



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® hot runner nozzle, which enables up to eight tips to be used for each nozzle.





# FOR SIDE GATING: TYPE OKTAFLOW® 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® 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®

- Side gating under 90°
- Small cavity spacing
- High number of cavities
- O 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 contoller technology requirements



For side gating under 90  $^{\circ}$  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

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**4.1.**10



# OktaFlow® linear

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 or 8

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

#### AHJ8

Operating voltage  $230 \, V_{\Delta C}^*$ 

Adapter straight (G)/radius (R)/

angle (W)

#### Contact us for other nozzle lengths!

\*Volts alternating current

available

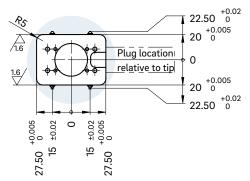
#### NOTE

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

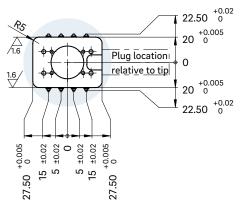




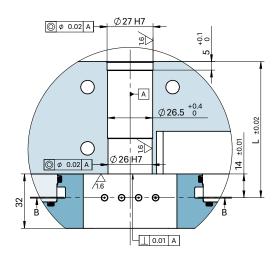
Tip distances for four tips

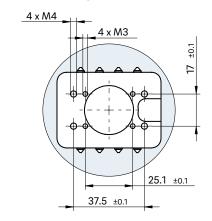


Tip distances for eight tips

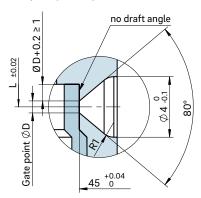






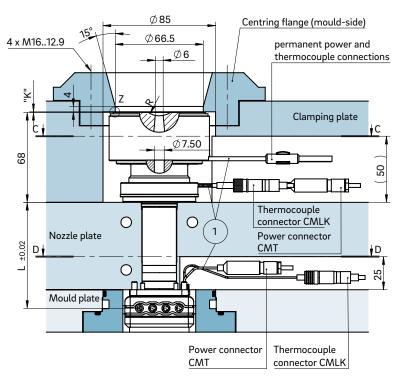


Gate point geometry

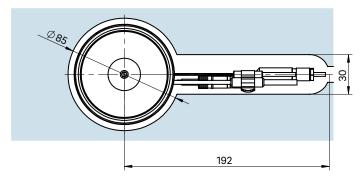


Dimension "K" required for heat expansion is to be ensured by grinding the location ring! Determine the difference between the height of the nozzle (with adapter) and the height of the structure when installed!  $\Delta T$  specifies the temperature differential between the processing temperature and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

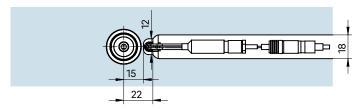
ΔT (°C)	100	150	200	250	300	350
K (mm)	0.04	0.08	0.12	0.16	0.20	0.25



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

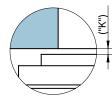


View D-D cutout for power and thermocouple plug connections of the sub-manifold



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

Detail "Z"





# OktaFlow® radial TK45

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 or 8 230 V<sub>AC</sub>\* **Operating voltage** 

#### AHJ8

Operating voltage  $230 \, V_{\Delta C}^*$ 

straight (G)/radius (R)/ Adapter

angle (W)

#### Contact us for other nozzle lengths!

\*Volts alternating current

available

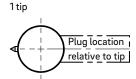
#### NOTE

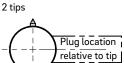
Power connector CMT and thermocouple connector CMLK are to be ordered separately.

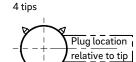


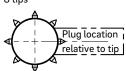


#### **PLUG LOCATION RELATIVE TO TIP**



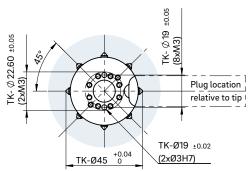




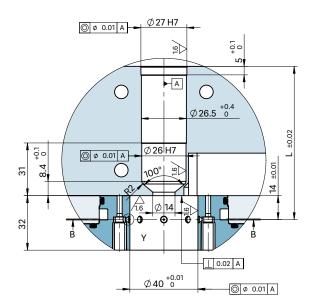




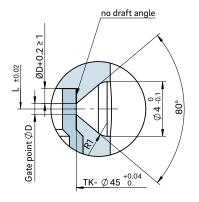
Fastening screw thread and tip distance

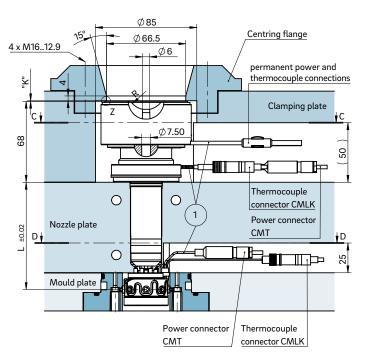




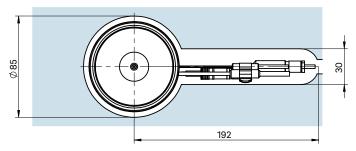


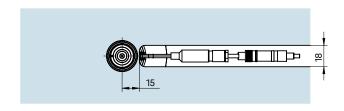
Gate point geometry





View C-C cutout for nozzle head, power and thermocouple plug connections  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ 

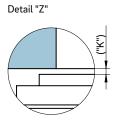




① Power and thermocouple plug connections in this area can only be bent once; minimum radius: R8

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!

