

Technical Reference

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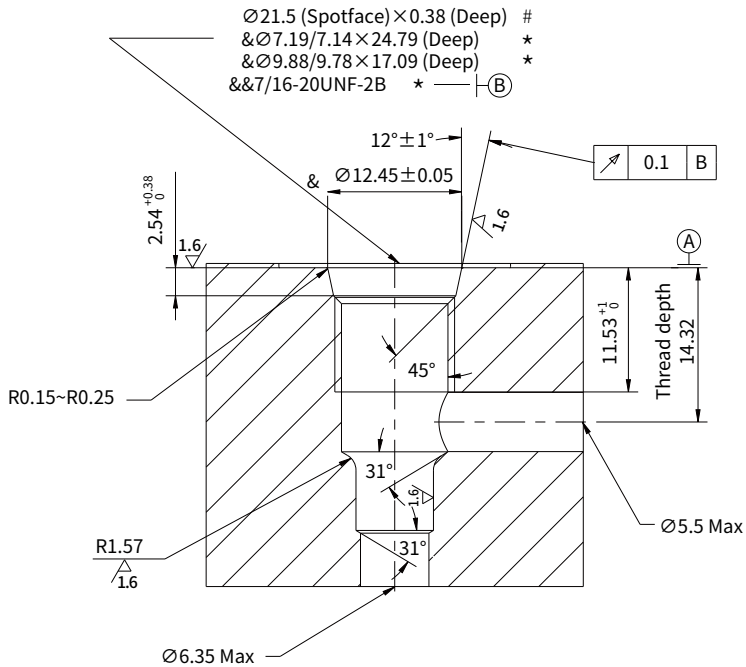
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Series 04 Cartridge Cavities

(Dimensions in mm)

VC04-2



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

$\& \text{---}$ $\begin{array}{|c|c|c|} \hline \text{---} & 0.025 & \text{A} \\ \hline \text{---} & 0.05 & \text{B} \\ \hline \end{array}$

$\& \text{---}$ $\begin{array}{|c|c|c|} \hline \text{---} & 0.025 & \text{A} \\ \hline \text{---} & 0.022 & \text{(Pitch Dia.)} \\ \hline \end{array}$

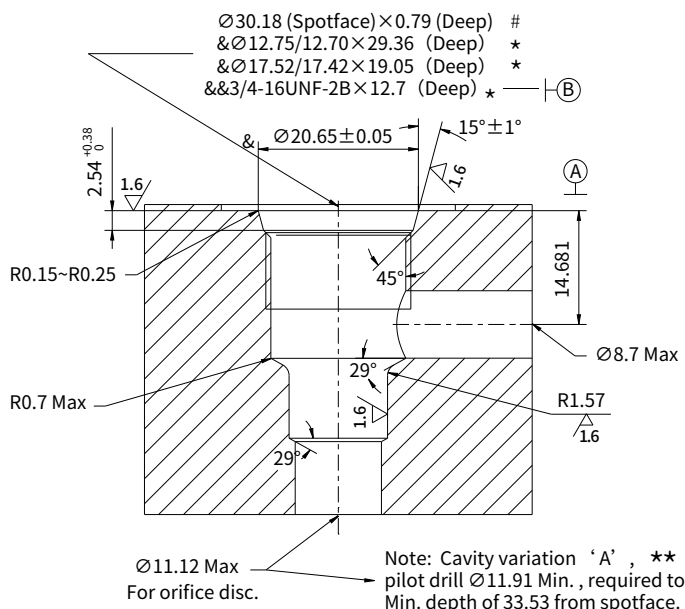
* -- Depths are from datum A.

-- Unless otherwise specified on machining drawing.
 Unspecified tolerances are ± 0.127 .
 Unspecified angular dimensions $\pm 3^\circ$.

Series 08 Cartridge Cavities

(Dimensions in mm)

VC08-2



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

& --	<u>1</u>	0.025	A
		0.05	B

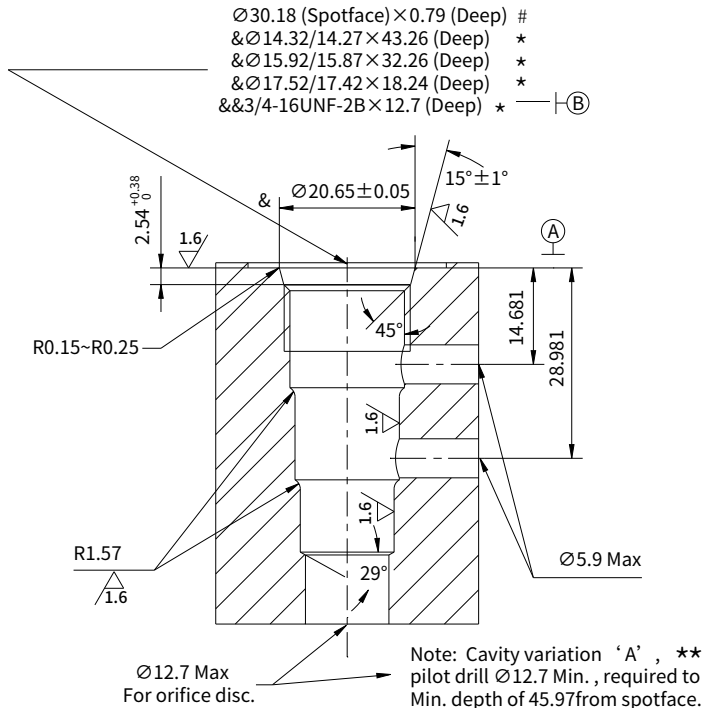
&& --		0.025	A
		0.022	(Pitch Dia.)

- ★ -- Depths are from datum A.
- # -- Unless otherwise specified on machining drawing.
Unspecified tolerances are ± 0.127 .
Unspecified angular dimensions $\pm 3^\circ$.
- ★★ -- Features of variation 'A' are only required if noted on a specific product catalog page.

Series 08 Cartridge Cavities

(Dimensions in mm)

VC08-3



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

$\& \begin{array}{|c|c|c|} \hline \text{---} & 0.025 & \text{A} \\ \hline \text{---} & 0.05 & \text{B} \\ \hline \end{array}$
 $\& \begin{array}{|c|c|c|} \hline \text{---} & 0.025 & \text{A} \\ \hline \text{---} & 0.022 & \text{(Pitch Dia.)} \\ \hline \end{array}$

* -- Depths are from datum A.

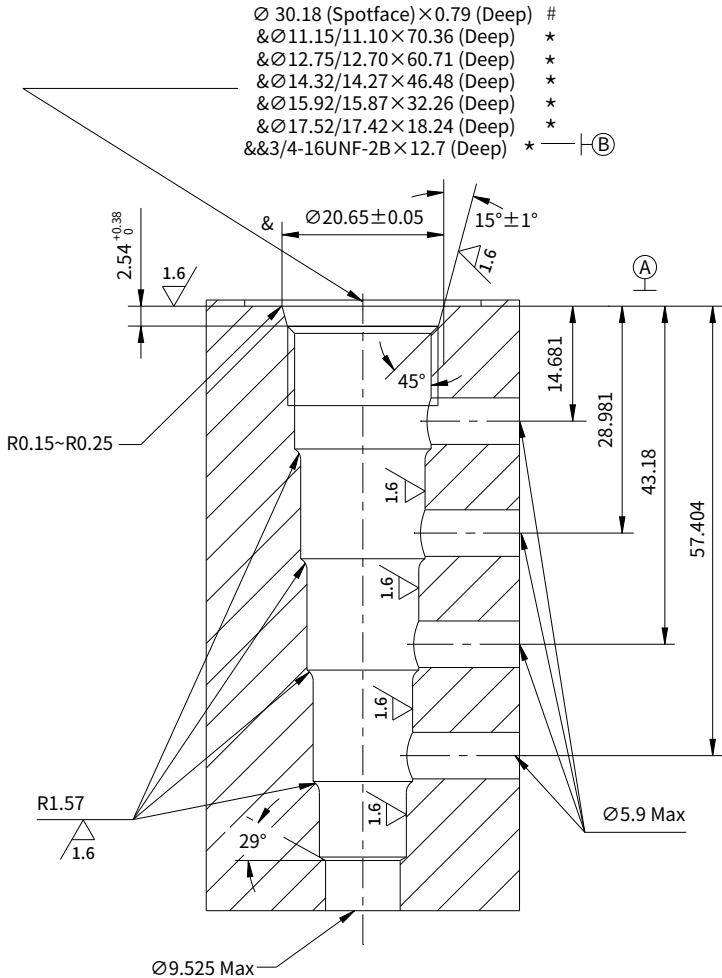
-- Unless otherwise specified on machining drawing.
 Unspecified tolerances are ± 0.127 .
 Unspecified angular dimensions $\pm 3^\circ$.

