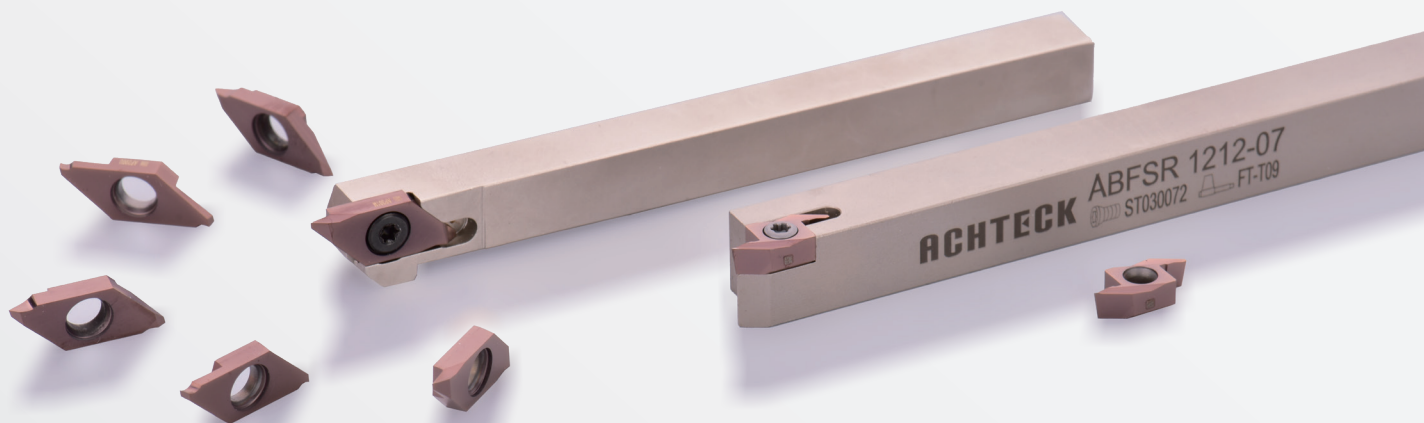


ASW/ABF Multi-functional tools series for small automatic lathes

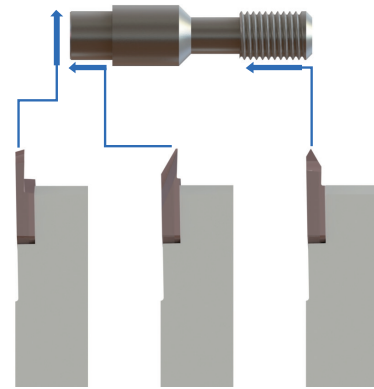




• Small tools

ASW series

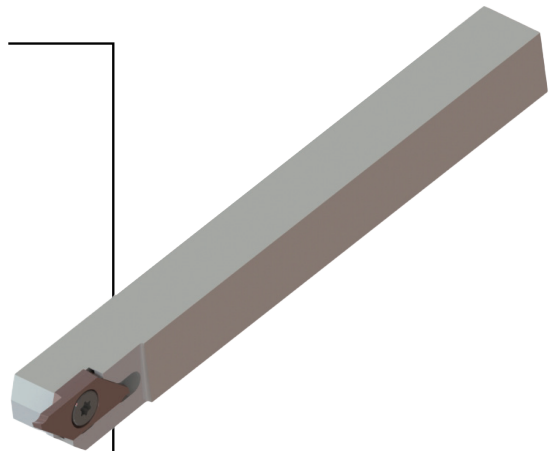
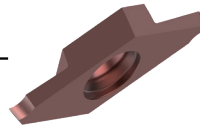
Suitable for parting off, back turning and threading.
Specific grades for reliable performance and long tool life.



