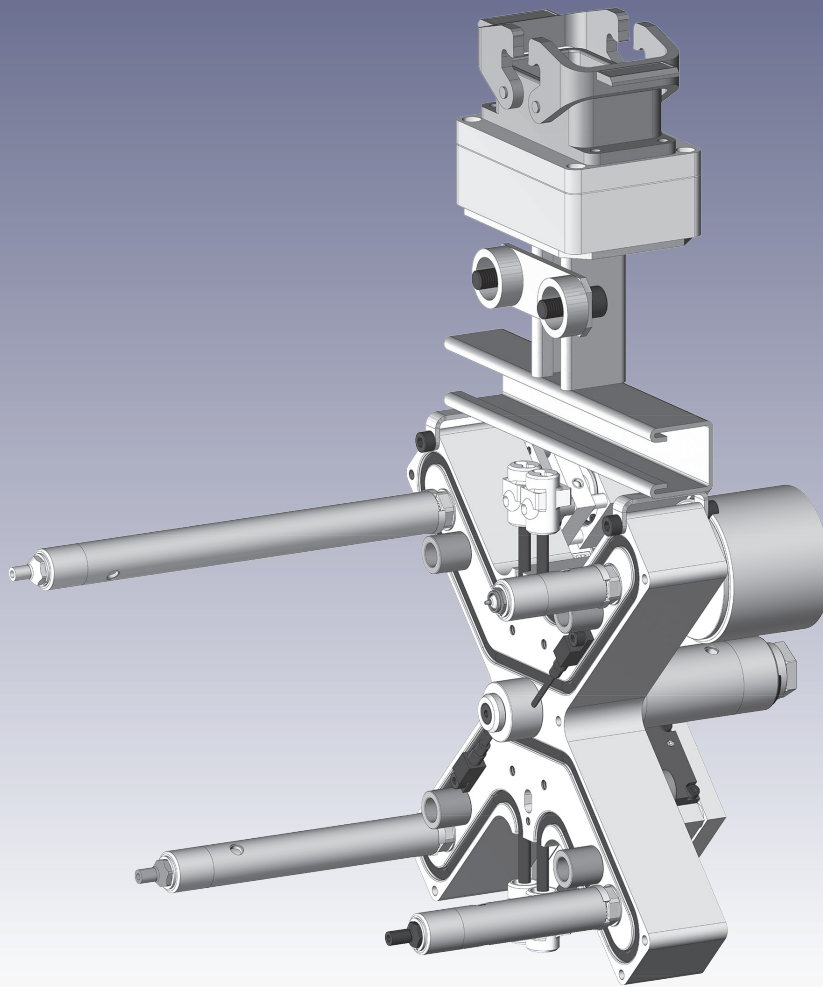


# 06E-03 Product Catalog

Threaded Nozzles Hot Runner Series



Doc009162\_RIS.png

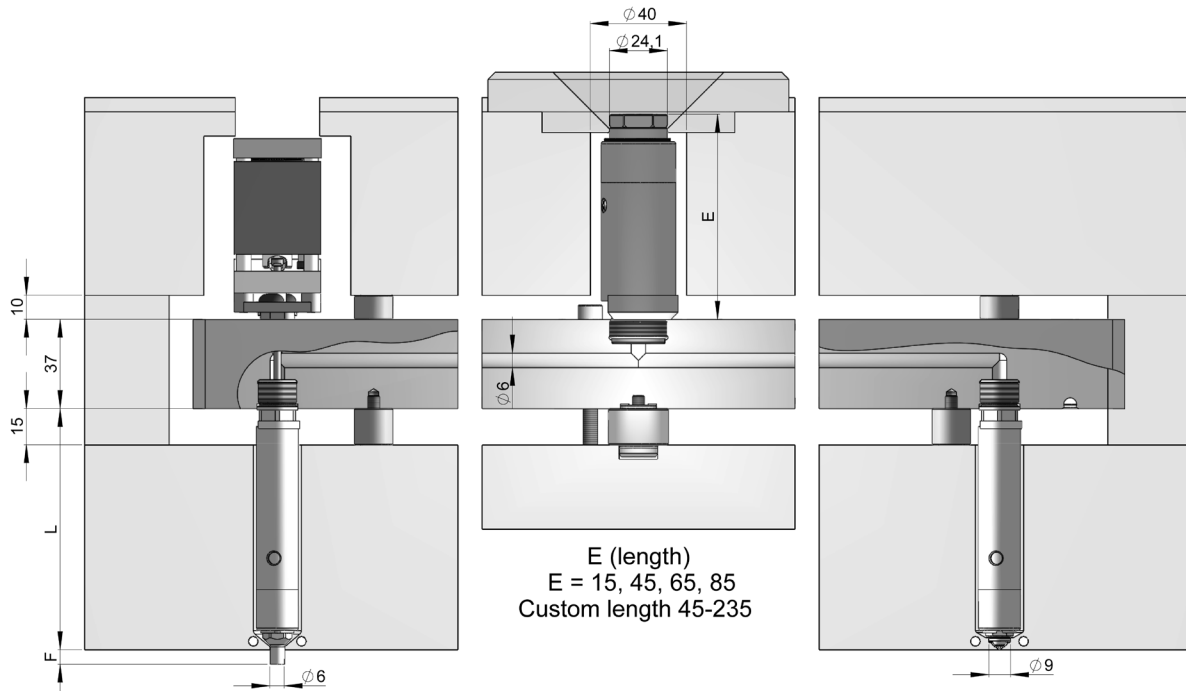
Stabilize your Process \_\_\_\_\_





Hot Runner System - Thrust Pad Manifold

Illustrations simplified, schematically drawn and not to scale. All dimensions in mm.

