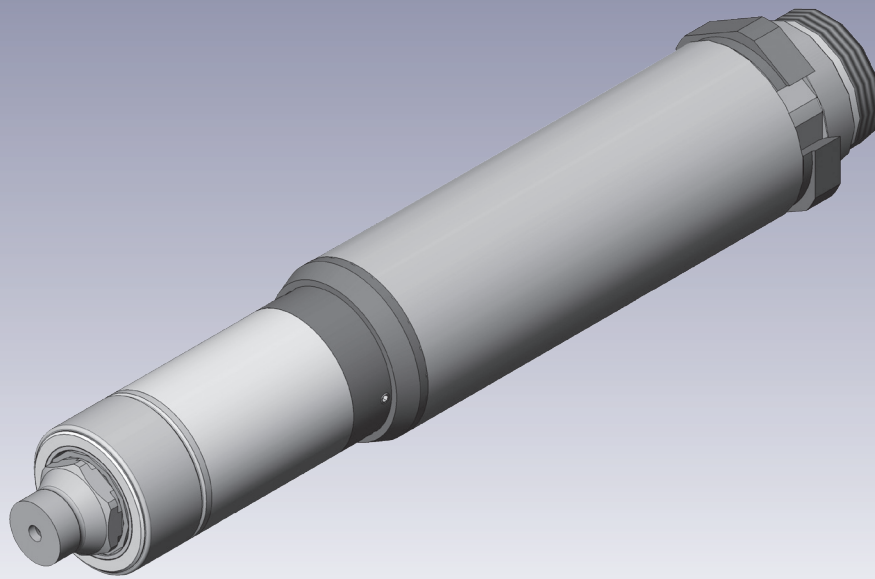


16EX22-02 Product Catalog

Threaded Nozzles Hot Runner Series

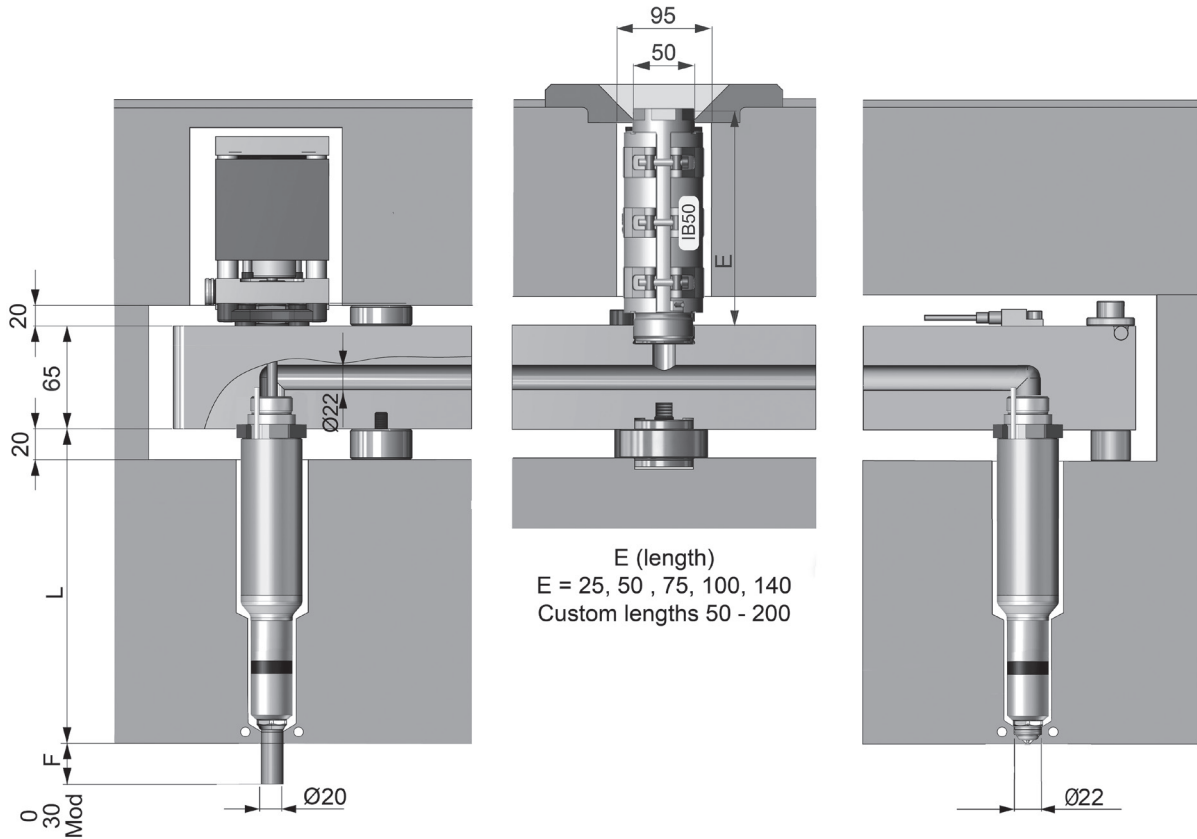


Stabilize your Process _____



