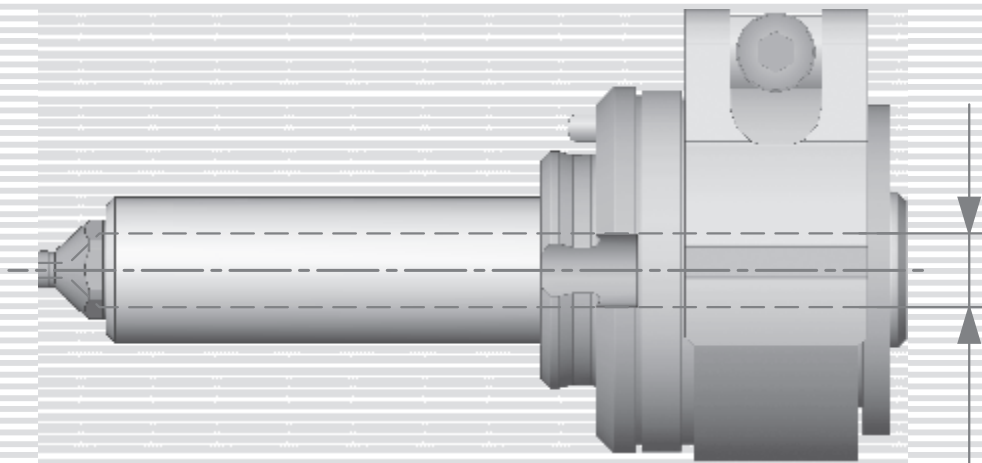
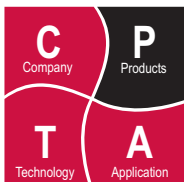


Series 04 S01

Single Nozzle, Open



Ø4



Product type

Hot runner nozzles in the **04 S01** range; this series belongs to nozzle class¹⁾ **04 S**.
 → Nozzle size **04**: Flow bore-Ø 4 mm²⁾
 → Nozzle style **S**: Single nozzle
 → Version **01**: Basic version, successor of CA ... E

With the nozzle tips in the form of screw-in parts, different nozzle types can be implemented (type = shape and gating of nozzle tip), see table at right.

Available gating types
 → open with torpedo (T)

Major dimensions (mm)

J	Flow bore Ø	Ø4 ²⁾
L	Nozzle length	36...126 ³⁾⁴⁾
D	Ø of cut out, front	Ø18
Dt	Centring Ø tip	see right
H	Hot runner exit Ø	see right ³⁾
K	Head height	32.2
Dk	Head Ø	Ø45
Ls	Depth of head centring	7
Ds	Ø of head centring	Ø26
R	Nozzle contact radius	max. 40

Heating

- externally heated, 230 V AC
- changeable heater and head heater band
- 2 zones, 360...410 W
- Fe/CuNi thermocouple, DIN 43722

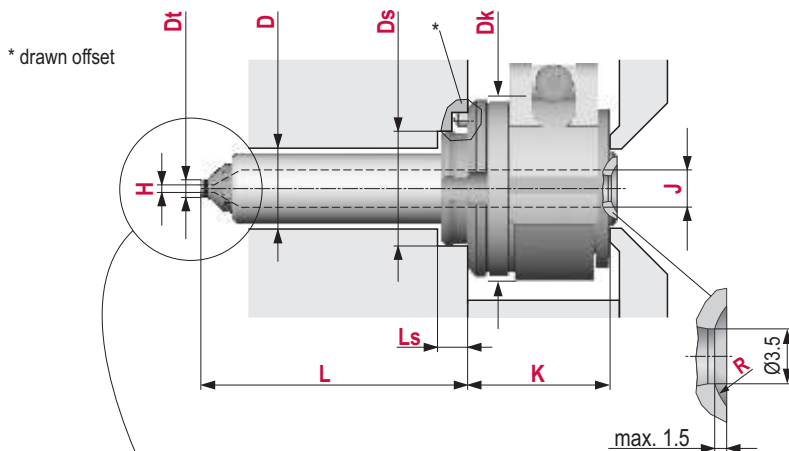
Application



For all usual thermoplastics
 Max. shot weight per nozzle (g)
 → 70 (open, low viscosity)

⊕ page no. of related data sheets

- 1) Enhanced classification for improved ease of selection. Part of the nozzle type No. for later nozzle series.
- 2) Standard value resp. average diameter of nozzle range, can be different depending on nozzle series and application.
- 3) Raster dimensions. Intermediate values can be found from the prescribed dimensional raster.
- 4) Minimum and maximum value of nozzle length depend on the selected tip shape.

