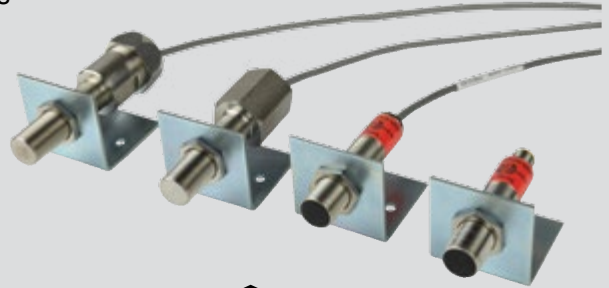


Features

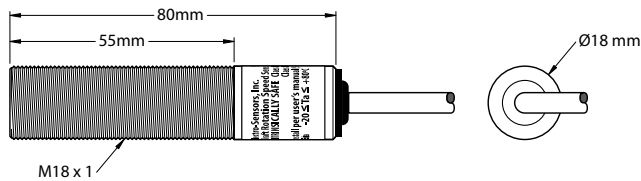
- Square-wave pulse frequency output, zero speed operation
- NPN or PNP output (open-collector or terminated) options
- Single channel or bidirectional (quadrature) signaling options
- 10-26 VDC powered
- Hall Effect or Magnetoresistive sensing options
- Standard and wide temperature options
- Rugged M18x1 stainless steel sensor housing
- Four housing options:
 - Basic (corded)
 - M12 Eurofast Connector
 - 1/2" NPT female conduit port (corded)
 - 1/2" flexible, liquid-tight conduit fitting (corded)
- Optional EZ-18mm mounting bracket and mounting magnet available



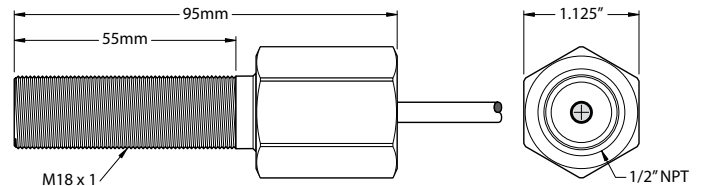
Description

Series 18 shaft speed sensors detect passing magnets of a shaft-mounted pulser disc or pulser wrap and output a voltage pulse frequency directly proportional to the shaft rotation speed. All models work with all Electro-Sensors pulser targets (discs and wraps) and operate down to zero speed. All models have rugged stainless steel M18x1 housings that are epoxy-filled and sealed against liquids/dust and come with two stainless steel hex jam nuts and a bracket.

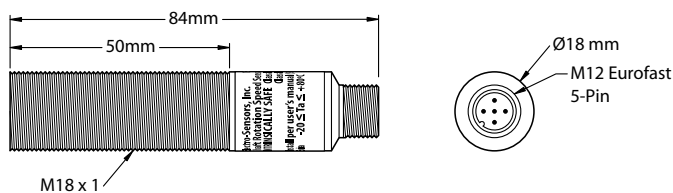
Basic Housing (18B)



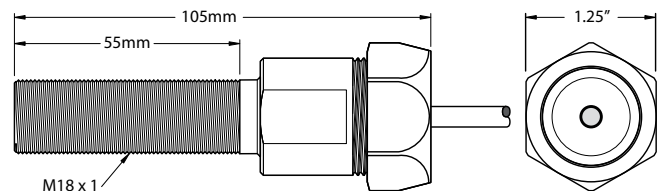
1/2" NPT Female Conduit Fitting (18R)



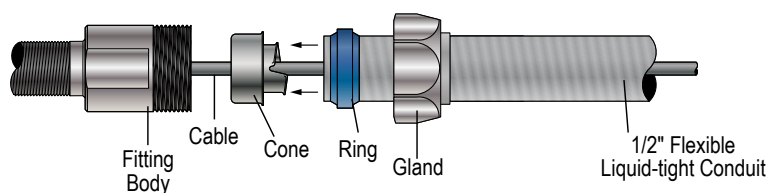
M12 Eurofast Connector (no cable) (18E)



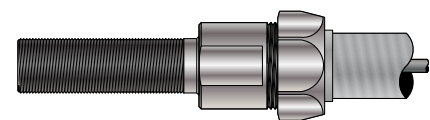
1/2" Flex Liquid-Tight Conduit Fitting (18F)



1/2" Flex Liquid-Tight Conduit Assembly (18F)