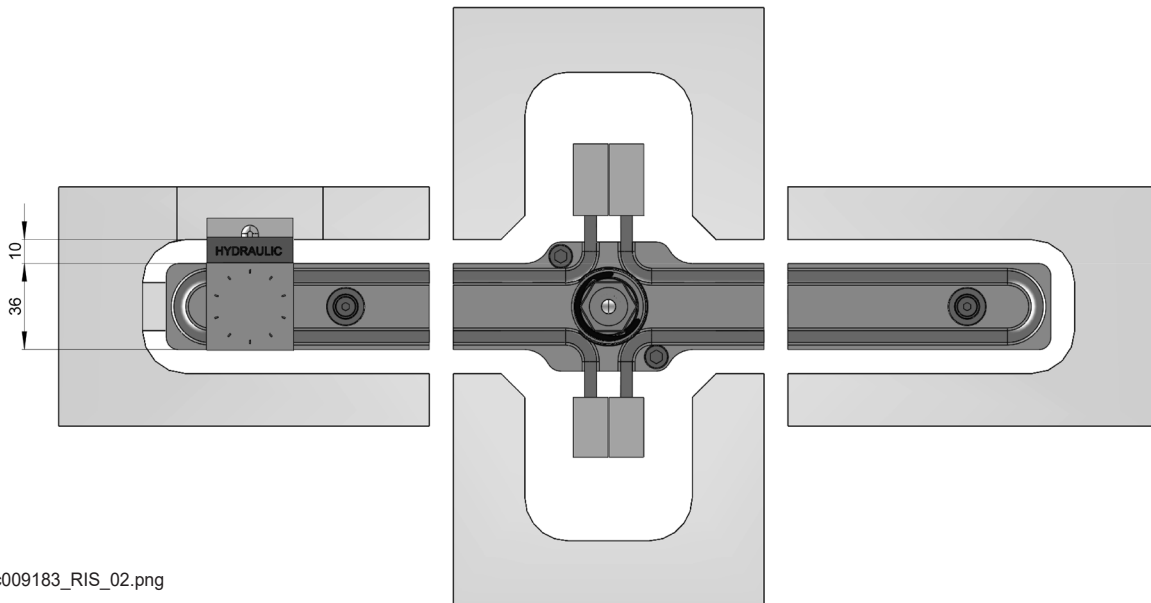


Doc009183\_RIS\_01.png

Thrust pad selection

Inlet bushing

Thrust pad selection



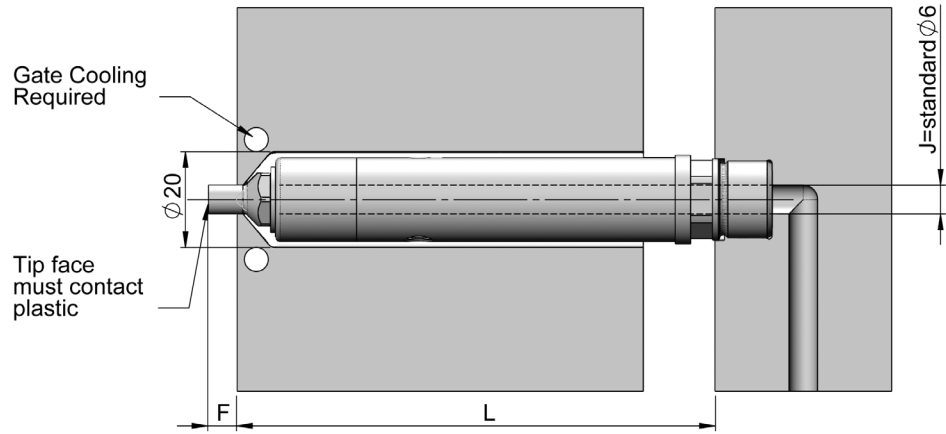
Doc009183\_RIS\_02.png

\*min.10<sup>1)</sup> For a specific application, please consult Synventive



Nozzle Lengths

Illustrations simplified, schematically drawn and not to scale. All dimensions in mm.



