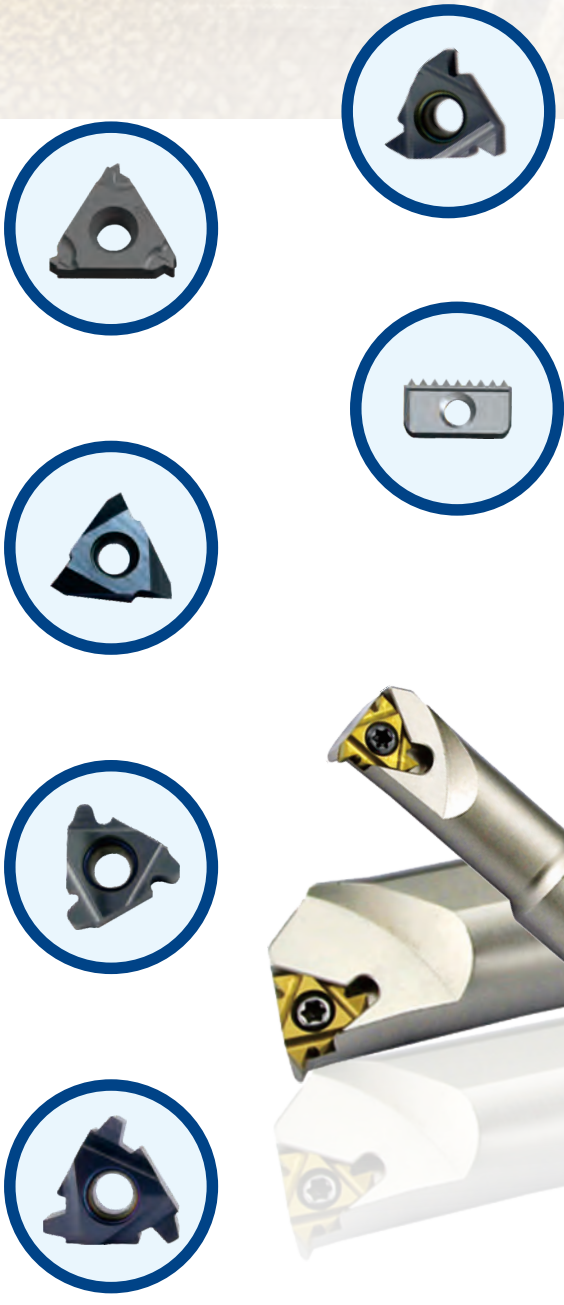
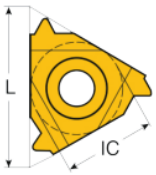
Thread Cutters



Index Table-

Insert Size

L (mm)	IC
06	3.968mm=5/32″
08	4.762mm=3/16″
11	6.350mm=1/4″
16	9.525mm=3/8″
22	12.700mm=1/2″
27	15.875mm=5/8″



Application

E – External
I – Internal
UE – U–Type, External
UI – U–Type, Internal
UEI – U–Type, External and Internal

U–Type

Regular Type

Hand of Tool

R – Right–hand
L – Left–hand
RL – Right–hand Left–hand

16 E R 1.50 ISO B NS4125

Pitch

Full Profile
(Value by number)
0.35 – 9.0 mm
72 – 2 TPI

Partial Profile
(Range by letter)

	mm	TPI
A	0.5 – 1.5	48 – 16
AG	0.5 – 3.0	48 – 8
G	1.75 – 3.0	14 – 8
N	3.5 – 5.0	7 – 5
U	5.5 – 9.0	4.5 – 2.75
Q	5.5 – 6.0	4.5 – 4

Thread Standard

60 – Partial Profile 60°
55 – Partial Profile 55°
ISO – ISO Metric
UN – American UN
W – Whitworth
BSPT – British BSPT
RND – Round DIN 405
TR – Trapeze DIN 103
ACME – ACME
STACME – Stub ACME
ABUT – American Buttress
UNJ – UNJ
NPT – NPT
API RD – API Round
BUT – API Buttress Casing
API – API

Type

B – Pressed chipbreaker
☐ – No indication regular type

Grade

Coated
TT7010
TT8010
TT9030

Uncoated
P30

Index Table-

Clamping System

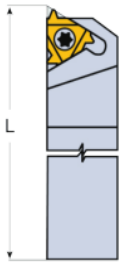
S – Screw Clamping

Application

E – External
I – Internal

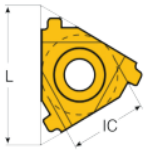
Tool Length

mm
D – 60
F – 80
H – 100
K – 125
L – 140
M – 150
P – 170
R – 200
S – 250
T – 300
U – 350
V – 400



Insert Size

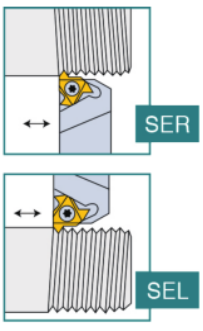
L (mm)	IC
06	3.968mm = 5/32″
08	4.762mm = 3/16″
08U	4.762mm = 3/16″
11	6.350mm = 1/4″
16	9.525mm = 3/8″
22	12.700mm = 1/2″
22U	12.700mm = 1/2″
27	15.875mm = 5/8″
27U	15.875mm = 5/8″



S **E** **R** **2020** **K** **16** **□**

Hand of Tool

R – Right–hand
L – Left–hand



Shank Size

External Toolholders
Shank: h × b

2020: 20 × 20mm

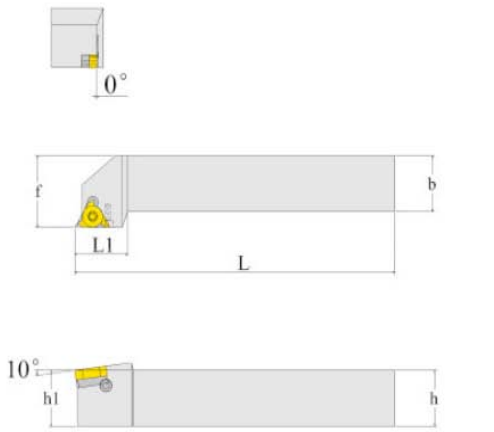
Internal Toolholders
Shank: Diameter d

0025: Diameter 25mm

Optional Specifications

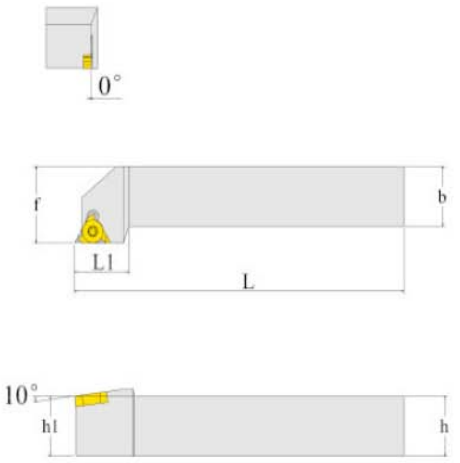
U – For U–type inserts
B – Bore for coolant
C – Carbide shank
SP – Special

