

L12E0101 I.S. Barrier IECEx TSA 23.0006X with Marking [Ex ib Mb] I

Type L12E [Ex ib Mb] I Barrier is an industrialised control interface module designed for the rigours of underground mobile mining machinery.

Designed to exacting requirements of IEC 60079.0 and IEC 60079.11 and MSHA CFR 30, this Ex i Barrier Module is designed for world-wide explosive atmosphere regulatory approval allowing it to be installed into any underground environment after certification assessment.

Designed to interface with Pempek Systems L12D I.S. Oracle and L12J I.S. Inclinometer using RS422 communication interface, the Type L12E IS Barrier can be integrated into almost any control system with relative ease since its equipped with a myriad of communication interfaces on the non-I.S. side which includes RS-422, CAN and Ethernet.

The apparatus shall be installed in a flameproof enclosure or in a safe area in an enclosure with an ingress protection of at least IP54.

- Highly ruggedised, industrial design using all industrial grade components.
- A nominal operating temperature range spanning -20°C ... 70 °C
- IECEx I approvals and pending in other parts of the world.
- Features internal I.S. power supply to power up I.S. devices connected to the barrier in the field.
- Simplifies machine installation for connecting devices.





L12E0101 I.S. Barrier IECEx TSA 23.0006X with Marking [Ex_ib Mb] I

Specifications

MASC RSA

I.S. Power (Blue) 5.355VIS Uo lo 2.46A Ро 1.46W Со 498µF 27.5µH Lo Non-I.S. Power (Green) U 15-30VDC 0.2A max **Electronics** RS-422 I.S. Interface RS-422, CAN 2.0B, Ethernet Non-I.S Interface Mechanical Brass / Teflon / Stainless Steel Material Width 88mm Height 93mm Depth 48mm Mass 500g **Environmental** -20°C..+70°C Operating Temperature Operating relative 10-90% non-condensing humidity **Approvals** IEC Australia IECEx TSA 23.0006X Group I MA China Pending MSHA USA Pending ATEX Europe Pending

M/23-8594X

Wiring

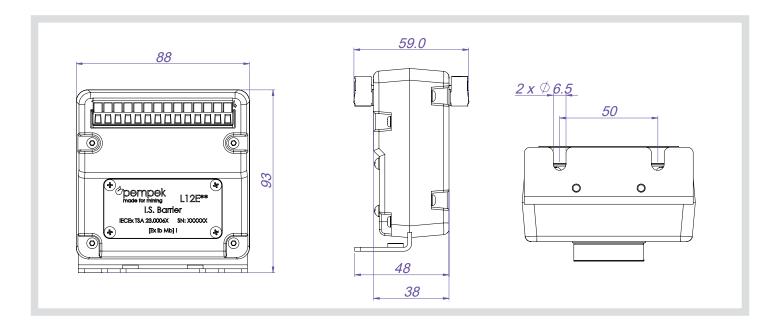
	B12E3 Green Connector	External Wiring
Item	PIN	LABEL
1	J2-1	Shield
2	J2-2	Ethernet-Tx-
3	J2-3	Ethernet-Tx+
4	J2-4	Ethernet-Rx+
5	J2-5	Ethernet-Rx-
6	J2-6	RS422-Rx+
7	J2-7	RS422-Rx-
8	J2-8	RS422-Tx-
9	J2-9	RS422-Tx+
10	J2-10	CAN-L
11	J2-11	CAN-H
12	J2-12	Shield
13	J2-13	OV
14	J2-14	+ Vin

	B12E Blue Connector	External Wiring
Item	PIN	LABEL
1	J2-1	+ VIS
2	J2-2	OVIS
3	J2-3	RS422-Rx+
4	J2-4	RS422-Rx-
5	J2-5	RS422-Tx+
6	J2-6	RS422-Tx-
7	J2-7	N/C



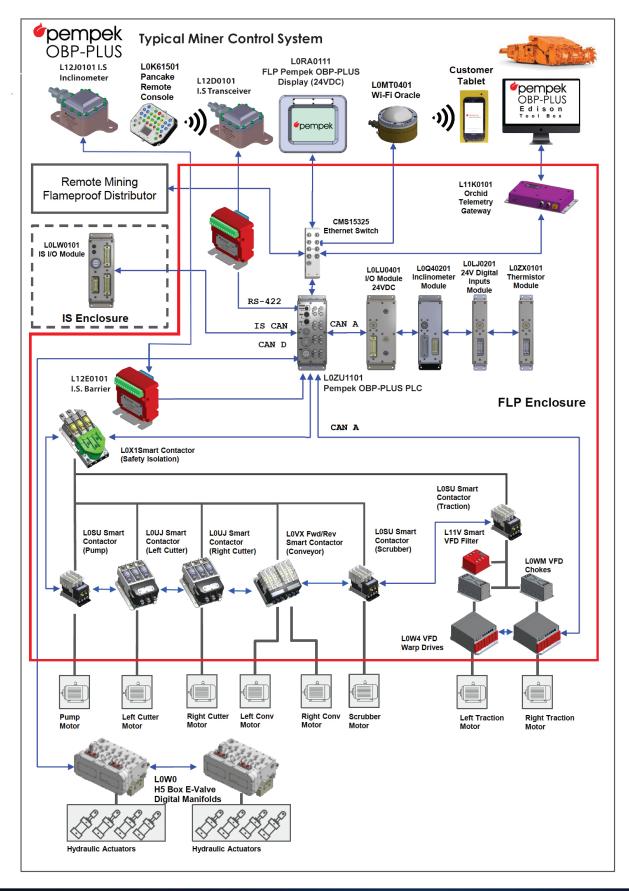
L12E0101 I.S. Barrier IECEx TSA 23.0006X with Marking [Ex_ib Mb] I

Dimensions





L12E0101 I.S. Barrier IECEx TSA 23.0006X with Marking [Ex_ib Mb] I



© Pempek 1985 – 2024 <u>www.pempek.world</u> | <u>sales@pempek.world</u> | 3/13 Hoyle Ave Castle Hill NSW 2154 | +61 02 8853 4800

Pempek Systems Pty Ltd ACN 622 172 721 (Pempek) is the owner of all intellectual property rights subsisting in all of its products, software and hardware, as well as all product information contained in this document (including without limitation in respect of all copyright, designs and know-how). Your use of Pempek's products and intellectual property is strictly subject to: Pempek's Licence Terms and Conditions, which are accessible here: https://pempek.world/terms-and-conditions/#PempekIntellectualPropertyLicenceAgreement