

BTA SOLUTION

INDEXABLE DEEP HOLE DRILLING SOLUTIONS



Drilling Tools



700.10 Series GHD

- Small diameter range: Dia 11.80-33.30mm
- Easy insert replacement
- Smooth chip evacuation for consistent productivity
- Versatile machining for various materials



700.20 Series GHD

- Small diameter range: Dia 33.31-65.00mm
- Easy insert replacement
- Smooth chip evacuation for consistent productivity
- Versatile machining for various materials



800 Series DHD

- Most commonly used diameter range
- High-speed drilling performance
- Stock in a variety of sizes
- Superior machining stability through efficient chip evacuation



801 Series LHD

- Designed for large diameters from Dia 65.00mm
- Cartridge design for enhanced cost-efficiency and versatility
- Stable drilling with minimized vibration
- Safety pad protects the head
- Extensive customization



T-max 424.10 Series THD

- Wide range of diameters can be manufactured
- Cartridge design for enhanced cost-efficiency and versatility
- Ensures high precision even in deep hole machining
- Efficient Chip Control

Drilling Tools



I 500 Series IHD

- Wide range of diameters (Diameter 40.00-255.99mm)
- Safety pads applied to prevent head damage
- Stable drilling through smooth chip evacuation
- Adjustable diameter using various pads

Counter Boring Head Tools



I 818 Series TBH

- Excellent counter boring
- Excellent stability due to long fiber pads
- Adjust Counterbore Diameter
- Replace insert using cartridge



I 818 Series BBH

- Maximized straightness through pull-boring
- Achieves superior surface finish by minimizing vibration
- Maintains stable precision during deep-hole boring
- Increases operational efficiency with an effective chip evacuation structure

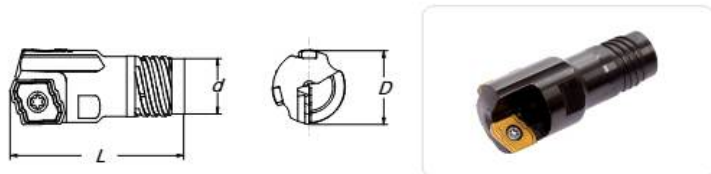
Deep Hole Drilling 700 Series

- Manufacturing range: Diameter 12.00–65.00mm
- Streamlined inventory: Multiple diameter ranges compatible with a single insert type
- Cost-effective solution: Minimize tool costs with versatile insert compatibility



Type	Thread	Diameter	Tube outer Diameter
GHD	13	D65.00	-51

700.20 Series (Dia 12.00-33.30mm)



Diameter Range mm D	Tube outer diameter mm	Order Code	Dimensions mm		Insert	Support Pad
			d	L		
12.00-13.60	11.0	GHD-940***	9.6	58.0	LXET06T104-DR	LNXT0418-R055
13.61-13.99	12.0	GHD-950***	10.6	58.0	LXET06T104-DR	LNXT0418-R055
14.00-14.62	12.0				LXET080204-DR	LNXT0418-R065
14.63-14.99	13.0	GHD-960***	11.6	58.0	LXET080204-DR	LNXT0418-R065
15.00-15.49	13.0					LNXT0618-R070
15.50-15.59	13.0	GHD-970***	12.6	60.0	LXET080204-DR	LNXT0618-R070
15.60-15.99	14.0				LXET09T204-DR	LNXT0618-R075
16.00-16.50	14.0	GHD-980***	13.6	60.0	LXET09T204-DR	LNXT0618-R075
16.51-16.69	14.0				LXET09T204-DR	LNXT0618-R075
16.70-17.69	15.0	GHD-990***	14.5	60.0	LXET100305-DR	LNXT0618-R085
17.70-17.99	16.0				LXET100305-DR	LNXT0618-R085
18.00-18.89	16.0	GHD-000***	15.5	61.0	LXET100305-DR	LNXT0618-R085
18.90-19.50	17.0				LXET110305-DR	LNXT0618-R095
19.51-19.99	17.0	GHD-010***	16.0	61.0	LXET110305-DR	LNXT0618-R095
20.00-21.79	18.0				LXET110305-DR	LNXT0618-R095
21.80-21.99	20.0	GHD-020***	18.0	61.0	LXET13T305-DR	LNXT0618-R105
22.00-22.50	20.0				LXET13T305-DR	LNXT0618-R105
22.51-24.09	20.0	GHD-030***	19.5	65.0	LXET13T305-DR	LNXT0618-R105
24.10-24.99	22.0				LXET140405-DR	LNXT0618-R120
25.00-26.39	22.0	GHD-040***	21.0	68.0	LXET140405-DR	LNXT0618-R120
26.40-28.69	24.0				LXET150505-DR	LNXT0618-R130
28.70-30.99	26.0	GHD-050***	23.5	73.0	LXET150505-DR	LNXT0618-R130
31.00-33.30	28.0	GHD-060***	25.5	75.0	LXET160605-DR	LNXT0720-R140

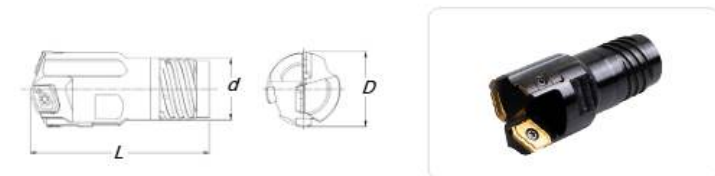
700 Series diameter range Insert & Pad (Dia 12.00-33.30mm)

Diameter Range mm	Insert	Diameter Range mm	Support Pad
12.00-13.60	LXET 06T104-DR	12.00-13.99	LNXT 0418-R055
14.00-15.99	LXET 080204-DR	14.00-14.99	LNXT 0418-R065
16.00-17.99	LXET 09T204-DR	15.00-15.99	LNXT 0618-R070
18.00-19.99	LXET 100305-DR	16.00-17.99	LNXT 0618-R075
20.00-21.99	LXET 110305-DR	18.00-19.99	LNXT 0618-R085
22.00-24.99	LXET 13T305-DR	20.00-21.99	LNXT 0618-R095
25.00-28.69	LXET 140405-DR	22.00-24.99	LNXT 0618-R105
28.70-30.99	LXET 150505-DR	25.00-28.69	LNXT 0618-R120
31.00-33.30	LXET 160605-DR	28.70-30.99	LNXT 0618-R130
		31.00-33.30	LNXT 0720-R140

700 Series Screw (Dia 12.00-33.30mm)

Diameter Range mm	Insert screw	Insert screw driver	Support pad screw	Support pad screw driver
12.00-13.99	FTNA02205-M2.2	TORX-T6	FTNA02205-M2.2	TORX-T6
14.00-14.99	FTKA02543S-M2.5	TORX-T8		
15.00-15.49	FTKA02543S-M2.5	TORX-T8	FTKA02555-M2.5	TORX-T7
15.50-16.50	FTKA02543S-M2.5	TORX-T8		
16.51-17.99	FTKA02550S-M2.5	TORX-T8		
18.00-19.50	FTNA0305-M3.0	TORX-T9		
19.51-21.99	FTNA0306-M3.0	TORX-T9		
22.00-22.50	FTGA03575-M3.5	TORX-T15		
22.51-28.69	FTGA03508-M3.5	TORX-T15	FTKA02555-M2.5	TORX-T7
28.70-30.99	FTKA0410-M4.0	TORX-T15		
31.00-33.30				

700.20 Series (Dia 33.31-65.00mm)



Diameter Range mm D	Tube outer diameter mm	Order Code	Dimensions mm		Insert	Flute	Support Pad
			d	L			
33.31-36.20	30.0	GHD-07D***	28.0	76.0	LXET13T305-DR	2	LNXT0720-R140
36.21-37.99	33.0	GHD-08D***	30.0	86.0	LXET13T305-DR		LNXT0720-R140
38.00-39.60					LXET140405-DR		LNXT0825-SUP
39.61-43.00	36.0	GHD-09D***	33.0	90.0	LXET140405-DR		LNXT0825-SUP
43.01-47.00	39.0	GHD-10D***	36.0	92.0	LXET150505-DR		LNXT1030-SUP
47.01-51.70	43.0	GHD-11D***	39.0	100.0	LXET160605-DR		LNXT1030-SUP
51.71-52.49	47.0	GHD-12D***	43.0	105.0	LXET160605-DR	3	LNXT1030-SUP
52.50-56.20					LXET13T305-DR		LNXT1030-SUP
56.21-59.99	51.0	GHD-13D***	47.0	110.0	LXET13T305-DR		LNXT1235-SUP
60.00-65.00					LXET140405-DR		LNXT1235-SUP

700 Series diameter range Insert & Screw (Dia 33.31-65.00mm)

Diameter Range mm	Insert	Insert Screw	Insert screw driver
33.31-37.99	LXET 13T305-DR	FTGA03508-M3.5	TORK-T15
38.00-43.00	LXET 140405-DR		
43.01-47.00	LXET 150505-DR	FTKA0410-M4.0	
47.01-52.49	LXET 160605-DR		
52.50-56.20	LXET 13T305-DR	FTGA03508-M3.5	
60.00-65.00	LXET 140405-DR		

700 Series diameter range Support pad & Screw (Dia 33.31-65.00mm)

Diameter Range mm	Support Pad	Support Pad Screw	Support Pad screw driver
33.31-37.99	LNXT 0720-R140	FTKA0363-60-M3.0	TORX PLUS-T9
38.00-47.00	LNXT 0825-SUP	5513 020-16-M3.5	
47.01-59.99	LNXT 1030-SUP	4161-833-M3.5	TORX PLUS-T10
60.00-65.00	LNXT 1235-SUP		

INSERT

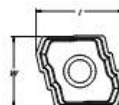


Fig.2



HM3



SM3&IM3

★ : first recommend grade ☆ : second recommend grade

Insert size	P		M		K		N		S		I	W	S	Fig
	HM3	SM3	IM3	SM3	IM3	SM3	IM3	SM3	IM3	SM3				
LXET06T104-DR	★	☆		★	☆	★	☆		★	☆	9.5	7.3	2.0	2
LXET080204-DR	★	☆		★	☆	★	☆		★	☆	11.0	8.6	2.3	
LXET09T204-DR	★	☆		★	☆	★	☆		★	☆	12.0	8.6	2.8	
LXET100305-DR	★	☆		★	☆	★	☆		★	☆	13.5	10.6	3.0	
LXET110305-DR	★	☆		★	☆	★	☆		★	☆	15.0	11.7	3.3	
LXET13T305-DR	★	☆		★	☆	★	☆		★	☆	15.5	13.2	3.75	
LXET140405-DR	★	☆		★	☆	★	☆		★	☆	15.5	14.7	4.0	
LXET150405-DR	★	☆		★	☆	★	☆		★	☆	16.5	16.2	4.5	
LXET160505-DR	★	☆		★	☆	★	☆		★	☆	16.5	17.4	5.0	

SUPPORT PAD



HM3



SM3&IM3

★ : first recommend grade ☆ : second recommend grade

Insert size	P		M		K		N		S		I	W	S
	PM3	IM3	PM3	IM3	PM3	IM3	PM3	IM3	PM3	IM3			
LNXT0418-R055	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	4.0	2.2
LNXT0418-R065	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	4.0	2.2
LNXT0618-R070	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	6.0	3.0
LNXT0618-R075	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	6.0	3.0
LNXT0618-R085	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	6.0	3.0
LNXT0618-R095	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	6.0	3.0
LNXT0618-R105	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	6.0	3.0
LNXT0618-R120	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	6.0	3.0
LNXT0618-R130	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	6.0	3.0
LNXT0720-R140	★	☆	☆	★	★	☆	☆	★	☆	★	20.0	7.0	3.5

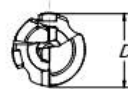
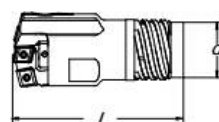
Deep Hole Drilling 800 Series

- Standard diameter range: Diameter 25.00–65.00mm
- High Rigidity: Robust construction minimizes vibration for superior straightness and deep-hole precision
- Efficient chip evacuation: Optimized channels for continuous, clog-free drilling and maximum productivity
- Wide material versatility: Ideal for various materials, including high-alloy steel and difficult-to-cut materials



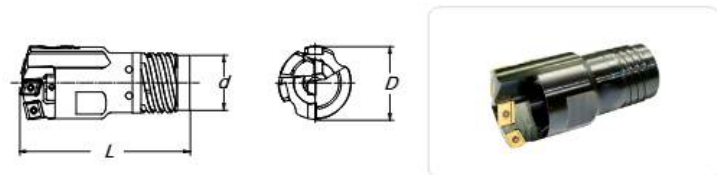
Type	Thread	Diameter	Tube outer Diameter
DHD	13	D65.00	-51

STS SYSTEM Single Tube-ST5(800.20)



