

Imperial  
and Metric  
Measurements  
for metric data see page 26

# NOTCH-GRIP

GROOVE-TURN LINE

## Engineered for **MAXIMUM** Precision Grooving and Threading



## Imperial Measurements

Grooving Inserts .....	3-8
Threading Inserts .....	8-22
External Tools .....	22-23
Boring Bars.....	24-25

## Metric Measurements

Grooving Inserts .....	27-31
Threading Inserts .....	32-44
External Tools .....	44-45

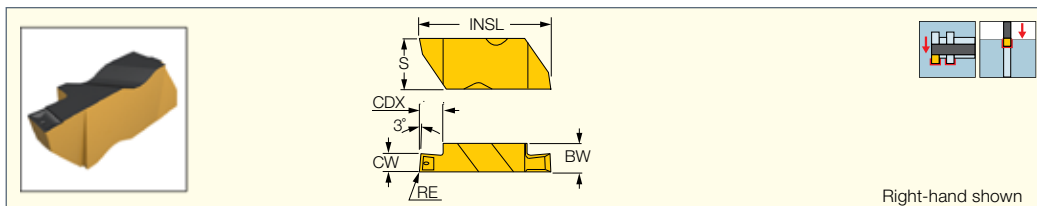
<b>User Guide .....</b>	<b>46-47</b>
-------------------------	--------------

# GROOVING INSERTS

**NOTCH GRIP**  
GROOVE-TURN LINE

**ING-RCB/LCB**

Precision Double-Ended Grooving Inserts with a Chipformer

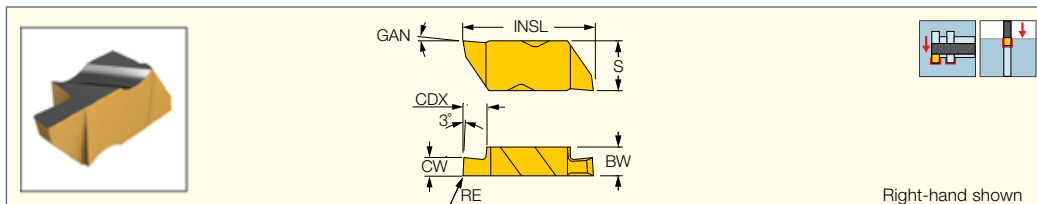


Designation	Dimensions								IC807	Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	BW	S	INSL		f groove (IPR)
ING3031LCB	.031	.0010	.0035	.0012	.050	.195	.344	.890	●	.0011-.0020
ING3031RCB	.031	.0010	.0035	.0025	.050	.195	.344	.890	●	.0011-.0020
ING2M100R/LCB	.039	.0010	.0075	.0025	.050	.150	.219	.510	●	.0016-.0024
ING3M100R/LCB	.039	.0010	.0075	.0025	.075	.195	.344	.890	●	.0015-.0024
ING3M120R/LCB	.047	.0010	.0075	.0025	.075	.195	.344	.890	●	.0015-.0024
ING3047R/LCB	.047	.0010	.0075	.0025	.075	.195	.344	.890	●	.0015-.0024
ING2M150R/LCB	.059	.0010	.0075	.0025	.110	.150	.219	.510	●	.0020-.0031
ING3M150R/LCB	.059	.0010	.0075	.0025	.120	.195	.344	.890	●	.0019-.0031
ING2062R/LCB	.062	.0010	.0075	.0025	.110	.150	.219	.514	●	.0019-.0031
ING3062R/LCB	.062	.0010	.0075	.0025	.120	.195	.344	.890	●	.0019-.0031
ING3M175R/LCB	.069	.0010	.0075	.0025	.120	.195	.344	.890	●	.0019-.0035
ING3072R/LCB	.072	.0010	.0075	.0025	.120	.195	.344	.890	●	.0019-.0035
ING3078R/LCB	.078	.0010	.0075	.0025	.120	.195	.344	.890	●	.0019-.0039
ING2M200R/LCB	.079	.0010	.0075	.0025	.110	.150	.219	.510	●	.0020-.0039
ING3M200R/LCB	.079	.0010	.0075	.0025	.120	.195	.344	.890	●	.0019-.0039
ING2094R/LCB	.094	.0010	.0075	.0025	.110	.150	.219	.514	●	.0023-.0039
ING3094R/LCB	.094	.0010	.0075	.0025	.180	.195	.344	.890	●	.0023-.0039
ING3M250R/LCB	.098	.0010	.0075	.0025	.180	.195	.344	.890	●	.0023-.0039
ING3M300R/LCB	.118	.0010	.0075	.0025	.180	.195	.344	.890	●	.0035-.0055
ING2125R/LCB	.125	.0010	.0075	.0025	.110	.150	.219	.514	●	.0035-.0055
ING3125R/LCB	.125	.0010	.0075	.0025	.180	.195	.344	.890	●	.0035-.0055
ING4125R/LCB	.125	.0010	.0075	.0025	.250	.255	.453	1.120	●	.0035-.0055
ING3M400R/LCB	.157	.0010	.0126	.0025	.180	.195	.344	.890	●	.0047-.0079
ING3189R/LCB	.189	.0010	.0224	.0025	.180	.195	.344	.890	●	.0047-.0087
ING4189R/LCB	.189	.0010	.0224	.0025	.250	.255	.453	1.120	●	.0047-.0087
ING4250R/LCB	.250	.0010	.0224	.0025	.250	.255	.453	1.120	●	.0047-.0098

• DMIN according to related boring bar

<sup>(1)</sup> Cutting width tolerance (+/-)

<sup>(2)</sup> Corner radius tolerance (+/-)



Designation	Dimensions									Tough ↔ Hard		Recommended Machining Data  f groove (IPR)
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	GAN	BW	S	INSL	IC808	IC807	
INGP2031R/L	.031	.0010	.0035	.0012	.050	5	.150	.219	.514		●	.0008-.0016
ING2031R/L	.031	.0010	.0035	.0012	.050	0	.150	.219	.514		●	.0008-.0016
ING2041R/L	.041	.0010	.0035	.0012	.050	0	.150	.219	.514		●	.0012-.0020
ING2047R/L	.047	.0010	.0035	.0012	.050	0	.150	.219	.514		●	.0012-.0020
INGP2062R/L	.062	.0010	.0075	.0025	.110	5	.150	.219	.514		●	.0016-.0024
ING2062R/L	.062	.0010	.0075	.0025	.110	0	.150	.219	.514		●	.0016-.0024
ING2094R/L	.094	.0010	.0075	.0025	.110	0	.150	.219	.514		●	.0020-.0031
ING2125R/L	.125	.0010	.0075	.0025	.110	0	.150	.219	.514		●	.0031-.0047
ING3031R/L	.031	.0010	.0035	.0012	.050	0	.195	.344	.890	●		.0008-.0016
INGP3047R/L	.047	.0010	.0075	.0025	.075	5	.195	.344	.890		●	.0012-.0020
ING3047R/L	.047	.0010	.0075	.0025	.075	0	.195	.344	.890	●		.0012-.0020
ING3058R/L	.058	.0010	.0075	.0025	.094	0	.195	.344	.890	●		.0012-.0020
INGP3062R/L	.062	.0010	.0075	.0025	.120	5	.195	.344	.890		●	.0016-.0024
ING3062R/L	.062	.0010	.0075	.0025	.094	0	.195	.344	.890	●		.0016-.0024
ING3072R/L	.072	.0010	.0075	.0025	.094	0	.195	.344	.890	●		.0016-.0031
ING3078R/L	.078	.0010	.0075	.0025	.094	0	.195	.344	.890	●		.0016-.0035
ING3088R/L	.088	.0010	.0075	.0025	.094	0	.195	.344	.890	●		.0020-.0035
INGP3094R/L	.094	.0010	.0075	.0025	.180	5	.195	.344	.890		●	.0020-.0031
ING3094R/L	.094	.0010	.0075	.0025	.150	0	.195	.344	.890	●		.0020-.0035
ING3097R/L	.097	.0010	.0125	.0025	.150	0	.195	.344	.890	●		.0024-.0039
ING3105R/L	.105	.0010	.0075	.0025	.150	0	.195	.344	.890	●		.0027-.0043
ING3110R/L	.110	.0010	.0125	.0025	.150	0	.195	.344	.890	●		.0027-.0043
ING3122R/L	.122	.0010	.0075	.0025	.150	0	.195	.344	.890	●		.0027-.0047
INGP3125R/L	.125	.0010	.0075	.0025	.180	5	.195	.344	.890		●	.0031-.0047
ING3125R/L	.125	.0010	.0075	.0025	.150	0	.195	.344	.890	●		.0031-.0051
ING3142R/L	.142	.0010	.0125	.0025	.150	0	.195	.344	.890	●		.0035-.0059
ING3156R/L	.156	.0010	.0075	.0025	.150	0	.195	.344	.890	●		.0039-.0079
ING3178R/L	.178	.0010	.0075	.0025	.150	0	.195	.344	.890	●		.0043-.0083
ING3185R/L	.185	.0010	.0224	.0025	.150	0	.195	.344	.890	●		.0043-.0087
ING3189R/L	.189	.0010	.0224	.0025	.150	0	.195	.344	.890	●		.0043-.0087
ING4125R/L	.125	.0010	.0075	.0025	.250	0	.255	.453	1.120		●	.0031-.0047
ING4189R/L	.189	.0010	.0224	.0025	.250	0	.255	.453	1.120		●	.0039-.0079
ING4250R/L	.250	.0010	.0224	.0025	.250	0	.255	.453	1.120		●	.0039-.0087

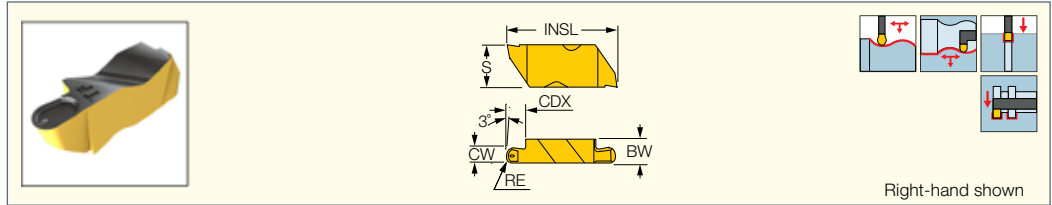
• DMIN according to related boring bar

<sup>(1)</sup> Cutting width tolerance (+/-)

<sup>(2)</sup> Corner radius tolerance (+/-)



**INR-RCB/LCB**  
Precision, Double-Ended  
Full Radius Grooving Inserts  
with a Chipformer



Right-hand shown

Designation	Dimensions									IC807	Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	BW	S	INSL	f groove (IPR)		
<b>INR3062R/LCB</b>	.125	.0010	.0625	.0025	.180	.195	.344	.890		●	.0027-.0047

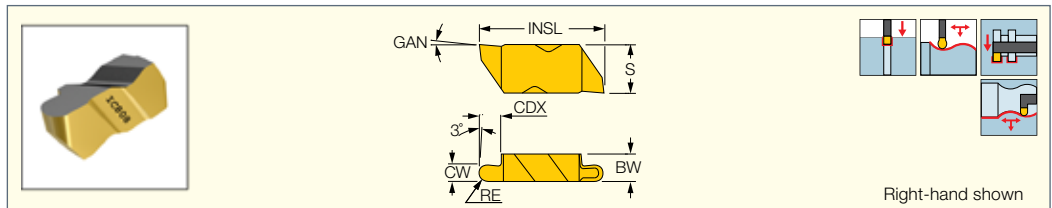
• DMIN according to related boring bar

<sup>(1)</sup> Cutting width tolerance (+/-)

<sup>(2)</sup> Corner radius tolerance (+/-)



**INR/INRP-R/L**  
Precision Double-Ended Flat  
Top Round Grooving Inserts



Right-hand shown

Designation	Dimensions									Tough ↔ Hard		Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	BW	S	INSL	GAN	IC808	IC807	f groove (IPR)
<b>INR2031R/L</b>	.062	.0010	.0307	.0025	.110	.150	.219	.514	0		●	.0012-.0020
<b>INRP3031R/L</b>	.062	.0010	.0307	.0025	.125	.195	.344	.890	5		●	.0012-.0020
<b>INR3031R/L</b>	.062	.0010	.0311	.0025	.125	.195	.344	.890	0	●		.0016-.0031
<b>INR2047R/L</b>	.094	.0010	.0469	.0025	.110	.150	.219	.514	0		●	.0016-.0027
<b>INRP3047R/L</b>	.094	.0010	.0469	.0025	.180	.195	.344	.890	5		●	.0016-.0027
<b>INR3047R/L</b>	.094	.0010	.0469	.0025	.150	.195	.344	.890	0	●		.0024-.0047
<b>INRP3062R/L</b>	.125	.0010	.0618	.0025	.180	.195	.344	.890	5		●	.0027-.0043
<b>INR3062R/L</b>	.125	.0010	.0626	.0025	.150	.195	.344	.890	0	●		.0031-.0063
<b>INR3078R/L</b>	.156	.0010	.0780	.0025	.150	.195	.344	.890	0	●		.0039-.0079
<b>INR3094R/L</b>	.188	.0010	.0941	.0025	.150	.195	.344	.890	0	●		.0047-.0087
<b>INR4125R/L</b>	.250	.0010	.1252	.0025	.250	.255	.453	1.120	0		●	.0039-.0087

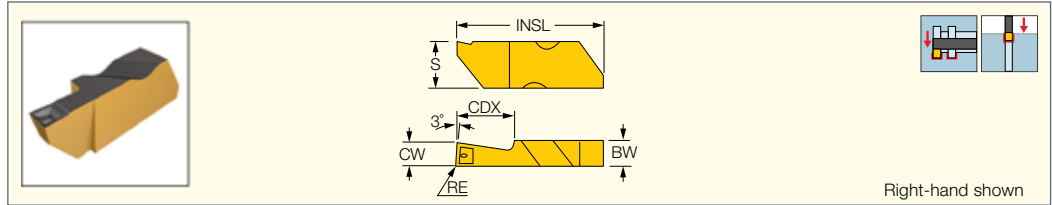
• DMIN according to related boring bar

<sup>(1)</sup> Cutting width tolerance (+/-)

<sup>(2)</sup> Corner radius tolerance (+/-)

**NOTCH-GRIP**  
GROOVE-TURN LINE

**INGD-RCB/LCB**  
Precision, Single-Ended  
Deep Grooving Inserts  
with a Chipformer



Right-hand shown

Designation	Dimensions								IC807	Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	BW	S	INSL		f groove (IPR)
INGD3094R/LCB	.094	.0010	.0075	.0025	.250	.195	.344	.990	●	.0024-.0039
INGD3125R/LCB	.125	.0010	.0075	.0025	.250	.195	.344	.990	●	.0035-.0055

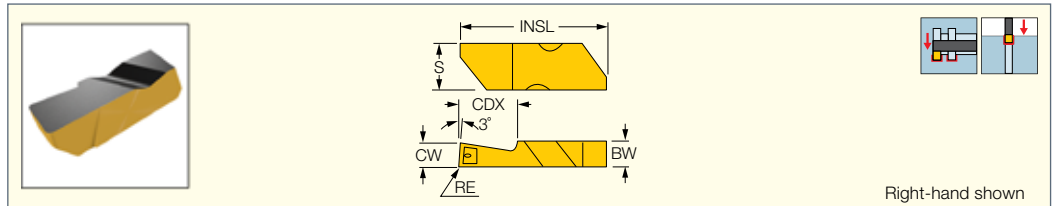
• DMIN according to related boring bar

<sup>(1)</sup> Cutting width tolerance (+/-)

<sup>(2)</sup> Corner radius tolerance (+/-)

**NOTCH-GRIP**  
GROOVE-TURN LINE

**INGD-R/L**  
Precision, Single-Ended Flat  
Top Deep Grooving Inserts



Right-hand shown

Designation	Dimensions								IC807	Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	BW	S	INSL		f groove (IPR)
INGD3062R/L	.062	.0010	.0075	.0025	.120	.195	.344	.990	●	.0015-.0024
INGD3094R/L	.094	.0010	.0075	.0025	.250	.195	.344	.990	●	.0019-.0031
INGD3125R/L	.125	.0010	.0075	.0025	.250	.195	.344	.990	●	.0031-.0047
INGD3189R/L	.189	.0010	.0224	.0025	.250	.195	.344	.990	●	.0039-.0079

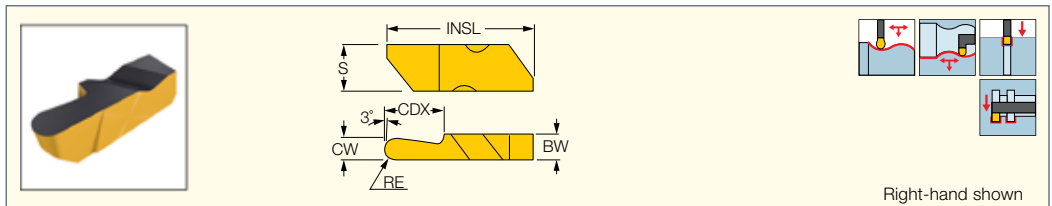
• DMIN according to related boring bar

<sup>(1)</sup> Cutting width tolerance (+/-)

<sup>(2)</sup> Corner radius tolerance (+/-)

**NOTCH-GRIP**  
GROOVE-TURN LINE

**INRD-R/L**  
Precision, Single-Ended  
Full Radius Deep Grooving  
Inserts with a Flat Rake



Right-hand shown

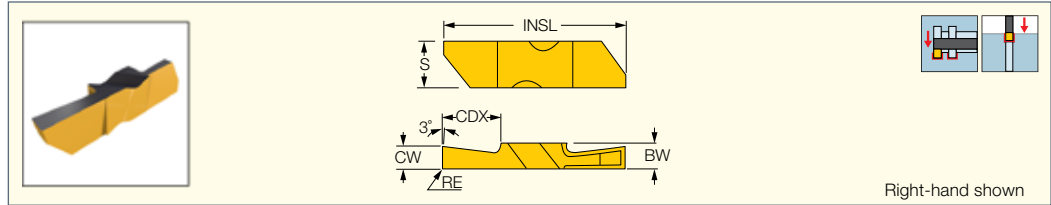
Designation	Dimensions								IC807	Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	BW	S	INSL		f groove (IPR)
INRD3062R/L	.125	.0010	.0618	.0025	.250	.195	.344	.990	●	.0027-.0043

<sup>(1)</sup> Cutting width tolerance (+/-)

<sup>(2)</sup> Corner radius tolerance (+/-)



**INGT-R/L**  
Precision, Double-Ended Flat Top Deep Grooving Inserts



Right-hand shown

Designation	Dimensions									IC807	Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	BW	S	INSL	f groove (IPR)		
<b>INGT3094R/L</b>	.094	.0010	.0075	.0025	.275	.195	.344	1.370		●	.0020-.0031
<b>INGT3125R/L</b>	.125	.0010	.0075	.0025	.437	.195	.344	1.370		●	.0031-.0047

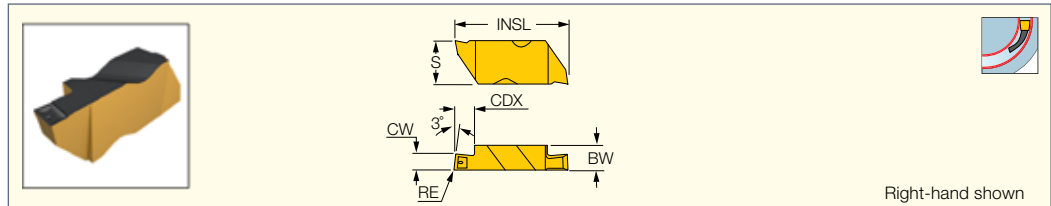
• DMIN according to related boring bar

<sup>(1)</sup> Cutting width tolerance (+/-)

<sup>(2)</sup> Corner radius tolerance (+/-)



**INF-RCB/LCB**  
Precision, Double-Ended Face Grooving Inserts with a Chipformer



Right-hand shown

Designation	Dimensions									IC807	Recommended Machining Data	
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	DAXN <sup>(3)</sup>	BW	S	INSL		f face-groove (IPR)	
<b>INF3125R/LCB</b>	.125	.0010	.0075	.0025	.180	.94	.195	.344	.890		●	.0035-.0055

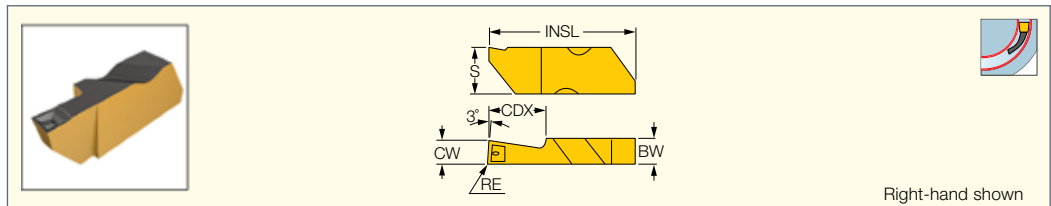
<sup>(1)</sup> Cutting width tolerance (+/-)

<sup>(2)</sup> Corner radius tolerance (+/-)

<sup>(3)</sup> Minimum axial grooving diameter



**INF-D-RCB/LCB**  
Precision, Single-Ended Deep Face Grooving Inserts with a Chipformer



Right-hand shown

Designation	Dimensions									IC807	Recommended Machining Data	
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	DAXN <sup>(3)</sup>	BW	S	INSL		f face-groove (IPR)	
<b>INF-D3125R/LCB</b>	.125	.0010	.0075	.0025	.250	1.87	.195	.344	.990		●	.0035-.0055

<sup>(1)</sup> Cutting width tolerance (+/-)

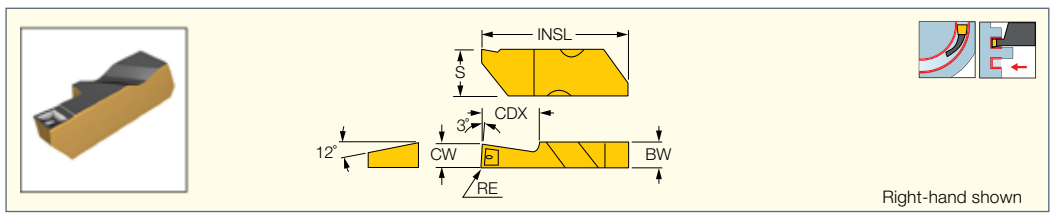
<sup>(2)</sup> Corner radius tolerance (+/-)

<sup>(3)</sup> Minimum axial grooving diameter

For tools, see pages: A-FLER/L ( ) • FLASR/L (20) • FLRSR/L (19) • H-FLER (21) • HS-FLER (22)



**INF D-RCB/LCB-I**  
Precision, Single-Ended  
Deep Face Grooving Inserts  
with a Chipformer



Right-hand shown

Designation	Dimensions									IC807	Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	DAXN <sup>(3)</sup>	BW	S	INSL		f face-groove (IPR)
<b>INF D3125R/LCB-I</b>	.125	.0010	.0075	.0025	.250	1.87	.195	.344	.990	●	.0035-.0055

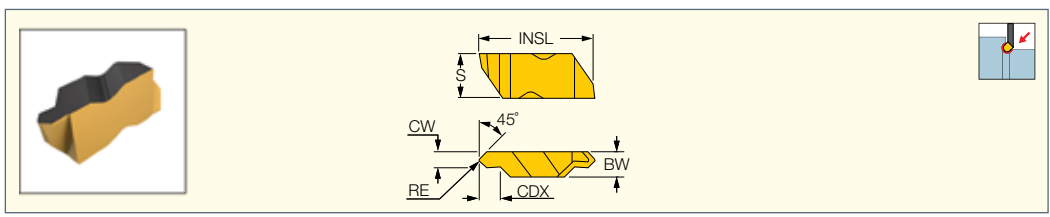
<sup>(1)</sup> Cutting width tolerance (+/-)  
<sup>(2)</sup> Corner radius tolerance (+/-)  
<sup>(3)</sup> Minimum axial grooving diameter

For tools, see pages: A-FLER/L ( ) • FLASR/L (20) • FLRSR/L (19) • H-FLER (21) • HS-FLER (22)

## UNDERCUTTING INSERTS



**INU-R/L**  
Precision Double-Ended Flat Top  
Inserts for External Undercutting



Designation	Dimensions								IC807	Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	BW	S	INSL		f groove (IPR)
<b>INU3094R/L</b>	.094	.0010	.0201	.0025	.125	.195	.344	.890	●	.0020-.0031

