

Supplementary instructions

Screening tube adapter

for VEGACAL 63, 64/VEGACAP 63

Rod \varnothing 16 mm



Document ID: 34849



VEGA

1 Product description

The screening tube adapter can be used for all VEGACAP 63 and VEGACAL 63 and 64 sensors with rod \varnothing 16 mm (0.63 in).

Typical applications of the screening tube adapters are e.g. for condensation or sockets.

Apart from the standard version there is a second version for vacuum with a special seal.

When the screening tube adapter is submerged in liquid, we recommend the use of a vacuum-tight version.

The following versions of the screening tube adapter are available:

Screening against condensation

- Screening against measurement faults caused by condensation.
- Screening against high capacitances caused by installation conditions. This can occur, e.g. in long sockets.

Capacitive screening, vacuum-tight

- Screening against high capacitances caused by installation conditions. This can occur, e.g. in long sockets. In addition, the screening tube is vacuum-tight.

Condensation

In case of strong condensation, the draining of condensed water can change the measurement accuracy. The suitable version is the **Screening against condensation**. The condensation can drain off outside on the screening tube adapter.

Socket

In case of long sockets, the screening tube can increase the sensitivity of the probe by compensating the influences of the socket. The suitable version is **Capacitive screening, vacuum-tight**.

When the probe is mounted laterally, buildup can accumulate in the socket. A screening tube makes the covered part of the probe inactive and hence insensitive to influence from buildup and socket. Hence, the screening tube adapter excludes changing influences caused by the medium and ensures stable measurement conditions. The suitable version is **Capacitive screening, vacuum-tight**.

2 Mounting

2.1 Version: screening against condensation

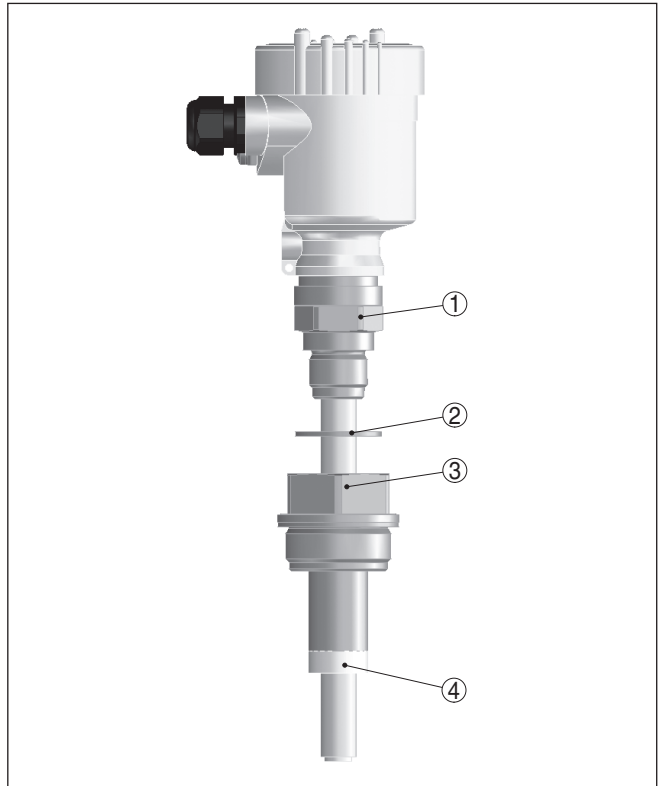


Fig. 1: Mounting of the screening tube adapter - screening against condensation

- 1 Probe
- 2 Process seal
- 3 Screening tube adapter
- 4 Centering cone (PTFE)



Caution:

Check the insulation of the probe for deep scratches.

To ensure the seal effect of the screening tube adapter, the isolation of the probe must be undamaged in the area of the lower screening tube adapter end.

1. Place the process seal (2) on the thread of the probe
2. If it is harmless to the process, grease the two O-rings with an acid-free grease so that the rod of the probe slides more easily
3. Push the rod of the probe (1) through the screening tube adapter (3)

4. Screw the screening tube adapter (3) onto the thread of the probe and tighten with 100 Nm (74 lbf ft) (SW 46)

The mounting of the screening tube adapter is now finished. The probe can now be installed.

You can find the mounting procedure in the operating instructions of the probe.



Note:

The VEGACAP probe must be re-compensated after mounting the screening tube adapter. Use the compensation key on the electronics module. You can find the instructions for this in the operating instructions of the probe.