Diameter Range mm D	Tube outer diameter mm	Order Code	Dimensions mm		Center Insert	Intermediate Insert	Peripheral Insert	Support Pad
			d	L				
25.00–26.40	22.0	DHD-03D***	19.5	73	LPMT050308C-G-L	LPMT050308I-G-L	LPET060308P-G-L	LNXT0618-SUP
26.41–28.70	24.0	DHD-04D***	21	74	LPMT050308C-G-L	LPMT050308I-G-L	LPET060308P-G-L	LNXT0618-SUP
28.71–31.00	26.0	DHD-05D***	23.5	75	LPMT06T308C-G-L	LPMT050308I-G-L	LPET060308P-G-L	LNXT0618-SUP
31.01–33.30	28.0	DHD-06D***	25.5	76	LPMT06T308C-G-L	LPMT06T308I-G-L	LPET08T308P-G-L	LNXT0720-SUP
33.31–36.20	30.0	DHD-07D***	28.0	77	LPMT06T308C-G-L	LPMT06T308I-G-L	LPET08T308P-G-L	LNXT0720-SUP
					LPMT08T308C-G-L	LPMT08T308I-G-L		
36.21–39.60	33.0	DHD-07D***	30.0	89	LPMT08T308C-G-L	LPMT08T308I-G-L	LPET08T308P-G-L	LNXT0720-SUP
							LPET09T308P-G-L	
39.61–43.00	36.0	DHD-09D***	33.0	93	LPMT08T308C-G-L	LPMT08T308I-G-L	LPET09T308P-G-L	LNXT0825-SUP
43.01–47.00	39.0	DHD-10D***	36.0	95	LPMT10T308C-G-L	LPMT08T308I-G-L	LPET09T308P-G-L	LNXT0825-SUP
47.01–51.70	43.0	DHD-11D***	39.0	102	LPMT12T308C-G-L	LPMT08T308I-G-L	LPET09T308P-G-L	LNXT1030-SUP
					LPMT10T308C-G-L		LPET11T208P-G-L	
51.71–56.20	47.0	DHD-12D***	43.0	110	LPMT10T308C-G-L	LPMT08T308I-G-L	LPET11T208P-G-L	LNXT1030-SUP
						LPMT12T308I-G-L		LNXT1235-SUP
56.21–65.00	51.0	DHD-13D***	47.0	115	LPMT10T308C-G-L	LPMT12T308I-G-L	LPET11T208P-G-L	LNXT1235-SUP
					LPMT12T308C-G-L			
60.61–65.00	57.0	DHD-13E***	51.0	115	LPMT12T308C-G-L	LPMT12T308I-G-L	LPET11T208P-G-L	LNXT1235-SUP

EJECTOR SYSTEM (800.24)



Diameter Range mm	Tube outer diameter mm	Order Code	Dimensions mm		Center Insert	Intermediate Insert	Peripheral Insert	Support Pad
			d	L				
25.00~26.40	23.5	E-DHD-03D***	21.0	74	LPMT060308C-G-L	LPMT050308I-G-L	LPET060308P-G-L	LNXT0618-SUP
26.41~28.70	26.0	E-DHD-04D***	23.5	75	LPMT050308C-G-L	LPMT050308I-G-L	LPET060308P-G-L	LNXT0618-SUP
28.71~31.00	28.0	E-DHD-05D***	25.5	76	LPMT06T308C-G-L	LPMT050308I-G-L	LPET060308P-G-L	LNXT0618-SUP
31.01~33.30	30.5	E-DHD-06D***	28.0	77	LPMT06T308C-G-L	LPMT06T308I-G-L	LPET08T308P-G-L	LNXT0720-SUP
33.31~36.20	33.0	E-DHD-07D***	30.0	89	LPMT06T308C-G-L	LPMT06T308I-G-L	LPET08T308P-G-L	LNXT0720-SUP
					LPMT08T308C-G-L	LPMT08T308I-G-L		
36.21~39.60	35.5	E-DHD-08D***	33.0	93	LPMT08T308C-G-L	LPMT08T308I-G-L	LPET08T308P-G-L	LNXT0720-SUP
							LPET09T308P-G-L	
39.61~43.00	39.0	E-DHD-09D***	36.0	95	LPMT08T308C-G-L	LPMT08T308I-G-L	LPET09T308P-G-L	LNXT0825-SUP
43.01~47.00	42.5	E-DHD-10D***	39.0	102	LPMT10T308C-G-L	LPMT08T308I-G-L	LPET09T308P-G-L	LNXT0825-SUP
47.01~51.70	46.5	E-DHD-11D***	43.0	110	LPMT12T308C-G-L	LPMT08T308I-G-L	LPET09T308P-G-L	LNXT1030-SUP
					LPMT10T308C-G-L		LPET11T308P-G-L	
51.71~56.20	51.0	E-DHD-12D***	47.0	115	LPMT10T308C-G-L	LPMT08T308I-G-L	LPET11T308P-G-L	LNXT1030-SUP
					LPMT12T308C-G-L	LPMT12T308I-G-L		LNXT1235-SUP
56.21~65.00	55.5	E-DHD-13D***	51.0	115	LPMT10T308C-G-L	LPMT12T308I-G-L	LPET11T308P-G-L	LNXT1235-SUP
					LPMT12T308C-G-L			

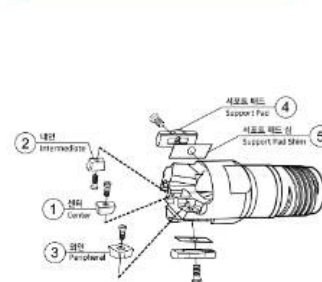
800 Series Diameter Range Insert & Support Pad

Diameter Range mm	Center Insert	Diameter Range mm	Intermediate Insert	Diameter Range mm	Peripheral Insert	Diameter Range mm	Support Pad
25.00~28.70	LPMT050308C-G-L	25.00~31.00	LPMT050308I-G-L	25.00~31.00	LPET060308P-G-L	25.00~31.00	LNXT0618-SUP
28.71~33.99	LPMT06T308C-G-L	31.01~34.99	LPMT06T308I-G-L	31.01~38.99	LPET08T308P-G-L	31.01~39.60	LNXT0720-SUP
34.00~43.00	LPMT08T308C-G-L	35.00~54.99	LPMT08T308I-G-L	39.00~49.99	LPET09T308P-G-L	39.61~47.00	LNXT0825-SUP
43.01~47.00	LPMT10T308C-G-L	55.00~65.00	LPMT12T308I-G-L	50.00~65.00	LPET11T308P-G-L	47.01~54.99	LNXT1030-SUP
47.01~49.99	LPMT12T308C-G-L					55.00~65.00	LNXT1235-SUP
50.00~57.99	LPMT10T308C-G-L						
58.00~65.00	LPMT12T308C-G-L						

800 Series Screw

Diameter Range mm	Center	Intermediate	Peripheral	Insert screw driver	Support Pad screw driver	Support Pad screw driver
25.00~28.70		5513 020-05-M2.2		TORX PLUS T-7	5513 020-20-M2.5	TORX PLUS T-7
28.71~31.00	5513 020-34-M2.5	5513 020-05-M2.2		TORX PLUS T-7	5513 020-20-M2.5	TORX PLUS T-8
31.01~39.60		5513 020-34-M2.5		TORX PLUS T-8	4161-632-M3.0	TORX PLUS T-9
39.61~47.00		5513 020-34-M2.5		TORX PLUS T-8	5513 020-16-M3.5	TORX PLUS T-10
47.01~65.00		5513 020-34-M2.5		TORX PLUS T-8	4161-633-M3.5	TORX PLUS T-10

800 Series Parts & Shim set



Support Pad	Size (mm)	Order Code
LNXT 0618-SUP	0.02 (4pcs)	800-060420
	0.03 (4pcs)	
	0.05 (4pcs)	
LNXT 0720-SUP	0.02 (4pcs)	800-070420
	0.03 (4pcs)	
	0.05 (4pcs)	
LNXT 0825-SUP	0.02 (4pcs)	800-080420
	0.03 (4pcs)	
	0.05 (4pcs)	
LNXT 1030-SUP	0.02 (4pcs)	800-100420
	0.03 (4pcs)	
	0.05 (4pcs)	
LNXT 1235-SUP	0.02 (4pcs)	800-120420
	0.03 (4pcs)	
	0.05 (4pcs)	

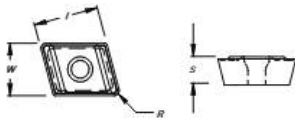
800 Series (Center Insert)



★ : first recommend grade ☆ : second recommend grade

Insert size	P		M		K		N		S		I	W	S	R	
	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3						
LPMT050308C-G,L	★	☆		★	☆	☆		★	☆	☆	★	9.87	5.56	3.18	0.8
LPMT06T308C-G,L	★	☆		★	☆	☆		★	☆	☆	★	9.87	6.35	3.97	0.8
LPMT08T308C-G,L	★	☆		★	☆	☆		★	☆	☆	★	9.87	7.94	3.97	0.8
LPMT10T308C-G,L	★	☆		★	☆	☆		★	☆	☆	★	9.87	9.53	3.97	0.8
LPMT12T308C-G,L	★	☆		★	☆	☆		★	☆	☆	★	9.87	12.7	3.97	0.8

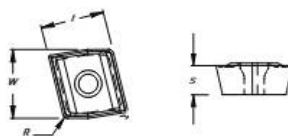
800 Series (Intermediate Insert)



★ : first recommend grade ☆ : second recommend grade

Insert size	P		M		K		N		S		I	W	S	R	
	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3					SM3
LPMT050308I-G,L	★	☆		★	☆	☆		★	☆	☆	★	9.87	5.56	3.18	0.8
LPMT06T308I-G,L	★	☆		★	☆	☆		★	☆	☆	★	9.87	6.35	3.97	0.8
LPMT08T308I-G,L	★	☆		★	☆	☆		★	☆	☆	★	9.87	7.94	3.97	0.8
LPMT12T308I-G,L	★	☆		★	☆	☆		★	☆	☆	★	9.87	12.7	3.97	0.8

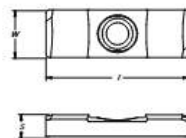
800 Series (Peripheral Insert)



★ : first recommend grade ☆ : second recommend grade

Insert size	P		M		K		N		S		I	W	S	R	
	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	SM3					IM3
LPET060308P-G,L	★	☆		★	☆	☆		★	☆	☆	★	8.0	6.42	3.18	0.8
LPET08T308P-G,L	★	☆		★	☆	☆		★	☆	☆	★	9.0	8.62	3.97	0.8
LPET09T308P-G,L	★	☆		★	☆	☆		★	☆	☆	★	9.0	9.63	3.97	0.8
LPET11T308P-G,L	★	☆		★	☆	☆		★	☆	☆	★	9.0	12.7	3.97	0.8

800 Series Support Pad



★ : first recommend grade ☆ : second recommend grade

Insert size	P		M		K		N		S		I	W	S
	PM3	IM3	PM3	IM3	PM3	IM3	PM3	IM3	PM3	IM3			
LNXT0618-SUP	★	☆	☆	★	★	☆	☆	★	☆	★	18	6	3.0
LNXT0720-SUP	★	☆	☆	★	★	☆	☆	★	☆	★	20	7	3.4
LNXT0825-SUP	★	☆	☆	★	★	☆	☆	★	☆	★	25	8	4.5
LNXT1030-SUP	★	☆	☆	★	★	☆	☆	★	☆	★	30	10	4.5
LNXT1235-SUP	★	☆	☆	★	★	☆	☆	★	☆	★	35	12	5.5

Deep Hole Drilling 801 Series

• Cartridge-type BTA head designed for exceptional chip evacuation, high-speed drilling, and superior durability.

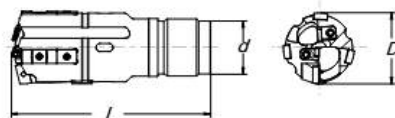
• Diameter range: D65.00-162.00 mm

• Tube : Single Tube (STS) & Ejector Tube (Double)



Advantage		Product Features	
- High machining stability - Extended diameter adjustment range using cartridges and shims - Robust head design for heavy-duty performance - Optimized chip breaker for efficient chip control		- Staggered insert arrangement reduces vibration during drilling - Versatile application across various industries - Customizable solutions to meet specific requirements - Integrated safety pads for head protection	
Type	Thread	Diameter	Tube outer Diameter
LHD	18	D100.00	-82

801 Series LHD



Customized solutions are available for products or tube types not listed in this catalog.

