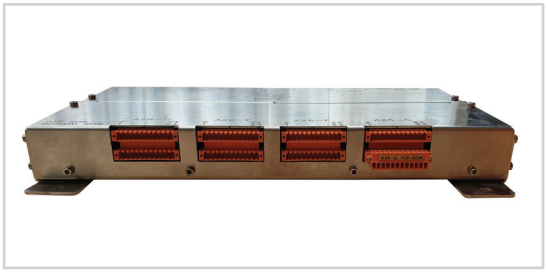
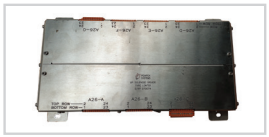
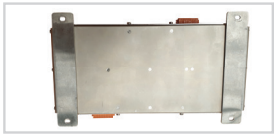
L0NT0301 Pempek OBP Proportional Solenoid I/O Module 24VDC Type C

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 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, 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)

L0NT Solenoid Module Connector A26C (Bottom) – Klippon 12 Pin Female		
Pin	**Description**	**Signal**
1	Solenoid #17A Supply	24VDC Output
3	Solenoid #17A Return	24VDC Return
5	Solenoid #18A Supply	24VDC Output
7	Solenoid #18A Return	24VDC Return
9	Solenoid #19A Supply	24VDC Output
11	Solenoid #19A Return	24VDC Return
13	Solenoid #1A Proportional Supply	24VDC PWM Output
15	Solenoid #1A Proportional Return	24VDC PWM Return
17	Solenoid #2A Proportional Supply	24VDC PWM Output
19	Solenoid #2A Proportional Return	24VDC PWM Return
21	Solenoid #3A Proportional Supply	24VDC PWM Output
23	Solenoid #3A Proportional Return	24VDC PWM Return

L0NT Solenoid Module Connector A26C (Top) – Klippon 12 Pin Female		
Pin	**Connector A26B (Top) – Klippon**	**Signal**
2	Solenoid #17B Supply	24VDC Output
4	Solenoid #17B Return	24VDC Return
6	Solenoid #18B Supply	24VDC Output
8	Solenoid #18B Return	24VDC Return
10	Solenoid #19B Supply	24VDC Output
12	Solenoid #19B Return	24VDC Return
14	Solenoid #1B Proportional Supply	24VDC PWM Output
16	Solenoid #1B Proportional Return	24VDC PWM Return
18	Solenoid #2B Proportional Supply	24VDC PWM Output
20	Solenoid #2B Proportional Return	24VDC PWM Return
22	Solenoid #3B Proportional Supply	24VDC PWM Output
24	Solenoid #3B Proportional Return	24VDC PWM Return

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

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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	24VDC
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

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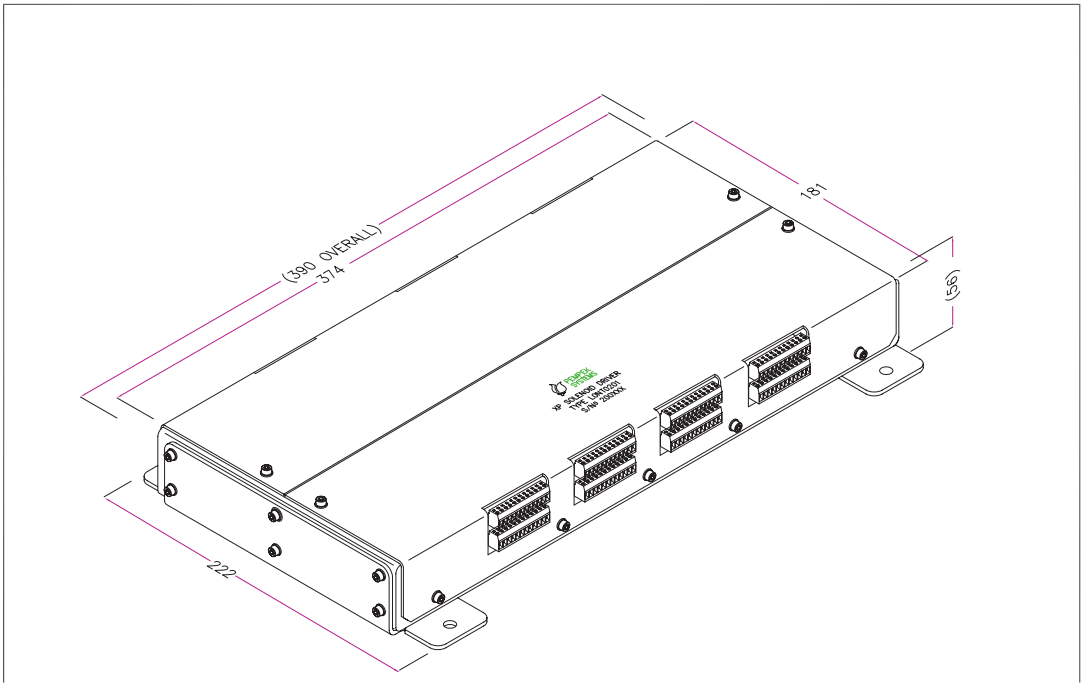
Electrical Characteristics

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
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)