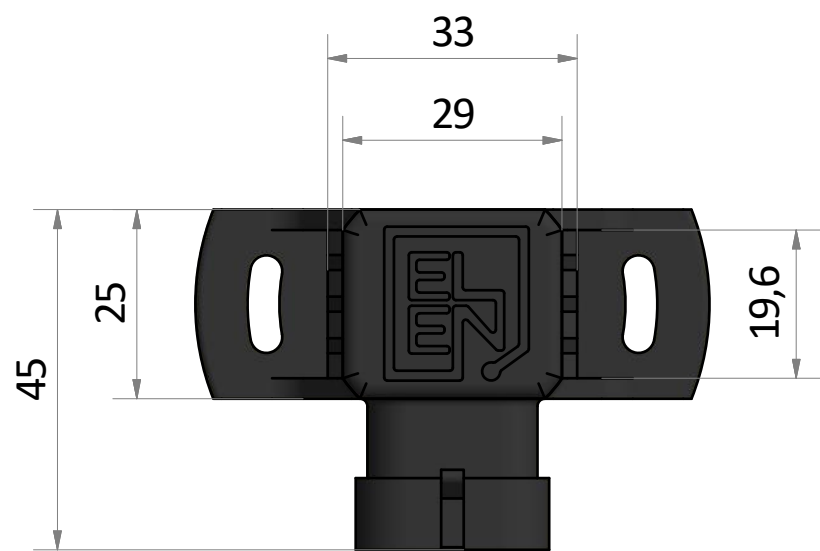
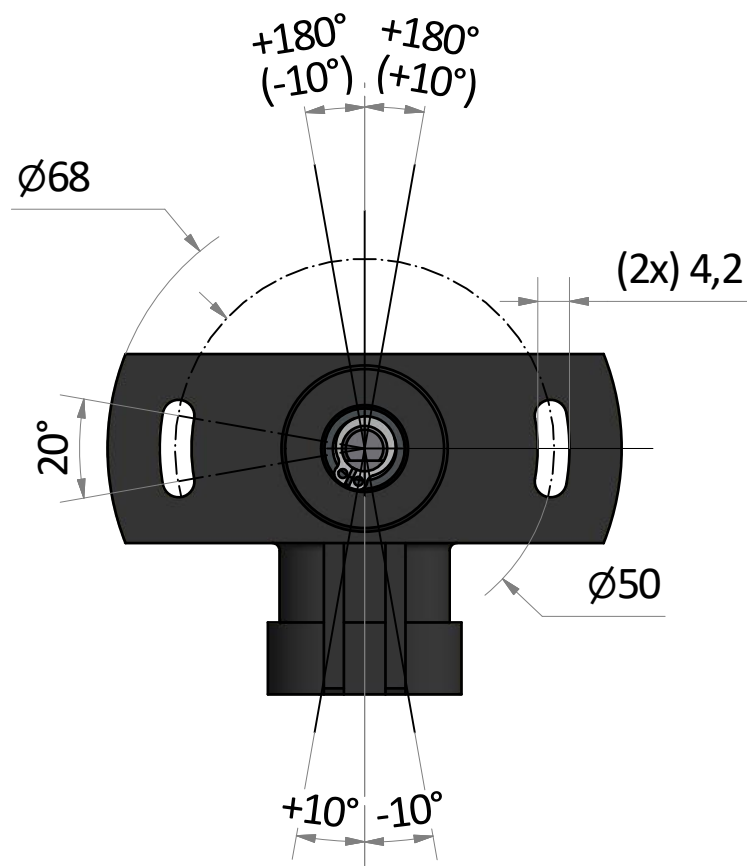
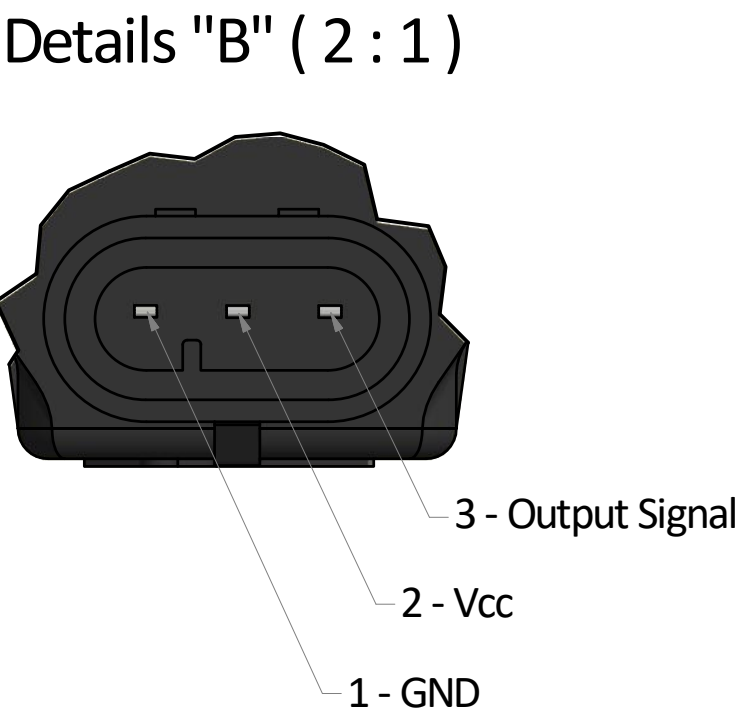
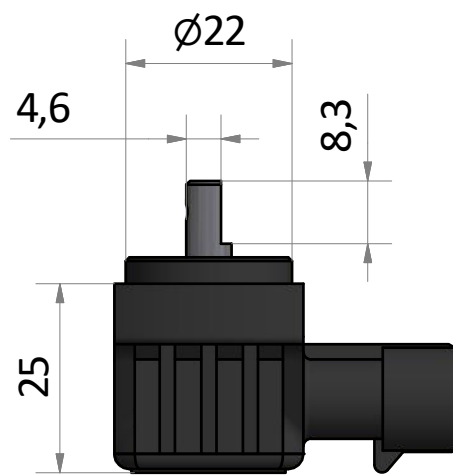
