



MODEL HESS - HALL EFFECT SPEED SENSOR



- DETECTS STEEL SENSING GEARS OR OTHER FERROUS TARGETS
- NPN OPEN COLLECTOR OUTPUT
- OPERATES FROM 0 TO 10 KHz
- 3/8" DIAMETER STAINLESS STEEL CASE
- EPOXY ENCAPSULATED FOR OIL, DIRT & MOISTURE RESISTANCE
- IDEAL FOR TACHOMETRIC INPUTS

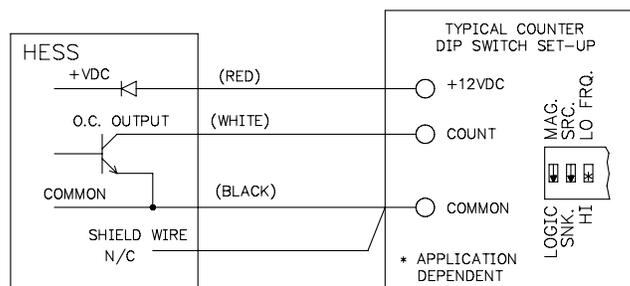
DESCRIPTION

The Hall Effect speed sensor (HESS) is ideal for sensing steel gears or other ferrous targets from 0 to 10 KHz. This sensor does not have a minimum threshold speed as does a magnetic pickup sensor. However, when the sensor is first powered up, the output state is indeterminate (*Hi or Lo*) when the sensor is not detecting metal. The unit operates from a +8 to +30 VDC power supply and is reverse polarity protected. The sensor face can be mounted flush into metal panels. The case is stainless steel and is supplied with 10 feet (3 M) of cable. The stranded shield wire is not connected to the sensor circuit or case.

SPECIFICATIONS

1. **POWER SUPPLY:** +8 to +30 VDC @ 30 mA max.; reverse polarity protected.
2. **MAXIMUM SENSING DISTANCE:** 0.040" (1 mm).
3. **OUTPUT:** NPN O.C. transistor; $V_{MAX} = 30$ VDC; $V_{SAT} = 1 V_{MAX}$ @ 30 mA max. load.
4. **OPERATING TEMPERATURE RANGE:** -25°C to 70°C (-14°F to 158°F).
5. **CABLE LENGTH:** 10 feet (3.05 M).
6. **OPERATING FREQUENCY:** 0 to 10 KHz.
7. **WIRE:** 3 wire, 22 AWG with stranded shield wire and 100% foil coverage; grey PVC jacket.
Color Code: Red (+VDC), Black (Comm.), White (Output).
8. **CABLE STRAIN RELIEF:** 10 lbs. (4.5 Kg.) for 1 minute.

Note: DO NOT adjust sensor air gap while target (gear) is moving.



TARGET SIZE

The HESS can detect gears as small as 24 D.P. or other ferrous targets with equal or greater dimensions. The sensor is compatible with all Red Lion Controls Sensing Gears.

ORDERING INFORMATION

MODEL NO.	DESCRIPTION	PART NUMBER
HESS	NPN O.C. Hall Effect Speed Sensor	HESS0000

DIMENSIONS In inches (mm)