** -- Features of variation 'A' are only required if noted on a specific product catalog page.

Series 08 Cartridge Cavities

(Dimensions in mm)

VC08-5



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

& --		0.025	A
		0.05	B

&& --		0.025	A
		0.022	(Pitch Dia.)

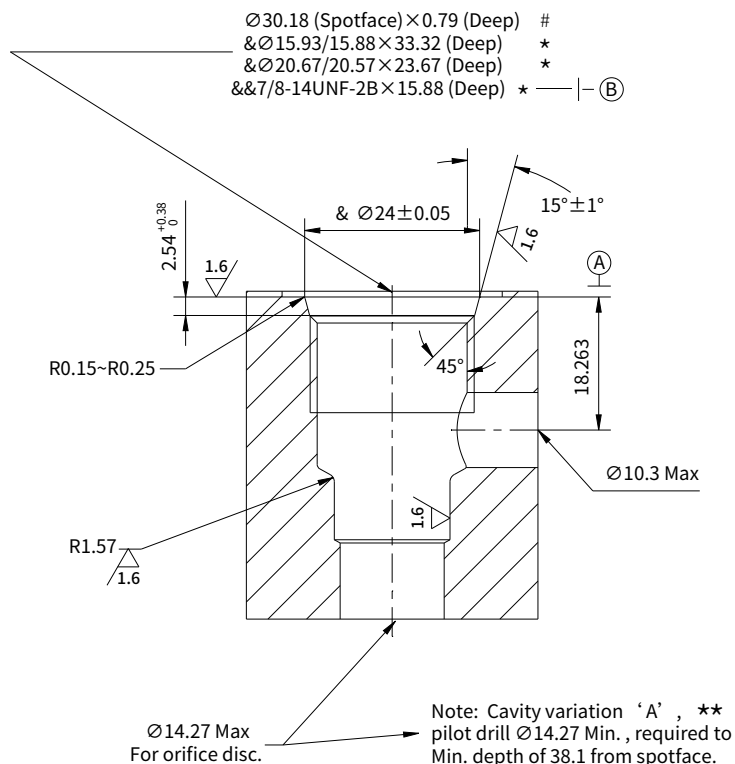
* -- Depths are from datum A.

-- Unless otherwise specified on machining drawing.
 Unspecified tolerances are ± 0.127 .
 Unspecified angular dimensions $\pm 3^\circ$.

Series 10 Cartridge Cavities

(Dimensions in mm)

VC10-2



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

& --		0.025	A
		0.05	B

&& --		0.025	A
		0.022	(Pitch Dia.)

* -- Depths are from datum A.

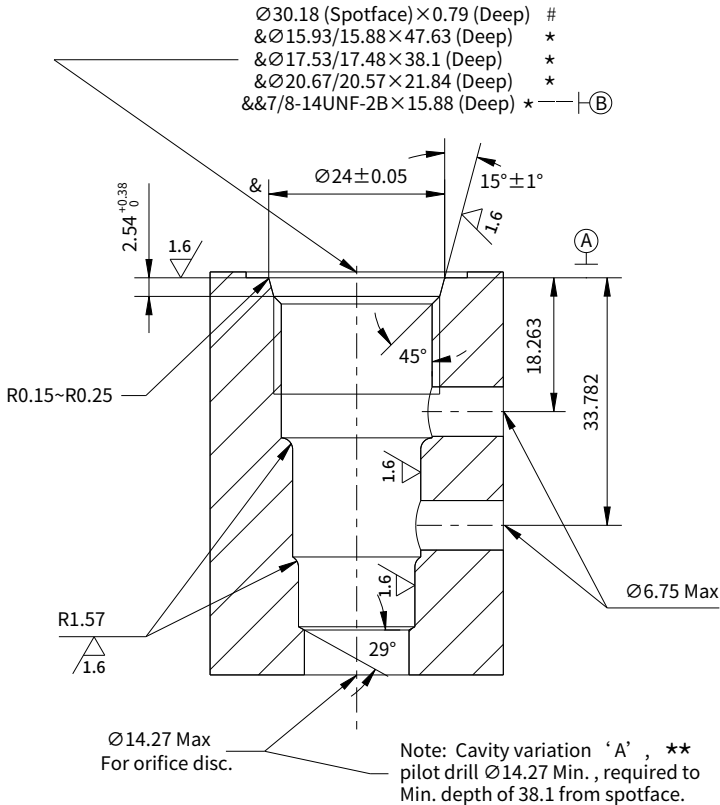
-- Unless otherwise specified on machining drawing.
 Unspecified tolerances are ± 0.127 .
 Unspecified angular dimensions $\pm 3^\circ$.

** -- Features of variation 'A' are only required if noted on a specific product catalog page.

Series 10 Cartridge Cavities

(Dimensions in mm)

VC10-3



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

& --		0.025	A
		0.05	B

&& --		0.025	A
		0.022	(Pitch Dia.)

* -- Depths are from datum A.

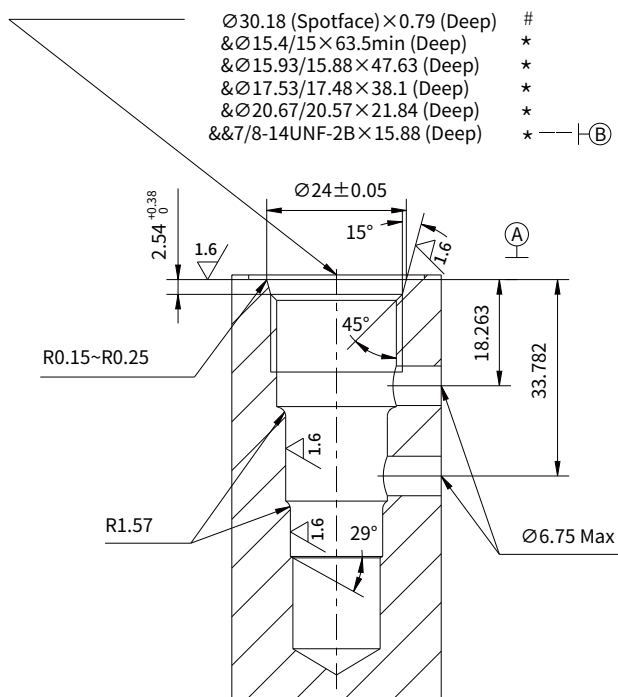
-- Unless otherwise specified on machining drawing.
 Unspecified tolerances are ± 0.127 .
 Unspecified angular dimensions $\pm 3^\circ$.

** -- Features of variation 'A' are only required if noted on a specific product catalog page.

Series 10 Cartridge Cavities

(Dimensions in mm)

VC10-3D



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

& --		0.025	A
		0.05	B

&& --

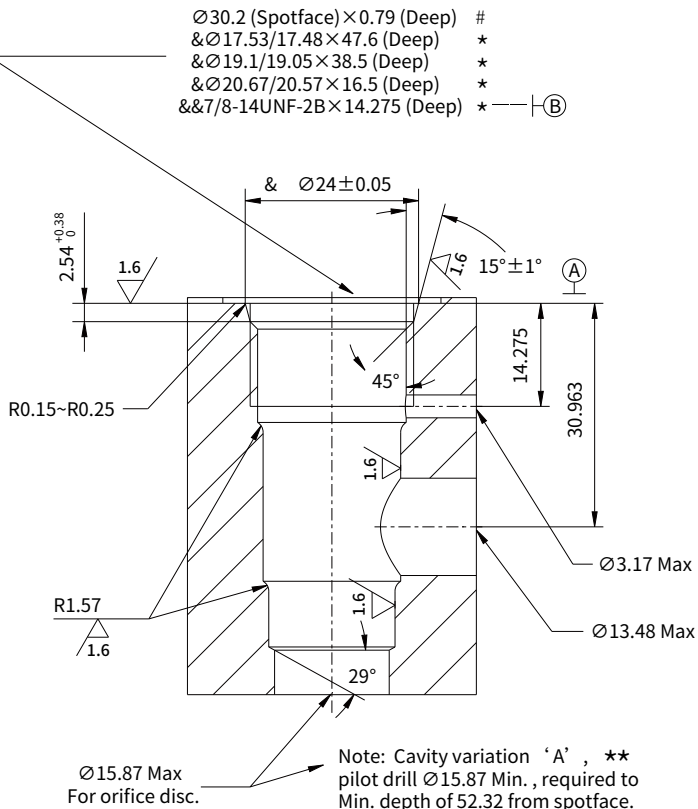
	0.025	A
	0.022	(Pitch Dia.)

- * -- Depths are from datum A.
- # -- Unless otherwise specified on machining drawing.
Unspecified tolerances are ± 0.127 .
Unspecified angular dimensions $\pm 3^\circ$.

