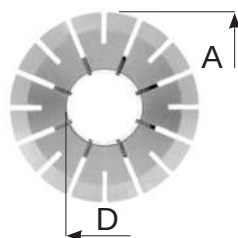
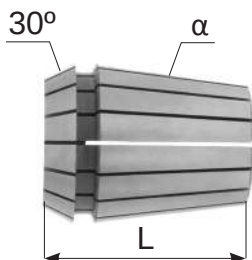




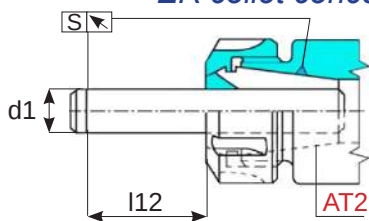
**PROGRAMA**

|                                                                                     |                                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|    | <b>UP</b><br> |    |    |    |    |    |
| PAG. 4-8                                                                            | PAG. 9-12                                                                                      | PAG. 13-16                                                                          | PAG. 17                                                                             | PAG. 18-19                                                                          | PAG. 20                                                                             | PAG. 21                                                                               |
|    |               |    |    |    |    |    |
| PAG. 22-23                                                                          | PAG. 24                                                                                        | PAG. 25                                                                             | PAG. 26                                                                             | PAG. 27                                                                             | PAG. 27-28                                                                          | PAG. 29                                                                               |
|    |               |    |    |    |    |    |
| PAG. 30                                                                             | PAG. 31                                                                                        | PAG. 32                                                                             | PAG. 33-34                                                                          | PAG. 35-38                                                                          | PAG. 38                                                                             | PAG. 39-42                                                                            |
|   |              |  |  |  |  |   |
| PAG. 42                                                                             | PAG. 43                                                                                        | PAG. 43                                                                             | PAG. 44                                                                             | PAG. 44                                                                             | PAG. 44                                                                             | PAG. 45                                                                               |
|  |             |  |  |  |  |  |
| PAG. 46                                                                             | PAG. 47                                                                                        | PAG. 48-49                                                                          | PAG. 50-51                                                                          | PAG. 52-59                                                                          | PAG. 54                                                                             | PAG. 60                                                                               |
|  |             |  |  |  |  |  |
| PAG. 61-71                                                                          | PAG. 63                                                                                        | PAG. 72-88                                                                          | PAG. 89                                                                             | PAG. 90-91                                                                          | PAG. 92                                                                             | PAG. 92                                                                               |



| <b>CODIGO<br/>CODE</b> | <b>D mm<br/>min-max</b> | <b>Campo de Apriete<br/>Clamping Range</b> | <b>A</b> | <b>α<br/>AT3</b> | <b>L</b> |
|------------------------|-------------------------|--------------------------------------------|----------|------------------|----------|
| <b>ER08 - 4004E</b>    | 1 ÷ 5                   | 0,5 mm                                     | 8,5      | 8°               | 13,5     |
| <b>ER11 - 4008E</b>    | 1 ÷ 7                   | 0,5 mm                                     | 11,5     | 8°               | 18       |
| <b>ER16 - 426E</b>     | 1 ÷ 10                  | 0,5 ÷ 1 mm                                 | 17       | 8°               | 27,5     |
| <b>ER20 - 428E</b>     | 1 ÷ 14                  | 0,5 ÷ 1 mm                                 | 21       | 8°               | 31,5     |
| <b>ER25 - 430E</b>     | 1 ÷ 20                  | 0,5 ÷ 1 mm                                 | 26       | 8°               | 34       |
| <b>ER32 - 470E</b>     | 2 ÷ 22                  | 0,5 ÷ 1 mm                                 | 33       | 8°               | 40       |
| <b>ER40 - 472E</b>     | 3 ÷ 30                  | 1 mm                                       | 41       | 8°               | 46       |
| <b>ER50 - 477E</b>     | 6 ÷ 34                  | 2 mm                                       | 52       | 8°               | 60       |
| <b>ER60 - 494E</b>     | 10 ÷ 40                 | 2 mm                                       | 61       | 10°              | 60       |

**Tolerancia de la rotación de la pinza ER**  
*ER collet concentricity specification*



| <b>d1 - h5</b> |               | <b>l12</b> | <b>S max <sup>(2)</sup></b> |           |
|----------------|---------------|------------|-----------------------------|-----------|
| <i>minimo</i>  | <i>máximo</i> |            | <i>Standard</i>             | <i>HP</i> |
| <i>mm</i>      | <i>mm</i>     | <i>mm</i>  | <i>mm</i>                   | <i>mm</i> |
| <b>1</b>       | 1.6           | 6          | 0.015                       | 0.010     |
| <b>1.6</b>     | 3             | 10         | 0.015                       | 0.010     |
| <b>3</b>       | 7             | 16         | 0.015                       | 0.010     |
| <b>7</b>       | 10            | 25         | 0.015                       | 0.010     |
| <b>10</b>      | 18            | 40         | 0.020                       | 0.015     |
| <b>18</b>      | 26            | 50         | 0.020                       | 0.015     |
| <b>26</b>      | 40            | 60         | 0.020                       | 0.015     |

<sup>(2)</sup> El valor de la concentricidad se controla sobre el Ø nominal de la pinza

<sup>(2)</sup> This runout accuracy is valid only for the nominal size of the collets

Pinza de precisión standard  
*Standard precision collets*

## ER8



0,010 ÷ 0,015

| REFERENCIA  | CAPACIDAD |   |     |
|-------------|-----------|---|-----|
| ER8. D. 1   | 1         | ÷ | 0.5 |
| ER8. D. 1.5 | 1.5       | ÷ | 1   |
| ER8. D. 2   | 2         | ÷ | 1.5 |
| ER8. D. 2.5 | 2.5       | ÷ | 2   |
| ER8. D. 3   | 3         | ÷ | 2.5 |
| ER8. D. 3.5 | 3.5       | ÷ | 3   |
| ER8. D. 4   | 4         | ÷ | 3.5 |
| ER8. D. 4.5 | 4.5       | ÷ | 4   |
| ER8. D. 5   | 5         | ÷ | 4.5 |

Kit de pinzas / *Kit in Tray*

### REFERENCIA

TY.ER8-9 **KIT** **FIG. 1**  
D. 1 . 1.5 . 2 . 2.5 . 3 . 3.5 . 4 . 4.5 . 5

**FIG. 1**



Estuche de pinzas / *Kit in Box*

### REFERENCIA

BX.ER8-9 **BOX** **FIG. 2**  
D. 1 . 1.5 . 2 . 2.5 . 3 . 3.5 . 4 . 4.5 . 5

**FIG. 2**



Pinza de precisión standard  
*Standard precision collets*

## ER11



0,010 ÷ 0,015

| REFERENCIA   | CAPACIDAD |   |     |
|--------------|-----------|---|-----|
| ER11. D. 1   | 1         | ÷ | 0.5 |
| ER11. D. 1.5 | 1.5       | ÷ | 1   |
| ER11. D. 2   | 2         | ÷ | 1.5 |
| ER11. D. 2.5 | 2.5       | ÷ | 2   |
| ER11. D. 3   | 3         | ÷ | 2.5 |
| ER11. D. 3.5 | 3.5       | ÷ | 3   |
| ER11. D. 4   | 4         | ÷ | 3.5 |
| ER11. D. 4.5 | 4.5       | ÷ | 4   |
| ER11. D. 5   | 5         | ÷ | 4.5 |
| ER11. D. 5.5 | 5.5       | ÷ | 5   |
| ER11. D. 6   | 6         | ÷ | 5.5 |
| ER11. D. 6.5 | 6.5       | ÷ | 6   |
| ER11. D. 7   | 7         | ÷ | 6.5 |

Kit de pinzas / *Kit in Tray*

### REFERENCIA

TY.ER11-13 **KIT** **FIG. 1**  
D. 1 . 1.5 . 2 . 2.5 . 3 . 3.5 . 4 . 4.5 . 5 . 5.5 . 6  
D. 6.5 . 7

**FIG. 1**



Estuche de pinzas / *Kit in Box*

### REFERENCIA

BX.ER11-13 **BOX** **FIG. 2**  
D. 1 . 1.5 . 2 . 2.5 . 3 . 3.5 . 4 . 4.5 . 5 . 5.5 . 6  
D. 6.5 . 7

**FIG. 2**



Pinza de precisión standard  
*Standard precision collets*

## ER16



0,010 ÷ 0,015

| REFERENCIA  | CAPACIDAD |
|-------------|-----------|
| ER16. D. 1  | 1 ÷ 0.5   |
| ER16. D. 2  | 2 ÷ 1     |
| ER16. D. 3  | 3 ÷ 2     |
| ER16. D. 4  | 4 ÷ 3     |
| ER16. D. 5  | 5 ÷ 4     |
| ER16. D. 6  | 6 ÷ 5     |
| ER16. D. 7  | 7 ÷ 6     |
| ER16. D. 8  | 8 ÷ 7     |
| ER16. D. 9  | 9 ÷ 8     |
| ER16. D. 10 | 10 ÷ 9    |

Kit de pinzas / *Kit in Tray*

### REFERENCIA

|                                           |     |        |
|-------------------------------------------|-----|--------|
| TY.ER16-10                                | KIT | FIG. 1 |
| D. 1 . 2 . 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 |     |        |

FIG. 1



Estuche de pinzas / *Kit in Box*

### REFERENCIA

|                                           |     |        |
|-------------------------------------------|-----|--------|
| BX.ER16-10                                | BOX | FIG. 2 |
| D. 1 . 2 . 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 |     |        |

FIG. 2



Pinza de precisión standard  
*Standard precision collets*

## ER20



0,010 ÷ 0,015

| REFERENCIA  | CAPACIDAD |
|-------------|-----------|
| ER20. D. 1  | 1 ÷ 0.5   |
| ER20. D. 2  | 2 ÷ 1     |
| ER20. D. 3  | 3 ÷ 2     |
| ER20. D. 4  | 4 ÷ 3     |
| ER20. D. 5  | 5 ÷ 4     |
| ER20. D. 6  | 6 ÷ 5     |
| ER20. D. 7  | 7 ÷ 6     |
| ER20. D. 8  | 8 ÷ 7     |
| ER20. D. 9  | 9 ÷ 8     |
| ER20. D. 10 | 10 ÷ 9    |
| ER20. D. 11 | 11 ÷ 10   |
| ER20. D. 12 | 12 ÷ 11   |
| ER20. D. 13 | 13 ÷ 12   |
| ER20. D. 14 | 14 ÷ 13   |

Kit de pinzas / *Kit in Tray*

### REFERENCIA

|                                                      |     |        |
|------------------------------------------------------|-----|--------|
| TY.ER20-12                                           | KIT | FIG. 1 |
| D. 2 . 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 |     |        |

FIG. 1



Estuche de pinzas / *Kit in Box*

### REFERENCIA

|                                                      |     |        |
|------------------------------------------------------|-----|--------|
| BX.ER20-12                                           | BOX | FIG. 2 |
| D. 2 . 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 |     |        |

FIG. 2



Pinza de precisión standard  
Standard precision collets

## ER25



0,010 ÷ 0,015

| REFERENCIA  | CAPACIDAD |   |     |
|-------------|-----------|---|-----|
| ER25. D. 1  | 1         | ÷ | 0.5 |
| ER25. D. 2  | 2         | ÷ | 1   |
| ER25. D. 3  | 3         | ÷ | 2   |
| ER25. D. 4  | 4         | ÷ | 3   |
| ER25. D. 5  | 5         | ÷ | 4   |
| ER25. D. 6  | 6         | ÷ | 5   |
| ER25. D. 7  | 7         | ÷ | 6   |
| ER25. D. 8  | 8         | ÷ | 7   |
| ER25. D. 9  | 9         | ÷ | 8   |
| ER25. D. 10 | 10        | ÷ | 9   |
| ER25. D. 11 | 11        | ÷ | 10  |
| ER25. D. 12 | 12        | ÷ | 11  |
| ER25. D. 13 | 13        | ÷ | 12  |
| ER25. D. 14 | 14        | ÷ | 13  |
| ER25. D. 15 | 15        | ÷ | 14  |
| ER25. D. 16 | 16        | ÷ | 15  |
| ER25. D. 17 | 17        | ÷ | 16  |
| ER25. D. 18 | 18        | ÷ | 17  |
| ER25. D. 19 | 19        | ÷ | 18  |
| ER25. D. 20 | 20        | ÷ | 19  |

Kit de pinzas / Kit in Tray

| REFERENCIA                  |     |        |
|-----------------------------|-----|--------|
| TY.ER25-6                   | KIT | FIG. 1 |
| D. 4 . 6 . 8 . 10 . 12 . 16 |     |        |

Estuche de pinzas / Kit in Box

| REFERENCIA                                                          |     |        |
|---------------------------------------------------------------------|-----|--------|
| TY.ER25-15                                                          | KIT | FIG. 1 |
| BX.ER25-15                                                          | BOX | FIG. 2 |
| D. 2 . 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 . 14 . 15 . 16 |     |        |



Pinza de precisión standard  
Standard precision collets

## ER32



0,010 ÷ 0,015

| REFERENCIA  | CAPACIDAD |   |     |
|-------------|-----------|---|-----|
| ER32. D. 2  | 2         | ÷ | 1.5 |
| ER32. D. 3  | 3         | ÷ | 2   |
| ER32. D. 4  | 4         | ÷ | 3   |
| ER32. D. 5  | 5         | ÷ | 4   |
| ER32. D. 6  | 6         | ÷ | 5   |
| ER32. D. 7  | 7         | ÷ | 6   |
| ER32. D. 8  | 8         | ÷ | 7   |
| ER32. D. 9  | 9         | ÷ | 8   |
| ER32. D. 10 | 10        | ÷ | 9   |
| ER32. D. 11 | 11        | ÷ | 10  |
| ER32. D. 12 | 12        | ÷ | 11  |
| ER32. D. 13 | 13        | ÷ | 12  |
| ER32. D. 14 | 14        | ÷ | 13  |
| ER32. D. 15 | 15        | ÷ | 14  |
| ER32. D. 16 | 16        | ÷ | 15  |
| ER32. D. 17 | 17        | ÷ | 16  |
| ER32. D. 18 | 18        | ÷ | 17  |
| ER32. D. 19 | 19        | ÷ | 18  |
| ER32. D. 20 | 20        | ÷ | 19  |
| ER32. D. 21 | 21        | ÷ | 20  |
| ER32. D. 22 | 22        | ÷ | 21  |

Kit de pinzas / Kit in Tray

| REFERENCIA                   |     |        |
|------------------------------|-----|--------|
| TY.ER32-6                    | KIT | FIG. 1 |
| D. 6 . 8 . 10 . 12 . 16 . 20 |     |        |

Estuche de pinzas / Kit in Box

| REFERENCIA                                                                          |     |        |
|-------------------------------------------------------------------------------------|-----|--------|
| TY.ER32-18                                                                          | KIT | FIG. 1 |
| BX.ER32-18                                                                          | BOX | FIG. 2 |
| D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 . 14 . 15 . 16 . 17 . 18 . 19 . 20 |     |        |



Pinza de precisión standard  
*Standard precision collets*

## ER40



0,010 ÷ 0,015

Pinza de precisión standard  
*Standard precision collets*

## ER50



0,010 ÷ 0,015

| REFERENCIA  | CAPACIDAD |   |    |
|-------------|-----------|---|----|
| ER40. D. 3  | 3         | ÷ | 2  |
| ER40. D. 4  | 4         | ÷ | 3  |
| ER40. D. 5  | 5         | ÷ | 4  |
| ER40. D. 6  | 6         | ÷ | 5  |
| ER40. D. 7  | 7         | ÷ | 6  |
| ER40. D. 8  | 8         | ÷ | 7  |
| ER40. D. 9  | 9         | ÷ | 8  |
| ER40. D. 10 | 10        | ÷ | 9  |
| ER40. D. 11 | 11        | ÷ | 10 |
| ER40. D. 12 | 12        | ÷ | 11 |
| ER40. D. 13 | 13        | ÷ | 12 |
| ER40. D. 14 | 14        | ÷ | 13 |
| ER40. D. 15 | 15        | ÷ | 14 |
| ER40. D. 16 | 16        | ÷ | 15 |
| ER40. D. 17 | 17        | ÷ | 16 |
| ER40. D. 18 | 18        | ÷ | 17 |
| ER40. D. 19 | 19        | ÷ | 18 |
| ER40. D. 20 | 20        | ÷ | 19 |
| ER40. D. 21 | 21        | ÷ | 20 |
| ER40. D. 22 | 22        | ÷ | 21 |
| ER40. D. 23 | 23        | ÷ | 22 |
| ER40. D. 24 | 24        | ÷ | 23 |
| ER40. D. 25 | 25        | ÷ | 24 |
| ER40. D. 26 | 26        | ÷ | 25 |
| ER40. D. 27 | 27        | ÷ | 26 |
| ER40. D. 28 | 28        | ÷ | 27 |
| ER40. D. 29 | 29        | ÷ | 28 |
| ER40. D. 30 | 30        | ÷ | 29 |

| REFERENCIA  | CAPACIDAD |   |    |
|-------------|-----------|---|----|
| ER50. D. 6  | 6         | ÷ | 5  |
| ER50. D. 7  | 7         | ÷ | 6  |
| ER50. D. 8  | 8         | ÷ | 7  |
| ER50. D. 9  | 9         | ÷ | 8  |
| ER50. D. 10 | 10        | ÷ | 9  |
| ER50. D. 11 | 11        | ÷ | 10 |
| ER50. D. 12 | 12        | ÷ | 10 |
| ER50. D. 13 | 13        | ÷ | 11 |
| ER50. D. 14 | 14        | ÷ | 12 |
| ER50. D. 15 | 15        | ÷ | 13 |
| ER50. D. 16 | 16        | ÷ | 14 |
| ER50. D. 17 | 17        | ÷ | 15 |
| ER50. D. 18 | 18        | ÷ | 16 |
| ER50. D. 19 | 19        | ÷ | 17 |
| ER50. D. 20 | 20        | ÷ | 18 |
| ER50. D. 21 | 21        | ÷ | 19 |
| ER50. D. 22 | 22        | ÷ | 20 |
| ER50. D. 23 | 23        | ÷ | 21 |
| ER50. D. 24 | 24        | ÷ | 22 |
| ER50. D. 25 | 25        | ÷ | 23 |
| ER50. D. 26 | 26        | ÷ | 24 |
| ER50. D. 27 | 27        | ÷ | 25 |
| ER50. D. 28 | 28        | ÷ | 26 |
| ER50. D. 29 | 29        | ÷ | 27 |
| ER50. D. 30 | 30        | ÷ | 28 |
| ER50. D. 31 | 31        | ÷ | 29 |
| ER50. D. 32 | 32        | ÷ | 30 |
| ER50. D. 33 | 33        | ÷ | 31 |
| ER50. D. 34 | 34        | ÷ | 32 |

Kit de pinzas / *Kit in Tray*

### REFERENCIA

|                                                                                                               |     |        |
|---------------------------------------------------------------------------------------------------------------|-----|--------|
| TY.ER40-23                                                                                                    | KIT | FIG. 1 |
| BX.ER40-23                                                                                                    | BOX | FIG. 2 |
| D. 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 . 14 . 15 . 16 . 17 . 18 . 19 . 20 . 21 . 22 . 23 . 24 . 25 . 26 |     |        |

FIG. 2

FIG. 1



Kit de pinzas / *Kit in Tray*

### REFERENCIA

|                                                              |     |        |
|--------------------------------------------------------------|-----|--------|
| TY.ER50-12                                                   | KIT | FIG. 1 |
| D. 12 . 14 . 16 . 18 . 20 . 22 . 24 . 26 . 28 . 30 . 32 . 34 |     |        |

FIG. 1



Pinza de precisión standard  
Standard precision collets

## ER60

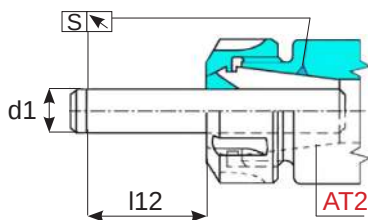


0,010 ÷ 0,015

| REFERENCIA  | CAPACIDAD |   |    |
|-------------|-----------|---|----|
| ER60. D. 10 | 10        | ÷ | 9  |
| ER60. D. 11 | 11        | ÷ | 10 |
| ER60. D. 12 | 12        | ÷ | 10 |
| ER60. D. 13 | 13        | ÷ | 11 |
| ER60. D. 14 | 14        | ÷ | 12 |
| ER60. D. 15 | 15        | ÷ | 13 |
| ER60. D. 16 | 16        | ÷ | 14 |
| ER60. D. 17 | 17        | ÷ | 15 |
| ER60. D. 18 | 18        | ÷ | 16 |
| ER60. D. 19 | 19        | ÷ | 17 |
| ER60. D. 20 | 20        | ÷ | 18 |
| ER60. D. 21 | 21        | ÷ | 19 |
| ER60. D. 22 | 22        | ÷ | 20 |
| ER60. D. 23 | 23        | ÷ | 21 |
| ER60. D. 24 | 24        | ÷ | 22 |

| REFERENCIA  | CAPACIDAD |   |    |
|-------------|-----------|---|----|
| ER60. D. 25 | 25        | ÷ | 23 |
| ER60. D. 26 | 26        | ÷ | 24 |
| ER60. D. 27 | 27        | ÷ | 25 |
| ER60. D. 28 | 28        | ÷ | 26 |
| ER60. D. 29 | 29        | ÷ | 27 |
| ER60. D. 30 | 30        | ÷ | 28 |
| ER60. D. 31 | 31        | ÷ | 29 |
| ER60. D. 32 | 32        | ÷ | 30 |
| ER60. D. 33 | 33        | ÷ | 31 |
| ER60. D. 34 | 34        | ÷ | 32 |
| ER60. D. 35 | 35        | ÷ | 33 |
| ER60. D. 36 | 36        | ÷ | 34 |
| ER60. D. 37 | 37        | ÷ | 35 |
| ER60. D. 38 | 38        | ÷ | 36 |
| ER60. D. 39 | 39        | ÷ | 37 |
| ER60. D. 40 | 40        | ÷ | 38 |

Tolerancia de la rotación de la pinza ER  
ER collet concentricity specification



| d1 - h5 |        | l12 | S max <sup>②</sup> |       |
|---------|--------|-----|--------------------|-------|
| minimo  | máximo |     | Standard           | HP    |
| mm      | mm     | mm  | mm                 | mm    |
| 1       | 1.6    | 6   | 0.015              | 0.010 |
| 1.6     | 3      | 10  | 0.015              | 0.010 |
| 3       | 7      | 16  | 0.015              | 0.010 |
| 7       | 10     | 25  | 0.015              | 0.010 |
| 10      | 18     | 40  | 0.020              | 0.015 |
| 18      | 26     | 50  | 0.020              | 0.015 |
| 26      | 40     | 60  | 0.020              | 0.015 |

② El valor de la concentricidad se controla sobre el Ø nominal de la pinza

② This runout accuracy is valid only for the nominal size of the collets

Pinza de Alta precisión  
*High precision collets*

## ER8-UP



0,005HP

| REFERENCIA    | CAPACIDAD |   |     |
|---------------|-----------|---|-----|
| ER8UP. D. 1   | 1         | ÷ | 0.5 |
| ER8UP. D. 1.5 | 1.5       | ÷ | 1   |
| ER8UP. D. 2   | 2         | ÷ | 1.5 |
| ER8UP. D. 2.5 | 2.5       | ÷ | 2   |
| ER8UP. D. 3   | 3         | ÷ | 2.5 |
| ER8UP. D. 3.5 | 3.5       | ÷ | 3   |
| ER8UP. D. 4   | 4         | ÷ | 3.5 |
| ER8UP. D. 4.5 | 4.5       | ÷ | 4   |
| ER8UP. D. 5   | 5         | ÷ | 4.5 |

Kit de pinzas / *Kit in Tray*

### REFERENCIA

TY.ER8UP-9 KIT FIG. 1  
D. 1 . 1.5 . 2 . 2.5 . 3 . 3.5 . 4 . 4.5 . 5

FIG. 1



Estuche de pinzas / *Kit in Box*

### REFERENCIA

BX.ER8UP-9 BOX FIG. 2  
D. 1 . 1.5 . 2 . 2.5 . 3 . 3.5 . 4 . 4.5 . 5

FIG. 2



Pinza de Alta precisión  
*High precision collets*

## ER11-UP



0,005HP

| REFERENCIA     | CAPACIDAD |   |     |
|----------------|-----------|---|-----|
| ER11UP. D. 1   | 1         | ÷ | 0.5 |
| ER11UP. D. 1.5 | 1.5       | ÷ | 1   |
| ER11UP. D. 2   | 2         | ÷ | 1.5 |
| ER11UP. D. 2.5 | 2.5       | ÷ | 2   |
| ER11UP. D. 3   | 3         | ÷ | 2.5 |
| ER11UP. D. 3.5 | 3.5       | ÷ | 3   |
| ER11UP. D. 4   | 4         | ÷ | 3.5 |
| ER11UP. D. 4.5 | 4.5       | ÷ | 4   |
| ER11UP. D. 5   | 5         | ÷ | 4.5 |
| ER11UP. D. 5.5 | 5.5       | ÷ | 5   |
| ER11UP. D. 6   | 6         | ÷ | 5.5 |
| ER11UP. D. 6.5 | 6.5       | ÷ | 6   |
| ER11UP. D. 7   | 7         | ÷ | 6.5 |

Kit de pinzas / *Kit in Tray*

### REFERENCIA

TY.ER11UP-13 KIT FIG. 1  
D. 1 . 1.5 . 2 . 2.5 . 3 . 3.5 . 4 . 4.5 . 5 . 5.5 . 6 . 6.5 . 7

FIG. 1



Estuche de pinzas / *Kit in Box*

### REFERENCIA

BX.ER11UP-13 BOX FIG. 2  
D. 1 . 1.5 . 2 . 2.5 . 3 . 3.5 . 4 . 4.5 . 5 . 5.5 . 6 . 6.5 . 7

FIG. 2



Pinza de Alta precisión  
*High precision collets*

## ER16-UP



0,005HP

| REFERENCIA     | CAPACIDAD |   |     |
|----------------|-----------|---|-----|
| ER16UP. D. 1   | 1         | ÷ | 0.5 |
| ER16UP. D. 1.5 | 1.5       | ÷ | 1   |
| ER16UP. D. 2   | 2         | ÷ | 1.5 |
| ER16UP. D. 2.5 | 2.5       | ÷ | 2   |
| ER16UP. D. 3   | 3         | ÷ | 2.5 |
| ER16UP. D. 3.5 | 3.5       | ÷ | 3   |
| ER16UP. D. 4   | 4         | ÷ | 3.5 |
| ER16UP. D. 4.5 | 4.5       | ÷ | 4   |
| ER16UP. D. 5   | 5         | ÷ | 4.5 |
| ER16UP. D. 5.5 | 5.5       | ÷ | 5   |
| ER16UP. D. 6   | 6         | ÷ | 5.5 |
| ER16UP. D. 6.5 | 6.5       | ÷ | 6   |
| ER16UP. D. 7   | 7         | ÷ | 6.5 |
| ER16UP. D. 7.5 | 7.5       | ÷ | 7   |
| ER16UP. D. 8   | 8         | ÷ | 7.5 |
| ER16UP. D. 8.5 | 8.5       | ÷ | 8   |
| ER16UP. D. 9   | 9         | ÷ | 8.5 |
| ER16UP. D. 9.5 | 9.5       | ÷ | 9   |
| ER16UP. D. 10  | 10        | ÷ | 9.5 |

Estuche de pinzas / *Kit in Box*

| REFERENCIA                                |     |        |
|-------------------------------------------|-----|--------|
| BX.ER16UP-10                              | BOX | FIG. 2 |
| D. 1 . 2 . 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 |     |        |

FIG. 2



Pinza de Alta precisión  
*High precision collets*

## ER20-UP



0,005HP

| REFERENCIA      | CAPACIDAD |   |      |
|-----------------|-----------|---|------|
| ER20UP. D. 1    | 1         | ÷ | 0.5  |
| ER20UP. D. 1.5  | 1.5       | ÷ | 1    |
| ER20UP. D. 2    | 2         | ÷ | 1.5  |
| ER20UP. D. 2.5  | 2.5       | ÷ | 2    |
| ER20UP. D. 3    | 3         | ÷ | 2.5  |
| ER20UP. D. 3.5  | 3.5       | ÷ | 3    |
| ER20UP. D. 4    | 4         | ÷ | 3.5  |
| ER20UP. D. 4.5  | 4.5       | ÷ | 4    |
| ER20UP. D. 5    | 5         | ÷ | 4.5  |
| ER20UP. D. 5.5  | 5.5       | ÷ | 5    |
| ER20UP. D. 6    | 6         | ÷ | 5.5  |
| ER20UP. D. 6.5  | 6.5       | ÷ | 6    |
| ER20UP. D. 7    | 7         | ÷ | 6.5  |
| ER20UP. D. 7.5  | 7.5       | ÷ | 7    |
| ER20UP. D. 8    | 8         | ÷ | 7.5  |
| ER20UP. D. 8.5  | 8.5       | ÷ | 8    |
| ER20UP. D. 9    | 9         | ÷ | 8.5  |
| ER20UP. D. 9.5  | 9.5       | ÷ | 9    |
| ER20UP. D. 10   | 10        | ÷ | 9.5  |
| ER20UP. D. 10.5 | 10.5      | ÷ | 10   |
| ER20UP. D. 11   | 11        | ÷ | 10.5 |
| ER20UP. D. 11.5 | 11.5      | ÷ | 11   |
| ER20UP. D. 12   | 12        | ÷ | 11.5 |
| ER20UP. D. 12.5 | 12.5      | ÷ | 12   |
| ER20UP. D. 13   | 13        | ÷ | 12.5 |

Estuche de pinzas / *Kit in Box*

| REFERENCIA                                           |     |        |
|------------------------------------------------------|-----|--------|
| BX.ER20UP-12                                         | BOX | FIG. 2 |
| D. 2 . 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 |     |        |

FIG. 2



Pinza de Alta precisión  
High precision collets

## ER25-UP



0,005HP

| REFERENCIA      | CAPACIDAD |   |      |
|-----------------|-----------|---|------|
| ER25UP. D. 1    | 1         | ÷ | 0.5  |
| ER25UP. D. 1.5  | 1.5       | ÷ | 1    |
| ER25UP. D. 2    | 2         | ÷ | 1.5  |
| ER25UP. D. 2.5  | 2.5       | ÷ | 2    |
| ER25UP. D. 3    | 3         | ÷ | 2.5  |
| ER25UP. D. 3.5  | 3.5       | ÷ | 3    |
| ER25UP. D. 4    | 4         | ÷ | 3.5  |
| ER25UP. D. 4.5  | 4.5       | ÷ | 4    |
| ER25UP. D. 5    | 5         | ÷ | 4.5  |
| ER25UP. D. 5.5  | 5.5       | ÷ | 5    |
| ER25UP. D. 6    | 6         | ÷ | 5.5  |
| ER25UP. D. 6.5  | 6.5       | ÷ | 6    |
| ER25UP. D. 7    | 7         | ÷ | 6.5  |
| ER25UP. D. 7.5  | 7.5       | ÷ | 7    |
| ER25UP. D. 8    | 8         | ÷ | 7.5  |
| ER25UP. D. 8.5  | 8.5       | ÷ | 8    |
| ER25UP. D. 9    | 9         | ÷ | 8.5  |
| ER25UP. D. 9.5  | 9.5       | ÷ | 9    |
| ER25UP. D. 10   | 10        | ÷ | 9.5  |
| ER25UP. D. 10.5 | 10.5      | ÷ | 10   |
| ER25UP. D. 11   | 11        | ÷ | 10.5 |
| ER25UP. D. 11.5 | 11.5      | ÷ | 11   |
| ER25UP. D. 12   | 12        | ÷ | 11.5 |
| ER25UP. D. 12.5 | 12.5      | ÷ | 12   |
| ER25UP. D. 13   | 13        | ÷ | 12.5 |
| ER25UP. D. 13.5 | 13.5      | ÷ | 13   |
| ER25UP. D. 14   | 14        | ÷ | 13.5 |
| ER25UP. D. 14.5 | 14.5      | ÷ | 14   |
| ER25UP. D. 15   | 15        | ÷ | 14.5 |
| ER25UP. D. 15.5 | 15.5      | ÷ | 15   |
| ER25UP. D. 16   | 16        | ÷ | 15.5 |

Estuche de pinzas / Kit in Box

### REFERENCIA

BX.ER25UP-15 BOX FIG. 2  
D. 2 . 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13  
D. 14 . 15 . 16

FIG. 2



Pinza de Alta precisión  
High precision collets

## ER32-UP



0,005HP

| REFERENCIA      | CAPACIDAD |   |      |
|-----------------|-----------|---|------|
| ER32UP. D. 2    | 2         | ÷ | 1.5  |
| ER32UP. D. 2.5  | 2.5       | ÷ | 2    |
| ER32UP. D. 3    | 3         | ÷ | 2.5  |
| ER32UP. D. 3.5  | 3.5       | ÷ | 3    |
| ER32UP. D. 4    | 4         | ÷ | 3.5  |
| ER32UP. D. 4.5  | 4.5       | ÷ | 4    |
| ER32UP. D. 5    | 5         | ÷ | 4.5  |
| ER32UP. D. 5.5  | 5.5       | ÷ | 5    |
| ER32UP. D. 6    | 6         | ÷ | 5.5  |
| ER32UP. D. 6.5  | 6.5       | ÷ | 6    |
| ER32UP. D. 7    | 7         | ÷ | 6.5  |
| ER32UP. D. 7.5  | 7.5       | ÷ | 7    |
| ER32UP. D. 8    | 8         | ÷ | 7.5  |
| ER32UP. D. 8.5  | 8.5       | ÷ | 8    |
| ER32UP. D. 9    | 9         | ÷ | 8.5  |
| ER32UP. D. 9.5  | 9.5       | ÷ | 9    |
| ER32UP. D. 10   | 10        | ÷ | 9.5  |
| ER32UP. D. 10.5 | 10.5      | ÷ | 10   |
| ER32UP. D. 11   | 11        | ÷ | 10.5 |
| ER32UP. D. 11.5 | 11.5      | ÷ | 11   |
| ER32UP. D. 12   | 12        | ÷ | 11.5 |
| ER32UP. D. 12.5 | 12.5      | ÷ | 12   |
| ER32UP. D. 13   | 13        | ÷ | 12.5 |
| ER32UP. D. 13.5 | 13.5      | ÷ | 13   |
| ER32UP. D. 14   | 14        | ÷ | 13.5 |
| ER32UP. D. 14.5 | 14.5      | ÷ | 14   |
| ER32UP. D. 15   | 15        | ÷ | 14.5 |
| ER32UP. D. 15.5 | 15.5      | ÷ | 15   |
| ER32UP. D. 16   | 16        | ÷ | 15.5 |
| ER32UP. D. 16.5 | 16.5      | ÷ | 16   |
| ER32UP. D. 17   | 17        | ÷ | 16.5 |
| ER32UP. D. 17.5 | 17.5      | ÷ | 17   |
| ER32UP. D. 18   | 18        | ÷ | 17.5 |
| ER32UP. D. 18.5 | 18.5      | ÷ | 18   |
| ER32UP. D. 19   | 19        | ÷ | 18.5 |
| ER32UP. D. 19.5 | 19.5      | ÷ | 19   |
| ER32UP. D. 20   | 20        | ÷ | 19.5 |

Estuche de pinzas / Kit in Box

### REFERENCIA

BX.ER32UP-18 BOX FIG. 2  
D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 . 14  
D. 15 . 16 . 17 . 18 . 19 . 20

Pinza de Alta precisión  
*High precision collets*

## ER40-UP



✓ 0,005HP

| REFERENCIA    | CAPACIDAD |   |    |
|---------------|-----------|---|----|
| ER40UP. D. 3  | 3         | ÷ | 2  |
| ER40UP. D. 4  | 4         | ÷ | 3  |
| ER40UP. D. 5  | 5         | ÷ | 4  |
| ER40UP. D. 6  | 6         | ÷ | 5  |
| ER40UP. D. 7  | 7         | ÷ | 6  |
| ER40UP. D. 8  | 8         | ÷ | 7  |
| ER40UP. D. 9  | 9         | ÷ | 8  |
| ER40UP. D. 10 | 10        | ÷ | 9  |
| ER40UP. D. 11 | 11        | ÷ | 10 |
| ER40UP. D. 12 | 12        | ÷ | 11 |
| ER40UP. D. 13 | 13        | ÷ | 12 |
| ER40UP. D. 14 | 14        | ÷ | 13 |
| ER40UP. D. 15 | 15        | ÷ | 14 |
| ER40UP. D. 16 | 16        | ÷ | 15 |
| ER40UP. D. 17 | 17        | ÷ | 16 |
| ER40UP. D. 18 | 18        | ÷ | 17 |
| ER40UP. D. 19 | 19        | ÷ | 18 |
| ER40UP. D. 20 | 20        | ÷ | 19 |
| ER40UP. D. 21 | 21        | ÷ | 20 |
| ER40UP. D. 22 | 22        | ÷ | 21 |
| ER40UP. D. 23 | 23        | ÷ | 22 |
| ER40UP. D. 24 | 24        | ÷ | 23 |
| ER40UP. D. 25 | 25        | ÷ | 24 |
| ER40UP. D. 26 | 26        | ÷ | 25 |

Estuche de pinzas / *Kit in Box*

FIG. 2



### REFERENCIA

**BX.ER40UP-23**      **BOX**      **FIG. 2**

D. 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 . 14 .  
D. 15 . 16 . 17 . 18 . 19 . 20 . 21 . 22 . 23 . 24  
D. 25 . 26



