



**Multi-drop  
hot runner nozzles**





## 4 Multi-drop hot runner nozzles

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## Multi-drop hot runner nozzles

GÜNTHER offer both radial and linear multi-drop hot runner nozzles. Optimum freedom for designing hot runner systems with minimal cavity spacing is made possible by using type SGF/SGT multi-drop hot runner nozzles.



### TYPE SGF/SGT MULTI-DROP HOT RUNNER NOZZLE IN A COMMON HOUSING

Up to eight nozzles with a nozzle length of 20 mm or more can be implemented.

### FOR VERTICAL GATING: TYPE SGF/SGT MULTI-DROP HOT RUNNER NOZZLES

With their type SGF/SGT multi-drop hot runner nozzles, GÜNTHER Hot Runner Technology has developed a series which ensures optimum freedom for designing your hot runner systems. This nozzle series is ideal for the multi-drop injection of small parts with minimal cavity spacing. Thanks to their flexibility and ability to adapt to complex requirements, type SGF/SGT series nozzles are able to fulfil the highest requirements on the gate position, vestige quality and shot weight

Another advantage for your applications is that the temperature of the nozzles can be controlled separately for each tip. The nozzles allow for a gentle flow of molten plastic and enable the use of compact moulds with a high number of drops on micro-injection moulding machines.

#### THE ADVANTAGES AT A GLANCE

##### Type SGF/SGT

- + Simple mould design
- + Small cavity spacing
- + Tips can be controlled individually
- + Also for micro-injection moulding machines

A perfect solution for side gating is the OktaFlow<sup>®</sup> hot runner nozzle, which enables up to eight tips to be used for each nozzle.



**FOR SIDE GATING:  
TYPE OKTAFLOW<sup>®</sup> MULTI-DROP HOT RUNNER NOZZLE**

Guaranteed free of problematic production-related “cold slugs”, the especially cost-effective and spacesaving multi-drop nozzles of the radial and linear OktaFlow<sup>®</sup> series ensure direct side gating.

Both versions have the same features – they can be used in combination with a heated nozzle adapter or a manifold for injection moulding tools with a high number of drops. For the processing of filled materials, nozzle tips with wear protection can be used instead to ensure long service lives in continuous operation. The tips can be changed individually.

**THE ADVANTAGES AT A GLANCE**

**Type OktaFlow<sup>®</sup>**

- + Side gating under 90°
- + Small cavity spacing
- + High number of cavities
- + No complex, split insert necessary
- + Longitudinal expansion via feed nozzle, installation of the sub-manifold independent of the heat expansion
- + Optimal temperature profile
- + Exchangeable nozzle tips
- + Installation-friendly plug-in type power and thermocouple plug connections
- + Reduced controller technology requirements



For side gating under 90° without cold slugs, where up to four tips per nozzle are possible.



### FOR SIDE GATING: TYPE LHF/LHT MULTI-DROP HOT RUNNER NOZZLES

They can be used in conjunction with a heated adapter or a manifold for injection moulding tools with a high number of drops. This series of nozzles is also suitable for processing filled plastics.













#### THE ADVANTAGES AT A GLANCE

##### Type LHF/LHT

- + Side gating under 90°
- + Small cavity distances
- + Optimal temperature profile
- + Installation-friendly plug-in type power and thermocouple plug connections
- + Reduced control technology requirements



## 4.1 Multi-drop hot runner nozzles with heated adapter as a single nozzle

|   |   | Page       |
|---|---|------------|
|    | <b>OktaFlow® linear OLT45 + AHJ8, Quantity of tips 4/8</b><br>Multi-drop hot runner nozzle linear version for side gating, with heated adapter                                      | <b>20</b>  |
|    | <b>OktaFlow® linear OLT45 + AHJ8, Quantity of tips 1/2</b><br>Multi-drop hot runner nozzle linear version for side gating, with heated adapter                                      | <b>30</b>  |
|    | <b>OktaFlow® linear OLT58 + AHJ8, Quantity of tips 1/2</b><br>Multi-drop hot runner nozzle linear version for side gating, with heated adapter                                      | <b>40</b>  |
|    | <b>OktaFlow® linear OLT65 + AHJ8, Quantity of tips 1/2</b><br>Multi-drop hot runner nozzle linear version for side gating, with heated adapter                                      | <b>50</b>  |
|   | <b>OktaFlow® radial ORT45 + AHJ8, Quantity of tips 1/2/4/8</b><br>Multi-drop hot runner nozzle radial version for side gating, with heated adapter                                  | <b>60</b>  |
|  | <b>OktaFlow® radial ORT58 + AHJ8, Quantity of tips 1/2/4/8</b><br>Multi-drop hot runner nozzle radial version for side gating, with heated adapter                                  | <b>70</b>  |
|  | <b>OktaFlow® radial ORT65 + AHJ8, Quantity of tips 1/2/4/8</b><br>Multi-drop hot runner nozzle radial version for side gating, with heated adapter                                  | <b>80</b>  |
|  | <b>18LHF, Quantity of tips 1/2/4</b><br>Multi-drop hot runner nozzle for side gating under 90 °, without cold slugs, with thick-film heating element (BlueFlow®) and heated adapter | <b>90</b>  |
|  | <b>22LHT, Quantity of tips 1/2/4</b><br>Multi-drop hot runner nozzle for side gating under 90 °, without cold slugs, with conventional heating element and heated adapter           | <b>100</b> |
|  | <b>26LHT, Quantity of tips 1/2/4</b><br>Multi-drop hot runner nozzle for side gating under 90 °, without cold slugs, with conventional heating element and heated adapter           | <b>110</b> |
|  | <b>3SGT 2-drop, 3-drop, 4-drop</b><br>Multi-drop hot runner nozzle for gating with minimal cavity distances, with heated adapter  | <b>120</b> |
|  | <b>3SGT 1-drop</b><br>Multi-drop hot runner nozzle with heated adapter  | <b>130</b> |



# OktaFlow<sup>®</sup> linear OLT45 + AHJ8

Multi-drop hot runner nozzle

linear version for side gating, with heated adapter

## TECHNICAL DATA

### 80HT

Melt channel Ød 7.5 mm

Operating voltage 230 V<sub>AC</sub> \*

Nominal length of the nozzle (L) in mm

|    |    |     |
|----|----|-----|
| 50 | 80 | 120 |
| ■  | ■  | ■   |

### OLT45

Quantity of tips 4/8

Operating voltage 230 V<sub>AC</sub> \*

### AHJ8

Melt channel Ød 6.0 mm

Operating voltage 230 V<sub>AC</sub> \*

Adapter  
straight (G)  
radius (R)  
angle (W)

Contact us for other nozzle lengths!

\*Volts alternating current

■ available

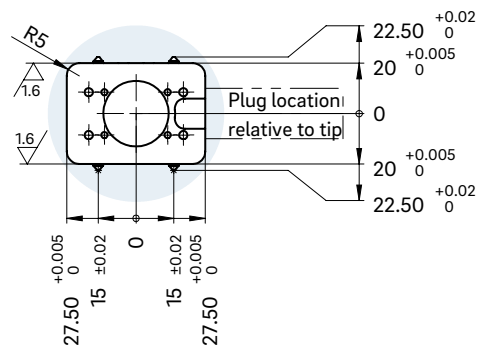
## NOTE

Power connector CMT and thermocouple connector CMLK are to be ordered separately.

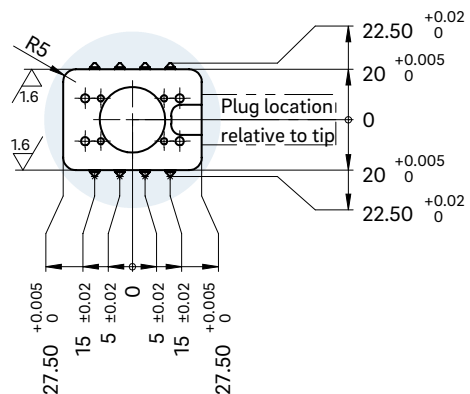
WEBCODE  
41010

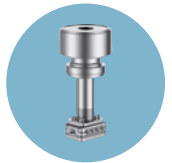


Tip distances for four tips

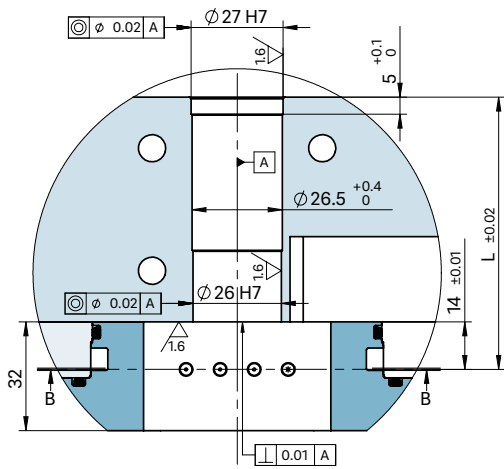


Tip distances for eight tips

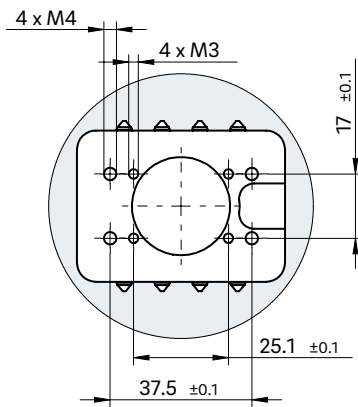




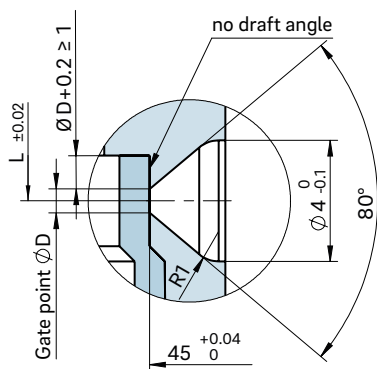
**INSTALLATION**



View B-B for fastening screw thread

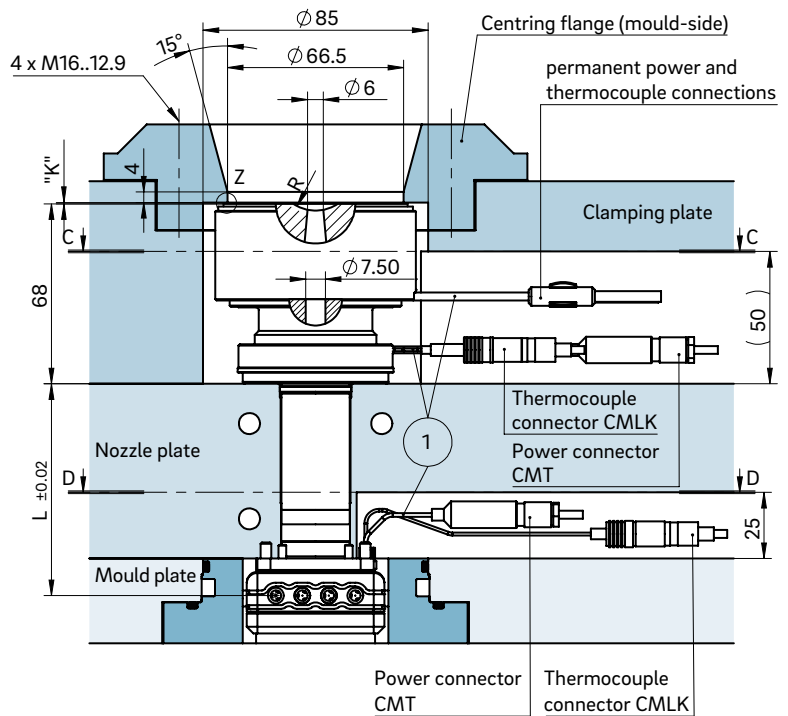


Gate point geometry

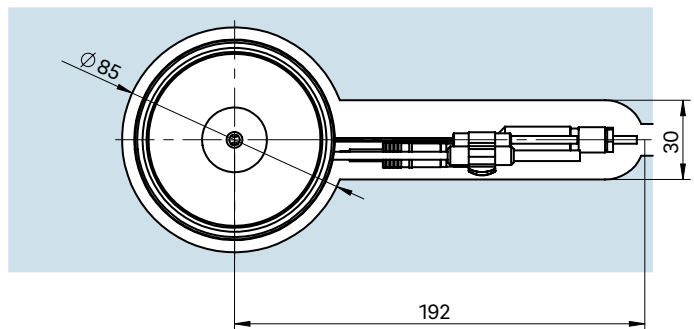


Dimension "K" required for heat expansion is to be ensured by grinding the location ring! Determine the difference between the height of the nozzle (with adapter) and the height of the structure when installed!  $\Delta T$  specifies the temperature differential between the processing temperature and the mould temperature!

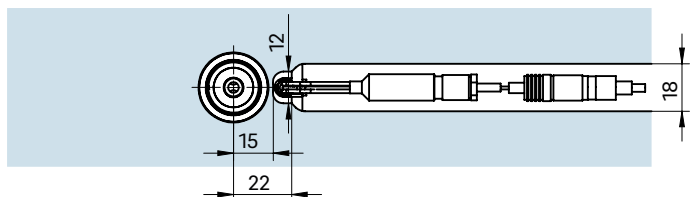
| $\Delta T$ (°C) | 100  | 150  | 200  | 250  | 300  | 350  |
|-----------------|------|------|------|------|------|------|
| K (mm)          | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.25 |



View C-C cutout for nozzle head, power and thermocouple plug connections

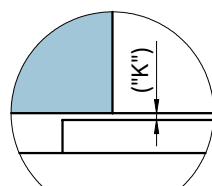


View D-D cutout for power and thermocouple plug connections of the sub-manifold



① Power and thermocouple plug connections in this area can only be bent once; minimum radius: R8

Detail "Z"





## OktaFlow<sup>®</sup> linear OLT45 + AHJ8

Multi-drop hot runner nozzle

linear version for side gating, with heated adapter

### TECHNICAL DATA

#### 80HT

Melt channel Ød 7.5 mm

Operating voltage 230 V<sub>AC</sub> \*

Nominal length of the nozzle (L) in mm

|    |    |     |
|----|----|-----|
| 60 | 90 | 130 |
| ■  | ■  | ■   |

#### OLT45

Quantity of tips 1/2

Operating voltage 230 V<sub>AC</sub> \*

#### AHJ8

Melt channel Ød 6.0 mm

Operating voltage 230 V<sub>AC</sub> \*

Adapter  
straight (G)  
radius (R)  
angle (W)

Contact us for other nozzle lengths!

\*Volts alternating current

■ available

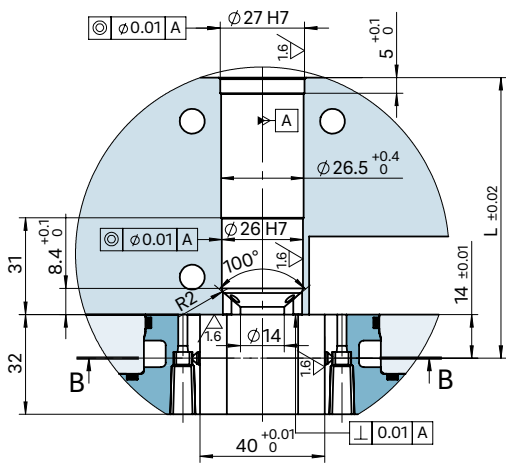
### NOTE

Power connector CMT and thermocouple connector CMLK are to be ordered separately.

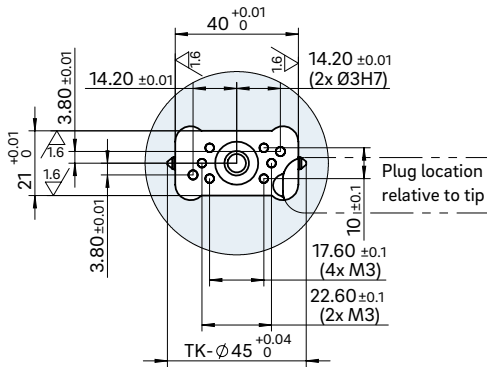




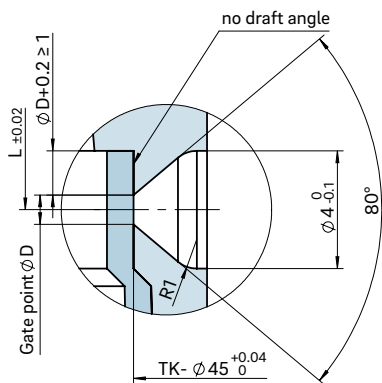
**INSTALLATION**



View B-B for fastening screw thread and tip distances

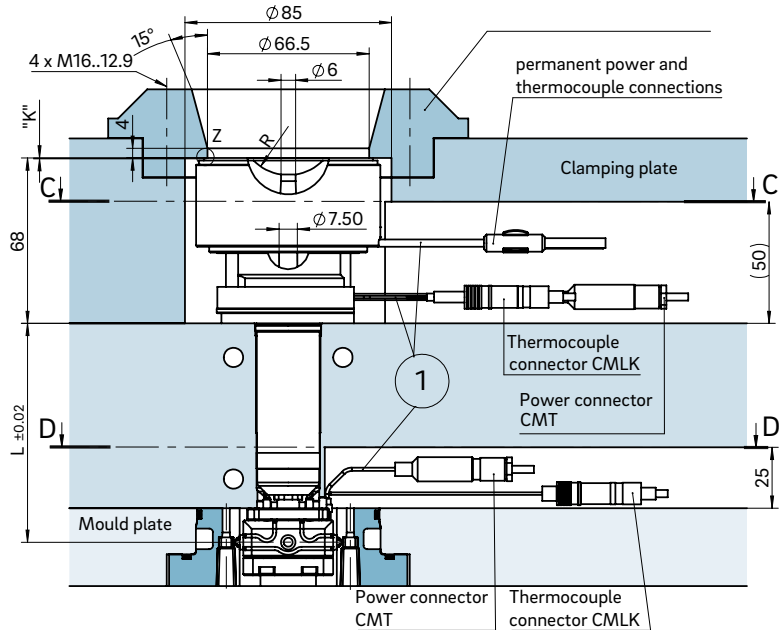


**Gate point geometry**

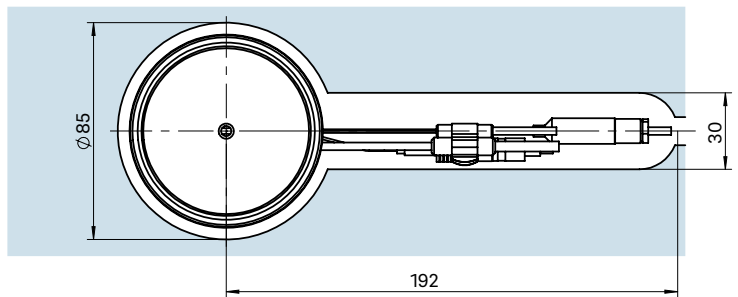


Dimension "K" required for heat expansion is to be ensured by grinding the location ring! Determine the difference between the height of the nozzle (with adapter) and the height of the structure when installed!  $\Delta T$  specifies the temperature differential between the processing temperature and the mould temperature!

