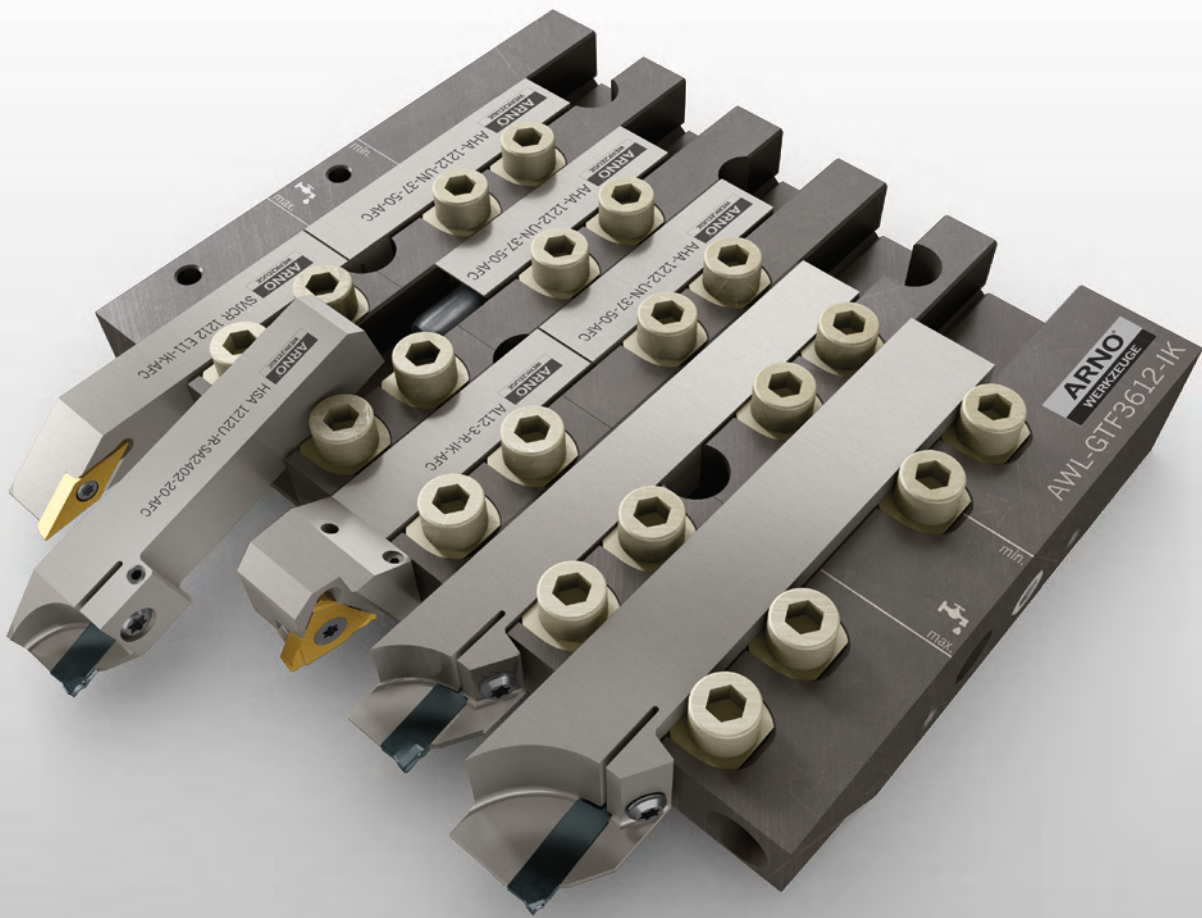


ARNO®

WERKZEUGE



AWL sliding head and AFC tool holders: the revolution in fast tool changes

AWL / AFC

CITIZEN Machines

OUTSTANDING FOR MORE PRODUCTIVITY IN YOUR PRODUCTION.

Do you have challenging machining tasks? We have outstanding solutions. For three generations, we have been developing tool systems which have outstanding quality, long tool life and process reliability. As an ARNO customer you benefit from a combination of experience and pioneering spirit. Besides these values we are also influenced by the typical Swabian talent for inventiveness. We are proud to assist our customers to secure that extra competitive advantage with clever new developments and advancements and we will continue along this path in the future

SYSTEM AWL/AFC

CITIZEN - Machines

04 - 05	<i>AFC System Overview</i>
06 - 34	<i>Toolholders Available:</i> <i>Parting-Off, Grooving, ISO Turn, Deco-cut, Threading.</i>
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SWISS TYPE MACHINING, FAST CHANGES.

AFC tool holders: the revolution in fast tool changes – patent applied.

Your solution for easy tool changes despite space constraints in Swiss type machines:
the two-part AFC holder – even untrained staff can replace tools fast and reliably.

This is how it works: The rear part of the tool holder (AHA fixed stop) is first fixed in place. Only the front part is removed to replace the tool. This eliminates the need to restart and recalibrate the zero point since the length to the insert tip is always the same – whether the grooving system or the turning system is used. The two holder parts are simply joined by a connector system with O-ring. The front part is then secured immediately it is placed in the connector – nothing drops into the machine accidentally. At the same time, the floating mount provides enough clearance to compensate for angle offset. The two parts then fit together perfectly. Now you benefit from a high level of precisions when changing tools and a leak-proof coolant hole.



IMMEDIATE BENEFITS of the two-part AFC tool holder

Simple – only the front part of the holder
is removed to change the tool

Precise – the floating mount compensate
for angle offset

Fast – starting and calibrating the zero point are
eliminated, so the tool is changed in no time

Flexibly combinable

- The right sizes to
fit all sliding heads

Simple tool changes

- Only the front part of the holder need be removed
- Even untrained staff can change tools easily and
reliably in the application



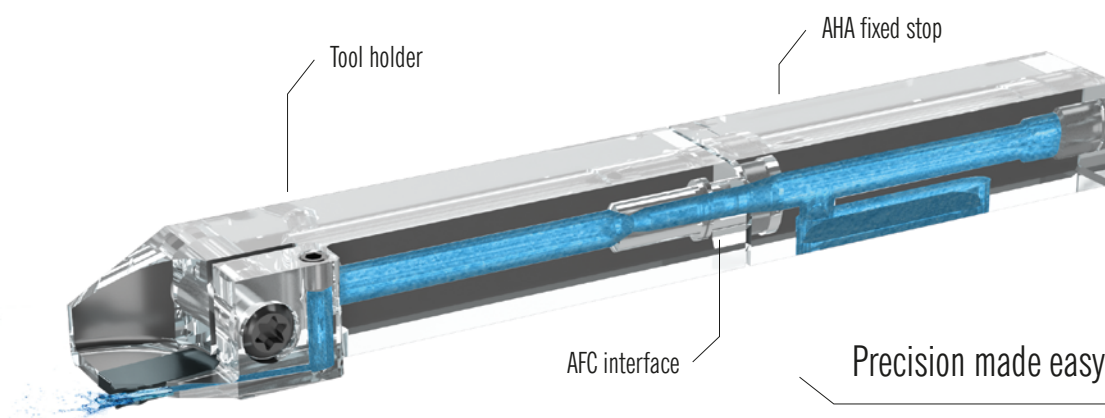
ARNO DIGITAL // For all details on the AFC system, go to langdrehen.arno.de

Floating mount

- Angle offset compensation when clamped
- Secure hold when fitted together – nothing drops into the machine

2-part tool holder

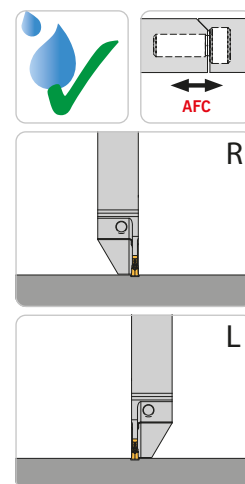
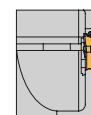
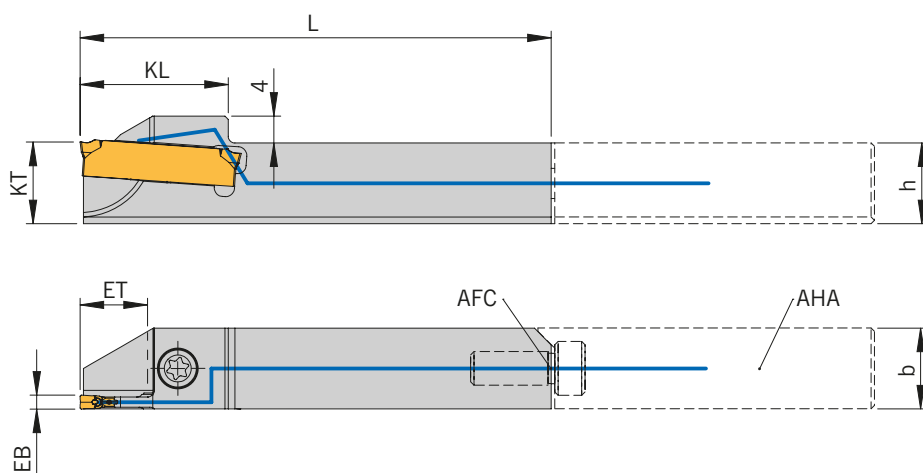
- Rear part (AHA fixed stop) to fix the zero point
- Front part for fast, convenient tool change
- Available with or without internal cooling



Precision made easy

- Precise tool change by angle offset compensation
- Excellent clamping in connection with the AFC sliding head

HSA-...-ACS1-AFC



Right-hand execution shown

AFC = AFC interface

AHA = fix stop



Holders

Article	EB	ET	Dmax	h	b	L	KL	KT	Insert
HSA 1212L/R-SA2402-12-ACS1-AFC	2,0	6	12	12	12	70	18	12	SA24-20...
HSA 1212L/R-SA2402-20-ACS1-AFC	2,0	10	20	12	12	70	22	12	SA24-20...
HSA 1212L/R-SA2402-26-ACS1-AFC	2,0	13	26	12	12	70	25	12	SA24-20...
HSA 1212L/R-SA2402-26-ACS1-AFC	2,5	13	26	12	12	70	25	12	SA24-25...
HSA 1212L/R-SA2403-26-ACS1-AFC	3,0	13	26	12	12	70	25	12	SA24-30...
HSA 1616L/R-SA2402-20-ACS1-AFC	2,0	10	20	16	16	70	22	16	SA24-20...
HSA 1616L/R-SA2402-26-ACS1-AFC	2,0	13	26	16	16	70	25	16	SA24-20...
HSA 1616L/R-SA2402-34-ACS1-AFC	2,0	17	34	16	16	70	29	16	SA24-20...
HSA 1616L/R-SA2402-42-ACS1-AFC	2,0	21	42	16	16	70	33	16	SA24-20...
HSA 1616L/R-SA2402-26-ACS1-AFC	2,5	13	26	16	16	70	25	16	SA24-25...
HSA 1616L/R-SA2403-26-ACS1-AFC	3,0	13	26	16	16	70	25	16	SA24-30...
HSA 1616L/R-SA2403-34-ACS1-AFC	3,0	17	34	16	16	70	29	16	SA24-30...
HSA 1616L/R-SA2403-42-ACS1-AFC	3,0	21	42	16	16	70	33	16	SA24-30...

D_{max} = Maximum diameter in solid

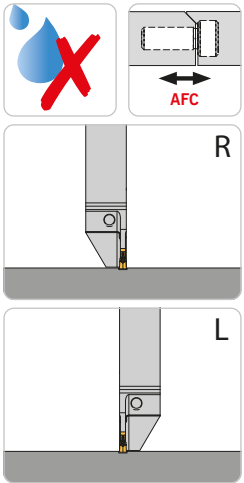
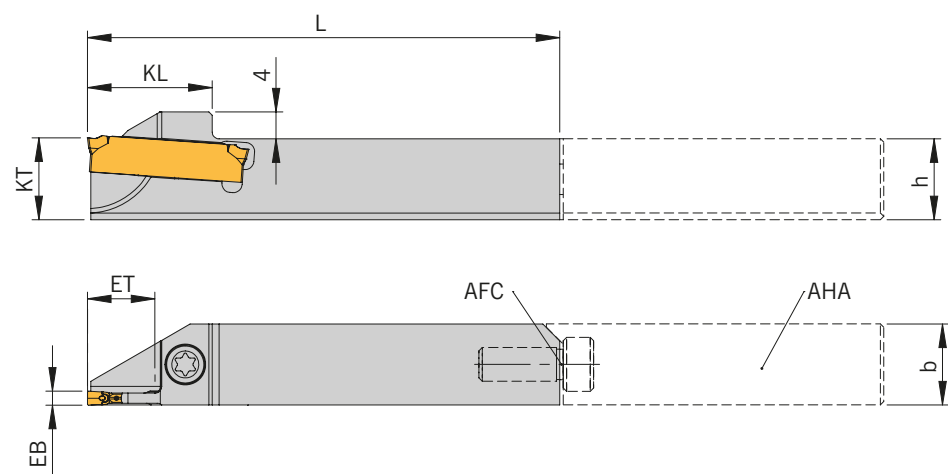


Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
HSA 1212L/R-SA.....ACS1-AFC	AS 0022	T5215-IP	O-RING 4.8 (VITON)
HSA 1616L/R-SA.....ACS1-AFC	AS 0022	T5215-IP	OR 4,7X1,6 NBR70

HSA...-AFC



Right-hand execution shown
AFC = AFC interface
AHA = fix stop



Holders

Article	EB	ET	Dmax	h	b	L	KL	KT	Insert
HSA 1212L/R-SA2402-20-AFC	2	10	20	12	12	70	18,5	12	SA24-20...
HSA 1212L/R-SA2402-26-AFC 	2	13	26	12	12	70	21,5	12	SA24-20...

D_{max} = Maximum diameter in solid

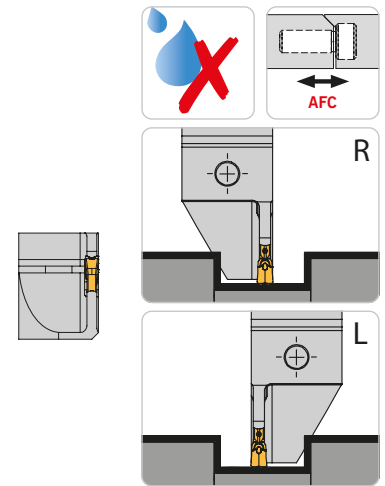
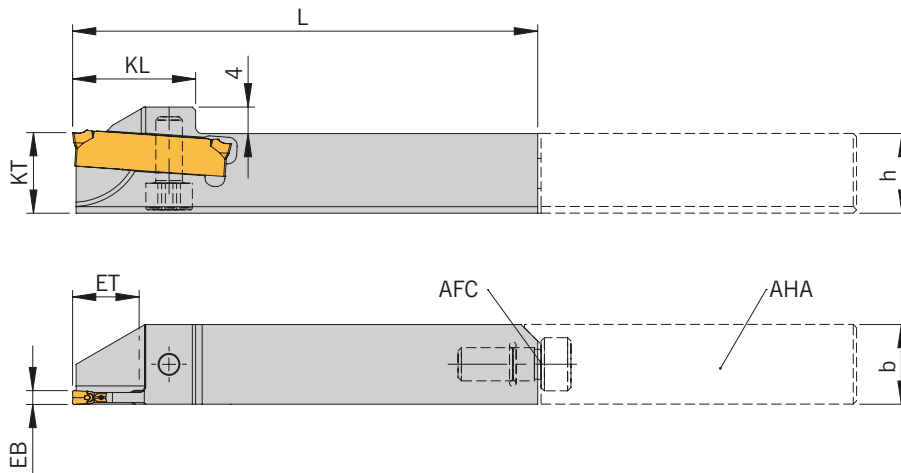
 Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
HSA 1212L/R-SA...-AFC	AS 0022	T5215-IP	O-RING 4.8 (VITON)

HSA-...U...-AFC

with clamping from below



Right-hand execution shown

AFC = AFC interface

AHA = fix stop

Holders

Article	EB	ET	Dmax	L	KL	KT	Insert
HSA 1212U-L/R-SA24015-20-AFC	1,5	10	20	70	18,5	12	SA24-15...
HSA 1212U-L/R-SA2402-12-AFC	2,0	6	12	70	14,5	12	SA24-20...
HSA 1212U-L/R-SA2402-20-AFC	2,0	10	20	70	18,5	12	SA24-20...
HSA 1212U-L/R-SA2402-26-AFC	2,0	13	26	70	21,5	12	SA24-20...

