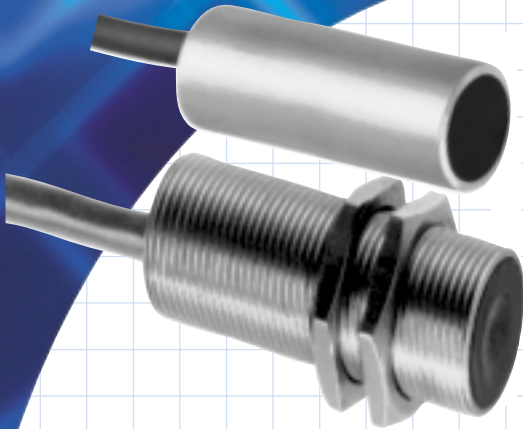


Series 54Z & 54ZT Pickups



- **Low Cost Pickup**
- **Compact Design**
- **Simple Installation**
- **Wide Operating Range**

The Series 54 pickups offer new levels of economy, performance and convenience to sensing devices. The Series 54 sensors operate over a wide range of air gaps, making them suitable for parts counting and speed sensing applications. The wide operating voltage makes them compatible with most counters, indicators or controllers. The Series 54 does not require a minimum target speed, and can operate from zero up to 20,000 targets per second. Commonly used targets include gear teeth, slotted discs, shafts with keyways, etc. made of carbon steel, iron, or magnetic stainless steel. This low cost sensor offers reliable operation in wet, dirty and high temperature environments.

Applications

- Parts counting
- Speed sensing
- Sensor for PLC's and indicators

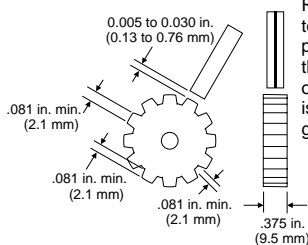
Application Guidelines:

For ease of installation and optimum performance, a keyway is provided so that the sensor may be visually aligned with the target's direction of travel.

Target: Requirements

- Gap: 0.005 to 0.030 inch
- Length: 0.081 inch min.
- Separation: 0.081 inch min.
- Width: 0.375 inch min.
- Height: 0.081 inch min.
- Speed: 0 to 20,000 targets/sec. max.
- Pitch: 20 max

Target Requirements



Remember to rotate the pickup so that the line on the side is parallel to gear travel.

SPECIFICATIONS

Power Requirements: 5 to 18 VDC, 10 mA plus load

Weight: 2 oz.

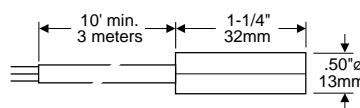
Operating Temperature: -40 to +105 °C (-40 to +220 °F.)

Cable: 105 °C, PVC insulation, 10 foot length

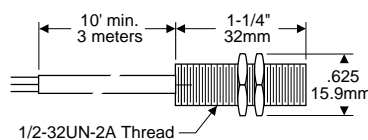
Material: Stainless 303 Steel

Approximate Dimensions

Model 54Z

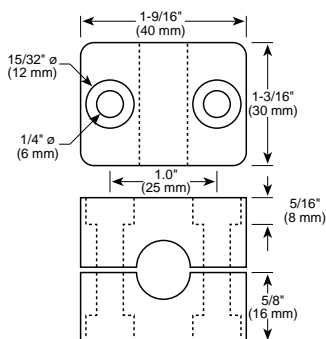


Model 54ZT

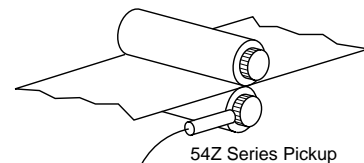


Mounting Clamp

(not required for model 54ZT)



Typical Application



54Z Series Pickup

Electrical Output Ratings

Outputs	Voltage Range	Sink (mA)	Source (mA)	Operating Speed
Current Sink (open collector w/2.2 kΩ pull-ups)	5 to 18 VDC	17	0.9 mA @ V _{CC} -2V output	20 kHz max.

Electrical Connections

Function	Series 54Z Wire Color Code
5 to 18 VDC	RED
Signal	WHT
Common	BLK

Recommended Dynapar brand Gears

Gear	Dia.	Bore	Pitch	PPR	54Z/54ZT
16002070081	3-1/10"	3/8"	20	60	X
16002070083	3-7/8"	1/2"	16	60	X
16002070216	5-1/2"	1-1/8"	11	60	X
16002070217	5-1/2"	1-3/8"	11	60	X
16002070218	5-1/2"	1-5/8"	11	60	X
16002600314	5-1/2"	1-7/8"	11	60	X
16002600315	5-1/2"	2"	11	60	X
16002600316	5-1/2"	2-1/8"	11	60	X
16002600317	5-1/2"	2-1/4"	11	60	X
16002600318	5-1/2"	2-3/8"	11	60	X
16002600319	5-1/2"	2-1/2"	11	60	X
16002600320	5-1/2"	2-7/8"	11	60	X
Key or Keyway				1	X

Ordering Information

Output Waveform	Description	Model No.
Unidirectional	Pickup	54Z
A	Threaded Pickup	54ZT
	Clamp for 54Z	605213