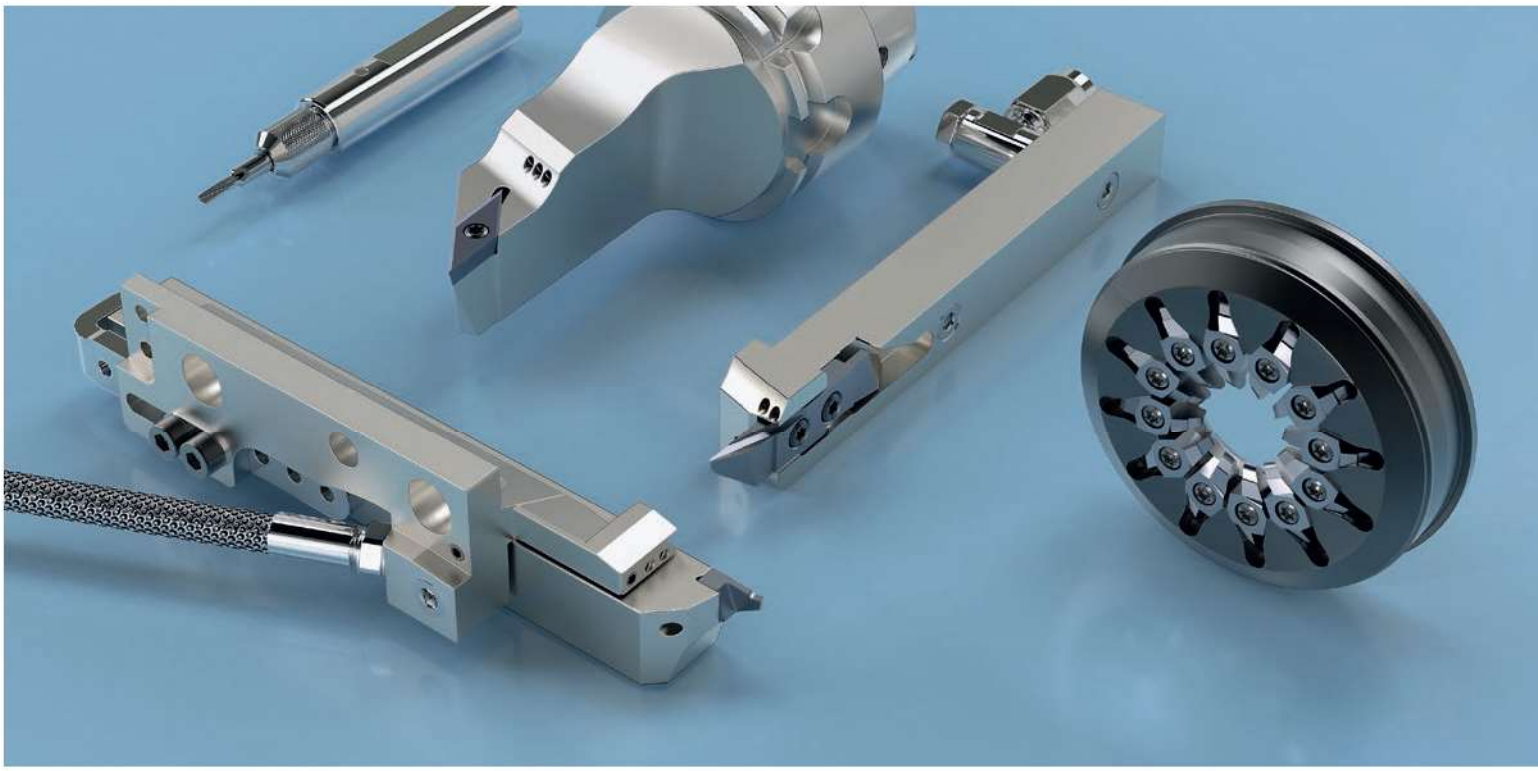
UTILIS
multidec®
swiss type tools

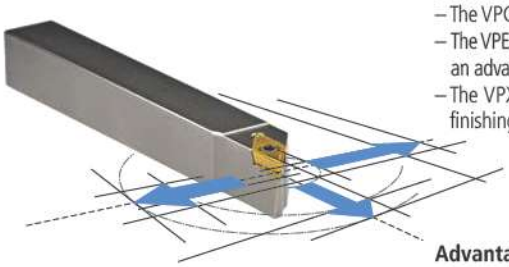
GENERAL CATALOG 2020/21



PRECISION TOOLS
FOR SMALL PART MANUFACTURING AND MICRO-CUTTING

future since 1915

UTILIS®
Tooling for High Technology



The "TOP" system with drag-cut permits an increase of the feed rate of up to 100 % compared to conventional ISO inserts.
– The VPGT 1003… F provides a sharp cutting edge for semi-finishing, finishing and micro-finishing.
– The VPET 1003… F provides a sharp cutting edge and the tolerance of its insert height is more precise. This is an advantage as the height does not have to be reset when changing the insert.
– The VPXT 1003… E is a directly pressed insert with rounded cutting edge for roughing and semi-finishing.

Advantages:
– Front turning, back turning and facing with one insert
– Carbide grades and coatings for steel, stainless steel and superalloys
– Cutting edge radius from 0 to 0.35 mm available as standard
– Heat-treated holders and boring bars
– Reinforced "V" type holders for front turning with high depths of cut

"IC" tool holder with integrated cooling

Cost-efficient processing of modern materials increasingly requires accurate control of the coolant at the cutting edge. Conveying the coolant as close as possible to the cutting edge is often a difficult task in the machine rooms of Swiss type turning lathes.
The multidec®-IC program offers a wide range of holders with integrated cooling. Because of the high precision and pressure, it is possible to discharge the chip quickly and safely from the cutting edge and the workpiece, which protects the cutting edge of the insert. This means significantly longer tool life as well as very reliable serial production.

Advantages:
– All holders feature five possible connectors for the coolant supply
– Constant coolant discharge means low build-up at front near the holder
– With or without high pressure, the coolant medium always hits the cutting edge precisely

"TWIN" holder with and without integrated coolant supply

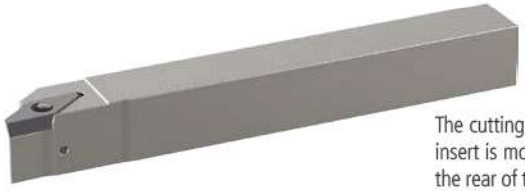
The "TWIN" range allows you to work with two inserts on the same holder.
Different combinations are possible, and provide the user with a high degree of flexibility. Holders are available with shank cross-sections of 8 to 20 mm, with and without internal cooling.

Advantages:
– Twice the number of tools on the machine
– Two different turning operations are possible with a single tool holder
– All holders with an integrated coolant supply have five connecting options

"Y-AXIS" holder with and without integrated coolant supply

Y-AXIS holders solve the chip control problems that can occur when cutting long-chip materials. With the Y-AXIS holder, the cutting edge is offset by 90° compared to the standard holder, whereby the chips fall in the bed of the machine. This prevents troublesome tumbling and flowing chips that can become caught on the cutting edge and damage it.

Benefits:
– Suitable for long chipping materials
– The problem of chip control is solved
– Holders with internal cooling
– All holders feature five possible connectors for the coolant supply



"FC" holder with quick cutting edge change system (fast change)

The cutting edge can be changed without unclamping the holder using the "FC" holder. The indexable insert is mounted using a specially developed knee lever which is operated using a clamping screw on the rear of the holder.

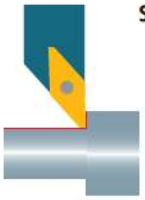
Advantages:
– Quick indexable insert change directly in the machine
– Holder with and without integrated coolant supply

Application OD turning

multidec®-TOP

Front turning

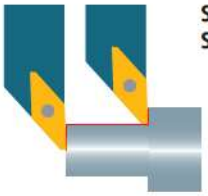
Holders 🗋311



SVAP… (90°)

Turning and facing

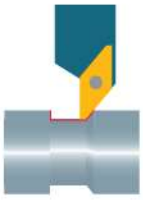
Holders 🗋312/314



SVJP… (93°)
SVJP… V (93°)

Back turning

Holders 🗋320



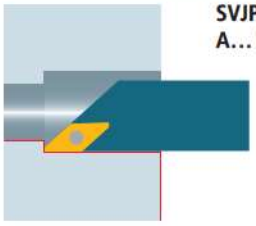
SVXP… (91°)

Application ID turning

multidec®-TOP

Turning and facing

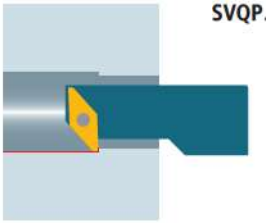
Holders 🗋327/328



SVJP… (92°)
A… SVJP… (92°)

Back turning

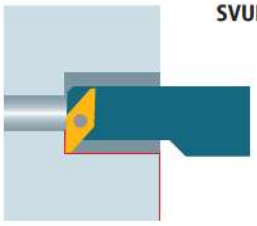
Holders 🗋329



SVQP… (92°)

Turning and facing

Holders 🗋330



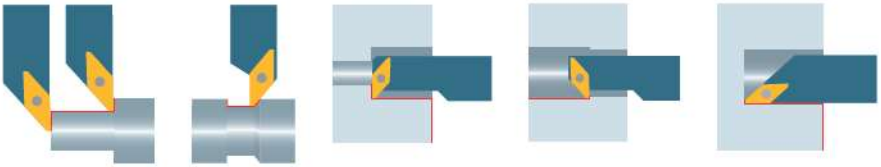
SVUP… (92°)

Inserts 🗋307

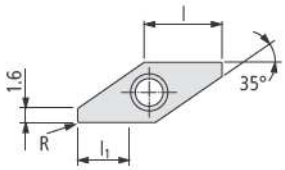
All illustrations show right hand design. Left hand design is also available.