SER/L



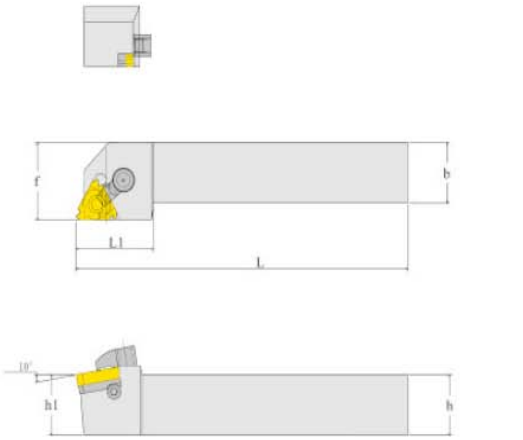
Model		Dimension							Screw	Wrench	L-shim	R-shim	Side Screw
		h	d	L	f	h1	L1						
SER/L	1012 H16	10	12	100	16	10	20	ER/L16	M3.5*12	T15	WLW16	NLW16	NLJ0308
	1212 H16	12	12	100	16	12	20						
	1616 H16	16	16	100	20	16	22						
	2020 K16	20	20	125	25	20	25						
	2525 M16	25	25	150	32	25	30						
	3232 P16	32	32	170	40	32	35						

SER/L-W



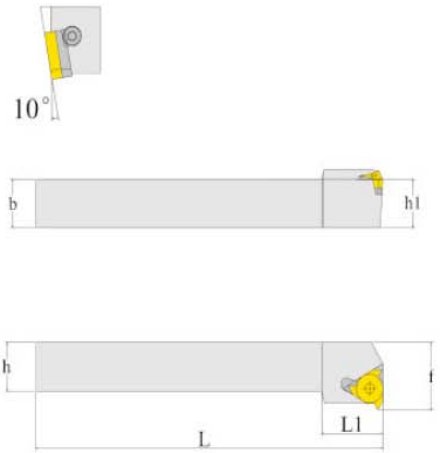
Model		Dimension							Screw	Wrench
		h	d	L	f	h1	L1			
型 号 Model		h	d	L	f	h1	L1		螺 丝 Screw	扳 手 Wrench
SER/L	1616 H16-W	16	16	100	20	16	22	ER/L16	M3.5*8	T15
	2020 K16-W	20	20	125	25	20	25			
	2525 M16-W	25	25	150	32	25	30			

MER/L



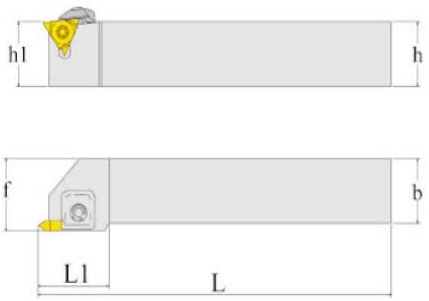
Model		Dimension							Screw	Wrench	L-shim	R-shim	Side Screw	Press Plate	Screw
		h	d	L	f	h1	L1								
MER/L	2525M22	25	25	150	32	25	35	22ER/L	M4*12	T15	WLW022	NLW022	NLJ0412	MYB1814	ST0625
	3232P22	32	32	170	40	32	35								

B-SER/L



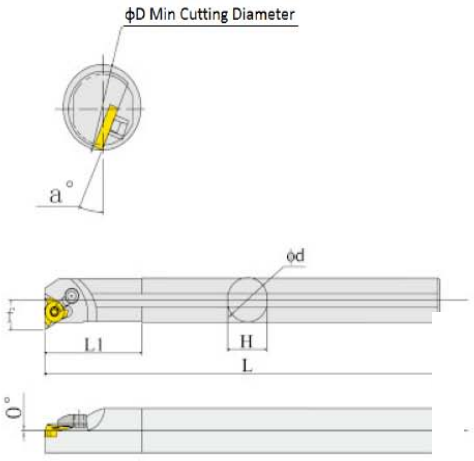
Model		Dimension							Screw	Wrench	L-shim	R-shim	Side Screw
		h	d	L	f	h1	L1						
B-SER/L	1010 H16	10	12	100	16	10	20	ER/L16	M3.5*12	T15	WLW016	NLW016	NLJ0308
	1212 K16	12	12	100	16	12	20						
	1616 K16	16	16	125	20	16	22						
	2020 K16	20	20	125	25	20	25						
	2525 M16	25	25	150	32	25	30						

MTWHR/L



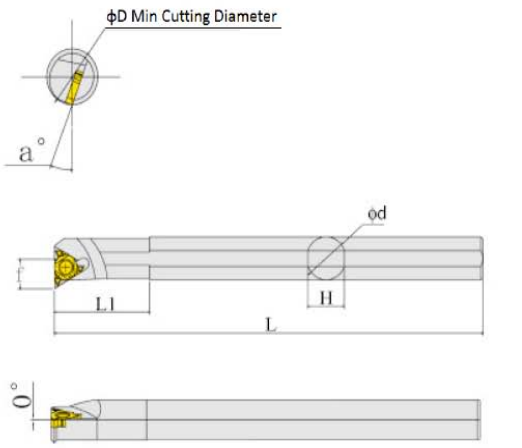
Model		Dimension							Side Screw	Wrench	Screw	Press Plate	Spring
		h	d	L	f	h1	L1						
MTWHR/L	1616 H-4	16	16	100	22	16	20	TT43	NLJ0620-P	L4.0	M3.5*12	MYB1318	TH0814
	2020 K-4	20	20	125	28	20	25						
	2525 M-4	25	25	150	35	25	32						
	3232 P-4	32	32	170	35	32	40						

MNR/L



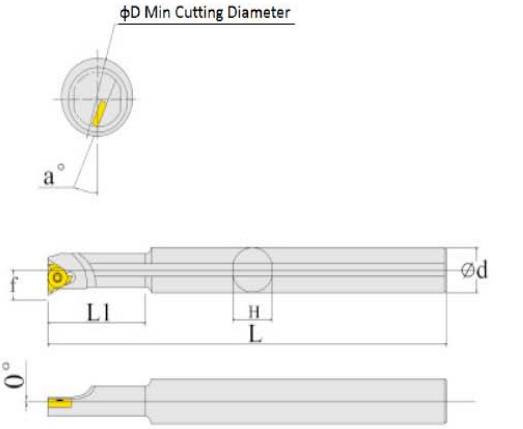
Model		Dimension							R-shim	L-shim	Side Screw	Press Plate	Screw	Screw	Wrench
		øD	ød	H	L	L1	f	a°							
MNR/L	0025 R22	29	25	23	200	45	16.2	21	22NR/L	WLW022	NLW022	NLJ0410	MYB1814	ST0625	M4*12	T15
	0032 S22	36	32	29	250	50	19.7	15								

SNR/L



Model		Dimension								Screw	Wrench
		øD	ød	H	L	L1	f	a°			
SNR/L	0010 K11	13	10	9	125	22	7.2	15	NR/L11	M2.5*6	T-8
	0012 M11	15	12	11	150	22	8.5	15			
	0013 M11	16	13	12	150	32	8.5	17			
	0013 M16	16	13	12	150	32	10.2	17	NR/L16	M3.5*8	T-15
	0016 M16	19	16	15	150	40	11.7	15			
	0016 Q16	19	16	15	180	40	11.7	15			
	0020 Q16	24	20	18	180	40	13.7	21			
	0025 R16	29	25	23	200	45	16.2	21			
	0032 S16	36	32	29	250	50	19.7	15			