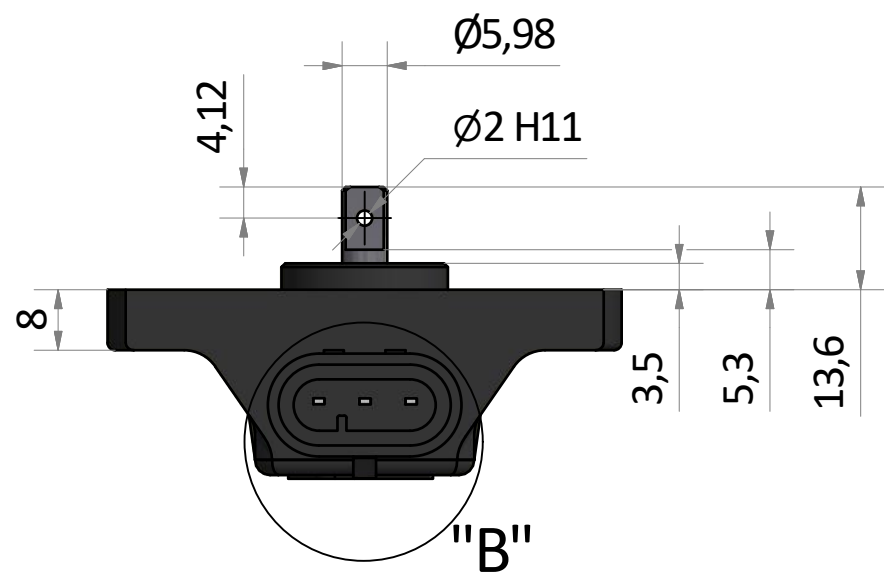
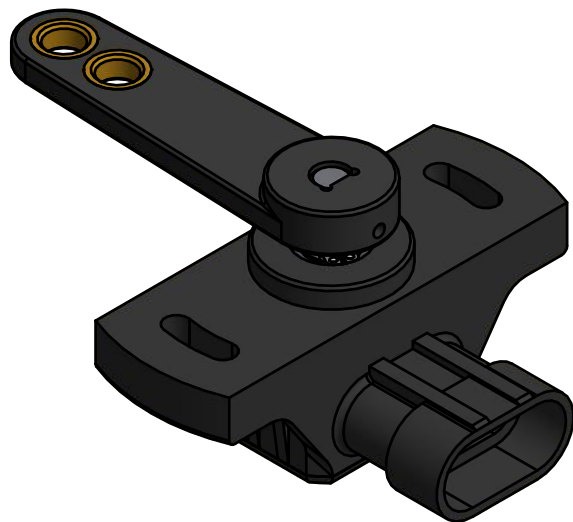
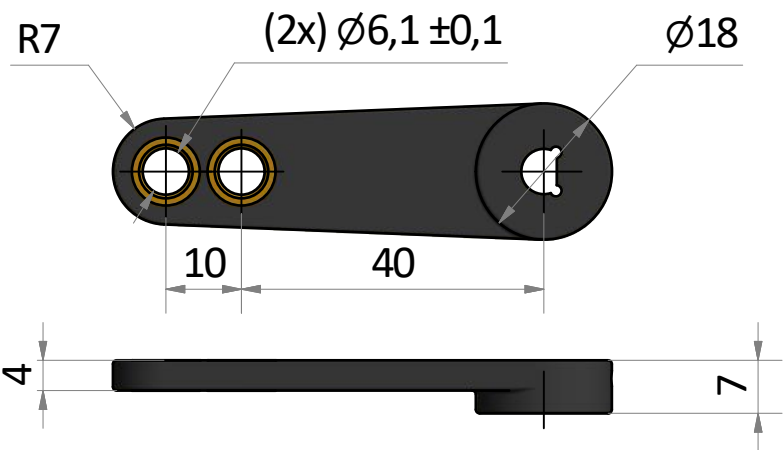