Inserts (Carbide)

multidec®-TOP



VPET … -TOP*



β: 12°
s: ±0.025
C: <0.002

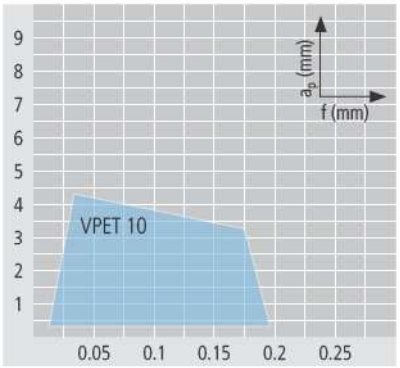
Order designation	Carbide													Cermet			Diamond			Dimensions				Holder
																								🗋311…
	–	–	●	●	○	●	●	●	○	○	●	●	○	●	●	●	–	–	–					
	–	●	●	–	○	●	●	○	○	●	●	●	●	○	●	○	–	–	–					
	○	●	●	–	○	●	●	–	○	●	●	–	–	–	–	–	–	–	–					
	●	○	–	–	●	○	–	–	○	○	–	–	○	–	–	–	●	●	●					
	–	–	●	–	–	–	○	–	–	–	–	–	–	–	–	–	–	–	–					
	UHM 10	UHM 10 HX	UHM 10 TX+	UHM 10 MZ	UHM 20	UHM 20 HPX	UHM 20 TX+	UHM 20 MZ	UHM 30	UHM 30 HX	UHM 30 TX+	UHM 30 MZ	UHM 30 SX	UCM 10	UCM 10 HX	UCM 10 MZ	UCVD 08	UPCD 15	UPCD 20	l	R	l_1		
PREMIUM-LINE																								
L VPET 1003ZZ FL -TOP …	■	■	■		■	■	■		■	■			■							8.9	0	4.5		SV… …
L VPET 1003008 FL -TOP …	■	■	■		■	■	■		■	■			■							8.9	0.08	4.5		SV… …
L VPET 1003015 FL - TOP …	■	■	■		■	■	■		■	■			■							8.9	0.15	4.5		SV… …
R VPET 1003ZZ FR -TOP …	■	■	■		■	■	■		■	■			■							8.9	0	4.5		SV… …
R VPET 1003005 FR -TOP …									■	■										8.9	0.05	4.5		SV… …
R VPET 1003008 FR -TOP …	■	■	■		■	■	■		■	■			■							8.9	0.08	4.5		SV… …
R VPET 1003015 FR -TOP …	■	■	■		■	■	■		■	■			■							8.9	0.15	4.5		SV… …

* Description TOP ..... 🗋13

Application range of chip breaker

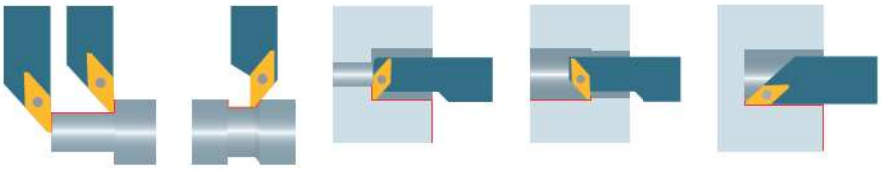
multidec®-TOP

Properties:
- polished rake and ground clearance
- sharp cutting edge "F"
- submicrograin carbide, high toughness
- TOP system, for a better surface finish
- closer tolerance "E"

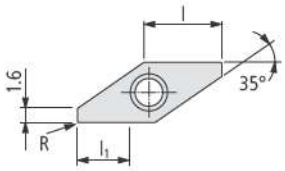


Optimal chip breaking

Application:
- finishing for 20–100 % higher feed rates compair to the standard
- chip breaker for general application
- stainless steel, alloyed steel and super alloy



VPGT … -TOP*



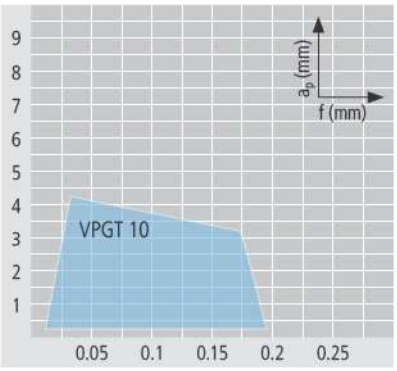
β: 12°
s: ±0.13
C: <0.002

Order designation	Carbide													Cermet			Diamond			Dimensions				Holder
																								🗋311…
	–	–	●	●	○	●	●	●	○	○	●	●	○	●	●	●	–	–	–					
	–	●	●	–	○	●	●	○	○	●	●	●	●	○	●	○	–	–	–					
	○	●	●	–	○	●	●	–	○	●	●	–	–	–	–	–	–	–	–					
	●	○	–	–	●	○	–	–	○	○	–	–	○	–	–	–	●	●	●					
	–	–	●	–	–	–	○	–	–	–	–	–	–	–	–	–	–	–	–					
	UHM 10	UHM 10 HX	UHM 10 TX+	UHM 10 MZ	UHM 20	UHM 20 HPX	UHM 20 TX+	UHM 20 MZ	UHM 30	UHM 30 HX	UHM 30 TX+	UHM 30 MZ	UHM 30 SX	UCM 10	UCM 10 HX	UCM 10 MZ	UCVD 08	UPCD 15	UPCD 20	l	R	l_1		
STANDARD-LINE																								
L	VPGT 1003ZZ FL -TOP …	■	■	■		■	■	■		■	■			■						8.9	0	4.5		SV… …
L	VPGT 1003008 FL -TOP …	■	■	■		■	■	■		■	■			■						8.9	0.08	4.5		SV… …
L	VPGT 1003015 FL -TOP …	■	■	■		■	■	■		■	■			■						8.9	0.15	4.5		SV… …
R	VPGT 1003ZZ FR -TOP …	■	■	■		■	■	■		■	■			■						8.9	0	4.5		SV… …
R	VPGT 1003005 FR -TOP …									■	■									8.9	0.05	4.5		SV… …
R	VPGT 1003008 FR -TOP …	■	■	■		■	■	■		■	■			■						8.9	0.08	4.5		SV… …
R	VPGT 1003015 FR -TOP …	■	■	■		■	■	■		■	■			■						8.9	0.15	4.5		SV… …

* Description TOP ..... 🗋13

Application range of chip breaker

Properties:
- polished rake and ground clearance
- sharp cutting edge "F"
- submicrograin carbide, high toughness
- TOP system, for a better surface finish

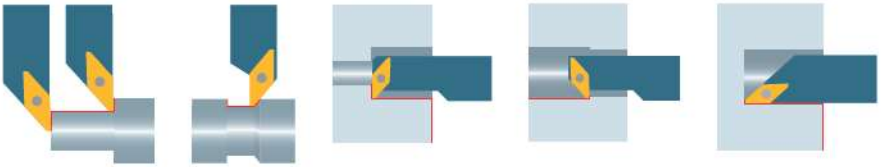


Optimal chip breaking

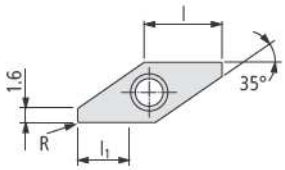
Application:
- finishing for 20–100 % higher feed rates compair to the standard
- chip breaker for general application
- stainless steel, alloyed steel and super alloy

