

SMT



Technical Features

- › Designed to achieve standardization based on each thread size
- › Reduce the amount of tooling required to cover the valve range
- › UNF based cartridges are made to fit the ISO recommendations for standard cavities
- › Drawings for standard tools are available upon request
- › Special tools can be supplied, consult factory for cost and leadtime

Functional Description

The tables below show the specific tools and the required tooling sequence to produce the respective cavity. Note: A pilot hole may have to be drilled before using the form drill. Great care must be taken to ensure that the tools are inserted along the same machining axis to maintain the required concentricity. The cavity should be machined in a single clamping. Argo-Hytos normally stocks the standard tools in the sizes indicated. Tool drawings are available upon request.

Ordering Code

| Standard cavity tools (HS-Steel) | | SMT | | Tool material - technical characteristics | |
|----------------------------------|--|--------|--------|---|---|
| Cavity thread size | | UNF | Metric | No designation High speed steel (HSS) | |
| 7/16-20UNF-2B (C-4-3) | | N3 | QC2 | M12x1 | Tool type Drill Countersink conical Counterbore Forming drill Forming reamer Tap drill |
| 3/4-16UNF-2B (C-8-2) | | A2 | QD3 | M12x1,5 | |
| 3/4-16UNF-2B (C-8-3) | | A3 | I3 | M18x1,5 | |
| 3/4-16UNF-2B (C-8-4) | | AY3 | Q3 | M20x1,5 | |
| 3/4-16UNF-2B (C-10-2) | | A4 | QE3 | M20x1,5 | |
| 3/4-16UNF-2B (C-10-3) | | AY4 | RA2 | M22x1,5 | |
| 7/8-14UNF-2B (C-10-4) | | B2 | QF2 | M22x1,5 | |
| 7/8-14UNF-2B (C-10-3) | | B3 | QF3 | M22x1,5 | |
| 7/8-14UNF-2B (C-10-4) | | B4 | QG2 | M22x1,5 | |
| 7/8-14UNF-2B (C-10-3S) | | BP3 | LA3 | M24x1,5 | |
| 7/8-14UNF-2B (VC12-2) | | BPY3 | QI3 | M24x1,5 | |
| 1-1/16-12UN-2B (VC12-2) | | C2 | QJ3 | M24x1,5 | |
| 1-1/16-12UN-2B (VC12-3) | | CA2 | QH2 | M24x1,5 | |
| 1-1/16-12UN-2B (VC12-S3) | | C3 | R3 | M27x1,5 | |
| 1-1/16-12UN-2B (VC16-4) | | CP3 | R4 | M27x1,5 | |
| 1-1/16-12UN-2B (VC16-S3) | | CPY3 | K2 | M27x2 | |
| 1-5/16-12UN-2B (VC16-4) | | D4 | K3 | M27x2 | |
| 1-5/16-12UN-2B (VC16-S3) | | S3 | QL3 | M27x2 | |
| 1-5/16-12UN-2B | | V4 | QK2 | M27x2 | |
| 1-1/8-12UNF-2B | | U3, U4 | QM3 | M27 x 2 | |
| | | | QP2 | M28x1,5 | |
| | | | RB2 | M30x1,5 | |
| | | | RB3 | M30x1,5 | |
| | | | QT2 | M35x1,5 | |
| | | | T3 | M38x2 | |
| | | | QY3 | G1/8 | |
| | | | W3, X3 | SLIP-IN | |
| | | | Y3 | SLIP-IN | |

| B | Z | D | R | T |
|---|---|---|---|---|
| | | | | |
| | C | | | |
| | | | | |

Tool Type

| Product name | Cavity No. | Cavity | B Drill | Z Countersink conical | C Counterbore | D Forming drill | R Forming reamer | T Tap drill |
|---|------------|----------------------|----------------------------|-----------------------|---------------|-----------------|---------------------------|-------------|
| | Page | Thread size | SAP | SAP | SAP | SAP | SAP | SAP |
| SD2E; SD1E; SD3E; SD1M; SC1F; SR1A; SR1E2; ST21A, RCA; SD3P; SF22A; SR1P2; SRN1P1; SD1EX; SD1E2X | 279396 | A2 (C-8-2) | SMT-A2-B | | SMT-A2-D | | SMT-A2-R | SMT-A2-T |
| | 5 | 3/4-16UNF-2B | 33532700 | | 15604400 | | 33595500 | 33696500 |
| SD2E; SD1E; SC1F; SP2A; SS4A; SH1F; SD1EX; SD1E2X; SP2P1 | 279397 | A3 (C-8-3) | SMT-A3-B | | SMT-A3-D | | SMT-A3-R | SMT-A3-T |
| | 5 | 3/4-16UNF-2B | 33532800 | | 33567700 | | 33595700 | 33696500 |
| SD6H-AY3 | 288009 | AY3 | SMT-AY3-B | | SMT-AY3-D | | SMT-AY3-R | SMT-AY3-T |
| | 5 | 3/4-16UNF-2B | 33532800 | | 33567700 | | 33595700 | 33696500 |
| SD2E; SC5HD | 279398 | A4 (C-8-4) | SMT-A4-B | | SMT-A4-D | | SMT-A4-R | SMT-A4-T |
| | 6 | 3/4-16UNF-2B | 33532900 | | 33567800 | | 33595800 | 33696500 |
| SD6H | 288010 | AY4 | SMT-AY4-B | | SMT-AY4-D | | SMT-AY4-R | SMT-AY4-T |
| | 6 | 3/4-16UNF-2B | 33532900 | | 33567800 | | 33595800 | 33696500 |
| SD2E; SD3E; SC1F; ST21A; SR1A; SR4A; SR4E2; SRN4P1; SF22A; SR4P2; SD3EX; SD2EX; SD3E2X; SD2E2X; SD3P; SRN4P2 | 279399 | B2 (C-10-2) | SMT-B2-B | | SMT-B2-D | | SMT-B2-R | SMT-B2-T |
| | 7 | 7/8-14UNF-2B | 40523200 | | 40531500 | | 33595900 | 33696800 |
| SD2E; SP2A; SP4A; SP4E1; SF32A; SP4P2; SPN4P1; SD2EX; SD2E2X | 279400 | B3 (C-10-3) | SMT-B3-B | | SMT-B3-D | | SMT-B3-R | SMT-B3-T |
| | 7 | 7/8-14UNF-2B | 40523200 | | 40531300 | | 33598000 | 33696800 |
| SD2E; SP4P1; SD2P; SD2EX; SD2PX; SD2P2X; SD2E2X; SFD2F | 279401 | B4 (C-10-4) | SMT-B4-B | | SMT-B4-D | | SMT-B4-R | SMT-B4-T |
| | 7 | 7/8-14UNF-2B | 40523200 | | 40531400 | | 33598100 | 33696800 |
| SO5A; SOB5A; SL2H; SC5H; SS3A | 379230 | BP3 (C-10-3S) | SMT-BP3-B | | SMT-BP3-D | | SMT-BP3-R | SMT-BP3-T |
| | 8 | 7/8-14UNF-2B | 33538500 | | 41017500 | | 41017600 | 33696800 |
| SOBD5A | 379231 | BPY3 | SMT-BPY3-B | | SMT-BPY3-D | | SMT-BPY3-R | SMT-BPY3-T |
| | 8 | 7/8-14UNF-2B | 33538500 | | 41017400 | | 41017800 | 33696800 |
| SC1F; SD3E; SD3EX; SD3E2X; SR4P1; SR4E2; | *11433 | C2 (VC12-2) | not used | | SMT-C2-D | | SMT-C2-R | SMT-C2-T |
| | 9 | 1-1/16-12UN-2B | - | | 40666100 | | 40666300 | 41671600 |
| SR1A | *529576 | C2 (VC12-2) | SMT-CA2-B | | SMT-CA2-D | | SMT-CA2-R | SMT-CA2-T |
| | 9 | 1-1/16-12UN-2B | 33537700 | | 40666100 | | 40666300 | 41671600 |
| SF32P; SF32A | *11513 | C3 | SMT-C3-B | | SMT-C3-C | SMT-C3-D | SMT-C3-R | SMT-C3-T |
| | 10 | 1-1/16-12UN-2B | 43362100 | | 43361600 | 43361200 | 43360900 | 41671600 |
| SO5A; SOB5A; SL2H; SC5H | *97634 | CP3 (VC12-53) | not used | | SMT-C3-C | SMT-CP3-D | SMT-CP3-R | SMT-CP3-T |
| | 10 | 1-1/16-12UN-2B | - | | 43361600 | 41642700 | 41642900 | 41671600 |
| SOBD5A | *97635 | CPY3 | not used | | SMT-CPY3-D | | SMT-CPY3-Rx | SMT-CPY3-T |
| | 11 | 1-1/16-12UN-2B | - | | 41643400 | | R 41642900 R1 41643500 | 41671600 |
| VSV2; VSV2-J | 284410 | QC2 | SMT-QC2-Bx | not used | SMT-QC2-C | SMT-QC2-D | SMT-QC2-R | SMT-QC2-T |
| | 12 | M12x1 | B1 33538100 B2 33538200 | - | 33694800 | 33592700 | 33607300 | 33697700 |
| SC5H | 376417 | I3 | SMT-I3-B | | SMT-I3-C | SMT-I3-D | SMT-I3-R | SMT-I3-T |
| | 12 | M18x1,5 | 45468200 | | 45468500 | 45468700 | 45468800 | 45468900 |
| SC5H; SCC5H; SO5A; SOP5A; SOB5A | 291248 | Q3 | SMT-Q3-B | | SMT-Q3-D | | SMT-Q3-R | SMT-Q3-T |
| | 12 | M20x1,5 | 40523200 | | 40518000 | | 33607400 | 33697800 |
| PVRM1; TV3-063 | 279404 | QE3 | SMT-QE3-B | | SMT-QE3-D | | SMT-QE3-R | SMT-QE3-T |
| | 13 | M20x1,5 | 33538400 | | 40518300 | | 33607500 | 33697800 |
| VRN2-06; LV1-063/S | 279405 | QF3 | SMT-QF3-B | | SMT-QF3-D | | SMT-QF3-R | SMT-QF3-T |
| | 13 | M22x1,5 | 33538500 | | 40518200 | | 33607600 | 41131500 |

* replace the star with number „1000“ – the valve cavity is marked with a nine-digit number

Tool Type

| Product name | Cavity No. | Cavity | B Drill | Z Countersink conical | C Counterbore | D Forming drill | R Forming reamer | T Tap drill |
|--|------------|-------------------|----------------------------|-----------------------|---------------|-----------------|----------------------------|-------------|
| | Page | Thread size | SAP | SAP | SAP | SAP | SAP | SAP |
| ROE3; ROR3-062; VPP2-04; VPN1-06; VSS3-062 | 279406 | QG2 | SMT-QG2-B | | SMT-QG2-D | | SMT-QG2-R | SMT-QG2-T |
| | 13 | M22x1,5 | 41272800 | | 40518100 | | 33607700 | 41131500 |
| RCA | 360372 | RA2 | SMT-RA2-B | SMT-RA2-Z | SMT-RA2-C | SMT-RA2-D | SMT-RA2-R | SMT-RA2-T |
| | 14 | M22x1,5 | 41272800 | 41131600 | 41131300 | 41131200 | 33607700 | 41131500 |
| SQ1F-N3 | 415486 | N3 (C-4-3) | | | | | | na vyžádání |
| | 14 | 7/16-20UNF-2B | | | | | | |
| VPN1-06SX,SY | *70114 | QF2 | SMT-QF2-Bx | | SMT-QF2-D | | SMT-QF2-R | SMT-QF2-T |
| | 15 | M22x1,5 | B1 41272800 | | 41273000 | | 41273100 | 41131500 |
| | | | B2 41272900 | | | | | |
| RJV1-05 | 279412 | QI3 | SMT-QI3-B | not used | not used | SMT-QI3-D | SMT-QI3-R | not used |
| | 16 | M24x1,5 | 33538800 | - | - | 33593400 | 40523000 | - |
| PVRM3-10 | 281052 | QJ3 | SMT-QJ3-B | SMT-QJ3-Z | SMT-QJ3-C | SMT-QJ3-D | SMT-QJ3-Rx | SMT-QJ3-T |
| | 16 | M24x1,5 | 41272800 | 33616200 | 33695500 | 33593500 | R1 33608100 R2 33608200 | 33698200 |
| DBV3 | 279411 | QH2 | SMT-QH2-B | SMT-QH2-Z | SMT-QH2-C | SMT-QH2-D | SMT-QH2-R | SMT-QH2-T |
| | 16 | M24x1,5 | 33543600 | 33629100 | 33695600 | 33593600 | 33608400 | 33698200 |
| SD2H | 336467 | LA3 | SMT-LA3-B | not used | SMT-LA3-C | SMT-LA3-D | SMT-LA3-R | SMT-LA3-T |
| | 17 | M24x1,5 | 33537900 | - | 33694600 | 33592500 | 33607000 | 33698200 |
| SC5H; SCD5H; SO5A; SOP5A; SOB5A | 303068 | R3 | SMT-R3-B | SMT-R3-Z | SMT-R3-C | SMT-R3-D | SMT-R3-Rx | SMT-R3-T |
| | 17 | M27x1,5 | 33537600 | 33613600 | na vyžádání | 33594200 | R1 33610400 R2 33599200 | 33698700 |
| SOBD5A | 303235 | R4 | SMT-R4-B | SMT-R4-Z | not used | SMT-R4-D | SMT-R4-Rx | SMT-R4-T |
| | 17 | M27x1,5 | 33537600 | 33629400 | - | 33594300 | R1 33610600 R2 33734400 | 33698700 |
| VPN2-10/S | 279407 | QK2 | SMT-QK2-B | SMT-QK2-Z | SMT-QK2-C | SMT-QK2-D | SMT-QK2-R | SMT-QK2-T |
| | 18 | M27x2 | 33537600 | 33613600 | 33694400 | 33568300 | 33599200 | 33697400 |
| VPN2-10/SX,SY | 279408 | QL3 | SMT-QL3-B | not used | not used | SMT-QL3-D | SMT-QL3-Rx | SMT-QL3-T |
| | 18 | M27x2 | 33537600 | - | - | 33592400 | R1 33606700 R2 33599200 | 33697400 |
| TV2-102/S; TV2-103/S | 279409 | QM3 | SMT-QM3-B | SMT-QM3-Z | SMT-QM3-C | SMT-QM3-D | SMT-QM3-Rx | SMT-QM3-T |
| | 18 | M27x2 | 33537700 | 33613600 | 33694500 | 33593700 | R1 33599200 | 33697400 |
| | | | | | | | R2 33606600 | |
| SF2C2A; | | K2 | SMT-K2-B | SMT-K2-Z | SMT-K2-C | SMT-K2-D | SMT-K2-R | SMT-K2-T |
| | 19 | M27x2 | 33537600 | 33613600 | 33694400 | 33568300 | 33599200 | 33697400 |
| VRN2-10; SF32A; | 281054 | K3 | SMT-K3-B | SMT-K3-Z | SMT-K3-C | SMT-K3-D | SMT-K3-Rx | SMT-K3-T |
| | 19 | M27x2 | 33537700 | 33613600 | 33694500 | 33592100 | R1 33599200 R2 33606600 | 33697400 |
| VPP1-06, VPP2-06 | 279413 | QP2 | SMT-QP2-Bx | not used | SMT-QP2-C | SMT-QP2-D | SMT-QP2-R | SMT-QP2-T |
| | 19 | M28x1,5 | B1 33547100 B2 40523200 | - | 33695800 | 33593900 | 33609200 | 33698500 |
| VPN1-20 / S (SY) | *34959 | RB2 | SMT-RB2-Bx | | SMT-RB2-D | | SMT-RB2-R | SMT-RB2-T |
| | 20 | M30x1,5 | B1 41199500 B2 41199900 | | 41200400 | | 41845500 | 41200300 |
| VPN1-20 / SX | *34415 | RB3 | SMT-RB3-Bx | | SMT-RB3-D | | SMT-RB3-R | SMT-RB3-T |
| | 20 | M30x1,5 | B1 41199500 B2 41199900 | | 41845300 | | 41845500 | 41200300 |
| VPP1-10 | 279415 | QT2 | SMT-QT2-Bx | not used | SMT-QT2-C | SMT-QT2-D | SMT-QT2-R | not used |
| | 21 | M35x1,5 | B1 40523100 B2 40523000 | - | 33695900 | 33594000 | 33609700 | - |
| SO5A; SOP5A | 303237 | T3 | SMT-T3-B | SMT-T3-Z | SMT-T3-C | SMT-T3-D | SMT-T3-R | |
| | 21 | M38x2 | 40523100 | 33629700 | 33696100 | 33594600 | 33610800 | |