Pinza refrigeración central  
*Collets for coolant*



**ERXG-11**

**Max. 40 BAR**



$\nabla 0,010 \div 0,015$

Pinza refrigeración central  
*Collets for coolant*

**ERXG-16**



$\nabla 0,010 \div 0,015$

| REFERENCIA     | CAPACIDAD |
|----------------|-----------|
| ERXG11. D. 3   | 3         |
| ERXG11. D. 3.5 | 3.5       |
| ERXG11. D. 4   | 4         |
| ERXG11. D. 4.5 | 4.5       |
| ERXG11. D. 5   | 5         |
| ERXG11. D. 5.5 | 5.5       |
| ERXG11. D. 6   | 6         |
| ERXG11. D. 6.5 | 6.5       |
| ERXG11. D. 7   | 7         |

| REFERENCIA   | CAPACIDAD |
|--------------|-----------|
| ERXG16. D. 3 | 3         |
| ERXG16. D. 4 | 4         |
| ERXG16. D. 5 | 5         |
| ERXG16. D. 6 | 6         |
| ERXG16. D. 7 | 7         |
| ERXG16. D. 8 | 8         |
| ERXG16. D. 9 | 9         |
| ERXG16. D.10 | 10        |

Kit de pinzas / *Kit in Tray*

| REFERENCIA                        |
|-----------------------------------|
| TY.ERXG11-8 KIT FIG. 1            |
| D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 |

FIG. 1



Kit de pinzas / *Kit in Tray*

| REFERENCIA                        |
|-----------------------------------|
| TY.ERXG16-8 KIT FIG. 1            |
| D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 |

FIG. 1



Estuche de pinzas / *Kit in Box*

| REFERENCIA                        |
|-----------------------------------|
| BX.ERXG11-8 BOX FIG. 2            |
| D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 |

FIG. 2



Cierra solo el diametro nominal  
*Only nominal size can be clamped*

Estuche de pinzas / *Kit in Box*

| REFERENCIA                        |
|-----------------------------------|
| BX.ERXG16-8 BOX FIG. 2            |
| D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 |

FIG. 2



Cierra solo el diametro nominal  
*Only nominal size can be clamped*

Pinza refrigeración central  
*Collets for coolant*



**ERXG-20**

**Max. 40 BAR**



$\nabla 0,010 \div 0,015$

Pinza refrigeración central  
*Collets for coolant*

**ERXG-25**



$\nabla 0,010 \div 0,015$

| REFERENCIA   | CAPACIDAD |
|--------------|-----------|
| ERXG20. D. 3 | 3         |
| ERXG20. D. 4 | 4         |
| ERXG20. D. 5 | 5         |
| ERXG20. D. 6 | 6         |
| ERXG20. D. 7 | 7         |
| ERXG20. D. 8 | 8         |
| ERXG20. D. 9 | 9         |
| ERXG20. D.10 | 10        |
| ERXG20. D.11 | 11        |
| ERXG20. D.12 | 12        |
| ERXG20. D.13 | 13        |

Kit de pinzas / *Kit in Tray*

| REFERENCIA                                       |     |        |
|--------------------------------------------------|-----|--------|
| TY.ERXG20-11                                     | KIT | FIG. 1 |
| D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 |     |        |

FIG. 1



Estuche de pinzas / *Kit in Box*

| REFERENCIA                                       |     |        |
|--------------------------------------------------|-----|--------|
| BX.ERXG20-11                                     | BOX | FIG. 2 |
| D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 |     |        |

FIG. 2



| REFERENCIA    | CAPACIDAD |
|---------------|-----------|
| ERXG25. D. 3  | 3         |
| ERXG25. D. 4  | 4         |
| ERXG25. D. 5  | 5         |
| ERXG25. D. 6  | 6         |
| ERXG25. D. 7  | 7         |
| ERXG25. D. 8  | 8         |
| ERXG25. D. 9  | 9         |
| ERXG25. D. 10 | 10        |
| ERXG25. D. 11 | 11        |
| ERXG25. D. 12 | 12        |
| ERXG25. D. 13 | 13        |
| ERXG25. D. 14 | 14        |
| ERXG25. D. 15 | 15        |
| ERXG25. D. 16 | 16        |

Kit de pinzas / *Kit in Tray*

| REFERENCIA                  |     |        |
|-----------------------------|-----|--------|
| TY.ERXG25-6                 | KIT | FIG. 1 |
| D. 4 . 6 . 8 . 10 . 12 . 16 |     |        |

FIG. 1



Estuche de pinzas / *Kit in Box*

| REFERENCIA                                                      |     |        |
|-----------------------------------------------------------------|-----|--------|
| TY.ERXG25-14                                                    | KIT | FIG. 1 |
| BX.ERXG25-14                                                    | BOX | FIG. 2 |
| D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 . 14 . 15 . 16 |     |        |

FIG. 2



Cierra solo el diametro nominal  
*Only nominal size can be clamped*

Pinza refrigeración central  
*Collets for coolant*

Pinza refrigeración central  
*Collets for coolant*



**ERXG-32**

**Max. 40 BAR**

**ERXG-40**



$\nabla 0,010 \div 0,015$



$\nabla 0,010 \div 0,015$

| REFERENCIA    | CAPACIDAD |
|---------------|-----------|
| ERXG32. D. 3  | 3         |
| ERXG32. D. 4  | 4         |
| ERXG32. D. 5  | 5         |
| ERXG32. D. 6  | 6         |
| ERXG32. D. 7  | 7         |
| ERXG32. D. 8  | 8         |
| ERXG32. D. 9  | 9         |
| ERXG32. D. 10 | 10        |
| ERXG32. D. 11 | 11        |
| ERXG32. D. 12 | 12        |
| ERXG32. D. 13 | 13        |
| ERXG32. D. 14 | 14        |
| ERXG32. D. 15 | 15        |
| ERXG32. D. 16 | 16        |
| ERXG32. D. 17 | 17        |
| ERXG32. D. 18 | 18        |
| ERXG32. D. 19 | 19        |
| ERXG32. D. 20 | 20        |

**Kit de pinzas / Kit in Tray**

| REFERENCIA                   |     |        |
|------------------------------|-----|--------|
| TY.ERXG32-6                  | KIT | FIG. 1 |
| D. 6 . 8 . 10 . 12 . 16 . 20 |     |        |

FIG. 1



**Estuche de pinzas / Kit in Box**

| REFERENCIA                                            |     |        |
|-------------------------------------------------------|-----|--------|
| TY.ERXG32-18                                          | KIT | FIG. 1 |
| BX.ERXG32-18                                          | BOX | FIG. 2 |
| D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 . 14 |     |        |
| D. 15 . 16 . 17 . 18 . 19 . 20                        |     |        |

FIG. 2



| REFERENCIA    | CAPACIDAD |
|---------------|-----------|
| ERXG40. D. 3  | 3         |
| ERXG40. D. 4  | 4         |
| ERXG40. D. 5  | 5         |
| ERXG40. D. 6  | 6         |
| ERXG40. D. 7  | 7         |
| ERXG40. D. 8  | 8         |
| ERXG40. D. 9  | 9         |
| ERXG40. D. 10 | 10        |
| ERXG40. D. 11 | 11        |
| ERXG40. D. 12 | 12        |
| ERXG40. D. 13 | 13        |
| ERXG40. D. 14 | 14        |
| ERXG40. D. 15 | 15        |
| ERXG40. D. 16 | 16        |
| ERXG40. D. 17 | 17        |
| ERXG40. D. 18 | 18        |
| ERXG40. D. 19 | 19        |
| ERXG40. D. 20 | 20        |
| ERXG40. D. 21 | 21        |
| ERXG40. D. 22 | 22        |
| ERXG40. D. 23 | 23        |
| ERXG40. D. 24 | 24        |
| ERXG40. D. 25 | 25        |
| ERXG40. D. 26 | 26        |

**Estuche de pinzas / Kit in Box**

| REFERENCIA                                                 |     |        |
|------------------------------------------------------------|-----|--------|
| TY.ERXG40-7                                                | KIT | FIG. 1 |
| TY.ERXG40-23                                               | KIT | FIG. 1 |
| BX.ERXG40-23                                               | BOX | FIG. 2 |
| D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 . 14 . 15 |     |        |
| 16 . 17 . 18 . 19 . 20 . 21 . 22 . 23 . 24 . 25 . 26       |     |        |

FIG. 1



FIG. 2



Pinza refrigeración central  
*Collets for coolant*

Estuche de pinzas / *Kit in Box*



**ERXG-50**

**Max. 40 BAR**



$\nabla 0,010 \div 0,015$

**FIG. 1**



**FIG. 2**



| REFERENCIA    | CAPACIDAD |
|---------------|-----------|
| ERXG50. D. 10 | 10        |
| ERXG50. D. 12 | 12        |
| ERXG50. D. 14 | 14        |
| ERXG50. D. 16 | 16        |
| ERXG50. D. 18 | 18        |
| ERXG50. D. 20 | 20        |
| ERXG50. D. 22 | 22        |
| ERXG50. D. 24 | 24        |
| ERXG50. D. 25 | 25        |
| ERXG50. D. 26 | 26        |
| ERXG50. D. 28 | 28        |
| ERXG50. D. 30 | 30        |
| ERXG50. D. 32 | 32        |
| ERXG50. D. 34 | 34        |

| REFERENCIA                                         |     |        |
|----------------------------------------------------|-----|--------|
| TY.ERXG50-7                                        | KIT | FIG. 1 |
| TY.ERXG50-12                                       | KIT | FIG. 1 |
| BX.ERXG50-12                                       | BOX | FIG. 2 |
| D. 12 . 14 . 16 . 18 . 20 . 22 . 24 . 26 . 28 . 30 |     |        |
| D. 32 . 34                                         |     |        |

Cierra solo el diametro nominal  
*Only nominal size can be clamped*



Pinza de acero con Refrigeración Central a través de la herramienta  
*Steel sealed collets for coolant through tools*



## ER25-SSC Max. 130 BAR ER40-SSC



▽0,008



▽0,008

| REFERENCIA      | CAPACIDAD |
|-----------------|-----------|
| ERC25SSC. D. 3  | 3         |
| ERC25SSC. D. 4  | 4         |
| ERC25SSC. D. 5  | 5         |
| ERC25SSC. D. 6  | 6         |
| ERC25SSC. D. 7  | 7         |
| ERC25SSC. D. 8  | 8         |
| ERC25SSC. D. 9  | 9         |
| ERC25SSC. D. 10 | 10        |
| ERC25SSC. D. 11 | 11        |
| ERC25SSC. D. 12 | 12        |
| ERC25SSC. D. 13 | 13        |
| ERC25SSC. D. 14 | 14        |
| ERC25SSC. D. 15 | 15        |
| ERC25SSC. D. 16 | 16        |

## ER32-SSC



▽0,008

| REFERENCIA      | CAPACIDAD |
|-----------------|-----------|
| ERC32SSC. D. 3  | 3         |
| ERC32SSC. D. 4  | 4         |
| ERC32SSC. D. 5  | 5         |
| ERC32SSC. D. 6  | 6         |
| ERC32SSC. D. 7  | 7         |
| ERC32SSC. D. 8  | 8         |
| ERC32SSC. D. 9  | 9         |
| ERC32SSC. D. 10 | 10        |
| ERC32SSC. D. 11 | 11        |
| ERC32SSC. D. 12 | 12        |
| ERC32SSC. D. 13 | 13        |
| ERC32SSC. D. 14 | 14        |
| ERC32SSC. D. 15 | 15        |
| ERC32SSC. D. 16 | 16        |
| ERC32SSC. D. 17 | 17        |
| ERC32SSC. D. 18 | 18        |
| ERC32SSC. D. 19 | 19        |
| ERC32SSC. D. 20 | 20        |

| REFERENCIA      | CAPACIDAD |
|-----------------|-----------|
| ERC40SSC. D. 4  | 4         |
| ERC40SSC. D. 5  | 5         |
| ERC40SSC. D. 6  | 6         |
| ERC40SSC. D. 7  | 7         |
| ERC40SSC. D. 8  | 8         |
| ERC40SSC. D. 9  | 9         |
| ERC40SSC. D. 10 | 10        |
| ERC40SSC. D. 11 | 11        |
| ERC40SSC. D. 12 | 12        |
| ERC40SSC. D. 13 | 13        |
| ERC40SSC. D. 14 | 14        |
| ERC40SSC. D. 15 | 15        |
| ERC40SSC. D. 16 | 16        |
| ERC40SSC. D. 17 | 17        |
| ERC40SSC. D. 18 | 18        |
| ERC40SSC. D. 19 | 19        |
| ERC40SSC. D. 20 | 20        |
| ERC40SSC. D. 21 | 21        |
| ERC40SSC. D. 22 | 22        |
| ERC40SSC. D. 23 | 23        |
| ERC40SSC. D. 24 | 24        |
| ERC40SSC. D. 25 | 25        |
| ERC40SSC. D. 26 | 26        |

Estuche de pinzas / Kit in Box

| REFERENCIA                                                                                               |
|----------------------------------------------------------------------------------------------------------|
| BX.ERC25SSC-13 BOX FIG. 1                                                                                |
| D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 12 . 13 . 14 . 15 . 16                                               |
| BX.ERC32SSC-18 BOX FIG. 1                                                                                |
| D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 . 14 . 15 . 16 . 17 . 18 . 19 . 20                      |
| BX.ERC40SSC-23 BOX FIG. 1                                                                                |
| D. 4 . 5 . 6 . 7 . 8 . 9 . 10 . 12 . 13 . 14 . 15 . 16 . 17 . 18 . 19 . 20 . 21 . 22 . 23 . 24 . 25 . 26 |

FIG. 1



Pinza con taladros de Refrigeración  
*Collets with coolant holes*



## ER16-JET



0,010 ÷ 0,015

| REFERENCIA     | CAPACIDAD |
|----------------|-----------|
| ERC16JET. D. 3 | 3         |
| ERC16JET. D. 4 | 4         |
| ERC16JET. D. 5 | 5         |
| ERC16JET. D. 6 | 6         |
| ERC16JET. D. 7 | 7         |
| ERC16JET. D. 8 | 8         |

## ER25-JET



0,010 ÷ 0,015

| REFERENCIA      | CAPACIDAD |
|-----------------|-----------|
| ERC25JET. D. 3  | 3         |
| ERC25JET. D. 4  | 4         |
| ERC25JET. D. 5  | 5         |
| ERC25JET. D. 6  | 6         |
| ERC25JET. D. 7  | 7         |
| ERC25JET. D. 8  | 8         |
| ERC25JET. D. 9  | 9         |
| ERC25JET. D. 10 | 10        |
| ERC25JET. D. 11 | 11        |
| ERC25JET. D. 12 | 12        |
| ERC25JET. D. 13 | 13        |
| ERC25JET. D. 14 | 14        |

Estuche de pinzas / *Kit in Box*

| REFERENCIA                                              |     |        |
|---------------------------------------------------------|-----|--------|
| BX.ERC16JET-8                                           | BOX | FIG. 1 |
| D. 3 . 4 . 5 . 6 . 7 . 8                                |     |        |
| BX.ERC20JET-11                                          | BOX | FIG. 1 |
| D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11                  |     |        |
| BX.ERC25JET-13                                          | BOX | FIG. 1 |
| D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 12 . 13 . 14 . 15   |     |        |
| D. 16                                                   |     |        |
| BX.ERC32JET-18                                          | BOX | FIG. 2 |
| D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 . 14 . |     |        |
| D. 15 . 16 . 17 . 18 . 19 . 20                          |     |        |

Cierra solo el diametro nominal  
*Only nominal size can be clamped*

## ER20-JET



0,010 ÷ 0,015

| REFERENCIA      | CAPACIDAD |
|-----------------|-----------|
| ERC20JET. D. 3  | 3         |
| ERC20JET. D. 4  | 4         |
| ERC20JET. D. 5  | 5         |
| ERC20JET. D. 6  | 6         |
| ERC20JET. D. 7  | 7         |
| ERC20JET. D. 8  | 8         |
| ERC20JET. D. 9  | 9         |
| ERC20JET. D. 10 | 10        |
| ERC20JET. D. 11 | 11        |

## ER32-JET



0,010 ÷ 0,015

| REFERENCIA      | CAPACIDAD |
|-----------------|-----------|
| ERC32JET. D. 3  | 3         |
| ERC32JET. D. 4  | 4         |
| ERC32JET. D. 5  | 5         |
| ERC32JET. D. 6  | 6         |
| ERC32JET. D. 7  | 7         |
| ERC32JET. D. 8  | 8         |
| ERC32JET. D. 9  | 9         |
| ERC32JET. D. 10 | 10        |
| ERC32JET. D. 11 | 11        |
| ERC32JET. D. 12 | 12        |
| ERC32JET. D. 13 | 13        |
| ERC32JET. D. 14 | 14        |
| ERC32JET. D. 15 | 15        |
| ERC32JET. D. 16 | 16        |
| ERC32JET. D. 17 | 17        |
| ERC32JET. D. 18 | 18        |
| ERC32JET. D. 19 | 19        |
| ERC32JET. D. 20 | 20        |

FIG. 1



FIG. 2



Pinza con taladros de Refrigeración  
*Collets with coolant holes*



## ER40-JET



0,010 ÷ 0,015

| REFERENCIA      | CAPACIDAD | REFERENCIA      | CAPACIDAD |
|-----------------|-----------|-----------------|-----------|
| ERC40JET. D. 4  | 4         | ERC40JET. D. 15 | 15        |
| ERC40JET. D. 5  | 5         | ERC40JET. D. 16 | 16        |
| ERC40JET. D. 6  | 6         | ERC40JET. D. 17 | 17        |
| ERC40JET. D. 7  | 7         | ERC40JET. D. 18 | 18        |
| ERC40JET. D. 8  | 8         | ERC40JET. D. 19 | 19        |
| ERC40JET. D. 9  | 9         | ERC40JET. D. 20 | 20        |
| ERC40JET. D. 10 | 10        | ERC40JET. D. 21 | 21        |
| ERC40JET. D. 11 | 11        | ERC40JET. D. 22 | 22        |
| ERC40JET. D. 12 | 12        | ERC40JET. D. 23 | 23        |
| ERC40JET. D. 13 | 13        | ERC40JET. D. 24 | 24        |
| ERC40JET. D. 14 | 14        | ERC40JET. D. 25 | 25        |
|                 |           | ERC40JET. D. 26 | 26        |

Estuche de pinzas / *Kit in Box*

### REFERENCIA

|                                                     |     |        |
|-----------------------------------------------------|-----|--------|
| BX.ERC40JET-23                                      | BOX | FIG. 2 |
| D. 4 . 5 . 6 . 7 . 8 . 9 . 10 . 12 . 13 . 14 . 15 . |     |        |
| D. 16 . 17 . 18 . 19 . 20 . 21 . 22 . 23 . 24 . 25  |     |        |
| D. 26                                               |     |        |

FIG. 2



Cierra solo el diametro nominal  
*Only nominal size can be clamped*

Pinza para macho con cuadradillo de Arrastre

*Tapping collets with internal square*



## ERX-16M

| REFERENCIA     | M       | Ø   | X | □   |
|----------------|---------|-----|---|-----|
| ERX16M. D. 3.5 | M 3     | 3.5 | x | 2.7 |
| ERX16M. D. 4   | M 3.5   | 4   | x | 3   |
| ERX16M. D. 4.5 | M 4     | 4.5 | x | 3.4 |
| ERX16M. D. 5   | M 5     | 5   | x | 4   |
| ERX16M. D. 6   | M 5-6-8 | 6   | x | 4.9 |
| ERX16M. D. 6.3 | M 6-8   | 6.3 | x | 5   |
| ERX16M. D. 7   | M 7-10  | 7   | x | 5.5 |
| ERX16M. D. 8   | M 8     | 8   | x | 6.2 |

## ERX-20M

| REFERENCIA     | M       | Ø   | X | □   |
|----------------|---------|-----|---|-----|
| ERX20M. D. 3.5 | M 3     | 3.5 | x | 2.7 |
| ERX20M. D. 4   | M 3.5   | 4   | x | 3   |
| ERX20M. D. 4.5 | M 4     | 4.5 | x | 3.4 |
| ERX20M. D. 5   | M 5     | 5   | x | 4   |
| ERX20M. D. 6   | M 5-6-8 | 6   | x | 4.9 |
| ERX20M. D. 6.3 | M 6-8   | 6.3 | x | 5   |
| ERX20M. D. 7   | M 7-10  | 7   | x | 5.5 |
| ERX20M. D. 8   | M 8     | 8   | x | 6.2 |
| ERX20M. D. 9   | M 9-12  | 9   | x | 7   |
| ERX20M. D. 10  | M 10    | 10  | x | 8   |
| ERX20M. D. 11  | M 14    | 11  | x | 9   |
| ERX20M. D. 12  | M 16    | 12  | x | 9   |

## ERX-25M

| REFERENCIA     | M       | Ø   | X | □   |
|----------------|---------|-----|---|-----|
| ERX25M. D. 3.5 | M 3     | 3.5 | x | 2.7 |
| ERX25M. D. 4   | M 3.5   | 4   | x | 3   |
| ERX25M. D. 4.5 | M 4     | 4.5 | x | 3.4 |
| ERX25M. D. 5   | M 5     | 5   | x | 4   |
| ERX25M. D. 6   | M 5-6-8 | 6   | x | 4.9 |
| ERX25M. D. 6.3 | M 6-8   | 6.3 | x | 5   |
| ERX25M. D. 7   | M 7-10  | 7   | x | 5.5 |
| ERX25M. D. 8   | M 8     | 8   | x | 6.2 |
| ERX25M. D. 9   | M 9-12  | 9   | x | 7   |
| ERX25M. D. 10  | M 10    | 10  | x | 8   |
| ERX25M. D. 11  | M 14    | 11  | x | 9   |
| ERX25M. D. 12  | M 16    | 12  | x | 9   |
| ERX25M. D. 14  | M 18    | 14  | x | 11  |
| ERX25M. D. 16  | M 20    | 16  | x | 12  |

## ERX-32M

| REFERENCIA     | M       | Ø   | X | □    |
|----------------|---------|-----|---|------|
| ERX32M. D. 3.5 | M 3     | 3.5 | x | 2.7  |
| ERX32M. D. 4   | M 3.5   | 4   | x | 3    |
| ERX32M. D. 4.5 | M 4     | 4.5 | x | 3.4  |
| ERX32M. D. 6   | M 5-6-8 | 6   | x | 4.9  |
| ERX32M. D. 7   | M 7-10  | 7   | x | 5.5  |
| ERX32M. D. 8   | M 8     | 8   | x | 6.2  |
| ERX32M. D. 9   | M 9-12  | 9   | x | 7    |
| ERX32M. D. 10  | M 10    | 10  | x | 8    |
| ERX32M. D. 11  | M 14    | 11  | x | 9    |
| ERX32M. D. 12  | M 16    | 12  | x | 9    |
| ERX32M. D. 14  | M 18    | 14  | x | 11   |
| ERX32M. D. 16  | M 20    | 16  | x | 12   |
| ERX32M. D. 18  | M 24    | 18  | x | 14.5 |
| ERX32M. D. 20  | M 27    | 20  | x | 16   |

## ERX-40M

| REFERENCIA    | M       | Ø  | X | □    |
|---------------|---------|----|---|------|
| ERX40M. D. 6  | M 5-6-8 | 6  | x | 4.9  |
| ERX40M. D. 7  | M 7-10  | 7  | x | 5.5  |
| ERX40M. D. 8  | M 8     | 8  | x | 6.2  |
| ERX40M. D. 9  | M 9-12  | 9  | x | 7    |
| ERX40M. D. 10 | M 10    | 10 | x | 8    |
| ERX40M. D. 11 | M 14    | 11 | x | 9    |
| ERX40M. D. 12 | M 16    | 12 | x | 9    |
| ERX40M. D. 14 | M 18    | 14 | x | 11   |
| ERX40M. D. 16 | M 20    | 16 | x | 12   |
| ERX40M. D. 18 | M 24    | 18 | x | 14.5 |
| ERX40M. D. 20 | M 27    | 20 | x | 16   |

## ERX-50M

| REFERENCIA       | M       | Ø  | X | □    |
|------------------|---------|----|---|------|
| ERX50M. D. 8     | M 8     | 8  | x | 6.2  |
| ERX50M. D. 9     | M 9-12  | 9  | x | 7    |
| ERX50M. D. 10    | M 10    | 10 | x | 8    |
| ERX50M. D. 11    | M 14    | 11 | x | 9    |
| ERX50M. D. 12    | M 16    | 12 | x | 9    |
| ERX50M. D. 14    | M 18    | 14 | x | 11   |
| ERX50M. D. 16    | M 20    | 16 | x | 12   |
| ERX50M. D. 18    | M 24    | 18 | x | 14.5 |
| ERX50M. D. 20    | M 27    | 20 | x | 16   |
| ERX50M. D. 22-24 | M 30    | 22 | x | 18   |
| ERX50M. D. 25    | M 33    | 25 | x | 20   |
| ERX50M. D. 28    | M 36    | 28 | x | 22   |
| ERX50M. D. 32    | M 39-42 | 32 | x | 24   |

Pinza para macho con cuadradillo de Arrastre con paso Refrigerante  
*Rubber sealed tapping collets with internal square*



## ERXG-16M

| REFERENCIA      | M       | Ø   | X | ✓   |
|-----------------|---------|-----|---|-----|
| ERXG16M. D. 4   | M 3.5   | 4   | x | 3   |
| ERXG16M. D. 4.5 | M 4     | 4.5 | x | 3.4 |
| ERXG16M. D. 6   | M 5-6-8 | 6   | x | 4.9 |
| ERXG16M. D. 7   | M 7-10  | 7   | x | 5.5 |
| ERXG16M. D. 8   | M 8     | 8   | x | 6.2 |

## ERXG-32M

| REFERENCIA      | M       | Ø   | X | ✓   |
|-----------------|---------|-----|---|-----|
| ERXG32M. D. 4.5 | M 4     | 4.5 | x | 3.4 |
| ERXG32M. D. 6   | M 5-6-8 | 6   | x | 4.9 |
| ERXG32M. D. 7   | M 7-10  | 7   | x | 5.5 |
| ERXG32M. D. 8   | M 8     | 8   | x | 6.2 |
| ERXG32M. D. 9   | M 9-12  | 9   | x | 7   |
| ERXG32M. D. 10  | M 10    | 10  | x | 8   |
| ERXG32M. D. 11  | M 14    | 11  | x | 9   |
| ERXG32M. D. 12  | M 16    | 12  | x | 9   |
| ERXG32M. D. 14  | M 18    | 14  | x | 11  |
| ERXG32M. D. 16  | M 20    | 16  | x | 12  |

## ERXG-20M

| REFERENCIA      | M       | Ø   | X | ✓   |
|-----------------|---------|-----|---|-----|
| ERXG20M. D. 4   | M 3.5   | 4   | x | 3   |
| ERXG20M. D. 4.5 | M 4     | 4.5 | x | 3.4 |
| ERXG20M. D. 6   | M 5-6-8 | 6   | x | 4.9 |
| ERXG20M. D. 7   | M 7-10  | 7   | x | 5.5 |
| ERXG20M. D. 8   | M 8     | 8   | x | 6.2 |
| ERXG20M. D. 9   | M 9-12  | 9   | x | 7   |
| ERXG20M. D. 10  | M 10    | 10  | x | 8   |

## ERXG-40M

| REFERENCIA     | M       | Ø  | X | ✓    |
|----------------|---------|----|---|------|
| ERXG40M. D. 6  | M 5-6-8 | 6  | x | 4.9  |
| ERXG40M. D. 7  | M 7-10  | 7  | x | 5.5  |
| ERXG40M. D. 8  | M 8     | 8  | x | 6.2  |
| ERXG40M. D. 9  | M 9-12  | 9  | x | 7    |
| ERXG40M. D. 10 | M 10    | 10 | x | 8    |
| ERXG40M. D. 11 | M 14    | 11 | x | 9    |
| ERXG40M. D. 12 | M 16    | 12 | x | 9    |
| ERXG40M. D. 14 | M 18    | 14 | x | 11   |
| ERXG40M. D. 16 | M 20    | 16 | x | 12   |
| ERXG40M. D. 18 | M 24    | 18 | x | 14.5 |
| ERXG40M. D. 20 | M 27    | 20 | x | 16   |

## ERXG-25M

| REFERENCIA      | M       | Ø   | X | ✓   |
|-----------------|---------|-----|---|-----|
| ERXG25M. D. 4   | M 3.5   | 4   | x | 3   |
| ERXG25M. D. 4.5 | M 4     | 4.5 | x | 3.4 |
| ERXG25M. D. 6   | M 5-6-8 | 6   | x | 4.9 |
| ERXG25M. D. 7   | M 7-10  | 7   | x | 5.5 |
| ERXG25M. D. 8   | M 8     | 8   | x | 6.2 |
| ERXG25M. D. 9   | M 9-12  | 9   | x | 7   |
| ERXG25M. D. 10  | M 10    | 10  | x | 8   |
| ERXG25M. D. 11  | M 14    | 11  | x | 9   |
| ERXG25M. D. 12  | M 16    | 12  | x | 9   |



Pinza para macho con cuadradillo de arrastre con Compensación Axial  
*Tapping collets with axial compensation*



## ER16-FT

T = Compensación

| REFERENCIA      | M1 - M8                           | Ø   | X | ∇   | T    |
|-----------------|-----------------------------------|-----|---|-----|------|
| ERC16FT. D. 2.5 | M 1 - 1.1 - 1.2 - 1.4 - 1.6 - 1.8 | 2.5 | x | 2.1 | 7 mm |
| ERC16FT. D. 2.8 | M 2 - 2.2 - 2.5                   | 2.8 | x | 2.1 |      |
| ERC16FT. D. 3.5 | M 3                               | 3.5 | x | 2.7 |      |
| ERC16FT. D. 4   | M 3.5                             | 4   | x | 3   |      |
| ERC16FT. D. 4.5 | M 4                               | 4.5 | x | 3.4 |      |
| ERC16FT. D. 6   | M 5 - 6 - 8                       | 6   | x | 4.9 |      |

## ER20-FT

T = Compensación

| REFERENCIA      | M1 - M10                          | Ø   | X | ∇   | T   |
|-----------------|-----------------------------------|-----|---|-----|-----|
| ERC20FT. D. 2.5 | M 1 - 1.1 - 1.2 - 1.4 - 1.6 - 1.8 | 2.5 | x | 2.1 | 7mm |
| ERC20FT. D. 2.8 | M 2 - 2.2 - 2.5                   | 2.8 | x | 2.1 |     |
| ERC20FT. D. 3.5 | M 3                               | 3.5 | x | 2.7 |     |
| ERC20FT. D. 4   | M 3.5                             | 4   | x | 3.0 |     |
| ERC20FT. D. 4.5 | M 4                               | 4.5 | x | 3.4 |     |
| ERC20FT. D. 6   | M 5 - 6 - 8                       | 6   | x | 4.9 |     |
| ERC20FT. D. 7   | M 10                              | 7   | x | 5.5 |     |

## ER25-FT

T = Compensación

| REFERENCIA      | M1 - 12                           | Ø   | X | ∇   | T   |
|-----------------|-----------------------------------|-----|---|-----|-----|
| ERC25FT. D. 2.5 | M 1 - 1.1 - 1.2 - 1.4 - 1.6 - 1.8 | 2.5 | x | 2.1 | 8mm |
| ERC25FT. D. 2.8 | M 2 - 2.2 - 2.5                   | 2.8 | x | 2.1 |     |
| ERC25FT. D. 3.5 | M 3                               | 3.5 | x | 2.7 |     |
| ERC25FT. D. 4   | M 3.5                             | 4   | x | 3.0 |     |
| ERC25FT. D. 4.5 | M 4                               | 4.5 | x | 3.4 |     |
| ERC25FT. D. 6   | M 5 - 6 - 8                       | 6   | x | 4.9 |     |
| ERC25FT. D. 7   | M 10                              | 7   | x | 5.5 |     |
| ERC25FT. D. 8   | M 8                               | 8   | x | 6.2 |     |
| ERC25FT. D. 9   | M 12                              | 9   | x | 7   |     |
| ERC25FT. D. 10  | M 10                              | 10  | x | 8   |     |

Pinza para macho con cuadradillo de arrastre con Compensación Axial  
*Tapping collets with axial compensation*



## ER32-FT

T = Compensación

| REFERENCIA      | M4 - M16    | Ø   | X | ∇   | T    |
|-----------------|-------------|-----|---|-----|------|
| ERC32FT. D. 4.5 | M 4         | 4.5 | x | 3.4 | 10mm |
| ERC32FT. D. 6   | M 5 - 6 - 8 | 6   | x | 4.9 |      |
| ERC32FT. D. 7   | M 10        | 7   | x | 5.5 |      |
| ERC32FT. D. 8   | M 8         | 8   | x | 6.2 |      |
| ERC32FT. D. 9   | M 12        | 9   | x | 7   |      |
| ERC32FT. D. 10  | M 10        | 10  | x | 8   |      |
| ERC32FT. D. 11  | M 14        | 11  | x | 9   |      |
| ERC32FT. D. 12  | M 16        | 12  | x | 9   |      |

## ER40-FT

T = Compensación

| REFERENCIA       | M5 - M24    | Ø    | X | ∇   | T    |
|------------------|-------------|------|---|-----|------|
| ERC40FT. D. 6    | M 5 - 6 - 8 | 6    | x | 4.9 | 13mm |
| ERC40FT. D. 7    | M 7 - 10    | 7    | x | 5.5 |      |
| ERC40FT. D. 8    | M 8         | 8    | x | 6.2 |      |
| ERC40FT. D. 9    | M 9 - 12    | 9    | x | 7   |      |
| ERC40FT. D. 10   | M 10        | 10   | x | 8   |      |
| ERC40FT. D. 11   | M 14        | 11   | x | 9   |      |
| ERC40FT. D. 12   | M 16        | 12   | x | 9   |      |
| ERC40FT. D. 12.5 | M 16        | 12.5 | x | 10  |      |
| ERC40FT. D. 14   | M 18        | 14   | x | 11  |      |
| ERC40FT. D. 16   | M 20        | 16   | x | 12  |      |



Pinza para escariador con cuadradillo de Arrastre Flotante  
*Floating collets for reamers*



Flotación  
R=0.5



## ER16-PA

| REFERENCIA    | Ø Mango |
|---------------|---------|
| ERC16PA. D. 2 | 2       |
| ERC16PA. D. 3 | 3       |
| ERC16PA. D. 4 | 4       |
| ERC16PA. D. 5 | 5       |
| ERC16PA. D. 6 | 6       |
| ERC16PA. D. 7 | 7       |

## ER20-PA

| REFERENCIA    | Ø Mango |
|---------------|---------|
| ERC20PA. D. 3 | 3       |
| ERC20PA. D. 4 | 4       |
| ERC20PA. D. 5 | 5       |
| ERC20PA. D. 6 | 6       |
| ERC20PA. D. 7 | 7       |
| ERC20PA. D. 8 | 8       |

## ER25-PA

| REFERENCIA     | Ø Mango |
|----------------|---------|
| ERC25PA. D. 3  | 3       |
| ERC25PA. D. 4  | 4       |
| ERC25PA. D. 5  | 5       |
| ERC25PA. D. 6  | 6       |
| ERC25PA. D. 7  | 7       |
| ERC25PA. D. 8  | 8       |
| ERC25PA. D. 9  | 9       |
| ERC25PA. D. 10 | 10      |

## ER32-PA

| REFERENCIA     | Ø Mango |
|----------------|---------|
| ERC32PA. D. 4  | 4       |
| ERC32PA. D. 5  | 5       |
| ERC32PA. D. 6  | 6       |
| ERC32PA. D. 7  | 7       |
| ERC32PA. D. 8  | 8       |
| ERC32PA. D. 9  | 9       |
| ERC32PA. D. 10 | 10      |
| ERC32PA. D. 11 | 11      |
| ERC32PA. D. 12 | 12      |
| ERC32PA. D. 13 | 13      |

## ER40-PA

| REFERENCIA     | Ø Mango |
|----------------|---------|
| ERC40PA. D. 4  | 4       |
| ERC40PA. D. 5  | 5       |
| ERC40PA. D. 6  | 6       |
| ERC40PA. D. 7  | 7       |
| ERC40PA. D. 8  | 8       |
| ERC40PA. D. 9  | 9       |
| ERC40PA. D. 10 | 10      |
| ERC40PA. D. 11 | 11      |
| ERC40PA. D. 12 | 12      |
| ERC40PA. D. 13 | 13      |
| ERC40PA. D. 14 | 14      |
| ERC40PA. D. 15 | 15      |
| ERC40PA. D. 16 | 16      |



Tuerca de apriete MINI preequilibrada  
*Prebalanced clamping nuts*

## Tuerca MINI

| REFERENCIA | D  | M x P      | * Nm    |
|------------|----|------------|---------|
| G8M        | 12 | M10 X 0.75 | 5 ÷ 6   |
| G11M       | 16 | M13 X 0.75 | 7 ÷ 17  |
| G16M       | 22 | M19 X 1    | 12 ÷ 24 |
| G20M       | 28 | M24 X 1    | 16 ÷ 28 |
| G25M       | 35 | M30 X 1    | 22 ÷ 32 |



12000 rpm

## Tuerca MINI - Izquierda

| REFERENCIA | D  | M x P      | * Nm    |
|------------|----|------------|---------|
| G11ML      | 16 | M13 X 0.75 | 7 ÷ 17  |
| G16ML      | 22 | M19 X 1.5  | 12 ÷ 24 |
| G20ML      | 28 | M24 X 1.5  | 16 ÷ 28 |
| G25ML      | 35 | M30 X 1.5  | 22 ÷ 32 |