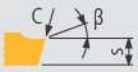
Inserts (Carbide)

multidec®-TOP



VPXT … -TOP*





β: 12°
s: ±0.1
C: <0.02

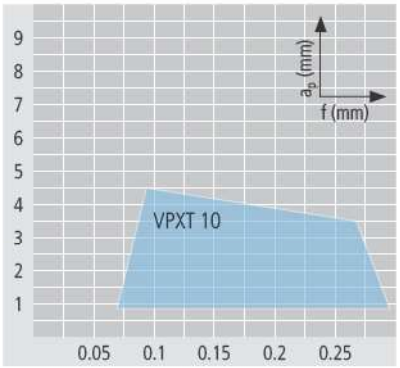
Order designation		Carbide													Cermet			Diamond			Dimensions				Holder
																									311…
		–	–	●	●	○	●	●	●	○	○	●	●	○	●	●	●	–	–	–					
		–	●	●	–	○	●	●	○	○	●	●	●	●	○	●	○	–	–	–					
		○	●	●	–	○	●	●	–	○	●	●	–	–	–	–	–	–	–	–					
		●	○	–	–	●	○	–	–	○	○	–	–	○	–	–	–	●	●	●					
		–	–	●	–	–	–	○	–	–	–	–	–	–	–	–	–	–	–	–					
		UHM 10	UHM 10 HX	UHM 10 TX+	UHM 10 MZ	UHM 20	UHM 20 HPX	UHM 20 TX+	UHM 20 MZ	UHM 30	UHM 30 HX	UHM 30 TX+	UHM 30 MZ	UHM 30 SX	UCM 10	UCM 10 HX	UCM 10 MZ	UCVD 08	UPCD 15	UPCD 20	l	R	l_1		
VALUE-LINE																									
L	VPXT 1003015 EL -TOP …						■														8.9	0.15	4.5		SV… …
L	VPXT 1003035 EL -TOP …						■														8.9	0.35	4.5		SV… …
R	VPXT 1003015 ER -TOP …						■														8.9	0.15	4.5		SV… …
R	VPXT 1003035 ER -TOP …						■														8.9	0.35	4.5		SV… …

* Description TOP 13

Application range of chip breaker

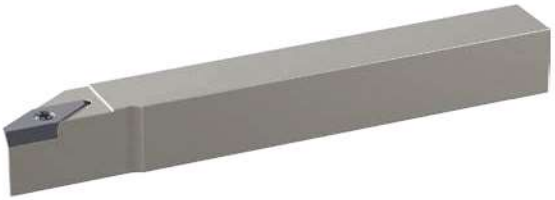
multidec®-TOP

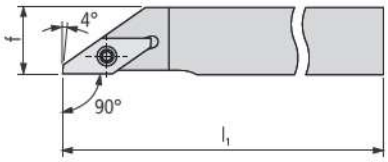
Properties:
- high precision sintered insert
- rounded cutting edge "E"
- submicrograin carbide, high toughness and hardnes
- TOP system, for a better surface finish
- best performance-cost ratio

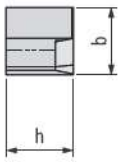


Optimal chip breaking

Application:
- finishing for 20–100 % higher feed rates compair to the standard
- chip breaker for general application
- alloyed steel, stainless steel and super alloy







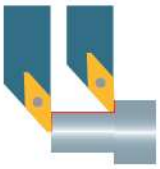
SVAP… (90°)

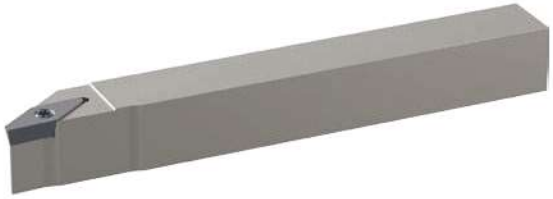
Order designation L		Order designation R		Dimensions h	b	l_1		f				Inserts 🗋307…
STANDARD-LINE												
SVAPL 0707 H10	■	SVAPR 0707 H10	■	7	7	100		7				VP..1003..
SVAPL 0708 H10	■	SVAPR 0708 H10	■	7	8	100		8				VP..1003..
SVAPL 0808 F10	■	SVAPR 0808 F10	■	8	8	80		8				VP..1003..
SVAPL 0808 H10	■	SVAPR 0808 H10	■	8	8	100		8				VP..1003..
SVAPL 1010 F10	■	SVAPR 1010 F10	■	10	10	80		10				VP..1003..
SVAPL 1010 H10	■	SVAPR 1010 H10	■	10	10	100		10				VP..1003..
SVAPL 1212 H10	■	SVAPR 1212 H10	■	12	12	100		12				VP..1003..

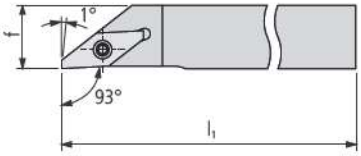
SVAP… (90°) INCH

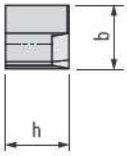
Order designation L		Order designation R		Dimensions h	b	l_1		f				Inserts 🗋307…
STANDARD-LINE												
SVAPL 3/8" F10	■	SVAPR 3/8" F10	■	9.525	9.525	80		9.525				VP..1003..
SVAPL 3/8" H10	■	SVAPR 3/8" H10	■	9.525	9.525	100		9.525				VP..1003..
SVAPL 1/2" H10	■	SVAPR 1/2" H10	■	12.7	12.7	100		12.7				VP..1003..

Legend ..... 🗋8…









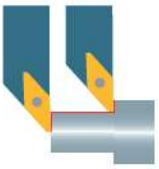
SVJP… (93°)

Order designation L		Order designation R		Dimensions h	b	l_1		f				Inserts ⊡307…
STANDARD-LINE												
SVJPL 0708 H10	■	SVJPR 0708 H10	■	7	8	100		8				VP..1003..
SVJPL 0808 F10	■	SVJPR 0808 F10	■	8	8	80		8				VP..1003..
SVJPL 0808 H10	■	SVJPR 0808 H10	■	8	8	100		8				VP..1003..
SVJPL 1010 F10	■	SVJPR 1010 F10	■	10	10	80		10				VP..1003..
SVJPL 1010 H10	■	SVJPR 1010 H10	■	10	10	100		10				VP..1003..
SVJPL 1212 H10	■	SVJPR 1212 H10	■	12	12	100		12				VP..1003..
SVJPL 1616 K10	■	SVJPR 1616 K10	■	16	16	125		16				VP..1003..
SVJPL 2020 K10	■	SVJPR 2020 K10	■	20	20	125		20				VP..1003..

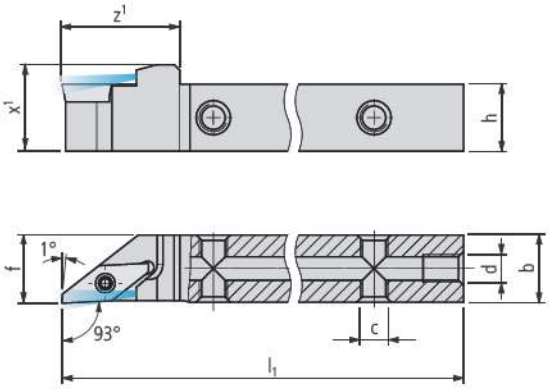
SVJP… (93°) INCH

Order designation L		Order designation R		Dimensions h	b	l_1		f				Inserts ⊡307…
STANDARD-LINE												
SVJPL 3/8" F10	■	SVJPR 3/8" F10	■	9.525	9.525	80		9.525				VP..1003..
SVJPL 3/8" H10	■	SVJPR 3/8" H10	■	9.525	9.525	100		9.525				VP..1003..
SVJPL 1/2" H10	■	SVJPR 1/2" H10	■	12.7	12.7	100		12.7				VP..1003..
SVJPL 5/8" K10	■	SVJPR 5/8" K10	■	15.875	15.875	125		15.875				VP..1003..
SVJPL 3/4" K10	■	SVJPR 3/4" K10	■	19.05	19.05	125		19.05				VP..1003..

Legend ⊡8…



With internal cooling



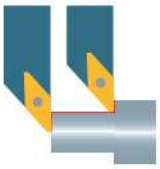
SVJP… IC (93°)

Order designation				Dimensions								Inserts
L		R		h	b	l_1	z^1	x^1	c	d	f	307…
PREMIUM-LINE												
SVJPL 0810 H10 IC	■	SVJPR 0810 H10 IC	■	8	10	100	21	11.5	M5	M5	10	VP..1003..
SVJPL 1010 H10 IC	■	SVJPR 1010 H10 IC	■	10	10	100	21	13.5	M5	M5	10	VP..1003..
SVJPL 1212 H10 IC	■	SVJPR 1212 H10 IC	■	12	12	100	21	15.5	M5	M5	12	VP..1003..
SVJPL 1616 K10 IC	■	SVJPR 1616 K10 IC	■	16	16	125	21	19.5	M5	G⅛"	16	VP..1003..
SVJPL 2020 K10 IC	■	SVJPR 2020 K10 IC	■	20	20	125	21	23.5	M5	G⅛"	20	VP..1003..

