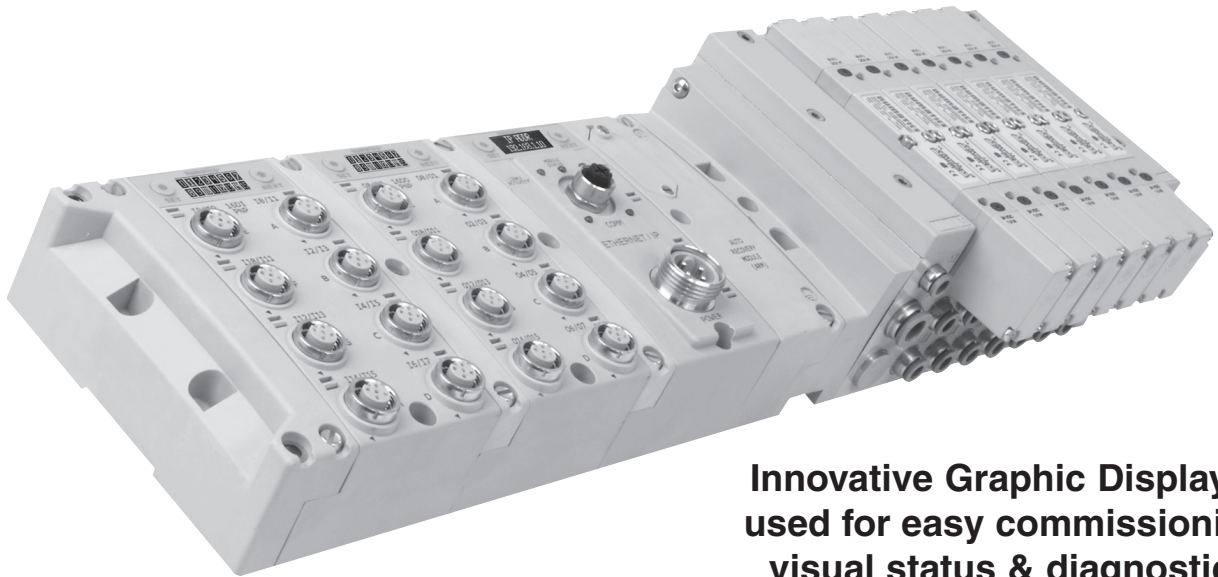


G3 displays its innovations !



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

Commissioning Capabilities

- Set network address
- Set baud rate
- Set auto or manual Inputs sizes
- Set fault/idle output states
- Set brightness
- Set factory defaults

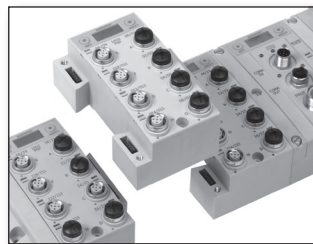
Visual Diagnostics

- Shorted and open load detection
- Shorted sensor/cable detection
- Low & missing power detection
- Missing module detection
- Self-test activation
- Log of network errors
- Distribution errors

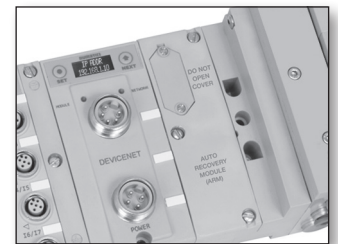
Graphic Display for configuration & diagnostics



Highly Distributable

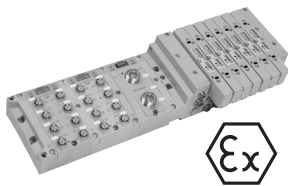


Easy, Robust Connections



Easy to use, time-saving features:

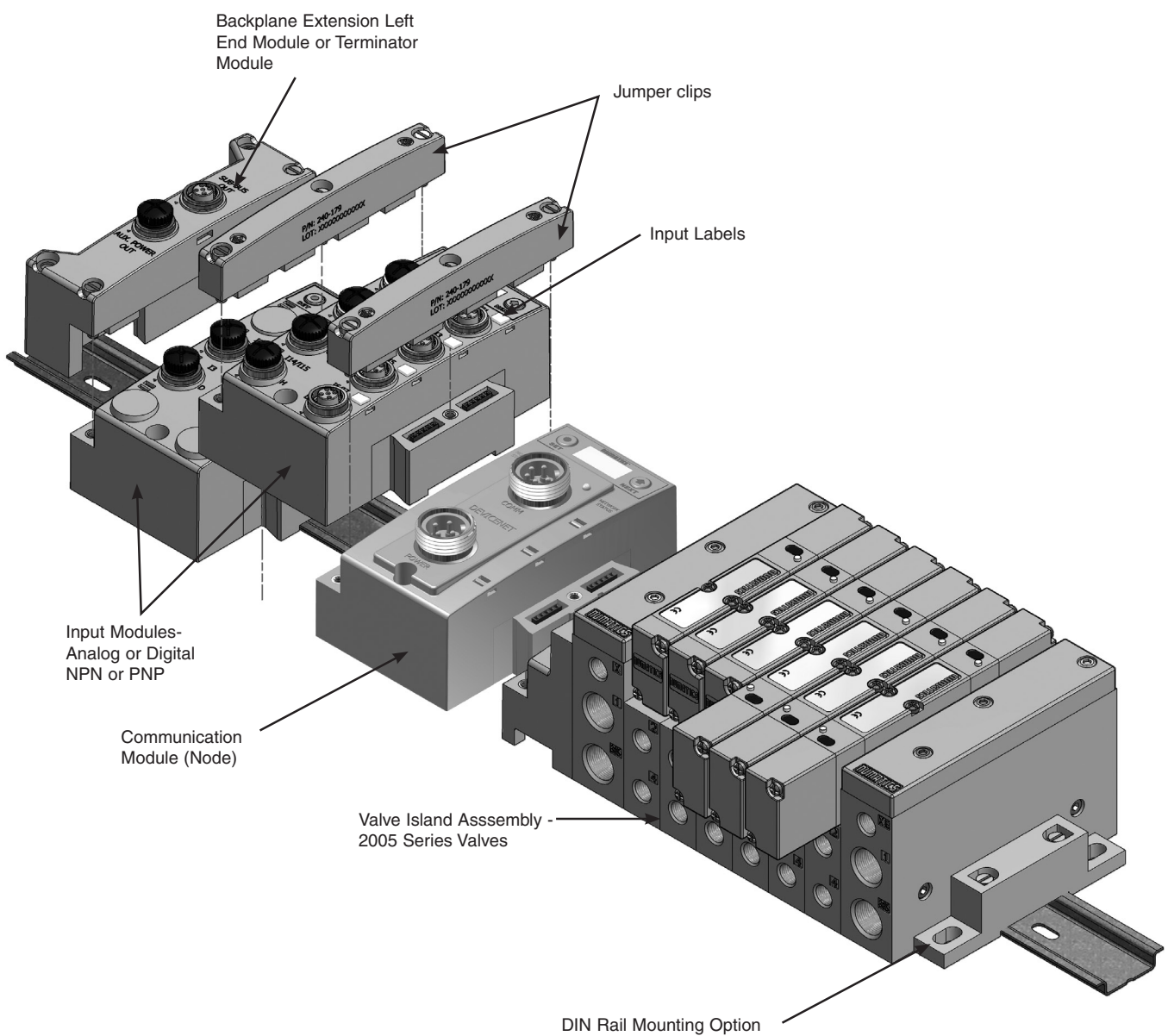
- **Reduced wiring:** Distributed mode allows inputs/Valves to be connected close to the actuator
- **Standard connections:** With screw-type M12 connector or terminal strip
- **Fast and efficient connection:** SPEEDCON M12 connector for ½ turn Inputs connector insertion
- **Fast troubleshooting:** Diagnostic display on each module
- **Accessibility:** Novel “clip” design allows easy module removal/replacement without dismantling manifold
- **Pneumatic modularity:** Interfaces to valves with flow rates of 400 to 600 l/min ANR
- **Electrical modularity:** Analog and digital inputs
- **Easy planning:** On-line 2D/3D CAD files available in 85 formats

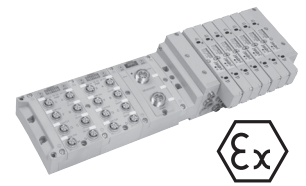


G3 Electronics Modularity

Digital Inputs

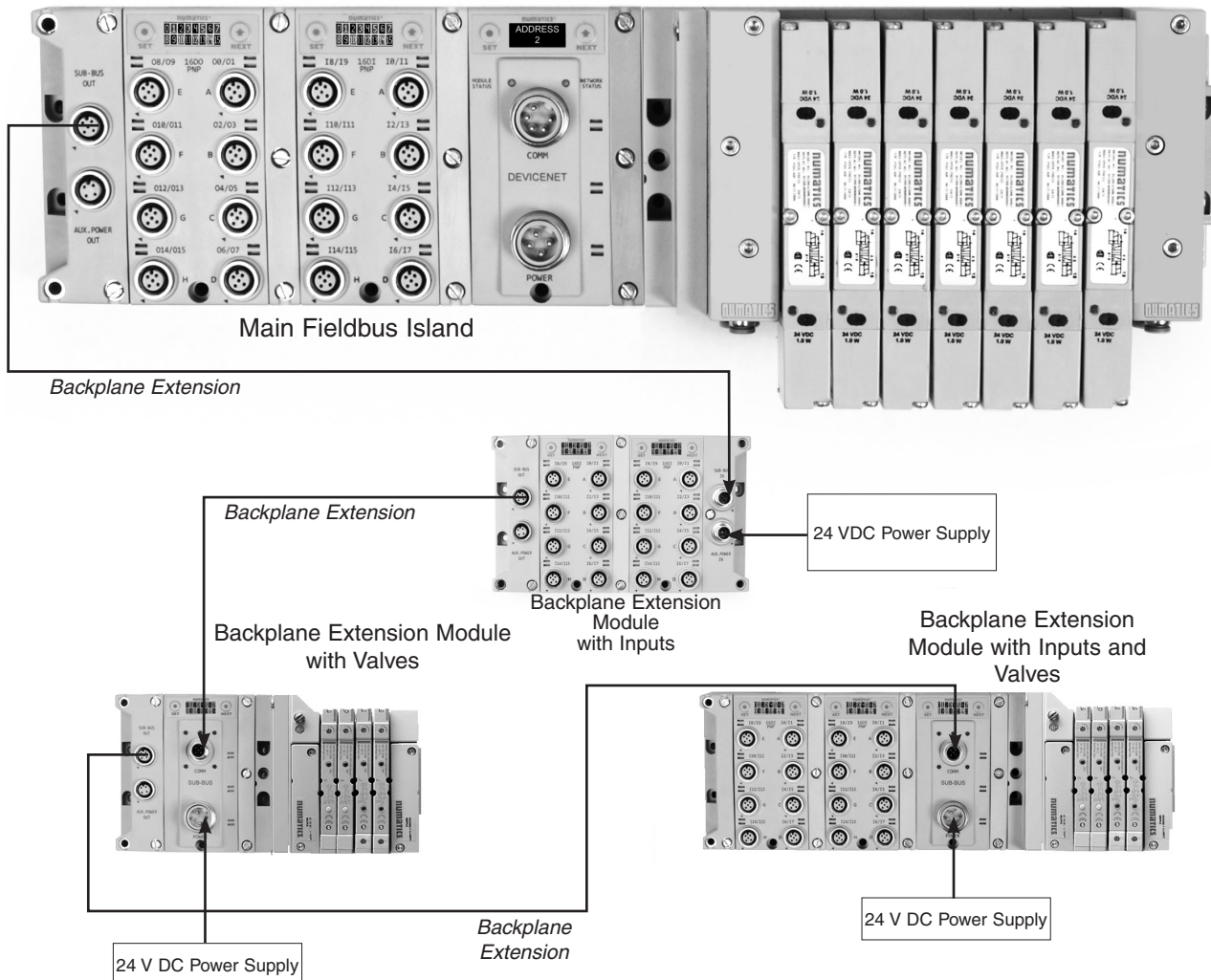
The G3 Series product line is a completely modular system. All of the G3 electronic modules plug together, via mechanical clips, allowing easy assembly and field changes. This makes the system highly distributable. Additional flexibility is incorporated because the same modules can be used in either centralised or distributed applications.





