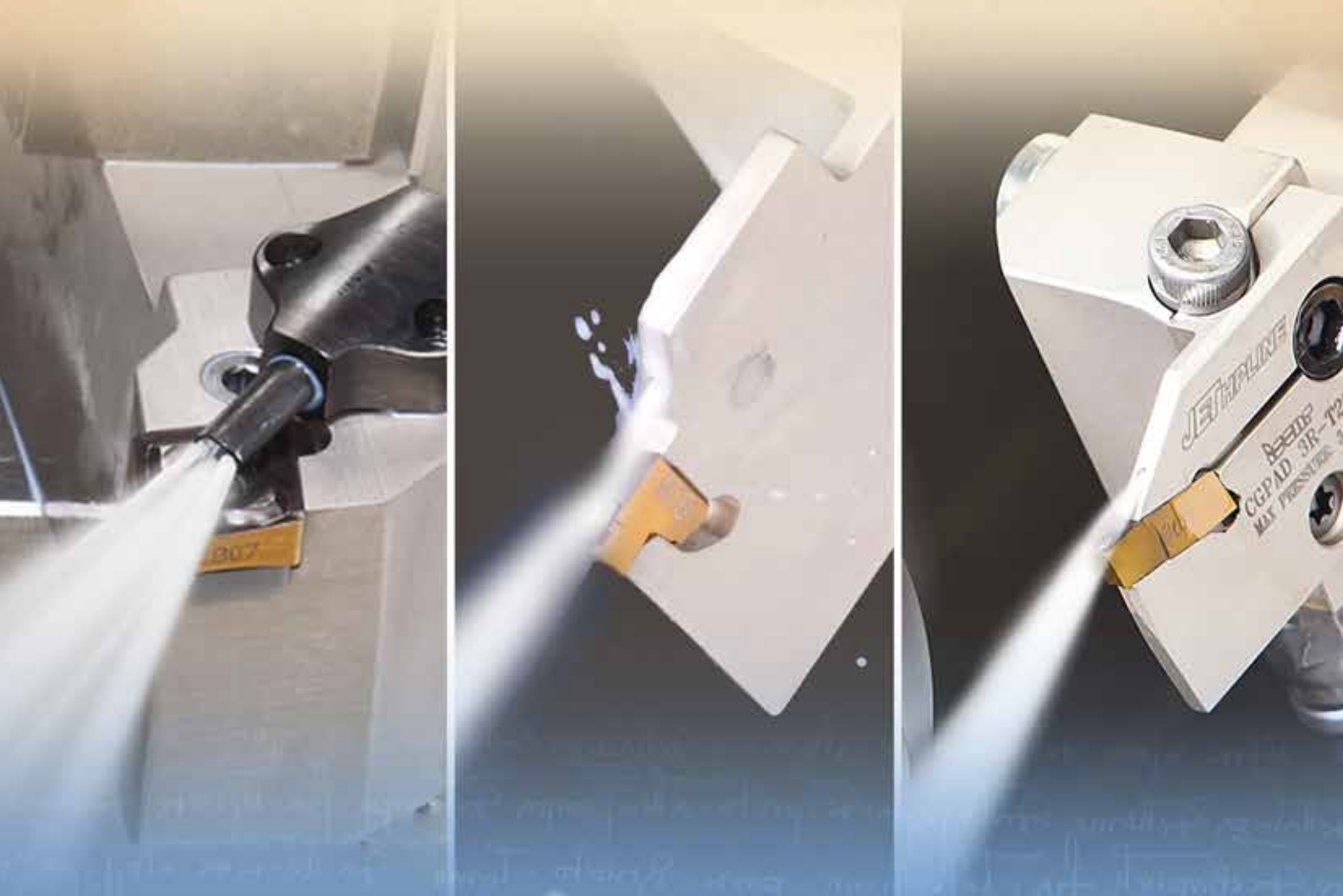
JETHPLINE

Engineered for HIGH PRESSURE Economical Turning, Grooving and Parting Performance

Metric Version 2014 **Edition 2**



Member IMC Group

ISCAR

www.iscar.com

ISCAR CMS APP

ISCAR's Complete Machining Solutions Catalogs

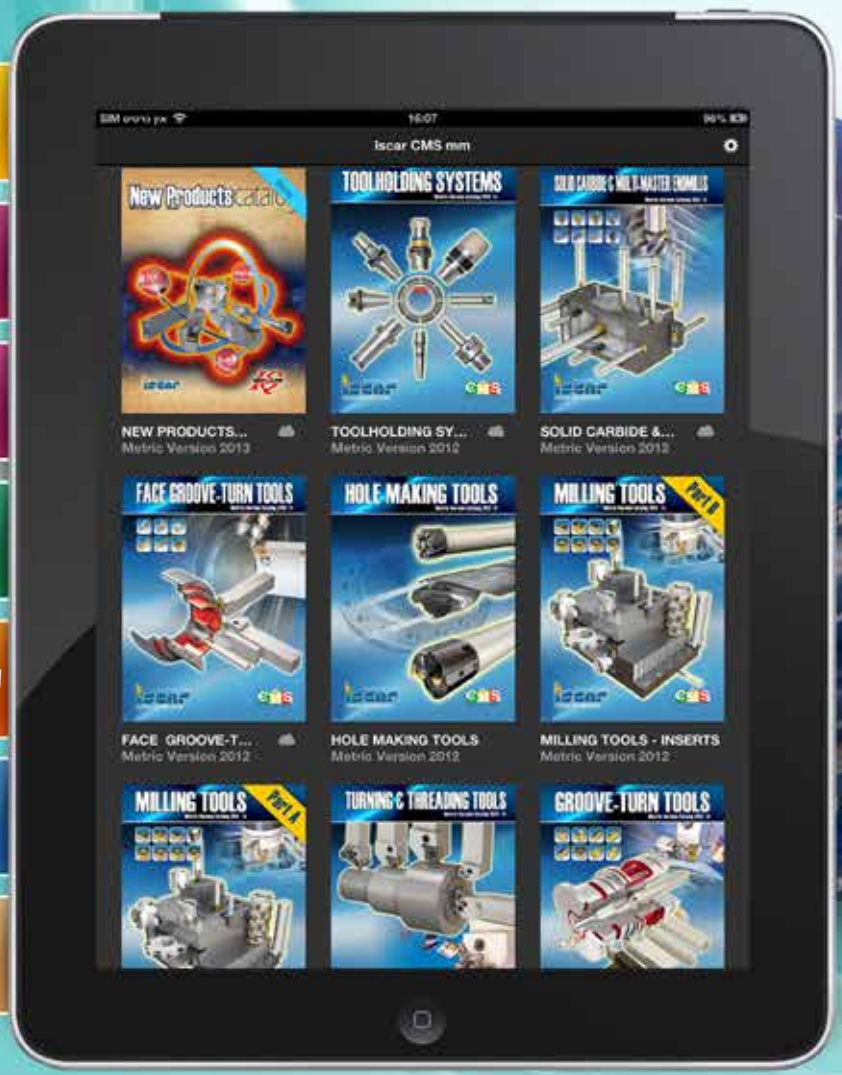
Now on Your Tablet

FREE Download

METRIC CMS — INCH CMS

- User-Friendly App
- Online Interface Updates
- Web Viewer at ISCAR's Website

- Groove-Turn Tools
- Solid-Carbide & MM Endmills
- Milling Tools
- Hole Making Tools
- Turning & Threading Tools
- Tooling Systems
- New Products Catalog



Member IMC Group

www.iscar.com

ANDROID APP ON Google play

Download on the App Store

Table of Contents

Engineered for
HIGH PRESSURE
Economical TURNING
Performance

JETHPLINE

High Pressure Coolant

The high pressure coolant feature has been in existence for a long time in the metal removal world, taking a bigger role in today's machining.
High pressure coolant was initially implemented mainly for difficult-to-machine materials such as titanium, inconel and other heat resistant alloys.
Later it was found that tool life, productivity and chip control can be improved when machining stainless and alloyed steel.

JHP tools are essential and important in the aviation, aerospace and medical industries.
How does it work?
The stream velocity of the coolant emitted from the pump increases as the coolant holes become smaller. When it emerges out of the tool through the nozzle, the velocity is very high, exerting considerable force on the chips, lowering their temperature and protecting the cutting edge from thermal shock.

High temperature alloys produce a very high temperature as they are being cut. By effectively removing the heat, the chips become less ductile and thus easier to break. Shorter chips are easily managed - they do not tangle around the workpiece or machine parts, so there is no need to stop the process frequently. Usually in conventional cooling the chip prevents the coolant from reaching the insert rake face in the cutting zone. The coolant stream of the JHP tools is directed precisely between the insert rake face and the flowing chip. This results in longer tool life and a much more reliable process.

Using the JHP tools with regular machine pressure will also improve performance.

The usage of high pressure coolant is growing as manufacturers are looking for ways to reduce cutting time, improve machining process reliability and achieve longer tool life.
ISCAR's JHP tools provide all of these advantages.

The coolant channels of the JHP tools feature outlets very close to the cutting edges, thus gaining the following advantages:

- Shorter machining time – The cutting speed may be increased by up to 200% when machining titanium and heat resistant alloys.
- Longer tool life – tool life increases by up to 100% not only on titanium and heat resistant alloys, but also on stainless and alloy steels.
- Improved chip control – even on the most ductile and problematic materials, small chips can be obtained.
- Very effective cooling down of the cutting edge, which reduces sensitivity to heat fluctuations
- Safer and more stable process

JHP tools provide advantageous performance also when conventional pressure is applied.

General Information

- **Pressure Ranges**

  Up to 30 bar – Low pressure (LP) provides improvement in tool life. Usually will not have an effect on chip control.
  30 – 120 bar – High pressure (HP) the most commonly used pressure range used with JHP tools.
  Increase in tool life, increase in cutting speeds, improved chip control.

  120 – 400 bar – Ultra high pressure (UHP)
  Minor increase in tool life compared to HP range.
  ISCAR standard JHP tools were designed for up to 300 bar coolant pressure.
  Ultra high pressure coolant is usually implemented for machining titanium and heat resistant alloys when there is a need for very small chips and higher machining rates.
  ISCAR has provided hundreds of special tools featuring ultra high pressure coolant capability, for various customers and applications.

- **Pressure vs. Flow**

  Each JHP tool is designed to work at a certain flow rate, depending on the pressure. The flow rates are listed in the catalog pages for each tool. The user should verify that his pump can supply the required flow in order to achieve the optimal results. The pump data sheet will usually list the maximum flow rate for each pressure range.

- **Chips and Pressure**

  The coolant flow will start to break the chips at a certain pressure, depending on the specific tool and the workpiece material. If the chips are not breaking, the pressure should be increased until chip control is achieved. Above this pressure, as it is increased, the chips become smaller and smaller. It is possible to control the size of the chips by modifying the pressure in order to achieve the desired chip size.

- ISCAR can provide different specially tailored tools for ultra high pressure coolant.

Recommended Speed Correction for High Pressure Coolant vs. External Low Pressure Coolant

Material	RoughTurning	Finish Turning	Grooving	Contouring with Full Radius Insert
Titanium Ti64				
80 bar	+ 50%	+ 70%	+ 70%	+ 100%
150 bar	+ 75%	+ 120%	+ 100%	+ 130%
300 bar	+ 100%	+ 200%	+ 120%	+ 150%
Inconel 718				
80 bar	+ 40%	+ 60%	+ 50%	+ 50%
150 bar	+ 60%	+ 90%	+ 75%	+ 80%
300 bar	+ 80%	+ 110%	+ 100%	+ 100%
Steel				
80 bar	+ 50%	+ 50%	+ 100%	+ 50%
150 bar	+ 50%	+ 50%	+ 100%	+ 50%
300 bar	+ 50%	+ 50%	+ 100%	+ 50%
Stainless Steel				
80 bar	+ 50%	+ 50%	+ 100%	+ 50%
150 bar	+ 50%	+ 50%	+ 100%	+ 50%
300 bar	+ 50%	+ 50%	+ 100%	+ 50%

Example: If current rough turning cutting speed of Ti64 is 30 m/min, when JHP tool is used with 150 bar coolant, cutting speed can be raised up to about 55 m/min.

Engineered for
HIGH PRESSURE
Economical TURNING
Performance

JETHPLINE

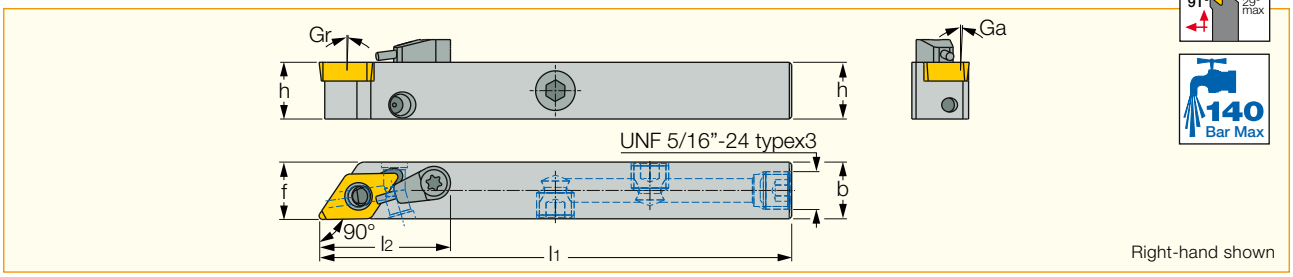
SWISSTURN Toolholders

The new tools were designed for Swiss-type automatics and CNC machines.
They include tools for ISO standard screw-clamped and lever-lock rhombic 80° (C-type), 55° (D-type) and 35° (V-type) inserts, all with 7° positive flank relief inclination.

Engineered for HIGH PRESSURE Economical TURNING Performance

PDACR/L-JHP

Lever Lock Tools with Channels for High Pressure Coolant for 55° Positive Rhombic Inserts for Swiss Automatic Machines



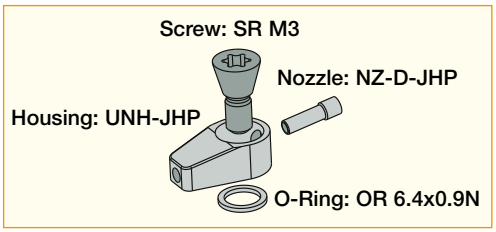
Designation	h	b	l_1	l_2	f	G_a°	G_r°	Th	Insert
PDACR/L 1010H-07S-JHP	10.0	10.0	100.00	28.0	10.2	0	0	UNF 5/16 "	DC..0702
PDACR/L 1212H-11S-JHP	12.0	12.0	100.00	28.0	12.2	0	0	UNF 5/16 "	DC..11T3
PDACR/L 1616K-11S-JHP	16.0	16.0	125.00	28.0	16.2	0	0	UNF 5/16 "	DC..11T3

• For user guide, see pages 4-5, 29-31,60-61

Spare Parts

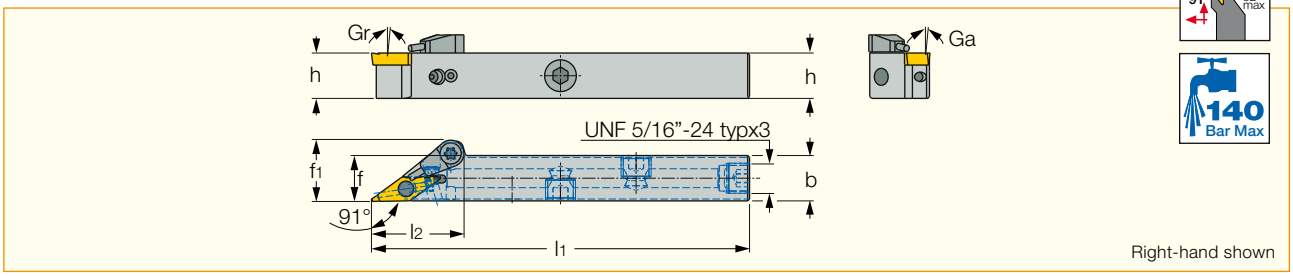
Designation	Lever	Locking Pin	Screw	Hex Flag Key	Plug	Cooling Unit
PDACR/L-JHP	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5	SR 5/16UNF TL360	S-CU-JHP

S-CU-JHP



PVACR/L-JHP

Lever Lock Tools with Channels for High Pressure Coolant for 35° Positive Rhombic Inserts for Swiss Automatic Machines



Designation	h	b	l_1	l_2	f	f_1	G_a°	G_r°	Insert
PVACR/L 1010H-11S-JHP	10.0	10.0	100.00	20.0	10.2	-	0	0	VC..1103
PVACR/L 1212H-11S-JHP	12.0	12.0	100.00	20.0	12.2	16.0	0	0	VC..1103
PVACR/L 1616K-11S-JHP	16.0	16.0	125.00	20.0	16.2	-	0	0	VC..1103
NEW PVACR/L 2020K-11S-JHP	20.0	20.0	125.00	25.0	20.2	-	0	0	VC..1103

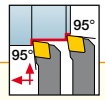
• For user guide, see pages 4-5, 29-31, 60-61

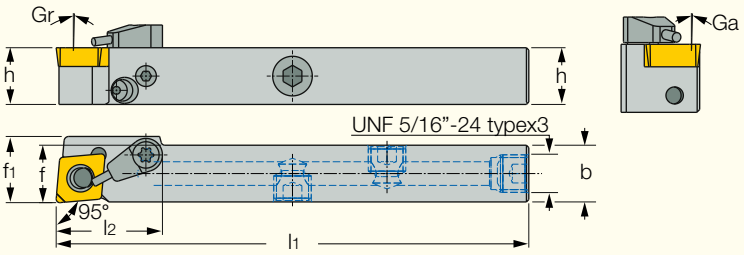
Spare Parts

Designation	Lever	Locking Pin	Screw	Hex Flag Key	Plug	Cooling Unit
PVACR/L-JHP	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5	SR 5/16UNF TL360	S-CU-JHP

PCLCR/L-JHP

Lever Lock Tools with Channels for High Pressure Coolant for 80° Positive Rhombic Inserts for Swiss Automatic Machines



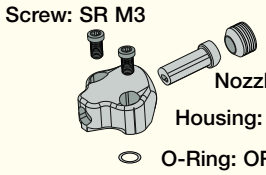


Right-hand shown

Designation	h	b	l_1	l_2	f	f_1	G_a°	G_r°	Insert
PCLCR/L 1010H-06S-JHP	10.0	10.0	100.00	22.3	10.2	-	0	0	CC.. 0602
PCLCR/L 1212H-09S-JHP	12.0	12.0	100.00	22.3	12.2	14.0	0	0	CC.. 09T3
PCLCR/L 1616K-09S-JHP	16.0	16.0	125.00	22.3	16.2	-	0	0	CC.. 09T3
NEW PCLCR/L 2020K-09S-JHP	20.0	20.0	125.00	22.3	20.2	-	0	0	CC.. 09T3

• For user guide, see pages 4-5, 29-31,60-61

S-CU-JHP



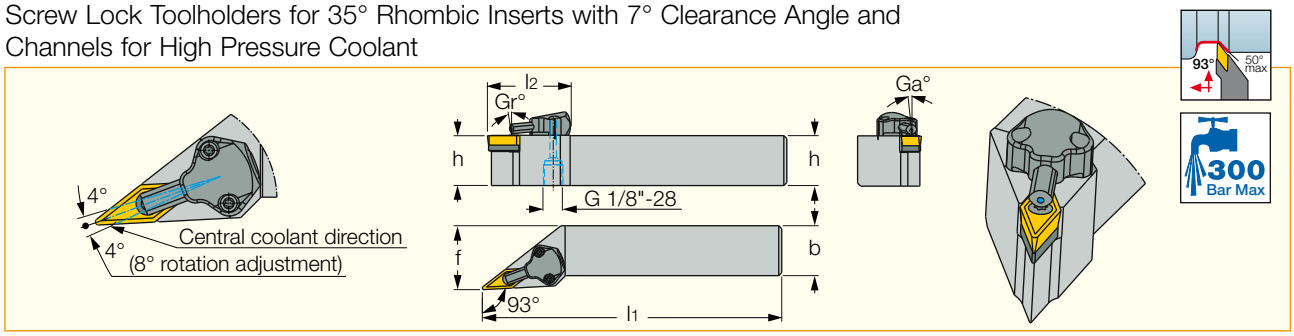
Spare Parts

Designation	Lever	Locking Pin	Screw	Hex Flag Key	Plug	Cooling Unit
PCLCR/L-JHP	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5	SR 5/16UNF TL360	S-CU-JHP

Engineered for HIGH PRESSURE Economical TURNING Performance

SVJCR/L-16-JHP

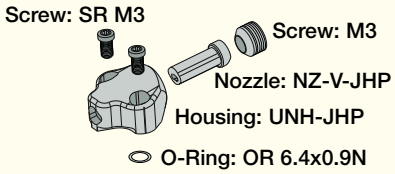
Screw Lock Toolholders for 35° Rhombic Inserts with 7° Clearance Angle and Channels for High Pressure Coolant



Designation	h	b	l_1	l_2	f	G_a°	G_r°	Insert
SVJCR/L 2525M-16-JHP	25.0	25.0	150.00	42.0	32.0	0	0	VCMT 1604

• For user guide, see pages 4-5, 29-31, 60-61

CU-V-JHP



Spare Parts

Designation	Seat	Seat Screw	Screw	Cooling Unit	O-Ring	Key	Key 1	Key 2
SVJCR/L 2525M-16-JHP	TVC 3-1	SR TC-3	SR 16-236 P	CU-V-JHP	OR 6.4X0.9N	T-15/5	HW 2.5	T-8/5

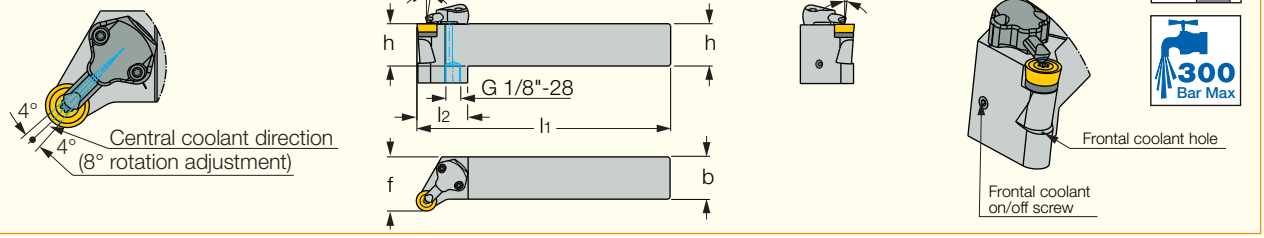
Engineered for
HIGH PRESSURE
Economical TURNING
Performance

JETHPLINE • ISOTURN

Engineered for HIGH PRESSURE Economical TURNING Performance

SRGCR-12-JHP

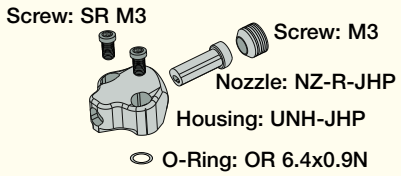
Screw Lock Toolholders for Round Inserts with 7° Clearance Angle and Channels for High Pressure Coolant



Designation	h	b	l_1	l_2	f	G_a°	G_r°	Insert
SRGCR 2525M-12-JHP	25.0	25.0	150.00	30.0	32.0	0	0	RCMT 1204

