



**MF 89**



**+ Características**

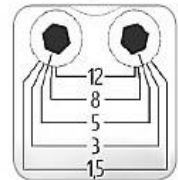
- Recomendado para moleteados tipo RGE
- Ajuste de las moletas según diámetro a moletear mediante escala graduada (Fig. 2)
- Cabeza basculante para el alineamiento de las moletas (Fig. 1)
- Ejes de HSS+TIN
- Ajuste del ángulo de ataque mediante tornillos integrados en el mango

**+ Features**

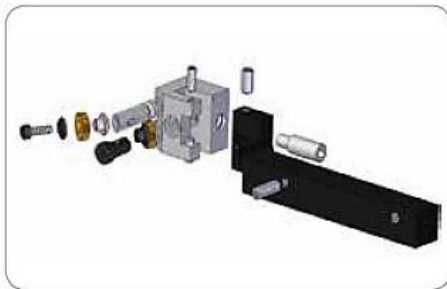
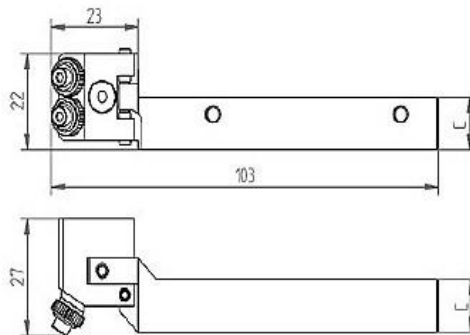
- Recommended for RGE type knurling
- Easy setting to the workpiece diameter by means of a graduated scale (Fig. 2)
- Pivoting head for knurls self-centering (Fig. 1)
- HSS+TIN bushing
- Adjustment of tool clearance angle by threaded studs integrated in the shank



(Fig. 1)



(Fig. 2)



**+ Avance Feed**



**+ Formas de moleteados realizables**  
Feasible knurling forms

|                                     | R<br>RGE 30° | R<br>RGE 45°  |
|-------------------------------------|--------------|---------------|
| Tipo de moleteado<br>Knurling form  |              |               |
| Con moleta tipo<br>With knurl type  | AA + AA      | BL15° + BR15° |
| Avances permitidos<br>Allowed feeds | F            | F             |

**R Moleteados recomendados | Recommended knurling**

| Herramienta   Tool |                         |                    |                       |                 |    |          |
|--------------------|-------------------------|--------------------|-----------------------|-----------------|----|----------|
| Código<br>Code     | Referencia<br>Reference | Versión<br>Version | Capacidad<br>Capacity | Moleta<br>Knurl | C  | Kg<br>Kg |
| 01101300           | MF 89.25.08 R           | R                  | Ø 1.5 ÷ 12            | 8.9x2.5x4       | 8  | 0.2      |
| 01101400           | MF 89.25.08 L           | L                  | Ø 1.5 ÷ 12            | 8.9x2.5x4       | 8  | 0.2      |
| 01101500           | MF 89.25.10 R           | R                  | Ø 1.5 ÷ 12            | 8.9x2.5x4       | 10 | 0.2      |
| 01101600           | MF 89.25.10 L           | L                  | Ø 1.5 ÷ 12            | 8.9x2.5x4       | 10 | 0.2      |
| 01101700           | MF 89.25.12 R           | R                  | Ø 1.5 ÷ 12            | 8.9x2.5x4       | 12 | 0.2      |
| 01101800           | MF 89.25.12 L           | L                  | Ø 1.5 ÷ 12            | 8.9x2.5x4       | 12 | 0.2      |

| Repuesto   Spare Part |                         |
|-----------------------|-------------------------|
| Código<br>Code        | Referencia<br>Reference |
| 01985500              | EAT 89.25               |





# MOLETEADORES POR CORTE CUT-KNURLING TOOLS



## MF1 14

### + Características

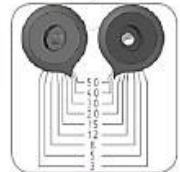
- Recomendado para moleteados tipo RGE
- Ajuste de las moletas según diámetro a moletear mediante escala graduada (Fig. 2)
- Doble posición del mango para trabajar a derechas o izquierdas (Fig. 1)
- Ejes de HSS+TIN
- Ajuste del ángulo de ataque mediante tornillos integrados en el mango

