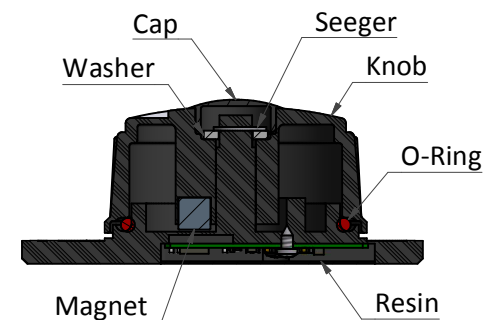
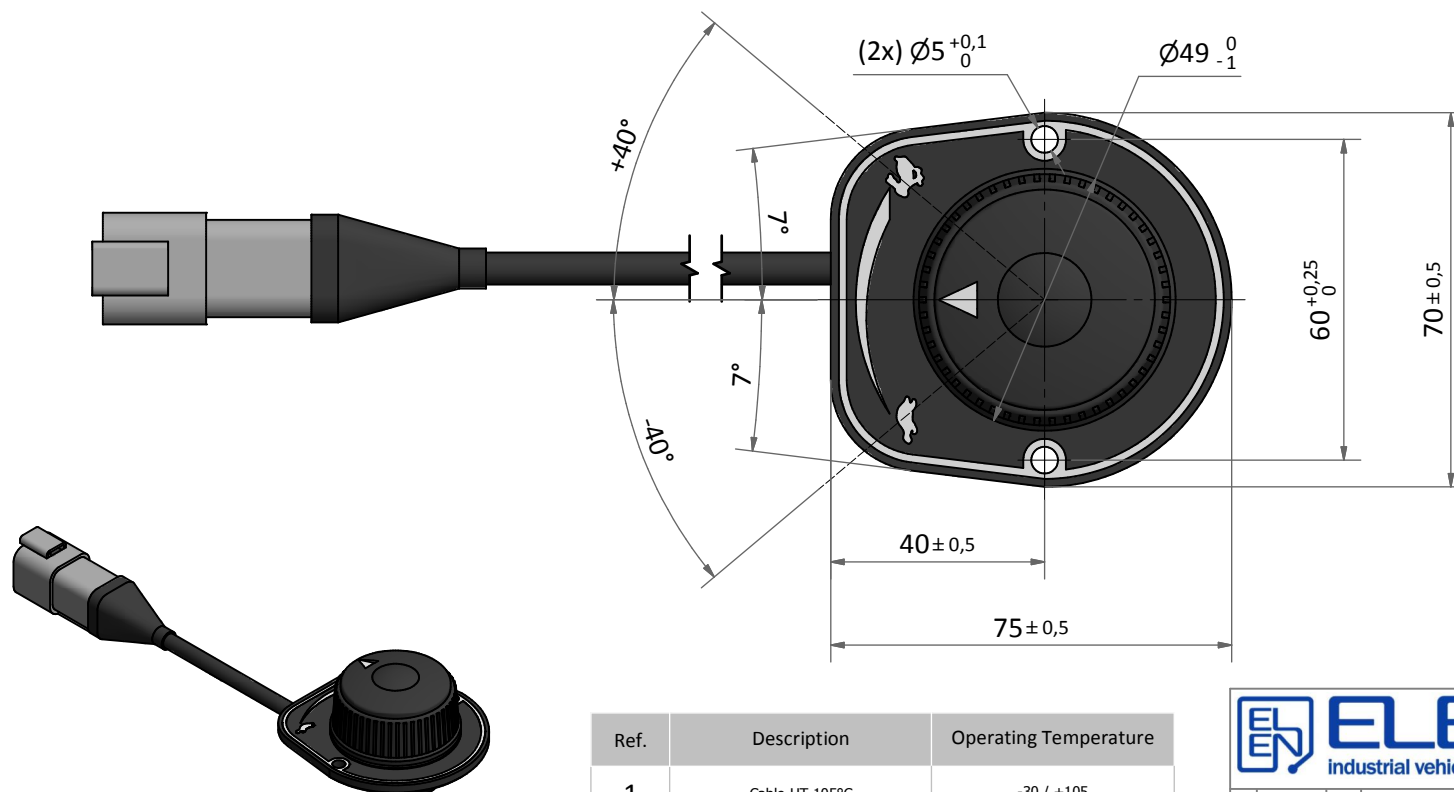
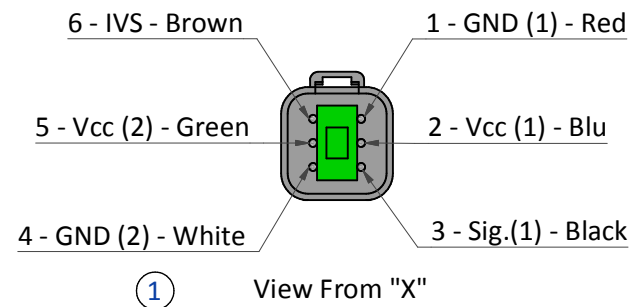
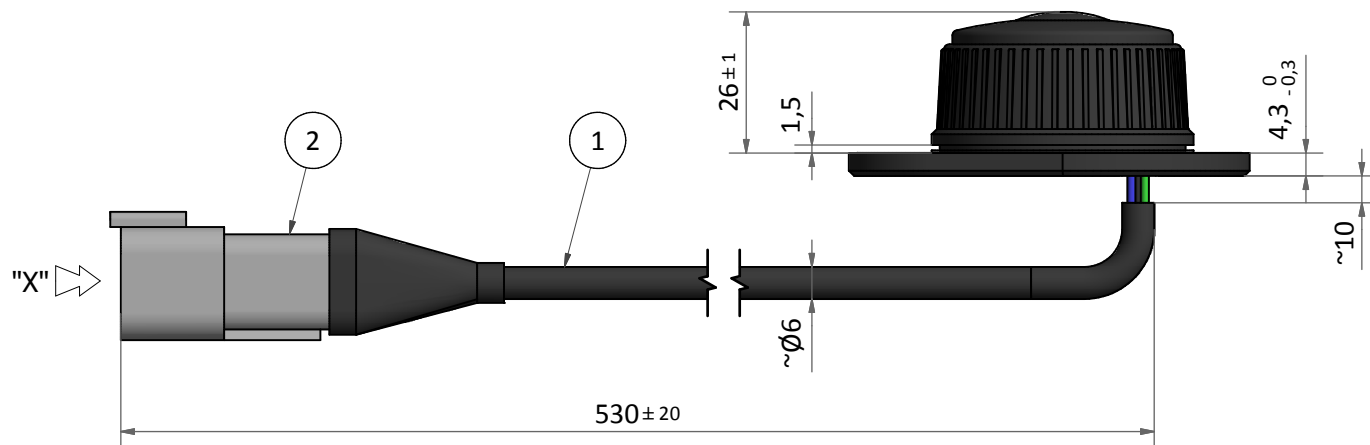


## ■ Hall Effect Accelerator Knob



| Ref. | Description                         | Operating Temperature |
|------|-------------------------------------|-----------------------|
| 1    | Cable HT 105°C                      | -30 / +105            |
| 2    | Deutsch DT04-6P<br>6 Pins Connector | -55 / +125            |



| Rev. | Date       | Sign. | Review Description |
|------|------------|-------|--------------------|
| 1    | 21/05/2021 | A.DES | Changed pin colors |
|      |            |       |                    |
|      |            |       |                    |
|      |            |       |                    |
|      |            |       |                    |

www.elensrl.com Elen Srl - Garbagnate Milanese (MI)

Part Number: AA020590-5

Description: Accelerator Knob ±40° 5V Double Sign.

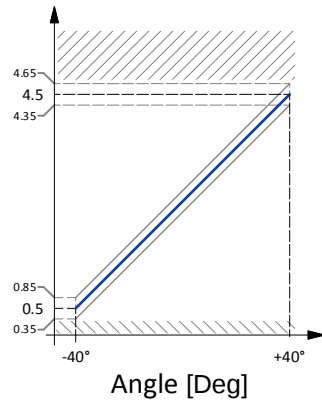
Designed 12/10/2017 Mirko Luperi Scale: 1 : 1 (A3 format)

Checked 21/05/2021 M.CANAVESE Dimensions without tolerance indication:  
ISO 2768 - m

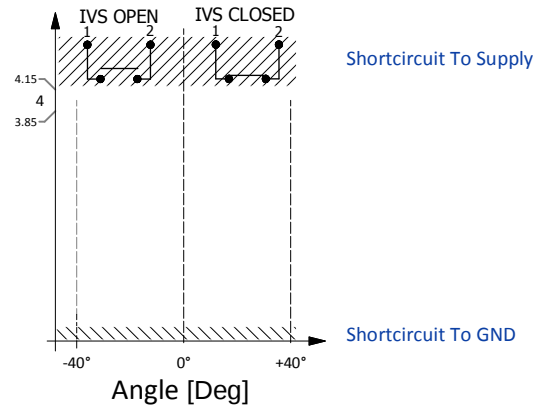
Approved 21/05/2021 M.CANAVESE Units mm Page 1 / 2

