



**New**

**Internal  
Machining**

## Carbide Shank Boring Bars

### Features

- Excellent cutting performance in wide range of boring size even at vibration cutting condition.
- Applied for various workpiece such as steel, stainless steel, cast iron, etc.
- Assures longer tool life and excellent surface finish.









# Carbide Shank Boring Bars

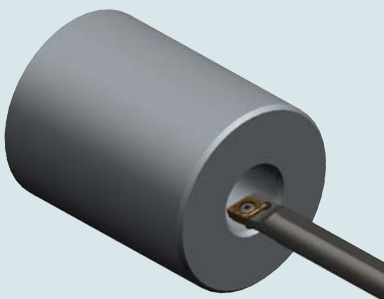
Code System | Application example

## Code System

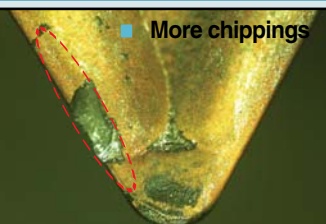



<b>C</b>	<b>12</b>	<b>M</b>	<b>-</b>
<b>Shank type</b>	<b>Shank diameter</b>	<b>Shank length (mm)</b>	
<b>S</b> : Steel shank <b>A</b> : Steel shank with oil hole <b>C</b> : Carbide shank <b>E</b> : Carbide shank with oil hole	ISO : mm AISI : inch	<b>F</b> : 80 <b>R</b> : 200 <b>G</b> : 90 <b>S</b> : 250 <b>H</b> : 100 <b>T</b> : 300 <b>J</b> : 110 <b>U</b> : 350 <b>K</b> : 125 <b>V</b> : 400 <b>M</b> : 150 <b>W</b> : 450 <b>Q</b> : 180 <b>T</b> : 500	

<b>S</b>	<b>C</b>	<b>L</b>	<b>C</b>	<b>R</b>	<b>-</b>	<b>06</b>
<b>Clamping system</b>	<b>Insert shape</b>	<b>Lead angle</b>	<b>Relief angle of Insert</b>	<b>Hand of tool</b>		<b>Length of cutting edge</b>
<b>S</b> : Screw on <b>P</b> : Lever lock <b>C</b> : Clamp on <b>M</b> : Multi lock <b>W</b> : Wedge clamp <b>D</b> : Double clamp	<b>C</b> : 80° Rhombic <b>D</b> : 55° Rhombic <b>S</b> : 90° Square <b>T</b> : 60° Triangular <b>V</b> : 35° Rhombic <b>W</b> : 80° Trigon	<b>F</b> : 90° <b>K</b> : 75° <b>L</b> : 95° <b>Q</b> : 108° <b>U</b> : 93°	<b>B</b> : 5° Positive <b>C</b> : 7° Positive <b>N</b> : 0° <b>P</b> : 11° Positive	<b>R</b> : Right <b>L</b> : Left		80° Rhombic  55° Rhombic  90° Square  60° Triangular  35° Rhombic  80° Trigon 

## Application example



- Cutting conditions
  - Insert : TCMT110204-HMP
  - Boring bar : C12M-STFCR-11
  - Workpiece : SCM440
  - Cutting speed : 200 m/min
  - Depth of cut : 0.4 mm
  - Feed : 0.15 mm/rev

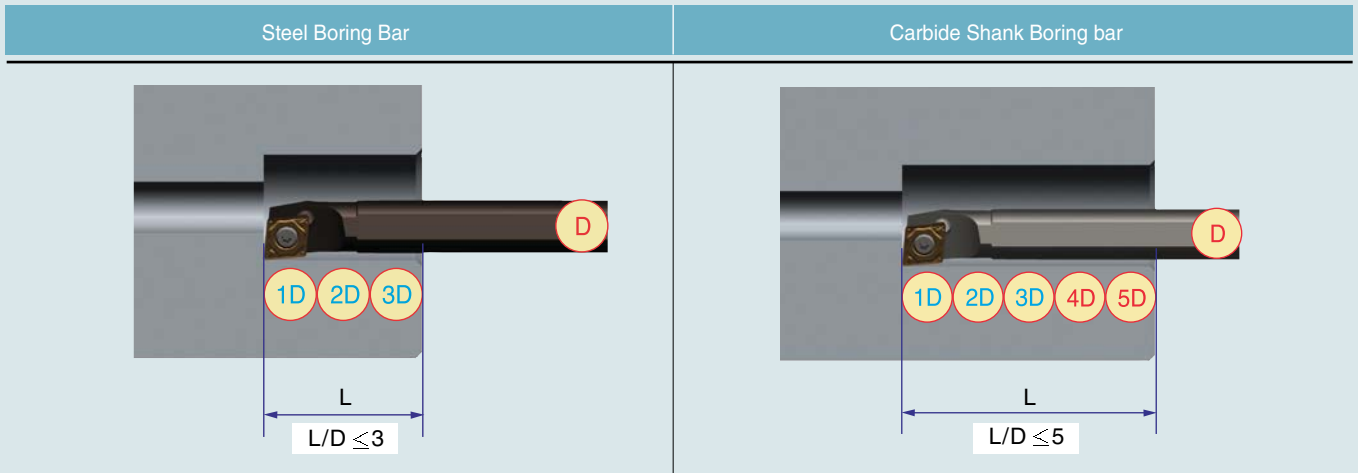
	Steel boring bar			Carbide boring bar		
<b>5D Machining test</b> (After 40passes)	 <p>More chippings</p>			 <p>Long and stable tool life</p>		
<b>Surface Roughness</b> (5D machining)						
	<b>Rmax</b>	<b>Rz</b>	<b>Ra</b>	<b>Rmax</b>	<b>Rz</b>	<b>Ra</b>
	4.67	3.68	0.62	3.07	2.76	0.53

