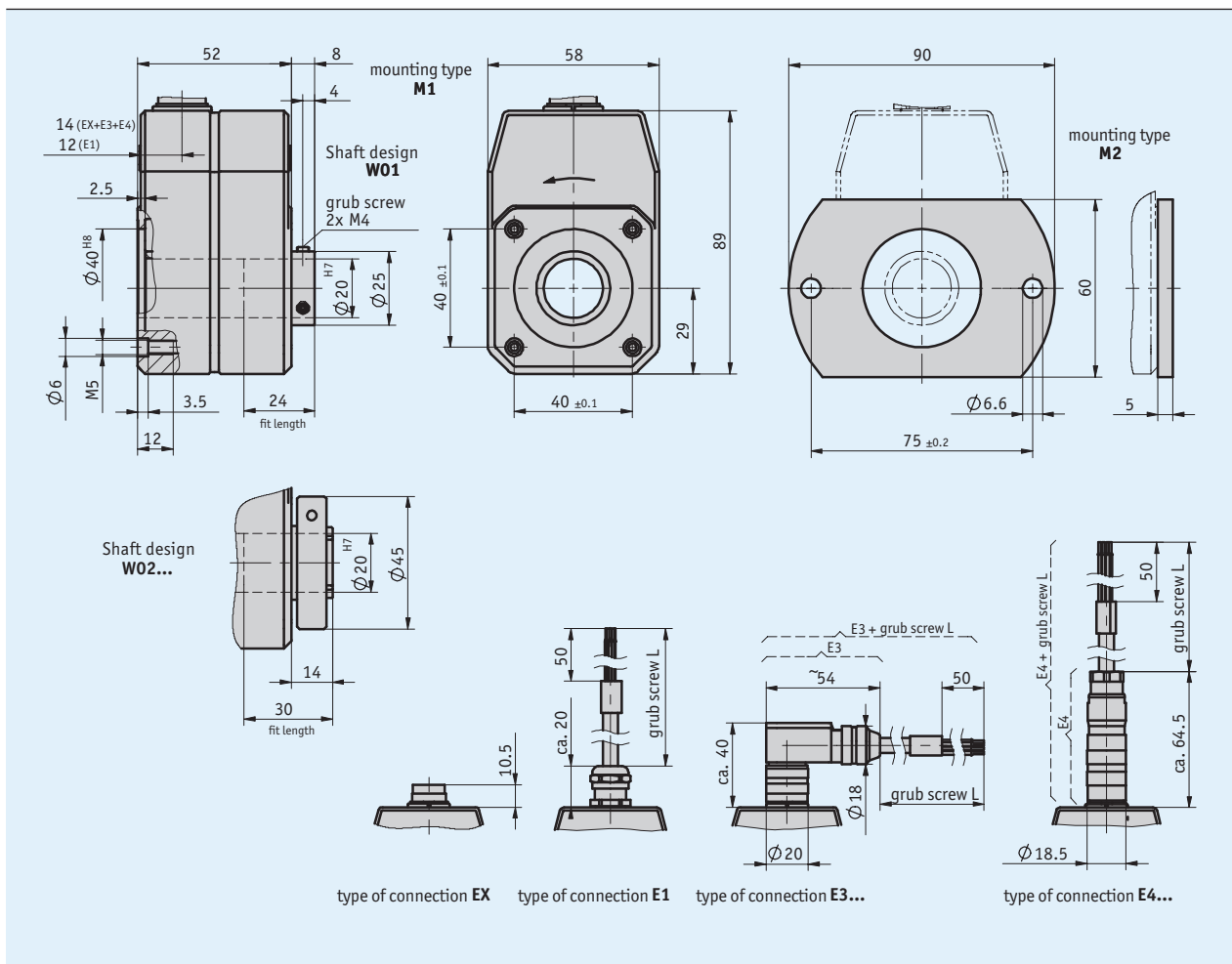


# Incremental encoder IG07

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
Shaft	black-finished steel	
Housing	zinc, die-cast	
Speed	≤6000 rpm	IP64
	≤3000 rpm	IP65
Moment of inertia	~28.5 x 10 <sup>-6</sup> kgm <sup>2</sup>	W01 shaft design
	~58.5 x 10 <sup>-6</sup> kgm <sup>2</sup>	W02 shaft design
Starting torque	≤6 Ncm at 20 °C	IP64
	≤10 Ncm at 20 °C	IP65
Shaft load rating	1400 N axial	
	5600 N radial	
Cable sheath	PVC	
Weight	~0.75 kg	

### Electrical data

#### ■ PP output circuit

Feature	Technical data	Additional information
Operating voltage	10 ... 30 V DC	reverse polarity protected
Current consumption	typical <40 mA	without load (ABO output signals)
Output signal level high	UB -2 V	
Output signal level low	≤1 V at 40 mA	
Pulse frequency	≤80 kHz	
Phasing	90° ±30°	
Load	±40 mA short-circuit proof	max. adm.

#### ■ OP output circuit

Feature	Technical data	Additional information
Operating voltage	10 ... 30 V DC	reverse polarity protected
Current consumption	typically <40 mA	without load (ABO output signals)
Output signal level high	UB -2 V	
Output signal level low	≤1 V at 40 mA	
Pulse frequency	≤80 kHz	
Phasing	90° ±30°	
Load	±40 mA short-circuit-proof	max. adm.

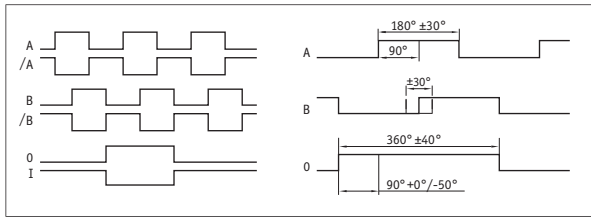
#### ■ LD output circuit

Feature	Technical data	Additional information
Operating voltage	5 V DC ±5 %	without reverse polarity protection
Current consumption	typically <40 mA	without load (ABO output signals)
Output signal level	RS422 A spec.	
Pulse frequency	≤50 kHz	
Phasing	90° ±30°	
Load	±40 mA short-circuit-proof	max. adm.

#### ■ LD24 output circuit

Feature	Technical data	Additional information
Operating voltage	10 ... 30 V DC	without reverse polarity protection
Current consumption	typically <40 mA	without load (ABO output signals)
Output signal level	RS422 A spec.	
Pulse frequency	≤50 kHz	
Phasing	90° ±30°	
Load	±40 mA short-circuit-proof	max. adm.

### Signal pattern



### Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	0 ... 60 °C	
Storage temperature	-20 ... 85 °C	
Protection category	IP64, IP65	EN 60529
Shock resistance	2000 m/s <sup>2</sup> , 6 ms	EN 60068-2-27
Vibration resistance	100 m/s <sup>2</sup> , 50 Hz	EN 60068-2-6

### 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
nc		6
nc		7

#### Output Circuit OP Output signals AXX, AX0, ABX

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

#### Output Circuit LP 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
nc		L
nc		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 only with LD5	red	G
SGND only with LD5	blue	H
O	red-blue	J
O	gray-pink	K
GND	black	L
+UB	violet	M