Series 10 Cartridge Cavities

(Dimensions in mm)

VC10-S3



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

$\& \text{---} \begin{array}{|c|c|c|} \hline \text{ } & 0.025 & \text{A} \\ \hline \text{ } & 0.05 & \text{B} \\ \hline \end{array}$

$\&\& \text{---} \begin{array}{|c|c|c|} \hline \text{ } & 0.025 & \text{A} \\ \hline \text{ } & 0.022 & (\text{Pitch Dia.}) \\ \hline \end{array}$

* -- Depths are from datum A.

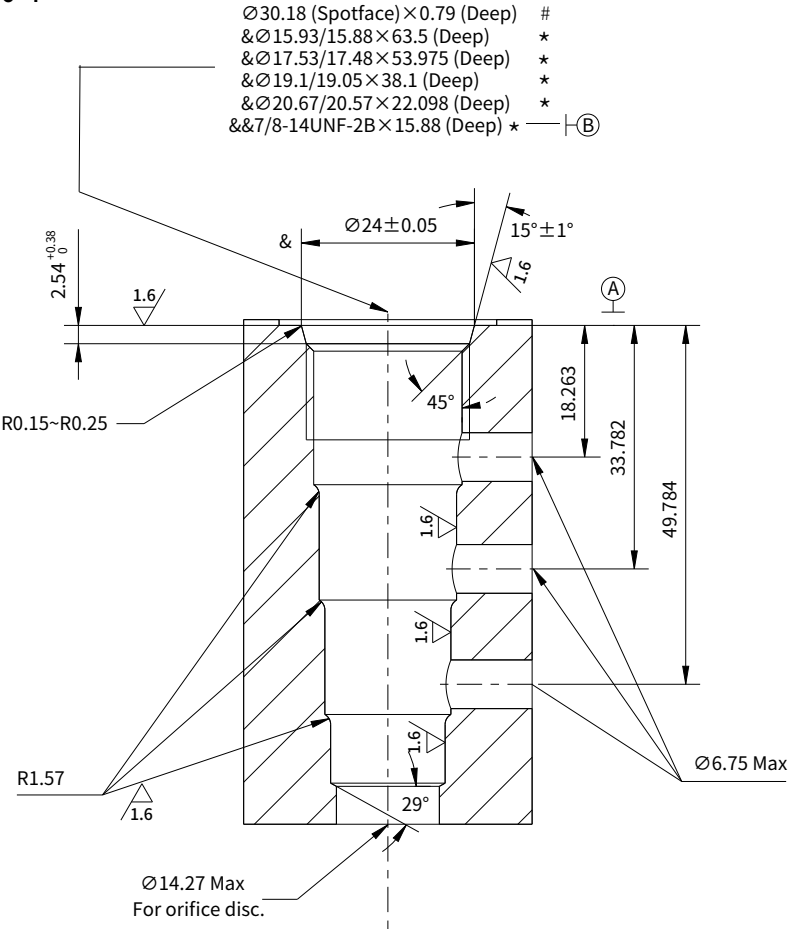
-- Unless otherwise specified on machining drawing.
 Unspecified tolerances are ± 0.127 .
 Unspecified angular dimensions $\pm 3^\circ$.

** -- Features of variation 'A' are only required if noted on a specific product catalog page.

Series 10 Cartridge Cavities

(Dimensions in mm)

VC10-4



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

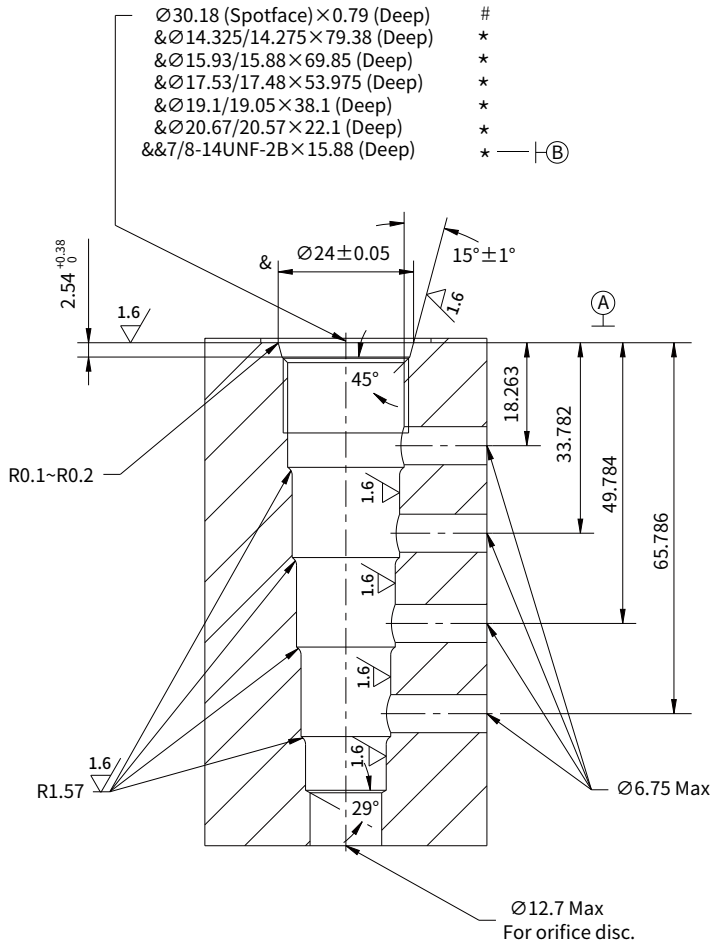
$\& \text{---} \begin{array}{|c|c|c|} \hline \text{---} & 0.025 & \text{A} \\ \hline \text{---} & 0.05 & \text{B} \\ \hline \end{array}$
 $\& \text{---} \begin{array}{|c|c|c|} \hline \text{---} & 0.025 & \text{A} \\ \hline \text{---} & 0.022 & \text{(Pitch Dia.)} \\ \hline \end{array}$

- * -- Depths are from datum A.
- # -- Unless otherwise specified on machining drawing. Unspecified tolerances are ± 0.127 . Unspecified angular dimensions $\pm 3^\circ$.
- ** -- Features of variation 'A' are only required if noted on a specific product catalog page.

Series 10 Cartridge Cavities

(Dimensions in mm)

VC10-5



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

$\& \text{---}$	$\frac{0.025}{0.05}$	A
---	$\frac{0.05}{0.025}$	B

$\& \text{---}$	$\frac{0.025}{0.022}$	A
---	$\frac{0.022}{0.025}$	(Pitch Dia.)

* -- Depths are from datum A.

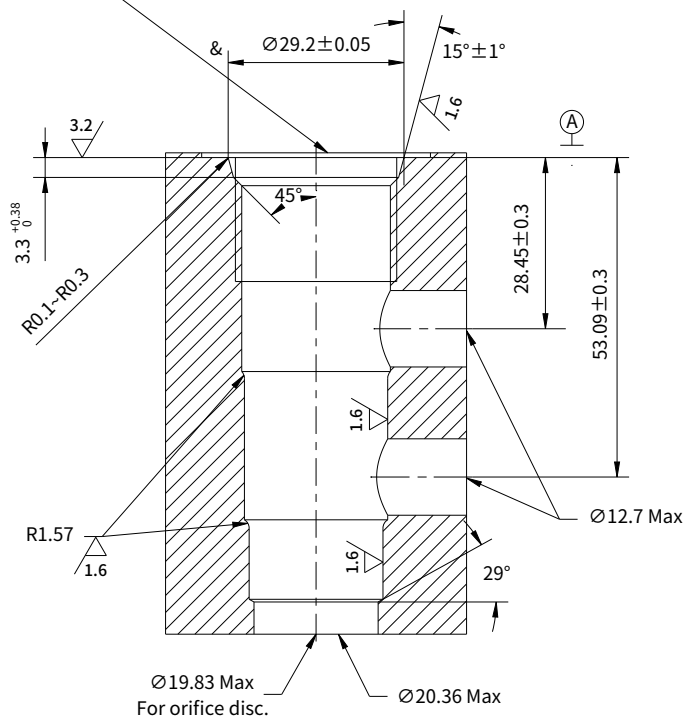
-- Unless otherwise specified on machining drawing.
 Unspecified tolerances are ± 0.127 .
 Unspecified angular dimensions $\pm 3^\circ$.

Series 12 Cartridge Cavities

(Dimensions in mm)

VC12-3

Ø38 (Spotface)×0.79 (Deep)	#
&Ø22.28/22.23×73.41 (Deep)	*
&Ø23.86/23.8×60.2 (Deep)	*
&Ø24.85/24.69×35.56 (Deep)	*
&&1-1/16-12 UN-2B×20.6 (Deep)	* — (B)



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

& --		0.025	A
		0.05	B

&& --

⊥	0.025	A
○	0.022	(Pitch Dia.)

