


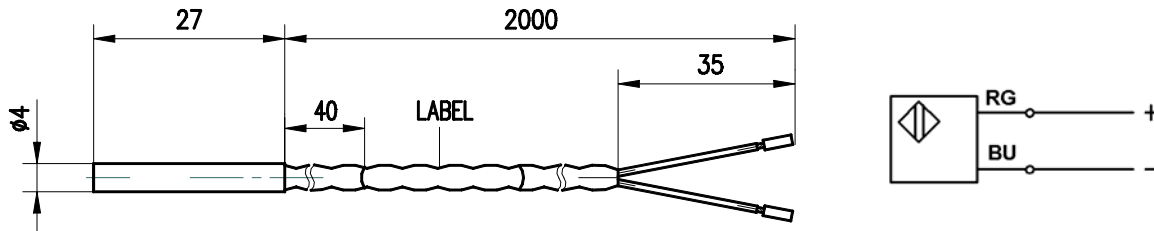
Inductive Proximity Switches

Vacuum resistant sensor

HYTECH

BALLUFF GROUP

HW19367 128607
 PROX 921AA0.4XIV-Z925
 Ø4mm L=27mm NAMUR
 S_n=0.8mm
 Shielded




Specifications

Common Data

Real switching distance (S_r) (@8.2VDC/R_{load}=1KΩ) 0.8mm -10%/+20%
 Assured operating distance (S_a) (@8.2VDC/R_{load}=1KΩ) 0...0.65mm
 Hysteresis (@8.2VDC/R_{load}=1KΩ) < 5% S_r
 Repeatability < 0.01mm
 Operating temperature range -25...70°C
 Max operating frequency 2 KHz
 Supply voltage (including ripple)* 5...30 V
 Max Current (@ 8.2VDC/R_{load}=1KΩ) 10 mA
 Nominal switching current (@8.2VDC/R_{load}=1KΩ) 1.65 mA

Mechanical Data

Housing size See drawing
 Housing material Stainless steel
 Caps material Ceramic
 Degree of protect. IP67
 Target size 4x4mm (St37)
 Cable type Teflon 2x0.09mm²
 Vacuum resistant
 Cable length 2.0m
 Potting material Tra-Con Bipax BA-3103

Table with sensing states (@ 8.2VDC/R_{Load}= 1KΩ)

State	Output Current	Distance of Nominal Target
Open	I _{open} ≤ 0.30[mA]	N.A.
Short	I _{short} ≥ 6.00[mA]	N.A.
Metal Sensed	0.30[mA] ≤ I _{sensed} ≤ 1.65[mA]	0 < S [mm] ≤ S _u (min)
No metal Sensed	1.65[mA] ≤ I _{sensed} ≤ 3.00[mA]	S _u (max) ≤ S [mm]
Target on Sensor face	0.30[mA] ≤ I _{sensed} ≤ 1.00[mA]	S [mm] = 0
Target far away	3.00[mA] ≤ I _{sensed} ≤ 6.00[mA]	S [mm] ≥ 3X S _n
Indefinite zone	1.65 [mA]	0.65mm < S _u < 1.05 mm

- R_(load) must be adapted in function of the working voltage

Black mark on the wire is the minus of the supply !