2.2 Version: capacitive screening, vacuum-tight

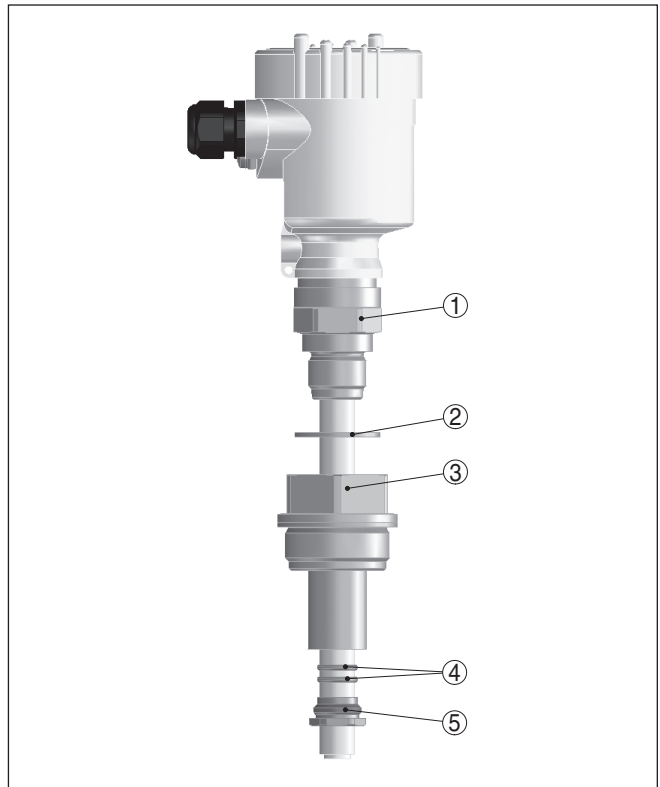


Fig. 2: Mounting of the screening tube adapter - capacitive screening, vacuum-tight

- 1 Probe
- 2 Process seal
- 3 Screening tube adapter
- 4 O-rings (2 pcs.)
- 5 Pressure screw

**Caution:**

Check the insulation of the probe for deep scratches.

To ensure the seal effect of the screening tube adapter, the isolation of the probe must be undamaged in the area of the lower screening tube adapter end.

1. Loosen and remove (SW 24) pressure screw (5)
2. Remove the two O-rings (4) from the screening tube
3. Place the process seal (2) on the thread of the probe
4. Push the rod of the probe (1) through the screening tube adapter (3)
5. Screw the screening tube adapter (3) onto the thread of the probe and tighten with 100 Nm (74 lbf ft) (SW 46)
6. If it is harmless to the process, grease the two O-rings with an acid-free grease so that the rod of the probe slides more easily
7. Slide the two O-rings (4) over the rod of the probe
8. Slide the pressure screw (5) of the screening tube adapter onto the probe
9. Screw pressure screw (5) with the two O-rings into the screening tube adapter and tighten it to the stop (SW 24)

The mounting of the screening tube adapter is now finished. The probe can now be installed.

You can find the mounting procedure in the operating instructions of the probe.

**Note:**

The VEGACAP probe must be re-compensated after mounting the screening tube adapter. Use the compensation key on the electronics module. You can find the instructions for this in the operating instructions of the probe.

3 Supplement

3.1 Technical data

General data

Material 316L corresponds to 1.4404 or 1.4435

Material

- Screening tube adapter	316L
- Pressure screw (only with version: capacitive screening, vacuum-tight)	316L
- Centering cone (only with version: screening against condensation)	PTFE
- Process seal	Klingsil C-4400
- O-ring seal (15.6 x 1.78)	FKM (Viton)

Suitable probes VEGACAP 63, VEGACAL 63, VEGACAL 64 - requirement: \varnothing 16 mm (0.63 in)

Process fittings

- Inner thread	G1 A, pipe thread, cylindrical (ISO 228 T1)
- Outer thread	G1½ A, pipe thread, cylindrical (ISO 228 T1)

Weight

- Basic weight (approx.)	500 g (17.64 oz)
- Pipe weight: \varnothing 27 mm (1.063 in)	1000 g/m (10.75 oz/ft)

Screening tube length (L1) 0.07 ... 6 m (0.23 ... 19.69 ft)

Max. torque (process fitting - thread) 100 Nm (74 lbf ft)

Process conditions

Process temperature -40 ... +150 °C (-40 ... +302 °F), depending on process fitting

Process pressure

- Screening against condensation	0 ... 1 bar/-100 ... 100 kPa (-14.5 ... 14.5 psig), depending on the process fitting
- Screening, vacuum-tight	-1 ... 40 bar/-100 ... 4000 kPa (-14.5 ... 580 psig), depending on the process fitting

3.2 Dimensions

Screening tube adapter against condensation for VEGACAL/VEGACAP, rod \varnothing 16 mm (0.63 in)

