

# D

## D - GROOVING & PARTING OFF


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D - 656 | GROOVING PLUS

D - 656 | Inserts code key

D - 657 | GP Inserts

D - 660 | Blades & Toolholders code key

D - 661 | Blades & Toolholders

# GROOVING & PARTING OFF




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D - 664 | Inserts code key & Overview
D - 665 | Inserts
D - 670 | Blades code key
D - 671 | Blades & Toolholders
D - 673 | Trigon Inserts
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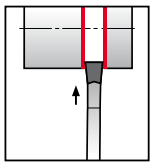
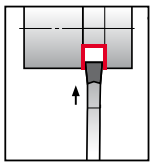
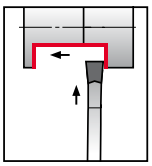
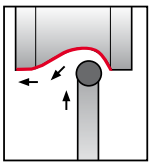
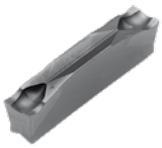
# GENERAL INSERTS OVERVIEW

| Insert Type + Chipbreaker / Operation | | Parting Off | General Grooving | Turning | Profiling |
|---|---|---|---|---|---|
| | |  |  |  |  |
|  | GP...-N01-MC<br>GP...-R01-MC<br>GP...-L01-MC | ◎ | ○ | | |
|  | GP...-N02-MC<br>GP...-R02-MC<br>GP...-L02-MC | ◎ | ○ | | |
|  | GP...-N02-MG | ○ | ◎ | | |
|  | GP...-N02-MM | | ○ | ◎ | |
|  | GP...-N02-MP | | | | ◎ |
|  | GP...-N02-NP | | | | ◎ |
|  | GCMX-... | ◎ | ○ | | |
|  | SANCAR-... | ◎ | ○ | | |

◎ First choice | Primeira opção | Primera opción

○ Alternative | Alternativa

| Toolholder / Insert Size | GPNC | GPLC | GPRC | BLST | BLS |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| GP02... | ✓ | ✓ | ✓ | | |
| GP03... | ✓ | ✓ | ✓ | | |
| GP04... | ✓ | ✓ | ✓ | | |
| GP05... | | ✓ | ✓ | | |
| GP06... | | ✓ | ✓ | | |
| GCMX-... | | | | ✓ | |
| SANCAR-... | | | | | ✓ |

# GP INSERTS CODE KEY

Chave de codificação para pastilhas GP | Llave de codificación para plaquitas GP

For R or L Insert type

| GP | 0300 | B | 020 | - | 050 | R | 02 | - | MC |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | | 5 | 6 | 7 | | 8 |

For N Insert type

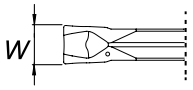
| GP | 0300 | B | 020 | - | N | 02 | - | MC |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | | 6 | 7 | | 8 |

## 1 - Product Line

GP - Grooving Plus

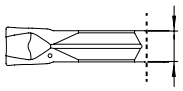
## 2 - Cutting Width

0200 - 2,00mm | 0300 - 3,00mm | 0400 - 4,00mm | 0500 - 5,00mm | 0600 - 6,00mm



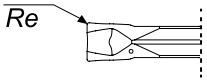

## 3 - Seat Size

A -1,60mm | B - 2,30mm | C - 3,30mm | D - 4,30mm | E - 4,90mm | F - 6,60mm

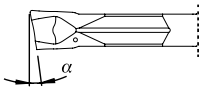


## 4 - Cutting Radius

020 - 0,20mm | 025 - 0,25mm | 040 - 0,40mm | 600 - 6,00mm

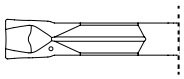



## 5 - Relief Angle

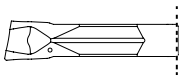



## 6 - Insert Type

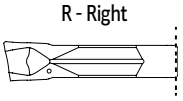
N - Neutral



L - Left

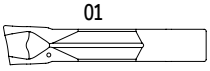


R - Right

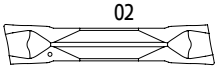


## 7 - Nº of Cutting Edges

01



02

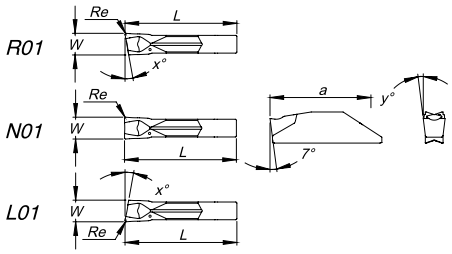


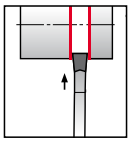
## 8 - Chipbreaker

MC - Medium Cut Off | MG - Medium Grooving | MM - Medium Multi Function | MP - Medium Profiling | NP - Non-Ferrous Profiling

## GP...01-MC | Medium Cut Off





| | | P | | | M | | | K | | | | N | S | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CVD-MT | | PVD | CVD-MT | | PVD | UNC | CVD-MT | | | UNC | PVD | | | | | | | | | | | |
| | [2] Grade code | L8 | N2 | G4 | L8 | N2 | G4 | 25 | L5 | L6 | N2 | 10 | G4 | | | | | | | | | | | |
| [1] Geometry code | ISO/ANSI Reference | PH5125 | PH5135 | PH7920 | PH5125 | PH5135 | PH7920 | PH0705 | PH5705 | PH5320 | PH5135 | PH0910 | PH7920 | W | Re | L | x° | a[1] | y° | Seat[2] Size | fn (mm/r) | Min | Max |
| 1130422 | GP0200A020-N01-MC | | ◉ | ◉ | | ◉ | ◉ | | | ◉ | ◉ | | ◉ | 2,0 | 0,2 | 20,2 | - | - | 6,0 | A | 0,06 | 0,05 | 0,10 |
| 1130423 | GP0300B020-N01-MC | | ◉ | ◉ | | ◉ | ◉ | | | ◉ | ◉ | | ◉ | 3,0 | 0,2 | 20,1 | - | - | 8,0 | B | 0,08 | 0,05 | 0,15 |
| 1130424 | GP0400C020-N01-MC | | ◉ | ◉ | | ◉ | ◉ | | | ◉ | ◉ | | ◉ | 4,0 | 0,2 | 20,5 | - | - | 7,0 | C | 0,13 | 0,05 | 0,25 |
| 1130425 | GP0200A020-050R01-MC | | ○ | ○ | | ○ | ○ | | | ○ | ○ | | ○ | 2,0 | 0,2 | 20,2 | 5,0 | - | 6,0 | A | 0,05 | 0,04 | 0,08 |
| 1130426 | GP0300B020-050R01-MC | | ○ | ○ | | ○ | ○ | | | ○ | ○ | | ○ | 3,0 | 0,2 | 20,1 | 5,0 | - | 8,0 | B | 0,07 | 0,04 | 0,12 |
| 1130427 | GP0400C020-050R01-MC | | ○ | ○ | | ○ | ○ | | | ○ | ○ | | ○ | 4,0 | 0,2 | 20,5 | 5,0 | - | 7,0 | C | 0,10 | 0,04 | 0,20 |
| 1130428 | GP0200A020-050L01-MC | | ○ | ○ | | ○ | ○ | | | ○ | ○ | | ○ | 2,0 | 0,2 | 20,2 | 5,0 | - | 6,0 | A | 0,05 | 0,04 | 0,08 |
| 1130429 | GP0300B020-050L01-MC | | ○ | ○ | | ○ | ○ | | | ○ | ○ | | ○ | 3,0 | 0,2 | 20,1 | 5,0 | - | 8,0 | B | 0,07 | 0,04 | 0,12 |
| 1130430 | GP0400C020-050L01-MC | | ○ | ○ | | ○ | ○ | | | ○ | ○ | | ○ | 4,0 | 0,2 | 20,5 | 5,0 | - | 7,0 | C | 0,10 | 0,04 | 0,20 |

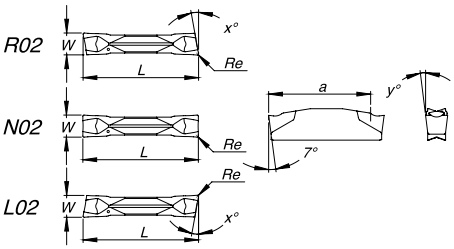
◉ First choice | Primeira opção | 1ª opción ◉ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta Disponible bajo consulta

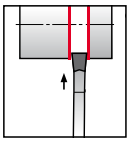
**Insert order code** = (1) Geometry Code + (2) Grade Code

1 - When using inserts with 1 Cutting edge, the "a" measure is given by the Toolholder | 2 - Correspond to a Specific Holder

## GP...02-MC | Medium Cut Off





| | | P | | | M | | | K | | | | N | S | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CVD-MT | | PVD | CVD-MT | | PVD | UNC | CVD-MT | | | UNC | PVD | | | | | | | | | | | |
| | [2] Grade code | L8 | N2 | G4 | L8 | N2 | G4 | 25 | L5 | L6 | N2 | 10 | G4 | | | | | | | | | | | |
| [1] Geometry code | ISO/ANSI Reference | PH5125 | PH5135 | PH7920 | PH5125 | PH5135 | PH7920 | PH0705 | PH5705 | PH5320 | PH5135 | PH0910 | PH7920 | W | Re | L | x° | a | y° | Seat[2] Size | fn (mm/r) | Min | Max |
| 1130383 | GP0200A020-N02-MC | | ◉ | ◉ | | ◉ | ◉ | | | ◉ | ◉ | | ◉ | 2,0 | 0,2 | 20,5 | - | 18,5 | 6,0 | A | 0,06 | 0,05 | 0,10 |
| 1130384 | GP0300B020-N02-MC | | ◉ | ◉ | | ◉ | ◉ | | | ◉ | ◉ | | ◉ | 3,0 | 0,2 | 20,4 | - | 18,5 | 8,0 | B | 0,08 | 0,05 | 0,15 |
| 1130397 | GP0400C020-N02-MC | | ◉ | ◉ | | ◉ | ◉ | | | ◉ | ◉ | | ◉ | 4,0 | 0,2 | 21,0 | - | 18,5 | 7,0 | C | 0,13 | 0,05 | 0,25 |
| 1130416 | GP0200A020-050R02-MC | | ◉ | ◉ | | ◉ | ◉ | | | ○ | ◉ | | ◉ | 2,0 | 0,2 | 20,5 | 5,0 | 18,5 | 6,0 | A | 0,05 | 0,04 | 0,08 |
| 1130417 | GP0300B020-050R02-MC | | ◉ | ◉ | | ◉ | ◉ | | | ○ | ◉ | | ◉ | 3,0 | 0,2 | 20,4 | 5,0 | 18,5 | 8,0 | B | 0,07 | 0,04 | 0,12 |
| 1130418 | GP0400C020-050R02-MC | | ○ | ○ | | ○ | ○ | | | ○ | ○ | | ○ | 4,0 | 0,2 | 21,0 | 5,0 | 18,5 | 7,0 | C | 0,10 | 0,04 | 0,20 |
| 1130419 | GP0200A020-050L02-MC | | ◉ | ◉ | | ◉ | ◉ | | | ○ | ◉ | | ◉ | 2,0 | 0,2 | 20,5 | 5,0 | 18,5 | 6,0 | A | 0,05 | 0,04 | 0,08 |
| 1130420 | GP0300B020-050L02-MC | | ◉ | ◉ | | ◉ | ◉ | | | ○ | ◉ | | ◉ | 3,0 | 0,2 | 20,4 | 5,0 | 18,5 | 8,0 | B | 0,07 | 0,04 | 0,12 |
| 1130421 | GP0400C020-050L02-MC | | ○ | ○ | | ○ | ○ | | | ○ | ○ | | ○ | 4,0 | 0,2 | 21,0 | 5,0 | 18,5 | 7,0 | C | 0,10 | 0,04 | 0,20 |

◉ First choice | Primeira opção | 1ª opción ◉ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta Disponible bajo consulta

**Insert order code** = (1) Geometry Code + (2) Grade Code

2 - Correspond to a Specific Holder

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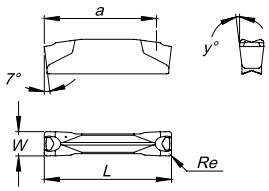
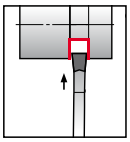
## GP...02-MG | Medium Grooving





| (1) Geometry code | ISO/ANSI Reference | P | | | M | | | K | | | | N | S | Dimensions (mm) | | | | | | | Cutting Conditions | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CVD-MT | | PVD | CVD-MT | | PVD | UNC | CVD-MT | | | UNC | PVD | | | | | | | | | | |
| | (2) Grade code | L8 | N2 | G4 | L8 | N2 | G4 | 25 | L5 | L6 | N2 | 10 | G4 | | | | | | | | | | |
| | | PH5125 | PH5135 | PH7920 | PH5125 | PH5135 | PH7920 | PH0705 | PH5705 | PH5320 | PH5135 | PH0910 | PH7920 | W | Re | L | x° | a | y° | Seat[2] Size | fn (mm/r) | Min | Max |
| 1130398 | GP0300B020-N02-MG | ◉ | | ◉ | ◉ | | ◉ | | | ◉ | | | ◉ | 3,0 | 0,2 | 21,0 | - | 18,5 | 6,5 | B | 0,06 | 0,05 | 0,10 |
| 1130399 | GP0400C040-N02-MG | ◉ | | ◉ | ◉ | | ◉ | | | ◉ | | | ◉ | 4,0 | 0,4 | 21,0 | - | 18,5 | 6,5 | C | 0,08 | 0,05 | 0,15 |
| 1130400 | GP0500D040-N02-MG | ◉ | | ◉ | ◉ | | ◉ | | | ◉ | | | ◉ | 5,0 | 0,4 | 21,0 | - | 18,5 | 6,0 | D | 0,13 | 0,05 | 0,25 |

◉ First choice | Primeira opção | 1ª opción

◉ Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta
Disponible bajo consulta

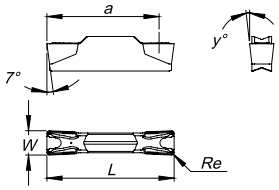
**Insert order code** = (1) Geometry Code + (2) Grade Code

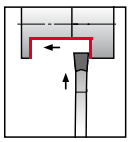
**In some positions new grade PH7920, will be available when PH7325 stock ends.**

2 - Correspond to a Specific Holder

## GP...02-MM | Medium Multi Function





| (1) Geometry code | ISO/ANSI Reference | P | | | M | | | K | | | | N | S | Dimensions (mm) | | | | | | | | Cutting Conditions | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CVD-MT | | PVD | CVD-MT | | PVD | UNC | CVD-MT | | | UNC | PVD | | | | | | | | | | | | | | |
| | (2) Grade code | L8 | N2 | G4 | L8 | N2 | G4 | 25 | L5 | L6 | N2 | 10 | G4 | | | | | | | | | | | | | | |
| | | PH5125 | PH5135 | PH7920 | PH5125 | PH5135 | PH7920 | PH0705 | PH5705 | PH5320 | PH5135 | PH0910 | PH7920 | W | Re | L | x° | a[1] | y° | Seat[2] Size | Ap (mm) | Min | Max | fn (mm/r) | Min | Max |
| 1130401 | GP0300B040-N02-MM | ◉ | | ◉ | ◉ | | ◉ | ◉ | ○ | ◉ | | | ◉ | 3,0 | 0,4 | 21,0 | - | 18,5 | 6,0 | B | 0,8 | 0,4 | 1,5 | 0,09 | 0,05 | 0,12 |
| 1130402 | GP0400C040-N02-MM | ◉ | | ◉ | ◉ | | ◉ | ◉ | ○ | ◉ | | | ◉ | 4,0 | 0,4 | 21,0 | - | 18,5 | 6,0 | C | 1,1 | 0,6 | 2,0 | 0,12 | 0,07 | 0,15 |
| 1130403 | GP0500D040-N02-MM | ◉ | | ◉ | ◉ | | ◉ | ◉ | ○ | ◉ | | | ◉ | 5,0 | 0,4 | 21,0 | - | 18,5 | 5,5 | D | 1,5 | 0,8 | 2,5 | 0,14 | 0,10 | 0,18 |

◉ First choice | Primeira opção | 1ª opción

◉ Stock item | Produto de stock | Itens de stock

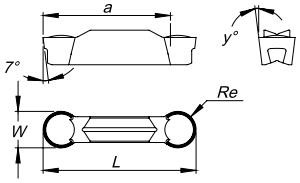
○ Available under request | Disponível sobre consulta
Disponible bajo consulta

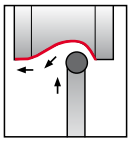
**Insert order code** = (1) Geometry Code + (2) Grade Code

1 - When using inserts with 1 Cutting edge, the "a" measure is given by the Toolholder | 2 - Correspond to a Specific Holder

## GP...02-MP | Medium Profiling





| (1) Geometry code | ISO/ANSI Reference | (2) Grade code | P | | | M | | | K | | | | N | S | Dimensions (mm) | | | | | | | Cutting Conditions | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CVD-MT | | PVD | CVD-MT | | PVD | UNC | CVD-MT | | | UNC | PVD | | | | | | | | | | | | | |
| | | | L8 | N2 | G4 | L8 | N2 | G4 | 25 | L5 | L6 | N2 | 10 | G4 | | | | | | | | | | | | | |
| | | | PH5125 | PH5135 | PH7920 | PH5125 | PH5135 | PH7920 | PH0705 | PH5705 | PH5320 | PH5135 | PH0910 | PH7920 | W | Re | L | x° | a | y° | Seat[2] Size | Ap (mm) | Min | Max | fn (mm/r) | Min | Max |
| 1130404 | GP0600E300-N02-MP | | ◈ | | ◈ | ◈ | | ◈ | ○ | | ◈ | | | ◈ | 6,0 | 3,0 | 25,2 | - | 21,0 | 7,0 | E | 1,50 | 0,04 | 2,20 | 0,18 | 0,15 | 0,22 |

◈ First choice | Primeira opção | 1ª opción

◈ Stock item | Produto de stock | Itens de stock

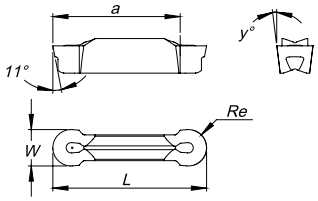
○ Available under request | Disponível sobre consulta
Disponible bajo consulta

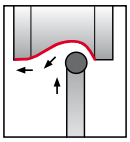
**Insert order code** = (1) Geometry Code + (2) Grade Code

