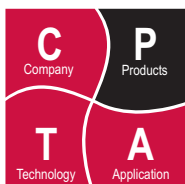
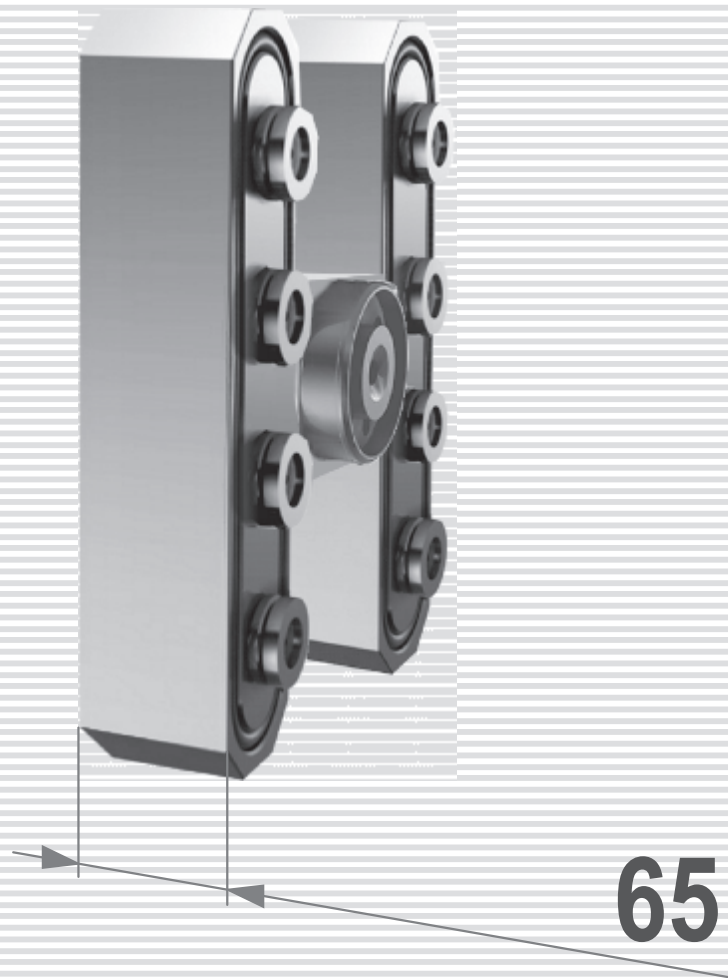


# Series VF

## Hot Runner Manifolds



Illustrations simplified, schematically drawn and not to scale.

**Product type**

Hot runner manifold of series **VF** which are characterised by the following dimensions:

- M** Thickness 65 mm
- J2** Flow bore  $\varnothing$  max.  $\varnothing 22$  mm

The manifolds can be supplied in standard shapes (I, H, X, Y) and in any realisable customised shape.

