

# P9390

## Holder for Hall effect speed sensors

### Assembly and Installation Manual

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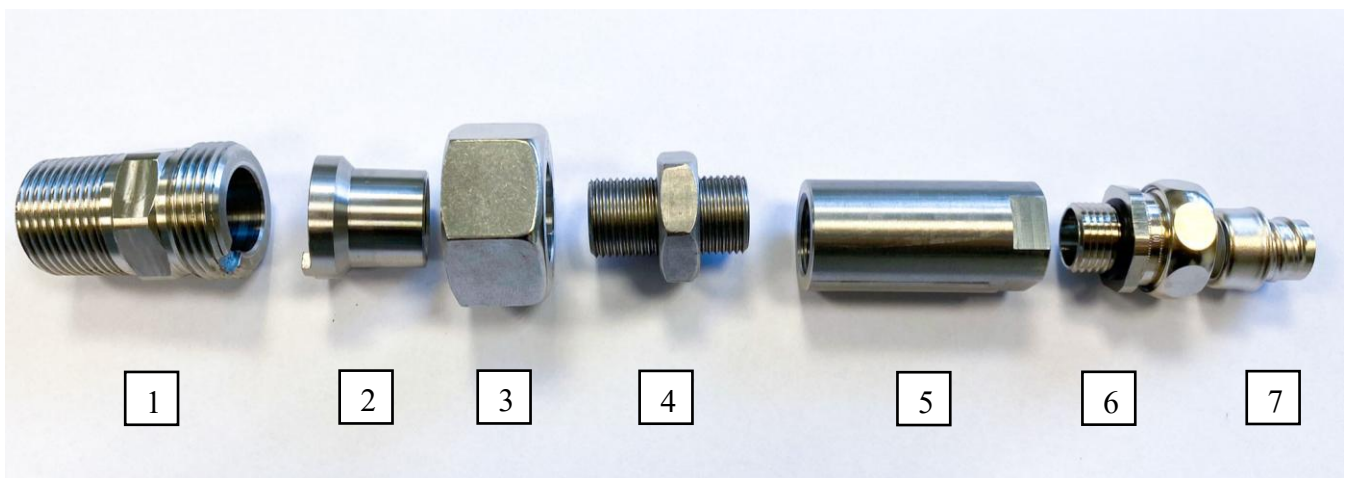
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## 1. Introduction

The P9390 holder is designed for fixing of hall effect speed sensors – Braun A5S0, PR9376-P or similar. This holder is to be installed in the cover above the trigger gear.

### 1.1. Holder consists of following parts:

1. Bushing (available with mounting thread 3/4NPT-14 or M27x2)
2. Guide sleeve
3. Locking nut M30/S36
4. Mounting clamp for sensor PR9376 / Braun A5S0 including M18x1,5 nut
5. Threaded adapter M18x1,5 to M16x1,5
6. Sleeve M16x1,5 for protection tube MPT13
7. Ring for cable hose



### 1.2. Required tools and material

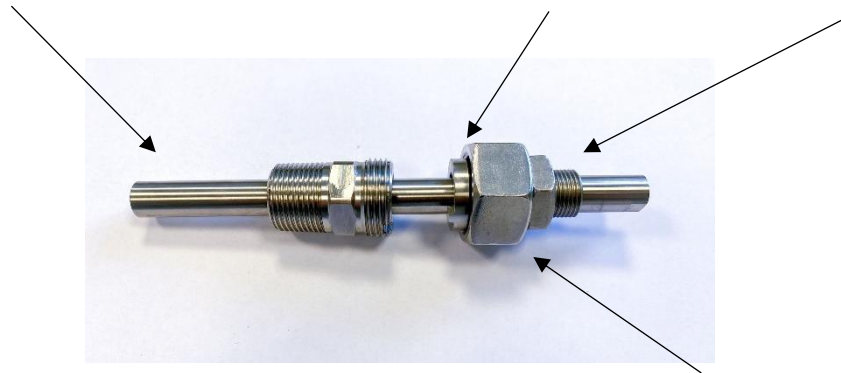
- Spanners: S12, S13, S24, S27, S36
- Sealing Teflon tape (for version with 3/4NPT-14 thread)
- Oil proof sealing compound (e.g. Loctite 542)
- Gap gauges

### 1.3. Prior the assembly and installation

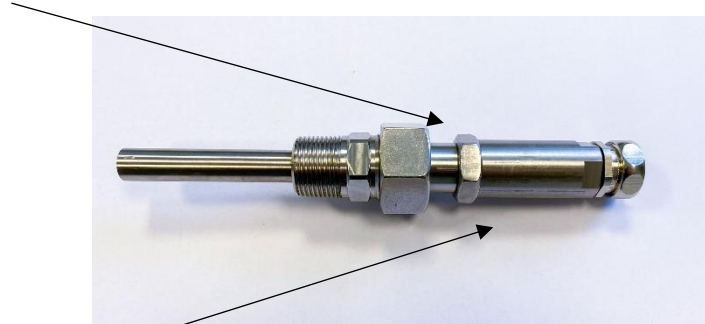
Make sure the correct size of the mounting thread in the machine and the diameter of a drilled hole prior the installation. The minimum of diameter is 16 mm all the way to the surface of the shaft.

