SPRING-LOADED COMPRESSION FITTINGS



TYPE **UGS**

Data sheet UGS | Edition 2023

Application

• Easy installation of temperature sensors in measuring point

Features

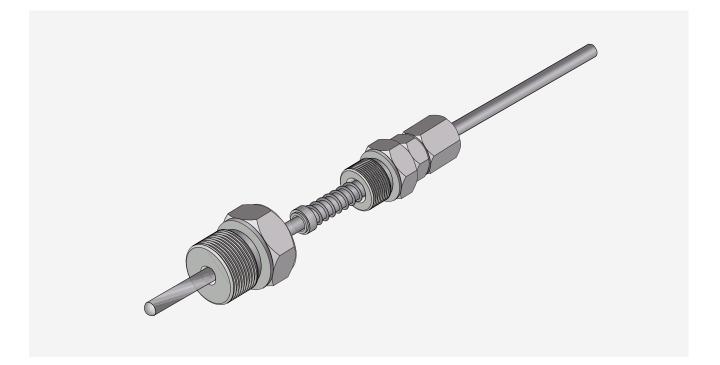
- High quality
- Metric, cylinder and NPT threads
- Tightness level IP40
- O-ring sealing available (IP68)

TERMOAPARATURA WROCŁAW supplies high quality compression fittings suitable for installation of temperature sensors in measuring point.

Compression fittings UGI consist of four parts: body with process thread (metric or NPT), olive, spring and compression screw. Body and compression screw are made of stainless steel.

The internal spring presses the sensor to the end of hole in socket where temperature need to be measured, resulting in good heat transfer.

Standard versions of UGS ensure IP40 tightness, optionally we can deliver a version with o-ring sealing (IP68), which means that, among others, the bearing oil will not get beyond the area of the measuring socket.



Material

• 1.4301 (AISI304)

Compression fitting allows simple adaptation to the required insertion length at the installation point.

Material: stainless steel

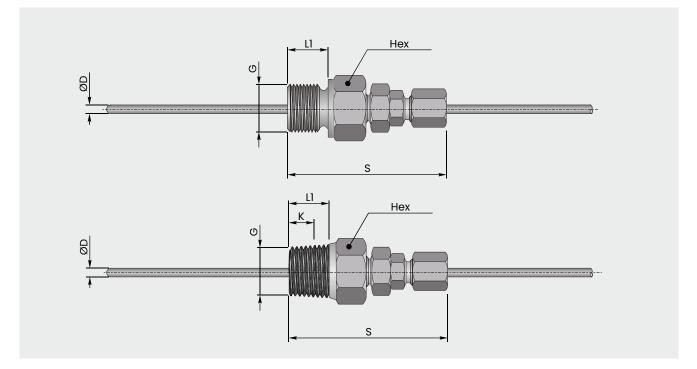
Sealing ring material: stainless steel

Stainless steel olives can be adjusted once, after unscrewing, sliding along the sheath is no longer possible. Max. temperature at process connection +300 °C

Type **UGS**



Construction



Standard dimensions

| Thread G | Hex | Length L1 [mm] | Length S [mm] |
|-------------|------|-------------------|------------------|
| M16x1.5 | SW24 | 15 | ~70 |
| M16x2 | SW24 | 15 | ~70 |
| M18x1.5 | SW24 | 15 | ~70 |
| M20x1.5 | SW27 | 15 | ~70 |
| M22x1.5 | SW30 | 15 | ~70 |
| M24x1.5 | SW30 | 15 | ~70 |

| Thread G | Hex | Length L1 [mm] | Length S [mm] |
|-------------|------|-------------------|------------------|
| G3/8" | SW24 | 15 | ~70 |
| G1/2" | SW27 | 15 | ~70 |
| G3/4" | SW36 | 18 | ~75 |

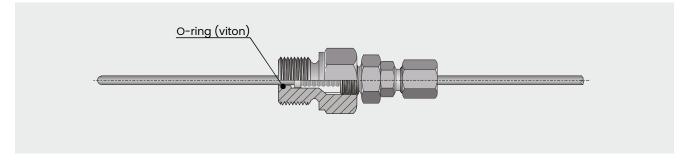
| Thead G | Hex | Length L1 [mm] | Length S [mm] |
|------------|------|-------------------|------------------|
| 3/8"NPT | SW24 | 15 | ~70 |
| 1/2"NPT | SW24 | 18 | ~75 |
| 3/4"NPT | SW30 | 20 | ~75 |

(i) Handtight engagement (K)

- thread 3/8"NPT about 7,3 mm - thread 1/2"NPT about 8,1 mm - thread 3/4"NPT about 8,6 mm

Other versions

On the customer's request, it is possible to produce a compression fitting with o-ring (Viton). Operating temperature range is limited to -20° C .. $+200^{\circ}$ C then.





Ordering code



| Diameter of sensor D | | |
|----------------------|----------|---|
| 1 | 3.0 | Ø3.0 mm |
| | 3.2 | Ø3.2 mm |
| | 4.5 | Ø4.5 mm |
| | 4.8 | Ø4.8 mm |
| | 6.0 | Ø6.0 mm |
| | 6.4 | Ø6.4 mm |
| | XXX | other, please specify |
| | Thread G | |
| 2 | XXX | please specify |
| Options | | |
| 3 | IP68 | optional version with o-ring seal, protection degree IP68 |
| | XXX | other, please specify |
| | | |

Examples

Compression fitting UGS-3-G1/2" (compression fitting for sensor Ø3.0 mm, thread G1/2")

Compression fitting UGS-4.5-1/2"NPT (compression fitting for sensor Ø4.5 mm, thread 1/2"NPT)

Compression fitting UGS-4.5-1/2"NPT-IP68 (compression fitting for sensor Ø4.5 mm, thread 1/2"NPT, optional version with o-ring seal, protection degree IP68)