



# TOOL-FLO



E 31

WALTER

CRAFTSMAN

TOOL-FLO  
CR-5B75-4E  
TF22675 G50

TOOL-FLO  
CR-8R-71  
TF14828 AT50

TOOL-FLO  
CR-8R-3E  
TF19310 AT50

TOOL-FLO  
CR-8R-3E  
TF19310

TOOL-FLO  
CR-8R-3E  
TF19310 GP50

TOOL-FLO BHR-450S  
SCREW T8-25  
WRENCH T8 TORX

TOOL-FLO BFR-312S  
MADE IN THE USA  
SCREW T8-25  
WRENCH T8 TORX

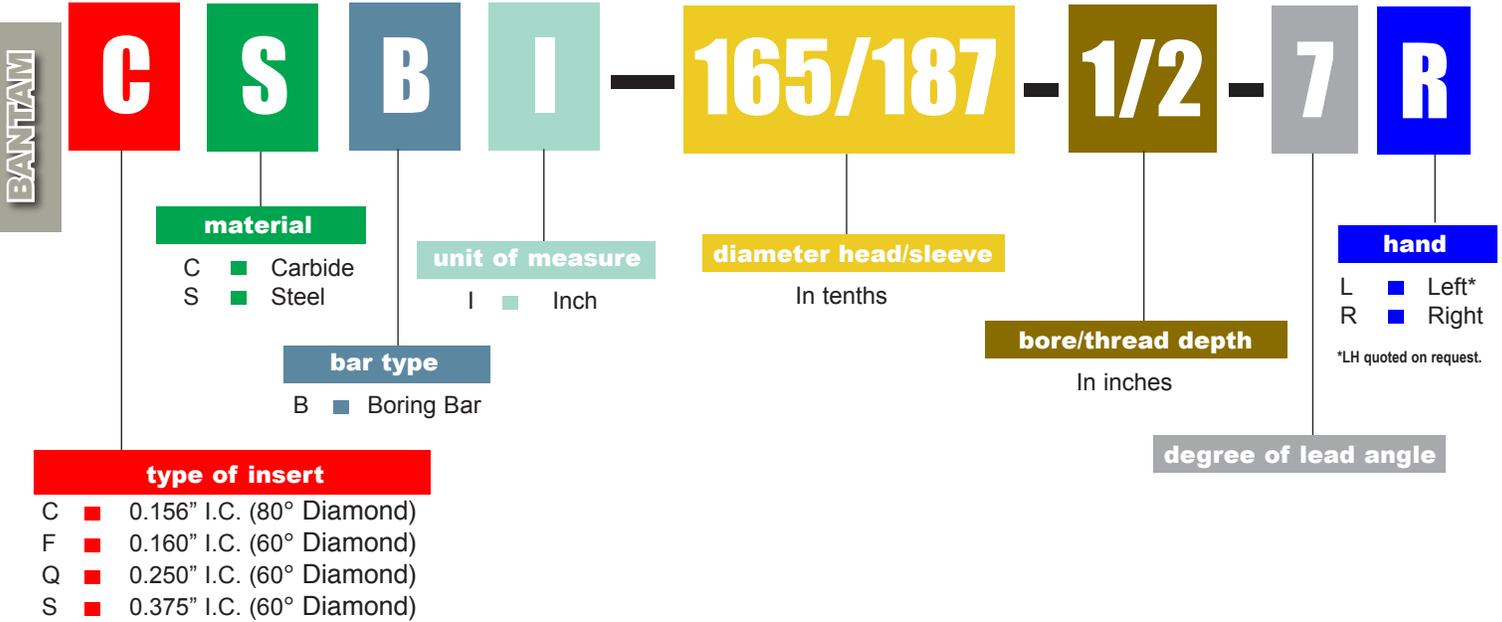
TOOL-FLO  
CR-8R-3E  
TF19310

# BANTAM

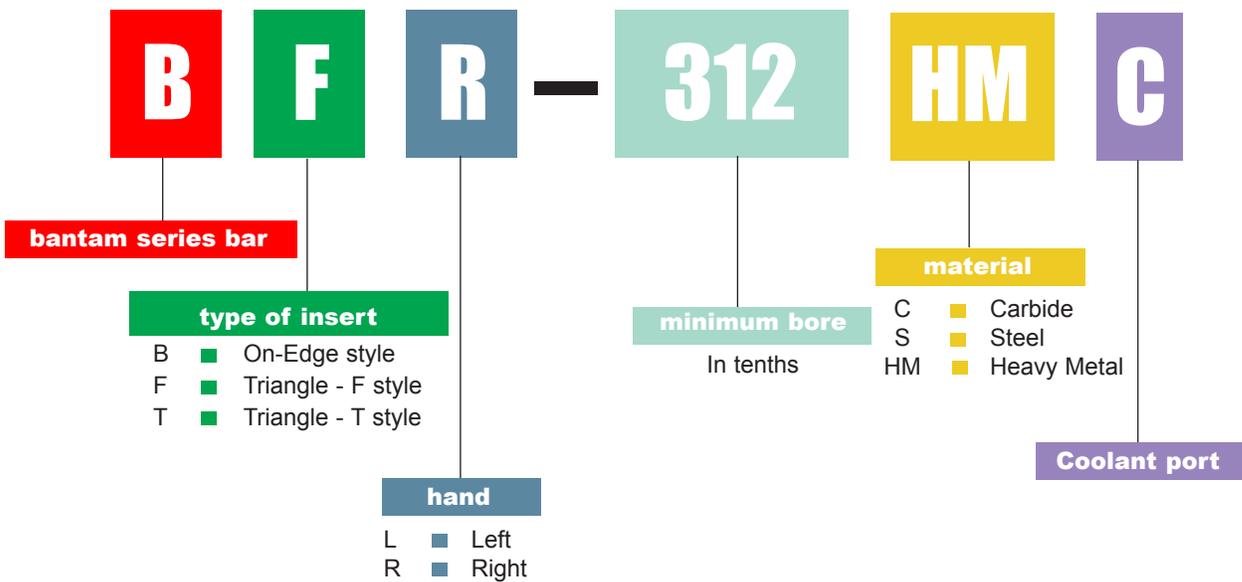
Small diameter  
Threading • Boring • Grooving



### Bantam Boring Bar Nomenclature Chart



### Bantam Grooving/Threading Bar Nomenclature Chart

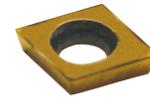
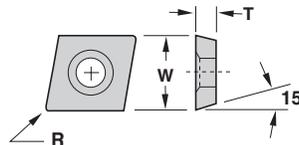


**SAVE!!!**  
 Ask about our refurbished heavy metal bars at a discount price!



# MINIMUM BORE .180

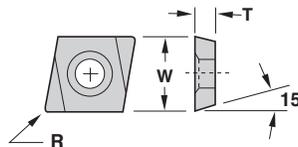
BORING  
CDCD



Description	EDP Code	T	W	R	Coating				
					C22	GP22	GP4	AC22	AC4
CDCD-500	9BCD500	.040	.156	.002	●	●	●	●	●
CDCD-505	9BCD505	.040	.156	.007	●	●	●	●	●
CDCD-51	9BCD51	.040	.156	.015	●	●	●	●	●

Uncoated		TiN Coated		AlTiN Coated	
C22	GP22	GP4	AC22	AC4	
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●

# BORING - Positive Rake CDCG



Description	EDP Code	T	W	R	Coating				
					C22	GP22	GP4	AC22	AC4
CDCG-500L	9BCG500L	.040	.156	.002	●	●	●	●	●
CDCG-505L	9BCG505L	.040	.156	.007	●	●	●	●	●
CDCG-51L	9BCG51L	.040	.156	.015	●	●	●	●	●

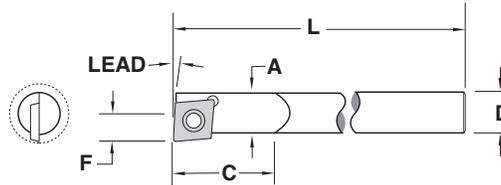
Uncoated		TiN Coated		AlTiN Coated	
C22	GP22	GP4	AC22	AC4	
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●

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● High performance choice in optimal conditions.  
▲ Recommended grade under general conditions.

