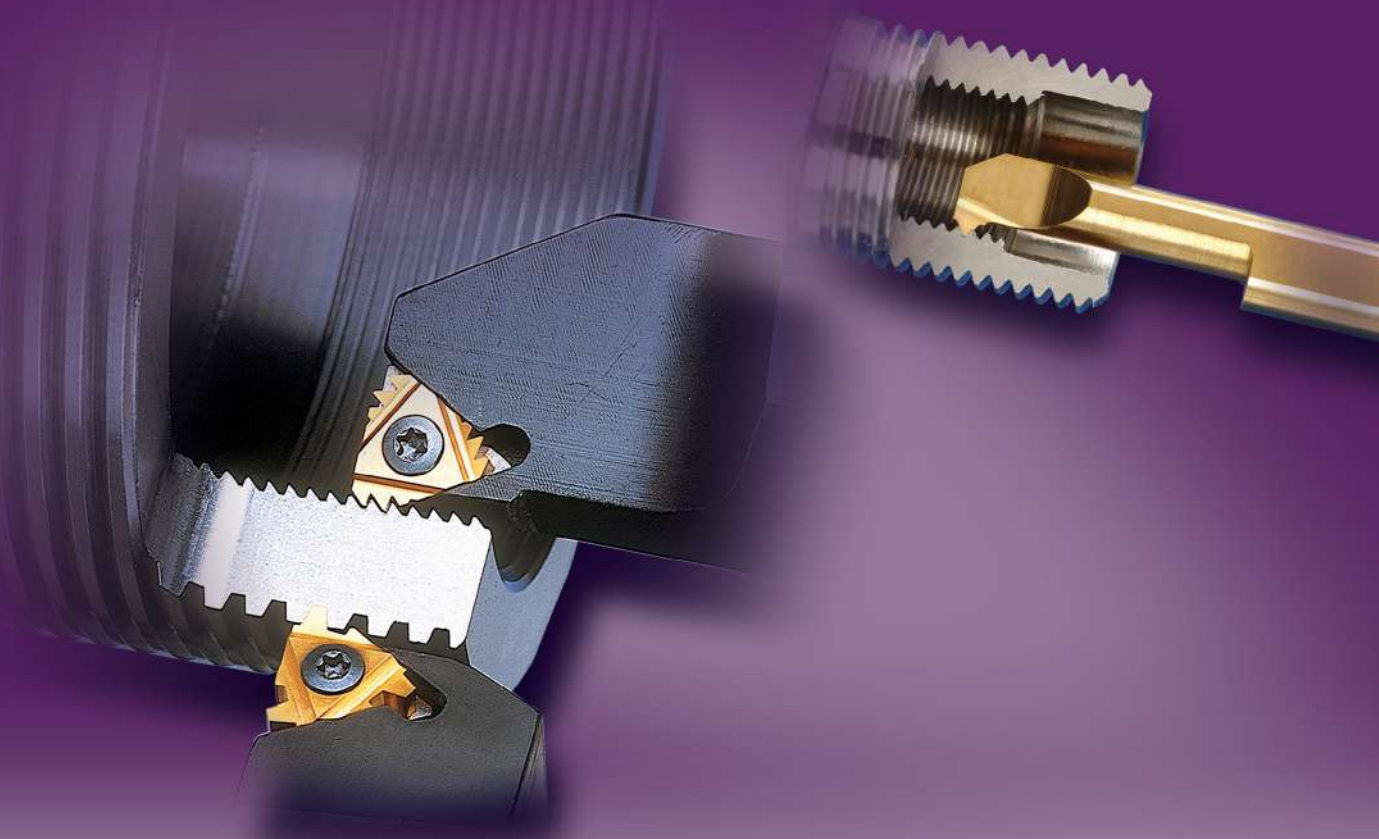


Thread Turning Inserts



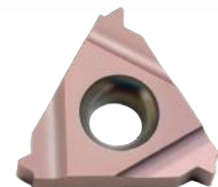
BLU Grade

A sub-micrograin grade with PVD triple layer coating. The BLU grade provides a combination of very high strength with high wear resistance.



HBA Grade

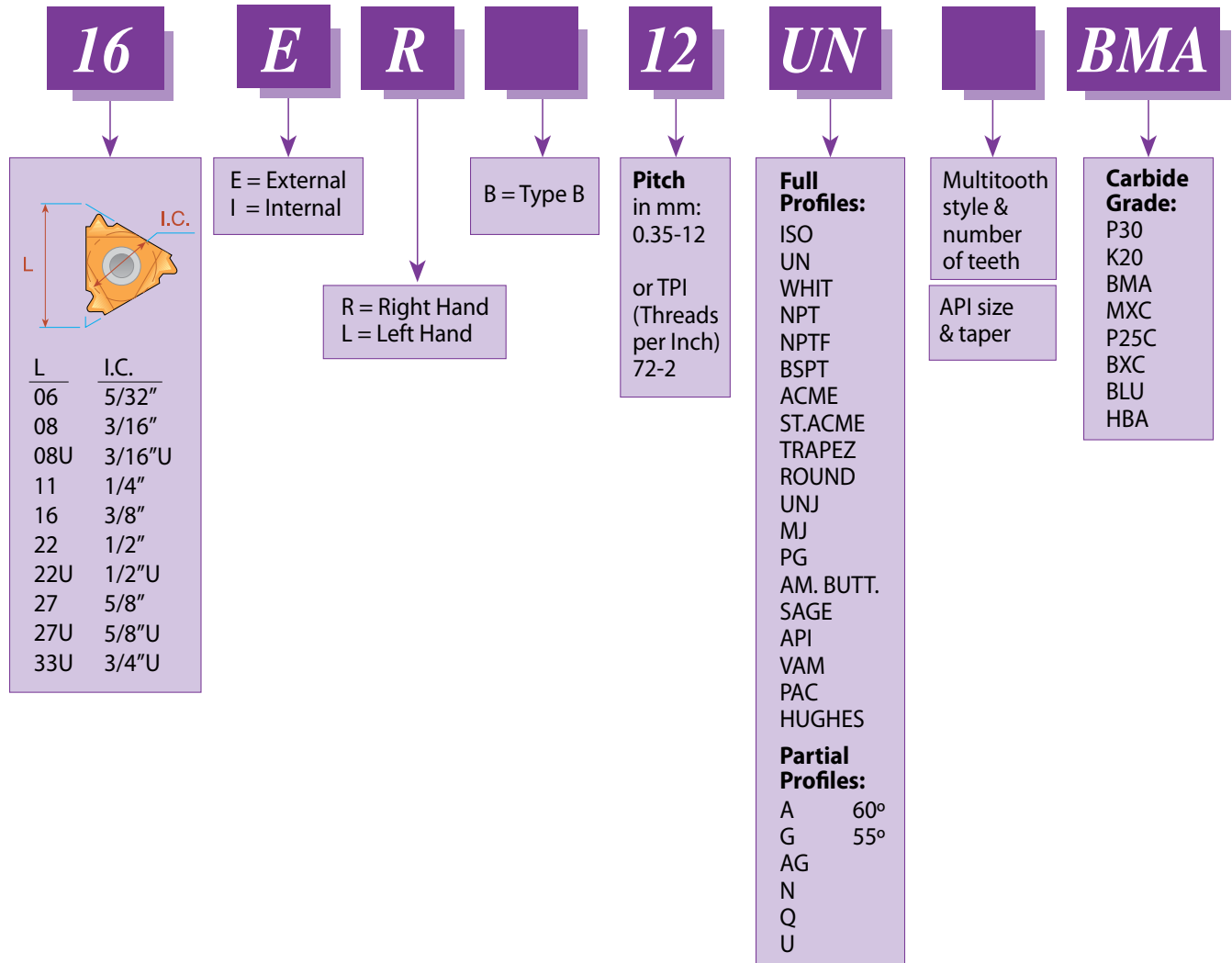
An extra-fine sub-micron grade with high toughness, for optimized performance on Hardened Steels and Cast Iron up to 62HRc, Titanium Alloys and Super Alloys (Hastelloy, Inconel, and Nickel based alloys).



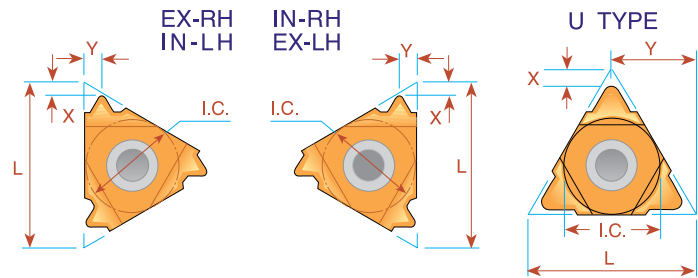
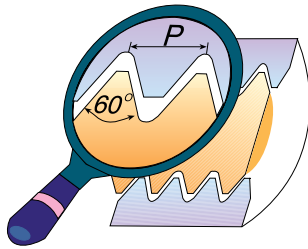
Contents:	Page:	Contents:	Page:
Product Identification	4	Trapez - DIN 103	27
Partial Profile 60°	5-6	PG - DIN 40430	28
Partial Profile 55°	7-8	Sagengewinde- DIN 513	28
ISO - metric	9-11	Round - DIN 405	29
UN - unified	12-15	Round - DIN 20400	29
Whitworth 55°	16-19	UNJ	30-31
NPT	20-21	MJ - ISO 5855	32
NPTF	22	American Buttress	33-34
BSPT	23-24	Oil Threads	35-37
DIN 477	24	HUGHES	38
Acme	25	PAC	38
Stub Acme	26	VAM	39

Product Identification

Thread Turning Inserts Ordering Codes



Partial Profile 60°

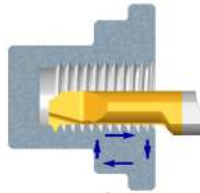


L mm	I.C.	Pitch Range mm TPI	EXTERNAL Ordering Code		INTERNAL Ordering Code		X	Y
			Right Hand	Left Hand	Right Hand	Left Hand		
6	5/32	0.5 -1.25 48-20	ULTRA MINIATURE →		*06 IR A60	*06 IL A60	.02	.02
8	3/16	0.5 -1.5 48-16	MINIATURE →		*08 IR A60	*08 IL A60	.02	.03
8U	3/16U	1.75-2.0 14-11	"U" MINIATURE →		*08U IR/L U60		.03	.16
11	1/4	0.5 -1.5 48-16	11 ER A60	11 EL A60	11 IR A60	11 IL A60	.03	.04
16	3/8	0.5 -1.5 48-16	16 ER A60	16 EL A60	16 IR A60	16 IL A60	.03	.04
16	3/8	1.75-3.0 14- 8	16 ER G60	16 EL G60	16 IR G60	16 IL G60	.05	.07
16	3/8	0.5 -3.0 48- 8	16 ER AG60	16 EL AG60	16 IR AG60	16 IL AG60	.05	.07
22	1/2	3.5 -5.0 7- 5	22 ER N60	22 EL N60	22 IR N60	22 IL N60	.07	.10
22U	1/2U	5.5 -8.0 4.5- 3.25	22U E/R/L U60				.02	.43
27	5/8	5.5 -6.0 4.5- 4	27 ER Q60	27 EL Q60	27 IR Q60	27 IL Q60	.08	.12
27U	5/8U	6.5 -9.0 4- 2.75	27U E/R/L U60				.04	.54

Order example: 16 ER G60 MXC

For small bore threading see page 88

* Available only in BXC and BMA grade



Type B

Ground Profile with Sintered Chip-breaker

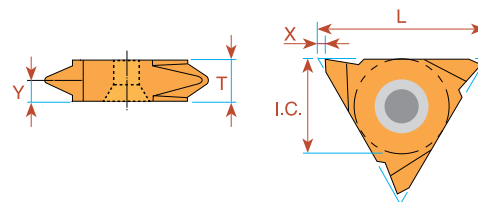


L mm	I.C.	Pitch Range mm TPI	EXTERNAL Ordering Code		INTERNAL Ordering Code		X	Y
			Right Hand	Left Hand	Right Hand	Left Hand		
16	3/8	0.5 -1.5 48-16	16 ER B A60		16 IR B A60		.03	.04
16	3/8	1.75-3.0 14- 8	16 ER B G60		16 IR B G60		.05	.07
16	3/8	0.5 -3.0 48- 8	16 ER B AG60		16 IR B AG60		.05	.07

Order example: 16 ER B G60 BMA

For Carbide Grade and Cutting Speed see page 66-67

Partial Profile 60° Vertical

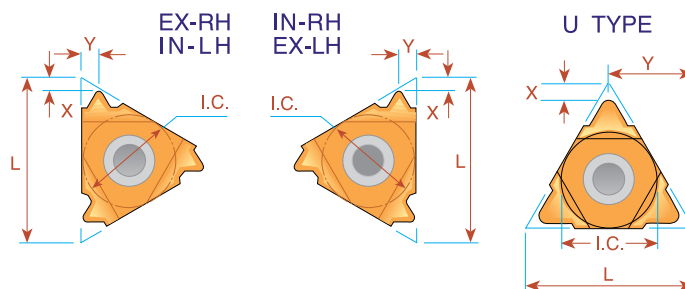


L mm	I.C.	Pitch Range mm TPI	EXTERNAL Ordering Code		INTERNAL Ordering Code		X	Y	T
			Right Hand	Left Hand	Right Hand	Left Hand			
16	3/8	0.5 - 1.5 48-16	16V ER A60	16V EL A60			.04	.04	.14
16	3/8	1.75- 3.0 14- 8	16V ER G60	16V EL G60			.04	.07	.14
16	3/8	0.5 - 3.0 48- 8	16V ER AG60	16V EL AG60			.04	.07	.14
22	1/2	1.75- 3.0 14- 8	22V ER G60	22V EL G60			.05	.07	.16
22	1/2	0.5 - 5.0 7- 5	22V ER N60	22V EL N60			.05	.10	.19
27	5/8	6.0 -10.0 4- 2.5	27V ER V60	27V EL V60	27V IR V60	27V IL V60	.07	.20	.41

Order example: 16V ER G60 BMA

For Carbide Grade and Cutting Speed see page 66-67

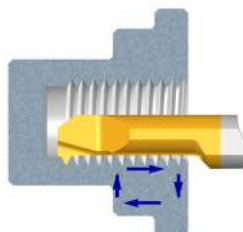
Partial Profile 55°



L mm	I.C.	Pitch Range mm TPI	EXTERNAL Ordering Code		INTERNAL Ordering Code		X	Y
			Right Hand	Left Hand	Right Hand	Left Hand		
6	5/32	0.5 -1.25 48-20	ULTRA MINIATURE →		*06 IR A55	*06 IL A55	.02	.02
8	3/16	0.5 -1.5 48-16	MINIATURE →		*08 IR A55	*08 IL A55	.02	.03
8U	3/16U	1.75-2.0 14-11	"U" MINIATURE →		*08U IR/L U55		.03	.16
11	1/4	0.5 -1.5 48-16	11 ER A55	11 EL A55	11 IR A55	11 IL A55	.03	.04
16	3/8	0.5 -1.5 48-16	16 ER A55	16 EL A55	16 IR A55	16 IL A55	.03	.04
16	3/8	1.75-3.0 14- 8	16 ER G55	16 EL G55	16 IR G55	16 IL G55	.05	.07
16	3/8	0.5 -3.0 48- 8	16 ER AG55	16 EL AG55	16 IR AG55	16 IL AG55	.05	.07
22	1/2	3.5 -5.0 7- 5	22 ER N55	22 EL N55	22 IR N55	22 IL N55	.07	.10
22U	1/2U	5.5 -8.0 4.5- 3.25	22U E/R/L U55				.04	.43
27	5/8	5.5 -6.0 4.5- 4	27 ER Q55	27 EL Q55	27 IR Q55	27 IL Q55	.08	.11
27U	5/8U	6.5 -9.0 4 - 2.75	27U E/R/L U55				.05	.54

Order example: 16 ER G55 MXC

For small bore threading see page 88
 * Available only in BXC and BMA grades



Type B

Ground Profile with Sintered Chip-breaker

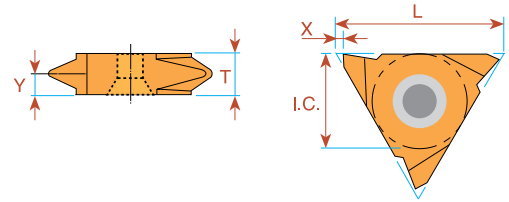


L mm	I.C.	Pitch Range mm TPI		<i>EXTERNAL</i>	<i>INTERNAL</i>	X	Y
				Ordering Code Right Hand	Ordering Code Right Hand		
16	3/8	1.75-3.0	14-8	16 ER B G55	16 IR B G55	.05	.07
16	3/8	0.5-3.0	48-8	16 ER B AG55	16 IR B AG55	.05	.07

Order example: 16 ER B G55 BMA

For Carbide Grade and Cutting Speed see page 66-67

Partial Profile 55° Vertical

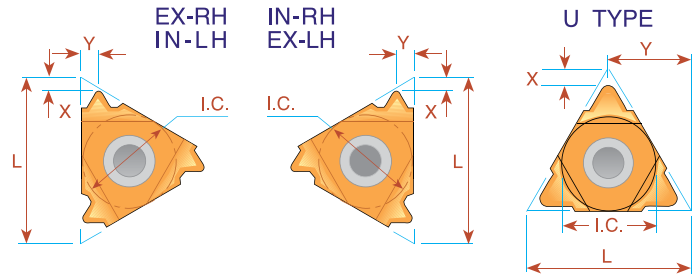
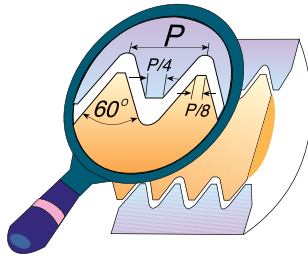


L mm	I.C.	Pitch Range mm TPI		<i>EXTERNAL</i>		<i>INTERNAL</i>		X	Y	T
				Ordering Code		Ordering Code				
				Right Hand	Left Hand	Right Hand	Left Hand			
16	3/8	0.5 - 1.5	48-16	16V ER A55	16V EL A55			.04	.04	.14
16	3/8	1.75- 3.0	14- 8	16V ER G55	16V EL G55			.04	.07	.14
16	3/8	0.5 - 3.0	48- 8	16V ER AG55	16V EL AG55			.04	.07	.14
22	1/2	3.5 - 5.0	7- 5	22V ER N55	22V EL N55			.05	.10	.19
27	5/8	6.0 -10.0	4- 2.5	27V ER V55	27V EL V55	27V IR V55	27V IL V55	.07	.20	.41

Order example: 22V ER N55 BMA

For Carbide Grade and Cutting Speed see page 66-67

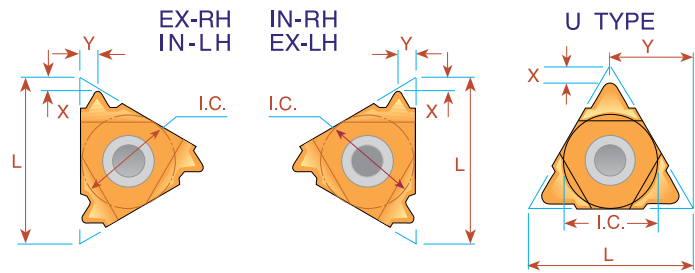
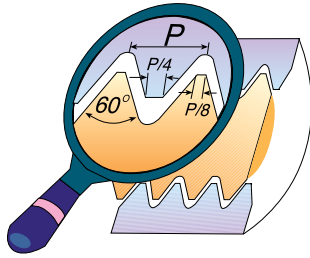
ISO - metric