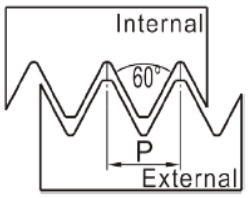
SNR/L - Reducing Diameter

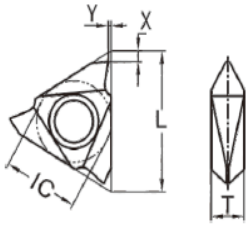


Model		Dimension								Screw	Wrench
		øD	ød	H	L	L1	f	a°			
SNR/L	0716M08	10	16	15	150	18	5.7	15	NR/L08	M2.2*6	T6
	0816M08	11	16	15	150	20	6.2	15			
	0916M08	12	16	15	150	23	6.7	15			
	1016M08	13	16	15	150	25	7.2	15			
	1016M11	13	16	15	150	22	7.7	15		M2.5*6	T8
	1316M11	16	16	15	150	32	8.7	15			
	1020M11	13	20	18	150	32	7.7	15			
	1316M16	16	16	15	150	32	8.7	15	NR/L16	M3.5*10	T15
	1620M16	20	20	18	150	40	11.7	15			

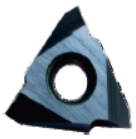
Partial Profile 60°

- for General Purpose



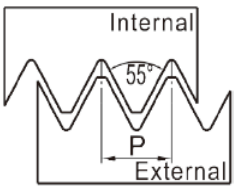


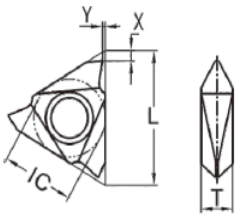
P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non-ferrous Metal			●
S	Heat-resistant Alloy		●	

Shape	Ordering Code	Pitch		Dimension						CVD	PVD	Uncoated
	ER	mm	TPI	D	S	L	X	Y	R	1115	4125	9115
	TT43R6001	1.0–1.75	24–14	1/2"	4.76	22	1.70	0.29	0.10	●	●	●
	TT43R6002	2.0–2.5	13–10						0.20	●	●	●
	TT43R6003	3.0–3.5	9–7						0.30	●	●	●
	TT43R6004	4.0–4.5	6–5						0.40	●	●	●

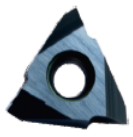
Partial Profile 55°

- for General Purpose



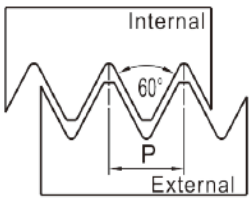


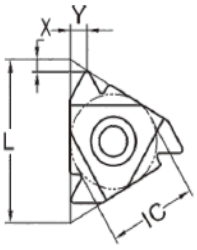
P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non-ferrous Metal			●
S	Heat-resistant Alloy		●	

Shape	Ordering Code	Pitch		Dimension						CVD	PVD	Uncoated
	ER	mm	TPI	D	S	L	X	Y	R	1115	4125	9115
	TT43R/L5501	1.0–1.75	24–14	1/2"	4.76	22	1.70	0.29	0.10	●	●	●
	TT43R/L5502	2.0–2.5	13–10						0.20	●	●	●
	TT43R/L5503	3.0–3.5	9–7						0.30	●	●	●
	TT43R/L5504	4.0–4.5	6–5						0.40	●	●	●

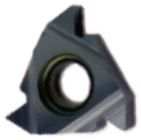
Partial Profile 60°

- for General Purpose



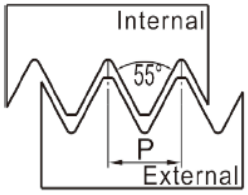


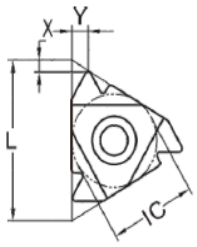
P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non–ferrous Metal			●
S	Heat–resistant Alloy		●	

Shape	Ordering Code		Pitch		Dimension						CVD	PVD	Uncoated
	ER	IR	mm	TPI	IC	S	L	X	Y	R	1115	4125	9115
		11IR/A60	0.5–1.5	48–16	6.35	3.18	11	0.80	0.90	0.08	●	●	●
	16ER A60	16IR A60	0.5–1.5	48–16	9.525	3.97	16	0.80	0.90	0.08	●	●	●
	16ER AG60	16IR AG60	0.5–3.0	48–8				1.20	1.70	0.08	●	●	●
	16ER G60	16IR G60	1.75–3.0	14–8				1.20	1.70	0.28	●	●	●
	22ER N60	22IR N60	3.5–5.0	7–5	12.7	5.56	22	1.70	2.50	0.53	●	●	●
	16ER A60–B	16IR A60–B	0.5–1.5	48–16	9.525	3.97	16	0.80	0.90	0.08		●	
	16ER AG60–B	16IR AG60–B	0.5–3.0	48–8				1.20	1.70	0.08		●	
	16ER G60–B	16IR G60–B	1.75–3.0	14–8				1.20	1.70	0.18		●	

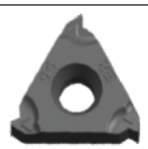
Partial Profile 55°

- for General Purpose

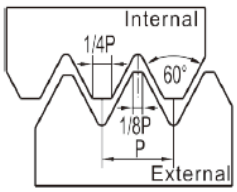


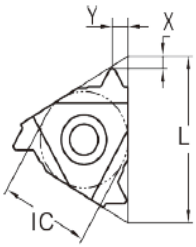


P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non–ferrous Metal			●
S	Heat–resistant Alloy		●	

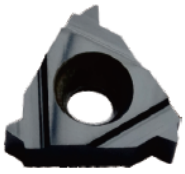
Shape	Ordering Code		Pitch		Dimension						CVD	PVD	Uncoated
	ER	IR	mm	TPI	D	S	L	X	Y	R	1115	4125	9115
		11IR/A55	0.5–1.5	48–16	6.35	3.18	11	0.80	0.90	0.08	●	●	●
	16ER A55	16IR A55	0.5–1.5	48–16	9.525	3.97	16	0.80	0.90	0.08	●	●	●
	16ER AG55	16IR AG55	0.5–3.0	48–8				1.20	1.70	0.08	●	●	●
	16ER G55	16IR G55	1.75–3.0	14–8				1.20	1.70	0.28	●	●	●
	22ER N55	22IR N55	3.5–5.0	7–5	12.7	5.56	22	1.70	2.50	0.53	●	●	●
	16ER A55–B	16IR A55–B	0.5–1.5	48–16	9.525	3.97	16	0.80	0.90	0.08		●	
	16ER AG55–B	16IR AG55–B	0.5–3.0	48–8				1.20	1.70	0.08		●	
	16ER G55–B	16IR G55–B	1.75–3.0	14–8				1.20	1.70	0.18		●	