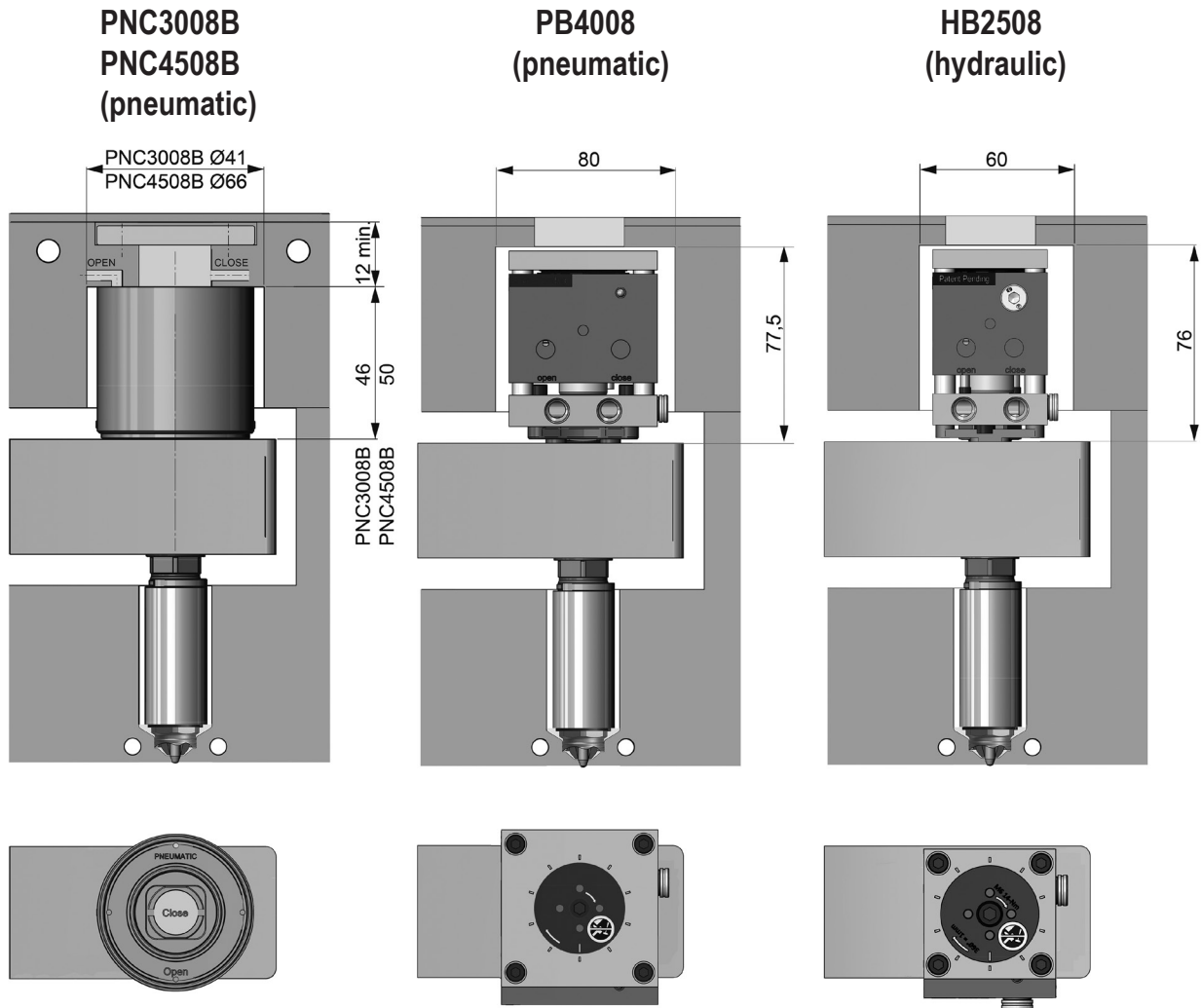
Doc009184\_RIS.png

L (mm)	Heater zone power (Watt)	L (mm)	Heater zone power (Watt)
	Power1		Power 1
One control area (thermocouple) Standard lengths		One control area (thermocouple) Custom lengths	
60	125 W	>60-<80	125 W
70	125 W	>80-<100	139 W
80	139 W	>100-<120	159 W
90	139 W	>120-<140	179 W
100	159 W	>140-<180	199 W
110	159 W	>180-<200	239 W
120	179 W	>200-220	259 W
130	179 W		
140	199 W		
160	199 W		
180	219 W		
200	239 W		



Available Actuators

Illustrations simplified, schematically drawn and not to scale. All dimensions in mm.



Doc009185\_RIS.png

**PNC3008B**  
 Pressure range:  
 6 - 12 bar (87 - 174 psi)  
 Min/Max Close Forces:  
 424 N / 848 N

**PNC4508B**  
 Pressure range:  
 6 - 12 bar (87 - 174 psi)  
 Min/Max Close Forces:  
 954 N / 1908 N

**PB4008**  
 Pressure range:  
 6 - 12 bar (87 - 174 psi)  
 Min/Max Close Forces:  
 754 N / 1508 N

Available features:  
 ♦ Position Sensor  
 ♦ SynCool®

**HB2508**  
 Pressure range:  
 40 - 60 bar (600 - 870 psi)  
 Min/Max Close Forces:  
 1963 N / 2945 N

Available features:  
 ♦ Position Sensor  
 ♦ SynCool®