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





# OktaFlow® radial TK65

Multi-drop hot runner nozzle radial version for side gating, with heated adapter

#### **TECHNICAL DATA**

#### **80HT**

 $\frac{\text{Melt channel Ød}}{\text{Operating voltage}} \quad 7.5 \text{ mm}$ 

Nominal length of the nozzle (L) in mm

65 95 135 ■ ■ ■

#### **ORT65**

Quantity of tips 1, 2, 4 or 8

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

#### AHJ8

Melt channel Ød 6 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

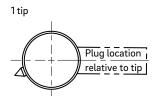
#### NOTE

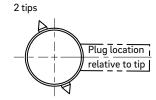
Power connector CMT and thermocouple connector CMLK are to be ordered separately.

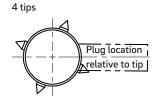


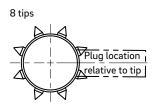


# PLUG LOCATION RELATIVE TO TIP

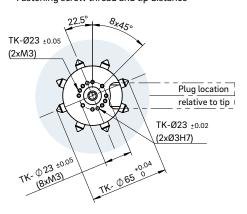




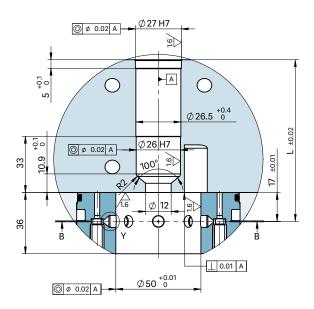




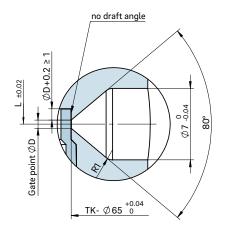
View B-B Fastening screw thread and tip distance

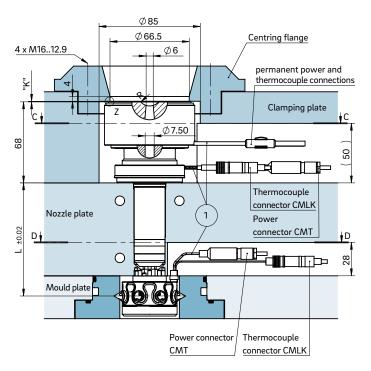




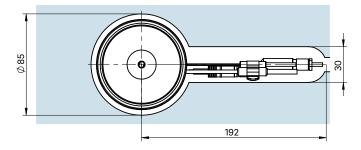


Gate point geometry

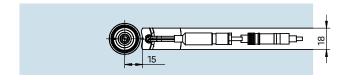




View C-C cutout for nozzle head, power and thermocouple plug connections



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!  $\Delta T$  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

Detail "Z"



# 18LHF

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

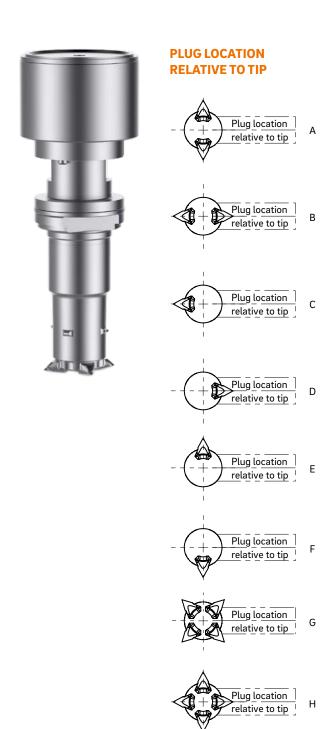
#### **TECHNICAL DATA** 18LHF Melt channel Ød 3.8 mm Operating voltage 230 V<sub>AC</sub>\* **Quantity of tips** 1, 2 or 4 Nominal length of the nozzle (L) in mm 60 80 100 AHJ5 Operating voltage 230 V<sub>AC</sub>\* straight (G)/radius (R)/ Adapter angle (W) \*Volts alternating current available

#### NOTE

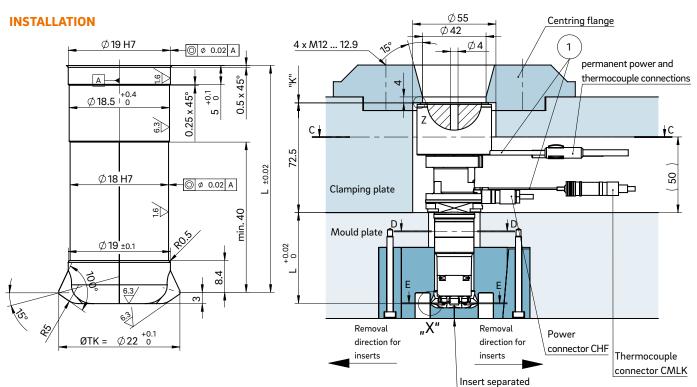
Power connector CHF and thermocouple connector CMLK are to be ordered separately.

BlueFlow® hot runner nozzle type 18LHF is not intended for sale or use in the USA or Canada!







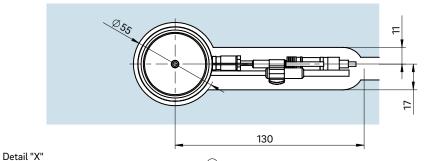


for two nozzle tips 18.5  $\emptyset$  26  $^{+0.1}_{0}$ 

View D-D for four nozzle tips

Ø18.5

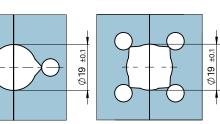
View C-C cutout for nozzle head, power and thermocouple plug connections



View E-E for two nozzle tips

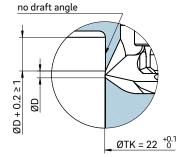
mould temperature!

