



*shaping your dreams*


Finally, the answer you've been looking for is here

# A-TAP SERIES

VOL. 4



# Finally, the answer you've been looking for is here...

- 
- 1 Stabilize chip shape  
Sharp cutting edge
  - 2 Accelerate chip evacuation  
Variable lead flute (PAT.)
  - 3 High wear resistance  
V coating
  - 4 High wear resistance  
Powder Metallurgy HSS (CPM)



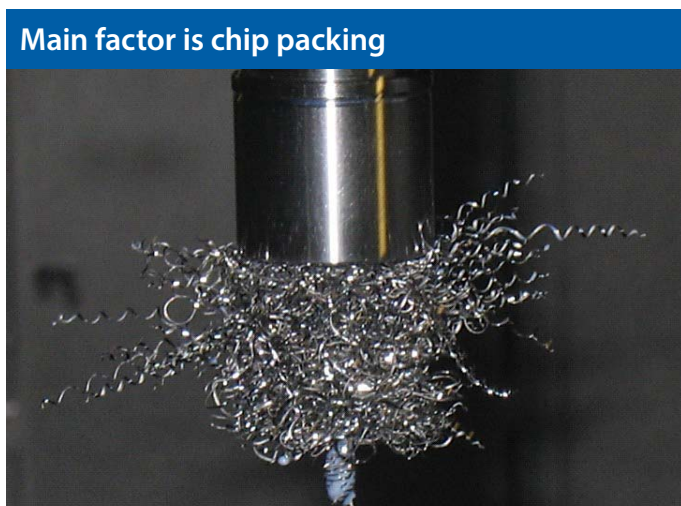
# OSG's new premium brand "A-TAP Series"

## The answer for your troubles lies here

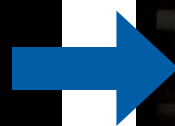
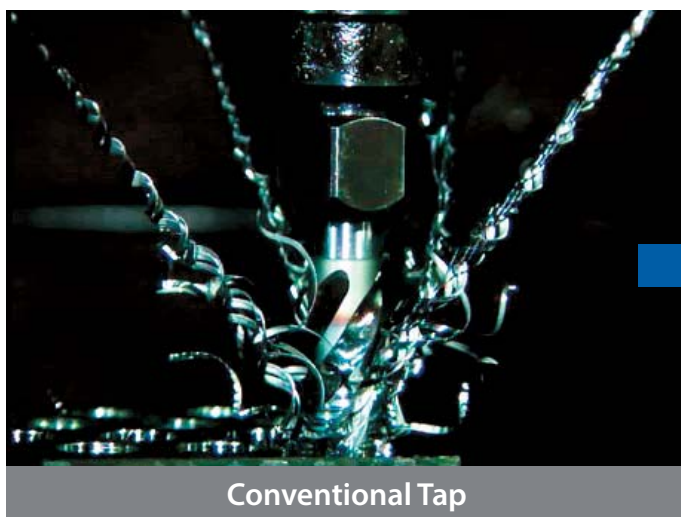
Most of tapping troubles are caused by unstable chip evacuation.

A-TAP Series resolve such troubles and apply to a wide range of work materials and cutting speed.

| Tapping Troubles          |      |
|---------------------------|------|
| N°1 breakage and chipping | 26 % |
| N°2 dimensional error     | 17 % |
| N°3 galling               | 14 % |
| Others                    | 43 % |



The biggest advantage of A-TAP Series:  
**The best chip evacuation**

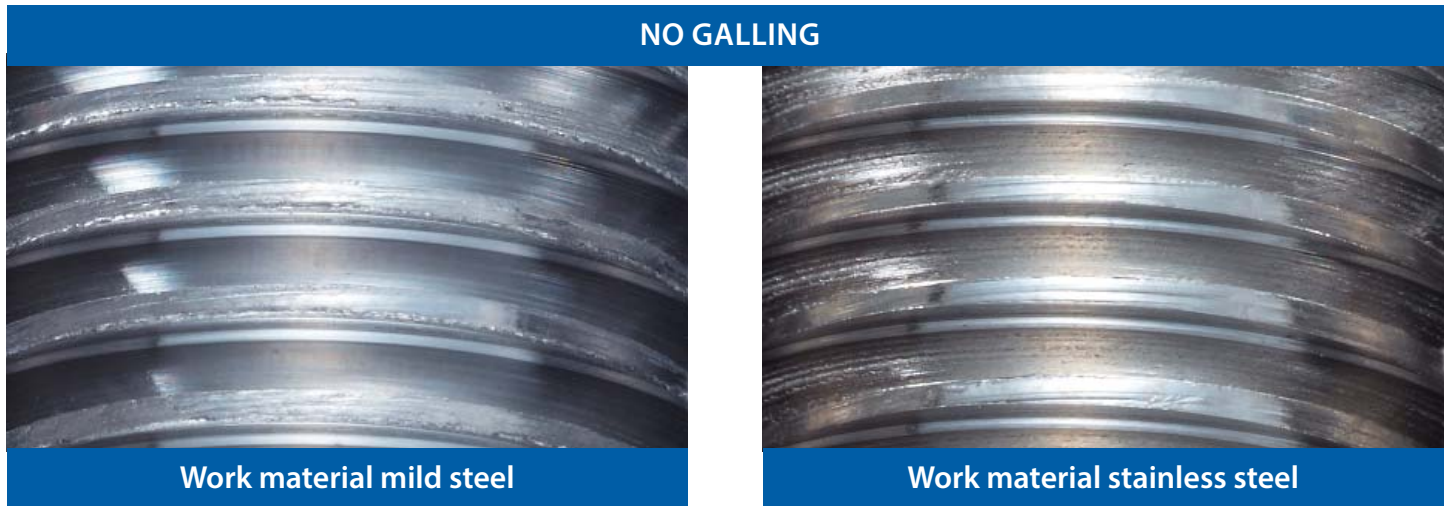




# Key features A-TAP Series

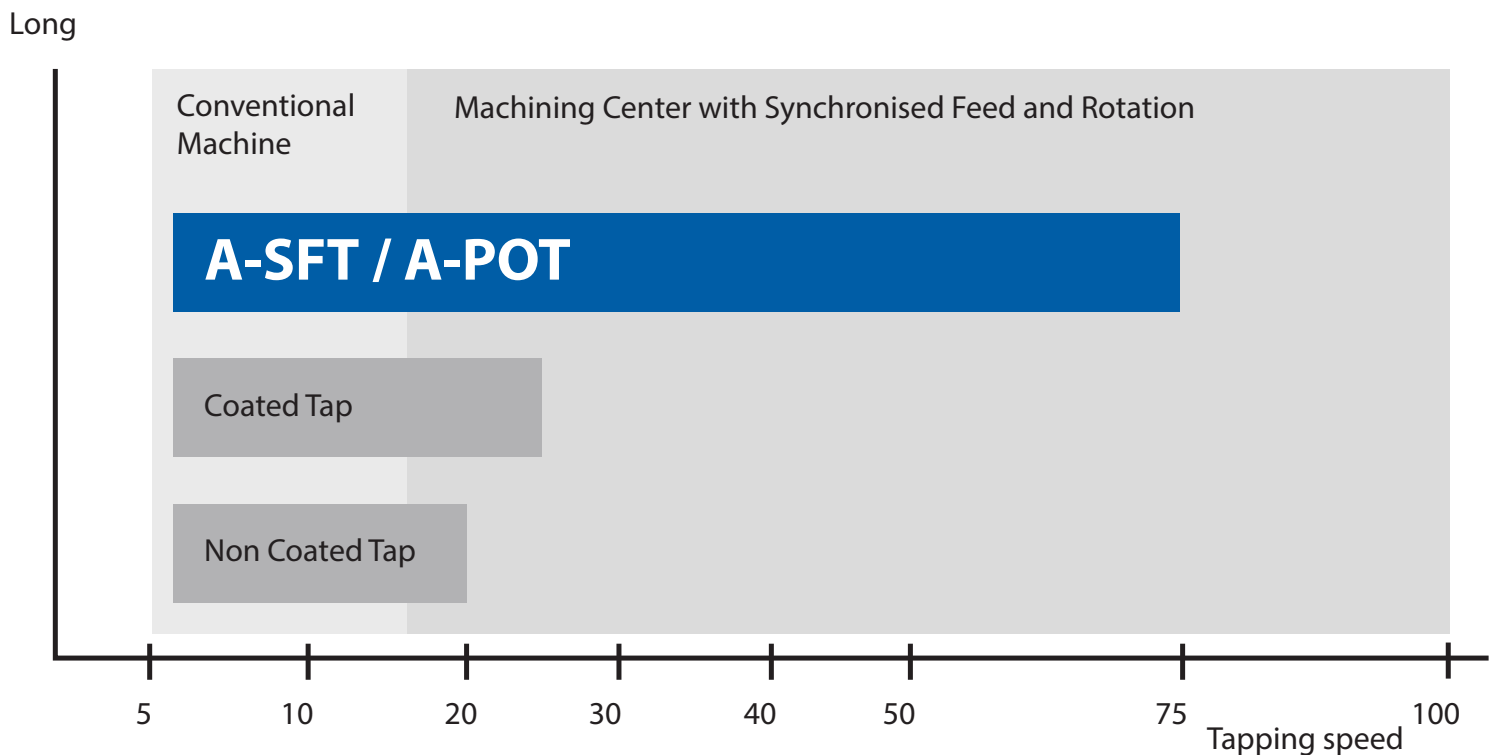
## 1 Applies to a wide variety of work materials

Even to mild steel and stainless steel



## 2 High performance in machining center

Applies to a wide cutting range



- It is a image of tapping in medium and high carbon steel with water soluble coolant.
- Machining center with synchronized feed and rotation is recommended for more than 15m/min.
- As the best speed varies by tapping condition, please find it by trials.

# Performance

## ■ SUS304

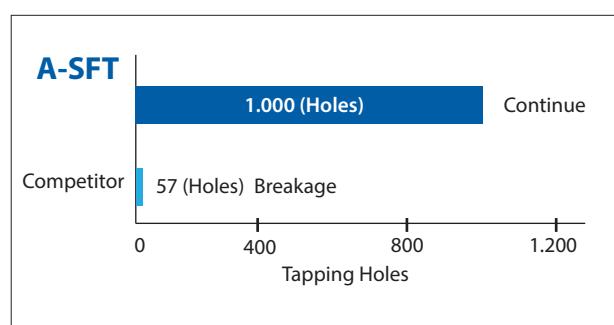
### Deep Hole Tapping (2D) in stainless steel

High performance achieved in stainless steel with water soluble oil



■ Cutting edge after 1.000 holes tapping

|                |  |
|----------------|--|
| Tool           | A-SFT M8x1,25                          |
| Work Material  | SUS304                                 |
| Hole Size      | Ø6,8x22mm (Blind)                      |
| Tapping Length | 16mm (2D)                              |
| Tapping Speed  | 10m/min (398min <sup>-1</sup> )        |
| Coolant        | Water Soluble Chlorine-Free (10%)      |
| Machine        | Vertical Synchronized Machining Center |

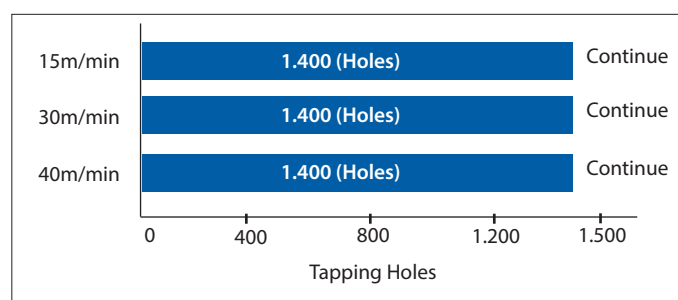


## ■ S45C

### High speed tapping by machining center

Tapping operation in 15,30,40m/min are all stable

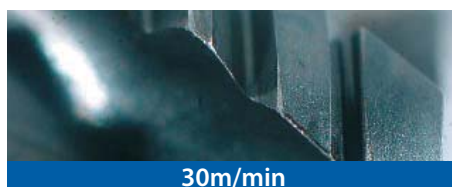
|                |  |
|----------------|--|
| Tool           | A-SFT M6x1                             |
| Work Material  | S45C                                   |
| Hole Size      | Ø5x16mm (Blind)                        |
| Tapping Length | 12mm (2D)                              |
| Coolant        | Water Soluble Chlorine-Free (10%)      |
| Machine        | Vertical Synchronized Machining Center |



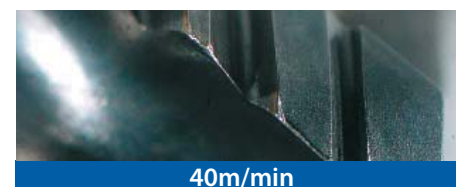
■ Cutting edge after 1.400 holes Tapping



15m/min

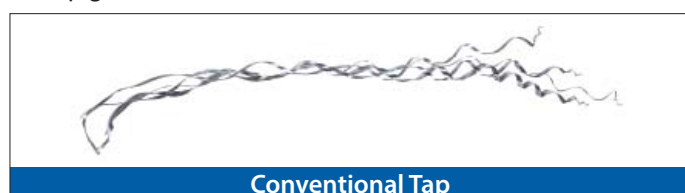


30m/min



40m/min

■ Chip generated in 40m/min



Conventional Tap



A-SFT

## Icons EN DE IT FR DA SV ES RU TR PL

### Material - Material - Materiale - Matière outil - Materiale - Material - Material - Обрабатываемый материал - Malzemesi - Material

|  |   |                                      |  |                             |                                     |   |                                  |   |   |  |
|--|---|--------------------------------------|--|-----------------------------|-------------------------------------|---|----------------------------------|---|---|--|
|  | Powder Metallurgy HSS (PM-T15) (Co5 + V5) | Pulvermetall HSS (PM-T15) (Co5 + V5) | Metallurgia delle polveri sinterizzate HSS | Métallurgie des poudres HSS | Pulvermetal HSS (PM-T15) (Co5 + V5) | PM: Pulver metall HSS (PM-T15) (Co5 + V5) | PM: HSS sinterizado HSS (PM-T15) | PM: порошок металлургия HSS (PM-T15) (Co5 + V5) | Toz Metalurjisi Metalurjisi HSS (XPM) (Co10+V5) | Metallurgia proszków HSS (PM-T15) (Co5 + V5) |
|--|---|--------------------------------------|--|-----------------------------|-------------------------------------|---|----------------------------------|---|---|--|

### Coating - Beschichtung - Rivestimento - Revêtement - Belægning - Belægning - Recubrimiento - Покрытие - Kaplama - Powłoka

|  |                         |                            |                            |                              |                           |                               |                               |                            |                           |                             |
|--|-------------------------|----------------------------|----------------------------|------------------------------|---------------------------|-------------------------------|-------------------------------|----------------------------|---------------------------|-----------------------------|
|  | Coating Tin             | Beschichtung TiN           | Rivestimento TiN           | Revêtement TiN               | TiN Belægning             | TiN: Belægning med TiN        | Recubrimiento TiN             | Покрытие TiN               | Tin Kaplama               | Powłoka TiN                 |
|  | Multilayer coating TiCN | Mehrlagenbeschichtung TiCN | Multistrato composito TiCN | Revêtement multicouches TiCN | Multilayer belægning TiCN | Multilayer belægning med TiCN | Recubrimiento TiCN, multicapa | многослойное покрытие TiCN | Çok katmanlı TiCN kaplama | Wielowarstwowa powłoka TiCN |
|  | Steam Oxide             | Dampfangelassen            | Trattamento al vapore      | Traitement vapeur            | Damp oxideret             | Ångoxiderad                   | Vaporizado                    | паровой оксид              | Oksidasyon                | Oksydowane                  |