Illustrations simplified, schematically drawn and not to scale.



Shape of nozzle tip	Available nozzle types for this series		
	N (open)	T (open with torpedo)	V (valve gate)
Y		 YT H: 1.0...1.8 Dt: Ø6	
U			
F			
P			
K			
L			
S			
V			
W		 WT H: 0.4...1.8 Dt: Ø7.5	
X			

S

C

E

Illustrations simplified, schematically drawn and not to scale.

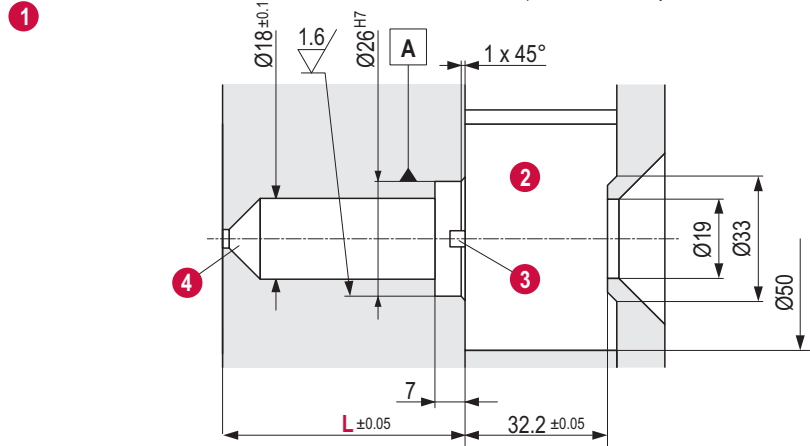
1. Cut out for the nozzle

L Nozzle length

General tolerances: DIN ISO 2768-mK

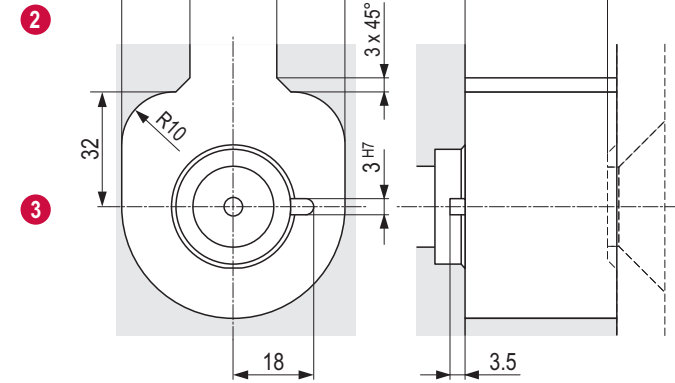
Surfaces: $\sqrt[3.2]{}$ ($\sqrt[1.6]{}$ $\sqrt[0.8]{}$)

Values of the dimension L can be found in the data sheet for the selected nozzle type.



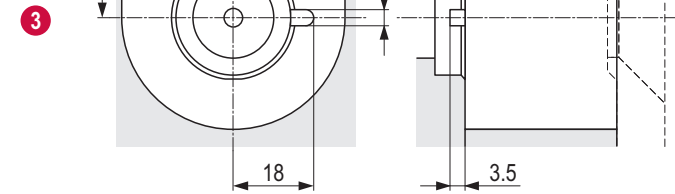
2. Cut out for connections

- electrical power
- thermocouple



3. Groove for locking pin

The locking pin secures the nozzle against rotation.



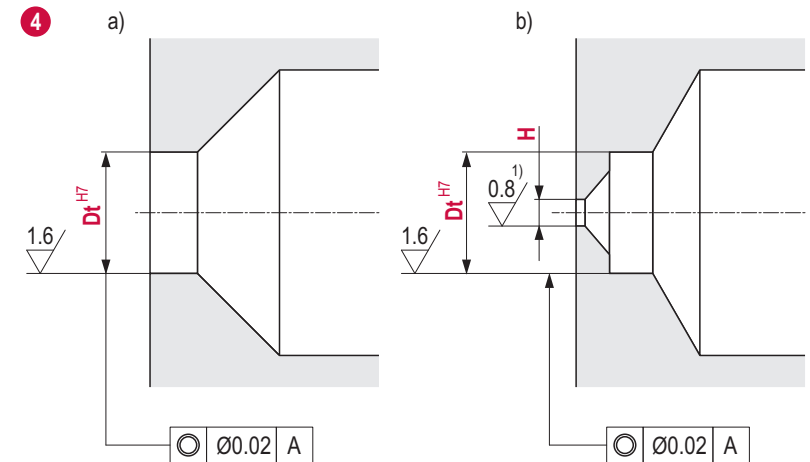
4. Cut out for the nozzle tip

- a) Through bore nozzle tip (Y...V)
- b) Blind bore nozzle tip (W, X)

Dt Tip Ø
H Hot runner gate Ø

Depending on the selected nozzle type, different cut outs are required for the nozzle tip.

