

Rexnord Monitorq

Process torque monitoring



The Latest in Industrial Torque Monitoring

Rexnord has more than 25 years experience in the field of process torque monitoring having launched the original Rexnord® Monitorq® design in the early 1990s.

The Rexnord Monitorq provides a true measurement of torque, from any location in a drive train. Proven strain-gauge technology is used with a short-range telemetry system, to measure and transmit real-time torque data. Rexnord Monitorq enhances equipment performance by providing a variety of functions ranging from simple overload protection to production or process control and condition monitoring, as used in modern preventative maintenance systems.

Rexnord Monitorq has become established as a robust and reliable torque measuring device which can be integrated into a drive line using standard power transmission products such as couplings, pulleys and gears.

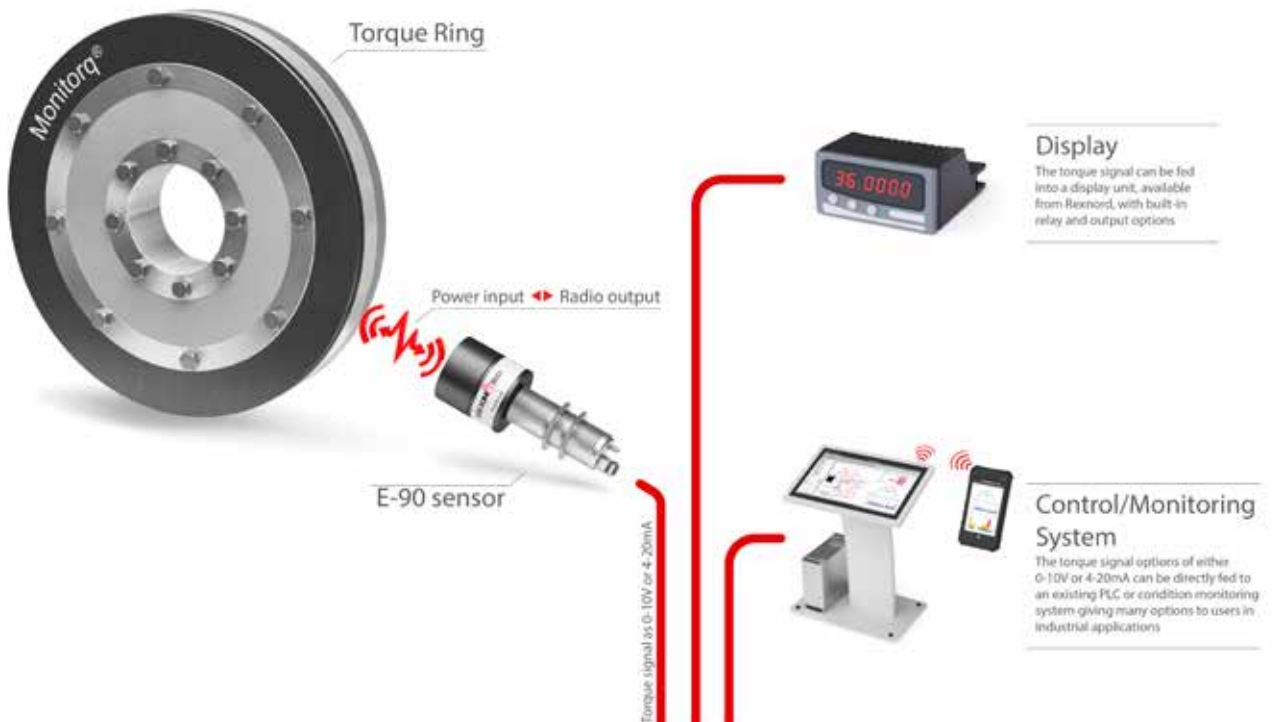


Features

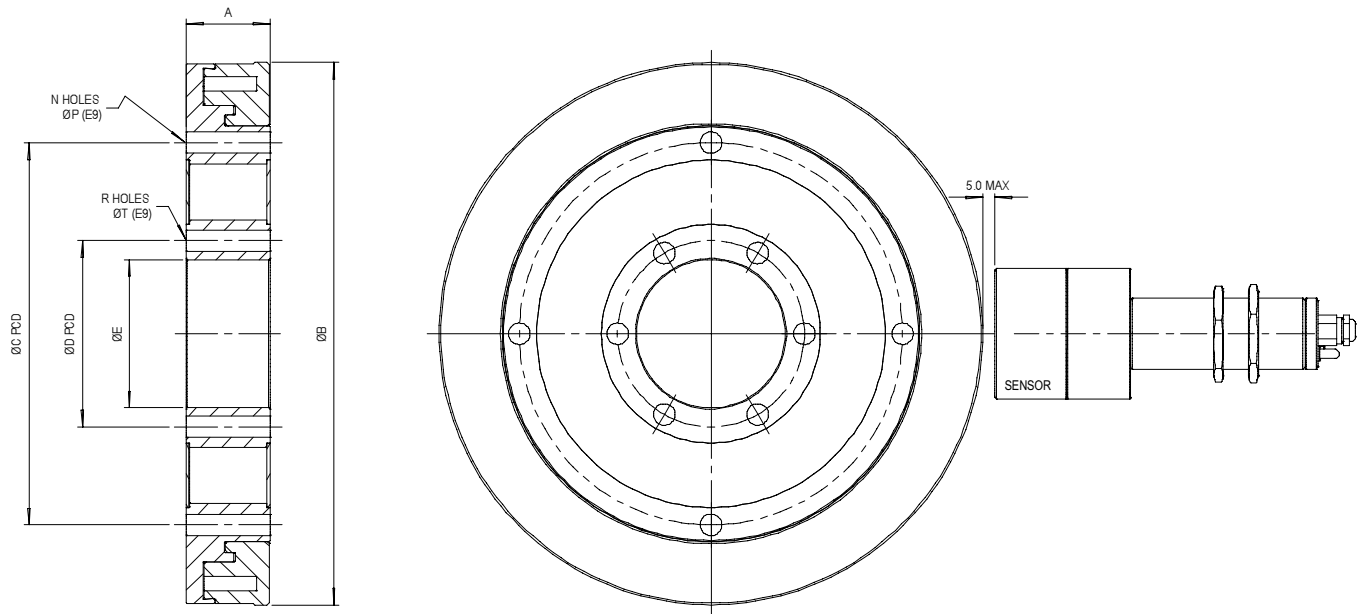
- Condition monitoring of rotating equipment
- Real-time torque feedback for process equipment
- Torque control and protection of machinery
- Rugged design that stands up to the demands of industrial applications
- Accurate to one percent of selected full scale torque
- High dynamic sampling rate (1kHz)
- Inductive power system; no battery changes required
- Standard output signal ready to input into any existing control system

How it works