Cast Iron	●	▲	▲		
Non-Ferrous	●	▲			
Stainless/High Temp	●	▲			
Steel	●	▲			

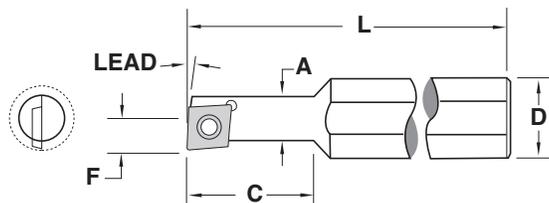
# CCBI/CSBI



Description	EDP Code	Stk	Material	Insert	Lead	A	D	L	C	F	Min Bore	Screw*
CSBI-165/187-1/2-7R	9BCS16187R	●	Steel	CDCD/G	7°	.165	.187	2.50	.500	.094	.180	TS1
CCBI-165/156-6-7R	9BCC16157R	●	Carbide	CDCD/G	7°	.165	.156	6.00	---	.094	.180	TS1
CSBI-180/187-2 1/2-5R	9BCS18185R	●	Steel	CDCD/G	5°	.180	.187	2.50	.500	.104	.208	TS1
CCBI-180/187-4-5R	9BCC18185R	●	Carbide	CDCD/G	5°	.189	.187	4.00	---	.104	.208	TS1
CSBI-250-3-5R	9BCS255R	●	Steel	CDCD/G	5°	.260	.250	3.00	---	.145	.285	TS1
CCBI-250-4-5R	9BCC255R	●	Carbide	CDCD/G	5°	.258	.250	4.00	---	.145	.285	TS1
CSBI-250-3-0R	9BCS250R	●	Steel	CDCD/G	0°	.260	.250	3.00	---	.152	.292	TS1
CCBI-250-4-0R	9BCC250R	●	Carbide	CDCD/G	0°	.258	.250	4.00	---	.152	.292	TS1

\*TS1 screw uses K05 wrench

# CCBI/CSBI



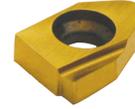
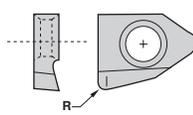
Description	EDP Code	Stk	Material	Insert	Lead	A	D	L	C	F	Min Bore	Screw*
CSBI-180/500-1/2-5R	9BCS18505R	●	Steel	CDCD/G	5°	.180	.500	2.75	.500	.104	.208	TS1
CCBI-180/500-7/8-5R	9BCC18505R	●	Carbide	CDCD/G	5°	.189	.500	2.37	.875	.104	.208	TS1
CSBI-250/500-3/4-5R	9BCS25505R	●	Steel	CDCD/G	5°	.260	.500	2.75	.750	.145	.285	TS1
CCBI-250/500-1 1/4-5R	9BCC25505R	●	Carbide	CDCD/G	5°	.258	.500	2.75	1.25	.145	.285	TS1
CSBI-250/500-3/4-0R	9BCS25500R	●	Steel	CDCD/G	0°	.260	.500	2.75	.750	.152	.292	TS1
CCBI-250/500-1 1/4-0R	9BCC25500R	●	Carbide	CDCD/G	0°	.258	.500	2.75	1.25	.152	.292	TS1

\*TS1 screw uses K05 wrench



## MINIMUM BORE .250

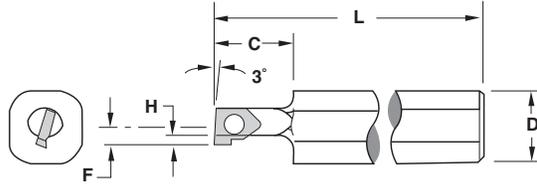
BORING  
BSBR



	Uncoated	TIN Coated	AlTiN Coated
C22	GP22	GP4	AC22
		●	AC4

Description	EDP Code	R
BSBR-005	9BSBR	.005

BSR

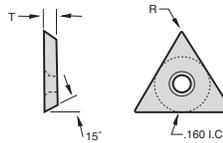


Description	EDP Code	Stk	Material	Insert	Coolant Port	L	D	C	H	F**	Min. Bore	Screw*
BSR-250S	9B250S	●	Steel	BSBR		5.000	.500	.500	.050	.125	.250	TS1
BSR-250SC	9B250SC	●	Steel	BSBR	✓	5.000	.500	.500	.050	.125	.250	TS1

\*TS1 screw uses K05 wrench  
\*\* Dimension over sharp point

## MINIMUM BORE .275 - .360

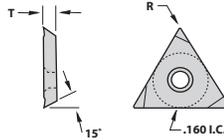
BORING  
TDAB



	Uncoated	TIN Coated	AlTiN Coated
C22	GP22	GP4	AC22
	●	●	AC4

Description	EDP Code	R	T
TDAB-505	9BDB505	.007	.047
TDAB-51	9BDB51	.015	.047

BORING - Positive Rake  
TDCG



	Uncoated	TIN Coated	AlTiN Coated
C22	GP22	GP4	AC22
	●	●	AC4

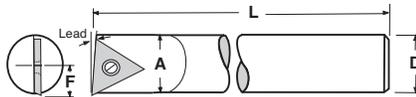
Description	EDP Code	R	T
TDCG-505L	9BDG505L	.007	.047
TDCG-51L	9BDG51L	.015	.047

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Cast Iron	●	▲			
Non-Ferrous	●	▲			
Stainless/High Temp	●	▲			
Steel	●	▲			

FCBI/FSBI



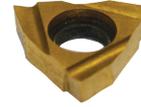
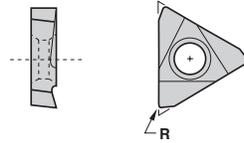
Description	EDP Code	Stk	Material	Insert	Lead	A	D	L	F	Min. Bore	Screw*
FCBI-187-4-5R	9BFC185R	●	Carbide	TDAB/TDCG	5°	.203	.187	4.000	.126	.275	TS3
FCBI-250-4-5R	9BFC255R	●	Carbide	TDAB/TDCG	5°	.250	.250	4.000	.156	.300	TS3
FSBI-250-4-5R	9BFS255R	●	Steel	TDAB/TDCG	5°	.260	.250	4.000	.156	.300	TS3
FCBI-312-4-5R	9BFC315R	●	Carbide	TDAB/TDCG	5°	.312	.312	4.000	.187	.360	TS3

\*TS3 screw uses K1 wrench



# MINIMUM BORE .312

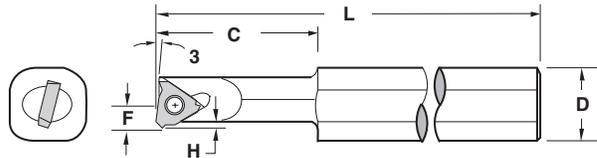
BORING  
BFR3



Uncoated	TIN Coated	AlTiN Coated
C22	GP22	GP4
	AC22	AC4

Description	EDP Code	R
BFR3-BR	9BFR3B	.005

BFR3

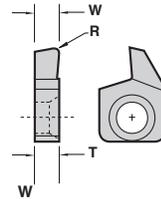


Description	EDP Code	Stk	Material	Insert	Coolant Port	L	D	C	H	F	Min. Bore	Screw*
BFR-312S	9BF312S	●	Steel	BFR3		5.000	.500	.500	.050	.150	.312	TS25
BFR-312SC	9BF312SC	●	Steel	BFR3	✓	5.000	.500	.500	.050	.150	.312	TS25
BFR-312HM	9BF312HM	●	Heavy Metal	BFR3		5.000	.500	1.250	.050	.150	.312	TS25
BFR-312HMC	9BF312HMC	●	Heavy Metal	BFR3	✓	5.000	.500	1.250	.050	.150	.312	TS25

\*TS25 screw uses K2 wrench

# MINIMUM BORE .312 - .440

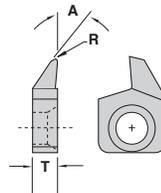
BORING  
BNBR/L



Uncoated	TIN Coated	AlTiN Coated
C22	GP22	GP4
	AC22	AC4

Description	EDP Code	W	R	T
BNBR-125W	9BB125R	.125	.005/.010	.137
BNBL-125W	9BB125L	.125	.005/.010	.137

Back Turning  
BNPR/L



Uncoated	TIN Coated	AlTiN Coated
C22	GP22	GP4
	AC22	AC4

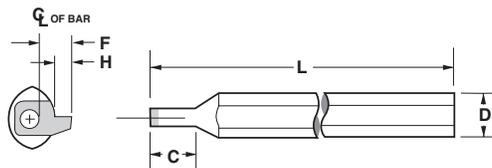
Description	EDP Code	A	R	T
BNPR-015R	9BP015R	45°	.015	.137
BNPL-015R	9BP015L	45°	.015	.137

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Cast Iron	●	▲		
Non-Ferrous	●	▲		
Stainless/High Temp	●	▲		
Steel	●	▲		

