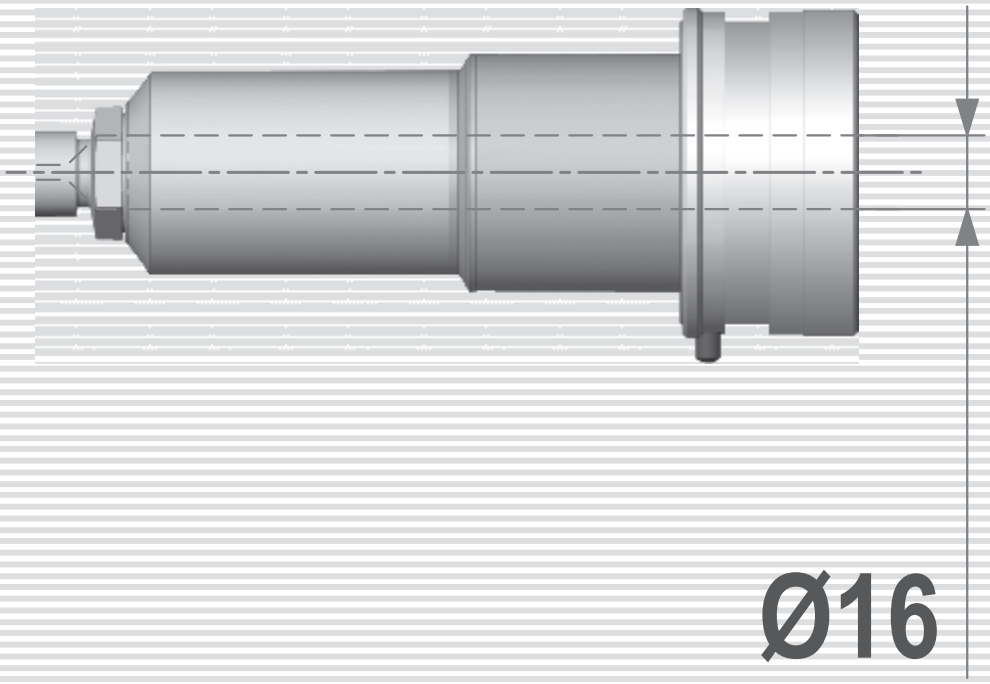
Series (N) GB ... M

Manifold Nozzles, Face Fit



C Company
P Products
T Technology
A Application

Synventive
molding solutions

Synventive molding solutions

Series (N) GB ... M
Manifold nozzles, face fit, open / valve gate

C P T A

Product type

Hot runner nozzles in the **(N) GB ... M** range; this series belongs to nozzle class[1] **16 C**.
➔Nozzle size **16**: Flow bore-Ø 16 mm [2]
➔Nozzle style **C**: Manifold nozzle, face fit

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 (**N**)
➔open with torpedo (**T**)
➔valve gate (**V**)

Major dimensions (mm)

J	Flow bore Ø	Ø16 [2]
L	Nozzle length	48...387 [3)4)]
D	Ø of cut out, front	Ø48
Dt	Tip Ø	see right
H	Hot runner gate Ø	see right [3]
L1	Length of cut out, back	0...260 [3)5)]
D1	Ø of cut out, back	Ø56 [5]
K	Head height	40
Dk	Head Ø	Ø73
Ls	Depth of head ring	8
Ds	Ø of head ring	Ø75

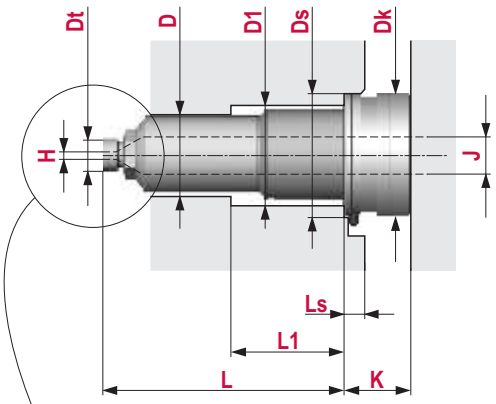
Heating

➔externally heated, 230 V AC
➔1...3 zones, 400...1630 W
➔Fe/CuNi thermocouple, DIN 43710

Application

For all usual thermoplastics
Max. shot weight per nozzle (g)
➔2500 (open, low viscosity)
➔1500 (valve gate, low viscosity)

Illustrations simplified, schematically drawn and not to scale.



Available nozzle types for this series

Shape of nozzle tip	N (open)	T (open with torpedo)	V (valve gate)
Y		YT 3 H: 2.4...3.9 Dt: Ø 20	YV 4 H: 5.0 Dt: Ø 20
U		UT 5 H: 2.4...3.9 Dt: Ø 20	
F		FT 6 H: 2.4...3.9 Dt: Ø 20	
P		PT 7 H: 2.4...3.9 Dt: Ø 20	
K	KN 8 H: 2.5...4.5 Dt: Ø 20		
L		LT 9 H: 2.4...3.9 Dt: Ø 20	LV 10 H: 5.0 Dt: Ø 20
S		ST 11 H: 2.4...3.9 Dt: Ø 20	SV 12 H: 5.0 Dt: Ø 20
V			VV 13 H: 5.0 Dt: Ø 20
W		WT 14 H: 2.4...3.9 Dt: Ø 20	WV 15... H: 5.0 Dt: Ø 22
X			

8 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.
5) depending on nozzle length

For design and application information, see the Synventive Hot Runner Guide.

Illustrations simplified, schematically drawn and not to scale.

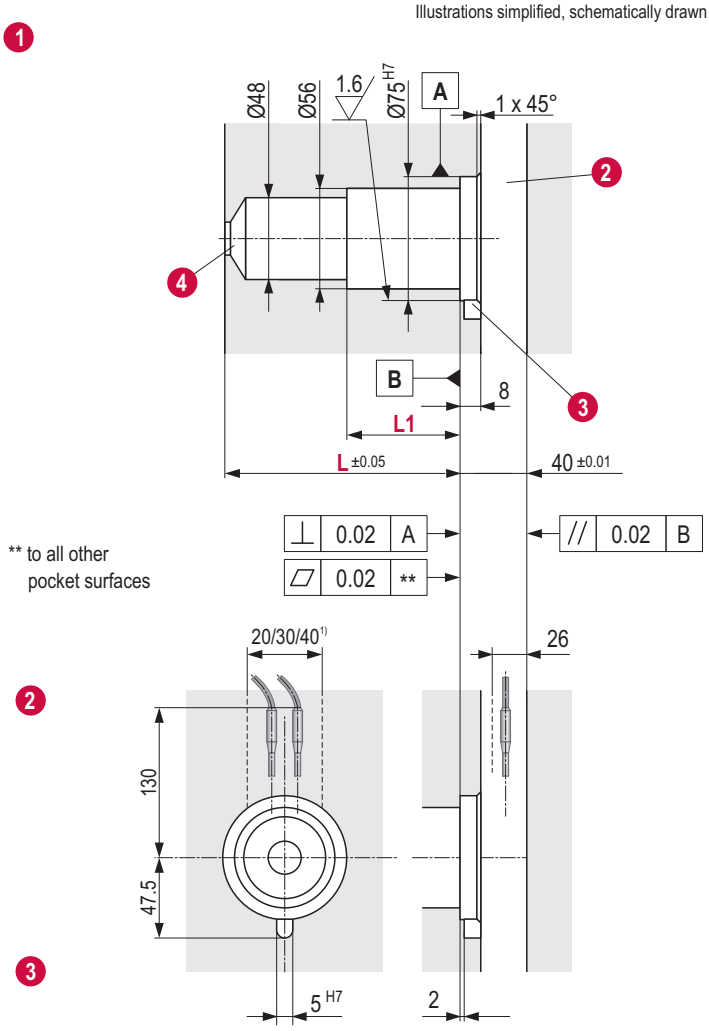
1. Cut out for the nozzle

L Nozzle length
L1 Length of cut out, back

General tolerances: DIN ISO 2768-mK

Surfaces: 3.2 (1.6 0.8)

Values of the dimensions L and L1 can be found in the data sheet for the selected nozzle type.



