

Блоки управления системами продувки и наддува типа Х, Ех рхb серии 6000 и аксессуары

Технические характеристики

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Улан-Удэ (3012)59-97-51
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Type X and Ex pxb purge and pressurization control unit

6000 Control System

- Certified for Class I, Class II, Division I; Zone 1 / Zone 21 to nonhazardous
- Intrinsically safe electrical/pneumatic manifold assembly
- Intrinsically safe user interface for programming and monitoring the system
- Enclosure volume up to 450 ft³ (12.7 m³)
- Control Unit monitors system operation and controls enclosure power
- Universal mounting (brackets included)
- 316L stainless steel Type 4X enclosure

6000 Series Type X and Ex pxb purge and pressurization system control unit



Function

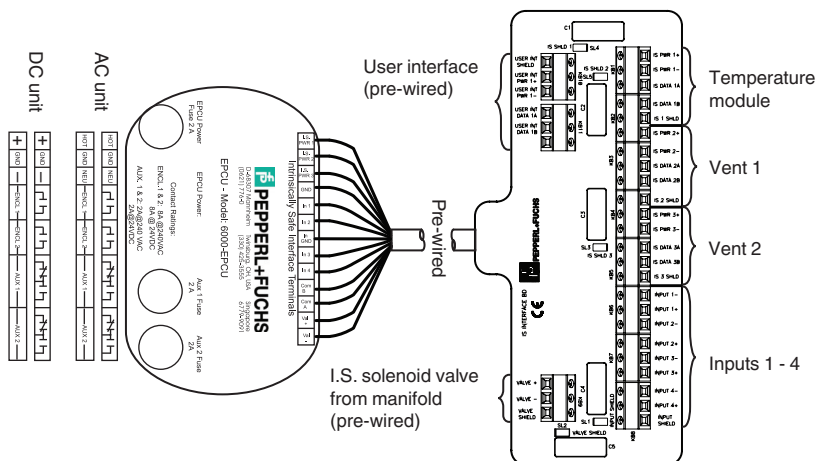
The 6000 series consists of the control unit (EPCU) and user interface (UIC) mounted in a 316L stainless steel Type 4X (IP66) enclosure with the pneumatic solenoid valve mounted on the unit. The EPV-6000 relief vent is separate and is mounted to the enclosure.

The user interface allows programming of up to 4 switch inputs, temperature modules, enclosure power contacts, 2 auxiliary outputs, and various operational functions. Also, the user interface screen allows monitoring and easy configuration.

Among the additional features are inputs for system bypass, enclosure power on/off, temperature overload and activation of Rapid Exchange flow for cooling or auxiliary relay for separate cooling source, and delay power shutdown.

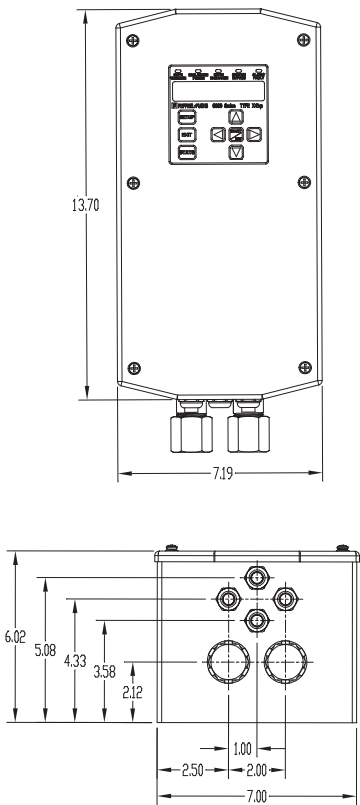
Component kits are available for custom installations.