Order Code	Range of radius adjustment	Tube outer diameter mm	Center Insert	Intermediate Insert	Peripheral Insert	S-Safety Pad F-Fiber Pad	Support Pad
LHD-14D065	0.75	56.0	LPMT12T308C 1	LPMT12T308I 1	LPMT13T308 1	142067-S 3 142067-F 1	430.32-12D65.0 LNX135D065-SUP
LHD-15D068	0.75	62.0	LPMT12T308C 1	LPMT12T308I 1	LPMT13T308 1	142067-S 3 142067-F 1	430.32-12D65.0 LNX135D065-SUP
LHD-15D070	0.50	62.0	LPMT08T308C 2 LPMT06T308C 1	LPMT08T308I 1	LPMT13T308 1	142067-S 3 142067-F 1	430.32-12D65.0 LNX135D065-SUP
LHD-15D071	1.50	62.0	LPMT10T308C 1	LPMT12T308I 1	LPMT180608 1	142067-S 3 142067-F 1	430.32-12D70.0 LNX135D065-SUP
LHD-16D073	2.00	68.0	LPMT12T308C 1	LPMT12T308I 1	LPMT180608 1	142067-S 3 142067-F 1	430.32-12D70.0-12D75.0 LNX135D065-SUP
LHD-17D080	2.00	75.0	LPMT08T308C 1 LPMT06T308C 2	LPMT12T308I 1	LPMT180608 1	142067-S 3 142067-F 1	430.32-12D80.0 LNX135D075-SUP
LHD-17D086	2.00	75.0	LPMT08T308C 2 LPMT06T308C 1	LPMT12T308I 1	LPMT180608 1	142067-S 3 142067-F 1	430.32-12D85.0 LNX135D085-SUP
LHD-18D090	2.00	82.0	LPMT08T308C 3	LPMT12T308I 1	LPMT180608 1	142067-S 3 142067-F 1	430.32-12D90.0 LNX135D085-SUP
LHD-18D094	0.75	82.0	LPMT08T308C 3	LPMT12T308I 1	LPMT180608 1	142067-S 3 142067-F 1	430.32-12D90.0 LNX135D085-SUP
LHD-18D095	2.00	82.0	LPMT12T308C 1 LPMT12T308I 1	LPMT08T308I 2 LPMT12T308I 1	LPMT180608 1	142067-S 3 142067-F 1	430.32-12D95.0 LNX135D085-SUP
LHD-18D098	2.00	82.0	LPMT12T308C 1	LPMT08T308I 2 LPMT12T308I 1	LPMT180608 1	142067-S 3 142067-F 1	430.32-12D95.0 LNX135D085-SUP
LHD-19D105	2.50	94.0	LPMT12T308C 1	LPMT08T308I 1 LPMT12T308I 2	LPMT180608 1	202582-S 3 202582-F 1	430.32-16D105.0 430.32-16D110.0-D115.0 LNX150D100-SUP
LHD-20D120	2.50	106.0	LPMT12T308C 1	LPMT12T308I 4	LPMT180608 1	202582-S 1 202582-F 1	430.32-16D120.0 LNX150D110-SUP
LHD-21D125	2.50	118.0	LPMT12T308C 1	LPMT12T308I 4	LPMT180608 1	202582-S 1 202582-F 1	430.32-16D125.0 LNX150D120-SUP
LHD-21D130	2.50	118.0	LPMT12T308C 1	LPMT12T308I 3	LPMT180608 1	202582-S 1 202582-F 1	430.32-16D130.0 LNX150D120-SUP
LHD-21D135	2.50	118.0	LPMT12T308C 1	LPMT12T308I 2	LPMT180608 1	202582-S 1 202582-F 1	430.32-16D130.0 LNX150D130-SUP
LHD-22D141	2.50	130.0	LPMT12T308C 1	LPMT12T308I 3	LPMT180608 1	202582-S 1 202582-F 1	430.32-16D140.0 LNX150D130-SUP
LHD-23D150	2.50	142.0	LPMT12T308C 1	LPMT12T308I 4	LPMT180608 1	202582-S 1 202582-F 1	430.32-16D150.0 LNX150D130-SUP
LHD-23D157	2.50	142.0	LPMT12T308C 1	LPMT12T308I 5	LPMT180608 1	202582-S 1 202582-F 1	430.32-16D150.0 LNX150D130-SUP
LHD-24D162	2.50	154.0	LPMT12T308C 1	LPMT12T308I 5	LPMT180608 1	202582-S 1 202582-F 1	430.32-16D160.0 LNX150D130-SUP

801 Series LHD Cartridge

Order Code	Center Cartridge		Intermediate Cartridge		Peripheral Cartridge	
LHD-14D065	CLP12T3C-K	1	CLP12T3I-K	1	CLP13T3P-K	1
LHD-15D068	CLP12T3C-K	1	CLP12T3I-K	1	CLP13T3P-K	1
LHD-15D070	CLP06T3C-2-K	1	CLP08T3I-K	1	CLP13T3P-K	1
	CLP06T3C-K	1				
LHD-15D071	CLP10T3C-K	1	CLP12T3I-K	1	CLP1806P-K	1
LHD-16D073	CLP12T3C-K	1	CLP12T3I-K	1	CLP1806P-K	1
LHD-17D080	CLP06T3C-2-K	1	CLP12T3I-K	1	CLP1806P-K	1
	CLP06T3C-K	1				
	CLP06T3C-K	2				
LHD-17D086	CLP06T3C-K	1	CLP12T3I-K	1	CLP1806P-K	1
	CLP06T3C-K	1				
LHD-18D090	CLP08T3C-K	3	CLP12T3I-K	1	CLP1806P-K	1
LHD-18D094	CLP08T3C-K	3	CLP12T3I-K	1	CLP1806P-K	1
LHD-18D095	CLP12T3C-K	1	CLP08T3I-K	2	CLP1806P-K	1
			CLP12T3I-K	1		
			CLP08T3I-K	2		
LHD-18D098	CLP12T3C-K	1	CLP12T3I-K	1	CLP1806P-K	1
			CLP12T3I-K	1		
LHD-19D105	CLP12T3C-K	1	CLP08T3I-K	1	CLP1806P-K	1
			CLP12T3I-K	2		
			CLP12T3I-K	2		
LHD-20D120	CLP12T3C-K	1	CLP08T3I-K	4	CLP1806P-K	1
			CLP12T3I-K	1		
			CLP12T3I-K	1		
LHD-21D125	CLP12T3C-K	1	CLP08T3I-K	4	CLP1806P-K	1
			CLP12T3I-K	1		
			CLP12T3I-K	1		
LHD-21D130	CLP12T3C-K	1	CLP08T3I-K	3	CLP1806P-K	1
			CLP12T3I-K	2		
			CLP12T3I-K	2		
LHD-21D135	CLP12T3C-K	1	CLP08T3I-K	3	CLP1806P-K	1
			CLP12T3I-K	2		
			CLP12T3I-K	2		
LHD-22D141	CLP12T3C-K	1	CLP08T3I-K	3	CLP1806P-K	1
			CLP12T3I-K	2		
			CLP12T3I-K	2		
LHD-23D150	CLP12T3C-K	1	CLP08T3I-K	1	CLP1806P-K	1
			CLP12T3I-K	4		
			CLP12T3I-K	4		
LHD-23D157	CLP12T3C-K	1	CLP12T3I-K	5	CLP1806P-K	1
LHD-24D162	CLP12T3C-K	1	CLP12T3I-K	5	CLP1806P-K	1

801 Series Support Pad Screw & Driver

Diameter Range mm	Support Pad Screw	Support Pad Screw Driver
65.00-99.99	5513 020-01-M3.5	TORX PLUS-T15
100.00-162.00	5513 020-26-M5.0	TORX PLUS-T20

801 Series LHD Center Cartridge

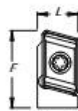


Fig 1

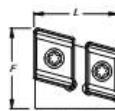
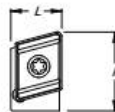


Fig 2



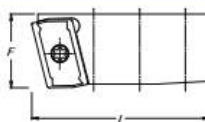
Cartridge	Insert	F	L	Insert screw	Cartridge screw	Insert screw Driver	Cartridge screw Driver	Fig
CLP06T3C-K	LPMT06T306C-GL	14.30	8.0	5513 020-34-M2.5	5513 020-25-M4	TORX PLUS-T8	TORX PLUS-T15	1
CLP06T3C-2-K	LPMT08T306C-GL	17.30	17.5	5513 020-34-M2.5	5513 020-26-M5	TORX PLUS-T8	TORX PLUS-T20	2
	LPMT06T306C-GL	17.30	17.5	5513 020-34-M2.5	5513 020-26-M5	TORX PLUS-T8	TORX PLUS-T20	2
CLP08T3C-K	LPMT08T306C-GL	14.30	10.00	5513 020-34-M2.5	5513 020-25-M4	TORX PLUS-T8	TORX PLUS-T15	1
CLP10T3C-K	LPMT10T306C-GL	15.30	12.00	5513 020-34-M2.5	5513 020-26-M5	TORX PLUS-T8	TORX PLUS-T20	1
CLP12T3C-K	LPMT12T306C-GL	15.30	15.60	5513 020-34-M2.5	5513 020-26-M5	TORX PLUS-T8	TORX PLUS-T20	1

801 Series LHD Intermediate Cartridge



Cartridge	Insert	F	L	Insert screw	Cartridge screw	Insert screw Driver	Cartridge screw Driver
CLP08T3I-K	LPMT08T308I-G/L	14.30	9.70	5513 020-34-M2.5	5513 020-25-M4	TORX PLUS-T8	TORX PLUS-T15
CLP12T3I-K	LPMT12T308I-G/L	15.30	14.60	5513 020-34-M2.5	5513 020-26-M5	TORX PLUS-T8	TORX PLUS-T20

801 Series LHD Peripheral Cartridge



Cartridge	Insert	F	L	Insert screw	Cartridge screw	Insert screw Driver	Cartridge screw Driver
CLP13T3P-K	LPMT13T306-K22,K23	16.10	49.50	5513 020-24-M3	5513-M5-0.8P*15L	TORX PLUS-T9	TORX PLUS-T15
CLP1806P-K	LPMT180608-K22,K23	21.00	50.70	5513 020-25-M4	5513-M6-1P*20L	TORX PLUS-T9	TORX PLUS-T15

801 Series LHD Parts & Shim set



Cartridge	Size (mm)	Order Code
CLP13T3P-K	0.05 (4pcs)	801-130420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
CLP1808P-K	0.05 (4pcs)	801-180420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	

Support Pad	Size (mm)	Order Code
LNXT350XXX-SUP	0.05 (4pcs)	0350420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
LNXT50DXXX-SUP	0.05 (4pcs)	0500420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	

Fiber Pad	Size (mm)	Order Code
142067-F	0.05 (4pcs)	670420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
202582-F	0.05 (4pcs)	820420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	

Deep Hole Drilling

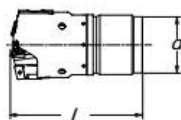
T-MAX 424.10 Series

- Diameter range: 65.00~183.90mm (Custom larger diameters available)
- Superior straightness and high-quality surface finish
- Enhanced head competitiveness with cartridge-type design
- Efficient chip evacuation for smooth processing
- Simple and quick insert replacement



Type	Thread	Diameter	Tube outer Diameter
THD	19	D120.00	-94

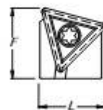
T-MAX 424.10 Series THD



Customized solutions are available for products or tube types not listed in this catalog.

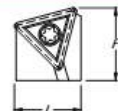
Order Code	Tube Outer diameter	Dimensions mm		Center Cartridge	Intermediate Cartridge	Peripheral Cartridge	Support Pad
		d	L				
THD-13D63.50-64.99	51.0	47.0	115	CTP16-K-L	1	CTP16-K-R	1
						CLP13-K	1
THD-13E63.50-65.00	57.0	51.0	115	CTP16-K-L	1	CTP16-K-R	1
						CLP13-K	1
THD-14D63.50-65.00	56.0	52.0	150	CTP16-K-L	1	CTP16-K-R	1
						CLP13-K	1
THD-15D65.01-74.99	62.0	58.0	150	CTP16-K-L	1	CTP16-K-R	1
						CLP13-K	1
THD-16D75.00-79.99	68.0	63.0	160	CTP16-K-L	1	CTP16-K-R	1
						CLP18-K	1
THD-17D80.00-84.99	75.0	70.0	190	CTP16-K-L	1	CTP16-K-R	1
THD-17D85.00-88.99				CTP22-K-R	1	CLP18-K	1
THD-18D88.90-94.99	82.0	77.0	190	CTP16-K-L	1	CTP22-K-R	1
THD-18D95.00-99.99				CTP22-K-L		CLP18-K	1
THD-19D100.00-107.94	94.0	89.0	195	CTP22-K-L	1	CTP22-K-R	1
THD-19D107.95-114.29				CTP16-K-L	1	CTP16-K-R	3
THD-20D114.30-120.64	108.0	101.0	220	CTP16-K-L	1	CTP16-K-R	3
						CLP13-K	1
THD-20D120.65-124.99						CLP18-K	1
						CLP18-K	1
THD-21D125.00-130.00	118.0	113.0	220	CTP16-K-L	1	CTP16-K-R	3
						CLP18-K	1
THD-22D131.00-147.99	Custom-made						
THD-23D148.00-159.99							
THD-24D160.00-171.99							
THD-25D172.00-183.99							

T-MAX 424.10 Series Center Cartridge



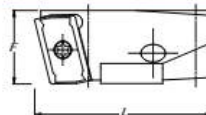
Cartridge	Insert	F	L	Insert screw	Cartridge Screw	Insert screw Driver	Cartridge Screw Driver
CTP16-K-L	TPMT16T312R-K22.K23	15.50	15.50	5513 020-24-M3	5513 020-26-M5	TORX PLUS-T9	TORX PLUS-T20
CTP22-K-L	TPMT220612R-K22.K23	20.80	20.80	5513 020-25-M4	5513 020-26-M5	TORX PLUS-T15	TORX PLUS-T20