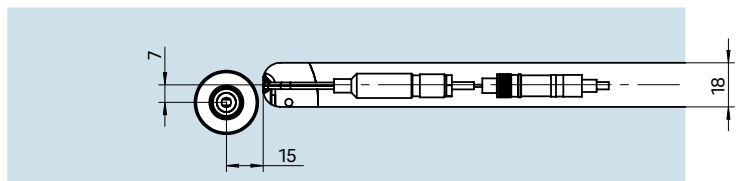
| $\Delta T$ (°C) | 100  | 150  | 200  | 250  | 300  | 350  |
|-----------------|------|------|------|------|------|------|
| K (mm)          | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.25 |



View C-C cutout for nozzle head, power and thermocouple plug connections

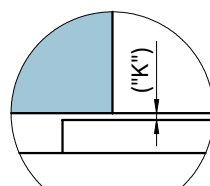


View D-D cutout for power and thermocouple plug connections of the sub-manifold



① Power and thermocouple plug connections in this area can only be bent once; minimum radius: R8

**Detail "Z"**





## OktaFlow<sup>®</sup> linear OLT58 + AHJ8

Multi-drop hot runner nozzle

linear version for side gating, with heated adapter

### TECHNICAL DATA

#### 80HT

Melt channel Ød 7.5 mm

Operating voltage 230 V<sub>AC</sub> \*

Nominal length of the nozzle (L) in mm

|                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| 65                       | 95                       | 135                      |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

#### OLT58

Quantity of tips 1/2

Operating voltage 230 V<sub>AC</sub> \*

#### AHJ8

Melt channel Ød 6.0 mm

Operating voltage 230 V<sub>AC</sub> \*

Adapter  
straight (G)  
radius (R)  
angle (W)

Contact us for other nozzle lengths!

\*Volts alternating current

on request

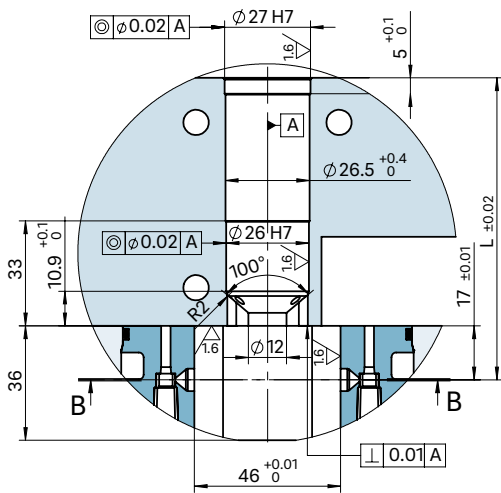
### NOTE

Power connector CMT and thermocouple connector CMLK are to be ordered separately.

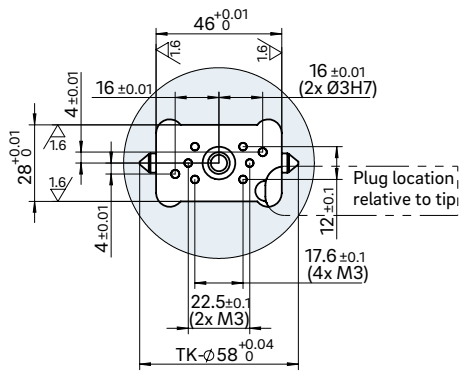




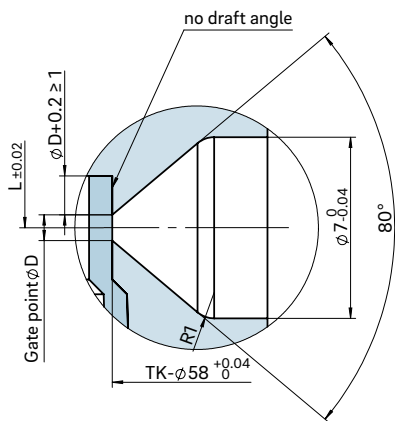
**INSTALLATION**



View B-B for fastening screw thread and tip distances

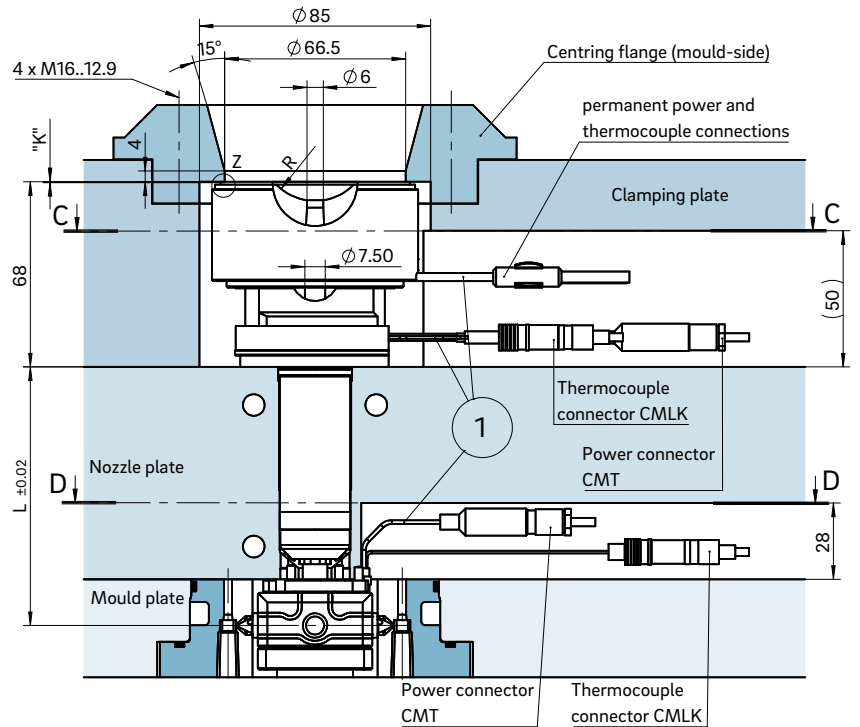


**Gate point geometry**

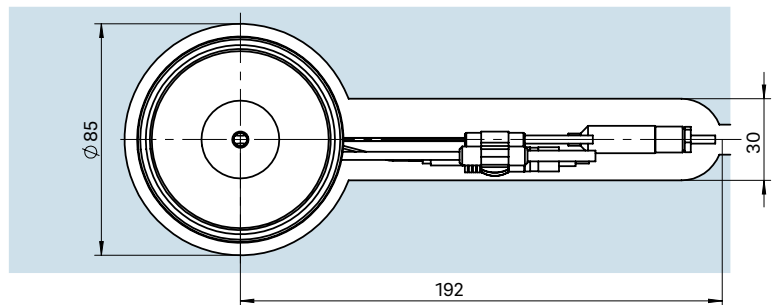


Dimension "K" required for heat expansion is to be ensured by grinding the location ring! Determine the difference between the height of the nozzle (with adapter) and the height of the structure when installed! ΔT specifies the temperature differential between the processing temperature and the mould temperature!

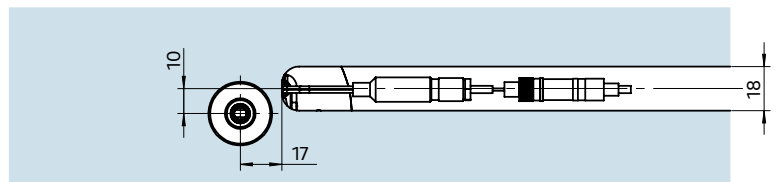
| ΔT (°C) | 100  | 150  | 200  | 250  | 300  | 350  |
|---------|------|------|------|------|------|------|
| K (mm)  | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.25 |



View C-C cutout for nozzle head, power and thermocouple plug connections

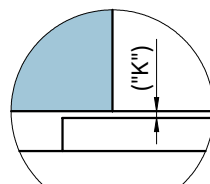


View D-D cutout for power and thermocouple plug connections of the sub-manifold



① Power and thermocouple plug connections in this area can only be bent once; minimum radius: R8

**Detail "Z"**





## OktaFlow<sup>®</sup> linear OLT65 + AHJ8

Multi-drop hot runner nozzle

linear version for side gating, with heated adapter

### TECHNICAL DATA

#### 80HT

Melt channel Ød 7.5 mm

Operating voltage 230 V<sub>AC</sub> \*

Nominal length of the nozzle (L) in mm

|    |    |     |
|----|----|-----|
| 65 | 95 | 135 |
| ■  | ■  | ■   |

#### OLT65

Quantity of tips 1/2

Operating voltage 230 V<sub>AC</sub> \*

#### AHJ8

Melt channel Ød 6.0 mm

Operating voltage 230 V<sub>AC</sub> \*

Adapter  
straight (G)  
radius (R)  
angle (W)

Contact us for other nozzle lengths!

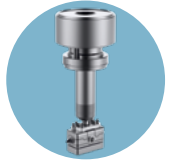
\*Volts alternating current

■ available

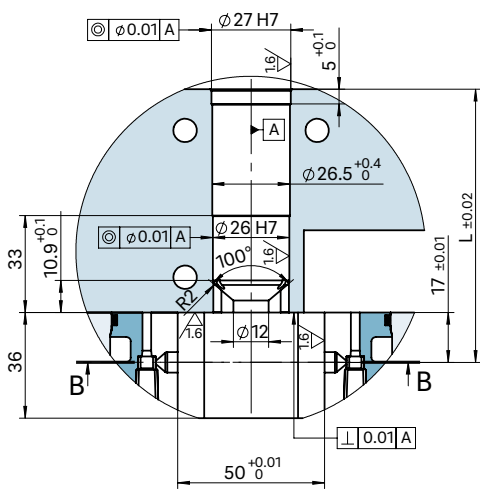
### NOTE

Power connector CMT and thermocouple connector CMLK are to be ordered separately.

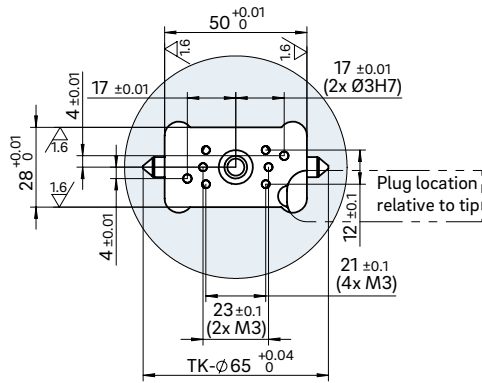




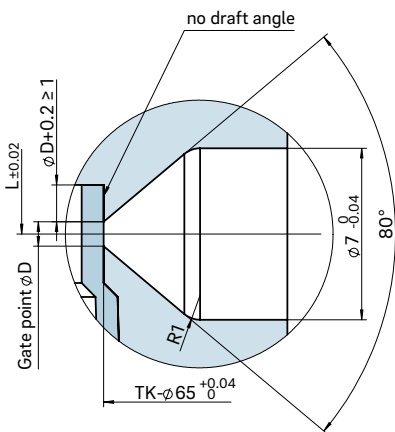
**INSTALLATION**



View B-B for fastening screw thread and tip distances

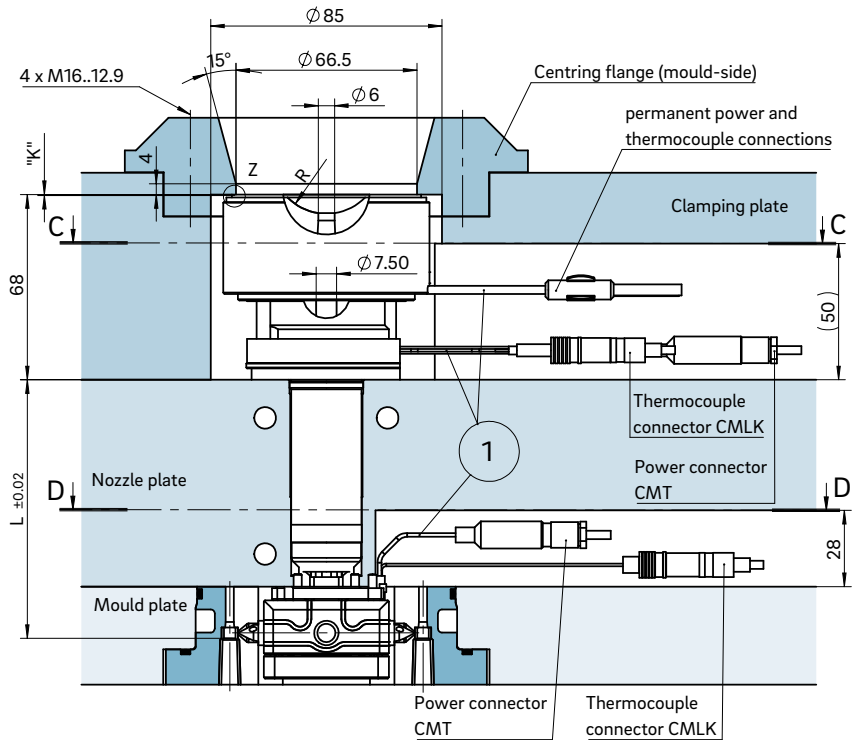


Gate point geometry

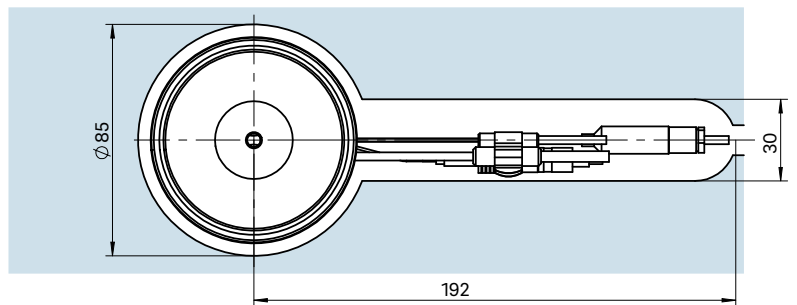


Dimension "K" required for heat expansion is to be ensured by grinding the location ring! Determine the difference between the height of the nozzle (with adapter) and the height of the structure when installed!  $\Delta T$  specifies the temperature differential between the processing temperature and the mould temperature!

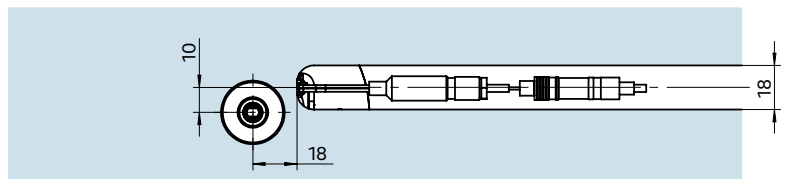
| $\Delta T$ (°C) | 100  | 150  | 200  | 250  | 300  | 350  |
|-----------------|------|------|------|------|------|------|
| K (mm)          | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.25 |



View C-C cutout for nozzle head, power and thermocouple plug connections

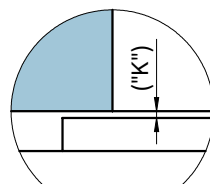


View D-D cutout for power and thermocouple plug connections of the sub-manifold



① Power and thermocouple plug connections in this area can only be bent once; minimum radius: R8

Detail "Z"





# OktaFlow<sup>®</sup> radial ORT45 + AHJ8

Multi-drop hot runner nozzle

radial version for side gating, with heated adapter

## TECHNICAL DATA

### 80HT

Melt channel Ød 7.5 mm

Operating voltage 230 V<sub>AC</sub> \*

Nominal length of the nozzle (L) in mm

|    |    |     |
|----|----|-----|
| 60 | 90 | 130 |
| ■  | ■  | ■   |

### ORT45

Quantity of tips 1/2/4/8

Operating voltage 230 V<sub>AC</sub> \*

### AHJ8

Melt channel Ød 6.0 mm

Operating voltage 230 V<sub>AC</sub> \*

Adapter  
straight (G)  
radius (R)  
angle (W)

Contact us for other nozzle lengths!

\*Volts alternating current

■ available

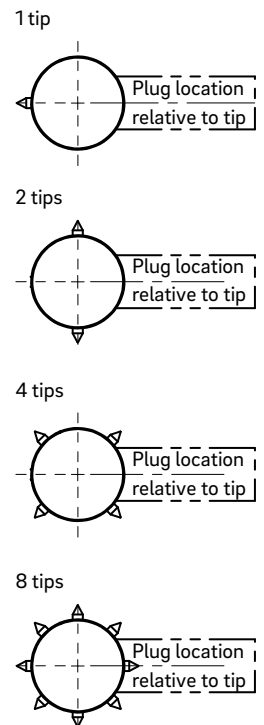
## NOTE

Power connector CMT and thermocouple connector CMLK are to be ordered separately.