# Carbide Shank Boring Bars

Features



## Features

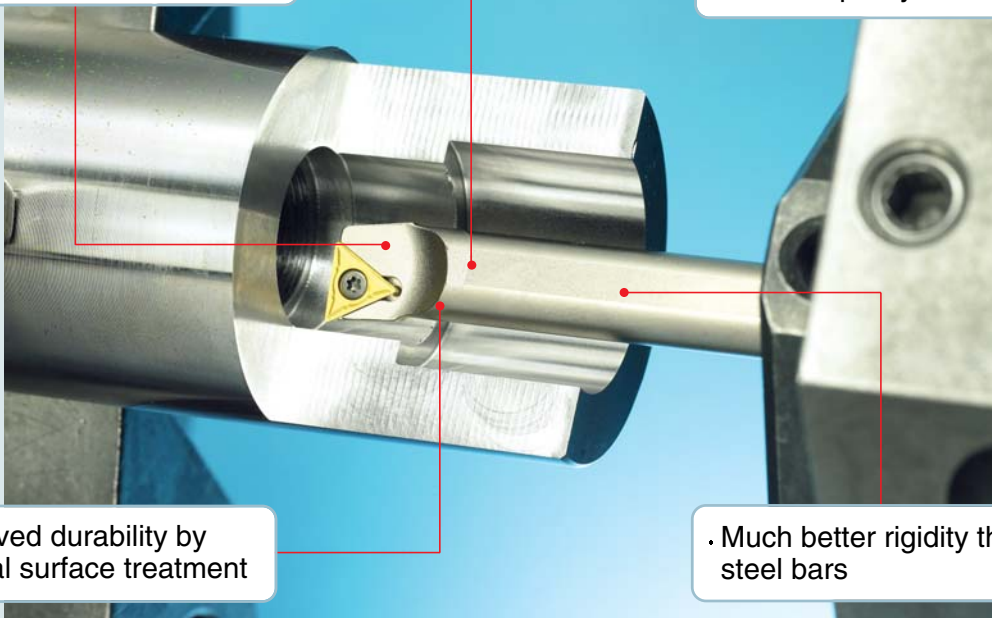


. Excellent chip control

. Special brazing technique assures quality security

. Improved durability by special surface treatment

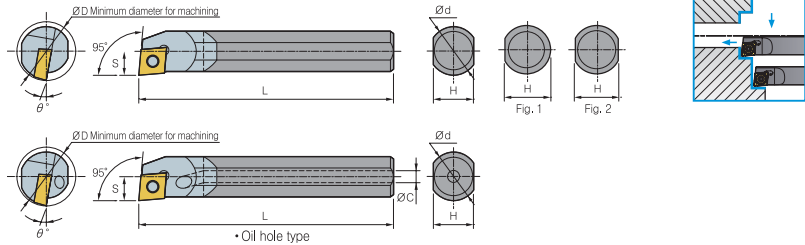
. Much better rigidity than steel bars



# Carbide Shank Boring Bars

SCLCR/L

SCLCR/L



Designation	Stock		øD	ød	H	L	S	θ°	Parts Insert	Screw	Wrench	Fig.
	R	L										
C04G-SCLCR/L-03	●	○	5	4	3.8	90	2.5	-15°	CC□T0301□□	FTNA01633	TW06P	1
C05H-SCLCR/L-03	●	○	6	5	4.4	100	3	-15°	CC□T0301□□	FTNA01633	TW06P	1
C06H-SCLCR/L-04	●	○	7	6	5.4	100	3.5	-15°	CC□T0401□□	FTNA0238	TW06P	1
C07K-SCLCR/L-04	●	○	8	7	6.4	125	4	-12°	CC□T0401□□	FTNA0238	TW06P	1
C08K-SCLCR/L-06	●	○	10	8	7	125	5	-12°	CC□T0602□□	FTKA02555	TW07P	2
C10K-SCLCR/L-06	●	○	12	10	9	125	6	-12°	CC□T0602□□	FTKA02565	TW07P	2
C10M-SCLCR/L-06	●	○	12	10	9	150	6	-12°	CC□T0602□□	FTKA02565	TW07P	2
C12M-SCLCR/L-06	●	○	14	12	11	150	7	-12°	CC□T0602□□	FTKA02565	TW07P	2
C12Q-SCLCR/L-06	●	○	14	12	11	180	7	-12°	CC□T0602□□	FTKA02565	TW07P	2
C12M-SCLCR/L-09	●	○	15	12	11	150	8	-12°	CC□T09T3□□	FTGA03508	TW15P	2
C12Q-SCLCR/L-09	●	○	15	12	11	180	8	-12°	CC□T09T3□□	FTGA03508	TW15P	2
C16R-SCLCR/L-09	●	○	20	16	15	250	10	-12°	CC□T09T3□□	FTGA03508	TW15P	2