Parting off

ASWP

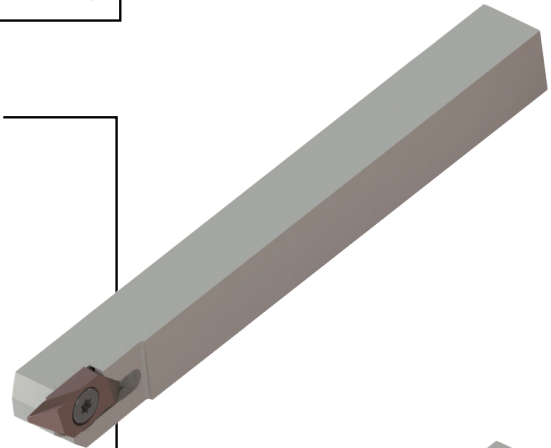
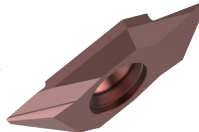
- Max Parting Off Dia. of ASWP 09: $\phi 5 \sim \phi 12$, Max Dia. of ASWP10: $\phi 16$
- Cutting edge width: 0.5~2.0 mm.
- F Chip breaker: Sharp edge to achieve smooth cutting with low cutting forces.
- M Chip breaker: Strong cutting edge for stable performance in interrupted machining.
- T Chip breaker: Suitable for high efficiency machining.



Back turning

ASWB

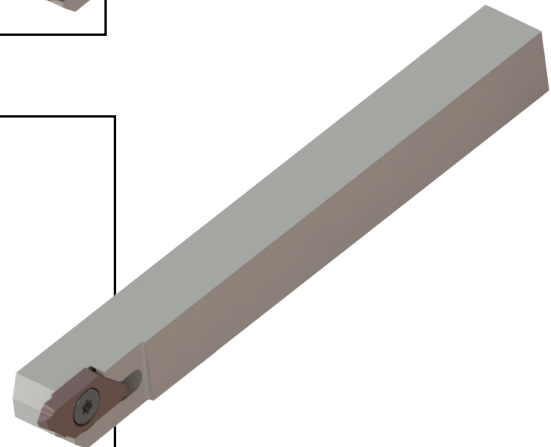
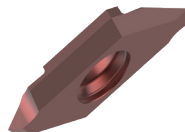
- Max Parting Off Dia. of ASWP 09: 3~4mm, Max ap. of ASWB10: 5mm
- Cutting edge width: 1.5~3.8 mm.
- Sharp cutting edge and large rake angle for large ap and low cutting forces.



Threading

ASWT


- ASWT series is suitable for thread pitch 0.2~1.5 mm.
- Designed with different tip offset directions to match the flexible working condition demands.
- The cutting edge is strong, can be used in high feed machining and is very versatile.



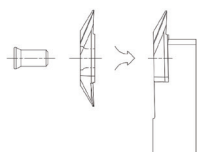
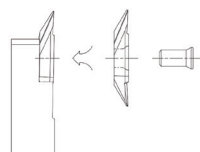


• **Small tools**






ASWP chip breaker introduction

F	GAN	M	GAN	T	GAN	Shape
ASWP 09...-F	15°	ASWP...-M/M16R	12°	ASWP...-T/T20R	0°	
ASWP 09...-F16R	25°					
ASWP 10...-F/F16R	20°					

The left/right hands of ASWB

Holder	Right hand(R)	Holder	Left hand (L)
Insert	Right hand(R)	Insert	Left hand (L)
Lead direction	Right hand(R)	Lead direction	Right hand(R)
			
<p>Note: When roughing and finishing separately, use the tool with left hand and right lead direction to avoid the burr formed by roughing into the guide bushing.</p>			

The tip offset direction of ASWT

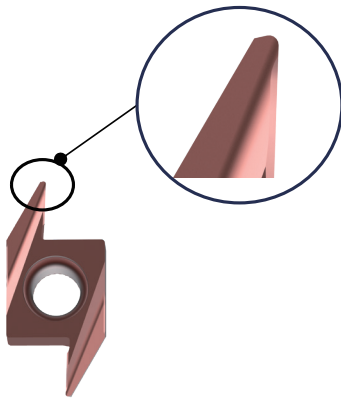
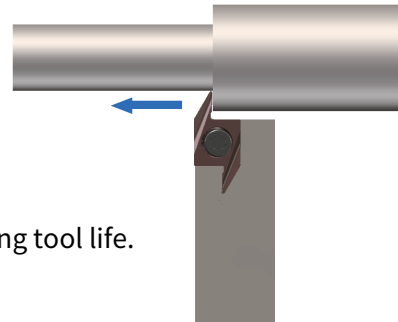
Direction Insert	FL	FR	FN
	Right hand (R)		
Left hand (L)			