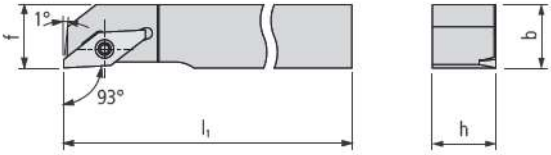
SVJP… IC (93°) INCH

Order designation				Dimensions								Inserts
L		R		h	b	l_1	z^1	x^1	c	d	f	307…
PREMIUM-LINE												
SVJPL 3/8" H10 IC	■	SVJPR 3/8" H10 IC	■	9.525	9.525	100	21	13	M5	M5	9.525	VP..1003..
SVJPL 1/2" H10 IC	■	SVJPR 1/2" H10 IC	■	12.7	12.7	100	21	16.2	M5	M5	12.7	VP..1003..
SVJPL 5/8" K10 IC	■	SVJPR 5/8" K10 IC	■	15.875	15.875	125	21	19.4	M5	G⅛"	15.875	VP..1003..
SVJPL 3/4" K10 IC	■	SVJPR 3/4" K10 IC	■	19.05	19.05	125	21	22.6	M5	G⅛"	19.05	VP..1003..

Scope of delivery: Holder without coolant connector
Coolant system ..... 619…



Strenghten type V



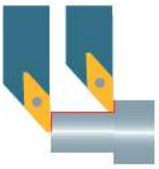
SVJP… V (93°)

Order designation L		Order designation R		Dimensions h	b	l_1		f				Inserts ⊡307…
STANDARD-LINE												
SVJPL 0810 F10 V	■	SVJPR 0810 F10 V	■	8	10	80		10				VP..1003..
SVJPL 0810 H10 V	■	SVJPR 0810 H10 V	■	8	10	100		10				VP..1003..
SVJPL 1010 F10 V	■	SVJPR 1010 F10 V	■	10	10	80		10				VP..1003..
SVJPL 1010 H10 V	■	SVJPR 1010 H10 V	■	10	10	100		10				VP..1003..
SVJPL 1212 H10 V	■	SVJPR 1212 H10 V	■	12	12	100		12				VP..1003..
SVJPL 1616 K10 V	■	SVJPR 1616 K10 V	■	16	16	125		16				VP..1003..
SVJPL 2020 K10 V	■	SVJPR 2020 K10 V	■	20	20	125		20				VP..1003..

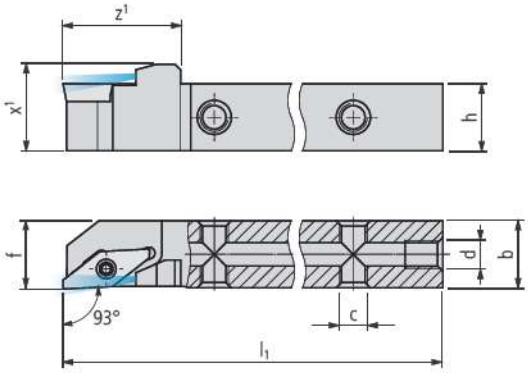
SVJP… V (93°) INCH

Order designation L		Order designation R		Dimensions h	b	l_1		f				Inserts ⊡307…
STANDARD-LINE												
SVJPL 3/8" F10 V	■	SVJPR 3/8" F10 V	■	9.525	9.525	80		9.525				VP..1003..
SVJPL 3/8" H10 V	■	SVJPR 3/8" H10 V	■	9.525	9.525	100		9.525				VP..1003..
SVJPL 1/2" H10 V	■	SVJPR 1/2" H10 V	■	12.7	12.7	100		12.7				VP..1003..
SVJPL 5/8" K10 V	■	SVJPL 5/8" K10 V	■	15.875	15.875	125		15.875				VP..1003..
SVJPL 3/4" K10 V	■	SVJPL 3/4" K10 V	■	19.05	19.05	125		19.05				VP..1003..

Legend ⊡8…



Strenghten type V with internal cooling



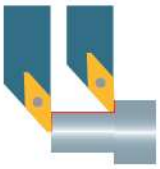
SVJP… V IC (93°)

Order designation				Dimensions								Inserts
L		R		h	b	l_1	z^1	x^1	c	d	f	307…
PREMIUM-LINE												
SVJPL 0810 H10 V IC	■	SVJPR 0810 H10 V IC	■	8	10	100	21	11.5	M5	M5	10	VP..1003..
SVJPL 1010 H10 V IC	■	SVJPR 1010 H10 V IC	■	10	10	100	21	13.5	M5	M5	10	VP..1003..
SVJPL 1212 H10 V IC	■	SVJPR 1212 H10 V IC	■	12	12	100	21	15.5	M5	M5	12	VP..1003..
SVJPL 1616 K10 V IC	■	SVJPR 1616 K10 V IC	■	16	16	125	21	19.5	M5	G⅛"	16	VP..1003..
SVJPL 2020 K10 V IC	■	SVJPR 2020 K10 V IC	■	20	20	125	21	23.5	M5	G⅛"	20	VP..1003..

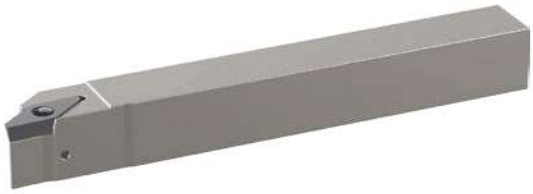
SVJP… V IC (93°) INCH

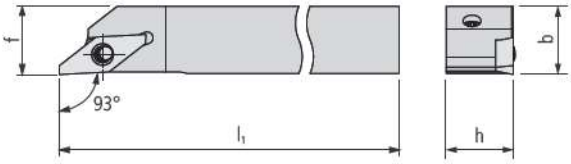
Order designation				Dimensions								Inserts
L		R		h	b	l_1	z^1	x^1	c	d	f	307…
PREMIUM-LINE												
SVJPL 3/8" H10 V IC	■	SVJPR 3/8" H10 V IC	■	9.525	9.525	100	21	13	M5	M5	9.525	VP..1003..
SVJPL 1/2" H10 V IC	■	SVJPR 1/2" H10 V IC	■	12.7	12.7	100	21	16.2	M5	M5	12.7	VP..1003..
SVJPL 5/8" K10 V IC	■	SVJPR 5/8" K10 V IC	■	15.875	15.875	125	21	19.4	M5	G⅛"	15.875	VP..1003..
SVJPL 3/4" K10 V IC	■	SVJPR 3/4" K10 V IC	■	19.05	19.05	125	21	22.6	M5	G⅛"	19.05	VP..1003..

Scope of delivery: Holder without coolant connector
Coolant system ..... 619…



"FC" version (fast change)





SVJP… FC* (93°)

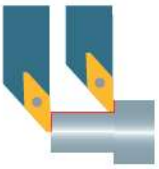
Order designation				Dimensions								Inserts
L		R		h	b	l_1		f				307…
STANDARD-LINE												
SVJPL 1212 H10 FC	■	SVJPR 1212 H10 FC	■	12	12	100		12				VP..1003..
SVJPL 1616 K10 FC	■	SVJPR 1616 K10 FC	■	16	16	125		16				VP..1003..

SVJP… FC* (93°) INCH

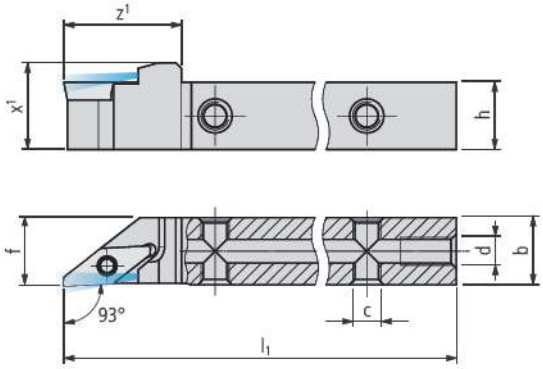
Order designation				Dimensions								Inserts
L		R		h	b	l_1		f				307…
STANDARD-LINE												
SVJPL 1/2" H10 FC	■	SVJPR 1/2" H10 FC	■	12.7	12.7	100		12.7				VP..1003..
SVJPL 5/8" K10 FC	■	SVJPR 5/8" K10 FC	■	15.875	15.875	125		15.875				VP..1003..

Spare parts (clamping bolts/screws) 331

*** Note**
With this holder, the indexable insert is secured with a screw using a knee lever that can be operated from behind. This means the holder does not have to be unclamped to change the cutting edge.
Tighten the clamping screw to 1.2 Nm using a torque screwdriver.