Hot Runner System - Thrust Pad / Bolt Down Manifold

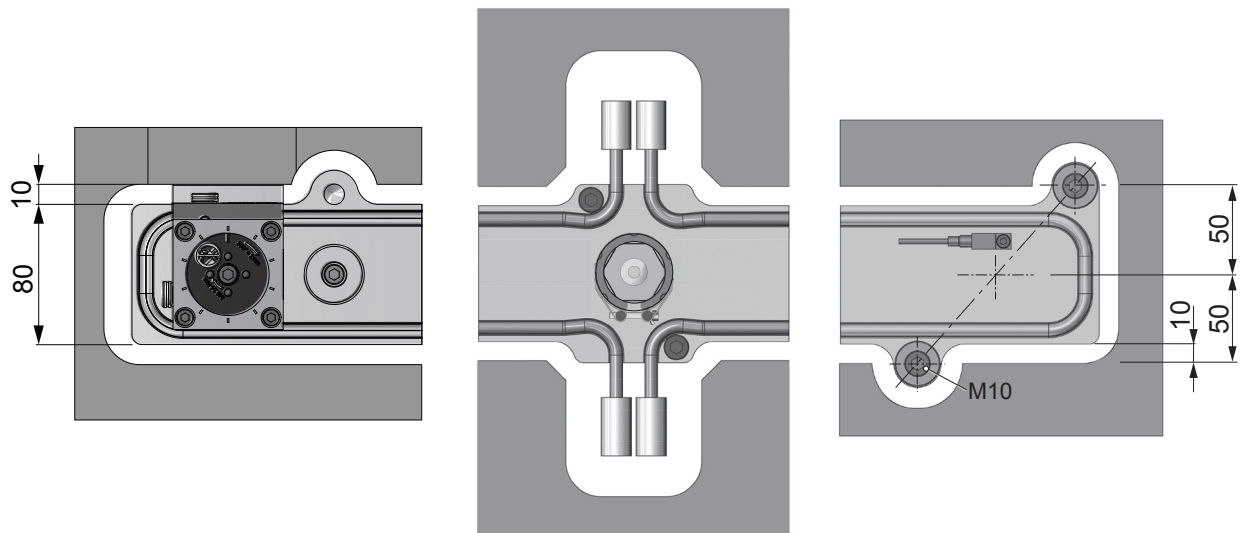
Illustrations simplified, schematically drawn and not to scale. All dimensions in mm.



