

**TURNLINE** TAC toolholders for external and internal turning

**TURNINGA**

**Extended version  
with items for large  
size inserts**

**Higher indexing accuracy and clamping rigidity with a double  
clamping system**



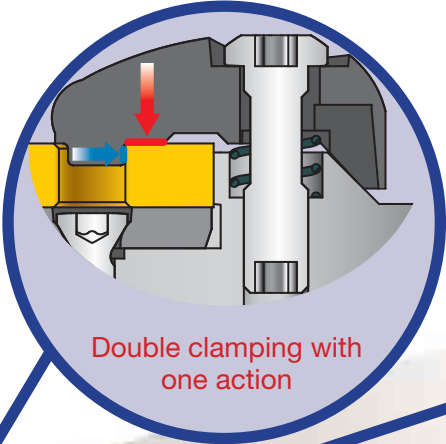
# Highly rigid “Double-Clamp” system provides remarkable stability and high accuracy!

## Features

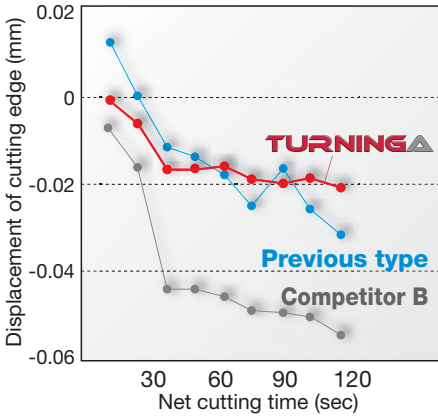
### ● Simple and strong double-clamp system

#### Provides strong clamping force with one screw

Only one screw and one action delivers double clamping force by simultaneously pushing down and pulling. This strong clamping force provides high stability for the cutting edge.

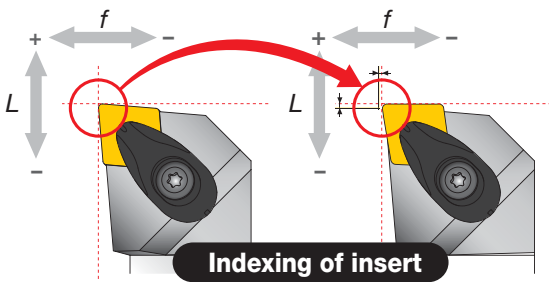


#### ■ Comparison of cutting edge stability



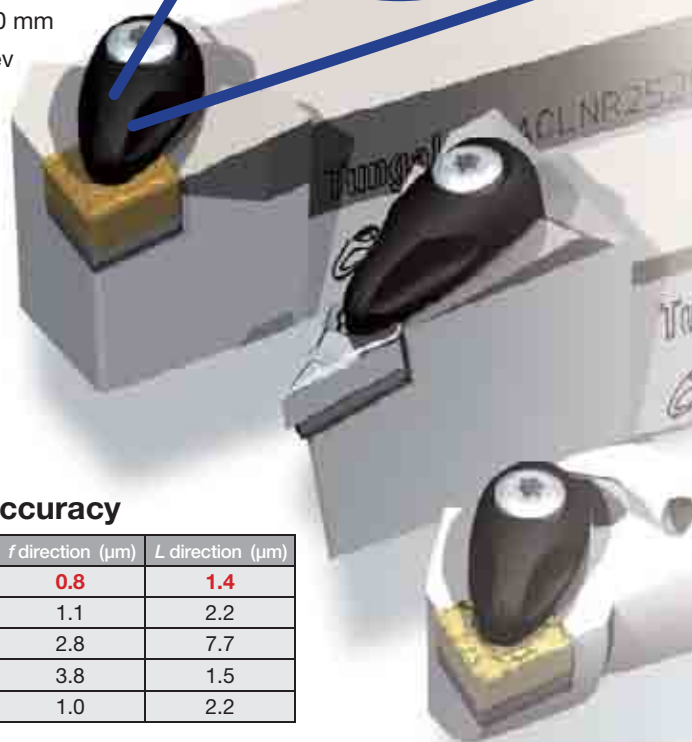
Toolholder : AVJNR2525M16-A  
 Insert : VNMG160408-ZM  
 Work material : Carbon steel (JIS S45C)  
 Machining mode : Continuous  
 Cutting speed :  $V_c = 150$  m/min  
 Depth of cut :  $a_p = 1.0 \sim 2.0$  mm  
 Feed :  $f = 0.3$  mm/rev

#### Higher indexing accuracy



#### ■ Indexing accuracy

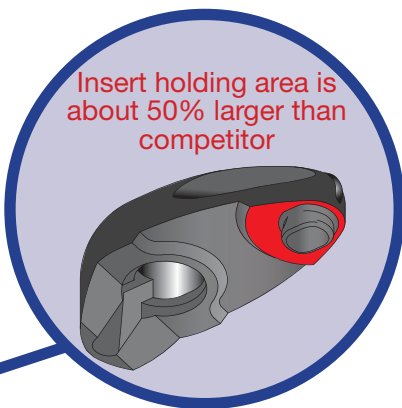
	$f$ direction ( $\mu\text{m}$ )	$L$ direction ( $\mu\text{m}$ )
<b>TURNING</b>	<b>0.8</b>	<b>1.4</b>
Previous type	1.1	2.2
Competitor A	2.8	7.7
Competitor B	3.8	1.5
Competitor C	1.0	2.2



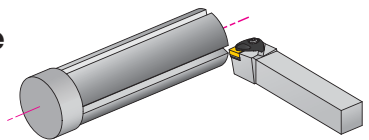
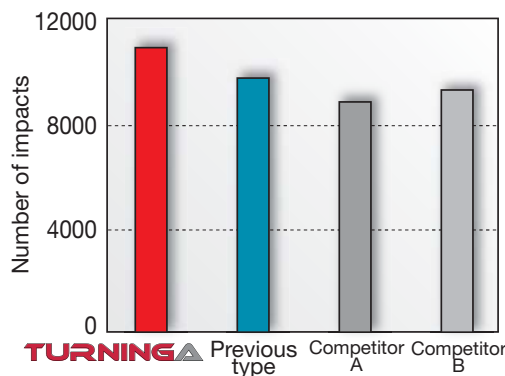


## Unique clamp improves rigidity

Larger holding area enhances clamping force drastically. Higher rigidity provides excellent stability and reduces vibration.