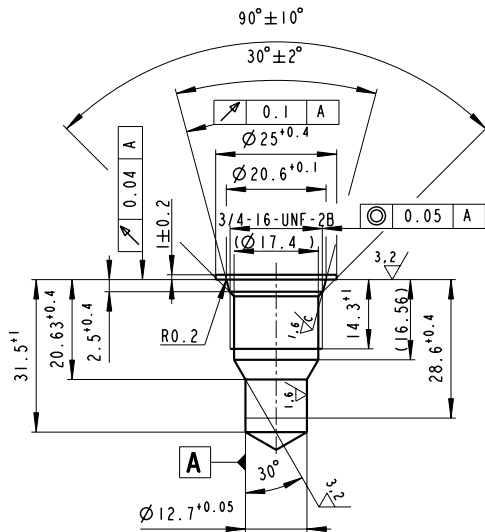
* replace the star with number „1000“ – the valve cavity is marked with a nine-digit number

Tool Type

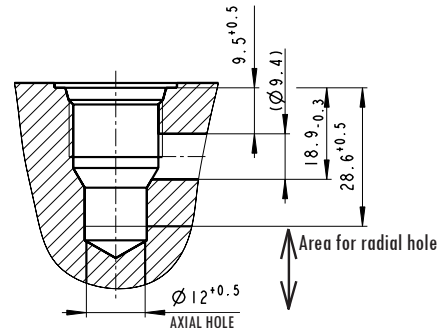
| Product name | Cavity No. | Cavity | B Drill | Z Countersink conical | C Counterbore | D Forming drill | R Forming reamer | T Tap drill |
|----------------------------------|------------|----------------------|----------------------------|-----------------------|---------------|-----------------|---|-------------|
| | Page | Thread size | SAP | SAP | SAP | SAP | SAP | SAP |
| LV1-043 | 303227 | QY3 | SMT-QY3-Bx | not used | not used | SMT-QY3-D | SMT-QY3-R | SMT-QY3-T |
| | 21 | G 1/8 | B1 40522900 B2 40522800 | - | - | 33594100 | 33610300 | 33698600 |
| LV2-043 | 279417 | QD3 | SMT-QD3-B | not used | SMT-QD3-C | SMT-QD3-D | SMT-QD3-Rx | SMT-QD3-T |
| | 22 | M12x1,5 | 34041500 | - | 34042400 | 34041800 | R 33610300 R2 34042100 | 34044700 |
| SFD2F | 303234 | D4 (VC 16-4) | SMT-D4-B | SMT-D4-Z | SMT-D4-C | SMT-D4-D | SMT-D4-Rx | SMT-D4-T |
| | 22 | 1-5/16-12UN-2B | 33537500 | 33613500 | 33694200 | 33568200 | R1 33598200 R2 33598400 R3 33598500 | 33697100 |
| SC5H; SCC5H; SOB5A | 291482 | S3 (VC 16-S3) | SMT-S3-B | SMT-S3-Z | SMT-S3-C | SMT-S3-D | SMT-S3-R | SMT-S3-T |
| | 22 | 1-5/16-12UN-2B | 33548400 | 33629500 | 33696000 | 33594500 | 33610700 | 33697100 |
| SU6A | 291480 | U3 | SMT-U3-B | not used | SMT-U3-C | SMT-U3-D | SMT-U3-Rx | SMT-U3-T |
| | 23 | 1-1/8-12UNF-2B | 33537700 | - | 33696200 | 33594700 | R1 33611000 R2 33611100 | 33699000 |
| SUD6A | 291479 | U4 | SMT-U4-B | not used | SMT-U4-C | SMT-U4-D | SMT-U4-Rx | SMT-U4-T |
| | 23 | 1-1/8-12UNF-2B | 33537700 | - | 33696200 | 33594700 | R1 33611000 R2 33611100 | 33699000 |
| SUD6A | 291483 | V4 | SMT-V4-B | SMT-V4-Z | SMT-V4-C | SMT-V4-D | SMT-V4-R | SMT-V4-T |
| | 24 | 1-5/16-12UN-2B | 33549200 | 33629500 | 33696000 | 33594900 | 33611200 | 33697100 |
| PP2P1; PP2P3; D2E1-X; PD2E1-W | 279403 | W3, X3 | SMT-X3,W3-B | SMT-X3,W3-Z | not used | SMT-3,W3-D | SMT-X3,W3-R | not used |
| | 24 | SLIP-IN | 33538500 | 33693800 | - | 33595000 | 33611400 | - |
| PD2E1-Y | 279402 | Y3 | SMT-Y3-B | not used | not used | SMT-Y3-D | SMT-Y3-R | not used |
| | 25 | SLIP-IN | 33549900 | - | - | 33595100 | 33611800 | - |

A2 - 279396

3/4-16UNF-2B

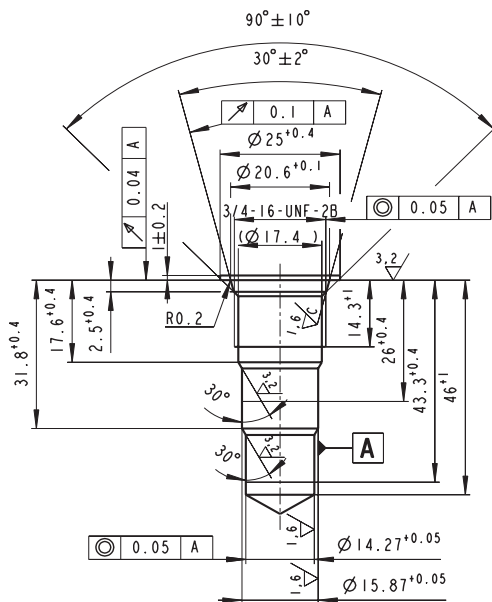


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-A2-B | 33532700 |
| Forming drill | SMT-A2-D | 15604400 |
| Forming reamer | SMT-A2-R | 33595500 |
| Tap drill | SMT-A2-T | 33696500 |

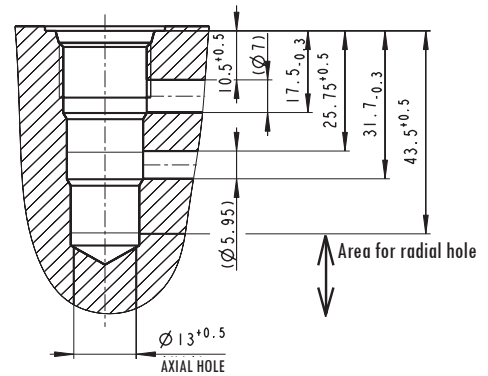


A3 - 279397

3/4-16UNF-2B

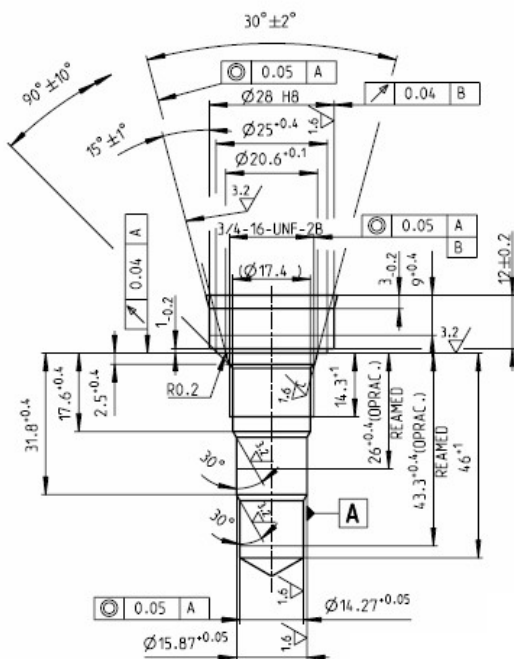


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-A3-B | 25974600 |
| Forming drill | SMT-A3-D | 33567700 |
| Forming reamer | SMT-A3-R | 33595700 |
| Tap drill | SMT-A3-T | 33696500 |

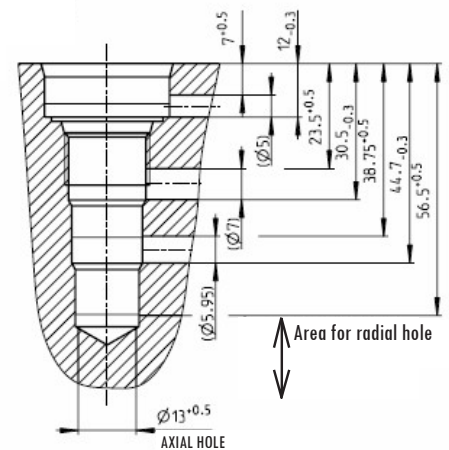


AY3 - 288009

3/4-16UNF-2B

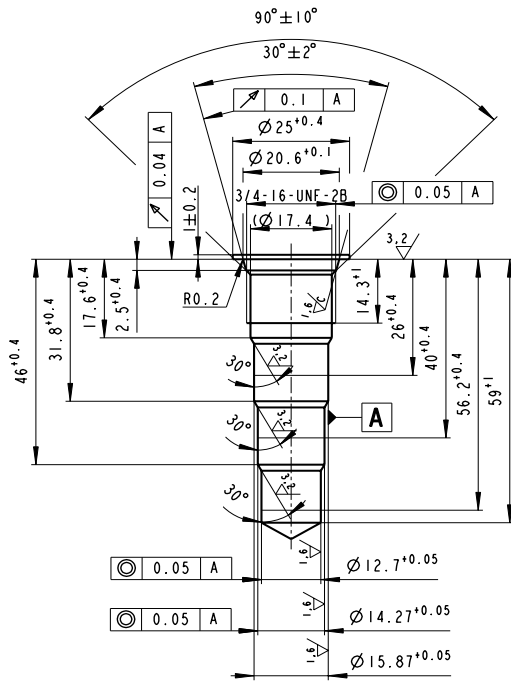


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-AY3-B | 33532800 |
| Forming drill | SMT-AY3-D | 33567700 |
| Forming reamer | SMT-AY3-R | 33595700 |
| Tap drill | SMT-AY3-T | 33696500 |

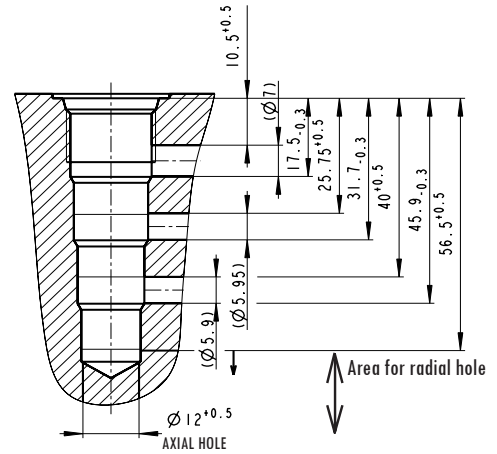


A4 - 279398

3/4-16UNF-2B

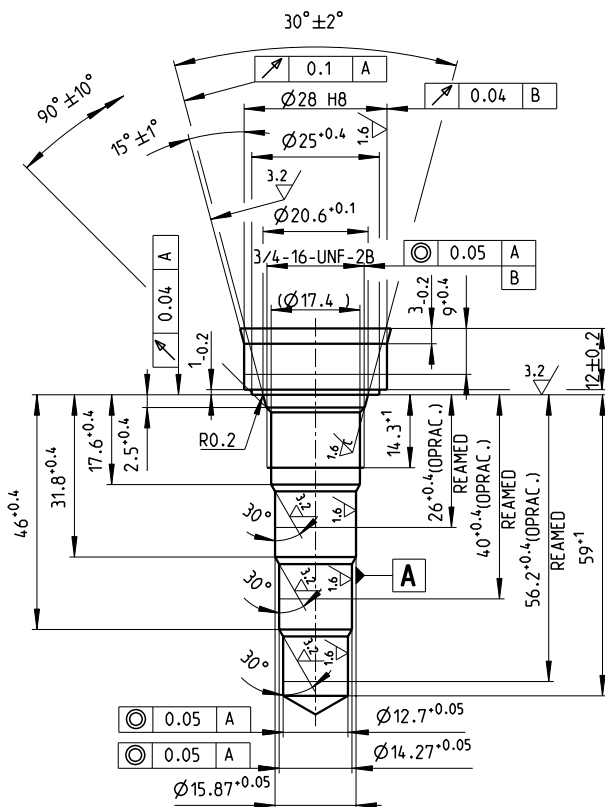


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-A4-B | 25974700 |
| Forming drill | SMT-A4-D | 33567800 |
| Forming reamer | SMT-A4-R | 33595800 |
| Tap drill | SMT-A4-T | 33696500 |

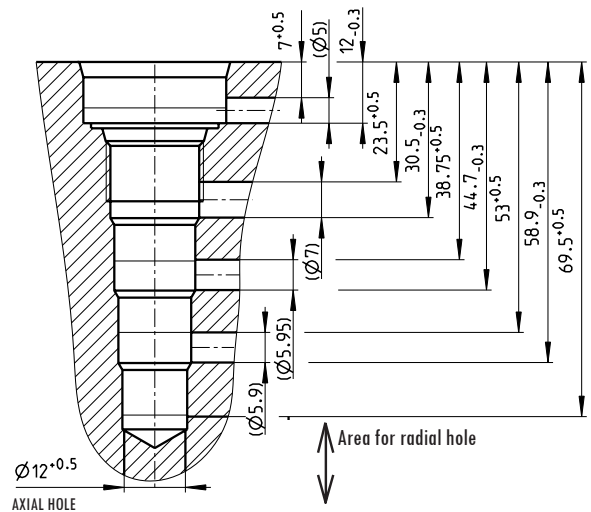


AY4 - 288010

3/4-16UNF-2B

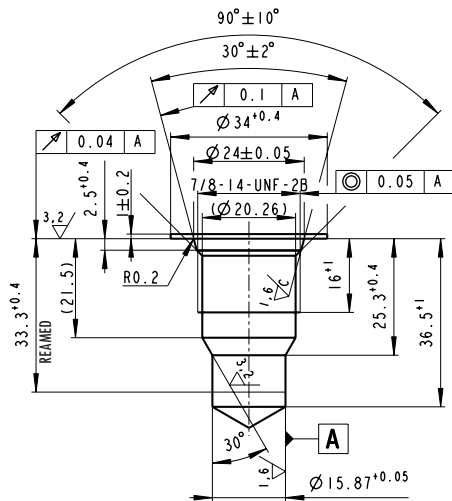


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-A4-B | 33532900 |
| Forming drill | SMT-A4-D | 33567800 |
| Forming reamer | SMT-A4-R | 33595800 |
| Tap drill | SMT-A4-T | 33696500 |

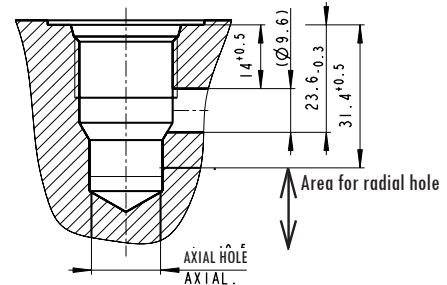


B2 - 279399

7/8-14UNF-2B

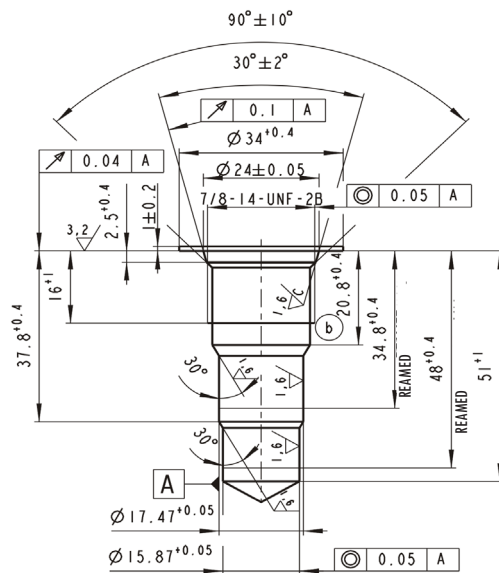


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-B2-B | 40523200 |
| Forming drill | SMT-B2-D | 40531500 |
| Forming reamer | SMT-B2-R | 33595900 |
| Tap drill | SMT-B2-T | 33696800 |