■ Angular Sensor



1



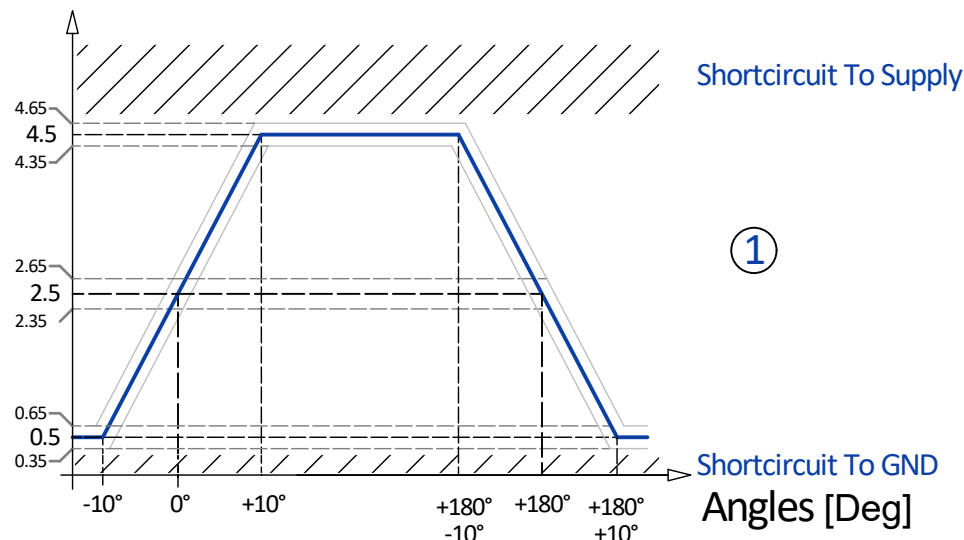
Mating with 3-way Tyco
Superseal connector 282087-1

 ELEN industrial vehicles sensors				www.elensrl.com			
Part Number:				AA301100-9			
Description:				Angular Sensor 10-30V ±10°			
Rev.	Date	Sign.	Review Description	Designed	23/02/2022	Matteo M.	Scale : 1 : 1 (A3 format)
1	28/03/2022	M.M.	Changed Output Signal	Checked	-	-	Dimensions without tolerance indication: ISO 2768 - m
				Approved	-	-	Units mm