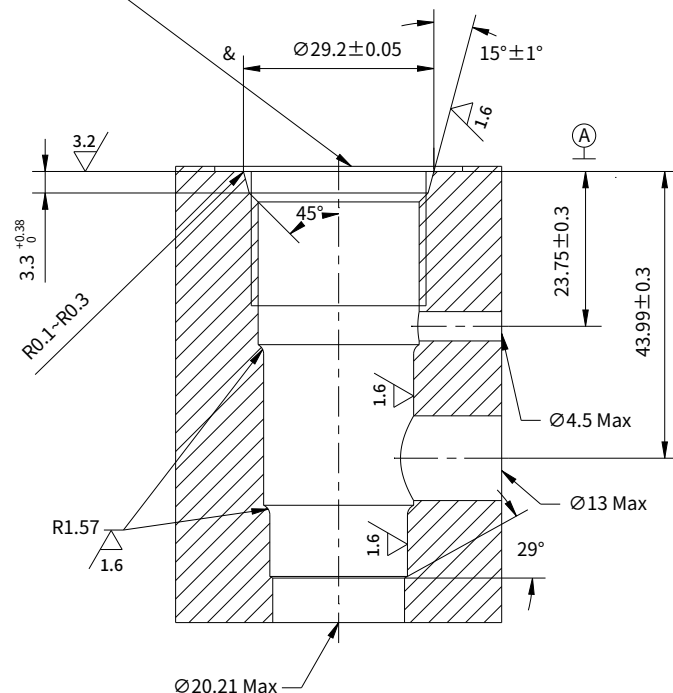
- ★ -- Depths are from datum A.
- # -- Unless otherwise specified on machining drawing.
Unspecified tolerances are ± 0.127 .
Unspecified angular dimensions $\pm 3^\circ$.
- ★★ -- Features of variation 'A' are only required if noted on a specific product catalog page.

Series 12 Cartridge Cavities

(Dimensions in mm)

VC12-S3

Ø38 (Spotface)×0.79 (Deep)	#
&Ø21.03/21×62.13 (Deep)	*
&Ø23.03/23×51.21 (Deep)	*
&Ø24.85/24.69×26.7 (Deep)	*
&&1-1/16-12 UN-2B×20.6 (Deep)	* — (B)



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

& --		0.025	A
		0.05	B

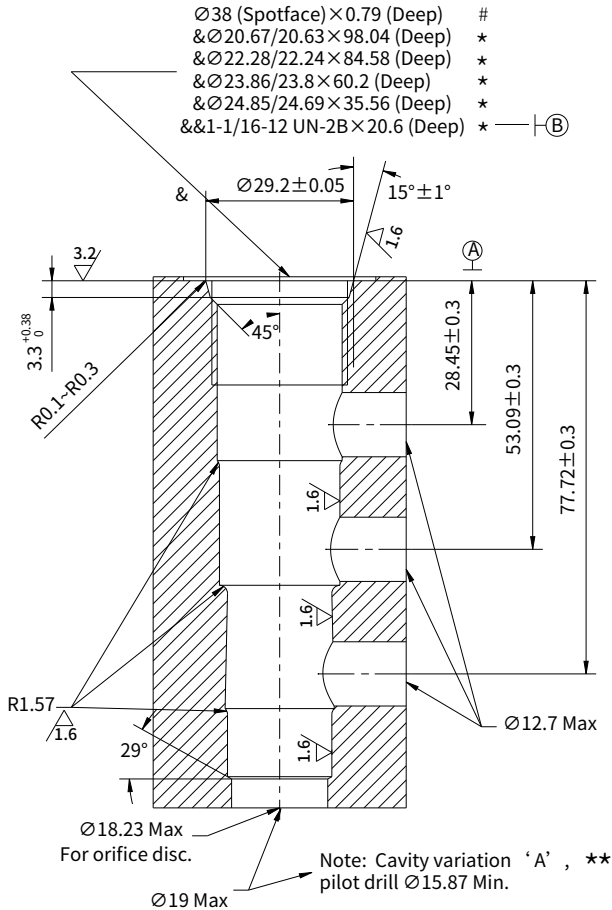
&& --		0.025	A
		0.022	(Pitch Dia.)

- ★ -- Depths are from datum A.
- # -- Unless otherwise specified on machining drawing.
Unspecified tolerances are ± 0.127 .
Unspecified angular dimensions $\pm 3^\circ$.
- ★★ -- Features of variation 'A' are only required if noted on a specific product catalog page.

Series 12 Cartridge Cavities

(Dimensions in mm)

VC12-4



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

	0.025	A
	0.05	B

	0.025	A
	$\varnothing$ 0.022	(Pitch Dia.)

* -- Depths are from datum A.

-- Unless otherwise specified on machining drawing.
 Unspecified tolerances are ± 0.127 .
 Unspecified angular dimensions $\pm 3^\circ$.

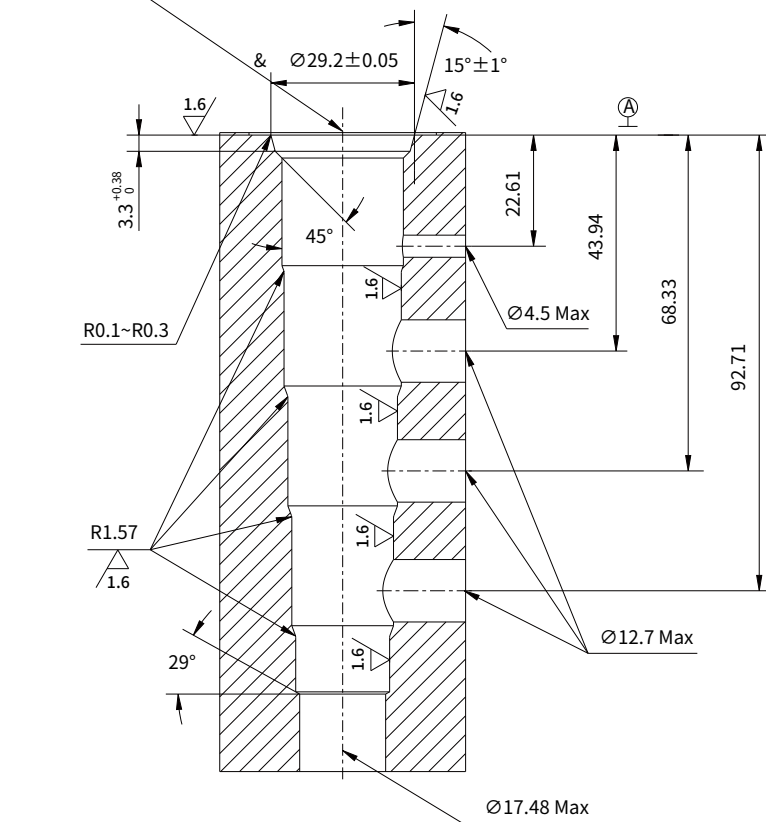
** -- Features of variation 'A' are only required if noted on a specific product catalog page.

Series 12 Cartridge Cavities

(Dimensions in mm)

VC12-S5

$\varnothing 38.1(\text{Spotface}) \times 0.79$ (Deep) #
 $\& \varnothing 19.10/19.05 \times 113.28$ (Deep) *
 $\& \varnothing 20.68/20.62 \times 99.82$ (Deep) *
 $\& \varnothing 22.28/22.23 \times 75.44$ (Deep) *
 $\& \varnothing 23.85/23.80 \times 51.05$ (Deep) *
 $\& \varnothing 24.84/24.69 \times 26.57$ (Deep) *
 $\& 1-1/16-12 \text{ UN}-2\text{B} \times 20.6$ (Deep) * $\rightarrow \textcircled{B}$



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

$\& \text{---}$

	0.025	A
$\nearrow$	0.05	B

$\&\& \text{---}$

	0.025	A
$\bigcirc$	0.022	(Pitch Dia.)

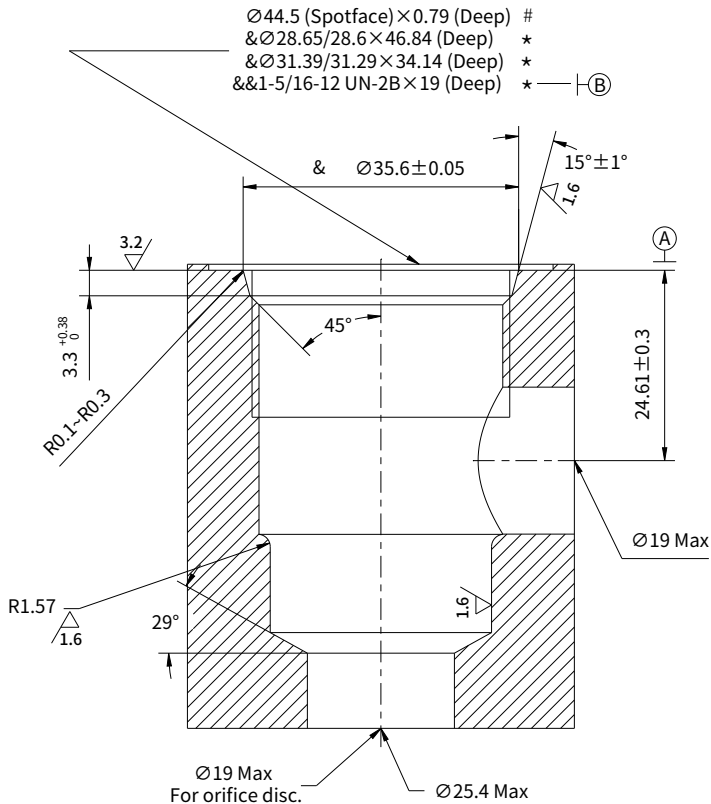
* -- Depths are from datum A.