Pitch mm	L mm	I.C.	EXTERNAL				INTERNAL			
			Ordering Code		X	Y	Ordering Code		X	Y
			Right Hand	Left Hand			Right Hand	Left Hand		
0.5	6	5/32	ULTRA MINIATURE →				*06 IR 0.5 ISO	*06 IL 0.5 ISO	.04	.02
0.75	6	5/32					*06 IR 0.75 ISO	*06 IL 0.75 ISO	.03	.02
1.0	6	5/32					*06 IR 1.0 ISO	*06 IL 1.0 ISO	.03	.02
1.25	6	5/32					*06 IR 1.25 ISO	*06 IL 1.25 ISO	.02	.02
0.5	8	3/16	MINIATURE →				*08 IR 0.5 ISO	*08 IL 0.5 ISO	.02	.02
0.75	8	3/16					*08 IR 0.75 ISO	*08 IL 0.75 ISO	.02	.02
1.0	8	3/16					*08 IR 1.0 ISO	*08 IL 1.0 ISO	.02	.02
1.25	8	3/16					*08 IR 1.25 ISO	*08 IL 1.25 ISO	.02	.03
1.5	8	3/16					*08 IR 1.5 ISO	*08 IL 1.5 ISO	.02	.03
1.75	8	3/16					*08 IR 1.75 ISO	*08 IL 1.75 ISO	.02	.03
2.0	8U	3/16U	"U" MINIATURE →				*08U IR/L 2.0 ISO		.04	.16
0.35	11	1/4	11 ER 0.35 ISO	11 EL 0.35 ISO	.03	.02	11 IR 0.35 ISO	11 IL 0.35 ISO	.03	.01
0.4	11	1/4	11 ER 0.4 ISO	11 EL 0.4 ISO	.03	.02	11 IR 0.4 ISO	11 IL 0.4 ISO	.03	.02
0.45	11	1/4	11 ER 0.45 ISO	11 EL 0.45 ISO	.03	.02	11 IR 0.45 ISO	11 IL 0.45 ISO	.03	.02
0.5	11	1/4	11 ER 0.5 ISO	11 EL 0.5 ISO	.02	.02	11 IR 0.5 ISO	11 IL 0.5 ISO	.02	.02
0.6	11	1/4	11 ER 0.6 ISO	11 EL 0.6 ISO	.02	.02	11 IR 0.6 ISO	11 IL 0.6 ISO	.02	.02
0.7	11	1/4	11 ER 0.7 ISO	11 EL 0.7 ISO	.02	.02	11 IR 0.7 ISO	11 IL 0.7 ISO	.02	.02
0.75	11	1/4	11 ER 0.75 ISO	11 EL 0.75 ISO	.02	.02	11 IR 0.75 ISO	11 IL 0.75 ISO	.02	.02
0.8	11	1/4	11 ER 0.8 ISO	11 EL 0.8 ISO	.02	.02	11 IR 0.8 ISO	11 IL 0.8 ISO	.02	.02
1.0	11	1/4	11 ER 1.0 ISO	11 EL 1.0 ISO	.03	.03	11 IR 1.0 ISO	11 IL 1.0 ISO	.02	.03
1.25	11	1/4	11 ER 1.25 ISO	11 EL 1.25 ISO	.03	.04	11 IR 1.25 ISO	11 IL 1.25 ISO	.03	.03
1.5	11	1/4	11 ER 1.5 ISO	11 EL 1.5 ISO	.03	.04	11 IR 1.5 ISO	11 IL 1.5 ISO	.03	.04
1.75	11	1/4	11 ER 1.75 ISO	11 EL 1.75 ISO	.03	.04	11 IR 1.75 ISO	11 IL 1.75 ISO	.03	.04
2.0	11	1/4	11 ER 2.0 ISO	11 EL 2.0 ISO	.03	.04	11 IR 2.0 ISO	11 IL 2.0 ISO	.03	.04
2.5	11	1/4					11 IR 2.5 ISO	11 IL 2.5 ISO	.03	.05
0.35	16	3/8	16 ER 0.35 ISO	16 EL 0.35 ISO	.03	.02	16 IR 0.35 ISO	16 IL 0.35 ISO	.03	.01
0.4	16	3/8	16 ER 0.4 ISO	16 EL 0.4 ISO	.03	.02	16 IR 0.4 ISO	16 IL 0.4 ISO	.03	.02
0.45	16	3/8	16 ER 0.45 ISO	16 EL 0.45 ISO	.03	.02	16 IR 0.45 ISO	16 IL 0.45 ISO	.03	.02
0.5	16	3/8	16 ER 0.5 ISO	16 EL 0.5 ISO	.02	.02	16 IR 0.5 ISO	16 IL 0.5 ISO	.02	.02
0.6	16	3/8	16 ER 0.6 ISO	16 EL 0.6 ISO	.02	.02	16 IR 0.6 ISO	16 IL 0.6 ISO	.02	.02
0.7	16	3/8	16 ER 0.7 ISO	16 EL 0.7 ISO	.02	.02	16 IR 0.7 ISO	16 IL 0.7 ISO	.02	.02
0.75	16	3/8	16 ER 0.75 ISO	16 EL 0.75 ISO	.02	.02	16 IR 0.75 ISO	16 IL 0.75 ISO	.02	.02
0.8	16	3/8	16 ER 0.8 ISO	16 EL 0.8 ISO	.02	.02	16 IR 0.8 ISO	16 IL 0.8 ISO	.02	.02
1.0	16	3/8	16 ER 1.0 ISO	16 EL 1.0 ISO	.03	.03	16 IR 1.0 ISO	16 IL 1.0 ISO	.02	.03
1.25	16	3/8	16 ER 1.25 ISO	16 EL 1.25 ISO	.03	.04	16 IR 1.25 ISO	16 IL 1.25 ISO	.03	.03
1.5	16	3/8	16 ER 1.5 ISO	16 EL 1.5 ISO	.03	.04	16 IR 1.5 ISO	16 IL 1.5 ISO	.03	.04
1.75	16	3/8	16 ER 1.75 ISO	16 EL 1.75 ISO	.04	.05	16 IR 1.75 ISO	16 IL 1.75 ISO	.04	.05
2.0	16	3/8	16 ER 2.0 ISO	16 EL 2.0 ISO	.04	.05	16 IR 2.0 ISO	16 IL 2.0 ISO	.04	.05
2.5	16	3/8	16 ER 2.5 ISO	16 EL 2.5 ISO	.04	.06	16 IR 2.5 ISO	16 IL 2.5 ISO	.04	.06
3.0	16	3/8	16 ER 3.0 ISO	16 EL 3.0 ISO	.05	.06	16 IR 3.0 ISO	16 IL 3.0 ISO	.04	.06
3.5	16	3/8	16 ER 3.5 ISO	16 EL 3.5 ISO	.05	.06	16 IR 3.5 ISO	16 IL 3.5 ISO	.05	.07

* Available only in BXC and BMA grades

ISO - metric

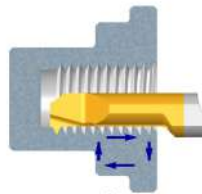


Pitch mm	L mm	I.C.	EXTERNAL		X	Y	INTERNAL		X	Y
			Ordering Code Right Hand	Ordering Code Left Hand			Ordering Code Right Hand	Ordering Code Left Hand		
3.5	22	1/2	22 ER 3.5 ISO	22 EL 3.5 ISO	.06	.09	22 IR 3.5 ISO	22 IL 3.5 ISO	.06	.09
4.0	22	1/2	22 ER 4.0 ISO	22 EL 4.0 ISO	.06	.09	22 IR 4.0 ISO	22 IL 4.0 ISO	.06	.09
4.5	22	1/2	22 ER 4.5 ISO	22 EL 4.5 ISO	.07	.09	22 IR 4.5 ISO	22 IL 4.5 ISO	.06	.09
5.0	22	1/2	22 ER 5.0 ISO	22 EL 5.0 ISO	.07	.10	22 IR 5.0 ISO	22 IL 5.0 ISO	.06	.09
5.5	22	1/2	22 ER 5.5 ISO	22 EL 5.5 ISO	.07	.10	22 IR 5.5 ISO	22 IL 5.5 ISO	.06	.09
6.0	22	1/2	*22 ER 6.0 ISO	*22 EL 6.0 ISO	.07	.11	22 IR 6.0 ISO	22 IL 6.0 ISO	.06	.09
5.5	22U	1/2U	22U ER/L 5.5 ISO		.09	.43	22U IR/L 5.5 ISO		.09	.43
6.0	22U	1/2U	22U ER/L 6.0 ISO		.10	.43	22U IR/L 6.0 ISO		.08	.43
5.5	27	5/8	27 ER 5.5 ISO	27 EL 5.5 ISO	.07	.11	27 IR 5.5 ISO	27 IL 5.5 ISO	.06	.09
6.0	27	5/8	27 ER 6.0 ISO	27 EL 6.0 ISO	.08	.11	27 IR 6.0 ISO	27 IL 6.0 ISO	.07	.10
8.0	27U	5/8U	27U ER/L 8.0 ISO		.09	.54	27U IR/L 8.0 ISO		.09	.54
12.0	33U	3/4U	33U ER/L 12.0 ISO		.10	.65	33U IR/L 12.0 ISO		.14	.67

Order example: 22 IR 3.5 ISO BMA

* Special holder required

For small bore threading see page 89



Type B

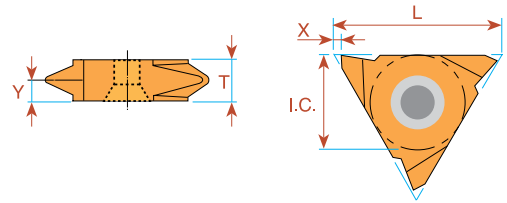
Ground Profile with Sintered Chip-breaker

Pitch mm	L	I.C. in	EXTERNAL	X	Y	INTERNAL	X	Y
			Ordering Code Right Hand			Ordering Code Right Hand		
0.5	11	1/4				11 IR B 0.5 ISO	.02	.02
0.75	11	1/4				11 IR B 0.75 ISO	.02	.02
0.8	11	1/4				11 IR B 0.8 ISO	.02	.02
1.0	11	1/4				11 IR B 1.0 ISO	.02	.02
1.25	11	1/4				11 IR B 1.25 ISO	.03	.04
1.5	11	1/4				11 IR B 1.5 ISO	.03	.04
1.75	11	1/4				11 IR B 1.75 ISO	.03	.04
2.0	11	1/4				11 IR B 2.0 ISO	.03	.04
0.8	16	3/8	16 ER B 0.8 ISO	.02	.02			
1.0	16	3/8	16 ER B 1.0 ISO	.03	.03	16 IR B 1.0 ISO	.02	.03
1.25	16	3/8	16 ER B 1.25 ISO	.03	.04	16 IR B 1.25 ISO	.03	.03
1.5	16	3/8	16 ER B 1.5 ISO	.03	.04	16 IR B 1.5 ISO	.03	.04
1.75	16	3/8	16 ER B 1.75 ISO	.04	.05	16 IR B 1.75 ISO	.04	.05
2.0	16	3/8	16 ER B 2.0 ISO	.04	.05	16 IR B 2.0 ISO	.04	.05
2.5	16	3/8	16 ER B 2.5 ISO	.04	.06	16 IR B 2.5 ISO	.04	.06
3.0	16	3/8	16 ER B 3.0 ISO	.05	.06	16 IR B 3.0 ISO	.04	.06

Order example: 16 IR B 1.5 ISO BMA

For Carbide Grade and Cutting Speed see page 66-67

ISO - metric Vertical



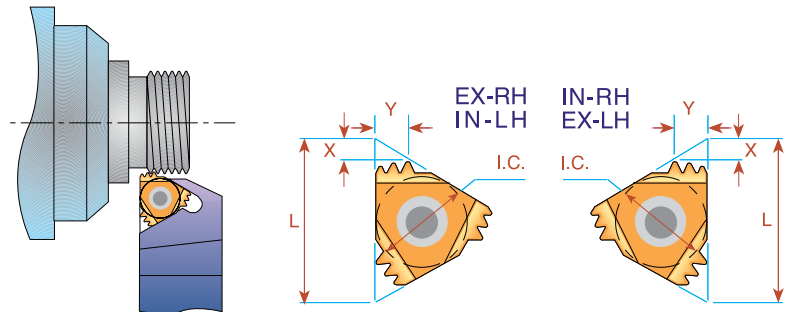
Pitch mm	L mm	I.C.	EXTERNAL		INTERNAL		X	Y	T
			Ordering Code Right Hand	Ordering Code Left Hand	Ordering Code Right Hand	Ordering Code Left Hand			
0.5	16	3/8	16V ER 0.5 ISO	16V EL 0.5 ISO			.04	.02	.14
0.75	16	3/8	16V ER 0.75 ISO	16V EL 0.75 ISO			.04	.02	.14
0.8	16	3/8	16V ER 0.8 ISO	16V EL 0.8 ISO			.04	.02	.14
1.0	16	3/8	16V ER 1.0 ISO	16V EL 1.0 ISO			.04	.03	.14
1.25	16	3/8	16V ER 1.25 ISO	16V EL 1.25 ISO			.04	.04	.14
1.5	16	3/8	16V ER 1.5 ISO	16V EL 1.5 ISO			.04	.04	.14
1.75	16	3/8	16V ER 1.75 ISO	16V EL 1.75 ISO			.04	.05	.14
2.0	16	3/8	16V ER 2.0 ISO	16V EL 2.0 ISO			.04	.05	.14
2.5	16	3/8	16V ER 2.5 ISO	16V EL 2.5 ISO			.04	.06	.14
3.0	16	3/8	16V ER 3.0 ISO	16V EL 3.0 ISO			.04	.07	.14
* 8.0	27	5/8	27V ER 8.0 ISO	27V EL 8.0 ISO	27V IR 8.0 ISO	27 IL 8.0 ISO	.07	.20	.41
** 10.0	27	5/8	27V ER 10.0 ISO	27V EL 10.0 ISO	27V IR 10.0 ISO	27 IL 10.0 ISO	.07	.20	.41

Order example: 16V ER 1.5 ISO BMA

* Minimum bore: 2.36"

** Minimum bore: 2.83"

Multitooth



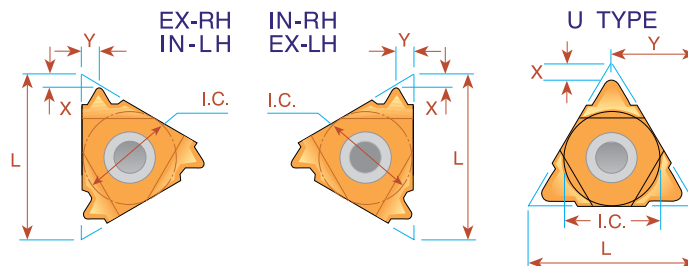
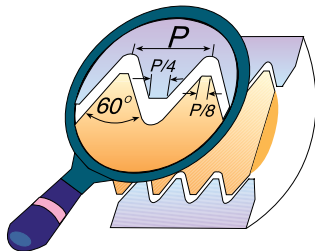
Pitch mm	L mm	I.C.	Number of Teeth	EXTERNAL Ordering Code	Anvil	INTERNAL Ordering Code	Anvil	X	Y
1.0	16	3/8	3	16 ER 1.0 ISO 3M	AE16M	16 IR 1.0 ISO 3M	AI16M	.07	.10
1.5	16	3/8	2	16 ER 1.5 ISO 2M	AE16M	16 IR 1.5 ISO 2M	AI16M	.06	.09
1.5	22	1/2	3	22 ER 1.5 ISO 3M	AE22M	22 IR 1.5 ISO 3M	AI22M	.09	.15
2.0	22	1/2	2	22 ER 2.0 ISO 2M	AE22M	22 IR 2.0 ISO 2M	AI22M	.08	.12
2.0	22	1/2	3	22 ER 2.0 ISO 3M	AE22M	22 IR 2.0 ISO 3M	AI22M	.12	.20
3.0	27	5/8	2	27 ER 3.0 ISO 2M	AE27M	27 IR 3.0 ISO 2M	AI27M	.11	.18

Order example: 22 IR B 2.0 ISO 2M BMA

For recommended number of passes see page 68

For Carbide Grade and Cutting Speed see page 66-67

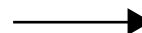
UN - Unified UNC, UNF, UNEF, UNS



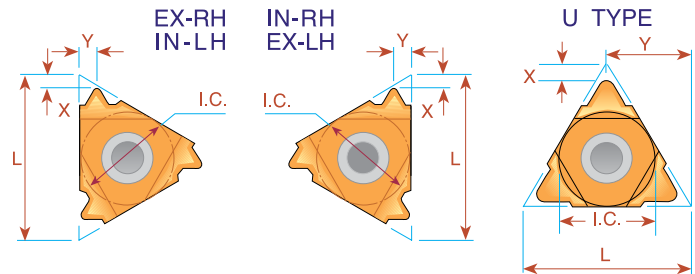
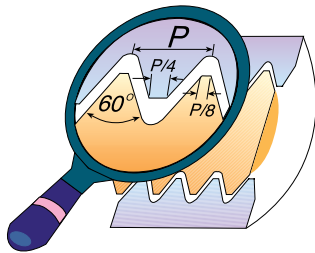
Pitch TPI	L mm	I.C.	EXTERNAL				INTERNAL			
			Ordering Code		X	Y	Ordering Code		X	Y
			Right Hand	Left Hand			Right Hand	Left Hand		
32	6	5/32	ULTRA MINIATURE →				*06 IR 32 UN	*06 IL 32 UN	.03	.02
28	6	5/32					*06 IR 28 UN	*06 IL 28 UN	.03	.02
24	6	5/32					*06 IR 24 UN	*06 IL 24 UN	.03	.02
20	6	5/32					*06 IR 20 UN	*06 IL 20 UN	.02	.02
18	6	5/32					*06 IR 18 UN	*06 IL 18 UN	.02	.03
32	8	3/16	MINIATURE →				*08 IR 32 UN	*08 IL 32 UN	.02	.02
28	8	3/16					*08 IR 28 UN	*08 IL 28 UN	.02	.02
24	8	3/16					*08 IR 24 UN	*08 IL 24 UN	.02	.02
20	8	3/16					*08 IR 20 UN	*08 IL 20 UN	.02	.03
18	8	3/16					*08 IR 18 UN	*08 IL 18 UN	.02	.03
16	8	3/16					*08 IR 16 UN	*08 IL 16 UN	.02	.03
14	8	3/16					*08 IR 14 UN	*08 IL 14 UN	.02	.03
13	8	3/16					*08 IR 13 UN		.03	.04
13	8U	3/16U	“U” MINIATURE →				*08U IR/L 13 UN		.04	.16
12	8U	3/16U					*08U IR/L 12 UN		.04	.16
11	8U	3/16U					*08U IR/L 11 UN		.04	.16
72	11	1/4	11 ER 72 UN	11 EL 72 UN	.03	.02	11 IR 72 UN	11 IL 72 UN	.03	.01
64	11	1/4	11 ER 64 UN	11 EL 64 UN	.03	.02	11 IR 64 UN	11 IL 64 UN	.03	.02
56	11	1/4	11 ER 56 UN	11 EL 56 UN	.03	.02	11 IR 56 UN	11 IL 56 UN	.03	.02
48	11	1/4	11 ER 48 UN	11 EL 48 UN	.02	.02	11 IR 48 UN	11 IL 48 UN	.02	.02
44	11	1/4	11 ER 44 UN	11 EL 44 UN	.02	.02	11 IR 44 UN	11 IL 44 UN	.02	.02
40	11	1/4	11 ER 40 UN	11 EL 40 UN	.02	.02	11 IR 40 UN	11 IL 40 UN	.02	.02
36	11	1/4	11 ER 36 UN	11 EL 36 UN	.02	.02	11 IR 36 UN	11 IL 36 UN	.02	.02
32	11	1/4	11 ER 32 UN	11 EL 32 UN	.02	.02	11 IR 32 UN	11 IL 32 UN	.02	.02
28	11	1/4	11 ER 28 UN	11 EL 28 UN	.02	.03	11 IR 28 UN	11 IL 28 UN	.02	.03
27	11	1/4	11 ER 27 UN	11 EL 27 UN	.03	.03	11 IR 27 UN	11 IL 27 UN	.03	.03
24	11	1/4	11 ER 24 UN	11 EL 24 UN	.03	.03	11 IR 24 UN	11 IL 24 UN	.03	.03
20	11	1/4	11 ER 20 UN	11 EL 20 UN	.03	.04	11 IR 20 UN	11 IL 20 UN	.03	.04
18	11	1/4	11 ER 18 UN	11 EL 18 UN	.03	.04	11 IR 18 UN	11 IL 18 UN	.03	.04
16	11	1/4	11 ER 16 UN	11 EL 16 UN	.04	.04	11 IR 16 UN	11 IL 16 UN	.04	.04
14	11	1/4	11 ER 14 UN	11 EL 14 UN	.04	.04	11 IR 14 UN	11 IL 14 UN	.04	.04
13	11	1/4					11 IR 13 UN	11 IL 13 UN	.03	.04
12	11	1/4					11 IR 12 UN	11 IL 12 UN	.04	.04
11	11	1/4					11 IR 11 UN	11 IL 11 UN	.03	.04
72	16	3/8	16 ER 72 UN	16 EL 72 UN	.03	.02	16 IR 72 UN	16 IL 72 UN	.03	.01
64	16	3/8	16 ER 64 UN	16 EL 64 UN	.03	.02	16 IR 64 UN	16 IL 64 UN	.03	.02
56	16	3/8	16 ER 56 UN	16 EL 56 UN	.03	.02	16 IR 56 UN	16 IL 56 UN	.03	.02
48	16	3/8	16 ER 48 UN	16 EL 48 UN	.02	.02	16 IR 48 UN	16 IL 48 UN	.02	.02
44	16	3/8	16 ER 44 UN	16 EL 44 UN	.02	.02	16 IR 44 UN	16 IL 44 UN	.02	.02
40	16	3/8	16 ER 40 UN	16 EL 40 UN	.02	.02	16 IR 40 UN	16 IL 40 UN	.02	.02
36	16	3/8	16 ER 36 UN	16 EL 36 UN	.02	.02	16 IR 36 UN	16 IL 36 UN	.02	.02

* Available only in BXC and BMA grades

** To be used with Holder SIR 0354 K08 on page 52



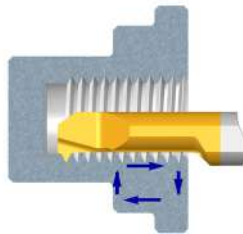
UN - Unified UNC, UNF, UNEF, UNS



Pitch TPI	L mm	I.C.	EXTERNAL				INTERNAL			
			Ordering Code		X	Y	Ordering Code		X	Y
			Right Hand	Left Hand			Right Hand	Left Hand		
32	16	3/8	16 ER 32 UN	16 EL 32 UN	.02	.02	16 IR 32 UN	16 IL 32 UN	.02	.02
28	16	3/8	16 ER 28 UN	16 EL 28 UN	.02	.03	16 IR 28 UN	16 IL 28 UN	.02	.03
27	16	3/8	16 ER 27 UN	16 EL 27 UN	.03	.03	16 IR 27 UN	16 IL 27 UN	.03	.03
24	16	3/8	16 ER 24 UN	16 EL 24 UN	.03	.03	16 IR 24 UN	16 IL 24 UN	.03	.03
20	16	3/8	16 ER 20 UN	16 EL 20 UN	.03	.04	16 IR 20 UN	16 IL 20 UN	.03	.04
18	16	3/8	16 ER 18 UN	16 EL 18 UN	.03	.04	16 IR 18 UN	16 IL 18 UN	.03	.04
16	16	3/8	16 ER 16 UN	16 EL 16 UN	.04	.04	16 IR 16 UN	16 IL 16 UN	.04	.04
14	16	3/8	16 ER 14 UN	16 EL 14 UN	.04	.05	16 IR 14 UN	16 IL 14 UN	.04	.05
13	16	3/8	16 ER 13 UN	16 EL 13 UN	.04	.05	16 IR 13 UN	16 IL 13 UN	.04	.05
12	16	3/8	16 ER 12 UN	16 EL 12 UN	.04	.06	16 IR 12 UN	16 IL 12 UN	.04	.06
11.5	16	3/8	16 ER 11.5 UN	16 EL 11.5 UN	.04	.06	16 IR 11.5 UN	16 IL 11.5 UN	.04	.06
11	16	3/8	16 ER 11 UN	16 EL 11 UN	.04	.06	16 IR 11 UN	16 IL 11 UN	.04	.06
10	16	3/8	16 ER 10 UN	16 EL 10 UN	.04	.06	16 IR 10 UN	16 IL 10 UN	.04	.06
9	16	3/8	16 ER 9 UN	16 EL 9 UN	.05	.07	16 IR 9 UN	16 IL 9 UN	.05	.07
8	16	3/8	16 ER 8 UN	16 EL 8 UN	.05	.06	16 IR 8 UN	16 IL 8 UN	.04	.06
7	22	1/2	22 ER 7 UN	22 EL 7 UN	.06	.09	22 IR 7 UN	22 IL 7 UN	.06	.09
6	22	1/2	22 ER 6 UN	22 EL 6 UN	.06	.09	22 IR 6 UN	22 IL 6 UN	.06	.09
5	22	1/2	22 ER 5 UN	22 EL 5 UN	.07	.10	22 IR 5 UN	22 IL 5 UN	.06	.09
4.5	22U	1/2U	22U ER/L 4.5 UN		.08	.43	22U IR/L 4.5 UN		.09	.43
4	22U	1/2U	22U ER/L 4 UN		.08	.43	22U IR/L 4 UN		.09	.43
4.5	27	5/8	27 ER 4.5 UN	27 EL 4.5 UN	.07	.11	27 IR 4.5 UN	27 IL 4.5 UN	.07	.09
4	27	5/8	27 ER 4 UN	27 EL 4 UN	.08	.12	27 IR 4 UN	27 IL 4 UN	.07	.11
3	27U	5/8U	27U ER/L 3 UN		.10	.54	27U IR/L 3 UN		.11	.54
2	33U	3/4U	33U ER/L 2 UN		.11	.65	33U IR/L 2 UN		.14	.67