• For user guide, see pages 4-5, 29-31, 60-61

CU-R-JHP

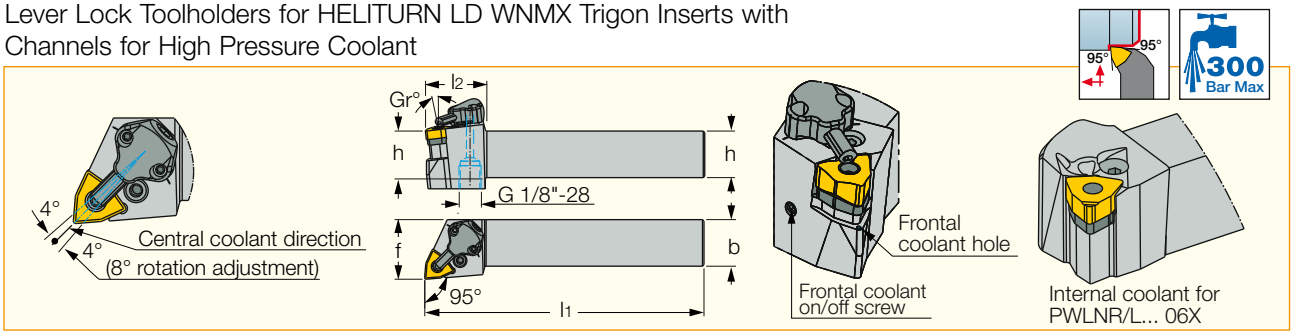


Spare Parts

Designation	Seat	Seat Screw	Key	Screw	Key 1	Cooling Unit	O-Ring	Plug	Key 2	Key 3
SRGCR 2525M-12-JHP	TRC 4-0	SR TC-4	T-8/5	SR 16-212	T-20/5	CU-R-JHP	OR 6.4X0.9N	SR M4X4 TL360	HW 2.0	HW 3.0

PWLNR/L-X-JHP

Lever Lock Toolholders for HELITURN LD WNMX Trigon Inserts with Channels for High Pressure Coolant

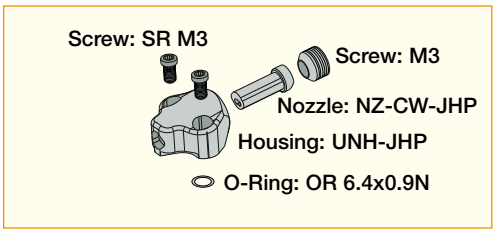


Designation	h	b	l_1	l_2	f	G_a°	G_r°	Insert
PWLNR/L 2020K-06X-JHP (1)	20.0	20.0	125.00	25.0	25.0	-6	-6	WNMX 0606 WNMG 0604
PWLNR/L 2525M-06X-JHP (1)	25.0	25.0	150.00	25.0	32.0	-6	-6	WNMX 0606 WNMG 0604
PWLNR/L 2525M-08X-JHP (2)	25.0	25.0	150.00	33.0	32.0	-6	-6	WNMX 0807 WNMG 0804
PWLNR/L 3232P-08X-JHP (2)	32.0	32.0	170.00	33.0	40.0	-6	-6	WNMX 0807 WNMG 0804

• For user guide, see pages 4-5, 29-31, 60-61

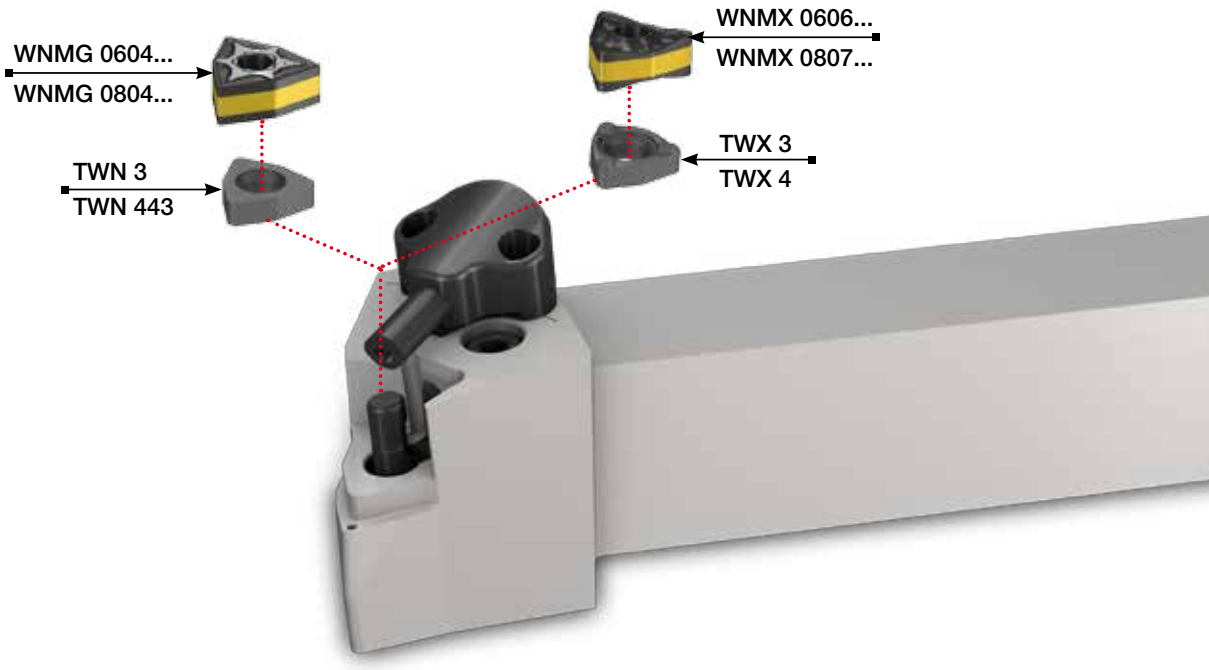
(1) Use TWX 3 seat for WNMX 0606.. inserts and TWN 3 seat for WNMG 0604.. insert.
(2) Use TWX 4 seat for WNMX 0807... inserts and TWN 443 seat for WNMG 0804.. insert

CU-CW-JHP



Spare Parts

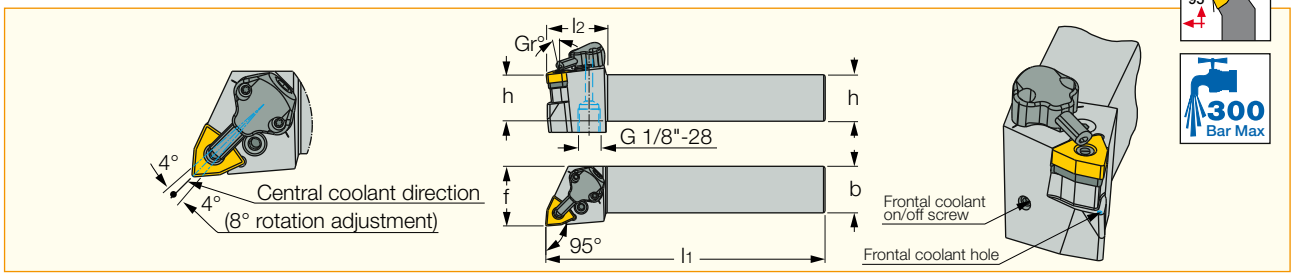
Designation	Seat	Seat 1	Spring Pin	Punch	Lever	Screw	Key	O-Ring	Plug	Cooling Unit	Key 1	Key 2
PWLNR/L-06X-JHP	TWX 3	TWN 3	SP 3	PN 3-4	LR 3	SR 117-2014					HW 2.5/5	
PWLNR/L-08X-JHP	TWX 4	TWN 443	SP 4	PN 3-4	LR 4D	SR 117-2010	T-8/5	OR 6.4X0.9N	SR M4X4 TL360	CU-CW-JHP	HW 2.0	HW 3.0



Engineered for HIGH PRESSURE Economical TURNING Performance

PWLNR/L-08-JHP

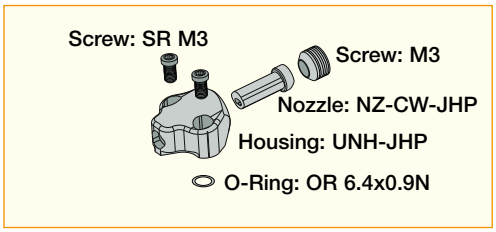
Lever Lock Toolholders for Trigon Inserts with Channels for High Pressure Coolant



Designation	h	b	l_1	l_2	f	G_a°	G_r°	Insert
PWLNR/L 2525M-08-JHP	25.0	25.0	150.00	33.0	32.0	-6	-6	WNMG 0804..
PWLNR/L 3232P-08-JHP	32.0	32.0	170.00	33.0	40.0	-6	-6	WNMG 0804..

• For user guide, see pages 4-5, 29-31, 60-61

CU-CW-JHP

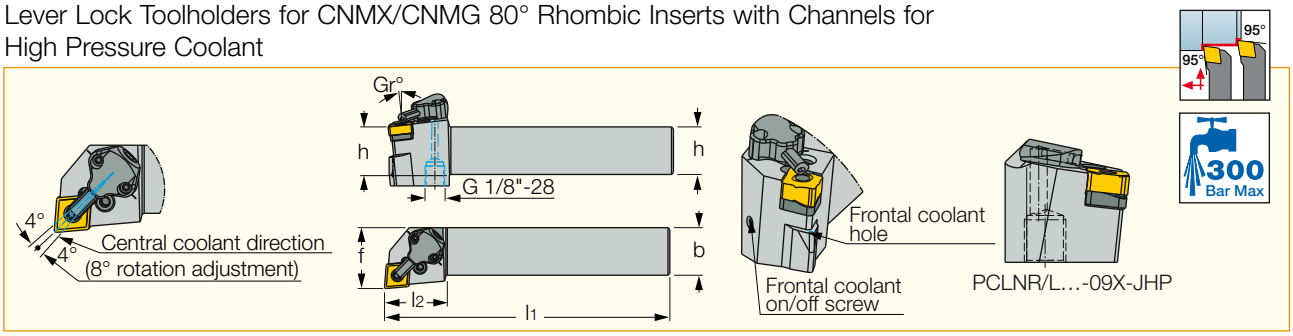


Spare Parts

Designation	Seat	Spring Pin	Punch	Lever	Screw	Plug	O-Ring	Cooling Unit	Key	Key 1	Key 2
PWLNR/L-08-JHP	TWN 423	SP 4	PN 3-4	LR 4	SR 117-2010	SR M4X4 TL360	OR 6.4X0.9N	CU-CW-JHP	HW 2.0	HW 3.0	T-8/5

PCLNR/L-X-JHP

Lever Lock Toolholders for CNMX/CNMG 80° Rhombic Inserts with Channels for High Pressure Coolant

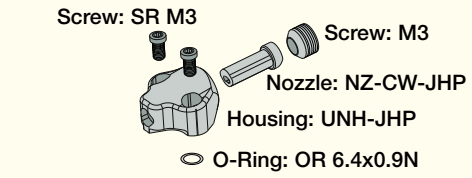


Designation	b	h	l_1	l_2	f	G_a°	G_r°	Insert
NEW PCLNR/L 1616H-09X-JHP (1)	16.0	16.0	150.00	33.0	32.0	-6	-6	CNMX 0906, CNMG 0904
PCLNR/L 2020K-09X-JHP (1)	20.0	20.0	125.00	33.0	32.0	-6	-6	CNMX 0906, CNMG 0904
PCLNR/L 2525M-09X-JHP (1)	25.0	25.0	150.00	33.0	32.0	-6	-6	CNMX 0906, CNMG 0904
PCLNR/L 2525M-12X-JHP (2)	25.0	25.0	150.00	33.0	32.0	-6	-6	CNMX 1207, CNMG 1204
PCLNR/L 3232P-12X-JHP (2)	32.0	32.0	170.00	33.0	40.0	-6	-6	CNMX 1207, CNMG 1204

• For user guide, see pages 4-5, 29-31, 60-61

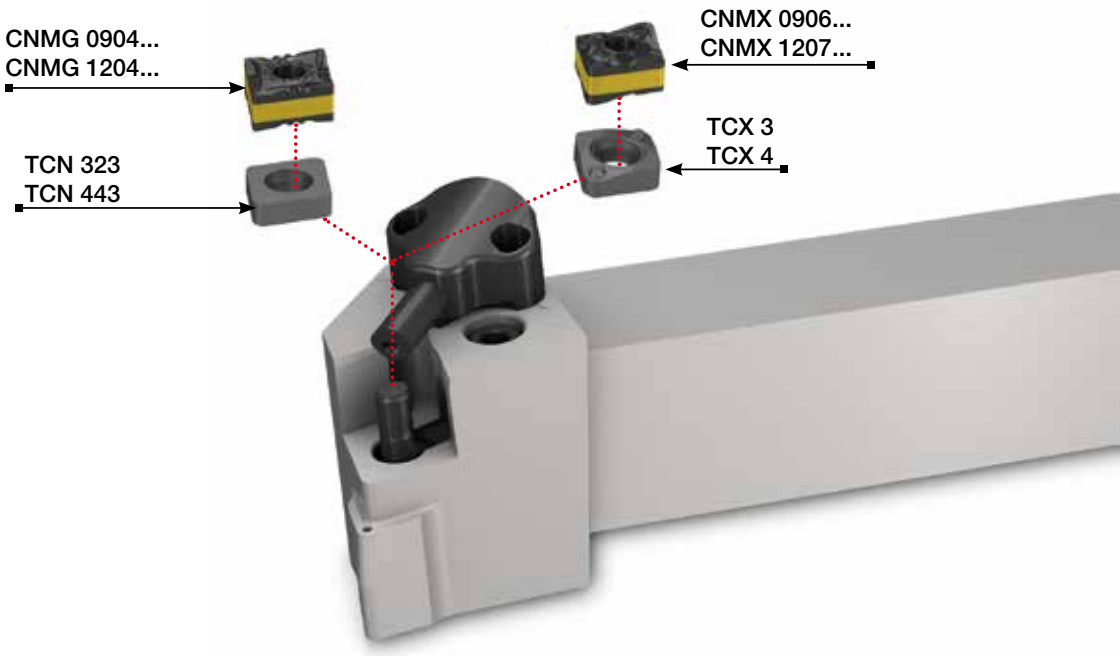
(1) Supplied with TCX 3 seat for CNMX 0906.. inserts and TCN 323 seat for CNMG 0904.. inserts.
(2) Supplied with TCX 4 seat for CNMX 1207.. inserts and TCN 443 seat for CNMG 1204.. inserts.

CU-CW-JHP



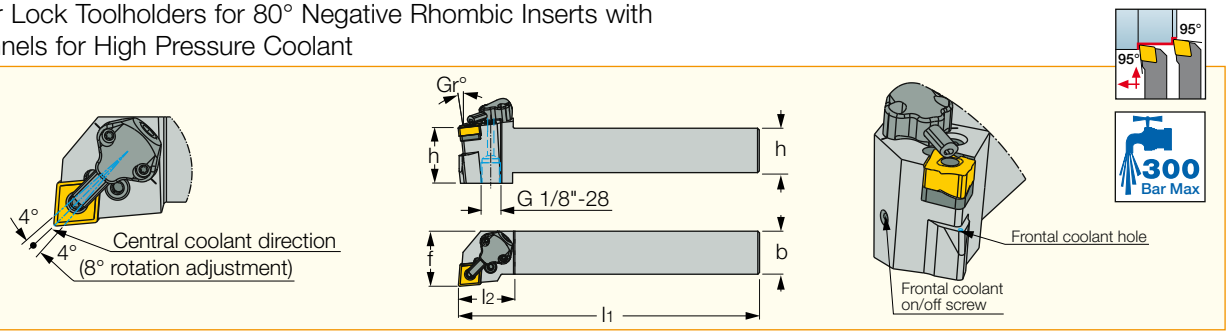
Spare Parts

Designation	Seat	Seat 1	Spring Pin	Lever	Screw	Punch	Cooling Unit	Key	Hex Flag Key	Key 1	Plug
PCLNR/L 1616H-09X-JHP	TCX 3	TCN 323	SP 3	LR 3	SR 117-2014	PN 3-4			HW 2.5/5		
PCLNR/L 2020K-09X-JHP	TCX 3	TCN 323	SP 3	LR 3	SR 117-2014	PN 3-4			HW 2.5		
PCLNR/L 2525M-09X-JHP	TCX 3	TCN 323	SP 3	LR 3	SR 117-2014	PN 3-4			HW 2.5/5		
PCLNR/L 2525M-12X-JHP	TCX 4	TCN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L	CU-CW-JHP	T-8/5	HW 2.0	HW 3.0	SR M4X4 TL360
PCLNR/L 3232P-12X-JHP	TCX 4	TCN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L	CU-CW-JHP	T-8/5	HW 2.0	HW 3.0	SR M4X4 TL360



PCLNR/L-12-JHP

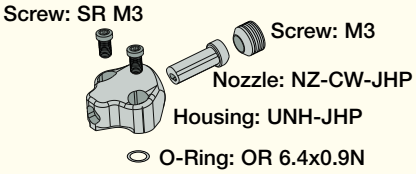
Lever Lock Toolholders for 80° Negative Rhombic Inserts with Channels for High Pressure Coolant



Designation	h	b	l_1	l_2	f	G_a°	G_r°	Insert
PCLNR/L 2525M-12-JHP	25.0	25.0	150.00	33.0	32.0	-6	-6	CNMG 1204
PCLNR/L 3232P-12-JHP	32.0	32.0	170.00	33.0	40.0	-6	-6	CNMG 1204

• For user guide, see pages 4-5, 29-31, 60-61

CU-CW-JHP

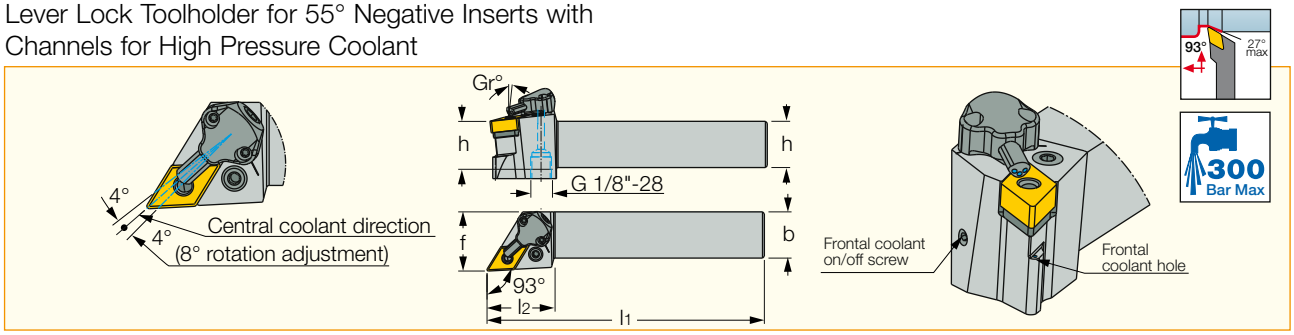


Spare Parts

Designation	Seat	Spring Pin	Lever	Screw	Punch	Cooling Unit	O-Ring	Plug	Key	Key 1	Key 2
PCLNR/L-12-JHP	TCN 423	SP 4	LR 4	SR 117-2010	PN 3-4	CU-CW-JHP	OR 6.4X0.9N	SR M4X4 TL360	HW 2.0	HW 3.0	T-8/5

PDJNR/L-JHP

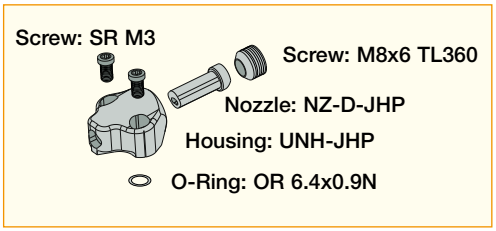
Lever Lock Toolholder for 55° Negative Inserts with Channels for High Pressure Coolant



Designation	b	h	l_1	l_2	f	G_a°	G_r°	Insert
PDJNR/L 2525M-11-JHP	25.0	25.0	150.00	36.0	32.0	-6	-7	DNMG 1104
PDJNR/L 2525M-15-JHP	25.0	25.0	150.00	36.0	32.0	-6	-6	DNMG 1506

• For user guide, see pages 4-5, 29-31, 60-61

CU-D-JHP



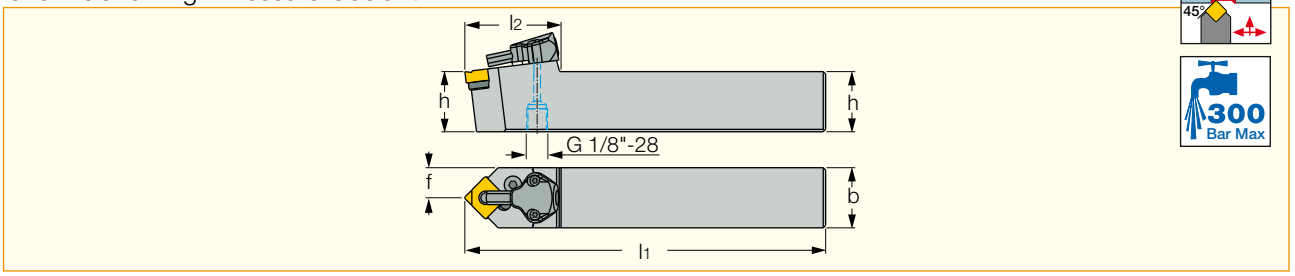
Spare Parts

Designation	Seat	Spring Pin	Punch	Lever	Screw	Cooling Unit	O-Ring	Plug	Key	Key 1	Key 2
PDJNR/L 2525M-11-JHP	TDN 322	SP 3	PN 3-4	LR 3D	SR 117-2014	CU-D-JHP	OR 6.4X0.9NRB		T-8/5	HW 2.5/5	
PDJNR/L 2525M-15-JHP	TDN 422(1)	SP 4	PN 3-4	LR 4D	SR 117-2010	CU-D-JHP	OR 6.4X0.9N	SR M4X4 TL360	T-8/5	HW 2.0	HW 3.0

(1) For DN.. 1504... inserts, use TDN 432 seat (ordered separately).

PSDNN-JHP

Lever Lock 45° Lead Angle Tools for Negative Square Inserts with Channels for High Pressure Coolant



Designation	h	b	l_1	l_2	f	G_a°	G_r°	Insert
PSDNN 2525M-12-JHP	25.0	25.0	150.00	40.0	12.5	-7	0	SNMG 1204

For user guide, see pages 4-5, 29-31,60-61

Spare Parts

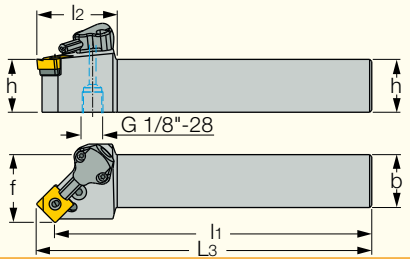
Designation	Seat	Seat	Spring Pin	Punch	Lever	Screw	O-Ring	Cooling Unit	Key	Key 1
PSDNN 2525M-12-JHP	TSN 423	TSN 423-PIN SET(1)	SP 4	PN 3-4	LR 4	SR 117-2010	OR 6.4X0.9N	CU-CW-JHP	HW 3.0	T-8/5

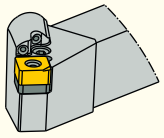
(1) For SNMG... EM-M/EM-R inserts, use optional seat TSN 423-PIN SET (ordered separately).

Engineered for HIGH PRESSURE Economical TURNING Performance

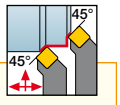
PSSNR/L-JHP

Lever Lock 45° Longitudinal and Facing Tools for Negative Square Inserts with Channels for High Pressure Coolant





Inside coolant for PSSNR/L... 09

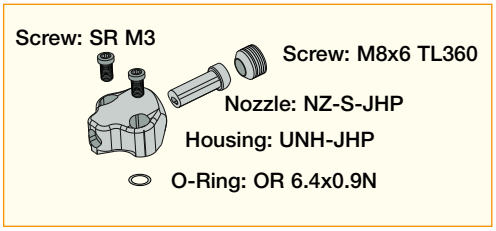


Right-hand shown

Designation	h	b	l_1	l_2	f	G_a°	G_r°	Insert
PSSNR/L 2020K-09-JHP	20.0	20.0	125.00	28.6	25.0	-5.5	-5.5	SNMG 09..
PSSNL 2525M-12-JHP	25.0	25.0	150.00	38.0	32.0	-5.5	-5.5	SNMG 1204

• For user guide, see pages 4-5, 29-31,60-61

CU-S-JHP



Spare Parts

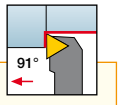
Designation	Seat	Seat 1	Spring Pin	Punch	Lever	Screw	O-Ring	Cooling Unit	Key	Key 1
PSSNR/L 2020K-09-JHP	TSN 323	TSN 333	SP 3	PN 3-3L	LR 3	SR 117-2014			HW 2.5	
PSSNL 2525M-12-JHP	TSN 423	TSN 423-PIN SET[1]*	SP 4	PN 3-4	LR 4	SR 117-2010	OR 6.4X0.9N	CU-S-JHP	HW 3.0	T-8/5

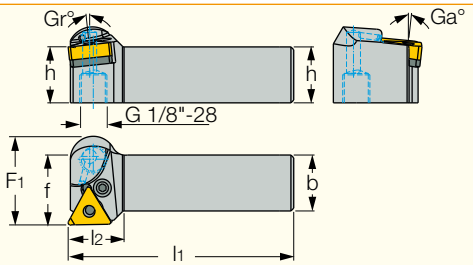
* Optional, should be ordered separately

[1] When SNMG-EM-M/-R inserts are used, replace the standard seat.