C16S-SCLCR/L-09	●	○	20	16	15	250	10	-12°	CC□T09T3□□	FTGA03508	TW15P	2
C20R-SCLCR/L-09	●	○	25	20	18	200	13	-8°	CC□T09T3□□	FTGA03508	TW15P	2
C20S-SCLCR/L-09	●	○	25	20	18	250	13	-8°	CC□T09T3□□	FTGA03508	TW15P	2
C25T-SCLCR/L-12	●	○	32	25	23	300	17	-6°	CC□T1204□□	FTGA0411F	TW15P	2
E06H-SCLCR/L-04	●	○	7	6	5.4	100	3.5	-1°	CC□T0401□□	FTNA0238	TW06P	1
E07K-SCLCR/L-04	●	○	8	7	6.4	125	4	-1°	CC□T0401□□	FTNA0238	TW06P	1
E08K-SCLCR/L-06	●	○	10	8	7	125	5	-1°	CC□T0602□□	FTKA02555	TW07P	2
E10K-SCLCR/L-06	●	○	12	10	9	125	6	-12°	CC□T0602□□	FTKA02565	TW07P	2
E10M-SCLCR/L-06	●	○	12	10	9	150	6	-12°	CC□T0602□□	FTKA02565	TW07P	2
E12M-SCLCR/L-06	●	○	14	12	11	150	7	-12°	CC□T0602□□	FTKA02565	TW07P	2
E12Q-SCLCR/L-06	●	○	14	12	11	180	7	-12°	CC□T0602□□	FTKA02565	TW07P	2
E12M-SCLCR/L-09	●	○	15	12	11	150	8	-12°	CC□T09T3□□	FTGA03508	TW15P	2
E12Q-SCLCR/L-09	●	○	15	12	11	180	8	-12°	CC□T09T3□□	FTGA03508	TW15P	2
E16R-SCLCR/L-09	●	○	20	16	15	250	10	-12°	CC□T09T3□□	FTGA03508	TW15P	2
E16S-SCLCR/L-09	●	○	20	16	15	250	10	-12°	CC□T09T3□□	FTGA03508	TW15P	2
E20R-SCLCR/L-09	●	○	25	20	18	200	13	-8°	CC□T09T3□□	FTGA03508	TW15P	2
E20S-SCLCR/L-09	●	○	25	20	18	250	13	-8°	CC□T09T3□□	FTGA03508	TW15P	2
E25T-SCLCR/L-12	●	○	32	25	23	300	17	-6°	CC□T1204□□	FTGA0411F	TW15P	2

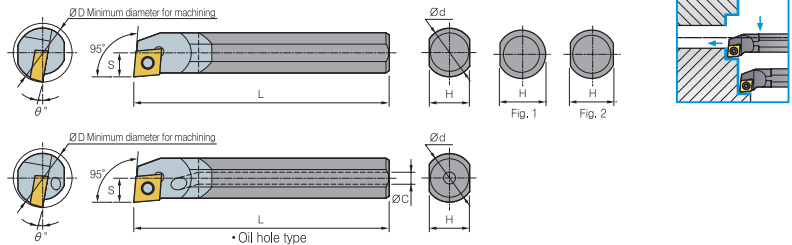
●: Stock item, ○: Under preparing for stock