2 - Correspond to a Specific Holder

## GP...02-NP | Non-Ferrous Profiling





| (1) Geometry code | ISO/ANSI Reference | (2) Grade code | P | | | M | | | K | | | | N | S | Dimensions (mm) | | | | | | | Cutting Conditions | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CVD-MT | | PVD | CVD-MT | | PVD | UNC | CVD-MT | | | UNC | PVD | | | | | | | | | | | | | |
| | | | L8 | N2 | G4 | L8 | N2 | G4 | 25 | L5 | L6 | N2 | 10 | G4 | | | | | | | | | | | | | |
| | | | PH5125 | PH5135 | PH7920 | PH5125 | PH5135 | PH7920 | PH0705 | PH5705 | PH5320 | PH5135 | PH0910 | PH7920 | W | Re | L | x° | a | y° | Seat[2] Size | Ap (mm) | Min | Max | fn (mm/r) | Min | Max |
| 1130405 | GP0600E300-N02-NP | | | | | | | | | | | | ◈ | | 6,0 | 3,0 | 25,4 | - | 18,5 | 7,0 | E | 1,30 | 0,50 | 2,50 | 0,20 | 0,15 | 0,25 |

◈ First choice | Primeira opção | 1ª opción

◈ Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta
Disponible bajo consulta

**Insert order code** = (1) Geometry Code + (2) Grade Code

2 - Correspond to a Specific Holder

# BLADES & TOOLHOLDERS CODE KEY

Chave de codificação para lâminas | Llave de codificación de lamas

For Blades

| GP | N | C | - | 080 | 25 | .A | .0 |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | | 5 | 6 | 7 | 8 |

For Internal grooving

| GP | R | C | - | 100 | 010 | 25.25 | .A | .1 |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 |

## 1 - Product Line

GP - Grooving Plus

## 2 - Work Side

R - Right 

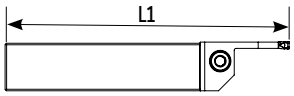
N - Neutral 

L - Left 

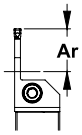
## 3 - Tool Type

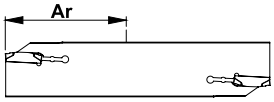
C - Frontal

## 4 - Total toolholder lenght

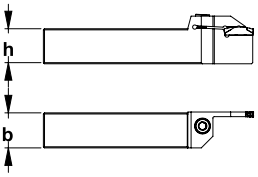


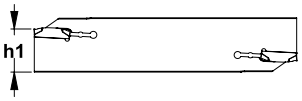

## 5 - Maximum Depth of Cut



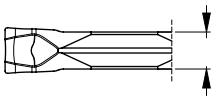

## 6 - Shaft | Cutting Unit Dimension



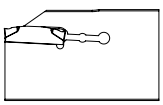



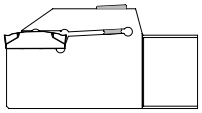

## 7 - Seat Size

A - 1,60mm | B - 2,30mm | C - 3,30mm | D - 4,30mm | E - 4,00mm | F - 6,60mm



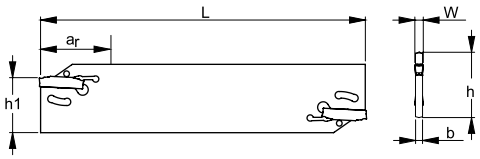
## 8 - Clamping System

0 - Spring 

1 - Screw 

## GPNC






GP02... | GP03... | GP04...




Seat Size A, B, C, D

Order separately

| Order code Código | Reference Referência Referencia | Dimensions \| Dimensões \| Dimensiones (mm) | | | | | | | Insert | Toolholder | | Wrench* | Stock |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ar | L1 | h | h1 | b | W | Seat Size | | CPTS | DPTS | | |
| 213010000 | GPNC-020 25.A.0 | 20 | 150 | 32 | 25,0 | 1,5 | 2 | A | GP02... | CPTS 32... | DPTS 32... | LE25-30 | ⊛ |
| 213009900 | GPNC-055 25.B.0 | 55 | 150 | 32 | 25,0 | 2,3 | 3 | B | GP03... | CPTS 32... | DPTS 32... | LE25-30 | ⊛ |
| 213009700 | GPNC-055 25.C.0 | 55 | 150 | 32 | 25,0 | 2,3 | 4 | C | GP04... | CPTS 32... | DPTS 32... | LE25-30 | ⊛ |

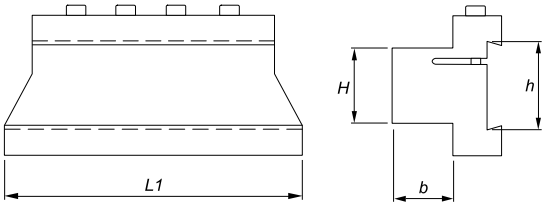
⊛ Stock item | Produto de stock | Itens de stock ◯ Available under request | Disponível sobre consulta | Disponible bajo consulta

*Note: Wrench must be ordered separately

**Note: For inserts with 2 cutting edges, the ar is defined by the insert**

## CPTS



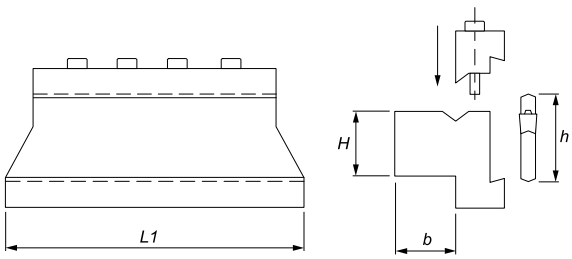



| Order code Código | Reference Referência Referencia | Dimensions \| Dimensões \| Dimensiones (mm) | | | | Kg | Screw | Wrench | Stock |
|---|---|---|---|---|---|---|---|---|---|
| | | h | L1 | H | b | | | | |
| 290006200 | CPTS 3220 | 32 | 100 | 20 | 20 | 0,700 | D0603600 | SS50 | ⊛ |
| 290005000 | CPTS 3225 | 32 | 110 | 25 | 25 | 0,950 | D0603600 | SS50 | ⊛ |
| 290006300 | CPTS 3232 | 32 | 120 | 32 | 32 | 1,400 | D0603600 | SS50 | ⊛ |

⊛ Stock item | Produto de stock | Itens de stock ◯ Available under request | Disponível sobre consulta | Disponible bajo consulta

## DPTS



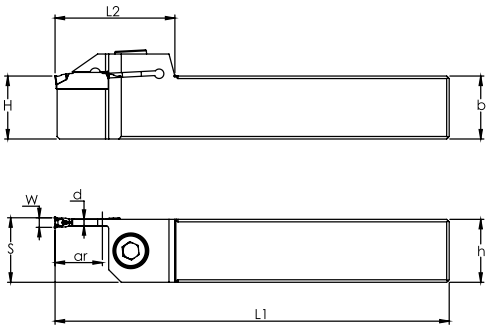



| Order code Código | Reference Referência Referencia | Dimensions \| Dimensões \| Dimensiones (mm) | | | | Kg | Screw | Wrench | Stock |
|---|---|---|---|---|---|---|---|---|---|
| | | h | L1 | H | b | | | | |
| 290073600 | DPTS 3220 | 32 | 100 | 20 | 20 | 0,750 | D0603600 | SS50 | ⊛ |
| 290073700 | DPTS 3225 | 32 | 110 | 25 | 25 | 1,00 | D0603600 | SS50 | ⊛ |
| 290073800 | DPTS 3232 | 32 | 120 | 32 | 32 | 1,450 | D0603600 | SS50 | ⊛ |

⊛ Stock item | Produto de stock | Itens de stock ◯ Available under request | Disponível sobre consulta | Disponible bajo consulta

# GPLC

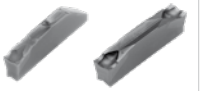





| Order code<br>Código | Reference<br>Referência<br>Referencia | Dimensions \| Dimensões \| Dimensiones (mm) | | | | | | | | | Seat Size | Insert | Screw | Wrench | Stock |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ar | L1 | h | b | H | L2 | S | d | W | | | | | |
| 213020800 | GPLC-100 010 16.16.A.1 | 10 | 100 | 16 | 16 | 16 | 30 | 16,25 | 1,5 | 2 | A | GP02... | D0602200 | SS50 | ○ |
| 213020900 | GPLC-100 015 16.16.A.1 | 15 | 100 | 16 | 16 | 16 | 38 | 16,25 | 1,5 | 2 | | GP02... | D0602200 | SS50 | ◈ |
| 213021000 | GPLC-125 010 20.20.A.1 | 10 | 125 | 20 | 20 | 20 | 32 | 20,25 | 1,5 | 2 | | GP02... | D0602200 | SS50 | ○ |
| 213021100 | GPLC-125 015 20.20.A.1 | 15 | 125 | 20 | 20 | 20 | 38 | 20,25 | 1,5 | 2 | | GP02... | D0602200 | SS50 | ◈ |
| 213021200 | GPLC-150 010 25.25.A.1 | 10 | 150 | 25 | 25 | 25 | 34 | 25,25 | 1,5 | 2 | | GP02... | D0602200 | SS50 | ◈ |
| 213021300 | GPLC-150 020 25.25.A.1 | 20 | 150 | 25 | 25 | 25 | 42 | 25,25 | 1,5 | 2 | | GP02... | D0602200 | SS50 | ◈ |
| 213021400 | GPLC-100 010 16.16.B.1 | 10 | 100 | 16 | 16 | 16 | 30 | 16,5 | 2 | 3 | B | GP03... | D0602200 | SS50 | ○ |
| 213021500 | GPLC-100 015 16.16.B.1 | 15 | 100 | 16 | 16 | 16 | 38 | 16,5 | 2 | 3 | | GP03... | D0602200 | SS50 | ◈ |
| 213021600 | GPLC-125 010 20.20.B.1 | 10 | 125 | 20 | 20 | 20 | 32 | 20,5 | 2 | 3 | | GP03... | D0602200 | SS50 | ○ |
| 213021700 | GPLC-125 015 20.20.B.1 | 15 | 125 | 20 | 20 | 20 | 38 | 20,5 | 2 | 3 | | GP03... | D0602200 | SS50 | ◈ |
| 213021800 | GPLC-150 010 25.25.B.1 | 10 | 150 | 25 | 25 | 25 | 34 | 25,5 | 2 | 3 | | GP03... | D0602200 | SS50 | ◈ |
| 213021900 | GPLC-150 020 25.25.B.1 | 20 | 150 | 25 | 25 | 25 | 42 | 25,5 | 2 | 3 | | GP03... | D0602200 | SS50 | ◈ |
| 213022000 | GPLC-125 013 20.20.C.1 | 13 | 125 | 20 | 20 | 20 | 32 | 20,5 | 3 | 4 | C | GP04... | D0602200 | SS50 | ○ |
| 213022100 | GPLC-125 019 20.20.C.1 | 19 | 125 | 20 | 20 | 20 | 38 | 20,5 | 3 | 4 | | GP04... | D0602200 | SS50 | ◈ |
| 213022200 | GPLC-150 013 25.25.C.1 | 13 | 150 | 25 | 25 | 25 | 34 | 25,5 | 3 | 4 | | GP04... | D0602200 | SS50 | ◈ |
| 213022300 | GPLC-150 023 25.25.C.1 | 23 | 150 | 25 | 25 | 25 | 42 | 25,5 | 3 | 4 | | GP04... | D0602200 | SS50 | ◈ |
| 213022400 | GPLC-125 013 20.20.D.1 | 13 | 125 | 20 | 20 | 20 | 32 | 20,5 | 4 | 5 | D | GP05... | D0602200 | SS50 | ○ |
| 213022500 | GPLC-125 019 20.20.D.1 | 19 | 125 | 20 | 20 | 20 | 38 | 20,5 | 4 | 5 | | GP05... | D0602200 | SS50 | ◈ |
| 213022600 | GPLC-150 013 25.25.D.1 | 13 | 150 | 25 | 25 | 25 | 34 | 25,5 | 4 | 5 | | GP05... | D0602200 | SS50 | ◈ |
| 213022700 | GPLC-150 023 25.25.D.1 | 23 | 150 | 25 | 25 | 25 | 42 | 25,5 | 4 | 5 | | GP05... | D0602200 | SS50 | ◈ |
| 213022800 | GPLC-150 015 25.25.E.1 | 15 | 150 | 25 | 25 | 25 | 34 | 26 | 4 | 6 | E | GP06... | D0602200 | SS50 | ◈ |
| 213022900 | GPLC-150 023 25.25.E.1 | 23 | 150 | 25 | 25 | 25 | 42 | 26 | 4 | 6 | | GP06... | D0602200 | SS50 | ◈ |

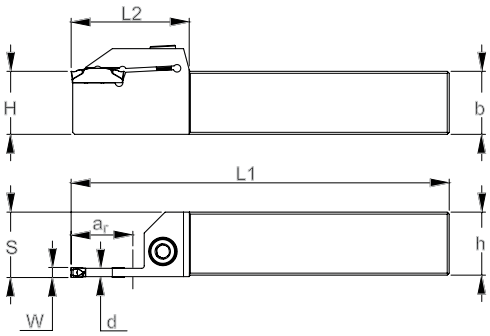
◈ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

**Note: For inserts with 2 cutting edges, the ar is defined by the insert**

| GP02... \| GP03... \| GP04... \| GP05... | | | GP06... | |
|---|---|---|---|---|
|  | |  |  | |
| MC | | MG | MP | NP |
| Seat Size A, B, C, D | | | Seat Size E | |

## GPRC

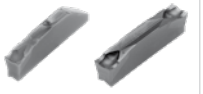





| Order code<br>Código | Reference<br>Referência<br>Referencia | Dimensions \| Dimensões \| Dimensiones (mm) | | | | | | | | | Seat Size | Insert | Screw | Wrench | Stock |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ar | L1 | h | b | H | L2 | S | d | W | | | | | |
| 213018400 | GPRC-100 010 16.16.A.1 | 10 | 100 | 16 | 16 | 16 | 30 | 16,25 | 1,5 | 2 | A | GP02... | D0602200 | SS50 | ○ |
| 213018500 | GPRC-100 015 16.16.A.1 | 15 | 100 | 16 | 16 | 16 | 38 | 16,25 | 1,5 | 2 | | GP02... | D0602200 | SS50 | ◈ |
| 213018600 | GPRC-125 010 20.20.A.1 | 10 | 125 | 20 | 20 | 20 | 32 | 20,25 | 1,5 | 2 | | GP02... | D0602200 | SS50 | ○ |
| 213018700 | GPRC-125 015 20.20.A.1 | 15 | 125 | 20 | 20 | 20 | 38 | 20,25 | 1,5 | 2 | | GP02... | D0602200 | SS50 | ◈ |
| 213018800 | GPRC-150 010 25.25.A.1 | 10 | 150 | 25 | 25 | 25 | 34 | 25,25 | 1,5 | 2 | | GP02... | D0602200 | SS50 | ◈ |
| 213018900 | GPRC-150 020 25.25.A.1 | 20 | 150 | 25 | 25 | 25 | 42 | 25,25 | 1,5 | 2 | | GP02... | D0602200 | SS50 | ◈ |
| 213019000 | GPRC-100 010 16.16.B.1 | 10 | 100 | 16 | 16 | 16 | 30 | 16,50 | 2,0 | 3 | B | GP03... | D0602200 | SS50 | ○ |
| 213019100 | GPRC-100 015 16.16.B.1 | 15 | 100 | 16 | 16 | 16 | 38 | 16,50 | 2,0 | 3 | | GP03... | D0602200 | SS50 | ◈ |
| 213019200 | GPRC-125 010 20.20.B.1 | 10 | 125 | 20 | 20 | 20 | 32 | 20,50 | 2,0 | 3 | | GP03... | D0602200 | SS50 | ○ |
| 213019300 | GPRC-125 015 20.20.B.1 | 15 | 125 | 20 | 20 | 20 | 38 | 20,50 | 2,0 | 3 | | GP03... | D0602200 | SS50 | ◈ |
| 213019400 | GPRC-150 010 25.25.B.1 | 10 | 150 | 25 | 25 | 25 | 34 | 25,50 | 2,0 | 3 | | GP03... | D0602200 | SS50 | ◈ |
| 213019500 | GPRC-150 020 25.25.B.1 | 20 | 150 | 25 | 25 | 25 | 42 | 25,50 | 2,0 | 3 | | GP03... | D0602200 | SS50 | ◈ |
| 213019600 | GPRC-125 013 20.20.C.1 | 13 | 125 | 20 | 20 | 20 | 32 | 20,50 | 3,0 | 4 | C | GP04... | D0602200 | SS50 | ○ |
| 213019700 | GPRC-125 019 20.20.C.1 | 19 | 125 | 20 | 20 | 20 | 38 | 20,50 | 3,0 | 4 | | GP04... | D0602200 | SS50 | ◈ |
| 213019800 | GPRC-150 013 25.25.C.1 | 13 | 150 | 25 | 25 | 25 | 34 | 25,50 | 3,0 | 4 | | GP04... | D0602200 | SS50 | ◈ |
| 213019900 | GPRC-150 023 25.25.C.1 | 23 | 150 | 25 | 25 | 25 | 42 | 25,50 | 3,0 | 4 | | GP04... | D0602200 | SS50 | ◈ |
| 213020000 | GPRC-125 013 20.20.D.1 | 13 | 125 | 20 | 20 | 20 | 32 | 20,50 | 4,0 | 5 | D | GP05... | D0602200 | SS50 | ○ |
| 213020100 | GPRC-125 019 20.20.D.1 | 19 | 125 | 20 | 20 | 20 | 38 | 20,50 | 4,0 | 5 | | GP05... | D0602200 | SS50 | ◈ |
| 213020200 | GPRC-150 013 25.25.D.1 | 13 | 150 | 25 | 25 | 25 | 34 | 25,50 | 4,0 | 5 | | GP05... | D0602200 | SS50 | ◈ |
| 213020300 | GPRC-150 023 25.25.D.1 | 23 | 150 | 25 | 25 | 25 | 42 | 25,50 | 4,0 | 5 | | GP05... | D0602200 | SS50 | ◈ |
| 213020400 | GPRC-150 015 25.25.E.1 | 15 | 150 | 25 | 25 | 25 | 34 | 26,00 | 4,0 | 6 | E | GP06... | D0602200 | SS50 | ◈ |
| 213020500 | GPRC-150 023 25.25.E.1 | 23 | 150 | 25 | 25 | 25 | 42 | 26,00 | 4,0 | 6 | | GP06... | D0602200 | SS50 | ◈ |

◈ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

**Note: For inserts with 2 cutting edges, the ar is defined by the insert**

| GP02... \| GP03... \| GP04... \| GP05... | | | GP06... | |
|---|---|---|---|---|
|  | |  |  |  |
| MC | | MG | MP | NP |
| Seat Size A, B, C, D | | | Seat Size E | |