**Components**

**Melt flow components**

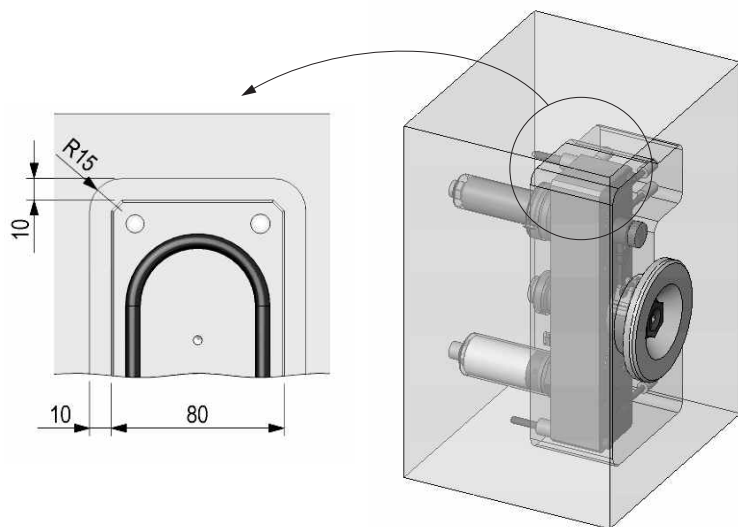
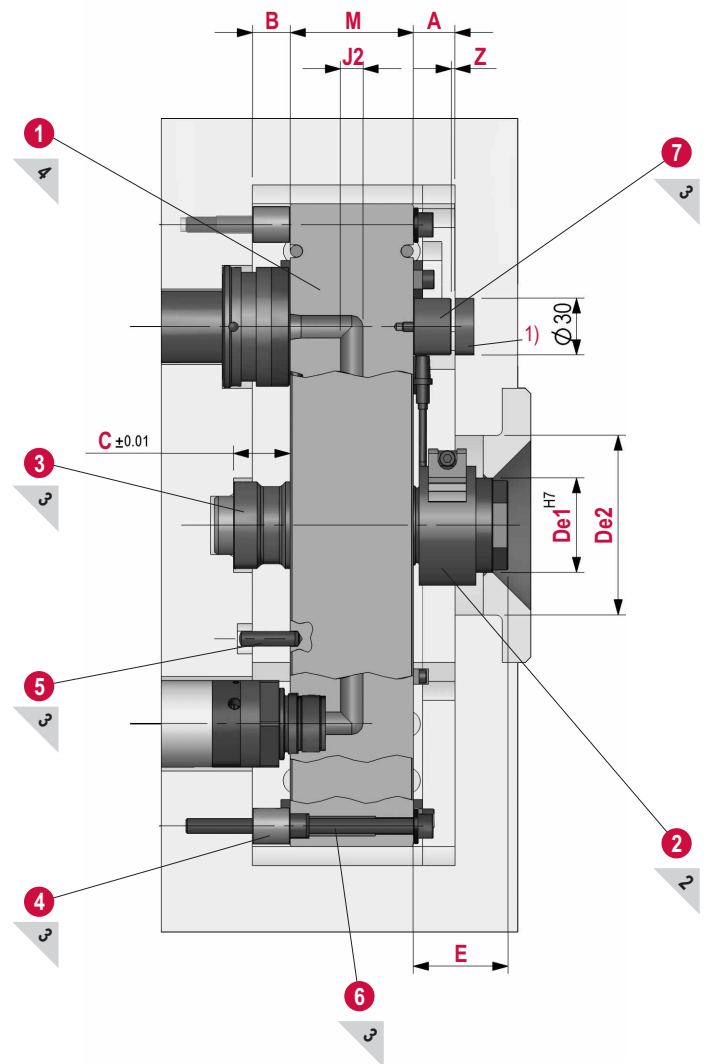
1. Manifold block including heaters, connections and thermocouple
2. Inlet bushing (including heater)

**Attached parts and accessories**

3. Centre support
4. Support pillar with spring dowel
5. Dowel
6. Fastening screw
7. Support pad

**Major dimensions (mm)**

- A** Manifold cut out, right (above)  $20^{2)}$
- B** Manifold cut out, left (below)  $20...32^{2)}$
- Z** Expansion gap  $0...0.16^{2)}$
- C** Height centre support  $20...50$
- E** Height inlet bushing  $25...200$
- De1**  $\varnothing$  of contact inlet bushing  $\varnothing 50$
- De2**  $\varnothing$  of cut out inlet bushing  $\varnothing 60 / \varnothing 95$



page no. of related data sheets

- 1) Hardened insert recommended; is not supplied with the hot runner system.
- 2) Values of these dimensions depend on the selected nozzle or on the selected material. They can be found in the Synventive Hot Runner Guide.

