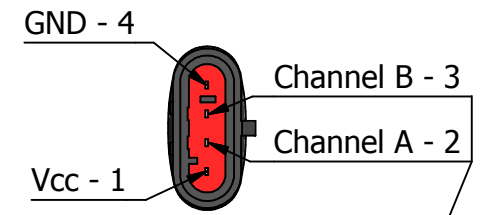
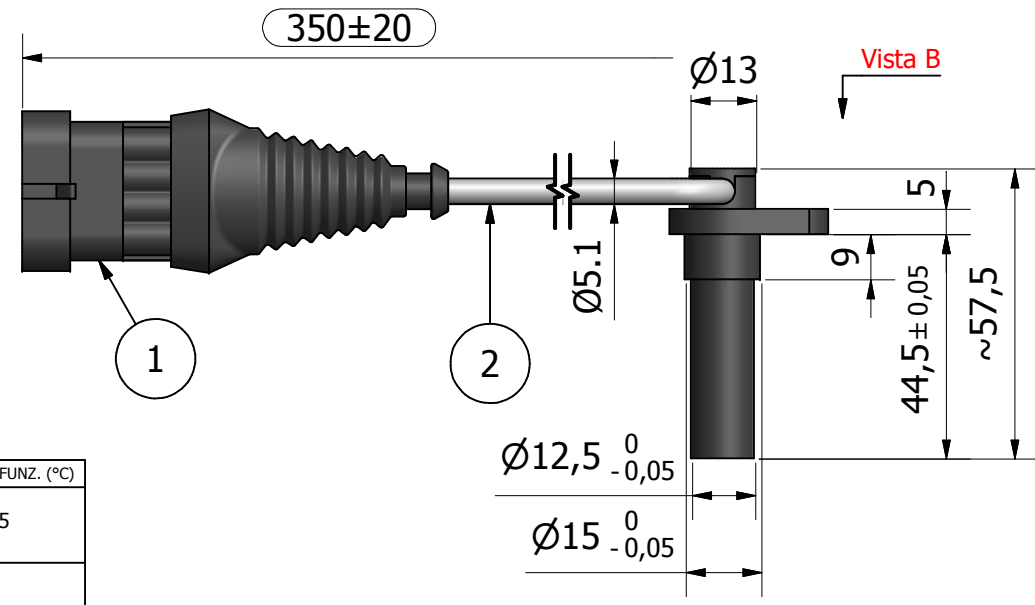
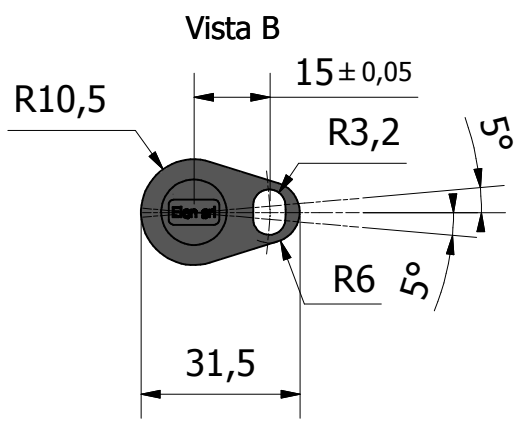
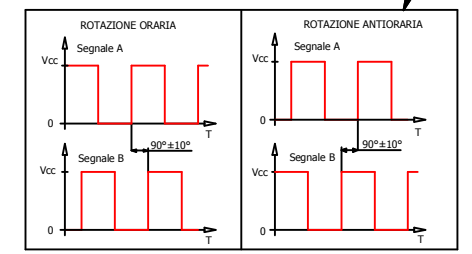


SENSORE EFFETTO HALL PER LA MISURA DI GIRI/VELOCITA' E DIREZIONE IN RUOTE FONICHE O DENTATE
HALL EFFECT SENSOR FOR MEASUREMENT OF SPEED/RPM AND DIRECTION FROM PHONIC WHEEL OR GEAR WHEEL

