INDUcoder

Euro No Shaft Encoder ES 401

Optical incremental encoder with hollow shaft, small and efficient

Resolution

Resolution (Pulses/Revolution):			
20	30	32	40
50	60	100	125
200	256	300	360
400	500	512	600
800	900	1000	1024
1200	1500	1800	2000
2048	2500	3600	

Type explanation

ES 401-3-2500-24-P-S/Ø6	
Encoder type	Incremental
Hollow shaft	Yes
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 5 mm

Technical data

Mechanical data	
Rotational speed	≤ 6000 min^{-1}
Torque	≤ 0,1 Ncm
Moment of inertia	8 g cm^2
shaft loading	≤ 30 N radial ≤ 10 N axial
Angular acceleration	≤ 10^5 rad/sec^2
Weight	≤ 0,15 kg

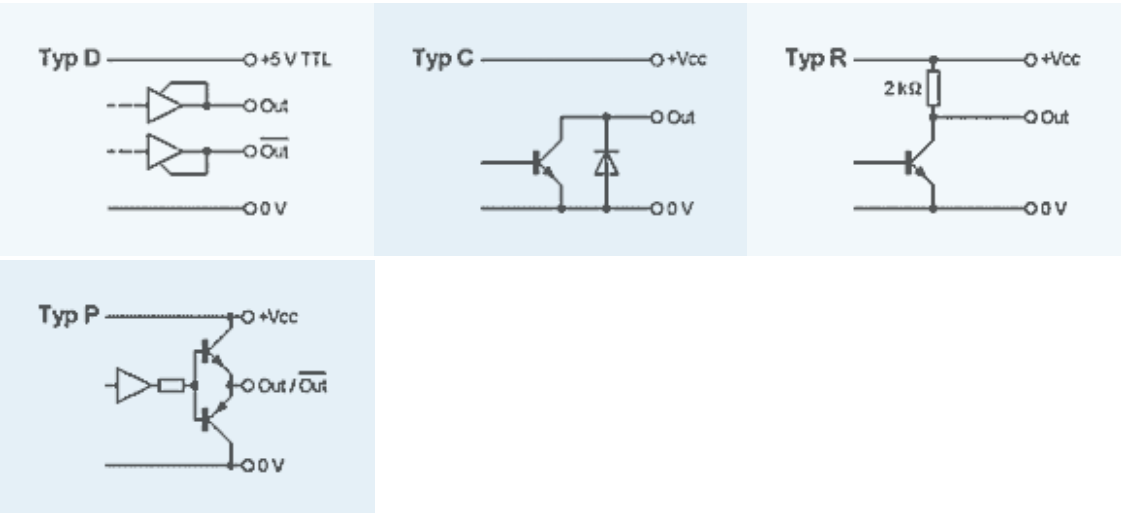
Environmental conditions	
Vibration	150 ms^{-2} (55 Hz / 1h)
Shock	300 ms^{-2} (11 ms)
Operating temperature	-10 ... +70°C
Storage temperature	-30 ... +80°C
Atmospheric humidity	≤ 85% r.h.
Protection class	IP 50 (DIN 40050/IEC 144)

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 consumtion	≤ 80 mA, output C, R, P ≤ 150 mA, Output D
Output frequency	≤ 200 kHz
Signal level	High > Vcc -1 V High > Vcc -1 V Low < 0,5 V (20 mA)
Load capacity of the outputs	20 mA
Dielectric strength of outputs	+50 V

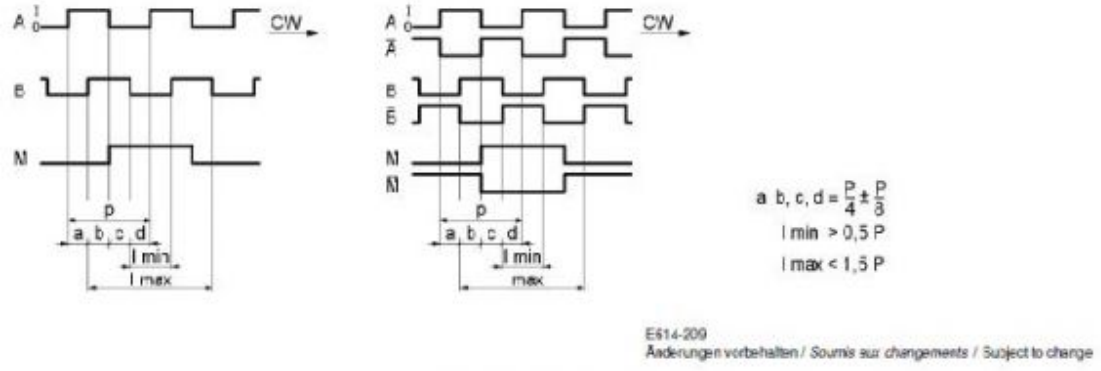
Cable 3 channels	
Wire colour	**Signal**
Red	+Vcc
Black	0 V GND
Green	Signal A
White	Signal B
Yellow	Signal M
Shield	N.C.

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

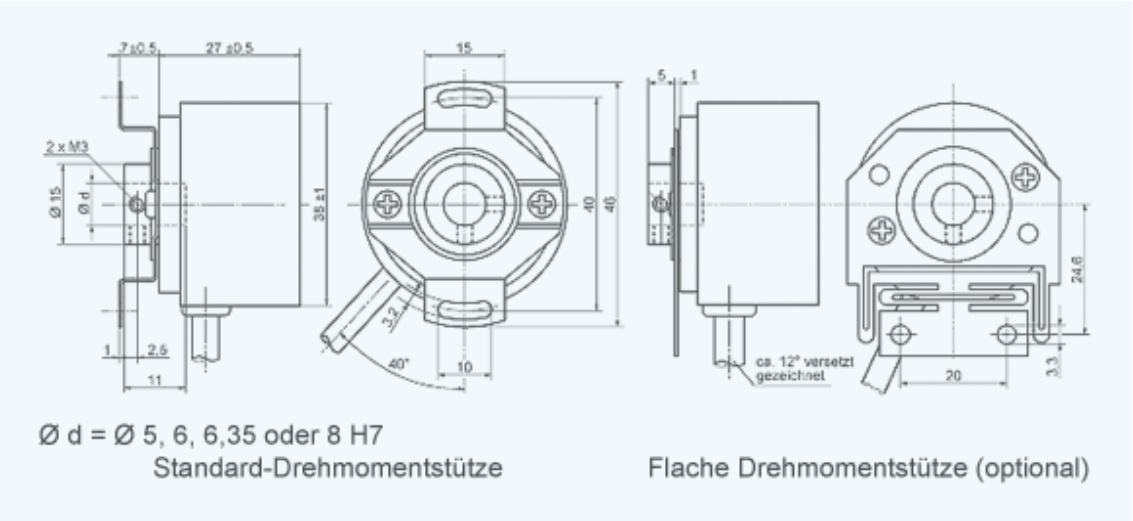


Output channels / Output signals



E614-209
Änderungen vorbehalten / *Sous réserve de modifications* / Subject to change

Outline drawing



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