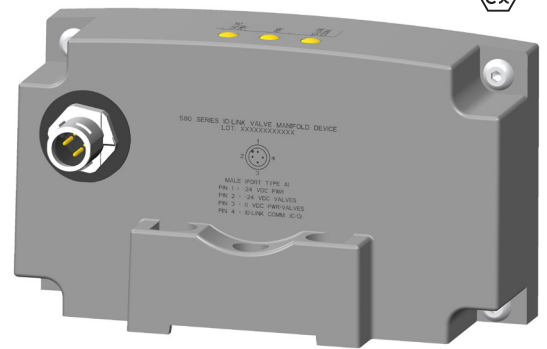


IO-Link® (Class A & Class B)

IO-Link® is a globally standardized IO technology (IEC 61131-9) developed primarily for communication with smart sensors and actuators that can also be used with valves and other field devices. IO-Link® is used to individually link field devices and resides below the I/O level. An IO-Link® Master with a higher level fieldbus or Ethernet communication protocol is required. The IO-Link Consortium, which is a technical committee within PROFIBUS® & PROFINET® International (PI), oversees and manages IO-Link® specifications.

Numatics' IO-Link® communications node offers both event based as well as standard I/O mapped diagnostics, requires minimal commissioning, and is compatible with distributed modular I/O. Supports both Class A (4 pin) and Class B (5 pin) with isolated ground) communication port types.

More information regarding IO-Link® can be obtained from the following website: www.io-link.com





Description	ATEX
IO-Link® Class A (4 pin) Communications Module (node)	2-22 (3GD) IP65X
	2-22 (3GD) IP54X
	2 (3G) IP54X
IO-Link® Class B (5 pin) Communications Module (node)	2-22 (3GD) IP65X
	2-22 (3GD) IP54X 2 (3G) IP54X

HOW TO ORDER

Consult the online configurator - CAD files on: www.asco.com

IO-Link® (Class A & Class B)

<p>The IO-Link® (Port Type A) connector is a single keyway 4 pin M12 male connector</p> <p>Pin 1 = +24 V DC PWR Pin 2 = +24 V DC (Valves) Pin 3 = 0 V DC PWR (Valves) Pin 4 = IO-Link COMM (C/Q) Pin 5 = NO CONNECT</p> 	<p>The IO-Link® (Port Type B) connector is a single keyway 5 pin M12 male connector</p> <p>Pin 1 = +24 V DC PWR Pin 2 = +24 V DC (Valves) Pin 3 = 0 V DC PWR Pin 4 = IO-Link COMM (C/Q) Pin 5 = 0 V DC (Valves)</p> 
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Technical Data

Node Power	24 VDC +/- 10%	0,020 A
Valves	24 VDC +/- 10%	4 A Maximum
Power and Communication Connector	Class A: A-Coded 4 pin M12 (male)/Class B: A-Coded 5 pin M12 with isolated ground (male)	
LEDs	Valve Power, Node Power, Communication	

Temperature Range (ambient)	-10°C to 50°C	
Humidity	95% Relative Humidity, Non-condensing	
Vibration/Shock	IEC 60068-2-27, IEC 60068-2-6	
Moisture	IP65 Certified	

Maximum Valve Solenoid Outputs	18 (501) / 13 (502)	
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Supported Baud Rates	COM 2: 38,4K	
Diagnostics	Power, short, open load conditions with both standard I/O mapped diagnostics and event based diagnostics	
Special Features	Fail-safe device settings	

IO-Link® Communications Module	Class A: 298 g, Class B: 303 g	
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IO Link field wireable

M12 straight 5 pins Female A-Coded IO Link field wireable PG-9 Cable Gland



TC05F20000000000

M12 90° Elbow 5 pins Female A-Coded IO Link field wireable PG-9 Cable Gland



TD05F20000000000



Accessories for IO-Link® (Class A & Class B)

Accessory	Description		Order Code
M12 Class A Compatible Cables			
	M12 Straight 4 Pin Male Single Ended Cable, Euro Color Code	1,5 m	TA04E5MIE000071P
		5 m	TA0405MIE000071P
	M12 90° 4 Pin Male Single Ended Cable, Euro Color Code	1,5 m	TB04E5MIE000071P
		5 m	TB0405MIE000071P
	M12 Straight 4 Pin Male to Female Cable Extension	1,5 m	TC04E5MIETA0471P
		3 m	TC0403MIETA0471P
M12 Class B Compatible Cables			
	M12 Straight 5 Pin Female Single Ended Cable - Unshielded	5 m	TC0505MIE000071P
		10 m	TC0510MIE000071P
	M12 Straight 5 Pin Female to Male Double Ended Cable - Unshielded	5 m	TC0505MIETA0571P
		10 m	TC0510MIETA0571P
	M12 90° 5 Pin Female Single Ended Cable - Unshielded	5 m	TD0505MIE000071P
		10 m	TD0510MIE000071P

