



ATLANTIC
Fluid Tech

**SECTION
24**

Cavities and
Technical
Drawings

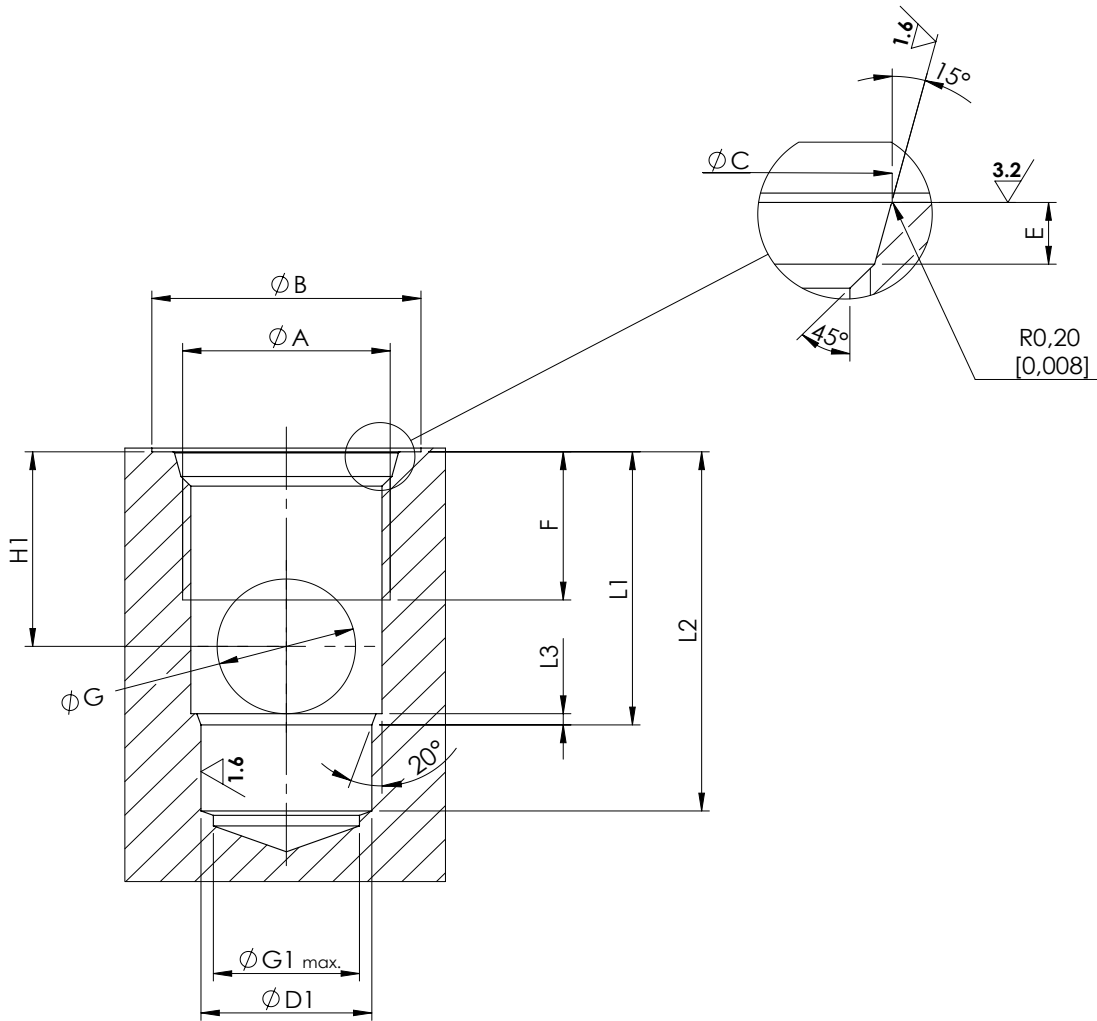
CAVITIES AND TECHNICAL DRAWINGS



SAE-XX-2N



Dimensions: mm [inches]



General tolerances : 0.3 mm [0,012 inches]

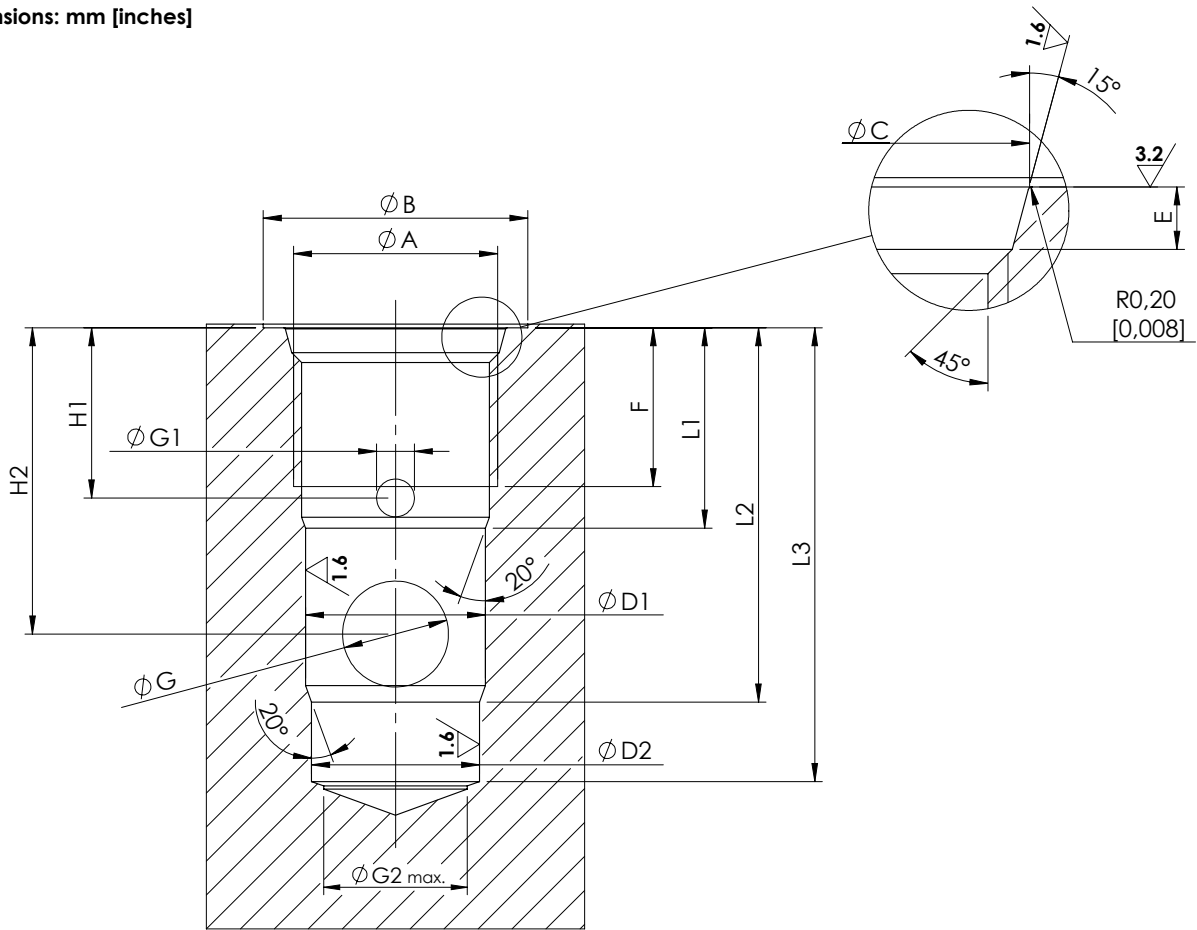
⊙	0.03[0,0012]
⊥	0.02[0,0008]

	SAE-08-2N	SAE-10-2N	SAE-12-2N	SAE-16-2N	SAE-20-2N
A	3/4-16 UNF	7/8-14 UNF	1-1/16 12 UNF	1-5-16 12 UNF	1-5/8 12 UNF
B	26 [1,02]	30 [1,18]	35 [1,38]	42 [1,65]	48 [1,89]
C	20.6 ^{+0,1} ₀ [0,811 ^{+0,004} ₀]	23.9 ^{+0,1} ₀ [0,941 ^{+0,004} ₀]	29.2 ^{+0,1} ₀ [1,15 ^{+0,004} ₀]	35.5 ^{+0,1} ₀ [1,398 ^{+0,004} ₀]	43.5 ^{+0,1} ₀ [1,713 ^{+0,004} ₀]
D1	12.7 ^{+0,05} ₀ [0,5 ^{+0,002} ₀]	15.87 ^{+0,05} ₀ [0,625 ^{+0,002} ₀]	22.22 ^{+0,05} ₀ [0,875 ^{+0,002} ₀]	28.60 ^{+0,05} ₀ [1,126 ^{+0,002} ₀]	36.52 ^{+0,05} ₀ [1,438 ^{+0,002} ₀]
E	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]	3.4 ^{+0,3} ₀ [0,134 ^{+0,012} ₀]
F	13 [0,512]	15 [0,591]	20 [0,787]	20 [0,787]	22 [0,866]
G	9 [0,354]	12 [0,472]	18 [0,709]	19 [0,748]	25 [0,984]
G1	12 [0,472]	15 [0,591]	19 [0,748]	24 [0,945]	30 [1,18]
H1	14 [0,551]	18 [0,709]	26 [1,024]	25 [0,984]	30 [1,180]
L1	20.5 [0,807]	25.5 [1,004]	36.5 [1,437]	36 [1,417]	44.5 [1,752]
L2	29 [1,142]	34.5 [1,358]	48 [1,890]	49 [1,929]	59 [2,323]
L3	1,5 [0,06]	1,5 [0,06]	1,5 [0,06]	1,5 [0,06]	1,5 [0,06]

SAE-XX-3C



Dimensions: mm [inches]