-- Unless otherwise specified on machining drawing. Unspecified tolerances are ± 0.127 . Unspecified angular dimensions $\pm 3^\circ$.

Series 16 Cartridge Cavities

(Dimensions in mm)

VC16-2



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

$\& \text{---}$	$\frac{0.025}{0.05}$	A
	$\frac{1.6}{1.6}$	B

$\& \text{---}$	$\frac{0.025}{0.022}$	A
	$\frac{1.6}{1.6}$	(Pitch Dia.)

* -- Depths are from datum A.

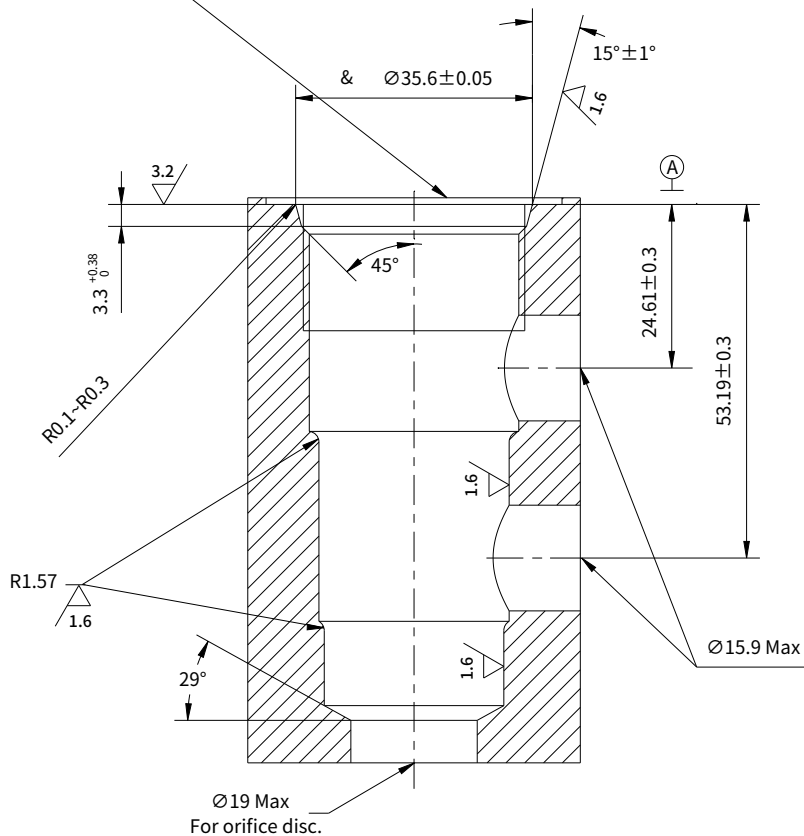
-- Unless otherwise specified on machining drawing.
 Unspecified tolerances are ± 0.127 .
 Unspecified angular dimensions $\pm 3^\circ$.

Series 16 Cartridge Cavities

(Dimensions in mm)

VC16-3

Ø44.5 (Spotface) × 0.79 (Deep) #
 & Ø27.05/27 × 75.34 (Deep) ★
 & Ø28.65/28.6 × 62.71 (Deep) ★
 & Ø31.39/31.29 × 34.14 (Deep) ★
 & 1-5/16-12 UN-2B × 19 (Deep) ★ — (B)



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

& --		0.025	A
		0.05	B

&& --

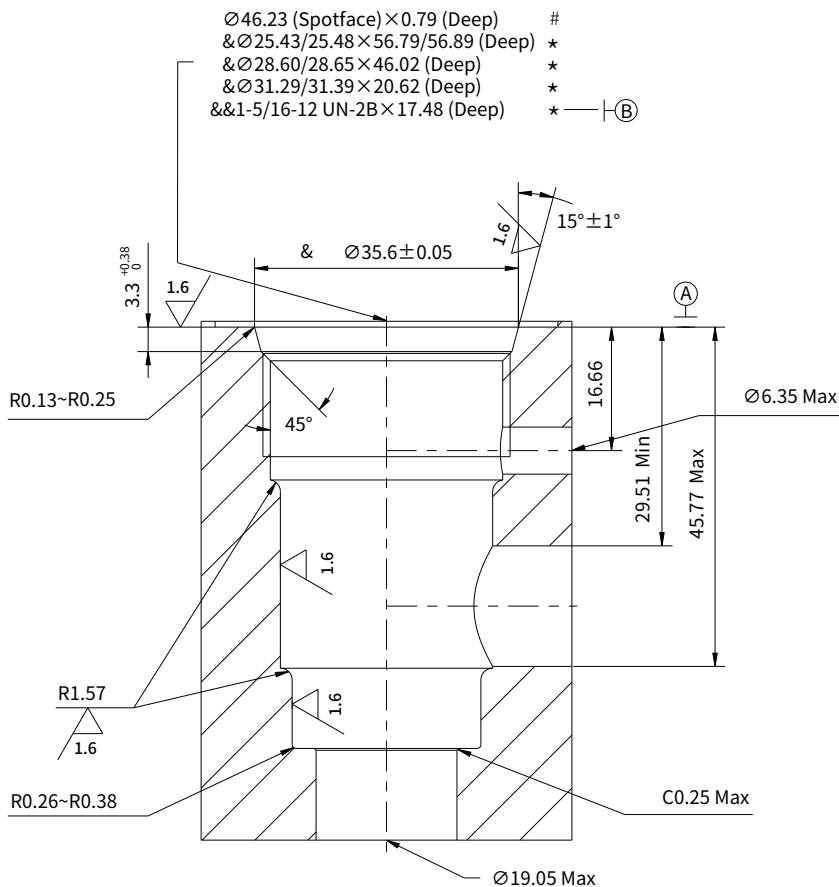
	0.025	A
	0.022	(Pitch Dia.)

- * -- Depths are from datum A.
-- Unless otherwise specified on machining drawing.
Unspecified tolerances are ± 0.127 .
Unspecified angular dimensions $\pm 3^\circ$.

Series 16 Cartridge Cavities

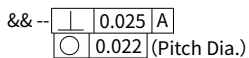
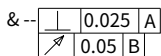
(Dimensions in mm)

HVC16-S3



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.



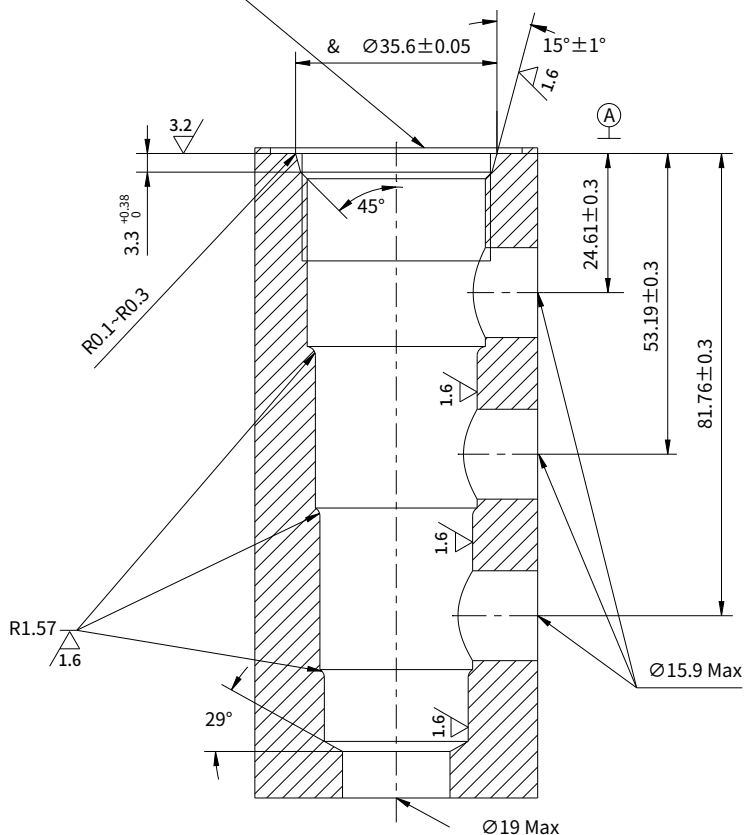
- * -- Depths are from datum A.
-- Unless otherwise specified on machining drawing.
Unspecified tolerances are ± 0.127 .
Unspecified angular dimensions $\pm 3^\circ$.