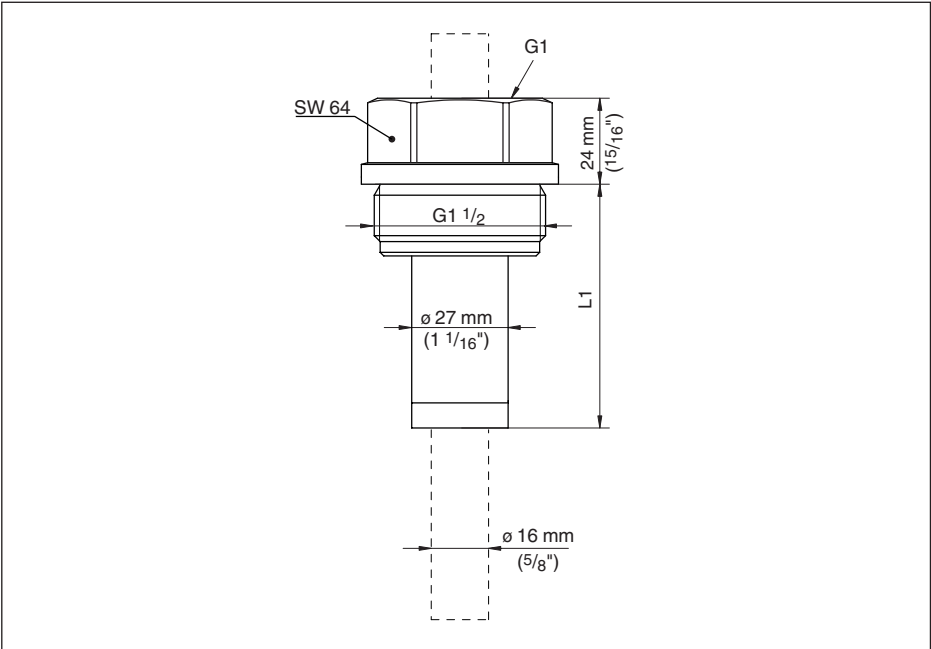


Fig. 3: Screening tube adapter against condensation for VEGACAL/VEGACAP, rod \varnothing 16 mm (0.63 in)

L1 Length, screening tube adapter - see chapter "Technical data"