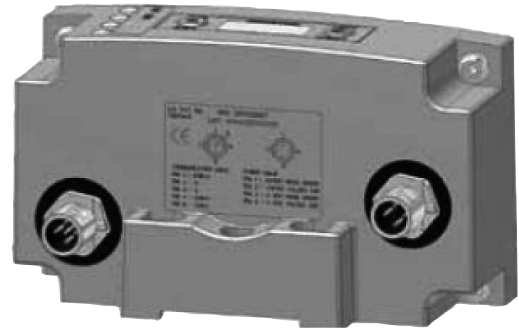
Molded Body/Insert	TPU	Polyamide	
Coupling Nut	Nickel Plated Zinc	Nickel Plated Zinc	
Cable Jacket Material	PUR	NA	
Cable O.D.	5mm	Accepts 3 – 6,5 mm	
Voltage Rating	60 V	125 V	
Current Rating	4 A	4 A	
Degree of Protection	IP65 (mated)	IP65 (mated)	
Operating Temperature	-25°C to 90°C	-20°C to 100°C	
Conductor Gauge	22 AWG	18 – 24 AWG	
Minimum Bend Radius	50 mm	NA	
Wire Connection	NA	Screw Terminal	

Female View



580 CHARM Node

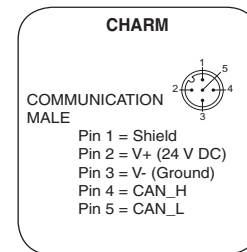
The 580 CHARM node allows the pneumatic valve manifold to directly connect to the CHARM I/O Card (CIOC) baseplate and be controlled by DeltaV. The 580 CHARM node is connected via 2 cables to the bottom baseplate extender of the (CIOC). This provides full redundancy to the pneumatic manifold. The 580 CHARM node is commissioned via the DeltaV explorer.



Description	ATEX
580 CHARM module (node)	2-22 (3GD) IP65X
	2-22 (3GD) IP54X
	2 (3G) IP54X

HOW TO ORDER

Consult the online configurator - CAD files on: www.asco.com



Technical Data

Electrical Data	Voltage	Current
Comm. Power (via baseplate extender)	6,3 V	100 mA
Valve Power (via baseplate extender)	24 V	1,07 A
Power and Communication Connector	A-coded 5 Pin M12 (male)	
LED's	Module Status and Network Status	

Operating Data	
Temperature Range (ambient)	-10°C to +50°C
Humidity	95% relative humidity, non-condensing
Vibration / Shock	IEC 60068-2-27, IEC60068-2-6
Moisture Protection	IP65

Configuration Data	
Graphic Display	Display used for setting CHARM address and all other system settings.
Maximum Valve-Solenoid Outputs	48 (501 Series) / 32 (série 502)

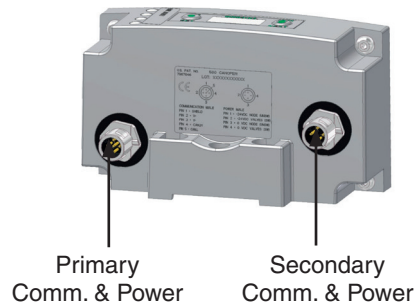
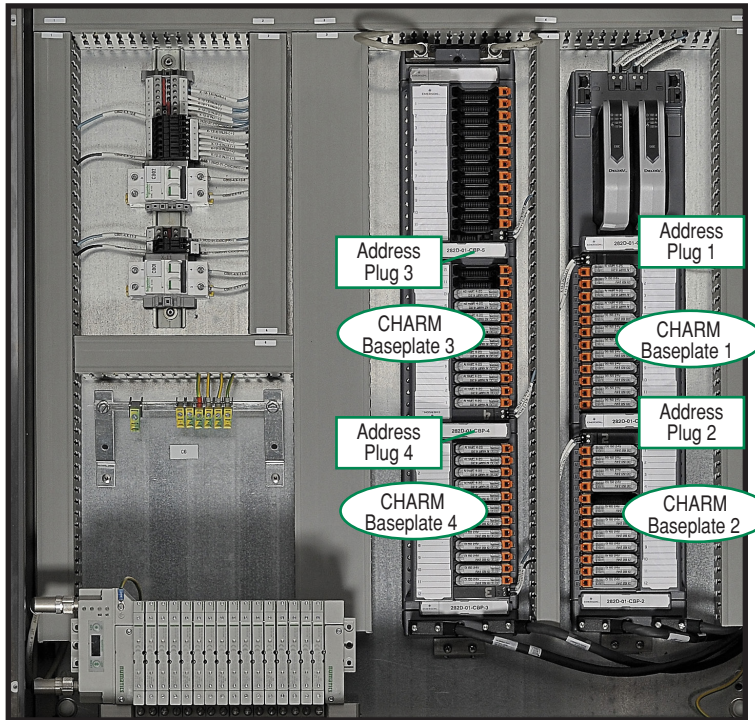
Network Data	
Redundant Power and Comm. Connectors (Primary & Secondary)	A-coded 5 Pin M12 (male)
Diagnostics	Power, short, open load conditions are monitored
DeltaV version	Compatible DeltaV series S ; FHX file integrated in v13 version ; download file for v11 and v12 versions