Inlet bushings which can be combined with hot runner manifolds of series VF:

**1. BC 025 50**

- short inlet bushing, not heated
- screwed into manifold

**2. BC ... 50**

- heated inlet bushing of different heights
- screwed into manifold

**3. BC ... 80**

- heated inlet bushing of different heights
- screwed into manifold
- for hotrunners with side arms and big systems

**Here you can configure your inlet bushing**

1. Complete the inlet bushing description

<b>BC</b>		<b>50</b>
Part code ↑	Length code ↑	Size ↑

2. Selection of variables

E=↑	R= ↑	AD=↑
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**Example and explanations**

Inlet bushing	Position in length chart	
↓	↓	
<b>BC</b>	<b>100</b>	<b>50</b>
Part code ↑	Length code ↑	Size ↑

<b>65</b>	<b>16</b>	<b>-</b>
E=↑	R= ↑	AD=↑

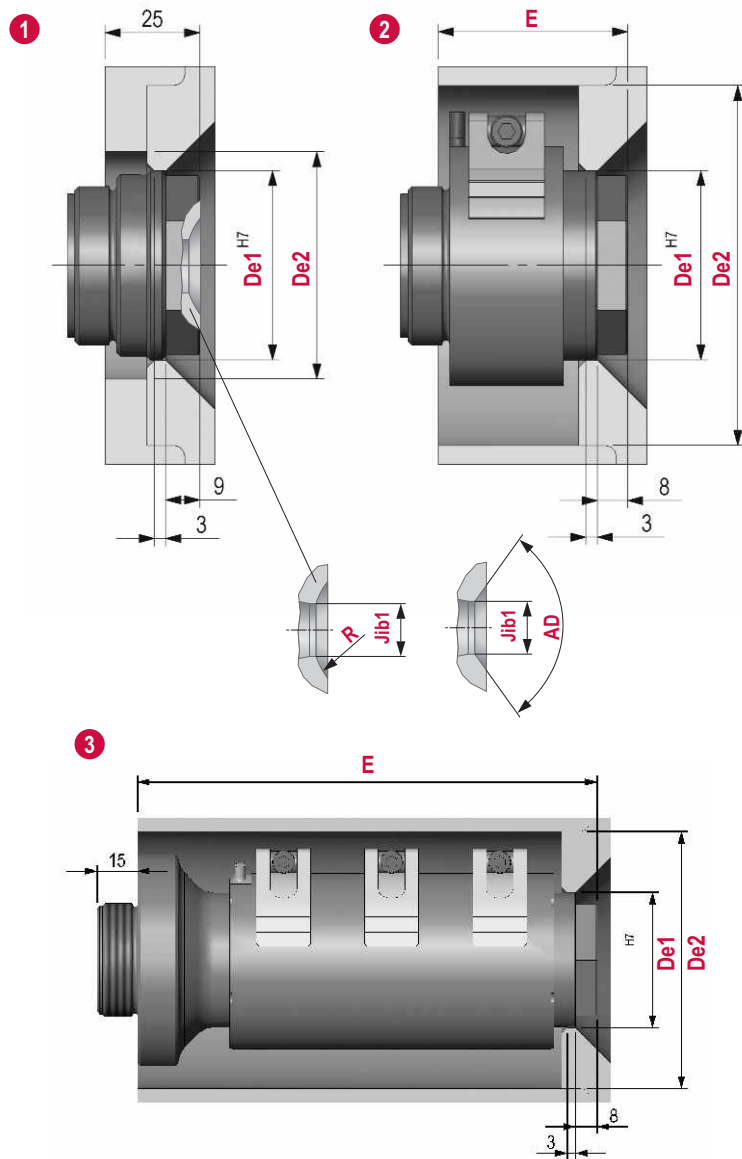
↑ Variables for precise part specification from the drawings and tables shown here

Jib1 (mm)
6 ... 21 (preferred 10)

R (mm)
0 ... 50

AD (°)
90 / 120

Illustrations simplified, schematically drawn and not to scale.



