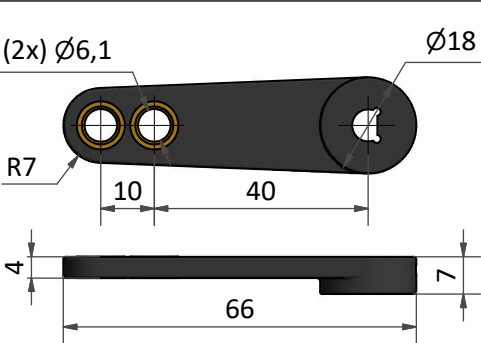
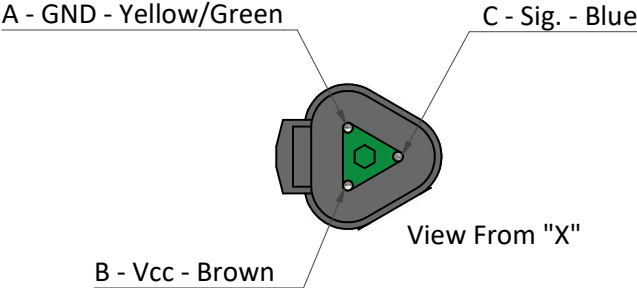
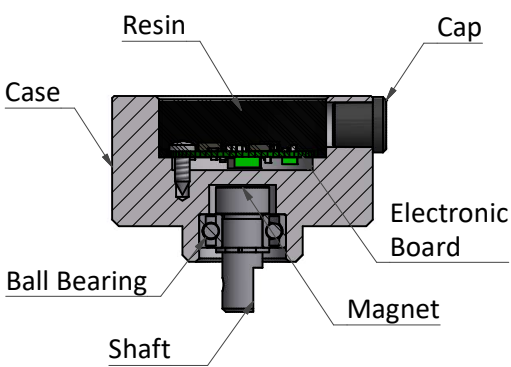
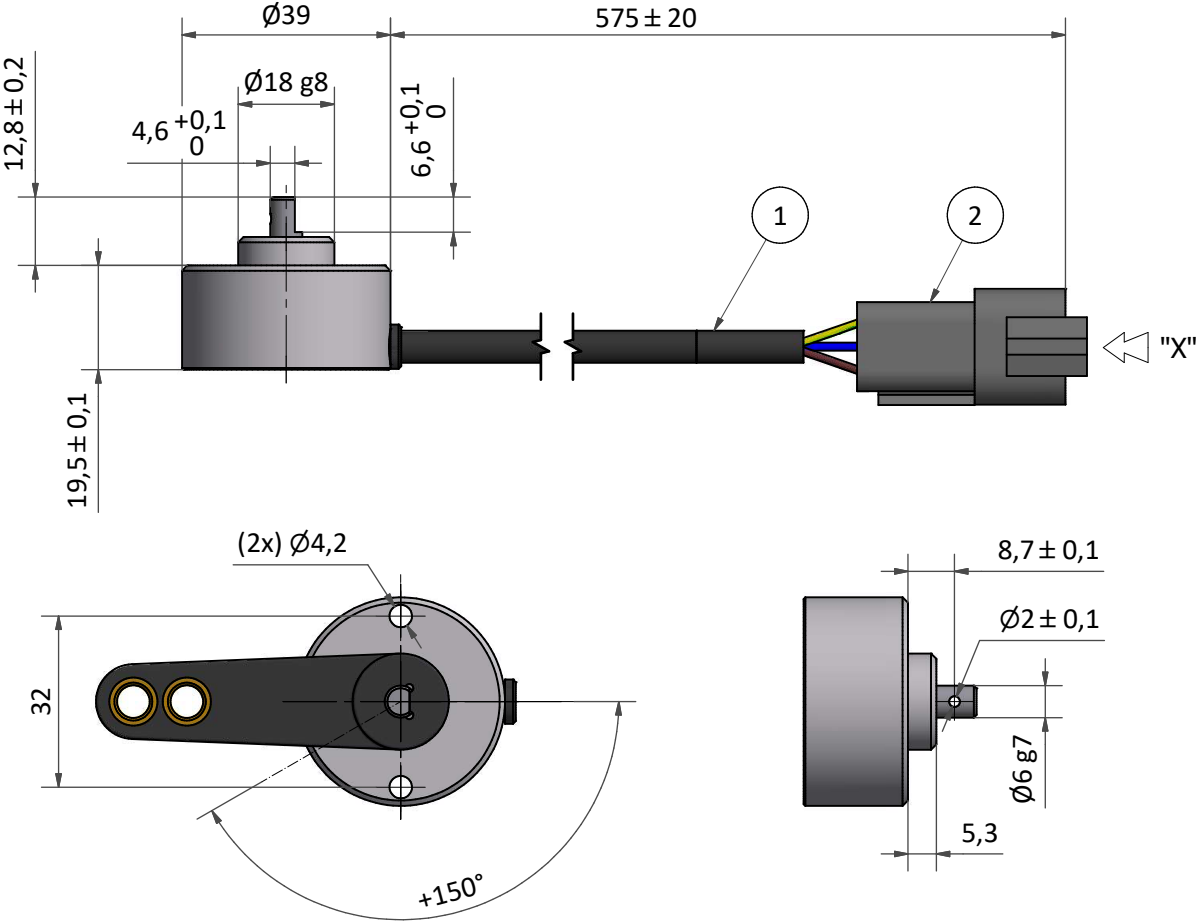