ISO Metric

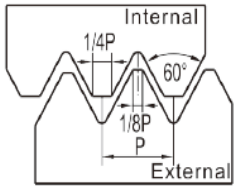


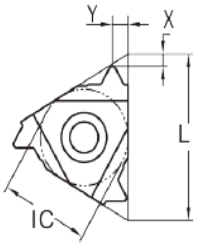


P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non–ferrous Metal			●
S	Heat–resistant Alloy		●	

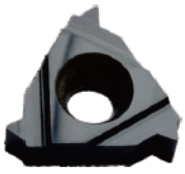
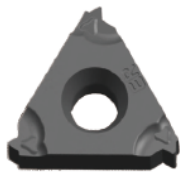
Shape	Ordering Code		Pitch		Dimension						CVD	PVD	Uncoated
	ER	IR	mm	TPI	IC	S	L	X	Y	R	1115	4125	9115
		11IR0.50 ISO	0.50		6.35	3.18	11	0.60	0.60	0.05	●	●	●
		11IR0.75 ISO	0.75					0.60	0.60	0.08	●	●	●
		11IR1.00 ISO	1.00					0.70	0.70	0.10	●	●	●
		11IR1.25 ISO	1.25					0.80	0.90	0.13	●	●	●
		11IR1.50 ISO	1.50					0.80	1.0	0.18	●	●	●
		11IR1.75 ISO	1.75					0.80	1.10	0.22	●	●	●
		11IR2.00 ISO	2.00					–	–	0.25	●	●	●
		11IR0.50 ISO–B	0.50		6.35	3.18	11	0.60	0.60	0.05		●	
		11IR0.75 ISO–B	0.75					0.60	0.60	0.08		●	
		11IR1.00 ISO–B	1.00					0.70	0.70	0.10		●	
		11IR1.25 ISO–B	1.25					0.80	0.90	0.13		●	
		11IR1.50 ISO–B	1.50					0.80	1.0	0.18		●	
		11IR1.75 ISO–B	1.75					0.80	1.10	0.22		●	
		11IR2.00 ISO–B	2.00					–	–	0.25		●	
	16ER0.50 ISO	16IR0.50 ISO	0.50		9.525	3.97	16	0.60	0.60	0.05	●	●	●
	16ER0.75 ISO	16IR0.75 ISO	0.75					0.60	0.60	0.08	●	●	●
	16ER1.00 ISO	16IR1.00 ISO	1.00					0.70	0.70	0.10	●	●	●
	16ER1.25 ISO	16IR1.25 ISO	1.25					0.80	0.90	0.13	●	●	●
	16ER1.50 ISO	16IR1.50 ISO	1.50					0.80	1.0	0.18	●	●	●
	16ER1.75 ISO	16IR1.75 ISO	1.75					0.90	1.20	0.22	●	●	●
	16ER2.00 ISO	16IR2.00 ISO	2.00					1.0	1.30	0.25	●	●	●
	16ER2.50 ISO	16IR2.50 ISO	2.50					1.10	1.50	0.30	●	●	●
	16ER3.00 ISO	16IR3.00 ISO	3.00					1.20	1.60	0.36	●	●	●
	22ER3.50 ISO	22IR/L3.50 ISO	3.50		12.7	5.56	22	1.60	2.30	0.38	●	●	●
	22ER4.00 ISO	22IR/L4.00 ISO	4.00					1.60	2.30	0.40	●	●	●
	22ER4.50 ISO	22IR/L4.50 ISO	4.50					1.70	2.40	0.40	●	●	●
	22ER5.00 ISO	22IR/L5.00 ISO	5.00					1.70	2.40	0.40	●	●	●
	16ER0.50 ISO–B	16IR0.50 ISO–B	0.50		9.525	3.97	16	0.60	0.60	0.05		○	
	16ER0.75 ISO–B	16IR0.75 ISO–B	0.75					0.60	0.60	0.08		○	
	16ER1.00 ISO–B	16IR1.00 ISO–B	1.00					0.70	0.70	0.10		●	
	16ER1.25 ISO–B	16IR1.25 ISO–B	1.25					0.80	0.90	0.13		●	
	16ER1.50 ISO–B	16IR1.50 ISO–B	1.50					0.80	1.0	0.18		●	
	16ER1.75 ISO–B	16IR1.75 ISO–B	1.75					0.90	1.20	0.22		●	
	16ER2.00 ISO–B	16IR2.00 ISO–B	2.00					1.0	1.30	0.25		●	
	16ER2.50 ISO–B	16IR2.50 ISO–B	2.50					1.10	1.50	0.30		●	
	16ER3.00 ISO–B	16IR3.00 ISO–B	3.00					1.20	1.60	0.36		●	

60° American UN



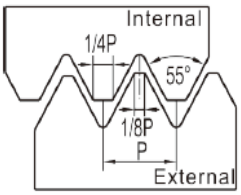


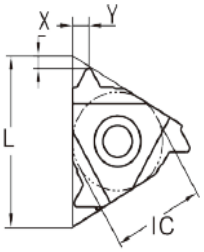
P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non–ferrous Metal			●
S	Heat–resistant Alloy		●	

Shape	Ordering Code		Pitch		Dimension						CVD	PVD	Uncoated
	ER	IR	mm	TPI	D	S	L	X	Y	R	1115	4125	9115
		11IR32 UN	32		6.36	3.18	11	0.60	0.60	0.10	●	●	●
		11IR28 UN	28					0.60	0.70	0.10	●	●	●
		11IR24 UN	24					0.70	0.80	0.13	●	●	●
		11IR20 UN	20					0.80	0.90	0.15	●	●	●
		11IR18 UN	18					0.80	1.0	0.18	●	●	●
		11IR16 UN	16					0.90	1.10	0.20	●	●	●
	16ER32 UN	16IR32 UN	32		9.525	3.97	16	0.60	0.60	0.08	●	●	●
	16ER28 UN	16IR28 UN	28					0.60	0.70	0.08	●	●	●
	16ER24 UN	16IR24 UN	24					0.70	0.80	0.10	●	●	●
	16ER20 UN	16IR20 UN	20					0.80	0.90	0.10	●	●	●
	16ER18 UN	16IR18 UN	18					0.80	1.0	0.13	●	●	●
	16ER16 UN	16IR16 UN	16					0.9	1.1	0.15	●	●	●
	16ER14 UN	16IR14 UN	14					1.0	1.2	0.18	●	●	●
	16ER13 UN	16IR13 UN	13					1.1	1.3	0.20	●	●	●
	16ER12 UN	16IR12 UN	12					1.1	1.4	0.23	●	●	●
	16ER11.5 UN	16IR11.5 UN	11.5					1.1	1.4	0.25	●	●	●
	16ER11 UN	16IR11 UN	11					1.1	1.5	0.28	●	●	●
	16ER10 UN	16IR10 UN	10					1.1	1.5	0.30	●	●	●
	16ER9 UN	16IR 9 UN	9					1.2	1.7	0.33	●	●	●
	16ER8 UN	16IR8 UN	8					1.2	2.0	0.36	●	●	●
	22ER7 UN	22IR7 UN	7		12.7	5.56	22	1.60	2.30	0.38	●	●	●
	22ER6 UN	22IR6 UN	6					1.60	2.30	0.41	●	●	●
	22ER5 UN	22IR5 UN	5					1.70	2.50	0.43	●	●	●
	16ER32 UN–B	16IR32 UN–B	32		9.525	3.97	16	0.60	0.60	0.08		○	
	16ER28 UN–B	16IR28 UN–B	28					0.60	0.70	0.08		○	
	16ER24 UN–B	16IR24 UN–B	24					0.70	0.80	0.10		○	
	16ER20 UN–B	16IR20 UN–B	20					0.80	0.90	0.10		○	
	16ER18 UN–B	16IR18 UN–B	18					0.80	1.0	0.13		○	
	16ER16 UN–B	16IR16 UN–B	16					0.9	1.1	0.15		○	
	16ER14 UN–B	16IR14 UN–B	14					1.0	1.2	0.18		○	
	16ER13 UN–B	16IR13 UN–B	13					1.1	1.3	0.20		○	
	16ER12 UN–B	16IR12 UN–B	12					1.1	1.4	0.23		○	
	16ER11.5 UN–B	16IR11.5 UN–B	11.5					1.1	1.4	0.25		○	
	16ER11 UN–B	16IR11 UN–B	11					1.1	1.5	0.28		○	
	16ER10 UN–B	16IR10 UN–B	10					1.1	1.5	0.30		○	
	16ER9 UN–B	16IR 9 UN–B	9					1.2	1.7	0.33		○	
	16ER8 UN–B	16IR8 UN–B	8					1.2	2.0	0.36		○	

