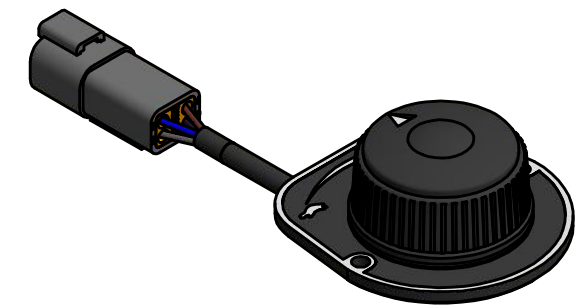
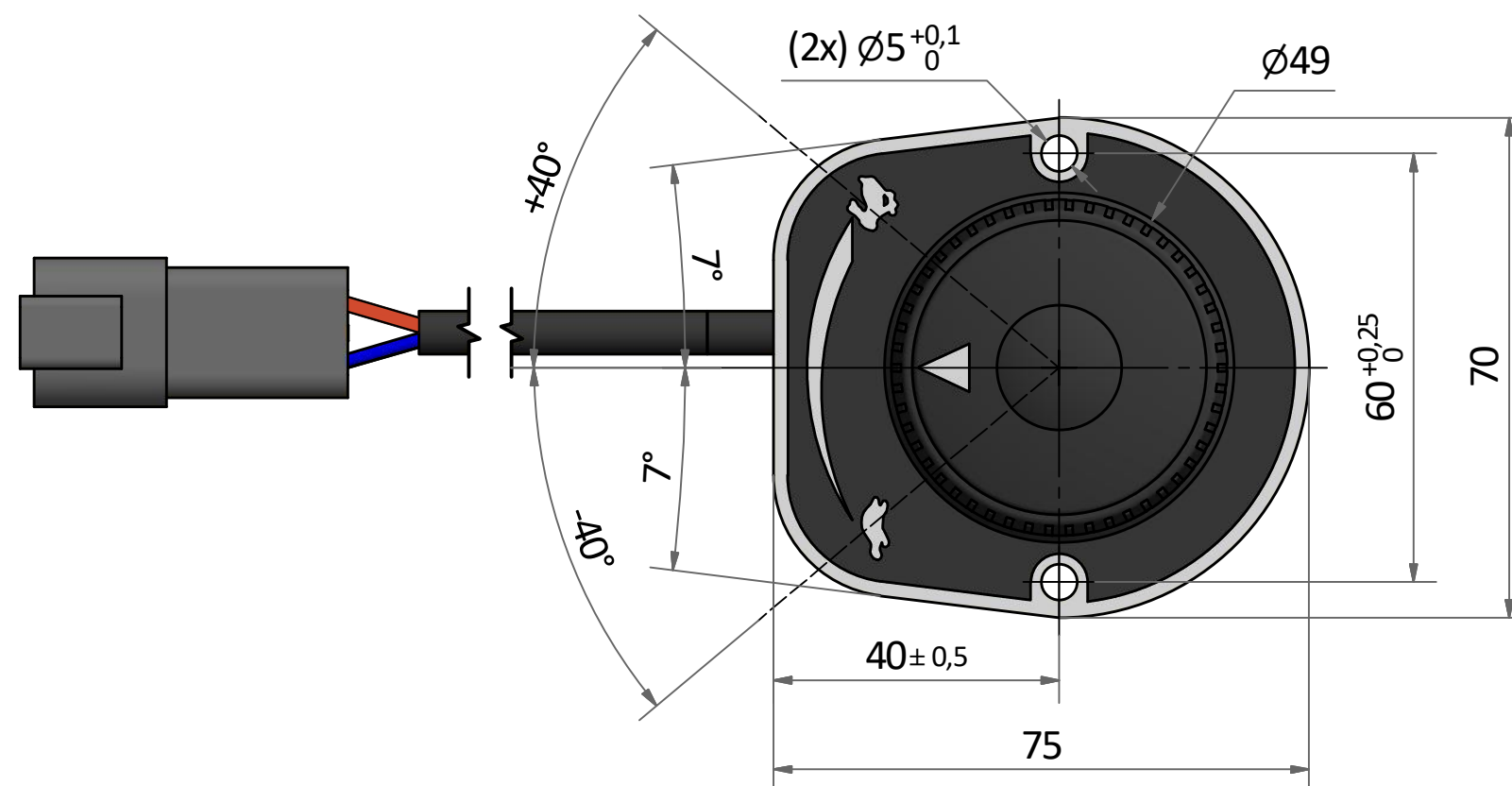