General tolerances : 0.3 mm [0,012 inches]

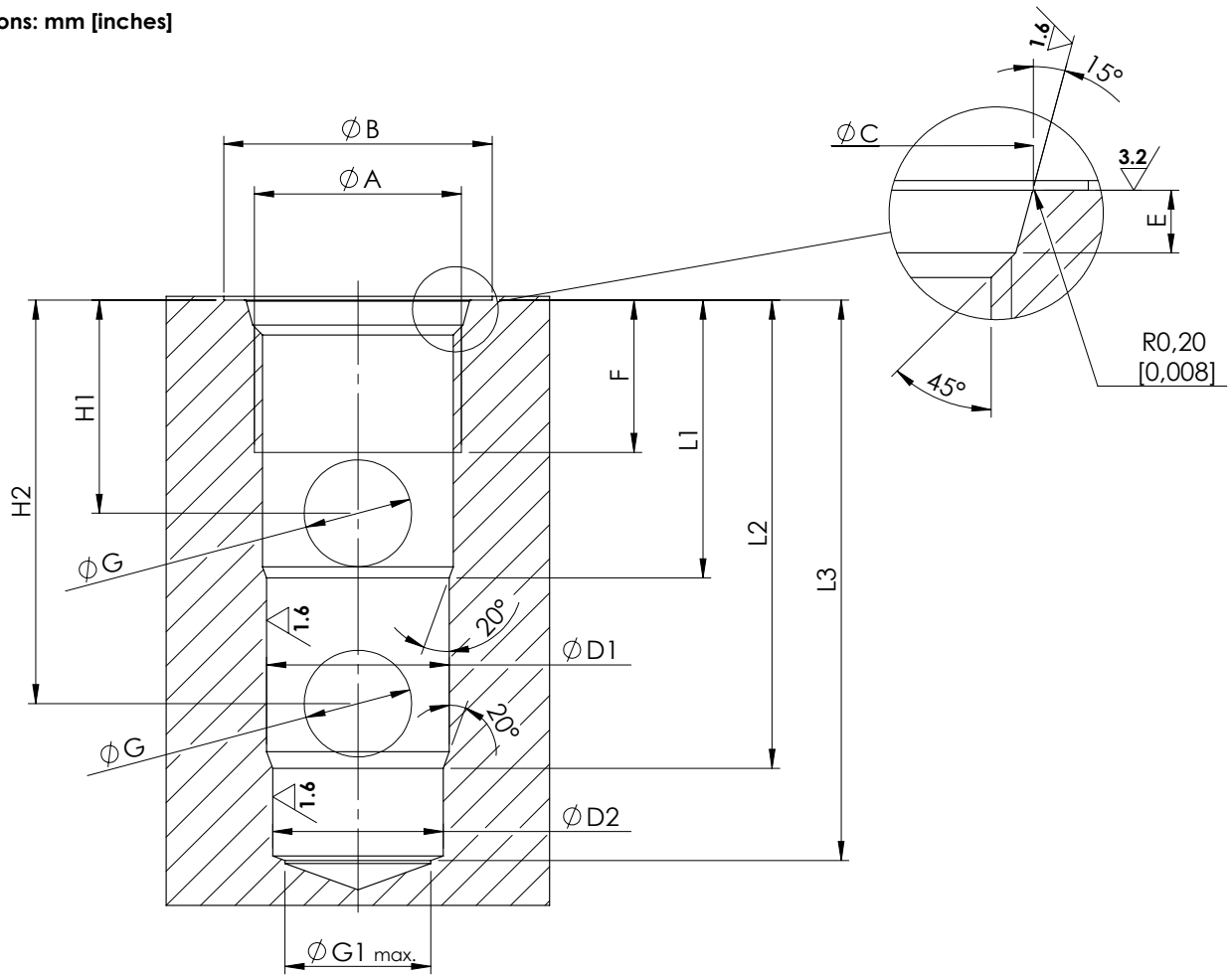
⊙	0.03[0,0012]
⏏	0.02[0,0008]

	SAE-08-3C	SAE-10-3C	SAE-12-3C	SAE-16-3C	SAE-20-3C
A	3/4-16 UNF	7/8-14 UNF	1-1/16 12 UNF	1-5/16 12 UNF	1-5/8 12 UNF
B	26 [1,024]	30 [1,181]	35 [1,378]	42 [1,654]	48 [1,89]
C	20.6 ^{+0,1} ₀ [0,811 ^{+0,004} ₀]	23.9 ^{+0,1} ₀ [0,941 ^{+0,004} ₀]	29.2 ^{+0,1} ₀ [1,15 ^{+0,004} ₀]	35.5 ^{+0,1} ₀ [1,398 ^{+0,004} ₀]	43.5 ^{+0,1} ₀ [1,713 ^{+0,004} ₀]
D1	15.87 ^{+0,05} ₀ [0,625 ^{+0,002} ₀]	19.05 ^{+0,05} ₀ [0,750 ^{+0,002} ₀]	23.80 ^{+0,05} ₀ [0,937 ^{+0,002} ₀]	28.60 ^{+0,05} ₀ [1,126 ^{+0,002} ₀]	36.52 ^{+0,05} ₀ [1,438 ^{+0,002} ₀]
D2	14.27 ^{+0,05} ₀ [0,562 ^{+0,002} ₀]	17.47 ^{+0,05} ₀ [0,688 ^{+0,002} ₀]	22.22 ^{+0,05} ₀ [0,875 ^{+0,002} ₀]	25.42 ^{+0,05} ₀ [1,001 ^{+0,002} ₀]	33.35 ^{+0,05} ₀ [1,313 ^{+0,002} ₀]
E	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]	3.4 ^{+0,3} ₀ [0,134 ^{+0,012} ₀]
F	12 [0,472]	13 [0,512]	21 [0,827]	16.5 [0,650]	20 [0,787]
G	8 [0,315]	14 [0,551]	14 [0,551]	15 [0,591]	28 [1,102]
G1	3 [0,118]	4 [0,157]	5 [0,197]	5 [0,197]	7 [0,276]
G2	12 [0,472]	15 [0,591]	19 [0,748]	24 [0,945]	30 [1,181]
H1	12.5 [0,492]	14 [0,551]	22.5 [0,886]	17.5 [0,689]	20 [0,787]
H2	26.5 [1,043]	31.5 [1,240]	40.5 [1,594]	38 [1,496]	50 [1,969]
L1	16 [0,630]	18 [0,709]	26.5 [1,043]	22 [0,866]	25.5 [1,004]

SAE-XX-3N



Dimensions: mm [inches]



General tolerances : 0.3 mm [0,012 inches]

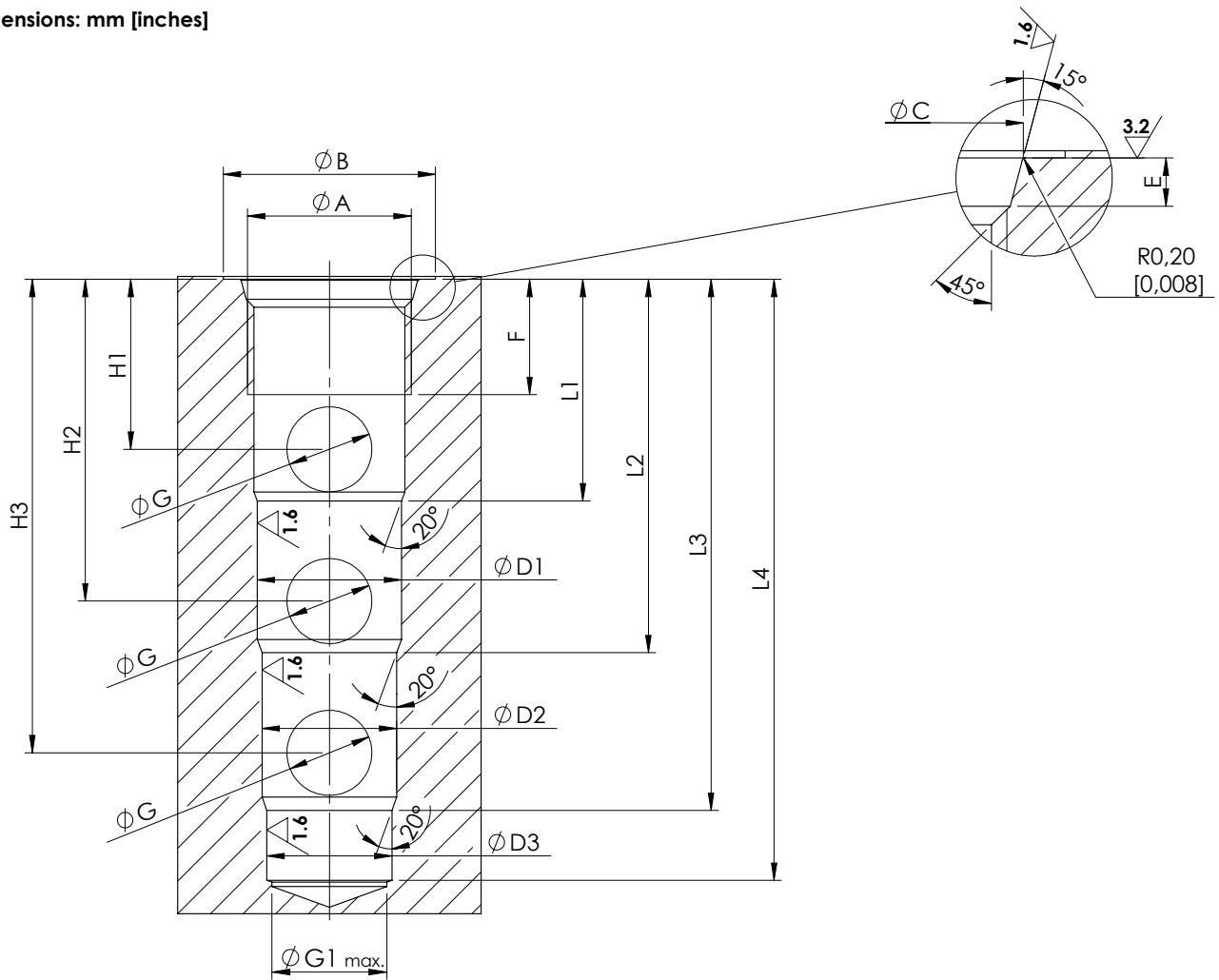
⊙	0.03[0,0012]
⏏	0.02[0,0008]