View D-D



View E-E

for four nozzle tips

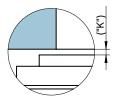


To prevent open jet formations, injection should be carried out against a core, for example.

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

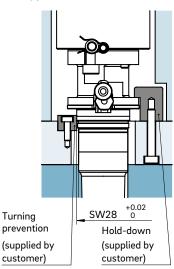
ΔT (°C)	100	150	200	250	300	350
K (mm)	0.06	0.08	0.09	0.11	0.13	0.16

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





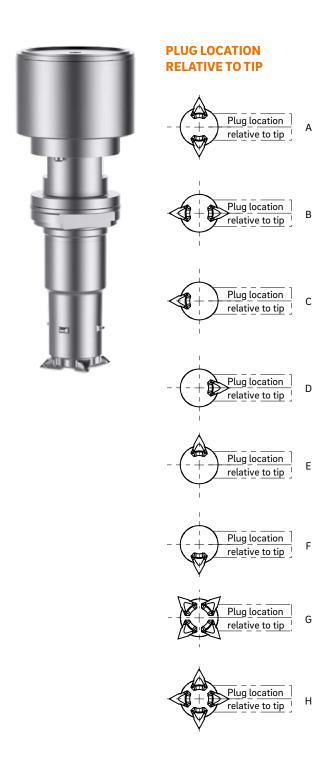
### **22LHT**

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 or 4 Nominal length of the nozzle (L) in mm 60 80 100 AHJ5 Operating voltage 230 V<sub>AC</sub>\* straight (G)/radius (R)/ Adapter angle (W) \*Volts alternating current available

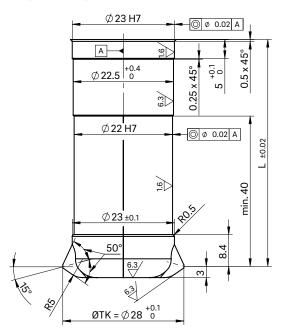
Power connector CMT and thermocouple connector CMLK are to be ordered separately.

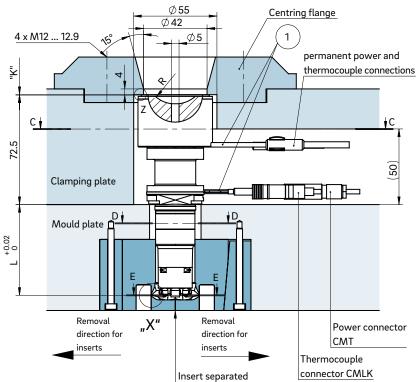




NOTE





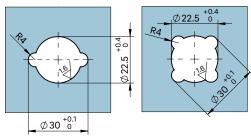


View D-D for two nozzle tips

Ø 22.5

View D-D for four nozzle tips







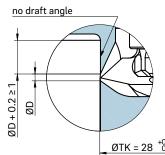
Ø 23 ±0.1 Ø 23 ±0.1

View E-E for four nozzle tips



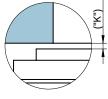
Dimension "K" required for heat expansion is to be ensured by grinding the location ring! Determine the difference between the height of the nozzle (with adapter) and the height of the structure when installed!  $\Delta T$  specifies the temperature differential between the processing temperature and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

ΔT (°C)	100	150	200	250	300	350
K (mm)	0.06	0.08	0.09	0.11	0.13	0.16



Detail "Z"

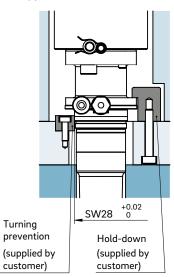
Detail "X"



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

#### Turning prevention

192





### **26LHT**

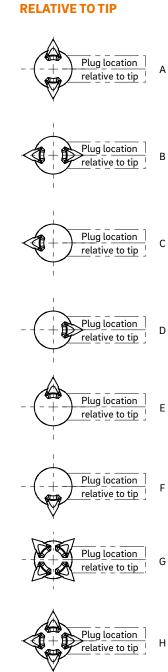
Multi-drop hot runner nozzle for side gating under 90°, without cold slugs, with conventional heating element and heated adapter

#### **TECHNICAL DATA 26LHT** Melt channel Ød 6.0 mm Operating voltage 230 V<sub>AC</sub>\* **Quantity of tips** 1, 2 or 4 Nominal length of the nozzle (L) in mm 60 80 100 AHJ5 Operating voltage 230 V<sub>AC</sub>\* straight (G)/radius (R)/ Adapter angle (W) \*Volts alternating current available

Power connector CMT and thermocouple

connector CMLK are to be ordered separately.



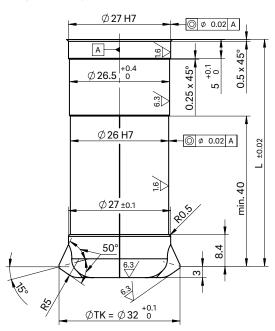


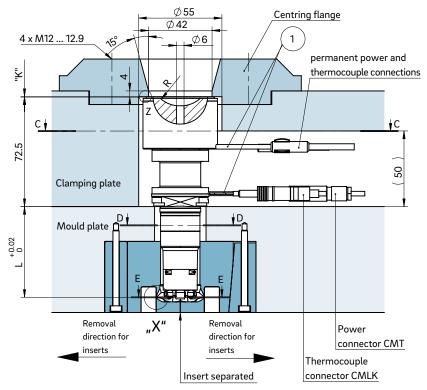
**PLUG LOCATION** 



NOTE







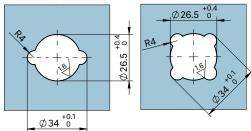
View D-D for two nozzle tips

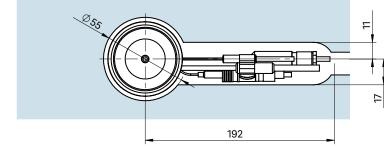
Ø 26.5

View D-D

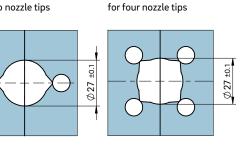
for four nozzle tips

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



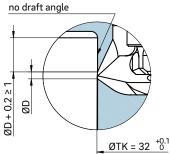


View E-E for two nozzle tips



View E-E

Detail "X"