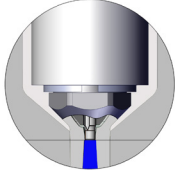
Electric actuators are also available for the 06E nozzle.  
 See the actuator catalog CAT-03-0001\_EN-REV##



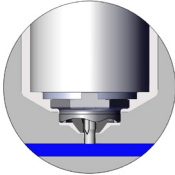
Nozzle Tip Styles

Illustrations simplified, schematically drawn and not to scale. All dimensions in mm.  
H = Gate orifice diameter, F = Tip extension, Dt = Tip Diameter, Mod = Modifiable

**VSP** Valve Gate - Straight Pin - Plunged Through

Tip Style	Description	Dt = Ø6 F = 0, 6, Mod H = 1.6		
	Standard  Doc009099_RIS.png		✓	

**VSW** Valve Gate - Straight Pin - Blind

Tip Style	Description	Dt = Ø9		
		H = 0.8	H = 1.2	H = 1.6
	Standard  Doc009100_RIS.png	✓	✓	✓

✓ Preferred

(✓) Available

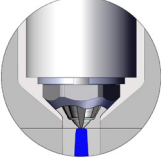
✗ Not Available



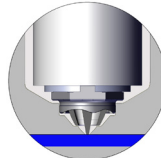
Nozzle Tip Styles

Illustrations simplified, schematically drawn and not to scale. All dimensions in mm.  
H = Gate orifice diameter, F = Tip extension, Dt = Tip Diameter, Mod = Modifiable

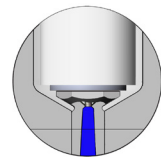
**TTP** Thermal Gate – Torpedo - Plunged Through

Tip Style	Description	Dt = Ø6 F = 0, 6, Mod		
		H = 0.8	H = 1.2	H = 1.6
	Standard Doc009101_RIS.png	✓	✓	✓

