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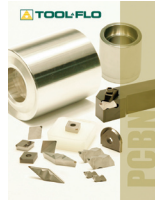
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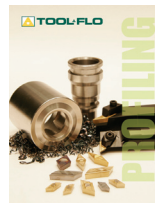
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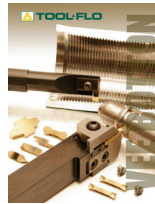
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TOOL-FLO



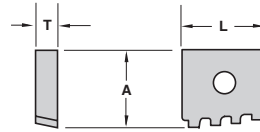
API

CHASERS

EXTERNAL API BUTTRESS

For Holders see pg. 70

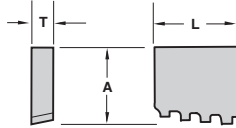
API Oilfield Threading



Description	EDP Code	TPI	TPF	L	A	T	No. of Teeth	G50	GP50	AT50	AC50
CR-5B75-3E #1	M16415188	5	3/4	.670	.573	.205	3	●	●	●	●
CR-5B75-3E #2	M16415189	5	3/4	.670	.582	.205	3	●	●	●	●
CR-5B75-3E #3	M16415190	5	3/4	.670	.590	.205	3	●	●	●	●
CR-5B75-4E	M16422675	5	3/4	.804	.625	.200	4	●	●	●	●
CR-5B1-4E	M1741130	5	1	.800	.640	.200	4	●	●	●	●
CR-8B75-4E	M2145353	8	3/4	.800	.605	.200	4	●	●	●	●

INTERNAL API BUTTRESS

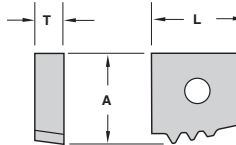
For Holders see pg. 70



Description	EDP Code	TPI	TPF	L	A	T	No. of Teeth	G50	GP50	AT50	AC50
CR-5B75-3I	M1681847	5	3/4	.630	.577	.204	3	●	●	●	●
CR-5B75-4I	M1681347	5	3/4	.800	.582	.205	4	●	●	●	●
CR-5B75-5I	M16815688	5	3/4	1.000	.590	.205	5	●	●	●	●
CR-5B1-3I	M1782052	5	1	.635	.635	.200	3	●	●	●	●
CR-5B1-4I	M1782051	5	1	.800	.640	.200	4	●	●	●	●
CR-8B75-4I	M2185353	8	3/4	.800	.590	.205	4	●	●	●	●

EXTERNAL API ROUND

For Holders see pg. 70

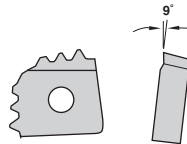


Description	EDP Code	TPI	TPF	L	A	T	No. of Teeth	G50	GP50	AT50	AC50
CR-8R-3E #1	M32416731	8	3/4	.630	.577	.204	3	●	●	●	●
CR-8R-3E #2	M32416732	8	3/4	.630	.586	.204	3	●	●	●	●
CR-8R-3E #3	M32416733	8	3/4	.630	.591	.204	3	●	●	●	●
CR-8R-3E	M32419310	8	3/4	.630	.592	.204	3	●	●	●	●
CR-8R-4E 6°	M3241136	8	3/4	.640	.625	.200	4	●	●	●	●
CR-8R-4E 12°	M3241163	8	3/4	.635	.625	.200	4	●	●	●	●
CR-10R-3E #1	M34416728	10	3/4	.628	.563	.204	3	●	●	●	●
CR-10R-3E #2	M34416729	10	3/4	.628	.572	.204	3	●	●	●	●
CR-10R-3E #3	M34416730	10	3/4	.628	.575	.204	3	●	●	●	●

EXTERNAL API ROUND AND BUTTRESS Chaser Style

CNGA - Double Sided (2 cutting edges)

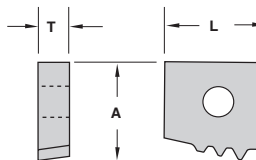
For Holders see pg. 70



Description	EDP Code	TPI	TPF	L	A	T	No. of Teeth	G50	GP50	AT50	AC50
CNGA-8R-3E	M32416731	8	3/4				3	●	●	●	●
CNGA-10R-3E	M32416732	10	3/4				3	●	●	●	●
CNGA-5B75-3E	M32416733	5	3/4				3	●	●	●	●

INTERNAL API ROUND

For Holders see pg. 70



Description	EDP Code	TPI	TPF	L	A	T	No. of Teeth	G50	GP50	AT50	AC50
CR-8R-3I	M3287464	8	3/4	.640	.592	.200	3	●	●	●	●
CR-8R-4I	M3281136	8	3/4	.640	.625	.200	4	●	●	●	●
CR-8R-4I	M32825150	8	3/4	.640	.625	.200	4	●	●	●	●
CR-8R-7I	M32814828	8	3/4	1.000	.625	.200	7	●	●	●	●
CR-8R-7I	M32817968HH	8	3/4	1.000	.625	.200	7	●	●	●	●
CR-10R-3I	M3481291	10	3/4	.640	.625	.200	3	●	●	●	●

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.

TOOL FLO

J-Series		▲	●
K-Series	▲		●
L-Series	▲	●	
N-Series	▲	●	
P-Series	▲	●	
Q-Series	●	▲	

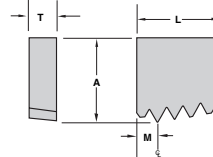


CHASERS

EXTERNAL LPT/NPT

For Holders see pg. 70

API Oilfield Threading

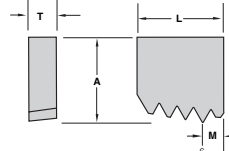


Insert Description	EDP Code	TPI	TPF	L	A	T	M	No. of Teeth	G50	GP50	AT50	AC50
CR-8NPT-4E	M3648996	8	3/4	.625	.620	.203	.156	4	●	●	●	●
CR-11.5NPT-4E	M3649668	11.5	3/4	.625	.620	.1875	.294	4	●	●	●	●

CVD Coated	TiN Coated	AlTiN Coated	AlTiN* Coated
G50	GP50	AT50	AC50

INTERNAL LPT/NPT

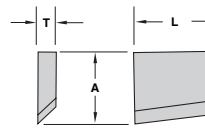
For Holders see pg. 70



Description	EDP Code	TPI	TPF	L	A	T	M	No. of Teeth	G50	GP50	AT50	AC50
CR-8NPT-4I	M3689804	8	3/4	.625	.620	.203	.156	4				

CHIPBREAKER

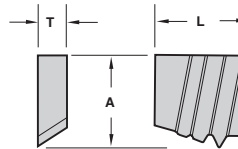
EXTERNAL



Description	EDP Code	L	A	T	Inserts
CR-5B75/5B1-4E-CB	TF2993	.800	.500	.125	CR-5B75-4E/CR-5B1-4E
CR-8R/10R-3E/4E-CB	TF1353E	.630	.460	.125	CR-8R-3E/CR-8R-4E/CR-10R-3E/CR-8LPT-4E

CHIPBREAKER

EXTERNAL

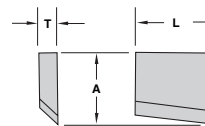


Description	EDP Code	L	A	T	Coolant Grooves	Inserts
TD4601 5B75-1-CB	TF16660	.665	.550	.170	✓	CR-5B75-3E #1
TD4602 5B75-2-CB	TF16661	.668	.550	.170	✓	CR-5B75-3E #2
TD4603 5B75-3-CB	TF16662	.665	.560	.170	✓	CR-5B75-3E #3
TD3931 8R-1-CB	TF16657	.628	.518	.165	✓	CR-8R-3E #1
TD3932 8R-2-CB	TF16658	.635	.526	.165	✓	CR-8R-3E #2
TD3933 8R-3-CB	TF16659	.628	.520	.165	✓	CR-8R-3E #3
TA2237 10R-1-CB	TF16760	.628	.503	.175	✓	CR-10R-3E #1
TA2238 10R-2-CB	TF16761	.628	.512	.175	✓	CR-10R-3E #2
TA2239 10R-3-CB	TF16762	.628	.515	.175	✓	CR-10R-3E #3
#3 CB W/COOLANT GROOVES .170	TF26423	.618	.460	.170	✓	CR-8R-3E
#3 CB W/O COOLANT GROOVES .170	TF26424	.618	.460	.170		CR-8R-3E

CHIPBREAKER

INTERNAL

CB



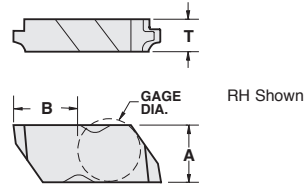
Description	EDP Code	L	A	T	Inserts
CR-5B75/5B1-4I-CB	TF16104	.800	.500	.125	CR-5B75-4I/CR-5B1-4I
CR-8R/10R-3I/4I-CB	TF1353I	.630	.460	.125	CR-8R-3I/CR-8R-4I/CR-10R-3I/CR-8LPT-4I
CR-8R-7I-CB	TF18096	1.000	.510	.125	CR-8R-7I



FLO-LOCK

API BUTTRESS THREADING

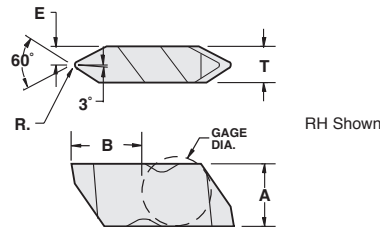
For Holders see pgs. 111-114



Description	EDP Code	TPI	TPF	T	A	B	Gage Dia.	C3	GP3	GP50	AT3	AT50
FLDC-3-5B75E	553616E	5	3/4	.250	.344	.4026	.3750			●		
FLDC-3-5B75I	553616I	5	3/4	.250	.344	.4026	.3750			●		
FLDC-3-5B1E	553617E	5	1	.250	.344	.4026	.3750			●		
FLDC-3-5B1I	553617I	5	1	.250	.344	.4026	.3750			●		
FLDC-4-5B75E	554616E	5	3/4	.255	.453	.6320	.3750			●		
FLDC-4-5B75I	554616I	5	3/4	.255	.453	.6320	.3750			●		
FLDC-4-5B1E	554617E	5	1	.255	.453	.6320	.3750			●		
FLDC-4-5B1I	554617I	5	1	.255	.453	.6320	.3750			●		

API THREADING NON-TOPPING

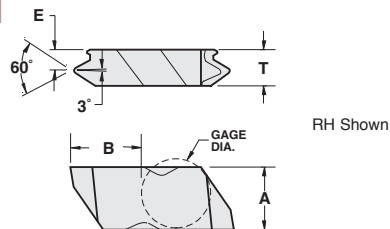
For Holders see pgs. 111-114



Description	EDP Code	TPI	R	T	E	A	B	Gage Dia.	C3	GP3	GP50	AT3	AT50
FLD-3038R	553438R	4	.033/.038	.195	.082	.344	.3991	.3750			●		
FLD-3038L	553438L	4	.033/.038	.195	.082	.344	.3991	.3750			●		
FLD-3040R	553440R	5	.015/.020	.195	.082	.344	.3991	.3750			●		
FLD-3040L	553440L	5	.015/.020	.195	.082	.344	.3991	.3750			●		
FLD-4038R	554438R	4	.033/.038	.255	.128	.453	.6293	.3750			●		
FLD-4038L	554438L	4	.033/.038	.255	.128	.453	.6293	.3750			●		
FLD-4040R	554440R	5	.015/.020	.255	.128	.453	.6293	.3750			●		
FLD-4040L	554440L	5	.015/.020	.255	.128	.453	.6293	.3750			●		
FLD-4050R	554450R	4	.020/.025	.255	.128	.453	.6293	.3750			●		
FLD-4050L	554450L	4	.020/.025	.255	.128	.453	.6293	.3750			●		

API ROTARY SHOULDER CONNECTION THREADING

For Holders see pgs. 111-114



Description	EDP Code	TPI	TPF	T	E	A	B	Gage Dia.	Conn. No. or Size	C3	GP3	GP50	AT3	AT50
FLDC-3-530E	553613E	5	3	.250	.147	.344	.4026	.3750	3-1/2 FH, 2-3/8-4-1/2 Reg.			●		
FLDC-3-530I	553613I	5	3	.250	.147	.344	.4026	.3750	3-1/2 FH, 2-3/8-4-1/2 Reg.			●		
FLDC-4-425E	554609E	4	2	.312	.183	.453	.6320	.3750	5-1/2 FH, 6-5/8 FH & Reg.			●		
FLDC-4-425I	554609I	4	2	.312	.183	.453	.6320	.3750	5-1/2 FH, 6-5/8 FH & Reg.			●		
FLDC-4-428E	554610E	4	2	.312	.183	.453	.6320	.3750	NC23-NC50, 2-3/8-5-1/2IF			●		
FLDC-4-428I	554610I	4	2	.312	.183	.453	.6320	.3750	NC23-NC50, 2-3/8-5-1/2IF			●		
FLDC-4-435E	554611E	4	3	.312	.183	.453	.6320	.3750	5-1/2, 7-5/8, 8-5/8 Reg.			●		
FLDC-4-435I	554611I	4	3	.312	.183	.453	.6320	.3750	5-1/2, 7-5/8, 8-5/8 Reg.			●		
FLDC-4-438E	554612E	4	3	.312	.183	.453	.6320	.3750	NC56 - NC71			●		
FLDC-4-438I	554612I	4	3	.312	.183	.453	.6320	.3750	NC56 - NC71			●		

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- ▲ Recommended grade under general conditions.

