

L0NT0201 Obelix Proportional Solenoid I/O Module 24VDC Type B

The L0NT Industrial Solenoid I/O Module range is designed to directly support 24VDC Solenoid applications together with a range of other I/Os. Additional analogue and digital input support make for a highly integrated I/O module.

- Embedded 24VDC Solenoid Outputs
 - 30 x Discreet Outputs with feedback output voltage monitoring.
 - 6 x Proportional Outputs with feedback current monitoring
 - Switched Coil Supply & Return
 - Multi-Stage Diagnostic Monitoring
 - Sequential Switching Redundancy
 - Microprocessor Controlled
- Embedded Proximity Inputs
 - 15 x 24VDC Proximity Inputs
 - Microprocessor Sampling
- Embedded Counters Inputs
 - 4 x Counter Inputs
 - 2 x Configurable Count Inputs
 - 20Hz to 6.5KHz
 - Quadrature Configurable.
- Embedded Analog Inputs
 - 12 x 4-20mA Inputs
 - Microprocessor Sampling
- Embedded Digital Inputs
 - 8 x 110VAC Digital Inputs
 - Microprocessor Sampling
- CAN Network
 - Opto-Coupler Isolation
 - CAN 2.0B Compatible
- Operates -10°C to +85°C
 - All industrial components
- Heavy Duty Enclosure
 - Electroless Nickel Plated
 - Rugged Construction



Typical Applications

- Continuous Bolter/Miners
- Continuous Haulage
- Long Wall Shearers
- Mobile Bolters
- Mobile Roof Supports
- Remote Control Scoops
- Remote Control Loaders
- Any industrial switching application

Interface Description

The Type L0NT Solenoid Module utilizes industrial connectors that are unique when configured for use with the Obelix Control System. 7x24(12 A-BOTTOM, 12 B-TOP) way connectors.

Each module in the series is allocated a unique connector prefix for schematic reference purposes. For example, L0NT0101 is allocated prefixes A26-A, A26-B whilst L0NT0201 has B26-A and B26-B etc.

Plugs are marked as X26A, .. X26G (where X is module type A, B, C, D, E, F, G, H)

LONT0201 Obelix Proportional Solenoid I/O Module 24VDC Type B

**LONT Solenoid Module
Connector A26B (Bottom) – Klippon
12 Pin Female**

| Pin | Description | Signal |
|-----|----------------------|--------------|
| 1 | Solenoid #11A Supply | 24VDC Output |
| 3 | Solenoid #11A Return | 24VDC Return |
| 5 | Solenoid #12A Supply | 24VDC Output |
| 7 | Solenoid #12A Return | 24VDC Return |
| 9 | Solenoid #13A Supply | 24VDC Output |
| 11 | Solenoid #13A Return | 24VDC Return |
| 13 | Solenoid #14A Supply | 24VDC Output |
| 15 | Solenoid #14A Return | 24VDC Return |
| 17 | Solenoid #15A Supply | 24VDC Output |
| 19 | Solenoid #15A Return | 24VDC Return |
| 21 | Solenoid #16A Supply | 24VDC Output |
| 23 | Solenoid #16A Return | 24VDC Return |

**LONT Solenoid Module
Connector A26B (Top) – Klippon
12 Pin Female**

| Pin | Connector A26B (Top) – Klippon | Signal |
|-----|--------------------------------|--------------|
| 2 | Solenoid #11B Supply | 24VDC Output |
| 4 | Solenoid #11B Return | 24VDC Return |
| 6 | Solenoid #12B Supply | 24VDC Output |
| 8 | Solenoid #12B Return | 24VDC Return |
| 10 | Solenoid #13B Supply | 24VDC Output |
| 12 | Solenoid #13B Return | 24VDC Return |
| 14 | Solenoid #14B Supply | 24VDC Output |
| 16 | Solenoid #14B Return | 24VDC Return |
| 18 | Solenoid #15B Supply | 24VDC Output |
| 20 | Solenoid #15B Return | 24VDC Return |
| 22 | Solenoid #16B Supply | 24VDC Output |
| 24 | Solenoid #16B Return | 24VDC Return |

² Solenoids Designated xA / xB can only be operated exclusively. For example, outputs 9A or 9B can be energised independently but not simultaneously.

