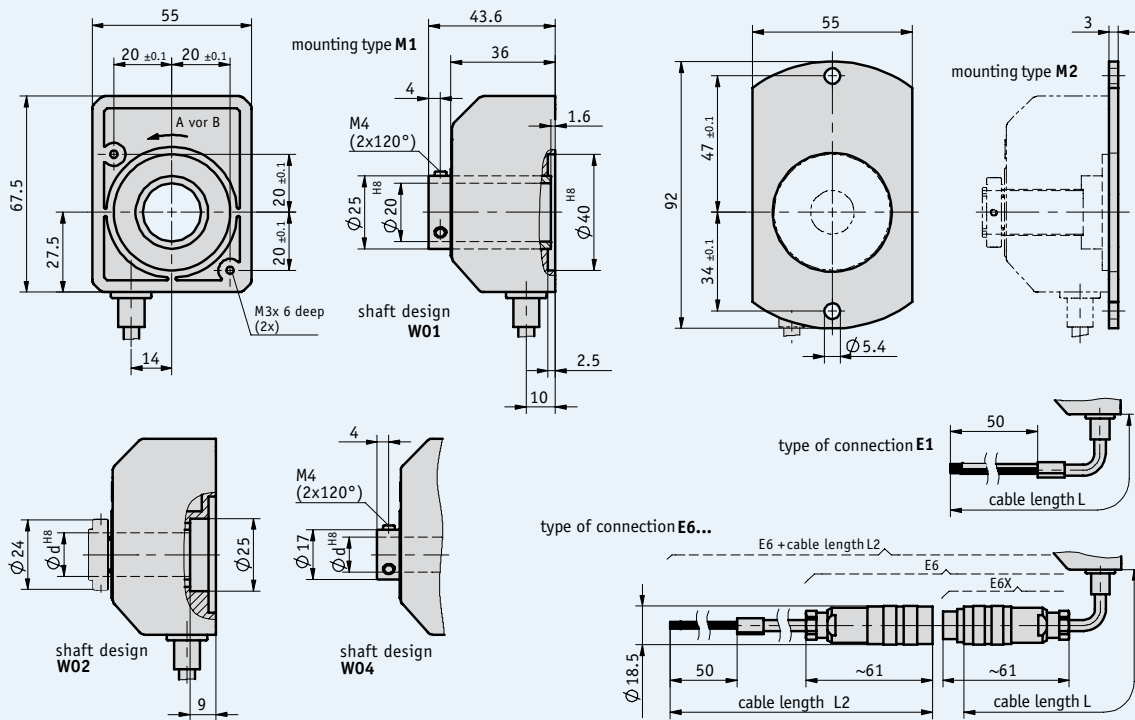


### Profile

- Resolutions of max. 1024 pulses/revolution
- Through hollow shafts up to  $\varnothing 20$  mm
- Housing made of impact-resistant plastic
- Low-cost version



2.2

### Mechanical data

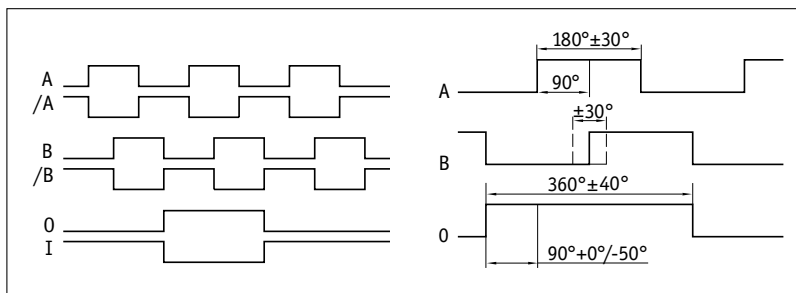
Feature	Technical data	Additional information
Max. speed	6000 rpm 600 rpm	with W02, W04 with W01, W01N
Shaft moment of inertia	$\sim 10.5 \times 10^{-6} \text{ kgm}^2$ $\sim 9.5 \times 10^{-6} \text{ kgm}^2$ $\sim 9 \times 10^{-6} \text{ kgm}^2$	with W01, W01N with W02 with W04
Starting torque at 20 °C	$\leq 15 \text{ Ncm}$ , with W01 $\leq 1.5 \text{ Ncm}$ , with W02 and W04	
Shaft load rating	radial 20 N axial 10 N radial 50 N axial 25 N	with W01 with W01 with W02, W04 with W02, W04
Weight	$\sim 0.14 \text{ kg}$	
Protection category	IP54	
Operating temperature	0 ... +60 °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	browned steel	
Housing	reinforced plastic	
Cable sheath	PVC or PUR	