Connection

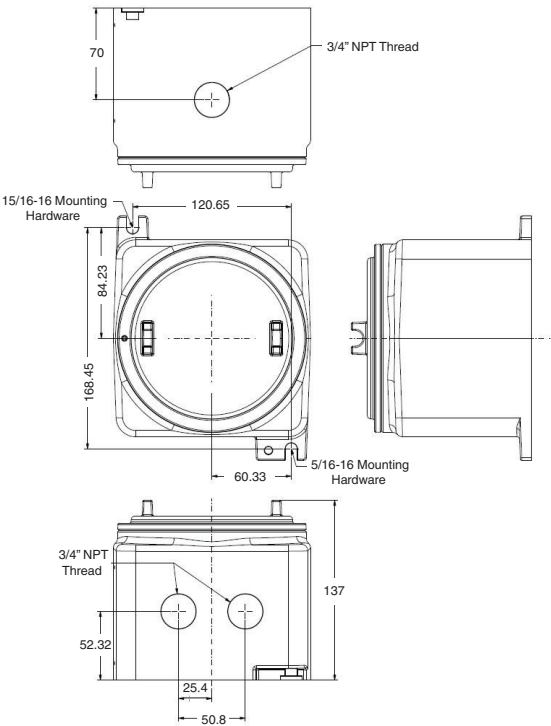


Dimensions

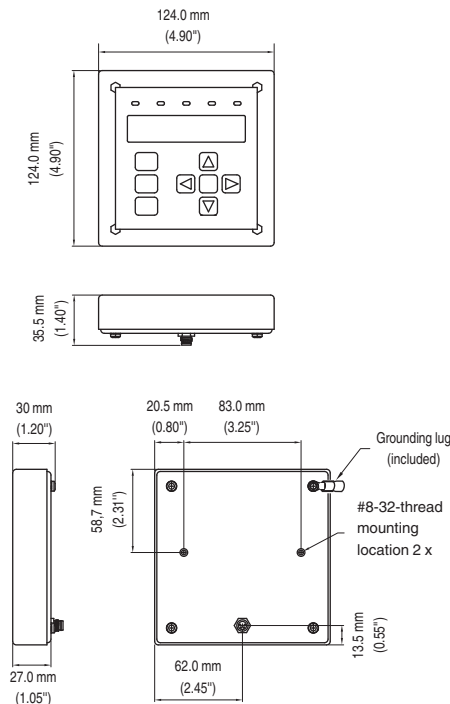
Main Control Unit



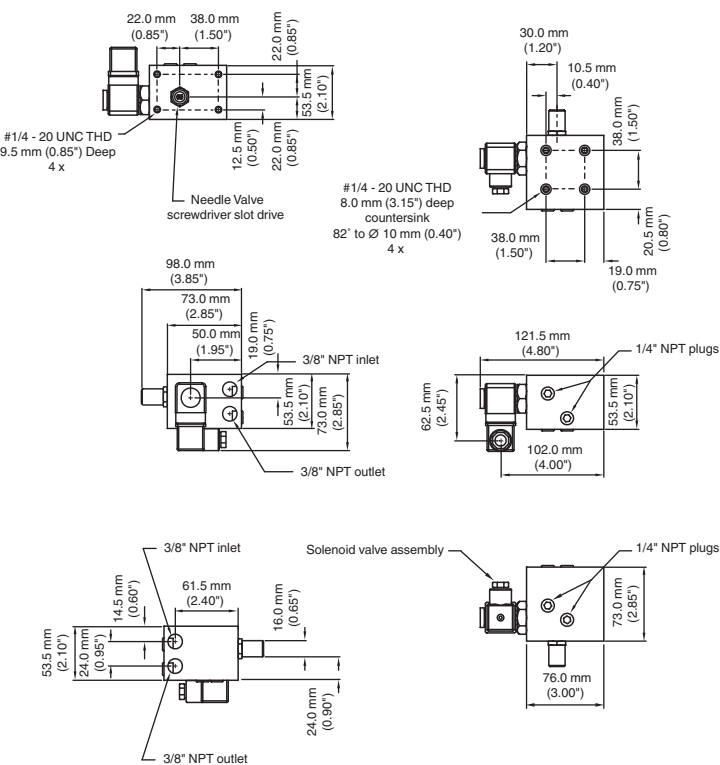
EPCU with Ex Enclosure for Component Kit



User Interface for Component Kit



Manifold for Component Kit



Technical Data

General specifications		
Operating mode		manual, semi-automatic, or fully automatic - programmable
Series		6000 Series
System		Type X Purge ; Ex pxb Purge
Number of volume exchanges		4 to 19
Hazardous environment		gas, dust, gas and dust
Supply		
Rated voltage	U _r	90 ... 264 V AC, 48 ... 62 Hz / 0.2 A 20 ... 30 V DC
Electrical specifications		
Connection		Terminal blocks
Input		
Input I		Inputs 1, 2, 3, 4: contact input, 5 VDC @ 2 mA
Input type		intrinsically safe
Input II		Temperature inputs
Input type		intrinsically safe
Sensor type		6000-TEMP
Input III		EPV-6000 Vent
Input type		intrinsically safe
Input IV		User interface module
Connection		M8 connector, 4-pin
Input type		intrinsically safe
Output		
Output I		AUX 1
Output type		Dry contacts, SPDT
Inrush current		5 A
Contact loading		2 A @ 240 VAC resistive load 2 A @ 24 VDC
Output II		AUX 2
Output type		Dry contacts, SPDT
Inrush current		5 A
Contact loading		2 A @ 240 VAC resistive load 2 A @ 24 VDC
Output III		ENC_1, ENC_2 (protected enclosure contacts)
Output type		Dry contacts (2) SPST, NO
Contact loading		8 A @ 240 VAC / 120 VAC resistive load 8 A @ 24 VDC
Indicators/settings		
LED indication		Safe pressure: Blue - safe pressure is achieved Enclosure power: Green - power on; Red - power off Rapid exchange: Blue - purging is running System bypass: Yellow - bypass is activated Alarm fault: Red (blinking) - any alarm input detected; Red (solid) - 6000 series system fault
Pneumatic parameters		
Protective gas supply		instrument grade air or inert gas
Pressure requirement		20 ... 120 psig (1.4 ... 8.3 bar) (138 ... 827 kPa) regulated
Safe pressure		Gas: 0.25" wc (6.4 mm wc) (0.625 mbar) (62 Pa) Dust: 0.65" wc (16.5 mm wc) (1.6 mbar) (162 Pa) Gas and Dust: 0.65" wc (16.5 mm wc) (1.6 mbar) (162 Pa)
Purge flow rate		Maximum flow rate measurement for enclosure size (enclosure volume:flow rate): < 20 ft³ (0.57 m³): 5, 12 SCFM (141, 340 l/min), or dynamic 20 ... 30 ft³ (0.57 ... 0.85 m³): 5, 12, 20 SCFM (141, 340, 565 l/min), or dynamic > 30 ft³ (0.85 m³): 5, 12, 20, 30 SCFM (141, 340, 565, 850 l/min), or dynamic

Technical Data

Purge flow and enclosure pressure rate	With EPV-6000-xx-01, EPV-6000-xx-02 5 SCFM @ 1.5" wc, (141 l/min @ 3.7 mbar) 12 SCFM @ 2.0" wc, (340 l/min @ 5.0 mbar) 20 SCFM @ 2.7" wc, (565 l/min @ 6.7 mbar) 30 SCFM @ 4.1" wc, (850 l/min @ 10.2 mbar) With EPV-6000-xx-03, EPV-6000-xx-04 5 SCFM @ 2.1" wc, (141 l/min @ 5.2 mbar) 12 SCFM @ 2.6" wc, (340 l/min @ 6.5 mbar) 20 SCFM @ 4.1" wc, (565 l/min @ 10.2 mbar) 30 SCFM @ 5.3" wc, (850 l/min @ 13.2 mbar) With EPV-6000-xx-05, 06 5 SCFM @ 1.8" wc, (141 l/min @ 4.5 mbar) 12 SCFM @ 2.9" wc, (340 l/min @ 7.3 mbar) 20 SCFM @ 7.4" wc, (565 l/min @ 18.5 mbar)
Flow rate for leakage compensation	Depends on enclosure seal. With EPV-6000-xx-01, EPV-6000-xx-02 0.35 SCFM @ 0.25" wc (10.0 l/min @ 6.3 mbar) 1.0 SCFM @ 0.75" wc (28.0 l/min @ 1.9 mbar) With EPV-6000-xx-03, EPV-6000-xx-04 0.22 SCFM @ 0.25" wc (6.2 l/min @ 6.3 mbar) 0.58 SCFM @ 0.75" wc (16.4 l/min @ 1.9 mbar) With EPV-6000-xx-05, EPV-6000-xx-06 0.15 SCFM @ 0.25" wc (4.2 l/min @ 6.3 mbar) 0.35 SCFM @ 0.75" wc (10.0 l/min @ 1.9 mbar)
Ambient conditions	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-30 ... 80 °C (-22 ... 176 °F)
Relative humidity	5 ... 95 %, noncondensing
Vibration resistance	5 ... 100 Hz , 1 g, 12 m/s ² , all axes
Impact resistance	30 g, 11 ms, all axes
Mechanical specifications	
Connection type	Pneumatic : Inlet fitting to manifold: 3/8" ferrule fitting Outlet fitting from manifold: 3/8" ferrule fitting Inlet fitting to enclosure: 3/8" bulkhead fitting
Cable gland	4 - M16 x 1.5 cable gland
Degree of protection	Type 4X , IP66
Material	Enclosure: 316L (UNS S31603) stainless steel Manifold valve: anodized 6082 aluminum Fittings: 316L (UNS S31603) stainless steel
Mass	-WH- 11.4 kg (25 lb) -CK- 7.2 kg (16 lb)
Dimensions	183 x 367.5 x 152.5 mm (7.20 x 14.45 x 6.00 inch)
Height	367.5 mm
Width	183 mm
Depth	152.5 mm
Data for application in connection with hazardous areas	
EU-type examination certificate	
Marking	6000 main control unit with housing 6000-xx-S2-UN-xx-xx: ATEX UL/Demko 07 ATEX 0705753X II 2 G Ex db ib [ib Gb] [pxb Gb] IIC T4 Gb (-20 °C ≤ Ta ≤ 60 °C) II 2 D Ex tb [ib Db] [pxb Db] IIIC T60°C Db (-20 °C ≤ Ta ≤ 50 °C) 6000 main control unit kit version 6000-xx-S2-UN-CK-xx: ATEX UL/Demko 07 ATEX 0705753X II 2 G Ex db [ib Gb] [pxb Gb] IIC T4 Gb (-20 °C ≤ Ta ≤ 60 °C) II 2 D Ex tb [ib Db] [pxb Db] IIIC T80°C Db (-20 °C ≤ Ta ≤ 60 °C) User interface 6000-UIC-xx: ATEX UL/Demko 07 ATEX 0705753X II 2 G Ex ib [pxb Gb] IIC T4 Gb
Directive conformity	
Directive 2014/34/EU	IEC/EN 60079-0 IEC/EN 60079-1 IEC/EN 60079-2 IEC/EN 60079-11 IEC/EN 60079-31
Directive 94/9/EC	
International approvals	