### Helix Angle - Drillwinkel - Angolo d'elica - Angle d'hélice - Spiralvinkel - Spiral vinkel - Angulo de helice - Угол спирали - Helis açısı - Kąt spirali

|  |             |                    |                |                |              |               |                  |              |             |             |
|--|-------------|--------------------|----------------|----------------|--------------|---------------|------------------|--------------|-------------|-------------|
|  | Helix Angle | Helix Drill Winkel | Angolo d'elica | Angle d'hélice | Spiralvinkel | Spiral vinkel | Angulo de helice | Угол спирали | Helis açısı | Kąt spirali |
|--|-------------|--------------------|----------------|----------------|--------------|---------------|------------------|--------------|-------------|-------------|

### Tool tolerance - Werkzeugtoleranz - Tolleranza del diametro - Tolérance outil - Værktøjs tolerance - Verktøys tolerans - Tolerancia de herramienta - точность инструмента - Takim toleransı - Tolerancja narzędzia

|  |                |                  |                         |                 |                    |                   |                           |                      |                 |                      |
|--|----------------|------------------|-------------------------|-----------------|--------------------|-------------------|---------------------------|----------------------|-----------------|----------------------|
|  | Tool tolerance | Werkzeugtoleranz | Tolleranza del diametro | Tolérance outil | Værktøjs tolerance | Verktøys tolerans | Tolerancia de herramienta | точность инструмента | Takim toleransı | Tolerancja narzędzia |
|--|----------------|------------------|-------------------------|-----------------|--------------------|-------------------|---------------------------|----------------------|-----------------|----------------------|

### Chamfer lead - Schälanschnitt - Imbocco - Entrée gun - Styrefas - Fas ingång - Chaflán de entrada - заходная фаска - Ağzılama boyu - zwoja nakroju

|  |                        |                          |             |                |                         |                          |                              |                          |                         |                   |
|--|------------------------|--------------------------|-------------|----------------|-------------------------|--------------------------|------------------------------|--------------------------|-------------------------|-------------------|
|  | 1,5 pitch chamfer lead | 1,5 Gang, Anschnittlänge | 1,5 filetti | 1,5 Entrée gun | 1,5 x stigning på opløb | Fasingång 1,5 x stigning | Chaflán de entrada 1,5 pasos | заходная фаска 1,5 витка | Ağzılama boyu 1,5 hatve | 1,5 zwoja nakroju |
|  | 2,5 pitch chamfer lead | 2,5 Gang, Anschnittlänge | 2,5 filetti | 2,5 Entrée gun | 2,5 x stigning på opløb | Fasingång 2,5 x stigning | Chaflán de entrada 2,5 pasos | заходная фаска 2,5 витка | Ağzılama boyu 2,5 hatve | 2,5 zwoja nakroju |
|  | 4 pitch chamfer lead   | 4 Gang, Anschnittlänge   | 4 filetti   | 4 Entrée gun   | 4 x stigning på opløb   | Fasingång 4 x stigning   | Chaflán de entrada 4 pasos   | заходная фаска 4 витка   | Ağzılama boyu 4 hatve   | 4 zwoja nakroju   |

### Shank - Schaft - Gambo - Queue - Skaft - Skaft - Mango - Хвостовик - Şaft - Chwyt

|  |   |                            |  |  |   |   |  |   |  |  |
|--|---|----------------------------|--|--|---|---|--|---|--|--|
|  | Shank diameter tolerance                            | Schaftdurchmesser Toleranz | Tolleranza del diametro del gambo      | Tolérance du diamètre de queue                                       | Skaft diameter tolerance                        | Tolerans på skaft diameter                          | Tolerancia en diametro de mango                                    | точность диаметра хвостовика                      | Şaft çapı toleransı                                  | Tolerancja średnicy chwytu                                 |
|  | All shanks are suitable for Hypro Shrink Fit system | Zum Einschrumpfen geeignet | Adatto al sistema di serraggio a caldo | Toutes les queues des fraises sont adaptées pour le sys. de frettage | Alle OSG skafter passer til Hypro krympe system | Alla skaft kan användas till OSG Hypro-krymp system | Todos los mangos de metal duro OSG son aptos para fijación térmica | хвостовики пригодны для Hypro термической системы | Bütün şaftlar Hypro-Shrink Fit sistemi için uygundur | Wszystkie chwytysą odpowiednie dla systemu temokurczliwego |
|  | Straight shank                                      | Überlaufschafft            | Gambo passante                         | Queue cylindrique  | Lige skaft                                      | Rakt skaft  | Mango sencillo   | Прямой хвостовик                                  | Düz Şaft   | Chwyt walcowy  |
|  | Reinforced shank                                    | Verstärkter Schaft         | Gambo rinforzato                       | Queue renforcée  | Forstærket skaft                                | Förstärkt skaft                                     | Mango reforzado  | Усиленный хвостовик                               | Takviyeli şaft                                       | Chwyt wzmocniony   |

### Threading - Gewinde - Filettatura - Taraudage - Gevindskæring - Gängning - Roscado - Нарезка резьбы - Diş - Głębość gwintu

|  |                   |                      |                   |                        |                         |                     |                        |                        |                    |                            |
|--|-------------------|----------------------|-------------------|------------------------|-------------------------|---------------------|------------------------|------------------------|--------------------|----------------------------|
|  | For blind holes   | Für Sacklöcher       | Per fori ciechi   | Pour trous borgnes     | Til bundhuller          | För bottenhål       | Para agujeros ciegos   | для глухих отверстий   | Kör delikler için  | Do otworów nieprzelotowych |
|  | For through holes | Für Durchgangslöcher | Per fori passanti | Pour trous débouchants | Til gennemgående huller | För genomgående hål | Para agujeros pasantes | для сквозных отверстий | Açık delikler için | Do otworów przelotowych    |

### Internal cooling - Innere Kühlmittelzuführung - Con fori di lubrificazione centrali - Arosage central - Indvendig køling - Invändig spolning - Refrigeración interna - Внутреннее охлаждение - İçten soğutma - Chłodzenie wewnętrzne

|  |                 |                            |                                     |                 |                  |                   |                       |                       |               |                       |
|--|-----------------|----------------------------|-------------------------------------|-----------------|------------------|-------------------|-----------------------|-----------------------|---------------|-----------------------|
|  | Through Coolant | Innere Kühlmittelzuführung | Con fori di lubrificazione centrali | Arosage central | Indvendig køling | Invändig spolning | Refrigeración interna | внутреннее охлаждение | İçten soğutma | Chłodzenie wewnętrzne |
|--|-----------------|----------------------------|-------------------------------------|-----------------|------------------|-------------------|-----------------------|-----------------------|---------------|-----------------------|

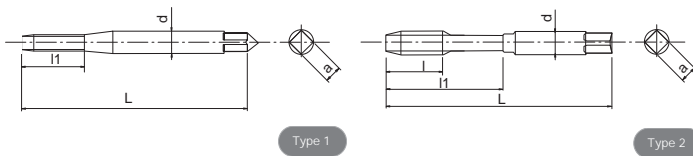
### Standard DIN - Standard DIN - Standard DIN - Standard DIN - Standard DIN - Standard DIN - Estándar DIN - Стандартное для DIN - Standart DIN - Standard DIN

|  |              |               |              |              |              |              |              |                     |               |              |
|--|--------------|---------------|--------------|--------------|--------------|--------------|--------------|---------------------|---------------|--------------|
|  | Standard DIN | Standard DIN  | Standard DIN | Standard DIN | Standard DIN | Standard DIN | Estándar DIN | Стандартное для DIN | Standart DIN  | Standard DIN |
|  | Weldon       | Weldon Schaft | Weldon       | Queue Weldon | Weldon skaft | Weldon       | Mango Weldon | для Weldon          | Weldon Şaftlı | Weldon       |

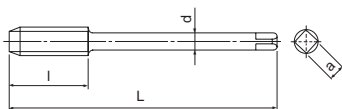
## Metric

Available in Jan. 2016

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel
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- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål
- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl
- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox
- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox
- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için
- High performance
- High speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål
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- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidables
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- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей сталях
- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych



|           | EDP      | M   | P    | L   | l   | l1 | d   | a   | ZΔ | Type | Price |
|-----------|----------|-----|------|-----|-----|----|-----|-----|----|------|-------|
| NEW SIZES | 48139115 | 1,4 | 0,3  | 40  | -   | 6  | 2,5 | 2,1 | 2  | 1    |       |
| NEW SIZES | 48139118 | 1,6 | 0,35 | 40  | -   | 7  | 2,5 | 2,1 | 2  | 1    |       |
| NEW SIZES | 48139119 | 1,7 | 0,35 | 40  | -   | 8  | 2,5 | 2,1 | 2  | 1    |       |
| NEW SIZES | 48139120 | 1,8 | 0,35 | 40  | -   | 8  | 2,5 | 2,1 | 2  | 1    |       |
| NEW SIZES | 48139125 | 2   | 0,4  | 45  | 3,2 | 10 | 2,8 | 2,1 | 2  | 2    |       |
| NEW SIZES | 48139127 | 2,2 | 0,45 | 45  | 3,6 | 11 | 2,8 | 2,1 | 2  | 2    |       |
| NEW SIZES | 48139128 | 2,3 | 0,4  | 45  | 3,6 | 12 | 2,8 | 2,1 | 2  | 2    |       |
| NEW SIZES | 48139133 | 2,5 | 0,45 | 50  | 3,6 | 13 | 2,8 | 2,1 | 2  | 2    |       |
| NEW SIZES | 48139136 | 2,6 | 0,45 | 50  | 3,6 | 13 | 2,8 | 2,1 | 2  | 2    |       |
| NEW SIZES | 48139138 | 3   | 0,5  | 56  | 4   | 18 | 3,5 | 2,7 | 3  | 2    |       |
| NEW SIZES | 48139142 | 3,5 | 0,6  | 56  | 4,8 | 20 | 4   | 3   | 3  | 2    |       |
| NEW SIZES | 48139144 | 4   | 0,7  | 63  | 5,6 | 21 | 4,5 | 3,4 | 3  | 2    |       |
| NEW SIZES | 48139147 | 4,5 | 0,75 | 70  | 6   | 25 | 6   | 4,9 | 3  | 2    |       |
| NEW SIZES | 48139149 | 5   | 0,8  | 70  | 6,4 | 25 | 6   | 4,9 | 3  | 2    |       |
| NEW SIZES | 48139152 | 5,5 | 0,9  | 80  | 7,2 | 30 | 6   | 4,9 | 3  | 2    |       |
| NEW SIZES | 48139155 | 6   | 1    | 80  | 8   | 30 | 6   | 4,9 | 3  | 2    |       |
| NEW SIZES | 48139158 | 7   | 1    | 80  | 8   | 30 | 7   | 5,5 | 3  | 2    |       |
| NEW SIZES | 48139161 | 8   | 1,25 | 90  | 10  | 35 | 8   | 6,2 | 3  | 2    |       |
| NEW SIZES | 48139165 | 9   | 1,25 | 90  | 10  | 35 | 9   | 7   | 3  | 2    |       |
| NEW SIZES | 48139169 | 10  | 1,5  | 100 | 12  | 39 | 10  | 8   | 3  | 2    |       |



|           | EDP      | M  | P    | L   | l   | d   | a    | ZΔ | Price |
|-----------|----------|----|------|-----|-----|-----|------|----|-------|
| NEW SIZES | 48139139 | 3  | 0,5  | 56  | 4   | 2,2 | -    | 3  |       |
| NEW SIZES | 48139185 | 4  | 0,7  | 63  | 5,6 | 2,8 | 2,1  | 3  |       |
| NEW SIZES | 48139150 | 5  | 0,8  | 70  | 6,4 | 3,5 | 2,7  | 3  |       |
| NEW SIZES | 48139187 | 6  | 1    | 80  | 8   | 4,5 | 3,4  | 3  |       |
| NEW SIZES | 48139159 | 7  | 1    | 80  | 8   | 5,5 | 4,3  | 3  |       |
| NEW SIZES | 48139188 | 8  | 1,25 | 90  | 10  | 6   | 4,9  | 3  |       |
| NEW SIZES | 48139166 | 9  | 1,25 | 90  | 10  | 7   | 5,5  | 3  |       |
| NEW SIZES | 48139189 | 10 | 1,5  | 100 | 12  | 7   | 5,5  | 3  |       |
| NEW SIZES | 48139175 | 11 | 1,5  | 100 | 12  | 8   | 6,2  | 3  |       |
| NEW SIZES | 48139179 | 12 | 1,75 | 110 | 14  | 9   | 7    | 3  |       |
| NEW SIZES | 48139191 | 14 | 2    | 110 | 16  | 11  | 9    | 3  |       |
| NEW SIZES | 48139202 | 16 | 2    | 110 | 16  | 12  | 9    | 3  |       |
| NEW SIZES | 48139214 | 18 | 2,5  | 125 | 25  | 14  | 11   | 4  |       |
| NEW SIZES | 48139228 | 20 | 2,5  | 140 | 25  | 16  | 12   | 4  |       |
| NEW SIZES | 48139238 | 22 | 2,5  | 140 | 25  | 18  | 14,5 | 4  |       |
| NEW SIZES | 48139247 | 24 | 3    | 160 | 30  | 18  | 14,5 | 4  |       |

ZΔ= Number of flutes - Anzahl Schneiden - Numero di denti - Nombre de lèvres - Liczba ostrzy -  
 Antal skær - Antal skär - Numero de ranuras - Число режущих кромок - Kanal sayısı

| Applications - Anwendungen - Applicazioni - Applications - Applikation - Applikation - Aplicaciones - Применение - Uygulama - Zastosowania |             |             |            |             |             |             |             |            |     |        |             |     |
|--|-------------|-------------|------------|-------------|-------------|-------------|-------------|------------|-----|--------|-------------|-----|
| C≤0.2%   | 0.25<C≤0.4% | C≥0.45%     | SCM        | 25~35 HRC   | 35~45 HRC   | 45~52 HRC   | 52~62 HRC   | SUS        | SKD | SC     | GG          | GGG |
| 15~60 m/min  | 15~60 m/min | 10~60 m/min | 8~30 m/min | 8~20 m/min  |             |             |             | 8~20 m/min |     |        |             |     |
| Cu   | BS          | BsC         | PB         | Al          | AC,ADC      | MC          | ZDC         | Ti         | Ni  | Plast. | Vinyl       |     |
| 15~35 m/min  |             | 15~30 m/min |            | 15~35 m/min | 15~35 m/min | 15~35 m/min | 15~35 m/min | 5~10 m/min |     |        | 15~20 m/min |     |