T-MAX 424.10 Series Intermediate Cartridge



Cartridge	Insert	F	L	Insert screw	Cartridge Screw	Insert screw Driver	Cartridge Screw Driver
CTP16-K-R	TPMT16T312R-K22.K23	15.50	15.50	5513 020-24-M3	5513 020-26-M5	TORX PLUS-T9	TORX PLUS-T20
CTP22-K-R	TPMT220612R-K22.K23	20.80	20.80	5513 020-25-M4	5513 020-26-M5	TORX PLUS-T15	TORX PLUS-T20

T-MAX 424.10 Series Peripheral Cartridge



Cartridge	Insert	F	L	Insert screw	Cartridge Screw	Fiber pad Screw	Insert screw Driver
CLP13-K	LPMT131308-K22.K23	15.60	45.80	5513 020-24-M3	430.21-825-M5	1543-835-M3.0	TORX PLUS-T9
CLP18-K	LPMT180608-K22.K23	21.00	50.80	5513 020-25-M4	430.21-825-M6	1543-835-M3.0	TORX PLUS-T15

T-max 424.10 Series Support Pad Screw & Driver

Diameter Range mm	Support Pad Screw	Support Pad Screw Driver
65.00-99.99	5513 020-01-M3.5	TORX PLUS-T15
100.00-183.99	5513 020-26-M5.0	TORX PLUS-T20

Center & Intermediate Insert



★ : first recommend grade ☆ : second recommend grade

Insert size	P		M		K		N		S		I	W	S	R	
	HM3	SM3	HM3	SM3	HM3	SM3	HM3	SM3	HM3	SM3					
TPMT16T312R-K22	★	★			★	★	★	★		★	★	9.52	16.5	3.97	1.2
TPMT16T312R-K23	★	★			★	★	★	★		★	★	9.52	16.5	3.97	1.2
TPMT220612R-K22	★	★			★	★	★	★		★	★	12.7	22.0	6.35	1.2
TPMT220612R-K23	★	★			★	★	★	★		★	★	12.7	22.0	6.35	1.2

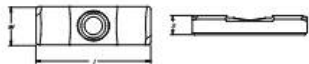
Peripheral Insert (801& T-max 424.10 Series)



★ : first recommend grade ☆ : second recommend grade

Insert size	P		M		K		N		S		I	W	S	R	
	HM3	SM3	HM3	SM3	HM3	SM3	HM3	SM3	HM3	SM3					
LPMT13T308-K22	★	★			★	★	★	★		★	★	10.0	14.3	3.96	0.8
LPMT13T308-K23	★	★			★	★	★	★		★	★	10.0	14.3	3.96	1.2
LPMT180608-K22	★	★			★	★	★	★		★	★	11.5	19.4	6.35	0.8
LPMT180608-K23	★	★			★	★	★	★		★	★	11.5	19.4	6.35	0.8

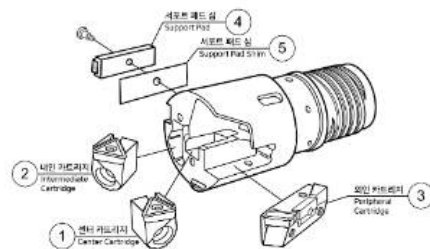
Support Pad (801& T-max 424.10 Series)



★ : first recommend grade ☆ : second recommend grade

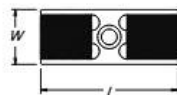
Insert size	P		M		K		N		S		I	W	S
	HM3	SM3	HM3	SM3	HM3	SM3	HM3	SM3	HM3	SM3			
LNXT35D065-SUP	★	★	★	★	★	★	★	★	★	★	35	14	7.0
LNXT35D075-SUP	★	★	★	★	★	★	★	★	★	★	35	14	7.0
LNXT35D085-SUP	★	★	★	★	★	★	★	★	★	★	35	14	7.0
LNXT50D100-SUP	★	★	★	★	★	★	★	★	★	★	50	20	8.5
LNXT50D110-SUP	★	★	★	★	★	★	★	★	★	★	50	20	8.5
LNXT50D120-SUP	★	★	★	★	★	★	★	★	★	★	50	20	8.5
LNXT50D130-SUP	★	★	★	★	★	★	★	★	★	★	50	20	8.5

T-MAX 424.10 Series THD Parts & Shim set



Cartridge	Size (mm)	Order Code
CLP13-K	0.05 (4pcs)	424-130420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
CLP18-K	0.05 (4pcs)	424-130420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
Support Pad	Size (mm)	Order Code
LNXT35DXXX-SUP	0.05 (4pcs)	0350420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
LNXT50DXXX-SUP	0.05 (4pcs)	0500420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	

SUPPORT Pad (801,818,424.10,424.31,424.32,424.41,424.42)



Insert size	Coating			L	W	S
	Non	TiAlN	IM3			
430.32-10D35.0	★	★		35	12	7.0
430.32-10D40.0	★	★		35	12	7.0
430.32-10D45.0	★	★		35	12	7.0
430.32-10D50.0	★	★		35	12	7.0
430.32-10D55.0	★	★		35	12	7.0
430.32-10D60.0	★	★		35	12	7.0
430.32-12D65.0	★	★		35	14	7.0
430.32-12D70.0	★	★		35	14	7.0
430.32-12D75.0	★	★		35	14	7.0
430.32-12D80.0	★	★		35	14	7.0
430.32-12D85.0	★	★		35	14	7.0
430.32-12D90.0	★	★		35	14	7.0
430.32-12D95.0	★	★		35	14	7.0
430.32-16D100.0	★	★		50	20	8.5
430.32-16D105.0	★	★		50	20	8.5
430.32-16D110.0	★	★		50	20	8.5
430.32-16D115.0	★	★		50	20	8.5
430.32-16D120.0	★	★		50	20	8.5
430.32-16D125.0	★	★		50	20	8.5
430.32-16D130.0	★	★		50	20	8.5
430.32-16D140.0	★	★		50	20	8.5
430.32-16D150.0	★	★		50	20	8.5
430.32-16D160.0	★	★		50	20	8.5
430.32-16D170.0	★	★		50	20	8.5
430.32-16D180.0	★	★		50	20	8.5

Deep Hole Drilling

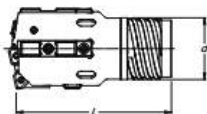
500 Series

- Precision machining quality: High dimensional precision even in BTA drilling
- Efficient chip removal: Smooth chip drain from deep holes
- Strong durability: High wear resistance to maintain long
- High productivity: High-speed processing improves processing speed and productivity
- Cartridge Type: Adjustable diameter range by changing cartridge
- Pad: Protect the head with safety pads and sub guide pads



Type	Thread	Diameter	Tube outer Diameter
IHD	19	D120.00	-94

500 Series IHD



Customized solutions are available for products or tube types not listed in this catalog.

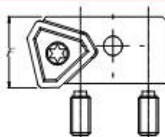
Order Code	Tube Outer diameter mm	Dimensions mm		Center Cartridge	Intermediate Cartridge	Peripheral Cartridge	Support Pad	Sub Support Pad
		D	L					
IHD-11046.50-47.99	43.0	39.0	95	CENC04-K	CENC04-K	PERC04-K	GC08 3	SC08 3
IHD-12048.00-51.70	47.0	43.0	95	CENC04-K	CENC04-K	PERC04-K	GC10 3	SC08 3
IHD-13051.71-51.99				CENC04-K	CENC04-K	PERC04-K		
IHD-13052.00-54.99	51.0	47.0	100	CENC04-K	CENC04-K	PERC32-K	GC10 3	SC08 3
IHD-13055.00-56.20				CENC32-K	CENC04-K	PERC32-K		
IHD-13056.21-57.99					CENC04-K		GC10 3	SC08 3
IHD-13058.00-59.99	57.0	51.0	110	CENC32-K	CENC32-K	PERC32-K	GC14 3	SC10 3
IHD-13060.00-63.99							GC14 3	SC10 3
IHD-13064.00-65.00							GC14 3	SC10 3
IHD-14065.00-66.99	60.0	52.0	150	CENC32-K	CENC32-K	PERC43-K	GC14 3	SC10 3
IHD-15067.00-67.99	62.0	58.0	150	CENC32-K	CENC32-K	PERC43-K	GC14 3	SC10 3
IHD-15068.00-72.99				CENC43-K	CENC43-K	PERC32-K		
IHD-16073.00-77.99	68.0	63.0	150	CENC43-K	CENC43-K	PERC32-K	GC14 3	SC10 3
IHD-16078.00-79.99								
IHD-17080.00-84.99	75.0	70.0	180	CENC43-K	CENC43-K	PERC43-K	GC14 3	SC10 3
IHD-17085.00-86.99				CENC43-K	CENC43-K	PERC63-K	GC14 3	SC10 3
IHD-18087.00-91.99				CENC43-K	CENC43-K	PERC63-K	GC14 3	SC10 3
IHD-18092.00-96.99	82.0	77.0	180	CENC63-K	CENC63-K	PERC63-K	GC16 3	SC14 3
IHD-18099.00-99.99				CENC63-K	CENC63-K	PERC63-K	GC16 3	SC14 3
IHD-190100.00-106.99	94.0	89.0	180	CENC63-K	CENC63-K	PERC63-K	GC16 3	SC14 3
IHD-190107.00-111.99				CENC63-K	CENC32-K	PERC43-K	GC16 5	SC14 3
IHD-200112.00-117.99	106.0	101.0	205	CENC43-K	CENC32-K	PERC43-K	GC16 5	SC14 3
IHD-200116.00-123.99				CENC43-K	CENC43-K			
IHD-210124.00-135.99	118.0	113.0	205	CENC43-K	CENC43-K	PERC43-K	GC16 5	SC14 3
IHD-220136.00-147.99	130.0	125.0	205	CENC63-K	CENC43-K	PERC43-K	GC16 5	SC14 3
IHD-230148.00-150.99						PERC43-K		
IHD-230151.00-156.99	142.0	137.0	225	CENC63-K	CENC43-K	PERC63-K	GC16 5	SC14 3
IHD-230157.00-169.99								
IHD-240160.00-162.99				CENC63-K	CENC43-K	PERC63-K	GC16 5	SC14 3
IHD-240163.00-168.99	154.0	149.0	225	CENC63-K	CENC63-K	PERC63-K	GC16 5	SC14 3
IHD-240169.00-171.99				CENC43-K	CENC43-K	PERC43-K	GC16 5	SC14 3
IHD-250172.00-183.99	166.0	161.0	230	CENC43-K	CENC43-K	PERC43-K	GC16 5	SC14 3
IHD-260184.00-188.99				CENC43-K	CENC43-K	PERC43-K	GC16 5	SC14 3
IHD-260189.00-195.99	178.0	173.0	250	CENC63-K	CENC43-K	PERC43-K	GC16 5	SC14 3
IHD-270196.00-207.99	190.0	185.0	250	CENC63-K	CENC43-K	PERC43-K	GC16 5	SC14 3
IHD-280208.00-208.99						PERC43-K		
IHD-280209.00-214.99	202.0	197.0	250	CENC63-K	CENC43-K	PERC43-K	GC16 5	SC14 3
IHD-280215.00-219.99						PERC63-K		
IHD-290220.00-226.99	214.0	208.0	270	CENC63-K	CENC43-K	PERC63-K	GC16 5	SC14 3
IHD-290227.00-231.99				CENC63-K	CENC63-K	PERC63-K	GC16 5	SC14 3
IHD-300232.00-232.99	226.0	220.0	270	CENC63-K	CENC63-K	PERC63-K	GC16 5	SC14 3
IHD-300233.00-243.99			294	CENC63-K	CENC43-K	PERC43-K	GC16 5	SC14 3
IHD-310244.00-247.99	238.0	232.0	294	CENC63-K	CENC43-K	PERC43-K	GC16 5	SC14 3
IHD-310248.00-255.99				CENC63-K	CENC43-K	PERC63-K		

500 Series Center & Intermediate Cartridge



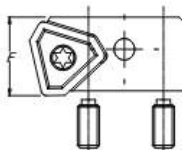
Cartridge	Insert	F	Insert screw	Cartridge screw	Insert screw driver	Cartridge screw driver
CENC04-K	TPGX140308R-G-L	11.50	FTKA02555	FTGA03508	Torx-T8	Torx-T15
CENC32-K	TPGX170408R-G-L	14.50	FTGA03508	FTGA0513-P	Torx-T15	Torx-T20
CENC43-K	TPGX240512R-G-L	19.50	FTKA0410	TSB615560	Torx-T15	Torx-T25
CENC63-K	TPGX280716R-G-L	23.50	FTGA0513-P	TSB615560	Torx-T20	Torx-T25

500 Series Peripheral Cartridge



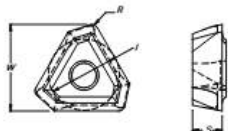
Cartridge	Insert	F	Insert screw	Cartridge screw	Insert screw driver	Cartridge screw driver
PERC04-K	TPGX140308R-G-L	11.50	FTKA02555	D-M3.5x10 (L2.5mm)	Torx-T8	M4x8 (L2mm)
PERC32-K	TPGX170408R-G-L	14.50	FTGA03508	D-M5x15 (L3mm)	Torx-T9	M5x10 (L2.5mm)
PERC43-K	TPGX240512R-G-L	19.50	FTKA0410	D-M6x20 (L4mm)	Torx-T15	M6x15 (L3mm)
PERC63-K	TPGX280716R-G-L	23.50	FTGA0513-P	D-M6x20 (L4mm)	Torx-T20	M6x15 (L3mm)