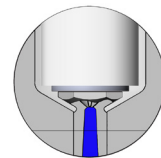
**TTW** Thermal Gate – Torpedo - Blind

Tip Style	Description	Dt = Ø9		
		H = 0.8	H = 1.2	H = 1.6
	Standard Doc009102_RIS.png	✓	✓	✓

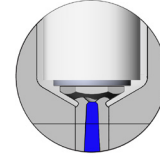
**TNK** Thermal Gate – Full Flow - Plunged Through

Tip Style	Description	Dt = Ø6 / Mod Dt = 5-6 F = 6, Mod F = 0-6		
		H = 1.2 Mod 1,4	H = 1.6 Mod 1,8	H = 2.0
	Standard (cold runner applica- tions) Doc009103_RIS.png	✓	✓	✓

**TTK** Thermal Gate – Torpedo - K

Tip Style	Description	Dt = Ø6 / Mod Dt = 5-6 F = 6, Mod F = 0-6		
		H = 1.2 Mod 1,4	H = 1.6 Mod 1,8	H = 2.0
	Standard (cold runner applica- tions, semi crystalline materials) Doc009104_RIS.png	✓	✓	✓

**TPK** Thermal Gate – Full Flow - K

Tip Style	Description	Dt = Ø6 / Mod Dt = 5-6 F = 6, Mod F = 0-6		
		H = 1.2 Mod 1,4	H = 1.6 Mod 1,8	H = 2.0
	Standard (cold runner applica- tions) Doc009105_RIS.png	✓	✓	✓

✓ Preferred

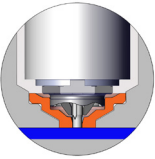
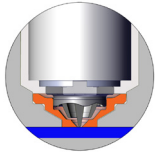
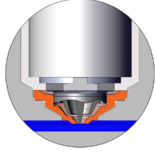
(✓) Available

✗ Not Available



Wear Inserts

Illustrations simplified, schematically drawn and not to scale. All dimensions in mm. H = Gate orifice diameter, F = Tip extension, Dt = Tip Diameter, Mod = Modifiable

Part	Description	F = 0, 6, Mod		
		H=0.8	H=1.2	H=1.6
 <b>WI-VSW</b> Doc009106_RIS.png	Wear Insert	✓	✓	✓
 Doc009107_RIS.png	Wear Insert (without Dimple)	✓	✓	✓
 Doc009108_RIS.png	Wear Insert (with Dimple)	F = 0		
		✓	✓	✓

