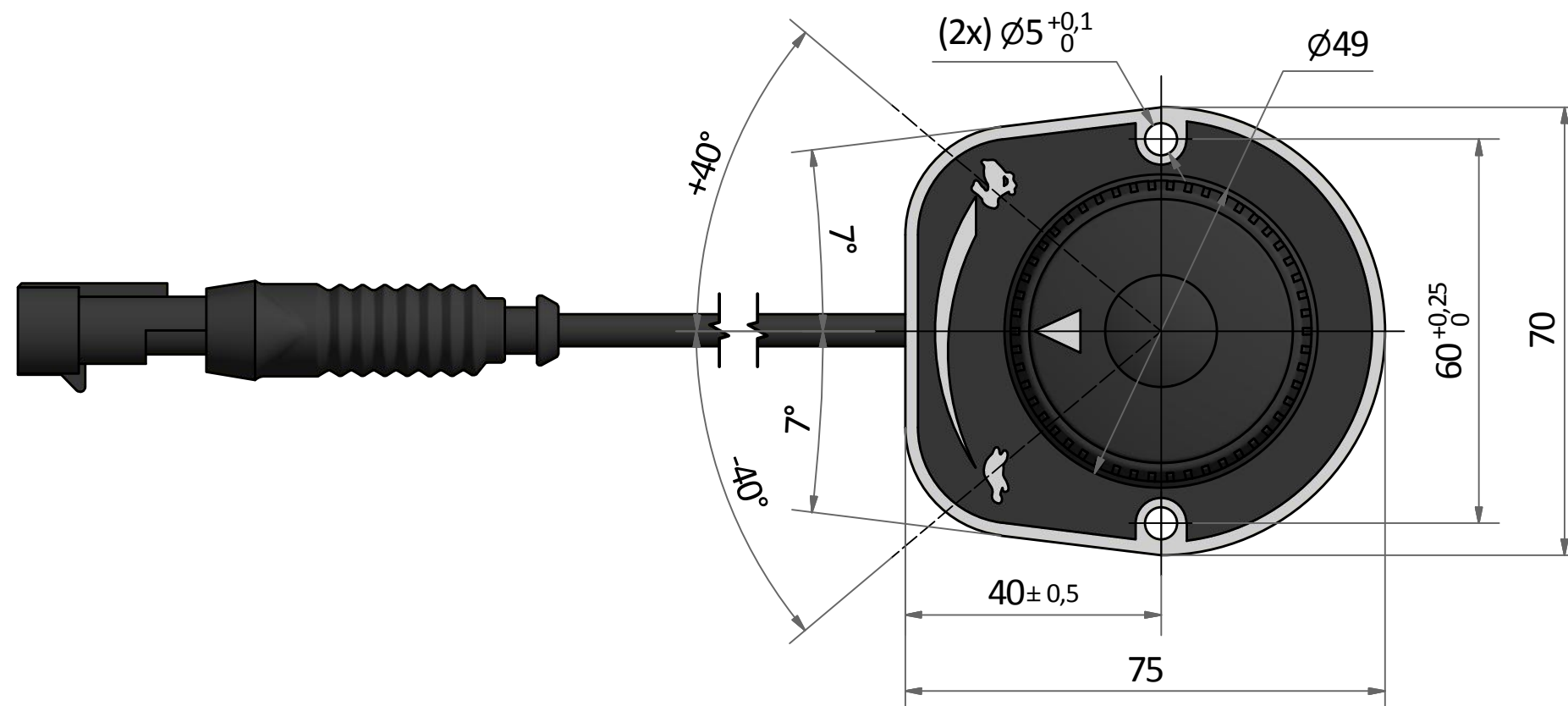
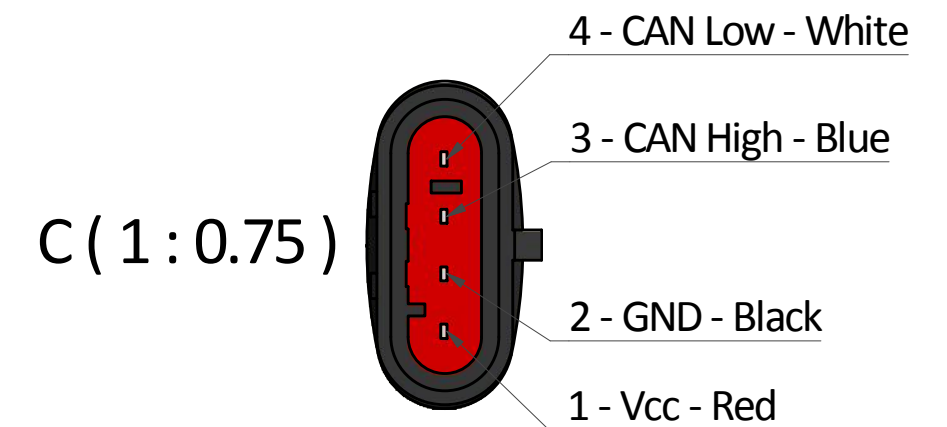
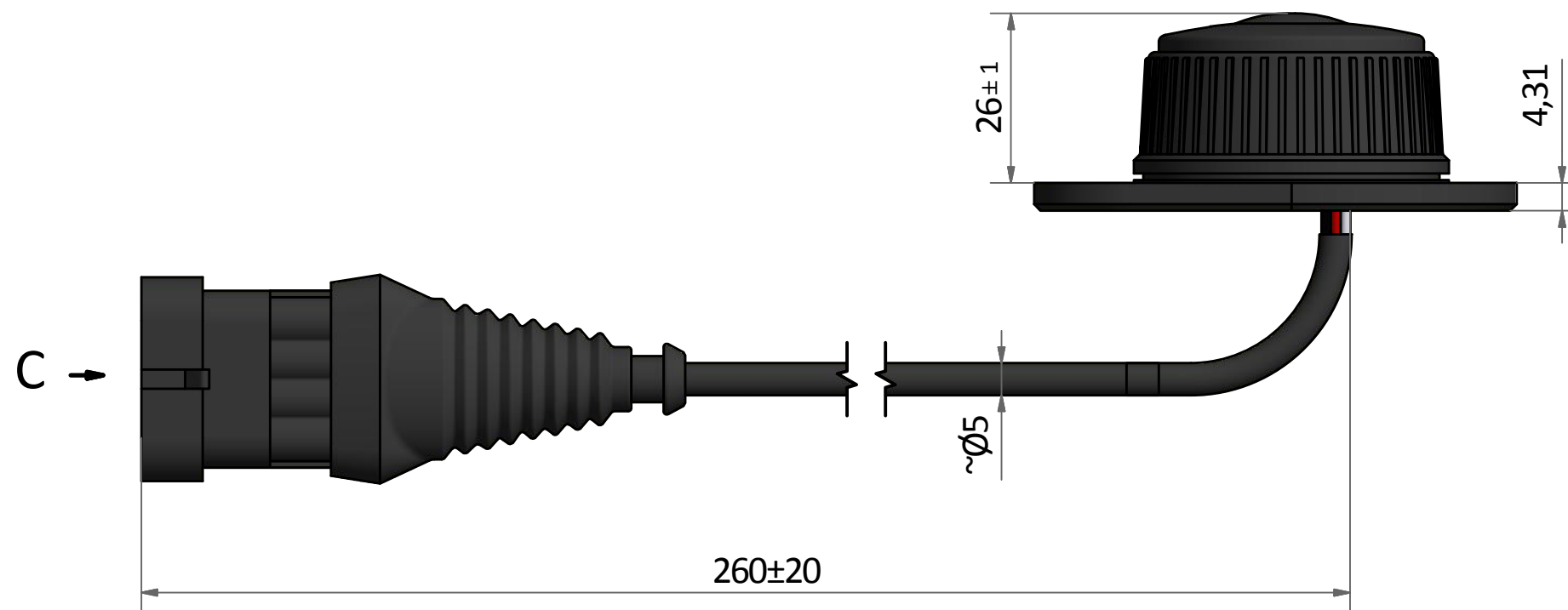
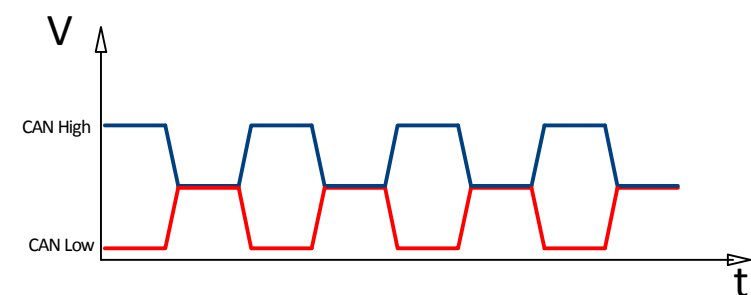