PTGNR/L-X-JHP

91° Lead Angle Lever Lock External Turning Tools for Negative Triangular Inserts with Channels for High Pressure Coolant





Right-hand shown

Designation	h	b	l_1	l_2	f	F_1	G_a°	G_r°	Insert
PTGNR/L 2020K-16X-JHP	20.0	20.0	125.00	20.0	25.0	31.7	-6	-6	TNMX 16.., TNMG 16..
PTGNR/L 2525M-16X-JHP	25.0	25.0	150.00	20.0	32.0	-	-6	-6	TNMX 16.., TNMG 16..

• For user guide, see pages 4-5, 29-31,60-61

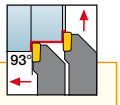
Spare Parts

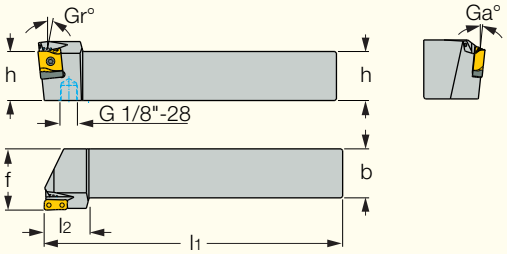
Designation	Seat	Seat 1	Spring Pin	Lever	Screw	Key	Punch
PTGNR/L-X-JHP	TTN 3	TTX 3	SP 3	LR 3	SR 117-2014	HW 2.5	PN 3-4

Engineered for HIGH PRESSURE Economical TURNING Performance

SLANR/L-15-TANG-JHP

Screw Lock Toolholders for LNMX Tangentially Clamped Inserts with Channels for High Pressure Coolant

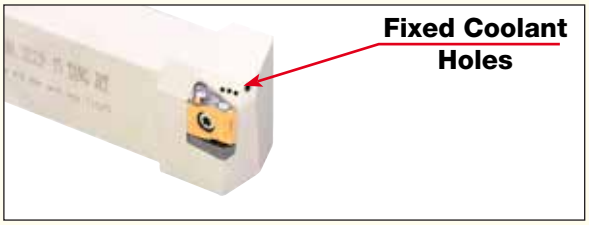




Designation	h	b	l_1	l_2	f	G_a°	G_r°	Insert
SLANR/L 3232P-15 TANG-JHP	32.0	32.0	170.00	30.0	40.0	-6	-6	LNMX 1506

• ap max for facing 3.8 mm • For user guide, see pages 4-5, 29-31, 60-61

The tools with LNMX 1506... inserts feature fixed coolant holes



Spare Parts

Designation	Seat	Screw	Screw 1	Torx Blade	T-Handle	Key
SLANL 3232P-15 TANG-JHP	TLN 15L-HT	SR RS4	SR 34-535-SN	BLD T15/S7	SW6-T-SH	T-6/5
SLANR 3232P-15 TANG-JHP	TLN 15R-HT	SR RS4	SR 34-535-SN	BLD T15/S7	SW6-T-SH	T-6/5

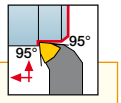
Engineered for
HIGH PRESSURE
Economical TURNING
Performance

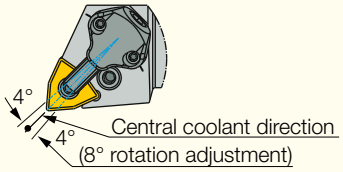
JETHPLINE • CAMFIX

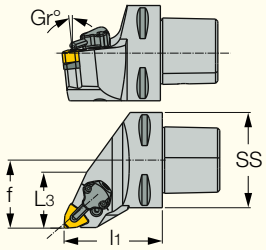
Engineered for HIGH PRESSURE Economical TURNING Performance

C#-PWLNR/L-X-JHP

Lever Lock Toolholders for HELITURN LD WNMX Trigon Inserts, with CAMFIX Shank and Channels for High Pressure Coolant





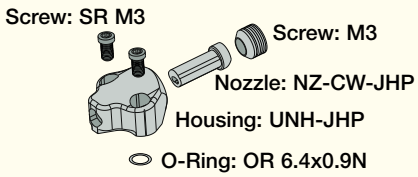


Designation	SS	l_1	f	L_3	G_a°	G_r°	Insert
C3 PWLNR-22040-06X-JHP (1)	32	40.00	22.0	22.00	-6	-6	WNMX 0606 WNMG 0604
C3 PWLNR-22045-08X-JHP (2)	32	40.00	22.0	22.00	-6	-6	WNMX 0807 WNMG 0804
C4 PWLNR/L-27050-08X-JHP (2)	40	50.00	27.0	27.00	-6	-6	WNMX 0807 WNMG 0804
C5 PWLNR/L-35060-08X-JHP (2)	50	60.00	35.0	25.00	-6	-6	WNMX 0807 WNMG 0804
C6 PWLNR/L-45065-08X-JHP (2)	63	65.00	45.0	37.00	-6	-6	WNMX 0807 WNMG 0804

(1) Use TWX 3 seat for WNMX 0606.. inserts and TWN 3 seat for WNMG 0604.. insert. (2) Use TWX 4 seat for WNMX 0807.. inserts and TWN 443 seat for WNMG 0804.. insert

• For user guide, see pages 4-5, 29-31, 60-61

CU-CW-JHP

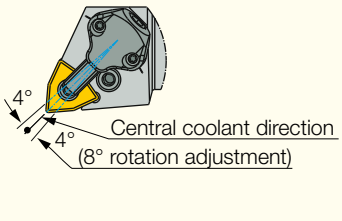


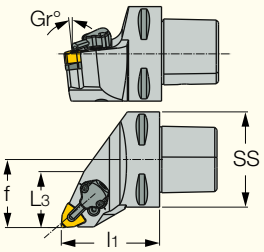
Spare Parts

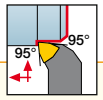
Designation	Seat	Seat 1	Spring Pin	Punch	Lever	Screw	Cooling Unit	Key	Key 1
C3 PWLNR-22040-06X-JHP	TWX 3	TWN 3	SP 3	PN 3-4	LR 3	SR 117-2014	CU-CW-JHP	T-8/5	HW 2.5/5
C3 PWLNR-22045-08X-JHP	TWX 4	TWN 443	SP 4	PN 3-4L	LR 4DH	SR 117-2010	CU-CW-JHP	T-8/5	HW 3.0
C4 PWLNR/L-27050-08X-JHP	TWX 4	TWN 443	SP 4	PN 3-4L	LR 4DH	SR 117-2010	CU-CW-JHP	T-8/5	HW 3.0
C5 PWLNR/L-35060-08X-JHP	TWX 4	TWN 443	SP 4	PN 3-4L	LR 4DH	SR 117-2010	CU-CW-JHP	T-8/5	HW 3.0
C6 PWLNR/L-45065-08X-JHP	TWX 4	TWN 443	SP 4	PN 3-4	LR 4DH	SR 117-2010	CU-CW-JHP	T-8/5	HW 3.0

C#-PWLNR/L-08-JHP

Lever Lock Toolholders for Trigon Inserts, with CAMFIX Exchangeable Heads and Channels for High Pressure Coolant







Right-hand shown

Designation	SS	f	l_1	L_3	G_a°	G_r°	Insert
C6 PWLNR/L-45065-08-JHP	63	45.0	65.00	37.00	-6	-6	WNMG 08..

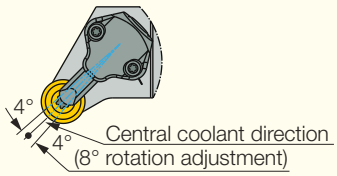
• For user guide, see pages 4-5, 29-31, 60-61

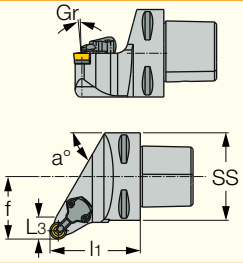
Spare Parts

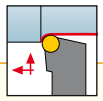
Designation	Seat	Spring Pin	Lever	Screw	Key	Punch	Cooling Unit	O-Ring	Key 1	Key 2
C6 PWLNR/L-45065-08-JHP	TWN 423	SP 4	LR 4	SR 117-2010	T-8/5	PN 3-4	CU-CW-JHP	OR 6.4X0.9N	HW 3.0	HW 1.5

C#-SRGCR-12-JHP

Screw Lock Toolholders for Round Inserts with 7° Clearance Angle and CAMFIX Exchangeable Shanks



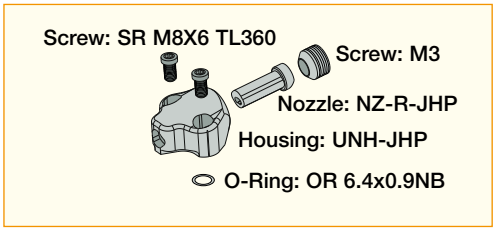




Designation	SS	f	l_1	a°	L_3	Insert
C6 SRGCR-45065-12-JHP	63	45.0	65.00	60	16.00	RCMT 1204MO

• For user guide, see pages 4-5, 29-31, 60-61

CU-R-JHP



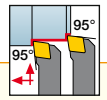
Spare Parts

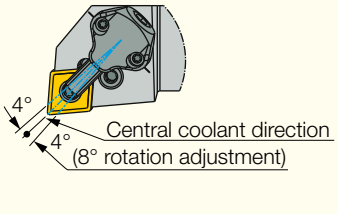
Designation	Seat	Seat Screw	Key	Screw	Key 1	Cooling Unit	O-Ring	Key 2	Plug
C6 SRGCR-45065-12-JHP	TRC 4-0	SR TC-4	T-20/5	SR 16-212	HW 3.0	CU-R-JHP	OR 6.4X0.9N	T-8/5	SR M5X5 TL360

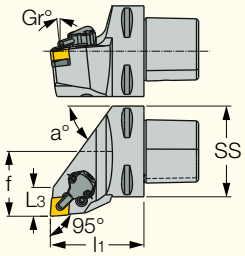
Engineered for HIGH PRESSURE Economical TURNING Performance

C#-PCLNR/L-X-JHP

Lever Lock Tools for CNMX, 80° Negative Rhombic Inserts and CAMFIX Heads with Channels for High Pressure Coolant





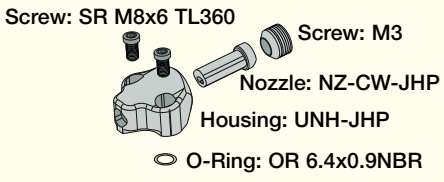


Designation	SS	f	l_1	L_3	a°	G_a°	G_r°	Insert
C3 PCLNR-22040-09X-JHP (1)	32	22.0	40.00	18.00	54	-6	-6	CNMX 0906, CNMG 0904
C4 PCLNR/L-27050-09X-JHP (1)	40	27.0	50.00	24.00	54	-6	-6	CNMX 0906, CNMG 0904
C5 PCLNR/L-35060-09X-JHP (1)	50	35.0	60.00	22.00	54	-6	-6	CNMX 0906, CNMG 0904
C4 PCLNR/L-27050-12X-JHP (2)	40	27.0	50.00	18.00	54	-6	-6	CNMX 1207, CNMG 1204
C5 PCLNR/L-35060-12X-JHP (2)	50	35.0	60.00	22.00	54	-6	-6	CNMX 1207, CNMG 1204
C6 PCLNR/L-45065-12X-JHP (2)	63	45.0	65.00	20.00	54	-6	-6	CNMX 1207, CNMG 1204

(1) Supplied with TCX 3 seat for CNMX 0906.. inserts and TCN 323 seat for CNMG 0904.. inserts. (2) Supplied with TCX 4 seat for CNMX 1207... inserts and TCN 443 seat for CNMG 1204.. inserts.

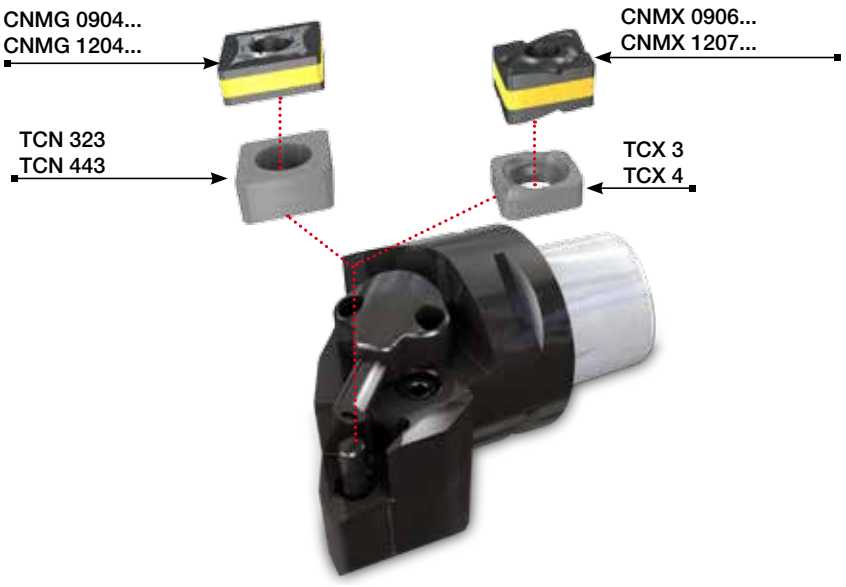
• For user guide, see pages 4-5, 29-31, 60-61

CU-CW-JHP



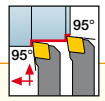
Spare Parts

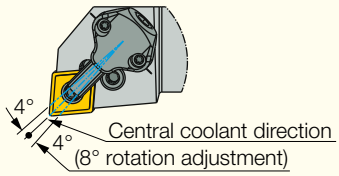
Designation	Seat	Seat 1	Spring Pin	Lever	Screw	Punch	Cooling Unit	Key	Key 1
C4 PCLNR/L-27050-09X-JHP	TCX 3	TCN 323	SP 3	LR 3	SR 117-2014	PN 3-4	CU-CW-JHP	T-8/5	HW 2.5
C5 PCLNR/L-35060-09X-JHP	TCX 3	TCN 323	SP 3	LR 3	SR 117-2014	PN 3-4	CU-CW-JHP	T-8/5	HW 2.5
C4 PCLNR/L-27050-12X-JHP	TCX 4	TCN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L	CU-CW-JHP	T-8/5	HW 3.0
C5 PCLNR/L-35060-12X-JHP	TCX 4	TCN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L	CU-CW-JHP	T-8/5	HW 3.0
C6 PCLNR/L-45065-12X-JHP	TCX 4	TCN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L	CU-CW-JHP	T-8/5	HW 3.0

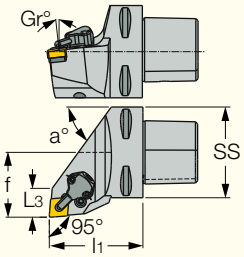


C#-PCLNR/L-JHP

Lever Lock Toolholders for 80° Negative Rhombic Inserts and CAMFIX Heads with Channels for High Pressure Coolant





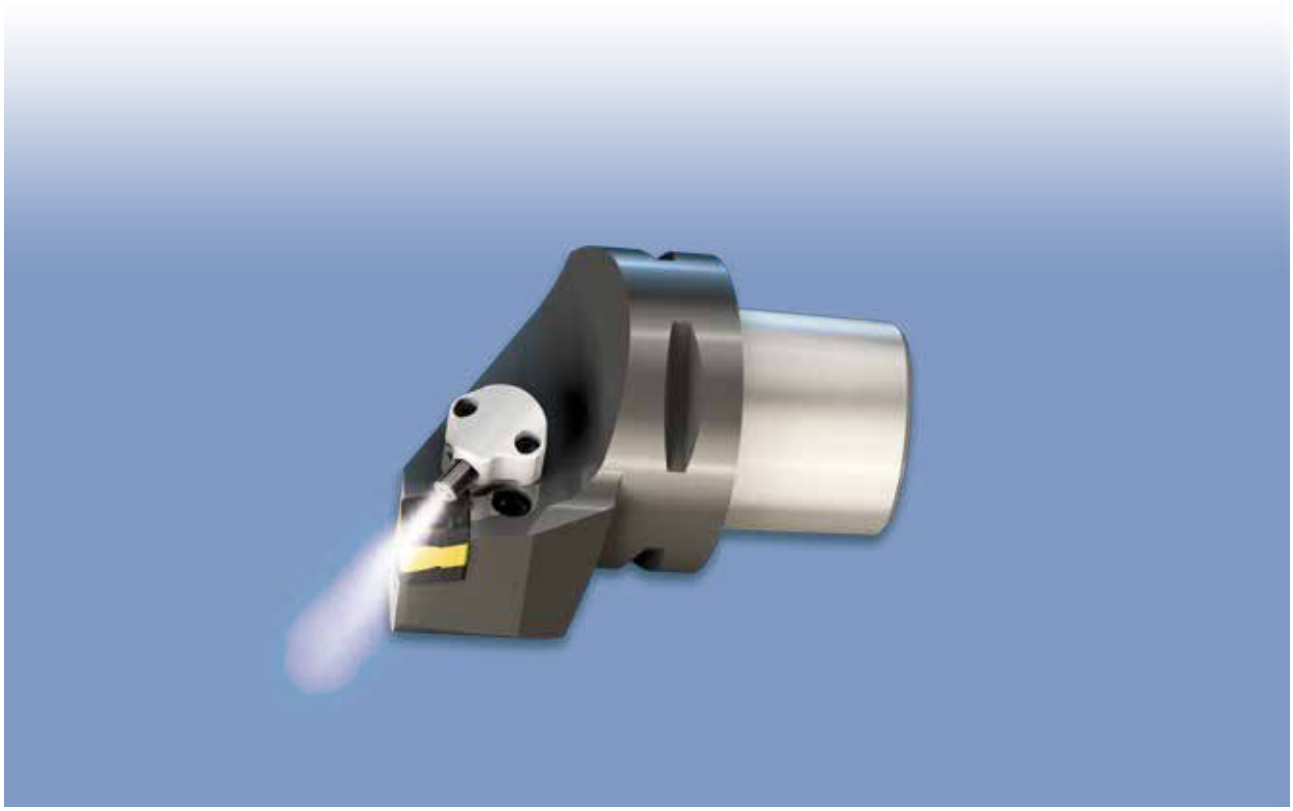


Designation	SS	f	l_1	L_3	a°	G_a°	G_r°	Insert
C6 PCLNR/L-45065-12-JHP	63	45.0	65.00	20.00	54	-6	-6	CNMG 1204

• For user guide, see pages 4-5, 29-31, 60-61

Spare Parts

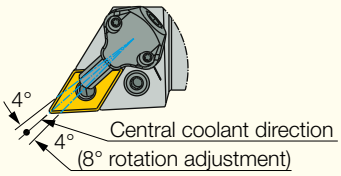
Designation	Seat	Spring Pin	Lever	Screw	Punch	Cooling Unit	O-Ring	Key	Key 1	Plug
C6 PCLNR/L-45065-12-JHP	TCN 423	SP 4	LR 4	SR 117-2010	PN 3-4	CU-CW-JHP	OR 6.4X0.9N	HW 3.0	T-8/5	SR M5X5 TL360

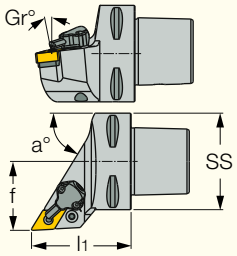


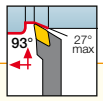
Engineered for HIGH PRESSURE Economical TURNING Performance

C#-PDJNR/L-JHP

Lever Lock Toolholders for Negative 55° Inserts with CAMFIX Exchangeable Heads and Channels for High Pressure Coolant



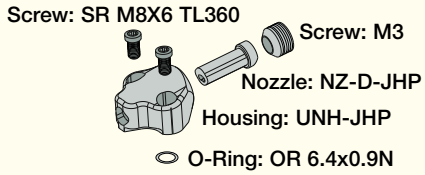




Designation	SS	f	l_1	G_a°	G_r°	a°	Insert
C3 PDJNR-22045-11-JHP	32	22.0	45.00	-6	-6	58	DN.. 11..
C4 PDJNR/L 27050-11-JHP	40	27.0	55.00	-6	-6	58	DN.. 11..
C4 PDJNR/L 27055-15-JHP	40	27.0	55.00	-6	-6	58	DN.. 15..
C5 PDJNR/L 35060-11-JHP	50	35.0	60.00	-6	-6	58	DN.. 11..
C5 PDJNR/L 35060-15-JHP	50	35.0	60.00	-6	-6	58	DN.. 15..
C6 PDJNR/L 45065-15-JHP	63	45.0	65.00	-6	-6	58	DN.. 15..