✓ Preferred

(✓) Available

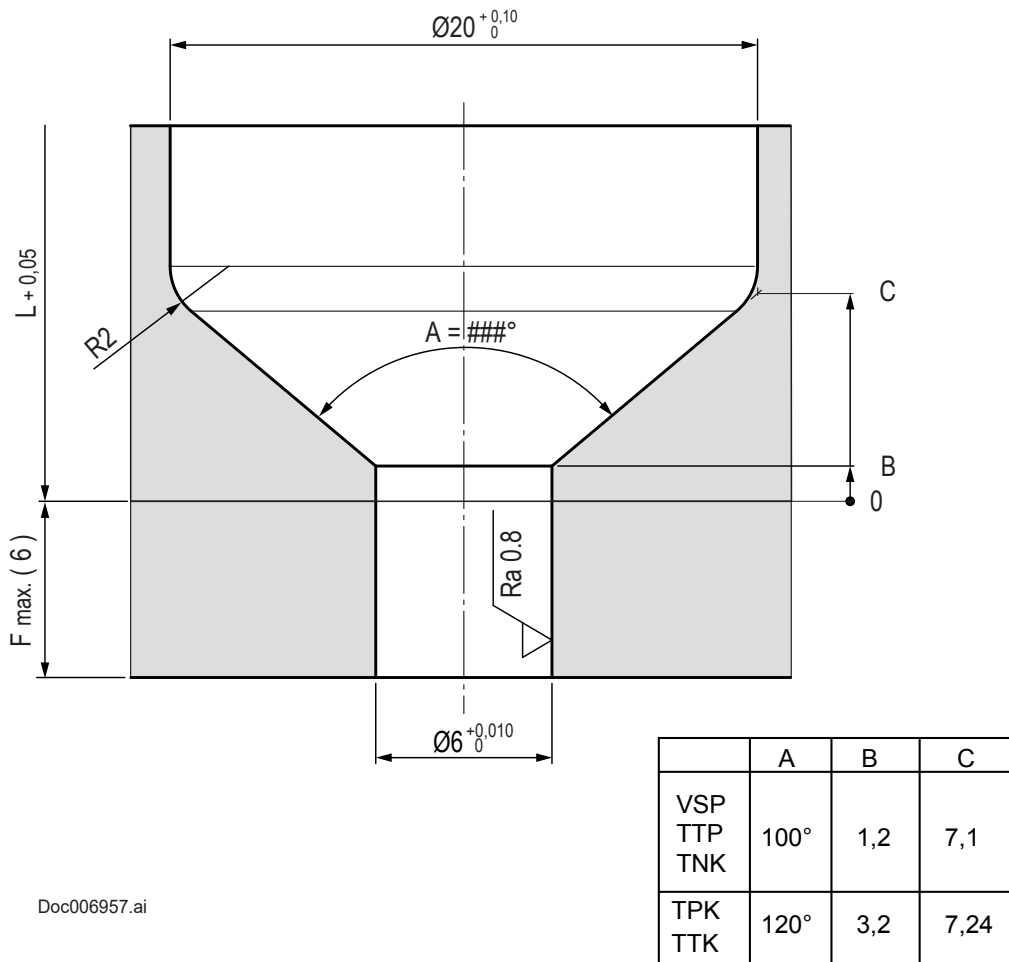
✗ Not Available



### Nozzle Tip Cutout Dimensions

Illustrations simplified, schematically drawn and not to scale. All dimensions in mm.  
Dimensions for reference only. Reference system drawing for complete dimensions prior to machining gate detail in mold.

#### VSP, TTP, TNK, TTK, TPK- Nozzle tip cutout dimensions



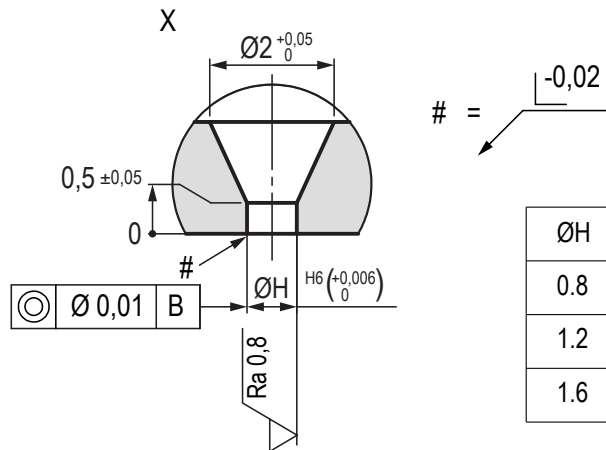
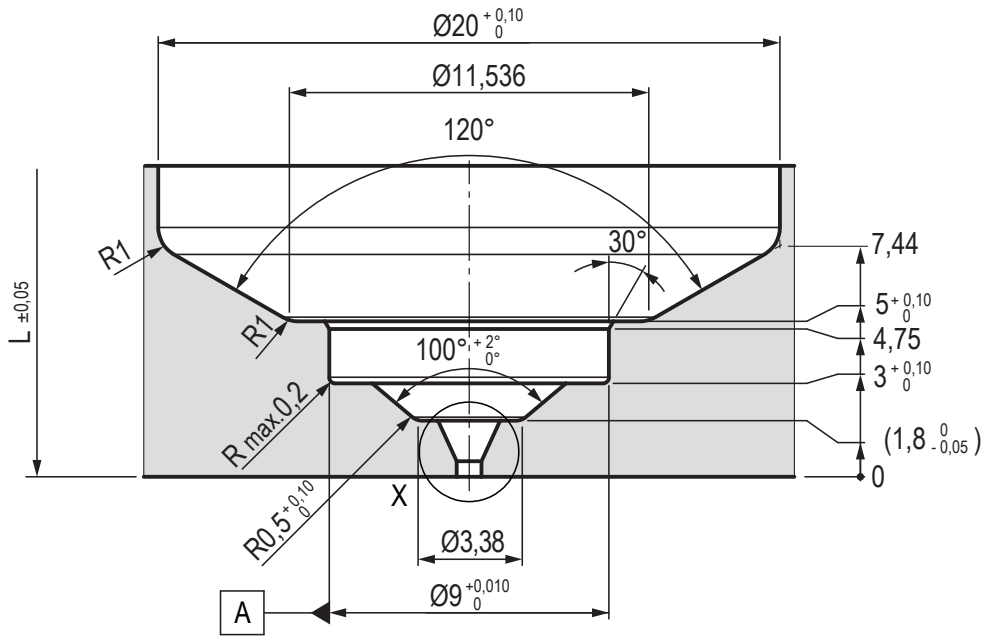