G3 Platform Distribution Options

Easy, Cost-Effective Solutions for Valve Automation

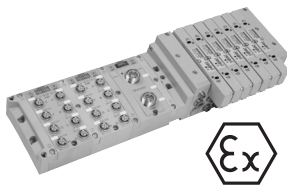


Distribution benefits

- Up to 256 input / 544 output capability (1200 bits) with one communication node (or address)
- 32 valve solenoid per manifold up to 16 manifolds per communication node
- One node supports 16 Input modules - analog Input, digital Input (NPN & PNP)
- Plug & play distribution capability without the need for special configuration

G3 supported protocols :

- DeviceNet™
- Modbus/TCP
- EtherNet/IP™
- DeviceLogix
- PROFIBUS DP
- PROFINET
- POWERLINK



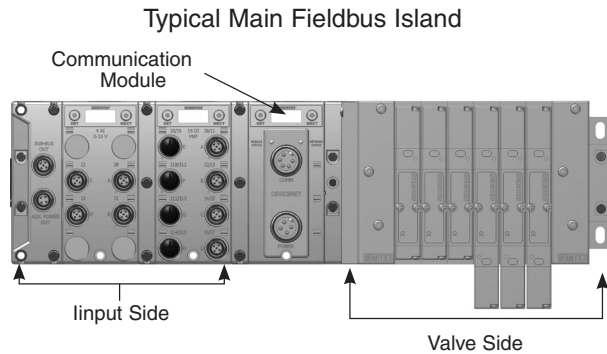
G3 Platform Distribution Options

The G3 platform is flexible to the point that there are a virtually infinite number of Inputs distribution options using the few basic G3 modules. The following basic rules should be followed in the configuration of your control architecture.

Valve Side

- The number of coils under voltage at the same time depends on the number of input modules associated with the pneumatic distribution.

input modules	501	2005
	max. coils	max. coils
0	18	10
1	16	9
2	14	8
3	12	7
4	10	6
580	18	-
25/37 Pin Sub-D 1-32 Terminal Strip 19 Pin Round Connector	24	14



Note:

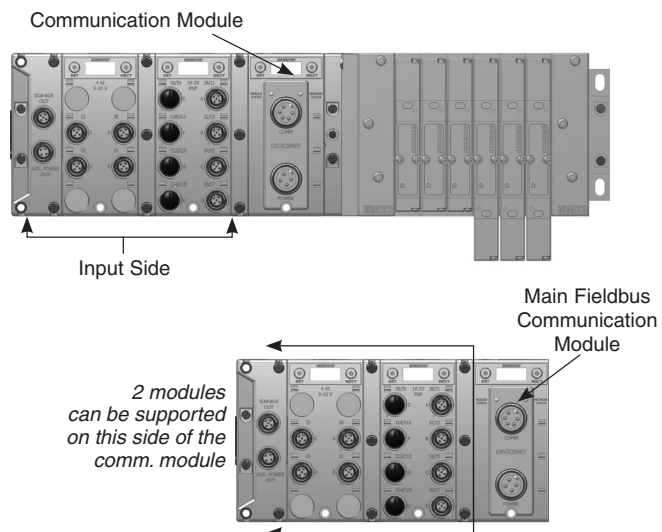
- For a 2x3/2 valve (2 pneumatic functions for each valve), the 2 coils of the valve can be supplied simultaneously, each 3/2 having an independent distribution function.
- For the 5/3, 5/2 monostable or bistable valves (1 pneumatic function for each valve), only one of the 2 coils may be supplied during valve commutation. (Never supply the 2 coils simultaneously).

Configuration example: Fieldbus island 2005 with 1 input module

- 1 5/2 bistable valve = 1 pneumatic function ⇒ Max. number of coils that may be supplied simultaneously equals 1.
 - 2 5/3 valves = 2 pneumatic functions ⇒ Max. number of coils that may be supplied simultaneously equals 2.
 - 3 2x3/2 valves = 6 pneumatic functions ⇒ Max. number of coils that may be supplied simultaneously equals 6.
- Total number of coils that may be supplied simultaneously = 9 ⇒ correct configuration

Input Side Distribution

- A total of 16 modules can be integrated into the network and controlled by the main fieldbus communication module (Node)
- Modules include analog and digital Input modules providing addressing capacity for up to 256 Inputs / 544 Outputs (1200 bits) per node.
- Unique distribution system allows system efficiency by allowing the same modules to be used in either centralised or distributed applications.
- Distribution options include Inputs only, valves with Inputs.
- Configuration can include up to 16 of the following modules:
 - Digital Input modules
 - Backplane extension valve modules
 - Analog Input modules





ATEX CERTIFICATION

- ATEX Directive 94/09/EC, applicable standards: EN 60079-0 / EN 60079-15 / EN 61241-1
- Apparatus suitable for use in ATEX Group II, Category 3, gas (G) or dust (D) environments
- Temperature class: T4 (gas), T85 °C (dust)
- Ingress protection: IP65 / IP54
- Ambient temperature range: -20°C ≤ Ta ≤ +46°C (2005) / -10°C ≤ Ta ≤ +50°C (501)
- Marking:
Gas: II 3G Ex nA IIC T4 Gc IP54X or IP65X
Dust: II 3D Ex tc IIIA or IIIB T85°C Dc IP54X or
Ex tc IIIC T85°C Dc IP65X

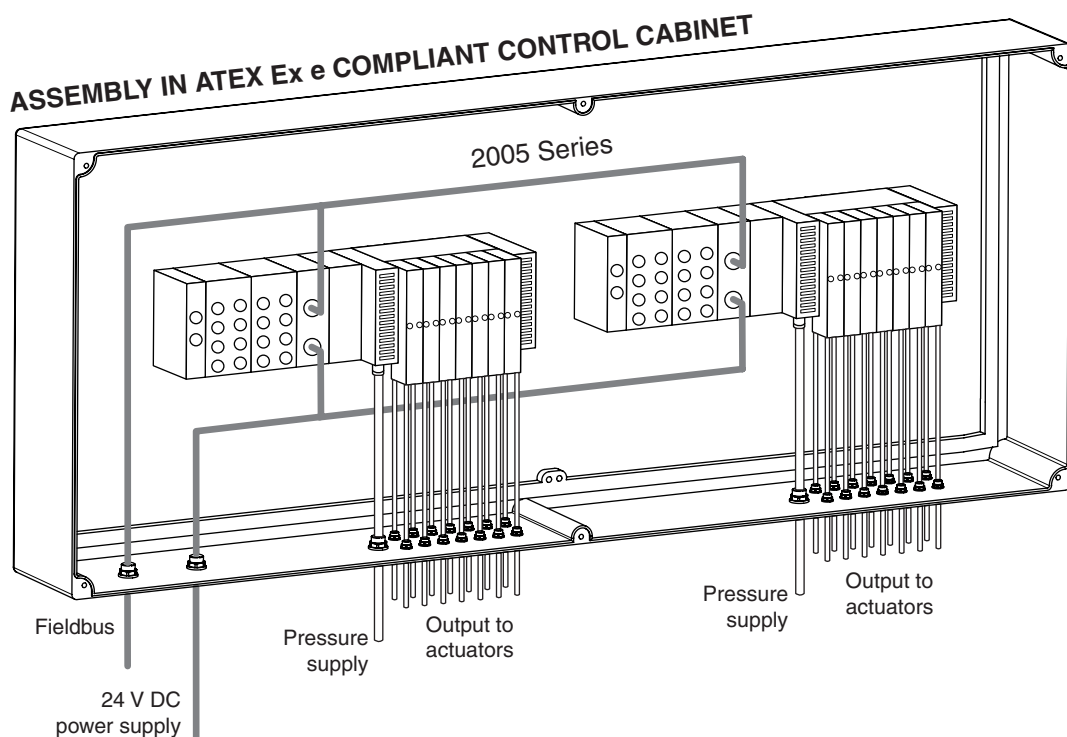
SPECIAL CONDITIONS FOR SAFE USE

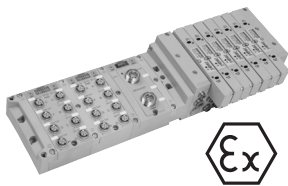
- The apparatus must be installed in a control cabinet with a protection degree of IP54 or IP65 in conformance with standards EN 60079-0 and EN 60079-7 (and EN 60079-31 for dust applications).
- **WARNING – LIVE PARTS: DO NOT DISCONNECT CONNECTORS FROM SOCKETS WHILE POWER IS ON**
- The cross-section 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.

	501	2005
input modules ⁽¹⁾	max. coils ⁽¹⁾	max. coils ⁽¹⁾
0	18	10
1	16	9
2	14	8
3	12	7
4	10	6
580	18	-
25/37 Pin Sub-D 1-32 Terminal Strip 19 Pin Round Connector	24	14

⁽¹⁾ Max. number of coil under voltage according to input module number.

- 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.





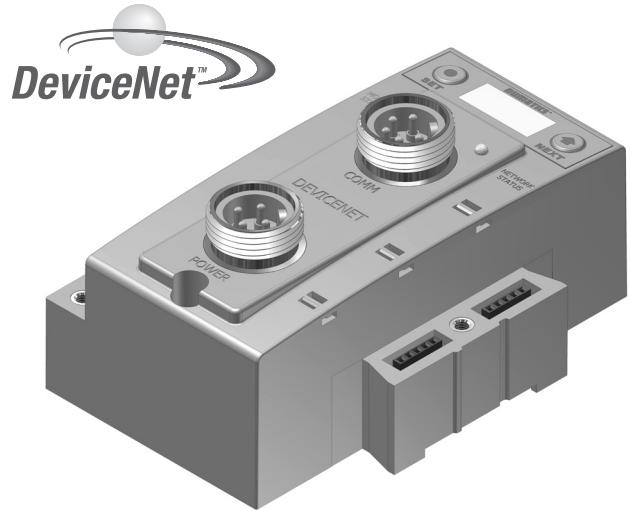
DeviceNet™

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.

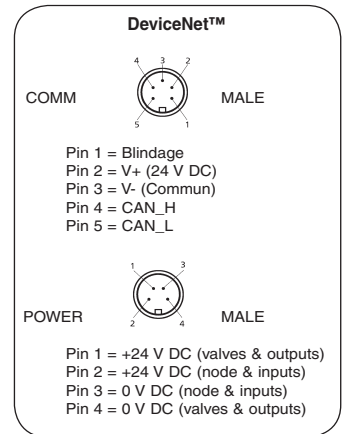
Numatics'G3 DeviceNet™ nodes have an integrated graphic display and are capable of addressing combinations of up to 256 inputs / 544 outputs.

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

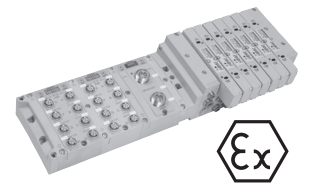


DESCRIPTION	REPLACEMENT ORDER CODE
DeviceNet™ communications module (node)	240-331



Technical Data

ELECTRICAL DATA	VOLTAGE	CURRENT
Node Power at Max. Brightness	24 V DC +/- 10%	70 mA
Consommation du BUS	11-25 V DC	25 mA
Valves & Discrete I/O	24 V DC +/- 10%	8 A max.
Connecteur de puissance	Single key 4 pin 7/8" MINI type (male)	
Communication Connector	Single key 5 pin 7/8" MINI type (male)	
LEDs	Module Status and Network Status	
OPERATING DATA		
Temperature Range (ambient)	-20° to +46°C	
Humidity	95% relative humidity, non-condensing	
Vibration / Shock	IEC 60068-2-27, IEC 60068-2-6	
Moisture Protection	IP65, IP67 (with appropriate assembly and termination)	
CONFIGURATION DATA		
Graphic Display	Display used for setting Node Address, Baud Rate, Fault / Idle Actions, DeviceNet QuickConnect and all other system settings.	
MCM	(Manual Configuration Module) Optional module containing DIP switches for setting node address and baud rate.	
ARM	(Auto Recovery Module) Optional module that contains automatic recovery of system setting in the event of total or partial system failure	
Maximum Valve-Solenoid Outputs	32	
Maximum Addressable I/O Points	Various combinations of 256 inputs / 544 outputs (1200 bits)	
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 7/8" MINI type (male)	
Diagnostics	Power, short, open load conditions and module health are monitored	
Special Features	Supports Auto-Device Replacement (ADR) and fail-safe device settings	
WEIGHT		
DeviceNet Communication Module	252 g	



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).

