



GROOVING & PARTING OFF



D - GROOVING & PARTING OFF

D - 602 | Inserts code key (Grooving plus)

D - 603 | Inserts overview

D - 604 | Inserts program (Grooving plus)

D - 607 | Toolholders & blades code key (Grooving plus)

D - 608 | Tools program (Grooving plus)

D - 611 | Inserts code key (Grooving)

D - 612 | Inserts program (Grooving)

D - 619 | Blades code key (Grooving)

D - 620 | Tools program (Grooving)

D - 622 | SAL (Swiss Automatic Lathes)

D - 624 | Inserts code key (SAL)

D - 625 | Toolholders code key (SAL)

D - 626 | Tools program (SAL)

D - 627 | Inserts program (SAL)

D - 630 | Technical data (SAL)

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 | |
| | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>N - Neutral</p> </div> <div style="text-align: center;"> <p>L - Left</p> </div> <div style="text-align: center;"> <p>R - Right</p> </div> </div> |
| 7 - N° of Cutting Edges | |
| | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>01</p> </div> <div style="text-align: center;"> <p>02</p> </div> </div> |
| 8 - Cutting Geometry | |

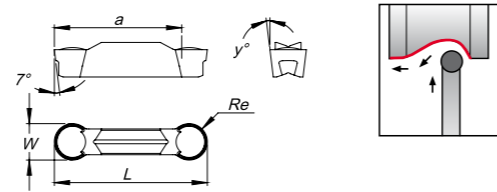
MC - Medium Cut Off | MG - Medium Grooving | MM - Medium Multi Function | MP - Medium Profiling | NP - Non-Ferrous Profiling

| | | Parting Off | General Grooving | Turning | Profiling |
|--|-----------|-------------|------------------|---------|-----------|
| | GP..02-MC | | | | |
| | GP..01-MC | | | | |
| | GP..02-MG | | | | |
| | GP..02-MM | | | | |
| | GP..02-MP | | | | |
| | GP..02-NP | | | | |
| | GCMX... | | | | |
| | SANCAR... | | | | |

First choice | Primeira opção | 1ª opción

Alternative | Alternativa | Alternativa

GP...02-MP | Medium Profiling

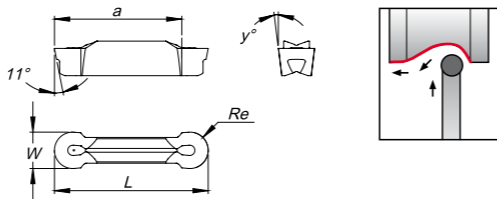


| Geometry code | ISO/ANSI Reference | P | | | M | | | K | | | N | S | Dimensions (mm) | | | | | | Cutting Conditions | | | | | | | | | |
|---------------|--------------------|----|----|----|----|----|----|----|----|----|----|----|-----------------|---|---|-----|-----|------|--------------------|------|-----|---|------|------|------|------|------|------------------------|
| | | L8 | N2 | G4 | L8 | N2 | G4 | 25 | L5 | L6 | N2 | 10 | | | | | | | | | G4 | W | Re | L | x° | a | y° | Seat ² Size |
| 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 opção ⊗ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta In some positions new grade PH7920, will be available when PH6325 stock ends.

2 - Correspond to a Specific Holder

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



| Geometry code | ISO/ANSI Reference | P | | | M | | | K | | | N | S | Dimensions (mm) | | | | | | Cutting Conditions | | | | | | | | | |
|---------------|--------------------|----|----|----|----|----|----|----|----|----|----|----|-----------------|--|--|-----|-----|------|--------------------|------|-----|---|------|------|------|------|------|------------------------|
| | | L8 | N2 | G4 | L8 | N2 | G4 | 25 | L5 | L6 | N2 | 10 | | | | | | | | | G4 | W | Re | L | x° | a | y° | Seat ² Size |
| 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 |
| 1130439 | GP0800E400-N02-NP | | | | | | | | | | ○ | | | | | 8,0 | 4,0 | 25,4 | - | 18,5 | 7,0 | E | 1,50 | 0,60 | 2,60 | 0,20 | 0,16 | 0,30 |

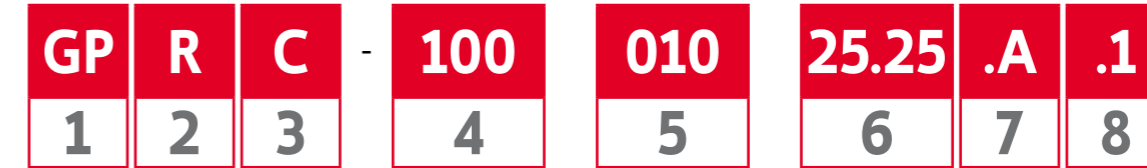
⊗ First choice | Primeira opção | 1ª opção ⊗ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