# GCMX & SANCAR INSERTS CODE KEY

Chave de codificação para pastilhas | Llave de codificación para plaquitas

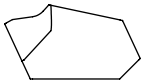
For GCMX Inserts

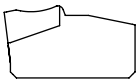
| GCMX | - | 3 | R | 15 |
|---|---|---|---|---|
| 1 | | 2 | 3 | 4 |

For SANCAR Inserts

| SANCAR | - | 3 | R | 5 |
|---|---|---|---|---|
| 1 | | 2 | 3 | 4 |

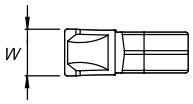
## 1 - Product Line

GCMX 

SANCAR 

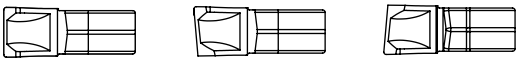
## 2 - Cutting Width

2mm | 2,4mm | 3mm | 4mm | 4,8mm | 5mm | 6mm



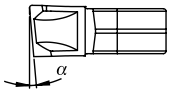

## 3 - Inserts Type

N - Neutral | R - Right | L - Left

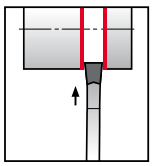
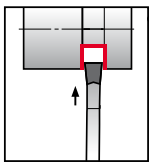
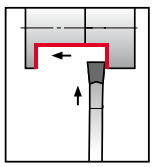
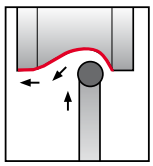


## 4 - Relief Angle

4 - 4º | 5 - 5º | 8 - 8º | 15 - 15º




## INSERTS OVERVIEW | Visão geral | Visión general

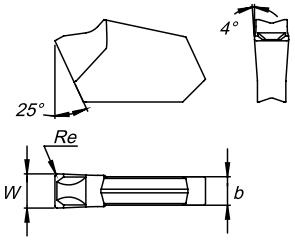
| Insert Type + Chipbreaker / Operation | | Parting Off | General Grooving | Turning | Profiling |
|---|---|---|---|---|---|
| | |  |  |  |  |
|  | GCMX-... | ◎ | ○ | | |
|  | SANCAR-... | ◎ | ○ | | |

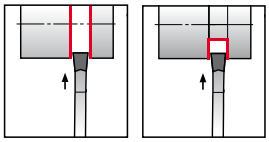
◎ First choice | Primeira opção | Primera opción

○ Alternative | Alternativa

# GCMX-N





| (1) Geometry code | (2) Grade code ISO Reference | ANSI Reference | P CVD-MT L7 PH5115 | P CVD-MT N2 PH5135 | M CVD-MT L7 PH5115 | M CVD-MT N2 PH5135 | K CVD-MT L6 PH5320 | K CVD-MT N2 PH5135 | Dimensions (mm) W | b | Re | α | Cutting Conditions fn (mm/r) | Min | Max |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1130165 | GCMX-2N | GTN-2N | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | 2,2 | 1,8 | 0,16 | - | 0,08 | 0,05 | 0,16 |
| 1130228 | GCMX-2.4N | | ○ | ○ | ○ | ○ | ○ | ○ | 2,4 | 2,0 | 0,16 | - | 0,10 | 0,06 | 0,18 |
| 1130169 | GCMX-3N | GTN-3N | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | 3,1 | 2,6 | 0,20 | - | 0,15 | 0,10 | 0,25 |
| 1130174 | GCMX-4N | GTN-4N | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | 4,1 | 3,5 | 0,25 | - | 0,18 | 0,10 | 0,30 |
| 1130229 | GCMX-4.8N | GTN-4.8N | ○ | ○ | ○ | ○ | ○ | ○ | 4,8 | 4,2 | 0,28 | - | 0,20 | 0,12 | 0,35 |
| 1130175 | GCMX-5N | GTN-5N | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | 5,1 | 4,5 | 0,28 | - | 0,20 | 0,12 | 0,35 |
| 1130176 | GCMX-6N | GTN-6N | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | 6,4 | 5,5 | 0,35 | - | 0,25 | 0,15 | 0,40 |
| 1130449 | GCMX-8N | GTN-8N | ○ | ○ | ○ | ○ | ○ | ○ | 8,0 | 7,1 | 0,40 | - | 0,28 | 0,17 | 0,45 |

◉ First choice | Primeira opção | 1ª opción

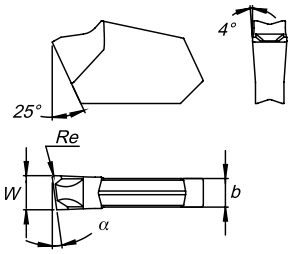
◉ Stock item | Produto de stock | Itens de stock

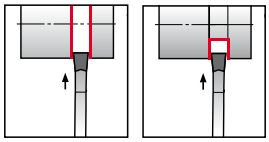
○ Available under request | Disponível sobre consulta
Disponible bajo consulta

**Insert order code** = (1) Geometry Code + (2) Grade Code

## GCMX-R





| (1) Geometry code | ISO Reference | ANSI Reference | P CVD-MT L7 PH5115 | P CVD-MT N2 PH5135 | M CVD-MT L7 PH5115 | M CVD-MT N2 PH5135 | K CVD-MT L6 PH5320 | K CVD-MT N2 PH5135 | Dimensions (mm) W | b | Re | α | Cutting Conditions fn (mm/r) | Min | Max |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (2) Grade code | | L7 | N2 | L7 | N2 | L6 | N2 | | | | | | | |
| 1130166 | GCMX-2R 4 | GTN-2R 4 | ○ | ○ | ○ | ○ | ○ | ○ | 2,2 | 1,8 | 0,16 | 4 | 0,07 | 0,04 | 0,13 |
| 1130167 | GCMX-2R 8 | GTN-2R 8 | ○ | ○ | ○ | ○ | ○ | ○ | 2,2 | 1,8 | 0,16 | 8 | 0,06 | 0,04 | 0,11 |
| 1130255 | GCMX-2R 15 | GTN-2R 15 | ○ | ○ | ○ | ○ | ○ | ○ | 2,2 | 1,8 | 0,16 | 15 | 0,06 | 0,04 | 0,09 |
| 1130257 | GCMX-2.4R 4 | GTN-2.4R 4 | ○ | ○ | ○ | ○ | ○ | ○ | 2,4 | 2,0 | 0,16 | 4 | 0,08 | 0,04 | 0,14 |
| 1130233 | GCMX-2.4R 8 | GTN-2.4R 8 | ○ | ○ | ○ | ○ | ○ | ○ | 2,4 | 2,0 | 0,16 | 8 | 0,07 | 0,04 | 0,12 |
| 1130258 | GCMX-2.4R 15 | GTN-2.4R 15 | ○ | ○ | ○ | ○ | ○ | ○ | 2,4 | 2,0 | 0,16 | 15 | 0,06 | 0,04 | 0,10 |
| 1130170 | GCMX-3R 4 | GTN-3R 4 | ○ | ○ | ○ | ○ | ○ | ○ | 3,1 | 2,6 | 0,20 | 4 | 0,08 | 0,05 | 0,15 |
| 1130171 | GCMX-3R 8 | GTN-3R 8 | ○ | ○ | ○ | ○ | ○ | ○ | 3,1 | 2,6 | 0,20 | 8 | 0,07 | 0,05 | 0,12 |
| 1130253 | GCMX-3R 15 | GTN-3R 15 | ○ | ○ | ○ | ○ | ○ | ○ | 3,1 | 2,6 | 0,20 | 15 | 0,06 | 0,05 | 0,10 |
| 1130261 | GCMX-4R 4 | GTN-4R 4 | ○ | ○ | ○ | ○ | ○ | ○ | 4,1 | 3,5 | 0,25 | 4 | 0,12 | 0,08 | 0,20 |
| 1130222 | GCMX-4R 8 | GTN-4R 8 | ○ | ○ | ○ | ○ | ○ | ○ | 4,1 | 3,5 | 0,25 | 8 | 0,10 | 0,08 | 0,12 |
| 1130262 | GCMX-4R 15 | GTN-4R 15 | ○ | ○ | ○ | ○ | ○ | ○ | 4,1 | 3,5 | 0,25 | 15 | 0,10 | 0,08 | 0,12 |
| 1130264 | GCMX-4.8R 4 | GTN-4.8R 4 | ○ | ○ | ○ | ○ | ○ | ○ | 4,8 | 4,2 | 0,28 | 4 | 0,18 | 0,10 | 0,25 |
| 1130230 | GCMX-4.8R 8 | GTN-4.8R 8 | ○ | ○ | ○ | ○ | ○ | ○ | 4,8 | 4,2 | 0,28 | 8 | 0,13 | 0,10 | 0,18 |
| 1130265 | GCMX-4.8R 15 | GTN-4.8R 15 | ○ | ○ | ○ | ○ | ○ | ○ | 4,8 | 4,2 | 0,28 | 15 | 0,12 | 0,09 | 0,15 |
| 1130268 | GCMX-5R 4 | GTN-5R 4 | ○ | ○ | ○ | ○ | ○ | ○ | 5,1 | 4,5 | 0,28 | 4 | 0,18 | 0,10 | 0,25 |
| 1130224 | GCMX-5R 8 | GTN-5R 8 | ○ | ○ | ○ | ○ | ○ | ○ | 5,1 | 4,5 | 0,28 | 8 | 0,13 | 0,10 | 0,18 |
| 1130269 | GCMX-5R 15 | GTN-5R 15 | ○ | ○ | ○ | ○ | ○ | ○ | 5,1 | 4,5 | 0,28 | 15 | 0,12 | 0,09 | 0,15 |
| 1130272 | GCMX-6R 4 | GTN-6R 4 | ○ | ○ | ○ | ○ | ○ | ○ | 6,4 | 5,5 | 0,35 | 4 | 0,20 | 0,10 | 0,30 |
| 1130227 | GCMX-6R 8 | GTN-6R 8 | ○ | ○ | ○ | ○ | ○ | ○ | 6,4 | 5,5 | 0,35 | 8 | 0,17 | 0,12 | 0,20 |
| 1130276 | GCMX-6R 15 | GTN-6R 15 | ○ | ○ | ○ | ○ | ○ | ○ | 6,4 | 5,5 | 0,35 | 15 | 0,14 | 0,10 | 0,18 |

First choice | Primeira opção | 1ª opción

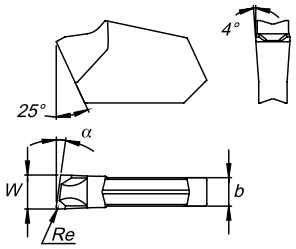
Stock item | Produto de stock | Itens de stock

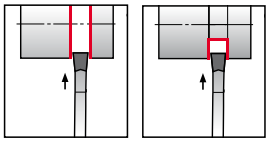
○ Available under request | Disponível sobre consulta
Disponible bajo consulta

**Insert order code** = (1) Geometry Code + (2) Grade Code

# GCMX-L





| (1) Geometry code | (2) Grade code ISO Reference | ANSI Reference | P CVD-MT L7 PH5115 | P CVD-MT N2 PH5135 | M CVD-MT L7 PH5115 | M CVD-MT N2 PH5135 | K CVD-MT L6 PH5320 | K CVD-MT N2 PH5135 | Dimensions (mm) W | b | Re | α | Cutting Conditions fn (mm/r) | Min | Max |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1130164 | GCMX-2L 4 | GTN-2L 4 | ○ | ○ | ○ | ○ | ○ | ○ | 2,2 | 1,8 | 0,16 | 4 | 0,07 | 0,04 | 0,13 |
| 1130220 | GCMX-2L 8 | GTN-2L 8 | ○ | ○ | ○ | ○ | ○ | ○ | 2,2 | 1,8 | 0,16 | 8 | 0,06 | 0,04 | 0,11 |
| 1130256 | GCMX-2L 15 | GTN-2L 15 | ○ | ○ | ○ | ○ | ○ | ○ | 2,2 | 1,8 | 0,16 | 15 | 0,06 | 0,04 | 0,09 |
| 1130259 | GCMX-2.4L 4 | GTN-2.4L 4 | ○ | ○ | ○ | ○ | ○ | ○ | 2,4 | 2,0 | 0,16 | 4 | 0,08 | 0,04 | 0,14 |
| 1130232 | GCMX-2.4L 8 | GTN-2.4L 8 | ○ | ○ | ○ | ○ | ○ | ○ | 2,4 | 2,0 | 0,16 | 8 | 0,07 | 0,04 | 0,12 |
| 1130260 | GCMX-2.4L 15 | GTN-2.4L 15 | ○ | ○ | ○ | ○ | ○ | ○ | 2,4 | 2,0 | 0,16 | 15 | 0,06 | 0,04 | 0,10 |
| 1130221 | GCMX-3L 4 | GTN-3L 4 | ○ | ○ | ○ | ○ | ○ | ○ | 3,1 | 2,6 | 0,20 | 4 | 0,08 | 0,05 | 0,15 |
| 1130168 | GCMX-3L 8 | GTN-3L 8 | ○ | ○ | ○ | ○ | ○ | ○ | 3,1 | 2,6 | 0,20 | 8 | 0,07 | 0,05 | 0,12 |
| 1130254 | GCMX-3L 15 | GTN-3L 15 | ○ | ○ | ○ | ○ | ○ | ○ | 3,1 | 2,6 | 0,20 | 15 | 0,06 | 0,05 | 0,10 |
| 1130173 | GCMX-4L 4 | GTN-4L 4 | ○ | ○ | ○ | ○ | ○ | ○ | 4,1 | 3,5 | 0,25 | 4 | 0,12 | 0,08 | 0,20 |
| 1130223 | GCMX-4L 8 | GTN-4L 8 | ○ | ○ | ○ | ○ | ○ | ○ | 4,1 | 3,5 | 0,25 | 8 | 0,10 | 0,08 | 0,12 |
| 1130263 | GCMX-4L 15 | GTN-4L 15 | ○ | ○ | ○ | ○ | ○ | ○ | 4,1 | 3,5 | 0,25 | 15 | 0,10 | 0,08 | 0,12 |
| 1130266 | GCMX-4.8L 4 | GTN-4.8L 4 | ○ | ○ | ○ | ○ | ○ | ○ | 4,8 | 4,2 | 0,28 | 4 | 0,18 | 0,10 | 0,25 |
| 1130231 | GCMX-4.8L 8 | GTN-4.8L 8 | ○ | ○ | ○ | ○ | ○ | ○ | 4,8 | 4,2 | 0,28 | 8 | 0,13 | 0,10 | 0,18 |
| 1130267 | GCMX-4.8L 15 | GTN-4.8L 15 | ○ | ○ | ○ | ○ | ○ | ○ | 4,8 | 4,2 | 0,28 | 15 | 0,12 | 0,09 | 0,15 |
| 1130270 | GCMX-5L 4 | GTN-5L 4 | ○ | ○ | ○ | ○ | ○ | ○ | 5,1 | 4,5 | 0,28 | 4 | 0,18 | 0,10 | 0,25 |
| 1130225 | GCMX-5L 8 | GTN-5L 8 | ○ | ○ | ○ | ○ | ○ | ○ | 5,1 | 4,5 | 0,28 | 8 | 0,13 | 0,10 | 0,18 |
| 1130271 | GCMX-5L 15 | GTN-5L 15 | ○ | ○ | ○ | ○ | ○ | ○ | 5,1 | 4,5 | 0,28 | 15 | 0,12 | 0,09 | 0,15 |
| 1130274 | GCMX-6L 4 | GTN-6L 4 | ○ | ○ | ○ | ○ | ○ | ○ | 6,4 | 5,5 | 0,35 | 4 | 0,20 | 0,10 | 0,30 |
| 1130226 | GCMX-6L 8 | GTN-6L 8 | ○ | ○ | ○ | ○ | ○ | ○ | 6,4 | 5,5 | 0,35 | 8 | 0,17 | 0,12 | 0,20 |
| 1130275 | GCMX-6L 15 | GTN-6L 15 | ○ | ○ | ○ | ○ | ○ | ○ | 6,4 | 5,5 | 0,35 | 15 | 0,14 | 0,10 | 0,18 |

First choice | Primeira opção | 1ª opción

Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta
Disponible bajo consulta

**Insert order code** = (1) Geometry Code + (2) Grade Code

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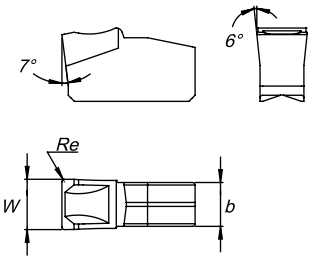
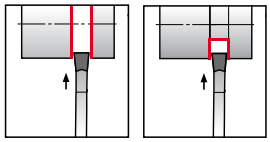
page D - 693

# INSERTS

## SANCAR-N





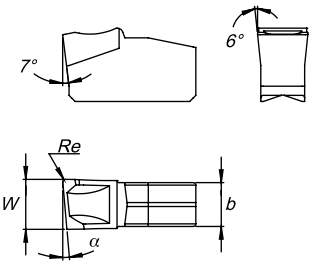
| (1) Geometry code | ISO Reference | ANSI Reference | (2) Grade code P CVD-MT L7 PH5115 | P CVD-MT N2 PH5135 | M CVD-MT L7 PH5115 | M CVD-MT N2 PH5135 | K CVD-MT L6 PH5320 | K CVD-MT N2 PH5135 | Dimensions (mm) W | b | Re | α | Cutting Conditions fn (mm/r) | Min | Max |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1130186 | SANCAR-3N | SANCAR-3N | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | 3,0 | 2,5 | 0,25 | - | 0,13 | 0,05 | 0,25 |
| 1130187 | SANCAR-4N | SANCAR-4N | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | 4,0 | 3,3 | 0,25 | - | 0,18 | 0,10 | 0,30 |
| 1130189 | SANCAR-5N | SANCAR-5N | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | 5,0 | 4,3 | 0,25 | - | 0,22 | 0,10 | 0,35 |

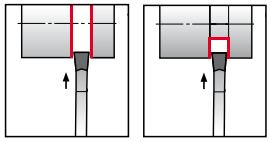
◉ First choice | Primeira opção | 1ª opción  ◉ Stock item | Produto de stock | Itens de stock  ○ Available under request | Disponível sobre consulta Disponible bajo consulta