Technical Data

UL approval		6000 Main control unit with housing 6000-xx-S2-UN-xx-xx: cULus Class I, Division 1, Groups A,B,C,D T4 (-20 °C ≤ Ta ≤ 60 °C) Class II, Division 1, Groups E,F,G T4 (-20 °C ≤ Ta ≤ 50 °C) Class I, Zone 1, Group IIC T4 (-20 °C ≤ Ta ≤ 60 °C) Class II, Zone 21, Group IIIC T60 °C (-20 °C ≤ Ta ≤ 50 °C) [Ex i] Associated Equipment Ex db ib [ib Gb] [pxb Gb] IIC T4 (-20 °C ≤ Ta ≤ 60 °C) Ex ib tb [ib Db] [pxb Db] IIIC T4 (-20 °C ≤ Ta ≤ 50 °C) 6000 Main control unit kit version 6000-xx-S2-UN-CK-xx: cULus Class I, Division 1, Groups A,B,C,D T4 (-20 °C ≤ Ta ≤ 60 °C) Class II, Division 1, Groups E,F,G T4 (-20 °C ≤ Ta ≤ 60 °C) Class I, Zone 1, Group IIC T4 Class II, Zone 21, Group IIIC T60 °C [Ex i] Associated Equipment Ex db [ib Gb] [pxb Gb] IIC T4 X (-20 °C ≤ Ta ≤ 60 °C) Ex tb [ib Db] [pxb Db] IIIC T4 X (-20 °C ≤ Ta ≤ 60 °C) User interface 6000-UIC-xx: cULus (-20 °C ≤ Ta ≤ 60 °C) Class I, Division 1, Groups A,B,C,D T4 Class I, Zone 1, Group IIC T4 Ex i Intrinsically safe
IECEx approval		6000 Main Control unit with housing 6000-xx-S2-UN-xx-xx: IECEx UL 08.0003X Ex db ib [ib Gb] [pxb Gb] IIC T4 Gb (-20 °C ≤ Ta ≤ 60 °C) Ex ib tb [ib Db] [pxb Db] IIIC T60 °C Db (-20 °C ≤ Ta ≤ 50 °C) 6000 Main control unit kit version 6000-xx-S2-UN-CK-xx: IECEx UL 08.0003X Ex db [ib Gb] [pxb Gb] IIC T4 Gb (-20 °C ≤ Ta ≤ 60 °C) Ex tb [ib Db] [pxb Db] IIIC T80 °C Db (-20 °C ≤ Ta ≤ 60 °C) User interface 6000-UIC-xx: IECEx UL 08.0003X Ex ib [pxb Gb] IIC T4 Gb
General information		

Assembly



Type Code

6	0	0	0	-	D	V	-	S	2	-	U	N	-	W	H	-	A	C
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Valve type
DV digital solenoid valve
NV no valve



Voltage requirement
AC 100 - 250 VAC
DC 20 - 30 VDC

Connection style
WH with stainless steel housing
CK component kit
XD with Ex de coupling