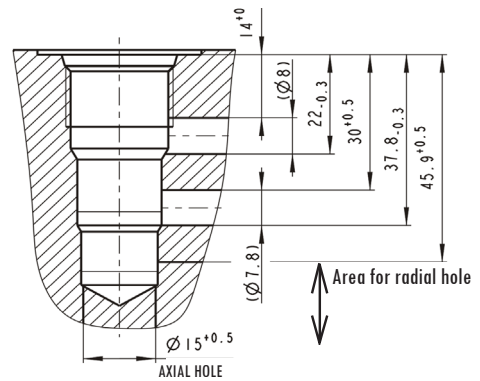


B3 - 279400

7/8-14UNF-2B

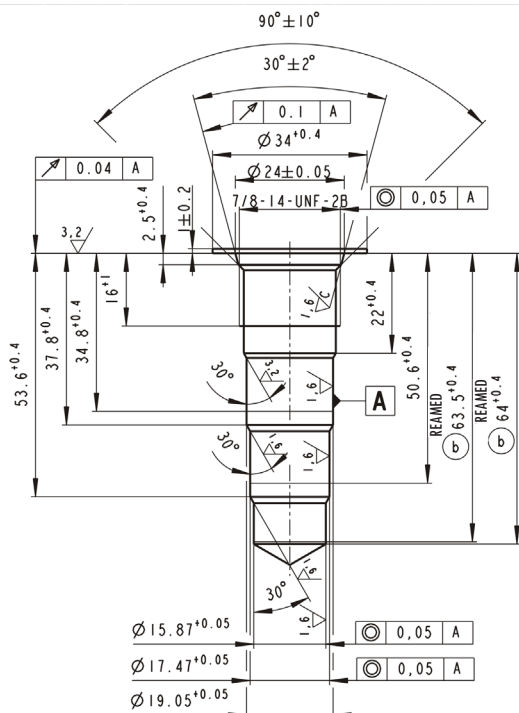


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-B3-B | 40523200 |
| Forming drill | SMT-B3-D | 40531300 |
| Forming reamer | SMT-B3-R | 33598000 |
| Tap drill | SMT-B3-T | 33696800 |

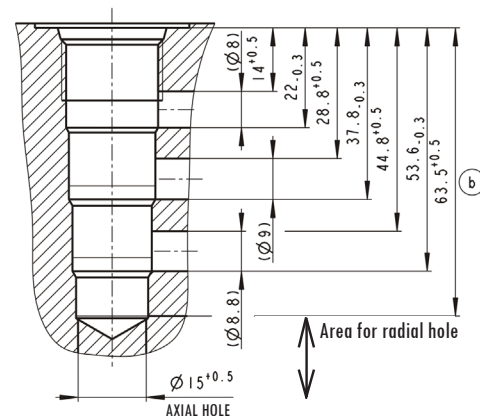


B4 - 279401

7/8-14UNF-2B

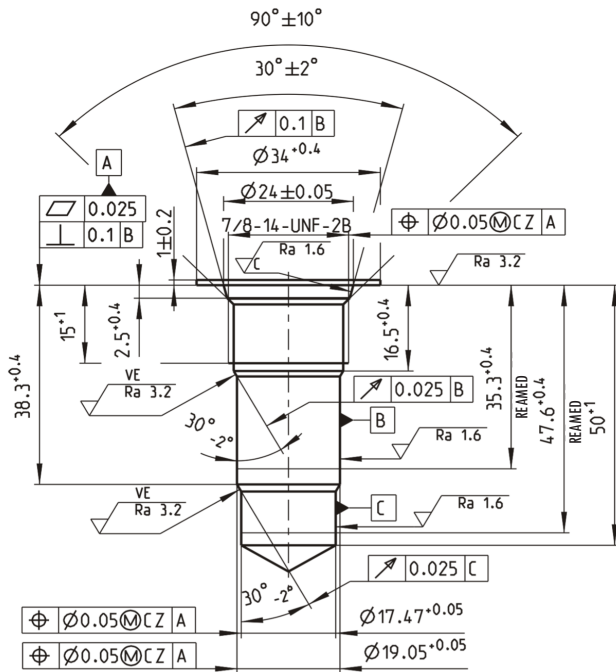


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-B4-B | 40523200 |
| Forming drill | SMT-B4-D | 40531400 |
| Forming reamer | SMT-B4-R | 33598100 |
| Tap drill | SMT-B4-T | 33696800 |

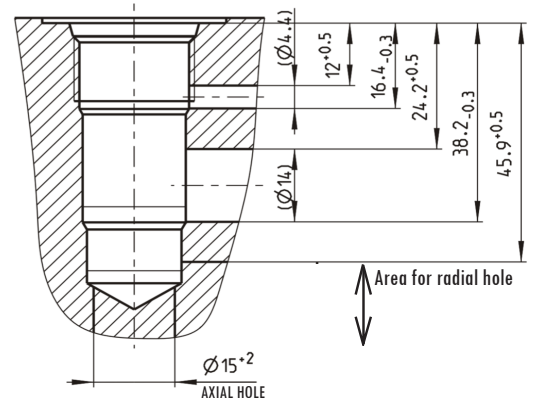


BP3 - 379230

7/8-14UNF-2B

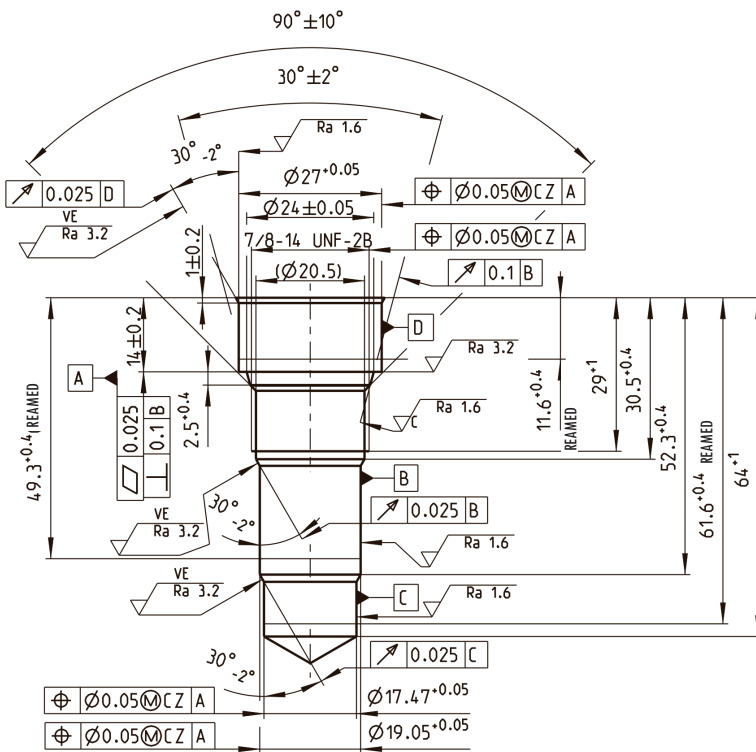


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-BP3-B | 33538500 |
| Forming drill | SMT-BP3-D | 41017500 |
| Forming reamer | SMT-BP3-R | 41017600 |
| Tap drill | SMT-BP3-T | 33696800 |

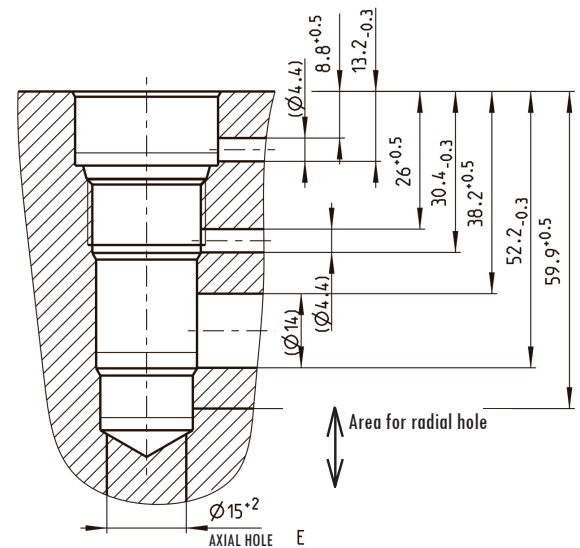


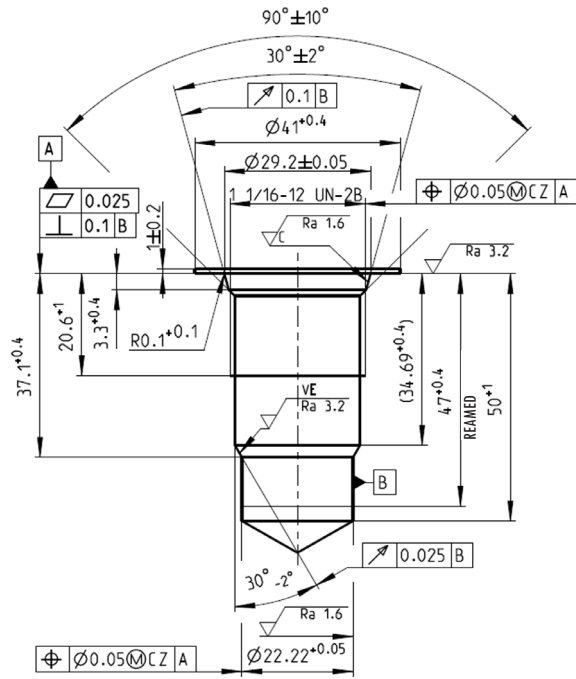
BPY3 - 379231

7/8-14UNF-2B

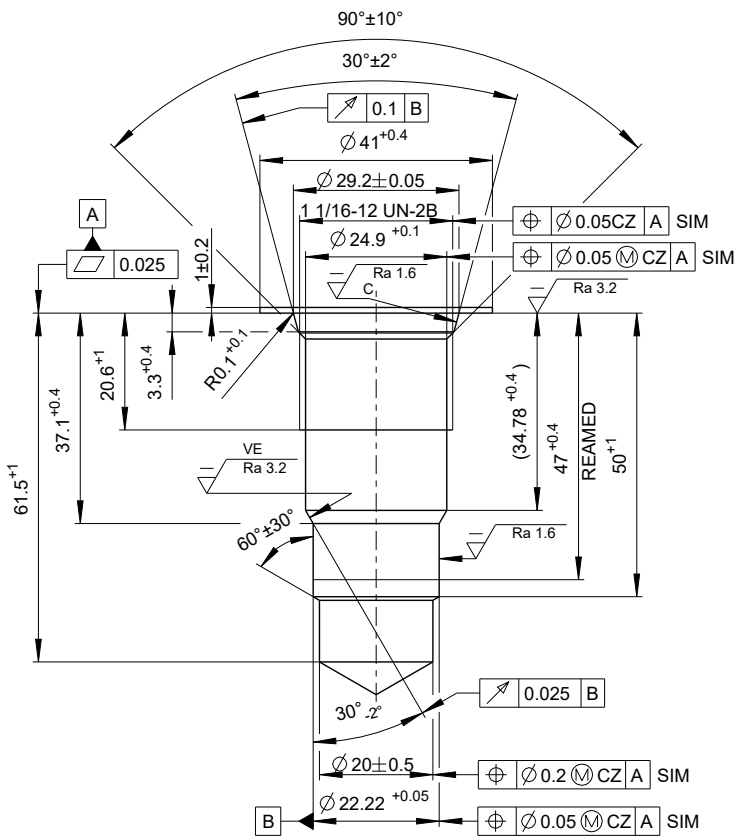
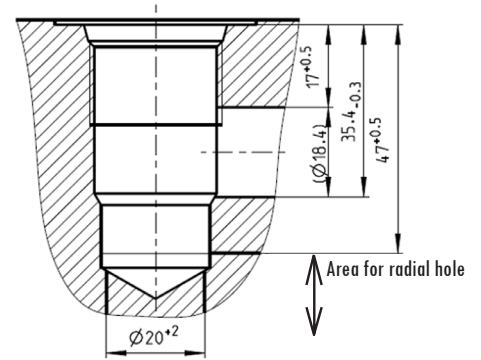


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-BPY3-B | 33538500 |
| Forming drill | SMT-BPY3-D | 41017400 |
| Forming reamer | SMT-BPY3-R | 41017800 |
| Tap drill | SMT-BPY3-T | 33696800 |

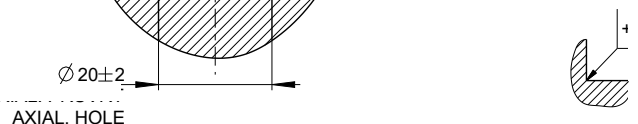
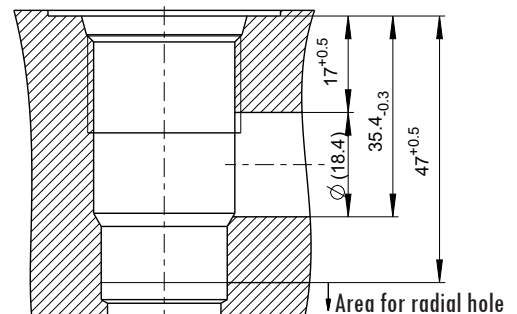


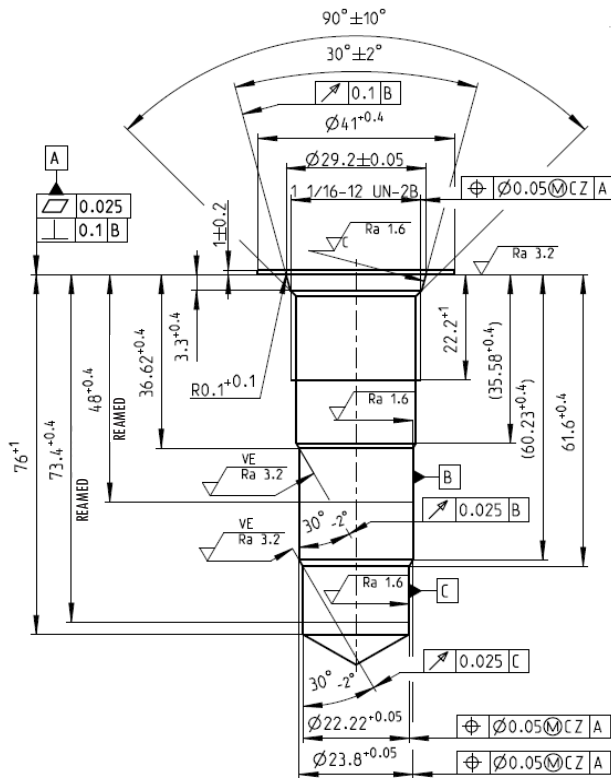


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Forming drill | SMT-C2-D | 40666100 |
| Forming reamer | SMT-C2-R | 40666300 |
| Tap drill | SMT-C3-T | 41671600 |