The Rexnord Monitorq system is comprised of a strain-gauged torque ring and an E-90 Sensor. The E-90 Sensor provides the torque ring with inductive power and receives a radio signal back from the ring. The radio signal is converted into an output signal proportional to torque that can be directly connected to a control system, or shown on a dedicated screen also available from Rexnord.



Technical details



Rexnord Monitorq Ring Size	1	2	3	4	5	6	7
Rated FS Torque Nm	500	1000	2000	3000	6000	25000	40000
Max. Overload Torque (1)	1000	2000	3500	5000	9000	40000	70000
Max. Tilting Moment (2)	500	500	1000	1600	3000	4000	8000
Max. Axial Force kN (2)	7	7	12	14	30	60	80
Max. Radial Force kN (2)	6	8	15	18	30	80	140
Max. Speed rpm	5000	4500	4000	3800	3500	3000	1800
Torque Scale A Nm	250	500	1000	1500	3000	12500	20000
Torque Scale B Nm	500	1000	2000	3000	6000	25000	40000
A Width mm	35	35	35	35	35	45	45
B Outside Diameter mm	198	227	258	283	317	378	453
E Inside Diameter mm	45	62	94	101	131	145	200
R Inner Mounting Holes No.	4	6	8	8	12	16	16
D PCD mm	60	78	112	122	155	177	240
T Size (E9) mm	9	9	9	11	11	19	23
N Outer Fixing Holes No.	4	4	8	6	8	12	12
C PCD mm	130	160	190	210	245	294	370
P Size (E9) mm	9	9	9	11	11	19	21

(1) - Maximum non reversing overload torque condition. If reversing overloads likely, consult Rexnord Autogard®.

(2) - May be applied in addition to non-reversing rated torque. If applied in combination, percentage of max for each must be <100 percent in total.