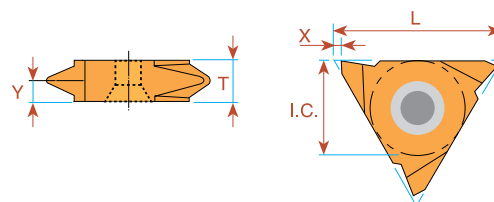
Order example: 22ER 7 UN BMA

For small bore threading see page 89



For Carbide Grade and Cutting Speed see page 66-67

UN - Unified Vertical



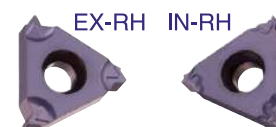
Pitch TPI	L mm	I.C.	EXTERNAL		INTERNAL		X	Y	T
			Ordering Code		Ordering Code				
			Right Hand	Left Hand	Right Hand	Left Hand			
32	16	3/8	16V ER 32 UN	16V EL 32 UN			.04	.02	.14
28	16	3/8	16V ER 28 UN	16V EL 28 UN			.04	.03	.14
24	16	3/8	16V ER 24 UN	16V EL 24 UN			.04	.03	.14
20	16	3/8	16V ER 20 UN	16V EL 20 UN			.04	.03	.14
18	16	3/8	16V ER 18 UN	16V EL 18 UN			.04	.04	.14
16	16	3/8	16V ER 16 UN	16V EL 16 UN			.04	.04	.14
14	16	3/8	16V ER 14 UN	16V EL 14 UN			.04	.05	.14
12	16	3/8	16V ER 12 UN	16V EL 12 UN			.04	.05	.14
10	16	3/8	16V ER 10 UN	16V EL 10 UN			.04	.06	.14
8	16	3/8	16V ER 8 UN	16V EL 8 UN			.04	.06	.14
7	22	1/2	22V ER 7 UN	22V EL 7 UN			.05	.09	.19
* 3	27	5/8	27V ER 3 UN	27V EL 3 UN	27V IR 3 UN	27 IL 3 UN	.07	.20	.41

Order example: 22V ER 7UN MXC

* Minimum bore: Ø2.56"

UN - Unified Type B

UNC, UNF, UNEF, UNS

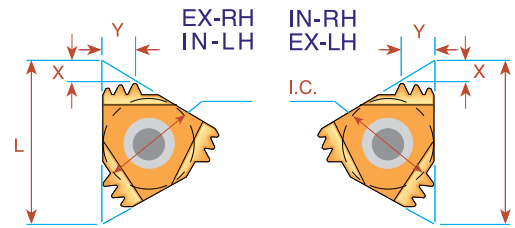
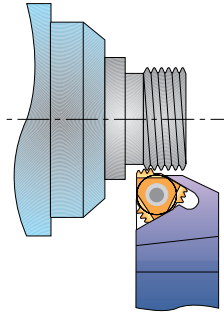


Ground Profile with Sintered Chip-breaker

Pitch TPI	L	I.C. in	EXTERNAL Ordering Code Right Hand	X	Y	INTERNAL Ordering Code Right Hand	X	Y
32	11	1/4				11 IR B 32 UN	.02	.02
28	11	1/4				11 IR B 28 UN	.02	.02
24	11	1/4				11 IR B 24 UN	.02	.02
20	11	1/4				11 IR B 20 UN	.03	.04
18	11	1/4				11 IR B 18 UN	.03	.04
16	11	1/4				11 IR B 16 UN	.03	.04
14	11	1/4				11 IR B 14 UN	.03	.04
12	11	1/4				11 IR B 12 UN	.03	.04
24	16	3/8	16 ER B 24 UN	.03	.03	16 IR B 24 UN	.03	.03
20	16	3/8	16 ER B 20 UN	.03	.04	16 IR B 20 UN	.03	.03
18	16	3/8	16 ER B 18 UN	.03	.04	16 IR B 18 UN	.03	.03
16	16	3/8	16 ER B 16 UN	.04	.04	16 IR B 16 UN	.04	.04
14	16	3/8	16 ER B 14 UN	.04	.05	16 IR B 14 UN	.04	.05
13	16	3/8	16 ER B 13 UN	.04	.05			
12	16	3/8	16 ER B 12 UN	.04	.06	16 IR B 12 UN	.04	.06
11	16	3/8	16 ER B 11 UN	.04	.06			
10	16	3/8	16 ER B 10 UN	.04	.06	16 IR B 10 UN	.04	.06
9	16	3/8	16 ER B 9 UN	.05	.07			
8	16	3/8	16 ER B 8 UN	.05	.06	16 IR B 8 UN	.04	.06

Order example: 16 IR B 12 UN BMA

Multitooth



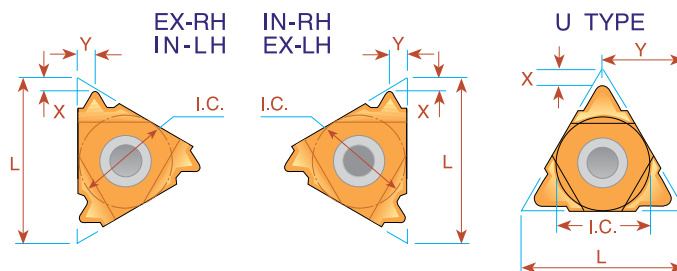
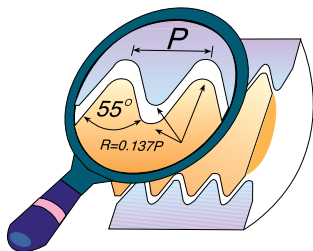
Pitch TPI	L	I.C. in	Number of Teeth	EXTERNAL Ordering Code	Anvil	INTERNAL Ordering Code	Anvil	X	Y
24	16	3/8	2	16 ER 24 UN 2M	AE16M	16 IR 24 UN 2M	AI16M	.04	.07
20	16	3/8	2	16 ER 20 UN 2M	AE16M	16 IR 20 UN 2M	AI16M	.06	.08
18	16	3/8	2	16 ER 18 UN 2M	AE16M	16 IR 18 UN 2M	AI16M	.06	.09
16	16	3/8	2	16 ER 16 UN 2M	AE16M	16 IR 16 UN 2M	AI16M	.06	.09
14	16	3/8	2	16 ER 14 UN 2M	AE16M	16 IR 14 UN 2M	AI16M	.07	.11
12	16	3/8	2	16 ER 12 UN 2M	AE16M	16 IR 12 UN 2M	AI16M	.08	.12
16	22	1/2	3	22 ER 16 UN 3M	AE22M	22 IR 16 UN 3M	AI22M	.10	.16
13	22	1/2	3	22 ER 13 UN 3M	AE22M	-	AI22M	.12	.19
12	22	1/2	2	22 ER 12 UN 2M	AE22M	22 IR 12 UN 2M	AI22M	.09	.13
12	22	1/2	3	22 ER 12 UN 3M	AE22M	22 IR 12 UN 3M	AI22M	.13	.21
8	27	5/8	2	27 ER 8 UN 2M	AE27M	27 IR 8 UN 2M	AI27M	.12	.19

Order example: 22 IR 16 UN 3M BMA

For recommended number of passes see page 68

For Carbide Grade and Cutting Speed see page 66-67

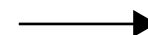
Whitworth - 55° BSW, BSF, BSP, BSB



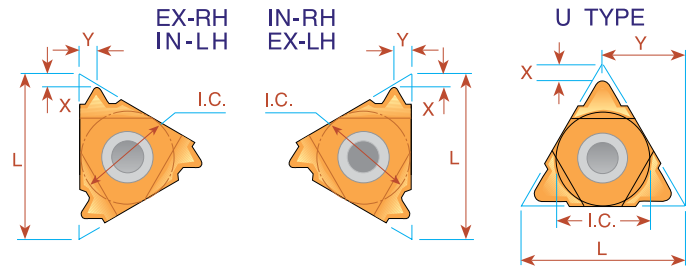
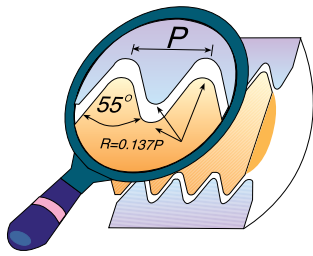
Pitch TPI	L mm	I.C.	EXTERNAL		INTERNAL		X	Y
			Ordering Code Right Hand	Ordering Code Left Hand	Ordering Code Right Hand	Ordering Code Left Hand		
26	6	5/32	ULTRA MINIATURE →		*06 IR 26 W	*06 IL 26 W	.03	.02
22	6	5/32			*06 IR 22 W	*06 IL 22 W	.02	.02
20	6	5/32			*06 IR 20 W	*06 IL 20 W	.02	.03
18	6	5/32			*06 IR 18 W	*06 IL 18 W	.02	.03
28	8	3/16	MINIATURE →		*08 IR 28 W	*08 IL 28 W	.02	.02
24	8	3/16			*08 IR 24 W	*08 IL 24 W	.02	.02
20	8	3/16			*08 IR 20 W	*08 IL 20 W	.02	.03
19	8	3/16			*08 IR 19 W	*08 IL 19 W	.02	.03
18	8	3/16			*08 IR 18 W	*08 IL 18 W	.02	.03
16	8	3/16			*08 IR 16 W	*08 IL 16 W	.02	.03
14	8U	3/16U	"U" MINIATURE →		*08U IR/L 14 W		.04	.16
12	8U	3/16U			*08U IR/L 12 W		.04	.16
11	8U	3/16U			*08U IR/L 11 W		.04	.16
72	11	1/4	11 ER 72 W	11 EL 72 W	11 IR 72 W	11 IL 72 W	.03	.02
60	11	1/4	11 ER 60 W	11 EL 60 W	11 IR 60 W	11 IL 60 W	.03	.02
56	11	1/4	11 ER 56 W	11 EL 56 W	11 IR 56 W	11 IL 56 W	.03	.02
48	11	1/4	11 ER 48 W	11 EL 48 W	11 IR 48 W	11 IL 48 W	.02	.02
40	11	1/4	11 ER 40 W	11 EL 40 W	11 IR 40 W	11 IL 40 W	.02	.02
36	11	1/4	11 ER 36 W	11 EL 36 W	11 IR 36 W	11 IL 36 W	.02	.02
32	11	1/4	11 ER 32 W	11 EL 32 W	11 IR 32 W	11 IL 32 W	.02	.02
28	11	1/4	11 ER 28 W	11 EL 28 W	11 IR 28 W	11 IL 28 W	.02	.03
26	11	1/4	11 ER 26 W	11 EL 26 W	11 IR 26 W	11 IL 26 W	.03	.03
24	11	1/4	11 ER 24 W	11 EL 24 W	11 IR 24 W	11 IL 24 W	.03	.03
22	11	1/4	11 ER 22 W	11 EL 22 W	11 IR 22 W	11 IL 22 W	.03	.04
20	11	1/4	11 ER 20 W	11 EL 20 W	11 IR 20 W	11 IL 20 W	.03	.04
19	11	1/4	11 ER 19 W	11 EL 19 W	11 IR 19 W	11 IL 19 W	.03	.04
18	11	1/4	11 ER 18 W	11 EL 18 W	11 IR 18 W	11 IL 18 W	.03	.04
16	11	1/4	11 ER 16 W	11 EL 16 W	11 IR 16 W	11 IL 16 W	.04	.04
14	11	1/4	11 ER 14 W	11 EL 14 W	11 IR 14 W	11 IL 14 W	.04	.04
12	11	1/4			11 IR 12 W	11 IL 12 W	.04	.04
11	11	1/4			⁽¹⁾ 11 IR 11 W	⁽¹⁾ 11 IL 11 W	.04	.05
72	16	3/8	16 ER 72 W	16 EL 72 W	16 IR 72 W	16 IL 72 W	.03	.02
60	16	3/8	16 ER 60 W	16 EL 60 W	16 IR 60 W	16 IL 60 W	.03	.02
56	16	3/8	16 ER 56 W	16 EL 56 W	16 IR 56 W	16 IL 56 W	.03	.02
48	16	3/8	16 ER 48 W	16 EL 48 W	16 IR 48 W	16 IL 48 W	.02	.02
40	16	3/8	16 ER 40 W	16 EL 40 W	16 IR 40 W	16 IL 40 W	.02	.02
36	16	3/8	16 ER 36 W	16 EL 36 W	16 IR 36 W	16 IL 36 W	.02	.02
32	16	3/8	16 ER 32 W	16 EL 32 W	16 IR 32 W	16 IL 32 W	.02	.02
28	16	3/8	16 ER 28 W	16 EL 28 W	16 IR 28 W	16 IL 28 W	.02	.03
26	16	3/8	16 ER 26 W	16 EL 26 W	16 IR 26 W	16 IL 26 W	.03	.03
24	16	3/8	16 ER 24 W	16 EL 24 W	16 IR 24 W	16 IL 24 W	.03	.03

* Available only in BXC and BMA grades

(1) Special holder is required or standard holder can be amended by customer.



Whitworth - 55° BSW, BSF, BSP, BSB



Pitch TPI	L mm	I.C.	EXTERNAL		INTERNAL		X	Y
			Ordering Code		Ordering Code			
			Right Hand	Left Hand	Right Hand	Left Hand		
22	16	3/8	16 ER 22 W	16 EL 22 W	16 IR 22 W	16 IL 22 W	.03	.04
20	16	3/8	16 ER 20 W	16 EL 20 W	16 IR 20 W	16 IL 20 W	.03	.04
19	16	3/8	16 ER 19 W	16 EL 19 W	16 IR 19 W	16 IL 19 W	.03	.04
18	16	3/8	16 ER 18 W	16 EL 18 W	16 IR 18 W	16 IL 18 W	.03	.04
16	16	3/8	16 ER 16 W	16 EL 16 W	16 IR 16 W	16 IL 16 W	.04	.04
14	16	3/8	16 ER 14 W	16 EL 14 W	16 IR 14 W	16 IL 14 W	.04	.05
12	16	3/8	16 ER 12 W	16 EL 12 W	16 IR 12 W	16 IL 12 W	.04	.06
11	16	3/8	16 ER 11 W	16 EL 11 W	16 IR 11 W	16 IL 11 W	.04	.06
10	16	3/8	16 ER 10 W	16 EL 10 W	16 IR 10 W	16 IL 10 W	.04	.06
9	16	3/8	16 ER 9 W	16 EL 9 W	16 IR 9 W	16 IL 9 W	.05	.07
8	16	3/8	16 ER 8 W	16 EL 8 W	16 IR 8 W	16 IL 8 W	.05	.06
7	22	1/2	22 ER 7 W	22 EL 7 W	22 IR 7 W	22 IL 7 W	.06	.09
6	22	1/2	22 ER 6 W	22 EL 6 W	22 IR 6 W	22 IL 6 W	.06	.09
5	22	1/2	22 ER 5 W	22 EL 5 W	22 IR 5 W	22 IL 5 W	.07	.09
4.5	22U	1/2U	22U E//R/L 4.5 W				.09	.43
4	22U	1/2U	22U E//R/L 4 W				.07	.43
4.5	27	5/8	27 ER 4.5 W	27 EL 4.5 W	27 IR 4.5 W	27 IL 4.5 W	.07	.10
4	27	5/8	27 ER 4 W	27 EL 4 W	27 IR 4 W	27 IL 4 W	.08	.11
3.5	27U	5/8U	27U E//R/L 3.5 W				.08	.54
3.25	27U	5/8U	27U E//R/L 3.25 W				.08	.54
3	27U	5/8U	27U E//R/L 3 W				.09	.54
2.75	27U	5/8U	27U E//R/L 2.75 W				.09	.54

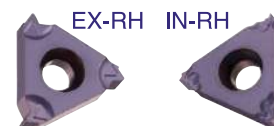
Order example: 16 IR 18 W BMA

For Carbide Grade and Cutting Speed see page 66-67

Whitworth - 55° BSW, BSF, BSP, BSB

Type B

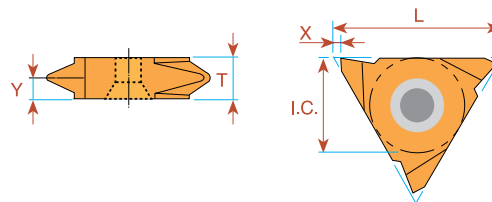
Ground Profile with Sintered Chip-breaker



Pitch TPI	L	I.C. in	EXTERNAL Ordering Code Right Hand	INTERNAL Ordering Code Right Hand	X	Y
28	11	1/4		11 IR B 28 W	.02	.02
24	11	1/4		11 IR B 24 W	.02	.02
20	11	1/4		11 IR B 20 W	.03	.04
19	11	1/4		11 IR B 19 W	.03	.04
18	11	1/4		11 IR B 18 W	.03	.04
16	11	1/4		11 IR B 16 W	.03	.04
14	11	1/4		11 IR B 14 W	.03	.04
19	16	3/8	16 ER B 19 W	16 IR B 19 W	.03	.04
16	16	3/8	16 ER B 16 W	16 IR B 16 W	.04	.04
14	16	3/8	16 ER B 14 W	16 IR B 14 W	.04	.05
11	16	3/8	16 ER B 11 W	16 IR B 11 W	.04	.06
10	16	3/8	16 ER B 10 W	16 IR B 10 W	.04	.06

Order example: 16 IR B 10 W BMA

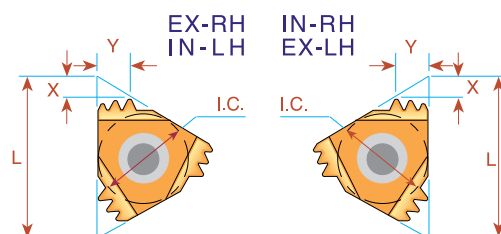
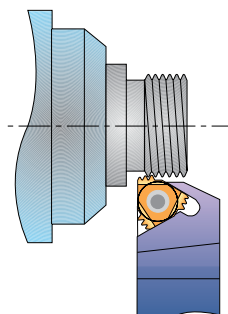
Vertical



Pitch TPI	L mm	I.C.	EXTERNAL Ordering Code Right Hand	EXTERNAL Ordering Code Left Hand	X	Y	T
20	16	3/8	16V ER 20 W	16V EL 20 W	.04	.04	.14
19	16	3/8	16V ER 19 W	16V EL 19 W	.04	.04	.14
18	16	3/8	16V ER 18 W	16V EL 18 W	.04	.04	.14
16	16	3/8	16V ER 16 W	16V EL 16 W	.04	.04	.14
14	16	3/8	16V ER 14 W	16V EL 14 W	.04	.05	.14
12	16	3/8	16V ER 12 W	16V EL 12 W	.04	.05	.14
11	16	3/8	16V ER 11 W	16V EL 11 W	.04	.06	.14

Order example: 16V ER 14 W MXC

Multitooth



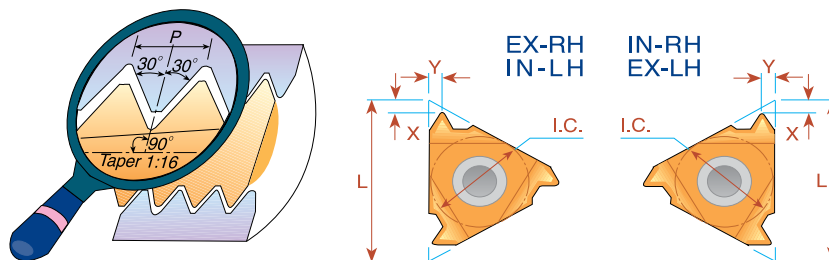
Pitch TPI	L mm	I.C.	Number of Teeth	EXTERNAL Ordering Code	Anvil	INTERNAL Ordering Code	Anvil	X	Y
14	16	3/8	2	16 ER 14 W 2M	AE16M	16 IR 14 W 2M	AI16M	.07	.11
14	22	1/2	3	22 ER 14 W 3M	AE22M	22 IR 14 W 3M	AI22M	.11	.18
11	22	1/2	2	22 ER 11 W 2M	AE22M	22 IR 11 W 2M	AI22M	.09	.13

Order example: 16 ER 14 W 2M MXC

For recommended number of passes see page 68

For Carbide Grade and Cutting Speed see page 66-67

NPT



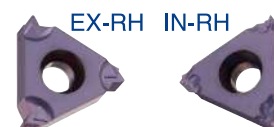
Pitch TPI	L mm	I.C.	EXTERNAL		INTERNAL		X	Y
			Ordering Code		Ordering Code			
			Right Hand	Left Hand	Right Hand	Left Hand		
27	6	5/32	ULTRA MINIATURE →		*06 IR 27 NPT	*06 IL 27 NPT	.02	.02
27	8	3/16	MINIATURE →		*08 IR 27 NPT	*08 IL 27 NPT	.02	.02
18	8	3/16			*08 IR 18 NPT	*08 IL 18 NPT	.02	.02
27	11	1/4	11 ER 27 NPT	11 EL 27 NPT	11 IR 27 NPT	11 IL 27 NPT	.03	.03
18	11	1/4	11 ER 18 NPT	11 EL 18 NPT	11 IR 18 NPT	11 IL 18 NPT	.03	.04
14	11	1/4	11 ER 14 NPT	11 EL 14 NPT	11 IR 14 NPT	11 IL 14 NPT	.03	.04
27	16	3/8	16 ER 27 NPT	16 EL 27 NPT	16 IR 27 NPT	16 IL 27 NPT	.03	.03
18	16	3/8	16 ER 18 NPT	16 EL 18 NPT	16 IR 18 NPT	16 IL 18 NPT	.03	.04
14	16	3/8	16 ER 14 NPT	16 EL 14 NPT	16 IR 14 NPT	16 IL 14 NPT	.04	.05
11.5	16	3/8	16 ER 11.5 NPT	16 EL 11.5 NPT	16 IR 11.5 NPT	16 IL 11.5 NPT	.04	.06
8	16	3/8	16 ER 8 NPT	16 EL 8 NPT	16 IR 8 NPT	16 IL 8 NPT	.05	.07