2. Cut out for connections

→electrical power
→thermocouple

1) width for 2, 3 and 4 heater zones

3. Groove for locking pin

The locking pin secures the nozzle against rotation.

4. Cut out for the nozzle tip

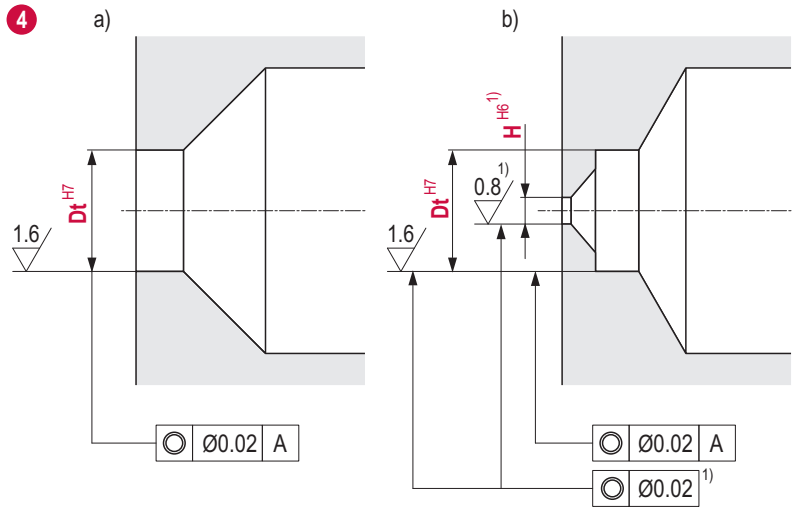
a) Through bore nozzle tip (Y...V)
b) Blind bore nozzle tip (W, X)

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.

1) These data apply for valve gate nozzles.



For design and application information, see the Synventive Hot Runner Guide.

Synventive molding solutions

GB YT M
Manifold nozzle, face fit, open with torpedo

C P T A

Illustrations simplified, schematically drawn and not to scale.

You can configure your nozzle here

1. Complete the nozzle description [1]

GB	YT	M	
Series & Type ↑			Length code ↑

2. Selection of variables

L=↑* H=↑

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

Example and explanations

Series: GB — Position in nozzle length chart [2]: 048

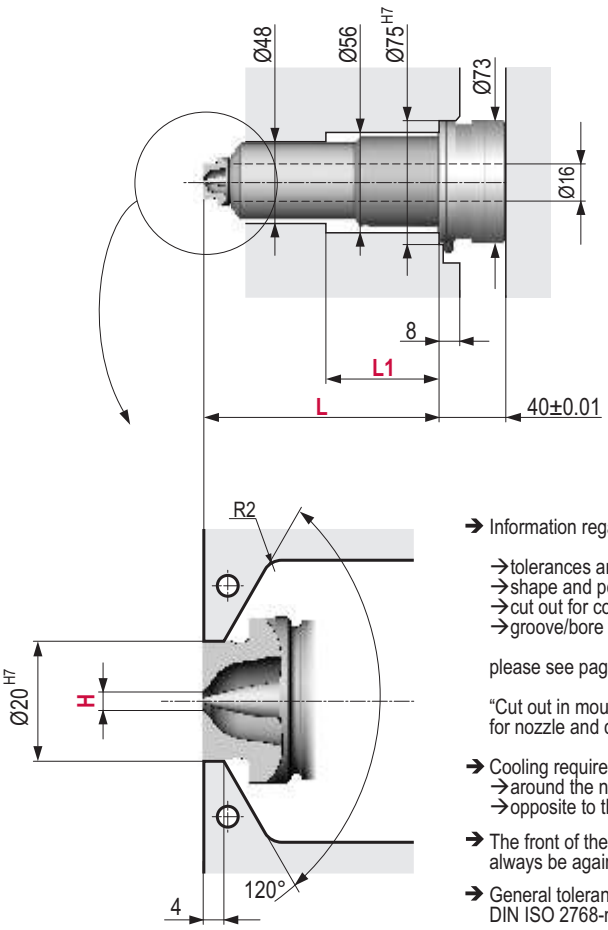
GB YT M 048

Series & Type ↑ — Type [1] — Length code ↑

- **Y** Nozzle tip shape Y
  - →for materials with narrrow to medium process window
- **T** Gating type T: open with torpedo

48 (L=↑) **3.6** (H=↑)

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



- → 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

H (mm)					
2.4	2.7	3.0	3.3	3.6	3.9

Length code	L (mm)	L1 (mm)	L2 (mm)	Heater zones power [3] (Watt)					
				1	2	3	4	5	1...5
048	48	-	-	400	-	-	-	-	400
078	78	-	-	500	-	-	-	-	500
108	108	-	-	630	-	-	-	-	630
138	138	60	-	500	400	-	-	-	900
166	166	60	-	500	400	-	-	-	900
196	196	80	-	500	400	-	-	-	900
226	226	110	-	500	400	-	-	-	900
256	256	140	-	500	500	-	-	-	1000
286	286	170	-	630	500	-	-	-	1130
316	316	200	-	630	500	-	-	-	1130
346	346	230	-	630	500	500	-	-	1630
376	376	260	-	630	500	500	-	-	1630

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.

For design and application information, see the Synventive Hot Runner Guide.

Synventive molding solutions

N GB Y M

Manifold nozzle, face fit, valve gate

C P T A

Illustrations simplified, schematically drawn and not to scale.

