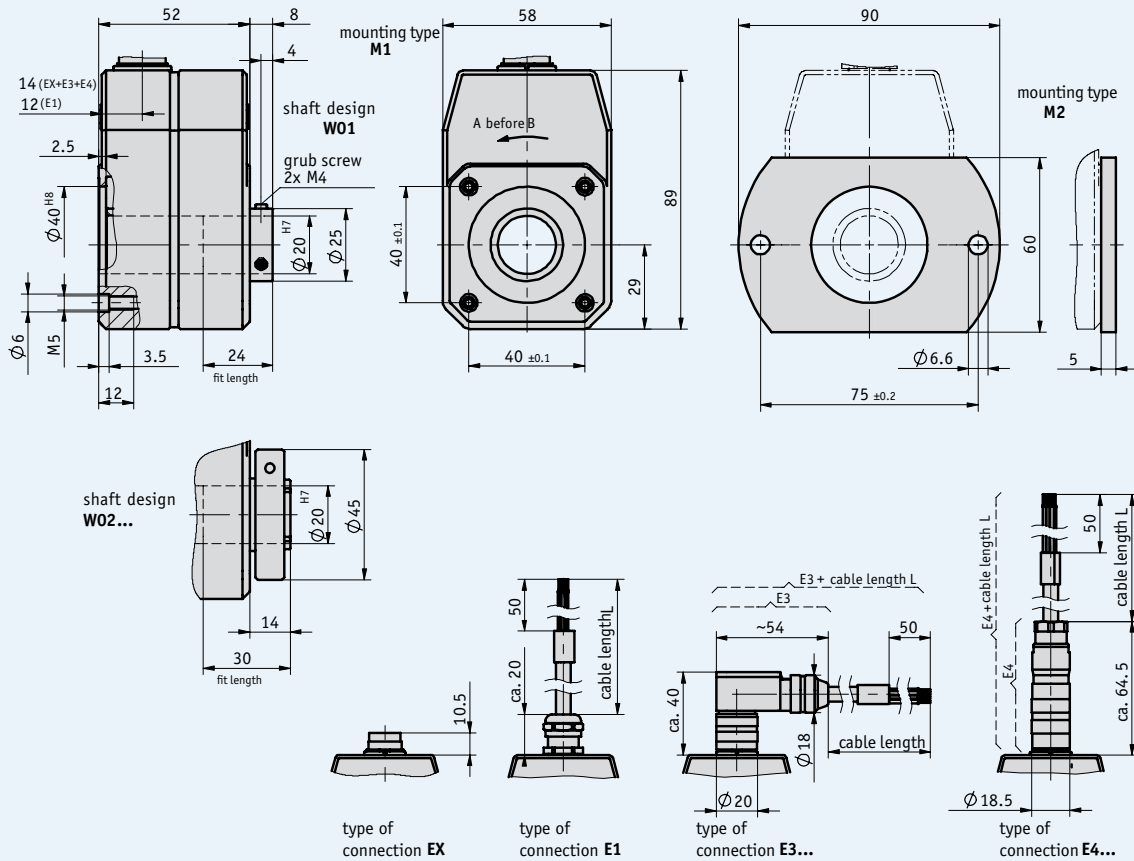


Incremental encoder IG07

Housing made of zinc die-cast with through hollow shaft

Profile

- Resolutions of max. 1024 pulses/revolution
- Through hollow shafts up to $\varnothing 20$ mm
- Housing made of zinc die-cast
- High shaft load rating: radial 5600 N, axial 1400 N



Mechanical data

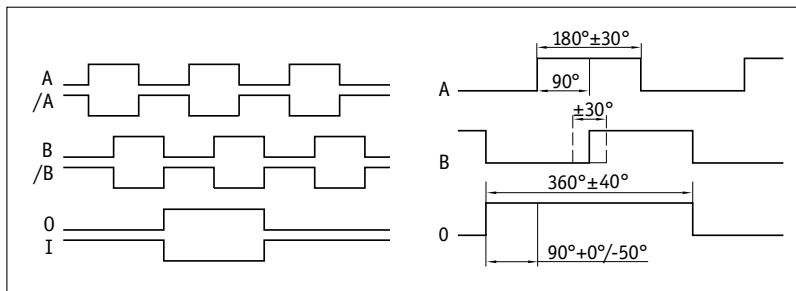
Feature	Technical data	Additional information
Max. speed	6000 rpm 3000 rpm	with IP64 with IP65
Shaft moment of inertia	$\sim 28.5 \times 10^{-6} \text{ kgm}^2$ $\sim 58.5 \times 10^{-6} \text{ kgm}^2$ $\sim 35.5 \times 10^{-6} \text{ kgm}^2$	with W01 with W02 with W03
Starting torque at 20 °C	$\leq 6 \text{ Ncm}$ $\leq 10 \text{ Ncm}$	with IP64 with IP65
Shaft load rating	radial 5600 N axial 1400 N	
Weight	$\sim 0.75 \text{ kg}$	
Protection category	IP64, IP65	
Operating temperature	0 ... +60 °C	
Storage temperature	-20 ... +85 °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	browned steel	
Housing	zinc, die-cast	
Cable sheath	PVC	