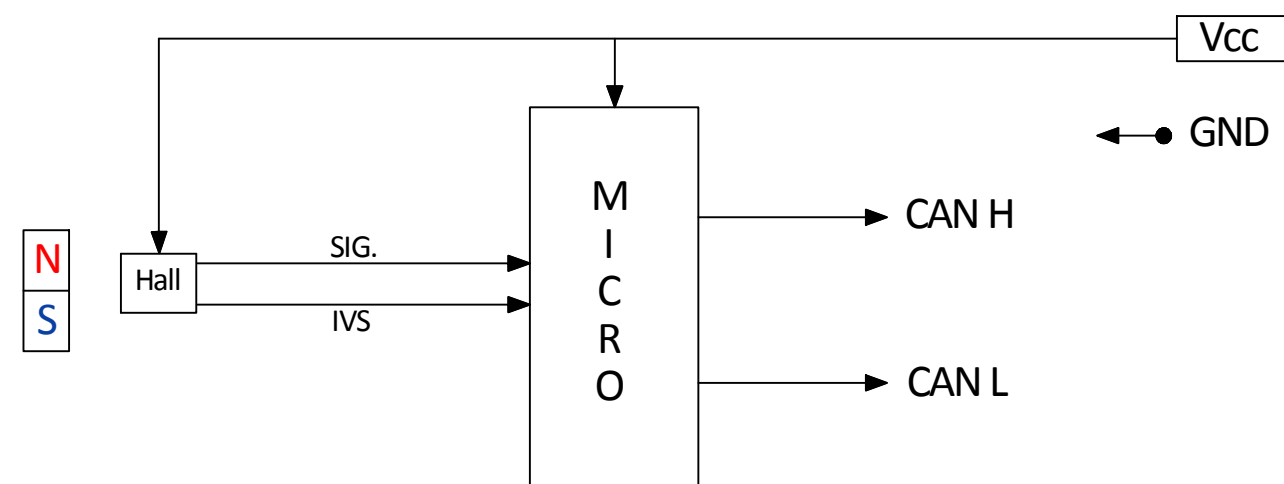
Ref.	Description	Operating temperature
1	HT 105° Cable	-25 / +105
2	Tyco Superseal 4-Way Connector	-40 / +125