Thrust pad selection

Inlet bushing

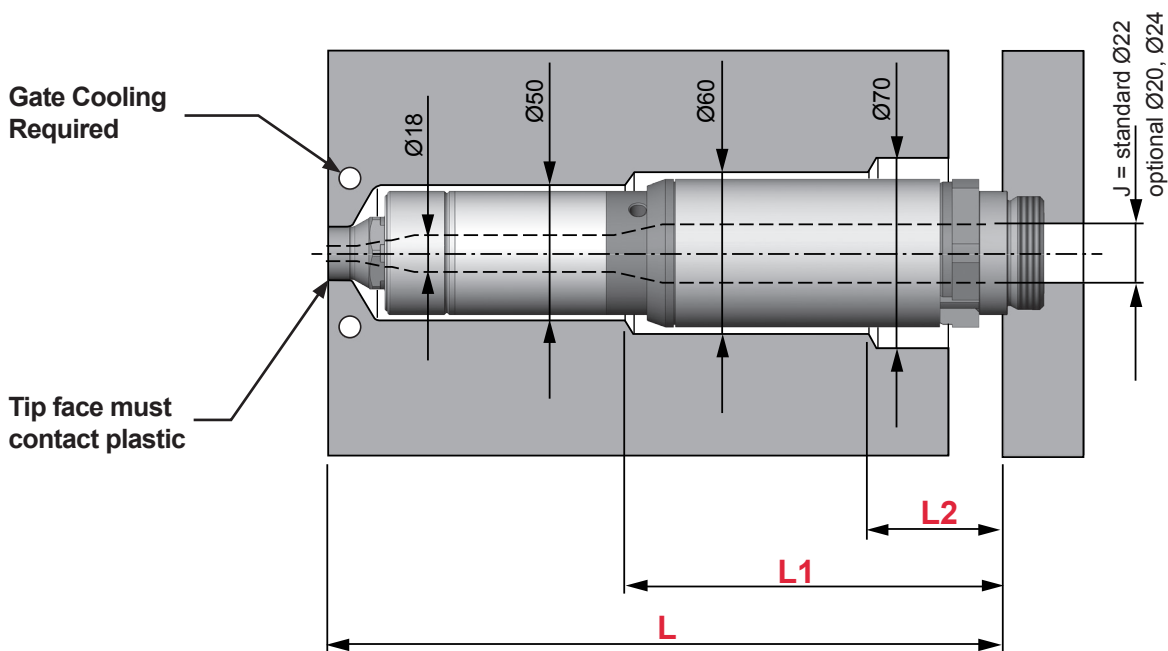
Bolt down selection





Nozzle Lengths

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



L (mm)	L1	L2	Heater zone power ¹⁾ (Watt)				
			Power 1	Power 2	Power 3	Power 4	Power 1-4
205-<245	L-110	-	500W	315W	-	-	815W
245-<285	L-110	-	500W	400W	-	-	900W
285-<325	L-110	-	500W	400W	-	-	900W
325-<365	L-110	-	500W	500W	-	-	1000W
365-<405	L-110	-	500W	630W	-	-	1130W
405-<445	L-110	-	500W	630W	-	-	1130W
445-<485	L-110	-	500W	630W	200W	-	1330W
485-<525	L-110	L-380	500W	630W	315W	-	1645W
525-<565	L-110	L-380	500W	630W	400W	-	1530W
565-<605	L-110	L-380	500W	630W	400W	-	1530W
605-<645	L-110	L-380	500W	630W	500W	-	1630W
675-705	L-110	L-380	500W	630W	630W	-	1760W

