Rotary Encoders Optical encoder technology for rugged industrial environments Incremental encoders up to 50,000 pulses per revolution Absolute encoders up to 30 bit resolution Industry standard sizes – 50 mm (2"), 58 mm, and 2.5" Solid shaft, hollow shaft and recessed hollow shaft models ■ Magnetic noncontact incremental encoder system

A Complete Overview of Pepperl+Fuchs Rotary Encoders

Rotary encoders are used to provide accurate position measurement and speed feedback in many machine and system control environments. Pepperl+Fuchs is proud to offer a complete line of incremental and absolute rotary encoders in solid and hollow shaft designs for virtually every industry application.

Pepperl+Fuchs rotary encoders are crafted using state-of-the-art components and the latest technologies to ensure precision, reliability, and functionality. We've been supplying rotary encoders for over 25 years and have the experience to solve your most difficult rotary or linear measurement problems.



RVI25

The RV125 is a rugged, industrystandard, 2.5" incremental encoder with a wide variety of options. With resolutions up to 5,000 ppr

available, this encoder is ready for most applications. Multiple flange types and connection options, including mil-spec connectors, make it simple to integrate. Available with 1/4" and 3/8" shaft sizes.



TVI40/THI40/TSI40

These solid, hollow, and recessed hollow shaft models are our smallest, most economical incremental encoders. With a diameter of only 40 mm (1.57")

it can fit in the tightest spaces. The tangential cable exit allows the cable to be positioned either axially or radially. These units also feature a metal code disc and Opto-ASIC technology for high reliability. Output resolutions are available up to 1,024 ppr.



RVI58/RHI58

The small, hollow shaft RHI58 encoder is available with resolution up to 50,000 ppr while the solid shaft RVI58 provides 50,000 ppr for precise

positioning applications. Shaft bore sizes on the RHI58 include 10 mm, 12 mm, and 1/2". Solid shaft models are available with 6 mm, 10 mm, or 12 mm shaft diameters. Both models measure 58 mm in diameter and are held in place with the included torque rest.



RVI58L

This is an all stainless steel version of the RVI58 encoder. It is especially suited for applications in the food industry. This rugged encoder is IP69k

steam jet-proof, certified according to EHEDG, and approved for ECOLAB detergents.



RHI90

This large, hollow shaft incremental encoder can be used for shaft sizes ranging from 16 mm to 45 mm, including 5/8", 3/4", 7/8" and 1".

With a metal code disc these encoders are engineered to take abuse. Designed for high shock and vibration. They provide resolutions up to 2,500 ppr.



DVS/DVM58

DeviceNet absolute encoders now have up to 30-bit resolution: up to 16-bit for single-turn and 14-bit for multiturn. They are designed for the most

precise positioning applications with 65,536 steps per turn. Diagnostic LEDs are integrated into the removable housing cover to make troubleshooting guick and easy.



EVS/EVM58

Our industrial network/fieldbus encoder portfolio includes Ethernet IP and PROFINET absolute encoders. They provide resolutions up 16-bit for single-

turn and 30-bit for multi-turn units.



RHS58

The RHS58 incremental encoder offers a sine/cosine output in a hollow shaft housing. Shaft bore sizes include 10 mm, 12 mm, and 15 mm. Output resolutions include 1,024 and

2,048 signal periods per revolution. The sin/cos signal allows easy interpolation at the controller for higher resolutions. The encoder has a full complement of six signal outputs and maximum frequency of 200 kHz. The included torque rest holds the encoder in place.



MNI40

These magnetic encoders utilize the latest technologies to achieve high-accuracy feedback for incremental encoder feedback. This two-piece

design enables the magnetic code wheel to be mounted directly to a machine shaft. Easy to use, with convienent setup diagnostics, the MNI40 provides reliable, long-life service in difficult applications.

Want more information?

Simply go to: www.sensing.net/encoder

Subject to modifications without notice

Pepperl+Fuchs Group www.pepperl-fuchs.com USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com Germany: +49 621 776-4411 fa-info@de.pepperl-fuchs.com Copyright Pepperl+Fuchs Singapore: +65 6779 9091 fa-info@sg.pepperl-fuchs.com



Incremental Rotary Encoders



	TVI40	TS140	THI40	TVI50	TVI58	THI58
Diameter	40 mm	40 mm	40 mm	50 mm	58 mm	58 mm
Max. PPR	1,024	1,024	1,024	1,024	1,500	1,500
Shaft Type	Solid	Semi-hollow	Hollow	Solid	Solid	Hollow

	RHS58 Sine-Cosine	RHS90 Sine-Cosine	MNI40N Magnetic	RVI25 Square Flange	RVI58L Stainless Steel
Diameter	58 mm	90 mm	40 mm	63 mm	58 mm
Max. PPR	2,048	2,048	3,600	5,000	5,000
Shaft Type	Hollow	Hollow	Mag wheel	Solid	Solid

Absolute Rotary Encoders

Single Turn (65,536) Multi-turn (16,3840) 58 mm diameter	1			
EtherNet IP	ESS58/ESM58	EVS58/EVM58		
ProfiNet	ESS58/ESM58	EVS58/EVM58		
CANopen			CSS58/CSM58	CSS58/CSM58
DeviceNet			DSS58/DSM58	DSS58/DSM58
ProfiBus			PSS58/PSM58	PSS58/PSM58

				10	
SSI	ASS58/ASM58	AVS58/ASM58	AHS58/AHM58		
AS-Interface				BSS58/BSM58	BVS58/BVM58
Single Turn	65,536	65,536	65,536	8,192	8,192
Multi-turn	16,384	16,384	16,384	4,096	4,096

Absolute Magnetic Encoders, Safety Encoders

Single Turn (8192) Multi-turn (4096) 36 mm diameter	5		63 m		
	Absolute Magnetic Encoders		Safety Encoders		
SSI	AVS36M/AVM36M	ASS36M/ASM36M			
CANopen	CVS36M/CVM36M	CSS36M/CSM36M		CVS58S/CVM58S	
Sine/Cosine			RVS58S		
			Incremental	Absolute	

Want more information?

Simply go to: www.sensing.net/encoder

Hazardous Area Rotary Encoders

Incremental Rotary Encoders



Absolute Rotary Encoders



Accessories

Couplings



- Spring steel coupling
- Spring disk coupling
- Bellows coupling Precision coupling
- Helix coupling

Connectors



- Amphenol
- Coninvers
- SUB-D
- Souriau

Cable Pulls



Measuring ranges:

- **1,**000 mm
- **2,000** mm ■ 3,000 mm
- 5,000 mm
- 15,000 mm

Want more information?

Simply go to: www.sensing.net/encoder