

IQ58/ IQ58S/ CKQ58 Hollow Shaft Magnetic Encoder Series



FEATURES

- Programmable Incremental Encoder
- Resolution from 1 to 16384 PPR
- Selectable Index length 90 or 180° el.
- Push-Pull and Line Driver Compatible Output
- Programmable via USB Cable
- IP 65 Rating

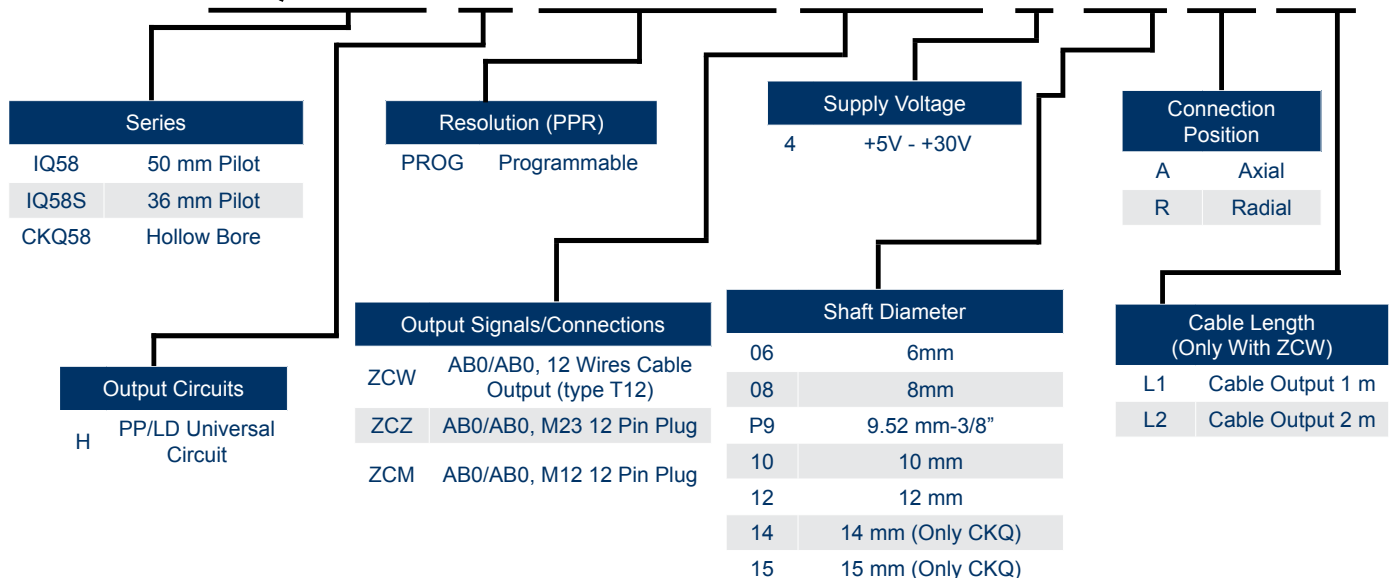


DESCRIPTION

The IQ58S Programmable Incremental Encoders are for standard application with resolutions up to 16384 PPR (Pulses Per Revolution). This Programmable Encoder sets up its parameters by using software expressly written by Lika. The software program is supplied for free and can be installed on any PC with a Windows operating system that is Windows XP or later. This program sets up the working parameters of the encoder and monitors whether the encoder is working properly. The IQ58S Encoders have an absolute core, but this is only so they may be programmed. Furthermore, it has a selectable index length of 90° or 180° encode level. There is a Push-Pull and Line Driver compatible output. To properly use the IQ58S programmable incremental encoder it is highly recommended to purchase the EC-IP/IQ58-M12 Programming Cable and the KIT-IP/IQ58 USB Programming Kit.