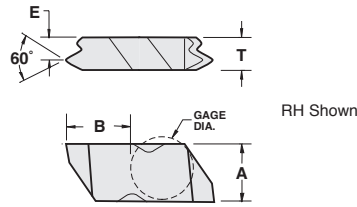
Cast Iron
Non-Ferrous
Stainless/High Temp
Steel



FLO-LOCK

API ROUND THREADING

For Holders see pgs. 111-114

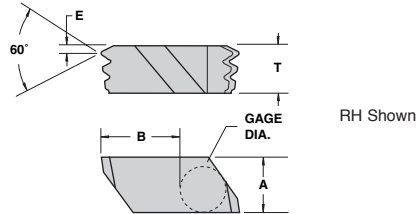


Description	EDP Code	TPI	TPF	T	E	A	B	Gage Dia.	C3	GP3	GP50	AT3	AT50
FLDC-3-8RDR75	553632R	8	3/4	.195	.125	.344	.4010	.3750			●	●	●
FLDC-3-8RDL75	553632L	8	3/4	.195	.125	.344	.4010	.3750			●	●	●
FLDC-3-10RDR75	553634R	10	3/4	.195	.125	.344	.4010	.3750			●	●	●
FLDC-3-10RDL75	553634L	10	3/4	.195	.125	.344	.4010	.3750			●	●	●

Uncoated	TIN Coated	AITIN Coated
C3	GP3	GP50
		AT3
		AT50

MULTI TOOTH

For Holders see pgs. 111-114

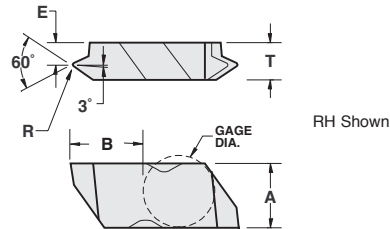


Description	EDP Code	TPI	TPF	T	A	B	Gage Dia.	C3	GP3	GP50	AT3	AT50
FLDC-3-8RDR-75M	553633R	8	3/4	.427	.453	.6110	.3750			●	●	●
FLDC-3-10RDR-75M	553635R	10	3/4	.427	.453	.6282	.3750			●	●	●

Uncoated	TIN Coated	AITIN Coated
C3	GP3	GP50
		AT3
		AT50

NPT THREADING

For Holders see pgs. 111-114

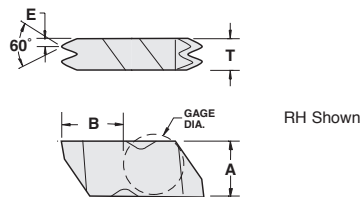


Description	EDP Code	TPI	TPF	T	E	A	B	Gage Dia.	C3	GP3	GP50	AT3	AT50
FLDC-38VR-75	553608R	8	3/4	.195	.100	.344	.4000	.3750			●	●	●
FLDC-38VL-75	553608L	8	3/4	.195	.100	.344	.4000	.3750			●	●	●
FLDC-3115VR-75	553611R	11.5	3/4	.195	.144	.344	.4000	.3750			●	●	●
FLDC-3115VL-75	553611L	11.5	3/4	.195	.144	.344	.4000	.3750			●	●	●
FLDC-314VR-75	553614R	14	3/4	.195	.148	.344	.4023	.3750			●	●	●
FLDC-314VL-75	553614L	14	3/4	.195	.148	.344	.4023	.3750			●	●	●
FLDC-318VR-75	553618R	18	3/4	.195	.154	.344	.4023	.3750			●	●	●
FLDC-318VL-75	553618L	18	3/4	.195	.154	.344	.4023	.3750			●	●	●
FLDC-327VR-75	553627R	27	3/4	.195	.162	.344	.4023	.3750			●	●	●
FLDC-327VL-75	553627L	27	3/4	.195	.162	.344	.4023	.3750			●	●	●

Uncoated	TIN Coated	AITIN Coated
C3	GP3	GP50
		AT3
		AT50

MULTI TOOTH

For Holders see pgs. 111-114



Description	EDP Code	TPI	TPF	T	E	A	B	Gage Dia.	C3	GP3	GP50	AT3	AT50
FLDC-3-8P NPT-2E	553708E	8	3/4	.250	.058	.344	.4050	.3750			●	●	
FLDC-3-8P NPT-2I	553708I	8	3/4	.250	.058	.344	.4050	.3750			●	●	
FLDC-3-11.5P NPT-2E	553711E	11.5	3/4	.250	.048	.344	.4050	.3750			●	●	
FLDC-3-11.5P NPT-2I	553711I	11.5	3/4	.250	.048	.344	.4050	.3750			●	●	

Uncoated	TIN Coated	AITIN Coated
C3	GP3	GP50
		AT3
		AT50

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.

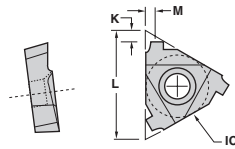
Cast Iron	▲	●	
Non-Ferrous	▲	●	
Stainless/High Temp	▲	●	
Steel	▲	●	



LAYDOWN - LT

API BUTTRESS THREADING

For Holders see pg. 132



EXT SHOWN
INT OPPOSITE

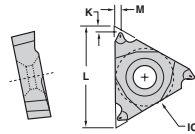
Description	EDP Code	TPI	TPF	IC	L	M	K	Connection	C22	Uncoated	GP22	GP50	AT22	AT50
22ER 8B75	5102100	8	3/4	1/2	.87	.102	.073	U.S. Improved Buttress						
22ER 5B75	5101600	5	3/4	1/2	.87	.087	.087	4-1/2 - 13-3/8						
22ER 5B1	5101700	5	1	1/2	.87	.095	.087	16 and larger						
22NR 8B75	5122100	8	3/4	1/2	.87	.102	.073	U.S. Improved Buttress						
22NR 5B75	5121600	5	3/4	1/2	.87	.087	.087	4-1/2 - 13-3/8						
22NR 5B1	5121700	5	1	1/2	.87	.095	.090	16 and larger						

NPT THREADING

CHIPBREAKER

Exclusive patented design!

For Holders see pg. 132

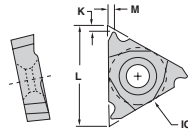


EXT RH SHOWN

Description	EDP Code	TPI	IC	L	M	K	C22	Uncoated	GP22	GP50	AT22	AT50
16ER 27NPT-CB	5003627P	27	3/8	.65	.03	.02						
16ER 18NPT-CB	5003618P	18	3/8	.65	.03	.02						
16ER 14NPT-CB	5003614P	14	3/8	.65	.06	.04						
16ER 11.5NPT-CB	5003611P	11.5	3/8	.65	.06	.04						
16ER 8NPT-CB	5003608P	8	3/8	.65	.06	.04						
16NR 27NPT-CB	5023627P	27	3/8	.65	.03	.02						
16NR 18NPT-CB	5023618P	18	3/8	.65	.03	.02						
16NR 14NPT-CB	5023614P	14	3/8	.65	.06	.04						
16NR 11.5NPT-CB	5023611P	11.5	3/8	.65	.06	.04						
16NR 8NPT-CB	5023608P	8	3/8	.65	.06	.04						

NPT THREADING

For Holders see pg. 132



EXT RH SHOWN

Description	EDP Code	TPI	IC	L	M	K	C22	Uncoated	GP22	GP50	AT22	AT50
16ER 27NPT	5003627	27	3/8	.65	.03	.03						
16EL 27NPT	5043627	27	3/8	.65	.03	.03						
16ER 18NPT	5003618	18	3/8	.65	.04	.03						
16EL 18NPT	5043618	18	3/8	.65	.04	.03						
16ER 14NPT	5003614	14	3/8	.65	.05	.04						
16EL 14NPT	5043614	14	3/8	.65	.05	.04						
16ER 11.5NPT	5003611	11.5	3/8	.65	.06	.04						
16EL 11.5NPT	5043611	11.5	3/8	.65	.06	.04						
16ER 8NPT	5003608	8	3/8	.65	.07	.05						
16EL 8NPT	5043608	8	3/8	.65	.07	.05						
11NR 18NPT	4923618	18	1/4	.43	.04	.03						
11NR 27NPT	4923627	27	1/4	.43	.03	.03						
16NR 27NPT	5023627	27	3/8	.65	.03	.03						
16NL 27NPT	5063627	27	3/8	.65	.03	.03						
16NR 18NPT	5023618	18	3/8	.65	.04	.03						
16NL 18NPT	5063618	18	3/8	.65	.04	.03						
16NR 14NPT	5023614	14	3/8	.65	.05	.04						
16NL 14NPT	5063614	14	3/8	.65	.05	.04						
16NR 11.5NPT	5023611	11.5	3/8	.65	.06	.04						
16NL 11.5NPT	5063611	11.5	3/8	.65	.06	.04						
16NR 8NPT	5023608	8	3/8	.65	.06	.05						
16NL 8NPT	5063608	8	3/8	.65	.06	.05						

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

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

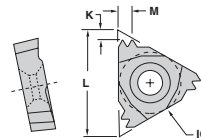


LAYDOWN - LT

NPT THREADING

MULTI-TOOTH

For Holders see pg. 132



EXT RH SHOWN

Description	EDP Code	No of Teeth	TPI	IC	L	M	K	C22	GP22	GP50	AT22	AT50
22ER 11.5NPT2M	5103811	2	11.5	1/2	.87	.13	.09				●	●
27ER 11.5NPT3M	5203811	3	11.5	5/8	1.08	.22	.14				●	●
27ER 8NPT2M	5203808	2	8	5/8	1.08	.19	.11				●	●
22NR 11.5NPT2M	5123811	2	11.5	1/2	.87	.13	.09				●	●
27NR 11.5NPT3M	5223811	3	11.5	5/8	1.08	.22	.14				●	●
27NR 8NPT2M	5223808	2	8	5/8	1.08	.19	.11				●	●

Uncoated	TIN Coated	AITIN Coated

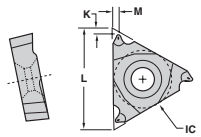
NPTF THREADING

CHIPBREAKER

Exclusive patented design!

For Dry Seal listing see pg.

For Holders see pg. 132



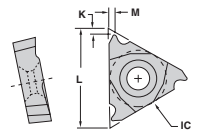
EXT RH SHOWN

Description	EDP Code	TPI	IC	L	M	K	C22	GP22	GP50	AT22	AT50
16ER 27NPTF-CB	5004027P	27	3/8	.65	.03	.03		●			
16ER 18NPTF-CB	5004018P	18	3/8	.65	.04	.03		●			
16ER 14NPTF-CB	5004014P	14	3/8	.65	.05	.04		●			
16ER 11.5NPTF-CB	5004011P	11.5	3/8	.65	.06	.04		●			
16ER 8NPTF-CB	5004008P	8	3/8	.65	.07	.05		●			
16NR 27NPTF--CB	5024027P	27	3/8	.65	.03	.03		●			
16NR 18NPTF-CB	5024018P	18	3/8	.65	.03	.02		●			
16NR 14NPTF-CB	5024014P	14	3/8	.65	.06	.04		●			
16NR 11.5NPTF-CB	5024011P	11.5	3/8	.65	.06	.04		●			
16NR 8NPTF-CB	5024008P	8	3/8	.65	.06	.04		●			

Uncoated	TIN Coated	AITIN Coated

NPTF THREADING

For Holders see pg. 132



EXT RH SHOWN

Description	EDP Code	TPI	IC	L	M	K	C22	GP22	GP50	AT22	AT50
16ER 27NPTF	5004027	27	3/8	.65	.03	.03		●			
16EL 27NPTF	5044027	27	3/8	.65	.03	.03		●			
16ER 18NPTF	5004018	18	3/8	.65	.04	.03		●			
16EL 18NPTF	5044018	18	3/8	.65	.04	.03		●			
16ER 14NPTF	5004014	14	3/8	.65	.05	.04		●			
16EL 14NPTF	5044014	14	3/8	.65	.05	.04		●			
16ER 11.5NPTF	5004011	11.5	3/8	.65	.06	.04		●			
16EL 11.5NPTF	5044011	11.5	3/8	.65	.06	.04		●			
16ER 8NPTF	5004008	8	3/8	.65	.07	.05		●			
16EL 8NPTF	5044008	8	3/8	.65	.07	.05		●			
11NR 27NPTF	4923827	27	1/4	.43	.03	.03		●			
11NL 18NPTF	4963818	18	1/4	.43	.04	.03		●			
16NR 27NPTF	5024027	27	3/8	.65	.03	.03		●			
16NL 27NPTF	5064027	27	3/8	.65	.03	.03		●			
16NR 18NPTF	5024018	18	3/8	.65	.04	.03		●			
16NL 18NPTF	5064018	18	3/8	.65	.04	.03		●			
16NR 14NPTF	5024014	14	3/8	.65	.05	.04		●			
16NL 14NPTF	5064014	14	3/8	.65	.05	.04		●			
16NR 11.5NPTF	5024011	11.5	3/8	.65	.06	.04		●			
16NL 11.5NPTF	5064011	11.5	3/8	.65	.06	.04		●			
16NR 8NPTF	5024008	8	3/8	.65	.07	.05		●			
16NL 8NPTF	5064008	8	3/8	.65	.07	.05		●			

Uncoated	TIN Coated	AITIN Coated

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▲ Recommended grade under general conditions.

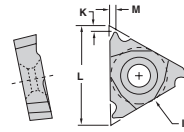
Cast Iron	▲	●
Non-Ferrous	▲	●
Stainless/High Temp	▲	●
Steel		●



LAYDOWN - LT

API ROTARY SHOULDER CONNECTION THREADING

For Holders see pg. 132



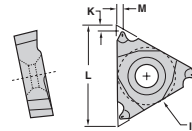
EXT SHOWN
INT OPPOSITE

Description	EDP Code	TPI	TPF	IC	L	M	K	Connection	Coating				
									C22	GP22	GP50	AT22	AT50
22ER 530	5101300	5	3	1/2	.87	.10	.08	3-1/2FH, 2-3/8, 4-1/2 Reg.					
22ER 4PAC	5101500	4	1-1/2	1/2	.87	.11	.08	American Open Hole					
22ER 438	5101200	4	3	1/2	.87	.11	.11	NC56 - NC71					
22ER 435	5101100	4	3	1/2	.87	.11	.08	5-1/2, 7-5/8, 8-5/8 Reg.					
22ER 42F	5101400	4	2	1/2	.87	.11	.08	VO.065*					
22ER 428	5101000	4	2	1/2	.87	.10	.08	NC23-NC50, 2-3/8 - 5-1/2IF					
22ER 425	5100900	4	2	1/2	.87	.10	.08	5-1/2, 6-5/8FH, 6-5/8 Reg.					
22NR 530	5121300	5	3	1/2	.87	.10	.08	3-1/2FH, 2-3/8, 4-1/2 Reg.					
22NR 4PAC	5121500	4	1-1/2	1/2	.87	.11	.08	American Open Hole					
22NR 438	5121200	4	3	1/2	.87	.11	.11	NC56 - NC71					
22NR 435	5121100	4	3	1/2	.87	.11	.08	5-1/2, 7-5/8, 8-5/8 Reg.					
22NR 42F	5121400	4	2	1/2	.87	.11	.08	VO.065*					
22NR 428	5121000	4	2	1/2	.87	.10	.08	NC23-NC50, 2-3/8 - 5-1/2IF					
22NR 425	5120900	4	2	1/2	.87	.10	.08	5-1/2, 6-5/8FH, 6-5/8 Reg.					
27ER 530	5201300	5	3	5/8	.108	.11	.07	3-1/2FH, 2-3/8, 4-1/2 Reg.					
27ER 438	5201200	4	3	5/8	.108	.11	.08	NC56 - NC71					
27ER 435	5201100	4	3	5/8	.108	.12	.08	5-1/2, 7-5/8, 8-5/8 Reg.					
27ER 428	5201000	4	2	5/8	.108	.11	.08	NC23-NC50, 2-3/8 - 5-1/2IF					
27ER 425	5200900	4	2	5/8	.108	.12	.08	5-1/2, 6-5/8FH, 6-5/8 Reg.					
27NR 530	5221300	5	3	5/8	.108	.11	.08	3-1/2FH, 2-3/8, 4-1/2 Reg.					
27NR 438	5221200	4	3	5/8	.108	.11	.08	NC56 - NC71					
27NR 435	5221100	4	3	5/8	.108	.12	.08	5-1/2, 7-5/8, 8-5/8 Reg.					
27NR 428	5221000	4	2	5/8	.108	.11	.08	NC23-NC50, 2-3/8 - 5-1/2IF					
27NR 425	5220900	4	2	5/8	.108	.12	.08	5-1/2, 6-5/8FH, 6-5/8 Reg.					