12000 rpm

## Tuerca MINI - Hexagonal

| REFERENCIA | D  | M x P      | * Nm    |
|------------|----|------------|---------|
| G11MSE     | 16 | M13 X 0.75 | 7 ÷ 17  |
| G16MSE     | 25 | M19 X 1    | 12 ÷ 24 |
| G20MSE     | 30 | M24 X 1    | 16 ÷ 28 |
| G25MSE     | 37 | M30 X 1    | 22 ÷ 32 |



12000 rpm

Llave tuerca  
MINI

Llave tuerca  
MINI  
Dinamométrica

Llave tuerca  
MINI  
Dinamométrica  
con rodillos

Llave tuerca  
MINI  
Hexagonal

Llave tuerca  
MINI  
Hexagonal  
Dinamométrica

| REFERENCIA | REFERENCIA | REFERENCIA | REFERENCIA | REFERENCIA |
|------------|------------|------------|------------|------------|
| CH 8M      | CD 8M      | CD 8MR12   | CH11M.E14  | CD11.E14M  |
| CH11M      | CD11M      | CD11MR16   | CH16M.E22  | CD16.E22M  |
| CH16M      | CD16M      | CD16MR22   | CH20M.E27  | CD20.E27M  |
| CH20M      | CD20M      | CD20MR28   | CH25M.E34  |            |
| CH25M      | CD25M      | CD25MR35   |            |            |



\* Nm = Fuerza de apriete aconsejada  
Recommended tightening torque

Tuerca de apriete STANDARD preequilibrada  
*Prebalanced clamping nuts*

## Tuerca Standard

| REFERENCIA | D  | M x P     | * Nm      |
|------------|----|-----------|-----------|
| G16S       | 32 | M22 x 1,5 | 15 ÷ 50   |
| G20S       | 35 | M25 x 1,5 | 16 ÷ 75   |
| G25S       | 42 | M32 x 1,5 | 25 ÷ 100  |
| G32S       | 50 | M40 x 1,5 | 25 ÷ 140  |
| G40S       | 63 | M50 x 1,5 | 60 ÷ 170  |
| G50S       | 78 | M64 x 2   | 120 ÷ 250 |



12000 rpm

| REFERENCIA      | D  | M x P     | * Nm     |
|-----------------|----|-----------|----------|
| G32SL Izquierda | 50 | M40 x 1,5 | 25 ÷ 120 |
| G40SL Izquierda | 63 | M50 x 1,5 | 60 ÷ 170 |

## Tuerca Standard - Hexagonal

| REFERENCIA | D  | M x P      | * Nm     |
|------------|----|------------|----------|
| G11SE      | 19 | M14 x 0.75 | 8 ÷ 24   |
| G16SE      | 28 | M22 x 1.5  | 15 ÷ 50  |
| G20SE      | 34 | M25 x 1.5  | 16 ÷ 75  |
| G25SE      | 42 | M32 x 1.5  | 25 ÷ 100 |



12000 rpm

| REFERENCIA       | D  | M x P     | * Nm    |
|------------------|----|-----------|---------|
| G16SEL Izquierda | 28 | M22 x 1.5 | 15 ÷ 50 |
| G20SEL Izquierda | 34 | M25 x 1.5 | 16 ÷ 75 |

Llave tuerca  
STANDARD

Llave tuerca  
STANDARD  
*Dinamométrica*

Llave tuerca  
HEXAGONAL

Llave tuerca  
HEXAGONAL  
*Dinamométrica*

| REFERENCIA |
|------------|
| CH16S      |
| CH20S      |
| CH25S      |
| CH32S      |
| CH40S      |
| CH50S      |

| REFERENCIA |
|------------|
| CD16S      |
| CD20S      |
| CD25S      |
| CD32S      |
| CD40S      |

| REFERENCIA |
|------------|
| CH11.E17   |
| CH16.E25   |
| CH20.E30   |
| CH25.E38   |

| REFERENCIA |
|------------|
| CD11.E17   |
| CD16.E25   |
| CD20.E30   |



\* Nm = Fuerza de apriete aconsejada  
*Recommended tightening torque*

Tuerca de apriete STANDARD a bolas  
*Friction bearing nuts*

## Tuerca Standard a Bolas

| REFERENCIA |        | D  | M x P     | * Nm     |
|------------|--------|----|-----------|----------|
| G16C       | FIG. 1 | 32 | M22 x 1,5 | 16 ÷ 55  |
| G20C       | FIG. 1 | 35 | M25 x 1,5 | 16 ÷ 80  |
| G25C       | FIG. 1 | 42 | M32 x 1,5 | 20 ÷ 110 |
| G32C       | FIG. 1 | 50 | M40 x 1,5 | 20 ÷ 140 |
| G40C       | FIG. 1 | 63 | M50 x 1,5 | 40 ÷ 180 |
| G60CO      | FIG. 2 | 83 | M70 x 1,5 | 60 ÷ 240 |

FIG. 1



FIG. 2



| REFERENCIA      |        | D  | M x P     | * Nm     |
|-----------------|--------|----|-----------|----------|
| G32CL Izquierda | FIG. 1 | 50 | M40 x 1,5 | 20 ÷ 140 |
| G40CL Izquierda | FIG. 1 | 63 | M50 x 1,5 | 40 ÷ 180 |

## Tuerca Standard - Inoxidable

FIG. 3

| REFERENCIA |        | D  | M x P     | * Nm     |
|------------|--------|----|-----------|----------|
| G32 INOX   | FIG. 3 | 50 | M40 x 1,5 | 25 ÷ 120 |



## Tuerca Standard - Clip extractor

| REFERENCIA |        | D  | M x P     | Nm       | CLIP     |
|------------|--------|----|-----------|----------|----------|
| G25SEB     | FIG. 1 | 42 | M32 x 1,5 | 25 ÷ 100 | CLP25-10 |
| G32SEB     | FIG. 1 | 50 | M40 x 1,5 | 25 ÷ 140 | CLP32-10 |
| G40SEB     | FIG. 1 | 63 | M50 x 1,5 | 60 ÷ 170 | CLP40-10 |

Llave tuerca  
STANDARD

Llave de  
Gancho

| REFERENCIA |               |
|------------|---------------|
| CH16S      | FIG. 1        |
| CH20S      | FIG. 1        |
| CH25S      | FIG. 1        |
| CH32S      | FIG. 1 FIG. 3 |
| CH40S      | FIG. 1        |

| REFERENCIA |        |
|------------|--------|
| CH60CO     | FIG. 2 |



\* Nm = Fuerza de apriete aconsejada  
*Recommended tightening torque*

Tuerca MINI extracción concéntrica para ALTA VELOCIDAD  
*Mini nuts with concentric extractor for high speed*

## Tuerca Standard Mini / Alta Velocidad

| REFERENCIA           | D  | M x P   | * Nm    |
|----------------------|----|---------|---------|
| G16WDM <b>FIG. 1</b> | 22 | M19 x 1 | 12 ÷ 24 |
| G20WDM <b>FIG. 1</b> | 28 | M24 x 1 | 16 ÷ 28 |
| G25WDM <b>FIG. 1</b> | 35 | M30 x 1 | 22 ÷ 32 |

FIG. 1



## Tuerca Standard - Hexagonal / Alta Velocidad

| REFERENCIA           | D  | M x P     | * Nm    |
|----------------------|----|-----------|---------|
| G20WDE <b>FIG. 2</b> | 34 | M25 x 1.5 | 16 ÷ 75 |

FIG. 2



## Tuerca Standard / Alta Velocidad

| REFERENCIA          | D  | M x P     | * Nm     |
|---------------------|----|-----------|----------|
| G20WD <b>FIG. 3</b> | 35 | M25 x 1.5 | 16 ÷ 70  |
| G25WD <b>FIG. 3</b> | 42 | M32 x 1.5 | 25 ÷ 100 |
| G32WD <b>FIG. 3</b> | 50 | M40 x 1.5 | 25 ÷ 140 |
| G40WD <b>FIG. 3</b> | 63 | M50 x 1.5 | 60 ÷ 170 |

FIG. 3



## Tuerca Standard / A Bolas

| REFERENCIA                      | D  | M x P     | * Nm     |
|---------------------------------|----|-----------|----------|
| G32WDC Derecha <b>FIG. 4</b>    | 50 | M40 x 1.5 | 20 ÷ 140 |
| G40WDC Derecha <b>FIG. 4</b>    | 63 | M50 x 1.5 | 40 ÷ 180 |
| G32WDCL Izquierda <b>FIG. 4</b> | 50 | M40 x 1.5 | 20 ÷ 140 |
| G40WDCL Izquierda <b>FIG. 4</b> | 63 | M50 x 1.5 | 40 ÷ 180 |

FIG. 4



Llave tuerca  
**MINI**

| REFERENCIA          |
|---------------------|
| CH16M <b>FIG. 1</b> |
| CH20M <b>FIG. 1</b> |
| CH25M <b>FIG. 1</b> |



Llave tuerca  
**HEXAGONAL**

| REFERENCIA             |
|------------------------|
| CH20.E30 <b>FIG. 2</b> |



Llave tuerca  
**STANDARD**

| REFERENCIA                 |
|----------------------------|
| CH20S <b>FIG. 3 FIG. 4</b> |
| CH25S <b>FIG. 3 FIG. 4</b> |
| CH32S <b>FIG. 3 FIG. 4</b> |
| CH40S <b>FIG. 3 FIG. 4</b> |



\* Nm = Fuerza de apriete aconsejada  
*Recommended tightening torque*

Tuerca MINI pinza ER - ALTA VELOCIDAD

*Notch-free MINI nuts for high speed*

## Tuerca MINI Alta Velocidad

| REFERENCIA | D  | M x P      | * Nm    |
|------------|----|------------|---------|
| NF8M       | 12 | M10 x 0.75 | 5 ÷ 6   |
| NF11M      | 16 | M13 x 0.75 | 7 ÷ 17  |
| NF16M      | 24 | M19 x 1    | 12 ÷ 24 |
| NF20M      | 30 | M24 x 1    | 16 ÷ 28 |
| NF25M      | 37 | M30 x 1    | 22 ÷ 32 |



20000 rpm

Tuerca STANDARD pinza ER - ALTA VELOCIDAD

*Notch-free STANDARD nuts for high speed*

## Tuerca Standard Alta Velocidad

| REFERENCIA | D  | M x P     | * Nm     |
|------------|----|-----------|----------|
| NF16       | 32 | M22 x 1.5 | 15 ÷ 50  |
| NF20       | 35 | M25 x 1.5 | 16 ÷ 75  |
| NF25       | 42 | M32 x 1.5 | 25 ÷ 100 |
| NF32       | 50 | M40 x 1.5 | 25 ÷ 140 |
| NF40       | 63 | M50 x 1.5 | 60 ÷ 170 |



20000 rpm

Llave  
MINI  
Alta Velocidad

### REFERENCIA

CD8NFMR12  
CD11NFMR16  
CD16NFMR24  
CD20NFMR30  
CD25NFMR37



Llave  
STANDARD  
Alta Velocidad

### REFERENCIA

CD16NFR32  
CD20NFR35  
CD25NFR42  
CD32NFR50  
CD40NFR63



\* Nm = Fuerza de apriete aconsejada  
Recommended tightening torque

**Tuerca MINI con disco de Retención paso refrigerante**  
*Nuts with seal disks Mini type*

| REFERENCIA | D  | M x P   | * Nm    |
|------------|----|---------|---------|
| G16HTM     | 22 | M19 x 1 | 12 ÷ 24 |
| G20HTM     | 28 | M24 x 1 | 16 ÷ 28 |
| G25HTM     | 35 | M30 x 1 | 22 ÷ 32 |



12000 rpm

**Tuerca HEXAGONAL con disco de Retención paso refrigerante**  
*Nuts with seal disks HEXAGONAL type*

| REFERENCIA | D  | M x P     | * Nm    |
|------------|----|-----------|---------|
| G16HTE     | 28 | M22 x 1.5 | 15 ÷ 50 |
| G20HTE     | 34 | M25 x 1.5 | 16 ÷ 75 |



12000 rpm

**Tuerca STANDARD con disco de Retención paso refrigerante**  
*Nuts with seal disks STANDARD type*

| REFERENCIA | D  | M x P     | * Nm     |
|------------|----|-----------|----------|
| G25HT      | 42 | M32 x 1.5 | 25 ÷ 100 |
| G32HT      | 50 | M40 x 1.5 | 25 ÷ 140 |
| G40HT      | 63 | M50 x 1.5 | 60 ÷ 170 |



12000 rpm

**Disco de Retención paso refrigerante**  
*Sealed disc with viton-o-ring*

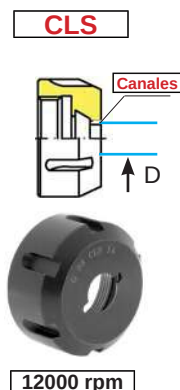
| REFERENCIA TUERCA | REFERENCIA DISCO | RANGO |
|-------------------|------------------|-------|
| G16HTM / G16HTE   | RG16 Ø3.5 - Ø10  | x 1mm |
| G20HTM / G20HTE   | RG20 Ø4 - Ø13    | x 1mm |
| G25HTM / G25HT    | RG25 Ø3.5 - Ø16  | x 1mm |
| G32HT             | RG32 Ø3.5 - Ø20  | x 1mm |
| G40HT             | RG40 Ø4 - Ø26    | x 1mm |



\* Nm = Fuerza de apriete aconsejada  
 Recommended tightening torque

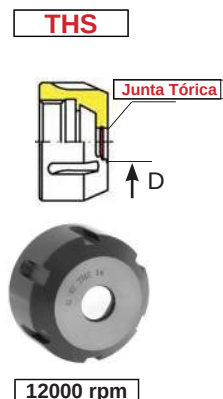
**Tuerca con Canales de refrigeración**  
*Nuts with coolant channels*

| REFERENCIA    | A  | F         | * Nm     |
|---------------|----|-----------|----------|
| G32CLS. D. 4  | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32CLS. D. 5  | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32CLS. D. 6  | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32CLS. D. 7  | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32CLS. D. 8  | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32CLS. D. 9  | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32CLS. D. 10 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32CLS. D. 11 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32CLS. D. 12 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32CLS. D. 13 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32CLS. D. 14 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32CLS. D. 15 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32CLS. D. 16 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32CLS. D. 17 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32CLS. D. 18 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32CLS. D. 19 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32CLS. D. 20 | 50 | M40 x 1.5 | 25 ÷ 140 |



**Tuerca refrigeración Central con junta**  
*Sealed nuts*

| REFERENCIA    | A  | F         | * Nm     |
|---------------|----|-----------|----------|
| G32THS. D. 4  | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32THS. D. 5  | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32THS. D. 6  | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32THS. D. 7  | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32THS. D. 8  | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32THS. D. 9  | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32THS. D. 10 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32THS. D. 11 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32THS. D. 12 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32THS. D. 13 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32THS. D. 14 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32THS. D. 15 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32THS. D. 16 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32THS. D. 17 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32THS. D. 18 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32THS. D. 19 | 50 | M40 x 1.5 | 25 ÷ 140 |
| G32THS. D. 20 | 50 | M40 x 1.5 | 25 ÷ 140 |



\* Nm = Fuerza de apriete aconsejada  
Recommended tightening torque

**Tuerca de apriete con rosca Externa**  
*Externally threaded nuts*

| REFERENCIA | M x P     | T  |
|------------|-----------|----|
| G11A       | M18 x 1   | 6  |
| G16A       | M24 x 1   | 8  |
| G20A       | M28 x 1.5 | 11 |
| G25A       | M32 x 1.5 | 12 |
| G32A       | M40 x 1.5 | 14 |



**Tuerca de apriete HEXAGONAL con rosca externa**  
*Externally threaded EXAGONAL nuts*

| REFERENCIA | M x P     | T    |
|------------|-----------|------|
| G16A.EX19  | M24 x 1   | 12   |
| G20A.EX22  | M28 x 1.5 | 13   |
| G25A.EX27  | M32 x 1.5 | 16.5 |
| G32A.EX32  | M40 x 1.5 | 19   |



**Llave PIVOTE**

| REFERENCIA  |
|-------------|
| CH11A-Comp. |
| CH16A       |
| CH20A       |
| CH25A       |
| CH32A       |



**Llave Hexagonal**

| REFERENCIA |
|------------|
| CH16A.EX19 |
| CH20A.EX22 |
| CH25A.EX27 |
| CH32A.EX32 |



**Llave  
MINI**

**REFERENCIA**

CH 8M  
CH11M  
CH16M  
CH20M  
CH25M



**Llave  
MINI  
Dinamométrica**

**REFERENCIA**

CD 8M  
CD11M  
CD16M  
CD20M  
CD25M



**Llave MINI  
con rodillos  
Dinamométrica**

**REFERENCIA**

CD 8MR12  
CD11MR16  
CD16MR22  
CD20MR28  
CD25MR35



**Llave MINI  
Hexagonal  
Dinamométrica**

**REFERENCIA**

CD11.E14M  
CD16.E22M  
CD20.E27M



**Llave  
MINI  
Hexagonal**

**REFERENCIA**

CH11M.E14  
CH16M.E22  
CH20M.E27  
CH25M.E34



**Llave  
STANDARD  
Hexagonal**

**REFERENCIA**

CH11.E17  
CH16.E25  
CH20.E30  
CH25.E38



**Llave STANDARD  
Hexagonal  
Dinamométrica**

**REFERENCIA**

CD11.E17  
CD16.E25  
CD20.E30



**Llave  
STANDARD**

**REFERENCIA**

CH16S  
CH20S  
CH25S  
CH32S  
CH40S  
CH50S



**Llave  
STANDARD  
Dinamométrica**

**REFERENCIA**

CD16S  
CD20S  
CD25S  
CD32S  
CD40S



**Llave  
de  
GANCHO**

**REFERENCIA**

CH60CO



**Llave  
Dinamométrica**

**REFERENCIA**

CD16S32  
CD20S35  
CD25S42  
CD32S50  
CD40S63



**Llave STANDARD  
con rodillos  
Dinamométrica**

**REFERENCIA**

CD16R32  
CD20R35  
CD25R42  
CD32R50  
CD40R63



Mango  
para llave  
Dinamométrica

**REFERENCIA**

TW803-210

$R_n = 40 \div 210 \text{ Nm}$



Mango  
Carraca para  
tuerca ER

**REFERENCIA**

CRC12RV



Llave  
Carraca de  
recambio

**REFERENCIA**

CC25

CC32

CC40



Llave  
MINI  
*Alta Velocidad*

**REFERENCIA**

CD8NFMR12

CD11NFMR16

CD16NFMR24

CD20NFMR30

CD25NFMR37



Llave  
STANDARD  
*Alta Velocidad*

**REFERENCIA**

CD16NFR32

CD20NFR35

CD25NFR42

CD32NFR50

CD40NFR63



Llave  
de  
PIVOTES

**REFERENCIA**

CH11A-Comp.

CH16A

CH20A

CH25A

CH32A



Llave STANDARD  
Hexagonal para tuerca  
con rosca Externa

**REFERENCIA**

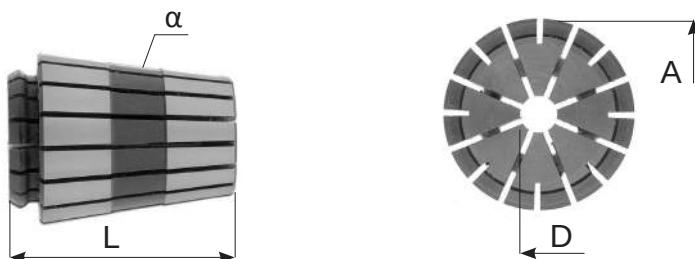
CH16A.EX19

CH20A.EX22

CH25A.EX27

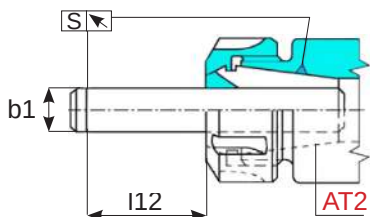
CH32A.EX32





| <b>CODIGO<br/>CODE</b> | <b>D mm<br/>min-max</b> | <b>Campo de Apriete<br/>Clamping Range</b> | <b>A</b> | <b><math>\alpha</math><br/>AT3</b> | <b>L</b> |
|------------------------|-------------------------|--------------------------------------------|----------|------------------------------------|----------|
| <b>ERCD16</b>          | 1 ÷ 10                  | 0,5 ÷ 1 mm                                 | 17       | 8°                                 | 24       |
| <b>ERCD20</b>          | 1 ÷ 13                  | 0,5 ÷ 1 mm                                 | 21       | 8°                                 | 30.5     |
| <b>ERCD25</b>          | 1 ÷ 16                  | 0,5 ÷ 1 mm                                 | 26       | 8°                                 | 34       |
| <b>ERCD32</b>          | 2 ÷ 20                  | 0,5 ÷ 1 mm                                 | 33       | 8°                                 | 40       |
| <b>ERCD40</b>          | 3 ÷ 30                  | 1 mm                                       | 41       | 8°                                 | 46       |

**Tolerancia de la rotación de la pinza ERCD**  
*ERCD collet concentricity specification*



| <b>minimo</b> | <b>d1 - h5<br/>máximo</b> | <b>l12</b> | <b>S max ①</b> |
|---------------|---------------------------|------------|----------------|
| <b>mm</b>     | <b>mm</b>                 | <b>mm</b>  | <b>mm</b>      |
| <b>1</b>      | 1.6                       | 6          | 0.010          |
| <b>1.6</b>    | 3                         | 10         | 0.010          |
| <b>3</b>      | 7                         | 16         | 0.010          |
| <b>7</b>      | 10                        | 25         | 0.010          |
| <b>10</b>     | 18                        | 40         | 0.015          |
| <b>18</b>     | 26                        | 50         | 0.015          |
| <b>26</b>     | 40                        | 60         | 0.015          |

① El valor de la concentricidad se controla sobre el Ø nominal de la pinza

① This runout accuracy is valid only for the nominal size of the collets

Pinza de precisión  
*Precision collets*

## ERCD16



0.010

| REFERENCIA   | CAPACIDAD |   |   |
|--------------|-----------|---|---|
| ERCD16. D. 2 | 2         | ÷ | 1 |
| ERCD16. D. 3 | 3         | ÷ | 2 |
| ERCD16. D. 4 | 4         | ÷ | 3 |
| ERCD16. D. 5 | 5         | ÷ | 4 |
| ERCD16. D. 6 | 6         | ÷ | 5 |
| ERCD16. D. 7 | 7         | ÷ | 6 |
| ERCD16. D. 8 | 8         | ÷ | 7 |
| ERCD16. D. 9 | 9         | ÷ | 8 |
| ERCD16. D.10 | 10        | ÷ | 9 |

Kit de pinzas / *Kit in Tray*

### REFERENCIA

TY.ERCD16-9 **KIT** **FIG. 1**  
D. 2 . 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10

**FIG. 1**



Estuche de pinzas / *Kit in Box*

### REFERENCIA

BX.ERCD16-9 **BOX** **FIG. 2**  
D. 2 . 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10

**FIG. 2**



Pinza de precisión  
*Precision collets*

## ERCD20



0.010

| REFERENCIA    | CAPACIDAD |   |    |
|---------------|-----------|---|----|
| ERCD20. D. 2  | 2         | ÷ | 1  |
| ERCD20. D. 3  | 3         | ÷ | 2  |
| ERCD20. D. 4  | 4         | ÷ | 3  |
| ERCD20. D. 5  | 5         | ÷ | 4  |
| ERCD20. D. 6  | 6         | ÷ | 5  |
| ERCD20. D. 7  | 7         | ÷ | 6  |
| ERCD20. D. 8  | 8         | ÷ | 7  |
| ERCD20. D. 9  | 9         | ÷ | 8  |
| ERCD20. D. 10 | 10        | ÷ | 9  |
| ERCD20. D. 11 | 11        | ÷ | 10 |
| ERCD20. D. 12 | 12        | ÷ | 11 |
| ERCD20. D. 13 | 13        | ÷ | 12 |

Kit de pinzas / *Kit in Tray*

### REFERENCIA

TY.ERCD20-12 **KIT** **FIG. 1**  
D. 2 . 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13

**FIG. 1**



Estuche de pinzas / *Kit in Box*

### REFERENCIA

BX.ERCD20-12 **BOX**  
D. 2 . 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13

**FIG. 2**



★ ERCD = Compatible con pinza ERC Din 6499

Pinza de precisión  
*Precision collets*

## ERCD25



✓ 0,010

| REFERENCIA    | CAPACIDAD |   |    |
|---------------|-----------|---|----|
| ERCD25. D. 3  | 3         | ÷ | 2  |
| ERCD25. D. 4  | 4         | ÷ | 3  |
| ERCD25. D. 5  | 5         | ÷ | 4  |
| ERCD25. D. 6  | 6         | ÷ | 5  |
| ERCD25. D. 7  | 7         | ÷ | 6  |
| ERCD25. D. 8  | 8         | ÷ | 7  |
| ERCD25. D. 9  | 9         | ÷ | 8  |
| ERCD25. D. 10 | 10        | ÷ | 9  |
| ERCD25. D. 11 | 11        | ÷ | 10 |
| ERCD25. D. 12 | 12        | ÷ | 11 |
| ERCD25. D. 13 | 13        | ÷ | 12 |
| ERCD25. D. 14 | 14        | ÷ | 13 |
| ERCD25. D. 15 | 15        | ÷ | 14 |
| ERCD25. D. 16 | 16        | ÷ | 15 |

Kit de pinzas / *Kit in Tray*

| REFERENCIA                  |
|-----------------------------|
| TY.ERCD25-6 KIT FIG. 1      |
| D. 4 . 6 . 8 . 10 . 12 . 16 |

Estuche de pinzas / *Kit in Box*

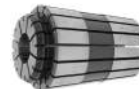
| REFERENCIA                                            |
|-------------------------------------------------------|
| BX.ERCD25-14 BOX FIG. 2                               |
| D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 . 14 |
| D. 15 . 16                                            |



★ ERCD = Compatible con pinza ERC Din 6499

Pinza de precisión  
*Precision collets*

## ERCD32



✓ 0,010 ÷ 0,015

| REFERENCIA    | CAPACIDAD |   |    |
|---------------|-----------|---|----|
| ERCD32. D. 3  | 3         | ÷ | 2  |
| ERCD32. D. 4  | 4         | ÷ | 3  |
| ERCD32. D. 5  | 5         | ÷ | 4  |
| ERCD32. D. 6  | 6         | ÷ | 5  |
| ERCD32. D. 7  | 7         | ÷ | 6  |
| ERCD32. D. 8  | 8         | ÷ | 7  |
| ERCD32. D. 9  | 9         | ÷ | 8  |
| ERCD32. D. 10 | 10        | ÷ | 9  |
| ERCD32. D. 11 | 11        | ÷ | 10 |
| ERCD32. D. 12 | 12        | ÷ | 11 |
| ERCD32. D. 13 | 13        | ÷ | 12 |
| ERCD32. D. 14 | 14        | ÷ | 13 |
| ERCD32. D. 15 | 15        | ÷ | 14 |
| ERCD32. D. 16 | 16        | ÷ | 15 |
| ERCD32. D. 17 | 17        | ÷ | 16 |
| ERCD32. D. 18 | 18        | ÷ | 17 |
| ERCD32. D. 19 | 19        | ÷ | 18 |
| ERCD32. D. 20 | 20        | ÷ | 19 |

Kit de pinzas / *Kit in Tray*

| REFERENCIA                   |
|------------------------------|
| TY.ERCD32-6 KIT FIG. 1       |
| D. 6 . 8 . 10 . 12 . 16 . 20 |

Estuche de pinzas / *Kit in Box*

| REFERENCIA                                            |
|-------------------------------------------------------|
| BX.ERCD32-18 BOX FIG. 2                               |
| D. 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 . 14 |
| D. 15 . 16 . 17 . 18 . 19 . 20                        |



Pinza de precisión  
*Precision collets*

## ERCD40



✓ 0,010 ÷ 0,015

| REFERENCIA    | CAPACIDAD |   |    | REFERENCIA    | CAPACIDAD |   |    |
|---------------|-----------|---|----|---------------|-----------|---|----|
| ERCD40. D. 4  | 4         | ÷ | 3  | ERCD40. D. 15 | 15        | ÷ | 14 |
| ERCD40. D. 5  | 5         | ÷ | 4  | ERCD40. D. 16 | 16        | ÷ | 15 |
| ERCD40. D. 6  | 6         | ÷ | 5  | ERCD40. D. 17 | 17        | ÷ | 16 |
| ERCD40. D. 7  | 7         | ÷ | 6  | ERCD40. D. 18 | 18        | ÷ | 17 |
| ERCD40. D. 8  | 8         | ÷ | 7  | ERCD40. D. 19 | 19        | ÷ | 18 |
| ERCD40. D. 9  | 9         | ÷ | 8  | ERCD40. D. 20 | 20        | ÷ | 19 |
| ERCD40. D. 10 | 10        | ÷ | 9  | ERCD40. D. 21 | 21        | ÷ | 20 |
| ERCD40. D. 11 | 11        | ÷ | 10 | ERCD40. D. 22 | 22        | ÷ | 21 |
| ERCD40. D. 12 | 12        | ÷ | 11 | ERCD40. D. 23 | 23        | ÷ | 22 |
| ERCD40. D. 13 | 13        | ÷ | 12 | ERCD40. D. 24 | 24        | ÷ | 23 |
| ERCD40. D. 14 | 14        | ÷ | 13 | ERCD40. D. 25 | 25        | ÷ | 24 |
|               |           |   |    | ERCD40. D. 26 | 26        | ÷ | 25 |

★ ERCD = Compatible con pinza ERC Din 6499

## Tuerca Mini

| REFERENCIA | D    | M x P | ★ Nm    |
|------------|------|-------|---------|
| G16DHM     | 24   | M19x1 | 12 ÷ 24 |
| G20DHM     | 30.5 | M24x1 | 16 ÷ 28 |
| G25DHM     | 36   | M30x1 | 22 ÷ 32 |



## Tuerca Standard

| REFERENCIA | D  | M x P   | ★ Nm     |
|------------|----|---------|----------|
| G16DH      | 32 | M22x1,5 | 15 ÷ 50  |
| G20DH      | 35 | M25x1,5 | 16 ÷ 75  |
| G25DH      | 42 | M32x1,5 | 25 ÷ 100 |
| G32DH      | 50 | M40x1,5 | 25 ÷ 140 |
| G40DH      | 63 | M50x1,5 | 60 ÷ 170 |



Llave MINI  
Hexagonal

Llave  
STANDARD

Llave  
STANDARD  
Dinamométrica

| REFERENCIA |
|------------|
| CH16.DHM22 |
| CH20.DHM28 |
| CH25.DHM34 |

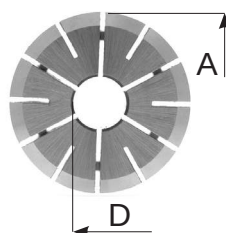
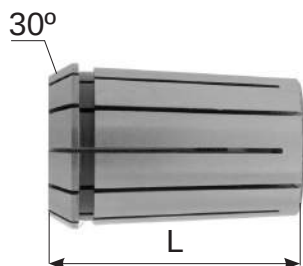


| REFERENCIA |
|------------|
| CH16S      |
| CH20S      |
| CH25S      |
| CH32S      |
| CH40S      |



| REFERENCIA |
|------------|
| CD16S      |
| CD20S      |
| CD25S      |
| CD32S      |
| CD40S      |





| <b>CODIGO<br/>CODE</b> | <b>D mm<br/>min-max</b> | <b>Campo de Apriete<br/>Clamping Range</b> | <b>A</b> | <b>L</b> |
|------------------------|-------------------------|--------------------------------------------|----------|----------|
| <b>EOC6B - 400E</b>    | 1 ÷ 6                   | 0,5 mm                                     | 11.50    | 21       |
| <b>EOC8B - 401E</b>    | 1 ÷ 8                   | 0,5 mm                                     | 14.50    | 26       |
| <b>EOC10B - 404E</b>   | 1 ÷ 10                  | 0,5 mm                                     | 17.20    | 30       |
| <b>EOC12B - 407E</b>   | 1 ÷ 12                  | 0,5 mm                                     | 19.80    | 34       |
| <b>EOC16B - 415E</b>   | 2 ÷ 16                  | 0,5 mm                                     | 25.50    | 40       |
| <b>EOC20B - 4541E</b>  | 2 ÷ 20                  | 0,5 mm                                     | 29.80    | 45       |
| <b>EOC25B - 462E</b>   | 2 ÷ 25                  | 0,5 mm                                     | 35.05    | 52       |
| <b>EOC32B - 467E</b>   | 3 ÷ 32                  | 0,5 mm                                     | 43.70    | 60       |
| <b>EOC40B - 468E</b>   | 8 ÷ 40                  | 0,5 mm                                     | 52.20    | 68       |

Pinza de precisión standard  
*Standard precision collets*

## EOC-B



✓ 0,010 ÷ 0,015

### EOC06B / 08B / 10B / 12B

| <b>REFERENCIA</b> | <b>FAM</b> | <b>COD</b> | <b>CAPACIDAD</b> |   |    | <b>CAMPO DE APRIETE</b> |
|-------------------|------------|------------|------------------|---|----|-------------------------|
| EOC6B             | 2          | 0578       | 1                | ÷ | 6  | 0,5mm                   |
| EOC8B             | 2          | 0633       | 1                | ÷ | 8  | 0,5mm                   |
| EOC10B            | 2          | 0645       | 1                | ÷ | 10 | 0,5mm                   |
| EOC12B            | 2          | 0768       | 1                | ÷ | 12 | 0,5mm                   |

Pinza de precisión standard  
*Standard precision collets*

## EOC16B



0,010 ÷ 0,015

| REFERENCIA    | COD  | CAPACIDAD |   |      |
|---------------|------|-----------|---|------|
| EOC16B. D. 2  | 0768 | 2         | ÷ | 1.5  |
| EOC16B. D. 3  |      | 3         | ÷ | 2.5  |
| EOC16B. D. 4  |      | 4         | ÷ | 3.5  |
| EOC16B. D. 5  |      | 5         | ÷ | 4.5  |
| EOC16B. D. 6  |      | 6         | ÷ | 5.5  |
| EOC16B. D. 7  |      | 7         | ÷ | 6.5  |
| EOC16B. D. 8  |      | 8         | ÷ | 7.5  |
| EOC16B. D. 9  |      | 9         | ÷ | 8.5  |
| EOC16B. D. 10 |      | 10        | ÷ | 9.5  |
| EOC16B. D. 11 |      | 11        | ÷ | 10.5 |
| EOC16B. D. 12 |      | 12        | ÷ | 11.5 |
| EOC16B. D. 13 |      | 13        | ÷ | 12.5 |
| EOC16B. D. 14 |      | 14        | ÷ | 13.5 |
| EOC16B. D. 15 |      | 15        | ÷ | 14.5 |
| EOC16B. D. 16 |      | 16        | ÷ | 15.5 |

Pinza de precisión standard  
*Standard precision collets*

## EOC20B



0,010 ÷ 0,015

| REFERENCIA    | COD  | CAPACIDAD |   |      |
|---------------|------|-----------|---|------|
| EOC20B. D. 2  | 0783 | 2         | ÷ | 1.5  |
| EOC20B. D. 3  |      | 3         | ÷ | 2.5  |
| EOC20B. D. 4  |      | 4         | ÷ | 3.5  |
| EOC20B. D. 5  |      | 5         | ÷ | 4.5  |
| EOC20B. D. 6  |      | 6         | ÷ | 5.5  |
| EOC20B. D. 8  |      | 8         | ÷ | 7.5  |
| EOC20B. D. 10 |      | 10        | ÷ | 9.5  |
| EOC20B. D. 12 |      | 12        | ÷ | 11.5 |
| EOC20B. D. 14 |      | 14        | ÷ | 13.5 |
| EOC20B. D. 16 |      | 16        | ÷ | 15.5 |
| EOC20B. D. 18 |      | 18        | ÷ | 17.5 |
| EOC20B. D. 20 |      | 20        | ÷ | 19.5 |

Kit de pinzas / *Kit in Tray*

### REFERENCIA

TY.EOC16B-15 **FIG. 1**  
D. 2 . 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 .  
D. 14 . 15 . 16

**FIG. 1**



Estuche de pinzas / *Kit in Box*

### REFERENCIA

BX.EOC16B-15 **FIG. 2**  
D. 2 . 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 .  
D. 14 . 15 . 16