6000 Series intrinsically safe termination board

6000-ISB-01

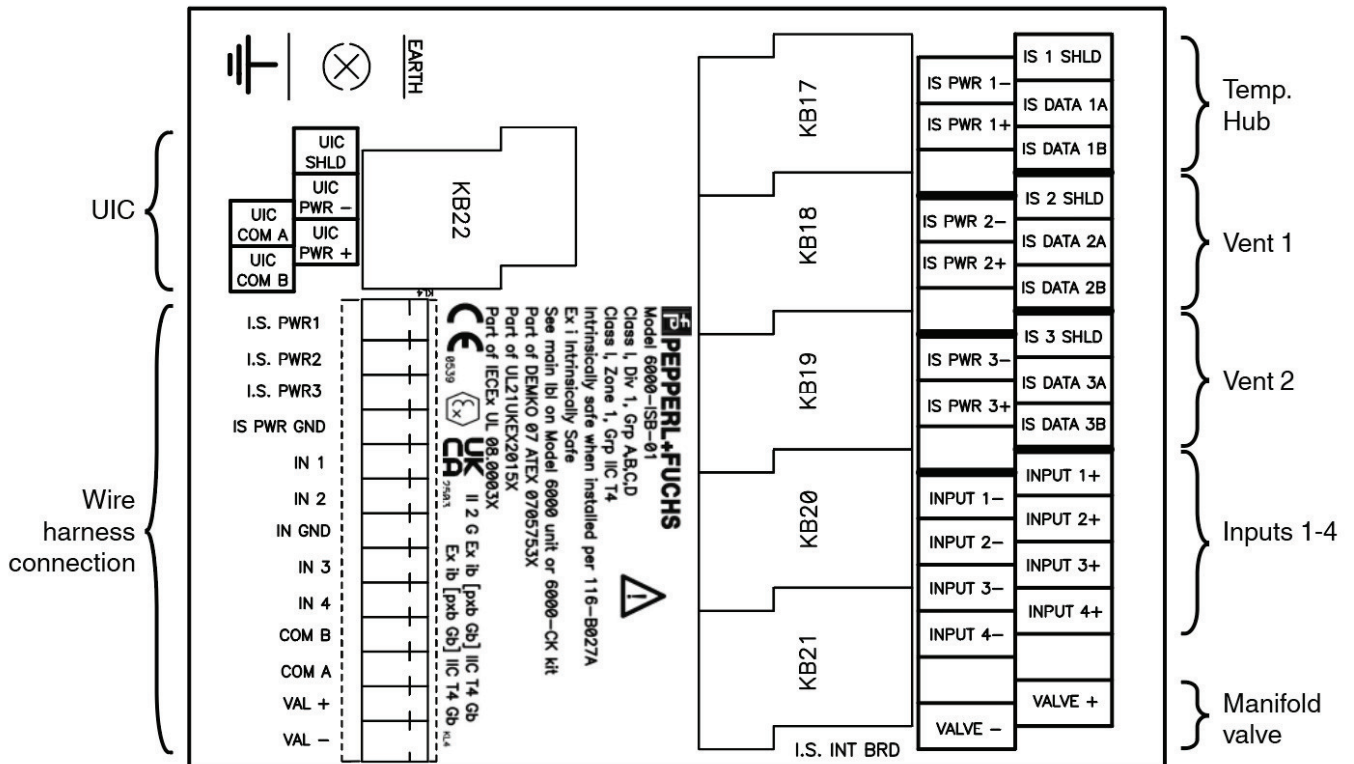
- Interface for field connection back to EPCU
- DIN rail mounting
- Easy termination of connections
- Removable terminal on EPCU side



Function

The intrinsically safe termination board is DIN rail mountable within a pressurized enclosure or other suitable enclosure. The terminal board allows for interfacing of the vent(s), Temperature Hub, User-interface, manifold valve, and the 4 digital inputs from the field. The board and its connection are intrinsically safe and should maintain proper distance from non-intrinsically safe wiring. When mounted in a pressurized enclosure the board is only rated for hazardous gas atmosphere. However, if mounted in hazardous dust atmosphere a proper enclosure is required.

Connection



Technical Data

General specifications

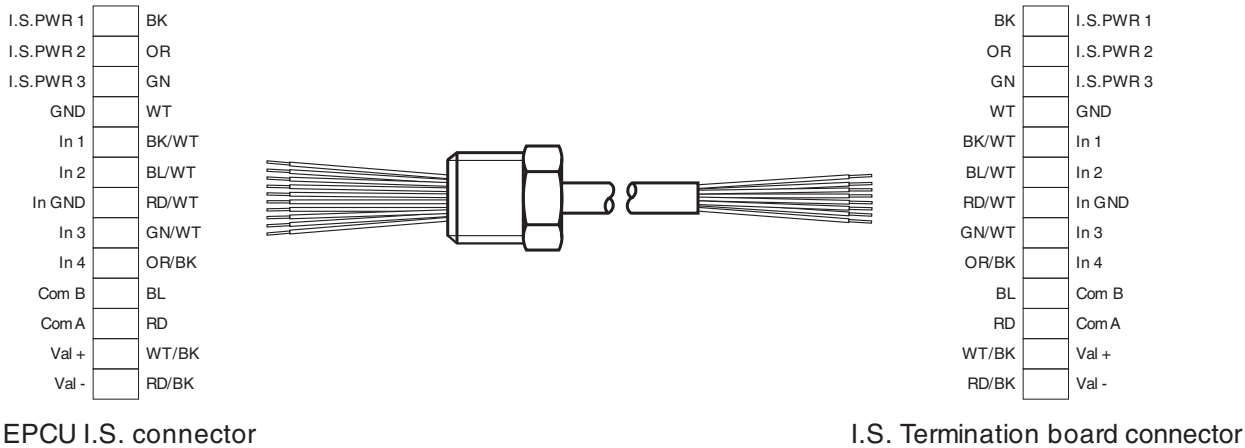
Series	6000 Series
System	Type X Purge ; Ex pxb Purge

Technical Data

Electrical specifications		
Connection		Shield / ground: capacitively coupled to ground
Mechanical specifications		
Connection type		Screw Terminals Field devices: 0.13 - 2.08 mm ² max (26 - 14 AWG) Torque 5-7 in-lb (0.6 to 0.8 Nm) Screw Terminals EPCU: 0.08 - 1.31 mm ² (28 - 16 AWG) Torque 4 in-lb (0.5 Nm)
Degree of protection		IP20
Terminal assembly		
Terminal type		Field connection
Terminal capacity		Min: 24 AWG (0.2 mm ²) Max: 12 AWG (3.3 mm ²)
Mass		800 g
Dimensions		83 x 126 x 67 mm (3.3 inch x 5.0 inch x 2.6 inch)
Mounting		DIN rail mounting , 2 mounting clips
General information		
System information		Must be used with 6000 series purge system to meet certification requirements.

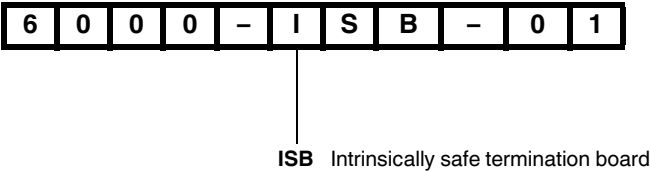
Connection

Connection (Optional)



Optional wire harness 6000-CBLA-ISB-* (not included)

Type Code





NPT to metric coupler

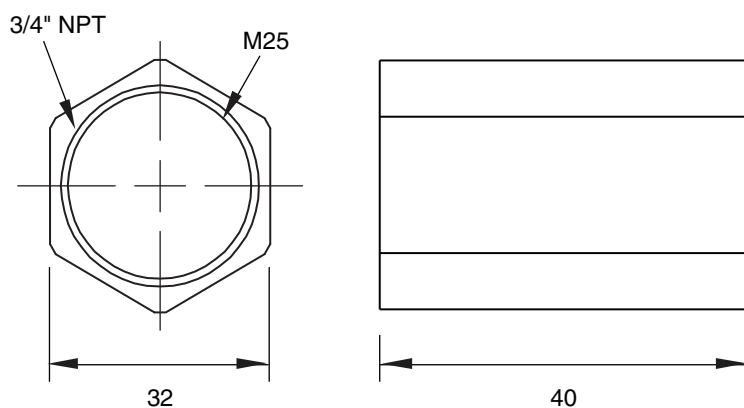
6000-COUPLER-3/4 -M25

- Converts 3/4" NPT male thread to M25 female thread
- Exd, Exe fittings
- Easy to add on any certified cable gland

Function

The 6000-COUPLER, female to female adapter, is designed to convert the 3/4" NPT male power conduit of the purge 6000 Series control unit to a female metric size thread so that standard certified cable glands can be used.

