

Comatrol

RESPONSIVENESS IN MOTION

Member of the Danfoss Group



Cavities

www.comatrol.com

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OVERVIEW

The following pages show details for Comatrol standard valve cavities. These cavities are designed around SAE standard O-ring thread ports. In many cases these cavities are interchangeable with cavities used by other manufacturers. The table below is intended as a guide for cartridge valve interchanges.

Cavity crossover table

Comatrol	Thread	Delta Power	Eaton-Vickers	HydraForce	Parker	Sterling [Parker]	Command Controls [Bucher]
CP04-2	7/16-20			NO	NO		NO
CP04-3				NO	NO		NO
CP07-3	5/8-18	YES		YES	YES		
SDC08-2	3/4-16	YES	YES	YES	YES	YES	YES
SDC08-3		YES	YES	YES	YES	YES	YES
SDC08-3S		YES	YES	YES	YES	YES	YES
CP08-3L							
SDC08-4		YES	YES	YES	YES	YES	YES
SDC10-2	7/8-14	YES	YES	YES	YES	YES	YES
SDC10-3		YES	YES	YES	YES	YES	YES
SDC10-3S			YES	YES	YES	YES	YES
SDC10-4		YES	YES	YES	YES	YES	YES
SDC12-2	1 1/16-12	NO	NO	YES*	NO		NO
CP12-2		NO	NO	YES*	NO		NO
CP12-3S		NO	NO	NO	NO		NO
CP12-3		NO	NO	YES	NO		NO
CP12-4		NO	NO	NO	NO		NO
SDC16-2	1 5/16-12		YES	YES	YES	YES	YES
SDC16-3S			YES	YES	YES	YES	YES
SDC16-3			YES	YES	YES	YES	YES
SDC16-4 & CP16-4 (Interchangeable)				YES	YES	YES	YES
SDC20-2	1 5/8-12		YES		YES		
CP20-3S				NO			
SDC20-3				YES			
SDC20-4				YES			

*Cavities are not 100% compatible, but all Comatrol cartridges will work in HF cavity.

Please note that most manufacturers have many non-standard cavities and that details are subject to change. Compare cavity details before interchanging cartridges.

Dimensions

mm [in]

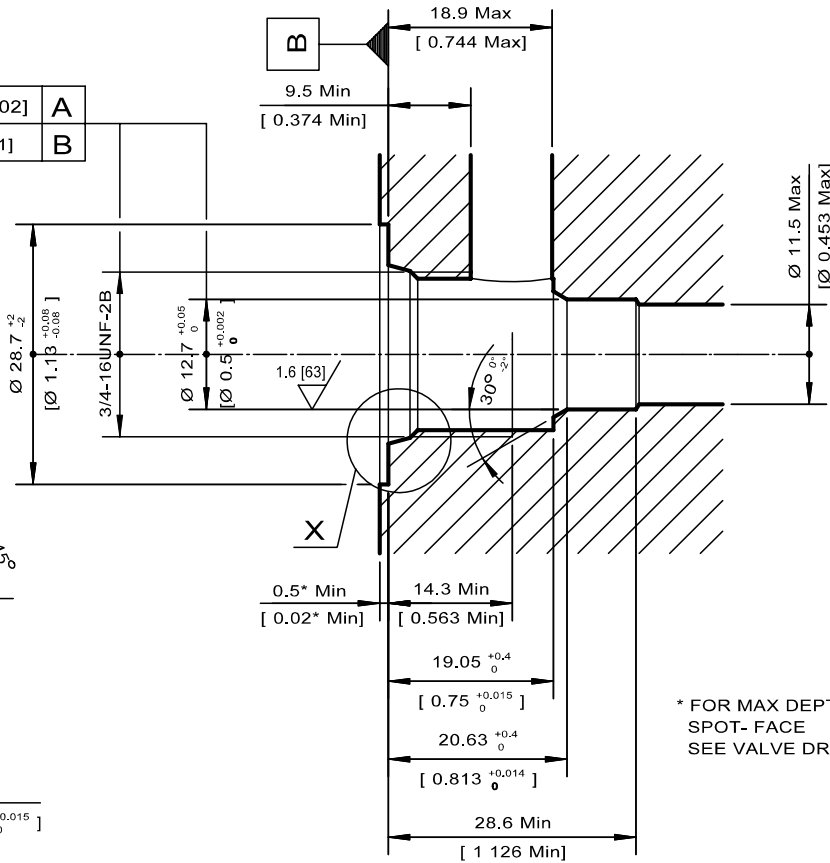
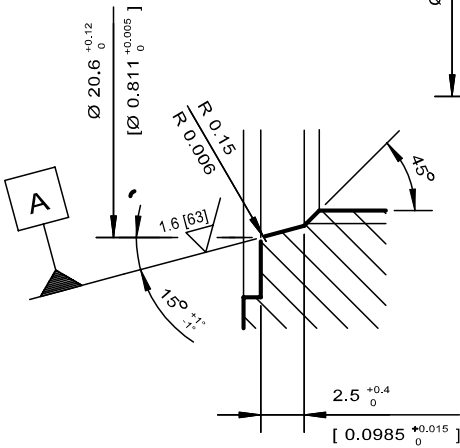
TOLERANCES UNLESS OTHERWISE SPECIFIED

Diameter and Lengths:
if < 18mm ± 0.1 [0.004]
Angles ± 2°

	Ø0.05 [0.002]	A
	0.025 [0.001]	B

1.6 [63]

Detail X



* FOR MAX DEPTH OF SPOT- FACE
SEE VALVE DRAWINGS

Form tools

	Model code	Material number
Finishing tool	SDC-08-2-FT	11027180
Roughing tool	SDC-08-2-RT	11027181

Housings

Order Code	Description	Ports	Page
CP08-2-4S	Aluminum Housing	SAE #4	HS - 68
CP08-2-6S	Aluminum Housing	SAE #6	HS - 68
CP08-2-6S-2CR	Aluminum Housing - Crossover	SAE #6	-
CP08-2-8S-2CR	Aluminum Housing - Crossover	SAE #8	-
CP08-2-8S-2PL	Aluminum Housing - Parallel	SAE #8	-
CP08-2-S4S	Steel Housing	SAE #4	HS - 68
SDC08-2-DG-2B	Aluminum Housing, Two #2 Ports	3/8 BSP	HS - 64
SDC08-2-DG-3B	Aluminum Housing, Two #1 Ports	3/8 BSP	HS - 65
SDC08-2-LG1-3B	Aluminum Housing	1/4 BSP	HS - 66
SDC08-2-LG2-3B	Aluminum Housing	3/8 BSP	HS - 67

Dimensions

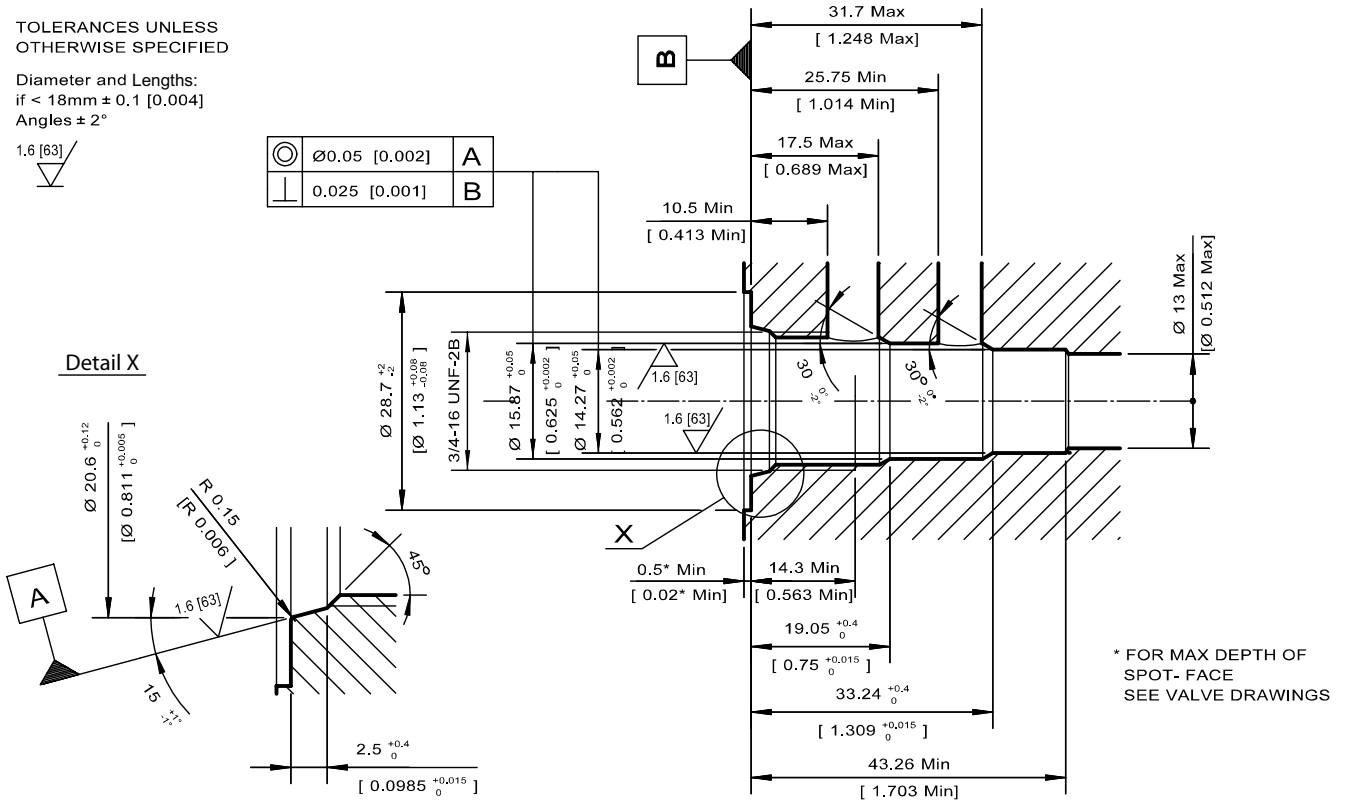
mm [in]

TOLERANCES UNLESS OTHERWISE SPECIFIED

Diameter and Lengths:
 if < 18mm ± 0.1 [0.004]
 Angles ± 2°

1.6 [63]

	Ø0.05 [0.002]	A
	0.025 [0.001]	B



CA - Cavities
 SDC08-3

Form tools

	Model code	Material number
Finishing tool	SDC-08-3-FT	11027182
Roughing tool	SDC-08-3-RT	11027183

Housings

Order Code	Description	Ports	Page
CP08-3-4S	Aluminum Housing	SAE #4	HS - 71
CP08-3-6S	Aluminum Housing	SAE #6	HS - 71
CP08-3-S4S	Steel Housing	SAE #4	HS - 71
CP08-3-S6S	Steel Housing	SAE #6	HS - 71
SDC08-3-HI-2B	Aluminum Housing, Two #1 Ports	1/4 BSP	HS - 69
SDC08-3-SE-2B	Aluminum Housing	1/4 BSP	HS - 70
SDC08-3-SE-3B	Aluminum Housing	3/8 BSP	HS - 70

Dimensions

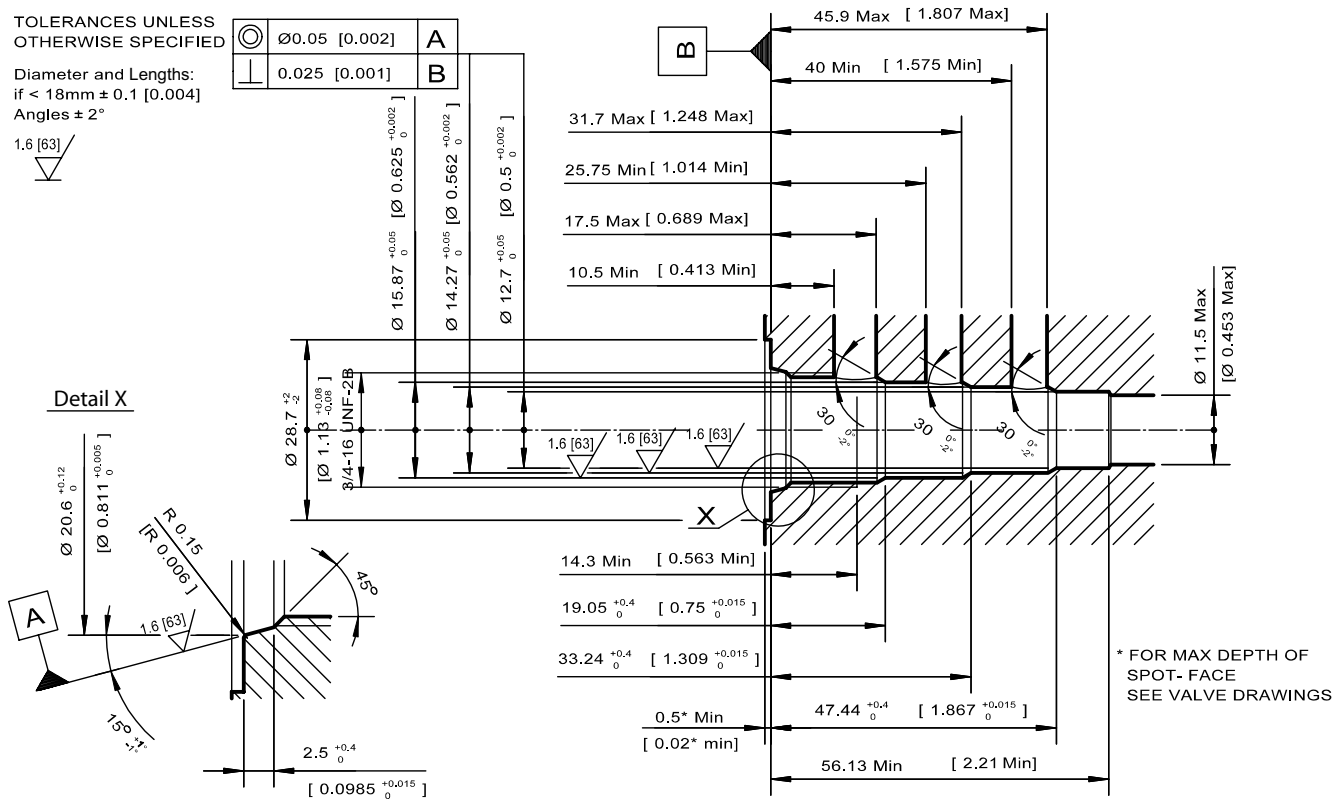
mm [in]

TOLERANCES UNLESS OTHERWISE SPECIFIED

H	H	H	H
H	H	H	H
H	H	H	H
H	H	H	H

Diameter and Lengths:
if < 18mm ± 0.1 [0.004]
Angles $\pm 2^\circ$

1.6 [63]



CA - Cavities
SDC08-4

Form tools

	Model code	Material number
Finishing tool	SDC-08-4-FT	11027184
Roughing tool	SDC-08-4-RT	11027185

Housings

Order Code	Description	Ports	Page
CP08-4-4S	Aluminum Housing	SAE #4	HS - 72
CP08-4-6S	Aluminum Housing	SAE #6	HS - 72
SDC08-4-L-2B	Aluminum Housing	1/4 BSP	HS - 73

Dimensions

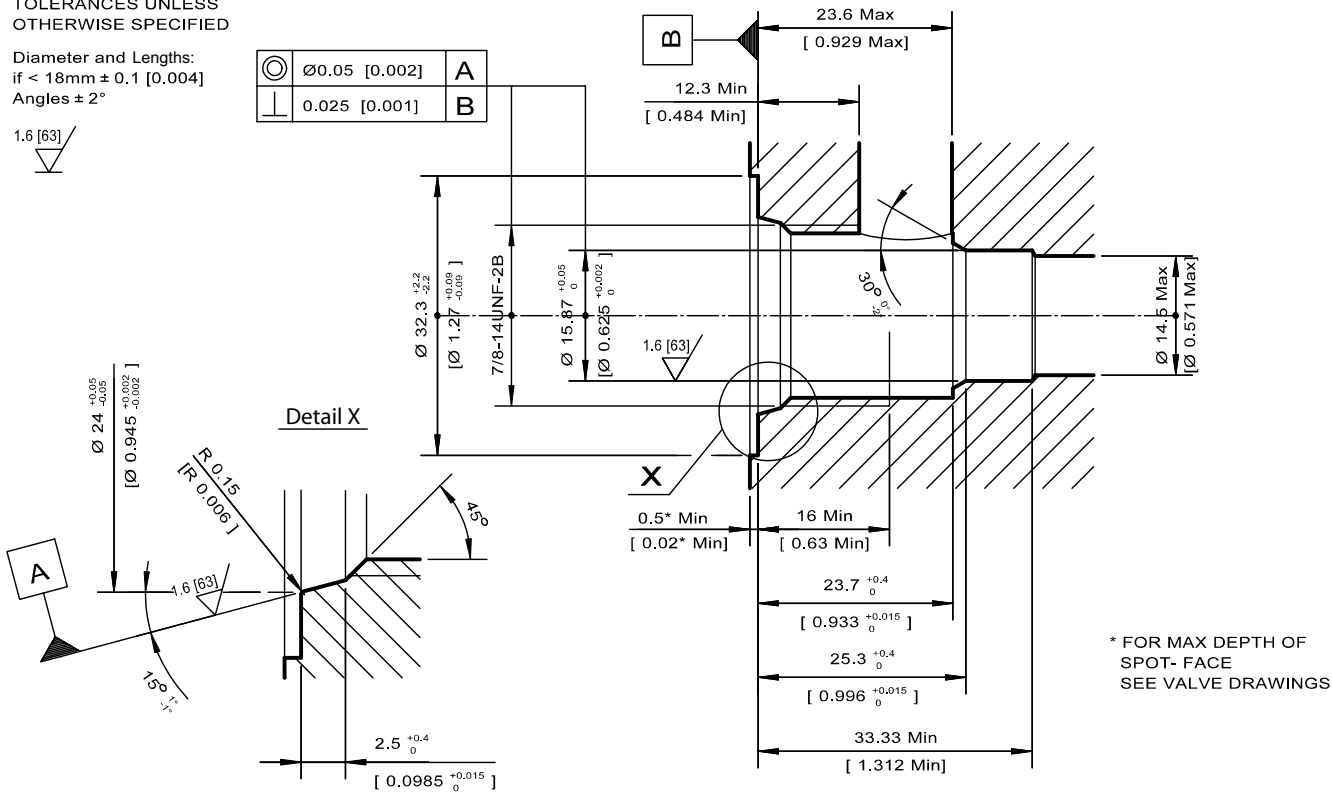
mm [in]

TOLERANCES UNLESS OTHERWISE SPECIFIED

Diameter and Lengths:
 if < 18mm ± 0.1 [0.004]
 Angles ± 2°

	Ø0.05 [0.002]	A
	0.025 [0.001]	B

1.6 [63]



CA - Cavities
 SDC10-2

Form tools

	Model code	Material number
Finishing tool	SDC-10-2-FT	11027186
Roughing tool	SDC-10-2-RT	11027187

Housings

Order Code	Description	Ports	Page
CP10-2-10S-2CR	Aluminum Housing	SAE #10	-
CP10-2-6S	Aluminum Housing	SAE #6	HS - 77
CP10-2-8S	Aluminum Housing	SAE #8	HS - 77
CP10-2-8S-2PL	Parallel housing	SAE #8	-
CP10-2-S6S	Steel Housing	SAE #6	HS - 77
CP10-2-S8S	Steel Housing	SAE #8	HS - 77
SDC10-2-3B	Aluminum Housing	3/8 BSP	HS - 74
SDC10-2-4B	Aluminum Housing	1/2 BSP	HS - 75
SDC10-2-S3B	Steel Housing	3/8 BSP	HS - 74
SDC10-2-S4B	Steel Housing	1/2 BSP	HS - 75
SDC10-2-LG1-4B	Aluminum Housing, Two #2 Ports	1/2 BSP	HS - 78
SDC10-2-LG2-4B	Aluminum Housing, Two #1 Ports	1/2 BSP	HS - 79

Dimensions

mm [in]