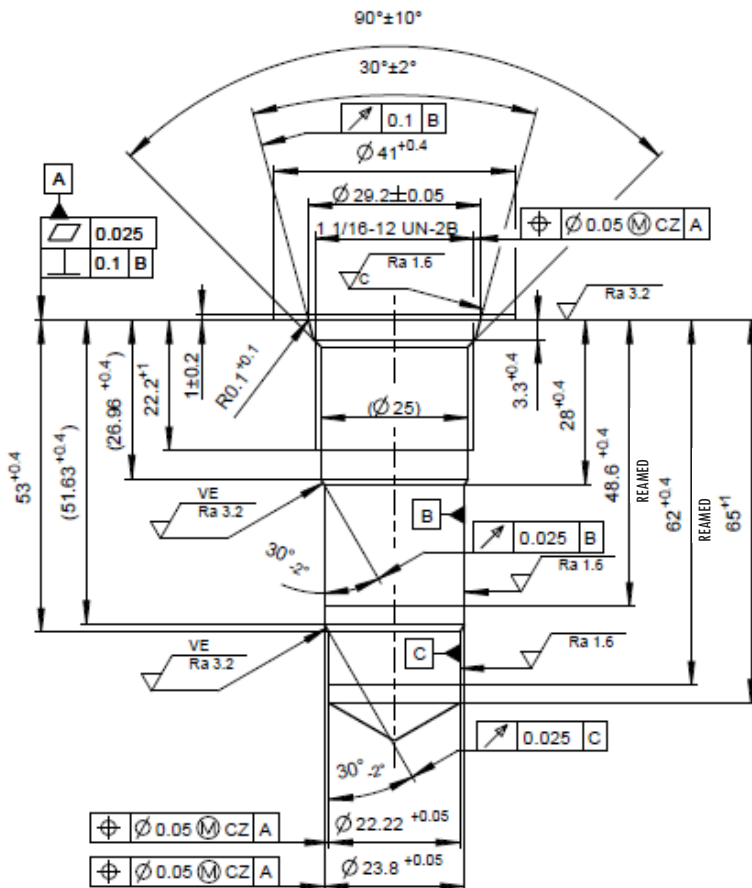
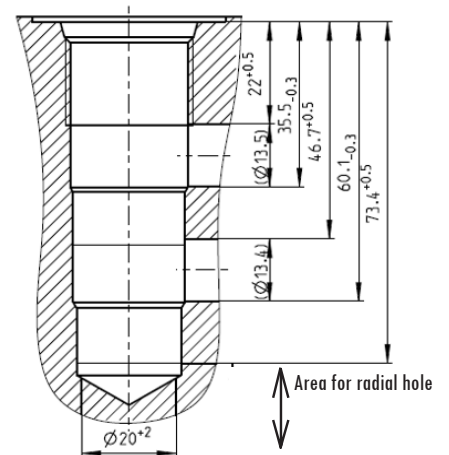


| Tool type | Ordering code | SAP No. |
|----------------|---------------|-----------|
| Drill | SMT-CA2-B | 433537700 |
| Forming drill | SMT-CA2-D | 40666100 |
| Forming reamer | SMT-CA2-R | 40666300 |
| Tap drill | SMT-CA2-T | 41671600 |

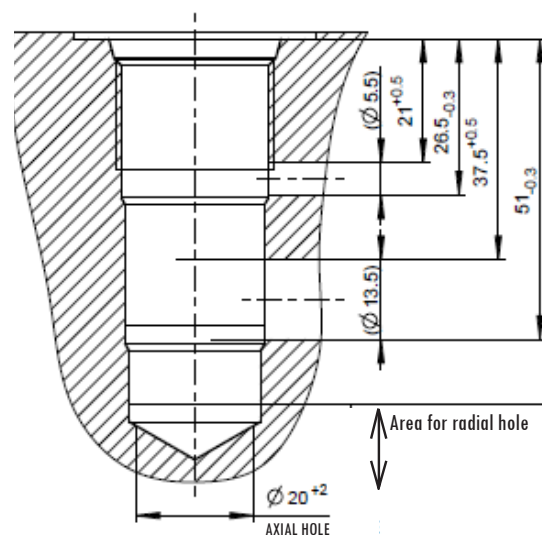


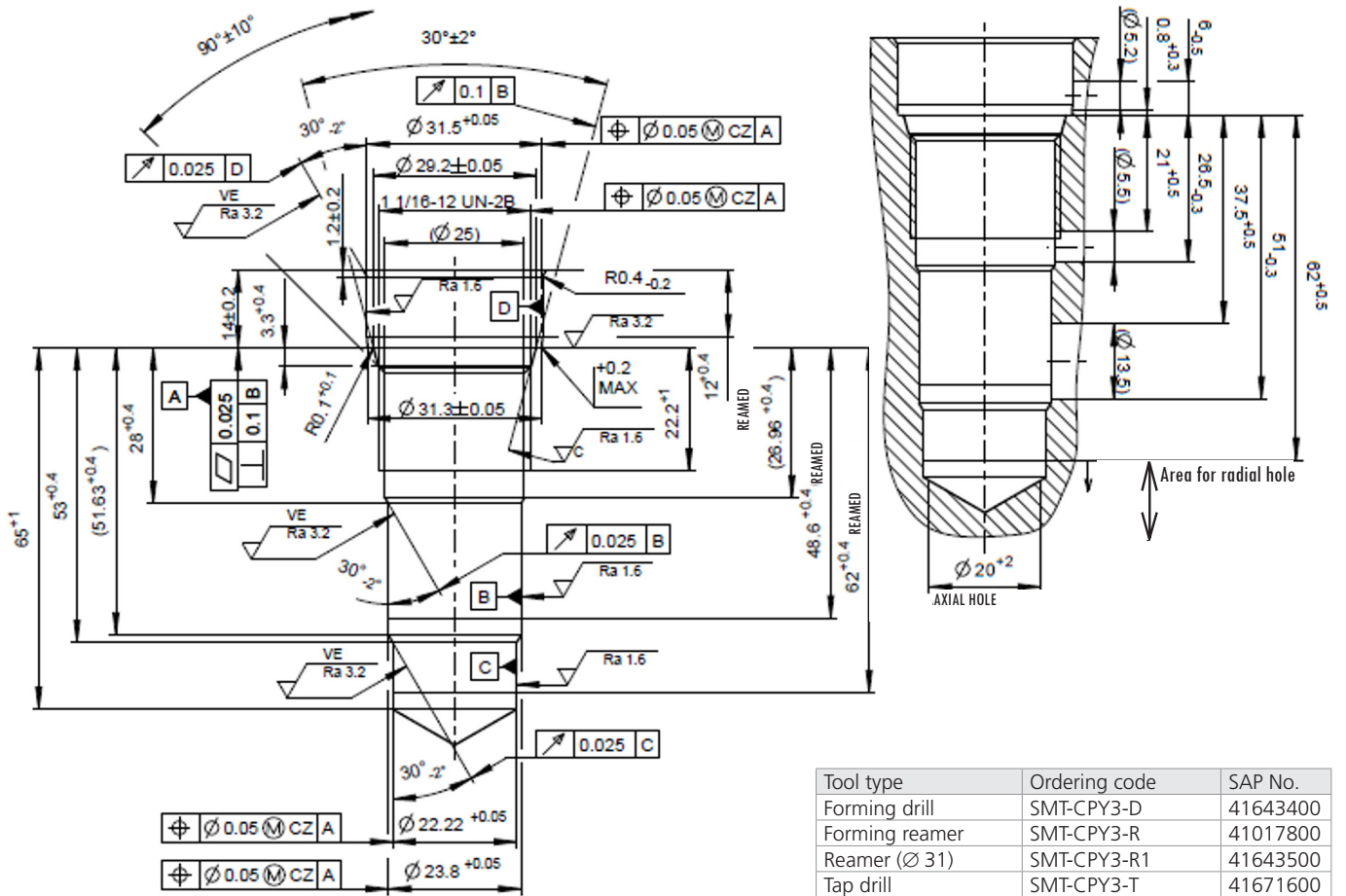


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-C3-B | 43362100 |
| Counterbore | SMT-C3-C | 43361600 |
| Forming drill | SMT-C3-D | 43361200 |
| Forming reamer | SMT-C3-R | 43360900 |
| Tap drill | SMT-C3-T | 41671600 |



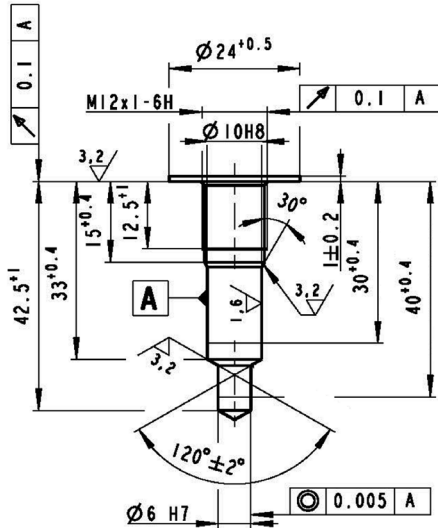
| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Forming drill | SMT-CP3-D | 41642700 |
| Forming reamer | SMT-CP3-R | 41642900 |
| Tap drill | SMT-CP3-T | 41671600 |
| Counterbore | SMT-C3-C | 43361600 |



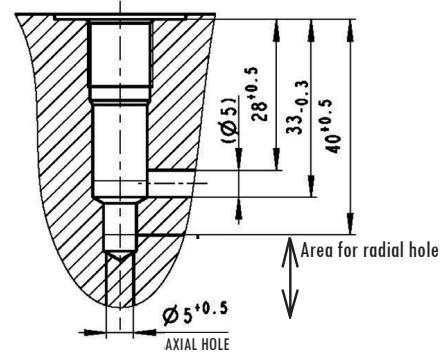


QC2 - 284410

M12x1

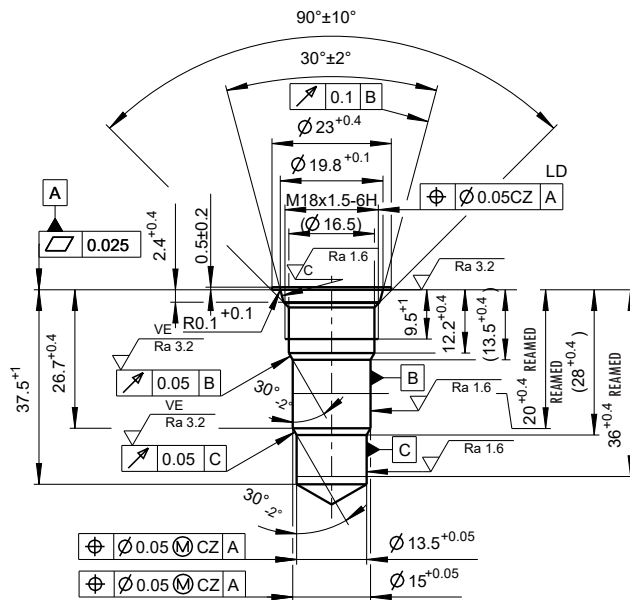


| Tool type | Ordering code | SAP No. |
|----------------|------------------|----------|
| Drill | SMT-QC2-B1 (Ø 5) | 33538100 |
| | SMT-QC2-B2 (Ø 9) | 33538200 |
| Counterbore | SMT-QC2-C | 33694800 |
| Forming drill | SMT-QC2-D | 33592700 |
| Forming reamer | SMT-QC2-R | 33607300 |
| Tap drill | SMT-QC2-T | 33697700 |

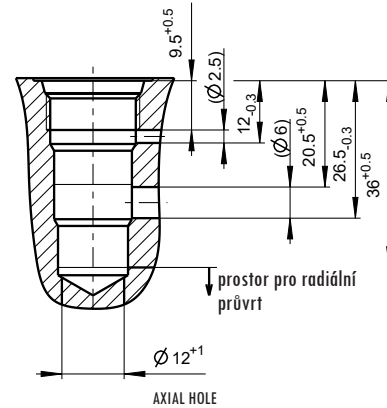


I3 - 376417

M18x1.5

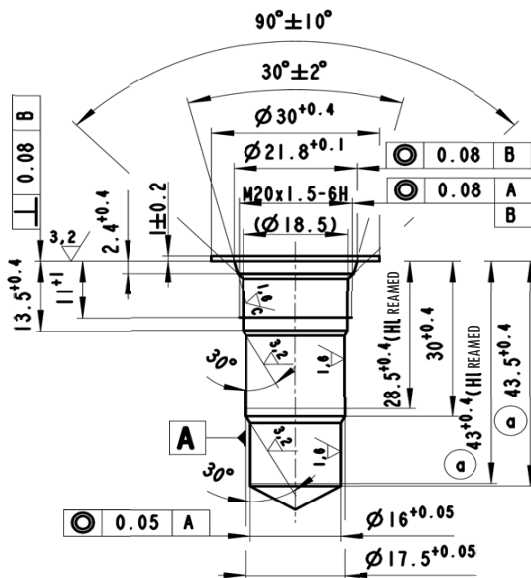


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-I3-B | 45468200 |
| Counterbore | SMT-I3-C | 45468500 |
| Forming drill | SMT-I3-D | 45468700 |
| Forming reamer | SMT-I3-R | 45468800 |
| Tap drill | SMT-I3-T | 45468900 |

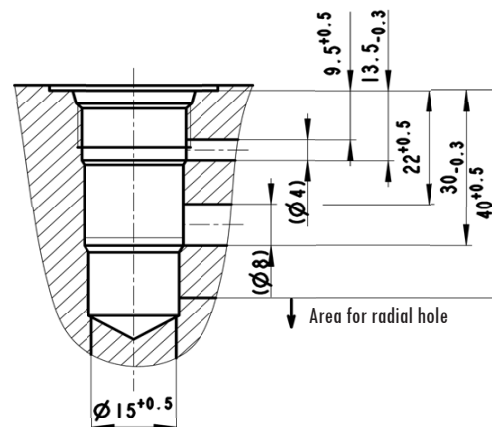


Q3 - 291248

M20x1.5

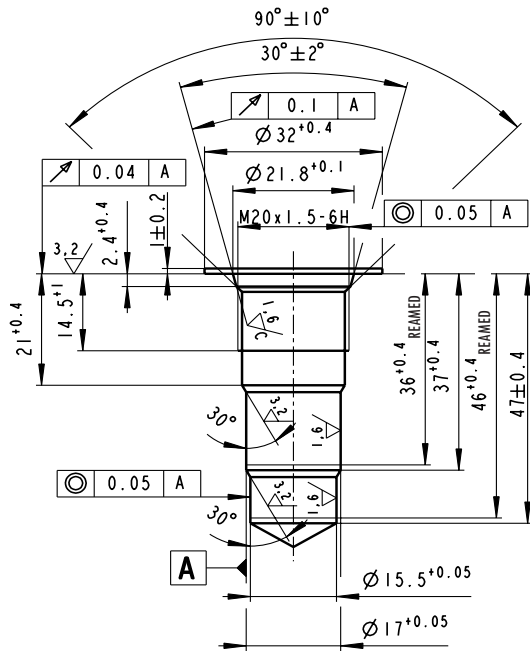


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-Q3-B | 40523200 |
| Forming drill | SMT-Q3-D | 40518000 |
| Forming reamer | SMT-Q3-R | 33607400 |
| Tap drill | SMT-Q3-T | 33697800 |

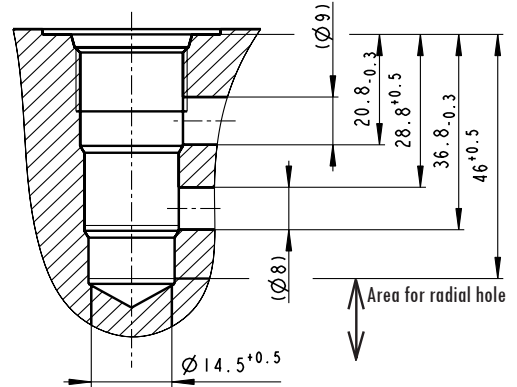


QE3 - 279404

M20x1.5

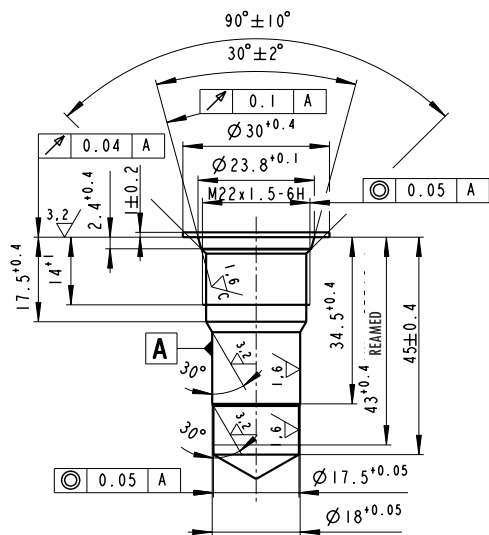


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-QE3-B | 33538400 |
| Forming drill | SMT-QE3-D | 40518300 |
| Forming reamer | SMT-QE3-R | 33607500 |
| Tap drill | SMT-QE3-T | 33697800 |