### ■ Comparison of impact resistance

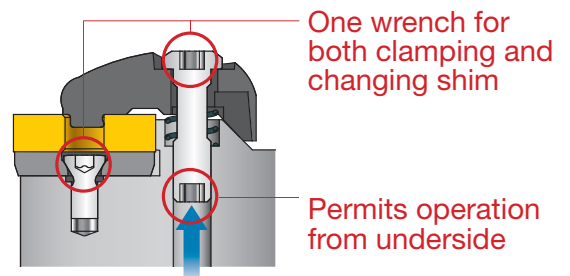


Toolholder : ACLNR2525M12-A  
 Insert : CNMG120408-TM  
 Grade : T9115  
 Work material : Carbon steel (JIS S45C)  
 Machining mode : Interrupted  
 Cutting speed :  $V_c = 200$  m/min  
 Depth of cut :  $a_p = 1.0 \sim 2.0$  mm  
 Feed :  $f = 0.3$  mm/rev

## ● Easy handling and maintenance

### Only one wrench required

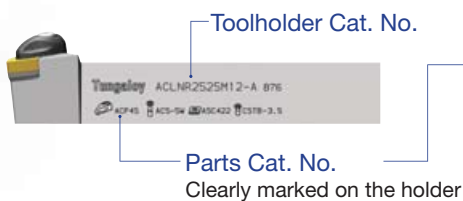
Only one wrench is required for the clamping screw and the shim screw. Easy maintenance!



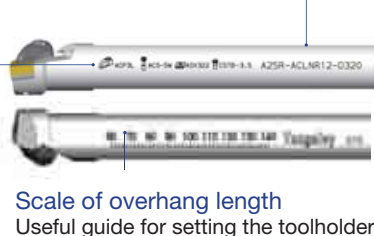
### Marking

Parts Cat. No. are marked on the holder.

#### External-use toolholder



#### Internal-use toolholders

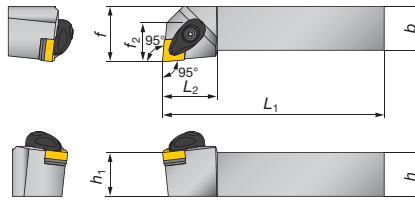
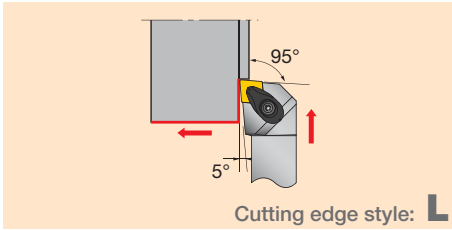


Toolholder Cat. No.  
(Min. bore diameter is included in Cat. No.)

The last three digits indicate min. bore diameter.  
(Example : -D320 indicates 32.0 mm)

## Toolholders

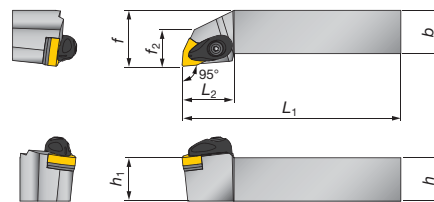
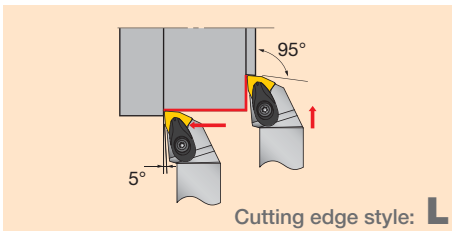
### ACLN R/L External turning and facing A-type (Negative rake, clamp-on system)



Right hand (R) shown

Toolholder Cat. No	Stock		Dimensions (mm)							Std. corner radius $r_E$	Applicable inserts
	R	L	$h$	$b$	$L_1$	$L_2$	$h_1$	$f$	$f_2$		
ACLNR/L2020K12-A	●	●	20	20	125	26	20	25	19	0.8	CN□□1204□□
ACLNR/L2525M12-A	●	●	25	25	150	30	25	32	21		
ACLNR/L3225P12-A	●	●	32	25	170	30	32	32	21		
<b>NEW</b> ACLNR/L2525M16-A	●	●	25	25	150	31	25	32	22	1.2	CN□□1606□□
<b>NEW</b> ACLNR/L3225P16-A	●	●	32	25	170	31	32	32	22		
<b>NEW</b> ACLNR/L3232P16-A	●	●	32	32	170	31	32	40	22		
<b>NEW</b> ACLNR/L3232P19-A	●	●	32	32	170	40	32	40	25	1.2	CN□□1906□□
<b>NEW</b> ACLNR/L4040S19-A	●	●	40	40	250	40	40	50	25		

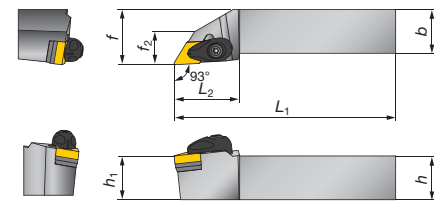
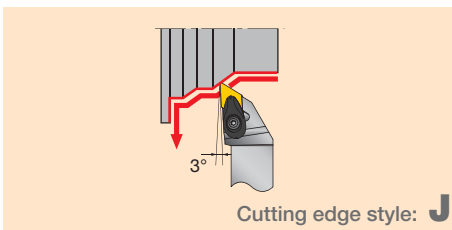
### AWLN R/L External turning and facing A-type (Negative rake, clamp-on system)