## Output Signal

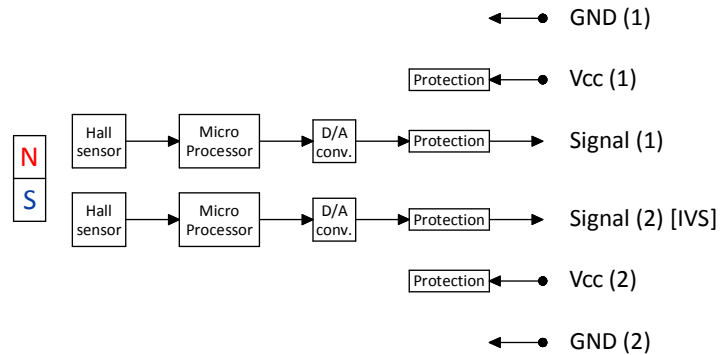
Signal 1 (V)  
@Vin = 5V



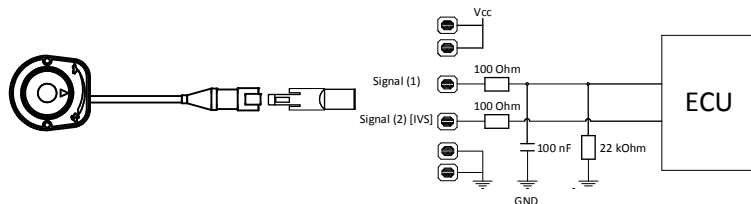
Signal 2  
@Vin = 5V



## Functional Scheme



## Typical Application



## Technical Specifications

|               | Specific                        | Value                                                                                                                                                                               | Standard Reference                                              |
|---------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Electrical    | Power Supply (Vcc)              | 5V ±0.5V                                                                                                                                                                            | PDV Rev. 3 - P. 5.1;                                            |
|               | Output Current                  | 20 mA Max                                                                                                                                                                           | PDV Rev. 3 - P. 5.5;                                            |
|               | Supply Current (No Load)        | 30 mA Max                                                                                                                                                                           | PDV Rev. 3 - P. 5.2;                                            |
|               | Output Signal (1)               | Linear 0.5 ÷ 4.5V (2.5V @0°)                                                                                                                                                        | -                                                               |
|               | Output Signal (2)               | N/O@<0° - N/C@>0° [±1°]                                                                                                                                                             | -                                                               |
|               | Overload Protection             | 24mA For 1h                                                                                                                                                                         | PDV Rev. 3 - P. 5.6;                                            |
|               | Overvoltage Protection          | 6.5V For 1 h                                                                                                                                                                        | PDV Rev. 3 - P. 5.7;                                            |
|               | Reverse Polarity Protection     | -5 ±0.5% V 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%                                                                                                                                                                                 | -                                                               |
|               | Response time                   | 3 msec                                                                                                                                                                              | -                                                               |
|               | Resolution                      | <0.1°                                                                                                                                                                               | -                                                               |
| Environmental | Maximum Load Recommended Output | >220 Ohm                                                                                                                                                                            | -                                                               |
|               | Operating Temperature           | -40°C ÷ +85°C                                                                                                                                                                       | IEC 60068-2-14; IEC60068-2-1;<br>IEC 60068-2-30 ; IEC60068-2-2; |
|               | Storage Temperature             | -40°C ÷ +100°C                                                                                                                                                                      | IEC 60068-2-14; IEC60068-2-1;<br>IEC 60068-2-30 ; IEC60068-2-2; |
|               | Degree Of Protection            | IP67                                                                                                                                                                                | IEC 60529                                                       |
|               | Vibrations Resistance - Random  | f=10Hz@PSD=1.44g <sup>2</sup> /Hz;<br>f=100Hz@PSD=3.85 g <sup>2</sup> /Hz,<br>f=1000Hz@PSD=3.85g <sup>2</sup> /Hz,<br>f=2000Hz@PSD=0.96g <sup>2</sup> /Hz;<br>3 Axes - 24h for Axis | IEC 60068-2-6;<br>ENS 0310 Rev. J                               |
| Mech.         | Vibrations Resistance - Sine    | (5÷12.87)Hz@Displacement=±15mm,<br>(12.87÷200)Hz@dis≤15mm@5g,<br>1Octave/min, 20 Sweep Cycles                                                                                       | IEC 60068-2-6; ISO 15998;                                       |
|               | EMC Compatibility - BCI         | BCI Class "A" - 100mA; (1÷400)MHz                                                                                                                                                   | ISO11452-4;                                                     |
|               | Body Material                   | Nylon 6.6 GF                                                                                                                                                                        | -                                                               |
|               | Tightening Torque               | 7 Nm                                                                                                                                                                                | -                                                               |