Dimensions



Technical Data

Ambient conditions

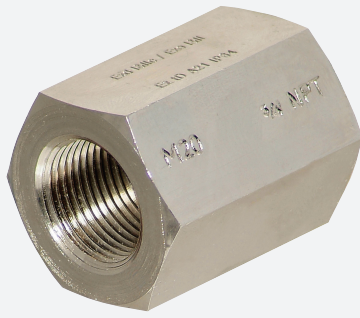
Ambient temperature	-60 ... 200 °C (-76 ... 392 °F)
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Mechanical specifications

Degree of protection	IP64
Material	brass, nickel-plated
Dimensions	40 mm long x 32 mm across the flats

Data for application in connection with hazardous areas

EC-Type Examination Certificate	Sira 10ATEX1225X Sira 00ATEX1073U IECEx SIR 09.084U GOST TC C-GB.06.B00105 INMETRO NCC 12.0764U
Group, category, type of protection	Exd I&Ic / Exe I&I / Ex tD A21



NPT to metric coupler

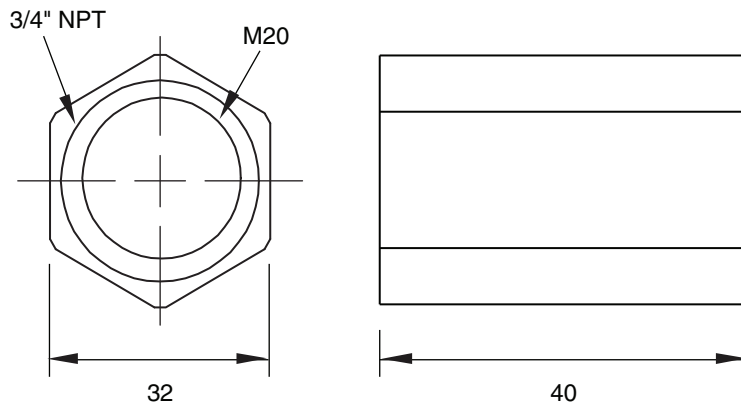
6000-COUPLER-3/4-M20

- Converts 3/4" NPT male thread to M20 female thread
- Exd, Exe fittings
- Easy to add on any certified cable gland

Function

The 6000-COUPLER, female to female adapter, is designed to convert the 3/4" NPT male power conduit of the purge 6000 Series control unit to a female metric size thread so that standard certified cable glands can be used.

Dimensions



Technical Data

Ambient conditions

Ambient temperature	-60 ... 200 °C (-76 ... 392 °F)
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Mechanical specifications

Degree of protection	IP64
Material	brass, nickel-plated
Dimensions	40 mm long x 32 mm across the flats

Data for application in connection with hazardous areas

EC-Type Examination Certificate	Sira 10ATEX1225X Sira 00ATEX1073U IECEx SIR 09.084U GOST TC C-GB.06.B00105 INMETRO NCC 12.0764U
Group, category, type of protection	Exd I&Ic / Exe I&I / Ex tD A21



6000 Series Vent

EPV-6000-**-**

- Maximum enclosure size 450 ft³ (12.7 m³)
- Pressure relief vent with flow and pressure monitoring at the exhaust
- Universal mounting in any orientation
- 6000 Control Unit supports 2 vents
- Different vents for different applications

BEBCO EPS[®]

6000 series purge and pressurization system vent



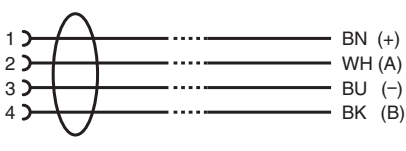
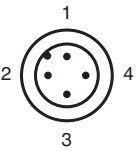
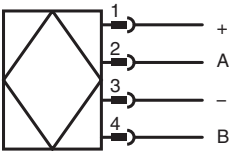
Function

The EPV-6000 vent exhausts excess pressure from the enclosure and measures flow and pressure during operation. The 6000 series vent has a pressure transducer and thermal flow sensor that is connected to the 6000 EPCU. It is intrinsically safe through the galvanic isolation barrier within the 6000 EPCU.

Because measurement of the flow is always at the exhaust of the pressurized enclosure, the vent is located on the enclosure(s) such that it is venting to the atmosphere. The EPV-6000 vent can be mounted vertically or horizontally and is not gravity dependent.

The EPV-6000 vent can be mounted external or internally to the enclosure. When mounting internally, only the vent cap is exposed to the outside atmosphere.

Connection



EPV-6000-**-** Cordset, M12, 4-pin, shielded 6000 Control Unit

Technical Data		
General specifications		
Series	6000 Series	
System		Type X Purge ; Ex pxb Purge
Number of volume exchanges	4 to 19	
Hazardous environment		gas, dust, gas and dust
Electrical specifications		
Connection		
Power	Intrinsically Safe back to 6000 control unit	
Signal		BUS back to 6000 control unit

