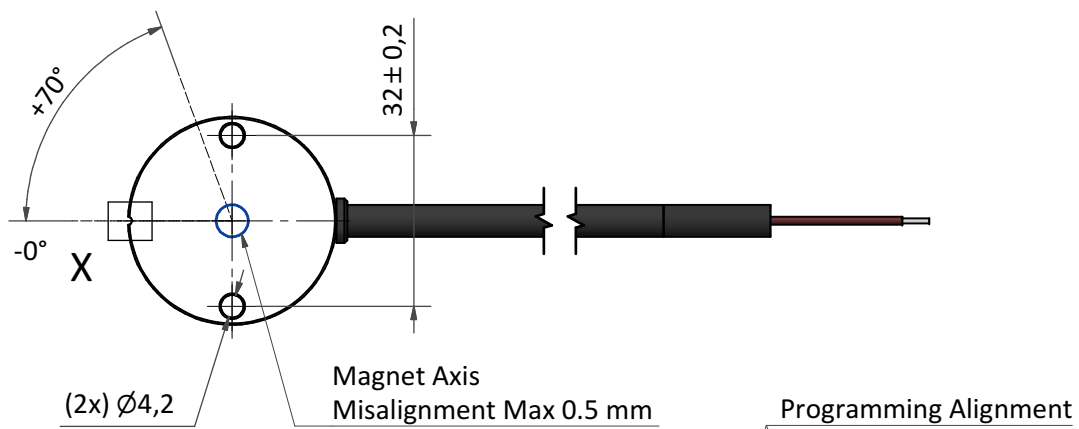
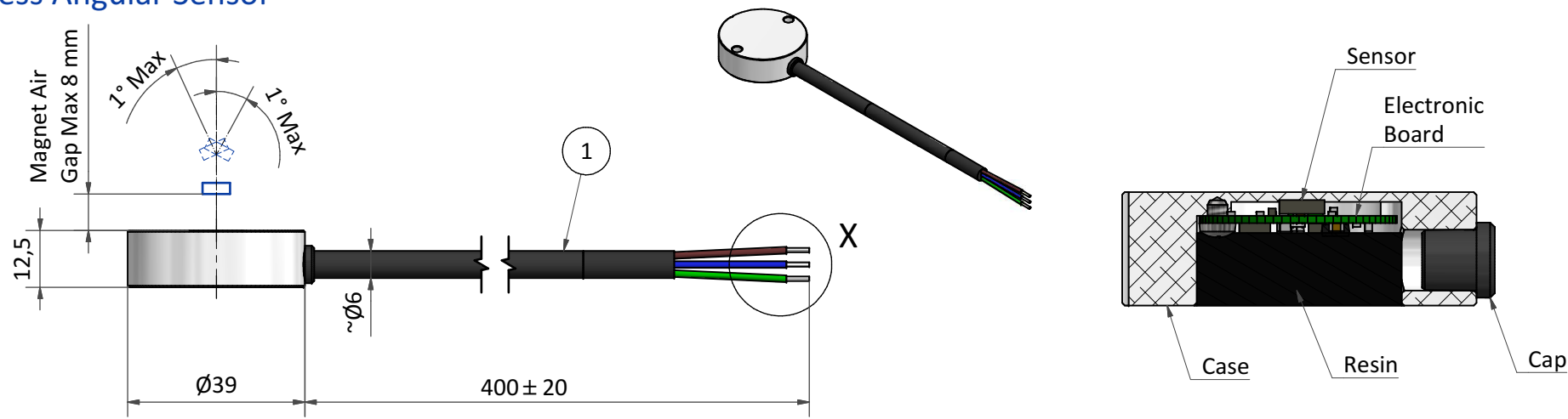
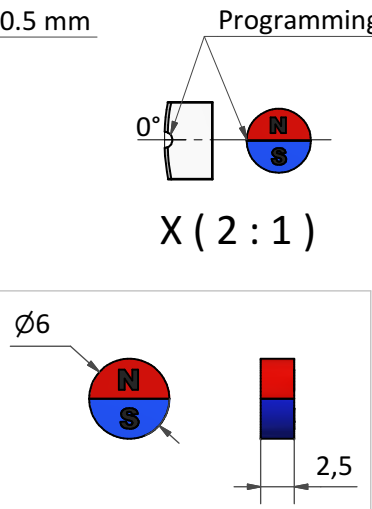