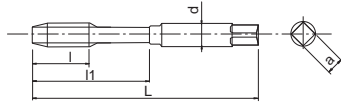
# A-OIL-SFT



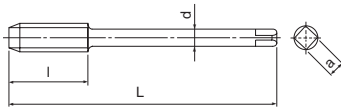
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Available in Aug. 2015



| EDP      | M  | P    | L   | l  | l1 | d  | a   | ZΔ | Price |
|----------|----|------|-----|----|----|----|-----|----|-------|
| 48140155 | 6  | 1    | 80  | 8  | 30 | 6  | 4,9 | 3  |       |
| 48140161 | 8  | 1,25 | 90  | 10 | 35 | 8  | 6,2 | 3  |       |
| 48140169 | 10 | 1,5  | 100 | 12 | 39 | 10 | 8   | 3  |       |



Blind Hole ■ Metric

| EDP                | M  | P    | L   | l  | d  | a    | ZΔ | Price |
|--------------------|----|------|-----|----|----|------|----|-------|
| 48140179           | 12 | 1,75 | 110 | 14 | 9  | 7    | 3  |       |
| 48140191           | 14 | 2    | 110 | 16 | 11 | 9    | 3  |       |
| 48140202           | 16 | 2    | 110 | 16 | 12 | 9    | 3  |       |
| 48140214           | 18 | 2,5  | 125 | 25 | 14 | 11   | 4  |       |
| 48140228           | 20 | 2,5  | 140 | 25 | 16 | 12   | 4  |       |
| 48140238           | 22 | 2,5  | 140 | 25 | 18 | 14,5 | 4  |       |
| 48140247           | 24 | 3    | 160 | 30 | 18 | 14,5 | 4  |       |
| NEW SIZES 48140262 | 27 | 3    | 160 | 36 | 20 | 16   | 4  |       |
| NEW SIZES 48140271 | 30 | 3,5  | 180 | 42 | 22 | 18   | 4  |       |
| NEW SIZES 48140281 | 33 | 3,5  | 180 | 42 | 25 | 20   | 4  |       |
| NEW SIZES 48140294 | 36 | 4    | 200 | 48 | 28 | 22   | 4  |       |
| NEW SIZES 48140304 | 39 | 4    | 200 | 48 | 32 | 24   | 4  |       |
| NEW SIZES 48140314 | 42 | 4,5  | 200 | 54 | 32 | 24   | 4  |       |
| NEW SIZES 48140319 | 45 | 4,5  | 220 | 54 | 36 | 29   | 4  |       |
| NEW SIZES 48140325 | 48 | 5    | 250 | 60 | 36 | 29   | 4  |       |
| NEW SIZES 48140337 | 52 | 5    | 250 | 60 | 40 | 32   | 4  |       |
| NEW SIZES 48140347 | 56 | 5,5  | 250 | 66 | 40 | 32   | 4  |       |

ZΔ= Number of flutes - Anzahl Schneiden - Numero di denti - Nombre de lèvres - Liczba ostrzy -  
 Antal skær - Antal skär - Numero de ranuras - Число режущих кромок - Kanal sayısı

| Applications - Anwendungen - Applicazioni - Applications - Applikation - Applikation - Aplicaciones - Применение - Uygulama - Zastosowania |             |             |            |             |             |             |             |            |     |        |             |     |
|--|-------------|-------------|------------|-------------|-------------|-------------|-------------|------------|-----|--------|-------------|-----|
| C≤0.2%   | 0.25<C≤0.4% | C≥0.45%     | SCM        | 25~35 HRC   | 35~45 HRC   | 45~52 HRC   | 52~62 HRC   | SUS        | SKD | SC     | GG          | GGG |
| 15~60 m/min  | 15~60 m/min | 10~60 m/min | 8~30 m/min | 8~20 m/min  |             |             |             | 8~20 m/min |     |        |             |     |
| Cu   | BS          | BsC         | PB         | Al          | AC,ADC      | MC          | ZDC         | Ti         | Ni  | Plast. | Vinyl       |     |
| 15~35 m/min  |             | 15~30 m/min |            | 15~35 m/min | 15~35 m/min | 15~35 m/min | 15~35 m/min | 5~10 m/min |     |        | 15~20 m/min |     |



# ■ A-SFT-6GX



## Metric

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel

- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl

- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox

- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox

- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için

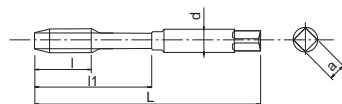
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål

- High performance
- För high speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål

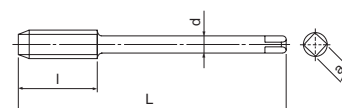
- Altas prestaciones
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidable

- Высокая производительность
- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей сталях

- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych



| EDP      | M   | P    | oversize | L   | l   | l1 | d   | a   | ZΔ | Price |
|----------|-----|------|----------|-----|-----|----|-----|-----|----|-------|
| 48201125 | 2   | 0,4  | +0,019   | 45  | 3,2 | 10 | 2,8 | 2,1 | 2  |       |
| 48201133 | 2,5 | 0,45 | +0,020   | 50  | 3,6 | 13 | 2,8 | 2,1 | 2  |       |
| 48201138 | 3   | 0,5  | +0,020   | 56  | 4   | 18 | 3,5 | 2,7 | 3  |       |
| 48201144 | 4   | 0,7  | +0,022   | 63  | 5,6 | 21 | 4,5 | 3,4 | 3  |       |
| 48201149 | 5   | 0,8  | +0,024   | 70  | 6,4 | 25 | 6   | 4,9 | 3  |       |
| 48201155 | 6   | 1    | +0,026   | 80  | 8   | 30 | 6   | 4,9 | 3  |       |
| 48201161 | 8   | 1,25 | +0,028   | 90  | 10  | 35 | 8   | 6,2 | 3  |       |
| 48201169 | 10  | 1,5  | +0,032   | 100 | 12  | 39 | 10  | 8   | 3  |       |



| EDP      | M  | P    | oversize | L   | l  | d  | a | ZΔ | Price |
|----------|----|------|----------|-----|----|----|---|----|-------|
| 48201179 | 12 | 1,75 | +0,034   | 110 | 14 | 9  | 7 | 3  |       |
| 48201202 | 16 | 2    | +0,038   | 110 | 16 | 12 | 9 | 3  |       |
|          |    |      |          |     |    |    |   |    |       |
|          |    |      |          |     |    |    |   |    |       |
|          |    |      |          |     |    |    |   |    |       |
|          |    |      |          |     |    |    |   |    |       |
|          |    |      |          |     |    |    |   |    |       |
|          |    |      |          |     |    |    |   |    |       |
|          |    |      |          |     |    |    |   |    |       |
|          |    |      |          |     |    |    |   |    |       |
|          |    |      |          |     |    |    |   |    |       |
|          |    |      |          |     |    |    |   |    |       |
|          |    |      |          |     |    |    |   |    |       |
|          |    |      |          |     |    |    |   |    |       |
|          |    |      |          |     |    |    |   |    |       |
|          |    |      |          |     |    |    |   |    |       |
|          |    |      |          |     |    |    |   |    |       |
|          |    |      |          |     |    |    |   |    |       |
|          |    |      |          |     |    |    |   |    |       |

ZΔ = Number of flutes - Anzahl Schneiden - Numero di denti - Nombre de lèvres - Liczba ostrzy - Antal skær - Antal skär - Numero de ranuras - Число режущих кромок - Kanal sayısı

| Applications - Anwendungen - Applicazioni - Applications - Applikation - Applikation - Aplicaciones - Применение - Uygulama - Zastosowania |                 |               |              |               |               |               |               |              |     |        |               |     |
|--|-----------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|-----|--------|---------------|-----|
| C ≤ 0.2%   | 0.25 < C ≤ 0.4% | C ≥ 0.45%     | SCM          | 25~35 HRC     | 35~45 HRC     | 45~52 HRC     | 52~62 HRC     | SUS          | SKD | SC     | GG            | GGG |
| ◎ 15~60 m/min  | ◎ 15~60 m/min   | ◎ 10~60 m/min | ◎ 8~30 m/min | ○ 8~20 m/min  |               |               |               | ◎ 8~20 m/min |     |        |               |     |
| Cu   | BS              | BsC           | PB           | Al            | AC,ADC        | MC            | ZDC           | Ti           | Ni  | Plast. | Vinyl         |     |
| ○ 15~35 m/min  |                 | ○ 15~30 m/min |              | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 5~10 m/min |     |        | ○ 15~20 m/min |     |

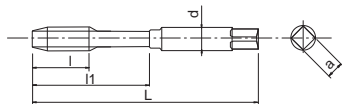
Blind Hole ■ Metric

# A-SFT-7GX

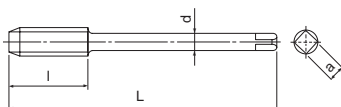


## Metric

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål
- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl
- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox
- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox
- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için
- High performance
- High speed
- gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål
- Altas prestaciones
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidables
- Высокая производительность
- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей сталях
- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych



| EDP      | M   | P    | oversize | L   | l   | l1 | d   | a   | ZΔ | Price |
|----------|-----|------|----------|-----|-----|----|-----|-----|----|-------|
| 48202125 | 2   | 0,4  | +0,038   | 45  | 3,2 | 10 | 2,8 | 2,1 | 2  |       |
| 48202133 | 2,5 | 0,45 | +0,040   | 50  | 3,6 | 13 | 2,8 | 2,1 | 2  |       |
| 48202138 | 3   | 0,5  | +0,040   | 56  | 4   | 18 | 3,5 | 2,7 | 3  |       |
| 48202144 | 4   | 0,7  | +0,044   | 63  | 5,6 | 21 | 4,5 | 3,4 | 3  |       |
| 48202149 | 5   | 0,8  | +0,048   | 70  | 6,4 | 25 | 6   | 4,9 | 3  |       |
| 48202155 | 6   | 1    | +0,052   | 80  | 8   | 30 | 6   | 4,9 | 3  |       |
| 48202161 | 8   | 1,25 | +0,056   | 90  | 10  | 35 | 8   | 6,2 | 3  |       |
| 48202169 | 10  | 1,5  | +0,064   | 100 | 12  | 39 | 10  | 8   | 3  |       |



| EDP      | M  | P    | oversize | L   | l  | d  | a | ZΔ | Price |
|----------|----|------|----------|-----|----|----|---|----|-------|
| 48202179 | 12 | 1,75 | +0,068   | 110 | 14 | 9  | 7 | 3  |       |
| 48202202 | 16 | 2    | +0,076   | 110 | 16 | 12 | 9 | 3  |       |

ZΔ= Number of flutes - Anzahl Schneiden - Numero di denti - Nombre de lèvres - Liczba ostrzy -  
 Antal skær - Antal skär - Numero de ranuras - Число режущих кромок - Kanal sayısı

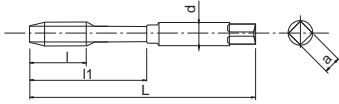
| Applications - Anwendungen - Applicazioni - Applications - Applikation - Applikation - Aplicaciones - Применение - Uygulama - Zastosowania |             |             |            |             |             |             |             |            |     |        |             |     |
|--|-------------|-------------|------------|-------------|-------------|-------------|-------------|------------|-----|--------|-------------|-----|
| C≤0.2%   | 0.25<C≤0.4% | C≥0.45%     | SCM        | 25~35 HRC   | 35~45 HRC   | 45~52 HRC   | 52~62 HRC   | SUS        | SKD | SC     | GG          | GGG |
| 15~60 m/min  | 15~60 m/min | 10~60 m/min | 8~30 m/min | 8~20 m/min  |             |             |             | 8~20 m/min |     |        |             |     |
| Cu   | BS          | BsC         | PB         | Al          | AC,ADC      | MC          | ZDC         | Ti         | Ni  | Plast. | Vinyl       |     |
| 15~35 m/min  |             | 15~30 m/min |            | 15~35 m/min | 15~35 m/min | 15~35 m/min | 15~35 m/min | 5~10 m/min |     |        | 15~20 m/min |     |

# A-SFT (FORM E)

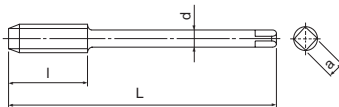


## Metric

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål
- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl
- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox
- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox
- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için
- High performance
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidable
- Высокая производительность
- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей сталях
- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych nierdzewnych



| EDP      | M  | P    | L   | l   | l1 | d   | a   | ZΔ | Price |
|----------|----|------|-----|-----|----|-----|-----|----|-------|
| 48203138 | 3  | 0,5  | 56  | 4   | 18 | 3,5 | 2,7 | 3  |       |
| 48203144 | 4  | 0,7  | 63  | 5,6 | 21 | 4,5 | 3,4 | 3  |       |
| 48203149 | 5  | 0,8  | 70  | 6,4 | 25 | 6   | 4,9 | 3  |       |
| 48203155 | 6  | 1    | 80  | 8   | 30 | 6   | 4,9 | 3  |       |
| 48203161 | 8  | 1,25 | 90  | 10  | 35 | 8   | 6,2 | 3  |       |
| 48203169 | 10 | 1,5  | 100 | 12  | 39 | 10  | 8   | 3  |       |



| EDP      | M  | P    | L   | l  | d  | a | ZΔ | Price |
|----------|----|------|-----|----|----|---|----|-------|
| 48203179 | 12 | 1,75 | 110 | 14 | 9  | 7 | 3  |       |
| 48203191 | 14 | 2    | 110 | 16 | 11 | 9 | 3  |       |
| 48203202 | 16 | 2    | 110 | 16 | 12 | 9 | 3  |       |

ZΔ= Number of flutes - Anzahl Schneiden - Numero di denti - Nombre de lèvres - Liczba ostrzy -  
 Antal skær - Antal skär - Numero de ranuras - Число режущих кромок - Kanal sayısı

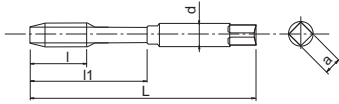
| Applications - Anwendungen - Applicazioni - Applications - Applikation - Applikation - Aplicaciones - Применение - Uygulama - Zastosowania |               |               |              |               |               |               |               |              |     |        |               |     |
|--|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|-----|--------|---------------|-----|
| C≤0.2%   | 0.25<C≤0.4%   | C≥0.45%       | SCM          | 25~35 HRC     | 35~45 HRC     | 45~52 HRC     | 52~62 HRC     | SUS          | SKD | SC     | GG            | GGG |
| ⊙ 15~60 m/min  | ⊙ 15~60 m/min | ⊙ 10~60 m/min | ⊙ 8~30 m/min | ○ 8~20 m/min  |               |               |               | ⊙ 8~20 m/min |     |        |               |     |
| Cu   | BS            | BsC           | PB           | Al            | AC,ADC        | MC            | ZDC           | Ti           | Ni  | Plast. | Vinyl         |     |
| ○ 15~35 m/min  |               | ○ 15~30 m/min |              | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 5~10 m/min |     |        | ○ 15~20 m/min |     |

# A-SFT+0.1

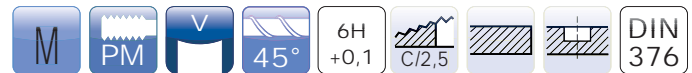
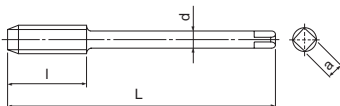