Right hand (R) shown

Toolholder Cat. No	Stock		Dimensions (mm)							Std. corner radius $r_E$	Applicable inserts
	R	L	$h$	$b$	$L_1$	$L_2$	$h_1$	$f$	$f_2$		
AWLNR/L2020K06-A	●	●	20	20	125	27	20	25	16	0.8	WN□□0604□□
AWLNR/L2525M06-A	●	●	25	25	150	27	25	32	23		
AWLNR/L2020K08-A	●	●	20	20	125	30	20	25	19		
AWLNR/L2525M08-A	●	●	25	25	150	30	25	32	21	0.8	WN□□0804□□
AWLNR/L3225P08-A	●	●	32	25	170	30	32	32	21		

### ADJN R/L External turning and profiling A-type (Negative rake, clamp-on system)



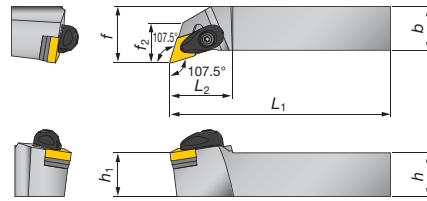
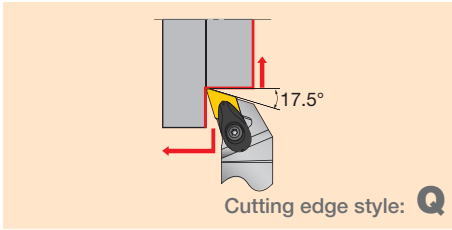
Right hand (R) shown

Toolholder Cat. No	Stock		Dimensions (mm)							Std. corner radius $r_E$	Applicable inserts
	R	L	$h$	$b$	$L_1$	$L_2$	$h_1$	$f$	$f_2$		
ADJNR/L2020K15-A	●	●	20	20	125	36	20	25	17	0.8	DN□□1504□□
ADJNR/L2525M15-A	●	●	25	25	150	36	25	32	18		
ADJNR/L3225P15-A	●	●	32	25	170	36	32	32	18		
ADJNR/L2020K1506-A	●	●	20	20	125	36	20	25	17	0.8	DN□□1506□□
ADJNR/L2525M1506-A	●	●	25	25	150	36	25	32	18		

● : Stocked items



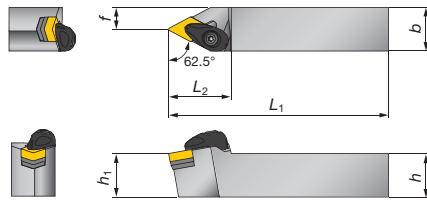
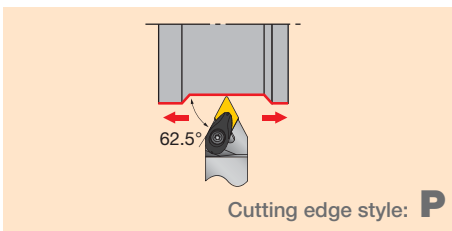
## ADQN R/L External turning and profiling A-type (Negative rake, clamp-on system)



Right hand (R) shown

Toolholder Cat. No	Stock		Dimensions (mm)							Std. corner radius $r_E$	Applicable inserts
	R	L	$h$	$b$	$L_1$	$L_2$	$h_1$	$f$	$f_2$		
ADQNR/L2020K15-A	●	●	20	20	125	32	20	25	21	0.8	DN□□1504□□
ADQNR/L2525M15-A	●	●	25	25	150	36	25	32	23		
ADQNR/L2020K1506-A	●	●	20	20	125	32	20	25	21	0.8	DN□□1506□□
ADQNR/L2525M1506-A	●	●	25	25	150	36	25	32	23		

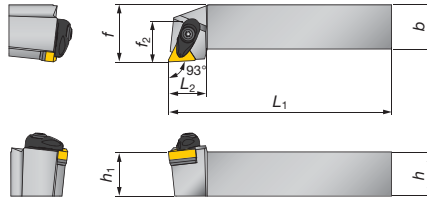
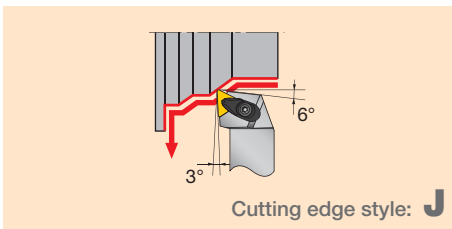
## ADPN N External turning and profiling A-type (Negative rake, clamp-on system)



Right hand (R) shown

Toolholder Cat. No	Stock		Dimensions (mm)							Std. corner radius $r_E$	Applicable inserts
	R	L	$h$	$b$	$L_1$	$L_2$	$h_1$	$f$	$f_2$		
ADPNN2020K15-A	●		20	20	125	36	20	7.5	-	0.8	DN□□1504□□
ADPNN2525M15-A	●		25	25	150	36	25	12.5	-		

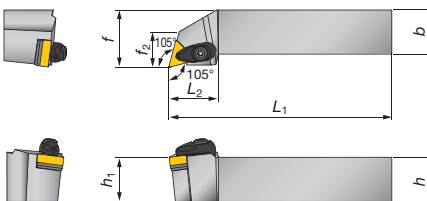
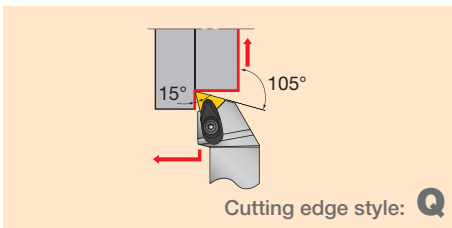
## ATJN R/L External turning and profiling A-type (Negative rake, clamp-on system)



Right hand (R) shown

Toolholder Cat. No	Stock		Dimensions (mm)							Std. corner radius $r_E$	Applicable inserts
	R	L	$h$	$b$	$L_1$	$L_2$	$h_1$	$f$	$f_2$		
ATJNR/L2020K16-A	●	●	20	20	125	22	20	25	23	0.8	TN□□1604□□
ATJNR/L2525M16-A	●	●	25	25	150	22	25	32	25		

