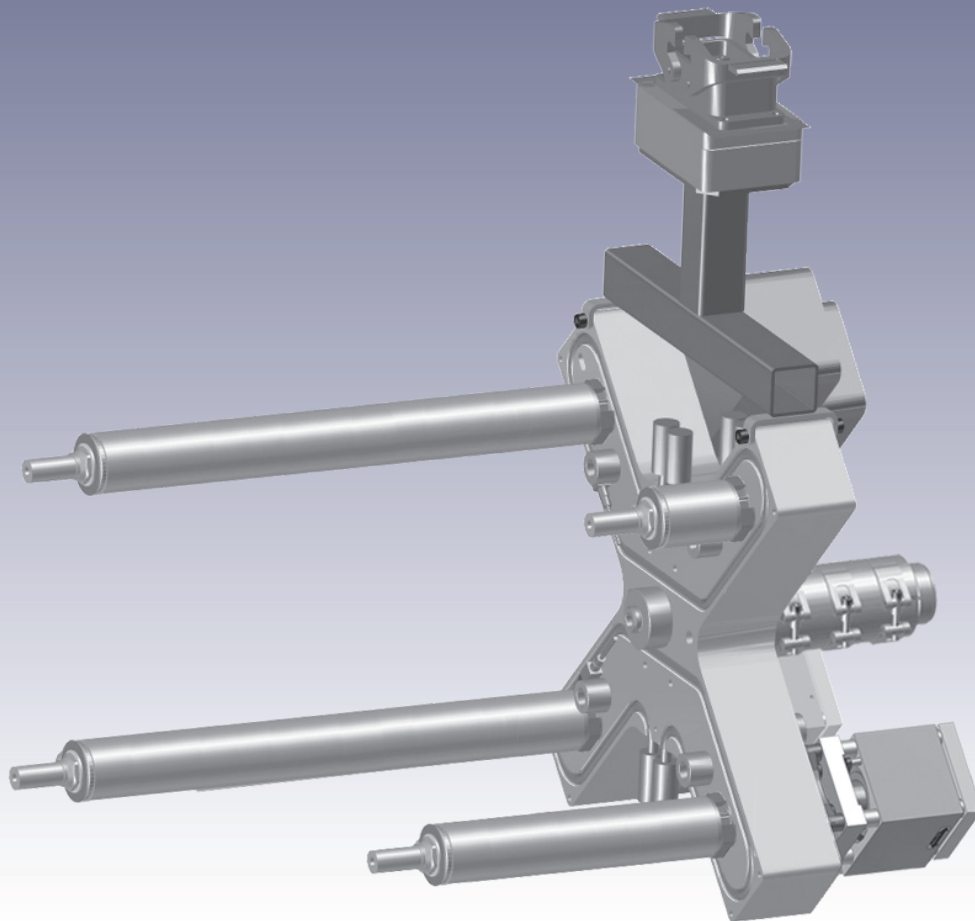


22E-04 Product Catalog

Threaded Nozzles Hot Runner Series

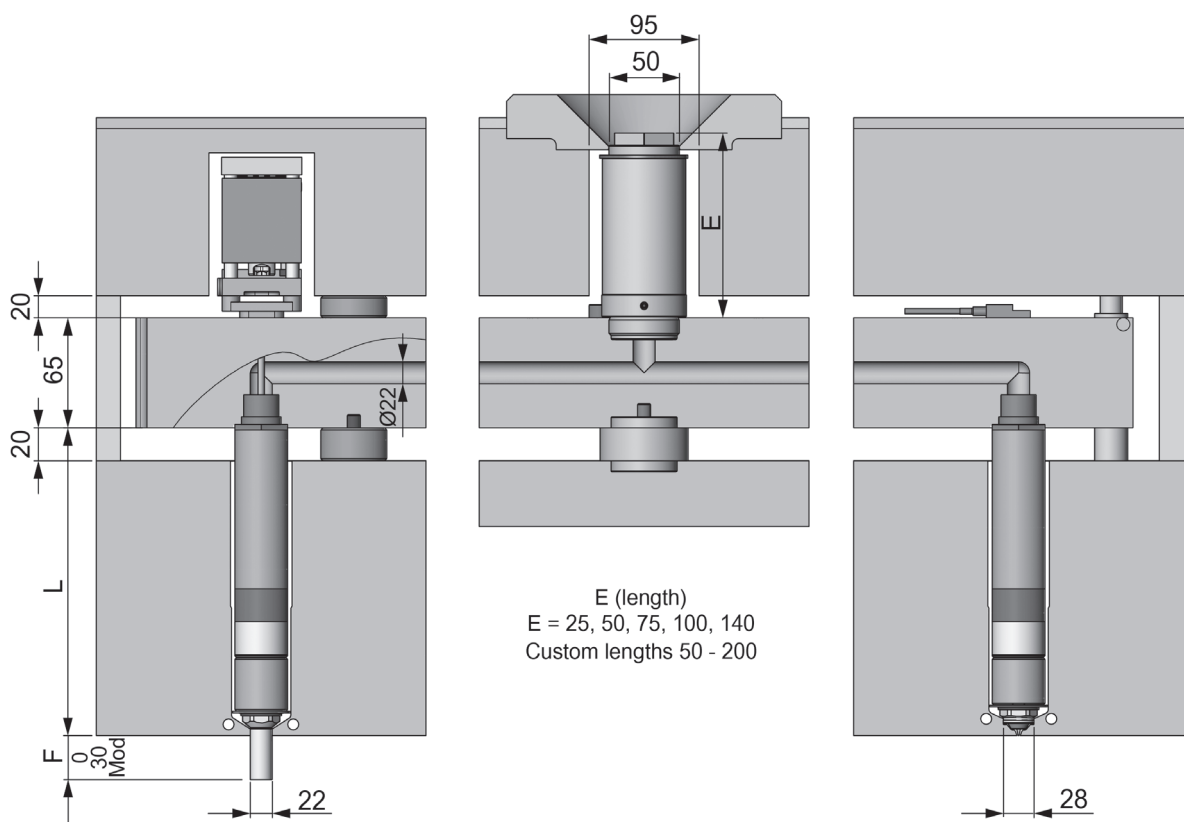


Stabilize your Process _____



Hot Runner System - Thrust Pad / Bolt Down Manifold

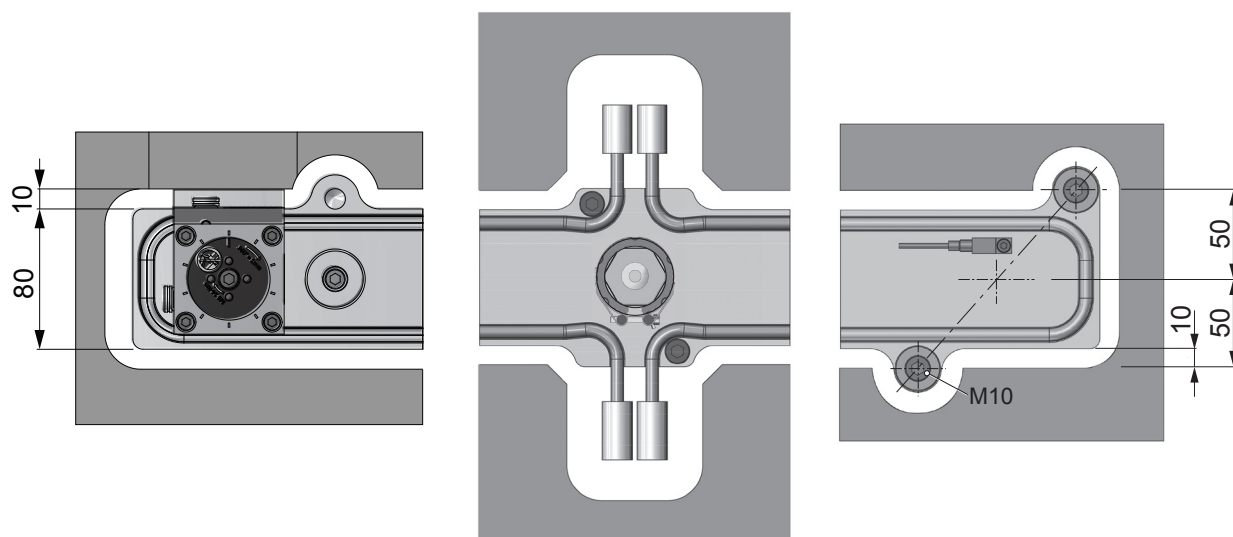
Illustrations simplified, schematically drawn and not to scale. All dimensions in mm.



Thrust pad selection

Inlet bushing

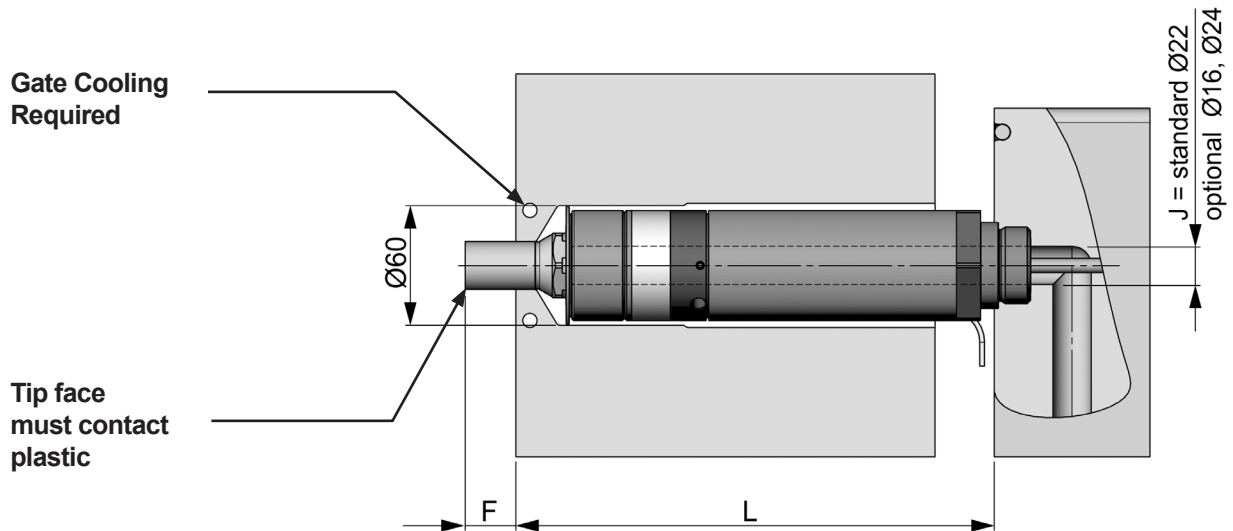
Bolt down selection





Nozzle Lengths

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



L (mm)	Heater zone power ¹⁾ (Watt)		
	Power 1	Power 2	Power 3
110-<130	500W	-	-
130-<150	500W	200W	-
150-<185	500W	315W	-
185-<265	500W	400W	-
265-<305	500W	500W	-
305-<380	500W	630W	-
380-<390	500W	630W	200W
390-<430	500W	630W	315W
430-<510	500W	630W	400W
510-<550	500W	630W	500W
550-650	500W	630W	630W
>650	500W		

