

SERDI

SINGLE POINT CNC VALVE SEAT MACHINES



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Machines voor motoren revisie,
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PROFILE

2023 TOOLING CATALOG

40

YEARS AND MORE
OF EXPERTISE



ADVICE &
SERVICE

WORLD CLASS TECHNOLOGY

SINGLE POINT CUTTING BITS

038174 6 MM EDGE CBN - 3 TIPS



Material: CBN

Edge length: 6 mm

Cutting-bit holder compatibility: PRF-06 range

Geometry: flat

Application: Sintered valve seat machining

Radius value: 0.4 mm



Use with 025163
Torx screw T6 (M2x4.9)



(order separately)

038291 6 MM EDGE CERMET - 3 TIPS



Material: Cermet

Edge length: 6 mm

Cutting-bit holder compatibility: PRF-06 range

Geometry: chip-breaker to combine with Longitudinal machining strategy

Application: Beryllium and bronze valve seat
Aluminium valve seat counterboring

Radius value: 0.4 mm



Use with 025163
Torx screw T6 (M2x4.9)



(order separately)

032023 11 MM EDGE CBN - 3 TIPS



Material: CBN

Edge length: 11 mm

Cutting-bit holder compatibility: PRF-11 range

Geometry: flat

Application: Sintered valve seat machining

Radius value: 0.4 mm

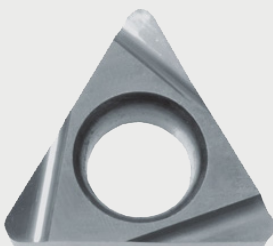


Use with 015762
Torx screw T8
(M2.5x4.9)



(order separately)

038377 11 MM EDGE CERMET - 3 TIPS



Material: Cermet

Edge length: 11 mm

Cutting-bit holder compatibility: PRF-11 range

Geometry: chip-breaker to combine with Longitudinal machining strategy

Application: Beryllium and bronze valve seat
Aluminium valve seat counterboring



Use with 015762
Torx screw T8
(M2.5x4.9)



(order separately)

TOOLING

025164 T6 PLUS TORX SCREWDRIVER



Screwdriver to tighten the cutting bit screw.

Cutting-bit holder compatibility: PRF-06 range



Use with 025163
Torx screw T6 (M2x4.9)



(order separately)

582501 T8 TORX SCREWDRIVER



Screwdriver to tighten the cutting bit screw.

Cutting-bit holder compatibility: PRF-11 range



Use with 015762
Torx screw T8
(M2.5x4.9)



(order separately)

035961 TORQUE LIMITING SCREWDRIVER



1.2 Nm Torque limiting screwdriver body to clamp the pilot in its hydraulic holder.

Combine with 035962
Screwdriver tip

035962 SCREWDRIVER TIP



Screwdriver tip to insert in screwdriver body.

Combine with 035961
Torque limiting
screwdriver

CUTTING BIT HOLDERS PRF-06

038254 PRF-06-15-S

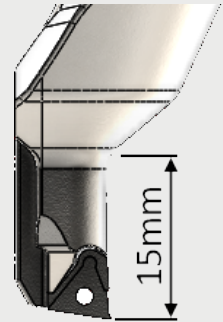


- 019809** Clamping screw (CHC M6x12) x 2 included
- 025163** Torx screw T6 (M2x4.9) x 1 included

Machining capacity:
 Minimum diameter: **14 mm - 0.551"**
 Maximum diameter: **68 mm - 2.677"**
 Maximum counterboring depth: **15 mm - 0.59"**

Application: Motorcycle, automotive

Compatible with **6 mm** edge cutting bits
 CSD pilot may be necessary to reach diameters lower than 19 mm - 0.748"



038271 PRF-06-15

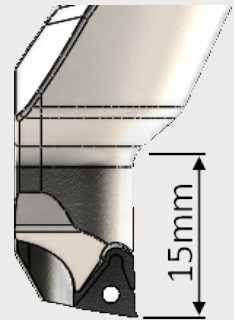


- 019809** Clamping screw (CHC M6x12) x 2 included
- 025163** Torx screw T6 (M2x4.9) x 1 included