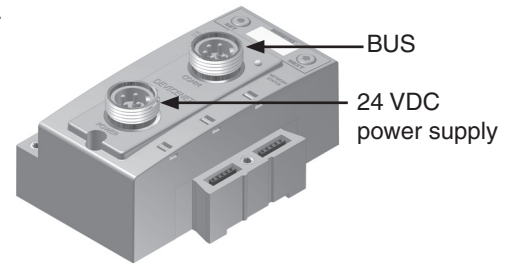
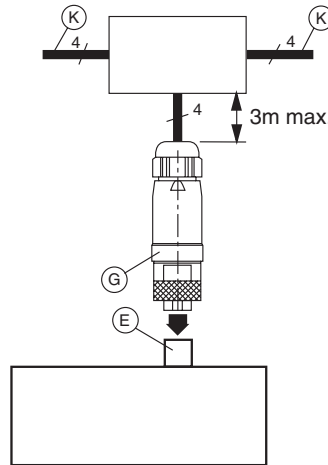
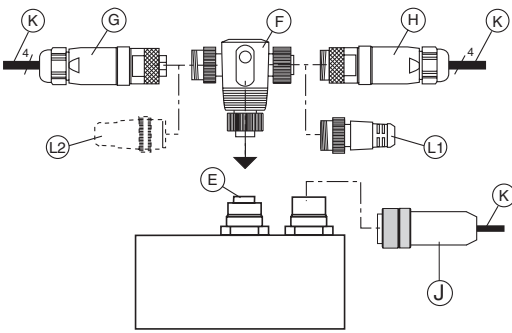
The bus can be connected in the two following ways:

- 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**

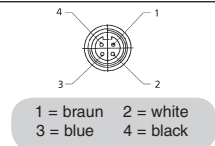
■ **Connection with DeviceNet™ distributor box (X)**



Accessories for DeviceNet™

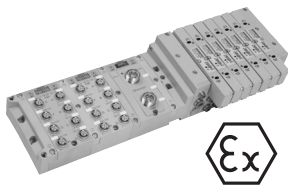
The modules on either side of the system must be provided with terminating resistors (H)

	Accessory	Description	Order Code
G		5 pin straight 7/8-16 UN female connector	88161930
H		5 pin straight 7/8-16 UN male connector	88161931
F		T-connector 7/8-16 UN, 5 male / female / female pins	88161932
L1		Terminating resistor female plug 120 ohms	88161933
L2		Terminating resistor male plug 120 ohms	88161934
J		4 pin straight female cable connector 7/8"	230-1003
		4 pin elbow female cable connector 7/8"	230-1001
		4 pin elbow female cable connector 7/8" with 9,15 m cable	230-950



(K) Cable to be ordered separately.

00572GB-2014/R01 Availability, design and specifications are subject to change without notice. All rights reserved.



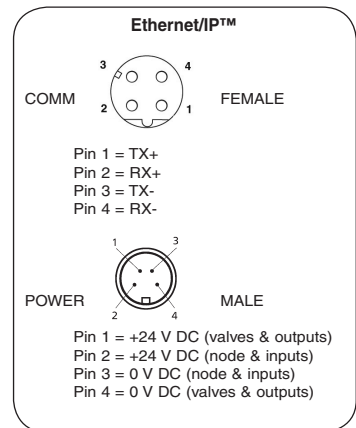
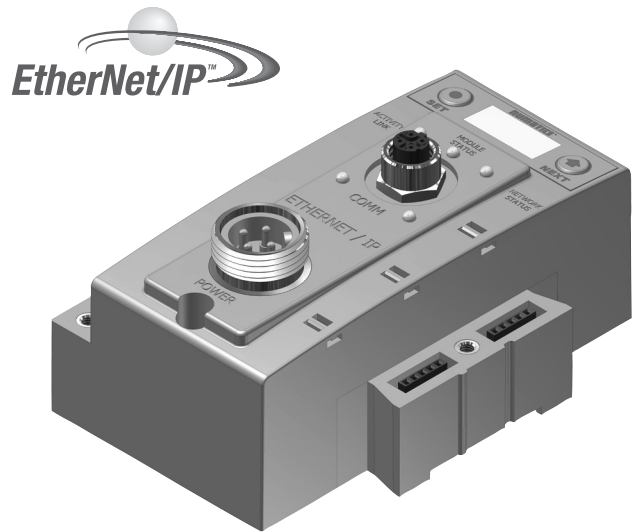
EtherNet/IP™

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. Various application layers for this protocol including EtherNet/IP™ and Modbus TCP/IP. 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' G3 Ethernet nodes have an integrated graphic display and are capable of addressing combinations of up to 256 inputs / 544 outputs.

The G3 EtherNet/IP™ nodes have an integrated graphic display and are capable of addressing combinations of up to 256 inputs / 544 outputs.

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



DESCRIPTION

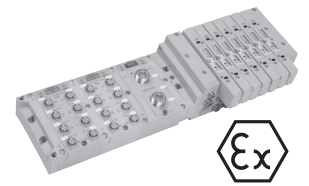
EtherNet/IP™
communications module (node)

REPLACEMENT ORDER CODE






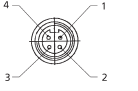
240-332

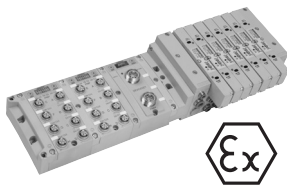
Technical Data

ELECTRICAL DATA	VOLTAGE	CURRENT
Node Power at Max. Brightness	24 V DC +/- 10%	91 mA
Valves & Discrete I/O	24 V DC +/- 10%	8 A max.
Power Connector	Single key 4 pin 7/8" MINI type (male)	
Communication Connector	D-coded 4 pin M12 type (female)	
LEDs	Module Status, Network Status and Activity/Link	
OPERATING DATA		
Temperature Range (ambient)	-20° to +46°C	
Humidity	95% relative humidity, non-condensing	
Vibration / Shock	IEC 60068-2-27, IEC 60068-2-6	
Moisture Protection	IP65, IP67 (with appropriate assembly and termination)	
CONFIGURATION DATA		
Graphic Display	Display used for setting IP Address, Subnet mask, Fault / Idle Actions, DHCP / BootP and all other system settings.	
MCM	(Manual Configuration Module) Optional module containing DIP switches for setting IP address.	
ARM	(Auto Recovery Module) Optional module that contains automatic recovery of system setting in the event of total or partial system failure	
Maximum Valve-Solenoid Outputs	32	
Maximum Addressable I/O Points	Various combinations of 256 inputs / 544 outputs (1200 bits)	
NETWORK DATA		
Supported Baud Rates	10 Mbit / 100 Mbit	
Bus Connector	D-coded 5 pin M12 type (female)	
Diagnostics	Power, short, open load conditions and module health are monitored	
Special Features	Integrated web server and fail-safe device settings	
WEIGHT		
Ethernet Communication Module	255 g	



Accessories for EtherNet/IP™

Accessory	Description		Order Code
	M12 Straight 4 Pin Male D-Coded to Male RJ45 Cable - Shielded	5 m	QA0405MK0VA04000
		10 m	QA0410MK0VA04000
	M12 Straight 4 Pin Male D-Coded Field Wireable Connector PG 9 Cable Gland – Screw Terminal		QA04F20000000000
	4 pin straight female cable connector 7/8"		230-1003
	4 pin elbow female cable connector 7/8"		230-1001
	4 pin elbow female cable connector 7/8" with 9,15 m cable	 <p>1 = braun 2 = white 3 = blue 4 = black</p>	230-950



Modbus TCP

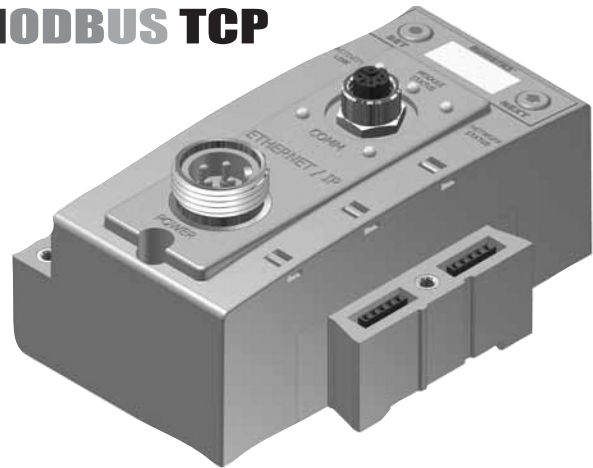
Ethernet used throughout the world to network millions of PC's has now evolved into a viable industrial network. Ethernet is an open architecture high-level communication network that meets the demands of today's industrial applications requiring high-speed (10/100 Mbit/s), high-throughput and flexibility. Various application layers for this protocol including EtherNet/IP™ and Modbus TCP. 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' G3 Ethernet nodes have an integrated graphic display and are capable of addressing combinations of up to 256 inputs / 544 outputs.

The G3 Modbus TCP nodes have been tested and approved for conformance by the ODVA.

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

MODBUS TCP



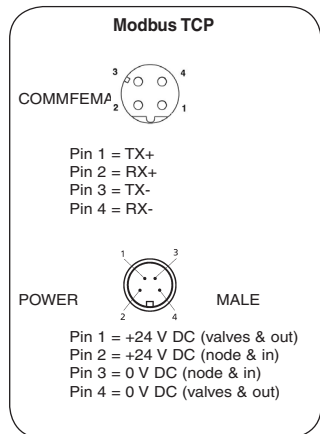
Modul with 2 switch

DESCRIPTION

Modbus TCP
communications
module (node)

REPLACEMENT PART NUMBER

240-337






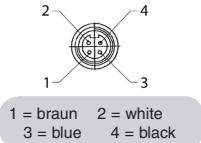


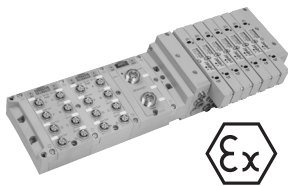
Technical Data

ELECTRICAL DATA	VOLTAGE	CURRENT
Node Power at Max. Brightness	24 V DC +/- 10%	91 mA
Valves & Discrete I/O	24 V DC +/- 10%	8 A max.
Power Connector	Single key 4 pin 7/8" MINI type (male)	
Communication Connector	Two D-coded 4 pin M12 type (female)	
LED's	Module Status, Network Status and Activity/Link	
OPERATING DATA		
Temperature Range (ambient)	-23° to +50°C	
Humidity	95% relative humidity, non-condensing	
Vibration / Shock	IEC 60068-2-27, IEC 60068-2-6	
Moisture Protection	IP65, IP67 (with appropriate assembly and termination)	
CONFIGURATION DATA		
Graphic Display	Display used for setting IP Address, Subnet mask, Fault / Idle Actions, DHCP / BootP and all other system settings.	
ARM	(Auto Recovery Module) Optional module that contains automatic recovery of system setting in the event of total or partial system failure	
Maximum Valve-Solenoid Outputs	32	
Maximum Addressable I/O Points	Various combinations of 256 inputs / 544 outputs (1200 bits)	
NETWORK DATA		
Supported Baud Rates	10 Mbit / 100 Mbit	
Bus Connector	D-coded 4 pin M12 type (female)	
Diagnostics	Power, short, open load conditions and module health are monitored	
Special Features	Integrated web server and fail-safe device settings	
WEIGHT		
Ethernet Communication Module	255 g	



Accessories for Modbus TCP

Accessory	Description		Order Code
	M12 Straight 4 Pin Male D-Coded to Male RJ45 network Cable - Shielded	5 m	QA0405MK0VA04000
		10 m	QA0410MK0VA04000
	M12 Straight 4 Pin Male D-Coded Field Wireable network Connector PG 9 Cable Gland – Screw Terminal		QA04F20000000000
	4 pin straight female cable connector 7/8"		230-1003
	4 pin elbow female cable connector 7/8"		230-1001
	4 pin elbow female cable connector 7/8" with 9,15 m cable		



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.

