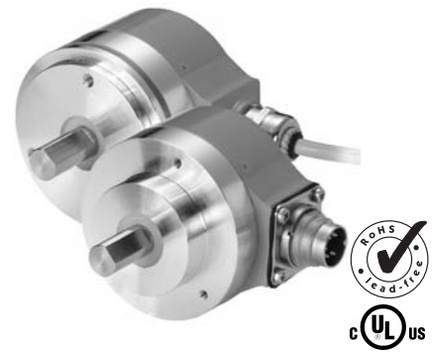
Rotary Measuring Technology
Incremental shaft encoder

MICRONOR
automation components

Low-cost Type ESI 58E



- Economical up to 512 ppr
- Ø58 mm housing
- Short-circuit proof outputs
- High mechanical protection
- Push-pull output (10 ... 30 V supply voltage)
- Ex available as explosion proof zone 2 and 22

Mechanical characteristics:

Speed:	max. 6000 min^{-1}
Rotor moment of inertia:	approx. 0.6 x 10^{-6} kgm^2
Starting torque:	< 0.01 Nm
Radial load capacity of shaft:	40 N
Axial load capacity of shaft::	20 N
Weight:	approx. 0.4 kg
Protection acc. to EN 60 529:	IP 64
Working temperature:	0° C ... +65 °C
Operating temperature:	–10° C ... +75 °C
Shaft:	stainless steel
Shock resistance acc. to DIN-IEC 68-2-27	1000 m/s^2, 6 ms
Vibration resistance acc. to DIN-IEC 68-2-6:	100 m/s^2, 10...2000 Hz

Pulse rates available at short notice:

2, 5, **10**, 20, 25, 30, 36, 40, **50**, 60, 64, 87, 88, 90, 96, **100**, 125, 180, **200**, 250, 300, **360**, 393, 400, **500**, **512**

Other pulse rates on request

Electrical characteristics:

Output circuit:	Push-pull
Supply voltage:	10 ... 30 V DC
Power consumption (no load) without inverted signal:	max. 80 mA
Permissible load/channel:	max. ±30 mA
Pulse frequency:	max. 20 kHz
Signal level high:	min. U_B – 1.5 V
Signal level low:	max. 2.0 V
Rise time t_r	max. 1 µs
Fall time t_f	max. 1 µs
Short circuit proof outputs:[1)]	yes
Reverse connection protection at UB:	yes
Conforms to CE requirements acc. to EN 61000-6-1, EN 61000-6-4 and EN 61000-6-3	

[1)] If supply voltage correctly applied

Terminal assignment

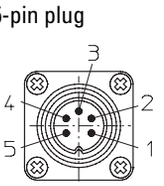
Signal:	0 V	+U_B	A	B	0 or. $\overline{0}$	Shield
5 pin plug, Pin:	1	2	3	4	5	PH[1)]
Colour	WH	BN	GN	YE	GY	

[1)] PH = Shield is attached to connector housing

Insulate unused outputs before initial startup.

Top view of mating side, male contact base:

5-pin plug



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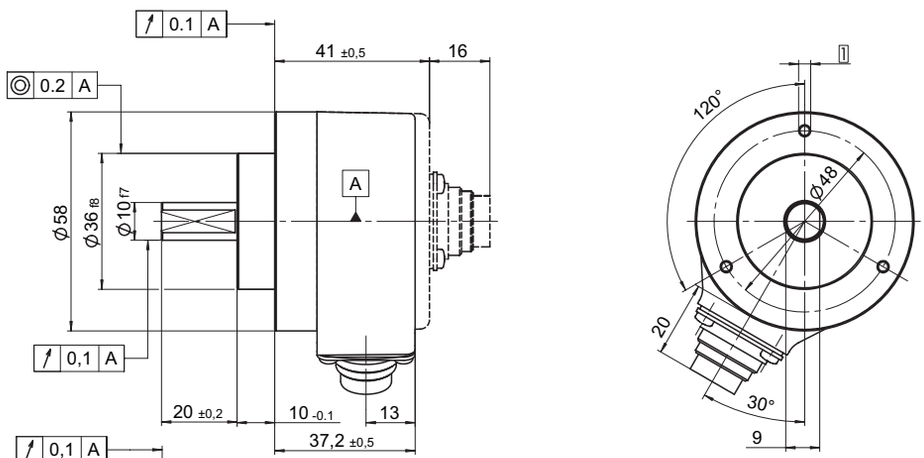
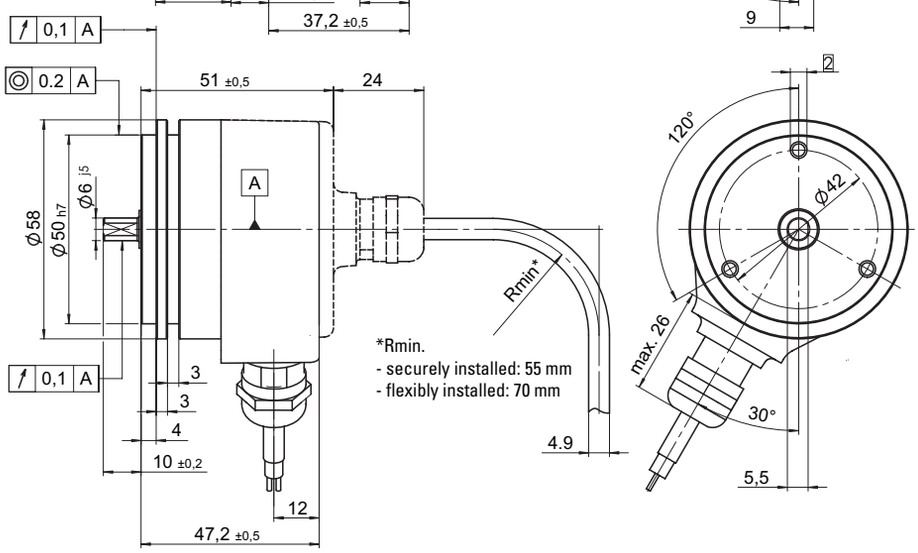
Dimensions

Clamping bracket ø 58



Synchronous bracket ø



1 M3, 5 deep
2 M4, 5 deep

Mounting advice:

The brackets and shafts of the encoder and drive should not both be rigidly coupled together at the same time! We recommend the use of suitable couplings (see Accessories section).

Order code:

ESI 58E.XXXX.XXXX

Range	
Bracket	**1 = Clamping bracket ø 58** **2 = Synchronous bracket ø 58**
Shaft	**1 = ø 6 mm x 10 mm** **2 = ø 10 mm x 20 mm**
Output circuit	1 = Push-pull, Channel A 3 = Push-pull, Channel A and B **4 = Push-pull, Channels A and B and 0**
Pulse rate	(e.g. 250 pulses=> 0250)
Type of connection	1 = Cable axial (1 m PVC-Cable) **2 = Cable radial (1 m PVC-Cable)** 3 = axial 5 pin plug without mating connector **5 = radial 5 pin plug without mating connector**

Preferred types are indicated in **bold**