		ELEN		industrial vehicles sensors		www.elensrl.com		Elen Srl - Garbagnate Milanese (MI)	
Rev.		Date		Sign.		Review Description		Part Number: AA356120-4	
Designed		24/03/2022		alorenzetto		Description: Accelerator Knob		Scale: 1 : 1 (A3 format)	
Checked								Dimensions without tolerance indication: ISO 2768 - m	
Approved								Units mm	
								Page 1 / 3	

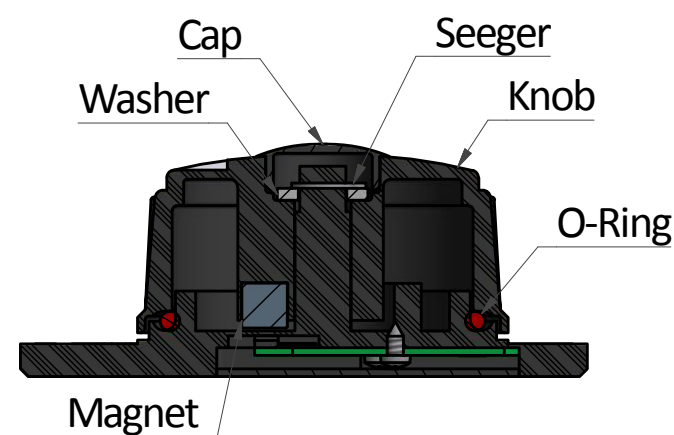
■ Output Signal



■ Functional Scheme



■ Section View



■ Technical Specifications

	Specific	Value	Standard Reference
Electrical	Power Supply (Vcc)	9V Min ÷ 32V Max	PDV Rev. 3 - P. 5.1;
	Supply Current (No Load)	30 mA Max	PDV Rev. 3 - P. 5.2;
	Overvoltage Protection	Max 38V for 1h	PDV Rev. 3 - P. 5.7;
	Temperature Operating Voltage	32V @80°C	PDV Rev. 3 - P. 5.8;
	Signal Output	CAN J1939 Default Baudrate 250 kb/s Default message cadence 10ms	-
	Reverse Polarity Protection	-32V 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;
Environmental	Linearity	±1%	-
	Operating Temperature	-30°C ÷ +80°C	IEC 60068-2-14; IEC60068-2-1; IEC60068-2-2; IEC60068-2-30;
	Storage Temperature	-40°C ÷ +85°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 60068-2-64; 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 Imm.	15Hz ÷ 150 kHz	ISO11452-8:2007;
Mech.	EMC Compatibility - BCI	BCI Class "A" - 100mA; (1÷400)MHz	ISO11452-4;
	Body Material	Nylon 6.6 GF	-
	Tightening Torque	7 Nm	-

■ Protocol Description

Throttle		
Cycle Time	10 ms	-
Identifier	0C 00 00 89	-
Lenght	8	Byte

Throttle Message Structure			
BYTE 1	bit 8...7 : 11	Not Used	-
	bit 6...5 : 00	SPN 696	Driveline
	bit 4...3 : 10	SPN 897	High Priority
	bit 2...1 : 01	SPN 695	Speed Control
BYTE 2 - 3	-	SPN 898	Requested Speed Min = 1400 RPM Max = 3600 RPM
BYTE 4	11111111	Not Used	-
BYTE 5	bit 8...4 : 00000	SPN 3350	Accelerator Pedal Control
	bit 4...1 : 111	SPN 3349	TSC1 Cyclic 10 ms
BYTE 6	bit 8...5 : 1111	Not Used	-
	bit 4...1 : 1111	SPN 4191	N.A.
BYTE 7	11111111	Not Used	-
BYTE 8	bit 8...5 : xxxx	SPN 4207	Message Checksum
	bit 4...1 : xxxx	SPN 4206	Message Rolling Counter

Preliminary