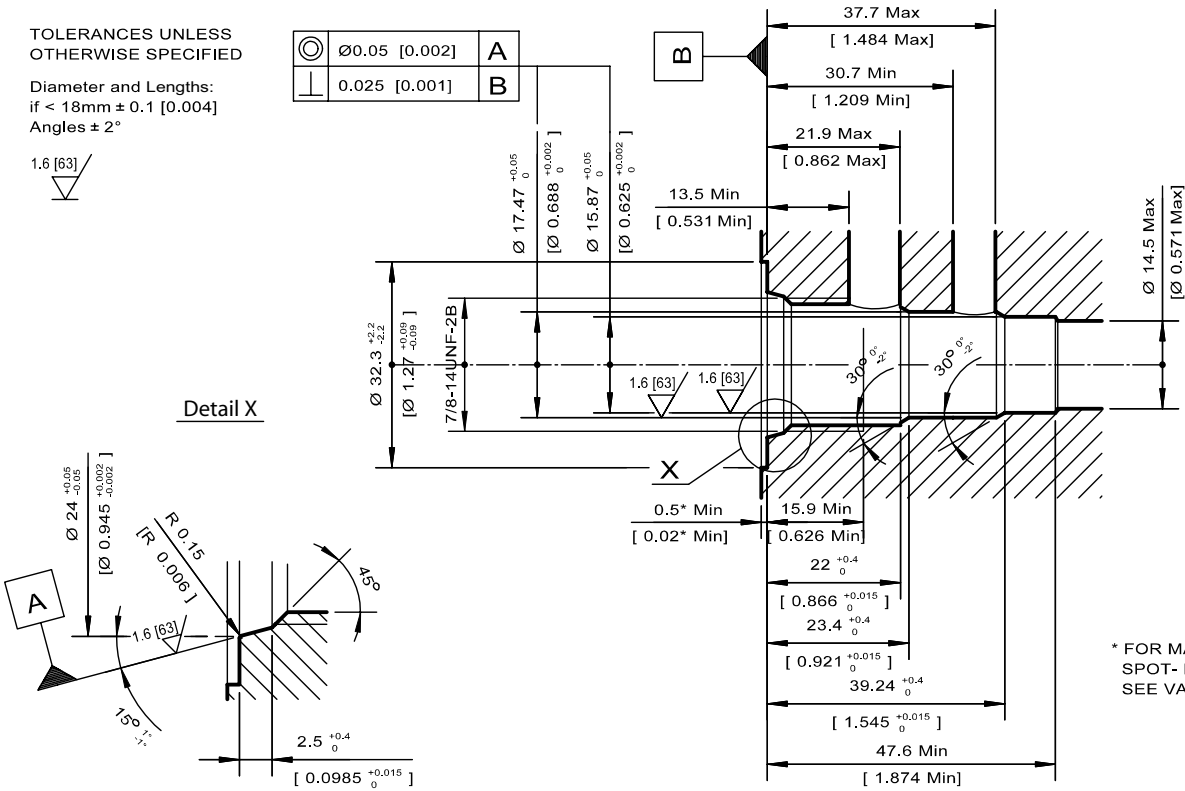
TOLERANCES UNLESS OTHERWISE SPECIFIED

Diameter and Lengths:
if < 18mm ± 0.1 [0.004]
Angles ± 2°

⊙	∅0.05 [0.002]	A
⊥	0.025 [0.001]	B



Detail X



CA - Cavities
SDC10-3

Form tools

	Model code	Material number
Finishing tool	SDC-10-3-FT	11027188
Roughing tool	SDC-10-3-RT	11027119

Housings

Order Code	Description	Ports	Page
CP10-3-6S	Aluminum Housing	SAE #6	HS - 80
CP10-3-8S	Aluminum Housing	SAE #8	HS - 80
CP10-3-S6S	Steel Housing	SAE #6	HS - 80
CP10-3-S8S	Steel Housing	SAE #8	HS - 80
SDC10-3-SI-3B	Aluminum Housing, Two #1 Ports	3/8 BSP	HS - 82
SDC10-3-SI-4B	Aluminum Housing, Two #1 Ports	1/2 BSP	HS - 83
SDC10-3-SE-3B	Aluminum Housing	3/8 BSP	HS - 85
SDC10-3-SE-4B	Aluminum Housing	1/2 BSP	HS - 84

Dimensions

mm [in]

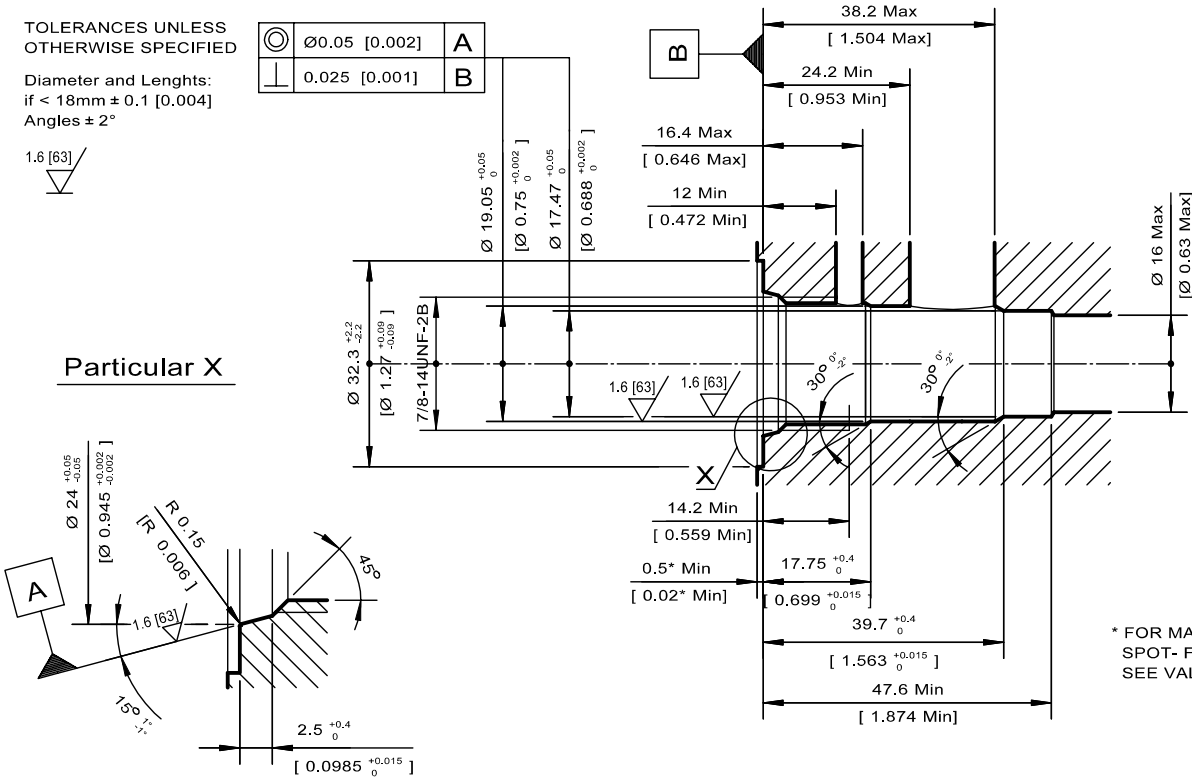
TOLERANCES UNLESS OTHERWISE SPECIFIED

⊙	$\text{⌀}0.05$ [0.002]	A
⊥	0.025 [0.001]	B

Diameter and Lengths:
if < 18mm ± 0.1 [0.004]
Angles $\pm 2^\circ$

1.6 [63]

Particular X



Form tools

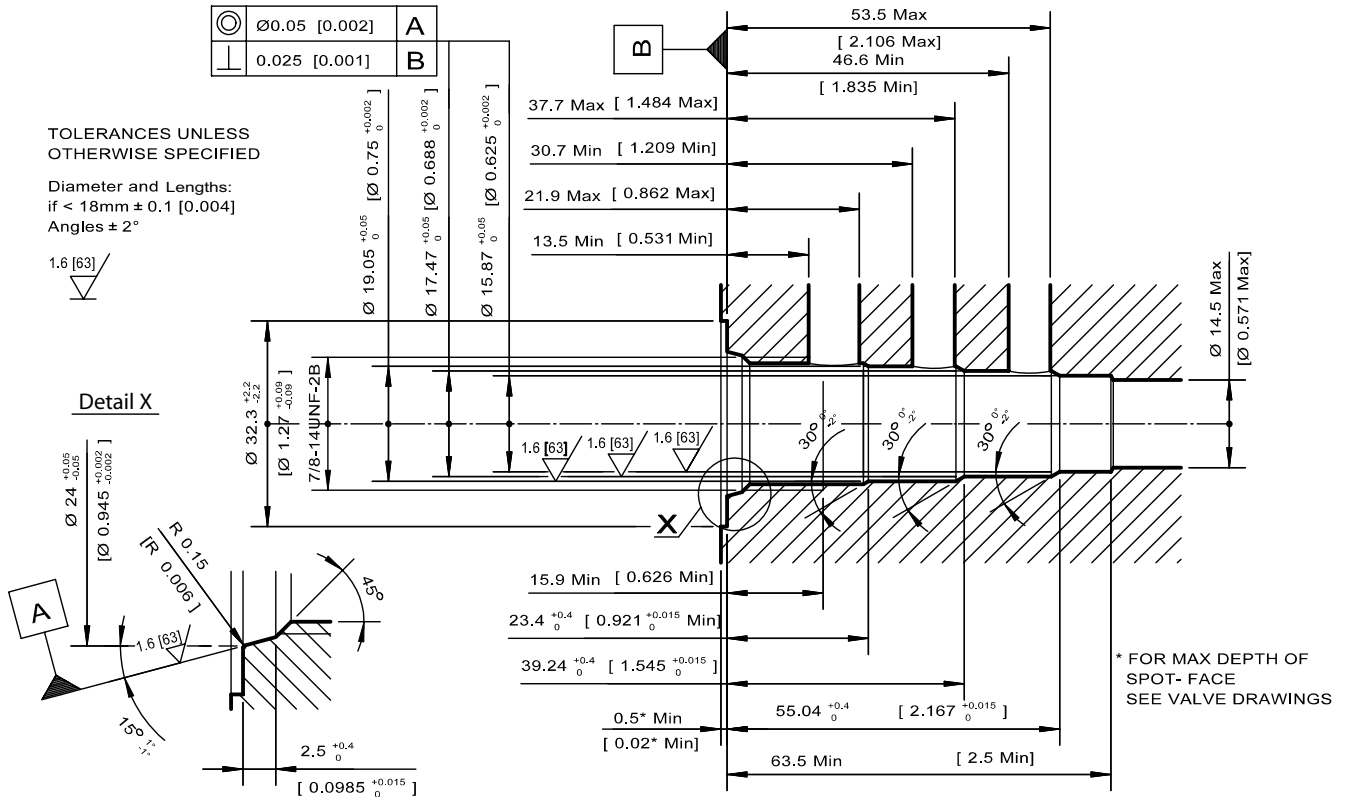
	Model code	Material number
Finishing tool	SDC-10-3S-FT	11027120
Roughing tool	SDC-10-3S-RT	11027121

Housings

Order Code	Description	Ports	Page
SDC10-3S-SE-3B	Aluminum Housing	3/8 BSP	HS - 86
SDC10-3S-SE-4B	Aluminum Housing	1/2 BSP	HS - 86
SDC10-3S-10S/6S	Aluminum Housing, Pilot at Port #3	SAE #10	HS - 87
SDC10-3S-8S/6S	Aluminum Housing, Pilot at Port #3	SAE #8	HS - 87
SDC10-3S-6S/6S	Aluminum housing, pilot at Port #3	SAE #6	HS - 87
SDC10-3S-S8S/6S	Ductile Housing, Pilot at Port #3	SAE #8	HS - 87
SDC10-3S-S4B/2B	Ductile Housing, Pilot at Port #3	1/2 BSP	HS - 87

Dimensions

mm [in]



CA - Cavities
SDC10-4

Form tools

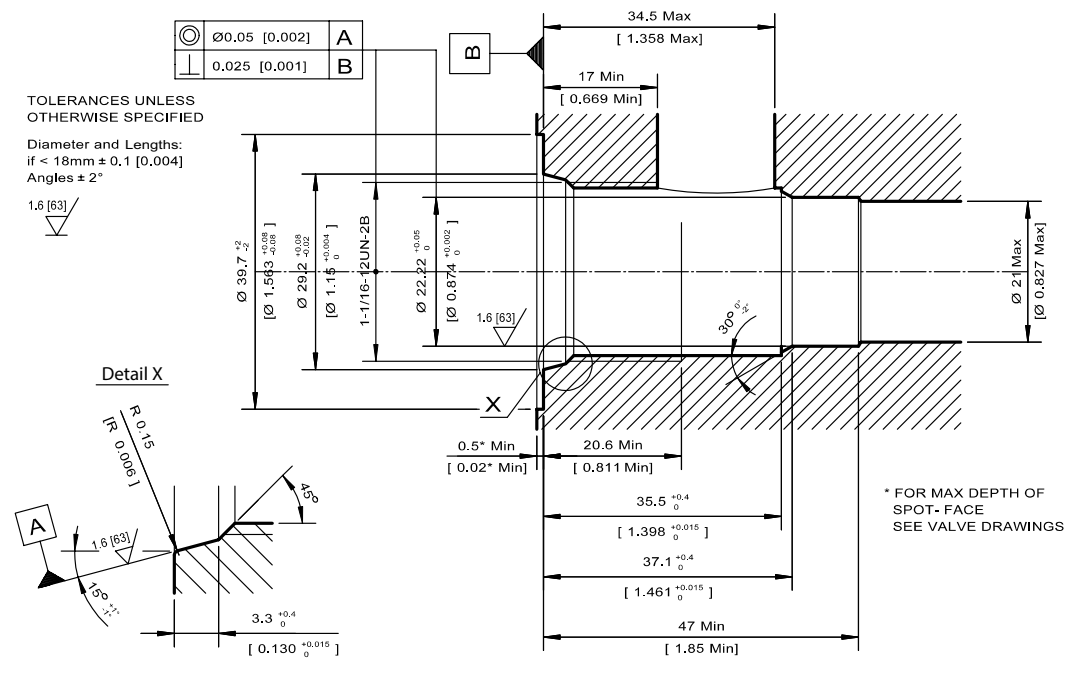
	Model code	Material number
Finishing tool	SDC-10-4-FT	11027192
Roughing tool	SDC-10-4-RT	11027193

Housings

Order Code	Description	Ports	Page
CP10-4-6S	Aluminum Housing	SAE #6	HS - 90
CP10-4-6S-X1	Aluminum Housing, No Port #1	SAE #6	HS - 90
CP10-4-8S	Aluminum Housing	SAE #8	HS - 90
CP10-4-8S-X1	Aluminum Housing, No Port #1	SAE #8	HS - 90
CP10-4-S6S	Steel Housing	SAE #6	HS - 90
CP10-4-S8S	Steel Housing	SAE #8	HS - 90
SDC10-4-HD-3B	Aluminum Housing, No Port #1	3/8 BSP	HS - 91
SDC10-4-L-3B	Aluminum Housing	3/8 BSP	HS - 92
SDC10-4-L-4B	Aluminum Housing	1/2 BSP	HS - 93

Dimensions

mm [in]



Caution
SDC12-2 and CP12-2 cavities are not interchangeable. Differences in sealing area depth may lead to leakage if the wrong valve is used with this cavity. Use only the specified cavity for each valve.

CA - Cavities
SDC12-2

Form tools

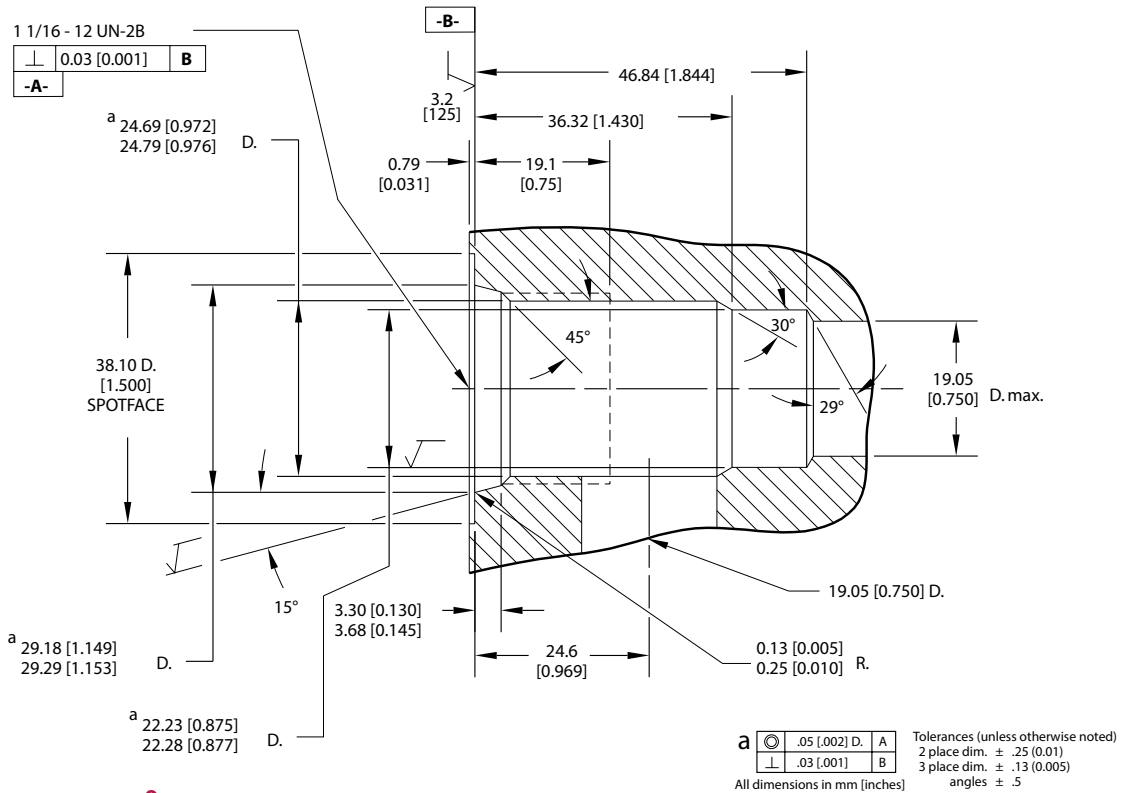
	Model code	Material number
Finishing tool	SDC-12-2-FT	11027194
Roughing tool	SDC-12-2-RT	11027195

Housings

Order Code	Description	Ports	Page
SDC12-2-DG-4B	Aluminum Housing	1/2 BSP	HS - 102
SDC12-2-DG-6B	Aluminum Housing	3/4 BSP	HS - 98
SDC12-2-LG1-6B	Aluminum Housing, Two #2 Ports	3/4 BSP	HS - 101
SDC12-2-LG2-6B	Aluminum Housing, Two #1 Ports	3/4 BSP	HS - 100
SDC12-2-10S	Aluminum housing	#10 SAE	HS - 99
SDC12-2-12S	Aluminum housing	#12 SAE	HS - 99

Dimensions

mm [in]



Form tools

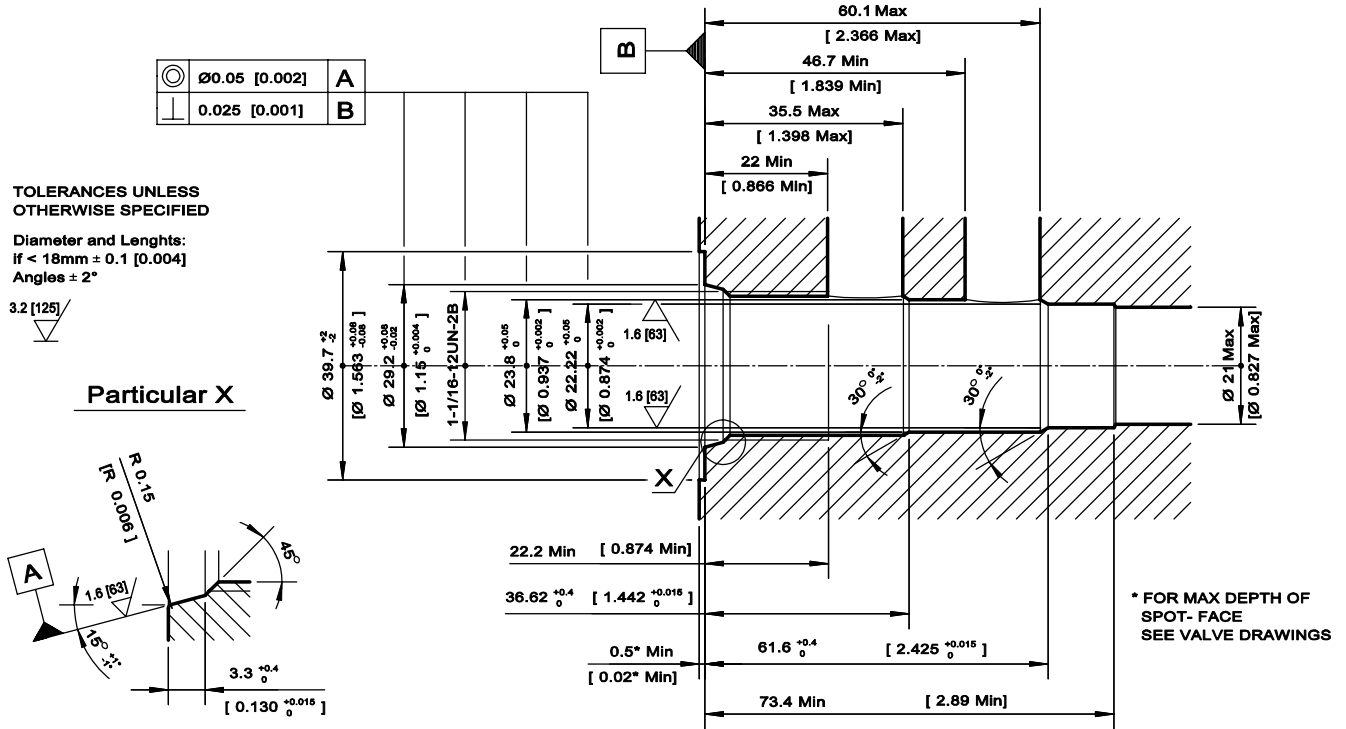
	Model code	Material number
Finishing tool	CP-12-2-FT	310005
Roughing tool	CP-12-2-RT	310022