	SAE-08-3N	SAE-10-3N	SAE-12-3N	SAE-16-3N	SAE-20-3N
A	3/4-16 UNF	7/8-14 UNF	1-1/16 12 UNF	1-5/16 12 UNF	1-5/8 12 UNF
B	26 [1,02]	30 [1,18]	35 [1,38]	42 [1,65]	48 [1,89]
C	20.6 ^{+0,1} ₀ [0,811 ^{+0,004} ₀]	23.9 ^{+0,1} ₀ [0,941 ^{+0,004} ₀]	29.2 ^{+0,1} ₀ [1,15 ^{+0,004} ₀]	35.5 ^{+0,1} ₀ [1,398 ^{+0,004} ₀]	43.5 ^{+0,1} ₀ [1,713 ^{+0,004} ₀]
D1	15.87 ^{+0,05} ₀ [0,625 ^{+0,002} ₀]	17.47 ^{+0,05} ₀ [0,688 ^{+0,002} ₀]	23.80 ^{+0,05} ₀ [0,937 ^{+0,002} ₀]	28.60 ^{+0,05} ₀ [1,126 ^{+0,002} ₀]	36.52 ^{+0,05} ₀ [1,438 ^{+0,002} ₀]
D2	14.27 ^{+0,05} ₀ [0,562 ^{+0,002} ₀]	15.87 ^{+0,05} ₀ [0,625 ^{+0,002} ₀]	22.22 ^{+0,05} ₀ [0,875 ^{+0,002} ₀]	27.00 ^{+0,05} ₀ [1,063 ^{+0,002} ₀]	33.35 ^{+0,05} ₀ [1,313 ^{+0,002} ₀]
E	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]	3.4 ^{+0,3} ₀ [0,134 ^{+0,012} ₀]
F	13 [0,512]	14 [0,551]	20 [0,787]	20 [0,787]	22 [0,866]
G	6 [0,236]	8 [0,315]	14 [0,551]	17 [0,669]	25 [0,984]
G1	12 [0,472]	15 [0,591]	19 [0,748]	24 [0,945]	30 [1,181]
-	-	-	-	-	-
H1	15 [0,591]	18 [0,709]	28 [1,102]	25.5 [1,004]	32 [1,260]
H2	29 [1,142]	34 [1,339]	53 [2,087]	54 [2,126]	72 [2,835]
L1	19.50 [0,768]	23.5 [0,925]	36.5 [1,437]	35.5 [1,398]	46 [1,811]
L2	33.50 [1,319]	39.50 [1,555]	61.50 [2,421]	64 [2,520]	86 [3,386]
L3	43 [1,693]	48.50 [1,910]	73 [2,874]	75 [2,953]	100 [3,937]

SAE-XX-4N



Dimensions: mm [inches]



General tolerances : 0.3 mm [0,012 inches]

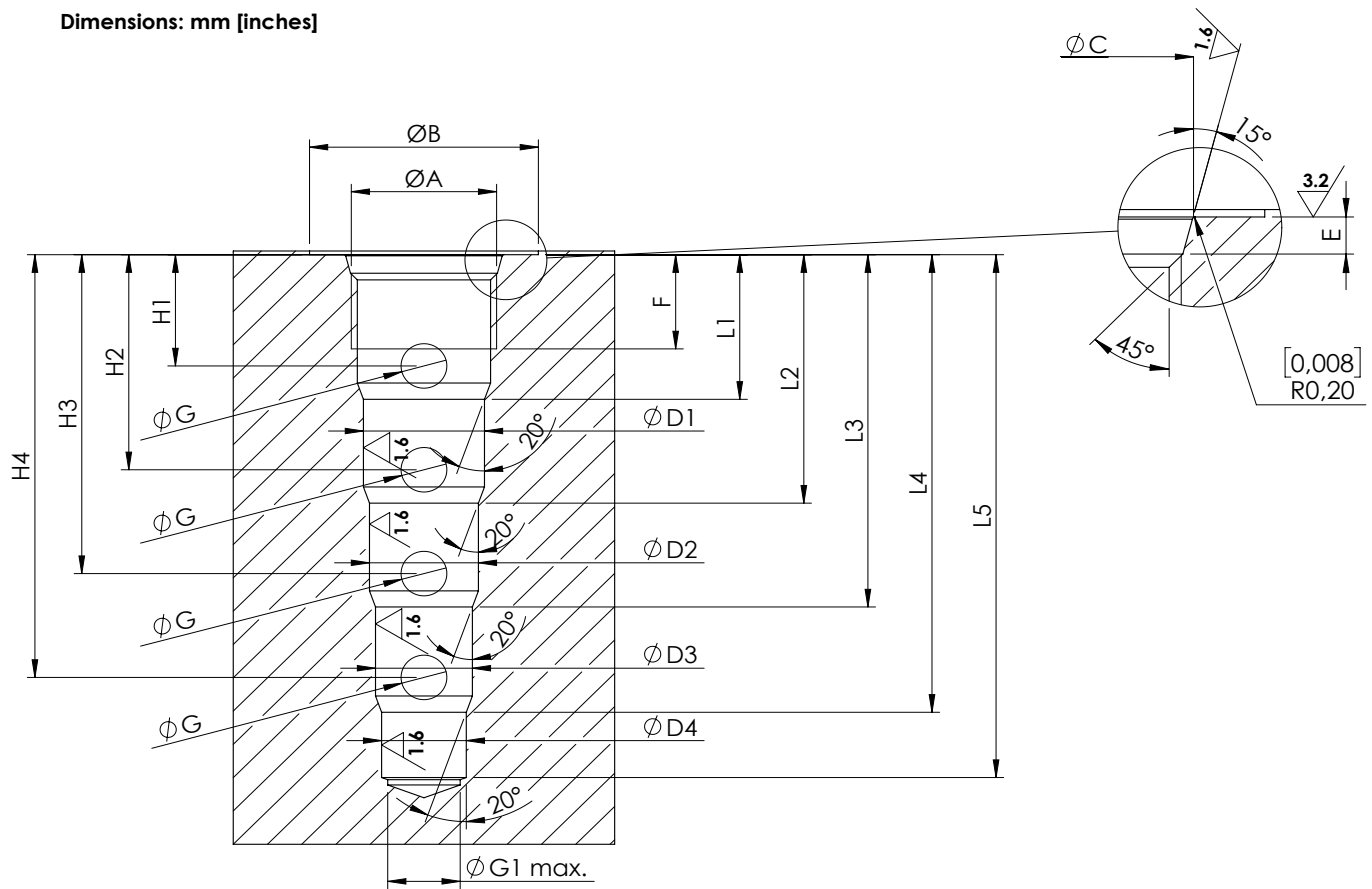
Ⓞ	0.03[0,0012]
Ⓜ	0.02[0,0008]

	SAE-08-4N	SAE-10-4N	SAE-12-4N	SAE-16-4N	SAE-20-4N
A	3/4-16 UNF	7/8-14 UNF	1-1/16 12 UNF	1-5/16 12 UNF	1-5/8 12 UNF
B	26 [1,02]	30 [1,18]	35 [1,38]	42 [1,65]	48 [1,89]
C	20.6 ^{+0,1} ₀ [0,811 ^{+0,004} ₀]	23.9 ^{+0,1} ₀ [0,941 ^{+0,004} ₀]	29.2 ^{+0,1} ₀ [1,15 ^{+0,004} ₀]	35.5 ^{+0,1} ₀ [1,398 ^{+0,004} ₀]	43.5 ^{+0,1} ₀ [1,713 ^{+0,004} ₀]
D1	15.87 ^{+0,05} ₀ [0,625 ^{+0,002} ₀]	19.05 ^{+0,05} ₀ [0,750 ^{+0,002} ₀]	23.80 ^{+0,05} ₀ [0,937 ^{+0,002} ₀]	28.60 ^{+0,05} ₀ [1,126 ^{+0,002} ₀]	36.52 ^{+0,05} ₀ [1,438 ^{+0,002} ₀]
D2	14.27 ^{+0,05} ₀ [0,562 ^{+0,002} ₀]	17.47 ^{+0,05} ₀ [0,688 ^{+0,002} ₀]	22.22 ^{+0,05} ₀ [0,875 ^{+0,002} ₀]	27.00 ^{+0,05} ₀ [1,063 ^{+0,002} ₀]	33.35 ^{+0,05} ₀ [1,313 ^{+0,002} ₀]
D3	12.7 ^{+0,05} ₀ [0,500 ^{+0,002} ₀]	15.87 ^{+0,05} ₀ [0,625 ^{+0,002} ₀]	20.62 ^{+0,05} ₀ [0,812 ^{+0,002} ₀]	25.42 ^{+0,05} ₀ [1 ^{+0,002} ₀]	31.75 ^{+0,05} ₀ [1,250 ^{+0,002} ₀]
E	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]	3.4 ^{+0,3} ₀ [0,134 ^{+0,012} ₀]
F	13 [0,512]	15 [0,591]	19 [0,748]	20 [0,787]	22 [0,866]
G	6 [0,236]	8 [0,315]	14 [0,551]	16 [0,630]	25 [0,984]
G1	12 [0,472]	15 [0,591]	19 [0,748]	24 [0,945]	30 [1,181]
H1	15 [0,591]	18 [0,709]	28 [1,102]	25 [0,984]	32 [1,260]
H2	29 [1,142]	34 [1,339]	53 [2,087]	53.5 [2,106]	72 [2,835]
H3	43 [1,693]	50 [1,969]	78 [3,071]	82 [3,228]	114 [4,488]
L1	19.50 [0,768]	23.5 [0,925]	36.5 [1,437]	35.5 [1,398]	46 [1,811]
L2	33.50 [1,319]	39.50 [1,555]	61.50 [2,421]	64 [2,520]	87 [3,425]
L3	47.5 [1,870]	55.5 [2,185]	87.5 [3,445]	92.5 [3,642]	128.5 [5,059]
L4	56 [2,205]	64.5 [2,539]	99 [3,898]	104 [4,095]	142 [5,591]