### + Features

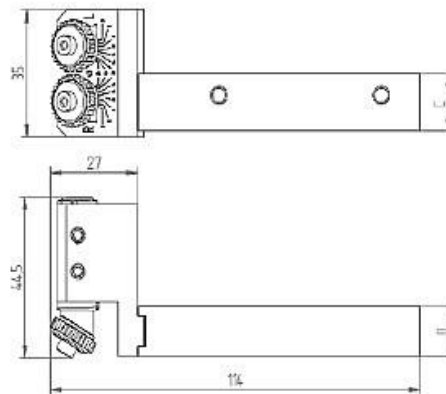
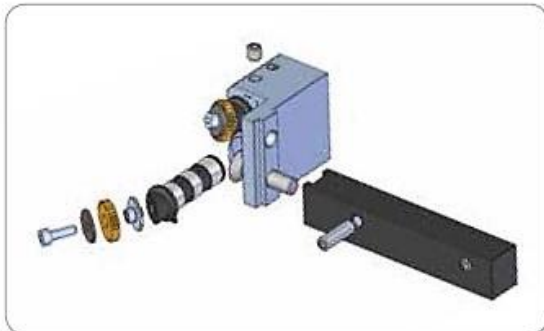
- Recommended for RGE type knurling
- Easy setting to the workpiece diameter by means of a graduated scale (Fig. 2)
- Tool with reversible shank able to fit on left-hand or right-hand lathes (Fig. 1)
- HSS+TIN bushing
- Adjustment of tool clearance angle by threaded studs integrated in the shank



(Fig. 1)



(Fig. 2)



### + Avance Feed



### + Formas de moleteados realizables Feasible knurling forms

|                                     | R<br>RGE 30° | R<br>RGE 45°  |
|-------------------------------------|--------------|---------------|
| Tipo de moleteado<br>Knurling form  |              |               |
| Con moleta tipo<br>With knurl type  | AA + AA      | BL15° + BR15° |
| Avances permitidos<br>Allowed feeds | F            | F             |

### R Moleteados recomendados | Recommended knurling

| Herramienta   Tool |                         |                    |                       |                 |    |    |          |
|--------------------|-------------------------|--------------------|-----------------------|-----------------|----|----|----------|
| Código<br>Code     | Referencia<br>Reference | Versión<br>Version | Capacidad<br>Capacity | Moleta<br>Knurl | C  | D  | Kg<br>Kg |
| 01250100           | MF1 14.53.12            | R+L                | ∅ 3 ÷ 50              | 14.5x3x5        | 12 | 14 | 0.5      |
| 01250200           | MF1 14.53.14            | R+L                | ∅ 3 ÷ 50              | 14.5x3x5        | 14 | 14 | 0.5      |
| 01250300           | MF1 14.53.16            | R+L                | ∅ 3 ÷ 50              | 14.5x3x5        | 16 | 16 | 0.5      |

| Repuesto   Spare Part |                         |  |
|-----------------------|-------------------------|--|
| Código<br>Code        | Referencia<br>Reference |  |
| 01985600              | EAT 14.53               |  |



# MOLETEADORES POR CORTE CUT-KNURLING TOOLS



## MF 14

### + Características

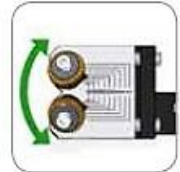
- Recomendado para moleteados tipo RGE
- Ajuste de las moletas según diámetro a moletear mediante escala graduada [Fig. 2]
- Cabeza basculante para el alineamiento de las moletas (Fig. 1)
- Ejes de HSS+TIN
- Ajuste del ángulo de ataque mediante tornillos integrados en el mango

### + Features

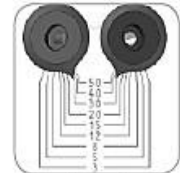
- Recommended for RGE type knurling
- Easy setting to the workpiece diameter by means of a graduated scale [Fig. 2]
- Pivoting head for knurls self-centering [Fig. 1]
- HSS+TIN bushing
- Adjustment of tool clearance angle by threaded studs integrated in the shank