Order example: 16 ER 14 NPT MXC

* Available only in BXC and BMA grades

Type B

Ground Profile with Sintered Chip-breaker

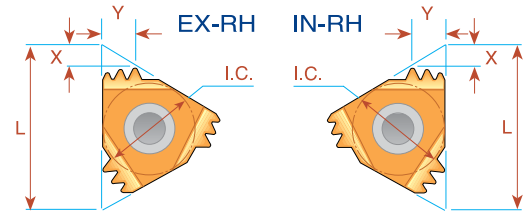
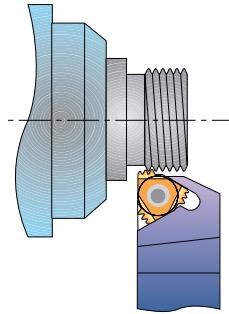


Pitch TPI	L	I.C. in	EXTERNAL	INTERNAL	X	Y
			Ordering Code Right Hand	Ordering Code Right Hand		
18	11	1/4		11 IR B 18 NPT	.03	.04
18	16	3/8	16 ER B 18 NPT	16 IR B 18 NPT	.03	.04
14	16	3/8	16 ER B 14 NPT	16 IR B 14 NPT	.04	.05
11.5	16	3/8	16 ER B 11.5 NPT	16 IR B 11.5 NPT	.04	.06
8	16	3/8	16 ER B 8 NPT	16 IR B 8 NPT	.05	.07

Order example: 16 IR B 11.5 NPT BMA

For Carbide Grade and Cutting Speed see page 66-67

NPT Multitooth

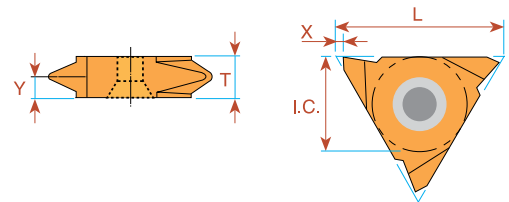


Pitch TPI	L mm	I.C.	Number of Teeth	EXTERNAL Ordering Code	Anvil	INTERNAL Ordering Code	Anvil	X	Y
14	16	3/8	2	16 ER 14 NPT 2M	AE16M	16 IR 14 NPT 2M	AI16M	.07	.11
11.5	22	1/2	2	22 ER 11.5 NPT 2M	AE22M	22 IR 11.5 NPT 2M	AI22M	.09	.14
11.5	27	5/8	3	27 ER 11.5 NPT 3M	AE27M	27 IR 11.5 NPT 3M	AI27M	.13	.22
8	27	5/8	2	27 ER 8 NPT 2M	AE27M	27 IR 8 NPT 2M	AI27M	.12	.20

Order example: 22 ER 11.5 NPT 2M MXC

For recommended number of passes see page 68

NPT Vertical

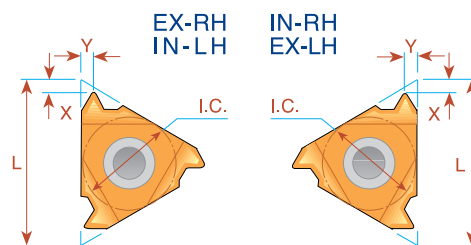
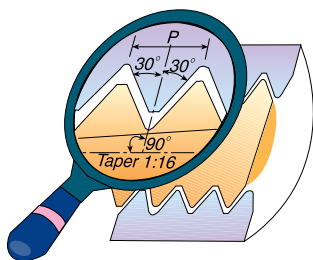


Pitch TPI	L mm	I.C.	EXTERNAL Ordering Code Right Hand	EXTERNAL Ordering Code Left Hand	X	Y	T
27	16	3/8	16V ER 27 NPT	16V EL 27 NPT	.04	.03	.14
18	16	3/8	16V ER 18 NPT	16V EL 18 NPT	.04	.04	.14
14	16	3/8	16V ER 14 NPT	16V EL 14 NPT	.04	.05	.14
11.5	16	3/8	16V ER 11.5 NPT	16V EL 11.5 NPT	.04	.06	.14

Order example: 16V ER 14 NPT BMA

For Carbide Grade and Cutting Speed see page 66-67

NPTF - Dryseal



Pitch TPI	L mm	I.C.	EXTERNAL		INTERNAL		X	Y
			Ordering Code Right Hand	Ordering Code Left Hand	Ordering Code Right Hand	Ordering Code Left Hand		
27	6	5/32	ULTRA MINIATURE →		*06 IR 27 NPTF	*06 IL 27 NPTF	.03	.02
27	8	3/16			*08 IR 27 NPTF	*08 IL 27 NPTF	.02	.02
18	8	3/16	MINIATURE →		*08 IR 18 NPTF	*08 IL 18 NPTF	.02	.02
27	11	1/4	11 ER 27 NPTF	11 EL 27 NPTF	11 IR 27 NPTF	11 IL 27 NPTF	.03	.03
18	11	1/4	11 ER 18 NPTF	11 EL 18 NPTF	11 IR 18 NPTF	11 IL 18 NPTF	.03	.04
14	11	1/4	11 ER 14 NPTF	11 EL 14 NPTF	11 IR 14 NPTF	11 IL 14 NPTF	.03	.04
27	16	3/8	16 ER 27 NPTF	16 EL 27 NPTF	16 IR 27 NPTF	16 IL 27 NPTF	.03	.03
18	16	3/8	16 ER 18 NPTF	16 EL 18 NPTF	16 IR 18 NPTF	16 IL 18 NPTF	.03	.04
14	16	3/8	16 ER 14 NPTF	16 EL 14 NPTF	16 IR 14 NPTF	16 IL 14 NPTF	.04	.05
11.5	16	3/8	16 ER 11.5 NPTF	16 EL 11.5 NPTF	16 IR 11.5 NPTF	16 IL 11.5 NPTF	.04	.06
8	16	3/8	16 ER 8 NPTF	16 EL 8 NPTF	16 IR 8 NPTF	16 IL 8 NPTF	.05	.07

Order example: 11 ER 27 NPTF MXC

* Available only in BXC and BMA grades

Type B

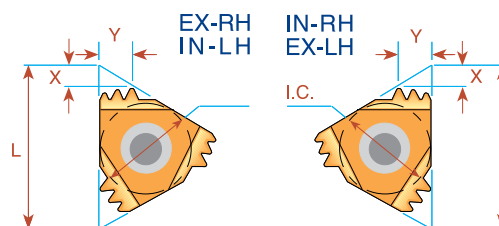
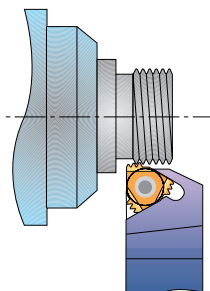
Ground Profile with Sintered Chip-breaker

Pitch TPI	L	I.C. in	INTERNAL Ordering Code Right Hand	X	Y
18	11	1/4	11 IR B 18 NPTF	.03	.04



For Carbide Grade and Cutting Speed see page 66-67

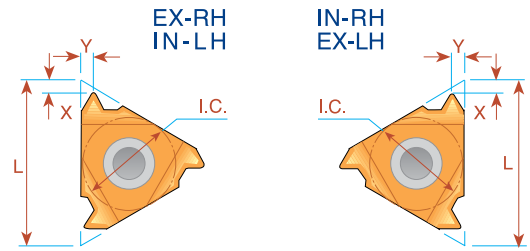
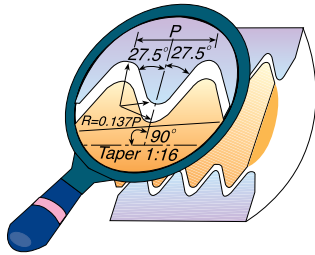
Multitooth

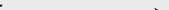


Pitch TPI	L	I.C. in	Number of Teeth	EXTERNAL Ordering Code	Anvil	INTERNAL Ordering Code	Anvil	X	Y
11.5	22	1/2	2	22 ER 11.5 NPTF 2M	AE22M	22 IR 11.5 NPTF 2M	AI22M	.09	0.14

For Carbide Grade and Cutting Speed see page 66-67

BSPT



Pitch TPI	L mm	I.C.	<i>EXTERNAL</i>		<i>INTERNAL</i>		X	Y
			Ordering Code		Ordering Code			
			Right Hand	Left Hand	Right Hand	Left Hand		
28	6	5/32	<i>ULTRA MINIATURE</i> 		<i>*06 IR 28 BSPT</i>	<i>*06 IL 28 BSPT</i>	.03	.02
28	8	3/16	<i>MINIATURE</i> 		<i>*08 IR 28 BSPT</i>	<i>*08 IL 28 BSPT</i>	.02	.02
19	8	3/16			<i>*08 IR 19 BSPT</i>	<i>*08 IL 19 BSPT</i>	.02	.02
28	11	1/4			<i>11 IR 28 BSPT</i>	<i>11 IL 28 BSPT</i>	.02	.02
19	11	1/4			<i>11 IR 19 BSPT</i>	<i>11 IL 19 BSPT</i>	.03	.04
14	11	1/4			<i>11 IR 14 BSPT</i>	<i>11 IL 14 BSPT</i>	.04	.04
11	11	1/4			⁽¹⁾ <i>11 IR 11 BSPT</i>	⁽¹⁾ <i>11 IL 11 BSPT</i>	.04	.05
28	16	3/8	<i>16 ER 28 BSPT</i>	<i>16 EL 28 BSPT</i>	<i>16 IR 28 BSPT</i>	<i>16 IL 28 BSPT</i>	.02	.03
19	16	3/8	<i>16 ER 19 BSPT</i>	<i>16 EL 19 BSPT</i>	<i>16 IR 19 BSPT</i>	<i>16 IL 19 BSPT</i>	.03	.04
14	16	3/8	<i>16 ER 14 BSPT</i>	<i>16 EL 14 BSPT</i>	<i>16 IR 14 BSPT</i>	<i>16 IL 14 BSPT</i>	.04	.05
11	16	3/8	<i>16 ER 11 BSPT</i>	<i>16 EL 11 BSPT</i>	<i>16 IR 11 BSPT</i>	<i>16 IL 11 BSPT</i>	.04	.06

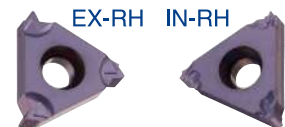
Order example: 11 IR 14 BSPT BMA

* Available only in BXC and BMA grades

(1) Special holder is required or standard holder can be amended by customer.

Type B

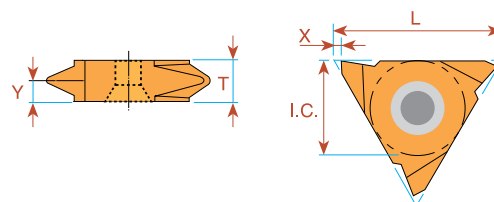
Ground Profile with Sintered Chip-breaker



Pitch TPI	L mm	I.C.	EXTERNAL	INTERNAL	X	Y
			Ordering Code Right Hand	Ordering Code Right Hand		
19	11	1/4		11 IR B 19 BSPT	.03	.04
19	16	3/8	16 ER B 19 BSPT		.04	.04
14	16	3/8	16 ER B 14 BSPT	16 IR B 14 BSPT	.05	.04
11	16	3/8	16 ER B 11 BSPT	16 IR B 11 BSPT	.06	.04

Order example: 16 ER B 11 BSPT BMA

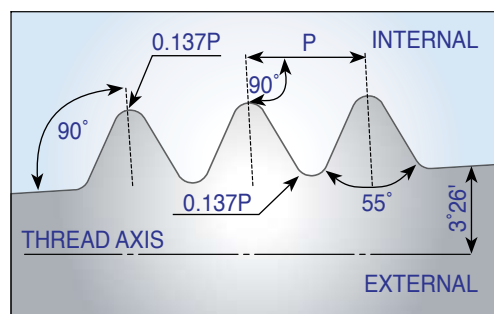
BSPT Vertical



Pitch TPI	L mm	I.C.	EXTERNAL Ordering Code Right Hand	EXTERNAL Ordering Code Left Hand	X	Y	T
28	16	3/8	16V ER 28 BSPT	16V EL 28 BSPT	.04	.02	.14
19	16	3/8	16V ER 19 BSPT	16V EL 19 BSPT	.04	.04	.14
14	16	3/8	16V ER 14 BSPT	16V EL 14 BSPT	.04	.05	.14
11	16	3/8	16V ER 11 BSPT	16V EL 11 BSPT	.04	.06	.14

Order example: 16V ER 19 BSPT BMA

DIN 477



Pitch TPI	L	I.C. in	Taper Ratio	EXTERNAL Ordering Code Right Hand	INTERNAL Ordering Code Right Hand	X	Y	Thread Designation
14	16	3/8	3/25	16 ER 14 DIN477		.04	.05	W19.8x1/14 keg(Ext.)
14	11	1/4	3/25		*11 IR 14 DIN477	.04	.04	W19.8x1/14 keg(Int.)
14	16	3/8	3/25	16 ER 14 DIN477	**16 IR 14 DIN477	.04	.05	W28.8x1/14 keg
14	16	3/8	3/25	16 ER 14 DIN477	***16 IR 14 DIN477	.04	.05	W31.3x1/14 keg

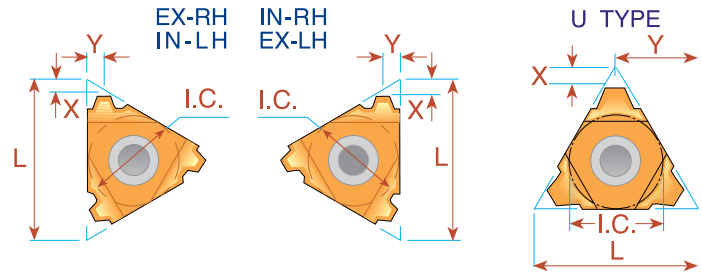
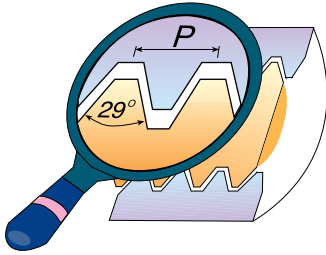
* Holder to use: SIR0375H11/SIR0375K11

** Holder to use: SIR0625H16

*** Holder to use: SIR0750P16

For Carbide Grade and Cutting Speed see page 66-67

Acme



Pitch TPI	L mm	I.C.	EXTERNAL		INTERNAL		X	Y
			Ordering Code Right Hand	Ordering Code Left Hand	Ordering Code Right Hand	Ordering Code Left Hand		
16	8	3/16	MINIATURE →		**08 IR 16 ACME	**08 IL 16 ACME	.02	.02
14	8U	3/16U	"U" MINIATURE →		*08U IR/L 14 ACME		.03	.16
12	8U	3/16U			*08U IR/L 12 ACME		.03	.16
10	8U	3/16U			*08U IR/L 10 ACME		.03	.16
16	11	1/4	11 ER 16 ACME	11 EL 16 ACME	11 IR 16 ACME	11 IL 16 ACME	.04	.04
16	16	3/8	16 ER 16 ACME	16 EL 16 ACME	16 IR 16 ACME	16 IL 16 ACME	.04	.04
14	16	3/8	16 ER 14 ACME	16 EL 14 ACME	16 IR 14 ACME	16 IL 14 ACME	.04	.05
12	16	3/8	16 ER 12 ACME	16 EL 12 ACME	16 IR 12 ACME	16 IL 12 ACME	.04	.05
10	16	3/8	16 ER 10 ACME	16 EL 10 ACME	16 IR 10 ACME	16 IL 10 ACME	.05	.05
8	16	3/8	16 ER 8 ACME	16 EL 8 ACME	16 IR 8 ACME	16 IL 8 ACME	.06	.05
6	16	3/8	⁽¹⁾ 16 ER 6 ACME	⁽¹⁾ 16 EL 6 ACME	⁽¹⁾ 16 IR 6 ACME	⁽¹⁾ 16 IL 6 ACME	.07	.07
6	22	1/2	22 ER 6 ACME	22 EL 6 ACME	22 IR 6 ACME	22 IL 6 ACME	.07	.08
5	22	1/2	22 ER 5 ACME	22 EL 5 ACME	22 IR 5 ACME	22 IL 5 ACME	.08	.09
4	22	1/2	⁽¹⁾ 22 ER 4 ACME	⁽¹⁾ 22 EL 4 ACME	⁽¹⁾ 22 IR 4 ACME	⁽¹⁾ 22 IL 4 ACME	.08	.09
4	22U	1/2U	22U ER/L 4 ACME		22U IR/L 4 ACME		.09	.43
4	27	5/8	27 ER 4 ACME	27 EL 4 ACME	27 IR 4 ACME	27 IL 4 ACME	.09	.11
3	27U	5/8U	27U ER/L 3 ACME		27U IR/L 3 ACME		.11	.54
2	33U	3/4U	33U ER/L 2 ACME		33U IR/L 2 ACME		.17	.67

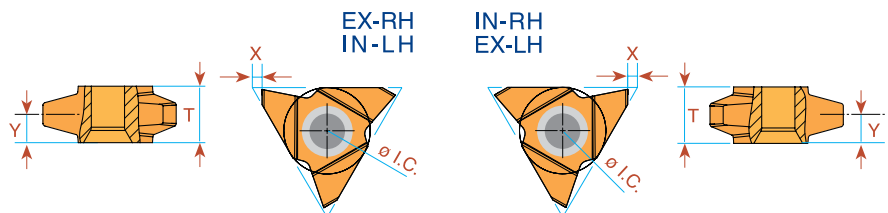
Order example: 16 ER 16 ACME MXC

* Available only in BXC and BMA grades

** One cutting edge

(1) Special holder is required or standard holder can be amended by customer.

Acme Vertical



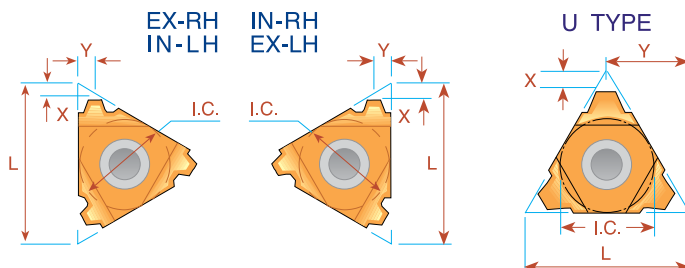
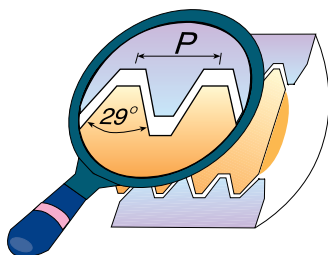
Pitch TPI	L mm	I.C.	EXTERNAL		X	Y	T	INTERNAL		X	Y	T
			Ordering Code Right Hand	Ordering Code Left Hand				Ordering Code Right Hand	Ordering Code Left Hand			
* 3.5	27	5/8	27V ER 3.5 ACME	—	.07	.20	.41	27V IR 3.5 ACME	—	.07	.16	.41
** 3	27	5/8	27V ER 3 ACME	—	.07	.20	.41	27V IR 3 ACME	—	.07	.18	.41
*** 2	27	5/8	27V ER 2 ACME	27V EL 2 ACME	.07	.20	.41	27V IR 2 ACME	27V IL 2 ACME	.07	.20	.41

Order example: 27V ER 2 ACME BMA

* Minimum bore: Ø2.17" ** Minimum bore: Ø2.17" *** Minimum bore: Ø3"

For Carbide Grade and Cutting Speed see page 66-67

Stub Acme



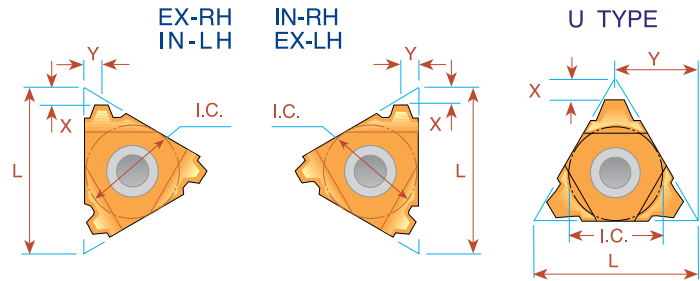
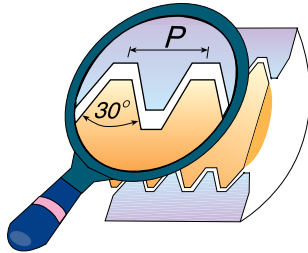
Pitch TPI	L mm	I.C.	EXTERNAL		INTERNAL		X	Y
			Right Hand	Left Hand	Right Hand	Left Hand		
16	8	3/16	MINIATURE →		**08 IR 16 STACME	**08 IL 16 STACME	.02	.02
14	8U	3/16U	"U" MINIATURE →		*08U IR/L 14 STACME		.03	.16
12	8U	3/16U			*08U IR/L 12 STACME		.04	.16
10	8U	3/16U			*08U IR/L 10 STACME		.04	.16
16	11	1/4	11 ER 16 STACME	11 EL 16 STACME			.04	.04
16	16	3/8	16 ER 16 STACME	16 EL 16 STACME	16 IR 16 STACME	16 IL 16 STACME	.04	.04
14	16	3/8	16 ER 14 STACME	16 EL 14 STACME	16 IR 14 STACME	16 IL 14 STACME	.04	.04
12	16	3/8	16 ER 12 STACME	16 EL 12 STACME	16 IR 12 STACME	16 IL 12 STACME	.05	.05
10	16	3/8	16 ER 10 STACME	16 EL 10 STACME	16 IR 10 STACME	16 IL 10 STACME	.05	.05
8	16	3/8	16 ER 8 STACME	16 EL 8 STACME	16 IR 8 STACME	16 IL 8 STACME	.06	.06
6	16	3/8	16 ER 6 STACME	16 EL 6 STACME	16 IR 6 STACME	16 IL 6 STACME	.07	.07
5	22	1/2	22 ER 6 STACME	22 EL 6 STACME	22 IR 6 STACME	22 IL 6 STACME	.07	.07
5	22	1/2	22 ER 5 STACME	22 EL 5 STACME	22 IR 5 STACME	22 IL 5 STACME	.08	.09
4	22	1/2	22 ER 4 STACME	22 EL 4 STACME	22 IR 4 STACME	22 IL 4 STACME	.09	.09
4	22U	1/2U	22U ER/L 4 STACME		22U IR/L 4 STACME		.10	.43
3	22U	1/2U	22U ER/L 3 STACME		22U IR/L 3 STACME		.13	.43
4	27	5/8	27 ER 4 STACME	27 EL 4 STACME	27 IR 4 STACME	27 IL 4 STACME	.09	.09
3	27	5/8	27 ER 3 STACME	27 EL 3 STACME	27 IR 3 STACME	27 IL 3 STACME	.11	.11
2	33U	3/4U	33U ER/L 2 STACME		33U IR/L 2 STACME		.20	.67