Weight	
CHARM Communication Node	336 g

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CHARM Communication & Power connection
the front panel of the communication module is equipped with a 5 pin M12.



Both Cables provide 6.3 V for Comm. and 24 V for valve Power

Accessories for CHARM

Accessory	Description	Order Code
-	1,5 Meter Cable with M12 and Sub-D Connectors (Moulded version)	P599AF519387001
-	0,5 Meter Cable with M12 and Sub-D Connectors (Moulded version)	P599AF519387002
	Valve Power Isolator M12-Y	P599AF516881001

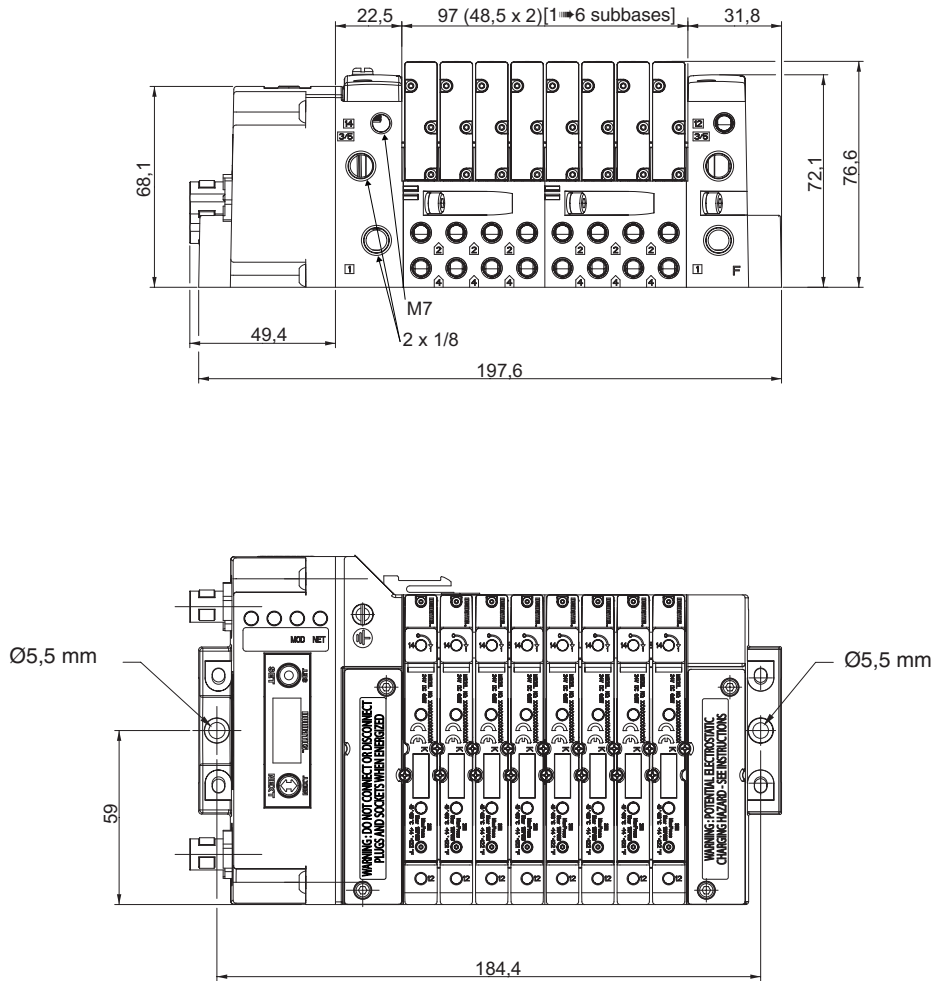


Dimensions (mm)

Dimensional Drawing - 580 Fieldbus Manifold Assembly

[Configurator - CAD Files](#)