2 - Correspond to a Specific Holder

For Blades



For Internal grooving



1 - Product Line

GP - Grooving Plus

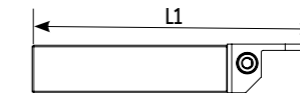
2 - Work Side



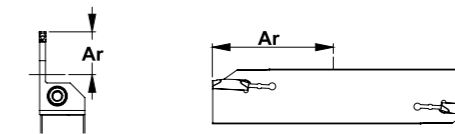
3 - Tool Type

C - Frontal

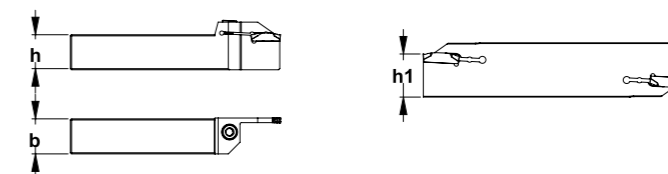
4 - Total toolholder length



5 - Maximum Depth of Cut

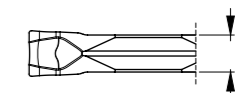


6 - Shaft | Cutting Unit Dimension



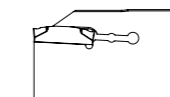
7 - Seat Size

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

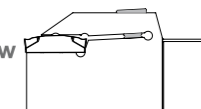


8 - Clamping System

0 - Spring



1 - Screw

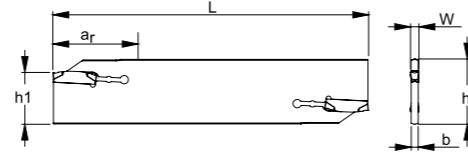


Insert Order Code = (1) geometry Code + (2) Grade Code

GROOVING & PARTING OFF

GROOVING & PARTING OFF

GPNC



Order separately

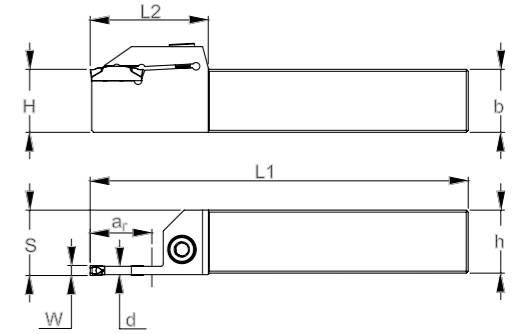
| Order code Código | Reference Referência Referencia | Dimensions Dimensões Dimensiones (mm) | | | | | | | Seat Size | Insert | Wrench | Stock |
|----------------------|---------------------------------------|---|-----|----|------|-----|---|---|-----------|---------|--------|-------|
| | | ar | L1 |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

☉ 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

Note: Wrench must be ordered separately

GPRC

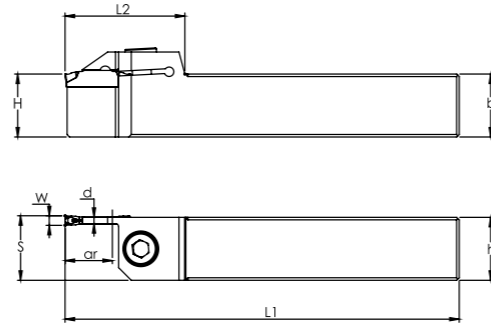


| Order code Código | Reference Referência Referencia | Dimensions Dimensões Dimensiones (mm) | | | | | | | | | | Seat Size | Insert | Screw | Wrench | Stock |
|----------------------|---------------------------------------|---|-----|----|----|----|----|-------|-----|---|---|-----------|----------|-------|--------|-------|
| | | 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 | ☉ | |
| 213020600 | GPRC-150 015 25.25.F.1 | 15 | 150 | 25 | 25 | 25 | 34 | 25,75 | 6,5 | 8 | F | GP08... | D0602200 | SS50 | ○ | |
| 213020700 | GPRC-150 023 25.25.F.1 | 23 | 150 | 25 | 25 | 25 | 42 | 25,75 | 6,5 | 8 | | GP08... | 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

GPLC



| Order code Código | Reference Referência 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 | ⊗ |
| 213023000 | GPLC-150 015 25.25.F.1 | 15 | 150 | 25 | 25 | 25 | 34 | 25,75 | 6,5 | 8 | F | GP08... | D0602200 | SS50 | ○ |
| 213023100 | GPLC-150 023 25.25.F.1 | 23 | 150 | 25 | 25 | 25 | 42 | 25,75 | 6,5 | 8 | | GP08... | 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

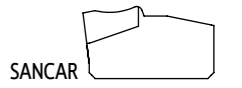
For GCMX Inserts



For SANCAR Inserts

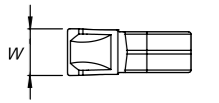


1 - Product Line



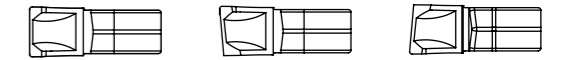
2 - Cutting Width

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



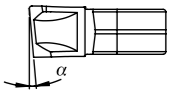
3 - Inserts Type

N - Neutral | R - Right | L - Left



4 - Relief Angle

4 - 4° | 5 - 5° | 8 - 8° | 15 - 15°

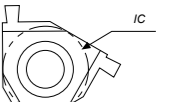


For Trigon 60° Inserts



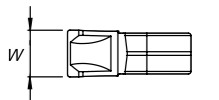
1 - Inscribed Circle

16 - 9,525mm



2 - Insert Type

ER - External Right | IR - Internal Right

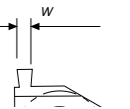


3 - Cutting Edge Type

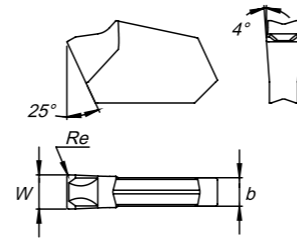


4 - Cutting Edge Length

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



GCMX-N

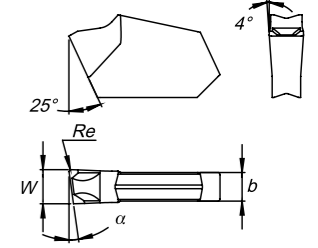


| (1) Geometry code | ISO Reference | ANSI Reference | P | | M | | K | | Dimensions (mm) | | | | Cutting Conditions | | |
|----------------------|---------------|----------------|----------------|----|--------|----|--------|----|-----------------|-----|------|----------|--------------------|------|--------|
| | | | (2) Grade code | | CVD-MT | | CVD-MT | | | | | | | | CVD-MT |
| | | | L7 | N2 | L7 | N2 | L6 | N2 | W | b | Re | α | 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 | GTN-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 | | M | | K | | Dimensions (mm) | | | | Cutting Conditions | | |
|----------------------|---------------|----------------|----------------|----|--------|----|--------|----|-----------------|-----|------|----------|--------------------|------|--------|
| | | | (2) Grade code | | CVD-MT | | CVD-MT | | | | | | | | CVD-MT |
| | | | L7 | N2 | L7 | N2 | L6 | N2 | W | b | Re | α | fn (mm/r) | Min | Max |
| 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 |

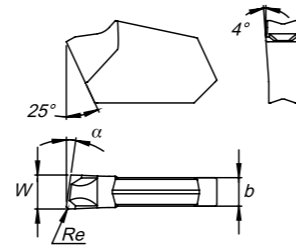
⊗ First choice | Primeira opção | 1ª opción ⊗ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

