

Flange type rotary

# TORQUE SENSOR

YDFF  
Series



- Torque Ranges 50Nm to 5kNm
- 0.3% Accuracy Class
- Slip ring technology
- Flange coupling
- up to 5000rpm
- 3 YEAR WARRANTY

#### Options Available

Mounting pedestal

Customer-specific measuring ranges

Supplied With Any Instrumentation and Calibrated as a Complete System with Traceable Certificate

## DESCRIPTION

The YDFF torque sensors are a slip ring rotating transducers and have flange drives at both ends. They feature female thread holes on the flange to provide easy installation and requires minimal mounting space due to their compact size.

The YDFF series can be further complimented by any of our range of instrumentation to offer a complete system, supplied and calibrated from a single supplier.

*Transducer Specialists...*

**APPLIED MEASUREMENTS LIMITED**

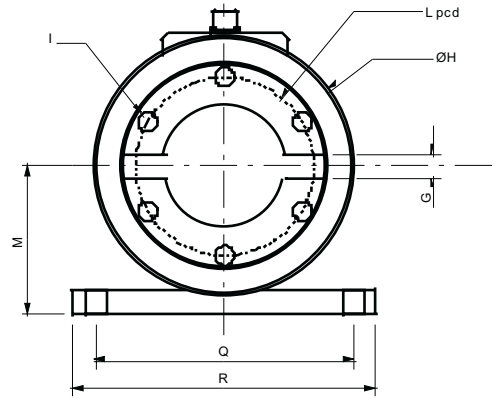
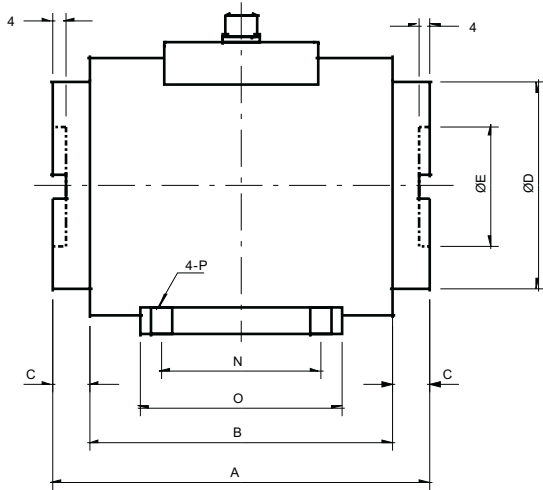
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# SPECIFICATION

| CHARACTERISTICS                            | YDFF                    | UNITS           |
|--|-------------------------|-----------------|
| <b>Torque Ranges:</b>                      | <b>50 - 5</b>           | <b>Nm- kNm</b>  |
| <b>Rated Output (FSO):</b>                 | <b>1.5</b>              | <b>MV/V</b>     |
| <b>Excitation Voltage:</b>                 | <b>10</b>               | <b>VDC</b>      |
| <b>Safe Overload:</b>                      | <b>150</b>              | <b>% FSO</b>    |
| <b>Non-Linearity:</b>                      | <b>0.3</b>              | <b>±% FSO</b>   |
| <b>Repeatability:</b>                      | <b>0.2</b>              | <b>±% FSO</b>   |
| <b>Hysteresis:</b>                         | <b>0.3</b>              | <b>±% FSO</b>   |
| <b>Temperature Range Operating:</b>        | <b>-20 to -70</b>       | <b>°C</b>       |
| <b>Compensated:</b>                        | <b>-10 to -60</b>       | <b>°C</b>       |
| <b>Temperature Effect on Zero:</b>         | <b>0.01</b>             | <b>±%FSO/°C</b> |
| <b>Temperature Effect on Output:</b>       | <b>0.008</b>            | <b>±%FSO/°C</b> |
| <b>Terminal Resistance (Input/Output):</b> | <b>350</b>              | <b>ohms</b>     |
| <b>Insulation Resistance:</b>              | <b>300</b>              | <b>megohms</b>  |
| <b>Environmental Protection:</b>           | <b>IP50</b>             |                 |
| <b>Cable:</b>                              | <b>3m screened Ø5mm</b> |                 |
| <b>RPM Output:</b>                         | <b>N/A</b>              |                 |



| CAPACITY | A   | B   | C  | ØD  | ØE | G  | ØH  | M    | N  | O  | ØP  | Q   | R   | L  | I         | RPM   |
|----------|-----|-----|----|-----|----|----|-----|------|----|----|-----|-----|-----|----|-----------|-------|
| 50-200Nm | 119 | 95  | 12 | 65  | 38 | 8  | 81  | 46.0 | 50 | 64 | 6.5 | 81  | 95  | 56 | 8-M6x15DP | 5.000 |
| 500Nm    | 125 | 99  | 13 | 76  | 40 | 10 | 88  | 49.5 | 50 | 64 | 6.5 | 88  | 102 | 60 | 8-M6x15DP | 4.000 |
| 1kNm     | 122 | 96  | 13 | 86  | 52 | 16 | 100 | 58.0 | 50 | 64 | 8.5 | 100 | 118 | 68 | 8-M8x15DP | 3.000 |
| 2kNm     | 141 | 105 | 18 | 102 | 60 | 16 | 116 | 66.0 | 50 | 68 | 8.5 | 116 | 134 | 85 | 8-M8x15DP | 3.000 |
| 3kNm     | 141 | 105 | 18 | 102 | 60 | 16 | 116 | 66.0 | 50 | 68 | 8.5 | 116 | 134 | 85 | 8-M8x15DP | 2.000 |
| 5kNm     | 141 | 105 | 18 | 107 | 70 | 20 | 128 | 74.0 | 56 | 74 | 8.5 | 128 | 146 | 91 | 8-M8x15DP | 2.000 |

