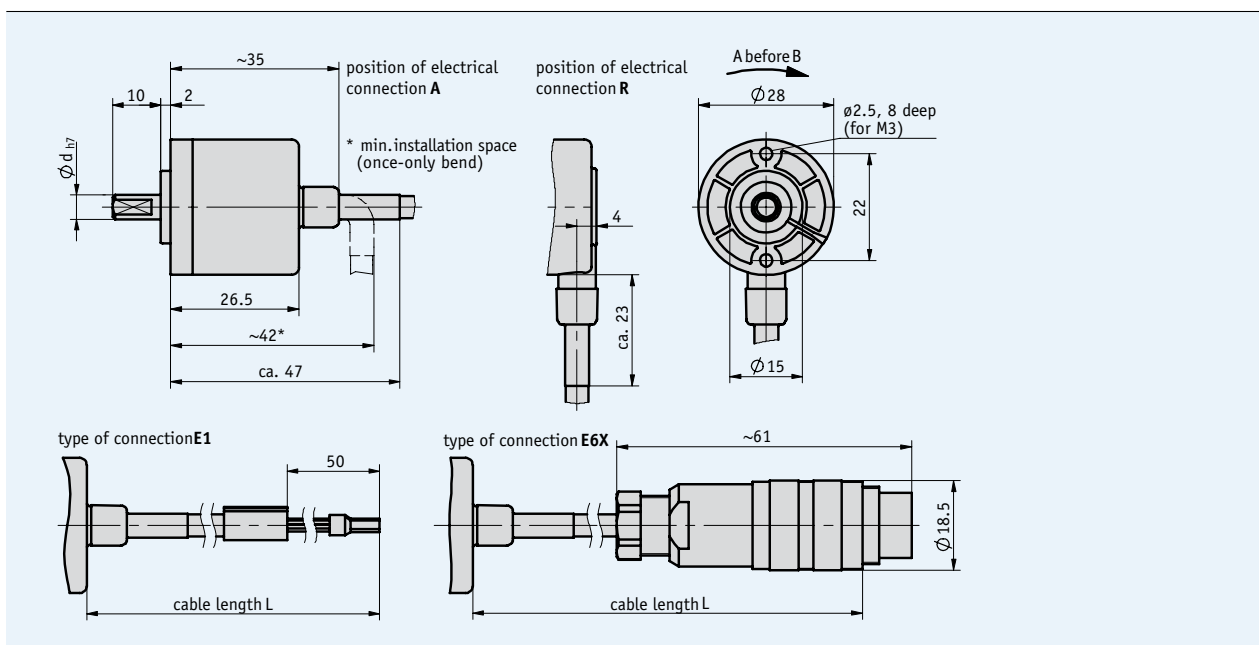


Profile

- Small design, \varnothing 28 mm
- Resolutions of max. 1000 pulses/revolution
- Solid shafts up to \varnothing 6 mm, stainless steel
- IP54 protection category
- Plastic housing



2.1

Mechanical data

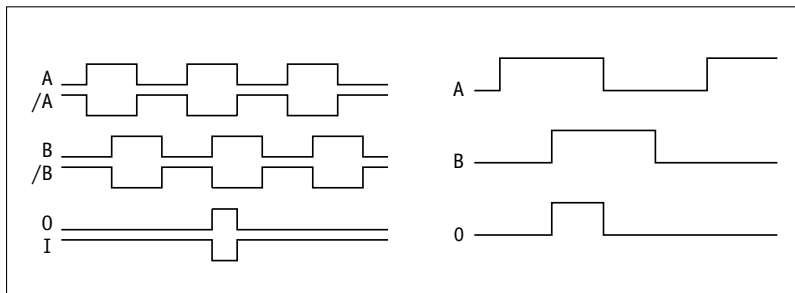
Feature	Technical data	Additional information
Max. speed	3000 rpm	
Shaft moment of inertia	$\sim 0.24 \times 10^{-6} \text{ kgm}^2$	
Starting torque	$\leq 0.1 \text{ Ncm}$	at 20 °C
Shaft load rating	radial 30 N axial 8 N	
Weight	$\sim 0.1 \text{ kg}$	
Protection category	IP54	
Operating temperature	-20 ... +70 °C	
Storage temperature	-20 ... +80 °C	
Shock resistance	200 g/6 ms	according to DIN EN 60068-2-27
Vibration resistance	10 g/50 Hz	according to DIN EN 60068-2-6
Shaft	stainless steel	
Housing	plastic	
Cable sheath	PUR \varnothing 4.8 mm	