500 Series Range Expansion Cartridge



Order Code				
F+1mm	F+2mm	F+3mm	F+4mm	F+5mm
PERC04-K+1	PERC04-K+2	PERC04-K+3		
PERC32-K+1	PERC32-K+2	PERC32-K+3	PERC32-K+4	
PERC43-K+1	PERC43-K+2	PERC43-K+3	PERC43-K+4	PERC43-K+5
PERC63-K+1	PERC63-K+2	PERC63-K+3	PERC63-K+4	PERC63-K+5

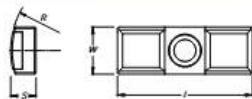
Counter Boring Insert (818, 424.41)



★ : first recommend grade ☆ : second recommend grade

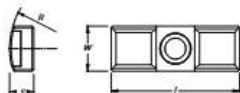
Insert size	P		M		K		N		S		I	W	S	R
	HM3	SM3	HM3	SM3	HM3	SM3	HM3	SM3	HM3	SM3				
TPGX140308R-G-L	★	☆			★	☆			★	☆	8.43	10.26	3.52	0.8
TPGX170408R-G-L	★	☆			★	☆			★	☆	10.30	12.37	4.00	0.8
TPGX240512R-G-L	★	☆			★	☆			★	☆	14.20	17.29	5.50	1.2
TPGX280716R-G-L	★	☆			★	☆			★	☆	17.00	20.46	7.57	1.6

500 Series IHD Support Pad



Order Code	I	W	S	R	Screw	Support Pad Screw Driver
GCC08	25	8	4.5	17.5	ST3072-60H	Torx-T8
GCC10	35	10	6.0	20.0	FTKA0410	Torx-T15
GCC14	40	10	7.5	25.0	FTGA0510-P	Torx-T20
GCC18	40	10	9.0	30.0	TSB612560	Torx-T25

500 Series IHD Range Expansion Support Pad



Order Code				
S+1mm	S+2mm	S+3mm	S+4mm	S+5mm
GCC08+1	GCC08+2	GCC08+3		
GCC10+1	GCC10+2	GCC10+3	GCC10+4	
GCC14+1	GCC14+2	GCC14+3	GCC14+4	GCC14+5
GCC18+1	GCC18+2	GCC18+3	GCC18+4	GCC18+5

500 Series IHD Pad

Safety Pad

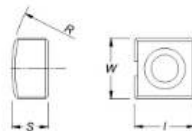


Fig 1

Sub Support Pad

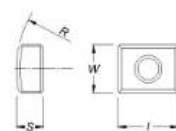
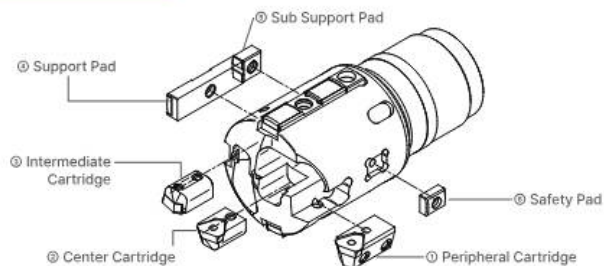


Fig 2

Pad	I	W	S	R	Fig	Pad Screw	Pad Screw Driver
PC08	8	8	4.5	17.5	1	ST3072-60H	Torx-T8
PC10	10	10	6.0	20.0	1	FTKA0410	Torx-T15
PC14	14	14	7.5	25.0	1	FTGA0510-P	Torx-T20
PC18	18	18	9.0	30.0	1	TSB612560	Torx-T25
SC08	10	8	4.5	17.5	2	ST3072-60H	Torx-T8
SC10	10	10	5.0	29.0	2	FTKA0410	Torx-T8
SC14	20	14	7.0	45.0	2	FTGA0510-P	Torx-T20

500 Series IHD Parts



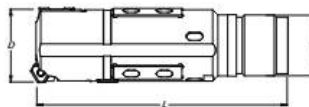
Counter Boring Head 818 Series

- A single tool allows you to process different diameters, greatly reducing work time
- Maximize processing precision by maintaining accurate diameter and shape
- Suitable for a wide range of materials, especially steel, stainless steel, aluminum, etc.
- A fiber pad is mounted on the head for stable and deep hole drilling
- It can be manufactured in a wide diameter range



Type	Thread	Diameter	Tube outer Diameter
TBH	19	D120.00	-94

Counter Boring Head 818 Series TBH



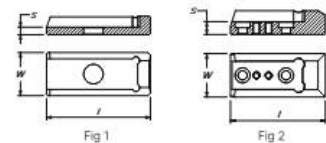
Customized solutions are available for products or tube types not listed in this catalog.

Order Code	Tube Outer diameter mm	Dimensions mm		Range of diameter adjustment	Pad Shoes	Pad Shoes Shim Set	Cartridge	Insert	Support Pad
		d	L						
TBH-08D38.10-42.30	33.0	30.0	168.00	-	818-10-0720-S	-	CTX16-K-R	TXN 160408	LNXT 0720-SUP
				2mm	818-10-0720-S1	-			
				4.2mm	818-10-0720-S2	-			
TBH-08D42.30-46.50	33.0	30.0	168.00	-	818-10-0720-S	-	CTX16-K-R	TXN 160408	LNXT 0720-SUP
				2mm	818-10-0720-S1	-			
				4.2mm	818-10-0720-S2	-			
TBH-08D46.50-50.80	33.0	30.0	168.00	-	818-10-0720-S	-	CTX16-K-R	TXN 160408	LNXT 0720-SUP
				2mm	818-10-0720-S1	-			
				4.2mm	818-10-0720-S2	-			
TBH-11D50.80-55.00	43.0	39.0	186.00	-	818-10-1030-S	-	CTX16-K-R	TXN 160408	LNXT 1030-SUP
				2mm	818-10-1030-S1	-			
				4.2mm	818-10-1030-S2	-			
TBH-11D55.00-59.20	43.0	39.0	186.00	-	818-10-1030-S	-	CTX16-K-R	TXN 160408	LNXT 1030-SUP
				2mm	818-10-1030-S1	-			
				4.2mm	818-10-1030-S2	-			
TBH-11D59.20-63.50	43.0	39.0	186.00	-	818-10-1030-S	-	CTX16-K-R	TXN 160408	LNXT 1030-SUP
				2mm	818-10-1030-S1	-			
				4.2mm	818-10-1030-S2	-			
TBH-13D83.50-67.70	51.0	47.0	186.00	-	818-10-1235-S	-	CTX16-K-R	TXN 160408	LNXT 1235-SUP
				2mm	818-10-1235-S1	-			
				4.2mm	818-10-1235-S2	-			
TBH-13D67.70-71.90	51.0	47.0	190.50	-	818-10-1235-S	-	CTX16-K-R	TXN 160408	LNXT 1235-SUP
				2mm	818-10-1235-S1	-			
				4.2mm	818-10-1235-S2	-			
TBH-13D71.90-76.20	51.0	47.0	190.50	-	818-10-1235-S	-	CTX16-K-R	TXN 160408	LNXT 1235-SUP
				2mm	818-10-1235-S1	-			
				4.2mm	818-10-1235-S2	-			
TBH-16D76.20-88.90	68.0	63.0	270.00	0.35mm	818-12-065-S	818-12-650420	CTX25-K-R	TXN 250408	LNXT35 D075-SUP
				12.7mm	818-12-065-S1				
				0.35mm	818-12-065-S				
TBH-18D88.90-101.60	82.0	77.0	310.00	12.7mm	818-12-065-S1	818-12-650420	CTX25-K-R	TXN 250408	LNXT35 D085-SUP
				0.35mm	818-12-065-S				
				12.7mm	818-12-065-S1				
TBH-19D101.60-117.60	94.0	89.0	330.00	8.0mm	818-16-110-S	818-16-110420	CTX40-K-R	TXN 400408	LNXT50 D100-SUP
				16.0mm	818-16-110-S1				
				6.0mm	818-16-110-S				
TBH-19D117.60-133.60	94.0	89.0	330.00	16.0mm	818-16-110-S1	818-16-110420	CTX40-K-R	TXN 400408	LNXT50 D100-SUP
				6.0mm	818-16-110-S				
				16.0mm	818-16-110-S1				
TBH-19D133.60-149.60	94.0	89.0	380.00	6.0mm	818-16-110-S	818-16-110420	CTX40-K-R	TXN 400408	LNXT50 D130-SUP
				16.0mm	818-16-110-S1				
				8.0mm	818-16-110-S				
TBH-20D149.60-165.60	106.0	101.0	400.00	8.0mm	818-16-110-S	818-16-110420	CTX40-K-R	TXN 400408	430.32-160140.00
				16.0mm	818-16-110-S1				

Counter Boring Head 818 Series TBH Parts

Ordering Code	Support Pad Screw	Sub Support Pad	Blank Fiber Pad	Seat protection plate	Sub Support Pad Screw	Blank Fiber Pad Screw	Seat protection plate Screw
TBH-08D38.10-42.30	4161-832-M3.0	142030-F	5571 001-05	-	5513 020-01-M3.5	CML-0306	-
TBH-08D42.30-46.50	4161-832-M3.0	142030-F	5571 001-05	-	5513 020-01-M3.5	CML-0306	-
TBH-08D46.50-50.80	4161-832-M3.0	142030-F	5571 001-05	-	5513 020-01-M3.5	CML-0306	-
TBH-11D50.80-55.00	4161-833-M3.5	142067-F	5571 001-06	-	5513 020-01-M3.5	CML-0410	-
TBH-11D55.00-59.20	4161-833-M3.5	142067-F	5571 001-06	-	5513 020-01-M3.5	CML-0410	-
TBH-11D59.20-63.50	4161-833-M3.5	142067-F	5571 001-06	-	5513 020-01-M3.5	CML-0410	-
TBH-13D63.50-67.70	4161-833-M3.5	142067-F	5571 001-06	-	5513 020-01-M3.5	CML-0410	-
TBH-13D67.70-71.90	4161-833-M3.5	142067-F	5571 001-06	5549 029-01	5513 020-01-M3.5	CML-0410	3212 020-259
TBH-13D71.90-76.20	4161-833-M3.5	142067-F	5571 001-06	5549 029-02	5513 020-01-M3.5	CML-0410	3212 020-369
TBH-16D76.20-88.90	5513 020-01-M3.5	142067-F	5571 001-07	5549 029-03	5513 020-01-M3.5	CML-0512	3212 020-360
TBH-16D88.90-101.60	5513 020-01-M 3.5	142067-F	5571 001-08	5549 029-04	5513 020-01-M3.5	CML-0614	3212 020-410
TBH-19D101.60-117.60	5513 020-26-M5.0	142067-F	5571 001-09	5549 029-04	5513 020-01-M3.5	CML-0614	3212 020-410
TBH-19D117.60-133.60	5513 020-26-M5.0	202582-F	5571 001-09	5549 029-05	5513 020-26-M5.0	CML-0614	3212 020-462
TBH-19D133.60-149.60	5513 020-26-M5.0	202582-F	5571 001-10	5549 029-05	5513 020-26-M5.0	CML-0616	3212 020-462
TBH-20D149.60-165.60	5513 020-26-M5.0	202582-F	5571 001-10	5549 029-05	5513 020-26-M5.0	CML-0616	3212 020-462

Pull-counter Boring & Conter Boring 818 Series Pad shoes



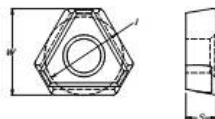
Ordering Code	L	W	S	Fig	Screw	Driver
818-10-0720-S	26	10	1.5	1	-	-
818-10-0720-S1	26	10	2.5	1	-	-
818-10-0720-S2	26	10	3.6	1	-	-
818-10-1030-S	36	15	2	1	-	-
818-10-1030-S1	36	15	3	1	-	-
818-10-1030-S2	36	15	4.1	1	-	-
818-10-1235-S	41	17	2	1	-	-
818-10-1235-S1	41	17	3	1	-	-
818-10-1235-S2	41	17	4.1	1	-	-
818-12-065-S	48	22	6.5	2	CML-0410	L-3.0
818-12-065-S1	48	22	10	2	CML-0410	L-3.0
818-16-110-S	65	32	11	2	CML-0515	L-3.0
818-16-110-S1	65	32	15	2	CML-0515	L-3.0

Counter Boring Cartridge (818 Series)



Cartridge	Insert	F	L	Insert Screw	Insert Screw Driver	Cartridge Screw	Cartridge Screw Driver
CTX16-K	TXN160408-G-L	16.00	32.00	5513 020-02-M4	TORX PLUS-T15	CML-0515	L-4.0
CTX25-K	TXN250408-G-L	24.00	54.00	5513 020-55-M5	TORX PLUS-T20	CML-0625	L-6.0
CTX40-K	TXN400708-G-L	32.00	56.00	5513 020-14-M8	TORX PLUS-T25	CML-1030	L-8.0