**WEBCODE**  
41020

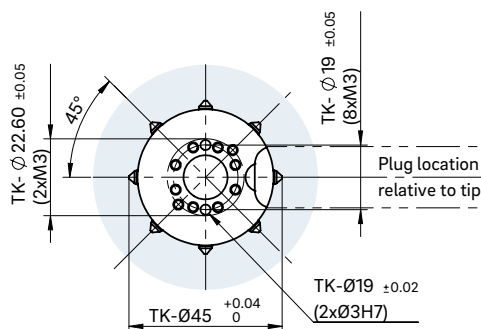


## PLUG LOCATION RELATIVE TO TIP



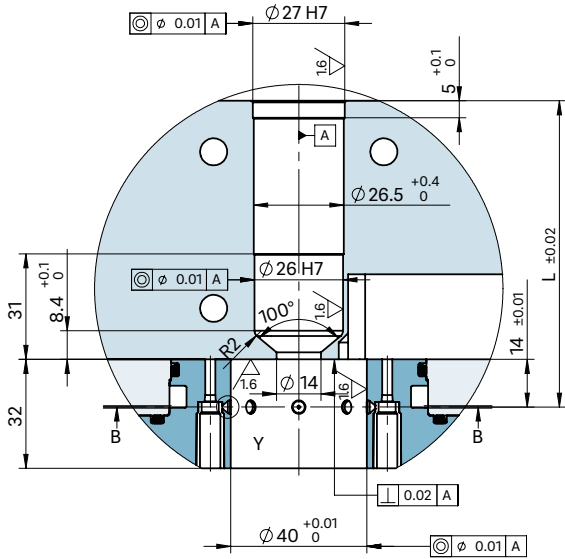
View B-B

Fastening screw thread and tip distance

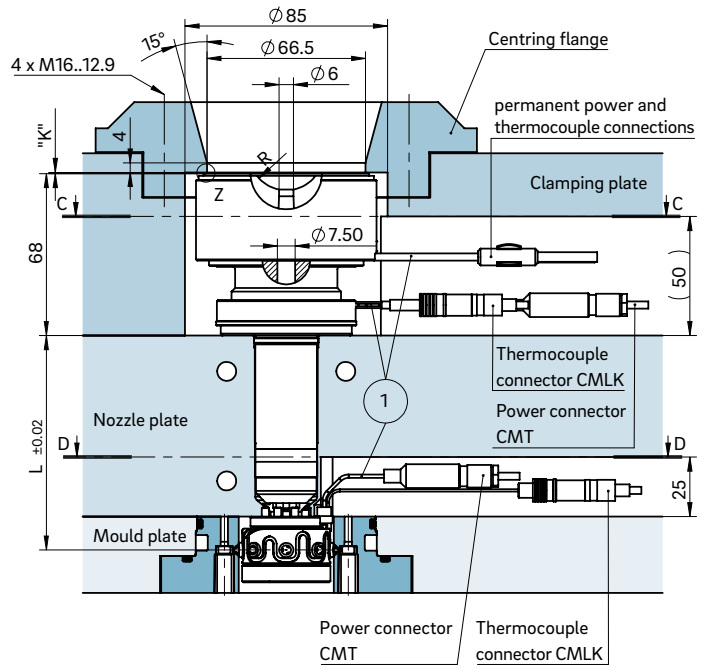
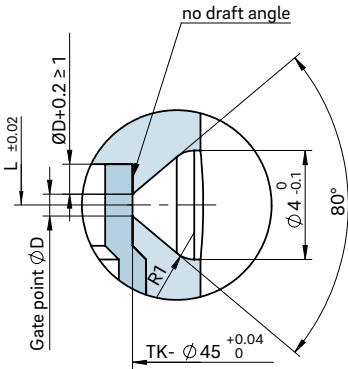




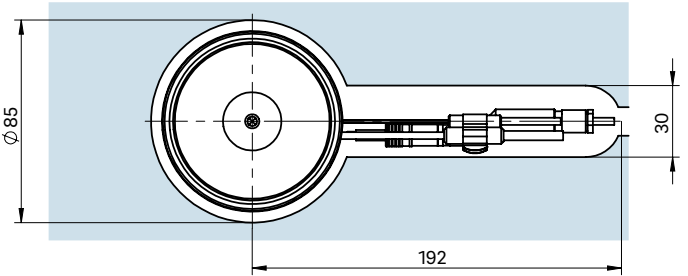
**INSTALLATION**



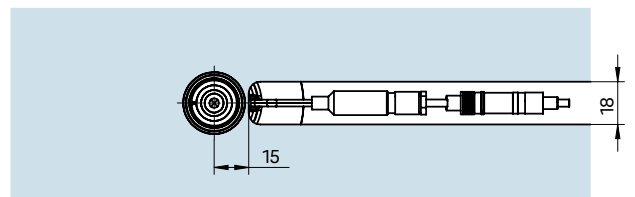
**Gate point geometry**



View C-C cutout for nozzle head, power and thermocouple plug connections



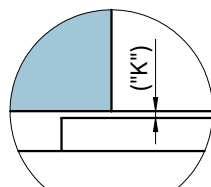
View D-D cutout for power and thermocouple plug connections of the sub-manifold



① Power and thermocouple plug connections in this area can only be bent once; minimum radius: R8

Dimension "K" required for heat expansion is to be ensured by grinding the location ring! Determine the difference between the height of the nozzle (with adapter) and the height of the structure when installed! ΔT specifies the temperature differential between the processing temperature and the mould temperature!

**Detail "Z"**



| ΔT (°C) | 100  | 150  | 200  | 250  | 300  | 350  |
|---------|------|------|------|------|------|------|
| K (mm)  | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.25 |



# OktaFlow<sup>®</sup> radial ORT58 + AHJ8

Multi-drop hot runner nozzle

radial version for side gating, with heated adapter

## TECHNICAL DATA

### 80HT

Melt channel Ød 7.5 mm

Operating voltage 230 V<sub>AC</sub> \*

Nominal length of the nozzle (L) in mm

|                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| 65                       | 95                       | 135                      |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

### ORT58

Quantity of tips 1/2/4/8

Operating voltage 230 V<sub>AC</sub> \*

### AHJ8

Melt channel Ød 6.0 mm

Operating voltage 230 V<sub>AC</sub> \*

Adapter  
 straight (G)  
 radius (R)  
 angle (W)

Contact us for other nozzle lengths!

\*Volts alternating current

on request

## NOTE

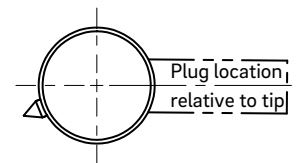
Power connector CMT and thermocouple connector CMLK are to be ordered separately.

**WEBCODE**  
41025

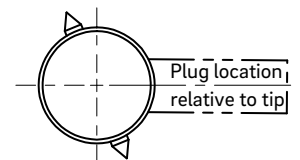


## PLUG LOCATION RELATIVE TO TIP

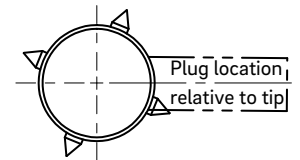
1 tip



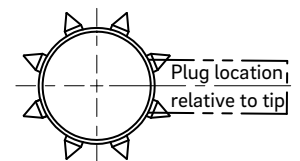
2 tips



4 tips

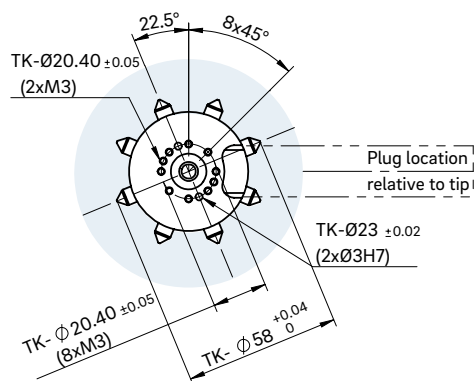


8 tips



View B-B

Fastening screw thread and tip distance







# OktaFlow<sup>®</sup> radial ORT65 + AHJ8

Multi-drop hot runner nozzle

radial version for side gating, with heated adapter

## TECHNICAL DATA

### 80HT

Melt channel Ød 7.5 mm

Operating voltage 230 V<sub>AC</sub> \*

Nominal length of the nozzle (L) in mm

|    |    |     |
|----|----|-----|
| 65 | 95 | 135 |
| ■  | ■  | ■   |

### ORT65

Quantity of tips 1/2/4/8

Operating voltage 230 V<sub>AC</sub> \*

### AHJ8

Melt channel Ød 6.0 mm

Operating voltage 230 V<sub>AC</sub> \*

Adapter  
 straight (G)  
 radius (R)  
 angle (W)

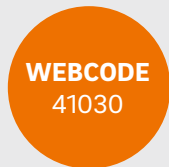
Contact us for other nozzle lengths!

\*Volts alternating current

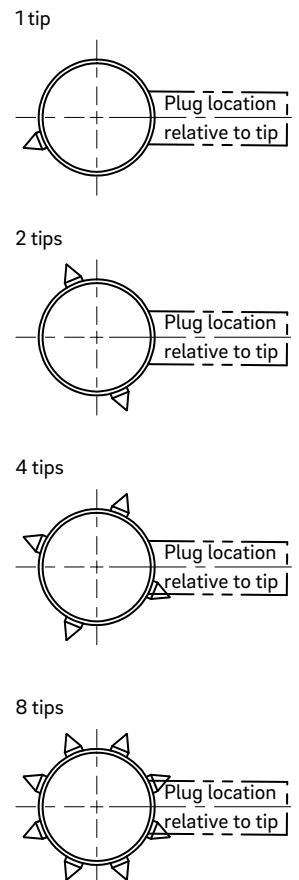
■ available

## NOTE

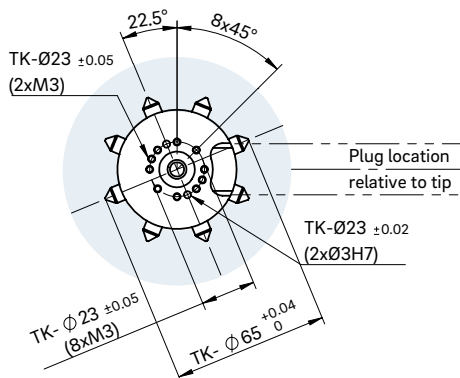
Power connector CMT and thermocouple connector CMLK are to be ordered separately.



## PLUG LOCATION RELATIVE TO TIP



View B-B  
 Fastening screw thread and tip distance







# 18LHF + AHJ5

Multi-drop hot runner nozzle for side gating under 90°, without cold slugs, thick-film heating element (BlueFlow®) and heated adapter

## TECHNICAL DATA

### 18LHF

|  |                       |     |
|--|-----------------------|-----|
| Melt channel Ød                        | 4.8 mm                |     |
| Operating voltage                      | 230 V <sub>AC</sub> * |     |
| Quantity of tips                       | 1/2/4                 |     |
| Nominal length of the nozzle (L) in mm |                       |     |
| 60                                     | 80                    | 100 |
| ■                                      | ■                     | ■   |

### AHJ5

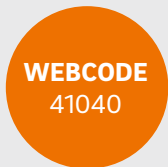
|                   |   |
|-------------------|---|
| Melt channel Ød   | 5.0 mm                                  |
| Operating voltage | 230 V <sub>AC</sub> *                   |
| Adapter           | straight (G)<br>radius (R)<br>angle (W) |

\*Volts alternating current  
■ available

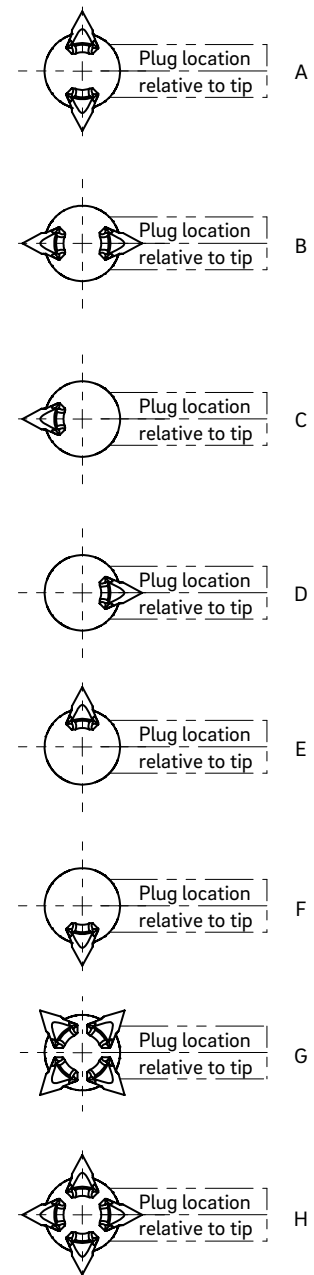
## NOTE

Power connector CHF and thermocouple connector CMLK are to be ordered separately.

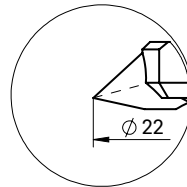
Design II is used in applications with filled materials, with a gate diameter ØAP >1.3 mm.



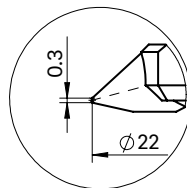
## PLUG LOCATION RELATIVE TO TIP



Tip design I

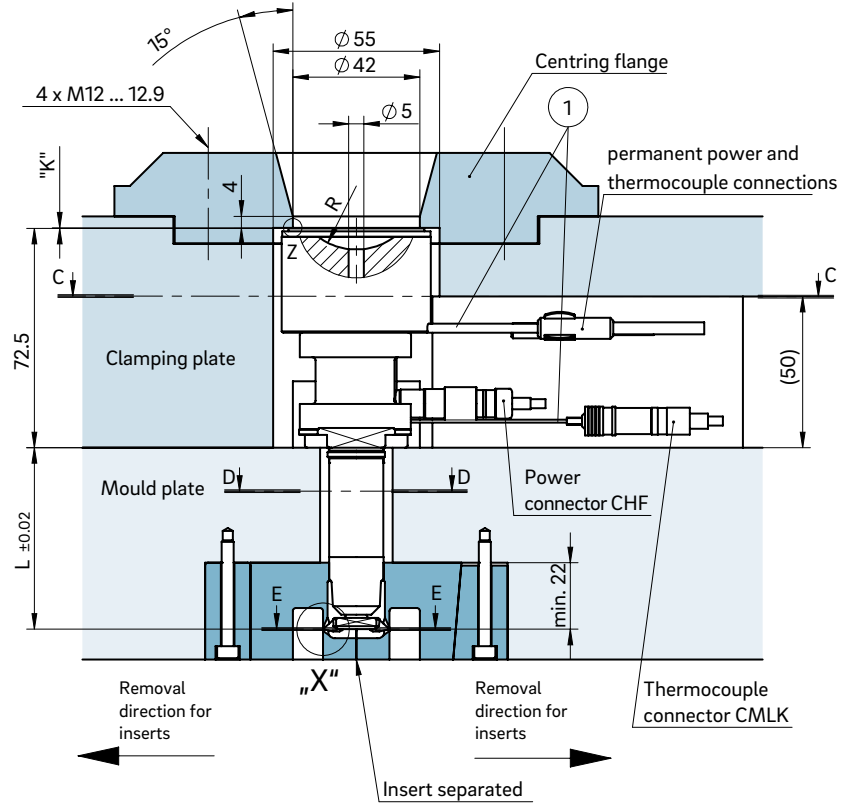
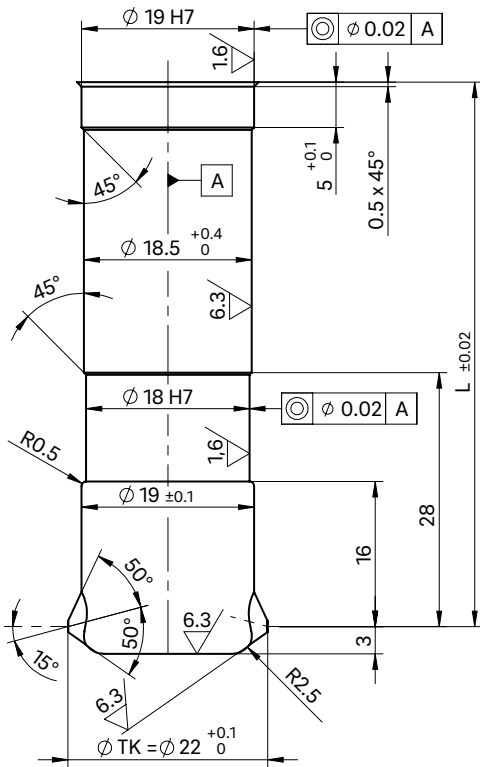


Tip design II

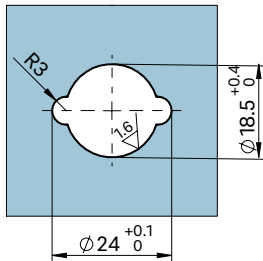




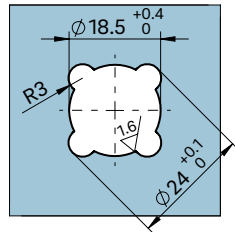
**INSTALLATION**



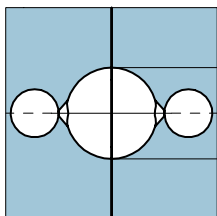
View D-D for two nozzle tips



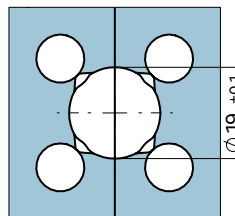
View D-D for four nozzle tips



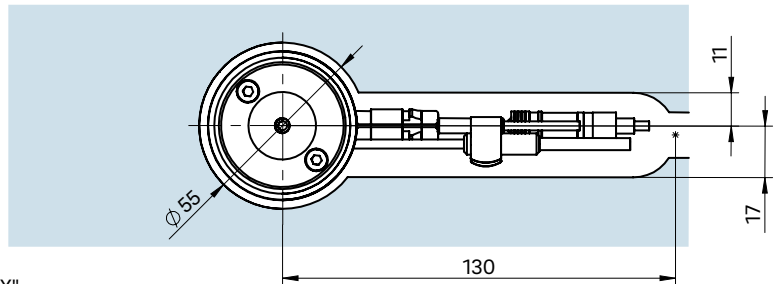
View E-E for two nozzle tips



View E-E for four nozzle tips

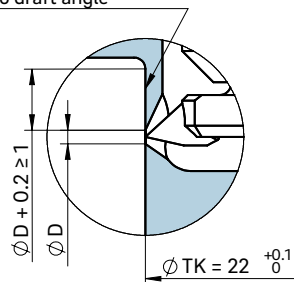


View C-C cutout for nozzle head, power and thermocouple plug connections



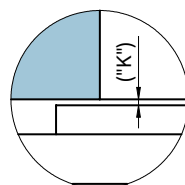
Detail "X"

no draft angle



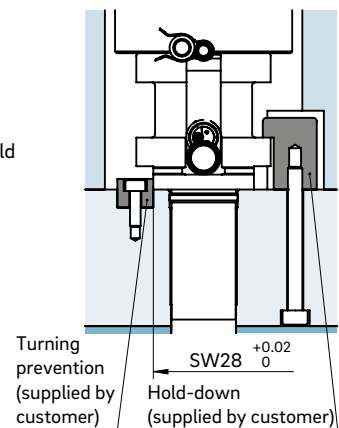
To prevent open jet formations, injection should be carried out against a core, for example.

