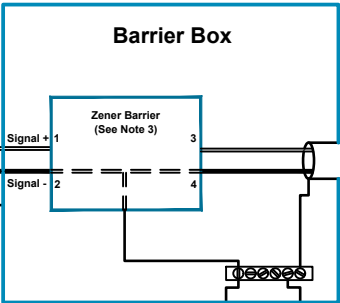
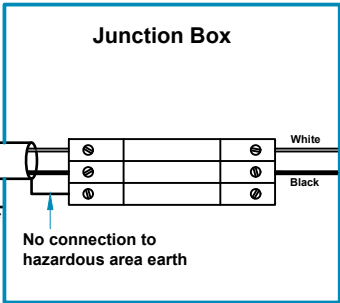


Non-hazardous area apparatus which is unspecified except that it must not be supplied from nor contain under normal or abnormal conditions, a source of potential with respect to earth in excess of 250 volts rms or 250 volts dc. under normal conditions the potential at the connections to the zener barrier must not exceed 40 volts dc.

Non-Hazardous Area



Hazardous Area
CI I, II,III, Div 1, 2 Gr A-G
CI 1 Zone 0, CI Zone 20



See Note 1 & 2

Inner screen connected to accelerometer body

HS-150I Series or HS-150IS Series and HS-170I Series or HS-170IS Series Accelerometer

Certificate details: Group II and III Integral Cable

SGSNA/19/BAS/00005
CI I, II, III, Div 1, 2 Gr A-G T*
CI I Zn 0 AEx ia IIC T6...T4 Ga
CI II Zn 20 AEx ia IIIC T*...T* Da
CI II Zn 20 AEx ia IIIB T*...T* Da
Ex ia IIC T6...T4 Ga
Ex ia IIIC T110°C...T145 Da

Certificate details: Group II and III Connector

SGSNA/19/BAS/00005
CI I, II, III, Div 1, 2 Gr A-G T*
CI I Zn 0 AEx ia IIC T6...T4 Ga
CI II Zn 20 AEx ia IIIC T135°C Da
Ex ia IIC T6...T4 Ga
Ex ia IIIC T135°C Da

Terminal Parameters Connector

Ui = 28V, li = 93mA, Pi = 0.65W
Ci = 1.2nF
Li = 0

Terminal Parameters 10m of cable

Ui = 28V, li = 93mA, Pi = 0.65W
Ci = 5.0nF
Li = 7.2µH

Terminal Parameters 92m of cable

Ui = 28V, li = 93mA, Pi = 0.65W
Ci = 35.9nF
Li = 66µH

Isolators/Zener Barriers

Ui ≥ Uo
li ≥ lo
Pi ≥ Po
Co ≥ Ci + Ccable
Lo ≥ Li + Lcable

Certified Temperature Range

Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +57°C) (Gas)
Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +103°C) (Gas)
Ex ia IIIB T110°C Da (-55°C ≤ Ta ≤ +57°C) (Dust Connector Only)
Ex ia IIIC T110°C Da (-55°C ≤ Ta ≤ +57°C) (Dust Integral Cable Only)
Ex ia IIIC T135°C Da (-55°C ≤ Ta ≤ +70°C) (Dust Connector and Integral cable)
Ex ia IIIB T145°C Da (-55°C ≤ Ta ≤ +92°C) (Dust Connector Only)
Ex ia IIIC T145°C Da (-55°C ≤ Ta ≤ +92°C) (Dust Integral Cable Only)

500V Isolation

Units Will Pass A 500V Isolation Test

Hansford Sensors Ltd
HS-150I, HS-150IS, HS-170I and HS-170IS Series Accelerometer System

Notes:

- The cable from the accelerometer to the junction box must not be installed in a high velocity dust laden atmosphere.
- Any single zener diode safety barrier certified by an approved body to [Ex ia] IIC having the following output parameters: Uo = 28V dc, Io = 93mA dc, Po = 0.65W. e.g. MTL7728 to BAS01ATEX7217 or Pepperl + Fuchs Z728 to BAS01ATEX7005.
- The installer is to perform a risk assessment in accordance with clause 10 of EN 60079-25 and install lightning protection arrestors as deemed necessary.

Special conditions of use: When a sensor is supplied with integral cable, this must be terminated in an enclosure providing at least degree of protection IP20.

Note: If the equipment is to be used in unusual environments or aggressive substances are likely to be encountered, contact the manufacturer to discuss suitability.

Rev No	DRF No	Date Drg	Drg By	Appd By
A	Release	15/03/19	MJS	CMH

Material: N/A

Tolerances Unless Stated

0 or 0.0 ±0.5
0.00 ±0.15
Angle ±5°

1.6/√ Finish All Over
Threads g6 H6

Hansford Sensors Ltd
Artisan, Hillbottom Rd
Sands Industrial Estate
High Wycombe
Bucks HP12 4HJ

Do Not Scale

All Dimensions In mm Unless Otherwise Stated

If In Doubt - Ask!

Description: **System Connections For HS-150I, HS-150IS and HS-170IS Accelerometers With Silicon Cable F.U.W. Zener Barrier**

Drawing No: **M06-085-A**

Scale: **NTS**
Sheet: **2 of 2**

Form Number: **QF024 Issue 1**