Series 16 Cartridge Cavities

(Dimensions in mm)

VC16-4

Ø44.5 (Spotface)×0.79 (Deep) #
 &Ø25.48/25.43×103.99 (Deep) ★
 &Ø27.05/27×91.29 (Deep) ★
 &Ø28.65/28.6×62.71 (Deep) ★
 &Ø31.39/31.29×34.14 (Deep) ★
 &&1-5/16-12 UN-2B×19 (Deep) ★ — (B)



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

& --		0.025	A
		0.05	B

&& --

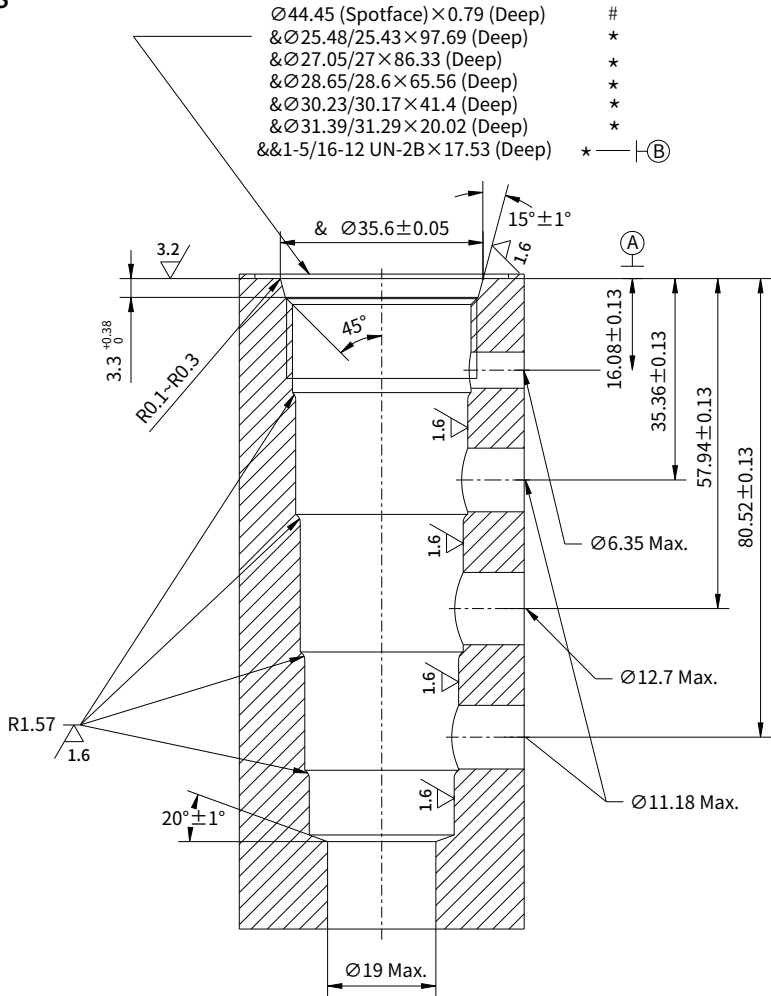
⊥	0.025	A
○	0.022	(Pitch Dia.)

- * -- Depths are from datum A.
- # -- Unless otherwise specified on machining drawing.
Unspecified tolerances are ± 0.127 .
Unspecified angular dimensions $\pm 3^\circ$.

Series 16 Cartridge Cavities

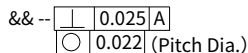
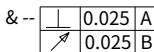
(Dimensions in mm)

C16-5S



Notes:

The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.



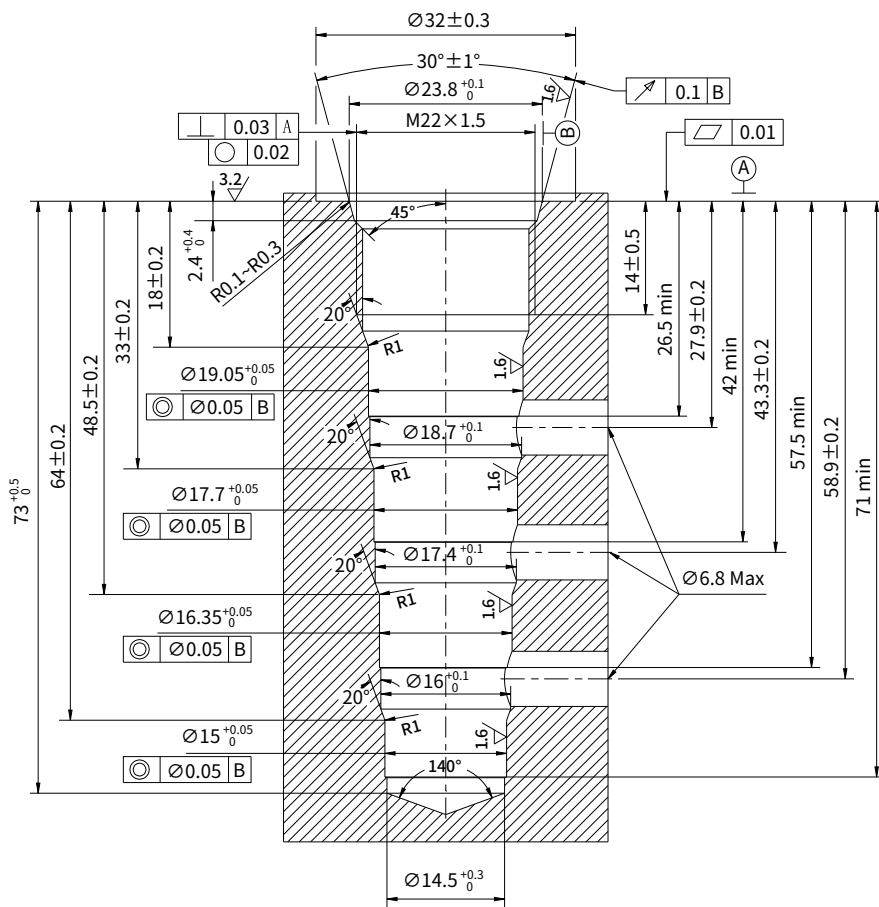
* -- Depths are from datum A.

-- Unless otherwise specified on machining drawing.
 Unspecified tolerances are ± 0.127 .
 Unspecified angular dimensions $\pm 3^\circ$.

Series 22 Cartridge Cavities

(Dimensions in mm)

VC-22M-4



Notes:

The above features (except for pilot drill and cross drills)

can be machined simultaneously using Hengli form tools.

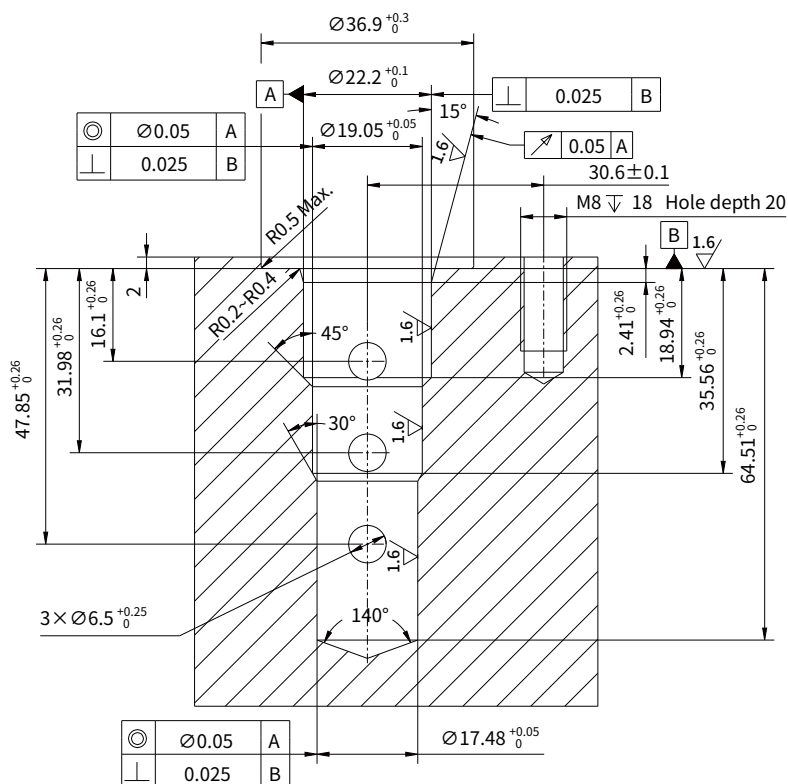
Consult factory.

