

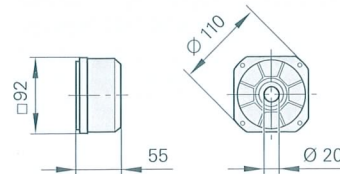
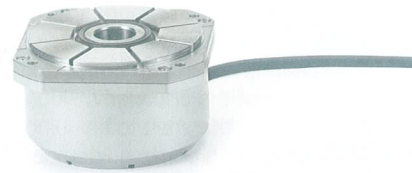
RCN, RON, RPN Angle Encoders

with integral bearing and integrated stator coupling

Because of their high static and dynamic accuracy, the **RCN, RON** and **RPN** angle encoders with integral bearings and stator couplings are the preferred units for high-precision applications such as rotary tables and tilting axes. For the units with stator coupling, the specified accuracy includes the error caused by the coupling. For angle encoders with separate shaft coupling, the coupling error must be added to find the system accuracy.

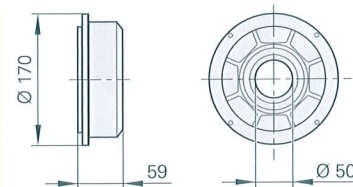
RCN/RON 200 Series

- **Compact design**
- Sturdy design
- Typically used with rotary tables, tilting tables, for positioning and speed control
- Measuring steps to 0.0001°.
- Versions in stainless steel (e.g. for antennas) available on request

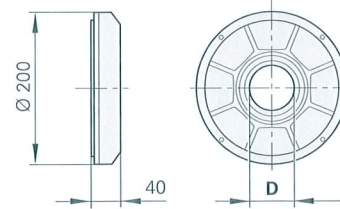


RCN/RON 700 Series and RCN/RON/RPN 800

- **Large hollow shaft diameter** up to Ø 100 mm
- Measuring steps to 0.00001° with system accuracy grades of ± 2" and ± 1"
- Typically used on rotary and angle measuring tables, indexing fixtures, measuring setups, image scanners
- Versions in stainless steel (e.g. for antennas) available on request



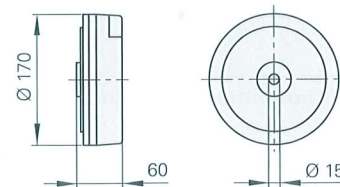
RON 785



RCN 700/800 D = 60 mm or 100 mm
RON 786/886, RPN 886 D = 60 mm

RON 905

- **Very high-accuracy angle encoder**
- Measuring steps to 0.00001°.
- System accuracy ± 0.4"
- Used with high-accuracy measuring devices and for the inspection of measuring equipment



	Absolute			Incremental			
	RCN 226 RCN 228	RCN 223 F RCN 227 F	RCN 223 M RCN 227 M	RON 225	RON 275	RON 285	RON 287
Incremental signals	~ 1 V _{PP} ³⁾	–	–	□ TTL x 2	□ TTL x 5 □ TTL x 10	~ 1 V _{PP}	–
Line count Signal periods/rev	16384 ³⁾	–	–	9000 18000	18000 90000 or 180000	18000	–
Absolute position values	EnDat 2.2 ¹⁾	Fanuc 02	Mit02-4	–	–	–	–
Position values per rev	67 108 864 (26 bits) 268 435 456 (28 bits)	8 388 608 (23 bits) 134 217 728 (27 bits)	–	–	–	–	–
System accuracy	± 5" ± 2.5"	–	–	± 5"	–	–	± 2.5"
Recommended measuring step²⁾	0.0001°	–	–	0.005°	0.001° 0.0005°	0.0001°	–
Mech. perm. speed	≤ 3000 min ⁻¹	–	–	≤ 3000 min ⁻¹	–	–	–

¹⁾ PROFIBUS-DP via gateway ²⁾ For position measurement ³⁾ Only for EnDat 2.2/02

	Absolute			Incremental		RPN 886
	RCN 729 RCN 829	RCN 727 F RCN 827 F	RCN 727 M RCN 827 M	RON 786 RON 785	RON 886	
Incremental signals	~ 1 V _{PP} ⁴⁾	–	–	~ 1 V _{PP}	–	–
Line count Signal periods/rev	32 768 ⁴⁾	–	–	18000, 36000 ³⁾	36000	90000 180000
Absolute position values	EnDat 2.2 ¹⁾	Fanuc 02	Mit02-4	–	–	–
Position values per rev	536 870 912 (29 bits)	134 217 728 (27 bits)	–	–	–	–
System accuracy	RCN 72x: ± 2"; RCN 82x: ± 1"			± 2"	± 1"	–
Rec. meas. step²⁾	0.0001°/0.00005°			0.0001°	0.00005°	0.00001°
Mech. perm. speed	≤ 1000 min ⁻¹			≤ 1000 min ⁻¹	–	–

¹⁾ PROFIBUS-DP via gateway ²⁾ For position measurement ³⁾ Only RON 786 ⁴⁾ Only for EnDat 2.2/02

	Incremental
	RON 905
Incremental signals	~ 11 μA _{PP}
Line count	36000
System accuracy	± 0.4"
Rec. meas. step	0.00001°
Mech. perm. speed	≤ 100 min ⁻¹