Housings

Order Code	Description	Ports	Page
CP12-2-10S	Aluminum Housing	SAE #10	HS - 97
CP12-2-12S	Aluminum Housing	SAE #12	HS - 97
CP12-2-S10S	Steel Housing	SAE #10	HS - 97
CP12-2-S12S	Steel Housing	SAE #12	HS - 97
CP12-2-4B	Aluminum housing	1/2 BSP	HS - 97
CP12-2-6B	Aluminum housing	3/4 BSP	HS - 97
CP12-2-S4B	Steel housing	1/2 BSP	HS - 96
CP12-2-S6B	Steel housing	3/4 BSP	HS - 97

Dimensions

mm [in]



CA - Cavities
 SDC12-3

Form tools

	Model code	Material number
Finishing tool	Consult Factory	
Roughing tool	Consult Factory	

Order Code	Description	Ports	Page
SDC12-3-10S	Aluminum Housing	SAE #10	-
SDC12-3-12S	Aluminum Housing	SAE #12	-
SDC12-3-S10S	Ductile Housing	SAE #10	-
SDC12-3-S12S	Ductile Housing	SAE #12	-
SDC12-3-HE-3/4	Aluminum Housing	3/4 BSP	-
SDC12-3-HE-1/2	Aluminum Housing	1/2 BSP	-

Dimensions

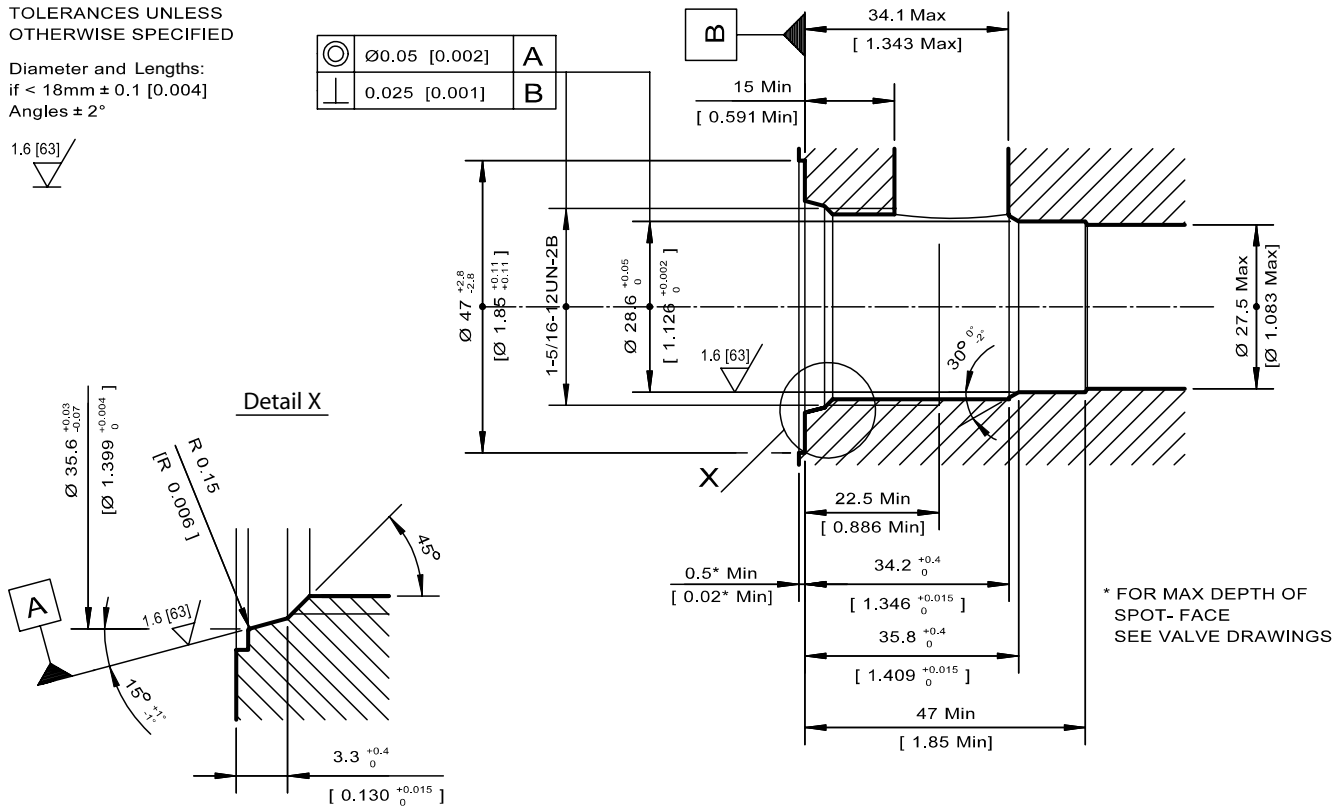
mm [in]

TOLERANCES UNLESS OTHERWISE SPECIFIED

Diameter and Lengths:
if < 18mm ± 0.1 [0.004]
Angles ± 2°



	Ø0.05 [0.002]	A
	0.025 [0.001]	B



* FOR MAX DEPTH OF SPOT- FACE SEE VALVE DRAWINGS

CA - Cavities
SDC16-2

Form tools

	Model code	Material number
Finishing tool	SDC-16-2-FT	11027196
Roughing tool	SDC-16-2-RT	11027197

Housings

Order Code	Description	Ports	Page
CP16-2-12S	Aluminum Housing	SAE #12	HS - 108
CP16-2-16S	Aluminum Housing	SAE #16	HS - 108
CP16-2-S16S	Steel Housing	SAE #16	HS - 108
SDC16-2-HG1-8B	Aluminum Housing, Two #2 Ports	1 BSP	HS - 109
SDC16-2-HG2-8B	Aluminum Housing, Two #1 Ports	1 BSP	HS - 110
SDC16-2-HG-6B	Aluminum Housing	3/4 BSP	-
SDC16-2-HG-8B	Aluminum Housing	1 BSP	-

Dimensions

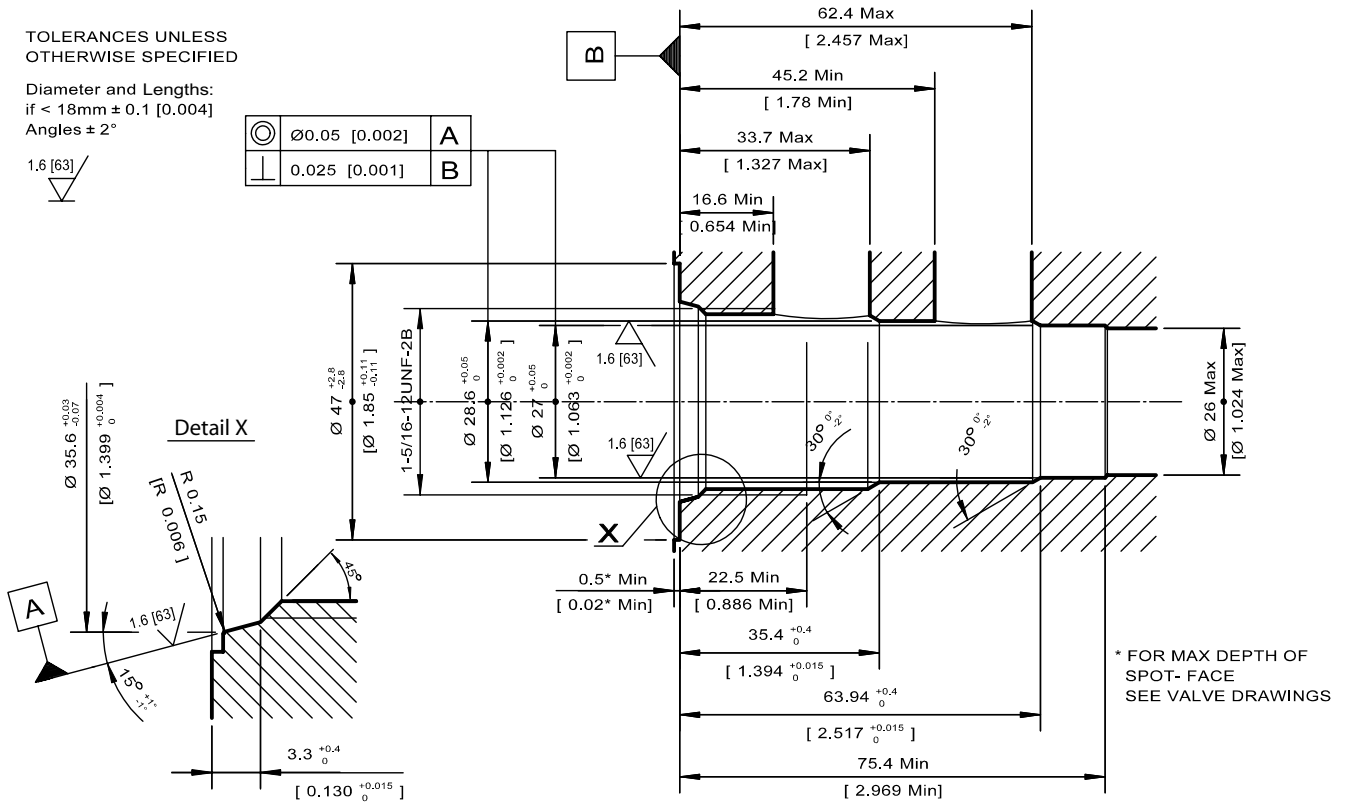
mm [in]

TOLERANCES UNLESS OTHERWISE SPECIFIED

Diameter and Lengths:
 if < 18mm ± 0.1 [0.004]
 Angles ± 2°

1.6 [63]

	Ø0.05 [0.002]	A
	0.025 [0.001]	B



* FOR MAX DEPTH OF SPOT- FACE SEE VALVE DRAWINGS

CA - Cavities
 SDC16-3

Form tools

	Model code	Material number
Finishing tool	SDC-16-3-FT	11027198
Roughing tool	SDC-16-3-RT	11027199

Housings

Order Code	Description	Ports	Page
CP16-3-12S	Aluminum Housing	SAE #12	HS - 114
CP16-3-16S	Aluminum Housing	SAE #16	HS - 114
SDC16-3-HE-6B	Aluminum Housing	3/4 BSP	HS - 112
SDC16-3-HE-8B	Aluminum Housing	1 BSP	HS - 111
SDC16-3-HI-8B	Aluminum Housing, Two #1 Ports	1 BSP	HS - 113

Dimensions

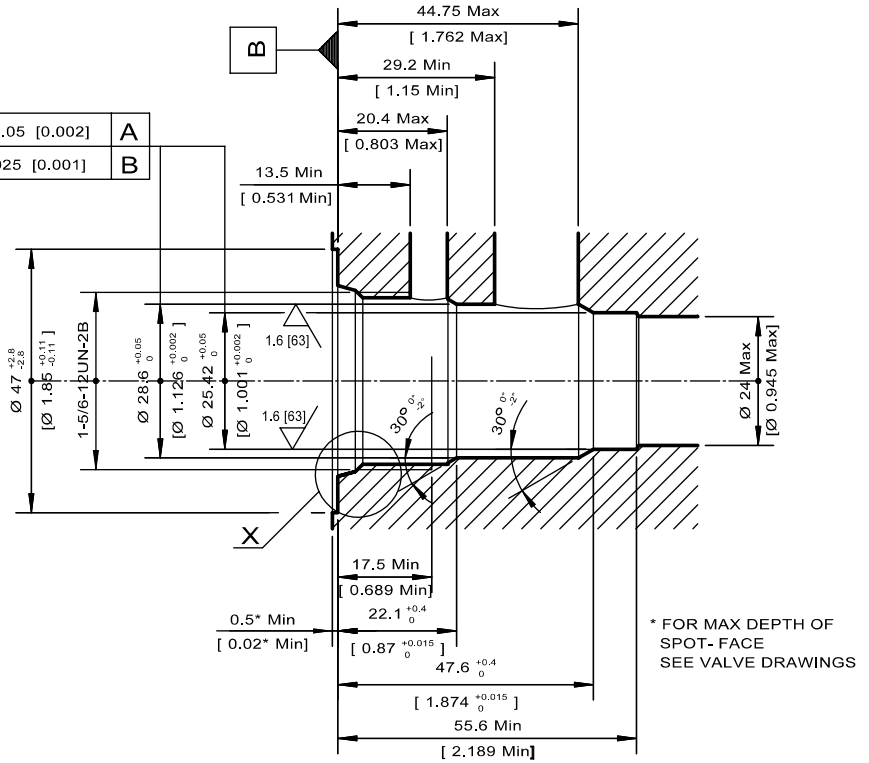
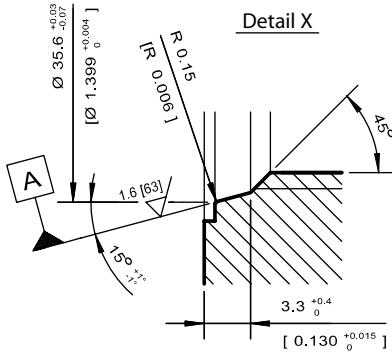
mm [in]

TOLERANCES UNLESS OTHERWISE SPECIFIED

Diameter and Lengths:
if < 18mm ± 0.1 [0.004]
Angles ± 2°

1.6 [63]

⊙	∅0.05 [0.002]	A
⊥	0.025 [0.001]	B



CA - Cavities
SDC16-3S

Form tools

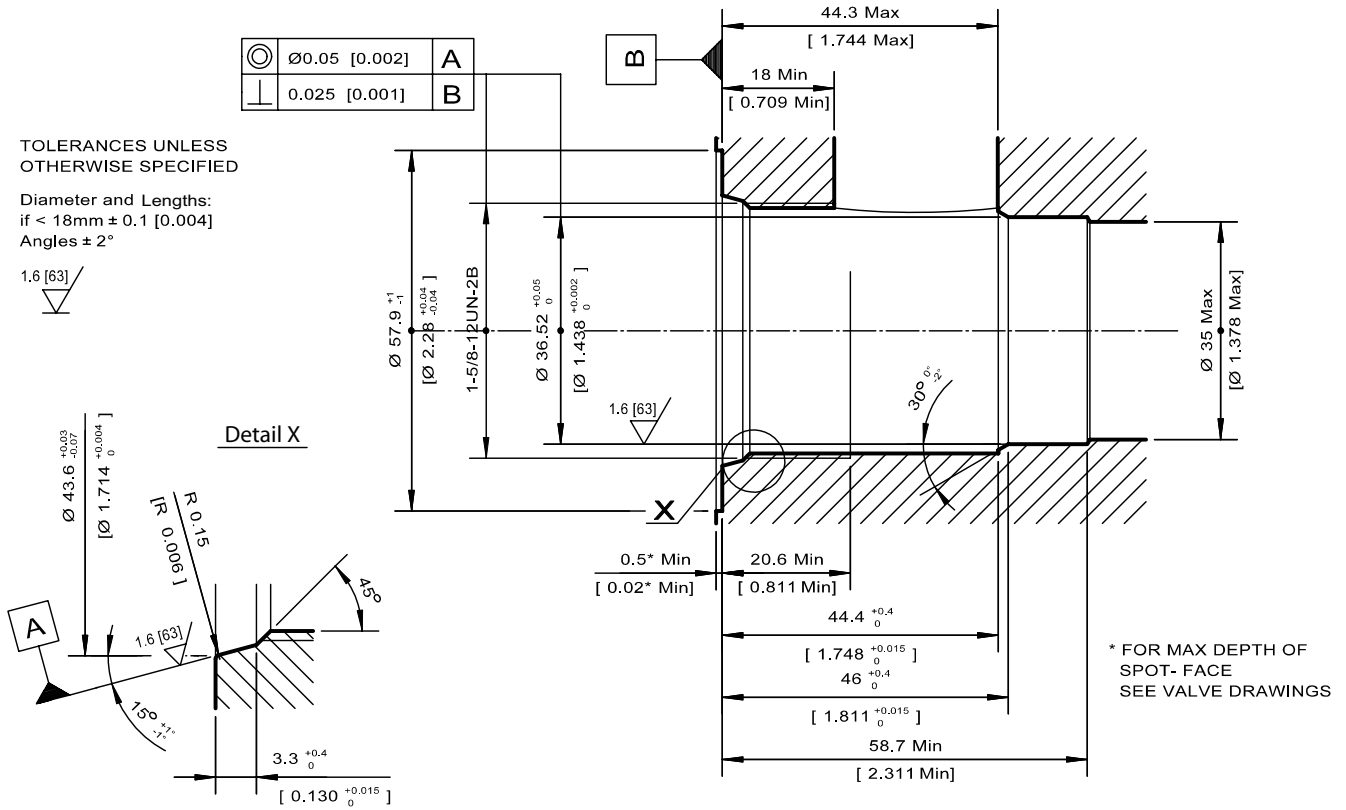
	Model code	Material number
Finishing tool	SDC-16-3S-FT	11027234
Roughing tool	SDC-16-3S-RT	11027235

Housings

Order Code	Description	Ports	Page
CP16-3S-12S/4S	Aluminum Housing, Pilot at Port #3	SAE #12, #4	HS - 115
CP16-3S-16S/4S	Aluminum Housing, Pilot at Port #3	SAE #16, #4	HS - 115
CP16-3S-6B/2B	Aluminum Housing, Pilot at Port #3	3/4 BSP, 1/4 BSP	HS - 115
CP16-3S-8B/2B	Aluminum Housing, Pilot at Port #3	1 BSP, 1/4 BSP	HS - 115

Dimensions

mm [in]



CA - Cavities
 SDC20-2

Form tools

	Model code	Material number
Finishing tool	SDC-20-2-FT	11027236
Roughing tool	SDC-20-2-RT	11027237

Housings

Order Code	Description	Ports	Page
CP20-2-10B	Aluminum Housing	1 1/4 BSP	HS - 121
CP20-2-16S	Aluminum Housing	SAE #16	HS - 121
CP20-2-20S	Aluminum Housing	SAE #20	HS - 121
CP20-2-8B	Aluminum Housing	1 BSP	HS - 121

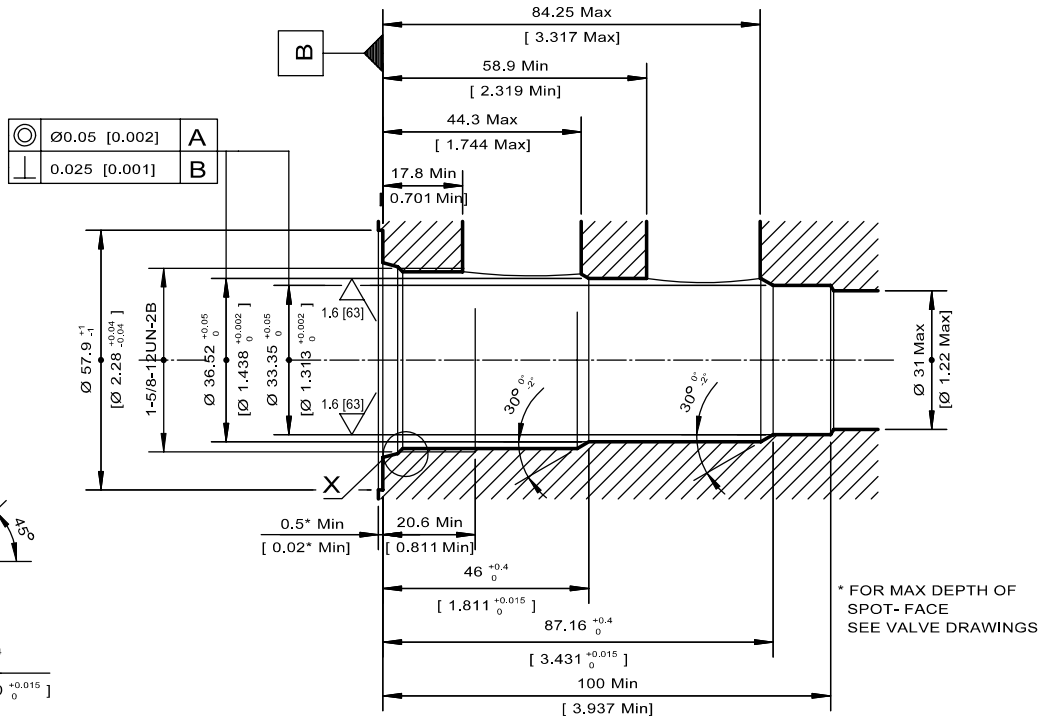
Dimensions

mm [in]