# Carbide Shank Boring Bars

SCLPR/L



## SCLPR/L



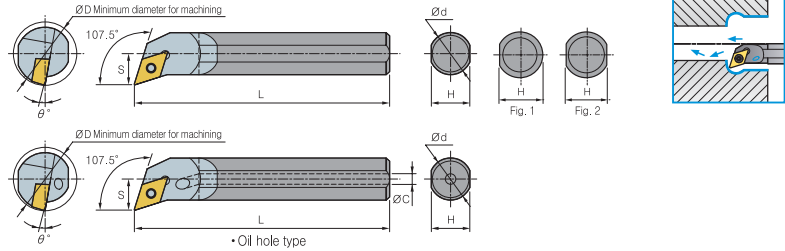
Desingation	Stock		øD	ød	H	L	S	θ°	Parts Insert	Screw	Wrench	Fig.
	R	L										
C10K-SCLPR/L-08	●	○	12	10	9	125	6	-5°	CP □ T0802 □ □	FTNA0305	TW09P	2
C10M-SCLPR/L-08	●	○	12	10	9	150	6	-5°	CP □ T0802 □ □	FTNA0305	TW09P	2
C12M-SCLPR/L-08	●	○	15	12	11	150	7.5	-2°	CP □ T0802 □ □	FTNA0307	TW09P	2
C12Q-SCLPR/L-08	●	○	15	12	11	180	7.5	-2°	CP □ T0802 □ □	FTNA0307	TW09P	2
C12M-SCLPR/L-09	●	○	15	12	11	150	8	-2°	CP □ T0903 □ □	FTNA0408	TW15P	2
C12Q-SCLPR/L-09	●	○	15	12	11	180	8	-2°	CP □ T0903 □ □	FTNA0408	TW15P	2
C16R-SCLPR/L-09	●	○	20	16	15	200	10	-2°	CP □ T0903 □ □	FTNA0408	TW15P	2
C16S-SCLPR/L-09	●	○	20	16	15	250	10	-2°	CP □ T0903 □ □	FTNA0408	TW15P	2
C20R-SCLPR/L-09	●	○	25	20	18	200	13	-2°	CP □ T0903 □ □	FTNA0408	TW15P	2
C20S-SCLPR/L-09	●	○	25	20	18	250	13	-2°	CP □ T0903 □ □	FTNA0408	TW15P	2
E10K-SCLPR/L-08	●	○	12	10	9	125	6	-5°	CP □ T0802 □ □	FTNA0305	TW09P	2
E10M-SCLPR/L-08	●	○	12	10	9	150	6	-5°	CP □ T0802 □ □	FTNA0305	TW09P	2
E12M-SCLPR/L-08	●	○	15	12	11	150	7.5	-2°	CP □ T0802 □ □	FTNA0307	TW09P	2
E12Q-SCLPR/L-08	●	○	15	12	11	180	7.5	-2°	CP □ T0802 □ □	FTNA0307	TW09P	2
E12M-SCLPR/L-09	●	○	15	12	11	150	8	-2°	CP □ T0903 □ □	FTNA0408	TW15P	2
E12Q-SCLPR/L-09	●	○	15	12	11	180	8	-2°	CP □ T0903 □ □	FTNA0408	TW15P	2
E16R-SCLPR/L-09	●	○	20	16	15	200	10	-2°	CP □ T0903 □ □	FTNA0408	TW15P	2
E16S-SCLPR/L-09	●	○	20	16	15	250	10	-2°	CP □ T0903 □ □	FTNA0408	TW15P	2
E20R-SCLPR/L-09	●	○	25	20	18	200	13	-2°	CP □ T0903 □ □	FTNA0408	TW15P	2
E20S-SCLPR/L-09	●	○	25	20	18	250	13	-2°	CP □ T0903 □ □	FTNA0408	TW15P	2

●: Stock item, ○: Under preparing for stock

# Carbide Shank Boring Bars

SDQCR/L

## SDQCR/L



Desingation	Stock		ØD	ød	H	L	S	θ°	Parts Insert	Screw	Wrench	Fig.
	R	L										
C08K-SDQCR/L-07	●	○	10	8	7	125	6	-15°	DC □ T0702 □ □	FTKA02555	TW07P	2
C10K-SDQCR/L-07	●	○	13	10	9	125	7	-15°	DC □ T0702 □ □	FTKA02555	TW07P	2
C12M-SDQCR/L-07	●	○	16	12	11	150	9	-10°	DC □ T0702 □ □	FTKA02565	TW07P	2
C16R-SDQCR/L-07	●	○	20	16	15	200	11	-6°	DC □ T0702 □ □	FTKA02565	TW07P	2
C16R-SDQCR/L-11	●	○	20	16	15	200	11	-6°	DC □ T11T3 □ □	FTGA03508	TW15P	2
C20R-SDQCR/L-11	●	○	25	20	18	200	13	-6°	DC □ T11T3 □ □	FTGA03508	TW15P	2
C20S-SDQCR/L-11	●	○	25	20	18	250	13	-6°	DC □ T11T3 □ □	FTGA03508	TW15P	2
E08K-SDQCR/L-07	●	○	10	8	7	125	6	-1°	DC □ T0702 □ □	FTKA02555	TW07P	2
E10K-SDQCR/L-07	●	○	13	10	9	125	7	-1°	DC □ T0702 □ □	FTKA02555	TW07P	2
E12M-SDQCR/L-07	●	○	16	12	11	150	9	-10°	DC □ T0702 □ □	FTKA02565	TW07P	2
E16R-SDQCR/L-07	●	○	20	16	15	200	11	-6°	DC □ T0702 □ □	FTKA02565	TW07P	2
E16R-SDQCR/L-11	●	○	20	16	15	200	11	-6°	DC □ T11T3 □ □	FTGA03508	TW15P	2
E20R-SDQCR/L-11	●	○	25	20	18	200	13	-6°	DC □ T11T3 □ □	FTGA03508	TW15P	2
E20S-SDQCR/L-11	●	○	25	20	18	250	13	-6°	DC □ T11T3 □ □	FTGA03508	TW15P	2

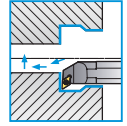
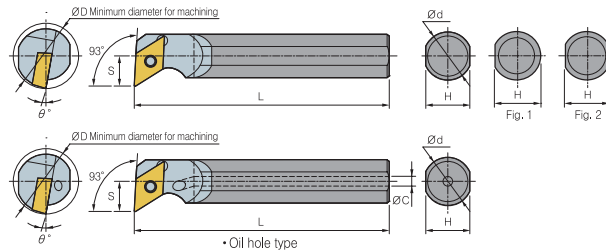
●: Stock item, ○: Under preparing for stock