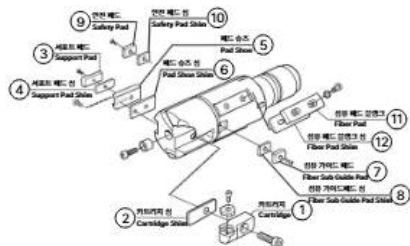
Counter Boring Insert(818 Series)



★ : first recommend grade ☆ : second recommend grade

Insert size	P HM3	M SM3 IM3	M SM3 IM3	K SM3 IM3	N SM3 IM3	S SM3 IM3	I	W	S
TXN160408-G-L	★ ☆	★ ☆	★ ☆	★ ☆	★ ☆	★ ☆	10.9	11.9	4.76
TXN250408-G-L	★ ☆	★ ☆	★ ☆	★ ☆	★ ☆	★ ☆	17.2	18.8	4.76
TXN400708-G-L	★ ☆	★ ☆	★ ☆	★ ☆	★ ☆	★ ☆	23.5	25.5	7.00

Counter Boring Head 818 Series TBH Parts & Shim Set



Cartridge (Main)	Size (mm)	Order Code	Cartridge (Compatible)	Size (mm)	Order Code		
CTX16-K	0.05 (4pcs)	CX-160420	CTP17-K-SP	0.05 (4pcs)	CX-170420		
	0.1 (4pcs)			0.1 (4pcs)			
	0.2 (4pcs)			0.2 (4pcs)			
	0.3 (4pcs)			0.3 (4pcs)			
	0.5 (4pcs)			0.5 (4pcs)			
CTX25-K	0.05 (4pcs)	CX-250420	CTP24-K-SP	0.05 (4pcs)	CX-240420		
	0.1 (4pcs)			0.1 (4pcs)			
	0.2 (4pcs)			0.2 (4pcs)			
	0.3 (4pcs)			0.3 (4pcs)			
	0.5 (4pcs)			0.5 (4pcs)			
CTX40-K	0.05 (4pcs)	CX-400420	CTP28-K-SP	0.05 (4pcs)	CX-280420		
	0.1 (4pcs)			0.1 (4pcs)			
	0.2 (4pcs)			0.2 (4pcs)			
	0.3 (4pcs)			0.3 (4pcs)			
	0.5 (4pcs)			0.5 (4pcs)			
Support Pad	Size (mm)	Order Code	Brazed Pad	Size (mm)	Order Code		
LNXT 0618-SUP	0.02 (4pcs)	800-060420	430.32-10DXX-XX	0.05 (4pcs)	0120420		
	0.03 (4pcs)			0.1 (4pcs)			
	0.05 (4pcs)			0.2 (4pcs)			
LNXT 0720-SUP	0.02 (4pcs)	800-070420	430.32-12DXX-XX	0.3 (4pcs)	0350420		
	0.03 (4pcs)			0.5 (4pcs)			
	0.05 (4pcs)			0.05 (4pcs)			
LNXT 0825-SUP	0.02 (4pcs)	800-080420	430.32-16DXX-XX	0.1 (4pcs)	0500420		
	0.03 (4pcs)			0.2 (4pcs)			
	0.05 (4pcs)			0.3 (4pcs)			
LNXT 1030-SUP	0.02 (4pcs)	800-100420	430.32-16DXX-XX	0.5 (4pcs)			
	0.03 (4pcs)			0.05 (4pcs)			
	0.05 (4pcs)			0.1 (4pcs)			
LNXT 1235-SUP	0.02 (4pcs)	800-120420	430.32-16DXX-XX	0.2 (4pcs)			
	0.03 (4pcs)			0.3 (4pcs)			
	0.05 (4pcs)			0.5 (4pcs)			
LNXT35DXXX-SUP	0.05 (4pcs)	0350420	430.32-16DXX-XX	0.05 (4pcs)	0500420		
	0.1 (4pcs)			0.1 (4pcs)			
	0.2 (4pcs)			0.2 (4pcs)			
	0.3 (4pcs)			0500420			
	0.5 (4pcs)					0.5 (4pcs)	
0.05 (4pcs)	0.05 (4pcs)						
LNXT50DXXX-SUP	0.1 (4pcs)	0500420		430.32-16DXX-XX	0.1 (4pcs)	0500420	
	0.2 (4pcs)				0.2 (4pcs)		
	0.3 (4pcs)				0.3 (4pcs)		
	0.5 (4pcs)				0500420		
	0.05 (4pcs)						0.05 (4pcs)
0.1 (4pcs)	0.1 (4pcs)						

818 Series TBH Shim Set

Pad shoes	Size (mm)	Order Code	Safety Pad	Size (mm)	Order Code
818-12-065-S	0.05 (4pcs)	818-12-650420	142030-S	0.05 (4pcs)	300420S
	0.1 (4pcs)			0.1 (4pcs)	
	0.2 (4pcs)			0.2 (4pcs)	
	0.3 (4pcs)			0.3 (4pcs)	
	0.5 (4pcs)			0.5 (4pcs)	
818-16-110-S	0.05 (4pcs)	818-16-110420	142067-S	0.05 (4pcs)	670420S
	0.1 (4pcs)			0.1 (4pcs)	
	0.2 (4pcs)			0.2 (4pcs)	
	0.3 (4pcs)			0.3 (4pcs)	
	0.5 (4pcs)			0.5 (4pcs)	
818-18-300-R	0.05 (4pcs)	818-18-300420	202582-S	0.05 (4pcs)	820420S
	0.1 (4pcs)			0.1 (4pcs)	
	0.2 (4pcs)			0.2 (4pcs)	
	0.3 (4pcs)			0.3 (4pcs)	
	0.5 (4pcs)			0.5 (4pcs)	
818-26-500-R	0.05 (4pcs)	818-26-500420			
	0.1 (4pcs)				
	0.2 (4pcs)				
	0.3 (4pcs)				
	0.5 (4pcs)				

Fiber Pad	Size (mm)	Order Code	Blank fiber Pad	Size (mm)	Order Code
142067-F	0.05 (4pcs)	670420F	5571 001-08	1.0 (3pcs)	00108-1
	0.1 (4pcs)		5571 001-09	1.0 (3pcs)	00109-1
	0.2 (4pcs)		5571 001-10	1.0 (3pcs)	00110-1
	0.3 (4pcs)			1.0 (3pcs)	00111-1
	0.5 (4pcs)		5571 001-11	1.0 (3pcs)	00112-1
0.05 (4pcs)	820420F	5571 001-12		1.0 (3pcs)	00113-1
202582-F	0.1 (4pcs)	820420F	5571 001-11	1.0 (3pcs)	00114-1
	0.2 (4pcs)			1.0 (3pcs)	00115-1
	0.3 (4pcs)			1.0 (3pcs)	00116-1
	0.5 (4pcs)			1.0 (3pcs)	00117-1
	0.5 (4pcs)			1.0 (3pcs)	00118-1

Pull-Counter Bore BBH Series

• Superior Concentricity and Straightness

By using the pre-drilled hole as a guide and machining through a pulling action, this method significantly reduces vibration compared to the conventional push-type, ensuring the center axis remains perfectly aligned.

• Excellent Surface Finish

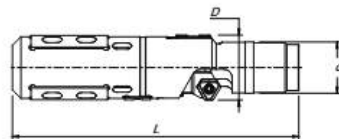
Equipped with fiber pads as shown, the head absorbs vibrations during machining and smooths the internal bore walls for a superior finish.

• Stability in Deep-Hole Machining

The pull-boring structure applies tensile force to the tool, preventing bending and ensuring high stability even when machining extremely deep holes.



Pull-Counter Bore (BBH Seires)



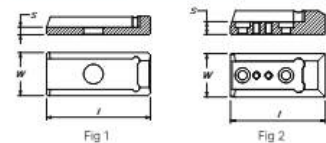
Customized solutions are available for products or tube types not listed in this catalog.

Order Code	Tube Outer diameter mm	Dimensions mm		Range of diameter adjustment	Pad Shoes	Cartridge	Insert	Support Pad
		d	L					
BBH-08D38.10-42.30	33.0	30.0	168.00	-	818-10-0720-S	CTX16-K-LS	TXN 160406	LNXT 0720-SUP
				2mm	818-10-0720-S1			
				4.2mm	818-10-0720-S2			
BBH-08D42.30-46.30	33.0	30.0	168.00	-	818-10-0720-S	CTX16-K-LS	TXN 160408	LNXT 0720-SUP
				2mm	818-10-0720-S1			
				4.2mm	818-10-0720-S2			
BBH-08D46.30-50.80	33.0	30.0	168.00	-	818-10-0720-S	CTX16-K-LS	TXN 160408	LNXT 0720-SUP
				2mm	818-10-0720-S1			
				4.2mm	818-10-0720-S2			
BBH-11D50.80-55.00	43.0	39.0	186.00	-	818-10-1030-S	CTX16-K-LS	TXN 160408	LNXT 1030-SUP
				2mm	818-10-1030-S1			
				4.2mm	818-10-1030-S2			
BBH-11D55.00-59.20	43.0	39.0	186.00	-	818-10-1030-S	CTX16-K-LS	TXN 160408	LNXT 1030-SUP
				2mm	818-10-1030-S1			
				4.2mm	818-10-1030-S2			
BBH-11D59.20-63.50	43.0	39.0	186.00	-	818-10-1030-S	CTX16-K-LS	TXN 160408	LNXT 1030-SUP
				2mm	818-10-1030-S1			
				4.2mm	818-10-1030-S2			
BBH-13D63.50-67.70	51.0	47.0	186.00	-	818-10-1235-S	CTX16-K-LS	TXN 160406	LNXT 1235-SUP
				2mm	818-10-1235-S1			
				4.2mm	818-10-1235-S2			
BBH-13D67.70-71.90	51.0	47.0	190.50	-	818-10-1235-S	CTX16-K-LS	TXN 160408	LNXT 1235-SUP
				2mm	818-10-1235-S1			
				4.2mm	818-10-1235-S2			
BBH-13D71.90-76.20	51.0	47.0	190.50	-	818-10-1235-S	CTX16-K-LS	TXN 160408	LNXT 1235-SUP
				2mm	818-10-1235-S1			
				4.2mm	818-10-1235-S2			
BBH-16D76.20-88.90	68.0	63.0	270.00	6.35mm	818-12-065-S	CTX25-K-LS	TXN 250408	LNXT35 D075-SUP
				12.7mm	818-12-065-S1			
				6.35mm	818-12-065-S2			
BBH-18D88.90-101.60	82.0	77.0	310.00	12.7mm	818-12-065-S1	CTX25-K-LS	TXN 250408	LNXT35 D085-SUP
				6.35mm	818-12-065-S2			
				12.7mm	818-12-065-S3			
BBH-19D101.60-117.80	94.0	89.0	330.00	8.0mm	818-16-110-S	CTX40-K-LS	TXN 400408	LNXT50 D100-SUP
				16.0mm	818-16-110-S1			
				8.0mm	818-16-110-S2			
BBH-19D117.80-133.60	94.0	89.0	330.00	16.0mm	818-16-110-S1	CTX40-K-LS	TXN 400408	LNXT50 D100-SUP
				8.0mm	818-16-110-S2			
				16.0mm	818-16-110-S3			
BBH-19D133.60-149.60	94.0	89.0	380.00	8.0mm	818-16-110-S1	CTX40-K-LS	TXN 400408	LNXT50 D130-SUP
				16.0mm	818-16-110-S2			
				8.0mm	818-16-110-S3			
BBH-20D149.60-165.60	106.0	101.0	400.00	8.0mm	818-16-110-S1	CTX40-K-LS	TXN 400408	430.32-150140.00
				16.0mm	818-16-110-S2			
				8.0mm	818-16-110-S3			

Pull-Counter Boring Head 818 Series BBH Parts

Ordering Code	Support Pad Screw	Sub Support Pad	Blank Fiber Pad	Sub Support Pad Screw	Sub Support Pad Screw	Shape
BBH-08038.10-42.30	4161-832-M3.0	142030-F	5571 001-05	5513 020-01-M3.5	CML-0306	Fig1
BBH-08042.30-46.50	4161-832-M3.0	142030-F	5571 001-05	5513 020-01-M3.5	CML-0306	
BBH-08046.50-50.80	4161-832-M3.0	142030-F	5571 001-05	5513 020-01-M3.5	CML-0306	
BBH-11050.80-55.00	4161-833-M3.5	142067-F	5571 001-06	5513 020-01-M3.5	CML-0410	
BBH-11055.00-59.20	4161-833-M3.5	142067-F	5571 001-06	5513 020-01-M3.5	CML-0410	
BBH-11059.20-63.50	4161-833-M3.5	142067-F	5571 001-06	5513 020-01-M3.5	CML-0410	Fig2
BBH-13D63.50-67.70	4161-833-M3.5	142067-F	5571 001-06	5513 020-01-M3.5	CML-0410	
BBH-13D67.70-71.90	4161-833-M3.5	142067-F	5571 001-06	5513 020-01-M3.5	CML-0410	
BBH-13D71.90-76.20	4161-833-M3.5	142067-F	5571 001-06	5513 020-01-M3.5	CML-0410	
BBH-16D76.20-88.90	5513 020-01-M3.5	142067-F	5571 001-07	5513 020-01-M3.5	CML-0512	
BBH-18D88.90-101.60	5513 020-01-M 3.5	142067-F	5571 001-08	5513 020-01-M3.5	CML-0614	Fig2
BBH-18D101.60-117.60	5513 020-26-M5.0	142067-F	5571 001-09	5513 020-01-M3.5	CML-0614	
BBH-19D117.60-133.80	5513 020-26-M5.0	202582-F	5571 001-09	5513 020-26-M5.0	CML-0614	
BBH-19D133.80-149.60	5513 020-26-M5.0	202582-F	5571 001-10	5513 020-26-M5.0	CML-0816	
BBH-20D149.60-165.60	5513 020-26-M5.0	202582-F	5571 001-10	5513 020-26-M5.0	CML-0816	

