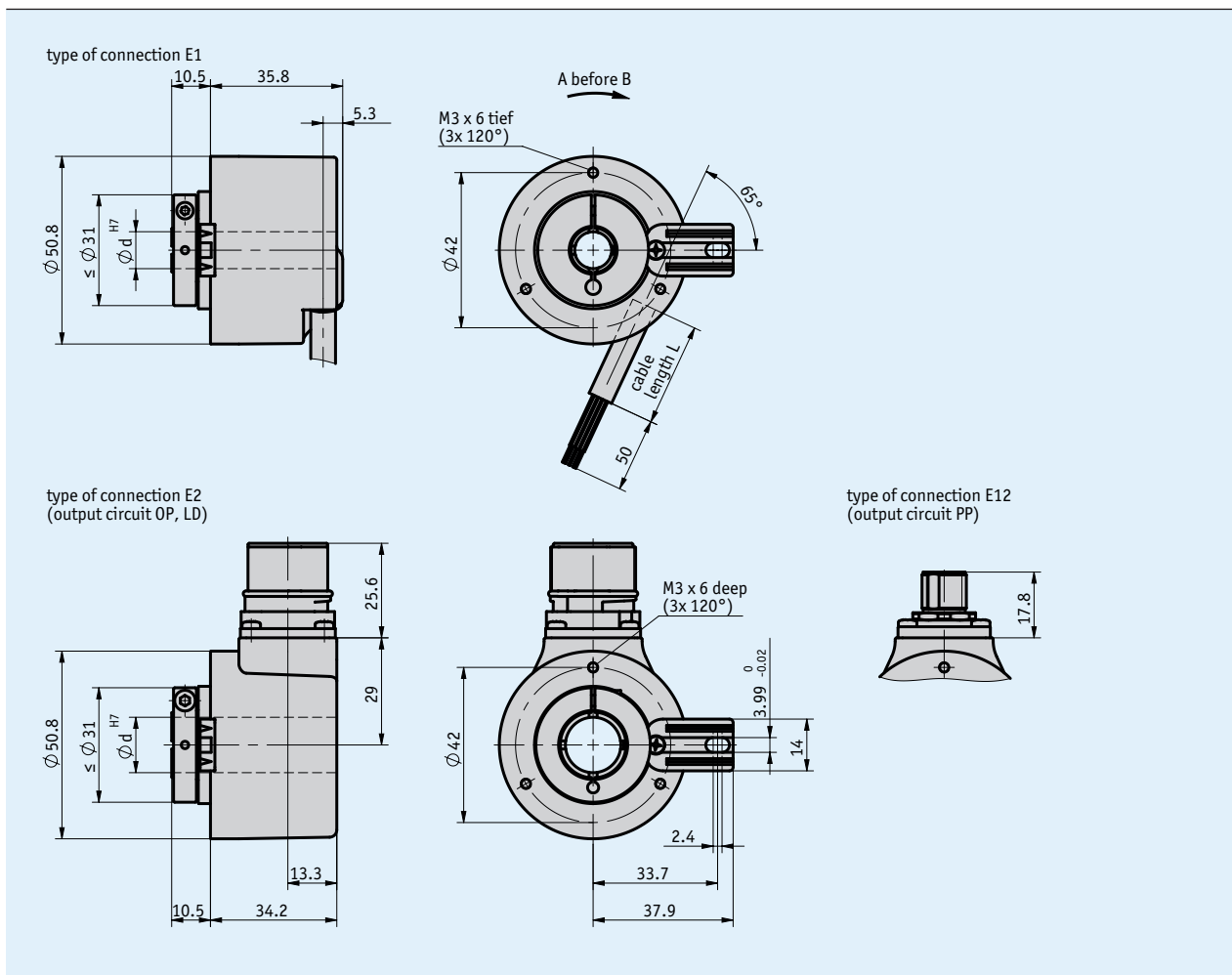


Profile

- Resolution max. 5000 pulses/revolution
- Through hollow shaft up to max. $\varnothing 15$ mm
- Robust bearing construction
- $-40\text{ }^{\circ}\text{C}$... $+85\text{ }^{\circ}\text{C}$ operating temperature
- High shock and vibration resistance



Mechanical data

Feature	Technical data	Additional information
Shaft	stainless steel	
Housing	die-cast	
Speed	≤12000 rpm	IP65
	≤6000 rpm	IP65 continuous operation
	≤6000 rpm	IP66/IP67
	≤3000 rpm	IP66/IP67 continuous operation
Moment of inertia	~6 x 10 ⁻⁶ kgm ²	
Starting torque	<0.01 Nm at 20 °C	IP65
	<0.05 Nm at 20 °C	IP66/IP67
Shaft load rating	100 N	radial
	50 N	axial
Cable sheath	PVC	~ø6.7 mm
Cable bending radius	75 mm	static
	110 mm	dynamic
Weight	~0.4 kg	