• Not recommended for turning • DMIN according to related boring bar  
<sup>(1)</sup> Cutting width tolerance (+/-)  
<sup>(2)</sup> Corner radius tolerance (+/-)



## Grooving/Threading Insert Identification Chart

1. Insert Style		2. Additional Info		3. Insert Size		
A	– Acme	D	Deep Grooving	Size	Inch	Metric
B	– Blank	F	– Fine Pitch	2	.150	3,81
C	– API Thread	K	– Fine Pos Rake	3	.195	4,95
D	– API Thread	P	– Positive Rake	4	.255	6,48
F	– Face grooving	T	– Double Ended	5	.380	9,65
G	– Grooving			6	.383	9,73
J	– UNJ Thread					
R	– Full Radius					
T	– 60° Thread					
U	– Undercut					
V	– Poly Vee					

4. Metric Size
Used to indicate metric groovers



5. Insert Width	6. Hand of Insert	7. Coarse
Inch/Metric sizes Example: Inch: .125 = 125 Metric: 1,50 = 150	L .125 = 125 R 1,50 = 150	Used to indicate coarse pitch threaders only

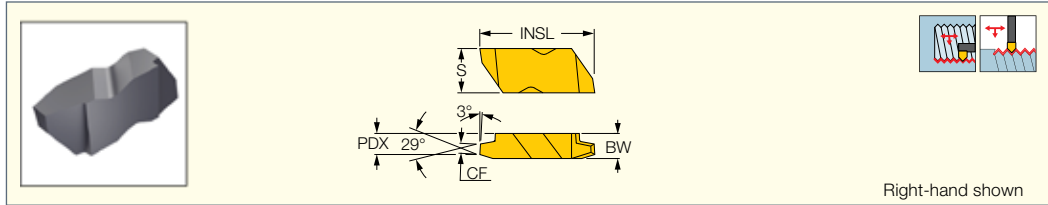
8. Chipbreaker Style
Threading: FCB Ultra Fine CB Fine HCB General Purpose
Grooving: CB General Purpose

9. Grade
IC908

**ISCAR THREAD**

**ACME THREADING FLA**  
Double-Ended Precision Flat  
Top Threading Inserts



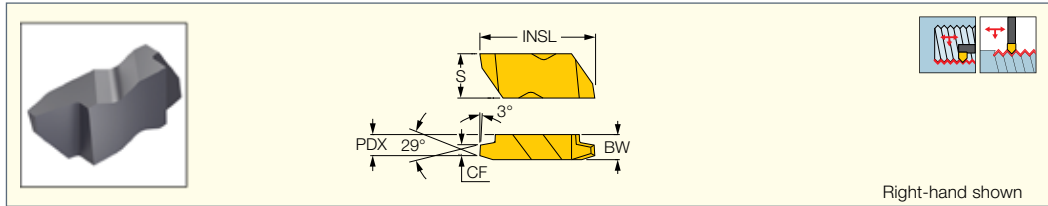
Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	CF	PDX	BW	S	INSL	
FLA-6R/L2	2.0	.180	.2835	.383	.453	1.120	●
FLA-6R/L2.5	2.5	.143	.2835	.383	.453	1.120	●
FLA-6R/L3	3.0	.118	.2835	.383	.453	1.120	●
FLA-3R/L4	4.0	.087	.1339	.195	.344	.890	●
FLA-4R/L4	4.0	.087	.2008	.255	.453	1.120	●
FLA-3R/L5	5.0	.069	.1496	.195	.344	.890	●
FLA-4R/L5	5.0	.069	.2008	.255	.453	1.120	●
FLA-3R/L6	6.0	.057	.1496	.195	.344	.890	●
FLA-4R/L6	6.0	.057	.2008	.255	.453	1.120	●
FLA-3R/L8	8.0	.041	.1496	.195	.344	.890	●
FLA-4R/L8	8.0	.041	.2008	.255	.453	1.120	●
FLA-3R/L10	10.0	.032	.1496	.195	.344	.890	●
FLA-3R/L12	12.0	.028	.1496	.195	.344	.890	●
FLA-3R/L14	14.0	.024	.1496	.195	.344	.890	●
FLA-3R/L16	16.0	.020	.1496	.195	.344	.890	●

• For ACME thread limits, see page 10  
• DMIN according to related boring bar  
<sup>(1)</sup> Threads per inch

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**ACME THREADING FLAS**  
Double-Ended Precision Flat  
Top Threading Inserts



Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	CF	PDX	BW	S	INSL	
FLAS-6R/L2	2.0	.206	.2835	.383	.453	1.120	●
FLAS-4R/L3	3.0	.135	.2008	.255	.453	1.120	●
FLAS-3L4	4.0	.100	.1496	.195	.344	.890	●
FLAS-3R/L5	5.0	.079	.1496	.195	.344	.890	●
FLAS-3R/L6	6.0	.065	.1496	.195	.344	.890	●
FLAS-3R/L8	8.0	.048	.1496	.195	.344	.890	●
FLAS-3R/L10	10.0	.037	.1496	.195	.344	.890	●
FLAS-3R/L12	12.0	.033	.1496	.195	.344	.890	●
FLAS-3R/L14	14.0	.028	.1496	.195	.344	.890	●
FLAS-3R/L16	16.0	.024	.1496	.195	.344	.890	●

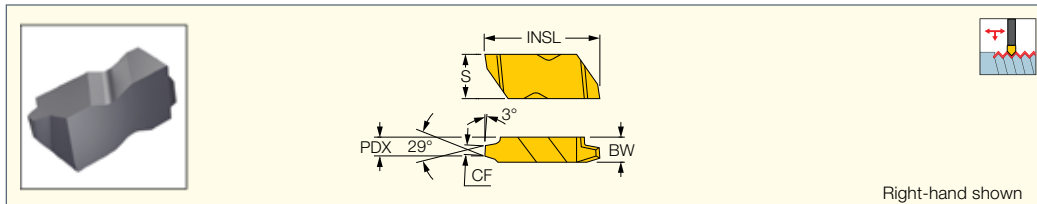
• DMIN according to related boring bar  
<sup>(1)</sup> Threads per inch

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**ACME THREADING FLA-PT-E**

Double-Ended Precision Flat Top External Threading Inserts



Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	CF	PDX	BW	S	INSL	
FLA-3R4-PT-E	4.0	.087	.1339	.195	.344	.890	●
FLA-3R5-PT-E	5.0	.069	.1496	.195	.344	.890	●
FLA-3R6-PT-E	6.0	.057	.1496	.195	.344	.890	●
FLA-3R8-PT-E	8.0	.041	.1496	.195	.344	.890	●
FLA-3R10-PT-E	10.0	.032	.1496	.195	.344	.890	●
FLA-3R12-PT-E	12.0	.028	.1496	.195	.344	.890	●
FLA-3R14-PT-E	14.0	.024	.1496	.195	.344	.890	●
FLA-3R16-PT-E	16.0	.020	.1496	.195	.344	.890	●
FLA-4R4-PT-E	4.0	.087	.2008	.255	.453	1.120	●
FLA-4R5-PT-E	5.0	.069	.2008	.255	.453	1.120	●
FLA-4R6-PT-E	6.0	.057	.2008	.255	.453	1.120	●
FLA-4R8-PT-E	8.0	.041	.2008	.255	.453	1.120	●
FLA-6R2-T-E	2.0	.180	.2835	.383	.453	1.120	●
FLA-6R2.5-PT-E	2.5	.143	.2835	.383	.453	1.120	●
FLA-6R3-PT-E	3.0	.118	.2835	.383	.453	1.120	●

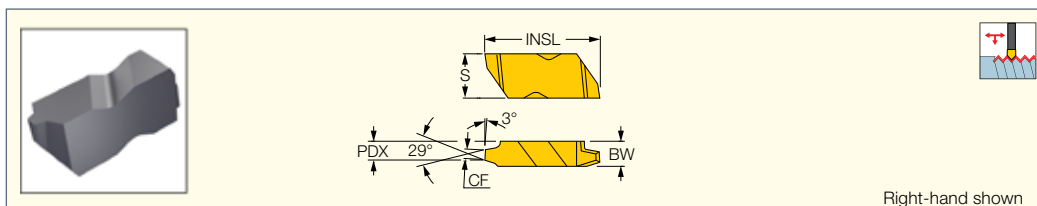
<sup>(1)</sup> Threads per inch

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**STUB ACME THREADING FLAS-PT-E**

Double-Ended Precision Flat Top External Threading Inserts



Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	CF	PDX	BW	S	INSL	
FLAS-3R4-PT-E	4.0	.100	.1496	.195	.344	.890	●
FLAS-3R5-PT-E	5.0	.079	.1496	.195	.344	.890	●
FLAS-3R6-PT-E	6.0	.065	.1496	.195	.344	.890	●
FLAS-3R8-PT-E	8.0	.048	.1496	.195	.344	.890	●
FLAS-3R10-PT-E	10.0	.037	.1496	.195	.344	.890	●
FLAS-3R12-PT-E	12.0	.033	.1496	.195	.344	.890	●
FLAS-3R14-PT-E	14.0	.028	.1496	.195	.344	.890	●
FLAS-3R16-PT-E	16.0	.024	.1496	.195	.344	.890	●
FLAS-4R3-PT-E	3.0	.136	.2008	.255	.453	1.120	●
FLAS-6R2-PT-E	2.0	.206	.2835	.383	.453	1.120	●

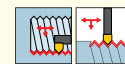
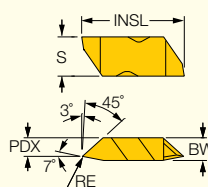
<sup>(1)</sup> Threads per inch

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**AMERICAN STANDARD BUTTRESS THREADING FLT-B-A**

Double-Ended Precision Flat Top Threading Inserts for 7° Lead



Right-hand shown

Dimensions								IC908
Designation	TPIN <sup>(1)</sup>	TPIX <sup>(2)</sup>	RE	PDX	BW	S	INSL	
FLT-B-4R/LA	4.00	6.00	.0080	.2047	.255	.453	1.120	●
FLT-B-3R/LA	8.00	16.00	.0050	.1654	.195	.344	.890	●
FLT-B-2R/LA	16.00	20.00	.0020	.1260	.150	.219	.514	●

• For user guide, see page • DMIN according to related boring bar

<sup>(1)</sup> TPI min.

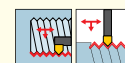
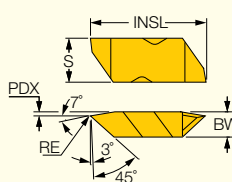
<sup>(2)</sup> TPI max.

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**AMERICAN STANDARD BUTTRESS THREADING FLT-B-B**

Double-Ended Precision Flat Top Threading Inserts for 45° Lead



Left-hand shown

Dimensions								IC908
Designation	TPIN <sup>(1)</sup>	TPIX <sup>(2)</sup>	RE	PDX	BW	S	INSL	
FLT-B-4R/LB	4.00	6.00	.0080	.0157	.255	.453	1.120	●
FLT-B-3R/LB	8.00	16.00	.0050	.0118	.195	.344	.890	●
FLT-B-2R/LB	16.00	20.00	.0020	.0118	.150	.219	.514	●

• For user guide, see page • DMIN according to related boring bar

<sup>(1)</sup> TPI min.

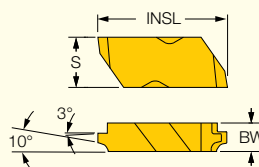
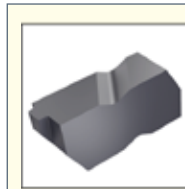
<sup>(2)</sup> TPI max.

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**API BUTTRESS THREADING FLDC-B-E**

Double-Ended Precision Flat Top Threading Inserts



Right-hand shown

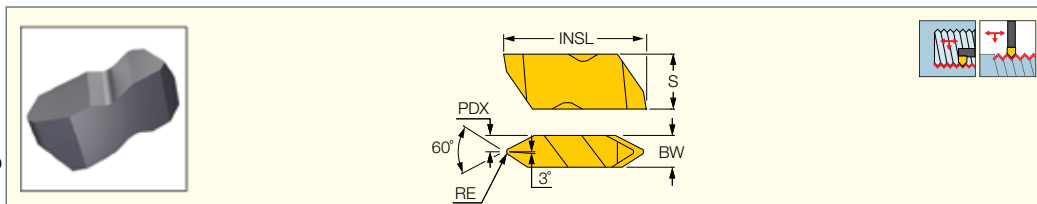
Dimensions						IC908
Designation	TPI <sup>(1)</sup>	IPF <sup>(2)</sup>	BW	S	INSL	
FLDC-3-5B1E	5.0	1	.250	.344	.890	●
FLDC-4-5B1E	5.0	1	.255	.453	1.120	●
FLDC-3-5B75E	5.0	3/4	.250	.344	.890	●
FLDC-4-5B75E	5.0	3/4	.255	.453	1.120	●

<sup>(1)</sup> Threads per inch

<sup>(2)</sup> Taper Per Foot (TPF) or Inch Per Foot (IPF)

**NOTCH GRIP**  
GROOVE-TURN LINE  
**ISCARTHREAD**

**API PARTIAL PROFILE THREADING FLD**  
Double-Ended, Precision, Flat Top Partial Profile Threading Inserts



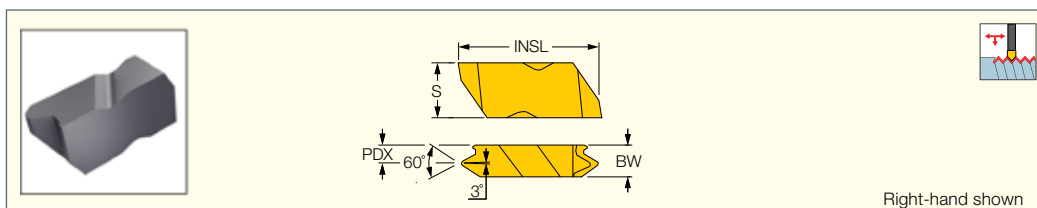
Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	RE	PDX	BW	S	INSL	
FLD-4050R/L	4.0	.0201	.1280	.255	.453	1.120	●
FLD-3038R/L	4.0	.0331	.0819	.195	.344	.890	●
FLD-4038R/L	4.0	.0331	.1280	.255	.453	1.120	●
FLD-3040R/L	5.0	.0150	.0819	.195	.344	.890	●
FLD-4040R/L	5.0	.0150	.1280	.255	.453	1.120	●

• DMIN according to related boring bar

<sup>(1)</sup> Threads per inch

**NOTCH GRIP**  
GROOVE-TURN LINE  
**ISCARTHREAD**

**API THREADING FLDC-E**  
Double-Ended Precision Flat Top Threading Inserts

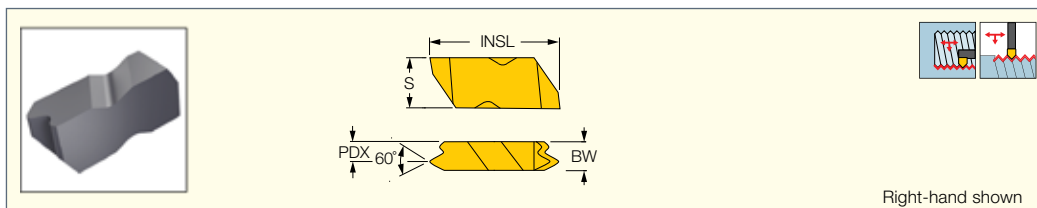


Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	IPF	PDX	BW	S	INSL	
FLDC-4-425E	4.0	2	.1831	.312	.453	1.120	●
FLDC-4-428E	4.0	2	.1831	.312	.453	1.120	●
FLDC-4-435E	4.0	3	.1831	.312	.453	1.120	●
FLDC-4-438E	4.0	3	.1831	.312	.453	1.120	●
FLDC-3-530E	5.0	3	.1469	.250	.344	.890	●

<sup>(1)</sup> Threads per inch

**NOTCH GRIP**  
GROOVE-TURN LINE  
**ISCARTHREAD**

**API ROUND THREADING FLDC-RD-75**  
Double-Ended Precision Flat Top Threading Inserts



Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	IPF	PDX	BW	S	INSL	
FLDC-3-8RDR/L75	8.0	3/4	.1969	.125	.344	.890	●
FLDC-3-10RDR/L75	10.0	3/4	.1969	.125	.344	.890	●

• DMIN according to related boring bar

<sup>(1)</sup> Threads per inch

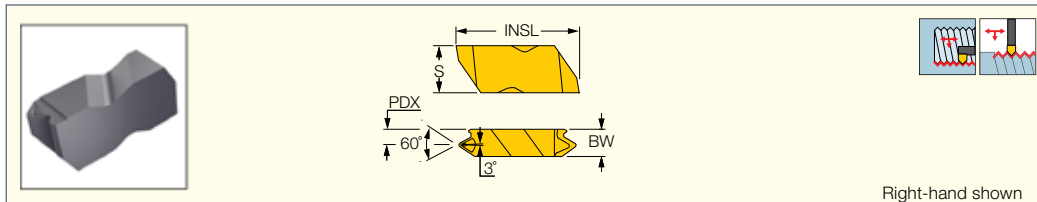
**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**API ROUND THREADING**

**FLDC-RD-75-CB**

Double-Ended, Precision Threading Inserts with a Chipbreaker



Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	IPF	PDX	BW	S	INSL	
<b>FLDC-3-8RDR/L75-CB</b>	8.0	3/4	.1950	.125	.344	.990	●

• DMIN according to related boring bar  
(1) Threads per inch

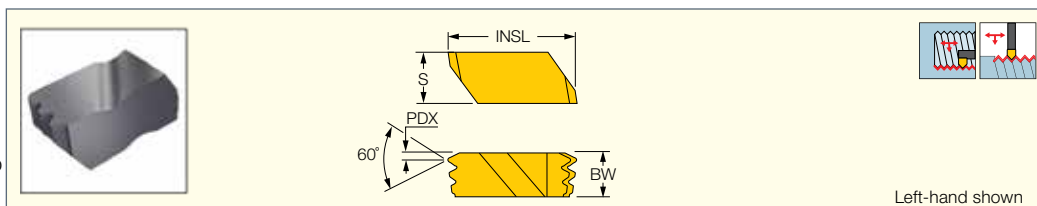
**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**API ROUND THREADING**

**FLDC-RD-75M**

Double-Ended, Precision, Flat Top Multi-Tooth Threading Inserts



Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	IPF	PDX	BW	S	INSL	
<b>FLDC-6-8RDR75</b>	8.0	3/4	.0709	.383	.453	1.120	●
<b>FLDC-6-10RDR75</b>	10.0	3/4	.1339	.383	.453	1.120	●

• DMIN according to related boring bar  
(1) Threads per inch

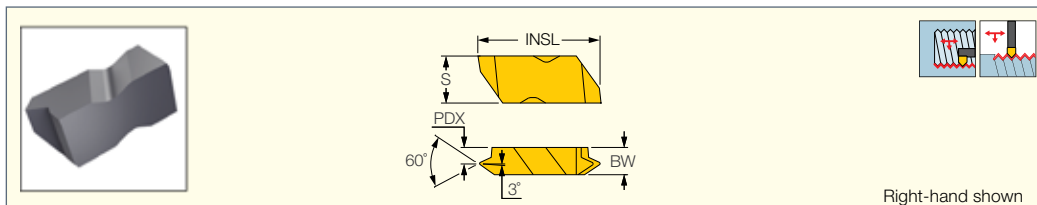
**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**NPT THREADING**

**FLDC-V-75**

Double-Ended Precision Flat Top Threading Inserts



Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	IPF	PDX	BW	S	INSL	
<b>FLDC-3-8VR/L75</b>	8.0	3/4	.0984	.195	.344	.890	●
<b>FLDC-3-115VR/L75</b>	11.5	3/4	.1457	.195	.344	.890	●
<b>FLDC-3-14VR/L-75</b>	14.0	3/4	.1496	.195	.344	.890	●
<b>FLDC-3-18VR/L-75</b>	18.0	3/4	.1535	.195	.344	.890	●
<b>FLDC-3-27VR/L-75</b>	27.0	3/4	.1614	.195	.344	.890	●

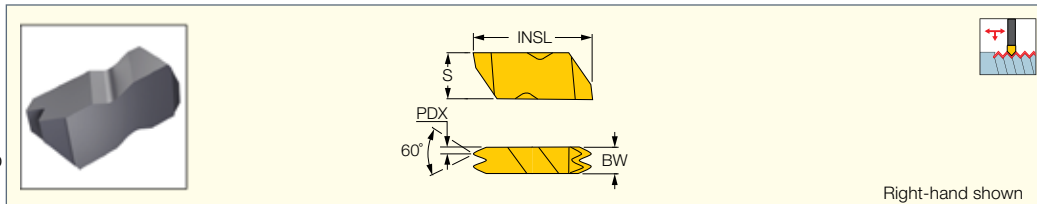
• DMIN according to related boring bar  
(1) Threads per inch

**NOTCHGRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**NPT THREADING FLDC-NPT-E**

Double-Ended, Precision, Flat Top Multi-Tooth Threading Inserts



Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	IPF	PDX	BW	S	INSL	
FLDC-3-8NPT 2E	8.0	3/4	.0590	.250	.344	.890	•
FLDC-3-11.5NPT-2E	11.5	3/4	.0472	.250	.344	.890	•

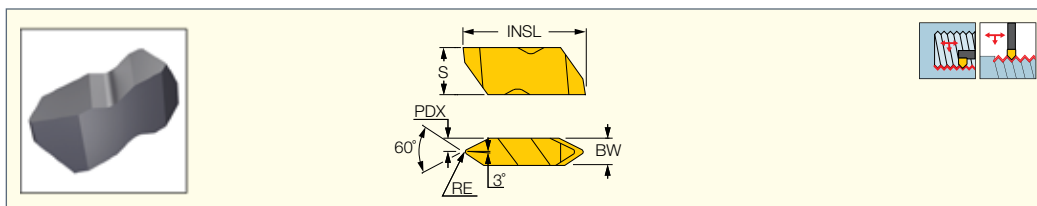
<sup>(1)</sup> Threads per inch

**NOTCHGRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**UNJ THREADING FLJ**

Double-Ended Precision Flat Top Threading Inserts



Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	RE	PDX	BW	S	INSL	
FLJ-3020R/L8	8.0	.0189	.0980	.195	.344	.890	•
FLJ-3014R/L12	12.0	.0126	.0980	.195	.344	.890	•
FLJ-3010R/L16	16.0	.0094	.0980	.195	.344	.890	•

• DMIN according to related boring bar

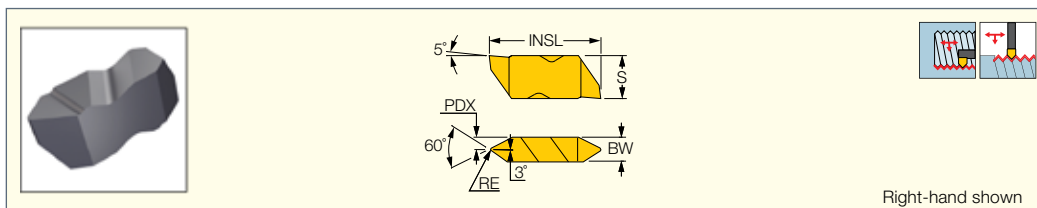
<sup>(1)</sup> Threads per inch

**NOTCHGRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**UNJ THREADING FLJP**

Double-Ended, Precision Threading Inserts with a Positive Rake



Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	RE	PDX	BW	S	INSL	
FLJP-3020R/L8	8.0	.0189	.0984	.195	.344	.890	•
FLJP-3014R/L12	12.0	.0126	.0984	.195	.344	.890	•
FLJP-3010R/L16	16.0	.0094	.0984	.195	.344	.890	•

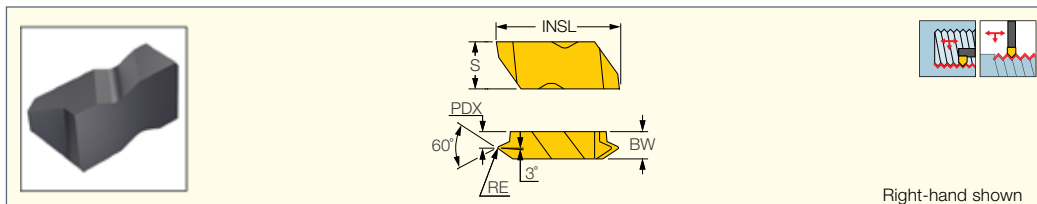
• DMIN according to related boring bar

<sup>(1)</sup> Threads per inch

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**UNJ THREADING FLJF**  
Double-Ended, Precision  
Flat Top Threading Inserts