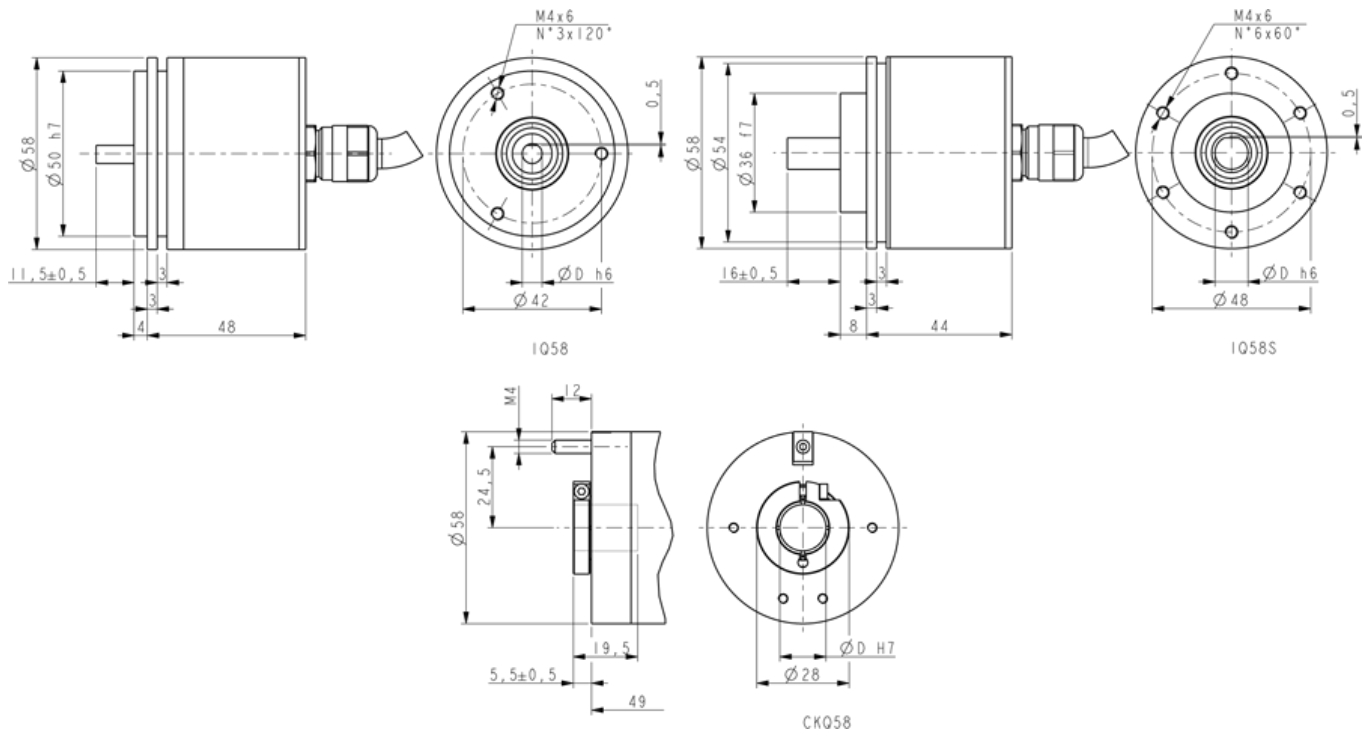
ORDERING INFORMATION

ENC-IQ58S-H-PROG-ZCW-4-06-A-L1



L011521

DIMENSIONS



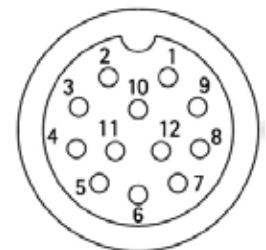
CONNECTOR INFORMATION

Signals	M23 12-Pin	M12 12-Pin
A	1	3
/A	2	4
B	3	5
/B	4	6
0	5	9
/0	6	10
+5VDC +30VDC 0VDC	7	2
Index Pulse Setting*	8	1
Counting Direction*	9	7
	10	8
SDA	11	11
SCL*	12	12
Shield	Case	Case