Nozzle Tip Cutout Dimensions

Illustrations simplified, schematically drawn and not to scale. All dimensions in mm. Dimensions for reference only. Reference system drawing for complete dimensions prior to machining gate detail in mold.

VSW - Nozzle tip cutout dimensions



1. At the area of the nozzle gate replaceable, hardened (52 +2/-1 HRC) inserts are recommended by Synventive.
2. Radius/chamfer at the front of the valve pin shall not be removed.
3. Synventive recommends that the gate area geometry is manufactured by grinding and not EDM with a surface quality of  $\sqrt{Ra0,4}$
4. To avoid a deformation at the gate the space to move freely has to be checked at hot condition.

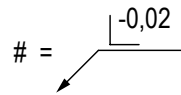
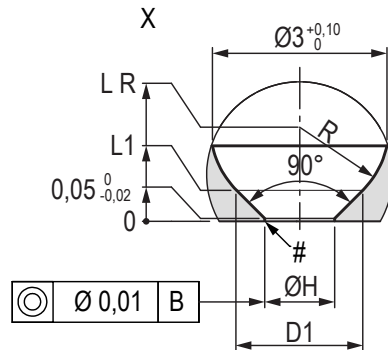
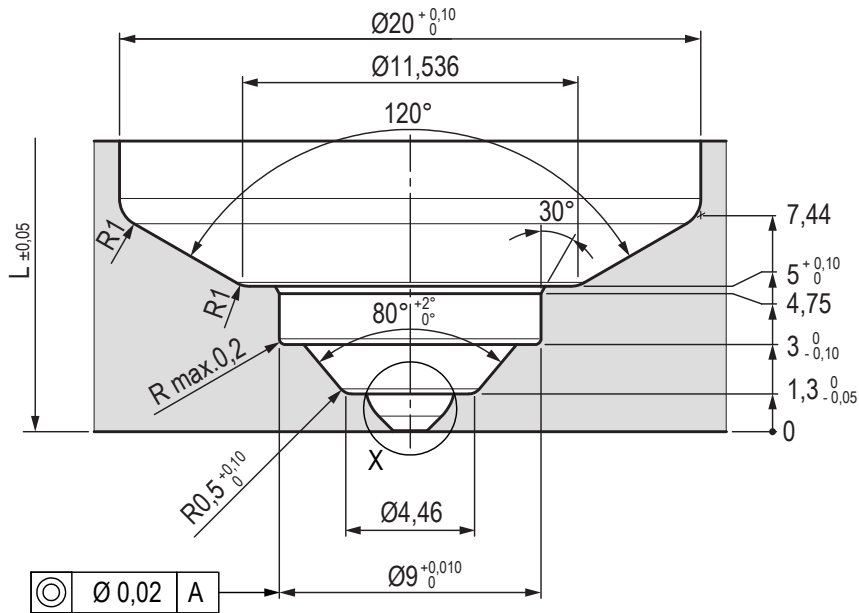
Doc006956.ai



Nozzle Tip Cutout Dimensions

Illustrations simplified, schematically drawn and not to scale. All dimensions in mm. Dimensions for reference only. Reference system drawing for complete dimensions prior to machining gate detail in mold.