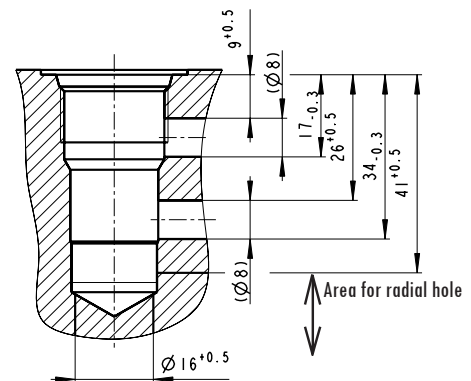


QF3 - 279405

M22x1.5

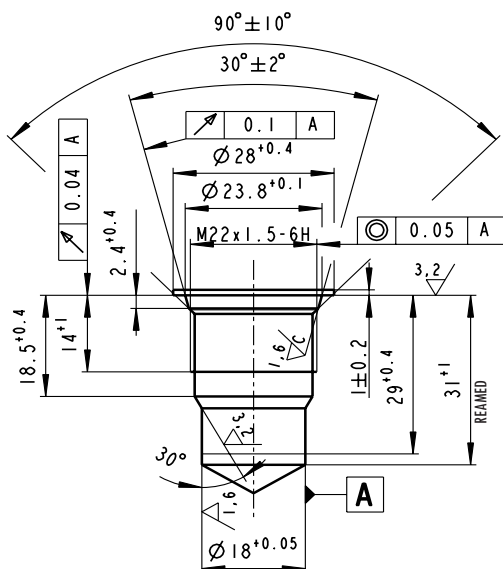


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-QF3-B | 33538500 |
| Forming drill | SMT-QF3-D | 40518200 |
| Forming reamer | SMT-QF3-R | 33607600 |
| Tap drill | SMT-QF3-T | 41131500 |

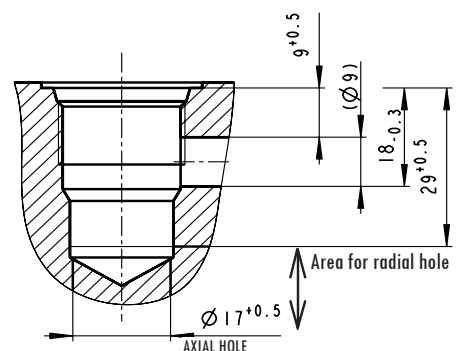


QG2 - 279406

M22x1.5

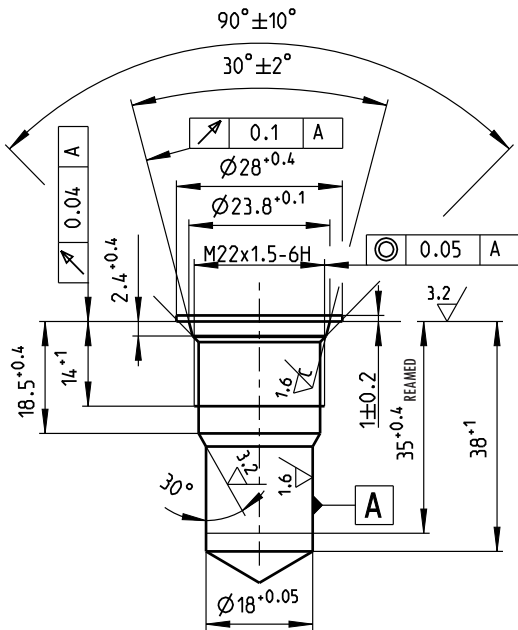


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-QG2-B | 41272800 |
| Forming drill | SMT-QG2-D | 40518100 |
| Forming reamer | SMT-QG2-R | 33607700 |
| Tap drill | SMT-QG2-T | 41131500 |

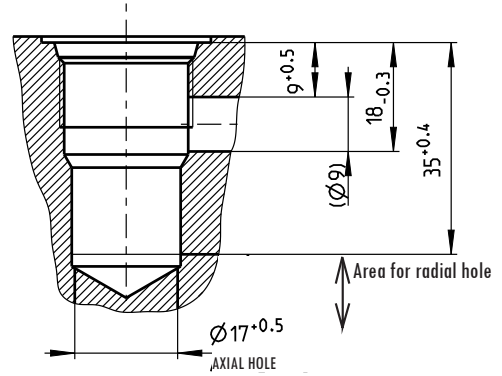


RA2 - 360372

M22x1.5

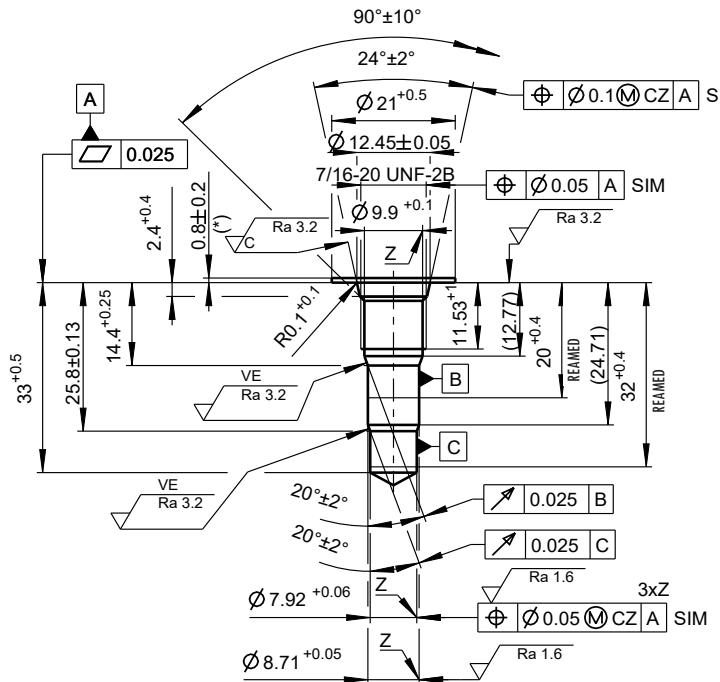


| Tool type | Ordering code | SAP No. |
|---------------------|---------------|----------|
| Drill | SMT-RA2-B | 41272800 |
| Forming drill | SMT-RA2-D | 41131200 |
| Forming reamer | SMT-RA2-R | 33607700 |
| Countersink conical | SMT-RA2-Z | 41131600 |
| Counterbore | SMT-RA2-C | 41131300 |
| Tap drill | SMT-RA2-T | 41131500 |

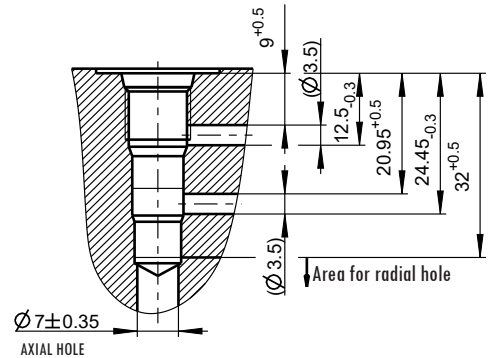


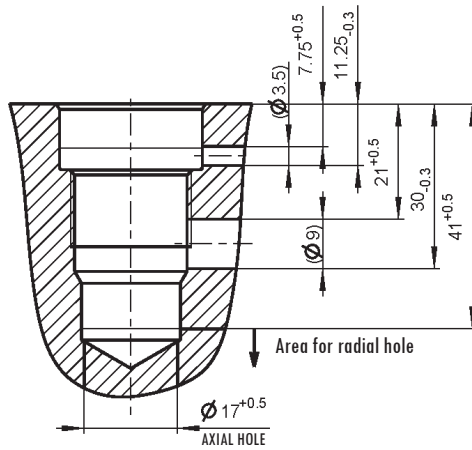
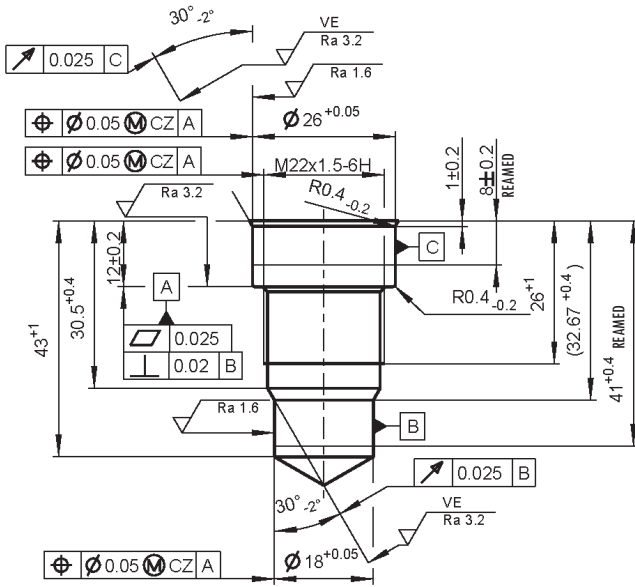
N3 - 415486

7/16-20 UNF -2B



| Tool type | Ordering code | SAP No. |
|------------|---------------|---------|
| On request | | |

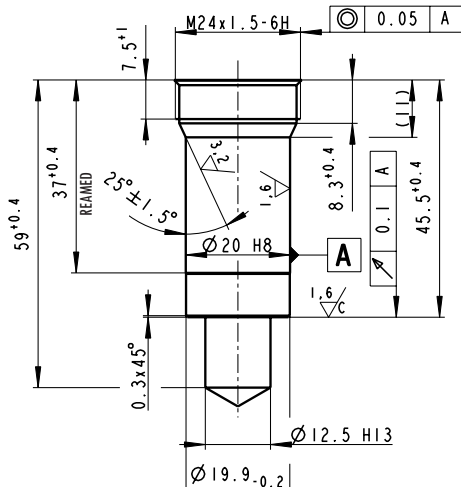




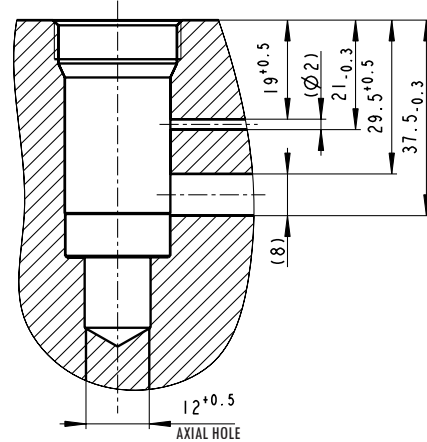
| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-QF2-B1 | 41272800 |
| | SMT-QF2-B2 | 41272900 |
| Forming drill | SMT-QF2-D | 41273000 |
| Forming reamer | SMT-QF2-R | 41273100 |
| Tap drill | SMT-QF2-T | 41131500 |

Q13 - 279412

M24x1.5

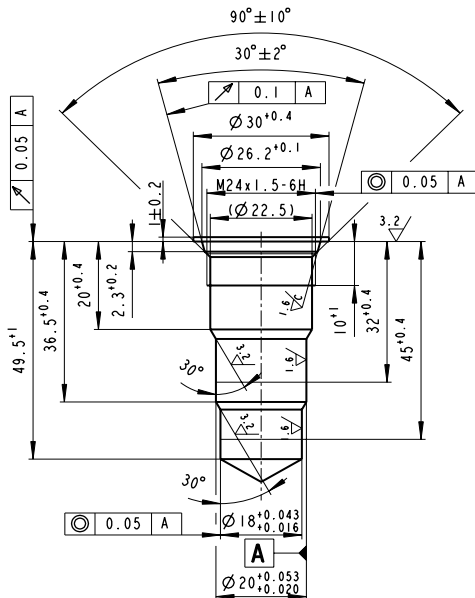


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-Q13-B | 33538800 |
| Forming drill | SMT-Q13-D | 33593400 |
| Forming reamer | SMT-Q13-R | 40523000 |

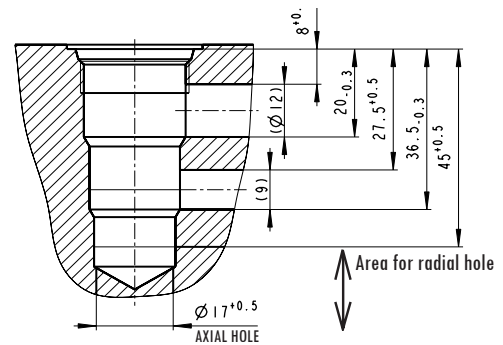


QJ3 - 281052

M24x1.5

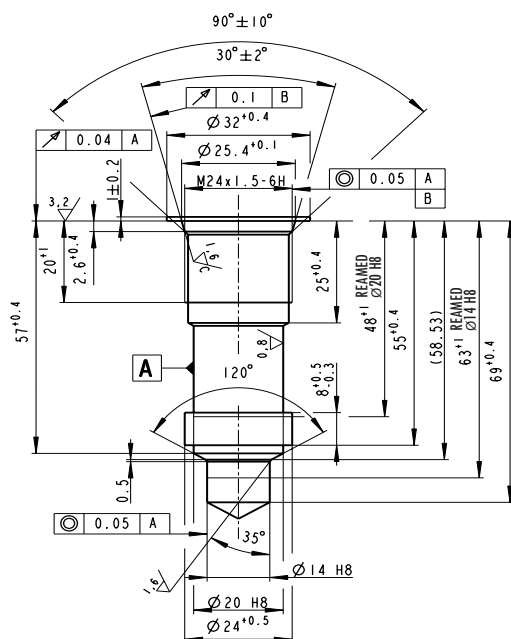


| Tool type | Ordering code | SAP No. |
|---------------------|------------------|----------|
| Drill | SMT-QJ3-B | 41272800 |
| Countersink conical | SMT-QJ3-Z | 33616200 |
| Counterbore | SMT-QJ3-C | 33695500 |
| Forming drill | SMT-QJ3-D | 33593500 |
| Forming reamer | SMT-QJ3-R1 - Ø20 | 33608100 |
| | SMT-QJ3-R2 - Ø18 | 33608200 |
| Tap drill | SMT-QJ3-T | 33698200 |

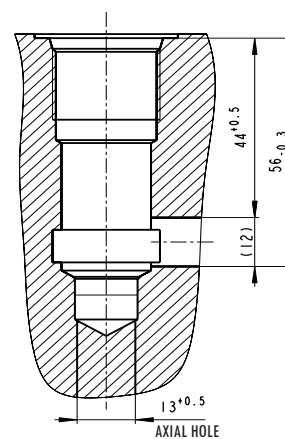


QH2 - 279411

M24x1.5

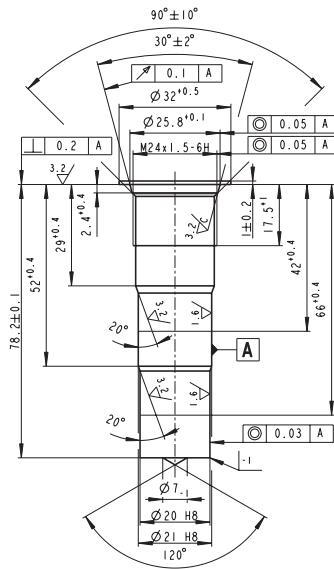


| Tool type | Ordering code | SAP No. |
|---------------------|---------------|----------|
| Drill | SMT-QH2-B | 33543600 |
| Countersink conical | SMT-QH2-Z | 33629100 |
| Counterbore | SMT-QH2-C | 33695600 |
| Forming drill | SMT-QH2-D | 33593600 |
| Forming reamer | SMT-QH2-R | 33608400 |
| Tap drill | SMT-QH2-T | 33698200 |

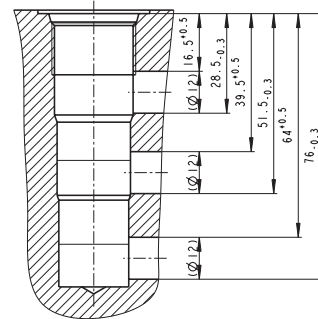


LA3 - 336467

M24x1.5

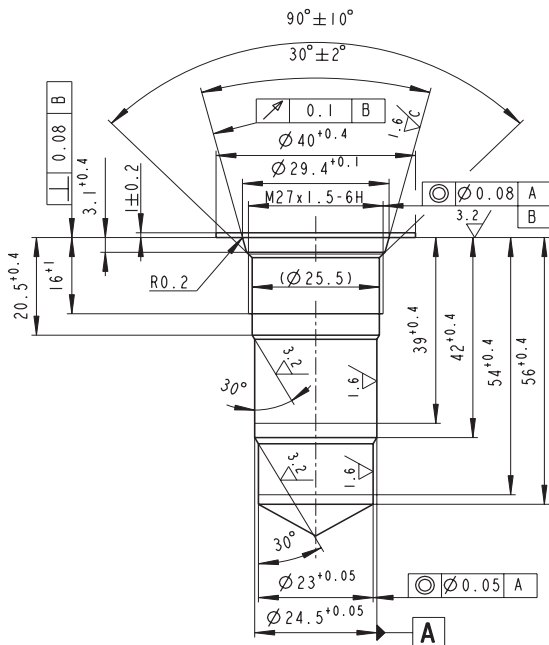


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-LA3-B | 33537900 |
| Counterbore | SMT-LA3-C | 33694600 |
| Forming drill | SMT-LA3-D | 33592500 |
| Forming reamer | SMT-LA3-R | 33607000 |
| Tap drill | SMT-LA3-T | 33698200 |