"FC" version (fast change) with internal cooling



SVJP… FC* IC (93°)

Order designation				Dimensions								Inserts
L		R		h	b	l_1	z^1	x^1	c	d	f	🗋307…
PREMIUM-LINE												
SVJPL 1212 H10 FC IC	■	SVJPR 1212 H10 FC IC	■	12	12	100	21	15.5	M5	M5	12	VP..1003..
SVJPL 1616 K10 FC IC	■	SVJPR 1616 K10 FC IC	■	16	16	125	21	19.5	M5	G⅛"	16	VP..1003..

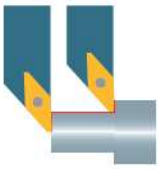
SVJP… FC* IC (93°) INCH

Order designation				Dimensions								Inserts
L		R		h	b	l_1	z^1	x^1	c	d	f	🗋307…
PREMIUM-LINE												
SVJPL 1/2" H10 FC IC	■	SVJPR 1/2" H10 FC IC	■	12.7	12.7	100	21	16.2	M5	M5	12.7	VP..1003..
SVJPL 5/8" K10 FC IC	■	SVJPR 5/8" K10 FC IC	■	15.875	15.875	125	21	19.4	M5	G⅛"	15.875	VP..1003..

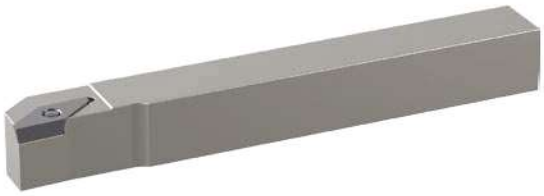
Spare parts (clamping bolts /screws) ..... 🗋331

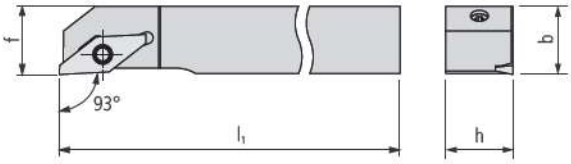
*** Note**
With this holder, the indexable insert is secured with a screw using a knee lever that can be operated from behind. This means the holder does not have to be unclamped to change the cutting edge.
Tighten the clamping screw to 1.2 Nm using a torque screwdriver.

Scope of delivery: Holder without coolant connector
Coolant system ..... 🗋619…



Reinforced version V and version "FC" (fast change)





SVJP… V FC* (93°)

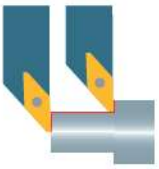
Order designation				Dimensions								Inserts
L		R		h	b	l_1		f				307…
STANDARD-LINE												
SVJPL 1212 H10 V FC	■	SVJPR 1212 H10 V FC	■	12	12	100		12				VP..1003..
SVJPL 1616 K10 V FC	■	SVJPR 1616 K10 V FC	■	16	16	125		16				VP..1003..

SVJP… V FC* (93°) INCH

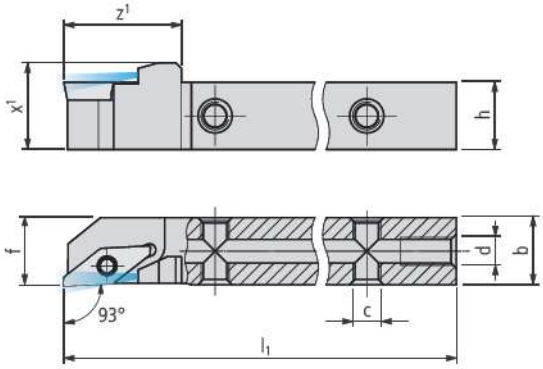
Order designation				Dimensions								Inserts
L		R		h	b	l_1		f				307…
STANDARD-LINE												
SVJPL 1/2" H10 V FC	■	SVJPR 1/2" H10 V FC	■	12.7	12.7	100		12.7				VP..1003..
SVJPL 5/8" K10 V FC	■	SVJPR 5/8" K10 V FC	■	15.875	15.875	125		15.875				VP..1003..

Spare parts (clamping bolts/screws) 331

*** Note**
With this holder, the indexable insert is secured with a screw using a knee lever that can be operated from behind. This means the holder does not have to be unclamped to change the cutting edge.
Tighten the clamping screw to 1.2 Nm using a torque screwdriver.



Reinforced version V and version "FC" (fast change) with internal cooling



SVJP… V FC* IC (93°)

Order designation	L		R		Dimensions h	b	l_1	z^1	x^1	c	d	f	Inserts 🗋307…
PREMIUM-LINE													
SVJPL 1212 H10 V FC IC	■	SVJPR 1212 H10 V FC IC	■		12	12	100	21	15.5	M5	M5	12	VP..1003..
SVJPL 1616 K10 V FC IC	■	SVJPR 1616 K10 V FC IC	■		16	16	125	21	19.5	M5	G⅛"	16	VP..1003..

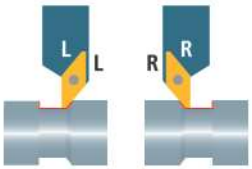
SVJP… V FC* IC (93°) INCH

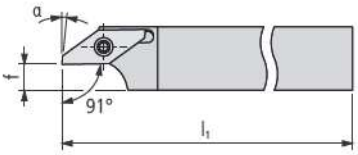
Order designation	L		R		Dimensions h	b	l_1	z^1	x^1	c	d	f	Inserts 🗋307…
PREMIUM-LINE													
SVJPL 1/2" H10 V FC IC	■	SVJPR 1/2" H10 V FC IC	■		12.7	12.7	100	21	15.5	M5	M5	12.7	VP..1003..
SVJPL 5/8" K10 V FC IC	■	SVJPR 5/8" K10 V FC IC	■		15.875	15.875	125	21	19.5	M5	G⅛"	15.875	VP..1003..

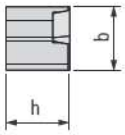
Spare parts (clamping bolts /screws) ..... 🗋331

*** Note**
With this holder, the indexable insert is secured with a screw using a knee lever that can be operated from behind. This means the holder does not have to be unclamped to change the cutting edge.
Tighten the clamping screw to 1.2 Nm using a torque screwdriver.

Scope of delivery: Holder without coolant connector
Coolant system ..... 🗋619…







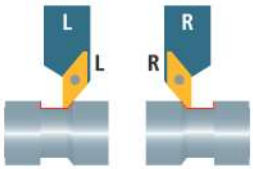
SVXP… (91°)

Order designation				Dimensions								Inserts
L		R		h	b	l_1		f		α		307…
STANDARD-LINE												
SVXPL 0808 F10	■	SVXPR 0808 F10	■	8	8	80		1		3°		VP..1003..
SVXPL 0808 H10	■	SVXPR 0808 H10	■	8	8	100		1		3°		VP..1003..
SVXPL 1010 F10	■	SVXPR 1010 F10	■	10	10	80		3		3°		VP..1003..
SVXPL 1010 H10	■	SVXPR 1010 H10	■	10	10	100		3		3°		VP..1003..
SVXPL 1212 H10	■	SVXPR 1212 H10	■	12	12	100		5		3°		VP..1003..
SVXPL 1616 K10	■	SVXPR 1616 K10	■	16	16	125		9		3°		VP..1003..
SVXPL 2020 K10	■	SVXPR 2020 K10	■	20	20	125		13		3°		VP..1003..

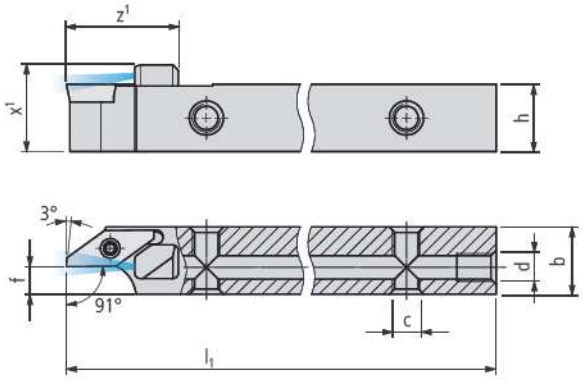
SVXP… (91°) INCH

Order designation				Dimensions								Inserts
L		R		h	b	l_1		f		α		307…
STANDARD-LINE												
SVXPL 3/8" F10	■	SVXPR 3/8" F10	■	9.525	9.525	80		2.5		3°		VP..1003..
SVXPL 3/8" H10	■	SVXPR 3/8" H10	■	9.525	9.525	100		2.5		3°		VP..1003..
SVXPL 1/2" H10	■	SVXPR 1/2" H10	■	12.7	12.7	100		5.7		3°		VP..1003..
SVXPL 5/8" K10	■	SVXPR 5/8" K10	■	15.875	15.875	125		8.8		3°		VP..1003..
SVXPL 3/4" K10	■	SVXPR 3/4" K10	■	19.05	19.05	125		12		3°		VP..1003..

