G3
ELECTRONICS

ASCO NUMATICS™

G3 Fieldbus - Electronics Made Easy!

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


Graphic Display for Configuration & Diagnostics


Auto Recovery Module


Highly Distributable


Easy, Robust Connections

Commissioning Capabilities

- Set network address (including IP & Subnet mask for Ethernet)
- Set baud rate
- Set auto or manual I/O 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

G3 Fieldbus Communications Electronics

Why use Numatics Fieldbus communication electronics?
Modular Reality...

No internal wiring simplifies assembly

- SPEEDCON® M12 connector technology allows for fast and efficient ½ turn I/O connector attachment
- Power connector allows output power to be removed while inputs and communication are left active
- IP65 protection
- Up to 1,200 Input/1,200 Output capability with one communication node!
- Up to 128 valve solenoids per manifold, up to 17 manifolds per communication node!
- One node supports 16 I/O modules – Analog I/O, Digital I/O (NPN & PNP) and Specialty
- Integrated web server with EtherCAT® , EtherNet/IP™ , EtherNet/IP™ DLR, Ethernet POWERLINK®, Modbus® TCP/IP, and PROFINET™
- Innovative clip design allows easy module removal/ replacement without dismantling manifold
- Auto Recovery Module (ARM) protects configuration information during a critical failure. Allows configuration information to be saved and reloaded to replacement module automatically

Supported Protocols

- CANopen®
- CC-Link IE Field™
- DeviceNet™
- DeviceNet™ w/ QuickConnect™
- EtherCAT®
- EtherNet/IP™
- EtherNet/IP™ DLR w/ QuickConnect™
- Ethernet POWERLINK®
- Modbus® TCP/IP
- PROFIBUS™ DP
- PROFINET™

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*Numatics I/O with SPEEDCON® Technology

- 1/2 turn for faster I/O connections
- Backwards compatible with standard M12 cables/connectors
- Meets the same IP/NEMA standards as M12/Micro cables/connectors
- Same cost as standard M12/Micro cables/connectors
- See the I/O Cables and Connectors section for cables with SPEEDCON® connector technology

Modbus is a registered trademark of Modbus Organization, Inc.
EtherNet/IP, DeviceNet and QuickConnect are trademarks of ODVA.
EtherCAT is a registered trademark of the EtherCAT Technology Group.
CANopen is a registered Community trademark of CAN in Automation e.V.
PROFIBUS and PROFINET are trademarks of Profibus Nutzerorganisation e.V.
Ethernet POWERLINK is a registered trademark of Bernecker + Rainer Industrie – Elektronik Ges.m.b.H.
CC-Link is a registered trademark and CC-Link IE Field is a trademark of the CC-Link Partner Association.

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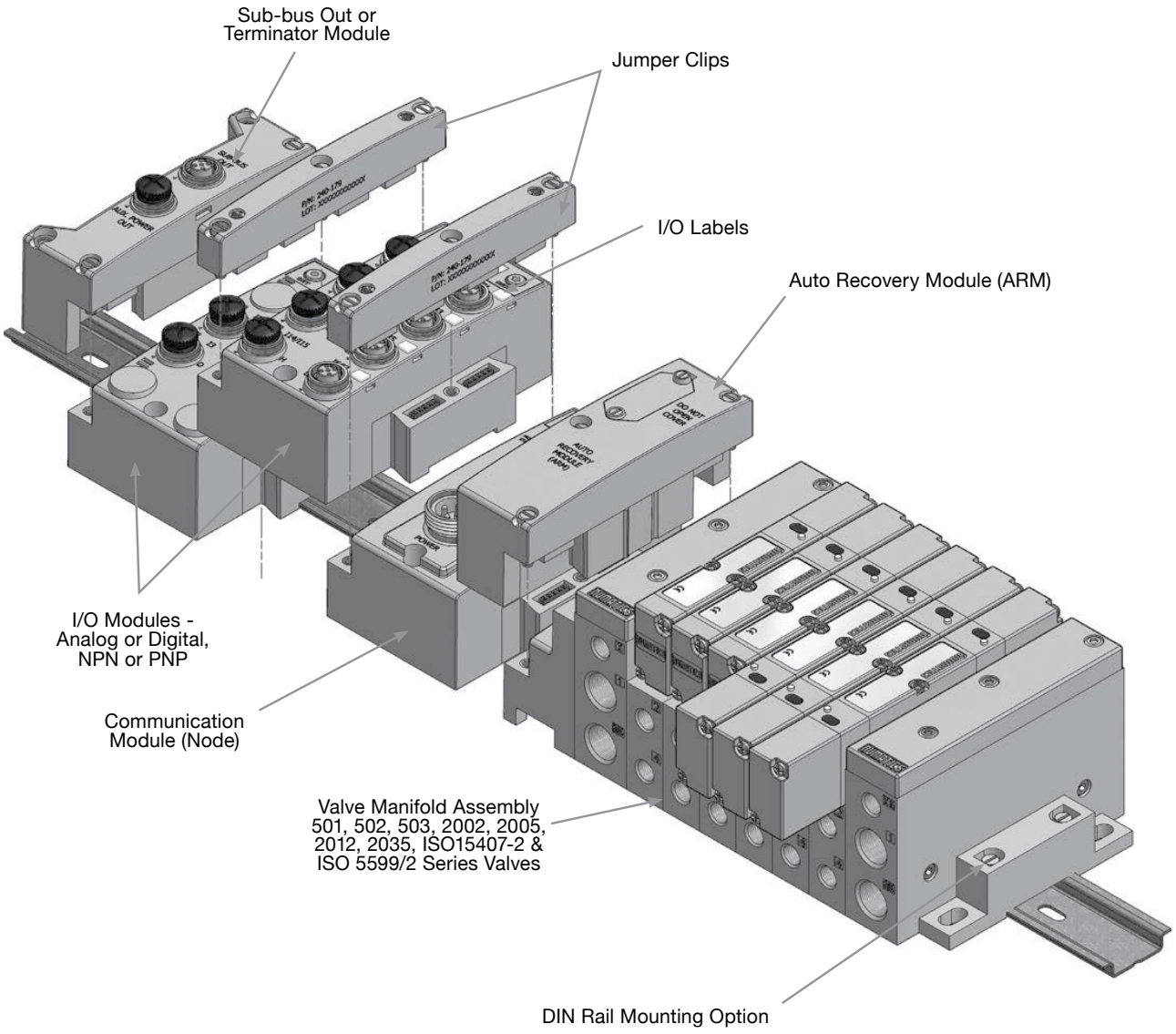
G3 Electronics Modularity