Detail "Z"



① Power and thermocouple plug connections in this area can only be bent once; minimum radius: R8  
SW = flat area on nozzle head

Turning prevention



Dimension "K" required for heat expansion is to be ensured by grinding the location ring! Determine the difference between the height of the nozzle (with adapter) and the height of the structure when installed!  $\Delta T$  specifies the temperature differential between the processing temperature and the mould temperature!

| $\Delta T$ (°C) | 100  | 150  | 200  | 250  | 300  | 350  |
|-----------------|------|------|------|------|------|------|
| K (mm)          | 0.06 | 0.08 | 0.09 | 0.11 | 0.13 | 0.16 |



## 22LHT + AHJ5

Multi-drop hot runner nozzle for side gating under 90°, without cold slugs, with conventional heating element and heated adapter

### TECHNICAL DATA

#### 22LHT

|  |                       |     |
|--|-----------------------|-----|
| Melt channel Ød                        | 4.8 mm                |     |
| Operating voltage                      | 230 V <sub>AC</sub> * |     |
| Quantity of tips                       | 1/2/4                 |     |
| Nominal length of the nozzle (L) in mm |                       |     |
| 60                                     | 80                    | 100 |
| ■                                      | ■                     | ■   |

#### AHJ5

|                   |   |
|-------------------|---|
| Melt channel Ød   | 5.0 mm                                  |
| Operating voltage | 230 V <sub>AC</sub> *                   |
| Adapter           | straight (G)<br>radius (R)<br>angle (W) |

\*Volts alternating current

■ available

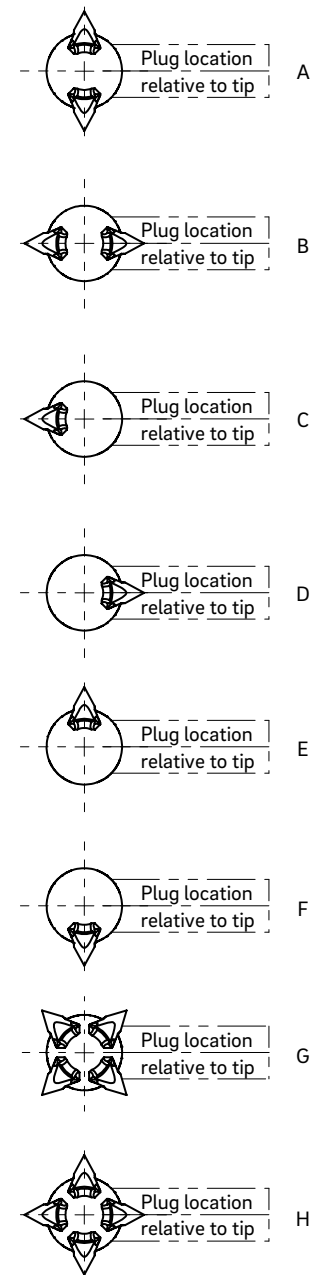
### NOTE

Power connector CMT and thermocouple connector CMLK are to be ordered separately.

**WEBCODE**  
41050



### PLUG LOCATION RELATIVE TO TIP







# 26LHT + AHJ6

Multi-drop hot runner nozzle for side gating under 90°, without cold slugs, with conventional heating element and heated adapter

## TECHNICAL DATA

### 26LHT

|  |                       |
|--|-----------------------|
| Melt channel Ød                        | 6.0 mm                |
| Operating voltage                      | 230 V <sub>AC</sub> * |
| Quantity of tips                       | 1/2/4                 |
| Nominal length of the nozzle (L) in mm |                       |

|    |    |     |
|----|----|-----|
| 60 | 80 | 100 |
| ■  | ■  | ■   |

### AHJ6

|                   |   |
|-------------------|---|
| Melt channel Ød   | 6.0 mm                                  |
| Operating voltage | 230 V <sub>AC</sub> *                   |
| Adapter           | straight (G)<br>radius (R)<br>angle (W) |

\*Volts alternating current

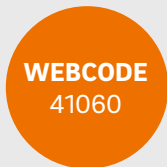
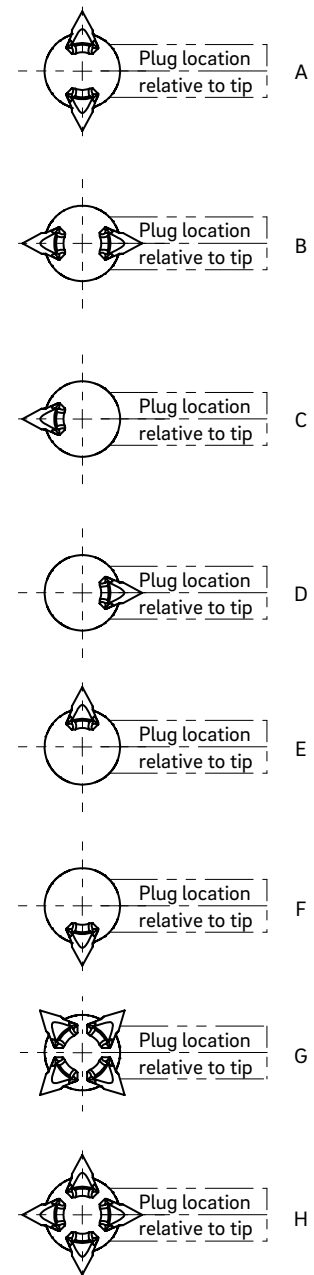
■ available

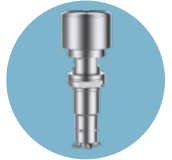
## NOTE

Power connector CMT and thermocouple connector CMLK are to be ordered separately.

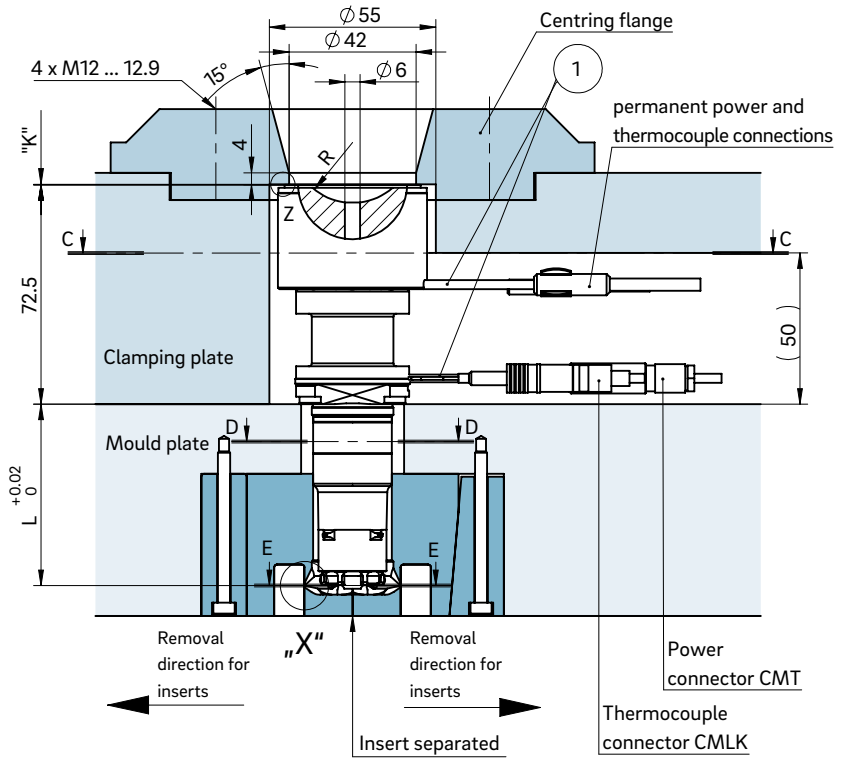
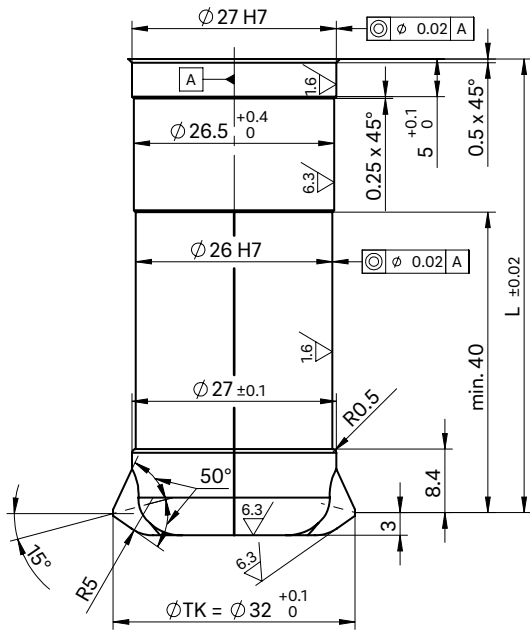


## PLUG LOCATION RELATIVE TO TIP

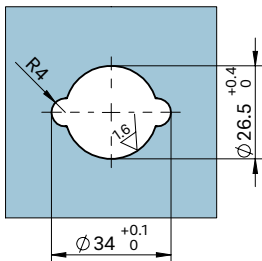




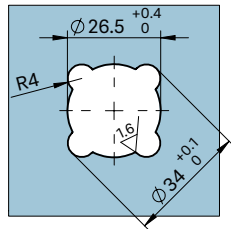
**INSTALLATION**



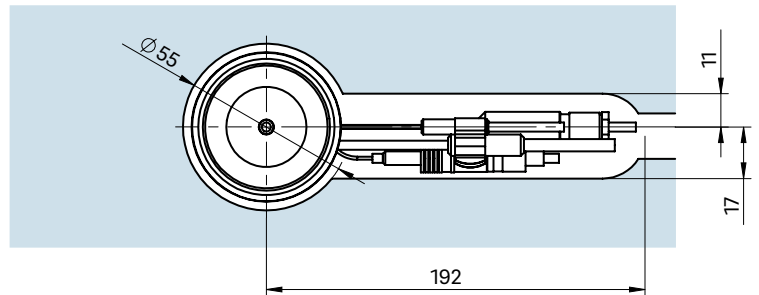
View D-D for two nozzle tips



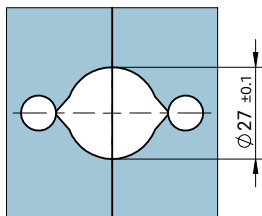
View D-D for four nozzle tips



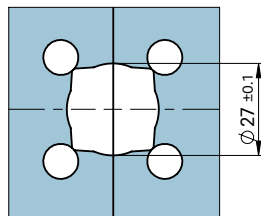
View C-C cutout for nozzle head, power and thermocouple plug connections



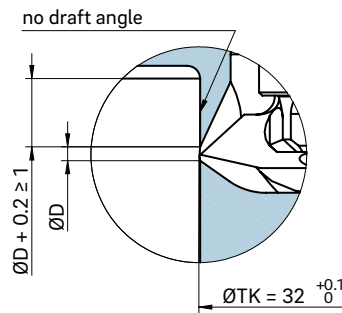
View E-E for two nozzle tips



View E-E for four nozzle tips

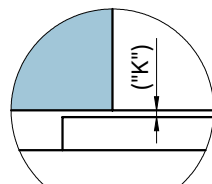


Detail "X"



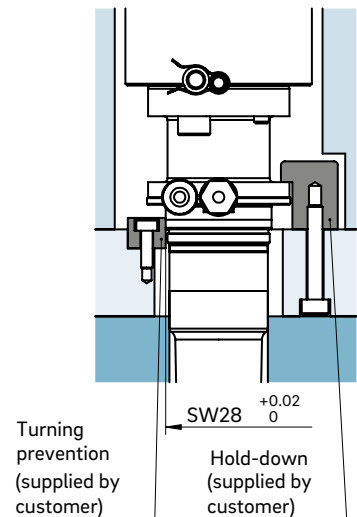
To prevent open jet formations, injection should be carried out against a core, for example.

Detail "Z"



① Thermocouple plug connection in this area can only be bent once; minimum radius: R8  
SW = flat area on nozzle head

Turning prevention



Dimension "K" required for heat expansion is to be ensured by grinding the location ring! Determine the difference between the height of the nozzle (with adapter) and the height of the structure when installed!  $\Delta T$  specifies the temperature differential between the processing temperature and the mould temperature!

| $\Delta T$ (°C) | 100  | 150  | 200  | 250  | 300  | 350  |
|-----------------|------|------|------|------|------|------|
| K (mm)          | 0.06 | 0.08 | 0.09 | 0.11 | 0.13 | 0.16 |



# 3SGT 2-drop, 3-drop and 4-drop

Multi-drop hot runner nozzle for minimal cavity distances, with heated adapter

## TECHNICAL DATA

### 3SGT 2-drop, 3-drop and 4-drop

Melt channel Ød 6.0 mm

Possible pitch circle diameter ØTK:

2-drop Ø 11 to Ø 31 mm

3-drop Ø 12 to Ø 31 mm

4-drop Ø 14 to Ø 31 mm

Adapter straight (G)  
radius (R)  
angle (W)

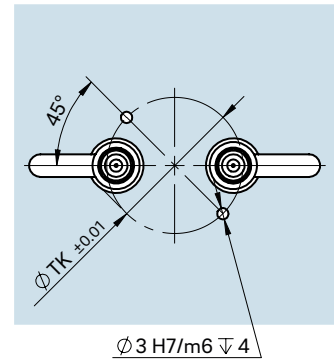
Operating voltage 230 V<sub>AC</sub> \*

Nominal length of the nozzle (L): 20 mm

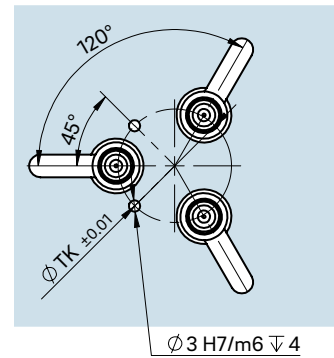
\*Volts alternating current



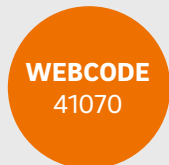
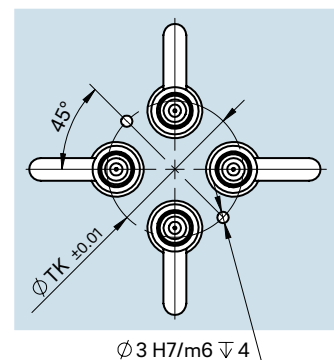
2-drop – cutout for nozzle and centring/positioning pin



3-drop – cutout for nozzle and centring/positioning pin



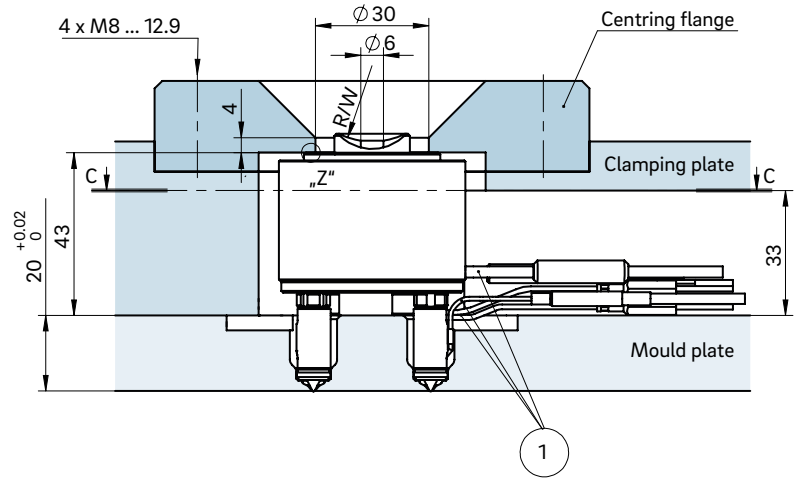
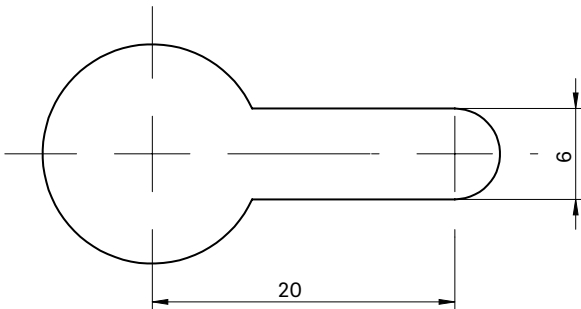
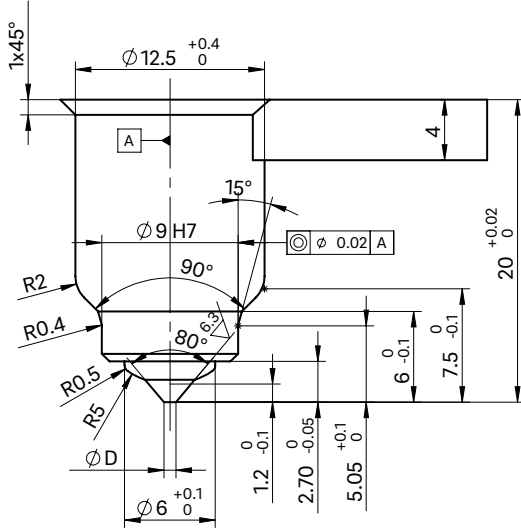
4-drop – cutout for nozzle and centring/positioning pin



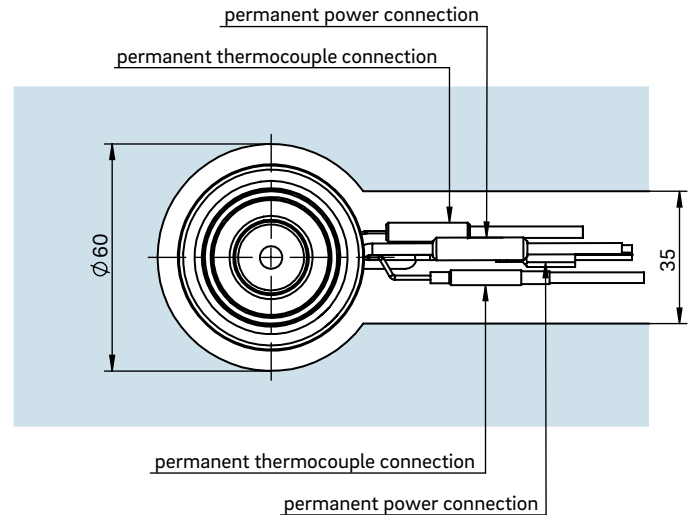


**INSTALLATION**

Open nozzle with tip



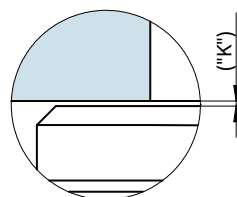
Cross-section C-C: Cutout for nozzle head, power and thermocouple plug connections



① Power and thermocouple plug connections in this area can only be bent once; minimum radius: R8

Dimension "K" required for heat expansion is to be ensured by grinding the location ring! Determine the difference between the height of the nozzle (with adapter) and the height of the structure when installed!  $\Delta T$  specifies the temperature differential between the processing temperature and the mould temperature!