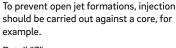
can only be bent once; minimum radius: R8 SW = flat area on nozzle head

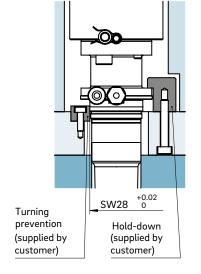
1 Thermocouple plug connection in this area

Turning prevention

Detail "Z" 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!

mouta te	inperace	116.				
ΔT (°C)	100	150	200	250	300	350
K (mm)	0.06	0.08	0.09	0.11	0.13	0.16





4.1.70



# 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 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)/

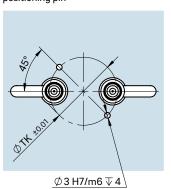
angle (W)

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

Nominal length of the nozzle (L): 20 mm



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

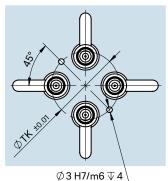


3-drop – cutout for nozzle and centring/ positioning pin



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



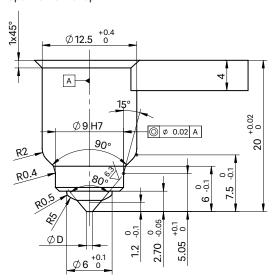


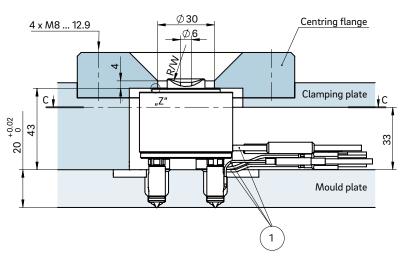


<sup>\*</sup>Volts alternating current

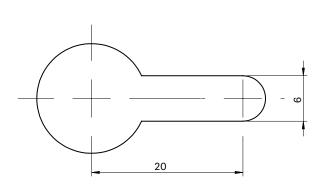


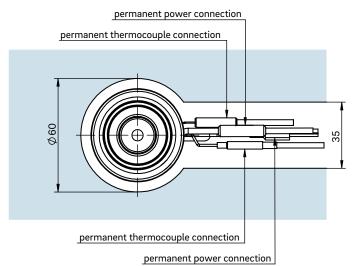
#### Open nozzle with tip





Cross-section C-C: Cutout for nozzle head, power and thermocouple plug connections  $% \left( 1\right) =\left( 1\right) \left( 1\right$ 



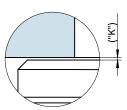


① Power and thermocouple plug connections in this area can only be bent once; minimum radius: R8

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!

ΔT (°C)	100	150	200	250	300	350
K (mm)	0.01	0.03	0.05	0.07	0.1	0.11

Detail "Z"





# 3SGT 1-drop

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

#### **TECHNICAL DATA**

#### 3SGT 1-drop

Melt channel Ød 3 mm

Adapter straight (G)/radius (R)/

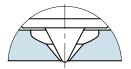
angle (W)

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

Nominal length of the nozzle (L): 20 mm



Version "Tip" Antechamber version A

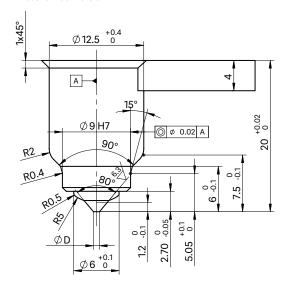


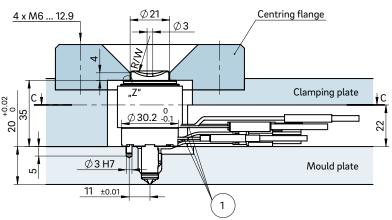


<sup>\*</sup>Volts alternating current

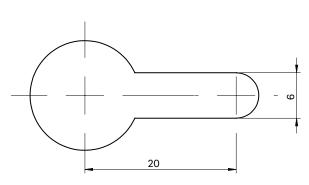


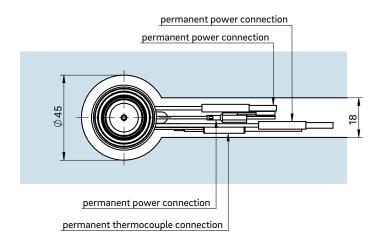
Open nozzle with tip Nozzle type version C Antechamber version A





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

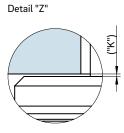




① Power and thermocouple plug connections in this area can only be bent once; minimum radius: R8

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!

ΔT (°C)	100	150	200	250	300	350
K (mm)	0.02	0.03	0.04	0.06	0.07	0.08



# 4.2 Multi-drop hot runner nozzles as system nozzles

	Page
OktaFlow® linear Multi-drop hot runner nozzle linear version for side gating	20
OktaFlow® radial TK45 Multi-drop hot runner nozzle radial version for side gating	30
OktaFlow® radial TK65 Multi-drop hot runner nozzle radial version for side gating	40
<b>18LHF</b> Multi-drop hot runner nozzle for side gating under 90°, without cold slugs, with thick-film heating element (BlueFlow®)	50
<b>22LHT</b> Multi-drop hot runner nozzle for side gating under 90 °, without cold slugs, with conventional heating element	60
<b>26LHT</b> Multi-drop hot runner nozzle for side gating under 90 °, without cold slugs, with conventional heating element	70

07/18 We reserve the right to make technical changes. 4.2.10



# OktaFlow® linear

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 or 8

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

Contact us for other nozzle lengths!