501 Series Valve Manifold Assembly with 580 Electronics



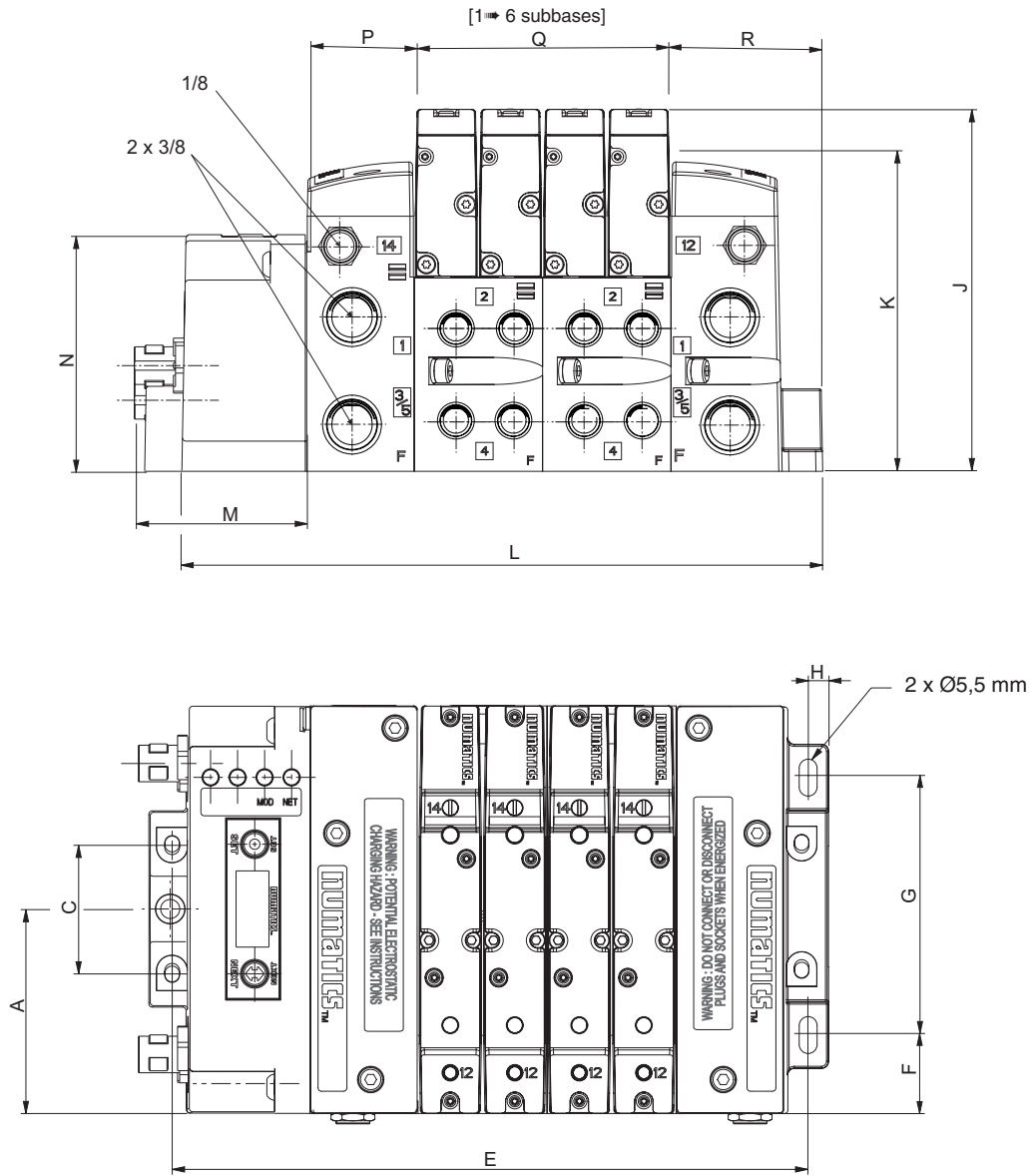
* - For valve manifold dimensions refer to Valve Series product catalogs



Dimensions (mm/ Inches)

Dimensional Drawing - 580 Fieldbus Manifold Assembly

502 Series Valve Manifold Assembly with 580 Electronics



A	C	E	F	G	H	J	K	L	M	N	P	Q	R
60	38	186,95	23,1	75,8	6	107,3	91,5	187,8	49,4	68,1	31,8	76	45

* - For valve manifold dimensions refer to Valve Series product catalogs



ATEX CERTIFICATION

- ATEX Directive
- Apparatus suitable for use in ATEX Group II, Category 3, gas (G) or dust (D) environments
- Temperature class: T4 (gas), T85 °C (dusts)
- Ingress protection: IP65 / IP54
- Ambient temperature range: -10°C ≤ Ta ≤ +50°C (501/502)
- Marking:
 Gas and dusts: II 3G Ex nA IIC T4 Gc IP54 X or IP65 X
 II 3D Ex tc IIIA or IIIB T85°C Dc IP54 X or Ex tc IIIC T85°C Dc IP65 X
 Dusts: II 3G Ex nA IIC T4 Gc IP54 X