Detail "Z"



| $\Delta T$ (°C) | 100  | 150  | 200  | 250  | 300 | 350  |
|-----------------|------|------|------|------|-----|------|
| K (mm)          | 0.01 | 0.03 | 0.05 | 0.07 | 0.1 | 0.11 |



## 3SGT 1-drop

Multi-drop hot runner nozzle for minimal cavity distances,  
with heated adapter

### TECHNICAL DATA

#### 3SGT 1-drop

**Melt channel Ød** 3.0 mm

**Adapter** straight (G)  
radius (R)  
angle (W)

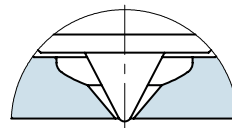
**Operating voltage** 230 V<sub>AC</sub> \*

**Nominal length of the nozzle (L): 20 mm**

\*Volts alternating current



Version "Tip"  
Antechamber version A













**WEBCODE**  
41080







## 4.2 Multi-drop hot runner nozzles as system nozzles

|   |  | Page       |
|---|--|------------|
|    | <b>OktaFlow® linear OLT45, Quantity of tips 4/8</b><br>Multi-drop hot runner nozzle linear version for side gating   | <b>20</b>  |
|    | <b>OktaFlow® linear OLT45, Quantity of tips 1/2</b><br>Multi-drop hot runner nozzle linear version for side gating   | <b>30</b>  |
|    | <b>OktaFlow® linear OLT58, Quantity of tips 1/2</b><br>Multi-drop hot runner nozzle linear version for side gating   | <b>40</b>  |
|    | <b>OktaFlow® linear OLT65, Quantity of tips 1/2</b><br>Multi-drop hot runner nozzle linear version for side gating   | <b>50</b>  |
|   | <b>OktaFlow® radial ORT45, Quantity of tips 1/2/4/8</b><br>Multi-drop hot runner nozzle radial version for side gating   | <b>60</b>  |
|  | <b>OktaFlow® radial ORT58, Quantity of tips 1/2/4/8</b><br>Multi-drop hot runner nozzle radial version for side gating   | <b>70</b>  |
|  | <b>OktaFlow® radial ORT65, Quantity of tips 1/2/4/8</b><br>Multi-drop hot runner nozzle radial version for side gating   | <b>80</b>  |
|  | <b>18LHF, Quantity of tips 1/2/4</b><br>Multi-drop hot runner nozzle for side gating under 90 °, without cold slugs,<br>with thick-film heating element (BlueFlow®) and heated adapter | <b>90</b>  |
|  | <b>22LHT, Quantity of tips 1/2/4</b><br>Multi-drop hot runner nozzle for side gating under 90 °, without cold slugs,<br>with conventional heating element and heated adapter           | <b>100</b> |
|  | <b>26LHT, Quantity of tips 1/2/4</b><br>Multi-drop hot runner nozzle for side gating under 90 °, without cold slugs,<br>with conventional heating element and heated adapt             | <b>110</b> |



# OktaFlow<sup>®</sup> linear OLT45

Multi-drop hot runner nozzle  
linear version for side gating

## TECHNICAL DATA

### 80HT

Melt channel Ød 7.5 mm

Operating voltage 230 V<sub>AC</sub> \*

Nominal length of the nozzle (L) in mm

|    |    |     |
|----|----|-----|
| 50 | 80 | 120 |
| ■  | ■  | ■   |

### OLT45

Quantity of tips 4/8

Operating voltage 230 V<sub>AC</sub> \*

Contact us for other nozzle lengths!

\*Volts alternating current

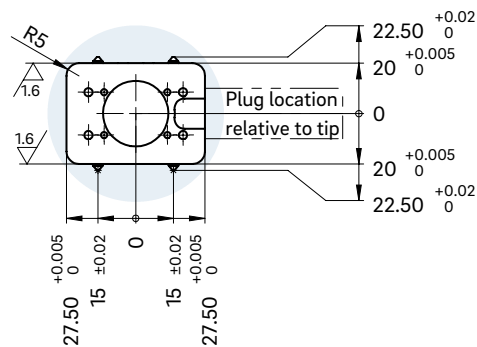
■ available

## NOTE

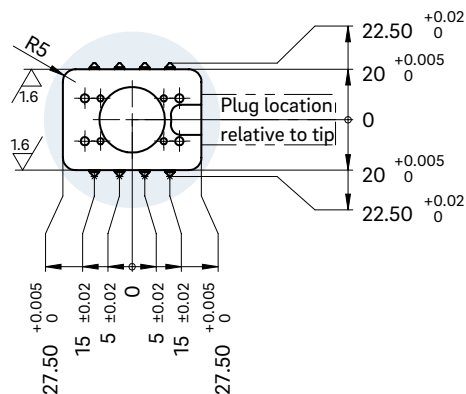
Power connector CMT and thermocouple connector CMLK are to be ordered separately.

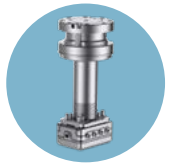


Tip distance for four tips

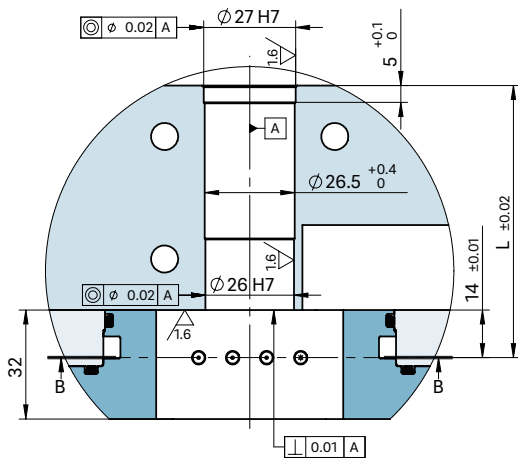


Tip distance for eight tips

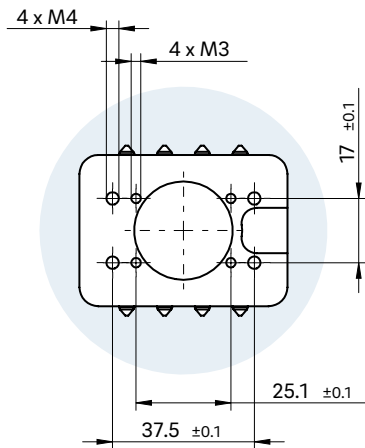




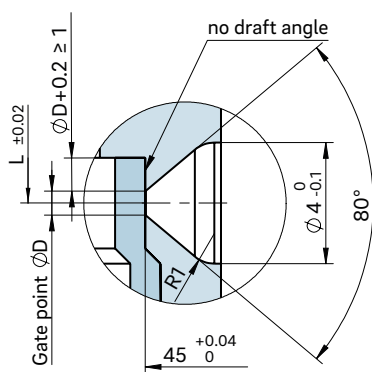
**INSTALLATION**



View B-B for fastening screw thread

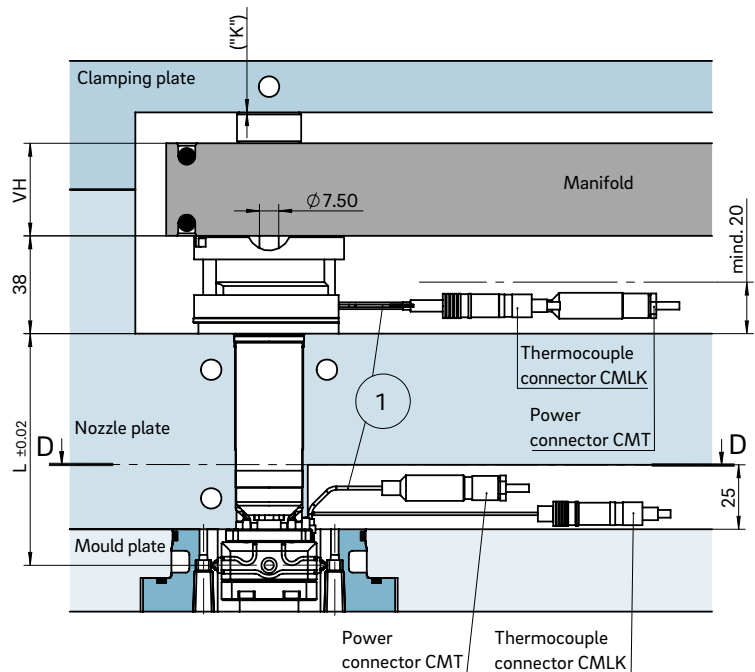


Gate point geometry

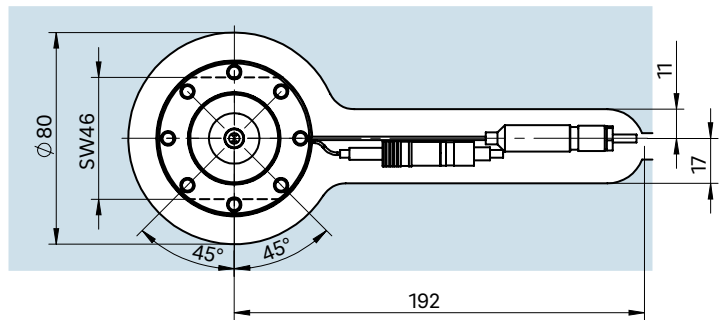


The size "K" required for heat expansion is to be ensured by grinding the pressure pads (12 + 0.1 mm)! Determine the difference between the height of the manifold system and the height of the frame plate when installed!  $\Delta T$  specifies the temperature differential between the processing temperature and the mould temperature!

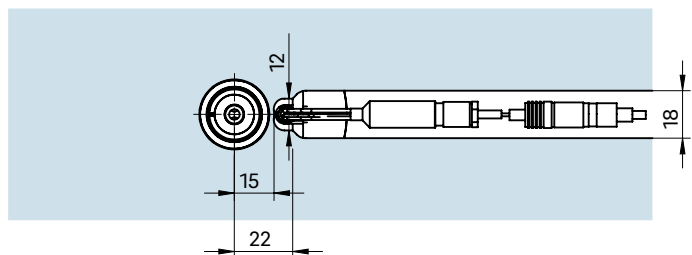
| VH    | $\Delta T$ (°C) | 100   | 150   | 200   | 250   | 300   | 350   |
|-------|-----------------|-------|-------|-------|-------|-------|-------|
| 36 mm | K (mm)          | 0.021 | 0.059 | 0.098 | 0.137 | 0.177 | 0.217 |
| 46 mm | K (mm)          | 0.033 | 0.078 | 0.124 | 0.170 | 0.218 | 0.264 |
| 56 mm | K (mm)          | 0.046 | 0.097 | 0.150 | 0.203 | 0.258 | 0.311 |



Example Cutout for nozzle head, power and thermocouple plug connections



View D-D cutout for power and thermocouple plug connections of the sub-manifold



- ① Power and thermocouple plug connections in this area can only be bent once; minimum radius: R8

SW = flat area on nozzle head



## OktaFlow<sup>®</sup> linear OLT45

Multi-drop hot runner nozzle  
linear version for side gating

### TECHNICAL DATA

#### 80HT

Melt channel Ød 7.5 mm

Operating voltage 230 V<sub>AC</sub> \*

Nominal length of the nozzle (L) in mm

|    |    |     |
|----|----|-----|
| 60 | 90 | 130 |
| ■  | ■  | ■   |

#### OLT45

Quantity of tips 1/2

Operating voltage 230 V<sub>AC</sub> \*

Contact us for other nozzle lengths!

\*Volts alternating current

■ available

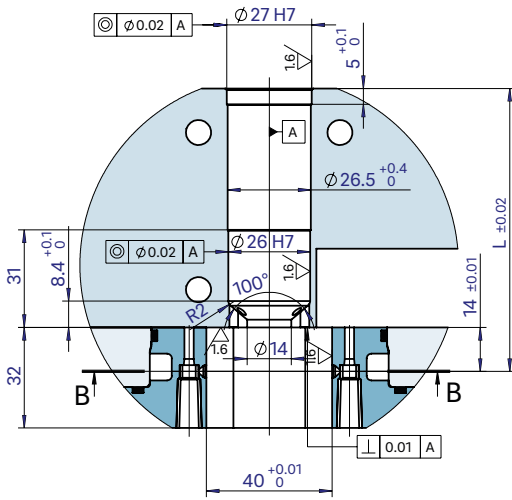
### NOTE

Power connector CMT and thermocouple connector CMLK are to be ordered separately.

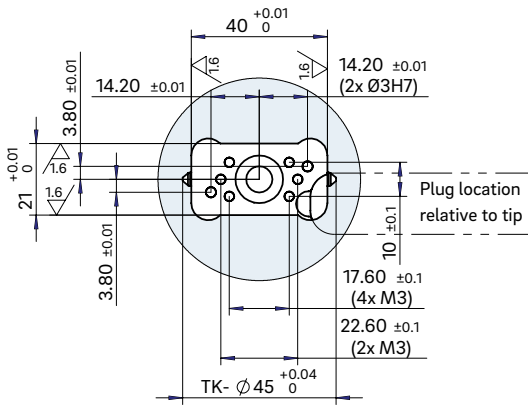




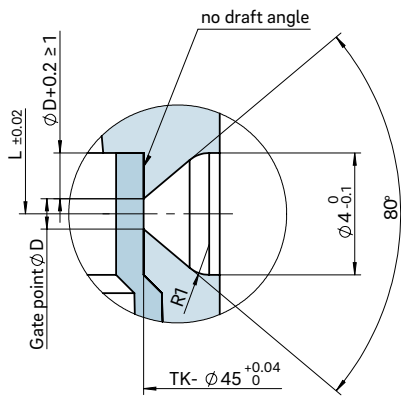
**INSTALLATION**



View B-B for fastening screw thread and tip distances

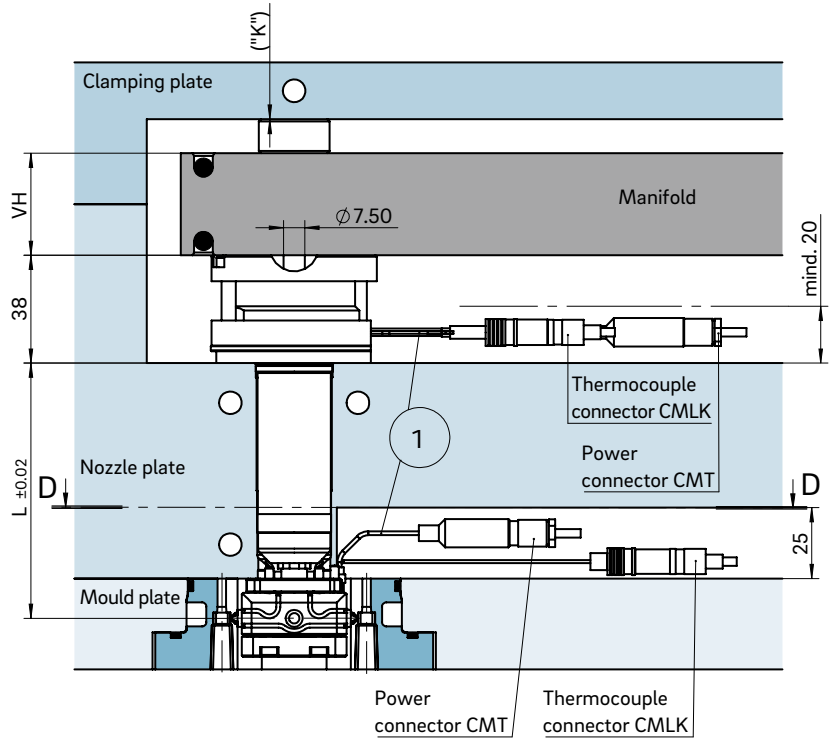


Gate point geometry

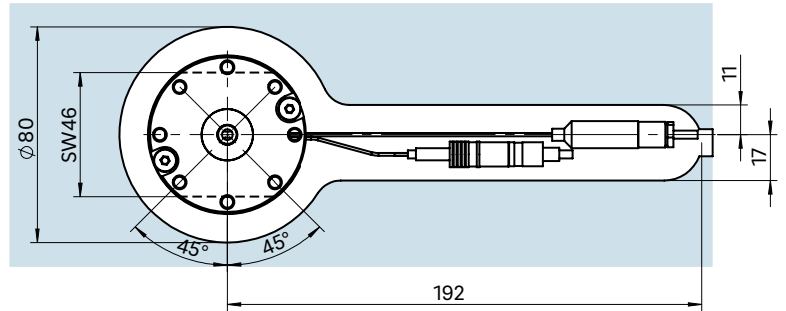


The size "K" required for heat expansion is to be ensured by grinding the pressure pads (12 + 0.1 mm)! Determine the difference between the height of the manifold system and the height of the frame plate when installed! ΔT specifies the temperature differential between the processing temperature and the mould temperature!