Length code		E (mm)	De1 (mm)	De2 (mm)	Heater power (Watt)
BC 025 50	025	25	Ø50	Ø60	-
BC 50	060	50...59.9	Ø50	Ø95	630
BC 50	100	60...99.9	Ø50	Ø95	500
BC 50	140	100...139.9	Ø50	Ø95	500
BC 50	180	140...179.9	Ø50	Ø95	630
BC 50	200	180...200	Ø50	Ø95	750
BC 80	164	150...163.9	Ø50	Ø95	500
BC 80	200	164...200	Ø50	Ø95	630

Attached parts and accessories for hot runner manifolds of series VF:

**1. MCS 46 ...**

Centre support	Lcs (mm)	B <sup>2)</sup> (mm)
MCS 46 20	20	max. 20
MCS 46 30	30	max. 30
MCS 46 50	50	max. 50

C (mm)
for nozzle size 12 / 16 / 22
≥B

**2. MSPL ...**

Support pillar	Dsp (mm)	Lsp (mm)	B <sup>2)</sup> (mm)
MSPL 13 20	Ø13	20	max. 20
MSPL 13 30	Ø13	30	max. 30
MSPL 13 50	Ø13	50	max. 50
MSPL 16 20	Ø16	20	max. 20
MSPL 16 30	Ø16	30	max. 30
MSPL 16 50	Ø16	50	max. 50

**3. DIN 7346: 13x20 ST / 16x20 ST**

→ Spring dowel

**4. DIN 912: M8 / M10.5**

→ Fastening screws

**5. DIN 6340: 8.4-ST / 10.5-ST**

→ Washers

**6. DIN 6325: 8 m6**

→ Dowel

**7. 56-30 ...**

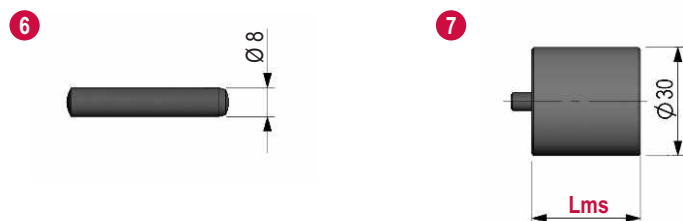
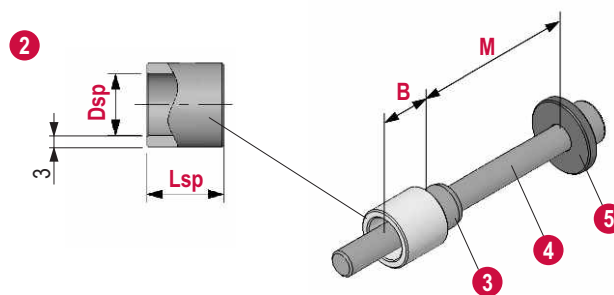
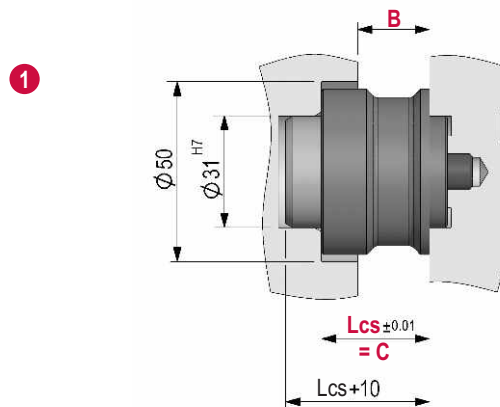
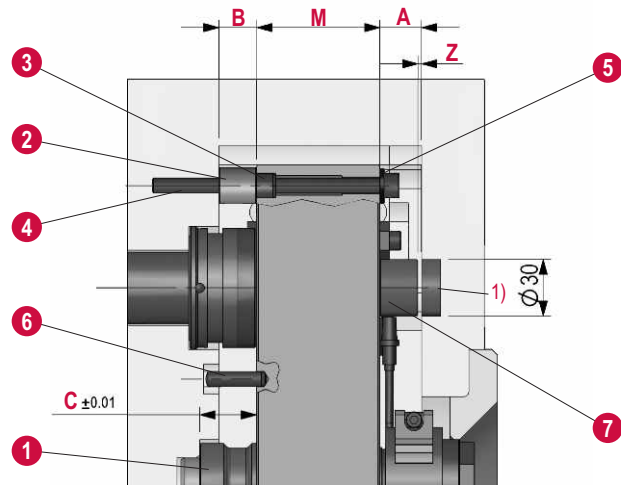
→ Support pads are only used when they are needed e.g. when face fit manifold nozzles are used.