TOLERANCES UNLESS OTHERWISE SPECIFIED

Diameter and Lengths:
if < 18mm ± 0.1 [0.004]
Angles ± 2°

1.6 [63]



CA - Cavities
SDC20-3

Form tools

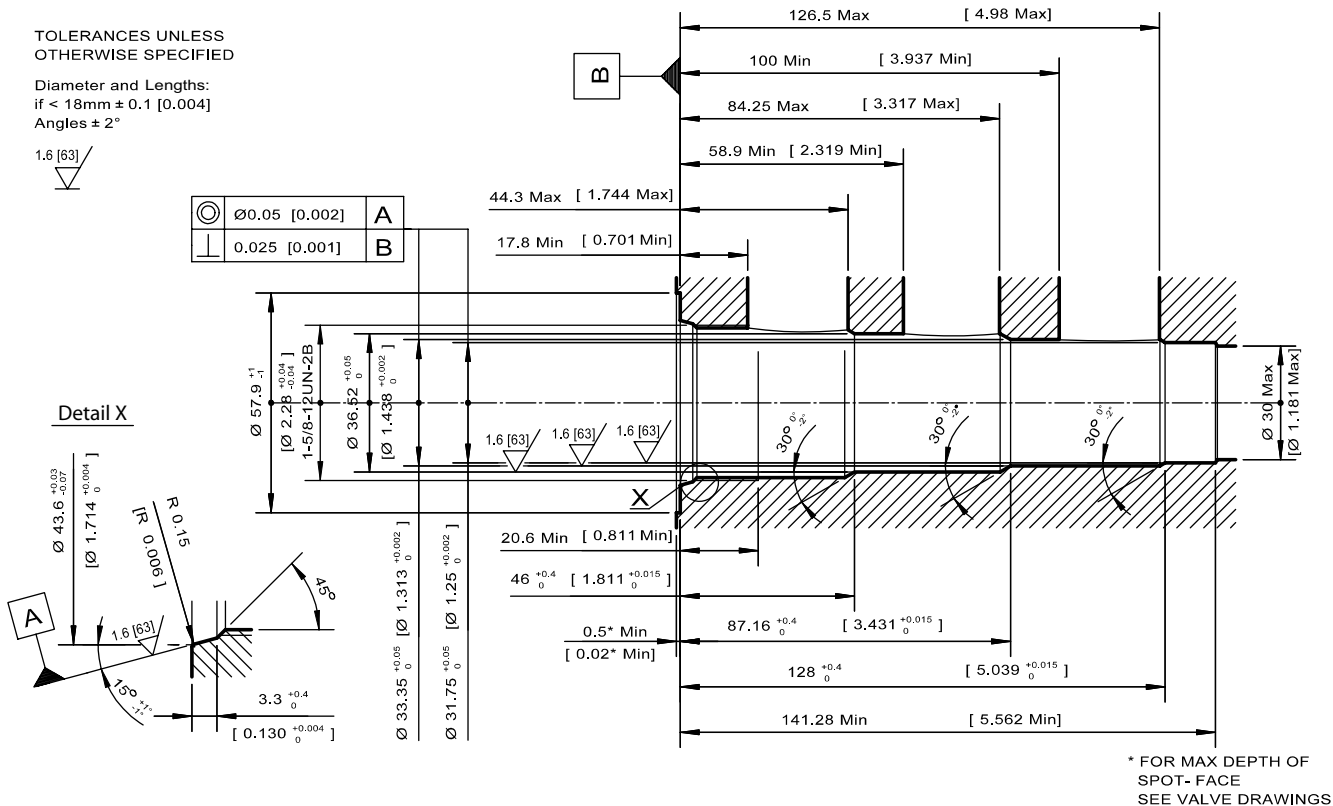
	Model code	Material number
Finishing tool	SDC-20-3-FT	11027238
Roughing tool	SDC-20-3-RT	11027239

Housings

Order Code	Description	Ports	Page
CP20-3-10B	Aluminum Housing	1 1/4 BSP	HS - 122
CP20-3-10B/2B1	Aluminum Housing, Pilot at Port #3	1 1/4 BSP, 1/4 BSP	HS - 122
CP20-3-16S	Aluminum Housing	SAE #16	HS - 122
CP20-3-16S/4S1	Aluminum Housing, Pilot at Port #3	SAE #16, #4	HS - 122
CP20-3-20S	Aluminum Housing	SAE #20	HS - 122
CP20-3-20S/4S1	Aluminum Housing, Pilot at Port #3	SAE #20, #4	HS - 122
CP20-3-8B	Aluminum Housing	1 BSP	HS - 122
CP20-3-8B/2B1	Aluminum Housing, Pilot at Port #3	1 BSP, 1/4 BSP	HS - 122

Dimensions

mm [in]



CA - Cavities
SDC20-4

Form tools

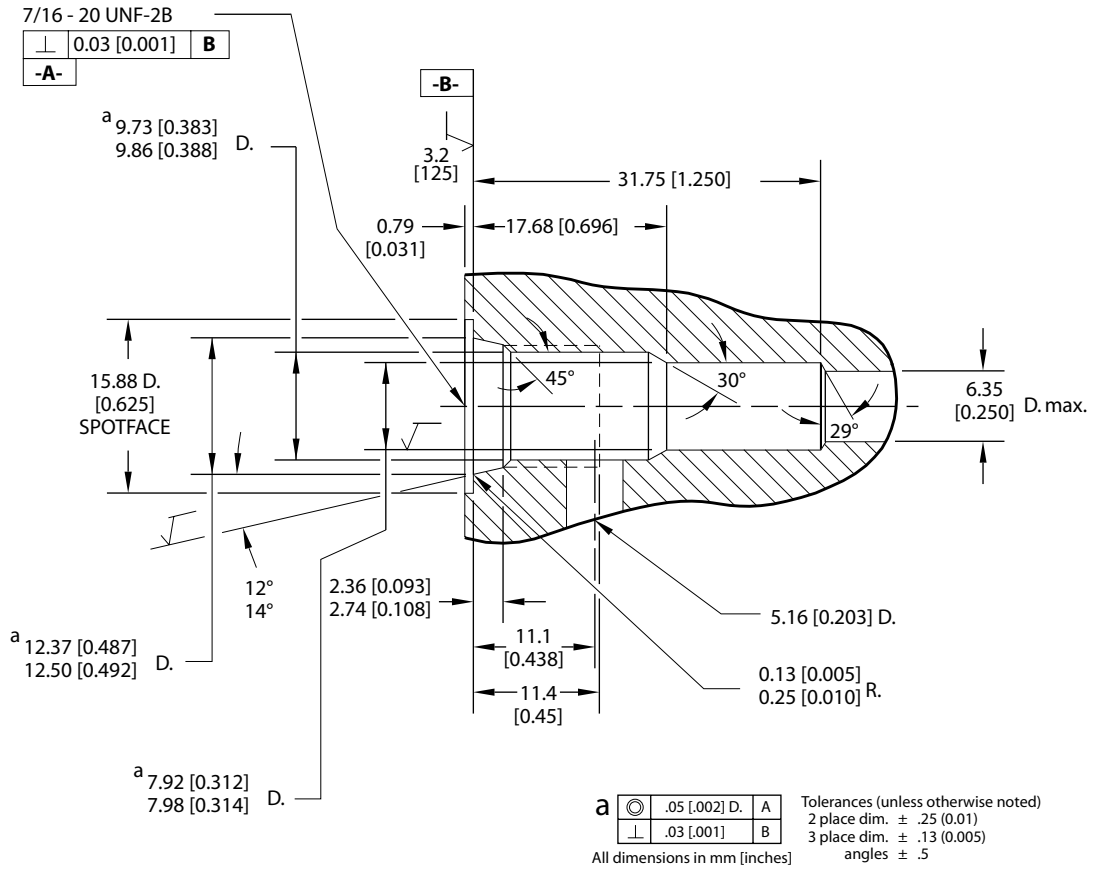
	Model code	Material number
Finishing tool	SDC-20-4-FT	11027240
Roughing tool	SDC-20-4-RT	11027241

Housings

Order Code	Description	Ports	Page
CP20-4-10B	Aluminum Housing	1 1/4 BSP	HS - 123
CP20-4-10B-X1	Aluminum Housing, No Port #1	1 1/4 BSP	HS - 123
CP20-4-16S	Aluminum Housing	SAE #16	HS - 123
CP20-4-16S/4S	Aluminum Housing, Pilot at Port #1	SAE #16, #4	HS - 123
CP20-4-16S-X1	Aluminum Housing, No Port #1	SAE #16	HS - 123
CP20-4-20S	Aluminum Housing	SAE #20	HS - 123
CP20-4-20S/4S	Aluminum Housing, Pilot at Port #1	SAE #20, #4	HS - 123
CP20-4-20S-X1	Aluminum Housing, No Port #1	SAE #20	HS - 123
CP20-4-8B	Aluminum Housing	1 BSP	HS - 123
CP20-4-8B-X1	Aluminum Housing, No Port #1	1 BSP	HS - 123
CP20-4-516S	Steel Housing	SAE #16	HS - 123
CP20-4-516S-X1	Steel Housing, No Port #1	SAE #16	HS - 123

Dimensions

mm [in]



$\sqrt{\quad} = 1.6 [63]$

Form tools

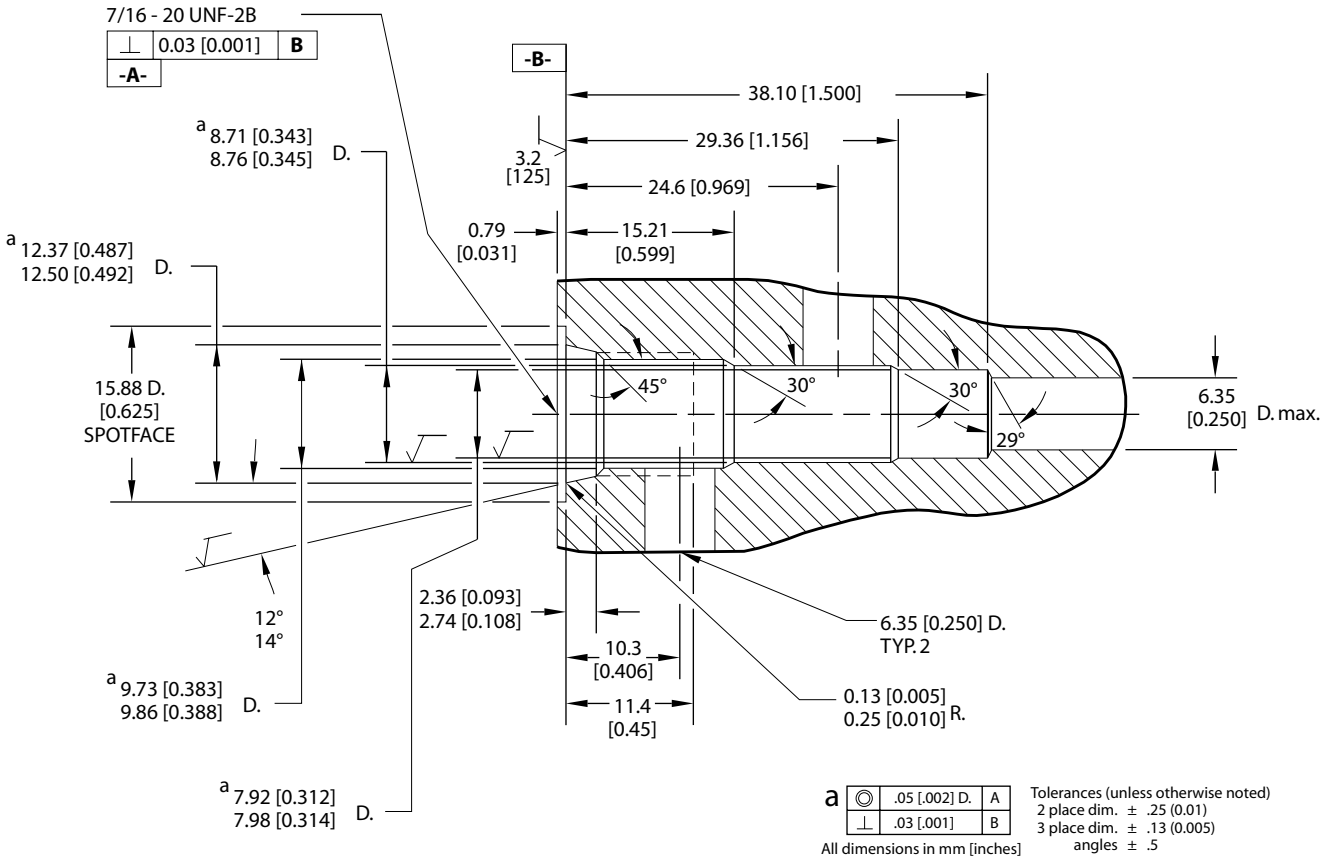
	Model Code	Material Number
Finishing tool	CP-04-2-FT	310027
Roughing tool	CP-04-2-RT	310038

Housings

Order Code	Description	Ports	Page
CP04-2-2B	Aluminum Housing	1/4 BSP	HS - 8
CP04-2-4S	Aluminum Housing	SAE #4	HS - 8

Dimensions

mm [in]



$\sqrt{\quad} = 1.6 [63]$

CA - Cavities
CP04-3

Form tools

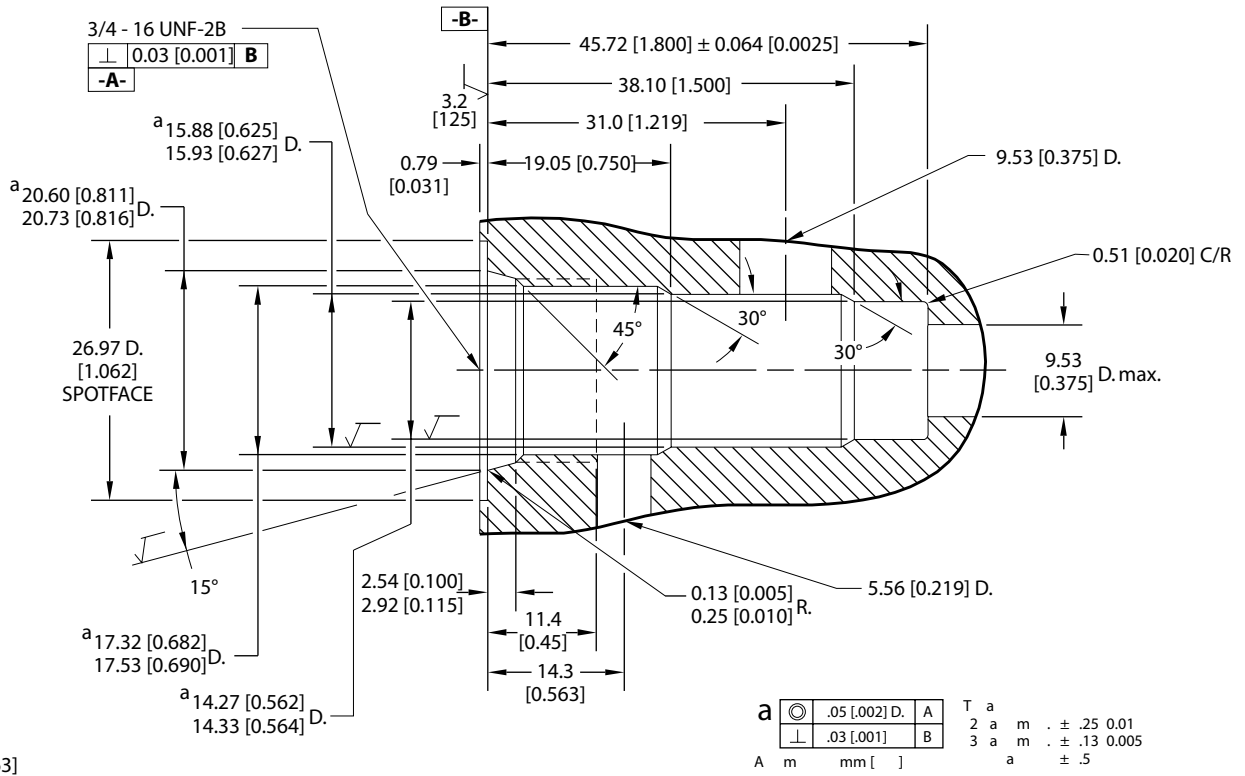
	Model Code	Material Number
Finishing tool	CP-04-3-FT	310028
Roughing tool	CP-04-3-RT	310037

Housings

Order Code	Description	Ports	Page
CP04-3-2B	Aluminum Housing	1/4 BSP	HS - 9
CP04-3-4S	Aluminum Housing	SAE #4	HS - 9

Dimensions

mm [in]



$\sqrt{\quad} = 1.6 [63]$

CA - Cavities
CP08-3L

Form tools

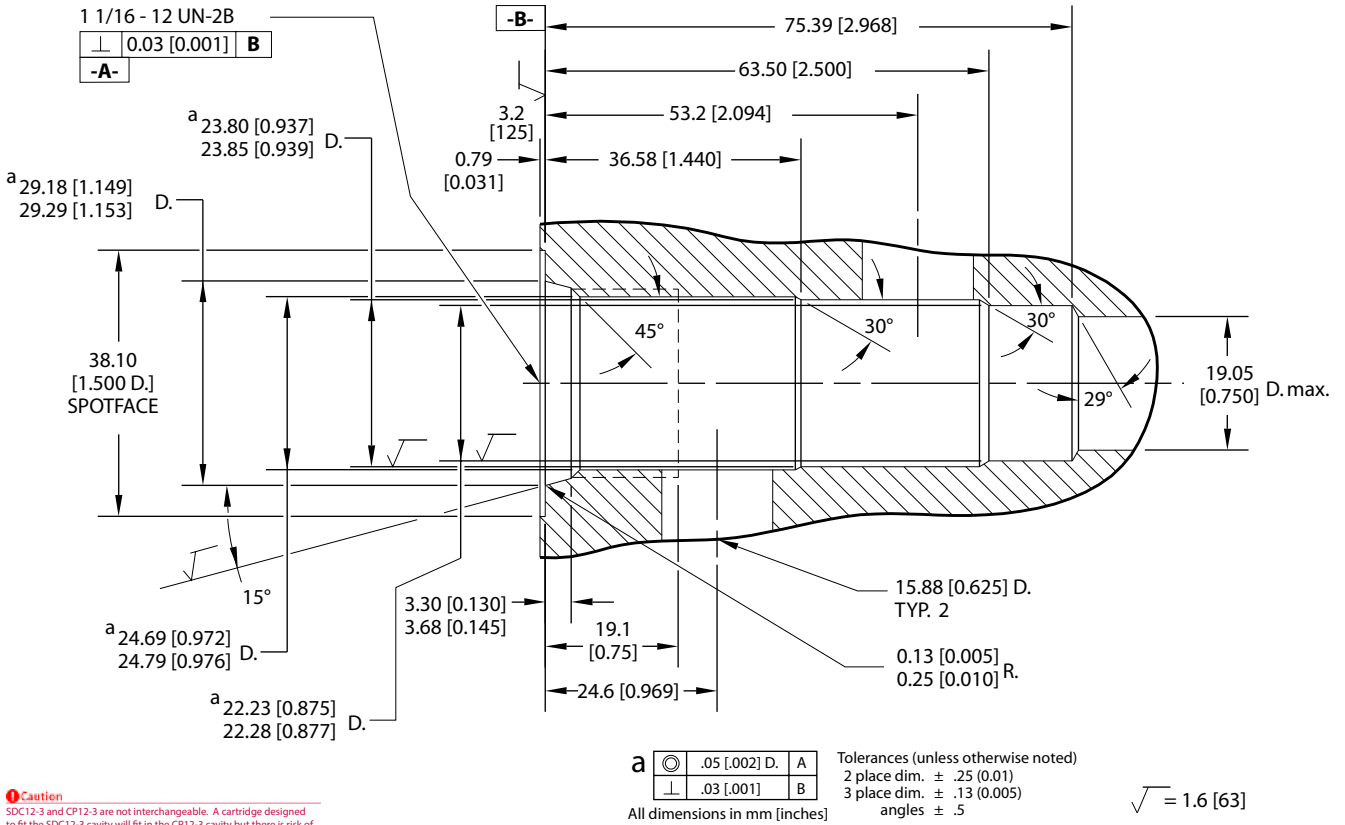
	Model code	Material number
Finishing tool	CP-08-3L-FT	11027088
Roughing tool	CP-08-3L-RT	11027089

Housings

Order Code	Description	Ports	Page
CP08-3L-2B	Aluminum Housing	1/4 BSP	HS - 11
CP08-3L-3B	Aluminum Housing	3/8 BSP	HS - 11
CP08-3L-4S	Aluminum Housing	SAE #4	HS - 11
CP08-3L-6S	Aluminum Housing	SAE #6	HS - 11

Dimensions

mm [in]



Caution
 SDC12-3 and CP12-3 are not interchangeable. A cartridge designed to fit the SDC12-3 cavity will fit in the CP12-3 cavity but there is risk of the top backup ring between port 1 and port 2 not being covered in the cavity. If the cartridge has pressure at port 1 the risk of the back up ring extruding exists.