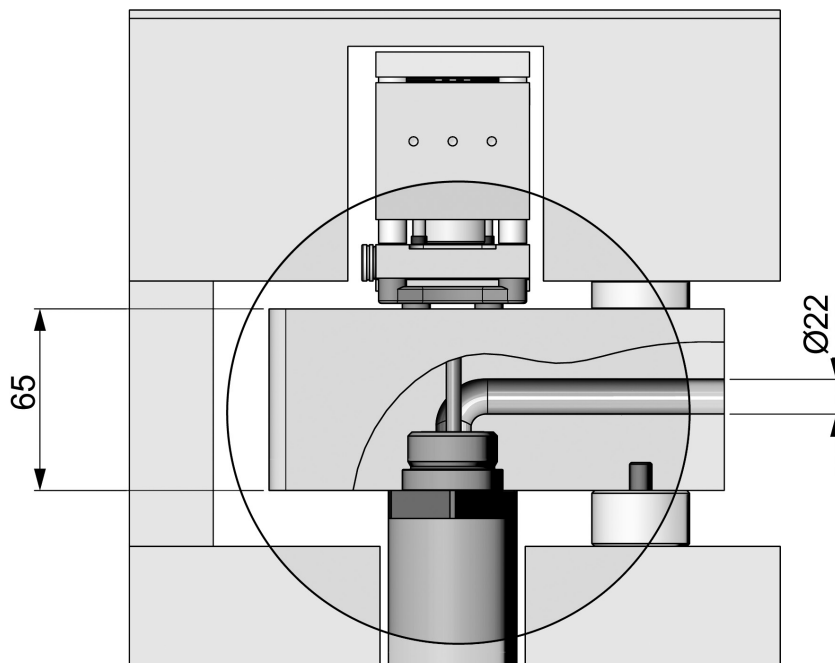
¹⁾ The numbering of the heating zones starts at the nozzle tip and ends at the nozzle head



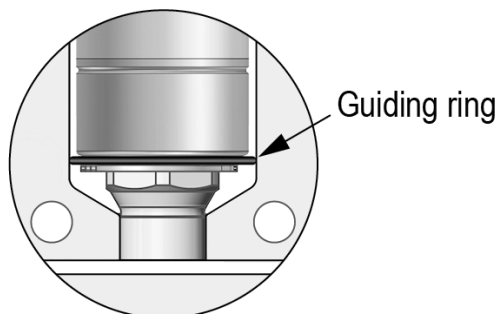
Optional Features

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

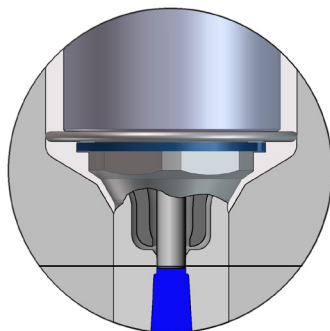
Smooth flow



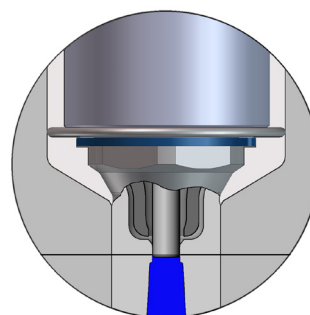
Optional Guiding ring (European Standard)



Mold strenghts



Reduced cutout

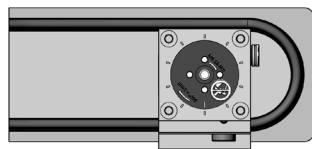
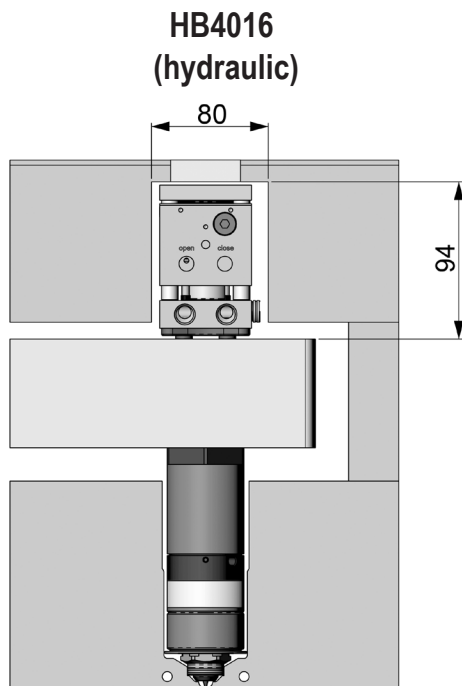


