

hotflex

Flexible tubular heater



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Components

We provide our customers with an extensive portfolio of technically mature products from the field of heating elements, thermal sensors and control technology. Since 1973, we have manufactured heating elements in Germany, and since 2002, we have been continuously developing our production location in Malta.

The manufactured products are usually individually-tailored to the customer – in extremely small unit numbers or in large quantities, at an attractive price. Our core process is organized highly efficiently using our own software, and we provide customer storage in all significant global markets. We work with our own specialists in order to select the best product for our customers.

Facts

- Easy installation with a uniform finish
- Can be formed by hand
- Stored in a straight condition to save storage space
- No special installation tools required
- Patented technology ensures industry leading heat transfer
- Up to 75% sheath contact with round and square hotflex heaters when recommended groove geometry is followed
- Rapid heat-up times
- Minimal temperature difference between heater sheath and heated tool
- 3-dimensional groove geometry possible
- Industry's smallest bending radius
- Hotflex's flexibility enables heat to be located where it is needed; an improvement over rigid cartridge heaters
- Reduced energy costs: tool mass can be reduced



Technical Key Features

Sheath material	stainless steel
Sheath temperature of heating element	max. 700 °C / 1290 °F
Standard connection voltage	230 V
High voltage test*	1000 V AC
Insulation resistance*	≥ 5 MΩ at 500 V DC
Leakage current*	< 0.5 mA at 253 V AC
Min. Bending radius internal	10 mm
Wattage tolerance	± 10 %
Length tolerance	± 1.5 %

*tested at environmental temperature

Options

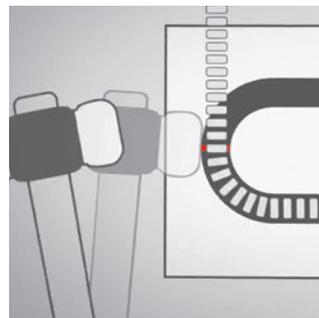
- Bendable unheated zones
- Connection voltage from 12 V to 250 V, from ≥ Ø 8.0 mm up to 277 V
- Individual length
- Individual wattage
- Individual connection options



