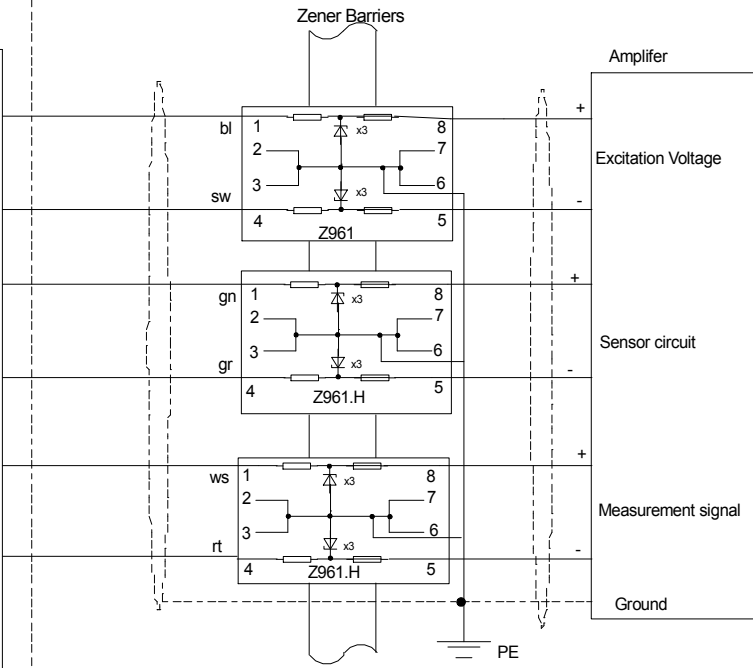
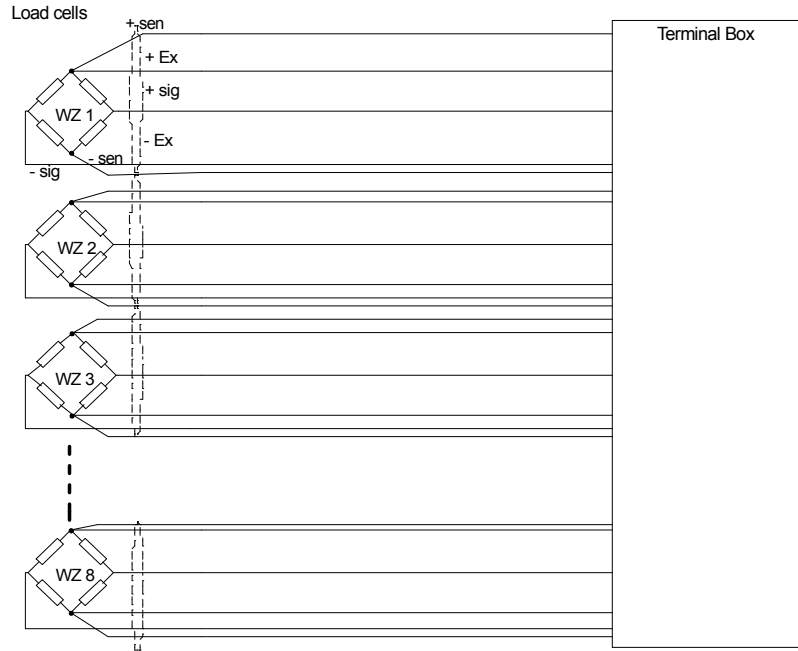


HAZARDOUS AREA

NON HAZARDOUS AREA



Technical data Zener Barriers:

Type Z961
 Pepperl+Fuchs
 Ⓢ II (1) GD [Ex ia Ga] IIC
 BAS 01 ATEX 7005
 -20 °C < Ta < 60 °C
 U_{o1} = 8,7 V U_{o2} = 8,7 V
 I_{o1} = 89 mA I_{o2} = 89 mA
 P_{o1} = 190 mW P_{o2} = 190 mW
 C_{o1IC1} = 5,9 µF C_{o1IC2} = 5,9 µF
 L_{o1IC1} = 4,5 mH L_{o1IC2} = 4,5 mH
 R_{o1} = 98 Ohm R_{o2} = 98 Ohm

