

|                                                       | Incremental                                                                                  |           |                                                                                             |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------------|
|                                                       | RON 786                                                                                      | RON 886   | RPN 886                                                                                     |
| <b>Incremental signals</b>                            | $\sim 1 V_{PP}$                                                                              |           |                                                                                             |
| Line count*                                           | 18 000<br>36 000                                                                             | 36 000    | 90 000<br>( $\triangleq$ 180 000 signal periods)                                            |
| Reference mark*                                       | RON x86: One<br>RON x86 C: Distance-coded                                                    |           | One                                                                                         |
| Cutoff frequency –3 dB<br>–6 dB                       | $\geq 180$ kHz                                                                               |           | $\geq 800$ kHz<br>$\geq 1300$ kHz                                                           |
| <b>Recommended meas. step</b><br>for position capture | 0.0001°                                                                                      | 0.00005°  | 0.00001°                                                                                    |
| <b>System accuracy</b>                                | $\pm 2''$                                                                                    | $\pm 1''$ |                                                                                             |
| <b>Power supply</b><br>without load                   | 5 V $\pm$ 10% max. 150 mA                                                                    |           | 5 V $\pm$ 10% max. 250 mA                                                                   |
| <b>Electrical connection*</b>                         | Cable 1 m, with or without M23 coupling                                                      |           |                                                                                             |
| <b>Max. cable length</b> <sup>1)</sup>                | 150 m                                                                                        |           |                                                                                             |
| <b>Shaft</b>                                          | Hollow through shaft D= 60 mm                                                                |           |                                                                                             |
| <b>Mech. permissible speed</b>                        | $\leq 1000$ rpm                                                                              |           |                                                                                             |
| <b>Starting torque</b>                                | $\leq 0.5$ Nm at 20 °C                                                                       |           |                                                                                             |
| <b>Moment of inertia</b> of rotor                     | $1.2 \cdot 10^{-3}$ kgm <sup>2</sup>                                                         |           |                                                                                             |
| <b>Natural frequency</b>                              | $\geq 1000$ Hz                                                                               |           | $\geq 500$ Hz                                                                               |
| <b>Permissible axial motion</b><br>of measured shaft  | $\leq \pm 0.1$ mm                                                                            |           |                                                                                             |
| <b>Vibration</b> 55 to 2000 Hz<br><b>Shock</b> 6 ms   | $\leq 100$ m/s <sup>2</sup> (IEC 60068-2-6)<br>$\leq 1000$ m/s <sup>2</sup> (IEC 60068-2-27) |           | $\leq 50$ m/s <sup>2</sup> (IEC 60068-2-6)<br>$\leq 1000$ m/s <sup>2</sup> (IEC 60068-2-27) |
| <b>Operating temperature</b>                          | 0 to 50 °C                                                                                   |           |                                                                                             |
| <b>Protection</b> IEC 60529                           | IP 64                                                                                        |           |                                                                                             |
| <b>Weight</b>                                         | Approx. 2.5 kg                                                                               |           |                                                                                             |

\* Please indicate when ordering

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