The dimensions of the cut out for the nozzle tip used can be found in the nozzle data sheet.



You can configure your nozzle here

1. Complete the nozzle description ¹⁾

04 S01 Y10T

Series & Type ↑ Length code ↑

2. Selection of variables

L=↑* H=↑ R=↑

*equal to the value of the length code for this series

Example and explanations

Series ↓ Position in nozzle length chart ²⁾ ↓
04 S01 Y10T **036**

Series & Type ↑ Type ¹⁾ ↑ Length code ↑

- Y Nozzle tip shape Y
- 10 Version 10: for materials with medium to wide process window
- T Gating type T: open with torpedo

36 1.4 16

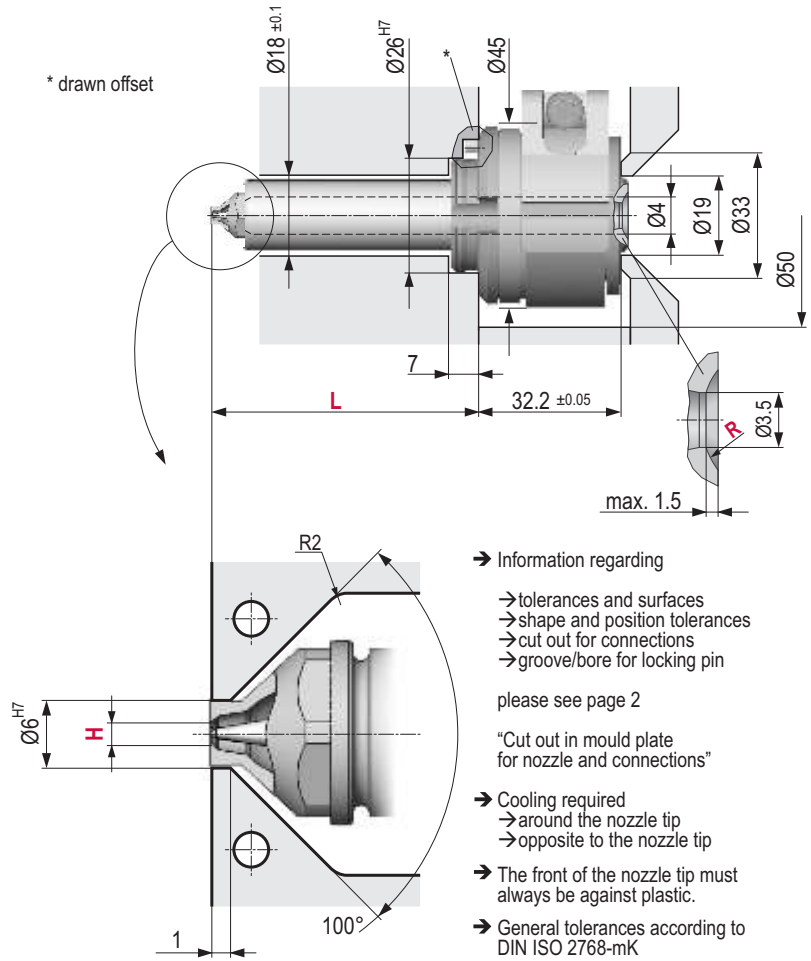
L=↑ H=↑ R=↑

↑ Variables for precise nozzle specification from the drawings and tables shown here

H (mm)		
1.0	1.4	1.8

R (mm)	
max. 40	

Illustrations simplified, schematically drawn and not to scale.