BB



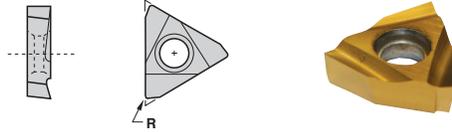
Description	EDP Code	Stk	Material	Insert	L	D	C	F	H	Min. Bore	Screw*
BB-312S	9B312S	●	Steel	BNBR/L BNPR/L	5.000	.500	.750	.156	.070	.312	TS25
BB-344S	9B344S	●	Steel	BNBR/L BNPR/L	5.000	.500	.750	.152	.070	.344	TS25
BB-375S	9B375S	●	Steel	BNBR/L BNPR/L	5.000	.500	.750	.1625	.070	.375	TS25
BB-440S	9B440S	●	Steel	BNBR/L BNPR/L	5.000	.500	1.000	.190	.070	.440	TS25
BB-312HM	9B312HM	●	Heavy Metal	BNBR/L BNPR/L	5.000	.500	1.000	.156	.070	.312	TS25
BB-344HM	9B344HM	●	Heavy Metal	BNBR/L BNPR/L	5.000	.500	1.000	.152	.070	.344	TS25
BB-375HM	9B375HM	●	Heavy Metal	BNBR/L BNPR/L	5.000	.500	1.250	.1625	.070	.375	TS25
BB-440HM	9B440HM	●	Heavy Metal	BNBR/L BNPR/L	5.000	.500	1.500	.190	.070	.440	TS25
BB-312C	9B312C	●	Carbide	BNBR/L BNPR/L	5.000	.500	1.250	.156	.070	.312	TS25
BB-440C	9B440C	●	Carbide	BNBR/L BNPR/L	5.000	.500	1.500	.190	.070	.440	TS25

\*TS25 screw uses K2 wrench



## MINIMUM BORE .400

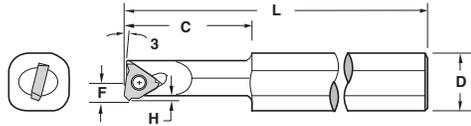
BORING  
BFR4



	Uncoated	TIN Coated	AlTiN Coated
C22	● GP22	● GP4	● AC22
			● AC4

Description	EDP Code	R
BFR4-BR	9BFR4B	.005

BFR4

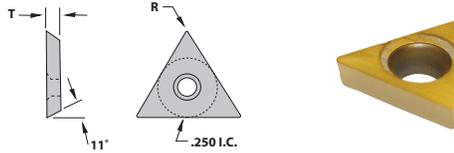


Description	EDP Code	Stk	Material	Insert	Coolant Port	L	D	C	H	F**	Min. Bore	Screw*
BFR-400S	9BF400S	●	Steel	BFR4		5.000	.500	1.000	.050	.237	.400	TS25
BFR-400SC	9BF400SC	●	Steel	BFR4	✓	5.000	.500	1.000	.050	.237	.400	TS25
BFR-400HM	9BF400HM	●	Heavy Metal	BFR4		5.000	.500	1.000	.050	.237	.400	TS25
BFR-400HMC	9BF400HMC	●	Heavy Metal	BFR4	✓	5.000	.500	1.000	.050	.237	.400	TS25

\*TS25 screw uses K2 wrench  
\*\* Dimension over sharp point

## MINIMUM BORE .438

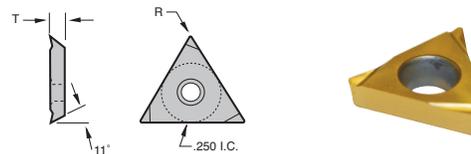
BORING  
TPCB



	Uncoated	TIN Coated	AlTiN Coated
C22	● GP22	● GP4	● AC22
			● AC4

Description	EDP Code	R	T
TPCB-2205	9BPB2205	.007	.096
TPCB-221	9BPB221	.015	.096

BORING - Positive Rake  
TPCG



	Uncoated	TIN Coated	AlTiN Coated
C22	● GP22	● GP4	● AC22
			● AC4

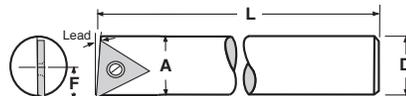
Description	EDP Code	R	T
TPCG-2205L	9BPG2205	.007	.096
TPCG-221L	9BPG221L	.015	.096

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Cast Iron	●	▲		
Non-Ferrous	●	▲		
Stainless/High Temp	●	▲		
Steel	●	▲		

QCBI/QSBI



Description	EDP Code	Stk	Material	Insert	Lead	A	D	L	F	Min. Bore	Screw*
QSBI-375-5-5R	9BQS375R	●	Steel	TPCB/G	5°	.385	.375	5.000	.221	.438	TS6
QCBI-375-6-5R	9BQC375R	●	Carbide	TPCB/G	5°	.390	.375	6.000	.211	.438	TS6
QCBI-500-8-5R	9BQC505R	●	Carbide	TPCB/G	5°	.510	.500	8.000	.296	.563	TS6

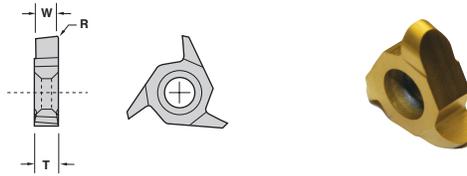
\*TS6 screw uses K3 wrench



**BANTAM**

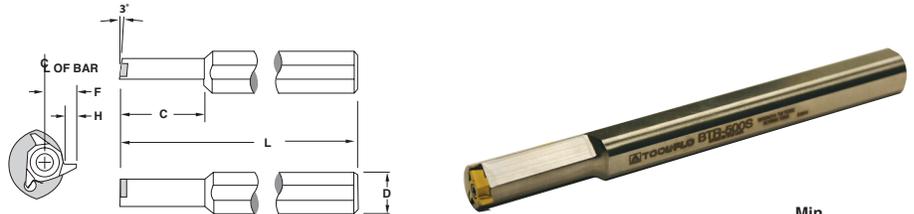
# MINIMUM BORE .500

BORING  
BTBR/L



Description	EDP Code	W	R	T	C22	GP22	GP4	AC22	AC4	Uncoated	TIN Coated	AlTiN Coated
BTBR-125	9BTB125R	.125	.005/.010	.130		●	●					
BTBL-125	9BTB125L	.125	.005/.010	.130		●	●					

BTR/L

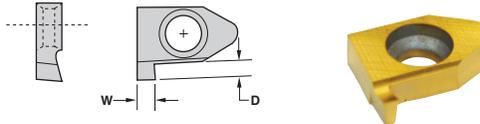


Description	EDP Code	Stk	Material	Insert	L	D	C	H	F	Min. Bore	Screw*
BTR-500S	9BTR500S	●	Steel	BTBR	5.000	.500	1.250	.075	.225	.500	TS25
BTL-500S	9BTL500S	●	Steel	BTBL	5.000	.500	1.250	.075	.225	.500	TS25
BTR-500HM	9BTR500HM	●	Heavy Metal	BTBR	5.000	.500	1.500	.075	.225	.500	TS25
BTL-500HM	9BTL500HM	●	Heavy Metal	BTBL	5.000	.500	1.500	.075	.225	.500	TS25

\*TS25 screw uses K2 wrench  
\*\* Dimension over sharp point

# MINIMUM BORE .250

GROOVING  
BSGR



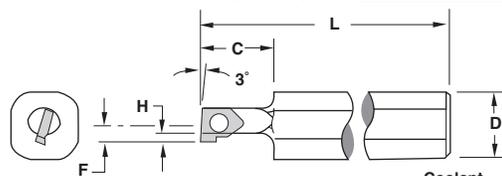
Description	EDP Code	W	D	C22	GP22	GP4	AC22	AC4	Uncoated	TIN Coated	AlTiN Coated
BSGR-015W	9BSG015R	.015	.030			●					
BSGR-020W	9BSG020R	.020	.050			●					
BSGR-031W	9BSG031R	.031	.050			●					
BSGR-047W	9BSG047R	.047	.050			●					

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- ▲ Recommended grade under general conditions.