• For user guide, see pages 4-5, 29-31, 60-61

CU-D-JHP

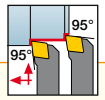


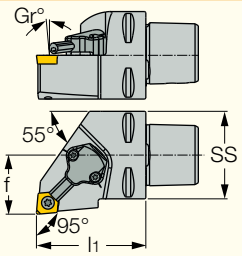
Spare Parts

Designation	Seat	Spring Pin	Lever	Screw	Punch	Cooling Unit	O-Ring	Key	Hex Flag Key
C3 PDJNR-22045-11-JHP	TDN 322	SP 3	LR 3D	SR 117-2014	PN 3-4	CU-D-JHP	OR 6.4X0.9N	T-8/5	HW 2.5/5
C4 PDJNR/L 27050-11-JHP	TDN 322	SP 3	LR 3D	SR 117-2014	PN 3-4	CU-D-JHP	OR 6.4X0.9N	T-8/5	HW 2.5/5
C4 PDJNR/L 27055-15-JHP	TDN 422	SP 4	LR 4D	SR 117-2010	PN 3-4	CU-D-JHP	OR 6.4X0.9N	T-8/5	HW 3.0
C5 PDJNR/L 35060-11-JHP	TDN 322	SP 3	LR 3D	SR 117-2014	PN 3-4	CU-D-JHP	OR 6.4X0.9N	T-8/5	HW 2.5/5
C5 PDJNR/L 35060-15-JHP	TDN 422	SP 4	LR 4D	SR 117-2010	PN 3-4	CU-D-JHP	OR 6.4X0.9N	T-8/5	HW 3.0
C6 PDJNLR/L 45065-15-JHP	TDN 422	SP 4	LR 4D	SR 117-2010	PN 3-4	CU-D-JHP	OR 6.4X0.9N	T-8/5	HW 3.0

C#-SCLCR/L-JHP

Screw Clamp Tools for Positive 80° Rhombic Inserts and CAMFIX Shanks, with Channels for High Pressure Coolant





Right-hand shown

Designation	SS	f	l_1	G_a°	G_r°	Insert
C3 SCLCR-22045-09-JHP	32	22.0	45.00	0	0	CC.. 09T3
C4 SCLCR/L 27050-09-JHP	40	27.0	50.00	0	0	CC.. 09T3
C5 SCLCR/L 35060-09-JHP	50	35.0	60.00	0	0	CC.. 09T3

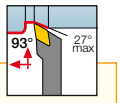
• For user guide, see pages 4-5, 29-31, 60-61

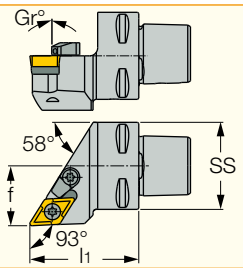
Spare Parts

Designation	Screw	Key	Cooling Unit	Plug		Key 1
C3 SCLCR-22045-09-JHP	SR 16-236	T-15/5	CU-CW-JHP			
C4 SCLCR/L 27050-09-JHP	SR 16-236	T-15/5	CU-CW-JHP	SR M5X5 DIN913	TL360	T-8/5
C5 SCLCR/L 35060-09-JHP	SR 16-236	T-15/5	CU-CW-JHP	SR M5X5 DIN913	TL360	T-8/5

C#-SDJCR-JHP

Screw Clamp Tools for Positive 55° Rhombic Inserts and CAMFIX Shanks, with Channels for High Pressure Coolant





Right-hand shown

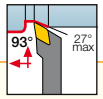
Designation	SS	f	l_1	Insert
C3 SDJCR-22040-11-JHP	32	22.0	40.00	DC.. 11T3

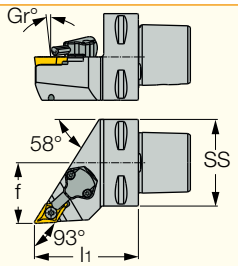
• For user guide, see pages 4-5, 29-31, 60-61

Engineered for HIGH PRESSURE Economical TURNING Performance

C#-SDJCR/L-13-SL-JHP

Screw Clamp Tools for Positive 55° Rhombic Inserts and CAMFIX Shanks, with Channels for High Pressure Coolant





Right-hand shown

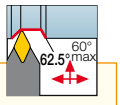
Designation	SS	f	l_1	G_a°	G_r°	Insert
C3 SDJCR-22040-13-SL-JHP	32	22.0	45.00	0	0	DCMT 13T5-SL
C4 SDJCR/L-27055-13-SL-JHP	40	27.0	55.00	0	0	DCMT 13T5-SL
C5 SDJCR/L-35060-13-SL-JHP	50	35.0	60.00	0	0	DCMT 13T5-SL

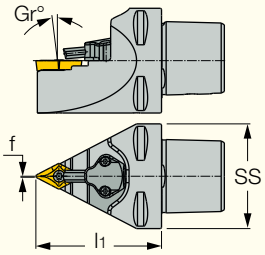
Spare Parts

Designation	Cooling Unit	Plug	Key	Screw	Key 1
C3 SDJCR-22040-13-SL-JHP	CH-1.9D-JHP	SR M4X4 TL360		SR M4X0.7-L9.5 IP15	
C4 SDJCR/L-27055-13-SL-JHP	CU-D-JHP	SR M5X5 DIN913 TL360	IP-15/5	SR M4X0.7-L9.6 IP15	T-8/5
C5 SDJCL-35060-13-SL-JHP	CU-D-JHP	SR M5X5 DIN913 TL360	IP-15/5	SR M4X0.7-L9.6 IP15	T-8/5
C5 SDJCR-35060-13-SL-JHP	CU-D-JHP	SR M5X5 DIN913 TL360	IP-15/5	SR M4X0.7-L9.6 IP15	

C#-SDNCN-13-SL-JHP

Screw Clamp Tools for Positive 55° Rhombic Inserts and CAMFIX Shanks, with Channels for High Pressure Coolant





Designation	SS	f	l_1	G_a°	G_r°	Insert
C3 SDNCN-00045-13-SL-JHP	32	0.5	45.00	0	0	DCMT 13T5-SL
C4 SDNCN-00060-13-SL-JHP	40	0.5	60.00	0	0	DCMT 13T5-SL
C5 SDNCN-00060-13-SL-JHP	50	0.5	60.00	0	0	DCMT 13T5-SL

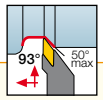
• For user guide, see pages 4-5, 29-31, 60-61

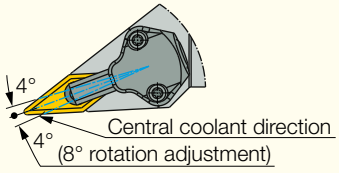
Spare Parts

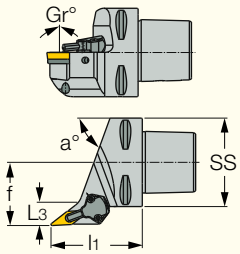
Designation	Cooling Unit	Key	Screw	Key 1
C#-SDNCN-13-SL-JHP	CU-D-JHP	IP-15/5	SR M4X0.7-L9.5 IP15	T-8/5

C#-SVJCR/L-JHP

Screw Lock Toolholders for 35° Rhombic Inserts with 7° Clearance Angle and ISO 26623-1 Standard Exchangeable Shanks



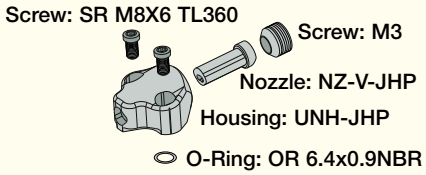




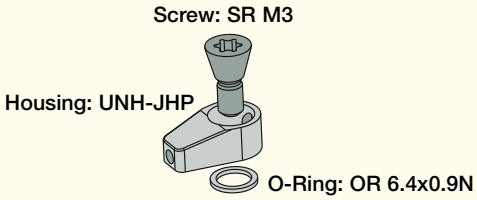
Designation	SS	f	l_1	G_a°	G_r°	a°	L_3	Insert
C3 SVJCR-22040-11-JHP	32	22.0	40.00	0	0	70	16.80	VCMT 1103
C4 SVJCR/L-27055-16-JHP	40	27.0	55.00	0	0	70	16.80	VCMT 1604
C5 SVJCR/L-35060-16-JHP	50	35.0	60.00	0	0	70	16.80	VCMT 1604
C6 SVJCR-45065-16-JHP	63	45.0	65.00	0	0	70	16.80	VCMT 1604

• For user guide, see pages 4-5, 29-31, 60-61

CU-V-JHP



CH-1.9D-JHP



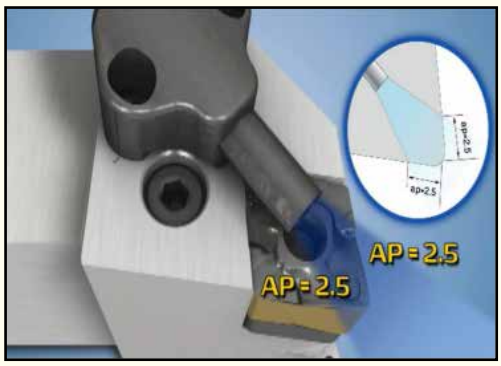
Spare Parts

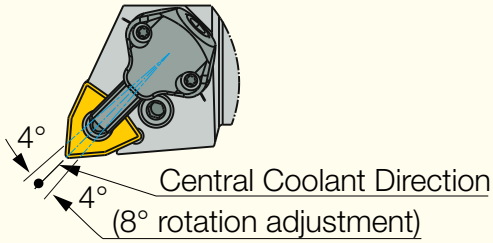
Designation	Seat	Seat Screw	Key	Screw	Cooling Unit	O-Ring	Key 1	Key 2
C3 SVJCR-22040-11-JHP				SR 14-560	CH-1.9D-JHP		T-8/5	
C4 SVJCR/L-27055-16-JHP	TVC 3-1	SR TC-3	T-15/5	SR 16-236 P	CU-V-JHP	OR 6.4X0.9N	T-8/5	HW 2.5
C5 SVJCR/L-35060-16-JHP	TVC 3-1	SR TC-3	T-15/5	SR 16-236 P	CU-V-JHP	OR 6.4X0.9N	T-8/5	HW 2.5
C6 SVJCR-45065-16-JHP	TVC 3-1	SR TC-3	T-15/5	SR 16-236 P	CU-V-JHP	OR 6.4X0.9N	T-8/5	HW 2.5

Engineered for HIGH PRESSURE Economical TURNING Performance

ISOTURN JHP TOOLS

In its standard ISO turning lines ISCAR has developed a unique high pressure coolant system composed of a static housing and telescopic tube to direct the coolant exactly to the cutting edge of the insert. The telescopic tube embedded in the housing skews right and left according to the working direction of the tool (see drawing). The advantage of this system is that there is no need to detach the housing of the tool when changing an insert. This reduces setup time.





Insert Indexing Procedure

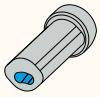
To mount or change an insert:
Press on the telescopic tube in a backward direction.
After indexing the insert cutting edge, starting the coolant will extract the tube automatically to its operating position.

Insert Indexing Procedure

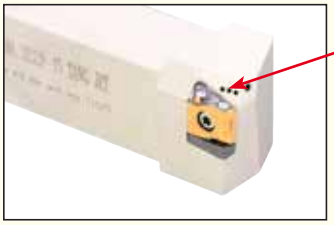
Press on the telescopic tube in a backward direction.
After indexing the insert cutting edge, starting the coolant flow will extract the tube automatically to its operating position.

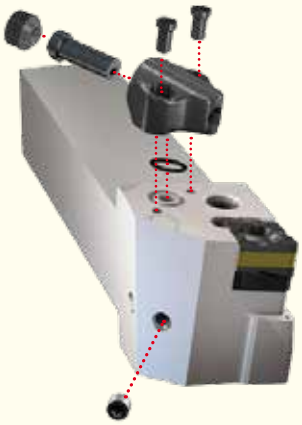
There are 5 various telescopic tubes intended for various insert geometries (see table). Each tube possesses a different profile optimized for the specific geometry of the insert.
The flow rate for each tube is listed in the table below.

Flow Rate for Various JHP Nozzles

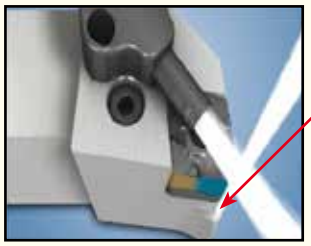
Insert	Channel Shape Inside the Nozzle Tube	Nozzle Tube	Flow Rate liter/min			
			70 Bar	100 Bar	140 Bar	300 Bar
		NZ-CW-JHP	17	20	24	35
		NZ-D-JHP	16	19	22	32
		NZ-V-JHP	11	13	15	22
		NZ-R-JHP	14	16	19	29
		NZ-S-JHP	18	21	25	37
		Holes	15	18	21	32
Frontal Coolant Hole(1)		Hole	1.8÷2.6	2.1÷3.4	2.5÷3.6	3.7÷4.8

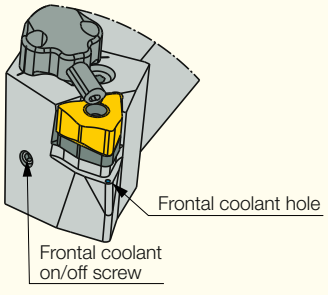
The tools with LNMX 1506... inserts feature fixed coolant channels.





For most of the tools which have a square shank, a frontal coolant hole has been added underneath the seat of the insert to enable coolant flow directed to the flank area of the insert.
The frontal coolant jet increases the amount of coolant to the cutting zone. By closing or opening a screw, it acts as a valve that monitors the rate of coolant flow.

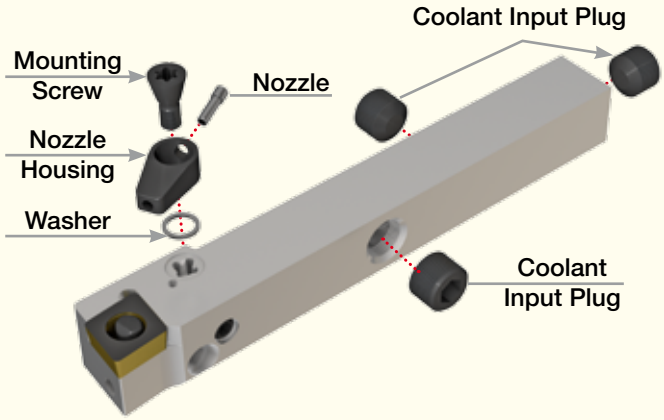




Engineered for HIGH PRESSURE Economical TURNING Performance

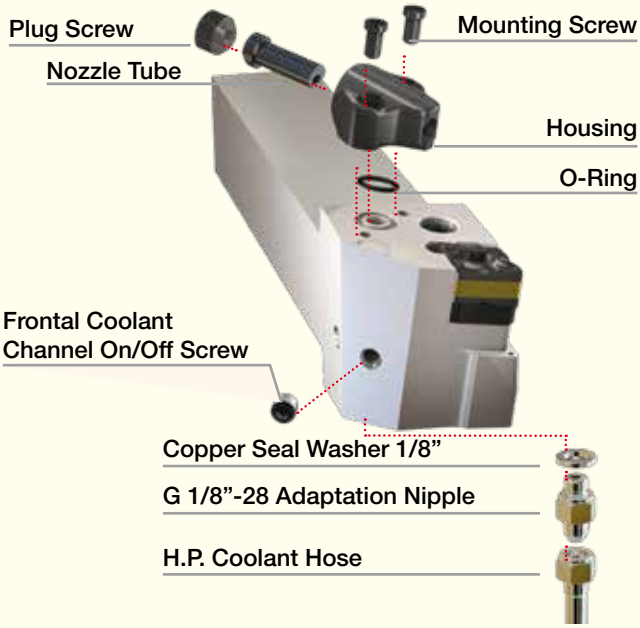
NEW

MAX PRESSURE 140 BAR



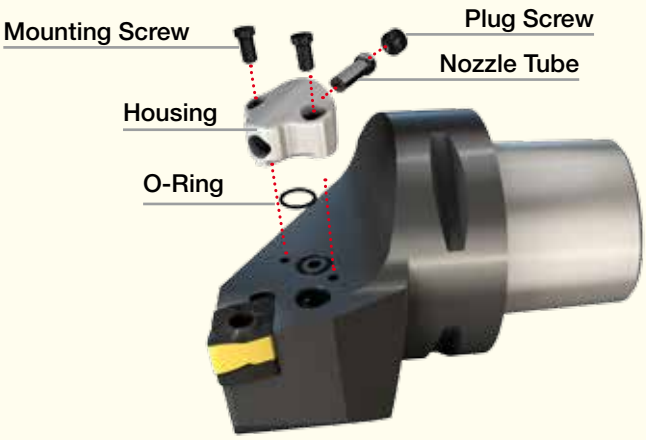
NEW

MAX PRESSURE 300 BAR



NEW

MAX PRESSURE 300 BAR



Engineered for
HIGH PRESSURE
Economical GROOVING
Performance

CUT-GRIP

CUT-GRIP

MODULAR-GRIP

JETHPLINE

Grooving and Parting Tools for High Pressure Coolant

As in the ISO turning line, **JHP** groove-turn and parting tools also feature coolant outlets near the cutting zone and thus the coolant jet increases the amount of coolant that reaches directly to the cutting edge and chips.
In grooving and parting operations, applying high pressure coolant provides excellent chip breaking results on all materials. On exotic alloys such as Inconel and titanium, it is usually impossible to break the chips with standard external coolant pressure. Applying high coolant pressure provides excellent chip breaking results. On some alloyed and stainless steel, especially when low feeds are applied, high pressure coolant may solve chip breaking problems. High pressure coolant reduces or even eliminates built-up edge phenomenon, especially when machining stainless steel and high temperature alloys.

Advantages

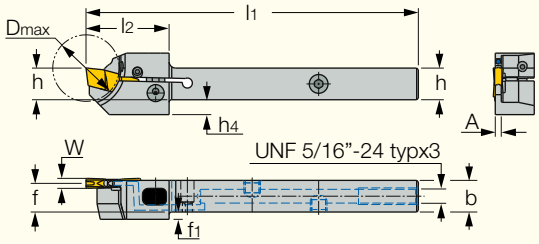
- Up to 200% increased cutting speed when machining titanium and heat resistant alloys.
- Effective chip control on problematic materials
- Up to 100% increased tool life when machining titanium, heat resistant materials stainless and alloy steel

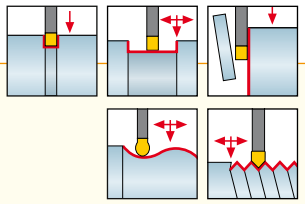
The **JHP** line includes a complete line of **CUT-GRIP**, **HELI-GRIP**, **SUMO-GRIP**, **TANG-GRIP, PENTACUT** and **MINCUT** tools for machining with high pressure coolant.

Engineered for HIGH PRESSURE GROOVING Economical Performance

GHSR/L-JHP-SL

Grooving and Turning Side Lock Tools with Channels for High Pressure Coolant on Swiss-Type and Automatic Machines





Left-hand shown

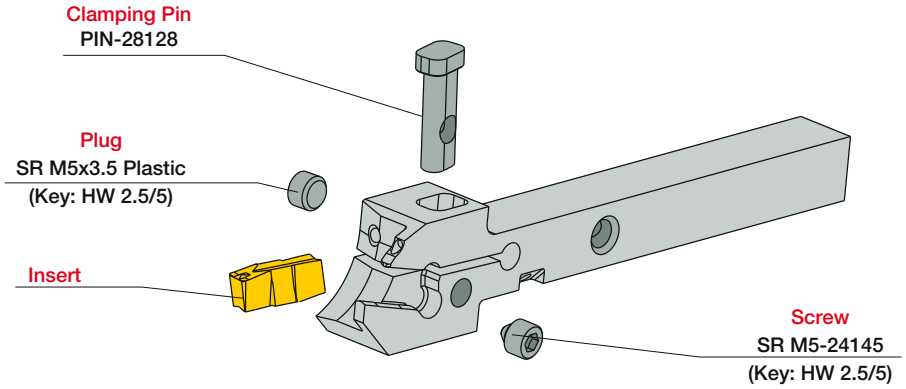
Designation	W min	W max	h	b	D max	l1	l2	f	f1	A	Th
GHSR/L 10-2-JHP-SL	2.20	3.00	10.0	10.0	20.0	100.00	25.0	9.1	2.2	1.80	UNF 5/16-24
GHSR/L 12-2-JHP-SL	2.20	3.00	12.0	12.0	25.0	100.00	25.0	11.1	-	1.80	UNF 5/16-24
GHSR/L 16-2-JHP-SL	2.20	3.00	16.0	16.0	25.0	120.00	27.0	15.1	-	1.80	UNF 5/16-24
GHSR/L 12-3-JHP-SL	2.80	4.00	12.0	12.0	25.0	100.00	25.0	10.8	-	2.40	UNF 5/16-24
GHSR/L 16-3-JHP-SL	2.80	4.00	16.0	16.0	25.0	120.00	27.0	14.8	-	2.40	UNF 5/16-24

• For user guide and accessories see pages 4-5, 32, 60-61

For inserts: GIG • GIM-J • GIM-J-RA/LA • GIMY • GIMY (full radius) • GIMY-F • GIP • GIP (full radius W<M) • GIP (full radius) • GIP-E • GIP-E (full radius) • GIPA (full radius W=3-6) • GIPA (W=3-6) • GIPM-A46 / GIP-1250 • GIPY • GITM • GITM (full radius) • TIP-MT • TIP-P-BSPT • TIP-P-BSW • TIP-P-ISO • TIP-P-NPT • TIP-P-UN • TIP-WT .

Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
GHSR/L-JHP	4-6	7-9	9-11

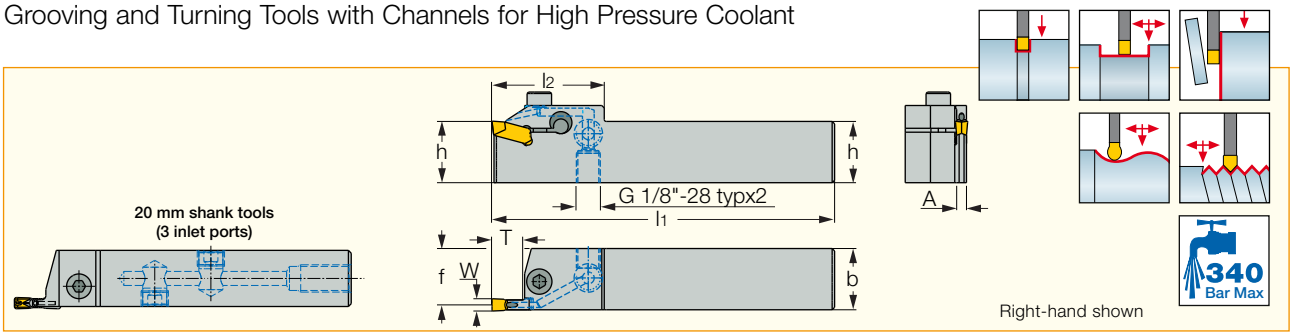


Spare Parts

Designation	Clamp Screw	Plug	Hex Flag Key	Plug 1	Key
GHSR/L 10-2-JHP-SL	SR M5-24145	SR M5X3.5 ULTEM 2300	HW 2.5/5	SR 5/16XUNF-TL-S	HW 5/32"
GHSR/L 12-2-JHP-SL	SR M5-24145	SR M5X3.5 ULTEM 2300	HW 2.5/5	SR 5/16UNF TL360	HW 5/32"
GHSR/L 16-2-JHP-SL	SR M5-24145	SR M5X3.5 ULTEM 2300	HW 2.5/5	SR 5/16UNF TL360	HW 5/32"
GHSR/L 12-3-JHP-SL	SR M5-24145	SR M5X3.5 ULTEM 2300	HW 2.5/5	SR 5/16UNF TL360	HW 5/32"
GHSR/L 16-3-JHP-SL	SR M5-24145	SR M5X3.5 ULTEM 2300	HW 2.5/5	SR 5/16UNF TL360	HW 5/32"

GHDR/L-JHP (short pocket)

Grooving and Turning Tools with Channels for High Pressure Coolant



Designation	W min	W max	h	Tmax-r	b	l1	l2	f	A
GHDR/L 20-3-JHP	2.80	4.00	20.0	9.00	20.0	120.00	29.0	18.8	2.40
GHDR/L 25-3-JHP	2.80	4.00	25.0	9.00	25.0	140.00	44.0	23.8	2.40
GHDR/L 20-4-JHP	4.00	5.00	20.0	10.00	20.0	120.00	29.0	18.4	3.20
GHDR/L 25-4-JHP	4.00	5.00	25.0	10.00	25.0	140.00	45.0	23.4	3.20
GHDR/L 25-5-JHP	5.00	6.40	25.0	12.00	25.0	140.00	46.0	22.9	4.20
NEW GHDR/L 25-P8-JHP (1)	7.00	10.00	25.0	16.50	25.0	150.00	50.0	21.8	6.50

• For using TIP and GPV inserts, toolholder seat needs to be modified according to insert profile to ensure clearance. • For user guide and accessories see pages 4-5, 32, 60-61

(1) Used with GIMF, GIMY, GIPY, GIMM, GITM, GPV inserts.

For inserts: GIA-K (W=3-6) • GIF • GIF (full radius) • GIF-E (W=4-6 full radius) • GIF-E (W=4-6) • GIM-C • GIM-J • GIM-J-RA/LA • GIM-UT • GIM-UT-RA/LA • GIM-W • GIM-W-RA/LA • GIMF • GIMN • GIMY • GIMY (full radius) • GIMY-F • GIP • GIP (full radius) • GIP-E • GIP-E (full radius) • GIP-UN • GIPA (full radius W=3-6) • GIPA (W=3-6) • GIPY • GITM • GITM (full radius) • GPV • TIP-MT • TIP-P-BSPT • TIP-P-BSW • TIP-P-ISO • TIP-P-NPT • TIP-P-UN • TIP-WT .