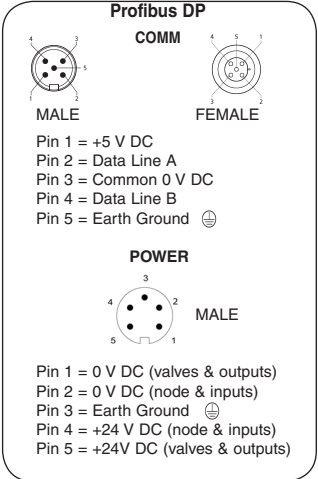
Numatics' G3 PROFIBUS-DP® nodes have an integrated graphic display and are capable of addressing combinations of up to 256 inputs / 544 outputs.

The G3 PROFIBUS-DP® nodes 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 Organisation (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

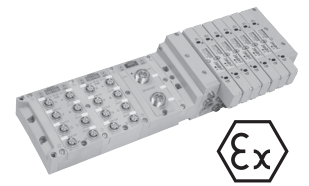


DESCRIPTION	REPLACEMENT ORDER CODE
PROFIBUS-DP® communications module (node) DPV0/DPV1	240-333
PROFIBUS-DP® communications module (node) Automotive industry	240-341



Technical Data

ELECTRICAL DATA	VOLTAGE	CURRENT
Node Power at Max. Brightness	24 V DC +/- 10%	94 mA
Valves & Discrete I/O	24 V DC +/- 10%	8 A max.
Power Connector	Single key 5 pin 7/8" MINI type (male)	
Communication Connector	Single reverse key (B-Coded) 5 pin M12 type (1 male and 1 female)	
LEDs	Module Status and Network Status	
OPERATING DATA		
Temperature Range (ambient)	-20° to +46°C	
Humidity	95% relative humidity, non-condensing	
Vibration / Shock	IEC 60068-2-27, IEC 60068-2-6	
Moisture Protection	IP65, IP67 (with appropriate assembly and termination)	
CONFIGURATION DATA		
Graphic Display	Display used for setting Node Address, Baud Rate, Fault / Idle Actions, and all other system settings.	
MCM	(Manual Configuration Module) Optional module containing DIP switches for setting node address and baud rate.	
ARM	(Auto Recovery Module) Optional module that contains automatic recovery of system setting in the event of total or partial system failure	
Maximum Valve-Solenoid Outputs	32	
Maximum Addressable I/O Points	Various combinations of 256 inputs / 544 outputs (1200 bits)	
NETWORK DATA		
Supported Baud Rates	Auto-Baud from 9.6k to 12M Baud	
Bus Connector	Single reverse key (B-Coded) 5 pin M12 type (1 male and 1 female)	
Diagnostics	Power, short, open load conditions and module health are monitored	
Special Features	Supports Class 2 PROFIBUS-DP master with auto-configuration and fail-safe device settings	
WEIGHT		
PROFIBUS-DP Communication Module	227 g	

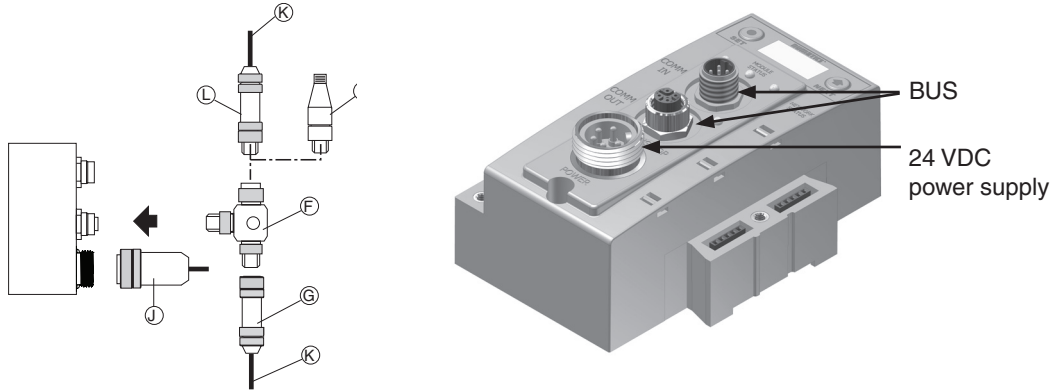


PROFIBUS-DP® bus connection

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)

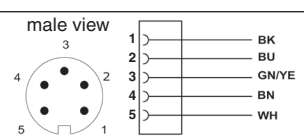
Wiring with T-connector



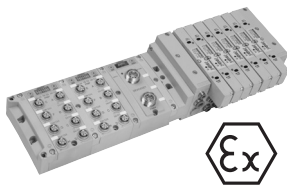
Accessories for PROFIBUS-DP®

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 connector, 5 female pins - for cable dia. 6 - 8 mm (Profibus 12Mb max)	88100713
L		M12-B connector, 5 male pins - for cable dia. 6 - 8 mm (Profibus 12Mb max)	88100714
H		Terminating resistor M12-B - male plug	88100716
J		5 pin straight female cable connector 7/8"	MC05F9000000000
		5 pin elbow female cable connector 7/8"	MD05F2000000000
		5 pin elbow female cable connector 7/8" with 10 m cable single-ended, Euro colour code	MD0510MAG0000000
		Dust cover - M12 female	88157773



(K) Cable to be ordered separately.



PROFINET®

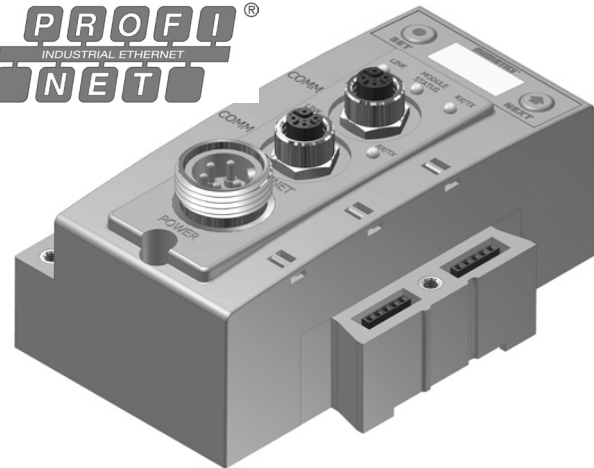
PROFINET® is the innovative open standard for Industrial Ethernet, developed by Siemens and the Profibus User Organization (PNO). PROFINET® complies to IEC 61158 and IEC 61784 standards. PROFINET® products are certified by the PNO user organization, guaranteeing worldwide compatibility.

Numatics' G3 PROFINET® IO (PROFINET RT) nodes have an integrated graphic display and are capable of addressing combinations of up to 256 inputs / 544 outputs. Additionally, PROFINET® technology can integrate an on-board Web server, which can make the node readily accessible for configuration, testing and even retrieval of technical documentation.

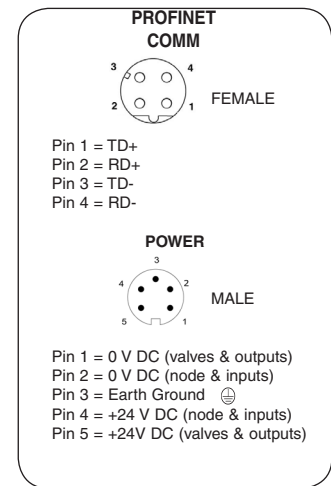
PROFINET® is based on Ethernet and uses TCP/IP and IT standards and complements them with specific protocols and mechanisms to achieve a good Real Time performance.

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

Remark: Compatibility with MRP functionalities.



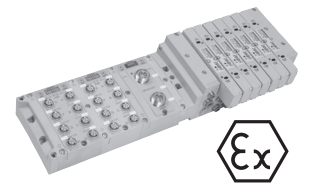
Modul with 2 switch



DESCRIPTION	REPLACEMENT PART NUMBER
PROFINET communications module (node)	240-334

Technical Data

ELECTRICAL DATA	VOLTAGE	CURRENT
Node Power at Max. Brightness	24 V DC +/- 10%	
Valves & Discrete I/O	24 V DC +/- 10%	8 A max.
Power Connector	Single key 5 pin 7/8" MINI type (male)	
Communication Connector	Two D-coded 4 pin M12 type (female)	
LED's	Module Status, Network Status and Activity/Link	
OPERATING DATA		
Temperature Range (ambient)	-23° to +50°C	
Humidity	95% relative humidity, non-condensing	
Vibration / Shock	IEC 60068-2-27, IEC 60068-2-6	
Moisture Protection	IP65, IP67 (with appropriate assembly and termination)	
CONFIGURATION DATA		
Graphic Display	Display used for setting IP Address, Subnet Mask, Fault / Idle Actions, and all other system settings.	
ARM	(Auto Recovery Module) Optional module that contains automatic recovery of system setting in the event of total or partial system failure.	
Maximum Valve-Solenoid Outputs	32	
Maximum Addressable I/O Points	Various combinations of 256 inputs / 544 outputs (1200 bits)	
NETWORK DATA		
Supported Baud Rates	10 Mbit / 100 Mbit	
Bus Connector	Two D-coded 4 pin M12 type (2-Female)	
Diagnostics	Power, short, open load conditions and module health and configuration are monitored	
Special Features	Integrated web server, Integrated 2 port switch and fail-safe device settings	
WEIGHT		
PROFINET Communication Module	Contact us	



Accessories for PROFINET®

Accessory	Description		Order Code
	M12 Straight 4 Pin Male D-Coded to Male RJ45 Cable - Shielded	5 m	QA0405MK0VA04000
		10 m	QA0410MK0VA04000
	M12 Straight 4 Pin Male D-Coded Field Wireable Connector PG 9 Cable Gland – Screw Terminal		QA04F20000000000
	5 pin straight female cable connector 7/8"		MC05F90000000000
	5 pin elbow female cable connector 7/8"		MD05F20000000000
	5 pin elbow female cable connector 7/8" with 10 m cable Euro colour code		MD0510MAG0000000

Server web page

numatics | EMERSON Industrial Automation

Home | Node Configuration | Node Password | Diagnostics | RSLogix 5000 Config | Quick Start Manual | Download | Numatics.com

Current Configuration

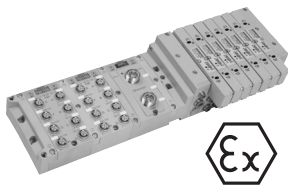
Module	Part No.	Description	Details	Activity
Node	240-181	EtherNet Communications Module	<input type="checkbox"/> Show Details	Close all Details ✓
Valve Driver	219-828	Valve Driver Output Module	<input type="checkbox"/> Show Details	Close all Details ✓
ARM	240-182	Auto Recovery Module	<input type="checkbox"/> Show Details	Close all Details ✓
No. 1	240-207	16 Outputs PNP Digital M12 x 8	<input type="checkbox"/> Show Details	Close all Details ✓
No. 2	240-211	8 Inputs / 8 Outputs PNP Digital M12 x 8	<input type="checkbox"/> Show Details	Close all Details ✓
No. 3	240-241	Sub-Bus Valve Driver	<input type="checkbox"/> Show Details	Close all Details ✓
No. 4	240-205	16 Inputs PNP Digital M12 x 8	<input checked="" type="checkbox"/> Show Details	Close all Details !

Firmware Revision: 2.021

	PNP Inputs: I/O Mapping Input (Starting) Byte: 15	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
		<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10	<input type="checkbox"/> 11	<input type="checkbox"/> 12	<input type="checkbox"/> 13	<input type="checkbox"/> 14	<input type="checkbox"/> 15
	Short Circuit on Connector: I/O Mapping Diagnostics (Starting) Byte: 17	<input type="checkbox"/> A	<input type="checkbox"/> B	<input checked="" type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H

Show Error/Event Log

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POWERLINK

Ethernet POWERLINK is an open fieldbus protocol designed by B&R for communication between automation control systems and distributed I/O at the device level. Numatics' G3 Ethernet POWERLINK nodes have an integrated graphic display and are capable of addressing combinations of up to 256 Inputs / 512 Outputs. The G3 Ethernet POWERLINK nodes have been designed and tested to conform to the Ethernet POWERLINK specifications available at EPSG group (Ethernet Powerlink Standardization Group). Additionally, POWERLINK technology can integrate an on-board Web server, which can make the node readily accessible for configuration, testing and even retrieval of technical documentation.

The certification process ensures interoperability for all Ethernet POWERLINK devices and compatible with B&R systems.