Discrete I/O

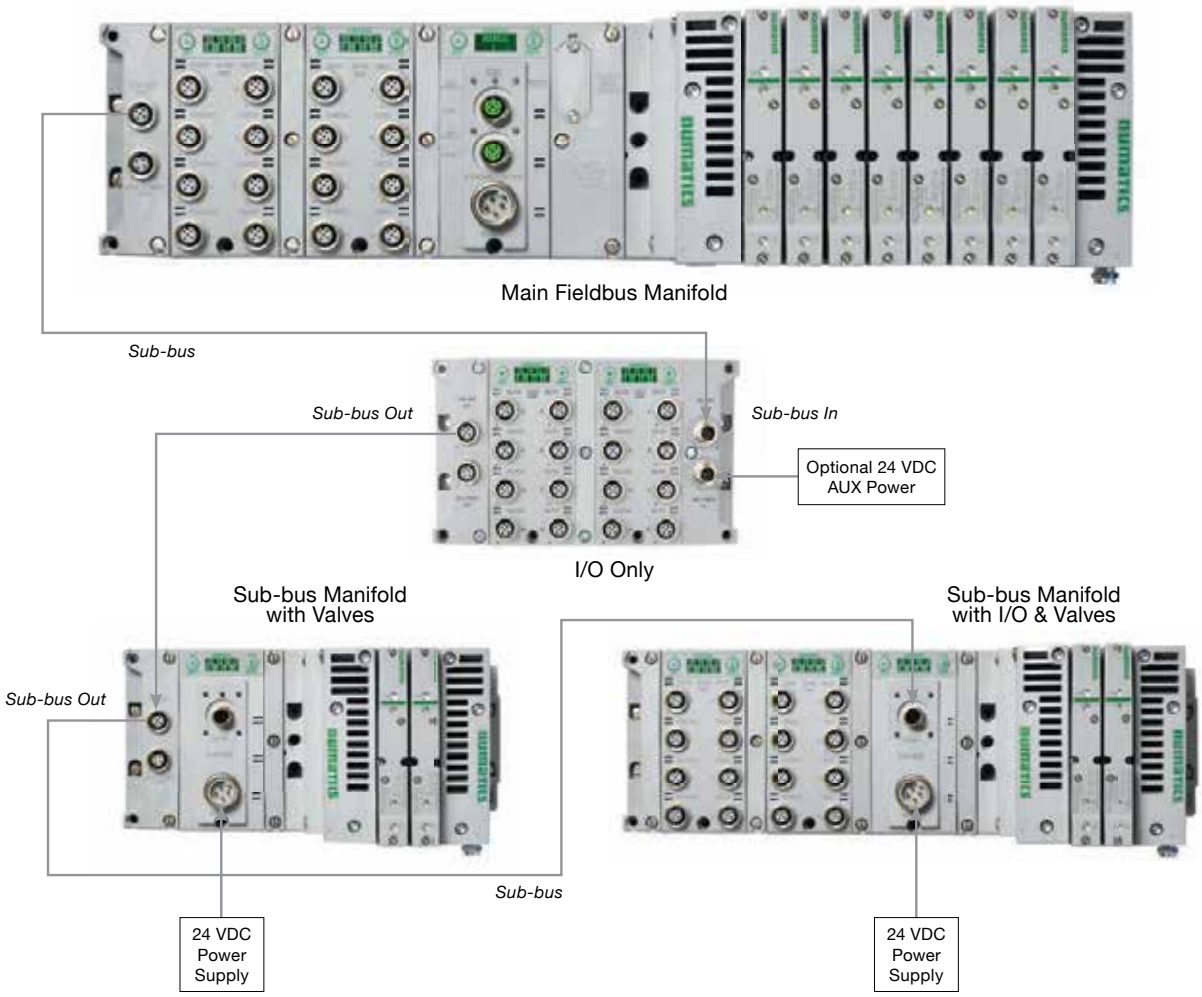
The G3 Series product line is a completely modular system. All of the G3 electronic modules plug together, via mechanical clips, allowing easy assembly and field changes. This makes the system highly distributable. Additional flexibility is incorporated because the same modules can be used in either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

The G3 electronics interfaces with the highly modular Numatics 500 Series, Generation 2000 Series, ISO 5599/2 and ISO 15407-2 Series valve lines to further enhance the modularity and flexibility of the entire system. 500 Series valves allow up to 128 valve solenoids per manifold when properly configured. An external air pilot supply may be required with more than 32 valve solenoids on a manifold.



G3 Platform Distribution Options

Easy, Cost Effective Solutions for Digital I/O and Valve Automation using G3 Electronics.



- Unique distribution system allows system efficiency by allowing the same modules to be used in either centralized or distributed applications
- Distribution options include:
  Inputs OR Outputs
  Inputs AND Outputs
  Valves with Inputs AND Outputs
  Valves with Inputs OR Outputs
  Valves Only
- Maximum Sub-bus length not to exceed 30 meters. Maximum Sub-bus cable current not to exceed 4 amps or excessive cable voltage drops per segment. Auxiliary power connections available for currents above 4 amps. Consult factory for possible deviations.

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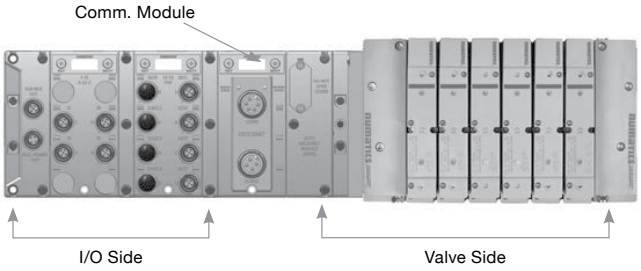
G3 Platform Distribution Options

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

Valve Side

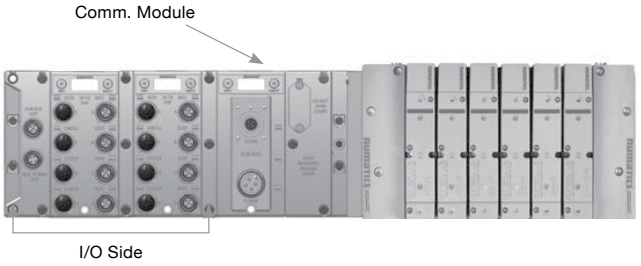
- Up to a total of 128 valve solenoids can be driven in a manifold assembly integrated into the main fieldbus manifold. This can be any number of single or double solenoid valves with a total number of solenoids not to exceed 128

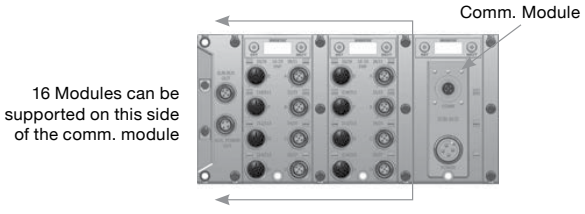
Typical Main Fieldbus Manifold



I/O 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 I/O modules providing addressing capacity for up to 1200 Inputs/1200 Outputs per node
- Unique distribution system allows system efficiency by allowing the same modules to be used in either centralized or distributed applications
- Distribution options include Inputs only, Outputs only, I/O only, valves with Inputs, valves with Outputs and valves with I/O
- Configuration can include up to 16 of the following modules:
  - Digital I/O modules
  - Sub-bus valve modules
  - Analog I/O modules





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 nodes for CANopen® have an integrated graphic display and are capable of addressing combinations of up to 1200 outputs and 1200 inputs.

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

Description	Replacement Part Number
CANopen® Communications Module (node)	240-291

Technical Data

Electrical Data	Voltage	Current
Node Power at Max. Brightness	24 VDC +/- 10%	0.0404 Amps
Bus Power	11 – 25 VDC	0.025 Amps
Valves & Discrete I/O	24 VDC +/- 10%	8 Amps Maximum
Power Connector	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)	-23 °C to 46 °C (-10 °F to 115 °F)
Humidity	95% relative humidity, non-condensing
Vibration/Shock	IEC 60068-2-27, IEC60068-2-6
Moisture Protection	IP65 (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 1200 outputs and 1200 inputs

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® Communications Module	252g/8.9 oz

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CC-Link IE Field™

CC-Link IE Field™ is an open standard 1 Gbps Ethernet Manufacturing network that enables seamless data communication from the plant-level enterprise network to the production floor network. The CC-Link Partner Association (CLPA) oversees and manages CC-Link® specifications.

Numatics' G3 nodes for CC-Link IE Field™ have an integrated graphic display and are capable of addressing combinations of up to 1200 outputs and 1200 inputs.

CC-Link IE Field™ is based on 1 Gbps Ethernet standards and complements them with specific protocols and mechanisms to achieve real time performance.

More information regarding CC-Link IE Field™ can be obtained from the following website: www.CCLinkAmerica.org

Description	Replacement Part Number
CC-Link IE Field™ Communications Module (node)	240-362

Technical Data

Electrical Data	Voltage	Current
Node Power at Max. Brightness	24 VDC +/- 10%	0.0495 Amps
Valves & Discrete I/O	24 VDC +/- 10%	8 Amps Maximum
Power Connector	Single key 5 Pin 7/8" MINI type (male)	
Communication Connector	Two X-coded 8 Pin M12 type (female)	
LEDs	Run, ERR, Link, D Link, L.ERR, L.ER	

Operating Data	
Temperature Range (ambient)	-23 °C to 46 °C (-10 °F to 115 °F)
Humidity	95% relative humidity, non-condensing
Vibration/Shock	IEC 60068-2-27, IEC60068-2-6
Moisture Protection	IP65 (with appropriate assembly and termination)

Configuration Data	
Graphic Display	Display used for setting Node Number, Network Number, 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	128 for 501, 80 for 502/503 and 32 for all other series
Maximum Addressable I/O Points	Various combinations of 1200 outputs and 1200 inputs

Network Data	
Supported Baud Rates	1 Gbps
Bus Connector	Two D-coded 8 Pin M12 type (2-Female)
Diagnostics	Power, short, open load conditions and module health and configuration are monitored
Special Features	Integrated 2 port switch, fail-safe device settings

Weight	
CC-Link IE Field™ Communications Module	269g/9.5 oz

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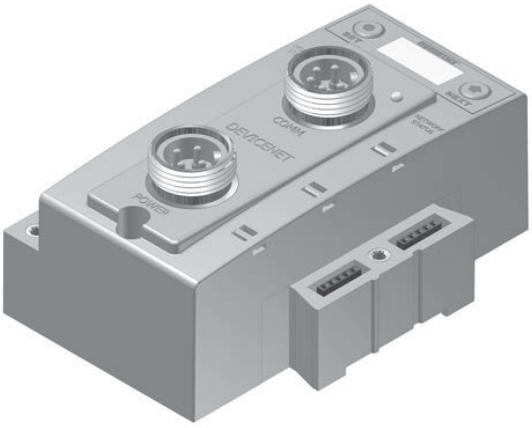
DeviceNet™

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 nodes for DeviceNet™ have an integrated graphic display and are capable of addressing combinations of up to 1200 outputs and 1200 inputs.

