

tempflex

Flexible temperature channel



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Components and Systems

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Flexible temperature channel

for cooling or heating with oil or water. Flexibility enables cooling and heating to be located close to the outline with a self-defined groove.

Advantages in Applications

- Cooling and heating at the outline, e. g. close to a cavity
- Replaceable if soiled or blocked
- Corrosion resistant
- Subsequent tool cooling and heating can be easily realized



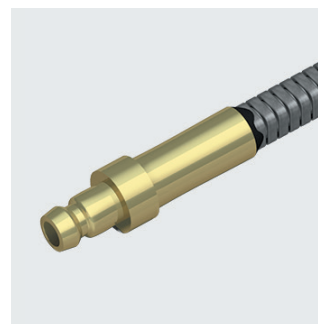
Technical Key Features

Sheath material	Stainless steel
Max. temperature	250 °C / 482 °F
Max. pressure	10 bar / 145 psi
Cross-section (outside)	8.0 x 8.0 mm/ 12.0 x 12.0 mm
Length (L)	200 ... 2600 mm / 7.9 ... 102.3 inch
Length tolerance	≤ 1000 mm: ± 3 mm / ≤ 39.37 inch: ± 0.12 inch > 1000 mm: ± 5 mm / > 39.37 inch: ± 0.2 inch

Options

Plug-in coupling

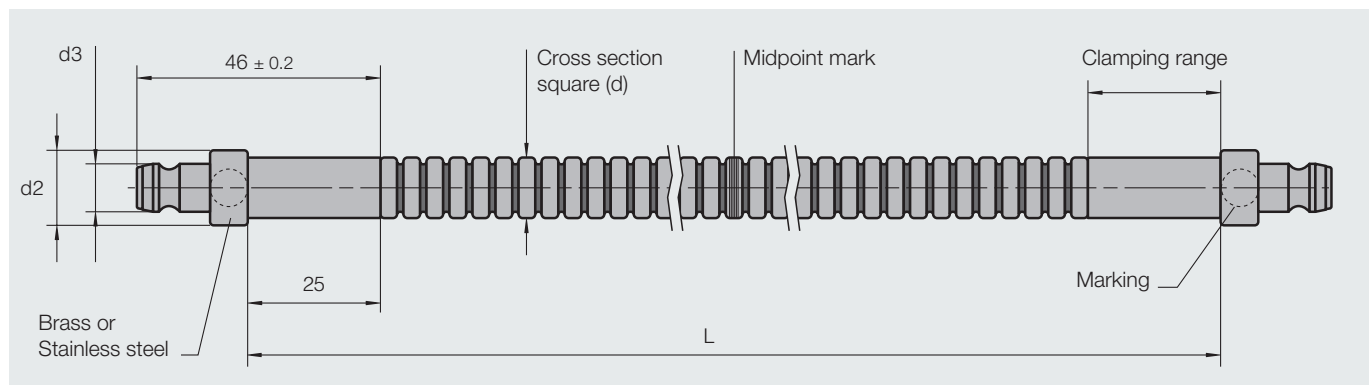
- metric (brass) or
- imperial (stainless steel)



Brass



Stainless steel

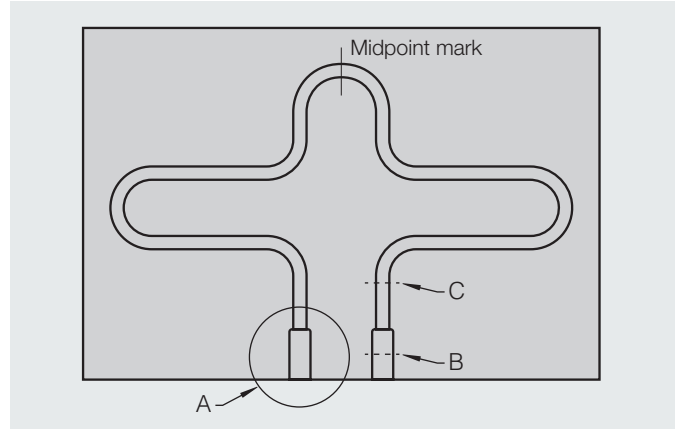


Type tempflex (d)	L min [mm]	L max [mm]	d2 max [mm]	d3 max [mm]	Min. Bending radius internal [mm]
□ 8.0	200	2600	14.0	9.0 or 9.4	10.0
□ 12.0	200	2600	22.0	13.5	14.0

Application Examples

Tool cooling, pre-heating or other tool heating with fluids, e. g.

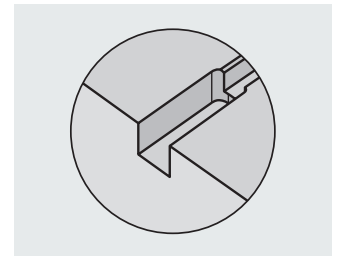
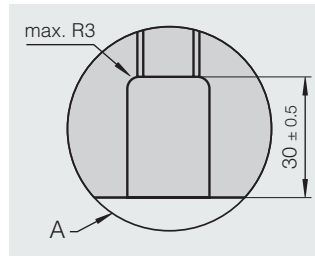
- Extrusion tools
- Thermoforming tools (deep-drawing)
- Die-casting tools



Top view of the tool

Installation instruction

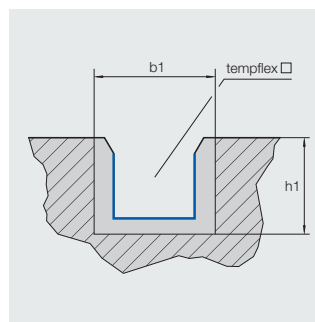
- To stabilize the tempflex the clamping range of the plug-in couplings must be countersunk in the tool by a minimum of 5 mm / 0.2 inch and can be countersunk by a maximum of 25 mm / 0.98 inch.
- Installation order:
 - ▶ Fix tempflex at the midpoint mark with a plastic hammer
 - ▶ Fix clamping parts of the plug in couplings in recesses
 - ▶ Install tempflex evenly in the groove
- Pressure test after installation required



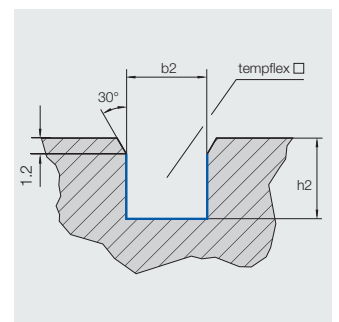
3D view
Milling groove for plug coupling

Recommended groove geometry

Type tempflex	Groove dimensions [mm] b1 x h1	Groove dimensions [mm] b2 x h2
□ 8.0 ±0.1	11.5 ^{+0.1} x 12.0 ^{+0.1}	7.8 ^{+0.1} x 8.1 ^{+0.1}
□ 12.0 ±0.1	19.1 ^{+0.1} x 19.5 ^{+0.1}	11.8 ^{+0.1} x 12.1 ^{+0.1}



Groove cross-section (B)



Groove cross-section (C)