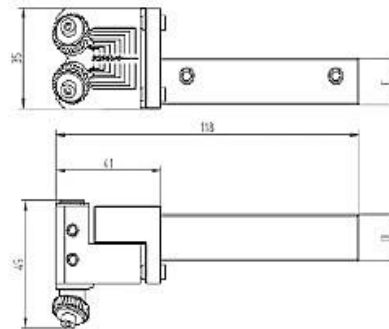
### + Avance Feed



[Fig. 1]



[Fig. 2]



### + Formas de moleteados realizables Feasible knurling forms

|                                     | R       | R               |
|-------------------------------------|---------|-----------------|
|                                     | RGE 30° | RGE 45°         |
| Tipo de moleteado<br>Knurling form  |         |                 |
| Con moleta tipo<br>With knurl type  | AA + AA | BL 15° + BR 15° |
| Avances permitidos<br>Allowed feeds | F       | F               |

**R** Moleteados recomendados | Recommended knurling

| Herramienta   Tool |                         |                    |                       |                 |    |    |          |
|--------------------|-------------------------|--------------------|-----------------------|-----------------|----|----|----------|
| Código<br>Code     | Referencia<br>Reference | Versión<br>Version | Capacidad<br>Capacity | Moleta<br>Knurl | C  | D  | Kg<br>Kg |
| 01100900           | MF14.53.12 R            | R                  | ∅ 3 ÷ 50              | 14.5x3x5        | 12 | 16 | 0.5      |
| 01101000           | MF 14.53.12 L           | L                  | ∅ 3 ÷ 50              | 14.5x3x5        | 12 | 16 | 0.5      |
| 01100100           | MF 14.53.14 R           | R                  | ∅ 3 ÷ 50              | 14.5x3x5        | 14 | 16 | 0.5      |
| 01100200           | MF 14.53.14 L           | L                  | ∅ 3 ÷ 50              | 14.5x3x5        | 14 | 16 | 0.5      |
| 01100300           | MF 14.53.16 R           | R                  | ∅ 3 ÷ 50              | 14.5x3x5        | 16 | 16 | 0.5      |
| 01100400           | MF 14.53.16 L           | L                  | ∅ 3 ÷ 50              | 14.5x3x5        | 16 | 16 | 0.5      |

| Repuesto   Spare Part |                         |
|-----------------------|-------------------------|
| Código<br>Code        | Referencia<br>Reference |
| 01985600              | EAT 14.53               |





# MOLETEADORES POR CORTE CUT-KNURLING TOOLS



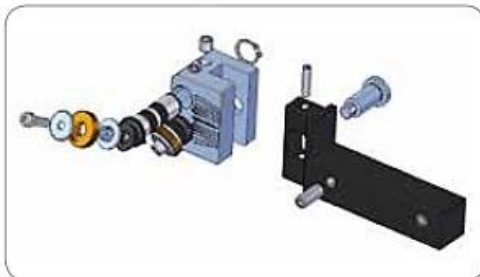
## MF 21

### + Características

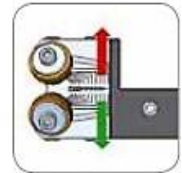
- Recomendado para moleteados tipo RGE
- Ajuste de las moletas según diámetro a moletear mediante escala graduada (Fig. 2)
- Cabeza ajustable en altura para el alineamiento de las moletas (Fig. 1)
- Cabeza reversible para trabajar a derechas o izquierdas (Fig. 3)
- Ejes de HSS+TIN
- Ajuste del ángulo de ataque mediante tornillos integrados en el mango

### + Features

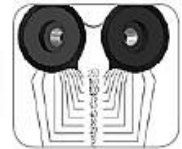
- Recommended for RGE type knurling
- Easy setting to the workpiece diameter by means of a graduated scale (Fig. 2)
- Up&down tool head alignment for knurls centering (Fig. 1)
- Tool with reversible head able to fit on left-hand or right-hand lathes (Fig. 3)
- HSS+TIN bushing
- Adjustment of tool clearance angle by threaded studs integrated in the shank