D_{max} = Maximum diameter in solid

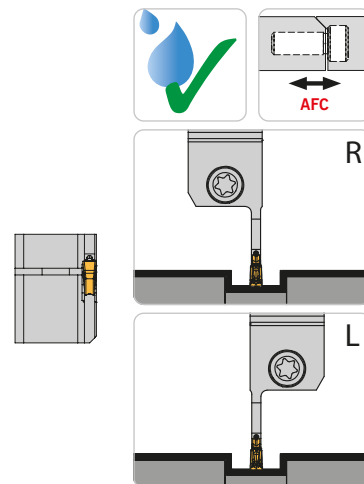
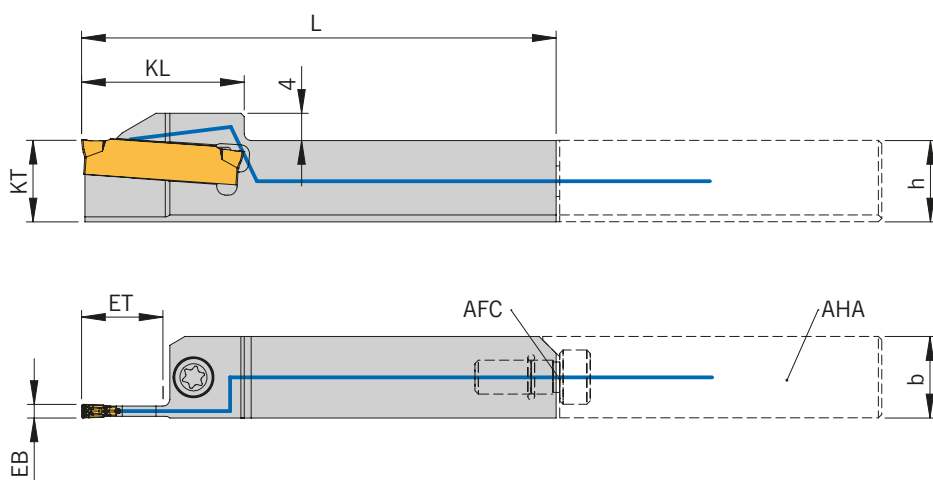


Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
HSA 1212U-L/R-SA-...-AFC	DIN912-M4X10-12.9	KP 1111	O-RING 4.8 (VITON)

HSE...-ACS1-AFC



Right-hand execution shown

AFC = AFC interface

AHA = fix stop



NEW

Holders

	EB	ET	h	b	L	KL	KT	Insert
HSE 1212L/R-SE2402-ET12-ACS1-AFC	2	12	12	12	70	24	12	SE24-20...
HSE 1212R-SE2403-ET12-ACS1-AFC	3	12	12	12	70	24	12	SE24-30...
HSE 1616R-SE2403-ET12-ACS1-AFC N	3	12	16	16	70	24	16	SE24-30...

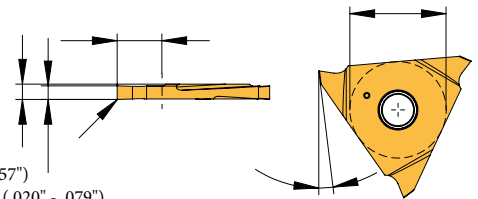
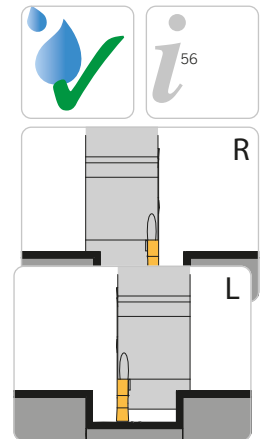
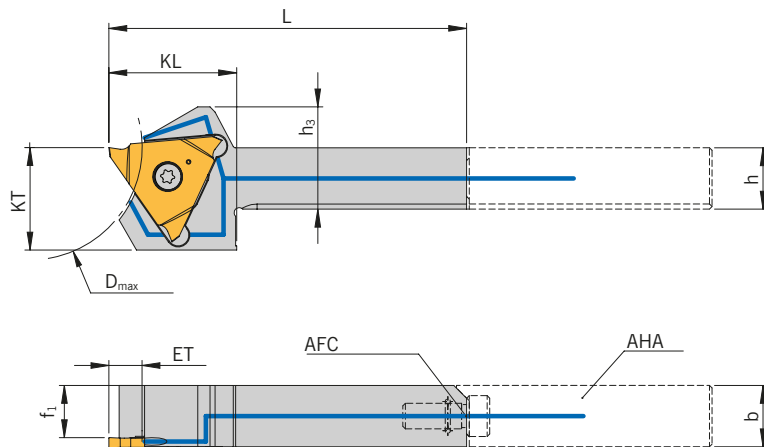


Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
HSE 1212L/R-SE...-ACS1-AFC	AS 0022	T5215-IP	O-RING 4.8 (VITON)
HSE 1616R-SE...-ACS1-AFC	AS 0022	T5215-IP	OR 4,7X1,6 NBR70

HTE-....IK2-AFC



TE14 Insert:
Widths of cut: 1 - 4mm (.040" - .157")
Full radius inserts: 0.50 - 2.00mm (.020" - .079")

Holders

Designation	ETmax	Dmax	h	b	h3	L	f1	KL	KT	Size	Insert
HTE-1212L/R-14F-IK2-AFC	6,5	44	12	12	20	70	9,95	25	20	F	T...14F-...
HTE-1212L/R-14H-IK2-AFC 	6,5	44	12	12	20	70	8,95	25	20	H	T...14H-...
HTE-1212L/R-14K-IK2-AFC 	6,5	44	12	12	20	70	7,95	25	20	K	T...14K-...
HTE-1616L/R-14F-IK2-AFC 	6,5	44	16	16	24	70	13,95	25	20	F	T...14F-...
HTE-1616L/R-14H-IK2-AFC 	6,5	44	16	16	24	70	12,95	25	20	H	T...14H-...
HTE-1616L/R-14K-IK2-AFC 	6,5	44	16	16	24	70	11,95	25	20	K	T...14K-...



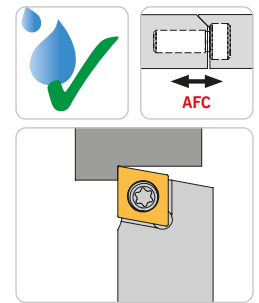
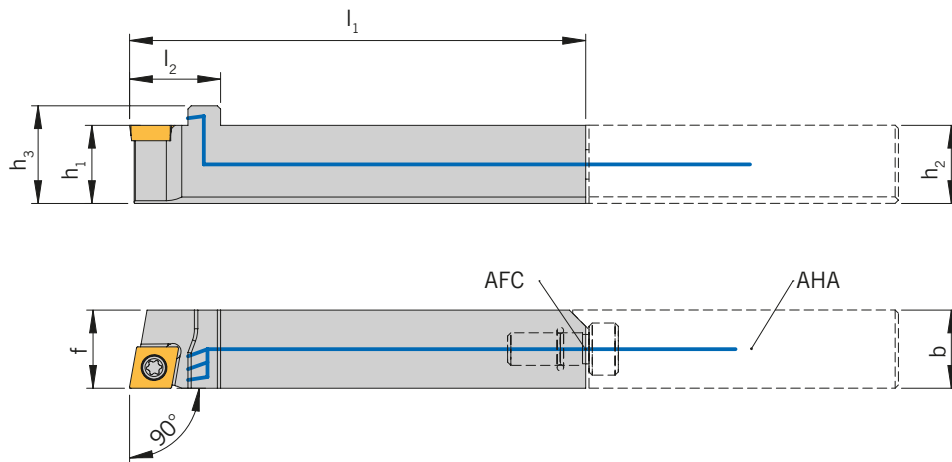
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Torque	Key	O-ring
HTE-1212L/R-14...-IK2-AFC	AS 0005	2,5 Nm	T5210-IP	O-RING 4.8 (VITON)
HTE-1616L/R-14...-IK2-AFC	AS 0005	2,5 Nm	T5210-IP	OR 4,7X1,6 NBR70

SCAC L/R ...-IK-AFC

With through tool coolant – Approach angle 90,0°



Right-hand execution shown

AFC = AFC interface

AHA = fix stop



Holders

Designation	h1 / h2	h3	b	l1	l2	f	Insert
SCACR 1212 E06-IK-AFC	12	15	12	70	14	12	CC.. 0602...
SCACR 1212 E09-IK-AFC	12	15	12	70	18	12	CC.. 09T3...
SCACL/R 1616 E09-IK-AFC 	16	19	16	70	18	16	CC.. 09T3...



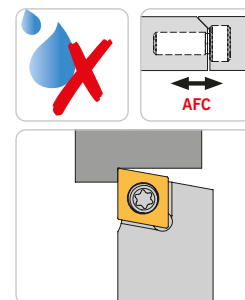
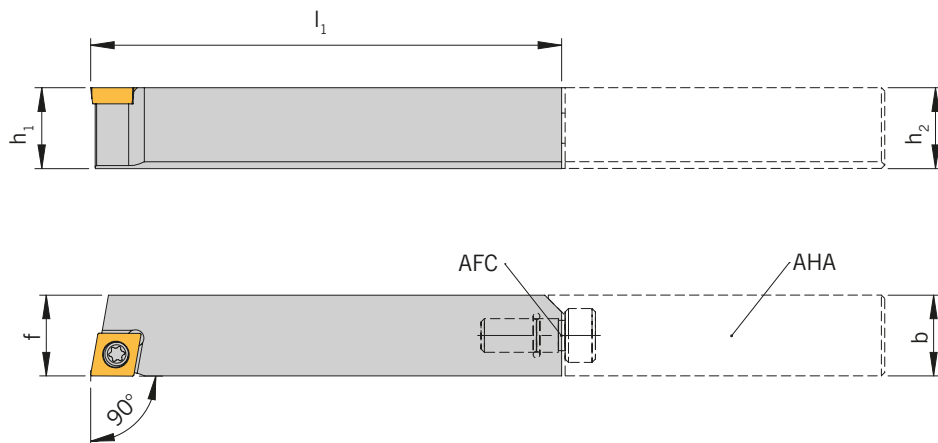
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SCACR 1212 E06-IK-AFC	SS 1751	KS 1751	O-RING 4.8 (VITON)
SCACR 1212 E09-IK-AFC	SS 1111	KS 1111	O-RING 4.8 (VITON)
SCACL/R 1616 E09-IK-AFC	SS 1111	KS 1111	OR 4,7X1,6 NBR70

SCAC R ...-AFC

Approach angle 90°



Right-hand execution shown

AFC = AFC interface

AHA = fix stop

Holders

Designation	h1 / h2	h3	b1	l1	f	Insert
SCACR 1212 E06-AFC	12	12	12	70	12	CC.. 0602...
SCACR 1212 E09-AFC	12	12	12	70	12	CC.. 09T3...



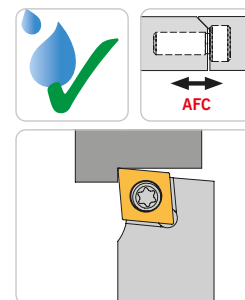
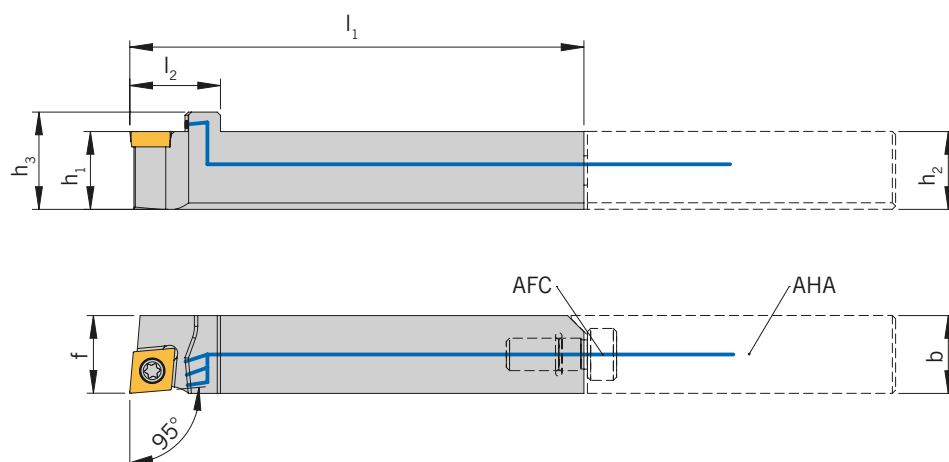
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SCACR 1212 E06-AFC	SS 1751	KS 1751	O-RING 4.8 (VITON)
SCACR 1212 E09-AFC	SS 1111	KS 1111	O-RING 4.8 (VITON)

SCLC L/R ...-IK-AFC

With through tool coolant – Approach angle 95°



Right-hand execution shown

AFC = AFC interface

AHA = fix stop



Holders

Designation	h1 / h2	h3	b	l1	l2	f	Insert
SCLCR 1212 E06-IK-AFC	12	15	12	70	14	12	CC.. 0602...
SCLCL/R 1212 E09-IK-AFC	12	15	12	70	18	12	CC.. 09T3...
SCLCL/R 1616 E06-IK-AFC	16	19	16	70	14	16	CC.. 0602...
SCLCL/R 1616 E09-IK-AFC	16	19	16	70	18	16	CC.. 09T3...
SCLCL/R 1616 E12-IK-AFC	16	19	16	70	22	16	CC.. 1204...



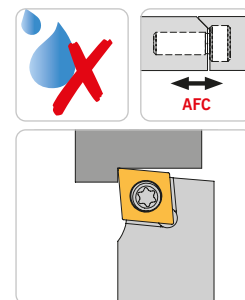
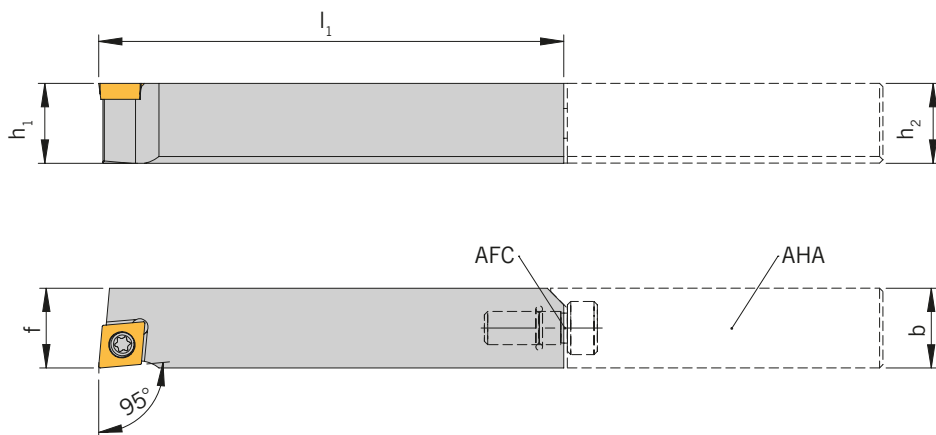
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SCLCR 1212 E06-IK-AFC	SS 1751	KS 1751	O-RING 4.8 (VITON)
SCLCL/R 1212 E09-IK-AFC	SS 1111	KS 1111	O-RING 4.8 (VITON)
SCLCL/R 1616 E06-IK-AFC	SS 1751	KS 1751	OR 4,7X1,6 NBR70
SCLCL/R 1616 E09-IK-AFC	SS 1111	KS 1111	OR 4,7X1,6 NBR70
SCLCL/R 1616 E12-IK-AFC	SS 1221	KS 1115	OR 4,7X1,6 NBR70

SCLC L/R ...-AFC

Approach angle 95°



Right-hand execution shown
AFC = AFC interface
AHA = fix stop

Holders

Designation	h1 / h2	h3	b1	l1	f	Insert
SCLCR 1212 E06-AFC	12	12	12	70	12	CC.. 0602...
SCLCL/R 1212 E09-AFC	12	12	12	70	12	CC.. 09T3...



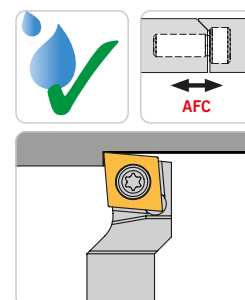
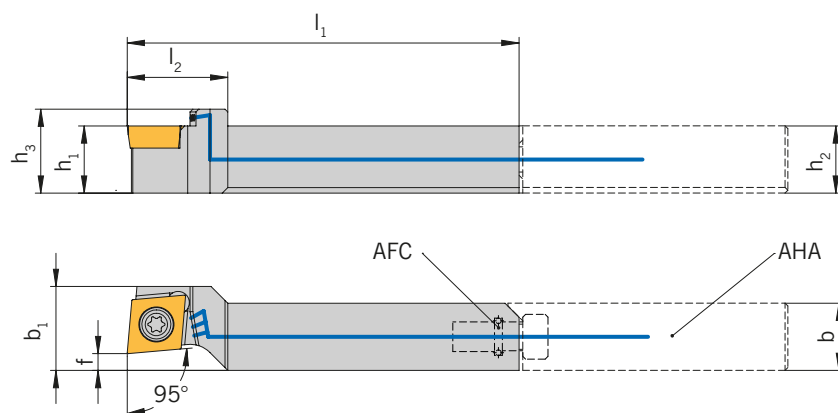
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SCLCR 1212 E06-AFC	SS 1751	KS 1751	O-RING 4.8 (VITON)
SCLCL/R 1212 E09-AFC	SS 1111	KS 1111	O-RING 4.8 (VITON)

SCLC R ...F03-IK-AFC

With through tool coolant – Approach angle 95°



Right-hand execution shown

AFC = AFC interface

AHA = fix stop

Holders

Designation	h1 / h2	h3	b	b1	l1	l2	f	Insert
SCLCR 1212 E09-F03-IK-AFC	12	15	12	15	70	18	3	CC.. 09T3...



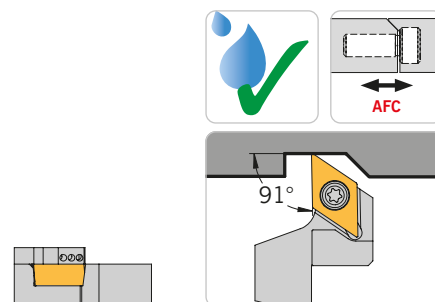
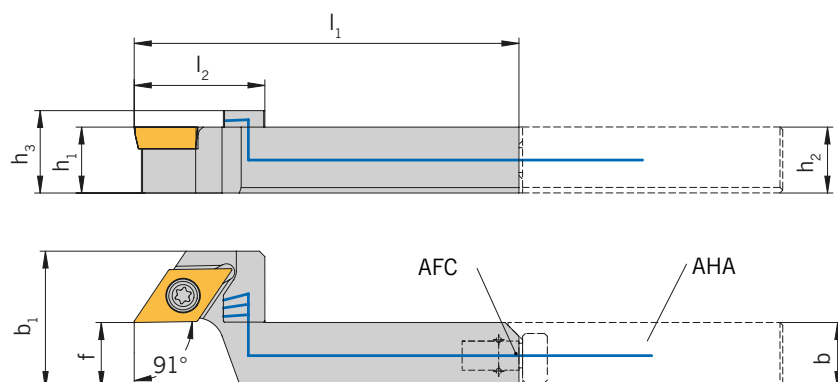
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SCLCR 1212 E09-F03-IK-AFC	SS 1111	KS 1111	O-RING 4.8 (VITON)

SD91C L/R ...IK-AFC

With through tool coolant – Approach angle 91°



Right-hand execution shown

AFC = interface

AHA = fix stop

Holders

Designation	h1 / h2	h3	b	b1	l1	l2	f	Insert
SD91CL/R 1212 E11-IK-AFC	12	15	12	25	70	24	12	DC.. 11T3...