Order example: 22 IR 5 STACME MXC

* Available only in BXC and BMA grades

** One cutting edge

Trapez - DIN 103



Pitch mm	L mm	I.C.	EXTERNAL Ordering Code		INTERNAL Ordering Code		X	Y
			Right Hand	Left Hand	Right Hand	Left Hand		
1.5	8	3/16	<i>MINIATURE</i>		**08 IR 1.5 TR	**08 IL 1.5 TR	.02	.02
2.0	8U	3/16U	<i>"U" MINIATURE</i>		*08U IR/L 2 TR		.04	.16
1.5	16	3/8	16 ER 1.5 TR	16 EL 1.5 TR			.04	.04
2.0	16	3/8	16 ER 2 TR	16 EL 2 TR	16 IR 2 TR	16 IL 2 TR	.04	.05
3.0	16	3/8	16 ER 3 TR	16 EL 3 TR	16 IR 3 TR	16 IL 3 TR	.05	.06
4.0	16	3/8	⁽¹⁾ 16 ER 4 TR	⁽¹⁾ 16 EL 4 TR	⁽¹⁾ 16 IR 4 TR	⁽¹⁾ 16 IL 4 TR	.05	.06
4.0	22	1/2	22 ER 4 TR	22 EL 4 TR	22 IR 4 TR	22 IL 4 TR	.07	.07
5.0	22	1/2	22 ER 5 TR	22 EL 5 TR	22 IR 5 TR	22 IL 5 TR	.08	.09
6.0	22	1/2	⁽¹⁾ 22 ER 6 TR	⁽¹⁾ 22 EL 6 TR	⁽¹⁾ 22 IR 6 TR	⁽¹⁾ 22 IL 6 TR	.08	.09
6.0	22U	1/2U	22U ER/L 6 TR		22U IR/L 6 TR		.08	.43
7.0	22U	1/2U	22U ER/L 7 TR		22U IR/L 7 TR		.09	.43
8.0	22U	1/2U	22U ER/L 8 TR		22U IR/L 8 TR		.10	.43
6.0	27	5/8	27 ER 6 TR	27 EL 6 TR	27 IR 6 TR	27 IL 6 TR	.09	.11
7.0	27	5/8	27 ER 7 TR	27 EL 7 TR	27 IR 7 TR	27 IL 7 TR	.09	.10
8.0	27U	5/8U	27U ER/L 8 TR		27U IR/L 8 TR		.10	.54
9.0	27U	5/8U	27U ER/L 9 TR		27U IR/L 9 TR		.12	.54
10.0	27U	5/8U	**27U ER/L 10 TR		**27U IR/L 10 TR		.13	.54
12.0	33U	3/4U	33U ER/L 12 TR		33U IR/L 12 TR		.15	.67

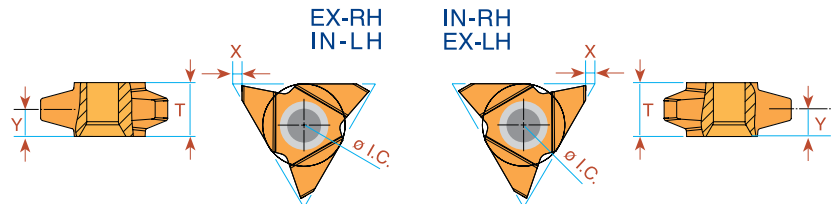
Order example: 22 IR 5 TR MXC

* Available only in BXC and BMA grades

** One cutting edge

(1) Special holder is required or standard holder can be amended by customer.

Trapez - DIN 103 Vertical



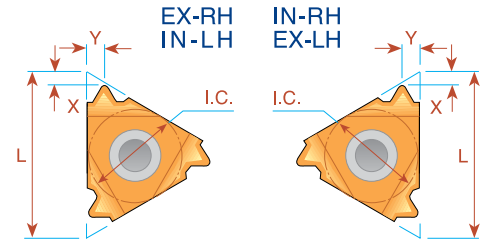
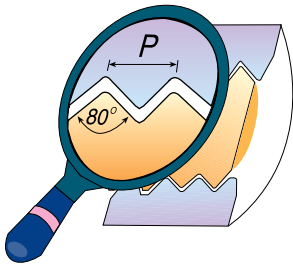
Pitch mm	L mm	I.C.	EXTERNAL Ordering Code		INTERNAL Ordering Code		X	Y	T
			Right Hand	Left Hand	Right Hand	Left Hand			
* 9	27	5/8	27V ER 9 TR	27V EL 9 TR	27V IR 9 TR	27V IL 9 TR	.07	.21	.41
** 10	27	5/8	27V ER 10 TR	27V EL 10 TR	27V IR 10 TR	27V IL 10 TR	.07	.21	.41
*** 12	27	5/8	27V ER 12 TR	27V EL 12 TR	27V IR 12 TR	27V IL 12 TR	.07	.21	.41

Order example: 27V ER 10 TR BMA

* Minimum bore: Ø2.56" ** Minimum bore: Ø2.56" *** Minimum bore: Ø2.87"

For Carbide Grade and Cutting Speed see page 66-67

PG - DIN 40430

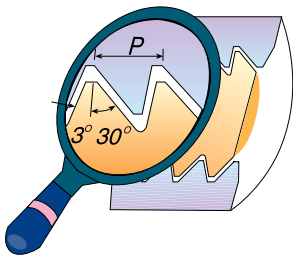


Pitch TPI	L mm	I.C.	EXTERNAL		INTERNAL		X	Y
			Right Hand	Standard	Right Hand	Standard		
20	8	3/16	<i>MINIATURE</i>		*08 IR 20 PG	(PG 7)	.02	.03
18	11	1/4			11 IR 18 PG	(PG 9)	.03	.04
20	16	3/8	16 ER 20 PG	(PG 7)			.03	.03
18	16	3/8	16 ER 18 PG	(PG 9, 11, 13.5, 16)	16 IR 18 PG	(PG 11, 13.5, 16)	.03	.04
16	16	3/8	16 ER 16 PG	(PG 21, 29, 36, 42, 48)	16 IR 16 PG	(PG 21, 29, 36, 42, 48)	.03	.04

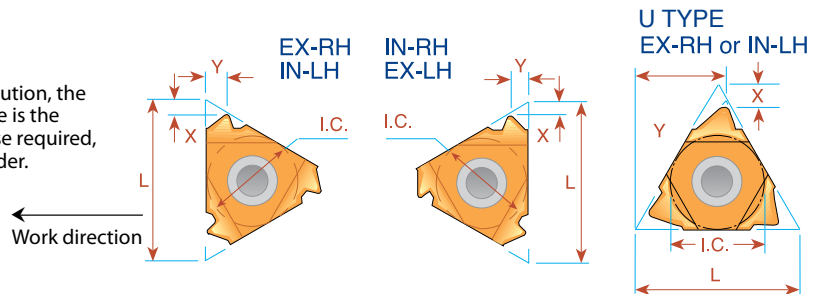
Order example: 16 ER 16 PG BMA

* Available only in BXC and BMA grades

Sagengewinde- DIN 513



IMPORTANT NOTE:
In Carmex standard execution, the flank with the large angle is the leading edge. If otherwise required, please specify in your order.



Pitch mm	L mm	I.C.	EXTERNAL		X	Y	INTERNAL		X	Y
			Right Hand	Left Hand			Right Hand	Left Hand		
2.0	16	3/8	16 ER 2 SAGE	16 EL 2 SAGE	.04	.06	16 IR 2 SAGE	16 IL 2 SAGE	.05	.07
(1) 3.0	22	1/2	22 ER 3 SAGE	22 EL 3 SAGE	.06	.09	22 IR 3 SAGE	22 IL 3 SAGE	.07	.11
(1) 4.0	22	1/2	22 ER 4 SAGE	22 EL 4 SAGE	.07	.12	22 IR 4 SAGE	22 IL 4 SAGE	.09	.14
*5.0	22U	1/2U	22U ER 5 SAGE	22U EL 5 SAGE	.05	.46	22U IR 5 SAGE	22U IL 5 SAGE	.07	.46
*6.0	22U	1/2U	22U ER 6 SAGE	22U EL 6 SAGE	.05	.46	22U IR 6 SAGE	22U IL 6 SAGE	.08	.47

Order example: 22 IR 4 SAGE BMA

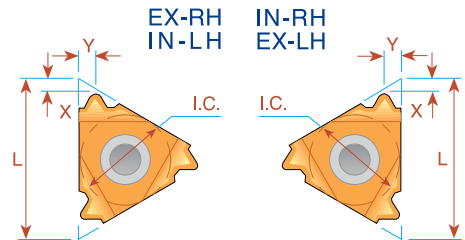
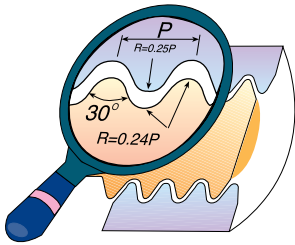
* Requires a special anvil AER 22U-1.5 SAGE 5/6, AEL 22U-1.5 SAGE 5/6, AIR 22U-1.5 SAGE 5/6, AIL 22U-1.5 SAGE 5/6.

(1) Requires a special anvil AER 22-1.5 SAGE 3/4, AEL 22-1.5 SAGE 3/4

AIR 22-1.5 SAGE 3/4, AIL 22-1.5 SAGE 3/4

For Carbide Grade and Cutting Speed see page 66-67

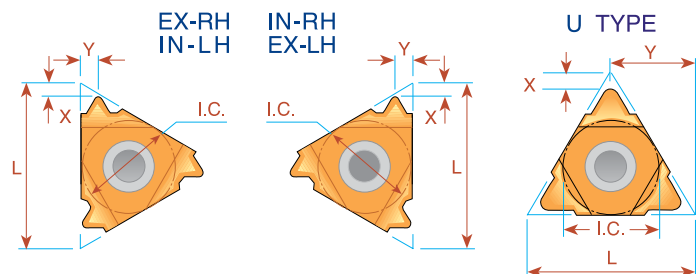
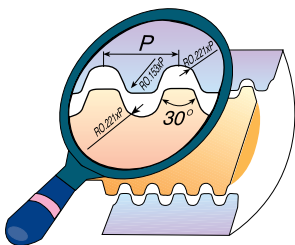
Round - DIN 405



Pitch TPI	L mm	I.C.	EXTERNAL		X	Y	INTERNAL		X	Y
			Ordering Code Right Hand	Ordering Code Left Hand			Ordering Code Right Hand	Ordering Code Left Hand		
10	16	3/8	16 ER 10 RD	16 EL 10 RD	.04	.05	16 IR 10 RD	16 IL 10 RD	.04	.05
8	16	3/8	16 ER 8 RD	16 EL 8 RD	.06	.05	16 IR 8 RD	16 IL 8 RD	.06	.06
6	16	3/8	16 ER 6 RD	16 EL 6 RD	.06	.07	16 IR 6 RD	16 IL 6 RD	.06	.06
6	22	1/2	22 ER 6 RD	22 EL 6 RD	.06	.07	22 IR 6 RD	22 IL 6 RD	.06	.07
4	22	1/2	22 ER 4 RD	22 EL 4 RD	.09	.09	22 IR 4 RD	22 IL 4 RD	.09	.09
4	27	5/8	27 ER 4 RD	27 EL 4 RD	.09	.09	27 IR 4 RD	27 IL 4 RD	.09	.09

Order example: 27 IL 4 RD BMA

Round - DIN 20400



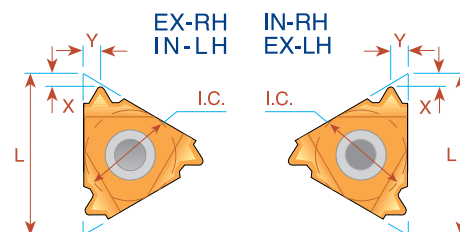
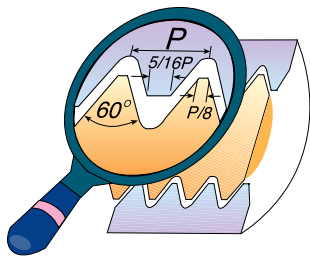
Pitch mm	L mm	I.C.	EXTERNAL	INTERNAL	X	Y
			Ordering Code Right Hand	Ordering Code Right Hand		
4.0	22	1/2	22 ER 4.0 RD 20400	22 IR 4.0 RD 20400	.06	.06
5.0	22	1/2	22 ER 5.0 RD 20400	22 IR 5.0 RD 20400	.07	.07
6.0	22	1/2	22 ER 6.0 RD 20400	22 IR 6.0 RD 20400	.07	.08
8.0	27U	5/8U	*27U - 8.0 RD 20400		.12	.54
10.0	27U	5/8U	*27U - 10.0 RD 20400		.13	.54

Order example: 22 ER 4.0 RD 20400 MXC

* Same insert for Internal and External Right Hand Thread

For Carbide Grade and Cutting Speed see page 66-67

UNJ UNJC, UNJF, UNJEF, UNJS



Pitch TPI	L mm	I.C.	EXTERNAL		INTERNAL		X	Y
			Ordering Code		Ordering Code			
			Right Hand	Left Hand	Right Hand	Left Hand		
48	11	1/4	11 ER 48 UNJ	11 EL 48 UNJ	11 IR 48 UNJ	11 IL 48 UNJ	.02	.02
44	11	1/4	11 ER 44 UNJ	11 EL 44 UNJ	11 IR 44 UNJ	11 IL 44 UNJ	.02	.02
40	11	1/4	11 ER 40 UNJ	11 EL 40 UNJ	11 IR 40 UNJ	11 IL 40 UNJ	.02	.02
36	11	1/4	11 ER 36 UNJ	11 EL 36 UNJ	11 IR 36 UNJ	11 IL 36 UNJ	.02	.02
32	11	1/4	11 ER 32 UNJ	11 EL 32 UNJ	11 IR 32 UNJ	11 IL 32 UNJ	.02	.02
28	11	1/4	11 ER 28 UNJ	11 EL 28 UNJ	11 IR 28 UNJ	11 IL 28 UNJ	.02	.02
24	11	1/4	11 ER 24 UNJ	11 EL 24 UNJ	11 IR 24 UNJ	11 IL 24 UNJ	.03	.03
20	11	1/4	11 ER 20 UNJ	11 EL 20 UNJ	11 IR 20 UNJ	11 IL 20 UNJ	.03	.04
18	11	1/4	11 ER 18 UNJ	11 EL 18 UNJ	11 IR 18 UNJ	11 IL 18 UNJ	.03	.04
16	11	1/4	11 ER 16 UNJ	11 EL 16 UNJ	11 IR 16 UNJ	11 IL 16 UNJ	.03	.04
14	11	1/4	11 ER 14 UNJ	11 EL 14 UNJ	11 IR 14 UNJ	11 IL 14 UNJ	.04	.04
48	16	3/8	16 ER 48 UNJ	16 EL 48 UNJ	16 IR 48 UNJ	16 IL 48 UNJ	.02	.02
44	16	3/8	16 ER 44 UNJ	16 EL 44 UNJ	16 IR 44 UNJ	16 IL 44 UNJ	.02	.02
40	16	3/8	16 ER 40 UNJ	16 EL 40 UNJ	16 IR 40 UNJ	16 IL 40 UNJ	.02	.02
36	16	3/8	16 ER 36 UNJ	16 EL 36 UNJ	16 IR 36 UNJ	16 IL 36 UNJ	.02	.02
32	16	3/8	16 ER 32 UNJ	16 EL 32 UNJ	16 IR 32 UNJ	16 IL 32 UNJ	.02	.02
28	16	3/8	16 ER 28 UNJ	16 EL 28 UNJ	16 IR 28 UNJ	16 IL 28 UNJ	.02	.02
24	16	3/8	16 ER 24 UNJ	16 EL 24 UNJ	16 IR 24 UNJ	16 IL 24 UNJ	.03	.03
20	16	3/8	16 ER 20 UNJ	16 EL 20 UNJ	16 IR 20 UNJ	16 IL 20 UNJ	.03	.04
18	16	3/8	16 ER 18 UNJ	16 EL 18 UNJ	16 IR 18 UNJ	16 IL 18 UNJ	.03	.04
16	16	3/8	16 ER 16 UNJ	16 EL 16 UNJ	16 IR 16 UNJ	16 IL 16 UNJ	.03	.04
14	16	3/8	16 ER 14 UNJ	16 EL 14 UNJ	16 IR 14 UNJ	16 IL 14 UNJ	.04	.05
13	16	3/8	16 ER 13 UNJ	16 EL 13 UNJ	16 IR 13 UNJ	16 IL 13 UNJ	.04	.05
12	16	3/8	16 ER 12 UNJ	16 EL 12 UNJ	16 IR 12 UNJ	16 IL 12 UNJ	.04	.06
11	16	3/8	16 ER 11 UNJ	16 EL 11 UNJ	16 IR 11 UNJ	16 IL 11 UNJ	.04	.06
10	16	3/8	16 ER 10 UNJ	16 EL 10 UNJ	16 IR 10 UNJ	16 IL 10 UNJ	.04	.06
9	16	3/8	16 ER 9 UNJ	16 EL 9 UNJ	16 IR 9 UNJ	16 IL 9 UNJ	.05	.06
8	16	3/8	16 ER 8 UNJ	16 EL 8 UNJ	16 IR 8 UNJ	16 IL 8 UNJ	.05	.06

Order example: 16 IR 16 UNJ MXC

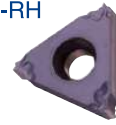
UNJ UNJC, UNJF, UNJEF, UNJS

Type B

Ground Profile with Sintered Chip-breaker

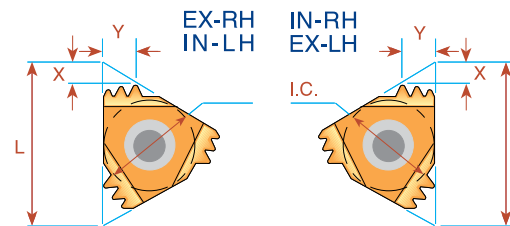
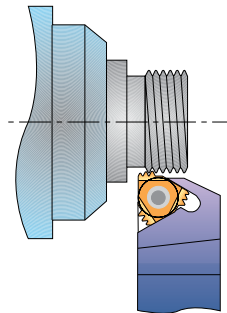
Pitch TPI	L	I.C. in	INTERNAL Ordering Code Right Hand	X	Y
32	11	1/4	11 IR B 32 UNJ	.02	.02
28	11	1/4	11 IR B 28 UNJ	.02	.02
24	11	1/4	11 IR B 24 UNJ	.02	.02
20	11	1/4	11 IR B 20 UNJ	.03	.04
18	11	1/4	11 IR B 18 UNJ	.03	.04
16	11	1/4	11 IR B 16 UNJ	.03	.04
14	11	1/4	11 IR B 14 UNJ	.03	.04

IN-RH



Order example: 11 IR B 20 UNJ BMA

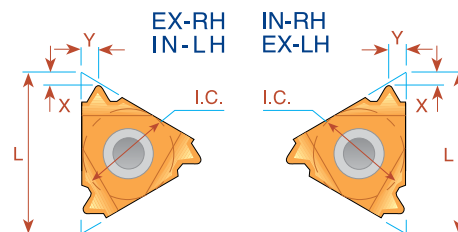
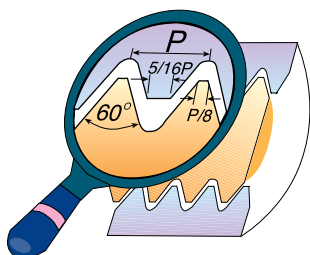
Multitooth



Pitch TPI	L	I.C. in	Number of Teeth	EXTERNAL Ordering Code	Anvil	INTERNAL Ordering Code	Anvil	X	Y
16	16	3/8	2	16 ER 16 UNJ 2M	AE16M	-	-	.06	.09
16	22	1/2	3	22 ER 16 UNJ 2M	AE22M	-	-	.09	.15

Order example: 22 ER 16 UNJ 2M BMA

MJ - ISO 5855



Pitch mm	L mm	I.C.	EXTERNAL Ordering Code Right Hand	INTERNAL Ordering Code Right Hand	X	Y
1.0	11	1/4		11 IR 1.0 MJ	.03	.03
1.25	11	1/4		11 IR 1.25 MJ	.03	.04
1.5	11	1/4		11 IR 1.5 MJ	.03	.04
2.0	11	1/4		11 IR 2.0 MJ	.04	.04
1.0	16	3/8	16 ER 1.0 MJ	16 IR 1.0 MJ	.03	.03
1.25	16	3/8	16 ER 1.25 MJ	16 IR 1.25 MJ	.03	.04
1.5	16	3/8	16 ER 1.5 MJ	16 IR 1.5 MJ	.03	.04
2.0	16	3/8	16 ER 2.0 MJ	16 IR 2.0 MJ	.04	.05

Order example: 16 ER 1.5 MJ BMA

Type B

Ground Profile with Sintered Chip-breaker

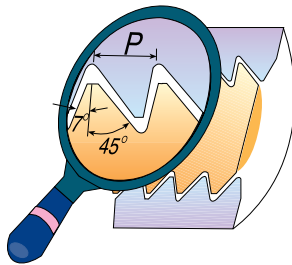
Pitch mm	L	I.C. in	INTERNAL Ordering Code Right Hand	X	Y
1.0	11	1/4	11 IR B 1.0 MJ	.02	.02
1.5			11 IR B 1.5 MJ	.03	.04



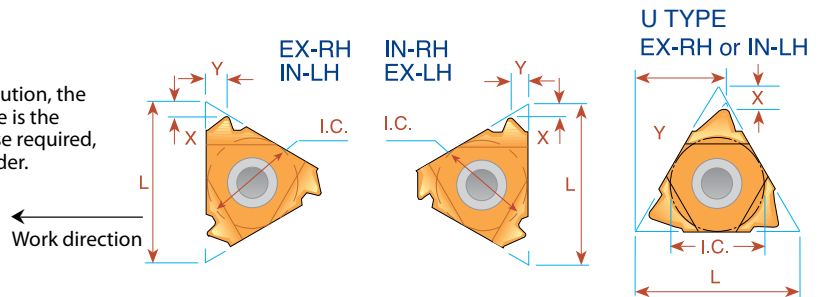
Order example: 11 IR B 1.5 MJ BMA

For Carbide Grade and Cutting Speed see page 66-67

American Buttress



IMPORTANT NOTE:
In Carmex standard execution, the flank with the large angle is the leading edge. If otherwise required, please specify in your order.