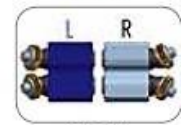
### + Avance Feed



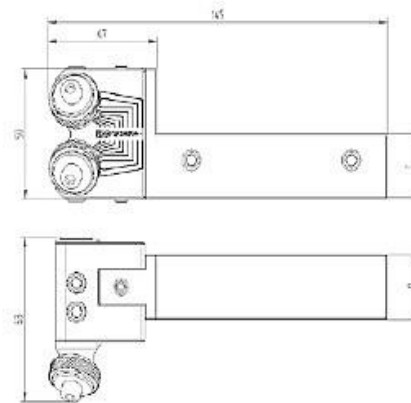
[Fig. 1]



[Fig. 2]



[Fig. 3]



### + Formas de moleteados realizables Feasible knurling forms

|                                     | R<br>RGE 30° | R<br>RGE 45°  |
|-------------------------------------|--------------|---------------|
| Tipo de moleteado<br>Knurling form  |              |               |
| Con moleta tipo<br>With knurt type  | AA + AA      | BL15° + BR15° |
| Avances permitidos<br>Allowed feeds | F            | F             |

**R** Moleteados recomendados | Recommended knurling

| Herramienta   Tool |                         |                    |                       |                 |    |    |          |
|--------------------|-------------------------|--------------------|-----------------------|-----------------|----|----|----------|
| Código<br>Code     | Referencia<br>Reference | Versión<br>Version | Capacidad<br>Capacity | Moleta<br>Knurl | C  | D  | Kg<br>Kg |
| 01100500           | MF 21.55.20             | R+L                | ∅ 5 ÷ 250             | 21.5x5x8        | 20 | 25 | 1.3      |
| 01100700           | MF 21.55.25             | R+L                | ∅ 5 ÷ 250             | 21.5x5x8        | 25 | 25 | 1.4      |

| Repuesto   Spare Part |                         |
|-----------------------|-------------------------|
| Código<br>Code        | Referencia<br>Reference |
| 01985700              | EAT 21.55               |





# MOLETEADORES POR CORTE CUT-KNURLING TOOLS



## MF 21 VDI

### + Características

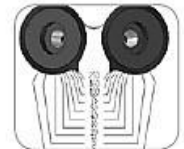
- Recomendado para moleteados tipo RGE
- Ajuste de las moletas según diámetro a moletear mediante escala graduada (Fig. 2)
- Cabeza basculante para el alineamiento de las moletas (Fig. 1)
- Ejes de HSS+TIN

### + Features

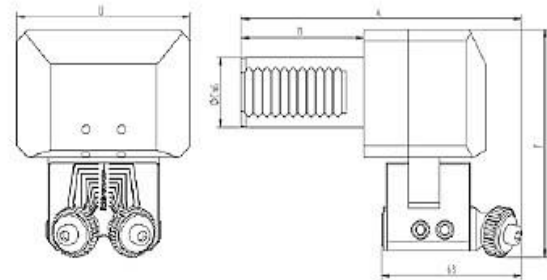
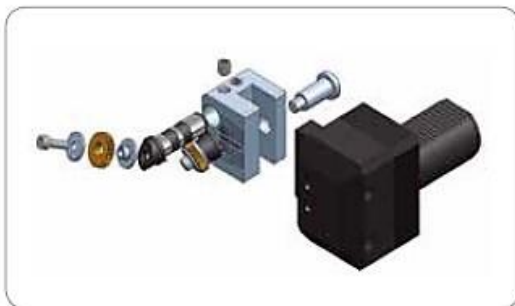
- Recommended for RGE type knurling
- Easy setting to the workpiece diameter by means of a graduated scale (Fig. 2)
- Pivoting head for knurl alignment (Fig. 1)
- HSS+TIN bushing



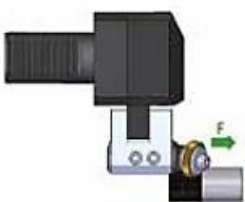
(Fig. 1)



(Fig. 2)