You can configure your nozzle here

1. Complete the nozzle description [1]

N GB	Y	M
Series & Type ↑		Length code ↑

2. Selection of variables

L=↑* H=↑

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

Example and explanations

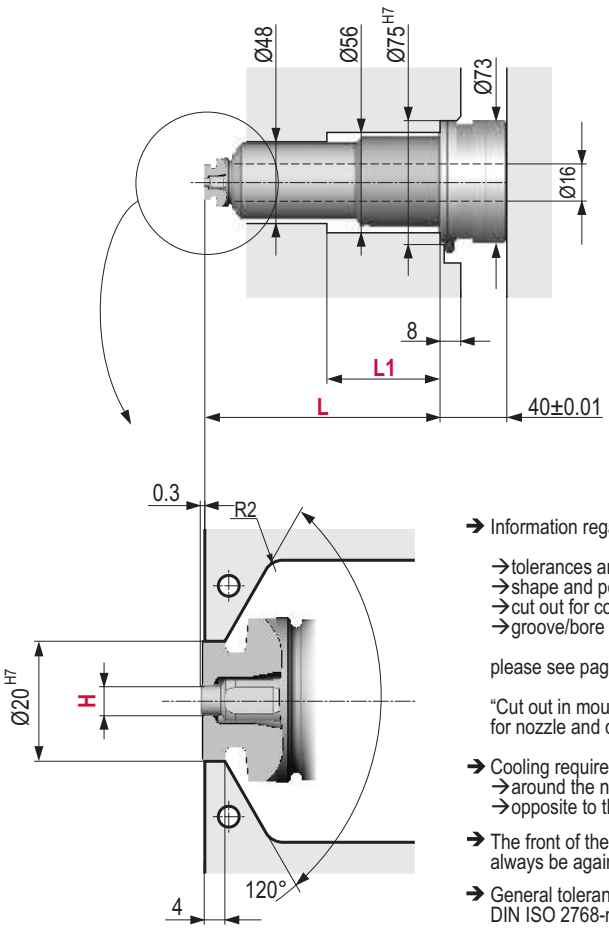
Series — Position in nozzle length chart [2]

N GB	Y	M	048
Series & Type ↑	Type [1]		Length code ↑

- **Y** Nozzle tip shape Y
  → for materials with narrrow to medium process window
- **N** Gating type: valve gate (**V**) [1]

48	5.0
L=↑	H=↑

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



→ 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

H (mm)
5.0

Length code	L (mm)	L1 (mm)	L2 (mm)	Heater zones power [3] (Watt)					
				1	2	3	4	5	1...5
048	48	-	-	400	-	-	-	-	400
078	78	-	-	500	-	-	-	-	500
108	108	-	-	630	-	-	-	-	630
138	138	60	-	500	400	-	-	-	900
166	166	60	-	500	400	-	-	-	900
196	196	80	-	500	400	-	-	-	900
226	226	110	-	500	400	-	-	-	900
256	256	140	-	500	500	-	-	-	1000
286	286	170	-	630	500	-	-	-	1130
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346	346	230	-	630	500	500	-	-	1630
376	376	260	-	630	500	500	-	-	1630

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For design and application information, see the Synventive Hot Runner Guide.

Synventive molding solutions

GB UT M
Manifold nozzle, face fit, open with torpedo

C P T A

Illustrations simplified, schematically drawn and not to scale.

You can configure your nozzle here

1. Complete the nozzle description [1]

GB	UT	M	
Series & Type ↑			Length code ↑

2. Selection of variables

L=↑* H=↑

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

Example and explanations

Series: GB UT — Position in nozzle length chart [2]: M 052

GB UT M 052

Series & Type ↑ — Type [1] — Length code ↑

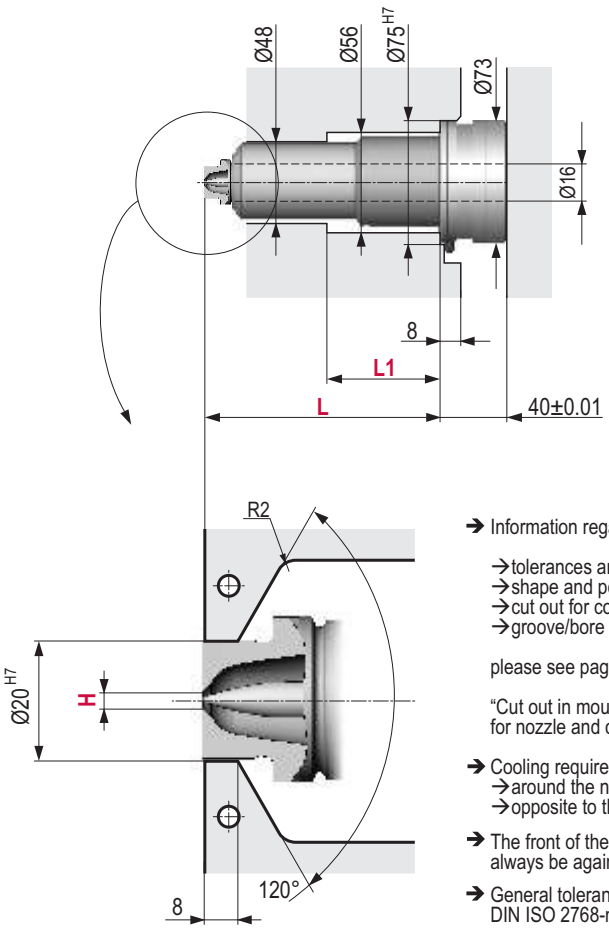
- **U** Nozzle tip shape U
  - →for materials with medium to wide process window
- **T** Gating type T: open with torpedo

52 3.6

L=↑ H=↑

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

H (mm)					
2.4	2.7	3.0	3.3	3.6	3.9



➔ 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	2	3	4	5	1...5
052	52	-	-	400	-	-	-	-	400
082	82	-	-	500	-	-	-	-	500
112	112	-	-	630	-	-	-	-	630
142	142	60	-	500	400	-	-	-	900
170	170	60	-	500	400	-	-	-	900
200	200	80	-	500	400	-	-	-	900
230	230	110	-	500	400	-	-	-	900
260	260	140	-	500	500	-	-	-	1000
290	290	170	-	630	500	-	-	-	1130
320	320	200	-	630	500	-	-	-	1130
350	350	230	-	630	500	500	-	-	1630
380	380	260	-	630	500	500	-	-	1630

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.

For design and application information, see the Synventive Hot Runner Guide.

Synventive molding solutions

GB FT M

Manifold nozzle, face fit, open with torpedo

C P T A

S

C

E

You can configure your nozzle here

1. Complete the nozzle description [1]

GB	FT	M
Series & Type ↑		Length code ↑

2. Selection of variables

L=↑* H=↑

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

Example and explanations

Series — Position in nozzle length chart [2]