**Insert order code** = (1) Geometry Code + (2) Grade Code

## SANCAR-R





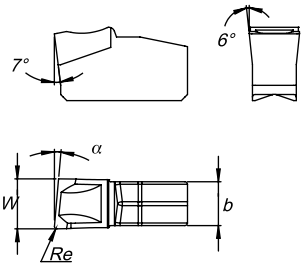
| (1) Geometry code | ISO Reference | ANSI Reference | (2) Grade code P CVD-MT L7 PH5115 | P CVD-MT N2 PH5135 | M CVD-MT L7 PH5115 | M CVD-MT N2 PH5135 | K CVD-MT L6 PH5320 | K CVD-MT N2 PH5135 | Dimensions (mm) W | b | Re | α | Cutting Conditions fn (mm/r) | Min | Max |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1130288 | SANCAR-3R 5 | SANCAR-3R 5 | ○ | ○ | ○ | ○ | ○ | ○ | 3,0 | 2,5 | 0,25 | 5 | 0,10 | 0,05 | 0,15 |
| 1130188 | SANCAR-4R 5 | SANCAR-4R 5 | ○ | ○ | ○ | ○ | ○ | ○ | 4,0 | 3,3 | 0,25 | 5 | 0,12 | 0,08 | 0,20 |
| 1130388 | SANCAR-5R 5 | SANCAR-5R 5 | ○ | ○ | ○ | ○ | ○ | ○ | 5,0 | 4,3 | 0,25 | 5 | 0,15 | 0,08 | 0,25 |

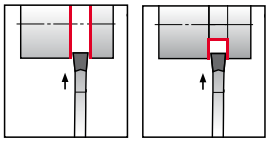
◉ First choice | Primeira opção | 1ª opción  ◉ Stock item | Produto de stock | Itens de stock  ○ Available under request | Disponível sobre consulta Disponible bajo consulta

**Insert order code** = (1) Geometry Code + (2) Grade Code

# SANCAR-L





| (1) Geometry code | ISO Reference | ANSI Reference | (2) Grade code P CVD-MT L7 PH5115 | P CVD-MT N2 PH5135 | M CVD-MT L7 PH5115 | M CVD-MT N2 PH5135 | K CVD-MT L6 PH5320 | K CVD-MT N2 PH5135 | Dimensions (mm) W | b | Re | α | Cutting Conditions fn (mm/r) | Min | Max |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1130185 | SANCAR-3L 5 | SANCAR-3L 5 | ○ | ○ | ○ | ○ | ○ | ○ | 3,0 | 2,5 | 0,25 | 5 | 0,10 | 0,05 | 0,15 |
| 1130390 | SANCAR-4L 5 | SANCAR-4L 5 | ○ | ○ | ○ | ○ | ○ | ○ | 4,0 | 3,3 | 0,25 | 5 | 0,12 | 0,08 | 0,20 |
| 1130389 | SANCAR-5L 5 | SANCAL-5L 5 | ○ | ○ | ○ | ○ | ○ | ○ | 5,0 | 4,3 | 0,25 | 5 | 0,15 | 0,08 | 0,25 |

First choice | Primeira opção | 1ª opción

Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta
Disponible bajo consulta

**Insert order code** = (1) Geometry Code + (2) Grade Code

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# BLADES CODE KEY | Chave de codificação para laminas | Llave de codificación de lamas

| BL | ST | 3 | - | 26 |
|---|---|---|---|---|
| 1 | 2 | 3 | | 4 |

## 1 - Product Line

BL - Blade

## 2 - Blade Type

ST - Standard Blade

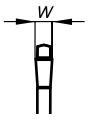


S - SANCAR Blade



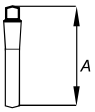
## 3 - Cutting Width

2mm | 3mm | 4mm | 5mm | 6mm



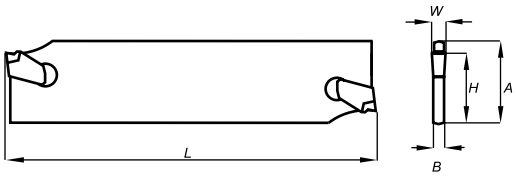

## 4 - Maximum Depth of Cut

19 - 19mm | 26 - 26mm | 32 - 32mm



## BLST (GCMX)






GCMX...



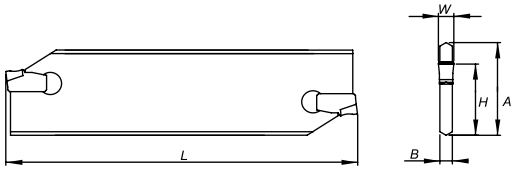
Hand Type
N, R, L

| Order code<br>Código | Reference<br>Referência<br>Referencia | Dimensions \| Dimensões \| Dimensiones (mm) | | | | | Inserts | Toolholder | | Wrench | Stock |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | A | W | H | B | L | | CPTS | DPTS | | |
| 213008000 | BLST 2-19 | 19 | 2 | 16 | 1,6 | 85 | GCMX-2... | CPTS 19... | DPTS 19... | LE05 | ◉ |
| 213008100 | BLST 2-26 | 26 | 2 | 21,4 | 1,6 | 110 | GCMX-2... | CPTS 26... | DPTS 26... | LE05 | ◉ |
| 213008200 | BLST 3-26 | 26 | 3 | 21,4 | 2,4 | 110 | GCMX-3... | CPTS 26... | DPTS 26... | LE05 | ◉ |
| 213008300 | BLST 4-26 | 26 | 4 | 21,4 | 3,2 | 110 | GCMX-4... | CPTS 26... | DPTS 26... | LE05 | ◉ |
| 213008400 | BLST 5-26 | 26 | 5 | 21,4 | 4 | 110 | GCMX-5... | CPTS 26... | DPTS 26... | LE05 | ◉ |
| 213008500 | BLST 6-26 | 26 | 6 | 21,4 | 5,2 | 110 | GCMX-6... | CPTS 26... | DPTS 26... | LE05 | ◉ |
| 213008600 | BLST 2-32 | 32 | 2 | 25 | 1,6 | 150 | GCMX-2... | CPTS 32... | DPTS 32... | LE05 | ◉ |
| 213008700 | BLST 3-32 | 32 | 3 | 25 | 2,4 | 150 | GCMX-3... | CPTS 32... | DPTS 32... | LE05 | ◉ |
| 213008800 | BLST 4-32 | 32 | 4 | 25 | 3,2 | 150 | GCMX-4... | CPTS 32... | DPTS 32... | LE05 | ◉ |
| 213008900 | BLST 5-32 | 32 | 5 | 25 | 4 | 150 | GCMX-5... | CPTS 32... | DPTS 32... | LE05 | ◉ |
| 213009000 | BLST 6-32 | 32 | 6 | 25 | 5,2 | 150 | GCMX-6... | CPTS 32... | DPTS 32... | LE05 | ◉ |

◉ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

## BLS (SANCAR)






SANCAR...



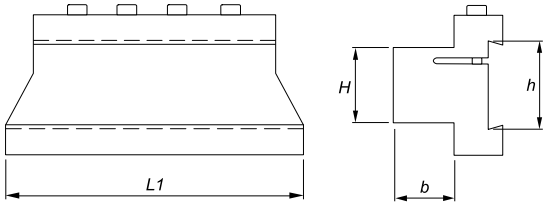
Hand Type
N, R, L

| Order code<br>Código | Reference<br>Referência<br>Referencia | Dimensions \| Dimensões \| Dimensiones (mm) | | | | | Inserts | Toolholder | | Wrench | Stock |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | A | W | H | B | L | | CPTS | DPTS | | |
| 213004600 | BLS 3-32 | 32 | 3 | 25 | 2,4 | 150 | SANCAR 3... | CPTS 32... | DPTS 32... | LE05 | ◉ |
| 213004700 | BLS 4-32 | 32 | 4 | 25 | 3,2 | 150 | SANCAR 4... | CPTS 32... | DPTS 32... | LE05 | ◉ |
| 213005500 | BLS 5-32 | 32 | 5 | 25 | 4 | 150 | SANCAR 5... | CPTS 32... | DPTS 32... | LE05 | ◉ |

◉ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

## CPTS



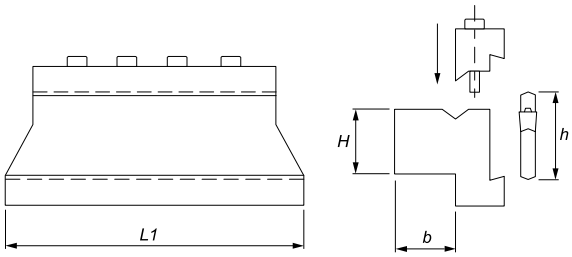



| Order code<br>Código | Reference<br>Referência<br>Referencia | Dimensions \| Dimensões \| Dimensiones (mm) | | | | Kg | Screw | Wrench | Stock |
|---|---|---|---|---|---|---|---|---|---|
| | | h | L1 | H | b | | | | |
| 290009300 | CPTS 1916 | 19 | 76 | 16 | 16 | 0,300 | D0503000 | SS40 | ◈ |
| 290008200 | CPTS 2616 | 26 | 76 | 16 | 16 | 0,450 | D0603600 | SS50 | ◈ |
| 290006000 | CPTS 2620 | 26 | 87 | 20 | 20 | 0,500 | D0603600 | SS50 | ◈ |
| 290006100 | CPTS 2625 | 26 | 87 | 25 | 25 | 0,650 | D0603600 | SS50 | ◈ |
| 290006200 | CPTS 3220 | 32 | 100 | 20 | 20 | 0,700 | D0603600 | SS50 | ◈ |
| 290005000 | CPTS 3225 | 32 | 110 | 25 | 25 | 0,950 | D0603600 | SS50 | ◈ |
| 290006300 | CPTS 3232 | 32 | 120 | 32 | 32 | 1,400 | D0603600 | SS50 | ◈ |
| 290074000 | CPTS 5250 | 52 | 135 | 50 | 50 | 3,400 | D0804800 | SS60 | ◈ |

◈ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

## DPTS






| Order code<br>Código | Reference<br>Referência<br>Referencia | Dimensions \| Dimensões \| Dimensiones (mm) | | | | Kg | Screw | Wrench | Stock |
|---|---|---|---|---|---|---|---|---|---|
| | | h | L1 | H | b | | | | |
| 290045400 | DPTS 1916 | 19 | 76 | 16 | 16 | 0,250 | D0503000 | SS40 | ◈ |
| 290045500 | DPTS 2620 | 26 | 87 | 20 | 20 | 0,550 | D0603600 | SS50 | ◈ |
| 290046600 | DPTS 2625 | 26 | 87 | 25 | 25 | 0,700 | D0603600 | SS50 | ◈ |
| 290073600 | DPTS 3220 | 32 | 100 | 20 | 20 | 0,750 | D0603600 | SS50 | ◈ |
| 290073700 | DPTS 3225 | 32 | 110 | 25 | 25 | 1,00 | D0603600 | SS50 | ◈ |
| 290073800 | DPTS 3232 | 32 | 120 | 32 | 32 | 1,450 | D0603600 | SS50 | ◈ |
| 290073900 | DPTS 5250 | 52 | 135 | 50 | 50 | 3,450 | D0804800 | SS60 | ◈ |

◈ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta



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# TRIGON INSERTS CODE KEY

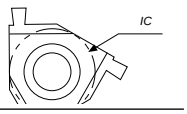
Chave de codificação para pastilhas | Llave de codificación para plaquitas

## For Trigon 60º Inserts

| 16 | - | ER | - | W | - | 1.00 |
|---|---|---|---|---|---|---|
| 1 | | 2 | | 3 | | 4 |

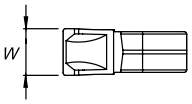
### 1 - Inscribed Circle

16 - 9,525mm



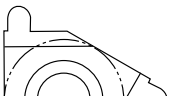

### 2 - Insert Type

ER - External Right | IR - Internal Right



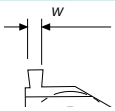

### 3 - Cutting Edge Type

W - Rectangular 

R - Rounded 

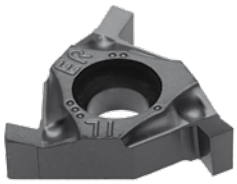
### 4 - Cutting Edge Length

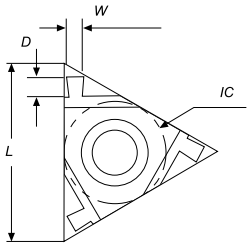
0,50 - 0,5mm | 2,25 - 2,25mm

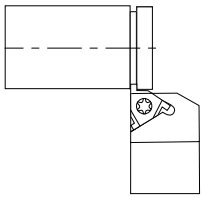


# TRIGON INSERTS

## FLAT GROOVING





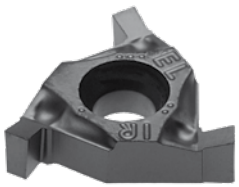
### External

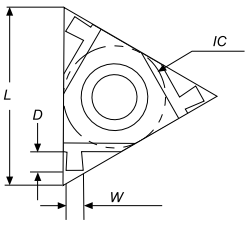
**Inserts IR = EL**

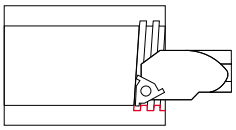
| Order code<br>Código | Reference<br>Referência<br>Referencia | Anvil | Dimensions \| Dimensões \| Dimensiones (mm) | | | | Stock - Grade Code (2) | |
|---|---|---|---|---|---|---|---|---|
| | | | IC | L | W | D | (68) PH6920 | (D0) PH8920 |
| 1883721 | 11 ER W 0.50 | - | 6,35 | 11,00 | 0,50 | 1,40 | ○ | ○ |
| 1883722 | 11 ER W 0.60 | - | 6,35 | 11,00 | 0,60 | 1,40 | ○ | ○ |
| 1883723 | 11 ER W 0.70 | - | 6,35 | 11,00 | 0,70 | 1,40 | ○ | ○ |
| 1883724 | 11 ER W 0.80 | - | 6,35 | 11,00 | 0,80 | 1,40 | ○ | ○ |
| 1883725 | 11 ER W 1.00 | - | 6,35 | 11,00 | 1,00 | 1,30 | ○ | ○ |
| 1883726 | 16 ER W 0.50 | EA 16 | 9,525 | 16,00 | 0,50 | 1,40 | ○ | ○ |
| 1881125 | 16 ER W 1.00 | EA 16 | 9,525 | 16,00 | 1,00 | 1,40 | ◈ | ○ |
| 1883707 | 16 ER W 1.20 | EA 16 | 9,525 | 16,00 | 1,20 | 1,60 | ◈ | ○ |
| 1883720 | 16 ER W 1.40 | EA 16 | 9,525 | 16,00 | 1,40 | 1,80 | ◈ | ○ |
| 1881129 | 16 ER W 1.70 | EA 16 | 9,525 | 16,00 | 1,70 | 2,00 | ◈ | ◈ |
| 1883711 | 16 ER W 1.95 | EA 16 | 9,525 | 16,00 | 1,95 | 2,00 | ◈ | ◈ |
| 1883714 | 16 ER W 2.25 | EA 16 | 9,525 | 16,00 | 2,25 | 2,25 | ◈ | ◈ |

◈ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

**Note: Select the toolholder "SXAN"**





### Internal

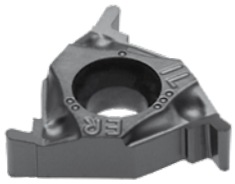
**Inserts IR = EL**

| Order code<br>Código | Reference<br>Referência<br>Referencia | Anvil | Dimensions \| Dimensões \| Dimensiones (mm) | | | | Stock - Grade Code (2) | |
|---|---|---|---|---|---|---|---|---|
| | | | IC | L | W | D | (68) PH6920 | (D0) PH8920 |
| 1881142 | 11 IR W 0.50 | - | 6,35 | 11,00 | 0,50 | 1,40 | ◈ | ○ |
| 1883727 | 11 IR W 0.60 | - | 6,35 | 11,00 | 0,60 | 1,40 | ○ | ○ |
| 1883728 | 11 IR W 0.70 | - | 6,35 | 11,00 | 0,70 | 1,40 | ○ | ○ |
| 1883729 | 11 IR W 0.80 | - | 6,35 | 11,00 | 0,80 | 1,40 | ○ | ○ |
| 1881144 | 11 IR W 1.00 | - | 6,35 | 11,00 | 1,00 | 1,30 | ◈ | ○ |
| 1883730 | 16 IR W 0.50 | EA 16 | 9,525 | 16,00 | 0,50 | 1,40 | ○ | ○ |
| 1881134 | 16 IR W 1.00 | EA 16 | 9,525 | 16,00 | 1,00 | 1,40 | ◈ | ○ |
| 1883731 | 16 IR W 1.20 | EA 16 | 9,525 | 16,00 | 1,20 | 1,60 | ◈ | ○ |
| 1883712 | 16 IR W 1.40 | EA 16 | 9,525 | 16,00 | 1,40 | 1,80 | ◈ | ○ |
| 1881138 | 16 IR W 1.70 | EA 16 | 9,525 | 16,00 | 1,70 | 2,00 | ◈ | ○ |
| 1883710 | 16 IR W 1.95 | EA 16 | 9,525 | 16,00 | 1,95 | 2,00 | ◈ | ○ |
| 1883713 | 16 IR W 2.25 | EA 16 | 9,525 | 16,00 | 2,25 | 2,25 | ◈ | ○ |

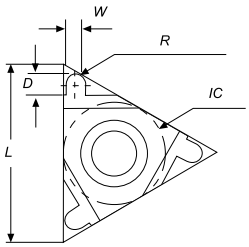
◈ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

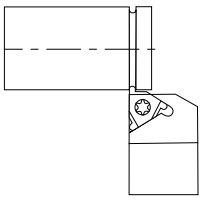
**Note: Select the toolholder "SXFN"**

# FULL RADIUS GROOVING



## External



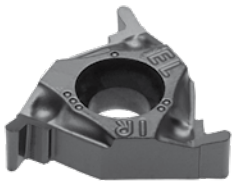



**Inserts IR = EL**

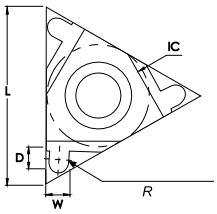
| Order code<br>Código | Reference<br>Referência<br>Referencia | Anvil | Dimensions \| Dimensões \| Dimensiones (mm) | | | | | Stock - Grade Code (2) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | IC | L | W | R | D | (68) PH6920 | (D0) PH8920 |
| 1881149 | 16 ER R 0.50 | EA 16 | 9,525 | 16 | 1,00 | 0,50 | 1,40 | ◉ | ○ |
| 1883732 | 16 ER R 0.60 | EA 16 | 9,525 | 16 | 1,20 | 0,60 | 1,60 | ○ | ○ |
| 1883733 | 16 ER R 0.90 | EA 16 | 9,525 | 16 | 1,80 | 0,90 | 2,00 | ○ | ○ |
| 1881151 | 16 ER R 1.00 | EA 16 | 9,525 | 16 | 2,00 | 1,00 | 2,00 | ○ | ○ |
| 1883734 | 16 ER R 1.10 | EA 16 | 9,525 | 16 | 2,20 | 1,10 | 2,15 | ○ | ○ |
| 1883735 | 16 ER R 1.20 | EA 16 | 9,525 | 16 | 2,40 | 1,20 | 2,15 | ○ | ○ |