## Metric

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål
- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl
- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox
- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox
- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için
- High performance
- För hög speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål
- Altas prestaciones
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidable
- Высокая производительность
- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей сталях
- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych



| EDP      | M  | P    | L   | l   | l1 | d   | a   | ZΔ | Price |
|----------|----|------|-----|-----|----|-----|-----|----|-------|
| 48204138 | 3  | 0,5  | 56  | 4   | 18 | 3,5 | 2,7 | 3  |       |
| 48204144 | 4  | 0,7  | 63  | 5,6 | 21 | 4,5 | 3,4 | 3  |       |
| 48204149 | 5  | 0,8  | 70  | 6,4 | 25 | 6   | 4,9 | 3  |       |
| 48204155 | 6  | 1    | 80  | 8   | 30 | 6   | 4,9 | 3  |       |
| 48204161 | 8  | 1,25 | 90  | 10  | 35 | 8   | 6,2 | 3  |       |
| 48204169 | 10 | 1,5  | 100 | 12  | 39 | 10  | 8   | 3  |       |



| EDP      | M  | P    | L   | l  | d  | a | ZΔ | Price |
|----------|----|------|-----|----|----|---|----|-------|
| 48204179 | 12 | 1,75 | 110 | 14 | 9  | 7 | 3  |       |
| 48204202 | 16 | 2    | 110 | 16 | 12 | 9 | 3  |       |

ZΔ= Number of flutes - Anzahl Schneiden - Numero di denti - Nombre de lèvres - Liczba ostrzy -  
 Antal skær - Antal skär - Numero de ranuras - Число режущих кромок - Kanal sayısı

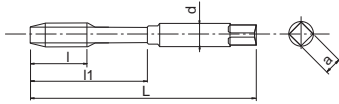
| Applications - Anwendungen - Applicazioni - Applications - Applikation - Applikation - Aplicaciones - Применение - Uygulama - Zastosowania |               |               |              |               |               |               |               |              |     |        |               |     |
|--|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|-----|--------|---------------|-----|
| C≤0.2%   | 0.25<C≤0.4%   | C≥0.45%       | SCM          | 25~35 HRC     | 35~45 HRC     | 45~52 HRC     | 52~62 HRC     | SUS          | SKD | SC     | GG            | GGG |
| ⊙ 15~60 m/min  | ⊙ 15~60 m/min | ⊙ 10~60 m/min | ⊙ 8~30 m/min | ○ 8~20 m/min  |               |               |               | ⊙ 8~20 m/min |     |        |               |     |
| Cu   | BS            | BsC           | PB           | Al            | AC,ADC        | MC            | ZDC           | Ti           | Ni  | Plast. | Vinyl         |     |
| ○ 15~35 m/min  |               | ○ 15~30 m/min |              | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 5~10 m/min |     |        | ○ 15~20 m/min |     |

# A-LT-SFT

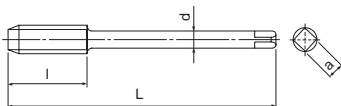


## Metric

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel
- Long shank
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål
- Langt skaft
- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl
- Langt Schaft
- High performance
- For high speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål
- Långt skaft
- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox
- Gambo lungo
- Altas prestaciones
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidables
- Mango larga
- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox
- Queue longue
- Высокая производительность
- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей сталях
- Длинный хвостовик
- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için
- Uzun shaft
- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych
- Długi chwyt



| EDP      | M   | P    | L   | l   | l1 | d   | a   | ZΔ | Price |
|----------|-----|------|-----|-----|----|-----|-----|----|-------|
| 48208125 | 2   | 0,4  | 80  | 3,2 | 10 | 2,8 | 2,1 | 2  |       |
| 48208133 | 2,5 | 0,45 | 100 | 3,6 | 13 | 2,8 | 2,1 | 2  |       |
| 48208138 | 3   | 0,5  | 100 | 4   | 18 | 3,5 | 2,7 | 3  |       |
| 48208144 | 4   | 0,7  | 125 | 5,6 | 21 | 4,5 | 3,4 | 3  |       |
| 48208149 | 5   | 0,8  | 160 | 6,4 | 25 | 6   | 4,9 | 3  |       |
| 48208155 | 6   | 1    | 160 | 8   | 30 | 6   | 4,9 | 3  |       |
| 48208161 | 8   | 1,25 | 180 | 10  | 35 | 8   | 6,2 | 3  |       |
| 48208169 | 10  | 1,5  | 200 | 12  | 39 | 10  | 8   | 3  |       |



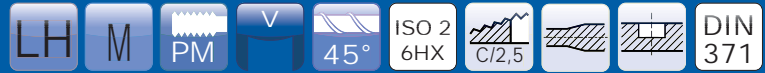
| EDP      | M  | P    | L   | l  | d   | a   | ZΔ | Price |
|----------|----|------|-----|----|-----|-----|----|-------|
| 48209155 | 6  | 1    | 160 | 10 | 4,5 | 3,4 | 3  |       |
| 48209161 | 8  | 1,25 | 180 | 11 | 6   | 4,9 | 3  |       |
| 48209169 | 10 | 1,5  | 200 | 14 | 7   | 5,5 | 3  |       |
| 48209179 | 12 | 1,75 | 200 | 14 | 9   | 7   | 3  |       |
| 48209191 | 14 | 2    | 200 | 16 | 11  | 9   | 3  |       |
| 48209202 | 16 | 2    | 200 | 16 | 12  | 9   | 3  |       |
| 48209214 | 18 | 2,5  | 200 | 25 | 14  | 11  | 4  |       |
| 48209228 | 20 | 2,5  | 200 | 25 | 16  | 12  | 4  |       |

ZΔ= Number of flutes - Anzahl Schneiden - Numero di denti - Nombre de lèvres - Liczba ostrzy -  
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|--|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|-----|--------|---------------|-----|
| C≤0.2%   | 0.25<C≤0.4%   | C≥0.45%       | SCM          | 25~35 HRC     | 35~45 HRC     | 45~52 HRC     | 52~62 HRC     | SUS          | SKD | SC     | GG            | GGG |
| ⊙ 15~60 m/min  | ⊙ 15~60 m/min | ⊙ 10~60 m/min | ⊙ 8~30 m/min | ○ 8~20 m/min  |               |               |               | ⊙ 8~20 m/min |     |        |               |     |
| Cu   | BS            | BsC           | PB           | Al            | AC,ADC        | MC            | ZDC           | Ti           | Ni  | Plast. | Vinyl         |     |
| ○ 15~35 m/min  |               | ○ 15~30 m/min |              | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 5~10 m/min |     |        | ○ 15~20 m/min |     |



# A-SFT-LH



## Metric

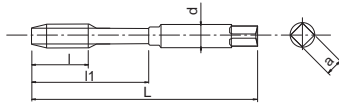
- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel
- Left hand
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål
- venstre

- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl
- Links
- High performance
- För high speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål
- vänster skärande

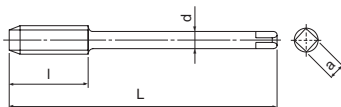
- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox
- Sinistri
- Altas prestaciones
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidables
- Mano izquierda

- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox
- Coupe à gauche
- Высокая производительность
- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей стаях
- левая

- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için
- Sol Helis
- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych
- lewa ręka



| NEW | EDP      | M  | P    | L   | l   | l1 | d   | a   | ZΔ | Price |
|-----|----------|----|------|-----|-----|----|-----|-----|----|-------|
|     | 48217138 | 3  | 0,5  | 56  | 4   | 18 | 3,5 | 2,7 | 3  |       |
|     | 48217144 | 4  | 0,7  | 63  | 5,6 | 21 | 4,5 | 3,4 | 3  |       |
|     | 48217149 | 5  | 0,8  | 70  | 6,4 | 25 | 6   | 4,9 | 3  |       |
|     | 48217155 | 6  | 1    | 80  | 8   | 30 | 6   | 4,9 | 3  |       |
|     | 48217161 | 8  | 1,25 | 90  | 10  | 35 | 8   | 6,2 | 3  |       |
|     | 48217169 | 10 | 1,5  | 100 | 12  | 39 | 10  | 8   | 3  |       |



| NEW | EDP      | M  | P    | L   | l  | d  | a    | ZΔ | Price |
|-----|----------|----|------|-----|----|----|------|----|-------|
|     | 48217179 | 12 | 1,75 | 110 | 14 | 9  | 7    | 3  |       |
|     | 48217191 | 14 | 2    | 110 | 16 | 11 | 9    | 3  |       |
|     | 48217202 | 16 | 2    | 110 | 16 | 12 | 9    | 3  |       |
|     | 48217214 | 18 | 2,5  | 125 | 25 | 14 | 11   | 4  |       |
|     | 48217228 | 20 | 2,5  | 140 | 25 | 16 | 12   | 4  |       |
|     | 48217238 | 22 | 2,5  | 140 | 25 | 18 | 14,5 | 4  |       |
|     | 48217247 | 24 | 3    | 160 | 30 | 18 | 14,5 | 4  |       |

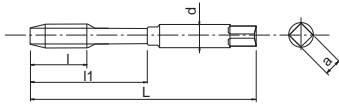
ZΔ= Number of flutes - Anzahl Schneiden - Numero di denti - Nombre de lèvres - Liczba ostrzy -  
 Antal skær - Antal skär - Numero de ranuras - Число режущих кромок - Kanal sayısı

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|--|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|-----|--------|---------------|-----|
| C≤0.2%   | 0.25<C≤0.4%   | C≥0.45%       | SCM          | 25~35 HRC     | 35~45 HRC     | 45~52 HRC     | 52~62 HRC     | SUS          | SKD | SC     | GG            | GGG |
| ⊙ 15~60 m/min  | ⊙ 15~60 m/min | ⊙ 10~60 m/min | ⊙ 8~30 m/min | ○ 8~20 m/min  |               |               |               | ⊙ 8~20 m/min |     |        |               |     |
| Cu   | BS            | BsC           | PB           | Al            | AC,ADC        | MC            | ZDC           | Ti           | Ni  | Plast. | Vinyl         |     |
| ○ 15~35 m/min  |               | ○ 15~30 m/min |              | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 5~10 m/min |     |        | ○ 15~20 m/min |     |

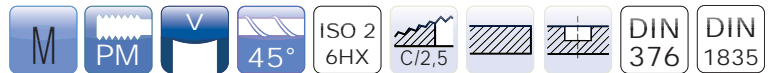
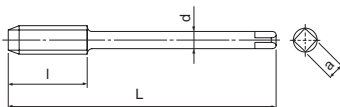
## Metric

Available in Jan. 2016

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel
- Weldon
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål
- Weldon skaft
- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl
- Weldon Schaft
- High performance
- För high speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål
- Weldon
- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox
- Weldon
- Altas prestaciones
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidables
- Mango Weldon
- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox
- Queue Weldon
- Высокая производительность
- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей стальных
- для Weldon
- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için
- Weldon şaftlı
- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych
- Weldon



| NEW | EDP      | M  | P    | L   | l   | l1 | d  | a   | ZΔ | Price |
|-----|----------|----|------|-----|-----|----|----|-----|----|-------|
|     | 48220138 | 3  | 0,5  | 56  | 4   | 18 | 6  | 4,9 | 3  |       |
|     | 48220144 | 4  | 0,7  | 63  | 5,6 | 21 | 6  | 4,9 | 3  |       |
|     | 48220149 | 5  | 0,8  | 70  | 6,4 | 25 | 6  | 4,9 | 3  |       |
|     | 48220155 | 6  | 1    | 80  | 8   | 30 | 6  | 4,9 | 3  |       |
|     | 48220161 | 8  | 1,25 | 90  | 10  | 35 | 8  | 6,2 | 3  |       |
|     | 48220169 | 10 | 1,5  | 100 | 12  | 39 | 10 | 8   | 3  |       |



| NEW | EDP      | M  | P    | L   | l  | d  | a  | ZΔ | Price |
|-----|----------|----|------|-----|----|----|----|----|-------|
|     | 48220179 | 12 | 1,75 | 110 | 17 | 12 | 9  | 3  |       |
|     | 48220191 | 14 | 2    | 110 | 20 | 14 | 11 | 3  |       |
|     | 48220202 | 16 | 2    | 110 | 20 | 16 | 12 | 3  |       |

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|--|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|-----|--------|---------------|-----|
| C≤0.2%   | 0.25<C≤0.4%   | C≥0.45%       | SCM          | 25~35 HRC     | 35~45 HRC     | 45~52 HRC     | 52~62 HRC     | SUS          | SKD | SC     | GG            | GGG |
| ⊙ 15~60 m/min  | ⊙ 15~60 m/min | ⊙ 10~60 m/min | ⊙ 8~30 m/min | ○ 8~20 m/min  |               |               |               | ⊙ 8~20 m/min |     |        |               |     |
| Cu   | BS            | BsC           | PB           | Al            | AC,ADC        | MC            | ZDC           | Ti           | Ni  | Plast. | Vinyl         |     |
| ○ 15~35 m/min  |               | ○ 15~30 m/min |              | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 5~10 m/min |     |        | ○ 15~20 m/min |     |

## Metric Fine

Available in Jan. 2016

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel

- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl

- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox

- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox

- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için

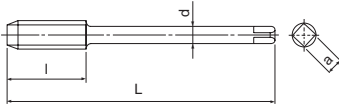
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål

- High performance
- Für high speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål

- Altas prestaciones
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidables

- Высокая производительность
- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей сталях

- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych



Blind Hole ■ Metric Fine

|           | EDP      | MF | P    | L   | l  | d   | a    | ZΔ | Price |
|-----------|----------|----|------|-----|----|-----|------|----|-------|
| NEW SIZES | 48139156 | 6  | 0,75 | 80  | 8  | 4,5 | 3,4  | 3  |       |
|           | 48139157 | 6  | 0,5  | 80  | 8  | 4,5 | 3,4  | 3  |       |
|           | 48139162 | 8  | 1    | 90  | 10 | 6   | 4,9  | 3  |       |
| NEW SIZES | 48139163 | 8  | 0,75 | 80  | 8  | 6   | 4,9  | 3  |       |
|           | 48139167 | 9  | 1    | 90  | 10 | 7   | 5,5  | 3  |       |
|           | 48139170 | 10 | 1,25 | 100 | 12 | 7   | 5,5  | 3  |       |
|           | 48139171 | 10 | 1    | 90  | 10 | 7   | 5,5  | 3  |       |
| NEW SIZES | 48139172 | 10 | 0,75 | 90  | 10 | 7   | 5,5  | 3  |       |
|           | 48139176 | 11 | 1    | 90  | 12 | 8   | 6,2  | 3  |       |
|           | 48139180 | 12 | 1,5  | 100 | 14 | 9   | 7    | 3  |       |
|           | 48139181 | 12 | 1,25 | 100 | 12 | 9   | 7    | 3  |       |
|           | 48139182 | 12 | 1    | 100 | 12 | 9   | 7    | 3  |       |
|           | 48139192 | 14 | 1,5  | 100 | 16 | 11  | 9    | 3  |       |
| NEW SIZES | 48139193 | 14 | 1,25 | 100 | 16 | 11  | 9    | 3  |       |
|           | 48139194 | 14 | 1    | 100 | 16 | 11  | 9    | 3  |       |
| NEW SIZES | 48139203 | 16 | 1,5  | 100 | 16 | 12  | 9    | 3  |       |
|           | 48139204 | 16 | 1    | 100 | 16 | 12  | 9    | 3  |       |
| NEW SIZES | 48139216 | 18 | 1,5  | 110 | 16 | 14  | 11   | 4  |       |
|           | 48139218 | 18 | 1    | 110 | 16 | 14  | 11   | 4  |       |
| NEW SIZES | 48139220 | 20 | 2    | 140 | 25 | 16  | 12   | 4  |       |
|           | 48139230 | 20 | 1,5  | 125 | 16 | 16  | 12   | 4  |       |
| NEW SIZES | 48139232 | 20 | 1    | 125 | 16 | 16  | 12   | 4  |       |
|           | 48139239 | 22 | 2    | 140 | 25 | 18  | 14,5 | 4  |       |
| NEW SIZES | 48139240 | 22 | 1,5  | 125 | 16 | 18  | 14,5 | 4  |       |
|           | 48139241 | 22 | 1    | 125 | 16 | 18  | 14,5 | 4  |       |
| NEW SIZES | 48139249 | 24 | 2    | 140 | 30 | 18  | 14,5 | 4  |       |
|           | 48139250 | 24 | 1,5  | 140 | 16 | 18  | 14,5 | 4  |       |
| NEW SIZES | 48139251 | 24 | 1    | 140 | 16 | 18  | 14,5 | 4  |       |

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|--|-----------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|-----|--------|---------------|-----|
| C ≤ 0.2%   | 0.25 < C ≤ 0.4% | C ≥ 0.45%     | SCM          | 25~35 HRC     | 35~45 HRC     | 45~52 HRC     | 52~62 HRC     | SUS          | SKD | SC     | GG            | GGG |
| ⊙ 15~60 m/min  | ⊙ 15~60 m/min   | ⊙ 10~60 m/min | ⊙ 8~30 m/min | ○ 8~20 m/min  |               |               |               | ⊙ 8~20 m/min |     |        |               |     |
| Cu   | BS              | BsC           | PB           | Al            | AC,ADC        | MC            | ZDC           | Ti           | Ni  | Plast. | Vinyl         |     |
| ○ 15~35 m/min  |                 | ○ 15~30 m/min |              | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 5~10 m/min |     |        | ○ 15~20 m/min |     |

## UNC/UNJC

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel

- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl

- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox

- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox

- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için

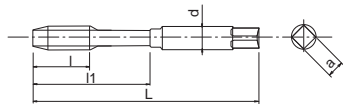
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål

- High performance
- För high speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål

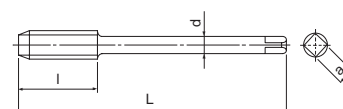
- Altas prestaciones
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidable

- Высокая производительность
- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей сталей

- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych



|           | EDP      | UNC  | P  | L   | l    | l1 | d   | a   | ZΔ | Price |
|-----------|----------|------|----|-----|------|----|-----|-----|----|-------|
| NEW SIZES | 48139453 | 2    | 56 | 45  | 3,6  | 11 | 2,8 | 2,1 | 2  |       |
| NEW SIZES | 48139455 | 3    | 48 | 50  | 3,6  | 13 | 2,8 | 2,1 | 2  |       |
|           | 48139457 | 4    | 40 | 56  | 5,1  | 18 | 3,5 | 2,7 | 2  |       |
|           | 48139459 | 5    | 40 | 56  | 5,1  | 18 | 3,5 | 2,7 | 2  |       |
|           | 48139461 | 6    | 32 | 56  | 6,4  | 20 | 4   | 3   | 2  |       |
|           | 48139464 | 8    | 32 | 63  | 6,4  | 21 | 4,5 | 3,4 | 2  |       |
|           | 48139466 | 10   | 24 | 70  | 8,5  | 25 | 6   | 4,9 | 2  |       |
| NEW SIZES | 48139468 | 12   | 24 | 80  | 8,5  | 30 | 6   | 4,9 | 2  |       |
|           | 48139471 | 1/4  | 20 | 80  | 10,2 | 30 | 7   | 5,5 | 2  |       |
|           | 48139474 | 5/16 | 18 | 90  | 11,3 | 35 | 8   | 6,2 | 3  |       |
|           | 48139479 | 3/8  | 16 | 100 | 12,7 | 39 | 10  | 8   | 3  |       |



|           | EDP      | UNC  | P  | L   | l    | d  | a    | ZΔ | Price |
|-----------|----------|------|----|-----|------|----|------|----|-------|
|           | 48139484 | 7/16 | 14 | 100 | 14,5 | 8  | 6,2  | 3  |       |
|           | 48139489 | 1/2  | 13 | 110 | 15,6 | 9  | 7    | 3  |       |
| NEW SIZES | 48139494 | 9/16 | 12 | 110 | 16,9 | 11 | 9    | 3  |       |
|           | 48139501 | 5/8  | 11 | 110 | 18,5 | 12 | 9    | 3  |       |
|           | 48139515 | 3/4  | 10 | 125 | 25,4 | 14 | 11   | 4  |       |
|           | 48139526 | 7/8  | 9  | 140 | 28,2 | 18 | 14,5 | 4  |       |
|           | 48139538 | 1    | 8  | 160 | 31,8 | 18 | 14,5 | 4  |       |

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|--|-----------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|-----|--------|---------------|-----|
| C ≤ 0.2%   | 0.25 < C ≤ 0.4% | C ≥ 0.45%     | SCM          | 25~35 HRC     | 35~45 HRC     | 45~52 HRC     | 52~62 HRC     | SUS          | SKD | SC     | GG            | GGG |
| ⊙ 15~60 m/min  | ⊙ 15~60 m/min   | ⊙ 10~60 m/min | ⊙ 8~30 m/min | ○ 8~20 m/min  |               |               |               | ⊙ 8~20 m/min |     |        |               |     |
| Cu   | BS              | BsC           | PB           | Al            | AC, ADC       | MC            | ZDC           | Ti           | Ni  | Plast. | Vinyl         |     |
| ○ 15~35 m/min  |                 | ○ 15~30 m/min |              | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 5~10 m/min |     |        | ○ 15~20 m/min |     |

## UNF/UNJF

Available in Jan. 2016

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel

- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl

- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox

- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox

- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için

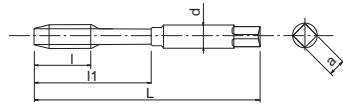
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål

- High performance
- För high speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål

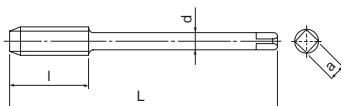
- Altas prestaciones
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidables

- Высокая производительность
- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей сталях

- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych



|           | EDP      | UNF  | P  | L  | l    | l1 | d   | a   | ZΔ | Price |
|-----------|----------|------|----|----|------|----|-----|-----|----|-------|
| NEW SIZES | 48139454 | 2    | 64 | 45 | 3,6  | 11 | 2,8 | 2,1 | 2  |       |
| NEW SIZES | 48139456 | 3    | 56 | 50 | 3,6  | 13 | 2,8 | 2,1 | 2  |       |
| NEW SIZES | 48139458 | 4    | 48 | 56 | 5,1  | 18 | 3,5 | 2,7 | 2  |       |
| NEW SIZES | 48139460 | 5    | 44 | 56 | 5,1  | 18 | 3,5 | 2,7 | 2  |       |
|           | 48139462 | 6    | 40 | 56 | 6,4  | 20 | 4   | 3   | 2  |       |
| NEW SIZES | 48139465 | 8    | 36 | 63 | 6,4  | 21 | 4,5 | 3,4 | 2  |       |
|           | 48139467 | 10   | 32 | 70 | 8,5  | 25 | 6   | 4,9 | 2  |       |
| NEW SIZES | 48139469 | 12   | 28 | 80 | 8,5  | 30 | 6   | 4,9 | 2  |       |
|           | 48139472 | 1/4  | 28 | 80 | 10,2 | 30 | 7   | 5,5 | 2  |       |
|           | 48139476 | 5/16 | 24 | 90 | 11,3 | 35 | 8   | 6,2 | 3  |       |
|           | 48139481 | 3/8  | 24 | 90 | 12,7 | 35 | 10  | 8   | 3  |       |



|           | EDP      | UNF  | P  | L   | l    | d  | a    | ZΔ | Price |
|-----------|----------|------|----|-----|------|----|------|----|-------|
|           | 48139486 | 7/16 | 20 | 100 | 14,5 | 8  | 6,2  | 3  |       |
|           | 48139491 | 1/2  | 20 | 100 | 15,6 | 9  | 7    | 3  |       |
| NEW SIZES | 48139496 | 9/16 | 18 | 100 | 16,9 | 11 | 9    | 3  |       |
|           | 48139504 | 5/8  | 18 | 100 | 18,5 | 12 | 9    | 3  |       |
|           | 48139517 | 3/4  | 16 | 110 | 25,4 | 14 | 11   | 4  |       |
|           | 48139528 | 7/8  | 14 | 125 | 28,2 | 18 | 14,5 | 4  |       |
|           | 48139539 | 1    | 12 | 140 | 31,8 | 18 | 14,5 | 4  |       |

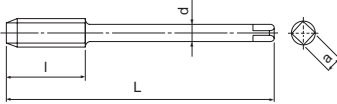
ZΔ= Number of flutes - Anzahl Schneiden - Numero di denti - Nombre de lèvres - Liczba ostrzy -  
Antal skær - Antal skär - Numero de ranuras - Число режущих кромок - Kanal sayısı

| Applications - Anwendungen - Applicazioni - Applications - Applikation - Applikation - Aplicaciones - Применение - Uygulama - Zastosowania |               |               |              |               |               |               |               |              |     |        |               |     |
|--|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|-----|--------|---------------|-----|
| C≤0.2%   | 0.25<C≤0.4%   | C≥0.45%       | SCM          | 25~35 HRC     | 35~45 HRC     | 45~52 HRC     | 52~62 HRC     | SUS          | SKD | SC     | GG            | GGG |
| ⊙ 15~60 m/min  | ⊙ 15~60 m/min | ⊙ 10~60 m/min | ⊙ 8~30 m/min | ○ 8~20 m/min  |               |               |               | ⊙ 8~20 m/min |     |        |               |     |
| Cu   | BS            | BsC           | PB           | Al            | AC,ADC        | MC            | ZDC           | Ti           | Ni  | Plast. | Vinyl         |     |
| ○ 15~35 m/min  |               | ○ 15~30 m/min |              | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 5~10 m/min |     |        | ○ 15~20 m/min |     |



## G (BSP)

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål
- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl
- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox
- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox
- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için
- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål
- Alta prestaciones
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidable
- Высокая производительность
- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей сталях
- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych



| EDP      | G   | P  | L   | l  | d  | a    | ZΔ | Price |
|----------|-----|----|-----|----|----|------|----|-------|
| 48139900 | 1/8 | 28 | 90  | 20 | 7  | 5,5  | 3  |       |
| 48139000 | 1/4 | 19 | 100 | 22 | 11 | 9    | 3  |       |
| 48139100 | 3/8 | 19 | 100 | 22 | 12 | 9    | 4  |       |
| 48139200 | 1/2 | 14 | 125 | 25 | 16 | 12   | 4  |       |
| 48139300 | 5/8 | 14 | 125 | 25 | 18 | 14,5 | 4  |       |
| 48139400 | 3/4 | 14 | 140 | 28 | 20 | 16   | 4  |       |
| 48139500 | 7/8 | 14 | 150 | 28 | 22 | 18   | 4  |       |
| 48139600 | 1   | 11 | 160 | 30 | 25 | 20   | 4  |       |

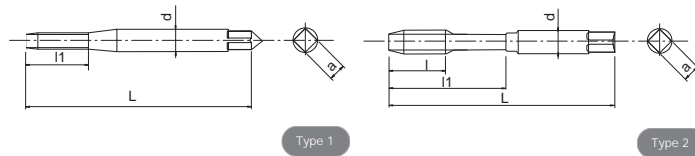
ZΔ= Number of flutes - Anzahl Schneiden - Numero di denti - Nombre de lèvres - Liczba ostrzy -  
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|--|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|-----|--------|---------------|-----|
| C≤0.2%   | 0.25<C≤0.4%   | C≥0.45%       | SCM          | 25~35 HRC     | 35~45 HRC     | 45~52 HRC     | 52~62 HRC     | SUS          | SKD | SC     | GG            | GGG |
| ⊙ 15~60 m/min  | ⊙ 15~60 m/min | ⊙ 10~60 m/min | ⊙ 8~30 m/min | ○ 8~20 m/min  |               |               |               | ⊙ 8~20 m/min |     |        |               |     |
| Cu   | BS            | BsC           | PB           | Al            | AC,ADC        | MC            | ZDC           | Ti           | Ni  | Plast. | Vinyl         |     |
| ○ 15~35 m/min  |               | ○ 15~30 m/min |              | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 5~10 m/min |     |        | ○ 15~20 m/min |     |

## Metric

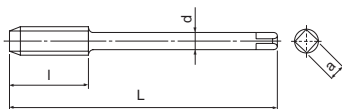
Available in Jan. 2016

- High performance
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- High performance
- För hög speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål
- Altas prestaciones
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidables
- Высокая производительность
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- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych



|           | EDP      | M   | P    | L   | l  | l1 | d   | a   | ZΔ | Type | Price |
|-----------|----------|-----|------|-----|----|----|-----|-----|----|------|-------|
| NEW SIZES | 48145115 | 1,4 | 0,3  | 40  | -  | 7  | 2,5 | 2,1 | 2  | 1    |       |
| NEW SIZES | 48145118 | 1,6 | 0,35 | 40  | -  | 8  | 2,5 | 2,1 | 2  | 1    |       |
| NEW SIZES | 48145119 | 1,7 | 0,35 | 40  | -  | 8  | 2,5 | 2,1 | 2  | 1    |       |
| NEW SIZES | 48145120 | 1,8 | 0,35 | 40  | -  | 8  | 2,5 | 2,1 | 2  | 1    |       |
| NEW SIZES | 48145125 | 2   | 0,4  | 45  | -  | 8  | 2,8 | 2,1 | 2  | 1    |       |
| NEW SIZES | 48145127 | 2,2 | 0,45 | 45  | -  | 9  | 2,8 | 2,1 | 2  | 1    |       |
| NEW SIZES | 48145128 | 2,3 | 0,4  | 45  | -  | 9  | 2,8 | 2,1 | 2  | 1    |       |
| NEW SIZES | 48145133 | 2,5 | 0,45 | 50  | -  | 9  | 2,8 | 2,1 | 2  | 1    |       |
| NEW SIZES | 48145136 | 2,6 | 0,45 | 50  | -  | 9  | 2,8 | 2,1 | 2  | 1    |       |
| NEW SIZES | 48145138 | 3   | 0,5  | 56  | 11 | 18 | 3,5 | 2,7 | 3  | 2    |       |
| NEW SIZES | 48145142 | 3,5 | 0,6  | 56  | 12 | 20 | 4   | 3   | 3  | 2    |       |
| NEW SIZES | 48145144 | 4   | 0,7  | 63  | 13 | 21 | 4,5 | 3,4 | 3  | 2    |       |
| NEW SIZES | 48145147 | 4,5 | 0,75 | 70  | 16 | 25 | 6   | 4,9 | 3  | 2    |       |
| NEW SIZES | 48145149 | 5   | 0,8  | 70  | 16 | 25 | 6   | 4,9 | 3  | 2    |       |
| NEW SIZES | 48145152 | 5,5 | 0,9  | 80  | 17 | 30 | 6   | 4,9 | 3  | 2    |       |
| NEW SIZES | 48145155 | 6   | 1    | 80  | 19 | 30 | 6   | 4,9 | 3  | 2    |       |
| NEW SIZES | 48145158 | 7   | 1    | 80  | 19 | 30 | 7   | 5,5 | 3  | 2    |       |
| NEW SIZES | 48145161 | 8   | 1,25 | 90  | 22 | 35 | 8   | 6,2 | 3  | 2    |       |
| NEW SIZES | 48145165 | 9   | 1,25 | 90  | 22 | 35 | 9   | 7   | 3  | 2    |       |
| NEW SIZES | 48145169 | 10  | 1,5  | 100 | 24 | 39 | 10  | 8   | 3  | 2    |       |