**FIG. 2**



Kit de pinzas / *Kit in Tray*

### REFERENCIA

TY.EOC20B-12 **FIG. 1**  
D. 2 . 3 . 4 . 5 . 6 . 8 . 10 . 12 . 14 . 16 . 18 . 20

**FIG. 1**



Estuche de pinzas / *Kit in Box*

### REFERENCIA

BX.EOC20B-12 **FIG. 2**  
D. 2 . 3 . 4 . 5 . 6 . 8 . 10 . 12 . 14 . 16 . 18 . 20

**FIG. 2**



Pinza de precisión standard  
Standard precision collets

## EOC25B



0,010 ÷ 0,015

Pinza de precisión standard  
Standard precision collets

## EOC32B



0,010 ÷ 0,015

| REFERENCIA    | COD  | CAPACIDAD |   |      |
|---------------|------|-----------|---|------|
| EOC25B. D. 2  | 0769 | 2         | ÷ | 1.5  |
| EOC25B. D. 3  |      | 3         | ÷ | 2.5  |
| EOC25B. D. 4  |      | 4         | ÷ | 3.5  |
| EOC25B. D. 5  |      | 5         | ÷ | 4.5  |
| EOC25B. D. 6  |      | 6         | ÷ | 5.5  |
| EOC25B. D. 7  |      | 7         | ÷ | 6.5  |
| EOC25B. D. 8  |      | 8         | ÷ | 7.5  |
| EOC25B. D. 9  |      | 9         | ÷ | 8.5  |
| EOC25B. D. 10 |      | 10        | ÷ | 9.5  |
| EOC25B. D. 11 |      | 11        | ÷ | 10.5 |
| EOC25B. D. 12 |      | 12        | ÷ | 11.5 |
| EOC25B. D. 13 |      | 13        | ÷ | 12.5 |
| EOC25B. D. 14 |      | 14        | ÷ | 13.5 |
| EOC25B. D. 15 |      | 15        | ÷ | 14.5 |
| EOC25B. D. 16 |      | 16        | ÷ | 15.5 |
| EOC25B. D. 17 |      | 17        | ÷ | 16.5 |
| EOC25B. D. 18 |      | 18        | ÷ | 17.5 |
| EOC25B. D. 19 |      | 19        | ÷ | 18.5 |
| EOC25B. D. 20 |      | 20        | ÷ | 19.5 |
| EOC25B. D. 21 |      | 21        | ÷ | 20.5 |
| EOC25B. D. 22 |      | 22        | ÷ | 21.5 |
| EOC25B. D. 23 |      | 23        | ÷ | 22.5 |
| EOC25B. D. 24 |      | 24        | ÷ | 23.5 |
| EOC25B. D. 25 |      | 25        | ÷ | 24.5 |

Estuche de pinzas / Kit in Box

| REFERENCIA                                                                                                     |
|----------------------------------------------------------------------------------------------------------------|
| TY.EOC25B-6                                                                                                    |
| D4 . 6 . 8 . 10 . 12 . 16                                                                                      |
| TY.EOC25B-24                                                                                                   |
| D2 . 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 . 14 . 15 . 16 . 17 . 18 . 19 . 20 . 21 . 22 . 23 . 24 . 25 |
| BX.EOC25B-24                                                                                                   |
| D2 . 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 . 14 . 15 . 16 . 17 . 18 . 19 . 20 . 21 . 22 . 23 . 24 . 25 |

FIG. 2

FIG. 1



| REFERENCIA    | COD  | CAPACIDAD |   |      |
|---------------|------|-----------|---|------|
| EOC32B. D. 3  | 0770 | 3         | ÷ | 2.5  |
| EOC32B. D. 4  |      | 4         | ÷ | 3.5  |
| EOC32B. D. 5  |      | 5         | ÷ | 4.5  |
| EOC32B. D. 6  |      | 6         | ÷ | 5.5  |
| EOC32B. D. 7  |      | 7         | ÷ | 6.5  |
| EOC32B. D. 8  |      | 8         | ÷ | 7.5  |
| EOC32B. D. 9  |      | 9         | ÷ | 8.5  |
| EOC32B. D. 10 |      | 10        | ÷ | 9.5  |
| EOC32B. D. 11 |      | 11        | ÷ | 10.5 |
| EOC32B. D. 12 |      | 12        | ÷ | 11.5 |
| EOC32B. D. 13 |      | 13        | ÷ | 12.5 |
| EOC32B. D. 14 |      | 14        | ÷ | 13.5 |
| EOC32B. D. 15 |      | 15        | ÷ | 14.5 |
| EOC32B. D. 16 |      | 16        | ÷ | 15.5 |
| EOC32B. D. 17 |      | 17        | ÷ | 16.5 |
| EOC32B. D. 18 |      | 18        | ÷ | 17.5 |
| EOC32B. D. 19 |      | 19        | ÷ | 18.5 |
| EOC32B. D. 20 |      | 20        | ÷ | 19.5 |
| EOC32B. D. 21 |      | 21        | ÷ | 20.5 |
| EOC32B. D. 22 |      | 22        | ÷ | 21.5 |
| EOC32B. D. 23 |      | 23        | ÷ | 22.5 |
| EOC32B. D. 24 |      | 24        | ÷ | 23.5 |
| EOC32B. D. 25 |      | 25        | ÷ | 24.5 |
| EOC32B. D. 26 |      | 26        | ÷ | 25.5 |
| EOC32B. D. 27 |      | 27        | ÷ | 26.5 |
| EOC32B. D. 28 |      | 28        | ÷ | 27.5 |
| EOC32B. D. 29 |      | 29        | ÷ | 28.5 |
| EOC32B. D. 30 |      | 30        | ÷ | 29.5 |
| EOC32B. D. 31 |      | 31        | ÷ | 30.5 |
| EOC32B. D. 32 |      | 32        | ÷ | 31.5 |

Estuche de pinzas / Kit in Box

| REFERENCIA                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------|
| TY.EOC32B-6                                                                                                                                   |
| D4 . 6 . 8 . 10 . 12 . 16                                                                                                                     |
| TY.EOC32B-31                                                                                                                                  |
| BX.EOC32B-31                                                                                                                                  |
| D3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 11 . 12 . 13 . 14 . 15 . 16 . 17 . 18 . 19 . 20 . 21 . 22 . 23 . 24 . 25 . 26 . 27 . 28 . 29 . 30 . 31 . 32 |

Pinza de precisión standard  
*Standard precision collets*

## EOC40B



0,010 ÷ 0,015

| REFERENCIA    | COD  | CAPACIDAD |   |      | REFERENCIA    | COD  | CAPACIDAD |   |      |
|---------------|------|-----------|---|------|---------------|------|-----------|---|------|
| EOC40B. D. 8  | 0802 | 8         | ÷ | 7.5  | EOC40B. D. 25 | 0802 | 25        | ÷ | 24.5 |
| EOC40B. D. 9  |      | 9         | ÷ | 8.5  | EOC40B. D. 26 |      | 26        | ÷ | 25.5 |
| EOC40B. D. 10 |      | 10        | ÷ | 9.5  | EOC40B. D. 27 |      | 27        | ÷ | 26.5 |
| EOC40B. D. 11 |      | 11        | ÷ | 10.5 | EOC40B. D. 28 |      | 28        | ÷ | 27.5 |
| EOC40B. D. 12 |      | 12        | ÷ | 11.5 | EOC40B. D. 29 |      | 29        | ÷ | 28.5 |
| EOC40B. D. 13 |      | 13        | ÷ | 12.5 | EOC40B. D. 30 |      | 30        | ÷ | 29.5 |
| EOC40B. D. 14 |      | 14        | ÷ | 13.5 | EOC40B. D. 31 |      | 31        | ÷ | 30.5 |
| EOC40B. D. 15 |      | 15        | ÷ | 14.5 | EOC40B. D. 32 |      | 32        | ÷ | 31.5 |
| EOC40B. D. 16 |      | 16        | ÷ | 15.5 | EOC40B. D. 33 |      | 33        | ÷ | 32.5 |
| EOC40B. D. 17 |      | 17        | ÷ | 16.5 | EOC40B. D. 34 |      | 34        | ÷ | 33.5 |
| EOC40B. D. 18 |      | 18        | ÷ | 17.5 | EOC40B. D. 35 |      | 35        | ÷ | 34.5 |
| EOC40B. D. 19 |      | 19        | ÷ | 18.5 | EOC40B. D. 36 |      | 36        | ÷ | 35.5 |
| EOC40B. D. 20 |      | 20        | ÷ | 19.5 | EOC40B. D. 37 |      | 37        | ÷ | 36.5 |
| EOC40B. D. 21 |      | 21        | ÷ | 20.5 | EOC40B. D. 38 |      | 38        | ÷ | 37.5 |
| EOC40B. D. 22 |      | 22        | ÷ | 21.5 | EOC40B. D. 39 |      | 39        | ÷ | 38.5 |
| EOC40B. D. 23 |      | 23        | ÷ | 22.5 | EOC40B. D. 40 |      | 40        | ÷ | 39.5 |
| EOC40B. D. 24 |      | 24        | ÷ | 23.5 |               |      |           |   |      |

## PINZAS EOC REFRIGERANTE MAX. 40 BAR

Pinza de precisión standard con Refrigeración  
*Watertight EOC Collets*



## EOC-RF



### EOC16RF / 20RF / 25RF / 32RF

| REFERENCIA | FAM | COD     | CAPACIDAD |   |    | D     | L  | CAMPO DE APRIETE |
|------------|-----|---------|-----------|---|----|-------|----|------------------|
| EOC12RF    | 2   | 0645 RF | 1         | ÷ | 12 | 19.90 | 34 | 0.5 mm           |
| EOC16RF    |     | 0768 RF | 2         | ÷ | 16 | 25.50 | 40 | 0.5 mm           |
| EOC20RF    |     | 0783 RF | 3         | ÷ | 20 | 30.00 | 45 | 0.5 mm           |
| EOC25RF    |     | 0769 RF | 3         | ÷ | 25 | 35.05 | 52 | 0.5 mm           |
| EOC32RF    |     | 0770 RF | 4         | ÷ | 32 | 44.00 | 60 | 0.5 mm           |

Pinza de precisión standard para Macho  
*EOC Tapping collets with square*



## EOC-MF



### EOC16MF / 20MF / 25MF / 32MF

| REFERENCIA | FAM | COD     | CAPACIDAD  | D     | L  |
|------------|-----|---------|------------|-------|----|
| EOC16MF    | 2   | 0768 MF | Ø3.5 ÷ Ø12 | 25.50 | 40 |
| EOC20MF    |     | 0783 MF | Ø3.5 ÷ Ø16 | 30.00 | 45 |
| EOC25MF    |     | 0769 MF | Ø3.5 ÷ Ø20 | 35.05 | 52 |
| EOC32MF    |     | 0770 MF | Ø3.5 ÷ Ø28 | 44.00 | 60 |

Tuerca de apriete sin Bolas / *Nuts without friction bearing*

| REFERENCIA        | FAM | COD  | D  | M x P         | Nm  |
|-------------------|-----|------|----|---------------|-----|
| GOC 6             | 2   | 8641 | 18 | M14 x 1       | -   |
| GOC 8             |     | 8642 | 26 | M20 x 1.5     | -   |
| GOC 10            |     | 8643 | 30 | M22 x 1.5     | -   |
| GOC 12            |     | 8644 | 35 | M27 x 1.5     | -   |
| GOC 16            |     | 4067 | 43 | M33 x 1.5     | 85  |
| GOC 20            |     | 4008 | 50 | M42 x 2.0     | -   |
| GOC 25            |     | 4068 | 60 | M48 x 2.0     | 140 |
| GOC 25L Izquierda | 1   | -    | 60 | M48 x 2.0 Izq | 140 |
| GOC 32            | 2   | 4069 | 72 | M60 x 2.5     | 170 |
| GOC 40            |     | 8645 | 85 | M68 x 2.5     | -   |



Tuerca de apriete a Bolas / *Friction bearing nuts*

| REFERENCIA | FAM | M x P | M x P     | Nm  |
|------------|-----|-------|-----------|-----|
| GOC16S     | 1   | 43    | M33 x 1.5 | 130 |
| GOC25S     |     | 60    | M48 x 2   | 200 |
| GOC32S     |     | 72    | M60 x 2.5 | 220 |



Llave  
Gancho

| REFERENCIA | FAM | COD  |
|------------|-----|------|
| CH6GOC     | 2   | 2880 |
| CH8GOC     |     | 2820 |
| CH10GOC    |     | 2881 |
| CH12GOC    |     | 2882 |
| CH16GOC    |     | 2883 |
| CH20GOC    |     | 2908 |
| CH25GOC    |     | 2909 |
| CH32GOC    |     | 2910 |
| CH40GOC    |     | 2836 |



Llave  
Gancho  
Dinamométrica

| REFERENCIA |
|------------|
| CD25EOC    |



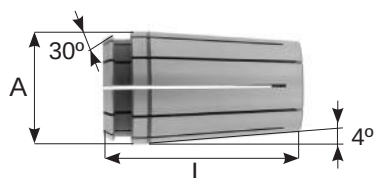
Llave  
Rodillos  
Dinamométrica

| REFERENCIA |
|------------|
| CD25EOCR   |



**Pinza Tipo "TG"**

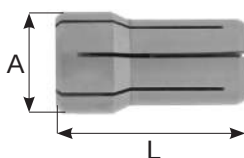
*Collets "TG" Type*



| REFERENCIA | FAM | COD  | A    | L    | CAMPO DE APRIETE |
|------------|-----|------|------|------|------------------|
| TG 75-420E | 2   | 1250 | 27.0 | 46.9 | 0.5 mm           |
| TG100-464E |     | 1251 | 35.0 | 60.4 | 0.5 mm           |
| TG150-466E |     | 1252 | 50.8 | 76.2 | 0.5 mm           |

**Pinza Tipo "DA"**

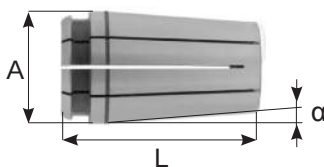
*Collets "DA" Type*



| REFERENCIA | FAM | COD  | CAPACIDAD |   |      | A    | L    | CAMPO DE APRIETE |
|------------|-----|------|-----------|---|------|------|------|------------------|
| DA300-416E | 2   | 5118 | 1.5       | ÷ | 6.0  | 9.5  | 25.4 | 0.5 mm           |
| DA200-417E |     | 5119 | 1.5       | ÷ | 10.0 | 13.6 | 30.3 | 0.5 mm           |
| DA100-418E |     | 5120 | 2.0       | ÷ | 14.5 | 19.4 | 36.7 | 0.5 mm           |
| DA180-419E |     | 5121 | 2.0       | ÷ | 20.0 | 26.2 | 41.6 | 0.5 mm           |
| DA400-465E |     | 5129 | 6.0       | ÷ | 25.5 | 36.9 | 51.0 | 0.5 mm           |

**Pinza Tipo "BAKUER"**

*Collets "BAKUER" Type*



| REFERENCIA | FAM | COD  | CAPACIDAD |   |    | A    | L  | α  | CAMPO DE APRIETE |
|------------|-----|------|-----------|---|----|------|----|----|------------------|
| BAK-11     | 2   | 0896 | 2         | ÷ | 6  | 11.1 | 23 | 4° | 0.5 mm           |
| BAK-15     |     | 0895 | 3         | ÷ | 10 | 15.6 | 35 | 4° | 0.5 mm           |
| BAK-25     |     | 0736 | 4         | ÷ | 16 | 25.6 | 48 | 3° | 0.5 mm           |
| BAK-29     |     | 0737 | 6         | ÷ | 20 | 29.6 | 54 | 3° | 0.5 mm           |
| BAK-35     |     | 0738 | 8         | ÷ | 25 | 35.7 | 60 | 3° | 0.1 mm           |
| BAK-44     |     | 0774 | 10        | ÷ | 32 | 44.7 | 67 | 3° | 0.1 mm           |

**Pinza cilíndrica para mandrino de Gran Apriete Mecánico**  
*Collets for power milling chucks*

|                   |               |            |
|-------------------|---------------|------------|
| <b>D = 20</b>     | <b>E = 25</b> | <b>FAM</b> |
| <b>L = 50</b>     | <b>L1 = 5</b> | <b>2</b>   |
| <b>REFERENCIA</b> | <b>COD</b>    |            |

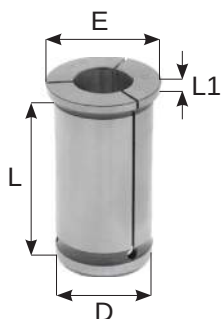
|              |      |
|--------------|------|
| 3SR20. D. 3  | 0809 |
| 3SR20. D. 4  |      |
| 3SR20. D. 5  |      |
| 3SR20. D. 6  |      |
| 3SR20. D. 7  |      |
| 3SR20. D. 8  |      |
| 3SR20. D. 9  |      |
| 3SR20. D. 10 |      |
| 3SR20. D. 11 |      |
| 3SR20. D. 12 |      |
| 3SR20. D. 13 |      |
| 3SR20. D. 14 |      |
| 3SR20. D. 15 |      |
| 3SR20. D. 16 |      |
| 3SR20. D. 17 |      |
| 3SR20. D. 18 |      |

|                   |               |            |
|-------------------|---------------|------------|
| <b>D = 25</b>     | <b>E = 30</b> | <b>FAM</b> |
| <b>L = 55</b>     | <b>L1 = 5</b> | <b>2</b>   |
| <b>REFERENCIA</b> | <b>COD</b>    |            |

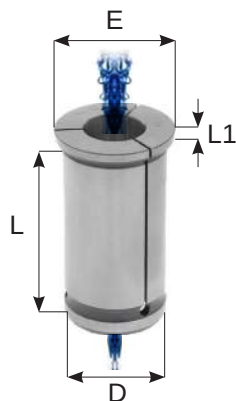
|              |      |
|--------------|------|
| 3SR25. D. 3  | 0820 |
| 3SR25. D. 4  |      |
| 3SR25. D. 5  |      |
| 3SR25. D. 6  |      |
| 3SR25. D. 7  |      |
| 3SR25. D. 8  |      |
| 3SR25. D. 9  |      |
| 3SR25. D. 10 |      |
| 3SR25. D. 11 |      |
| 3SR25. D. 12 |      |
| 3SR25. D. 13 |      |
| 3SR25. D. 14 |      |
| 3SR25. D. 15 |      |
| 3SR25. D. 16 |      |
| 3SR25. D. 17 |      |
| 3SR25. D. 18 |      |
| 3SR25. D. 19 |      |
| 3SR25. D. 20 |      |
| 3SR25. D. 21 |      |
| 3SR25. D. 22 |      |
| 3SR25. D. 23 |      |

|                   |               |            |
|-------------------|---------------|------------|
| <b>D = 32</b>     | <b>E = 37</b> | <b>FAM</b> |
| <b>L = 60</b>     | <b>L1 = 5</b> | <b>2</b>   |
| <b>REFERENCIA</b> | <b>FAM</b>    |            |

|              |      |
|--------------|------|
| 3SR32. D. 3  | 0810 |
| 3SR32. D. 4  |      |
| 3SR32. D. 5  |      |
| 3SR32. D. 6  |      |
| 3SR32. D. 7  |      |
| 3SR32. D. 8  |      |
| 3SR32. D. 9  |      |
| 3SR32. D. 10 |      |
| 3SR32. D. 11 |      |
| 3SR32. D. 12 |      |
| 3SR32. D. 13 |      |
| 3SR32. D. 14 |      |
| 3SR32. D. 15 |      |
| 3SR32. D. 16 |      |
| 3SR32. D. 17 |      |
| 3SR32. D. 18 |      |
| 3SR32. D. 19 |      |
| 3SR32. D. 20 |      |
| 3SR32. D. 21 |      |
| 3SR32. D. 22 |      |
| 3SR32. D. 23 |      |
| 3SR32. D. 24 |      |
| 3SR32. D. 25 |      |
| 3SR32. D. 26 |      |
| 3SR32. D. 27 |      |
| 3SR32. D. 28 |      |
| 3SR32. D. 29 |      |
| 3SR32. D. 30 |      |



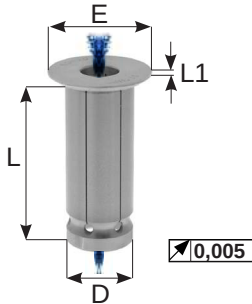
**Pinza cilíndrica para mandrino de Gran Apriete Mecánico con paso refrigerante**  
*Collets for power milling chucks collets for coolant*



|                   |               |            |
|-------------------|---------------|------------|
| <b>D = 20</b>     | <b>E = 25</b> | <b>FAM</b> |
| <b>L = 50</b>     | <b>L1 = 5</b> |            |
| <b>REFERENCIA</b> |               |            |
| 4SR20. D. 3       | 1             |            |
| 4SR20. D. 4       |               |            |
| 4SR20. D. 5       |               |            |
| 4SR20. D. 6       |               |            |
| 4SR20. D. 8       |               |            |
| 4SR20. D. 10      |               |            |
| 4SR20. D. 12      |               |            |
| 4SR20. D. 16      |               |            |

|                   |               |            |
|-------------------|---------------|------------|
| <b>D = 32</b>     | <b>E = 37</b> | <b>FAM</b> |
| <b>L = 64</b>     | <b>L1 = 5</b> |            |
| <b>REFERENCIA</b> |               |            |
| 4SR32. D. 6       | 1             |            |
| 4SR32. D. 8       |               |            |
| 4SR32. D. 10      |               |            |
| 4SR32. D. 12      |               |            |
| 4SR32. D. 16      |               |            |
| 4SR32. D. 20      |               |            |
| 4SR32. D. 25      |               |            |

Pinza cilíndrica Gran Apriete Hidráulico con paso refrigerante  
Collets for hydraulic expansion chucks



|                   |               |            |
|-------------------|---------------|------------|
| <b>D = 20</b>     | <b>E = 24</b> | <b>FAM</b> |
| <b>L = 50.5</b>   | <b>L1 = 2</b> | <b>2</b>   |
| <b>REFERENCIA</b> | <b>COD</b>    |            |

|             |      |
|-------------|------|
| SR20. D. 3  | 0521 |
| SR20. D. 4  |      |
| SR20. D. 5  |      |
| SR20. D. 6  |      |
| SR20. D. 7  |      |
| SR20. D. 8  |      |
| SR20. D. 9  |      |
| SR20. D. 10 |      |
| SR20. D. 11 |      |
| SR20. D. 12 |      |
| SR20. D. 13 |      |
| SR20. D. 14 |      |
| SR20. D. 15 |      |
| SR20. D. 16 |      |
| SR20. D. 17 |      |
| SR20. D. 18 |      |

|                   |               |            |
|-------------------|---------------|------------|
| <b>D = 25</b>     | <b>E = 30</b> | <b>FAM</b> |
| <b>L = 50.6</b>   | <b>L1 = 3</b> | <b>2</b>   |
| <b>REFERENCIA</b> | <b>COD</b>    |            |

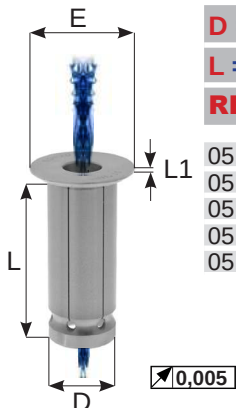
|             |      |
|-------------|------|
| SR25. D. 3  | 0676 |
| SR25. D. 4  |      |
| SR25. D. 5  |      |
| SR25. D. 6  |      |
| SR25. D. 7  |      |
| SR25. D. 8  |      |
| SR25. D. 9  |      |
| SR25. D. 10 |      |
| SR25. D. 11 |      |
| SR25. D. 12 |      |
| SR25. D. 13 |      |
| SR25. D. 14 |      |
| SR25. D. 15 |      |
| SR25. D. 16 |      |
| SR25. D. 17 |      |
| SR25. D. 18 |      |
| SR25. D. 19 |      |
| SR25. D. 20 |      |
| SR25. D. 21 |      |
| SR25. D. 22 |      |

|                   |               |            |
|-------------------|---------------|------------|
| <b>D = 32</b>     | <b>E = 36</b> | <b>FAM</b> |
| <b>L = 60.5</b>   | <b>L1 = 3</b> | <b>2</b>   |
| <b>REFERENCIA</b> | <b>COD</b>    |            |

|             |      |
|-------------|------|
| SR32. D. 4  | 0522 |
| SR32. D. 5  |      |
| SR32. D. 6  |      |
| SR32. D. 7  |      |
| SR32. D. 8  |      |
| SR32. D. 9  |      |
| SR32. D. 10 |      |
| SR32. D. 11 |      |
| SR32. D. 12 |      |
| SR32. D. 13 |      |
| SR32. D. 14 |      |
| SR32. D. 15 |      |
| SR32. D. 16 |      |
| SR32. D. 17 |      |
| SR32. D. 18 |      |
| SR32. D. 19 |      |
| SR32. D. 20 |      |
| SR32. D. 21 |      |
| SR32. D. 22 |      |
| SR32. D. 23 |      |
| SR32. D. 24 |      |
| SR32. D. 25 |      |
| SR32. D. 26 |      |
| SR32. D. 27 |      |
| SR32. D. 28 |      |

Pinza cilíndrica Gran Apriete Hidráulico con paso refrigerante  
Collets for hydraulic expansion chucks

Max. 100 BAR



|                   |               |            |
|-------------------|---------------|------------|
| <b>D = 12</b>     | <b>E = 16</b> | <b>FAM</b> |
| <b>L = 44.5</b>   | <b>L1 = 2</b> |            |
| <b>REFERENCIA</b> |               |            |

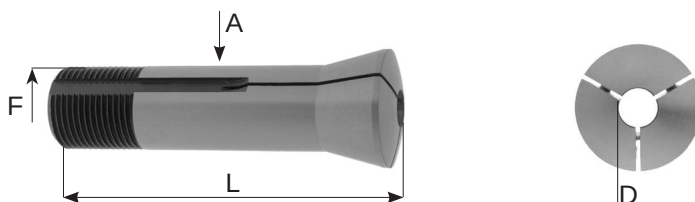
|                 |   |
|-----------------|---|
| 05.024.216 D. 3 | 4 |
| 05.024.217 D. 4 |   |
| 05.024.218 D. 5 |   |
| 05.024.219 D. 6 |   |
| 05.024.220 D. 8 |   |

|                   |               |            |
|-------------------|---------------|------------|
| <b>D = 20</b>     | <b>E = 29</b> | <b>FAM</b> |
| <b>L = 50.5</b>   | <b>L1 = 2</b> |            |
| <b>REFERENCIA</b> |               |            |

|                  |   |
|------------------|---|
| 05.024.221 D. 6  | 4 |
| 05.024.222 D. 8  |   |
| 05.024.223 D. 10 |   |
| 05.024.224 D. 12 |   |
| 05.024.225 D. 14 |   |
| 05.024.226 D. 16 |   |

|                   |               |            |
|-------------------|---------------|------------|
| <b>D = 32</b>     | <b>E = 40</b> | <b>FAM</b> |
| <b>L = 64</b>     | <b>L1 = 2</b> |            |
| <b>REFERENCIA</b> |               |            |

|                  |   |
|------------------|---|
| 05.024.227 D. 6  | 4 |
| 05.024.228 D. 8  |   |
| 05.024.229 D. 10 |   |
| 05.024.230 D. 12 |   |
| 05.024.231 D. 14 |   |
| 05.024.232 D. 16 |   |
| 05.024.233 D. 18 |   |
| 05.024.234 D. 20 |   |
| 05.024.235 D. 22 |   |
| 05.024.236 D. 25 |   |



| CODIGO<br>CODE | D (max) | A  | L    | F                |
|----------------|---------|----|------|------------------|
| CP-E28 / 349E  | 20      | 20 | 73   | 19.70 1.66 45/5° |
| CP-E48 / 364E  | 21      | 25 | 97.6 | 24.70X15" 45/5°  |

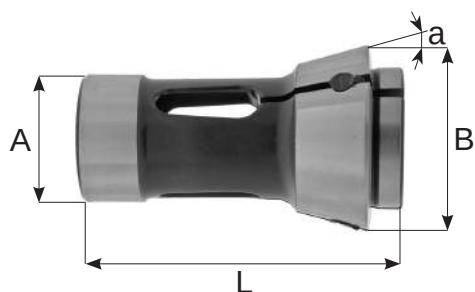
**Pinza de Cierre Roscada**  
*Drawback collets*

| PINZA W20         |     |
|-------------------|-----|
| REFERENCIA        | FAM |
| CP-E28/349E. D.3  | 1   |
| CP-E28/349E. D.4  |     |
| CP-E28/349E. D.5  |     |
| CP-E28/349E. D.6  |     |
| CP-E28/349E. D.7  |     |
| CP-E28/349E. D.8  |     |
| CP-E28/349E. D.9  |     |
| CP-E28/349E. D.10 |     |
| CP-E28/349E. D.11 |     |
| CP-E28/349E. D.12 |     |
| CP-E28/349E. D.13 |     |
| CP-E28/349E. D.14 |     |
| CP-E28/349E. D.15 |     |
| CP-E28/349E. D.16 |     |
| CP-E28/349E. D.17 |     |
| CP-E28/349E. D.18 |     |
| CP-E28/349E. D.19 |     |
| CP-E28/349E. D.20 |     |



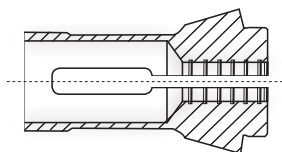
| PINZA W25         |     |
|-------------------|-----|
| REFERENCIA        | FAM |
| CP-E48/364E. D.3  | 1   |
| CP-E48/364E. D.4  |     |
| CP-E48/364E. D.5  |     |
| CP-E48/364E. D.6  |     |
| CP-E48/364E. D.7  |     |
| CP-E48/364E. D.8  |     |
| CP-E48/364E. D.9  |     |
| CP-E48/364E. D.10 |     |
| CP-E48/364E. D.11 |     |
| CP-E48/364E. D.12 |     |
| CP-E48/364E. D.13 |     |
| CP-E48/364E. D.14 |     |
| CP-E48/364E. D.15 |     |
| CP-E48/364E. D.16 |     |
| CP-E48/364E. D.17 |     |
| CP-E48/364E. D.18 |     |
| CP-E48/364E. D.19 |     |
| CP-E48/364E. D.20 |     |
| CP-E48/364E. D.21 |     |



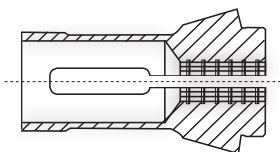


Pinza para Torno DIN/6343  
Collets for Single - Spindle lathes

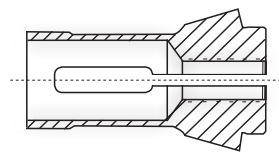
Tipo (Ranurada)  
Type (Grooved)



Tipo "S" (Estriada)  
Type "S" (Serrated)



Tipo "L" (Lisa)  
Type "L" (Smooth)



Ejemplo para este pedido: Ref. 0721

Example for order: Ref. 0721

Ejemplo para este pedido: Añadimos la letra "L" Ref. 0721L

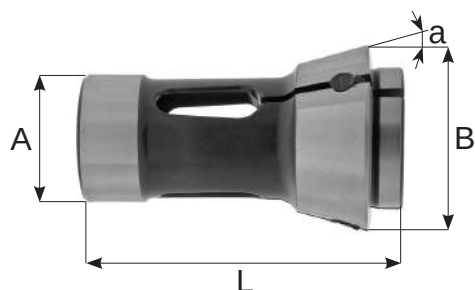
Example for order: Add the letter "L" Ref. 0721L

Ejemplo para este pedido: Añadimos la letra "S" Ref. 0721S

Example for order: Add the letter "S" Ref. 0721S

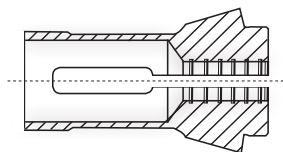


| REF  | REF  | REF  | COD   | FAM | A    | B    | L    | a   | ●max | ⬡max | ■max |
|------|------|------|-------|-----|------|------|------|-----|------|------|------|
| 1072 | -    | -    | 100E  | 2   | 6    | 10   | 30   | 15° | 4.5  | -    | -    |
| 5293 | -    | -    | 1020E |     | 7    | 10.7 | 26   | 15° | 5.0  | -    | -    |
| 0721 | -    | -    | 101E  |     | 8    | 12   | 42   | 16° | 6.5  | -    | -    |
| 0725 | 0949 | 5000 | 109E  |     | 10   | 15.5 | 47.5 | 20° | 8.0  | 6.0  | 5.0  |
| 5232 | -    | -    | 110E  |     | 10   | 16.0 | 43   | 15° | 7.0  | -    | -    |
| 0347 | -    | -    | -     |     | 12   | 14.5 | 21   | 16° | 8.0  | -    | -    |
| 0749 | -    | -    | -     |     | 12   | 17   | 27   | 20° | 10.0 | -    | -    |
| 1132 | -    | -    | -     |     | 12   | 18   | 64   | 16° | 10.0 | 8.0  | 7.0  |
| 0940 | 0941 | 0943 | 116E  |     | 13   | 19   | 64   | 16° | 10.0 | 8.0  | 7.0  |
| 0740 | 0741 | 0742 | 117E  |     | 14   | 18   | 46   | 13° | 10.0 | 9.0  | 8.0  |
| 0730 | -    | -    | -     |     | 15   | 19.2 | 24   | 15° | 12.0 | -    | -    |
| 0722 | 0723 | 0724 | 120E  |     | 15   | 21   | 64   | 16° | 12.0 | 10.0 | 9.0  |
| 5308 | 5309 | 5310 | 121E  |     | 15   | 22   | 47   | 20° | 11.0 | 9.0  | 8.0  |
| 0913 | 0914 | 0915 | 123E  |     | 16   | 22   | 55   | 15° | 12.5 | 11.0 | 9.0  |
| 0813 | -    | -    | 125E  |     | 17.5 | 22   | 51   | 15° | 14.0 | 10.0 | 8.0  |
| 5034 | 5577 | -    | 1248E |     | 18   | 24   | 64   | 16° | 14.0 | 12.0 | 10.0 |
| 0867 | 0868 | 0869 | 127E  |     | 18   | 25   | 67   | 15° | 13.0 | 10.0 | 9.0  |
| 0731 | -    | -    | -     |     | 20   | 25.2 | 28   | 15° | 18.0 | -    | -    |
| 0954 | 0955 | 0956 | 136E  |     | 20   | 26.0 | 54   | 15° | 16.0 | 12.0 | 10.0 |
| 5299 | 5300 | 5301 | 1299E |     | 20   | 27.5 | 60   | 15° | 17.0 | 15.0 | 12.0 |
| 0937 | 0938 | 0939 | 138E  |     | 20   | 28   | 67   | 16° | 16.0 | 14.0 | 11.0 |
| 0743 | 0744 | 0745 | 139E  |     | 22   | 28   | 67   | 13° | 16.0 | 14.0 | 12.0 |
| 0705 | 0707 | 0706 | 140E  |     | 22   | 30   | 55   | 15° | 18.0 | 14.0 | 13.0 |
| 5302 | 5303 | 5304 | 1323E |     | 22   | 32   | 66   | 16° | 17.0 | 14.0 | 12.0 |
| 0732 | -    | -    | -     |     | 25   | 30   | 34   | 15° | 20.0 | 17.0 | 14.0 |
| 0671 | 0672 | 0673 | 143E  |     | 25   | 31   | 54   | 15° | 21.0 | 18.0 | 15.0 |
| 0846 | 0847 | 0848 | 144E  |     | 25   | 34   | 65   | 15° | 20.0 | 17.0 | 14.0 |

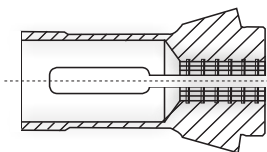


Pinza para Torno DIN/6343  
Collets for Single - Spindle lathes

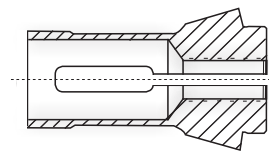
Tipo (Ranurada)  
Type (Grooved)



Tipo "S" (Estriada)  
Type "S" (Serrated)



Tipo "L" (Lisa)  
Type "L" (Smooth)



Ejemplo para este pedido: Ref. 0721

Example for order: Ref. 0721

Ejemplo para este pedido: Añadimos la letra "L" Ref. 0721L

Example for order: Add the letter "L" Ref. 0721L

Ejemplo para este pedido: Añadimos la letra "S" Ref. 0721S

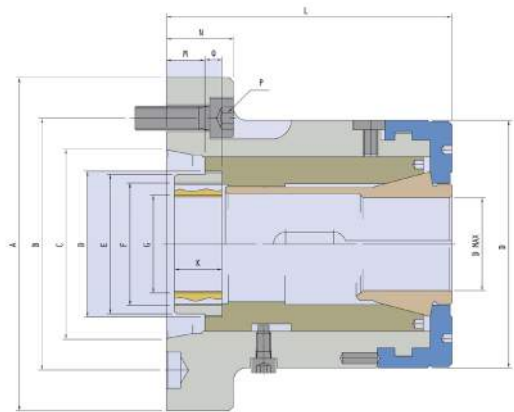
Example for order: Add the letter "S" Ref. 0721S



| REF  | REF  | REF  | COD   | FAM | A    | B    | L     | a   | ● max | ◆ max | ■ max |
|------|------|------|-------|-----|------|------|-------|-----|-------|-------|-------|
| 0717 | 0719 | 0718 | 145E  | 2   | 25   | 35   | 77    | 16° | 20.0  | 18.0  | 15.0  |
| 0746 | 0747 | 0748 | 146E  |     | 26   | 32   | 67    | 13° | 20.0  | 18.0  | 15.0  |
| 0901 | 0902 | 0903 | 147E  |     | 27   | 38   | 72.7  | 15° | 22.0  | 20.0  | 16.0  |
| 0713 | 0715 | 0714 | 148E  |     | 28   | 38   | 70    | 15° | 23.0  | 20.0  | 17.0  |
| 0931 | 0932 | 0933 | 1446E |     | 30   | 38   | 65    | 15° | 26.0  | 22.0  | 18.0  |
| 0727 | 0728 | 0729 | 157E  |     | 30   | 42   | 80    | 16° | 25.0  | 23.0  | 19.0  |
| 5305 | 5306 | 5307 | 1473E |     | 32   | 40   | 65    | 15° | 26.0  | 23.0  | 19.0  |
| 5435 | -    | -    | -     |     | 32   | 42   | 80    | 15° | 28.0  | 22.0  | 18.0  |
| 0701 | 0703 | 0702 | 161E  |     | 32   | 45   | 75    | 15° | 26.0  | 24.0  | 20.0  |
| 0615 | 0616 | 0617 | 162E  |     | 35   | 43   | 70    | 15° | 25.0  | 24.0  | 20.0  |
| 0764 | 0766 | 0765 | 163E  |     | 35   | 48   | 80    | 15° | 30.0  | 27.0  | 22.0  |
| 0827 | 0828 | 0830 | -     |     | 36   | 48   | 90    | 15° | 30.0  | 27.0  | 22.0  |
| 0970 | 0972 | 0973 | 1536E |     | 37   | 47   | 92    | 16° | 32.0  | 27.0  | 22.0  |
| 0837 | 0839 | 0838 | -     |     | 38   | 50.3 | 86    | 15° | 32.0  | 28.0  | 25.0  |
| 0919 | 0920 | 0921 | 164E  |     | 38.1 | 49   | 107.5 | 15° | 32.0  | 27.0  | 22.0  |
| 0861 | 0862 | 0863 | 171E  |     | 42   | 55   | 94    | 15° | 37.0  | 32.0  | 26.0  |
| 0709 | 0711 | 0710 | 173E  |     | 48   | 60   | 94    | 15° | 42.0  | 38.0  | 30.0  |
| 0666 | 0667 | 0668 | -     |     | 52   | 63   | 92    | 15° | 46.0  | 38.0  | 32.0  |
| 2424 | 2425 | 2426 | 177E  |     | 58   | 70   | 94    | 15° | 52.0  | 45.0  | 36.0  |
| 0859 | 0870 | 0872 | -     |     | 60   | 72   | 102   | 15° | 52.0  | 46.0  | 36.0  |
| 0759 | 0760 | 0761 | 185E  |     | 66   | 84   | 110   | 15° | 60.0  | 52.0  | 42.0  |
| 0647 | 0648 | 0649 | -     |     | 80   | 98   | 115   | 15° | 70.0  | 62.0  | 50.0  |
| 0826 | 0829 | 0831 | 190E  |     | 88   | 106  | 115   | 15° | 80.0  | 68.0  | 56.0  |
| 0851 | 0852 | 0853 | 193E  |     | 90   | 107  | 130   | 15° | 80.0  | 68.0  | 56.0  |
| 0681 | 0683 | 0684 | -     |     | 95   | 117  | 125   | 15° | 80.0  | 68.0  | 56.0  |
| 0959 | 0962 | 0964 | -     |     | 115  | 135  | 140   | 15° | 100.0 | 86.0  | 70.0  |

