

GCheat®

The highest degree.



柔性加热管

GC-flex® flexible tubular heaters

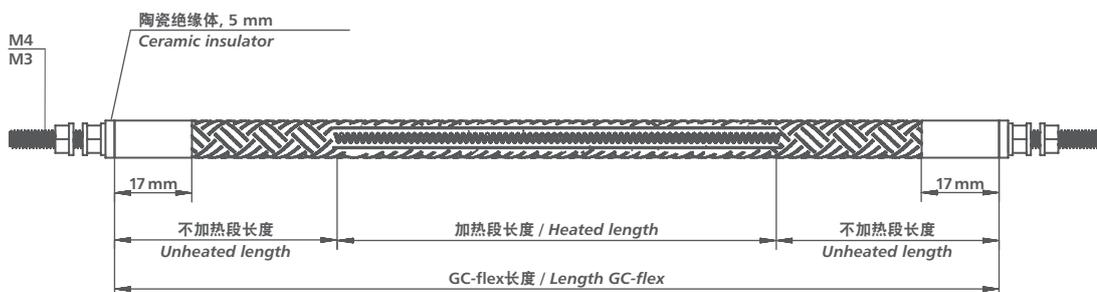


GC-flex® 柔性管式加热器

GC-flex® flexible tubular heaters

GC-flex D形或GC-flex方形柔性管式加热器按照客户要求，提供不同尺寸，并能使用GC-flex工具组将它们弯曲安装到几乎任何2D或3D形状的槽内。纯镍编织制成的外壳随任何曲度自我调整并将自己均匀压在沟槽表面。即使在极端机械应力条件下，它也能保证最佳的热传递。

The flexible tubular heater GC-flex D-shape or GC-flex square are delivered ex-stock in various sizes and can be bent to fit virtually any 2D or 3D groove using the GC-flex tool set, for example. The outer sheath, made of woven pure nickel, adapts to any curvature and presses itself evenly against the surface of the groove. This guarantees optimal heat transfer even when under extreme mechanical stress.





GC-flex®

技术可能性和选项

Technical possibilities and options

- D形、方形或圆形截面的GC-flex
GC-flex with D-shape, with square or with round cross section
- D形: Ø 6.5 mm、Ø 8.0 mm或Ø 8.5 mm
方形: 4 x 4 mm、6 x 6 mm或8 x 8 mm
圆形: Ø 6.5 mm、Ø 8.0 mm, Ø 8.5 mm或Ø 10 mm
D-shape: Ø 6.5 mm, Ø 8.0 mm or Ø 8.5 mm
Square: 4 x 4 mm, 6 x 6 mm or 8 x 8 mm
Round: Ø 6.5 mm, Ø 8.0 mm, Ø 8.5 mm or Ø 10 mm
- 有各种长度和性能可从库存交货
Various lengths and performance available ex-stock
- 由于是纯镍外壳, 有最佳的热传递
Optimum heat transfer due to pure nickel outer sheath
- 最大400 V
Max. 400 V
- 各种连接形式、长度和输出可按客户要求提供
Various connections, lengths and outputs available on request

- 轻松弯入2D或3D外形的现有沟槽

Easy bending into an existing groove with 2D or 3D contour

- 中间最小弯曲半径12 mm、14 mm或16 mm (中性纤维)
Minimum bend radius of 12 mm, 14 mm or 16 mm in the middle (neutral fibre)

- 电压230 V (最大400 V)
Voltage 230 V (max. 400 V)

应用

Applications

- 热流道系统
Hot runner systems
- 塑料焊棒
Welding bars



GC-flex®

GC-flex® 柔性管式加热器 GC-flex® flexible tubular heaters

GC-flex柔性管式加热器的许多尺寸都有库存（见第29页）。

Numerous dimensions of GC-flex flexible tubular heaters are available from stock (see page 29) at short notice.