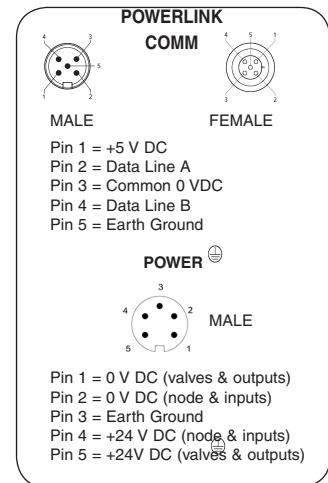
More information regarding Ethernet POWERLINK can be obtained from the following WEB site:
www.ethernet-powerlink.org

ETHERNET POWERLINK



Modul with 2 hub

DESCRIPTION	REPLACEMENT PART NUMBER
POWERLINK communications module (node)	240-342



Technical Data

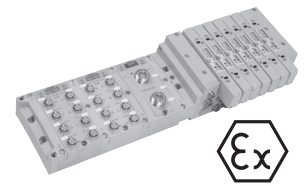
ELECTRICAL DATA	VOLTAGE	CURRENT
Node Power at Max. Brightness	24 V DC +/- 10%	94 mA
Valves & Discrete I/O	24 V DC +/- 10%	8 A max.
Power Connector	Single key 5 pin 7/8" MINI type (male)	
Communication Connector	Two D-coded 4 pin M12 type (female)	
LED's	Module Status and Network Status	

OPERATING DATA	
Temperature Range (ambient)	-23° to +50°C
Humidity	95% relative humidity, non-condensing
Vibration / Shock	IEC 60068-2-27, IEC 60068-2-6
Moisture Protection	IP65, IP67 (with appropriate assembly and termination)

CONFIGURATION DATA	
Graphic Display	Display used for setting Node Address, Baud Rate, Fault / Idle Actions, and all other system settings.
ARM	(Auto Recovery Module) Optional module that contains automatic recovery of system setting in the event of total or partial system failure
Maximum Valve-Solenoid Outputs	32
Maximum Addressable I/O Points	Various combinations of 256 inputs / 544 outputs (1200 bits)

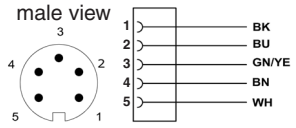
NETWORK DATA	
Supported Baud Rates	
Bus Connector	Single reverse key (B-Coded) 5 pin M12 type (1 male and 1 female)
Diagnostics	Power, short, open load conditions and module health are monitored
Special Features	

WEIGHT	
POWERLINK Communication Module	227 g



Accessories for POWERLINK

Accessory	Description	Order Code	
	M12 Straight 4 Pin Male D-Coded to Male RJ45 Cable - Shielded	5 m	QA0405MK0VA04000
		10 m	QA0410MK0VA04000
	M12 Straight 4 Pin Male D-Coded Field Wireable Connector PG 9 Cable Gland – Screw Terminal	QA04F20000000000	
	5 pin straight female cable connector 7/8"	MC05F90000000000	
	5 pin elbow female cable connector 7/8"	MD05F20000000000	
	5 pin elbow female cable connector 7/8" with 10 m cable Euro colour code	MD0510MAG00000000	



Server web page

numatics **EMERSON Industrial Automation**

Home Node Configuration Node Password Diagnostics RSLogix 5000 Config Quick Start Manual Download Numatics.com

Current Configuration

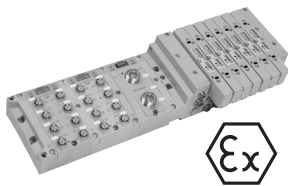
Module	Part No.	Description	Details	Activity
Node	240-181	EtherNet Communications Module	<input type="checkbox"/> Show Details	Close all Details ✓
Valve Driver	219-828	Valve Driver Output Module	<input type="checkbox"/> Show Details	Close all Details ✓
ARM	240-182	Auto Recovery Module	<input type="checkbox"/> Show Details	Close all Details ✓
No. 1	240-207	16 Outputs PNP Digital M12 x 8	<input type="checkbox"/> Show Details	Close all Details ✓
No. 2	240-211	8 Inputs / 8 Outputs PNP Digital M12 x 8	<input type="checkbox"/> Show Details	Close all Details ✓
No. 3	240-241	Sub-Bus Valve Driver	<input type="checkbox"/> Show Details	Close all Details ✓
No. 4	240-205	16 Inputs PNP Digital M12 x 8	<input checked="" type="checkbox"/> Show Details	Close all Details !

Firmware Revision: 2.021

	PNP Inputs: I/O Mapping Input (Starting) Byte: 15	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
		<input type="radio"/> 8	<input type="radio"/> 9	<input type="radio"/> 10	<input type="radio"/> 11	<input type="radio"/> 12	<input type="radio"/> 13	<input type="radio"/> 14	<input type="radio"/> 15
	Short Circuit on Connector: I/O Mapping Diagnostics (Starting) Byte: 17	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E	<input type="radio"/> F	<input type="radio"/> G	<input type="radio"/> H

Show Error/Event Log

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ATEX
G3 Electronics

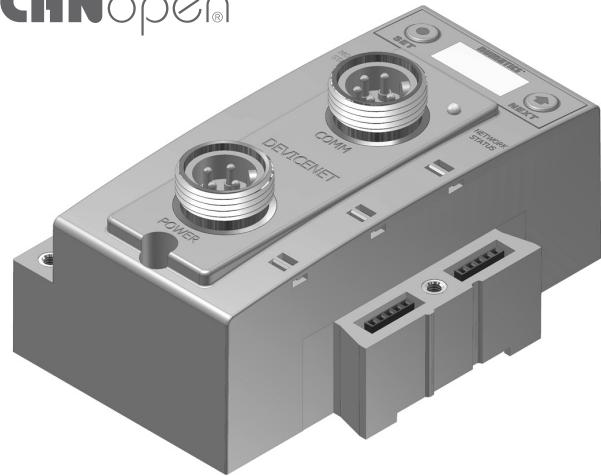
NUMATICS™

CANopen®

CANopen® is an open protocol based on Controller Area Network (CAN). It was designed for motion oriented machine control networks but has migrated to various industrial applications. CAN in Automation (CIA) is the international users' and manufacturers' organization that develops and supports CAN-based protocols. Numatics' G3 CANopen® nodes have an integrated graphic display and are capable of addressing combinations of up to 256 inputs / 256 outputs.

More information regarding this organization can be found at: www.can-cia.org

CANopen®



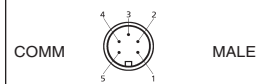
DESCRIPTION

CANopen®
communications
module (node)

REPLACEMENT PART NUMBER

240-336

CANopen®



COMM

Pin 1 = Shield
Pin 2 = V+ (24 V DC)
Pin 3 = V- (Ground)
Pin 4 = CAN_H
Pin 5 = CAN_L



POWER

Pin 1 = +24 V DC (valves & out)
Pin 2 = +24 V DC (node & in)
Pin 3 = 0 V DC (node & in)
Pin 4 = 0 V DC (valves & out)

Technical Data

ELECTRICAL DATA	VOLTAGE	CURRENT
Node Power at Max. Brightness	24 V DC +/- 10%	70 mA
BUS Power	11-25 V DC	25 mA
Valves & Discrete I/O	24 V DC +/- 10%	8 A max.
Power Connector	Single key 4 pin 7/8" MINI type (male)	
Communication Connector	Single key 5 pin 7/8" MINI type (male)	
LED's	Module Status and Network Status	
OPERATING DATA		
Temperature Range (ambient)	-23° to +50°C	
Humidity	95% relative humidity, non-condensing	
Vibration / Shock	IEC 60068-2-27, IEC60068-2-6	
Moisture Protection	IP65, IP67 (with appropriate assembly and termination)	
CONFIGURATION DATA		
Graphic Display	Display used for setting Node Address, Baud Rate, Fault / Idle Actions, and all other system settings.	
ARM	(Auto Recovery Module) Optional module that contains automatic recovery of system setting in the event of total or partial system failure.	
Maximum Valve-Solenoid Outputs	32	
Maximum Addressable I/O Points	Various combinations of 256 inputs / 256 outputs	
NETWORK DATA		
Supported Baud Rates	125K Baud, 250K Baud, 500K Baud, 1M Baud	
Bus Connector	Single key 5 pin 7/8" MINI type (male)	
Diagnostics	Power, short, open load conditions and module health are monitored and fail-safe device settings	
WEIGHT		
CANopen® Communication Module	252 g	



CANopen® bus connection

The front panel of the communication module for CANopen® is equipped with:

- a 4 pin male 7/8" socket for power supply
- a 5 pin male 7/8" socket for the bus cable (E)

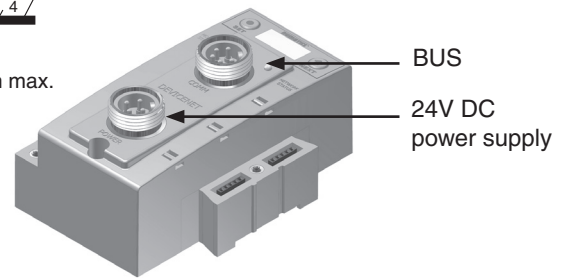
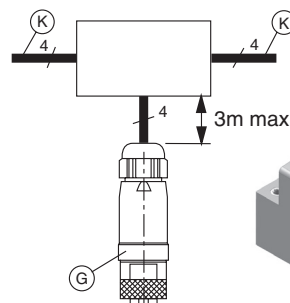
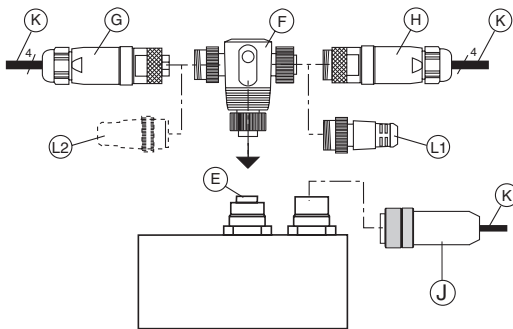
The bus can be connected in the two following ways:

- 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**

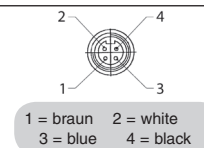
■ **Connection with distributor box**



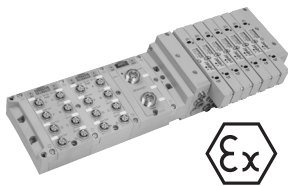
Accessories for CANopen®

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

	Accessory	Description	Order Code
G		5 pin straight 7/8-16 UN female connector	88161930
H		5 pin straight 7/8-16 UN male connector	88161931
F		T-connector 7/8-16 UN, 5 male / female / female pins	88161932
L1		Terminating resistor female plug 120 ohms	88161933
L2		Terminating resistor male plug 120 ohms	88161934
J		4 pin straight female cable connector 7/8"	230-1003
		4 pin elbow female cable connector 7/8"	230-1001
		4 pin elbow female cable connector 7/8" with 9,15 m cable	230-950



(K) Cable to be ordered separately.



DeviceLogix

DeviceLogix is a Rockwell Automation technology that allows a DeviceNet™ node to be programmed to execute a sequence independently from the control for the main PLC/IPC. A DeviceLogix enabled DeviceNet™ node can be used in conjunction with a standard DeviceNet™ network, providing simple distributed control functionality. Additionally it can also be used in a standalone application, without a network connection or PLC/IPC, to sequence pneumatic valves and control I/O. Numatics has integrated this licensed technology into its DeviceNet™ compatible valve island series, which combine the functionality of a modular pneumatic valve system with integrated I/O.

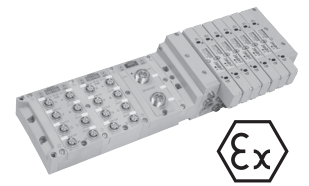


Programming of the DeviceLogix enabled node is done using the industry standard DeviceNet™ commissioning software tool RSNetWorx for DeviceNet from Rockwell Automation. The programming software features an easily understandable graphics environment where the users can simply “drag and drop” logic function blocks (i.e. AND, NAND, OR, NOR, XOR, XNOR, RS LATCHES, COUNTERS and TIMERS) onto a page and interconnect them to develop the required sequence, or ladder logic programming can be used to develop a sequence. The programmed sequence is downloaded to the node via standard DeviceNet communication connection, thus multiple nodes can be programmed on the same network.