## ATQN R/L External turning and profiling A-type (Negative rake, clamp-on system)

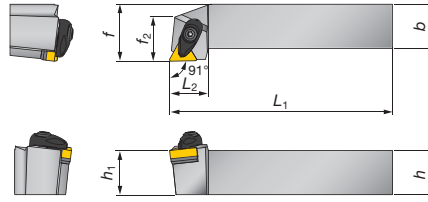
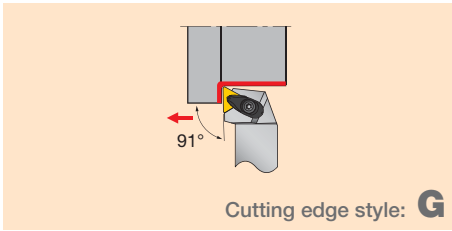


Right hand (R) shown

Toolholder Cat. No	Stock		Dimensions (mm)							Std. corner radius $r_E$	Applicable inserts
	R	L	$h$	$b$	$L_1$	$L_2$	$h_1$	$f$	$f_2$		
ATQNR/L2020K16-A	●	●	20	20	125	28	20	25	18	0.8	TN□□1604□□
ATQNR/L2525M16-A	●	●	25	25	150	28	25	32	20		

● : Stocked items

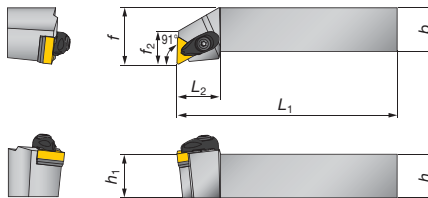
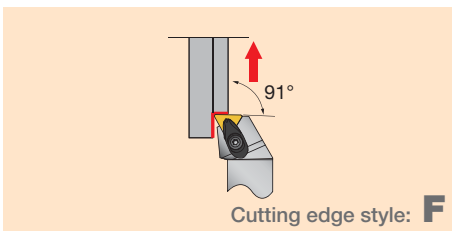
## ATGN R/L External turning A-type (Negative rake, clamp-on system)



Right hand (R) shown

Toolholder Cat. No	Stock		Dimensions (mm)							Std. corner radius $r_E$	Applicable inserts
	R	L	$h$	$b$	$L_1$	$L_2$	$h_1$	$f$	$f_2$		
ATGNR/L2020K16-A	●	●	20	20	125	22	20	25	22	0.8	TN□□1604□□
ATGNR/L2525M16-A	●	●	25	25	150	22	25	32	25		
ATGNR/L2525M22-A	●	●	25	25	150	26	25	32	26	0.8	TN□□2204□□

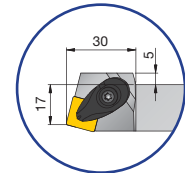
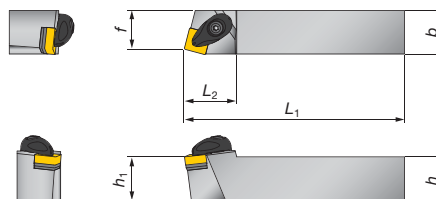
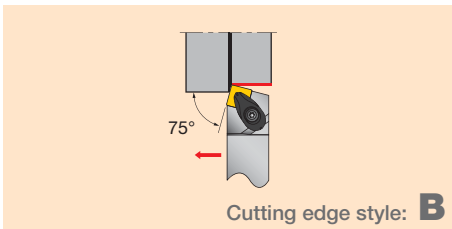
## ATFN R/L Facing A-type (Negative rake, clamp-on system)



Right hand (R) shown

Toolholder Cat. No	Stock		Dimensions (mm)							Std. corner radius $r_E$	Applicable inserts
	R	L	$h$	$b$	$L_1$	$L_2$	$h_1$	$f$	$f_2$		
ATFNR/L2020K16-A	●	●	20	20	125	25	20	25	18	0.8	TN□□1604□□
ATFNR/L2525M16-A	●	●	25	25	150	25	25	32	19		
ATFNR/L2525M22-A	●	●	25	25	150	29	25	32	23	0.8	TN□□2204□□

## ASBN R/L External turning A-type (Negative rake, clamp-on system)



□ Enlarged view of 2020 type  
Right hand (R) shown

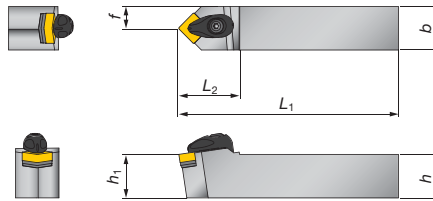
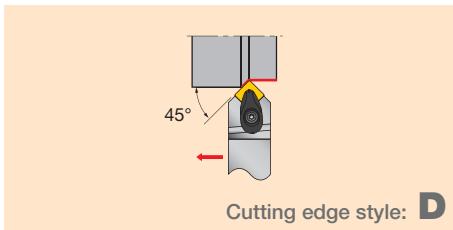
Toolholder Cat. No	Stock		Dimensions (mm)							Std. corner radius $r_E$	Applicable inserts
	R	L	$h$	$b$	$L_1$	$L_2$	$h_1$	$f$	$f_2$		
ASBNR/L2020K12-A	●	●	20	20	125	30	20	17	-	0.8	SN□□1204□□
ASBNR/L2525M12-A	●	●	25	25	150	30	25	22	-		
<b>NEW</b> ASBNR/L2525M15-A	●	●	25	25	150	42.5	25	22	-	1.2	SN□□1506□□
<b>NEW</b> ASBNR/L3232P15-A	●	●	32	32	170	42.5	32	27	-		
<b>NEW</b> ASBNR/L3232P19-A	●	●	32	32	170	47.5	32	27	-	1.2	SN□□1906□□
<b>NEW</b> ASBNR/L4040S19-A	●	●	40	40	250	47.5	40	35	-		