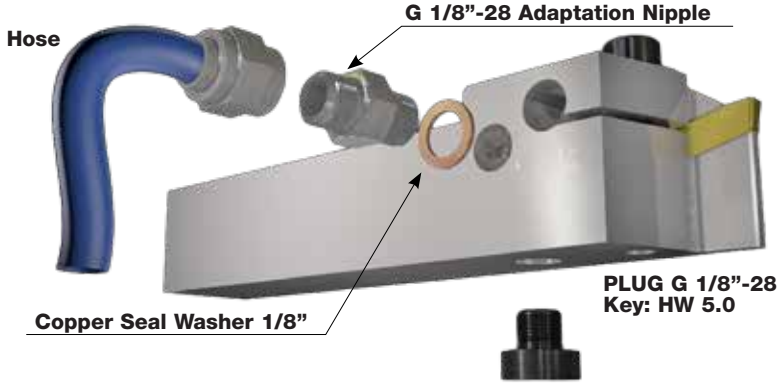
Spare Parts

Designation	Screw	Key	Plug	Key 1
GHDR/L 20-3-JHP	SR M5X16DIN912 12.9	HW 4.0	PLG 1/8BSP TL360	HW 5.0
GHDR/L 25-3-JHP	SR M5X20DIN912 12.9	HW 4.0	PLG 1/8ISO1179	HW 5.0
GHDR/L 20-4-JHP	SR M6X16DIN912 12.9		PLG 1/8BSP TL360	HW 5.0
GHDR/L 25-4-JHP	SR M6X20DIN912 12.9		PLG 1/8ISO1179	HW 5.0
GHDR/L 25-5-JHP	SR M6X20DIN912 12.9		PLG 1/8ISO1179	HW 5.0
GHDR/L 25-P8-JHP	SR M6X20DIN912 12.9		PLG 1/8ISO1179	HW 5.0

Flow Rate vs. Pressure

Designation	70 bar Flow Rate (liters/min)	100 bar Flow Rate (liters/min)	140 bar Flow Rate (liters/min)
GHDR/L 20-3-JHP	5-7	7-9	9-11
GHDR/L 20-4-JHP	6-8	10-12	12-14
GHDR/L 25-3-JHP	6-8	8-10	10-12
GHDR/L 25-4-JHP	10-12	14-16	16-18
GHDR/L 25-5-JHP	13-16	19-21	22-24

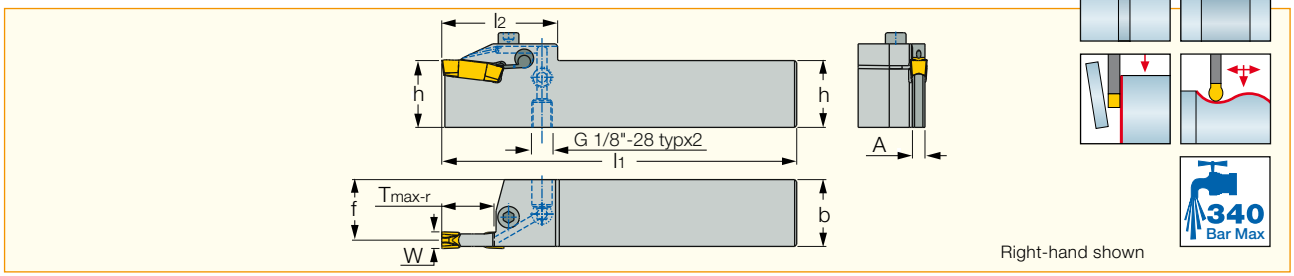
GHDR...-JHP



Engineered for HIGH PRESSURE GROOVING Economical Performance

GHDR/L-JHP (long pocket)

Grooving and Turning CUT-GRIP Tools with Channels for High Pressure Coolant



Designation	W min	W max	Tmax-r	h	b	l1	l2	f	A
GHDR/L 32-8-JHP	6.60	8.30	25.00	32.0	32.0	170.00	55.0	29.0	6.00

• For user guide and accessories see pages 4-5, 32, 60-61

For inserts, see pages: GDMF • GDMM-CC • GDMN • GDMU • GDMY • GDMY (full radius) • GDMY-F • GIA-K (long pocket) • GIF (long pocket) • GIF-E (W=8,10 full radius) • GIF-E (W=8,10) • GIPA/GIDA 8 (full radius) .

Spare Parts

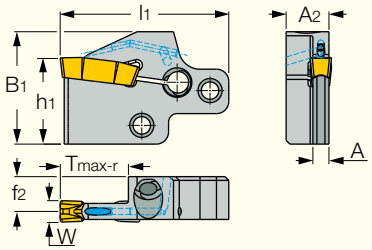
Designation	Screw	Key	Plug
GHDR/L-JHP (long pocket)	SR M6X25DIN912 12.9U	HW 5.0	PLG 1/8ISO1179

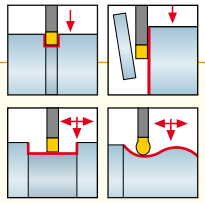
Flow Rate vs. Pressure

Designation	70 bar Flow Rate (liters/min)	100 bar Flow Rate (liters/min)	140 bar Flow Rate (liters/min)
GHDR/L 32-8-JHP	13-16	19-21	22-24

GADR/L-JHP

Adapters for up to 25 mm Deep Machining with High Pressure Coolant Channels Carrying Groove-Turn Inserts





Right-hand shown

Designation	W min	W max	Tmax-r	A	h1	B1	l1	A2	f2
GADR/L 8-JHP	6.60	8.30	25.50	6.00	32.0	42.0	63.00	17.0	14.00
GADR/L 10-JHP	8.60	10.30	25.50	7.40	32.0	42.0	63.00	17.7	14.00

• For user guide and accessories see pages 4-5, 32, 60-61

For inserts: GDMA • GDMF • GDMM-CC • GDMN • GDMU • GDMY • GDMY (full radius) • GDMY-F • GDPY • GIA-K (long pocket) • GIA-K (W=3-6) • GIF (long pocket) • GIF-E (W=8,10 full radius) • GIF-E (W=8,10) • GIPA 8-35V (V-shape) • GIPA/GIDA 8 (full radius) .

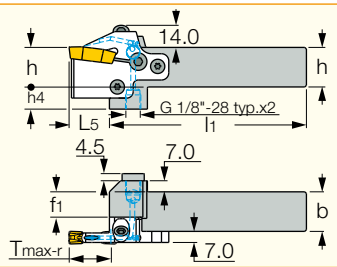
For holders, see pages: C#-GHAD-8-JHP (37) • GHAR/L-8-JHP (36).

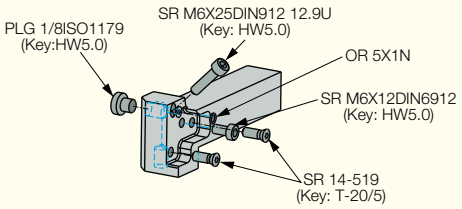
Flow Rate vs. Pressure

Designation	70 bar Flow Rate (liters/min)	100 bar Flow Rate (liters/min)	140 bar Flow Rate (liters/min)
GADR/L-JHP	15-17	23-25	27-29

GHAR/L-8-JHP

Holders with High Pressure Coolant Channels for Grooving and Turning Adapters





Right-hand shown

Designation	h	b	f1	l1	L5	h4	Tmax-r(2)
GHAR/L 25-8-JHP	25.0	25.0	16.0	124.50	25.00	14.0	-

• f=f1+f2 (see adapter dimensions) • For user guide and accessories see pages 4-5, 32, 60-61

(2) See specific adapter dimensions

For tools, see pages: GADR/L-8-JHP (36).

Spare Parts

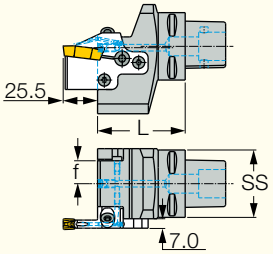
Designation	Screw	Key	O-Ring	Screw 1	Screw 2	Plug	Key 1
GHAR 25-8-JHP	SR 14-519	T-20/5	OR 5X1N	SR M6X12DIN6912	SR M6X25DIN912 12.9U	PLG 1/8ISO1179	HW 5.0x120

Engineered for HIGH PRESSURE Economical GROOVING Performance

C#-GHAD-8-JHP

Holders for Grooving and Turning with High Pressure Coolant Channels and CAMFIX Exchangeable Shanks

340 Bar Max



Designation	SS	L	f	W
C5 GHAD-8-JHP	50	65.00	17.00	8.00
C6 GHAD-8-JHP	63	65.00	23.50	8.00
C8 GHAD-8-JHP	80	74.00	38.50	8.00

• For user guide and accessories see pages 4-5, 32, 60-61

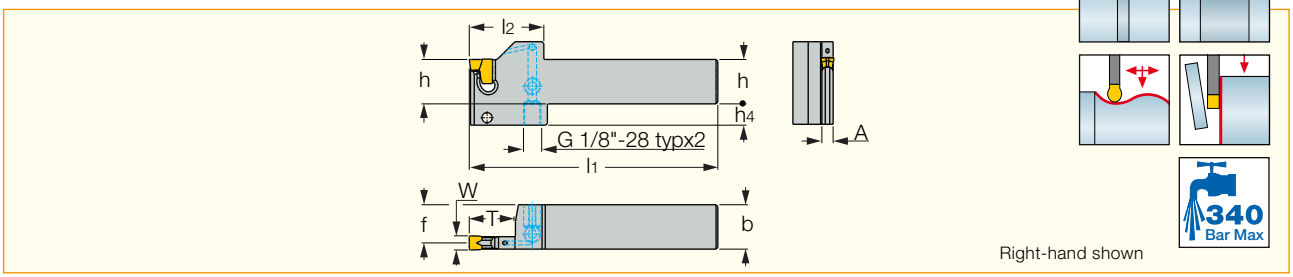
For tools, see pages: GADR/L-8-JHP (36).

Spare Parts

Designation	Screw	Key	O-Ring	Screw 1	Screw 2	Screw 2	Key 1
GHAR 25-8-JHP	SR 14-519	T-20/5	OR 5X1N	SR M6X12DIN6912	SR M6X25DIN912 12.9U	PLG 1/8ISO1179	HW 5.0x120

TGBHR/L-JHP

Grooving and Turning SUMO-GRIP Tools with Channels for High Pressure Coolant



Designation	h	W	b	l_2	A	l_1	T_{max-r}	f	h_4
TGBHR/L 25-8-JHP	25.0	8.00	25.0	42.0	7.00	150.00	25.00	21.5	12.0
TGBHR/L 32-8-JHP	32.0	8.00	32.0	42.0	7.00	170.00	25.00	28.5	12.0

• For user guide see pages 4-5, 32, 60-61

For inserts: TAG N-C/W/M • TAGB/TAGBA.

Flow Rate vs. Pressure

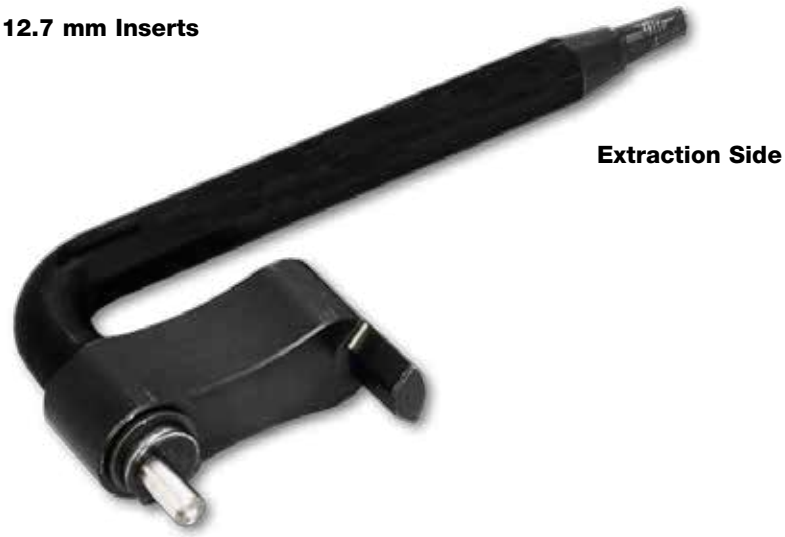
Designation	70 bar Flow Rate (liters/min)	100 bar Flow Rate (liters/min)	140 bar Flow Rate (liters/min)
TGBHR/L-JHP	13-16	19-21	22-24

Spare Parts

Designation	Extractor	Plug	Key
TGBHR/L-JHP	ETG 8-12*	PLG 1/8ISO1179	HW 5.0

* Optional, should be ordered separately

ETG 8-12 Extractor for 8 to 12.7 mm Inserts



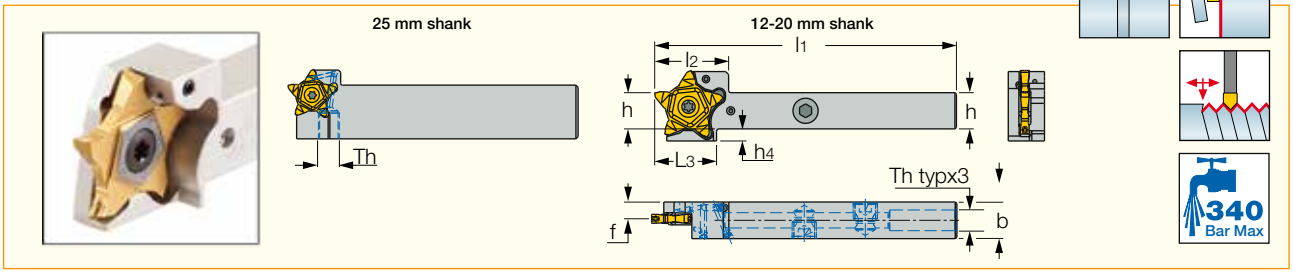
Extraction Side

Insertion Side

Engineered for HIGH PRESSURE GROOVING Economical Performance

PCHR/L-24-JHP

Grooving, Parting and Recessing Holders for PENTA Inserts with Channels for High Pressure Coolant



Designation	h	b	W min	W max(1)	f	l1	l2	L3	h4	Th	Tmax-r(2)	Insert
PCHR/L 12-24-JHP	12.0	12.0	0.50	3.20	5.5	100.00	24.5	20.50	4.0	UNF 5/16-24	6.50	PENTA 24
PCHR/L 16-24-JHP	16.0	16.0	0.50	3.20	9.5	120.00	24.5	-	-	UNF 5/16-24	6.50	PENTA 24
PCHR/L 20-24-JHP	20.0	20.0	0.50	3.20	13.5	135.00	24.5	-	-	G1/8	6.50	PENTA 24
PCHR/L 25-24-JHP	25.0	25.0	0.50	3.20	18.5	135.00	24.5	-	-	G1/8	6.50	PENTA 24

• For user guide and accessories see pages 4-5, 32, 60-61

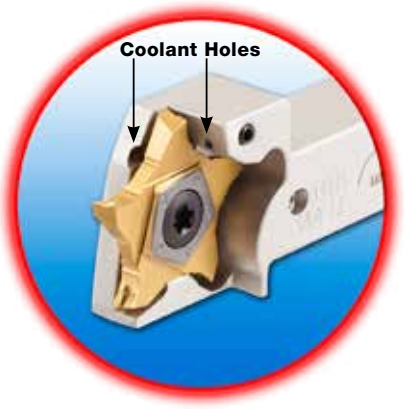
(1) Up to 6.2 mm width may be ordered on request. (2) For specific information, refer to insert data.

Flow Rate vs. Pressure

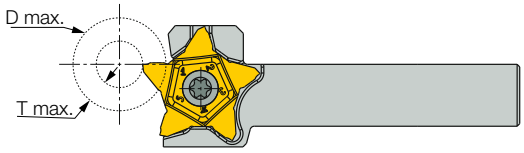
Designation	70 bar Flow Rate (liters/min)	100 bar Flow Rate (liters/min)	140 bar Flow Rate (liters/min)
PCHR/L 12-24-JHP	7-9	9-11	11-13
PCHR/L 16/20/25-24-JHP	12-14	14-16	16-18

(2) Grooving Depth Tmax Relative to Dmax

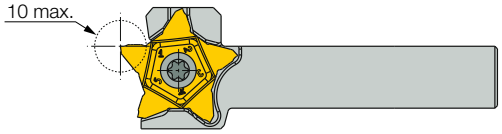
Tmax	3.5	4	4.5	5
Dmax	No-limit	210	135	50



Groove Capacity



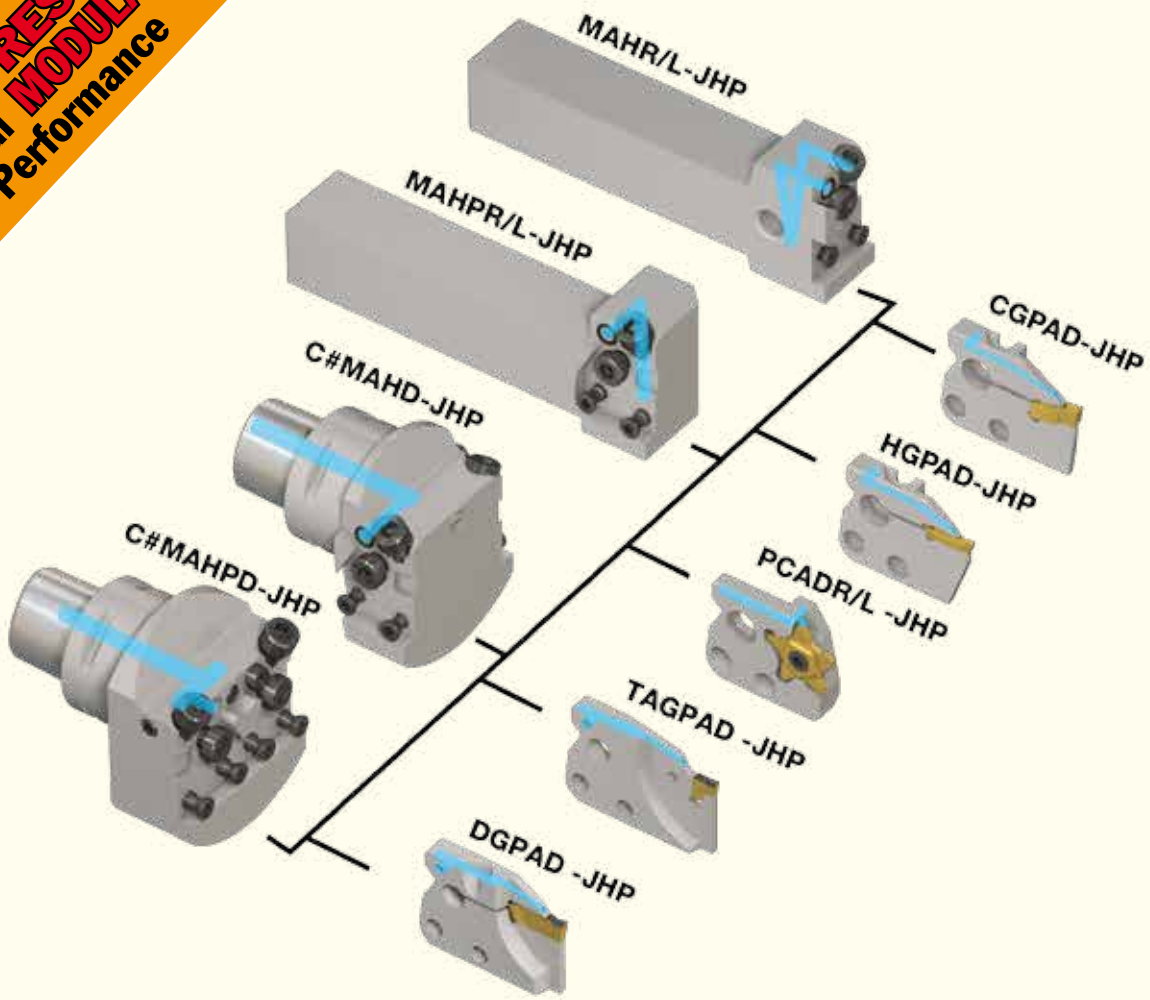
Cut-off to Center



Spare Parts

Designation	Screw	Key	Plug	Plug Key
PCHL 12-24-JHP	SR 16-212-01397L-L8.5	T-2010/5	SR 5/16UNF TL360	HW 5/32"
PCHR 12-24-JHP	SR 16-212-01397-L8.5	T-2010/5	SR 5/16UNF TL360	HW 5/32"
PCHL 16-24-JHP	SR 16-212-01397L	T-2010/5	SR 5/16UNF TL360	HW 5/32"
PCHR 16-24-JHP	SR 16-212-01397	T-2010/5	SR 5/16UNF TL360	HW 5/32"
PCHL 20-24-JHP	SR 16-212-01397L	T-2010/5	PLG 1/8BSP TL360	HW 5.0
PCHR 20-24-JHP	SR 16-212-01397	T-2010/5	PLG 1/8BSP TL360	HW 5.0
PCHL 25-24-JHP	SR 16-212-01397L	T-2010/5		
PCHR 25-24-JHP	SR 16-212-01397	T-2010/5		

Engineered for
HIGH PRESSURE
Economical MODULAR-GRIP
Performance



MODULAR-GRIP

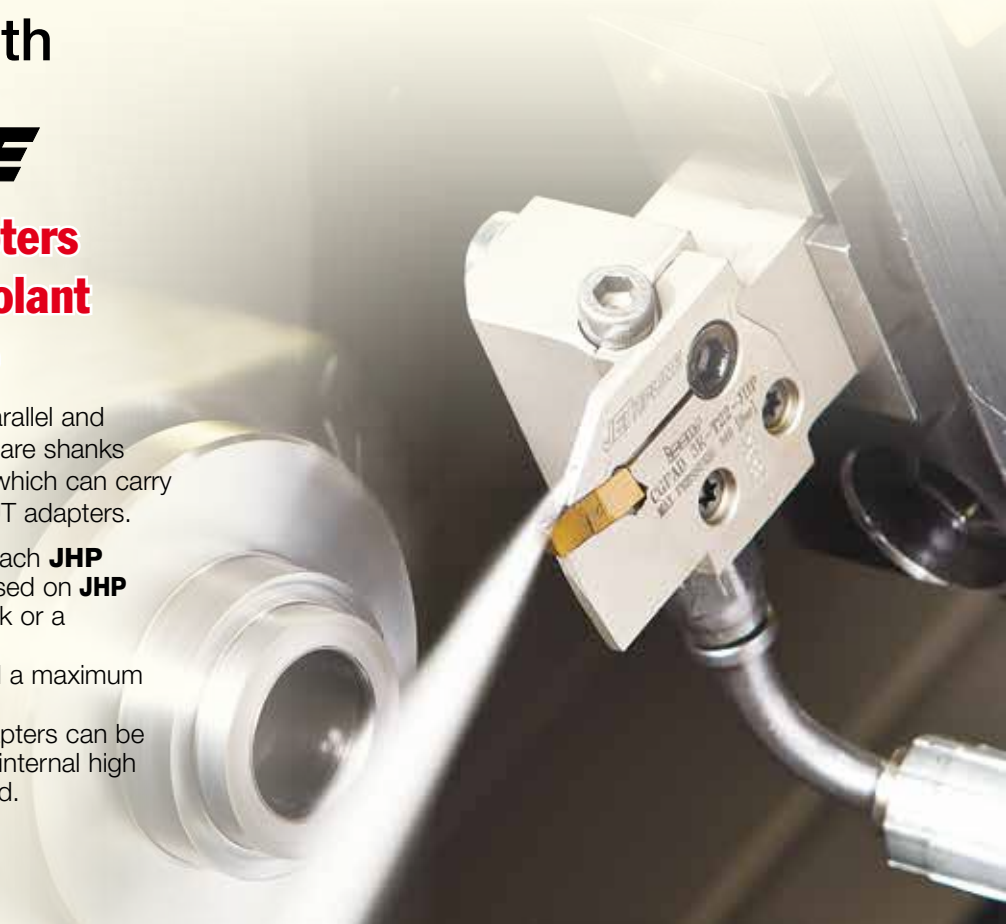
Combined with

JETHPLINE

MODULAR-GRIP Adapters for High Pressure Coolant Makes the Difference

The MODULAR-GRIP line includes parallel and perpendicular 20, 25 and 32 mm square shanks and 4, 5 and 6 CAMFIX shank sizes which can carry HELI-GRIP, CUT-GRIP and PENTACUT adapters.

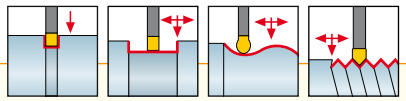
- Reduces tooling cost and stock, as each **JHP MODULAR-GRIP** adapter can be used on **JHP** straight or perpendicular square shank or a CAMFIX shank.
- The tools were designed to withstand a maximum coolant pressure of up to 340 bars.
- The standard **MODULAR-GRIP** adapters can be used with the **JHP** toolholders when internal high pressure coolant option is not required.