DESCRIPTION	REPLACEMENT PART NUMBER
DeviceLogix communications module (node)	240-338

Technical Data

ELECTRICAL DATA	VOLTAGE	CURRENT
Node Power at Max. Brightness	24 V DC +/- 10%	70 mA
BUS Power	11-25 V DC	25 mA
Valves & Discrete I/O	24 V DC +/- 10%	8 A max.
Power Connector	Single key 4 pin 7/8" MINI type (male)	
Communication Connector	Single key 5 pin 7/8" MINI type (male)	
LED's	Module Status and Network Status	
OPERATING DATA		
Temperature Range (ambient)	-23° to +50°C	
Humidity	95% relative humidity, non-condensing	
Vibration / Shock	IEC 60068-2-27, IEC 0068-2-6	
Moisture Protection	IP65, IP67 (with appropriate assembly and termination)	
CONFIGURATION DATA		
Communication Module	Display used for setting Node Address, Baud Rate, Fault / Idle Actions, and all other system settings.	
ARM	(Auto Recovery Module) Optional module that contains automatic recovery of system setting in the event of total or partial system failure including embedded DeviceLogix logic instructions.	
Maximum Valve-Solenoid Outputs	32	
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 7/8" MINI type (male)	
Diagnostics	Power, short, open load conditions and module health are monitored and fail-safe device settings	
Special Features	Supports function block diagram and ladder logic programming	
WEIGHT		
DeviceLogix Communication Module	252g	



DeviceLogix bus connection

The front panel of the communication module for DeviceLogix is equipped with a 5 pin 7/8-16 UN male socket for the bus cable.

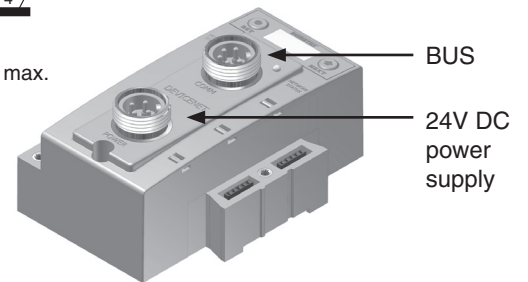
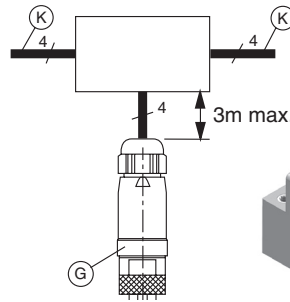
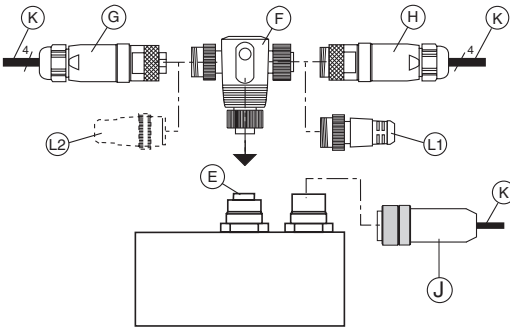
The bus can be connected in the two following ways:

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

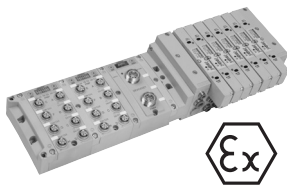


Accessories for DeviceLogix

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

	Accessory	Description	Order Code
G		5 pin straight 7/8-16 UN female connector	88161930
H		5 pin straight 7/8-16 UN male connector	88161931
F		T-connector 7/8-16 UN, 5 male / female / female pins	88161932
L1		Terminating resistor female plug 120 ohms	88161933
L2		Terminating resistor male plug 120 ohms	88161934
J		4 pin straight female cable connector 7/8"	230-1003
		4 pin elbow female cable connector 7/8"	230-1001
		4 pin elbow female cable connector 7/8" with 9,15 m cable	<p>1 = braun 2 = white 3 = blue 4 = black</p>

(K) Cable to be ordered separately.



ATEX
G3 Electronics

numatics™

EtherNet/IP™ DLR

EtherNet/IP™ used throughout the world to network millions of PCs 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 for configuration, testing and even retrieval of technical documentation.

Numatics' G3 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). This technology alleviates the need for an external Ethernet switch device in a single subnet configuration. 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).

Numatics' G3 EtherNet/IP™ nodes are capable of addressing combinations of up to 544 Outputs and 256 Inputs.

The G3 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 website: Open Device Vendors Association (ODVA) www.odva.org.



Description	Replacement Part Number
EtherNet/IP™ DLR communications module (node)	240-340

Technical Data

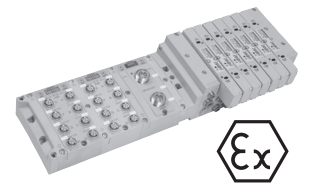
Electrical Data	Voltage	Current
Node Power at Max. Brightness Valves and Discrete I/O	24 V DC +/- 10% 24 V DC +/- 10%	8 A Max.
Power Connector	Single key 4 pin 7/8" MINI type (male)	
Communication Connector	Two D-coded 4 pin M12 type (female)	
LEDs	Module Status, Network Status and Activity / Link	

Operating Data	
Temperature Range	-10° to 115°F (-23° to +50°C)
Humidity	95% relative humidity, non-condensing
Vibration / Shock	IEC 60068-2-27, IEC 60068-2-6
Moisture	IP65, IP67 (with appropriate assembly and termination)







Configuration Data	
Graphic Display	Display used for setting IP address, Subnet Mask, Fault / Idle Actions, Diagnostics and all other system settings
ARM	(Auto Recovery Module) Optional module that contains automatic recovery of system settings in the event of total or partial system failure
Maximum Valve Solenoid Outputs	32
Maximum Sub-Bus I/O Points	Various combinations of 544 outputs and 256 inputs

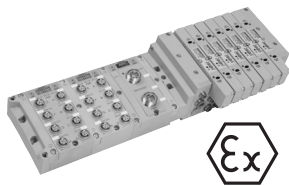
Network Data	
Supported Baud Rates	10 Mbit / 100 Mbit
Bus Connector	Two D-coded 4 pin M12 type (female)
Diagnostics	Power, short, open load conditions and module health and configuration are monitored
Special Features	Embedded two port switch, Device Level Ring (DLR) compatibility, Linear network topology,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

Weight	
EtherCAT® communications module	227 g



Accessories for EtherNet 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 Straight 4 Pin Male D-Coded Field Wireable network Connector PG 9 Cable Gland – Screw Terminal		QA04F20000000000
	4 pin straight female cable connector 7/8"		230-1003
	4 pin elbow female cable connector 7/8"		230-1001
	4 pin elbow female cable connector 7/8" with 9,15 m cable	 <p>1 = braun 2 = white 3 = blue 4 = black</p>	230-950



ATEX
G3 Electronics

NUMATICS™

EtherCAT®

EtherCAT® is an open ethernet based fieldbus protocol developed by Beckhoff. EtherCAT® sets new standards for real-time performance and topology flexibility with short data update/cycle times and low communication jitter.

Numatics' G3 EtherCAT® node has an integrated graphic display for simplified commissioning and diagnostics. It is capable of addressing combinations of up to 544 outputs and 256 inputs.

The G3 nodes for EtherCAT® have been designed and tested to conform with EtherCAT® specifications set forth by the ETG.

More information regarding EtherCAT® can be obtained from the following website: www.ethercat.org.



Description	Replacement Part Number
EtherCAT® communications module	240-339

Technical Data

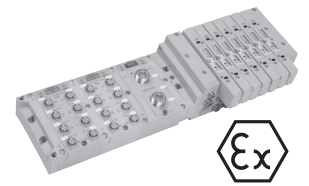
Electrical Data	Voltage	Current
Node Power at Max. Brightness Valves and Discrete I/O	24 V DC +/- 10% 24 V DC +/- 10%	8 A Max.
Power Connector	Single key 5 pin 7/8" MINI type (male)	
Communication Connector	Two D-coded 4 pin M12 type (female)	
LEDs	Module Status, Network Status and Activity /Link	

Operating Data	
Temperature Range	-10° to 115° F (-23° to +50° C)
Humidity	95% relative humidity, non-condensing
Vibration / Shock	IEC 60068-2-27, IEC 60068-2-6
Moisture	IP65, IP67 (with appropriate assembly and termination)






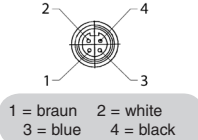
Configuration Data	
Graphic Display	Display used for setting IP address, Subnet Mask, Fault / Idle Actions, and all other system settings
ARM	(Auto Recovery Module) Optional module that contains automatic recovery of system settings in the event of total or partial system failure
Maximum Valve Solenoid Outputs	32
Maximum Sub-Bus I/O Points	Various combinations of 544 outputs and 256 inputs

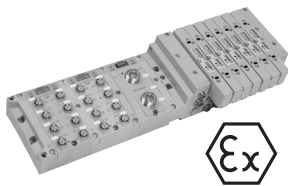
Network Data	
Supported Baud Rates	10 Mbit / 100 Mbit
Bus Connector	Two D-coded 4 pin M12 type (female)
Diagnostics	Power, short, open load conditions and module health and configuration are monitored.
Special Features	Integrated web server, fail-safe device settings

Weight	
EtherCAT® communications module	227 g



Accessories for EtherCAT®

Accessory	Description	Order Code
	M12 Straight 4 Pin Male D-Coded to Male RJ45 network Cable - Shielded	5m QA0405MK0VA04000
		10m QA0410MK0VA04000
	M12 Straight 4 Pin Male D-Coded Field Wireable network Connector PG 9 Cable Gland – Screw Terminal	QA04F20000000000
	4 pin straight female cable connector 7/8", supply 24 V DC	230-1003
	4 pin elbow female cable connector 7/8", supply 24 V DC	230-1001
	4 pin elbow female cable connector 7/8" with 9,15 m cable, supply 24 V DC	



ATEX
G3 Electronics - Input Modules

Input modules are compatible with sensors and apparatus installed in zone 0, 1, 2, 20, 21, 22, protection types d, m, ia and nA

Input Modules M12
with integrated short circuit protection

Digital Input 5-pin M12 Modules

Ex	I/O type	DESCRIPTION		ORDER CODE		
		Signal Type	PNP	NPN	NAMUR	
d, m, nA	Inputs	8 Inputs	240-346	240-348	-	
		16 Inputs	240-345	240-347	-	
8 DI Ex ia	Inputs	8 Inputs	-	-	240-320	



ia (Namur) input module

Analog Input (16 bit resolution)
5-pin M12 Modules

Ex	I/O type	DESCRIPTION		ORDER CODE	
		Signal Type	0-10 V DC	4-20 mA	
d, m, nA	Analog Input	4 Inputs	240-349	240-350	

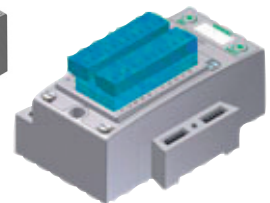
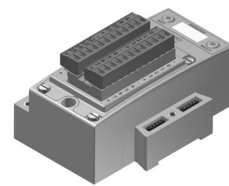


SUB-BUS HUB Module	DESCRIPTION	PART NUMBER
HUB (M12)	4 Branches	240-351

Digital Inputs -Terminal Strip Modules
with integrated short circuit protection

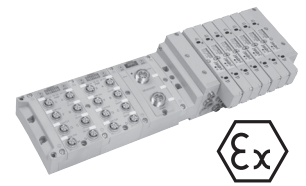
Digital Inputs -Terminal Strip Modules

Ex	I/O type	DESCRIPTION		ORDER CODE		
		Signal Type	PNP	NPN	NAMUR	
d, m, nA	Inputs	16 Inputs	240-343	240-344	-	
ia	Inputs	8 Inputs	-	-	240-322	



Technical Data

OPERATING DATA	5-pin M12 Modules	Terminal Strip Modules	OPERATING DATA	Namur Ex ia Module
Temperature Range (ambient)	-20° to +46° C		electrical type of input	input signal type 2 and NAMUR (2 and 4 wires)
Humidity	95% relative humidity, non-condensing		current consumption of input module	55 mA
Vibration / Shock	IEC 60068-2-27, IEC 60068-2-6		input signal	≤1 mA for status «1» ≥ 3 mA for status «0»
Wire Range	12 to 24 AWG		ATEX certification	II 2 G Ex de [ja] IIC T6 Gb II 2 D Ex tb Db IP67 T80°C
Strip Length	7 mm			
Tightening Torque	0.5 Nm			
Moisture Protection	IP65, IP67 (with appropriate assembly and termination)	IP20		
WEIGHT				
Module Inputs - Analog	244 g			
Module Inputs - Digital	274 g			