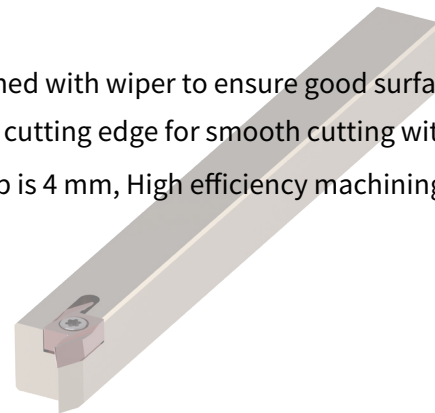
Small tools

ABF series

For back turning
Specific insert grades for reliable performance and long tool life.



- Designed with wiper to ensure good surface quality.
- Sharp cutting edge for smooth cutting with low cutting forces.
- Max ap is 4 mm, High efficiency machining.



Grade features

M15-M35
S15-S35

Stainless steel

AP301M

AP301M is designed for small component machining. It is suitable for working on stainless steel and steel, designed to minimize built-up edge.

P15-P35
M15-M35

Universal grade

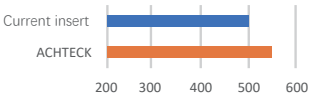
AP301U

AP301U has stable tool life when machining on steel, stainless steel, superalloy.

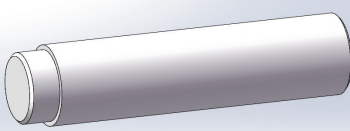
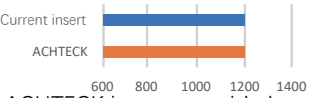
Machining material	Steel(carbon steel/alloy steel)					Stainless steel					Difficult machining material				
application	finishing ←→ Roughing					finishing ←→ Roughing					finishing ←→ Roughing				
ISO group	P01	P10	P20	P30	P40	M01	M10	M20	M30	M40	S01	S10	S20	S30	S40
insert Grade			AP301U				AP301M					AP301M			
						AP301U									

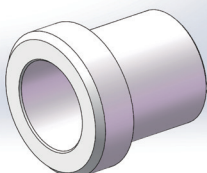
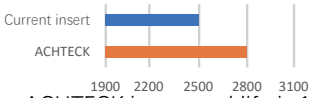


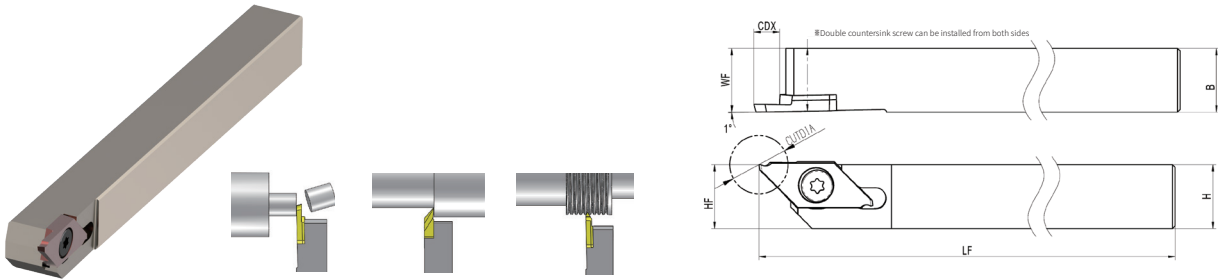
• **Application case**

Insert	ASWP 09R150D12-F AP301M
Workpiece	
Material	304L
Vc	44m/min
f	0.04mm/rev
ap	1.8mm (φ3.5mm Parting off)
Coolant	oil
Result	 <p>ACHTECK insert tool life is 10% higher</p>

Insert	ASWB 09R280005-FR AP301M
Workpiece	
Material	SUM23
Vc	44m/min
f	0.02mm/rev
ap	1mm
Coolant	oil
Result	 <p>ACHTECK inserts provide lower unit costs with the same tool life.</p>