GB	FT	M	048
Series & Type ↑	Type [1]		Length code ↑

F Nozzle tip shape F
→for materials with narrrow to medium process window

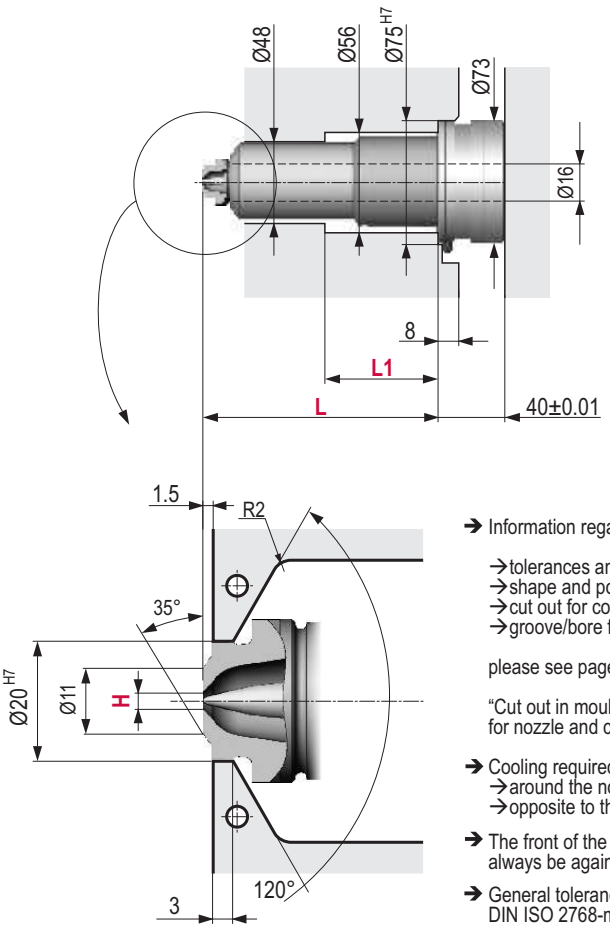
T Gating type T: open with torpedo

48	3.6
L=↑	H=↑

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

H (mm)					
2.4	2.7	3.0	3.3	3.6	3.9

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	2	3	4	5	1...5
048	48	-	-	400	-	-	-	-	400
078	78	-	-	500	-	-	-	-	500
108	108	-	-	630	-	-	-	-	630
138	138	60	-	500	400	-	-	-	900
166	166	60	-	500	400	-	-	-	900
196	196	80	-	500	400	-	-	-	900
226	226	110	-	500	400	-	-	-	900
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For design and application information, see the Synventive Hot Runner Guide.

Synventive molding solutions

GB PT M
Manifold nozzle, face fit, open with torpedo

C P T A

Illustrations simplified, schematically drawn and not to scale.

You can configure your nozzle here

1. Complete the nozzle description [1]

GB	PT	M
Series & Type ↑		Length code ↑

2. Selection of variables

L=↑* H=↑

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

Example and explanations

Series — Position in nozzle length chart [2]

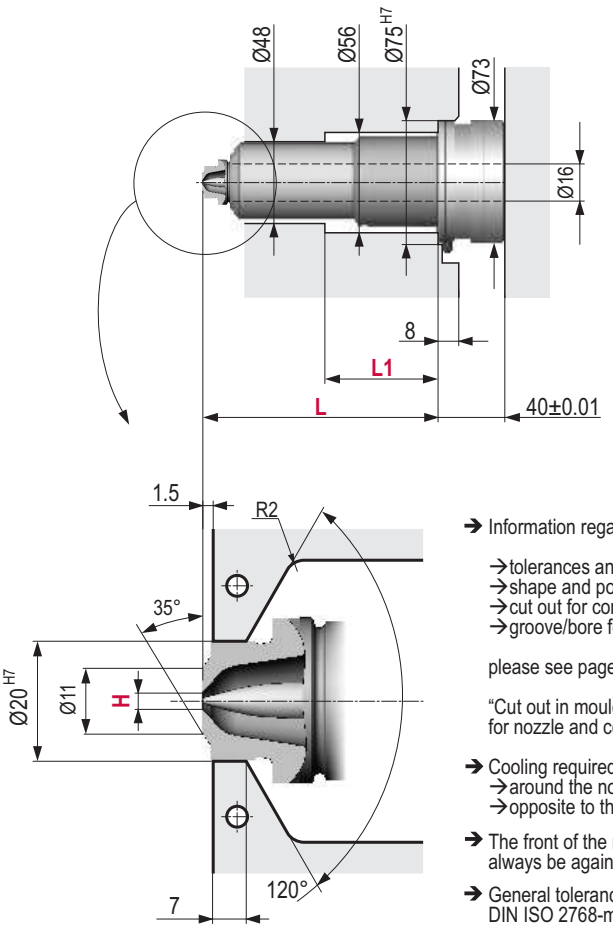
GB	PT	M	052
Series & Type ↑	Type [1]		Length code ↑

- **P** Nozzle tip shape P
  → for materials with medium to wide process window
- **T** Gating type T: open with torpedo

52	3.6
L=↑	H=↑

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

H (mm)					
2.4	2.7	3.0	3.3	3.6	3.9



→ 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	2	3	4	5	1...5
052	52	-	-	400	-	-	-	-	400
082	82	-	-	500	-	-	-	-	500
112	112	-	-	630	-	-	-	-	630
142	142	60	-	500	400	-	-	-	900
170	170	60	-	500	400	-	-	-	900
200	200	80	-	500	400	-	-	-	900
230	230	110	-	500	400	-	-	-	900
260	260	140	-	500	500	-	-	-	1000
290	290	170	-	630	500	-	-	-	1130
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350	350	230	-	630	500	500	-	-	1630
380	380	260	-	630	500	500	-	-	1630

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For design and application information, see the Synventive Hot Runner Guide.

Synventive molding solutions

GB KN M
Manifold nozzle, face fit, open

C P T A

Illustrations simplified, schematically drawn and not to scale.

You can configure your nozzle here

1. Complete the nozzle description [1]

GB	KN	M
Series & Type ↑		Length code ↑

2. Selection of variables

L=↑* H=↑ F=↑

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

Example and explanations

Series — Position in nozzle length chart [2]

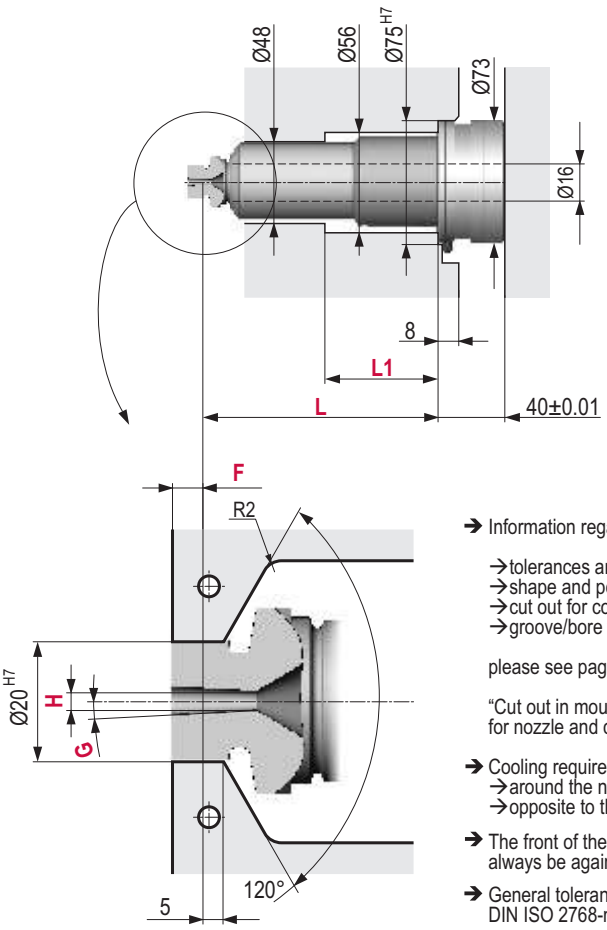
GB	KN	M	052
Series & Type ↑	Type [1] ↑		Length code ↑

K Nozzle tip shape K
→for all usual thermoplastics

N Gating type N: open

52	3.6	30
L=↑	H=↑	F=↑

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



→ Information regarding
→tolerances and surfaces
→shape and position tolerances
→cut out for connections
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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

H (mm)					
2.5	2.8	3.2	3.6	4.0	4.5

F (mm)					
0	5	30	50	70	90

G (°)	
F = 0...50	F = 70 / 90
3	1.5

Length code	L (mm)	L1 (mm)	L2 (mm)	Heater zones power [3] (Watt)					
				1	2	3	4	5	1...5
052	52	-	-	400	-	-	-	-	400
082	82	-	-	500	-	-	-	-	500
112	112	-	-	630	-	-	-	-	630
142	142	60	-	500	400	-	-	-	900
170	170	60	-	500	400	-	-	-	900
200	200	80	-	500	400	-	-	-	900
230	230	110	-	500	400	-	-	-	900
260	260	140	-	500	500	-	-	-	1000
290	290	170	-	630	500	-	-	-	1130
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380	380	260	-	630	500	500	-	-	1630

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For design and application information, see the Synventive Hot Runner Guide.