■ Contactless Angular Sensor



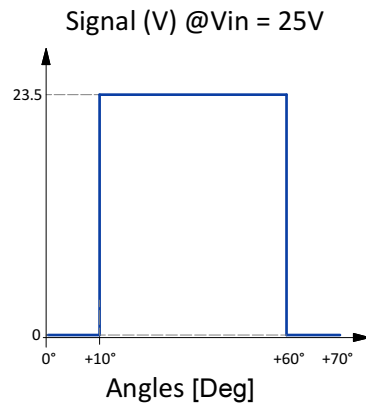
SHAFT MAGNET CHARACTERISTIC	
DESCRIPTION	VALUE
Magnetization Direction	Radial
Material	Samarium Cobalt MPS 2/17-28
Magnetization Quality	28 Anisotropic
Coating Type	Nichel
Force Of Attraction	~ 0.5 Kg / 4.9 N (TBC)
Weight	0.6 g
Operating Temperature Max	< 300 °C
Curie Temperature	800 °C
Br Remanence	10300-10800 G / 1.03-1.08 T
bHc Coercive Force	9.5-10 kOe / 756-796 kA/m
iHc Coercive Force	>= 18 kOe / >= 1433 kA/m
Max Energy Product (BxH)	26-28 MGOe / 205-222 kJ/m³



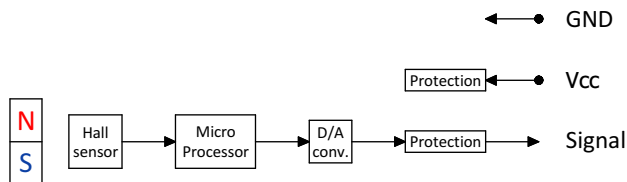
Ref.	Description	Operating temperature
1	Cable HT 105°C	-25 / +105

 ELEN industrial vehicles sensors				www.elensrl.com		Elen Srl - Garbagnate Milanese (MI)	
				Part Number:		AA020515-2	
				Description:		Contactless Angular Sensor (0-70°) Single Signal 10-30V	
Rev.	Date	Sign.	Review Description				
				Designed	12/01/2018	Mirko Luperi	Scale : 1 : 1 (A3 format)
				Checked	12/01/2018	Roberto La Capruccia	Dimensions without tolerance indication: ISO 2768 - m
				Approved	12/01/2018	Roberto La Capruccia	 Units mm Page 1 / 2

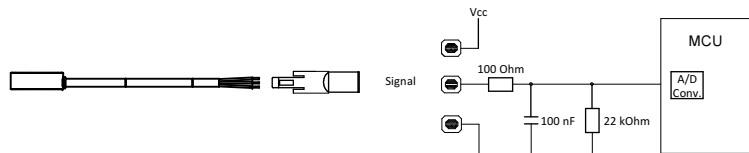
■ Output Signal



■ Functional Scheme



■ Typical Application



■ Technical Specifications

	Specific	Value	Standard Reference
Electrical	Power Supply (Vcc)	24V Min ÷ 30V Max	PDV Rev. 3 - P. 5.1;
	Output Current	20mA Max	PDV Rev. 3 - P. 5.5;
	Max Load Recommended Output	1200 Ω	-
	Supply Current (no load)	30mA Max	PDV Rev. 3 - P. 5.2;
	Linear Output	0V ÷ 23.5V	-
	Overload Protection	24mA For 1h	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 , 5	ISO 7637-2:2011 ; ISO 16750-2:2012
	Linearity	<±1%	-
	Resolution	12 bit	-
Environmental	Operating Temperature	-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	-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 60068-2-6 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
	EMC Compatibility - Magnetic Field Immunity	15Hz ÷ 150 kHz	ISO11452-8:2007;
Mech.	EMC Compatibility - BCI	BCI Class "A" - 100mA; (1÷400)MHz	ISO11452-4;
	Body Material	Aluminium With Antioxidant Treatment	-