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

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



Description	Replacement Part Number
DeviceNet™ Communications Module (node)	240-180

Technical Data

Electrical Data	Voltage	Current
Node Power at Max. Brightness	24 VDC +/- 10%	0.0404 Amps
Bus Power	11 – 25 VDC	0.025 Amps
Valves & Discrete I/O	24 VDC +/- 10%	8 Amps Maximum
Power Connector	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)	-23 °C to 46 °C (-10 °F to 115 °F)
Humidity	95% relative humidity, non-condensing
Vibration/Shock	IEC 60068-2-27, IEC60068-2-6
Moisture Protection	IP65 (with appropriate assembly and termination)

Configuration Data	
Graphic Display	Display used for setting Node Address, Baud Rate, Fault/Idle Actions, DeviceNet™ w/ QuickConnect™ 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 1200 outputs and 1200 inputs

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, and QuickConnect™ capability

Weight	
DeviceNet™ Communications Module	252g/8.9 oz

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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 1200 outputs and 1200 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 (node)	240-310

Technical Data

Electrical Data	Voltage	Current
Node Power at Max. Brightness	24 VDC +/- 10%	0.073 Amps
Valves and Discrete I/O	24 VDC +/- 10%	8 Amps Maximum
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	-23 °C to 46 °C (-10 °F to 115 °F)
Humidity	95% relative humidity, non-condensing
Vibration/Shock	IEC 60068-2-27, IEC 60068-2-6
Moisture	IP65 (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	128 for 501, 80 for 502/503 and 32 for all other series
Maximum Sub-bus I/O Points	Various combinations of 1200 outputs and 1200 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	227g /8 oz

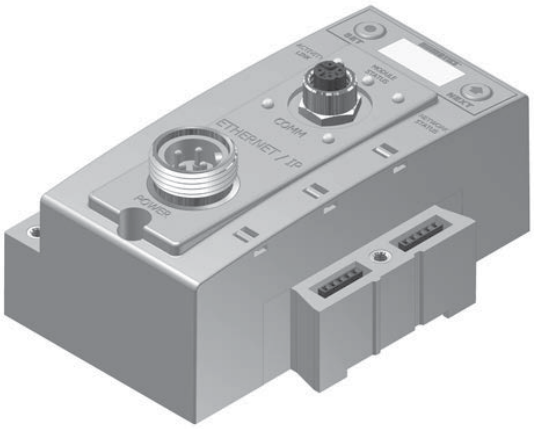
EtherNet/IP™

Ethernet used throughout the world to network millions of PCs 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 to any standard web browser for configuration, testing and even retrieval of technical documentation.

Numatics' G3 nodes for EtherNet/IP™ have an integrated graphic display and are capable of addressing combinations of up to 1200 outputs and 1200 inputs.

The G3 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 website: www.odva.org.



Description	Replacement Part Number
EtherNet/IP™ Communications Module (node)	240-181

Technical Data

Electrical Data	Voltage	Current
Node Power at Max. Brightness	24 VDC +/- 10%	0.0657 Amps
Valves & Discrete I/O	24 VDC +/- 10%	8 Amps Maximum
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)	-23 °C to 46 °C (-10 °F to 115 °F)
Humidity	95% relative humidity, non-condensing
Vibration/Shock	IEC 60068-2-27, IEC60068-2-6
Moisture Protection	IP65 (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 1200 outputs and 1200 inputs

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, fail-safe device settings, HTTP, FTP, and UNICAST (for EtherNet/IP™)

Weight	
EtherNet/IP™ Communications Module	255g/9 oz

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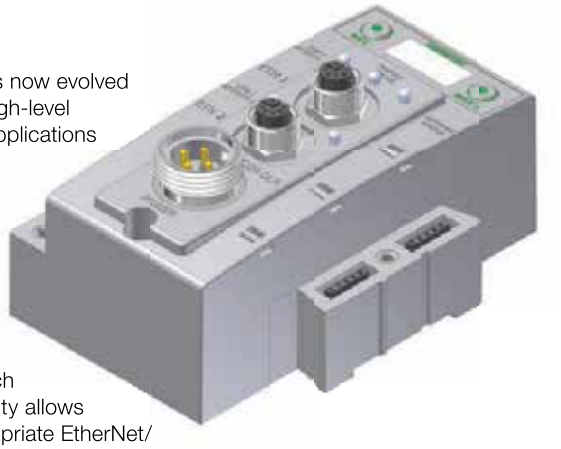
EtherNet/IP™ DLR



EtherNet/IP™ used throughout the world to network millions of PCs has now evolved into a viable industrial 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' 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 1200 outputs and 1200 inputs.

Description	Replacement Part Number
EtherNet/IP™ DLR Communications Module (node)	240-325

The G3 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 website: www.odva.org.

Technical Data

Electrical Data	Voltage	Current
Node Power at Max. Brightness	24 VDC +/- 10%	0.0953 Amps
Valves and Discrete I/O	24 VDC +/- 10%	8 Amps Maximum
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	-23 °C to 46 °C (-10 °F to 115 °F)
Humidity	95% relative humidity, non-condensing
Vibration/Shock	IEC 60068-2-27, IEC 60068-2-6
Moisture	IP65 (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	128 for 501, 80 for 502/503 and 32 for all other series
Maximum Sub-bus I/O Points	Various combinations of 1200 outputs and 1200 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	
EtherNet/IP™ DLR Communications Module	227g/8 oz

Ethernet 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 1200 outputs and 1200 inputs.

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

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

Description	Replacement Part Number
POWERLINK® Communications Module (node)	240-309

Technical Data

Electrical Data	Voltage	Current
Node Power at Max. Brightness	24 VDC +/- 10%	0.0955 Amps
Valves & Discrete I/O	24 VDC +/- 10%	8 Amps Maximum
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 (ambient)	-23 °C to 46 °C (-10 °F to 115 °F)
Humidity	95% relative humidity, non-condensing
Vibration/Shock	IEC 60068-2-27, IEC60068-2-6
Moisture Protection	IP65 (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	128 for 501, 80 for 502/503 and 32 for all other series
Maximum Addressable I/O Points	Various combinations of 1200 outputs and 1200 inputs

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	
POWERLINK® Communications Module	227g/8 oz

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Modbus® TCP/IP

Ethernet used throughout the world to network millions of PCs 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 to any standard web browser for configuration, testing and even retrieval of technical documentation.

Numatics' G3 nodes for Modbus® TCP/IP have an integrated graphic display and are capable of addressing combinations of up to 1200 outputs and 1200 inputs.