Insert Order Code = (1) geometry Code + (2) Grade Code

GROOVING & PARTING OFF

GROOVING & PARTING OFF

GCMX-L

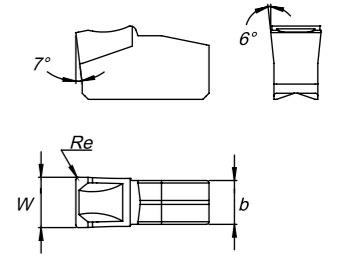


| (1) Geometry code | ISO Reference | ANSI Reference | P | | M | | K | | Dimensions (mm) | | | | Cutting Conditions | | |
|----------------------|---------------|----------------|----------------|----|--------|----|--------|----|-----------------|-----|------|----------|--------------------|------|--------|
| | | | (2) Grade code | | CVD-MT | | CVD-MT | | | | | | | | CVD-MT |
| | | | L7 | N2 | L7 | N2 | L6 | N2 | W | b | Re | α | 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

SANCAR-N

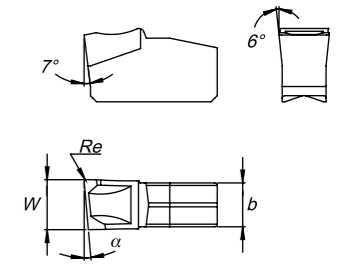


| (1) Geometry code | ISO Reference | ANSI Reference | P | | M | | K | | Dimensions (mm) | | | | Cutting Conditions | | |
|----------------------|---------------|----------------|----------------|----|--------|----|--------|----|-----------------|-----|------|----------|--------------------|------|--------|
| | | | (2) Grade code | | CVD-MT | | CVD-MT | | | | | | | | CVD-MT |
| | | | L7 | N2 | L7 | N2 | L6 | N2 | W | b | Re | α | 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 | P | | M | | K | | Dimensions (mm) | | | | Cutting Conditions | | |
|----------------------|---------------|----------------|----------------|----|--------|----|--------|----|-----------------|-----|------|----------|--------------------|------|--------|
| | | | (2) Grade code | | CVD-MT | | CVD-MT | | | | | | | | CVD-MT |
| | | | L7 | N2 | L7 | N2 | L6 | N2 | W | b | Re | α | 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

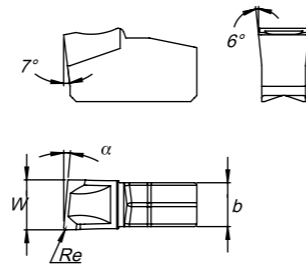
D GROOVING & PARTING OFF Grooving & Part Off

D GROOVING & PARTING OFF Grooving & Part Off

5AL Swiss Automatic Lathes

5AL Swiss Automatic Lathes

SANCAR-L



| Geometry code | ISO Reference | ANSI Reference | P | | M | | K | | Dimensions (mm) | | | | Cutting Conditions | | |
|---------------|---------------|----------------|---------------------------|----|--------|----|--------|----|-----------------|-----|------|---|--------------------|------|--------|
| | | | ⁽²⁾ Grade code | | CVD-MT | | CVD-MT | | | | | | | | CVD-MT |
| | | | L7 | N2 | L7 | N2 | L6 | N2 | W | b | Re | α | 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 |

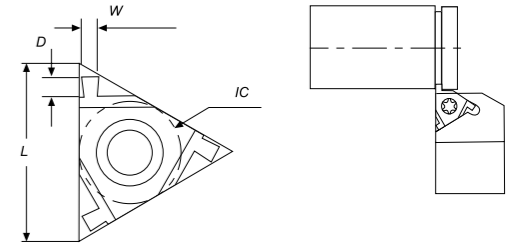
⊗ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

Insert Order Code = (1) geometry Code + (2) Grade Code

FLAT GROOVING



External



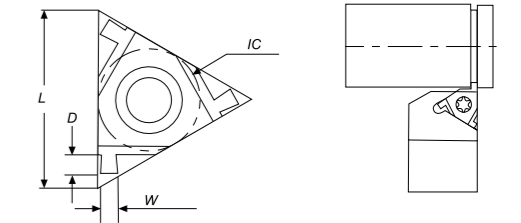
| Order code Código | Reference Referência Referencia | Anvil | Dimensions Dimensões Dimensiones (mm) | | | | Stock - Grade Code (2) | |
|----------------------|---------------------------------------|-------|---|-------|------|------|------------------------|-------------|
| | | | IC | L | W | D | (68) 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: To select the toolholders "SXAN" see page E-688 | Note: Inserts is ER/IL



Internal



| Order code Código | Reference Referência 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 | ⊗ | ○ |

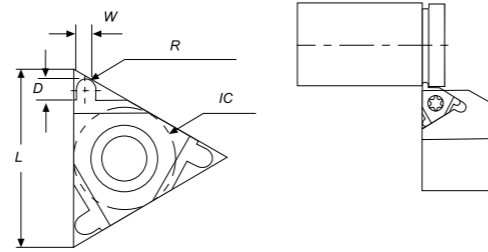
⊗ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

Note: To select the toolholders "SXAN" see page E-688 | Note: Inserts is IR/EL

FULL RADIUS GROOVING



External



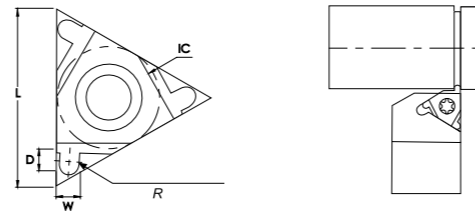
| Order code Código | Reference Referência Referencia | Anvil | Dimensions Dimensões Dimensiones (mm) | | | | | Stock - Grade Code (2) | |
|----------------------|---------------------------------------|-------|---|----|------|------|------|------------------------|-------------|
| | | | IC | L | W | 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: To select the toolholders "SXAN" see page E-688 | Note: Inserts is ER/IL



Internal



| Order code Código | Reference Referência 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: To select the toolholders "SXAN" see page E-688 | Note: Inserts is IR/EL