Mandrino torno CNC amarre flangia cónica DIN/55026

Power chucks for NC lathes short taper ASA B5.9A1



| REF     | PINZA | A   | B     | C      | D       | E  | F       |
|---------|-------|-----|-------|--------|---------|----|---------|
|         |       | mm  | mm    | mm     | mm      | mm | mm      |
| CL36-A4 | 171E  | 112 | 82.6  | 63.5   | M50x1.5 | 45 | M40x1.5 |
| CL36-A5 | 173E  | 135 | 104.8 | 82.56  | M65x1.5 | 62 | M55x2   |
| CL42-A5 | 177E  | 135 | 104.8 | 82.56  | M65x1.5 | 62 | M55x2   |
| CL42-A6 | 185E  | 170 | 133.4 | 106.36 | M65x1.5 | 66 | M60x2   |
| CL52-A5 | 185E  | 135 | 104.8 | 82.56  | M70x1.5 | 62 | M55x2   |
| CL52-A6 | 185E  | 170 | 133.4 | 105.35 | M90x1.5 | 66 | M60x2   |
| CL60-A6 | 185E  | 170 | 133.4 | 105.35 | M90x1.5 | 66 | M60x2   |
| CL60-A8 | 185E  | 220 | 171.4 | 139.70 | M90x1.5 | 90 | M85x2   |

| G  | K  | L   | M    |      | d   | O   | N  | P        | Q  |
|----|----|-----|------|------|-----|-----|----|----------|----|
|    |    |     | max  | min  | max |     |    |          |    |
| mm | mm | mm  | mm   | mm   | mm  | mm  | mm | mm       | mm |
| 20 | 23 | 110 | 21.5 | 16.5 | 30  | 87  | 30 | 3xM10x30 | 8  |
| 30 | 23 | 129 | 26   | 21   | 36  | 103 | 27 | 4xM10x30 | 8  |
| 30 | 23 | 129 | 26   | 21   | 42  | 103 | 27 | 4xM10x30 | 8  |
| 30 | 23 | 133 | 29   | 24   | 42  | 103 | 32 | 4xM12x30 | 8  |
| 30 | 23 | 129 | 26   | 21   | 52  | 113 | 27 | 4xM12x30 | 8  |
| 30 | 31 | 155 | 33   | 28   | 52  | 132 | 27 | 4xM12x30 | 8  |
| 30 | 31 | 155 | 33   | 28   | 60  | 132 | 27 | 4xM12x30 | 8  |
| 30 | 31 | 155 | 33   | 28   | 60  | 132 | 37 | 4xM16x35 | 8  |

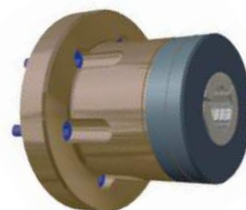
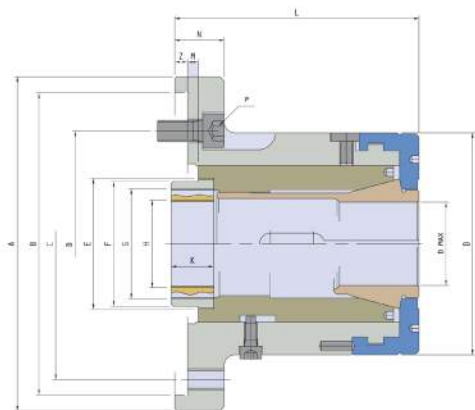
Pinza para Torno DIN/6343

Collets for Single - Spindle lathes

| REF  | A  | B  | L   | a   | ● max | ● max | ■ max |
|------|----|----|-----|-----|-------|-------|-------|
| 171E | 42 | 55 | 94  | 15° | 37.0  | 32.0  | 26.0  |
| 173E | 48 | 60 | 94  | 15° | 42.0  | 38.0  | 30.0  |
| 177E | 58 | 70 | 94  | 15° | 52.0  | 45.0  | 36.0  |
| 185E | 66 | 84 | 110 | 15° | 60.0  | 52.0  | 42.0  |



**Mandrino torno CNC amarre cilíndrico DIN/6353**  
*Power chucks for NC lathes plain back mounting*



**DIN/6343**

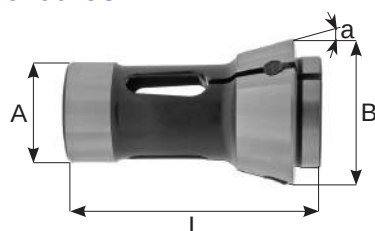


| REF       | PINZA | A   | B   | C   | D     | E       | F  | G     | H  |
|-----------|-------|-----|-----|-----|-------|---------|----|-------|----|
|           |       | mm  | mm  | mm  | mm    | mm      | mm | mm    | mm |
| CL36 140D | 171E  | 155 | 140 | 126 | 104.8 | M66x1.5 | 62 | M55x2 | 30 |
| C42 140D  | 173E  | 155 | 140 | 152 | 104.8 | M55x2   | 62 | M55x2 | 30 |
| CL52 170D | 177E  | 185 | 170 | 152 | 133.4 | M85x2   | 90 | M85x2 | 30 |
| CL60 170D | 185E  | 185 | 170 | 152 | 133.4 | M85x2   | 90 | M85x2 | 30 |

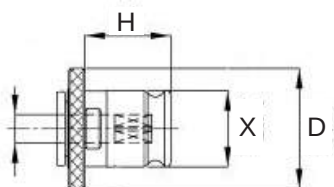
| K  | L     | M   |     | d   |     | O   | N  | P        | Z  |
|----|-------|-----|-----|-----|-----|-----|----|----------|----|
|    |       | max | min | max | min |     |    |          |    |
| mm | mm    | mm  | mm  | mm  | mm  | mm  | mm | mm       | mm |
| 23 | 113.5 | 5   | 0   | 0   | 36  | 103 | 23 | 4xM10x25 | 6  |
| 23 | 113.5 | 5   | 0   | 0   | 42  | 103 | 23 | 4xM10x25 | 6  |
| 31 | 139   | 11  | 11  | 6   | 52  | 132 | 30 | 4xM12x25 | 6  |
| 31 | 139   | 11  | 11  | 6   | 60  | 132 | 30 | 4xM12x25 | 6  |

**Pinza para Torno DIN/6343**  
*Collets for Single - Spindle lathes*

| REF  | A  | B  | L   | a   | ● max | ● max | ■ max |
|------|----|----|-----|-----|-------|-------|-------|
| 171E | 42 | 55 | 94  | 15° | 37.0  | 32.0  | 26.0  |
| 173E | 48 | 60 | 94  | 15° | 42.0  | 38.0  | 30.0  |
| 177E | 58 | 70 | 94  | 15° | 52.0  | 45.0  | 36.0  |
| 185E | 66 | 84 | 110 | 15° | 60.0  | 52.0  | 42.0  |



**Pinza porta machos de Roscar sin Embrague de cambio rápido**  
*Quick change adaptors for tapping without safety clutch*



**SE**



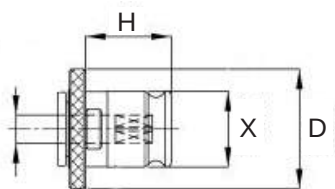
| REFERENCIA      | TIPO     | CAP                 | Ø x ∇     | X         | H    | D  |
|-----------------|----------|---------------------|-----------|-----------|------|----|
| SE0 - 2.5 x 2.1 | <b>0</b> | M.1 - 1.8           | 2.5 x 2.1 | <b>13</b> | 19.5 | 22 |
| SE0 - 2.8 x 2.1 |          | M.2 - 2.2 - 2.5 - 4 | 2.8 x 2.1 |           |      |    |
| SE0 - 3.5 x 2.7 |          | M.3                 | 3.5 x 2.7 |           |      |    |
| SE0 - 4 x 3     |          | M.3.5               | 4 x 3     |           |      |    |
| SE0 - 4.5 x 3.4 |          | M.4                 | 4.5 x 3.4 |           |      |    |
| SE0 - 6 x 4.9   |          | M.5 - 6 - 8         | 6 x 4.9   |           |      |    |
| SE0 - 7 x 5.5   |          | M.10                | 7 x 5.5   |           |      |    |
| SE0 - 8 x 6.2   |          | M.8                 | 8 x 6.2   |           |      |    |

| REFERENCIA      | TIPO     | CAP                 | Ø x ∇     | X         | H    | D  |
|-----------------|----------|---------------------|-----------|-----------|------|----|
| SE1 - 2.5 x 2.1 | <b>1</b> | M.1 - 1.8           | 2.5 x 2.1 | <b>19</b> | 21.5 | 30 |
| SE1 - 2.8 x 2.1 |          | M.2 - 2.2 - 2.5 - 4 | 2.8 x 2.1 |           |      |    |
| SE1 - 3.5 x 2.7 |          | M.3                 | 3.5 x 2.7 |           |      |    |
| SE1 - 4 x 3     |          | M.3.5               | 4 x 3     |           |      |    |
| SE1 - 4.5 x 3.4 |          | M.4                 | 4.5 x 3.4 |           |      |    |
| SE1 - 6 x 4.9   |          | M.5 - 6 - 8         | 6 x 4.9   |           |      |    |
| SE1 - 7 x 5.5   |          | M.10                | 7 x 5.5   |           |      |    |
| SE1 - 8 x 6.2   |          | M.8                 | 8 x 6.2   |           |      |    |
| SE1 - 9 x 7     |          | M.12                | 9 x 7     |           |      |    |
| SE1 - 10 x 8    |          | M.10                | 10 x 8    |           |      |    |
| SE1 - 11 x 9    |          | M.14                | 11 x 9    |           |      |    |

| REFERENCIA      | TIPO     | CAP         | Ø x ∇     | X         | H  | D  |
|-----------------|----------|-------------|-----------|-----------|----|----|
| SE2 - 3.5 x 2.7 | <b>2</b> | M.3         | 3.5 x 2.7 | <b>31</b> | 35 | 48 |
| SE2 - 4 x 3     |          | M.3.5       | 4 x 3     |           |    |    |
| SE2 - 4.5 x 3.4 |          | M.4         | 4.5 x 3.4 |           |    |    |
| SE2 - 6 x 4.9   |          | M.5 - 6 - 8 | 6 x 4.9   |           |    |    |
| SE2 - 7 x 5.5   |          | M.10        | 7 x 5.5   |           |    |    |
| SE2 - 8 x 6.2   |          | M.8         | 8 x 6.2   |           |    |    |
| SE2 - 9 x 7     |          | M.12        | 9 x 7     |           |    |    |
| SE2 - 10 x 8    |          | M.10        | 10 x 8    |           |    |    |
| SE2 - 11 x 9    |          | M.14        | 11 x 9    |           |    |    |
| SE2 - 12 x 9    |          | M.16        | 12 x 9    |           |    |    |
| SE2 - 14 x 11   |          | M.18        | 14 x 11   |           |    |    |
| SE2 - 16 x 12   |          | M.20        | 16 x 12   |           |    |    |
| SE2 - 18 x 14.5 |          | M.22 - 24   | 18 x 14.5 |           |    |    |

**Porta machos con norma ISO - JIS - ANSI son disponibles sobre pedido**  
*On request we can supply the adaptors suitable for taps ISO - JIS - ANSI shank dimensions*

Pinza porta machos de Roscar sin Embrague de cambio rápido  
*Quick change adaptors for tapping without safety clutch*



**SE**



| REFERENCIA      | TIPO     | CAP       | Ø x Z     | X         | H    | D  |
|-----------------|----------|-----------|-----------|-----------|------|----|
| SE3 - 9 x 7     | <b>3</b> | M.12      | 9 x 7     | <b>48</b> | 55.5 | 70 |
| SE3 - 10 x 8    |          | M.10      | 10 x 8    |           |      |    |
| SE3 - 11 x 9    |          | M.14      | 11 x 9    |           |      |    |
| SE3 - 12 x 9    |          | M.16      | 12 x 9    |           |      |    |
| SE3 - 14 x 11   |          | M.18      | 14 x 11   |           |      |    |
| SE3 - 16 x 12   |          | M.20      | 16 x 12   |           |      |    |
| SE3 - 18 x 14.5 |          | M.22 - 24 | 18 x 14.5 |           |      |    |
| SE3 - 20 x 16   |          | M.27      | 20 x 16   |           |      |    |
| SE3 - 22 x 18   |          | M.30      | 22 x 18   |           |      |    |
| SE3 - 25 x 20   |          | M.33      | 25 x 20   |           |      |    |
| SE3 - 28 x 22   |          | M.36      | 28 x 22   |           |      |    |

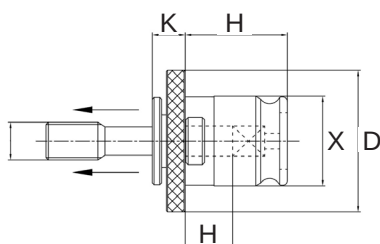
| REFERENCIA      | TIPO     | CAP       | Ø x Z     | X         | H    | D  |
|-----------------|----------|-----------|-----------|-----------|------|----|
| SE4 - 16 x 12   | <b>4</b> | M.20      | 16 x 12   | <b>60</b> | 62.8 | 90 |
| SE4 - 18 x 14.5 |          | M.22 - 24 | 18 x 14.5 |           |      |    |
| SE4 - 20 x 16   |          | M.27      | 20 x 16   |           |      |    |
| SE4 - 22 x 18   |          | M.30      | 22 x 18   |           |      |    |
| SE4 - 25 x 20   |          | M.33      | 25 x 20   |           |      |    |
| SE4 - 28 x 22   |          | M.36      | 28 x 22   |           |      |    |
| SE4 - 32 x 24   |          | M.39 - 42 | 32 x 24   |           |      |    |
| SE4 - 36 x 29   |          | M.45 - 48 | 36 x 29   |           |      |    |

| REFERENCIA      | TIPO     | CAP         | Ø x Z     | X         | H  | D  |
|-----------------|----------|-------------|-----------|-----------|----|----|
| SE7 - 4.5 x 3.4 | <b>7</b> | M.4         | 4.5 x 3.4 | <b>26</b> | 32 | 40 |
| SE7 - 6 x 4.9   |          | M.5 - 6 - 8 | 6 x 4.9   |           |    |    |
| SE7 - 7 x 5.5   |          | M.10        | 7 x 5.5   |           |    |    |
| SE7 - 8 x 6.2   |          | M.8         | 8 x 6.2   |           |    |    |
| SE7 - 9 x 7     |          | M.12        | 9 x 7     |           |    |    |
| SE7 - 10 x 8    |          | M.10        | 10 x 8    |           |    |    |
| SE7 - 11 x 9    |          | M.14        | 11 x 9    |           |    |    |
| SE7 - 12 x 9    |          | M.16        | 12 x 9    |           |    |    |
| SE7 - 14 x 11   |          | M.18        | 14 x 11   |           |    |    |

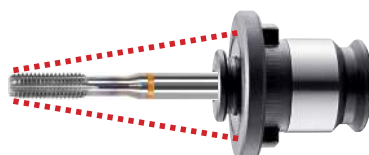
Porta machos con norma ISO - JIS - ANSI son disponibles sobre pedido  
*On request we can supply the adaptors suitable for taps ISO - JIS - ANSI shank dimensions*

Pinza porta machos de Roscar sin Embrague de cambio rápido  
paso refrigerante

*Quick change adaptors for tapping without safety clutch with  
coolant through*



**SEC**



| REFERENCIA       | TIPO     | CAP         | Ø x L     | X         | H    | D  | K | R  |
|------------------|----------|-------------|-----------|-----------|------|----|---|----|
| SEC1 - 3.5 x 2.7 | <b>1</b> | M.3         | 3.5 x 2.7 | <b>19</b> | 21.5 | 30 | 7 | 10 |
| SEC1 - 4 x 3     |          | M.3.5       | 4 x 3     |           |      |    |   |    |
| SEC1 - 4.5 x 3.4 |          | M.4         | 4.5 x 3.4 |           |      |    |   |    |
| SEC1 - 6 x 4.9   |          | M.5 - 6 - 8 | 6 x 4.9   |           |      |    |   |    |
| SEC1 - 7 x 5.5   |          | M.10        | 7 x 5.5   |           |      |    |   |    |
| SEC1 - 8 x 6.2   |          | M.8         | 8 x 6.2   |           |      |    |   |    |
| SEC1 - 9 x 7     |          | M.12        | 9 x 7     |           |      |    |   |    |
| SEC1 - 10 x 8    |          | M.10        | 10 x 8    |           |      |    |   |    |
| SEC1 - 11 x 9    |          | M.14        | 11 x 9    |           |      |    |   |    |

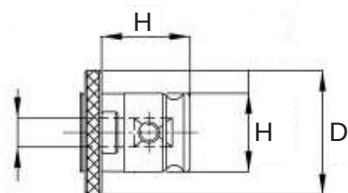
| REFERENCIA       | TIPO     | CAP         | Ø x L     | X         | H  | D  | K  | R  |
|------------------|----------|-------------|-----------|-----------|----|----|----|----|
| SEC2 - 6 x 4.9   | <b>2</b> | M.5 - 6 - 8 | 6 x 4.9   | <b>31</b> | 35 | 48 | 11 | 19 |
| SEC2 - 7 x 5.5   |          | M.10        | 7 x 5.5   |           |    |    |    |    |
| SEC2 - 8 x 6.2   |          | M.8         | 8 x 6.2   |           |    |    |    |    |
| SEC2 - 9 x 7     |          | M.12        | 9 x 7     |           |    |    |    |    |
| SEC2 - 10 x 8    |          | M.10        | 10 x 8    |           |    |    |    |    |
| SEC2 - 11 x 9    |          | M.14        | 11 x 9    |           |    |    |    |    |
| SEC2 - 12 x 9    |          | M.16        | 12 x 9    |           |    |    |    |    |
| SEC2 - 14 x 11   |          | M.18        | 14 x 11   |           |    |    |    |    |
| SEC2 - 16 x 12   |          | M.20        | 16 x 12   |           |    |    |    |    |
| SEC2 - 18 x 14.5 |          | M.22 - 24   | 18 x 14.5 |           |    |    |    |    |

| REFERENCIA       | TIPO     | CAP       | Ø x L     | X         | H    | D  | K  | R  |
|------------------|----------|-----------|-----------|-----------|------|----|----|----|
| SEC3 - 11 x 9    | <b>3</b> | M.14      | 11 x 9    | <b>48</b> | 55.5 | 70 | 14 | 30 |
| SEC3 - 12 x 9    |          | M.16      | 12 x 9    |           |      |    |    |    |
| SEC3 - 14 x 11   |          | M.18      | 14 x 11   |           |      |    |    |    |
| SEC3 - 16 x 12   |          | M.20      | 16 x 12   |           |      |    |    |    |
| SEC3 - 18 x 14.5 |          | M.22 - 24 | 18 x 14.5 |           |      |    |    |    |
| SEC3 - 20 x 16   |          | M.27      | 20 x 16   |           |      |    |    |    |
| SEC3 - 22 x 18   |          | M.30      | 22 x 18   |           |      |    |    |    |
| SEC3 - 25 x 20   |          | M.33      | 25 x 20   |           |      |    |    |    |
| SEC3 - 28 x 22   |          | M.36      | 28 x 22   |           |      |    |    |    |

Porta machos con norma ISO - JIS - ANSI son disponibles sobre pedido

*On request we can supply the adaptors suitable for taps ISO - JIS - ANSI shank dimensions*

Pinza porta machos de Roscar sin Embrague  
de cambio rápido Sobredimensionado  
*Quick change adaptors for tapping without safety clutch*

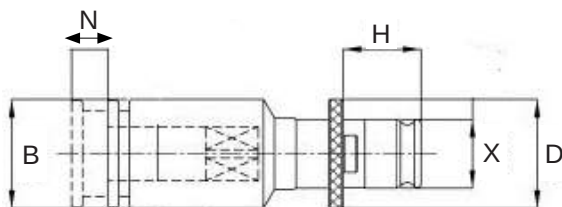


**SEK**



| REFERENCIA     | TIPO     | CAP       | Ø X $\nabla$ | X         | H    | D  |
|----------------|----------|-----------|--------------|-----------|------|----|
| SEK1 - 12 x 9  | <b>1</b> | M.16      | 12 x 9       | <b>19</b> | 21.5 | 30 |
| SEK1 - 14 x 11 |          | M.18      | 14 x 11      |           |      |    |
| REFERENCIA     | TIPO     | CAP       | Ø X $\nabla$ | X         | H    | D  |
| SEK2 - 20 x 16 | <b>2</b> | M.27      | 20 x 16      | <b>31</b> | 35   | 48 |
| SEK2 - 22 x 18 |          | M.30      | 22 x 18      |           |      |    |
| REFERENCIA     | TIPO     | CAP       | Ø X $\nabla$ | X         | H    | D  |
| SEK3 - 32 x 24 | <b>3</b> | M.39 - 42 | 32 x 24      | <b>48</b> | 55.5 | 70 |
| SEK3 - 36 x 29 |          | M.45 - 48 | 36 x 29      |           |      |    |
| REFERENCIA     | TIPO     | CAP       | Ø X $\nabla$ | X         | H    | D  |
| SEK4 - 40 x 32 | <b>4</b> | M.52      | 40 x 32      | <b>60</b> | 62.8 | 90 |
| SEK4 - 45 x 35 |          | M.56 - 60 | 45 x 35      |           |      |    |

Pinza porta machos de Roscar sin embrague  
Sobredimensionado longitud ajustable  
*Quick change adaptors for tapping with bigger front part length adjustment*

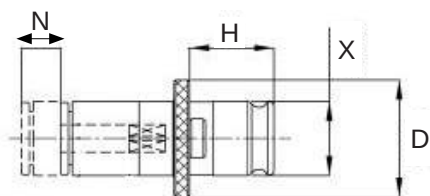


**SENE**



| REFERENCIA        | TIPO     | CAP       | Ø X $\nabla$ | X         | H    | D  | N  | B  |
|-------------------|----------|-----------|--------------|-----------|------|----|----|----|
| SENE0 - 9 x 7     | <b>0</b> | M.12      | 9 x 7        | <b>13</b> | 19.5 | 22 | 8  | 19 |
| SENE0 - 10 x 8    |          | M.10      | 10 x 8       |           |      |    |    |    |
| SENE1 - 12 x 9    |          | M.16      | 12 x 9       |           |      |    |    |    |
| SENE1 - 14 x 11   | <b>1</b> | M.18      | 14 x 11      | <b>19</b> | 21.5 | 30 | 10 | 30 |
| SENE1 - 16 x 12   |          | M.20      | 16 x 12      |           |      |    |    |    |
| SENE1 - 18 x 14.5 |          | M.22 - 24 | 18 x 14.5    |           |      |    |    |    |
| SENE2 - 20 x 16   | <b>2</b> | M.27      | 20 x 16      | <b>31</b> | 35   | 48 | 15 | 48 |
| SENE2 - 22 x 18   |          | M.30      | 22 x 18      |           |      |    |    |    |

Pinza porta machos de Roscar sin Embrague longitud ajustable  
*Quick change adaptors for tapping with length adjustment*



**SEN**

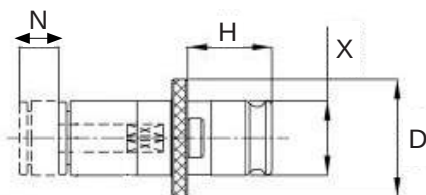


| REFERENCIA       | TIPO     | CAP                 | Ø x L     | X         | H    | D  | N        |
|------------------|----------|---------------------|-----------|-----------|------|----|----------|
| SEN0 - 2.5 x 2.1 | <b>0</b> | M.1 - 1.8           | 2.5 x 2.1 | <b>13</b> | 19.5 | 22 | <b>8</b> |
| SEN0 - 2.8 x 2.1 |          | M.2 - 2.2 - 2.5 - 4 | 2.8 x 2.1 |           |      |    |          |
| SEN0 - 3.5 x 2.7 |          | M.3                 | 3.5 x 2.7 |           |      |    |          |
| SEN0 - 4 x 3     |          | M.3.5               | 4 x 3     |           |      |    |          |
| SEN0 - 4.5 x 3.4 |          | M.4                 | 4.5 x 3.4 |           |      |    |          |
| SEN0 - 6 x 4.9   |          | M.5 - 6 - 8         | 6 x 4.9   |           |      |    |          |
| SEN0 - 7 x 5.5   |          | M.10                | 7 x 5.5   |           |      |    |          |

| REFERENCIA       | TIPO     | CAP                 | Ø x L     | X         | H    | D  | N         |
|------------------|----------|---------------------|-----------|-----------|------|----|-----------|
| SEN1 - 2.5 x 2.1 | <b>1</b> | M.1 - 1.8           | 2.5 x 2.1 | <b>19</b> | 21.5 | 30 | <b>10</b> |
| SEN1 - 2.8 x 2.1 |          | M.2 - 2.2 - 2.5 - 4 | 2.8 x 2.1 |           |      |    |           |
| SEN1 - 3.5 x 2.7 |          | M.3                 | 3.5 x 2.7 |           |      |    |           |
| SEN1 - 4 x 3     |          | M.3.5               | 4 x 3     |           |      |    |           |
| SEN1 - 4.5 x 3.4 |          | M.4                 | 4.5 x 3.4 |           |      |    |           |
| SEN1 - 6 x 4.9   |          | M.5 - 6 - 8         | 6 x 4.9   |           |      |    |           |
| SEN1 - 7 x 5.5   |          | M.10                | 7 x 5.5   |           |      |    |           |
| SEN1 - 8 x 6.2   |          | M.8                 | 8 x 6.2   |           |      |    |           |
| SEN1 - 9 x 7     |          | M.12                | 9 x 7     |           |      |    |           |
| SEN1 - 10 x 8    |          | M.10                | 10 x 8    |           |      |    |           |
| SEN1 - 11 x 9    |          | M.14                | 11 x 9    |           |      |    |           |

| REFERENCIA       | TIPO     | CAP         | Ø x L     | X         | H  | D  | N         |
|------------------|----------|-------------|-----------|-----------|----|----|-----------|
| SEN2 - 6 x 4.9   | <b>2</b> | M.5 - 6 - 8 | 6 x 4.9   | <b>31</b> | 35 | 48 | <b>15</b> |
| SEN2 - 7 x 5.5   |          | M.10        | 7 x 5.5   |           |    |    |           |
| SEN2 - 8 x 6.2   |          | M.8         | 8 x 6.2   |           |    |    |           |
| SEN2 - 9 x 7     |          | M.12        | 9 x 7     |           |    |    |           |
| SEN2 - 10 x 8    |          | M.10        | 10 x 8    |           |    |    |           |
| SEN2 - 11 x 9    |          | M.14        | 11 x 9    |           |    |    |           |
| SEN2 - 12 x 9    |          | M.16        | 12 x 9    |           |    |    |           |
| SEN2 - 14 x 11   |          | M.18        | 14 x 11   |           |    |    |           |
| SEN2 - 16 x 12   |          | M.20        | 16 x 12   |           |    |    |           |
| SEN2 - 18 x 14.5 |          | M.22 - 24   | 18 x 14.5 |           |    |    |           |

Pinza porta machos de Roscar sin Embrague longitud ajustable  
*Quick change adaptors for tapping with length adjustment*



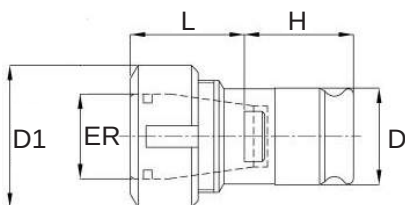
**SEN**



| REFERENCIA       | TIPO     | CAP       | Ø x L     | X         | H           | D         | N         |
|------------------|----------|-----------|-----------|-----------|-------------|-----------|-----------|
| SEN3 - 11 x 9    | <b>3</b> | M.14      | 11 x 9    | <b>48</b> | <b>55.5</b> | <b>70</b> | <b>25</b> |
| SEN3 - 12 x 9    |          | M.16      | 12 x 9    |           |             |           |           |
| SEN3 - 14 x 11   |          | M.18      | 14 x 11   |           |             |           |           |
| SEN3 - 16 x 12   |          | M.20      | 16 x 12   |           |             |           |           |
| SEN3 - 18 x 14.5 |          | M.22 - 24 | 18 x 14.5 |           |             |           |           |
| SEN3 - 20 x 16   |          | M.27      | 20 x 16   |           |             |           |           |
| SEN3 - 22 x 18   |          | M.30      | 22 x 18   |           |             |           |           |
| SEN3 - 25 x 20   |          | M.33      | 25 x 20   |           |             |           |           |
| SEN3 - 28 x 22   |          | M.36      | 28 x 22   |           |             |           |           |

| REFERENCIA     | TIPO     | CAP       | Ø x L   | X         | H           | D         | N         |
|----------------|----------|-----------|---------|-----------|-------------|-----------|-----------|
| SEN4 - 20 x 16 | <b>4</b> | M.27      | 20 x 16 | <b>60</b> | <b>62.8</b> | <b>90</b> | <b>40</b> |
| SEN4 - 22 x 18 |          | M.30      | 22 x 18 |           |             |           |           |
| SEN4 - 25 x 20 |          | M.33      | 25 x 20 |           |             |           |           |
| SEN4 - 28 x 22 |          | M.36      | 28 x 22 |           |             |           |           |
| SEN4 - 32 x 24 |          | M.39 - 42 | 32 x 24 |           |             |           |           |
| SEN4 - 36 x 29 |          | M.45 - 48 | 36 x 29 |           |             |           |           |

Adaptador porta pinzas ER  
*Positive drive ER collet adapters*



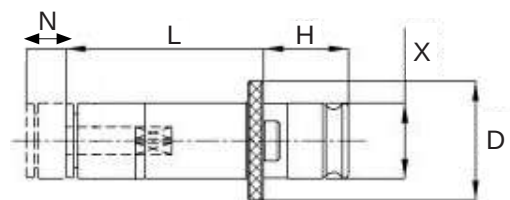
**SEP**



| REFERENCIA   | TIPO     | CAP        | PINZA | CAP    | D  | D1 | H    | L  |
|--------------|----------|------------|-------|--------|----|----|------|----|
| SEP1 - ERC16 | <b>1</b> | M.3 a M.12 | ER16  | 0.5-10 | 19 | 22 | 21.5 | 26 |
| SEP1 - ERC20 |          | M.3 a M.12 | ER20  | 1 - 13 | 19 | 34 | 21.5 | 46 |
| SEP1 - ERC25 |          | M.3 a M.12 | ER25  | 1 - 16 | 19 | 42 | 21.5 | 50 |
| SEP1 - ERC32 |          | M.3 a M.12 | ER32  | 2 - 20 | 19 | 50 | 21.5 | 58 |
| SEP2 - ERC25 | <b>2</b> | M.8 a M.20 | ER25  | 1 - 16 | 31 | 35 | 35   | 30 |
| SEP2 - ERC32 |          | M.8 a M.20 | ER32  | 2 - 20 | 31 | 50 | 35   | 54 |
| SEP2 - ERC40 |          | M.8 a M.20 | ER40  | 3 - 26 | 31 | 63 | 35   | 65 |

Porta machos con norma ISO - JIS - ANSI están disponibles sobre pedido  
*On request we can supply the adaptors suitable for taps ISO - JIS - ANSI shank dimensions*

Pinza porta machos de Roscar sin Embrague longitud ajustable  
Quick change adaptors for tapping with length adjustment



**SENV**

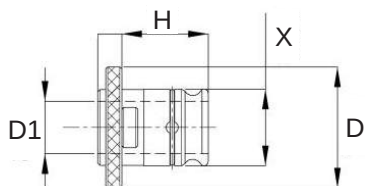


| REFERENCIA        | TIPO     | CAP                 | Ø x L     | X         | H    | D  | N         | L                |
|-------------------|----------|---------------------|-----------|-----------|------|----|-----------|------------------|
| SENV0 - 2.5 x 2.1 | <b>0</b> | M.1 a 1.8           | 2.5 x 2.1 | <b>13</b> | 19.5 | 22 | <b>8</b>  | <b>40 ÷ 120</b>  |
| SENV0 - 2.8 x 2.1 |          | M.2 - 2.2 - 2.5 - 4 | 2.8 x 2.1 |           |      |    |           |                  |
| SENV0 - 3.5 x 2.7 |          | M.3                 | 3.5 x 2.7 |           |      |    |           |                  |
| SENV0 - 4 x 3     |          | M.3.5               | 4 x 3     |           |      |    |           |                  |
| SENV0 - 4.5 x 3.4 |          | M.4                 | 4.5 x 3.4 |           |      |    |           |                  |
| SENV0 - 6 x 4.9   |          | M.5 - 6 - 8         | 6 x 4.9   |           |      |    |           |                  |
| SENV0 - 7 x 5.5   |          | M.10                | 7 x 5.5   |           |      |    |           |                  |
| SENV1 - 3.5 x 2.7 | <b>1</b> | M.3                 | 3.5 x 2.7 | <b>19</b> | 21.5 | 30 | <b>10</b> | <b>40 ÷ 140</b>  |
| SENV1 - 4 x 3     |          | M.3.5               | 4 x 3     |           |      |    |           |                  |
| SENV1 - 4.5 x 3.4 |          | M.4                 | 4.5 x 3.4 |           |      |    |           |                  |
| SENV1 - 6 x 4.9   |          | M.5 - 6 - 8         | 6 x 4.9   |           |      |    |           |                  |
| SENV1 - 7 x 5.5   |          | M.10                | 7 x 5.5   |           |      |    |           |                  |
| SENV1 - 8 x 6.2   |          | M.8                 | 8 x 6.2   |           |      |    |           |                  |
| SENV1 - 9 x 7     |          | M.12                | 9 x 7     |           |      |    |           |                  |
| SENV1 - 10 x 8    |          | M.10                | 10 x 8    |           |      |    |           |                  |
| SENV1 - 11 x 9    |          | M.14                | 11 x 9    |           |      |    |           |                  |
| SENV2 - 6 x 4.9   | <b>2</b> | M.5 - 6 - 8         | 6 x 4.9   | <b>31</b> | 35   | 48 | <b>15</b> | <b>70 ÷ 160</b>  |
| SENV2 - 7 x 5.5   |          | M.10                | 7 x 5.5   |           |      |    |           |                  |
| SENV2 - 8 x 6.2   |          | M.8                 | 8 x 6.2   |           |      |    |           |                  |
| SENV2 - 9 x 7     |          | M.12                | 9 x 7     |           |      |    |           |                  |
| SENV2 - 10 x 8    |          | M.10                | 10 x 8    |           |      |    |           |                  |
| SENV2 - 11 x 9    |          | M.14                | 11 x 9    |           |      |    |           |                  |
| SENV2 - 12 x 9    |          | M.16                | 12 x 9    |           |      |    |           |                  |
| SENV2 - 14 x 11   |          | M.18                | 14 x 11   |           |      |    |           |                  |
| SENV2 - 16 x 12   |          | M.20                | 16 x 12   |           |      |    |           |                  |
| SENV2 - 18 x 14.5 |          | M.22 - 24           | 18 x 14.5 |           |      |    |           |                  |
| SENV3 - 11 x 9    | <b>3</b> | M.14                | 11 x 9    | <b>48</b> | 55.5 | 70 | <b>25</b> | <b>100 ÷ 180</b> |
| SENV3 - 12 x 9    |          | M.16                | 12 x 9    |           |      |    |           |                  |
| SENV3 - 14 x 11   |          | M.18                | 14 x 11   |           |      |    |           |                  |
| SENV3 - 16 x 12   |          | M.20                | 16 x 12   |           |      |    |           |                  |
| SENV3 - 18 x 14.5 |          | M.22 - 24           | 18 x 14.5 |           |      |    |           |                  |
| SENV3 - 20 x 16   |          | M.27                | 20 x 16   |           |      |    |           |                  |
| SENV3 - 22 x 18   |          | M.30                | 22 x 18   |           |      |    |           |                  |
| SENV3 - 25 x 20   |          | M.33                | 25 x 20   |           |      |    |           |                  |
| SENV3 - 28 x 22   |          | M.36                | 28 x 22   |           |      |    |           |                  |