Form tools

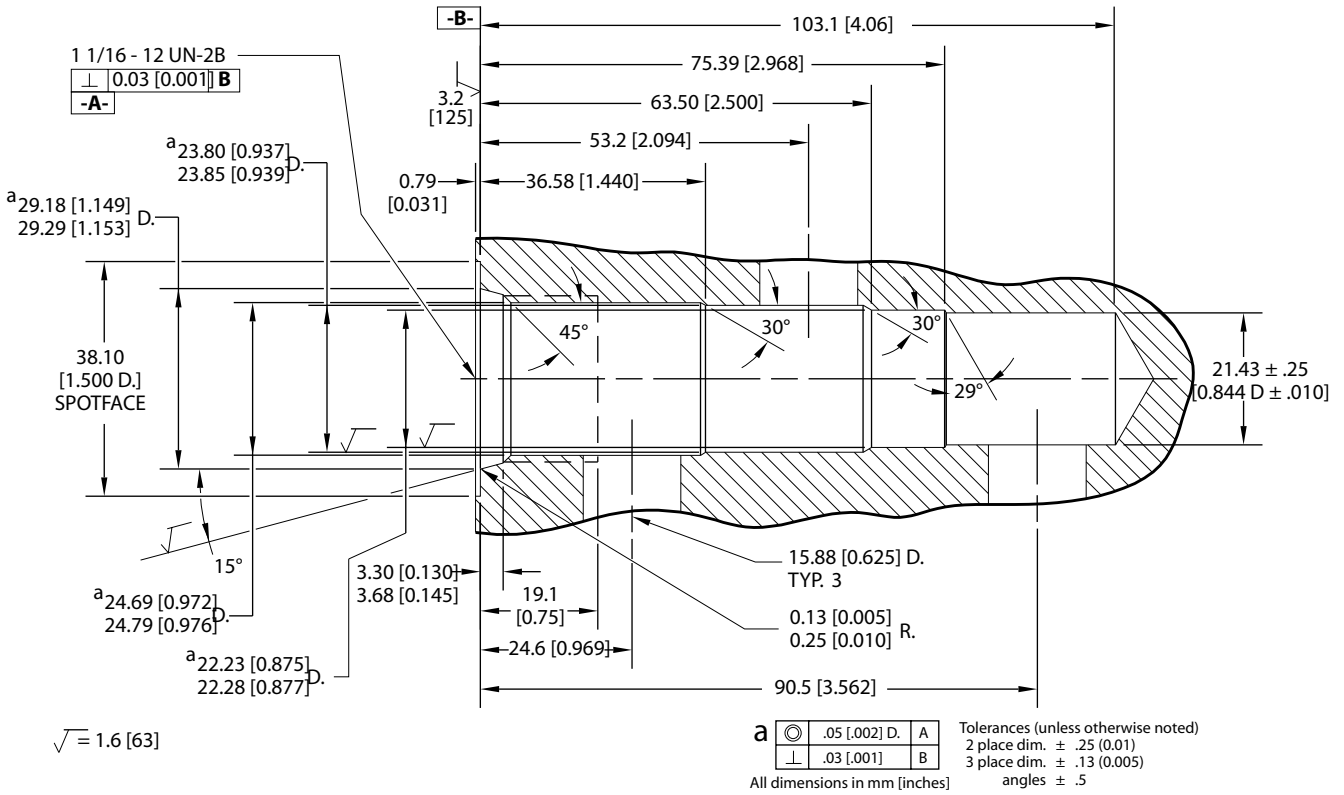
	Model code	Material number
Finishing tool	CP-12-3-FT	310007
Roughing tool	CP-12-3-RT	310033

Housings

Order Code	Description	Ports	Page
CP12-3-10S	Aluminum Housing	SAE #10	HS - 12
CP12-3-12S	Aluminum Housing	SAE #12	HS - 12
CP12-3-4B	Aluminum Housing	1/2 BSP	HS - 12
CP12-3-6B	Aluminum Housing	3/4 BSP	HS - 12
CP12-3-S10S	Steel Housing	SAE #10	HS - 12
CP12-3-S12S	Steel Housing	SAE #12	HS - 12

Dimensions

mm [in]



CA - Cavities
 CP12-3M

Form tools

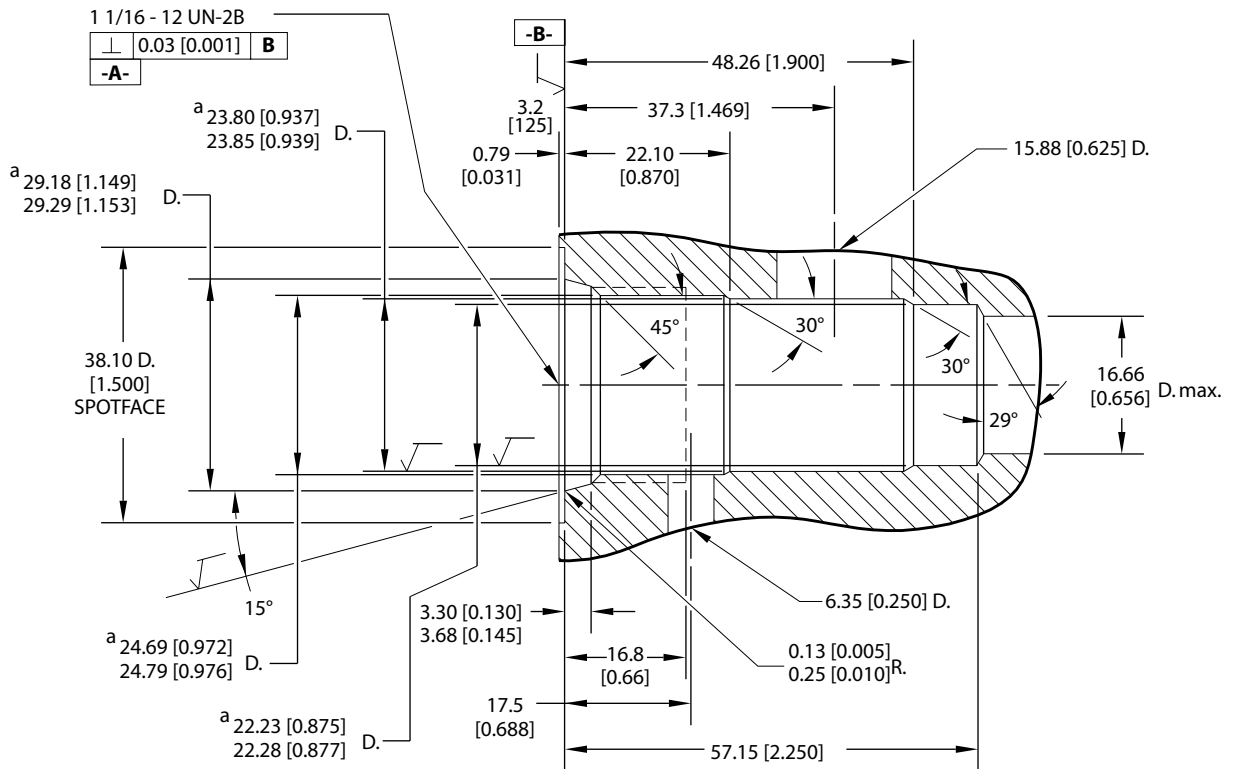
	Model code
Finishing tool	
Roughing tool	

Housings

Order Code	Description	Ports	Page
CP12-3M-10S	Aluminum Housing	SAE #10	HS - 13
CP12-3M-12S	Aluminum Housing	SAE #12	HS - 13
CP12-3M-6B	Aluminum Housing	3/4 BSP	HS - 13

Dimensions

mm [in]



$\sqrt{\quad} = 1.6 [63]$

a ⊙ .05 [0.002] D. A
 ⊥ .03 [0.001] B
 Tolerances (unless otherwise noted)
 2 place dim. \pm .25 (0.01)
 3 place dim. \pm .13 (0.005)
 angles \pm .5
 All dimensions in mm [inches]

CA - Cavities
CP12-3S

Form tools

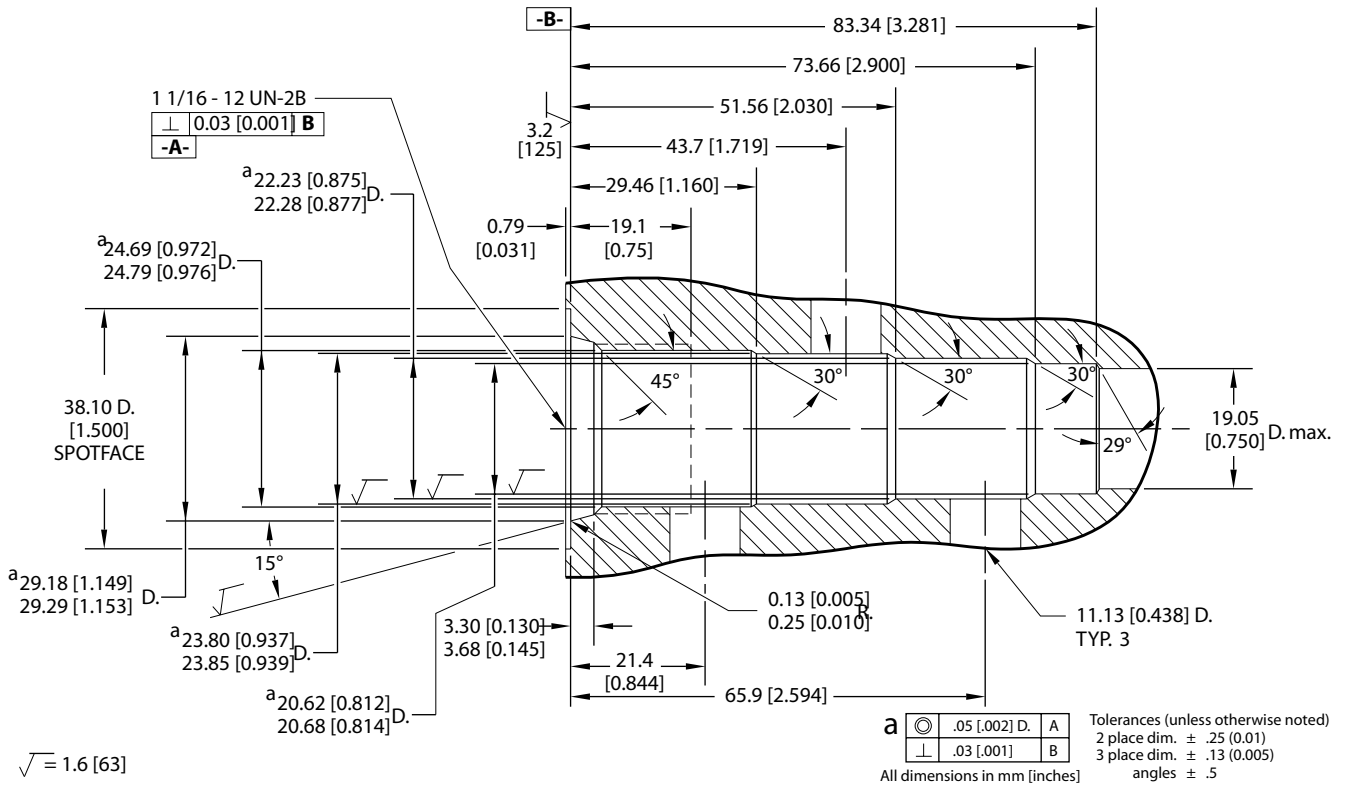
	Model code	Material number
Finishing tool	CP-12-3S-FT	310006
Roughing tool	CP-12-3S-RT	310020

Housings

Order Code	Description	Ports	Page
CP12-3S-10S/4S	Aluminum Housing, Pilot at Port #3	SAE #10, #4	HS - 14
CP12-3S-12S/4S	Aluminum Housing, Pilot at Port #3	SAE #12, #4	HS - 14
CP12-3S-4B/2B	Aluminum Housing, Pilot at Port #3	1/2 BSP, 1/4 BSP	HS - 14
CP12-3S-6B/2B	Aluminum Housing, Pilot at Port #3	3/4 BSP, 1/4 BSP	HS - 14

Dimensions

mm [in]



CA - Cavities
CP12-4

Form tools

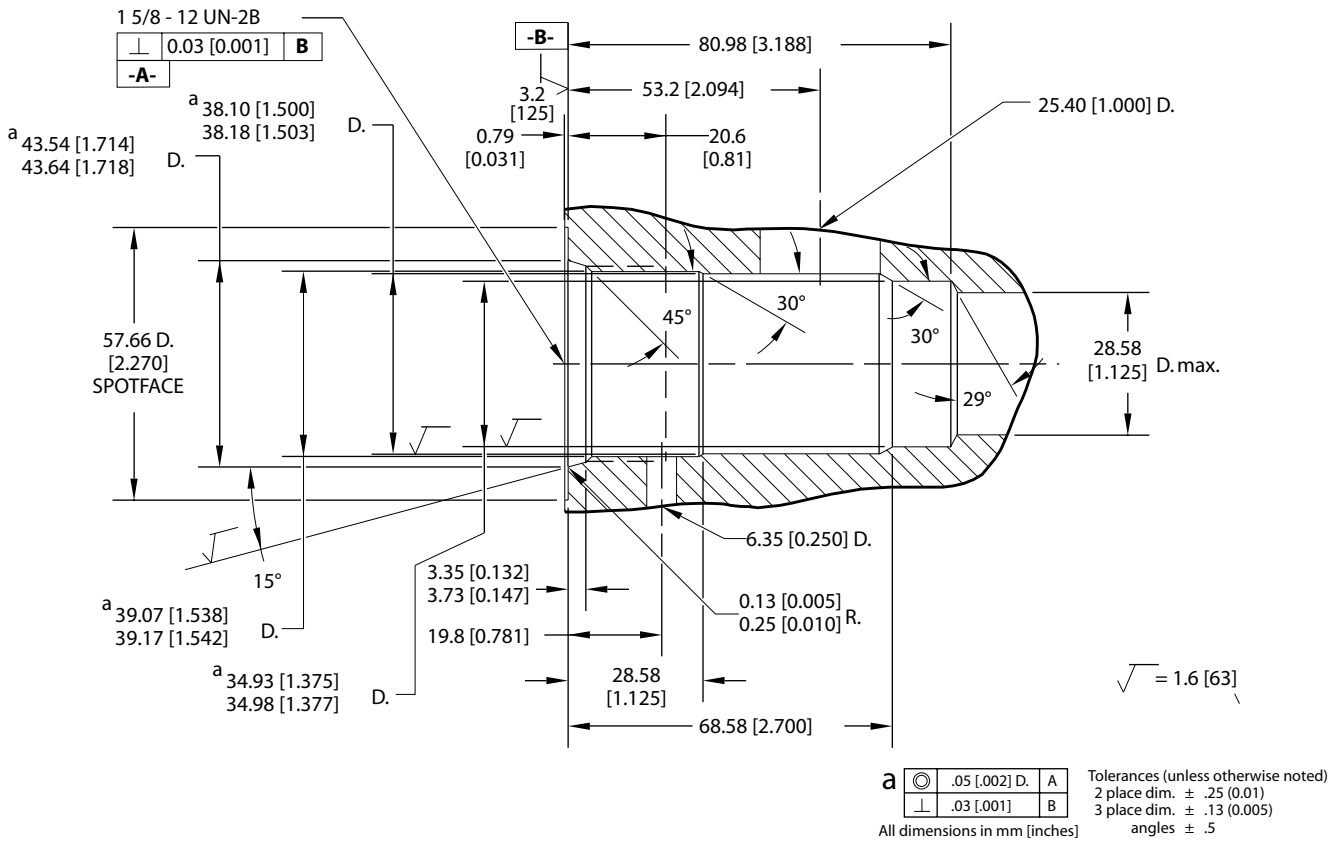
	Model code	Material number
Finishing tool	CP-12-4-FT	11027091
Roughing tool	CP-12-4-RT	11027090

Housings

Order Code	Description	Ports	Page
CP12-4-10S	Aluminum Housing	SAE #10	HS - 15
CP12-4-10S/4S	Aluminum Housing, Pilot at Port #1	SAE #10, #4	HS - 15
CP12-4-10S-X1	Aluminum Housing, No Port #1	SAE #10	HS - 15
CP12-4-3B	Aluminum Housing	3/8 BSP	HS - 15
CP12-4-3B-X1	Aluminum Housing, No Port #1	3/8 BSP	HS - 15
CP12-4-4B	Aluminum Housing	1/2 BSP	HS - 15
CP12-4-4B-X1	Aluminum Housing, No Port #1	1/2 BSP	HS - 15
CP12-4-8S	Aluminum Housing	SAE #8	HS - 15
CP12-4-8S/4S	Aluminum Housing, Pilot at Port #1	SAE #10, #4	HS - 15
CP12-4-8S-X1	Aluminum Housing, No Port #1	SAE #8	HS - 15

Dimensions

mm [in]



CA - Cavities
CP20-3S

Form tools

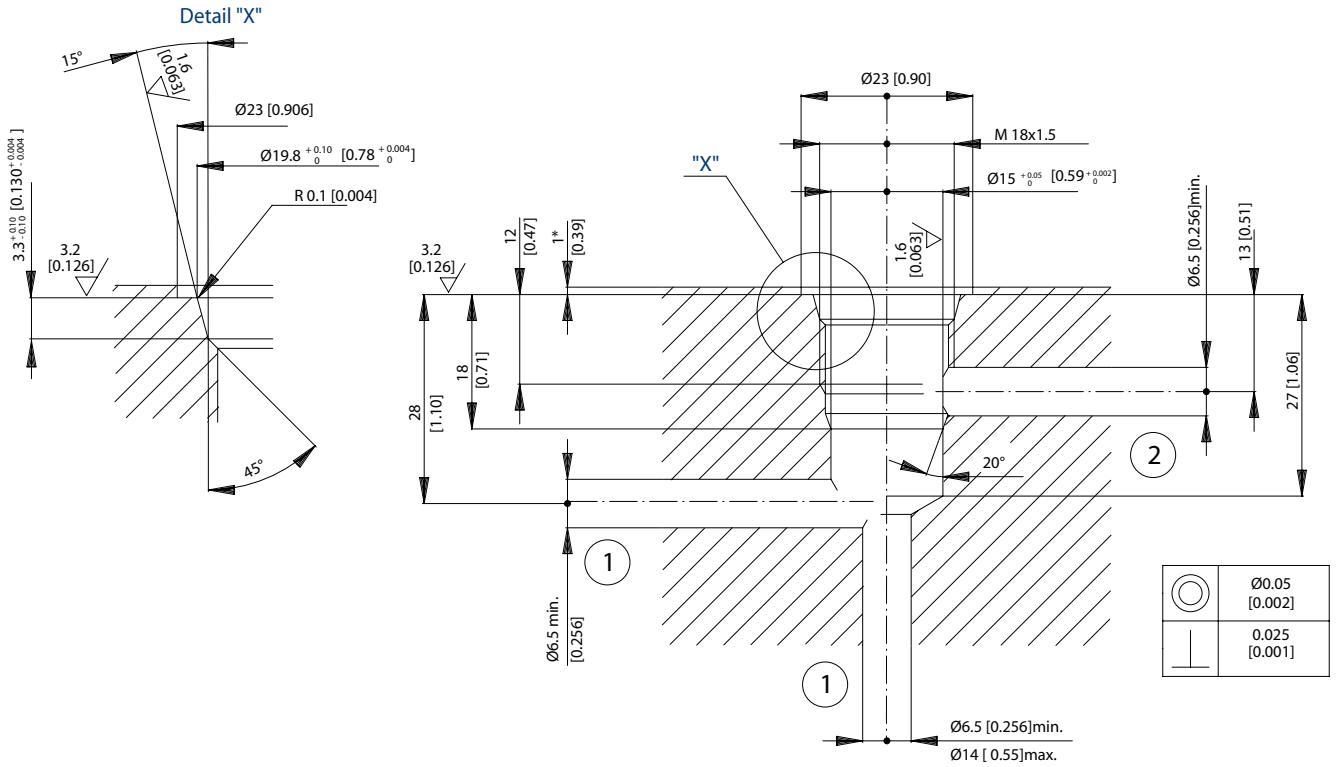
	Model code	Material number
Finishing tool	CP-20-3S-FT	11013235
Roughing tool	CP-20-3S-RT	11013233