1 - Product Line

BL - Blade

2 - Blade Type

ST - Standard
Blade

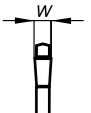


S - SANCAR
Blade



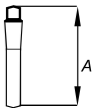
3 - Cutting Width

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

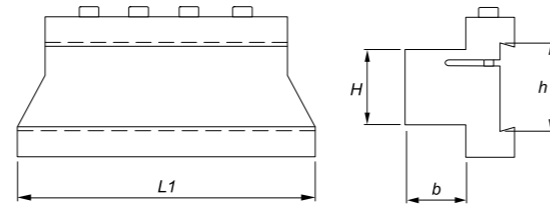


4 - Maximum Depth of Cut

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



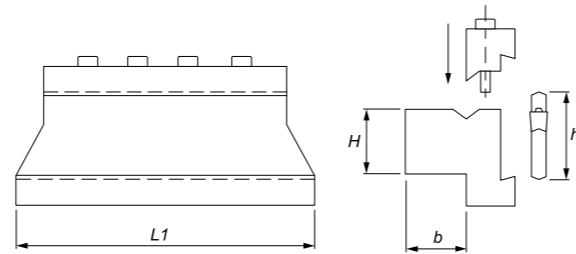
CPTS



| Order code Código | Reference Referência 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

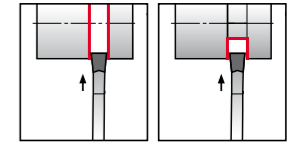
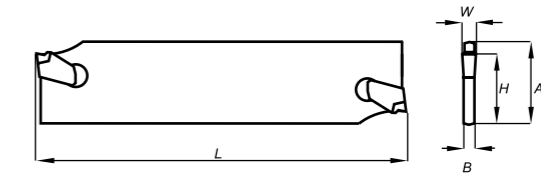
DPTS



| Order code Código | Reference Referência 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 | 1,000 | 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

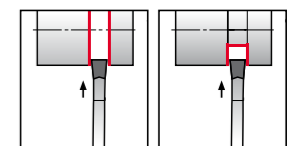
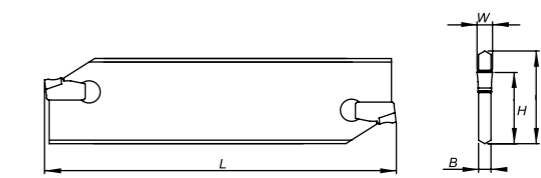
BLST (GCMX)



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

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

BLS (SANCAR)



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

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

MAIN APPLICATIONS - Características principais | Características principales

INSERTS

4 Different operations:

- Turning
- Parting off
- Grooving
- Threading

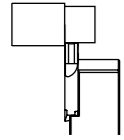
TOOLHOLDERS

Metric:

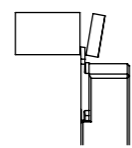
- 08x08mm
- 10x10mm
- 12x12mm
- 16x16mm

Inches:

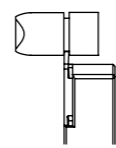
- 0,625 x 0,625"
- 0,500 x 0,500"
- 0,375 x 0,375"
- 0,312 x 0,312"



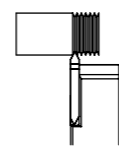
Turning



Parting off



Grooving



Threading



Download complete brochure

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

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

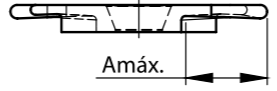
| Parting Off Inserts | | | | | | | |
|---------------------|----|---|-----|---|---|---|-----|
| 1 | 3 | 5 | 6 | 8 | 9 | - | 11 |
| SAL | 11 | P | 100 | R | N | | PO7 |

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

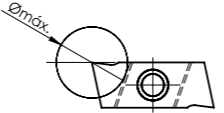
| Turning Inserts | | | | | | |
|-----------------|----|---|-----|---|---|----|
| 1 | 2 | 5 | 6 | 8 | - | 11 |
| SAL | 60 | T | 300 | R | | TP |

| 1 - Product line |
|-----------------------------------|
| SAL - Swiss Automatic Lathes Line |

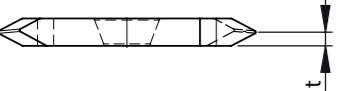
| 2 - Maximum depth of cut (Turning and Grooving inserts) |
|---|
| 25 - 2,5mm 60 - 6,0mm |




| 3 - Maximum Cutting Diameter (Parting Off Inserts) |
|--|
| 11 - 11,0mm 13 - 13,0mm |



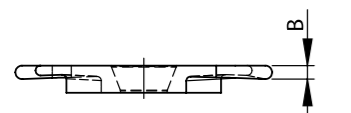
| 4 - Center distance (Threading Inserts) |
|---|
| 050 - 0,5mm 100 - 1,00mm |



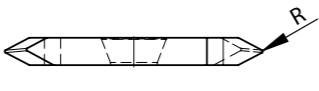
| 5 - Operations type | | | |
|---------------------|-----------------|---------------|-------------|
| G - Grooving | P - Parting off | H - Threading | T - Turning |



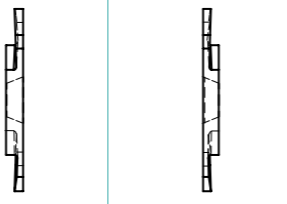
| 6 - Cut thickness (Grooving, Parting Off and Turning Inserts) |
|--|
| 050 - 0,50mm 070 - 0,70mm 080 - 0,80mm 090 - 0,90mm 100 - 1,00mm 110 - 1,10mm 130 - 1,30mm 150 - 1,50mm 160 - 1,60mm 185 - 1,85mm 200 - 2,00 mm 300 - 3,00 mm |




| 7 - Corner radius (Threading Inserts) |
|---|
| 005 - 0,05mm 010 - 0,10mm 012 - 0,12mm |



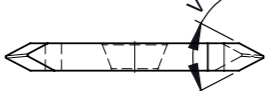
| 8 - Insert / toolholder side | |
|------------------------------|----------------|
| L - Left hand | R - Right hand |



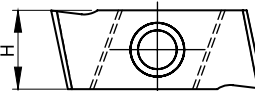
| 9 - Front angle (Parting off) | | |
|-------------------------------|-----------|----------|
| N - Neutral | R - Right | L - Left |



| 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 GR - Round Grooving |
| Parting Off | P00 - Front angle 0° P07 - Front angle 7° |
| Threading | PT - Partial Profile |