Insert	ASWB 09R280010-FR AP301M
Workpiece	
Material	A3
Vc	100m/min
f	0.08mm/rev
ap	1mm
Coolant	emulsion
Result	 <p>ACHTECK inserts provide lower unit costs with the same tool life.</p>




Insert	ABF 07R280015-FR AP301M
Workpiece	
Material	TC4
Vc	50m/min
f	0.01mm/rev
ap	2mm
Coolant	emulsion
Result	 <p>ACHTECK insert tool life is 12% higher</p>

ASW Series


Product code	Dimension (mm)							Stock		Spare parts	
	H	HF	B	LF	LH	WF	CDX	R	L	Screw	Wrench
ASWSR/L 1010-09	10	10	10	120	15	10	6	○	○	SP04509357	FT-TP10
ASWSR/L 1212-09	12	12	12	120	-	12	6	●	●		
ASWSR/L 1616-09	16	16	16	120	-	16	6	●	●		
ASWSR/L 2020-09	20	20	20	120	-	20	6	●	●		
ASWSR/L 1010-10	10	10	10	120	20	10	8	○	○		
ASWSR/L 1212-10	12	12	12	120	-	12	8	●	●		
ASWSR/L 1616-10	16	16	16	120	-	16	8	●	●		
ASWSR/L 2020-10	20	20	20	120	-	20	8	●	●		

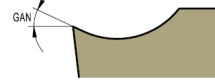
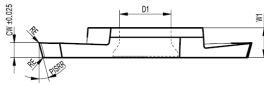
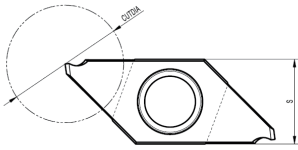
● Stock available ○ Made to order

Applicable insert

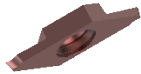
Application	Parting off	Back turning	Threading
Insert shape Holder type			
ASWSR/L...-09	ASWP 09R/L	ASWB 09R/L	ASWT 09R/L
ASWSR/L...-10	ASWP 10R/L	ASWB 10R/L	ASWT 10R/L



● **ASWP Parting off insert**



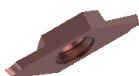
Product code		Dimension (mm)								Grade	
		CW	CUTDIA	RE	PSIRR	GAN	W1	S	D1	AP301U	AP301M
	ASWP 09R050D05-F	0.5	5	0.03	0°	15°	3	8.7	5.2	○	●
	ASWP 09L050D05-F	0.5	5	0.03	0°	15°	3	8.7	5.2	○	○
	ASWP 09R070D08-F	0.7	8	0.03	0°	15°	3	8.7	5.2	○	○
	ASWP 09L070D08-F	0.7	8	0.03	0°	15°	3	8.7	5.2	○	●
	ASWP 09R100D12-F	1	12	0.03	0°	15°	3	8.7	5.2	●	●
	ASWP 09L100D12-F	1	12	0.03	0°	15°	3	8.7	5.2	○	○
	ASWP 09R120D12-F	1.2	12	0.03	0°	15°	3	8.7	5.2	○	○
	ASWP 09L120D12-F	1.2	12	0.03	0°	15°	3	8.7	5.2	●	●
	ASWP 09R150D12-F	1.5	12	0.03	0°	15°	3	8.7	5.2	●	●
	ASWP 09L150D12-F	1.5	12	0.03	0°	15°	3	8.7	5.2	○	●
	ASWP 09R200D12-F	2	12	0.03	0°	15°	3	8.7	5.2	○	●
	ASWP 09L200D12-F	2	12	0.03	0°	15°	3	8.7	5.2	○	●
	ASWP 09R050D05-F-16R	0.5	5	0.03	16°	25°	3	8.7	5.2	○	●
	ASWP 09L050D05-F-16R	0.5	5	0.03	16°	25°	3	8.7	5.2	○	○
	ASWP 09R070D08-F-16R	0.7	8	0.03	16°	25°	3	8.7	5.2	○	○
	ASWP 09L070D08-F-16R	0.7	8	0.03	16°	25°	3	8.7	5.2	○	○
	ASWP 09R100D12-F-16R	1	12	0.03	16°	25°	3	8.7	5.2	●	●
	ASWP 09L100D12-F-16R	1	12	0.03	16°	25°	3	8.7	5.2	○	●
	ASWP 09R120D12-F-16R	1.2	12	0.03	16°	25°	3	8.7	5.2	○	●
	ASWP 09L120D12-F-16R	1.2	12	0.03	16°	25°	3	8.7	5.2	○	○
	ASWP 09R150D12-F-16R	1.5	12	0.03	16°	25°	3	8.7	5.2	●	●
	ASWP 09L150D12-F-16R	1.5	12	0.03	16°	25°	3	8.7	5.2	●	●
	ASWP 09R200D12-F-16R	2	12	0.03	16°	25°	3	8.7	5.2	●	●
	ASWP 09L200D12-F-16R	2	12	0.03	16°	25°	3	8.7	5.2	○	●
	ASWP 09R100D12-M	1	12	0.08	0°	12°	3	8.7	5.2	○	●
	ASWP 09L100D12-M	1	12	0.08	0°	12°	3	8.7	5.2	●	●
	ASWP 09R150D12-M	1.5	12	0.08	0°	12°	3	8.7	5.2	●	●
	ASWP 09L150D12-M	1.5	12	0.08	0°	12°	3	8.7	5.2	○	●
	ASWP 09R200D12-M	2	12	0.08	0°	12°	3	8.7	5.2	●	○
	ASWP 09L200D12-M	2	12	0.08	0°	12°	3	8.7	5.2	○	○