SAE-XX-5N



Dimensions: mm [inches]

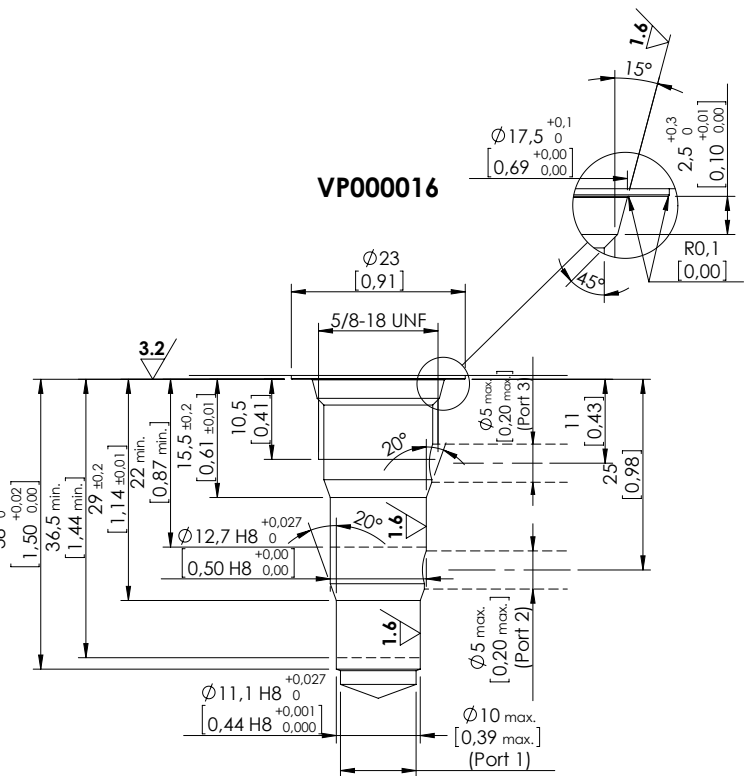
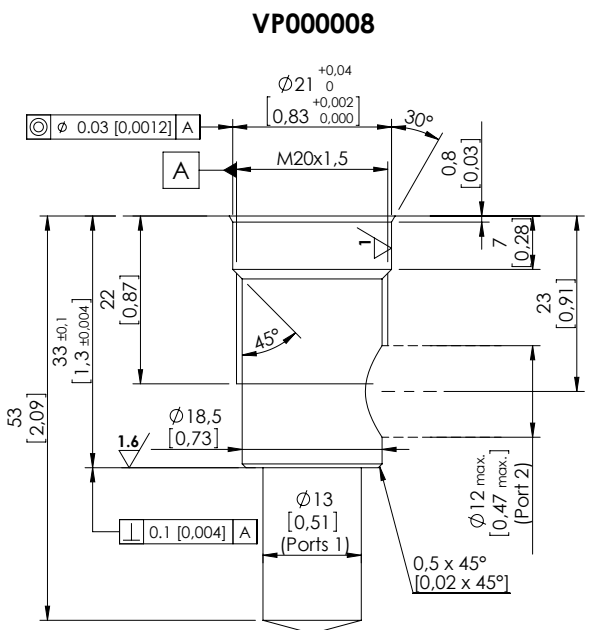
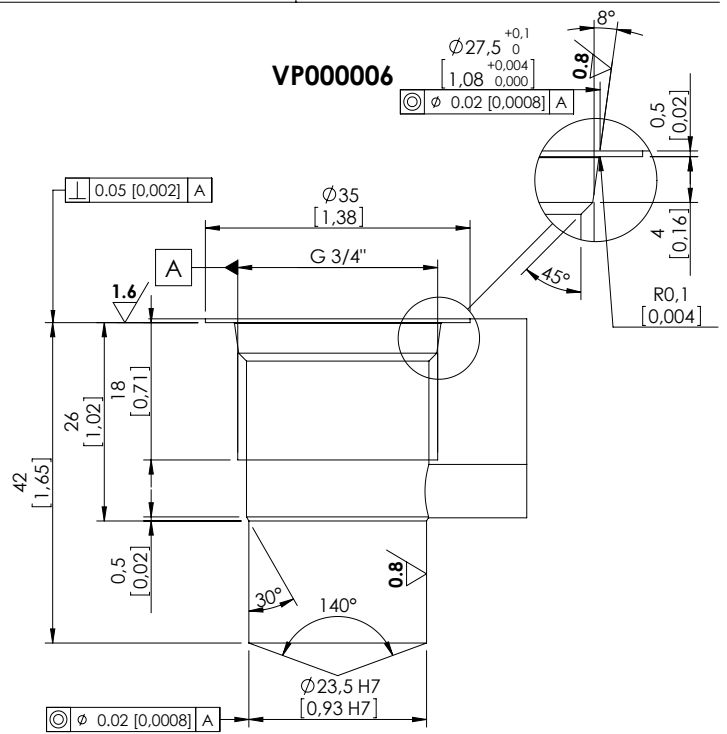
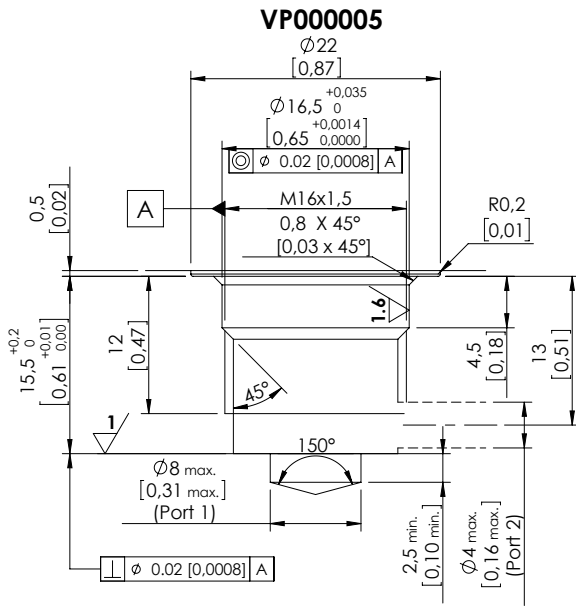


General tolerances : 0.3 mm [0,012 inches]

⊙	0.03[0,0012]
⊥	0.02[0,0008]

	SAE-08-5N	SAE-10-5N	SAE-12-5N	SAE-16-5N
A	3/4-16 UNF	7/8-14 UNF	1-1/16 12 UN	1-5/16 12 UN
B	30 [1,181]	30 [1,181]	35 [1,378]	42 [1,653]
C	20.6 ^{+0,1} ₀ [0,811 ^{+0,004} ₀]	23.9 ^{+0,1} ₀ [0,941 ^{+0,004} ₀]	29.2 ^{+0,1} ₀ [1,15 ^{+0,004} ₀]	35.5 ^{+0,1} ₀ [1,398 ^{+0,004} ₀]
D1	15.87 ^{+0,05} ₀ [0,625 ^{+0,002} ₀]	19.05 ^{+0,05} ₀ [0,750 ^{+0,002} ₀]	23.80 ^{+0,05} ₀ [0,937 ^{+0,002} ₀]	28.60 ^{+0,05} ₀ [1,126 ^{+0,002} ₀]
D2	14.27 ^{+0,05} ₀ [0,562 ^{+0,002} ₀]	17.47 ^{+0,05} ₀ [0,688 ^{+0,002} ₀]	22.22 ^{+0,05} ₀ [0,875 ^{+0,002} ₀]	27.00 ^{+0,05} ₀ [1,063 ^{+0,002} ₀]
D3	12.70 ^{+0,05} ₀ [0,500 ^{+0,002} ₀]	15.87 ^{+0,05} ₀ [0,625 ^{+0,002} ₀]	20.62 ^{+0,05} ₀ [0,812 ^{+0,002} ₀]	25.42 ^{+0,05} ₀ [1,002 ^{+0,002} ₀]
D4	11.10 ^{+0,05} ₀ [0,437 ^{+0,002} ₀]	14.27 ^{+0,05} ₀ [0,562 ^{+0,002} ₀]	19.05 ^{+0,05} ₀ [0,750 ^{+0,002} ₀]	23.80 ^{+0,05} ₀ [0,937 ^{+0,002} ₀]
E	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]
F	13 [0,512]	15 [0,591]	19 [0,748]	20 [0,787]
G	6 [0,236]	7 [0,276]	14 [0,551]	16 [0,630]
G1	10.5[0,413]	13.5 [0,531]	18 [0,708]	23 [0,905]
H1	14,7 [0,44]	18 [0,709]	27.5 [1,082]	24 [0,945]
H2	29 [1,142]	34 [1,339]	52.2 [2,055]	53.5 [2,106]
H3	43 [1,693]	50 [1,969]	78 [3,071]	82.5 [3,250]
H4	57 [2,244]	66 [2,598]	104 [4,094]	110.5 [4,350]
L1	19.50 [0,768]	23.6 [0,929]	36.5 [1,437]	35.5 [1,397]
L2	33.50 [1,319]	40.2 [1,583]	61.50 [2,421]	64 [2,520]
L3	47.5 [1,870]	56.1 [2,209]	87.5 [3,445]	92.5 [3,642]
L4	61.7 [2,429]	72 [2,835]	113.5 [4,468]	121 [4,763]
L5	70.5 [2,776]	79.4 [3,126]	125.2 [4,930]	132.8 [5,228]