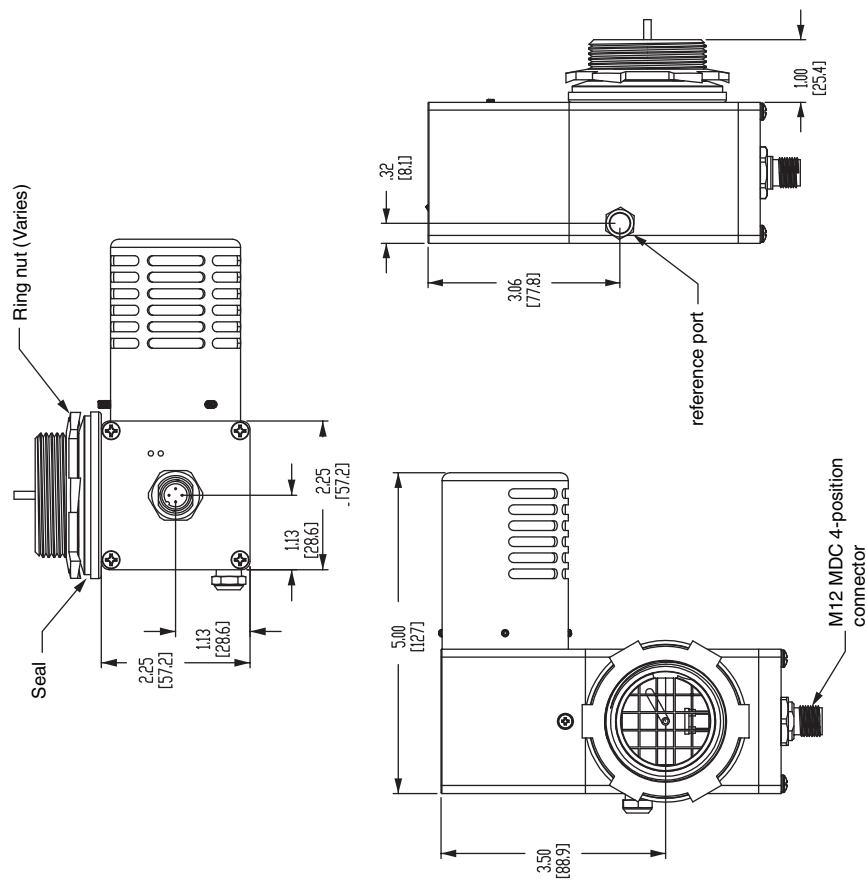
Technical Data

Connection		M12 connector, 4-pin
Indicators/settings		
LED indication		power: green vent number: yellow, on for second vent
Pneumatic parameters		
Protective gas supply		instrument grade air or inert gas
Safe pressure		Gas: 0.25" wc (6.4 mm wc) (0.625 mbar) (62 Pa) Dust: 0.65" wc (16.5 mm wc) (1.6 mbar) (162 Pa) Gas and Dust: 0.65" wc (16.5 mm wc) (1.6 mbar) (162 Pa)
Enclosure pressure		0 ... 9.9" wc (25 mbar) (250 mm wc)
Max. enclosure pressure		25" wc (62 mbar) (625 mm wc)
Purge flow rate		Maximum flow rate measurement for enclosure size (enclosure volume:flow rate): < 20 ft³ (0.57 m³): 5, 12 SCFM (141, 340 l/min), or dynamic 20 ... 30 ft³ (0.57 ... 0.85 m³): 5, 12, 20 SCFM (141, 340, 565 l/min), or dynamic > 30 ft³ (0.85 m³): 5, 12, 20, 30 SCFM (141, 340, 565, 850 l/min), or dynamic
Purge flow and enclosure pressure rate		With EPV-6000-xx-01, EPV-6000-xx-02 141 l/min @ 3.7 mbar, (5 SCFM @ 1.5" wc) 340 l/min @ 5.0 mbar, (12 SCFM @ 2.0" wc) 565 l/min @ 6.7 mbar, (20 SCFM @ 2.7" wc) 850 l/min @ 10.2 mbar, (30 SCFM @ 4.1" wc) With EPV-6000-xx-03, EPV-6000-xx-04 141 l/min @ 5.2 mbar, (5 SCFM @ 2.1" wc) 340 l/min @ 6.5 mbar, (12 SCFM @ 2.6" wc) 565 l/min @ 10.2 mbar, (20 SCFM @ 4.1" wc) 850 l/min @ 13.2 mbar, (30 SCFM @ 5.3" wc) With EPV-6000-xx-05, 06 141.6 l/min @ 4.1 mbar, (5 SCFM @ 1.64" wc) 339.8 l/min @ 5.5 mbar, (12 SCFM @ 2.20" wc) 566.3 l/min @ 14.9 mbar, (20 SCFM @ 6.00" wc)
Flow rate for leakage compensation		Depends on enclosure seal. With EPV-6000-xx-01, EPV-6000-xx-02 0.35 SCFM @ 0.25" wc (10.0 l/min @ 0.63 mbar) 1.0 SCFM @ 0.75" wc (28.0 l/min @ 1.9 mbar) With EPV-6000-xx-03, EPV-6000-xx-03 0.22 SCFM @ 0.25" wc (6.2 l/min @ 0.63 mbar) 0.58 SCFM @ 0.75" wc (16.4 l/min @ 1.9 mbar) With EPV-6000-xx-05, EPV-6000-xx-06 0.15 SCFM @ 0.25" wc (4.2 l/min @ 0.63 mbar) 0.35 SCFM @ 0.75" wc (10.0 l/min @ 1.9 mbar)
Breaking pressure		EPV-6000-xx-01, EPV-6000-xx-02: 0.8" wc (2.0 mbar) EPV-6000-xx-03, EPV-6000-xx-04: 1.3" to 1.4" wc (3.2 to 3.5 mbar) EPV-6000-xx-05, EPV-6000-xx-06: 1.4" to 1.5" wc (3.5 to 3.8 mbar)
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013 EN 61000-6-2:2005
RoHS		
Directive 2011/65/EU (RoHS)		EN IEC 63000:2018
Ambient conditions		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °F)
Storage temperature		-30 ... 80 °C (-22 ... 176 °F)
Relative humidity		5 ... 95 %, noncondensing
Vibration resistance		5 ... 100 Hz , 1 g, 12 m/s², all axes
Impact resistance		30 g, 11 ms, all axes
Mechanical specifications		
Material		EPV-6000-AA-.... Cap: marine grade 5052 anodized aluminum, marine grade 6061T6 anodized aluminum EPV-6000-SS-.... Cap: 316L (UNS S31603) stainless steel; Body: marine grade 6061T6 anodized aluminum
Spark arrestor		304 (UNS S30400) stainless steel
Installation		- any orientation to enclosure - not gravity dependent - internal and external mounting possible
Mass		approx. 1.4 kg (3.1 lb)
Dimensions		127.5 x 146 x 82.5 mm (5.05 x 5.75 x 3.25 inch)
Height		146 mm

Technical Data

Width	127.5 mm
Depth	82.5 mm
Mounting	1 1/2" NPT knockout (50.8 mm (2") hole) with sealed nut
Data for application in connection with hazardous areas	
EU-type examination certificate	DEMKO 15 ATEX 1622X
Marking	II 2 G Ex ib [pxb Gb] IIC T4 Gb II 2 D Ex ib [pxb Db] IIIC T135 °C Db -20 °C ≤ Ta ≤ 60 °C
Directive conformity	
Directive 2014/34/EU	EN IEC 60079-0:2018 , EN 60079-2:2014 , EN 60079-11:2012
International approvals	
UL approval	cULus Class I, Division 1, Groups A, B, C, D IP66/Type 4X Class I, Zone 1, Groups IIC, T4 Class II, Division 1, Groups E, F, G Class II, Zone 21, Group IIIC T135 °C -20 °C ≤ TA ≤ 60 °C Ex i intrinsically safe
IECEx approval	Ex ib [pxb Gb] IIC T4 Gb Ex ib [pxb Db] IIIC T135 °C Db -20 °C ≤ Ta ≤ 60 °C IECEx UL 15.0147X
General information	