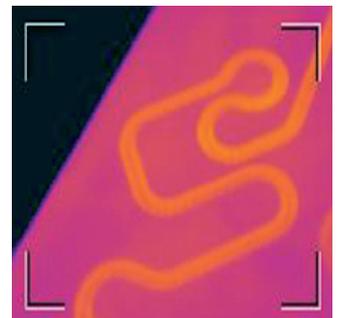
hotflex, round groove



hotflex, square groove



Installation without special tools



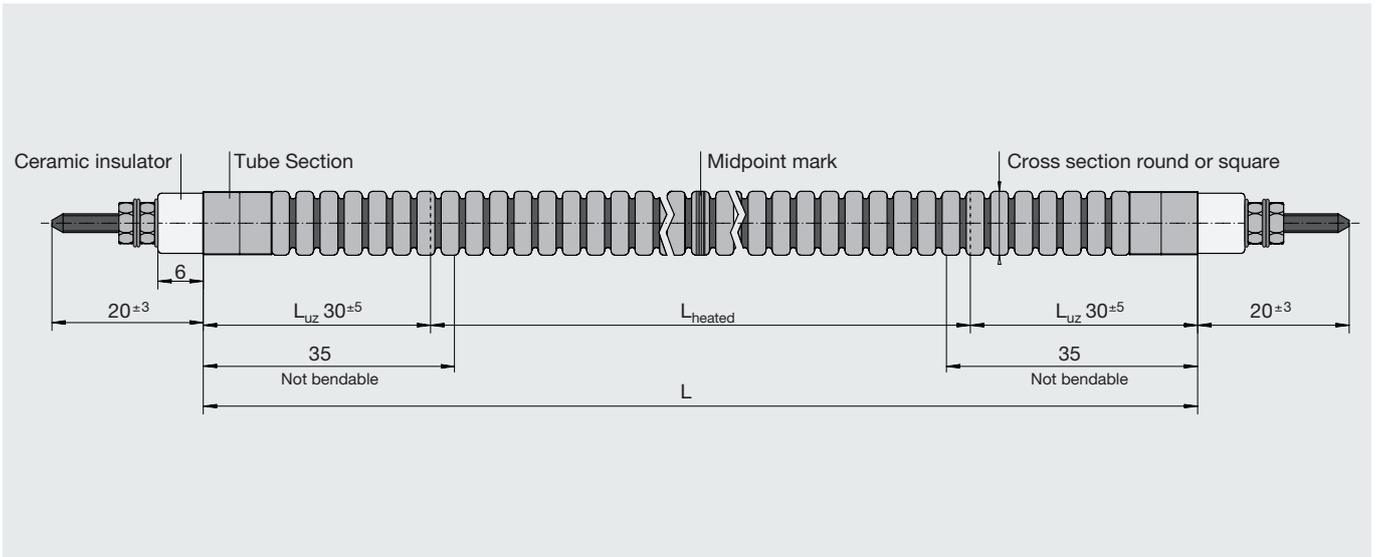
Ideal heat transfer



Installed, round groove geometry



Installation example

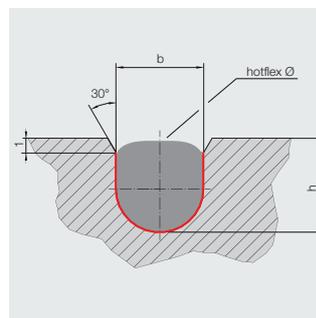


Type hotflex	L min [mm]	L max [mm]	Tube section max [mm]	Min. Bending radius internal	Max. Sheath surface load [W/cm ²]
□ 6.0	300	1800	24	6.5	10
∅ 6.5	300	1800	24	6.5	10
∅ 8.0	300	3000	10	10	15
□ 8.0	300	3000	10	10	15
∅ 8.2	300	3000	10	10	15
∅ 8.5	300	3000	10	10	15
∅ 10.0	300	3000	10	10	12.5

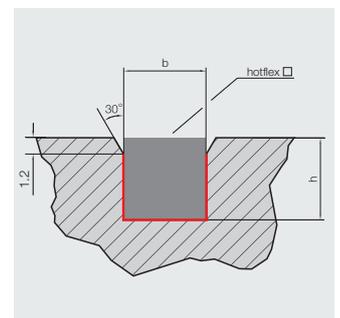
Depending on the number of bends the hotflex length can increase. For a more precise calculation of the extension you might use our template for assistance: www.hotset.com/hotflex_extensionfactors

Recommended groove geometry

Type hotflex	Groove dimensions [mm] b x h
□ 6.0 ±0.1	6.1 ^{+0.1} x 7.1 ^{+0.1}
∅ 6.5 ±0.1	6.0 ^{+0.1} x 6.5 ^{+0.1}
∅ 8.0 ±0.1	7.7 ^{±0.05} x 8.0 ^{±0.1}
□ 8.0 ±0.1	8.1 ^{+0.1} x 9.1 ^{+0.1}
∅ 8.2 ±0.1	7.9 ^{±0.05} x 8.2 ^{±0.1}
∅ 8.5 ±0.1	8.2 ^{±0.05} x 8.5 ^{±0.1}
∅ 10.0 ±0.1	9.7 ^{±0.05} x 10.0 ^{±0.1}



Round groove geometry

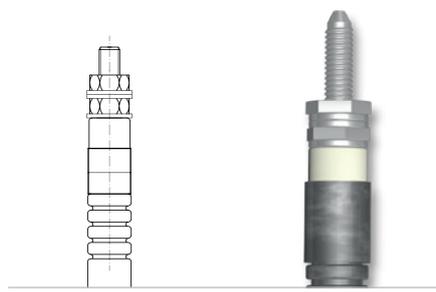


Square groove geometry

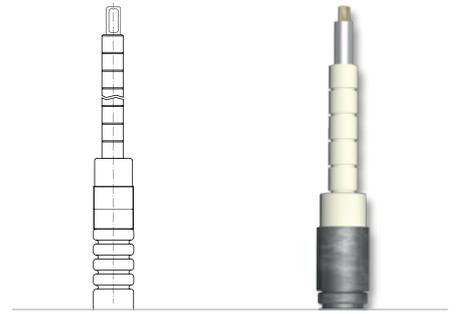
Connector types



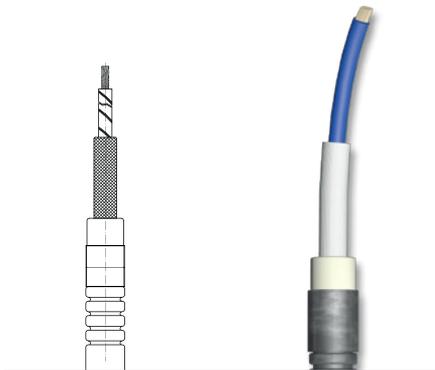
Ceramic terminal connector "plug 'n' heat"
 Temp. resist. 230 °C / 445 °F
 Short term max. 280 °C / 535 °F
 14 x 21 x 25 mm / 5.51 x 8.27 x 9.84"
 available with stock items



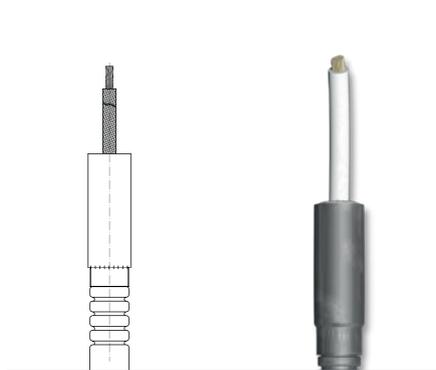
Standard: threaded pins M2.5
 Option: M4 from Ø 8.0 mm
 with set of nuts and washers,
 Temp. resist. 350 °C / 660 °F