Standard cutout



Available Actuators

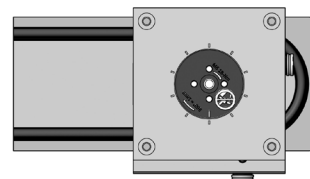
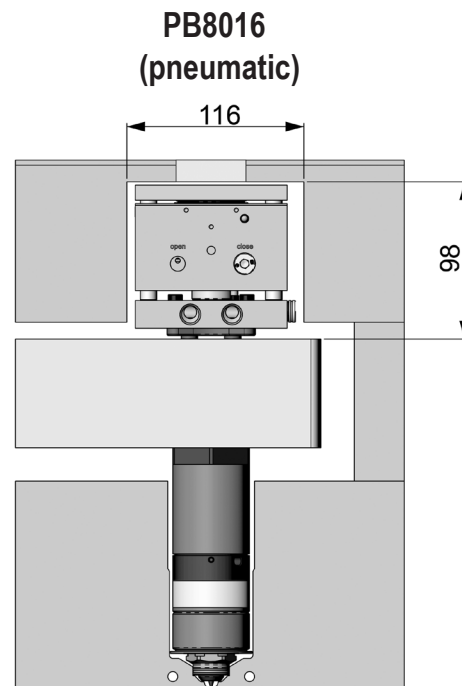
Illustrations simplified, schematically drawn and not to scale. All dimensions in mm.



Pressure range:
40 - 60 bar (600 - 870 psi)
Min/Max Close Forces:
5027 N / 7540 N

Available features:

- ◆ Position Sensor
- ◆ SynCool®



Pressure range:
6 - 12 bar (87 - 174 psi)
Min/Max Close Forces:
3016 N / 6032 N

Available features:

- ◆ Position Sensor
- ◆ SynCool®

For additional specification and requirements see the actuator catalog CAT-03-0001_EN-REV##

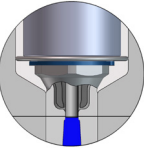
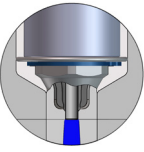
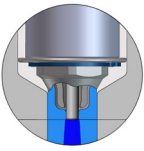
The pneumatic actuator series VP8016, mounted in the back plate, is also available for the 22E nozzle. See the actuator catalog CAT-03-0001_EN-REV##



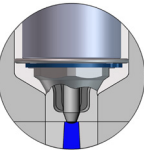
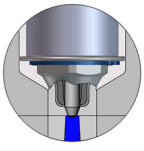
Nozzle Tip Styles

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 = Ø22 F = 0, 30, Mod	
			H=6.0	H=7.0
	VSP	Standard	✓	(✓)
	VSP-SC	Color Seal	✓	(✓)
	VSP-WC	Wear C	(✓)	✓

VTP Valve Gate - Tapered Pin - Plunged Through

Tip Style		Description	Dt = Ø22 F = 0, 30, Mod	
			H=6.0	H=6.5
	VTP	Standard	✓	(✓)
	VTP-SC	Color Seal	✓	(✓)

*

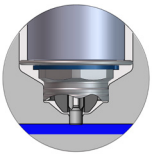
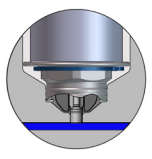
✓ Preferred (✓) Available ✗ Not Available



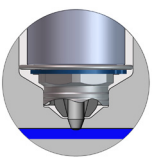
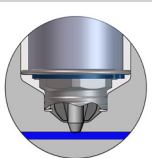
Nozzle Tip Styles

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

VSW Valve Gate - Straight Pin - Blind

Tip Style		Description	H=5.0	H=6.0	H=7.0
			Dt = Ø28		
	VSW	Standard	(✓)	✓	(✓)
	VSW-SC	Color Seal	(✓)	✓	(✓)

VTW Valve Gate - Tapered Pin - Blind

Tip Style		Description	H=5.5	H=6.0	H=6.5
			Dt = Ø28		
	VTW	Standard	(✓)	✓	(✓)
	VTW-SC	Color Seal	(✓)	✓	(✓)

✓ Preferred

(✓) Available

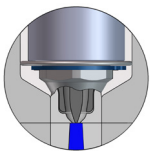
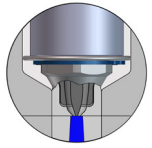
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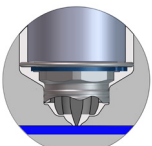
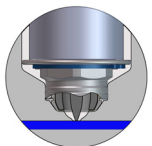
Nozzle Tip Styles

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

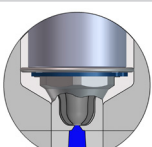
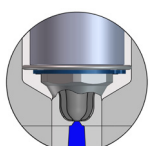
TTP Thermal Gate – Torpedo - Plunged Through

Tip Style		Description	Dt = Ø22 F = 0, 30, Mod			
			H=3.0	H=3.5	H=4.0	H=4.5
	TTP	Standard	✓	✓	✓	✓
	TTP-SC	Color Seal	✓	✓	✓	✓

TTW Thermal Gate – Torpedo - Blind

Tip Style		Description	Dt = Ø28			
			H=3.0	H=3.5	H=4.0	H=4.5
	TTW	Standard	✓	✓	✓	✓
	TTW-SC	Color Seal	✓	✓	✓	✓