Electrical data

Output circuit

Feature	PP, OP Push-pull	LD5 Line driver	LD24 Line driver	Additional information
Operating voltage	+10 ... +30 V DC	+5 V DC $\pm 5\%$	+10 ... +30 V DC	
Current consumpt. w/o load (typ.)	<25 mA	<25 mA	<25 mA	ABO variant
Maximum load/channel	± 30 mA	± 30 mA	± 30 mA	
Max. pulse frequency	100 kHz	100 kHz	100 kHz	
Phasing	90°	90°	90°	
Signal level high (min.)	29.2 V DC			UB = 30 V, IOH = -30 mA
Signal level low (max.)	0.5 V DC			UB = 30 V, IOL = 30 mA
Signal level		RS422 A spec.	RS422 A spec.	
Inverse-polarity protection on UB	yes	no	yes	

Signal image



! The state of the signals A and B with regard to the reference signal 0 is not defined and can deviate from the signal image.

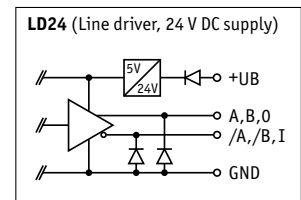
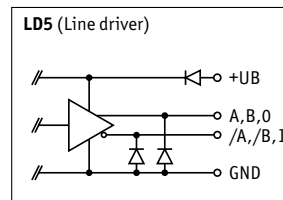
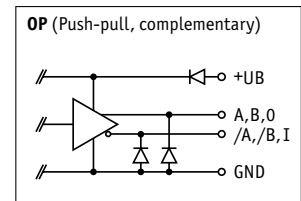
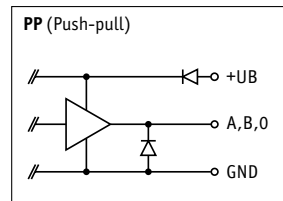
Pin assignment

Output circuit PP

Signal	E1	E6X
B	white	1
+UB	brown	2
O/I	green	3
A	yellow	4
GND	gray	5
N.C.		6, 7

Output circuit OP, LD5, LD24

Signal	E1	E6X
/B	blue	A
N.C.		B
O	green	C
/O	red	D
A	yellow	E
/A	pink	F
N.C.		G
B	white	H
N.C.		J
GND	gray	K
N.C.		L
+UB	brown	M



Order

Order table

Feature	Order data	Specification	Additional information
Output signals	... A	ABO, ABI, ABX	
Pulses/revolution	... B	36, 50, 200, 250, 400, 500, 800, 1000 others on request	
Type of connection	E1 E6X C	flying leads connector	
Position of the electrical connection	A R D	axial radial	
Cable length L (m)	... E	0.07, 0.3, 0.35, 1, 2, 2.5, 3, 4, 5, 8, 10	
Output circuit	PP OP LD5 LD24 F	push-pull push-pull with inverted signals line driver line driver	
Shaft diameter	5x10 6x10 G	∅ 5 mm, length 10 mm ∅ 6 mm, length 10 mm, bush glued on	

2.1

Order code

IV28M/1 - - - - - - -

A B C D E F G

Scope of delivery: IV28M/1, User information

Accessories:

Mating connectors Page 106
 Cable extension Page 108
 Electronic display MA10/4 Page 96
 Electronic display MA55 Page 94

Additional information:

General information and areas of application Page 8 cont.