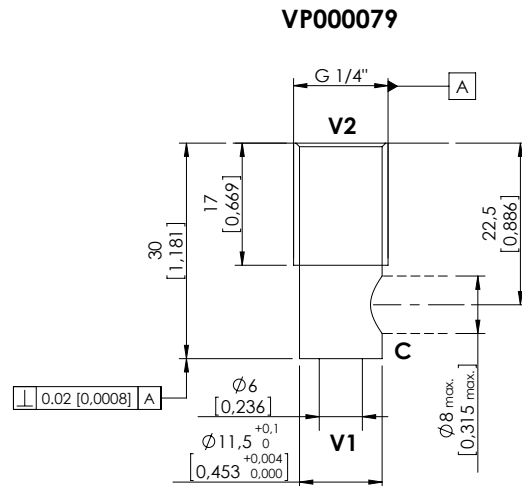
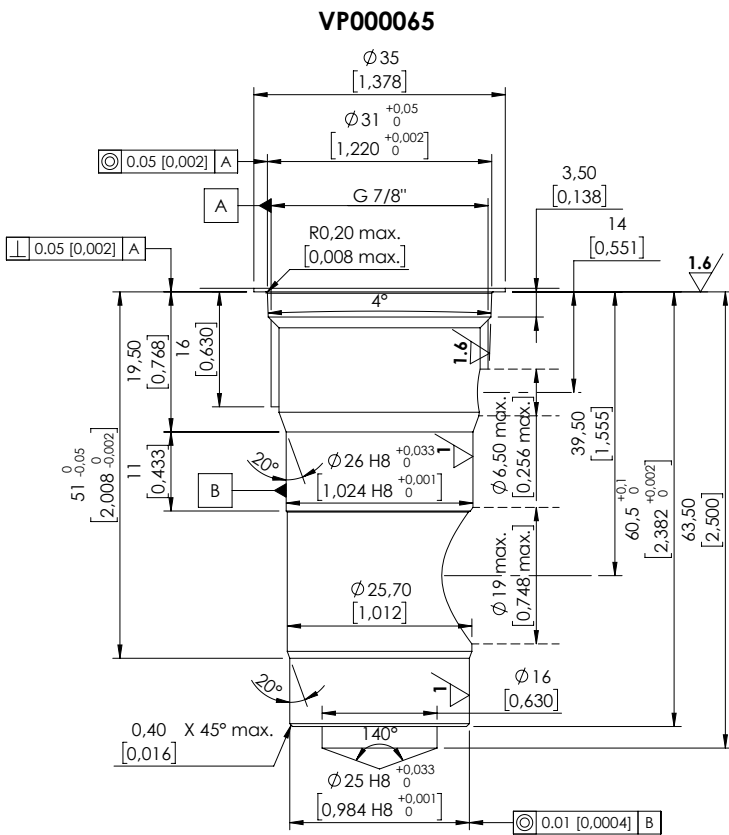
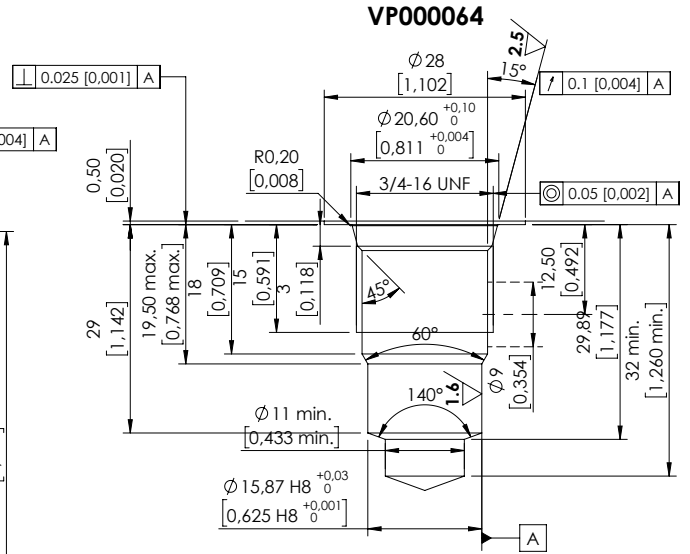
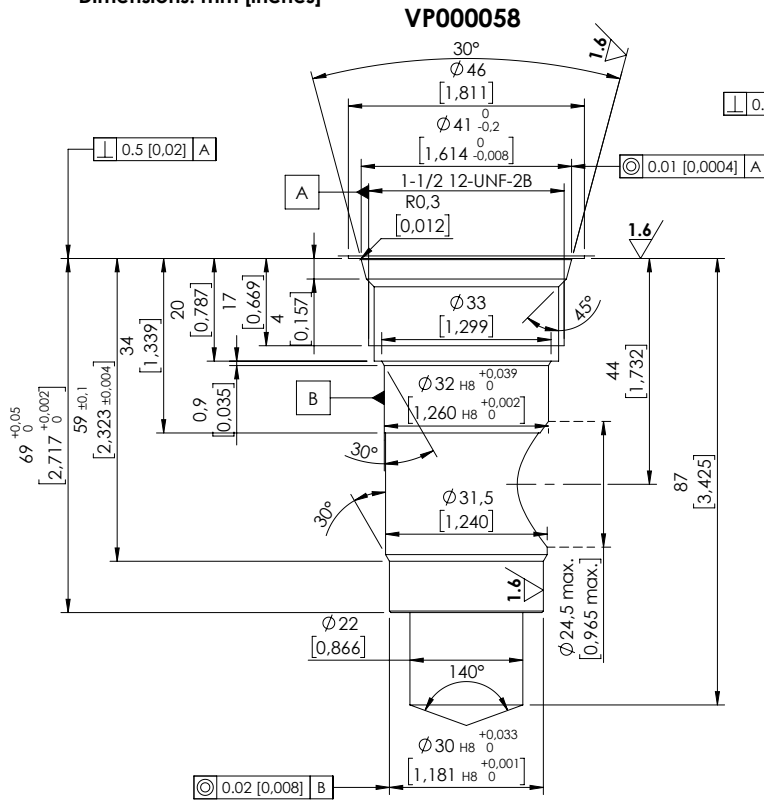
Dimensions: mm [inches]



General Tolerances:

	0.03 [0.0012]
	0.02 [0.0008]

Dimensions: mm [inches]

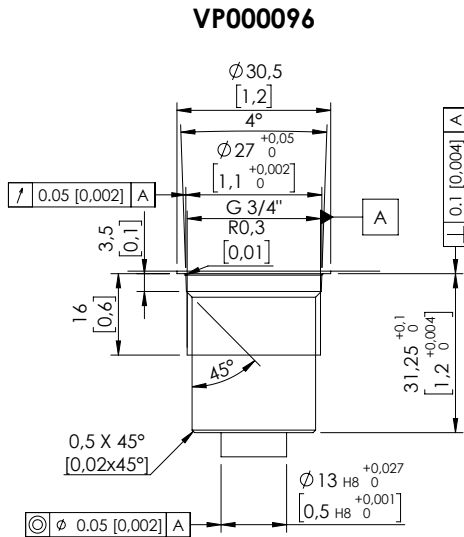
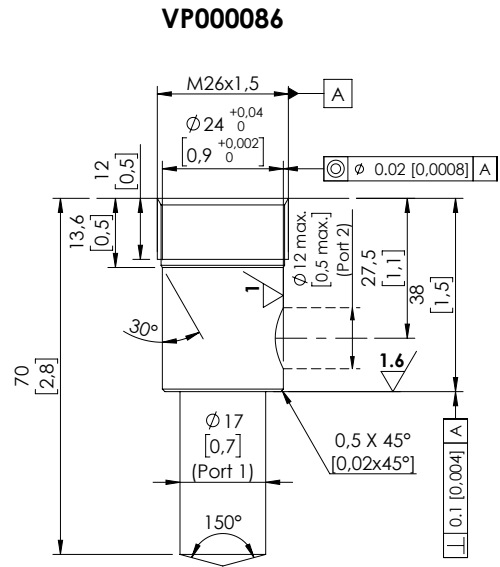
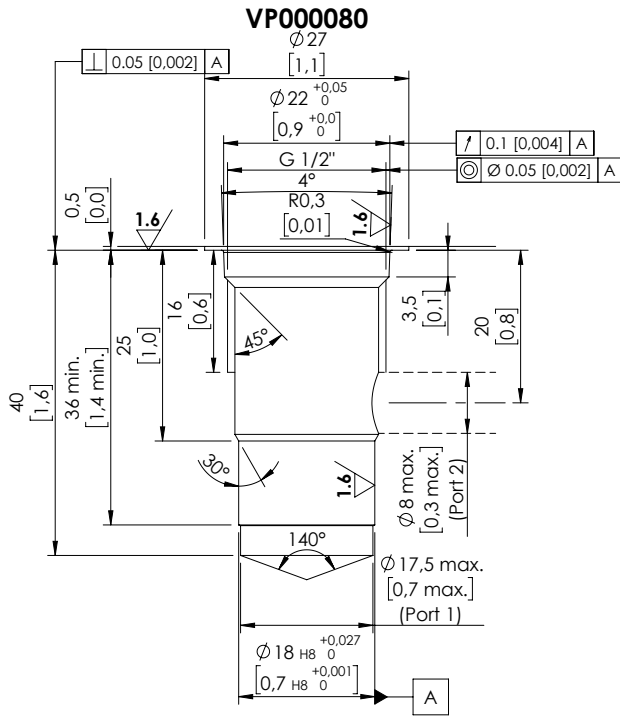