Legend ..... 8…



With internal cooling



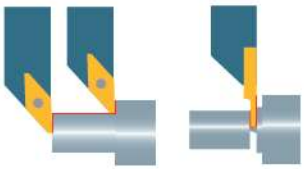
SVXP… IC (91°)

Order designation				Dimensions								Inserts
L		R		h	b	l_1	z^1	x^1	c	d	f	307…
PREMIUM-LINE												
SVXPL 0808 H10 IC	■	SVXPR 0808 H10 IC	■	8	8	100	20	11.5	M5	M5	1	VP..1003..
SVXPL 1010 H10 IC	■	SVXPR 1010 H10 IC	■	10	10	100	20	13.5	M5	M5	3	VP..1003..
SVXPL 1212 H10 IC	■	SVXPR 1212 H10 IC	■	12	12	100	20	15.5	M5	M5	5	VP..1003..
SVXPL 1616 K10 IC	■	SVXPR 1616 K10 IC	■	16	16	125	20	19.5	M5	G⅛"	9	VP..1003..
SVXPL 2020 K10 IC	■	SVXPR 2020 K10 IC	■	20	20	125	20	23.5	M5	G⅛"	13	VP..1003..

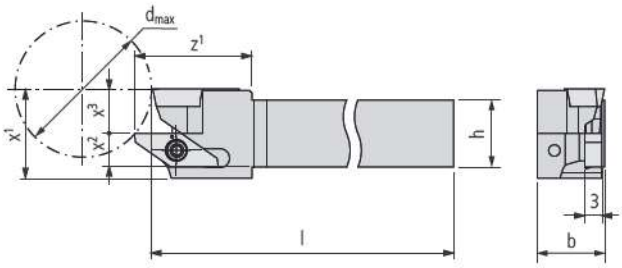
SVXP… IC (91°) INCH

Order designation				Dimensions								Inserts
L		R		h	b	l_1	z^1	x^1	c	d	f	307…
PREMIUM-LINE												
SVXPL 3/8" H10 IC	■	SVXPR 3/8" H10 IC	■	9.525	9.525	100	20	13	M5	M5	2.5	VP..1003..
SVXPL 1/2" H10 IC	■	SVXPR 1/2" H10 IC	■	12.7	12.7	100	20	16.2	M5	M5	5.7	VP..1003..
SVXPL 5/8" K10 IC	■	SVXPR 5/8" K10 IC	■	15.875	15.875	125	20	19.4	M5	G⅛"	8.8	VP..1003..
SVXPL 3/4" K10 IC	■	SVXPR 3/4" K10 IC	■	19.05	19.05	125	20	22.6	M5	G⅛"	12	VP..1003..

Scope of delivery: Holder without coolant connector
Coolant system ..... 619…



"TWIN" version



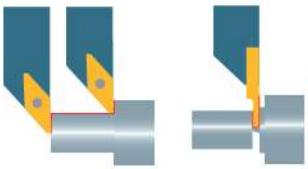
SVJP. (93°)/1600… TWIN (R-R)

Order designation			Dimensions									Inserts	
	R R		h	b	l	z^1	x^1	x^2	x^3		d_{max}	307…	49…
STANDARD-LINE													
	SVJPR/1600R-0810 H10 Twin	■	8	10	100	21	16	4	8		23	VP..1003..	16…
	SVJPR/1600R-1010 H10 Twin	■	10	10	100	21	16	5	8		23	VP..1003..	16…
	SVJPR/1600R-1212 H10 Twin	■	12	12	100	21	16	6	8		23	VP..1003..	16…
	SVJPR/1600R-1616 K10 Twin	■	16	16	125	21	20	8	10		34	VP..1003..	16…
	SVJPR/1600R-2020 K10 Twin	■	20	20	125	21	24	8	14		63	VP..1003..	16…

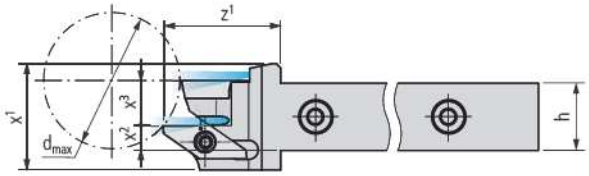
SVJP. (93°)/1600… TWIN INCH (R-R)

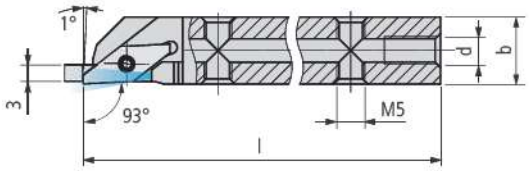
Order designation			Dimensions									Inserts	
	R R		h	b	l	z^1	x^1	x^2	x^3		d_{max}	307…	49…
STANDARD-LINE													
	SVJPR/1600R-3/8" H10 Twin	■	9.525	9.525	100	21	16	4.76	8		23	VP..1003..	16…
	SVJPR/1600R-1/2" H10 Twin	■	12.7	12.7	100	21	16	6.35	8		23	VP..1003..	16…
	SVJPR/1600R-5/8" K10 Twin	■	15.875	15.875	125	21	20	7.94	10		34	VP..1003..	16…
	SVJPR/1600R-3/4" K10 Twin	■	19.05	19.05	125	21	24	7.53	14		63	VP..1003..	16…

Legend ..... 8…



"TWIN" version with internal cooling





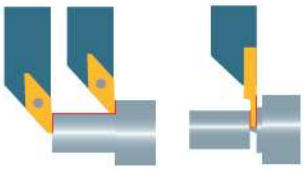
SVJP. (93°)/1600… TWIN IC (R-R)

Order designation		Dimensions									Inserts	
R R		h	b	l	z^1	x^1	x^2	x^3	d	d_{max}	307…	49…
PREMIUM-LINE												
SVJPR/1600R-0810 H10 Twin IC	■	8	10	100	21	19	2.5	8	M5	23	VP..1003..	16…
SVJPR/1600R-1010 H10 Twin IC	■	10	10	100	21	19	3.5	8	M5	23	VP..1003..	16…
SVJPR/1600R-1212 H10 Twin IC	■	12	12	100	21	19	4.5	8	M5	23	VP..1003..	16…
SVJPR/1600R-1616 K10 Twin IC	■	16	16	125	21	23	6.5	10	G⅛"	34	VP..1003..	16…
SVJPR/1600R-2020 K10 Twin IC	■	20	20	125	21	27	6.5	14	G⅛"	63	VP..1003..	16…

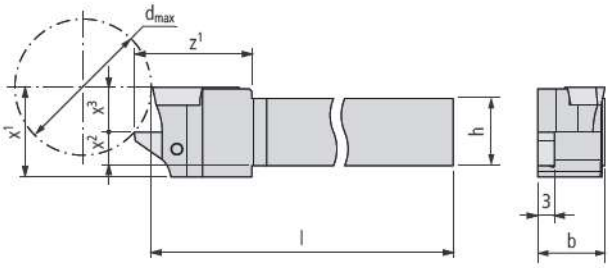
SVJP. (93°)/1600… TWIN IC INCH (R-R)

Order designation		Dimensions									Inserts	
R R		h	b	l	z^1	x^1	x^2	x^3	d	d_{max}	307…	49…
PREMIUM-LINE												
SVJPR/1600R-3/8" H10 Twin IC	■	9.525	9.525	100	21	19	3.26	8	M5	23	VP..1003..	16…
SVJPR/1600R-1/2" H10 Twin IC	■	12.7	12.7	100	21	19	4.85	8	M5	23	VP..1003..	16…
SVJPR/1600R-5/8" K10 Twin IC	■	15.875	15.875	125	21	23	6.44	10	G⅛"	34	VP..1003..	16…
SVJPR/1600R-3/4" K10 Twin IC	■	19.05	19.05	125	21	27	6.03	14	G⅛"	63	VP..1003..	16…

Scope of delivery: Holder without coolant connector
Coolant system ..... 619…



"TWIN" version



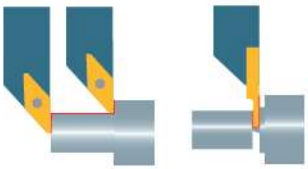
SVJP. (93°)/1600… TWIN (R-L)