Pitch TPI	L mm	I.C.	EXTERNAL		INTERNAL		X	Y
			Ordering Code Right Hand	Ordering Code Left Hand	Ordering Code Right Hand	Ordering Code Left Hand		
20	11	1/4	11 ER 20 ABUT	11 EL 20 ABUT	11 IR 20 ABUT	11 IL 20 ABUT	.04	.05
16	11	1/4	11 ER 16 ABUT	11 EL 16 ABUT	11 IR 16 ABUT	11 IL 16 ABUT	.04	.06
20	16	3/8	16 ER 20 ABUT	16 EL 20 ABUT	16 IR 20 ABUT	16 IL 20 ABUT	.04	.05
16	16	3/8	16 ER 16 ABUT	16 EL 16 ABUT	16 IR 16 ABUT	16 IL 16 ABUT	.04	.06
12	16	3/8	16 ER 12 ABUT	16 EL 12 ABUT	16 IR 12 ABUT	16 IL 12 ABUT	.06	.08
10	16	3/8	16 ER 10 ABUT	16 EL 10 ABUT	16 IR 10 ABUT	16 IL 10 ABUT	.06	.09
8	22	1/2	22 ER 8 ABUT	22 EL 8 ABUT	22 IR 8 ABUT	22 IL 8 ABUT	.08	.13
6	22	1/2	22 ER 6 ABUT	22 EL 6 ABUT	22 IR 6 ABUT	22 IL 6 ABUT	.08	.13
⁽¹⁾ 4	22U	1/2U	22U ER 4 ABUT	22U EL 4 ABUT	22U IR 4 ABUT	22U IL 4 ABUT	.09	.37
⁽²⁾ 3	27U	5/8U	27U ER 3 ABUT	27U EL 3 ABUT	27U IR 3 ABUT	27U IL 3 ABUT	.12	.46

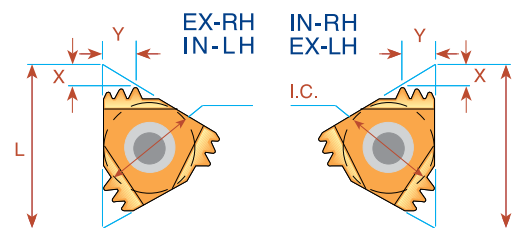
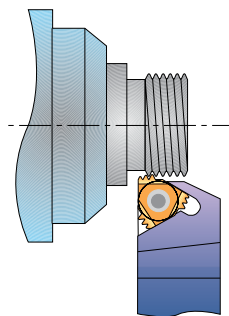
Order example: 16 IL 12 ABUT MXC

Most applications requires anvil change in toolholder see page 71

(1) Requires a special anvil AE 22U-1.5 ABUT4, AI22U-1.5 ABUT4

(2) Requires a special anvil AE 27U-1.5 ABUT3, AI27U-1.5 ABUT3

Multitooth

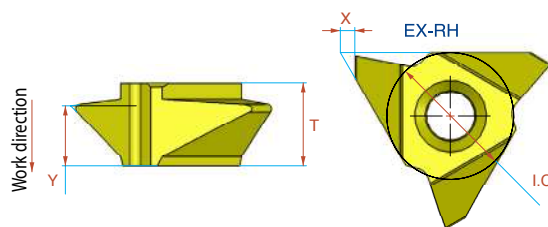


Pitch TPI	L	I.C. in	Number of Teeth	EXTERNAL	Anvil	INTERNAL	Anvil	X	Y
				Ordering Code		Ordering Code			
12	22	1/2	2	22 ER 12 ABUT 2M	AE22M	22 IR 16 ABUT 2M	AI22M	.10	.16

Order example: 22 IR 16 ABUT 2M BMA

For Carbide Grade and Cutting Speed see page 66-67

American Buttress Vertical

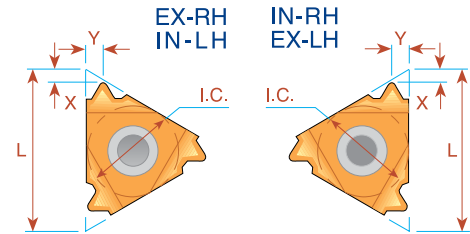
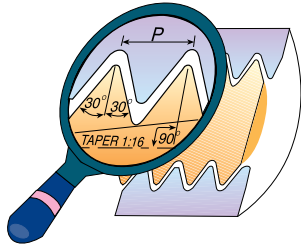


Pitch TPI	L mm	I.C.	EXTERNAL				INTERNAL			
			Ordering Code Right Hand	X	Y	T	Ordering Code Right Hand	X	Y	T
* 4	27	5/8	*27V ER 4 ABUT	0.07	0.30	0.41	27V IR 4 ABUT	0.07	0.30	0.41
** 3	27	5/8	*27V ER 3 ABUT	0.07	0.30	0.41	27V IR 3 ABUT	0.07	0.24	0.41

* For EXT. RH use only holders SER 1000M27V-ABUT 4/3-T10, SER1250P27V-ABUT 4/3-T10

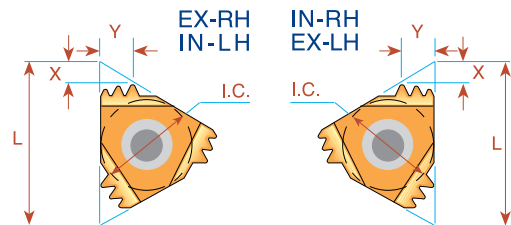
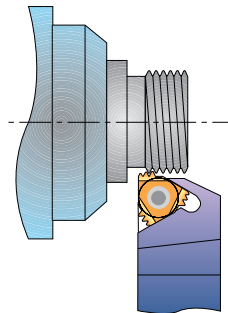
* Minimum bore: Ø2.17" ** Minimum bore: Ø2.76"

OIL Threads API Round



Pitch TPI	L mm	I.C.	Taper IPF	EXTERNAL Ordering Code Right Hand	INTERNAL Ordering Code Right Hand	X	Y
10	16	3/8	0.75	16 ER 10 API RD	16 IR 10 API RD	.06	.06
8	16	3/8	0.75	16 ER 8 API RD	16 IR 8 API RD	.05	.06

Multitooth



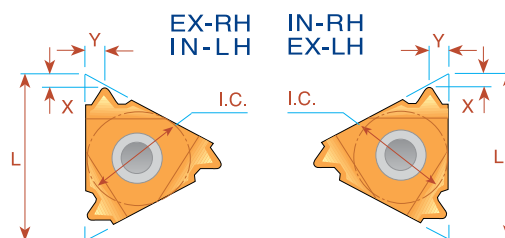
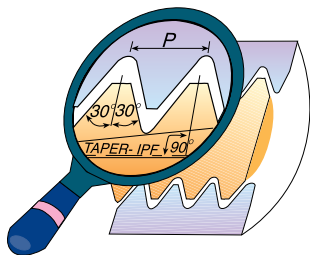
Pitch TPI	L mm	I.C.	Number of Teeth	EXTERNAL Ordering Code	Anvil	INTERNAL Ordering Code	Anvil	X	Y
10	22	1/2	2	22 ER 10API RD 2M	AE22M	22 IR 10API RD 2M	AI22M	.09	.15
10	27	5/8	3	27 ER 10API RD 3M	AE27M	27 IR 10API RD 3M	AI27M	.15	.24
8	27	5/8	2	27 ER 8API RD 2M	AE27M	27 IR 8API RD 2M	AI27M	.12	.18

Order example: 27 IR 10 API RD 3M MXC

For recommended number of passes see page 68

For Carbide Grade and Cutting Speed see page 66-67

OIL Threads



V-0.040

Pitch TPI	L mm	I.C.	Taper IPF	EXTERNAL Ordering Code Right Hand	INTERNAL Ordering Code Right Hand	X	Y	Connection No. or Size
5	22	1/2	3	22 ER 5 API 403	22 IR 5 API 403	.07	.10	23/8-4 1/2 REG

V-0.038R

Pitch TPI	L mm	I.C.	Taper IPF	EXTERNAL Ordering Code Right Hand	INTERNAL Ordering Code Right Hand	X	Y	Connection No. or Size
4	27	5/8	2	27 ER 4 API 382	27 IR 4 API 382	.08	.08	NC23-NC50
4	27	5/8	3	27 ER 4 API 383	27 IR 4 API 383	.08	.11	NC56-NC77

V-0.050

Pitch TPI	L mm	I.C.	Taper IPF	EXTERNAL Ordering Code Right Hand	INTERNAL Ordering Code Right Hand	X	Y	Connection No. or Size
4	27	5/8	2	27 ER 4 API 502	27 IR 4 API 502	.08	.12	65/8 REG
4	27	5/8	3	27 ER 4 API 503	27 IR 4 API 503	.08	.12	5 1/2, 7 5/8, 8 5/8 REG

V-0.055

Macaroni Tubing (MT)

American Macaroni Tubing (AMT)

American Mining Macaroni Tubing (AMMT)

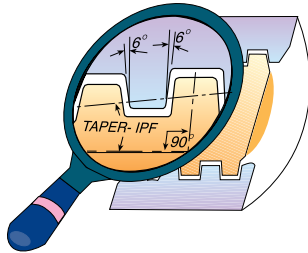
Pitch TPI	L	I.C. in	Taper IPF	EXTERNAL Ordering Code Right Hand	INTERNAL Ordering Code Right Hand	X	Y	Connection No. or Size
6	22	1/2	1.5	22 ER 6 API 551.5	-	.08	.07	NC10, NC12, NC13, NC16
6	16	3/8	1.5	-	16 IR 6 API 551.5	.08	.07	NC10, NC12, NC13 *
6	22	1/2	1.5	-	22 IR 6 API 551.5	.08	.07	NC16 **

* For NC10, NC12 use holder SIR062516CB
For NC13 use holders SIR0750P16/SIR0750P16B/SIR0750S16CB

** For NC16 use holder SIR1000R22

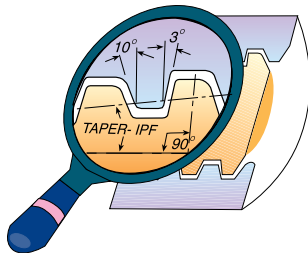
For Carbide Grade and Cutting Speed see page 66-67

OIL Threads Extreme - Line Casing



Pitch TPI	L mm	I.C.	Taper IPF	EXTERNAL Ordering Code Right Hand	INTERNAL Ordering Code Right Hand	X	Y	Connection No. or Size
6	22	1/2	1.50	22 ER 6 EL 1.5	22 IR 6 EL 1.5	.07	.07	5-7 ⁵ / ₈
5	22	1/2	1.25	22 ER 5 EL 1.25	22 IR 5 EL 1.25	.09	.09	8 ⁵ / ₈ -10 ³ / ₄

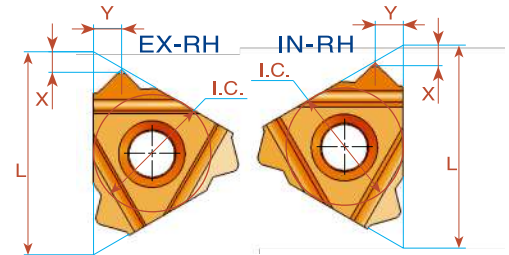
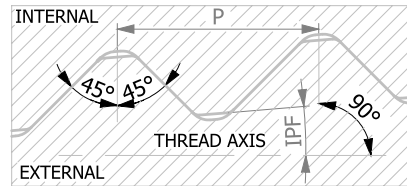
Buttress Casing



Pitch TPI	L mm	I.C.	Taper IPF	EXTERNAL Ordering Code Right Hand	INTERNAL Ordering Code Right Hand	X	Y	Connection No. or Size
5	22	1/2	0.75	22 ER 5 BUT 0.75	22 IR 5 BUT 0.75	.09	.09	4 ¹ / ₂ -13 ³ / ₈
5	22	1/2	1.00	22 ER 5 BUT 1.0	22 IR 5 BUT 1.0	.09	.09	16-20

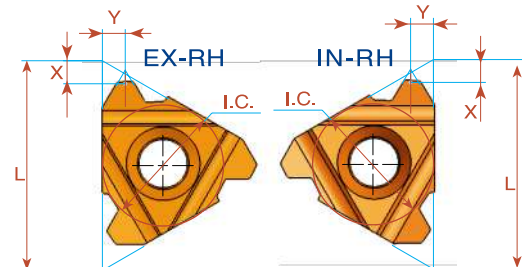
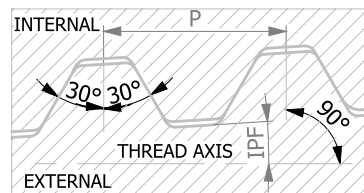
Order example: 22 ER 5 BUT 0.75 MXC

HUGHES



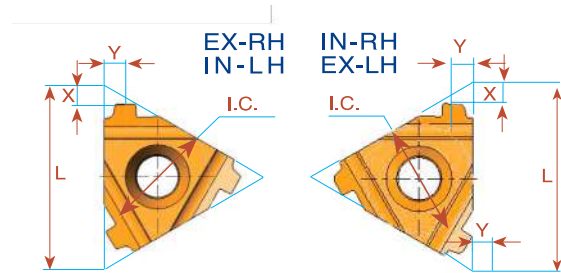
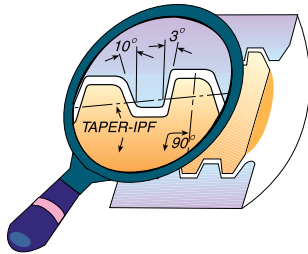
Pitch TPI	L mm	I.C.	Taper IPF	EXTERNAL Ordering Code Right Hand	INTERNAL Ordering Code Right Hand	X	Y	Connection No. or Size
3.5	27	5/8	2	27 ER 3.5 H 902	27 IR 3.5 H 902	.11	.15	3 1/2 - 65/8
3.5	27	5/8	3	27 ER 3.5 H 903	27 IR 3.5 H 903	.11	.15	7 - 85/8
3	27	5/8	1.25	27 ER 3 SLH 90	27 IR 3 SLH 90	.13	.18	2 3/8 - 3 1/2

PAC



Pitch TPI	L mm	I.C.	Taper IPF	EXTERNAL Ordering Code Right Hand	INTERNAL Ordering Code Right Hand	X	Y	Connection No. or Size
4	22	1/2	1.5	22 ER 4 PAC	22 IR 4 PAC	.09	.09	2 1/2 - 27/8
4	27	5/8	1.5	27 ER 4 PAC	27 IR 4 PAC	.09	.09	2 1/2 - 27/8

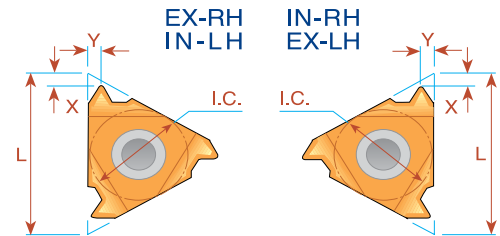
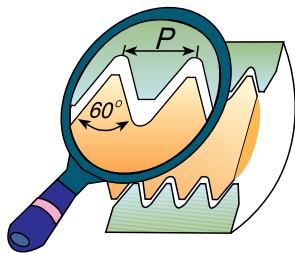
VAM



Pitch TPI	L mm	I.C.	Taper IPF	EXTERNAL Ordering Code Right Hand	X	Y	INTERNAL Ordering Code Right Hand	X	Y	Connection No. or Size
8	16	3/8	0.75	16 ER 8 VAM	.07	.07	16 IR 8 VAM	.07	.07	2 3/8" - 2 7/8"
6	22	1/2	0.75	22 ER 6 VAM	.09	.09	22 IR 6 VAM	.10	.10	3 1/2" - 4 1/2"
5	22	1/2	0.75	22 ER 5 VAM	.09	.11	22 IR 5 VAM	.09	.10	5" - 13 3/8"

Order example: 16 ER 8 VAM BMA

NPS



Pitch TPI	L mm	I.C.	EXTERNAL Ordering Code		INTERNAL Ordering Code		X	Y
			Right Hand	Left Hand	Right Hand	Left Hand		
18	16	3/8	16 ER 18 NPS	16 EL 18 NPS	16 IR 18 NPS	16 IL 18 NPS	.03	.04
14	16	3/8	16 ER 14 NPS	16 EL 14 NPS	16 IR 14 NPS	16 IL 14 NPS	.04	.05
11.5	16	3/8	16 ER 11.5 NPS	16 EL 11.5 NPS	16 IR 11.5 NPS	16 IL 11.5 NPS	.04	.06
8	16	3/8	16 ER 8 NPS	16 EL 8 NPS	16 IR 8 NPS	16 IL 8 NPS	.05	.07

Order example: 30-11.5 NPS MT7

* One cutting edge

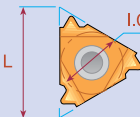
Thread Turning Toolholders and Kits



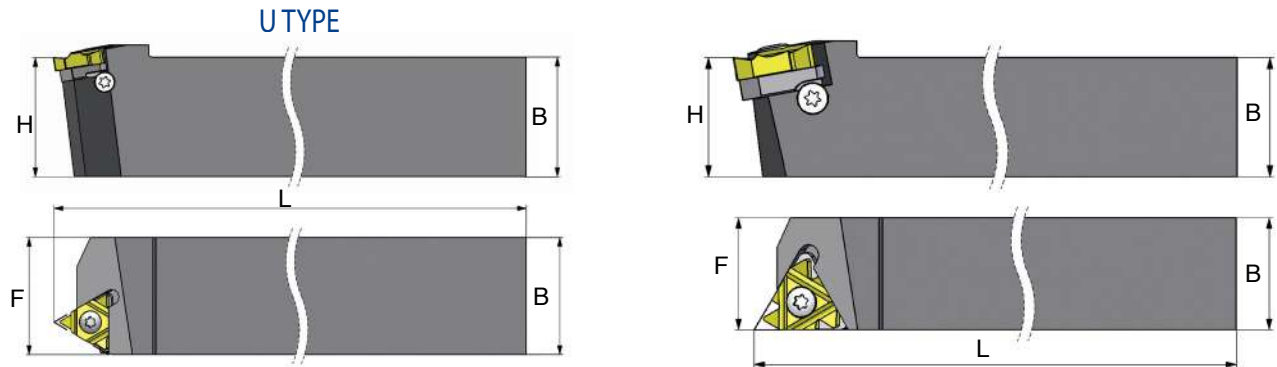
Contents:	Page:	Contents:	Page:
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External Toolholders with Top Clamp	44	External Toolholders	50
Vertical Toolholders	44	Internal Toolholders	51
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Product Identification

Threading Toolholders Ordering Codes

S	E	R	0750	K	16																							
↓	↓	↓	↓	↓	↓	↓																						
Clamping Method D = Clamp S = Screw	E = External I = Internal	R = Right Hand L = Left Hand	Shank Cross Section: External toolholders square shank 0750 = 3/4 x 3/4 	Length of Toolholder: D = 2.5 F = 3.25 H = 4 K = 5 L = 5.5 M = 6 P = 7 R = 8 S = 10 T = 12 U = 14 V = 16	Insert Pocket Size  <table border="1"> <thead> <tr> <th>L mm</th> <th>I.C.</th> </tr> </thead> <tbody> <tr><td>06</td><td>5/32"</td></tr> <tr><td>08</td><td>3/16"</td></tr> <tr><td>08U</td><td>3/16"U</td></tr> <tr><td>11</td><td>1/4"</td></tr> <tr><td>16</td><td>3/8"</td></tr> <tr><td>22</td><td>1/2"</td></tr> <tr><td>22U</td><td>1/2"U</td></tr> <tr><td>27</td><td>5/8"</td></tr> <tr><td>27U</td><td>5/8"U</td></tr> <tr><td>33U</td><td>3/4"U</td></tr> </tbody> </table>	L mm	I.C.	06	5/32"	08	3/16"	08U	3/16"U	11	1/4"	16	3/8"	22	1/2"	22U	1/2"U	27	5/8"	27U	5/8"U	33U	3/4"U	B - With coolant bore CB - Carbide shank V - Vertical (on edge) O - Offset style D - Drop head G - Gang tool U - U type
L mm	I.C.																											
06	5/32"																											
08	3/16"																											
08U	3/16"U																											
11	1/4"																											
16	3/8"																											
22	1/2"																											
22U	1/2"U																											
27	5/8"																											
27U	5/8"U																											
33U	3/4"U																											
			Internal toolholders & boring bars round shank 0750 = Diam. of 3/4 																									

External Toolholders



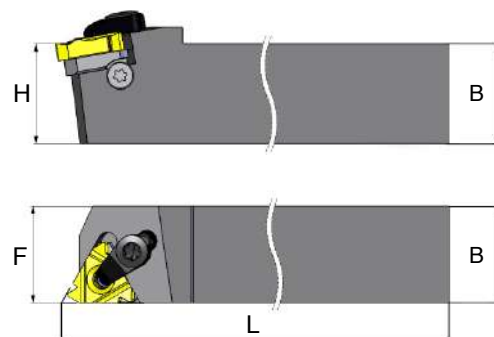
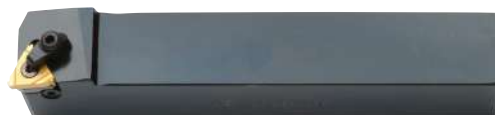
Ordering Code Right Hand	 L mm	B=H	L	F	Insert Screw	Anvil Screw	Torx Key	RH Anvil	LH Anvil
*SER 0310 H11	11	.31	4.00	.43	S11	-	K11	-	-
*SER 0375 H11	11	.38	4.00	.43	S11	-	K11	-	-
SER 0375 D16	16	.38	2.50	.63	S16	A16	K16	AE16	AI16
SER 0500 F16	16	.50	3.25	.63	S16	A16	K16	AE16	AI16
SER 0625 H16	16	.63	4.00	.63	S16	A16	K16	AE16	AI16
SER 0750 K16	16	.75	5.00	.75	S16	A16	K16	AE16	AI16
SER 1000 M16	16	1.00	6.00	1.00	S16	A16	K16	AE16	AI16
SER 1250 P16	16	1.25	7.00	1.25	S16	A16	K16	AE16	AI16
SER 1000 M22	22	1.00	6.00	1.00	S22	A22	K22	AE22	AI22
SER 1250 P22	22	1.25	7.00	1.25	S22	A22	K22	AE22	AI22
SER 1500 R22	22	1.50	8.00	1.50	S22	A22	K22	AE22	AI22
SER 1000 M22U	22U	1.00	6.00	1.10	S22	A22	K22	AE22U	AI22U
SER 1250 P22U	22U	1.25	7.00	1.25	S22	A22	K22	AE22U	AI22U
SER 1500 R22U	22U	1.50	8.00	1.50	S22	A22	K22	AE22U	AI22U
SER 1000 M27	27	1.00	6.00	1.25	S27	A27	K27	AE27	AI27
SER 1250 P27	27	1.25	7.00	1.25	S27	A27	K27	AE27	AI27
SER 1500 R27	27	1.50	8.00	1.50	S27	A27	K27	AE27	AI27
SER 1000 M27U	27U	1.00	6.00	1.25	S27	A27	K27	AE27U	AI27U
SER 1250 P27U	27U	1.25	7.00	1.25	S27	A27	K27	AE27U	AI27U
SER 1500 R27U	27U	1.50	8.00	1.50	S27	A27	K27	AE27U	AI27U
SER 1000 M33U	33U	1.00	6.00	1.45	S33	-	K33	-	-
SER 1250 P33U	33U	1.25	7.00	1.45	S33	-	K33	-	-

*Toolholders with no anvil

For **LEFT HAND** toolholders specify **SEL** instead of **SER**

Toolholders are made with a **1.5° Helix Angle**. For other Helix Angles please consult helix angle chart (page 71) in the technical section of this catalog.