● Stock available ○ Made to order

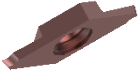


Product code	Dimension (mm)								Grade	
	CW	CUTDIA	RE	PSIRR	GAN	W1	S	D1	AP301U	AP301M
ASWP 09R100D12-M16R	1	12	0.08	16°	12°	3	8.7	5.2	○	○
ASWP 09L100D12-M16R	1	12	0.08	16°	12°	3	8.7	5.2	○	○
ASWP 09R150D12-M16R	1.5	12	0.08	16°	12°	3	8.7	5.2	●	●
ASWP 09L150D12-M16R	1.5	12	0.08	16°	12°	3	8.7	5.2	●	●
ASWP 09R200D12-M16R	2	12	0.08	16°	12°	3	8.7	5.2	○	○
ASWP 09L200D12-M16R	2	12	0.08	16°	12°	3	8.7	5.2	○	○
ASWP 09R050D05-T	0.5	5	0	0°	0°	3	8.7	5.2	○	●
ASWP 09L050D05-T	0.5	5	0	0°	0°	3	8.7	5.2	○	○
ASWP 09R070D08-T	0.7	8	0	0°	0°	3	8.7	5.2	○	●
ASWP 09L070D08-T	0.7	8	0	0°	0°	3	8.7	5.2	○	○
ASWP 09R100D12-T	1	12	0	0°	0°	3	8.7	5.2	●	○
ASWP 09L100D12-T	1	12	0	0°	0°	3	8.7	5.2	●	●
ASWP 09R120D12-T	1.2	12	0	0°	0°	3	8.7	5.2	○	○
ASWP 09L120D12-T	1.2	12	0	0°	0°	3	8.7	5.2	○	○
ASWP 09R150D12-T	1.5	12	0	0°	0°	3	8.7	5.2	●	●
ASWP 09L150D12-T	1.5	12	0	0°	0°	3	8.7	5.2	○	○
ASWP 09R200D12-T	2	12	0	0°	0°	3	8.7	5.2	○	○
ASWP 09L200D12-T	2	12	0	0°	0°	3	8.7	5.2	○	○
ASWP 09R050D05-T20R	0.5	5	0	20°	0°	3	8.7	5.2	○	○
ASWP 09L050D05-T20R	0.5	5	0	20°	0°	3	8.7	5.2	○	○
ASWP 09R070D08-T20R	0.7	8	0	20°	0°	3	8.7	5.2	○	○
ASWP 09L070D08-T20R	0.7	8	0	20°	0°	3	8.7	5.2	○	○
ASWP 09R100D12-T20R	1	12	0	20°	0°	3	8.7	5.2	●	●
ASWP 09L100D12-T20R	1	12	0	20°	0°	3	8.7	5.2	○	○
ASWP 09R120D12-T20R	1.2	12	0	20°	0°	3	8.7	5.2	○	○
ASWP 09L120D12-T20R	1.2	12	0	20°	0°	3	8.7	5.2	○	○
ASWP 09R150D12-T20R	1.5	12	0	20°	0°	3	8.7	5.2	●	●
ASWP 09L150D12-T20R	1.5	12	0	20°	0°	3	8.7	5.2	○	○
ASWP 09R200D12-T20R	2	12	0	20°	0°	3	8.7	5.2	●	●
ASWP 09L200D12-T20R	2	12	0	20°	0°	3	8.7	5.2	○	○
ASWP 10R150D16-F	1.5	16	0.05	0°	20°	4	9.5	5.2	●	●
ASWP 10L150D16-F	1.5	16	0.05	0°	20°	4	9.5	5.2	○	●
ASWP 10R200D16-F	2	16	0.05	0°	20°	4	9.5	5.2	●	●
ASWP 10L200D16-F	2	16	0.05	0°	20°	4	9.5	5.2	○	●
ASWP 10R150D16-F16R	1.5	16	0.05	16°	20°	4	9.5	5.2	●	●
ASWP 10L150D16-F16R	1.5	16	0.05	16°	20°	4	9.5	5.2	○	○
ASWP 10R200D16-F16R	2	16	0.05	16°	20°	4	9.5	5.2	●	●
ASWP 10L200D16-F16R	2	16	0.05	16°	20°	4	9.5	5.2	○	●