Order designation			Dimensions									Inserts	
	R L		h	b	l	z^1	x^1	x^2	x^3		d_{max}	307…	49…
STANDARD-LINE													
	SVJPR/1600L-0810 H10 Twin	■	8	10	100	21	16	4	8		23	VP..1003..	16…
	SVJPR/1600L-1010 H10 Twin	■	10	10	100	21	16	5	8		23	VP..1003..	16…
	SVJPR/1600L-1212 H10 Twin	■	12	12	100	21	16	6	8		23	VP..1003..	16…
	SVJPR/1600L-1616 K10 Twin	■	16	16	125	21	20	8	10		33	VP..1003..	16…
	SVJPR/1600L-2020 K10 Twin	■	20	20	125	21	24	8	12		63	VP..1003..	16…

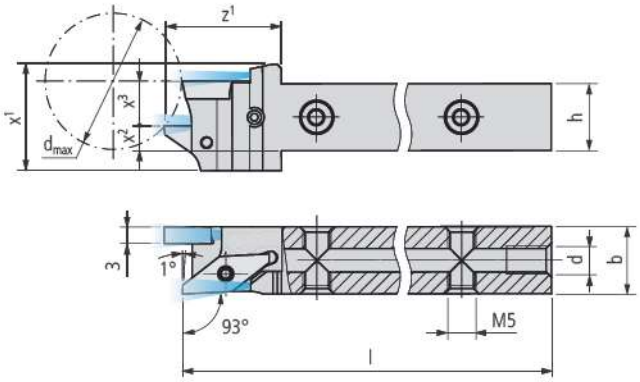
SVJP. (93°)/1600… TWIN INCH (R-L)

Order designation			Dimensions									Inserts	
	R L		h	b	l	z^1	x^1	x^2	x^3		d_{max}	307…	49…
STANDARD-LINE													
	SVJPR/1600L-3/8" H10 Twin	■	9.525	9.525	100	21	16	4.76	8		23	VP..1003..	16…
	SVJPR/1600L-1/2" H10 Twin	■	12.7	12.7	100	21	16	6.35	8		23	VP..1003..	16…
	SVJPR/1600L-5/8" K10 Twin	■	15.875	15.875	125	21	20	7.94	10		33	VP..1003..	16…
	SVJPR/1600L-3/4" K10 Twin	■	19.05	19.05	125	21	24	7.53	14		63	VP..1003..	16…

Legend ..... 8…



"TWIN" version with internal cooling



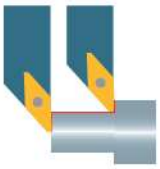
SVJP. (93°)/1600… TWIN IC (R-L)

Order designation		R L	Dimensions h	b	l	z¹	x¹	x²	x³	d	d_{max}	Inserts 🗋307…	🗋49…
PREMIUM-LINE													
	SVJPR/1600L-0810 H10 Twin IC	■	8	10	100	21	19	2.5	8	M5	23	VP..1003..	16…
	SVJPR/1600L-1010 H10 Twin IC	■	10	10	100	21	19	3.5	8	M5	23	VP..1003..	16…
	SVJPR/1600L-1212 H10 Twin IC	■	12	12	100	21	19	4.5	8	M5	23	VP..1003..	16…
	SVJPR/1600L-1616 K10 Twin IC	■	16	16	125	21	23	6.5	10	G⅛"	33	VP..1003..	16…
	SVJPR/1600L-2020 K10 Twin IC	■	20	20	125	21	27	6.5	14	G⅛"	63	VP..1003..	16…

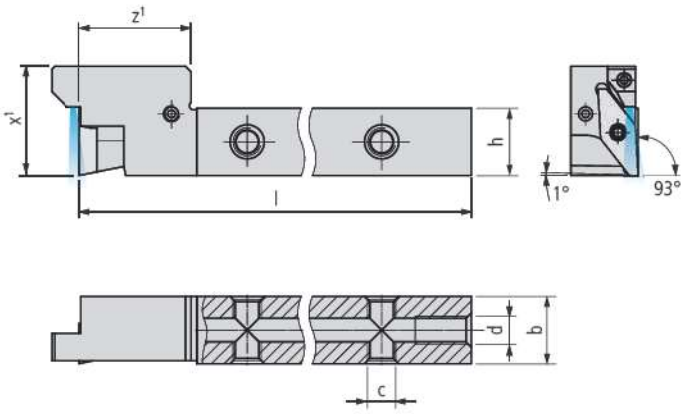
SVJP. (93°)/1600… TWIN IC INCH (R-L)

Order designation		R L	Dimensions h	b	l	z¹	x¹	x²	x³	d	d_{max}	Inserts 🗋307…	🗋49…
PREMIUM-LINE													
	SVJPR/1600L-3/8" H10 Twin IC	■	9.525	9.525	100	21	19	3.26	8	M5	23	VP..1003..	16…
	SVJPR/1600L-1/2" H10 Twin IC	■	12.7	12.7	100	21	19	4.85	8	M5	23	VP..1003..	16…
	SVJPR/1600L-5/8" K10 Twin IC	■	15.875	15.875	125	21	23	6.44	10	G⅛"	33	VP..1003..	16…
	SVJPR/1600L-3/4" K10 Twin IC	■	19.05	19.05	125	21	27	6.03	14	G⅛"	63	VP..1003..	16…

Scope of delivery: Holder without coolant connector
Coolant system ..... 🗋619…



"Y-AXIS" version with internal cooling



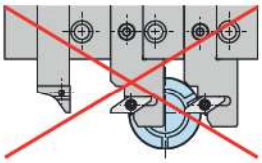
SVJP. YA… IC (93°)

Order designation L	Order designation R		Dimensions h	b	l_1	z^1	x^1	c	d		Inserts ⊡307…
PREMIUM-LINE											
	SVJPR YA-1212 H10-20 IC	■	12	12	100	20	19.5	M5	M5		VP.. 1003…
	SVJPR YA-1212 H10-25 IC	■	12	12	100	25	19.5	M5	M5		VP.. 1003…
	SVJPR YA-1212 H10-30 IC	■	12	12	100	30	19.5	M5	M5		VP.. 1003…
	SVJPR YA-1616 K10-20 IC	■	16	16	125	20	19.5	M5	G⅛		VP.. 1003…
	SVJPR YA-1616 K10-25 IC	■	16	16	125	25	19.5	M5	G⅛		VP.. 1003…
	SVJPR YA-1616 K10-30 IC	■	16	16	125	30	19.5	M5	G⅛		VP.. 1003…

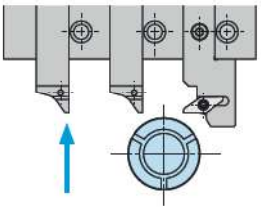
SVJP. YA… IC (93°) INCH

Order designation L	Order designation R		Dimensions h	b	l_1	z^1	x^1	c	d		Inserts ⊡307…
PREMIUM-LINE											
	SVJPR YA-1/2" H10-20 IC	■	12.7	12.7	100	20	19.5	M5	M5		VP.. 1003…
	SVJPR YA-1/2" H10-25 IC	■	12.7	12.7	100	25	19.5	M5	M5		VP.. 1003…
	SVJPR YA-1/2" H10-30 IC	■	12.7	12.7	100	30	19.5	M5	M5		VP.. 1003…
	SVJPR YA-5/8" K10-20 IC	■	15.875	15.875	125	20	19.5	M5	G⅛		VP.. 1003…
	SVJPR YA-5/8" K10-25 IC	■	15.875	15.875	125	25	19.5	M5	G⅛		VP.. 1003…
	SVJPR YA-5/8" K10-30 IC	■	15.875	15.875	125	30	19.5	M5	G⅛		VP.. 1003…

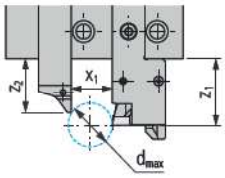
Usage notes:



To avoid problems, two Y-AXIS holders must not be mounted directly next to each other.
Mount a standard tool holder between the Y-AXIS holders.



To prevent collisions, move back the holder in accordance with the overhanging length before changing the tool position.