Description	Replacement Part Number
Modbus® TCP/IP Communications Module (node)	240-292

Technical Data

Electrical Data	Voltage	Current
Node Power at Max. Brightness	24 VDC +/- 10%	0.0657 Amps
Valves & Discrete I/O	24 VDC +/- 10%	8 Amps Maximum
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)	-23 °C to 46 °C (-10 °F to 115 °F)
Humidity	95% relative humidity, non-condensing
Vibration/Shock	IEC 60068-2-27, IEC60068-2-6
Moisture Protection	IP65 (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	128 for 501, 80 for 502/503 and 32 for all other series
Maximum Addressable I/O Points	Various combinations of 1200 outputs and 1200 inputs

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, fail-safe device settings, HTTP, FTP, and UNICAST (for EtherNet/IP™)

Weight	
Modbus® TCP/IP Communications Module	255g/9 oz

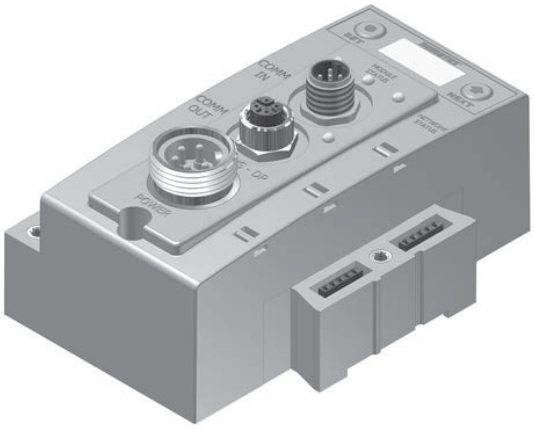
PROFIBUS™ DP

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 nodes for PROFIBUS™ DP have an integrated graphic display and are capable of addressing combinations of up to 1200 outputs and 1200 inputs.

The G3 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 website: www.profibus.com.



Description	Replacement Part Number
PROFIBUS™ DP Communications Module (node)	240-239

Technical Data

Electrical Data	Voltage	Current
Node Power at Max. Brightness	24 VDC +/- 10%	0.0623 Amps
Valves & Discrete I/O	24 VDC +/- 10%	8 Amps Maximum
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)	-23 °C to 46 °C (-10 °F to 115 °F)
Humidity	95% relative humidity, non-condensing
Vibration/Shock	IEC 60068-2-27, IEC60068-2-6
Moisture Protection	IP65 (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	128 for 501, 80 for 502/503 and 32 for all other series
Maximum Addressable I/O Points	Various combinations of 1200 outputs and 1200 inputs

Network Data	
Supported Baud Rates	125K Baud, 250K Baud, 500K Baud, with Auto-Baud detection
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	
PROFIBUS™ DP Communications Module	227g/8 oz

ASCO NUMATICS™

G3
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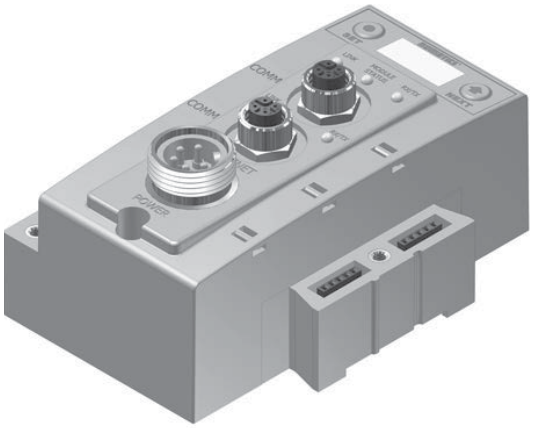
PROFINET™

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 nodes for PROFINET™ IO (PROFINET™ RT) have an integrated graphic display and are capable of addressing combinations of up to 1200 outputs and 1200 inputs.

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.

More information regarding PROFINET™ can be obtained from the following website: www.profibus.com.



Description	Replacement Part Number
PROFINET™ Communications Module (node)	240-240

Technical Data

Electrical Data	Voltage	Current
Node Power at Max. Brightness	24 VDC +/- 10%	0.0903 Amps
Valves & Discrete I/O	24 VDC +/- 10%	8 Amps Maximum
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 (ambient)	-23 °C to 46 °C (-10 °F to 115 °F)
Humidity	95% relative humidity, non-condensing
Vibration/Shock	IEC 60068-2-27, IEC60068-2-6
Moisture Protection	IP65 (with appropriate assembly and termination)

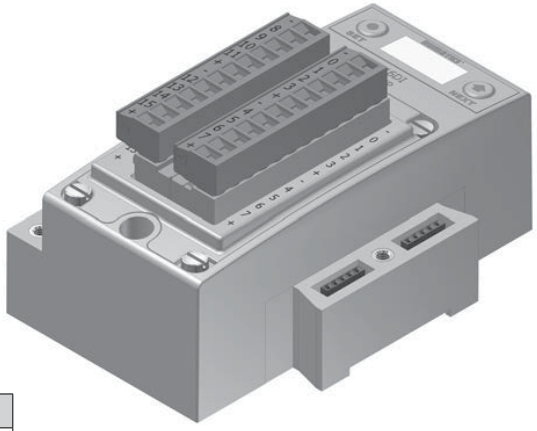
Configuration Data	
Graphic Display	Display used for setting IP Address, Subnet Mask, Fault/Idle Actions, and all other system settings
ARM	(Auto Recovery Module) Optional module that contains automatic recovery of system setting in the event of total or partial system failure
Maximum Valve-Solenoid Outputs	128 for 501, 80 for 502/503 and 32 for all other series
Maximum Addressable I/O Points	Various combinations of 1200 outputs and 1200 inputs

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, fail-safe device settings, and FSU

Weight	
PROFINET™ Communications Module	227g/8 oz

I/O Modules

Digital I/O - Terminal Strip Modules



Description	Part Number
16 PNP Inputs	240-203
16 NPN Inputs	240-204
8 PNP Inputs	240-316
16 PNP Outputs	240-330

Technical Data

Operating Data	
Temperature Range (ambient)	-23 °C to 46 °C (-10 °F to 115 °F)
Humidity	95% relative humidity, non-condensing
Vibration/Shock	IEC 60068-2-27, IEC60068-2-6
Wire Range	12 to 24 AWG
Strip Length	7mm
Tightening Torque	0.5 Nm
Ingress Protection	IP20

Spare Parts	
Replacement Terminal Strip (I/O 0-7)	140-1073
Replacement Terminal Strip (I/O 8-15)	140-1074
Keying Element for terminal strip	140-1076
Keying Element for Module	140-1077

Weight	
Input Module	292g/10.3 oz

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I/O Modules

Digital I/O 5 Pin M12 Modules

Description	Part Number
Inputs	
8 PNP Inputs	240-206
8 NPN Inputs	240-210
16 PNP Inputs	240-205
16 PNP Inputs 19 Pin M23 (Fig. B Only)	240-323
16 NPN Inputs	240-209
Outputs	
8 PNP Outputs	240-208
8 PNP High Current Outputs (Fig. A Only)	240-300
16 PNP Outputs	240-207
Inputs and Outputs	
8 PNP Inputs and 8 PNP Outputs	240-211

Figure A

Figure B

Analog I/O with settable high and low alarms 5 Pin M12 Modules

Description	Signal Type	Part Number
Inputs		
4 Analog Inputs	0 – 10 VDC	240-212
4 Analog Inputs	4 – 20 mA	240-214
Inputs and Outputs		
2 Analog Inputs & 2 Analog Outputs	0 – 10 VDC	240-213
2 Analog Inputs & 2 Analog Outputs	4 – 20 mA	240-215
2 Analog Inputs & 2 Analog Outputs High Current (Figure A Only)	0 – 10 VDC	240-307
4 Analog Inputs & 4 Analog Outputs High Current (Figure A Only)	4 – 20 mA	240-363

Dust Cover -
M12 Male 230-647

Technical Data

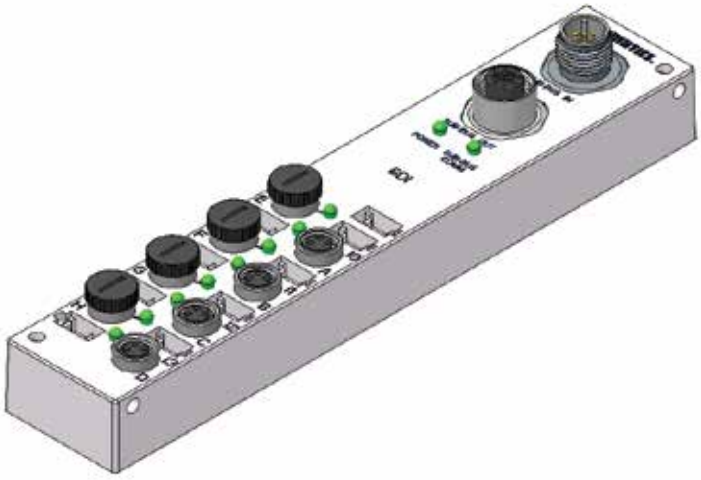
Operating Data	
Temperature Range (ambient)	-23 °C to 46 °C (-10 °F to 115 °F)
Humidity	95% relative humidity, non-condensing
Vibration/Shock	IEC 60068-2-27, IEC60068-2-6
Ingress Protection	IP65 (with appropriate assembly and termination)
Connector-Analog & Digital	M12 4 Pin Female, SPEEDCON® (Compatible with 5 Pin)
Connector-Figure A	M12 4 Pin Male
Connector-Figure B	M23 19 Pin Female
Resolution	16 bit