**L = 40 - 50 - 60 - 70 - 80 - 90 - 100 - 110 - 120 - 130 - 140 - 150 - 160 - 170 - 180**

Porta machos con norma ISO - JIS - ANSI son disponibles sobre pedido  
On request we can supply the adaptors suitable for taps ISO - JIS - ANSI shank dimensions

Reductor pinza porta machos  
*Tape collets reducers*



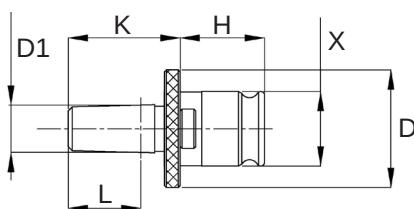
**SER**



| REFERENCIA  | TIPO         | X  | D1 | H    | D  |
|-------------|--------------|----|----|------|----|
| SER - 1 / 0 | <b>1 / 0</b> | 19 | 13 | 19.5 | 30 |
| SER - 2 / 0 | <b>2 / 0</b> | 31 | 13 | 35   | 48 |
| SER - 2 / 1 | <b>2 / 1</b> |    | 19 |      |    |
| SER - 3 / 1 | <b>3 / 1</b> | 48 | 19 | 55.5 | 70 |
| SER - 3 / 2 | <b>3 / 2</b> |    | 31 |      |    |
| SER - 4 / 2 | <b>4 / 2</b> | 60 | 31 | 62.8 | 90 |
| SER - 4 / 3 | <b>4 / 3</b> |    | 48 |      |    |

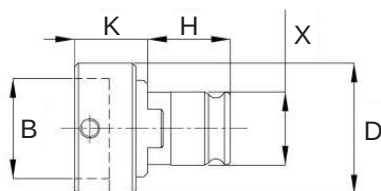
Adaptador Fijo DIN/238  
*Adaptors Rigid*

**SEB**



| REFERENCIA | TIPO     | CAP      | B   | D  | H    | X  | K    | D1     | L    |
|------------|----------|----------|-----|----|------|----|------|--------|------|
| SEB-1 B12  | <b>1</b> | M.3 a 12 | B12 | 30 | 21.5 | 19 | 28.5 | 12.065 | 18.5 |
| SEB-1 B16  |          |          | B16 |    |      |    | 35.5 | 15.733 | 24.0 |
| SEB-2 B12  | <b>2</b> | M.8 a 20 | B12 | 48 | 35   | 31 | 29.5 | 12.065 | 18.5 |
| SEB-2 B16  |          |          | B16 |    |      |    | 36.5 | 15.733 | 24.0 |
| SEB-2 B18  |          |          | B18 |    |      |    | 44.5 | 17.780 | 32.0 |

Pinza porta Hileras de Roscar de cambio rápido  
*Die holder adaptor*



**SEF**

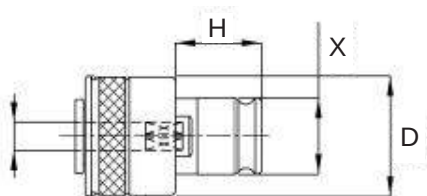


| REFERENCIA     | TIPO     | B X E   | X         | H           | K  | D  | B  |
|----------------|----------|---------|-----------|-------------|----|----|----|
| SEF1 - 16 x 5  | <b>1</b> | 16 x 5  | <b>19</b> | <b>21.5</b> | 14 | 25 | 16 |
| SEF1 - 20 x 5  |          | 20 x 5  |           |             | 14 | 30 | 20 |
| SEF1 - 20 x 7  |          | 20 x 7  |           |             | 16 | 30 | 20 |
| SEF1 - 25 x 9  |          | 25 x 9  |           |             | 19 | 35 | 25 |
| SEF1 - 30 x 11 |          | 30 x 11 |           |             | 21 | 40 | 30 |
| SEF1 - 38 x 10 |          | 38 x 10 |           |             | 20 | 48 | 38 |
| SEF1 - 38 x 14 |          | 38 x 14 |           |             | 24 | 48 | 38 |

| REFERENCIA     | TIPO     | B X E   | X         | H         | K    | D  | B  |
|----------------|----------|---------|-----------|-----------|------|----|----|
| SEF2 - 20 x 5  | <b>2</b> | 20 x 5  | <b>31</b> | <b>35</b> | 20   | 40 | 20 |
| SEF2 - 20 x 7  |          | 20 x 7  |           |           | 21.5 | 40 | 20 |
| SEF2 - 25 x 9  |          | 25 x 9  |           |           | 23.5 | 40 | 25 |
| SEF2 - 30 x 11 |          | 30 x 11 |           |           | 22   | 40 | 30 |
| SEF2 - 38 x 10 |          | 38 x 10 |           |           | 21   | 48 | 38 |
| SEF2 - 38 x 14 |          | 38 x 14 |           |           | 25   | 48 | 38 |
| SEF2 - 45 x 14 |          | 45 x 14 |           |           | 25   | 57 | 45 |
| SEF2 - 45 x 18 |          | 45 x 18 |           |           | 29   | 57 | 45 |

| REFERENCIA     | TIPO     | B X E   | X         | H           | K  | D  | B  |
|----------------|----------|---------|-----------|-------------|----|----|----|
| SEF3 - 30 x 11 | <b>3</b> | 30 x 11 | <b>48</b> | <b>55.5</b> | 30 | 60 | 30 |
| SEF3 - 38 x 10 |          | 38 x 10 |           |             | 28 | 60 | 38 |
| SEF3 - 38 x 14 |          | 38 x 14 |           |             | 32 | 60 | 38 |
| SEF3 - 45 x 14 |          | 45 x 14 |           |             | 32 | 60 | 45 |
| SEF3 - 45 x 18 |          | 45 x 18 |           |             | 36 | 60 | 45 |
| SEF3 - 55 x 16 |          | 55 x 16 |           |             | 30 | 72 | 55 |
| SEF3 - 55 x 22 |          | 55 x 22 |           |             | 35 | 72 | 55 |
| SEF3 - 65 x 18 |          | 65 x 18 |           |             | 32 | 82 | 65 |
| SEF3 - 65 x 25 |          | 65 x 25 |           |             | 38 | 82 | 65 |

Pinza porta machos de Roscar con Embrague de cambio rápido  
*Quick change adaptors for tapping with safety clutch*



**SES**



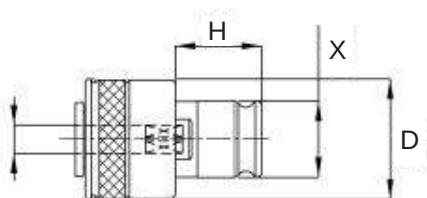
| REFERENCIA       | TIPO     | CAP             | Ø x ▯     | X         | H    | D  |
|------------------|----------|-----------------|-----------|-----------|------|----|
| SES0 - 2.5 x 2.1 | <b>0</b> | M.1 - 1.8       | 2.5 x 2.1 | <b>13</b> | 19.5 | 24 |
| SES0 - 2.8 x 2.1 |          | M.2 - 2.2 - 2.5 | 2.8 x 2.1 |           |      |    |
| SES0 - 3.5 x 2.7 |          | M.3 - 5         | 3.5 x 2.7 |           |      |    |
| SES0 - 4 x 3     |          | M.3.5           | 4 x 3     |           |      |    |
| SES0 - 4.5 x 3.4 |          | M.4 - 6         | 4.5 x 3.4 |           |      |    |
| SES0 - 6 x 4.9   |          | M.5 - 6 - 8     | 6 x 4.9   |           |      |    |
| SES0 - 7 x 5.5   |          | M.10            | 7 x 5.5   |           |      |    |

| REFERENCIA       | TIPO     | CAP                 | Ø x ▯     | X         | H    | D    |
|------------------|----------|---------------------|-----------|-----------|------|------|
| SES1 - 2.5 x 2.1 | <b>1</b> | M.1 - 1.8           | 2.5 x 2.1 | <b>19</b> | 21.5 | 32.5 |
| SES1 - 2.8 x 2.1 |          | M.2 - 2.2 - 2.5 - 4 | 2.8 x 2.1 |           |      |      |
| SES1 - 3.5 x 2.7 |          | M.3                 | 3.5 x 2.7 |           |      |      |
| SES1 - 4 x 3     |          | M.3.5               | 4 x 3     |           |      |      |
| SES1 - 4.5 x 3.4 |          | M.4                 | 4.5 x 3.4 |           |      |      |
| SES1 - 6 x 4.9   |          | M.5 - 6 - 8         | 6 x 4.9   |           |      |      |
| SES1 - 7 x 5.5   |          | M.10                | 7 x 5.5   |           |      |      |
| SES1 - 8 x 6.2   |          | M.8                 | 8 x 6.2   |           |      |      |
| SES1 - 9 x 7     |          | M.12                | 9 x 7     |           |      |      |
| SES1 - 10 x 8    |          | M.10                | 10 x 8    |           |      |      |
| SES1 - 11 x 9    |          | M.14                | 11 x 9    |           |      |      |

| REFERENCIA       | TIPO     | CAP         | Ø x ▯     | X         | H  | D    |
|------------------|----------|-------------|-----------|-----------|----|------|
| SES2 - 3.5 x 2.7 | <b>2</b> | M.3         | 3.5 x 2.7 | <b>31</b> | 35 | 50.5 |
| SES2 - 4 x 3     |          | M.3.5       | 4 x 3     |           |    |      |
| SES2 - 4.5 x 3.4 |          | M.4         | 4.5 x 3.4 |           |    |      |
| SES2 - 6 x 4.9   |          | M.5 - 6 - 8 | 6 x 4.9   |           |    |      |
| SES2 - 7 x 5.5   |          | M.10        | 7 x 5.5   |           |    |      |
| SES2 - 8 x 6.2   |          | M.8         | 8 x 6.2   |           |    |      |
| SES2 - 9 x 7     |          | M.12        | 9 x 7     |           |    |      |
| SES2 - 10 x 8    |          | M.10        | 10 x 8    |           |    |      |
| SES2 - 11 x 9    |          | M.14        | 11 x 9    |           |    |      |
| SES2 - 12 x 9    |          | M.16        | 12 x 9    |           |    |      |
| SES2 - 14 x 11   |          | M.18        | 14 x 11   |           |    |      |
| SES2 - 16 x 12   |          | M.20        | 16 x 12   |           |    |      |
| SES2 - 18 x 14.5 |          | M.22 - 24   | 18 x 14.5 |           |    |      |

Porta machos con norma ISO - JIS - ANSI son disponibles sobre pedido  
*On request we can supply the adaptors suitable for taps ISO - JIS - ANSI shank dimensions*

Pinza porta machos de Roscar con Embrague de cambio rápido  
*Quick change adaptors for tapping with safety clutch*



**SES**



| REFERENCIA       | TIPO     | CAP       | Ø x L     | X         | H    | D  |
|------------------|----------|-----------|-----------|-----------|------|----|
| SES3 - 9 x 7     | <b>3</b> | M.12      | 9 x 7     | <b>48</b> | 55.5 | 72 |
| SES3 - 10 x 8    |          | M.10      | 10 x 8    |           |      |    |
| SES3 - 11 x 9    |          | M.14      | 11 x 9    |           |      |    |
| SES3 - 12 x 9    |          | M.16      | 12 x 9    |           |      |    |
| SES3 - 14 x 11   |          | M.18      | 14 x 11   |           |      |    |
| SES3 - 16 x 12   |          | M.20      | 16 x 12   |           |      |    |
| SES3 - 18 x 14.5 |          | M.22 - 24 | 18 x 14.5 |           |      |    |
| SES3 - 20 x 16   |          | M.27      | 20 x 16   |           |      |    |
| SES3 - 22 x 18   |          | M.30      | 22 x 18   |           |      |    |
| SES3 - 25 x 20   |          | M.33      | 25 x 20   |           |      |    |
| SES3 - 28 x 22   |          | M.36      | 28 x 22   |           |      |    |

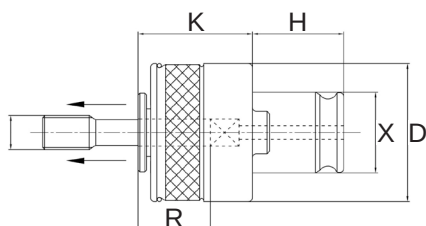
| REFERENCIA       | TIPO     | CAP       | Ø x L     | X         | H    | D  |
|------------------|----------|-----------|-----------|-----------|------|----|
| SES4 - 16 x 12   | <b>4</b> | M.20      | 16 x 12   | <b>60</b> | 62.8 | 95 |
| SES4 - 18 x 14.5 |          | M.22 - 24 | 18 x 14.5 |           |      |    |
| SES4 - 20 x 16   |          | M.27      | 20 x 16   |           |      |    |
| SES4 - 22 x 18   |          | M.30      | 22 x 18   |           |      |    |
| SES4 - 25 x 20   |          | M.33      | 25 x 20   |           |      |    |
| SES4 - 28 x 22   |          | M.36      | 28 x 22   |           |      |    |
| SES4 - 32 x 24   |          | M.39 - 42 | 32 x 24   |           |      |    |
| SES4 - 36 x 29   |          | M.45 - 48 | 36 x 29   |           |      |    |

| REFERENCIA       | TIPO     | CAP         | Ø x L     | X         | H  | D    |
|------------------|----------|-------------|-----------|-----------|----|------|
| SES7 - 4.5 x 3.4 | <b>7</b> | M.4         | 4.5 x 3.4 | <b>26</b> | 32 | 40.5 |
| SES7 - 6 x 4.9   |          | M.5 - 6 - 8 | 6 x 4.9   |           |    |      |
| SES7 - 7 x 5.5   |          | M.10        | 7 x 5.5   |           |    |      |
| SES7 - 8 x 6.2   |          | M.8         | 8 x 6.2   |           |    |      |
| SES7 - 9 x 7     |          | M.12        | 9 x 7     |           |    |      |
| SES7 - 10 x 8    |          | M.10        | 10 x 8    |           |    |      |
| SES7 - 11 x 9    |          | M.14        | 11 x 9    |           |    |      |
| SES7 - 12 x 9    |          | M.16        | 12 x 9    |           |    |      |

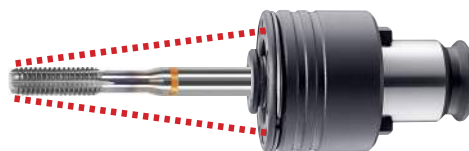
Porta machos con norma ISO - JIS - ANSI son disponibles sobre pedido  
*On request we can supply the adaptors suitable for taps ISO - JIS - ANSI shank dimensions*

Pinza porta machos de Roscar con Embrague de cambio rápido  
con paso refrigerante

*Quick change adaptors for tapping with safety clutch and  
with coolant throug*



**SESC**



| REFERENCIA        | TIPO     | CAP         | Ø X ∇     | X         | H    | D    | K  | R  |
|-------------------|----------|-------------|-----------|-----------|------|------|----|----|
| SESC1 - 3.5 x 2.7 | <b>1</b> | M.3 - 4     | 3.5 x 2.7 | <b>19</b> | 21.5 | 32.5 | 25 | 17 |
| SESC1 - 4 x 3     |          | M.3.5       | 4 x 3     |           |      |      |    |    |
| SESC1 - 4.5 x 3.4 |          | M.4 - 6     | 4.5 x 3.4 |           |      |      |    |    |
| SESC1 - 6 x 4.9   |          | M.5 - 6 - 8 | 6 x 4.9   |           |      |      |    |    |
| SESC1 - 7 x 5.5   |          | M.10        | 7 x 5.5   |           |      |      |    |    |
| SESC1 - 8 x 6.2   |          | M.8 - 10    | 8 x 6.2   |           |      |      |    |    |
| SESC1 - 9 x 7     |          | M.12        | 9 x 7     |           |      |      |    |    |
| SESC1 - 10 x 8    |          | M.10        | 10 x 8    |           |      |      |    |    |
| SESC1 - 11 x 9    |          | M.14        | 11 x 9    |           |      |      |    |    |

| REFERENCIA        | TIPO     | CAP         | Ø X ∇     | X         | H  | D    | K  | R  |
|-------------------|----------|-------------|-----------|-----------|----|------|----|----|
| SESC2 - 6 x 4.9   | <b>2</b> | M.5 - 6 - 8 | 6 x 4.9   | <b>31</b> | 35 | 50.5 | 34 | 30 |
| SESC2 - 7 x 5.5   |          | M.10        | 7 x 5.5   |           |    |      |    |    |
| SESC2 - 8 x 6.2   |          | M.8 - 10    | 8 x 6.2   |           |    |      |    |    |
| SESC2 - 9 x 7     |          | M.12        | 9 x 7     |           |    |      |    |    |
| SESC2 - 10 x 8    |          | M.10        | 10 x 8    |           |    |      |    |    |
| SESC2 - 11 x 9    |          | M.14        | 11 x 9    |           |    |      |    |    |
| SESC2 - 12 x 9    |          | M.16        | 12 x 9    |           |    |      |    |    |
| SESC2 - 14 x 11   |          | M.18        | 14 x 11   |           |    |      |    |    |
| SESC2 - 16 x 12   |          | M.20        | 16 x 12   |           |    |      |    |    |
| SESC2 - 18 x 14.5 |          | M.22 - 24   | 18 x 14.5 |           |    |      |    |    |

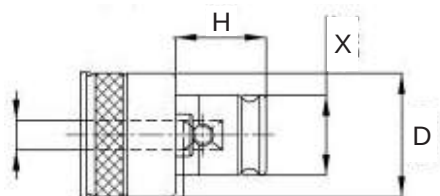
| REFERENCIA        | TIPO     | CAP        | Ø X ∇     | X         | H    | D  | K  | R  |
|-------------------|----------|------------|-----------|-----------|------|----|----|----|
| SESC3 - 11 x 9    | <b>3</b> | M.14       | 11 x 9    | <b>48</b> | 55.5 | 72 | 45 | 44 |
| SESC3 - 12 x 9    |          | M.16       | 12 x 9    |           |      |    |    |    |
| SESC3 - 14 x 11   |          | M.18       | 14 x 11   |           |      |    |    |    |
| SESC3 - 16 x 12   |          | M.20       | 16 x 12   |           |      |    |    |    |
| SESC3 - 18 x 14.5 |          | M.22 - 24  | 18 x 14.5 |           |      |    |    |    |
| SESC3 - 20 x 16   |          | M.27 - M30 | 20 x 16   |           |      |    |    |    |
| SESC3 - 22 x 18   |          | M.30       | 22 x 18   |           |      |    |    |    |
| SESC3 - 25 x 20   |          | M.33 - M36 | 25 x 20   |           |      |    |    |    |
| SESC3 - 28 x 22   |          | M.36       | 28 x 22   |           |      |    |    |    |

Porta machos con norma ISO - JIS - ANSI son disponibles sobre pedido

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Porta machos de Roscar con Embrague de cambio rápido  
Sobredimensionado

*Quick change adaptors for tapping with safety clutch*



**SESK**



| REFERENCIA      | TIPO     | CAP  | Ø X ▣   | A         | H    | D    |
|-----------------|----------|------|---------|-----------|------|------|
| SESK1 - 12 x 9  | <b>1</b> | M.16 | 12 x 9  | <b>19</b> | 21.5 | 32.5 |
| SESK1 - 14 x 11 |          | M.18 | 14 x 11 |           |      |      |

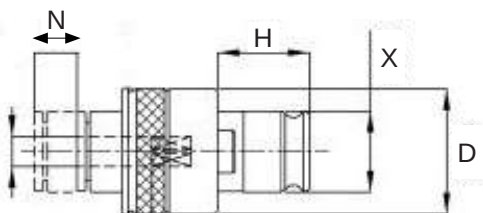
| REFERENCIA      | TIPO     | CAP  | Ø X ▣   | A         | H  | D    |
|-----------------|----------|------|---------|-----------|----|------|
| SESK2 - 20 x 16 | <b>2</b> | M.27 | 20 x 16 | <b>31</b> | 35 | 50.5 |
| SESK2 - 22 x 18 |          | M.30 | 22 x 18 |           |    |      |

| REFERENCIA      | TIPO     | CAP       | Ø X ▣   | A         | H    | D  |
|-----------------|----------|-----------|---------|-----------|------|----|
| SESK3 - 32 x 24 | <b>3</b> | M.39 - 42 | 32 x 24 | <b>48</b> | 55.5 | 72 |
| SESK3 - 36 x 29 |          | M.45 - 48 | 36 x 29 |           |      |    |

| REFERENCIA      | TIPO     | CAP       | Ø X ▣   | A         | H    | D  |
|-----------------|----------|-----------|---------|-----------|------|----|
| SESK4 - 40 x 32 | <b>4</b> | M.52      | 40 x 32 | <b>60</b> | 62.8 | 95 |
| SESK4 - 45 x 35 |          | M.56 - 60 | 45 x 35 |           |      |    |



Pinza porta machos de Roscar con Embrague longitud ajustable  
*Quick change adaptors for tapping with length adjustment*



**SESN**



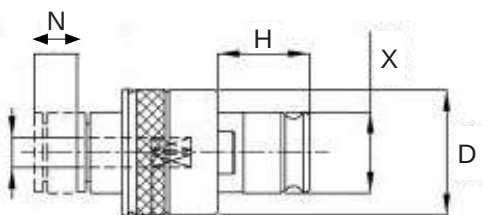
| REFERENCIA        | TIPO     | CAP                 | Ø x L     | A         | H    | D  | N        |
|-------------------|----------|---------------------|-----------|-----------|------|----|----------|
| SESNO - 2.5 x 2.1 | <b>0</b> | M.1 - 1.8           | 2.5 x 2.1 | <b>13</b> | 19.5 | 24 | <b>8</b> |
| SESNO - 2.8 x 2.1 |          | M.2 - 2.2 - 2.5 - 4 | 2.8 x 2.1 |           |      |    |          |
| SESNO - 3.5 x 2.7 |          | M.3                 | 3.5 x 2.7 |           |      |    |          |
| SESNO - 4 x 3     |          | M.3.5               | 4 x 3     |           |      |    |          |
| SESNO - 4.5 x 3.4 |          | M.4                 | 4.5 x 3.4 |           |      |    |          |
| SESNO - 6 x 4.9   |          | M.5 - 6 - 8         | 6 x 4.9   |           |      |    |          |
| SESNO - 7 x 5.5   |          | M.10                | 7 x 5.5   |           |      |    |          |

| REFERENCIA        | TIPO     | CAP                 | Ø x L     | A         | H    | D    | N         |
|-------------------|----------|---------------------|-----------|-----------|------|------|-----------|
| SESN1 - 2.5 x 2.1 | <b>1</b> | M.1 - 1.8           | 2.5 x 2.1 | <b>19</b> | 21.5 | 32.5 | <b>10</b> |
| SESN1 - 2.8 x 2.1 |          | M.2 - 2.2 - 2.5 - 4 | 2.8 x 2.1 |           |      |      |           |
| SESN1 - 3.5 x 2.7 |          | M.3                 | 3.5 x 2.7 |           |      |      |           |
| SESN1 - 4 x 3     |          | M.3.5               | 4 x 3     |           |      |      |           |
| SESN1 - 4.5 x 3.4 |          | M.4                 | 4.5 x 3.4 |           |      |      |           |
| SESN1 - 6 x 4.9   |          | M.5 - 6 - 8         | 6 x 4.9   |           |      |      |           |
| SESN1 - 7 x 5.5   |          | M.10                | 7 x 5.5   |           |      |      |           |
| SESN1 - 8 x 6.2   |          | M.8                 | 8 x 6.2   |           |      |      |           |
| SESN1 - 9 x 7     |          | M.12                | 9 x 7     |           |      |      |           |
| SESN1 - 10 x 8    |          | M.10                | 10 x 8    |           |      |      |           |
| SESN1 - 11 x 9    |          | M.14                | 11 x 9    |           |      |      |           |

| REFERENCIA        | TIPO     | CAP         | Ø x L     | A         | H  | D    | N         |
|-------------------|----------|-------------|-----------|-----------|----|------|-----------|
| SESN2 - 3.5 x 2.7 | <b>2</b> | M.3         | 3.5 x 2.7 | <b>31</b> | 35 | 50.5 | <b>15</b> |
| SESN2 - 4 x 3     |          | M.3.5       | 4 x 3     |           |    |      |           |
| SESN2 - 4.5 x 3.4 |          | M.4         | 4.5 x 3.4 |           |    |      |           |
| SESN2 - 6 x 4.9   |          | M.5 - 6 - 8 | 6 x 4.9   |           |    |      |           |
| SESN2 - 7 x 5.5   |          | M.10        | 7 x 5.5   |           |    |      |           |
| SESN2 - 8 x 6.2   |          | M.8         | 8 x 6.2   |           |    |      |           |
| SESN2 - 9 x 7     |          | M.12        | 9 x 7     |           |    |      |           |
| SESN2 - 10 x 8    |          | M.10        | 10 x 8    |           |    |      |           |
| SESN2 - 11 x 9    |          | M.14        | 11 x 9    |           |    |      |           |
| SESN2 - 12 x 9    |          | M.16        | 12 x 9    |           |    |      |           |
| SESN2 - 14 x 11   |          | M.18        | 14 x 11   |           |    |      |           |
| SESN2 - 16 x 12   |          | M.20        | 16 x 12   |           |    |      |           |
| SESN2 - 18 x 14.5 |          | M.22 - 24   | 18 x 14.5 |           |    |      |           |

Porta machos con norma ISO - JIS - ANSI son disponibles sobre pedido  
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Pinza porta machos de Roscar con Embrague longitud ajustable  
*Quick change adaptors for tapping with length adjustment*



**SESN**

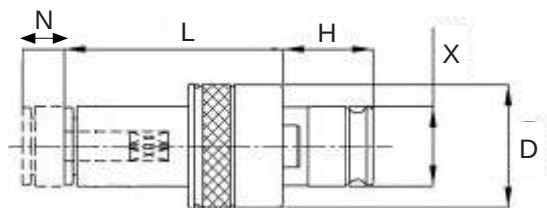


| REFERENCIA        | TIPO     | CAP       | Ø X ▯     | A         | H           | D         | N         |
|-------------------|----------|-----------|-----------|-----------|-------------|-----------|-----------|
| SESN3 - 8 x 6.2   | <b>3</b> | M.8       | 8 x 6.2   | <b>48</b> | <b>55.5</b> | <b>72</b> | <b>25</b> |
| SESN3 - 9 x 7     |          | M.12      | 9 x 7     |           |             |           |           |
| SESN3 - 10 x 8    |          | M10       | 10 x 8    |           |             |           |           |
| SESN3 - 11 x 9    |          | M.14      | 11 x 9    |           |             |           |           |
| SESN3 - 12 x 9    |          | M.16      | 12 x 9    |           |             |           |           |
| SESN3 - 14 x 11   |          | M.18      | 14 x 11   |           |             |           |           |
| SESN3 - 16 x 12   |          | M.20      | 16 x 12   |           |             |           |           |
| SESN3 - 18 x 14.5 |          | M.22 - 24 | 18 x 14.5 |           |             |           |           |
| SESN3 - 20 x 16   |          | M.27      | 20 x 16   |           |             |           |           |
| SESN3 - 22 x 18   |          | M.30      | 22 x 18   |           |             |           |           |
| SESN3 - 25 x 20   |          | M.33      | 25 x 20   |           |             |           |           |
| SESN3 - 28 x 22   |          | M.36      | 28 x 22   |           |             |           |           |

| REFERENCIA        | TIPO     | CAP       | Ø X ▯     | A         | H           | D         | N         |
|-------------------|----------|-----------|-----------|-----------|-------------|-----------|-----------|
| SESN4 - 16 x 12   | <b>4</b> | M.20      | 16 x 12   | <b>60</b> | <b>62.8</b> | <b>95</b> | <b>40</b> |
| SESN4 - 18 x 14.5 |          | M.22 - 24 | 18 x 14.5 |           |             |           |           |
| SESN4 - 20 x 16   |          | M.27      | 20 x 16   |           |             |           |           |
| SESN4 - 22 x 18   |          | M.30      | 22 x 18   |           |             |           |           |
| SESN4 - 25 x 20   |          | M.33      | 25 x 20   |           |             |           |           |
| SESN4 - 28 x 22   |          | M.36      | 28 x 22   |           |             |           |           |
| SESN4 - 32 x 24   |          | M.39 - 42 | 32 x 24   |           |             |           |           |
| SESN4 - 36 x 29   |          | M.45 - 48 | 36 x 29   |           |             |           |           |



Pinza porta machos de Roscar con Embrague longitud ajustable  
Quick change adaptors for tapping with length adjustment



**SESNV**



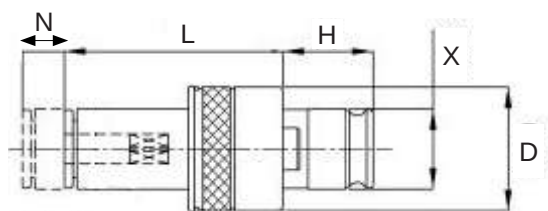
| REFERENCIA         | TIPO     | CAP                 | Ø X Z     | A         | H    | D  | N        | L        |
|--------------------|----------|---------------------|-----------|-----------|------|----|----------|----------|
| SESNV0 - 2.5 x 2.1 | <b>0</b> | M.1 - 1.8           | 2.5 x 2.1 | <b>13</b> | 19.5 | 24 | <b>8</b> | 40 ÷ 120 |
| SESNV0 - 2.8 x 2.1 |          | M.2 - 2.2 - 2.5 - 4 | 2.8 x 2.1 |           |      |    |          |          |
| SESNV0 - 3.5 x 2.7 |          | M.3                 | 3.5 x 2.7 |           |      |    |          |          |
| SESNV0 - 4 x 3     |          | M.3.5               | 4 x 3     |           |      |    |          |          |
| SESNV0 - 4.5 x 3.4 |          | M.4                 | 4.5 x 3.4 |           |      |    |          |          |
| SESNV0 - 6 x 4.9   |          | M.5 - 6 - 8         | 6 x 4.9   |           |      |    |          |          |
| SESNV0 - 7 x 5.5   |          | M.10                | 7 x 5.5   |           |      |    |          |          |

| REFERENCIA         | TIPO     | CAP                 | Ø X Z     | A         | H    | D    | N         | L        |
|--------------------|----------|---------------------|-----------|-----------|------|------|-----------|----------|
| SESNV1 - 2.5 x 2.1 | <b>1</b> | M.1 - 1.8           | 2.5 x 2.1 | <b>19</b> | 21.5 | 32.5 | <b>10</b> | 40 ÷ 140 |
| SESNV1 - 2.8 x 2.1 |          | M.2 - 2.2 - 2.5 - 4 | 2.8 x 2.1 |           |      |      |           |          |
| SESNV1 - 3.5 x 2.7 |          | M.3                 | 3.5 x 2.7 |           |      |      |           |          |
| SESNV1 - 4 x 3     |          | M.3.5               | 4 x 3     |           |      |      |           |          |
| SESNV1 - 4.5 x 3.4 |          | M.4                 | 4.5 x 3.4 |           |      |      |           |          |
| SESNV1 - 6 x 4.9   |          | M.5 - 6 - 8         | 6 x 4.9   |           |      |      |           |          |
| SESNV1 - 7 x 5.5   |          | M.10                | 7 x 5.5   |           |      |      |           |          |
| SESNV1 - 8 x 6.2   |          | M.8                 | 8 x 6.2   |           |      |      |           |          |
| SESNV1 - 9 x 7     |          | M.12                | 9 x 7     |           |      |      |           |          |
| SESNV1 - 10 x 8    |          | M.10                | 10 x 8    |           |      |      |           |          |
| SESNV1 - 11 x 9    |          | M.14                | 11 x 9    |           |      |      |           |          |

| REFERENCIA         | TIPO     | CAP         | Ø X Z     | A         | H  | D    | N         | L        |
|--------------------|----------|-------------|-----------|-----------|----|------|-----------|----------|
| SESNV2 - 3 x 2.7   | <b>2</b> | M.3         | 3 x 2.7   | <b>31</b> | 35 | 50.5 | <b>15</b> | 70 ÷ 160 |
| SESNV2 - 4.5 x 3.4 |          | M.4         | 4.5 x 3.4 |           |    |      |           |          |
| SESNV2 - 6 x 4.9   |          | M.5 - 6 - 8 | 6 x 4.9   |           |    |      |           |          |
| SESNV2 - 7 x 5.5   |          | M.10        | 7 x 5.5   |           |    |      |           |          |
| SESNV2 - 8 x 6.2   |          | M.8         | 8 x 6.2   |           |    |      |           |          |
| SESNV2 - 9 x 7     |          | M.12        | 9 x 7     |           |    |      |           |          |
| SESNV2 - 10 x 8    |          | M.10        | 10 x 8    |           |    |      |           |          |
| SESNV2 - 11 x 9    |          | M.14        | 11 x 9    |           |    |      |           |          |
| SESNV2 - 12 x 9    |          | M.16        | 12 x 9    |           |    |      |           |          |
| SESNV2 - 14 x 11   |          | M.18        | 14 x 11   |           |    |      |           |          |
| SESNV2 - 16 x 12   |          | M.20        | 16 x 12   |           |    |      |           |          |
| SESNV2 - 18 x 14.5 |          | M.22 - 24   | 18 x 14.5 |           |    |      |           |          |

Porta machos con norma ISO - JIS - ANSI son disponibles sobre pedido  
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Pinza porta machos de Roscar con Embrague longitud ajustable  
Quick change adaptors for tapping with length adjustment



**SESNV**



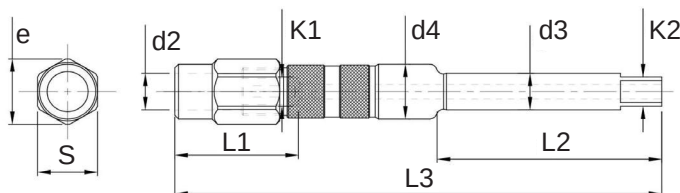
| REFERENCIA         | TIPO     | CAP     | Ø x L     | A         | H           | D         | N         | L                |
|--------------------|----------|---------|-----------|-----------|-------------|-----------|-----------|------------------|
| SESNV3 - 8 x 6.2   | <b>3</b> | M.8     | 8 x 6.2   | <b>48</b> | <b>55.5</b> | <b>72</b> | <b>25</b> | <b>100 ÷ 180</b> |
| SESNV3 - 9 x 7     |          | M.12    | 9 x 7     |           |             |           |           |                  |
| SESNV3 - 10 x 8    |          | M.10    | 10 x 8    |           |             |           |           |                  |
| SESNV3 - 11 x 9    |          | M.14    | 11 x 9    |           |             |           |           |                  |
| SESNV3 - 12 x 9    |          | M.16    | 12 x 9    |           |             |           |           |                  |
| SESNV3 - 14 x 11   |          | M.18    | 14 x 11   |           |             |           |           |                  |
| SESNV3 - 16 x 12   |          | M.20    | 16 x 12   |           |             |           |           |                  |
| SESNV3 - 18 x 14.5 |          | M.22-24 | 18 x 14.5 |           |             |           |           |                  |
| SESNV3 - 20 x 16   |          | M.27    | 20 x 16   |           |             |           |           |                  |
| SESNV3 - 22 x 18   |          | M.30    | 22 x 18   |           |             |           |           |                  |
| SESNV3 - 25 x 20   |          | M.33    | 25 x 20   |           |             |           |           |                  |
| SESNV3 - 28 x 22   |          | M.36    | 28 x 22   |           |             |           |           |                  |

**L** = 40 - 50 - 60 - 70 - 80 - 90 - 100 - 110 - 120 - 130 - 140 - 150 - 160 - 170 - 180

Porta machos con norma ISO - JIS - ANSI son disponibles sobre pedido

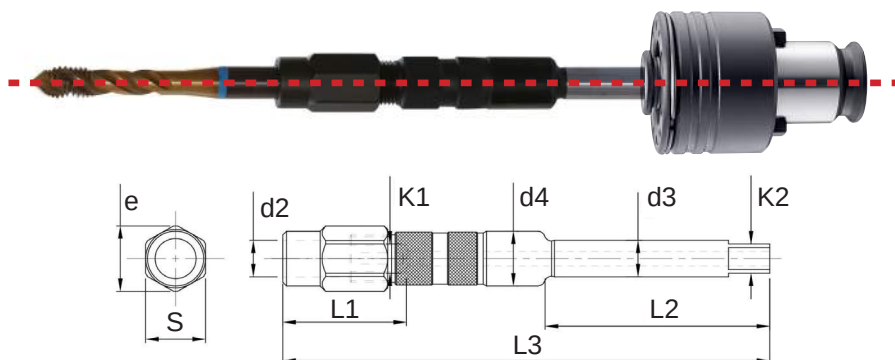
On request we can supply the adaptors suitable for taps ISO - JIS - ANSI shank dimensions

Alargadera porta machos con paso refrigerante  
Tap extensions coolant thru



| REFERENCIA     | DIN 371 | DIN 374,376 | d2 | K1 | L1 | d3 | K2 | d4 | e  | S | L2 | L3  |
|----------------|---------|-------------|----|----|----|----|----|----|----|---|----|-----|
| ABV2x35x27x130 | M3      | M4.5        | 4  | 3  | 24 | 6  | 5  | 8  | 9  | 8 | 60 | 130 |
| ABV2x35x27x230 |         | M5          | 4  | 3  | 24 | 6  | 5  | 8  | 9  | 8 | 60 | 230 |
| ABV3x45x34x130 | M4      | M6          | 5  | 3  | 24 | 6  | 5  | 8  | 10 | 9 | 60 | 130 |
| ABV3x45x34x230 |         |             | 5  | 3  | 24 | 6  | 5  | 8  | 10 | 9 | 60 | 230 |