● : Stocked items

# ASDN N

## External chamfering

### A-type (Negative rake, clamp-on system)



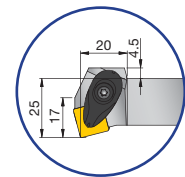
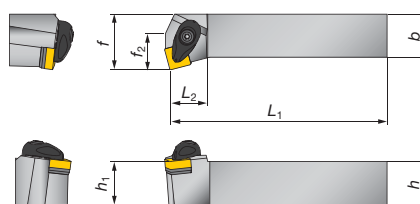
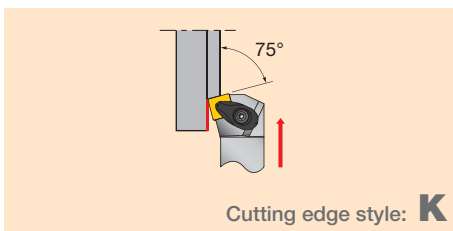
Right hand (R) shown

Toolholder Cat. No	Stock		Dimensions (mm)							Std. corner radius $r_E$	Applicable inserts
			$h$	$b$	$L_1$	$L_2$	$h_1$	$f$	$f_2$		
ASDNN2020K12-A	●	●	20	20	125	35	20	10	-	0.8	SN□□1204□□
ASDNN2525M12-A	●	●	25	25	150	35	25	12.5	-		

# ASKN R/L

## Facing

### A-type (Negative rake, clamp-on system)



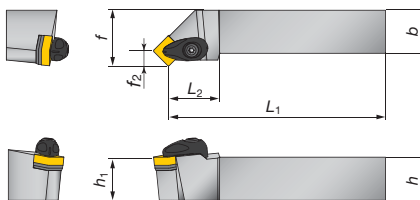
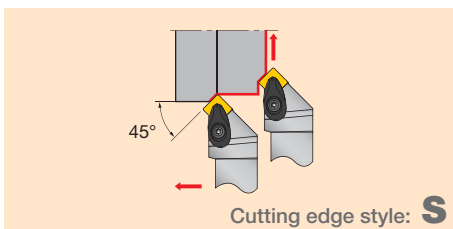
□ Enlarged view of 2020 type  
Right hand (R) shown

Toolholder Cat. No	Stock		Dimensions (mm)							Std. corner radius $r_E$	Applicable inserts
	R	L	$h$	$b$	$L_1$	$L_2$	$h_1$	$f$	$f_2$		
ASKNR/L2020K12-A	●	●	20	20	125	20	20	25	17	0.8	SN□□1204□□
ASKNR/L2525M12-A	●	●	25	25	150	22	25	32	21		

# ASSN R/L

## External chamfering

### A-type (Negative rake, clamp-on system)

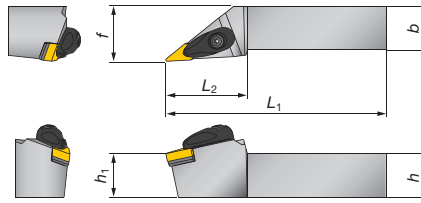
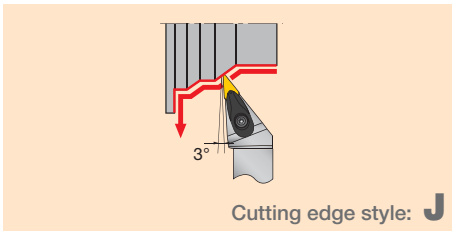


Right hand (R) shown

Toolholder Cat. No	Stock		Dimensions (mm)							Std. corner radius $r_E$	Applicable inserts
	R	L	$h$	$b$	$L_1$	$L_2$	$h_1$	$f$	$f_2$		
ASSNR/L2020K12-A	●	●	20	20	125	30	20	25	8.3	0.8	SN□□1204□□
ASSNR/L2525M12-A	●	●	25	25	150	30	25	32			
<b>NEW</b> ASSNR/L2525M15-A	●	●	25	25	150	25	25	32	10.3	1.2	SN□□1506□□
<b>NEW</b> ASSNR/L3232P15-A	●	●	32	32	170	25	32	40			
<b>NEW</b> ASSNR/L3232P19-A	●	●	32	32	170	27.5	32	40	12.5	1.2	SN□□1906□□
<b>NEW</b> ASSNR/L4040S19-A	●	●	40	40	250	27.5	40	50			

● : Stocked items

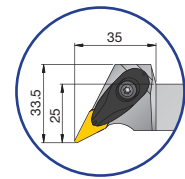
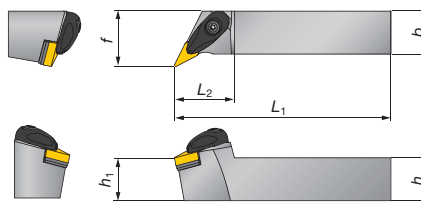
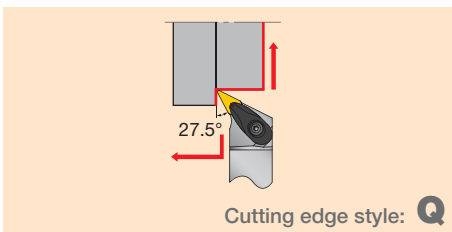
## AVJN R/L External turning and profiling A-type (Negative rake, clamp-on system)



Right hand (R) shown

Toolholder Cat. No	Stock		Dimensions (mm)							Std. corner radius $r_E$	Applicable inserts
	R	L	$h$	$b$	$L_1$	$L_2$	$h_1$	$f$	$f_2$		
AVJNR/L2020K16-A	●	●	20	20	125	43	20	25	-	0.8	VN□□1604□□ YN□□1604□□
AVJNR/L2525M16-A	●	●	25	25	150	46	25	32	-		

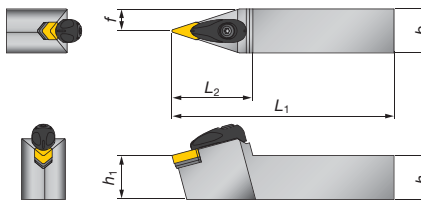
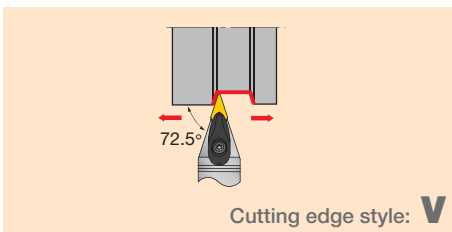
## AVQN R/L External turning and profiling A-type (Negative rake, clamp-on system)



