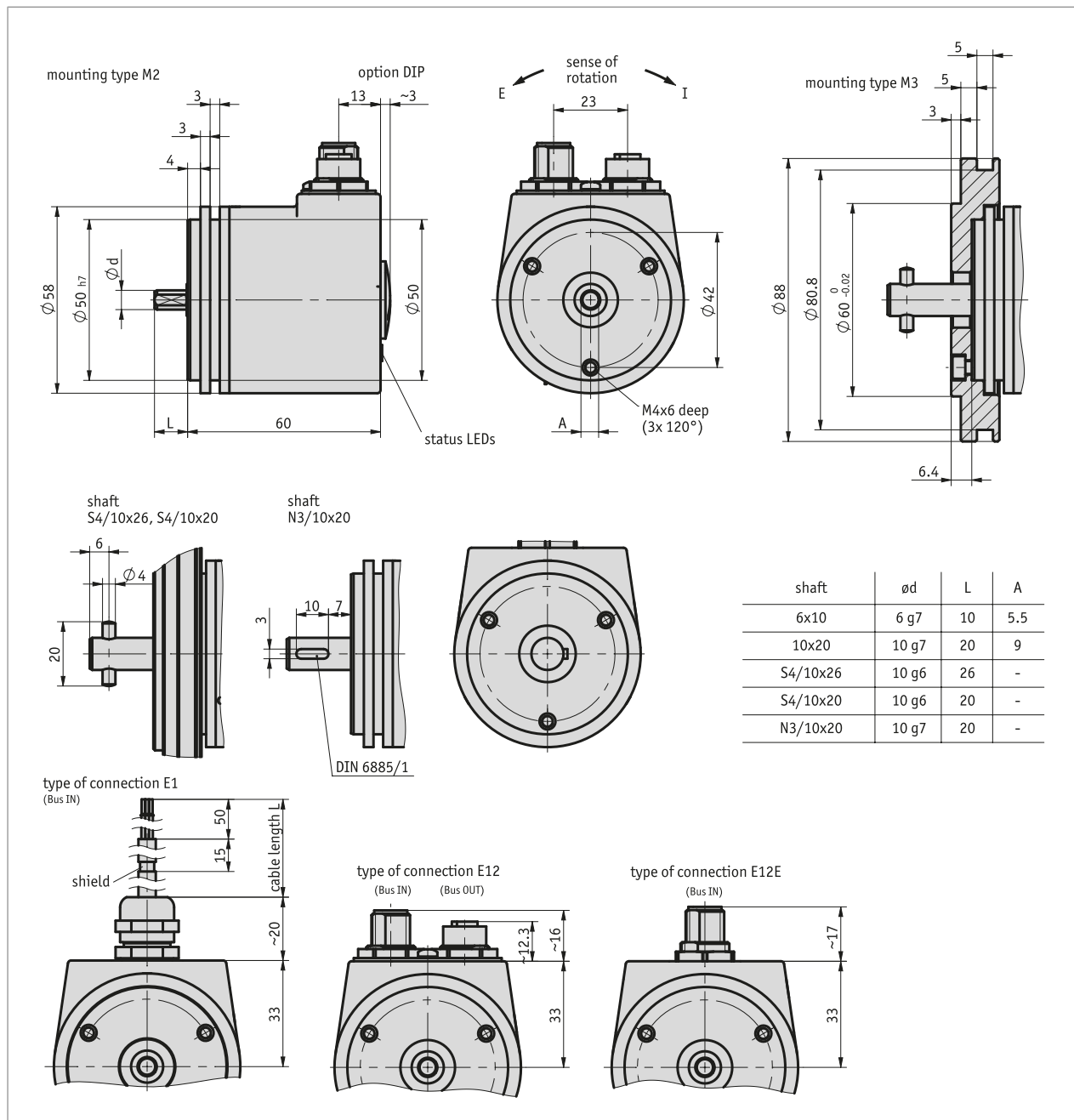


Absolute encoder WV5800M

absolute magnetic rotary encoder with solid shaft

Profile

- CANopen (DS406) or SAE J1939 interface
- Salt spray tested housing available
- High EMC compatibility
- with PURE.MOBILE technology
- Optional: Inclination sensor, bus address adjustable via rotary switch, digital I/O
- E1 Approval by the German Federal Office for Motor Vehicles
- Single turn or multiturn variant available



Mechanical data

Feature	Technical data	Additional information
shaft	rustproof stainless steel	
Flange	aluminum	
Housing	aluminum die-cast	CDP-coated
Speed	≤6000 min ⁻¹	IP65
	≤3000 min ⁻¹	IP67
Moment of inertia	≤8 gcm ²	
Starting torque	≤2 Ncm at 20 °C	
Shaft load rating	≤80 N	radial
	≤40 N	axial
Cable sheath	PVC	E1 connection type
Cable bending radius	>25 mm	E1 connection type, static
Mounting type	servo-flange	
Weight	~0.35 kg	

