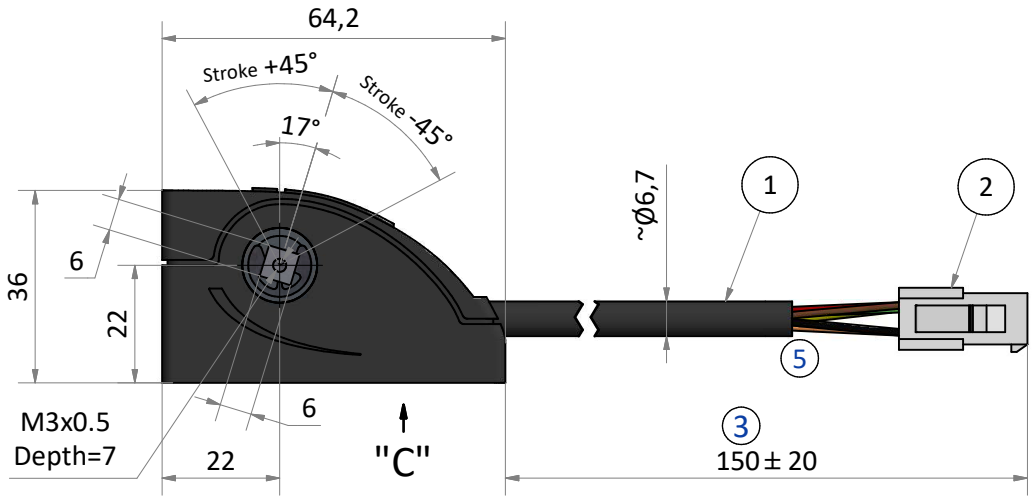

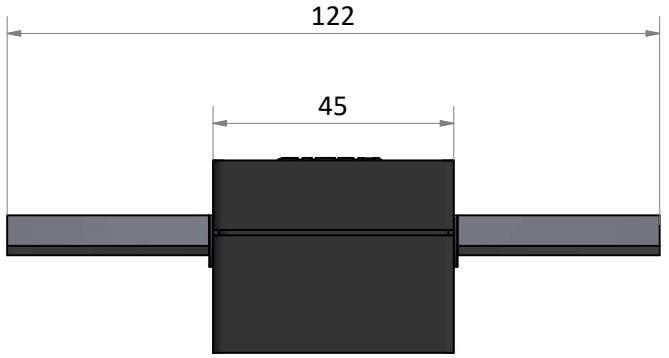

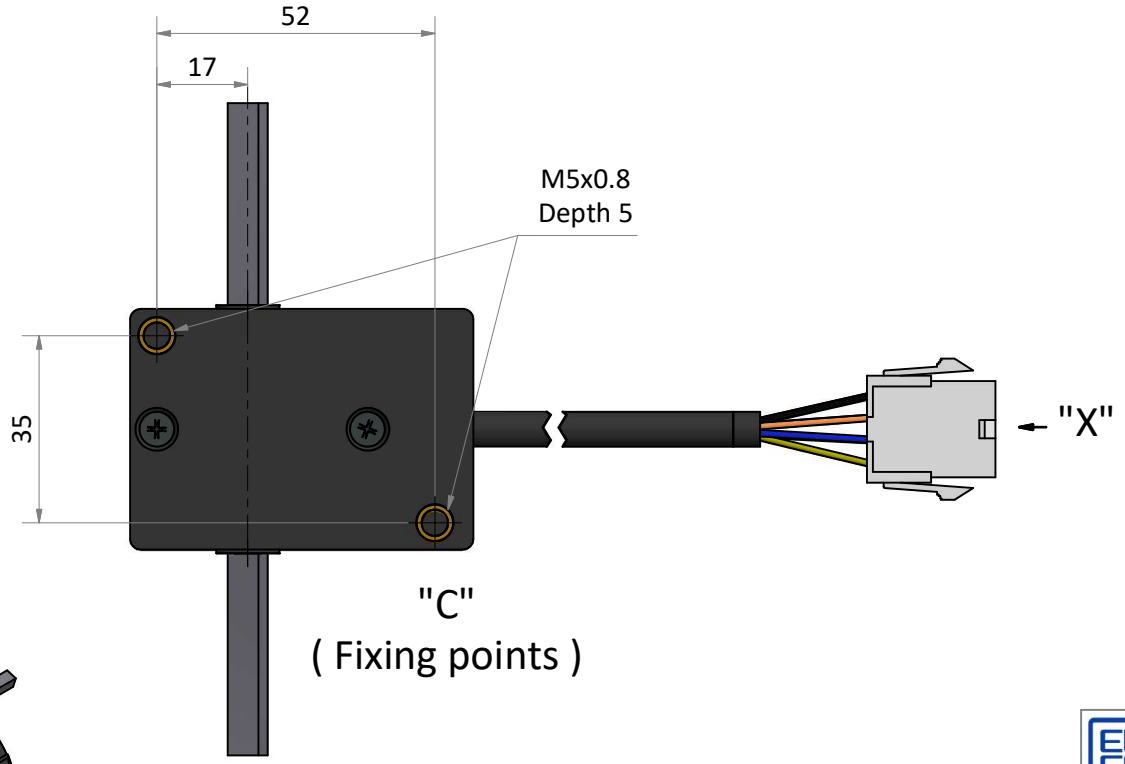

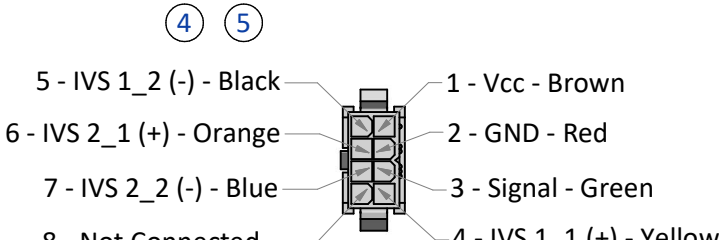

From "X"

Ref.	Description	Operating Tempreture
1	HT 105° Cable	-25 / +105
2	Molex 03901-2081 8-way connector	-40 / +105

ELEN industrial vehicles sensors

Rev.	Date	Sign.	Review Description
1	24/08/2017	H.T.	Updated fixing holes
2	09/01/2018	H.T.	17° shaft - 122 was 100 - Added Connector
3	29/06/2018	M.L.	Updated Cable Lenght, was 100
