



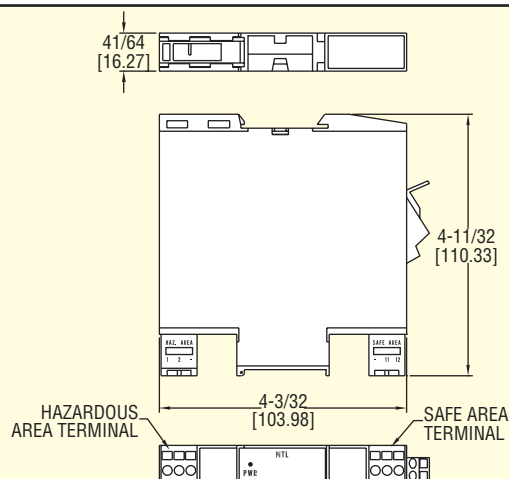
Series
MTL5041/
5045

Galvanic Barrier

Intrinsically Safe Isolators for Hazardous Locations



MTL5041



The **MTL5041/5045 Galvanic Barrier** provide total intrinsically safe isolation for communication with Dwyer® pressure transmitters approved for location in hazardous areas. Galvanic barrier eliminates the need for a high integrity earth ground required when using shunt diode type safety barriers. DIN rail mounting and plug-in signal and power connectors simplify installation and maintenance

Compatible Models: 637, 638, 608, 2700, 2800, 2900, SBLTX, PBLTX, IS626

Galvanic Barrier	Approval	Dwyer Series
MTL5041	FM for Class I, II, II; Div. 1 Groups C, D, F, G	638
MTL5041	UL for Class I; Div. 1 Groups A, B, C, D Class II Div. 1 Groups E, F, G Class III Div 1	IS626, SBLTX, PBLTX
MTL5041	FM for Class I, II, III; Div. 1 Groups B, C, D, E, F, G	637
MTL5041	FM for Class I, II, III; Div. 1 Groups A, B, C, D, E, F, G	608
MTL5045	FM for Class I, II, III; Div. 1 Groups C, D, E, F, G	2900
MTL5045	FM for Class I, II, III; Div. 1 Groups C, D, E, F, G	2700/2800

MTL5041/5045	FM		
	Group	μF	mH
	A & B	0.13	4.2
	C	0.30	12.6
	D	1.04	33.6
	BASEEFA (ATEX)		
	Group	μF	mH
	IIC	0.083	3.05
	IIB	0.85	9.15
	IIA	2.15	244

Region (Authority)	Standard	Approved For	Certificate/file no.
USA (FM) (UL)	3600, 3610 entity 3611, 3810 UL913 UL1604	AIS/I,II,III/1/Entity ABCDEFG-SCI-942; NI/I/@/ABCD/T4 [I/0] AEx[ia]IIC-SCI-942 Entity; NI/1/2/IIC/T4; Ta=140°F (60°C)	3010737
Canada (CSA)	CAN/CSA E60070, IEC60079, C22.2	Class I, Div.2, Gps A, B, C, D; Ex nA [ia] IIC T4 Class I, Xone 2, Aex nA IIC T4	1345550
UK (BASEEFA)	EN 50014, EN 50020	EEx ia IIC	BAS01ATEX7217
UK (BASEEFA) Systems	EN 50039	EEx ia IIC	Ex01E2219

SPECIFICATIONS

Hazardous Area Input:

Signal range: 0 to 24 mA (including over-range);
Transmitter voltage: 16.5 V at 20 mA.

Safe Area Output:

Signal range: 4 to 20 mA;
Safe-area load resistance: 0 to 1kΩ;
Safe-area output resistance: > 2 MΩ.

Power Requirement: 20 to 35 VDC.

Response Time: Settles to within 10% of final value within 250 μs.

Current Consumption (20 mA signal):

70 mA at 24 VDC;
85 mA at 20 VDC;
55 mA at 35 VDC.

Maximum Power Dissipation (20 mA signal): 1.2 W at 24 VDC.

Isolation: 250 V rms between input, output and power supply terminals.

Transfer Accuracy at 68°F (20°C): Better than 20 μA (typically 5 μA).

LED Indicator: Green: Power indication.

Temperature Limits: Operating: -4 to 140°F (-20 to 60°C); Storage: -40 to 176°F (-40 to 80°C).

Temperature Drift: <1 μA/°C.

Humidity: 5 to 95% RH.

Mounting: 1.4" (35 mm) top hat rail to:

EN 50022-35 x 7.5;
BS 5584;
35 x 27 x 7.3 DIN 46277.

Terminals: Accommodate up to 2.5 mm² stranded or single-core.

Safety Description: 28 V, 300Ω, 93 mA; Um=250 rms or dc.

Weight: 3.9 oz (110 g).

Agency Approvals: See table below.

ACCESSORY

A-360, Aluminum DIN Rail 1 m