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

| For convencional Toolholders (Metric) | | | | | | | | | |
|---------------------------------------|---|---|---|---|----|----|---|---|----|
| 1 | 2 | 3 | 4 | - | 5 | 6 | - | 7 | 8 |
| SAL | H | E | R | | 08 | 08 | | M | 07 |

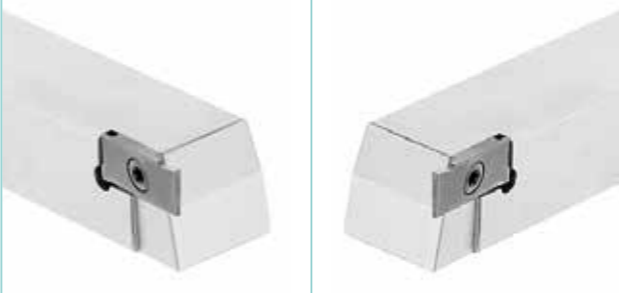
| For Convencional Toolholders (Imperial) | | | | | | | |
|---|---|---|---|---|----|----|--|
| 1 | 2 | 3 | 4 | - | 8 | 9 | |
| SAL | H | E | L | | 07 | 05 | |

| 1 - Product line |
|-----------------------------------|
| SAL - Swiss Automatic Lathes Line |

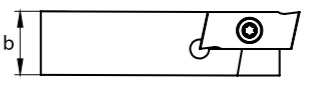
| 2 - Tool type |
|---------------|
| H - Holder |

| 3 - Internal or External |
|--------------------------|
| E - External |

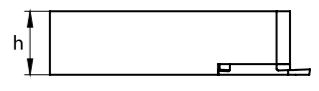
| 4 - Insert / toolholder side | |
|------------------------------|----------------|
| L - Left hand | R - Right hand |




| 5 - Shank height (Metric) |
|---------------------------|
| Metric |
| 08 - 8 mm |
| 10 - 10 mm |
| 12 - 12 mm |
| 16 - 16 mm |



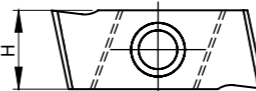
| 6 - Shank width (Metric) |
|--------------------------|
| Metric |
| 08 - 8 mm |
| 10 - 10 mm |
| 12 - 12 mm |
| 16 - 16 mm |



| 7 - Shank height (Metric or Imperial) | |
|---------------------------------------|--|
| L - 140 mm | |
| M - 150 mm | |



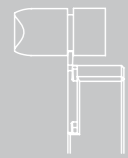
| 8 - Insert cutting edge length (mm) |
|-------------------------------------|
| 07 - 7,0 mm |



| 9 - Shank height (Imperial) | |
|-----------------------------|--|
| Imperial | |
| 05 - 5/16" x 5/16" | |
| 06 - 3/8" x 3/8" | |
| 08 - 1/2" x 1/2" | |
| 10 - 5/8" x 5/8" | |



GROOVING | Canais | Ranurado



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

GS



Square grooving

GR



Round grooving

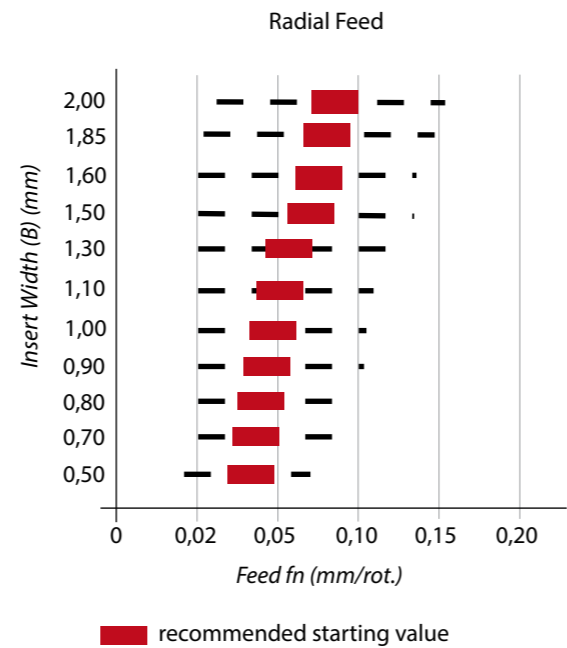
Recommended cutting conditions

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


Recommended grade PH7920, (Vc) m/min.

Grade PH7910 and PH7135

Available under request (2 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

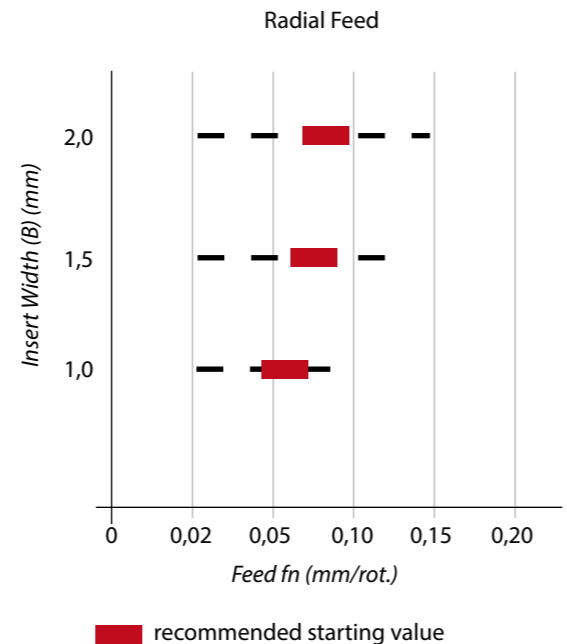
Recommended cutting conditions

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

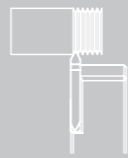
Recommended grade PH7920, (Vc) m/min.