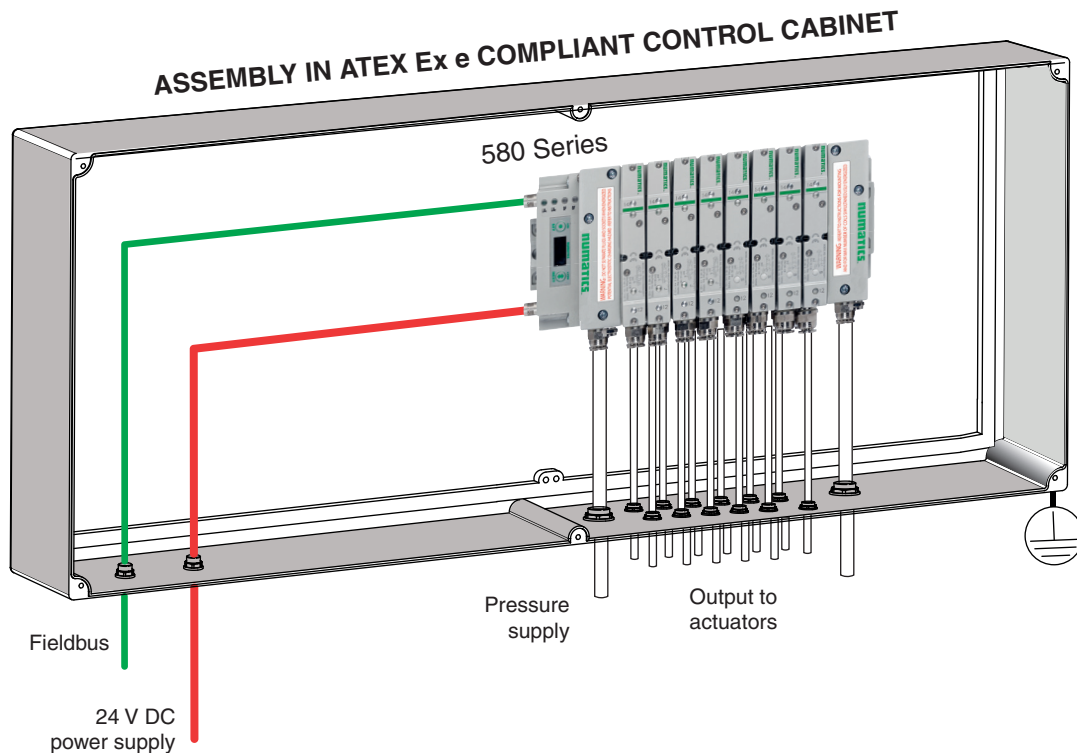
SPECIAL CONDITIONS FOR SAFE USE

- The apparatus must be installed in a control cabinet with a protection degree of IP54 or IP65 in conformance with standards EN 60079-0 and EN 60079-7 (and EN 60079-31 for dust applications).
- **WARNING – LIVE PARTS: DO NOT DISCONNECT CONNECTORS FROM SOCKETS WHILE POWER IS ON**
- The cross-section of the ground cable must be equal to the minimum cross-section of the supply cable. Provide for equipotential bonding between the apparatus and the control cabinet.
- Electrical connections must be made by qualified personnel to ensure reliable operation. The contact pressure of electrical connections must be maintained during regular operation.
- **WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD - SEE INSTRUCTIONS**
- Precautions shall be taken to guard against any effect due to the presence of circulating current caused by stray magnetic fields.
- Avoid all static charge build-up on the apparatus.
- No air movement inside the cabinet.
-

	501	502
	max. coils ⁽¹⁾	max. coils ⁽¹⁾
580	18	13
580 charms	48	32

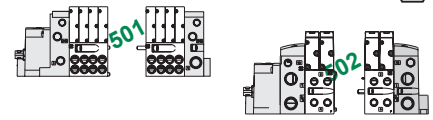
⁽¹⁾ Do not exceed the max. number of pilot solenoid valves authorised.

- The internal temperature of the cabinet may not exceed the minimum and maximum temperatures specified on the product.
Do not disassemble any component of the device except when replacing spare parts.
- The specifications of IP54 or IP65 must be met when installing the device in the cabinet.