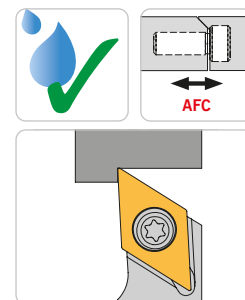
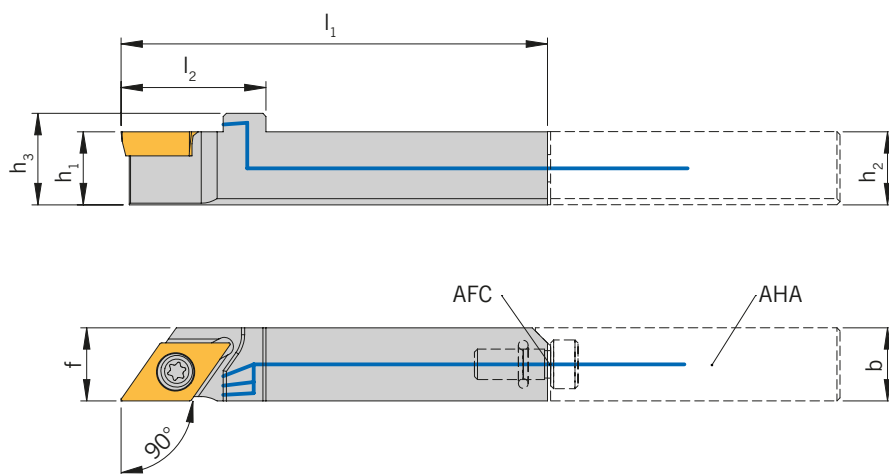
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SD91CL/R 1212 E11-IK-AFC	SS 1111	KS 1111	O-RING 4.8 (VITON)

SDAC L/R ...-IK-AFC

With through tool coolant – Approach angle 90,0°



Right-hand execution shown

AFC = interface

AHA = fix stop



Holders

Designation	h1 / h2	h3	b	l1	l2	f	Insert
SDACR 1212 E11-IK-AFC	12	15	12	70	24	12	DC.. 11T3...
SDACL/R 1616 E11-IK-AFC	16	19	16	70	24	16	DC.. 11T3...



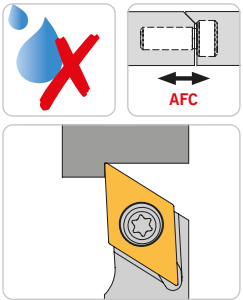
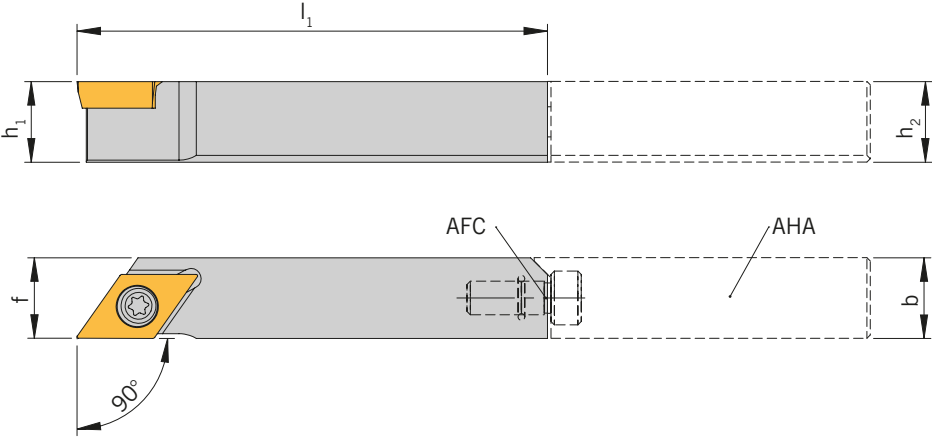
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SDACR 1212 E11-IK-AFC	SS 1111	KS 1111	O-RING 4.8 (VITON)
SDACL/R 1616 E11-IK-AFC	SS 1111	KS 1111	OR 4,7X1,6 NBR70

SDAC R ...-AFC

Approach angle 90,0°



Right-hand execution shown
AFC = interface
AHA = fix stop

Holders

Designation	h1 / h2	h3	b	b1	l1	f	Insert
SDACR 1212 E11-AFC	12	12	12	12	70	12	DC.. 11T3...

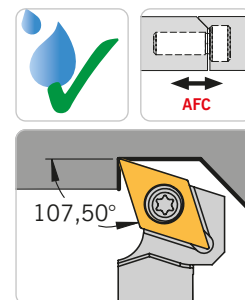
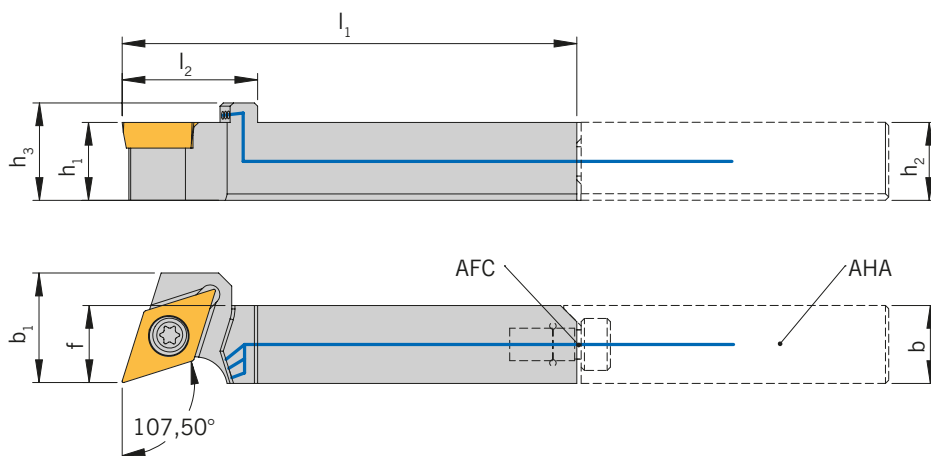
 Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SDACR 1212 E11-AFC	SS 1111	KS 1111	O-RING 4.8 (VITON)

SDHC L/R ...-IK-AFC

With through tool coolant – Approach angle 107,5°



Right-hand execution shown
AFC = interface
AHA = fix stop

Holders

Designation	h1 / h2	h3	b	b1	l1	l2	f	Insert
SDHCL/R 1212 E11-IK-AFC	12	15	12	17	70	21	12	DC.. 11T3...



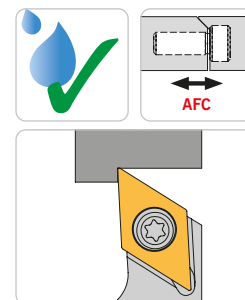
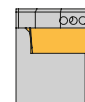
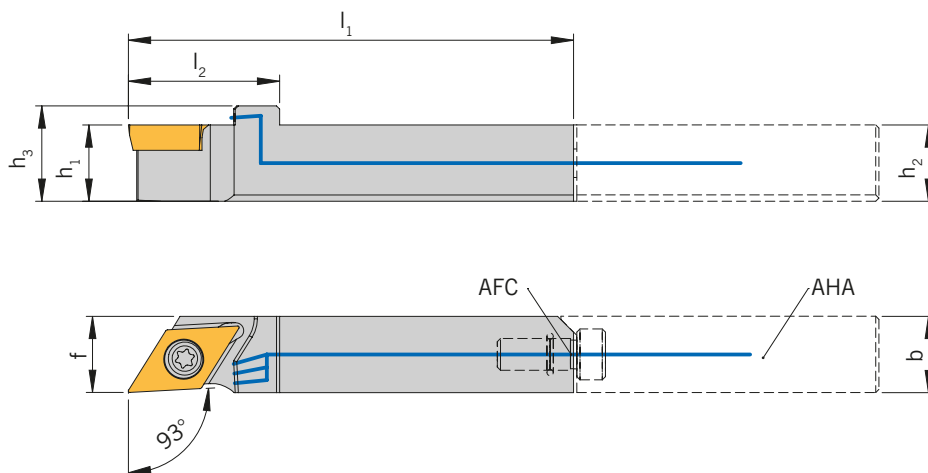
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw Vite	Key	O-Ring
SDHCL/R 1212 E11-IK-AFC	SS 1111	KS 1111	O-RING 4.8 (VITON)

SDJC L/R ...-IK-AFC

With through tool coolant – Approach angle 93°



Right-hand execution shown

AFC = interface

AHA = fix stop



Holders

Designation	h1 / h2	h3	b	l1	l2	f	Insert
SDJCL/R 1212 E07- IK-AFC	12	15	12	70	18	12	DC.. 0702...
SDJCL/R 1212 E11- IK-AFC	12	15	12	70	24	12	DC.. 11T3...
SDJCL/R 1616 E07- IK-AFC	16	19	16	70	18	16	DC.. 0702...
SDJCL/R 1616 E11- IK-AFC	16	19	16	70	24	16	DC.. 11T3...



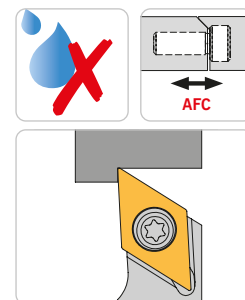
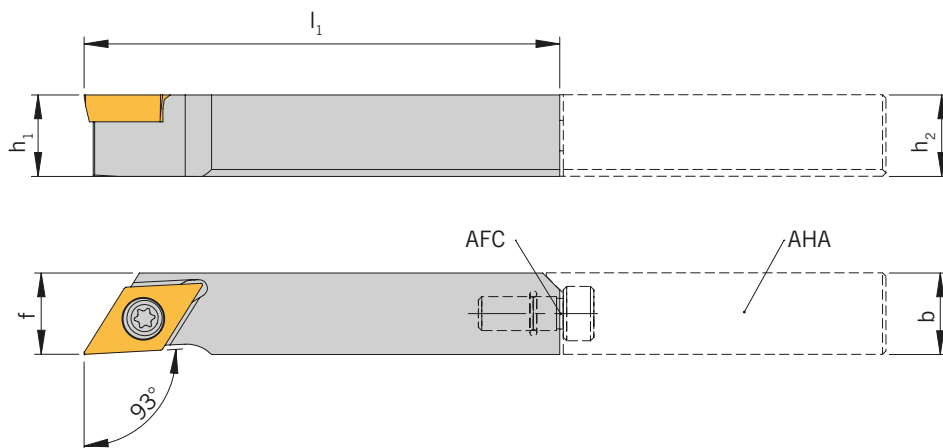
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SDJCL/R 1212 E07- IK-AFC	SS 1751	KS 1751	O-RING 4.8 (VITON)
SDJCL/R 1212 E11- IK-AFC	SS 1111	KS 1111	O-RING 4.8 (VITON)
SDJCL/R 1616 E07- IK-AFC	SS 1751	KS 1751	OR 4,7X1,6 NBR70
SDJCL/R 1616 E11- IK-AFC	SS 1111	KS 1111	OR 4,7X1,6 NBR70

SDJC L/R ...-AFC

Approach angle 93°



Right-hand execution shown

AFC = interface

AHA = fix stop

Holders

Designation	h1 / h2	h3	b	b1	l1	f	Insert
SDJCL/R 1212 E07-AFC	12	12	12	12	70	12	DC.. 0702...
SDJCL/R 1212 E11-AFC	12	12	12	12	70	12	DC.. 11T3...



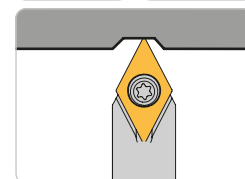
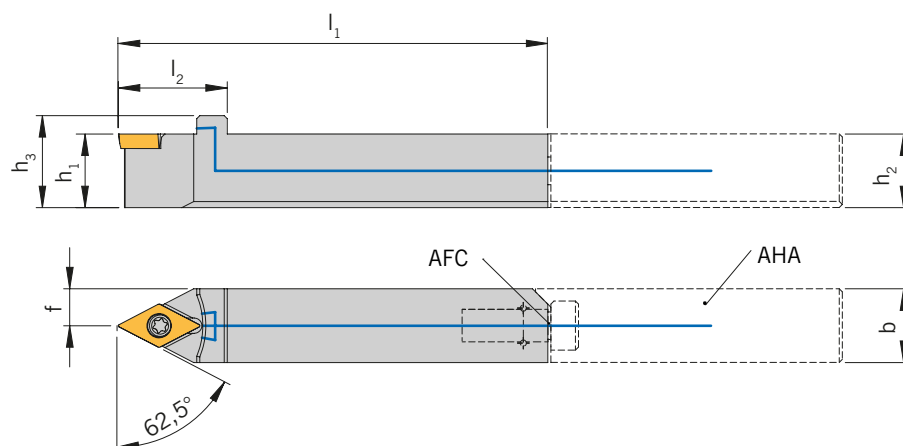
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SDJCL/R 1212 E07-IK-AFC	SS 1751	KS 1751	O-RING 4.8 (VITON)
SDJCL/R 1212 E11-IK-AFC	SS 1111	KS 1111	O-RING 4.8 (VITON)

SDNCN ...-IK-AFC

With through tool coolant – Approach angle 62,5°



Right-hand execution shown

AFC = interface

AHA = fix stop



Holders

Designation	h1 / h2	h3	b	l1	l2	f	Insert
SDNCN 1212 E07-IK-AFC	12	15	12	70	18	6	DC.. 0702...
SDNCN 1212 E11-IK-AFC	12	15	12	70	25	6	DC.. 11T3...
SDNCN 1616 E11-IK-AFC 	16	19	16	70	25	8	DC.. 11T3...



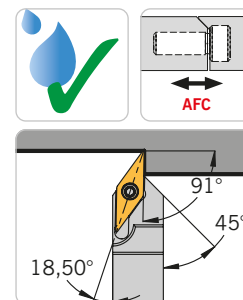
Remark: For matching fix stops see page 35 - 37

Spare Parts

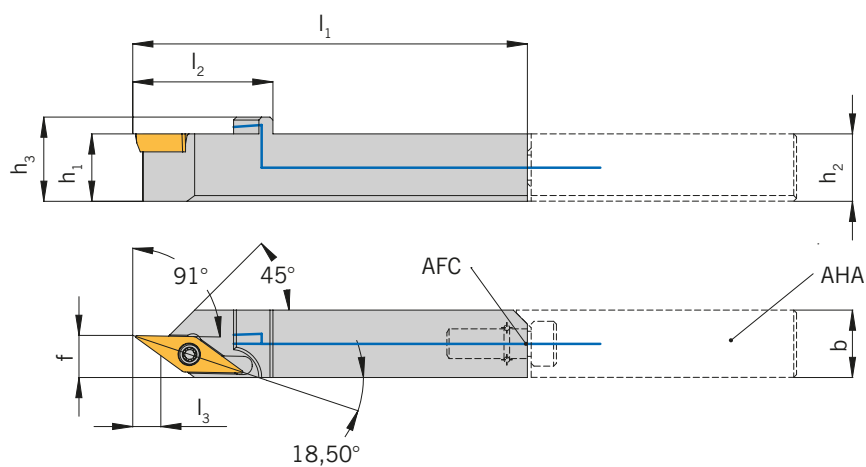
Holder	Screw	Key	O-ring
SDNCN 1212 E07-IK-AFC	SS 1751	KS 1751	O-RING 4.8 (VITON)
SDNCN 1212 E11-IK-AFC	SS 1111	KS 1111	O-RING 4.8 (VITON)
SDNCN 1616 E11-IK-AFC	SS 1111	KS 1111	OR 4,7X1,6 NBR70

SV91C R ...-IK-AFC

For back turning – with through tool coolant



Right-hand execution shown
AFC = interface
AHA = fix stop



Holders

Designation	h1 / h2	h3	b	l1	l2	l3	f	Insert
SV91CR 1212 E11-IK-AFC	12	15	12	70	25	5	7,5	VC.. 1103...



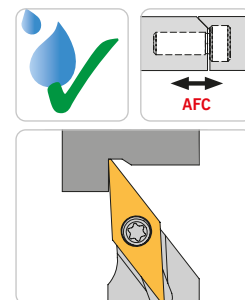
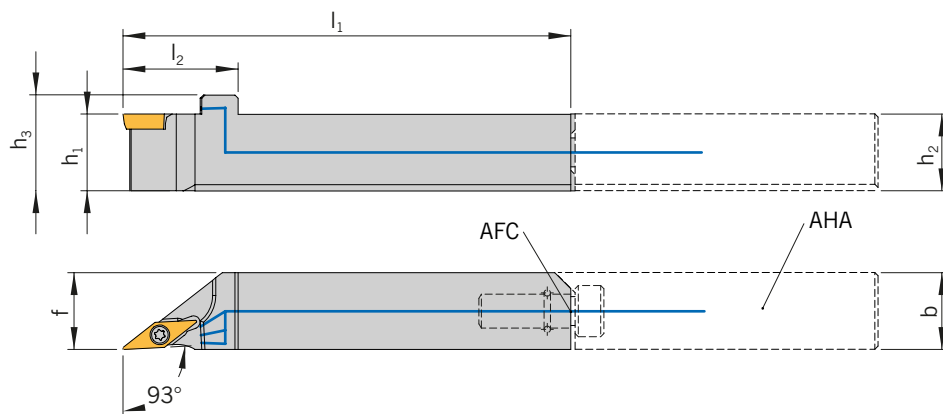
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SV91CR 1212 E11-IK-AFC	SS 1751	KS 1751	O-RING 4.8 (VITON)

SVJC L/R ...-IK-AFC

With through tool coolant – Approach angle 93°



Right-hand execution shown

AFC = interface

AHA = fix stop



Holders

Designation	h1 / h2	h3	b	l1	l2	f	Insert
SVJCL/R 1212 E07-IK-AFC	12	15	12	70	18	12	VC.. 0702...
SVJCL/R 1212 E11-IK-AFC	12	15	12	70	24	12	VC.. 1103...
SVJCL/R 1212 E13-IK-AFC	12	15	12	70	30	12	VC.. 1303...
SVJCL/R 1616 E11-IK-AFC	16	19	16	70	24	16	VC.. 1103...
SVJCL/R 1616 E13-IK-AFC	16	19	16	70	30	16	VC.. 1303...
SVJCL/R 1616 E16-IK-AFC	16	19	16	70	34	16	VC.. 1604...