Dimensions



Type Code

E	P	V	-	6	0	0	0	-	A	A	-	0	1
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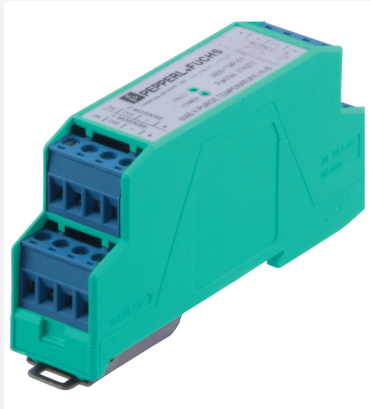


Configuration

- 01 standard configuration
- 02 standard configuration, 2nd vent
- 03 low leakage rate for pressurization/low flow
- 04 low leakage rate for pressurization/low flow, 2nd vent
- 05 very low leakage rate for pressurization/low flow
- 06 very low leakage rate for pressurization/low flow, 2nd vent

Body type

- AA anodized aluminum body and cap
- SS anodized aluminum body and 316L stainless steel cap



Temperature hub

6000-TEMP-01

- Allows for temperature sensing to automatically initiate cooling or heating of enclosure
- Intrinsically safe and loop powered with the 6000 Series control unit
- Suitable for Zone 1 and Division 1 mounting
- Four temperature points per hub
- Temperature control for purged/pressurized enclosures

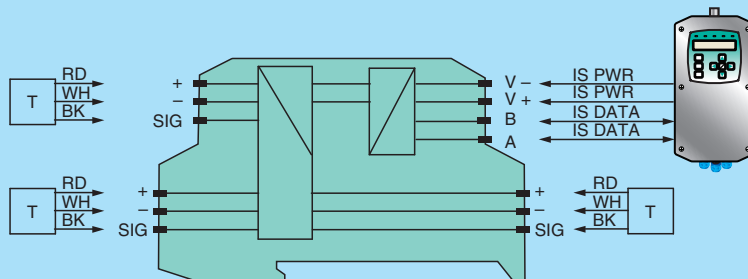
Temperature Hub for 6000 Series Purge system



Function

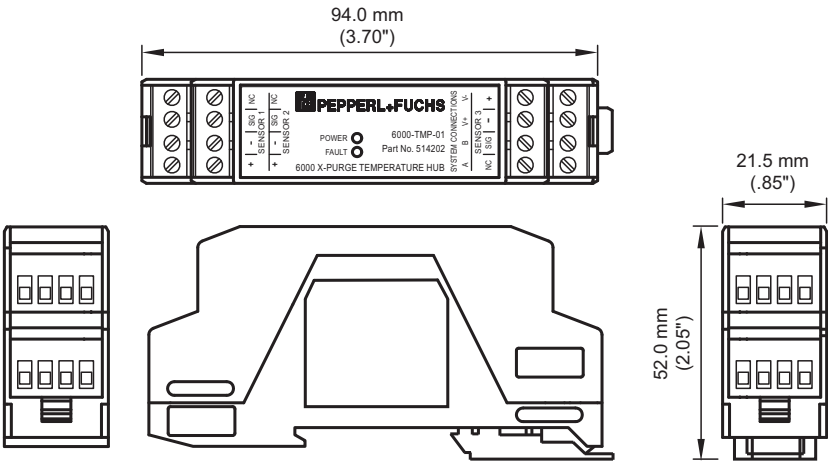
The 6000-TEMP-01 is intrinsically safe when connected to the control unit and will provide intrinsically safe connections for up to three (3) 6000-TSEN-01 temperature sensors. The 6000-TEMP-01 has one embedded temperature sensor for a single point temperature function. The 6000-TEMP-01 can only be used with the 6000 Series control unit and cannot be used as a standalone device. This unit can be mounted in Zone 1 and Class I / Division 1 locations but must be protected in Zone 21 and Class II / Division 1 locations.

Connection



Zone 1, 2
Class 1, Div. 1, 2

Dimensions



Technical Data

General specifications		
Series	6000 Series	
System		Type X Purge ; Ex pxb Purge
Electrical specifications		
Connection		
Power	Intrinsically Safe back to 6000 control unit	
Signal		BUS back to 6000 control unit
Connection	Intrinsically Safe cabling	
Rated voltage	U _r	13 V DC
Rated current	I _r	max. 10 mA
Distance		20 m to 6000 Control Unit
Ambient conditions		
Ambient temperature		-20 ... 85 °C (-4 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Relative humidity		< 95 % non-condensing
Vibration resistance		1 g , 10 ... 100 Hz , all axes
Impact resistance		30 g, 11 ms, all axes
Mechanical specifications		
Connection type		screw terminals
Core cross section		12 ... 30 AWG
Housing material		Akulon S225-KS
Degree of protection	IP20	

Technical Data

Mass		approx. 110 g
Dimensions		99 mm x 52 mm x 23 mm
Mounting		panel or DIN rail mounting
Data for application in connection with hazardous areas		
EU-type examination certificate		UL/Demko 07 ATEX 0705753X
International approvals		
UL approval		File no: E184741
cULus		File no: E184741
IECEX approval		IECEX UL 08.0003X



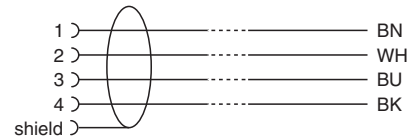
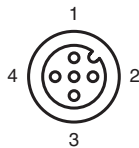
I.S. cordset and label for the 6000 series purge system

6000-ACC-514485

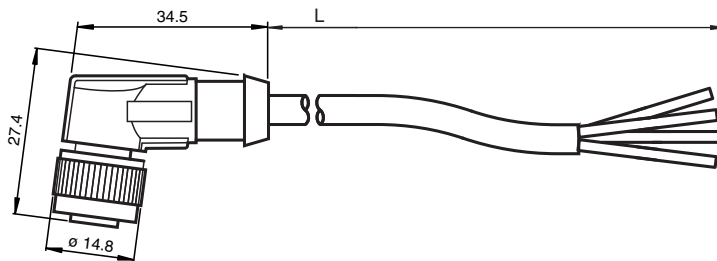
- Immunity to vibration, with mechanical latching
- Gold-plated and machined contacts
- I.S. wiring ID tag

