



MOTORTECH PICKUP

Technical Data/ Installation Instructions
for Magnetic Pickup
P/N 66.60.001-5818-L



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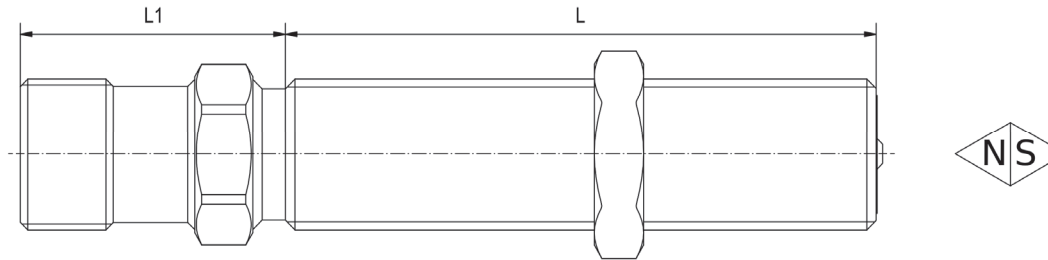
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Technical Data



Magnetic Pickup Mechanical Data

Feature	P/N	Value
L	-064 -152	63.5 mm (2.5") 152.4 mm (6.0")
L1		28.5 mm (1.12")
Thread/Screw connection		5/8-18 UNF
Temperature		-40 °C to +110 °C (-40 °F to +230 °F)
Air gap		0.5 mm to 1 mm (0.02" to 0.04")
Protection class		IP68
Enclosure material and nut		Stainless steel (300 series)

Electrical Data

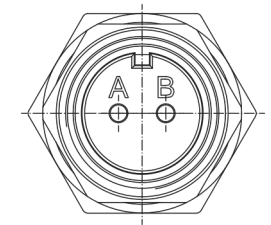
Feature	Value
Pole connector	2-pole, male, thread 5/8-24 UNEF
Resistance	1,200 Ω \pm 20%
Inductivity	450 mH \pm 20% at 1 kHz and +25 °C (+77 °F)
Triggering	Through holes, metal inserts, blind holes, slots, screws, pins, teeth
Output voltage	Gear wheel: 60 teeth Air gap: 0.5 mm (0.02") Load: 10 k Ω , 33 k Ω , 100 k Ω <i>See reference gear wheel and diagram "Nominal Voltage / Speed"</i>

Certification

CE
RoHS Directive
– EN IEC 63000

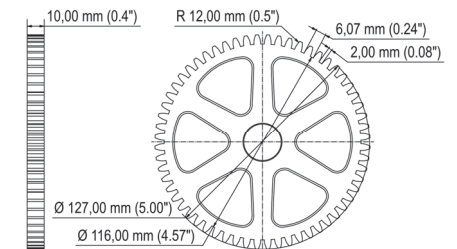
If required, you can obtain the EU declaration of conformity for your magnetic pickup from your MOTORTECH contact person.

Connector

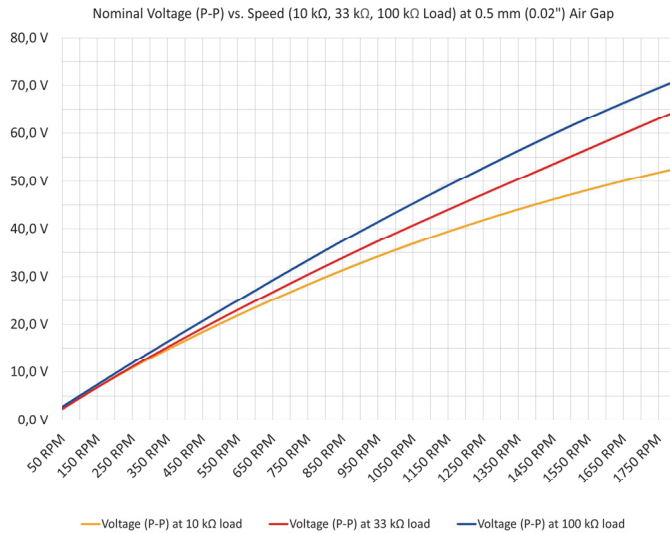


Pin B turns positive with respect to Pin A at the transition from non-ferromagnetic to ferromagnetic material.

Reference Gear Wheel



Nominal Voltage / Speed



Intended Use

When installed correctly on stationary gas engines in the industrial sector, the magnetic pickup is suitable for position detection of the camshaft or crankshaft or for speed measurement. The signals can be used for determining the ignition timing with an ignition controller. Any use other than the one described in the installation instruction shall be considered improper use and will result in the voiding of all warranties.

Safety Instructions



Explosion hazard!

The pickup may only be used in a non-explosive atmosphere. There is a risk of sparking.



Risk of destruction!

The pickup can be destroyed or damaged by the following hazards:

- Mechanical hazards
The pickup does not have to be exposed to ANY mechanical hazard. Please note that deviations from the recommended installation distance can be necessary due to different engines and installation conditions.
- UV radiation
The pickup and the connection leads have to be protected against UV radiation. This can be achieved when the sensor is used in internal areas.

Triggering

Through holes



Metal inserts



Blind holes



Slots



Screws



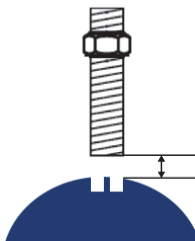
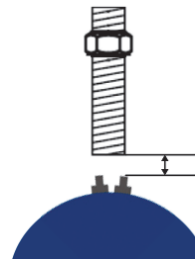
Pins



Teeth



*Observe Distance to Triggering!



Risk of injury and destruction!

Observe the following safety instructions during the installation of the pickup:

- All work has to be performed by trained and authorized personnel.
- Start the installation only if the engine is shut down.
- Do not touch the contacts.
- Follow all safety instructions of the system and engine manufacturers, especially in high voltage areas.
- High temperatures can occur at the installation location of the pickup. Do not touch the pickup.

Installation Instructions



Connection to ignition controller

The pickup has to be connected to an ignition controller with a shielded and twisted lead. Use a short lead that does not exceed a length of 20 meters (65.62'). Connect the lead shield on one side to the ignition controller. If the ignition controller does not have a corresponding connection, connect the lead shield with the earth potential.

Always carry out the start-up of the pickup in the following steps in the order given:

1. First install the pickup on the engine.
2. Set the air gap of 1 mm (0.04") recommended by MOTORTECH to the triggering (change of distance: 1 revolution \triangleq 1.4 mm [0.05"])*.
3. Fix the pickup (tightening torque: 15 Nm [11 lb-ft]).
4. Start the engine without gas supply.
 - ▶ Check the ignition timing with a stroboscopic lamp.

Maintenance

Check regularly that the pickup is tight and make sure that it is not subject to wear. If necessary, the pickup can be cleaned with a damp cloth and a non-aggressive cleaning agent when switched off.