(3) - Minimum reading possible is 3 percent of full scale torque.

Performance data

Accuracy Class	1% *
Linearity	0.5% *
Repeatability	0.5% *
Analogue Output (E-90V)	0-10V **
Analogue Output (E-90A)	4-20mA **
Sensor Bandwidth	1000Hz
Min. Operating Temperature	-20 degrees Celsius
Max. Operating Temperature	70 degrees Celsius
Environmental	IP rating IP65
ISO Balance Grade at rated speed	G6.3

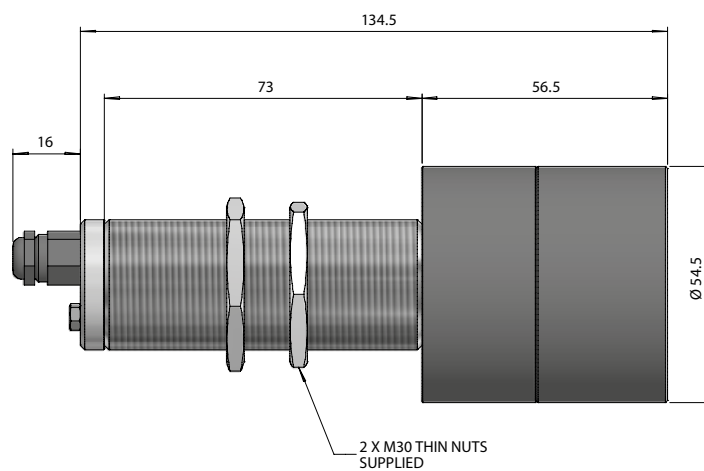
* Shown as percentage of full scale torque

** Selection of either V or A output must be made at point of order

E-90 Sensor unit

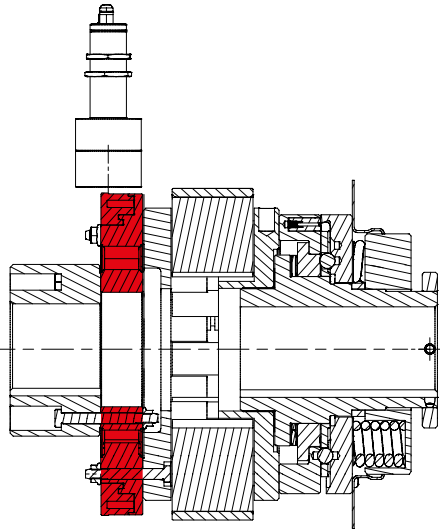
Requires 24V DC, 8W power supply

Available with either 0 - 10V output or 4 - 20mA output

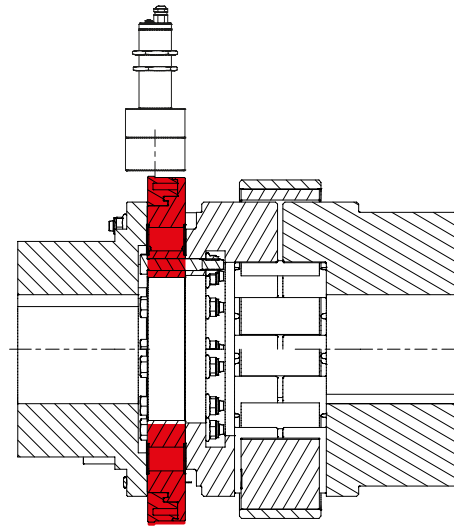


Standard configurations

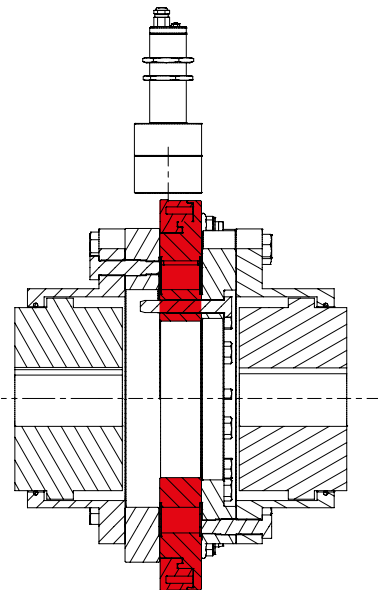
Rexnord Monitorq can be supplied as a ring and sensor only, or supplied as a full solution ready to be integrated into a drive line using standard power transmission products. It can be combined with a Rexnord Coupling, a sprocket, a pulley, a gear or a Rexnord Autogard Torque Limiter.