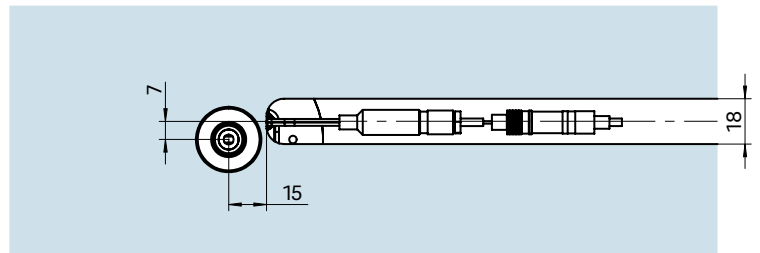
| VH    | ΔT (°C) | 100   | 150   | 200   | 250   | 300   | 350   |
|-------|---------|-------|-------|-------|-------|-------|-------|
| 36 mm | K (mm)  | 0.021 | 0.059 | 0.098 | 0.137 | 0.177 | 0.217 |
| 46 mm | K (mm)  | 0.033 | 0.078 | 0.124 | 0.170 | 0.218 | 0.264 |
| 56 mm | K (mm)  | 0.046 | 0.097 | 0.150 | 0.203 | 0.258 | 0.311 |



Example Cutout for nozzle head, power and thermocouple plug connections



View D-D cutout for power and thermocouple plug connections of the sub-manifold



① Power and thermocouple plug connections in this area can only be bent once; minimum radius: R8

SW = flat area on nozzle head



## OktaFlow<sup>®</sup> linear OLT58

Multi-drop hot runner nozzle  
linear version for side gating

### TECHNICAL DATA

#### 80HT

Melt channel Ød 7.5 mm

Operating voltage 230 V<sub>AC</sub> \*

Nominal length of the nozzle (L) in mm

|                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| 65                       | 95                       | 135                      |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

#### OLT58

Quantity of tips 1/2

Operating voltage 230 V<sub>AC</sub> \*

Contact us for other nozzle lengths!

\*Volts alternating current

on request

### NOTE

Power connector CMT and thermocouple connector CMLK are to be ordered separately.







## OktaFlow<sup>®</sup> linear OLT65

Multi-drop hot runner nozzle  
linear version for side gating

### TECHNICAL DATA

#### 80HT

Melt channel Ød 7.5 mm

Operating voltage 230 V<sub>AC</sub> \*

Nominal length of the nozzle (L) in mm

65 95 135

■ ■ ■

#### OLT65

Quantity of tips 1/2

Operating voltage 230 V<sub>AC</sub> \*

Contact us for other nozzle lengths!

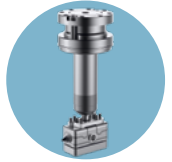
\*Volts alternating current

■ available

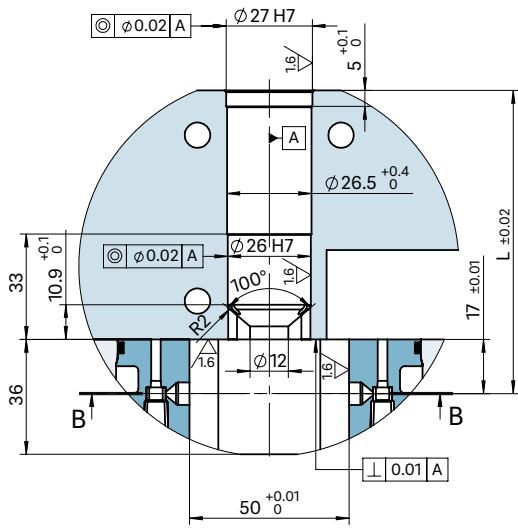
### NOTE

Power connector CMT and thermocouple connector CMLK are to be ordered separately.

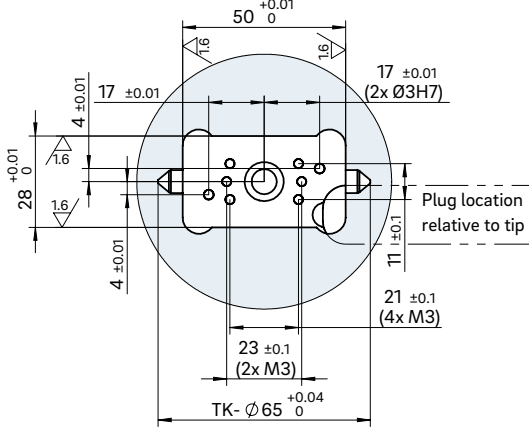




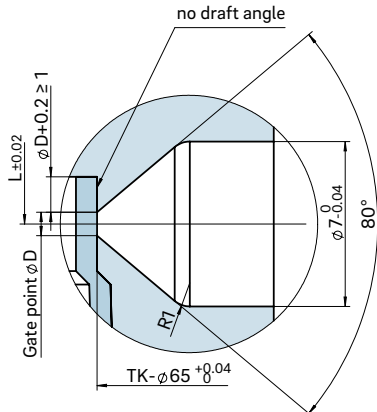
**INSTALLATION**



View B-B for fastening screw thread and tip distances

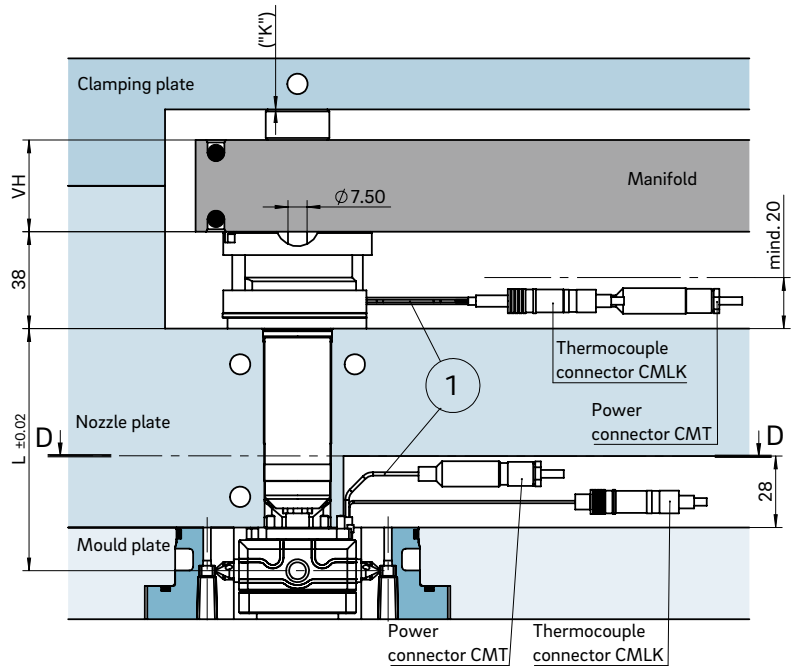


Gate point geometry

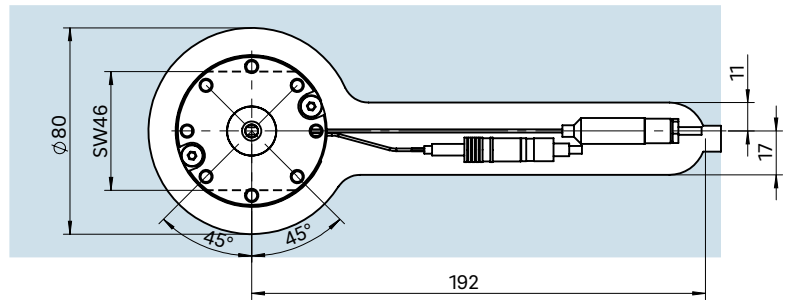


The size "K" required for heat expansion is to be ensured by grinding the pressure pads (12 + 0.1 mm)! Determine the difference between the height of the manifold system and the height of the frame plate when installed! ΔT specifies the temperature differential between the processing temperature and the mould temperature!

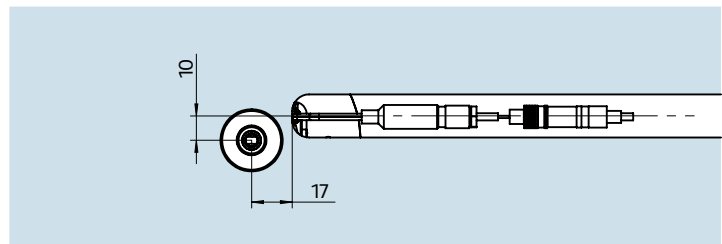
| VH    | ΔT (°C) | 100   | 150   | 200   | 250   | 300   | 350   |
|-------|---------|-------|-------|-------|-------|-------|-------|
| 36 mm | K (mm)  | 0.021 | 0.059 | 0.098 | 0.137 | 0.177 | 0.217 |
| 46 mm | K (mm)  | 0.033 | 0.078 | 0.124 | 0.170 | 0.218 | 0.264 |
| 56 mm | K (mm)  | 0.046 | 0.097 | 0.150 | 0.203 | 0.258 | 0.311 |



Example Cutout for nozzle head, power and thermocouple plug connections



View D-D cutout for power and thermocouple plug connections of the sub-manifold



① Power and thermocouple plug connections in this area can only be bent once; minimum radius: R8

SW = flat area on nozzle head



# OktaFlow<sup>®</sup> radial ORT45

Multi-drop hot runner nozzle  
radial version for side gating

## TECHNICAL DATA

### 80HT

Melt channel Ød 7.5 mm

Operating voltage 230 V<sub>AC</sub> \*

Nominal length of the nozzle (L) in mm

|    |    |     |
|----|----|-----|
| 60 | 90 | 130 |
| ■  | ■  | ■   |

### ORT45

Quantity of tips 1/2/4/8

Operating voltage 230 V<sub>AC</sub> \*

Contact us for other nozzle lengths!

\*Volts alternating current

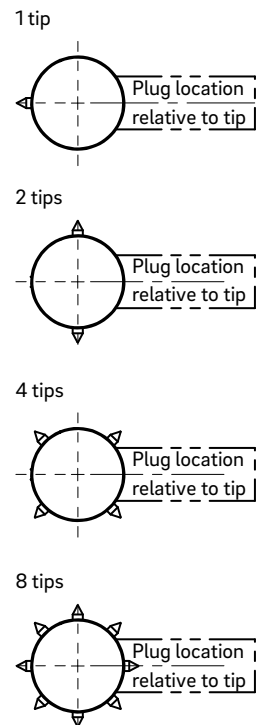
■ available

## NOTE

Power connector CMT and thermocouple connector CMLK are to be ordered separately.

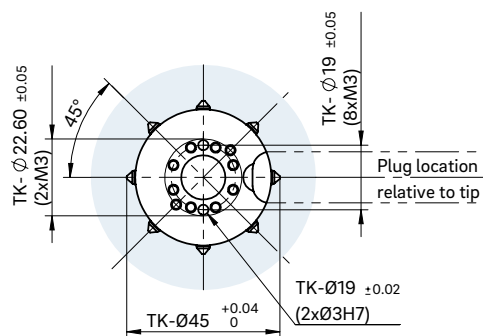


## PLUG LOCATION RELATIVE TO TIP



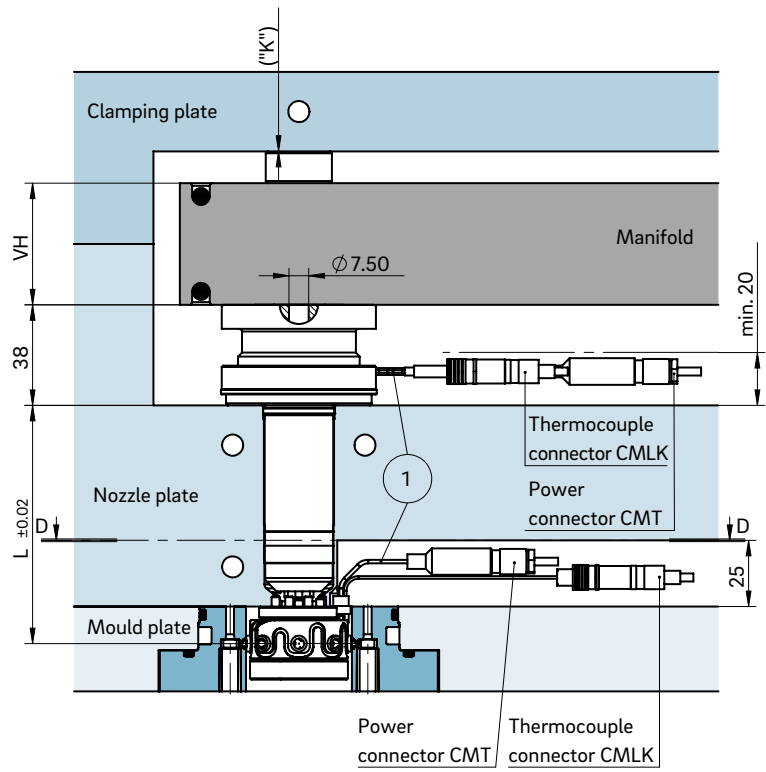
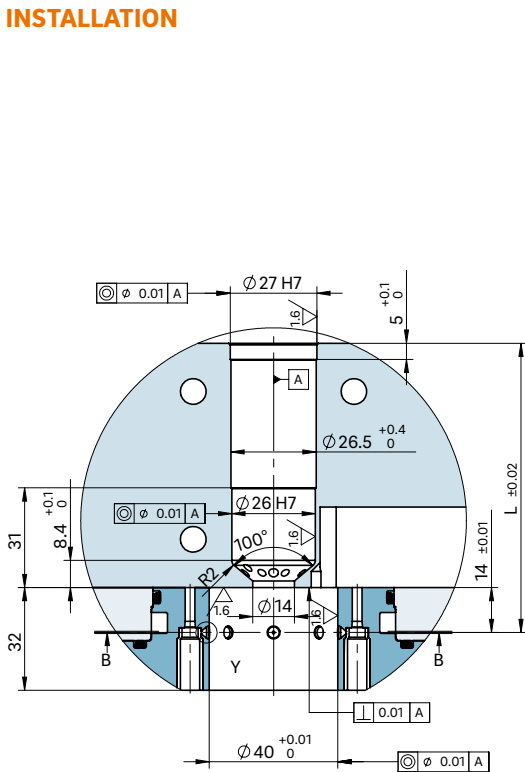
View B-B

Fastening screw thread and tip distance

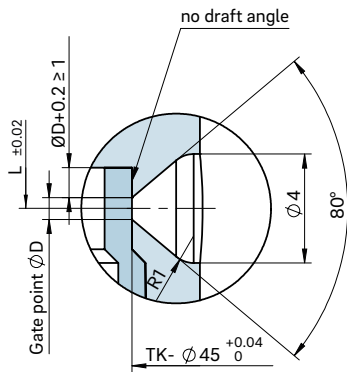




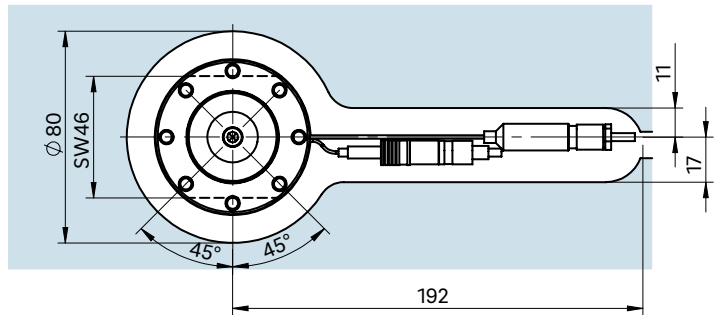
**INSTALLATION**



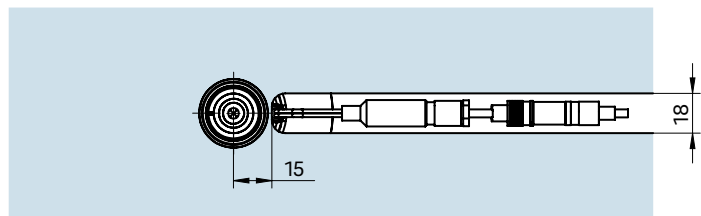
**Gate point geometry**



**Example Cutout for nozzle head, power and thermocouple plug connections**



**View D-D cutout for power and thermocouple plug connections of the sub-manifold**



The size "K" required for heat expansion is to be ensured by grinding the pressure pads (12 + 0.1 mm)! Determine the difference between the height of the manifold system and the height of the frame plate when installed! ΔT specifies the temperature differential between the processing temperature and the mould temperature!

| VH    | ΔT (°C) | 100   | 150   | 200   | 250   | 300   | 350   |
|-------|---------|-------|-------|-------|-------|-------|-------|
| 36 mm | K (mm)  | 0.021 | 0.059 | 0.098 | 0.137 | 0.177 | 0.217 |
| 46 mm | K (mm)  | 0.033 | 0.078 | 0.124 | 0.170 | 0.218 | 0.264 |
| 56 mm | K (mm)  | 0.046 | 0.097 | 0.150 | 0.203 | 0.258 | 0.311 |

- ① Power and thermocouple plug connections in this area can only be bent once; minimum radius: R8
- SW = flat area on nozzle head



# OktaFlow<sup>®</sup> radial ORT58

Multi-drop hot runner nozzle  
radial version for side gating

## TECHNICAL DATA

### 80HT

Melt channel Ød 7.5 mm

Operating voltage 230 V<sub>AC</sub> \*

Nominal length of the nozzle (L) in mm

|                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| 65                       | 95                       | 135                      |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

### ORT58

Quantity of tips 1 / 2 / 4 / 8

Operating voltage 230 V<sub>AC</sub> \*

Contact us for other nozzle lengths!

\*Volts alternating current

on request

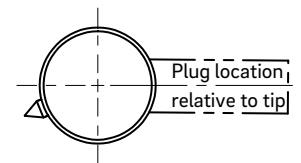
## NOTE

Power connector CMT and thermocouple connector CMLK are to be ordered separately.

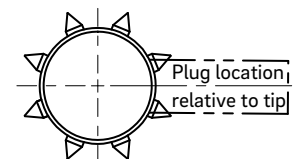
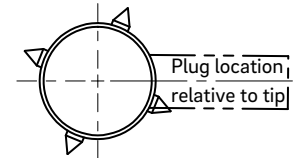
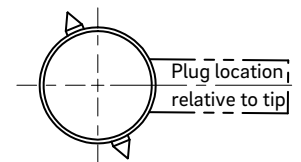


## PLUG LOCATION RELATIVE TO TIP

1 tip

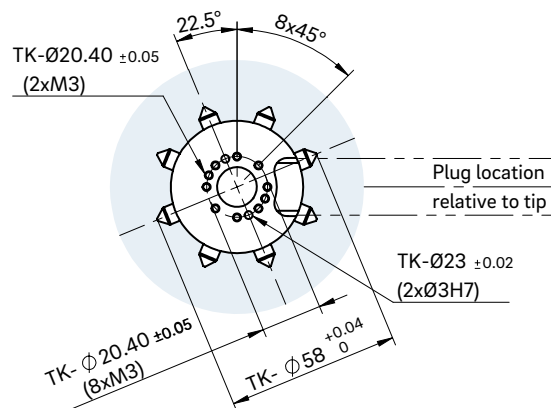


2 tips



View B-B

Fastening screw thread and tip distance







# OktaFlow<sup>®</sup> radial ORT65

Multi-drop hot runner nozzle  
radial version for side gating

## TECHNICAL DATA

### 80HT

Melt channel Ød 7.5 mm

Operating voltage 230 V<sub>AC</sub> \*

Nominal length of the nozzle (L) in mm

|    |    |     |
|----|----|-----|
| 65 | 95 | 135 |
| ■  | ■  | ■   |

### ORT65

Quantity of tips 1/2/4/8

Operating voltage 230 V<sub>AC</sub> \*

Contact us for other nozzle lengths!