■ Angular Sensor

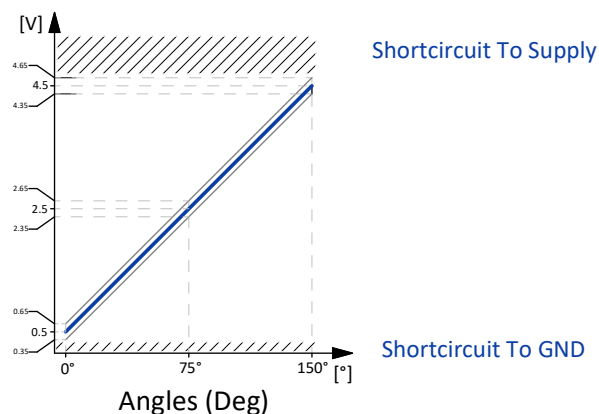


| Ref. | Description                     | Operating temperature |
|------|---------------------------------|-----------------------|
| 1    | Cable HT 105°C                  | -25 / +105            |
| 2    | 3 Pin Deutsch DT04-3P Connector | -55 / +125            |

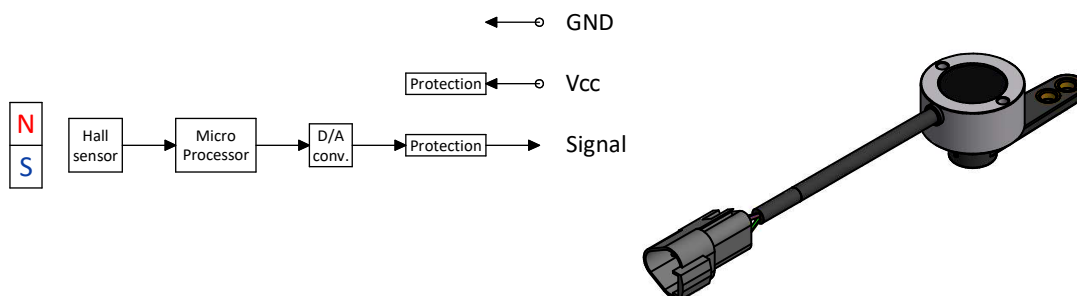
|                                                                                                                                  |  |  |  |                 |  |                                     |  |                    |  |              |  |                                                                                                   |  |            |  |
|----------------------------------------------------------------------------------------------------------------------------------|--|--|--|-----------------|--|-------------------------------------|--|--------------------|--|--------------|--|---------------------------------------------------------------------------------------------------|--|------------|--|
|  <b>ELEN</b><br>industrial vehicles sensors |  |  |  | www.elensrl.com |  | Elen Srl - Garbagnate Milanese (MI) |  |                    |  |              |  |                                                                                                   |  |            |  |
|                                                                                                                                  |  |  |  | Part Number:    |  | AA020575-27                         |  |                    |  |              |  |                                                                                                   |  |            |  |
| Rev.                                                                                                                             |  |  |  | Date            |  | Sign.                               |  | Review Description |  | Description: |  | Angular Sensor +150° 5-12V                                                                        |  |            |  |
|                                                                                                                                  |  |  |  |                 |  |                                     |  |                    |  | Designed     |  | 17/07/2020                                                                                        |  |            |  |
|                                                                                                                                  |  |  |  |                 |  |                                     |  |                    |  | Giulia M.    |  | Scale : 1 : 1 (A3 format)                                                                         |  |            |  |
|                                                                                                                                  |  |  |  |                 |  |                                     |  |                    |  | Checked      |  | Dimensions without tolerance indication:<br>ISO 2768 - m                                          |  |            |  |
|                                                                                                                                  |  |  |  |                 |  |                                     |  |                    |  | Approved     |  |  Units<br>mm |  | Page 1 / 2 |  |