标准型

Standard versions

GC-flex 标准型，有库存

GC-flex standard, available from stock

- 截面、长度、瓦数、连接形式依照表格（见第29页）
Cross-section, length, wattage, connection type acc. to table (see page 29)
- 电压：230 V
Voltage: 230 V
- 连接形式
Connection types
 - M3（螺纹销）
M3 (thread pins)
 - M4（螺纹销）
M4 (thread pins)

- 为了在装运和装配期间保护GC-flex，从工厂交货会将它配一个防护盖发货。

To protect the GC-flex during shipment and assembly, it will be delivered ex-works with a protective cap.

可用的连接形式

Available connection types

- 螺纹销 M3 / M4
Threaded pin M3 / M4
- 在外压接导线
Lead crimped on the outside
- 整根导线
Continuous lead
- 带有GC-flex-iso-陶瓷连接器
With GC-flex-iso – ceramic connector

GC-FLEX库存计划
GC-FLEX STOCK PROGRAM

长度 (mm) Length (mm)	瓦数 (W)*		Wattage (W)*		8.0 x 8.0	
	6.0 x 6.0	D形 Ø 6.5 D-shape	D形 Ø 8.5 D-shape	D形 Ø 8.5 D-shape	8.0 x 8.0	8.0 x 8.0
300	450	450	-	650	-	750
350	550	450	-	750	-	900
400	650	500	-	900	-	1050
450	750	600	-	1050	-	1200
500	800	700	700	1100	1100	1400
550	900	750	750	1250	1200	1550
600	1000	850	850	1400	1300	1700
650	1100	900	950	1550	1400	1850
700	1200	1000	1000	1700	1500	2000
750	1300	1050	1100	1850	1700	2150
800	1350	1200	1200	2000	1800	2300
850	1450	1250	1250	2150	1900	2450
900	1550	1300	1350	2300	2000	2600
950	1650	1350	1450	2450	2100	2750
1000	1750	1400	1500	2600	2200	2900
1050	1850	1450	1600	2650	2300	3050
1100	1950	1500	1650	2700	2400	3200
1150	2050	1550	1750	2750	2500	3300
1200	2100	1600	1800	2800	2700	3300
1250	2200	1650	1900	2850	2800	3300
1300	2300	1700	2000	2900	2900	3300
1350	2400	1750	2050	2950	3000	3300
1400	2500	1800	2150	3000	3100	3300
1450	2600	1850	2250	3050	3200	-
1500	2700	1900	2300	3100	3300	-
连接形式 Connection type	M3	M3	M4	M4	M4	M4

*在230V At 230 V.

可按客户要求提供其他设计 Other designs available on request.

GC-flex柔性管式加热器 GC-flex flexible tubular heater	GC-tube Ø 5.0		GC-flex 8.0 x 8.0 / Ø 8.5 / 8.0 / 8.2		Ø 10
	6.0 x 6.0 / Ø 6.5				
长度公差 Length tolerance	< 801 mm		+/- 4 mm		
长度公差 Length tolerance	801 – 1499 mm		+/- 8 mm		
长度公差 Length tolerance	1500 – 1999 mm		+/- 12 mm		
长度公差 Length tolerance	≥ 2000 mm		+/- 16 mm		
不加热段 Unheated zones	30/30 mm			40/40 mm	
弯曲半径，中间的 Bending radius, from the middle	min. R10 最少R10	min. R12 最少R12	min. R16 最少R16		
功率偏差 Power tolerance	+/- 10%				
连接形式 Connection type	M3			M4	
壳体温度 Sheath temperature	最高温度600°C max. 600°C				
高电压稳定性（冷态） High-voltage stability (cold)	1000 V-AC			1250 V-AC	

GC-flex® iso陶瓷连接器 GC-flex® iso ceramic connector

使用可选的陶瓷连接器“GC-flex-iso”帮助您将GC-flex安全快速地装配到您的应用中，享受其带来的简单。
Enjoy the simplicity of a safe and quick assembly of the GC-flex into your application with the help of our optionally deliverable ceramic connector GC-flex-iso.