Weight	
I/O Module-Analog	244g/8.6 oz
I/O Module-Digital	274g/9.7 oz
I/O Module-Figure A	264g/9.3 oz
I/O Module-Figure B	343g/12.1 oz

I/O Modules

Digital I/O 3 Pin M8 Sub-bus Module

Description	Part Number
Inputs	
8 PNP Inputs	240-379



Technical Data

Operating Data	
Temperature Range (ambient)	-23 °C to 46 °C (-10 °F to 115 °F)
Humidity	95% relative humidity, non-condensing
Vibration/Shock	IEC 60068-2-27, IEC60068-2-6
Ingress Protection	IP67 (with appropriate assembly and termination)
Connector	M8 3 Pin Female
Special Features	Linear topology and internally powered through Sub-bus connection
M12 Terminating Resistor (required on last M8 Module)	TA05TR0000000000

Weight	
Sub-bus Module	204g /7.2 oz

Dust Cover -
M8 Male 140-1152

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G3 RTD Temperature Module 240-311

The RTD module is for use with RTD (Resistive Temperature Detectors), supporting up to four RTD devices simultaneously. The module supports various RTD types including: Pt100, Pt200, Pt500, Pt1000, Ni100 and Ni1000.

Technical Data

Electrical Data	
Voltage	24 VDC Module Supply (Via G3 System Aux. Power Connection)
Input Type	RTD (Resistive Temperature Detector), 4 per Module
Supported Sensor Type	Pt100, Pt200, Pt500, Pt1000, Ni100, Ni1000
Supported Temperature Coefficients	.00385; .00392; ….Ω/Ω/°C
Resolution	15 bits plus sign
Data Format	Signed Integer
Calibration	Factory Calibrated Field Calibration w/ high tolerance (± .005%) 100 ohm and 350 ohm resistors.
Input Update (filter) Rate	Adjustable (5 – 20ms), factory default: 5ms
Accuracy	0.1% of full scale @ 25 °C

Mechanical Data	
I/O Connector	M12 4 Pin Female. SPEEDCON® (Compatible with 5 Pin)
Mass	247g/8.7 oz

Operating Data	
Temperature Range Ambient	-23 ºC to 46 ºC (-10 ºF to 115 ºF)
Humidity	95% relative humidity: non-condensing
Ingress Protection	IP65 (with appropriate assembly and terminations)

G3 [Ex ia] NAMUR Input Modules 240-320 and 240-322

The [Ex ia] modules are for use with NAMUR certified intrinsically safe (IS) sensors.

Figure A

Technical Data

Electrical Data	
Voltage	24 VDC Module Supply Sensor Supply = 8.2 VDC Nominal
Input Type NC (Normally Closed)	NAMUR Signal Current (0) ≥ 2.1 mA Signal Current (1) ≤ 1.2 mA Short Circuit Monitoring < 100 Ω Open/Broken Wire Detection < 0.05 mA
Safety Parameter Output Maximums	Uo ≤ 9.6 V Io ≤ 13 mA Po ≤ 31 mW
Diagnostics	Open (broken wire) and Short Circuit

Certification	
Module Marking (ATEX)	II(1)GD [Ex ia Ga] IIC [Ex ia Da] IIIC

Mechanical Data	
Connector-Figure A	M12 4 Pin Female SPEEDCON® (Compatible with 5 Pin)
Connector-Figure B	Terminal Strip
Mass-Figure A	284g/10.0 oz
Mass-Figure B	303g/10.7 oz

Operating Data	
Temperature Range Ambient	-23 ºC to 46 ºC (-10 ºF to 115 ºF)
Humidity	95% relative humidity: non-condensing
Ingress Protection-Figure A	IP65 (with appropriate assembly and termination)
Ingress Protection-Figure B	IP20

Figure B

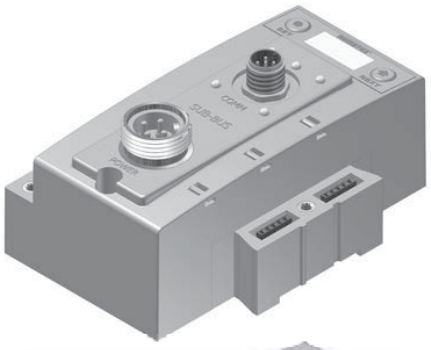
Sub-bus Modules

Sub-bus Valve Module

Provides Sub-bus In and Aux. Power In connections to a distributed valve manifold.

Description	Part Number	Weight
Sub-bus Valve Module w/ I/O	240-241	235g/8.3 oz
Sub-bus Valve Module w/o I/O*	P580AEDS4010A00	320g/11.3 oz
Sub-bus Valve Module w/o I/O, w/ DIN Rail Clips*	P580AEDS4010DRM	332g/11.7 oz

*500 Series only



Sub-bus Out Module

Provides Sub-bus Out and Aux. Power Out connections for I/O distribution.

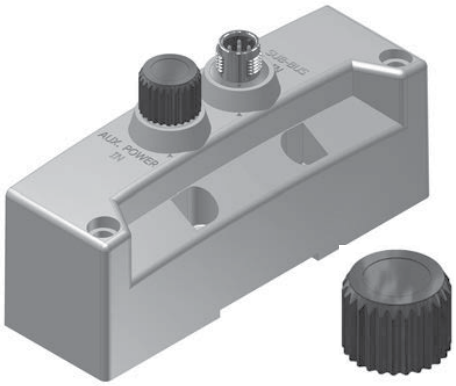
Description	Part Number	Weight
Sub-bus Out Module w/ DIN Rail Clips	240-244	141g/5.0 oz
Sub-bus Out Module	240-183	130g/4.6 oz
Sub-bus Out Module for Intrinsically Safe	240-318	150g/5.3 oz

Dust Cover - M12 Male 230-647

Sub-bus In Module

Provides Sub-bus In and Aux. Power In connections for I/O distribution.

Description	Part Number	Weight
Sub-bus In Module w/ DIN Rail Clips	240-246	141g/5.0 oz
Sub-bus In Module	240-185	130g/4.6 oz
Sub-bus In Module for Intrinsically Safe	240-318	150g/5.3 oz



Dust Cover - M12 Female 230-1200

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An O'Keefe Controls Company

G3 4 Branch Sub-bus HUB Module 240-326

The G3 HUB module allows for branch distribution from the I/O side of the G3 System and can be integrated into the existing G3 Series Sub-bus configuration. Auto Addressing allows for trouble free set up and configuration. Input, output, as well as Valve manifolds can be attached to the available four Branches on a HUB module. Each G3 System can support up to two HUB modules, allowing for maximum flexibility. The HUB module is transparent to the I/O side of the G3 and does not reserve one of the potential sixteen positions.

As with all other G3 I/O modules, standard G3 display and ARM functionality (storing of all parameters) is supported.

Technical Data

Electrical Data	
Voltage	24 VDC Module Supply
No. of HUB Branches	4 Per HUB Module, 2 HUB Modules per G3 System (A HUB module cannot be connected to the Branch of another HUB module)
HUB Branch Length	30 Meters Per Branch
Addressing	Auto Addressing on Power Up (Branch I/O reserve capability)
Display/Diagnostics	Onboard LCD Multi Function Display
G3 System Integration	Integrated into existing G3 I/O Side
Topology	Star, Tree and Hybrid

Mechanical Data	
Branch Connector	M12 5 Pin Female
Mass	255g/9.0 oz

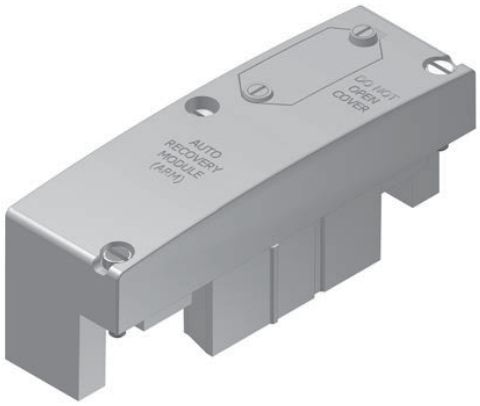
Operating Data	
Temperature Range	-23 °C to 46 °C (-10 °F to 115 °F)
Humidity	95% relative humidity: non-condensing
Ingress Protection	IP65 (with appropriate assembly and terminations)

Miscellaneous Modules

Auto Recovery Module (ARM)

Protects configuration information during a critical failure. Allows configuration information to be saved and reloaded to replacement module automatically.