Electrical data

■ PP output circuit

Feature	Technical data	Additional information
Operating voltage	10 ... 30 V DC	reverse-polarity protected
Current consumption	typical 50 mA	≤100 mA (no load)
Output signal level high	≥UB - 1.0 V	short-circuit proof
Output signal level low	≤0.5 V	short-circuit proof
Pulse frequency	≤300 kHz	
Load	±20 mA	max. adm.
Type of connection	1x M12 connector	5-pole, 1x pin

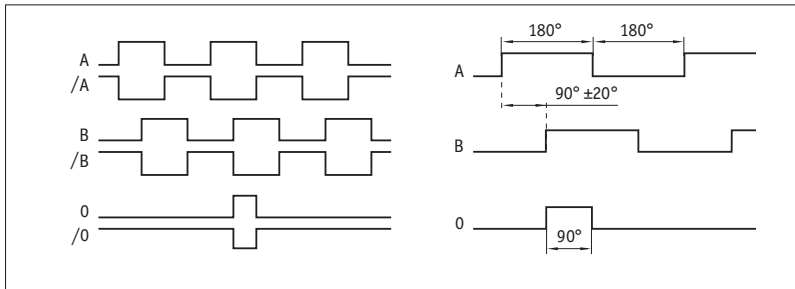
■ OP output circuit

Feature	Technical data	Additional information
Operating voltage	10 ... 30 V DC	reverse polarity protected
Current consumption	typical 50 mA	≤100 mA (no load)
Output signal level high	≥UB - 1.0 V	short-circuit proof
Output signal level low	≤0.5 V	short-circuit proof
Pulse frequency	≤300 kHz	
Load	±20 mA	max. adm.
Type of connection	open cable end 1x M23 connector	12-pole, 1x pin

■ LD output circuit

Feature	Technical data	Additional information
Operating voltage	5 ... 30 V DC	reverse-polarity protected
Current consumption	typical 40 mA	≤90 mA (no load)
Output signal level high	≥2.5 V	short-circuit proof, not against UB
Output signal level low	≤0.5 V	short-circuit proof, not against UB
Pulse frequency	≤300 kHz	
Load	±20 mA	max. adm.
Type of connection	open cable end 1x M23 connector	12-pole, 1x pin

■ signal pattern



Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	-40 ... 85 °C	plug
	-30 ... 85 °C	static laying of cables
	-20 ... 85 °C	dynamic laying of cables
EMC	EN 61326-1	immunity requirement of industry
Protection category	IP65, IP66/IP67	EN 60529
Shock resistance	3000 m/s ² , 6 ms	EN 60068-2-27
Vibration resistance	300 m/s ² , 10 ... 2000 Hz	EN 60068-2-6

Pin assignment

■ LD, PP, OP output circuits

Signal OP, LD	Signal PP	Cable color E1
/B	nc	pink
+SUB (sense line)	+SUB (sense line)	red-blue
0	0	blue
/0	nc	red
A	A	green
/A	nc	yellow
B	B	gray
GND	GND	white
SGND (sense line)	SGND (sense line)	gray-pink
+UB	+UB	brown

■ PP output circuit

Signal	PIN E12
GND	1
+UB	2
A	3
B	4
0	5

■ LD, OP output circuits

Signal	PIN E2
/B	1
+SUB (Sense line)	2
0	3
/0	4
A	5
/A	6
nc	7
B	8
nc	9
GND	10
SGND (Sense line)	11
+UB	12

Order

Ordering table

Feature	Ordering data	Specification	Additional information
Pulses/revolution	... A	50, 64, 100, 200, 250, 256, 300, 360, 400, 500, 512, 600, 800, 1000, 1024, 1200, 2000, 2048, 2500, 3600, 4000, 4096, 5000	
Type of connection	E1	open cable end	tangential, only with OP, LD
	E2	plug M23	radial, only with OP, LD
	E12	plug M12	radial, only with PP
Cable length	... C	01.0, 02.0, 03.0, 04.0, 05.0, 06.0, 08.0, 10.0, 15.0, 20.0 in m	only with E1
	OK	without	only with E2
Output circuit	PP	push-pull	
	OP	push-pull with inversion	
	LD	LineDriver	
Hollow shaft/diameter	... E	6, 8, 10, 12, 14, 15 in mm	
Protection category	IP65	IP65	
	IP66/67	IP66/IP67	

Order key

IH5815 - **ABO** - - - - - -

A B C D E F

Scope of delivery: IH5815, Quick Start Guide

Accessories:

Electronic display MA10/4	www.siko-global.com
Electronic display MA48	www.siko-global.com
Electronic display MA55	www.siko-global.com
Cable extension KV05S0, with PP	www.siko-global.com
Cable extension KV12S1, with OP and LD	www.siko-global.com
Mating Connector Overview	www.siko-global.com
Mating connector, with PP, 5-pole, socket	Order key 84109
Mating connector, with OP and LD, 12-pole, socket	Order key 81935