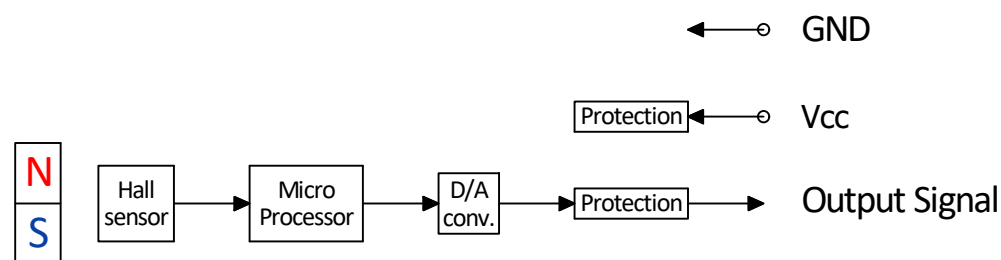
www.elensrl.com			Elen Srl - Garbagnate Milanese (MI)		
Part Number:			AA301100-9		
Description:			Angular Sensor 10-30V ±10°		
Designed	23/02/2022	Matteo M.	Scale : 1 : 1 (A3 format)		
Checked	-	-	Dimensions without tolerance indication: ISO 2768 - m		
Approved	-	-		Units mm	Page 1 / 2

■ Output Signal

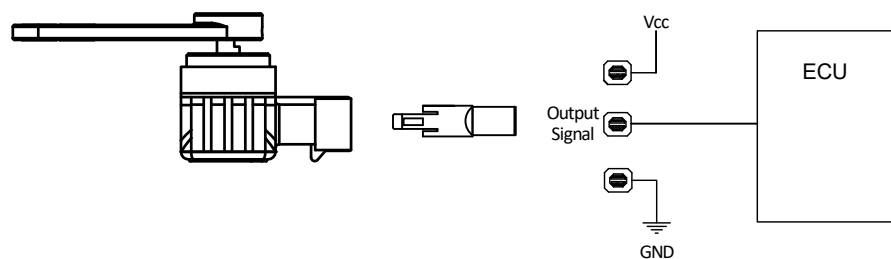
Signal (V) @Vin =
10V ÷ 30V



■ Functional Scheme



■ Typical Application



■ Technical Specifications

	Specific	Value	Standard Reference
Electrical	Power Supply (Vcc)	10V Min ÷ 30V Max	PDV Rev. 3 - P. 5.1;
	Supply Current (no load)	30mA Max	PDV Rev. 3 - P. 5.2;
	Output Current	20mA Max	PDV Rev. 3 - P. 5.5;
	Output Signal ①	0,5V ÷ 4,5V [±0.15 V] (2.5V @ 0°) [-10° ÷ +10°] 4,5V ÷ 0,5V [±0.15 V] (2.5V @ 180°) [170° ÷ 190°]	-
	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	30V @ 105° For 1h	PDV Rev. 3 - P. 5.8;
	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	ISO 7637-2; ISO 16750-2 (2012)
	Load Dump Transient	Test A (V supply 24V)	ISO 16750-2 (2012)
	Linearity Error	<1%	-
	Resolution	<0.1°	-
Environmental	Operating Temperature (For Electronic Components)	-40°C ÷ +105°C	IEC 60068-2-14;IEC60068-2-1; IEC60068-2-2;IEC60068-2-30
	Degree Of Protection	IP67	IEC 60529;
	Storage Temperature (For the Assembly)	-40°C ÷ +115°C	IEC 60068-2-14;IEC60068-2-1; IEC60068-2-2;IEC60068-2-30
	Vibrations Resistance - Random	f=10Hz@PSD=1.44g ² /Hz; f=100Hz@PSD=3.85 g ² /Hz, f=1000Hz@PSD=3.85g ² /Hz, f=2000Hz@PSD=0.96g ² /Hz; 3 Axes - 24h for Axis	IEC 60068-2-64; ENS 0310 Rev.J
	Vibrations Resistance - Sine	(5÷12.87)Hz@dis±15mm, (12.87÷200)Hz@dis<±15mm@5g, 1 Octave/min, 20 Sweep Cycles	EN 60068-2-6; ISO 15998
Mech.	EMC Compatibility - Magnetic Field Immunity	15Hz ÷ 150 kHz	ISO11452-8:2007;
	EMC Compatibility - BCI	BCI Class "A" - 100mA; (1÷400)MHz	ISO11452-4;
	Body Material	Nylon 6.6 + 30% G.F.	-
	Shaft Material	Stainless Steel	-