Cast Iron	●	▲			
Non-Ferrous	●	▲			
Stainless/High Temp	●	▲			
Steel	●	▲			

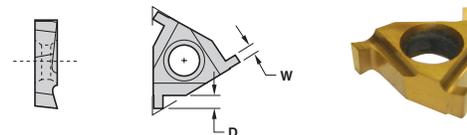
BSR



Description	EDP Code	Stk	Material	Insert	Coolant Port	L	D	C	H	F**	Min. Bore	Screw
BSR-250S	9B250S	●	Steel	BSGR		5.000	.500	.500	.050	.157	.250	TS20
BSR-250SC	9B250SC	●	Steel	BSGR	✓	5.000	.500	.500	.050	.157	.250	TS20

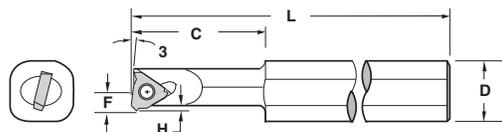
# MINIMUM BORE .312

GROOVING  
BFR3



Description	EDP Code	W	D	C22	GP22	GP4	AC22	AC4	Uncoated	TIN Coated	AlTiN Coated
BFR3-015W	9BFR3G015	.015	.020			●					
BFR3-020W	9BFR3G020	.020	.030			●					
BFR3-031W	9BFR3G031	.031	.035			●					

BFR3



Description	EDP Code	Stk	Material	Insert	Coolant Port	L	D	C	H	F	Min. Bore	Screw*
BFR-312S	9BF312S	●	Steel	BFR3		5.000	.500	1.000	.050	.150	.312	TS25
BFR-312SC	9BF312SC	●	Steel	BFR3	✓	5.000	.500	1.000	.050	.150	.312	TS25
BFR-312HM	9BF312HM	●	Heavy Metal	BFR3		5.000	.500	1.000	.050	.150	.312	TS25
BFR-312HMC	9BF312HMC	●	Heavy Metal	BFR3	✓	5.000	.500	1.000	.050	.150	.312	TS25

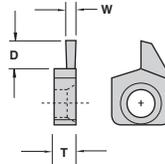
\*TS25 screw uses K2 wrench

BANTAM



## MINIMUM BORE .312 - .440

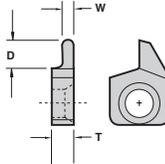
GROOVING  
BNGR/L



RH Shown

Description	EDP Code	W	D	T	Coating				
					C22	GP22	GP4	AC22	AC4
BNGR-031W	9BG031R	.031	.050	.137	●	●	●	●	●
BNGL-031W	9BG031L	.031	.050	.137	●	●	●	●	●
BNGR-047W	9BG047R	.047	.070	.137	●	●	●	●	●
BNGL-047W	9BG047L	.047	.070	.137	●	●	●	●	●
BNGR-062W	9BG062R	.062	.070	.137	●	●	●	●	●
BNGL-062W	9BG062L	.062	.070	.137	●	●	●	●	●
BNGR-094W	9BG094R	.094	.070	.137	●	●	●	●	●
BNGL-094W	9BG094L	.094	.070	.137	●	●	●	●	●
BNGR-125W	9BG125R	.125	.070	.137	●	●	●	●	●
BNGL-125W	9BG125L	.125	.070	.137	●	●	●	●	●

## GROOVING - Full Nose Radius BNRR/L



RH Shown

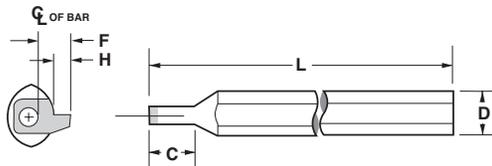
Description	EDP Code	W	R	D	T	Coating				
						C22	GP22	GP4	AC22	AC4
BNRR-031W	9BR031R	.031	.0155	.050	.137	●	●	●	●	●
BNRL-031W	9BR031L	.031	.0155	.050	.137	●	●	●	●	●
BNRR-047W	9BR047R	.047	.0235	.070	.137	●	●	●	●	●
BNRL-047W	9BR047L	.047	.0235	.070	.137	●	●	●	●	●
BNRR-062W	9BR062R	.062	.0310	.070	.137	●	●	●	●	●
BNRL-062W	9BR062L	.062	.0310	.070	.137	●	●	●	●	●
BNRR-094W	9BR094R	.094	.0470	.070	.137	●	●	●	●	●
BNRL-094W	9BR094L	.094	.0470	.070	.137	●	●	●	●	●
BNRR-125W	9BR125R	.125	.0625	.070	.137	●	●	●	●	●
BNRL-125W	9BR125L	.125	.0625	.070	.137	●	●	●	●	●

In an effort to improve our stock standard grade offering, there are periodic changes. Please see current price list for up-to-date grade offering.

- High performance choice in optimal conditions.
- ▲ Recommended grade under general conditions.

Material	C22	GP22	GP4	AC22	AC4
Cast Iron		●	▲		
Non-Ferrous	●	▲			
Stainless/High Temp	●	▲			
Steel	●	▲			

## BB



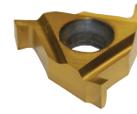
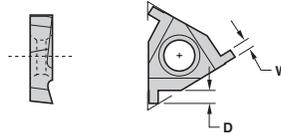
Description	EDP Code	Stk	Material	Insert	L	D	C	F	H	Min. Bore	Screw*
BB-312S	9B312S	●	Steel	BNGR/L BNRR/L	5.000	.500	.750	.156	.070	.312	TS25
BB-344S	9B344S	●	Steel	BNGR/L BNRR/L	5.000	.500	.750	.152	.070	.344	TS25
BB-375S	9B375S	●	Steel	BNGR/L BNRR/L	5.000	.500	.750	.1625	.070	.375	TS25
BB-440S	9B440S	●	Steel	BNGR/L BNRR/L	5.000	.500	1.000	.190	.070	.440	TS25
BB-312HM	9B312HM	●	Heavy Metal	BNGR/L BNRR/L	5.000	.500	1.000	.156	.070	.312	TS25
BB-344HM	9B344HM	●	Heavy Metal	BNGR/L BNRR/L	5.000	.500	1.000	.152	.070	.344	TS25
BB-375HM	9B375HM	●	Heavy Metal	BNGR/L BNRR/L	5.000	.500	1.250	.1625	.070	.375	TS25
BB-440HM	9B440HM	●	Heavy Metal	BNGR/L BNRR/L	5.000	.500	1.500	.190	.070	.440	TS25
BB-312C	9B312C	●	Carbide	BNGR/L BNRR/L	5.000	.500	1.250	.156	.070	.312	TS25
BB-440C	9B440C	●	Carbide	BNGR/L BNRR/L	5.000	.500	1.500	.190	.070	.440	TS25

\*TS25 screw uses K2 wrench



# MINIMUM BORE .400

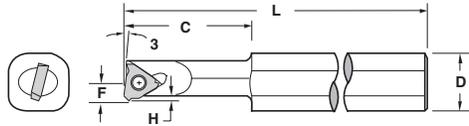
## GROOVING BFR4



Uncoated	TIN Coated	ATIN Coated
C22	GP22	AC22
	GP4	AC4

Description	EDP Code	W	D
BFR4-015W	9BFR4G015	.015	.035
BFR4-020W	9BFR4G020	.020	.035
BFR4-031W	9BFR4G031	.031	.035

## BFR4

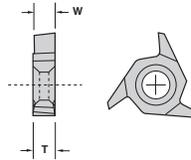


Description	EDP Code	Stk	Material	Insert	Coolant Port	L	D	C	H	F**	Min. Bore	Screw
BFR-400S	9BF400S	●	Steel	BFR4		5.000	.500	1.000	.050	.237	.400	TS25
BFR-400SC	9BF400SC	●	Steel	BFR4	✓	5.000	.500	1.000	.050	.237	.400	TS25
BFR-400HM	9BF400HM	●	Heavy Metal	BFR4		5.000	.500	1.000	.050	.237	.400	TS25
BFR-400HMC	9BF400HMC	●	Heavy Metal	BFR4	✓	5.000	.500	1.000	.050	.237	.400	TS25

\*TS25 screw uses K2 wrench  
\*\* Dimension over sharp point

# MINIMUM BORE .500

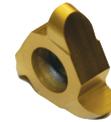
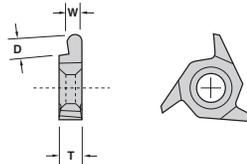
## GROOVING BTGR/L



Uncoated	TIN Coated	ATIN Coated
C22	GP22	AC22
	GP4	AC4

Description	EDP Code	W	D	T
BTGR-031W	9BTG031R	.031	.050	.130
BTGL-031W	9BTG031L	.031	.050	.130
BTGR-047W	9BTG047R	.047	.070	.130
BTGL-047W	9BTG047L	.047	.070	.130
BTGR-062W	9BTG062R	.062	.075	.130
BTGL-062W	9BTG062L	.062	.075	.130
BTGR-094W	9BTG094R	.094	.075	.130
BTGL-094W	9BTG094L	.094	.075	.130
BTGR-125W	9BTG125R	.125	.075	.130
BTGL-125W	9BTG125L	.125	.075	.130

## GROOVING - Full Nose Radius BTRR/L



Uncoated	TIN Coated	ATIN Coated
C22	GP22	AC22
	GP4	AC4

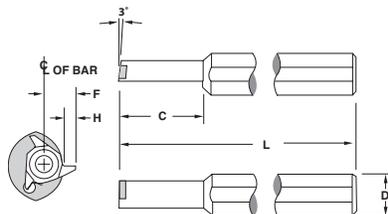
Description	EDP Code	W	R	D	T
BTRR-031W	9BTR031R	.031	.0155	.050	.130
BTRL-031W	9BTR031L	.031	.0155	.050	.130
BTRR-047W	9BTR047R	.047	.0235	.070	.130
BTRL-047W	9BTR047L	.047	.0235	.070	.130
BTRR-062W	9BTR062R	.062	.0310	.075	.130
BTRL-062W	9BTR062L	.062	.0310	.075	.130
BTRR-094W	9BTR094R	.094	.0470	.075	.130
BTRL-094W	9BTR094L	.094	.0470	.075	.130
BTRR-125W	9BTR125R	.125	.0625	.075	.130
BTRL-125W	9BTR125L	.125	.0625	.075	.130

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- High performance choice in optimal conditions.
- ▲ Recommended grade under general conditions.