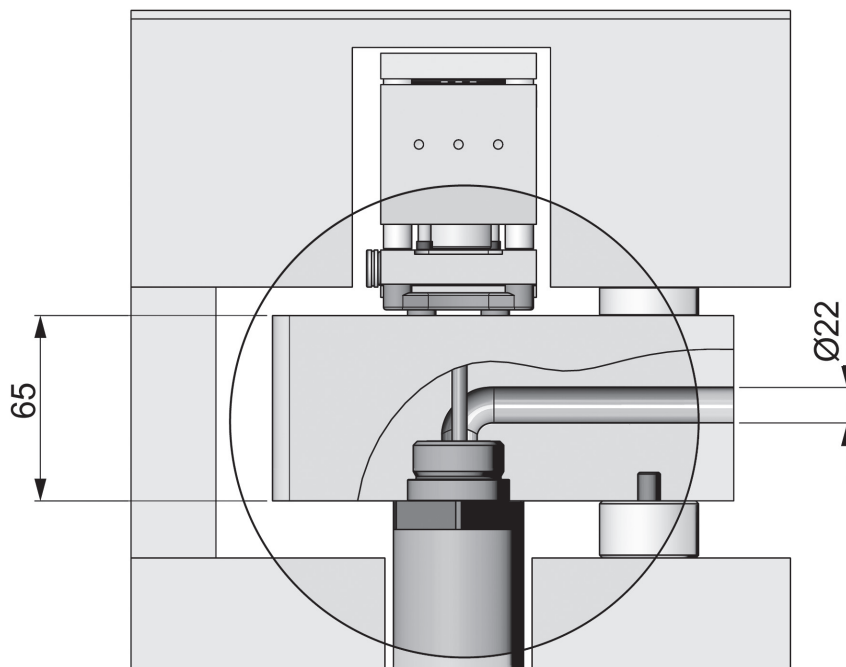
¹⁾ The numbering of the heating zones starts at the nozzle tip and ends at the nozzle head.



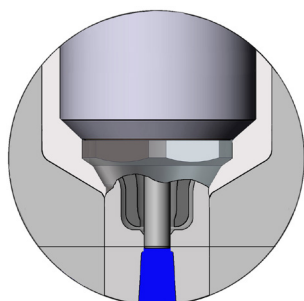
Optional Features

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

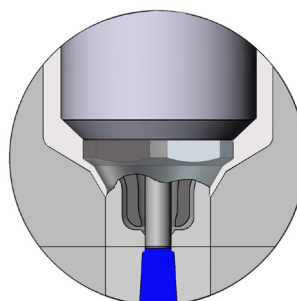
Smooth flow



Mold strenghts



Standard



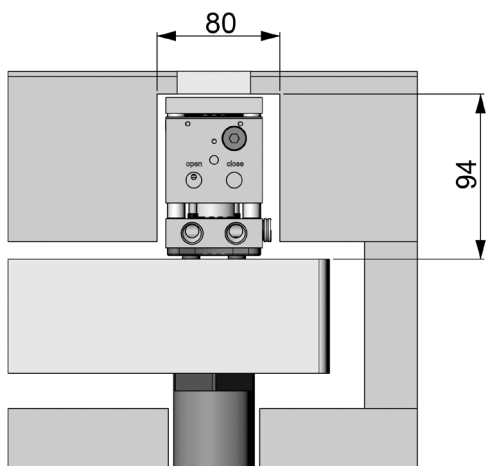
Reduced



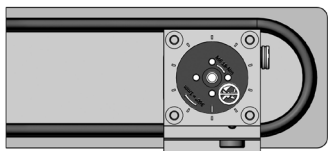
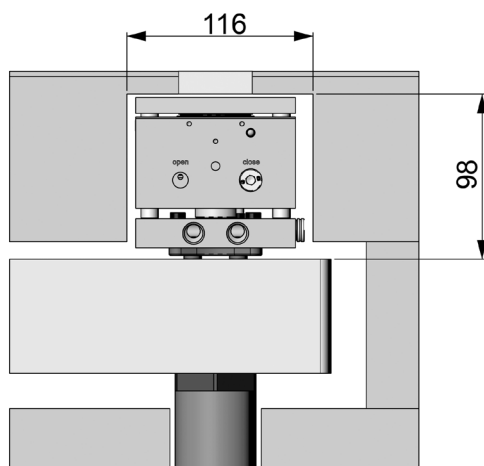
Available Actuators

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

HB4016
(hydraulic)



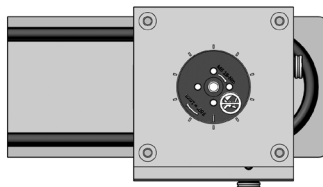
PB8016
(pneumatic)