## 2. Preparation of the holder

- Push the spindle with pre-installed sensor through the guide sleeve (2) and the mounting clamp (4).



- Screw the mounting clamp (4) into the guide sleeve (2), add the locking nut (3) and screw the M18x1,5 nut (4) on the other side. Do not tight it yet.



- Screw the threaded adapter (5) onto the mounting clamp (4). Do not tight it yet.
- Screw the sleeve M16x1,5 (6) onto the threaded adapter (5). Do not tight it yet.
- Pull the sensors cable through a protection hose and fix it onto the holder by the sleeve M16x1,5 (6).

## 3. Installation of the bushing

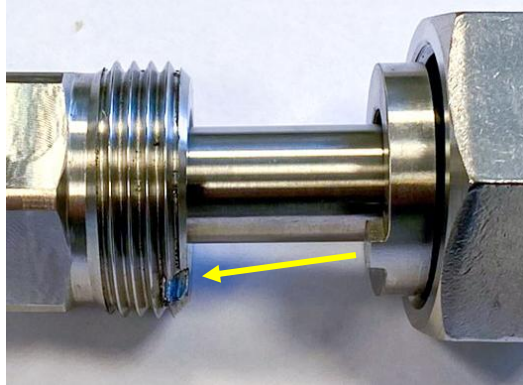
The mounting bushing is available with two types of thread, therefore there are two ways of sealing applied:

- 1) The 3/4 NPT-14 tapered thread is sealed by winding the Teflon tape into a thread (in the style of a “water pipe”).
- 2) The metric thread is sealed with a copper washer and an oil prof sealing compound (e.g. Loctite 542).



Apply the Teflon tape on the conical 3/4 NPT-14 thread.

- 3) Screw the bushing (1) in the drilled hole once the proper sealing applied and tighten it with the S27 spanner.
- 4) Push the prepared holder with the sensor into the bushing (1), pay attention to fit the tooth into the cutout. Tighten the locking nut (3) with a spanner S36.



#### 4. Precise adjustment of the sensor

- For precise adjusting of the sensor the M18x1,5 nut (4) should be loosen. Now use the spanner S12 and rotate the spindle with the sensor until the air gap between the sensor tip and the gear wheel is in the range 0,75 - 0,80 mm, measured with the gap gauges.
- Now tighten the nut (4) to secure the spindle and observe the air gap. Loosen the nut (4) if the gap is out of the range and set it again, otherwise continue to the next step.
- Tighten the threaded adapter and screw the sleeve M16x1,5 (6).
- Connect a protection hose to the sleeve (6) and tight it.

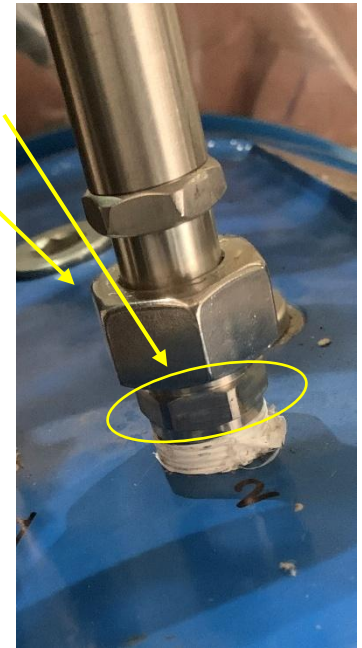
#### 5. Installation of the MPT13 protection hose

For fixing of protection hose use the M16x1,5 sleeve (6) instead of standard bushings (USP, Combi) delivered with MPT13 set. For installation details of MPT13 protection hose please refer a dedicated guide.

## 6. Removing of the holder

- Disconnect MPT13 protection hose from the holder.
- Hold the bushing (1) by the S27 spanner to prevent it from loosening and release the M30 locking nut (3).
- Carefully pull the holder out. Do not loosen the M18 nut (4).

Re-adjustment of the sensor is not required during the holder re-assembly, if the position of the sensor is not changed.



## 7. Replacement of the sensor

- The sensor is glued into the spindle. To replace the sensor, it is necessary to order a spindle of the same specification together with the sensor and during installation it is necessary to proceed in the same way as described above.

The holder P9390 with Braun A5S0 sensor mounted on a bearing cover.



Bushing with thread M27x2



Bushing with thread 3/4NPT-14

Notes: