

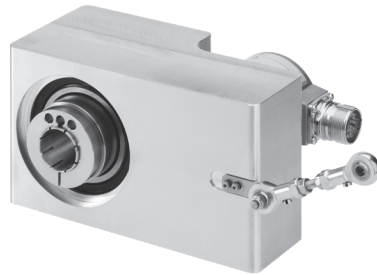
Rotary Position Technology

Absolute Encoders, Multiturn

Absolute, Multiturn Type RA-174 (Large Hollow Shaft)

Robust

- Decoupling of hollow shaft and encoder.
- Solid housing.



Versatile

- Can be combined with all Ø58 mm solid shaft encoders.
- Many variants for clamping ring attachment.
- Three different torque stop lengths.

Mechanical Characteristics

Maximum speed (continuous operation):	77 °F [25 °C]	2500 rpm
	104 °F [40 °C]	1750 rpm
	131 °F [55 °C]	1000 rpm
	158 °F [70 °C]	250 rpm
Maximum speed (short-term operation) ¹⁾ :	77 °F [25 °C]	4500 rpm
	104 °F [40 °C]	3250 rpm
	131 °F [55 °C]	2000 rpm
	158 °F [70 °C]	750 rpm
Starting torque at 73.4 °F [23 °C]:	max. 2124 oz-in. [15 Nm]	
Weight:	approx. 7.7 lbs [3.5 kg]	
Protection acc. to EN 60529/DIN 40050-9:	IP64	
Material:	housing	Aluminum
	shaft	stainless steel

¹⁾ 50% duty cycle, switch on time max. 5 min.

Electrical Characteristics:

The electrical characteristics and the connection can be found in the catalog pages of the relevant encoder.

Large Bore Assembly	Encoder Description
RA-174****-116T-7ASARNS-H1151	RM-116T10C-7ASARNS-H1151
RA-174T****-116T-8BSARNS-H1151	RM-116T10C-8BSARNS-H1151
RA-174T****-103T-3C13S12M-12M23	RM-103T10C-3C13S12M-12M23
RA-174T****-105T-9N32B-B3M12	RM-105T10C-9N32B-B3M12
RA-174T****-105T-9D38B-B2M12/N46	RM-105T10C-9D38B-B2M12/N46
RA-174T****-105T-9P32B-B1M12	RM-105T10C-9P32B-B1M12
RA-174T****-29T-9A28B-R3M12/N46	RM-29T10C-9A28B-R3M12/N46
RA-174T****-29T-9C28B-R3M12	RM-29T10C-9C28B-R3M12
RA-174T****-29T-9E28B-R3M12	RM-29T10C-9E28B-R3M12

Absolute, Multiturn Type RA-174 (Large Hollow Shaft)

Part Number Key: RA-174

A	B	C	D		E	F		G		H		I
RA-174	E	16	T2	-	29	S	-	9D28B	-	R3M12	/	N46

A	Type
RA-174	Large Bore Accessory

B	Clamping Ring Location
E	Encoder Side
T	Torque Arm Side

C	Bore
16	Ø 16 mm
20	Ø 20 mm
24	Ø 24 mm
25	Ø 25 mm
28	Ø 28 mm
30	Ø 30 mm
38	Ø 38 mm
42	Ø 42 mm
45	Ø 45 mm
A4	Ø 5/8"
A6	Ø 1"

D	Torque Arm Length
T2	2.76" (70 mm)
T3	3.93" (100 mm)
T4	5.91" (150 mm)

E	Encoder Type
29	RM-29, CANopen, EtherCat, PROFIBUS-DP, PROFINET IO
103	RM-103, SSI
105	RM-105, CANopen, EtherNet/IP, Modbus
116	RM-116, Analog

F	Encoder IP Rating
S	High IP Rating *
T	Low IP Rating*

*Rating Dependant on Encoder Selected

G	Voltage Supply and Output Type
Dependant on Encoder Selected	

H	Type of Connection
Dependant on Encoder Selected	

I	Specials
Dependant on Encoder Selected	

Accessories:

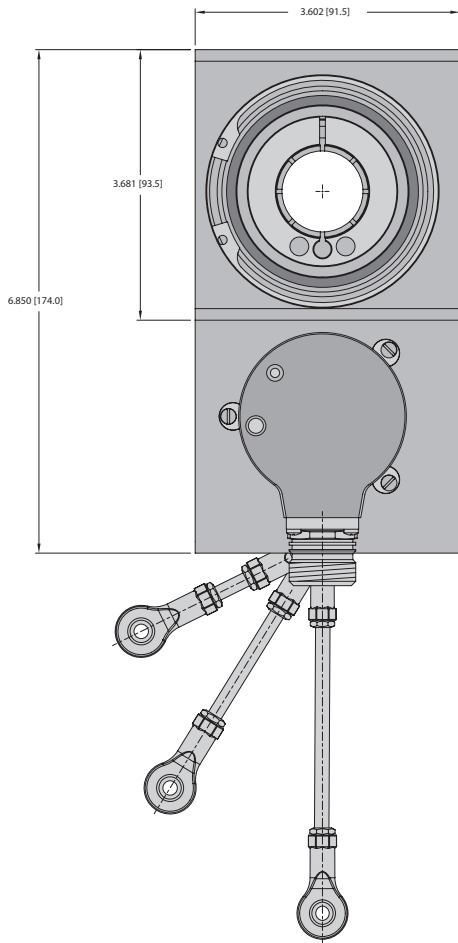
- See page H1, Connectivity, for cables and connectors

Rotary Position Technology

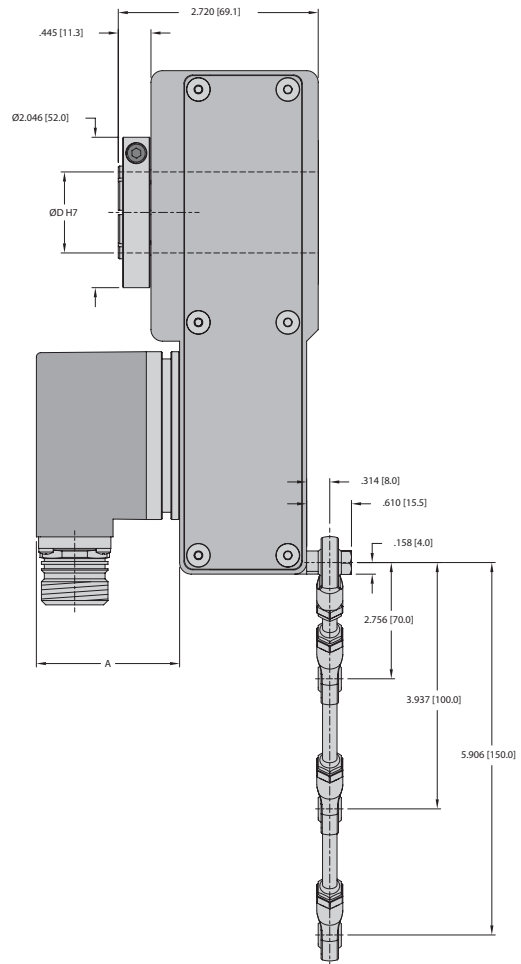
Absolute, Multiturn Type RA-174 (Large Hollow Shaft)

Dimensions: RM-174

RA-174
Front View



RA-174
Clamping Ring Location: E



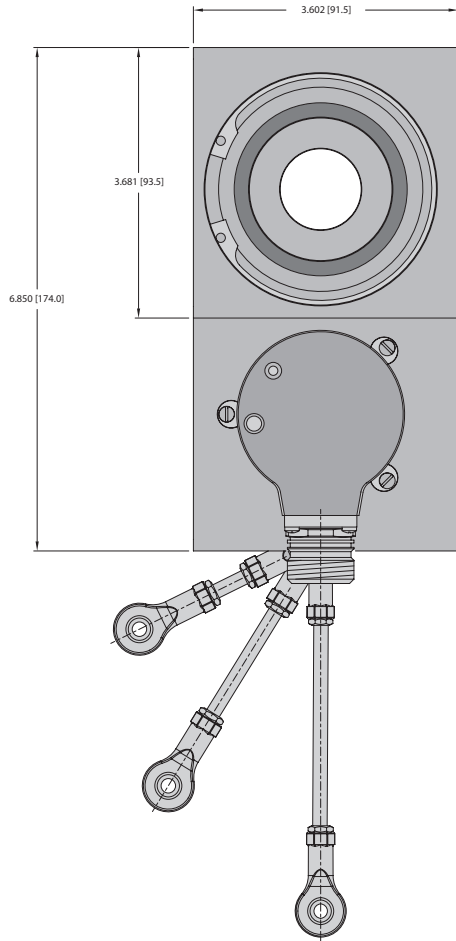
1) Recommended torque for clamping ring with M3: 141.6 oz-in. [1.0 Nm], with hollow shaft $\geq \text{Ø } 38 \text{ mm}$
Recommended torque for clamping ring with M4: 283.6 oz-in. [2.0 Nm], with hollow shaft $\leq \text{Ø } 30 \text{ mm}$

Notes: Dimension A depends on the encoder used. H7 fit for all bore options.

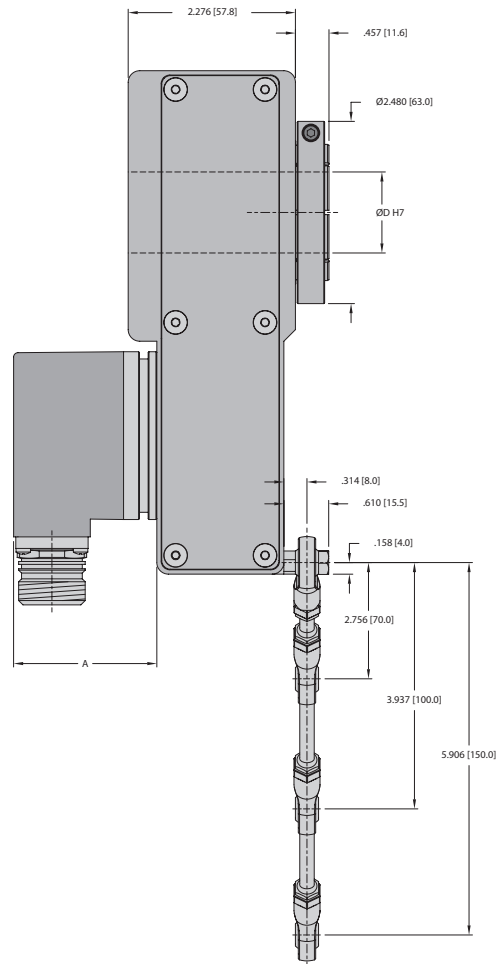
Absolute, Multiturn Type RA-174 (Large Hollow Shaft)

Dimensions: RM-174

RA-174
Front View



RA-174
Clamping Ring Location: T



¹⁾ Recommended torque for clamping ring with M3: 141.6 oz-in. [1.0 Nm], with hollow shaft $\geq \varnothing 38$ mm
 Recommended torque for clamping ring with M4: 283.6 oz-in. [2.0 Nm], with hollow shaft $\leq \varnothing 30$ mm

Notes: Dimension A depends on the encoder used. H7 fit for all bore options.