How to Order
Manifold assemblies kit (Electronic + End plate)



15-DIGIT PRODUCT CODE

G 501 A V 8 B 1 0 0 V A36

Thread connection

- G = ISO 228/1
- 8 = NPT (contact us)
- K = Push-in connectors

Product series

- 501 (11 mm valve)
- 502 (18 mm valve)

Revision letter

- A = Initial release

Product type

- V = Valve Manifold Assembly

Electronics

- 8 = 580 Fieldbus Electronics
- D = CHARMS Electronics

Number of Valve Stations

- | | | | |
|------------|------------|------------|---------|
| 502 | | 501 | |
| B = 2 | L = 12 | V = 22* | 7 = 32* |
| D = 4 | N = 14* | X = 24* | |
| F = 6 | P = 16* | Z = 26* | |
| H = 8 | R = 18* | 3 = 28* | |
| J = 10 | T = 20* | 5 = 30* | |
| A = NA/33* | H = 8/40* | O = 15/47* | V = 22* |
| B = NA/34* | I = 9/41* | P = 16/48* | W = 23* |
| C = 3/35* | J = 10/42* | Q = 17 | X = 24* |
| D = 4/36* | K = 11/43* | R = 18 | Y = 25* |
| E = NA/37* | L = 12/44* | S = 19* | Z = 26* |
| F = 6/38* | M = 13/45* | T = 20* | 2 = 27* |
| G = 7/39* | N = 14/46* | U = 21* | 3 = 28* |

ATEX options

- | | | |
|--------------------------|--------------------------|--------------------------|
| 2-22 (3GD) IP65X | 2-22 (3GD) IP54X | 2 (3G) IP54X |
| A36 = A00 ⁽¹⁾ | A41 = A00 ⁽¹⁾ | A43 = A00 ⁽¹⁾ |
| D36 = DRM ⁽²⁾ | D41 = DRM ⁽²⁾ | D43 = DRM ⁽²⁾ |
| D38 = 14X ⁽³⁾ | D42 = 14X ⁽³⁾ | D44 = 14X ⁽³⁾ |
| F16 = D14 ⁽⁴⁾ | F18 = D14 ⁽⁴⁾ | F19 = D14 ⁽⁴⁾ |

- ⁽¹⁾ Standard (no options)
- ⁽²⁾ DIN Rail Mount
- ⁽³⁾ External pilot supply from port 14
- ⁽⁴⁾ External pilot supply from port 14 and DIN Rail Mount

End Plate Style

- V = Vertical

End Plate Port Size (1-3-5)

- 501:**
Used with the first digit «G» or «8»:
1 = 1/8 (female thread only)
Used with the first digit «K»:
H = 6 x 8 mm (push-in connector)
- 502:**
Used with the first digit «G» or «8» or «K»:
3 = 3/8
(female thread or push-in connector)
Used with the first digit «K»:
K = 8 x 10 mm (push-in connector)
M = 10 x 12 mm (push-in connector)

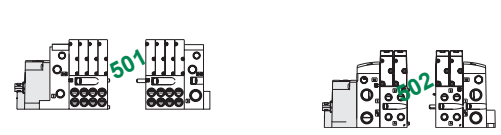
580 ATEX		max. coils ⁽¹⁾	
501		18	
502		13	
580 CHARMS	501	48	
	502	32	

* 580 CHARMS only.

⁽¹⁾ Max. number of coil under voltage.



How to Order
580 Electronics



15-DIGIT PRODUCT CODE

P 580 A E DN1 0 1 0 71W

- Product series**
580 Fieldbus Electronics

- Revision letter**
A = Initial release

- Actuation**
E = Electronics

- ATEX options**
71W = Standard (no options)

- Connector Type**
1 = M12 Connector (push-in connector)

- Protocol**
- | | |
|------------------------|--------------------------------|
| DN1 = DeviceNet™ | LM1 = IO-Link® Class A (4 pin) |
| ED1 = EtherNet/IP™ DLR | LM2 = IO-Link® Class B (5 pin) |
| EP1 = EtherNet/IP™ | |
| PN1 = PROFINET® | |
| PT1 = PROFIBUS-DP® | |
| CH1 = CHARMS | |

[Configurator - CAD Files](#)



How to Order

Valves

15-DIGIT PRODUCT CODE

R 501 A 2 B 4 0 M 71W F1

Thread connection
R = Pad mount

Product series
501 (11 mm valve)

Revision letter
A = Initial release

Actuation
2 = Rubber packed

Valve type
B = Solenoid pilot

Function
A = 2x3/2 NO, dual 3-way
D = 2x3/2 NC, dual 3-way
N = 5/2, Differential air return
1 = 5/2, spring return
4 = 5/2, solenoid air return
5 = 5/3, W3, open center to exhaust
6 = 5/3, W1, center closed
7 = 5/3, W2, open center to pressure