Right-hand shown

Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	RE	PDX	BW	S	INSL	
FLJF-3012R/L14	14.0	.0106	.1409	.195	.344	.890	●
FLJF-3010R/L16	16.0	.0094	.1417	.195	.344	.890	●
FLJF-3009R/L18	18.0	.0083	.1417	.195	.344	.890	●
FLJF-3008R/L20	20.0	.0075	.1417	.195	.344	.890	●
FLJF-3007R/L24	24.0	.0063	.1417	.195	.344	.890	●
FLJF-3006R/L28	28.0	.0055	.1417	.195	.344	.890	●
FLJF-3005R/L32	32.0	.0047	.1417	.195	.344	.890	●

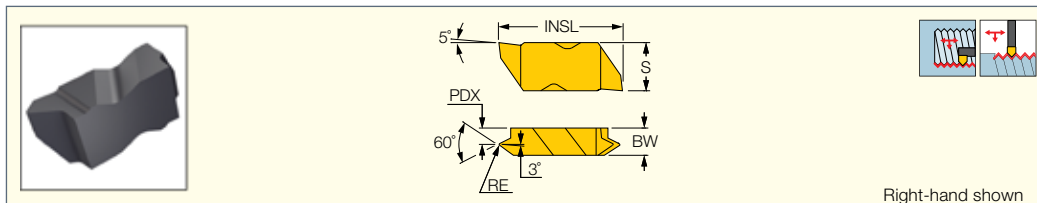
• DMIN according to related boring bar

<sup>(1)</sup> Threads per inch

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**UNJ THREADING FLJK**  
Double-Ended, Precision  
Threading Inserts, with  
a Positive Rake



Right-hand shown

Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	RE	PDX	BW	S	INSL	
FLJK-3012R/L14	14.0	.0106	.1409	.195	.344	.890	●
FLJK-3010R/L16	16.0	.0094	.1417	.195	.344	.890	●
FLJK-3009R/L18	18.0	.0083	.1417	.195	.344	.890	●
FLJK-3008R/L20	20.0	.0075	.1417	.195	.344	.890	●
FLJK-3007R/L24	24.0	.0063	.1417	.195	.344	.890	●
FLJK-3006R/L28	28.0	.0055	.1417	.195	.344	.890	●
FLJK-3005R/L32	32.0	.0047	.1417	.195	.344	.890	●

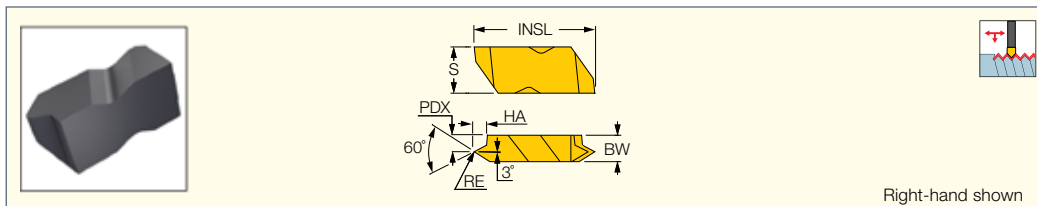
• DMIN according to related boring bar

<sup>(1)</sup> Threads per inch



**NOTCHGRIP**  
GROOVE-TURN LINE  
**ISCARTHREAD**

**UN THREADING FLTC-E**  
Double-Ended, Precision, Flat  
Top Full Profile Threading Inserts

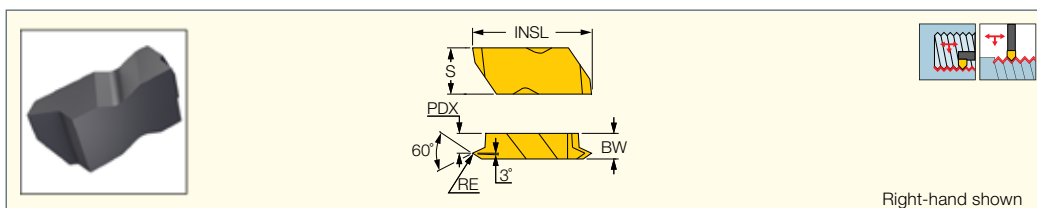


Designation	Dimensions								IC908
	TPI <sup>(1)</sup>	RE	HA	PDX	BW	S	INSL		
FLTC-3R/L7E	7.0	.0169	.108	.1063	.195	.344	.890	●	
FLTC-3R/L8E	8.0	.0150	.094	.1063	.195	.344	.890	●	
FLTC-3R/L9E	9.0	.0130	.084	.1063	.195	.344	.890	●	
FLTC-3R/L10E	10.0	.0118	.076	.1063	.195	.344	.890	●	
FLTC-3R/L11E	11.0	.0110	.069	.1063	.195	.344	.890	●	
FLTC-3R/L12E	12.0	.0098	.051	.1496	.195	.344	.890	●	
FLTC-3R/L14E	14.0	.0091	.054	.1496	.195	.344	.890	●	
FLTC-3R/L16E	16.0	.0079	.046	.1496	.195	.344	.890	●	
FLTC-3R/L18E	18.0	.0071	.041	.1496	.195	.344	.890	●	
FLTC-3R/L20E	20.0	.0059	.037	.1496	.195	.344	.890	●	
FLTC-3R/L24E	24.0	.0051	.031	.1496	.195	.344	.890	●	
FLTC-3R/L28E	28.0	.0031	.023	.1496	.195	.344	.890	●	
FLTC-3R/L32E	32.0	.0031	.021	.1496	.195	.344	.890	●	

<sup>(1)</sup> Threads per inch

**NOTCHGRIP**  
GROOVE-TURN LINE  
**ISCARTHREAD**

**60° PARTIAL PROFILE  
THREADING FLTF**  
Double-Ended, Precision  
Flat Top Threading Inserts



Designation	Dimensions										IC908	
	TPIN <sup>(1)</sup>	TPIX <sup>(2)</sup>	TPIN_DF2 <sup>(3)</sup>	TPIX_DF2 <sup>(4)</sup>	RE	PDX	BW	S	INSL	TPN_DF2		TPX_DF2
FLTF-3R/L	9.00	24.00	10.00	44.00	.0030	.1417	.195	.344	.890	2.500	1.750	●
FLTF-4R/L	9.00	24.00	10.00	44.00	.0030	.2008	.255	.453	1.120	2.500	1.750	●
FLTF-2R/L	12.00	24.00	14.00	44.00	.0030	.1102	.150	.219	.514	.600	1.750	●

• For 60° V-thread limits, see page • DMIN according to related boring bar

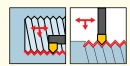
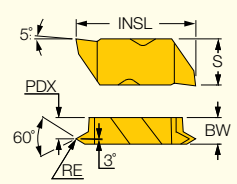
- <sup>(1)</sup> TPI int. min.
- <sup>(2)</sup> TPI int. max.
- <sup>(3)</sup> TPI ext. min.
- <sup>(4)</sup> TPI ext. max.

**NOTCHGRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**60° PARTIAL PROFILE THREADING FLTK**

Double-Ended, Precision Positive Rake Threading Inserts



Right-hand shown

Designation	Dimensions										IC908
	TPIN <sup>(1)</sup>	TPIX <sup>(2)</sup>	TPIN_DF2 <sup>(3)</sup>	TPIX_DF2 <sup>(4)</sup>	RE	TTP	PDX	BW	S	INSL	
FLTK-3R/L	9.00	24.00	10.00	44.00	.0030	BOTH	.1417	.195	.344	.890	●
FLTK-4R/L	9.00	24.00	10.00	44.00	.0030	BOTH	.2008	.255	.453	1.120	●
FLTK-2R/L	12.00	24.00	14.00	44.00	.0030	BOTH	.1102	.150	.219	.514	●

• For 60° V-thread limits, see page • DMIN according to related boring bar

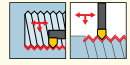
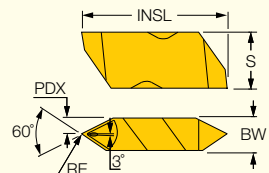
- (1) TPI int. min.
- (2) TPI int. max.
- (3) TPI ext. min.
- (4) TPI ext. max.

**NOTCHGRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**60° PARTIAL PROFILE THREADING FLT-CB**

Double-Ended Precision Threading Inserts with Chipbreakers



Right-hand shown

Designation	Dimensions										IC908
	TPIN <sup>(1)</sup>	TPIX <sup>(2)</sup>	TPIN_DF2 <sup>(3)</sup>	TPIX_DF2 <sup>(4)</sup>	RE	PDX	BW	S	INSL		
FLT-4R/L-HCB	4.00	12.00	4.00	20.00	.0065	.1299	.255	.453	1.120	●	
FLT-3R/LC-HCB	5.00	6.00	6.00	11.00	.0135	.0984	.195	.344	.890	●	
FLT-3R/L-HCB	5.00	12.00	6.00	20.00	.0065	.0984	.195	.344	.890	●	
FLT-3R/L-FCB	7.00	20.00	8.00	36.00	.0040	.0984	.195	.344	.890	●	
FLT-3R/L-CB	8.00	12.00	8.00	20.00	.0065	.0984	.195	.344	.890	●	

• DMIN according to related boring bar

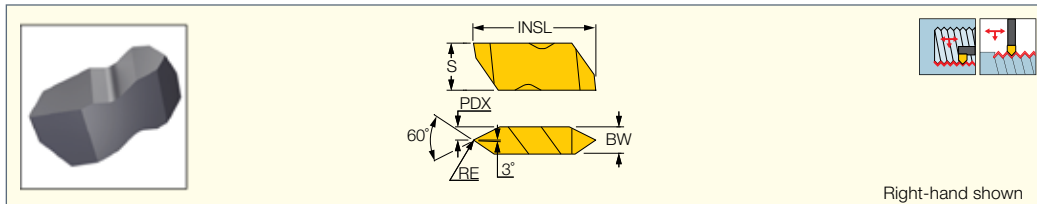
- (1) TPI int. min.
- (2) TPI int. max.
- (3) TPI ext. min.
- (4) TPI ext. max.

**NOTCHGRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**60° PARTIAL PROFILE THREADING FLT**

Double-Ended, Precision Flat Top Threading Inserts



Designation	Dimensions									IC908
	TPIN <sup>(1)</sup>	TPIX <sup>(2)</sup>	TPIN_DF2 <sup>(3)</sup>	TPIX_DF2 <sup>(4)</sup>	RE	PDX	BW	S	INSL	
<b>FLT-4R/L</b>	4.00	12.00	4.00	20.00	.0065	.1299	.255	.453	1.120	●
<b>FLT-3R/L</b>	5.00	12.00	6.00	20.00	.0040	.0984	.195	.344	.890	●
<b>FLT-3010R/L</b>	5.00	12.00	6.00	18.00	.0100	.0984	.195	.344	.890	●
<b>FLT-2R/L</b>	7.00	20.00	8.00	36.00	.0040	.0748	.150	.219	.514	●

• For 60° V-thread limits, see page • DMIN according to related boring bar

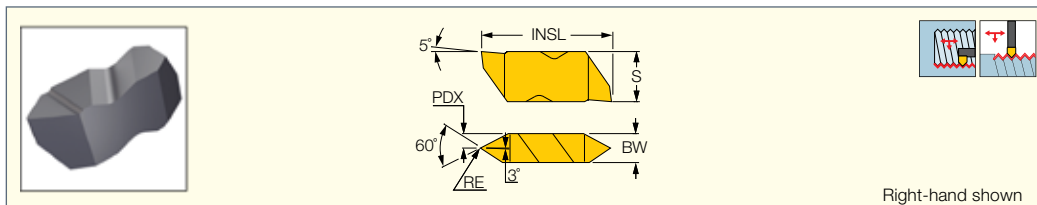
- (1) TPI int. min.
- (2) TPI int. max.
- (3) TPI ext. min.
- (4) TPI ext. max.

**NOTCHGRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**60° PARTIAL PROFILE THREADING FLTP**

Double-Ended, Precision Positive Rake Threading Inserts



Designation	Dimensions									IC908
	TPIN <sup>(1)</sup>	TPIX <sup>(2)</sup>	TPIN_DF2 <sup>(3)</sup>	TPIX_DF2 <sup>(4)</sup>	RE	PDX	BW	S	INSL	
<b>FLTP-4R/L</b>	4.00	12.00	4.00	20.00	.0065	.1299	.256	.453	1.120	●
<b>FLTP-3R/L</b>	5.00	12.00	6.00	20.00	.0065	.0984	.197	.344	.890	●
<b>FLTP-2R/L</b>	7.00	20.00	8.00	36.00	.0040	.0748	.150	.219	.514	●

• For 60° V-thread limits, see page • DMIN according to related boring bar

- (1) TPI int. min.
- (2) TPI int. max.
- (3) TPI ext. min.
- (4) TPI ext. max.

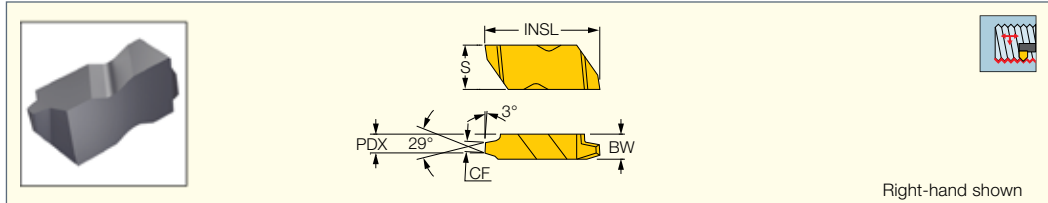
For tools, see pages: A-FLER/L ( ) • FLASR/L (20) • FLSR/L (19) • H-FLER (21) • HS-FLER (22)

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**ACME THREADING FLA-PT-I**

Double-Ended Precision Flat Top Internal Threading Inserts



Right-hand shown

Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	CF	PDX	BW	S	INSL	
FLA-3L16-PT-I	16.0	.020	.1496	.195	.344	.890	●
FLA-3L14-PT-I	14.0	.024	.1496	.195	.344	.890	●
FLA-3L12-PT-I	12.0	.028	.1496	.195	.344	.890	●
FLA-3L10-PT-I	10.0	.032	.1496	.195	.344	.890	●
FLA-3L8-PT-I	8.0	.041	.1496	.195	.344	.890	●
FLA-3L6-PT-I	6.0	.057	.1496	.195	.344	.890	●
FLA-3L5-PT-I	5.0	.069	.1496	.195	.344	.890	●
FLA-3L4-PT-I	4.0	.087	.1339	.195	.344	.890	●
FLA-4L8-PT-I	8.0	.041	.2008	.255	.453	1.120	●
FLA-4L6-PT-I	6.0	.057	.2008	.255	.453	1.120	●
FLA-4L5-PT-I	5.0	.069	.2008	.255	.453	1.120	●
FLA-4L4-PT-I	4.0	.087	.2008	.255	.453	1.120	●
FLA-6L3-PT-I	3.0	.118	.2835	.383	.453	1.120	●
FLA-6L2.5-PT-I	2.5	.143	.2835	.383	.453	1.120	●
FLA-6L2-PT-I	2.0	.180	.2835	.383	.453	1.120	●

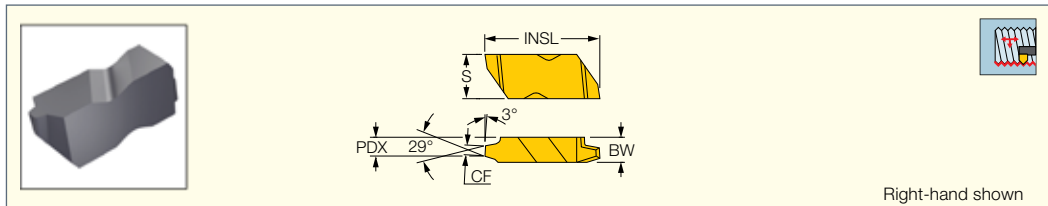
• For internal thread limits, see page  
<sup>(1)</sup> Threads per inch

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**STUB ACME THREADING FLAS-PT-I**

Double-Ended Precisi Flat Top on Internal Threading Inserts



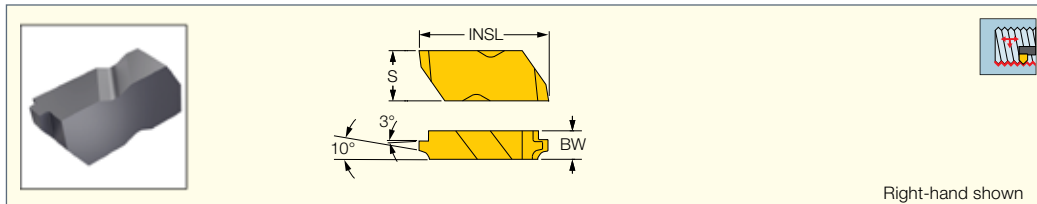
Right-hand shown

Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	CF	PDX	BW	S	INSL	
FLAS-6L2-PT-I	2.0	.206	.2835	.383	.453	1.120	●
FLAS-4L3-PT-I	3.0	.135	.2008	.255	.453	1.120	●
FLAS-3L4-PT-I	4.0	.100	.1496	.195	.344	.890	●
FLAS-3L5-PT-I	5.0	.079	.1496	.195	.344	.890	●
FLAS-3L6-PT-I	6.0	.065	.1496	.195	.344	.890	●
FLAS-3L8-PT-I	8.0	.048	.1496	.195	.344	.890	●
FLAS-3L10-PT-I	10.0	.037	.1496	.195	.344	.890	●
FLAS-3L12-PT-I	12.0	.033	.1496	.195	.344	.890	●
FLAS-3L14-PT-I	14.0	.028	.1496	.195	.344	.890	●
FLAS-3L16-PT-I	16.0	.024	.1496	.195	.344	.890	●

• For internal thread limits, see page  
<sup>(1)</sup> Threads per inch

**NOTCHGRIP**  
GROOVE-TURN LINE  
**ISCARTHREAD**

**API BUTTRESS  
THREADING FLDC-B-I**  
Double-Ended Precision Flat  
Top Threading Inserts



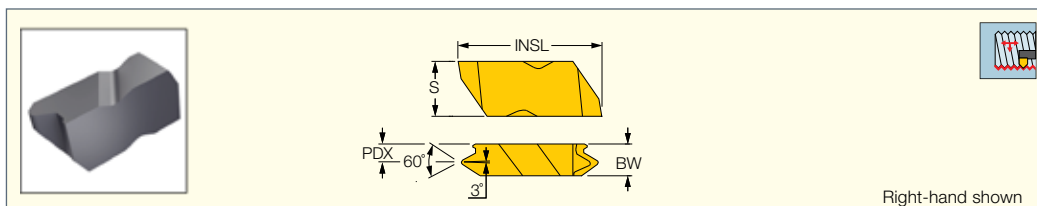
Right-hand shown

Dimensions							IC908
Designation	TPI <sup>(1)</sup>	IPF	BW	PDX	S	INSL	
FLDC-3-5B1I	5.0	1	.250	.4024	.344	.890	●
FLDC-4-5B1I	5.0	1	.255	.6319	.453	1.120	●
FLDC-3-5B75I	5.0	3/4	.250	.4024	.344	.890	●
FLDC-4-5B75I	5.0	3/4	.255	.6319	.453	1.120	●

<sup>(1)</sup> Threads per inch

**NOTCHGRIP**  
GROOVE-TURN LINE  
**ISCARTHREAD**

**API THREADING FLDC-I**  
Double-Ended Precision Flat  
Top Threading Inserts



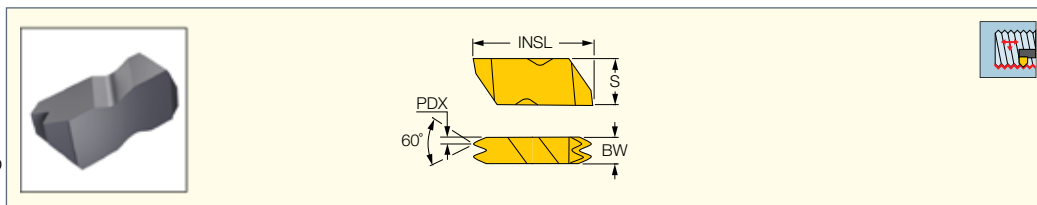
Right-hand shown

Dimensions							IC908
Designation	TPI <sup>(1)</sup>	IPF	PDX	BW	S	INSL	
FLDC-4-425I	4.0	2	.1831	.312	.453	1.120	●
FLDC-4-428I	4.0	2	.1831	.312	.453	1.120	●
FLDC-4-435I	4.0	3	.1831	.312	.453	1.120	●
FLDC-4-438I	4.0	3	.1831	.312	.453	1.120	●
FLDC-3-530I	5.0	3	.1469	.250	.344	.890	●

<sup>(1)</sup> Threads per inch

**NOTCHGRIP**  
GROOVE-TURN LINE  
**ISCARTHREAD**

**NPT THREADING FLDC-  
NPT-I**  
Double-Ended, Precision, Flat Top  
Multi-Tooth Threading Inserts



Dimensions							IC908
Designation	TPI <sup>(1)</sup>	IPF	PDX	BW	S	INSL	
FLDC-3-8NPT 2I	8.0	3/4	.0590	.250	.344	.890	●
FLDC-3-11.5NPT-2I	11.5	3/4	.0472	.250	.344	.890	●

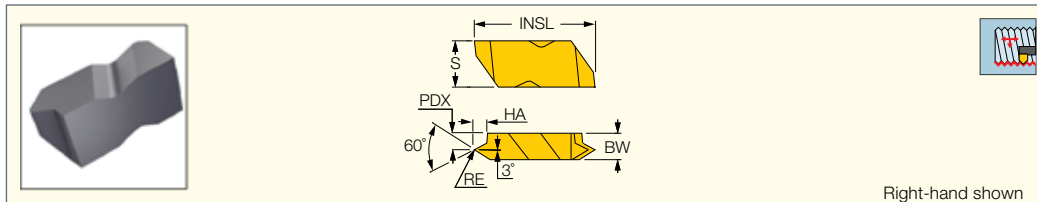
• For internal thread limits, see page

<sup>(1)</sup> Threads per inch

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**UN THREADING FLTC-I**  
Double-Ended, Precision, Flat  
Top Full Profile Threading Inserts



Right-hand shown

Designation	Dimensions							IC908
	TPI <sup>(1)</sup>	RE	HA	PDX	BW	S	INSL	
FLTC-3R/L7I	7.0	.0091	.092	.1063	.195	.344	.890	●
FLTC-3R/L8I	8.0	.0071	.081	.1063	.195	.344	.890	●
FLTC-3R/L9I	9.0	.0059	.072	.1063	.195	.344	.890	●
FLTC-3R/L10I	10.0	.0051	.065	.1063	.195	.344	.890	●
FLTC-3R/L11I	11.0	.0051	.059	.1063	.195	.344	.890	●
FLTC-3R/L12I	12.0	.0039	.048	.1496	.195	.344	.890	●
FLTC-3R/L14I	14.0	.0031	.044	.1480	.195	.344	.890	●
FLTC-3R/L16I	16.0	.0031	.040	.1480	.195	.344	.890	●
FLTC-3R/L18I	18.0	.0031	.036	.1480	.195	.344	.890	●
FLTC-3R/L20I	20.0	.0031	.031	.1480	.195	.344	.890	●
FLTC-3R/L24I	24.0	.0031	.026	.1480	.195	.344	.890	●
FLTC-3R/L28I	28.0	.0031	.023	.1480	.195	.344	.890	●