Cast Iron	●
Non-Ferrous	●
Stainless/High Temp	●
Steel	●

## BTR/L



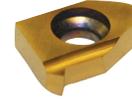
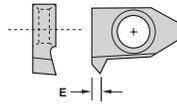
Description	EDP Code	Stk	Material	Insert	L	D	C	H	F	Min. Bore	Screw*
BTR-500S	9BTR500S	●	Steel	BTBR/BTRR	5.000	.500	1.250	.075	.225	.500	TS25
BTL-500S	9BTL500S	●	Steel	BTBL/BTRL	5.000	.500	1.250	.075	.225	.500	TS25
BTR-500HM	9BTR500HM	●	Heavy Metal	BTBR/BTRR	5.000	.500	1.500	.075	.225	.500	TS25
BTL-500HM	9BTL500HM	●	Heavy Metal	BTBL/BTRL	5.000	.500	1.500	.075	.225	.500	TS25

\*TS25 screw uses K2 wrench



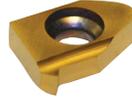
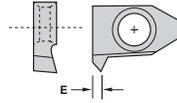
## MINIMUM BORE .250

THREADING - NPT  
BSVR



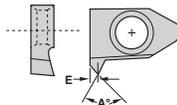
Description	EDP Code	TPI	E	Coating					
				C22	GP22	GP4	AC22	AC4	
BSVR-14NPT	9BSV14R	14	.045	Uncoated	TIN Coated	AITIN Coated			
BSVR-18NPT	9BSV18R	18	.033	●	●	●			
BSVR-27NPT	9BSV27R	27	.026	●	●	●			

THREADING - UN  
BSVR



Description	EDP Code	TPI	E	Coating					
				C22	GP22	GP4	AC22	AC4	
BSVR-12UN	9BSU12R	12	.040	Uncoated	TIN Coated	AITIN Coated			
BSVR-16UN	9BSU16R	16	.031	●	●	●			
BSVR-18UN	9BSU18R	18	.029	●	●	●			
BSVR-20UN	9BSU20R	20	.026	●	●	●			
BSVR-24UN	9BSU24R	24	.023	●	●	●			
BSVR-28UN	9BSU28R	28	.021	●	●	●			
BSVR-32UN	9BSU32R	32	.019	●	●	●			

THREADING - 55°/60° V  
BSVR



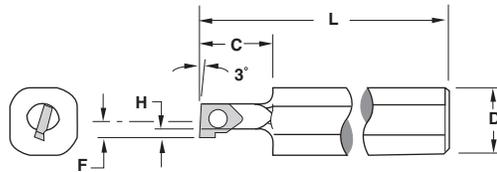
Description	EDP Code	TPI	R/F	E	A	Coating				
						C22	GP22	GP4	AC22	AC4
BSVR-55	9BSV55R	16-48	.003F	.039	55°			●		
BSVR-60	9BSV60R	16-48	.003R	.039	60°			●		

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- ▲ Recommended grade under general conditions.

Cast Iron			●		
Non-Ferrous		●			
Stainless/High Temp		●			
Steel		●			

BSR

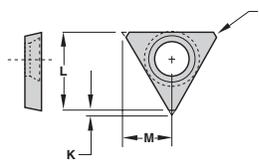


Description	EDP Code	Stk	Material	Insert	Coolant Port	L	D	C	H	F**	Min. Bore	Screw*
BSR-250SC	9B250SC	●	Steel	BSVR	✓	5.000	.500	.500	.050	.157	.250	TS1

\*TS1 screw uses K05 wrench  
\*\* Dimension over sharp point

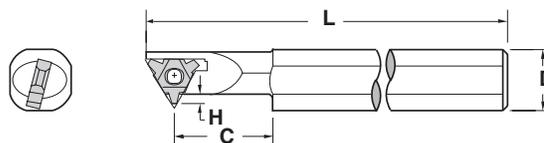
## MINIMUM BORE .312

THREADING - 60° V  
BHV



Description	EDP Code	TPI	F	Coating					
				C22	GP22	GP4	AC22	AC4	
BHV-002	9BHV002	16-48	.002	Uncoated	TIN Coated	AITIN Coated			

BHR



Description	EDP Code	Stk	Material	Insert	L	D	C	H	Min. Bore	Screw*
BHR-312HM	9BHR312HM	●	Heavy Metal	BHV	4.000	.500	1.000	.060	.312	TS3

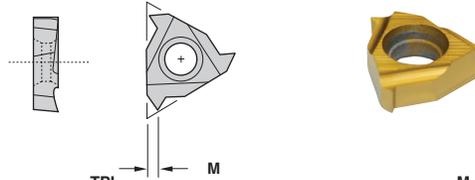
\*TS3 screw uses K1 wrench



# MINIMUM BORE .312

## THREADING - NPT

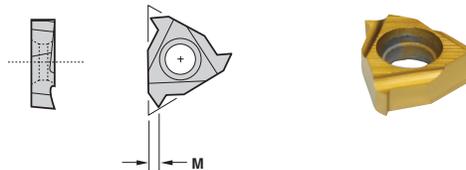
### BFR3



Description	EDP Code	TPI	M	Coating				
				C22	GP22	GP4	AC22	AC4
BFR3-18NPT	9BFR3V18	18	.033		●	●		
BFR3-27NPT	9BFR3V27	27	.026		●	●		

## THREADING - UN

### BFR3



Description	EDP Code	TPI	M	Coating				
				C22	GP22	GP4	AC22	AC4
BFR3-20UN	9BFR3U20	20	.026			●		
BFR3-24UN	9BFR3U24	24	.026			●		
BFR3-28UN	9BFR3U28	28	.021			●		
BFR3-32UN	9BFR3U32	32	.019	●	●			

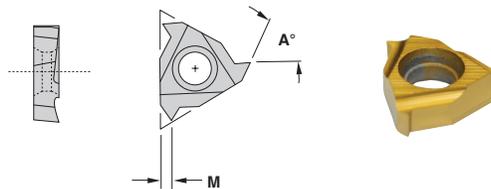
In an effort to improve our stock standard grade offering, there are periodic changes. Please see current price list for up to date grade offering.

- High performance choice in optimal conditions.
- ▲ Recommended grade under general conditions.

Cast Iron			●		
Non-Ferrous		●			
Stainless/High Temp					
Steel	●				

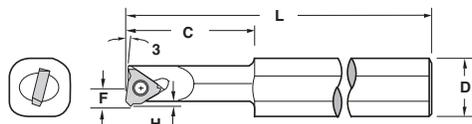
## THREADING - 55°/60° V

### BFR3



Description	EDP Code	TPI	M	A	Coating				
					C22	GP22	GP4	AC22	AC4
BFR3-55V	9BFR3V55	20-48	.028	55°					
BFR3-60V	9BFR3V60	27-48	.031	60°		●	●		

## BFR3



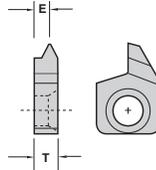
Description	EDP Code	Stk	Material	Insert	Coolant		L	D	C	H	F	Min. Bore	Screw*
					Port								
BFR-312S	9BF312S	●	Steel	BFR3			5.000	.500	.500	.050	.150	.312	TS25
BFR-312SC	9BF312SC	●	Steel	BFR3	✓		5.000	.500	.500	.050	.150	.312	TS25
BFR-312HM	9BF312HM	●	Heavy Metal	BFR3			5.000	.500	1.250	.050	.150	.312	TS25
BFR-312HMC	9BF312HMC	●	Heavy Metal	BFR3	✓		5.000	.500	1.250	.050	.150	.312	TS25

\*TS25 screw uses K2 wrench



## MINIMUM BORE .312 - .440

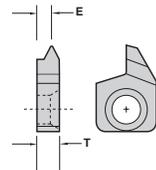
THREADING - NPT  
BNVR/L



Description	EDP Code	TPI	E	T	Uncoated		TiN Coated		AlTiN Coated	
					C22	GP22	GP4	AC22	AC4	
BNVR-14NPT	9BNP14R	14	.040	.137	●	●	●	●	●	●
BNVL-14NPT	9BNP14L	14	.040	.137	●	●	●	●	●	●
BNVR-18NPT	9BNP18R	18	.030	.137	●	●	●	●	●	●
BNVL-18NPT	9BNP18L	18	.030	.137	●	●	●	●	●	●
BNVR-27NPT	9BNP27R	27	.030	.137	●	●	●	●	●	●
BNVL-27NPT	9BNP27L	27	.030	.137	●	●	●	●	●	●