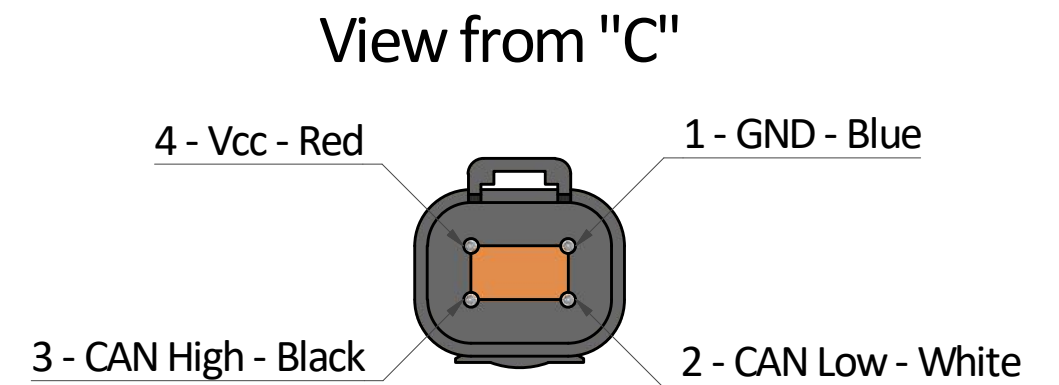
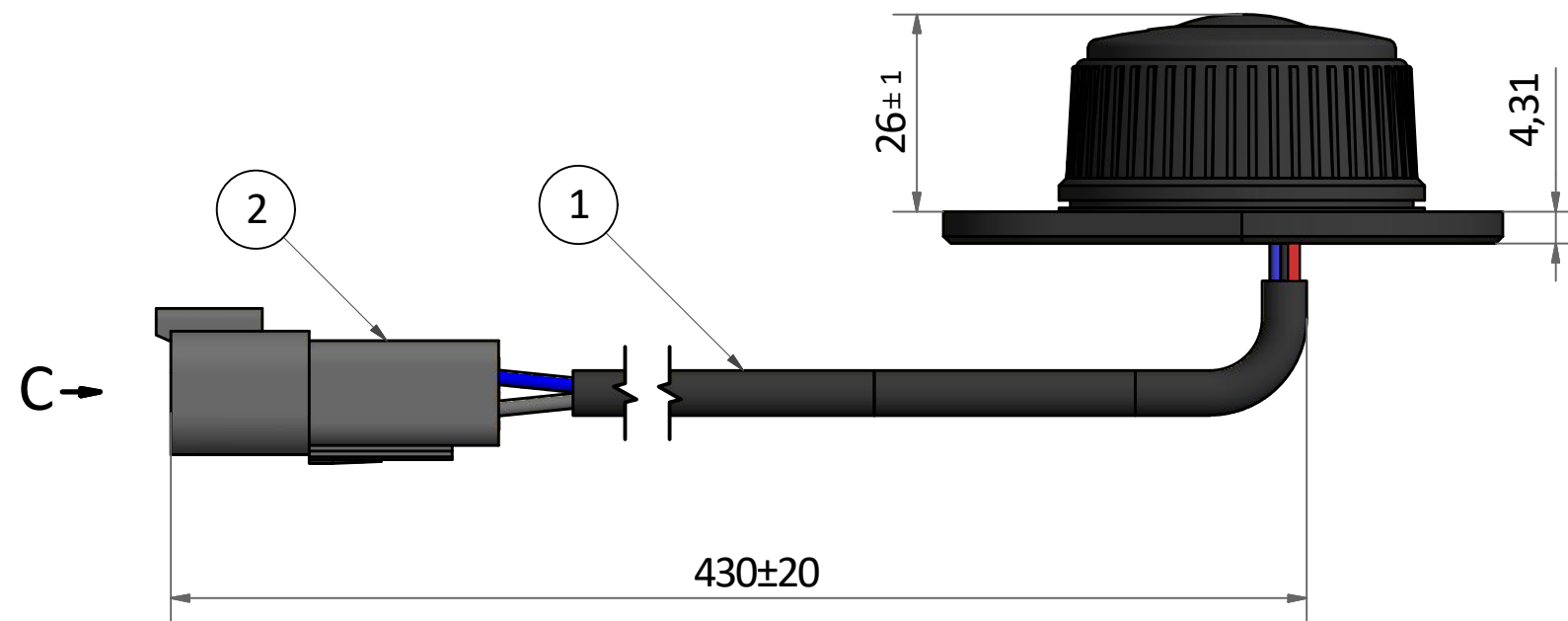