• For internal thread limits, see page

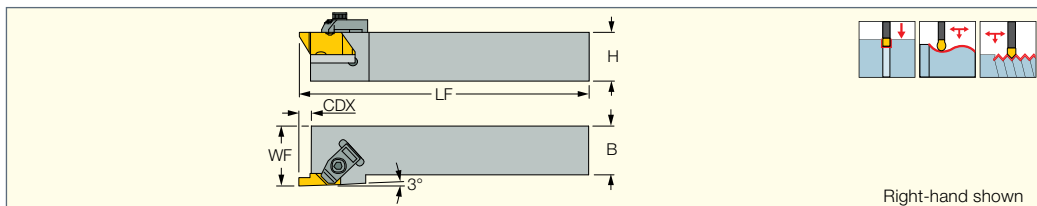
<sup>(1)</sup> Threads per inch

## EXTERNAL TOOLS

**NOTCH GRIP**  
GROOVE-TURN LINE

**FLSR/L**

Tools for External Grooving  
and Threading Inserts



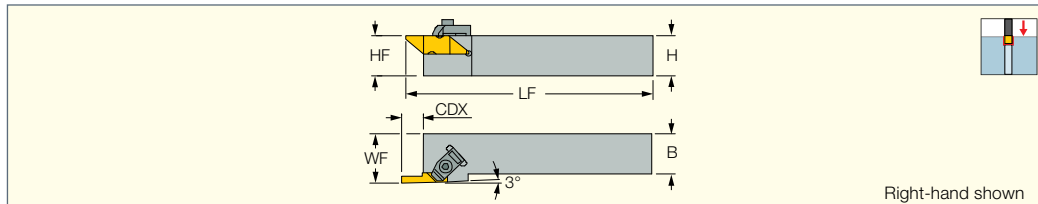
Right-hand shown

Designation	SSC <sup>(1)</sup>	H	B	CDX	WF	LF	Insert
FLSL-62	2.0	.375	.375	.140	.560	2.500	FL/IN_-2L
FLSR-62	2.0	.375	.375	.140	.560	2.500	FL/IN_-2R
FLSL-82V	2.0	.500	.500	.140	.750	3.500	FL/IN_-2L
FLSR-82V	2.0	.500	.500	.140	.750	3.500	FL/IN_-2R
FLSR-102B	2.0	.625	.625	.140	1.000	4.500	FL/IN_-2R
FLSL-122B	2.0	.750	.750	.140	1.000	4.500	FL/IN_-2L
FLSR-122B	2.0	.750	.750	.140	1.000	4.500	FL/IN_-2R
FLSL-162C	2.0	1.000	1.000	.140	1.250	5.000	FL/IN_-2L
FLSR-162C	2.0	1.000	1.000	.140	1.250	5.000	FL/IN_-2R
FLSL-123B	3.0	.750	.750	.210	1.000	4.500	FL/IN_-3L
FLSR-123B	3.0	.750	.750	.210	1.000	4.500	FL/IN_-3R
FLSL-163C	3.0	1.000	1.000	.210	1.250	5.000	FL/IN_-3L
FLSR-163C	3.0	1.000	1.000	.210	1.250	5.000	FL/IN_-3R
FLSL-163D	3.0	1.000	1.000	.210	1.250	6.000	FL/IN_-3L
FLSL-203D	3.0	1.250	1.250	.210	1.500	6.000	FL/IN_-3L
FLSR-203D	3.0	1.250	1.250	.210	1.500	6.000	FL/IN_-3R
FLSL-164D	4.0	1.000	1.000	.290	1.250	6.000	FL/IN_-4L
FLSR-164D	4.0	1.000	1.000	.290	1.250	6.000	FL/IN_-4R
FLSL-204D	4.0	1.250	1.250	.290	1.500	6.000	FL/IN_-4L
FLSR-204D	4.0	1.250	1.250	.290	1.500	6.000	FL/IN_-4R
FLSL-205D	5.0	1.250	1.250	.400	1.500	6.000	FL/IN_-5L
FLSR-205D	5.0	1.250	1.250	.400	1.500	6.000	FL/IN_-5R
FLSL-206D	6.0	1.250	1.250	.290	1.500	6.000	FL/IN_-6L
FLSR-206D	6.0	1.250	1.250	.290	1.500	6.000	FL/IN_-6R

<sup>(1)</sup> Seat size code

**NOTCHGRIP**  
GROOVE-TURN LINE

**FLSR/LT**  
External Tools for Deep Grooving Inserts



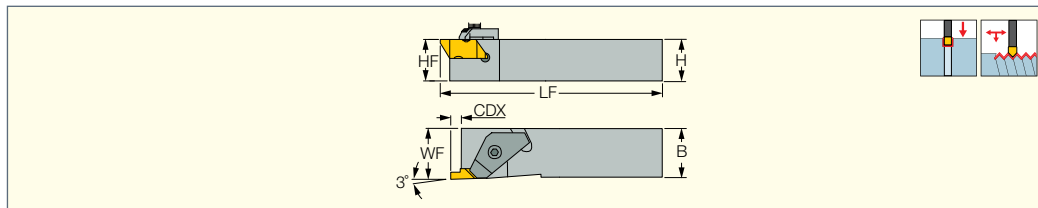
Right-hand shown

Designation	SSC <sup>(1)</sup>	H	HF	B	CDX	WF	LF	Insert
FLSLT-163D	3.0	1.000	1.000	1.000	.440	1.250	6.440	INGT-3L
FLSRT-163D	3.0	1.000	1.000	1.000	.440	1.250	6.440	INGT-3R
FLSLT-203D	3.0	1.250	1.250	1.250	.440	1.500	6.440	INGT-3L
FLSRT-203D	3.0	1.250	1.250	1.250	.440	1.500	6.440	INGT-3R
FLSLT-164D	4.0	1.000	1.000	1.000	.560	1.250	6.560	INGT-4L
FLSRT-164D	4.0	1.000	1.000	1.000	.560	1.250	6.560	INGT-4R
FLSLT-204D	4.0	1.250	1.250	1.250	.560	1.500	6.560	INGT-4L
FLSRT-204D	4.0	1.250	1.250	1.250	.560	1.500	6.560	INGT-4R

<sup>(1)</sup> Seat size code

**NOTCHGRIP**  
GROOVE-TURN LINE  
**ISCARTHREAD**

**FLASR/L**  
External Tools for Grooving and Threading for Swiss-type Machines

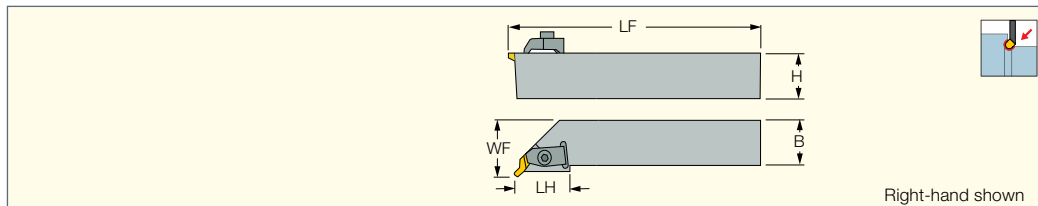


Designation	SSC <sup>(1)</sup>	H	HF	B	CDX	WF	LF	Insert
FLASR/L-062D	2.0	.375	.375	.375	.138	.380	6.000	FL/IN_-2
FLASR/L-082D	2.0	.500	.500	.500	.138	.500	6.000	FL/IN_-2
FLASR-102B	2.0	.625	.625	.625	.138	.630	4.500	FL/IN_-2
FLASR/L-103B	3.0	.625	.625	.625	.210	.630	4.500	FL/IN_-3

<sup>(1)</sup> Seat size code

**NOTCHGRIP**  
GROOVE-TURN LINE

**FLRR/L**  
External Tools for 45° Undercutting



Right-hand shown

Designation	SSC <sup>(1)</sup>	H	HF	B	WF	LH	LF	Insert
FLRR-123B	3.0	.750	.000	.750	1.000	1.250	4.500	INU-3
FLRR/L-163D	3.0	1.000	.000	1.000	1.250	1.250	6.000	INU-3
FLRR-203D	3.0	1.250	.000	1.250	1.500	1.250	6.000	INU-3

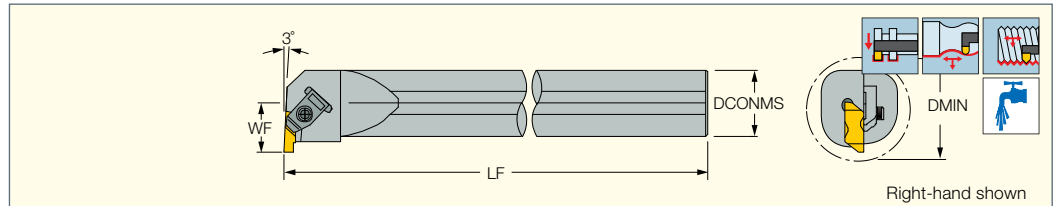
<sup>(1)</sup> Seat size code

# BORING BARS

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**A-FLER/L**  
Internal Grooving and Threading  
Bars with Coolant Channels

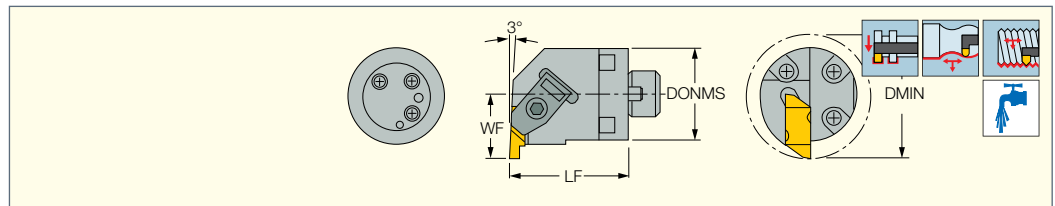


Designation	SSC <sup>(1)</sup>	DCONMS	DMIN	WF	LF	Insert
A16-FLER3	3.0	1.000	1.380	.690	12.000	FL/IN-3
A08-FLER/L2	2.0	.500	.730	.440	8.000	FL/IN-2
A16-FLEL3	3.0	1.000	1.375	.690	12.000	FL/IN-3
A10-FLER2	2.0	.625	1.000	.500	10.000	FL/IN-2
A20-FLER/L3	3.0	1.250	1.750	.880	14.000	FL/IN-3
A12-FLER/L2	2.0	.750	1.130	.560	10.000	FL/IN-2
A24-FLER/L3	3.0	1.500	2.000	1.000	14.000	FL/IN-3
A16-FLER/L2	2.0	1.000	1.375	.690	12.000	FL/IN-2
A28-FLER3	3.0	1.750	2.250	1.130	14.000	FL/IN-3
A32-FLER/L3	3.0	2.000	2.500	1.250	16.000	FL/IN-3
A28-FLER/L4	4.0	1.750	2.250	1.250	16.000	FL/IN-4
A32-FLER/L4	4.0	2.000	2.750	1.300	16.000	FL/IN-4
A32-FLER5	5.0	2.000	2.820	1.410	16.000	FL/IN-5
A32-FLER6	6.0	2.000	2.750	1.380	16.000	FL/IN-6

• Use left-hand inserts on right-hand tools and vice versa  
<sup>(1)</sup> Seat size code

**NOTCH GRIP**  
GROOVE-TURN LINE

**H-FLER**  
Grooving and Threading  
Interchangeable Heads (H-Type)



Designation	SSC <sup>(1)</sup>	DCONMS	DMIN	WF	LF	Insert
H20-FLER3W	3.0	1.250	1.750	.880	1.625	FL/IN-3L
H24-FLER3W	3.0	1.500	2.000	1.000	1.625	FL/IN-3L
H28-FLER3W	3.0	1.750	2.250	1.130	1.625	FL/IN-3L
H32-FLER3W	3.0	2.000	2.500	1.250	1.625	FL/IN-3L
H40-FLER3W	3.0	2.500	3.000	1.500	1.625	FL/IN-3L
H28-FLER4W	4.0	1.750	2.500	1.250	1.625	FL/IN-4L
H32-FLER4W	4.0	2.000	2.750	1.380	1.625	FL/IN-4L
H36-FLER4W	4.0	2.250	3.000	1.500	1.625	FL/IN-4L
H40-FLER4W	4.0	2.500	3.250	1.630	1.625	FL/IN-4L
H28-FLER6W	6.0	1.750	2.500	1.250	1.625	FL/IN-6L
H32-FLER6W	6.0	2.000	2.750	1.380	1.625	FL/IN-6L
H40-FLER6W	6.0	2.500	3.250	1.630	1.625	FL/IN-6L

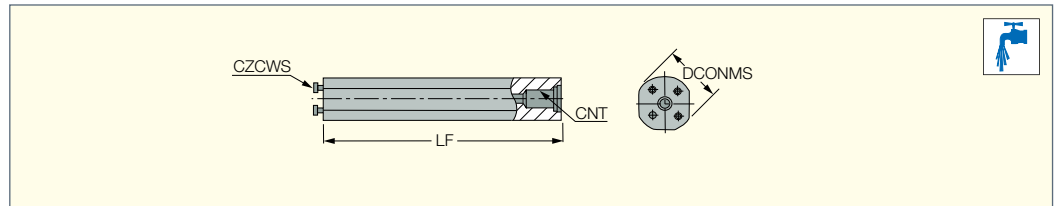
• Use left-hand inserts on right-hand tools and vice versa • Compatible with standard market adaptation  
<sup>(1)</sup> Seat size code



## Straight Shank

### S-570

Steel Shanks with Through Coolant for HS-Type Interchangeable Heads



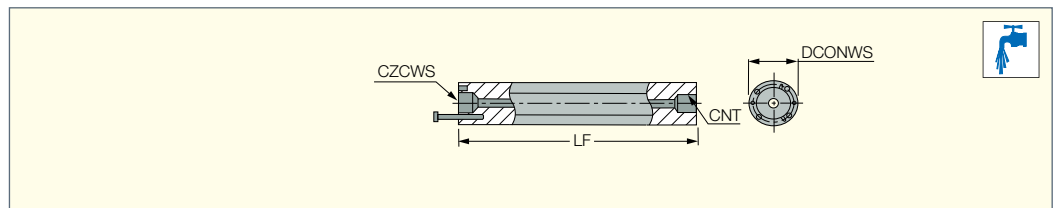
Designation	DCONMS	LF	CZCWS <sup>(1)</sup>	CNT
S-570-10-16	.625	4.21	HS16	1/8 - 27NPT
S-570-12-20	.750	5.20	HS20	1/4 - 18NPT
S-570-16-25	1.000	7.20	HS25	1/4 - 18NPT
S-570-20-32	1.250	8.74	HS32	3/8 - 18NPT
S-570-24-40	1.500	10.75	HS40	1/2 - 14NPT
S-570-32-50	2.000	14.41	HS50	1/2 - 14NPT

<sup>(1)</sup> Connection size code workpiece side

## Straight Shank

### S-4400W

Steel Shanks with Through Coolant for H-Type Interchangeable Heads



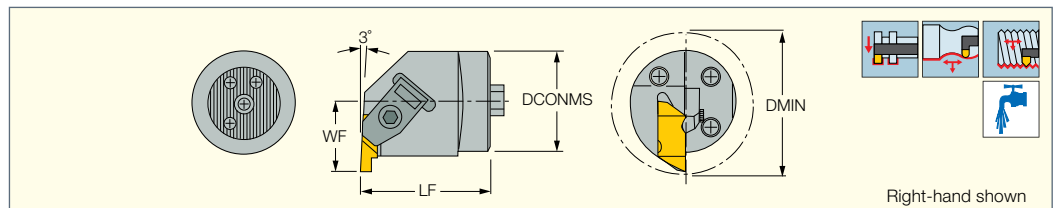
Designation	DCONWS	LF	CZCWS <sup>(1)</sup>	CNT
S-4416W	1.000	9.00	H16	1/4-18NPT
S-4424W	1.500	10.00	H24	3/8-18NPT
S-4428W	1.750	12.00	H28	3/8-18NPT
S-4432W	2.000	13.00	H32	3/8-18NPT
S-4440W	2.500	17.00	H40	3/8-18NPT

<sup>(1)</sup> Connection size code workpiece side

## NOTCH GRIP

### HS-FLER

Grooving and Threading Interchangeable Heads (HS-Type)



Designation	SSC <sup>(1)</sup>	DCONMS	DMIN	WF	LF	Insert
HS32-FLER3W	3.0	1.250	1.73	.870	1.34	FL/IN-3L
HS40-FLER3W	3.0	1.570	2.21	1.100	1.58	FL/IN-3L
HS50-FLER3W	3.0	1.970	2.76	1.380	1.65	FL/IN-3L
HS50-FLER4W	4.0	1.970	2.76	1.380	1.65	FL/IN-4L
HS60-FLER4W	4.0	2.360	3.48	1.740	1.75	FL/IN-4L

• Lefthand heads on request • Use left-hand inserts on right-hand tools and vice versa • Compatible with standard market adaptation

<sup>(1)</sup> Seat size code

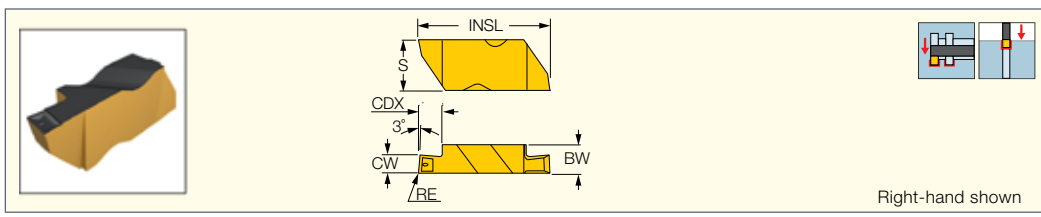
# Metric Measurements

**NOTCH-GRIP**  
GROOVE-TURN LINE





**ING-RCB/LCB**  
Precision Double-Ended Grooving  
Inserts with a Chipformer



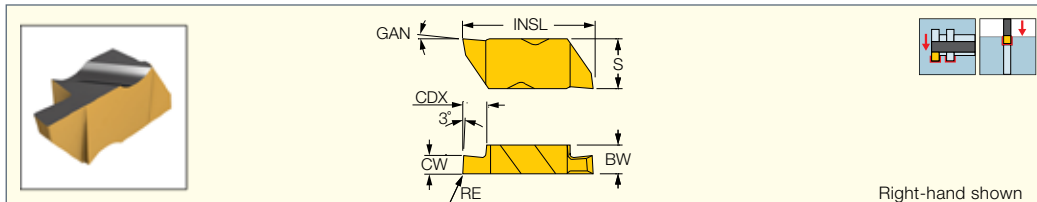
Right-hand shown

Designation	Dimensions								IC807	Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	BW	S	INSL		f groove (mm/rev)
ING3031LCB (0.79)	0.79	0.025	0.09	0.031	1.27	4.95	8.74	22.60	●	0.03-0.05
ING3031RCB (0.79)	0.79	0.025	0.09	0.063	1.27	4.95	8.74	22.60	●	0.03-0.05
ING2M100R/LCB (1.00)	1.00	0.025	0.19	0.063	1.27	3.81	5.56	12.95	●	0.04-0.06
ING3M100R/LCB (1.00)	1.00	0.025	0.19	0.063	1.90	4.95	8.74	22.60	●	0.04-0.06
ING3M120R/LCB (1.20)	1.20	0.025	0.19	0.063	1.90	4.95	8.74	22.60	●	0.04-0.06
ING3047R/LCB (1.19)	1.19	0.025	0.19	0.063	1.90	4.95	8.74	22.60	●	0.04-0.06
ING2M150R/LCB (1.50)	1.50	0.025	0.19	0.063	2.79	3.81	5.56	12.95	●	0.05-0.08
ING3M150R/LCB (1.50)	1.50	0.025	0.19	0.063	3.05	4.95	8.74	22.60	●	0.05-0.08
ING2062R/LCB (1.57)	1.57	0.025	0.19	0.063	2.79	3.81	5.56	12.95	●	0.05-0.08
ING3062R/LCB (1.57)	1.57	0.025	0.19	0.063	3.05	4.95	8.74	22.60	●	0.05-0.08
ING3M175R/LCB (1.75)	1.75	0.025	0.19	0.063	3.05	4.95	8.74	22.60	●	0.05-0.09
ING3072R/LCB (1.83)	1.83	0.025	0.19	0.063	3.05	4.95	8.74	22.60	●	0.05-0.09
ING3078R/LCB (1.98)	1.98	0.025	0.19	0.063	3.05	4.95	8.74	22.60	●	0.05-0.10
ING2M200R/LCB (2.00)	2.00	0.025	0.19	0.063	2.79	3.81	5.56	12.95	●	0.05-0.10
ING3M200R/LCB (2.00)	2.00	0.025	0.19	0.063	3.05	4.95	8.74	22.60	●	0.05-0.10
ING2094R/LCB (2.39)	2.39	0.025	0.19	0.063	2.79	3.81	5.56	12.95	●	0.06-0.10
ING3094R/LCB (2.39)	2.39	0.025	0.19	0.063	4.57	4.95	8.74	22.60	●	0.06-0.10
ING3M250R/LCB (2.50)	2.50	0.025	0.19	0.063	4.57	4.95	8.74	22.60	●	0.06-0.10
ING3M300R/LCB (3.00)	3.00	0.025	0.19	0.063	4.57	4.95	8.74	22.60	●	0.09-0.14
ING2125R/LCB (3.18)	3.18	0.025	0.19	0.063	2.79	3.81	5.56	12.95	●	0.09-0.14
ING3125R/LCB (3.18)	3.18	0.025	0.19	0.063	4.57	4.95	8.74	22.60	●	0.09-0.14
ING4125R/LCB (3.18)	3.18	0.025	0.19	0.063	6.35	6.48	11.51	28.45	●	0.09-0.14
ING3M400R/LCB (4.00)	4.00	0.025	0.32	0.063	4.57	4.95	8.74	22.60	●	0.12-0.20
ING3189R/LCB (4.80)	4.80	0.025	0.57	0.063	4.57	4.95	8.74	22.60	●	0.12-0.22
ING4189R/LCB (4.80)	4.80	0.025	0.57	0.063	6.35	6.48	11.51	28.45	●	0.12-0.22
ING4250R/LCB (6.35)	6.35	0.025	0.57	0.063	6.35	6.48	11.51	28.45	●	0.12-0.25

• DMIN according to related boring bar  
<sup>(1)</sup> Cutting width tolerance (+/-)  
<sup>(2)</sup> Corner radius tolerance (+/-)



**ING/INGP-R/L**  
Precision Double-Ended  
Flat Top Grooving Inserts



Right-hand shown

Designation	Dimensions									Tough ↔ Hard		Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	GAN	BW	S	INSL	IC808	IC807	
INGP2031R/L (0.79)	0.79	0.025	0.09	0.031	1.27	5	3.81	5.56	12.95		●	0.02-0.04
ING2031R/L (0.79)	0.79	0.025	0.09	0.031	1.27	0	3.81	5.56	12.95		●	0.02-0.04
ING2041R/L (1.04)	1.04	0.025	0.09	0.031	1.27	0	3.81	5.56	12.95		●	0.03-0.05
ING2047R/L (1.19)	1.19	0.025	0.09	0.031	1.27	0	3.81	5.56	12.95		●	0.03-0.05
INGP2062R/L (1.57)	1.57	0.025	0.19	0.063	2.79	5	3.81	5.56	12.95		●	0.04-0.06
ING2062R/L (1.57)	1.57	0.025	0.19	0.063	2.79	0	3.81	5.56	12.95		●	0.04-0.06
ING2094R/L (2.39)	2.39	0.025	0.19	0.063	2.79	0	3.81	5.56	12.95		●	0.05-0.08
ING2125R/L (3.18)	3.18	0.025	0.19	0.063	2.79	0	3.81	5.56	12.95		●	0.08-0.12
ING3031R/L (0.79)	0.79	0.025	0.09	0.031	1.27	0	4.95	8.65	22.60	●		0.02-0.04
INGP3047R/L (1.19)	1.19	0.025	0.19	0.063	1.90	5	4.95	8.74	22.60		●	0.03-0.05
ING3047R/L (1.19)	1.19	0.025	0.19	0.063	1.91	0	4.95	8.65	22.60	●		0.03-0.05
ING3058R/L (1.47)	1.47	0.025	0.19	0.063	2.39	0	4.95	8.65	22.60	●		0.03-0.05
INGP3062R/L (1.57)	1.57	0.025	0.19	0.063	3.05	5	4.95	8.74	22.60		●	0.04-0.06
ING3062R/L (1.58)	1.58	0.025	0.19	0.063	2.39	0	4.95	8.65	22.60	●		0.04-0.06
ING3072R/L (1.83)	1.83	0.025	0.19	0.063	2.39	0	4.95	8.65	22.60	●		0.04-0.08
ING3078R/L (1.98)	1.98	0.025	0.19	0.063	2.39	0	4.95	8.65	22.60	●		0.04-0.09
ING3088R/L (2.24)	2.24	0.025	0.19	0.063	2.39	0	4.95	8.65	22.60	●		0.05-0.09
INGP3094R/L (2.39)	2.39	0.025	0.19	0.063	4.57	5	4.95	8.74	22.60		●	0.05-0.08
ING3094R/L (2.39)	2.39	0.025	0.19	0.063	3.81	0	4.95	4.95	22.60	●		0.05-0.09
ING3097R/L (2.46)	2.46	0.025	0.32	0.063	3.81	0	4.95	4.95	22.60	●		0.06-0.10
ING3105R/L (2.67)	2.67	0.025	0.19	0.063	3.81	0	4.95	4.95	22.60	●		0.07-0.11
ING3110R/L (2.79)	2.79	0.025	0.32	0.063	3.81	0	4.95	4.95	22.60	●		0.07-0.11
ING3122R/L (3.10)	3.10	0.025	0.19	0.063	3.81	0	4.95	4.95	22.60	●		0.07-0.12
INGP3125R/L (3.18)	3.18	0.025	0.19	0.063	4.57	5	4.95	4.95	22.60		●	0.08-0.12
ING3125R/L (3.18)	3.18	0.025	0.19	0.063	3.81	0	4.95	8.65	22.60	●		0.08-0.13
ING3142R/L (3.61)	3.61	0.025	0.32	0.063	3.81	0	4.95	8.65	22.60	●		0.09-0.15
ING3156R/L (3.96)	3.96	0.025	0.19	0.063	3.81	0	4.95	8.65	22.60	●		0.10-0.20
ING3178R/L (4.52)	4.52	0.025	0.19	0.063	3.81	0	4.95	8.65	22.60	●		0.11-0.21
ING3185R/L (4.70)	4.70	0.025	0.57	0.063	3.81	0	4.95	8.65	22.60	●		0.11-0.22
ING3189R/L (4.80)	4.80	0.025	0.57	0.063	3.81	0	4.95	8.65	22.60	●		0.11-0.22
ING4125R/L (3.18)	3.18	0.025	0.19	0.063	6.35	0	6.48	11.51	28.45		●	0.08-0.12
ING4189R/L (4.80)	4.80	0.025	0.57	0.063	6.35	0	6.48	11.51	28.45		●	0.10-0.20
ING4250R/L (6.35)	6.35	0.025	0.57	0.063	6.35	0	6.48	11.51	28.45		●	0.10-0.22