□ Enlarged view of 2020 type  
Right hand (R) shown

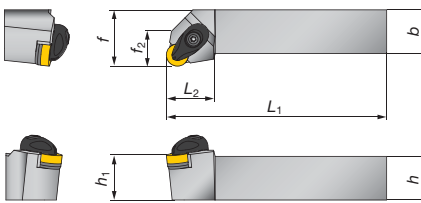
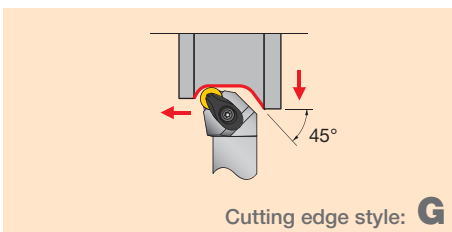
Toolholder Cat. No	Stock		Dimensions (mm)							Std. corner radius $r_E$	Applicable inserts
	R	L	$h$	$b$	$L_1$	$L_2$	$h_1$	$f$	$f_2$		
AVQNR/L2020K16-A	●	●	20	20	125	35	20	25	-	0.8	VN□□1604□□ YN□□1604□□
AVQNR/L2525M16-A	●	●	25	25	150	35	25	32	-		

## AVVN N External turning and profiling A-type (Negative rake, clamp-on system)



Toolholder Cat. No	Stock		Dimensions (mm)							Std. corner radius $r_E$	Applicable inserts
	R	L	$h$	$b$	$L_1$	$L_2$	$h_1$	$f$	$f_2$		
AVVNN2020K16-A	●		20	20	125	46	20	10	-	0.8	VN□□1604□□ YN□□1604□□
AVVNN2525M16-A	●		25	25	150	46	25	12.5	-		

## ARGN R/L External profiling A-type (Negative rake, clamp-on system)



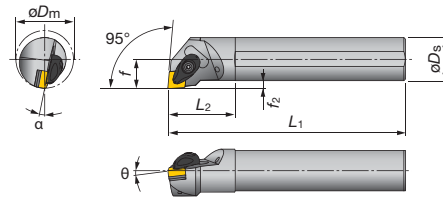
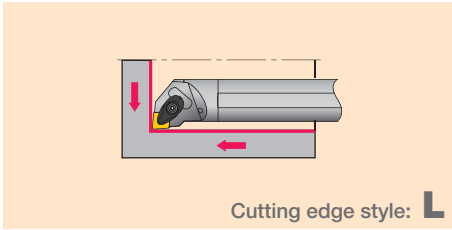
Right hand (R) shown

Toolholder Cat. No	Stock		Dimensions (mm)							Std. corner radius $r_E$	Applicable inserts
	R	L	$h$	$b$	$L_1$	$L_2$	$h_1$	$f$	$f_2$		
ARGNR/L2525M12-A	●	●	25	25	150	28	25	32	20	6.35	RN□□120400

● : Stocked items



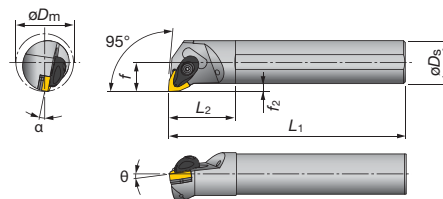
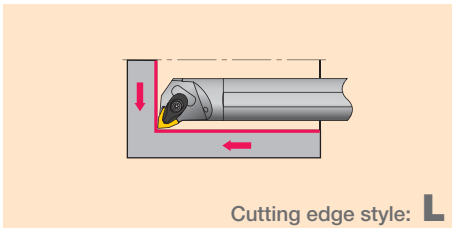
## A□□□-ACLN R/L Boring and internal facing A-type (Negative rake, clamp-on system)



Right hand (R) shown

Toolholder Cat. No.	Stock		Min. bore dia. $\phi D_m$	Dimensions (mm)								Std. corner radius $r_E$	Applicable inserts
	R	L		$\phi D_s$	$f$	$L_1$	$L_2$	$h$	$f_2$	$\alpha$	$\theta$		
A25R-ACLN R/L12-D320	●	●	32	25	17	200	45	23	4.5	-13°	-6°	0.8	CN□□1204□□
A32S-ACLN R/L12-D400	●	●	40	32	22	250	50	30	6	-10°			
A40T-ACLN R/L12-D500	●	●	50	40	27	300	55	37	7	-8°			
A50U-ACLN R/L12-D630	●		63	50	35	350	65	47	10	-7°			

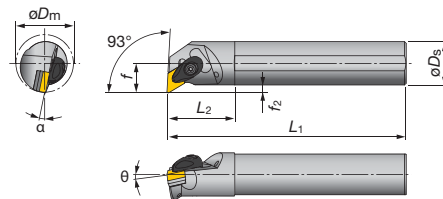
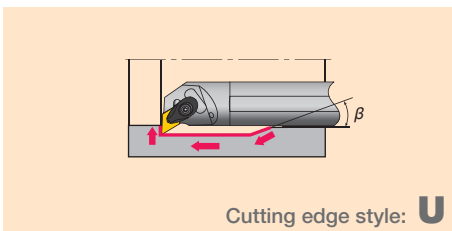
## A□□□-AWLN R/L Boring and internal facing A-type (Negative rake, clamp-on system)



Right hand (R) shown

Toolholder Cat. No.	Stock		Min. bore dia. $\phi D_m$	Dimensions (mm)								Std. corner radius $r_E$	Applicable inserts
	R	L		$\phi D_s$	$f$	$L_1$	$L_2$	$h$	$f_2$	$\alpha$	$\theta$		
A25R-AWLNR/L06-D320	●	●	32	25	17	200	45	23	4.5	-13°	-6°	0.8	WN□□0604□□
A32S-AWLNR/L06-D400	●	●	40	32	22	250	50	30	6	-10°			
A25R-AWLNR/L08-D320	●	●	32	25	17	200	45	23	4.5	-13°	-6°	0.8	WN□□0804□□
A32S-AWLNR/L08-D400	●	●	40	32	22	250	50	30	6	-10°			
A40T-AWLNR/L08-D500	●	●	50	40	27	300	55	37	7	-8°			
A50U-AWLNR/L08-D630	●	●	63	50	35	350	65	47	10	-7°			