技术细节

Technical details

- 材料：陶瓷
Material: ceramic
- M3:20 x 9 x 17.5 mm
- M4:30 x 15 x 23 mm
- 周围温度：最大350°C
Surrounding temperature: maximum 350°C
- 绝缘体载流能力：最大15A
Insulator capacity: maximum 15 A
- 适合的GC-flex连接：
M3和M4，可选
*Suitable for GC-flex connection:
M3 and M4 optional*



GC-flex® iso



GC-flex[®] D-shape

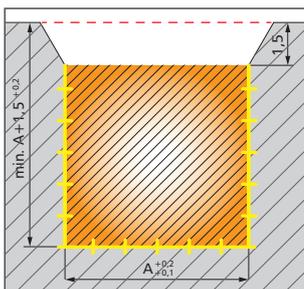
D形截面形状优化的GC-flex[®]柔性管式加热器

GC-flex[®] D-shape flexible tubular heaters with optimised shape

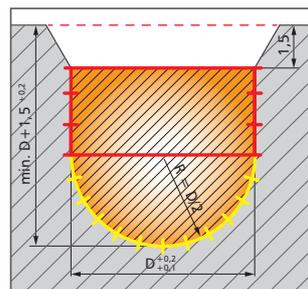
D形GC-flex是圆形沟槽最佳的GC-flex选择。采用了圆形和方形的组合，我们设法用工具获得尽可能大的接触表面。对于您的应用，这意味着：

The GC-flex D-shape is the best GC-flex for round grooves. With a combination of round and square shapes, we manage to realise the biggest possible contact surface with the tool. For your application this means:

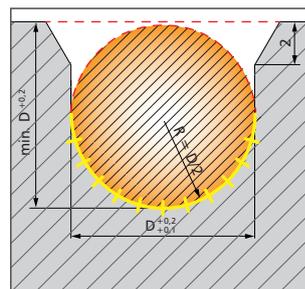
- 最佳的热传递
Optimised heat transfer
- 节省加热时间和能源
Savings in heating time and energy
- 与GC-flex工具组安装时，耐用度提高
Improved durability when mounted with the GC-flex tool set
- 72%的接触面（比类似圆形加热器超出约44%）
A contact surface of 72% (approx. 44% more than a comparable round heater)



方形GC-flex的接触面：75%
Contact surface GC-flex square: 75%



D形GC-flex的接触面：72%
Contact surface GC-flex D-shape: 72%



传统圆形加热器的接触面：50%
Contact surface conventional round heater: 50%

与传统圆形加热器相比，与工具的接触表面增加约44%。

Compared to a conventional round heater, the contact surface with the tool is increased by about 44%.



GC-flex[®] hermetic

GC-flex[®] 柔性管式加热器用隔绝密封连接头

GC-flex[®] hermetic hermetically sealed flexible tubular heaters

热流道系统的GC-flex也可以添加隔绝密封的加热元件。它永久性防止气体或液体（如湿气或油）的渗入，因而能消除逐渐启动加热的需要，即使是在超长时间储存后也具有此优点。这是由一种特殊密封剂实现的，它的耐温可达350°C。高耐温使电气连接能直接放在加热的工具上，节省空间。当然，GC-flex hermetic具有经证实的GC-flex的所有优势：

- 柔性结构，装配容易
- 最佳的热传递
- 耐用
- 各种尺寸

The proven GC-flex for hot runner systems is also available with a hermetically sealed heating element. This permanently prevents the penetration of gases or liquids (e.g. humidity or oil), thereby eliminating the need to gradually start up the heater – even after extended storage. This is achieved by a special sealant, which is resistant to temperatures up to 350°C. The high temperature resistance enables space-saving placement of the electrical connection directly on the heated tool. And naturally, the GC-flex hermetic has all the advantages of the proven GC-flex, e.g.:

- *easy assembly due to flexible construction*
- *optimised heat transfer*
- *long durability*
- *various dimensions*



GC-flex[®] hermetic vario

单侧连接的GC-flex[®] hermetic不同隔绝密封式柔性管式加热器

GC-flex[®] hermetic vario hermetically sealed flexible tubular heaters with one-sided connection

优势

The advantages

- 安装迅速、方便
Quick and easy installation
- 更紧凑的工具尺寸
More compact tool dimensions
- 隔绝密封防止气体和液体（如湿气或油）渗入加热元件
Hermetically sealed against the penetration of gases and liquids into the heating element (e.g. humidity or oil)



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