Machining capacity:
 Minimum diameter: **19 mm - 0.748"**
 Maximum diameter: **73 mm - 2.874"**
 Maximum counterboring depth: **15 mm - 0.59"**

Application:
 Automotive, small diesel

Compatible with **6 mm** edge cutting bits



038274 PRF-06-30

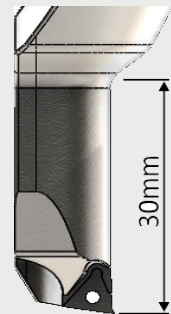


- 019809** Clamping screw (CHC M6x12) x 2 included
- 025163** Torx screw T6 (M2x4.9) x 1 included

Machining capacity:
 Minimum diameter: **19 mm - 0.748"**
 Maximum diameter: **73 mm - 2.874"**
 Maximum counterboring depth: **30 mm - 1.181"**

Application:
 Automotive, small diesel

Compatible with **6 mm** edge cutting bits



038275 PRF-06-45



- 019809** Clamping screw (CHC M6x12) x 2 included
- 025163** Torx screw T6 (M2x4.9) x 1 included

Machining capacity:
 Minimum diameter: **19 mm - 0.748"**
 Maximum diameter: **73 mm - 2.874"**
 Maximum counterboring depth: **45 mm - 1.771"**

Application: Hemispheric heads
 Long machining profiles reaching the port
 Cam bucket bore

Compatible with **6 mm** edge cutting bits



CUTTING BIT HOLDERS PRF-11

036777 PRF-11-15

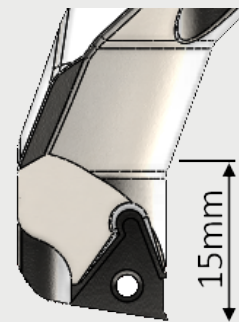


- 019809 Clamping screw (CHC M6x12) x 2 included
- 015762 Torx screw T8 (M2.5x4.9) x 1 included

Machining capacity:
 Minimum diameter: **31 mm - 1.220"**
 Maximum diameter: **85 mm - 3.35"**
 Maximum counterboring depth: **15 mm - 0.59"**

Application:
 Automotive, heavy duty

Compatible with **11 mm** edge cutting bits



038239 PRF-11-30



- 019809 Clamping screw (CHC M6x12) x 2 included
- 015762 Torx screw T8 (M2.5x4.9) x 1 included

Machining capacity:
 Minimum diameter: **31 mm - 1.220"**
 Maximum diameter: **85 mm - 3.35"**
 Maximum counterboring depth: **30 mm - 1.181"**

Application:
 Automotive, heavy duty



038241 PRF-11-45



- 019809 Clamping screw (CHC M6x12) x 2 included
- 015762 Torx screw T8 (M2.5x4.9) x 1 included

Machining capacity:
 Minimum diameter: **31 mm - 1.220"**
 Maximum diameter: **85 mm - 3.35"**
 Maximum counterboring depth: **45 mm - 1.771"**

Application:
 Hemispheric heads
 Long machining profiles reaching the port
 Cam bucket bore



PILOTS CL TYPE



The SERDI Profile uses the same pilots than the range of form tool machines.

Pilot shank is $\varnothing 9.52 \text{ mm}$ or $\varnothing 3/8''$

The tolerance on the centering diameter is $\pm 0.002 \text{ mm}$ / $\pm .00007''$.