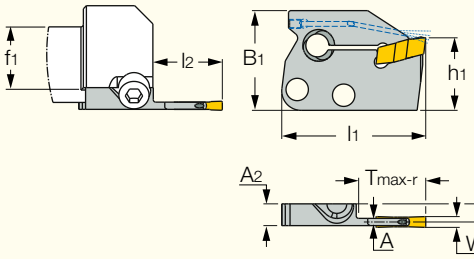


Engineered for HIGH PRESSURE Economical MODULAR-GRIP Performance

CGPAD-JHP

Adapters with High Pressure Coolant Channels for CUT-GRIP Inserts





Left-hand shown • f=f1(shank)+f2(adapter)

Designation	W min	W max	Tmax-r	l2	f2	A	A2	l1	B1	h1
CGPAD 3R/L-T16-JHP	2.80	4.00	16.00	17.3	6.00	2.40	7.2	42.00	33.0	24.0
CGPAD 3R-T22-JHP	2.80	4.00	22.00	23.0	6.00	2.40	7.2	47.70	33.0	24.0
CGPAD 4R/L-T16-JHP	4.00	5.00	16.00	17.3	5.45	3.50	7.2	42.00	33.0	24.0
CGPAD 5R/L-T16-JHP	5.00	6.40	16.00	17.3	4.95	4.50	7.2	42.00	33.0	24.0

• For using TIP insert, toolholder seat needs to be modified according to insert profile to ensure clearance.
• For user guide and accessories see pages 4-5, 32, 45, 47, 60-61

For inserts: GIF • GIF-E (W=4-6) • GIM-C • GIM-J • GIM-UT • GIM-W • GIMF • GIMY • GIP • GIP-E • GIP-UN • GIPA (W=3-6) • GITM • GITM (full radius) • TIP-MT • TIP-P-BSPT • TIP-P-BSW • TIP-P-ISO • TIP-P-NPT • TIP-P-UN .

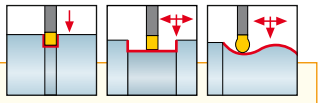
For holders, see pages: C#-MAHD-JHP (46) • C#-MAHPD-JHP (47) • MAHPR/L-JHP (44) • MAHR/L-JHP (43).

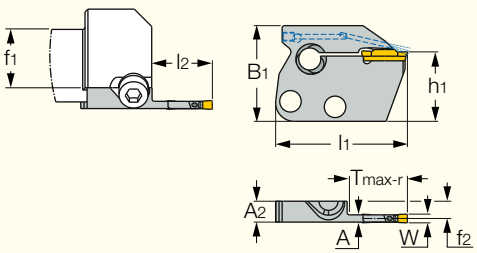
Flow Rate vs. Pressure

Designation	70 bar Flow Rate (liters/min)	100 bar Flow Rate (liters/min)	140 bar Flow Rate (liters/min)
CGPAD 3R/L-T16-JHP	6-8	7-9	8-10
CGPAD 3R-T22-JHP	5-7	6-8	7-9
CGPAD 4R/L-T16-JHP	10-12	11-13	12-14
CGPAD 5R/L-T16-JHP	12-14	16-18	19-21

HGPAD-JHP

Adapters with High Pressure Coolant Channels for HELI-GRIP Inserts





f=f1(shank)+f2(adapter)

Designation	W min	W max	Tmax-r	l2	f2	A	A2	l1	B1	h1
HGPAD 3R/L-T20-JHP	3.00	3.00	20.00	21.0	5.95	2.50	7.2	45.70	33.0	24.0
HGPAD 4R/L-T20-JHP	4.00	4.76	20.00	21.0	5.55	3.30	7.2	45.70	33.0	24.0
HGPAD 5R/L-T20-JHP	5.00	5.00	20.00	21.0	5.10	4.20	7.2	45.70	33.0	24.0
HGPAD 6R/L-T22-JHP	6.00	6.35	22.00	23.0	4.60	5.20	7.2	47.70	33.0	24.0

• For user guide and accessories see pages 4-5, 32, 45, 47, 60-61

For inserts: GRIP • GRIP (full radius) • DGN/DGNC/DGNM-C • HGN-C • DGN/DGNM-J/JS/JT • HGN-J • DGN-UT/UA • HGN-UT • DGN-W .

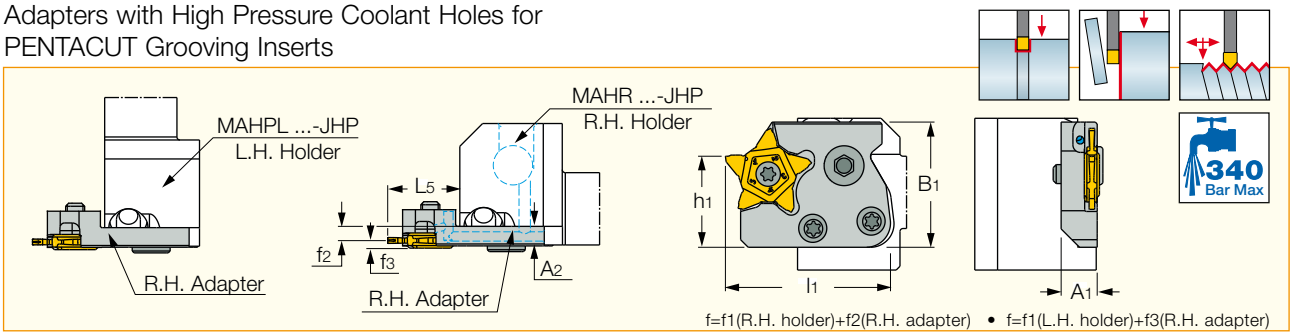
For holders, see pages: C#-MAHD-JHP (46) • C#-MAHPD-JHP (47) • MAHPR/L-JHP (44) • MAHR/L-JHP (43).

Flow Rate vs. Pressure

Designation	70 bar Flow Rate (liters/min)	100 bar Flow Rate (liters/min)	140 bar Flow Rate (liters/min)
HGPAD 3R/L-T20-JHP	5-7	6-8	7-9
HGPAD 4R/L-T20-JHP	9-11	10-12	11-13
HGPAD 5R/L-T20-JHP	11-13	12-14	13-15
HGPAD 6R/L-T22-JHP	16-18	16-18	19-21

PCADR/L-JHP

Adapters with High Pressure Coolant Holes for PENTACUT Grooving Inserts



Descrizione	W min	W max	L_5	l_1	f_2	f_3	A_1	A_2	h_1	B_1
PCADR/L 24-JHP	0.50	3.18 (1)	19.30	43.80	5.20	2.00	10.00	7.2	24.0	33.0

• Tmax and Dmax according to insert limitation • For user guide and accessories see pages 4-5, 32, 45, 47, 60-61

(1) Up to 6.2 mm width can be ordered on request

For inserts: PENTA 24-BSPT • PENTA 24-ISO • PENTA 24-MT • PENTA 24-NPT • PENTA 24-UN • PENTA 24-W • PENTA 24-WT • PENTA 24N-J • PENTA 24N-J (full radius) • PENTA 24N-P • PENTA 24N-Z • PENTA 24R-P • PENTA 24R/L-J • PENTA 24R/L-Z .

For holders, see pages: For holders, see pages: C#-MAHD-JHP (46) • C#-MAHPD-JHP (47) • MAHPR/L-JHP (44) • MAHR/L-JHP (43).

Flow Rate vs. Pressure

Designation	70 bar Flow Rate (liters/min)	100 bar Flow Rate (liters/min)	140 bar Flow Rate (liters/min)
PCADR/L 24-JHP	9-11	11-13	12-14

Spare Parts

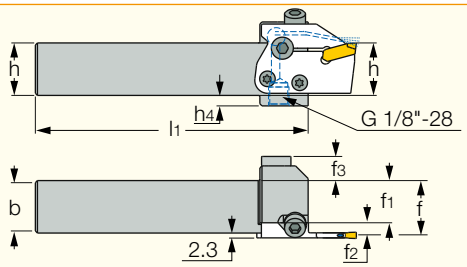
Designation	Screw	Key
PCADR-JHP	SR 16-212-01397	T-2010/5
PCADL-JHP	SR 16-212-01397L	T-2010/5

Engineered for HIGH PRESSURE Economical MODULAR-GRIP Performance

MAHR/L-JHP

Holders with High Pressure Coolant Channels for MODULAR-GRIP Adapters

340 Bar Max

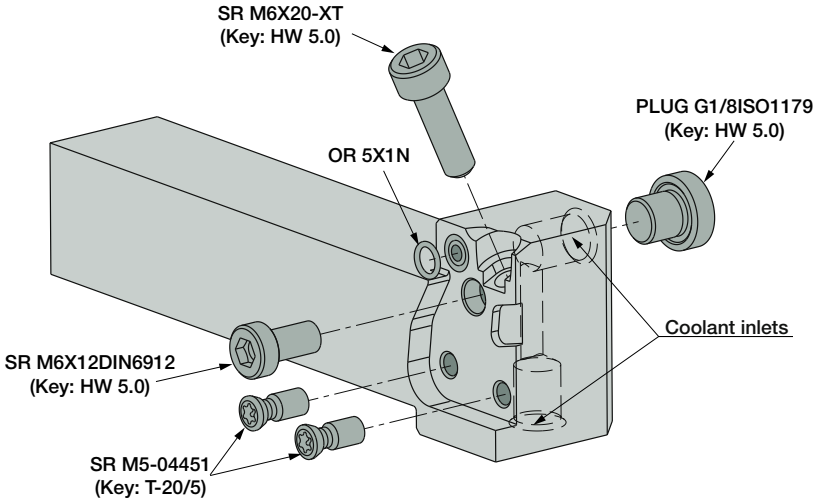


Left-hand shown • f=f1(shank)+f2(adapter)

Designation	h	b	l_1	h_4	f_1	f_3
MAHR/L 20-JHP	20.0	20.0	130.00	10.0	15.1	16.50
MAHR/L 25-JHP	25.0	25.0	130.00	5.0	20.1	11.50
MAHR/L 32-JHP	32.0	32.0	140.00	-	27.1	4.50

• For user guide and accessories see pages 4-5, 32, 45, 47, 60-61

For tools, see pages: DGPAD-JHP (50) • TAGPAD-JHP (52) • CGPAD-JHP (41) • HGPAD-JHP (41) • PCADR/L-JHP (42).



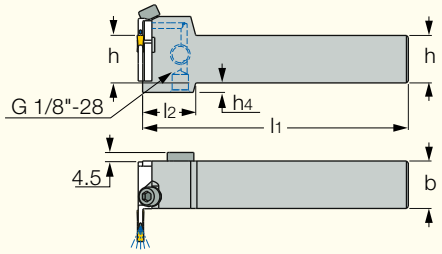
Spare Parts

Designation	Screw	Key	Screw 1	Screw 2	Key 1	O-Ring	Plug
MAHR/L-JHP	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW 5.0	OR 5X1N	PLG 1/8ISO1179

MAHPR/L-JHP

Holders with High Pressure Coolant Channels for
MODULAR-GRIP Perpendicularly Mounted Adapters

340 Bar Max

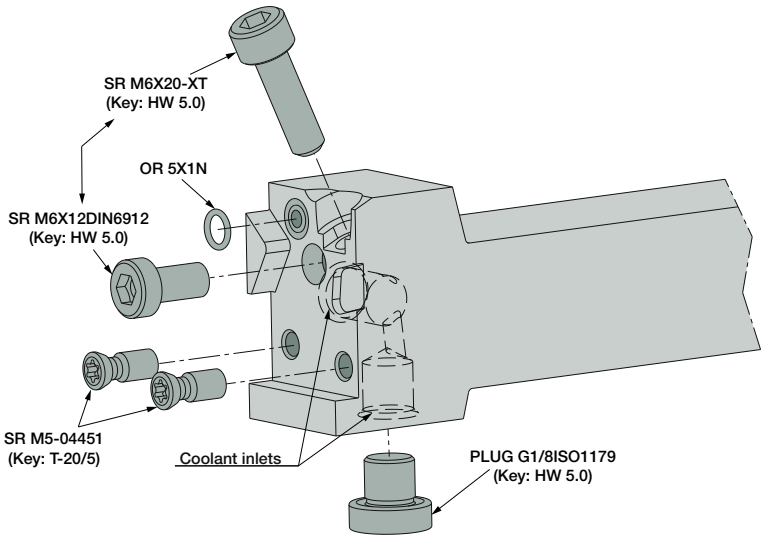


Right-hand shown

Designation	h	b	l_1	l_2	h_4
MAHPR/L 20-JHP	20.0	20.0	140.00	28.0	10.0
MAHPR/L 25-JHP	25.0	25.0	140.00	28.0	5.0
MAHPR/L 32-JHP	32.0	32.0	150.00	28.0	-

• For user guide and accessories see pages 4-5, 32, 45, 47, 60-61

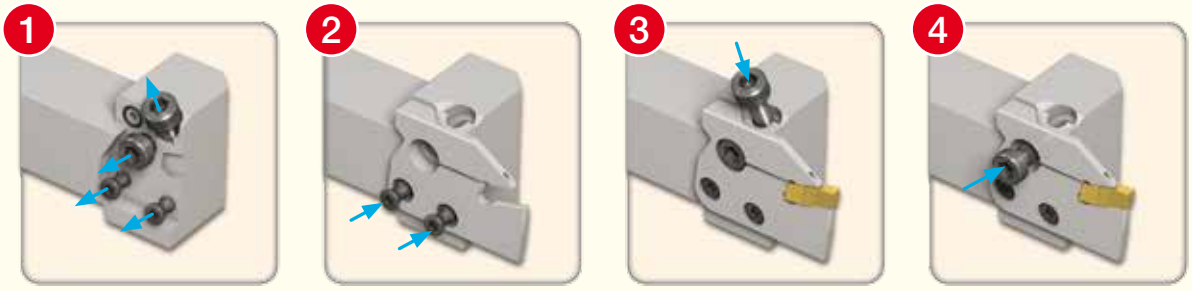
For tools, see pages: DGPAD-JHP (50) • TAGPAD-JHP (52) • CGPAD-JHP (41) • HGPAD-JHP (41) • PCADR/L-JHP (42).



Spare Parts

Designation	Screw	Key	Screw 1	Screw 2	Key 1	O-Ring	Plug
MAHPR/L-JHP	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW 5.0	OR 5X1N	PLG 1/8ISO1179

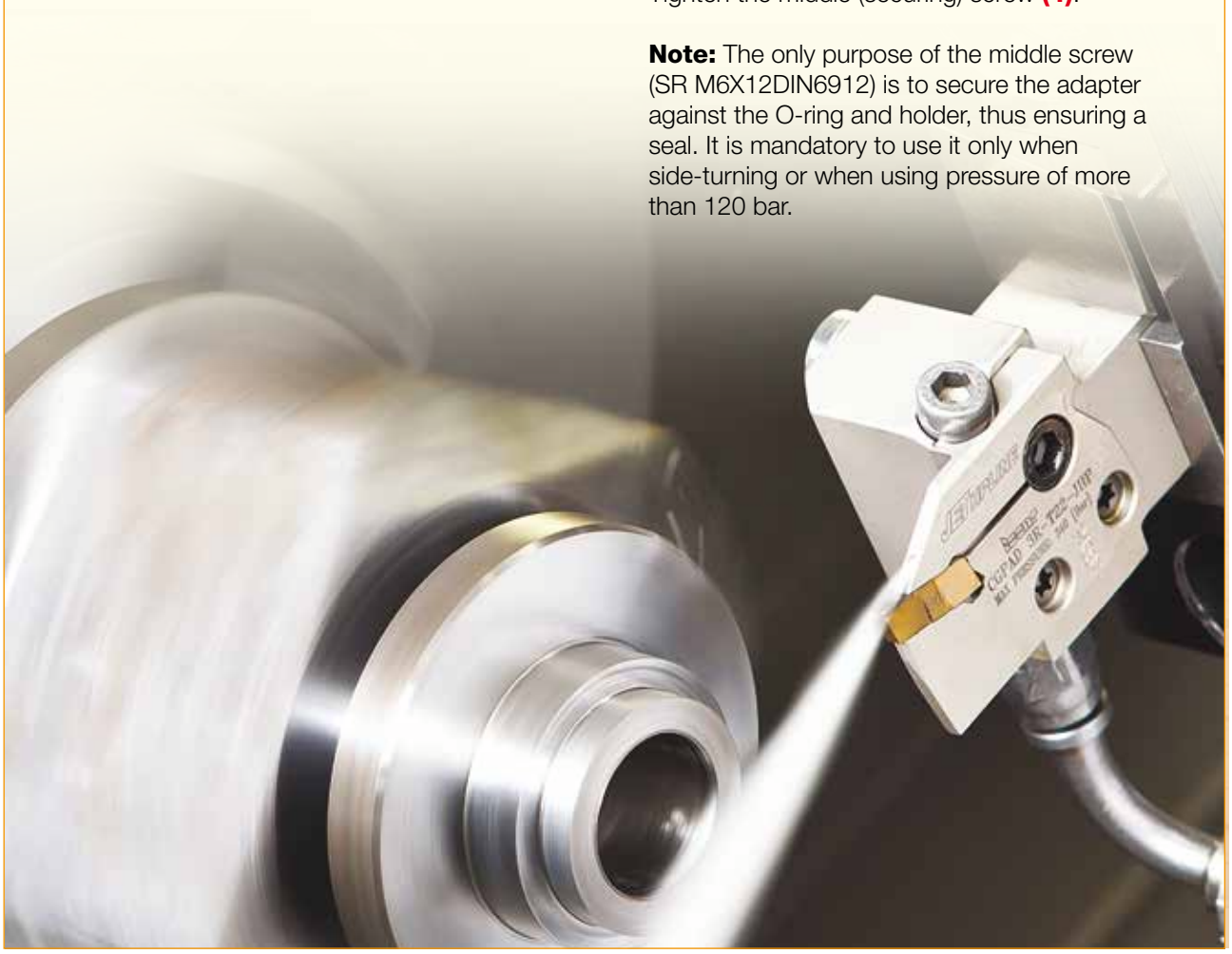
Adapter Assembly on Square Shanks



The tool is supplied with a long upper clamping screw which is inserted diagonally, two bottom clamping short screws, one middle (securing) screw and three sealing O-rings (two are spare).

- Unscrew all four screws and check that the O-ring is in place **(1)**.
- Start by clamping the adapter with the two short bottom screws **(2)**.
- Then place the insert into the pocket and clamp it with the long diagonal screw **(3)**.
- Tighten the middle (securing) screw **(4)**.

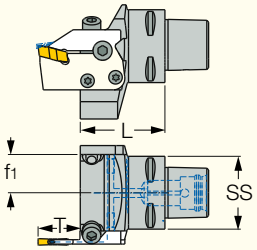
Note: The only purpose of the middle screw (SR M6X12DIN6912) is to secure the adapter against the O-ring and holder, thus ensuring a seal. It is mandatory to use it only when side-turning or when using pressure of more than 120 bar.



C#-MAHD-JHP

Holders with CAMFIX Exchangeable Shanks and High Pressure Coolant Channels for MODULAR-GRIP Adapters

340 Bar Max

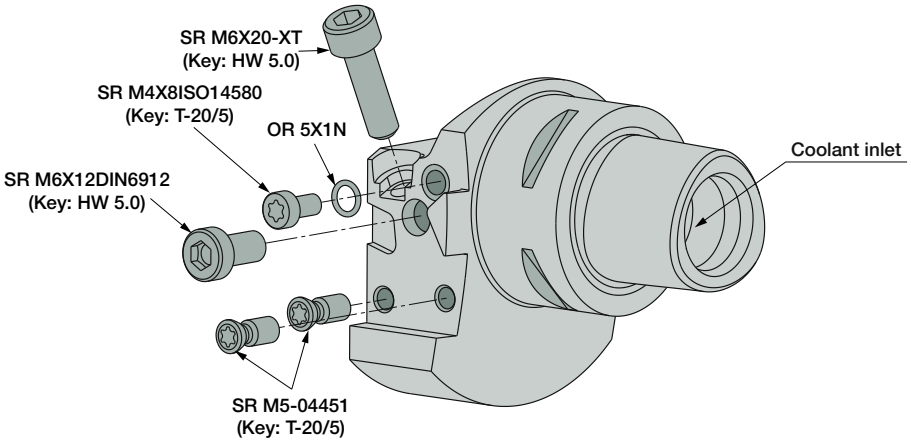


Right-hand shown • T - See specific adapter dimensions

Designation	SS	L	f1
C3 MAHD-JHP	32	46.00	18.5
C4 MAHD-JHP	40	46.50	21.0
C5 MAHD-JHP	50	47.00	26.0
C6 MAHD-JHP	63	50.00	32.5

• For user guide and accessories see pages 4-5, 32, 45, 47, 60-61

For tools, see pages: CGPAD-JHP (41) • HGPAD-JHP (41) • PCADR/L-JHP (42) • DGPAD-JHP (50) • TAGPAD-JHP (52)



Spare Parts

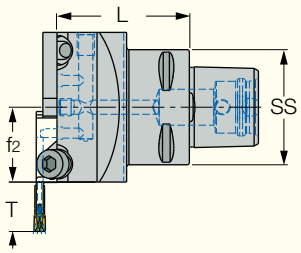
Designation	Screw	Key	Screw 1	Screw 2	Key 1	O-Ring	Screw 3
C#-MAHD-JHP	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW 5.0	OR 5X1N	SR M4X8ISO14580

Engineered for HIGH PRESSURE Economical MODULAR-GRIP Performance

C#-MAHPD-JHP

Perpendicular Holders for Parting, Grooving, Turning and Facing Adapters with CAMFIX Exchangeable Shanks

340 Bar Max



T= See specific adapter dimensions

Designation	SS	L	f2
C3 MAHPD-JHP	32	40.00	26.00
C4 MAHPD-JHP	40	46.00	26.00
C5 MAHPD-JHP	50	46.00	26.00
C6 MAHPD-JHP	63	46.00	33.00

• For user guide and accessories see pages 4-5, 32, 45, 47, 60-61

For tools, see pages: CGPAD-JHP (41) • HGPAD-JHP (41) • PCADR/L-JHP (42) • DGPAD-JHP (50) • TAGPAD-JHP (52)

Spare Parts

Designation	Screw	Key	Screw 1	Screw 2	Key 1	O-Ring	Screw 3
C#-MAHPD-JHP	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW 5.0	OR 5X1N	SR M4X8ISO14580

Adapter Assembly on CAMFIX Shanks


CGPAD...JHP


HGPAD...JHP

The tool is supplied with a long upper clamping screw which is inserted diagonally, two short bottom clamping screws, two middle (securing/sealing) screws and four sealing O-rings (two are spare).

- Unscrew all five screws and check that the O-rings are in place **(1)**.
- Start by clamping the adapter with the two short bottom screws **(2)**.
- Place the insert into the pocket and clamp the long diagonal screw **(3)**.
- Tighten the middle (securing) screw **(4)**.
- Finally, seal the opposite threaded hole with the sealing screw **(5)**.

Note: The only purpose of the middle screw (SR M6X12DIN6912) is to secure the adapter against the O-ring and holder, thus ensuring a seal. It is mandatory to use it only when side-turning or when using pressure of more than 120 bar.

Engineered for
HIGH PRESSURE
Economical PARTING
Performance

ISCAR PARTING
Combined with
JET HP LINE

High Pressure Coolant with Parting Tools

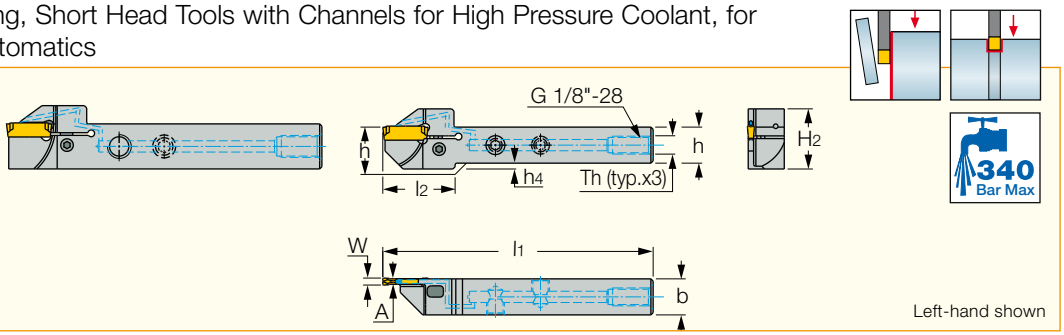
In grooving and parting operations, applying high pressure coolant provides excellent chip breaking results on all materials.