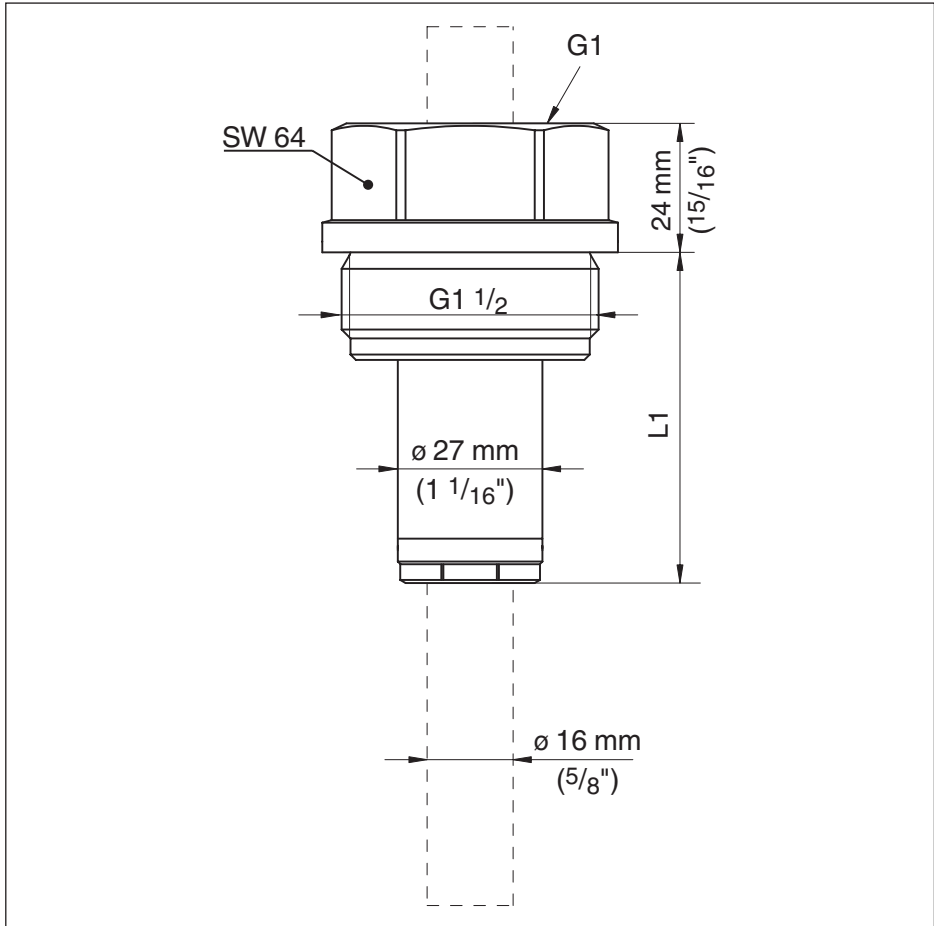
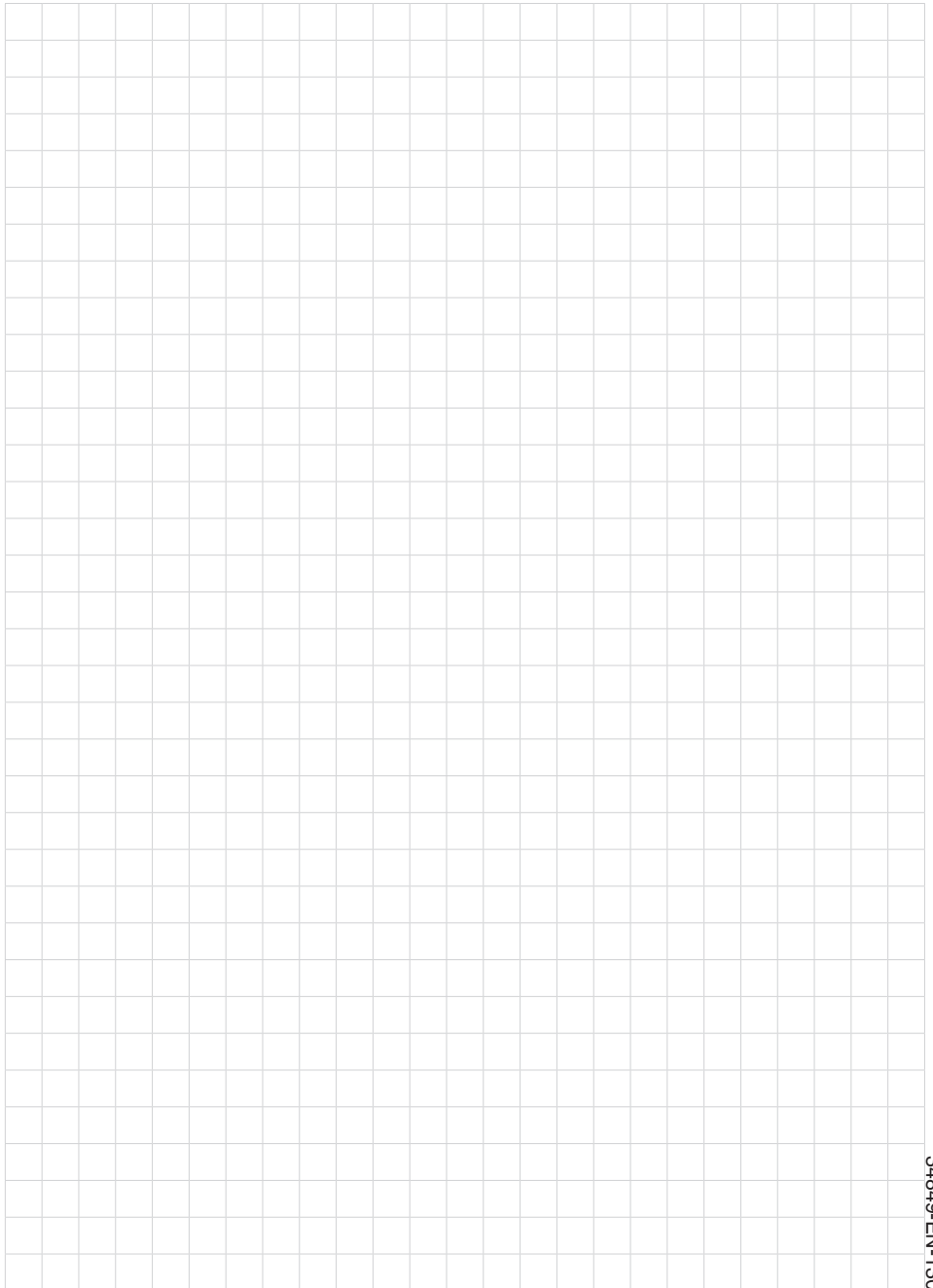
Screening tube adapter, vacuum-tight for VEGACAL/VEGACAP, rod \varnothing 16 mm (0.63 in)

Fig. 4: Screening tube adapter, vacuum-tight for VEGACAL/VEGACAP, rod \varnothing 16 mm (0.63 in)

L1 Length, screening tube adapter - see chapter "Technical data"



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All statements concerning scope of delivery, application, practical use and operating conditions of the sensors and processing systems correspond to the information available at the time of printing.

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