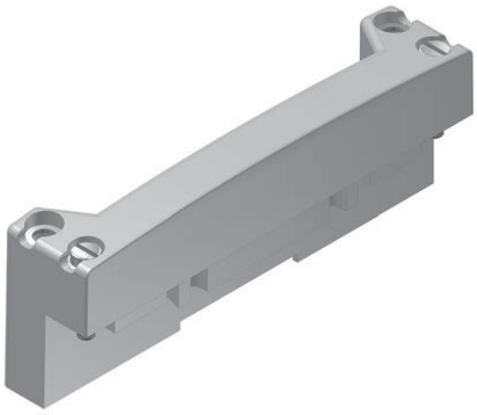
Description	Part Number	Weight
ARM Module	240-182	127g/4.5 oz



Terminator Module

Provides termination for the Sub-bus. Must be installed after the last I/O module or after the communications module if there are no I/O modules installed.

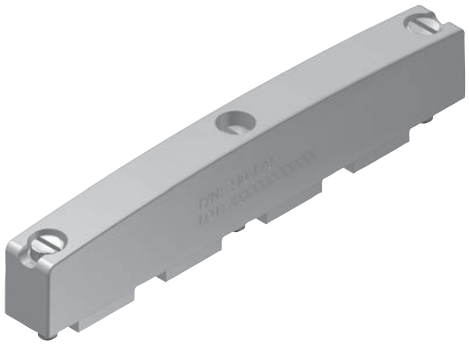
Description	Part Number	Weight
Terminator Module w/ DIN Rail Clips	240-245	102g/3.6 oz
Terminator Module	240-184	91g/3.2 oz



Jumper Clip

Provides electrical connections between modules.

Description	Part Number	Weight
Jumper Clip	240-179	45g/1.6 oz
Jumper Clip for Intrinsically Safe	240-317	65g/2.3 oz



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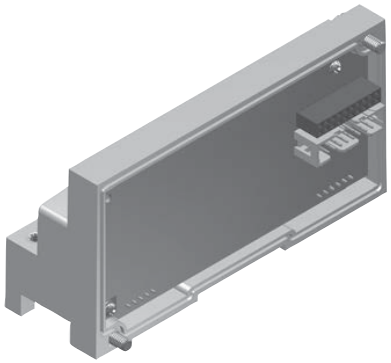
Miscellaneous Modules

Valve Driver Module

Provides connections between the communication module or Sub-bus valve module and the valve manifold.



Generation 2000, ISO 5599/2 and ISO 15407-2 Series

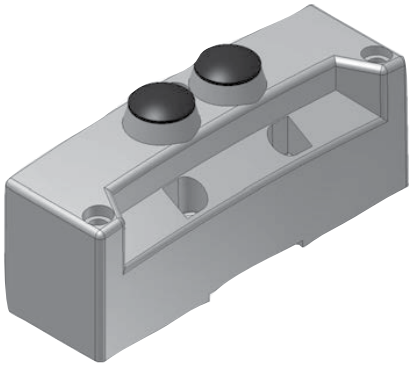
Description	Part Number	Weight
Valve Driver Module w/ DIN Rail Clips	219-858	147g/5.2 oz
Valve Driver Module	219-828	136g/4.8 oz

501, 502 and 503 Series Valves

Description	Part Number	Weight
Valve Driver Module	P599AE508827001	234g/8.3 oz
Valve Driver Module w/ DIN Rail Clips	P599AE508827002	246g/8.7 oz

Right Hand Mounting Cover

Used when a communications module is used without local valves installed.

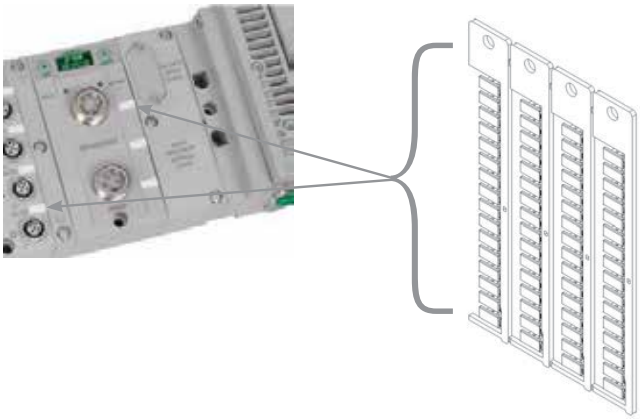


Description	Part Number	Weight
Right Hand Mounting Cover w/ DIN Rail Clips*	240-289	82g/2.9 oz
Right Hand Mounting Cover*	240-255	71g/2.5 oz
Right Hand Mounting Cover Assembly Kit for ARM	245-189	371g/13.1 oz

* Not for use in combination with ARM Module

Accessories

For use with Murrplastik© Type 20 Software.



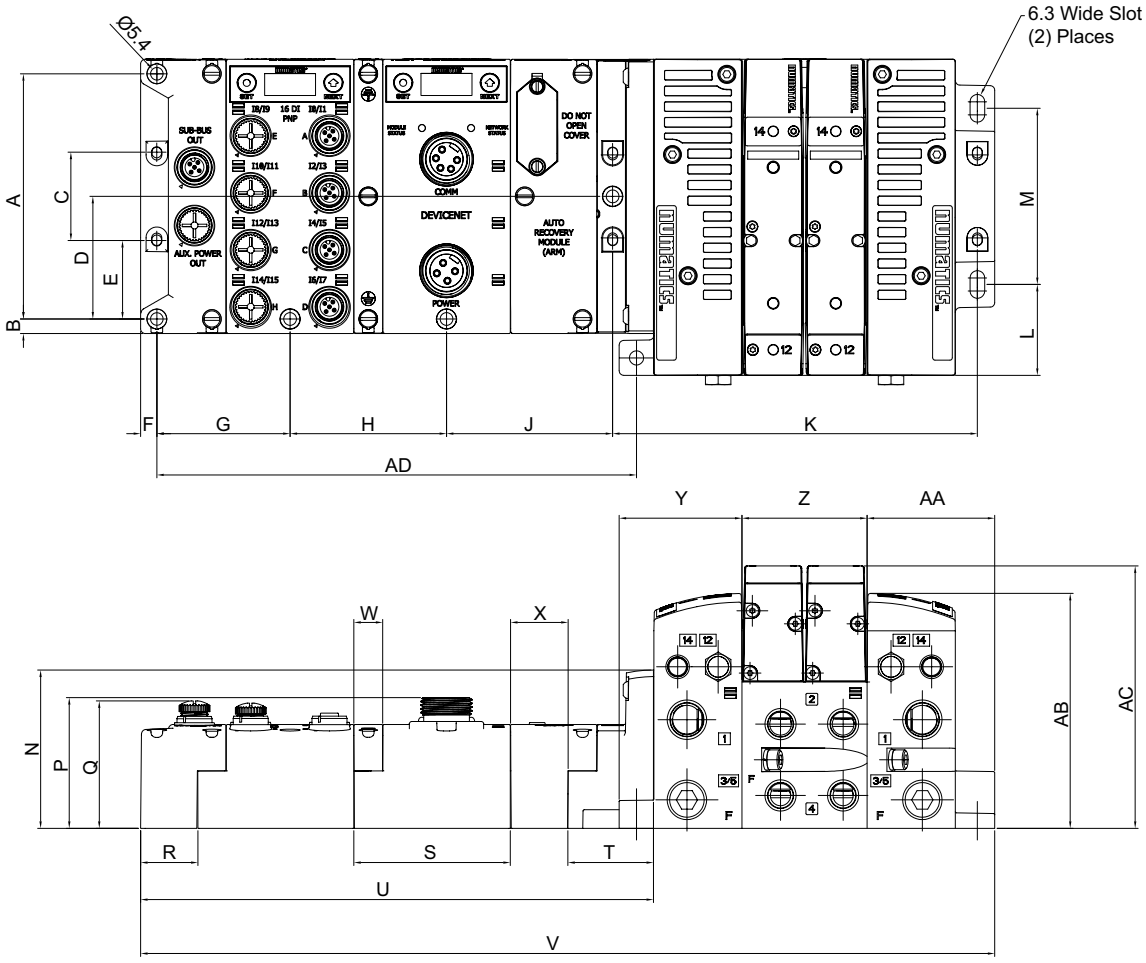
Labels - 122-1251

Technical Data	
Material	Polycarbonate (PC)
Color	White
Temperature Range	-40 °C to 140 °C (-40 °F to 284 °F)
Label Dimensions	0.19" x 0.39"
Label - Printable Area	0.19" x 0.39"