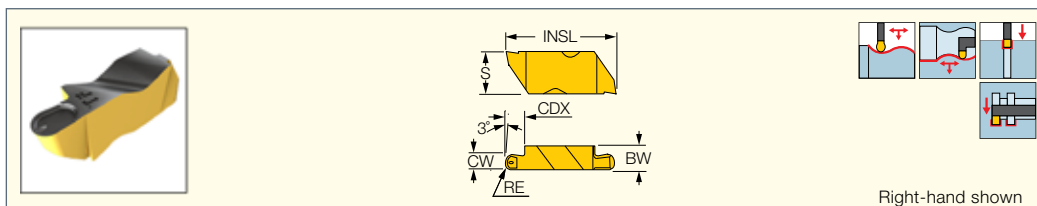
• DMIN according to related boring bar

<sup>(1)</sup> Cutting width tolerance (+/-)

<sup>(2)</sup> Corner radius tolerance (+/-)



**INR-RCB/LCB**  
Precision, Double-Ended  
Full Radius Grooving Inserts  
with a Chipformer



Right-hand shown

Designation	Dimensions									IC807	Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	BW	S	INSL			
INR3062R/LCB (3.18)	3.18	0.025	1.57	0.063	4.57	4.95	8.74	22.45		●	0.07-0.12

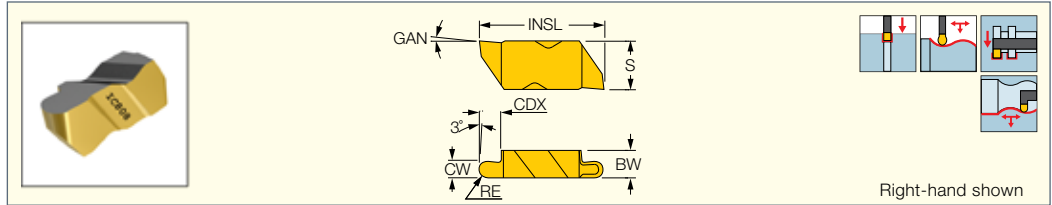
• DMIN according to related boring bar

<sup>(1)</sup> Cutting width tolerance (+/-)

<sup>(2)</sup> Corner radius tolerance (+/-)



**INR/INRP-R/L**  
Precision Double-Ended Flat  
Top Round Grooving Inserts



Designation	Dimensions									Tough ↔ Hard		Recommended Machining Data f groove (mm/rev)
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	BW	S	INSL	GAN	IC808	IC807	
<b>INR2031R/L (1.57)</b>	1.57	0.025	0.78	0.064	2.79	3.81	5.56	12.95	0		●	0.03-0.05
<b>INRP3031R/L (1.57)</b>	1.57	0.025	0.78	0.064	3.18	4.95	8.74	22.60	5		●	0.03-0.05
<b>INR3031R/L (1.58)</b>	1.58	0.025	0.79	0.064	3.17	4.95	8.65	22.60	0	●		0.04-0.08
<b>INR2047R/L (2.39)</b>	2.39	0.025	1.19	0.064	2.79	3.81	5.56	12.95	0		●	0.04-0.07
<b>INRP3047R/L (2.39)</b>	2.39	0.025	1.19	0.064	4.57	4.95	8.74	22.60	5		●	0.04-0.07
<b>INR3047R/L (2.39)</b>	2.39	0.025	1.19	0.064	3.81	4.95	8.65	22.60	0	●		0.06-0.12
<b>INRP3062R/L (3.18)</b>	3.18	0.025	1.57	0.064	4.57	4.95	8.74	22.60	5		●	0.07-0.11
<b>INR3062R/L (3.18)</b>	3.18	0.025	1.59	0.064	3.81	4.95	8.65	22.60	0	●		0.08-0.16
<b>INR3078R/L (3.98)</b>	3.96	0.025	1.98	0.064	3.81	4.95	8.65	22.60	0	●		0.10-0.20
<b>INR3094R/L (4.78)</b>	4.78	0.025	2.39	0.064	3.81	4.95	8.65	22.60	0	●		0.12-0.22
<b>INR4125R/L (6.35)</b>	6.35	0.025	3.18	0.064	6.35	6.48	11.51	28.45	0		●	0.10-0.22

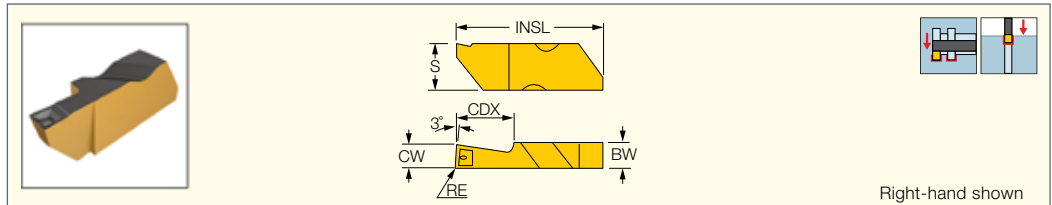
• DMIN according to related boring bar

<sup>(1)</sup> Cutting width tolerance (+/-)

<sup>(2)</sup> Corner radius tolerance (+/-)



**INGD-RCB/LCB**  
Precision, Single-Ended  
Deep Grooving Inserts  
with a Chipformer



Designation	Dimensions									IC807	Recommended Machining Data f groove (mm/rev)
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	BW	S	INSL			
<b>INGD3094R/LCB (2.39)</b>	2.39	0.025	0.19	0.063	6.35	4.95	8.74	25.15		●	0.06-0.10
<b>INGD3125R/LCB (3.18)</b>	3.18	0.025	0.19	0.063	6.35	4.95	8.74	25.15		●	0.09-0.14

• DMIN according to related boring bar

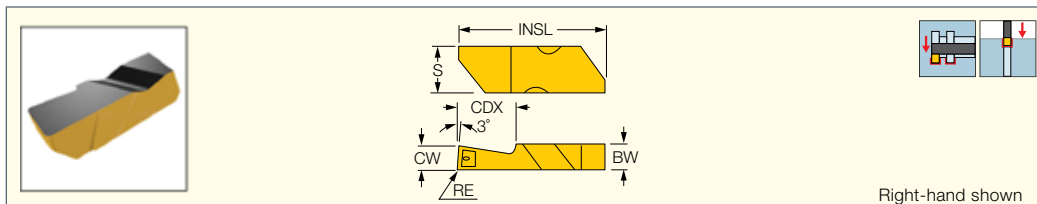
<sup>(1)</sup> Cutting width tolerance (+/-)

<sup>(2)</sup> Corner radius tolerance (+/-)

**NOTCH GRIP**  
GROOVE-TURN LINE

**INGD-R/L**

Precision, Single-Ended Flat Top Deep Grooving Inserts



Right-hand shown

Designation	Dimensions								IC807	Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	BW	S	INSL		f groove (mm/rev)
<b>INGD3062R/L (1.57)</b>	1.57	0.025	0.19	0.063	3.05	4.95	8.74	25.15	●	0.04-0.06
<b>INGD3094R/L (2.39)</b>	2.39	0.025	0.19	0.063	6.35	4.95	8.74	25.15	●	0.05-0.08
<b>INGD3125R/L (3.18)</b>	3.18	0.025	0.19	0.063	6.35	4.95	8.74	25.15	●	0.08-0.12
<b>INGD3189R/L (4.80)</b>	4.80	0.025	0.57	0.063	6.35	4.95	8.74	25.15	●	0.10-0.20

• DMIN according to related boring bar

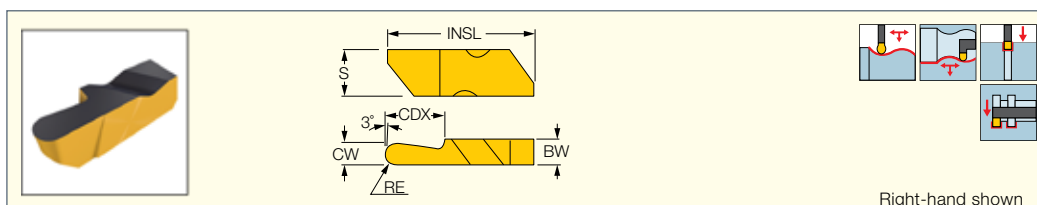
<sup>(1)</sup> Cutting width tolerance (+/-)

<sup>(2)</sup> Corner radius tolerance (+/-)

**NOTCH GRIP**  
GROOVE-TURN LINE

**INRD-R/L**

Precision, Single-Ended Full Radius Deep Grooving Inserts with a Flat Rake



Right-hand shown

Designation	Dimensions								IC807	Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	BW	S	INSL		f groove (mm/rev)
<b>INRD3062R/L (3.18)</b>	3.18	0.025	1.57	0.064	6.35	4.95	8.74	25.15	●	0.07-0.11

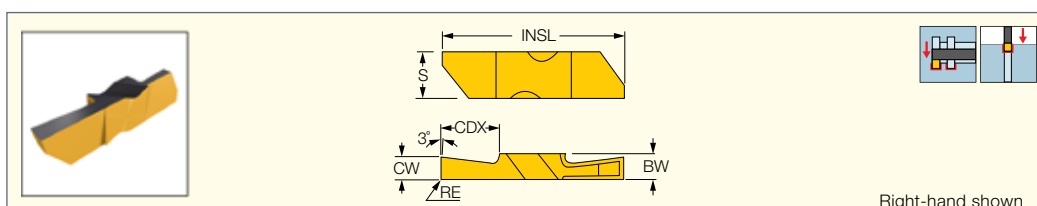
<sup>(1)</sup> Cutting width tolerance (+/-)

<sup>(2)</sup> Corner radius tolerance (+/-)

**NOTCH GRIP**  
GROOVE-TURN LINE

**INGT-R/L**

Precision, Double-Ended Flat Top Deep Grooving Inserts



Right-hand shown

Designation	Dimensions								IC807	Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	BW	S	INSL		f groove (mm/rev)
<b>INGT3094R/L (2.39)</b>	2.39	0.025	0.19	0.063	6.99	4.95	8.74	34.80	●	0.05-0.08
<b>INGT3125R/L (3.18)</b>	3.18	0.025	0.19	0.063	11.10	4.95	8.74	34.80	●	0.08-0.12

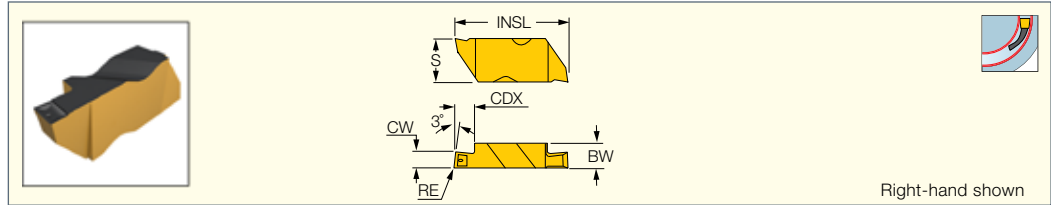
• DMIN according to related boring bar

<sup>(1)</sup> Cutting width tolerance (+/-)

<sup>(2)</sup> Corner radius tolerance (+/-)



**INF-RCB/LCB**  
Precision, Double-Ended  
Face Grooving Inserts  
with a Chipformer



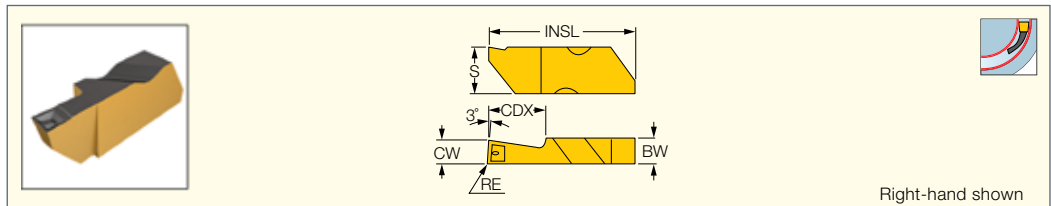
Right-hand shown

Designation	Dimensions									IC807	Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	DAXN <sup>(3)</sup>	BW	S	INSL		f face-groove (mm/rev)
<b>INF3125R/LCB (3.18)</b>	3.18	0.025	0.19	0.063	4.57	23.9	4.95	8.74	22.60	●	0.09-0.14

<sup>(1)</sup> Cutting width tolerance (+/-)  
<sup>(2)</sup> Corner radius tolerance (+/-)  
<sup>(3)</sup> Minimum axial grooving diameter



**INF3125R/LCB**  
Precision, Single-Ended  
Deep Face Grooving Inserts  
with a Chipformer



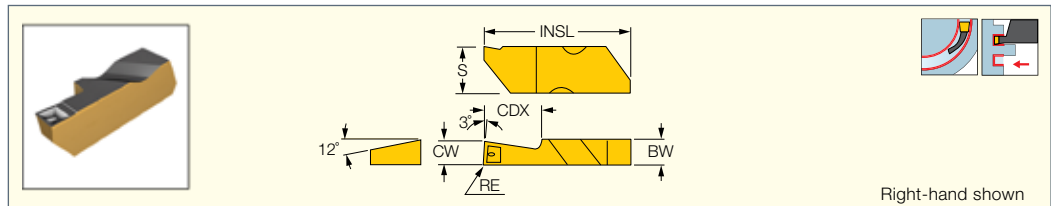
Right-hand shown

Designation	Dimensions									IC807	Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	DAXN <sup>(3)</sup>	BW	S	INSL		f face-groove (mm/rev)
<b>INF3125R/LCB (3.18)</b>	3.18	0.025	0.19	0.063	6.35	47.6	4.95	8.74	25.15	●	0.09-0.14

<sup>(1)</sup> Cutting width tolerance (+/-)  
<sup>(2)</sup> Corner radius tolerance (+/-)  
<sup>(3)</sup> Minimum axial grooving diameter



**INF3125R/LCB-I**  
Precision, Single-Ended  
Deep Face Grooving Inserts  
with a Chipformer



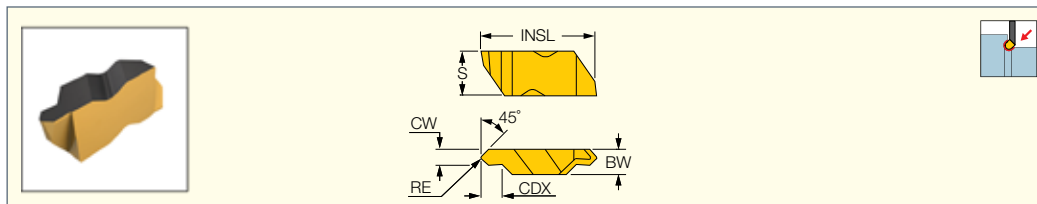
Right-hand shown

Designation	Dimensions									IC807	Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	DAXN <sup>(3)</sup>	BW	S	INSL		f face-groove (mm/rev)
<b>INF3125R/LCB-I(3.18)</b>	3.18	0.025	0.19	0.063	6.35	47.6	4.95	8.74	25.15	●	0.09-0.14

<sup>(1)</sup> Cutting width tolerance (+/-)  
<sup>(2)</sup> Corner radius tolerance (+/-)  
<sup>(3)</sup> Minimum axial grooving diameter

**NOTCH GRIP**  
GROOVE-TURN LINE

**INU-R/L**  
Precision Double-Ended Flat Top Inserts for External Undercutting



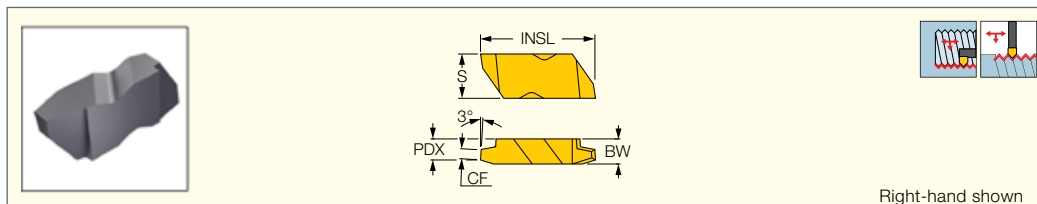
Designation	Dimensions								IC807	Recommended Machining Data
	CW	CWTOL <sup>(1)</sup>	RE	RETOL <sup>(2)</sup>	CDX	BW	S	INSL		f groove (mm/rev)
<b>INU3094R/L (2.39)</b>	2.39	0.025	0.51	0.064	3.18	4.95	8.74	22.60	●	0.05-0.08

- Not recommended for turning • DMIN according to related boring bar
- <sup>(1)</sup> Cutting width tolerance (+/-)
- <sup>(2)</sup> Corner radius tolerance (+/-)

# ISCAR THREAD

**ISCAR THREAD**

**ACME THREADING FLA**  
Double-Ended Precision Flat Top Threading Inserts



Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	CF	PDX	BW	S	INSL	
<b>FLA-6R/L2</b>	2.0	4.58	7.20	9.73	11.51	28.45	●
<b>FLA-6R/L2.5</b>	2.5	3.63	7.20	9.73	11.51	28.45	●
<b>FLA-6R/L3</b>	3.0	3.01	7.20	9.73	11.51	28.45	●
<b>FLA-3R/L4</b>	4.0	2.22	3.40	4.95	8.74	22.60	●
<b>FLA-4R/L4</b>	4.0	2.22	5.10	6.48	11.51	28.45	●
<b>FLA-3R/L5</b>	5.0	1.75	3.80	4.95	8.74	22.60	●
<b>FLA-4R/L5</b>	5.0	1.75	5.10	6.48	11.51	28.45	●
<b>FLA-3R/L6</b>	6.0	1.44	3.80	4.95	8.74	22.60	●
<b>FLA-4R/L6</b>	6.0	1.44	5.10	6.48	11.51	28.45	●
<b>FLA-3R/L8</b>	8.0	1.04	3.80	4.95	8.74	22.60	●
<b>FLA-4R/L8</b>	8.0	1.04	5.10	6.48	11.51	28.45	●
<b>FLA-3R/L10</b>	10.0	0.81	3.80	4.95	8.74	22.60	●
<b>FLA-3R/L12</b>	12.0	0.72	3.80	4.95	8.74	22.60	●
<b>FLA-3R/L14</b>	14.0	0.61	3.80	4.95	8.74	22.60	●
<b>FLA-3R/L16</b>	16.0	0.52	3.80	4.95	8.74	22.60	●

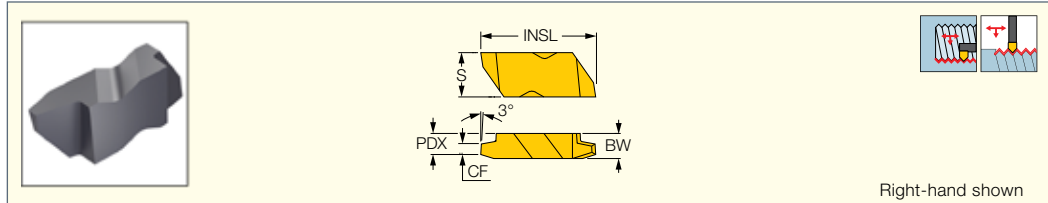
- For ACME thread limits, see page
- DMIN according to related boring bar
- <sup>(1)</sup> Threads per inch



**NOTCHGRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**ACME THREADING FLAS**  
Double-Ended Precision Flat  
Top Threading Inserts



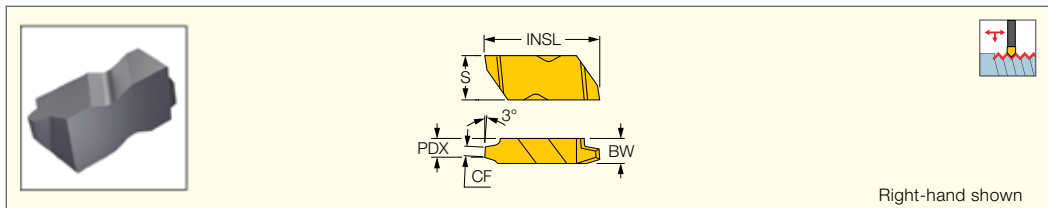
Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	CF	PDX	BW	S	INSL	
FLAS-6R/L2	2.0	5.23	7.20	9.73	11.51	28.45	●
FLAS-4R/L3	3.0	3.44	5.10	6.48	11.51	28.45	●
FLAS-3L4	4.0	2.55	3.80	4.95	8.74	22.60	●
FLAS-3R/L5	5.0	2.01	3.80	4.95	8.74	22.60	●
FLAS-3R/L6	6.0	1.66	3.80	4.95	8.74	22.60	●
FLAS-3R/L8	8.0	1.21	3.80	4.95	8.74	22.60	●
FLAS-3R/L10	10.0	0.94	3.80	4.95	8.74	22.60	●
FLAS-3R/L12	12.0	0.83	3.80	4.95	8.74	22.60	●
FLAS-3R/L14	14.0	0.70	3.80	4.95	8.74	22.60	●
FLAS-3R/L16	16.0	0.60	3.80	4.95	8.74	22.60	●

• DMIN according to related boring bar  
(1) Threads per inch

**NOTCHGRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**ACME THREADING FLA-PT-E**  
Double-Ended Precision Flat  
Top External Threading Inserts



Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	CF	PDX	BW	S	INSL	
FLA-3R4-PT-E	4.0	2.22	3.40	4.95	8.74	28.45	●
FLA-3R5-PT-E	5.0	1.75	3.80	4.95	8.74	28.45	●
FLA-3R6-PT-E	6.0	1.44	3.80	4.95	8.74	22.60	●
FLA-3R8-PT-E	8.0	1.04	3.80	4.95	8.74	28.45	●
FLA-3R10-PT-E	10.0	0.81	3.80	4.95	8.74	22.60	●
FLA-3R12-PT-E	12.0	0.72	3.80	4.95	8.74	22.60	●
FLA-3R14-PT-E	14.0	0.61	3.80	4.95	8.74	22.60	●
FLA-3R16-PT-E	16.0	0.52	3.80	4.95	8.74	22.60	●
FLA-4R4-PT-E	4.0	2.22	5.10	6.48	11.51	28.45	●
FLA-4R5-PT-E	5.0	1.75	5.10	6.48	11.51	22.60	●
FLA-4R6-PT-E	6.0	1.44	5.10	6.48	11.51	28.45	●
FLA-4R8-PT-E	8.0	1.04	5.10	6.48	11.51	22.60	●
FLA-6R2-PT-E	2.0	4.58	7.20	9.73	11.51	28.45	●
FLA-6R2.5-PT-E	2.5	3.63	7.20	9.73	11.51	28.45	●
FLA-6R3-PT-E	3.0	3.01	7.20	9.73	11.51	28.45	●

(1) Threads per inch

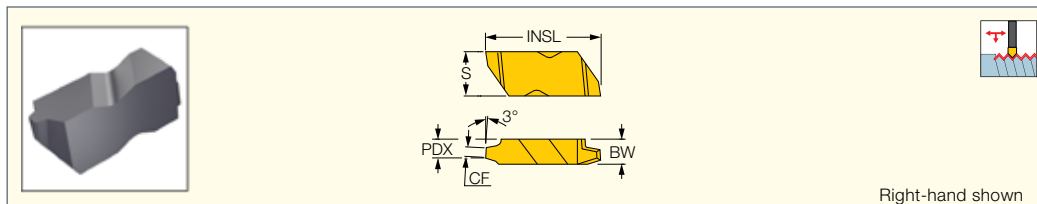
**NOTCH-GRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**STUB ACME THREADING**

**FLAS-PT-E**

Double-Ended Precision Flat Top External Threading Inserts



Right-hand shown

Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	CF	PDX	BW	S	INSL	
FLAS-3R4-PT-E	4.0	2.55	3.80	4.95	8.74	22.60	●
FLAS-3R5-PT-E	5.0	2.01	3.80	4.95	8.74	22.60	●
FLAS-3R6-PT-E	6.0	1.66	3.80	4.95	8.74	22.60	●
FLAS-3R8-PT-E	8.0	1.21	3.80	4.95	8.74	22.60	●
FLAS-3R10-PT-E	10.0	0.94	3.80	4.95	8.74	22.60	●
FLAS-3R12-PT-E	12.0	0.83	3.80	4.95	8.74	22.60	●
FLAS-3R14-PT-E	14.0	0.70	3.80	4.95	8.74	22.60	●
FLAS-3R16-PT-E	16.0	0.60	3.80	4.95	8.74	22.60	●
FLAS-4R3-PT-E	3.0	3.44	5.10	6.48	11.51	28.45	●
FLAS-6R2-PT-E	2.0	5.23	7.20	9.73	11.51	28.45	●

<sup>(1)</sup> Threads per inch

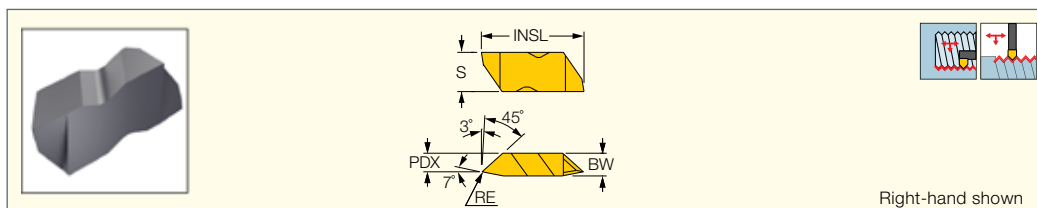
**NOTCH-GRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**AMERICAN STANDARD BUTTRESS THREADING**

**FLT-B-A**

Double-Ended Precision Flat Top Threading Inserts for 7° Lead



Right-hand shown

Designation	Dimensions							IC908
	TPIN <sup>(1)</sup>	TPIX <sup>(2)</sup>	RE	PDX	BW	S	INSL	
FLT-B-4R/LA	4.00	6.00	0.20	5.20	6.48	11.51	28.45	●
FLT-B-3R/LA	8.00	16.00	0.13	4.20	4.95	8.74	22.60	●
FLT-B-2R/LA	16.00	20.00	0.05	3.20	3.81	5.56	12.95	●

• For user guide, see page • DMIN according to related boring bar

<sup>(1)</sup> TPI min.