Through Hole ■ Metric



|           | EDP      | M  | P    | L   | l  | d   | a    | ZΔ | Price |
|-----------|----------|----|------|-----|----|-----|------|----|-------|
| NEW SIZES | 48145139 | 3  | 0,5  | 56  | 11 | 2,2 | -    | 3  |       |
| NEW SIZES | 48145185 | 4  | 0,7  | 63  | 13 | 2,8 | 2,1  | 3  |       |
| NEW SIZES | 48145150 | 5  | 0,8  | 70  | 16 | 3,5 | 2,7  | 3  |       |
| NEW SIZES | 48145187 | 6  | 1    | 80  | 19 | 4,5 | 3,4  | 3  |       |
| NEW SIZES | 48145159 | 7  | 1    | 80  | 19 | 5,5 | 4,3  | 3  |       |
| NEW SIZES | 48145188 | 8  | 1,25 | 90  | 22 | 6   | 4,9  | 3  |       |
| NEW SIZES | 48145166 | 9  | 1,25 | 90  | 22 | 7   | 5,5  | 3  |       |
| NEW SIZES | 48145189 | 10 | 1,5  | 100 | 24 | 7   | 5,5  | 3  |       |
| NEW SIZES | 48145175 | 11 | 1,5  | 100 | 24 | 8   | 6,2  | 3  |       |
| NEW SIZES | 48145179 | 12 | 1,75 | 110 | 29 | 9   | 7    | 3  |       |
|           | 48145191 | 14 | 2    | 110 | 30 | 11  | 9    | 3  |       |
|           | 48145202 | 16 | 2    | 110 | 32 | 12  | 9    | 3  |       |
|           | 48145214 | 18 | 2,5  | 125 | 34 | 14  | 11   | 3  |       |
|           | 48145228 | 20 | 2,5  | 140 | 34 | 16  | 12   | 3  |       |
|           | 48145238 | 22 | 2,5  | 140 | 34 | 18  | 14,5 | 3  |       |
|           | 48145247 | 24 | 3    | 160 | 38 | 18  | 14,5 | 3  |       |

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Antal skær - Antal skär - Numero de ranuras - Число режущих кромок - Kanal sayısı

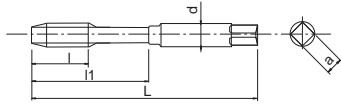
| Applications - Anwendungen - Applicazioni - Applications - Applikation - Applikation - Aplicaciones - Применение - Uygulama - Zastosowania |             |             |            |             |             |             |             |            |     |        |             |     |
|--|-------------|-------------|------------|-------------|-------------|-------------|-------------|------------|-----|--------|-------------|-----|
| C≤0.2%   | 0.25<C≤0.4% | C≥0.45%     | SCM        | 25~35 HRC   | 35~45 HRC   | 45~52 HRC   | 52~62 HRC   | SUS        | SKD | SC     | GG          | GGG |
| 15~60 m/min  | 15~60 m/min | 10~60 m/min | 8~30 m/min | 8~20 m/min  |             |             |             | 8~20 m/min |     |        |             |     |
| Cu   | BS          | BsC         | PB         | Al          | AC,ADC      | MC          | ZDC         | Ti         | Ni  | Plast. | Vinyl       |     |
| 15~35 m/min  |             | 15~30 m/min |            | 15~35 m/min | 15~35 m/min | 15~35 m/min | 15~35 m/min | 5~10 m/min |     |        | 15~20 m/min |     |

# A-OIL-POT

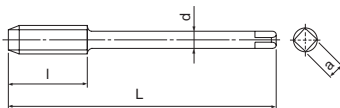


## Metric

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål
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- High performance
- För high speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål
- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox
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- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych



| NEW | EDP      | M  | P    | L   | l  | l1 | d  | a   | ZΔ | Price |
|-----|----------|----|------|-----|----|----|----|-----|----|-------|
|     | 48214155 | 6  | 1    | 80  | 19 | 30 | 6  | 4,9 | 3  |       |
|     | 48214161 | 8  | 1,25 | 90  | 22 | 35 | 8  | 6,2 | 3  |       |
|     | 48214169 | 10 | 1,5  | 100 | 24 | 39 | 10 | 8   | 3  |       |



| NEW | EDP      | M  | P    | L   | l  | d  | a    | ZΔ | Price |
|-----|----------|----|------|-----|----|----|------|----|-------|
|     | 48214179 | 12 | 1,75 | 110 | 29 | 9  | 7    | 3  |       |
|     | 48214191 | 14 | 2    | 110 | 30 | 11 | 9    | 3  |       |
|     | 48214202 | 16 | 2    | 110 | 32 | 12 | 9    | 3  |       |
|     | 48214214 | 18 | 2,5  | 125 | 34 | 14 | 11   | 3  |       |
|     | 48214228 | 20 | 2,5  | 140 | 34 | 16 | 12   | 3  |       |
|     | 48214238 | 22 | 2,5  | 140 | 34 | 18 | 14,5 | 3  |       |
|     | 48214247 | 24 | 3    | 160 | 38 | 18 | 14,5 | 3  |       |

ZΔ= Number of flutes - Anzahl Schneiden - Numero di denti - Nombre de lèvres - Liczba ostrzy -  
 Antal skær - Antal skär - Numero de ranuras - Число режущих кромок - Kanal sayısı

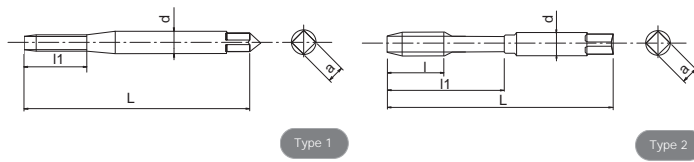
| Applications - Anwendungen - Applicazioni - Applications - Applikation - Applikation - Aplicaciones - Применение - Uygulama - Zastosowania |               |               |              |               |               |               |               |              |     |        |               |     |
|--|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|-----|--------|---------------|-----|
| C≤0.2%   | 0.25<C≤0.4%   | C≥0.45%       | SCM          | 25~35 HRC     | 35~45 HRC     | 45~52 HRC     | 52~62 HRC     | SUS          | SKD | SC     | GG            | GGG |
| ⊙ 15~60 m/min  | ⊙ 15~60 m/min | ⊙ 10~60 m/min | ⊙ 8~30 m/min | ○ 8~20 m/min  |               |               |               | ⊙ 8~20 m/min |     |        |               |     |
| Cu   | BS            | BsC           | PB           | Al            | AC,ADC        | MC            | ZDC           | Ti           | Ni  | Plast. | Vinyl         |     |
| ○ 15~35 m/min  |               | ○ 15~30 m/min |              | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 5~10 m/min |     |        | ○ 15~20 m/min |     |

# A-POT-6GX

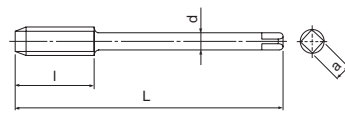


## Metric

- |  |  |  |   |  |
|--|--|--|---|--|
| <ul style="list-style-type: none"> <li>High performance</li> <li>For high speed tapping in aluminium, mild steel, die steel &amp; stainless steel</li> </ul> | <ul style="list-style-type: none"> <li>High performance</li> <li>Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl</li> </ul> | <ul style="list-style-type: none"> <li>Alta prestazione</li> <li>Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox</li> </ul>         | <ul style="list-style-type: none"> <li>Haute performance</li> <li>Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox</li> </ul>                                     | <ul style="list-style-type: none"> <li>Yüksek performans</li> <li>Alüminyuma yüksek kesme hızları, orta çelikler, kalıp çelikleri &amp; paslanmaz çelikler için</li> </ul> |
| <ul style="list-style-type: none"> <li>High performance</li> <li>Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål</li> </ul> | <ul style="list-style-type: none"> <li>High performance</li> <li>För high speed gängning i aluminium, mjukt stål, verktygsstål &amp; rostfritt stål</li> </ul>     | <ul style="list-style-type: none"> <li>Altas prestaciones</li> <li>Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidable</li> </ul> | <ul style="list-style-type: none"> <li>Высокая производительность</li> <li>для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющих сталях</li> </ul> | <ul style="list-style-type: none"> <li>Wysoka wydajność</li> <li>Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych</li> </ul>    |



| EDP      | M   | P    | oversize | L   | l  | l1 | d   | a   | ZΔ | Type | Price |
|----------|-----|------|----------|-----|----|----|-----|-----|----|------|-------|
| 48205125 | 2   | 0,4  | +0,019   | 45  | -  | 8  | 2,8 | 2,1 | 2  | 1    |       |
| 48205133 | 2,5 | 0,45 | +0,020   | 50  | -  | 9  | 2,8 | 2,1 | 2  | 1    |       |
| 48205138 | 3   | 0,5  | +0,020   | 56  | 11 | 18 | 3,5 | 2,7 | 3  | 2    |       |
| 48205144 | 4   | 0,7  | +0,022   | 63  | 13 | 21 | 4,5 | 3,4 | 3  | 2    |       |
| 48205149 | 5   | 0,8  | +0,024   | 70  | 16 | 25 | 6   | 4,9 | 3  | 2    |       |
| 48205155 | 6   | 1    | +0,026   | 80  | 19 | 30 | 6   | 4,9 | 3  | 2    |       |
| 48205161 | 8   | 1,25 | +0,028   | 90  | 22 | 35 | 8   | 6,2 | 3  | 2    |       |
| 48205169 | 10  | 1,5  | +0,032   | 100 | 24 | 39 | 10  | 8   | 3  | 2    |       |



| EDP      | M  | P    | oversize | L   | l  | d  | a | ZΔ | Price |
|----------|----|------|----------|-----|----|----|---|----|-------|
| 48205179 | 12 | 1,75 | +0,034   | 110 | 29 | 9  | 7 | 3  |       |
| 48205202 | 16 | 2    | +0,038   | 110 | 32 | 12 | 9 | 3  |       |

ZΔ= Number of flutes - Anzahl Schneiden - Numero di denti - Nombre de lèvres - Liczba ostrzy -  
Antal skær - Antal skär - Numero de ranuras - Число режущих кромок - Kanal sayısı

| Applications - Anwendungen - Applicazioni - Applications - Applikation - Applikation - Aplicaciones - Применение - Uygulama - Zastosowania |               |               |              |               |               |               |               |              |     |        |               |     |
|--|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|-----|--------|---------------|-----|
| C≤0.2%   | 0.25<C≤0.4%   | C≥0.45%       | SCM          | 25~35 HRC     | 35~45 HRC     | 45~52 HRC     | 52~62 HRC     | SUS          | SKD | SC     | GG            | GGG |
| ⊙ 15~60 m/min  | ⊙ 15~60 m/min | ⊙ 10~60 m/min | ⊙ 8~30 m/min | ○ 8~20 m/min  |               |               |               | ⊙ 8~20 m/min |     |        |               |     |
| Cu   | BS            | BsC           | PB           | Al            | AC,ADC        | MC            | ZDC           | Ti           | Ni  | Plast. | Vinyl         |     |
| ○ 15~35 m/min  |               | ○ 15~30 m/min |              | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 5~10 m/min |     |        | ○ 15~20 m/min |     |

# A-POT-7GX



## Metric

■ High performance  
■ For high speed tapping in aluminium, mild steel, die steel & stainless steel

■ High performance  
■ Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl

■ Alta prestazione  
■ Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox

■ Haute performance  
■ Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox

■ Yüksek performans  
■ Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için

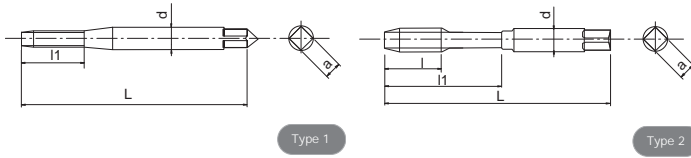
■ High performance  
■ Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål

■ High performance  
■ För high speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål

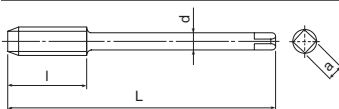
■ Altas prestaciones  
■ Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidable

■ Высокая производительность  
■ для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей сталях

■ Wysoka wydajność  
■ Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych



| EDP      | M   | P    | oversize | L   | l  | l1 | d   | a   | ZΔ | Type | Price |
|----------|-----|------|----------|-----|----|----|-----|-----|----|------|-------|
| 48206125 | 2   | 0,4  | +0,038   | 45  | -  | 8  | 2,8 | 2,1 | 2  | 1    |       |
| 48206133 | 2,5 | 0,45 | +0,040   | 50  | -  | 9  | 2,8 | 2,1 | 2  | 1    |       |
| 48206138 | 3   | 0,5  | +0,040   | 56  | 11 | 18 | 3,5 | 2,7 | 3  | 2    |       |
| 48206144 | 4   | 0,7  | +0,044   | 63  | 13 | 21 | 4,5 | 3,4 | 3  | 2    |       |
| 48206149 | 5   | 0,8  | +0,048   | 70  | 16 | 25 | 6   | 4,9 | 3  | 2    |       |
| 48206155 | 6   | 1    | +0,052   | 80  | 19 | 30 | 6   | 4,9 | 3  | 2    |       |
| 48206161 | 8   | 1,25 | +0,056   | 90  | 22 | 35 | 8   | 6,2 | 3  | 2    |       |
| 48206169 | 10  | 1,5  | +0,064   | 100 | 24 | 39 | 10  | 8   | 3  | 2    |       |



| EDP      | M  | P    | oversize | L   | l  | d  | a | ZΔ | Price |
|----------|----|------|----------|-----|----|----|---|----|-------|
| 48206179 | 12 | 1,75 | +0,068   | 110 | 14 | 29 | 7 | 3  |       |
| 48206202 | 16 | 2    | +0,076   | 110 | 16 | 32 | 9 | 3  |       |

