

**Z-PRO**  
*Ultimate Machine Tap Series*

# AUSP PIPE SERIES

Outstanding thread surface for pipe threads.



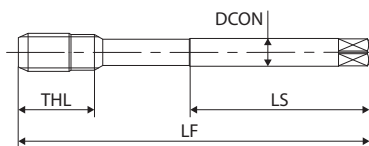
# AUSP G/Rp

Coated spiral fluted taps for parallel pipe threads



- The special flute design creates smoother chip ejection.
- The unique cutting edge geometry and the special coating produce excellent surface finish while achieving longer tool life.

## Dimensions and sizes



| Size       | AUSP G      |            | Size        | AUSP Rp     |            | Basic major Ø | LF (mm) | THL (mm) | LS (mm) | DCON (mm) | NOF (No. of flutes) |
|------------|-------------|------------|-------------|-------------|------------|---------------|---------|----------|---------|-----------|---------------------|
|            | TCTR (Tol.) | Code       |             | TCTR (Tol.) | Code       |               |         |          |         |           |                     |
| G 1/8 - 28 | P3          | SJG0020FET | Rp 1/8 - 28 | -           | SJRP020FET | 9.728         | 90      | 15       | 46      | 8         | 3                   |
| G 1/4 - 19 | P3.5        | SJG0040FET | Rp 1/4 - 19 | -           | SJRP040FET | 13.157        | 100     | 19       | 51      | 11        | 3                   |
| G 3/8 - 19 | P3.5        | SJG0060FET | Rp 3/8 - 19 | -           | SJRP060FET | 16.662        | 100     | 21       | 51      | 14        | 3                   |
| G 1/2 - 14 | P4          | SJG0080FET | Rp 1/2 - 14 | -           | SJRP080FET | 20.955        | 125     | 26       | 64      | 18        | 4                   |
| G 3/4 - 14 | P4          | SJG0120FET | Rp 3/4 - 14 | -           | SJRP120FET | 26.441        | 140     | 28       | 71      | 23        | 4                   |
| G 1" - 11  | P5          | SJG0160FET | Rp 1" - 11  | -           | SJRP160FET | 33.249        | 160     | 33       | 82      | 26        | 4                   |

AUSP G/Rp is different from G and Rp taps in overall length.  
Dimension of L and  $\ell$  of AUSP G/Rp is different from PF and PS taps.

## Parameters

| Work-materials                                     |                           | Vc (m/min) |
|--|---------------------------|------------|
| Stainless steel                                    | AlSi304, 1.4301           | -3         |
| Alloy steel  | 42CrMo4, 1.7225           | 5-15       |
| High carbon steels                                 | C45, 1.0503               | 5-15       |
| Middle carbon steels                               | C25-C45, 1.1158-1.0503    | 5-15       |
| Low carbon steels                                  | C22-St37-3, 1.0402-1.0037 | 5-15       |
| Aluminum alloy castings<br>Zinc alloy die castings | AlSi5Mg, AlSi10Mg, CuZn   | 5-15       |

## Process data

### AUSP G 1/4-19

|               |                   |
|---------------|-------------------|
| Work-material | St 44-2 - Fe 430B |
| Tapping speed | 5 m/min           |
| Machine       | Machining center  |
| Holder        | Fixed holder      |
| Tapping fluid | Water soluble     |

Smooth chip ejection



Excellent surface finish!



# AUSP Rc (PT)

Coated spiral fluted taps for taper pipe threads



- The unique cutting edge geometry and the special coating produce excellent surface finish while achieving longer tool life.

## Dimensions and sizes



| Size              | TCTR (Tol.) | Code       | Basic major $\varnothing$ | LF (mm) | THL (mm) | THLg (mm) | LS (mm) | DCON (mm) | NOF (No. of flutes) |
|-------------------|-------------|------------|---------------------------|---------|----------|-----------|---------|-----------|---------------------|
| Rc (PT) 1/16 - 28 | -           | SJRC010FET | 7.723                     | 90      | 14       | 10.1      | 60      | 8         | 3                   |
| Rc (PT) 1/8 - 28  | -           | SJRC020FET | 9.728                     | 90      | 15       | 10.1      | 46      | 8         | 3                   |
| Rc (PT) 1/4 - 19  | -           | SJRC040FET | 13.157                    | 100     | 19       | 15        | 51      | 11        | 3                   |
| Rc (PT) 3/8 - 19  | -           | SJRC060FET | 16.662                    | 100     | 21       | 15.4      | 51      | 14        | 3                   |
| Rc (PT) 1/2 - 14  | -           | SJRC080FET | 20.955                    | 125     | 26       | 20.5      | 64      | 18        | 4                   |
| Rc (PT) 3/4 - 14  | -           | SJRC120FET | 26.441                    | 140     | 28       | 21.8      | 71      | 23        | 4                   |
| Rc (PT) 1 - 11    | -           | SJRC160FET | 33.249                    | 160     | 33       | 26        | 82      | 26        | 4                   |

Please check new tap dimension of L/l/l<sub>g</sub>.

Length of L/l/l<sub>g</sub> of AUSP Rc is different from PT taps. Length of L of AUSP Rc (PT) is different from Rc taps. l<sub>g</sub> is basic diameter position.

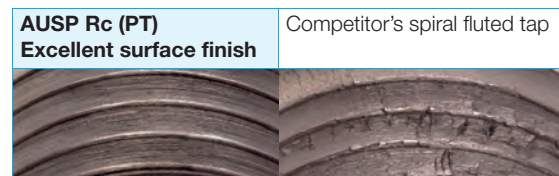
## Parameters

| Work-materials                                     |                           | Vc (m/min) |
|--|---------------------------|------------|
| Stainless steel                                    | AlSi304, 1.4301           | -3         |
| Alloy steel  | 42CrMo4, 1.7225           | -5         |
| High carbon steels                                 | C45, 1.0503               | -7         |
| Middle carbon steels                               | C25-C45, 1.1158-1.0503    | -7         |
| Low carbon steels                                  | C22-St37-3, 1.0402-1.0037 | -7         |
| Aluminum alloy castings<br>Zinc alloy die castings | AlSi5Mg, AlSi10Mg, CuZn   | -10        |

## Process data

### AUSP Rc (PT) 1/4-19

|               |                                     |
|---------------|-------------------------------------|
| Work-material | St 44-2 - Fe 430B                   |
| Tapping speed | 5 m/min                             |
| Machine       | Machining center                    |
| Holder        | Tap holder with tension/compression |
| Tapping fluid | Water soluble                       |



## WARNING

- Tools may shatter. Wear cover or eye glass to avoid injury during tapping.
- Tools may shatter. Use tools under the proper tapping condition.
- Never wear gloves during turning operations as the gloves may get caught with the tools.
- Wear safety shoes to avoid injuring yourself by the falling tools.
- On attaching tools to the machine, fasten firmly to avoid shattering and run-out.
- Fasten the workpieces firmly so that they never move during operation. Never use worn tools or damaged tools with chipping.
- Take a special care to fire trouble. High temperature during machining may cause fire.



JQA-QMA14664 JQA-EM3465