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##

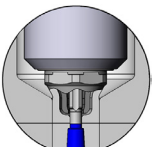
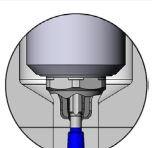
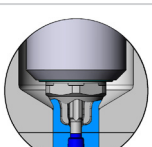
The pneumatic actuator series VP8016, mounted in the back plate, is also available for the 16EX22-02 nozzle. See the actuator catalog CAT-03-0001_EN-REV##



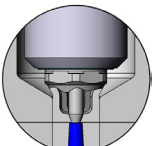
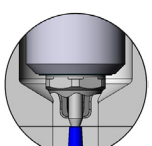
Nozzle Tip Styles

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 = Ø20 F = 0, 30, Mod	
			H=5.0	H=6.0
	VSP	Standard	✓	(✓)
	VSP-SC	Color Seal	✓	(✓)
	VSP-WC	Wear C	(✓)	✓

VTP Valve Gate - Tapered Pin - Plunged Through

Tip Style		Description	Dt = Ø20 F = 0, 30, Mod H=4.5	
	VTP	Standard	✓	
	VTP-SC	Color Seal	✓	

✓ Preferred

(✓) Available

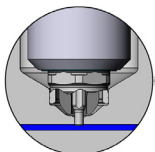
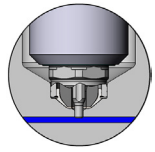
✗ Not Available



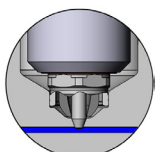
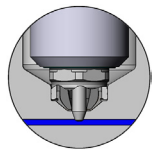
Nozzle Tip Styles

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	Dt = Ø22	
		H=4.0	H=5.0
	VSW Standard	(✓)	✓
	VSW-SC Color Seal	(✓)	✓

VTW Valve Gate - Tapered Pin - Blind

Tip Style	Description	Dt = Ø22	
		H=4.0	H=4.5
	VTW Standard	(✓)	✓
	VTW-SC Color Seal	(✓)	✓

✓ Preferred

(✓) Available

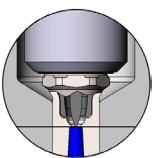
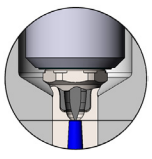
✗ Not Available



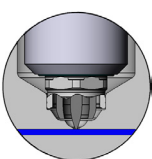
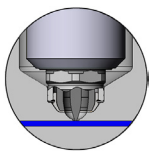
Nozzle Tip Styles

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

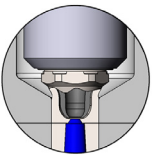
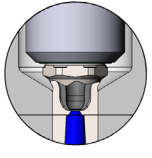
TTP Thermal Gate – Torpedo - Plunged Through

Tip Style		Description	Dt = Ø20 F = 0, 30, Mod			
			H=2.5	H=3.0	H=3.5	H=4.0
	TTP	Standard	✓	✓	✓	✓
	TTP-SC	Color Seal	✓	✓	✓	✓

TTW Thermal Gate – Torpedo - Blind

Tip Style		Description	Dt = Ø22			
			H=2.5	H=3.0	H=3.5	H=4.0
	TTW	Standard	✓	✓	✓	✓
	TTW-SC	Color Seal	✓	✓	✓	✓

TFP Thermal Gate – Full Flow - Plunged Through

Tip Style		Description	Dt = Ø20 F = 0, 30, Mod			
			H=2.0	H=2.5	H=3.0	H=3.5
	TFP	Standard	✓	✓	✓	✓
	TFP-SC	Color Seal	✓	✓	✓	✓