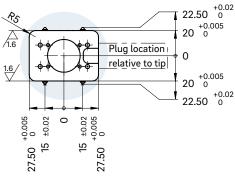
\*Volts alternating current

available

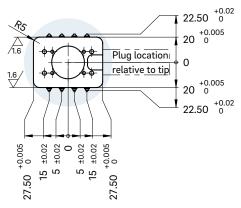
#### NOTE

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



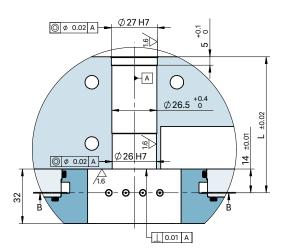


Tip distance for eight tips

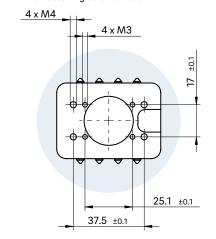




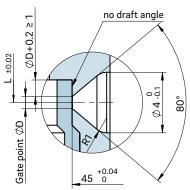




View B-B for fastening screw thread

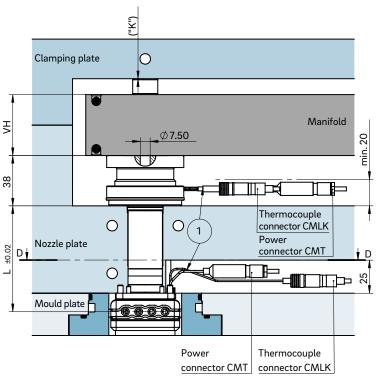


Gate point geometry

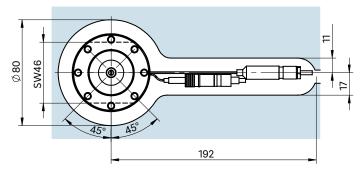


The size "K" required for heat expansion is to be ensured by grinding the pressure pads (12 + 0.1 mm)! Determine the difference between the height of the manifold system and the height of the frame plate when installed!  $\Delta T$  specifies the temperature differential between the processing temperature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

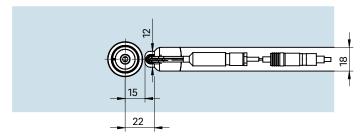
VH	ΔT (°C)	100	150	200	250	300	350
36 mm	K (mm)	0.021	0.059	0.098	0.137	0.177	0.217
46 mm	K (mm)	0.033	0.078	0.124	0.170	0.218	0.264
56 mm	K (mm)	0.046	0.097	0.150	0.203	0.258	0.311



Example Cutout for nozzle head, power and thermocouple plug connections  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ 



 $\label{lem:couple} \mbox{ View D-D cutout for power and thermocouple plug connections of the sub-manifold }$ 



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

SW = flat area on nozzle head



# OktaFlow® radial TK45

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**

1, 2, 4 or 8 **Quantity of tips** 

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

Contact us for other nozzle lengths!

\*Volts alternating current

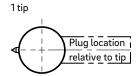
available

#### NOTE

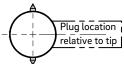
Power connector CMT and thermocouple connector CMLK are to be ordered separately.



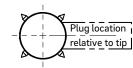
#### **PLUG LOCATION RELATIVE TO TIP**



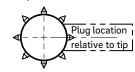
2 tips



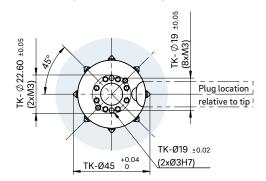
4 tips



8 tips

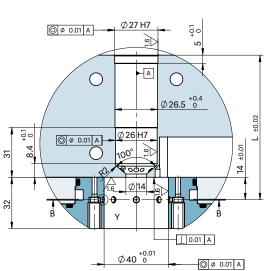


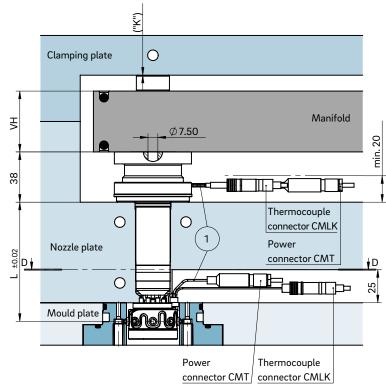




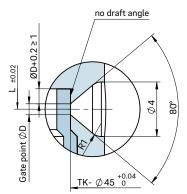




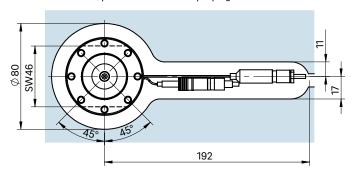




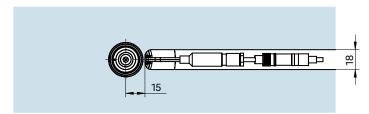
#### Gate point geometry



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!  $\Delta T$  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® radial TK65

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 or 8

Operating voltage  $230 \, V_{AC}^*$ 

#### Contact us for other nozzle lengths!

\*Volts alternating current

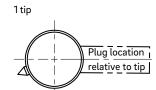
available

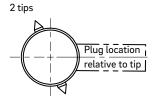
#### NOTE

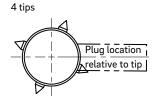
Power connector CMT and thermocouple connector CMLK are to be ordered separately.

