

Welding-in thermowell

Solid drills

Form 4 acc. to DIN 43772

for thermometer with male thread



Description

These thermowells TWW197 are acc. to DIN 43772 form 4.

They have to be welded-in into the process and resist high stresses caused by strong vibrations, flow rates, high pressures and temperatures.

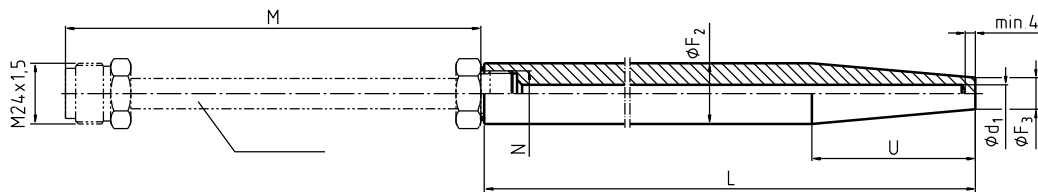
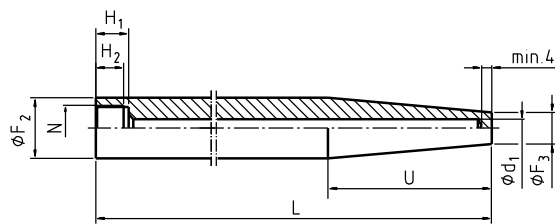
With special dimensions they are equivalent with thermowells D1-D4 acc. to DIN 43763.

Technical data

| | |
|----------------------------------|--|
| Type | TWW197 |
| Max. process temperature | 600°C |
| Max. process pressure (statical) | 150 bar |
| Thermowell material | |
| Standard | Stainless steel 1.4571 |
| Optional | Steel 1.0460 ; Special materials |
| Outer diameter | 18mm, 24mm, 26mm, 32mm |
| Connection to thermometer | Female: M14x1,5, M18x1,5, G1/2, G3/4 |
| Bore size | 3,5mm, 7mm, 9mm, 11mm |
| Insertion length U | 65mm, 73mm, 125mm, 133mm, 275mm |
| Total length L | 110mm, 140mm, 170mm, 200mm, 260mm, 410mm |

¹⁾ The rating depends on the process medium, -pressure, -temperature, flow rate and the design of the thermowell. With critical applications, a separate wake frequency calculation is recommended.

Dimensions



Legend

| | |
|-----------------|---------------------------|
| L | Total length |
| M | Extension tube length |
| N | Connection to thermometer |
| U | Insertion length |
| Ø | Total length |
| Ød ₁ | Bore size |
| ØF ₂ | Outer diameter |
| ØF ₃ | Outer diameter, tapered |

| L | U | G | weight [kg] |
|-----|-----|-----|-------------|
| 110 | 65 | 105 | 0,24 |
| 110 | 73 | 105 | 0,23 |
| 140 | 65 | 135 | 0,34 |
| 170 | 133 | 165 | 0,34 |
| 200 | 65 | 195 | 0,54 |
| 200 | 125 | 195 | 0,45 |
| 260 | 125 | 255 | 0,65 |
| 410 | 275 | 405 | 0,92 |

| Ød ₁ | ØF ₂ | N | ØF ₃ | H ₁ | H ₂ |
|-----------------|-----------------|---------|-----------------|----------------|----------------|
| 3,5 | 18 | M14x1,5 | 9 | 16 | 13 |
| 7 | 24 | M18x1,5 | 12,5 | | |
| | 9 | 26 | | G1/2 | 15 |
| 11 | 32 | G3/4 | 17 | 22 | 17 |

Suitable thermometer stem length I₁

| Design of connection | Thermometer length I ₁ | I ₁ in combination with extension tube |
|-------------------------|-----------------------------------|---|
| S Standard, male thread | I ₁ =L-10mm | --- |
| 2 Male nut | I ₁ =L-30mm | --- |
| 3 Union nut | --- | I ₁ =L-10mm+M |

Comparison old models acc. to DIN 43763 – dimensions acc. to DIN 43772

| DIN 43763 | L | U | d ₁ | F ₂ | N | Article-Key |
|-----------|-----|-----|----------------|----------------|---------|---------------|
| D1 | 140 | 65 | 7 | 24 | M18x1,5 | TWW197X326019 |
| D2 | 200 | 125 | 7 | 24 | M18x1,5 | TWW197X326014 |
| D4 | 200 | 65 | 7 | 24 | M18x1,5 | TWW197X326015 |
| D5 | 260 | 125 | 7 | 24 | M18x1,5 | TWW197X326018 |

Subject to technical modifications

TWW197

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