**Alargadera porta machos con paso refrigerante**  
*Tap extensions coolant thru*



| REFERENCIA             | DIN 371 | DIN 374/376 | d2 | K1 | L1 | d3 | K2 | d4 | e  | S  | L2  | L3  |
|------------------------|---------|-------------|----|----|----|----|----|----|----|----|-----|-----|
| ABV4x60x49x130         | M4.5    | M8          | 6  | 5  | 28 | 7  | 6  | 12 | 15 | 13 | 60  | 130 |
| ABV4x60x49x230         | M6      | M8          | 6  | 5  | 28 | 7  | 6  | 12 | 15 | 13 | 60  | 230 |
| ABV4x60x49-80x62x130   | M4.5    | M8          | 6  | 5  | 28 | 8  | 6  | 12 | 15 | 13 | 60  | 130 |
| ABV4x60x49-80x62x230   | M6      | M8          | 6  | 5  | 28 | 8  | 6  | 12 | 15 | 13 | 60  | 230 |
| ABV5x70x55x130         | M7      | M9          | 7  | 6  | 28 | 7  | 6  | 12 | 15 | 13 | 60  | 130 |
| ABV5x70x55x230         | M10     | M9          | 7  | 6  | 28 | 7  | 6  | 12 | 15 | 13 | 60  | 230 |
| ABV5x70x55-80x62x130   | M7      | M9          | 7  | 6  | 28 | 8  | 6  | 12 | 15 | 13 | 60  | 130 |
| ABV5x70x55-80x62x230   | M10     | M9          | 7  | 6  | 28 | 8  | 6  | 12 | 15 | 13 | 60  | 230 |
| ABV6x80x62x130         | M8      | M11         | 8  | 6  | 30 | 8  | 6  | 13 | 16 | 14 | 60  | 130 |
| ABV6x80x62x230         | M8      | M11         | 8  | 6  | 30 | 8  | 6  | 13 | 16 | 14 | 80  | 230 |
| ABV7x90x70x130         | M9      | M12         | 9  | 7  | 31 | 9  | 7  | 15 | 18 | 16 | 60  | 130 |
| ABV7x90x70x230         | M9      | M12         | 9  | 7  | 31 | 9  | 7  | 15 | 18 | 16 | 80  | 230 |
| ABV7x90x70-100x80x130  | M9      | M12         | 9  | 7  | 31 | 10 | 8  | 15 | 18 | 16 | 60  | 130 |
| ABV7x90x70-100x80x230  | M9      | M12         | 9  | 7  | 31 | 10 | 8  | 15 | 18 | 16 | 80  | 230 |
| ABV8x100x80x130        | M10     |             | 10 | 8  | 33 | 10 | 8  | 15 | 18 | 16 | 60  | 130 |
| ABV8x100x80x230        | M10     |             | 10 | 8  | 33 | 10 | 8  | 15 | 18 | 16 | 80  | 230 |
| ABV9x110x90x130        |         | M14         | 11 | 9  | 36 | 11 | 9  | 18 | 21 | 19 | 90  | 130 |
| ABV9x110x90x230        |         | M14         | 11 | 9  | 36 | 11 | 9  | 18 | 21 | 19 | 90  | 230 |
| ABV9x110x90-120x90x130 |         | M14         | 11 | 9  | 36 | 12 | 9  | 18 | 21 | 19 | 90  | 130 |
| ABV9x110x90-120x90x230 |         | M14         | 11 | 9  | 36 | 12 | 9  | 18 | 21 | 19 | 90  | 230 |
| ABV10x120x90x130       |         | M16         | 12 | 9  | 36 | 12 | 9  | 19 | 21 | 19 | 90  | 130 |
| ABV10x120x90x230       |         | M16         | 12 | 9  | 36 | 12 | 9  | 19 | 21 | 19 | 90  | 230 |
| ABV11x140x110x200      |         | M18         | 14 | 11 | 46 | 14 | 11 | 22 | 26 | 23 | 100 | 200 |
| ABV11x140x110x330      |         | M18         | 14 | 11 | 46 | 14 | 11 | 22 | 26 | 23 | 100 | 330 |
| ABV12x160x120x200      |         | M20         | 16 | 12 | 46 | 16 | 12 | 22 | 26 | 23 | 100 | 200 |
| ABV12x160x120x330      |         | M20         | 16 | 12 | 46 | 16 | 12 | 22 | 26 | 23 | 100 | 330 |
| ABV13x180x145x200      |         | M22         | 18 | 15 | 47 | 18 | 15 | 26 | 31 | 27 | 100 | 200 |
| ABV13x180x145x330      |         | M24         | 18 | 15 | 47 | 18 | 15 | 26 | 31 | 27 | 100 | 330 |
| ABV14x200x160x200      |         | M27         | 20 | 16 | 52 | 20 | 16 | 28 | 34 | 30 | 100 | 200 |
| ABV14x200x160x330      |         | M27         | 20 | 16 | 52 | 20 | 16 | 28 | 34 | 30 | 100 | 330 |
| ABV15x220x185x200      |         | M30         | 22 | 19 | 55 | 22 | 19 | 30 | 41 | 36 | 100 | 200 |
| ABV15x220x185x330      |         | M30         | 22 | 19 | 55 | 22 | 19 | 30 | 41 | 36 | 100 | 330 |
| ABV16x250x200x200      |         | M33         | 25 | 20 | 56 | 25 | 20 | 35 | 41 | 36 | 100 | 200 |
| ABV16x250x200x330      |         | M33         | 25 | 20 | 56 | 25 | 20 | 35 | 41 | 36 | 100 | 330 |
| ABV17x280x220x200      |         | M33         | 28 | 22 | 58 | 28 | 22 | 40 | 52 | 46 | 100 | 200 |
| ABV17x280x220x330      |         | M33         | 28 | 22 | 58 | 28 | 22 | 40 | 52 | 46 | 100 | 330 |
| ABV18x320x240x200      |         | M39         | 32 | 24 | 60 | 32 | 24 | 44 | 52 | 46 | 100 | 200 |
| ABV18x320x240x330      |         | M42         | 32 | 24 | 60 | 32 | 24 | 44 | 52 | 46 | 100 | 330 |

Tabla de Dimensiones DIN  
Tap shank Dimensions to DIN

| Ø x $\square$ | DIN     | DIN     | DIN  | DIN  | DIN     | DIN   | DIN    |
|---------------|---------|---------|------|------|---------|-------|--------|
|               | 352     | 353     | 371  | 374  | 376     | 2182  | 2183   |
| 2.5x2.1       | M1      |         | M1   |      | M3.5    | 1/16" |        |
|               | M1.1    |         | M1.1 | M3.5 |         |       |        |
|               | M1.2    |         | M1.2 |      |         |       |        |
|               | M1.4    |         | M1.4 |      |         |       |        |
|               | M1.6    |         | M1.6 |      |         |       |        |
|               | M1.8    |         | M1.8 |      |         |       |        |
| 2.8x2.1       | M2      |         | M2   | M4   | M4      | 3/32" | 5/32"  |
|               | M2.2    |         | M2.2 |      |         |       |        |
|               | M2.5    |         | M2.5 |      |         |       |        |
| 3.5x2.7       | M3      |         | M3   | M5   | M5      | 1/8"  |        |
| 4x3           | M3.5    |         | M3.5 |      |         |       |        |
| 4.5x3.4       | M4      |         | M4   | M6   | M6      | 5/32" | 1/4"   |
|               | M5      |         | M5   |      |         | 7/32" |        |
| 6x4.9         | M6      |         | M6   |      |         |       |        |
|               | M8      |         |      | M8   | M8      |       |        |
| 7x5.5         | M10     | G 1/8"  |      | M10  | M10     | 1/4"  | 3/8"   |
| 8x6.2         |         |         | M8   |      |         | 5/16" | 7/16"  |
| 9x7           | M12     |         |      | M12  | M12     | 3/8"  | 1/2"   |
| 10x8          |         |         | M10  |      |         |       |        |
| 11x9          | M14     | G 1/4"  |      | M14  | M14     |       | 9/16"  |
| 12x9          | M16     | G 3/8"  |      | M16  | M16     |       | 5/8"   |
| 14x11         | M18     |         |      | M18  | M18     |       | 11/16" |
| 16x12         | M20     | G 1/2"  |      | M20  | M20     |       | 13/16" |
| 18x14.5       | M22     | G 5/8"  |      | M22  | M22     |       | 7/8"   |
|               | M24     |         |      | M24  | M24     |       | 15/16" |
| 20x16         | M27     | G 3/4"  |      | M27  | M27     |       | 1"     |
| 22x18         | M30     | G 7/8"  |      | M30  | M30     |       | 1 1/8" |
| 25x20         | M33     | G 1"    |      | M33  | M33     |       | 1 1/4" |
| 28x22         | M36     | G1 1/8" |      | M36  | M36     |       | 1 3/8" |
| 32x24         | M39     | G1 1/4" |      | M39  | M39     |       | 1 1/2" |
|               | M42     |         |      | M42  | M42     |       | 1 5/8" |
| 36x29         | M45     | G1 3/8" |      | M45  | M45     |       | 1 3/4" |
|               | M48     | G1 1/2" |      | M48  | M48     |       | 1 7/8" |
|               |         | G1 3/4" |      |      |         |       |        |
|               |         | G2"     |      |      |         |       |        |
| 40x32         | M52/M56 | G2 1/4" |      | M52  | M52/M56 |       | 2"     |
| 45x35         |         | G2 1/2" |      |      |         |       | 2 1/4" |
|               | M60     |         |      |      | M60     |       |        |
| 50x39         | M64     | G2 3/4" |      |      | M64     |       | 2 1/2" |
|               |         | G3"     |      |      |         |       |        |
| 56x44         | M68     | G3 1/4" |      |      | M68     |       | 2 3/4" |
|               |         |         |      |      |         |       | 3"     |
| 56x45         |         |         |      |      |         |       |        |
|               |         |         |      |      |         |       |        |

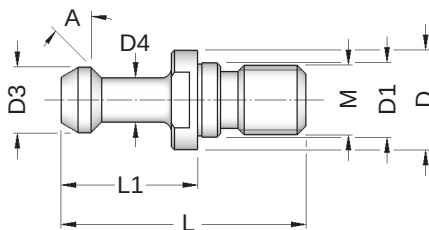
**Tabla de Dimensiones ISO**  
*Tap shank Dimensions to ISO*

| Ø x ▯     |      |      |              |          | ISO 529-1975 |          |              |              |              |          |      |       |
|-----------|------|------|--------------|----------|--------------|----------|--------------|--------------|--------------|----------|------|-------|
|           | M    |      | UNC          |          | UNF          |          | BSW          |              | BSF          |          | BA   |       |
|           |      | ●    |              | ●        |              | ●        |              | ●            |              | ●        |      | ●     |
| 2.24x1.8  | M3   |      | Nr.5-40      |          | Nr.5-44      |          |              |              |              | Nr.5     |      |       |
| 2.5x2.0   | M3.5 | M2   | Nr.6-32      | Nr.1-64  | Nr.6-40      | Nr.0-80  |              |              |              |          |      | Nr.11 |
|           |      |      |              |          |              | Nr.1-72  |              |              |              |          |      | Nr.10 |
|           |      |      |              |          |              |          |              |              |              |          |      | Nr.9  |
| 2.8x2.24  |      | M2.2 |              | Nr.5-56  |              | Nr.2-64  |              |              |              |          |      | Nr.8  |
|           |      | M2.5 |              | Nr.3-48  |              | Nr.3-56  |              |              |              |          |      | Nr.7  |
|           |      |      |              |          |              |          |              |              |              |          |      | Nr.6  |
| 3.15x2.24 | M4   | M3   |              | Nr.4-40  |              | Nr.4-48  |              |              |              |          |      | Nr.5  |
|           |      |      | Nr.8-32      | Nr.5-40  | Nr.8-36      | Nr.5-44  |              |              |              |          |      | Nr.3  |
|           |      |      |              |          |              |          |              |              |              |          |      |       |
| 3.55x2.8  | M4.5 | M3.5 | Nr.10-24     | Nr.6-32  | Nr.10-32     | Nr.6-40  | 3/16"-24     |              | 3/16"-32     |          | Nr.2 | Nr.4  |
| 4x3.15    | M5   | M4   | Nr.12-24     |          | Nr.12-28     |          |              | 7/32"-28     |              | Nr.1     |      |       |
| 4.5x3.55  | M6   |      | 1/4"-20      | Nr.8-32  | 1/4"-28      | Nr.3-36  | 1/4"-20      |              | 1/4"-26      |          | Nr.0 | Nr.3  |
| 5x4       |      | M5   |              | Nr.10-24 |              | Nr.10-32 |              | 3/16"-24     |              | 3/16"-32 |      | Nr.2  |
| 5.6x4.5   |      |      |              | Nr.12-24 |              | Nr.12-28 |              |              | 9/32"-26     | 7/32"-28 |      | Nr.1  |
| 6.3x5     | M8   | M6   | 5/16"-18     | 1/4"-20  | 5/16"-24     | 1/4"-28  | 5/16"-18     | 1/4"-20      | 5/16"-22     | 1/4"-26  |      | Nr.0  |
| 7.1x5.6   |      |      | 3/8"-16      |          | 3/8"-24      |          | 3/8"-16      |              | 3/8"-20      | 9/32"-26 |      |       |
| 8x6.3     | M10  | M8   | 7/16"-14     | 7/16"-18 | 7/16"-20     |          | 7/16"-14     | 5/16"-18     | 7/16"-18     | 5/16"-22 |      |       |
| 9x7.1     | M12  |      | 1/2"-13      |          | 1/2"-20      |          | 1/2"-12      |              | 1/2"-12      |          |      |       |
| 10x8      |      | M10  |              | 3/8"-16  |              | 3/8"-24  |              | 3/8"-16      |              | 3/8"-20  |      |       |
| 11.2x9    | M14  |      | 9/16"-12     |          | 9/16"-18     |          | 9/16"-12     |              | 9/16"-16     |          |      |       |
| 12.5x10   | M16  |      | 5/8"-11      |          | 5/8"-18      |          | 5/8"-11      |              | 3/8"-14      |          |      |       |
| 14x11.2   | M18  |      | 3/4"-10      |          | 3/4"-16      |          | 11/16"-14    |              |              |          |      |       |
|           | M20  |      |              |          |              |          | 3/4"-10      |              | 3/4"-12      |          |      |       |
| 16x12.5   | M22  |      | 7/8"-9       |          | 7/8"-14      |          | 7/8"-9       |              | 7/8"-11      |          |      |       |
| 18x14     | M24  |      | 1"-8         |          | 1"-12        |          | 1"-8         |              | 1"-10        |          |      |       |
| 20x16     | M27  |      | 1 1/8"-7     |          | 1 1/8"-12    | 1 1/8"-7 |              | 1 1/8"-9     |              |          |      |       |
|           | M30  |      |              |          |              |          |              |              |              |          |      |       |
| 22.4x18   | M33  |      | 1 1/4"-7     |          | 1 1/4"-12    | 1 1/4"-7 |              | 1 1/4"-9     |              |          |      |       |
| 25x20     | M36  |      | 1 3/8"-6     |          | 1 3/8"-12    |          |              | 1 3/8"-8     |              |          |      |       |
| 28x22.4   | M39  |      | 1 1/2"-6     |          | 1 1/2"-12    | 1 1/2"-6 |              | 1 1/2"-8     |              |          |      |       |
|           | M42  |      |              |          |              |          |              |              | 1 1/2"-8     |          |      |       |
| 31.5x25   | M45  |      | 1 7/16"-5    |          |              |          | 1 3/4"-5     |              | 1 3/4"-7     |          |      |       |
|           | M48  |      |              |          |              |          |              |              |              |          |      |       |
| 35.5x28   | M52  |      | 2"-4 1/2     |          |              |          | 2"-4 1/2     |              | 2"-7         |          |      |       |
|           | M56  |      |              |          |              |          |              |              |              |          |      |       |
| 40x31.5   | M60  |      | 2 1/4"-4 1/4 |          |              |          | 2 1/4"-4     |              | 2 1/4"-6     |          |      |       |
|           | M64  |      | 2 1/2"-4     |          |              |          | 2 1/2"-4     |              | 2 1/2"-6     |          |      |       |
| 45x35.5   | M68  |      | 2 3/4"-4     |          |              |          | 2 3/4"-3 1/2 |              | 2 3/4"-6     |          |      |       |
|           |      |      | 3"-4         |          |              |          | 3"-3 1/2     |              | 3"-5         |          |      |       |
| 50x40     |      |      | 3 1/4"-4     |          |              |          | 3 1/4"-3 1/4 | 3 1/4"-5     |              |          |      |       |
|           |      |      | 3 1/2"-4     |          |              |          | 3 1/2"-3 1/4 | 3 1/2"-4 1/4 |              |          |      |       |
| 56x45     |      |      | 3 3/4"-4     |          |              |          | 3 3/4"-3     |              | 3 3/4"-4 1/2 |          |      |       |
|           |      |      | 4"-4         |          |              |          | 4"-3         |              | 4"-4 1/2     |          |      |       |

● Mango Reforzado

**Tirante sin Agujero**  
*Without coolant hole (SOLID)*

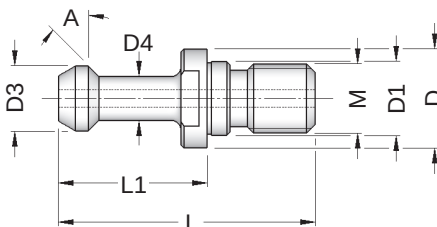
**BT**



| REFERENCIA | FAM | COD  | A   | M   | L  | L1 | D    | D1   | D3   | D4   |
|------------|-----|------|-----|-----|----|----|------|------|------|------|
| BT30-30°   | 2   | 3287 | 30° | M12 | 43 | 23 | 16.5 | 12.5 | 11.0 | 7.0  |
| BT30-45°   |     | 3288 | 45° | M12 | 43 | 23 | 16.5 | 12.5 | 11.0 | 7.0  |
| BT30-60°   | 1   | -    | 60° | M12 | 43 | 23 | 16.5 | 12.5 | 11.0 | 7.0  |
| BT40-30°   | 2   | 3293 | 30° | M16 | 60 | 35 | 23.0 | 17.0 | 15.0 | 10.0 |
| BT40-45°   |     | 3292 | 45° | M16 | 60 | 35 | 23.0 | 17.0 | 15.0 | 10.0 |
| BT40-60°   | 1   | -    | 60° | M16 | 60 | 35 | 23.0 | 17.0 | 15.0 | 10.0 |
| BT40-90°   | 2   | 3294 | 90° | M16 | 60 | 35 | 23.0 | 17.0 | 15.0 | 10.0 |
| BT50-30°   | 2   | 3301 | 30° | M24 | 85 | 45 | 38.0 | 25.0 | 23.0 | 17.0 |
| BT50-45°   |     | 3300 | 45° | M24 | 85 | 45 | 38.0 | 25.0 | 23.0 | 17.0 |
| BT50-60°   | 1   | -    | 60° | M24 | 85 | 45 | 38.0 | 25.0 | 23.0 | 17.0 |
| BT50-90°   | 2   | 3302 | 90° | M24 | 85 | 45 | 38.0 | 25.0 | 23.0 | 17.0 |

**Tirante con Agujero PASANTE**  
*With coolant hole (HOLLOW)*

**BT**



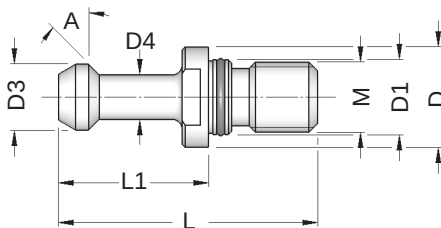
**Refrigeración  
Central  
Coolant flow**

| REFERENCIA | FAM | COD  | A   | M   | L  | L1 | D    | D1   | D3 | D4 | F   |
|------------|-----|------|-----|-----|----|----|------|------|----|----|-----|
| BT30-30°.F | 2   | 3224 | 30° | M12 | 43 | 23 | 16.5 | 12.5 | 11 | 7  | 2.5 |
| BT30-45°.F |     | 3225 | 45° | M12 | 43 | 23 | 16.5 | 12.5 | 11 | 7  | 2.5 |
| BT30-60°.F | 1   | -    | 60° | M12 | 43 | 23 | 16.5 | 12.5 | 11 | 7  | 2.5 |
| BT40-30°.F | 2   | 3327 | 30° | M16 | 60 | 35 | 23   | 17   | 15 | 10 | 4   |
| BT40-45°.F |     | 3328 | 45° | M16 | 60 | 35 | 23   | 17   | 15 | 10 | 4   |
| BT40-60°.F | 1   | -    | 60° | M16 | 60 | 35 | 23   | 17   | 15 | 10 | 4   |
| BT40-90°.F | 2   | 3330 | 90° | M16 | 60 | 35 | 23   | 17   | 15 | 10 | 4   |
| BT50-30°.F | 2   | 3331 | 30° | M24 | 85 | 45 | 38   | 25   | 23 | 17 | 6   |
| BT50-45°.F |     | 3332 | 45° | M24 | 85 | 45 | 38   | 25   | 23 | 17 | 6   |
| BT50-60°.F | 1   | -    | 60° | M24 | 85 | 45 | 38   | 25   | 23 | 17 | 6   |
| BT50-90°.F | 2   | 3333 | 90° | M24 | 85 | 45 | 38   | 25   | 23 | 17 | 6   |

F= Agujero

**Tirante sin Agujero y junta de alta presión**  
*Pull stud bolts without hole with O-Ring*

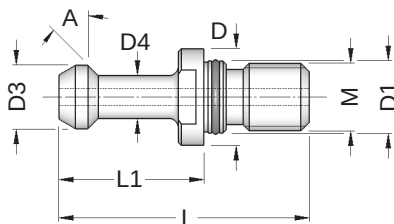
**BT**



| REFERENCIA  | FAM | COD  | A   | M   | L  | L1 | D  | D1 | D3 | D4 |
|-------------|-----|------|-----|-----|----|----|----|----|----|----|
| BT40-30°.OR | 2   | 3315 | 30° | M16 | 60 | 35 | 23 | 17 | 15 | 10 |
| BT40-45°.OR |     | 3316 | 45° | M16 | 60 | 35 | 23 | 17 | 15 | 10 |
| BT40-90°.OR |     | 3318 | 90° | M16 | 60 | 35 | 23 | 17 | 15 | 10 |
| BT50-30°.OR | 2   | 3322 | 30° | M24 | 85 | 45 | 38 | 25 | 23 | 17 |
| BT50-45°.OR |     | 3325 | 45° | M24 | 85 | 45 | 38 | 25 | 23 | 17 |
| BT50-90°.OR |     | 3326 | 90° | M24 | 85 | 45 | 38 | 25 | 23 | 17 |

**Tirante con Agujero PASANTE y junta de alta presión**  
*Sealed pull studs with O-Ring for high pressure coolant*

**BT**



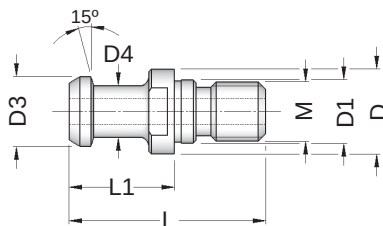
**Refrigeración  
Central  
Coolant flow**

| REFERENCIA    | FAM | COD  | A   | M   | L  | L1 | D  | D1 | D3 | D4 | F |
|---------------|-----|------|-----|-----|----|----|----|----|----|----|---|
| BT40-30°.F+OR | 2   | 3429 | 30° | M16 | 60 | 35 | 23 | 17 | 15 | 10 | 4 |
| BT40-45°.F+OR |     | 3430 | 45° | M16 | 60 | 35 | 23 | 17 | 15 | 10 | 4 |
| BT40-90°.F+OR |     | 3431 | 90° | M16 | 60 | 35 | 23 | 17 | 15 | 10 | 4 |
| BT50-30°.F+OR | 2   | 3500 | 30° | M24 | 85 | 45 | 38 | 25 | 23 | 17 | 6 |
| BT50-45°.F+OR |     | 3501 | 45° | M24 | 85 | 45 | 38 | 25 | 23 | 17 | 6 |
| BT50-90°.F+OR |     | 3502 | 90° | M24 | 85 | 45 | 38 | 25 | 23 | 17 | 6 |

F= Agujero

Tirante con Agujero **PASANTE** JIS B 6339  
JIS B 6339 Pull stud bolts

**JIS-B/6339**



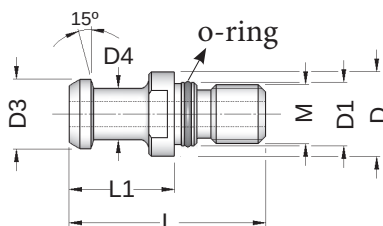
Refrigeración  
Central  
Coolant flow

| REFERENCIA    | FAM | COD  | M   | D    | D1   | D3 | D4 | L  | L1   | F |
|---------------|-----|------|-----|------|------|----|----|----|------|---|
| 6339.ISO30-F4 | 2   | 3334 | M12 | 16.5 | 12.5 | 12 | 8  | 43 | 23.4 | 4 |
| 6339.ISO40-F7 | 2   | 4588 | M16 | 23   | 17   | 19 | 14 | 54 | 29   | 7 |

F= Agujero

Tirante con Agujero **PASANTE** JIS B 6339 y junta de alta presión  
Pull stud bolts JIS B 6339 with hole and O-Ring

**JIS-B/6339**



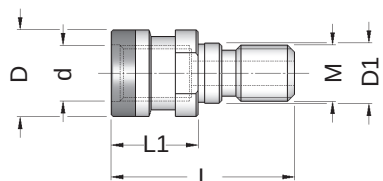
Refrigeración  
Central  
Coolant flow

| REFERENCIA        | FAM | COD  | M   | D  | D1 | D3 | D4 | L  | L1 | F  |
|-------------------|-----|------|-----|----|----|----|----|----|----|----|
| 6339.ISO40-F+OR4  | 2   | 3097 | M16 | 23 | 17 | 19 | 14 | 54 | 29 | 4  |
| 6339.ISO40-F+OR7  |     | 3317 | M16 | 23 | 17 | 19 | 14 | 54 | 29 | 7  |
| 6339.ISO50-F+OR10 | 2   | 3335 | M24 | 38 | 25 | 28 | 21 | 74 | 34 | 10 |

F= Agujero

Tirante **PASANTE CONVERSOR (BT-DIN2080)**  
With coolant bore

**OTT**

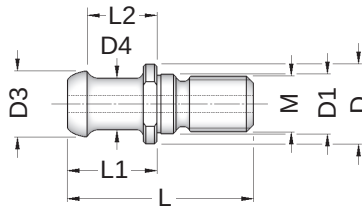


Refrigeración  
Central  
Coolant flow

| REFERENCIA        | FAM | COD  | M   | d   | D    | D1 | L1 | L  |
|-------------------|-----|------|-----|-----|------|----|----|----|
| OTTM16/L53-TC40   | 2   | 3487 | M16 | M16 | 25.3 | 17 | 25 | 53 |
| OTTM16/L56-BT40   | 2   | 3466 | M16 | M16 | 25.3 | 17 | 28 | 56 |
| OTTM24/L65-Cono50 | 2   | 0087 | M24 | M24 | 39.6 | 25 | 25 | 65 |

**Tirante CB FERRARI**  
*Pull stud bolts CB FERRARI type*

**CB FERRARI**

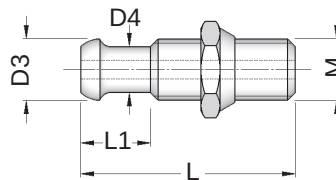


| REFERENCIA           | FAM | COD  | M   | D  | D1 | D3 | D4 | L  | L1 | L2    | F |
|----------------------|-----|------|-----|----|----|----|----|----|----|-------|---|
| CB.FERRARI.ISO40-M16 | 2   | 4597 | M16 | 23 | 17 | 19 | 15 | 54 | 26 | 20.31 | 5 |

F= Agujero

**Tirante CB FERRARI CON DADO**  
*Pull stud bolts CB FERRARI with nut type*

**CB FERRARI**

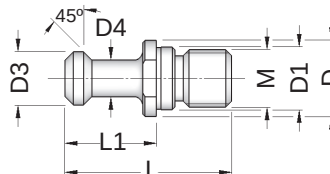


| REFERENCIA            | FAM | COD  | M   | D3 | D4 | L  | L1   | F |
|-----------------------|-----|------|-----|----|----|----|------|---|
| CB.FERRARI.ISO40-M16D | 2   | 3493 | M16 | 16 | 12 | 57 | 18.5 | 5 |

F= Agujero

**Tirante CHIRON**  
*Pull stud bolts CHIRON type*

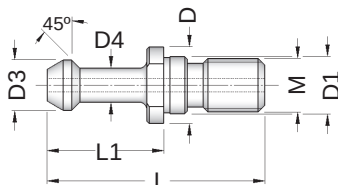
**CHIRON**



| REFERENCIA       | FAM | COD  | M   | D  | D1 | D3 | D4 | L  | L1 |
|------------------|-----|------|-----|----|----|----|----|----|----|
| CHIRON.ISO30-M12 | 2   | 4593 | M12 | 16 | 13 | 10 | 6  | 36 | 20 |

**Tirante CINCINNATI**  
*Pull stud bolts CINCINNATI type*

**CINCINNATI**

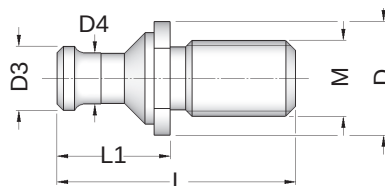


| REFERENCIA     | FAM | COD  | A   | M   | L    | L1   | D    | D1 | D3 | D4   | F   |
|----------------|-----|------|-----|-----|------|------|------|----|----|------|-----|
| SK40-45°F-36.6 | 2   | 4583 | 45° | M16 | 67.3 | 36.6 | 22.2 | 17 | 15 | 10.3 | 3.8 |
| SK40-45°F-39.4 |     | 4586 | 45° | M16 | 67.3 | 39.4 | 22.2 | 17 | 15 | 10.3 | 3.8 |

F= Agujero

**Tirante CORREA**  
*Pull stud bolts CORREA type*

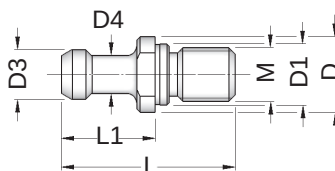
**CORREA**



| REFERENCIA       | FAM | COD  | M   | D  | D3 | D4 | L  | L1 |
|------------------|-----|------|-----|----|----|----|----|----|
| CORREA.ISO50-M24 | 2   | 4594 | M24 | 36 | 20 | 16 | 76 | 36 |

**Tirante MECCANICA CORTINI**  
*Pull stud bolts MECCANICA CORTINI type*

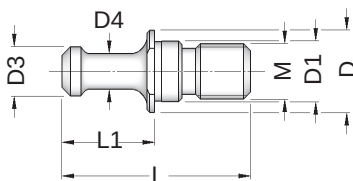
**CORTINI**



| REFERENCIA        | FAM | COD  | M   | D  | D1 | D3 | D4 | L  | L1 |
|-------------------|-----|------|-----|----|----|----|----|----|----|
| CORTINI.ISO30-M12 | 2   | 0064 | M12 | 16 | 13 | 10 | 7  | 39 | 21 |

**Tirante FAMUP**  
*Pull stud bolts FAMUP type*

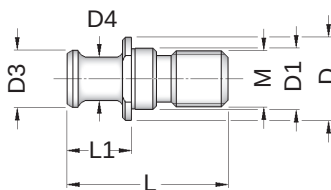
**FAMUP**



| REFERENCIA      | FAM | COD  | M   | D  | D1 | D3   | D4  | L  | L1 |
|-----------------|-----|------|-----|----|----|------|-----|----|----|
| FAMUP.ISO30-M12 | 2   | 2756 | M12 | 16 | 13 | 9.8  | 5.8 | 40 | 20 |
| FAMUP.ISO40-M16 |     | 3527 | M16 | 23 | 17 | 13.8 | 9.8 | 55 | 27 |
| FAMUP.ISO40-M16 |     | 4590 | M16 | 23 | 17 | 13.8 | 9.8 | 58 | 30 |

**Tirante GLORIA**  
*Pull stud bolts GLORIA type*

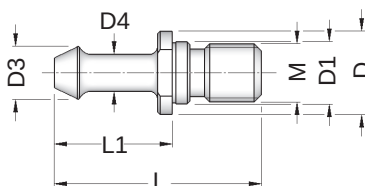
**GLORIA**



| REFERENCIA       | FAM | COD  | M   | D  | D1 | D3 | D4 | L  | L1 |
|------------------|-----|------|-----|----|----|----|----|----|----|
| GLORIA.ISO40-M16 | 2   | 3471 | M16 | 23 | 17 | 16 | 12 | 45 | 18 |

**Tirante OLIVETTI OCN**  
*Pull stud bolts OLIVETTI OCN*

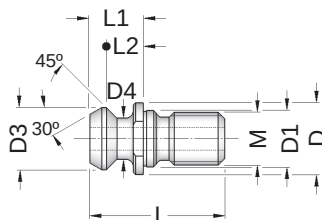
**OLIVETTI**



| REFERENCIA         | FAM | COD  | M   | D  | D1 | D3   | D4 | L  | L1 |
|--------------------|-----|------|-----|----|----|------|----|----|----|
| OLIVETTI.ISO40-M16 | 2   | 4591 | M16 | 23 | 17 | 14.3 | 10 | 58 | 33 |

**Tirante con Agujero PASANTE para Máquinas MAZAK**  
*Pull stud bolts MAZAK type with hole*

**MAZAK**



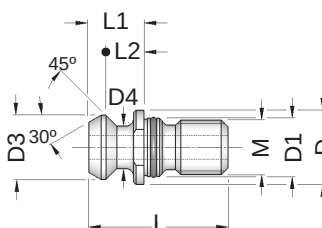
**Refrigeración  
Central  
Coolant flow**

| REFERENCIA         | FAM | COD  | M   | D    | D1 | D3    | D4    | L     | L1    | L2    | F  |
|--------------------|-----|------|-----|------|----|-------|-------|-------|-------|-------|----|
| MAZAK.ISO40-M16-F1 | 2   | 4589 | M16 | 21.8 | 17 | 18.79 | 12.44 | 41.25 | 16.25 | 11.17 | 7  |
| MAZAK.ISO40-M16-F2 |     | 4592 | M16 | 22.0 | 17 | 18.79 | 12.44 | 44.10 | 19.10 | 14.02 | 7  |
| MAZAK.ISO50-M24-F1 |     | 3269 | M24 | 35.5 | 25 | 28.95 | 20.82 | 65.40 | 25.40 | 17.78 | 10 |

F= Agujero

**Tirante con Agujero PASANTE Máquinas MAZAK y junta de alta presión**  
*Pull stud bolts MAZAK type with hole and O-RING*

**MAZAK**



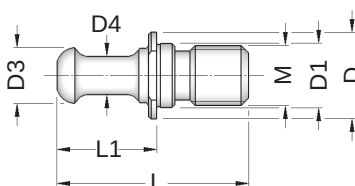
**Refrigeración  
Central  
Coolant flow**

| REFERENCIA            | FAM | COD  | M   | D    | D1 | D3    | D4    | L     | L1    | L2    | F  |
|-----------------------|-----|------|-----|------|----|-------|-------|-------|-------|-------|----|
| MAZAK.ISO40-M16-F1.OR | 2   | 4772 | M16 | 21.8 | 17 | 18.79 | 12.44 | 41.25 | 16.25 | 11.17 | 7  |
| MAZAK.ISO40-M16-F2.OR |     | 4773 | M16 | 22.0 | 17 | 18.79 | 12.44 | 44.10 | 19.10 | 14.02 | 7  |
| MAZAK.ISO50-M24-F1.OR |     | 4774 | M24 | 35.5 | 25 | 28.95 | 20.82 | 65.40 | 25.40 | 17.78 | 10 |

F= Agujero

**Tirante RAMBAUDI**  
*Pull stud bolts RAMBAUDI type*

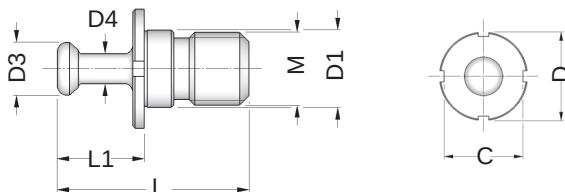
**RAMBAUDI**



| REFERENCIA         | FAM | COD  | M   | D    | D1 | D3   | D4 | L    | L1   |
|--------------------|-----|------|-----|------|----|------|----|------|------|
| RAMBAUDI.ISO40-M16 | 2   | 4595 | M16 | 24.0 | 17 | 14.6 | 10 | 52.0 | 27.0 |
| RAMBAUDI.ISO50-M24 |     | 4596 | M24 | 35.8 | 25 | 20.0 | 16 | 79.5 | 39.5 |

**Tirante SECMU**  
*Pull stud bolts SECMU type*

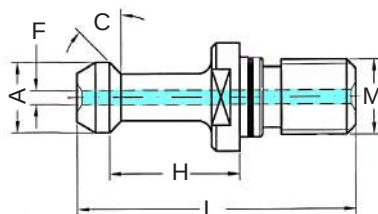
**SECMU**



| REFERENCIA      | FAM | COD  | M   | D  | D1 | D3   | D4  | L  | L1 | C  |
|-----------------|-----|------|-----|----|----|------|-----|----|----|----|
| SECMU.ISO50-M24 | 2   | 3496 | M24 | 40 | 25 | 17.5 | 9.8 | 64 | 29 | 36 |