<sup>(2)</sup> TPI max.

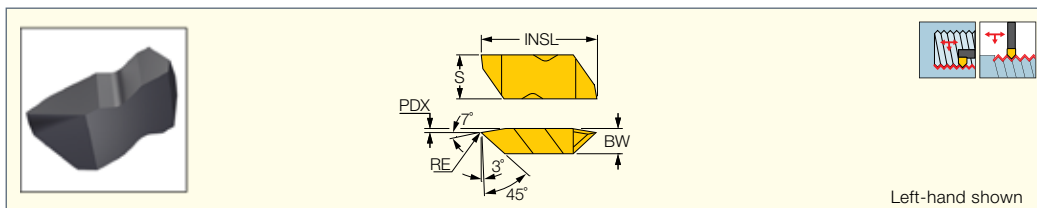
**NOTCH-GRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**AMERICAN STANDARD BUTTRESS THREADING**

**FLT-B-B**

Double-Ended Precision Flat Top Threading Inserts for 45° Lead



Left-hand shown

Designation	Dimensions							IC908
	TPIN <sup>(1)</sup>	TPIX <sup>(2)</sup>	RE	PDX	BW	S	INSL	
FLT-B-4R/LB	4.00	6.00	0.20	0.40	6.48	11.51	28.45	●
FLT-B-3R/LB	8.00	16.00	0.13	0.30	4.95	8.74	22.60	●
FLT-B-2R/LB	16.00	20.00	0.05	0.30	3.81	5.56	12.95	●

• For user guide, see page • DMIN according to related boring bar

<sup>(1)</sup> TPI min.

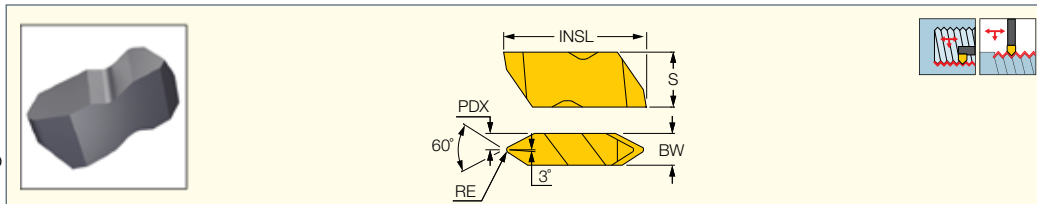
<sup>(2)</sup> TPI max.

**NOTCH-GRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**API PARTIAL PROFILE THREDDING FLD**

Double-Ended, Precision, Flat Top  
Partial Profile Threading Inserts



Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	RE	PDX	BW	S	INSL	
FLD-4050R/L	4.0	0.51	3.25	6.48	11.51	28.45	●
FLD-3038R/L	4.0	0.84	2.08	4.95	8.74	22.60	●
FLD-4038R/L	4.0	0.84	3.25	6.48	11.51	28.45	●
FLD-3040R/L	5.0	0.38	2.08	4.95	8.74	22.60	●
FLD-4040R/L	5.0	0.38	3.25	6.48	11.51	28.45	●

• DMIN according to related boring bar

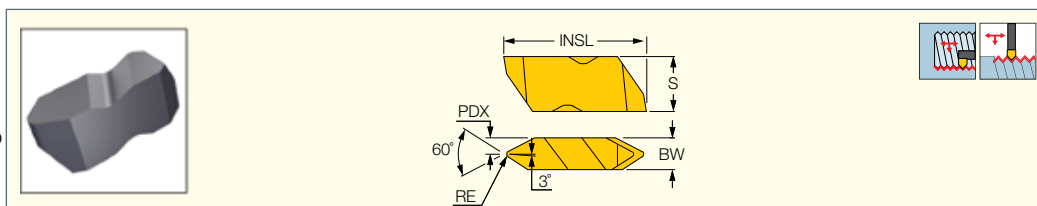
<sup>(1)</sup> Threads per inch

**NOTCH-GRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**PARTIAL PROFILE THREDDING FLD**

Double-Ended, Precision, Flat Top  
Partial Profile Threading Inserts



Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	RE	PDX	BW	S	INSL	
FLD-4050R/L	4.0	0.51	3.25	6.48	11.51	28.45	●
FLD-3038R/L	4.0	0.84	2.08	4.95	8.74	22.60	●
FLD-4038R/L	4.0	0.84	3.25	6.48	11.51	28.45	●
FLD-3040R/L	5.0	0.38	2.08	4.95	8.74	22.60	●
FLD-4040R/L	5.0	0.38	3.25	6.48	11.51	28.45	●

• DMIN according to related boring bar

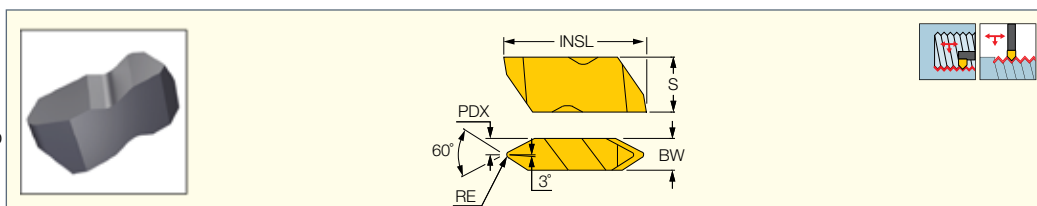
<sup>(1)</sup> Threads per inch

**NOTCH-GRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**PARTIAL PROFILE THREDDING FLD**

Double-Ended, Precision, Flat Top  
Partial Profile Threading Inserts



Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	RE	PDX	BW	S	INSL	
FLD-4050R/L	4.0	0.51	3.25	6.48	11.51	28.45	●
FLD-3038R/L	4.0	0.84	2.08	4.95	8.74	22.60	●
FLD-4038R/L	4.0	0.84	3.25	6.48	11.51	28.45	●
FLD-3040R/L	5.0	0.38	2.08	4.95	8.74	22.60	●
FLD-4040R/L	5.0	0.38	3.25	6.48	11.51	28.45	●

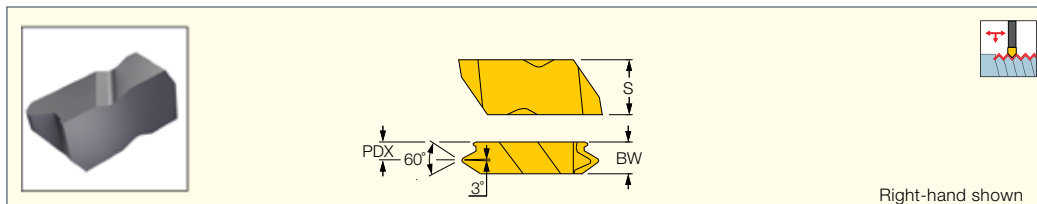
• DMIN according to related boring bar

<sup>(1)</sup> Threads per inch

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**API THREADING FLDC-E**  
Double-Ended Precision Flat  
Top Threading Inserts



Right-hand shown

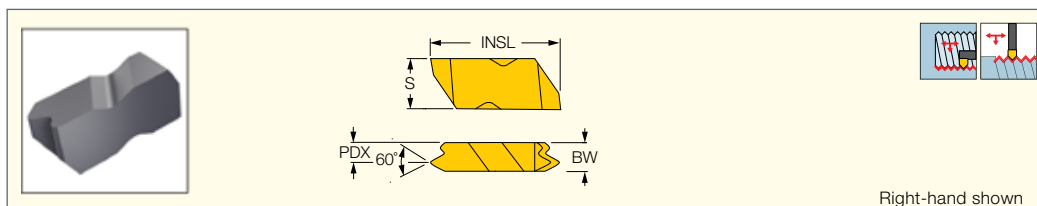
Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	IPF	PDX	BW	S	INSL	
FLDC-4-425E	4.0	2	4.65	7.92	11.51	28.45	●
FLDC-4-428E	4.0	2	4.65	7.92	11.51	28.45	●
FLDC-4-435E	4.0	3	4.65	7.92	11.51	28.45	●
FLDC-4-438E	4.0	3	4.65	7.92	11.51	28.45	●
FLDC-3-530E	5.0	3	3.73	6.35	8.74	22.60	●

<sup>(1)</sup> Threads per inch

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**API ROUND THREADING FLDC-RD-75**  
Double-Ended Precision Flat  
Top Threading Inserts



Right-hand shown

Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	IPF	PDX	BW	S	INSL	
FLDC-3-8RDR/L75	8.0	3/4	5.00	3.18	8.74	22.60	●
FLDC-3-10RDR/L75	10.0	3/4	5.00	3.18	8.74	22.60	●

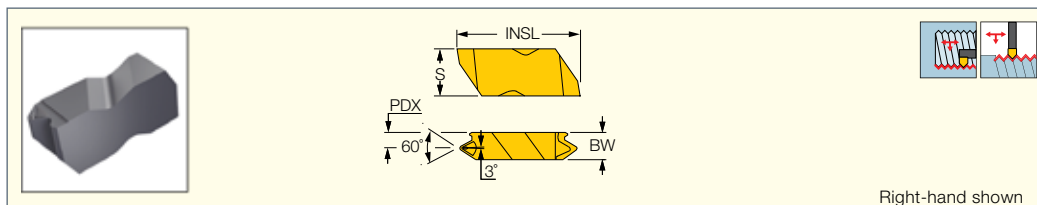
• DMIN according to related boring bar

<sup>(1)</sup> Threads per inch

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**API ROUND THREADING FLDC-RD-75-CB**  
Double-Ended, Precision  
Threading Inserts with  
a Chipbreaker



Right-hand shown

Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	IPF	PDX	BW	S	INSL	
FLDC-3-8RDR/L75-CB	8.0	3/4	4.95	3.18	8.74	25.15	●

• DMIN according to related boring bar

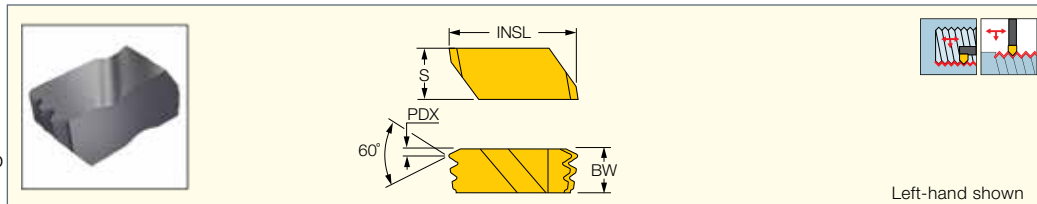
<sup>(1)</sup> Threads per inch

**NOTCH-GRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**API ROUND THREADING  
FLDC-RD-75M**

Double-Ended, Precision, Flat Top  
Multi-Tooth Threading Inserts,



Dimensions							IC908
Designation	TPI <sup>(1)</sup>	IPF	PDX	BW	S	INSL	
FLDC-6-8RDR75	8.0	3/4	1.80	9.73	11.51	28.45	●
FLDC-6-10RDR75	10.0	3/4	3.40	9.73	11.51	28.45	●

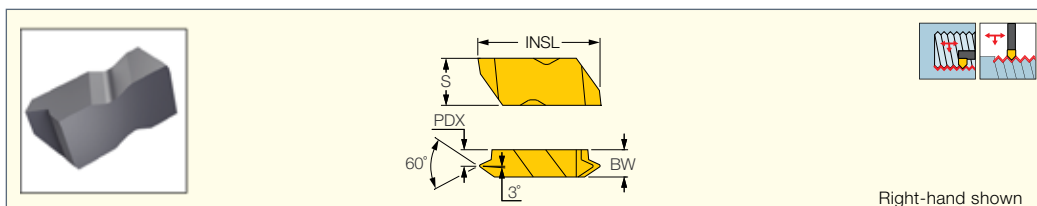
• DMIN according to related boring bar  
(1) Threads per inch

**NOTCH-GRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**NPT THREADING  
FLDC-V-75**

Double-Ended Precision Flat  
Top Threading Inserts



Dimensions							IC908
Designation	TPI <sup>(1)</sup>	IPF	PDX	BW	S	INSL	
FLDC-3-8VR/L75	8.0	3/4	2.50	4.95	8.74	22.60	●
FLDC-3-115VR/L75	11.5	3/4	3.70	4.95	8.74	22.60	●
FLDC-3-14VR/L-75	14.0	3/4	3.80	4.95	8.74	22.60	●
FLDC-3-18VR/L-75	18.0	3/4	3.90	4.95	8.74	22.60	●
FLDC-3-27VR/L-75	27.0	3/4	4.10	4.95	8.74	22.60	●

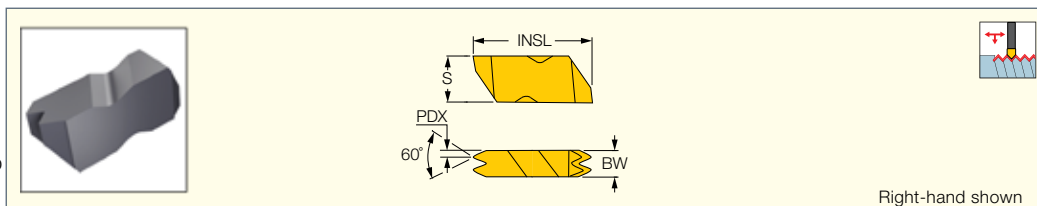
• DMIN according to related boring bar  
(1) Threads per inch

**NOTCH-GRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**NPT THREADING FLDC-  
NPT-E**

Double-Ended, Precision, Flat Top  
Multi-Tooth Threading Inserts



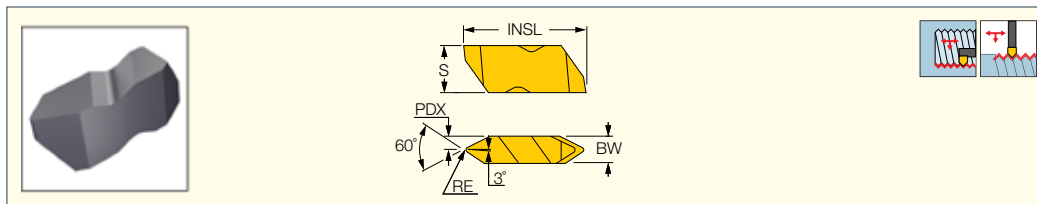
Dimensions							IC908
Designation	TPI <sup>(1)</sup>	IPF	PDX	BW	S	INSL	
FLDC-3-8NPT 2E	8.0	3/4	1.50	6.35	8.74	22.60	●
FLDC-3-11.5NPT-2E	11.5	3/4	1.20	6.35	8.74	22.60	●

(1) Threads per inch

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**UNJ THREADING FLJ**  
Double-Ended Precision Flat  
Top Threading Inserts



Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	RE	PDX	BW	S	INSL	
FLJ-3020R/L8	8.0	0.48	2.49	4.95	8.74	22.60	●
FLJ-3014R/L12	12.0	0.32	2.49	4.95	8.74	22.60	●
FLJ-3010R/L16	16.0	0.24	2.49	4.95	8.74	22.60	●

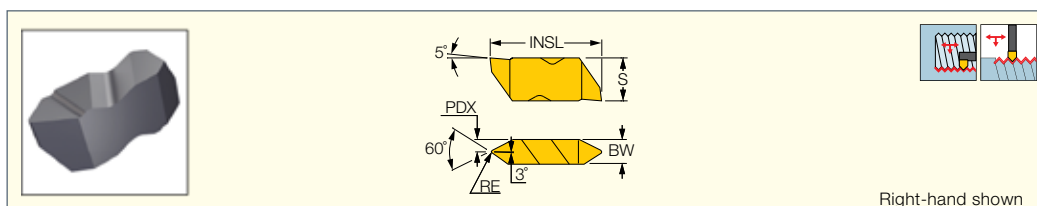
• DMIN according to related boring bar

<sup>(1)</sup> Threads per inch

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**UNJ THREADING FLJP**  
Double-Ended, Precision  
Threading Inserts with  
a Positive Rake



Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	RE	PDX	BW	S	INSL	
FLJP-3020R/L8	8.0	0.48	2.50	4.95	8.74	22.60	●
FLJP-3014R/L12	12.0	0.32	2.50	4.95	8.74	22.60	●
FLJP-3010R/L16	16.0	0.24	2.50	4.95	8.74	22.60	●

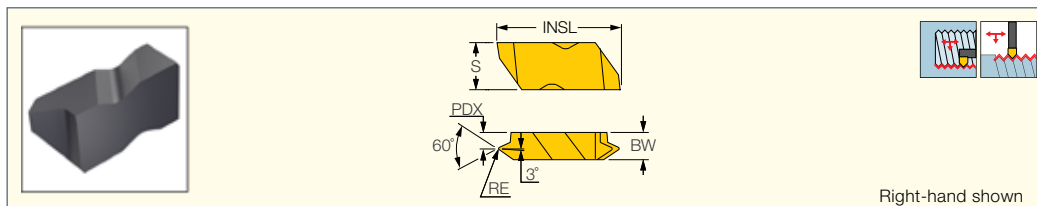
• DMIN according to related boring bar

<sup>(1)</sup> Threads per inch

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**UNJ THREADING FLJF**  
Double-Ended, Precision  
Flat Top Threading Inserts



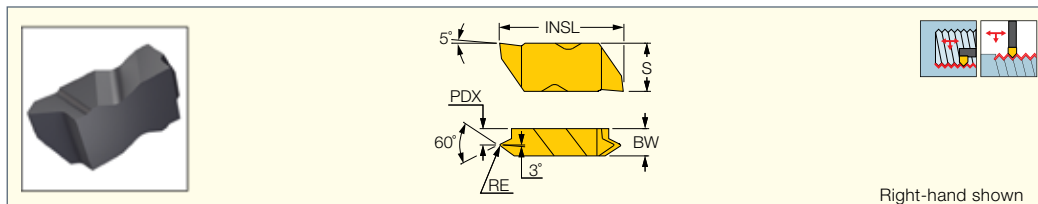
Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	RE	PDX	BW	S	INSL	
FLJF-3012R/L14	14.0	0.27	3.58	4.95	8.74	22.60	●
FLJF-3010R/L16	16.0	0.24	3.60	4.95	8.74	22.60	●
FLJF-3009R/L18	18.0	0.21	3.60	4.95	8.74	22.60	●
FLJF-3008R/L20	20.0	0.19	3.60	4.95	8.74	22.60	●
FLJF-3007R/L24	24.0	0.16	3.60	4.95	8.74	22.60	●
FLJF-3006R/L28	28.0	0.14	3.60	4.95	8.74	22.60	●
FLJF-3005R/L32	32.0	0.12	3.60	4.95	8.74	22.60	●

• DMIN according to related boring bar

<sup>(1)</sup> Threads per inch

**NOTCHGRIP**  
GROOVE-TURN LINE  
**ISCARTHREAD**

**UNJ THREADING FLJK**  
Double-Ended, Precision  
Threading Inserts, with  
a Positive Rake



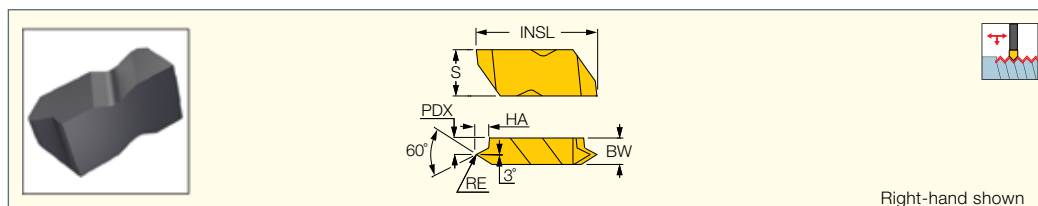
Right-hand shown

Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	RE	PDX	BW	S	INSL	
FLJK-3012R/L14	14.0	0.27	3.58	4.95	8.74	22.60	●
FLJK-3010R/L16	16.0	0.24	3.60	4.95	8.74	22.60	●
FLJK-3009R/L18	18.0	0.21	3.60	4.95	8.74	22.60	●
FLJK-3008R/L20	20.0	0.19	3.60	4.95	8.74	22.60	●
FLJK-3007R/L24	24.0	0.16	3.60	4.95	8.74	22.60	●
FLJK-3006R/L28	28.0	0.14	3.60	4.95	8.74	22.60	●
FLJK-3005R/L32	32.0	0.12	3.60	4.95	8.74	22.60	●

• DMIN according to related boring bar  
(1) Threads per inch

**NOTCHGRIP**  
GROOVE-TURN LINE  
**ISCARTHREAD**

**UN THREADING FLTC-E**  
Double-Ended, Precision, Flat  
Top Full Profile Threading Inserts,



Right-hand shown

Designation	Dimensions							IC908
	TPI <sup>(1)</sup>	RE	HA	PDX	BW	S	INSL	
FLTC-3R/L7E	7.0	0.43	2.74	2.70	4.95	8.74	22.60	●
FLTC-3R/L8E	8.0	0.38	2.39	2.70	4.95	8.74	22.60	●
FLTC-3R/L9E	9.0	0.33	2.13	2.70	4.95	8.74	22.60	●
FLTC-3R/L10E	10.0	0.30	1.93	2.70	4.95	8.74	22.60	●
FLTC-3R/L11E	11.0	0.28	1.75	2.70	4.95	8.74	22.60	●
FLTC-3R/L12E	12.0	0.25	1.30	3.80	4.95	8.74	22.60	●
FLTC-3R/L14E	14.0	0.23	1.37	3.80	4.95	8.74	22.60	●
FLTC-3R/L16E	16.0	0.20	1.17	3.80	4.95	8.74	22.60	●
FLTC-3R/L18E	18.0	0.18	1.04	3.80	4.95	8.74	22.60	●
FLTC-3R/L20E	20.0	0.15	0.94	3.80	4.95	8.74	22.60	●
FLTC-3R/L24E	24.0	0.13	0.79	3.80	4.95	8.74	22.60	●
FLTC-3R/L28E	28.0	0.08	0.58	3.80	4.95	8.74	22.60	●
FLTC-3R/L32E	32.0	0.08	0.53	3.80	4.95	8.74	22.60	●

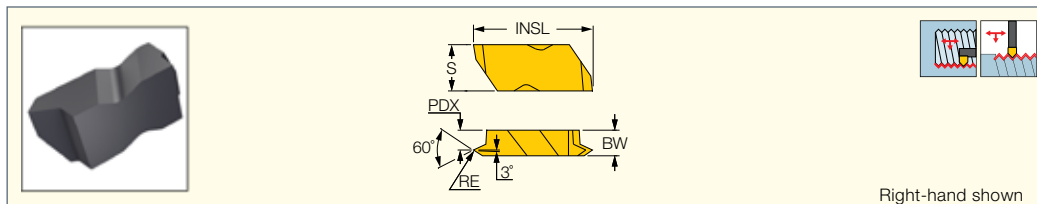
(1) Threads per inch

**NOTCH-GRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**60° PARTIAL PROFILE THREADING FLT F**

Double-Ended, Precision Flat Top Threading Inserts



Designation	Dimensions										IC908	
	TPIN <sup>(1)</sup>	TPIX <sup>(2)</sup>	TPIN_DF2 <sup>(3)</sup>	TPIX_DF2 <sup>(4)</sup>	RE	PDX	BW	S	INSL	TPN_DF2		TPX_DF2
FLTF-3R/L	9.00	24.00	10.00	44.00	0.00	3.60	4.95	8.74	22.60	2.500	1.750	●
FLTF-4R/L	9.00	24.00	10.00	44.00	0.00	5.10	6.48	11.51	28.45	2.500	1.750	●
FLTF-2R/L	12.00	24.00	14.00	44.00	0.00	2.80	3.81	5.56	12.95	0.600	1.750	●

• For 60° V-thread limits, see page • DMIN according to related boring bar

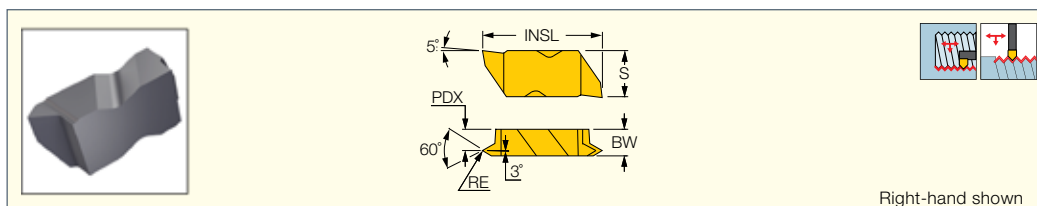
- (1) TPI int. min.
- (2) TPI int. max.
- (3) TPI ext. min.
- (4) TPI ext. max.