Grade PH7910 and PH7135

Available under request (2 weeks delivery time)



THREADING | Roscagem | Roscado



Two types of threading:

- Partial profile 55°
- Partial profile 60°

PT



Partial profile

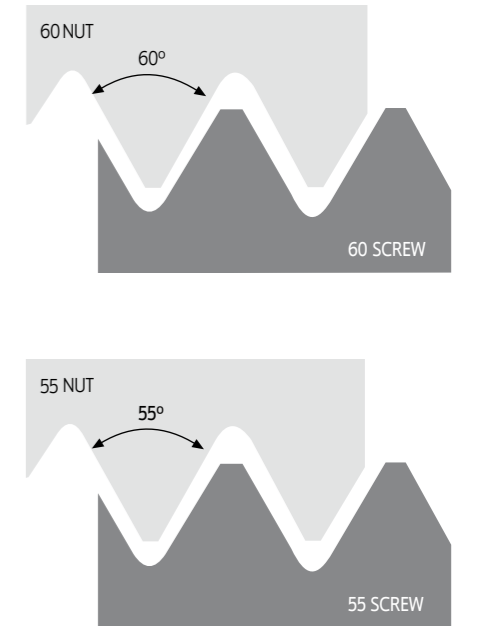
Recommended cutting conditions

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


Recommended grade PH7920, (Vc) m/min.

Grade PH7910 and PH7135

Available under request (2 weeks delivery time)



TURNING | Torneamento | Torneado



- Insert for turning
- Maximum deep of cut is 3,00 mm
- Too low cutting speed will result in inadequate tool life and it is advisable to follow cutting speed recommendations.

TP



Turning steel

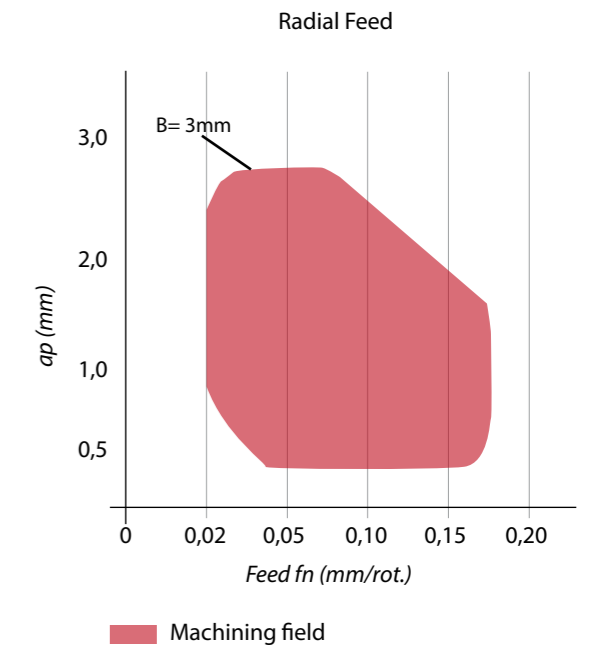
Recommended cutting conditions

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

Recommended grade PH7920, (Vc) m/min.

Grade PH7910 and PH7135

Available under request (2 weeks delivery time)



GROOVING & PARTING OFF

GROOVING & PARTING OFF

SCREWS



| Order code Código | Reference Referência Referencia | Stock |
|----------------------|---------------------------------------|-------|
| 290074100 | D0503000 | Ⓢ |
| 290020700 | D0603600 | Ⓢ |
| 290074200 | D0804800 | Ⓢ |
| 290062900 | D0602200 | Ⓢ |

Ⓢ Stock item | Produto de stock
Itens de stock

○ Available under request | Disponível sobre consulta
Disponível bajo consulta

WRENCHES



| Order code Código | Reference Referência Referencia | Stock | Order code Código | Reference Referência Referencia | Stock | Order code Código | Reference Referência Referencia | Stock |
|----------------------|---------------------------------------|-------|----------------------|---------------------------------------|-------|----------------------|---------------------------------------|-------|
| 290021200 | SS40 | Ⓢ | 290074400 | LE05 | Ⓢ | 290079600 | LE25-30 | Ⓢ |
| 290021300 | SS50 | Ⓢ | | | | | | |
| 290074300 | SS60 | Ⓢ | | | | | | |

Ⓢ Stock item | Produto de stock
Itens de stock

○ Available under request | Disponível sobre consulta
Disponível bajo consulta

GROOVING & PARTING OFF GRADES

| ISO | Uncoated grades | Coated Grades | | | | | | |
|--------------------------|-----------------|---------------|--------|---|--|--------|--------|---|
| | | CVD | PVD | | | | | |
| P | 05 | PH5115 | PH7920 | - Wear resistance - Resistência ao desgaste - Resistencia al desgaste | | | | |
| | 10 | | | | | | | |
| | 15 | | | | | | | |
| | 20 | | | | | | | |
| | 25 | | | | | | | |
| | 30 | | | | | | | |
| | 35 | | | | | | | |
| | 40 | | | | | | | |
| | 45 | | | | | | | |
| | 50 | | | | | | | |
| STEEL | 05 | PH5115 | PH7920 | - Toughness - Tenacidade - Tenacidad | | | | |
| | 10 | | | | | | | |
| | 15 | | | | | | | |
| | 20 | | | | | | | |
| | 25 | | | | | | | |
| | 30 | | | | | | | |
| | 35 | | | | | | | |
| | 40 | | | | | | | |
| | 45 | | | | | | | |
| | 50 | | | | | | | |
| M | 05 | PH5115 | PH7920 | - Wear resistance - Resistência ao desgaste - Resistencia al desgaste | | | | |
| | 10 | | | | | | | |
| | 15 | | | | | | | |
| | 20 | | | | | | | |
| | 25 | | | | | | | |
| | 30 | | | | | | | |
| | 35 | | | | | | | |
| | 40 | | | | | | | |
| | 45 | | | | | | | |
| | 50 | | | | | | | |
| STAINLESS STEEL | 05 | PH5115 | PH7920 | - Toughness - Tenacidade - Tenacidad | | | | |
| | 10 | | | | | | | |
| | 15 | | | | | | | |
| | 20 | | | | | | | |
| | 25 | | | | | | | |
| | 30 | | | | | | | |
| | 35 | | | | | | | |
| | 40 | | | | | | | |
| | 45 | | | | | | | |
| | 50 | | | | | | | |
| K | 05 | PH0705 | PH5320 | - Wear resistance - Resistência ao desgaste - Resistencia al desgaste | | | | |
| | 10 | | | | | | | |
| | 15 | | | | | | | |
| | 20 | | | | | | | |
| | 25 | | | | | | | |
| | 30 | | | | | | | |
| | 35 | | | | | | | |
| | 40 | | | | | | | |
| | PH5135 | | | | | | | |
| | CAST IRON | | | | 05 | PH0910 | PH7920 | - Wear resistance - Resistência ao desgaste - Resistencia al desgaste |
| 10 | | | | | | | | |
| 15 | | | | | | | | |
| 20 | | | | | | | | |
| 25 | | | | | | | | |
| 30 | | | | | | | | |
| 35 | | | | | | | | |
| 40 | | | | | | | | |
| Z | | 05 | PH0910 | PH7920 | - Toughness - Tenacidade - Tenacidad | | | |
| | | 10 | | | | | | |
| | 15 | | | | | | | |
| | 20 | | | | | | | |
| | 25 | | | | | | | |
| | 35 | | | | | | | |
| ALLUMINIUM & NON FERROUS | 05 | PH0910 | PH7920 | - Wear resistance - Resistência ao desgaste - Resistencia al desgaste | | | | |
| | 10 | | | | | | | |
| | 15 | | | | | | | |
| | 20 | | | | | | | |
| | 25 | | | | | | | |
| | 35 | | | | | | | |
| S | 05 | PH0910 | PH7920 | - Toughness - Tenacidade - Tenacidad | | | | |
| | 10 | | | | | | | |
| | 15 | | | | | | | |
| | 20 | | | | | | | |
| | 25 | | | | | | | |
| | 30 | | | | | | | |

