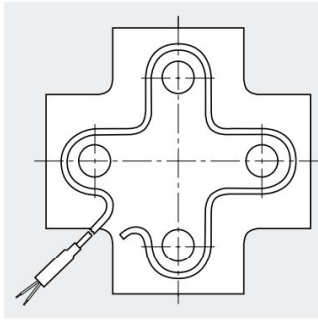
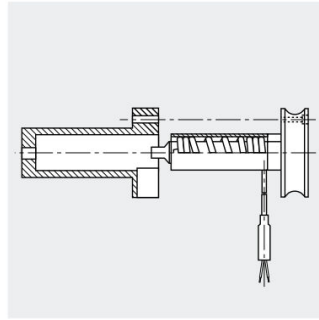


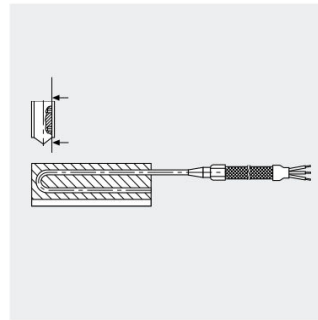
## Application Fields



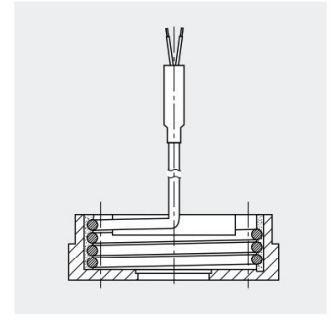
Hot runner industry  
 Heating of small distribution plates



Hot runner industry  
 Heating of various nozzles

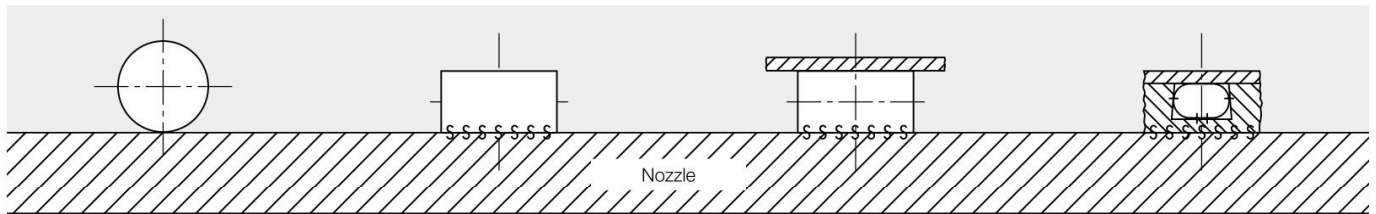


Packaging Industry  
 Heating of sealing bars



Packaging Industry  
 Heating of sealing jaws

## Sheath surface load



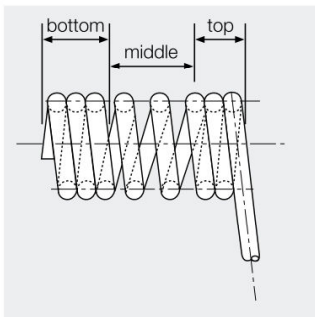
hotspring round  
 6 W/cm<sup>2</sup>  
 39 W/inch<sup>2</sup>

hotspring flat  
 7.5 W/cm<sup>2</sup>  
 48 W/inch<sup>2</sup>

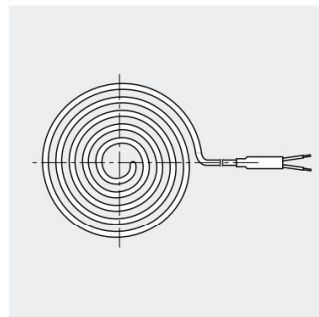
hotspring with reflection tube  
 10 W/cm<sup>2</sup>  
 65 W/inch<sup>2</sup>