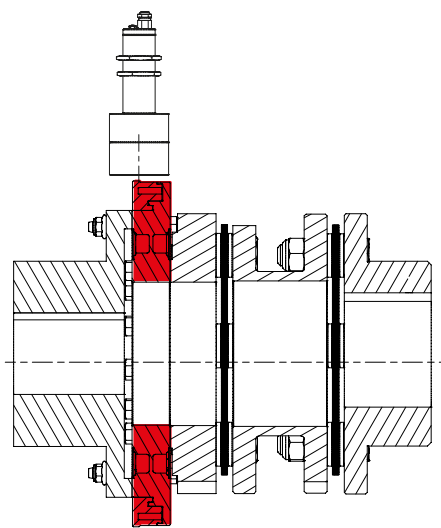
Combined with Rexnord Autogard 400 Series Torque Limiter



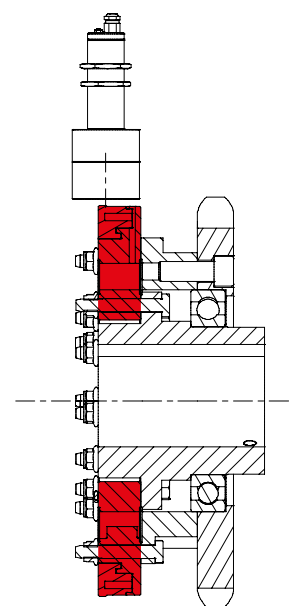
Combined with Falk® Wrapflex® Elastomeric Coupling



Combined with Falk Lifalign® Gear Coupling



Combined with Rexnord Thomas® XTSR Disc Coupling

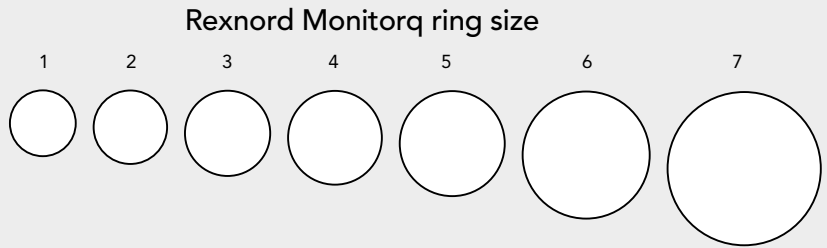


Combined with sprocket or pulley

What to consider before ordering

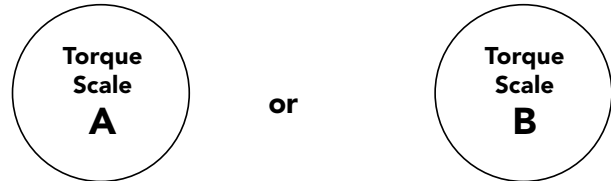
1. Confirm ring size

(see page 4)



2. Choose appropriate torque scale

(see page 4)



3. Choose desired output signal

(see page 5)



4. Is an output display required?

(see page 3)



5. Are driveline mountings required?

(see page 6)





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Why Choose Rexnord?

When it comes to providing highly engineered products that improve productivity and efficiency for industrial applications worldwide, Rexnord is the most reliable in the industry. Commitment to customer satisfaction and superior value extend across every business function.

Delivering Lowest Total Cost of Ownership

The highest quality products are designed to help prevent equipment downtime and increase productivity and dependable operation.

Valuable Expertise

An extensive product offering is accompanied by global sales specialists, customer service and maintenance support teams, available anytime.

Solutions to Enhance Ease of Doing Business

Commitment to operational excellence ensures the right products at the right place at the right time.

REXNORD

Rexnord Company Overview

Rexnord is a growth-oriented, multi-platform industrial company with leading market shares and highly trusted brands that serve a diverse array of global end markets.

Process & Motion Control

The Rexnord Process & Motion Control platform designs, manufactures, markets and services specified, highly engineered mechanical components used within complex systems where our customers' reliability requirements and the cost of failure or downtime are extremely high.

Water Management

The Rexnord Water Management platform designs, procures, manufactures and markets products that provide and enhance water quality, safety, flow control and conservation.