## Output Signal

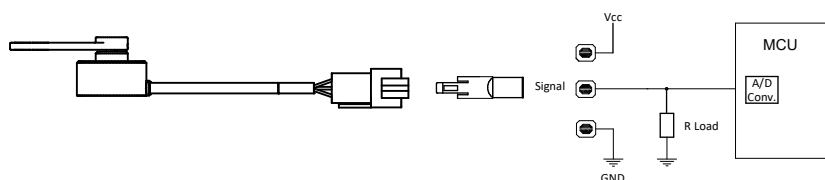
Signal (V) @  $V_{in} = 5V \div 12V$



## Functional Scheme



## Typical Application



## Technical Specifications

|               | Specific                                    | Value                                                                                                                           | Standard Reference                                           |
|---------------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| Electrical    | Power Supply (Vcc)                          | 5V±12V                                                                                                                          | PDV Rev. 3 - P. 5.1;                                         |
|               | Output Current                              | 1mA Max                                                                                                                         | PDV Rev. 3 - P. 5.5;                                         |
|               | Max Load Recommended Output                 | 220 Ω                                                                                                                           | -                                                            |
|               | Supply Current (no load)                    | ≥ 4,7 kΩ                                                                                                                        | PDV Rev. 3 - P. 5.2;                                         |
|               | Linear Output                               | 0,5V ÷ 4,5V (2.5V @ 75°)                                                                                                        | -                                                            |
|               | Overload Protection                         | 1,2mA For 1h                                                                                                                    | PDV Rev. 3 - P. 5.6;                                         |
|               | Overvoltage Protection                      | 18V for 1h                                                                                                                      | PDV Rev. 3 - P. 5.7;                                         |
|               | Temperature Operating Voltage               | +12V @ 105° For 1h                                                                                                              | PDV Rev. 3 - P. 5.8;                                         |
|               | Reverse Polarity Protection                 | -12V For 1h                                                                                                                     | PDV Rev. 3 - P. 5.3;                                         |
|               | Shortcircuit Protection                     | To Ground For 5' ; To Supply For 5'                                                                                             | PDV Rev. 3 - P. 5.4;                                         |
|               | Insulation Resistance                       | 1000MΩ@500V                                                                                                                     | PDV Rev. 3 - P. 5.10;                                        |
|               | Dielectric Rigidity                         | 750V@50Hz For 60s                                                                                                               | PDV Rev. 3 - P. 5.11;                                        |
|               | ESD Protection                              | ±8kV Contact; ±15kV Air                                                                                                         | EN 61000-4-2;                                                |
|               | Linearity                                   | <±1%                                                                                                                            | -                                                            |
|               | Resolution                                  | <0.1°                                                                                                                           | -                                                            |
| Environmental | Operating Temperature                       | -40°C ÷ +105°C                                                                                                                  | IEC 60068-2-14; IEC60068-2-1;<br>IEC60068-2-2; IEC60068-2-30 |
|               | Degree Of Protection                        | IP67                                                                                                                            | IEC 60529;                                                   |
|               | Storage Temperature                         | -40°C ÷ +115°C                                                                                                                  | IEC 60068-2-14; IEC60068-2-1;<br>IEC60068-2-2; IEC60068-2-30 |
|               | Vibrations Resistance - Random              | f=10Hz@PSD=1.44g2/Hz;<br>f=100Hz@PSD=3.85 g2/Hz;<br>f=1000Hz@PSD=3.85g2/Hz;<br>f=2000Hz@PSD=0.96g2/Hz;<br>3 Axes - 24h for Axis | IEC 60068-2-64;                                              |
|               | Vibrations Resistance - Sine                | (5±12.87)Hz@displacement ±15mm,<br>(12.87÷200)Hz@dis ±15mm@5g,<br>10octave/min, 20 Sweep Cycles                                 | IEC 60068-2-6<br>ENS 0310 Rev. J                             |
|               | EMC Compatibility - Magnetic Field Immunity | 15Hz ÷ 150 kHz                                                                                                                  | ISO11452-2:2007;                                             |
| Mech.         | EMC Compatibility - BCI                     | BCI Class "A" - 100mA; (1÷400)MHz                                                                                               | ISO11452-4;                                                  |
|               | Body Material                               | Aluminium With Antioxidant Treatment                                                                                            | -                                                            |
|               | Shaft Material                              | Stainless Steel                                                                                                                 | -                                                            |