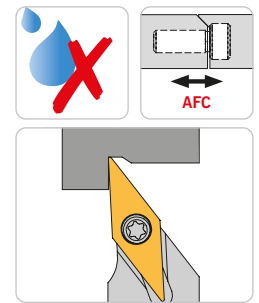
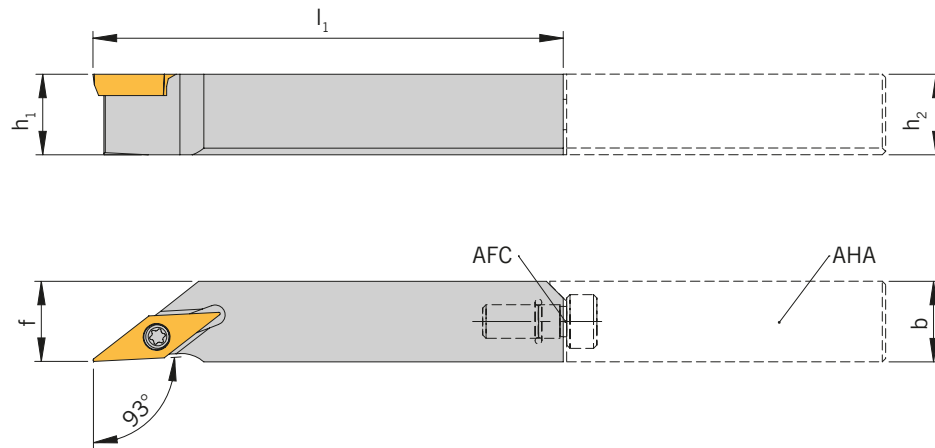
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SVJCL/R 1212 E07-IK-AFC	SS 5140	KS 1886	O-RING 4.8 (VITON)
SVJCL/R 1212 E11-IK-AFC	SS 1751	KS 1751	O-RING 4.8 (VITON)
SVJCL/R 1212 E13-IK-AFC	SS 8831	KS 1751	O-RING 4.8 (VITON)
SVJCL/R 1616 E11-IK-AFC	SS 1751	KS 1751	OR 4,7X1,6 NBR70
SVJCL/R 1616 E13-IK-AFC	SS 8831	KS 1751	OR 4,7X1,6 NBR70
SVJCL/R 1616 E16-IK-AFC	SS 1111	KS 1111	OR 4,7X1,6 NBR70

SVJC L/R ...-AFC

Approach angle 93°



Right-hand execution shown
AFC = interface
AHA = fix stop

Holders

Designation	h1 / h2	h3	b1	l1	f	Insert
SVJCL/R 1212 E11-AFC	12	12	12	70	12	VC.. 1103...

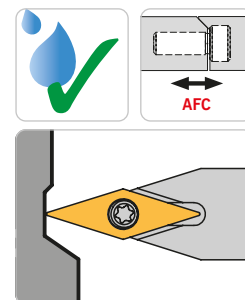
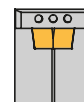
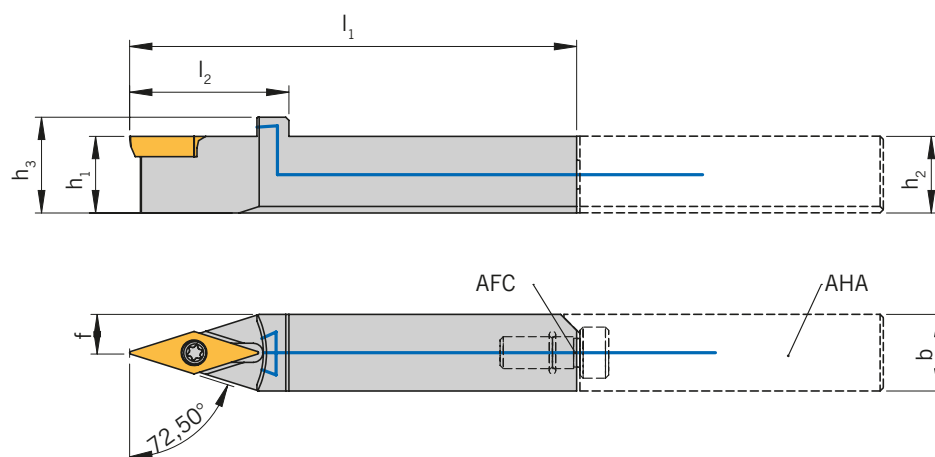
 Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SVJCL/R 1212 E11-AFC	SS 1751	KS 1751	O-RING 4.8 (VITON)

SVVC N ...-IK-AFC

With through tool coolant – Approach angle 72,5°



Right-hand execution shown

AFC = interface

AHA = fix stop



Holders

Designation	h1 / h2	h3	b	l1	l2	f	Insert
SVVCN 1212 E11-IK-AFC	12	15	12	70	25	6	VC.. 1103...
SVVCN 1616 E11-IK-AFC 	16	19	16	70	25	8	VC.. 1103...



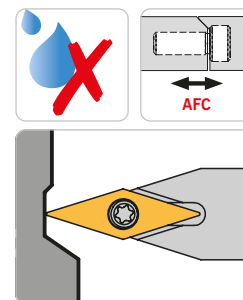
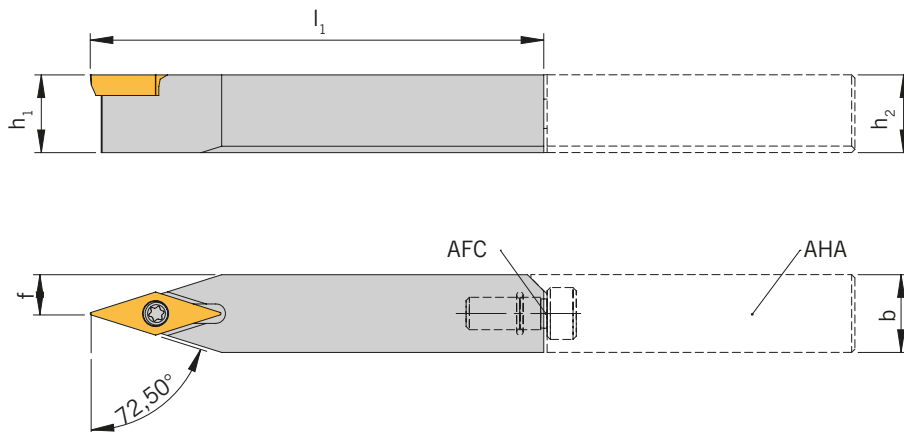
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SVVCN 1212 E11-IK-AFC	SS 1751	KS 1751	O-RING 4.8 (VITON)
SVVCN 1616 E11-IK-AFC	SS 1751	KS 1751	OR 4,7X1,6 NBR70

SVVC N ...-AFC

Approach angle 72,5°



Right-hand execution shown

AFC = interface

AHA = fix stop

Holders

Designation	h1 / h2	h3	b	l1	l2	f	Insert
SVVCN 1212 E11-AFC	12	15	12	70	25	6	VC.. 1103...



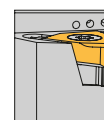
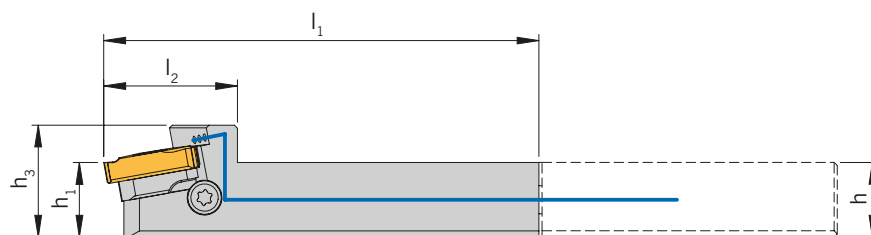
Remark: For matching fix stops see page 35 - 37

Spare Parts

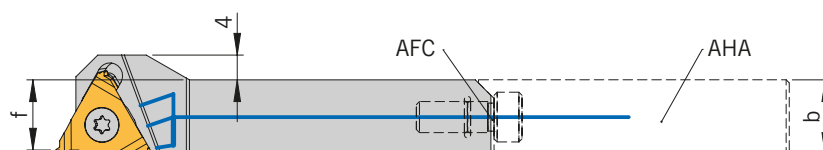
Holder	Screw	Key	O-ring
SVVCN 1212 E11-AFC	SS 1751	KS 1751	O-RING 4.8 (VITON)

AL ...-3R-IK-AFC

With through tool coolant



Right-hand execution shown
AFC = interface
AHA = fix stop



Holders

Designation	h = h1 = b	h3	l1	l2	f	Insert
AL 12-3R-IK-AFC	12	18	70	21,5	11,3	16ER...
AL 16-3R-IK-AFC 	16	22	70	21,5	15,3	16ER...



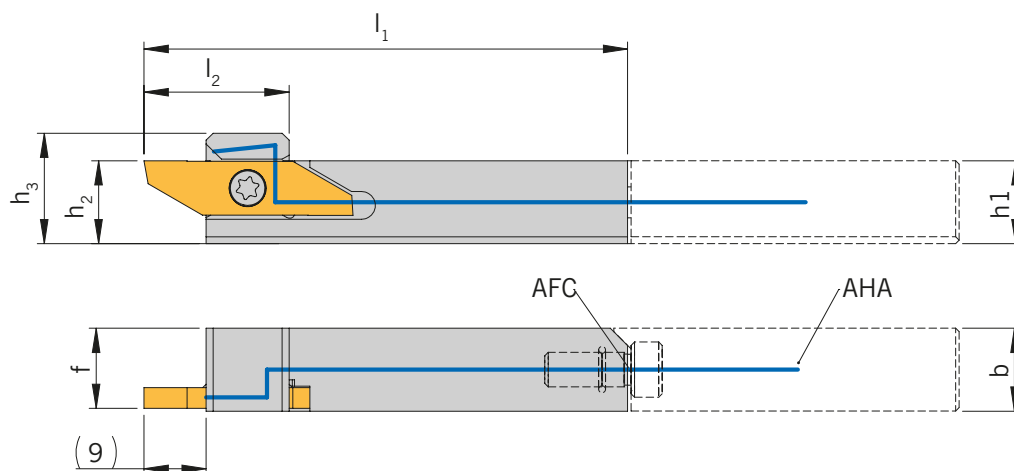
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Screw + washer for support pad	Key	Support pad R	O-ring
AL 12-3R-IK-AFC	SA3T	SY3T	KS 2510	YE3	O-RING 4.8 (VITON)
AL 16-3R-IK-AFC	SA3T	SY3T	KS 2510	YE3	OR 4,7X1,6 NBR70

SLAO L/R ...IK-AFC

With through tool coolant



Right-hand execution shown

AFC = interface

AHA = fix stop



Holders

Designation	h1 / h2	h3	b	l1	l2	f	Insert
SLAOL/R 1212 E08-IK-AFC	12	16	12	70	21	11,6	L.. 08...
SLAOL/R 1616 E08-IK-AFC	16	20	16	70	21	15,6	L.. 08...

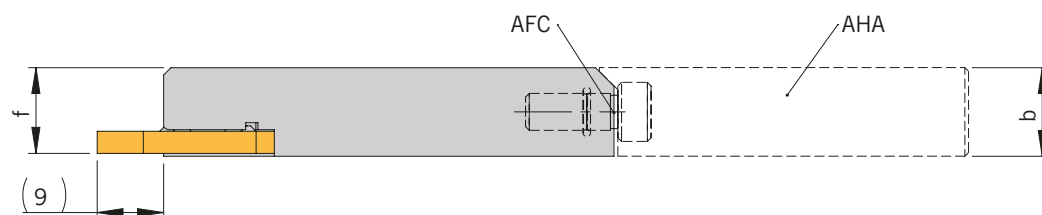
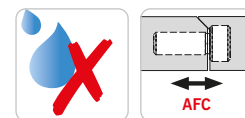


Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SLAOL/R 1212 E08-IK-AFC	AS 0028	KS 1111	O-RING 4.8 (VITON)
SLAOL/R 1616 E08-IK-AFC	AS 0028	KS 1111	OR 4,7X1,6 NBR70

SLAO L/R ...-AFC



Right-hand execution shown
AFC = interface
AHA = fix stop

Holders

Designation	h1 / h2	b	l1	f	Insert
SLAOL/R 1212 E08-AFC	12	12	70	11,6	L.. 08...



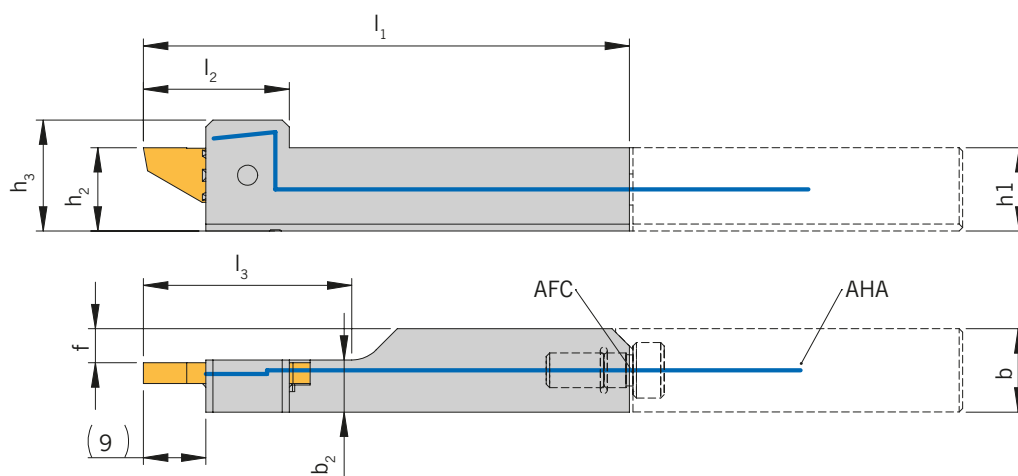
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SLAOL/R 1212 E08-AFC	AS 0028	KS 1111	O-RING 4.8 (VITON)

SLXO L ...IK-AFC

With through tool coolant



Left-hand execution shown

AFC = interface

AHA = fix stop



Holders

Designation	h1 / h2	h3	b	b2	l1	l2	l3	f	Insert
SLXOL 1212 E08-IK-AFC	12	16	12	7,5	70	21	30	4,9	L.. 08...
SLXOL 1616 E08-IK-AFC	16	20	16	7,5	70	21	30	8,9	L.. 08...

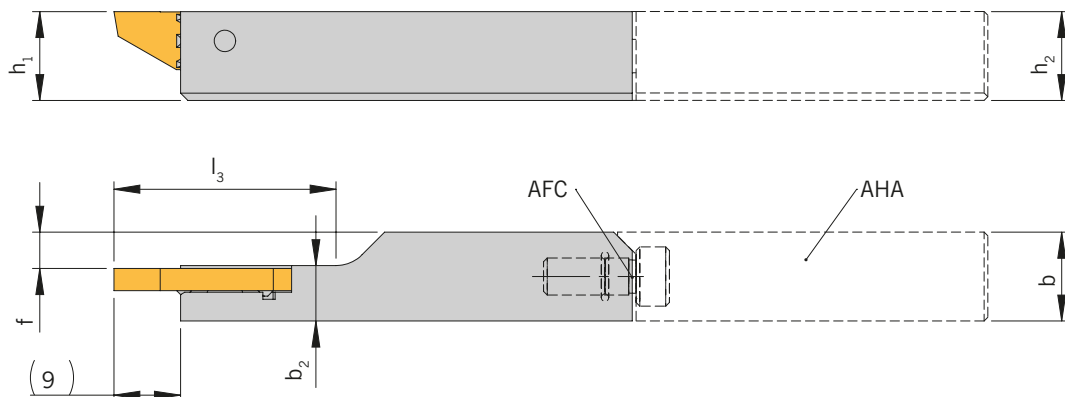
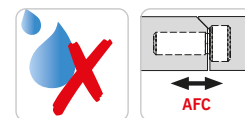


Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SLXOL 1212 E08-IK-AFC	AS 0028	KS 1111	O-RING 4.8 (VITON)
SLXOL 1616 E08-IK-AFC	AS 0029	KS 1111	OR 4,7X1,6 NBR70

SLXO L ...-AFC



Holders

Designation	h1 / h2	b	b2	l1	l3	f	Insert
SLXOL 1212 E08-AFC	12	12	7,5	70	30	4,9	L.. 08...