* Obsolete thread form, See A.P.I. Spec 7, 35th Edition, May 1, 1995, Section 9.4

API ROUND THREADING CHIPBREAKER

For Holders see pg. 132

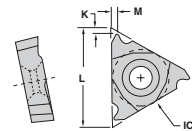


EXT SHOWN
INT OPPOSITE

Description	EDP Code	TPI	IC	L	M	K	Coating				
							C22	GP22	GP50	AT22	AT50
16ER 8RD-CB	5003200P	8	3/8	.65	.051	.059					
16ER 10RD-CB	5003400P	10	3/8	.65	.047	.059					

API ROUND THREADING

For Holders see pg. 132



EXT SHOWN
INT OPPOSITE

Description	EDP Code	TPI	IC	L	M	K	Coating				
							C22	GP22	GP50	AT22	AT50
16ER 8RD	5003200	8	3/8	.65	.059	.056					
16ER 10RD	5003400	10	3/8	.65	.059	.056					
22ER 8RD	5103200	8	1/2	.87	.060	.056					
22ER 10RD	5103400	10	1/2	.87	.046	.048					
16NR 8RD	5023200	8	3/8	.65	.059	.056					
16NR 10RD	5023400	10	3/8	.65	.059	.056					
22NR 8RD	5123200	8	1/2	.87	.060	.056					
22NR 10RD	5123400	10	1/2	.87	.046	.048					

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

Cast Iron											
Non-Ferrous											
Stainless/High Temp											
Steel											

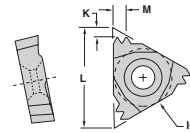


LAYDOWN - LT

API ROUND THREADING

MULTI-TOOTH

For Holders see pg. 132



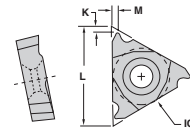
EXT SHOWN
INT OPPOSITE

Description	EDP Code	TPI	IC	L	M	K	C22	GP22	GP50	AT22	AT50
22ER 10RD2M	5103500	10	1/2	.87	.146	.094				●	●
27ER 8RD2M	5203300	8	5/8	1.08	.177	.114				●	●
22NR 10RD2M	5123500	10	1/2	.87	.146	.094				●	●
27NR 8RD2M	5223300	8	5/8	1.08	.177	.114				●	●

API VO.055

American MT, AMT & AMMT*

For Holders see pg. 132



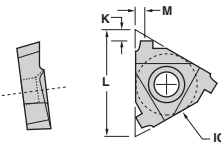
EXT SHOWN
INT OPPOSITE

Description	EDP Code	TPI	TPF	IC	L	M	K	Connection	C22	GP22	GP50	AT22	AT50
16ER 6P VO.055 MT	5004300	6	1-1/2	3/8	.65	.059	.051	NC10-NC16, VO.055			●	●	
22ER 6P VO.055 MT	5104300	6	1-1/2	1/2	.87	.072	.060	NC10-NC16, VO.055			●	●	
16NR 6P VO.055 MT	5024300	6	1-1/2	3/8	.65	.059	.051	NC10-NC16, VO.055			●	●	
22NR 6P VO.055 MT	5124300	6	1-1/2	1/2	.87	.072	.060	NC10-NC16, VO.055			●	●	

* MT is Macaroni Tubing, AMT is American Macaroni Tubing and AMMT is American Mining Macaroni Tubing.

API VAM THREADING

For Holders see pg. 132

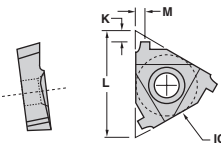


EXT SHOWN
INT OPPOSITE

Description	EDP Code	TPI	IC	L	M	K	C22	GP2	GP5	AT2	AT5
22ER 8VAM	5102500	8	1/2	.87	.059	.059			●		
22ER 6VAM	5102400	6	1/2	.87	.079	.079			●		
22ER 5VAM	5102300	5	1/2	.87	.079	.079			●		
22NR 8VAM	5122500	8	1/2	.87	.059	.059			●		
22NR 6VAM	5122400	6	1/2	.87	.079	.079			●		
22NR 5VAM	5122300	5	1/2	.87	.079	.079			●		

API X-LINE

For Holders see pg. 132



EXT RH SHOWN

Description	EDP Code	TPI	TPF	IC	L	M	K	Connection	C22	GP22	GP50	AT22	AT50
22ER 6XL75	5102000	6	3/4	1/2	.87	.075	.078					●	
22ER 6XL15	5101900	6	1-1/2	1/2	.87	.075	.086	5 - 7-5/8				●	
22ER 5XL12	5101800	5	1-1/4	1/2	.87	.087	.083	8-5/8 - 10-3/4				●	
22NR 6XL75	5122000	6	3/4	1/2	.87	.075	.078						
22NR 6XL15	5121900	6	1-1/2	1/2	.87	.075	.086	5 - 7-5/8					
22NR 5XL12	5121800	5	1-1/4	1/2	.87	.087	.083	8-5/8 - 10-3/4				●	

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

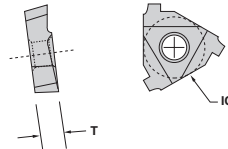
Cast Iron														
Non-Ferrous														
Stainless/High Temp														
Steel														



LAYDOWN

API BUTTRESS THREADING

For Holders see pg. 132



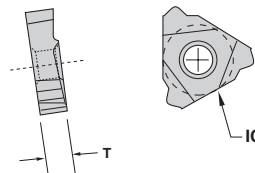
EXT SHOWN
INT OPPOSITE

Description	EDP Code	TPI	TPF	IC	T	Connection	Coating				
							C6H	GP50	GP54	AT50	AT54
L43 5B75 EXT	16154	5	3/4	.500	.189	4-1/2 - 13-3/8		●			
L43 5B1 EXT	17514	5	1	.500	.189	16 and larger		●		●	
L43 8B75 EXT	21154	8	3/4	.500	.189	US Improved Buttress		●			
L43 5B75 EXT-FC	16154F	5	3/4	.500	.189	4-1/2 - 13-3/8		●			
L43 5B1 EXT-FC	17514F	5	1	.500	.189	16 and larger		●			
L53 5B75 EXT	16474	5	3/4	.625	.189	4-1/2 - 13-3/8		●		●	
L53 5B1 EXT	17474	5	1	.625	.189	16 and larger		●			
L53 8B75 EXT	21474	8	3/4	.625	.189	US Improved Buttress		●		●	
L53 5B75 EXT-FC	16474F	5	3/4	.625	.189	4-1/2 - 13-3/8		●			
L53 5B1 EXT-FC	17474F	5	1	.625	.189	16 and larger		●			
L43 5B75 INT	16158	5	3/4	.500	.189	4-1/2 - 13-3/8		●			
L43 5B1 INT	17518	5	1	.500	.189	16 and larger		●		●	
L43 8B75 INT	21158	8	3/4	.500	.189	US Improved Buttress		●			
L43 5B75 INT-FC	16158F	5	3/4	.500	.189	4-1/2 - 13-3/8		●			
L43 5B1 INT-FC	17518F	5	1	.500	.189	16 and larger		●			
L53 5B75 INT	16478	5	3/4	.625	.189	4-1/2 - 13-3/8		●		●	
L53 5B1 INT	17478	5	1	.625	.189	16 and larger		●		●	
L53 8B75 INT	21478	8	3/4	.625	.189	US Improved Buttress		●			
L53 5B75 INT-FC	16478F	5	3/4	.625	.189	4-1/2 - 13-3/8		●			
L53 5B1 INT-FC	17478F	5	1	.625	.189	16 and larger		●			

FC designates 5° flank clearance

API HUGHES H90 THREADING

For Holders see pgs. 144-145

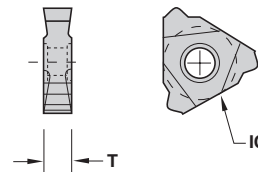


EXT SHOWN
INT OPPOSITE

Description	EDP Code	TPI	TPF	IC	T	Connection	Coating				
							C6H	GP50	GP54	AT50	AT54
L53 H902 EXT	28474	3-1/2	2	.625	.189	3-1/2 - 6-5/8 H90		●			
L53 H903 EXT	29474	3-1/2	3	.625	.189	7 - 8-5/8 H90		●			
L53 H90S EXT	27474	3	1-1/4	.625	.189	2-3/8 - 3-1/2 Slimline		●			
L53 H902 INT	28478	3-1/2	2	.625	.189	3-1/2 - 6-5/8 H90		●			
L53 H903 INT	29478	3-1/2	3	.625	.189	7 - 8-5/8 H90		●			
L53 H90S INT	27478	3	1-1/4	.625	.189	2-3/8 - 3-1/2 Slimline		●			

LDS DOUBLE SIDED INT/EXT

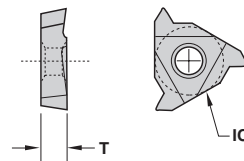
For Holders see pgs. 144-145



Description	EDP Code	TPI	TPF	IC	T	Connection	Coating				
							C6H	GP50	GP54	AT50	AT54
LDS 54 H902	28490	3-1/2	2	.625	.252	3-1/2 - 6-5/8 H90			●		
LDS 54 H903	29490	3-1/2	3	.625	.252	7 - 8-5/8 H90			●		
LDS 54 H90S	27490	3	1-1/4	.625	.252	2-3/8 - 3-1/2 Slimline			●		

NPT THREADING

For Holders see pgs. 144-145



EXT SHOWN

Description	EDP Code	TPI	TPF	IC	T	Connection	Coating				
							C22	GP22	GP50	GP54	AT22
L43 8NPT EXT	3615084	8	3/4	.500	.189				●		
L43 11.5NPT EXT	3615114	11.5	3/4	.500	.189				●		
L43 8NPT INT	3615088	8	3/4	.500	.189				●		
L43 11.5NPT INT	3615118	11.5	3/4	.500	.189				●		

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



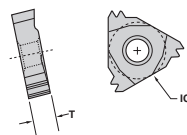
LAYDOWN

NPT THREADING

MULTI-TOOTH

For Holders see pgs. 144-145

Description	EDP Code	TPI	TPF	IC	T	C22	GP22	GP50	GP54	AT22
L43 11.5NPT2M EXT	3615114T	11.5	3/4	.500	.189					
L43 11.5NPT2M INT	3615118T	11.5	3/4	.500	.189					



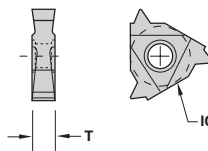
EXT SHOWN

Uncoated	TIN Coated	ATIN Coated
C22	GP22	GP50
		GP54
		AT22

LDS DOUBLE SIDED INT/EXT

For Holders see pgs. 144-145

Description	EDP Code	TPI	TPF	IC	T	C22	GP22	GP50	GP54	AT22
LDS 43 8NPT	361808	8	3/4	.500	.189					
LDS 43 11.5NPT	361811	11.5	3/4	.500	.189					
LDS 43 14NPT	361814	14	3/4	.500	.189					



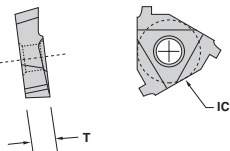
EXT SHOWN

Uncoated	TIN Coated	ATIN Coated
C22	GP22	GP50
		GP54
		AT22

PITTSBURG ACME

For Holders see pgs. 144-145

Description	EDP Code	TPI	TPF	IC	T	C22	GP22	GP50	GP54	AT22
L43 8PA75 EXT	22154	8	3/4	.500	.189					
L53 8PA75 EXT	22474	8	3/4	.625	.189					
L43 8PA75 INT	22158	8	3/4	.500	.189					
L53 8PA75 INT	22478	8	3/4	.625	.189					



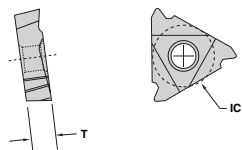
EXT SHOWN

Uncoated	TIN Coated	ATIN Coated
C22	GP22	GP50
		GP54
		AT22

API ROTARY SHOULDER CONNECTION THREADING

For Holders see pgs. 144-145

Description	EDP Code	TPI	TPF	R	IC	T	Connection	GP50	GP54	AT22	AT50	AT54
L43 425 EXT	09154	4	2	.025	.500	.189	5-1/2 FH 6-5/8 FH 6-5/8 Reg.					
L43 428 EXT	10154	4	2	.038	.500	.189	NC 23-NC50 2-3/8 - 5-1/2 IF					
L43 42F EXT*	14154	4	2	---	.500	.189	V0.065*					
L43 435 EXT	11154	4	3	.025	.500	.189	5-1/2 Rg. 7-5/8 Reg. 8-5/8 Reg.					
L43 438 EXT	12154	4	3	.038	.500	.189	NC56 - NC71					
L43 530 EXT	13154	5	3	.020	.500	.189	3-1/2 FH 2-3/8 - 4-1/2 Reg.					
L43 4PAC EXT	15154	4	1-1/2	---	.500	.189	American Open Hole					
L53 425 EXT	09474	4	2	.025	.625	.189	5-1/2 FH 6-5/8 FH 6-5/8 Reg.					
L53 428 EXT	10474	4	2	.038	.625	.189	NC 23-NC50 2-3/8 - 5-1/2 IF					
L53 42F EXT*	14474	4	2	---	.625	.189	V0.065*					
L53 435 EXT	11474	4	3	.025	.625	.189	5-1/2 Rg. 7-5/8 Reg. 8-5/8 Reg.					
L53 438 EXT	12474	4	3	.038	.625	.189	NC56 - NC71					
L53 530 EXT	13474	5	3	.020	.625	.189	3-1/2 FH 2-3/8 - 4-1/2 Reg.					
L53 4PAC EXT	15474	4	1-1/2	---	.625	.189	American Open Hole					
L43 425 INT	09158	4	2	.025	.500	.189	5-1/2 FH 6-5/8 FH 6-5/8 Reg.					
L43 428 INT	10158	4	2	.038	.500	.189	NC 23-NC50 2-3/8 - 5-1/2 IF					
L43 42F INT*	14158	4	2	---	.500	.189	V0.065*					
L43 435 INT	11158	4	3	.025	.500	.189	5-1/2 Rg. 7-5/8 Reg. 8-5/8 Reg.					
L43 438 INT	12158	4	3	.038	.500	.189	NC56 - NC71					
L43 530 INT	13158	5	3	.020	.500	.189	3-1/2 FH 2-3/8 - 4-1/2 Reg.					
L43 4PAC INT	15158	4	1-1/2	---	.500	.189	American Open Hole					
L53 425 INT	09478	4	2	.025	.625	.189	5-1/2 FH 6-5/8 FH 6-5/8 Reg.					
L53 428 INT	10478	4	2	.038	.625	.189	NC 23-NC50 2-3/8 - 5-1/2 IF					
L53 42F INT*	14478	4	2	---	.625	.189	V0.065*					
L53 435 INT	11478	4	3	.025	.625	.189	5-1/2 Rg. 7-5/8 Reg. 8-5/8 Reg.					
L53 438 INT	12478	4	3	.038	.625	.189	NC56 - NC71					
L53 530 INT	13478	5	3	.020	.625	.189	3-1/2 FH 2-3/8 - 4-1/2 Reg.					
L53 4PAC INT	15478	4	1-1/2	---	.625	.189	American Open Hole					



EXT SHOWN
INT OPPOSITE

TIN Coated	ATIN Coated
GP50	GP54
	AT22
	AT50
	AT54

* Obsolete thread form. See A.P.I. Spec 7, 35th Edition, May 1, 1995, Section 9.4

TOOL FLO

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.

