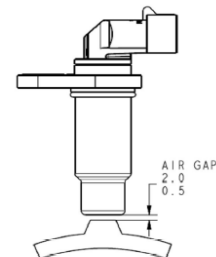
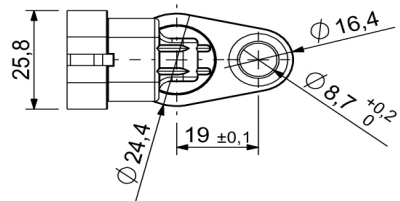
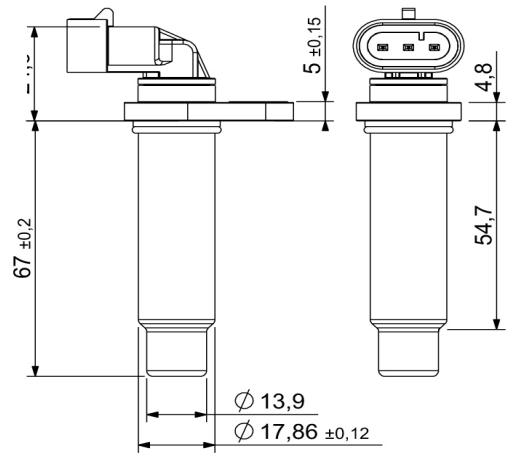


SDP00C9011632015B



Sensing range :

Sensing air gap 0,5...2,0 mm (dependent of target geometry)

Supply :

Operating voltage (Vs) 5,5...24 VDC
 Current consumption < 15 mA (5mA typical)

Output characteristics :

Output type 1x NPN
 Signal type Square wave
 Duty cycle Dependent of target geometry
 Output current 20mA Max
 Output leakage current < 50µA
 Pull-Up resistor No (no pull-up integrated)
 Pull-Down capacitor Yes (< 470pF capacitor, between Output and GND)
 Output Low level < 0,5V (with load current 20mA Max)
 Output High level >= Vs - 0,5V
 Operating frequency 0...10 KHz (dependent of target geometry and air gap)
 Output rise time < 20 µs (dependent of external pull-up resistor value)
 Output fall time <1, 5 µs

Electrical protections :

Reverse voltage protection Yes (-26 VDC)
 Over voltage protection Yes (26 VDC)
 Output protection Yes (Short-circuit & Overload protection)
 Short-circuit current < 100 mA / Ouput

EMC protections :

Radiated immunity 100 V/m (ISO 11452-2 400MHz ...2,5 GHz)
 Bulk current injection 100 mA (ISO 11452- 4 1MHz...400 MHz)
 Electrical disturbance Test pulse : a=-200V b=+200V (ISO 7637-3)
 Conductive transients Pulse 1, 2a, 3a , 3b (ISO 7637-2 for 12V system)
 ESD +/-8kV Contact , +/-15kV Air (IEC 61000-4-2)

Materials :

Housing PBT GF30
 O-ring FKM

Other characteristics :

Operating temperature range -40...+110 °C
 Storage temperature range -40...+120 °C
 Protection degree IP67 & IP69K
 Thermal shock protection 10 cycles -40°C/1H - +110°C/1H, with 3minutes changing times
 Salt fog protection 5% NaCl @ 35°C (96 Hours)
 Thermal saline dunk protection 100°C to 25°C air to liquid, 5% saline (10x cycles)
 High temp. exposure / Power +110°C, 13,5 VDC, 1kΩ load (500 hours)
 Mechanical shock 50 g half sinus EIC 68-2-27 (100 cycles +/- X, Y, Z)
 Mechanical vibration 3 axes, 4 hours per axe
 10-85 Hz: 1.5mm peak to peak
 85-2000Hz: 150m/s2 RMS
 Humidity test 95% Humidity @55°C during 48 hours
 Resistance to fluids General automotive under the hoods fluids
 MTTF > 40 years
 Connector type SuperSeal 1.5 / mating connector 282087

Pin assignment :

1 GND
 2 Output
 3 VCC (5,5...24 VDC)

Pin description :

