

LONTO101 Pempek OBP Proportional Solenoid I/O Module 24VDC Type A

The LONT 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 LONT Solenoid Module utilizes industrial connectors that are unique when configured for use with the Pempek OBP 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, LONT0101 is allocated prefixes A26-A, A26-B whilst LONT0201 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)



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LONT Solenoid Module MAIN Connector A26A (Bottom) – Klippon 12 Pin Female

| Pin | | Signal |
|-----|----------------------|--------------|
| 1 | Solenoid #1 Supply | 24VDC Output |
| 3 | Solenoid #1 Return | 24VDC Return |
| 5 | Solenoid #3 Supply | 24VDC Output |
| 7 | Solenoid #3 Return | 24VDC Return |
| 9 | Solenoid #5 Supply | 24VDC Output |
| 11 | Solenoid #5 Return | 24VDC Return |
| 13 | Solenoid #7 Supply | 24VDC Output |
| 15 | Solenoid #7 Return | 24VDC Return |
| 17 | Solenoid #9A Supply | 24VDC Output |
| 19 | Solenoid #9A Return | 24VDC Return |
| 21 | Solenoid #10A Supply | 24VDC Output |
| 23 | Solenoid #10A Return | 24VDC Return |

LONT Solenoid Module Connector A26A (Top) – Klippon 12 Pin Female

| Pin | Description | Signal |
|-----|----------------------|--------------|
| 2 | Solenoid #2 Supply | 24VDC Output |
| 4 | Solenoid #2 Return | 24VDC Return |
| 6 | Solenoid #4 Supply | 24VDC Output |
| 8 | Solenoid #4 Return | 24VDC Return |
| 10 | Solenoid #6 Supply | 24VDC Output |
| 12 | Solenoid #6 Return | 24VDC Return |
| 14 | Solenoid #8 Supply | 24VDC Output |
| 16 | Solenoid #8 Return | 24VDC Return |
| 18 | Solenoid #9B Supply | 24VDC Output |
| 20 | Solenoid #9B Return | 24VDC Return |
| 22 | Solenoid #10B Supply | 24VDC Output |
| 24 | Solenoid #10B 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.



LONT0101 Pempek OBP Proportional Solenoid I/O Module 24VDC Type A

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 |

| 1 1 11 1 | 1.5 |
|-----------------|-------|
| 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 | |
| Туре | 4-20mA | |
| Scale | 10-Bit | |
| Maximum Voltage | 5VDC | |

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



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Electrical Characteristics

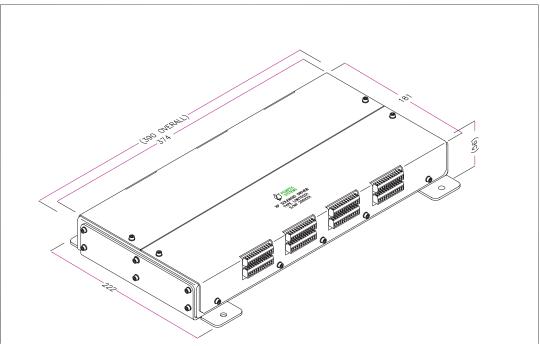
Environmental

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 |
| В | 390 | Length |
| С | 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)