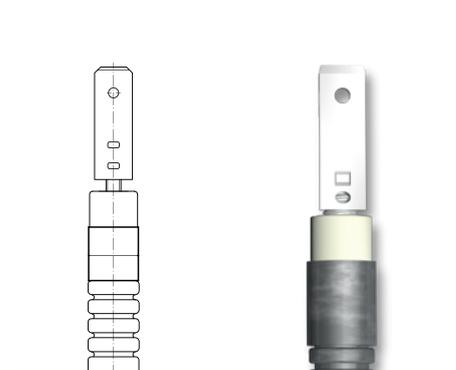
Plain Ni-leads with ceramic beads insulation,
 up to 600 °C / 1110 °F



Insulated Ni-leads
 Glass silk: up to 230 °C / 445 °F
 PTFE: up to 230 °C / 445 °F
 Silicon: up to 180 °C / 350 °F
 Option: eyelet connector M4
 available with stock items



High temperature mineral fibre insulated Ni-leads,
 with ceramic sealed tube section



Flat plug, W = 6.3 mm / 0.248 inch,
 Temp. resist. 350 °C / 660 °F
 available with stock items

Stock range

Ø 6.5 mm (230 V) with threaded pins M2.5

Stock ID	Length [mm]	Power [W]
6500300	300	350
6500350	350	400
6500400	400	500
6500450	450	600
6500500	500	650
6500550	550	700
6500600	600	800
6500650	650	850
6500700	700	900
6500750	750	1000
6500800	800	1100
6500850	850	1200
6500900	900	1300
6500950	950	1350
6501000	1000	1400
6501050	1050	1450
6501100	1100	1500
6501150	1150	1550
6501200	1200	1600
6501250	1250	1650
6501300	1300	1700
6501350	1350	1800
6501400	1400	1900
6501450	1450	2000
6501500	1500	2100

Ø 8.0 mm (240 V*) with threaded pins M4

Stock ID	Length [mm]	Power [W]
6300400	400	795
6300425	425	850
6300450	450	910
6300475	475	970
6300500	500	1025
6300525	525	1090
6300550	550	1145
6300575	575	1200
6300600	600	1260
6300625	625	1320
6300650	650	1380
6300675	675	1440
6300700	700	1495
6300725	725	1550
6300750	750	1615
6300775	775	1670
6300800	800	1730
6300825	825	1790
6300850	850	1845
6300875	875	1900
6300900	900	1960
6300925	925	2020
6300950	950	2080
6300975	975	2140
6301000	1000	2195
6301025	1025	2260
6301050	1050	2316
6301075	1075	2370
6301100	1100	2430
6301125	1125	2480
6301150	1150	2545
6301175	1175	2600
6301200	1200	2665
6301225	1225	2730
6301250	1250	2780
6301275	1275	2840
6301300	1300	2895
6301325	1325	2960
6301350	1350	3015
6301375	1375	3070
6301400	1400	3130
6301425	1425	3180
6301450	1450	3245
6301475	1475	3300
6301500	1500	3365
6301525	1525	3420
6301550	1550	3480
6301575	1575	3530
6301600	1600	3600

* with connection voltage 230 V wattage will decrease by 8%.

Ø 8.5 mm (230 V) with threaded pins M2.5

Stock ID	Length [mm]	Power [W]
6100300	300	650
6100350	350	750
6100375	375	825
6100400	400	900
6100425	425	975
6100450	450	1050
6100475	475	1100
6100500	500	1150
6100525	525	1225
6100550	550	1300
6100575	575	1375
6100600	600	1450
6100625	625	1525
6100650	650	1600
6100675	675	1675
6100700	700	1750
6100725	725	1825
6100750	750	1900
6100775	775	1975
6100800	800	2050
6100825	825	2125
6100850	850	2200
6100875	875	2275
6100900	900	2350
6100925	925	2425
6100950	950	2500
6100975	975	2575
6101000	1000	2650
6101025	1025	2725
6101050	1050	2800
6101075	1075	2865
6101100	1100	2930
6101125	1125	2995
6101150	1150	3060
6101175	1175	3095
6101200	1200	3190
6101250	1250	3320
6101300	1300	3450
6101350	1350	3580
6101400	1400	3710
6101450	1450	3840
6101500	1500	3970

Stock ID	Length [mm]	Power [W]
6110500	500	700
6110550	550	780
6110600	600	860
6110650	650	950
6110700	700	1000
6110750	750	1100
6110800	800	1190
6110850	850	1250
6110900	900	1350
6110950	950	1430
6111000	1000	1500
6111050	1050	1590
6111100	1100	1650
6111150	1150	1750
6111200	1200	1830
6111250	1250	1900
6111300	1300	1990
6111350	1350	2070
6111400	1400	2150
6111450	1450	2230
6111500	1500	2300

Ceramic terminal connector „plug 'n' heat“

Stock ID
229005



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