\*Volts alternating current

■ available

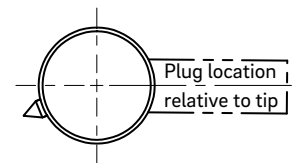
## NOTE

Power connector CMT and thermocouple connector CMLK are to be ordered separately.

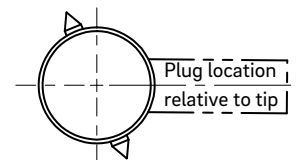


## PLUG LOCATION RELATIVE TO TIP

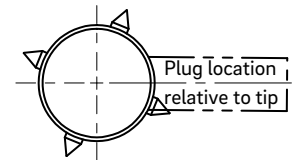
1 tip



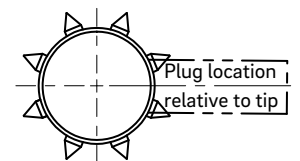
2 tips



4 tips

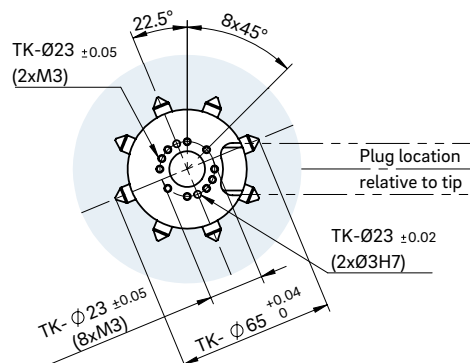


8 tips



View B-B

Fastening screw thread and tip distance







# 18LHF

Multi-drop hot runner nozzle for side gating under 90°, without cold slugs, with thick-film heating element (BlueFlow®)

## TECHNICAL DATA

### 18LHF

Melt channel Ød 4.8 mm

Operating voltage 230 V<sub>AC</sub> \*

Quantity of tips 1/2/4

Nominal length of the nozzle (L) in mm

|    |    |     |
|----|----|-----|
| 60 | 80 | 100 |
| ■  | ■  | ■   |

\*Volts alternating current

■ available

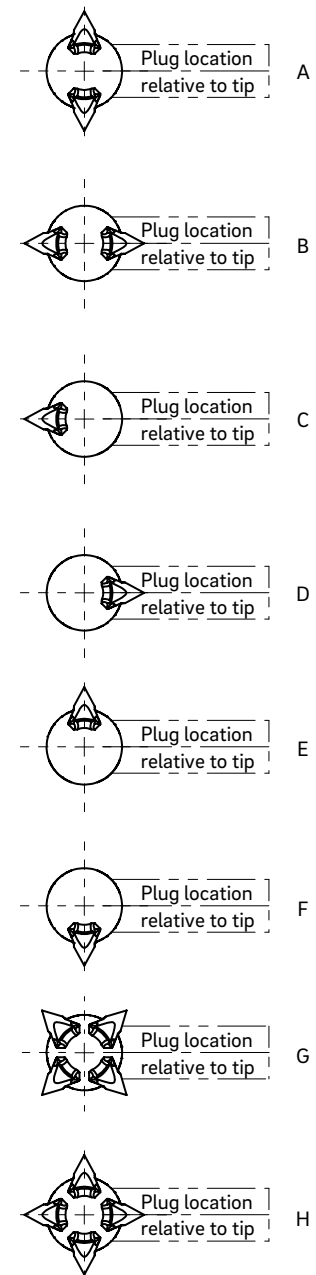
## NOTE

Power connector CHF and thermocouple connector CMLK are to be ordered separately.

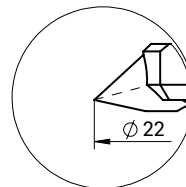
Design II is used in applications with filled materials, with a gate diameter ØAP >1.3 mm.



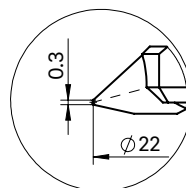
## PLUG LOCATION RELATIVE TO TIP



Tip design I



Tip design II



**WEBCODE**  
42040





# 22LHT

Multi-drop hot runner nozzle for side gating under 90°, without cold slugs, with conventional heating element

## TECHNICAL DATA

### 22LHT

Melt channel Ød 4.8 mm

Quantity of tips 1/2/4

Operating voltage 230 V<sub>AC</sub>\*

Nominal length of the nozzle (L) in mm

|    |    |     |
|----|----|-----|
| 60 | 80 | 100 |
| ■  | ■  | ■   |

\*Volts alternating current

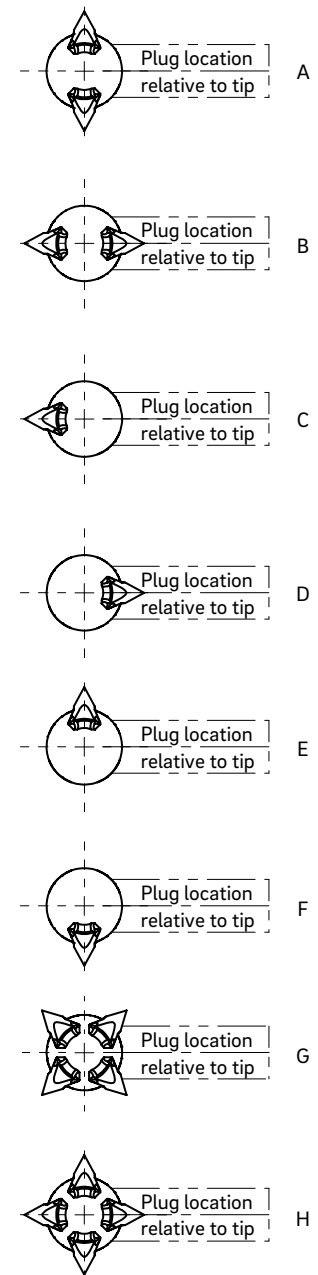
■ available

## NOTE

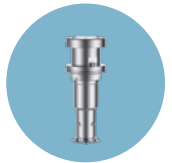
Power connector CMT and thermocouple connector CMLK are to be ordered separately.



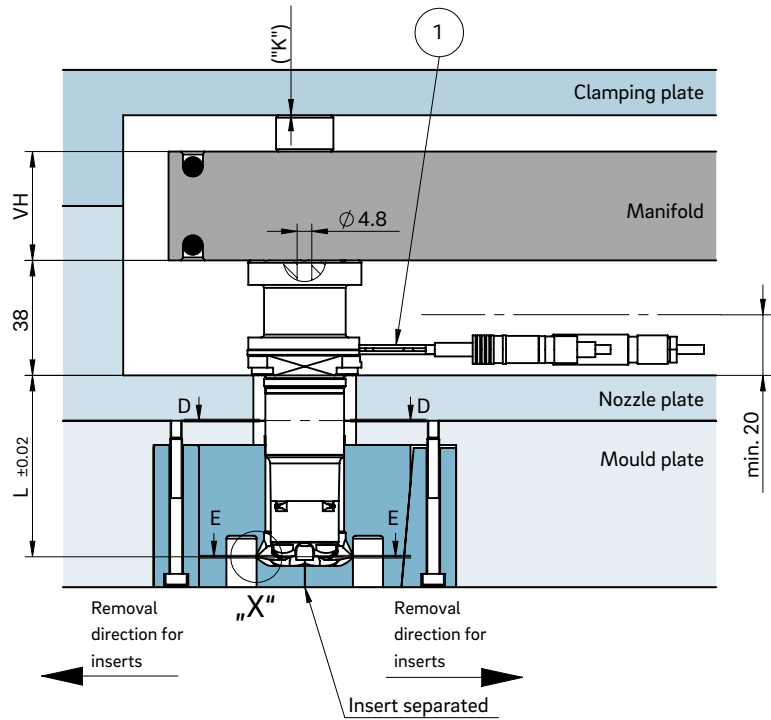
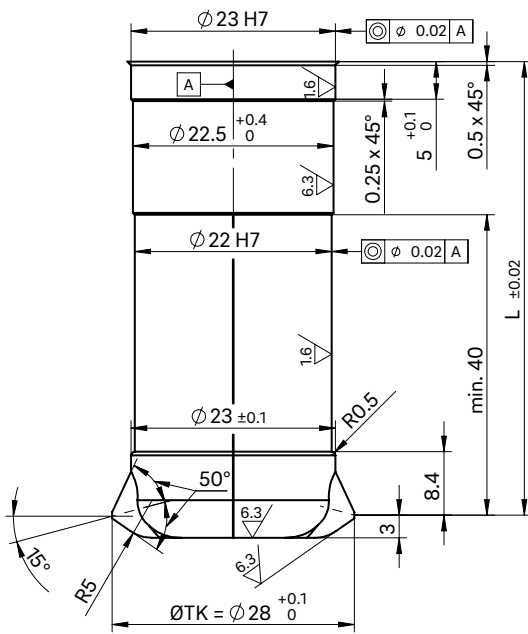
## PLUG LOCATION RELATIVE TO TIP



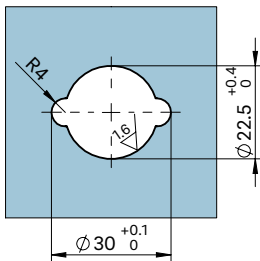
WEBCODE  
42050



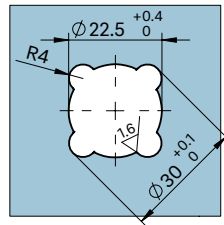
**INSTALLATION**



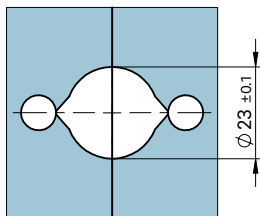
View D-D for two nozzle tips



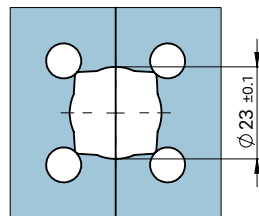
View D-D for four nozzle tips



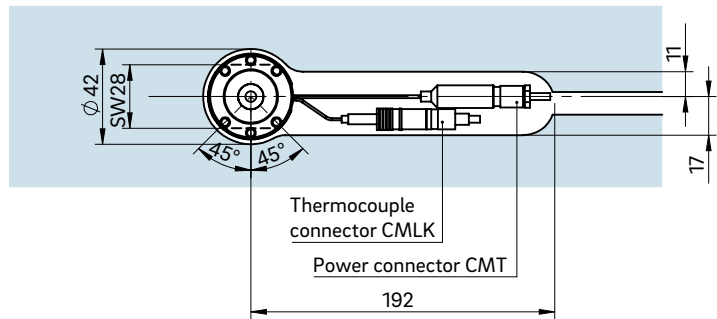
View E-E for two nozzle tips



View E-E for four nozzle tips

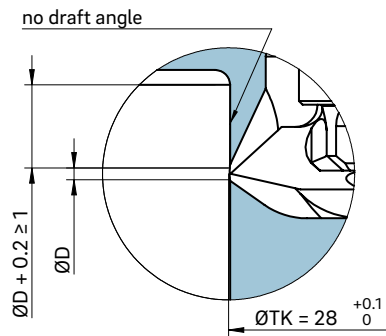


Example cutout for nozzle head, power and thermocouple plug connections

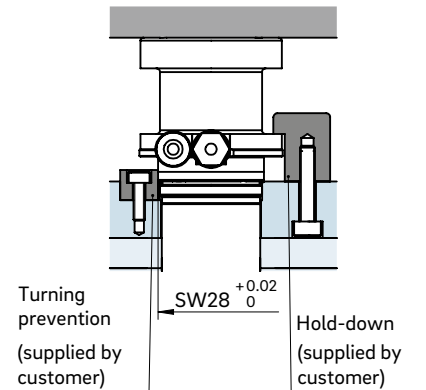


① Thermocouple plug connection in this area can only be bent once; minimum radius: R8  
SW = flat area on nozzle head

Detail "X"



Turning prevention



The size "K" required for heat expansion is to be ensured by grinding the pressure pads (12 + 0.1 mm)! Determine the difference between the height of the manifold system and the height of the clamping plate when installed! ΔT specifies the temperature differential between the processing temperature and the mould temperature!

| VH    | ΔT (°C) | 100   | 150   | 200   | 250   | 300   | 350   |
|-------|---------|-------|-------|-------|-------|-------|-------|
| 36 mm | K (mm)  | 0.021 | 0.059 | 0.098 | 0.137 | 0.177 | 0.217 |
| 46 mm | K (mm)  | 0.033 | 0.078 | 0.124 | 0.170 | 0.218 | 0.264 |
| 56 mm | K (mm)  | 0.046 | 0.097 | 0.150 | 0.203 | 0.258 | 0.311 |

To prevent open jet formations, injection should be carried out against a core, for example.



# 26LHT

Multi-drop hot runner nozzle for side gating under 90°, without cold slugs, with conventional heating element

## TECHNICAL DATA

### 26LHT

Melt channel Ød 6.0 mm

Quantity of tips 1/2/4

Operating voltage 230 V<sub>AC</sub>\*

Nominal length of the nozzle (L) in mm

|    |    |     |
|----|----|-----|
| 60 | 80 | 100 |
| ■  | ■  | ■   |

\*Volts alternating current

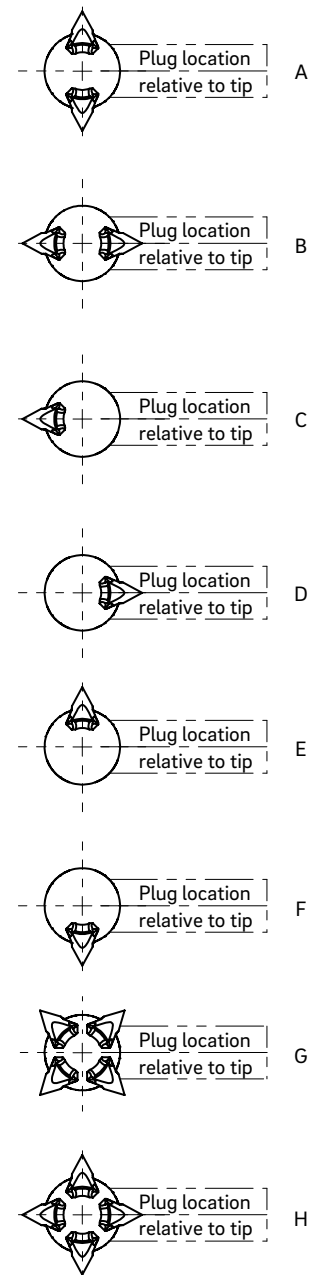
■ available

## NOTE

Power connector CMT and thermocouple connector CMLK are to be ordered separately.

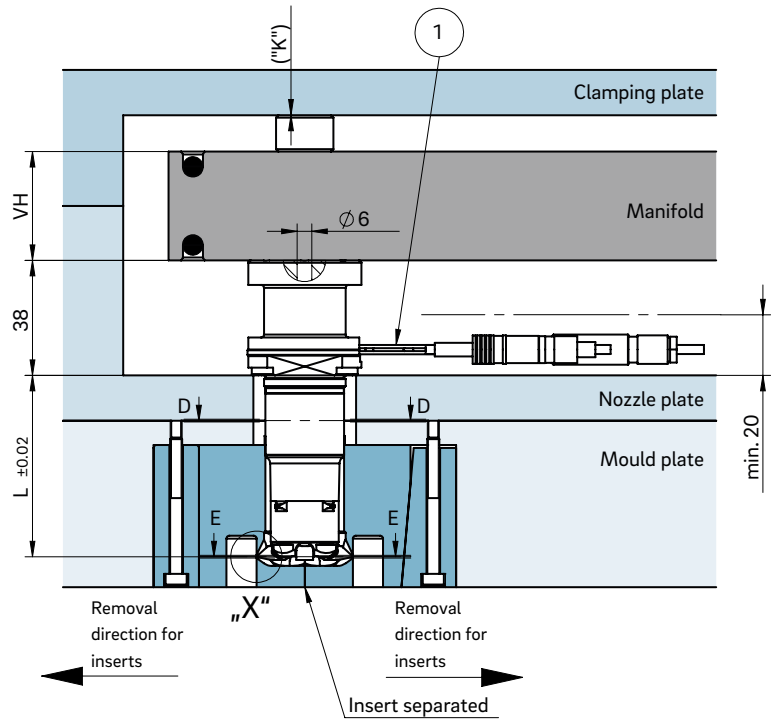
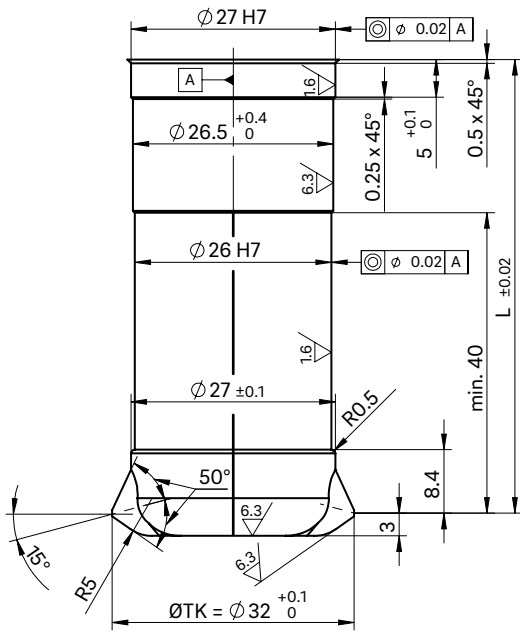