Voltage - class
F1 = 24 V DC - class F

ATEX options
71W = With impulse manual operator
82L = With maintained manual operator
84A = Without manual operator

Electrical interface
M = Plug-in (with LED indicator / DC)



15-DIGIT PRODUCT CODE

R 502 A 2 B 4 0 M 71W F1

Thread connection
R = Pad mount

Product series
502 (18 mm valve)

Revision letter
A = Initial release

Actuation
2 = Rubber packed

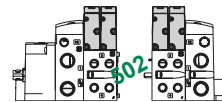
Valve type
B = Solenoid pilot
(With impulse manual operator)

Function
D = 2x3/2 NC, dual 3-way

Voltage - class
F1 = 24 V DC - class F

ATEX options
71W = With impulse manual operator ⁽¹⁾
82L = With maintained manual operator
84A = Without manual operator

Electrical interface
M = Plug-in (with LED indicator / DC)



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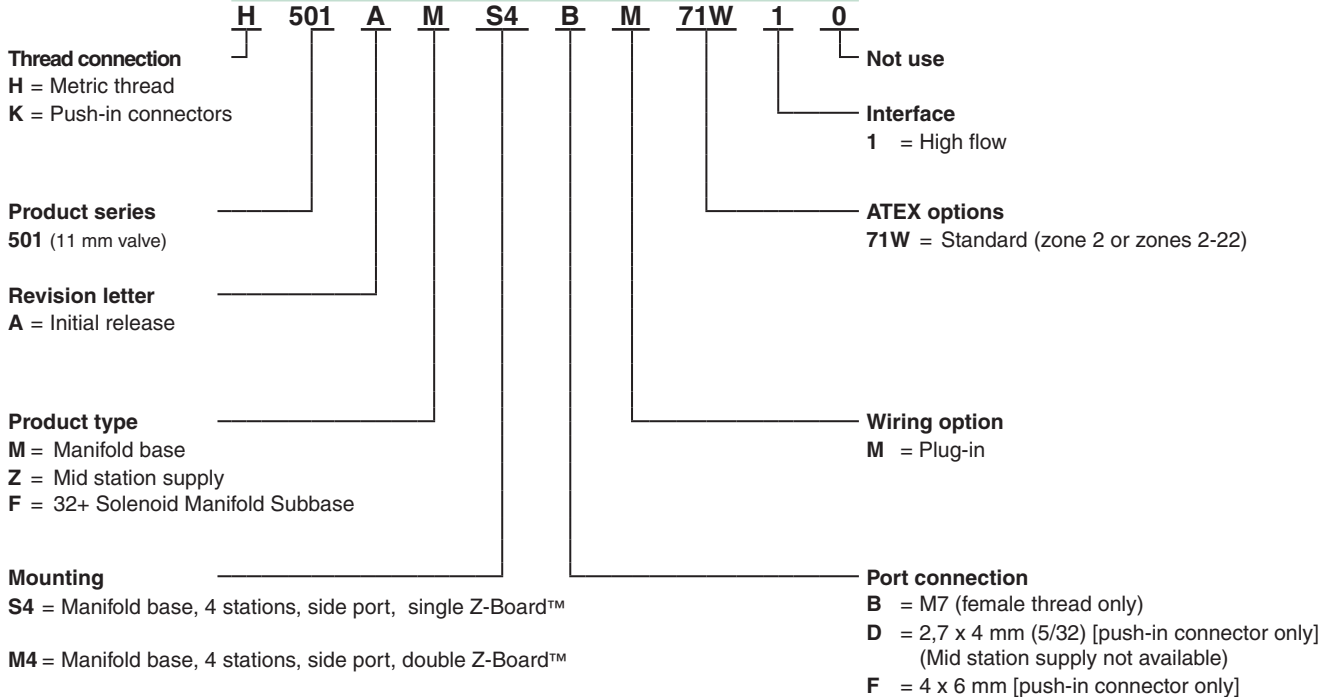
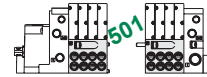
⁽¹⁾ Used external spool valves (internal/external supply configured in the end plate kits).
For internal piloting, contact us.