# Carbide Shank Boring Bars

SDUCR/L



## SDUCR/L



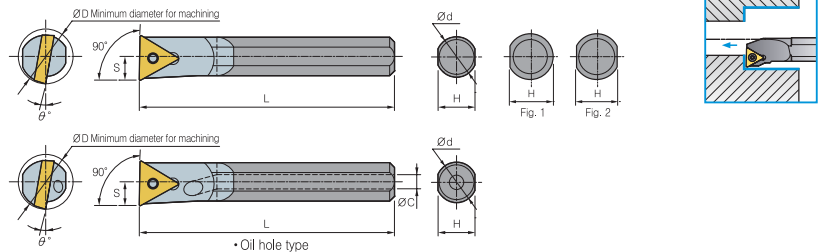
Desingation	Stock		ØD	Ød	H	L	S	θ°	Parts Insert	Screw	Wrench	Fig.
	R	L										
C10K-SDUCR/L-07	●	○	13	10	9	125	7	-15°	DC□T0702□□	FTKA02555	TW07P	2
C10M-SDUCR/L-07	●	○	13	10	9	150	7	-15°	DC□T0702□□	FTKA02555	TW07P	2
C12M-SDUCR/L-07	●	○	16	12	11	150	9	-10°	DC□T0702□□	FTKA02565	TW07P	2
C12Q-SDUCR/L-07	●	○	16	12	11	180	9	-10°	DC□T0702□□	FTKA02565	TW07P	2
C16R-SDUCR/L-07	●	○	20	16	15	200	11	-6°	DC□T0702□□	FTKA02565	TW07P	2
C16S-SDUCR/L-07	●	○	20	16	15	250	11	-6°	DC□T0702□□	FTKA02565	TW07P	2
C16R-SDUCR/L-11	●	○	20	16	15	200	11	-6°	DC□T11T3□□	FTGA03508	TW15P	2
C16S-SDUCR/L-11	●	○	20	16	15	250	11	-6°	DC□T11T3□□	FTGA03508	TW15P	2
C20R-SDUCR/L-11	●	○	25	20	18	200	13	-6°	DC□T11T3□□	FTGA03508	TW15P	2
C20S-SDUCR/L-11	●	○	25	20	18	250	13	-6°	DC□T11T3□□	FTGA03508	TW15P	2
C25T-SDUCR/L-11	●	○	32	25	23	300	17	-6°	DC□T11T3□□	FTGA03510	TW15P	2
E10K-SDUCR/L-07	●	○	13	10	9	125	7	-15°	DC□T0703□□	FTKA02555	TW07P	2
E10M-SDUCR/L-07	●	○	13	10	9	150	7	-15°	DC□T0702□□	FTKA02555	TW07P	2
E12M-SDUCR/L-07	●	○	16	12	11	150	9	-10°	DC□T0702□□	FTKA02565	TW07P	2
E12Q-SDUCR/L-07	●	○	16	12	11	180	9	-10°	DC□T0702□□	FTKA02565	TW07P	2
E16R-SDUCR/L-07	●	○	20	16	15	200	11	-6°	DC□T0702□□	FTKA02565	TW07P	2
E16S-SDUCR/L-07	●	○	20	16	15	250	11	-6°	DC□T0702□□	FTKA02565	TW07P	2
E16R-SDUCR/L-11	●	○	20	16	15	200	11	-6°	DC□T11T3□□	FTGA03508	TW15P	2
E16S-SDUCR/L-11	●	○	20	16	15	250	11	-6°	DC□T11T3□□	FTGA03508	TW15P	2
E20R-SDUCR/L-11	●	○	25	20	18	200	13	-6°	DC□T11T3□□	FTGA03508	TW15P	2
E20S-SDUCR/L-11	●	○	25	20	18	250	13	-6°	DC□T11T3□□	FTGA03508	TW15P	2
E25T-SDUCR/L-11	●	○	32	25	23	300	17	-6°	DC□T11T3□□	FTKA02555	TW15P	2