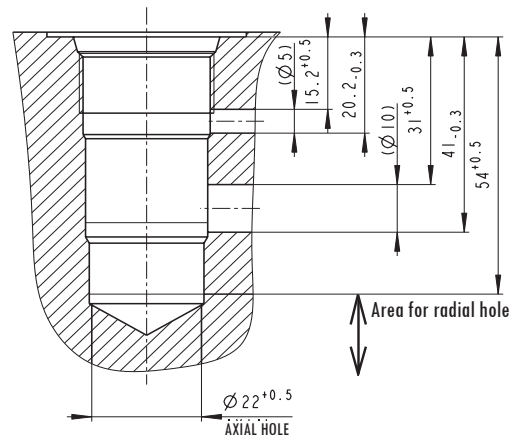


R3 - 303068

M27x1.5

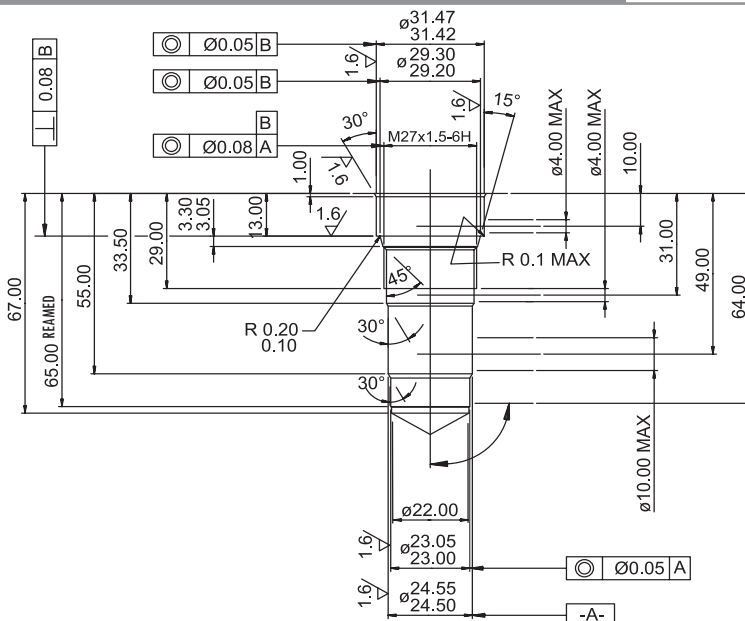


| Tool type | Ordering code | SAP No. |
|---------------------|-------------------------------|----------|
| Drill | SMT-R3-B | 33537600 |
| Countersink conical | SMT-R3-Z | 33613600 |
| Counterbore | SMT-R3-C | not used |
| Forming drill | SMT-R3-D | 33594200 |
| Forming reamer | SMT-R3-R1- $\varnothing 24.5$ | 33610400 |
| | SMT-R3-R2- $\varnothing 23$ | 33599200 |
| Tap drill | SMT-R3-T | 33698700 |



R4 - 303235

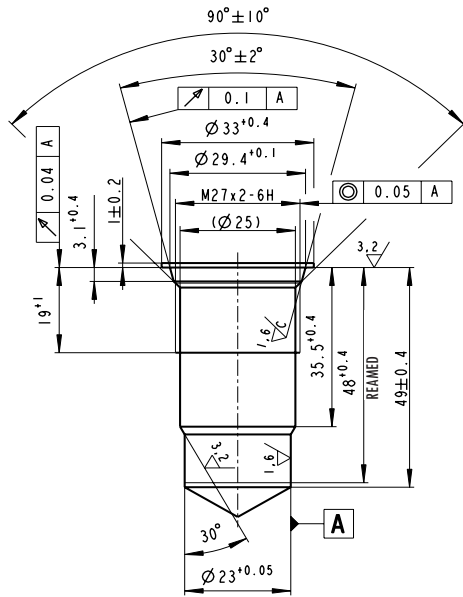
M27x1.5



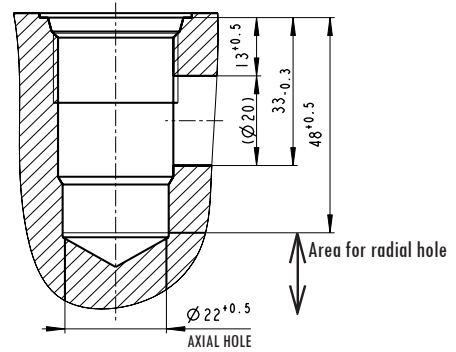
| Tool type | Ordering code | SAP No. |
|---------------------|--|----------|
| Drill | SMT-R4-B | 33537600 |
| Countersink conical | SMT-R4-Z | 33629400 |
| Forming drill | SMT-R4-D | 33594300 |
| Forming reamer | SMT-R4-R1- $\varnothing 31.4$ | 33610600 |
| | SMT-R4-R2 - $\varnothing 24.5$ - $\varnothing 23$ | 33734400 |
| Tap drill | SMT-R4-T | 33698700 |

QK2 - 279407

M27x2

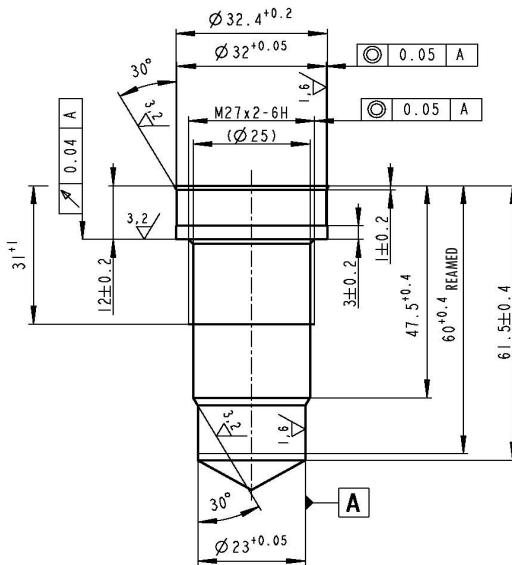


| Tool type | Ordering code | SAP No. |
|---------------------|---------------|----------|
| Drill | SMT-QK2-B | 33537600 |
| Countersink conical | SMT-QK2-Z | 33613600 |
| Counterbore | SMT-QK2-C | 33694400 |
| Forming drill | SMT-QK2-D | 33568300 |
| Forming reamer | SMT-QK2-R | 33599200 |
| Tap drill | SMT-QK2-T | 33697400 |

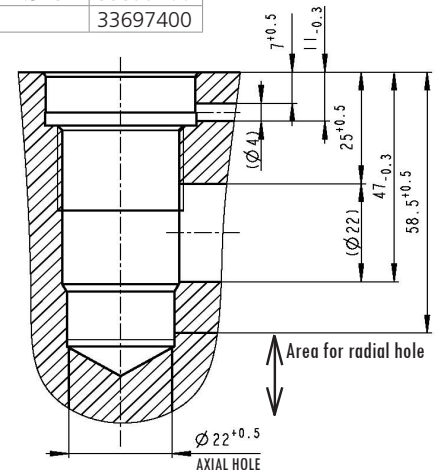


QL3 - 279408

M27x2

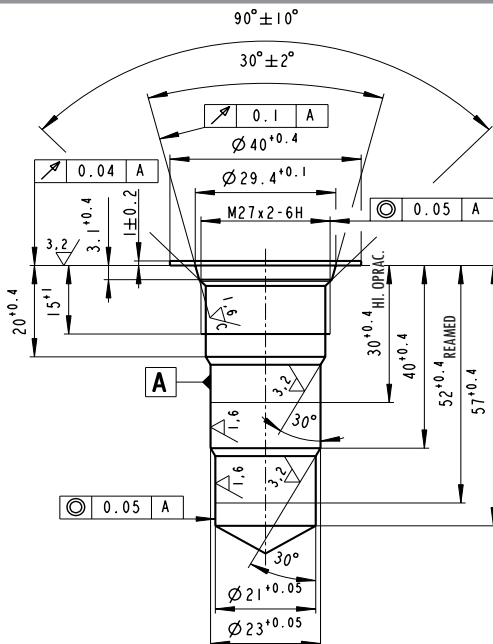


| Tool type | Ordering code | SAP No. |
|----------------|------------------|----------|
| Drill | SMT-QL3-B | 33537600 |
| Forming drill | SMT-QL3-D | 33592400 |
| Forming reamer | SMT-QL3-R1 - Ø32 | 33606700 |
| | SMT-QL3-R2 - Ø23 | 33599200 |
| Tap drill | SMT-QL3-T | 33697400 |

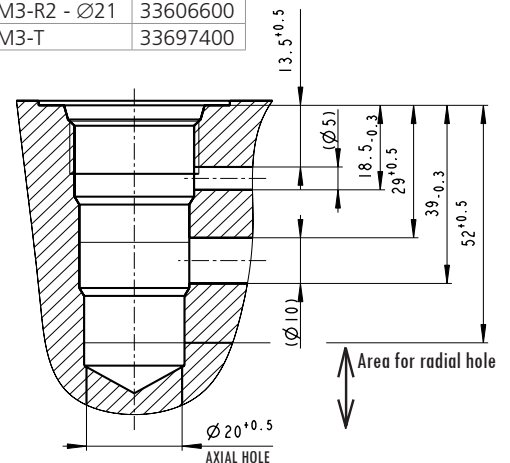


QM3 - 279409

M27x2

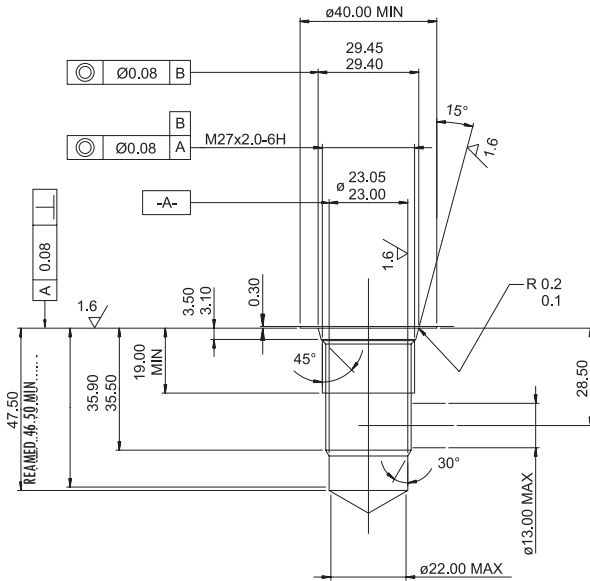


| Tool type | Ordering code | SAP No. |
|---------------------|------------------|----------|
| Drill | SMT-QM3-B | 33537700 |
| Countersink conical | SMT-QM3-Z | 33613600 |
| Counterbore | SMT-QM3-C | 33694500 |
| Forming drill | SMT-QM3-D | 33593700 |
| Forming reamer | SMT-QM3-R1 - Ø23 | 33599200 |
| | SMT-QM3-R2 - Ø21 | 33606600 |
| Tap drill | SMT-QM3-T | 33697400 |



K2

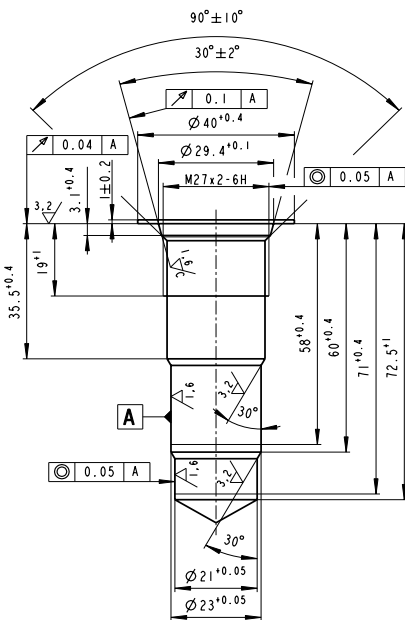
M27x2



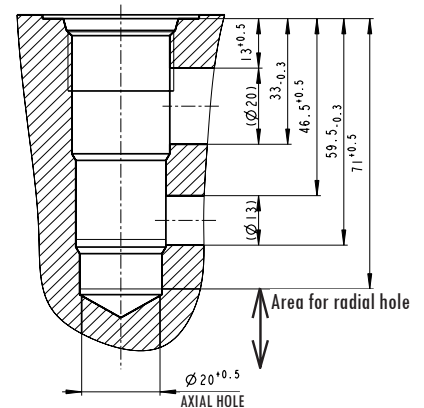
| Tool type | Ordering code | SAP No. |
|---------------------|---------------|----------|
| Drill | SMT-K2-B | 33537600 |
| Countersink conical | SMT-K2-Z | 33613600 |
| Counterbore | SMT-K2-C | 33694400 |
| Forming drill | SMT-K2-D | 33568300 |
| Forming reamer | SMT-K2-R | 33599200 |
| Tap drill | SMT-K2-T | 33697400 |

K3 - 281054

M27x2

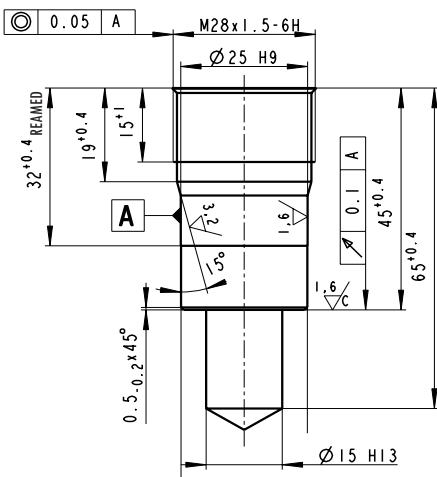


| Tool type | Ordering code | SAP No. |
|---------------------|-----------------|----------|
| Drill | SMT-K3-B | 33537700 |
| Countersink conical | SMT-K3-Z | 33613600 |
| Counterbore | SMT-K3-C | 33694500 |
| Forming drill | SMT-K3-D | 33592100 |
| Forming reamer | SMT-K3-R1 - Ø23 | 33599200 |
| | SMT-K3-R2 - Ø21 | 33606600 |
| Tap drill | SMT-K3-T | 33697400 |