- Reduces temperature at the cutting zone.
- Improves surface finish and insert life.
- High pressure coolant reduces or even eliminates built-up edge phenomenon, especially when machining stainless steel and high temperature alloys.

Engineered for HIGH PRESSURE Economical PARTING Performance

DGTR/L-B-D-JHP-SL

Parting and Grooving, Short Head Tools with Channels for High Pressure Coolant, for CNC and Swiss Automatics



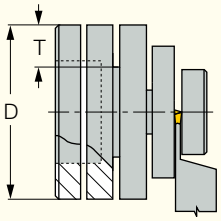
Designation	W min	W max	h	b	A	l2	D max	H2	h4	l1
DGTR/L 12B-2D24-JHP-SL	1.90	2.50	12.0	12.0	1.60	29.4	24.0	25.7	6.5	120.00
DGTR/L 16B-2D35-JHP-SL	1.90	2.50	16.0	16.0	1.60	32.0	35.0	26.7	2.6	120.00
DGTR/L 20B-2D35-JHP-SL	1.90	2.50	20.0	20.0	1.60	32.0	35.0	28.1	-	140.00
DGTR/L 12B-3D24-JHP-SL	3.00	3.18	12.0	12.0	2.40	29.4	24.0	25.7	6.5	120.00
DGTR/L 16B-3D35-JHP-SL	3.00	3.18	16.0	16.0	2.40	32.0	35.0	26.7	2.6	120.00
DGTR/L 20B-3D40-JHP-SL	3.00	3.18	20.0	20.0	2.40	35.6	40.0	28.1	-	140.00

• For user guide, see pages 4-5, 32, 48, 60-61

For inserts: DGN-LF/LFT • DGN-MF • DGN-P • DGN-UT/UA • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-P • DGR-WP • DGR-Z/ZS • DGR/L-C DGRC/LC-C • DGR/L-J/JS .

Depth Capacity DGTR/L-B-D

Depth of Cut as Function of Workpiece Diameter
(DGN/R/L-100... excluded)



Designation	øDmax																
DGTR/L 12B-2D24-JHP-SL	–	–	–	–	–	–	–	–	24	26	27	28	30	32	36	42	52
DGTR/L 16B-2D35-JHP-SL	–	–	–	–	–	–	–	–	24	26	27	28	30	32	36	42	52
DGTR/L 20B-2D35-JHP-SL	–	–	–	35	39	42	46	51	59	71	91	130	230	1200	NL	NL	NL
DGTR/L 12B-3D24-JHP-SL	–	–	–	35	39	42	46	51	59	71	91	130	230	1200	NL	NL	NL
DGTR/L 16B-3D35-JHP-SL	–	–	–	75	90	113	155	250	650	NL	NL	NL	NL	NL	NL	NL	NL
DGTR/L 20B-3D40-JHP-SL	56	62	71	83	102	134	200	400	NL	NL	NL	NL	NL	NL	NL	NL	NL
Depth T →	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4

NL - No Limit

Example:
For 9 mm depth of groove on a 75 mm workpiece diameter, four tools may be used.

Flow Rate vs. Pressure

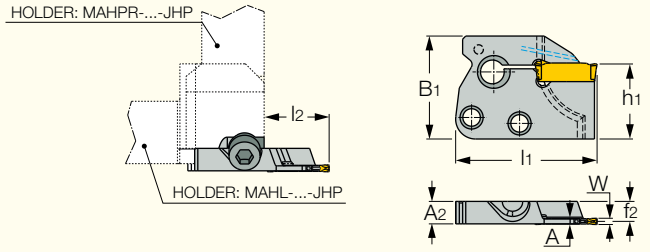
Designation	Top Drill Ø mm	70 bar Flow Rate (liters/min)	100 bar Flow Rate (liters/min)	140 bar Flow Rate (liters/min)
DGTR/L ...2-JHP-SL	1.1	3-4	4-5	5-6
DGTR/L ...3-JHP-SL	1.6	5-6	6-7	7-8

Spare Parts

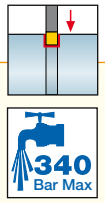
Designation	Clamp Screw	Hex Flag Key	Plug	Key
DGTR/L 12B-2D24-JHP-SL	SR M5-24145	HW 2.5/5	SR 5/16UNF TL360	HW 5/32"
DGTR/L 16B-2D35-JHP-SL	SR M5-24145	HW 2.5/5	SR 5/16UNF TL360	HW 5/32"
DGTR/L 20B-2D35-JHP-SL	SR M5-24145	HW 2.5/5	PLG 1/8BSP TL360	HW 5.0
DGTR/L 16B-3D35-JHP-SL	SR M5-24145	HW 2.5/5	SR 5/16UNF TL360	HW 5/32"
DGTR/L 20B-3D40-JHP-SL	SR M5-24145	HW 2.5/5	PLG 1/8BSP TL360	HW 5.0

DGPAD-JHP

Adapters with High Pressure Coolant Channels
for DO-GRIP Parting and Grooving Inserts



f=f1(shank)+f2(adapter)



Designation	W min	W max	D max	l2	f2	A	A2	l1	B1	h1
DGPAD 2R/L-D22-JHP	1.90	2.50	22.0	21.0	6.40	1.60	7.2	45.50	33.0	24.0
DGPAD 2R/L-D32-JHP	1.90	2.50	22.0	21.0	6.40	1.60	7.2	45.50	33.0	24.0
DGPAD 3R/L-D32-JHP	3.00	3.18	32.0	21.0	6.00	2.40	7.2	45.50	33.0	24.0

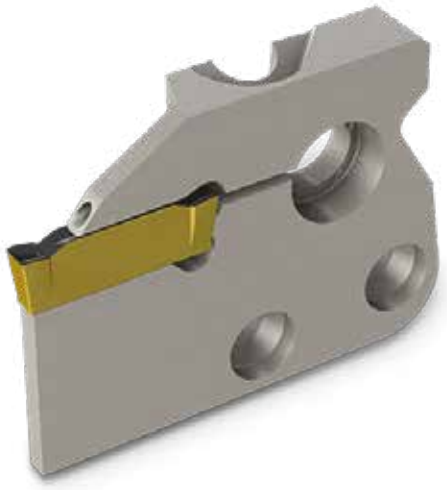
• For user guide and accessories see pages 4-5, 32, 48, 60-61

For inserts: DGN-LF/LFT • DGN-MF • DGN-P • DGN-UT/UA • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-P • DGR-WP • DGR-Z/ZS • DGR/L-C DGRC/LC-C • DGR/L-J/JS .

For holders, see pages: C#-MAHD-JHP (46) • C#-MAHPD-JHP (47) • MAHPR/L-JHP (44) • MAHR/L-JHP (43).

Flow Rate vs. Pressure

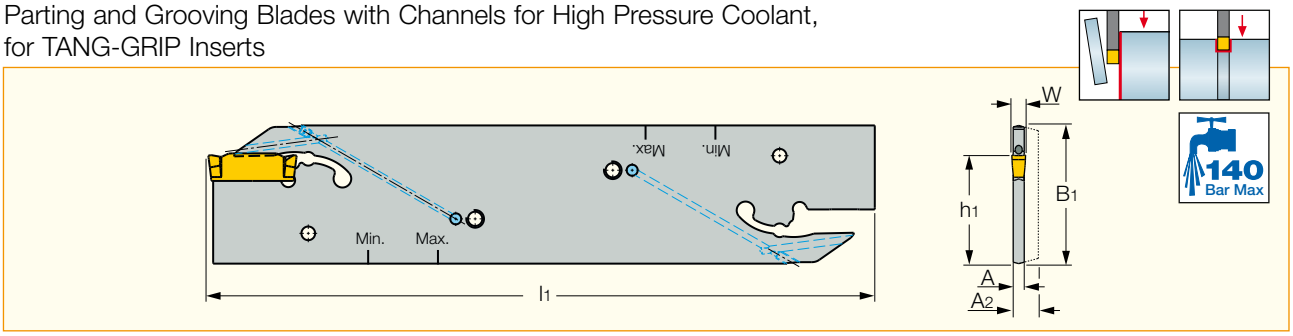
Designation	70 bar Flow Rate (liters/min)	100 bar Flow Rate (liters/min)	140 bar Flow Rate (liters/min)
DGPAD 2R/L-D22-JHP	5	6	7
DGPAD 2R/L-D32-JHP	5	6	7
DGPAD 3R/L-D32-JHP	8.5	10	12



Engineered for HIGH PRESSURE Economical TURNING Performance

DGFH-JHP

Parting and Grooving Blades with Channels for High Pressure Coolant, for TANG-GRIP Inserts



	Designation	B_1	W min	W max	A	A_2	l_1	h_1	D max
NEW	DGFH 32-2-JHP	32.0	1.90 (1)	2.50	1.72	2.5	150.00	24.8	39.0
NEW	DGFH 32-3-JHP	32.0	3.00 (1)	3.18	2.50	-	150.00	24.8	90.0
NEW	DGFH 32-4-JHP	32.0	4.00	4.00	3.40	-	150.00	24.8	90.0
NEW	DGFH 32-5-JHP	32.0	5.00	5.00	4.00	-	150.00	24.8	90.0
NEW	DGFH 32-6-JHP	32.0	6.00	6.35	5.20	-	150.00	24.8	90.0

• For user guide and accessories see pages 4-5, 32, 48, 60-61

(1) For DG. 1... insert, modify holder

For inserts: DGN-LF/LFT • DGN-MF • DGN-P • DGN-UT/UA • DGN-W • DGN-WP • DGN-Z • DGN/DGNC/DGNM-C • DGN/DGNM-J/JS/JT • DGR-P • DGR-WP • DGR-Z/ZS • DGR/L-C DGRC/LC-C • DGR/L-J/JS • GRIP • GRIP (full radius) .

For holders, see pages: TGTBU-JHP (58).

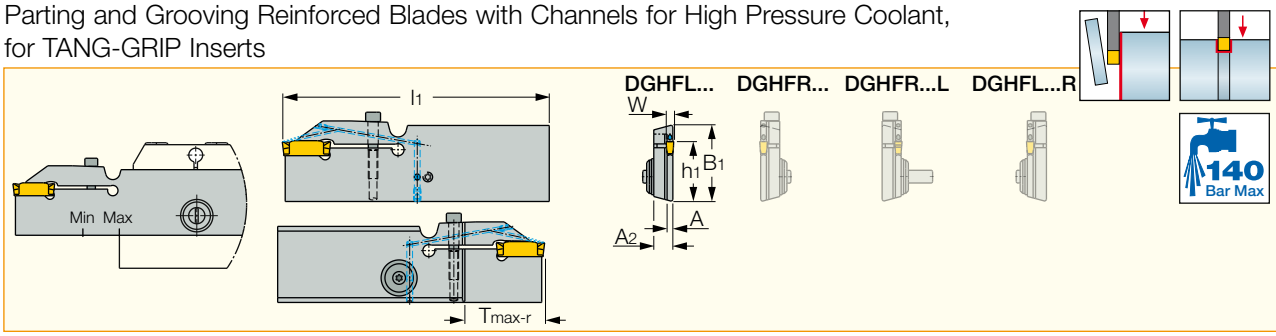
Spare Parts

Designation	Extractor	Sealing Screw
DGFH-JHP	EDG 33A*	SGC 340

* Optional, should be ordered separately

DGFHR/L-BC-JHP

Parting and Grooving Reinforced Blades with Channels for High Pressure Coolant, for TANG-GRIP Inserts



	Designation	B_1	W_{min} (1)	W_{max}	A_2	A	l_1	h_1	T_{max-r} (2)
NEW	DGFHR/L 32BC-3T33-JHP	32.0	3.00	3.18	7.9	2.40	111.00	24.8	33.00
NEW	DGFHL 32BC-3T33R-JHP	32.0	3.00	3.18	7.9	2.40	111.00	24.8	33.00
NEW	DGFHR 32BC-3T33L-JHP	32.0	3.00	3.18	7.9	2.40	111.00	24.8	33.00

• For user guide and accessories see pages 4-5, 32, 48, 60-61

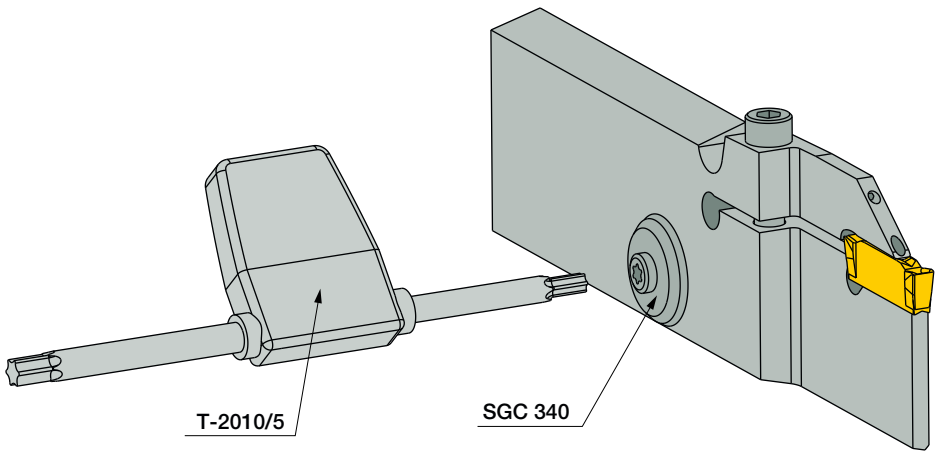
(1) For DG: 1.0 insert - modify holder. (2) The specified limit refers to the tool.

For inserts: DGN-MF • DGN-P • DGN-UT/UA • DGN-Z • DGN/DGNM-J/JS/JT • DGR-Z/ZS • DGR/L-C DGRC/LC-C • DGR/L-J/JS • GRIP .

For holders, see pages: TGTBU-JHP (58).

Spare Parts

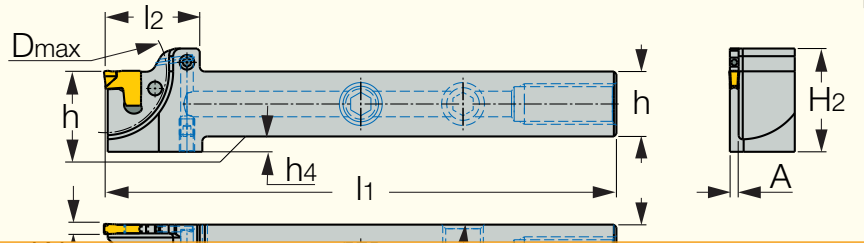
Designation	Screw	Screw 1	Sealing Screw	Key
DGFHR/L-BC-JHP	SR M2X3DIN913 45H	SR M3X4DIN913 45H	SGC 340	HW 3.0

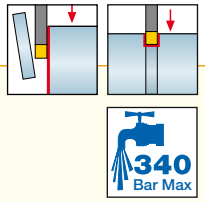


Engineered for HIGH PRESSURE Economical TURNING Performance

TGTR/L-JHP

Parting and Grooving Toolholders for TANG-GRIP Inserts,
with Channels for High Pressure Coolant





Left-hand shown

Designation	W min	W max	h	b	A	l1	H2	l2	h4	Th	D max	Insert
TGTR/L 1010-2JHP	1.80	2.50	10.0	10.0	1.72	100.00	19.5	18.5	5.0	UNF 5/16-24	24.0	TAG 2
TGTR/L 1212-2JHP	1.80	2.50	12.0	12.0	1.72	100.00	19.5	18.5	3.0	UNF 5/16-24	24.0	TAG 2
TGTR/L 1616-2JHP	1.80	2.50	16.0	16.0	1.72	120.00	21.5	25.5	-	UNF 5/16-24	35.0	TAG 2
TGTR/L 2012-2JHP	1.80	2.50	20.0	12.0	1.72	120.00	25.6	25.5	-	UNF 5/16-24	35.0	TAG 2
TGTR/L 1616-3JHP	2.80	3.50	16.0	16.0	2.50	120.00	24.5	25.5	3.0	UNF 5/16-24	35.0	TAG 3
TGTR/L 2020-3JHP	2.80	3.50	20.0	20.0	2.50	120.00	27.0	35.0	-	G 1/8-28	54.0	TAG 3
TGTR/L 2525-3JHP	2.80	3.50	25.0	25.0	2.50	150.00	32.5	35.0	-	G 1/8-28	56.0	TAG 3
TGTR/L 2020-4JHP	3.70	4.50	20.0	20.0	3.40	120.00	27.0	35.0	-	G 1/8-28	54.0	TAG 4
TGTR/L 2525-4JHP	3.70	4.50	25.0	25.0	3.40	150.00	32.5	35.0	-	G 1/8-28	56.0	TAG 4

• For user guide and accessories see pages 4-5, 32, 48, 60-61

(1) Use M5 G1/8 adapter.

Flow Rate vs. Pressure

Designation	70 bar Flow Rate (liters/min)	100 bar Flow Rate (liters/min)	140 bar Flow Rate (liters/min)
TGTR/L...-2JHP	2-4	4-6	6-8
TGTR/L...-3JHP	7-9	9-11	11-13

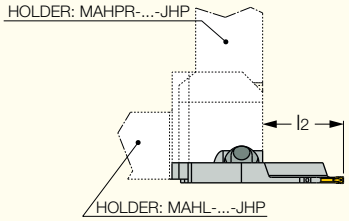
Spare Parts

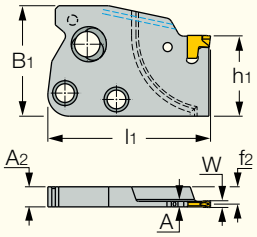
Designation	Extractor	Plug	Plug 1	Plug Key
TGTR/L 1010-2JHP	ETG 2-SH-T*	SR 5/16UNF*0.2"		HW 5/32"
TGTR/L 1212-2JHP	ETG 2-SH-T*	SR 5/16UNF TL360		HW 5/32"
TGTR/L 1616-2JHP	ETG 2*	SR 5/16UNF TL360		HW 5/32"
TGTR/L 2012-2JHP	ETG 2*	SR 5/16UNF TL360		HW 5/32"
TGTR/L 1616-3JHP	ETG 3-4-SH*	SR 5/16UNF TL360		HW 5/32"
TGTR/L 2020-3JHP	ETG 3-4-SH*		PLG 1/8BSP TL360	HW 5.0
TGTR/L 2525-3JHP	ETG 3-4-SH*	SR 5/16UNF TL360	PLG 1/8BSP TL360	
TGTR/L 2020-4JHP	ETG 3-4-SH*		PLG 1/8BSP TL360	HW 5.0
TGTR/L 2525-4JHP	ETG 3-4-SH*	SR 5/16UNF TL360	PLG 1/8BSP TL360	

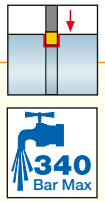
* Optional, should be ordered separately

TAGPAD-JHP

Adapters with High Pressure Coolant Channels for
TANG-GRIP Parting and Grooving Inserts







f=f1(shank)+f2(adapter)

Designation	W min	W max	D max	l_2	f_2	A	A_2	l_1	B_1	h_1
TAGPAD 2R/L-D42-JHP	1.80	2.40	42.0	24.0	5.18	1.65	6.0	48.40	33.0	24.0
TAGPAD 2R/L-D52-JHP	1.80	2.40	52.0	29.0	5.18	1.65	6.0	53.40	33.0	24.0
TAGPAD 3R/L-D42-JHP	2.80	3.50	42.0	24.0	4.80	2.40	6.0	48.40	33.0	24.0
TAGPAD 3R/L-D52-JHP	2.80	3.50	52.0	29.0	4.80	2.40	6.0	53.40	33.0	24.0

• For user guide and accessories see pages 4-5, 32, 45, 47, 60-61

For inserts: TAG N-A • TAG N-C/W/M • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS .

For holders, see pages: C#-MAHD-JHP (46) • C#-MAHPD-JHP (47) • MAHPR/L-JHP (44) • MAHR/L-JHP (43).

Flow Rate vs. Pressure

Designation	70 bar Flow Rate (liters/min)	100 bar Flow Rate (liters/min)	140 bar Flow Rate (liters/min)
TAGPAD 2R/L-D42-JHP	5	6	7
TAGPAD 2R/L-D52-JHP	5	6	7
TAGPAD 3R/L-D42-JHP	8.5	10	12
TAGPAD 3R/L-D52-JHP	8.5	10	12

Spare Parts

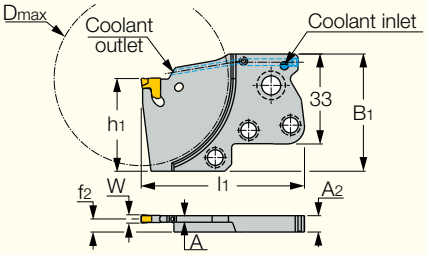
Designation	Extractor
TAGPAD 2R/L-D42-JHP	ETG 2*
TAGPAD 2R/L-D52-JHP	ETG 2*
TAGPAD 3R/L-D42-JHP	ETG 3-4-SH*
TAGPAD 3R/L-D52-JHP	ETG 3-4-SH*

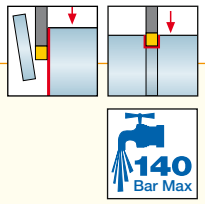
* Optional, should be ordered separately

Engineered for HIGH PRESSURE Economical TURNING Performance

TAGPAD-XL-JHP

Parting and Grooving Extra Long Adapters with Channels for High Pressure Coolant, for TANG-GRIP Inserts





	Designation	B1	W min(1)	W max	f2	A	A2	l1	h1	D max(2)
NEW	TAGPAD-XL-3R/L-D52-JHP	43.0	2.80	3.50	4.80	2.40	6.0	53.40	34.0	52.0
NEW	TAGPAD-XL-3R/L-D65-JHP	43.0	2.80	3.50	4.80	2.40	6.0	59.90	34.0	65.0
NEW	TAGPAD-XL-3R/L-D82-JHP	43.0	2.80	3.50	4.80	2.40	6.0	70.40	34.0	82.0

• For user guide and accessories see pages 4-5, 32, 45,47, 60-61

(1) For DG: 1.0 insert - modify holder. (2) The specified limit refers to the tool.

For inserts: TAG N-A • TAG N-C/W/M • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS .

For holders, see pages: MAHR/L-MG-XL-JHP (55).

Spare Parts

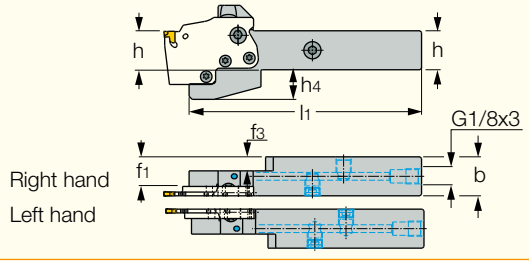
Designation	Plug	Extractor
TAGPAD-XL-JHP	SR M3X3 TL360	ETG 3-4-SH*

* Optional, should be ordered separately

JETHPLINE

MAHR/L-MG-XL-JHP

Holders with High Pressure Coolant Channels for MODULAR-GRIP Adapters



Left-hand shown • f=f1(shank)+f2(adapter)

	Designation	h	b	l1	h4	f1	f3
NEW	MAHR/L 20-MG-XL-JHP	20.0	20.0	149.10	24.0	14.0	4.00
NEW	MAHR/L 25-MG-XL-JHP	25.0	25.0	149.10	19.0	19.0	9.00

• For user guide and accessories see pages 4-5, 32, 48, 60-61

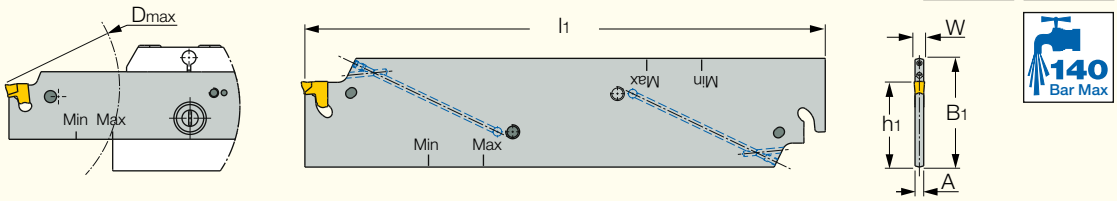
For tools, see pages: TAGPAD-XL-JHP (55).