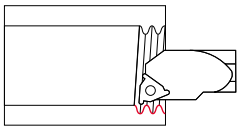
◉ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

**Note: Select the toolholder "SXAN"**



## Internal



**Inserts IR = EL**

| Order code<br>Código | Reference<br>Referência<br>Referencia | Anvil | Dimensions \| Dimensões \| Dimensiones (mm) | | | | | Stock - Grade Code (2) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | IC | L | W | R | D | (68) PH6920 | (D0) PH8920 |
| 1881145 | 16 IR R 0.50 | EA 16 | 9,525 | 16 | 1,00 | 0,50 | 1,40 | ○ | ○ |
| 1883736 | 16 IR R 0.60 | EA 16 | 9,525 | 16 | 2,00 | 1,00 | 1,40 | ○ | ○ |
| 1883737 | 16 IR R 0.90 | EA 16 | 9,525 | 16 | 2,40 | 1,20 | 1,60 | ○ | ○ |
| 1881147 | 16 IR R 1.00 | EA 16 | 9,525 | 16 | 2,80 | 1,40 | 1,80 | ○ | ○ |
| 1883738 | 16 IR R 1.10 | EA 16 | 9,525 | 16 | 3,40 | 1,70 | 2,00 | ○ | ○ |
| 1883739 | 16 IR R 1.20 | EA 16 | 9,525 | 16 | 3,90 | 1,95 | 2,00 | ○ | ○ |

◉ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

**Note: Select the toolholder "SXFN"**

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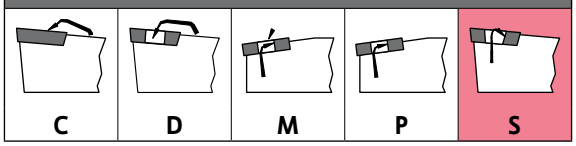
# EXTERNAL TOOLHOLDERS CODE KEY

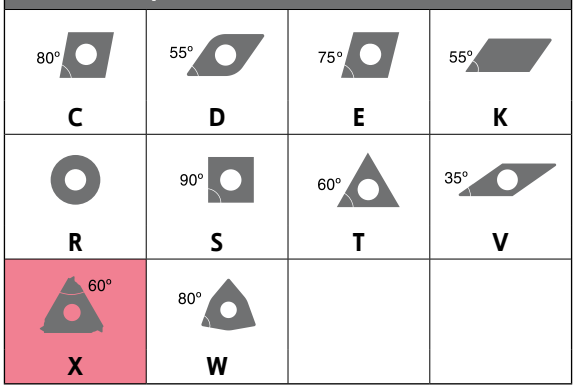
Chave de codificação para suporte externos | Llave de codificación para herramienta exterior

| S | X | A | N | R | 25 | 25 | M | 16 |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

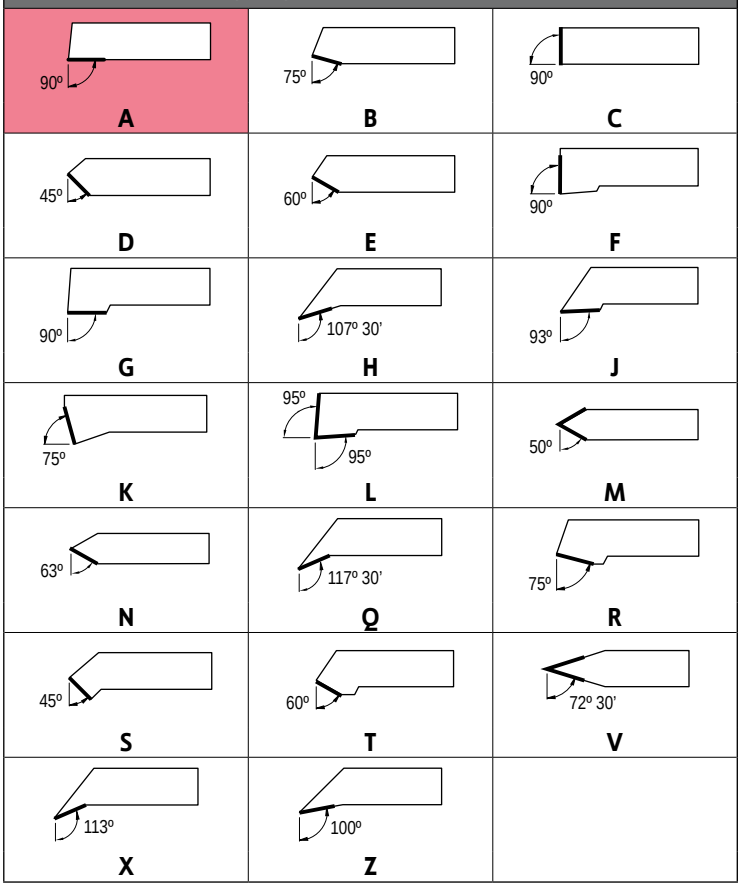
## 1 - Inserts Clamping System



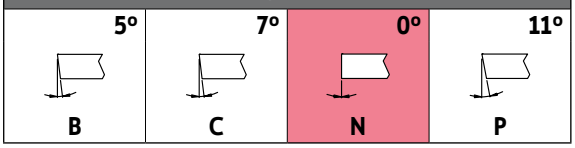

## 2 - Insert Shape



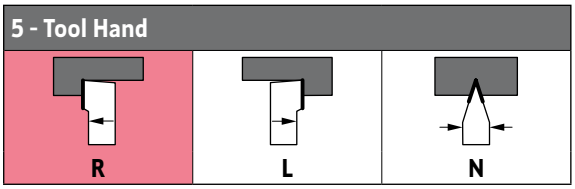

## 3 - Toolholder Leading Angle



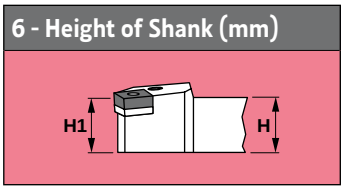

## 4 - Inserts Clearance Angle



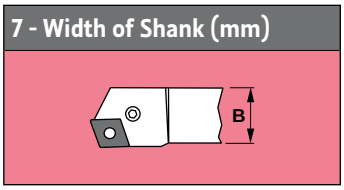

## 5 - Tool Hand



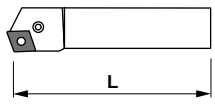

## 6 - Height of Shank (mm)




## 7 - Width of Shank (mm)

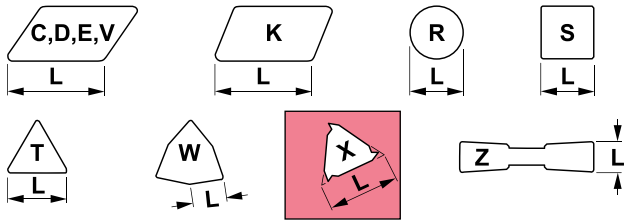



## 8 - Length of Holder (mm)



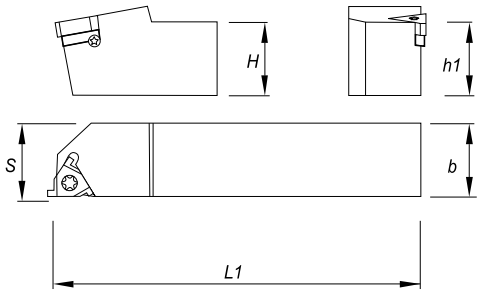

| | | | |
|---|---|---|---|
| D | 60 | P | 170 |
| E | 70 | R | 200 |
| F | 80 | S | 250 |
| H | 100 | T | 300 |
| K | 125 | U | 350 |
| L | 140 | V | 400 |
| M | 150 | X | Special |

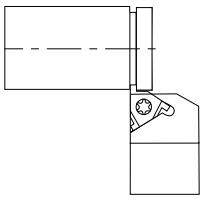
## 9 - Length of Inserts Cutting Edge (mm)



# EXTERNAL TOOLHOLDER

## SXAN



**External Left**

| Order Code<br>Código | Reference<br>Referência<br>Referencia | Insert Geometry | Dimensions \| Dimensões \| Dimensiones (mm) | | | | Anvil | Anvil Screw | Insert Screw | Torx Key | Stock |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | H=h1 | b | S | L | | | | | |
| 212244300 | SXAN L 0808 H11 | EL11 | 8 | 8 | 11 | 100 | - | - | P0260700 | XT08 | ○ |
| 212244400 | SXAN L 1010 H11 | EL11 | 10 | 10 | 11 | 100 | - | - | P0260700 | XT08 | ◎ |
| 212384500 | SXAN L 1212 K11 | EL11 | 12 | 12 | 12 | 125 | - | - | P0260700 | XT08 | ○ |
| 212384600 | SXAN L 1212 F16 | EL16 | 12 | 12 | 16 | 80 | IA16 | P5000790 | P5401390 | XT10 | ○ |
| 212123400 | SXAN L 1616 H16 | EL16 | 16 | 16 | 16 | 100 | IA16 | P5000790 | P5401390 | XT10 | ○ |
| 212123500 | SXAN L 2020 K16 | EL16 | 20 | 20 | 20 | 125 | IA16 | P5000790 | P5401390 | XT10 | ◎ |
| 212123800 | SXAN L 2525 M16 | EL16 | 25 | 25 | 25 | 150 | IA16 | P5000790 | P5401390 | XT10 | ◎ |
| 212124400 | SXAN L 3232 P16 | EL16 | 32 | 32 | 32 | 170 | IA16 | P5000790 | P5401390 | XT10 | ○ |

◎ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

**External Right**

| Order Code<br>Código | Reference<br>Referência<br>Referencia | Insert Geometry | Dimensions \| Dimensões \| Dimensiones (mm) | | | | Anvil | Anvil Screw | Insert Screw | Torx Key | Stock |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | H=h1 | b | S | L | | | | | |
| 212244700 | SXAN R 0808 H11 | ER11 | 8 | 8 | 10 | 100 | - | - | P0260700 | XT08 | ○ |
| 212244800 | SXAN R 1010 H11 | ER11 | 10 | 10 | 10 | 100 | - | - | P0260700 | XT08 | ◎ |
| 212384900 | SXAN R 1212 K11 | ER11 | 12 | 12 | 12 | 125 | - | - | P0260700 | XT08 | ○ |
| 212383800 | SXAN R 1212 F16 | ER16 | 12 | 12 | 16 | 80 | EA16 | P5000790 | P5401390 | XT10 | ◎ |
| 212053800 | SXAN R 1616 H16 | ER16 | 16 | 16 | 16 | 100 | EA16 | P5000790 | P5401390 | XT10 | ◎ |
| 212053100 | SXAN R 2020 K16 | ER16 | 20 | 20 | 20 | 125 | EA16 | P5000790 | P5401390 | XT10 | ◎ |
| 212053200 | SXAN R 2525 M16 | ER16 | 25 | 25 | 25 | 150 | EA16 | P5000790 | P5401390 | XT10 | ◎ |
| 212124300 | SXAN R 3232 P16 | ER16 | 32 | 32 | 32 | 170 | EA16 | P5000790 | P5401390 | XT10 | ◎ |

◎ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

# INTERNAL TOOLHOLDERS CODE KEY

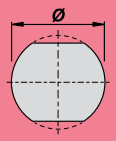
Chave de codificação para suporte internos | Llave de codificación para herramienta interior

| S | 32 | S | S | X | F | N | R | 16 |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

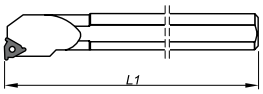
## 1 - Bar Type

| | |
|---|---|
| **S** | Steel shank |

## 2 - Bar Diameter (mm)




## 3 - Bar Length (mm)



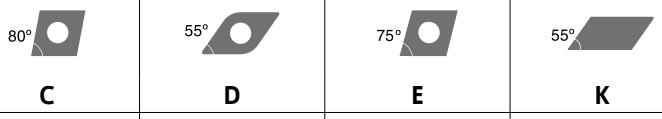

| | | | |
|---|---|---|---|
| **H** | 100 | **T** | 300 |
| **J** | 110 | **U** | 350 |
| **K** | 125 | **V** | 400 |
| **L** | 140 | **W** | 450 |
| **M** | 150 | **Y** | 500 |
| **Q** | 180 | **X** | Special |
| **R** | 200 | | |
| **S** | 250 | | |

## 4 - Inserts Clamping System



**C** **M** **P** **S**

## 5 - Insert Shape

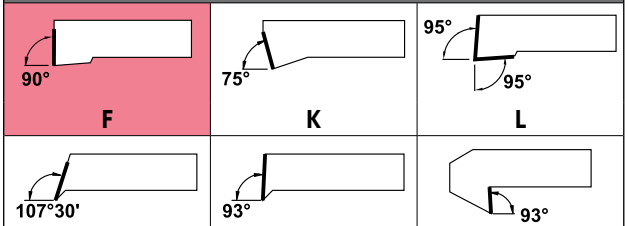



**C** **D** **E** **K**

**S** **T** **V** **W**

**X**

## 6 - Bar Leading Angle

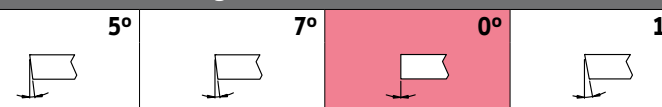



**F** **K** **L**

**Q** **U** **U-BT**

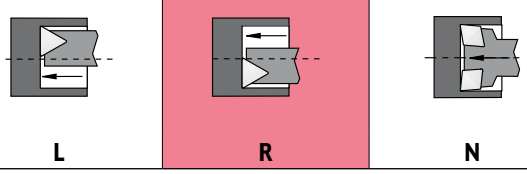
**G**

## 7 - Inserts Clearance Angle



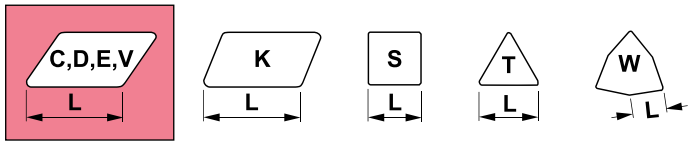

**B** **C** **N** **P**

## 8 - Bar Hand



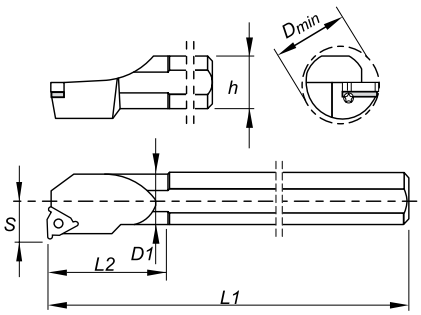
**L** **R** **N**

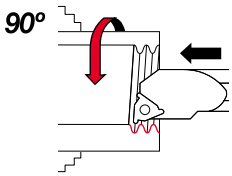
## 9 - Length of Inserts Cutting Edge (mm)



# INTERNAL TOOLHOLDER

## SXFN




**Internal Left**

| Order Code Código | Reference Referência Referencia | Insert Type | Dimensions \| Dimensões \| Dimensiones (mm) | | | | | | Anvil | Anvil Screw | Insert Screw | Torx Key | Stock |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | h | D1 | Dmin | L1 | L2 | S | | | | | |
| 212137600 | S10H SXFN L 11 | IL11 | 10 | 10 | 12 | 100 | - | 7,4 | - | - | P0260700 | XT08 | ◉ |
| 212137800 | S10K SXFN L 11 | IL11 | 16 | 10 | 12 | 125 | 25 | 7,4 | - | - | P0260700 | XT08 | ○ |
| 212385300 | S13L SXFN L 11 | IL11 | 16 | 13 | 15 | 140 | 32 | 8,9 | - | - | P0260700 | XT08 | ○ |
| 212138000 | S13M SXFN L 16 | IL16 | 16 | 13 | 16 | 150 | 32 | 10,2 | - | - | P5401391 | XT10 | ○ |
| 212127400 | S16P SXFN L 16 | IL16 | 20 | 16 | 19 | 170 | 40 | 11,7 | - | - | P5401391 | XT10 | ◉ |
| 212138200 | S20P SXFN L 16 | IL16 | 20 | 20 | 24 | 170 | - | 13,7 | EA16 | P5000790 | P5401390 | XT10 | ◉ |
| 212125500 | S25R SXFN L 16 | IL16 | 25 | 25 | 29 | 200 | - | 16,2 | EA16 | P5000790 | P5401390 | XT10 | ◉ |
| 212125700 | S32S SXFN L 16 | IL16 | 32 | 32 | 36 | 250 | - | 19,7 | EA16 | P5000790 | P5401390 | XT10 | ○ |
| 212125900 | S40T SXFN L 16 | IL16 | 40 | 40 | 44 | 300 | - | 23,7 | EA16 | P5000790 | P5401390 | XT10 | ○ |

◉ Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta | Disponible bajo consulta

Note: All the toolholders SXFN are made with 1,5° helix angle. | Todos os ferros de torno são fornecidos com um ângulo de hélice de 1,5° | Todos los suportes se hacen con un ángulo de hélice de 1,5°.

**Internal Right**

| Order Code Código | Reference Referência Referencia | Insert Type | Dimensions \| Dimensões \| Dimensiones (mm) | | | | | | Anvil | Anvil Screw | Insert Screw | Torx Key | Stock |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | h | D1 | Dmin | L1 | L2 | S | | | | | |
| 212137700 | S10H SXFN R 11 | IR11 | 10 | 10 | 12,5 | 100 | - | 7,3 | - | - | P0260700 | XT08 | ◉ |
| 212137900 | S10K SXFN R 11 | IR11 | 16 | 10 | 12,5 | 125 | 25 | 7,3 | - | - | P0260700 | XT08 | ○ |
| 212385400 | S10L SXFN R 11 | IL11 | 16 | 13 | 15 | 140 | 32 | 8,9 | - | - | P0260700 | XT08 | ○ |
| 212138100 | S13M SXFN R 16 | IR16 | 16 | 13 | 16,5 | 150 | 32 | 10,4 | - | - | P5401391 | XT10 | ○ |
| 212127300 | S16P SXFN R 16 | IR16 | 20 | 16 | 19,5 | 170 | 40 | 11,6 | - | - | P5401391 | XT10 | ◉ |
| 212138400 | S20P SXFN R 16 | IR16 | 20 | 20 | 23,5 | 170 | - | 13,6 | IA16 | P5000790 | P5401390 | XT10 | ◉ |
| 212125400 | S25R SXFN R 16 | IR16 | 25 | 25 | 28,5 | 200 | - | 16,3 | IA16 | P5000790 | P5401390 | XT10 | ◉ |
| 212125600 | S32S SXFN R 16 | IR16 | 32 | 32 | 35,5 | 250 | - | 19,6 | IA16 | P5000790 | P5401390 | XT10 | ○ |
| 212125800 | S40T SXFN R 16 | IR16 | 40 | 40 | 43,5 | 300 | - | 23,6 | IA16 | P5000790 | P5401390 | XT10 | ○ |

◉ Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta | Disponible bajo consulta

Note: All the toolholders SXFN are made with 1,5° helix angle. | Todos os ferros de torno são fornecidos com um ângulo de hélice de 1,5° | Todos los suportes se hacen con un ángulo de hélice de 1,5°.

