

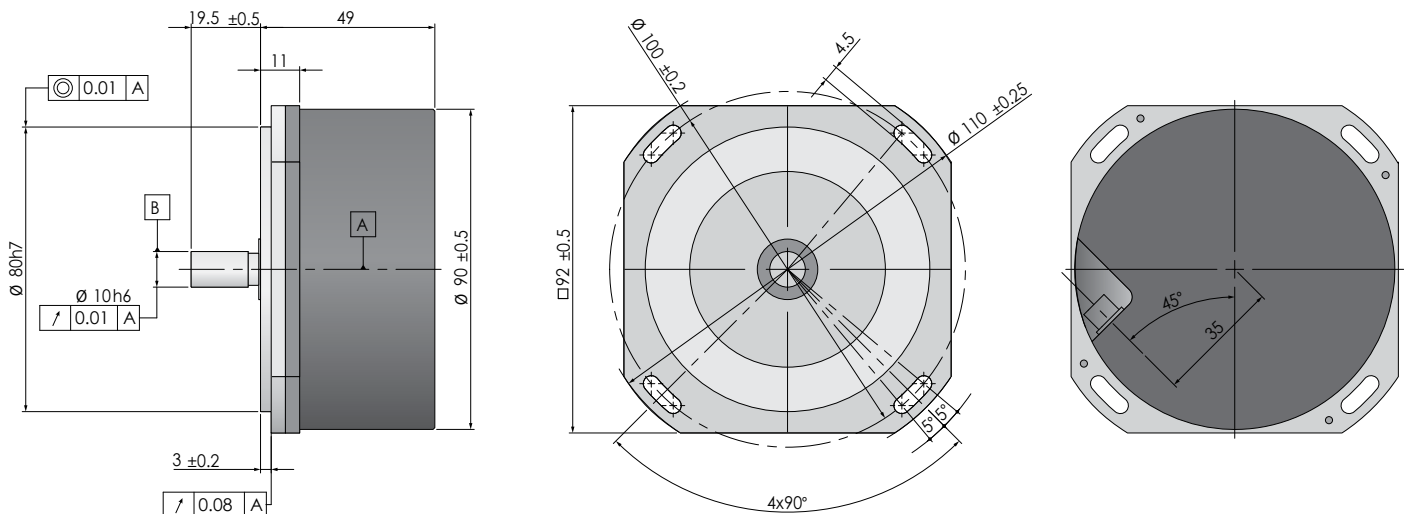
## AS 90 series

- 18,000 lines per disc
- Accuracy of  $\pm 5$  arc seconds
- Sturdy design with a Solid Shaft
- Typically used precision positioning and synchronization of rotary tables, industrial robots, telescopes, and satellite antennas



### Compatible with:

- Heidenhain ROD 200 series - ROD 220 ROD 260 ROD 270, ROD 271, ROD 280, and ROD 280C
- Fagor S-D90



# AS 90 series

	AS 9001	AS9002	AS 9005	AS 9010	AS 9000
<b>Line count</b>	18,000				
<b>Pulses per revolution</b>	18,000	36,000	90,000	180,000	18,000
<b>Output Signal</b>	TTL/RS422				1 Vpp, differential
<b>Max. output frequency</b>	≥ 160 kHz	≥ 320 kHz	≥ 800 kHz	≥ 1 MHz	≥ 180 kHz
<b>Max. mechanical speed</b>	5,000 RPM				
<b>Measuring step</b>	0.005°	0.0025°	0.001°	0.0005°	<i>depends on external circuitry</i>
<b>Accuracy grade</b>	± 5 arc sec.				
<b>Reference mark</b>	Single or 36 distance coded marks per revolution				
<b>Max. axial load</b>	1 kg				
<b>Max. radial load</b>	1 kg				
<b>Supply voltage</b>	5 V ± 5%				
<b>Supply current (without load)</b>	≤ 150 mA				
<b>Outlet type</b>	Cable or housing connector (HR25 miniature 8 pin round)				
<b>Max. cable length</b>	100 m			150 m	
<b>Environmental protection</b>	IP64 (IEC 60529)				
<b>Operating temperature range*</b>	-20°C...+70°C				
<b>Storage temperature range</b>	-30°C...+80°C				
<b>Humidity</b>	98% (non-condensing)				
<b>Vibration (55 ÷ 2000 Hz)</b>	≤ 100 m/s <sup>2</sup> (IEC 60068-2-6)				
<b>Shock (6 ms)</b>	≤ 1,000 m/s <sup>2</sup> (IEC 60068-2-27)				
<b>Weight (without cable)</b>	Approx. 0.7 kg (1.5 lb)				
<b>Rotor moment of inertia</b>	≤ 20 · 10 <sup>-6</sup> kgm <sup>2</sup>				
<b>Starting torque</b>	≤ 0.01 Nm				

\*for best accuracy, operating outside 0°C...+50°C is not recommended

<b>Order form</b>	<i>example: AS 9005-D-4</i>	
<b>AS 90XX</b>	<b>-X</b>	<b>-X</b>
<b>Model</b>	<b>Reference mark</b>	<b>Outlet type</b>
<ul style="list-style-type: none"> <li>AS 9000</li> <li>AS 9001</li> <li>AS 9002</li> <li>AS 9005</li> <li>AS 9010</li> </ul>	<ul style="list-style-type: none"> <li>S - single</li> <li>D - distance coded</li> </ul>	<ul style="list-style-type: none"> <li>C - housing connector</li> <li>1 - 1m cable</li> <li>2 - 2m cable</li> <li>3...</li> </ul>