ZΔ= Number of flutes - Anzahl Schneiden - Numero di denti - Nombre de lèvres - Liczba ostrzy -  
Antal skær - Antal skär - Numero de ranuras - Число режущих кромок - Kanal sayısı

| Applications - Anwendungen - Applicazioni - Applications - Applikation - Applikation - Aplicaciones - Применение - Uygulama - Zastosowania |             |             |            |             |             |             |             |            |     |        |             |     |
|--|-------------|-------------|------------|-------------|-------------|-------------|-------------|------------|-----|--------|-------------|-----|
| C≤0.2%   | 0.25<C≤0.4% | C≥0.45%     | SCM        | 25~35 HRC   | 35~45 HRC   | 45~52 HRC   | 52~62 HRC   | SUS        | SKD | SC     | GG          | GGG |
| 15~60 m/min  | 15~60 m/min | 10~60 m/min | 8~30 m/min | 8~20 m/min  |             |             |             | 8~20 m/min |     |        |             |     |
| Cu   | BS          | BsC         | PB         | Al          | AC,ADC      | MC          | ZDC         | Ti         | Ni  | Plast. | Vinyl       |     |
| 15~35 m/min  |             | 15~30 m/min |            | 15~35 m/min | 15~35 m/min | 15~35 m/min | 15~35 m/min | 5~10 m/min |     |        | 15~20 m/min |     |



# A-LT-POT



## Metric

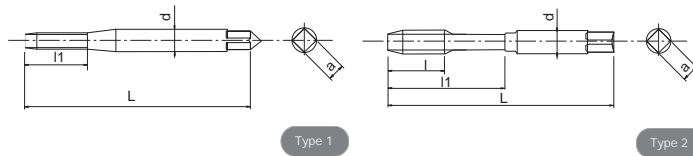
- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel
- Long shank
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål
- Langt skaft

- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl
- Langt Schaft
- High performance
- För high speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål
- Långt skaft

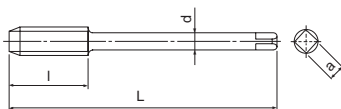
- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox
- Gambo lungo
- Altas prestaciones
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidables
- Mango larga

- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox
- Queue longue
- Высокая производительность
- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей сталей
- Длинный хвостовик

- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için
- Uzun shaft
- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych
- Długi chwyt



| EDP      | M   | P    | L   | l  | l1 | d   | a   | ZΔ | Type | Price |
|----------|-----|------|-----|----|----|-----|-----|----|------|-------|
| 48210125 | 2   | 0,4  | 80  | 8  | -  | 2,8 | 2,1 | 2  | 1    |       |
| 48210133 | 2,5 | 0,45 | 100 | 9  | -  | 2,8 | 2,1 | 2  | 1    |       |
| 48210138 | 3   | 0,5  | 100 | 11 | 18 | 3,5 | 2,7 | 3  | 2    |       |
| 48210144 | 4   | 0,7  | 125 | 13 | 21 | 4,5 | 3,4 | 3  | 2    |       |
| 48210149 | 5   | 0,8  | 160 | 16 | 25 | 6   | 4,9 | 3  | 2    |       |
| 48210155 | 6   | 1    | 160 | 19 | 30 | 6   | 4,9 | 3  | 2    |       |
| 48210161 | 8   | 1,25 | 180 | 22 | 35 | 8   | 6,2 | 3  | 2    |       |
| 48210169 | 10  | 1,5  | 200 | 24 | 39 | 10  | 8   | 3  | 2    |       |



| EDP      | M  | P    | L   | l  | d   | a   | ZΔ | Price |
|----------|----|------|-----|----|-----|-----|----|-------|
| 48211155 | 6  | 1    | 160 | 19 | 4,5 | 3,4 | 3  |       |
| 48211161 | 8  | 1,25 | 180 | 22 | 6   | 4,9 | 3  |       |
| 48211169 | 10 | 1,5  | 200 | 24 | 7   | 5,5 | 3  |       |
| 48211179 | 12 | 1,75 | 200 | 29 | 9   | 7   | 3  |       |
| 48211191 | 14 | 2    | 200 | 30 | 11  | 9   | 3  |       |
| 48211202 | 16 | 2    | 200 | 32 | 12  | 9   | 3  |       |
| 48211214 | 18 | 2,5  | 200 | 34 | 14  | 11  | 3  |       |
| 48211228 | 20 | 2,5  | 200 | 34 | 16  | 12  | 3  |       |

ZΔ= Number of flutes - Anzahl Schneiden - Numero di denti - Nombre de lèvres - Liczba ostrzy -  
 Antal skær - Antal skär - Numero de ranuras - Число режущих кромок - Kanal sayısı

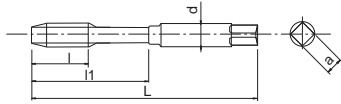
| Applications - Anwendungen - Applicazioni - Applications - Applikation - Applikation - Aplicaciones - Применение - Uygulama - Zastosowania |               |               |              |               |               |               |               |              |     |        |               |     |
|--|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|-----|--------|---------------|-----|
| C≤0.2%   | 0.25<C≤0.4%   | C≥0.45%       | SCM          | 25~35 HRC     | 35~45 HRC     | 45~52 HRC     | 52~62 HRC     | SUS          | SKD | SC     | GG            | GGG |
| ⊙ 15~60 m/min  | ⊙ 15~60 m/min | ⊙ 10~60 m/min | ⊙ 8~30 m/min | ○ 8~20 m/min  |               |               |               | ⊙ 8~20 m/min |     |        |               |     |
| Cu   | BS            | BsC           | PB           | Al            | AC,ADC        | MC            | ZDC           | Ti           | Ni  | Plast. | Vinyl         |     |
| ○ 15~35 m/min  |               | ○ 15~30 m/min |              | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 5~10 m/min |     |        | ○ 15~20 m/min |     |

# A-POT-LH

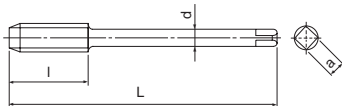


## Metric

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel
- Left hand
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål
- venstre
- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl
- Links
- High performance
- For high speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål
- vänster skärande
- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox
- Sinistri
- Altas prestaciones
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidable
- Mano izquierda
- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox
- Coupe à gauche
- Высокая производительность
- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей стальных
- левая
- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için
- Sol Helis
- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych
- lewa ręka



| NEW | EDP      | M  | P    | L   | l  | l1 | d   | a   | ZΔ | Price |
|-----|----------|----|------|-----|----|----|-----|-----|----|-------|
|     | 48218138 | 3  | 0,5  | 56  | 11 | 18 | 3,5 | 2,7 | 3  |       |
|     | 48218144 | 4  | 0,7  | 63  | 13 | 21 | 4,5 | 3,4 | 3  |       |
|     | 48218149 | 5  | 0,8  | 70  | 16 | 25 | 6   | 4,9 | 3  |       |
|     | 48218155 | 6  | 1    | 80  | 19 | 30 | 6   | 4,9 | 3  |       |
|     | 48218161 | 8  | 1,25 | 90  | 22 | 35 | 8   | 6,2 | 3  |       |
|     | 48218169 | 10 | 1,5  | 100 | 24 | 39 | 10  | 8   | 3  |       |



| NEW | EDP      | M  | P    | L   | l  | d  | a    | ZΔ | Price |
|-----|----------|----|------|-----|----|----|------|----|-------|
|     | 48218179 | 12 | 1,75 | 110 | 29 | 9  | 7    | 3  |       |
|     | 48218191 | 14 | 2    | 110 | 30 | 11 | 9    | 3  |       |
|     | 48218202 | 16 | 2    | 110 | 32 | 12 | 9    | 3  |       |
|     | 48218214 | 18 | 2,5  | 125 | 34 | 14 | 11   | 3  |       |
|     | 48218228 | 20 | 2,5  | 140 | 34 | 16 | 12   | 3  |       |
|     | 48218238 | 22 | 2,5  | 140 | 34 | 18 | 14,5 | 3  |       |
|     | 48218247 | 24 | 3    | 160 | 38 | 18 | 14,5 | 3  |       |

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| Applications - Anwendungen - Applicazioni - Applications - Applikation - Applikation - Aplicaciones - Применение - Uygulama - Zastosowania |             |             |            |             |             |             |             |            |     |        |             |     |
|--|-------------|-------------|------------|-------------|-------------|-------------|-------------|------------|-----|--------|-------------|-----|
| C≤0.2%   | 0.25<C≤0.4% | C≥0.45%     | SCM        | 25~35 HRC   | 35~45 HRC   | 45~52 HRC   | 52~62 HRC   | SUS        | SKD | SC     | GG          | GGG |
| 15~60 m/min  | 15~60 m/min | 10~60 m/min | 8~30 m/min | 8~20 m/min  |             |             |             | 8~20 m/min |     |        |             |     |
| Cu   | BS          | BsC         | PB         | Al          | AC,ADC      | MC          | ZDC         | Ti         | Ni  | Plast. | Vinyl       |     |
| 15~35 m/min  |             | 15~30 m/min |            | 15~35 m/min | 15~35 m/min | 15~35 m/min | 15~35 m/min | 5~10 m/min |     |        | 15~20 m/min |     |

## Metric

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel
- Weldon
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål
- Weldon skaft

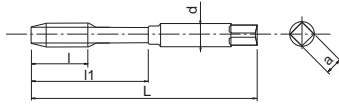
- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl
- Weldon Schaft
- High performance
- För high speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål
- Weldon

- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox
- Weldon
- Altas prestaciones
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidables
- Mango Weldon

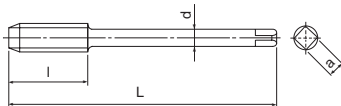
- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox
- Queue Weldon
- Высокая производительность
- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей сталях
- для Weldon

Available in Jan. 2016

- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için
- Weldon şaftlı
- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych
- Weldon



| NEW | EDP      | M  | P    | L   | l  | l1 | d  | a   | ZΔ | Price |
|-----|----------|----|------|-----|----|----|----|-----|----|-------|
|     | 48221138 | 3  | 0,5  | 56  | 11 | 18 | 6  | 4,9 | 3  |       |
|     | 48221144 | 4  | 0,7  | 63  | 13 | 21 | 6  | 4,9 | 3  |       |
|     | 48221149 | 5  | 0,8  | 70  | 16 | 25 | 6  | 4,9 | 3  |       |
|     | 48221155 | 6  | 1    | 80  | 19 | 30 | 6  | 4,9 | 3  |       |
|     | 48221161 | 8  | 1,25 | 90  | 22 | 35 | 8  | 6,2 | 3  |       |
|     | 48221169 | 10 | 1,5  | 100 | 24 | 39 | 10 | 8   | 3  |       |



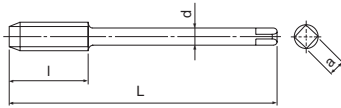
| NEW | EDP      | M  | P    | L   | l  | d  | a  | ZΔ | Price |
|-----|----------|----|------|-----|----|----|----|----|-------|
|     | 48221179 | 12 | 1,75 | 110 | 17 | 12 | 9  | 3  |       |
|     | 48221191 | 14 | 2    | 110 | 20 | 14 | 11 | 3  |       |
|     | 48221202 | 16 | 2    | 110 | 20 | 16 | 12 | 3  |       |

ZΔ= Number of flutes - Anzahl Schneiden - Numero di denti - Nombre de lèvres - Liczba ostrzy - Antal skær - Antal skär - Numero de ranuras - Число режущих кромок - Kanal sayısı

| Applications - Anwendungen - Applicazioni - Applications - Applikation - Applikation - Aplicaciones - Применение - Uygulama - Zastosowania |             |             |            |             |             |             |             |            |     |        |             |     |
|--|-------------|-------------|------------|-------------|-------------|-------------|-------------|------------|-----|--------|-------------|-----|
| C≤0.2%   | 0.25<C≤0.4% | C≥0.45%     | SCM        | 25~35 HRC   | 35~45 HRC   | 45~52 HRC   | 52~62 HRC   | SUS        | SKD | SC     | GG          | GGG |
| 15~60 m/min  | 15~60 m/min | 10~60 m/min | 8~30 m/min | 8~20 m/min  |             |             |             | 8~20 m/min |     |        |             |     |
| Cu   | BS          | BsC         | PB         | Al          | AC,ADC      | MC          | ZDC         | Ti         | Ni  | Plast. | Vinyl       |     |
| 15~35 m/min  |             | 15~30 m/min |            | 15~35 m/min | 15~35 m/min | 15~35 m/min | 15~35 m/min | 5~10 m/min |     |        | 15~20 m/min |     |

## Metric Fine

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål
- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl
- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox
- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox
- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için
- High performance
- Für high speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål
- Altas prestaciones
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidables
- Высокая производительность
- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей сталей
- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych



|           | EDP      | MF | P    | L   | I  | d   | a    | ZΔ | Price |
|-----------|----------|----|------|-----|----|-----|------|----|-------|
| NEW SIZES | 48145156 | 6  | 0,75 | 80  | 14 | 4,5 | 3,4  | 3  |       |
|           | 48145157 | 6  | 0,5  | 80  | 14 | 4,5 | 3,4  | 3  |       |
|           | 48145162 | 8  | 1    | 90  | 22 | 6   | 4,9  | 3  |       |
| NEW SIZES | 48145163 | 8  | 0,75 | 80  | 18 | 6   | 4,9  | 3  |       |
|           | 48145167 | 9  | 1    | 90  | 22 | 7   | 5,5  | 3  |       |
|           | 48145170 | 10 | 1,25 | 100 | 24 | 7   | 5,5  | 3  |       |
|           | 48145171 | 10 | 1    | 90  | 20 | 7   | 5,5  | 3  |       |
| NEW SIZES | 48145172 | 10 | 0,75 | 90  | 20 | 7   | 5,5  | 3  |       |
| NEW SIZES | 48145176 | 11 | 1    | 90  | 20 | 8   | 6,2  | 3  |       |
|           | 48145180 | 12 | 1,5  | 100 | 22 | 9   | 7    | 3  |       |
|           | 48145181 | 12 | 1,25 | 100 | 22 | 9   | 7    | 3  |       |
|           | 48145182 | 12 | 1    | 100 | 22 | 9   | 7    | 3  |       |
|           | 48145192 | 14 | 1,5  | 100 | 22 | 11  | 9    | 4  |       |
| NEW SIZES | 48145193 | 14 | 1,25 | 100 | 22 | 11  | 9    | 4  |       |
| NEW SIZES | 48145194 | 14 | 1    | 100 | 22 | 11  | 9    | 4  |       |
|           | 48145203 | 16 | 1,5  | 100 | 22 | 12  | 9    | 4  |       |
| NEW SIZES | 48145204 | 16 | 1    | 100 | 22 | 12  | 9    | 4  |       |
|           | 48145216 | 18 | 1,5  | 110 | 25 | 14  | 11   | 4  |       |
| NEW SIZES | 48145218 | 18 | 1    | 110 | 25 | 14  | 11   | 4  |       |
| NEW SIZES | 48145220 | 20 | 2    | 140 | 34 | 16  | 12   | 4  |       |
|           | 48145230 | 20 | 1,5  | 125 | 25 | 16  | 12   | 4  |       |
| NEW SIZES | 48145232 | 20 | 1    | 125 | 25 | 16  | 12   | 4  |       |
| NEW SIZES | 48145239 | 22 | 2    | 140 | 34 | 18  | 14,5 | 4  |       |
|           | 48145240 | 22 | 1,5  | 125 | 25 | 18  | 14,5 | 4  |       |
| NEW SIZES | 48145241 | 22 | 1    | 125 | 25 | 18  | 14,5 | 4  |       |
| NEW SIZES | 48145249 | 24 | 2    | 140 | 28 | 18  | 14,5 | 4  |       |
|           | 48145250 | 24 | 1,5  | 140 | 28 | 18  | 14,5 | 4  |       |
| NEW SIZES | 48145251 | 24 | 1    | 140 | 28 | 18  | 14,5 | 4  |       |