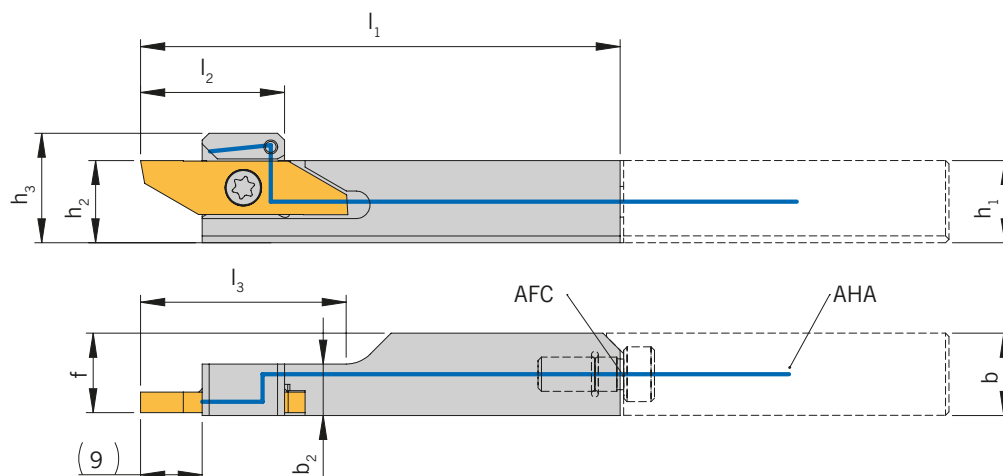
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SLXOL 1212 E08-AFC	AS 0028	KS 1111	O-RING 4.8 (VITON)

SLXO R ...-IK-AFC

With through tool coolant



Right-hand execution shown

AFC = interface

AHA = fix stop



Holders

Designation	h1 / h2	h3	b	b2	l1	l2	l3	f	Insert
SLXOR 1212 E08-IK-AFC	12	16	12	7,5	70	21	30	11,6	L.. 08...
SLXOR 1616 E08-IK-AFC	16	20	16	7,5	70	21	30	15,6	L.. 08...

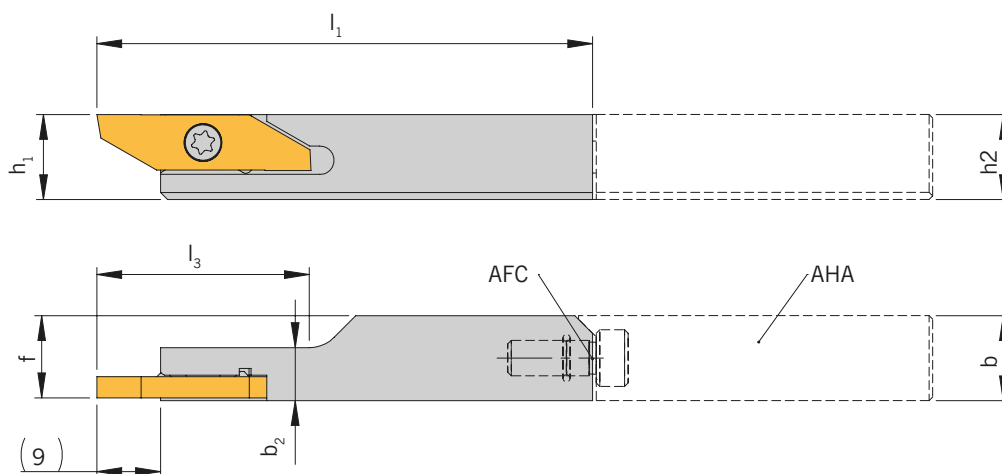
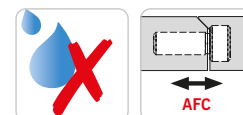


Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SLXOR 1212 E08-IK-AFC	AS 0029	KS 1111	O-RING 4.8 (VITON)
SLXOR 1616 E08-IK-AFC	AS 0029	KS 1111	OR 4,7X1,6 NBR70

SLXO R ...-AFC



Right-hand execution shown

AFC = interface

AHA = fix stop

Holders

Designation	h1 / h2	b	b2	l1	l3	f	Insert
SLXOR 1212 E08-AFC	12	12	7,5	70	30	11,6	L.. 08...



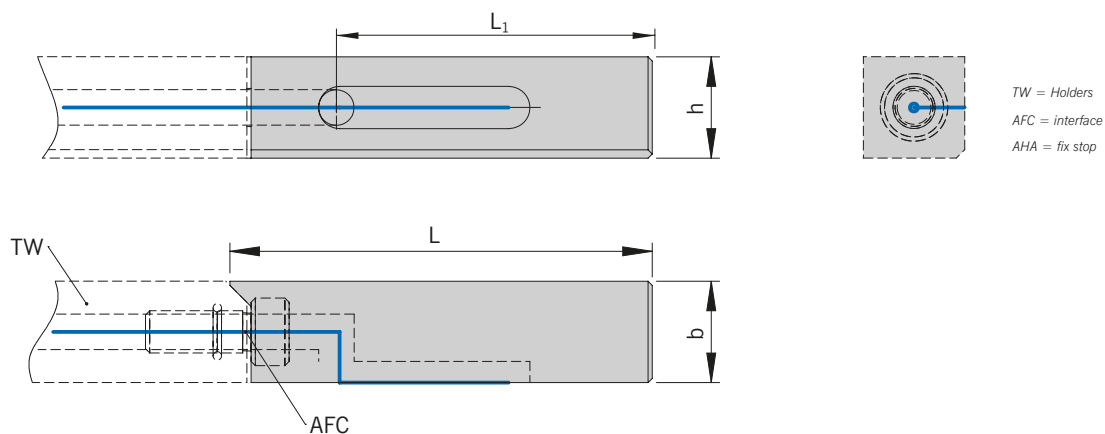
Remark: For matching fix stops see page 35 - 37

Spare Parts

Holder	Screw	Key	O-ring
SLXOR 1212 E08-AFC	AS 0028	KS 1111	O-RING 4.8 (VITON)

AHA...-UN...-AFC

Attention: This fix stop is only for ARNO tool holders (AWL -...) designed with UN delivery.



Fix-Stop

Designation	L	L1	h	b
AHA 1212-UN-27-50-AFC 2)	50	27	12	12
AHA 1212-UN-37-50-AFC	50	37	12	12
AHA 1212-UN1-37-50-AFC 1)	50	37	12	12
AHA 1616-UN-20-50-AFC	50	20	16	16
AHA 1616-UN-27-50-AFC	50	27	16	16
AHA 1616-UN-37-50-AFC	50	37	16	16

Please note for overhang lengths > 28mm please use fix-stop AHA 1212-UN-27-50-AFC

1) Fixed stop with coolant transfer groove on the opposite side – To mount the AFC tool holder overhead.

2) Fixed stop with offset coolant transfer groove – To extend the AFC tool holder overhang.

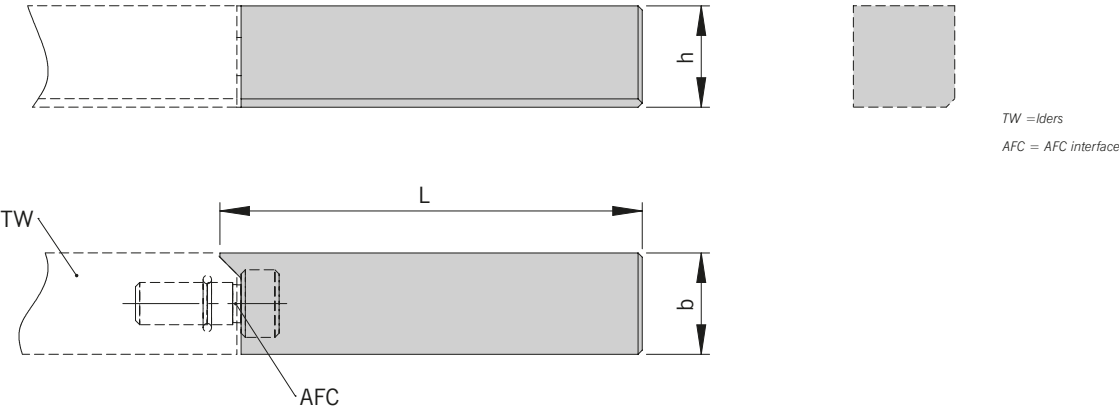
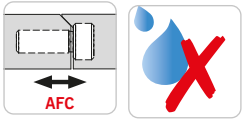
Remark: For matching tool holders see page 06 – 34

Remark: Please note the application notes on page 46 – 48

Spare Parts

Holder	AFC Pin	Key
AHA 1212-UN-...-AFC	458101	O-RING 4X1 (VITON)
AHA 1616-UN-...-AFC	458101	O-RING 4X1 (VITON)

AHA....-AFC



Fix-Stop

Designation	L	h	b
AHA 1212-50-AFC	50	12	12

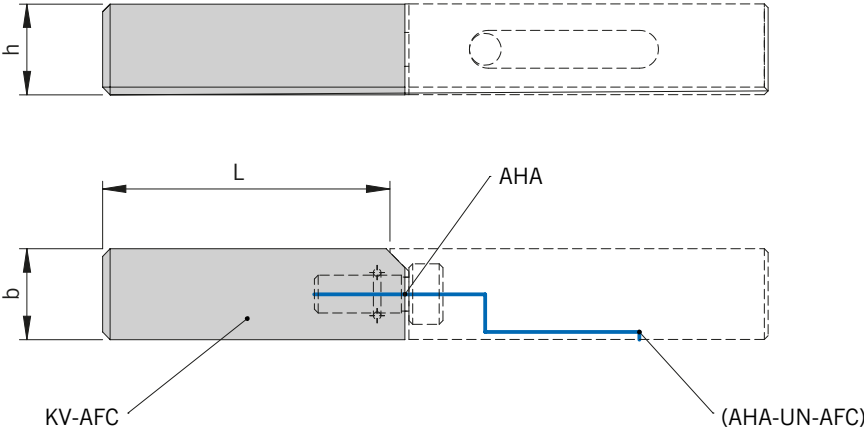
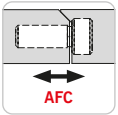
 Remark: For matching tool holders see page 06 – 34

 Remark: Please note the application notes on page 46 – 48

Spare Parts

Holder	AFC Pin	Key
AHA 1212-50-AFC	458101	O-RING 4X1 (VITON)

KV...-AFC



AFC = interface
AHA = fix stop



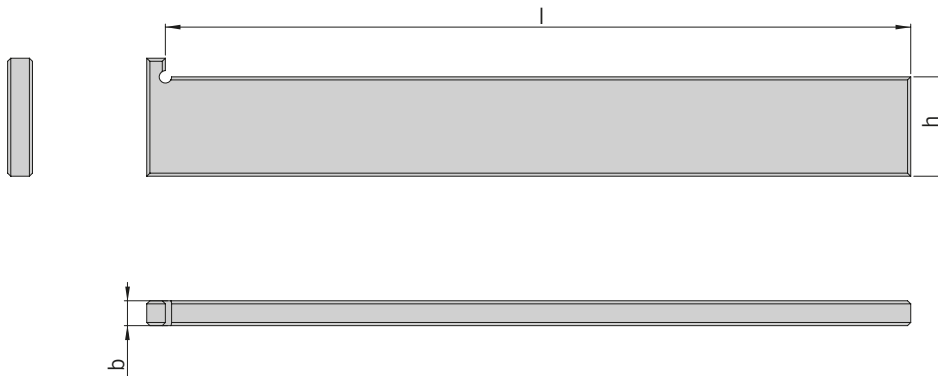
Fix-Stop

Designation	l	h	b
KV-1212-AFC	38	12	12
KV-1616-AFC 	38	16	16

Spare Parts

Holder	O-ring
KV-1212-AFC	O-RING 4.8 (VITON)
KV-1616-AFC	OR 4,7X1,6 NBR70

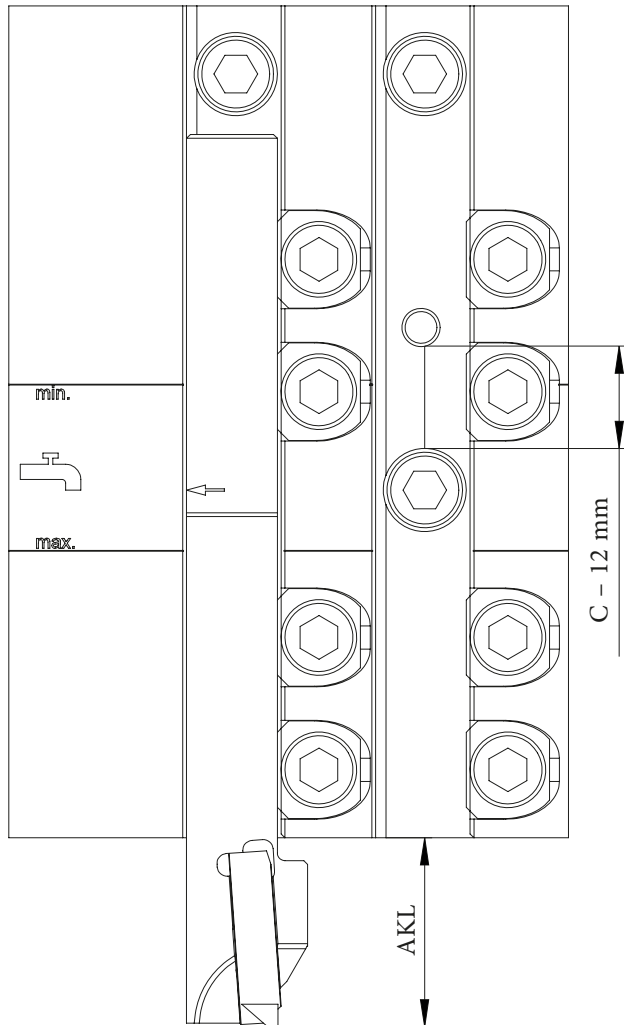
UP...-AFC



Support pad

Designation	l	h	b
UP-1212-AFC	115	12	4
UP-1616-AFC-104 	104	16	4
UP-1616-AFC-120 	120	16	4
UP-1616-AFC-132 	132	16	4

AHA... fixed stops



When selecting the correct AHA fixed stop for specific tool-holder slot positions note must be taken of the following criteria

- The required length of the specific tool holder projection length (AKL)
- The head length of the specific tool holder
- The spacing or distance between the bolt / mounting hole in the AWL rail and the UN coolant inlet port; this is indicated as detail C on the adjacent drawing. Please note this only applies in instances where there is a bolt / mounting hole contained inside or breaking into a tool holder slot position

The absolute critical feature to ensure full and leak free coolant supply is the position of the bolt / mounting hole in relation to the UN coolant inlet port; detail C.

To prevent leaks the C dimension must not be less than 12mm; please see below guidelines for the correct AHA fixed stop in relation to this dimensional requirement

Here we recommend the following:

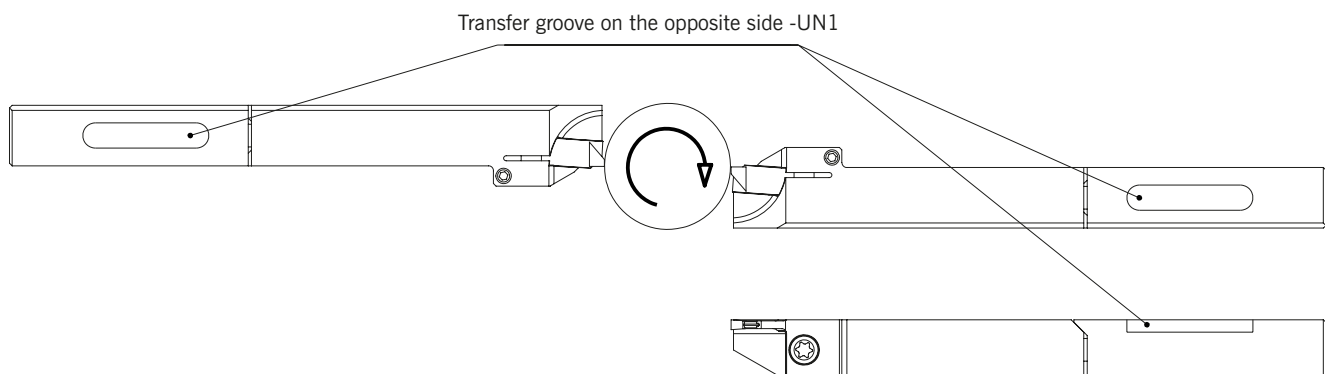
with $C \leq 12 \text{ mm}$ – please use AHA...-27...

with $C > 12 \text{ mm}$ – please use AHA...-37...

AHA... fixed stops with -UN1

On AHA... fixed stops with transfer groove -UN1..., the transfer groove is located on the opposite side. UN1 designs are therefore suitable for overhead machining. Similarly, they can be used when the spindle rotates counter-clockwise.

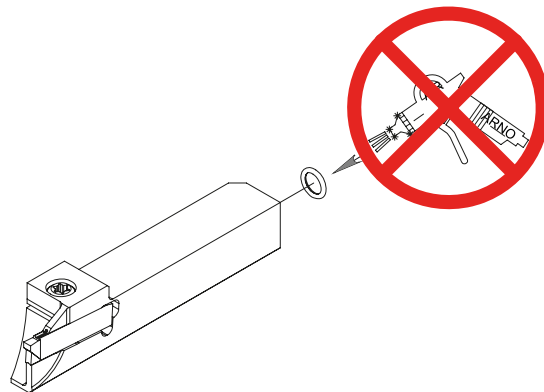
* Special requirements are possible on request after technical clarification



Maintenance & cleaning Of AFC tool holder heads

To maintain and clean / clear out the coolant inlet port on AFC tool holders it is recommended that the tool holder is flushed through with coolant or oil only.

DO NOT use compressed air, as indicated below, to clean out the tool as this may damage or loosen the internal O-ring which would, in turn, lead to coolant leakage.