External toolholders with top clamp



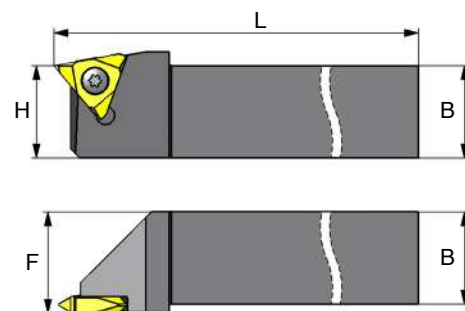
Ordering Code Right Hand	 L mm	B=H	L	F	Insert Screw	Clamp	Anvil Screw	Torx Key	RH Anvil	LH Anvil
DER 0750 K16	16	.75	5.0	.75	S16	C16	A16S	K16	AE16	AI16
DER 1000 M16	16	1.00	6.0	1.00	S16	C16	A16S	K16	AE16	AI16
*DER 1000 M22	22	1.00	6.0	1.00	S22	C22	A22	K22	AE22	AI22

For **LEFT HAND** toolholders specify **DEL** instead of **DER**

Toolholders are made with a **1.5° Helix Angle**. For other Helix Angles please consult helix angle chart in the technical section of this catalog.

Two clamping methods can be used: screw or top clamp.

*Use K21 torx key for C22 clamp

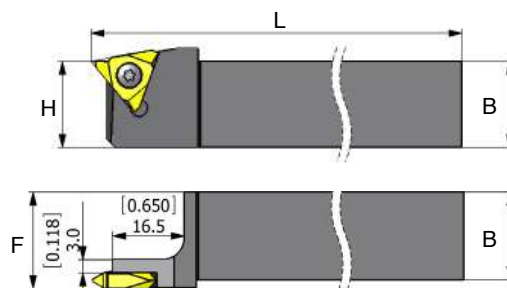


Vertical toolholders



Ordering Code Right Hand	 mm	B=H	L	F	Insert Screw	Torx Key
SER 0750 K16V	16	.75	5.0	.87	S16S	K16
SER 1000 M16V	16	1.00	6.0	1.06	S16S	K16
SER 1000 M22V	22	1.00	6.0	1.08	S22S	K22
SER 1000 M27V-T10	27	1.00	6.0	1.42	S27	K27
SER 1000 M27V-ABUT 4/3-T10	27	1.00	6.0	1.42	S27	K27
SER 1250 P27V-T10	27	1.25	7.0	1.42	S27	K27
SER 1250 P27V-ABUT 4/3-T10	27	1.25	7.0	1.42	S27	K27

Slim Throat toolholders



Ordering Code Right Hand	 mm	B=H	L	F	Insert Screw	Torx Key
SER 0625 H16VS	16	0.63	4.0	0.71	S16S	K16
SER 0750 K16VS	16	0.75	5.0	0.87	S16S	K16
SER 1000 M16VS	16	1.00	6.0	1.06	S16S	K16

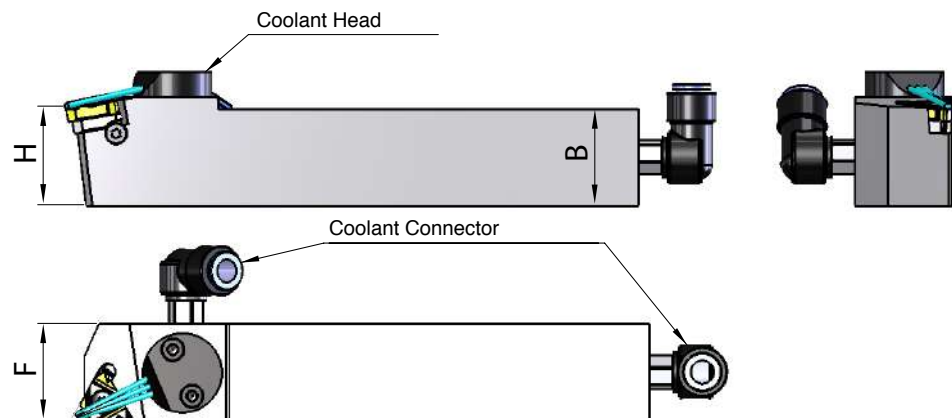
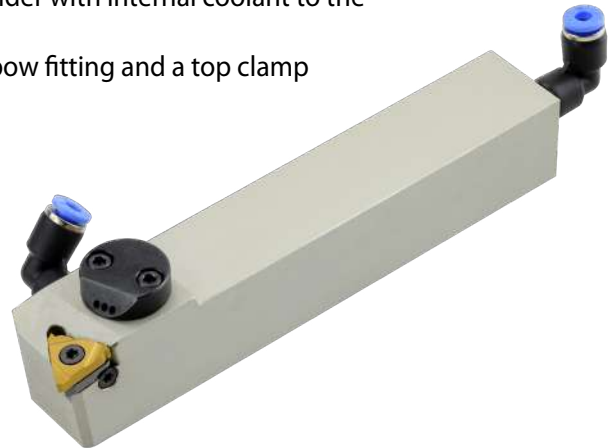
External Thread Turning Toolholder with Internal Coolant

Carmex has developed a unique external thread turning holder with internal coolant to the cutting edge.

The holder includes two connecting options through an elbow fitting and a top clamp directing the coolant flow to the cutting edge.

The coolant flow provides:

- Better chip control, and chip flow
- Longer tool life and high performance
- Reduces the cutting edge temperature
- Available RH and LH tool holders
- Coated holders provide abrasive resistance



Ordering Code	 L mm	B=H	L	F	Torx + Insert Screw	Torx + Anvil Screw	Torx + Key	RH Anvil	LH Anvil	Coolant* Connector mm
SER 0750 K16B	16	.75	5.00	.75	S16P	A16P	K16P	AE16	AI16	Ø4 / Ø6
SER 1000 M16B	16	1.00	6.00	1.00	S16P	A16P	K16P	AE16	AI16	Ø4 / Ø6
SER 1000 M22B	22	1.00	6.00	1.00	S22P	A22P	K22P	AE22	AI16	Ø4 / Ø6
SER 1000 M27B	27	1.00	6.00	1.25	S27P	A27P	K27P	AE27	AI27	Ø4 / Ø6
SER 1250 P16B	16	1.25	7.00	1.25	S16P	A16P	K16P	AE16	AI16	Ø4 / Ø6
SER 1250 P22B	22	1.25	7.00	1.25	S22P	A22P	K22P	AE22	AI22	Ø4 / Ø6
SER 1250 P27B	27	1.25	7.00	1.25	S27P	A27P	K27P	AE27	AI27	Ø4 / Ø6

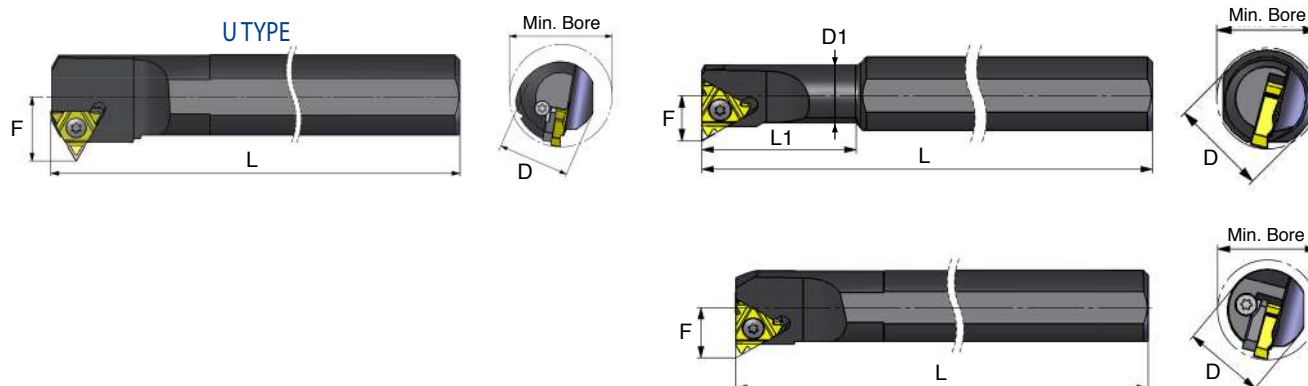
For **LEFT HAND** toolholders specify **SEL** instead of **SER**

Toolholders made with 1.5° helix angle

Please consult the helix angle chart page 71 in the technical section of this catalog

* Standard packing with Ø6 mm

Internal Toolholders



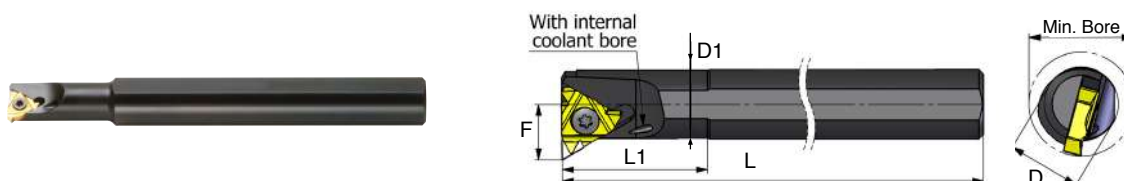
Ordering Code Right Hand	 L mm	D	D1	Min Bore Diam.	L	L1	F	Insert Screw	Anvil Screw	Torx Key	RH Anvil	LH Anvil
*SIR 0205 H06	6	.50	.20	.24	4.0	.47	.17	S06	-	K06	-	-
*SIR 0265 K08	8	.62	.26	.31	5.0	.70	.21	S08	-	K08	-	-
*SIR 0310 K08U	8U	.62	.29	.35	5.0	.83	.26	S08	-	K08	-	-
*SIR 0375 H11	11	.38	.38	.47	4.0	-	.28	S11	-	K11	-	-
*SIR 0375 K11	11	.62	.38	.47	5.0	1.00	.28	S11	-	K11	-	-
*SIR 0500 L11	11	.62	.50	.58	5.5	1.25	.34	S11	-	K11	-	-
*SIR 0500 M16	16	.62	.50	.64	6.0	1.25	.39	S16S	-	K16	-	-
*SIR 0625 P16	16	.75	.62	.75	7.0	1.57	.45	S16S	-	K16	-	-
SIR 0750 P16	16	.75	.75	.90	7.0	-	.51	S16	A16	K16	AI16	AE16
SIR 1000 R16	16	1.00	1.00	1.16	8.0	-	.65	S16	A16	K16	AI16	AE16
SIR 1250 S16	16	1.25	1.25	1.40	10.0	-	.77	S16	A16	K16	AI16	AE16
SIR 1500 T16	16	1.50	1.50	1.65	12.0	-	.90	S16	A16	K16	AI16	AE16
*SIR 0750 P22	22	.75	.75	.90	7.0	-	.59	S22S	-	K22	-	-
SIR 1000 R22	22	1.00	1.00	1.16	8.0	-	.71	S22	A22	K22	AI22	AE22
SIR 1250 S22	22	1.25	1.25	1.50	10.0	-	.85	S22	A22	K22	AI22	AE22
SIR 1500 T22	22	1.50	1.50	1.75	12.0	-	.98	S22	A22	K22	AI22	AE22
SIR 1250 S22U	22U	1.25	1.25	1.50	10.0	-	.95	S22	A22	K22	AI22U	AE22U
SIR 1500 T22U	22U	1.50	1.50	1.75	12.0	-	1.08	S22	A22	K22	AI22U	AE22U
SIR 1250 S27	27	1.25	1.25	1.56	10.0	-	.88	S27	A27	K27	AI27	AE27
SIR 1500 T27	27	1.50	1.50	1.80	12.0	-	1.00	S27	A27	K27	AI27	AE27
SIR 2000 U27	27	2.00	2.00	2.30	14.0	-	1.25	S27	A27	K27	AI27	AE27
SIR 2500 V27	27	2.50	2.50	2.80	16.0	-	1.50	S27	A27	K27	AI27	AE27
SIR 1250 S27U	27U	1.25	1.25	1.56	10.0	-	1.00	S27	A27	K27	AI27U	AE27U
SIR 1500 T27U	27U	1.50	1.50	1.80	12.0	-	1.13	S27	A27	K27	AI27U	AE27U
SIR 2000 U27U	27U	2.00	2.00	2.30	14.0	-	1.37	S27	A27	K27	AI27U	AE27U
SIR 2500 V27U	27U	2.50	2.50	2.80	16.0	-	1.61	S27	A27	K27	AI27U	AE27U
*SIR 2000 U33U	33U	2.00	2.00	2.50	14.0	-	1.50	S33	-	K33	-	-

*Toolholders with no anvil

For **LEFT HAND** toolholders specify **SIL** instead of **SIR**

Toolholders are made with a **1.5° Helix Angle**. For other Helix Angles please consult helix angle chart (page 71) in the technical section of this catalog.

Internal toolholders with coolant bore



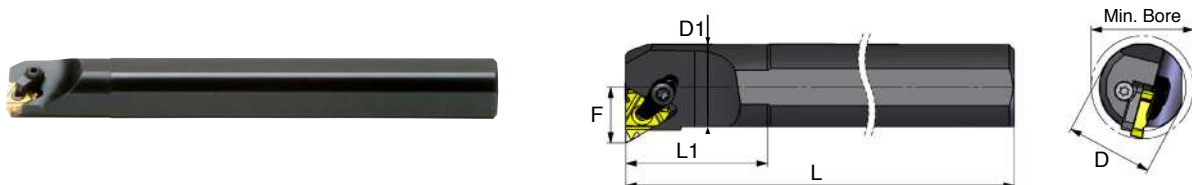
Ordering Code Right Hand	 L mm	D	D1	Min Bore Diam.	L	L1	F	Insert Screw	Anvil Screw	Torx Key	RH Anvil	LH Anvil
*SIR 0375 K11B	11	.62	.38	.47	5.0	.98	.28	S11	-	K11	-	-
*SIR 0500 M16B	16	.62	.50	.64	6.0	1.26	.39	S16S	-	K16	-	-
*SIR 0625 P16B	16	.75	.63	.75	7.0	1.57	.45	S16S	-	K16	-	-
SIR 0750 P16B	16	.75	.75	.90	7.0	-	.90	S16	A16	K16	AI16	AE16
SIR 1000 R16B	16	1.00	1.00	1.16	8.0	-	.65	S16	A16	K16	AI16	AE16
SIR 1000 R22B	22	1.00	1.00	1.16	8.0	-	.71	S22	A22	K22	AI22	AE22

*Toolholders with no anvil

For **LEFT HAND** toolholders specify **SIL** instead of **SIR**

Toolholders are made with a **1.5° Helix Angle**. For other Helix Angles please consult helix angle chart (page 71) in the technical section of this catalog.

Internal toolholders with top clamp



Ordering Code Right Hand	 L mm	D	D1	Min Bore Diam.	L	L1	F	Insert Screw	Clamp	Anvil Screw	Torx Key	RH Anvil	LH Anvil
DIR 0750 P16	16	.75	.75	.90	7.0	-	.51	S16	C16	A16S	K16	AI16	AE16
DIR 1000 R16	16	1.00	1.00	1.16	8.0	-	.65	S16	C16	A16S	K16	AI16	AE16
DIR 1250 S16	16	1.25	1.25	1.40	10.0	-	.77	S16	C16	A16S	K16	AI16	AE16
* DIR 1000 R22	22	1.00	1.00	1.16	8.0	-	.71	S22	C22	A22	K22	AI22	AE22

For **LEFT HAND** toolholders specify **DIL** instead of **DIR**

Two clamping methods can be used: screw or top clamp.

*Use K21 torx key for C22 clamp

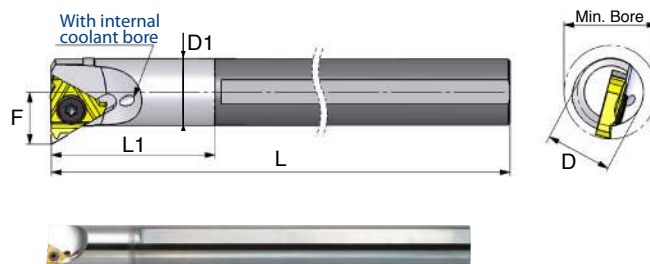
Toolholders with 3.5° Helix Angle

Ordering Code Right Hand	 L mm	D mm	D1 mm	Min Bore Diam. mm	L mm	L1 mm	F mm	Insert Screw	Torx Key
SIR 0016 P16B-3.5	16	0.787	0.630	0.748	0.149	0.635	0.540	S16S	K16
SIR 0020 P22B-3.5	22	0.787	0.787	0.945	0.149	-	0.614	S22S	K22

For **LEFT HAND** toolholders specify **SIL** instead of **SIR**

Carbide Shank Threading Bars With coolant bore

Carbide Shank Threading Bars are used when Chatter and deflection are expected due to long overhang in deep small bores.

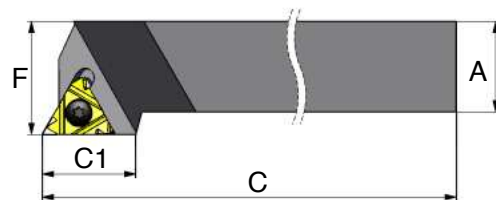
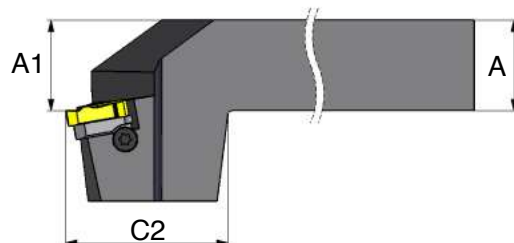


Ordering Code Right Hand	 L mm	D	D1	Min Bore Diam.	L	L1	F	Insert Screw	Anvil Screw	Torx Key	RH Anvil	LH Anvil
SIR 0205 H06CB	6	.25	.20	.24	4.0	1.02	.17	S06	-	K06	-	-
SIR 0265 K08CB	8	.31	.26	.31	5.0	1.22	.21	S08	-	K08	-	-
SIR 0310K08UCB	8U	.31	.29	.35	5.0	1.38	.26	S08	-	K08	-	-
SIR 0375 M11CB	11	.38	.38	.47	6.0	-	.28	S11	-	K11	-	-
SIR 0500 P11CB	11	.50	.50	.58	7.0	-	.34	S11	-	K11	-	-
SIR 0500 P16CB	16	.50	.50	.64	7.0	-	.40	S16S	-	K16	-	-
SIR 0625 R16CB	16	.62	.62	.75	8.0	-	.46	S16S	-	K16	-	-
*SIR 0750 S16CB	16	.75	.75	.90	10.0	-	.54	S16	A16	K16	AI16	AE16
*SIR 1000 S16CB	16	1.00	1.00	1.10	10.0	-	.64	S16	A16	K16	AI16	AE16

*Carbide shank Threading bars with anvil

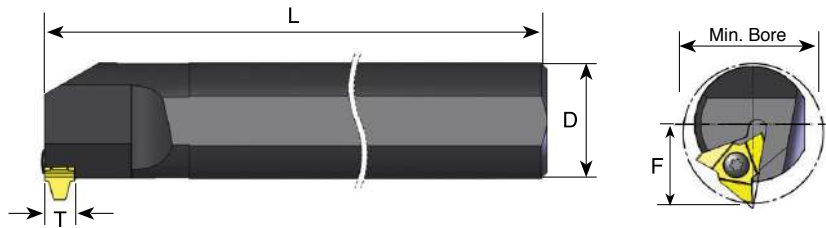
For **LEFT HAND** toolholders specify **SIL** instead of **SIR**

Drophead Toolholders



Ordering Code Right Hand	 L mm	A	A1	C	C1	F	C2	Insert Screw	Anvil Screw	Torx Key	RH Anvil	LH Anvil
SER 0750 K16D	16	.75	.75	5.0	.84	1.00	1.5	S16	A16	K16	AE16	AI16
SER 1000 M16D	16	1.00	1.00	6.0	.84	1.25	1.5	S16	A16	K16	AE16	AI16
SER 1000 M22D	22	1.00	1.00	6.0	1.00	1.25	1.5	S22	A22	K22	AE22	AI22

Vertical Toolholders



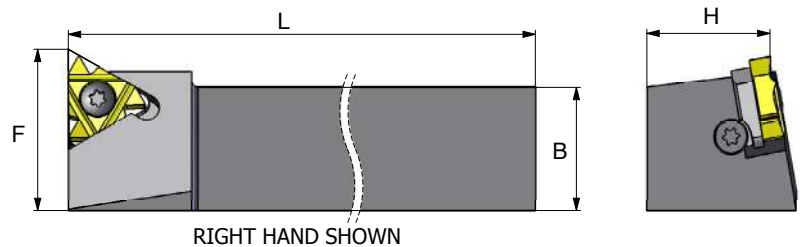
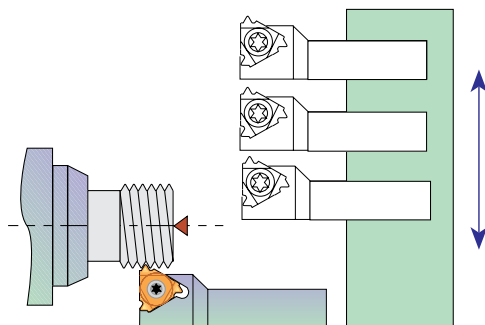
Ordering Code Right Hand	 L	D	* Min Bore Diam.	L	F	T	Insert Screw	Torx Key
SIR 1250 S27V-T10	27	1.25	1.65	10	0.94	0.41	S27	K27
SIR 1500 T27V-T10	27	1.5	1.80	12	1.05	0.41	S27	K27
SIR 2000 U27V-T10	27	2.0	2.32	14	1.31	0.41	S27	K27
SIR 2500 V27V-T10	27	2.5	2.85	16	1.51	0.41	S27	K27

For **LEFT HAND** toolholders specify **SIL** instead of **SIR**

* To be compared with given minimum bore profile.