Housings

Order Code	Description	Ports	Page
CP20-3S-10B/2B	Aluminum Housing, Pilot at Port #3	1 1/4 BSP, 1/4 BSP	HS - 20
CP20-3S-16S/4S	Aluminum Housing, Pilot at Port #3	SAE #16, #4	HS - 20
CP20-3S-20S/4S	Aluminum Housing, Pilot at Port #3	SAE #20, #4	HS - 20
CP20-3S-8B/2B	Aluminum Housing, Pilot at Port #3	1 BSP, 1/4 BSP	HS - 20

Dimensions

mm [in]



CA - Cavities
 NCS04/2

Form tools

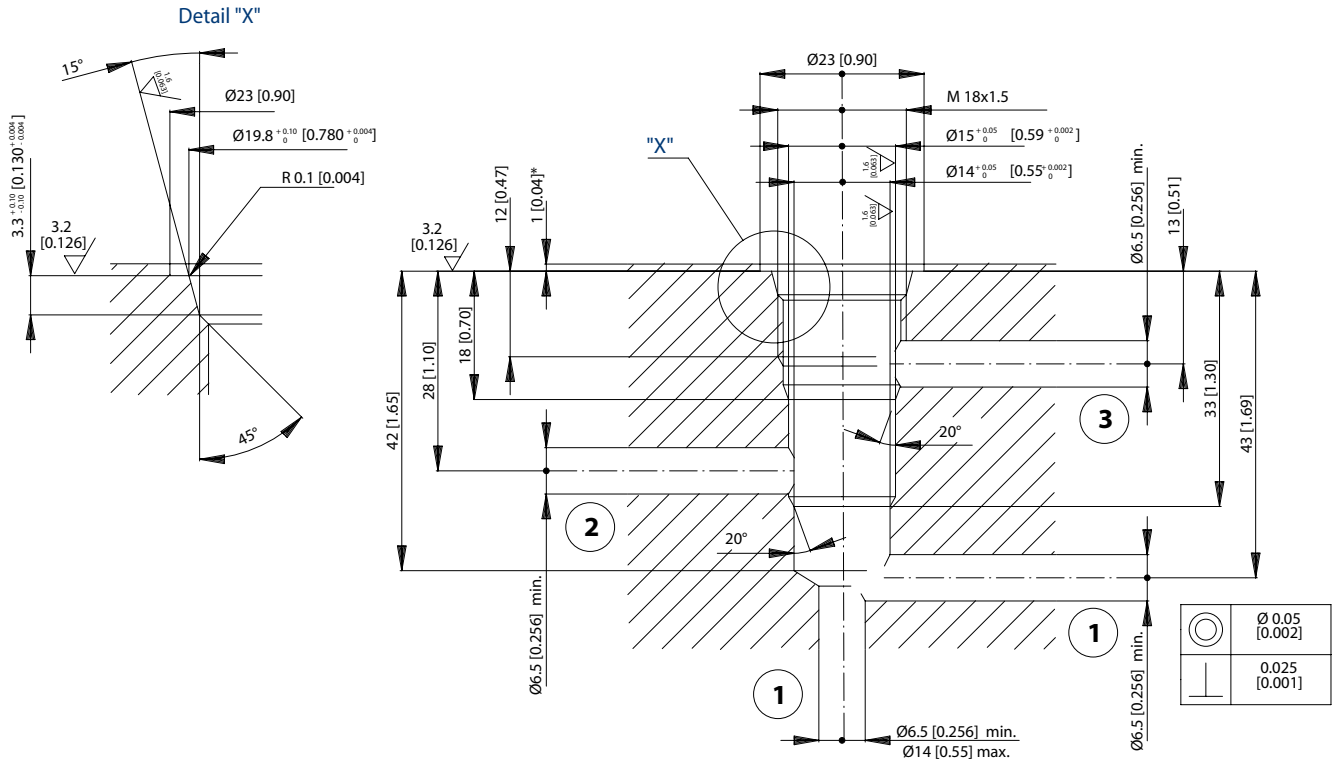
	Model code	Material number
Finishing tool	NCS-04-2-FT	11027154
Roughing tool	NCS-04-2-RT	11027155

Housings

Order Code	Description	Ports	Page
NCS04/2-DG-1/4	Aluminum Housing	1/4 BSP	HS - 24
NCS04/2-DG-4S	Aluminum Housing	SAE #4	HS - 24
NCS04/2-DG-6S	Aluminum Housing	SAE #6	HS - 24
NCS04/2-LG1-1/4	Aluminum Housing, Two #2 Ports	1/4 BSP	HS - 25
NCS04/2-LG1-4S	Aluminum Housing, Two #2 Ports	SAE #4	HS - 25
NCS04/2-LG1-6S	Aluminum Housing, Two #2 Ports	SAE #6	HS - 25
NCS04/2-LG2-1/4	Aluminum Housing, Two #1 Ports	1/4 BSP	HS - 23
NCS04/2-LG2-4S	Aluminum Housing, Two #1 Ports	SAE #4	HS - 23
NCS04/2-LG2-6S	Aluminum Housing, Two #1 Ports	SAE #6	HS - 23

Dimensions

mm [in]



CA - Cavities
NCS04/3

Form tools

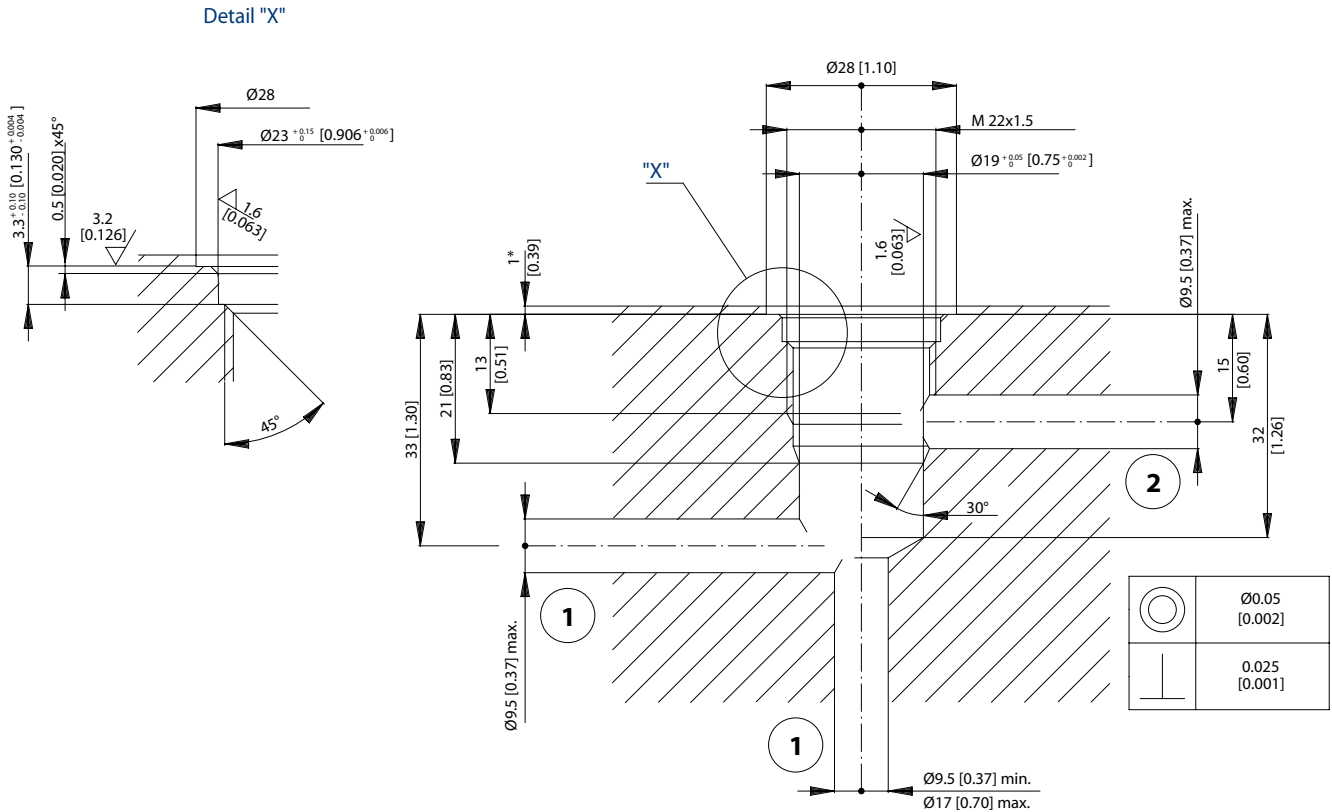
	Model code	Material number
Finishing tool	NCS-04-3-FT	11027156
Roughing tool	NCS-04-3-RT	11027157

Housings

Order Code	Description	Ports	Page
NCS04/3-DI-1/4	Alum. Hsg., 2 Cavities w/#3 Ports Conn.	1/4 BSP	HS - 27
NCS04/3-DI-3/8	Alum. Hsg., 2 Cavities w/#3 Ports Conn.	3/8 BSP	HS - 27
NCS04/3-DL-1/4	Alum. Hsg., 2 Cavities w/#1 Ports Conn.	1/4 BSP	HS - 28
NCS04/3-DL-4S	Alum. Hsg., 2 Cavities w/#1 Ports Conn.	SAE #4	HS - 28
NCS04/3-DL-6S	Alum. Hsg., 2 Cavities w/#1 Ports Conn.	SAE #6	HS - 28
NCS04/3-SE-1/4	Aluminum Housing	1/4 BSP	HS - 29
NCS04/3-SE-4S	Aluminum Housing	SAE #4	HS - 29
NCS04/3-SE-6S	Aluminum Housing	SAE #6	HS - 29
NCS04/3-SI-1/4	Aluminum Housing, Two #1 Ports	1/4 BSP	HS - 26
NCS04/3-SI-4S	Aluminum Housing, Two #1 Ports	SAE #4	HS - 30
NCS04/3-SI-6S	Aluminum Housing, Two #1 Ports	SAE #6	HS - 30

Dimensions

mm [in]



CA - Cavities
NCS06/2

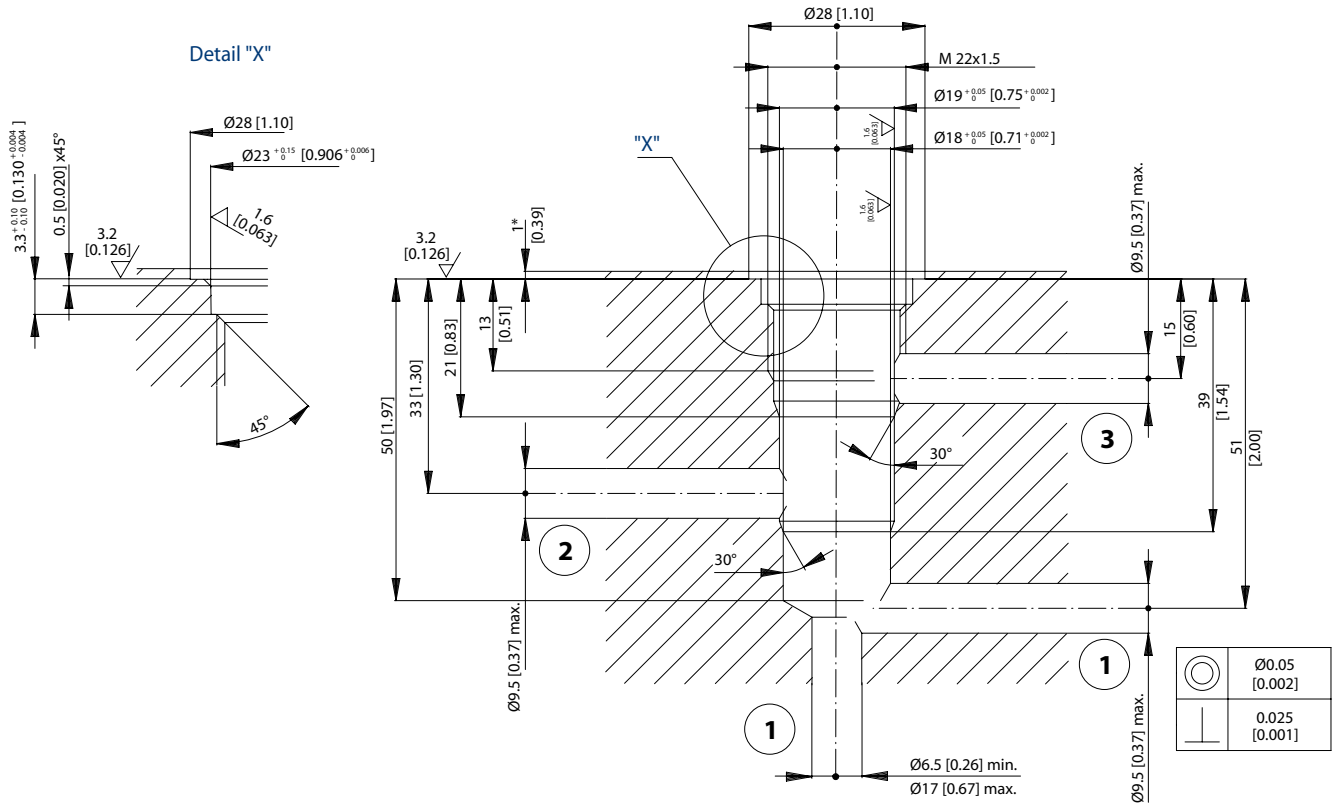
Form tools

	Model code	Material number
Finishing tool	NCS-06-2-FT	11027158
Roughing tool	NCS-06-2-RT	11027159

Housings

Order Code	Description	Ports	Page
NCS06/2-DG-1/2	Aluminum Housing	1/2 BSP	HS - 35
NCS06/2-DG-3/8	Aluminum Housing	3/8 BSP	HS - 34
NCS06/2-DG-6S	Aluminum Housing	SAE #6	HS - 34
NCS06/2-DG-8S	Aluminum Housing	SAE #8	HS - 35
NCS06/2-LG1-1/2	Aluminum Housing, Two #2 Ports	1/2 BSP	HS - 37
NCS06/2-LG1-3/8	Aluminum Housing, Two #2 Ports	3/8 BSP	HS - 38
NCS06/2-LG1-8S	Aluminum Housing, Two #2 Ports	SAE #8	HS - 37
NCS06/2-LG2-1/2	Aluminum Housing, Two #1 Ports	1/2 BSP	HS - 33
NCS06/2-LG2-3/8	Aluminum Housing, Two #1 Ports	3/8 BSP	HS - 36
NCS06/2-LG2-6S	Aluminum Housing, Two #1 Ports	SAE #6	HS - 36
NCS06/2-LG2-8S	Aluminum Housing, Two #1 Ports	SAE #8	HS - 33

Dimensions



CA - Cavities
 NCS06/3

Form tools

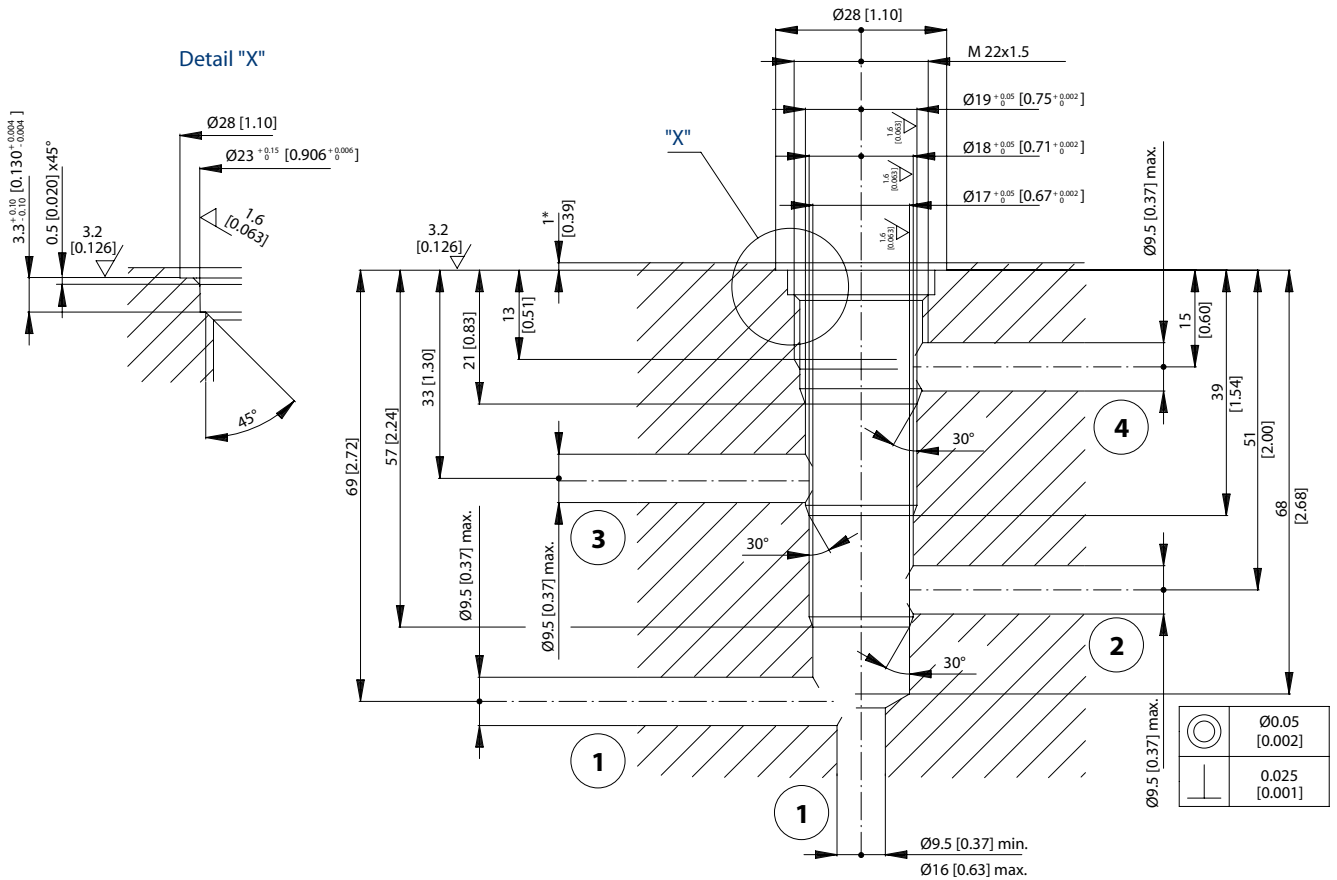
	Model code	Material number
Finishing tool	NCS-06-3-FT	11027160
Roughing tool	NCS-06-3-RT	11027161

Housings

Order Code	Description	Ports	Page
NCS06/3-DL-1/2	Alum. Hsg., 2 Cavities w/#1 Ports Conn.	1/2 BSP	HS - 39
NCS06/3-DL-3/8	Alum. Hsg., 2 Cavities w/#1 Ports Conn.	3/8 BSP	HS - 46
NCS06/3-DL-6S	Alum. Hsg., 2 Cavities w/#1 Ports Conn.	SAE #6	HS - 46
NCS06/3-DL-8S	Alum. Hsg., 2 Cavities w/#1 Ports Conn.	SAE #8	HS - 39
NCS06/3-LD-6S	Aluminum Housing, No Port #1	SAE #6	HS - 40
NCS06/3-LD-8S	Aluminum Housing, No Port #1	SAE #8	HS - 41
NCS06/3-SE-1/2	Aluminum Housing	1/2 BSP	HS - 42
NCS06/3-SE-3/8	Aluminum Housing	3/8 BSP	HS - 43
NCS06/3-SE-6S	Aluminum Housing	SAE #6	HS - 43
NCS06/3-SE-8S	Aluminum Housing	SAE #8	HS - 42
NCS06/3-SI-1/2	Aluminum Housing, Two #1 Ports	1/2 BSP	HS - 45
NCS06/3-SI-3/8	Aluminum Housing, Two #1 Ports	3/8 BSP	HS - 44
NCS06/3-SI-6S	Aluminum Housing, Two #1 Ports	SAE #6	HS - 44
NCS06/3-SI-8S	Aluminum Housing, Two #1 Ports	SAE #8	HS - 45

Dimensions

mm [in]