# MAIN APLICATIONS | Aplicações principais | Aplicaciones principales

## INSERTS

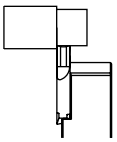
4 Different operations:

- Turning
- Parting off
- Grooving
- Threading

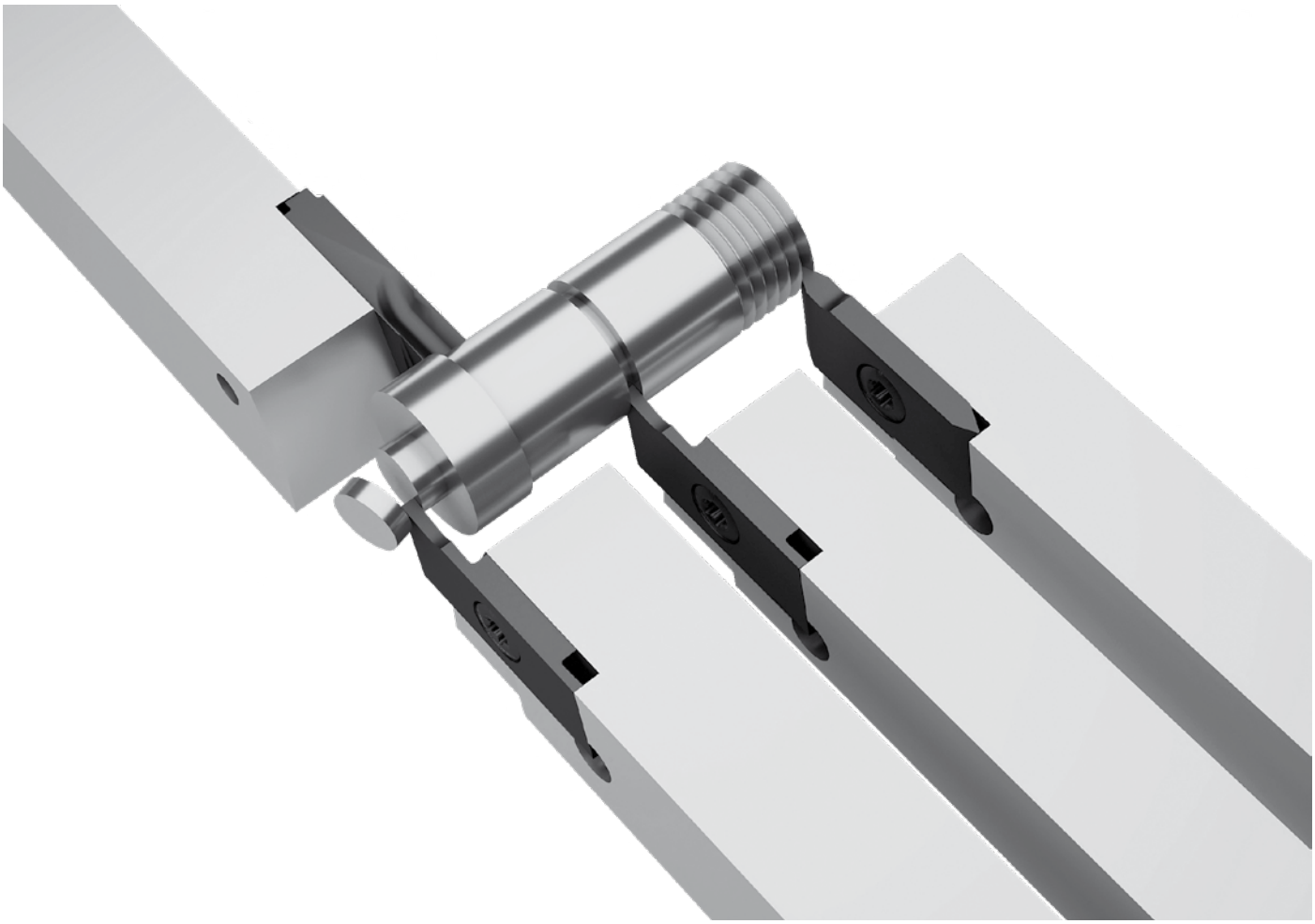
## TOOLHOLDERS

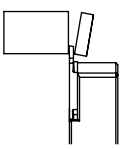
Dimensions:

- 08x08mm
- 10x10mm
- 12x12mm
- 16x16mm

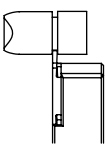


**Turning**

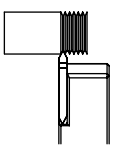




**Parting off**



**Grooving**



**Threading**

PDF

# INSERTS CODE KEY - Chave de codificação para pastilhas | Llave de codificación de plaquitas

**Grooving Inserts**

| SAL | 25 | G | 050 | R | - | GS |
|---|---|---|---|---|---|---|
| 1 | 2 | 5 | 6 | 8 | | 11 |

**Parting Off Inserts**

| SAL | 11 | P | 100 | R | N | - | P07 |
|---|---|---|---|---|---|---|---|
| 1 | 3 | 5 | 6 | 8 | 9 | | 11 |

**Threading Inserts**

| SAL | 100 | H | 010 | R | 60 | - | PT |
|---|---|---|---|---|---|---|---|
| 1 | 4 | 5 | 7 | 8 | 10 | | 11 |

**Turning Inserts**

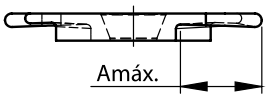
| SAL | 60 | T | 300 | R | - | TP |
|---|---|---|---|---|---|---|
| 1 | 2 | 5 | 6 | 8 | | 11 |

## 1 - Product line

SAL - Swiss Automatic Lathes Line

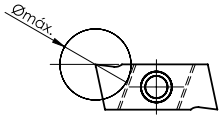
## 2 - Maximum depth of cut (Turning and Grooving inserts)

25 - 2,5mm | 60 - 6,0mm



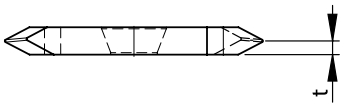

## 3 - Maximum Cutting Diameter (Parting Off Inserts)

11 - 11,0mm | 13 - 13,0mm

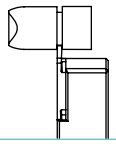
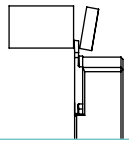
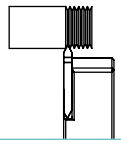
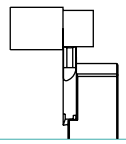



## 4 - Center distance (Threading Inserts)

050 - 0,5mm | 100 - 1,00mm

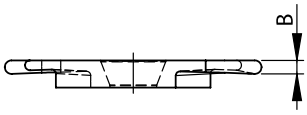



## 5 - Operations type

| G - Grooving | P - Parting off | H - Threading | T - Turning |
|---|---|---|---|
|  |  |  |  |

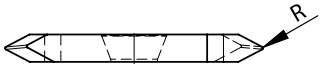
## 6 - Cut thickness (Grooving, Parting Off and Turning Inserts)

050 - 0,50mm | 070 - 0,70mm | 080 - 0,80mm
090 - 0,90mm | 100 - 1,00mm |110 - 1,10mm
130 - 1,30mm | 150 - 1,50mm | 160 - 1,60mm
185 - 1,85mm | 200 - 2,00 mm | 300 - 3,00 mm




## 7 - Corner radius (Threading Inserts)

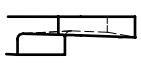
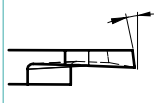
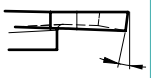
005 - 0,05mm | 010 - 0,10mm
012 - 0,12mm




## 8- Insert / toolholder side

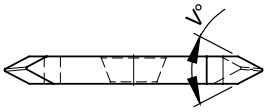
| L - Left hand | R - Right hand |
|---|---|
|  |  |

## 9 - Front angle (Parting off)

| N - Neutral | R - Right | L - Left |
|---|---|---|
|  |  |  |

## 10 - Angle (Threading Inserts)

55 - 55° | 60 - 60°




## 11 - Chip Breaker (Turning, Grooving, Parting Off and Threading Inserts)

| | |
|---|---|
| Turning | TP - Turning steel |
| Grooving | GS - Square Grooving<br>GR - Round Grooving |
| Parting Off | P00 - Front angle 0°<br>P07 - Front angle 7° |
| Threading | PT - Partial Profile |

# TOOLHOLDERS CODE KEY - Chave de codificação para suportes | Llave de codificación de herramienta

| SAL | H | E | R | - | 08 | 08 | - | M | 07 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | - | 5 | 6 | - | 7 | 8 |

## 1 - Product line

SAL - Swiss Automatic Lathes Line

## 2 - Tool type

H - Holder

## 3 - Internal or External

E - External

## 4 - Insert / toolholder side

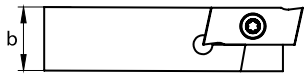
| L - Left hand | R - Right hand |
|---|---|





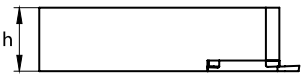
## 5 - Shank height

- 08 - 8 mm
- 10 - 10 mm
- 12 - 12 mm
- 16 - 16 mm




## 6 - Shank width

- 08 - 8 mm
- 10 - 10 mm
- 12 - 12 mm
- 16 - 16 mm




## 7 - Shank height

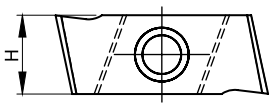
L - 140 mm

M - 150 mm

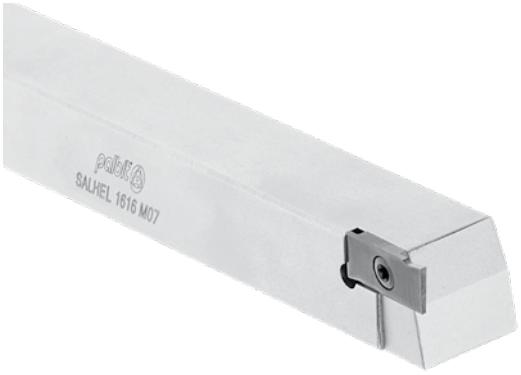



## 8 - Insert cutting edge lenght (mm)

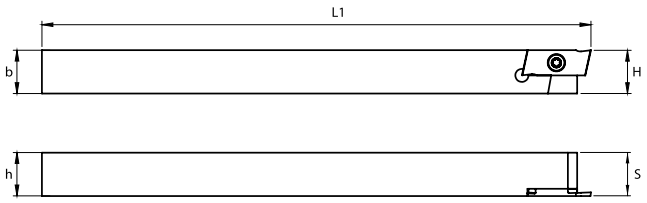
07 - 7,0 mm



## EXTERNAL TOOLHOLDERS | Suportes exteriores | herramientas de tronzado exterior




Left hand style show



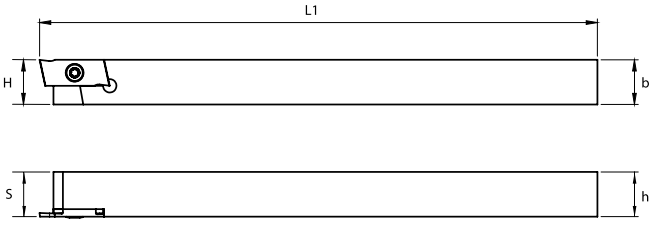

| Order code Código | Reference Referência Referencia | Dimensions \| Dimensões \| Dimensiones (mm) | | | | | * Insert | Screw | Wrench | Stock |
|---|---|---|---|---|---|---|---|---|---|---|
| | | h | b | H | L1 | S | | | | |
| 213023600 | SALHEL 0808 M07 | 8,00 | 8,00 | 8,00 | 150,00 | 8,00 | SAL...L | P0300900 | XT 08 | ◈ |
| 213023700 | SALHEL 1010 M07 | 10,00 | 10,00 | 10,00 | 150,00 | 10,00 | SAL...L | P0300900 | XT 08 | ◈ |
| 213023800 | SALHEL 1212 M07 | 12,00 | 12,00 | 12,00 | 150,00 | 12,00 | SAL...L | P0300900 | XT 08 | ◈ |
| 213023900 | SALHEL 1616 M07 | 16,00 | 16,00 | 16,00 | 150,00 | 16,00 | SAL...L | P0300900 | XT 08 | ◈ |

◈ Stock item | Produto de stock | Itens de stock ◯ Available under request | Disponível sobre consulta | Disponible bajo consulta

* Left insert only fits on left toolholder




Right hand style show




| Order code Código | Reference Referência Referencia | Dimensions \| Dimensões \| Dimensiones (mm) | | | | | * Insert | Screw | Wrench | Stock |
|---|---|---|---|---|---|---|---|---|---|---|
| | | h | b | H | L1 | S | | | | |
| 213023200 | SALHER 0808 M07 | 8,00 | 8,00 | 8,00 | 150,00 | 8,00 | SAL...R | P0300900 | XT 08 | ◈ |
| 213023300 | SALHER 1010 M07 | 10,00 | 10,00 | 10,00 | 150,00 | 10,00 | SAL...R | P0300900 | XT 08 | ◈ |
| 213023400 | SALHER 1212 M07 | 12,00 | 12,00 | 12,00 | 150,00 | 12,00 | SAL...R | P0300900 | XT 08 | ◈ |
| 213023500 | SALHER 1616 M07 | 16,00 | 16,00 | 16,00 | 150,00 | 16,00 | SAL...R | P0300900 | XT 08 | ◈ |

◈ Stock item | Produto de stock | Itens de stock ◯ Available under request | Disponível sobre consulta | Disponible bajo consulta

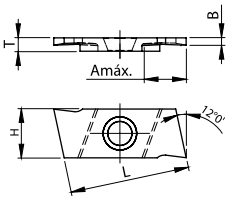
* Right insert only fits on right toolholder

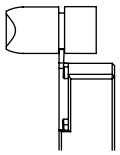
## GS SERIES | Inserts | Pastilhas | Plaquitas



Right hand style show

For square grooving
Para torneamento quadrado
Para torneado quadrado



**Grooving**

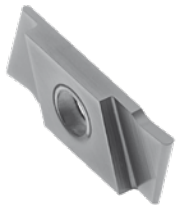
| (1) Geometry code | (2) Grade code ISO Reference | ANSI Reference | P G1 PVD PH7910 | P G4 PVD PH7920 | M G4 PVD PH7920 | M P8 PVD PH7135 | K G4 PVD PH7920 | K P8 PVD PH7135 | S G4 PVD PH7920 | S P8 PVD PH7135 | Dimensions (mm) Dimensões (mm) Dimensiones (mm) B | L | T | H | Amáx. | V° | Ømáx. | Cutting conditions Condições de corte Condiciones de corte fn (mm/r) Min. | Max. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1130441 | SAL25G050R-GS | SAL25G050R-GS | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 0,50 | 17,00 | 2,00 | 7,00 | 2,50 | - | - | 0,04 | 0,02 | 0,06 |
| 1130475 | SAL25G070R-GS | SAL25G070R-GS | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 0,70 | 17,00 | 2,00 | 7,00 | 2,50 | - | - | 0,05 | 0,02 | 0,08 |
| 1130477 | SAL25G080R-GS | SAL25G080R-GS | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 0,80 | 17,00 | 2,00 | 7,00 | 2,50 | - | - | 0,05 | 0,02 | 0,09 |
| 1130479 | SAL25G090R-GS | SAL25G090R-GS | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 0,90 | 17,00 | 2,00 | 7,00 | 2,50 | - | - | 0,06 | 0,02 | 0,10 |
| 1130488 | SAL60G110R-GS | SAL60G110R-GS | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,10 | 17,00 | 2,00 | 7,00 | 6,00 | - | - | 0,06 | 0,02 | 0,11 |
| 1130490 | SAL60G130R-GS | SAL60G130R-GS | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,30 | 17,00 | 2,00 | 7,00 | 6,00 | - | - | 0,07 | 0,02 | 0,12 |
| 1130442 | SAL60G160R-GS | SAL60G160R-GS | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,60 | 17,00 | 2,00 | 7,00 | 6,00 | - | - | 0,07 | 0,02 | 0,13 |
| 1130495 | SAL60G185R-GS | SAL60G185R-GS | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,85 | 17,00 | 2,00 | 7,00 | 6,00 | - | - | 0,08 | 0,02 | 0,14 |
| 1130473 | SAL25G050L-GS | SAL25G050L-GS | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 0,50 | 17,00 | 2,00 | 7,00 | 2,50 | - | - | 0,04 | 0,02 | 0,06 |
| 1130474 | SAL25G070L-GS | SAL25G070L-GS | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 0,70 | 17,00 | 2,00 | 7,00 | 2,50 | - | - | 0,05 | 0,02 | 0,08 |
| 1130476 | SAL25G080L-GS | SAL25G080L-GS | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 0,80 | 17,00 | 2,00 | 7,00 | 2,50 | - | - | 0,05 | 0,02 | 0,09 |
| 1130478 | SAL25G090L-GS | SAL25G090L-GS | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 0,90 | 17,00 | 2,00 | 7,00 | 2,50 | - | - | 0,06 | 0,02 | 0,10 |
| 1130487 | SAL60G110L-GS | SAL60G110L-GS | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,10 | 17,00 | 2,00 | 7,00 | 6,00 | - | - | 0,06 | 0,02 | 0,11 |
| 1130489 | SAL60G130L-GS | SAL60G130L-GS | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,30 | 17,00 | 2,00 | 7,00 | 6,00 | - | - | 0,07 | 0,02 | 0,12 |
| 1130493 | SAL60G160L-GS | SAL60G160L-GS | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,60 | 17,00 | 2,00 | 7,00 | 6,00 | - | - | 0,07 | 0,02 | 0,13 |
| 1130494 | SAL60G185L-GS | SAL60G185L-GS | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,85 | 17,00 | 2,00 | 7,00 | 6,00 | - | - | 0,08 | 0,02 | 0,14 |

◈ Stock item | Produto de stock | Itens de stock

○ Available under request with delivery time 4 weeks
Disponível sobre consulta com prazo de entrega de 4 semanas
Disponible bajo consulta, con fecha de entrega en 4 semanas

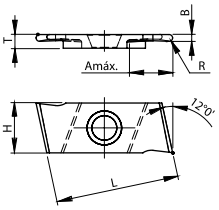
**Order code** = (1) Geometry code + (2) Grade code

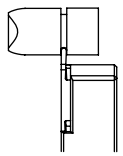
## GR SERIES | Inserts | Pastilhas | Plaquitas