The perpendicularity of the valve bore related to reference A is 0.025.

Series TC Cartridge Cavities

(Dimensions in mm)

TC90-4



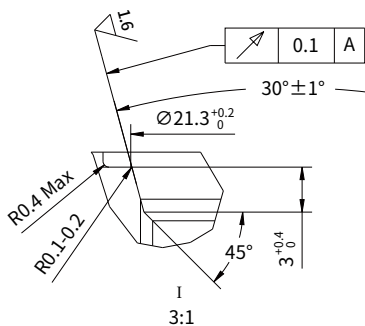
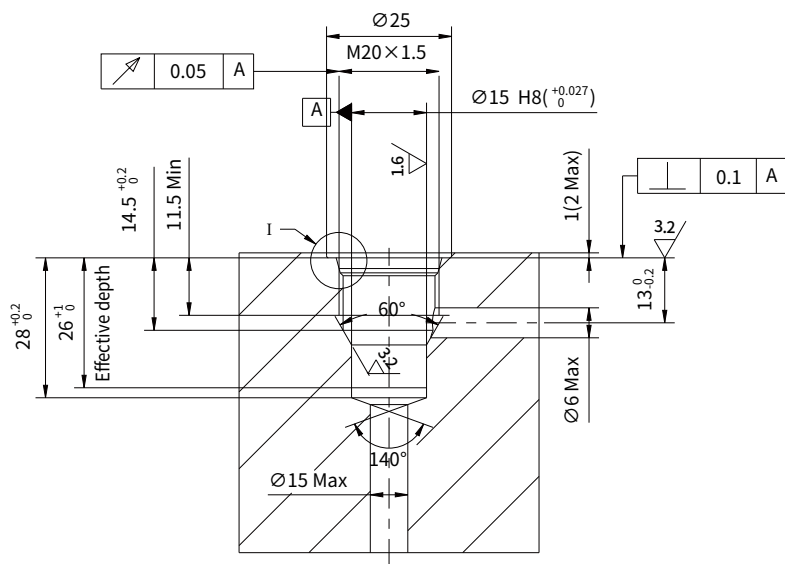
Notes:

The above features can be machined simultaneously using Hengli form tools.

Series VCM Cartridge Cavities

(Dimensions in mm)

VCM20-2



Notes:

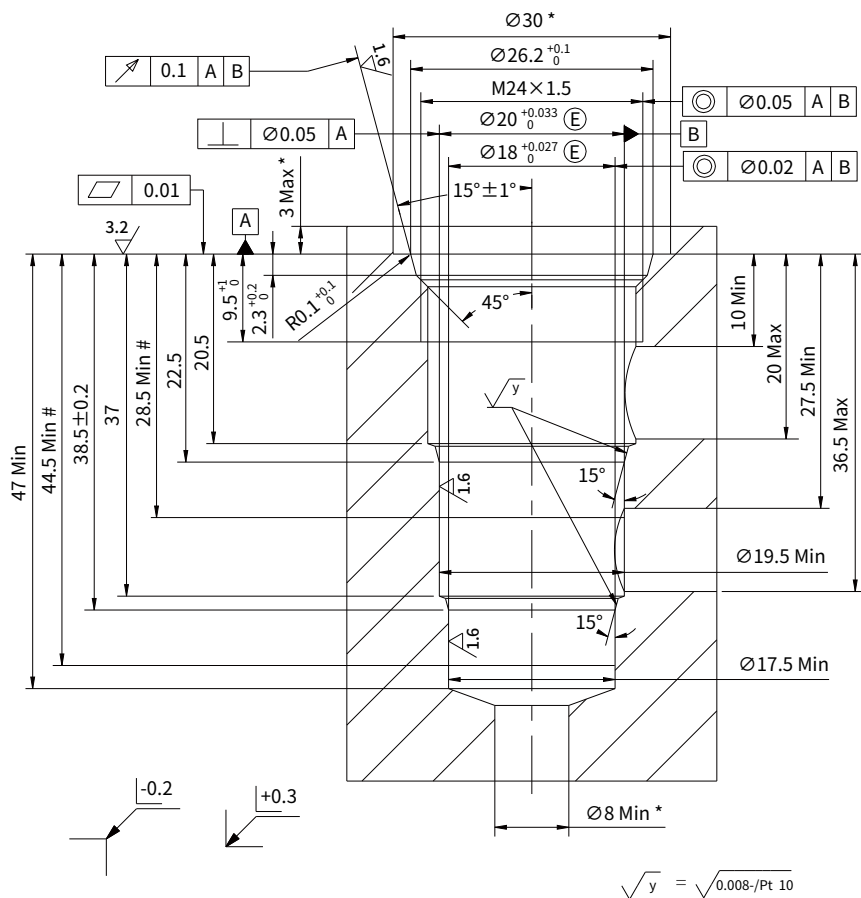
The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools.
Consult factory.

Unspecified tolerances are ± 0.127 .
Unspecified angular dimensions $\pm 3^\circ$.
Unpredicted roughness Ra12.5.

Series VCM Cartridge Cavities

(Dimensions in mm)

VCM24-3



Notes:

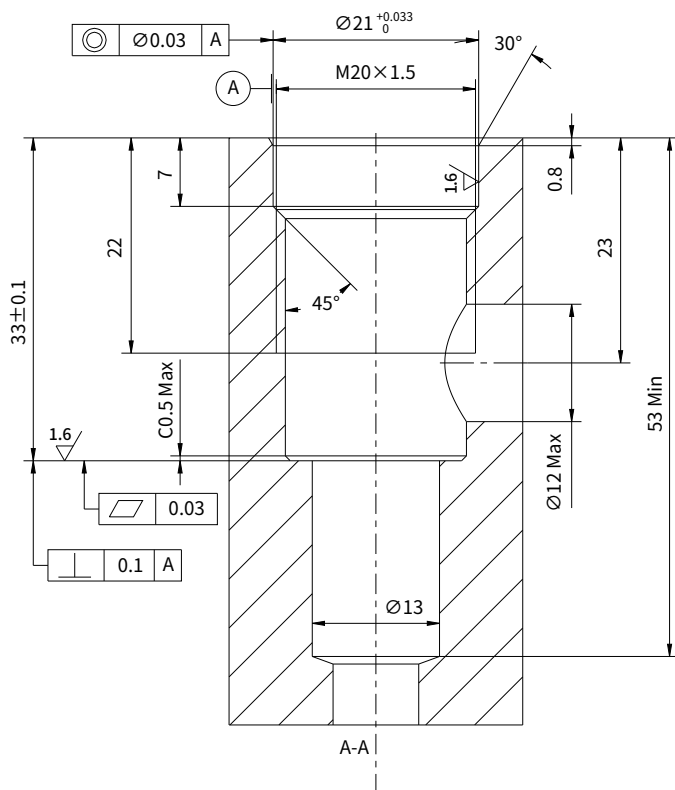
The above features (except for pilot drill and cross drills) can be machined simultaneously using Hengli form tools. Consult factory.

- # -- Tolerances requirement minimum depth.
- ★ -- The reference value shall be based on the requirements of the valve housing drawing hole table or marking requirements.