## A□□□-ADUN R/L Boring and internal profiling A-type (Negative rake, clamp-on system)



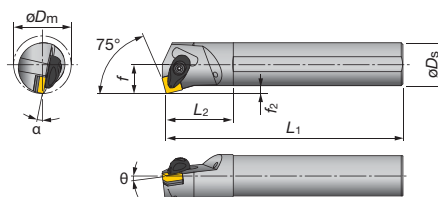
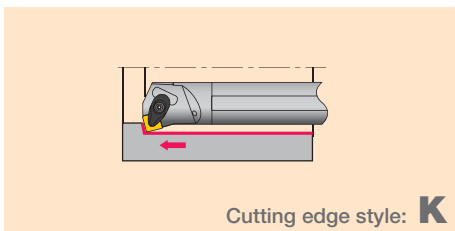
Right hand (R) shown

Toolholder Cat. No.	Stock		Min. bore dia. $\phi D_m$	Dimensions (mm)										Std. corner radius $r_E$	Applicable inserts
	R	L		$\phi D_s$	$f$	$L_1$	$L_2$	$h$	$f_2$	$\alpha$	$\theta$	$\beta$			
A25R-ADUN R/L15-D320	●	●	32	25	17	200	45	23	4.5	-13°	-6°	30°	0.8	DN□□1504□□	
A32S-ADUN R/L15-D400	●	●	40	32	22	250	50	30	6	-11°		20°			
A40T-ADUN R/L15-D500	●		50	40	27	300	55	37	7	-8°		15°			
A50U-ADUN R/L15-D630	●		63	50	35	350	65	47	10	-7°		15°			
A25R-ADUN R/L1506-D320	●	●	32	25	17	200	45	23	4.5	-13°	-6°	15°	0.8	DN□□1506□□	
A32S-ADUN R/L1506-D400	●	●	40	32	22	250	50	30	6	-11°		20°			

When using the insert with larger corner radius than Std shown in the table, the approach angle  $\beta$  will be smaller than shown value.

● : Stocked items

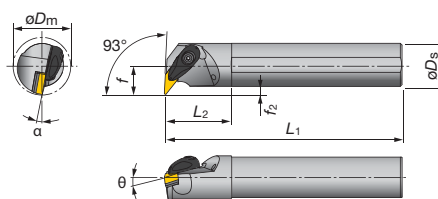
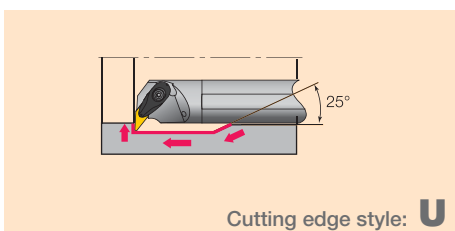
## A□□□-ASKN R/L Through boring A-type (Negative rake, clamp-on system)



Right hand (R) shown

Toolholder Cat. No.	Stock		Min. bore dia. $\phi D_m$	Dimensions (mm)								Std. corner radius $r_E$	Applicable inserts
	R	L		$\phi D_s$	$f$	$L_1$	$L_2$	$h$	$f_2$	$\alpha$	$\theta$		
A25R-ASKNR/L12-D320	●	●	32	25	17	200	45	23	4.5	-13°	-6°	0.8	SN□□1204□□
A32S-ASKNR/L12-D400	●	●	40	32	22	250	50	30	6	-10°			

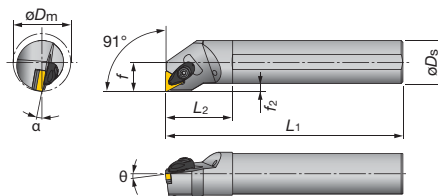
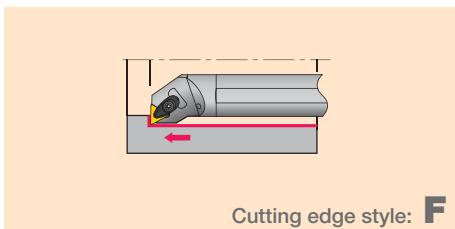
## A□□□-AVUN R/L Internal profiling A-type (Negative rake, clamp-on system)



Right hand (R) shown

Toolholder Cat. No.	Stock		Min. bore dia. $\phi D_m$	Dimensions (mm)								Std. corner radius $r_E$	Applicable inserts
	R	L		$\phi D_s$	$f$	$L_1$	$L_2$	$h$	$f_2$	$\alpha$	$\theta$		
A32S-AVUNR/L16-D400	●	●	40	32	22	250	50	30	6	-10°	-6°	0.8	VN□□1604□□ YN□□1604□□
A40T-AVUNR/L16-D500	●	●	50	40	27	300	55	37	7	-8°			

## A□□□-ATFN R/L Stop boring A-type (Negative rake, clamp-on system)










Right hand (R) shown

Toolholder Cat. No.	Stock		Min. bore dia. $\phi D_m$	Dimensions (mm)								Std. corner radius $r_E$	Applicable inserts
	R	L		$\phi D_s$	$f$	$L_1$	$L_2$	$h$	$f_2$	$\alpha$	$\theta$		
A25R-ATFNR/L16-D320	●	●	32	25	17	200	45	23	4.5	-13°	-6°	0.8	TN□□1604□□
A32S-ATFNR/L16-D400	●	●	40	32	22	250	50	30	6	-10°			