5 m, shielded M12 cable

Connection Assignment



Dimensions



Technical Data

General specifications

Number of pins	4
Connection 1	socket
Construction type 1	right angle
Threading 1	M12
Connection 2	cable end

Electrical specifications

Technical Data

Operating voltage	U_B	max. 300 V DC
Test voltage		> 1500 V _{eff} AC
Operating current	I_B	max. 4 A
Volume resistance		< 5 mΩ
Ambient conditions		
Ambient temperature		-25 ... 105 °C (-13 ... 221 °F)
Pollution degree		3
Mechanical specifications		
Pin diameter		1 mm
Degree of protection		IP69K
Material		
Contacts		CuSn
Contact surface		Ni/Au
Body		TPU , yellow
Cable		PVC
Slotted nut		Zinc die-casting, nickel-plated
Core insulation		PVC
Cable		fine-strand, flexible
Sheath diameter		Ø 5.9 mm
Bending radius		10 x cable diameter
Color		yellow
Cores		4 x 0.34 mm ²
Length	L	5 m
Flammability		
Contact carrier		94 V-2
Housing		94 V-2
Cable		VW-1 flame rating from UL
General information		
Supplementary information		Kit contains: 5 m, shielded M12 cable I.S. wire identification tags



Temperature sensor

6000-TSEN-01

- Remote sensor
- Suitable for Zone 1 and Division 1 mounting
- Intrinsically safe when used with the 6000 Series purge system control unit
- Easy mounting for temperature measurements up to 3 m from the temperature hub

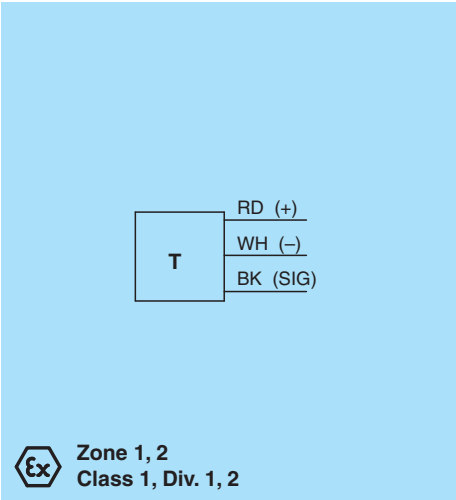
Temperature Sensor for 6000 Series Purge system



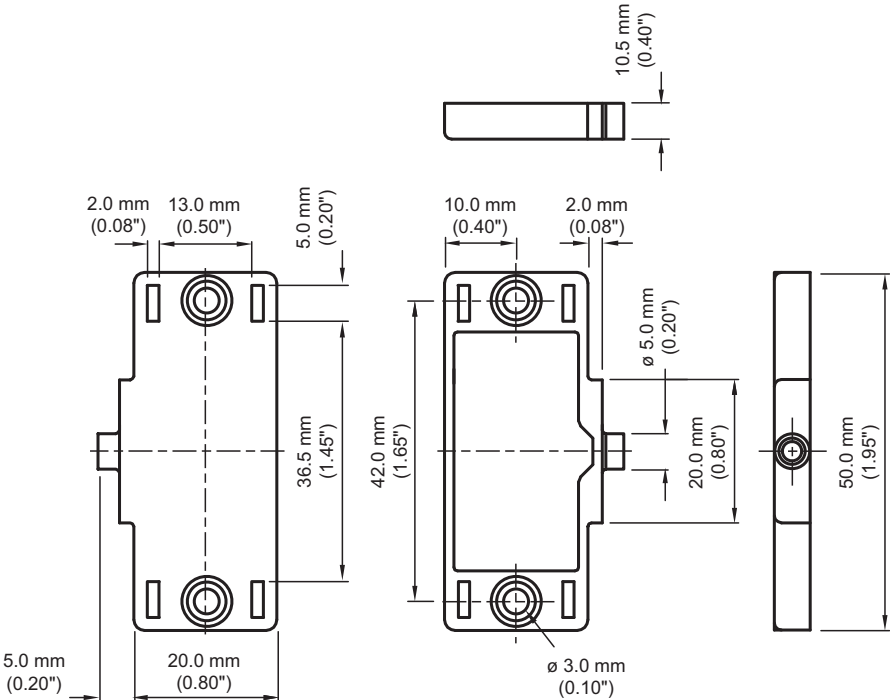
Function

The 6000-TSEN-01 temperature sensor is designed to be used with the 6000-TEMP-01 temperature hub and the 6000 Series purge and pressurization system.
Up to three (3) 6000-TSEN-01 temperature sensors can be mounted throughout the purged enclosure and connected to one (1) temperature hub. Multiple sensors can provide maximum or average enclosure temperature.
The 6000-TSEN-01 can only be used with the 6000-TEMP-01 temperature hub and cannot be used as a standalone device. This unit can be mounted in Zone 1 & 21 and Class I & II / Division 1 locations.
Note: The 6000-TSEN-01 is not required for a single temperature point as one (1) is included within the 6000-TEMP-01 device.

Connection



Dimensions



Technical Data

General specifications		
Series	6000 Series	
System		Type X Purge ; Ex pxb Purge
Electrical specifications		
Connection		
Power	+ , - , sensors	
Rated voltage	U _r	5.5 V DC
Rated current	I _r	max. 10 mA
Open loop voltage		9.6 V
Distance	3 m from 6000 control unit 3 m from 6000-TEMP-01	
Ambient conditions		
Ambient temperature	-20 ... 100 °C (-4 ... 212 °F)	
Storage temperature		-40 ... 100 °C (-40 ... 212 °F)
Relative humidity	< 95 % non-condensing	
Vibration resistance		1 g , 10 ... 100 Hz , all axes
Impact resistance	30 g, 11 ms, all axes	
Mechanical specifications		
Housing material	Ryton BR III BL	
Degree of protection		IP65
Cable	Gray PVC	
Diameter		5.03 mm ²

Technical Data

Wire gauge	22 AWG
Mass	approx. 110 g
Dimensions	50 mm x 25 mm x 5 mm
Mounting	panel or DIN rail mounting
Data for application in connection with hazardous areas	
EU-type examination certificate	UL/Demko 07 ATEX 0705753X
International approvals	
UL approval	File no: E184741
cULus	File no: E184741
IECEX approval	IECEX UL 08.0003X

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