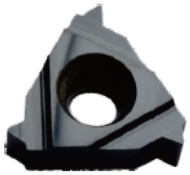
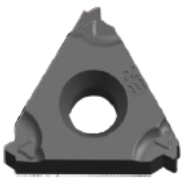
55° Whitworth Full Profile

-for BSP BSW

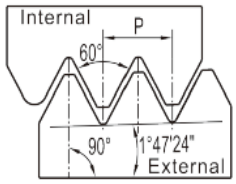


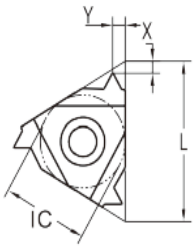


P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non–ferrous Metal			●
S	Heat–resistant Alloy		●	

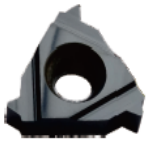
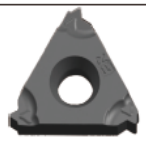
Shape	Ordering Code		Pitch		Dimension						CVD	PVD	Uncoated
	ER	IR	mm	TPI	D	S	L	X	Y	R	1115	4125	9115
		11IR28 W	28		6.35	3.18	11	0.60	0.70	0.08	●	●	●
		11IR26 W	26					0.70	0.80	0.08	●	●	●
		11IR24 W	24					0.70	0.80	0.08	●	●	●
		11IR20 W	20					0.80	0.90	0.10	●	●	●
		11IR19 W	19					0.80	1.00	0.15	●	●	●
		11IR18 W	18					0.90	1.00	0.20	●	●	●
		11IR16 W	16					0.90	1.10	0.23	●	●	●
		11IR14 W	14					1.00	1.20	0.25	●	●	●
	16ER28 W	16IR28 W	28					0.60	0.70	0.08	●	●	●
	16ER26 W	16IR26 W	26					0.70	0.80	0.08	●	●	●
	16ER24 W	16IR24 W	24		9.525	3.97	16	0.70	0.80	0.08			
	16ER20 W	16IR20 W	20					0.80	0.90	0.10	●	●	●
	16ER19 W	16IR19 W	19					0.80	1.00	0.15	●	●	●
	16ER18 W	16IR18 W	18					0.80	0.90	0.20	●	●	●
	16ER16 W	16IR16 W	16					0.90	1.10	0.23	●	●	●
	16ER14 W	16IR14 W	14					0.90	1.20	0.25	●	●	●
	16ER12 W	16IR12 W	12					1.10	1.40	0.28	●	●	●
	16ER11 W	16IR11 W	11					1.10	1.50	0.30	●	●	●
	16ER10 W	16IR10 W	10					1.10	1.50	0.33	●	●	●
	16ER9 W	16IR9 W	9					1.20	1.50	0.33	●	●	●
	16ER8 W	16IR8 W	8					1.20	1.70	0.36	●	●	●
	22ER7 W	22IR7 W	7		12.7	5.56	22	1.60	2.30	0.36	●	●	●
	22ER6 W	22IR6 W	6					1.60	2.30	0.38	●	●	●
	22ER5 W	22IR5 W	5					1.70	2.40	0.41	●	●	●
	16ER28 W–B	16IR28 W–B	28		9.525	3.97	16	0.60	0.70	0.08		○	
	16ER26 W–B	16IR26 W–B	26					0.70	0.80	0.08		○	
	16ER20 W–B	16IR20 W–B	20					0.80	0.90	0.10		○	
	16ER19 W–B	16IR19 W–B	19					0.80	1.00	0.15		●	
	16ER18 W–B	16IR18 W–B	18					0.80	0.90	0.20		○	
	16ER16 W–B	16IR16 W–B	16					0.90	1.10	0.23		○	
	16ER14 W–B	16IR14 W–B	14					0.90	1.20	0.25		●	
	16ER12 W–B	16IR12 W–B	12					1.10	1.40	0.28		○	
	16ER11 W–B	16IR11 W–B	11					1.10	1.50	0.30		●	
	16ER10 W–B	16IR10 W–B	10					1.10	1.50	0.33		○	
	16ER9 W–B	16IR9 W–B	9					1.20	1.50	0.33		○	
	16ER8 W–B	16IR8 W–B	8					1.20	1.70	0.36		○	

60° NPT



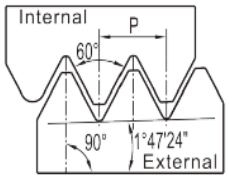


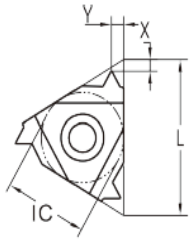
P	Steel	●	●										
M	Stainless Steel		●										
K	Cast Iron		●										
N	Non-ferrous Metal			●									
S	Heat-resistant Alloy		●										

Shape	Ordering Code		Pitch		Dimension						CVD	PVD	Uncoated
	ER	IR	mm	TPI	D	S	L	X	Y	R	1115	4125	9115
		11IR27 NPT	27		6.35	3.18	11	0.70	0.80	0.08	○	●	○
		11IR18 NPT	18					0.80	1.00	0.10	○	●	○
		11IR14 NPT	14					0.80	1.00	0.15	○	●	○
	16ER27 NPT	16IR27 NPT	27		9.525	3.97	16	0.70	0.80	0.08	○	●	○
	16ER18 NPT	16IR18 NPT	18					0.80	1.00	0.10	○	●	○
	16ER14 NPT	16IR14 NPT	14					0.90	1.20	0.15	○	●	○
	16ER11.5 NPT	16IR11.5 NPT	11.5					1.10	1.50	0.20	○	●	○
	16ER8 NPT	16IR8 NPT	8					1.20	1.80	2.54	○	●	○
	16ER27 NPT-B	16IR27 NPT-B	27		9.525	3.97	16	0.70	0.80	0.80		○	
	16ER18 NPT-B	16IR18 NPT-B	18					0.80	1.00	0.15		○	
	16ER14 NPT-B	16IR14 NPT-B	14					0.90	1.20	0.20		●	
	16ER11.5 NPT-B	16IR11.5 NPT-B	11.5					1.10	1.50	0.25		●	