Electrical data

Output circuit

Feature	PP, OP Push-pull	LD 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.)	<40 mA	<40 mA	<40 mA	AB0 variant
Maximum load/channel	$\pm 40 \text{ mA}$, short circuit-resist.	$\pm 40 \text{ mA}$, short circuit-resist.	$\pm 40 \text{ mA}$, short circuit-resist.	
Max. pulse frequency	80 kHz	50 kHz	50 kHz	
Phasing	$90^\circ \pm 30^\circ$	$90^\circ \pm 30^\circ$	$90^\circ \pm 30^\circ$	
Signal level high (min.)	UB -2 V			
Signal level low (max.)	1 V, at 40 mA			
Signal level		RS422 A spec.	RS422 A spec.	
Inverse-polarity protection on UB	yes	no	no	

Signal image



Pin assignment

Output circuit PP

Output signals AXX, AX0, ABX, ABO

Signal	E1	EX, E3, E4
GND	gray	1
A	yellow	2
B	white	3
O/I	green	4
+UB	brown	5
N.C.		6, 7

Output circuit OP

Output signals AXX, AX0, ABX

Signal	E1	EX, E3, E4
GND	gray	1
A	yellow	2
B	white	3
N.C.		4
+UB	brown	5
/A	pink	6
/B	blue	7

Output circuit OP

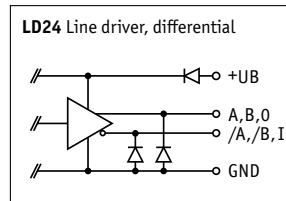
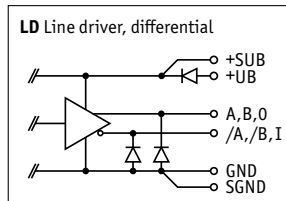
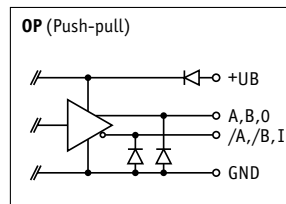
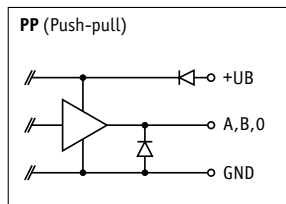
Output signals ABO

Signal	E1	EX, E3, E4
A	yellow	A
B	white	B
O	green	C
/A	pink	D
/B	blue	E
I	violet	F
GND	gray	G
GND	black	H
+UB	brown	J
+UB	red	K
N.C.		L, M

Output circuit LD, LD24

Output signals AXX, AX0, ABX, ABO

Signal	E1	EX, E3, E4
A	yellow	A
/A	green	B
GND	gray	C
+UB	pink	D
B	white	E
/B	brown	F
+SUB	red	G
only with LD5		
SGND	blue	H
only with LD5		
O	red-blue	J
I	gray-pink	K
GND	black	L
+UB	violet	M



Order

Order table

Feature	Order text	Specification	Additional information
Output signals	... A	AXX, ABX, ABO, ABI, AXO, AXI	
Pulses/revolution	... B	1, 2, 5, 10, 20, 25, 30, 36, 40, 50, 60, 70, 80, 90, 100, 125, 140, 150, 160, 180, 200, 220, 250, 280, 300, 350, 360, 400, 450, 500, 512, 585, 600, 750, 800, 900, 1000, 1024 others on request	
Type of connection	EX E1 E3 E4 C	without cable flying leads angle plug connector	
Cable length L	... OK D	0.5, 2 ... 50 m, in steps of 1 m without cable	
Mounting type	M1 M2 E	with blind hole bore with flange	
Output circuit	PP OP LD LD24 F	push-pull push-pull with inverted signals line driver line driver, 24 V	
Shaft design/diameter	W01 W01/RH12 W01/RH14 W01/RH15 W01/RH16 W02 W02N G	∅ 20 mm with reducing bush ∅ 12 mm with reducing bush ∅ 14 mm with reducing bush ∅ 15 mm with reducing bush ∅ 16 mm ∅ 20 mm ∅ 20 mm, stainless steel	ball bearing and clamping screw ball bearing and clamping screw ball bearing and clamping screw ball bearing and clamping screw ball bearing and clamping screw ball bearing und clamp ring ball bearing und clamp ring
Bearing	MS RS H	high-precision packed sealing gap, IP64 enhanced bearing sealing, IP65	

Order code

IG07 - - - - - - - - - - - -

A B C D E F G H SV SG

Scope of delivery: IG07, User information

Accessories:

Electronic displays MA55, MA10/4

Catalog 6 DisplayLine

Additional information:

General information and areas of application

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