Preferred



Available

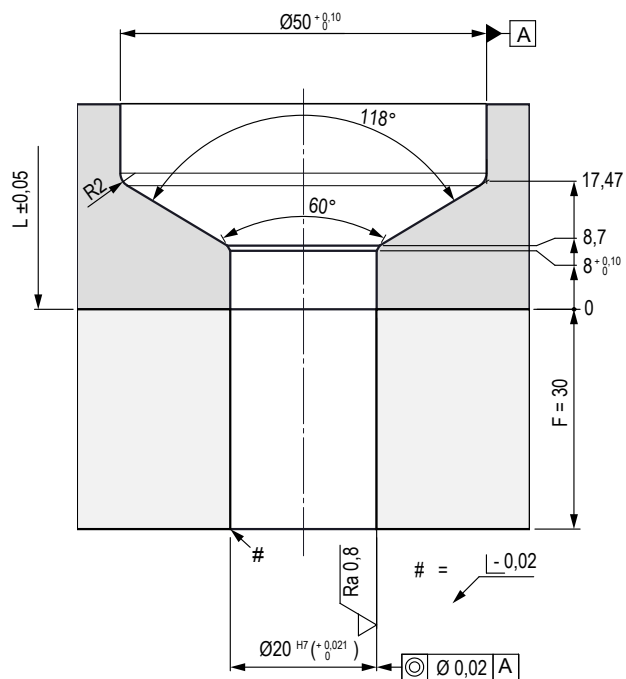


Not Available

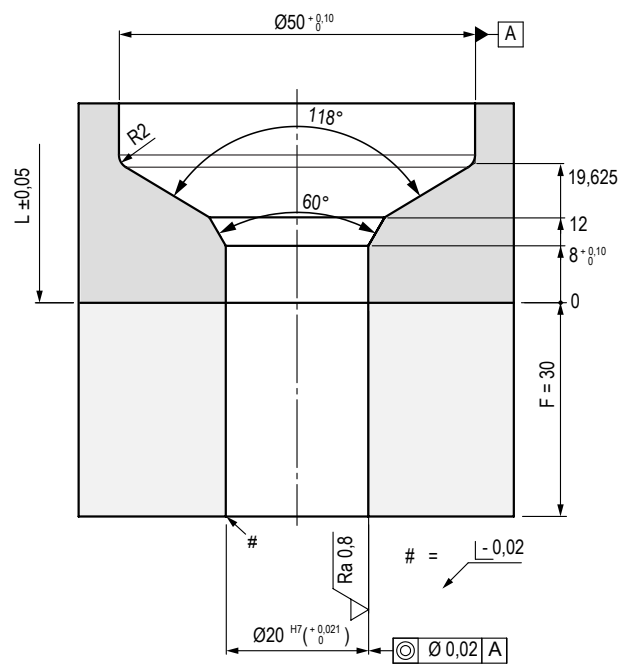
Nozzle Tip Cutout Dimensions

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

VSP, VTP, TTP, TFP - Nozzle tip cutout dimensions



Standard Cutout



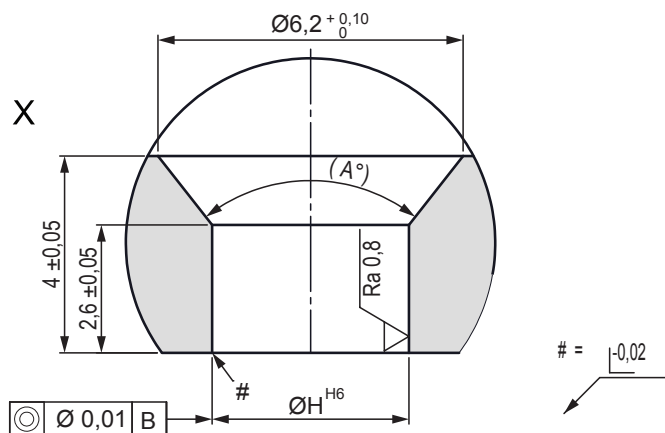
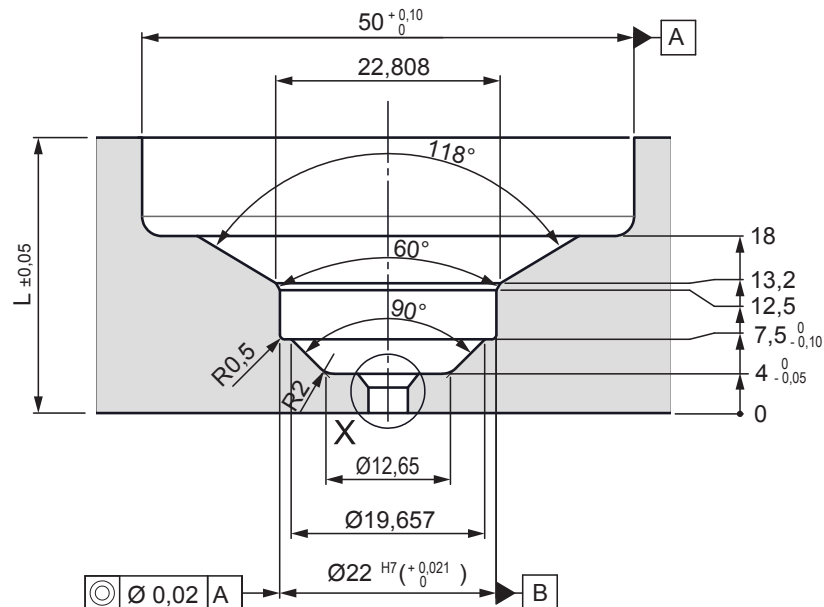
Reduced Cutout