TFP Thermal Gate – Full Flow - Plunged Through

Tip Style		Description	Dt = Ø22 F = 0, 30, Mod			
			H=2.5	H=3.0	H=3.5	H=4.0
	TFP	Standard	✓	✓	✓	✓
	TFP-SC	Color Seal	✓	✓	✓	✓

✓ Preferred

(✓) Available

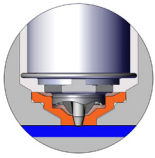
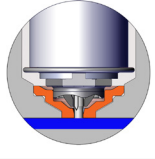
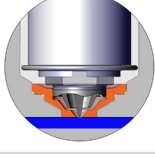
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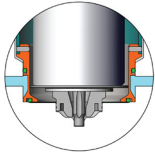
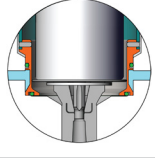
Wear Inserts / Cooling Bushings

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

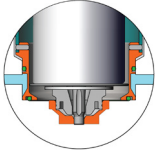
Wear Insert

Part			F = 0, 30, Mod						
			H=3.0	H=3.5	H=4.0	H=4.5	H=6.0	H=6.5	H=7.0
	WI-VTW	Wear Insert for VTW Nozzle tips	✗	✗	✗	✗	✓	✓	✗
	WI-VSW	Wear Insert for VSW Nozzle tips	✗	✗	✗	✗	✓	✗	✓
	WI-TTW	Wear Insert for TTW Nozzle tips	✓	✓	✓	✓	✗	✗	✗

Cooling Bushing

Part		VSP	VTP	VSW	VTW	TTT	TTW	TFP
	NC							
	Nozzle Cooling Bushing for Nozzle Tips, Blind and Plunged Through	✓	✓	✓	✓	✓	✓	✓
								

Cooling Bushing and Wear Insert

Part	Description	VSW	VTW	TTW
	NC + WI Wear Insert combined with Nozzle Cooling Bushing for Nozzle Tip Blind	✓	✓	✓

✓ Preferred

(✓) Available

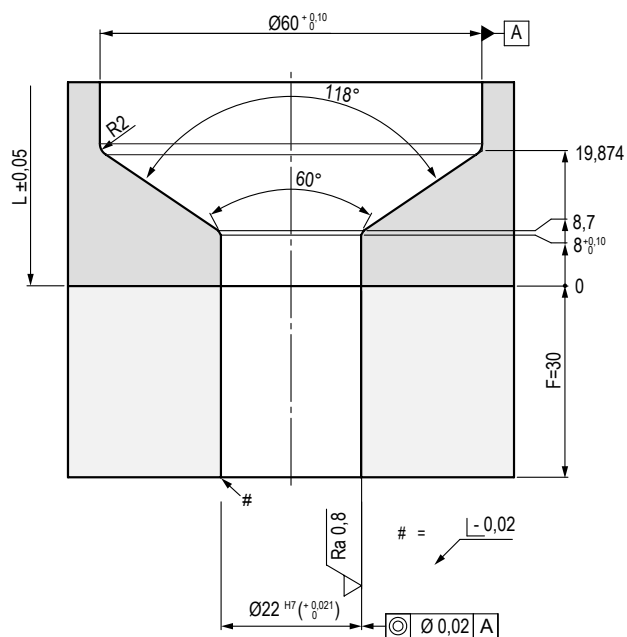
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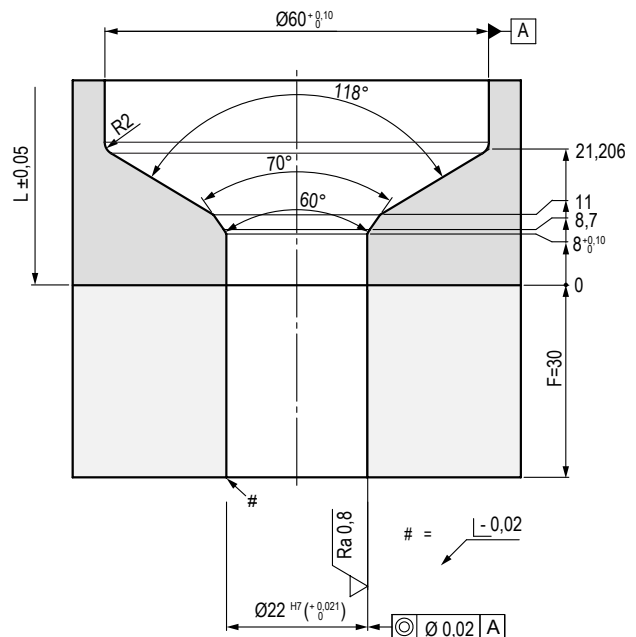
Nozzle Tip Cutout Dimensions

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, VTP, TTP, TFP - Nozzle tip cutout dimensions