13

Cast Iron					
Non-Ferrous					
Stainless/High Temp					
Steel					



LAYDOWN

API ROTARY SHOULDER

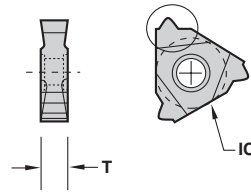
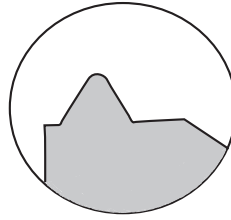
CONNECTION THREADING

LDS DOUBLE SIDED

LEAD FOLLOW TOPPING

INT/EXT

For Holders see pgs. 144-145



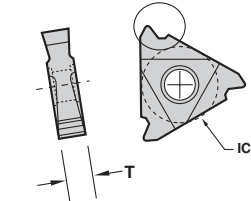
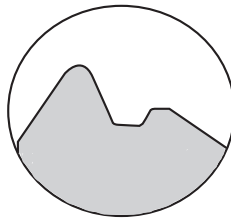
EXT SIDE SHOWN

Description	EDP Code	TPI	TPF	R	IC	T	Connection	CGH	GP54	AT22	AT50	AT54
LDS 54 428 #1	10490	4	2	.038	.625	.252	NC23-NC50, 2-3/8-5-1/2 IF		●	●	●	●
LDS 54 438 #2	12490	4	3	.038	.625	.252	NC56-NC71		●	●	●	●
LDS 54 425 #3	09490	4	2	.025	.625	.252	5-1/2 FH, 6-5/8 FH, 6-5/8 Reg.		●	●	●	●
LDS 54 435 #4	11490	4	3	.025	.625	.252	5-1/2 Reg. 7-5/8 Reg 8-5/8 Reg.		●	●	●	●
LDS 54 530 #5	13490	5	3	.020	.625	.252	3-1/2 FH 2-3/8 - 4-1/2 Reg.		●	●	●	●
LDS 54 42F	14490	4	2	---	.625	.252	V0.065*					
LDS 54 4PAC	15490	4	1-1/2	---	.625	.252	American Open Hole	●				

* Obsolete thread form, See A.P.I. Spec 7, 35th Edition, May 1, 1995, Section 9.4

LDS DOUBLE SIDED INT/EXT FOLLOW TOPPING

For Holders see pgs. 144-145



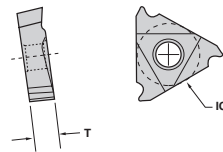
EXT SIDE SHOWN

Description	EDP Code	TPI	TPF	R	IC	T	Connection	GP50	GP54	AT22	AT50	AT54
LDS 54 428 #1-FT	10495	4	2	.038	.625	.252	NC23-NC50, 2-3/8-5-1/2 IF		●	●	●	●
LDS 54 438 #2-FT	12495	4	3	.038	.625	.252	NC56-NC71		●	●	●	●
LDS 54 425 #3-FT	09495	4	2	.025	.625	.252	5-1/2 FH, 6-5/8 FH, 6-5/8 Reg.		●	●	●	●
LDS 54 435 #4-FT	11495	4	3	.025	.625	.252	5-1/2 Reg. 7-5/8 Reg 8-5/8 Reg.		●	●	●	●
LDS 54 530 #5-FT	13495	5	3	.020	.625	.252	3-1/2 FH 2-3/8 - 4-1/2 Reg.		●	●	●	●
LDS 54 42F-FT	11495	4	2	---	.625	.252	V0.065*					
LDS 54 4PAC-FT	15495	4	1-1/2	---	.625	.252	American Open Hole	●				

* Obsolete thread form - see API Spec 7, 35th Edition, May 1, 1985 Section 9.4.

API ROUND THREADING

For Holders see pgs. 144-145

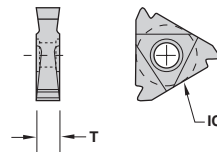


EXT SHOWN

Description	EDP Code	TPI	TPF	IC	T	GP50	GP54	AT22	AT50	AT54
L43 8RD EXT	32154	8	3/4	.500	.189	●			●	
L43 10RD EXT	34154	10	3/4	.500	.189	●			●	
L53 8RD EXT	32474	8	3/4	.625	.189	●			●	
L43 8RD INT	32158	8	3/4	.500	.189	●			●	
L43 10RD INT	34158	10	3/4	.500	.189	●			●	
L53 8RD INT	32478	8	3/4	.625	.189	●			●	

LDS DOUBLE SIDED INT/EXT

For Holders see pgs. 144-145



EXT SIDE SHOWN

Description	EDP Code	TPI	TPF	IC	T	GP50	GP54	AT22	AT50	AT54
LDS 43 8RD	32180	8	3/4	.500	.189		●	●		
LDS 43 10RD	34180	10	3/4	.500	.189		●	●		
LDS 54 8RD	32490	8	3/4	.625	.252		●	●		
LDS 54 10RD	34490	10	3/4	.625	.252		●	●		

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



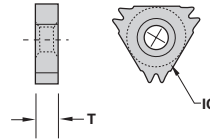
API Oilfield Threading

LAYDOWN

API ROUND THREADING

Double Sided for EXT & INT

For Holders see pgs. 144-145

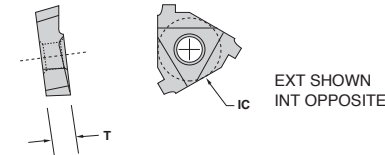


Description	EDP Code	TPI	TPF	IC	T					
TNFA 43 8RD	32N70	8	3/4	.500	.187		C6H	GP50	GP54	AT50

Uncoated	TiN Coated	AlTiN Coated

API VAM THREADING

For Holders see pgs. 144-145

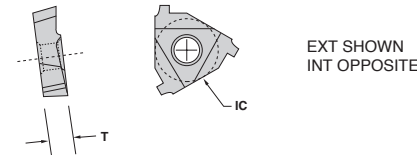


Description	EDP Code	TPI	TPF	IC	T					
L43 5VAM EXT	23154	5	3/4	.500	.189		C6H	GP50	GP54	AT50
L43 6VAM EXT	24154	6	3/4	.500	.189					
L43 8VAM EXT	25154	8	3/4	.500	.189					
L43 5VAM INT	23158	5	3/4	.500	.189					
L43 6VAM INT	24158	6	3/4	.500	.189					
L43 8VAM INT	25158	8	3/4	.500	.189					

Uncoated	TiN Coated	AlTiN Coated

API X-LINE THREADING

For Holders see pgs. 144-145



Description	EDP Code	TPI	TPF	IC	T	Connection					
L43 6XL15 EXT	19154	6	1-1/2	.500	.189	5 - 7-5/8		C6H	GP50	GP54	AT50
L43 6XL75 EXT	20154	6	3/4	.500	.189	-					
L43 5XL12 EXT	18154	5	1-1/4	.500	.189	8-5/8 - 10-3/4					
L53 6XL15 EXT	19474	6	1-1/2	.625	.252	5 - 7-5/8					
L53 6XL75 EXT	20474	6	3/4	.625	.252	-					
L53 5XL12 EXT	18474	5	1-1/4	.625	.252	8-5/8 - 10-3/4					
L43 6XL15 INT	19158	6	1-1/2	.500	.189	5 - 7-5/8					
L43 6XL75 INT	20158	6	3/4	.500	.189	-					
L43 5XL12 INT	18158	5	1-1/4	.500	.189	8-5/8 - 10-3/4					
L53 6XL15 INT	19478	6	1-1/2	.625	.252	5 - 7-5/8					
L53 6XL75 INT	20478	6	3/4	.625	.252	-					
L53 5XL12 INT	18478	5	1-1/4	.625	.252	8-5/8 - 10-3/4					

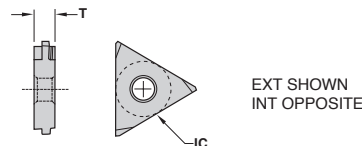
Uncoated	TiN Coated	AlTiN Coated

ON-EDGE

API BUTTRESS THREADING

STRAIGHT HOLE

For Holders see pgs. 164-165



Description	EDP Code	TPI	TPF	IC	T	Connection					
TNMA 43 8B75 EXT	23194	8	3/4	.500	.189	U.S. Improved Buttress		C3	C6H	GP3	GP50
TNMA 44 5B75 EXT	16434	5	3/4	.500	.252	4-1/2 - 13-3/8					
TNMA 54 5B1 EXT	17514	5	1	.625	.252	16 and larger					
TNMA 54 5B75 EXT	16514	5	3/4	.625	.252	4-1/2 - 13-3/8					
TNMA 54 5B1 EXT-FC*	17514F	5	1	.625	.252	16 and larger					
TNMA 54 5B75 EXT-FC*	16514F	5	3/4	.625	.252	4-1/2 - 13-3/8					
TNMA 43 8B75 INT	23198	8	3/4	.500	.189	U.S. Improved Buttress					
TNMA 44 5B75 INT	16438	5	3/4	.500	.252	4-1/2 - 13-3/8					
TNMA 54 5B1 INT	17518	5	1	.625	.252	16 and larger					
TNMA 54 5B75 INT	16518	5	3/4	.625	.252	4-1/2 - 13-3/8					
TNMA 54 5B1 INT-FC*	17518F	5	1	.625	.252	16 and larger					
TNMA 54 5B75 INT-FC*	16518F	5	3/4	.625	.252	4-1/2 - 13-3/8					

Uncoated	TiN Coated	AlTiN Coated

*FC indicates 5P flank clearance

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.

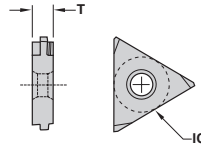
● High performance choice in optimal conditions.
▲ Recommended grade under general conditions.

Cast Iron						
Non-Ferrous						
Stainless/High Temp						
Steel						

ON-EDGE API BUTTRESS THREADING COUNTERSINK HOLE

For Holders see pgs. 164-165

API Oilfield Threading



EXT SHOWN
INT OPPOSITE

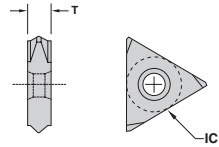


Description	EDP Code	TPI	TPF	IC	T	Connection	Coating					
							C3	C6H	GP3	GP50	AT3	AT50
TNMC 43 8B75 EXT	21414	8	3/4	.500	.189	U.S. Improved Buttress				●		
TNMC 54 5B75 EXT	16534	5	3/4	.625	.252	4-1/2 - 13-3/8				●		●
TNMC 54 5B75 EXT-FC	16534F	5	3/4	.625	.252	4-1/2 - 13-3/8				●		●
TNMC 54 5B1 EXT	17534	5	1	.625	.252	16 and larger				●		●
TNMC 54 5B1 EXT-FC	17534F	5	1	.625	.252	16 and larger				●		●
TNMC 43 8B75 INT	21418	8	3/4	.500	.189	U.S. Improved Buttress				●		
TNMC 54 5B75 INT	16538	5	3/4	.625	.252	4-1/2 - 13-3/8				●		●
TNMC 54 5B75 INT-FC	16538F	5	3/4	.625	.252	4-1/2 - 13-3/8				●		●
TNMC 54 5B1 INT	17538	5	1	.625	.252	16 and larger				●		●
TNMC 54 5B1 INT-FC	17538F	5	1	.625	.252	16 and larger				●		●

FC indicates 5P flank clearance

API HUGHES H90 THREADING STRAIGHT HOLE

For Holders see pgs. 164-165

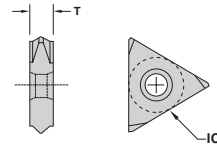


EXT SHOWN
INT OPPOSITE

Description	EDP Code	TPI	TPF	IC	T	Connection	Coating					
							C3	C6H	GP3	GP50	AT3	AT50
TNMA 55 H902 EXT	28554	3-1/2	2	.625	.314	3-1/2 - 6-5/8 H90				●		
TNMA 55 H903 EXT	29554	3-1/2	3	.625	.314	7 - 8-5/8 H90				●		
TNMA 56 H90S EXT	27Q14	3	1-1/4	.625	.377	2-3/8 - 3-1/2 Slimline				●		
TNMA 55 H902 INT	28558	3-1/2	2	.625	.314	3-1/2 - 6-5/8 H90				●		
TNMA 55 H903 INT	29558	3-1/2	3	.625	.314	7 - 8-5/8 H90				●		
TNMA 56 H90S INT	27Q18	3	1-1/4	.625	.377	2-3/8 - 3-1/2 Slimline				●		

API HUGHES H90 THREADING COUNTERSINK HOLE

For Holders see pgs. 164-165

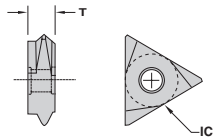


EXT SHOWN
INT OPPOSITE

Description	EDP Code	TPI	TPF	IC	T	Connection	Coating					
							C3	C6H	GP3	GP50	AT3	AT50
TNMC 55 H902 EXT	28564	3-1/2	2	.625	.314	3-1/2 - 6-5/8 H90				●		
TNMC 55 H903 EXT	29564	3-1/2	3	.625	.314	7 - 8-5/8 H90				●		
TNMC 56 H90S EXT	27Q34	3	1-1/4	.625	.377	2-3/8 - 3-1/2 Slimline				●		
TNMC 55 H902 INT	28568	3-1/2	2	.625	.314	3-1/2 - 6-5/8 H90				●		
TNMC 55 H903 INT	29568	3-1/2	3	.625	.314	7 - 8-5/8 H90				●		
TNMC 56 H90S INT	27Q38	3	1-1/4	.625	.377	2-3/8 - 3-1/2 Slimline				●		