Pull-counter Boring & Conter Boring 818 Series Pad shoes



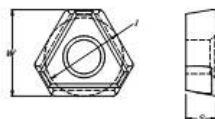
Ordering Code	L	W	S	Fig	Screw	Driver
818-10-0720-S	26	10	1.5	1	-	-
818-10-0720-S1	26	10	2.5	1	-	-
818-10-0720-S2	26	10	3.6	1	-	-
818-10-1030-S	36	15	2	1	-	-
818-10-1030-S1	36	15	3	1	-	-
818-10-1030-S2	36	15	4.1	1	-	-
818-10-1235-S	41	17	2	1	-	-
818-10-1235-S1	41	17	3	1	-	-
818-10-1235-S2	41	17	4.1	1	-	-
818-12-065-S	48	22	6.5	2	CML-0410	L-3.0
818-12-065-S1	48	22	10	2	CML-0410	L-3.0
818-16-110-S	65	32	11	2	CML-0515	L-3.0
818-16-110-S1	65	32	15	2	CML-0515	L-3.0

Pull-Counter Boring Cartridge (818 Series)



Cartridge	Insert	F	L	Insert Screw	Insert Screw Driver	Cartridge Screw	Cartridge Screw Driver
CTX16-K-LS	TXN160408-G-L	16	32	5513 020-02-M4	TORX PLUS-T15	CML-0515	L-4.0
CTX25-K-LS	TXN250408-G-L	24	54	5513 020-55-M5	TORX PLUS-T20	CML-0825	L-6.0
CTX40-K-LS	TXN400708-G-L	32	56	5513 020-14-M8	TORX PLUS-T25	CML-1030	L-8.0

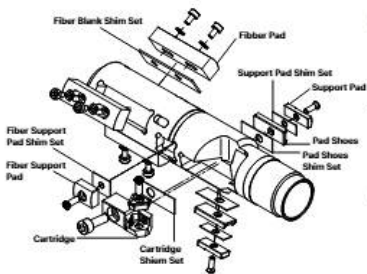
Pull-Counter Boring Insert(818 Series)



★ : first recommend grade ☆ : second recommend grade

Insert size	P HM3	M SM3 IM3	M HM3 IM3	K HM3 IM3	N SM3 IM3	S HM3 IM3	I	W	S
TXN160408-G-L	★ ☆	★ ☆	★ ☆	★ ☆	★ ☆	★ ☆	10.9	11.9	4.76
TXN250408-G-L	★ ☆	★ ☆	★ ☆	★ ☆	★ ☆	★ ☆	17.2	18.8	4.76
TXN400708-G-L	★ ☆	★ ☆	★ ☆	★ ☆	★ ☆	★ ☆	23.5	25.5	7.00

Counter Boring Head 818 Series TBH Parts & Shim Set



Support Pad	Size (mm)	Order Code
LNXT 0618-SUP	0.02 (4pcs)	800-060420
	0.03 (4pcs)	
	0.05 (4pcs)	
LNXT 0720-SUP	0.02 (4pcs)	800-070420
	0.03 (4pcs)	
	0.05 (4pcs)	
LNXT 0825-SUP	0.02 (4pcs)	800-080420
	0.03 (4pcs)	
	0.05 (4pcs)	
LNXT 1030-SUP	0.02 (4pcs)	800-100420
	0.03 (4pcs)	
	0.05 (4pcs)	
LNXT 1235-SUP	0.02 (4pcs)	800-120420
	0.03 (4pcs)	
	0.05 (4pcs)	
Support Pad	Size (mm)	Order Code
LNXT35DXXX-SUP	0.05 (4pcs)	0350420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
LNXT50DXXX-SUP	0.05 (4pcs)	0500420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	

Fiber Blank	Size (mm)	Order Code
5571 001-08	1.0 (3pcs)	00108-1
5571 001-09	1.0 (3pcs)	00109-1
5571 001-10	1.0 (3pcs)	00110-1
5571 001-11	1.0 (3pcs)	00111-1
5571 001-12	1.0 (3pcs)	00112-1

Cartridge	Size (mm)	Order Code
CTX16-K	0.05 (4pcs)	CX-160420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
CTX25-K	0.05 (4pcs)	CX-250420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
CTX40-K	0.05 (4pcs)	CX-400420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	

Pad Shoes	Size (mm)	Order Code
818-12-065-S	0.05 (4pcs)	818-12-650420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
818-16-110-S	0.05 (4pcs)	818-16-110420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
818-18-300-R	0.05 (4pcs)	818-18-300420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
818-26-500-R	0.05 (4pcs)	818-26-500420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	

Fiber Support Pad	Size (mm)	Order Code
142067-F	0.05 (4pcs)	670420F
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
202582-F	0.05 (4pcs)	820420F
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	

INSERT HM3 Features

IL JIN TOOL's HM3 grade is optimized for processing carbon steel, alloy steel, forged steel, etc. Also, it is basically the grade that is used a lot among gun drill inserts.

This grade has the following characteristics.

- Excellent wear resistance: It is resistant to friction and heat generated during processing, so it has a long tool life and boasts high wear resistance.
- Maintain hot hardness: Excellent hardness at high temperatures makes it suitable for high-speed processing.
- Coverage: Mostly used for various processing, such as cutting and milling of general steel, alloy steel, cast steel, etc.
- Suitable for high-speed and high-load machining: provides stable performance even under high cutting speeds and strong machining conditions.

HM3 grade provides high efficiency and productivity in a variety of metalworking operations, especially in continuous machining operations, which greatly helps extend tool life.

HM3 Grade			
ISO P	- Range 25-40 - Best for P material. - PVD coating general grade that balances wear resistance and toughness.	ISO M	- Range 20-30 - Suitable for stainless steel but low toughness.
ISO K	- Range 20-35 - 주철 가공에서 고속 절삭 성능을 발휘.	ISO N	- Range 10-20 - Good wear resistance in nonferrous metals.
ISO S	- Range 10-25 - Inconel and titanium materials show low performance, but provide moderate wear resistance		



INSERT SM3 Features

ILJIN TOOL's SM3 grade is mainly a high-performance cutting tool material optimized for stainless steel and stainless steel and hard to process processing. SM3 performs well, especially in gun drill operations.

This grade has the following characteristics.

- Excellent oxidation resistance: Excellent oxidation resistance at high temperatures, resulting in longer tool life.
- High heat resistance: It maintains stable cutting performance even at high temperatures and is suitable for high-speed processing or high-load operations.
- Optimized hard to process materials: Excellent performance in hard-to-process materials such as stainless steel and inconels.
- Reduce cutting resistance: Minimize cutting resistance to reduce tool wear and friction during machining.
- Uniform machining performance: Stable uniform performance under various cutting conditions.

If HM3 grade is a commonly used re-type, SM3 grade is primarily used to work on hard-to-work materials, especially in the machining of high-level materials to reduce heat generation and wear, which is excellent for extending tool life.



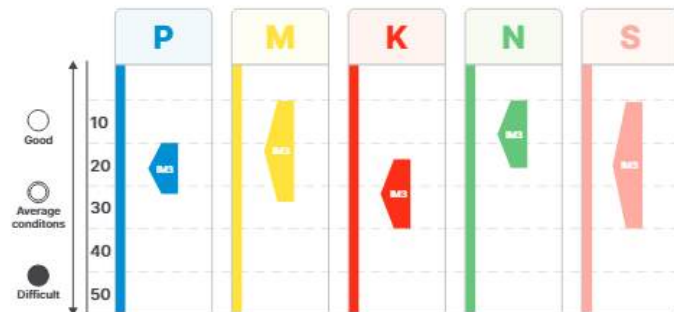
INSERT IM3 Features

ILJIN TOOL's IM3 grade is a premium-grade coating used, which further enhances durability through double coating. The IM3 coating performs well in high-temperature and high-speed processing environments.

This grade has the following characteristics.

- Durability enhanced by double coating: Unlike conventional coating, IM3 uses double coating technology to significantly improve the durability of the tool, providing a long life even in extreme processing conditions.
- Smooth surface: Despite double coating, it maintains a very smooth surface to reduce friction and improve the surface quality of the workpiece.
- Premium grade performance: It is the most premium grade of the coatings used in ILJIN TOOL, and it performs so well that it achieves the best performance in difficult cutting and high-level processing operations.
- Optimized for hard to materials: IM3 coatings are especially used for hard to materials such as INCONEL 718, ensuring high cutting performance and tool life even in these highly difficult materials.

IM3 grade performs best, especially in high-speed and high-load machining, and is the highest-performing coating that can significantly extend the lifespan of the tool to reduce machining costs.



INSERT PM3 Features

IL JIN TOOL's PM3 grade is a CVD coated carbide material used, which is used for the gun drill guide pad. This grade is specialized for the machining of hard to materials such as nickel alloy, stainless steel, etc.

This grade has the following characteristics.

- Excellent wear resistance: Provides excellent wear resistance and heat resistance, providing stable performance even in high-speed and high-volume processing environments.
- High Lifetime: High wear resistance extends the life of the guide pad, especially in cutting. This is also very advantageous in high speed machining environments.
- Coverage: It can be used in a variety of processing conditions and is a very versatile grade. It can be used extensively in various industries and shows excellent performance in many processing environments.
- Coating: CVD coating is applied to maximize wear resistance, greatly extending the life of the guide pad.

The PM3 grade excels in high-level processing and is widely used as a versatile product.

PM3 Grade	
ISO P	- Range 25-35 - Wear-resistant coating support pad.
ISO K	- Range 40-50 - Show excellent wear resistance in cast iron.
ISO S	- Range 35-45 - Balancing toughness and wear resistance in hard to materials.
ISO M	- Range 30-45 - Suitable for stainless steel.
ISO N	- Range 20-35 - Good wear resistance in nonferrous metals



Deep Hole Drilling Cutting data for STS & Ejector drill heads 700

ISO	Workpiece materials	Grade	Cutting Speed Vc (m/min)	Feed, f_n (mm/r)		
				Drill diameter (mm)		
				ø11.80- ø18.00	ø18.01- ø25.00	ø25.01- ø33.30
P	Non-alloyed steel	HM3	80-120	0.05-0.10	0.08-0.18	0.10-0.22
	Low alloy steel	HM3	80-120	0.06-0.12	0.08-0.19	0.10-0.23
	High alloy steel	HM3	70-100	0.04-0.10	0.06-0.14	0.08-0.18
M	Stainless steel	SM3	70-130	0.08-0.20	0.04-0.10	0.05-0.12
K	Gray iron Nodular	HM3	80-140	0.05-0.15	0.08-0.20	0.10-0.25
N	Aluminium alloy Copper alloy	HM3	100-200	0.08-0.15	0.10-0.20	0.12-0.25
S	Heat resistant super alloys	IM3	20-50	0.02-0.08	0.03-0.10	0.04-0.12

Deep Hole Drilling

Cutting data for STS & Ejector drill heads 800

ISO	Workpiece materials	Grade	Cutting Speed Vc (m/min)	Feed, f_n (mm/r)		
				Drill diameter (mm)		
				ø25.00- ø30.00	ø30.01- ø45.00	ø45.01- ø65.00
P	Non-alloyed steel	HM3	60-120	0.10-0.30	0.10-0.35	0.12-0.45
	Low alloy steel	HM3	60-110	0.10-0.30	0.13-0.40	0.18-0.45
	High alloy steel	HM3	50-110	0.10-0.30	0.13-0.40	0.18-0.45
M	Stainless steel	SM3	40-100	0.10-0.30	0.13-0.40	0.18-0.45
K	Gray iron Nodular	HM3	60-100	0.10-0.30	0.15-0.35	0.20-0.40
N	Aluminium alloy Copper alloy	HM3	60-140	0.07-0.30	0.13-0.30	0.20-0.35
S	Heat resistant super alloys	IM3	10-50	0.09-0.30	0.15-0.32	0.20-0.33

Deep Hole Drilling

Cutting data for STS & Ejector drill heads 801

ISO	Workpiece materials	Grade	Cutting Speed Vc (m/min)	Feed, f_n (mm/r)	
				Drill diameter (mm)	
				≥ 65.00	
P	Non-alloyed steel	HM3	70-100	0.08-0.18	
	Low alloy steel	HM3	60-100	0.08-0.19	
	High alloy steel	HM3	60-100	0.06-0.14	
M	Stainless steel	SM3	40-80	0.04-0.10	
K	Gray iron Nodular	HM3	60-100	0.08-0.20	
N	Aluminium alloy Copper alloy	HM3	60-120	0.10-0.20	
S	Heat resistant super alloys	IM3	10-40	0.15-0.30	