Standard Cutout

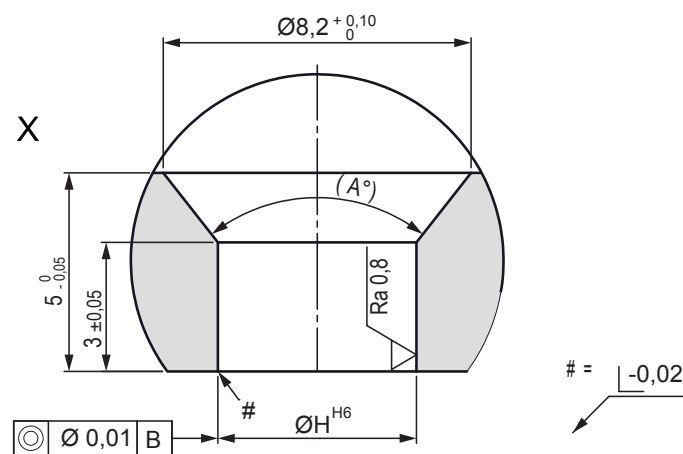
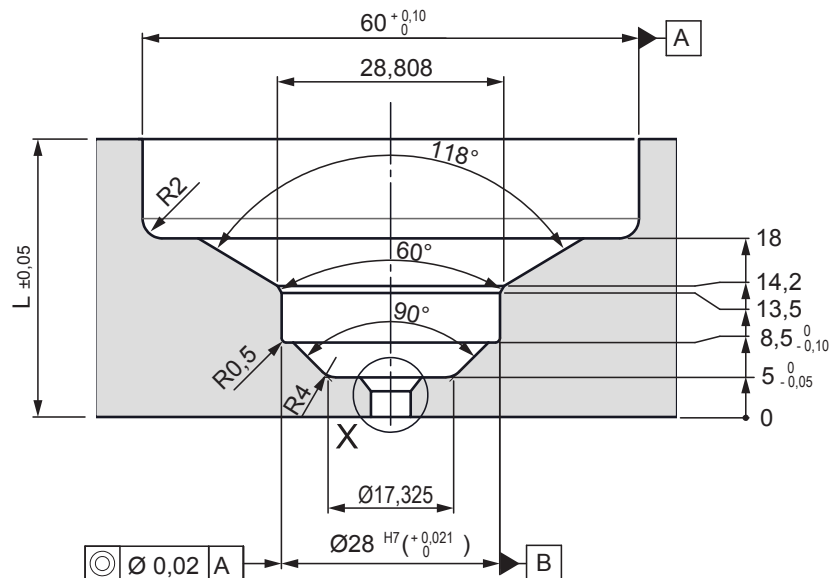


Reduced Cutout

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



ØH H6	(A°)
5,0 ^{+0,008} ₀	77,32
6,0 ^{+0,009} ₀	57,62
7,0 ^{+0,009} ₀	33,4

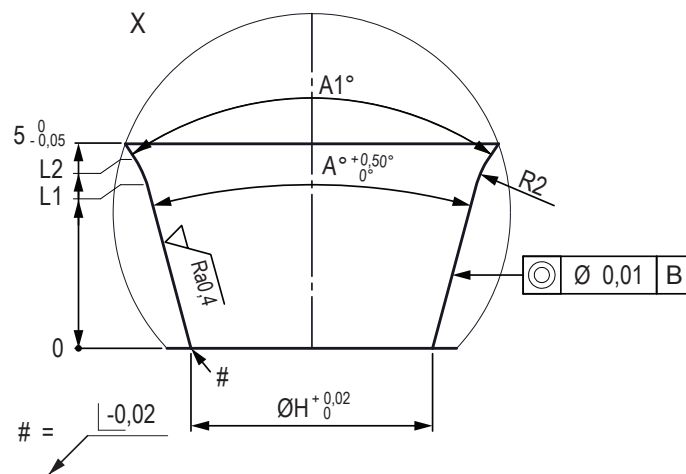
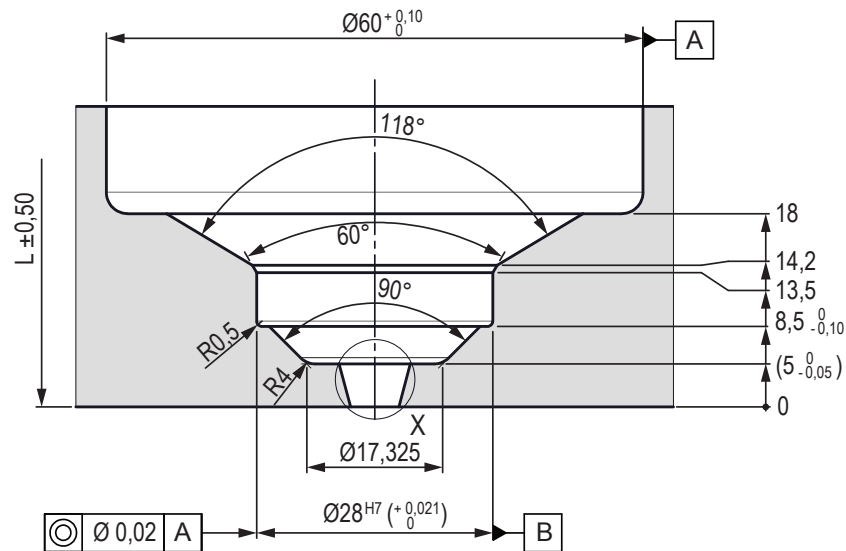
1. At the area of the nozzle gate replaceable, hardened (52 +2/-1HRC) inserts are recommended by Synventive.
2. Synventive recommends that the gate area geometry is manufactured by grinding and not EDM with a surface quality of $\sqrt{Ra0,8}$



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.