Synventive molding solutions

GB LT M
Manifold nozzle, face fit, open with torpedo

Illustrations simplified, schematically drawn and not to scale.

You can configure your nozzle here

1. Complete the nozzle description [1]

GB	LT	M	
Series & Type ↑			Length code ↑

2. Selection of variables

L=↑*	H=↑	F=↑

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

Example and explanations

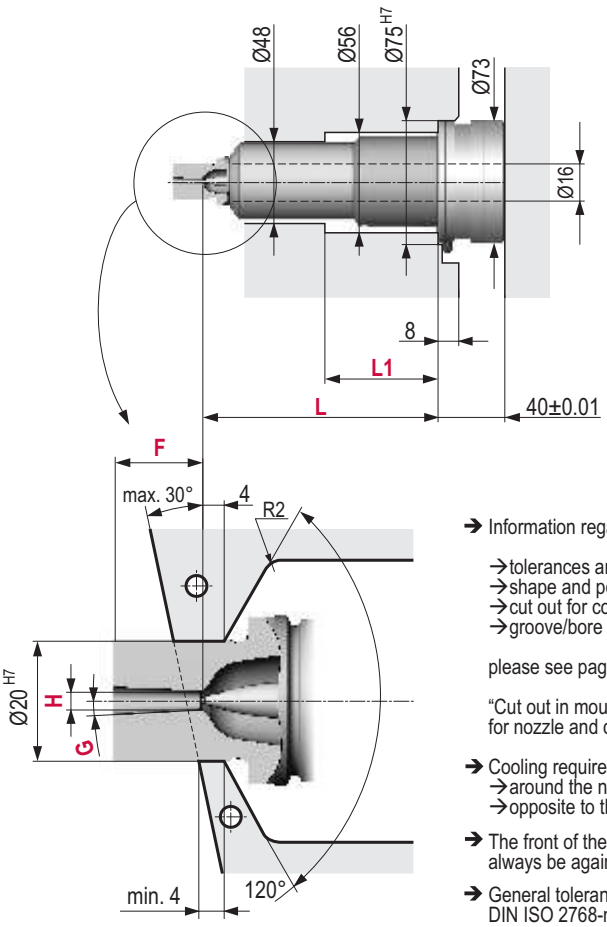
Series: GB LT — Position in nozzle length chart [2]: M 048

GB LT M 048
Series & Type ↑ (Type [1]) — Length code ↑

- **L** Nozzle tip shape L
  → for materials with narrrow to medium process window
- **T** Gating type T: open with torpedo

48	3.6	15
L=↑	H=↑	F=↑

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



→ 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

H (mm)					
2.4	2.7	3.0	3.3	3.6	3.9

F (mm)	
15	50

G (°)
3

Length code	L (mm)	L1 (mm)	L2 (mm)	Heater zones power [3] (Watt)					
				1	2	3	4	5	1...5
048	48	-	-	400	-	-	-	-	400
078	78	-	-	500	-	-	-	-	500
108	108	-	-	630	-	-	-	-	630
138	138	60	-	500	400	-	-	-	900
166	166	60	-	500	400	-	-	-	900
196	196	80	-	500	400	-	-	-	900
226	226	110	-	500	400	-	-	-	900
256	256	140	-	500	500	-	-	-	1000
286	286	170	-	630	500	-	-	-	1130
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346	346	230	-	630	500	500	-	-	1630
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For design and application information, see the Synventive Hot Runner Guide.

Synventive molding solutions

N GB L M
Manifold nozzle, face fit, open with torpedo

C P T A

Illustrations simplified, schematically drawn and not to scale.

You can configure your nozzle here

1. Complete the nozzle description [1]

N GB	L	M
Series & Type ↑		Length code ↑

2. Selection of variables

L=↑*	H=↑	F=↑

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

Example and explanations

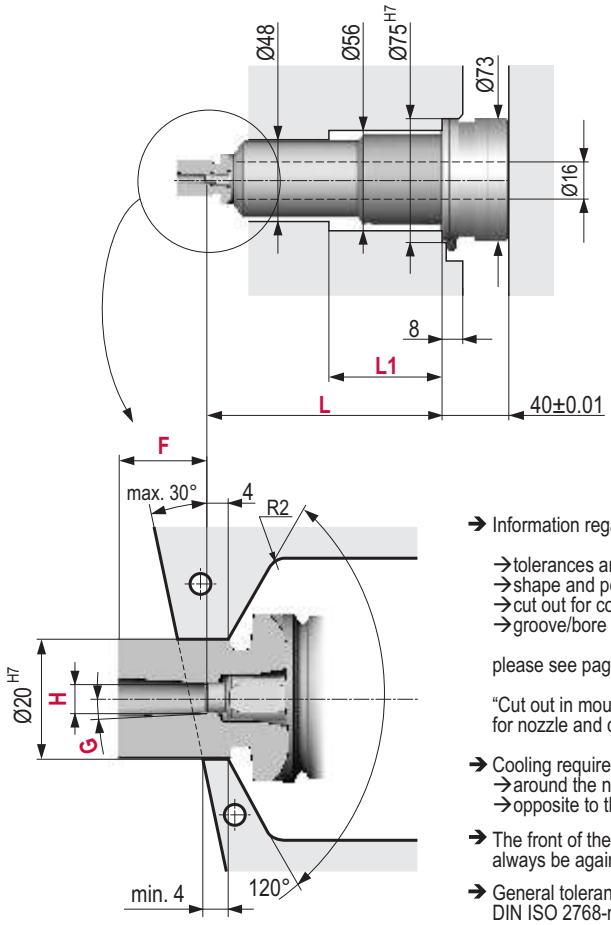
Series — Position in nozzle length chart [2]

N GB	L	M	048
Series & Type ↑	Type [1]		Length code ↑

- **L** Nozzle tip shape L
  → for materials with narrrow to medium process window
- **N** Gating type: valve gate (**V**) [1]

48	5.0	15
L=↑	H=↑	F=↑

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



→ 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

H (mm)
5.0

F (mm)	
15	50

G (°)
3

Length code	L (mm)	L1 (mm)	L2 (mm)	Heater zones power [3] (Watt)					
				1	2	3	4	5	1...5
048	48	-	-	400	-	-	-	-	400
078	78	-	-	500	-	-	-	-	500
108	108	-	-	630	-	-	-	-	630
138	138	60	-	500	400	-	-	-	900
166	166	60	-	500	400	-	-	-	900
196	196	80	-	500	400	-	-	-	900
226	226	110	-	500	400	-	-	-	900
256	256	140	-	500	500	-	-	-	1000
286	286	170	-	630	500	-	-	-	1130
316	316	200	-	630	500	-	-	-	1130
346	346	230	-	630	500	500	-	-	1630
376	376	260	-	630	500	500	-	-	1630

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.