Series VH Cartridge Cavities

(Dimensions in mm)

VH043



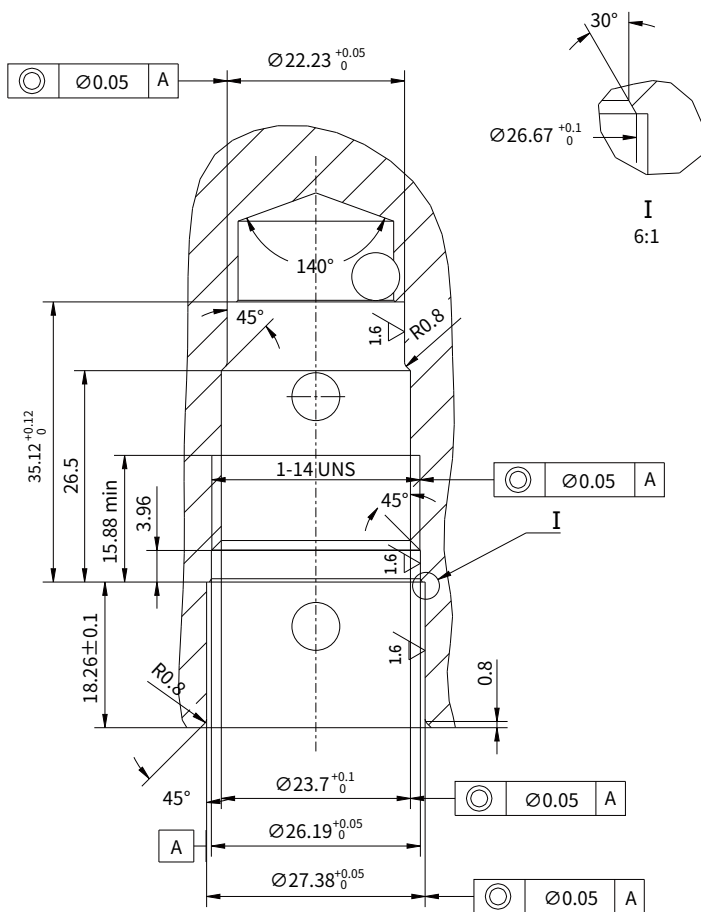
Notes:

The above features (except for pilot drill and cross drills)
can be machined simultaneously using Hengli form tools.
Consult factory.

Counterbalance Valve's Cartridge Cavities

(Dimensions in mm)

T-2A



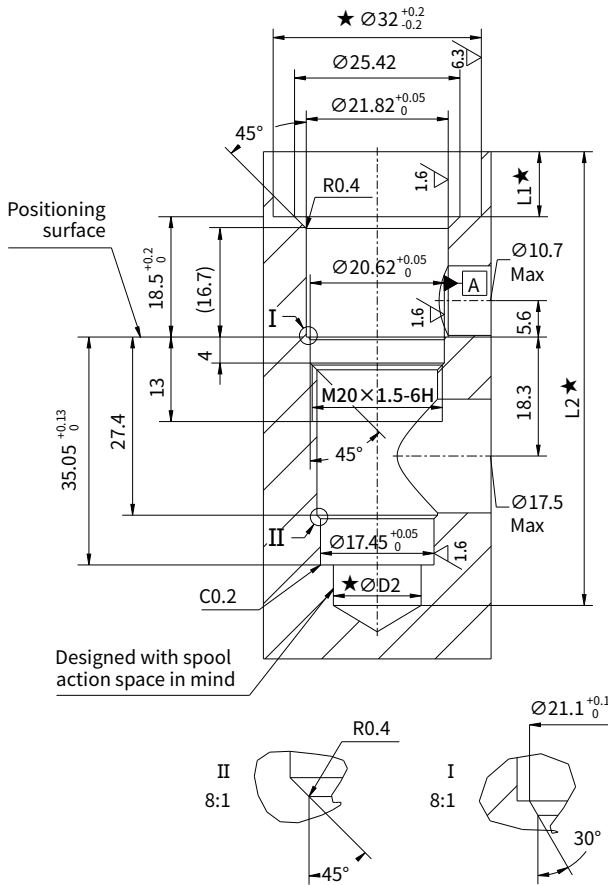
Notes:

1. Threads and all diameters to be met $\varnothing 0.05$ A
2. Unnotched chamfer R0.2

Counterbalance Valve's Cartridge Cavities

(Dimensions in mm)

T-11A



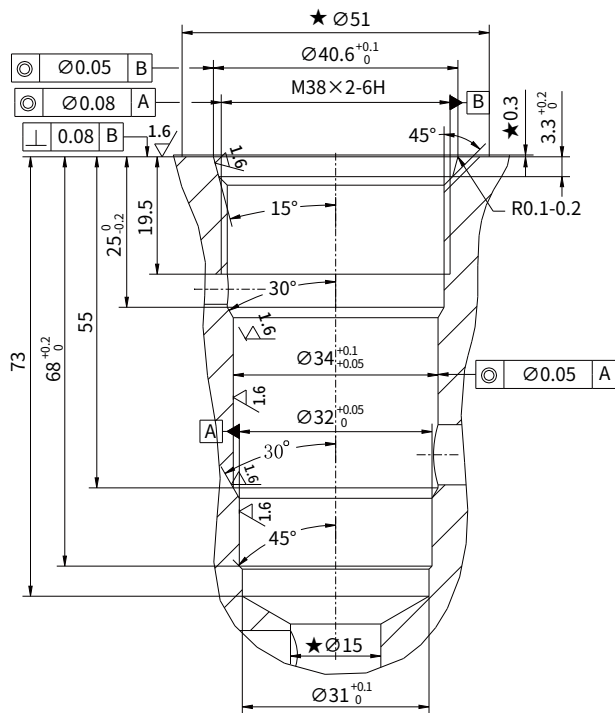
Notes:

1. Threads and all diameters to be met $\varnothing \varnothing 0.05$ A
2. Unnotched chamfer R0.2
3. ★ Note dimensions are based on actual production drawing size values

Counterbalance Valve's Cartridge Cavities

(Dimensions in mm)

H081



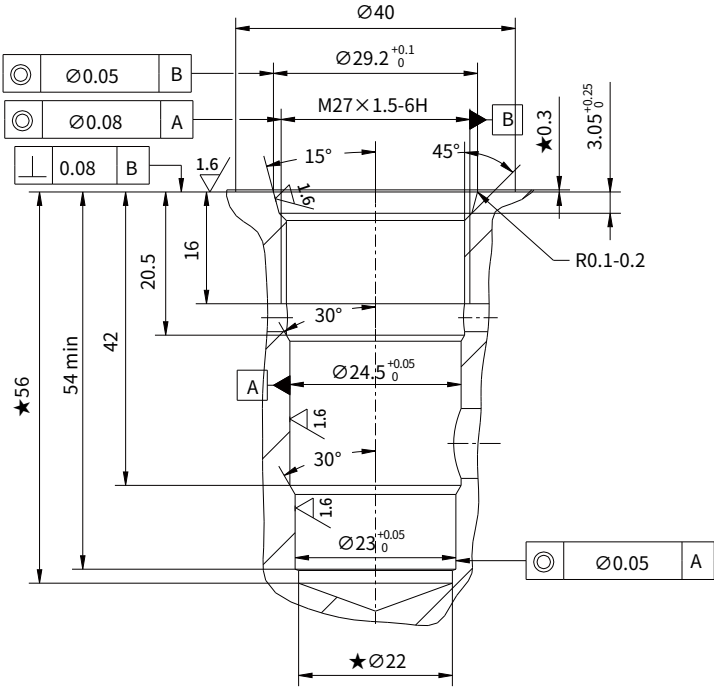
Notes:

- 1.Unnotched chamfer R0.2
- 2.★Note dimensions are based on actual production drawing size values

Counterbalance Valve's Cartridge Cavities

(Dimensions in mm)

H336



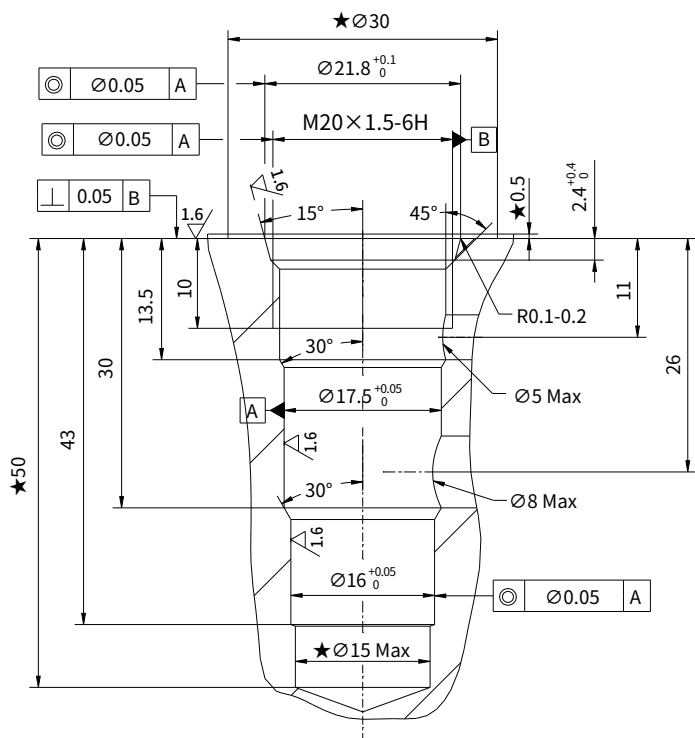
Notes:

1. Unnotched chamfer R0.2
2. $\star$ Note dimensions are based on actual production drawing size values

Counterbalance Valve's Cartridge Cavities

(Dimensions in mm)

H610



Notes:

1. Threads and all diameters to be met 0.05 A
2. Unnotched chamfer R0.2
3. ★Note dimensions are based on actual production drawing size values