●: Stock item, ○: Under preparing for stock

# Carbide Shank Boring Bars

STFCR/L

## STFCR/L



Desingation	Stock		øD	ød	H	L	S	θ°	Parts			Fig.
	R	L							Insert	Screw	Wrench	
C08K-STFCR/L-09	●	○	10	8	7	125	5	-10°	TC □T0902 □□	FTKA02206	TW06P	2
C10K-STFCR/L-09	●	○	12	10	9	125	6	-10°	TC □T0902 □□	FTKA02206	TW06P	2
C10K-STFCR/L-11	●	○	12	10	9	125	6	-10°	TC □T1102 □□	FTKA02565	TW07P	2
C12M-STFCR/L-11	●	○	15	12	11	150	8	-10°	TC □T1102 □□	FTKA02565	TW07P	2
C16R-STFCR/L-11	●	○	20	16	15	200	10	-10°	TC □T1102 □□	FTKA02565	TW07P	2
C20R-STFCR/L-11	●	○	25	20	18	200	13	-6°	TC □T1102 □□	FTKA02565	TW07P	2
C20S-STFCR/L-11	●	○	25	20	18	250	13	-6°	TC □T1102 □□	FTKA02565	TW07P	2
C20R-STFCR/L-16	●	○	25	20	18	200	13	-6°	TC □T16T3 □□	FTGA03510	TW15P	2
C20S-STFCR/L-16	●	○	25	20	18	250	13	-6°	TC □T16T3 □□	FTGA03510	TW15P	2
E08K-STFCR/L-09	●	○	10	8	7	125	5	-10°	TC □T0902 □□	FTKA02206	TW06P	2
E10K-STFCR/L-09	●	○	12	10	9	125	6	-10°	TC □T0902 □□	FTKA02206	TW06P	2
E10K-STFCR/L-11	●	○	12	10	9	125	6	-10°	TC □T1102 □□	FTKA02565	TW07P	2
E12M-STFCR/L-11	●	○	15	12	11	150	8	-10°	TC □T1102 □□	FTKA02565	TW07P	2
E16R-STFCR/L-11	●	○	20	16	15	200	10	-10°	TC □T1102 □□	FTKA02565	TW07P	2
E20R-STFCR/L-11	●	○	25	20	18	200	13	-6°	TC □T1102 □□	FTKA02565	TW07P	2
E20S-STFCR/L-11	●	○	25	20	18	250	13	-6°	TC □T1102 □□	FTKA02565	TW07P	2
E20R-STFCR/L-16	●	○	25	20	18	200	13	-6°	TC □T16T3 □□	FTGA03510	TW15P	2
E20S-STFCR/L-16	●	○	25	20	18	250	13	-6°	TC □T16T3 □□	FTGA03510	TW15P	2

●: Stock item, ○: Under preparing for stock

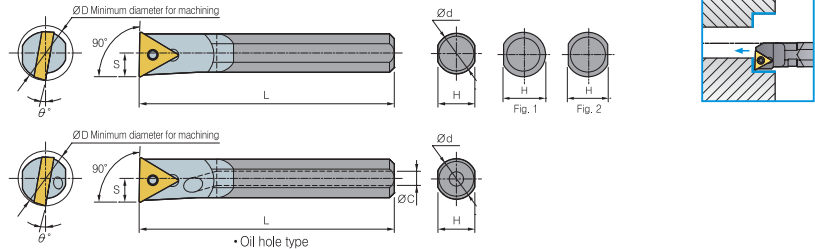


# Carbide Shank Boring Bars

STFPR/L



STFPR/L



Desingation	Stock		ØD	ød	H	L	S	θ°	Parts Insert	Screw	Wrench	Fig.
	R	L										
C08K-STFPR/L-08	●	○	10	8	7	125	5	-10°	TP □ T0802 □ □	FTNA02205	TW06P	2
C10K-STFPR/L-11	●	○	12	10	9	125	6	-10°	TP □ T1103 □ □	FTNA0305	TW09P	2
C10M-STFPR/L-11	●	○	12	10	9	150	6	-10°	TP □ T1103 □ □	FTNA0305	TW09P	2
C12M-STFPR/L-11	●	○	15	12	11	150	8	-10°	TP □ T1103 □ □	FTNA0307	TW09P	2
C12Q-STFPR/L-11	●	○	15	12	11	180	8	-10°	TP □ T1103 □ □	FTNA0307	TW09P	2
C16R-STFPR/L-11	●	○	20	16	15	200	10	-6°	TP □ T1103 □ □	FTNA0307	TW09P	2
C16S-STFPR/L-11	●	○	20	16	15	250	10	-6°	TP □ T1103 □ □	FTNA0307	TW09P	2
C20R-STFPR/L-11	●	○	25	20	18	200	13	-6°	TP □ T1103 □ □	FTNA0307	TW09P	2
C20S-STFPR/L-11	●	○	25	20	18	250	13	-6°	TP □ T1103 □ □	FTNA0307	TW09P	2
C20R-STFPR/L-16	●	○	25	20	18	200	13	-6°	TP □ T1604 □ □	FTNA0408	TW15P	2
C20S-STFPR/L-16	●	○	25	20	18	250	13	-6°	TP □ T1604 □ □	FTNA0408	TW15P	2
C25T-STFPR/L-16	●	○	32	25	23	300	17	-6°	TP □ T1604 □ □	FTNA0408	TW15P	2
E08K-STFPR/L-08	●	○	10	8	7	125	5	-10°	TP □ T0802 □ □	FTNA02205	TW06P	2
E10K-STFPR/L-11	●	○	12	10	9	125	6	-10°	TP □ T1103 □ □	FTNA0305	TW09P	2
E10M-STFPR/L-11	●	○	12	10	9	150	6	-10°	TP □ T1103 □ □	FTNA0305	TW09P	2
E12M-STFPR/L-11	●	○	15	12	11	150	8	-10°	TP □ T1103 □ □	FTNA0307	TW09P	2
E12Q-STFPR/L-11	●	○	15	12	11	180	8	-10°	TP □ T1103 □ □	FTNA0307	TW09P	2
E16R-STFPR/L-11	●	○	20	16	15	200	10	-6°	TP □ T1103 □ □	FTNA0307	TW09P	2
E16S-STFPR/L-11	●	○	20	16	15	250	10	-6°	TP □ T1103 □ □	FTNA0307	TW09P	2
E20R-STFPR/L-11	●	○	25	20	18	200	13	-6°	TP □ T1103 □ □	FTNA0307	TW09P	2
E20S-STFPR/L-11	●	○	25	20	18	250	13	-6°	TP □ T1103 □ □	FTNA0307	TW09P	2
E20R-STFPR/L-16	●	○	25	20	18	200	13	-6°	TP □ T1604 □ □	FTNA0408	TW15P	2
E20S-STFPR/L-16	●	○	25	20	18	250	13	-6°	TP □ T1604 □ □	FTNA0408	TW15P	2
E25T-STFPR/L-16	●	○	32	25	23	300	17	-6°	TP □ T1604 □ □	FTNA0408	TW15P	2