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°)
4,0 ^{+0,008} / 0	76,31
5,0 ^{+0,008} / 0	46,4

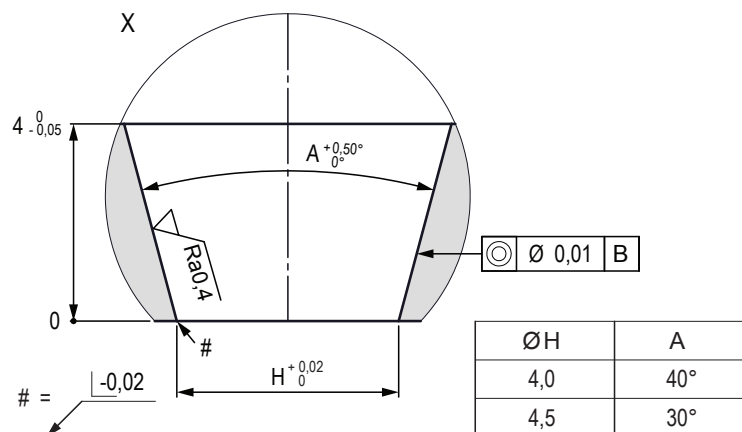
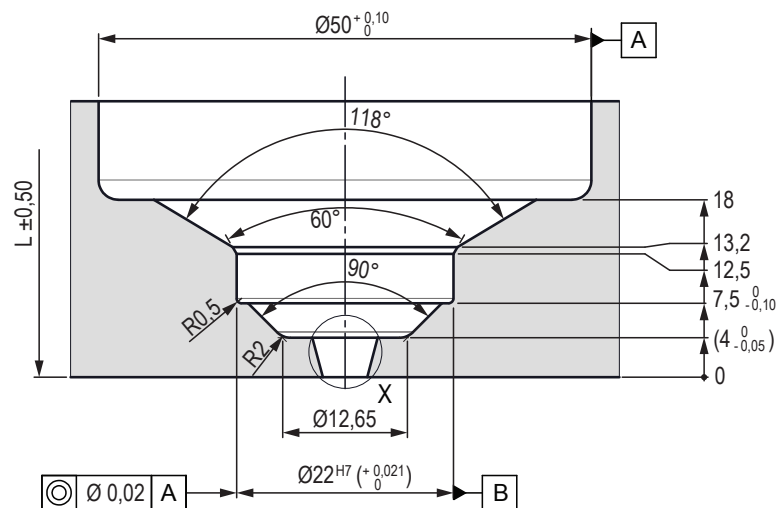
1. At the area of the nozzle gate replaceable, hardened (52 +2/-1HRC) inserts are recommended by Synventive.
2. Synventive recommends that the gate area geometry is manufactured by grinding and not EDM with a surface quality of $\sqrt{Ra0,8}$