M23 12-Pin

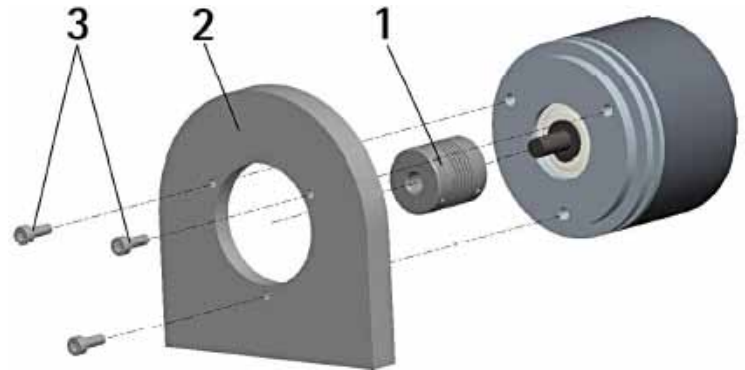


M12 12-Pin

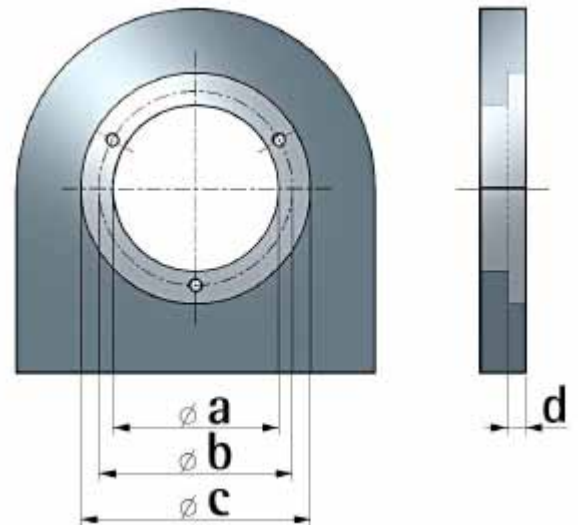


IQ58/IQ58S Series

- Mount the flexible coupling 1 on the encoder shaft
- Fix the encoder to the flange 2 (or to the mounting bell) by means of screws type M4 3;
- Mount the flexible coupling 1 on the motor shaft, then secure the flange 2 to the support (or the mounting bell to the motor);
- Make sure the misalignment tolerances of the flexible coupling 1 are respected.

