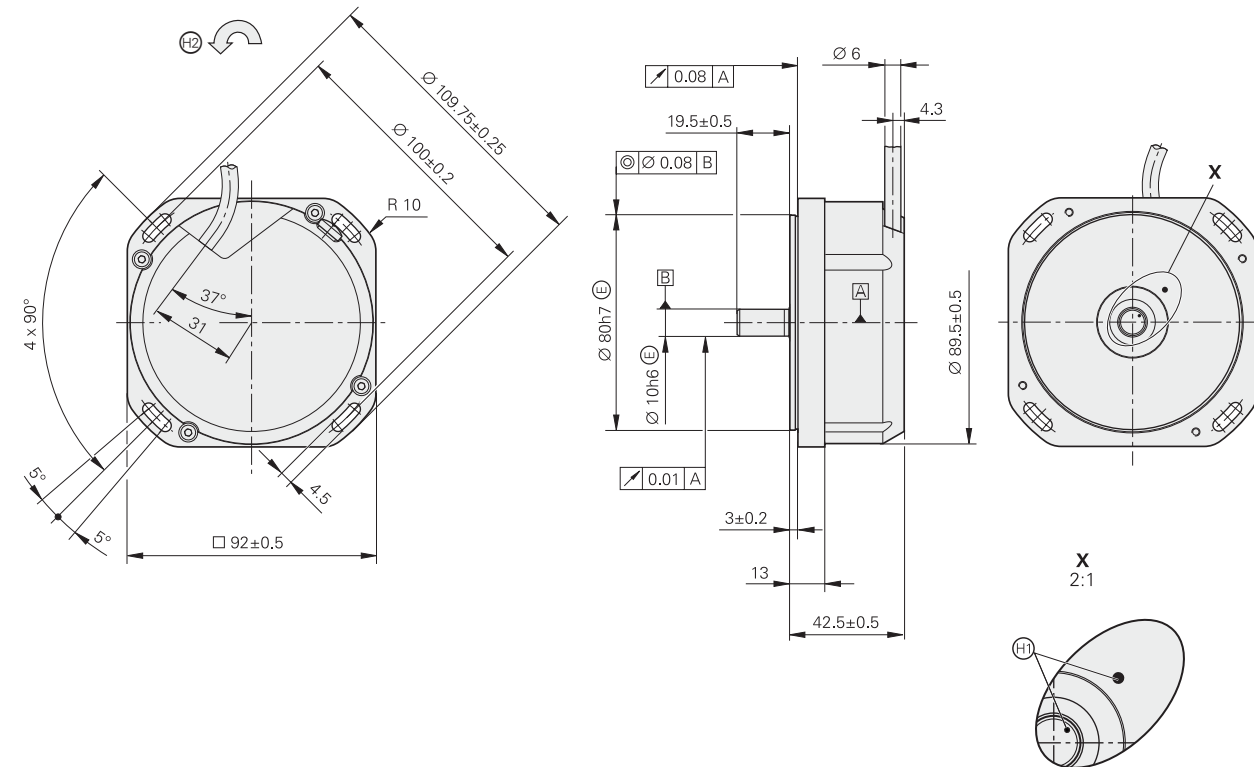


## ROD 200 series

- For separate shaft coupling
- System accuracy  $\pm 5''$



mm  
  
 Tolerancing ISO 8015  
 ISO 2768 - m H  
 <math>< 6\text{ mm}</math>:  $\pm 0.2\text{ mm}$

Cable radial, also usable axially  
 [A] = Bearing  
 [B] = Position of the reference-mark signal  $\pm 5^\circ$   
 [C] = Direction of shaft rotation for output signals as per the interface description

	Incremental ROD 220	ROD 270	ROD 280
<b>Measuring standard</b>	DIADUR circular scale with incremental track		
Line count	9000	18000	18000
<b>System accuracy</b>	$\pm 5''$		
Position error per signal period	$\leq \pm 1.4''$	$\leq \pm 0.7''$	
<b>Interface</b>	□□TTL		$\sim 1\text{V}_{pp}$
Integrated interpolation Output signals/rev	2-fold 18000	10-fold 180000	– 18000
Reference mark*	One		ROD 280: One RON 280 C: Distance-coded
Cutoff frequency –3 dB	–	–	$\geq 180\text{ kHz}$
Output frequency	$\leq 1\text{ MHz}$	$\leq 1\text{ MHz}$	–
Edge separation a	$\geq 0.125\ \mu\text{s}$	$\geq 0.22\ \mu\text{s}$	–
Elec. permissible speed	$\leq 3333\text{ min}^{-1}$	$\leq 333\text{ min}^{-1}$	–
<b>Electrical connection*</b>	Cable 1 m, with or without M23 coupling (male, 12-pin)		
Cable length <sup>1)</sup>	$\leq 100\text{ m}$	$\leq 150\text{ m}$	
Power supply	5 V DC $\pm 0.25\text{ V}$ / $\leq 150\text{ mA}$ (without load)		
<b>Shaft</b>	Solid shaft D = 10 mm		
Mech. permissible speed	$\leq 10000\text{ min}^{-1}$		
Starting torque	$\leq 0.01\text{ Nm}$ at 20 °C		
Moment of inertia of rotor	$20 \cdot 10^{-6}\text{ kgm}^2$		
Shaft load	Axial: 10 N Radial: 10 N at shaft end		
<b>Vibration</b> 55 to 2000 Hz <b>Shock</b> 6 ms	$\leq 100\text{ m/s}^2$ (EN 60068-2-6) $\leq 200\text{ m/s}^2$ (EN 60068-2-27)		
<b>Operating temperature</b>	Frequent flexing: –10 °C to 70 °C Stationary cable: –20 °C to 70 °C		
<b>Protection</b> EN 60529	IP 64		
<b>Weight</b>	Approx. 0.7 kg		

\* Please select when ordering

<sup>1)</sup> With HEIDENHAIN cable