Right hand style show

For round grooving
Para torneamento redondo
Para torneado redondo



**Grooving**

| (1) Geometry code | (2) Grade code ISO Reference | ANSI Reference | P G1 PVD PH7910 | P G4 PVD PH7920 | M G4 PVD PH7920 | M P8 PVD PH7135 | K G4 PVD PH7920 | K P8 PVD PH7135 | S G4 PVD PH7920 | S P8 PVD PH7135 | Dimensions (mm) Dimensões (mm) Dimensiones (mm) B | L | T | H | Amáx. | V° | Ømáx. | Cutting conditions Condições de corte Condiciones de corte fn (mm/r) Min. | Max. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1130443 | SAL60G100R-GR | SAL60G100R-GR | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,00 | 17,00 | 2,00 | 7,00 | 6,00 | - | - | 0,06 | 0,02 | 0,10 |
| 1130492 | SAL60G150R-GR | SAL60G150R-GR | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,50 | 17,00 | 2,00 | 7,00 | 6,00 | - | - | 0,08 | 0,02 | 0,12 |
| 1130497 | SAL60G200R-GR | SAL60G200R-GR | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 2,00 | 17,00 | 2,00 | 7,00 | 6,00 | - | - | 0,08 | 0,03 | 0,14 |
| 1130486 | SAL60G100L-GR | SAL60G100L-GR | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,00 | 17,00 | 2,00 | 7,00 | 6,00 | - | - | 0,06 | 0,02 | 0,10 |
| 1130491 | SAL60G150L-GR | SAL60G150L-GR | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,50 | 17,00 | 2,00 | 7,00 | 6,00 | - | - | 0,08 | 0,02 | 0,12 |
| 1130496 | SAL60G200L-GR | SAL60G200L-GR | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 2,00 | 17,00 | 2,00 | 7,00 | 6,00 | - | - | 0,08 | 0,03 | 0,14 |

◈ Stock item | Produto de stock | Itens de stock

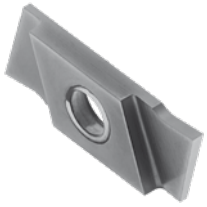
○ Available under request with delivery time 4 weeks
Disponível sobre consulta com prazo de entrega de 4 semanas
Disponible bajo consulta, con fecha de entrega en 4 semanas

**Order code** = (1) Geometry code + (2) Grade code

page D - 691
page D - 693

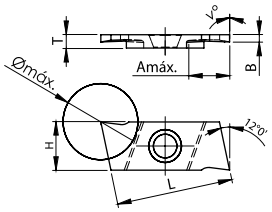
# SAL - SWISS AUTOMATIC LATHES

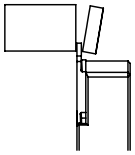
## P(P00) SERIES | Inserts | Pastilhas | Plaquitas



Right hand style show

Without front angle
Sem ângulo frontal
Sín angulo frontal



**Parting off**

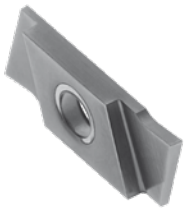
| (1) Geometry code | (2) Grade code ISO Reference | ANSI Reference | P PVD G1 PH7910 | P PVD G4 PH7920 | M PVD G4 PH7920 | M PVD P8 PH7135 | K PVD G4 PH7920 | K PVD P8 PH7135 | S PVD G4 PH7920 | S PVD P8 PH7135 | Dimensions (mm) Dimensões (mm) Dimensiones (mm) B | L | T | H | Amáx. | V° | Ømáx. | Cutting conditions Condições de corte Condiciones de corte fn (mm/r) | Min. | Max. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1130444 | SAL11P100RN-P00 | SAL11P100RN-P00 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,00 | 17,00 | 2,00 | 7,00 | 6,00 | 0 | 11,00 | 0,06 | 0,02 | 0,10 |
| 1130462 | SAL11P150RN-P00 | SAL11P150RN-P00 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,50 | 17,00 | 2,00 | 7,00 | 6,00 | 0 | 11,00 | 0,08 | 0,02 | 0,12 |
| 1130468 | SAL13P200RN-P00 | SAL13P200RN-P00 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 2,00 | 17,00 | 2,00 | 7,00 | 6,00 | 0 | 7,00 | 0,08 | 0,03 | 0,14 |
| 1130456 | SAL11P100LN-P00 | SAL11P100LN-P00 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,00 | 17,00 | 2,00 | 7,00 | 6,00 | 0 | 11,00 | 0,06 | 0,02 | 0,10 |
| 1130459 | SAL11P150LN-P00 | SAL11P150LN-P00 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,50 | 17,00 | 2,00 | 7,00 | 6,00 | 0 | 11,00 | 0,08 | 0,02 | 0,12 |
| 1130465 | SAL13P200LN-P00 | SAL13P200LN-P00 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 2,00 | 17,00 | 2,00 | 7,00 | 6,00 | 0 | 7,00 | 0,08 | 0,03 | 0,14 |

◈ Stock item | Produto de stock | Itens de stock

○ Available under request with delivery time 4 weeks
Disponível sobre consulta com prazo de entrega de 4 semanas
Disponible bajo consulta, con fecha de entrega en 4 semanas

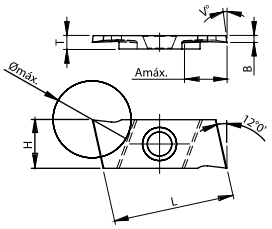
**Order code** = (1) Geometry code + (2) Grade code

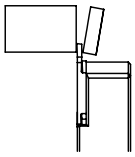
## P(P07) SERIES | Inserts | Pastilhas | Plaquitas



Right hand style show

Front angle 7°
Ângulo frontal de 7°
Angulo frontal de 7°



**Parting off**

| (1) Geometry code | (2) Grade code ISO Reference | ANSI Reference | P PVD G1 PH7910 | P PVD G4 PH7920 | M PVD G4 PH7920 | M PVD P8 PH7135 | K PVD G4 PH7920 | K PVD P8 PH7135 | S PVD G4 PH7920 | S PVD P8 PH7135 | Dimensions (mm) Dimensões (mm) Dimensiones (mm) B | L | T | H | Amáx. | V° | Ømáx. | Cutting conditions Condições de corte Condiciones de corte fn (mm/r) | Min. | Max. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1130445 | SAL11P100RR-P07 | SAL11P100RR-P07 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,00 | 17,00 | 2,00 | 7,00 | 6,00 | 7 | 11,00 | 0,05 | 0,02 | 0,08 |
| 1130446 | SAL11P100RL-P07 | SAL11P100RL-P07 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,00 | 17,00 | 2,00 | 7,00 | 6,00 | 7 | 11,00 | 0,05 | 0,02 | 0,08 |
| 1130463 | SAL11P150RR-P07 | SAL11P150RR-P07 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,50 | 17,00 | 2,00 | 7,00 | 6,00 | 7 | 11,00 | 0,06 | 0,02 | 0,10 |
| 1130461 | SAL11P150RL-P07 | SAL11P150RL-P07 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,50 | 17,00 | 2,00 | 7,00 | 6,00 | 7 | 11,00 | 0,06 | 0,02 | 0,10 |
| 1130469 | SAL13P200RR-P07 | SAL13P200RR-P07 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 2,00 | 17,00 | 2,00 | 7,00 | 6,00 | 7 | 7,00 | 0,06 | 0,03 | 0,12 |
| 1130467 | SAL13P200RL-P07 | SAL13P200RL-P07 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 2,00 | 17,00 | 2,00 | 7,00 | 6,00 | 7 | 7,00 | 0,06 | 0,03 | 0,12 |
| 1130457 | SAL11P100LR-P07 | SAL11P100LR-P07 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,00 | 17,00 | 2,00 | 7,00 | 6,00 | 7 | 11,00 | 0,05 | 0,02 | 0,08 |
| 1130455 | SAL11P100LL-P07 | SAL11P100LL-P07 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,00 | 17,00 | 2,00 | 7,00 | 6,00 | 7 | 11,00 | 0,05 | 0,02 | 0,08 |
| 1130460 | SAL11P150LR-P07 | SAL11P150LR-P07 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,50 | 17,00 | 2,00 | 7,00 | 6,00 | 7 | 11,00 | 0,06 | 0,02 | 0,10 |
| 1130458 | SAL11P150LL-P07 | SAL11P150LL-P07 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,50 | 17,00 | 2,00 | 7,00 | 6,00 | 7 | 11,00 | 0,06 | 0,02 | 0,10 |
| 1130466 | SAL13P200LR-P07 | SAL13P200LR-P07 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 2,00 | 17,00 | 2,00 | 7,00 | 6,00 | 7 | 7,00 | 0,06 | 0,03 | 0,12 |
| 1130464 | SAL13P200LL-P07 | SAL13P200LL-P07 | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 2,00 | 17,00 | 2,00 | 7,00 | 6,00 | 7 | 7,00 | 0,06 | 0,03 | 0,12 |

◈ Stock item | Produto de stock | Itens de stock

○ Available under request with delivery time 4 weeks
Disponível sobre consulta com prazo de entrega de 4 semanas
Disponible bajo consulta, con fecha de entrega en 4 semanas

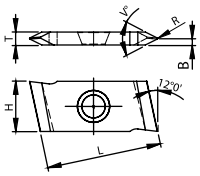
**Order code** = (1) Geometry code + (2) Grade code

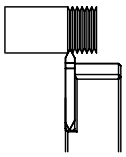
## PT SERIES | Inserts | Pastilhas | Plaquitas



Right hand style show

For partial profile threading
Para perfil parcial de roscagem
Para perfil parcial de roscado



**Threading**

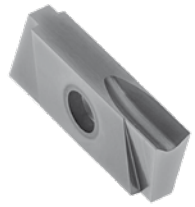
| (1) Geometry code | (2) Grade code ISO Reference | ANSI Reference | P PVD G1 PH7910 | P PVD G4 PH7920 | M PVD G4 PH7920 | M PVD P8 PH7135 | K PVD G4 PH7920 | K PVD P8 PH7135 | S PVD G4 PH7920 | S PVD P8 PH7135 | Dimensions (mm) Dimensões (mm) Dimensiones (mm) B | L | T | H | Amáx. | V° | Ømáx. | Cutting conditions Condições de corte Condiciones de corte fn (mm/r) | Min. | Max. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1130472 | SAL100H012R55-PT | SAL100H012R55-PT | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,00 | 17,00 | 2,00 | 7,00 | 0,12 | 55 | - | 0,80 | 0,20 | 2,00 |
| 1130447 | SAL100H012R60-PT | SAL100H012R60-PT | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,00 | 17,00 | 2,00 | 7,00 | 0,12 | 60 | - | 0,80 | 0,20 | 2,00 |
| 1130470 | SAL100H012L55-PT | SAL100H012L55-PT | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,00 | 17,00 | 2,00 | 7,00 | 0,12 | 55 | - | 0,80 | 0,20 | 2,00 |
| 1130471 | SAL100H012L60-PT | SAL100H012L60-PT | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | 1,00 | 17,00 | 2,00 | 7,00 | 0,12 | 60 | - | 0,80 | 0,20 | 2,00 |

◈ Stock item | Produto de stock | Itens de stock

○ Available under request with delivery time 4 weeks
Disponível sobre consulta com prazo de entrega de 4 semanas
Disponible bajo consulta, con fecha de entrega en 4 semanas

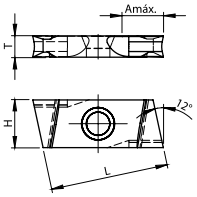
**Order code** = (1) Geometry code + (2) Grade code

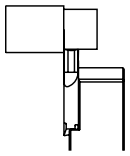
## TP SERIES | Inserts | Pastilhas | Plaquitas



Right hand style show

For turning
Para torneamento
Para torneado



**Turning**

| (1) Geometry code | (2) Grade code ISO Reference | ANSI Reference | P PVD G1 PH7910 | P PVD G4 PH7920 | M PVD G4 PH7920 | M PVD P8 PH7135 | K PVD G4 PH7920 | K PVD P8 PH7135 | S PVD G4 PH7920 | S PVD P8 PH7135 | Dimensions (mm) Dimensões (mm) Dimensiones (mm) B | L | T | H | Amáx. | V° | Ømáx. | Cutting conditions Condições de corte Condiciones de corte fn (mm/r) | Min. | Max. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1130501 | SAL60T300R-TP | SAL60T300R-TP | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | - | 17,00 | 3,17 | 7,00 | 6,00 | - | - | 0,08 | 0,02 | 0,12 |
| 1130499 | SAL60T300L-TP | SAL60T300L-TP | ○ | ◈ | ◈ | ○ | ◈ | ○ | ◈ | ○ | - | 17,00 | 3,17 | 7,00 | 6,00 | - | - | 0,08 | 0,02 | 0,12 |

◈ Stock item | Produto de stock | Itens de stock

○ Available under request with delivery time 4 weeks
Disponível sobre consulta com prazo de entrega de 4 semanas
Disponible bajo consulta, con fecha de entrega en 4 semanas

**Order code** = (1) Geometry code + (2) Grade code

## BLANKS FOR GRINDING | Blanks para personalizar | Blanks para personalizar



Right hand style show

Inserts blanks "do it yourself" grinding are available allowing modifications of the insert for any machining operation.

As pastilhas de blank "faça você mesmo" permitem a personalização da pastilha para qualquer operação de maquinação.

Las plaquitas de blank "haga usted mismo" permiten la personalización de la plaquita para qualquiera operación de maquinación.

| (1) Geometry code | (2) Grade code ISO Reference | Uncoated 10 PH0910 | Uncoated 12 PH0920 | Uncoated 14 PH0135 | Dimensions (mm) Dimensões (mm) Dimensiones (mm) B | L | T | H | Amáx. | V° | Ømáx. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1130440 | BLANK SALR 17x7x2 | ◈ | ◈ | ◈ | - | 17,50 | 2,00 | 7,50 | - | - | - |
| 1130504 | BLANK SALR 17x7x3,17 | ◈ | ◈ | ◈ | - | 17,50 | 3,17 | 7,50 | - | - | - |
| 1130453 | BLANK SALL 17x7x2 | ◈ | ◈ | ◈ | - | 17,50 | 2,00 | 7,50 | - | - | - |
| 1130505 | BLANK SALL 17x7x3,17 | ◈ | ◈ | ◈ | - | 17,50 | 3,17 | 7,50 | - | - | - |

◈ Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta | Disponible bajo consulta

**Order code** = (1) Geometry code + (2) Grade code

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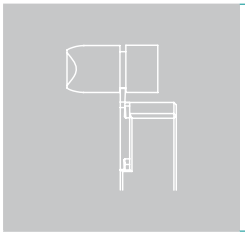
page D - 693

## GROOVING | Canais | Ranurado



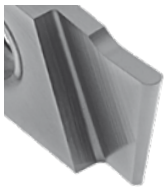
- High precision
- Close tolerances
- Wide variety of insert widths

### GS

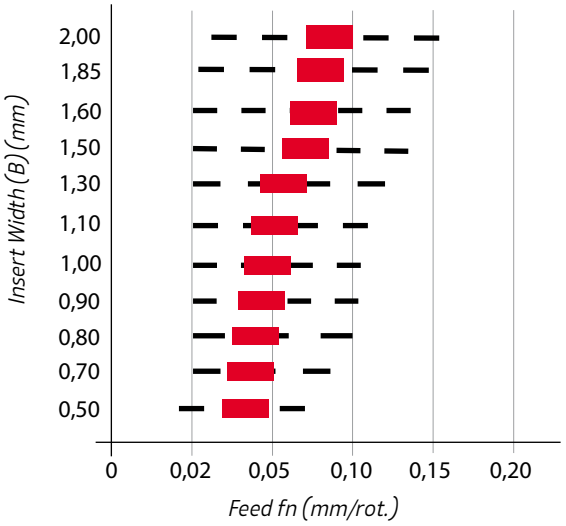


Square grooving

### GR



Round grooving



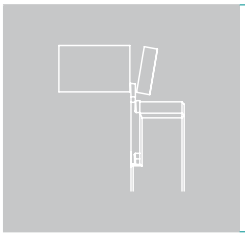

**Recomended cutting conditions**

| P | M | K | S |
|---|---|---|---|
| 60-200 | 60-180 | 60-150 | 20-50 |

Recomended grade PH7920, (Vc) m/min.

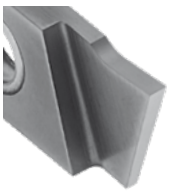
Grade PH7910 and PH7135
Available under request (4 weeks delivery time)

## PARTING OFF | Corte | Tronzado



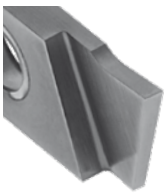
- When parting off with a sub-spindle, it is more productive to use a straight cutting edge. This is a more stable parting method and will generate the best surface finish.
- When parting off without a sub-spindle, we recommend you use an insert with a maximum 7° front angle to minimize the risk of burr and pips on the component.
- When parting off with 7° front angled inserts, we recommend reducing the feed rate by approximately 30%.

### P00

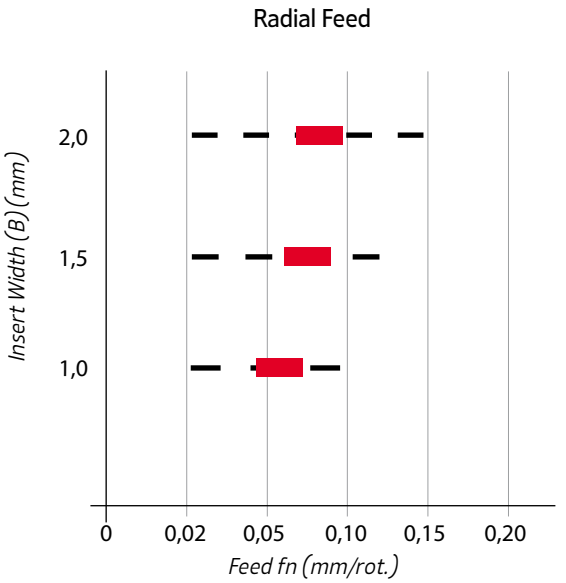


0° Relief angle

### P07



7° Relief angle



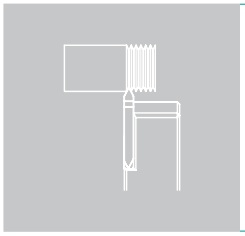

**Recomended cutting conditions**

| P | M | K | S |
|---|---|---|---|
| 60-200 | 60-180 | 60-150 | 20-50 |

Recomended grade PH7920, (Vc) m/min.