4	17/06/2019	H.T.	Added IVS indications (+) and (-)
5	02/02/2020	G.M.	Changed Cable Type

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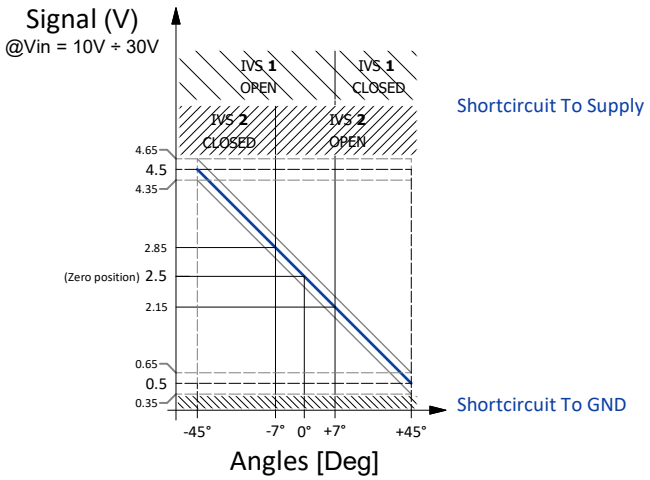
Part Number: AA311010

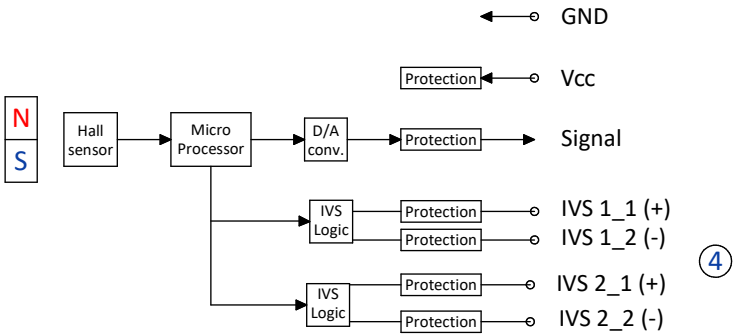
Description: Accelerator knob Metis

Designed	01/08/2017	Hamidreza T.	Scale : 1 : 1 (A3 format)
Checked	22/12/2017	Roberto La Capruccia	Dimensions without tolerance indication: ISO 2768 - m
Approved	22/12/2017	Roberto La Capruccia	Units mm