→ Information regarding

- tolerances and surfaces
- shape and position tolerances
- cut out for connections
- groove/bore for locking pin

please see page 2

"Cut out in mould plate for nozzle and connections"

- Cooling required
 - around the nozzle tip
 - opposite to the nozzle tip
- The front of the nozzle tip must always be against plastic.
- General tolerances according to DIN ISO 2768-mK

Length code	L (mm)	L1 (mm)	L2 (mm)	Heater zones power ³⁾ (Watt)					1...5
				1	2	3	4	5	
036	36	-	-	180	180	-	-	-	360
046	46	-	-	180	180	-	-	-	360
056	56	-	-	180	180	-	-	-	360
066	66	-	-	230	180	-	-	-	410
076	76	-	-	230	180	-	-	-	410
086	86	-	-	230	180	-	-	-	410
096	96	-	-	230	180	-	-	-	410
106	106	-	-	230	180	-	-	-	410
116	116	-	-	230	180	-	-	-	410
126	126	-	-	230	180	-	-	-	410

1) Nomenclature differences between older and newer nozzle series result from the revision of the nozzle range.
 2) Depending on the nozzle series, the length code corresponds either to a particular nozzle length or to a range of lengths.
 3) The numbering of the heating zones starts at the nozzle tip and ends at the nozzle head.

You can configure your nozzle here

1. Complete the nozzle description ¹⁾

04 S01 Y04T

Series & Type ↑ Length code ↑

2. Selection of variables

L=↑* H=↑ R=↑

*equal to the value of the length code for this series

Example and explanations

Series ↓ Position in nozzle length chart ²⁾ ↓
04 S01 Y04T **036**

Series & Type ↑ Type ¹⁾ ↑ Length code ↑

- Y Nozzle tip shape Y
- 04 Version 04: for high pressure application up to 2500 bar
- T Gating type T: open with torpedo

36 1.4 16

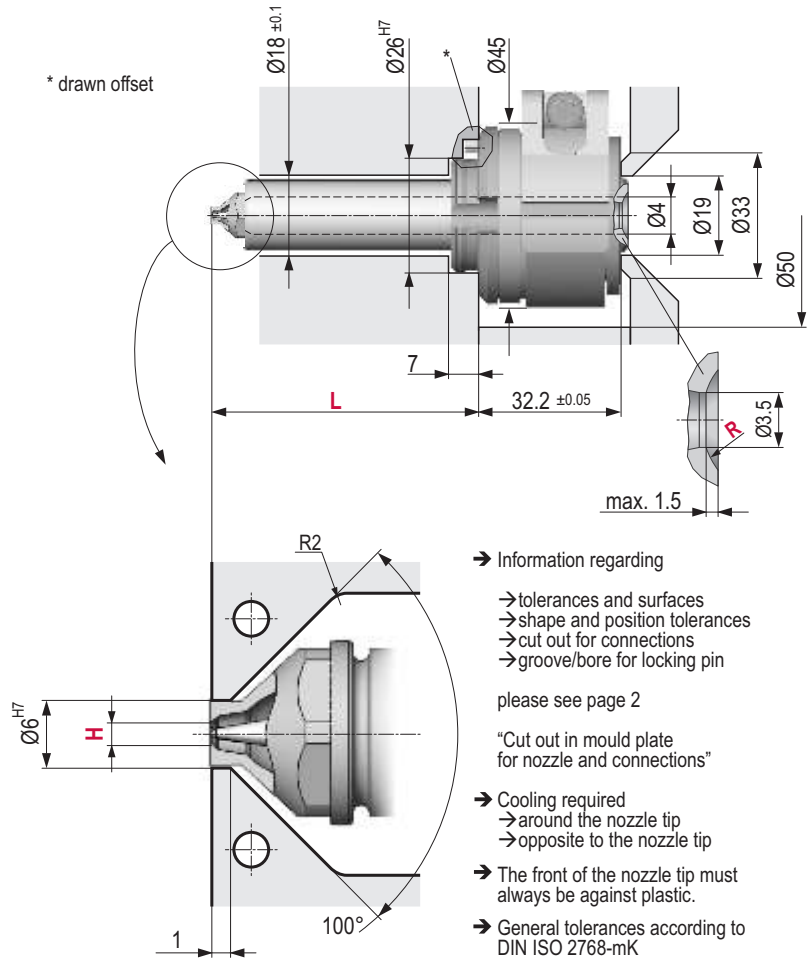
L=↑ H=↑ R=↑

↑ Variables for precise nozzle specification from the drawings and tables shown here

H (mm)		
1.0	1.4	1.8

R (mm)	
max. 40	

Illustrations simplified, schematically drawn and not to scale.