LONT0201 Obelix Proportional Solenoid I/O Module 24VDC Type B

Electrical Characteristics

Supply

| | |
|------------------------------|--------------------------|
| Voltage ^{Module} | 24VDC ^{Nominal} |
| Wattage ^{MIN} | 5W |
| Wattage ^{MAX} | 12W |
| Voltage ^{Solenoids} | 24VDC ^{Nominal} |
| Wattage ^{MIN} | 0W |
| Wattage ^{MAX} | 240W |

Solenoid Outputs

| | |
|-----------------|--------------------------|
| Installed | 30 Redundant Discreet |
| Voltage | 24VDC |
| Minimum Voltage | 24VDC |
| Maximum Voltage | 24 ^{VDC} |
| Installed | 6 Redundant Proportional |
| Voltage | 24VDC |
| Minimum Voltage | 24VDC |
| Maximum Voltage | 24VDC |

Proximity Inputs

| | |
|-----------------|-------|
| Installed | 15 |
| Voltage | 24VDC |
| Minimum Voltage | 24VDC |
| Maximum Voltage | 24VDC |

Digital Inputs

| | |
|-----------------|--------|
| Installed | 8 |
| Voltage | 110VAC |
| Minimum Voltage | 75VAC |
| Maximum Voltage | 130VAC |

Analog Inputs

| | |
|-----------------|--------|
| Installed | 12 |
| Type | 4-20mA |
| Scale | 10-Bit |
| Maximum Voltage | 5VDC |

Communications

| | |
|-------------|----------------------------|
| Interface | CAN 2.0B |
| Throughput | 500kbs (Supports Autobaud) |
| Protocol(s) | Message Oriented |
| Medium | Copper |

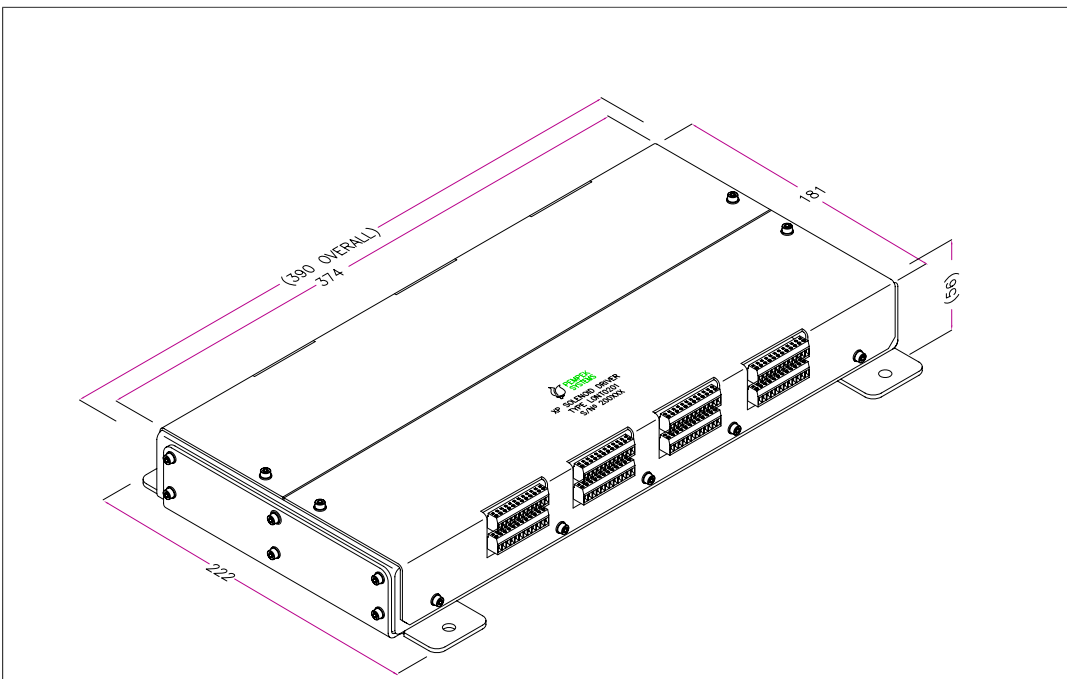
LONT0201 Obelix Proportional Solenoid I/O Module 24VDC Type B

Electrical Characteristics

Environmental

| | |
|-----------------------|---------------------|
| Operating Temperature | Minus 20°C to +85°C |
| Humidity | T.B.A. |
| MTBF | 12,000 hours |

Mechanical Characteristics



| Dimension | Measurement | Description |
|-----------|-------------|-----------------------|
| A | 222 | Mounting Flange Width |
| B | 390 | Length |
| C | 181 | Width |
| D | 60 | Height |

Notes

- All dimensions are in millimetres.

Material

- Enclosure is Electroless nickel plated mild steel.
- Facia is stainless steel.
- Mounting brackets are stainless steel.

Fasteners

- M5 x 10mm x 4
- M4 x 10mm x 24

Mass

- 3.5kg (7.7lb)