



Euro Encoder ES 38

Optical incremental encoder, small and efficient

Resolution

Resolution (Pulses/Revolution):

30	100	200	250
256	300	360	400
500	512	600	646
800	900	1000	1024
1200	1500	1800	2000
2048	2500		

Type explanation

ES 38-6-2500-05-D-S

Encoder type	Incremental
Flange diameter	ø 38 mm
Case diameter	ø 38 mm
Number of channels	3 = A + B + M 6 = AA + BB + MM
Resolutions	xxxx = Impulse pro Umdrehung
Supply voltage	05 = 5 VDC ± 5% 12 = 4,5 ... 13 VDC 24 = 10,8 ... 26 VDC
Output driver	D-RS422 C R P
Position of connection	S
Shaft diameter	ø 6 mm

Technical data

Mechanical data

Rotational speed	? 6000 min ⁻¹
Torque	? 0,1 Ncm
Moment of inertia	8 g cm ²
shaft loading	? 20 N radial ? 10 N axial
Angular acceleration	? 105 rad/sec ²
Weight	? 0,15 kg

Environmental conditions

Vibration	150 ms ⁻² (50 Hz / 1h)
Shock	300 ms ⁻² (11 ms)
Operating temperature	-10 ... +70°C
Storage temperature	-30 ... +80°C
Atmospheric humidity	? 85% r.h.
Protection class	IP 50 (DIN 40050/IEC 144)

Electrical data

Scanning type	Optical, without contact
Transmitter, infrared	LED
Receiver	Photo-Transistor
Supply voltage	Vcc = 5 VDC ±5%, output D Vcc = 4,5 ... 13 VDC, output R, C Vcc = 10,8 ... 26 VDC, output C, P
Power consumption	? 80 mA, output C, R, P ? 150 mA, Output D
Output frequency	? 200 kHz
Signal level	High > Vcc -1 V Low < 0,5 V (20 mA)
Load capacity of the outputs	20 mA
Dielectric strength of outputs	+50 V

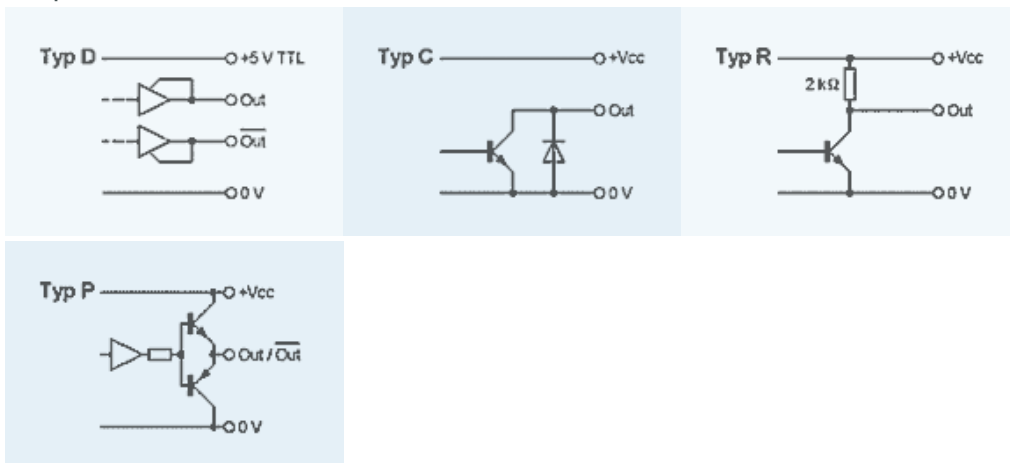
Cable 3 channels

Wire colour	Signal
Red	+Vcc
Black	0 V GND
Green	Signal A
White	Signal B
Yellow	Signal M
Shield	N.C.

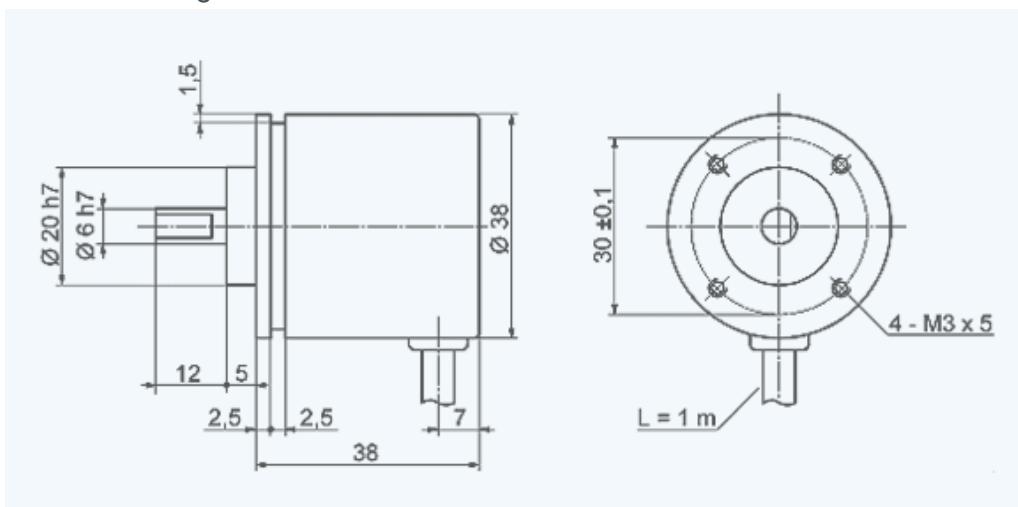
Cable 6 channels

Wire colour	Signal
Red	+Vcc
Black	0 V GND
Green	Signal A+
Blue	Signal A-
White	Signal B+
Grey	Signal B-
Yellow	Signal M+
Orange	Signal M-
Shield	N.C.

Output driver



Outline drawing



INDUcoder® · INDUcoder Messtechnik GmbH, Kaiserstraße 316, 47178 Duisburg, Deutschland
Tel: (0203) 57047-0, Fax: (0203) 57047-20, E-Mail: info@inducoder.de, Internet:
www.inducoder.de