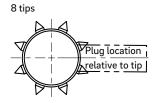


# PLUG LOCATION RELATIVE TO TIP

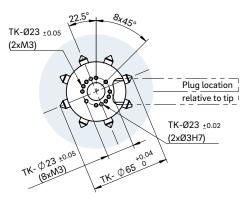






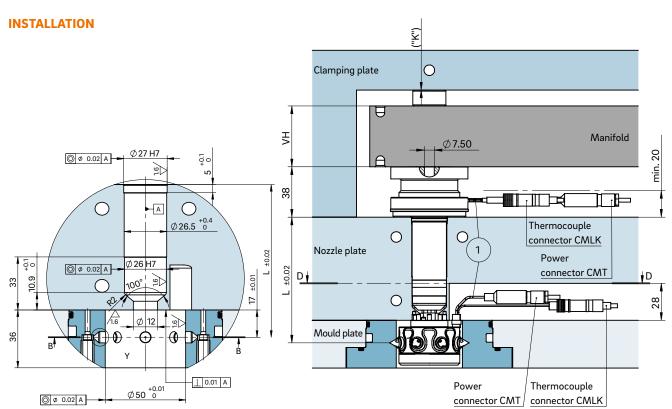


View B-B Fastening screw thread and tip distance

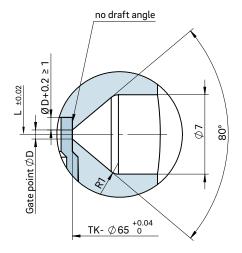




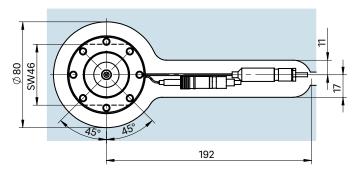




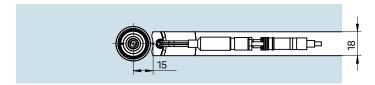
Gate point geometry



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!  $\Delta T$  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



# 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 3.8 mm Operating voltage 230 V<sub>AC</sub>\* Quantity of tips 1, 2 or 4 Nominal length of the nozzle (L) in mm 60 80 100 \*Volts alternating current

#### NOTE

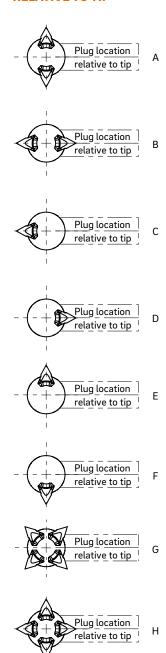
available

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

BlueFlow® hot runner nozzle type 18LHF is not intended for sale or use in the USA or Canada!

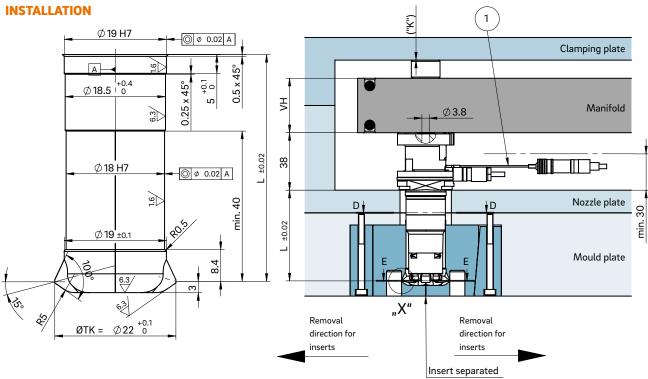


# PLUG LOCATION RELATIVE TO TIP









View D-D for two nozzle tips

View D-D for four nozzle tips

Ø18.5 +0.4

Ø18.5 +0.4

Ø18.5 +0.4

Ø18.5 +0.4

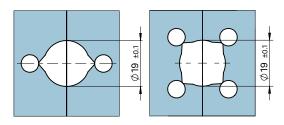
Ø18.5 +0.4

Ø18.5 +0.4

View E-E for two nozzle tips

 $\emptyset$  26  $^{+0.1}_{0}$ 

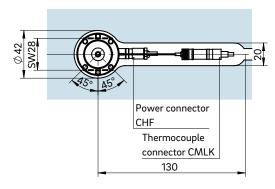
View E-E for four nozzle tips



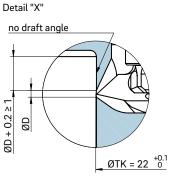
The size "K" required for heat expansion is to be ensured by grinding the pressure pads (12 + 0.1 mm)! Determine the difference between the height of the manifold system and the height of the clamping plate when installed!  $\Delta T$  specifies the temperature differential between the processing temperature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

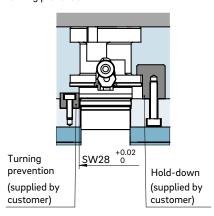


① Thermocouple plug connection in this area can only be bent once; minimum radius: R8 SW = flat area on nozzle head



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

Turning prevention





# **22LHT**

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

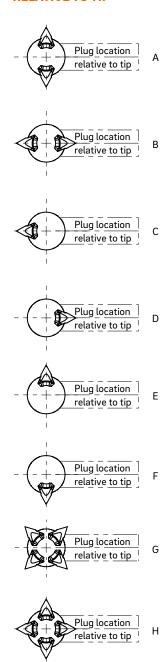
# TECHNICAL DATA 22LHT Melt channel Ød 4.8 mm Quantity of tips 1, 2 or 4 Operating voltage 230 V<sub>AC</sub>\* Nominal length of the nozzle (L) in mm 60 80 100 \*Volts alternating current available