API ROTARY SHOULDER CONNECTED THREADING STRAIGHT HOLE

For Holders see pgs. 164-165



EXT SHOWN
INT OPPOSITE

Description	EDP Code	TPI	TPF	IC	T	Connection	Coating					
							C3	C6H	GP3	GP50	AT3	AT50
TNMA 54 530 EXT	13514	5	3	.625	.252	3-1/2 FH 2-3/8 - 4-1/2 Reg.				●		●
TNMA 55 425 EXT	09554	4	2	.625	.314	5-1/2 FH 6-5/8 FH 6-5/8 Reg.				●		●
TNMA 55 428 EXT	10554	4	2	.625	.314	NC 23-NC50 2-3/8 - 5-1/2 IF				●		●
TNMA 55 42F EXT	14554	4	2	.625	.314	V0.065*				●		●
TNMA 55 435 EXT	11554	4	3	.625	.314	5-1/2 Reg. 7-5/8 Reg 8-5/8 Reg.				●		●
TNMA 55 438 EXT	12554	4	3	.625	.314	NC56-NC71				●		●
TNMA 55 530 EXT	13554	5	3	.625	.314	3-1/2 FH 2-3/8 - 4-1/2 Reg.				●		●
TNMA 55 4PAC EXT	15554	4	1-1/2	.625	.314	American Open Hole				●		●
TNMA 54 530 INT	13518	5	3	.625	.252	3-1/2 FH 2-3/8 - 4-1/2 Reg.				●		●
TNMA 55 425 INT	09558	4	2	.625	.314	5-1/2 FH 6-5/8 FH 6-5/8 Reg.				●		●
TNMA 55 428 INT	10558	4	2	.625	.314	NC 23-NC50 2-3/8 - 5-1/2 IF				●		●
TNMA 55 42F INT	14558	4	2	.625	.314	V0.065*				●		●
TNMA 55 435 INT	11558	4	3	.625	.314	5-1/2 Reg. 7-5/8 Reg 8-5/8 Reg.				●		●
TNMA 55 438 INT	12558	4	3	.625	.314	NC56-NC71				●		●
TNMA 55 530 INT	13558	5	3	.625	.314	3-1/2 FH 2-3/8 - 4-1/2 Reg.				●		●
TNMA 55 4PAC INT	15558	4	1-1/2	.625	.314	American Open Hole				●		●

*Obsolescent thread form - see API Spec 7, 35th Edition, May 1, 1985 Section 9.4.

TOOL FLO

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.

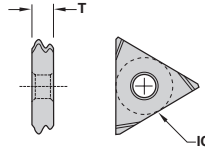
- High performance choice in optimal conditions.
- ▲ Recommended grade under general conditions.

Material	C3	C6H	GP3	GP50	AT3	AT50
Cast Iron						
Non-Ferrous						
Stainless/High Temp						
Steel				▲		●



ON-EDGE API ROUND THREADING TNMA STRAIGHT HOLE

For Holders see pgs. 164-165



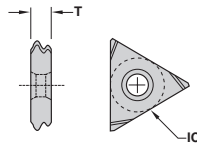
INT SHOWN
EXT OPPOSITE

Description	EDP Code	TPI	TPF	IC	T	C3	C6H	GP3	GP50	AT3	AT50
TNMA 43 8RD EXT	32394	8	3/4	.500	.189				●	●	●
TNMA 43 10RD EXT	34394	10	3/4	.500	.189				●	●	●
TNMA 54 8RD EXT	32514	8	3/4	.625	.252				●	●	●
TNMA 43 8RD INT	32398	8	3/4	.500	.189				●	●	●
TNMA 43 10RD INT	34398	10	3/4	.500	.189				●	●	●
TNMA 54 8RD INT	32518	8	3/4	.625	.252				●	●	●

Uncoated	TIN Coated	ATIN Coated
C3	GP3	AT3
C6H	GP50	AT50

API ROUND THREADING TNMC COUNTERSINK HOLE

For Holders see pgs. 164-165



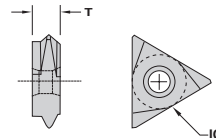
INT SHOWN
EXT OPPOSITE

Description	EDP Code	TPI	TPF	IC	T	C3	C6H	GP3	GP50	AT3	AT50
TNMC 43 8RD EXT	32414	8	3/4	.500	.189				●	●	●
TNMC 43 10RD EXT	34414	10	3/4	.500	.189				●	●	●
TNMC 54 8RD EXT	32534	8	3/4	.625	.252				●	●	●
TNMC 43 8RD INT	32418	8	3/4	.500	.189				●	●	●
TNMC 43 10RD INT	34418	10	3/4	.500	.189				●	●	●
TNMC 54 8RD INT	32538	8	3/4	.625	.252				●	●	●

Uncoated	TIN Coated	ATIN Coated
C3	GP3	AT3
C6H	GP50	AT50

API ROTARY SHOULDER CONNECTED THREADING COUNTERSINK HOLE

For Holders see pgs. 164-165



EXT SHOWN
INT OPPOSITE

Description	EDP Code	TPI	TPF	IC	T	Connection	C3	C6H	GP3	GP50	AT3	AT50
TNMC 54 530 EXT	13534	5	3	.625	.252	3-1/2 FH 2-3/8 - 4-1/2 Reg.				●	●	●
TNMC 55 425 EXT	09564	4	2	.625	.312	5-1/2 FH 6-5/8 FH 6-5/8 Reg.				●	●	●
TNMC 55 428 EXT	10564	4	2	.625	.312	NC 23-NC50 2-3/8 - 5-1/2 IF				●	●	●
TNMC 55 42F EXT*	14564	4	2	.625	.312	V0.065*				●	●	●
TNMC 55 435 EXT	11564	4	3	.625	.312	5-1/2 Reg. 7-5/8 Reg 8-5/8 Reg.				●	●	●
TNMC 55 438 EXT	12564	4	3	.625	.312	NC56-NC71				●	●	●
TNMC 55 530 EXT	13564	5	3	.625	.312	3-1/2 FH 2-3/8 - 4-1/2 Reg.				●	●	●
TNMC 55 4PAC EXT	15564	4	1-1/2	.625	.312	American Open Hole				●	●	●
TNMC 54 530 INT	13538	5	3	.625	.252	3-1/2 FH 2-3/8 - 4-1/2 Reg.						
TNMC 55 425 INT	09568	4	2	.625	.312	5-1/2 FH 6-5/8 FH 6-5/8 Reg.				●	●	●
TNMC 55 428 INT	10568	4	2	.625	.312	NC 23-NC50 2-3/8 - 5-1/2 IF				●	●	●
TNMC 55 42F INT*	14568	4	2	.625	.312	V0.065*				●	●	●
TNMC 55 435 INT	11568	4	3	.625	.312	5-1/2 Reg. 7-5/8 Reg 8-5/8 Reg.				●	●	●
TNMC 55 438 INT	12568	4	3	.625	.312	NC56-NC71				●	●	●
TNMC 55 530 INT	13568	5	3	.625	.312	3-1/2 FH 2-3/8 - 4-1/2 Reg.				●	●	●
TNMC 55 4PAC INT	15568	4	1-1/2	.625	.312	American Open Hole				●	●	●

Uncoated	TIN Coated	ATIN Coated
C3	GP3	AT3
C6H	GP50	AT50

*Obsolescent thread form - see API Spec 7, 35th Edition, May 1, 1985 Section 9.4.

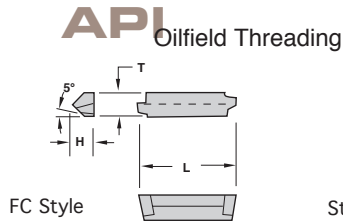
In an effort to improve our stock standard grade offering, there are periodic changes. Please see current price list for up to date grade offering.

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

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

VEE-BOTTOM API BUTTRESS THREADING

For Holders see pgs. 227-230



EXT SHOWN
INT OPPOSITE

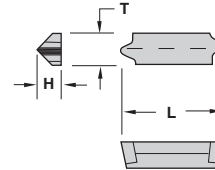


Description	EDP Code	TPI	TPF	T	L	H	Connection	C3	C6H	GP3	GP50	AT3	AT50
V84 5B75 EXT	16614	5	3/4	.250	1.000	.250	4-1/2 - 13-3/8				●		
V84 5B75 EXT-FC	16614F	5	3/4	.250	1.000	.250	4-1/2 - 13-3/8				●		
V84 5B1 EXT	17614	5	1	.250	1.000	.250	16 AND LARGER				●		
V84 5B1 EXT-FC	17614F	5	1	.250	1.000	.250	16 AND LARGER				●		
V84 8B75 EXT	21614	8	3/4	.250	1.000	.250	U.S. IMPROVED BUTTRESS				●		
V84 5B75 INT	16618	5	3/4	.250	1.000	.250	4-1/2 - 13-3/8				●		
V84 5B75 INT-FC	16618F	5	3/4	.250	1.000	.250	4-1/2 - 13-3/8				●		
V84 5B1 INT	17618	5	1	.250	1.000	.250	16 AND LARGER				●		
V84 5B1 INT-FC	17618F	5	1	.250	1.000	.250	16 AND LARGER				●		
V84 8B75 INT	21618	8	3/4	.250	1.000	.250	U.S. IMPROVED BUTTRESS				●		

FC indicates 5° flank clearance

API ROTARY SHOULDER

For Holders see pgs. 227-230



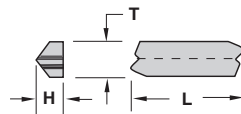
EXT SHOWN
INT OPPOSITE

Description	EDP Code	TPI	TPF	T	L	H	Connection	C3	C6H	GP3	GP50	AT3	AT50
V85 425 EXT	09634	4	2	.312	1.000	.250	5-1/2 - 6-5/8 FH, 6-5/8 REG				●	●	●
V85 428 EXT	10634	4	2	.312	1.000	.250	NC23 - 50, 2-3/8 - 5-1/2 IF				●	●	●
V85 42F EXT*	14634	4	2	.312	1.000	.250	VO.065*				●	●	●
V85 435 EXT	11634	4	3	.312	1.000	.250	5-1/2 REG, 7-5/8 REG, 8-5/8 REG				●	●	●
V85 438 EXT	12634	4	3	.312	1.000	.250	NC56 - NC71				●	●	●
V85 530 EXT	13634	5	3	.312	1.000	.250	3-1/2FH, 2-3/8 - 4-1/2 REG				●	●	●
V85 4PAC EXT	15634	4	1-1/2	.312	1.000	.250	American Open Hole				●	●	●
V85 425 INT	09638	4	2	.312	1.000	.250	5-1/2 - 6-5/8 FH, 6-5/8 REG				●	●	●
V85 428 INT	10638	4	2	.312	1.000	.250	NC23 - 50, 2-3/8 - 5-1/2 IF				●	●	●
V85 42F INT*	14638	4	2	.312	1.000	.250	VO.065*				●	●	●
V85 435 INT	11638	4	3	.312	1.000	.250	5-1/2 REG, 7-5/8 REG, 8-5/8 REG				●	●	●
V85 438 INT	12638	4	3	.312	1.000	.250	NC56 - NC71				●	●	●
V85 530 INT	13638	5	3	.312	1.000	.250	3-1/2FH, 2-3/8 - 4-1/2 REG				●	●	●
V85 4PAC INT	15638	4	1-1/2	.312	1.000	.250	American Open Hole				●	●	●

* Obsolete thread form, - See A.P.I. Spec 7, 35th Edition, May 1, 1995, Section 9.4

API ROUND THREADING

For Holders see pgs. 227-230

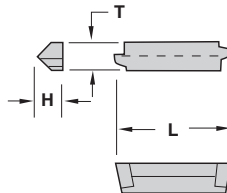


EXT SHOWN
INT OPPOSITE

Description	EDP Code	TPI	TPF	T	L	H	Connection	C3	C6H	GP3	GP50	AT3	AT50
V84 10RD EXT	34614	10	3/4	.250	1.000	.250					●	●	●
V84 10RD INT	34618	10	3/4	.250	1.000	.250					●	●	●
V84 8RD EXT	32614	8	3/4	.250	1.000	.250					●	●	●
V84 8RD INT	32618	8	3/4	.250	1.000	.250					●	●	●

API VAM THREADING

For Holders see pgs. 227-230



EXT SHOWN
INT OPPOSITE

Description	EDP Code	TPI	TPF	T	L	H	Connection	C3	C6H	GP3	GP50	AT3	AT50
V84 5 VAM EXT	23614	5	3/4	.250	1.000	.250					●		
V84 5 VAM INT	23618	5	3/4	.250	1.000	.250					●		
V84 6 VAM EXT	24614	6	3/4	.250	1.000	.250					●		
V84 6 VAM INT	24618	6	3/4	.250	1.000	.250					●		
V84 8 VAM EXT	25614	8	3/4	.250	1.000	.250					●		
V84 8 VAM INT	25618	8	3/4	.250	1.000	.250					●		

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

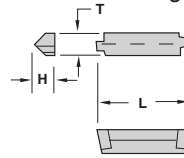
Cast Iron						●
Non-Ferrous						●
Stainless/High Temp						●
Steel					▲	●



VEE-BOTTOM API X-LINE THREADING

For Holders see pgs. 227-230

API Oilfield Threading

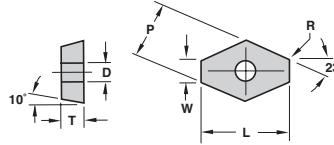


EXT SHOWN
INT OPPOSITE

Description	EDP Code	TPI	TPF	T	L	H	Connection	C3	C6H	GP3	GP50	AT3	AT50
V84 5XL12 EXT	18614	5	1-1/4	.250	1.000	.250	8-5/8 - 10-3/4						●
V84 5XL12 INT	18618	5	1-1/4	.250	1.000	.250	8-5/8 - 10-3/4						●
V84 6XL15 EXT	19614	6	1-1/2	.250	1.000	.250	5 - 7-5/8						●
V84 6XL15 INT	19618	6	1-1/2	.250	1.000	.250	5 - 7-5/8						●
V84 6XL75 EXT	20614	6	3/4	.250	1.000	.250							●
V84 6XL75 INT	20618	6	3/4	.250	1.000	.250							●