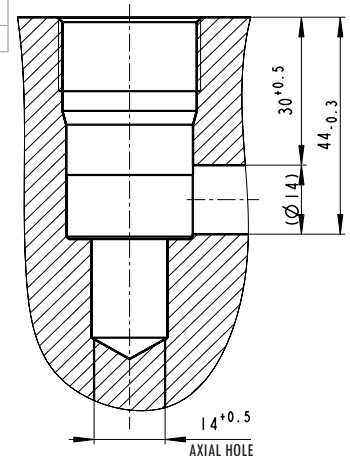


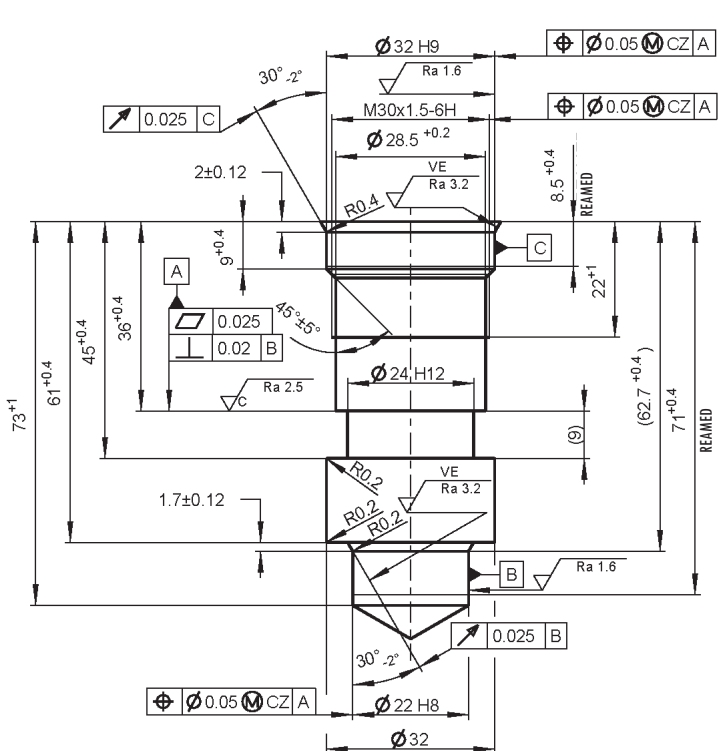
QP2 - 279413

M28x1.5

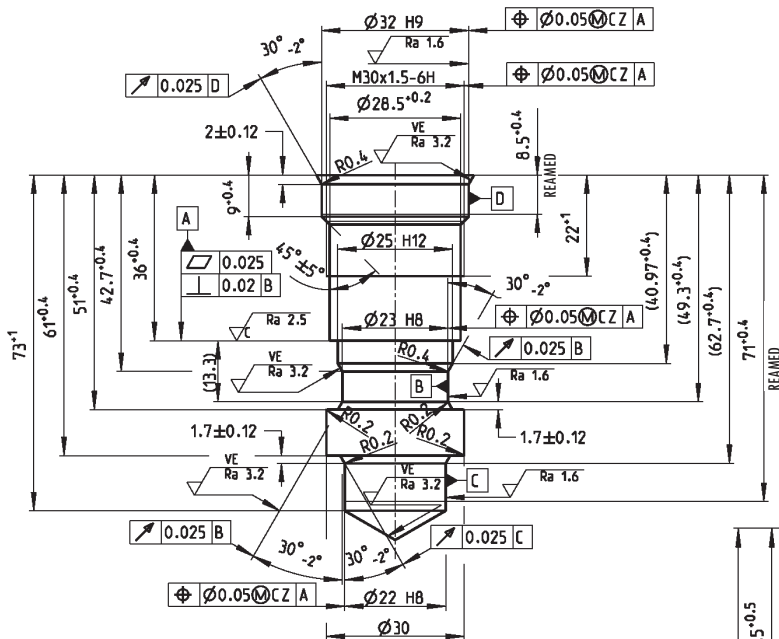
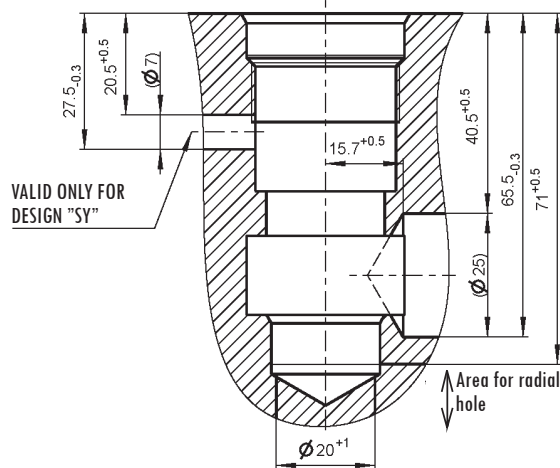


| Tool type | Ordering code | SAP No. |
|----------------|------------------|----------|
| Drill | SMT-QP2-B1 - Ø24 | 33547100 |
| | SMT-QP2-B2 - Ø15 | 40523200 |
| Counterbore | SMT-QP2-C | 33695800 |
| Forming drill | SMT-QP2-D | 33593900 |
| Forming reamer | SMT-QP2-R | 33609200 |
| Tap drill | SMT-QP2-T | 33698500 |

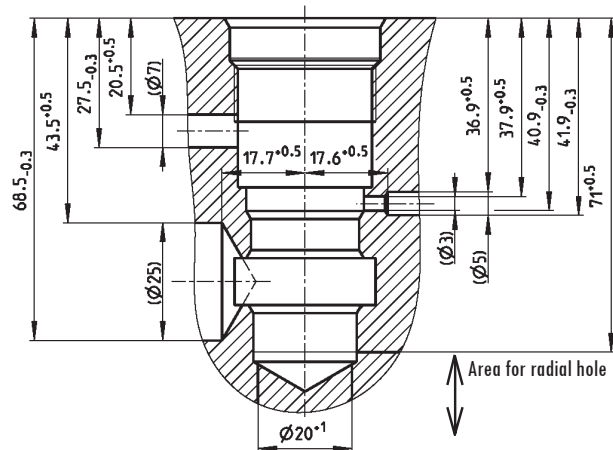




| Tool type | Ordering code | SAP No. |
|----------------|------------------|----------|
| Drill | SMT-RB2-B1 - Ø21 | 41199500 |
| Drill | SMT-RB2-B2 - Ø28 | 41199900 |
| Forming drill | SMT-RB2-D | 41200400 |
| Forming reamer | SMT-RB2-R | 41845500 |
| Tap drill | SMT-RB2-T | 41200300 |

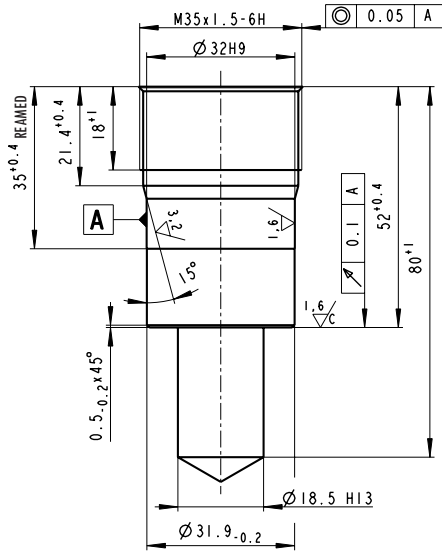


| Tool type | Ordering code | SAP No. |
|----------------|------------------|----------|
| Drill | SMT-RB3-B1 - Ø21 | 41199500 |
| Drill | SMT-RB3-B2 - Ø28 | 41199900 |
| Forming drill | SMT-RB3-D | 41845300 |
| Forming reamer | SMT-RB3-R | 41845500 |
| Tap drill | SMT-RB3-T | 41200300 |

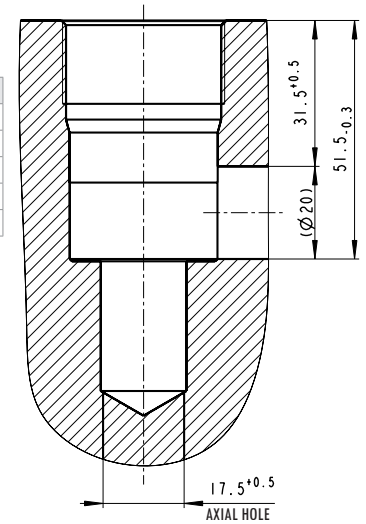


QT2 - 279415

M35x1.5

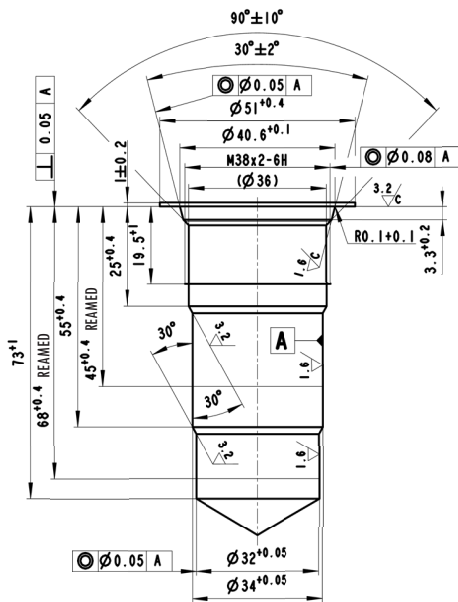


| Tool type | Ordering code | SAP No. |
|----------------|--------------------|----------|
| Drill | SMT-QT2-B1 - Ø31 | 40523100 |
| | SMT-QT2-B2 - Ø18.5 | 40523000 |
| Counterbore | SMT-QT2-C | 33695900 |
| Forming drill | SMT-QT2-D | 33594000 |
| Forming reamer | SMT-QT2-R | 33609700 |

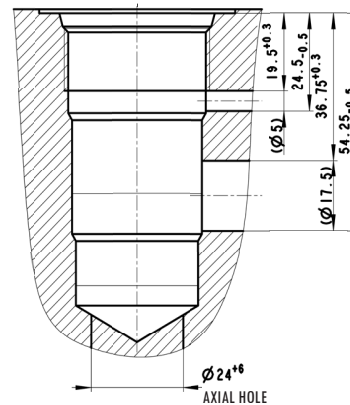


T3 - 303237

M38x2

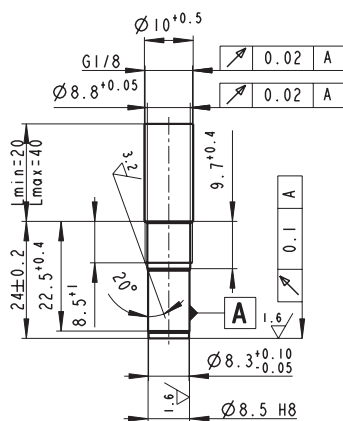


| Tool type | Ordering code | SAP No. |
|---------------------|---------------|----------|
| Drill | SMT-T3-B | 40523100 |
| Countersink conical | SMT-T3-Z | 33629700 |
| Counterbore | SMT-T3-C | 33696100 |
| Forming drill | SMT-T3-D | 33594600 |
| Forming reamer | SMT-T3-R | 33610800 |

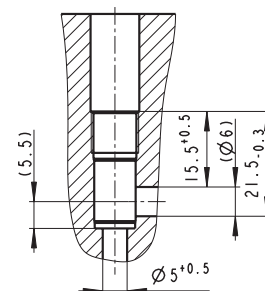


QY3 - 303227

G1/8

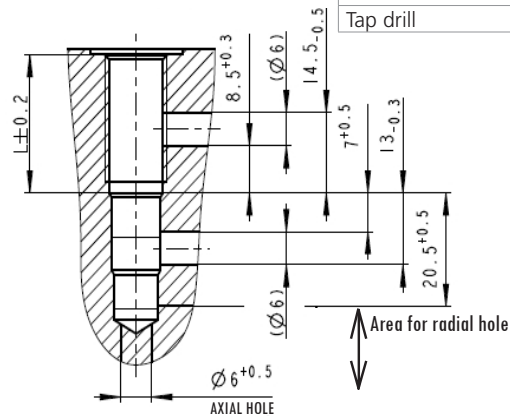
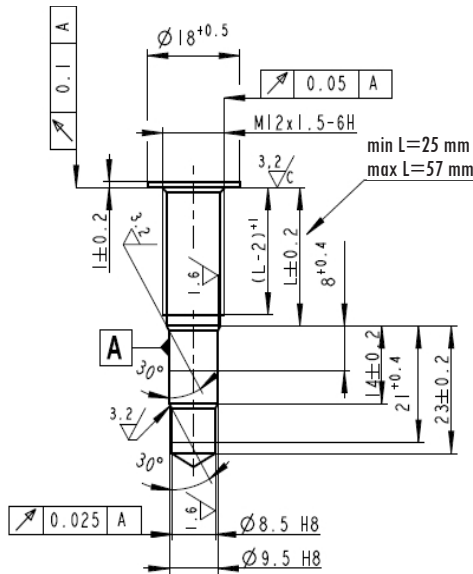


| Tool type | Ordering code | SAP No. |
|----------------|-------------------|----------|
| Drill | SMT-QY3-B1 - Ø7.5 | 40522900 |
| | SMT-QY3-B2 - Ø10 | 40522800 |
| Forming drill | SMT-QY3-D | 33594100 |
| Forming reamer | SMT-QY3-R - Ø8.5 | 33610300 |
| Tap drill | SMT-QY3-T | 33698600 |



QD3 - 279417

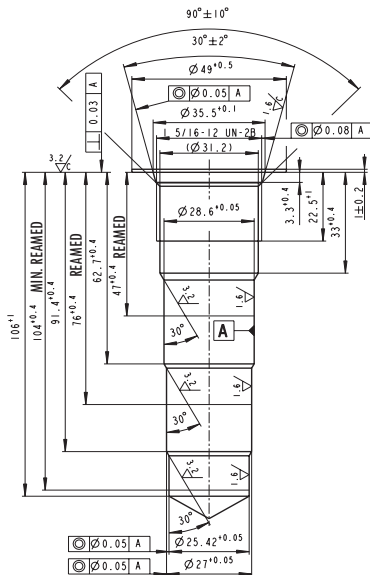
M12x1.5



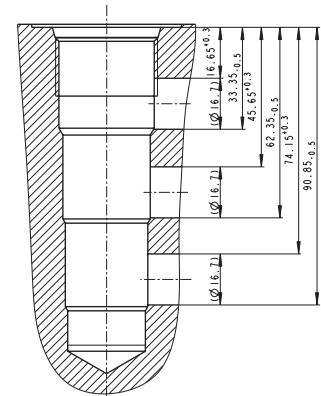
| Tool type | Ordering code | SAP No. |
|----------------|-------------------|----------|
| Drill | SMT-QD3-B | 34041500 |
| Counterbore | SMT-QD3-C | 34042400 |
| Forming drill | SMT-QD3-D | 34041800 |
| Forming reamer | SMT-QD3-R - Ø8.5 | 33610300 |
| | SMT-QD3-R2 - Ø9.5 | 34042100 |
| Tap drill | SMT-QD3-T | 34044700 |

D4 - 303234

1-5/16-12UN-2B

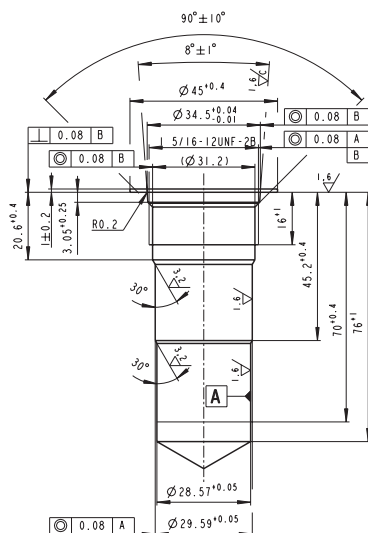


| Tool type | Ordering code | SAP No. |
|---------------------|-------------------|----------|
| Drill | SMT-D4-B | 33537500 |
| Countersink conical | SMT-D4-Z | 33613500 |
| Counterbore | SMT-D4-C | 33694200 |
| Forming drill | SMT-D4-D | 33568200 |
| Forming reamer | SMT-D4-R1 - Ø28.6 | 33598200 |
| | SMT-D4-R2 - Ø27 | 33598400 |
| | SMT-D4-R3 - Ø25.4 | 33598500 |
| Tap drill | SMT-D4-T | 33697100 |