I/O Modules M12
RTD temperature sensor input module

Analog I/O (16 bit resolution)
5-pin M12 Modules



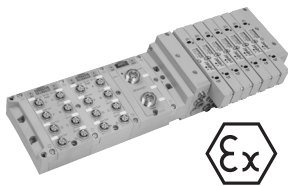
DESIGNATION	ORDER CODE
Analog I/O 4 Inputs	240-354

OPERATING DATA	RTD temperature sensor input module
Temperature range (ambient)	-25° to +50° C
Humidity	95% relative humidity, non-condensing
Vibration / Shock	IEC 60068-2-27, IEC 60068-2-6
Sensor type of input	Pt100 - Pt200 - Pt500 - Pt1000 Ni100 - Ni120 - Ni500 - Ni1000
Sensor connection technology	2-3-4 wires (3 wires with compensation of connection cable)
Temperature range of input signal	-200°C to +850°C
Minimum temperature scale	25°C
Moisture protection	IP65, IP67 with appropriate assembly and termination
Absolute accuracy at +25°C	0,03% (linearity / repeatability / hysteresis / stability)
Temperature error relatives to input range	+/- 0,05%
ATEX certification	compatible to zone 2-22 and sensor installed in zone 2-22
Standard	DIN/IEC 60751, IEC 751, DIN 43710
Module weight	244g

I/O Modules / cables & connectors

Accessory	Description	Order Code	
	5 pin straight male M12 connector	88100330	
	5 pin elbow male M12 connector	88161927	
	Dust Cover - M12 Male	230-647	
	5 pin male DUO M12 connector for 2 inputs (2 cables, Ø3-5 mm)	88100253	
		1,5 m	TA04E5MIE000071P
		3 m	TA0403MIE000071P
		5 m	TA0405MIE000071P
		1,5 m	TB04E5MIE000071P
		3 m	TB0403MIE000071P
		5 m	TB0405MIE000071P
	Replacement terminal strip	I/O 0-7	140-1073
		I/O 8-15	140-1074
	Keying element for terminal strip	140-1076	

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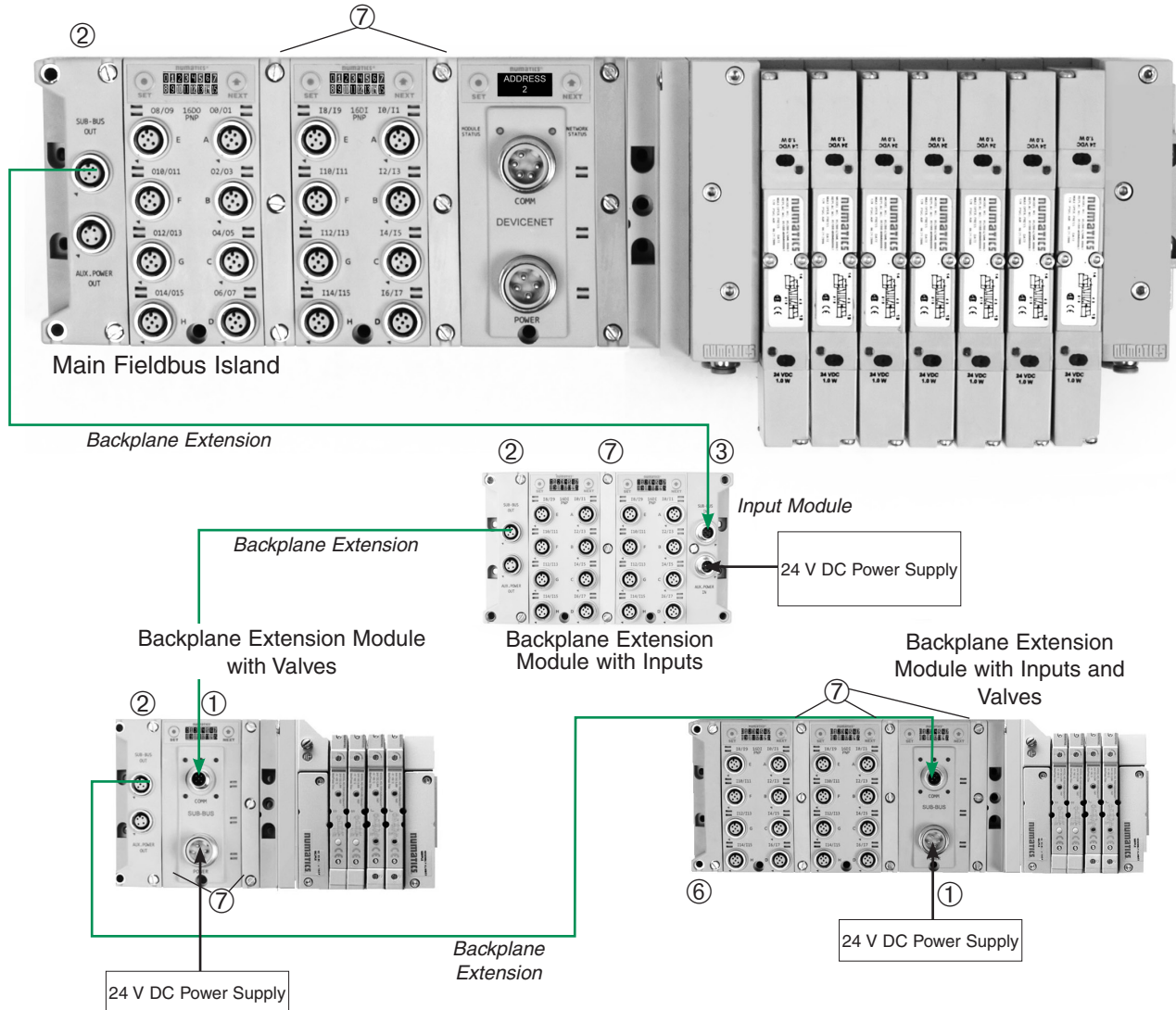


ATEX
G3 Electronics

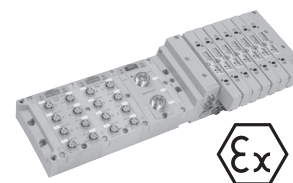
NUMATICS™



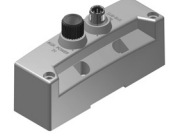
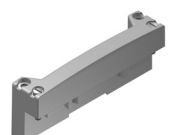

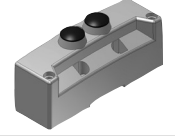
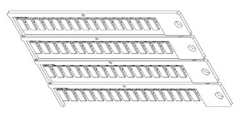
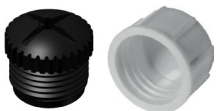
G3 Platform Distribution Options

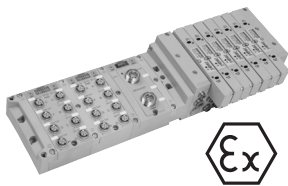
Easy, Cost Effective Solutions for Digital Inputs and Valve Automation using G3 Electronics



- Unique distribution system allows system efficiency by allowing the same modules to be used in either centralised or distributed applications
- Distribution options include:
 - Inputs
 - Valves with Inputs
 - Valves Only



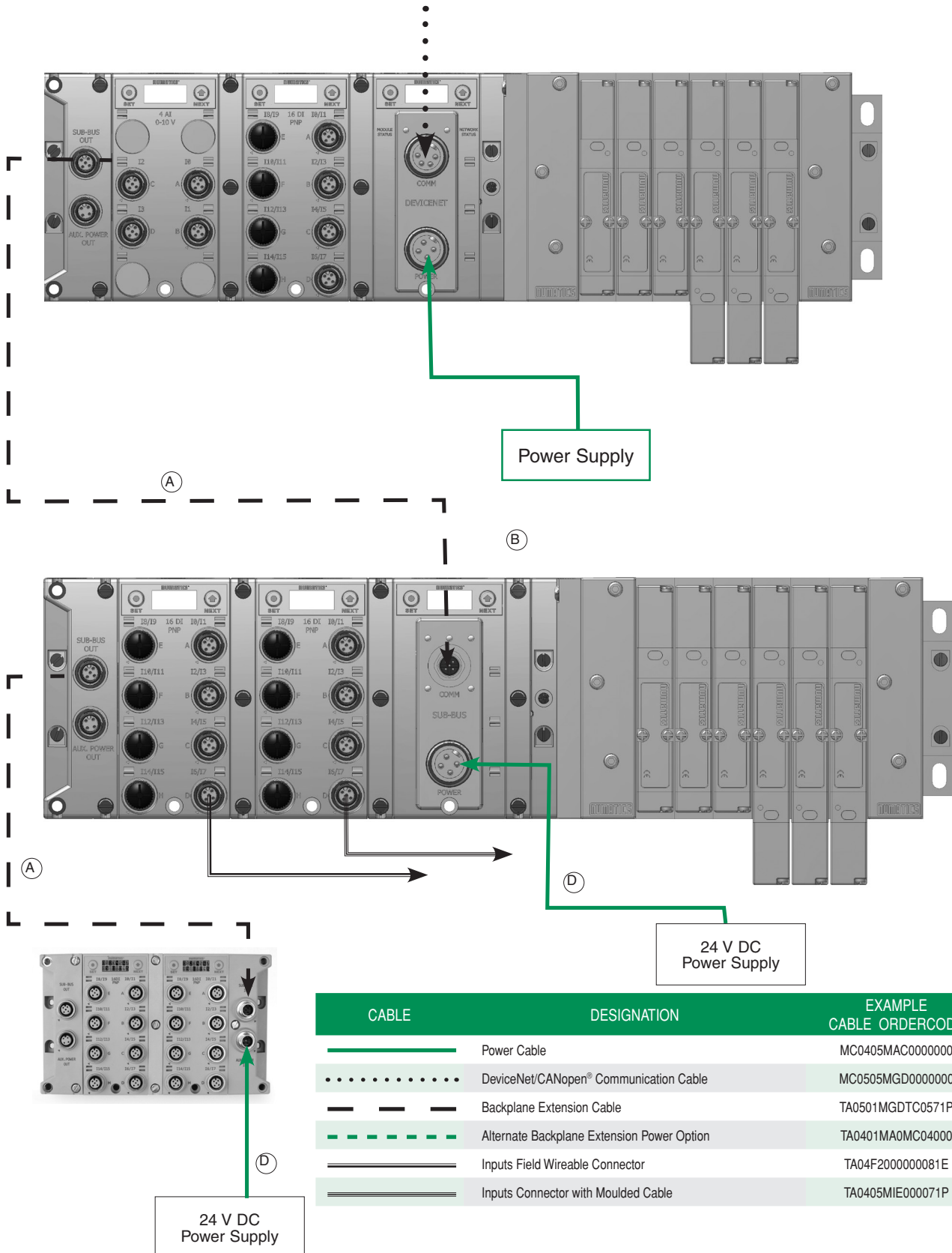
N°	Accessory	Description		Weight	Order Code	
Backplane Extension Modules						
①		Distributed Valve Module	Distributed module for valves with display	235g	240-335	
②		G3 Backplane extension Left End Module	G3 Left End Module for backplane distribution and 24 V DC to Inputs modules for Ex ia Namur	with DIN Rail Clips	141g	240-244
				W/o clips	130g	240-183
				W/o clips	-	240-318
③		G3 Backplane extension Right Module	G3 Right Module allowing the connection of distributed Inputs modules for Ex ia Namur	with DIN Rail Clips	141g	240-246
				W/o clips	130g	240-185
				W/o clips	-	240-319
Miscellaneous Modules						
⑥		G3 Left Terminator Module	Must be installed after the last Input module or after the communication module if there are no Inputs modules installed.	With DIN Rail Clips	102g	240-245
				W/o clips	91g	240-184
⑦		Jumper Clip	Provides electrical connections between modules for Ex ia Namur	-	45g	240-179
				-	-	240-317
⑨		Right Hand Mounting Cover	Used when a communication module is used without local valves installed	With DIN Rail Clips		240-289
				W/o clips		240-255
Accessories						
		Labels	For use with Murrplastik© Type 20 Software			122-1251
		M12 Dust Cover	Protects the connector against dust	Male		230-647
				Female		88157773