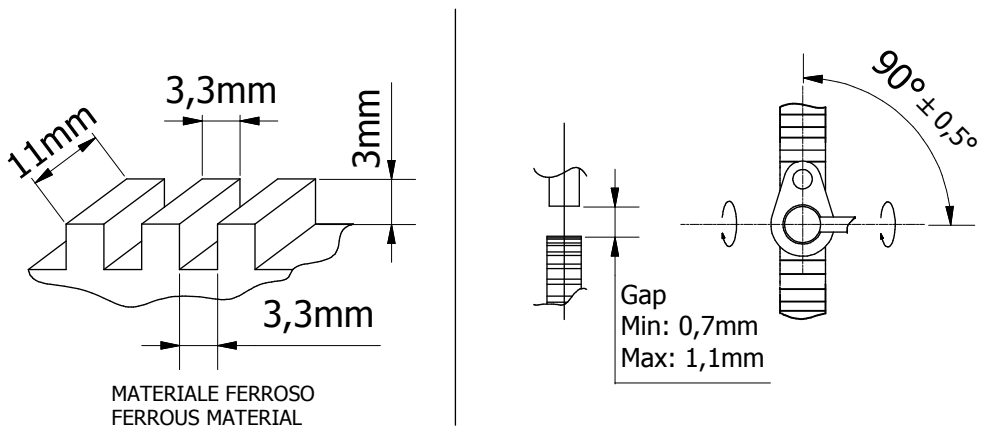


| RIF. | DESCRIZIONE | TEMPERATURA DI FUNZ. (°C) |
|------|--|---------------------------|
| 1 | TYCO SUPERSEAL 1.5series 4Pin CONTACT | -40 / +125 |
| 2 | CAVO Ø5.1mm UL 2464 - CSA C 22-2 AWM | -30 / +80 |
| 3 | TAPPO PLASTICA DP 375 | -40 / +105 |



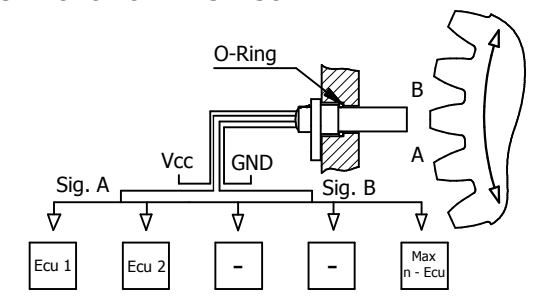
PRECISIONE : 90° ± 10°
 PRECISION : 90° ± 10°

DIMENSIONI MINIME DELLA RUOTA E INCLINAZIONE DELL'ASSE DI LETTURA
MINIMUM WHEEL SIZE AND READING AXIS INCLINATION



APPLICAZIONI TIPICHE - SENSORE PER USO AUTOMOTIVE
TYPICAL APPLICATIONS - AUTOMOTIVE SENSOR

- SENSORE PER ALBERO A CAMME
CAMSHAFT SENSOR
- SENSORE PER RUOTA DENTATA
GEARTOOTH SENSOR
- ENCODER LINEARE
LINEAR ENCODER
- ENCODER ROTATIVO
ROTARY ENCODER



GAP: Min=0,7mm
 Max=1,1mm

ATTENZIONE ! - Dispositivo sensibile alle cariche elettrostatiche
Il processo di pittura può danneggiare permanentemente il dispositivo
Proteggere il connettore con un coperchio di plastica isolante

CAUTION! - Electrostatic discharge sensitive device.
The painting process can permanently damage the device.
Protect the connector with an insulating plastic cover

| REV. | DATA | FIRMA | DESCR. ULT. REV. |
|------|------|-------|---|
| | | | ELEN srl Viale Forlanini 71 Garbagnate Milanese (MI) |
| | | | DATA: 29/04/2011 |
| | | | SCALA: 1:1.5 |
| | | | DIS.: Fabio S. |
| | | | UNITA DI MISURA: mm |
| | | | DENOMINAZIONE: SENSORE GIRI DIREZIONE |
| | | | CODICE PRODOTTO: AA.02.0006-2 1/3 |
| | | | Quote senza indicazione di tolleranza : ISO 2768 - m |

CARATTERISTICHE:

SENSORE ZERO SPEED

PRECISIONE : $90^\circ \pm 10^\circ$

ALIMENTAZIONE: Min 4.5 Vcc Max 30 Vcc

CORRENTE IN USCITA: Max 350 mA

FREQUENZA: 10 kHz

PROTEZIONE DA INVERSIONE DI POLARITA'

USCITA SEGNALE (FREQ.): OPEN COLLECTOR

RESISTENZE DI PULL-UP ESTERNE

GRADO DI PROTEZIONE: IP67

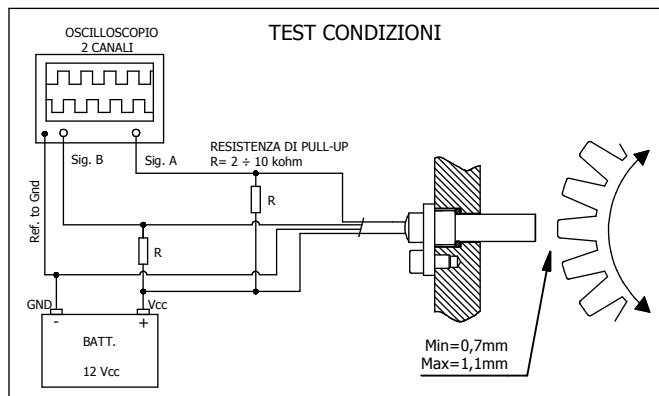
STRESS DA VIBRAZIONE: 1mm/80Hz (~4g)