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

Centre of the field of application.

Recommended fields of application

To be replaced by new grades

GROOVING & PARTING OFF

GROOVING & PARTING OFF

SAAL Swiss Automatic Lathes Grooving & Part Off

SAAL Swiss Automatic Lathes Grooving & Part Off

Technical Data

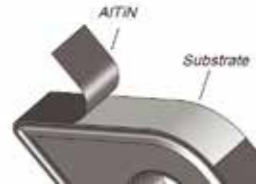
Technical Data

GROOVING & PARTING OFF GRADES DESCRIPTION

PVD GRADES

PH7920

P10-P35
M10-M25
S10-S30

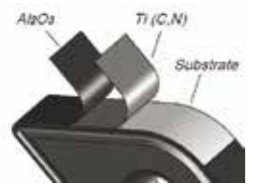


A micro grain size combined with the AlTiN PVD coating make it suitable for Roughing to Finishing operations under good cutting conditions to light interrupted cuts at medium cutting speeds. Suitable for steels, stainless steel, HRSA.

CVD GRADES

PH5115

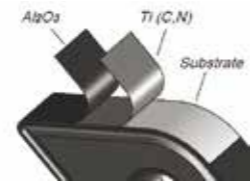
P01-P30
M01-M25



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

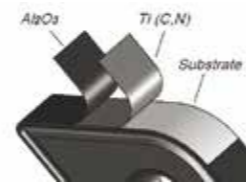
P10-P35
M05-M30



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

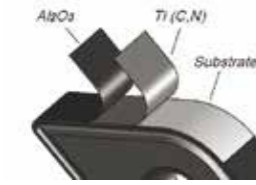
P20-P40
M15-M35
K15-K30



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 toughness. Suitable for rough to finish turning of HRSA, Titanium alloys, cast irons and Aluminium alloys.

CUTTING SPEED (m/min)

| ISO | Material | HB (brinell) | CVD Coating | | | PVD Coating |
|-----|------------------|--------------|-----------------|--------|--------|-------------|
| | | | Wear Resistance | | | Toughness |
| | | | PH5115 | PH5125 | PH5135 | PH7920 |
| 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 steel | 200-325 | 50-130 | 45-115 | 45-115 | 50-110 |

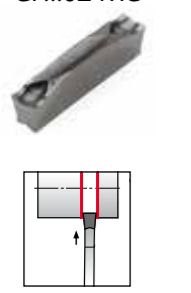
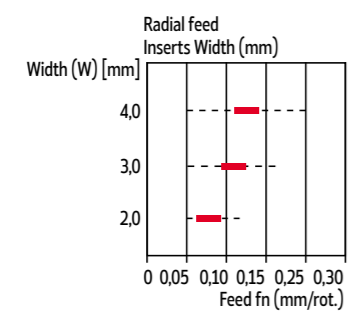
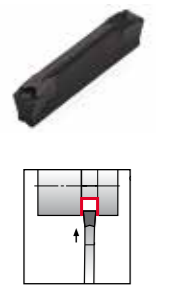
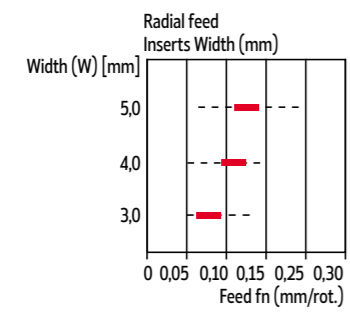

