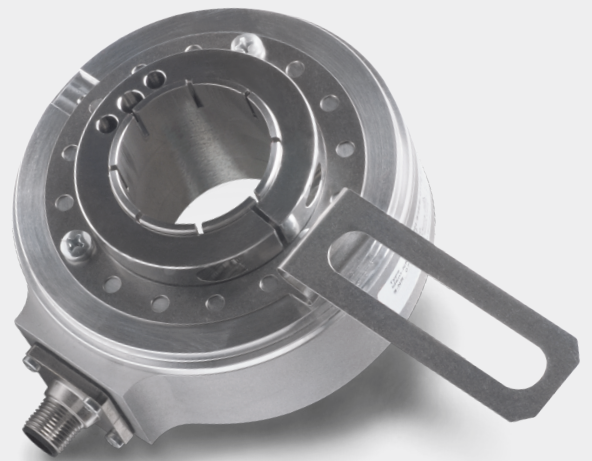


Your Global Automation Partner

TURCK

Any Device, 1 Price+2 Week Delivery

RI-43 Large Bore Encoders



A Global Leader in Industrial Automation

Turck's sensors, connectivity, and fieldbus technology products are built to be the best. As one of the most **prominent** sensor manufacturers **in the world**, we even back our sensors with a **lifetime warranty**. Turck works by bringing **rugged engineering** solutions to your industrial automation applications.

85,000+
SOLUTIONS

50+
YEARS OF INNOVATION

2,000+
EXPERIENCED SALES REPRESENTATIVES

Pioneer in non-contact
sensing technology

Developed innovative **connectivity**
solutions in response to our customers' needs

Recognized the need for advanced **I/O solutions**
in harsh duty environments

**SUPPORT &
DEDICATED SERVICE**

EXTENSIVE WARRANTY



4,000+
APPLICATION EXPERTS

RESPOND
and SOLVE over 1,200 inquiries
per day



Strategically placed manufacturing facilities in the

USA with **30** GLOBAL
SUBSIDIARIES

GLOBAL BUT LOCAL...

60 representations worldwide



When you need it now...

Check out our in-stock options for delivery now, or get short delivery times on products not already in stock. Turck has thousands of encoder configuration options available from our in-stock offering. Now, our Any Device, One Price Program also comes with a two-week delivery time on encoders not currently in stock! Let us help you find an encoder from our wide range of solutions for quick shipment.

Rugged yet affordable

The RI-43 series of incremental encoders is a rugged, large bore encoder designed to be used with large shaft vector motors in positioning applications. This industry-leading series of encoders offers:



- Modular design for ease of use
- Economical alternative to more costly competitive encoders
- Wider variety of options, solving more positioning applications
- Easy drop-in replacement for many competitive encoders

Industries

When Precision Counts

Large shaft vector motors often require encoders when precise speed or position feedback is needed. Turck's rugged RI-43 encoders are ideal for applications that need heavy duty measurement:

ELEVATOR LIFT EQUIPMENT

CONVEYING AND MATERIAL HANDLING

MOBILE EQUIPMENT

ALTERNATIVE ENERGY GENERATION

In stock, ready to go

Turck makes ordering easy

Turck is now able to deliver the majority of the RI-43 line in two weeks or less! We also have a huge inventory of the RI-43 series encoders to accommodate immediate needs.

To see a full listing of products currently in stock at Turck, contact your local sales office.

How to Order: Create any description from the RI-43 Part Key below.

All combinations listed will have the same list price and will be delivered within the two-week delivery window. For full specifications on the RI-43, refer to the RI-43 catalog pages in the [Linear, Angular and Rotary Encoder brochure](#)

PART NUMBER KEY:

RI-43 Hollow Shaft
Version

A	B	C		D	E		F		G/H/I
RI-43H	Bore Size	Flange Size	-	Output	Pulse Rate	-	Connector	/	Specials

Next Page

STEP 1: Choose the model

A	Type
RI-43H	Ø 100 mm, Hollow Shaft, IP65 Shaft Seal

STEP 2: Choose the bore size

B	Bore
20	Ø 20 mm ¹⁾
24	Ø 24 mm
25	Ø 25 mm ¹⁾
28	Ø 28 mm
30	Ø 30 mm ¹⁾
32	Ø 32 mm ²⁾
35	Ø 35 mm
38	Ø 38 mm
40	Ø 40 mm
42	Ø 42 mm
A3	Ø 1/2" ²⁾
A4	Ø 5/8" ¹⁾
A5	Ø 3/4" ²⁾
A6	Ø 1" ¹⁾
A7	Ø 1-1/8" ²⁾
A8	Ø 1-1/4" ¹⁾

