INTERFACE
FORCE MEASUREMENT SOLUTIONS™

AxialTQ™ WIRELESS ROTARY TORQUE TRANSDUCER

INTRODUCING THE INTERFACE AxialTQ™ TORQUE MEASUREMENT SYSTEM FOR TEST AND PRODUCTION APPLICATIONS

The Interface AxialTQ torque measurement system was developed in direct collaboration with over 30 end-users who shared their wish-lists for operational priorities, user interface, design, features, real-world field issues and more.

AxialTQ torque measurement system redefines the category in terms of function, accuracy and customizable compatibility.

The rotor sensing element and electronics are the heart of the system which will be offered in 8 torque capacities in 5 DIN sizes. In addition, there are 3 accuracy classes: EX, LX and HX. With the flexible capability of stator and output module mounting, the AxialTQ system offers an infinite number of configurations to meet any application need.

SPECIFICATIONS

ACCURACY / DATA RATE			
Model	EX	LX (2019)	HX (2019)
Accuracy Class	05	05 (20% to 100%)	02
Temp Effect on Zero - %RO/10°C	±0.05	±0.05	±0.02
Temp Effect on Output - %RO/10°C	±0.05	±0.05	±0.02
Data Rate (max) samples/sec	5K	1K	1K
Accuracy Class Output	Analog or digital	Digital Only	Digital Only

DIN Size	Capacity - NM	Material	RPM (Max)
100	100, 250	Aluminum	15K
120	500, 1K	Steel	15K
150	2K, 3K	Steel	12K
180	5K	Steel	10K
225	10K	Steel	8K

ENVIRONMENTAL	
Compensated Operating Range	+10 to +70 °C
Maximum Operating Range	-20 to +70 °C
Storage Range	-40 to +85 °C

ELECTRICAL	
Output Types	Voltage, Frequency, USB, Ethernet (2019), CAN bus (2019)
Power Supply – VDC	18 - 32

ANALOG OUTPUT	
10 kHz ± 5kHz	± 10 VDC
60 kHz ± 30kHz	± 5 VDC
60 kHz ± 20kHz	4 - 20 mA
240 kHz ± 120kHz	12 mA ± 8 mA

MECHANICAL	
Safe Overload – % RO	200
Rotor / Stator Axial Gap (Max)	6 mm
Allowable Radial Run Out	12 mm
IP Rating	IP65

MODELS

AxialTQ-EX
- Designed to minimize uncertainty while covering a broad array of torque measurement applications.
- An accuracy class of 05 with up to 6 mm axial gap and dual (analog and digital) simultaneous outputs.

AxialTQ-LX Progressive Calibration (2019)
- Test a wide range of loads without changing the scale, unlike traditional dual range systems.
- More accurate low torque readings with an accuracy class of 05 from 20% to 100% of FSO.

AxialTQ-HX High Accuracy (2019)
- Designed for applications that require an accuracy class of 02.
- With the same feature-set as the AxialTQ-EX, the AxialTQ-HX was created for testing facilities and labs that require maximum precision.
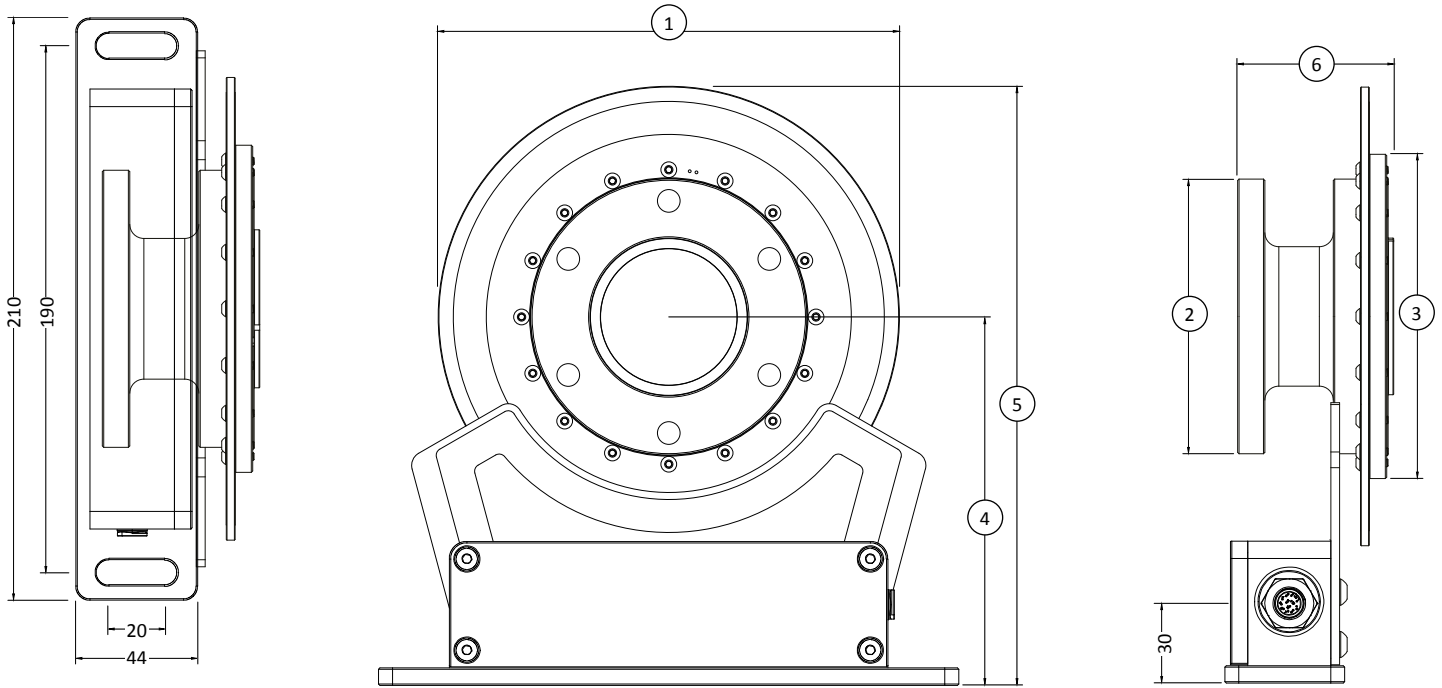
FEATURES & BENEFITS

- Crash-proof design for maximum reliability
- Versatile design for application flexibility
- Simultaneous analog and digital outputs enables real-time control and data collection
- Interchangeable stators and output modules to minimize parts inventory
- Wide range of standard components to match any application

OPTIONS

- Balanced Rotor to G2.5
- Speed Sensing 240 PPR

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DIMENSIONS

Din Size	100	120	150	180	225
Flexure Size	100, 250 NM	500, 1K NM	2K, 3K NM	5K NM	10K NM
(1)	167 mm	185 mm	220 mm	244 mm	287 mm
(2)	Ø100 mm	Ø120 mm	Ø150 mm	Ø180 mm	Ø225 mm
(3)	Ø117 mm	Ø140 mm	Ø170 mm	Ø200 mm	Ø245 mm
(4)	133 mm	144 mm	161 mm	175.5 mm	199 mm
(5)	217 mm	236 mm	271 mm	298 mm	343 mm
(6)	54.8 mm	62 mm	62 mm	62 mm	75.7 mm

SYSTEM ARCHITECTURE

Rotor

Stator

Output Module

PC

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Aufgrund laufender Weiterentwicklungen sind Änderungen der Spezifikationen vorbehalten. Alle Angaben vorbehaltlich Satz- und Druckfehler.

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