CA - Cavities
 NCS06/4

Form tools

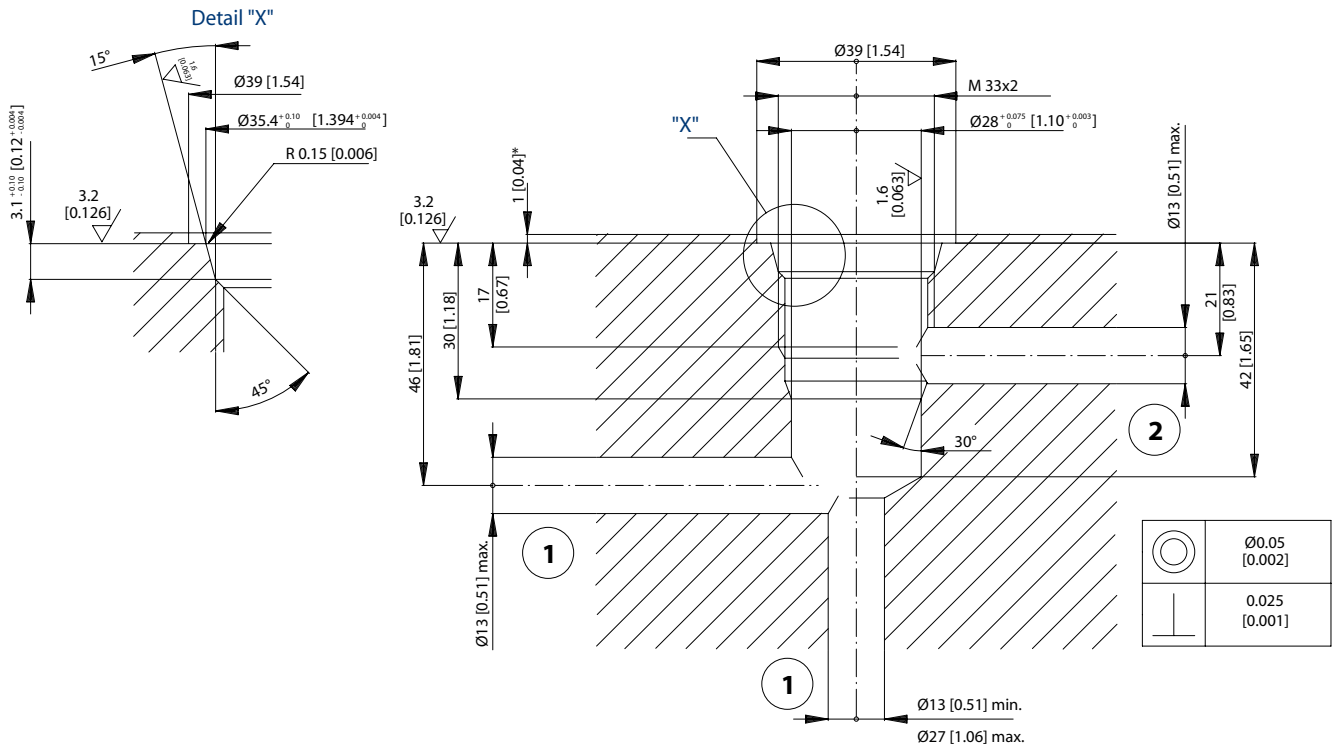
	Model code	Material number
Finishing tool	NCS-06-4-FT	11027172
Roughing tool	NCS-06-4-RT	11027173

Housings

Order Code	Description	Ports	Page
NCS06/4-L-1/2	Aluminum Housing	1/2 BSP	HS - 49
NCS06/4-L-3/8	Aluminum Housing	3/8 BSP	HS - 50
NCS06/4-L-6S	Aluminum Housing	SAE #6	HS - 50
NCS06/4-L-8S	Aluminum Housing	SAE #8	HS - 49
NCS06/4-LD-1/2	Aluminum Housing, No Port #1	1/2 BSP	HS - 48
NCS06/4-LD-3/8	Aluminum Housing, No Port #1	3/8 BSP	HS - 47

Dimensions

mm [in]



CA - Cavities
 NCS12/2

Form tools

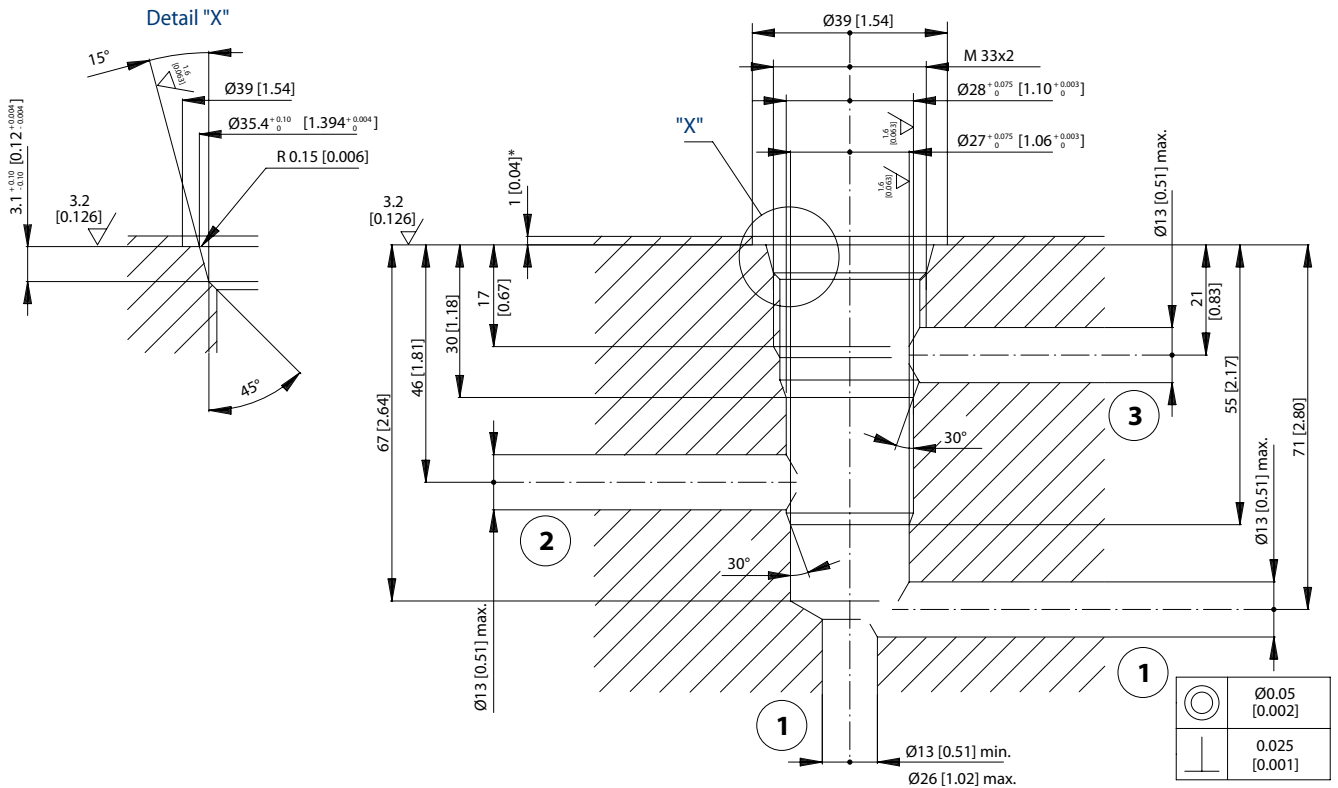
	Model code	Material number
Finishing tool	NCS-12-2-FT	11027174
Roughing tool	NCS-12-2-RT	11027175

Housings

Order Code	Description	Ports	Page
NCS12/2-DG-1/2	Aluminum Housing	1/2 BSP	HS - 51
NCS12/2-DG-12S	Aluminum Housing	SAE #12	HS - 51
NCS12/2-DG-3/4	Aluminum Housing	3/4 BSP	HS - 51
NCS12/2-DG-8S	Aluminum Housing	SAE #8	HS - 51
NCS12/2-LG1-12S	Aluminum Housing, Two #2 Ports	SAE #12	HS - 53
NCS12/2-LG1-8S	Aluminum Housing, Two #2 Ports	SAE #8	HS - 53
NCS12/2-LG2-1/2	Aluminum Housing, Two #1 Ports	1/2 BSP	HS - 53
NCS12/2-LG2-12S	Aluminum Housing, Two #1 Ports	SAE #12	HS - 53
NCS12/2-LG2-3/4	Aluminum Housing, Two #1 Ports	3/4 BSP	HS - 53
NCS12/2-LG2-8S	Aluminum Housing, Two #1 Ports	SAE #8	HS - 53

Dimensions

mm [in]



CA - Cavities
NCS12/3

Form tools

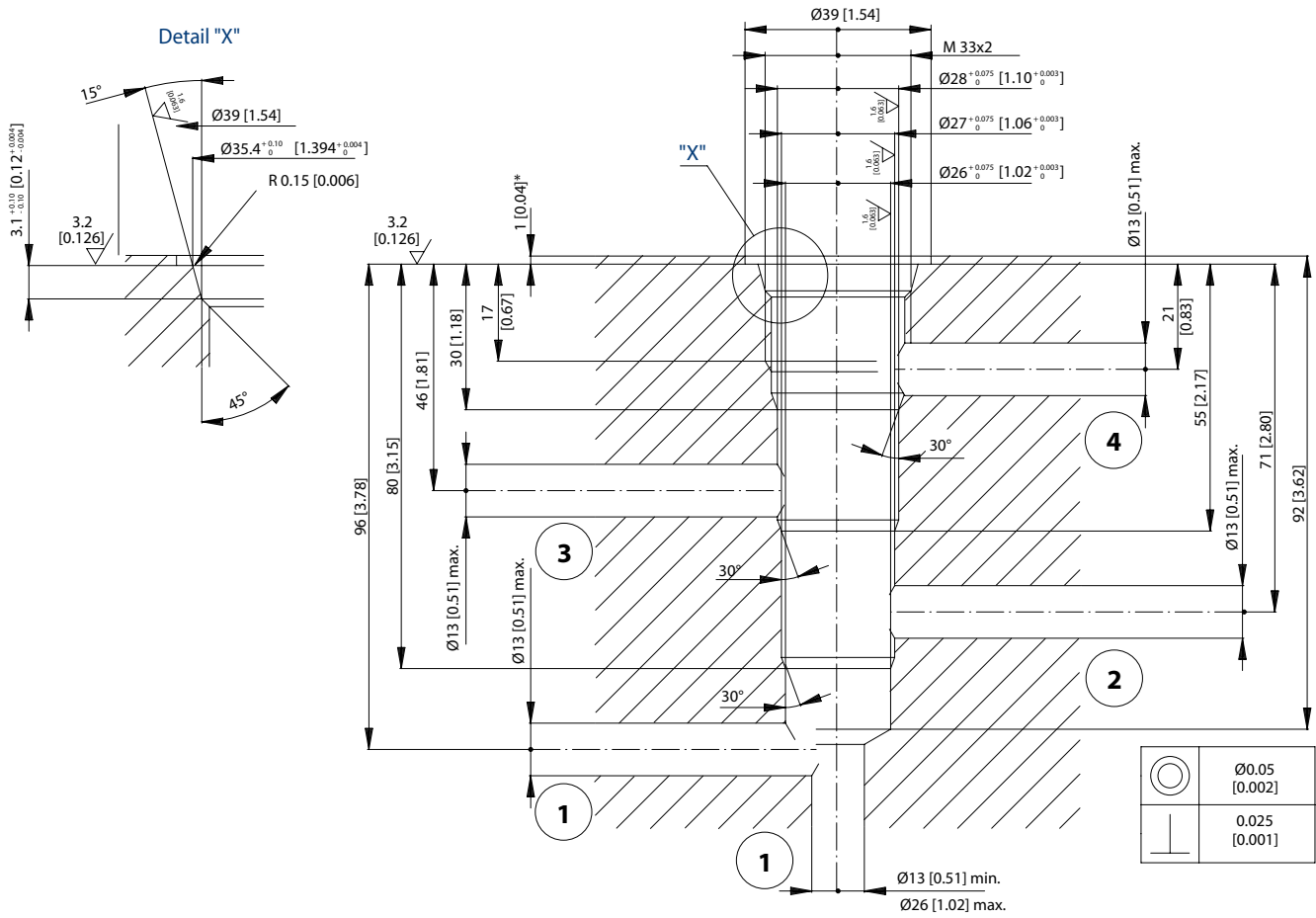
	Model code	Material number
Finishing tool	NCS12-3-FT	11027176
Roughing tool	NCS12-3-RT	11027177

Housings

Order Code	Description	Ports	Page
NCS12/3-DL-1/2	Alum. Hsg., 2 Cavities w/#1 Ports Conn.	1/2 BSP	HS - 55
NCS12/3-DL-12S	Alum. Hsg., 2 Cavities w/#1 Ports Conn.	SAE #12	HS - 54
NCS12/3-DL-3/4	Alum. Hsg., 2 Cavities w/#1 Ports Conn.	3/4 BSP	HS - 56
NCS12/3-DL-8S	Alum. Hsg., 2 Cavities w/#1 Ports Conn.	SAE #8	HS - 54
NCS12/3-SE-1	Aluminum Housing	1/2 BSP	HS - 57
NCS12/3-SE-12S	Aluminum Housing	SAE #12	HS - 57
NCS12/3-SE-3/4	Aluminum Housing	3/4 BSP	HS - 57
NCS12/3-SE-8S	Aluminum Housing	SAE #8	HS - 57
NCS12/3-SI-1	Aluminum Housing, Two #1 Ports	1/2 BSP	HS - 58
NCS12/3-SI-12S	Aluminum Housing, Two #1 Ports	SAE #12	HS - 58
NCS12/3-SI-3/4	Aluminum Housing, Two #1 Ports	3/4 BSP	HS - 58
NCS12/3-SI-8S	Aluminum Housing, Two #1 Ports	SAE #8	HS - 58

Dimensions

mm [in]



CA - Cavities
 NCS12/4

Form tools

	Model code	Material number
Finishing tool	NCS-12-4-FT	11027178
Roughing tool	NCS-12-4-RT	11027179

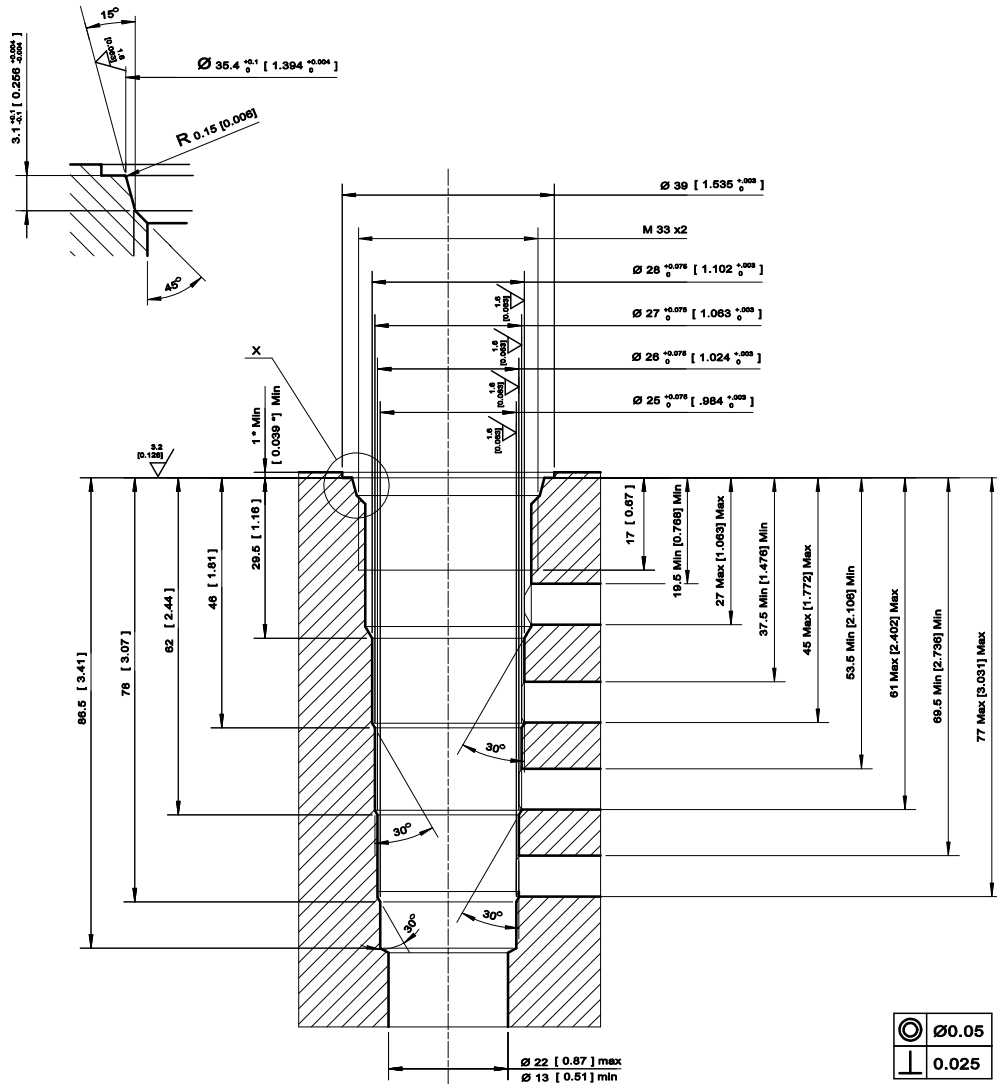
Housings

Order Code	Description	Ports	Page
NCS12/4-HD-1	Aluminum Housing, No Port #1	1/2 BSP	HS - 61
NCS12/4-L-1	Aluminum Housing	1/2 BSP	HS - 59
NCS12/4-L-12S	Aluminum Housing	SAE #12	HS - 60
NCS12/4-L-3/4	Aluminum Housing	3/4 BSP	HS - 59

Dimensions

Detail X

mm [in]



Form tools

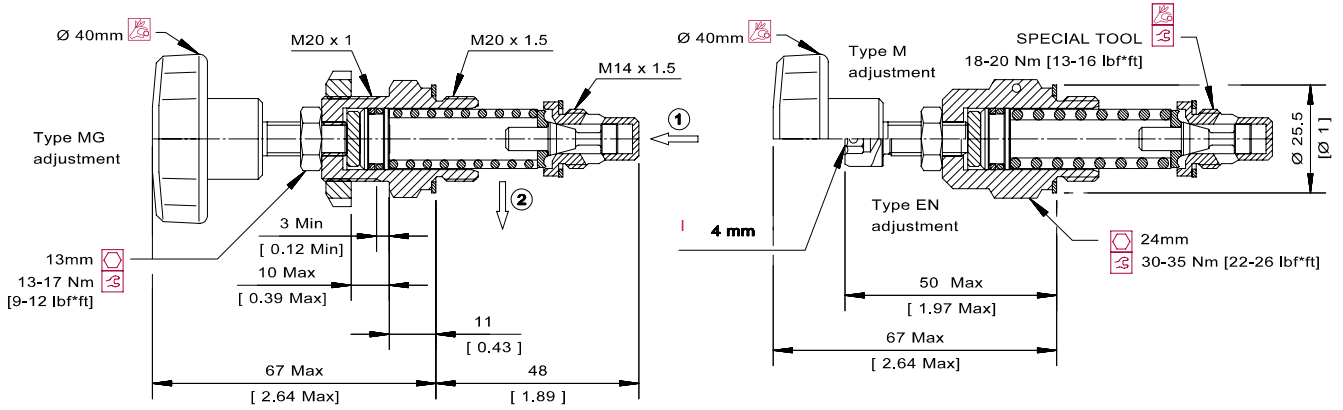
	Model code	Material number
Finishing tool	NCS-12-5-FT	11143088
Roughing tool	NCS-12-5-RT	11143089

Housings

Order Code	Description	Ports	Page
NCS12/5-6B/3B	Aluminum Housing, Pilot at Port 5	1/2 BSP, 3/8 BSP	HS - 62
NCS12/5-10S/6S	Aluminum Housing, Pilot at Port 5	SAE #10, #6	HS - 63
NCS12/5-12S/6S	Aluminum Housing, Pilot at Port 5	SAE #12, #6	HS - 63
NCS12/5-S10S/6S	Ductile Housing, Pilot at Port #5	SAE #10, #6	HS - 63
NCS12/5-S12S/6S	Ductile Housing, Pilot at Port #5	SAE #12, #6	HS - 63

Dimensions

mm [in]



