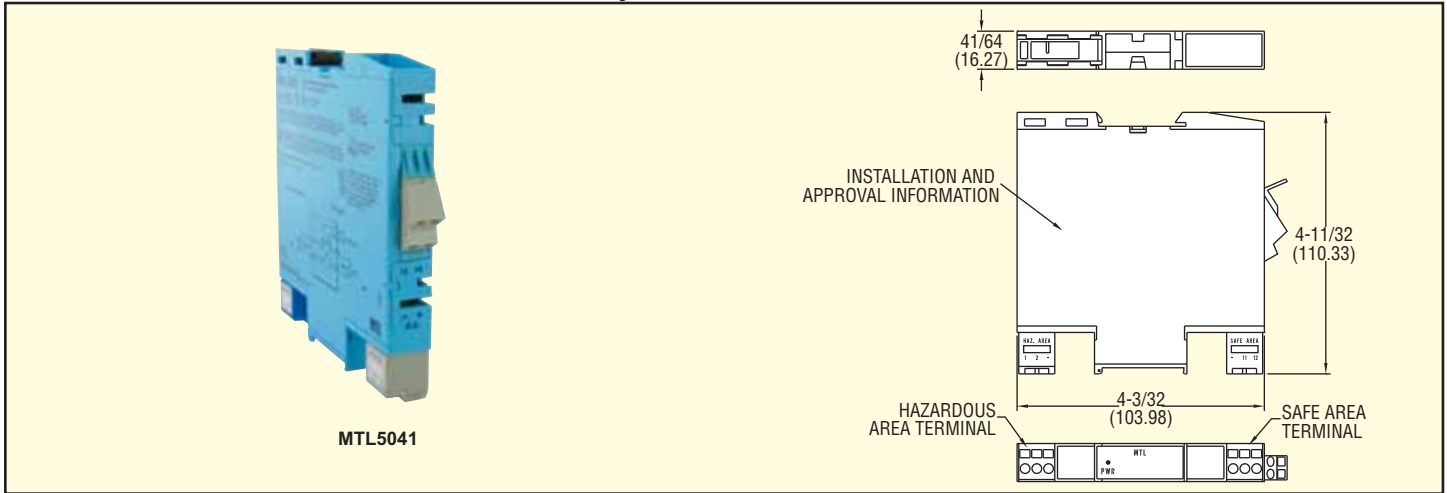




Series
MTL5041/
5045

Galvanic Isolator

Intrinsically Safe Isolators for Hazardous Locations



The **MTL5041/5045 Galvanic Isolators** provide total intrinsically safe isolation for communication with Dwyer® pressure transmitters approved for location in hazardous areas. Galvanic isolation 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 Isolator	Approval	Dwyer Series
MTL5041	FM for Class I, II, III; 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	µH/Ω
IIC	0.083	3.05	55
IIB	0.85	9.15	210
IIA	2.15	244	444

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: >2MΩ.

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.

Region (Authority)	Standard	Approved For	Certificate/file no.
USA (FM)	3600, 3610 entity 3611, 3810	AIS/I,II,III/1/Entity ABCDEFG-SCI-942; NI//@/ABCD/T4 [I/O] AEx[ja]IIC-SCI-942 Entity; NI/1/2/IIC/T4; Ta=140°F (60°C)	3010737
Canada (CSA)	CAN/CSA E60070, UL698, UL913, UL1604, 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