API 46° RING GROOVERS APIP

For Holders see pgs. 227-230



Description	EDP Code	R	W	P	T	L	D	Style	C6H	GP25	GP6	AT25	AT6
APIP 086-3	754000	.015	.079	.372	.187	3/4	-	Clamp			●	●	●
APIP 131-3	754005	.031	.125	.407	.187	3/4	-	Clamp			●	●	●
APIP (PGN-1A)	754003	.031	.131	.414	.187	3/4	-	Clamp			●	●	●
APIP 162-3 (PGN-6A)	75403	.031	.156	.437	.187	3/4	-	Clamp			●	●	●
APIP (PGN-7A)	75887	.031	.203	.484	.187	3/4	-	Clamp			●	●	●
APIP 203-3 (PGN-2A)	75413	.031	.197	.574	.187	1"	-	Clamp			●	●	●
APIP 203-3H	75413H	.031	.197	.574	.187	1"	.203	Lock Pin			●	●	●
APIP 213-3	75423	.062	.206	.574	.187	1"	.203	Lock Pin			●	●	●
APIP 265-3	75433	.031	.260	.633	.187	1"	.250	Lock Pin			●	●	●
APIP 281-3	75443	.031	.277	.645	.187	1"	.250	Lock Pin			●	●	●
APIP 300-3	75463	.031	.295	.662	.187	1"	.250	Lock Pin			●	●	●
APIP 329-3	75473	.031	.324	.683	.187	1"	.250	Lock Pin			●	●	●
APIP 355-3	75476	.031	.350	.712	.187	1"	.250	Lock Pin			●	●	●
APIP 420-3	75490	.031	.415	.772	.187	1"	.250	Lock Pin			●	●	●

HEAVY DUTY

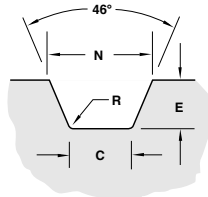
APIP 284-3	75753	.062	.278	.713	.187	1-3/16	.250	Lock Pin			●	●	●
APIP 162-4NL	75404NL	.031	.156	.733	.250	1-1/2	.250	Lock Pin			●	●	●
APIP 162-4 (Counter sink hole)	75404	.031	.156	.733	.250	1-1/2	.250	Screw			●	●	●
APIP 203-4NL	75414NL	.031	.197	.773	.250	1-1/2	.250	Lock Pin			●	●	●
APIP 203-4 (Counter sink hole)	75414	.031	.197	.773	.250	1-1/2	.250	Screw			●	●	●
APIP 213-4 (Counter sink hole)	75424	.062	.206	.773	.250	1-1/2	.250	Screw			●	●	●
APIP 265-4 (Counter sink hole)	75434	.031	.260	.773	.250	1-3/8	.250	Screw			●	●	●
APIP 281-4 (Counter sink hole)	75444	.031	.277	.773	.250	1-5/16	.250	Screw			●	●	●
APIP 300-4 (Counter sink hole)	75464	.031	.295	.773	.250	1-9/32	.250	Screw			●	●	●
APIP 329-4	75474	.031	.324	.773	.250	1-7/32	.250	Lock Pin			●	●	●
APIP 355-4	75484	.031	.350	.773	.250	1-5/32	.250	Lock Pin			●	●	●
APIP 420-4	75492	.031	.415	.773	.250	1"	.250	Lock Pin			●	●	●

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

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

RING GROOVE SPECIFICATIONS

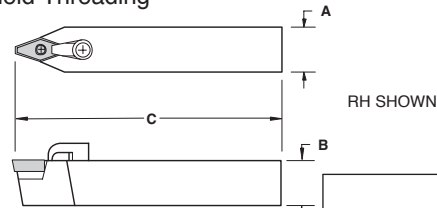


Groove Description	C	E	N	R	Insert Description
BX-150	.260	.220	.450	.031	APIP 265-3 or APIP 265-4
BX-151	.277	.220	.466	.031	APIP 281-3 or APIP 281-4
BX-152	.295	.230	.498	.031	APIP 300-3 or APIP 300-4
BX-153	.324	.270	.554	.031	APIP 329-3 or APIP 329-4
BX-154	.350	.300	.606	.031	APIP 355-3 or APIP 355-4
BX-155	.415	.330	.698	.031	APIP 420-3 or APIP 420-4
R19, 20, 22, 25, 29, 33, 36, 40, 43, 48, 52, 56, 59, 64, 68, 72, 76 & RX-20	.125	.250	.344	.031	APIP 131-3
R21, 23, 24, 26, 27, 30, 31, 34, 35, 37, 39, 41, 44, 45, 49, 53, 57, 61, 65, 84, 92, 99 & RX-215	.197	.310	.469	.031	APIP 203-3, 203-3H, 203-4
R28, 32, 46, 73 & 85	.206	.380	.531	.062	
R38, 50, 54, 62, 66, 77, 86 & 87	.278	.440	.656	.062	
R42, 47, 70, 74, 83, 88, 89 & 93	.350	.500	.781	.062	
R51, 58 & 90	.422	.560	.906	.062	
RX-201 & 205	.079	.160	.219	.015	
RX-210	.156	.250	.375	.031	



RING GROOVING HOLDERS

FGNR



PARTS

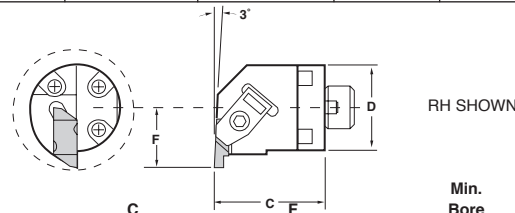
Description	EDP Code	Insert	A	B	C	Seat	Seat Screw	Clamp	Clamp Screw
FGNR 16-0863	92801600	APIP 086-3	1	1	6	-	-	TC-311	STC-8
FGNR-16-1A/1313	92801602	PGN 1A/131/3	1	1	6	FGS1A	SF20	CL-30	STC-4
FGNR-16-2A*	92801612	PGN 2A	1	1	6	FGS2ANL	SF46	CL-30	STC-4
FGNR-20-2A*	92802012	PGN 2A	1-1/4	1-1/4	7	FGS2ANL	SF46	CL-30	STC-4
FGNR 16-6A	92801606	PGN 6A	1	1	6	-	-	CL-30	STC-4
FGNR-16-7A	92801615	PGN 7A	1	1	6	-	-	CL-30	STC-4
FGNR-20-1624	92802013	APIP 162-4	1-1/4	1-1/4	7	-	SD-3	CL-30	STC-4
FGNR-24-1624	92802413	APIP 162-4	1-1/2	1-1/2	7	-	SD-3	CL-30	STC-4
FGNR-20-2034	92802014	APIP 203-4	1-1/4	1-1/4	7	-	SD-3	CL-30	STC-4
FGNR-24-2034	92802414	APIP 203-4	1-1/2	1-1/2	7	-	SD-3	CL-30	STC-4
FGNR-20-2134	92802015	APIP 213-4	1-1/4	1-1/4	7	-	SD-3	CL-30	STC-4
FGNR-20-2654	92802016	APIP 265-4	1-1/4	1-1/4	7	-	SD-3	CL-30	STC-4
FGNR-20-2814	92802011	APIP 281-4	1-1/4	1-1/4	7	-	SD-3	CL-30	STC-4
FGNR-20-3004	92802034	APIP 300-4	1-1/4	1-1/4	7	-	SD-3	CL-30	STC-4

* Holder can be used with APIP 203-3H (w/whole) insert. Order NL-46 lock pin to replace the SF46 seat screw.

INTERCHANGEABLE HEADS

FLO-LOCK

H-FLEL/R*

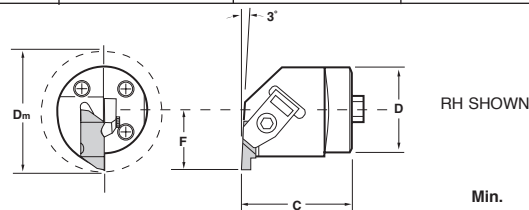


PARTS

Description	EDP Code	Insert	D	C	F	Min. Bore	Clamp	Clamp Screw
H20-FLER3W	9IH6502016	FL-3L	1.250	1.625	0.875	1.750	TF-73	S-412
H24-FLER3W	9IH6502416	FL-3L	1.500	1.625	1.000	2.000	TF-73	S-412
H28-FLER3W	9IH6502816	FL-3L	1.750	1.625	1.125	2.250	TF-73	S-412
H32-FLER3W	9IH6503216	FL-3L	2.000	1.625	1.250	2.500	TF-73	S-412
H40-FLER3W	9IH6504016	FL-3L	2.500	1.625	1.500	3.000	TF-73	S-412
H28-FLER4W	9IH6502820	FL-4L	1.750	1.625	1.250	2.250	TF-73	S-412
H32-FLER4W	9IH6503220	FL-4L	2.000	1.625	1.375	2.500	TF-73	S-412
H36-FLER4W	9IH6503620	FL-4L	2.250	1.625	1.500	2.500	TF-73	S-412
H40-FLER4W	9IH6504020	FL-4L	2.500	1.625	1.625	3.000	TF-73	S-412
H28-FLER6W	9IH6502828	FL-6L	1.750	1.625	1.250	2.500	TF-121	S-412
H32-FLER6W	9IH6503228	FL-6L	2.000	1.625	1.375	2.750	TF-121	S-412
H40-FLER6W	9IH6504028	FL-6L	2.500	1.625	1.625	3.250	TF-121	S-412

*Left hand quoted on request.

HS-FLEL/R*



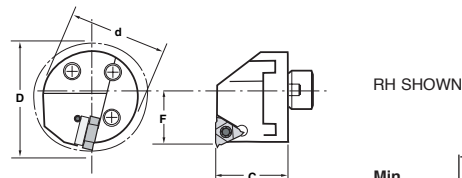
PARTS

Description	EDP Code	Insert	D	C	F	Min. Bore	Clamp	Clamp Screw
HS32-FLER3W	9IHS65032M32	FL-3L	1.25	1.34	0.866	1.730	TF-73	S-412
HS40-FLER3W	9IHS65040M40	FL-3L	1.57	1.58	1.102	2.210	TF-73	S-412
HS50-FLER3W	9IHS65050M50	FL-3L	1.97	1.65	1.380	2.760	TF-73	S-412
HS60-FLER3W	9IHS65060M60	FL-3L	2.36	1.75	1.740	3.480	TF-73	S-412
HS50-FLER4W	9IHS65050M50	FL-4L	1.97	1.65	1.380	2.760	TF-73	S-412
HS60-FLER4W	9IHS65060M60	FL-4L	2.36	1.75	1.740	3.480	TF-73	S-412

*Left hand quoted on request.

LAYDOWN

H-LNFR/L*



PARTS

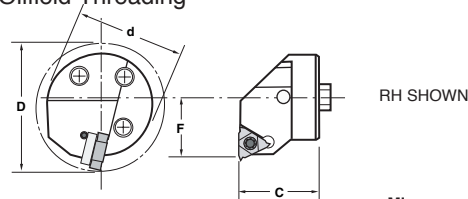
Description	EDP Code	Insert	D	C	F	Min. Bore	Clamp	Clamp Screw	Lock Pin
H20-LNFR-43	9IH4206856	L43	1.250	1.625	0.765	1.450	TC-190	STC-9	NL-44
H24-LNFR-43	9IH4207256	L43	1.500	1.625	0.890	1.760	TC-190	STC-9	NL-44
H32-LNFR-43	9IH4208056	L43	2.000	1.625	1.281	2.400	TC-190	STC-9	NL-44
H24-LNFR-53	9IH4207262	L53	1.500	1.625	0.890	1.760	TC-250	STC-11	NL-56
H32-LNFR-53	9IH4208062	L53	2.000	1.625	1.281	2.400	TC-250	STC-11	NL-56
H24-LNFR-54	9IH4207264	LDS 54	1.500	1.625	0.890	1.760	TC-250	STC-11	NL-56
H32-LNFR-54	9IH4208064	LDS 54	2.000	1.625	1.281	2.400	TC-250	STC-11	NL-56



API Oilfield Threading

INTERCHANGEABLE HEADS

HS-LNFR/L*



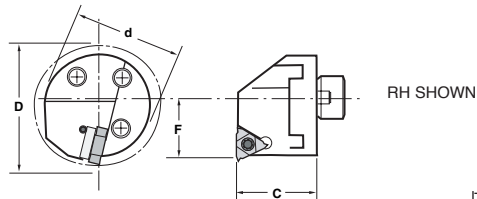
PARTS

Description	EDP Code	Insert	d	C	F	Min. Bore (D)	Clamp	Clamp Screw	Lock Pin
HS32-LNFR-43	9IHS42032M56	L43	1.25	1.26	0.866	1.570	TC-190	STC-9	NL-44
HS40-LNFR-43	9IHS42040M56	L43	1.57	1.26	1.063	1.970	TC-190	STC-9	NL-44
HS50-LNFR-43	9IHS42050M56	L43	1.97	1.57	1.378	2.480	TC-190	STC-9	NL-44
HS40-LNFR-53	9IHS42040M62	L53	1.57	1.26	1.063	1.970	TC-250	STC-11	NL-56
HS50-LNFR-53	9IHS42050M62	L53	1.97	1.57	1.378	2.480	TC-250	STC-11	NL-56
HS40-LNFR-54	9IHS42040M64	LDS 54	1.57	1.26	1.063	1.970	TC-250	STC-11	NL-56
HS50-LNFR-54	9IHS42050M64	LDS 54	1.97	1.57	1.378	2.480	TC-250	STC-11	NL-56

*Left hand quoted on request.

LAYDOWN

H-AVR/L*

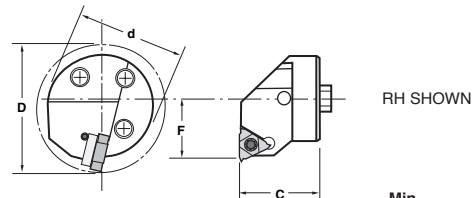


PARTS

Description	EDP Code	Insert	d	C	F	Min. Bore (D)	Insert Screw	Seat Screw	Seat
H16-AVR-16	9IH18064361	16NR	1.000	1.625	0.650	1.200	SA-3	SY-3	YI3
H20-AVR-16	9IH18068361	16NR	1.250	1.625	0.765	1.450	SA-3	SY-3	YI3
H24-AVR-16	9IH18072361	16NR	1.500	1.625	0.890	1.760	SA-3	SY-3	YI3
H32-AVR-16	9IH18080361	16NR	2.000	1.625	1.281	2.400	SA-3	SY-3	YI3
H24-AVR-22	9IH18072401	22NR	1.500	1.625	0.978	1.760	SA-4	SY-4	YI4
H32-AVR-22	9IH18080401	22NR	2.000	1.625	1.281	2.400	SA-4	SY-4	YI4

*Left hand quoted on request.