→ Information regarding

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- shape and position tolerances
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				1	2	3	4	5	1...5
036	36	-	-	180	180	-	-	-	360
046	46	-	-	180	180	-	-	-	360
056	56	-	-	180	180	-	-	-	360
066	66	-	-	230	180	-	-	-	410
076	76	-	-	230	180	-	-	-	410
086	86	-	-	230	180	-	-	-	410
096	96	-	-	230	180	-	-	-	410
106	106	-	-	230	180	-	-	-	410
116	116	-	-	230	180	-	-	-	410
126	126	-	-	230	180	-	-	-	410

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You can configure your nozzle here

1. Complete the nozzle description ¹⁾

04 S01 W01T

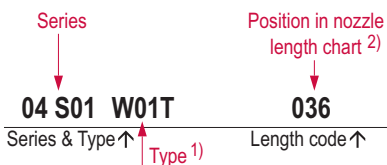
Series & Type ↑ Length code ↑

2. Selection of variables

L=↑* H=↑ R=↑

*equal to the value of the length code for this series

Example and explanations



- W Nozzle tip shape W
- 01 Version 01: for materials with narrow to medium process window
- T Gating type T: open with torpedo

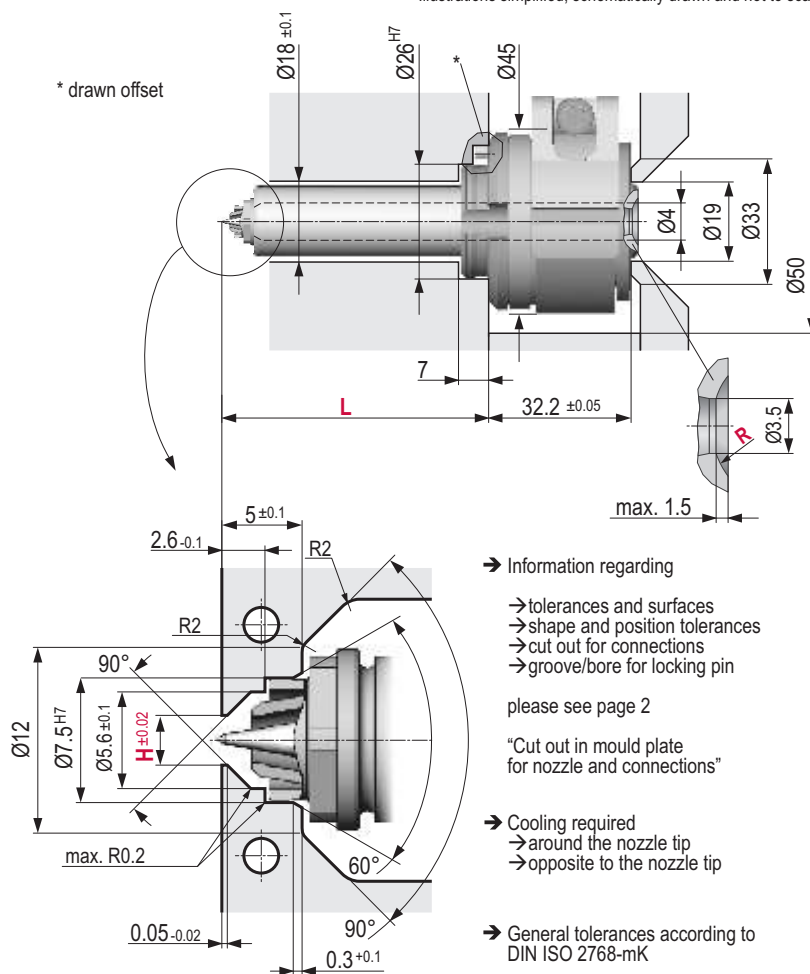
36 1.4 16
L=↑ H=↑ R=↑

↑ Variables for precise nozzle specification from the drawings and tables shown here

H (mm)
0.4, 0.5, 0.6 ... 1.8

R (mm)
max. 40

Illustrations simplified, schematically drawn and not to scale.



- Information regarding
 - tolerances and surfaces
 - shape and position tolerances
 - cut out for connections
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"Cut out in mould plate for nozzle and connections"

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				1	2	3	4	5	1...5
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066	66	-	-	230	180	-	-	-	410
076	76	-	-	230	180	-	-	-	410
086	86	-	-	230	180	-	-	-	410
096	96	-	-	230	180	-	-	-	410
106	106	-	-	230	180	-	-	-	410
116	116	-	-	230	180	-	-	-	410
126	126	-	-	230	180	-	-	-	410

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