Type Z961.H
 Pepperl+Fuchs
 Ⓢ II (1) GD [Ex ia Ga] IIC
 BAS 01 ATEX 7005
 -20 °C < Ta < 60 °C
 U_{o1} = 8,7 V U_{o2} = 8,7 V
 I_{o1} = 25 mA I_{o2} = 25 mA
 P_{o1} = 50 mW P_{o2} = 50 mW
 C_{o1IC1} = 5,9 µF C_{o1IC2} = 5,9 µF
 L_{o1IC1} = 56,9 mH L_{o1IC2} = 56,9 mH
 R_{o1} = 352,8 Ohm R_{o2} = 352,8 Ohm

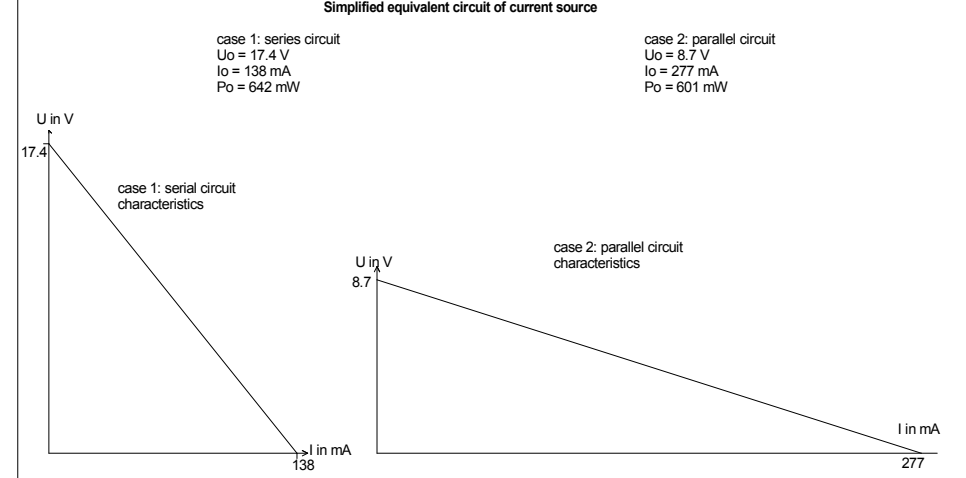
Load cells:
 e.g. HLC I-S-H-S-V3030-OV1-C-E HBM
 Ⓢ II 1 G Ex ia IIC T6/T4 Ga
 Ⓢ II 1 D Ex ia IIIC T125°C Da
 -30 °C < Ta < 70 °C
 BVS 13 ATEX E 108 X
 U = 30 V
 I = 500 mA
 P = 4 W
 C, L = negligible

Load cell cable:
 6 x 0.14 mm²
 HBM 200.00-7277 EA
 C_{c,c} = 162 nF/km
 L_{c,c} = 0.85 mH/km
 l_{c,c} = 6 m
 C_{o1,c,c} = 8 x 0.972 nF = 7.776 nF x 6 = 46.66 nF
 L_{o1,c,c} = 2 x 5.1 µH = 10.2 µH

Terminal box
 VKK2R-8Ex HBM
 Ⓢ II 2G Ex ia IIC T4 Gb
 Ⓢ II 2D Ex ia IIIC T125 °C Db
 -20 °C < Ta < 70 °C
 PTB 05 ATEX 2014
 U = 22 V
 I = 469 mA
 P = 4 W
 L, C = negligible

Measurement Cable:
 Li2YCY PIMF 3 x 2 x 0.5 mm²
 Cable type B
 Lapp
 C_{o1TS} = 75 nF/km
 L_{o1TS} = 0.4 mH/km
 l_{o1TS} = 100 m
 C_{o1S,c} = 6 x 7.5 nF = 45 nF
 L_{o1S,c} = 2 x 40 µH = 80 µH

Alternative measurement cable:
 LF-2YAEVY 3 x 2 x 0.14 mm²
 Cable type B
 HBM
 C_{o1TS} = 130 nF/km
 L_{o1TS} = 1 mH/km
 l_{o1TS} = 100 m
 C_{o1S,c} = 6 x 13 nF = 78 nF
 L_{o1S,c} = 2 x 100 µH = 200 µH



In accordance with ISpark - Calculation:
 These values are uncritical

Created by M. Rottmann	Checked by	Approved by - Date	File name	Date 2017-04-24	Scale
ExGuide Technology - Günter Kämper VDI Birkenstrasse 10 DE 44579 Castrop - Rauxel Tel.: 02305 3571-30 Fax.: 02305 12704 E-Mail: info@exguide.de URL: http://www.exguide.de			Control-Drawing ATEX Load cell SD01A-8LC		
Draw. No.: 1718035023_3a			Version 1.0	Page 1/1	