### Electrical data

#### Output circuit

Feature	PP Push-pull	OC (NPN) Open collector	Additional information
Operating voltage	+10 ... +30 V DC	+10 ... +30 V DC	
Current consumpt. w/o load (typ.)	<50 mA	<50 mA	AB0 variant
Maximum load/channel	$\pm 40 \text{ mA}$ , short circuit-resistant	$\pm 50 \text{ mA}$	
Max. pulse frequency	25 kHz	25 kHz	
Phasing	$90^\circ \pm 30^\circ$	$90^\circ \pm 30^\circ$	
Signal level high (min.)	UB -2 V, at 20 mA	wiring-dependent	
Signal level low (max.)	1 V, at 20 mA	0.1 V DC	
Inverse-polarity protection on UB	yes	yes	

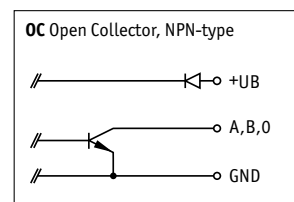
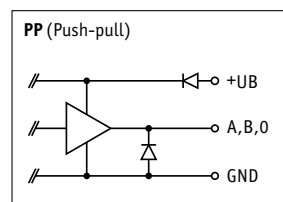
#### Signal image



### Pin assignment

#### Output circuit PP, OC


Signal	E1	E6X, E6
GND	gray	1
A	yellow	2
B	white	3
O/I	green	4
+UB	brown	5
N.C.		6, 7



### Order

#### Maximum pulses with output signals

Output signal	Plain bearing W01	Ball bearing, W02, W04
AXX	500	1024
ABX	250	500
ABO	220	250
ABI	220	250

 The max. permissible pulses/ revs. must not be exceeded by the output signals.

#### Order table

Feature	Order text	Specification	Additional information
Output signals	... A	AXX, ABX, ABO, ABI	
Pulses/revolution	... B	1, 2, 5, 10, 20, 25, 36, 40, 50, 60, 70, 80, 90, 100, 125, 140, 150, 180, 200, 220, 240, 250, 280, 300, 360, 400, 500, 600, 1000, 1024 others on request	
Cable sheath	PUR C PVC	oil-resistant	
Type of connection	E1 D E6 E6X	flying leads cable coupler with cable extension cable coupler	
Cable length L	... E	0.3, 2 ... 40 m, in steps of 1 m 0.3, 2, 3	only PVC only PUR
Cable length L2	... F	0.3, 2 ... 15 m, in steps of 1 m 0.3, 2, 3	only PVC only PUR
Mounting type	M1 G M2	with blind hole bore with mounting plate	
Output circuit	PP H OC	push-pull open collector	
Shaft design	W01 I W02 W04	set screw/plain bearing clamp ring/ball bearing set screw/ball bearing	
Hollow shaft/diameter (mm)	20 K ... ...	∅ 20 mm 14, 15 mm 10, 12 mm	with W01 with W02 with W04

#### Order code



**Scope of delivery:** IG06, User information

**Accessories:**

Electronic display MA10/4  
Electronic display MA55

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**Additional information:**

General information and areas of application

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