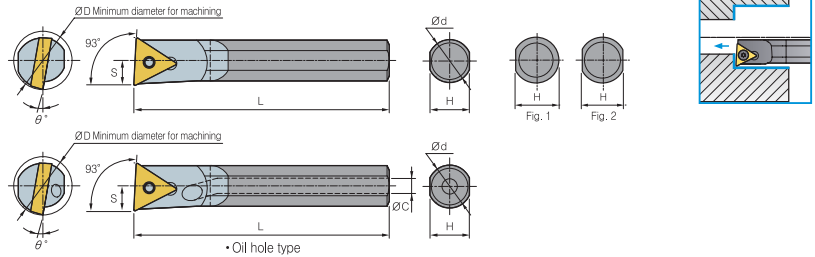
●: Stock item, ○: Under preparing for stock

# Carbide Shank Boring Bars

STUPR/L



## STUPR/L



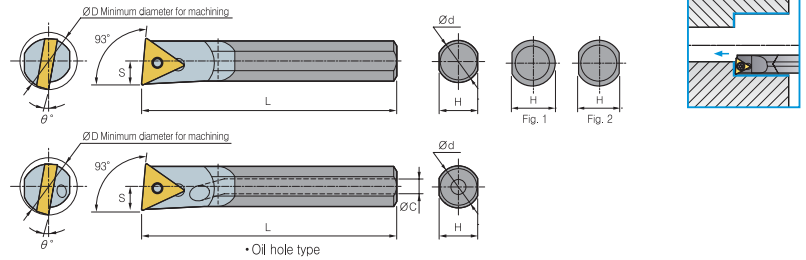
Desingation	Stock		$\varnothing D$	$\varnothing d$	H	L	S	$\theta^{\circ}$	Parts Insert	Screw	Wrench	Fig.
	R	L										
C08K-STUPR/L-08	●	○	10	8	7	125	5	-10°	TP □T0802 □□	FTNA02205	TW06P	2
C10K-STUPR/L-11	●	○	12	10	9	125	6	-10°	TP □T1103 □□	FTNA0305	TW09P	2
C10M-STUPR/L-11	●	○	12	10	9	150	6	-10°	TP □T1103 □□	FTNA0305	TW09P	2
C12M-STUPR/L-11	●	○	15	12	11	150	8	-10°	TP □T1103 □□	FTNA0307	TW09P	2
C12Q-STUPR/L-11	●	○	15	12	11	180	8	-10°	TP □T1103 □□	FTNA0307	TW09P	2
C16R-STUPR/L-11	●	○	20	16	15	200	10	-6°	TP □T1103 □□	FTNA0307	TW09P	2
C16S-STUPR/L-11	●	○	20	16	15	250	10	-6°	TP □T1103 □□	FTNA0307	TW09P	2
C20R-STUPR/L-11	●	○	25	20	18	200	13	-6°	TP □T1103 □□	FTNA0307	TW09P	2
C20S-STUPR/L-11	●	○	25	20	18	250	13	-6°	TP □T1103 □□	FTNA0307	TW09P	2
C20R-STUPR/L-16	●	○	25	20	18	200	13	-6°	TP □T1604 □□	FTNA0408	TW15P	2
C20S-STUPR/L-16	●	○	25	20	18	250	13	-6°	TP □T1604 □□	FTNA0408	TW15P	2
C25T-STUPR/L-16	●	○	32	25	23	300	17	-6°	TP □T1604 □□	FTNA0408	TW15P	2
E08K-STUPR/L-08	●	○	10	8	7	125	5	-10°	TP □T0803 □□	FTNA02205	TW06P	2
E10K-STUPR/L-11	●	○	12	10	9	125	6	-10°	TP □T1103 □□	FTNA0305	TW09P	2
E10M-STUPR/L-11	●	○	12	10	9	150	6	-10°	TP □T1103 □□	FTNA0305	TW09P	2
E12M-STUPR/L-11	●	○	15	12	11	150	8	-10°	TP □T1103 □□	FTNA0307	TW09P	2
E12Q-STUPR/L-11	●	○	15	12	11	180	8	-10°	TP □T1103 □□	FTNA0307	TW09P	2
E16R-STUPR/L-11	●	○	20	16	15	200	10	-6°	TP □T1103 □□	FTNA0307	TW09P	2
E16S-STUPR/L-11	●	○	20	16	15	250	10	-6°	TP □T1103 □□	FTNA0307	TW09P	2
E20R-STUPR/L-11	●	○	25	20	18	200	13	-6°	TP □T1103 □□	FTNA0307	TW09P	2
E20S-STUPR/L-11	●	○	25	20	18	250	13	-6°	TP □T1103 □□	FTNA0307	TW09P	2
E20R-STUPR/L-16	●	○	25	20	18	200	13	-6°	TP □T1604 □□	FTNA0408	TW15P	2
E20S-STUPR/L-16	●	○	25	20	18	250	13	-6°	TP □T1604 □□	FTNA0408	TW15P	2
E25T-STUPR/L-16	●	○	32	25	23	300	17	-6°	TP □T1604 □□	FTNA0408	TW15P	2