Gang Toolholders

Gang Toolholders are External Holders, used in small automatic machines with a gangtool post.



Ordering Code Right Hand	 L mm	B=H mm	L mm	F mm	Insert Screw	Anvil Screw	Torx Key	RH Anvil	LH Anvil
*SER 8 8 H11G	11	0.315	12.5	0.472	S11	-	K11	-	-
*SER 10 10 H11G	11	0.394	12.5	0.551	S11	-	K11	-	-
SER 16 16 K16G	16	0.630	4.92	0.854	S16	A16	K16	AE16	AI16
SER 20 20 K16G	16	0.787	4.92	1.031	S16	A16	K16	AE16	AI16

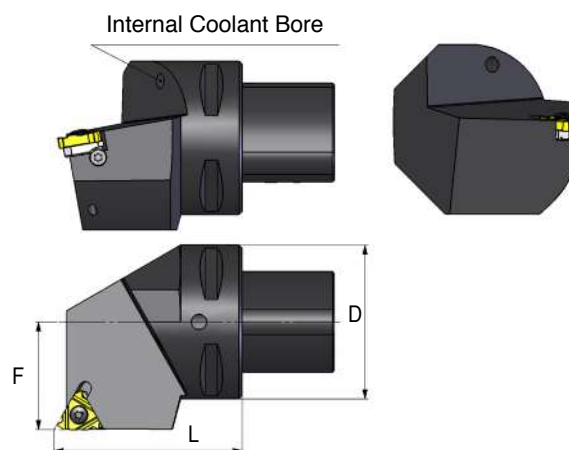
*Toolholders with no anvil

For **LEFT HAND** toolholders specify **SEL** instead of **SER**

Quick Change Polygon Threading Toolholders

- Polygon shank
- ISO standard (26623) compliant for toolholding systems
- Polygon taper ensures automatic radial centering and even pressure around the coupling
- ISO standard coupling system with a 1.4 degree tapered polygon shank design enables quick tool changes
- Interchangeable with leading manufacturers

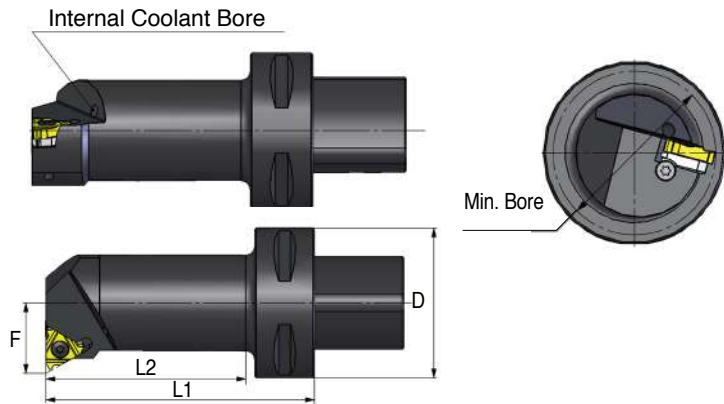
External Toolholders

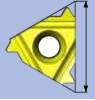


Equivalent to...	Ordering Code		D	F	L	Insert Screw	Anvil Screw	Torx key	RH Anvil	LH Anvil
C4	P40-SER 27050-16	16	1.575	1.063	1.969	S16	A16	K16	AE16	AI16
C5	P50-SER 35060-16	16	1.969	1.378	2.362	S16	A16	K16	AE16	AI16
C6	P63-SER 45065-16	16	2.480	1.772	2.559	S16	A16	K16	AE16	AI16
C4	P40-SER 27050-22	22	1.575	1.063	1.969	S22	A22	K22	AE22	AI22
C5	P50-SER 35060-22	22	1.969	1.378	2.362	S22	A22	K22	AE22	AI22
C6	P63-SER 45065-22	22	2.480	1.772	2.559	S22	A22	K22	AE22	AI22
C8	P80-SER 55080-22	22	3.150	2.165	3.150	S22	A22	K22	AE22	AI22

For **LEFT HAND** toolholders specify **SEL** instead of **SER**

Internal Toolholders

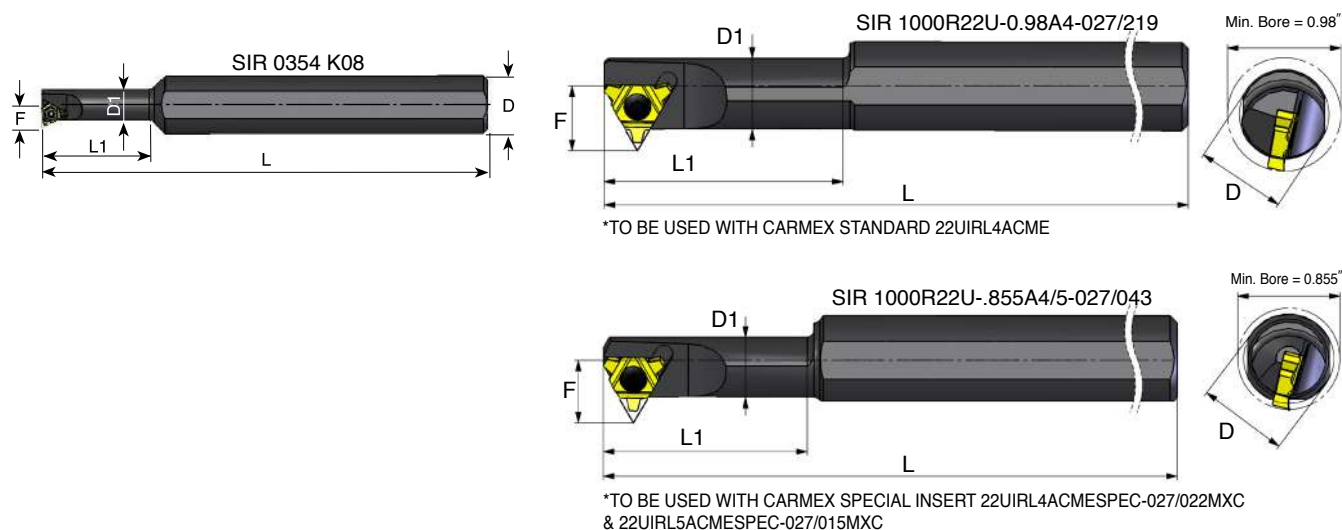


Equivalent to...	Ordering Code		D	F	Min. Bore Dia.	L1	L2	Insert Screw	Anvil Screw	Torx key	RH Anvil	LH Anvil
C4	* P40-SIR 12060-16	16	1.575	0.461	0.787	2.362	1.457	S16	-	K16	-	-
	P40-SIR 14060-16	16	1.575	0.531	0.984	2.362	1.496	S16	A16	K16	AI16	AE16
	P40-SIR 17070-16	16	1.575	0.630	1.142	2.756	1.890	S16	A16	K16	AI16	AE16
	P40-SIR 22090-16	16	1.575	0.768	1.417	3.543	2.717	S16	A16	K16	AI16	AE16
	P40-SIR 27080-16	16	1.575	0.925	1.732	3.150	2.362	S16	A16	K16	AI16	AE16
C5	* P50-SIR 12060-16	16	1.969	0.461	0.787	2.362	1.378	S16	-	K16	-	-
	P50-SIR 14060-16	16	1.969	0.531	0.984	2.362	1.417	S16	A16	K16	AI16	AE16
	P50-SIR 17070-16	16	1.969	0.630	1.142	2.756	1.850	S16	A16	K16	AI16	AE16
	P50-SIR 22090-16	16	1.969	0.768	1.417	3.543	2.677	S16	A16	K16	AI16	AE16
	P50-SIR 27105-16	16	1.969	0.925	1.732	4.134	3.307	S16	A16	K16	AI16	AE16
C6	P63-SIR 14070-16	16	2.480	0.531	0.984	2.756	1.654	S16	A16	K16	AI16	AE16
	P63-SIR 17075-16	16	2.480	0.630	1.142	2.953	1.890	S16	A16	K16	AI16	AE16
	P63-SIR 22090-16	16	2.480	0.768	1.417	3.543	2.520	S16	A16	K16	AI16	AE16
	P63-SIR 27105-16	16	2.480	0.925	1.732	4.134	3.150	S16	A16	K16	AI16	AE16
C4	* P40-SIR 15065-22	22	1.575	0.606	0.984	2.559	1.654	S22	-	K22	-	-
	P40-SIR 19070-22	22	1.575	0.705	1.142	2.756	1.890	S22	A22	K22	AI22	AE22
	P40-SIR 22090-22	22	1.575	0.843	1.496	3.543	2.717	S22	A22	K22	AI22	AE22
	P40-SIR 27080-22	22	1.575	1.000	1.811	3.150	2.362	S22	A22	K22	AI22	AE22
C5	* P50-SIR 15065-22	22	1.969	0.606	0.984	2.559	1.614	S22	-	K22	-	-
	P50-SIR 19070-22	22	1.969	0.705	1.142	2.756	1.850	S22	A22	K22	AI22	AE22
	P50-SIR 22090-22	22	1.969	0.843	1.496	3.543	2.677	S22	A22	K22	AI22	AE22
	P50-SIR 27105-22	22	1.969	1.000	1.811	4.134	3.307	S22	A22	K22	AI22	AE22
C6	P63-SIR 19075-22	22	2.480	0.705	1.142	2.953	1.890	S22	A22	K22	AI22	AE22
	P63-SIR 22090-22	22	2.480	0.843	1.496	3.543	2.520	S22	A22	K22	AI22	AE22
	P63-SIR 27105-22	22	2.480	1.000	1.811	4.134	3.150	S22	A22	K22	AI22	AE22

For **LEFT HAND** toolholders specify **SIL** instead of **SIR**

* Holders without anvil

Special Thread Turning Applications



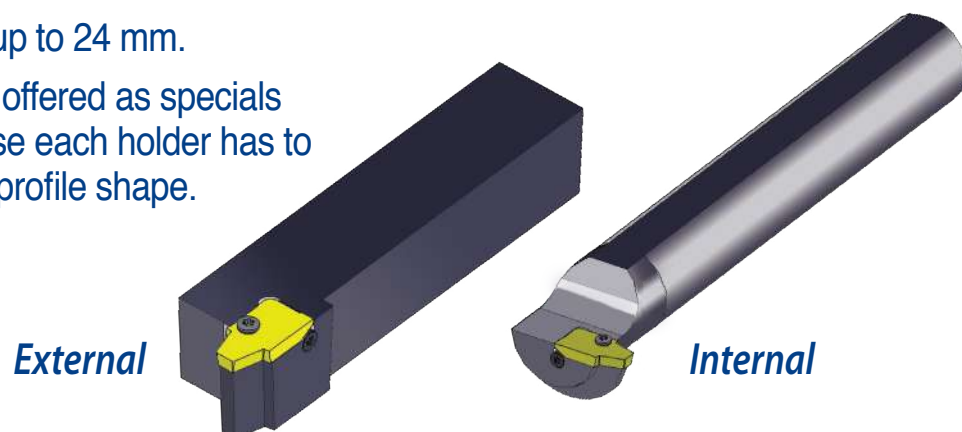
Ordering Code Right Hand		D	D1	L	L1	F	Thread	Insert Screw	Torx Key
*SIR 0354 K08	8	0.63	0.34	5	1.18	0.25	1/2 - 13UNC	S08	K08
SIR 1000 R22U-0.98A4-027/219	22U	1.00	0.79	8	2.75	0.72	—	S22	K22
SIR 1000 R22U-855A4/5-027/043	22U	1.00	0.67	8	2.00	0.70	—	S22	K22

For LH holders call Carmex

* Only right hand available

Large Profile Range

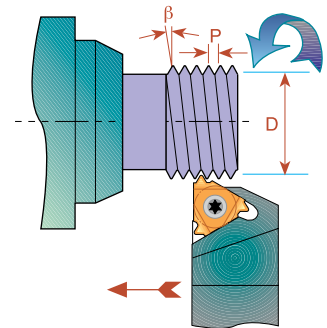
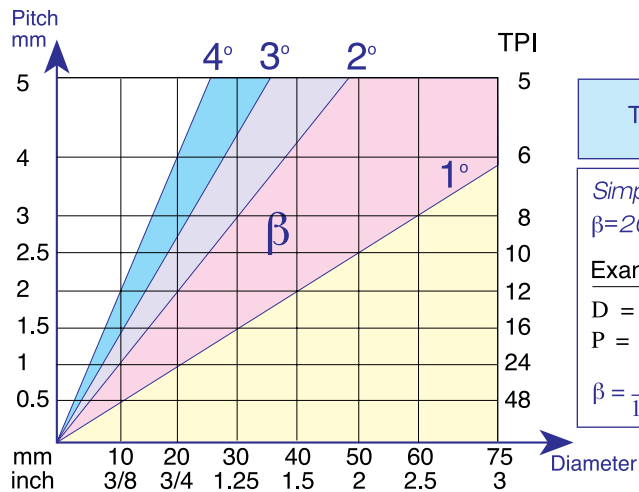
- Pitch Range: 14mm up to 24 mm.
- Tools and inserts are offered as specials (non catalog), because each holder has to be modified to fit the profile shape.
- Rigid Clamping.



- Tailor made profiles according to customer's request

Available Profile	Round (DIN 20400)	Trapez (DIN 103)	Acme, Stub Acme	American Buttress
Pitch	16 mm	14-24 mm	1.0 - 1.5 TPI	1.5 - 2.0 TPI

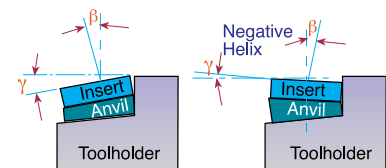
Thread Helix Angle



Standard and Slanted Anvils

CARMEX Toolholder Pockets have a built in 1.5° helix angle. This angle may be adjusted to better match the thread helix angle by simply changing the anvil.

Negative helix is usually used when threading RH thread with LH Holder or LH thread with RH Holder.



L mm	IC	Pocket Angle γ	4.5°	3.5°	2.5°	1.5° Standard	0.5°	-0.5°	-1.5°
16	3/8	EX-RH OR IN-LH	AE16+4.5	AE16+3.5	AE16+2.5	AE16	AE16+0.5	AE16-0.5	AE16-1.5
16	3/8	EX-LH OR IN-RH	AI 16+4.5	AI 16+3.5	AI 16+2.5	AI 16	AI 16+0.5	AI 16-0.5	AI 16-1.5
22	1/2	EX-RH OR IN-LH	AE22+4.5	AE22+3.5	AE22+2.5	AE22	AE22+0.5	AE22-0.5	AE22-1.5
22	1/2	EX-LH OR IN-RH	AI 22+4.5	AI 22+3.5	AI 22+2.5	AI 22	AI 22+0.5	AI 22-0.5	AI 22-1.5
22U	1/2U	EX-RH OR IN-LH	AE22U+4.5	AE22U+3.5	AE22U+2.5	AE22U	AE22U+0.5	AE22U-0.5	AE22U-1.5
22U	1/2U	EX-LH OR IN-RH	AI 22U+4.5	AI 22U+3.5	AI 22U+2.5	AI 22U	AI 22U+0.5	AI 22U-0.5	AI 22U-1.5
27	5/8	EX-RH OR IN-LH	AE27+4.5	AE27+3.5	AE27+2.5	AE27	AE27+0.5	AE27-0.5	AE27-1.5
27	5/8	EX-LH OR IN-RH	AI 27+4.5	AI 27+3.5	AI 27+2.5	AI 27	AI 27+0.5	AI 27-0.5	AI 27-1.5
27U	5/8U	EX-RH OR IN-LH	AE27U+4.5	AE27U+3.5	AE27U+2.5	AE27U	AE27U+0.5	AE27U-0.5	AE27U-1.5
27U	5/8U	EX-LH OR IN-RH	AI 27U+4.5	AI 27U+3.5	AI 27U+2.5	AI 27U	AI 27U+0.5	AI 27U-0.5	AI 27U-1.5

Anvil Kits

5 AE and 5 AI anvils with various helix angles



AE (FOR EX.RH. & IN.LH.)



AI (FOR IN.RH. & EX.LH.)



Ordering Code	Contents				
KA16	AE16+4.5	AE16+3.5	AE16+2.5	AE16+0.5	AE16-1.5
	AI 16+4.5	AI 16+3.5	AI 16+2.5	AI 16+0.5	AI 16-1.5
KA22	AE22+4.5	AE22+3.5	AE22+2.5	AE22+0.5	AE22-1.5
	AI 22+4.5	AI 22+3.5	AI 22+2.5	AI 22+0.5	AI 22-1.5
KA22U	AE22U+4.5	AE22U+3.5	AE22U+2.5	AE22U+0.5	AE22U-1.5
	AI 22U+4.5	AI 22U+3.5	AI 22U+2.5	AI 22U+0.5	AI 22U-1.5
KA27	AE27+4.5		AE27+2.5		AE27-1.5
	AI 27+4.5		AI 27+2.5		AI 27-1.5
KA27U	AE27U+4.5		AE27U+2.5		AE27U-1.5
	AI 27U+4.5		AI 27U+2.5		AI 27U-1.5

Standard Kits

Threading Kits are a versatile solution for users that cut a variety of thread types in limited quantity and do not want to sacrifice thread quality.

External UN Kit Ordering Code:KEU

INSERTS

16 ER A60 P25C
16 ER G60 P25C
16 ER AG60 P25C
16 ER 8 UN P25C
16 ER 12 UN P25C
16 ER 14 UN P25C
16 ER 16 UN P25C
16 ER 18 UN P25C
16 ER 20 UN P25C
16 ER 24 UN P25C

TOOLHOLDERS

SER 0750 K16
KEY
K16
SCREW
S16

Internal UN Kit Ordering Code:KIU

INSERTS

16 IR A60 P25C
16 IR G60 P25C
16 IR AG60 P25C
16 IR 8 UN P25C
16 IR 12 UN P25C
16 IR 14 UN P25C
16 IR 16 UN P25C
16 IR 18 UN P25C
16 IR 20 UN P25C
16 IR 24 UN P25C

TOOLHOLDERS

SIR 0750 P16
KEY
K16
SCREW
S16



If a larger toolholders with a 1.0 inch shank is required, add to the kit 1.0. For example: KIU - 1.0

Miniature & Ultra-miniature Kits



Ordering Code	Type	No. of Inserts	Inserts	Contents Boring Bar	Key
KU60I - BXC	ULTRA	10	06 IR A60 BXC	SIR 0205 H06	K6
KM60I - BXC	MINI	10	08 IR A60 BXC	SIR 0265 K08	K8

Inserts Kits

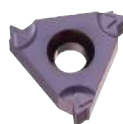
Type B Kits

Type B threading inserts.
A combination of ground profile and sintered chip-breaker threading inserts.
BMA Grade: Sub-Micron carbide grade with TiAlN multi-Layer Coating.



EXTERNAL UN KIT KEUB - BMA

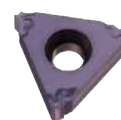
16 ER B A60 BMA-2 Pcs
16 ER B G60 BMA-1 Pcs
16 ER B AG60 BMA-2 Pcs
16 ER B 12 UN BMA-1 Pcs
16 ER B 16 UN BMA-1 Pcs
16 ER B 18 UN BMA-1 Pcs
16 ER B 20 UN BMA-1 Pcs
16 ER B 24 UN BMA-1 Pcs



EX-RH

INTERNAL UN KIT KIUB - BMA

16 IR B A60 BMA-2 Pcs
16 IR B G60 BMA-1 Pcs
16 IR B AG60 BMA-2 Pcs
16 IR B 12 UN BMA-1 Pcs
16 IR B 16 UN BMA-1 Pcs
16 IR B 18 UN BMA-1 Pcs
16 IR B 20 UN BMA-1 Pcs
16 IR B 24 UN BMA-1 Pcs



IN-RH

Standard Inserts Kits

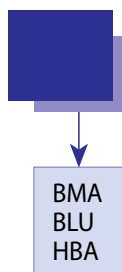
EXTERNAL ISO KIT

16 ER 1.0 ISO-2 Pcs
16 ER 1.25 ISO-2 Pcs
16 ER 1.5 ISO-2 Pcs
16 ER 1.75 ISO-2 Pcs
16 ER 2.0 ISO-2 Pcs

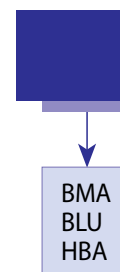
INTERNAL ISO KIT

16 IR 1.0 ISO-2 Pcs
16 IR 1.25 ISO-2 Pcs
16 IR 1.5 ISO-2 Pcs
16 IR 1.75 ISO-2 Pcs
16 IR 2.0 ISO-2 Pcs

Ordering Code: KEM



Ordering Code: KIM



Threading & Boring Combination Kit

A practical and convenient combination kit for **Ultra Miniature** Threading and Boring. It enables Boring and Threading of mini bores as small as **1/4" diameter** with just one deep reaching CARBIDE shank ultra mini Boring Bar.



Ordering Code	Contents			
	Threading Insert	Turning Inserts	Boring Bar	Key
KC6TI	06 IR A60 BXC 10Pcs	06 IR TURN BMA 10Pcs	SIR 0205 H06CB	K6

- BMA** - Coated carbide grade for medium to high cutting speeds
BXC - Coated carbide grade for low cutting speed - 130 to 300 ft/min
CB - Carbide shank boring bar with coolant bore