CA - Cavities
 VME06

Form tools

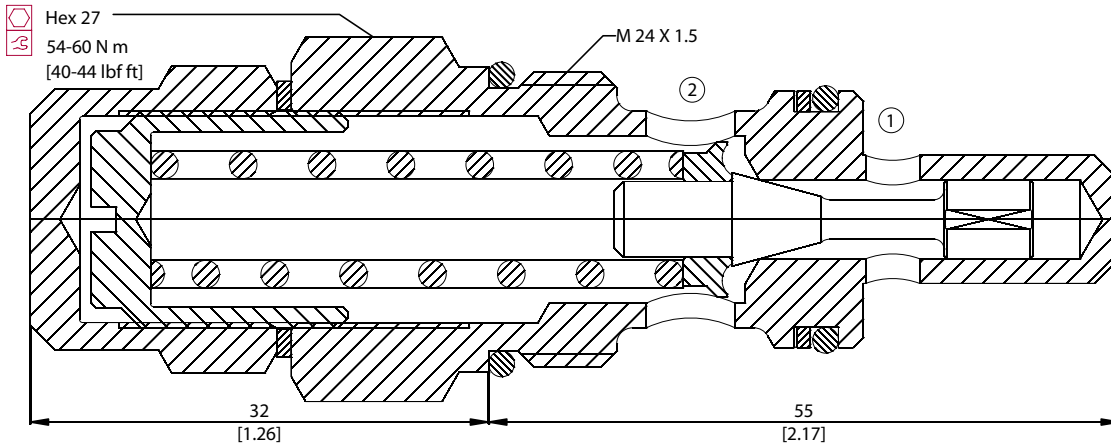
	Model code	Material number
Finishing tool	VME-06-FT	11027242
Roughing tool	VME-06-RT	11027243

Housings

Order Code	Description	Ports	Page
VME 06-DG-3B	Aluminum Housing	3/8 BSP	HS - 125
VME 06-DG-6S	Aluminum Housing	SAE #6	HS - 125
VME 06-LG-3B	Aluminum Housing	3/8 BSP	HS - 124
VME 06-LG-6S	Aluminum Housing	SAE #6	HS - 124

Dimensions

mm [in]



Form tools

	Model code	Material number
Finishing tool	VME-07-FT	11027244
Roughing tool	VME-07-RT	11027245

Housings

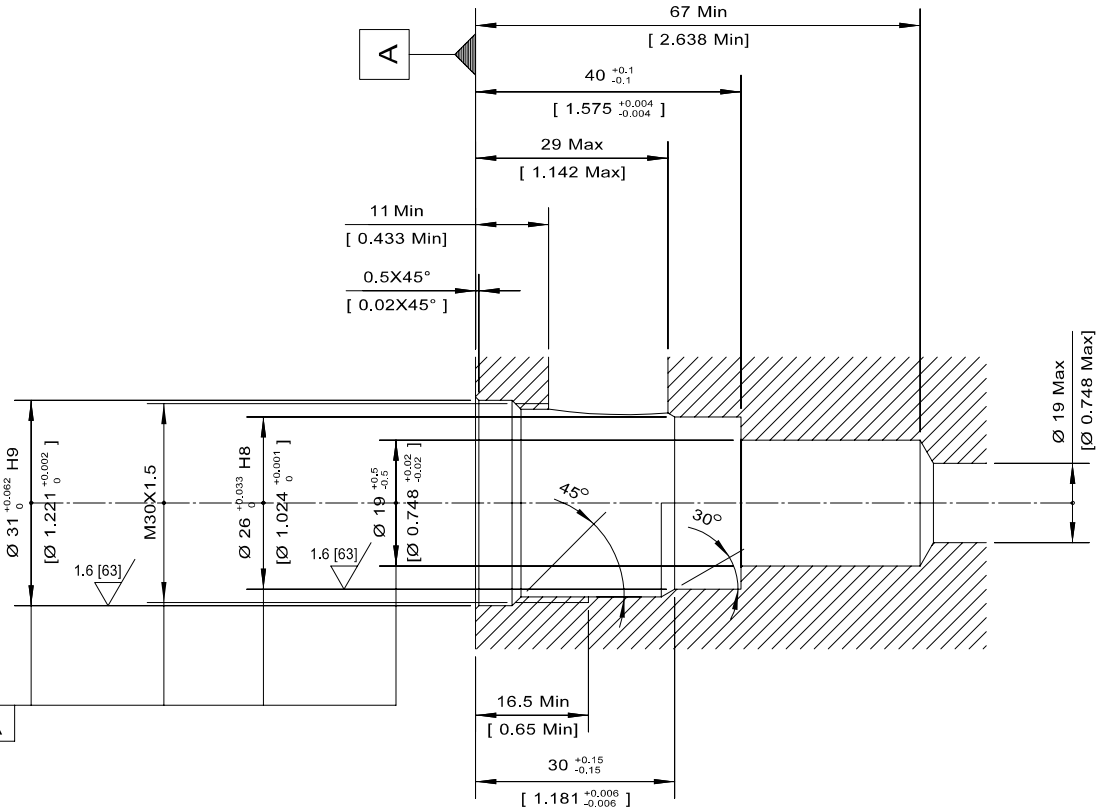
Order Code	Description	Ports	Page
VME 07-DG-4B	Aluminum Housing	1/2 BSP	HS - 126
VME 07-DG-8S	Aluminum Housing	SAE #8	HS - 126
VME 07-LG-4B	Aluminum Housing	1/2 BSP	HS - 127
VME 07-LG-8S	Aluminum Housing	SAE #8	HS - 127

Dimensions

mm [in]

TOLERANCES UNLESS OTHERWISE SPECIFIED

Diameter and Lengths:
 if < 18mm ± 0.1 [0.004]
 Angles ± 2°



	∅0.05 [0.002]	
	0.025 [0.001]	A

CA - Cavities
 VME08

Form tools

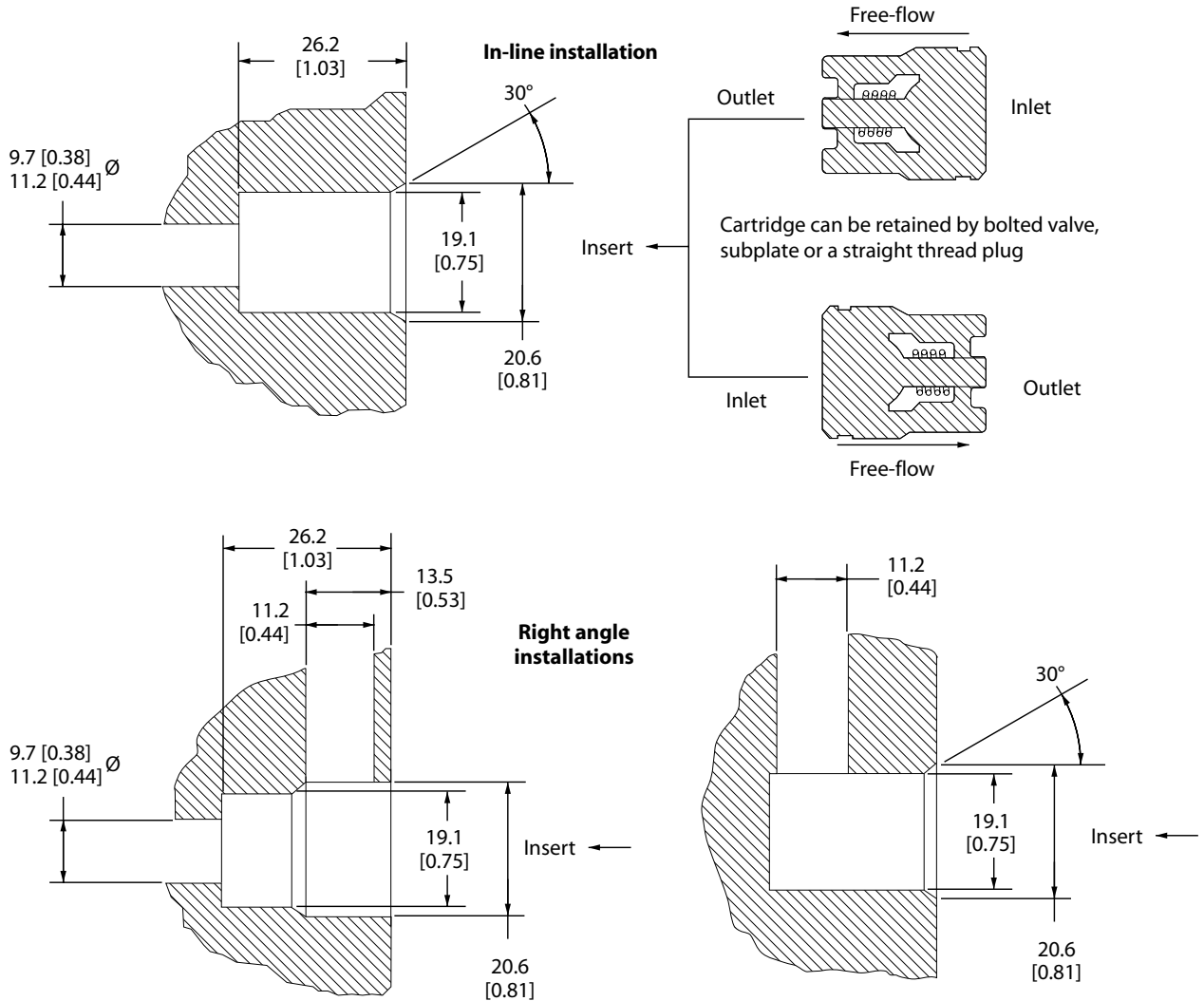
	Model code	Material number
Finishing tool	VME-08-FT	11027246
Roughing tool	VME-09-RT	11027247

Housings

Order Code	Description	Ports	Page
VME 08-DG-12S	Aluminum Housing	SAE #12	HS - 129
VME 08-DG-6B	Aluminum Housing	3/4 BSP	HS - 129
VME 08-LG-12S	Aluminum Housing	SAE #12	HS - 128
VME 08-LG-6B	Aluminum Housing	3/4 BSP	HS - 128

mm [in]

Dimensions

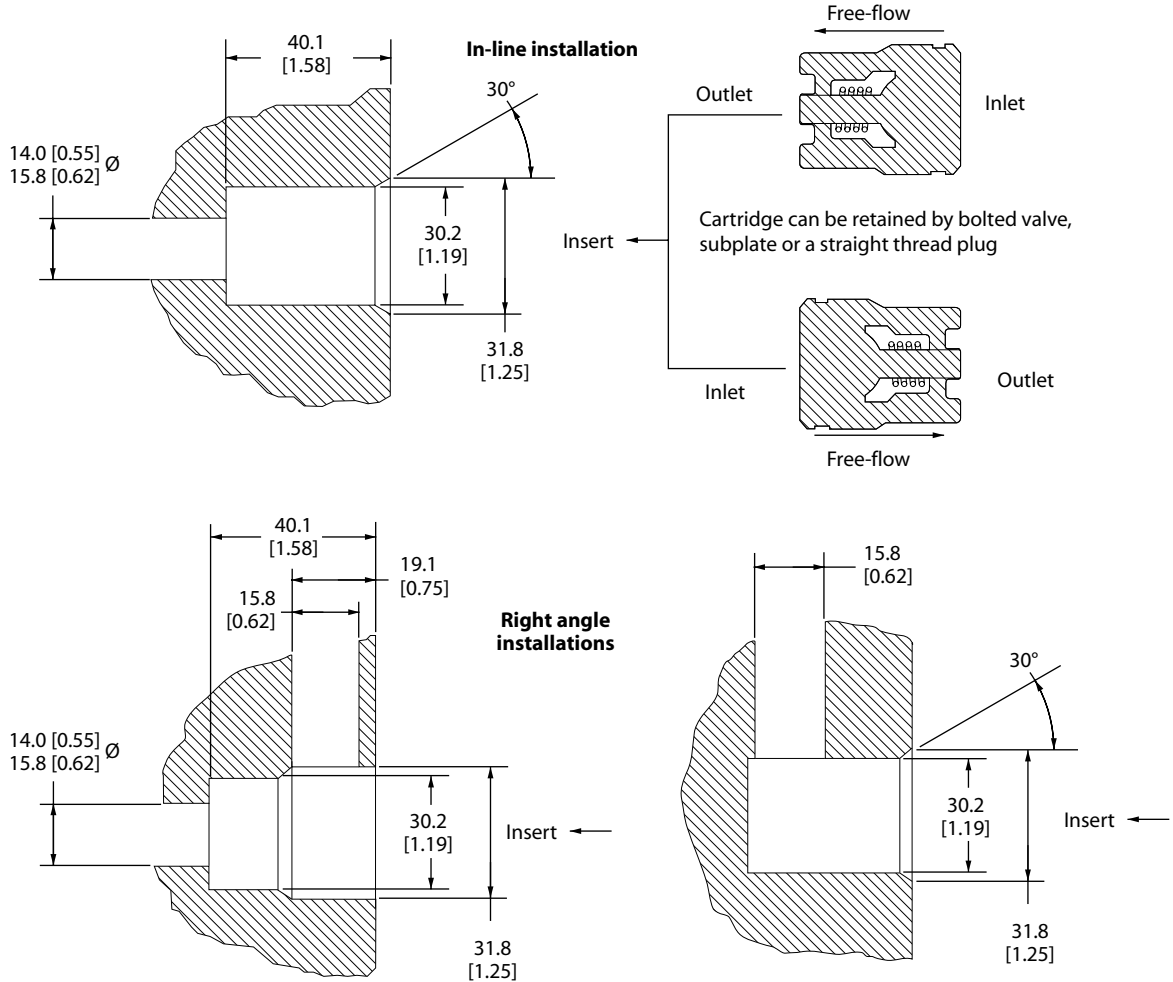


Form tools

	Model code	Material number
Finishing tool	FC-144-FT	
Roughing tool	FC-144-RT	

CA - Cavities
 FC-144

Dimensions



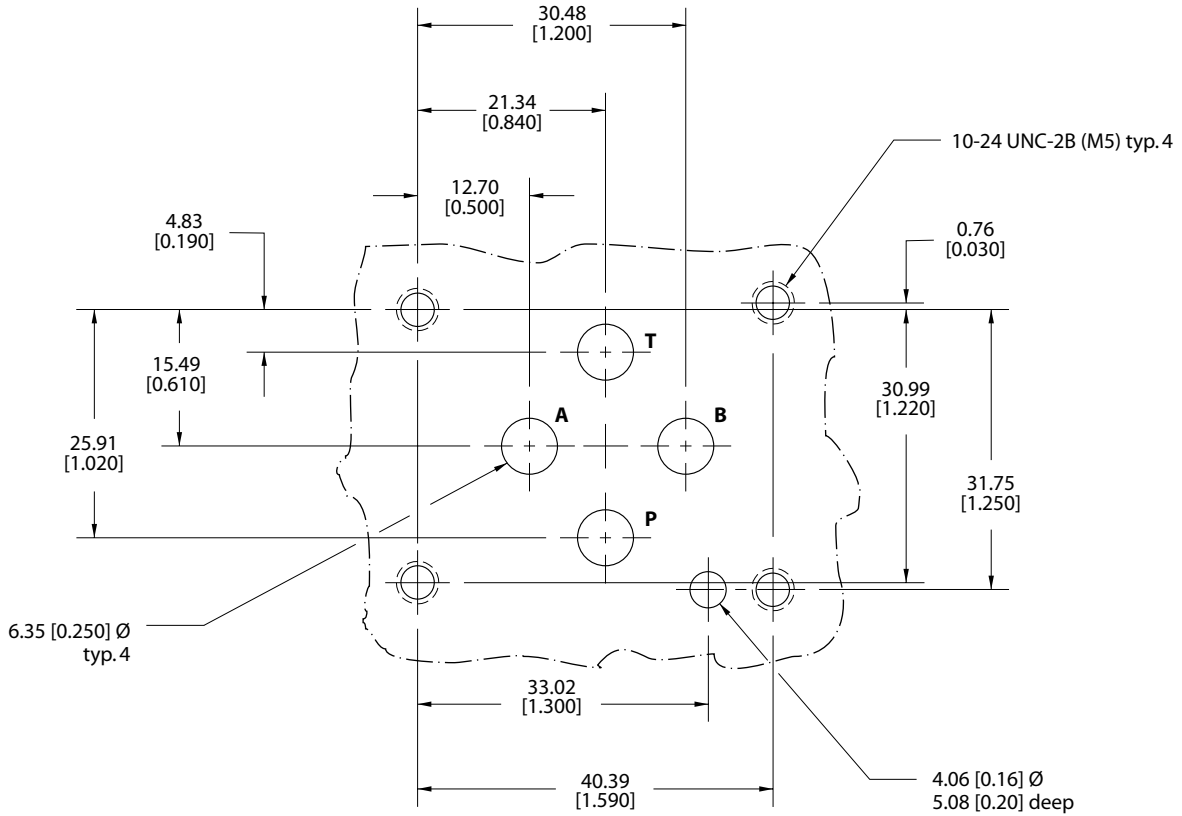
CA - Cavities
 FC-304

Form tools

	Model code	Material number
Finishing tool	FC-304-FT	
Roughing tool	FC-304-RT	

Dimensions

mm [in]

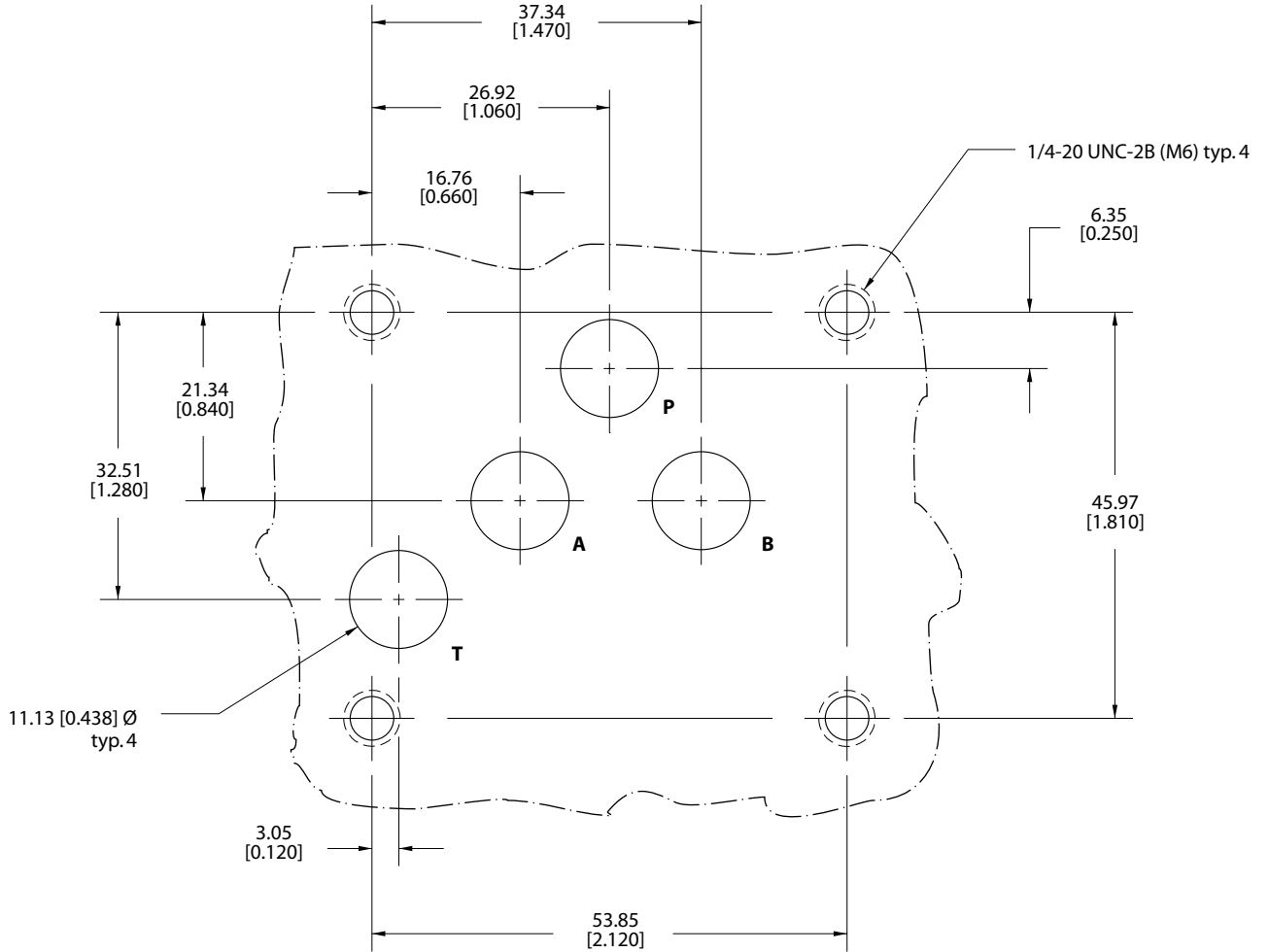


Housings

Order Code	Description	Ports	Page
UDPS-06-AL	ISO D03 Subplate, Aluminum	#8 SAE	HS - 21
UDPS-06-DI	ISO D03 Subplate, Ductile Iron	#8 SAE	-

Dimensions

mm [in]



Housings

Order Code	Description	Ports	Page
UDPS-10-AL	ISO D05 Subplate, Aluminum	#8 SAE	HS - 22
UDPS-10-DI	ISO D05 Subplate, Ductile Iron	#8 SAE	-