Dimensions: mm (inches)

G3 Fieldbus Manifold Assembly

503 Series Valve Manifold Assembly with G3 Electronics and Sub-bus Output



A	B	C	D	E	F	G	H	J	K	L	M	N	P
105.5 (4.154)	6.3 (0.248)	38 (1.5)	52.8 (2.08)	33.8 (1.33)	7 (0.28)	57.5 (2.264)	67.5 (2.66)	71.7 (2.82)	–	39.1 (1.54)	75.8 (2.984)	68.1 (2.68)	56.3 (2.217)

Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD
54 (2.13)	24.8 (0.98)	67.5 (2.66)	36.9 (1.45)	221.3 (8.713)	368.6 (14.51)	12.5 (0.49)	24.8 (0.976)	53 (2.087)	–	55.1 (2.17)	101.1 (3.98)	112.9 (4.445)	207 (8.2)

NOTE: For valve manifold dimensions refer to valve series product catalogs.

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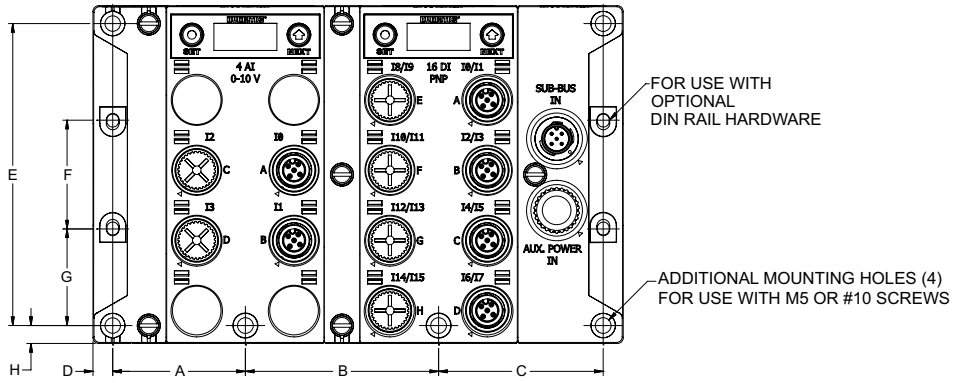
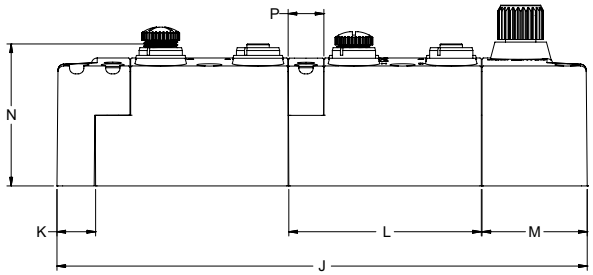
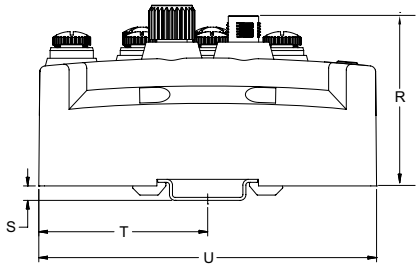
Dimensions: mm (inches)

G3 Fieldbus I/O Assembly

I/O Assembly with G3 Electronics and Sub-bus Input







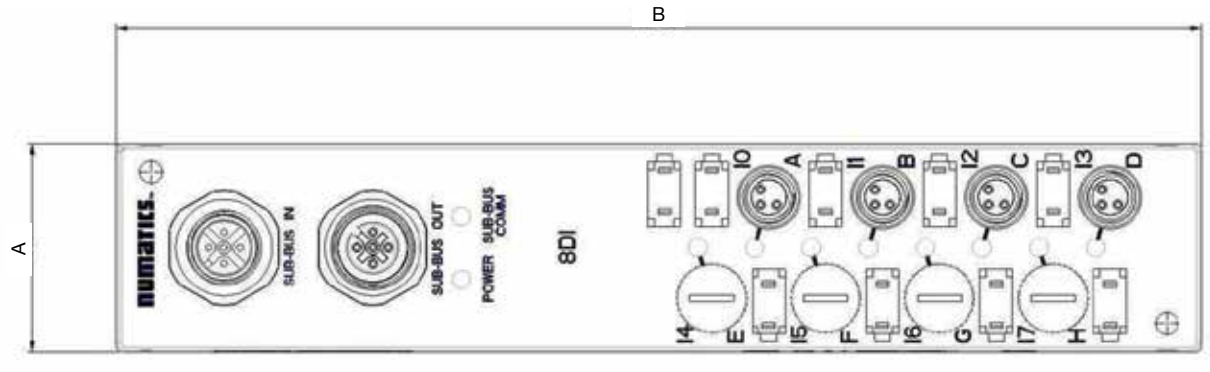
VIEW SHOWN WITH OPTIONAL DIN RAIL HARDWARE AND 35mm DIN RAIL

A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U
46.35 (1.82)	67.50 (2.66)	57.50 (2.26)	6.90 (0.27)	105.50 (4.15)	38.00 (1.50)	33.75 (1.33)	6.25 (0.25)	185.25 (7.29)	13.50 (0.53)	67.25 (2.65)	36.75 (1.45)	54.00 (2.13)	12.50 (0.49)	62.50 (2.46)	5.05 (0.20)	59.00 (2.32)	118.00 (4.65)

Dimensions: mm (inches)

G3 Sub-bus I/O Assembly

3 Pin M8 Sub-bus Module



A	B
33 (1.299)	171.75 (6.762)

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How To Order: 500 Series Manifold Assembly

K 501 A V 3 D 2 0 0 V A00

Port Type
[1] 8 = NPTF
[1] G = ISO228/1-G
K = Push-in Fittings

Product Series
501 = 11mm Valve
502 = 18mm Valve
503 = 26mm Valve

Revision
A = Initial Release

Product Type
V = Valve Manifold Assembly

Electronics
3 = G3 Fieldbus Electronics
8 = Sub-bus Valve Manifold w/o I/O

[2] **Number of Valve Stations**

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

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

End Plate Style
V = Vertical

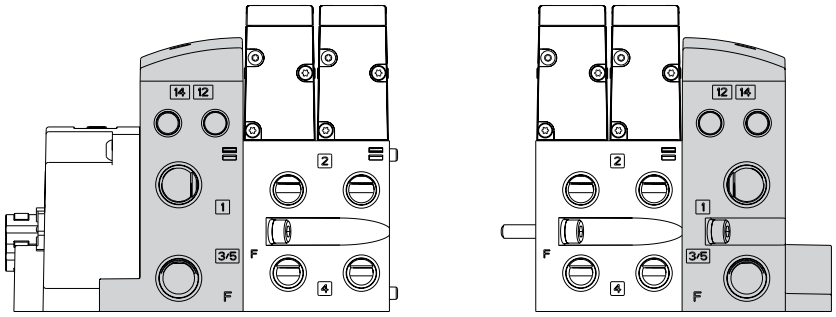
[3] **Second Valve Series**
0 = No Second Valve Series
1 = 501
2 = 502

Valve Station Adder
0 = No Adder
1 = 32+
2 = 64+
3 = 96+

[4] **Port Size**
1 = 1/8
2 = 1/4
G = 5/16
3 = 3/8
4 = 1/2
H = 8mm
K = 10mm
M = 12mm

[1] Port Type 8 & G only available in Port Size 3/8 for 502 & 503 and 1/8 for 501
[2] 501 not available with 2 stations, 502 and 503 only available with an even number of stations and with up to 80 valve solenoids
[3] With 502 11mm (501) valve available, with 503 18mm (502) valve available
[4] 501 Port Sizes 1/8, 1/4, 5/16, 8mm, 502 and 530 Port Sizes 3/8, 1/2, 10 and 12mm

How to Order: Sub-bus Valve Manifold without I/O or Additional Distribution



Shaded components are described by the manifold assembly number. The communications module is described by the electronic interface model number designation.