TEMPERATURA DI UTILIZZO: $-40^\circ\text{C} \div +120^\circ\text{C}$

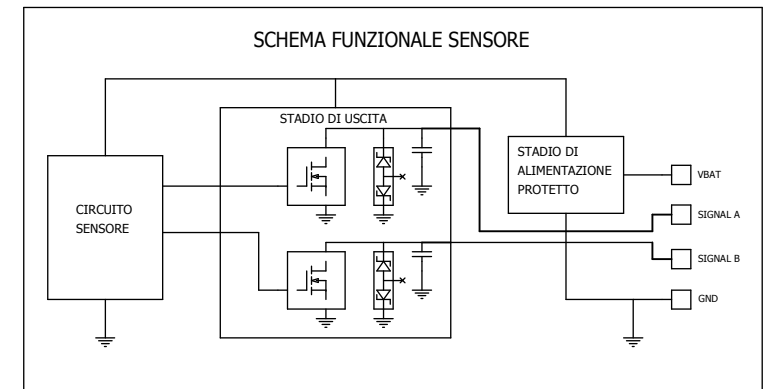
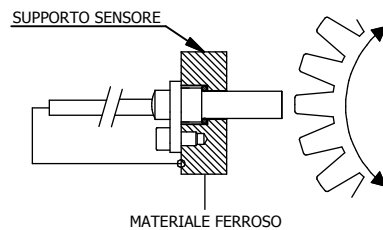
FORZA DI SERRAGGIO: 25 Nm

MATERIALE CORPO: NYLON 6 + F.V.

| | | |
|--|--|--|
| TEMPERATURA DI FUNZIONAMENTO: | $-40^\circ\text{C} \div +120^\circ\text{C}$ VALORE RIFERITO AL CASE INSERITO A RIDOSSO DELLA RUOTA | EN 60068-2-1; EN 60068-2-2 EN 60068-2-30; EN 60068-2-14 |
| TEMPERATURA DI STOCCAGGIO: | $-40^\circ\text{C} \div +120^\circ\text{C}$ | EN 60068-2-1; EN 60068-2-2 EN 60068-2-30; EN 60068-2-14 |
| RESISTENZA A VIBRAZIONI: | 1mm / 80Hz (~4g) | EN 60068-2-6 |
| GRADO DI PROTEZIONE: | IP 67 | IEC 60529 |
| COMPATIBILITA' EMC: | BCI - CLASS "A" - 100mA ; 1÷400 MHz | ISO 11452-4 (2005) |
| PROTEZIONE DA INVERSIONE DI POLARITA': | -30 Vcc PER 1h | PROCEDURA ELEN |
| PROTEZIONE DA SOVRACCARICO: | 420 mA PER 5' | PROCEDURA ELEN |
| PROTEZIONE DA SOVRATENSIONE: | 36 V PER 5' | PROCEDURA ELEN |
| PROTEZIONE DA CORTOCIRCUITO: | VERSO MASSA PER 5' VERSO VCC PER 5' | PROCEDURA ELEN |
| TENSIONE DI ALIMENTAZIONE: | Min. 4,5 Vcc Max. 30 Vcc | PROCEDURA ELEN |
| USCITE PROTETTE PER SCARICHE ELETTROSTATICHE FINO A 2000 V SECONDO MODELLO HBM | | RIF. : MIL-STD-883; method 3015. |



VERNICIATURA ELETTROSTATICA:
COLLEGARE TUTTI I CONTATTI AL SUPPORTO SENSORE



NOTE: LA ELEN SI RISERVA DI INSERIRE MIGLIORAMENTI/VARIAZIONI DI PRODOTTO, DANDONE COMUNQUE COMUNICAZIONE AL CLIENTE.
LA ELEN NON SI ASSUME ALCUNA RESPONSABILITA' SULL'USO NON APPROPRIATO DEL PRODOTTO O PER APPLICAZIONI FUORI SPECIFICA.