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



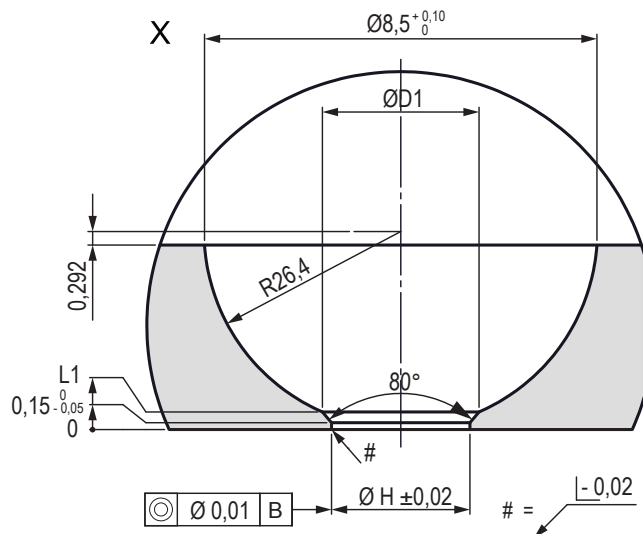
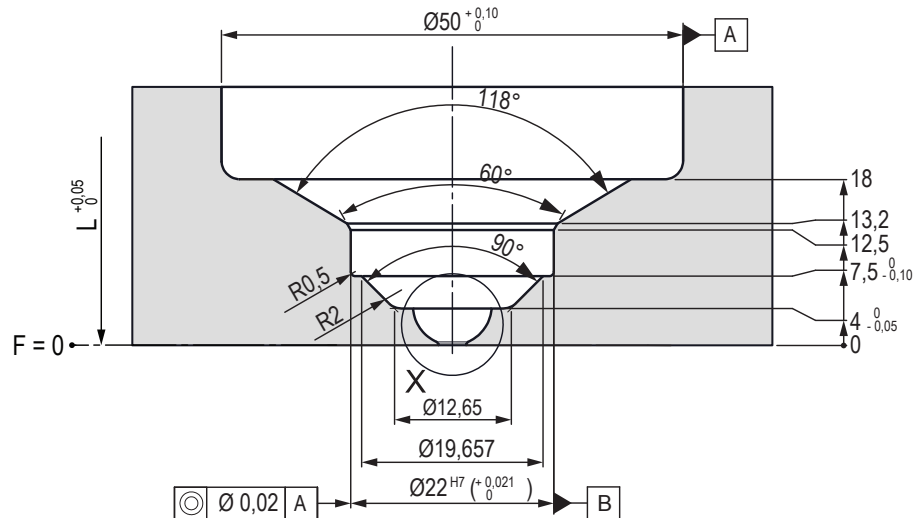
1. At the area of the nozzle gate replaceable, hardened (52 +2/-1HRC) inserts are recommended by Synventive.
2. Synventive recommends that the gate area geometry is manufactured by grinding and not EDM with a surface quality of $\sqrt{Ra0,4}$



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
2,5	0,244	2,658
3	0,384	3,393
3,5	0,602	4,259
4	1,025	5,468

- 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 $\sqrt{Ra0,8}$

North America

Synventive Molding Solutions Inc.
10 Centennial Drive
Peabody, MA 01960, USA
Tel.: +1 978 750 8065
Fax: +1 978 646 3600
E-Mail: info@synventive.com

Europe

Synventive Molding Solutions GmbH
Heimrodstr. 10
64625 Bensheim, Germany
Tel.: +49 (0) 6251 / 9332-0
Fax: +49 (0) 6251 / 9332-90
E-Mail: infohrde@synventive.com

Asia

Synventive Molding Solutions (Suzhou) Co.Ltd.
12B Gang Tian Industrial Square
Suzhou Industrial Park, China 215021
Tel.: +86 512 6283 8870
Fax: +86 512 6283 8890
E-Mail: infohrcn@synventive.com