●: Stock item, ○: Under preparing for stock

# Carbide Shank Boring Bars

STUBR/L | SWUBR/L

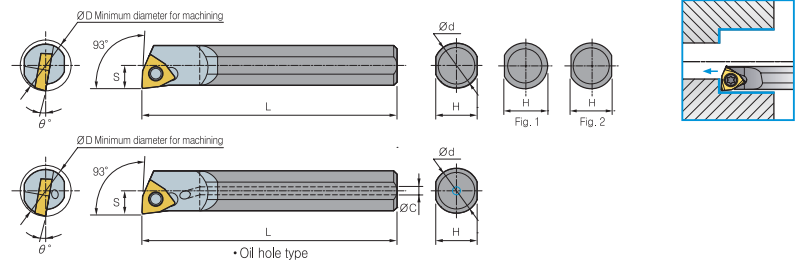
## STUBR/L



Desingation	Stock		ØD	Ød	H	L	S	θ°	Parts Insert	Screw	Wrench	Fig.
	R	L										
C08K-STUBR/L-06	●	○	10	8	7	125	5	-10°	TB □ T0601 □ □	FTNA0204	TW06P	2
C10K-STUBR/L-06	●	○	12	10	9	125	6	-10°	TB □ T0601 □ □	FTNA0204	TW06P	2
E08K-STUBR/L-06	●	○	10	8	7	125	5	-10°	TB □ T0601 □ □	FTNA0204	TW06P	2
E10K-STUBR/L-06	●	○	12	10	9	125	6	-10°	TB □ T0601 □ □	FTNA0204	TW06P	2

● Stock item, ○ Under preparing for stock

## SWUBR/L



Desingation	Stock		ØD	Ød	H	L	S	θ°	Parts Insert	Screw	Wrench	Fig.
	R	L										
C05H-SWUBR/L-02	●	○	6	5	4.4	100	3	-15°	WB □ T0201 □ □	FTNA0203	TW06P	1
C06H-SWUBR/L-02	●	○	7	6	5.4	100	3.5	-15°	WB □ T0201 □ □	FTNA0203	TW06P	1
C08K-SWUBR/L-02	●	○	9	8	7	125	4.5	-12°	WB □ T0201 □ □	FTNA02033	TW06P	2
C08K-SWUBR/L-S3	●	○	10	8	7	125	5	-12°	WB □ TS302 □ □	FTNA02205	TW06P	2
E06H-SWUBR/L-02	●	○	7	6	5.4	100	3.5	-15°	WB □ T0201 □ □	FTNA0203	TW06P	1
E08K-SWUBR/L-02	●	○	9	8	7	125	4.5	-12°	WB □ T0201 □ □	FTNA02033	TW06P	2
E08K-SWUBR/L-S3	●	○	10	8	7	125	5	-12°	WB □ TS302 □ □	FTNA02205	TW06P	2

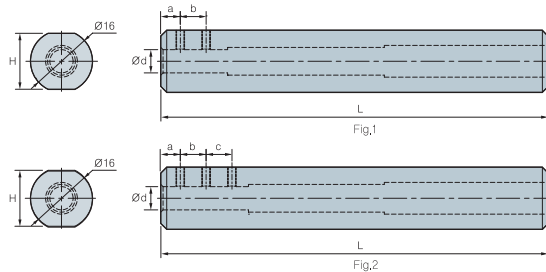
● Stock item, ○ Under preparing for stock

# Carbide Shank Boring Bars

SL(SLEEVE)



## SL(SLEEVE)



Desingation	Stock	ød	a	b	c	H	L	Screw	Wrench	Fig.
SL-1604	●	4	5	6	-	14	100	M4	HW20L	1
SL-1605	●	5	5	8	-	14	100	M4	HW20L	1
SL-1606	●	6	5	6	6	14	100	M4	HW20L	2
SL-1607	●	7	5	6	8	14	100	M4	HW20L	2

●: Stock item, ○: Under preparing for stock



**Warning**

### ※ Safety instruction

- Use glasses safely and face cover with protective equipment. If cutting condition and use method are inaccurate, you may be injured by broken tools or scattered chips.
- Excessive cutting load may influence badly on both tool and machine.  
Make suitable tool replacement for preventing failure of machining.
- After machine stopped, clean remained chips from machine with special cleaning equipment.
- Keep safety distance from acute and hot chip during machining.
- Make precaution for prevention of fire in advance when you use insoluble cutting oil.
- Assembled parts may be scattered at high speed cutting. Please use protective equipment.