

# Incremental encoder IH100

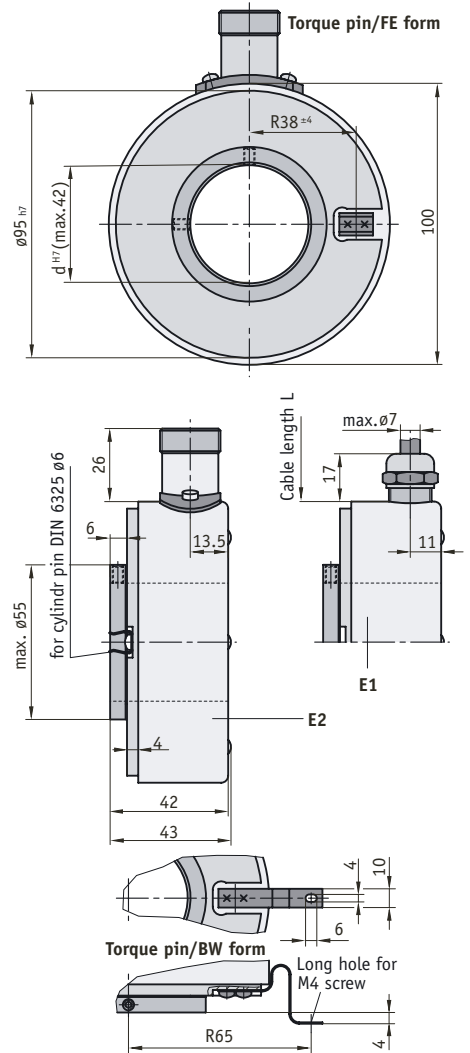
Hollow shaft

IH100 - the big one! - Versatile incremental encoder with through hollow shaft. For the accommodation of large shaft diameters.



**Features:**

- resolution max. 5000 pulses/revolution
- easy installation
- through hollow shafts with diam. 24 - 42 mm
- high type of protection: IP65



Feature	Order text	Technical data	Additional information		
Pulses/revolution	...	<b>A</b> 360, 1000, 1024, 2048, 2500, 5000			
Connection type	E1	<b>B</b> stripped cable ends			
	E2	connector	mating connector available as an accessory, article no. 81273		
Cable length L [m]	2.0	<b>C</b> 1.0, 2.0, 3.0, 5.0, 8.0, 10.0			
	OK	without cable (only E2)			
Output circuit	PP	<b>D</b> push-pull			
	OP	push-pull with additional inverted signals			
	LD	RS422, 5 V DC operating voltage			
	LD24	RS422, 24 V DC operating voltage			
Torque support	FE	<b>E</b> short spring element			
	BW	angle bracket			
Hollow shaft diam. [mm]	24	<b>F</b> d in			
		25, 28, 38, 42			
<b>Mechanical data</b>					
Speed		max. 6000 min <sup>-1</sup>			
Rotor moment of inertia		approx. 65 x 10 <sup>-6</sup> kgm <sup>2</sup>			
Starting torque		< 0.2 Nm			
Weight		approx. 0.7 kg			
Type of protection		IP 65	according to EN 60 529		
Working temperature		-20 °C ... +70 °C			
Shaft		stainless steel			
Cable sheath		PVC			
Shock resistance		2000 m/s <sup>2</sup> , 6 ms	according to DIN-IEC 68-2-27		
Vibration resistance		100 m/s <sup>2</sup> , 10 ... 2000 Hz	according to DIN-IEC 68-2-6		
<b>Electrical data</b>					
		<b>PP</b>	<b>OP</b>	<b>LD</b>	<b>LD24</b>
Output signals		AB0	AB0	AB0	AB0
Operating voltage		10 ... 30 V DC	10 ... 30 V DC	5 V DC ±5%	10 ... 30 V DC
Power cons. without load (typ.)		55 mA			
without inverting (max.)		125 mA			
Power cons. without load (typ.)			80 mA	70 mA	70 mA
with inverting (max.)			150 mA	100 mA	100 mA
Permitted load/channel (max.)		± 30 mA	± 30 mA	± 20 mA	± 20 mA
Pulse frequency (max.)		300 kHz	300 kHz	300 kHz	300 kHz
Signal level high (min.)		UB - 3 V	UB - 3 V	2.5 V	2.5 V
Signal level low (max.)		2.5 V	2.5 V	0.5 V	0.5 V
Rise time t <sub>r</sub> (max.)		1 μs	1 μs	200 ns	200 ns
Fall time t <sub>f</sub> (max.)		1 μs	1 μs	200 ns	200 ns
Short-circuit proof outputs		yes	yes	yes, only 1 channel *	yes, only 1 channel **
Polarity protection on UB		yes	yes	no	yes
<b>Other data</b>					
Test mark		CE			

\* Short circuit towards other channels, 0V or +UB permitted

\*\* Short circuit towards other channels, or 0V permitted

Your order data: IH100 -  -  -  -  -  -