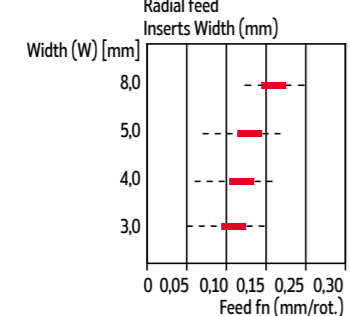
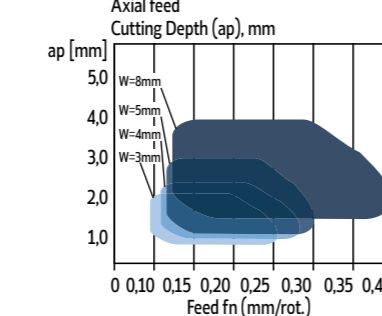
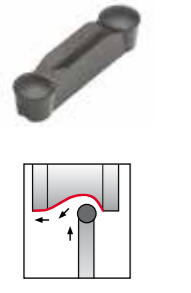
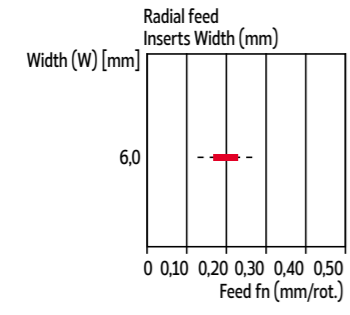
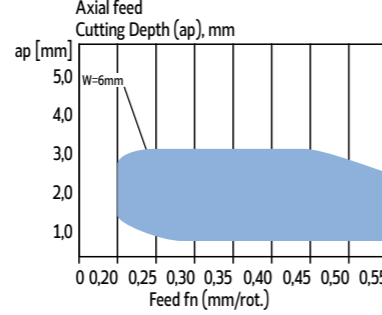
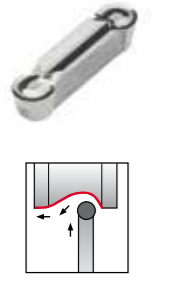
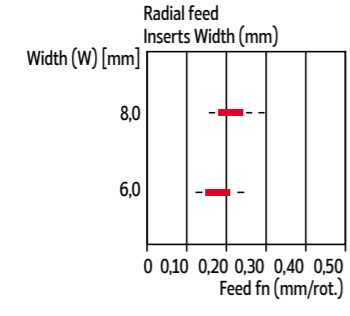
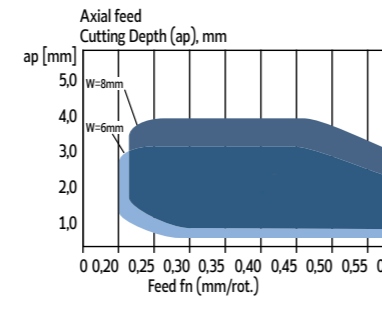
| ISO | Material | HB (brinell) | CVD Coating | | | PVD Coating |
|-----|-----------------------------------|--------------|-----------------|--------|--------|-------------|
| | | | Wear Resistance | | | Toughness |
| | | | PH5115 | PH5125 | PH5135 | PH7920 |
| M | SS - Ferritic/martensitic | 200-330 | 65-175 | 55-165 | 45-155 | 45-140 |
| | SS - Austenitic | 180-330 | 65-150 | 55-140 | 50-130 | 50-125 |
| | SS - Austenitic-ferritic (Duplex) | 230-260 | 65-140 | 55-130 | 50-125 | 50-120 |

| ISO | Material | HB (brinell) | CVD Coating | | |
|-----|-------------------|--------------|-----------------|--------|--------|
| | | | Wear Resistance | | |
| | | | PH5705 | PH5320 | PH5135 |
| 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 |

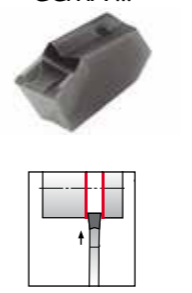
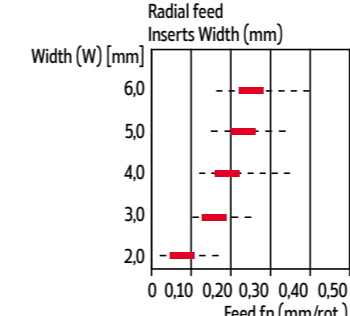
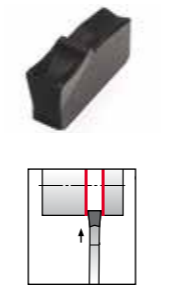
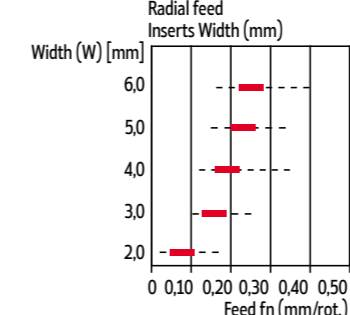
| ISO | Material | HB (brinell) | Uncoated |
|-----|--------------------------|--------------|-------------|
| | | | PH0910 |
| | | | 0.04 - 0.35 |
| N | Aluminium alloys | 60-130 | 190-1800 |
| | Copper and copper alloys | 90-110 | 40-420 |

| ISO | Material | HB (brinell) | PVD Coating |
|-----|---|--------------|-------------|
| | | | PH7920 |
| | | | 0.04 - 0.30 |
| S | Heat resistant super alloys (Iron base) | 200-280 | 35-90 |
| | Heat resistant super alloys (Nickel base) | 250-320 | 22-60 |
| | Heat resistant 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 |
|--|---|---|
| <p>GP...02-MC</p>  | <p>Radial feed Inserts Width (mm)</p>  | <p>Medium Parting Off</p> <p>Recommended for parting off, thin walled tubes and small diameter components in all materials.</p> <p>The positive geometry eliminates the risk of built-up edge.</p> <p>Low cutting forces resulting in reduced vibration.</p> |
| <p>GP...02-MG</p>  | <p>Radial feed Inserts Width (mm)</p>  | <p>Medium Grooving</p> <p>Outstanding chip control.</p> <p>Reduces chip width giving good surfaces.</p> <p>For all materials.</p> |
| <p>GP...02-MM</p>  | <p>Radial feed Inserts Width (mm)</p>  <p>Axial feed Cutting Depth (ap), mm</p>  | <p>Medium Multi Function (Grooving & Turning)</p> <p>For grooving and turning in all materials.</p> <p>Good chip control.</p> |
| <p>GP...02-MP</p>  | <p>Radial feed Inserts Width (mm)</p>  <p>Axial feed Cutting Depth (ap), mm</p>  | <p>Medium Profiling</p> <p>For profiling all materials.</p> <p>Outstanding chip control even at low feeds and small depths of cut.</p> <p>Good surface finish.</p> |
| <p>GP...02-NP</p>  | <p>Radial feed Inserts Width (mm)</p>  <p>Axial feed Cutting Depth (ap), mm</p>  | <p>Medium Aluminium profiling</p> <p>First choice for profiling in non-ferrous materials.</p> <p>Good chip flow provides a better surface finishing.</p> <p>Sharp cutting edge.</p> |

CUTTING PARAMETERS | Parâmetros de corte | Parámetros de corte

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

Recommended starting value.
For cutting speed recommendations, see page D-635