¹⁾ Bores available with isolation insert

²⁾ Bores only available with isolation insert

STEP 3: Select the flange

C	Flange
E2	4-1/2" C-Face Tether
S	Face Mount
S4	Long Anti-Rotation Spring
S5	Short Anti-Rotation Spring
S8	Long Tether Arm

How to Order (cont'd)

PART NUMBER KEY:

RI-43 Hollow Shaft
Version

A	B	C		D	E		F		G/H/I
RI-43H	Bore Size	Flange Size	-	Output	Pulse Rate	-	Connector	/	Specials

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STEP 4: Choose the output

D	Voltage Supply and Output Type
2E	5-30 VDC, Push-Pull (w/ Inverted Signals)
2F	5-30 VDC, Push-Pull (7272 compatible w/ Inverted Signals)
4B	5-30 VDC, RS422 (w/ Inverted Signals)

STEP 5: Choose the pulse rate

E	Pulse Rate
	50, 360, 512, 600, 1000, 1024, 1500, 2000, 2048, 2500, 4096, 5000

STEP 7: Choose the connector

F	Type of Connection
H1181	Radial 8-pin M12 Eurofast Connector
12M23	Radial 12-pin M23 Multifast Connector
10MIL	Radial 10-pin MS Connector
C1M	Radial Cable (1 m PVC)

STEP 8: Choose specials

G	Special Output Signal Formats
	See N21 thru N33 on next page

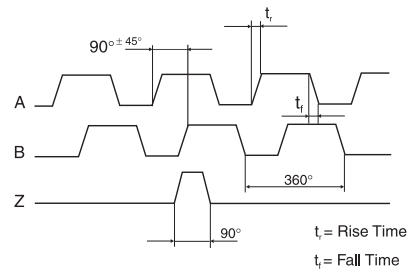
H	Special Insert Options
N42	Isolation Insert Included ³⁾

³⁾ Includes Plastic Hollow Shaft Inserts for Electrical Isolation

I	Special Connector Pin Configuration
	See N40 thru N41 on next page

Wave Forms Outputs

All Turck encoders come standard with six channels, where A leads B in the clockwise direction and the standard index is gated with A & B. The tolerance of the wave form affects the control, and in some cases it may affect the smoothness of system operation.



A leads B		B leads A	
A leads B when the shaft is turned in the clockwise direction viewing the shaft or collet end.		B leads A when the shaft is rotated in the clockwise direction viewing the shaft or collet end.	
This is Turck's standard. This format applies to the pin key codes listed below.		This format applies to the pin key codes listed below.	
A leads B, Z gated with A & B. This is Turck's standard. Z is 90° wide.		Code N24: B leads A, Z gated with A & B. Z is 90° wide.	
Code N21: A leads B, Z gated with B. Z is 180° wide.		Code N25: B leads A, Z gated with B. Z is 180° wide.	
Code N22: A leads B, Z gated with A. Z is 180° wide.		Code N26: B leads A, Z gated with A. Z is 180° wide.	
Code N23: A leads B, Z ungated. Z is 330° to 360° wide.		Code N27: B leads A, Z is ungated. Z is 330° to 360° wide.	
Code N28: A leads B, Z is 180° wide.		Code N29:* B leads A, Z gated with \bar{B} . Z is 180° wide.	
Code N33:* A leads B, Z gated with \bar{B} . Z is 180° wide.		Code N30: B leads A, Z is a negative marker gated with B. Z is 180° wide.	
Code N31: A leads B, Z is a minimum width of 270° (electrical degrees).		Code N32: B leads A. Z has a minimum width of 270° .	

Note: * For RI-10/12/65 encoders, Z is 160° Wide

Special Pin Configuration:

		Connection Type	Case Ground	Common (0 V)	+V	A	\bar{A}	B	\bar{B}	Z	Z	-	-
Output Code	N41	M12 Eurofast	Coupling Nut	7	2	1	3	4	5	6	8	-	-
	N40	MS 10-pin	G	F	D	A	H	B	I	C	J	-	-

Turck Inc. sells its products through Authorized Distributors. These distributors provide our customers with technical support, service, and local stock. Turck distributors are located nationwide – including all major metropolitan market areas.

For Application Assistance or for the location of your nearest Turck distributor, call:

1-800-544-7769

Specifications in this manual are subject to change without notice. Turck also reserves the right to make modifications and makes no guarantee of the accuracy of the information contained herein.

Literature and Media questions or concerns?
Contact Turck USA Marketing – tusa.marketing@turck.com

TURCK



30 subsidiaries and over
60 representations worldwide!

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