hotslot  
 12,5 W/cm<sup>2</sup>  
 81 W/inch<sup>2</sup>

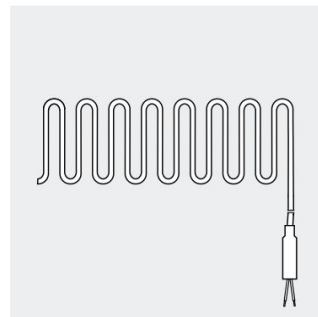
## Coiling options



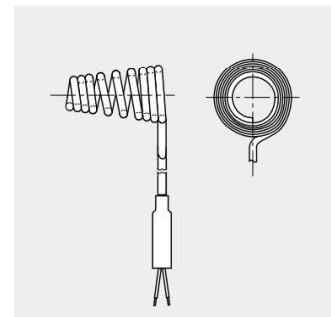
Cylindrical



Flat coiling



Serpentine coiling



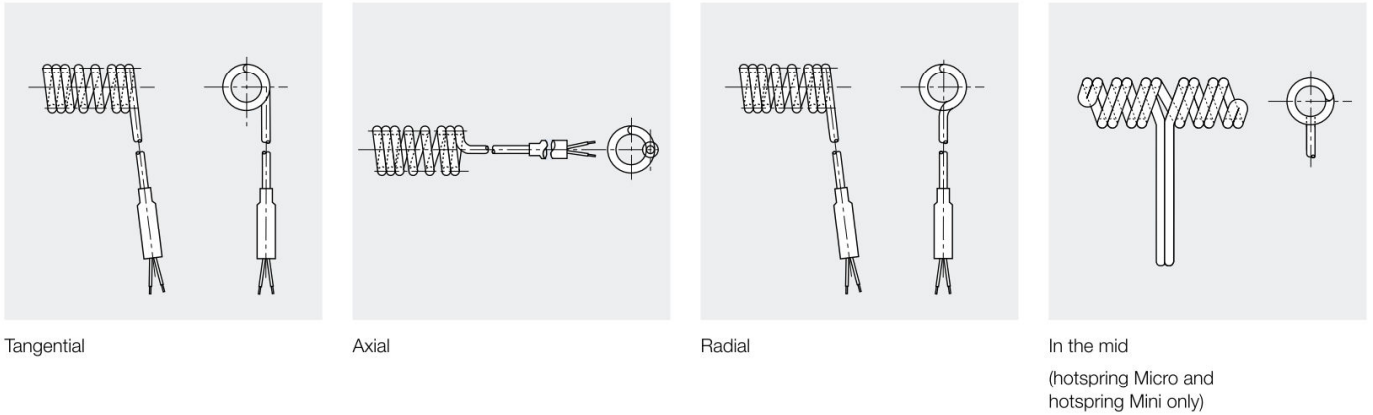
Conical coiling

### Options

- coiled tight
- coiled with defined pitch  
 (up to 50 mm per coil)
- coiled with wattage distribution



### Exit options



### Approximate calculation of the stretched heated length

$$\text{heated length straight} = (l \text{ } \varnothing \text{ coiled} + \text{heater height}) \times \pi \times \text{number of windings} \times 2^*$$

(\* „x 2“ applicable for hotspring Micro and hotspring Mini with two heads only)

### Performance Range

hotspring	Specifications				Options								
	Specifications	Dimensions (H x W / Ø) [mm]	Max. wattage [W]	Thermocouple in heater	Thermocouple coiled in reflection tube	Reflection tube	Reflection tube with thermal decoupled temperature measure ring	Available in straight condition	Number of connection heads	Smaller connection head	Tangential clamping band	Axial clamping band	Lock-System
Micro /F	flat	1.0 x 1.6	300	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mini /R	round	1.8	550	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mini /F	flat	1.3 x 2.3	550	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Midi /F	flat	1.8 x 3.2	650	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		1	<input checked="" type="checkbox"/> *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Classic /F	flat	2.2 x 4.2	1000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Classic /Q	square	3.0 x 3.0	1000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Classic /R	round	3.0	740	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medium /R	round	4.0	740	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maxi	flat	4.6 x 8.6	2100	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		0/1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

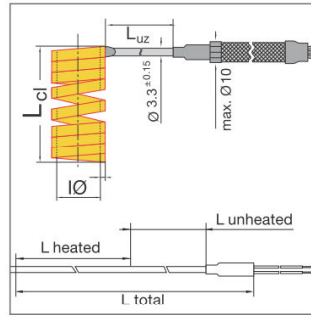
\* Ø max. 4.9 mm / 0.193 inch, max 2.3 A, lead protection sleeve option, without thermocouple