General Tolerances:

$\text{\O}0.03$ [0,0012]
$\text{\O}0.02$ [0,0008]

SPECIAL CAVITIES

Dimensions: mm [inches]



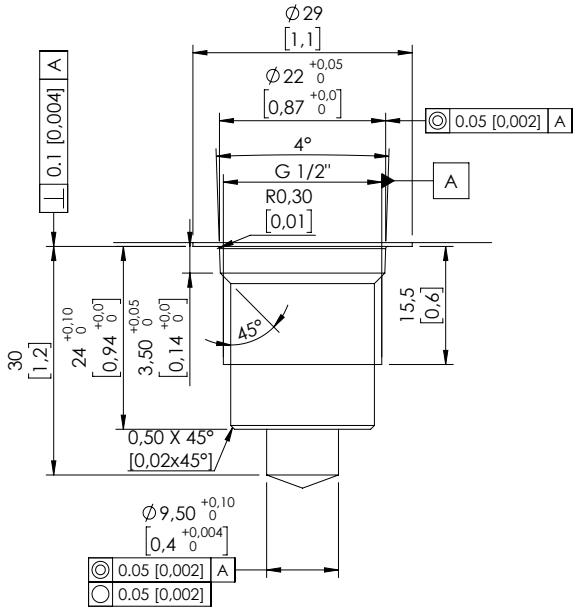
General Tolerances:

ϕ	0.03 [0,0012]
\perp	0.02 [0,0008]

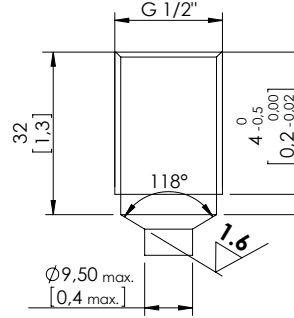
SPECIAL CAVITIES

Dimensions: mm [inches]



VP000132



VP000158

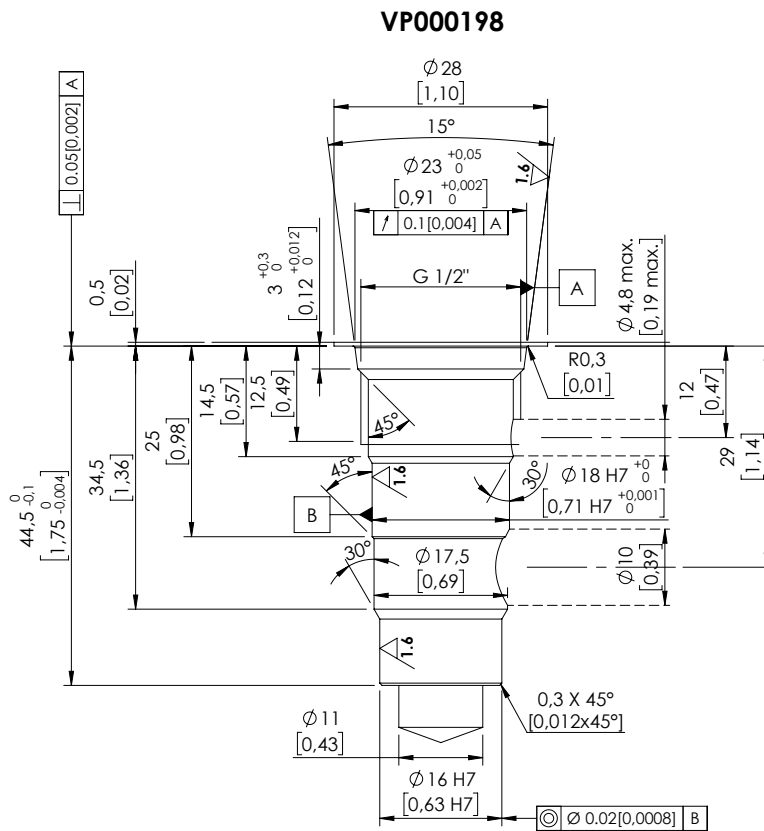
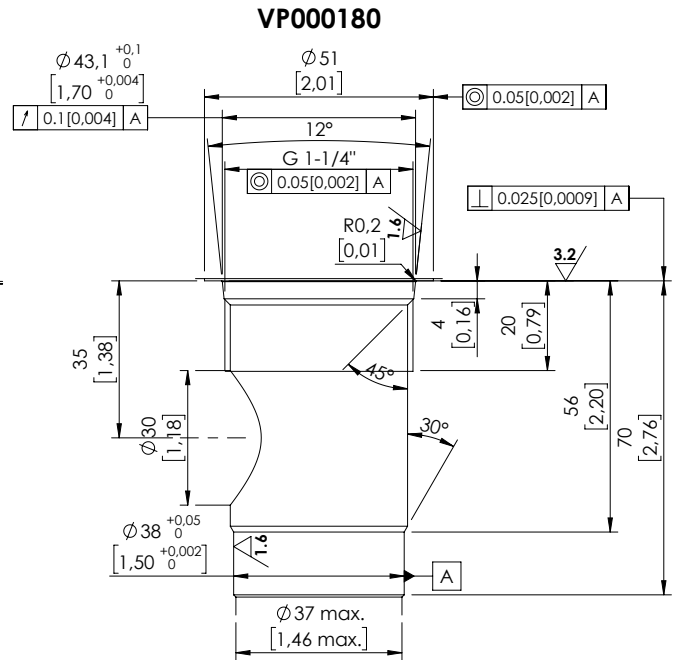
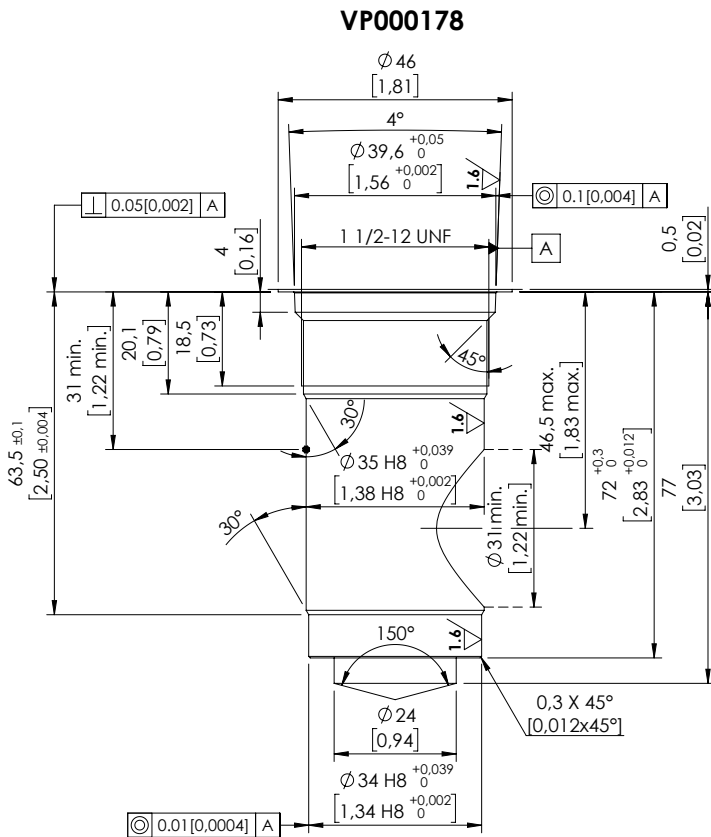


General Tolerances:

	0.03 [0,0012]
	0.02 [0,0008]