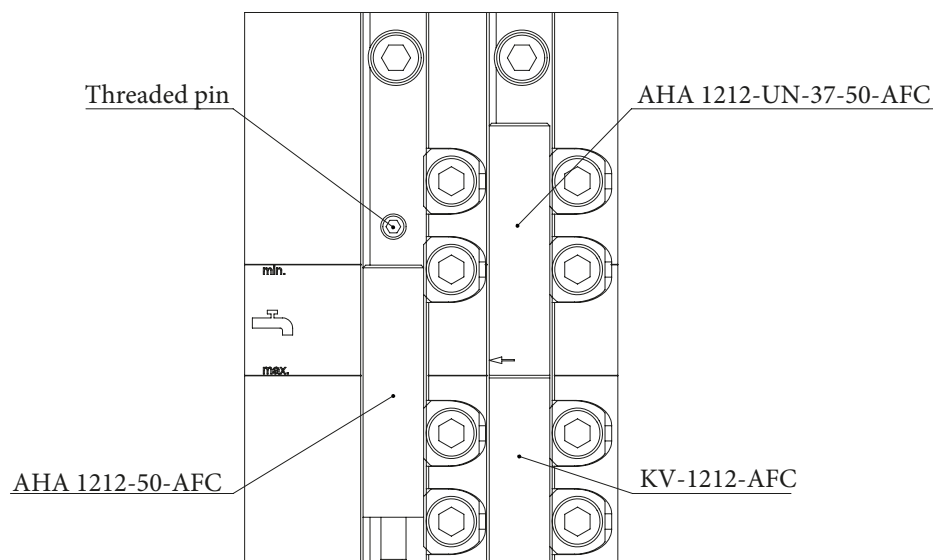


Options for sealing tool holder slot positions that are not in use

- Threaded pin
- AHA 1212-50-AFC
- AHA 1212-UN-37-50-AFC
- + KV-1212-AFC

There are two primary options for sealing tool holder slot positions that are not in use or required. These are as below:

1. Remove the AHA fixed stop and seal the UN coolant inlet port with the grub screw provided with the AWL unit. It is recommended that PTFE tape is used to coat the screw to ensure a leak free connection
2. Leave the AHA fixed stop in position and replace the AFC cutting tool with a KV-1212-AFC or KV-1616-AFC blanking plug. This is the preferred option as this route means that the AHA fixed stop does not need to be removed from the AWL rail and the UN coolant inlet port does not require sealing; this will mean that when the tool holder slot position is next required the time taken to re-set the tooling and AWL rail will be greatly reduced.



Guidelines for inserting, removing & replacing AFC tool holders in AWL rails

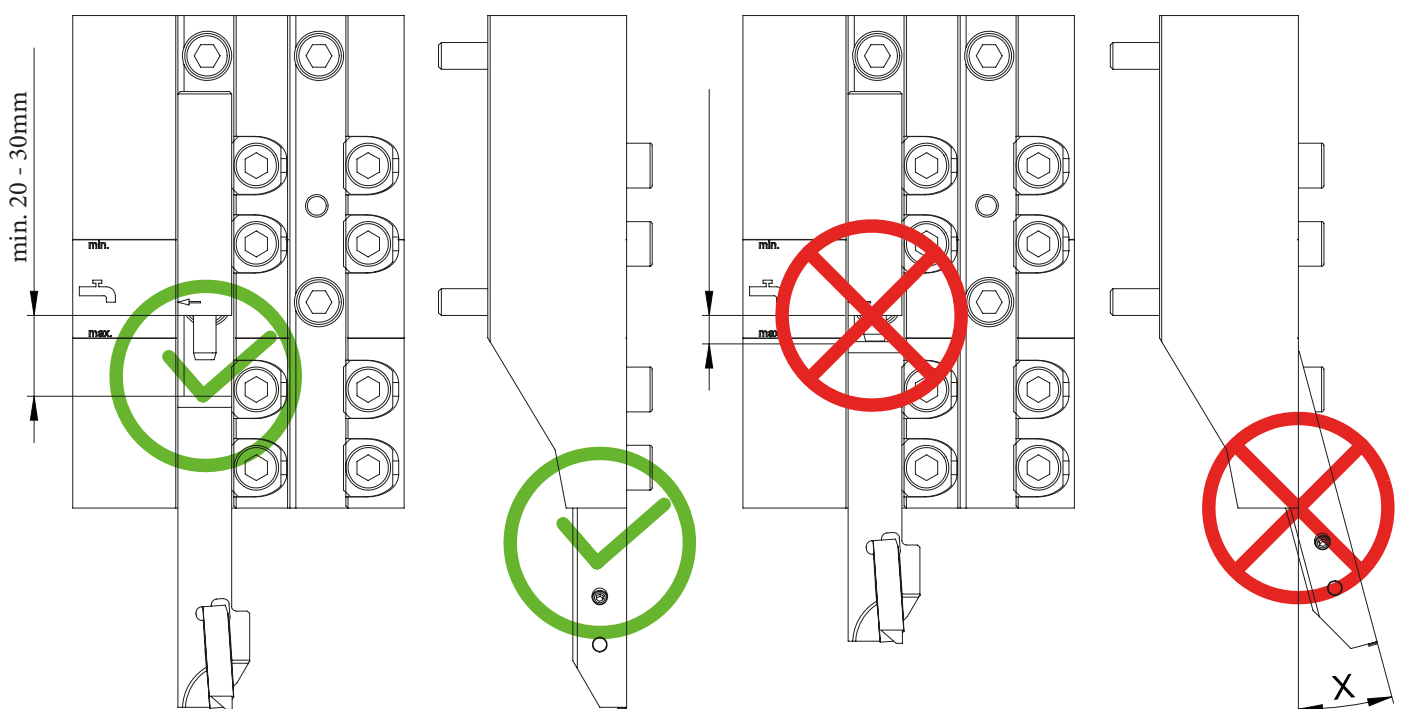
Before fitting or installing any AHA fixed stop of AFC tool holder thoroughly clean the tool holder slot within the AWL rail and the AHA fixed stop and AFC tool holder to be used.

- Position the AHA fixed stop inside the tool holder slot ensuring the arrow indicating the UN inlet coolant port position lines up with the markers on the AWL rail indicating the range at which through coolant feed supply is applicable. Press the AHA fixed stop down by hand locating it securely on the base of the tool holder slot. Then tighten the clamping wedges 'pinch tight'.
- Position AFC tool holder into the toolholder slot and locate into the AHA fixed stop and check that the AKL dimension of the completed assembly is correct for the application. If the position is correct double check that the AHA fixed stop is fully flat within the tool holder slot and tighten fully to the correct torque.
- If the position of the AHA fixed stop is incorrect to the required AKL dimension reposition the AHA fixed stop to the correct position then ensure that the AHA fixed stop is pressed down securely into position before clamping it down 'pinch tight'.
- Remove the AFC tool holder, double check that the AHA fixed stop is fully flat within the tool holder slot and tighten fully to the correct torque.
- When the AHA fixed stop is fully tightened insert the AFC tool holder ensuring it is correctly located into the AHA fixed stop and fully flat in the tool holder slot before tightening the two clamping wedges to the correct torque.

Removal & AFC toolholder replacement:

Remove the tool holder and the fixed stop in the reverse order.

- If removing both the AFC tool holder and AHA fixed stop remove the AFC tool holder first and then the AHA fixed stop.
- If only removing or replacing the AFC tool holder only unclamp the two clamping wedges that secure the AFC tool holder and remove as per the details and images below.
- When removing the AFC tool holder slide it out of the clamping position ensuring that it is 20mm to 30mm clear of the AFC coolant nozzle contained within the AHA fixed stop as shown in the images below with the green tick.
- **DO NOT** lift the AFC tool holder out of the rail whilst the AFC coolant nozzle is still inside the AFC tool holder as per the images below with the red cross. If you do this you will potentially damage the O-ring and seal which will cause the tools assembly to leak.



COOL RIGHT FROM THE START.

AWL sliding head*: with integrated coolant feed – patent applied.

Practical to achieve reliable efficient cooling: the integrated coolant feed on the AWL sliding head relegates complex installations with coolant hoses and space-consuming set-ups to the past. Thanks to two separate coolant holes, you can cut off coolant feed completely or partially at any time – even at 130 bar everything stays absolutely leak-proof.

Another clever feature: the lock nuts on the clamping claw screws raise the wedges when turned. This makes it easier to remove the holder to facilitate tool changes. The clamping claws mounted on the side also enhance the clamping force and permit a low height of only 5.5 mm.

* AWL sliding heads are currently available for selected machines. On request we manufacture AWL heads to fit your machine type. Simply send your enquiry to anfrage@arno.de



INTEGRATED ADVANTAGES of the AFC sliding head

Reliable cooling without hose assemblies – thanks to the integrated coolant feed in the sliding head

Flexible – the coolant feed can be completely or partially cut off

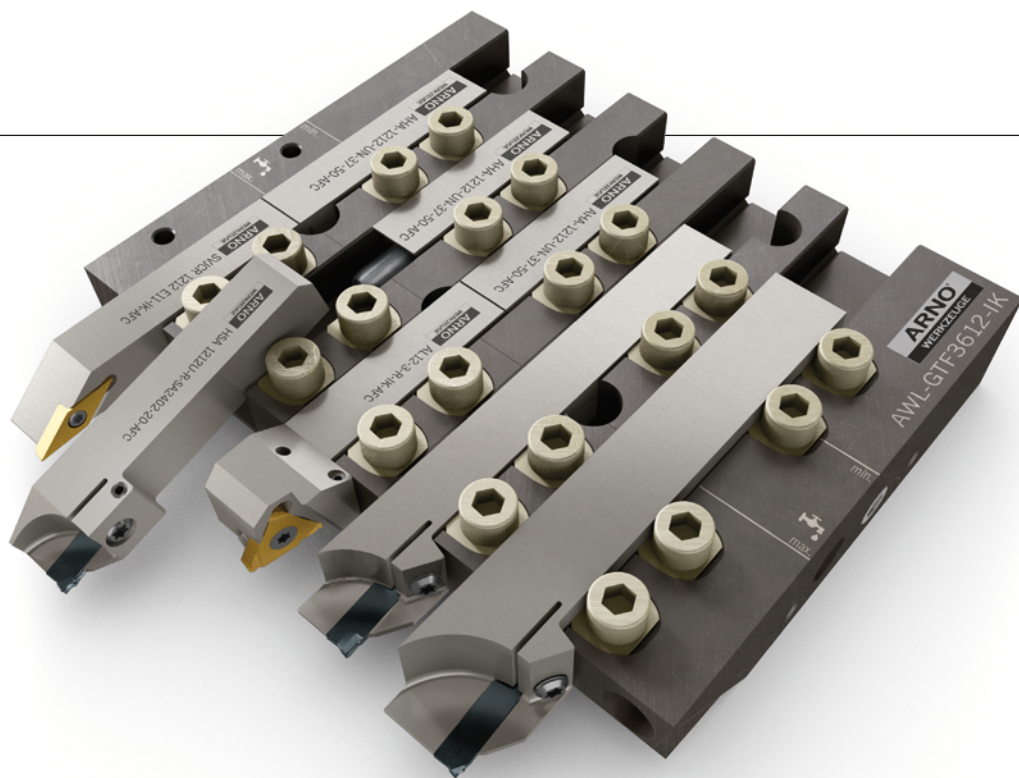
Securely clamped, easy to release – side-mounted clamping claws provide excellent clamping, lock nuts in the screws make tool changing easy

Flexibly combinable

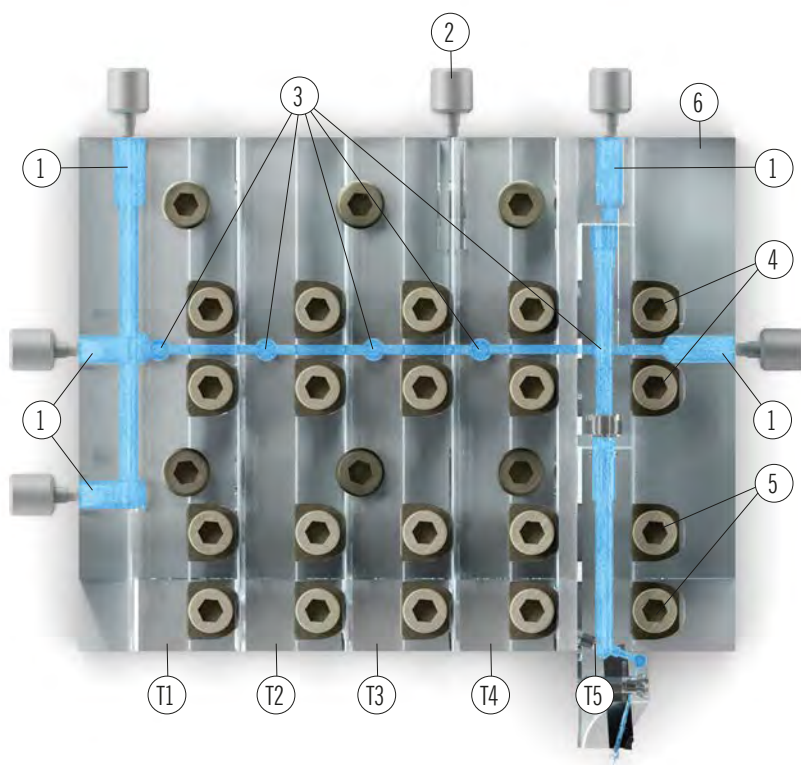
- All one and two-part tool holders are available in various sizes

Height of only 5.5 mm

- Ideal for restricted spaces inside Swiss type machines



ARNO DIGITAL // Discover the benefits of the AWL sliding head at langdrehen.arno.de



5 coolant holes

- The right size for any machine type
- Precise coolant feed

2 side clamping claws

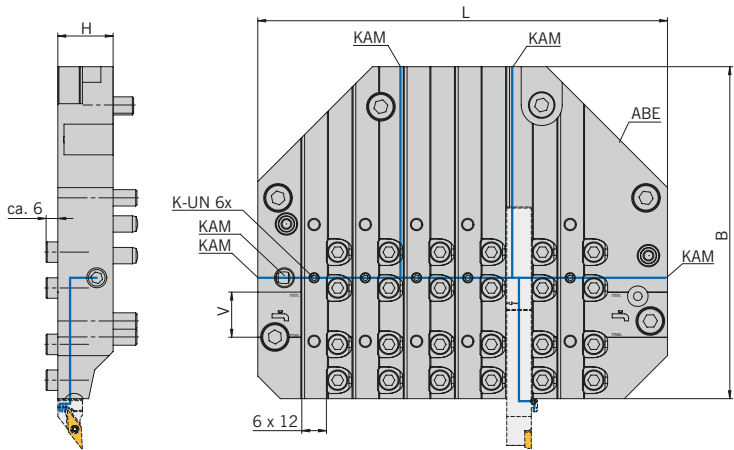
- Fits one or two-part holder systems
- Rigid thanks to perfect clamping
- Wedges lift automatically when screws are opened thanks to lock nuts

Tools with and without internal cooling can be used simultaneously

- Coolant feed can be cut off completely or partially by shut-off valve
- Absolutely leak-proof

- T Chambers T1, T2, T3, T4 for 12 x 12 mm tool holders and T5 for 16 x 16 mm tool holder or 12 x 12 mm tool holder with 4 mm support pad
1. 5 connection options for coolant supply
 2. Locking threaded pin to separate coolant supply T1, T2 and T3, T4, T5 inside tool holder
 3. Threaded pins to close/open individual chambers
 4. 2 clamping wedges to fit the AHA fixed stops
 5. 2 clamping wedges to fit the tool holders
 6. Parting insert rupture detection

ARNO gang plate for sliding head lathes – with internal cooling



KAM = coolant adapter options
V = coolant supply is ensured via UN in this range
ABE = parting insert rupture detection, Citizen original can be fitted

Machine model number:
K16E VII

Gang Plate

Designation	EDP#	L	B	H	12 x 12	V	KAM
AWL-BTF1012-IK	112304	200	162	27	6x	22	G1/8" (5x)

ARNO® SpecialDesign

On request we manufacture AWL heads to fit your machine type.

Spare Parts

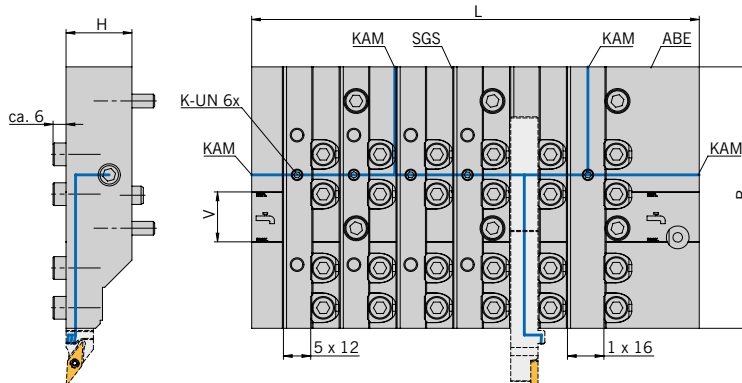
Plate	Clamping wedge	Dummy plug	Screw plug	Dowel pin	Coolant connection, angled, fixed	Torque wrench T-handle	Hexagonal blade
AWL-BTF1012-IK	AWL-SK111345	GN749-G1/8-A	AS 0075	ISO 8735-8x24-A	KA 005	T53	T53SW5

! Once the screw plug is tightened it can not be removed anymore.