### + Avance Feed



### + Formas de moleteados realizables Feasible knurling forms

|                                     | R<br>RGE 30° | R<br>RGE 45°  |
|-------------------------------------|--------------|---------------|
| Tipo de moleteado<br>Knurling form  |              |               |
| Con moleta tipo<br>With knurl type  | AA + AA      | BL15° + BR15° |
| Avances permitidos<br>Allowed feeds | F            | F             |

### R Moleteados recomendados | Recommended knurling

| Herramienta   Tool |                         |                    |                       |                 |     |    |    |    |    |          | Repuesto   Spare Part |                         |
|--------------------|-------------------------|--------------------|-----------------------|-----------------|-----|----|----|----|----|----------|-----------------------|-------------------------|
| Código<br>Code     | Referencia<br>Reference | Versión<br>Version | Capacidad<br>Capacity | Moleta<br>Knurl | A   | B  | C  | D  | E  | Kg<br>Kg | Código<br>Code        | Referencia<br>Reference |
| 01140100           | MF 21.55 VDI 30R        | R                  | Ø 5 ÷ 250             | 21.5x5x8        | 126 | 55 | 30 | 68 | 95 | 0.5      | 01985700              | EAT 21.55               |
| 01140200           | MF 21.55 VDI 30L        | L                  | Ø 5 ÷ 250             | 21.5x5x8        | 126 | 55 | 30 | 68 | 95 | 0.5      |                       |                         |
| 01140300           | MF 21.55 VDI 40R        | R                  | Ø 5 ÷ 250             | 21.5x5x8        | 136 | 63 | 40 | 78 | 98 | 0.5      |                       |                         |
| 01140400           | MF 21.55 VDI 40L        | L                  | Ø 5 ÷ 250             | 21.5x5x8        | 136 | 63 | 40 | 78 | 98 | 0.5      |                       |                         |





# MOLETEADORES POR CORTE CUT-KNURLING TOOLS



## MF 42

### + Características

- Recomendado para moleteados tipo RGE
- Ajuste de las moletas según diámetro a moletear mediante escala graduada (Fig. 3)
- Cabeza ajustable en altura para el alineamiento de las moletas (Fig. 1)
- Cabeza reversible para trabajar a derechas o izquierdas (Fig. 2)
- Ejes de metal duro

### + Features

- Recommended for RGE type knurling
- Easy setting to the workpiece diameter by means of a graduated scale (Fig. 3)
- Up&down tool head alignment for knurls centering (Fig. 1)
- Tool with reversible head able to fit on left-hand or right-hand lathes (Fig. 2)
- Carbide pins



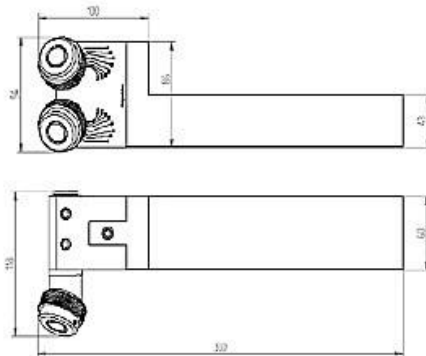
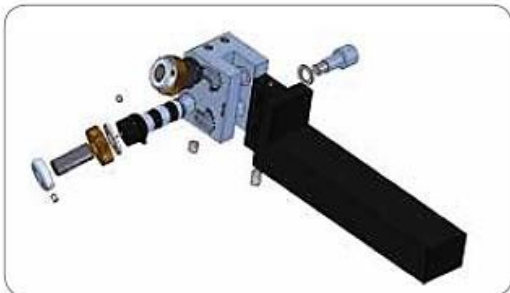
[Fig. 1]



[Fig. 2]



[Fig. 3]



### + Avance Feed



### + Formas de moleteados realizables Feasible knurling forms

|                                     | R<br>RGE 30° | R<br>RGE 45°  |
|-------------------------------------|--------------|---------------|
| Tipo de moleteado<br>Knurling form  |              |               |
| Con moleta tipo<br>With knurl type  | AA + AA      | BL15° + BR15° |
| Avances permitidos<br>Allowed feeds | F            | F             |