SPECIAL CAVITIES

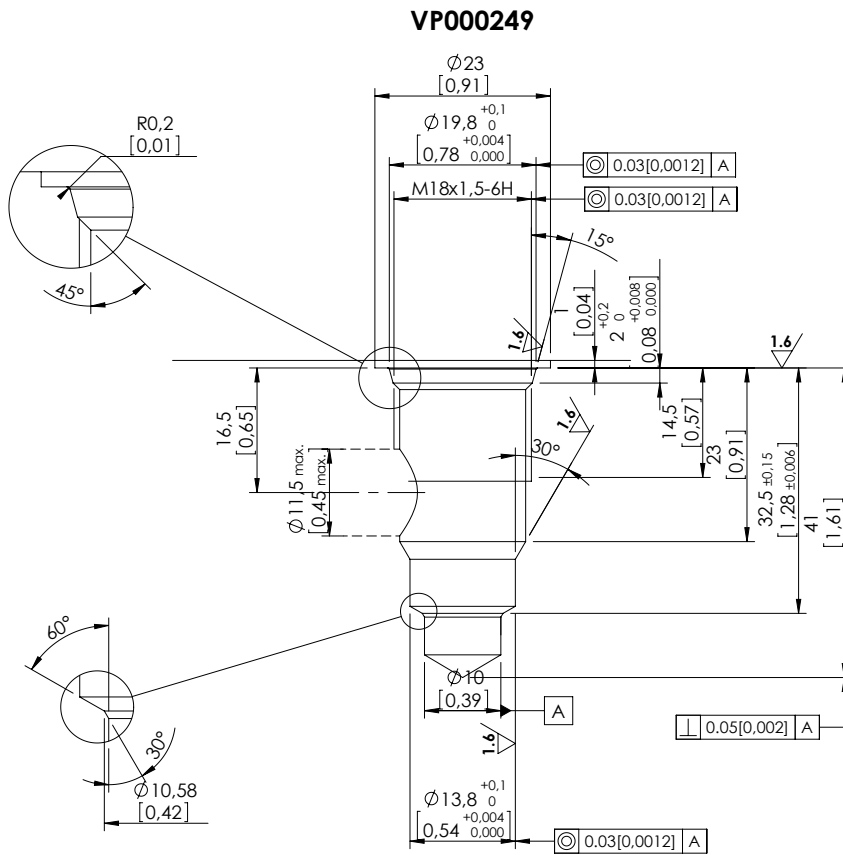
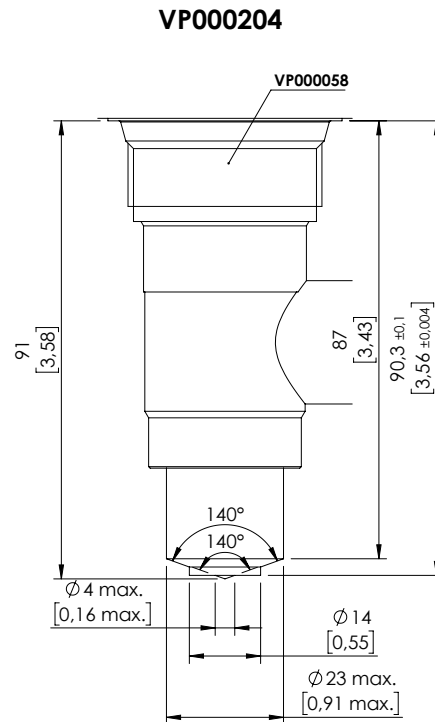
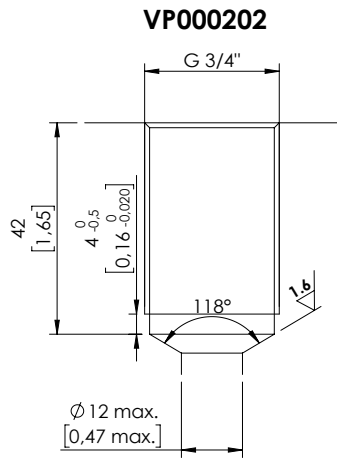
Dimensions: mm [inches]



General Tolerances:

⊙	0.03 [0.0012]
⊥	0.02 [0.0008]

Dimensions: mm [inches]



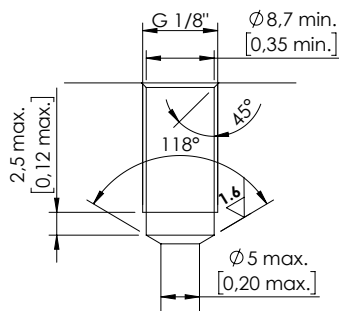
General Tolerances:

- ⊙ 0.03 [0.0012]
- ⌊ 0.02 [0.0008]

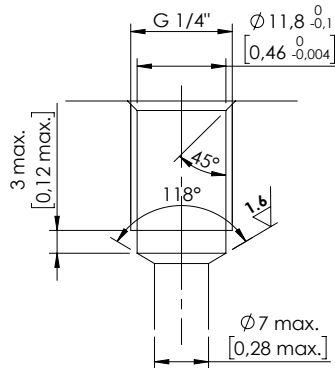
SPECIAL CAVITIES

Dimensions: mm [inches]

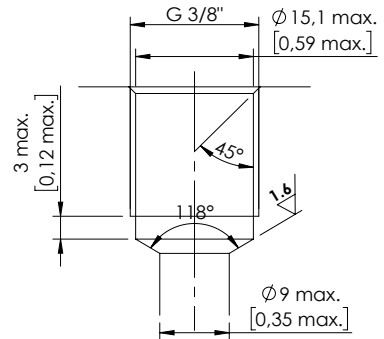
VP000307



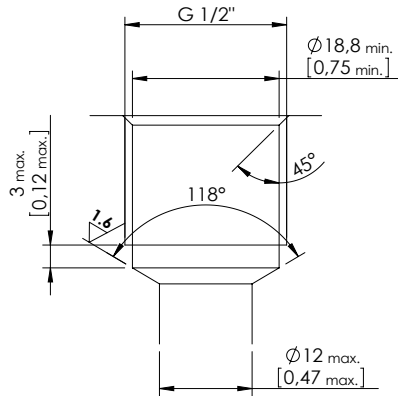
VP000309



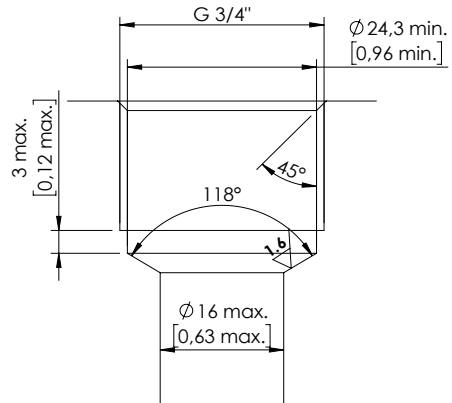
VP000310



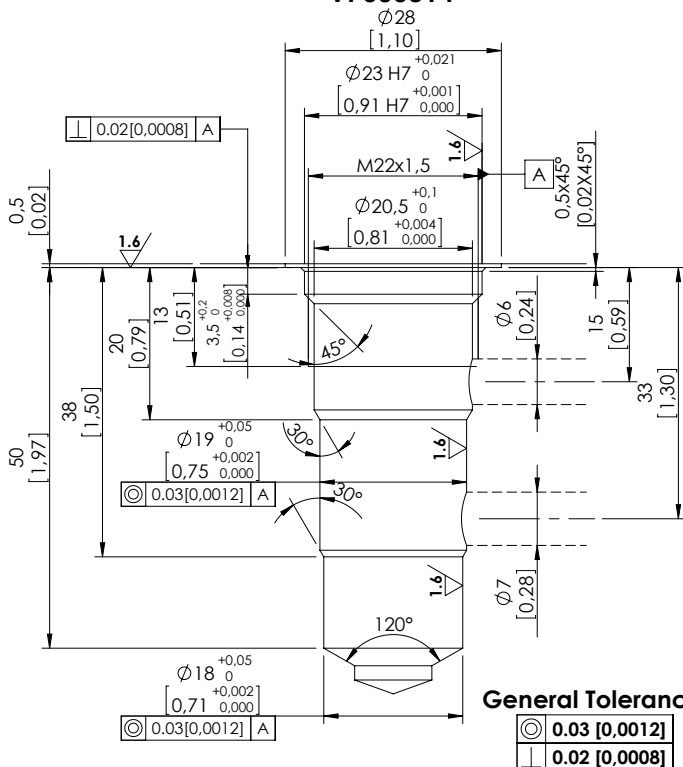
VP000311



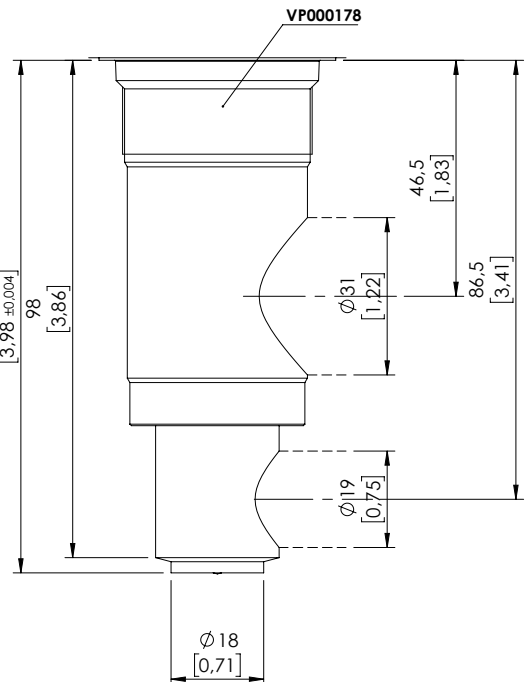
VP000312



VP000314



VP000330



General Tolerances:

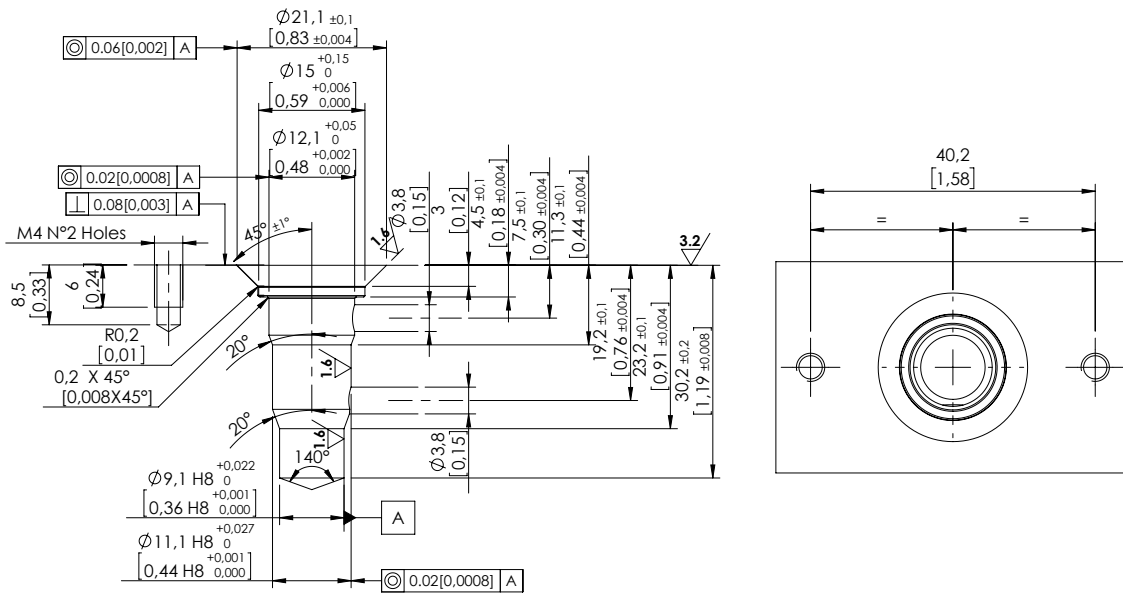
⊙	0.03	[0,0012]
⏏	0.02	[0,0008]