CHARACTERISTICS:

ZERO SPEED SENSOR

PRECISION : $90^\circ \pm 10^\circ$

POWER SUPPLY: Min 4.5 Vdc Max 30 Vdc

OUTPUT CURRENT: Max 350 mA

FREQUENCY: 10 kHz

PROTECTED BY POLARITY INVERSION

OUTPUT SIGNAL (FREQ.): OPEN COLLECTOR

EXTERNAL PULL-UP RESISTORS

DEGREE OF PROTECTION: IP67

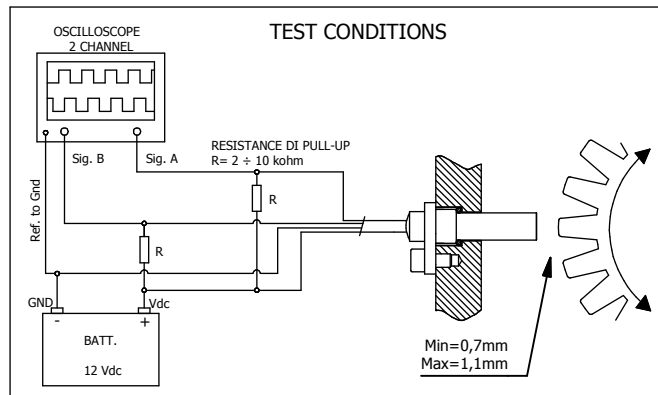
VIBRATION STRESS: 1mm/80Hz (~4g)

OPERATING TEMPERATURE: $-40^\circ\text{C} \div +120^\circ\text{C}$

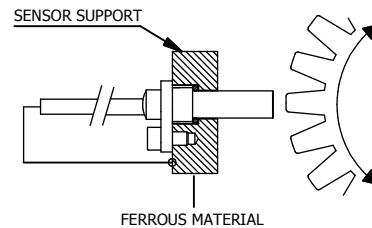
TIGHTENING TORQUE: 25 Nm

BODY MATERIALS: NYLON 6 + G.F.

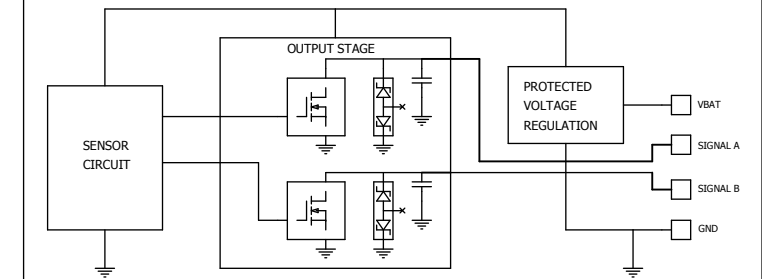
| | | |
|--|--|--|
| OPERATING TEMPERATURE: | $-40^\circ\text{C} \div +120^\circ\text{C}$ VALUE REFERRED TO A CASE MOUNTED BEHIND THE WHEEL | EN 60068-2-1;EN 60068-2-2 EN 60068-2-30;EN 60068-2-14 |
| STORAGE TEMPERATURE: | $-40^\circ\text{C} \div +120^\circ\text{C}$ | EN 60068-2-1;EN 60068-2-2 EN 60068-2-30;EN 60068-2-14 |
| VIBRATIONS RESISTANCE: | 1mm / 80Hz (~4g) | EN 60068-2-6 |
| DEGREE OF PROTECTION: | IP 67 | IEC 60529 |
| EMC COMPATIBILITY: | BCI - CLASS "A" - 100mA ; 1÷400 MHz | ISO 11452-4 (2005) |
| REVERSE POLARITY PROTECTION: | -30 Vdc PER 1h | ELEN PROCEDURE |
| OVERLOAD PROTECTION: | 420 mA PER 5' | ELEN PROCEDURE |
| OVERVOLTAGE PROTECTION: | 36 V PER 5' | ELEN PROCEDURE |
| SHORTCIRCUIT PROTECTION: | TO GROUND FOR 5' TO VDC FOR 5' | ELEN PROCEDURE |
| POWER SUPPLY: | Min. 4,5 Vdc Max. 30 Vdc | ELEN PROCEDURE |
| OUTPUT PINS ARE PROTECTED AGAINST 2000V ELECTROSTATIC DISCHARGE ACCORDING TO HBM | | RIF. : MIL-STD-883; method 3015. |



ELECTROSTATIC PAINTING:
CONNECT ALL CONTACTS TO SENSOR SUPPORT



SENSOR FUNCTIONAL SCHEME



NOTES: ELEN SRL RESERVES THE RIGHT TO MAKE MODIFICATIONS/ENHANCEMENTS TO ITS PRODUCTS, GIVING NOTICE TO THE CUSTOMERS.
ELEN SRL ASSUMES NO LIABILITY FOR NON PROPER USE OF ITS PRODUCTS AND FOR APPLICATIONS OUTSIDE OF THE INDICATED SPECIFICATIONS.

AA.02.0006-2

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