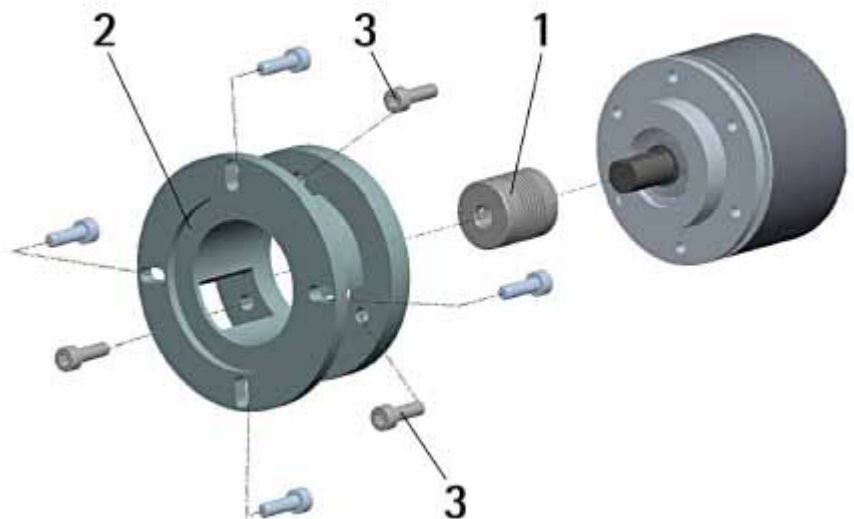


Series	a	b	c	d
IQ58	-	42	50 F7	4
IQ58S	36 H7	48	-	-



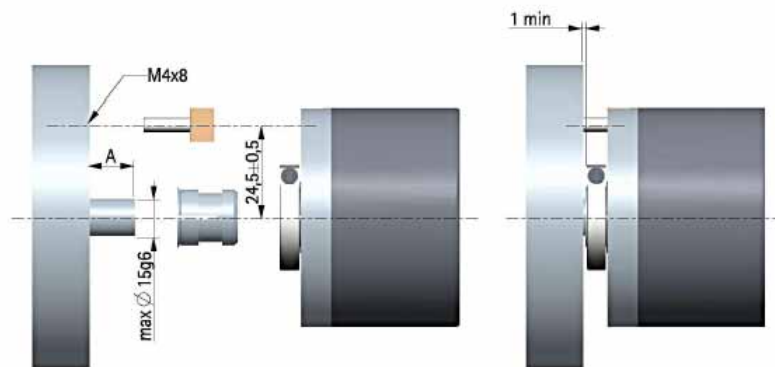
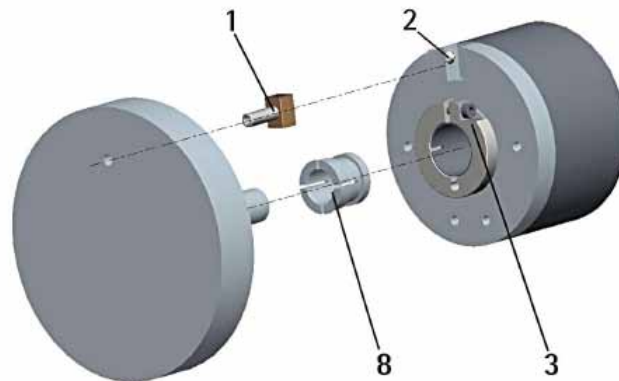
MOUNTING INSTRUCTIONS

IQ58S with Mounting Bell



CKQ58 Series

- Fasten the anti-rotation pin 1 to the rear of the motor (secure it using a locknut);
- Mount the encoder on the motor shaft using the reducing sleeve 8 (if supplied). Avoid forcing the encoder shaft;
- Insert the anti-rotation pin 1 into the slot on the flange of the encoder; this secures it in place by grub screw 2, preset at Lika;
- Fix the collar 3 to the encoder shaft.



Environmental Specifications	
Shock	100g, 6ms
Vibrations	10g, 5-2000 Hz
Protection	IP 65
Operating Temperature Range	-40°C +85°C (-40°F + 185°F)
Storage Temperature Range	-40°C +100°C (-40°F + 212°F) (98% R.H. without condensation)
Mechanical Specifications	
Dimensions	see drawing
Shaft Diameter	ø 6, 8, 9.52, 10, 12 mm
Hollow Shaft Diameter	ø 14, 15 mm
Reducing Sleeves BR1-xx from ø15 to:	ø 6, 8, 9.52, 10, 11, 12 mm
Shaft Loading (Axial, Radial)	100 N max.
Shaft Rotational Speed	Typ. 6000 RPM / 12000 Temporary
Starting Torque at 20°C	IQ58: 0, 15 Ncm / IQ58S, CKQ: 0, 4 Ncm (typical)
Bearings Life	400 x 10 ⁶ rev. min. (10 ⁹ rev. min. with 20 N shaft loading max.)
Electrical Connections	M12, M23 plug or cable output 1 m (3.3 ft)
Weight	~ 200 g (7 oz)
Option	Additional Cable
Electrical Specifications	
Resolution (PPR)	Programmable from 1 to 65536
Accuracy	± 0, 15°
Counting Frequency	500 kHz max.
Output Circuits	Universal Output (PP+LD compatible)
Power Supply	+5V +30V
Consumption	60 mA (typical)
Output Current (each channel)	40 mA max.
Protection	Against inversion of polarity and short cut
EMC	Electro-magnetic immunity, EN 61000-4-2 EN 61000-4-4
Materials	
Flange	Anticorodal, UNI EN AW-6082
Housing	Anticorodal, UNI EN AW-6082
Bearings	ABEC 5
Shaft	Stainless Steel, Non-Magnetic - UNI EN 4305