Spare Parts

Designation	Plug	Screw
MAHR/L-MG-XL-JHP	PLG 1/8BSP TL360	SR M4X3DIN913 45H

TGFH-JHP

Parting and Grooving Blades for TANG-GRIP Inserts,
with Channels for High Pressure Coolant



Designation	B_1	W min	W max	A	l_1	h_1	D max	Insert
TGFH 26C-3-JHP	26.0	2.80	3.50	2.50	140.00	21.4	75.0	TAG 3
TGFH 32C-3-JHP	32.0	2.80	3.50	2.50	150.00	24.8	90.0	TAG 3
TGFH 26C-4-JHP	26.0	3.70	4.50	3.40	140.00	21.4	75.0	TAG 4
TGFH 32C-4-JHP	32.0	3.70	4.50	3.40	150.00	24.8	90.0	TAG 4
TGFH 32C-5-JHP	32.0	4.70	5.50	4.00	160.00	24.8	120.0	TAG 5
TGFH 32C-6-JHP	32.0	5.70	6.50	5.20	160.00	24.8	120.0	TAG 6

• For user guide and accessories see pages 4-5, 32, 48, 60-61

For holders, see pages: TGTBU-JHP (58).

Spare Parts

Designation	Sealing Screw	Extractor
TGFH 26C-3-JHP	SGC 340	ETG 3-4-SH*
TGFH 32C-3-JHP	SGC 340	ETG 3-4-SH*
TGFH 26C-4-JHP	SGC 340	ETG 3-4-SH*
TGFH 32C-4-JHP	SGC 340	ETG 3-4-SH*
TGFH 32C-5-JHP	SGC 340	ETG 5-7*
TGFH 32C-6-JHP	SGC 340	ETG 5-7*

* Optional, should be ordered separately

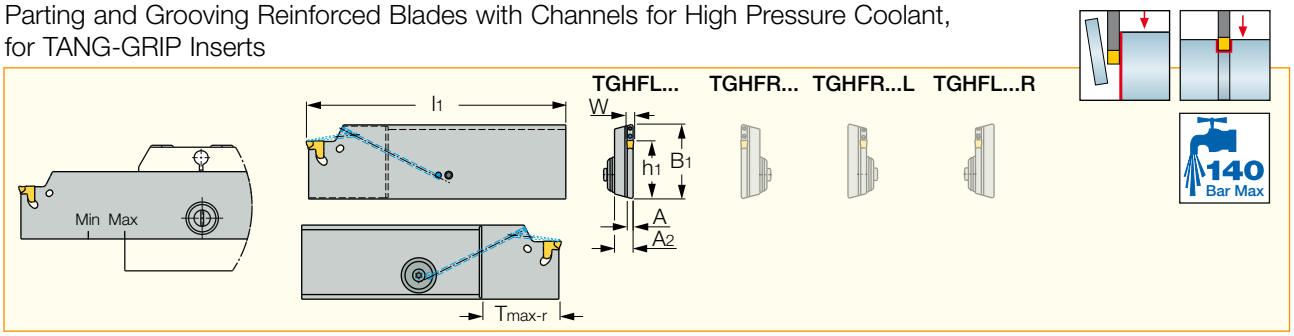
Flow Rate vs. Pressure

Designation	70 bar Flow Rate (liters/min)	100 bar Flow Rate (liters/min)	140 bar Flow Rate (liters/min)
TGFH-JHP	6-7	7-8	8-9

Engineered for HIGH PRESSURE Economical TURNING Performance

TGFHR/L-JHP

Parting and Grooving Reinforced Blades with Channels for High Pressure Coolant, for TANG-GRIP Inserts



	Designation	B_1	W_{min} (1)	W_{max}	A_2	A	l_1	h_1	T_{max-r} (2)
NEW	TGFHR/L 32C-3T33-JHP	32.0	2.80	3.50	7.9	2.50	110.50	24.8	33.00
NEW	TGFHL 32C-3T33R-JHP	32.0	2.80	3.50	7.9	2.50	110.50	24.8	33.00
NEW	TGFHR 32C-3T33L-JHP	32.0	2.80	3.50	7.9	2.50	110.50	24.8	33.00

• For user guide and accessories see pages 4-5, 32, 48, 60-61

(1) For DG: 1.0 insert - modify holder. (2) The specified limit refers to the tool.

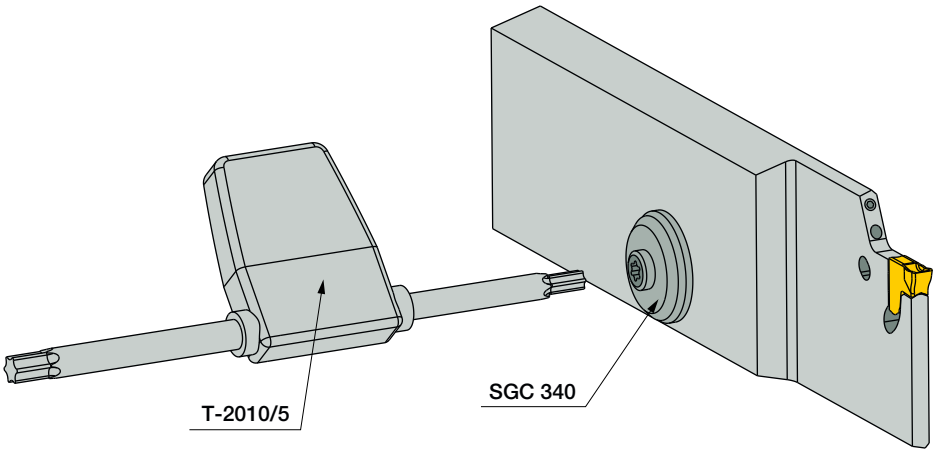
For inserts: TAG N-A • TAG N-C/W/M • TAG N-J/JS/JT • TAG N-LF • TAG N-MF • TAG N-UT • TAG R/L-C • TAG R/L-J/JS .

For holders, see pages: TGTBU-JHP (58).

Spare Parts

Designation	Extractor	Sealing Screw
TGFHR/L-JHP	ETG 3-4-SH*	SGC 340

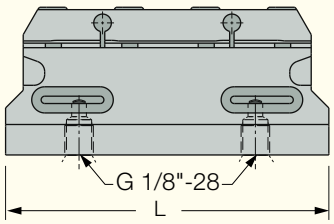
* Optional, should be ordered separately

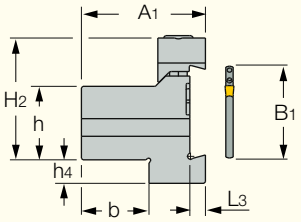


TGTBU-JHP

Tool Blocks for Parting and Grooving Blades for High Pressure Coolant

140 Bar Max





Choose blade by B1 dimension.

Designation	h	b	B_1	A_1	H_2	h_4	L_3	L
TGTBU 16-5G-JHP	16.0	16.9	26.0	35.60	29.9	13.1	4.10	86.00
TGTBU 20-5G-JHP	20.0	20.9	26.0	39.60	33.9	9.1	4.10	86.00
TGTBU 20-6G-JHP	20.0	19.0	32.0	39.20	36.4	15.0	5.30	100.00
TGTBU 25-5G-JHP	25.0	26.1	26.0	44.10	39.0	5.5	4.10	110.00
TGTBU 25-6G-JHP	25.0	23.0	32.0	43.20	41.4	8.0	5.30	110.00
TGTBU 32-6G-JHP	32.0	29.0	32.0	49.20	48.4	5.0	5.30	110.00

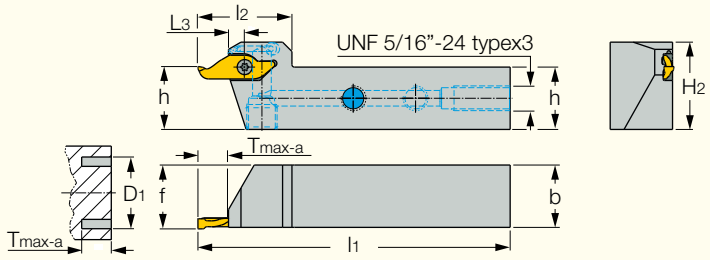
For tools, see pages: TGFH-JHP (56), DGFH-JHP (51), DGFHR/L-BC-JHP (52), TGFHR/L-JHP (57).

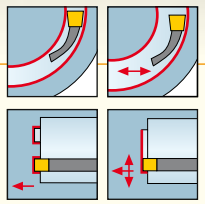
Spare Parts

Designation	Top Clamp	Screw	Key
TGTBU 16-5G-JHP	BKU 86	SR M6X16DIN912 12.9	HW 5.0
TGTBU 20-5G-JHP	BKU 86	SR M6X16DIN912 12.9	HW 5.0
TGTBU 20-6G-JHP	BKU 100	SR M6X16DIN912 12.9	HW 5.0
TGTBU 25-5G-JHP	BKU 105	SR M6X16DIN912 12.9	HW 5.0
TGTBU 25-6G-JHP	BKU 110	SR M6X16DIN912 12.9	HW 5.0
TGTBU 32-6G-JHP	BKU 110	SR M6X16DIN912 12.9	HW 5.0

MIN CUT
MINI FACE LINE

MFHR-JHP
Square Shank Tools for MIFR 10 Face Grooving Inserts





Designation	h	b	l1	l2	L3	Tmax-a	D1 min	H2	Th	Insert
MFHR 12C-10-JHP	12.0	12.0	100.00	27.0	5.20	9.00	10.0	20.0	UNF 5/16-24	MIFR 10
MFHR 16C-10-JHP	16.0	16.0	100.00	27.0	5.20	9.00	10.0	24.0	UNF 5/16-24	MIFR 10
MFHR 20C-10-JHP	20.0	20.0	100.00	30.0	5.20	9.00	10.0	28.0	UNF 5/16-24	MIFR 10

• For D1max, refer to insert data • For user guide and accessories see pages 4-5, 60-61

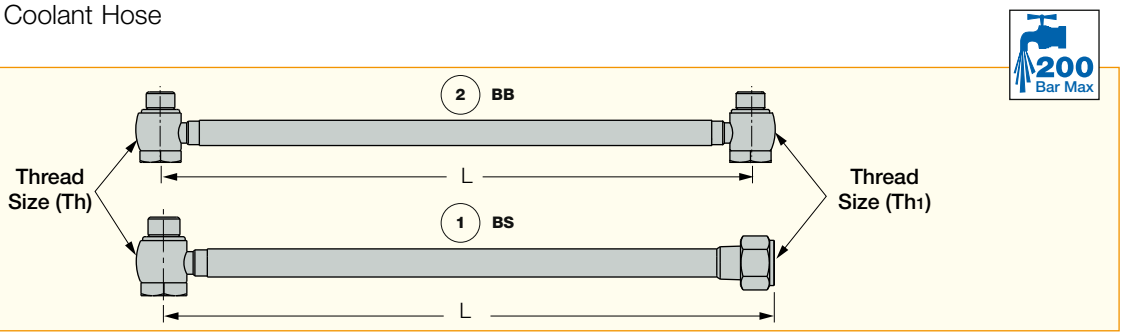
Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
MFHR 12C-10-JHP	3	5-9	9-11
MFHR 16C-10-JHP	3	7-9	9-11

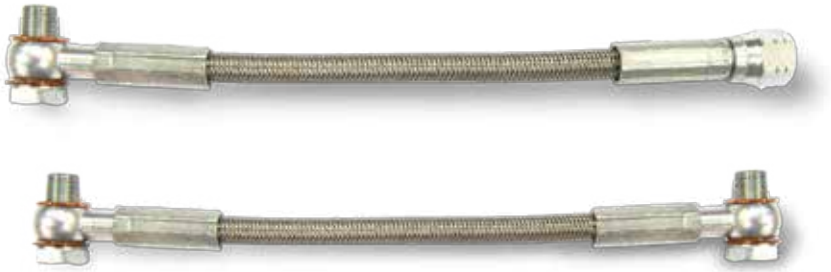
Spare Parts

Designation	Screw	Key	Plug
MFHR-JHP	SR 34-506	T-9/5	SR 5/16UNF TL360

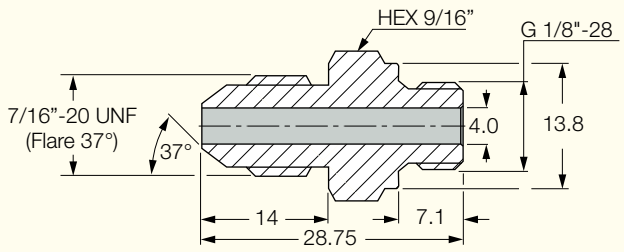
JHP HOSE
High Pressure Coolant Hose



Descrizione	L	Fig.	Th	Th1
JHP HOSE G1/8-7/16-200BS	200.00	1	G1/8"-28 BSPP	UNF7/16"-20FLARE 37°
JHP HOSE 5/16-G1/8-200BS	200.00	1	5/16"-24 UNF	G1/8"-28 BSPP
JHP HOSE 5/16-7/16-200BS	200.00	1	5/16"-24 UNF	UNF7/16"-20FLARE 37°
JHP HOSE G1/8-G1/8-200BB	200.00	2	G1/8"-28 BSPP	G1/8"-28 BSPP
JHP HOSE G1/8-7/16-250BS	250.00	1	G1/8"-28 BSPP	UNF7/16"-20FLARE 37°
JHP HOSE G1/8-G1/8-250BB	250.00	2	G1/8"-28 BSPP	G1/8"-28 BSPP



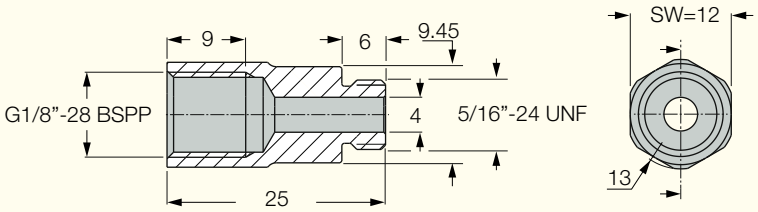
JHP NIPPLE
High Pressure Adaptation Nipple



Designation	L
JHP NIPPLE G1/8"-7/16"UNF	28.75

JHP CONNECTOR
High Pressure Connector

340 Bar Max



Designation	L
JHP CONECTOR 5/16"-G1/8"	25.00

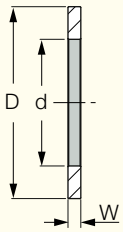
Spare Parts

Designation	Seal
JHP CONECTOR 5/16”-G1/8”	JHP COPPER SEAL 5/16"-2.5

JETHPLINE

JHP COPPER SEAL
High Pressure Copper Seal

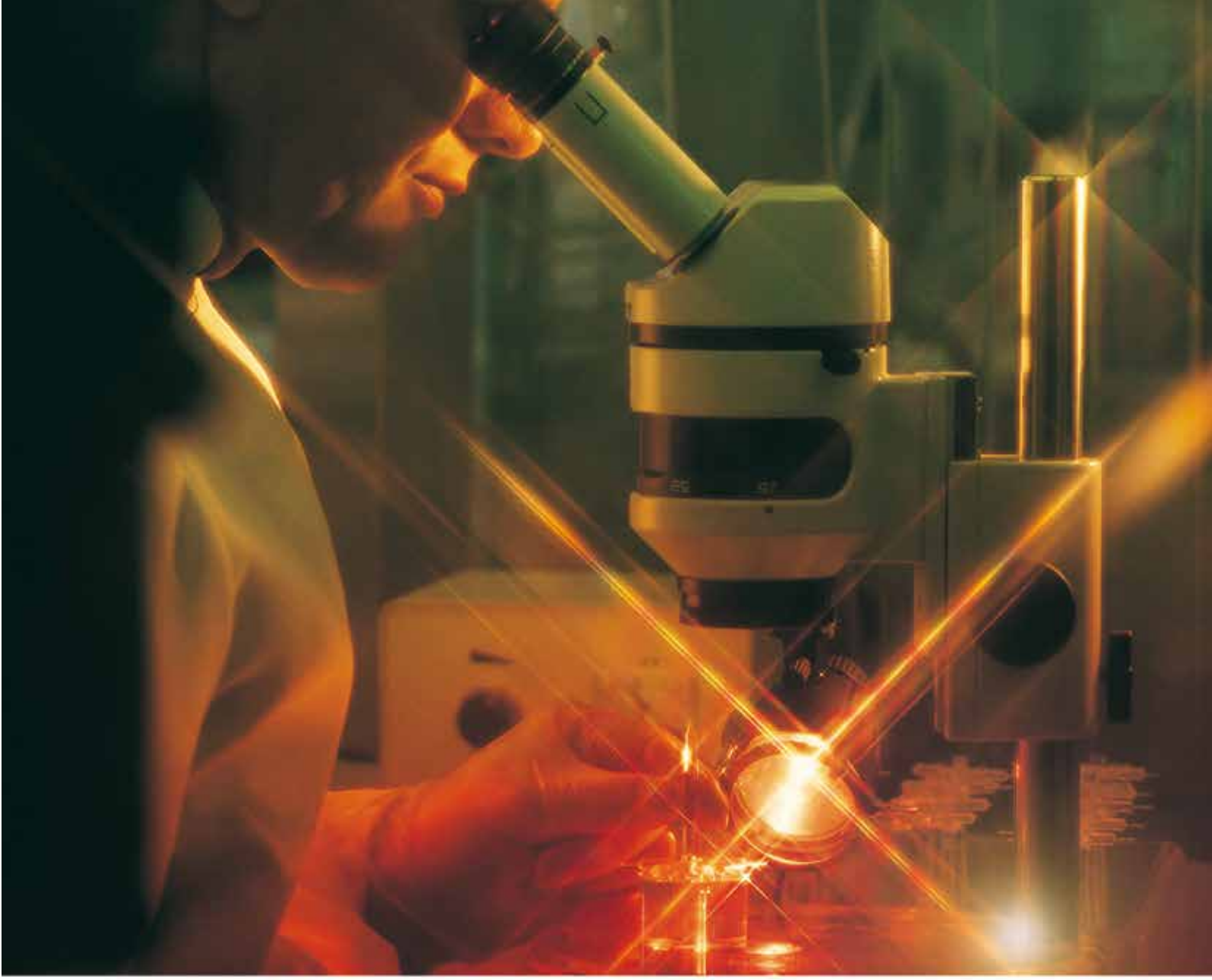
340 Bar Max



Designation	D	d	W
JHP COPPER SEAL 5/16”-2.5	9.4	8.00	2.50
JHP COPPER SEAL 5/16"	11.00	8.00	1.00
JHP COPPER SEAL 1/8"	15.00	10.00	1.00

Aero space
Industry

Special Ultra High Pressure Tools for the Aerospace Industry



Quality Standard

ISCAR has been certified by the prestigious Standards Institution, as being in full compliance with Quality and Environmental & Occupational Health and Safety Management Standards -
AS 9100 Rev C
ISO 9001:2008
ISO 14001:2004
OHSAS 18001:2007

In addition, completed products are inspected before shipping, to ensure delivery of the finest quality goods. Quality control facilities include the metallurgical laboratory, raw metal testing, an online testing procedure and a machining center for tool performance testing and final product inspection. Only the finest products are packaged for entry into ISCAR's inventory.

THE STANDARDS INSTITUTION OF ISRAEL THE STANDARDS INSTITUTION OF ISRAEL THE STANDARDS INSTITUTION OF ISRAEL THE STANDARDS INSTITUTION OF ISRAEL

Israel Headquarters Tel +972 (0)4 997 0311 www.iscar.com **Argentina** Tel +54 114 912 2200 www.iscararg.com.ar **Australia** Tel +61 (0) 2 8848 3500 www.iscar.com.au **Austria** Tel +43 7252 71200-0 www.iscar.at **Belarus** Tel +375 17 506 33 31/65 www.iscar.by **Belgium** Tel +32 (0)2 464 2020 www.iscar.be **Bosnia** Tel +387 32 201 100 **Brazil** Tel +55 19 3826 7100 www.iscar.com.br **Bulgaria** Tel +359 431 62557 www.iscar.bg **Canada** Tel +1 905 829 9000 www.iscar.ca **Chile**Tel +56 2 695 1700 logistica@sande.cl **China** Tel +86 10 6561 0261/2/3 www.iscar.com.cn **Colombia** Tel +57 (1) 4102800 **Croatia** Tel +385 (0)1 33 23 301 www.iscar.hr **Cyprus** Tel +357 (0) 2 336660/5498 **Czech Republic** Tel +420 377 420 625 www.iscar.cz **Denmark** Tel + 45 70 11 22 44 www.iscar.dk **Estonia** Tel +372 6775 671 **Finland** Tel +358-(0)9-439 1420 www.iscar.fi **France** Tel +33 (0)1 30 12 92 92 www.iscar.fr **Germany** Tel +49 (0)72 43 9908-0 www.iscar.de **Greece** INTERNATIONAL TOOLS: Tel +30 210 346 0133, VIMA: Tel +30 2310 517-117 / 544-521 **Hong Kong** Tel +85-2-23054838 **Hungary** Tel +36 28 887 700 www.iscar.hu **India** Tel +91 22 67051039/3371 **Indonesia** Tel. +62-21-29206242/44/45/59 **Ireland** Tel +353 (0) 1 286 2466 **Italy** Tel +39 02 93 528 1www.iscaritalia.it **Japan** Tel +81 6 6835 5471 www.iscar.co.jp **Latvia** Tel +371 6 733 11 54 **Lithuania** Tel +370 37 407 230 **Macedonia** Tel +389 2 309 02 52 **Mexico** Tel +52 (442)214 5505 www.iscar.com.mx **The Netherlands** Tel +31 (0)182 535523 www.iscar.nl **New Zealand** Tel +64 9 5731280 www.iscar.co.nz **Norway** Tel +47 32277750 **Philippines** Tel +63 2631 1775 **Poland** Tel +48 32 735 7700 www.iscar.pl **Portugal** Tel +351 256 579950 www.iscarportugal.pt **Romania** Tel +40 (0)312 286 614 **Russia Moscow** Tel +7 495 660 91 25/31 **Chelyabinsk** Tel +7 351 2450432 www.iscar.ru **Serbia** Tel +381 11 314 90 38 **Singapore** Tel +65 6566 7668 **Slovakia** Tel +421 (0)41 5074301 www.iscar.sk **Slovenia** Tel +386 1 580 92 30 www.iscar.si **South Africa** Tel +27 11 997 2700 www.iscar.co.za **South Korea** Tel +82 53 760 7590 www.iscarkorea.co.kr **Spain** Tel +34 93 594 6484 www.iscarib.es **Sweden** Tel +46 (0)18 66 90 60 www.iscar.se **Switzerland** Tel +41 (0)52 728 0850 www.iscar.ch **Taiwan** Tel +886 (0)4-24731573 www.iscar.org.tw **Thailand** Tel +66 (2)7136633-8 www.iscarthailand.com **Turkey** Tel +90 (262)751 04 84 (Pbx) www.iscar.com.tr **Ukraine** Tel +38 (044)503-07-08 www.iscar.com.ua **United Kingdom** Tel +44 (0)121 422 8585 www.iscar.co.uk **U.S.A.** Tel +1 817 258 3200 www.iscarmetals.com **Venezuela** Tel +58 2 632 8211/633 4657 **Vietnam** Tel +84 8 38 123 519/20 www.iscarvn.com

08/2014

7861913 G

Your Tool Advisor Genius

ITA recommends the optimal tool based on application parameters and your machine power. 3 tool options, 25 alternatives, cutting data, power consumption, cutting time, metal removal rates, engineering support and more.

Dansk
English
Français
Deutsch
Suomi
Italiano
日本語
한국어
Nederlands
Português
Русский
Svenska
Español-España
Tiếng Việt
中文
Български език
Српски
Magyar
Hrvatski
Español-México
Norsk
Polski
Românește
Slovenščina
Türkçe
Slovenčina
Čeština

Available for Windows and MAC operating systems, including iPhones and iPads.

Follow us on

Member IMC Group

www.iscar.com