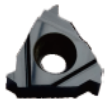
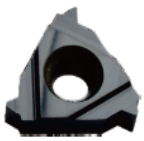
●Stock ○Availabie upon Order

60° NPTF

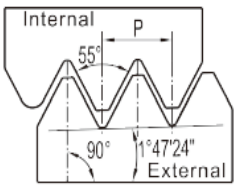


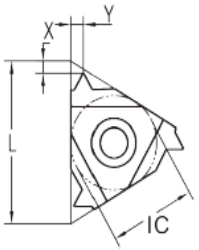


P	Steel	●	●										
M	Stainless Steel		●										
K	Cast Iron		●										
N	Non-ferrous Metal			●									
S	Heat-resistant Alloy		●										

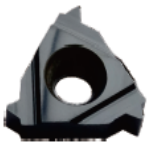
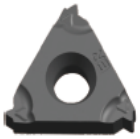
Shape	Ordering Code		Pitch		Dimension						CVD	PVD	Uncoated
	ER	IR	mm	TPI	D	S	L	X	Y	R	1115	4125	9115
		11IR27 NPTF	27		6.35	3.18	11	0.70	0.80	0.08	○	○	○
		11IR18 NPTF	18					0.80	1.00	0.10	○	○	○
		11IR14 NPTF	14					0.80	1.00	0.13	○	○	○
	16ER27 NPTF	16IR27 NPTF	27		9.525	3.97	16	0.70	0.80	0.08	○	○	○
	16ER18 NPTF	16IR18 NPTF	18					0.80	1.00	0.10	○	○	○
	16ER14 NPTF	16IR14 NPTF	14					0.90	1.20	0.13	○	○	○
	16ER11.5 NPTF	16IR11.5 NPTF	11.5					1.10	1.50	0.18	○	○	○
	16ER8 NPTF	16IR8 NPTF	8					1.30	1.80	0.23	○	○	○

55° BSPT

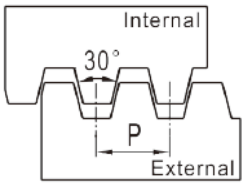


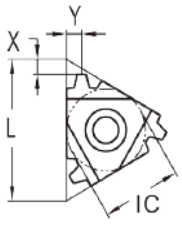


P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non–ferrous Metal			●
S	Heat–resistant Alloy		●	

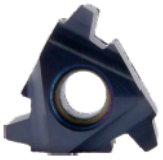
Shape	Ordering Code		Pitch		Dimension						CVD	PVD	Uncoated
	ER	IR	mm	TPI	D	S	L	X	Y	R	1115	4125	9115
		11IR28 BSPT	28		6.35	3.18	11	0.60	0.60	0.08	○	●	○
		11IR19 BSPT	19					0.80	0.90	0.10	○	●	○
		11IR14 BSPT	14					0.90	1.00	0.15	○	●	○
	16ER28 BSPT	16IR28 BSPT	28		9.525	3.97	16	0.60	0.60	0.08	○	●	○
	16ER19 BSPT	16IR19 BSPT	19					0.80	0.90	0.10	○	●	○
	16ER14 BSPT	16IR14 BSPT	14					1.00	1.20	0.15	○	●	○
	16ER11 BSPT	16IR11 BSPT	11					1.10	1.50	0.18	○	●	○
	16ER28 BSPT–B	16IR28 BSPT–B	28		9.525	3.97	16	0.60	0.60	0.08		●	
	16ER19 BSPT–B	16IR19 BSPT–B	19					0.80	0.90	0.10		●	
	16ER14 BSPT–B	16IR14 BSPT–B	14					1.00	1.20	0.15		●	
	16ER11 BSPT–B	16IR11 BSPT–B	11					1.10	1.50	0.18		●	

TR–30° Trapez DIN 103

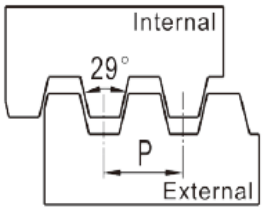


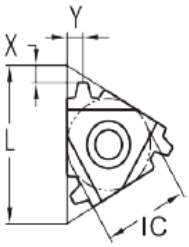


P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non–ferrous Metal			●
S	Heat–resistant Alloy		●	

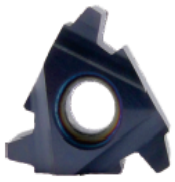
Shape	Ordering Code		Pitch		Dimension						CVD	PVD	Uncoated
	ER	IR	mm	TPI	D	S	L	X	Y	R	1115	4125	9115
	16ER1.5TR	16IR1.5TR	1.5		9.525	3.97	16	1.04	1.94	0.08	○	●	○
	16ER2.0TR	16IR2.0TR	2.0					1.30	2.58	0.10	○	●	○
	16ER3.0TR	16IR3.0TR	3.0					1.50	3.87	0.15	○	●	○
	22ER4.0TR	22IR4.0TR	4.0		12.7	5.56	22	1.91	5.16	0.20	○	●	○
	22ER5.0TR	22IR5.0TR	5.0					2.49	5.81	0.23	○	●	○
	22ER6.0TR	22IR6.0TR	6.0					2.57	7.10	0.28	○	●	○
	22ER7.0TR	22IR7.0TR	7.0					2.41	7.74	0.30	○	●	○

ACME–29° American

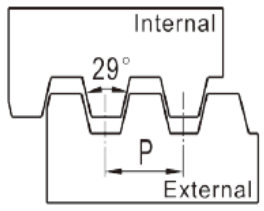


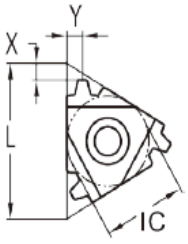


P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non–ferrous Metal			●
S	Heat–resistant Alloy		●	

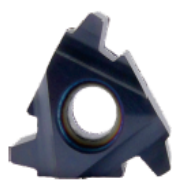
Shape	Ordering Code		Pitch		Dimension						CVD	PVD	Uncoated
	ER	IR	mm	TPI	D	S	L	X	Y	R	1115	4125	9115
	16ER16ACME	16IR16ACME	16.0		9.525	3.97	16	1.09	0.99	0.08	○	●	○
	16ER14ACME	16IR14ACME	14.0					1.09	0.99	0.10	○	●	○
	16ER12ACME	16IR12ACME	12.0					1.19	1.09	0.15	○	●	○
	16ER10ACME	16IR10ACME	10.0					1.40	1.30	0.20	○	●	○
	16ER8ACME	16IR8ACME	10.0					1.50	1.40	0.23	○	●	○
	22ER6ACME	22IR6ACME	8.0		12.7	5.56	22	2.11	1.80	0.28	○	●	○
	22ER5ACME	22IR5ACME	5.0					2.29	2.01	0.41	○	●	○
	22ER4ACME	22IR4ACME	4.0					2.84	2.34	0.53	○	●	○