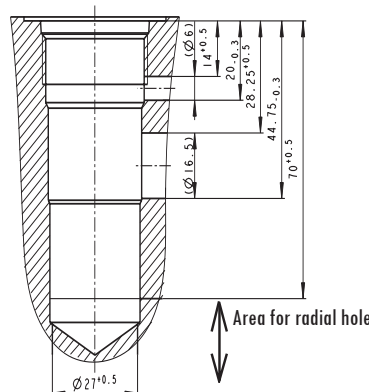


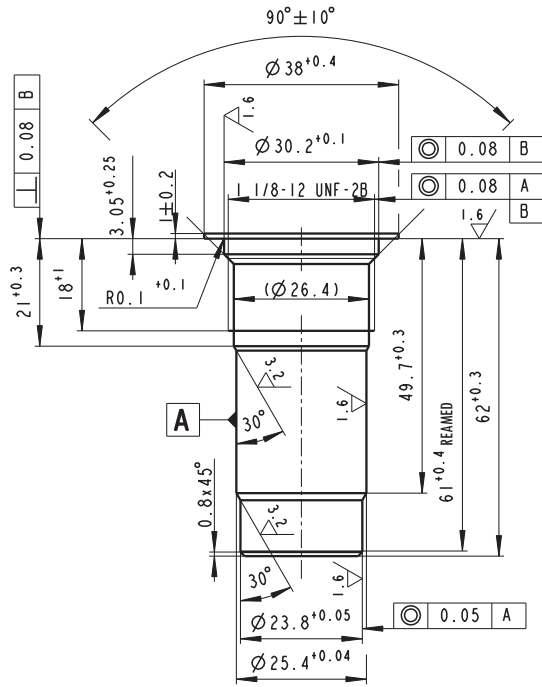
S3 - 291482

1-5/16-12UN-2B

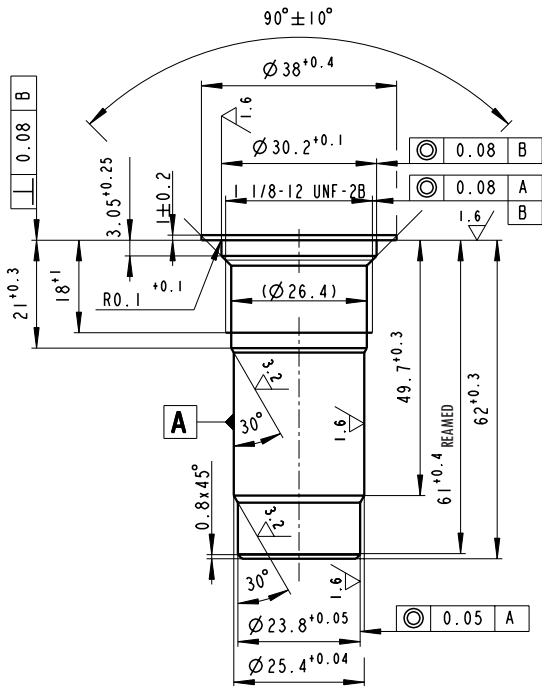
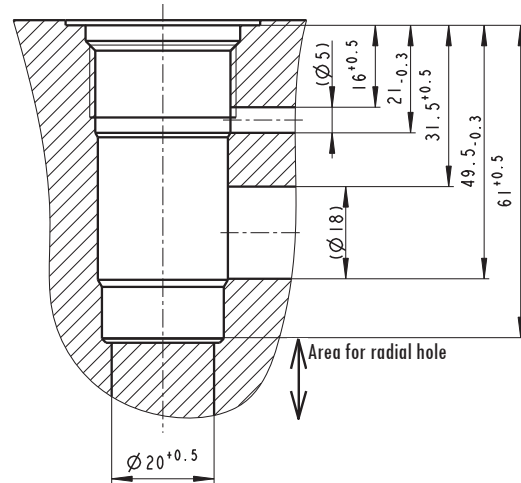


| Tool type | Ordering code | SAP No. |
|---------------------|---------------|----------|
| Drill | SMT-S3-B | 33548400 |
| Countersink conical | SMT-S3-Z | 33629500 |
| Counterbore | SMT-S3-C | 33696000 |
| Forming drill | SMT-S3-D | 33594500 |
| Forming reamer | SMT-S3-R | 33610700 |
| Tap drill | SMT-S3-T | 33697100 |

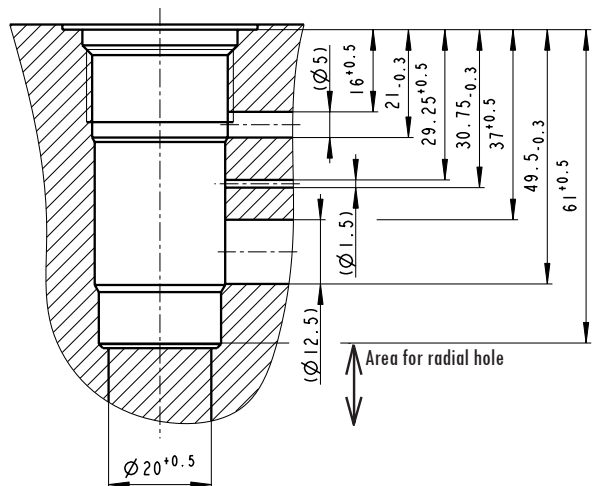


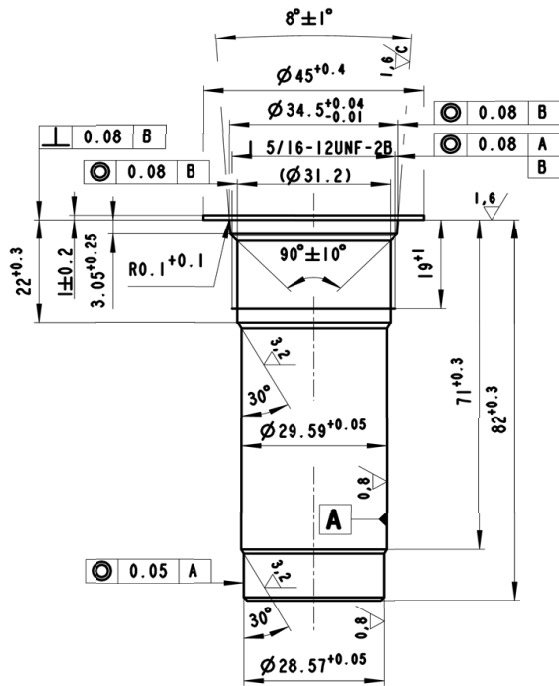


| Tool type | Ordering code | SAP No. |
|----------------|------------------|----------|
| Drill | SMT-U3-B | 33537700 |
| Counterbore | SMT-U3-C | 33696200 |
| Forming drill | SMT-U3-D | 33594700 |
| Forming reamer | SMT-U3-R1- Ø25.4 | 33611000 |
| | SMT-U3-R2- Ø23.8 | 33611100 |
| Tap drill | SMT-U3-T | 33699000 |

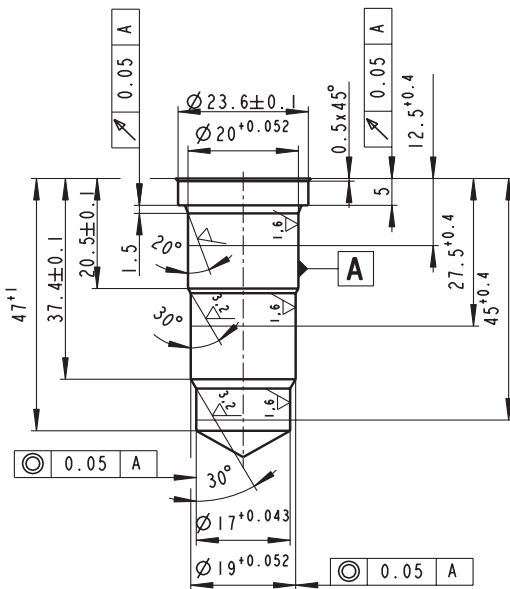
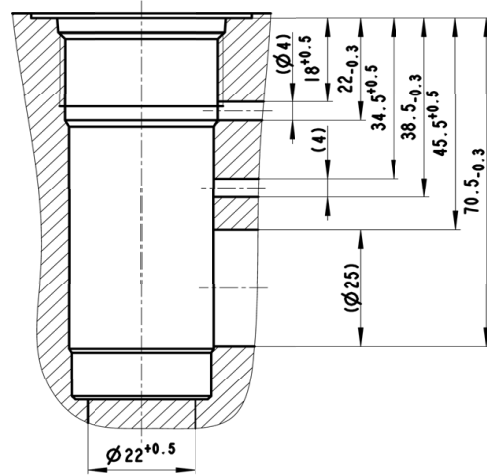


| Tool type | Ordering code | SAP No. |
|----------------|------------------|----------|
| Drill | SMT-U4-B | 33537700 |
| Counterbore | SMT-U4-C | 33696200 |
| Forming drill | SMT-U4-D | 33594700 |
| Forming reamer | SMT-U4-R1- Ø25.4 | 33611000 |
| | SMT-U4-R2- Ø23.8 | 33611100 |
| Tap drill | SMT-U4-T | 33699000 |

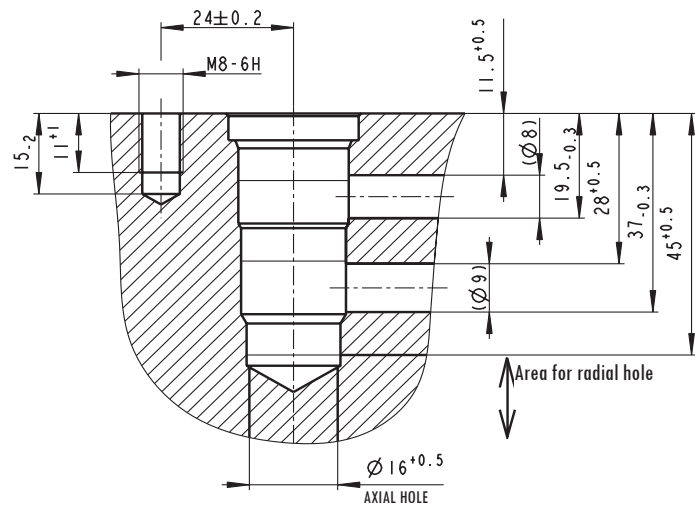




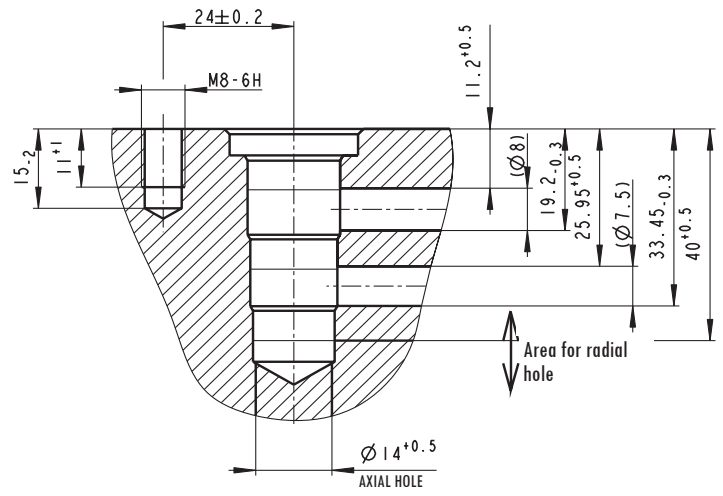
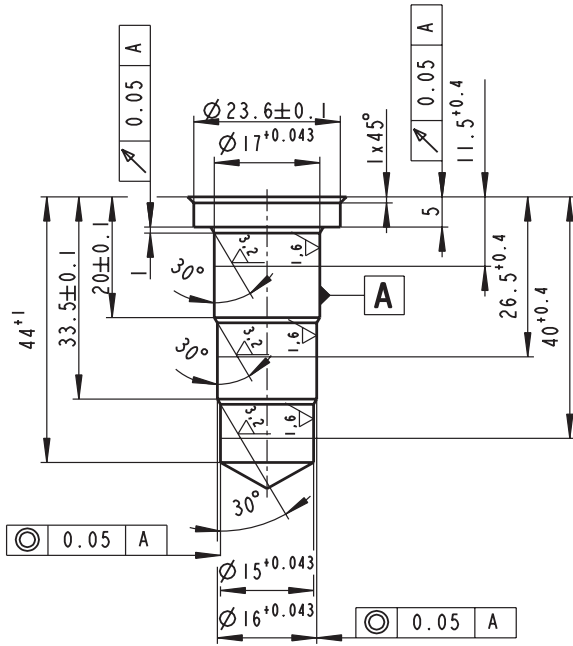
| Tool type | Ordering code | SAP No. |
|---------------------|---------------|----------|
| Drill | SMT-V4-B | 33549200 |
| Countersink conical | SMT-V4-Z | 33629500 |
| Counterbore | SMT-V4-C | 33696000 |
| Forming drill | SMT-V4-D | 33594900 |
| Forming reamer | SMT-V4-R | 33611200 |
| Tap drill | SMT-V4-T | 33697100 |



| Tool type | Ordering code | SAP No. |
|---------------------|---------------|----------|
| Drill | SMT-W3,X3-B | 33538500 |
| Countersink conical | SMT-W3,X3-Z | 33693800 |
| Forming drill | SMT-W3-X3-D | 33595000 |
| Forming reamer | SMT-W3,X3-R | 33611400 |

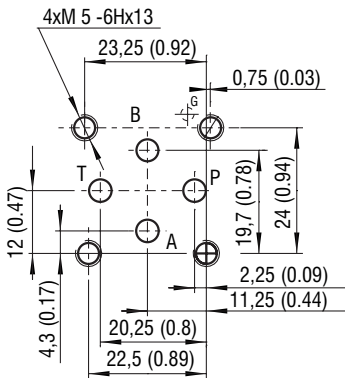


| Tool type | Ordering code | SAP No. |
|----------------|---------------|----------|
| Drill | SMT-Y3-B | 33549900 |
| Forming drill | SMT-Y3-D | 33595100 |
| Forming reamer | SMT-Y3-R | 33611800 |



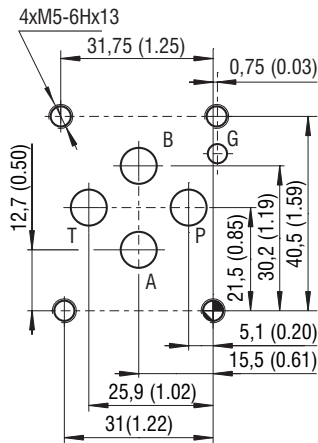
Montážní obrazec ISO 4401

Size 04 - ISO 4401-02-01-0-05



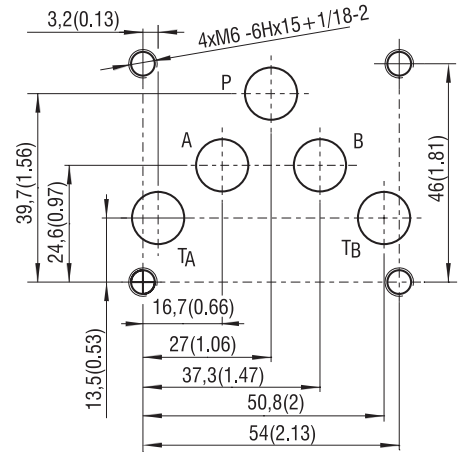
Ports P, A, B, T - max. $\varnothing 4.5$ mm (0.18 in)

Size 06 - ISO 4401-03-02-0-05



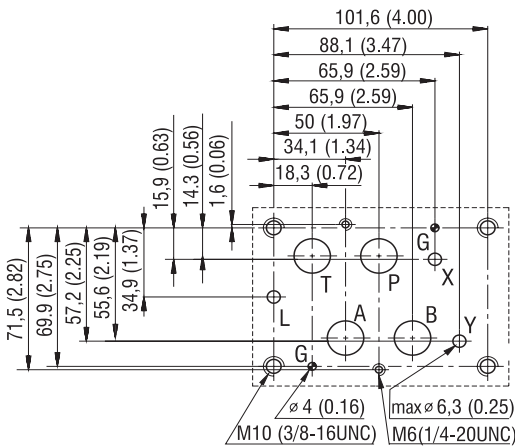
Ports P, A, B, T - max. $\varnothing 7.5$ mm (0.29 in)

Size 10 - ISO 4401-05-04-0-05

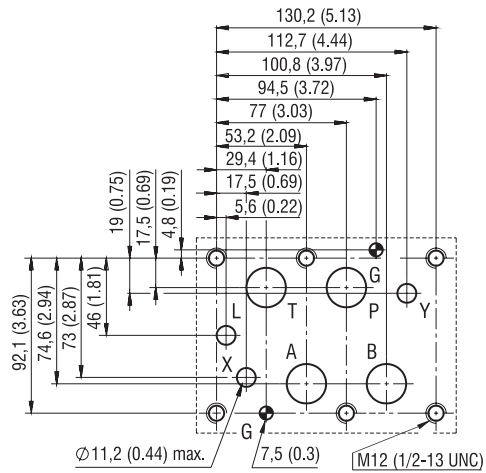


Ports P, A, B, T - max. $\varnothing 11.2$ mm (0.44 in)
Ports X, Y - max. $\varnothing 6.3$ mm (0.25 in)

Size 16 - ISO 4401-07-07-0-05

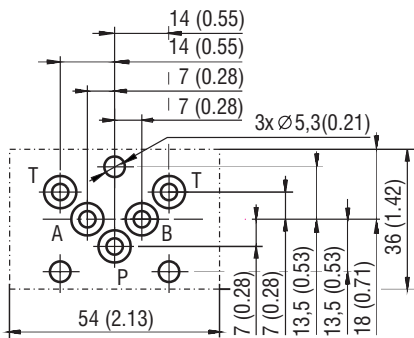


Size 25 - ISO 4401-08-08-0-05



Montážní obrazec - CETOP

Size 04 - CETOP-RP 121H



Size 04 - ISO 4401-AA-02-4-A
(DIN 24 340-A4)