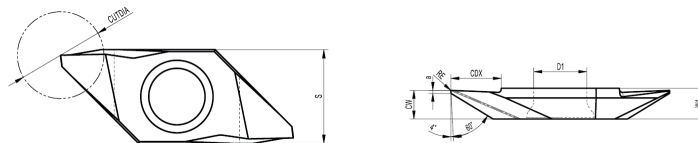
● Stock available ○ Made to order




Product code		Dimension (mm)								Grade	
		CW	CUTDIA	RE	PSIRR	GAN	W1	S	D1	AP301U	AP301M
	ASWP 10R150D16-M	1.5	16	0.08	0°	12°	4	9.5	5.2	○	○
	ASWP 10L150D16-M	1.5	16	0.08	0°	12°	4	9.5	5.2	○	○
	ASWP 10R200D16-M	2	16	0.08	0°	12°	4	9.5	5.2	●	○
	ASWP 10L200D16-M	2	16	0.08	0°	12°	4	9.5	5.2	●	●
	ASWP 10R150D16-M16R	1.5	16	0.08	16°	12°	4	9.5	5.2	○	●
	ASWP 10L150D16-M16R	1.5	16	0.08	16°	12°	4	9.5	5.2	○	●
	ASWP 10R200D16-M16R	2	16	0.08	16°	12°	4	9.5	5.2	●	●
	ASWP 10L200D16-M16R	2	16	0.08	16°	12°	4	9.5	5.2	○	○
	ASWP 10R150D16-T	1.5	16	0	0°	0°	4	9.5	5.2	○	●
	ASWP 10L150D16-T	1.5	16	0	0°	0°	4	9.5	5.2	○	○
	ASWP 10R200D16-T	2	16	0	0°	0°	4	9.5	5.2	●	●
	ASWP 10L200D16-T	2	16	0	0°	0°	4	9.5	5.2	●	●
	ASWP 10R150D16-T20R	1.5	16	0	20°	0°	4	9.5	5.2	○	●
	ASWP 10L150D16-T20R	1.5	16	0	20°	0°	4	9.5	5.2	○	●
	ASWP 10R200D16-T20R	2	16	0	20°	0°	4	9.5	5.2	●	●
ASWP 10L200D16-T20R	2	16	0	20°	0°	4	9.5	5.2	○	○	