SPECIAL CAVITIES

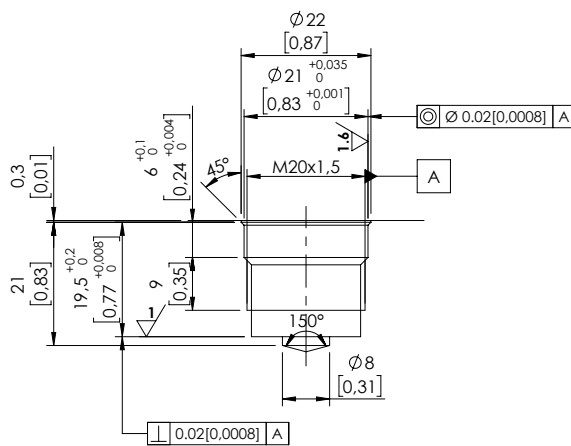


Dimensions: mm [inches]

VP000371



VP000445



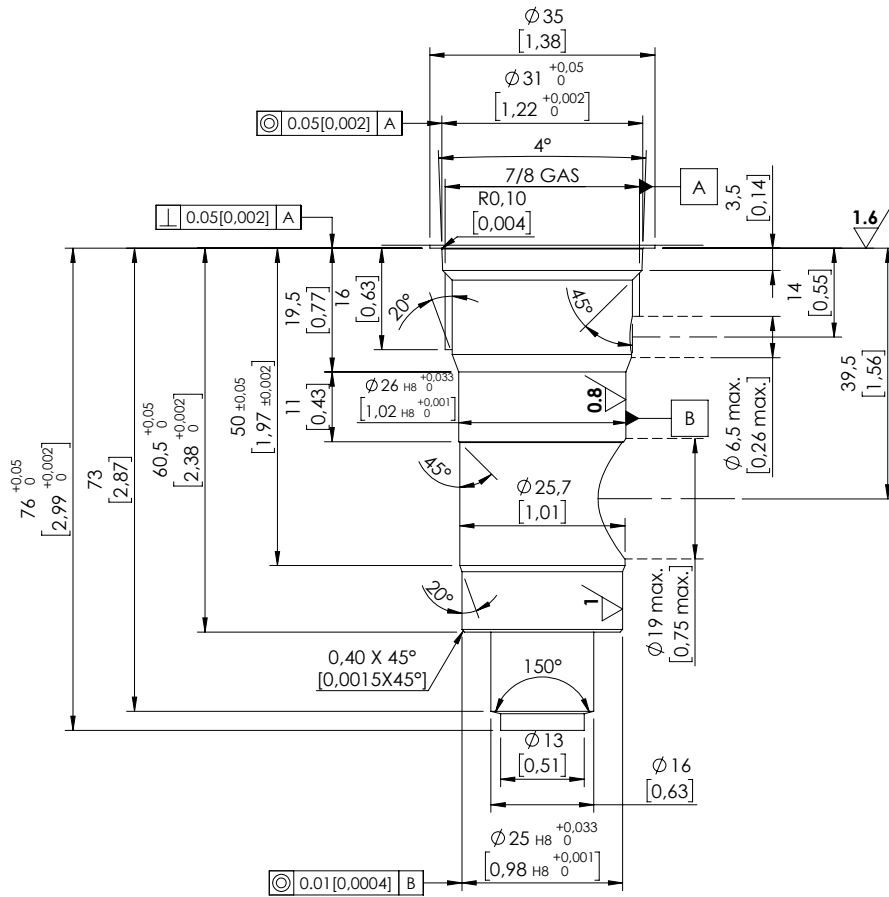
General Tolerances:

- $\sqrt{0.03}$ [0.0012]
- $\sqrt{0.02}$ [0.0008]

SPECIAL CAVITIES

Dimensions: mm [inches]

VP000555

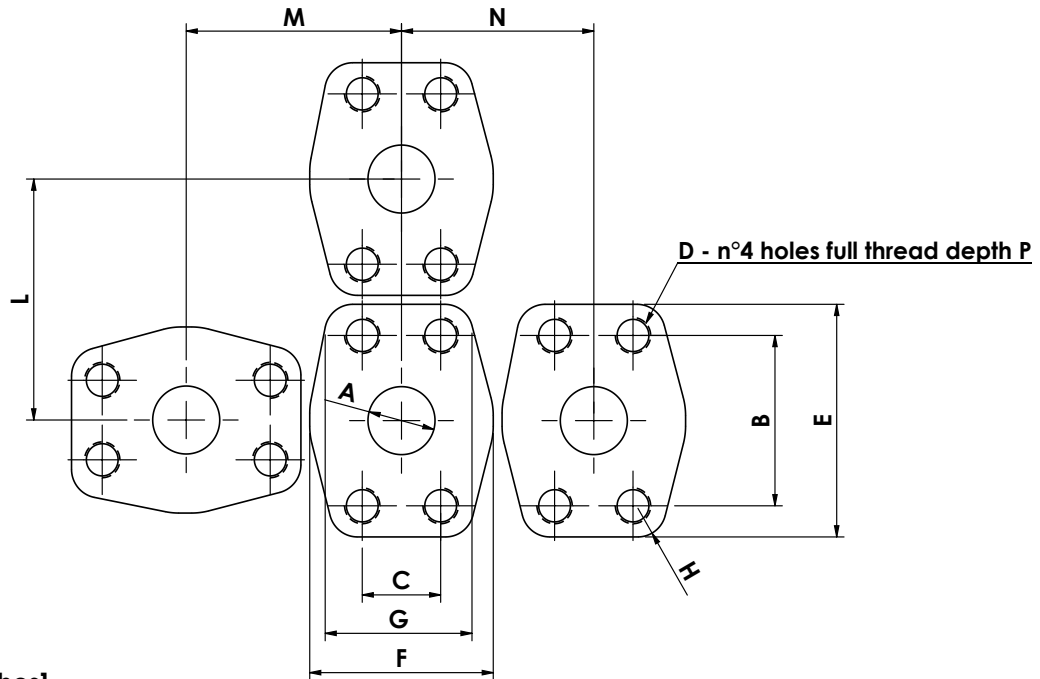


General Tolerances:

Ra	0.03 [0.0012]
Ra	0.02 [0.0008]

TECHNICAL DATA

SAE FLANGE



Dimension: mm [inches]

FLANGE SAE 3000 PSI (MEDIUM PRESSURE)						
		1/2	3/4	1"	1" 1/4	1" 1/2
A	∅ max.	13 [0,512]	19 [0,748]	25,5 [1,00]	32 [1,26]	38 [1,496]
B	-	38,1 [1,5]	47,6 [1,874]	52,4 [2,06]	58,7 [2,311]	69,9 [2,752]
C	-	17,5 [0,689]	22,2 [0,874]	26,2 [1,03]	30,2 [1,189]	35,7 [1,406]
D	unc-2B	5/16-18	3/8-16	3/8-16	7/16-14	1/2-13
	metric	M8	M10	M10	M10	M12
E	-	54 [2,13]	65 [2,559]	70 [2,756]	79 [3,110]	94 [3,701]
F	-	46 [1,81]	52 [2,047]	59 [2,323]	73 [2,874]	83
G	min.	33 [1,29]	41 [1,614]	48 [1,889]	54 [2,13]	83 [3,268]
H	radius	8 [0,315]	9 [0,354]	9 [0,354]	10 [0,393]	12 [0,472]
L	min.	56 [2,205]	68 [2,677]	72 [2,835]	82 [3,228]	96 [3,779]
M	min.	52 [2,05]	61 [2,402]	67 [2,638]	78 [3,070]	90 [3,543]
N	min.	49 [1,929]	55 [2,165]	61 [2,402]	75 [2,953]	85 [3,346]
P	min. mm	24 [0,945]	22 [0,866]	22 [0,866]	28 [1,102]	27 [1,063]
FLANGE SAE 6000 PSI (HIGH PRESSURE)						
		1/2	3/4	1"	1" 1/4	1" 1/2
A	∅ max.	13 [0,512]	19 [0,748]	25,5 [1,00]	32 [1,26]	38 [1,496]
B	-	40,5 [1,594]	50,8 [2]	57,2 [2,252]	66,7 [2,626]	79,4 [3,126]
C	-	18,2 [0,717]	23,8 [0,937]	27,8 [1,094]	31,8 [1,252]	36,5 [1,437]
D	unc-2B	5/16-18	3/8-16	7/16-14	1/2-13	5/8-11
	metric	M8	M10	M12	M14	M16
E	-	56 [2,205]	71 [2,795]	81 [3,189]	95 [3,740]	113 [4,449]
F	-	48 [1,889]	60 [2,362]	70 [2,756]	78 [3,071]	95 [3,740]
G	min.	38 [1,496]	48 [1,889]	54 [2,126]	60 [2,362]	70 [2,756]
H	radius	8 [0,315]	10 [0,393]	12 [0,472]	14 [0,551]	17 [0,669]
L	min.	59 [2,323]	75 [2,953]	84 [3,307]	99 [3,898]	116 [4,567]
M	min.	56 [2,205]	70 [2,756]	80 [3,149]	90 [3,543]	108 [4,252]
N	min.	53 [2,087]	66 [2,598]	75 [2,953]	83 [3,268]	101 [3,976]
P	min. mm	21 [0,827]	24 [0,945]	27 [1,063]	25 [0,984]	35 [1,378]