VTW - Nozzle tip cutout dimensions



ØH	A°	D	A1	R	L1	D1	L2	D2
5,5	40	9,14						
6	30	9,2	70	2	4,057	8,174	4,687	8,761
6,5	30	9,18						

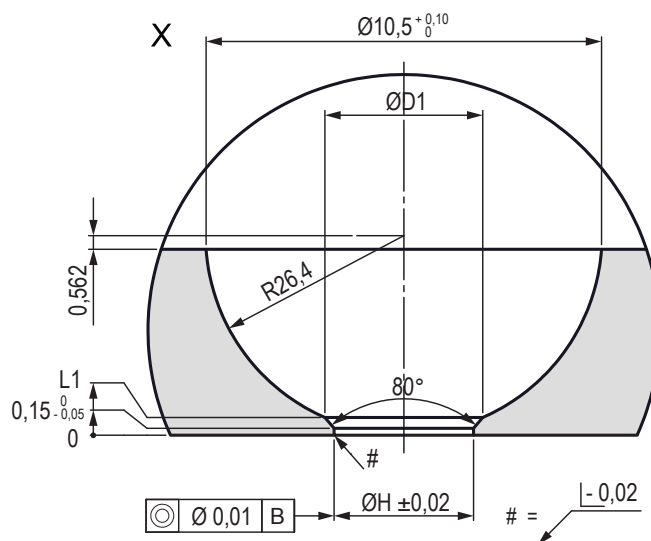
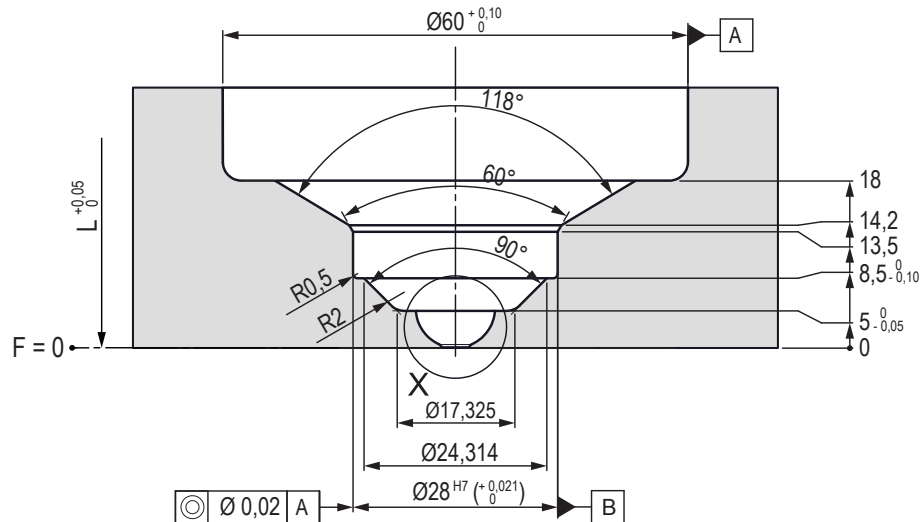
1. At the area of the nozzle gate replaceable, hardened (52 +2/-1HRC) inserts are recommended by Synventive.
2. Synventive recommends that the gate area geometry is manufactured by grinding and not EDM with a surface quality of $\sqrt{Ra0,4}$



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



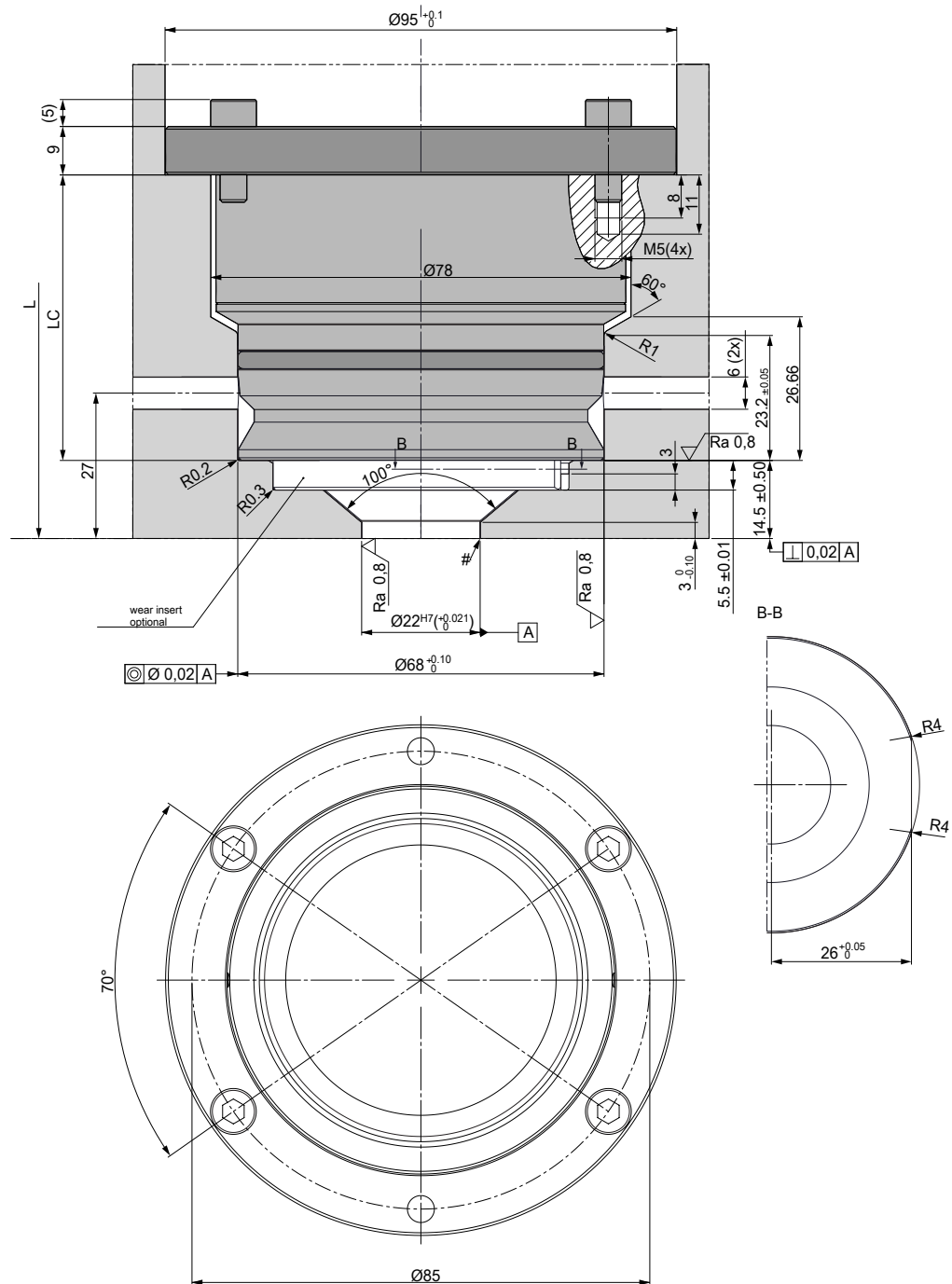
ØH	L1	D1
3	0,64	3,822
3,5	0,812	4,611
4	1,066	5,538
4,5	1,527	6,811