For design and application information, see the Synventive Hot Runner Guide.

Synventive molding solutions

GB ST M
Manifold nozzle, face fit, open with torpedo

CPTA

Illustrations simplified, schematically drawn and not to scale.

You can configure your nozzle here

1. Complete the nozzle description [1]

GB	ST	M
Series & Type ↑		Length code ↑

2. Selection of variables

L=↑*	H=↑	F=↑

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

Example and explanations

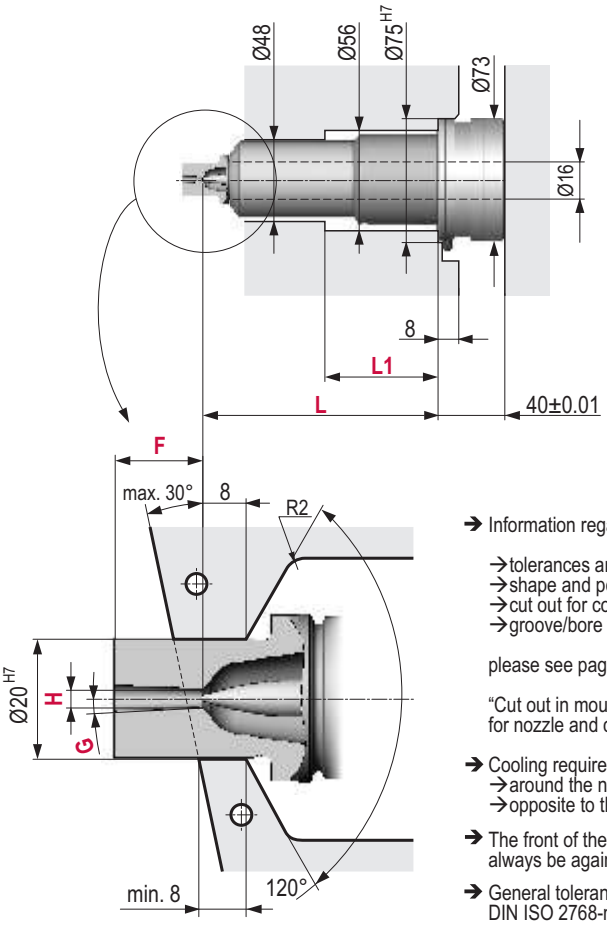
Series: GB ST — Position in nozzle length chart [2]: M 052

GB ST M 052
Series & Type ↑ — Type [1] — Length code ↑

- **S** Nozzle tip shape S
  → for materials with medium to wide process window
- **T** Gating type T: open with torpedo

52	3.6	15
L=↑	H=↑	F=↑

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



→ 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

H (mm)					
2.4	2.7	3.0	3.3	3.6	3.9

F (mm)	
15	50

G (°)
3

Length code	L (mm)	L1 (mm)	L2 (mm)	Heater zones power [3] (Watt)					
				1	2	3	4	5	1...5
052	52	-	-	400	-	-	-	-	400
082	82	-	-	500	-	-	-	-	500
112	112	-	-	630	-	-	-	-	630
142	142	60	-	500	400	-	-	-	900
170	170	60	-	500	400	-	-	-	900
200	200	80	-	500	400	-	-	-	900
230	230	110	-	500	400	-	-	-	900
260	260	140	-	500	500	-	-	-	1000
290	290	170	-	630	500	-	-	-	1130
320	320	200	-	630	500	-	-	-	1130
350	350	230	-	630	500	500	-	-	1630
380	380	260	-	630	500	500	-	-	1630

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.

For design and application information, see the Synventive Hot Runner Guide.

Synventive molding solutions

N GB S M
Manifold nozzle, face fit, open with torpedo

You can configure your nozzle here

1. Complete the nozzle description [1]

N GB	S	M
Series & Type ↑		Length code ↑

2. Selection of variables

L=↑*	H=↑	F=↑

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

Example and explanations

Series — Position in nozzle length chart [2]

N GB	S	M	052
Series & Type ↑	Type [1]		Length code ↑

- **S** Nozzle tip shape S
  → for materials with medium to wide process window
- **N** Gating type: valve gate (**V**) [1]

52	5.0	15
L=↑	H=↑	F=↑

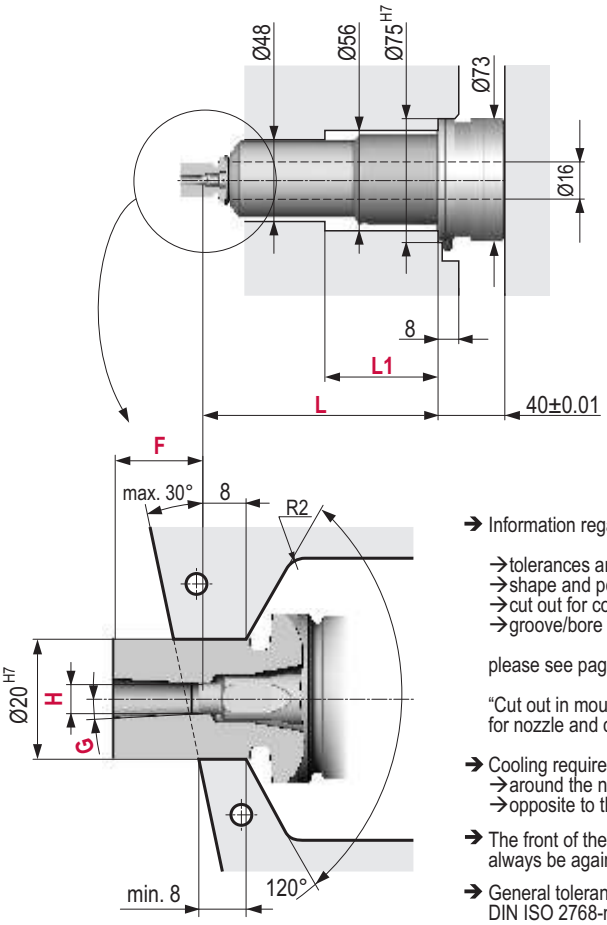
Variables for precise nozzle specification from the drawings and tables shown here

H (mm)
5.0

F (mm)	
15	50

G (°)
3

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	2	3	4	5	1...5
052	52	-	-	400	-	-	-	-	400
082	82	-	-	500	-	-	-	-	500
112	112	-	-	630	-	-	-	-	630
142	142	60	-	500	400	-	-	-	900
170	170	60	-	500	400	-	-	-	900
200	200	80	-	500	400	-	-	-	900
230	230	110	-	500	400	-	-	-	900
260	260	140	-	500	500	-	-	-	1000
290	290	170	-	630	500	-	-	-	1130
320	320	200	-	630	500	-	-	-	1130
350	350	230	-	630	500	500	-	-	1630
380	380	260	-	630	500	500	-	-	1630

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.