Grade PH7910 and PH7135
Available under request (4 weeks delivery time)

# THREADING | Roscagem | Roscado



**Two types of threading:**

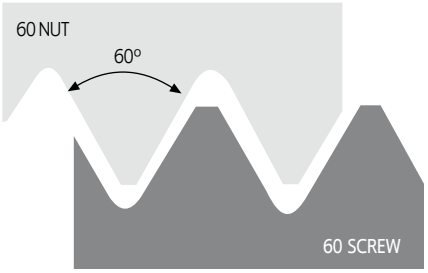
- Partial profile 55º

- Partial profile 60º

## PT



Partial profile

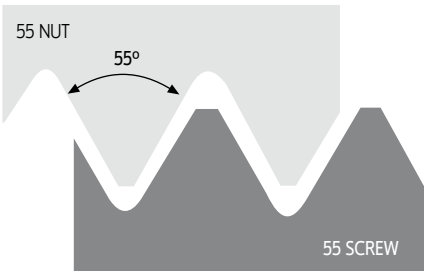



**Recomended cutting conditions**

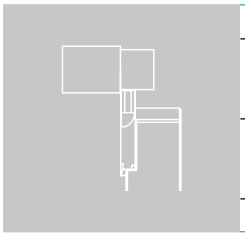
| P | M | K | S |
|---|---|---|---|
| 60-200 | 60-180 | 60-150 | 20-50 |

Recomended grade PH7920, (Vc) m/min.

Grade PH7910 and PH7135
Available under request (4 weeks delivery time)




# TURNING | Torneamento | Torneado

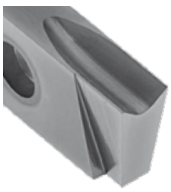


- Insert for turning

- Maximum deep of cut is 2,50 mm

- Too low cutting speed will result in inadequate tool life and it is advisable to follow cutting speed recommendations.

## TP



Turning steel

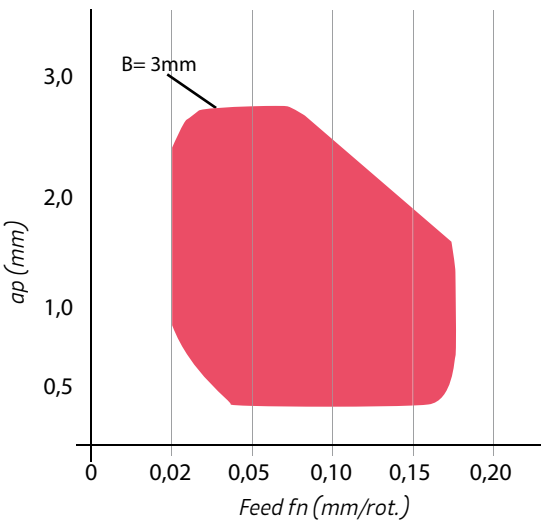
**Recomended cutting conditions**

| P | M | K | S |
|---|---|---|---|
| 60-200 | 60-180 | 60-150 | 20-50 |

Recomended grade PH7920, (Vc) m/min.

Grade PH7910 and PH7135
Available under request (4 weeks delivery time)

Radial Feed




Machining field

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## SCREWS & KEYS





**Screws**

| Order code<br>Código | Reference<br>Referência<br>Referencia | Sock |
|---|---|---|
| 290074100 | D0503000 | ◉ |
| 290020700 | D0603600 | ◉ |
| 290074200 | D0804800 | ◉ |
| 290062900 | D0602200 | ◉ |
| 290044800 | P0260700 | ◉ |
| 290044600 | P5401390 | ◉ |
| 290044900 | P5401391 | ◉ |

**Keys**

| Order Code<br>Código | Reference<br>Referência<br>Referencia | Stock |
|---|---|---|
| 290011700 | XT08 | ◉ |
| 290013100 | XT10 | ◉ |

◉ Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta | Disponible bajo consulta

## WRENCHES







| Order code<br>Código | Reference<br>Referência<br>Referencia | Sock |
|---|---|---|
| 290021200 | SS40 | ◉ |
| 290021300 | SS50 | ◉ |
| 290074300 | SS60 | ◉ |

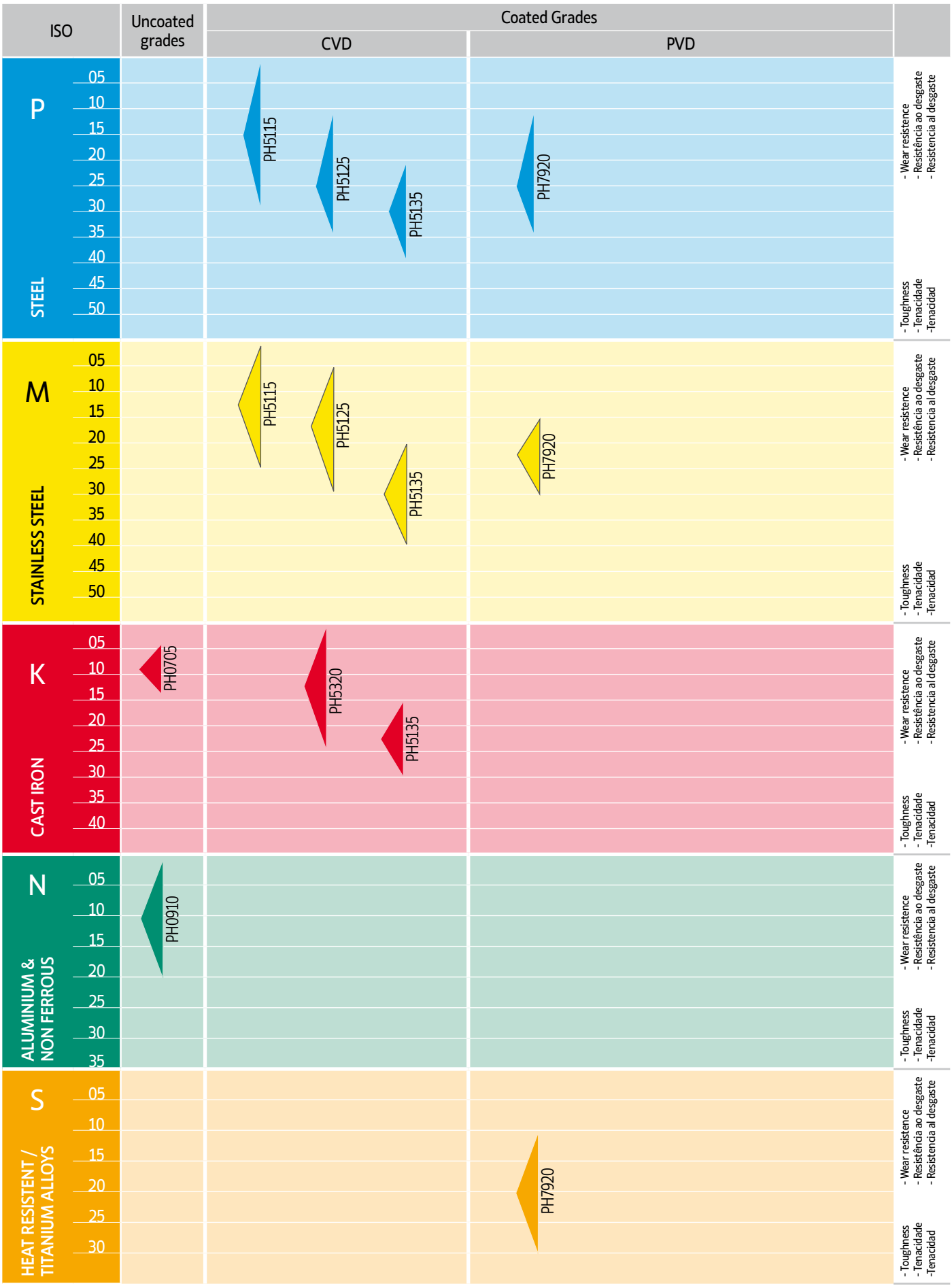
| Order code<br>Código | Reference<br>Referência<br>Referencia | Sock |
|---|---|---|
| 290074400 | LE05 | ◉ |

| Order code<br>Código | Reference<br>Referência<br>Referencia | Sock |
|---|---|---|
| 290079600 | LE25-30 | ◉ |

◉ Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta | Disponible bajo consulta

# GROOVING & PARTING OFF GRADES




The position and the form of the grade symbols indicate the suitable field of application.

Centre of the field of application.

Recommended fiels of application

To be replaced by new grades



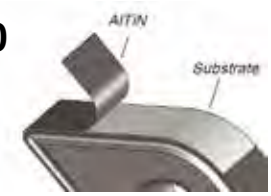


palbit 100 YEARS

# GROOVING & PARTING OFF GRADES DESCRIPTION

## PVD GRADES

### PH7920

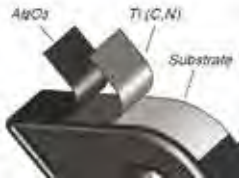



P10-P35
M10-M25
S10-S30

A micro grain size combined with the AlTiN PVD coating make it suitable for Roughing to Finishing operations under good cutting conditions to light interrupted cuts at medium cutting speeds. Suitable for steels, stainless steel, HRSA.

## CVD GRADES

### PH5115




P01-P30
M01-M25

Medium temperature CVD coating with α- Al2O3. Carbide grade with a gradient layer close to the surface. Suitable for high to medium cutting speeds on steels & cast steels.

### PH5125




P10-P35
M05-M30

Carbide grade suitable for medium machining of steels & cast steels at medium cutting speeds. The substrate is suitable for the adhesion of the Alumina coating (α- Al2O3) medium temperature - CVD, improving the tool life.

### PH5135




P20-P40
M15-M35
K15-K30

Substrate grade binary (Wc & Co) with medium grain size combined with the medium temperature CVD coating. Suitable for heavy roughing to roughing operations with interrupted cuts at medium to low cutting speeds.

### PH5320




K01-K25

Medium temperature CVD coating (α- Al2O3) combined with a hard substrate make it capable of withstanding interrupted conditions. Recommended as general choice for roughing of all cast irons at low to medium cutting speeds. Can also be a solution for high alloy steels.

## UNCOATED CARBIDE GRADE

### PH0910




N01-N20

Uncoated carbide micrograin grade combining a good abrasive wear resistance and thoughness. Suitable for rough to finish turning of HRSA, Titanium alloys, cast irons and Aluminium alloys.

# CUTTING SPEED (m/min)

| ISO | Material | Grade fn (mm/r) / HB (brinell) | CVD Coating | | | PVD Coating |
|---|---|---|---|---|---|---|
| | | | ← Wear Resistence | | | Toughness → |
| | | | PH5115 | PH5125 | PH5135 | PH7920 |
| | | | 0.04 -0.5 | 0.04 -0.5 | 0.04 -0.5 | 0.04 -0.5 |
| P | Unalloyed steel | 125-170 | 85-165 | 70-150 | 70-140 | 45-120 |
| | Low-alloy steel | 180-350 | 60-140 | 55-130 | 55-125 | 50-115 |
| | High-alloy stel | 200-325 | 50-130 | 45-115 | 45-115 | 50-110 |

| ISO | Material | Grade fn (mm/r) / HB (brinell) | CVD Coating | | | PVD Coating |
|---|---|---|---|---|---|---|
| | | | ← Wear Resistence | | | Toughness → |
| | | | PH5115 | PH5125 | PH5135 | PH7920 |
| | | | 0.04 -0.5 | 0.04 -0.5 | 0.04 -0.5 | 0.04 -0.5 |
| M | SS - Ferritic / Martensitic | 200-330 | 65-175 | 55-165 | 45-155 | 45-140 |
| | SS - Austenitic / Duplex | 180-330 | 65-150 | 55-140 | 50-130 | 50-125 |
| | SS - Ferritic / Duplex | 230-260 | 65-140 | 55-130 | 50-125 | 50-120 |

| ISO | Material | Grade fn (mm/r) / HB (brinell) | CVD Coating | | |
|---|---|---|---|---|---|
| | | | ← Wear Resistence | | Toughness → |
| | | | PH5705 | PH5320 | PH5135 |
| | | | 0.04 -0.5 | 0.04 -0.5 | 0.04 -0.5 |
| K | Marble cast iron | 130-230 | 95-180 | 75-160 | 75-155 |
| | Grey cast iron | 180-220 | 90-175 | 70-155 | 70-140 |
| | Nodular cast iron | 160-380 | 55-150 | 45-135 | 45-125 |

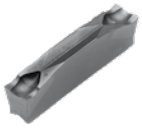
| ISO | Material | Grade fn (mm/r) / HB (brinell) | Uncoated |
|---|---|---|---|
| | | | PH0910 |
| | | | 0.04 -0.35 |
| N | Aluminium alloys | 60-130 | 190-1800 |
| | Cooper and cooper alloys | 90-110 | 40-420 |

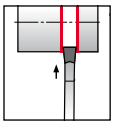
| ISO | Material | Grade fn (mm/r) / HB (brinell) | PVD Coating |
|---|---|---|---|
| | | | PH7920 |
| | | | 0.04 -0.30 |
| S | Heat resistent super alloys (Iron base) | 200-280 | 35-90 |
| | Heat resistent super alloys (Nickel base) | 250-320 | 22-60 |
| | Heat resistent super alloys (Cobalt base) | 200-320 | 27-80 |
| | Titanium alloys (400<or<1050[MPa]) | - | 85-175 |

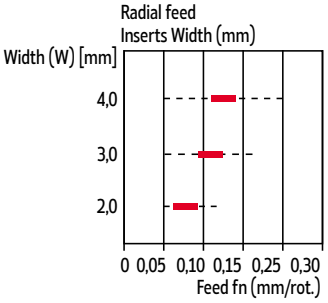
## CUTTING PARAMETERS | Parâmetros de corte | Parámetros de corte

| Feed recommendations and geometry descriptions | Grooving & Parting Off |
|---|---|

### GP...02-MC








**Medium Parting Off**

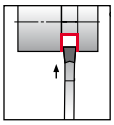
Recommended for parting off, thin walled tubes and small diameter components in all materials.

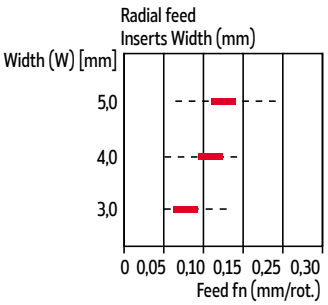
The positive geometry eliminates the risk of built-up edge.

Low cutting forces resulting in reducedvibration.

### GP...02-MG








**Medium Grooving**

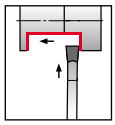
Outstanding chip control.

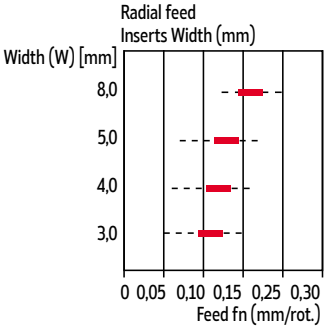
Reduces chip width giving good surfaces.

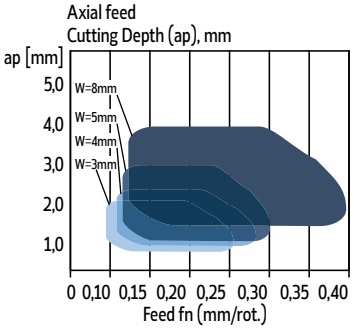
For all materials.

### GP...02-MM







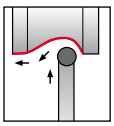

**Medium Multi Function (Grooving & Turning)**

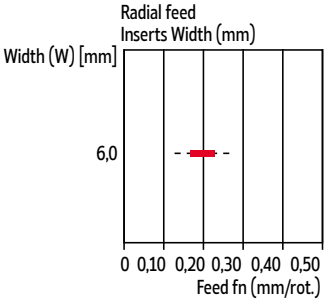
For grooving and turning in all materials.

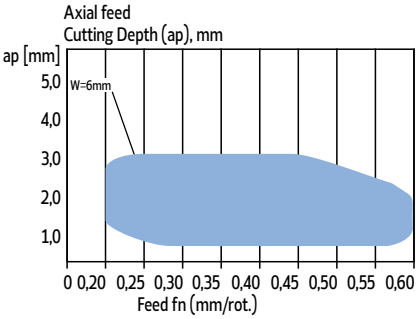
Good chip control.

### GP...02-MP








**Medium Profiling**

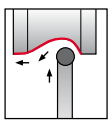
For profiling all materials.

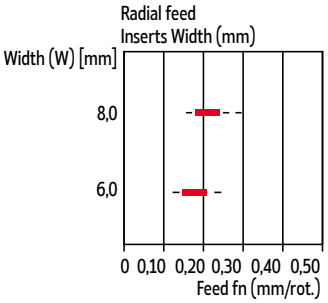
Outstanding chip control even at low feeds and small depths of cut.

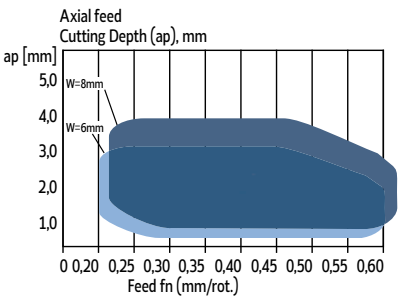
Good surface finish.

### GP...02-NP







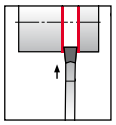
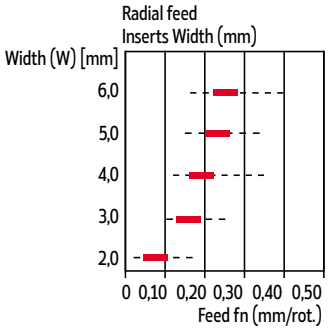
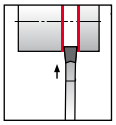
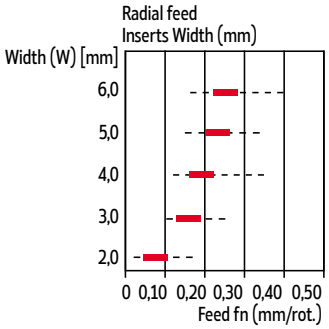

**Medium Aluminium profiling**

First choice for profiling in non-ferrous materials.

Good chip flow provides a better surface finishing.

Sharp cutting edge.

# CUTTING PARAMETERS | Parâmetros de corte | Parámetros de corte

| Feed recommendations and geometry descriptions | | Grooving & Parting Off |
|---|---|---|
| GCMX-...<br><br> | Radial feed<br>Inserts Width (mm)<br><br> | **Medium Parting Off**<br>Most efficient on stainless steel and most types of steel at moderate feed rates.<br>Superior straightness of cut |
| SANCAR-...<br><br> | Radial feed<br>Inserts Width (mm)<br><br> | **Medium Parting Off**<br>Optimizer to minimize pips and burrs on components.<br>Recommended for steel, stainless steel and cast iron. |

Recommended starting value.
For cutting speed recommendations, see page D-693