● Stock available ○ Made to order

ASWB Back Turning insert

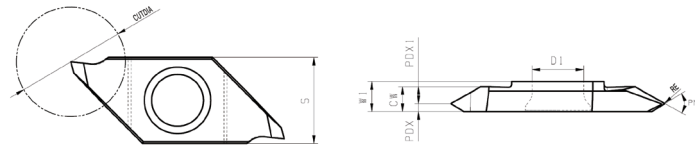


Product code		Dimension (mm)							Grade	
		CW	a	CDX	W1	S	D1	RE	AP301U	AP301M
	ASWB 09R150005-FR	1.5	0.25	2.6	3	8.7	5.2	0.05	○	●
	ASWB 09R280005-FR	2.8	0.3	4.6	3	8.7	5.2	0.05	○	●
	ASWB 09R280010-FR	2.8	0.3	4.6	3	8.7	5.2	0.1	●	●
	ASWB 09L280005-FR	2.8	0.3	4.6	3	8.7	5.2	0.05	○	○
	ASWB 09L280010-FR	2.8	0.3	4.6	3	8.7	5.2	0.1	○	●
	ASWB 10R380005-FR	3.8	0.3	6.3	4	9.5	5.2	0.05	○	●
	ASWB 10R380010-FR	3.8	0.3	6.3	4	9.5	5.2	0.1	○	●
	ASWB 10L380005-FR	3.8	0.3	6.3	4	9.5	5.2	0.05	○	○
	ASWB 10L380010-FR	3.8	0.3	6.3	4	9.5	5.2	0.1	○	○

● Stock available ○ Made to order



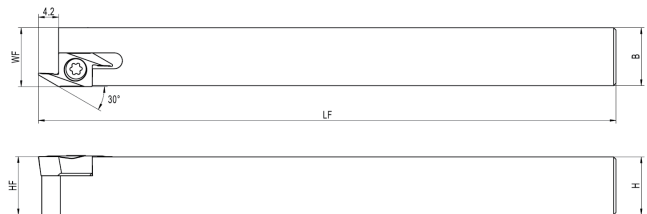
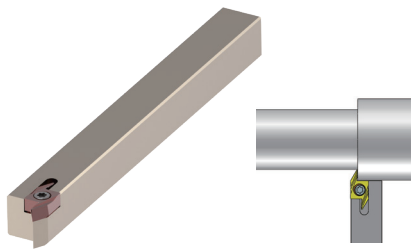
● **ASWT Threading insert**



Product code		Angle	Applicable thread		Dimension (mm)						Grade	
		PNA	mm	Teeth/inch	PDX	RE	CW	W1	S	D1	AP301U	AP301M
	ASWT 09R60000-FR	60	0.2~0.6	64~48	0.4	0.05	2.5	3	8.7	5.2	●	●
	ASWT 09R60000-FL	60	0.2~0.6	64~48	2.1	0.05	2.5	3	8.7	5.2	○	○
	ASWT 09R60005-FR	60	0.5~1.25	48~24	0.8	0.05	2.5	3	8.7	5.2	●	●
	ASWT 09R60005-FL	60	0.5~1.25	48~24	1.7	0.05	2.5	3	8.7	5.2	○	○
	ASWT 09R60010-FN	60	1.0~1.5	24~18	1.25	0.1	2.5	3	8.7	5.2	○	●
	ASWT 09R55005-FR	55	-	40~16	0.8	0.05	2.5	3	8.7	5.2	○	○
	ASWT 09R55005-FL	55	-	40~16	1.7	0.05	2.5	3	8.7	5.2	○	○
	ASWT 09L60000-FR	60	0.2~0.6	64~48	2.1	0.05	2.5	3	8.7	5.2	○	●
	ASWT 09L60000-FL	60	0.2~0.6	64~48	0.4	0.05	2.5	3	8.7	5.2	○	○

● Stock available ○ Made to order

● **ABF Back Turning Series**



Product code	Dimension (mm)					Stock	Spare part	
	H	B	HF	LF	WF	R	Screw	Wrench
ABFSR 1010-07	10	10	10	120	10.2	●	SP030082	FT-TP09
ABFSR 1212-07	12	12	12	120	12.2	●		
ABFSR 1616-07	16	16	16	120	16.2	●		

● Stock available ○ Made to order

Applicable insert

Insert	Product code	Dimension (mm)	Grade
		RE	AP301M
	ABF 07R280005-FR	0.05	●
	ABF 07R280010-FR	0.1	●
	ABF 07R280015-FR	0.15	●
	ABF 07R280020-FR	0.2	●

● Stock available ○ Made to order