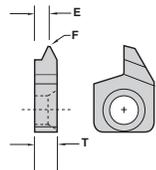
## MINIMUM BORE .312 - .440

THREADING - UN  
BNVR/L



Description	EDP Code	TPI	E	T	Uncoated		TiN Coated		AlTiN Coated	
					C22	GP22	GP4	AC22	AC4	
BNVR-12UN	9BNV12R	12	.040	.137	●	●	●	●	●	●
BNVL-12UN	9BNV12L	12	.040	.137	●	●	●	●	●	●
BNVR-16UN	9BNV16R	16	.031	.137	●	●	●	●	●	●
BNVL-16UN	9BNV16L	16	.031	.137	●	●	●	●	●	●
BNVR-18UN	9BNV18R	18	.031	.137	●	●	●	●	●	●
BNVL-18UN	9BNV18L	18	.031	.137	●	●	●	●	●	●
BNVR-20UN	9BNV20R	20	.030	.137	●	●	●	●	●	●
BNVL-20UN	9BNV20L	20	.030	.137	●	●	●	●	●	●
BNVR-24UN	9BNV24R	24	.030	.137	●	●	●	●	●	●
BNVL-24UN	9BNV24L	24	.030	.137	●	●	●	●	●	●
BNVR-28UN	9BNV28R	28	.030	.137	●	●	●	●	●	●
BNVL-28UN	9BNV28L	28	.030	.137	●	●	●	●	●	●
BNVR-32UN	9BNV32R	32	.030	.137	●	●	●	●	●	●
BNVL-32UN	9BNV32L	32	.030	.137	●	●	●	●	●	●

THREADING - 60° V  
BNVR/L



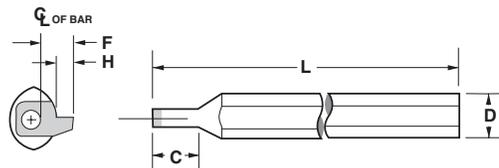
Description	EDP Code	TPI	F	E	T	Uncoated		TiN Coated		AlTiN Coated	
						GFI	C22	GP22	GP4	AC22	AC4
BNVR-60	9BNV60R	18-40	.003F	.095	.137	●	●	●	●	●	●
BNVL-60	9BNV60L	18-40	.003F	.095	.137	●	●	●	●	●	●

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- High performance choice in optimal conditions.
- ▲ Recommended grade under general conditions.

Cast Iron	●										
Non-Ferrous			●								
Stainless/High Temp			●								
Steel			●								

BB



Description	EDP Code	Stk	Material	Insert	L	D	C	F	H	Min. Bore	Screw*
BB-312S	9B312S	●	Steel	BNVR/L	5.000	.500	.750	.156	.070	.312	TS25
BB-344S	9B344S	●	Steel	BNVR/L	5.000	.500	.750	.152	.070	.344	TS25
BB-375S	9B375S	●	Steel	BNVR/L	5.000	.500	.750	.1625	.070	.375	TS25
BB-440S	9B440S	●	Steel	BNVR/L	5.000	.500	1.000	.190	.070	.440	TS25
BB-312HM	9B312HM	●	Heavy Metal	BNVR/L	5.000	.500	1.000	.156	.070	.312	TS25
BB-344HM	9B344HM	●	Heavy Metal	BNVR/L	5.000	.500	1.000	.152	.070	.344	TS25
BB-375HM	9B375HM	●	Heavy Metal	BNVR/L	5.000	.500	1.250	.1625	.070	.375	TS25
BB-440HM	9B440HM	●	Heavy Metal	BNVR/L	5.000	.500	1.500	.190	.070	.440	TS25
BB-312C	9B312C	●	Carbide	BNVR/L	5.000	.500	1.250	.156	.070	.312	TS25
BB-440C	9B440C	●	Carbide	BNVR/L	5.000	.500	1.500	.190	.070	.440	TS25

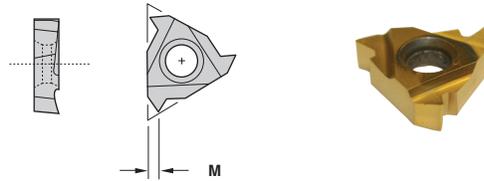
\*TS25 screw uses K2 wrench



# MINIMUM BORE .400

## THREADING - NPT

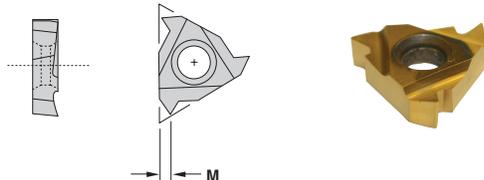
### BFR4



Description	EDP Code	TPI	M	Coating				
				C22	GP22	GP4	AC22	AC4
BFR4-18NPT	9BFR4V18	18	.033		●			
BFR4-27NPT	9BFR4V27	27	.026		●			

# THREADING - UN

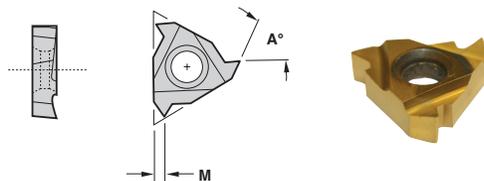
### BFR4



Description	EDP Code	TPI	M	Coating				
				C22	GP22	GP4	AC22	AC4
BFR4-12UN	9BFR4U12	12	.043		●			
BFR4-14UN	9BFR4U14	14	.039		●			
BFR4-16UN	9BFR4U16	16	.034		●			
BFR4-20UN	9BFR4U20	20	.026		●			
BFR4-24UN	9BFR4U24	24	.026		●			
BFR4-28UN	9BFR4U28	28	.021		●			
BFR4-32UN	9BFR4U32	32	.019		●			

# THREADING - 55°/60° V

### BFR4



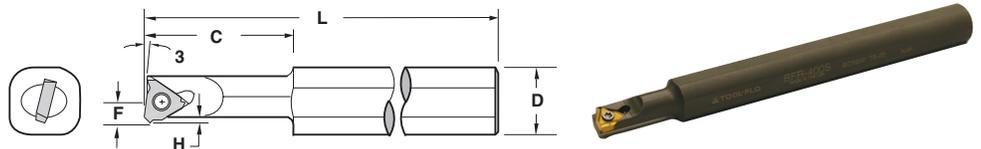
Description	EDP Code	TPI	M	A	Coating				
					C22	GP22	GP4	AC22	AC4
BFR4-55V	9BFR4V55	14-48	.043	55°		●	●		
BFR4-60V	9BFR4V60	14-48	.043	60°		●	●		

In an effort to improve our stock standard grade offering, there are periodic changes. Please see current price list for up-to-date grade offering.

● High performance choice in optimal conditions.  
▲ Recommended grade under general conditions.

	●	▲			
Cast Iron			●	▲	
Non-Ferrous	●	▲			
Stainless/High Temp	●	▲			
Steel	●	▲			

# BFR4



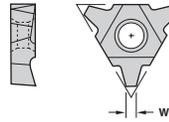
Description	EDP Code	Stk	Material	Insert	Coolant		L	D	C	H	F**	Min. Bore	Screw*
					Port	L							
BFR-400S	9BF400S	●	Steel	BFR4			5.000	.500	1.000	.050	.237	.400	TS25
BFR-400SC	9BF400SC	●	Steel	BFR4	✓		5.000	.500	1.000	.050	.237	.400	TS25
BFR-400HM	9BF400HM	●	Heavy Metal	BFR4			5.000	.500	1.000	.050	.237	.400	TS25
BFR-400HMC	9BF400HMC	●	Heavy Metal	BFR4	✓		5.000	.500	1.000	.050	.237	.400	TS25

\*TS25 screw uses K2 wrench  
\*\* Dimension over sharp point



## MINIMUM BORE .450

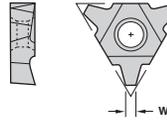
THREADING - ACME  
BHR4



	Uncoated	TIN Coated	AlTiN Coated
C22	GP22	GP4	AC22
		●	●
		●	●
		●	●

Description	EDP Code	TPI	W	C22	GP22	GP4	AC22	AC4
BHR4-8ACME	9BHA080R	8	.0411			●		
BHR4-10ACME	9BHA100R	10	.0319			●		
BHR4-12ACME	9BHA120R	12	.0283			●		
BHR4-16ACME	9BHA160R	16	.0206			●		

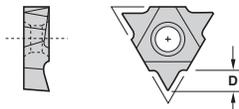
THREADING - STUB ACME  
BHR4



	C22	GP22	GP4	AC22	AC4
			●		
			●		
			●		

Description	EDP Code	TPI	W	C22	GP22	GP4	AC22	AC4
BHR4-8STACME	9BHA081R	8	.0476			●		
BHR4-10STACME	9BHA101R	10	.0370			●		
BHR4-12STACME	9BHA121R	12	.0326			●		
BHR4-16STACME	9BHA161R	16	.0238			●		

THREADING - 60° V  
BHR4



	C22	GP22	GP4	AC22	AC4
Cast Iron		●	▲		
Non-Ferrous	●	▲			
Stainless/High Temp	●	▲			
Steel	●	▲			

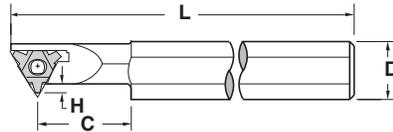
Description	EDP Code	TPI	D	C22	GP22	GP4	AC22	AC4
BHR4-60V	9BH460R	16-48	.075			●	●	

In an effort to improve our stock standard grade offering, there are periodic changes. Please see current price list for up to date grade offering.