For design and application information, see the Synventive Hot Runner Guide.

Synventive molding solutions

N GB V M
Manifold nozzle, face fit, open with torpedo

C P T A

Illustrations simplified, schematically drawn and not to scale.

You can configure your nozzle here

1. Complete the nozzle description [1]

N GB	V	M
Series & Type ↑		Length code ↑

2. Selection of variables

L=↑*	H=↑	F=↑

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

Example and explanations

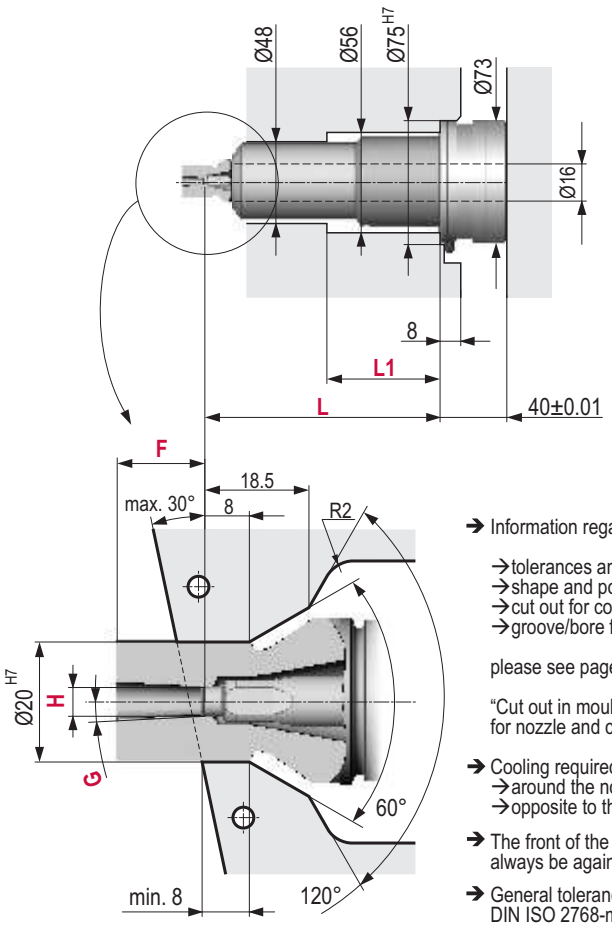
Series — Position in nozzle length chart [2]

N GB	V	M	059
Series & Type ↑	Type [1] ↑		Length code ↑

- **V** Nozzle tip shape V
  → for materials with medium to wide process window
- **N** Gating type: valve gate (**V**) [1]

59	5.0	15
L=↑	H=↑	F=↑

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



→ 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

H (mm)
5.0

F (mm)				
0	15	30	50	90

G (°)	
F = 0 / 15 / 30	F = 50 / 90
3	1.5

Length code	L (mm)	L1 (mm)	L2 (mm)	Heater zones power [3] (Watt)					
				1	2	3	4	5	1...5
059	59	-	-	400	-	-	-	-	400
089	89	-	-	500	-	-	-	-	500
119	119	-	-	630	-	-	-	-	630
149	149	60	-	500	400	-	-	-	900
177	177	60	-	500	400	-	-	-	900
207	207	80	-	500	400	-	-	-	900
237	237	110	-	500	400	-	-	-	900
267	267	140	-	500	500	-	-	-	1000
297	297	170	-	630	500	-	-	-	1130
327	327	200	-	630	500	-	-	-	1130
357	357	230	-	630	500	500	-	-	1630
387	387	260	-	630	500	500	-	-	1630

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.

For design and application information, see the Synventive Hot Runner Guide.

Synventive molding solutions

GB O W01T M
Manifold nozzle, face fit, open with torpedo

C P T A

Illustrations simplified, schematically drawn and not to scale.

You can configure your nozzle here

1. Complete the nozzle description [1]

GB O W01T M

Series & Type ↑ Length code ↑

2. Selection of variables

L=↑* **H=↑**

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

Example and explanations

Series — Position in nozzle length chart [2]

GB O W01T M 052

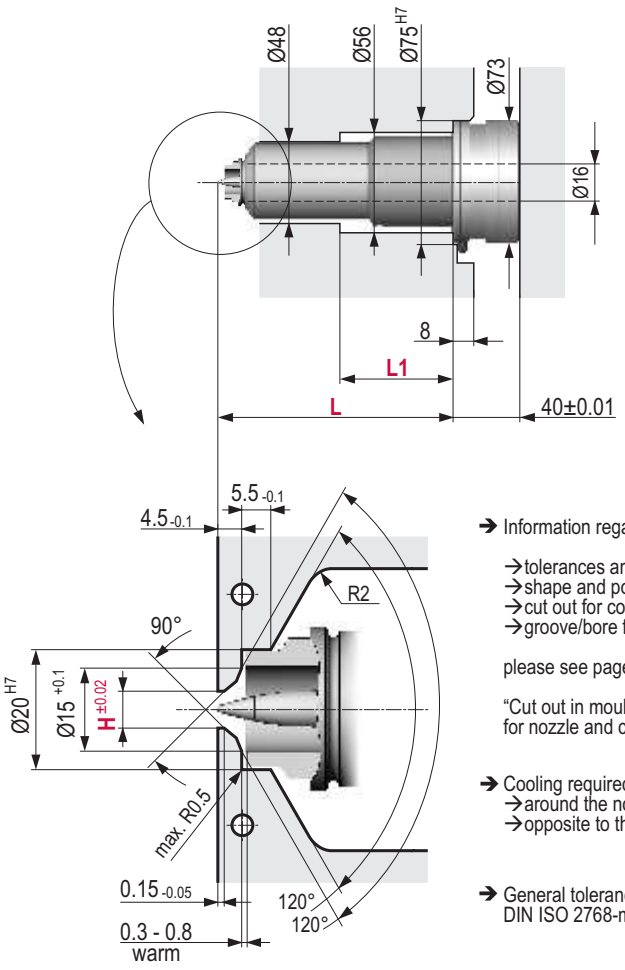
Series & Type ↑ Type [1] Length code ↑

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

52 **3.6**

L=↑ **H=↑**

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



➔ 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

➔ General tolerances according to DIN ISO 2768-mK

H (mm)					
2.4	2.7	3.0	3.3	3.6	3.9

Length code	L (mm)	L1 (mm)	L2 (mm)	Heater zones power [3] (Watt)					
				1	2	3	4	5	1...5
052	52	-	-	400	-	-	-	-	400
082	82	-	-	500	-	-	-	-	500
112	112	-	-	630	-	-	-	-	630
142	142	60	-	500	400	-	-	-	900
170	170	60	-	500	400	-	-	-	900
200	200	80	-	500	400	-	-	-	900
230	230	110	-	500	400	-	-	-	900
260	260	140	-	500	500	-	-	-	1000
290	290	170	-	630	500	-	-	-	1130
320	320	200	-	630	500	-	-	-	1130
350	350	230	-	630	500	500	-	-	1630
380	380	260	-	630	500	500	-	-	1630

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.

For design and application information, see the Synventive Hot Runner Guide.