Remark: For matching fix stops see page 35 - 37

Remark: For matching tool holders see page 06 – 34

ARNO gang plate for sliding head lathes – with internal cooling



KAM = coolant adapter options
 SGS = locking threaded pin – for two sep-arate pressure chambers (high pressure)
 V = coolant supply is ensured via UN in this range
 ABE = parting insert rupture detection, Citizen original can be fitted

Machine model numbers:
 A20 VII
 A320

Gang Plate

Designation	EDP#	L	B	H	12 x 12	16 x 16	V	KAM
AWL-BTF2212-IK	112200	197	115	29	5x	1x	22	G1/8" (4x)

ARNO® SpecialDesign

On request we manufacture AWL heads to fit your machine type.
 Su richiesta realizziamo piastre AWL adatti al vostro tipo di macchina.

Spare Parts

Plate	Clamping wedge	Dummy plug	Screw plug	Locking threaded pin	Support pad	Torque wrench T-handle	Hexagonal blade
AWL-BTF2212-IK	AWL-SK111345	GN749-G1/8-A	AS 0075	AWL-SGSM1045	UP-1212-AFC	T53	T53SW5

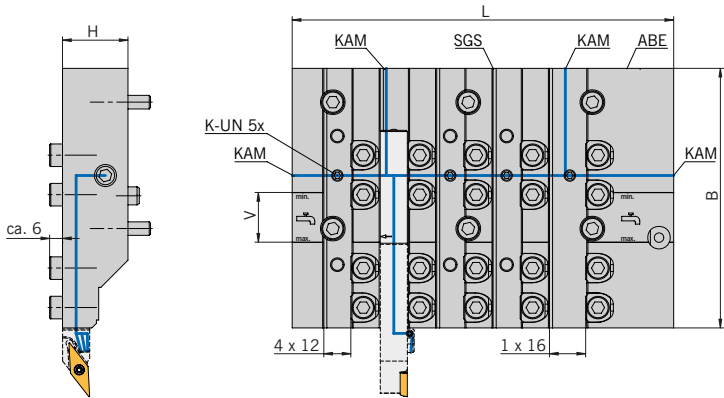
! Once the screw plug is tightened it can not be removed anymore.

⚙ Remark: For matching fix stops see page 35 - 37

Shim UP-1212-AFC: This shim permits the clamping of a 12x12 holder instead of a 16x16 holder.
 Piastra di supporto UP-1212-AFC: Con questa piastra è possibile serrare invece di un adattatore 16x16 un adattatore 12x12.

⚙ Remark: For matching tool holders see page 06 – 34

ARNO gang plate for sliding head lathes – with internal cooling



KAM = coolant adapter options

SGS = locking threaded pin – for two separate pressure chambers (high pressure)

V = coolant supply is ensured via UN in this range

ABE = parting insert rupture detection, Citizen original can be fitted

Machine model numbers:
A20 VII
A320

Gang Plate

Designation	EDP#	L	B	H	12 x 12	16 x 16	V	KAM
AWL-BTF2412-IK	112190	169	115	29	4x	1x	22	G1/8" (4x)

 ARNO® SpecialDesign

On request we manufacture AWL heads to fit your machine type.

Spare Parts

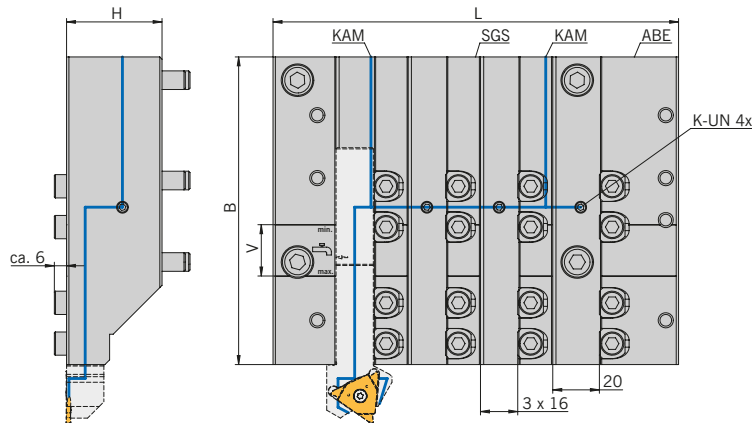
Plate	Clamping wedge Cuneo di	Dummy plug	Screw plug	Locking threaded pin	Support pad	Torque wrench T-handle	Hexagonal blade
AWL-BTF2412-IK	AWL-SK111345	GN749-G1/8-A	AS 0075	AWL-SGSM1045	UP-1212-AFC	T53	T53SW5

 Once the screw plug is tightened it can not be removed anymore.

 Remark: For matching fix stops see page 35 - 37
Shim UP-1212-AFC: This shim permits the clamping of a 12x12 holder instead of a 16x16 holder.

 Remark: For matching tool holders see page 06 – 34

ARNO gang plate for sliding head lathes – with internal cooling



KAM = coolant adapter options

SGS = locking threaded pin – for two separate pressure chambers (high pressure)

V = coolant supply is ensured via UN in this range

ABE = parting insert rupture detection, Citizen original can be fitted

Machine model numbers:
D25 VII, VIII

NEW

Gang Plate

Designation	EDP#	L	B	H	16 x 16	20 x 20	V	KAM
AWL-DTF116-IK	116664	174	132	41	3x	1x	22	G1/8" (2x)

ARNO® SpecialDesign

On request we manufacture AWL heads to fit your machine type.

Spare Parts

Plate	Clamping wedge	Dummy plug	Screw plug	Locking threaded pin	Support pad	Torque wrench T-handle	Hexagonal blade
AWL-DTF116-IK	AWL-SK111345	GN749-G1/8-A	AS 0075	AWL-SGSM1045	UP-1616-AFC-132	T53	T53SW5

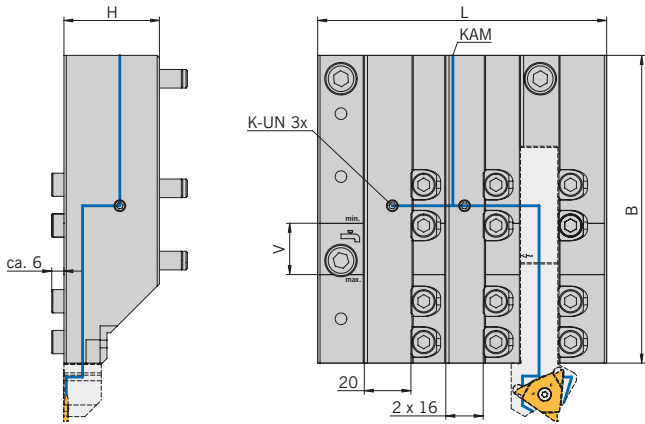
Once the screw plug is tightened it can not be removed anymore.

Remark: For matching fix stops see page 35 - 37

Shim UP-1616-AFC-132: This shim permits the clamping of a 16x16 holder instead of a 20x20 holder.

Remark: For matching tool holders see page 06 – 34

ARNO gang plate for sliding head lathes – with internal cooling



KAM = coolant adapter options

V = coolant supply is ensured via UN in this range

Machine model number: D25 VII, VIII



Gang Plate

Designation	EDP#	L	B	H	16 x 16	20 x 20	V	KAM
AWL-DTF216-1K	116663	124	132	41	2x	1x	22	G1/8"

ARNO® SpecialDesign

On request we manufacture AWL heads to fit your machine type.

Spare Parts

Plate	Clamping wedge	Dummy plug	Screw plug	Locking threaded pin	Support pad	Torque wrench T-handle	Hexagonal blade
AWL-DTF116-1K	AWL-SK111345	GN749-G1/8-A	AS 0075	AWL-SGSM1045	UP-1616-AFC-132	T53	T53SW5

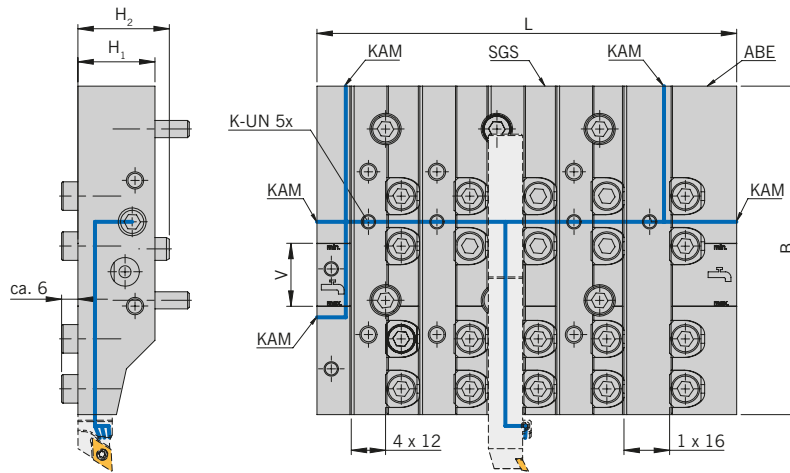
Once the screw plug is tightened it can not be removed anymore.

Remark: For matching fix stops see page 35 - 37

Shim UP-1616-AFC-132: This shim permits the clamping of a 16x16 holder instead of a 20x20 holder.

Remark: For matching tool holders see page 06 – 34

ARNO gang plate for sliding head lathes – with internal cooling



KAM = coolant adapter options

SGS = locking threaded pin –
for two sep-arate pressure
chambers (high pressure)

V = coolant supply is ensured
via UN in this range

ABE = parting insert rupture
detection, Citizen original can be
fitted

Machine model number:
L20 VIII, X, XII
A20 VII

Gang Plate

Designation	EDP#	L	B	H ₁	H ₂	12 x 12	16 x 16	V	KAM
AWL-GTF3612-IK	111870	147	115	27	32	4x	1x	22	G1/8" (5x)

ARNO® SpecialDesign

On request we manufacture AWL heads to fit your machine type.

Spare Parts

Plate	Clamping wedge	Dummy plug	Screw plug	Locking threaded pin	Support pad	Torque wrench T-handle	Hexagonal blade
AWL-GTF3612-IK-UK1	AWL-SK111345	GN749-G1/8-A	AS 0075	AWL-SGSM1045	UP-1212-AFC	T53	T53SW5



Once the screw plug is tightened it can not be removed anymore.



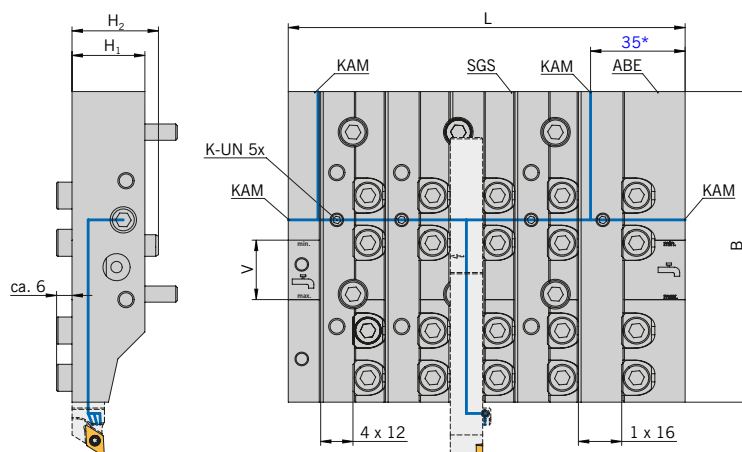
Remark: For matching fix stops see page 35 - 37

Shim UP-1212-AFC: This shim permits the clamping of a 12x12 holder instead of a 16x16 holder.



Remark: For matching tool holders see page 06 – 34

ARNO gang plate for sliding head lathes – with internal cooling



KAM = coolant adapter options

SGS = locking threaded pin – for two separate pressure chambers (high pressure)

V = coolant supply is ensured via UN in this range

ABE = parting insert rupture detection, Citizen original can be fitted

Machine model numbers:
L20 VIII, X, XII
A20 VII

35°: 35.00mm off-set coolant porthole, to allow for greater clearance between machine guard and coolant connection.



Gang Plate

Designation	EDP#	L	B	H1	H2	12 x 12	16 x 16	V	KAM
AWL-GTF3612-IK-UK1	116646	147	115	27	32	4x	1x	22	G1/8" (4x)

ARNO® SpecialDesign

On request we manufacture AWL heads to fit your machine type.

Spare Parts

Plate	Clamping wedge	Dummy plug	Screw plug	Locking threaded pin	Support pad	Torque wrench T-handle	Hexagonal blade
AWL-GTF3612-IK-UK1	AWL-SK111345	GN749-G1/8-A	AS 0075	AWL-SGSM1045	UP-1212-AFC	T53	T53SW5



Once the screw plug is tightened it can not be removed anymore.



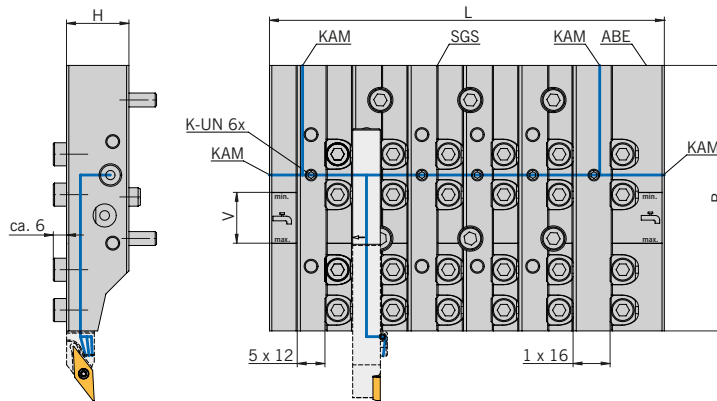
Remark: For matching fix stops see page 35 - 37

Shim UP-1212-AFC: This shim permits the clamping of a 12x12 holder instead of a 16x16 holder.



Remark: For matching tool holders see page 06 - 34

ARNO gang plate for sliding head lathes – with internal cooling



KAM = coolant adapter options

SGS = locking threaded pin – for two separate pressure chambers (high pressure)

V = coolant supply is ensured via UN in this range

ABE = parting insert rupture detection, Citizen original can be fitted

Machine model numbers:
L20 VIII, X, XII

Gang Plate

Designation	EDP#	L	B	H	12 x 12	16 x 16	V	KAM
AWL-GTF3812-IK	112148	171	115	27	5x	1x	22	G1/8" (4x)

ARNO® SpecialDesign

On request we manufacture AWL heads to fit your machine type.

Spare Parts

Plate	Clamping wedge	Dummy plug	Screw plug	Locking threaded pin	Support pad	Torque wrench T-handle	Hexagonal blade
AWL-GTF3812-IK	AWL-SK111345	GN749-G1/8-A	AS 0075	AWL-SGSM1045	UP-1212-AFC	T53	T53SW5



Once the screw plug is tightened it can not be removed anymore.



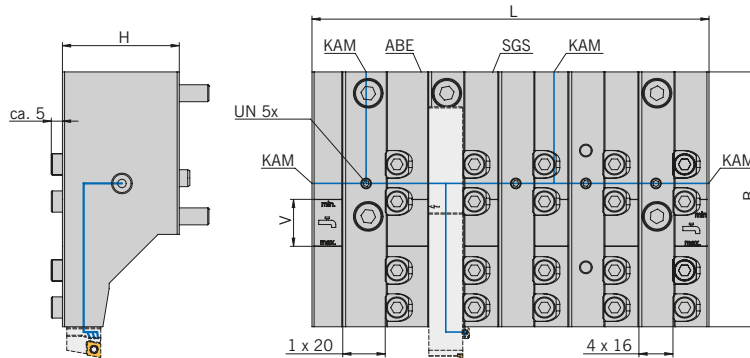
Remark: For matching fix stops see page 35 - 37

Shim UP-1212-AFC: This shim permits the clamping of a 12x12 holder instead of a 16x16 holder.



Remark: For matching tool holders see page 06 – 34

ARNO gang plate for sliding head lathes – with internal cooling



KAM = coolant adapter options

SGS = locking threaded pin – for two sep-arate pressure chambers (high pressure)

V = coolant supply is ensured via UN in this range
V

ABE = parting insert rupture detection, Citizen original can be fitted

Machine model numbers:**M32-V, VIII****M420, III, V, VII, VIII****M432, III, V, VII, VIII****Gang Plate**

Designation	EDP#	L	B	H	16 x 16	20 x 20	V	KAM
AWL-GTF5816-IK	116401	187	120	55	4x	1x	22	G1/8" (4x)

ARNO® SpecialDesign

On request we manufacture AWL heads to fit your machine type

Spare Parts

Plate	Clamping wedge	Dummy plug	Screw plug	Coolant connection, angled, fixed	Locking threaded pin	Support pad	Guide bolts	wrench T-handle	Hexagonal blade
AWL-GTF5816-IK	AWL-SK111345	GN749-G1/8-A	AS 0075	KA 005	AWL-SGSM1045	UP-1616-AFC-120	AWL-FB0908	T53	T53SW5



Once the screw plug is tightened it can not be removed anymore.



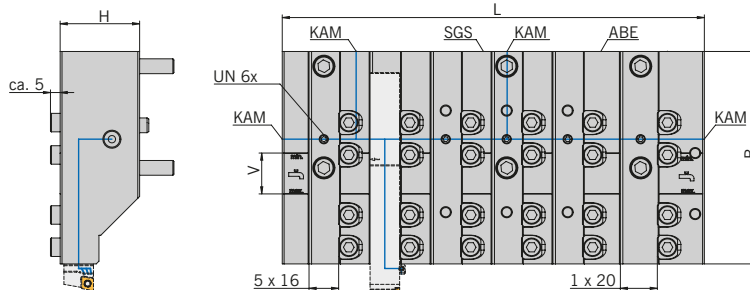
Remark: For matching fix stops see page 35 - 37

Shim UP-1616-AFC-120: This shim permits the clamping of a 16x16 holder instead of a 20x20 holder.