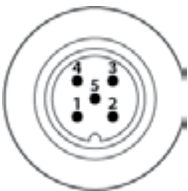
Disassembled



Assembled

Specifications

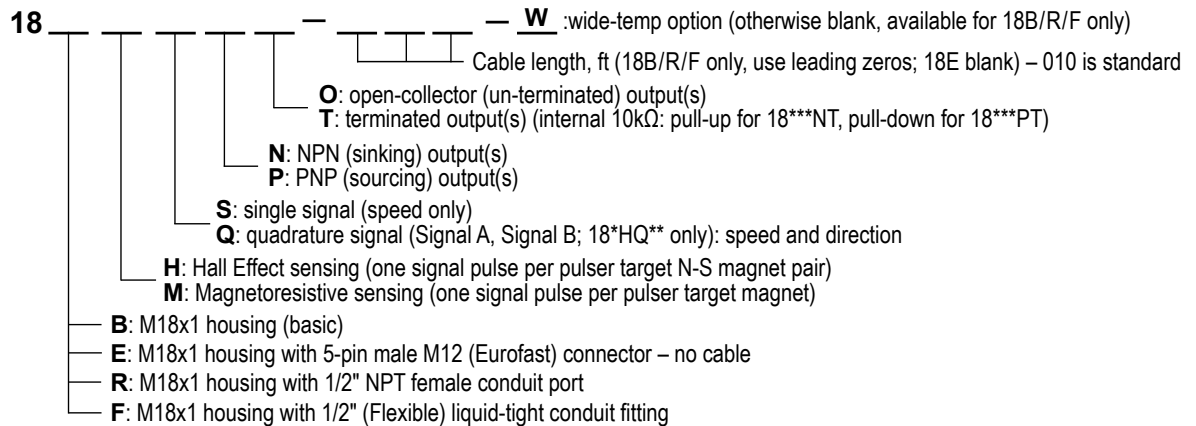
Output Functions	
Hall Effect	$f_{\text{pulse}} = \text{RPM} * \text{PPR} / 60$ $\text{RPM} = f_{\text{pulse}} * 60 / \text{PPR}$
Magneto-resistive	$f_{\text{pulse}} = \text{RPM} * \text{PPR} / 30$ $\text{RPM} = f_{\text{pulse}} * 30 / \text{PPR}$
Notes: f_{pulse} is the pulse output signal frequency (Hz). RPM is the shaft revolutions-per-minute. PPR is the pulser target pulses-per-revolution (number of N/S magnet pairs or 1/2 of total magnets). Magneto-resistive gives 2X the frequency of Hall-Effect. Some pulser target restrictions exist for Magneto-resistive sensing (consult factory).	
Operational Specifications	
Sensor Gap	1/4" ± 1/8" (using pulser targets with 1/2" magnets)
V _{supply}	10 → 26 VDC
I _{supply} (no I _{out} load)	10 mA (max)
I _{out}	10 mA (max, NPN sink / PNP source)

Operating Temperature	-20 → +80 °C (-4 → +176 °F) Standard Option 18B, R, F (not -W)
Output Frequency	0 → 20 kHz
Cable - Standard Option 18B, R, F (not -W)	
Type	Shielded, 24 AWG
Color code	Red (V+), Blk (Common), Wht (signal A), Grn* (signal B) * Q signal option only
M12 Eurofast male connector pinout – 18E	
	1 - Shield 2 - V+ (10 – 26 VDC) 3 - Common 4 - Signal (A) 5 - Signal (B) - Q signal option only, else unconnected * 18E housing option only

Specifications subject to change without notice.

Ordering:

Build a model number by filling in the blanks



Series 18 EZ Mounting Options

Option	Part Number
EZ-18mm Mounting Bracket Assembly	810-000042
MM-1.25 Mounting Magnet (Must be used with EZ-18mm)	810-000060



EZ-18mm Mounting Bracket Option



MM-1.25 Mounting Magnet Option
(must be used with EZ-18mm)

Additional Information

See the Series 18 Installation and Operating Manual for complete details, specifications, and programming instructions.

Approval Ratings

Intrinsically Safe:

Class I, II, III, Division 1, Groups A, B, C, D, E, F, G
AEx/Ex ia IIC

Install for I.S. per the Series 18 I.S. Control Drawing 990-006100

T5 Ta ≤ 85 °C (18B****-***-W, 18R****-***-W, 18F****-***-W)

T5 Ta ≤ 80 °C (All Others)

IP65 4X