- High performance choice in optimal conditions.
- ▲ Recommended grade under general conditions.

Cast Iron		●	▲		
Non-Ferrous	●	▲			
Stainless/High Temp	●	▲			
Steel	●	▲			

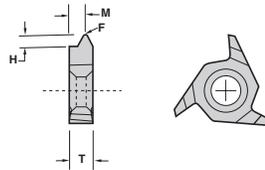
BHR4



Description	EDP Code	Stk	Material	Insert	L	D	C	H	Min. Bore	Screw
BHR-450S	9BHR450S	●	Steel	BHR4	5.000	.500	1.000	.075	.450	TS25
BHR-450HM	9BHR450HM	●	Heavy Metal	BHR4	5.000	.500	1.000	.075	.450	TS25

## MINIMUM BORE .500

THREADING - 60° V  
BTVR/L



	Uncoated	TIN Coated	AlTiN Coated
C22	GP22	GP4	AC22
		●	●
		●	●

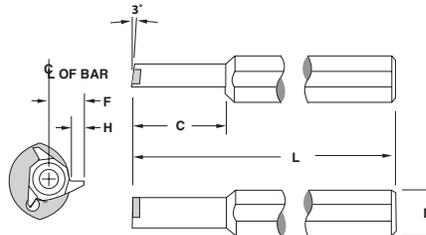
Description	EDP Code	TPI	M	H	T	F	C22	GP22	GP4	AC22	AC4
BTVR-60	9BTV60R	8-40	.047	.075	.130	.004			●		
BTVL-60	9BTV60L	8-40	.047	.075	.130	.004			●		

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- High performance choice in optimal conditions.
- ▲ Recommended grade under general conditions.

Cast Iron		●	▲		
Non-Ferrous	●	▲			
Stainless/High Temp	●	▲			
Steel	●	▲			

BTR/L



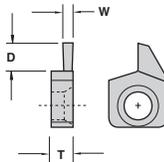
Description	EDP Code	Stk	Material	Insert	L	D	C	H	F	Min. Bore	Screw*
BTR-500S	9BTR500S	●	Steel	BTVR	5.000	.500	1.250	.075	.225	.500	TS25
BTL-500S	9BTL500S	●	Steel	BTVL	5.000	.500	1.250	.075	.225	.500	TS25
BTR-500HM	9BTR500HM	●	Heavy Metal	BTVR	5.000	.500	1.500	.075	.225	.500	TS25
BTL-500HM	9BTL500HM	●	Heavy Metal	BTVL	5.000	.500	1.500	.075	.225	.500	TS25

\*TS25 screw uses K2 wrench



## MINIMUM BORE .516

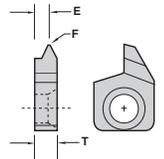
### CIRCULAR INTERPOLATING MILLGROOVING BNGR



Description	EDP Code	W	D	T						
					C22	GP22	GP4	AC22	AC4	
BNGR-031W	9BG031R	.031	.050	.137		●	●			
BNGR-047W	9BG047R	.047	.070	.137		●	●			
BNGR-062W	9BG062R	.062	.070	.137		●	●			
BNGR-094W	9BG094R	.094	.070	.137		●	●			
BNGR-125W	9BG125R	.125	.070	.137		●	●			

Uncoated		TIN Coated		AlTiN Coated	
C22	GP22	GP4	AC22	AC4	
	●	●			
	●	●			
	●	●			
	●	●			
	●	●			

### THREADMILLING BNVR



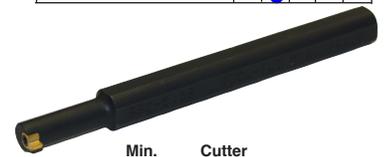
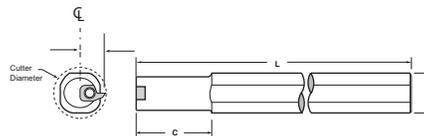
Description	EDP Code	TPI	F	E	T					
						GFI	GP22	GP4	AC22	AC4
BNVR-60	9BNV60R	18-40	.003F	.095	.137	●	●	●		●
BNVL-60	9BNV60L	18-40	.003F	.095	.137	●	●	●		●

Cast Iron		Non-Ferrous		Stainless/High Temp		Steel	
GFI	GP22	GP4	AC22	AC4			
			●				
		●					
		●					
		●					

In an effort to improve our stock standard grade offering, there are periodic changes. Please see current price list for up to date grade offering.

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- ▲ Recommended grade under general conditions.

### CIRCULAR INTERPOLATING THREADMILLING & MILLGROOVING BBC



Description	EDP Code	Stk	Material	Insert	L	D	C	Min. Dia.	Cutter Dia.	Screw*
BBC-516S	9BC516S	●	Steel	BN_R/L	5.000	.500	1.250	.800	.516	TS25
BBC-516HM	9BC516HM	●	Heavy Metal	BN_R/L	5.000	.500	1.500	.800	.516	TS25

\*TS25 screw uses K2 wrench

## Bantam Series Kits

### THREADING KITS V-THREADING KIT #1

Kit Contents

1	BFR-312S
10	BFR3-60V GP22
1	T8 WRENCH
1	TS25 SCREW

### 18NPT-THREADING KIT #2

Kit Contents

1	BFR-312S
10	BFR3-18NPT GP22
1	T8 WRENCH
1	TS25 SCREW

### 27NPT-THREADING KIT #3

Kit Contents

1	BFR-312S
10	BFR3-27NPT GP22
1	T8 WRENCH
1	TS25 SCREW

### GROOVING KITS W.031 GROOVING KIT #4

Kit Contents

1	BB-312S
10	BNGR-031W GP4
1	T8 WRENCH
1	TS25 SCREW

### W.047 GROOVING KIT #5

Kit Contents

1	BB-312S
10	BNGR-047W GP4
1	T8 WRENCH
1	TS25 SCREW

### W.062 GROOVING KIT #6

Kit Contents

1	BB-312S
10	BNGR-062W GP4
1	T8 WRENCH
1	TS25 SCREW

### BORING KITS .180 MIN BORE KIT #7

Kit Contents

1	CSBI-165/187-1/2-7R
10	CDCG-505L GP22
1	T6 WRENCH
1	TS1 SCREW

### .285 MIN BORE KIT #8

Kit Contents

1	CSBI-250-3-5R
10	CDCG-505L GP22
1	T6 WRENCH
1	TS1 SCREW





## Technical Information

BANTAM

		SURFACE FOOTAGE PER MINUTE (SFPM)					
Tool-Flo grade		uncoated		TiN coated		AlTiN coated	
		GFI	C22	GP4	GP22	AC4	AC22
WORKPIECE MATERIAL	Alloy Steel 4000 Series	60-120			100-250	100-180	200-500
	Aluminum		80-200		200-400		300-600
	Carbon Steel		80-150		80-200	100-210	200-500
	Ductile Iron	60-120			100-250		200-500
	Non Metals	60-120	80-150	60-150	200-400		300-600
	Stainless Steel 300 Series	60-120	80-150	60-150	100-250	80-180	150-350
	Stainless Steel 400 Series	60-120		60-150	100-300	80-180	200-500

		FEED RATE		
Application		THREADING	GROOVING	BORING
WORKPIECE MATERIAL	Alloy Steel 4000 Series	Set by pitch (DOC per pass= .002-.004)	IPR=.002-.004	.002-.004
	Aluminum Non-Metals	Set by pitch (DOC per pass= .004-.006)	IPR=.004-.006	.004-.006
	Carbon Steel	Set by pitch (DOC per pass= .002-.004)	IPR=.002-.004	.002-.004
	300Stainless Steel High Temp Alloys	Set by pitch (DOC per pass= .002-.004)	IPR=.002-.004	.002-.004
	Stainless Steel 400 Series	Set by pitch (DOC per pass= .002-.004)	IPR=.002-.004	.002-.004

### CUTTING DATA

TOOL-FLO MFG, on all threading and grooving bars, sets the cutting edge of inserts above centerline. This decreases the deflection reducing the load on the insert. The result is a better finish with less chatter. We recommend following the same procedure for boring operations.