HS-AVR/L*



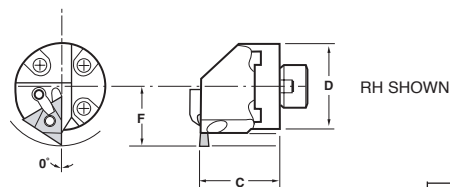
PARTS

Description	EDP Code	Insert	d	C	F	Min. Bore (D)	Insert Screw	Seat Screw	Seat
HS25-AVR-16	9IHS18025M361	16NR	0.98	0.98	0.669	1.260	SA-3	SY-3	YI3
HS32-AVR-16	9IHS18032M361	16NR	1.26	1.26	0.866	1.570	SA-3	SY-3	YI3
HS40-AVR-16	9IHS18040M361	16NR	1.57	1.26	1.063	1.970	SA-3	SY-3	YI3
HS50-AVR-16	9IHS18050M361	16NR	1.97	1.57	1.378	2.480	SA-3	SY-3	YI3
HS40-AVR-22	9IHS18040M401	22NR	1.57	1.26	1.063	1.970	SA-4	SY-4	YI4
HS50-AVR-22	9IHS18050M401	22NR	1.97	1.57	1.378	2.480	SA-4	SY-4	YI4

*Left hand quoted on request.

ON-EDGE

H-MTHOR/L*



PARTS

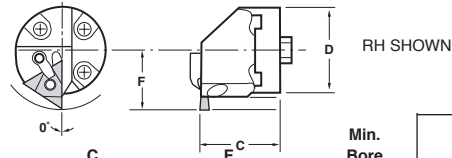
Description	EDP Code	Insert	d	C	F	Min. Bore (D)	Clamp	Clamp Screw	Lock Pin
H16-MTHOR-3	9IH7301648	TNMA/C 32	1.000	1.625	0.688	1.690	TC-190	STC-5	NL-33
H20-MTHOR-3	9IH7302048	TNMA/C 32	1.250	1.625	0.798	1.788	TC-190	STC-5	NL-33
H24-MTHOR-3	9IH7302448	TNMA/C 32	1.500	1.625	0.923	1.875	TC-190	STC-5	NL-33
H20-MTHOR-4	9IH7302056	TNMA/C 43	1.250	1.625	1.048	2.420	TC-190	STC-5	NL-44
H24-MTHOR-4	9IH7302456	TNMA/C 43	1.500	1.625	1.173	2.625	TC-190	STC-5	NL-44
H28-MTHOR-4	9IH7302856	TNMA/C 43	1.750	1.625	1.298	2.875	TC-190	STC-5	NL-44
H32-MTHOR-4	9IH7303256	TNMA/C 43	2.000	1.625	1.423	2.875	TC-190	STC-5	NL-44
H40-MTHOR-4	9IH7304056	TNMA/C 43	2.500	1.625	1.673	3.375	TC-190	STC-5	NL-44
H24-MTHOR-5	9IH7302464	TNMA/C 54	1.500	1.625	1.173	3.200	TC-250	STC-11	NL-56
H28-MTHOR-5	9IH7302864	TNMA/C 54	1.750	1.625	1.298	3.250	TC-250	STC-11	NL-56
H32-MTHOR-5	9IH7303264	TNMA/C 54	2.000	1.625	1.423	3.250	TC-250	STC-11	NL-56
H40-MTHOR-5	9IH7304064	TNMA/C 54	2.500	1.625	1.673	3.375	TC-250	STC-11	NL-56

*Left hand quoted on request.

TOOL FLO



HS-MTHOR/L*



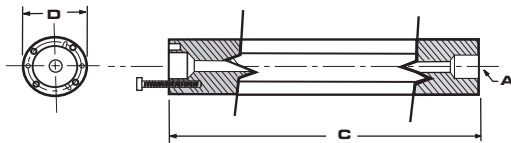
PARTS

Description	EDP Code	Insert	D	C	F	Min. Bore	Clamp	Clamp Screw	Lock Pin
HS25-MTHOR-3	9IHS73025M48	TNMA/C 32	0.98	0.98	0.678	1.690	TC-190	STC-5	NL-33
HS32-MTHOR-3	9IHS73032M48	TNMA/C 32	1.26	1.26	0.800	1.788	TC-190	STC-5	NL-33
HS40-MTHOR-3	9IHS73040M48	TNMA/C 32	1.57	1.26	0.933	1.875	TC-190	STC-5	NL-33
HS32-MTHOR-4	9IHS73032M56	TNMA/C 43	1.26	1.26	1.050	2.420	TC-190	STC-5	NL-44
HS40-MTHOR-4	9IHS73040M56	TNMA/C 43	1.57	1.26	1.203	2.625	TC-190	STC-5	NL-44
HS50-MTHOR-4	9IHS73050M56	TNMA/C 43	1.97	1.57	1.413	2.875	TC-190	STC-5	NL-44
HS60-MTHOR-4	9IHS73060M56	TNMA/C 43	2.36	1.57	1.603	3.375	TC-190	STC-5	NL-44
HS40-MTHOR-5	9IHS73040M64	TNMA/C 54	1.57	1.26	1.203	3.200	TC-190	STC-11	NL-56
HS50-MTHOR-5	9IHS73050M64	TNMA/C 54	1.97	1.57	1.413	3.250	TC-250	STC-11	NL-56
HS60-MTHOR-5	9IHS73060M64	TNMA/C 54	2.36	1.57	1.603	3.375	TC-250	STC-11	NL-56

*Left hand quoted on request.

S-4400W

Steel Shank with Through Coolant

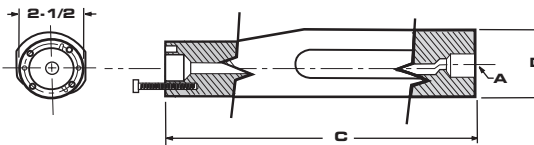


PARTS

Description	EDP Code	Head Style	D	C	A	Screw (3 req/d)	Screw
S-4416W	9IBS4416W	H16-_____	1.000	9.000	1/4 - 18NPT	S-319	S-322
S-4420W	9IBS4420W	H20-_____	1.250	9.000	3/8 - 18NPT	S-327	S-330
S-4424W	9IBS4424W	H24-_____	1.500	10.000	3/8 - 18NPT	S-327	S-330
S-4428W	9IBS4428W	H28-_____	1.750	12.000	3/8 - 18NPT	S-337	S-340
S-4432W	9IBS4432W	H32-_____	2.000	13.000	3/8 - 18NPT	S-337	S-340
S-4436W	9IBS4436W	H36-_____	2.250	15.000	3/8 - 18NPT	S-337	S-340
S-4440W	9IBS4440W	H40-_____	2.500	17.000	3/8 - 18NPT	S-350	S-353

S-4400W48

Steel Shank with Through Coolant

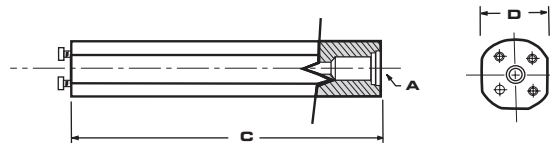


PARTS

Description	EDP Code	Head Style	D	C	A	Screw (3 req/d)	Screw
S-4440W48	9IBS4440W48	H40-_____	3.000	18.000	3/8 - 18NPT	S-350	S-353

S-570

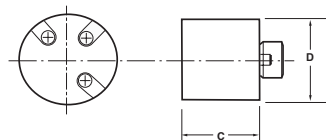
Steel Shank with Through Coolant



PARTS

Description	EDP Code	Head Style	D	C	A	Screw (3 req/d)	Screw
S-570-10-16	9IBS5701016	HS16-_____	0.625	4.210	1/8 - 27NPT		
S-570-12-20	9IBS5701220	HS20-_____	0.750	5.200	1/4 - 18NPT		
S-570-16-25	9IBS5701625	HS25-_____	1.000	7.200	1/4 - 18NPT		
S-570-20-32	9IBS5702032	HS32-_____	1.250	8.740	3/8 - 18NPT		
S-570-24-40	9IBS5702440	HS40-_____	1.500	10.750	1/2 - 14NPT		
S-570-32-50	9IBS5703250	HS50-_____	2.000	14.410	1/2 - 14NPT		
S-570-40-60	9IBS5704060	HS60-_____	2.500	18.430	1/2 - 14NPT		

H/HS-BLANKS



Description	EDP Code	D	C
H16-BLANK RH/LH*	9IH16BLKRH/LH	1.500	1.630
H20-BLANK RH/LH*	9IH20BLKRH/LH	1.625	1.630
H24-BLANK RH/LH*	9IH24BLKRH/LH	2.000	1.630
H28-BLANK RH/LH*	9IH28BLKRH/LH	2.000	1.630
H32-BLANK RH/LH*	9IH32BLKRH/LH	2.750	1.630
H40-BLANK RH/LH*	9IH40BLKRH/LH	2.750	1.900
HS25-BLANK RH/LH*	9IHS25BLKRH/LH	1.340	1.500
HS32-BLANK RH/LH*	9IHS32BLKRH/LH	1.740	1.665
HS40-BLANK RH/LH*	9IHS40BLKRH/LH	2.100	1.675
HS50-BLANK RH/LH*	9IHS50BLKRH/LH	2.708	1.650
HS60-BLANK RH/LH*	9IHS60BLKRH/LH	3.480	1.800

*Specify right or left hand when ordering.



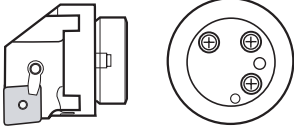
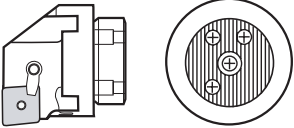
CROSSOVER CHART

INTERCHANGEABLE HEAD

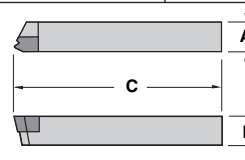
TOOL-FLO DESCRIPTION

KENNAMETAL®

SANDVIK®

H Style 	H_-FLER_W	H_-FLER_W	
	H_-AVR_	H_-AVR_	
	H_-MTHOR_	H_-MTHOR_	
	H_-MCLNR_	H_-MCLNR_	
	H_-MDUNR_	H_-MDUNR_	
	H_-MSKNR_	H_-MSKNR_	
	H_-MTFNR_	H_-MTFNR_	
	H_-MVUNR_	H_-MVUNR_	
	H_-MWLNR_	H_-MWLNR_	
HS Style 	HS_-FLER_W		570C-TLER-_-_-
	HS_-AVR_		R566-4KFC-_-_-
	HS_-MTHOR_		
	HS_-MCLNR_		R571.31C-_-_-
	HS_-MDUNR_		R571.35C-_-_-
	HS_-MSKNR_		
	HS_-MTFNR_		
	HS_-MVUNR_		
	HS_-MWLNR_		

API THREADING Brazen Tools



Description	TPI	TPF	A	B	C	Conn No orSize	C5H
B8 8RD EXT	8	3/4	1/2	1/2	3-1/2	-	●
B8 8RD INT	8	3/4	1/2	1/2	3-1/2	-	●
B8 10RD EXT	10	3/4	1/2	1/2	3-1/2	-	●
B8 10RD INT	10	3/4	1/2	1/2	3-1/2	-	●
B8 425 EXT	4	2	1/2	1/2	3-1/2	5-1/2 - 6-5/8 FH, 6-5/8 REG	
B8 425 INT	4	2	1/2	1/2	3-1/2	5-1/2 - 6-5/8 FH, 6-5/8 REG	
B8 428 EXT	4	2	1/2	1/2	3-1/2	NC23 - 50, 2-3/8 - 5-1/2 IF	
B8 428 INT	4	2	1/2	1/2	3-1/2	NC23 - 50, 2-3/8 - 5-1/2 IF	
B8 435 EXT	4	3	1/2	1/2	3-1/2	5-1/2 REG, 7-5/8 REG, 8-5/8 REG	
B8 435 INT	4	3	1/2	1/2	3-1/2	5-1/2 REG, 7-5/8 REG, 8-5/8 REG	
B8 438 EXT	4	3	1/2	1/2	3-1/2	NC56 - NC71	
B8 438 INT	4	3	1/2	1/2	3-1/2	NC56 - NC71	
B8 42F EXT*	4	2	1/2	1/2	3-1/2	VO.065*	
B8 42F INT*	4	2	1/2	1/2	3-1/2	VO.065*	
B8 530 EXT	5	3	1/2	1/2	3-1/2	3-1/2FH, 2-3/8 - 4-1/2 REG	
B8 530 INT	5	3	1/2	1/2	3-1/2	3-1/2FH, 2-3/8 - 4-1/2 REG	
B8 5B75 EXT	5	3/4	1/2	1/2	3-1/2	4-1/2 - 13-3/8	
B8 5B75 INT	5	3/4	1/2	1/2	3-1/2	4-1/2 - 13-3/8	
B8 5B1 EXT	5	1	1/2	1/2	3-1/2	16 AND LARGER	
B8 5B1 INT	5	1	1/2	1/2	3-1/2	16 AND LARGER	
B8 8B75 EXT	8	3/4	1/2	1/2	3-1/2	U.S. IMPROVED BUTTRESS	
B8 8B75 INT	8	3/4	1/2	1/2	3-1/2	U.S. IMPROVED BUTTRESS	
B10 8RD EXT	8	3/4	5/8	5/8	3-1/2	-	●
B10 8RD INT	8	3/4	5/8	5/8	3-1/2	-	●
B10 10RD EXT	10	3/4	5/8	5/8	3-1/2	-	●
B10 10RD INT	10	3/4	5/8	5/8	3-1/2	-	●
B10 425 EXT	4	2	5/8	5/8	3-1/2	5-1/2 - 6-5/8 FH, 6-5/8 REG	
B10 425 INT	4	2	5/8	5/8	3-1/2	5-1/2 - 6-5/8 FH, 6-5/8 REG	
B10 428 EXT	4	2	5/8	5/8	3-1/2	NC23 - 50, 2-3/8 - 5-1/2 IF	
B10 428 INT	4	2	5/8	5/8	3-1/2	NC23 - 50, 2-3/8 - 5-1/2 IF	
B10 435 EXT	4	3	5/8	5/8	3-1/2	5-1/2 REG, 7-5/8 REG, 8-5/8 REG	
B10 435 INT	4	3	5/8	5/8	3-1/2	5-1/2 REG, 7-5/8 REG, 8-5/8 REG	
B10 438 EXT	4	3	5/8	5/8	3-1/2	NC56 - NC71	
B10 438 INT	4	3	5/8	5/8	3-1/2	NC56 - NC71	
B10 42F EXT*	4	2	5/8	5/8	3-1/2	VO.065*	
B10 42F INT*	4	2	5/8	5/8	3-1/2	VO.065*	
B10 530 EXT	5	3	5/8	5/8	3-1/2	3-1/2FH, 2-3/8 - 4-1/2 REG	
B10 530 INT	5	3	5/8	5/8	3-1/2	3-1/2FH, 2-3/8 - 4-1/2 REG	
B10 5B75 EXT	5	3/4	5/8	5/8	3-1/2	4-1/2 - 13-3/8	
B10 5B75 INT	5	3/4	5/8	5/8	3-1/2	4-1/2 - 13-3/8	
B10 5B1 EXT	5	1	5/8	5/8	3-1/2	16 AND LARGER	
B8 5B1 INT	5	1	1/2	1/2	3-1/2	16 AND LARGER	
B8 8B75 EXT	8	3/4	1/2	1/2	3-1/2	U.S. IMPROVED BUTTRESS	
B8 8B75 INT	8	3/4	1/2	1/2	3-1/2	U.S. IMPROVED BUTTRESS	