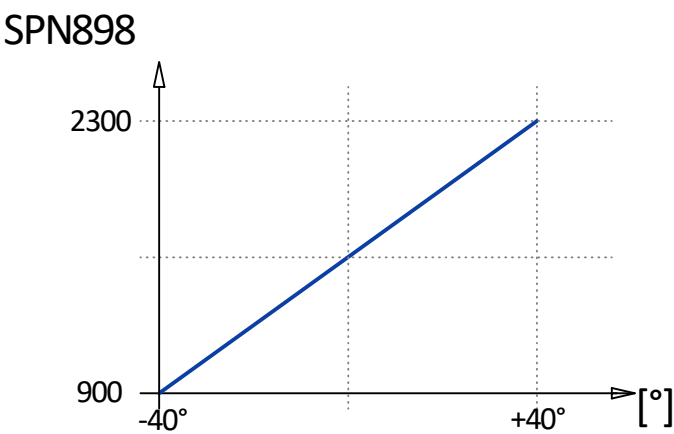
■ Hall Effect Accelerator Knob - Praxis Series



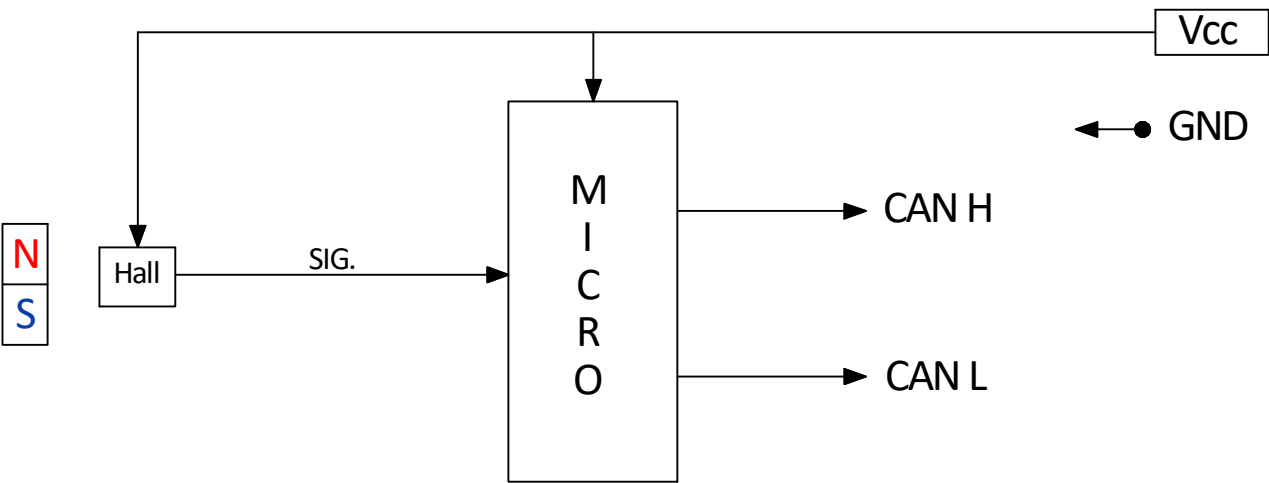
Ref.	Description	Operating temperature
1	HT 105° Cable	-40 / +105
2	Deutsch DT04-4P connector or compatible	-55 / +125

