

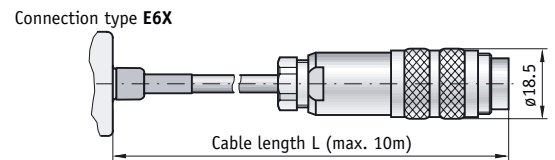
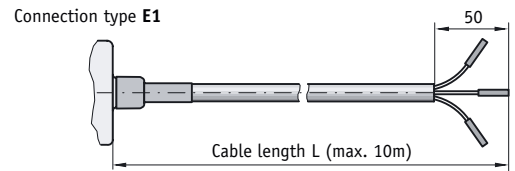
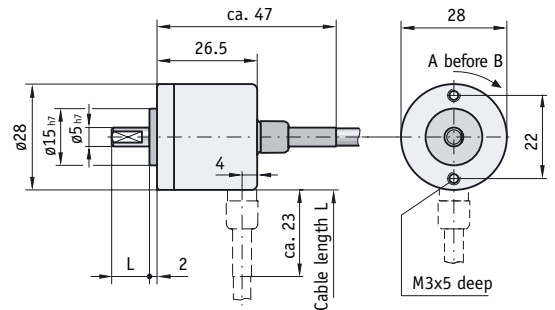
Incremental encoders IV28M

Miniature rotary encoders with high precision: The encapsulated solid shaft encoder IV28M can take a lot with regard to vibration, dirt, and humidity and convince with their particularly compact design.



Features:

- up to 1000 pulses/revolution
- PP, OP, LD5, LD24 output circuit
- solid shafts up to 6 mm diam.
- IP54 or higher type of protection
- 28 mm flange diameter



Pin-outs

E6X PIN	E1 Core colours	PP Signal
1	white	B
2	brown	+UB
3	green	0/I
4	yellow	A
5	grey	GND
6		
7		

E6X PIN	E1 Core colours	OP/LD24/LD5 Signal
A	blue	/B
B		
C	green	0
D	red	/0
E	yellow	A
F	pink	/A
G		
H	white	B
I		
K	grey	GND
L		
M	brown	+UB

Feature	Technical data	Additional information
Type of protection	IP54	
Max. rotational speed	3000 min ⁻¹	
Shaft moment of inertia	~0.24 x 10 ⁻⁶ kgm ²	
Starting torque (+20 °C)	≤0.1 Ncm	
Load capacity of shaft	radial 30 N, axial 15 N	only IV28M
Weight	~0.1 kg	
Working temperature	-20 °C ... +70 °C	storage temperature -20 °C ... +80 °C
Cable sheath	PUR	
Shock resistance	200 g/6 ms	acc. to DIN-IEC 68-2-27
Vibration resistance	10 g/50 Hz	acc. to DIN-IEC 68-2-6
Operating voltage	10 ... 30 V DC (PP, OP, LD24)	
	5 V DC ± 5% (LD5)	
Power cons. without load (typ.)	<25 mA	ABO version
Perm. load/channel (max.)	±30 mA	short-time up to 100 mA, t < 5 s
Pulse frequency (max.)	200 kHz	
Phase position	90° ± 15°	
Signal level high (min.)	29.2 V DC (not with LD5, LD24)	Ub = 30 V DC, I oh = -30 mA
Signal level low (max.)	0.5 V DC (not with LD5, LD24)	Ub = 30 V DC, I ol = 30 mA
Polarity protection on UB	yes (PP, OP, LD24), no (LD5)	
Housing	aluminium/plastic	
Shaft	stainless steel	
Test mark	CE	acc. to EN 61000-6-2, EN 61000-6-4

Ordering data

Output signals (see appendix)	ABX	A		standard
	ABO			
	ABI			
Pulses/revolution	...	B	50 ... 1000 in 50-increments	
Type of connection	E1	C	cable sleeve with flying leads	
	E6X		connector	
Cable length [m]	1.0	D	from 1.0 ... 10.0 m in steps of 1.0 m (E1)	standard
	0.3		only for E6X	
Output circuit (see appendix)	PP	E	push-pull	standard
	OP		push-pull, with inverted signals	
	LD5		line driver, 5 V DC encoder supply	RS422 A spec.
	LD24		line driver, 24 V DC encoder supply	RS422 A spec.
Shaft diameter	...	F	max. 8 mm	standard , hollow shaft
	5 x 10			standard , solid shaft

Accessories in the appendix

Your order: - - - - - - -