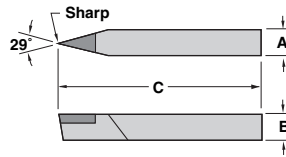
* Obsolete thread form, See A.P.I. Spec 7, 35th Edition, May 1, 1995, Section 9.4

TOOL FLO

Cast Iron
Non-Ferrous
Stainless/High Temp
Steel



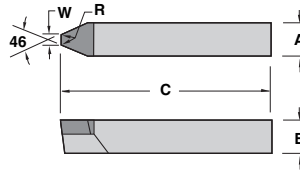
BRAZED TOOLS ACME THREADING NO PITCH



Description

	TPF	A	B	C	C5H
B6 NT NO PITCH	6-16	3/8	3/8	2-1/2	●
B8 NT NO PITCH	4-16	1/2	1/2	3-1/2	●
B10 NT NO PITCH	2-16	5/8	5/8	4	●
B12 NT NO PITCH	2-16	3/4	3/4	4-1/2	●

BRAZED TOOLS RING GROOVING NO PITCH



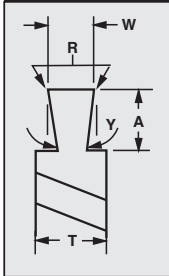
Description	W	R	A	B	C	Conn No or Size	C5H
B10 RG125	.125	1/32	5/8	5/8	4	R19, 20, 22, 25, 29, 33, 36, 40, 43, 48, 52, 56, 59, 64, 68, 72 & 76	●
B12 RG156	.156	1/32	3/4	3/4	5	RX210	●
B64 RG197	.197	1/32	3/4	1	6	R21, 23, 24, 27, 30, 31, 34, 35, 37, 39, 41, 44, 45, 49, 53, 57, 61, 65, 69, 84, 92, 99 & RX-215	●
B85 RG197	.197	1/32	1	1-1/4	7	R21, 23, 24, 27, 30, 31, 34, 35, 37, 39, 41, 44, 45, 49, 53, 57, 61, 65, 69, 84, 92, 99 & RX-215	●
B64 RG206	.206	1/16	3/4	1	6	R26, 32, 46, 73 & 85	●
B85 RG206	.206	1/16	1	1-1/4	7	R26, 32, 46, 73 & 85	●
B86 RG278	.278	1/16	1	1-1/2	8	BX-151	●
B86 RG350	.350	1/16	1	1-1/2	8	BX-154	●

* See page 77 for acme width specs.

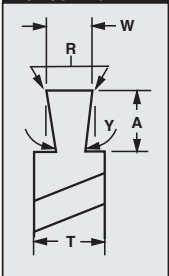
In an effort to improve our stock standard grade offering,
there are periodic changes.
Please see current price list for up to date grade offering.

Cast Iron	
Non-Ferrous	
Stainless/High Temp	
Steel	

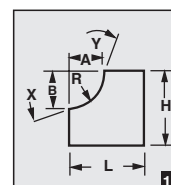
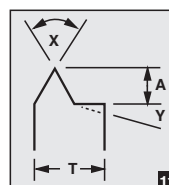
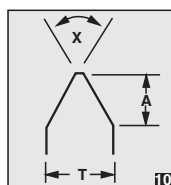
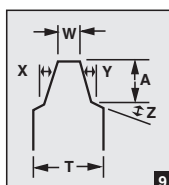
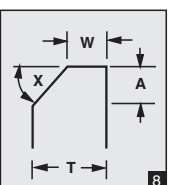
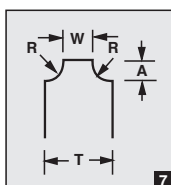
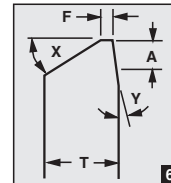
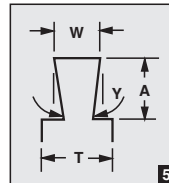
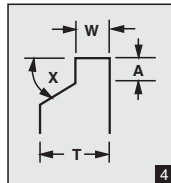
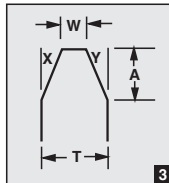
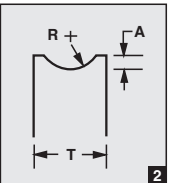
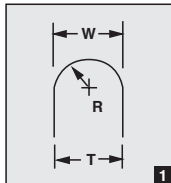
FLO-LOCK LEFT HAND



FLO-LOCK RIGHT HAND



We welcome specials!
Please call us with your specs.





TECHNICAL INFORMATION

thread form	Tool-Flo insert		tool joint application	minimum box size
	topping	non-topping		
V-.038R 2" tpf 4 tpi	TNMA 55 428 FLDC-4-428 E/I 22ER/NR 428 27ER/NR 428 L53 428 L43 428 V85 428	FLD-3038R/L	2-3/8 API Internal Flush 2-7/8 API Internal Flush 3-1/2 API Internal Flush 4 API Internal Flush 4-1/2 API Internal Flush 5-1/2 API Internal Flush 4 API Full Hole NC23 NC26 NC31 NC35 NC38 NC40 NC44 NC46 NC50	NC31 2-7/8 IF
V-.038R 3" tpf 4 tpi	FLDC-4-438 E/I 22ER/NR 438	FLD-3038R/L	NC56 NC61 NC70 NC77	NC56
V-.050 2" tpf 4 tpi	FLDC-4-425 E/I 27ER/NR 425	FLD-4050R/L	5-1/2 API Full Hole 6-5/8 API Regular 6-5/8 API Full Hole	5-1/2 API Full Hole
V-.050 3" tpf 4 tpi	FLDC-4-435 E/I 22ER/NR 435	FLD-4050R/L	5-1/2 API Regular 7-5/8 API Regular 8-5/8 API Regular	5-1/2 API Regular
V-.040 3" tpf 5 tpi	FLDC-3-530 E/I FLDC-4-530 E/I 22ER/NR 530	FLD-3040R/L FLD-4040R/L	2-3/8 API Regular 2-7/8 API Regular 3-1/2 API Regular 4-1/2 API Regular 3-1/2 API Full Hole 4-1/2 API Full Hole	3-1/2 API Regular

API NC SPECIFICATIONS

Conn. No. of Size	Thread Form	TPI	TPF	Cat. No.
NC10	V-0.055	6	1-1/2	VO.055
NC12	V-0.055	6	1-1/2	VO.055
NC13	V-0.055	6	1-1/2	VO.055
NC16	V-0.055	6	1-1/2	VO.055
NC23	V-0.038	4	2	428
NC26	V-0.038	4	2	428
NC31	V-0.038	4	2	428
NC35	V-0.038	4	2	428
NC38	V-0.038	4	2	428
NC40	V-0.038	4	2	428
NC44	V-0.038	4	2	428
NC46	V-0.038	4	2	428
NC50	V-0.038	4	2	428
NC56	V-0.038	4	3	438
NC61	V-0.038	4	3	438
NC70	V-0.038	4	3	438
NC71	V-0.038	4	3	438

API REGULAR SPECIFICATIONS

Conn. No. of Size	Thread Form	TPI	TPF	Cat. No.
2-3/8 REG.	V-0.040	5	3	530
2-7/8 REG.	V-0.040	5	3	530
3-1/2 REG.	V-0.040	5	3	530
4-1/2 REG.	V-0.040	5	3	530
5-1/2 REG.	V-0.050	4	3	435
6-5/8 REG.	V-0.050	4	2	425
7-5/8 REG.	V-0.050	4	3	435
8-5/8 REG.	V-0.050	4	3	435

API FULL HOLE SPECIFICATIONS

Conn. No. of Size	Thread Form	TPI	TPF	Cat. No.
3-1/2 FH	V-0.040	5	3	530
4 FH	V-0.038	4	2	428
4-1/2 FH	V-0.040	5	3	530
5-1/2 FH	V-0.050	4	2	425
6-5/8 FH	V-0.050	4	2	425

API INTERNAL FLUSH SPECIFICATIONS

Conn. No. of Size	Thread Form	TPI	TPF	Cat. No.
2-3/8 IF	V-0.038	4	2	428
2-7/8 IF	V-0.038	4	2	428
3-1/2 IF	V-0.038	4	2	428
4 IF	V-0.038	4	2	428
5-1/2 IF	V-0.038	4	2	428

API THREAD FORM SPECIFICATIONS

Thread Form	TPI	TPF	Width or Flat Crest	Root Radius	Cat. No.
V-0.038	4	2	.065	-.038	428
V-0.038	4	3	.065	-.038	438
V-0.040	5	3	.040	-.020	530
V-0.050	4	3	.050	-.025	435
V-0.050	4	2	.050	-.025	425
V-0.065*	4	2	.065	.056	42F*
V-0.076	4	1-1/2	.076	.067	4PAC
V-0.055	6	1-1/2	.055	.047	VO.055

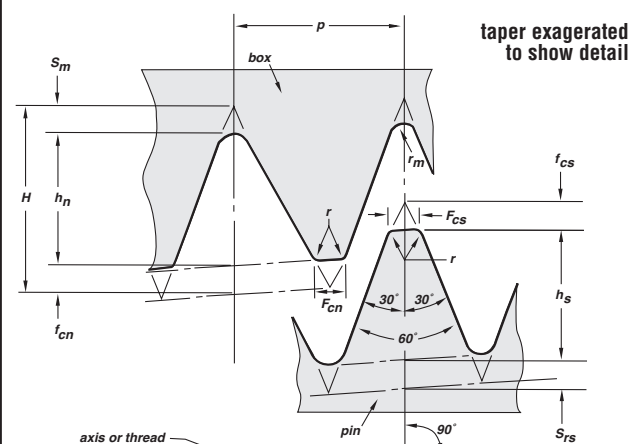
*Obsolescent thread form - See API Spec 7, 35th Edition, May 1, 1985, Section 9.4



PRODUCT THREAD DIMENSIONS - ROTARY SHOULDER CONNECTIONS

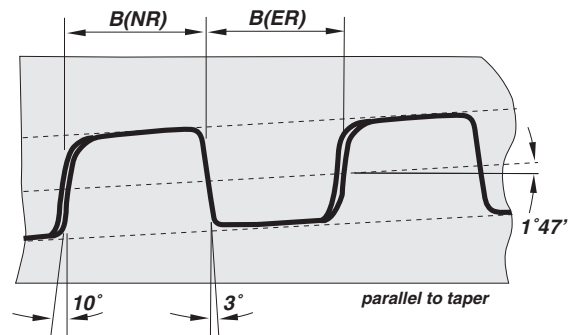
thread form	taper in. per ft.	thread height not truncated H	thread height truncated $h_n = h_s$	root truncation $S_m = S_{rs}$ $f_m = f_{rs}$	crest truncation $f_{cn} = f_{cs}$	width of flat		root radius $r_m = r_{rs}$	radius at thread corners r	pitch p
						crest $f_{cn} = f_{cs}$	crest $f_m = f_{rs}$			
V-038R	2	.216005	.121844	.038000	.056161	.065	-	.038	.015	.250
V-038R	3	.215379	.121381	.038000	.055998	.065	-	.038	.015	.250
V-040	3	.172303	.117842	.020000	.034461	.040	-	.020	.015	.200
V-050	3	.215379	.147303	.025000	.043076	.050	-	.025	.015	.250
V-050	2	.216005	.147804	.025000	.043201	.050	-	.025	.015	.250

V-.040 AND V-.050 PRODUCT THREAD FORM



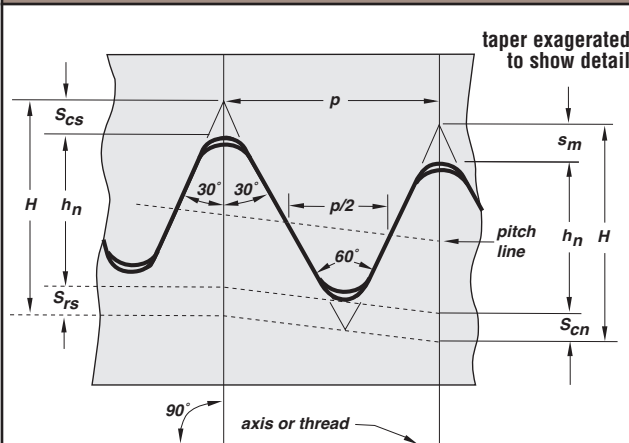
For inserts with this form see pages 8, 14, 17, 18, and 21-23
Chart based on API Spec 7, 38th Edition, April 1994, pg 30

API BUTTRESS



For inserts with this form see pages 6, 8, 11, 13, and 23
Chart based on API Spec Standard 5B, 14th Edition, August 1996, pg 52

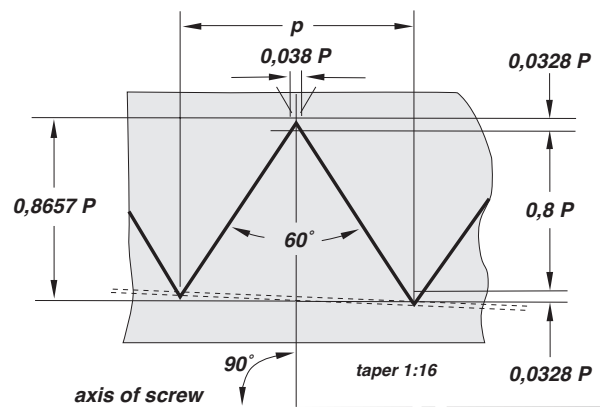
API CASING AND TUBING ROUND THREAD FORM



taper = 3/4 in. per ft. (62,5 mm per m) on diameter

For inserts with this form see pages 7, 9, 12, 13, 18, 19, and 21-23
Chart based on API Spec Standard 5B, 14th Edition, August 1996, pg 12

AMERICAN NATIONAL PIPE THREAD (NPT)



Use: fittings and pipe couplings

For inserts with this form see pages 7, 9, 15, 16, and 19
Chart based on API Spec Standard 5B, 14th Edition, August 1996, pg 52

CASING AND TUBING ROUND THREAD (Height Dimensions)

thread element		10 threads per inch $p=.1000$	8 threads per inch $p=.1250$
H	=	.0866p	.10825
$H_s = h_n$	=	.626p - .007	.05560
$S_{rs} = S_m$	=	.120p + .002	.01400
$S_{cs} = S_{cn}$	=	.120p + .005	.01700

NPT PIPE SIZE CROSSOVER

pipe size	NPT thread per inch
1/16", 1/8"	27 NPT
1/4", 3/8"	18NPT
1/2", 3/4"	14 NPT
1" - 2"	11.5 NPT
2-1/2" and up	8 NPT