\*When using the BB-312S/HM bar with a grooving insert .062 wide or greater, reduce the recommended IPR by 50%.

### GRADE CROSSOVER CHART

TOOL-FLO	CIRCLE	EVEREDE
C22	C2,C3,C25	CS2,CM2
GFI	C50	CS-4, CS-6, CS-7
GP22	CG5/CM-10	CVM-2, CV-7
GP4	C-4	CT-7
AC22	CG6	CA2
AC4	C70	CC-7



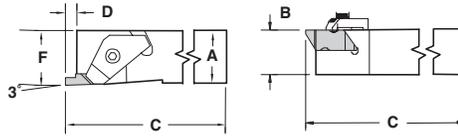
## EXTERNAL HOLDER (METRIC)

THREADING, GROOVING

FLASR/L

*Design for Swiss machines*

SEE FLO-LOCK SECTION FOR COMPLETE INSERT OFFERING



RH SHOWN

RH Holder uses RH Inserts

*Most holders available with coolant port  
(ie: Add CP to end of description)*

Description	EDP Code	Insert	A	B	C	D	F	Clamp	
								Clamp	Screw
FLASR-1010M2	92711008	FL_-2R	10,0	10,0	150,0	3,51	10,0	TF-182	S-310
FLASL-1010M2	92661008	FL_-2L	10,0	10,0	150,0	3,51	10,0	TF-183	S-310
FLASR-1212M2	92711208	FL_-2R	12,0	12,0	150,0	3,51	12,0	TF-182	S-310
FLASL-1212M2	92661208	FL_-2L	12,0	12,0	150,0	3,51	12,0	TF-183	S-310
FLASR-1616M2	92711608	FL_-2R	16,0	16,0	125,0	3,51	16,0	TF-184	S-412
FLASR-1616M3	92711616	FL_-3R	16,0	16,0	125,0	5,31	16,0	TF-184	S-412
FLASL-1616M3	92661616	FL_-3L	16,0	16,0	125,0	5,31	16,0	TF-185	S-412

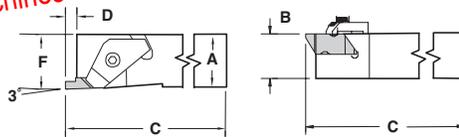
## EXTERNAL HOLDER (INCH)

THREADING, GROOVING

FLASR/L

*Design for Swiss machines*

SEE FLO-LOCK SECTION FOR COMPLETE INSERT OFFERING



RH SHOWN

RH Holder uses RH Inserts

*Most holders available with coolant port  
(ie: Add CP to end of description)*

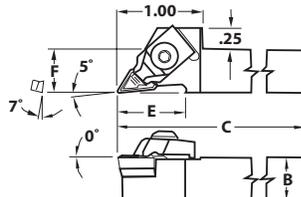
Description	EDP Code	Insert	A	B	C	F	D	Clamp	
								Clamp	Screw
FLASR-062D	92900608D	FL_-2R	3/8	3/8	6	.375	.138	TF-182	S-310
FLASL-062D	92650608D	FL_-2L	3/8	3/8	6	.375	.138	TF-183	S-310
FLASR-082D	92900808D	FL_-2R	1/2	1/2	6	.500	.138	TF-182	S-310
FLASL-082D	92650808D	FL_-2L	1/2	1/2	6	.500	.138	TF-183	S-310
FLASR-102B	92901008B	FL_-2R	5/8	5/8	4-1/2	.625	.138	TF-184	S-412
FLASR-083D	92900816D	FL_-3R	1/2	1/2	6	.500	.210	TF-184	S-412
FLASR-103B	92901016B	FL_-3R	5/8	5/8	4-1/2	.625	.210	TF-184	S-412
FLASL-103B	92651016B	FL_-3L	5/8	5/8	4-1/2	.625	.210	TF-185	S-412

## EXTERNAL HOLDER (INCH)

PROFILING

FLKL-F

SEE PROFILING SECTION FOR COMPLETE INSERT OFFERING



RH SHOWN

RH Holder uses RH Inserts

*Most holders available with coolant port  
(ie: Add CP to end of description)*

Description	EDP Code	Insert	A	B	C	E	F	PARTS			
								Seat	Seat Screw	Clamp	Clamp Screw
FLKLCRF-0805D	93150829D	FLPR-5_	1/2	1/2	6	.750	.500	SM-285	S-959	CM180	S-524
FLKLCLF-0805D	93140829D	FLPL-5_	1/2	1/2	6	.750	.500	SM-286	S-959	CM181	S-524
FLKLCRF-1005B	93151029B	FLPR-5_	5/8	5/8	4-1/2	.750	.625	SM-285	S-959	CM180	S-524
FLKLCLF-1005B	93141029B	FLPL-5_	5/8	5/8	4-1/2	.750	.625	SM-286	S-959	CM181	S-524



## EXTERNAL HOLDER (METRIC)

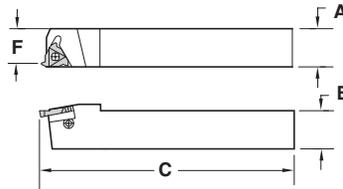
THREADING, GROOVING

AL

*Design for Swiss machines*



RH SHOWN  
RH Holder uses RH Inserts



SEE LAYDOWN SECTION FOR COMPLETE INSERT OFFERING

*Most holders available with coolant port  
(ie: Add CP to end of description)*

Description	EDP Code	Insert	A	B	C	F	Insert Screw	Seat Screw	Wrench	Seat
AL0808M2R	916108321	11ER	8,0	8,0	100,0	11,0	SN2	---	K2	---
AL1010M2R	916110321	11ER	10,0	10,0	100,0	10,0	SN2	---	K2	---
AL1616M3R	916116361	16ER	16,0	16,0	100,0	16,0	SA3	SY3	K3	YE3
AL1616M3L	916116362	16EL	16,0	16,0	100,0	16,0	SA3	SY3	K3	YI3
AL2020M3R	916120361	16ER	20,0	20,0	128,6	20,0	SA3	SY3	K3	YE3
AL2020M3L	916120362	16EL	20,0	20,0	128,6	20,0	SA3	SY3	K3	YI3
AL2525M3R	916125361	16ER	25,0	25,0	153,6	25,0	SA3	SY3	K3	YE3
AL2525M3L	916125362	16EL	25,0	25,0	153,6	25,0	SA3	SY3	K3	YI3

## EXTERNAL HOLDER (INCH)

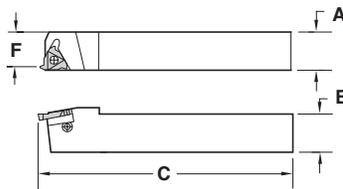
THREADING, GROOVING

AL

*Design for Swiss machines*



RH SHOWN  
RH Holder uses RH Inserts



SEE LAYDOWN SECTION FOR COMPLETE INSERT OFFERING

*Most holders available with coolant port  
(ie: Add CP to end of description)*

Description	EDP Code	Insert	A	B	C	E	F	Insert Screw	Seat Screw	Wrench	Seat
AL0500-3R	916050361	16ER	1/2	1/2	5	1.15	.63	SA3	SY3	K3	YE3
AL0500-3L	916050362	16EL	1/2	1/2	5	1.15	.63	SA3	SY3	K3	YI3
AL0625-3R	916052361	16ER	5/8	5/8	5	1.15	.63	SA3	SY3	K3	YE3
AL075-3R	916056361	16ER	3/4	3/4	5	1.2	.75	SA3	SY3	K3	YE3
AL075-3L	916056362	16EL	3/4	3/4	5	1.2	.75	SA3	SY3	K3	YI3
AL100-3R	916064361	16ER	1	1	6	1.2	1.0	SA3	SY3	K3	YE3
AL100-3L	916064362	16EL	1	1	6	1.2	1.0	SA3	SY3	K3	YI3
AL100-4R	916064401	22ER	1	1	6	1.42	1.0	SA4	SY4	K4	YE4
AL100-4L	916064402	22EL	1	1	6	1.42	1.0	SA4	SY4	K4	YI4
AL125-4R	916068401	22ER	1-1/4	1-1/4	7	1.42	1.250	SA4	SY4	K4	YE4
AL125-5R	916068441	27ER	1-1/4	1-1/4	7	1.57	1.250	SA5	SY5	K5	YE5
AL125-5L	916068442	27EL	1-1/4	1-1/4	7	1.57	1.250	SA5	SY5	K5	YI5