#### **NOTE**

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



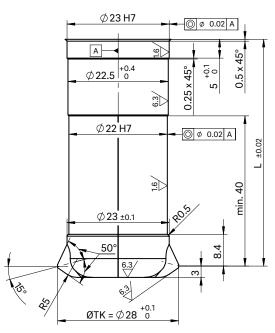
# PLUG LOCATION RELATIVE TO TIP

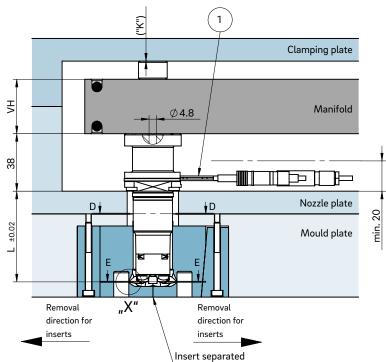






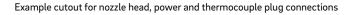


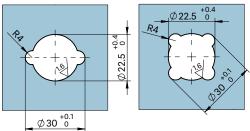




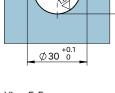
View D-D for two nozzle tips

View D-D for four nozzle tips

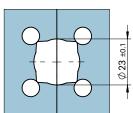




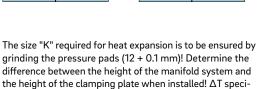
Ø 23 ±0.1



View E-E for two nozzle tips

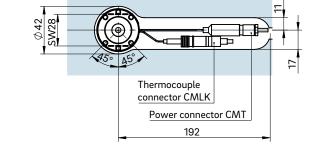


View E-E for four nozzle tips

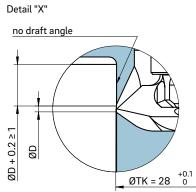


VH	ΔT (°C)	100	150	200	250	300	350
36 mm	K (mm)	0.021	0.059	0.098	0.137	0.177	0.217
46 mm	K (mm)	0.033	0.078	0.124	0.170	0.218	0.264
56 mm	K (mm)	0.046	0.097	0.150	0.203	0.258	0.311

fies the temperature differential between the processing

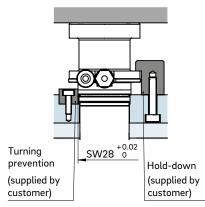


① Thermocouple plug connection in this area can only be bent once; minimum radius: R8 SW = flat area on nozzle head



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

Turning prevention



temperature and the mould temperature!



# **26LHT**

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

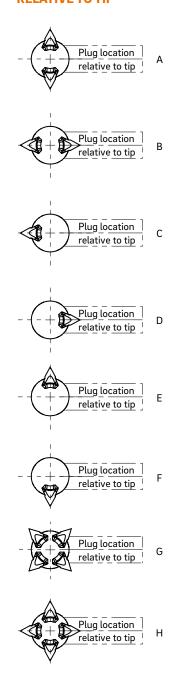
# TECHNICAL DATA 26LHT Melt channel Ød 6.0 mm Quantity of tips 1, 2 or 4 Operating voltage 230 V<sub>AC</sub>\* Nominal length of the nozzle (L) in mm 60 80 100 \*Volts alternating current available

#### **NOTE**

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

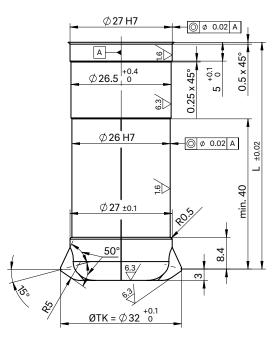


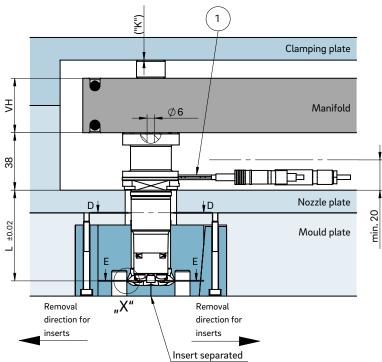
# PLUG LOCATION RELATIVE TO TIP





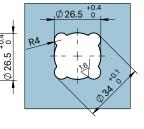






View D-D for two nozzle tips

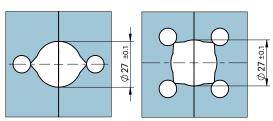
View D-D for four nozzle tips



View E-E for two nozzle tips

Ø34 <sup>+0.1</sup>

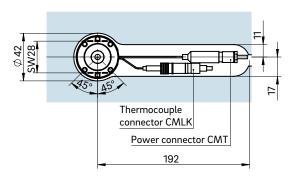
View E-E for four nozzle tips



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!  $\Delta T$  specifies the temperature differential between the processing temperature and the mould temperature!