**R** Moleteados recomendados | Recommended knurling

| Herramienta   Tool |                         |                    |                       |                 |          | Repuesto   Spare Part |                         |
|--------------------|-------------------------|--------------------|-----------------------|-----------------|----------|-----------------------|-------------------------|
| Código<br>Code     | Referencia<br>Reference | Versión<br>Version | Capacidad<br>Capacity | Moleta<br>Knurl | Kg<br>Kg | Código<br>Code        | Referencia<br>Reference |
| 01240100           | MF 42.12.40             | R+L                | Ø 100 ÷ 3000          | 42x12x18        | 9.0      | 01240105              | EMMF 42                 |





## KIT DE MOLETEADORES DE CORTE CUT-KNURING KITS



### KMF

#### + Características

- Kit de moleteado por fresado compuesto por una herramienta doble para moleteados cruzados tipo RGE y una herramienta simple para moleteados rectos tipo RAA
- Varios tamaños disponibles
- Suministrado en una estuche de protección de PVD rígido
- Incluye llaves de servicio
- No incluye moletas

#### + Features

- Cut knurling kit consisting of a double tool for cross-knurling type RGE and a single tool for straight knurling type RAA
- Available in various sizes
- Supplied in a rigid PVD protection case
- Service keys included
- Knurls not included



#### Herramienta | Tool

| Código<br>Code | Referencia<br>Reference | Herramientas incluidas<br>Included tools | Capacidad<br>Capacity |
|----------------|-------------------------|--|-----------------------|
| 01220400       | KMF 89-08 R             | MF 89.25.08 R + MFS 89.25.08 R           | Ø1,5-12               |
| 01220500       | KMF 89-08 L             | MF 89.25.08 L + MFS 89.25.08 L           | Ø1,5-12               |
| 01220600       | KMF 89-10 R             | MF 89.25.10 R + MFS 89.25.10 R           | Ø1,5-12               |
| 01220700       | KMF 89-10 L             | MF 89.25.10 L + MFS 89.25.10 L           | Ø1,5-12               |
| 01220800       | KMF 89-12 R             | MF 89.25.12 R + MFS 89.25.12 R           | Ø1,5-12               |
| 01220900       | KMF 89-12 L             | MF 89.25.12 L + MFS 89.25.12 L           | Ø1,5-12               |
| 01221000       | KMF1 14-12 R            | MF1 14.53.12 + MFS1 14.53.12 R           | Ø3-50                 |
| 01221100       | KMF1 14-12 L            | MF1 14.53.12 + MFS1 14.53.12 L           | Ø3-50                 |
| 01221200       | KMF1 14-14 R            | MF1 14.53.14 + MFS1 14.53.14 R           | Ø3-50                 |
| 01221300       | KMF1 14-14 L            | MF1 14.53.14 + MFS1 14.53.14 L           | Ø3-50                 |
| 01221400       | KMF1 14-16 R            | MF1 14.53.16 + MFS1 14.53.16 R           | Ø3-50                 |
| 01221500       | KMF1 14-16 L            | MF1 14.53.16 + MFS1 14.53.16 L           | Ø3-50                 |
| 01221600       | KMF 14-12 R             | MF 14.53.12 R + MFS 14.53.12             | Ø3-50                 |
| 01221700       | KMF 14-12 L             | MF 14.53.12 L + MFS 14.53.12             | Ø3-50                 |
| 01221800       | KMF 14-14 R             | MF 14.53.14 R + MFS 14.53.14             | Ø3-50                 |
| 01221900       | KMF 14-14 L             | MF 14.53.14 L + MFS 14.53.14             | Ø3-50                 |
| 01222000       | KMF 14-16 R             | MF 14.53.16 R + MFS 14.53.16             | Ø3-50                 |
| 01222100       | KMF 14-16 L             | MF 14.53.16 L + MFS 14.53.16             | Ø3-50                 |
| 01220200       | KMF 21-20               | MF 21.55.20 + MFS 21.55.20               | Ø5-250                |
| 01220300       | KMF 21-25               | MF 21.55.25 + MFS 21.55.25               | Ø5-250                |