Intrinsically Safe Load Cell Protection

In Safe and Hazardous Areas



Compact format

All models of ISB support simple installation and connection, with mounting features and removable terminal strip connectors. Optional kits for the ISB05x and ISB15x models include conduit seals and adapters for metric compatibility.



Robust safety

The ISB05x and ISB15x feature a type 7/9 flameproof / hazardous area housing with IP66 ingress protection, enabling installation in washdown and hazardous areas.



Global certifications

When correctly installed in a weighing system as specified by the relevant control drawings and guidelines, the ISBs comply with worldwide safety standards.



ISB05, ISB15, ISB05X and ISB15X Intrinsically Safe Load Cell Barriers

Four models of ISB are available. Select the ISB appropriate for the excitation voltages of the terminal to be connected. The ISB05 and ISB15 are designed for use in a non-hazardous environment, such as a control room. The ISB05x and ISB15x are housed in a flame-proof enclosure suitable for installation in a hazardous area.



Intrinsically Safe Load Cell Barriers





Terminal	ISB05	ISB15	ISB05X	ISB15X
Dimensions (WxHxD)	110 x 115 x 25 mm / 4.3 x 4.4 x 1.4 in.		150 x 195 x 140 mm / 5.8 x 7.6 x 5.6 in	
Weight	0.37 kg / 0.8 lb		3.4 kg / 7.5 lb	
Construction	(Covers) ABS Plastic		Cast aluminum allow, no more than 6% magnesium by weight	
Mounting	NS35 DIN rail or surface mount using four #6 or M4 screws		Surface mount using two 5/16" or M8 bolts	
Hazardous Area Approvals	FM # 3010967 as AIS/I,II,III/1/ABCDEFG KEMA 02ATEX1092 as II (2) G [Ex ib Gb] IIC or II (2) D [Ex ib Db] IIIC CSA - Certificate #1197104 as I.S. for CI I,II,III; Div 1;Gp A-G [Ex ia] IIC IECEX DEK 17.0018X [Ex ib Gb] IIC [Ex ib Db] IIIC		FM 3010967 as XP/I/1/CD/T6;DIP/II,III/1/EFG/T6 KEMA 02ATEX2091X as II 2 G Ex d [ib IIC] IIB+H ₂ T6 Gb or II 2 D Ex tb [ib] IIIC T85°C Db or II 2 D (2) G Ex tb [ib IIC Gb] IIIC T85°C Db CSA - Cert. #1197104 as I.S. for CI I,II,III; Div 1; Gp C-G Ex d IIB+H2 [ia] IIC Encl. Type 4 IECEX DEK 17.0018X Ex d [ib IIC] IIB+H ₂ T6 Gb Ex tb [ib] IIIC T85°C Db Ex tb [ib] IIIC Gb] IIIC T85°C Db	
Environment	Dry, non-hazardous areas only		Washdown, within hazardous areas	
Operating Voltages (excitation)	1-5 VDC	5-15 VDC	1-5 VDC	5-15 VDC
Replaceable Fuses	Yes - special 125 mA cartridge type, qty. 6 on ISB05 and qty. 1 on ISB15			
Operating Temperature	-10° to 40° C / 14° to 104° F			
Storage Temperature	-20° to 60° C / -4° to 140° F			
Shipping Weight	0.95 kg / 2.1 lb		4.4 kg / 9.6 lb	
Shipping Dimensions	260 x 320 x 135 mm / 10.3 x 12.5 X 5.3 in		410 x 340 x 255 mm / 16.1 x 13.3 x 10 in	

Features and Benefits

Features	Benefits
ATEX, IECEx, FM, and CSA Safety Approvals	Certified intrinsically safe when installed properly to reduce risk of personal injury.
Replaceable Fuse Cartridges	Protects against barrier failure during installation and during normal operating conditions. Lowers maintenance costs.
Removable Terminal Strip Connectors	Allows quick, easy access for installation and service to reduce installation and service costs.
"Entity" Approval	Allows use of other manufacturers' entity approved load cells. Reduces cost of overall solution when portions already exist.
DIN Rail Mounting	Quick, easy installation to reduce installation costs.
Two Voltage Versions Available	Match the barrier to the excitation voltage of the terminal to maximize the signal from the load cell for more stable and accurate weight readings.

Options

64035520: Kit with two 3/4" NPT conduit sealing fittings 64035521: Kit with two 3/4" NPT to 20mm thread adapters 64048856: Ground Kit Required for Canadian Approval

www.mt.com/hazardous _

For more information

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