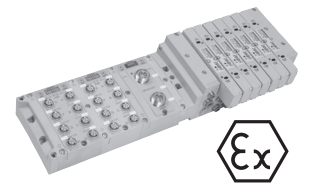
ATEX G3 Backplane Extension Cables and Connectors

numatics™

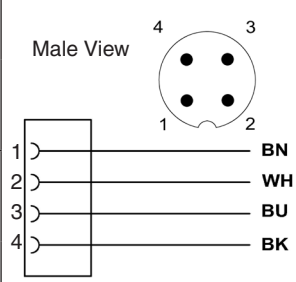
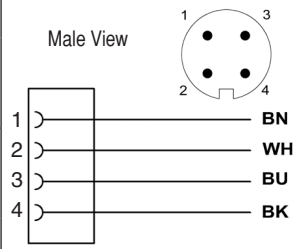
Example Backplane Extension Layout and Cabling (DeviceNet™ Network)



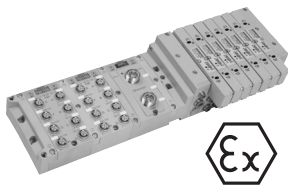
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Accessoire	Description	Order Code	
M12 Cables for Backplane Extension Modules			
	M12 Straight 5 Pin Male to Female SPEEDCON Backplane Extension Cable – Shielded (backplane extension)	1m TA0501MGDTC0571P	
		5m TA0505MGDTC0571P	
		10m TA0510MGDTC0571P	
7/8” MINI 4 Pin Cables & Connectors for Backplane Extension Valve Module Power			
	7/8” MINI Straight 4 Pin Female Single Ended Cable, Euro Colour Code	5m MC0405MAC0000000	
		10m MC0410MAC0000000	
	7/8” MINI 90° 4 Pin Female Single Ended Cable, Euro Colour Code	5m MD0405MAC0000000	
		10m MD0410MAC0000000	
		7/8” MINI Straight 4 Pin Female Field Wireable Connector –Cable Gland – One size fits all	230-1003
		7/8” MINI 90° 4 Pin Female Field Wireable Connector – PG 9 Cable Gland	230-1001
M12 4 Pin Cables for Backplane Extension In/Out Module Power			
	M12 Cables for Backplane extension Power M12 Straight 4 Pin Female Single Ended Cable, Euro Colour Code	5m TC0405MAE0000000	
		10m TC0410MAE0000000	
	M12 Cables for Backplane extension Power M12 90° 4 Pin Female Single Ended Cable, Euro Colour Code	5m TD0405MAE0000000	
		10m TD0410MAE0000000	

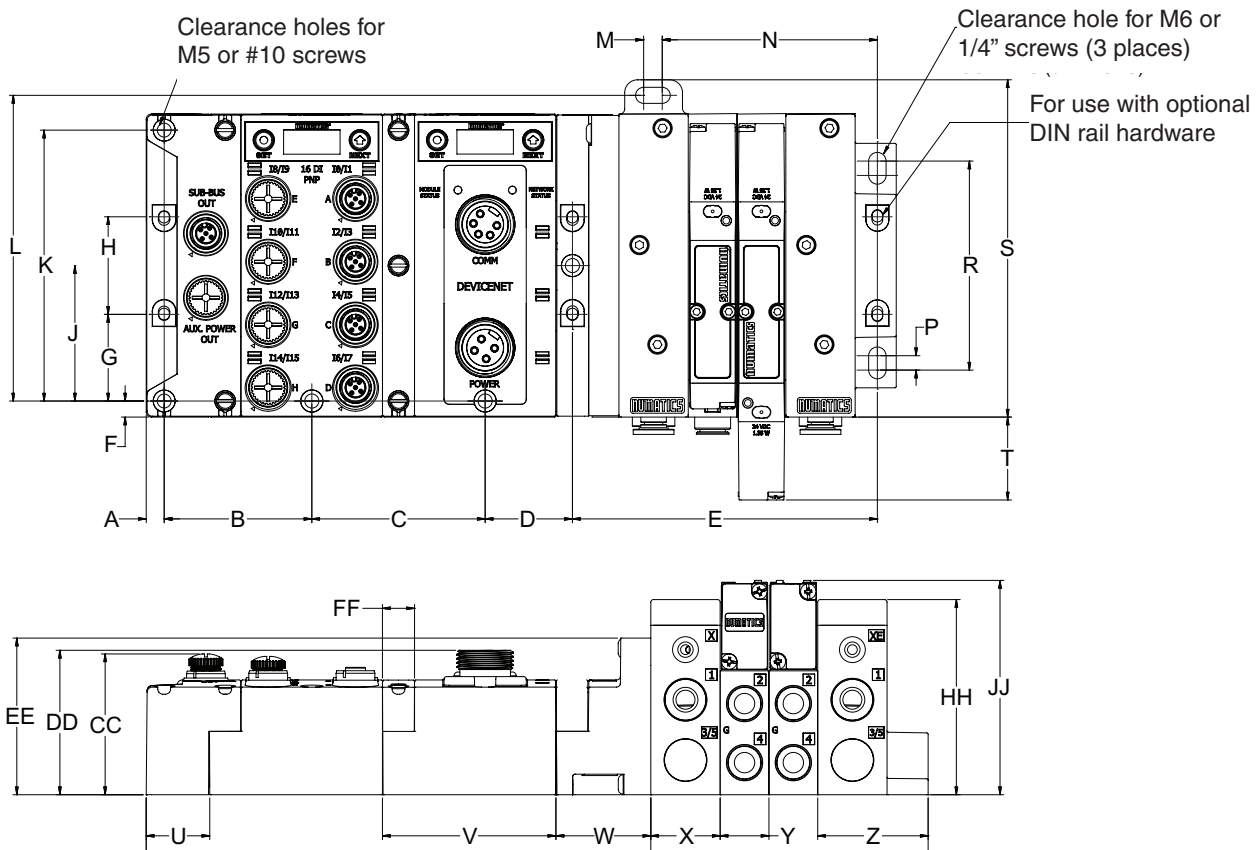


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Dimensional Drawing - G3 Fieldbus Island Assembly

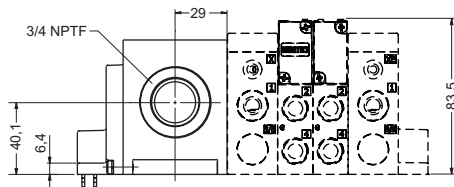
2005 Series Valve Island Assembly with G3 Electronics and Backplane Extension



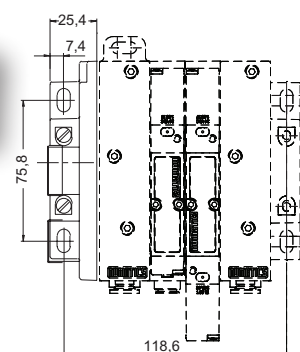
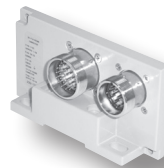
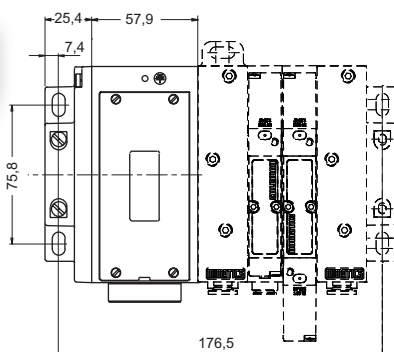
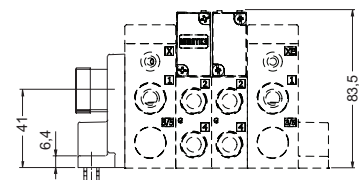
Dimensions (mm)

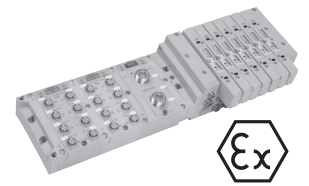
A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S
7.0	57.5	67.5	46.5	118.8	6.3	33.8	38.0	52.8	105.5	119.1	7.3	83.8	5.6	81.4	131.4
T	U	V	W	X	Y	Z	AA	BB	CC	DD	EE	FF	HH	JJ	
32.3	24.8	67.5	36.9	27.0	19.0	43.0	196.6	304.6	54.0	56.3	61.0	12.5	76.0	83.5	

End plate with terminal strip

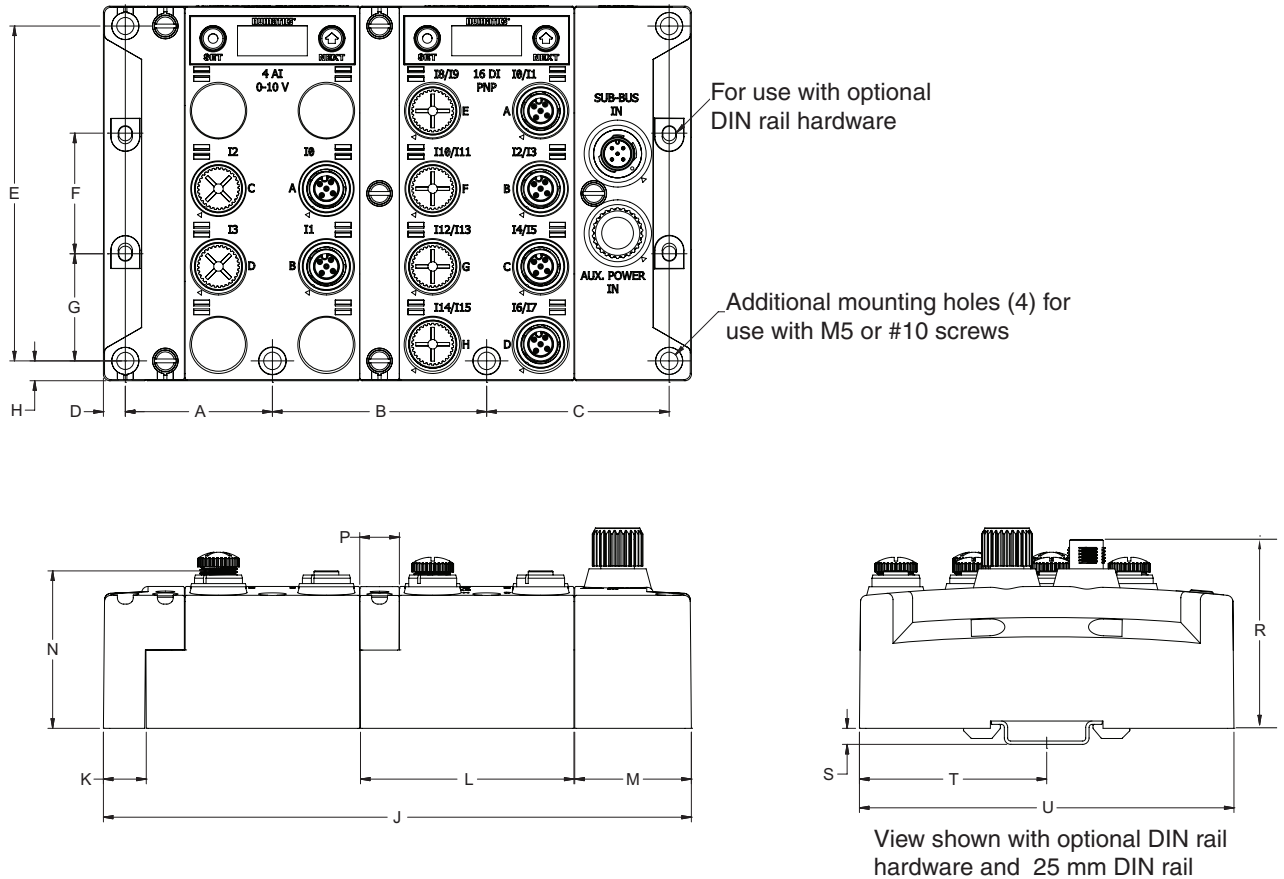


End plate with round connector





Dimensional Drawing - G3 Fieldbus Inputs Assembly
Inputs Assembly with G3 Electronics and Backplane Extension Input



Dimensions (mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U
46.4	67.54	57.6	7.0	105.5	38.0	33.7	6.25	185.3	13.5	67.3	37.0	54.0	12.5	62.5	5.1	59.0	118.0

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