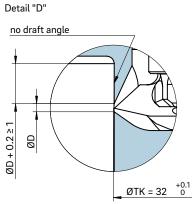
VH	ΔT (°C)	100	150	200	250	300	350
36 mm	K (mm)	0.021	0.059	0.098	0.137	0.177	0.217
46 mm	K (mm)	0.033	0.078	0.124	0.170	0.218	0.264
56 mm	K (mm)	0.046	0.097	0.150	0.203	0.258	0.311

Example cutout for nozzle head, power and thermocouple plug connections



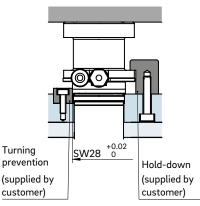
① Power and thermocouple plug connections in this area can only be bent once; minimum radius: R8

SW = flat area on nozzle head



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

Turning prevention





# 4.3 Connecting elements

HEATED ADAPTE	ERS	Page
	AHJ5 Heated adapter for using LHF/LHT nozzles as a single nozzle	20
	AHJ8 Heated adapter for use of OktaFlow nozzle type 80HT as a single nozzle	30



# Heated adapter type AHJ5

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

#### **TECHNICAL DATA**

#### AHJ5

Operating voltage  $230 \, V_{AC}^*$ 

Adapter straight (G)/radius (R)/

angle (W)

Can be used with nozzle type/Delivery times:

Type	18LHF	22LHT	26LHT
AHJ5			

\*Volts alternating current

■ Short delivery time

#### **NOTE**

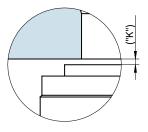
Recommended for processing thermally sensitive plastics.

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

Specify the machine nozzle version when ordering.



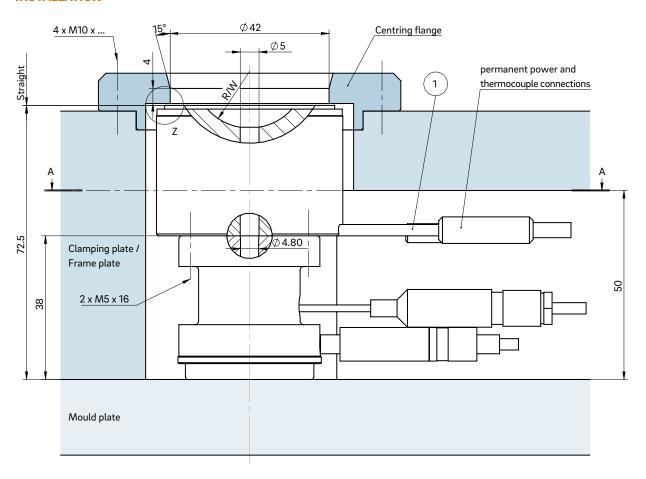




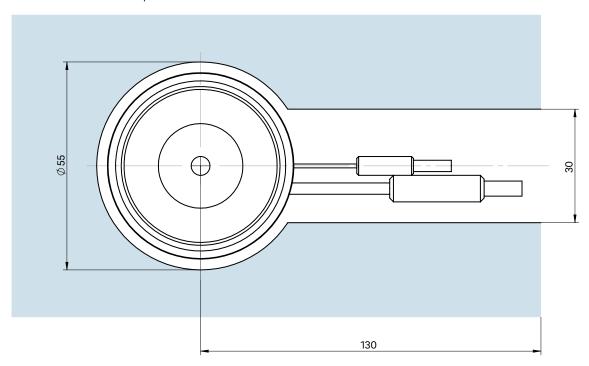
Dimension "K" required for heat expansion is to be ensured by grinding the locating ring! Determine the difference between the height of the nozzle (with adapter) and the height of the structure when installed!  $\Delta T$  specifies the temperature differential between the processing temperature and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

ΔT (°C)	100	150	200	250	300	350
K (mm)	0.06	80.0	0.09	0.11	0.13	0.16





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



 $<sup>{\</sup>Large \textcircled{1}}$  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 80HT as a single nozzle

#### **TECHNICAL DATA**

#### **AHJ8**

Operating voltage  $230 \, V_{AC}^*$ 

Adapter straight (G)/radius (R)/

angle (W)

Can be used with nozzle type/Delivery times:

Type	80HT		
AHJ8			

\*Volts alternating current

■ Short delivery time

#### **NOTE**

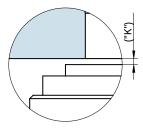
Recommended for processing thermally sensitive plastics.

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

Specify the machine nozzle version when ordering.



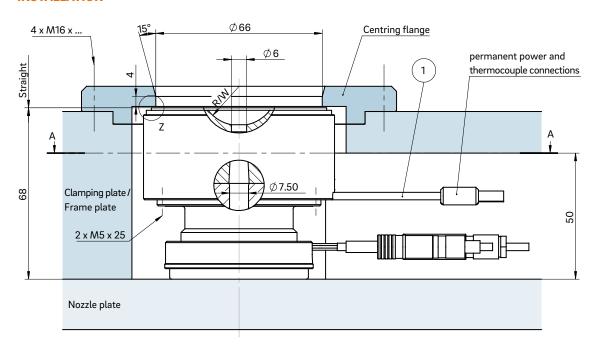




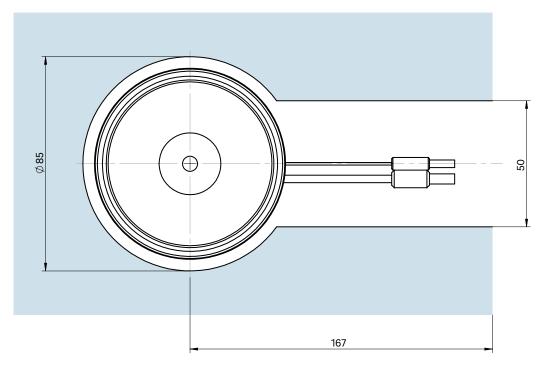
Dimension "K" required for heat expansion is to be ensured by grinding the locating ring! Determine the difference between the height of the nozzle (with adapter) and the height of the structure when installed!  $\Delta T$  specifies the temperature differential between the processing temperature and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

ΔT (°C)	100	150	200	250	300	350
K (mm)	0.04	80.0	0.12	0.16	0.20	0.25





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



 ${\Large \textcircled{1}}$  Power and thermocouple plug connections in this area can be bent once; minimum radius: R8