STACME–29° American Stub ACME

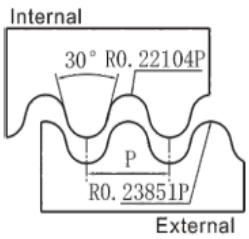


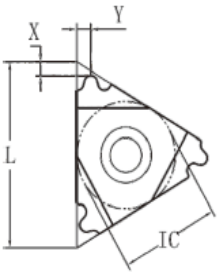


P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non–ferrous Metal			●
S	Heat–resistant Alloy		●	

Shape	Ordering Code		Pitch		Dimension						CVD	PVD	Uncoated
	ER	IR	mm	TPI	D	S	L	X	Y	R	1115	4125	9115
	16ER16STACME	16IR16STACME	16.0		9.525	3.97	16	0.99	0.99	0.08	○	●	○
	16ER14STACME	16IR14STACME	14.0					0.99	0.99	0.10	○	●	○
	16ER12STACME	16IR12STACME	12.0					1.30	1.19	0.15	○	●	○
	16ER10STACME	16IR10STACME	10.0					1.30	1.19	0.20	○	●	○
	16ER8STACME	16IR8STACME	10.0					1.50	1.40	0.23	○	●	○
	22ER6STACME	22IR6STACME	8.0		12.7	5.56	22	1.50	1.40	0.28	○	●	○
	22ER5STACME	22IR5STACME	5.0					2.29	2.11	0.41	○	●	○
	22ER4STACME	22IR4STACME	4.0					2.51	2.21	0.53	○	●	○

RD-30°（Round DIN 403）



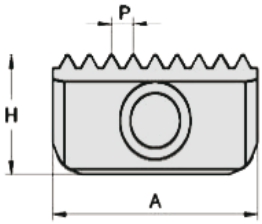


P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non–ferrous Metal			●
S	Heat–resistant Alloy		●	

Shape	Ordering Code		Pitch		Dimension						CVD	PVD	Uncoated
	ER	IR	mm	TPI	D	S	L	X	Y	R	1115	4125	9115
	16ER10RD	16IR10RD	10.0		9.525	3.97	16	1.30	1.40	0.61	○	●	○
	16ER8RD	16IR8RD	8.0					1.50	1.60	0.76	○	●	○
	16ER6RD	16IR6RD	6.0					1.70	1.50	1.02	○	●	○
	22ER6RD	22IR6RD	6.0		12.7	5.56	22	1.70	1.50	1.02	○	●	○
	22ER4RD	22IR4RD	4.0					2.34	2.21	1.50	○	●	○
	22ER4RD	22IR4RD	4.0								○	●	○

●Stock ○Availabie upon Order

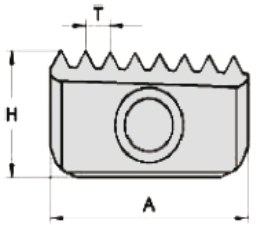
W–55° Whitworth full proile



P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non–ferrous Metal			●
S	Heat–resistant Alloy		●	

Pitch	Dimension					CVD	PVD	Uncoated
TPI	12mm	14mm	21mm	30mm	40mm	1115	4125	9115
24		14–24W				○	●	○
20		14–20W	21–20W			○	●	○
19	*12I–19W	14–19W	21–19W			○	●	○
16		14–16W	21–16W	30–16W		○	●	○
14		14–14W	21–14W	30–14W		○	●	○
11			21–11W	30–11W	40–11W	○	●	○
8					40–8W	○	●	○
H	6.3	7.5	12	16	20			
T	2.9	3.1	4.7	5.5	6.3			

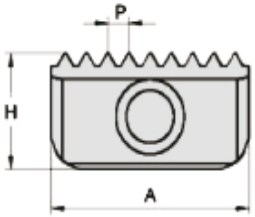
BSPT–55° British standard full proile



P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non–ferrous Metal			●
S	Heat–resistant Alloy		●	

Pitch	Dimension					CVD	PVD	Uncoated
TPI	12mm	14mm	21mm	30mm	40mm	1115	4125	9115
19	*12I–19BSPT	14–19BSPT				○	●	○
14		14–14BSPT	21–14BSPT			○	●	○
11			21–11BSPT	30–11BSPT	40–11BSPT	○	●	○
H	6.3	7.5	12	16	20			
T	2.9	3.1	4.7	5.5	6.3			

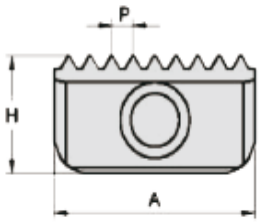
ISO Metric full proile



P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non–ferrous Metal			●
S	Heat–resistant Alloy		●	

Pitch	Dimension					CVD	PVD	Uncoated
TPI	12mm	14mm	21mm	30mm	40mm	1115	4125	9115
0.5	*12I–0.5 ISO	14I–0.5 ISO				○	●	○
0.75	*12I–0.75 ISO	14E/I–0.75 ISO				○	●	○
1	*12I–1.0 ISO	14E/I–1.0 ISO	21E/I–1.0 ISO			○	●	○
1.25	*12I–1.25 ISO	14E/I–1.25 ISO				○	●	○
1.5	*12I–1.5 ISO	14E/I–1.5 ISO	21E/I–1.5 ISO	30E/I–1.5 ISO	40E/I–1.5 ISO	○	●	○
1.75		14E/I–1.75 ISO	21I–1.75 ISO			○	●	○
2		14E/I–2.0 ISO	21E/I–2.0 ISO	30E/I–2.0 ISO	40E/I–2.0 ISO	○	●	○
2.5		14E/I–2.5 ISO	21E/I–2.5 ISO			○	●	○
3			21E/I–3.0 ISO	30E/I–3.0 ISO	40E/I–3.0 ISO	○	●	○
3.5			21I–3.5 ISO	30E/I–3.5 ISO	40I–3.5 ISO	○	●	○
4				30E/I–4.0 ISO	40E/I–4.0 ISO	○	●	○
4.5				30I–4.5 ISO	40I–4.5 ISO	○	●	○
5					40E/I–5.0 ISO	○	●	○
5.5					40I–5.5 ISO	○	●	○
6					40E/I–6.0 ISO	○	●	○
H	6.3	7.5	12	16	20			
T	2.9	3.1	4.7	5.5	6.3			

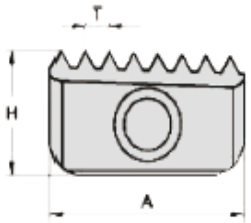
UN–60° American UN full proile



P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non–ferrous Metal			●
S	Heat–resistant Alloy		●	