 ELEN industrial vehicles sensors				www.elensrl.com		Elen Srl - Garbagnate Milanese (MI)																									
<table><tr><th>Rev.</th><th>Date</th><th>Sign.</th><th>Review Description</th></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>				Rev.	Date	Sign.	Review Description																					Part Number:		AA356120-9	
				Rev.	Date	Sign.	Review Description																								
Description:		Accelerator Knob CAN BUS																													
Designed	11/06/2024	Giulia M.	Scale :			1 : 1 (A3 format)																									
Checked	11/06/2024		Dimensions without tolerance indication:				ISO 2768 - m																								
Approved	11/06/2024				Units mm	Page 1 / 3																									

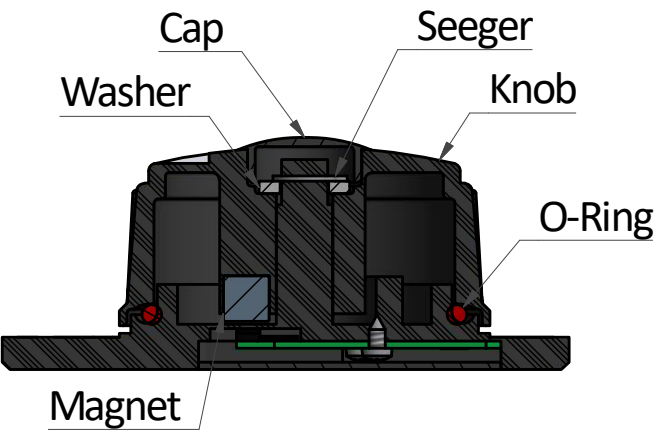
■ Output Signal



■ Functional Scheme



■ Section View



■ Technical Specifications

	Specific	Value	Standard Reference
Electrical	Power Supply (Vcc)	5V ± 5%	PDV Rev. 3 - P. 5.1;
	Supply Current (No Load)	30 mA Max	PDV Rev. 3 - P. 5.2;
	Overvoltage Protection	6.5V for 1h	PDV Rev. 3 - P. 5.7;
	Temperature Operating Voltage	5.5V @85°C	PDV Rev. 3 - P. 5.8;
	Signal Output	CAN J1939 Default Baudrate 250 kb/s Default message cadence 10ms	-
	Reverse Polarity Protection	-5.5V 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 (for Electronic Components)	-40°C ÷ +85°C	IEC 60068-2-14; IEC60068-2-1; IEC60068-2-2; IEC60068-2-30;
	Storage Temperature (for the Assembly)	-40°C ÷ +80°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=1.44g 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@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;
	EMC Compatibility - BCI	BCI Class "A" - 100mA; (1÷400)MHz	ISO11452-4;
Mech.	Body Material	Nylon 6.6 GF	-
	Tightening Torque	7 Nm	-

■ Protocol Description

Throttle		
Cycle Time	10 ms	-
Identifier	0C 00 00 21	-
Lenght	8	Byte

Throttle Message Structure			
BYTE 1	bit 8...7 : 11	Not Used	-
	bit 6...5 : 10	SPN 696	Driveline
	bit 4...3 : 10	SPN 897	Medium Priority
	bit 2...1 : 01	SPN 695	Speed Control
BYTE 2 - 3	-	SPN 898	Requested Speed Min = 900 RPM Max = 2300 RPM
BYTE 4	11111111	SPN 518	Engine Request Torque 0%
BYTE 5	bit 8...4 : 11111	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