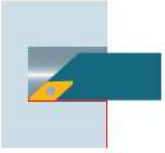


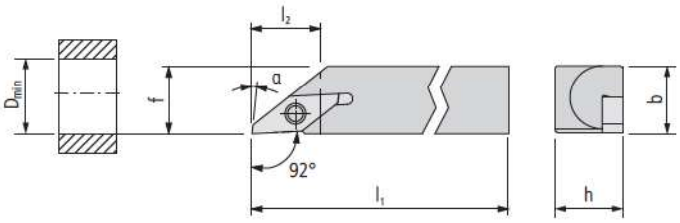
$$d_{max} = \frac{(z_1 - z_2)^2 + x_1^2}{x_1}$$

Scope of delivery: Holder without coolant connector

Coolant system ..... ⊡619…

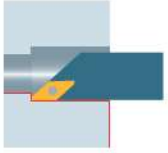
Legend ..... ⊡8…

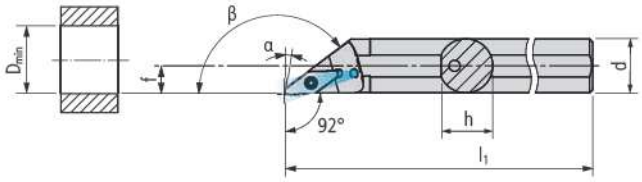




SVJP… (92°)

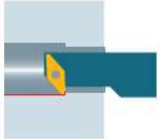
Order designation				Dimensions								Inserts
L		R		h	b	l_1	l_2	f	D_{min}	α		307…
STANDARD-LINE												
SVJPL 1212 XH10	■	SVJPR 1212 XH10	■	12	12	100	12	12.2	16	2°		VP..1003..
SVJPL 1616 XK10	■	SVJPR 1616 XK10	■	16	16	125	12	16.2	16	2°		VP..1003..

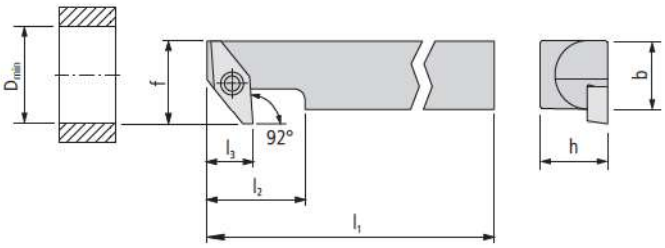




A… SVJP… (92°)

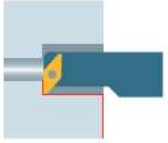
Order designation				Dimensions								Inserts
L		R		d	h	l_1		f	D_{min}	α	β	307…
STANDARD-LINE												
A16M SVJPL 10	■	A16M SVJPR 10	■	16	15.3	150		8.3	20	2°	143°	VP..1003..

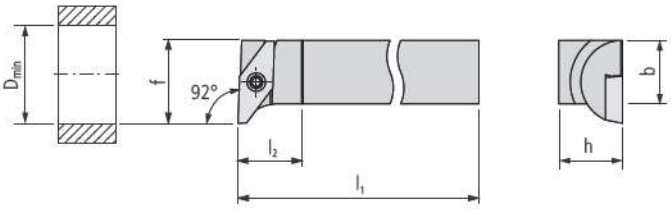




SVQP… (92°)

Order designation				Dimensions								Inserts
L		R		h	b	l_1	l_2	f	D_{min}	l_3		307…
STANDARD-LINE												
SVQPL 1212 XH10	■	SVQPR 1212 XH10	■	12	12	100	12	15.7	16	7.7		VP..1003..
SVQPL 1616 XK10	■	SVQPR 1616 XK10	■	16	16	125	12	15.7	16	7.7		VP..1003..





SVUP… (92°)

Order designation				Dimensions								Inserts
L		R		h	b	l_1	l_2	f	D_{min}			307…
STANDARD-LINE												
SVUPL 1212 XH10	■	SVUPR 1212 XH10	■	12	12	100	12	15.7	17			VP..1003..
SVUPL 1616 XK10	■	SVUPR 1616 XK10	■	16	16	125	12	15.7	17			VP..1003..

*** Attention**
Right hand holder needs left hand insert!

For holders (SV.P…) OD turning

Illustration	Description	Dimensions	Order designation		Holder
	TORX screw	M2.5 × 6 T08	MSP 25060 T08	■	SV.P… 10

For holders (SV.P… FC) OD turning

Illustration	Description	Dimensions	Order designation		Holder
	Clamping bolts	3 × 10	MSP SB 35080 FC	■	SV.P… 10 FC
	Clamping screw	M3 × 10	MSP KS 30080 FC T06	■	SV.P… 10 FC

For holders (… SV.P…) ID turning

Illustration	Description	Dimensions	Order designation		Holder
	TORX screw	M2.5 × 6 T08	MSP 25060 T08	■	A… SV.P… 10

TORX screwdriver ..... 651…

	Steel unalloyed			Steel low alloyed			Steel high alloyed		
Hardness value (HB) / (HRC)	125–300 HB			180–250 HB			200–350 HB		
Category	I			II			III		
Machining method	▼	▼▼	▼▼▼	▼	▼▼	▼▼▼	▼	▼▼	▼▼▼
Cutting speeds	v_c (m/min)								
Cutting material carbide									
UHM 10	40–110	60–120	60–140	60–100	60–120	60–130	40–90	60–110	60–120
UHM 10 HX	60–180	60–220	60–260	60–170	60–200	60–240	50–160	60–180	60–220
UHM 10 TX+	–	–	–	80–150	100–180	160–220	70–100	90–150	120–180
UHM 10 MZ	180–300	220–400	250–500	150–280	200–320	250–400	120–280	180–320	180–320
UHM 20 HPX	150–200	180–220	200–260	80–150	100–180	160–220	70–100	90–150	120–180
UHM 20 TX+	–	–	–	80–130	100–150	160–190	70–90	90–130	120–150
UHM 20 MZ	130–180	160–220	180–260	100–160	110–180	130–220	70–150	110–160	130–190
UHM 30	30–70	50–80	50–100	30–60	40–80	40–90	30–50	30–70	30–80
UHM 30 HX	50–140	50–180	50–220	50–130	50–160	50–200	40–120	50–140	50–180
UHM 30 TX+	50–120	50–140	50–150	50–100	50–120	50–140	40–80	50–100	50–110
UHM 30 MZ	120–160	150–200	170–240	90–140	100–160	120–200	60–130	90–140	110–160
UHM 30 SX	50–120	50–180	50–200	50–100	50–140	50–180	40–90	50–120	50–160

	Stainless steel			Stainless steel			Titanium		
Hardness value (HB) / (HRC)	180–220 HB			220 –330 HB			–		
Category	V			VI			IV		
Machining method	▼	▼▼	▼▼▼	▼	▼▼	▼▼▼	▼	▼▼	▼▼▼
Cutting speeds	v_c (m/min)								
Cutting material carbide									
UHM 10	40–100	40–110	40–120	30–70	30–80	30–80	40–60	50–70	60–80
UHM 10 HX	50–140	50–180	50–220	40–100	50–110	50–130	40–120	50–130	50–150
UHM 10 TX+	90–150	110–180	160–200	70–90	90–120	110–150	50–100	60–120	60–140
UHM 10 MZ	100–180	180–250	220–300	–	–	–	–	–	–
UHM 20 HPX	90–150	110–180	160–200	70–90	90–120	110–150	50–100	60–120	60–140
UHM 20 TX+	90–130	110–160	160–180	70–90	90–120	110–150	50–100	60–120	60–140
UHM 20 MZ	90–150	110–160	130–180	50–80	30–50	40–70	–	–	–
UHM 30	30–60	30–70	30–80	20–30	20–40	20–40	40–50	25–60	30–70
UHM 30 HX	40–100	40–140	40–180	30–60	40–70	40–90	30–90	40–100	40–120
UHM 30 TX+	–	–	–	–	–	–	–	–	–
UHM 30 MZ	80–130	100–140	110–160	40–80	50–90	90–110	–	–	–
UHM 30 SX	30–90	40–120	40–160	20–50	30–60	30–80	–	–	–

Legend ..... 8…

	Aluminum			Brass			Hard materials		
Hardness value (HB) / (HRC)	60–130 HB			–			45–70 HRC		
Category	VII			VIII			X		
Machining method	▼	▼▼	▼▼▼	▼	▼▼	▼▼▼	▼	▼▼	▼▼▼
Cutting speeds	v_c (m/min)								
Cutting material carbide									
UHM 10	100–1500	120–2000	160–2500	80–300	100–400	120–500	–	–	–
UHM 10 HX	140–2500	160–3000	200–3000	100–450	100–600	100–750	–	–	–
UHM 10 TX+	–	–	–	–	–	–	15–30	15–40	20–80
UHM 10 MZ	–	–	–	–	–	–	–	–	–
UHM 20 HPX	–	–	–	–	–	–	–	–	–
UHM 20 TX+	–	–	–	–	–	–	–	–	–
UHM 20 MZ	–	–	–	–	–	–	–	–	–
UHM 30	50–1000	60–1200	80–1500	40–100	50–140	50–160	–	–	–
UHM 30 HX	70–1500	80–2000	100–3000	50–150	50–200	50–250	–	–	–
UHM 30 TX+	–	–	–	–	–	–	–	–	–
UHM 30 MZ	–	–	–	–	–	–	–	–	–
UHM 30 SX	60–1200	80–2000	100–3000	50–120	50–180	50–200	–	–	–

Feed (f) and depths of cut (a_p) ..... 🗋307…