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

Cooling Bushing with 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.

VSW, VTW, TTW - Cooling bushing with wear insert cutout dimensions



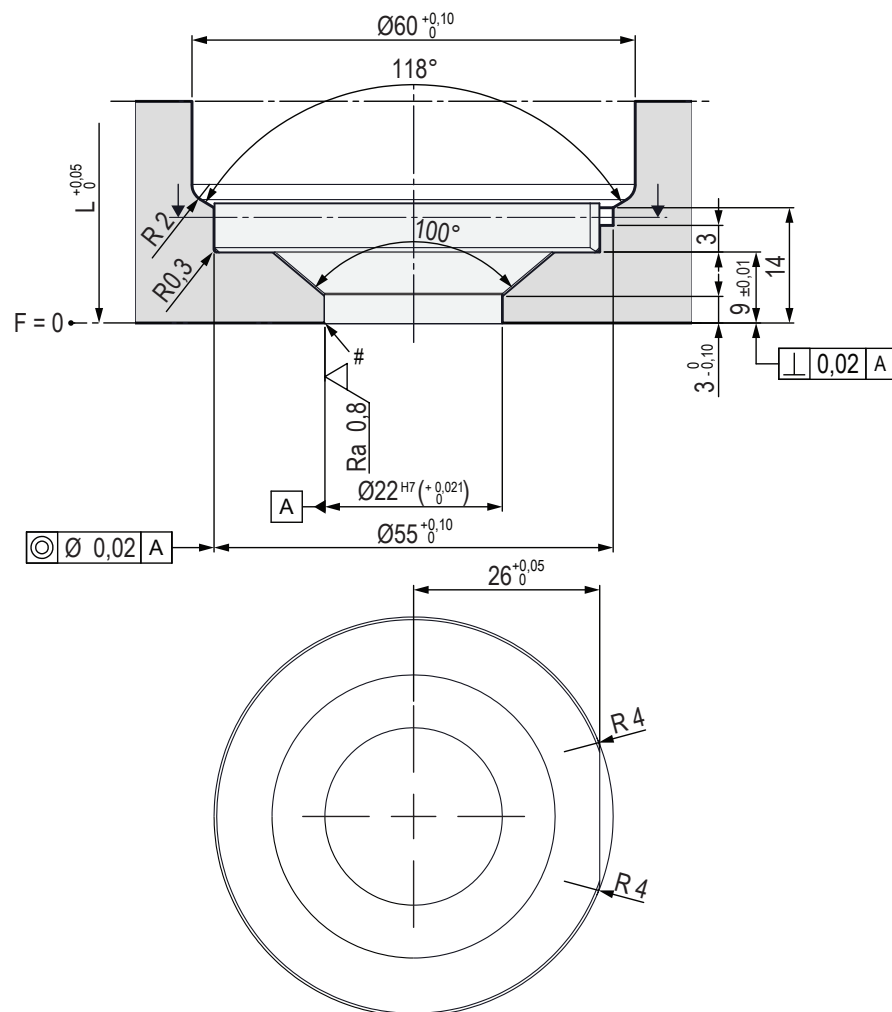
Illustrations simplified, schematically drawn and not to scale. All dimensions in mm.
Reference system drawing for complete dimensions prior to machining gate detail in mold.

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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.

VSW, VTW, TTW - Wear insert cutout dimensions



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