**Tirante con Agujero PASANTE - HURCO**  
*With coolant hole - HURCO*

**HURCO**



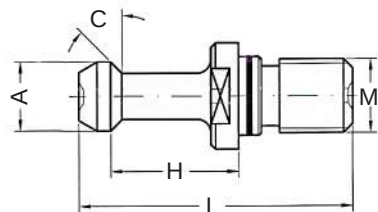
**Refrigeración  
Central  
Coolant flow**

| REFERENCIA  | FAM | C   | M   | A  | H±0.05 | L     | F |
|-------------|-----|-----|-----|----|--------|-------|---|
| PS.BT40-HC1 | 1   | 45° | M16 | 15 | 25.15  | 57.15 | 3 |
| PS.BT40-HC2 |     | 60° | M16 | 15 | 25.15  | 57.15 | 3 |
| PS.BT40-HC3 |     | 90° | M16 | 15 | 25.15  | 57.15 | 3 |

F= Agujero

**Tirantes sin Agujero - HURCO**  
*Without coolant hole - HURCO*

**HURCO**

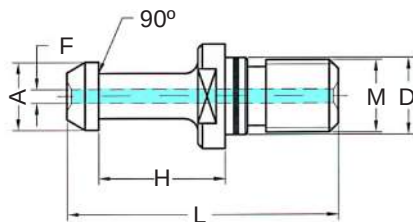


| REFERENCIA     | FAM | C   | M   | A  | H±0.05 | L     |
|----------------|-----|-----|-----|----|--------|-------|
| PS.BT40-HC1.SF | 1   | 45° | M16 | 15 | 25.15  | 57.15 |
| PS.BT40-HC2.SF |     | 60° | M16 | 15 | 25.15  | 57.15 |
| PS.BT40-HC3.SF |     | 90° | M16 | 15 | 25.15  | 57.15 |

**Tirante con Agujero PASANTE - MITSUI SEIKI**

*With coolant hole - MITSUI SEIKI Type*

**MITSUI SEIKI**



Refrigeración  
Central  
Coolant flow

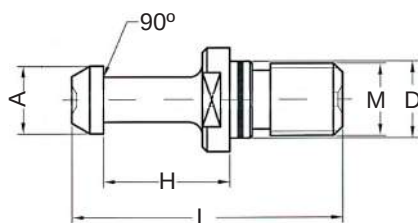
| REFERENCIA  | FAM | M   | A  | H±0.05 | D  | L  | F |
|-------------|-----|-----|----|--------|----|----|---|
| PS.BT40.31F | 1   | M16 | 15 | 18     | 17 | 50 | 3 |
| PS.BT50.31F | 1   | M24 | 24 | 23     | 25 | 71 | 8 |

F= Agujero

**Tirante sin Agujero - MITSUI SEIKI**

*Without coolant hole - MITSUI SEIKI Type*

**MITSUI SEIKI**

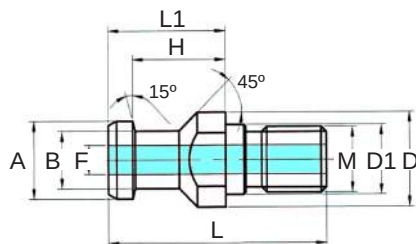


| REFERENCIA | FAM | M   | A  | H±0.05 | D  | L  |
|------------|-----|-----|----|--------|----|----|
| PS.BT40.31 | 1   | M16 | 15 | 18     | 17 | 50 |
| PS.BT50.31 | 1   | M24 | 24 | 23     | 25 | 71 |

**Tirante con Agujero PASANTE - KITAMURA**

*With coolant hole - KITAMURA Type*

**KITAMURA**



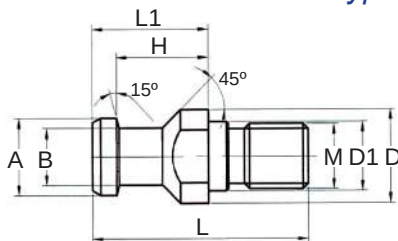
Refrigeración  
Central  
Coolant flow

| REFERENCIA         | FAM | M   | A  | H±0.05 | D1 | D  | B  | L1 | L  | F |
|--------------------|-----|-----|----|--------|----|----|----|----|----|---|
| PS.KITAMURA-M16/SF | 1   | M16 | 19 | 23     | 17 | 23 | 14 | 29 | 54 | 7 |

F= Agujero

**Tirante sin Agujero - KITAMURA**  
*Without coolant hole - KITAMURA Type*

**KITAMURA**



| REFERENCIA         | FAM | M   | A  | H±0.05 | D1 | D  | B  | L1 | L  |
|--------------------|-----|-----|----|--------|----|----|----|----|----|
| PS.KITAMURA-M16/SF | 1   | M16 | 19 | 23     | 17 | 23 | 14 | 29 | 54 |

**Llave dinamométrica para tirante**  
*Torque wrenches for pull studs mounting*



**Llave de bloqueo de tirante**  
*Quick ratchet*



| REFERENCIA | FAM | RANGO DE APRIETE |
|------------|-----|------------------|
| TW803-210  | 1   | 40-210 Nm        |

| REFERENCIA | FAM |
|------------|-----|
| CRC12RV    | 1   |

**Casquillo intercambiable**  
*Interchangeable socket*



| REFERENCIA | FAM | SW | ISO | TIRANTE      |
|------------|-----|----|-----|--------------|
| SKT40.BT   | 1   | 19 | 40  | (MAS403/BT)  |
| SKT50.BT   |     | 30 | 50  | (MAS403/BT)  |
| SKT40.JIS  |     | 19 | 40  | (JIS/6339-B) |
| SKT50.JIS  |     | 30 | 50  | (JIS/6339-B) |

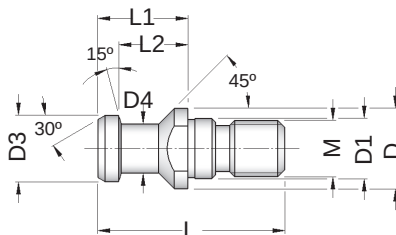
**Fuerza de Apriete recomendada**  
*Recommended tightening torque for pull stud bolt*

**REFERENCIA**

|                    |
|--------------------|
| G.M12 = 20÷25 Nm   |
| G.M16 = 60÷80 Nm   |
| G.M24 = 200÷250 Nm |

**Tirantes sin Agujero (DIN/69872)**  
*DIN/69872A Pull stud bolts without hole*

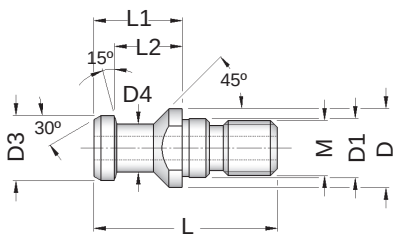
**DIN/69872**



| REFERENCIA  | FAM | COD  | M   | D  | D1 | D3 | D4 | L  | L1 | L2 |
|-------------|-----|------|-----|----|----|----|----|----|----|----|
| 69872-ISO30 | 2   | 3489 | M12 | 17 | 13 | 13 | 9  | 44 | 24 | 19 |
| 69872-ISO40 |     | 4573 | M16 | 23 | 17 | 19 | 14 | 54 | 26 | 20 |
| 69872-ISO50 |     | 4575 | M24 | 36 | 25 | 28 | 21 | 74 | 34 | 25 |

**Tirantes con Agujero PASANTE (DIN/69872)**  
*DIN/69872 Pull stud bolts with hole*

**DIN/69872**



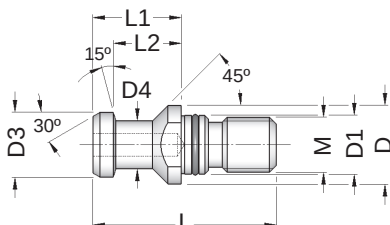
Refrigeración  
Central  
Coolant flow

| REFERENCIA    | FAM | COD  | D   | D1 | D2 | D3 | D4 | L  | L1 | L2 | F    |
|---------------|-----|------|-----|----|----|----|----|----|----|----|------|
| 69872.ISO30-F | 2   | 3423 | M12 | 17 | 13 | 13 | 9  | 44 | 24 | 19 | 3.0  |
| 69872.ISO40-F |     | 3476 | M16 | 23 | 17 | 19 | 14 | 54 | 26 | 20 | 7.0  |
| 69872.ISO50-F |     | 3478 | M24 | 36 | 25 | 28 | 21 | 74 | 34 | 25 | 11.5 |

F= Agujero

**Tirantes sin Agujero y junta de alta presión (DIN/69872)**  
*DIN 69872 Pull stud bolts with watertight O-Ring*

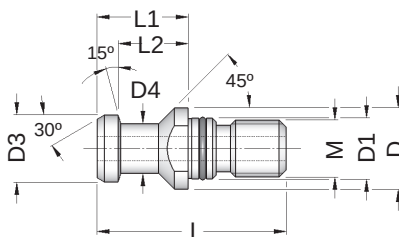
**DIN/69872**



| REFERENCIA     | FAM | COD  | M   | D  | D1 | D3 | D4 | L  | L1 | L2 |
|----------------|-----|------|-----|----|----|----|----|----|----|----|
| 69872.ISO40-OR | 2   | 3268 | M16 | 23 | 17 | 19 | 14 | 54 | 26 | 20 |
| 69872.ISO50-OR |     | 3270 | M24 | 36 | 25 | 28 | 21 | 74 | 34 | 25 |

Tirantes con Agujero **PASANTE** y junta de alta presión (DIN/69872)  
*DIN/69872 Pull stud bolts with hole and O-RING*

## DIN/69872



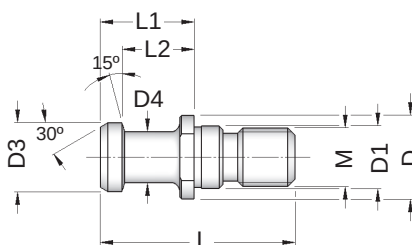
Refrigeración  
 Central  
 Coolant flow

| REFERENCIA       | FAM | COD  | M   | D  | D1 | D3 | D4 | L  | L1 | L2 | F   |
|------------------|-----|------|-----|----|----|----|----|----|----|----|-----|
| 69872.ISO40-F+OR | 2   | 3040 | M16 | 23 | 17 | 19 | 14 | 54 | 26 | 20 | 7.0 |
| 69872.ISO50-F+OR |     | 3042 | M24 | 36 | 25 | 28 | 21 | 74 | 34 | 25 | 113 |

F= Agujero

Tirante **sin Agujero** (ISO 7388/2A)  
*ISO 7388/2A Pull Stud bolts without hole*

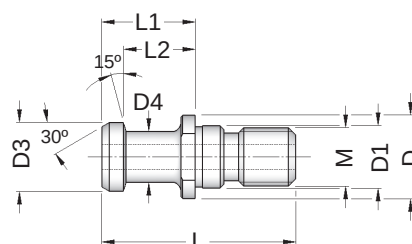
## ISO 7388/2-A



| REFERENCIA    | FAM | COD  | M   | D  | D1 | D3 | D4 | L  | L1 | L2 |
|---------------|-----|------|-----|----|----|----|----|----|----|----|
| 7388/2A-ISO30 | 2   | 3479 | M12 | 16 | 13 | 12 | 8  | 44 | 24 | 19 |
| 7388/2A-ISO40 |     | 4576 | M16 | 23 | 17 | 19 | 14 | 54 | 26 | 20 |
| 7388/2A-ISO50 |     | 4578 | M24 | 36 | 25 | 28 | 21 | 74 | 34 | 25 |

Tirante con Agujero **PASANTE** (ISO 7388/2A)  
*ISO 7388/2A Pull stud bolts with hole*

## ISO 7388/2-A



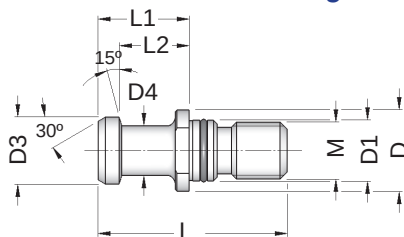
Refrigeración  
 Central  
 Coolant flow

| REFERENCIA      | FAM | COD  | M   | D  | D1 | D3 | D4 | L  | L1 | L2 | F    |
|-----------------|-----|------|-----|----|----|----|----|----|----|----|------|
| 7388/2A-ISO30.F | 2   | 3425 | M12 | 16 | 13 | 12 | 8  | 44 | 24 | 19 | 3.0  |
| 7388/2A-ISO40.F |     | 3480 | M16 | 23 | 17 | 19 | 14 | 54 | 26 | 20 | 7.0  |
| 7388/2A-ISO50.F |     | 3482 | M24 | 36 | 25 | 28 | 21 | 74 | 34 | 25 | 11.5 |

F= Agujero

**Tirante sin Agujero (ISO 7388/2A) y junta de alta presión**  
*ISO 7388/2A Pull stud bolts with watertight O-Ring*

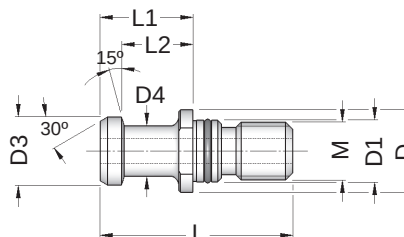
## ISO 7388/2-A



| REFERENCIA       | FAM | COD  | M   | D  | D1 | D3 | D4 | L  | L1 | L2 |
|------------------|-----|------|-----|----|----|----|----|----|----|----|
| 7388/2A.ISO40-OR | 2   | 4582 | M16 | 23 | 17 | 19 | 14 | 54 | 26 | 20 |
| 7388/2A.ISO50-OR |     | 4584 | M24 | 36 | 25 | 28 | 21 | 74 | 34 | 25 |

**Tirante con Agujero PASANTE (ISO 7388/2A) y junta de alta presión**  
*ISO 7388/2A Pull stud bolts with hole and O-Ring*

## ISO 7388/2-A



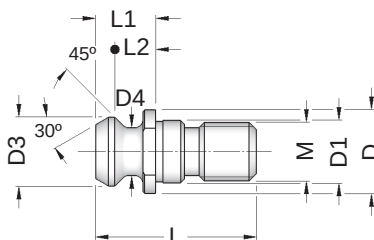
**Refrigeración  
Central  
Coolant flow**

| REFERENCIA         | FAM | COD  | M   | D  | D1 | D3 | D4 | L  | L1 | L2 | F    |
|--------------------|-----|------|-----|----|----|----|----|----|----|----|------|
| 7388/2A.ISO40-F+OR | 2   | 3047 | M16 | 23 | 17 | 19 | 14 | 54 | 26 | 20 | 7.0  |
| 7388/2A.ISO50-F+OR |     | 3049 | M24 | 36 | 25 | 28 | 21 | 74 | 34 | 25 | 11.5 |

F= Agujero

**Tirante sin Agujero (ISO 7388/2B)**  
*ISO 7388/2B Pull stud bolts without hole*

## ISO 7388/2-B

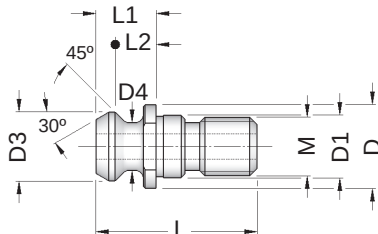


| REFERENCIA    | FAM | COD  | M   | D    | D1   | D3   | D4   | L    | L1   | L2   |
|---------------|-----|------|-----|------|------|------|------|------|------|------|
| 7388/2B.ISO30 | 2   | 3483 | M12 | 17.0 | 12.5 | 13.3 | 9.3  | 34.0 | 11.8 | 8.1  |
| 7388/2B.ISO40 |     | 4579 | M16 | 22.5 | 17.0 | 18.9 | 12.9 | 44.5 | 16.4 | 11.1 |
| 7388/2B.ISO50 |     | 4581 | M24 | 37.0 | 25.0 | 29.1 | 19.6 | 65.5 | 25.5 | 17.9 |

Tirante con Agujero **PASANTE** (ISO 7388/2B)

*ISO 7388/2B Pull stud bolts with hole*

## ISO 7388/2-B



Refrigeración  
Central  
Coolant flow

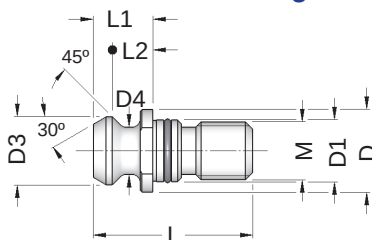
| REFERENCIA      | FAM | COD  | M   | D    | D1   | D3   | D4   | L    | L1   | L2   | F    |
|-----------------|-----|------|-----|------|------|------|------|------|------|------|------|
| 7388/2B.ISO40-F | 2   | 3484 | M16 | 22.5 | 17.0 | 18.9 | 12.9 | 44.5 | 16.4 | 11.1 | 7.3  |
| 7388/2B.ISO50-F |     | 3486 | M24 | 37.0 | 25.0 | 29.1 | 19.6 | 65.5 | 25.5 | 17.9 | 11.5 |

F= Agujero

Tirante **sin Agujero** (ISO 7388/2B) y junta de alta presión

*ISO 7388/2B Pull stud bolts with watertight O-Ring*

## ISO 7388/2-B

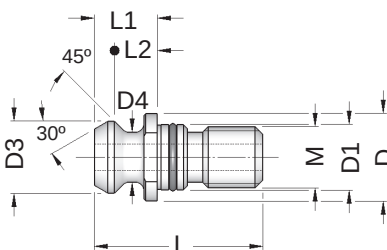


| REFERENCIA       | FAM | COD  | M   | D    | D1   | D3   | D4   | L    | L1   | L2   |
|------------------|-----|------|-----|------|------|------|------|------|------|------|
| 7388/2B.ISO40-OR | 2   | 4585 | M16 | 22.5 | 17.0 | 18.9 | 12.9 | 44.5 | 16.4 | 11.1 |
| 7388/2B.ISO50-OR |     | 4587 | M24 | 37.0 | 25.0 | 29.1 | 19.6 | 65.5 | 25.5 | 17.9 |

Tirante con Agujero **PASANTE** (ISO 7388/2B) y junta de alta presión

*ISO 7388/2B Pull stud bolts with hole and O-Ring*

## ISO 7388/2-B



Refrigeración  
Central  
Coolant flow

| REFERENCIA         | FAM | COD  | M   | D    | D1   | D3   | D4   | L    | L1   | L2   | F    |
|--------------------|-----|------|-----|------|------|------|------|------|------|------|------|
| 7388/2B.ISO40-F+OR | 2   | 3050 | M16 | 22.5 | 17.0 | 18.9 | 12.9 | 44.5 | 16.4 | 11.1 | 7.3  |
| 7388/2B.ISO50-F+OR |     | 3052 | M24 | 37.0 | 25.0 | 29.1 | 19.6 | 65.5 | 25.5 | 17.9 | 11.5 |

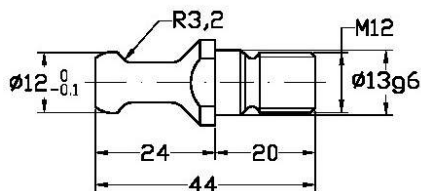
F= Agujero

**Tirante BIESSE**  
*Pull stud bolts BIESSE type*

**BIESSE**

| REFERENCIA | FAM |
|------------|-----|
|------------|-----|

|               |   |
|---------------|---|
| PS.WD30 - BS2 | 1 |
|---------------|---|

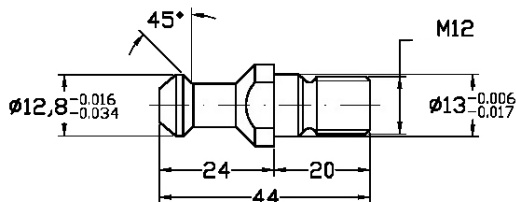


**Tirante ALBERTI**  
*Pull stud bolts ALBERTI type*

**ALBERTI**

| REFERENCIA | FAM |
|------------|-----|
|------------|-----|

|               |   |
|---------------|---|
| PS.WD30 - ALB | 1 |
|---------------|---|

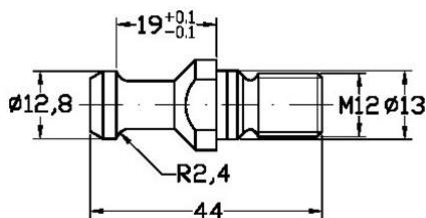


**Tirante CMS**  
*Pull stud bolts CMS type*

**CMS**

| REFERENCIA | FAM |
|------------|-----|
|------------|-----|

|               |   |
|---------------|---|
| PS.WD30 - CMS | 1 |
|---------------|---|

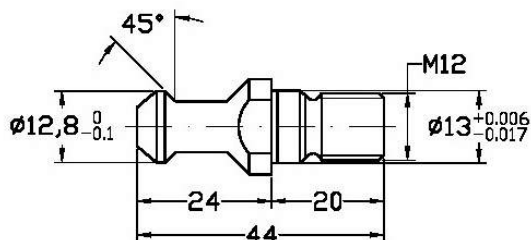


**Tirante COLOMBO**  
*Pull stud bolts COLOMBO type*

**COLOMBO**

| REFERENCIA | FAM |
|------------|-----|
|------------|-----|

|               |   |
|---------------|---|
| PS.WD30 - COL | 1 |
|---------------|---|

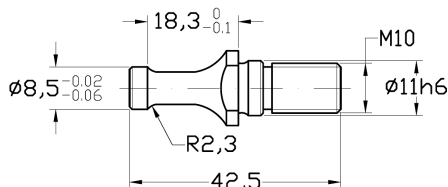


**Tirante SCM**  
*Pull stud bolts SCM type*

**SCM**

| REFERENCIA | FAM |
|------------|-----|
|------------|-----|

|               |   |
|---------------|---|
| PS.WD30 - SCM | 1 |
|---------------|---|

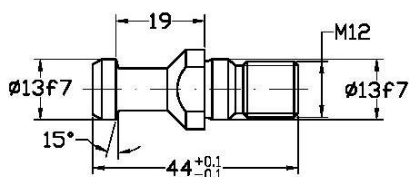


**Tirante sin Agujero DIN69872/A**  
*Pull stud bolts DIN69872/A type without hole*

**DIN/69872/A**

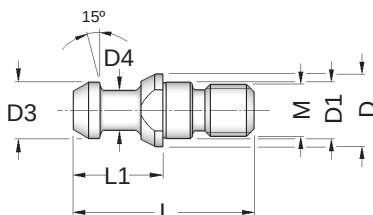
| REFERENCIA | FAM |
|------------|-----|
|------------|-----|

|            |   |
|------------|---|
| PS.DIN30SF | 1 |
|------------|---|



**Tirante ALTA VELOCIDAD para ISO 20**  
*High speed pull stud bolts for ISO 20 shank*

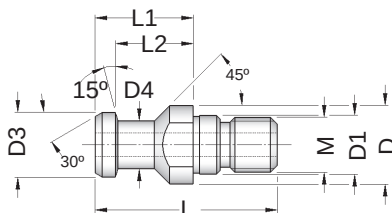
**ALTA VELOCIDAD**



| REFERENCIA   | FAM | COD  | M  | D  | D1  | D3  | D4 | L    | L1 |
|--------------|-----|------|----|----|-----|-----|----|------|----|
| ISO20-M8/L28 | 2   | 3491 | M8 | 11 | 8.5 | 8.5 | 6  | 28.0 | 14 |

**Tirante tipo BRIDGEPORT**  
*Pull stud bolts BRIDGEPORT type*

**BRIDGEPORT**



Refrigeración  
Central  
Coolant flow

| REFERENCIA           | FAM | COD  | M   | D  | D1 | D3 | D4 | L  | L1 | L2 | F |
|----------------------|-----|------|-----|----|----|----|----|----|----|----|---|
| BRIDGEPORTISO.40-M16 | 2   | 3359 | M16 | 23 | 17 | 19 | 14 | 54 | 29 | 23 | 7 |

F= Agujero

Llave dinamométrica para tirante  
*Torque wrenches for pull studs mounting*



Llave de bloqueo de tirante  
*Quick ratchet*



| REFERENCIA | FAM | RANGO DE APRITE |
|------------|-----|-----------------|
| TW803-210  | 1   | 40-210 Nm       |

| REFERENCIA | FAM |
|------------|-----|
| CRC12RV    | 1   |

Casquillo intercambiable  
*Interchangeable socket*



| REFERENCIA | FAM | SW | ISO | TIRANTE                    |
|------------|-----|----|-----|----------------------------|
| SKT40.DIN  | 1   | 19 | 40  | (DIN/69871) - (ISO7388/2A) |
| SKT50.DIN  |     | 30 | 50  | (DIN/69871) - (ISO7388/2A) |
| SKT40.CAT  |     | 19 | 40  | (ISO7388/2B)               |
| SKT50.CAT  |     | 30 | 50  | (ISO7388/2B)               |

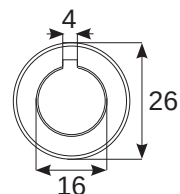
Fuerza de Apriete recomendada  
*Recommended tightening torque for pull stud bolt*

| REFERENCIA         |
|--------------------|
| G.M12 = 20÷25 Nm   |
| G.M16 = 60÷80 Nm   |
| G.M24 = 200÷250 Nm |

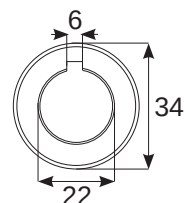


Anillo Distanciador  
Spacers

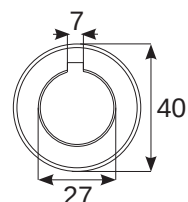
| DIAMETRO X ESPESOR |         |         |         |          | Ø  | FAM | COD  |
|--------------------|---------|---------|---------|----------|----|-----|------|
| D16X0.03           | D16X0.1 | D16X0.5 | D16X3.0 | D16X10.0 | 16 | 2   | 4084 |
| D16X0.04           | D16X0.2 | D16X0.6 | D16X4.0 | D16X20.0 |    |     |      |
| D16X0.05           | D16X0.3 | D16X1.0 | D16X5.0 | D16X30.0 |    |     |      |
| D16X0.06           | D16X0.4 | D16X2.0 | D16X6.0 |          |    |     |      |
|                    |         |         |         |          |    |     |      |



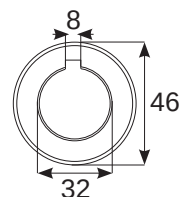
| DIAMETRO X ESPESOR |         |         |         |          | Ø  | FAM | COD  |
|--------------------|---------|---------|---------|----------|----|-----|------|
| D22X0.03           | D22X0.1 | D22X0.5 | D22X3.0 | D22X10.0 | 22 | 2   | 4085 |
| D22X0.04           | D22X0.2 | D22X0.6 | D22X4.0 | D22X20.0 |    |     |      |
| D22X0.05           | D22X0.3 | D22X1.0 | D22X5.0 | D22X30.0 |    |     |      |
| D22X0.06           | D22X0.4 | D22X2.0 | D22X6.0 | D22X60.0 |    |     |      |
|                    |         |         |         |          |    |     |      |



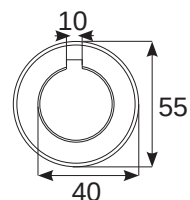
| DIAMETRO X ESPESOR |         |         |         |          | Ø  | FAM | COD  |
|--------------------|---------|---------|---------|----------|----|-----|------|
| D27X0.03           | D27X0.1 | D27X0.5 | D27X3.0 | D27X10.0 | 27 | 2   | 4086 |
| D27X0.04           | D27X0.2 | D27X0.6 | D27X4.0 | D27X20.0 |    |     |      |
| D27X0.05           | D27X0.3 | D27X1.0 | D27X5.0 | D27X30.0 |    |     |      |
| D27X0.06           | D27X0.4 | D27X2.0 | D27X6.0 | D27X60.0 |    |     |      |
|                    |         |         |         |          |    |     |      |



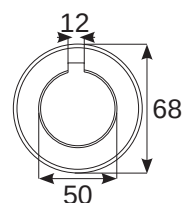
| DIAMETRO X ESPESOR |         |         |         |          | Ø  | FAM | COD  |
|--------------------|---------|---------|---------|----------|----|-----|------|
| D32X0.03           | D32X0.1 | D32X0.5 | D32X3.0 | D32X10.0 | 32 | 2   | 4087 |
| D32X0.04           | D32X0.2 | D32X0.6 | D32X4.0 | D32X20.0 |    |     |      |
| D32X0.05           | D32X0.3 | D32X1.0 | D32X5.0 | D32X30.0 |    |     |      |
| D32X0.06           | D32X0.4 | D32X2.0 | D32X6.0 | D32X60.0 |    |     |      |
|                    |         |         |         |          |    |     |      |



| DIAMETRO X ESPESOR |         |         |         |          | Ø  | FAM | COD  |
|--------------------|---------|---------|---------|----------|----|-----|------|
| D40X0.03           | D40X0.1 | D40X0.5 | D40X3.0 | D40X10.0 | 40 | 2   | 4088 |
| D40X0.04           | D40X0.2 | D40X0.6 | D40X4.0 | D40X20.0 |    |     |      |
| D40X0.05           | D40X0.3 | D40X1.0 | D40X5.0 | D40X30.0 |    |     |      |
| D40X0.06           | D40X0.4 | D40X2.0 | D40X6.0 | D40X60.0 |    |     |      |
|                    |         |         |         |          |    |     |      |



| DIAMETRO X ESPESOR |         |         |         |          | Ø  | FAM | COD  |
|--------------------|---------|---------|---------|----------|----|-----|------|
| -                  | D50X0.1 | D50X0.5 | D50X3.0 | D50X10.0 | 50 | 2   | 4089 |
| -                  | D50X0.2 | D50X0.6 | D50X4.0 | D50X20.0 |    |     |      |
| D50X0.05           | D50X0.3 | D50X1.0 | D50X5.0 | D50X30.0 |    |     |      |
| D50X0.06           | D50X0.4 | D50X2.0 | D50X6.0 | D50X60.0 |    |     |      |
|                    |         |         |         |          |    |     |      |

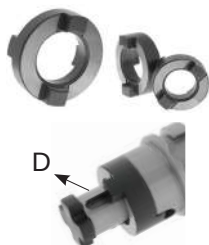


ACCESORIOS  
ACCESSORIES

Anillo Porta Fresas DIN/6366

Cluth drive rings DIN/6366

| FAM        | 1  |
|------------|----|
| REFERENCIA | D  |
| ATR.D13    | 13 |
| ATR.D16    | 16 |
| ATR.D22    | 22 |
| ATR.D27    | 27 |
| ATR.D32    | 32 |
| ATR.D40    | 40 |
| ATR.D50    | 50 |



Tornillo de bloqueo

Screws for shell end mill holders

| FAM        | 1  |
|------------|----|
| REFERENCIA | D  |
| VTR.M8     | 16 |
| VTR.M10    | 22 |
| VTR.M12    | 27 |
| VTR.M16    | 32 |
| VTR.M20    | 40 |



Tornillo de cruz DIN/6367

Cross retaining screw DIN/6367

| FAM        | 1  |
|------------|----|
| REFERENCIA | D  |
| VTC.M6     | 13 |
| VTC.M8     | 16 |
| VTC.M10    | 22 |
| VTC.M12    | 27 |
| VTC.M16    | 35 |
| VTC.M20    | 40 |
| VTC.M24    | 50 |



Tornillo de bloqueo

Screws for shell end mill holders

| FAM        | 1  |
|------------|----|
| REFERENCIA | D  |
| VTF.M6     | 13 |
| VTF.M8     | 16 |
| VTF.M10    | 22 |
| VTF.M12    | 27 |
| VTF.M16    | 32 |
| VTF.M20    | 40 |



Llave Tornillo de cruz DIN/6368

Spanners for cross screws DIN/6388

| FAM        | 1  |
|------------|----|
| REFERENCIA | M  |
| SP13C      | 6  |
| SP16C      | 8  |
| SP22C      | 10 |
| SP27C      | 12 |
| SP32C      | 16 |
| SP40C      | 20 |
| SP50C      | 24 |



Tornillo de bloqueo

Screws for shell end mill holders

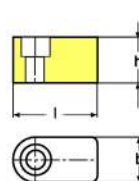
| FAM        | 1  |
|------------|----|
| REFERENCIA | D  |
| VTS.M8     | 16 |
| VTS.M10    | 22 |
| VTS.M12    | 27 |
| VTS.M16    | 32 |
| VTS.M20    | 40 |



Tope de fijación

Drive key

| FAM        | 1  |           |    |    |
|------------|----|-----------|----|----|
| REFERENCIA | D  | b x h x l |    |    |
| TTR8       | 16 | 8         | 8  | 14 |
| TTR10      | 22 | 10        | 10 | 18 |
| TTR12      | 27 | 12        | 12 | 18 |
| TTR14      | 32 | 14        | 14 | 22 |
| TTR16      | 40 | 16        | 16 | 25 |



**ACCESORIOS**  
**ACCESSORIES**

**Tornillo para mandrino weldon**  
*Screws for shell end mill holders*

| REFERENCIA      | WELDON | FAM |
|-----------------|--------|-----|
| WE.M6 x 10      | 6      | 1   |
| WE.M8 x 10      | 8      |     |
| WE.M10 x 12     | 10     |     |
| WE.M12 x 16     | 12-14  |     |
| WE.M14 x 16     | 16-18  |     |
| WE.M16 x 16     | 20     |     |
| WE.M18 x 2 x 20 | 25     |     |
| WE.M20 x 2 x 20 | 32-40  |     |
| WE.M24 x 2 x 25 | 50     |     |



**Tornillo especial para mandrino weldon**  
*Special locking Screws for shell end mill holders*

| REFERENCIA      | MEDIDA | FAM |
|-----------------|--------|-----|
| WE.M14 x 10     | 16     | 1   |
| WE.M16 x 10     | 20     |     |
| WE.M16 x 1 x 8  | 25-32  |     |
| WE.M18 x 2 x 12 | 25     |     |

**Tornillo para mandrino weldon WISTLE-NOTCH**  
*Lockling screws with half ball WHITLE-NOTCH*



| REFERENCIA       | WELDON WISTLE NOTCH | FAM |
|------------------|---------------------|-----|
| WHN.M6 x 10      | 6                   | 1   |
| WHN M8 x 10      | 8                   |     |
| WHN.M10 x 12     | 10                  |     |
| WHN.M12 x 16     | 12-14               |     |
| WHN M14 x 16     | 16-18               |     |
| WHN.M16 x 16     | 20                  |     |
| WHN.M18 x 2 x 20 | 25                  |     |
| WHN.M20 x 2 x 20 | 32-40               |     |

**Llave dinamométrica**  
*Dynamometric wrench for end mill holders screw*



| REFERENCIA | RANGO          | Nm | FAM |
|------------|----------------|----|-----|
| CDWE6      | M 6 - EX3      | 6  | 1   |
| CDWE8      | M 8 - EX4      | 10 |     |
| CDWE10     | M10 - EX5      | 16 |     |
| CDWE12.14  | M12 - EX6      | 28 |     |
| CDWE16.18  | M14 - EX6      | 42 |     |
| CDWE20     | M16 - EX8      | 50 |     |
| CDWE25     | M18 x 2 - EX10 | 60 |     |
| CDWE32.40  | M20 x 2 - EX10 | 72 |     |
| CDWE50     | M24 x 2 - EX12 | 90 |     |



**Cono limpiador Interno**  
*Spindle taper wipers*



| REFERENCIA | FAM | MODELO |
|------------|-----|--------|
| TCL30      | 1   | ISO30  |
| TCL40      |     | ISO40  |
| TCL50      |     | ISO50  |

**Cono limpiador Interno**  
*Spindle taper wipers*



| REFERENCIA | FAM | MODELO |
|------------|-----|--------|
| TCL1.MT    | 1   | CM1    |
| TCL2.MT    |     | CM2    |
| TCL3.MT    |     | CM3    |
| TCL4.MT    |     | CM4    |
| TCL5.MT    |     | CM5    |

**Cono limpiador Interno**  
*Spindle taper wipers*



| REFERENCIA | FAM   | COD  | MODELO       |
|------------|-------|------|--------------|
| TP-HSK32   | 2     | 5205 | HSK-32 A / E |
| TP-HSK40   | 1 / 2 | 5206 | HSK-40 A / E |
| TP-HSK50   | 1 / 2 | 5207 | HSK-50 A / E |
| TP-HSK63   | 1 / 2 | 5208 | HSK-63 A / E |
| TP-HSK80   | 2     | 5209 | HSK-80 A     |
| TP-HSK100  | 1 / 2 | 5210 | HSK-100 A    |

**Cono limpiador Externo**  
*Spindle taper wipers*



| REFERENCIA | FAM | MODELO       |
|------------|-----|--------------|
| TPA-HSK40  | 3   | HSK-40 A / E |
| TPA-HSK50  | 3   | HSK-50 A / E |
| TPA-HSK63  | 3   | HSK-63 A / E |

**RACOR para el refrigerante**  
*HSK- cooling tube*



| REFERENCIA   | FAM |
|--------------|-----|
| HSK40.CFM12  | 1   |
| HSK50.CFM16  |     |
| HSK63.CFM18  |     |
| HSK80.CFM20  |     |
| HSK100.CFM24 |     |

**Llave para**  
*HSK- cooling tube*



| REFERENCIA  | FAM |
|-------------|-----|
| HSK40.SP11  | 1   |
| HSK50.SP15  |     |
| HSK63.SP17  |     |
| HSK80.SP19  |     |
| HSK100.SP22 |     |