Support pad	Lms (mm)	A <sup>2)</sup> (mm)
56-30-30	30	max. 30
56-30-40	40	max. 40

Z (mm) <sup>2)</sup>
0 ... 0.16

- 1) Hardened insert recommended; is not supplied with the hot runner system.
- 2) Values of these dimensions depend on the selected nozzle or on the selected material. They can be found in the Synventive Hot Runner Guide.

Illustrations simplified, schematically drawn and not to scale.



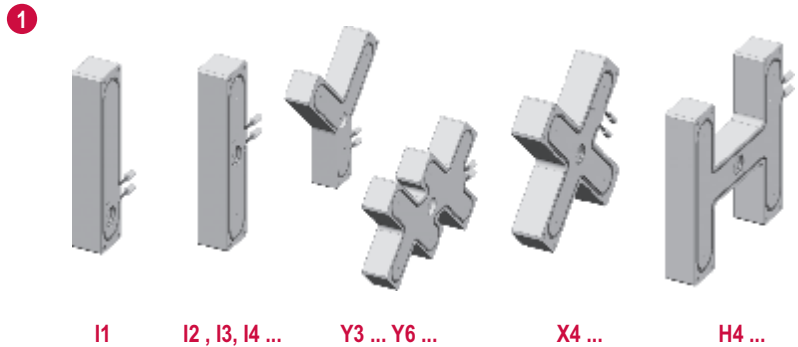
Illustrations simplified, schematically drawn and not to scale.

**1. Manifolds in standard shape**

Manifolds in standard shape have been designed by implementing the standard cavity and runner layouts which are widely used in practice: I, H, X and Y.

Shown on the right there are several examples for manifolds in standard shape based on the components of series VF. They are designed and made according to the customer's specification

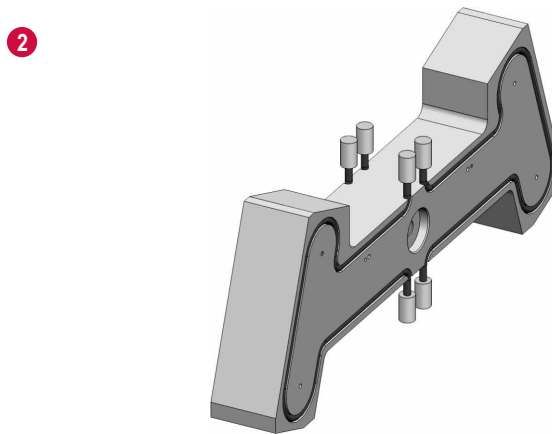
Using capital letters to describe the different manifold types does not only refer to the shape of the manifold but also to the runner layout inside the manifold. The number represents the number of nozzles attached to the manifold.



**2. Manifolds in customised shape**

Manifolds in customised shape are designed and made according to the customer's specification by using components of the selected manifold series.

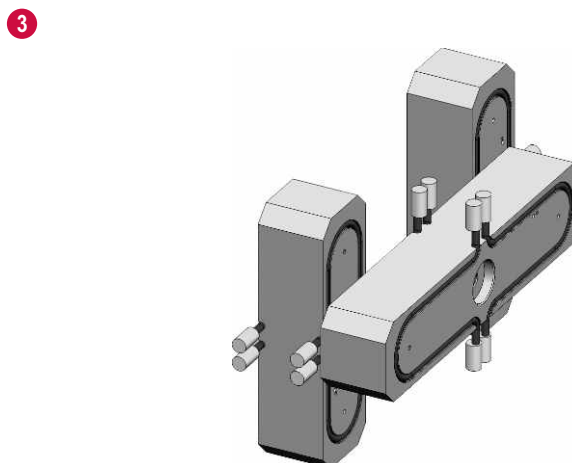
Shown on the right there is a manifold in customised shape which has been designed by using components of series VF.



**3. Bridge manifolds**

Bridge manifolds make it possible to combine several manifolds to one feed system. They are designed and made according to the customer's specification by using components of the selected manifold series.

Shown on the right there is a bridge manifold which has been designed by using components of series VF.



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