TTW - Nozzle tip cutout dimensions



ØH	R	L1	D1	LR
0.8	1.65	0.81	2.33	1.98
1.2	1.53	0.53	2.17	1.62
1.6	1.5	0.31	2.12	1.37

1. At the area of the nozzle gate replaceable, hardened (52 +2/-1HRC) inserts are recommended by Synventive.
2. Synventive recommends that the gate area geometry is manufactured by grinding and not EDM with a surface quality of  $\sqrt{Ra0,8}$

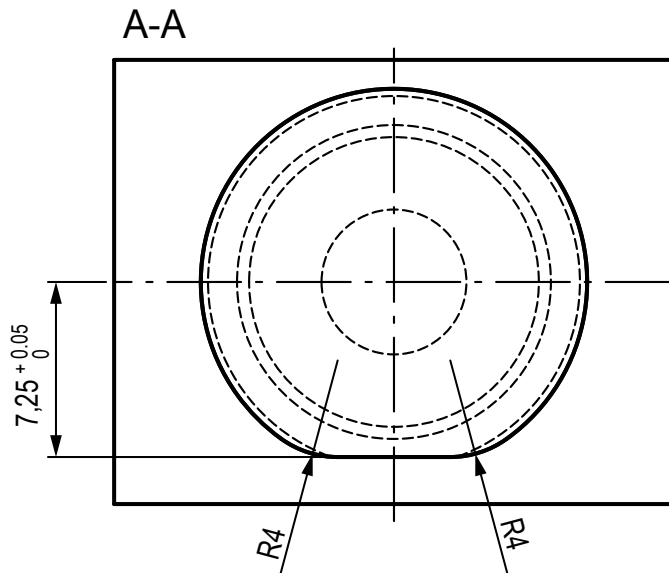
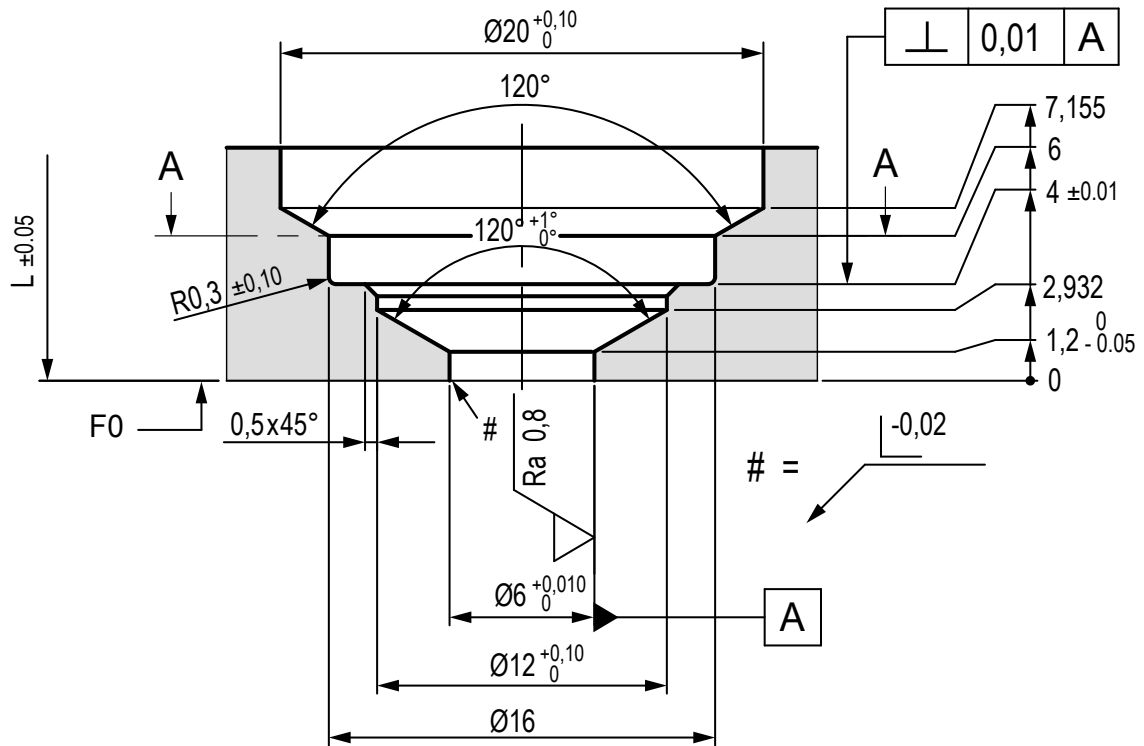
Doc006955.ai



Wear Insert Cutout Dimensions

Illustrations simplified, schematically drawn and not to scale. All dimensions in mm.  
Dimensions for reference only. Reference system drawing for complete dimensions prior to machining gate detail in mold.

WI-VSW, WI-TTW - Wear insert cutout dimensions



Doc006959.ai

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