## hotspring® Classic/F 2.2 x 4.2

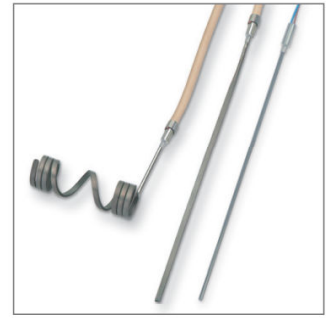
Coil heater with flat, square or round cross section

### Specifications

Sheath material	Stainless steel
Connection head dimensions	Ø 6.9 x 25 mm / 0.27 x 0.98 inch
Minimum Length unheated zone	25 mm / 0.98 inch
Length tolerance unheated zone	± 5%, least ± 15 mm / 0.59 inch
Length tolerance heated zone	± 1%
Minimum inner bending radius	4 mm / 0.16 inch



$L_{cl}$  = coiled length  
 $L_{uz}$  = length unheated zone



### Stock range

**2.2 x 4.2, Straight or coiled, connection 1,000 mm / 39.4 inch type NG (see connection options), brown / blue, Thermocouple ungrounded**

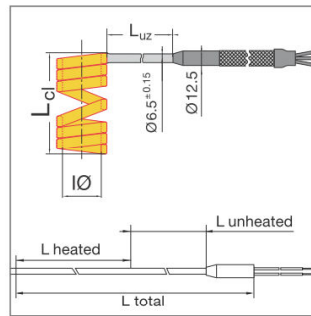
Stock ID	Total length incl. head [mm]	Wattage [W]	Length heated [mm]	Length unheated [mm]	thermocouple type J (Fe-CuNi)
7732519	340	195	250	65	
7832519	340	195	250	65	<input type="checkbox"/>
7732821	370	215	280	65	
7832821	370	215	280	65	<input type="checkbox"/>
7733324	425	240	335	65	
7833524	425	240	335	65	<input type="checkbox"/>
7733829	475	295	385	65	
7833829	475	295	385	65	<input type="checkbox"/>
7734635	550	350	460	65	
7834635	550	350	460	65	<input type="checkbox"/>
7735240	610	400	520	65	
7835240	610	400	520	65	<input type="checkbox"/>
7736046	690	460	600	65	
7836046	690	460	600	65	<input type="checkbox"/>
7737661	850	610	760	65	
7837601	850	610	760	65	<input type="checkbox"/>
7739069	990	690	900	65	
7839069	990	690	900	65	<input type="checkbox"/>
7731185	1200	850	1110	65	
7831185	1200	850	1110	65	<input type="checkbox"/>
7731395	1400	950	1310	65	
7831395	1400	950	1310	65	<input type="checkbox"/>

## hotspring® Maxi /F 4.6 x 8.6

Coil heater with flat cross section with or without connection head

### Specifications

Sheath material	Stainless steel
Connection head dimensions	Ø 12.5 x 45 mm / 0.49 x 1.77 inch
Minimum Length unheated zone	45 mm / 1.77 inch
Length tolerance unheated zone	± 5%, least ± 2 mm / 0.08 inch
Length tolerance heated zone	± 1%
Minimum inner bending radius	10 mm / 0.40 inch
Connection voltage	max. 440 V



$L_{cl}$  = coiled length  
 $L_{uz}$  = length unheated zone



### Stock range

**Straight or coiled, connection type N (see connection options), Thermocouple ungrounded**

Stock ID	Total length [mm] incl. head	Wattage [W]	Voltage [V]	L heated [mm]	L unheated [mm]	with connection-head	connection-length [mm]	Thermocouple
7402521	315	300	230	250	65		1.000	Type J, Fe-CuNi
7303527	415	450	230	350	65		1.000	
7403527	415	450	230	350	65		1.000	Type J, Fe-CuNi
7304531	515	550	230	450	65		1.000	
7404531	515	550	230	450	65		1.000	Type J, Fe-CuNi
7306543	715	800	230	650	65		1.000	
7406543	715	800	230	650	65		1.000	Type J, Fe-CuNi
7308550	915	1000	230	850	65		1.000	
7408550	915	1000	230	850	65		1.000	Type J, Fe-CuNi
7508561	2460	2800	400	2360	65		1.000	Type K, NiCr-Ni
7508573	2960	2800	400	2860	65		1.000	Type K, NiCr-Ni