Each valve station is listed in sequential order from left to right when facing the port side of the manifold as shown.

NOTE:
Up to 128 solenoid outputs are available. Either 128 single solenoid valves or 64 double solenoid valves or any combination of singles and doubles not to exceed 128 outputs can be specified.

Example Order - 503 Shown

Assembly Kit	8503AV8H300VMUF
Valve Station #1	R503A2B40MA00F1
Valve Station #2	R503A2B40MA00F1
Mounting #1	8503AMM22MA0010
Valve Station #3	R503A2B40MA00F1
Valve Station #4	R503A2B40MA00F1
Mounting #2	8503AMM22MA0010
Valve Station #5	R503A2B40MA00F1
Valve Station #6	R503A2B40MA00F1
Mounting #3	8503AMM22MA0010
Valve Station #7	R503A2B40MA00F1
Valve Station #8	R503A2B40MA00F1
Mounting #4	8503AMM22MA0010
Electronics	P580AEDS4010A00
	Assembled

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How To Order: 2000 and ISO Series Manifold Assembly

A K 3 E D 0 0 0 0 3 L STD

Electrical/Electronic Type & Location
3 = G3 Electronics

*** Valve Series**
0 = N/A
6 = 2002 - 02/R2
E = 2005
G = 2012
B = 2035
W = ISO 15407-2 18mm
X = ISO 15407-2 26mm
Q = ISO 5599/2 Size 1
R = ISO 5599/2 Size 2
S = ISO 5599/2 Size 3

Number of Valve Stations

A = 1	I = 9	Q = 17	Y = 25
B = 2	J = 10	R = 18	Z = 26
C = 3	K = 11	S = 19	2 = 27
D = 4	L = 12	T = 20	3 = 28
E = 5	M = 13	U = 21	4 = 29
F = 6	N = 14	V = 22	5 = 30
G = 7	O = 15	W = 23	6 = 31
H = 8	P = 16	X = 24	7 = 32

Special Options
STD = Standard
DRM = DIN Rail Mounting - Not available w/ 2035 and ISO 5599/2
MUF = Muffler - Not available with ISO 5599/2
DWM = DIN Rail w/ Muffler - Not available w/ 2035 and ISO 5599/2

End Plate Port Type
L = Push-in Fitting
N = NPTF Pressure Ports (NPTF Conduit Ports if applicable)
G = ISP 228/1-G Tap Pressure Ports (ISO 228/1-G Conduit Ports if applicable)

End Plate Port Size
2 = 1/4
3 = 3/8
4 = 1/2
6 = 1
8 = 8mm (5/16)
K = 10mm
X = Two or more valve groups resulting in different standard end plate port sizes

*For manifold assembly with multiple valve series - consult factory

How To Order

G3 Electronics

G3 EP1 00 R 0 STD

Series
G3 = G3 Electronics

Electronics Protocol
CC1 = CC-Link IE Field
CO1 = CANopen
DL1 = DeviceLogix
DN1 = DeviceNet
EC1 = EtherCAT
ED1 = EtherNet/IP DLR
EM1 = Ethernet Modbus TCP/IP
EP1 = EtherNet/IP
PL1 = Ethernet POWERLINK
PT1 = PROFIBUS™ DP
PN1 = PROFINET™
DS2 = Sub-bus Valve Manifold
DS3 = Sub-bus I/O Assembly

Number of I/O Modules

00 = 0		09 = 9	
01 = 1		10 = 10	
02 = 2		11 = 11	
03 = 3		12 = 12	
04 = 4		13 = 13	
05 = 5		14 = 14	
06 = 6		15 = 15	
07 = 7		16 = 16	
08 = 8			

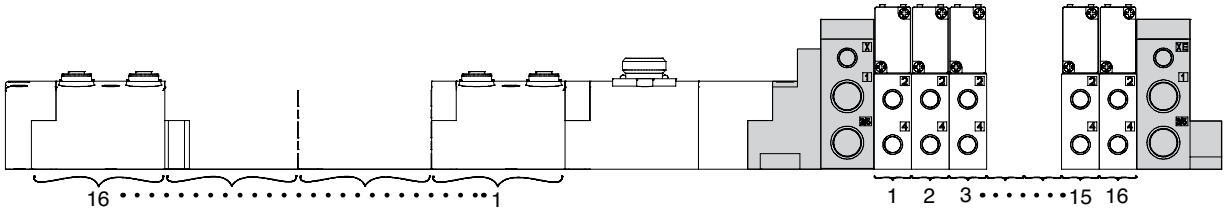
Options
STD = Standard
DRM = DIN Rail Mounting
E23 = Fieldbus Assembly without Valves
E40 = Auto Recovery Module (ARM)
G32 = E40 + DRM
G36 = E28 + E40

Modification
0 = Initial Release

Left Mounting
D = w/ Sub-bus Out
R = w/ Terminating Resistor

How to Order: Valve Manifold Assemblies w/ G3 Electronics & Discrete I/O

For valve series 2002, 2005, 2012, 2035, ISO 15407-2 & ISO 5599/2 (2005 shown)



Shaded components are described by the assembly kit (AK) model number (see previous page). The communications module and number of I/O modules are described by the electronic interface (G3) model number designation (see previous page).

Each valve station is listed in sequential order from left to right when facing the port side of the manifold as shown.

Each discrete I/O module is listed in sequential order from RIGHT to LEFT starting from the communication module as shown.

NOTE:

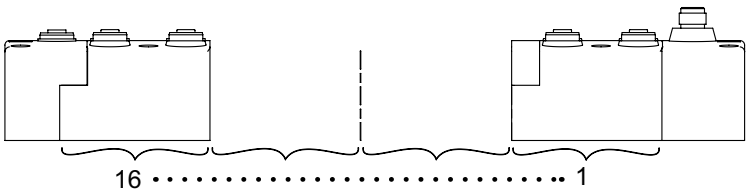
1. A total of 32 solenoid outputs are available. Either 32 single solenoid valves or 16 double solenoid valves or any combination of singles and doubles not to exceed 32 outputs can be specified.
2. For manifold assemblies that exceed 16 solenoids, the assembly MUST be configured so that an even number of solenoids are utilized prior to the station using the ribbon cable feature. The 16th and the 17th solenoids cannot be on the same valve.

Example Order - 2005 Shown

Assembly Kit	AK3EP00003LMUF
Station 1	052BB4Z2ML00061
Station 2	052BB4Z2ML00061
Station 3	052BB4Z2ML00061
Station 4	052BB4Z2ML00061
Station 5	052BB4Z2ML00061
Station 6	052BB4Z2ML00061
Station 7	052BB4Z2ML00061
Station 8	052BB4Z2ML00061
Station 9	052BB4R2ML00061
Station 10	052BB4Z2ML00061
Station 11	052BB4Z2ML00061
Station 12	052BB4Z2ML00061
Station 13	052BB4Z2ML00061
Station 14	052BB4Z2ML00061
Station 15	052BB4Z2ML00061
Station 16	052BB4Z2ML00061
Electronics	G3DN116R0E40
Station 1	240-205
Station 2	240-205
⋮	
Station 15	240-205
Station 16	240-205

How To Order

G3 Electronics



1. Refer to the selection table on the previous page to specify the control electronics and I/O configuration.
2. Each discrete I/O module is listed in sequential order from RIGHT to LEFT as shown.
3. A maximum of 16 I/O modules are supported by a single communication node. Analog I/O & digital I/O (NPN & PNP)

Example Order - I/O Assembly w/ Sub-bus In and Sub-bus Out Modules Shown

Electronics	G3DS316D0STD
Station 1	240-205
Station 2	240-205
⋮	
Station 15	240-205
Station 16	240-205