## PLUG LOCATION RELATIVE TO TIP

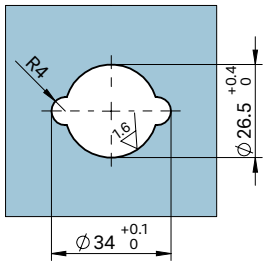




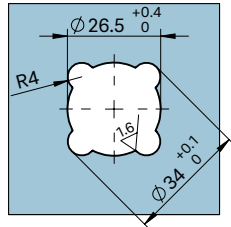
**INSTALLATION**



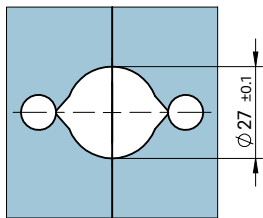
View D-D for two nozzle tips



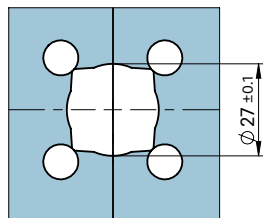
View D-D for four nozzle tips



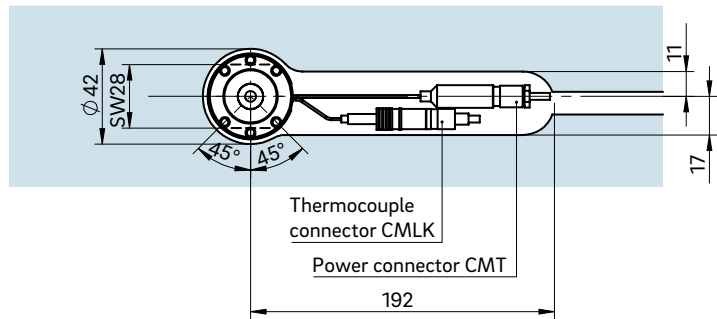
View E-E for two nozzle tips



View E-E for four nozzle tips

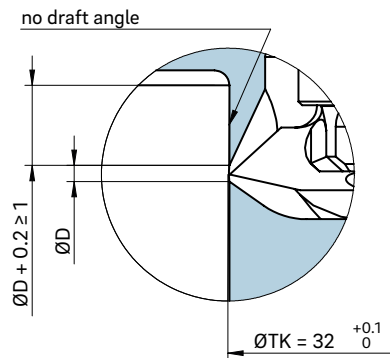


Example cutout for nozzle head, power and thermocouple plug connections

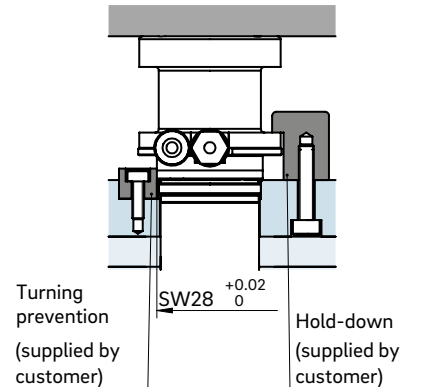


- ① Power and thermocouple plug connections in this area can only be bent once; minimum radius: R8  
SW = flat area on nozzle head

Detail "D"



Turning prevention



The size "K" required for heat expansion is to be ensured by grinding the pressure pads (12 + 0.1 mm)! Determine the difference between the height of the manifold system and the height of the clamping plate when installed! ΔT specifies the temperature differential between the processing temperature and the mould temperature!

| VH    | ΔT (°C) | 100   | 150   | 200   | 250   | 300   | 350   |
|-------|---------|-------|-------|-------|-------|-------|-------|
| 36 mm | K (mm)  | 0.021 | 0.059 | 0.098 | 0.137 | 0.177 | 0.217 |
| 46 mm | K (mm)  | 0.033 | 0.078 | 0.124 | 0.170 | 0.218 | 0.264 |
| 56 mm | K (mm)  | 0.046 | 0.097 | 0.150 | 0.203 | 0.258 | 0.311 |

To prevent open jet formations, injection should be carried out against a core, for example.





## 4.3 Connecting elements

### HEATED ADAPTERS

Page



#### AHJ5/6

Heated adapter for using LHF/LHT nozzles as a single nozzle

20



#### AHJ8

Heated adapter for use of OktaFlow nozzle type 8OHT as a single nozzle

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## Heated adapter type AHJ5/6

Heated adapter for using LHF/LHT nozzles as a single nozzle

### TECHNICAL DATA

#### AHJ5

**Operating voltage** 230 V<sub>AC</sub> \*

**Adapter** straight (G)  
radius (R)  
angle (W)

Can be used with nozzle type/Delivery times:

| Type | 18LHF | 22LHT | 26LHT |
|------|-------|-------|-------|
| AHJ5 | ■     | ■     |       |
| AHJ6 |       |       | ■     |

\*Volts alternating current

■ Short delivery time

### NOTE

Recommended for processing thermally sensitive plastics.

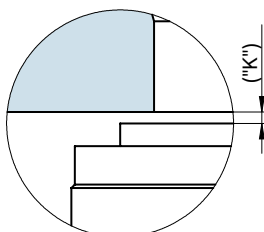
Using a heated adapter, the nozzle types specified above can also be used as single nozzles.

Specify the machine nozzle version when ordering.



| Heated adapter (mm) |     |     | Installation (mm)                                      |  |
|---------------------|-----|-----|--|--|
| Type                | Ød1 | Ød2 | A  | B  |
|                     |     |     | Strength class 12.9<br>(DIN EN ISO 4762)<br>Screw size | Strength class 12.9<br>(DIN EN ISO 4762)<br>Screw size |
| AHJ5                | 5.0 | 4.8 | 4 x M10 x ...  | 2 x M5 x 16  |
| AHJ6                | 6.0 | 6.0 | 4 x M12 x ...  | 2 x M5 x 16  |

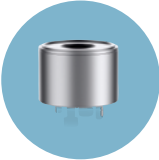
Detail "Z"



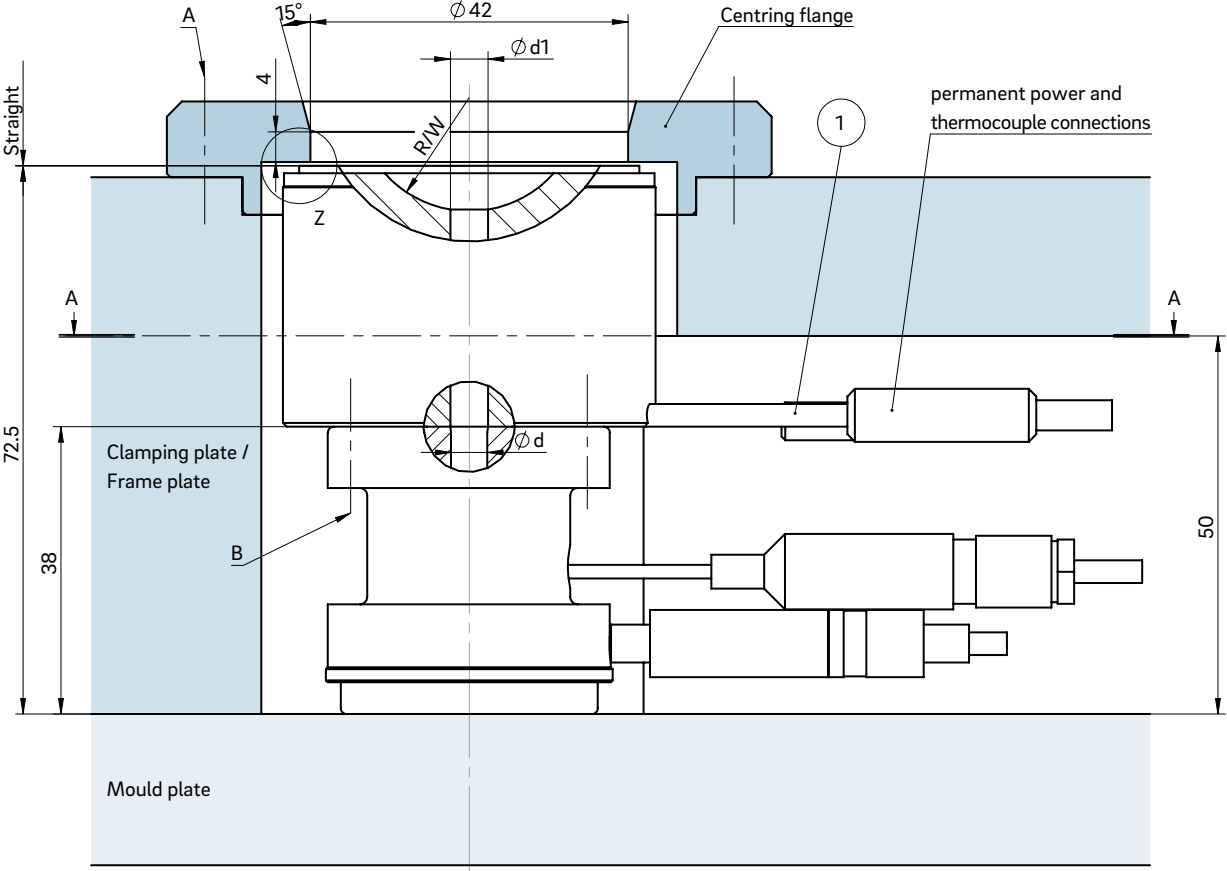
Dimension "K" required for heat expansion is to be ensured by grinding the locating ring! Determine the difference between the height of the nozzle (with adapter) and the height of the structure when installed!  $\Delta T$  specifies the temperature differential between the processing temperature and the mould temperature!

| $\Delta T$ (°C) | 100  | 150  | 200  | 250  | 300  | 350  |
|-----------------|------|------|------|------|------|------|
| K (mm)          | 0.06 | 0.08 | 0.09 | 0.11 | 0.13 | 0.16 |

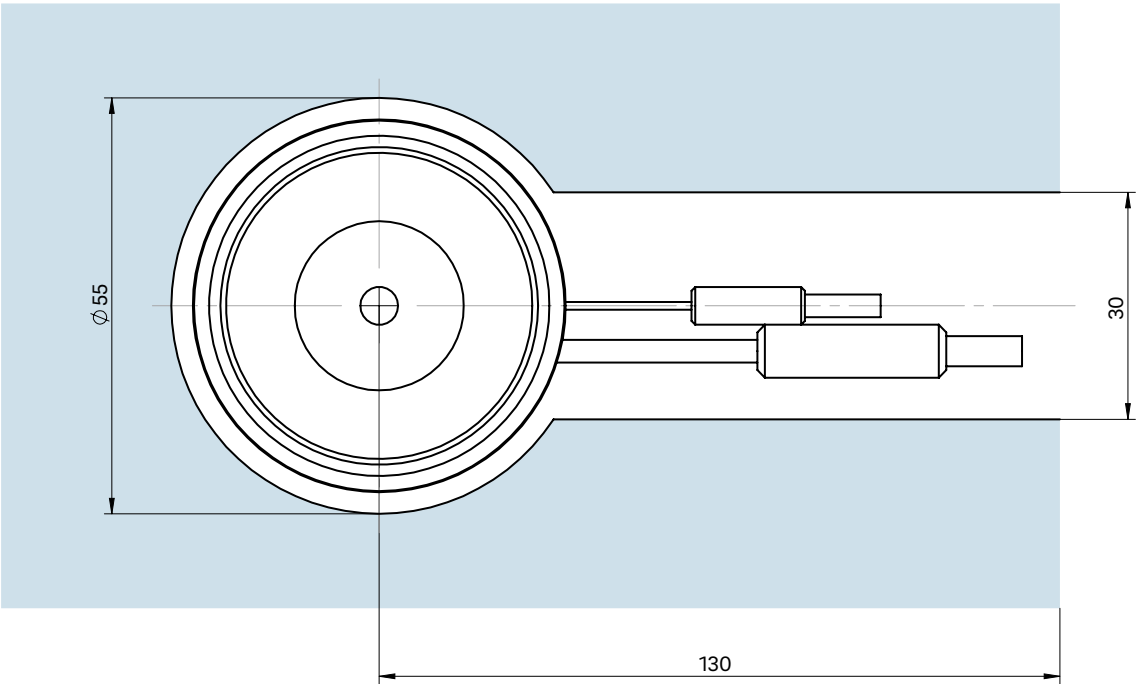
WEBCODE  
43010



INSTALLATION



Cross-section A-A: Cutout for heated adapter AHJ5



① Power and thermocouple plug connections in this area can be bent once; minimum radius: R8



## Heated adapter type AHJ8

Heated adapter for use of OktaFlow nozzle type 8OHT as a single nozzle

### TECHNICAL DATA

#### AHJ8

**Operating voltage** 230 V<sub>AC</sub> \*

**Adapter** straight (G)  
radius (R)  
angle (W)

Can be used with nozzle type/Delivery times:

| Type | 8OHT |
|------|------|
| AHJ8 | ■    |

\*Volts alternating current

■ Short delivery time

### NOTE

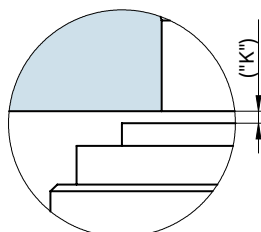
Recommended for processing thermally sensitive plastics.

Using a heated adapter, the nozzle types specified above can also be used as single nozzles.

Specify the machine nozzle version when ordering.



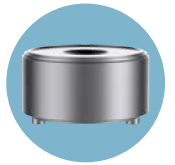
Detail "Z"



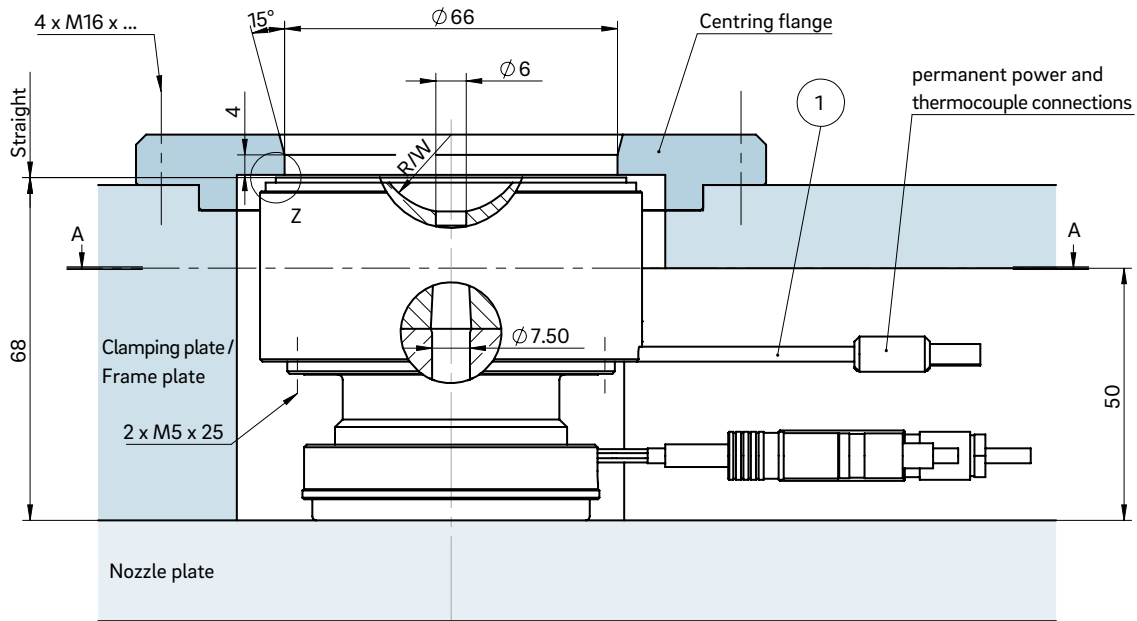
Dimension "K" required for heat expansion is to be ensured by grinding the locating ring! Determine the difference between the height of the nozzle (with adapter) and the height of the structure when installed!  $\Delta T$  specifies the temperature differential between the processing temperature and the mould temperature!

| $\Delta T$ (°C) | 100  | 150  | 200  | 250  | 300  | 350  |
|-----------------|------|------|------|------|------|------|
| K (mm)          | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.25 |

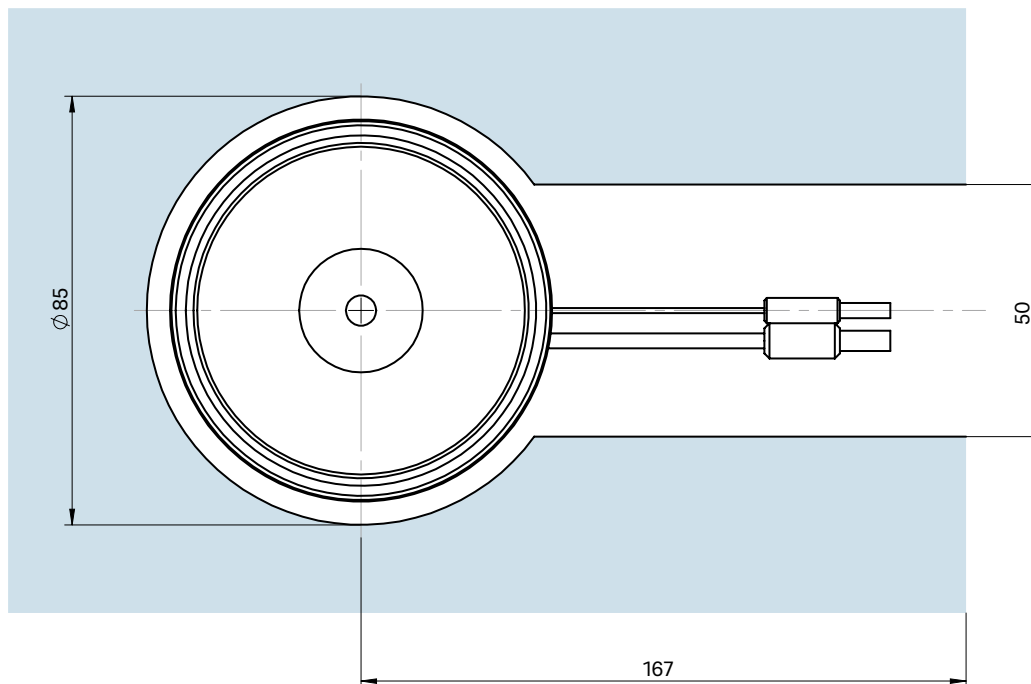
**WEBCODE**  
43020



## INSTALLATION



Cross-section A-A: Cutout for heated adapter AHJ8



① Power and thermocouple plug connections in this area can be bent once; minimum radius: R8