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|--|-----------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|-----|--------|---------------|-----|
| C ≤ 0.2%   | 0.25 < C ≤ 0.4% | C ≥ 0.45%     | SCM          | 25~35 HRC     | 35~45 HRC     | 45~52 HRC     | 52~62 HRC     | SUS          | SKD | SC     | GG            | GGG |
| ⊙ 15~60 m/min  | ⊙ 15~60 m/min   | ⊙ 10~60 m/min | ⊙ 8~30 m/min | ○ 8~20 m/min  |               |               |               | ⊙ 8~20 m/min |     |        |               |     |
| Cu   | BS              | BsC           | PB           | Al            | AC,ADC        | MC            | ZDC           | Ti           | Ni  | Plast. | Vinyl         |     |
| ○ 15~35 m/min  |                 | ○ 15~30 m/min |              | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 5~10 m/min |     |        | ○ 15~20 m/min |     |

## Metric Fine

■ High performance  
■ For high speed tapping in aluminium, mild steel, die steel & stainless steel

■ High performance  
■ Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl

■ Alta prestazione  
■ Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox

■ Haute performance  
■ Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox

■ Yüksek performans  
■ Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için

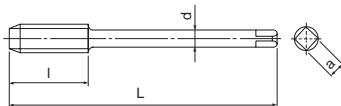
■ High performance  
■ Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål

■ High performance  
■ För high speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål

■ Altas prestaciones  
■ Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidable

■ Высокая производительность  
■ для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей сталях

■ Wysoka wydajność  
■ Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych



| NEW | EDP      | MF | P    | L   | l  | d  | a   | ZΔ | Price |
|-----|----------|----|------|-----|----|----|-----|----|-------|
|     | 48214162 | 8  | 1    | 90  | 22 | 6  | 4,9 | 3  |       |
|     | 48214171 | 10 | 1    | 90  | 20 | 7  | 5,5 | 3  |       |
|     | 48214170 | 10 | 1,25 | 100 | 24 | 7  | 5,5 | 3  |       |
|     | 48214180 | 12 | 1,5  | 100 | 22 | 9  | 7   | 3  |       |
|     | 48214192 | 14 | 1,5  | 100 | 22 | 11 | 9   | 4  |       |
|     | 48214203 | 16 | 1,5  | 100 | 22 | 12 | 9   | 4  |       |
|     | 48214216 | 18 | 1,5  | 110 | 25 | 14 | 11  | 4  |       |
|     | 48214230 | 20 | 1,5  | 125 | 25 | 16 | 12  | 4  |       |

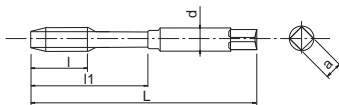
ZΔ= Number of flutes - Anzahl Schneiden - Numero di denti - Nombre de lèvres - Liczba ostrzy -  
Antal skær - Antal skär - Numero de ranuras - Число режущих кромок - Kanal sayısı

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|--|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|-----|--------|---------------|-----|
| C≤0.2%   | 0.25<C≤0.4%   | C≥0.45%       | SCM          | 25~35 HRC     | 35~45 HRC     | 45~52 HRC     | 52~62 HRC     | SUS          | SKD | SC     | GG            | GGG |
| ⊙ 15~60 m/min  | ⊙ 15~60 m/min | ⊙ 10~60 m/min | ⊙ 8~30 m/min | ○ 8~20 m/min  |               |               |               | ⊙ 8~20 m/min |     |        |               |     |
| Cu   | BS            | BsC           | PB           | Al            | AC,ADC        | MC            | ZDC           | Ti           | Ni  | Plast. | Vinyl         |     |
| ○ 15~35 m/min  |               | ○ 15~30 m/min |              | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 5~10 m/min |     |        | ○ 15~20 m/min |     |

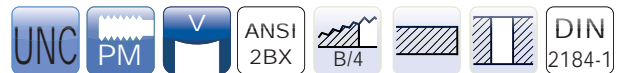
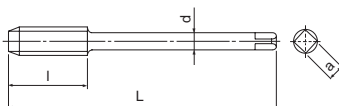
## UNC/UNJC

Available in Jan. 2016

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel
- High performance
- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål
- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl
- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox
- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox
- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için
- High performance
- Für high speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål
- Altas prestaciones
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidables
- Высокая производительность
- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей сталях
- Wysoka wydajność
- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych



|           | EDP      | UNC  | P  | L   | l  | l1 | d   | a   | ZΔ | Price |
|-----------|----------|------|----|-----|----|----|-----|-----|----|-------|
| NEW SIZES | 48145453 | 2    | 56 | 45  | -  | 9  | 2,8 | 2,1 | 2  |       |
| NEW SIZES | 48145455 | 3    | 48 | 50  | -  | 9  | 2,8 | 2,1 | 2  |       |
|           | 48145457 | 4    | 40 | 56  | 11 | 18 | 3,5 | 2,7 | 2  |       |
|           | 48145459 | 5    | 40 | 56  | 11 | 18 | 3,5 | 2,7 | 3  |       |
|           | 48145461 | 6    | 32 | 56  | 12 | 20 | 4   | 3   | 3  |       |
|           | 48145464 | 8    | 32 | 63  | 13 | 21 | 4,5 | 3,4 | 3  |       |
|           | 48145466 | 10   | 24 | 70  | 16 | 25 | 6   | 4,9 | 3  |       |
| NEW SIZES | 48145468 | 12   | 24 | 80  | 17 | 30 | 6   | 4,9 | 3  |       |
|           | 48145471 | 1/4  | 20 | 80  | 19 | 30 | 7   | 5,5 | 3  |       |
|           | 48145474 | 5/16 | 18 | 90  | 22 | 35 | 8   | 6,2 | 3  |       |
|           | 48145479 | 3/8  | 16 | 100 | 24 | 39 | 10  | 8   | 3  |       |



|  | EDP      | UNC  | P  | L   | l  | d  | a    | ZΔ | Price |
|--|----------|------|----|-----|----|----|------|----|-------|
|  | 48145484 | 7/16 | 14 | 100 | 24 | 8  | 6,2  | 3  |       |
|  | 48145489 | 1/2  | 13 | 110 | 28 | 9  | 7    | 3  |       |
|  | 48145494 | 9/16 | 12 | 110 | 30 | 11 | 9    | 3  |       |
|  | 48145501 | 5/8  | 11 | 110 | 32 | 12 | 9    | 3  |       |
|  | 48145515 | 3/4  | 10 | 125 | 34 | 14 | 11   | 3  |       |
|  | 48145526 | 7/8  | 9  | 140 | 34 | 18 | 14,5 | 3  |       |
|  | 48145538 | 1    | 8  | 160 | 38 | 18 | 14,5 | 3  |       |

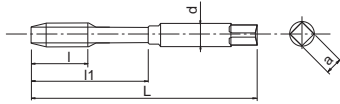
ZΔ= Number of flutes - Anzahl Schneiden - Numero di denti - Nombre de lèvres - Liczba ostrzy -  
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|--|-------------|-------------|------------|-------------|-------------|-------------|-------------|------------|-----|--------|-------------|-----|
| C≤0.2%   | 0.25<C≤0.4% | C≥0.45%     | SCM        | 25~35 HRC   | 35~45 HRC   | 45~52 HRC   | 52~62 HRC   | SUS        | SKD | SC     | GG          | GGG |
| 15~60 m/min  | 15~60 m/min | 10~60 m/min | 8~30 m/min | 8~20 m/min  |             |             |             | 8~20 m/min |     |        |             |     |
| Cu   | BS          | BsC         | PB         | Al          | AC,ADC      | MC          | ZDC         | Ti         | Ni  | Plast. | Vinyl       |     |
| 15~35 m/min  |             | 15~30 m/min |            | 15~35 m/min | 15~35 m/min | 15~35 m/min | 15~35 m/min | 5~10 m/min |     |        | 15~20 m/min |     |

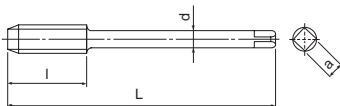
## UNF/UNJF

Available in Jan. 2016

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel
- High performance
- Für HSC Gewindeschneiden in Aluminium, unlegierten Stählen, Werkzeugstahl und VA-Stahl
- Alta prestazione
- Ad alta velocità per alluminio, acciai dolci, acciai per stampi e inox
- Haute performance
- Pour haute vitesse dans l'aluminium, l'acier doux, les aciers matrices et l'inox
- Yüksek performans
- Alüminyumda yüksek kesme hızları, orta çelikler, kalıp çelikleri & paslanmaz çelikler için
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- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål
- High performance
- För high speed gängning i aluminium, mjukt stål, verktygsstål & rostfritt stål
- Altas prestaciones
- Para roscado a alta velocidad en aluminio, aceros suaves y aceros inoxidable
- Высокая производительность
- для высокоскоростного нарезания резьбы в алюминии, низкоуглеродистых, инструментальных и нержавеющей сталей
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- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych



|           | EDP      | UNF  | P  | L  | l  | l1 | d   | a   | ZΔ | Price |
|-----------|----------|------|----|----|----|----|-----|-----|----|-------|
| NEW SIZES | 48145454 | 2    | 64 | 45 | -  | 9  | 2,8 | 2,1 | 2  |       |
| NEW SIZES | 48145456 | 3    | 56 | 50 | -  | 9  | 2,8 | 2,1 | 2  |       |
| NEW SIZES | 48145458 | 4    | 48 | 56 | 11 | 18 | 3,5 | 2,7 | 2  |       |
| NEW SIZES | 48145460 | 5    | 44 | 56 | 11 | 18 | 3,5 | 2,7 | 3  |       |
|           | 48145462 | 6    | 40 | 56 | 12 | 20 | 4   | 3   | 3  |       |
| NEW SIZES | 48145465 | 8    | 36 | 63 | 13 | 21 | 4,5 | 3,4 | 3  |       |
|           | 48145467 | 10   | 32 | 70 | 16 | 25 | 6   | 4,9 | 3  |       |
| NEW SIZES | 48145469 | 12   | 28 | 80 | 17 | 30 | 6   | 4,9 | 3  |       |
|           | 48145472 | 1/4  | 28 | 80 | 19 | 30 | 7   | 5,5 | 3  |       |
|           | 48145476 | 5/16 | 24 | 90 | 22 | 35 | 8   | 6,2 | 3  |       |
|           | 48145481 | 3/8  | 24 | 90 | 20 | 35 | 10  | 8   | 3  |       |



|  | EDP      | UNF  | P  | L   | l  | d  | a    | ZΔ | Price |
|--|----------|------|----|-----|----|----|------|----|-------|
|  | 48145486 | 7/16 | 20 | 100 | 24 | 8  | 6,2  | 3  |       |
|  | 48145491 | 1/2  | 20 | 100 | 22 | 9  | 7    | 3  |       |
|  | 48145496 | 9/16 | 18 | 100 | 22 | 11 | 9    | 3  |       |
|  | 48145504 | 5/8  | 18 | 100 | 22 | 12 | 9    | 3  |       |
|  | 48145517 | 3/4  | 16 | 110 | 25 | 14 | 11   | 3  |       |
|  | 48145528 | 7/8  | 14 | 125 | 25 | 18 | 14,5 | 3  |       |
|  | 48145539 | 1    | 12 | 140 | 28 | 18 | 14,5 | 3  |       |

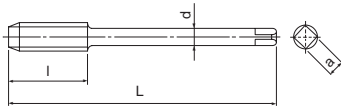
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|--|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|-----|--------|---------------|-----|
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| ⊙ 15~60 m/min  | ⊙ 15~60 m/min | ⊙ 10~60 m/min | ⊙ 8~30 m/min | ○ 8~20 m/min  |               |               |               | ⊙ 8~20 m/min |     |        |               |     |
| Cu   | BS            | BsC           | PB           | Al            | AC,ADC        | MC            | ZDC           | Ti           | Ni  | Plast. | Vinyl         |     |
| ○ 15~35 m/min  |               | ○ 15~30 m/min |              | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 5~10 m/min |     |        | ○ 15~20 m/min |     |



## G (BSP)

- High performance
- For high speed tapping in aluminium, mild steel, die steel & stainless steel
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- Til højhastigheds gevindskæring i aluminium, stål, værktøjsstål og rustfrit stål
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- Do dużych prędkości gwintowania w aluminium, stalach miękkich, narzędziowych i nierdzewnych



| EDP      | G   | P  | L   | l  | d  | a    | ZΔ | Price |
|----------|-----|----|-----|----|----|------|----|-------|
| 48145900 | 1/8 | 28 | 90  | 20 | 7  | 5,5  | 3  |       |
| 48145000 | 1/4 | 19 | 100 | 22 | 11 | 9    | 3  |       |
| 48145100 | 3/8 | 19 | 100 | 22 | 12 | 9    | 3  |       |
| 48145200 | 1/2 | 14 | 125 | 25 | 16 | 12   | 3  |       |
| 48145300 | 5/8 | 14 | 125 | 25 | 18 | 14,5 | 4  |       |
| 48145400 | 3/4 | 14 | 140 | 28 | 20 | 16   | 4  |       |
| 48145500 | 7/8 | 14 | 150 | 28 | 22 | 18   | 4  |       |
| 48145600 | 1   | 11 | 160 | 30 | 25 | 20   | 4  |       |

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| Applications - Anwendungen - Applicazioni - Applications - Applikation - Applikation - Aplicaciones - Применение - Uygulama - Zastosowania |                 |               |              |               |               |               |               |              |     |        |               |     |
|--|-----------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|-----|--------|---------------|-----|
| C ≤ 0.2%   | 0.25 < C ≤ 0.4% | C ≥ 0.45%     | SCM          | 25~35 HRC     | 35~45 HRC     | 45~52 HRC     | 52~62 HRC     | SUS          | SKD | SC     | GG            | GGG |
| ⊙ 15~60 m/min  | ⊙ 15~60 m/min   | ⊙ 10~60 m/min | ⊙ 8~30 m/min | ○ 8~20 m/min  |               |               |               | ⊙ 8~20 m/min |     |        |               |     |
| Cu   | BS              | BsC           | PB           | Al            | AC,ADC        | MC            | ZDC           | Ti           | Ni  | Plast. | Vinyl         |     |
| ○ 15~35 m/min  |                 | ○ 15~30 m/min |              | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 15~35 m/min | ○ 5~10 m/min |     |        | ○ 15~20 m/min |     |



*shaping your dreams*

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