Carbide Long pilot

Centering diameter $\varnothing A$ available from:

- $\varnothing 3.5 \text{ mm} - 0.138''$ to $\varnothing 14 \text{ mm} - 0.550''$ maximum

Standard length: **190mm - 7.480''**

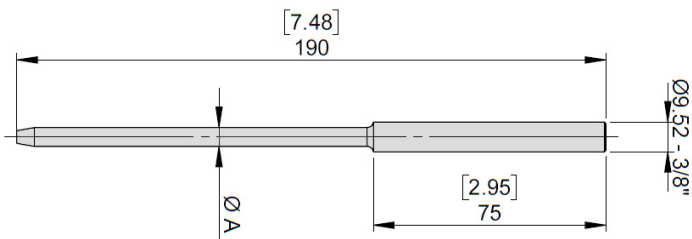
Optional length:

225 mm - 8.858''

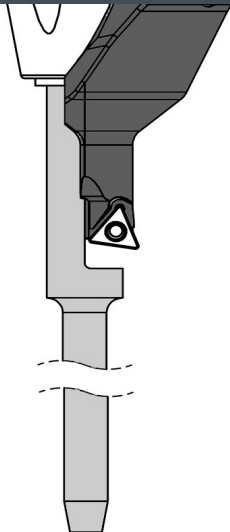
250 mm - 9.842''

300 mm - 11.811''

For a $\varnothing 9.02 \text{ mm}$ pilot, order part # : CL 9.02



PILOTS CSD TYPE



Carbide Small Diameter pilot

Centering diameter $\varnothing A$ available from:

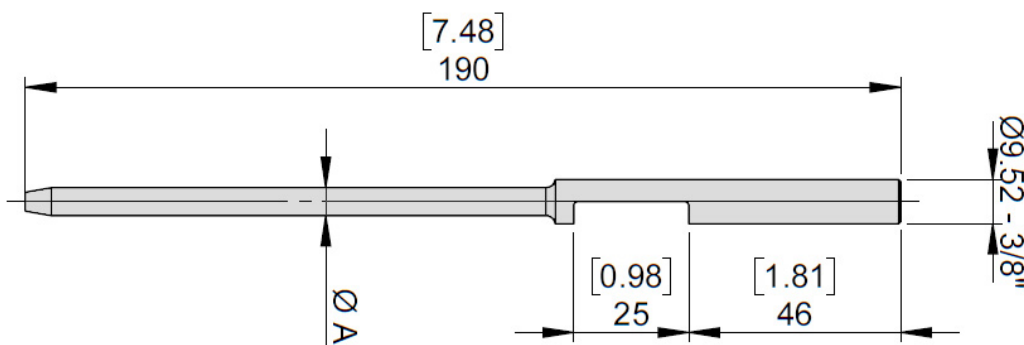
- $\varnothing 3.5 \text{ mm} - 0.138''$ to $\varnothing 14 \text{ mm} - 0.550''$ maximum

Standard length: **190mm - 7.480''**

Pilots with a clearance area for the tool holder access in order to reach smaller valve seat diameters.

To use in combination with cutting bit holder

PRF-06-15-S (038254) to reach valve seat diameters lower than 19 mm.



CONTROL INSTRUMENTS

035075 SERDIGITAL



Digital display micrometer allowing to measure the current diameter position of the tool tip, and to implement it into the machine to set its diameter reference.

Resolution pitch : **0.01 mm / .0005"**
Measuring unit system: **Metric / Imperial**
Display : **Digital liquid crystal**
Electric supply : **3V 2032 CRC battery**
Measuring capacity : **0 – 180 mm / 0 – 7.08"**

Fits on pilots from \varnothing 3.5 mm up to \varnothing 20 mm

036305 RUNOUT GAUGE



Device to insert on a pilot shank after seat machining, to display the runout value. The gauge turns around the pilot and the runout value must be read on one device rotation.

Resolution pitch : **0.01 mm / .0005"**
Measuring unit system: **Metric / Imperial**
Material: **Stainless steel and carbide**
Measuring capacity: **\varnothing 16 – \varnothing 120 mm seat diameter / \varnothing 0.63 – \varnothing 4.724"**
Pilot compatibility: **\varnothing 9.52 mm (3/8") shank**

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