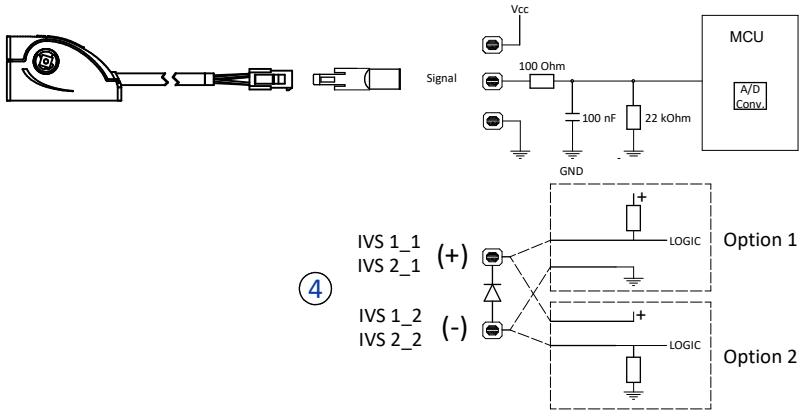
Output Signal



Functional Scheme



Typical Application



Technical Specifications

	Specific	Value	Standard Reference
Electrical	Power Supply (Vcc)	10V Min ÷ 30V Max	PDV Rev. 3 - P. 5.1;
	Output Current	20mA Max	PDV Rev. 3 - P. 5.5;
	Supply Current (no load)	30mA Max	PDV Rev. 3 - P. 5.2;
	Output Signal	Linear 4,5V@-45° ÷ 0,5V@+45°	-
	Overload Protection	24mA For 1h (50 mA)	PDV Rev. 3 - P. 5.6;
	Overvoltage Protection	36V for 1h	PDV Rev. 3 - P. 5.7;
	Temperature Operating Voltage	-30°C ÷ 80°C	PDV Rev. 3 - P. 5.8;
	Indipendent IVS 1 Circuit	Optoisolated, Closed @ Vin <2.15V ; Open @ Vin > 2.15V . 1A Max (Peak AC/DC) @60V Max (Peak AC/DC)	PDV Rev. 3 - P. 5.9;
	Indipendent IVS 2 Circuit	Optoisolated, Open @ Vin <2.85V ; Closed @ Vin > 2.85V . 1A Max (Peak AC/DC) @60V Max (Peak AC/DC)	PDV Rev. 3 - P. 5.9;
	Reverse Polarity Protection	-30V For 1h (-36 V)	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;
	Transient Voltage Protection	Pulses 1, 2A, 2B , 3A , 3B , 4 , 5B	ISO 7637-2; 2011 ISO 16750-2; 2012
	Linearity	<±1%	-
	Resolution	<0.1°	-
	Maximum Load Recommended Output	>220 Ohm	-
Environmental	Operating Temperature	-30°C ÷ +80°C	IEC 60068-2-14; IEC60068-2-1; IEC60068-2-2; IEC60068-2-30;
	Storage Temperature	-40°C ÷ +110°C	IEC 60068-2-14; IEC60068-2-1; IEC60068-2-2; IEC60068-2-30;
	Degree Of Protection	IP67	IEC 60529;
	Vibrations Resistance - Random	f=10Hz@PSD=1.44g2/Hz; f=100Hz@PSD=3.85 g2/Hz, f=1000Hz@PSD=3.85g2/Hz, f=2000Hz@PSD=0.96g2/Hz; 3 Axes - 24h for Axis	IEC 60068-2-6; ENS 0310 Rev J;
	Vibrations Resistance - Sine	(5÷12.87)Hz@displacement=±15mm, (12.87÷200)Hz@dis≤±15mm@5g, 1Octave/min, 20 Sweep Cycles	IEC 60068-2-6;ISO 15998;
	EMC Compatibility - Magnetic Field Immunity	15Hz ÷ 150 kHz	ISO11452-8:2015;
	EMC Compatibility - BCI	BCI Class "A" - 100mA; (1÷400)MHz	ISO11452-4;
Mech.	Body Material	Nylon 6.6 GF	-
	Cover Material	Nylon 6.6 GF	-
	Shaft Material	Stainless steel	-
	Tightening Torque	2.3 Nm	-