**NOTCH-GRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**60° PARTIAL PROFILE THREADING FLT K**

Double-Ended, Precision Positive Rake Threading Inserts



Designation	Dimensions										IC908
	TPIN <sup>(1)</sup>	TPIX <sup>(2)</sup>	TPIN_DF2 <sup>(3)</sup>	TPIX_DF2 <sup>(4)</sup>	RE	TTP	PDX	BW	S	INSL	
FLTK-3R/L	9.00	24.00	10.00	44.00	0.00	BOTH	3.60	4.95	8.74	22.60	●
FLTK-4R/L	9.00	24.00	10.00	44.00	0.00	BOTH	5.10	6.48	11.51	28.45	●
FLTK-2R/L	12.00	24.00	14.00	44.00	0.00	BOTH	2.80	3.81	5.56	12.95	●

• For 60° V-thread limits, see page • DMIN according to related boring bar

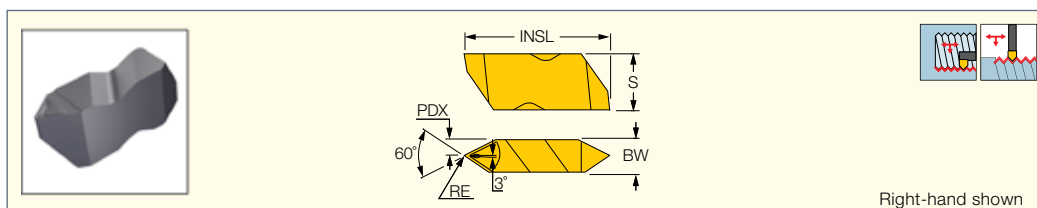
- (1) TPI int. min.
- (2) TPI int. max.
- (3) TPI ext. min.
- (4) TPI ext. max.

**NOTCH-GRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**60° PARTIAL PROFILE THREADING FLT-CB**

Double-Ended Precision Threading Inserts with Chipbreakers



Designation	Dimensions										IC908
	TPIN <sup>(1)</sup>	TPIX <sup>(2)</sup>	TPIN_DF2 <sup>(3)</sup>	TPIX_DF2 <sup>(4)</sup>	RE	PDX	BW	S	INSL		
FLT-4R/L-HCB	4.00	12.00	4.00	20.00	0.00	3.30	6.48	11.51	28.45	●	
FLT-3R/LC-HCB	5.00	6.00	6.00	11.00	0.00	2.50	4.95	8.74	22.60	●	
FLT-3R/L-HCB	5.00	12.00	6.00	20.00	0.00	2.50	4.95	8.74	22.60	●	
FLT-3R/L-FCB	7.00	20.00	8.00	36.00	0.00	2.50	4.95	8.74	22.60	●	
FLT-3R/L-CB	8.00	12.00	8.00	20.00	0.00	2.50	4.95	8.74	22.60	●	

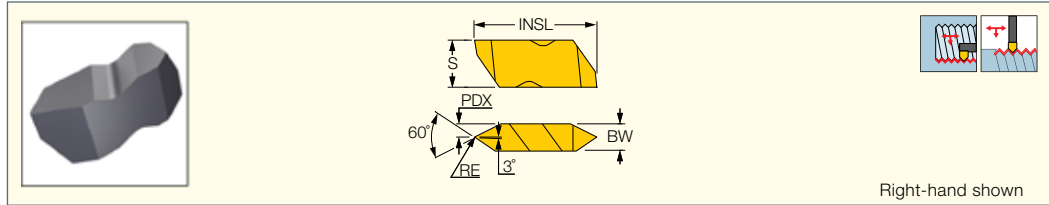
• DMIN according to related boring bar

- (1) TPI int. min.
- (2) TPI int. max.
- (3) TPI ext. min.
- (4) TPI ext. max.



**NOTCH GRIP**  
GROOVE-TURN LINE  
**ISCARTHREAD**

**60° PARTIAL PROFILE  
THREADING FLT**  
Double-Ended, Precision  
Flat Top Threading Inserts

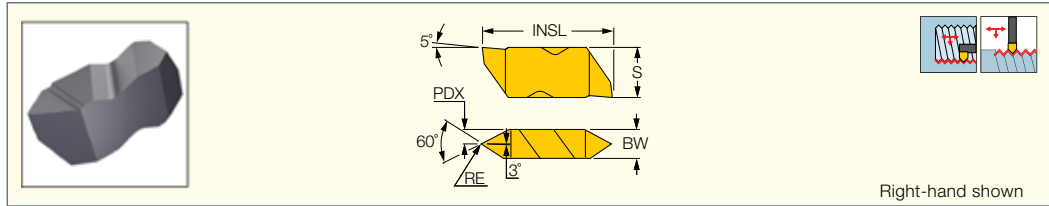


Designation	Dimensions									IC908
	TPIN <sup>(1)</sup>	TPIX <sup>(2)</sup>	TPIN_DF2 <sup>(3)</sup>	TPIX_DF2 <sup>(4)</sup>	RE	PDX	BW	S	INSL	
FLT-4R/L	4.00	12.00	4.00	20.00	0.00	3.30	6.48	11.51	28.45	●
FLT-3R/L	5.00	12.00	6.00	20.00	0.00	2.50	4.95	8.74	22.60	●
FLT-3010R/L	5.00	12.00	6.00	18.00	0.00	2.50	4.95	8.74	22.60	●
FLT-2R/L	7.00	20.00	8.00	36.00	0.00	1.90	3.81	5.56	12.95	●

- For 60° V-thread limits, see page
- DMIN according to related boring bar
- (1) TPI int. min.
- (2) TPI int. max.
- (3) TPI ext. min.
- (4) TPI ext. max.

**NOTCH GRIP**  
GROOVE-TURN LINE  
**ISCARTHREAD**

**60° PARTIAL PROFILE  
THREADING FLTP**  
Double-Ended, Precision Positive  
Rake Threading Inserts



Designation	Dimensions									IC908
	TPIN <sup>(1)</sup>	TPIX <sup>(2)</sup>	TPIN_DF2 <sup>(3)</sup>	TPIX_DF2 <sup>(4)</sup>	RE	PDX	BW	S	INSL	
FLTP-4R/L	4.00	12.00	4.00	20.00	0.00	3.30	6.50	11.51	28.45	●
FLTP-3R/L	5.00	12.00	6.00	20.00	0.00	2.50	5.00	8.74	22.60	●
FLTP-2R/L	7.00	20.00	8.00	36.00	0.00	1.90	3.80	5.56	12.95	●

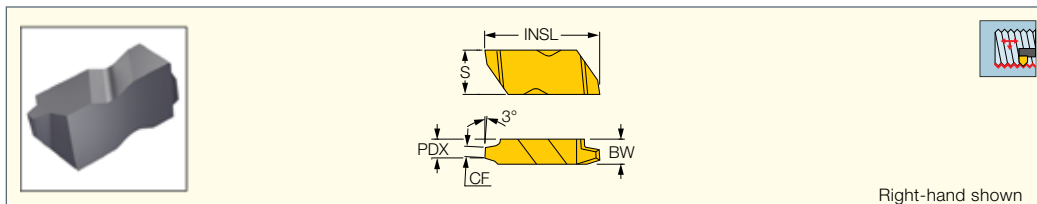
- For 60° V-thread limits, see page
- DMIN according to related boring bar
- (1) TPI int. min.
- (2) TPI int. max.
- (3) TPI ext. min.
- (4) TPI ext. max.

**NOTCHGRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**ACME THREADING FLA-PT-I**

Double-Ended Precision Flat Top Internal Threading Inserts



Right-hand shown

Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	CF	PDX	BW	S	INSL	
FLA-3L16-PT-I	16.0	0.52	3.80	4.95	8.74	22.60	●
FLA-3L14-PT-I	14.0	0.61	3.80	4.95	8.74	22.60	●
FLA-3L12-PT-I	12.0	0.72	3.80	4.95	8.74	22.60	●
FLA-3L10-PT-I	10.0	0.81	3.80	4.95	8.74	22.60	●
FLA-3L8-PT-I	8.0	1.04	3.80	4.95	8.74	22.60	●
FLA-3L6-PT-I	6.0	1.44	3.80	4.95	8.74	22.60	●
FLA-3L5-PT-I	5.0	1.75	3.80	4.95	8.74	22.60	●
FLA-3L4-PT-I	4.0	2.22	3.40	4.95	8.74	22.60	●
FLA-4L8-PT-I	8.0	1.04	5.10	6.48	11.51	28.45	●
FLA-4L6-PT-I	6.0	1.44	5.10	6.48	11.51	28.45	●
FLA-4L5-PT-I	5.0	1.75	5.10	6.48	11.51	28.45	●
FLA-4L4-PT-I	4.0	2.22	5.10	6.48	11.51	28.45	●
FLA-6L3-PT-I	3.0	3.01	7.20	9.73	11.51	28.45	●
FLA-6L2.5-PT-I	2.5	3.63	7.20	9.73	11.51	28.45	●
FLA-6L2-PT-I	2.0	4.58	7.20	9.73	11.51	28.45	●

• For internal thread limits, see page

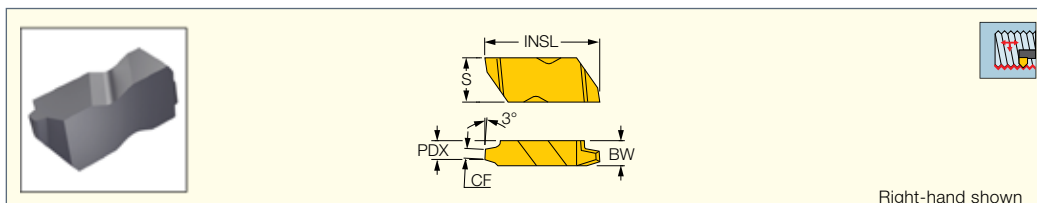
<sup>(1)</sup> Threads per inch

**NOTCHGRIP**  
GROOVE-TURN LINE

**ISCARTHREAD**

**STUB ACME THREADING FLAS-PT-I**

Double-Ended Precision Flat Top on Internal Threading Inserts



Right-hand shown

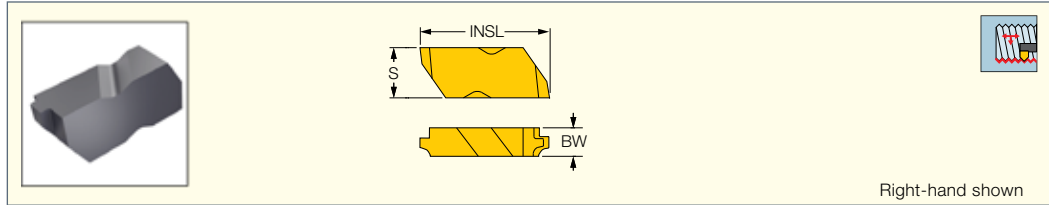
Designation	Dimensions						IC908
	TPI <sup>(1)</sup>	CF	PDX	BW	S	INSL	
FLAS-6L2-PT-I	2.0	5.23	7.20	9.73	11.51	28.45	●
FLAS-4L3-PT-I	3.0	3.44	5.10	6.48	11.51	28.45	●
FLAS-3L4-PT-I	4.0	2.55	3.80	4.95	8.74	22.60	●
FLAS-3L5-PT-I	5.0	2.01	3.80	4.95	8.74	22.60	●
FLAS-3L6-PT-I	6.0	1.66	3.80	4.95	8.74	22.60	●
FLAS-3L8-PT-I	8.0	1.21	3.80	4.95	8.74	22.60	●
FLAS-3L10-PT-I	10.0	0.94	3.80	4.95	8.74	22.60	●
FLAS-3L12-PT-I	12.0	0.83	3.80	4.95	8.74	22.60	●
FLAS-3L14-PT-I	14.0	0.70	3.80	4.95	8.74	22.60	●
FLAS-3L16-PT-I	16.0	0.60	3.80	4.95	8.74	22.60	●

• For internal thread limits, see page

<sup>(1)</sup> Threads per inch

**NOTCHGRIP**  
GROOVE-TURN LINE  
**ISCARTHREAD**

**API BUTTRESS  
THREADING FLDC-B-I**  
Double-Ended Precision Flat  
Top Threading Inserts



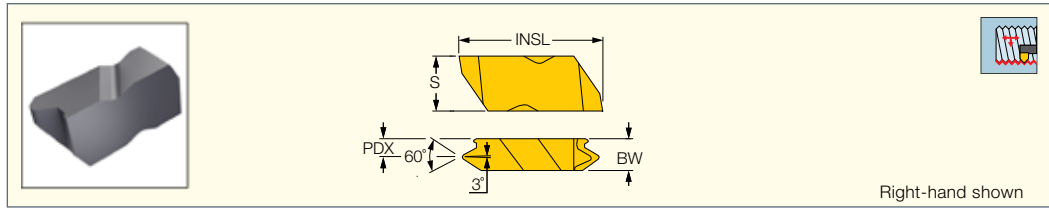
Right-hand shown

Dimensions							IC908
Designation	TPI <sup>(1)</sup>	IPF	BW	PDX	S	INSL	
FLDC-3-5B1I	5.0	1	6.35	10.22	8.74	22.60	●
FLDC-4-5B1I	5.0	1	6.48	16.05	11.51	28.45	●
FLDC-3-5B75I	5.0	3/4	6.35	10.22	8.74	22.60	●
FLDC-4-5B75I	5.0	3/4	6.48	16.05	11.51	28.45	●

<sup>(1)</sup> Threads per inch

**NOTCHGRIP**  
GROOVE-TURN LINE  
**ISCARTHREAD**

**API THREADING FLDC-I**  
Double-Ended Precision Flat  
Top Threading Inserts



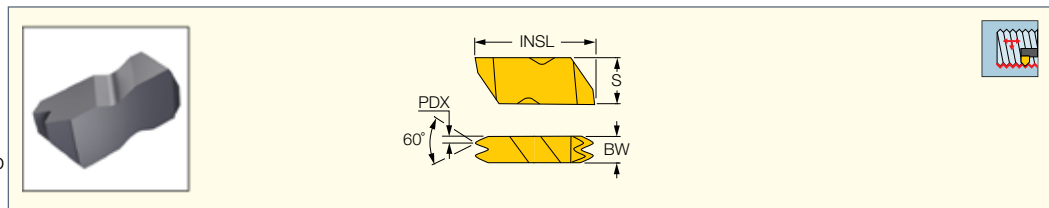
Right-hand shown

Dimensions							IC908
Designation	TPI <sup>(1)</sup>	IPF	PDX	BW	S	INSL	
FLDC-4-425I	4.0	2	4.65	7.92	11.51	28.45	●
FLDC-4-428I	4.0	2	4.65	7.92	11.51	28.45	●
FLDC-4-435I	4.0	3	4.65	7.92	11.51	28.45	●
FLDC-4-438I	4.0	3	4.65	7.92	11.51	28.45	●
FLDC-3-530I	5.0	3	3.73	6.35	8.74	22.60	●

<sup>(1)</sup> Threads per inch

**NOTCHGRIP**  
GROOVE-TURN LINE  
**ISCARTHREAD**

**NPT THREADING FLDC-  
NPT-I**  
Double-Ended, Precision, Flat Top  
Multi-Tooth Threading Inserts



Dimensions							IC908
Designation	TPI <sup>(1)</sup>	IPF	PDX	BW	S	INSL	
FLDC-3-8NPT-2I	8.0	3/4	1.50	6.35	8.74	22.60	●
FLDC-3-11.5NPT-2I	11.5	3/4	1.20	6.35	8.74	22.60	●

• For internal thread limits, see page

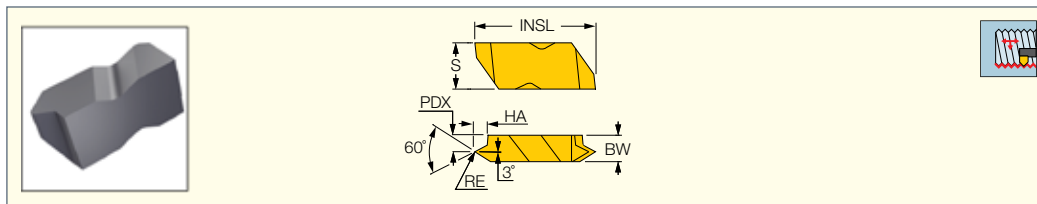
<sup>(1)</sup> Threads per inch

**NOTCH GRIP**  
GROOVE-TURN LINE

**ISCAR THREAD**

**FLTC-I**

Double-Ended, Precision, Full Profile Threading Inserts, for UN Internal Thread Applications



Designation	Dimensions								IC908
	TPI <sup>(1)</sup>	BW	INSL	PDX	S	RE	HA		
FLTC-3R/L7I	7.0	4.95	22.60	2.70	8.74	0.23	2.34	●	
FLTC-3R/L8I	8.0	4.95	22.60	2.70	8.74	0.18	2.06	●	
FLTC-3R/L9I	9.0	4.95	22.60	2.70	8.74	0.15	1.83	●	
FLTC-3R/L10I	10.0	4.95	22.60	2.70	8.74	0.13	1.65	●	
FLTC-3R/L11I	11.0	4.95	22.60	2.70	8.74	0.13	1.50	●	
FLTC-3R/L12I	12.0	4.95	22.60	3.80	8.74	0.10	1.22	●	
FLTC-3R/L14I	14.0	4.95	22.60	3.76	8.74	0.08	1.12	●	
FLTC-3R/L16I	16.0	4.95	22.60	3.76	8.74	0.08	1.02	●	
FLTC-3R/L18I	18.0	4.95	22.60	3.76	8.74	0.08	0.91	●	
FLTC-3R/L20I	20.0	4.95	22.60	3.76	8.74	0.08	0.79	●	
FLTC-3R/L24I	24.0	4.95	22.60	3.76	8.74	0.08	0.66	●	
FLTC-3R/L28I	28.0	4.95	22.60	3.76	8.74	0.08	0.58	●	

• For internal thread limits, see page

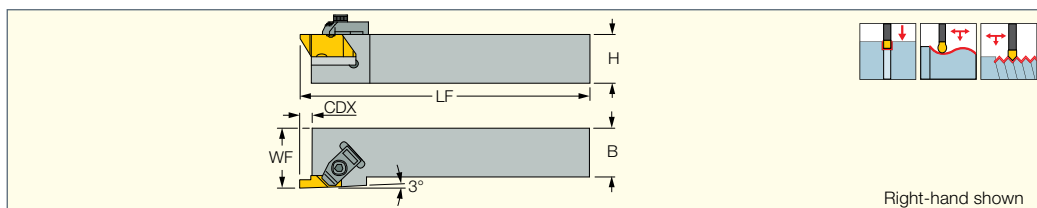
<sup>(1)</sup> Threads per inch

## EXTERNAL TOOLS

**NOTCH GRIP**  
GROOVE-TURN LINE

**FLSR/L**

Tools for External Grooving and Threading Inserts



Right-hand shown

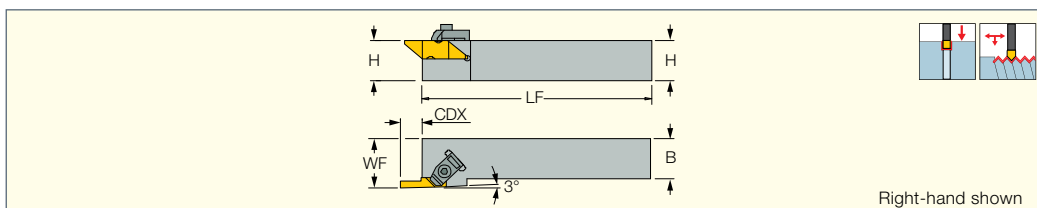
Designation	SSC <sup>(1)</sup>	H	B	CDX	WF	LF	Insert
FLSR/L-2020M2	2.0	20.0	20.0	3.00	25.00	125.00	FL/IN_-2
FLSR/L-2020M3	3.0	20.0	20.0	5.00	32.00	125.00	FL/IN_-3
FLSR/L-2525M2	2.0	25.0	25.0	3.00	32.00	150.00	FL/IN_-2
FLSR/L-2525M3	3.0	25.0	25.0	5.00	32.00	150.00	FL/IN_-3

<sup>(1)</sup> Seat size code

**NOTCH GRIP**  
GROOVE-TURN LINE

**FLSR/LT**

External Tools for Deep Grooving Inserts



Right-hand shown

Designation	H	B	SSC <sup>(1)</sup>	CDX	WF	LF	MIID <sup>(2)</sup>
FLSLT-2525M3	25.0	25.0	3.0	11.20	32.00	152.40	INGT-3L
FLSLT-2525M4	25.0	25.0	4.0	14.20	32.00	152.40	INGT-4L
FLSRT-2525M3	25.0	25.0	3.0	11.20	32.00	152.40	INGT-3R
FLSRT-2525M4	25.0	25.0	4.0	14.20	32.00	152.40	INGT-4R
FLSLT-3232M3	32.0	32.0	3.0	11.20	40.00	152.40	INGT-3L
FLSLT-3232M4	32.0	32.0	4.0	14.20	40.00	152.40	INGT-4L
FLSRT-3232M3	32.0	32.0	3.0	11.20	40.00	152.40	INGT-3R
FLSRT-3232M4	32.0	32.0	4.0	14.20	40.00	152.40	INGT-4R