Remark: For matching tool holders see page 06 - 34

ARNO gang plate for sliding head lathes – with internal cooling



KAM = coolant adapter options

SGS = locking threaded pin – for two separate pressure chambers (high pressure)

V = coolant supply is ensured via UN in this range

ABE = parting insert rupture detection, Citizen original can be fitted

Machine model numbers:
L32, VIII, X, XII



Gang Plate

Designation	EDP#	L	B	H	16 x 16	20 x 20	V	KAM
AWL-GTF5916-IK	116400	228,5	115	43	5x	1x	22	G1/8" (4x)

ARNO® SpecialDesign

On request we manufacture AWL heads to fit your machine type.

Spare Parts

Plate	Clamping wedge	Dummy plug	Screw plug	Coolant connection, angled, fixed	Locking threaded pin	Support pad	Guide bolts	Torque wrench T-handle	Hexagonal blade
AWL-GTF5916-IK	AWL-SK111345	GN749-G1/8-A	AS 0075	KA 005	AWL-SGSM1045	UP-1616-AFC-120	AWL-FB0908	T53	T53SW5

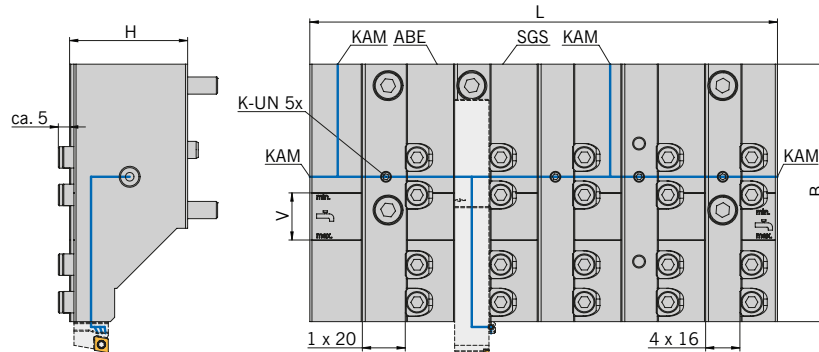
! Once the screw plug is tightened it can not be removed anymore.

⚙ Remark: For matching fix stops see page 35 - 37

Shim UP-1616-AFC-120: This shim permits the clamping of a 16x16 holder instead of a 20x20 holder.

⚙ Remark: For matching tool holders see page 06 – 34

ARNO gang plate for sliding head lathes – with internal cooling



KAM = coolant adapter options

SGS = locking threaded pin – for two separate pressure chambers (high pressure)

V = coolant supply is ensured via UN in this range

ABE = parting insert rupture detection, Citizen original can be fitted

Machine model numbers:
M32-M5

NEW

Gang Plate

Designation	EDP#	L	B	H	16 x 16	20 x 20	V	KAM
AWL-GTF6116-IK	117083	218	120	55	4x	1x	22	G1/8" (4x)

ARNO® SpecialDesign

On request we manufacture AWL heads to fit your machine type.

Spare Parts

Plate	Clamping wedge	Dummy plug	Screw plug	Coolant connection, angled, fixed	Locking threaded pin	Support pad	Guide bolts	Torque wrench T-handle	Hexagonal blade
AWL-GTF6116-IK	AWL-SK111345	GN749-G1/8-A	AS 0075	KA 005	AWL-SGSM1045	UP-1616-AFC-120	AWL-FB0908	T53	T53SW5

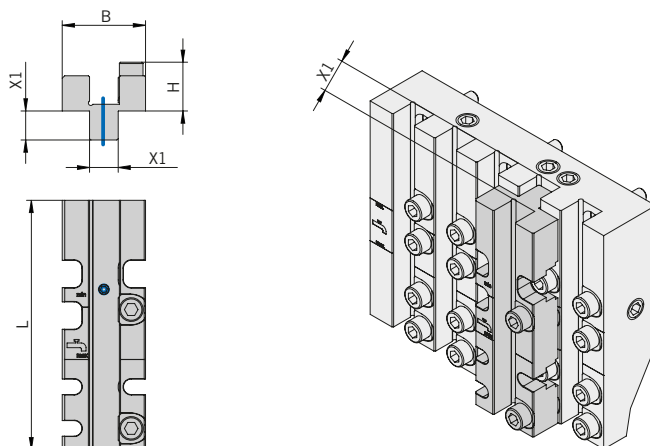
! Once the screw plug is tightened it can not be removed anymore.

Remark: For matching fix stops see page 35 - 37

Shim UP-1616-AFC-120: This shim permits the clamping of a 16x16 holder instead of a 20x20 holder.

Remark: For matching tool holders see page 06 - 34

Z-axis extension adaptor –with internal cooling



Z-axis extension adaptor

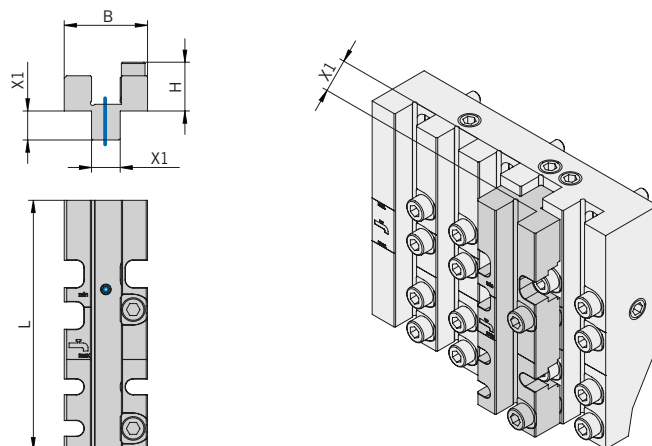
Designation	Schaft Shank Stelo	VZ	X1	X2	L	B	H
AWL-AZ1215-S1-IK	12x12	15	12	12	105	35	21
AWL-AZ1220-S1-IK	12x12	20	12	12	105	35	21
AWL-AZ1620-S1-IK	16x16	20	16	16	105	39	26
AWL-AZ1620-S2-IK	16x16	20	16	12	105	39	30

! To ensure compatibility with your AWL rail we recommend you to contact your ARNO Technical Sales Engineer for advise..

Spare Parts

Extension	Clamping wedge	Torque wrench T-handle	Hexagonal blade
AWL-AZ1215-S1-IK	AWL-SK111345	T53	T53SW5
AWL-AZ1220-S1-I	AWL-SK111345	T53	T53SW5
AWL-AZ1620-S1-IK	AWL-SK111345	T53	T53SW5
AWL-AZ1620-S2-IK	AWL-SK111345	T53	T53SW5

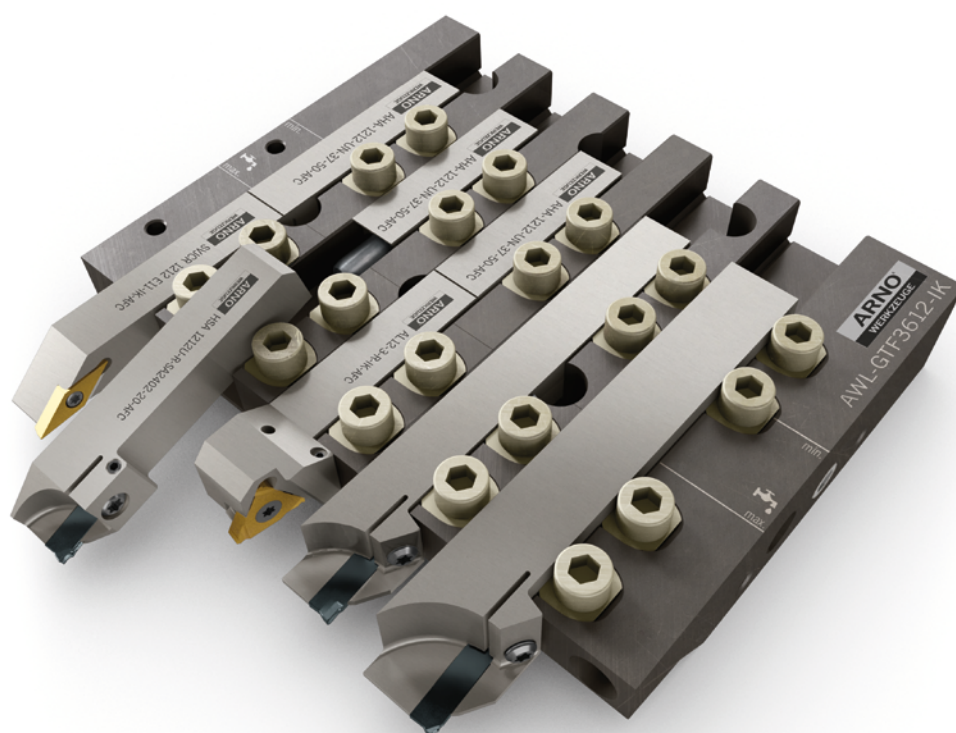
! Remark: The adaptor is supplied without clamping wedge. Please use the clamping wedge provided with the AWL rail for installation.



Compatibility AWL...AZ with AWL rail

Shank size 12 x 12		Shank size 16 x 16	
Offset 15 mm	Offset 20 mm	Offset 20 mm	Offset 20 mm
AWL-AZ1215-S1-IK	AWL-AZ1220-S1-IK	AWL-AZ1620-S1-IK	AWL-AZ1620-S2-IK
CITIZEN			
AWL-GTF3212-IK	AWL-GTF3212-IK		AWL-GTF3612-IK
AWL-GTF3812-IK	AWL-GTF3812-IK		AWL-GTF3812-IK
AWL-BTF2412-IK	AWL-BTF2412-IK		AWL-BTF2212-IK
AWL-BTF2212-IK	AWL-BTF2212-IK		AWL-BTF2412-IK
AWL-GTF3612-IK	AWL-GTF3612-IK		
AWL-GTF3612-IK-UK1	AWL-GTF3612-IK-UK1		

M9A0012



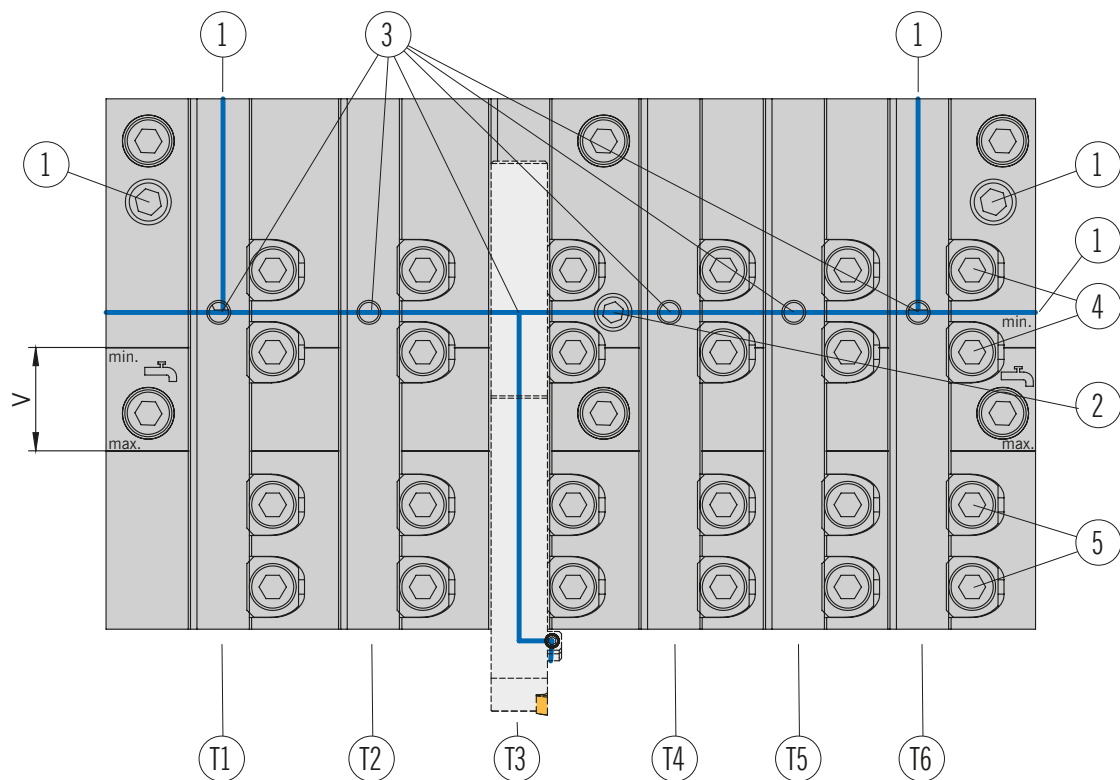
ARNO tool holder Swiss type machining

Similar picture

General:

To fit the tool holder, the screws required for fastening are enclosed, e.g. cylinder-head screws.

Depending on the machine manufacturer, the tool holder is positioned by pins on the rear of the machine.



Cooling

A number of different connection options are available for coolant supply (Pos. 1). Unused connections should be closed off by screw plugs or dummy plugs. These items are also enclosed.

It is possible to create two separate coolant circuits by fully screwing in the locking threaded pin (Pos. 2). The coolant circuits are separated into even/uneven pitch depending on the number of tools. This depends on the following: Two separate coolant outlets must be present on the cool-ant pump in order to control the two coolant circuits.

In addition, each cooling chamber can be closed off or opened by a threaded pin (Pos. 3). This ensures coolant supply within the adjustment path V.

Fitting and handling the AFC tool holder and AFC fixed stops

The fix stops AHA...1212...AFC are fitted using the top two clamping wedges (Pos.4). Remark: In all cases, use the fixed stop design UN

(AHA-1212-UN...- AFC) when internal coolant is utilized. To ensure accuracy and repeatability of the AFC toolinghead when indexing or replacing units it is recommended that the fixed stops is not removed from units AWL-GTF3612-IK.

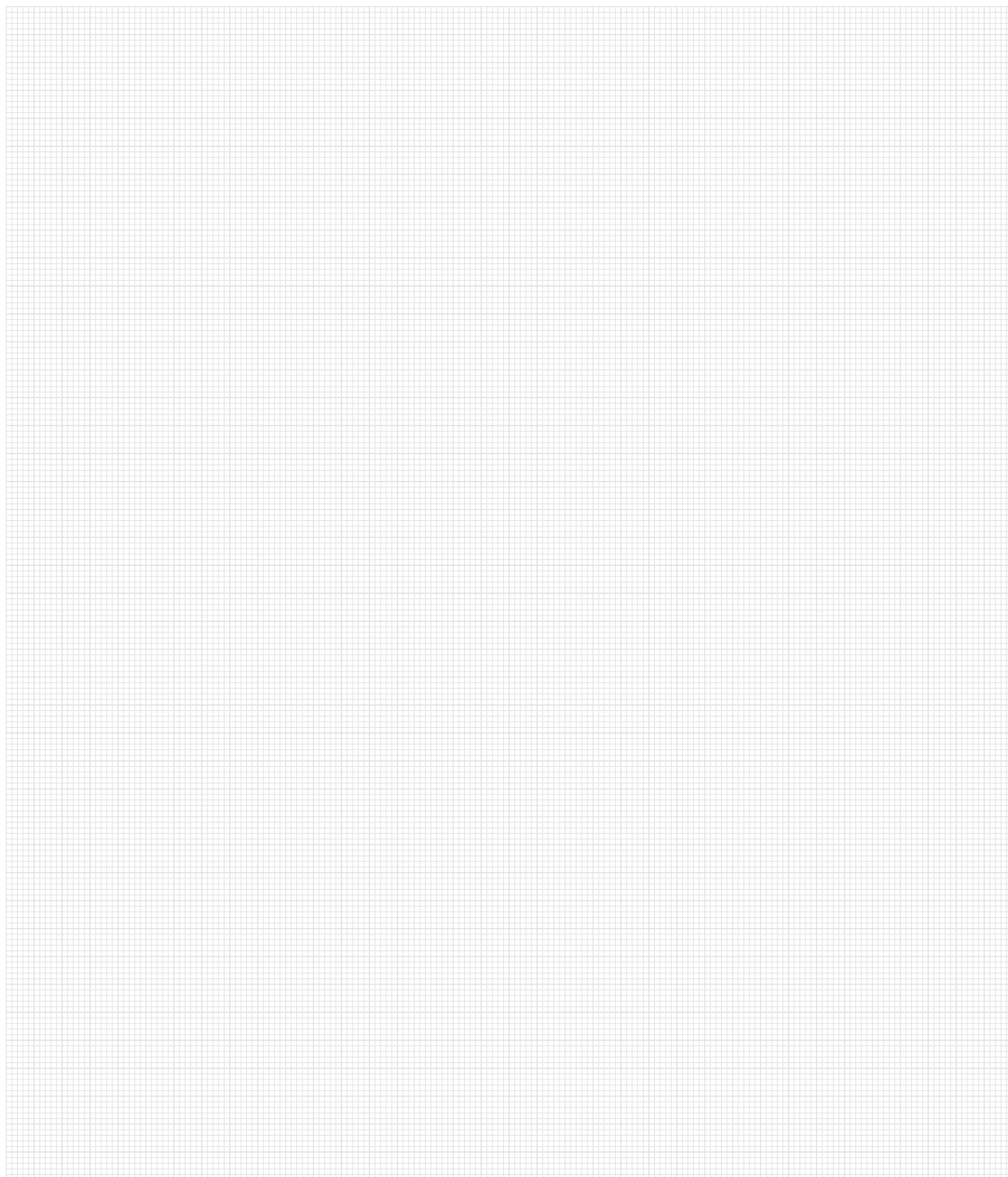
Fit the AFC tool holder and insert in the groove and slide them against the AFC fix stop. Then clamp and change with the bottom two clamping wedges (Pos.5).

Other remarks

The parting insert rupture detection (Pos.6) from Citizen can be fitted as usual.

Our recommendation

Please use the torque wrench T-handle TS3 and the hexagonal blade TS3SWS to clamp the clamping wedge AWL-SK111345.



For more information see

www.arnousa.com

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