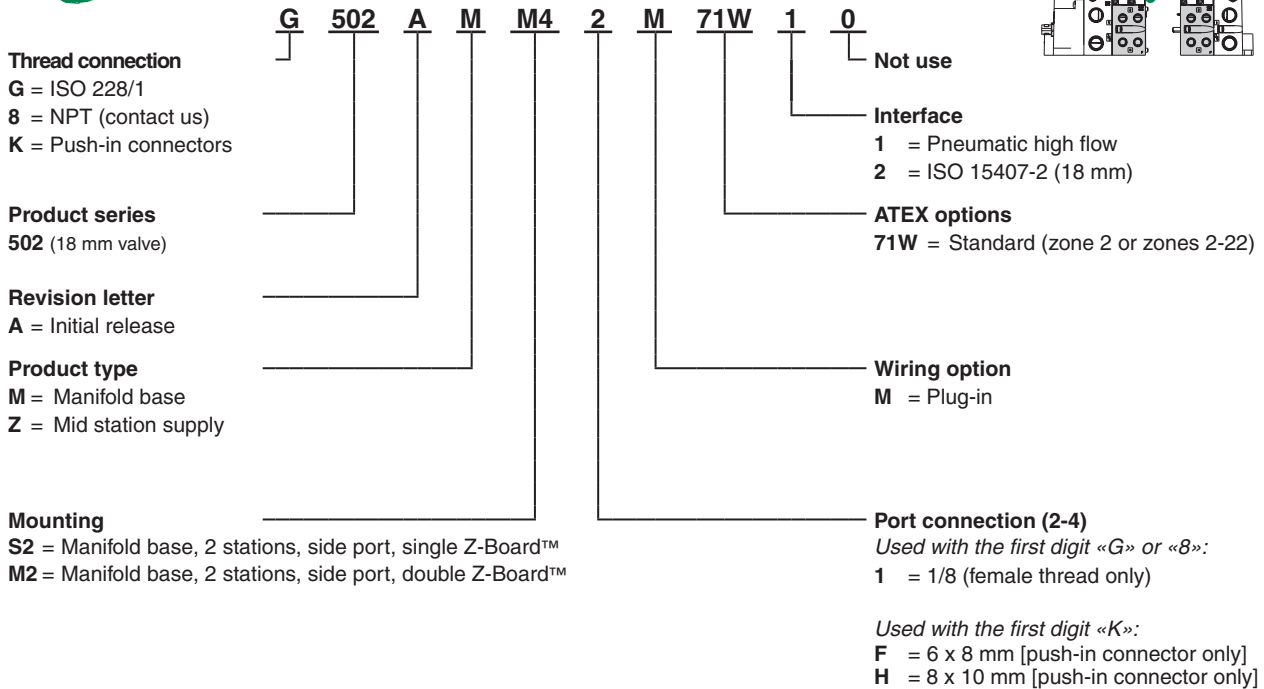
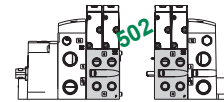
How to Order

Subbase

15-DIGIT PRODUCT CODE



15-DIGIT PRODUCT CODE



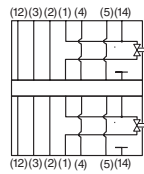


Sandwich shut off block (501-502 Series)

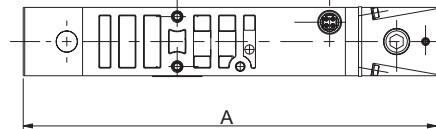
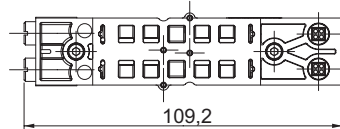
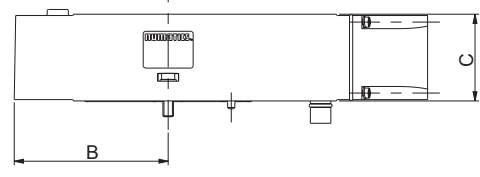
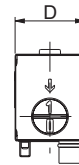
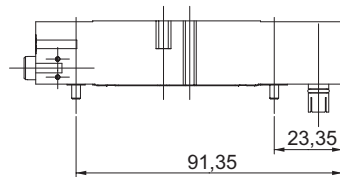
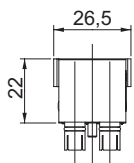
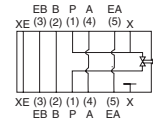
- Used to shut-off pressure to the valve which is mounted above it.
- Allows easy maintenance without the need to shut-off pressure to the whole manifold.
(specified for 2x3/2 NC-NC valve)



501 Series



502 Series



⚠
Usable only for internal pilot supply island

⚠
Pay attention to residual pressures

⚠
The valve(s) should not be energised during disassembly

	weight (kg)
501	0,11
502	0,145

Dimensions (mm)				
	A	B	C	D
502	147,2	50,5	27,5	18,5

15-DIGIT PRODUCT CODE	Description
R501AY428501001	Sandwich shut off block (double)

	15-DIGIT PRODUCT CODE	Description
502	R502AY429409002	High Flow - Sandwich shut off block

HOW TO ORDER [ATEX options (zone 2 or zones 2-22)]
Consult the online configurator - CAD files on: www.asco.com