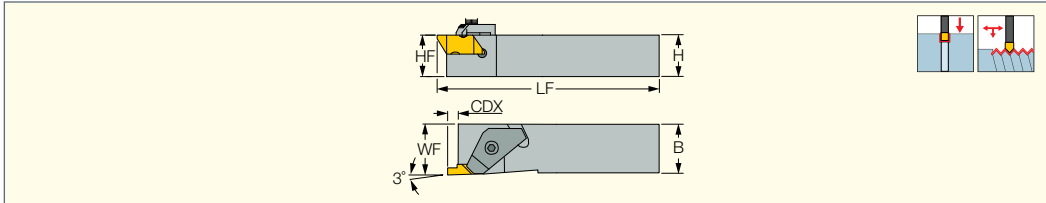
• For user guide, see pages

<sup>(1)</sup> Seat size code

<sup>(2)</sup> Master insert identification

**NOTCH GRIP**  
GROOVE-TURN LINE  
**ISCAR THREAD**

**FLASR/L**  
External Tools for Grooving  
and Threading for Swiss-  
type Machines



Designation	SSC <sup>(1)</sup>	H	HF	B	CDX	WF	LF	Insert
FLASR/L-1010M2	2.0	10.0	10.0	10.0	3.51	10.00	150.00	FL/IN_2
FLASR/L-1212M2	2.0	12.0	12.0	12.0	3.51	12.00	150.00	FL/IN_2
FLASR-1616M2	2.0	16.0	16.0	16.0	3.51	16.00	150.00	FL/IN_2
FLASR/L-1616M3	3.0	16.0	16.0	16.0	5.31	16.00	125.00	FL/IN_3

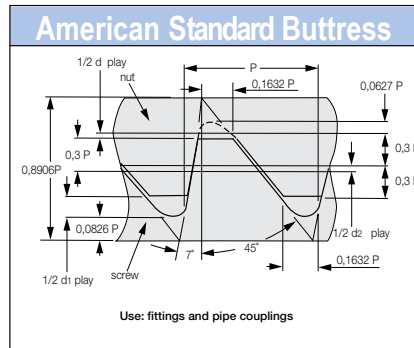
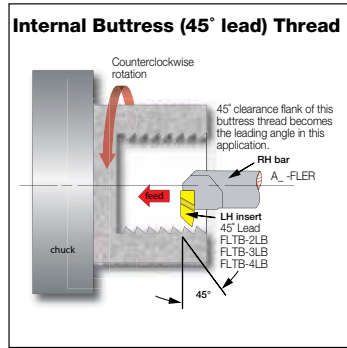
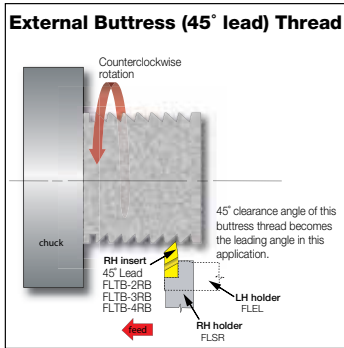
<sup>(1)</sup> Seat size code

# USER GUIDE

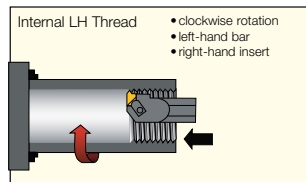
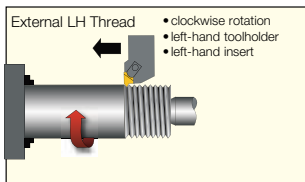
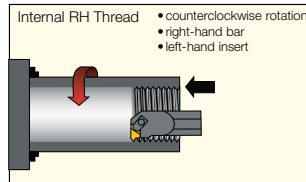
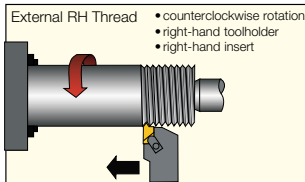
## American Standard Buttress Thread Designations

- When only the designation **BUTT** is used, the thread is a “pull” type buttress (external thread pulls) with the clearance flank (45°) leading and the pressure flank (7°) following.
- When the designation **PUSH-BUTT** is used, the thread is a push type buttress (external thread pushes) with the load flank (7°) leading and the 45° clearance flank following.

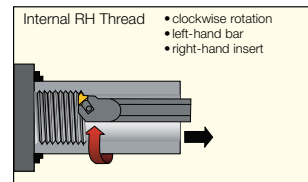
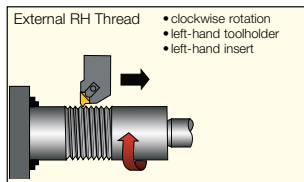
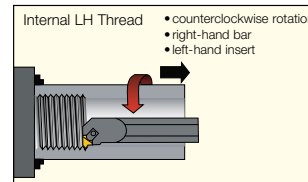
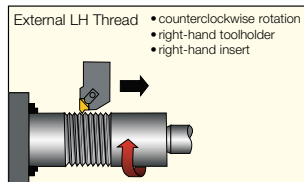
- Whenever possible this description should be confirmed by a simplified view showing thread angles on the drawing of the product that has the buttress thread.
- Always remember that the position of your holder and direction of your feed will determine the lead angle on the insert.



### Feed direction towards the chuck



### Feed direction towards the tailstock



## Cross Reference Chart

STYLE	TOOL-FLO	KENAMETAL®	SANDVIK®*	VALENITE®*	HORIZON®*	RTW®*
ACME	FLA	NA	TLA	VLA	HA	PA
ACME STUBFLAS	NAS	TLAS	VLAS	HAS	PAS	
API-NON TOPPING	FLD	ND	TLD	#	#	#
API-TOPPING	FLDC	NDC	TLDC	#	HDC	PDC
UNJ	FLJ	NJ	TLJ	#	HJ	#
UNJ-FINE PITCH	FLJF	NJF	TLJF	#	HJF	#
UNJ-FINE PITCH-POSITIVE	FLJK	NJK	TLJK	#	#	#
UNJ-POSITIVE	FLJP	NJP	TLJP	#	#	#
60° V	FLT	NT	TLT	VLRT	HT	PT
AMERICAN STANDARD BUTTRESS	FLTB	NTB	TLTB	#	HTB	#
UN - UNIFIED	FLTC	NTC	TLTC	VLTC	HTC	PTC
60° V - FINE PITCH	FLTF	NTF	TLTF	VLTF	HTF	PTF
60° V - FINE PITCH POSITIVE	FLTK	NTK	TLTK	VLTK	HTK	PTK
60° V - POSITIVE	FLTP	NTP	TLTP	VLTP	HTP	PTP

\*Top Clamp change is required when converting from SANDVIK®

# USER GUIDE

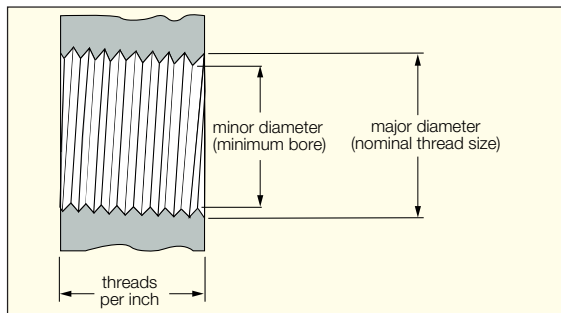
## Threading Limits with Standard NOTCH-GRIP Inserts

The following charts list the largest pitch that can be applied on internal applications for Acme and V-Threading NOTCH-GRIP inserts in sizes 2,3, 4 and 6.

### 60° V-Threading Limits

FLT-2 Inserts	Internal Threading Limitations			
	Threads per Inch	Nominal Thread Size	Minimum Minor Diameter	
			Inch	MM
6	1-7/8	1.695	43.05	
7	1-3/4	1.595	40.51	
8	1-5/8	1.490	37.85	
9	1-9/16	1.442	36.63	
10	1-1/2	1.392	35.36	
11	1-7/16	1.339	34.01	
12	1-3/8	1.285	32.64	
13	1-5/16	1.229	31.22	
14	1-1/4	1.173	29.79	
16	1-1/4	1.182	30.02	
18	1-1/8	1.065	27.05	
20	1-1/8	1.071	27.20	
24	1-1/16	1.017	25.83	

\* 24 TPI and finer can be cut with a #2 series insert provided that the minor diameter is 1.000 or larger.



FLT-3 & 4 Inserts	Internal Threading Limitations			
	Threads per Inch	Nominal Thread Size	Minimum Minor Diameter	
			Inch	MM
4**	3	2.729	69.32	
4-1/2**	2-7/8	2.634	66.90	
5	2-3/4	2.534	64.36	
6	2-1/2	2.320	58.93	
7	2-1/4	2.095	53.21	
8	2	1.865	47.37	
9	1-15/16	1.817	46.15	
10	1-7/8	1.767	44.88	
11	1-13/16	1.714	43.54	
12	1-3/4	1.660	42.16	
13	1-5/8	1.542	39.17	
14	1-9/16	1.485	37.72	
16*	1-7/16	1.370	34.80	

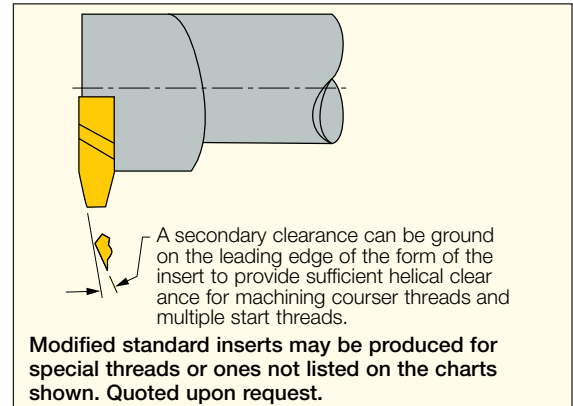
\* 16 pitch acme threads and finer can be cut provided the minor diameter is 1.370 or larger.

\*\* FLT-4 only.

### Acme Threading Limits

FLA-2	Internal Threading Limitations			
	Threads per Inch	Nominal Thread Size	Minimum Minor Diameter	
			Inch	MM
6	2-1/2	2.333	59.26	
8	2-1/4	2.125	53.98	
10	2	1.900	48.26	
12	1-3/4	1.667	42.34	
14	1-5/8	1.554	39.47	
16*	1-1/2	1.438	36.53	

\* 16 pitch acme threads and finer can be cut provided the minor diameter is 1.438 or larger.

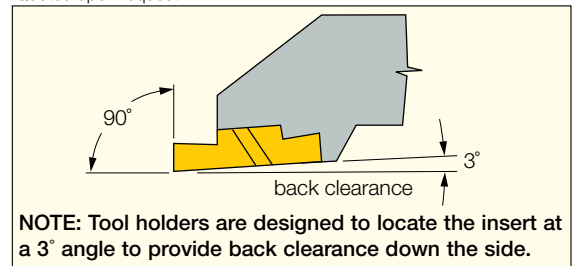


FLA-3, 4 & 6	Internal Threading Limitations			
	Threads per Inch	Nominal Thread Size	Minimum Minor Diameter	
			Inch	MM
2*	5	4.500	114.30	
2-1/2**	4-1/2	4.100	104.14	
3**	4	3.665	93.09	
4	3-1/2	3.250	82.55	
5	3	2.800	71.12	
6	2-1/2	2.333	59.26	
8	2-1/4	2.125	53.98	
10	2	1.900	48.26	
12	1-3/4	1.667	42.34	
14	1-5/8	1.554	39.47	
16*	1-1/2	1.438	36.53	

\* 16 pitch acme threads and finer can be cut provided the minor diameter is 1.438 or larger.

\*\* FLA-6 only.

NOTE: Positive rake ACME inserts are recommended for stainless steels and high-temp alloy applications. Quoted upon request.



FLTB-2A & 2B	Internal Threading Limitations			
	Threads per Inch	Nominal Thread Size	Minimum Minor Diameter	
			Inch	MM
8	1-3/4	1.600	40.64	
10	1-5/8	1.505	38.23	
12	1-1/2	1.400	35.56	
16	1-1/4	1.175	29.85	
20	1-1/16	1.002	25.45	

FLTB-3A & 4A	Internal Threading Limitations			
	Threads per Inch	Nominal Thread Size	Minimum Minor Diameter	
			Inch	MM
4*	2-1/2	2.200	55.88	
5	2-1/4	2.010	51.05	
6	2	1.800	45.72	
8	1-3/4	1.600	40.64	
10	1-5/8	1.505	38.23	
12**	1-1/2	1.400	35.56	

\* FLTB-4A insert only

\*\* 16 or 20 threads per inch can be cut providing minor diameter is 1.375 or larger.

FLTB-3B & 4B	Internal Threading Limitations			
	Threads per Inch	Nominal Thread Size	Minimum Minor Diameter	
			Inch	MM
4	*2-7/8	2.575	65.41	
5	2-3/4	2.510	63.75	
6	2-3/8	1.175	29.85	
8	2-1/8	1.975	50.17	
10	1-7/8	1.755	44.58	
12	1-5/8	1.525	38.74	
16	1-1/2	1.407	35.74	
20	1-7/16	1.378	35.00	

\* FLTB-4B insert only

**ISCAR LTD.**

**Israel**  
**Headquarters**  
Tel +972 (0)4 997 0311  
Fax +972 (0)4 987 3741  
www.iscar.com  
headquarter@iscar.co.il

**Argentina**

ISCAR TOOLS ARGENTINA SA  
Tel +54 114 912 2200  
Fax +54 114 912 4411  
admin@iscararg.com.ar  
www.iscararg.com.ar

**Australia**

ISCAR AUSTRALIA PTY. LTD  
Tel +61 (0) 2 8848 3500  
Fax +61 (0) 2 8848 3511  
iscaraus@iscar.com.au  
www.iscar.com.au

**Austria**

ISCAR AUSTRIA GmbH  
Tel +43 7252 71200-0  
Fax +43 7252 71200-999  
office@iscar.at  
www.iscar.at

**Belarus**

JV ALC "TWINING-M"  
Tel +375 17 506 32-38  
+375 17 506 33-31/65  
Tel/Fax +375 17 506 32-37  
info@twing.by  
www.twing.by, www.iscar.by

**Belgium**

n.v. ISCAR BENELUX s.a.  
Tel +32 (0) 2 464 2020  
Fax +32 (0) 2 522 5121  
info@iscar.be  
www.iscar.be

**Bosnia**

(Representative Office)  
Tel +387 32 201 100  
Fax +387 32 201 101  
info@iscar.ba

**Brazil**

ISCAR DO BRASIL COM.L. LTDA.  
Tel +55 19 3826-7100  
Fax +55 19 3826-7171  
DDG 0800 701 8877  
iscar@iscarbrasil.com.br  
www.iscar.com.br

**Bulgaria**

ISCAR BULGARIA  
Tel/Fax +359 431 62557  
aa\_iscar@infotel.bg  
www.iscar.bg

**Canada**

ISCAR TOOLS INC.  
Tel +1 905 829 9000  
Fax +1 905 829 9100  
admin@iscar.ca  
www.iscar.ca

**Chile**

SANDE SA  
Tel +56 2 695 1700  
Fax +56 2 697 0332  
logistica@sande.cl

**China**

ISCAR CHINA  
Tel +86 10 6561 0261/2/3  
Fax +86 10 6561 0264  
iscar@iscar.com.cn  
www.iscar.com.cn

**Colombia**

RACSI S.A.  
Tel +57 (1) 4102800  
Fax +57 (1) 2638988  
gerencia@racsi.com

**Croatia**

ISCAR ALATI d.o.o.  
Tel +385 (0) 1 33 23 301  
Fax +385 (0) 1 33 76 145  
iscar@zg.t-com.hr  
www.iscar.hr

**Cyprus**

WAMET (Demetriades) Ltd.  
Tel +357 (0) 2 336660/5498  
Fax +357 (0) 2 333386  
wamet@cytanet.com.cy

**Czech Republic**

ISCAR CR s.r.o.  
Tel +420 377 420 625  
Fax +420 377 420 630  
iscar@iscar.cz  
www.iscar.cz

**Denmark**

KJ VAERKTOEJ AS/ISCAR DENMARK  
Tel +45 70 11 22 44  
Fax ++45 46 98 67 10  
kj@kj.dk  
www.iscar.dk

**Estonia**

KATOMSK AS  
Tel +372 6775 671  
Fax +372 6720 266  
aleksei@katomsk.ee

**Finland**

ISCAR FINLAND OY  
Tel +358-(0)9-439 1420  
Fax +358-(0)9-466 328  
info@iscar.fi  
www.iscar.fi

**France**

ISCAR FRANCE SAS  
Tel +33 (0)1 30 12 92 92  
Fax +33 (0)1 30 12 95 82  
info@iscar.fr  
www.iscar.fr

**Germany**

ISCAR GERMANY GmbH  
Tel +49 (0) 72 43 9908-0  
Fax +49 (0) 72 43 9908-93  
gmbh@iscar.de  
www.iscar.de

**Greece**

INTERNATIONAL TOOLS  
K.-X. GEORGOPOULOS & SIA O.E  
Tel +30 210 346 0133  
Fax +30 210 342 5621  
info@internationaltools.gr

**VIMA**

V. MAZLOUMIAN & SONS  
Tel +30 2310 517-117 / 544-521  
Fax +30 2310 529-107  
vimaco@otenet.gr  
http://www.vimaco.gr

**Hong Kong**

MTC TOOLING SYSTEMS LTD  
Tel +85-2-23054838  
Fax +85-2-27988789  
yoongkamsing@hotmail.com

**Hungary**

ISCAR HUNGARY KFT.  
Tel +36 28 887 700  
Fax +36 28 887 710  
iscar@iscar.hu  
www.iscar.hu

**India**

LARSEN & TOUBRO Ltd.  
Tel +91 22 6705 1039 /3371  
Fax +91 22 6705 1358  
ask-imp@powai.ltdia.com

**Indonesia**

CV MULTI TEKNIK  
Tel. +62-21-29206242/44/45/59  
Fax. +62-21-29206243  
contact@multi-teknik.co.id

**Ireland**

HARDMETAL MACHINE TOOLS  
Tel +353 (0) 1 286 2466  
Fax +353 (0) 1 286 1514  
phannigan@hardmetal.ie

**Italy**

ISCAR ITALIA srl  
Tel +39 02 93 528 1  
Fax +39 02 93 528 213  
marketing@iscaritalia.it  
www.iscaritalia.it

**Japan**

ISCAR JAPAN LTD.  
Tel +81 6 6835 5471  
Fax +81 6 6835 5472  
iscar@iscar.co.jp  
www.iscar.co.jp

**Latvia**

SIA EKL/LS  
Tel +371 6 733 11 54  
Fax +371 6 780 56 48  
eklpstools@isr.lv

**Lithuania**

MECHA, UB  
Tel +370 37 407 230  
Fax +370 37 407 231  
sigitas@mecha.lt

**Macedonia**

(Representative Office)  
Tel +389 2 309 02 52  
Fax +389 2 309 02 54  
info@iscar.com.mk

**Mexico**

ISCAR DE MÉXICO,  
Tel +52 (442) 214 5505  
Fax +52 (442) 214 5510  
iscarmex@iscar.com.mx  
www.iscar.com.mx

**The Netherlands**

ISCAR NEDERLAND B.V.  
Tel +31 (0) 182 535523  
Fax +31 (0) 182 572777  
info@iscar.nl  
www.iscar.nl

**New Zealand**

ISCAR PACIFIC LTD.  
Tel +64 (0) 9 573 1280  
Fax +64 (0) 9 573 0781  
iscar@iscarpac.co.nz

**Norway**

SVEA MASKINER AS  
Tel +47 32277750  
Fax +47 32277751  
per.martin.bakken@svea.no

**Philippines**

MESCO  
Tel +63 2631 1775  
Fax +63 2635 0276  
mesco@mesco.com.ph

**Poland**

ISCAR POLAND Sp. z o.o.  
Tel +48 32 735 7700  
Fax +48 32 735 7701  
iscar@iscar.pl  
www.iscar.pl

**Portugal**

ISCAR PORTUGAL, SA  
Tel +351 256 579950  
Fax +351 256 586764  
info@iscarportugal.pt  
www.iscarportugal.pt

**Romania**

ISCAR TOOLS SRL  
Tel +40 (0)312 286 614  
Fax +40 (0)312 286 615  
iscar-romania@iscar.com

**Russia**

**Moscow**  
ISCAR RUSSIA CIS  
Tel/fax +7 495 660 91 25/31  
iscar@iscar.ru  
www.iscar.ru

**Chelyabinsk**

ISCAR RF EAST LTD  
Tel/fax +7 351 2450432  
rfe@iscar.com  
www.iscar.ru

**Serbia**

ISCAR TOOLS d.o.o.  
Tel +381 11 314 90 38  
Fax +381 11 314 91 47  
info@iscartools.rs

**Singapore**

SINO TOOLING SYSTEM  
Tel +65 6566 7668  
Fax +65 6567 7336  
sinotool@singnet.com.sg

**Slovakia**

ISCAR SR, s.r.o.  
Tel +421 (0) 41 5074301  
Fax +421 (0) 41 5074311  
info@iscar.sk  
www.iscar.sk

**Slovenia**

ISCAR SLOVENIJA d.o.o.  
Tel +386 1 580 92 30  
Fax +386 1 562 21 84  
info@iscar.si  
www.iscar.si

**South Africa**

ISCAR SOUTH AFRICA (PTY) LTD.  
ShareCall 08600-47227  
Tel +27 11 997 2700  
Fax +27 11 388 9750  
iscar@iscarsa.co.za  
www.iscar.co.za

**South Korea**

ISCAR KOREA  
Tel +82 53 760 7590  
Fax +82 53 767 7203  
koss@taegutec.co.kr  
www.iscarkorea.co.kr

**Spain**

ISCAR IBERICA SA  
Tel +34 93 594 6484  
Fax +34 93 582 4458  
iscar@iscarib.es  
www.iscarib.es

**Sweden**

ISCAR SVERIGE AB  
Tel +46 (0) 18 66 90 60  
Fax +46 (0) 18 122 920  
info@iscar.se  
www.iscar.se

**Switzerland**

ISCAR HARTMETALL AG  
Tel +41 (0) 52 728 0850  
Fax +41 (0) 52 728 0855  
office@iscar.ch  
www.iscar.ch

**Taiwan**

ISCAR TAIWAN LTD.  
Tel +886 (0)4-24731573  
Fax +886 (0)4-24731530  
iscar.taiwan@msa.hinet.net  
www.iscar.org.tw

**Thailand**

ISCAR THAILAND LTD.  
Tel +66 (2) 7136633-8  
Fax +66 (2) 7136632  
iscar@iscarthailand.com  
www.iscarthailand.com

**Turkey**

ISCAR KESICI TAKIM  
TIC. VE. IML. LTD  
Tel +90 (262) 751 04 84 (Pbx)  
Fax +90 (262) 751 04 85  
iscar@iscar.com.tr  
www.iscar.com.tr

**Ukraine**

ISCAR UKRAINE LLC  
Tel/fax +38 (044) 503-07-08  
iscar\_ua@iscar.com  
www.iscar.com.ua

**United Kingdom**

ISCAR TOOLS LTD.  
Tel +44 (0) 121 422 8585  
Fax +44 (0) 121 423 2789  
sales@iscar.co.uk  
www.iscar.co.uk

**United States**

ISCAR METALS INC.  
Tel +1 817 258 3200  
Tech Tel 1-877-BY-ISCAR  
Fax +1 817 258 3221  
info@iscarmetals.com  
www.iscarmetals.com

**Venezuela**

FERREINDUSTRIAL ISO-DIN C.A.  
Tel +58 2 632 8211/633 4657  
Fax +58 2 632 5277  
iso-din@cantv.net

**Vietnam**

ISCAR VIETNAM  
(Representative Office)  
Tel +84 8 38 123 519/20  
Fax +84 8 38 123 521  
iscarvn@hcm.fpt.vn  
www.iscarvn.com

"© 2013 Iscar Ltd. This document, as well as all information and other data contained herein and/or derived therefrom, including but not limited to, all trademarks, logos, trade-names, concepts, pictures, designs and/or devices, as well as any data from which any proprietary and/or intellectual property right may emanate ("Information"), is the sole and exclusive property of Iscar Ltd. and is protected by copyright and other applicable laws. No part of any information may be used or otherwise disseminated for any purpose whatsoever without the express prior written consent of Iscar Ltd.

Items appearing in this catalog may be improved, amended or withdrawn without prior notice."

03/2021



3325384G





# **NOTCH-GRIP**

GROOVE-TURN LINE