Synventive molding solutions

GB N W01 M
Manifold nozzle, face fit, open with torpedo

CPTA

Illustrations simplified, schematically drawn and not to scale.

You can configure your nozzle here

1. Complete the nozzle description [1]

GB N W01 M

Series & Type ↑ Length code ↑

2. Selection of variables

L=↑* **H=↑**

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

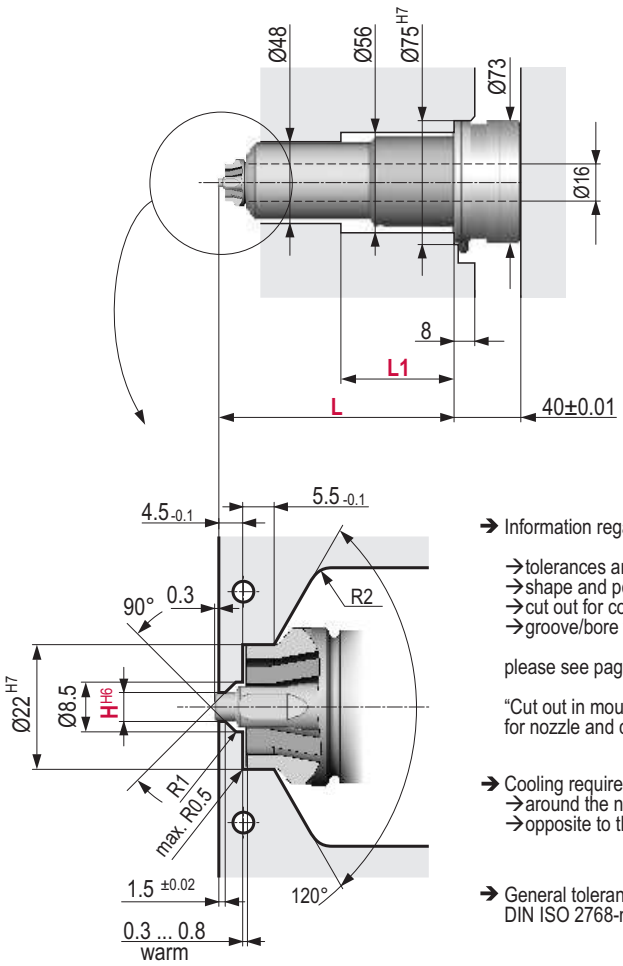
Example and explanations

Series: **GB N W01** Series & Type ↑ — Type [1] — **W** Nozzle tip shape W; **01** Version 01: for materials with medium to wide process window; **N** Gating type: valve gate (**V**) [1]

Position in nozzle length chart [2]: **M 052** Length code ↑

52 L=↑ **5.0** H=↑ — Variables for precise nozzle specification from the drawings and tables shown here

H (mm)
5.0



➔ 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

➔ General tolerances according to DIN ISO 2768-mK

Length code	L (mm)	L1 (mm)	L2 (mm)	Heater zones power [3] (Watt) 1	2	3	4	5	1...5
052	52	-	-	400	-	-	-	-	400
082	82	-	-	500	-	-	-	-	500
112	112	-	-	630	-	-	-	-	630
142	142	60	-	500	400	-	-	-	900
170	170	60	-	500	400	-	-	-	900
200	200	80	-	500	400	-	-	-	900
230	230	110	-	500	400	-	-	-	900
260	260	140	-	500	500	-	-	-	1000
290	290	170	-	630	500	-	-	-	1130
320	320	200	-	630	500	-	-	-	1130
350	350	230	-	630	500	500	-	-	1630
380	380	260	-	630	500	500	-	-	1630

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.

For design and application information, see the Synventive Hot Runner Guide.

Synventive molding solutions

GB N W02 M
Manifold nozzle, face fit, open with torpedo

C P T A

Illustrations simplified, schematically drawn and not to scale.

You can configure your nozzle here

1. Complete the nozzle description [1]

GB N W02 M

Series & Type ↑ Length code ↑

2. Selection of variables

L=↑* **H=↑**

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

Example and explanations

Series: GB N W02 — Position in nozzle length chart [2]: M 055

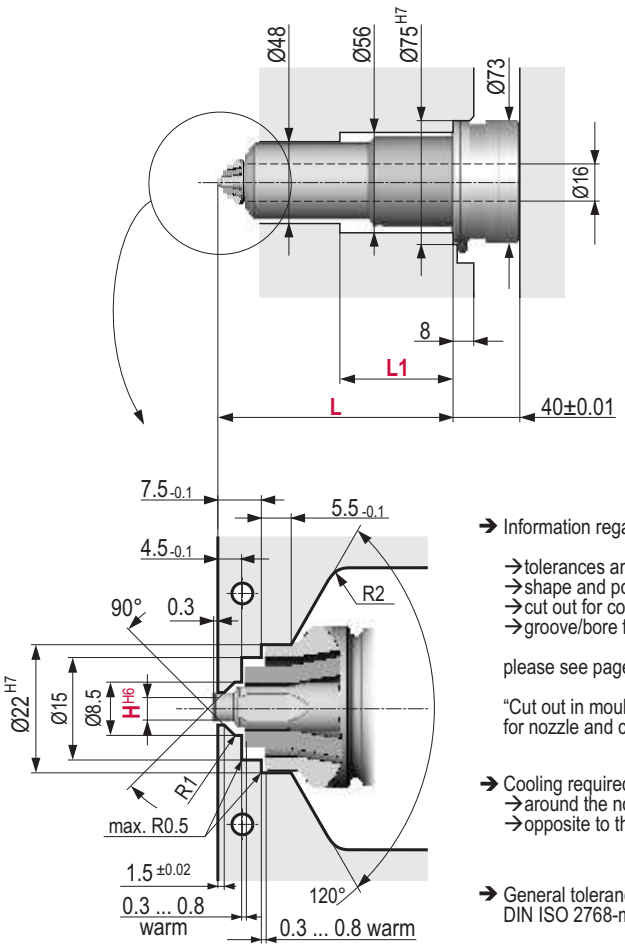
Series & Type ↑ (Type [1]) Length code ↑

- **W** Nozzle tip shape W
- **02** Version 02:
  - →for wide process window
  - →when installation space is limited
- **N** Gating type: valve gate (**V**) [1]

55 5.0

L=↑ **H=↑**

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



→ 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

→ General tolerances according to DIN ISO 2768-mK

H (mm)
5.0

Length code	L (mm)	L1 (mm)	L2 (mm)	Heater zones power [3] (Watt)					
				1	2	3	4	5	1...5
055	55	-	-	400	-	-	-	-	400
085	85	-	-	500	-	-	-	-	500
115	115	-	-	630	-	-	-	-	630
145	145	60	-	500	400	-	-	-	900
173	173	60	-	500	400	-	-	-	900
203	203	80	-	500	400	-	-	-	900
233	233	110	-	500	400	-	-	-	900
263	263	140	-	500	500	-	-	-	1000
293	293	170	-	630	500	-	-	-	1130
323	323	200	-	630	500	-	-	-	1130
353	353	230	-	630	500	500	-	-	1630
383	383	260	-	630	500	500	-	-	1630

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.

For design and application information, see the Synventive Hot Runner Guide.

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