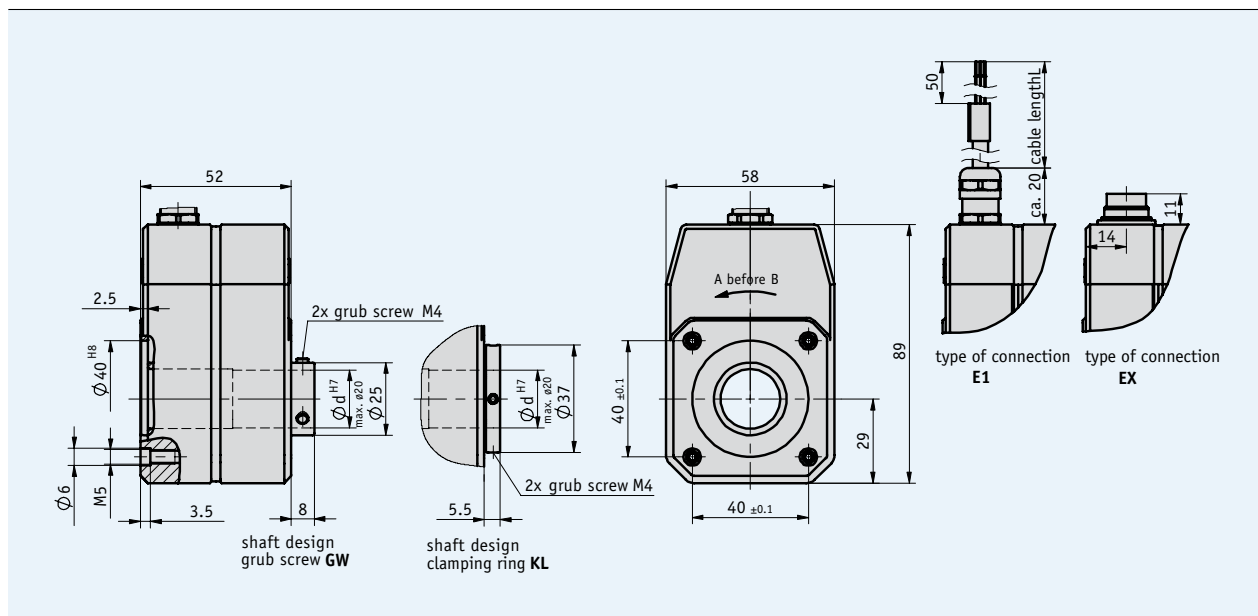


### Profile

- Resolutions of max. 2560 pulses/revolution
- High shaft load rating, axial 1400 N; radial 5600 N
- Through hollow shafts up to  $\varnothing$  20 mm, stainless steel
- IP64 protection category
- Housing made of zinc die-cast
- Condensation permitted with sealed electronics unit



2.1

### Mechanical data

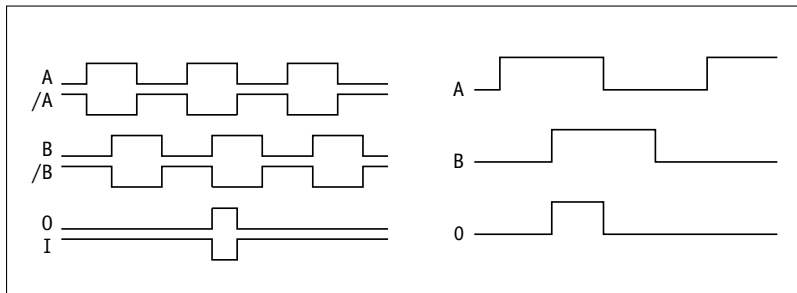
Feature	Technical data	Additional information
Max. speed	6000 rpm, IP64 3000 rpm, IP65	
Shaft moment of inertia	$\sim 0.3 \times 10^{-6} \text{ kgm}^2$	
Starting torque	$\leq 6 \text{ Ncm}$ , IP64 $\leq 10 \text{ Ncm}$ , IP65	at 20 °C
Shaft load rating	radial 5600 N axial 1400 N	
Weight	$\sim 0.75 \text{ kg}$	
Protection category	IP64, high-precision packed sealing gap IP65, enhanced bearing sealing	
Operating temperature	$-20 \dots +100 \text{ }^\circ\text{C}$	
Storage temperature	$-20 \dots +100 \text{ }^\circ\text{C}$	
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, $\varnothing$ 20 mm	
Housing	zinc die-cast	
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 ±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° ±15°	90° ±15°	90° ±15°	
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

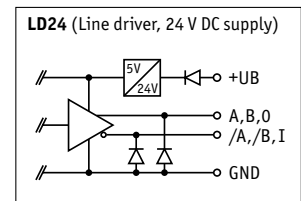
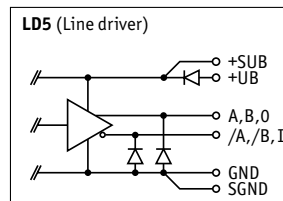
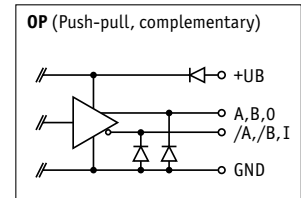
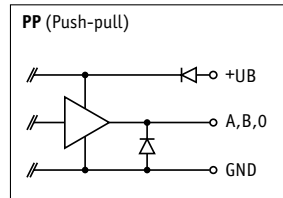
Signal	E1	E6X
N.C.		A
N.C.		B
O/I	green	C
N.C.		D
A	yellow	E
N.C.		F
N.C.		G
B	white	H
N.C.		J
GND	gray	K
N.C.		L
+UB	brown	M

Output circuit LD5

Signal	E1	E6X
/B	blue	A
+SUB	violet	B
0	green	C
/0	red	D
A	yellow	E
/A	pink	F
N.C.		G
B	white	H
N.C.		J
GND	gray	K
SGND	black	L
+UB	brown	M

Output circuit OP, LD24

Signal	E1	E6X
/B	blue	A
N.C.		B
0	green	C
/0	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	... <b>A</b>	ABO, ABI, ABX	
Pulses/revolution	... <b>B</b>	50, 64, 100, 200, 250, 256, 320, 400, 512, 640, 800, 900, 1000, 1024, 1280, 1600, 2000, 2048, 2560 others on request	
Type of connection	E1 EX <b>C</b>	flying leads connector	
Cable length L (m)	... OK <b>D</b>	01.0, 02.0, 03.0, 04.0, 05.0, 08.0, 10 without cable	only with EX
Output circuit	PP OP LD5 LD24 <b>E</b>	push-pull push-pull with inverted signals line driver line driver	
Shaft design	GW KL <b>F</b>	set screw clamp ring	
Bearing	MS RS <b>G</b>	IP64, high-precision packed sealing gap IP65, enhanced bearing sealing	
Ambient condition	S E <b>H</b>	condensation not permitted condensation permitted	

### Order code

IG07M -  -  -  -  -  -  - 20 - M1 -  -

A
B
C
D
E
F
G
H

**Scope of delivery:** IG07M, 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.