Pitch	Dimension					CVD	PVD	Uncoated
TPI	12mm	14mm	21mm	30mm	40mm	1115	4125	9115
32	*12I–32 UN	14E/I–32 UN				○	●	○
28	*12I–28 UN	14E/I–28 UN				○	●	○
27		14I–27 UN				○	●	○
24	*12I–24 UN	14E/I–24 UN	21E/I–24 UN			○	●	○
20	*12I–20 UN	14E/I–20 UN	21E/I–20 UN	30E/I–20 UN		○	●	○
18	*12I–18 UN	14E/I–18 UN	21E/I–18 UN	30E/I–18 UN		○	●	○
16	*12I–16 UN	14E/I–16 UN	21E/I–16 UN	30E/I–16 UN	40E/I–16 UN	○	●	○
14		14E/I–14 UN	21E/I–14 UN	30E/I–14 UN	40E/I–14 UN	○	●	○
12		14E/I–12 UN	21E/I–12 UN	30E/I–12 UN	40E/I–12 UN	○	●	○
10			21E/I–10 UN	30E/I–10 UN	40E/I–10 UN	○	●	○
8			21I–8 UN	30E/I–8 UN	40E/I–8 UN	○	●	○
6				30E/I–6 UN	40E/I–6 UN	○	●	○
4.5					40I–4.5 UN	○	●	○
4					40I–4 UN	○	●	○
H	6.3	7.5	12	16	20			
T	2.9	3.1	4.7	5.5	6.3			

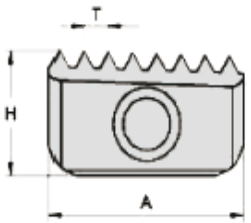
NPT–60° National pipe threading



P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non–ferrous Metal			●
S	Heat–resistant Alloy		●	

Pitch	Dimension					CVD	PVD	Uncoated
TPI	12mm	14mm	21mm	30mm	40mm	1115	4125	9115
18	*12–18 NPT	14–18 NPT				○	●	○
14		14–14 NPT	21–14 NPT			○	●	○
11.5			21–11.5 NPT	30–11.5 NPT	40–11.5 NPT	○	●	○
8				30–8 NPT	40–8 NPT	○	●	○
H	6.3	7.5	12	16	20			
T	2.9	3.1	4.7	5.5	6.3			

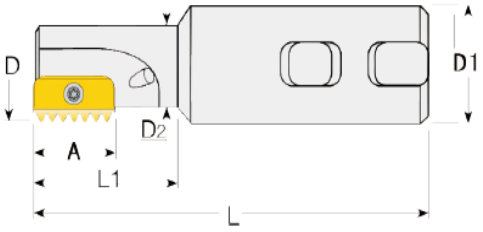
NPTF–American dry seal taper pipe threading



P	Steel	●	●	
M	Stainless Steel		●	
K	Cast Iron		●	
N	Non–ferrous Metal			●
S	Heat–resistant Alloy		●	

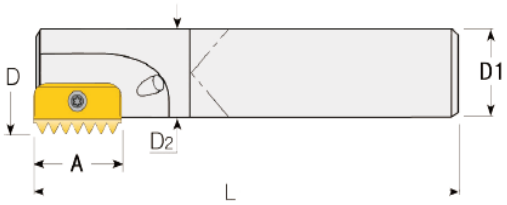
Pitch	Dimension					CVD	PVD	Uncoated
TPI	12mm	14mm	21mm	30mm	40mm	1115	4125	9115
18	*12–18 NPTF	14–18 NPTF				○	●	○
14		14–14 NPTF	21–14 NPTF			○	●	○
11.5			21–11.5 NPTF	30–11.5 NPTF	40–11.5 NPTF	○	●	○
8				30–8 NPTF	40–8 NPTF	○	●	○
H	6.3	7.5	12	16	20			
T	2.9	3.1	4.7	5.5	6.3			

Partial profile 60°



Part No.	Stock	Size						Screw	wrench
		A	D	D1	D2	L	L1		
SR0009H12	○	12	9.5	20	7.5	85	14	S12	K12
*SR0010H12	●	12	9.5	20	7.6	85	16	S12	K12
SR0012F14	●	14	12	20	8.9	75	20	S14	K14
SR0014H14	●	14	14.5	20	11.2	85	25	S14	K14
SR0017H14	●	14	17	20	13.4	85	30	S14	K14
**SR0018H21	●	21	18	20	14.4	85	30	S21	K21
SR0021H21	●	21	21	20	16.5	94	40	S21	K21
SR0029J30	●	30	29	25	22.4	110	50	S30	K30
SR0048M40	○	40	48	40	35	153	78	S40	K40

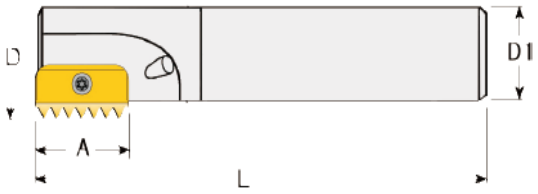
Partial profile 60°



Part No.	Stock	Size				Screw	wrench
		A	D	D1	L		
SR0010K12C	○	12	9.9	8	125	S12	K12
SR0013H14C	●	14	13.2	10	110	S14	K12
SR0013J14C	●	14	13.2	10	150	S14	K14
SR0015K14C	●	14	15.2	12	175	S14	K14
SR0021K21C	●	21	21	16	130	S21	K21
SR0021M21C	●	21	21	16	200	S21	K21
SR0027S30C	○	30	27	20	270	S30	K30

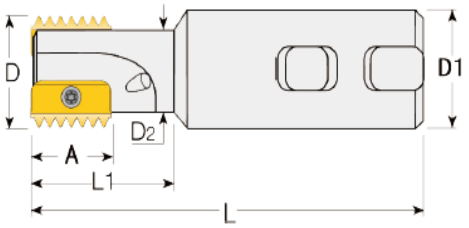
●Stock ○Availabie upon Order

ISO Mrtric Full Profile



Part No.	Stock	Size				Screw	wrench
		A	D	D1	L		
SR0025K21	●	21	25	20	125	S21	K21
SR0031M30	●	30	31	25	150	S20	K20
SR0038M30	●	30	38	32	150	S30	K30
SR0048R40	●	40	48	40	210	S40	K40

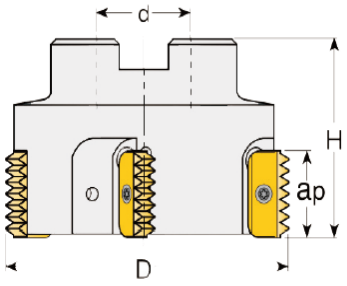
ISO Mrtric Full Profile



Part No.	Stock	Size						Z	Screw	wrench
		A	D	D1	D2	L	L1			
SR0020H14-2	○	14	20	20	16	93	41	2	S21	K21
SR0030J21-2	○	21	30	25	24	108	52	2	S20	K20
SR0040L30-2	○	30	40	32	30	130	70	2	S30	K30
SR0050M40-2	○	40	50	40	38	153	78	2	S40	K40

●Stock ○Availabie upon Order

ISO Mrtric Full Profile



Part No.	Stock	Size				Z	Screw	wrench
		A	D	D1	L			
SR0063C21-5	○	21	63	22	50	5	S21	K21
SR0063C30-4	○	30	63	22	50	4	S30	K30
SR0080D30-4	○	30	80	27	55	4	S30	K30
SR0100D30-4	○	30	100	32	60	4	S30	K30
SR0080D40-4	○	40	80	27	65	4	S40	K40
SR0100E40-4	○	40	100	32	70	4	S40	K40