Electrical data

Feature	Technical data	Additional information
Operating voltage	8 ... 36 V DC	reverse polarity protection
Current consumption	20 mA at 36 V	
	28 mA at 24 V	
	76 mA at 8 V	
Power input	≤800 mW	without load
Parameter storage	10 ⁵ cycles	also applies to calibration operations
Status display	three-color LED (red/green/yellow)	device status/CAN status
Power rating	±36 V	CAN interface
Interface	according to ISO 11898-1, not electrically isolated	CANopen, CiA 301, CiA 303 Part 3, CiA 305, CiA 406
Address	1 ... 127	Node ID, via SDO or Layer Setting Service (LSS)
Baud rate	20 kbit/s	
	50 kbit/s	
	125 kbit/s	
	250 kbit/s	
	500 kbit/s	
	800 kbit/s	
Cycle time	1.5 ms, typical	
Starting time	<150 ms	
Parameter	according to CiA 301, CiA 303 Part 3, CiA 305, CiA 406	CANopen
Type of connection	1x M12-plug connector (A-coded)	5-pin, 1x pin (E12E connection type)
	2x M12 plug connectors (A-coded)	5-pin, 1x pin, 1x socket (E12 connection type)
	open cable end	E1 connection type

System data

Feature	Technical data	Additional information
Scanning	magnetic	
Resolution	14 bit	singleturn, 16384 steps/revolution
Measuring range	1 rotation(s)	singelturm
	4096 rotation(s)	
Approval	E1	UN ECE R10 approval No.: E1*10R05/01*8898*00

Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	-40 ... 85 °C	
Storage temperature	-40 ... 85 °C	
Relative humidity	100 %	condensation admissible
EMC	EN 61000-6-2	interference resistance / immission
	EN 61000-6-4	emitted interference / emission
	EN 61326-3.1	immunity requirement of industrial applications, emission limit class B
	ISO 11452-1, -2, -3, -4, -5	Interference radiation ESA
	ISO 7637-1, -2	transient pulses
Protection category	IP65	EN 60529 fitted with suitable mating connector
	IP67	EN 60529
Salt spray test	severity level 4	EN 60068-2-52 (ambient condition SN)
Shock resistance	500 m/s ² , 11 ms	EN 60068-2-27, half-sine, 3 axes (+/-), each 3 shocks
Vibration resistance	100 m/s ² , 10 ... 2000 Hz	EN 60068-2-6, 3 axes, each 10 cycles

pin assignment

■ E12, E12E

Signal	PIN
nc	1
+UB	2
GND	3
CAN_H	4
CAN_L	5

■ E1

Signal	Cable color E1
nc	white
+UB	brown
GND	green
CAN_H	yellow
CAN_L	gray

Order

■ Ordering table

Feature	Ordering data	Spezifikation	Additional information
number of revolutions	A 1	singleturn	
	4096	12 bit	
shaft diameter x length	B 6x10	ø6 mm, length 10 mm	
	10x20	ø10 mm, length 20 mm	
	S4/10x20	Notch pin, ø10 mm, length 20 mm	
	S4/10x26	Notch pin, ø10 mm, length 26 mm	
	N3/10x20	feather key, ø10 mm, length 20 mm	
Mounting type	C M2	Servo flange, ø58 mm	
	M3	Servo flange, ø88 mm	
ambient conditions	D S	standard	
	SN	salt spray tested housing	
Protection category	E IP65	IP65	
	IP67	IP67	
Type of connection	F E1	open cable end	
	E12	Bus IN/Bus OUT	
	E12E	Bus IN	
Cable length	G ...	01.0, 02.0, 03.0, 05.0, 10.0 in m	
	OK	without cable	
option	H 0	without	
	DIP	rotary switch, address, baud rate	only with CANopen
	IK1	inclination sensor, 1 axis	

■ Order key

WV5800M - CAN - 16384 - A - B - C - D - E - R - F - G - SW - H

**Scope of delivery:**

WV5800M, Quick Start Guide

**Accessories you can find:**

Cable extension KV05S0	www.siko-global.com
Extension board DIP	www.siko-global.com
Extension board IK1	www.siko-global.com
Overview, Mating connector	www.siko-global.com
Mating connector, 5-pole, angle socket	Order key 83006
Mating connector, 5-pole, socket	Order key 84109
Bus terminating connector, 5-pole, pin	Order key 82815