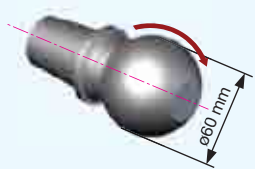
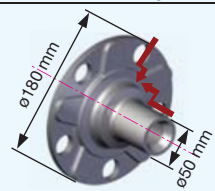
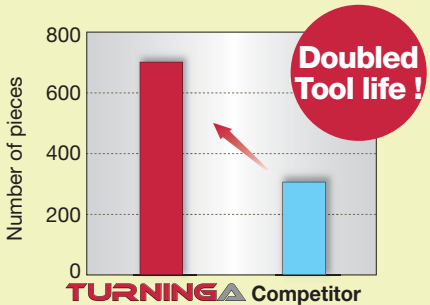
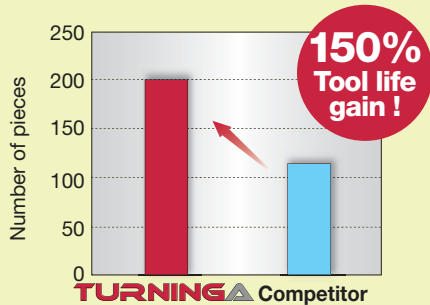
● : Stocked items

# Replacement parts

Toolholder Cat. No.	Applicable inserts	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench	Recommended clamping torque (N·m)
									
<b>ACLNR/L</b> (External-Internal)	<b>CN□□1204□□</b>	ACP4S	ACS-5W	BP-7	SP-2.5	ASC422	CSTB-3.5	T-15F	4.0
	<b>CN□□1606□□</b>	ACP5S	ACS-6W	BP-8.8		ASC533	CSTB-5	KEYV-T20	6.4
	<b>CN□□1906□□</b>	ACP6S				ASC634			
<b>ADJNR/L</b>	<b>DN□□1504□□</b>	ACP4S	ACS-5W	BP-7	SP-2.5	ASD432	CSTB-3.5	T-15F	4.0
<b>ADPNN</b>									
<b>ADQNR/L</b>									
<b>ADUNR/L</b> (Internal)									
<b>ADJNR/L</b>	<b>DN□□1506□□</b>	ACP4S	ACS-5W	BP-7	SP-2.5	ASD423	CSTB-3.5	T-15F	4.0
<b>ADQNR/L</b>									
<b>ADUNR/L</b> (Internal)									
<b>ATGNR/L</b>	<b>TN□□2204□□</b>	ACP4S	ACS-5W	BP-7	SP-2.5	AST422	CSTB-3.5	T-15F	4.0
<b>ATFNR/L</b>									
<b>ATJNR/L</b>	<b>TN□□1604□□</b>	ACP3S	ACS-5W	BP-7	SP-2.5	AST322	CSTB-3.5	T-15F	3.0
<b>ATGNR/L</b>									
<b>ATFNR/L</b> (External-Internal)									
<b>ATQNR/L</b>									
<b>ASBNR/L</b>	<b>SN□□1204□□</b>	ACP4S	ACS-5W	BP-7	SP-2.5	ASS422	CSTB-3.5	T-15F	4.0
	<b>SN□□1506□□</b>	ACP5S	ACS-6W	BP-8.8		ASS533	CSTB-5	KEYV-T20	6.4
	<b>SN□□1906□□</b>	ACP6S				ASS634			
<b>ASDNN</b>	<b>SN□□1204□□</b>	ACP4S	ACS-5W	BP-7	SP-2.5	ASS422	CSTB-3.5	T-15F	4.0
<b>ASSNR/L</b>	<b>SN□□1204□□</b>	ACP4S	ACS-5W	BP-7	SP-2.5	ASS422	CSTB-3.5	T-15F	4.0
	<b>SN□□1506□□</b>	ACP5S	ACS-6W	BP-8.8		ASS533	CSTB-5	KEYV-T20	6.4
	<b>SN□□1906□□</b>	ACP6S				ASS634			
<b>ASKNR/L</b> (External-Internal)	<b>SN□□1204□□</b>	ACP4S	ACS-5W	BP-7	SP-2.5	ASS422	CSTB-3.5	T-15F	4.0
<b>AVJNR/L</b>	<b>VN□□1604□□</b> <b>YN□□1604□□</b>	ACP3L	ACS-5W	BP-7	SP-2.5	ASV322	CSTB-3.5	T-15F	3.0
<b>AVVNN</b>									
<b>AVQNR/L</b>									
<b>AVUNR/L</b> (Internal)									
<b>AWLNR/L</b> (External-Internal)	<b>WN□□0604□□</b>	ACP3S	ACS-5W	BP-7	SP-2.5	ASW322	CSTB-3.5	T-15F	3.0
<b>AWLNR/L</b> (External-Internal)	<b>WN□□0804□□</b>	ACP4S	ACS-5W	BP-7	SP-2.5	ASW422	CSTB-3.5	T-15F	4.0
<b>ARGNR/L</b>	<b>RN□□1204□□</b>	ACP4S	ACS-5W	BP-7	SP-2.5	ASR420	CSTB-3.5	T-15F	4.0

Note: Replacement parts of former A-type toolholders are not applicable to “**TURNING**” toolholders.

# Practical examples

Work piece type		Connection (Automotive part)	Hub (Automotive parts)
Toolholder		AVVNN2525M16-A	ACLNR2525M12-A
Insert		VNMG160404-ZF	CNMG120412-TM
Grade		GT730	T9125
Work material		Alloy steel (SCr420)	Carbon steel (S53C)
			
Cutting conditions	Cutting speed : Vc (m/min)	100 ~ 250	150 ~ 200
	Feed : f (mm/rev)	0.12	0.25 ~ 0.30
	Depth of cut : ap (mm)	0.5	2.0
	Machining	External profiling (Continuous)	Face & Profiling (Continuous & Interrupted)
	Coolant	Wet	Wet
Results		 <p><b>Doubled Tool life !</b></p> <p>High clamping rigidity improves workpiece accuracy and can double the tool life.</p>	 <p><b>150% Tool life gain !</b></p> <p>High clamping strength drastically decreases the potential for sudden fracture. Tool life can be improved by 150%</p>



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