Deep Hole Drilling

Cutting data for STS&Ejector drill heads T-max 424.10

ISO	Workpiece materials	Grade	Cutting Speed Vc (m/min)	Feed, f_n (mm/r)		
				Drill diameter (mm)		
				≥ 65.00		
P	Non-alloyed steel	HM3	70-100	0.10-0.30	0.10-0.35	0.16-0.33
	Low alloy steel	HM3	60-100	0.10-0.30	0.13-0.40	0.16-0.33
	High alloy steel	HM3	60-100	0.10-0.30	0.13-0.40	0.15-0.30
M	Stainless steel	SM3	55-90	0.10-0.30	0.13-0.40	0.15-0.35
K	Gray iron Nodular	HM3	60-100	0.10-0.30	0.15-0.35	0.15-0.35
N	Aluminium alloy Copper alloy	HM3	65-130	0.07-0.30	0.13-0.30	0.10-0.30
S	Heat resistant super alloys	IM3	20-65	0.09-0.30	0.15-0.32	0.15-0.30

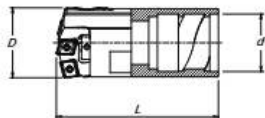
Counter Boring Head

Cutting data for 818 Series

ISO	Workpiece materials	Grade	Cutting Speed Vc (m/min)	Feed, f_n (mm/r)		
				Cutting depth (mm)		
				1-3	3-8	≥ 8
P	Non-alloyed steel	HM3	70-100	0.20-0.35	0.18-0.35	0.18-0.35
	Low alloy steel	HM3	60-110	0.20-0.35	0.18-0.35	0.18-0.35
	High alloy steel	HM3	60-100	0.20-0.30	0.18-0.30	0.18-0.30
M	Stainless steel	SM3	55-90	0.20-0.35	0.15-0.35	0.15-0.35
K	Gray iron Nodular	HM3	60-100	0.20-0.35	0.15-0.35	0.15-0.35
N	Aluminium alloy Copper alloy	HM3	65-130	0.20-0.45	0.18-0.45	0.18-0.45
S	Heat resistant super alloys	IM3	20-65	0.09-0.30	0.15-0.32	0.12-0.30

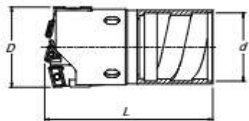
BTA & Counter Boring Head [Single-Start Thread]

* A minimum order quantity (MOQ) applies to single-start thread BTA heads.



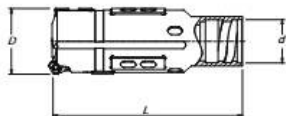
I 800 Series

- Diameter : _____
- Tube outer diameter : _____



I T-MAX 424.10 Series

- Diameter : _____
- Tube outer diameter : _____

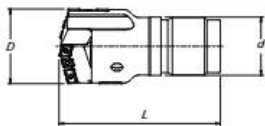


I 818 Series

- Diameter : _____
- Tube outer diameter : _____

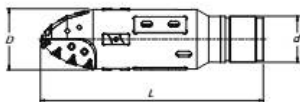
Special BTA

* A minimum order quantity (MOQ) applies to custom BTA heads.



I 800 Series

- Diameter : _____
- Tube outer diameter : _____



I Taper Series

- Diameter : _____
- Tube outer diameter : _____
- Taper Angle : _____



Drilling Tools



700.10 Series GHD

- Small diameter range: Dia 11.80-33.30mm
- Easy insert replacement
- Smooth chip evacuation for consistent productivity
- Versatile machining for various materials



700.20 Series GHD

- Small diameter range: Dia 33.31-65.00mm
- Easy insert replacement
- Smooth chip evacuation for consistent productivity
- Versatile machining for various materials



800 Series DHD

- Most commonly used diameter range
- High-speed drilling performance
- Stock in a variety of sizes
- Superior machining stability through efficient chip evacuation



801 Series LHD

- Designed for large diameters from Dia 65.00mm
- Cartridge design for enhanced cost-efficiency and versatility
- Stable drilling with minimized vibration
- Safety pad protects the head
- Extensive customization



T-max 424.10 Series THD

- Wide range of diameters can be manufactured
- Cartridge design for enhanced cost-efficiency and versatility
- Ensures high precision even in deep hole machining
- Efficient Chip Control

Drilling Tools



I 500 Series IHD

- Wide range of diameters (Diameter 40.00-255.99mm)
- Safety pads applied to prevent head damage
- Stable drilling through smooth chip evacuation
- Adjustable diameter using various pads

Counter Boring Head Tools



I 818 Series TBH

- Excellent counter boring
- Excellent stability due to long fiber pads
- Adjust Counterbore Diameter
- Replace insert using cartridge



I 818 Series BBH

- Maximized straightness through pull-boring
- Achieves superior surface finish by minimizing vibration
- Maintains stable precision during deep-hole boring
- Increases operational efficiency with an effective chip evacuation structure

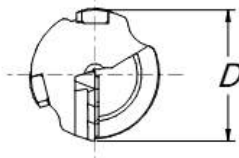
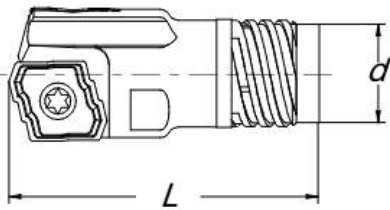
Deep Hole Drilling 700 Series

- Manufacturing range: Diameter 12.00–65.00mm
- Streamlined inventory: Multiple diameter ranges compatible with a single insert type
- Cost-effective solution: Minimize tool costs with versatile insert compatibility



Type	Thread	Diameter	Tube outer Diameter
GHD	13	D65.00	-51

700.20 Series (Dia 12.00-33.30mm)



Diameter Range mm	Tube outer diameter mm	Order Code	Dimensions mm		Insert	Support Pad
			d	L		
12.00~13.60	11.0	GHD-94D***	9.6	58.0	LXET06T104-DR	LNXT0418-R055
13.61~13.99	12.0	GHD-95D***	10.6	58.0	LXET06T104-DR	LNXT0418-R055
14.00~14.62	12.0				LXET080204-DR	LNXT0418-R065
14.63~14.99	13.0	GHD-96D***	11.6	58.0	LXET080204-DR	LNXT0418-R065
15.00~15.49	13.0					LNXT0618-R070
15.50~15.59	13.0					
15.60~15.99	14.0	GHD-97D***	12.6	60.0	LXET080204-DR	LNXT0618-R070
16.00~16.50	14.0				LXET09T204-DR	LNXT0618-R075
16.51~16.69	14.0					
16.70~17.69	15.0	GHD-98D***	13.6	60.0	LXET09T204-DR	LNXT0618-R075
17.70~17.99	16.0	GHD-99D***	14.5	60.0	LXET09T204-DR	LNXT0618-R075
18.00~18.89	16.0				LXET100305-DR	LNXT0618-R085
18.90~19.50	17.0	GHD-00D***	15.5	61.0	LXET100305-DR	LNXT0618-R085
19.51~19.99	17.0					
20.00~21.79	18.0	GHD-01D***	16.0	61.0	LXET110305-DR	LNXT0618-R095
21.80~21.99	20.0	GHD-02D***	18.0	61.0	LXET110305-DR	LNXT0618-R095
22.00~22.50	20.0				LXET13T305-DR	LNXT0618-R105
22.51~24.09	20.0					
24.10~24.99	22.0	GHD-03D***	19.5	65.0	LXET13T305-DR	LNXT0618-R105
25.00~26.39	22.0				LXET140405-DR	LNXT0618-R120
26.40~28.69	24.0	GHD-04D***	21.0	68.0	LXET140405-DR	LNXT0618-R120
28.70~30.99	26.0	GHD-05D***	23.5	73.0	LXET150505-DR	LNXT0618-R130
31.00~33.30	28.0	GHD-06D***	25.5	75.0	LXET160605-DR	LNXT0720-R140

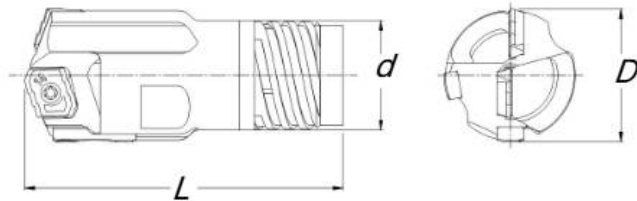
700 Series diameter range Insert & Pad (Dia 12.00-33.30mm)

Diameter Range mm	Insert	Diameter Range mm	Support Pad
12.00~13.60	LXET 06T104-DR	12.00-13.99	LNXT 0418-R055
14.00-15.99	LXET 080204-DR	14.00-14.99	LNXT 0418-R065
16.00-17.99	LXET 09T204-DR	15.00-15.99	LNXT 0618-R070
18.00-19.99	LXET 100305-DR	16.00-17.99	LNXT 0618-R075
20.00-21.99	LXET 110305-DR	18.00-19.99	LNXT 0618-R085
22.00-24.99	LXET 13T305-DR	20.00-21.99	LNXT 0618-R095
25.00-28.69	LXET 140405-DR	22.00-24.99	LNXT 0618-R105
28.70-30.99	LXET 150505-DR	25.00-28.69	LNXT 0618-R120
31.00-33.30	LXET 160605-DR	28.70-30.99	LNXT 0618-R130
		31.00-33.30	LNXT 0720-R140

700 Series Screw (Dia 12.00-33.30mm)

Diameter Range mm	Insert screw	Insert screw driver	Support pad screw	Support pad screw driver
12.00-13.99	FTNA02205-M2.2	TORX-T6	FTNA02205-M2.2	TORX-T6
14.00-14.99	FTKA02543S-M2.5	TORX-T8		
15.00-15.49	FTKA02543S-M2.5	TORX-T8	FTKA02555-M2.5	TORX-T7
15.50-16.50	FTKA02543S-M2.5	TORX-T8		
16.51-17.99	FTKA02550S-M2.5	TORX-T8		
18.00-19.50	FTNA0305-M3.0	TORX-T9		
19.51-21.99	FTNA0306-M3.0	TORX-T9		
22.00-22.50	FTGA03575-M3.5	TORX-T15		
22.51-28.69	FTGA03508-M3.5	TORX-T15		
28.70-30.99	FTKA0410-M4.0	TORX-T15	FTKA02555-M2.5	TORX-T7
31.00-33.30			FTKA0383-60-M3.0	TORX PLUS-T9

700.20 Series (Dia 33.31-65.00mm)



Diameter Range mm D	Tube outer diameter mm	Order Code	Dimensions mm		Insert	Flute	Support Pad
			d	L			
33.31~36.20	30.0	GHD-07D**,**	28.0	76.0	LXET13T305-DR	2	LNXT0720-R140
36.21~37.99	33.0	GHD-08D**,**	30.0	86.0	LXET13T305-DR		LNXT0720-R140
38.00~39.60					LXET140405-DR		LNXT0825-SUP
39.61~43.00	36.0	GHD-09D**,**	33.0	90.0	LXET140405-DR		LNXT0825-SUP
43.01~47.00	39.0	GHD-10D**,**	36.0	92.0	LXET150505-DR		LNXT0825-SUP
47.01~51.70	43.0	GHD-11D**,**	39.0	100.0	LXET160605-DR		LNXT1030-SUP
51.71~52.49	47.0	GHD-12D**,**	43.0	105.0	LXET160605-DR	3	LNXT1030-SUP
52.50~56.20					LXET13T305-DR		LNXT1030-SUP
56.21~59.99	51.0	GHD-13D**,**	47.0	110.0	LXET13T305-DR		LNXT1030-SUP
60.00~65.00					LXET140405-DR		LNXT1235-SUP

700 Series diameter range Insert & Screw (Dia 33.31-65.00mm)

Diameter Range mm	Insert	Insert Screw	Insert screw driver
33.31-37.99	LXET 13T305-DR	FTGA03508-M3.5	TORX-T15
38.00-43.00	LXET 140405-DR		
43.01-47.00	LXET 150505-DR	FTKA0410-M4.0	
47.01-52.49	LXET 160605-DR		
52.50-56.20	LXET 13T305-DR	FTGA03508-M3.5	
60.00-65.00	LXET 140405-DR		

700 Series diameter range Support pad & Screw (Dia 33.31-65.00mm)

Diameter Range mm	Support Pad	Support Pad Screw	Support Pad screw driver
33.31-37.99	LNXT 0720-R140	FTKA0383-60-M3.0	TORX PLUS-T9
38.00-47.00	LNXT 0825-SUP	5513 020-16-M3.5	TORX PLUS-T10
47.01-59.99	LNXT 1030-SUP	416.1-833-M3.5	
60.00-65.00	LNXT 1235-SUP		

INSERT

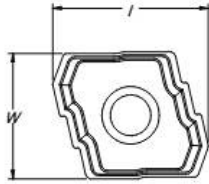


Fig.2



HM3

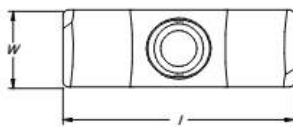


SM3&IM3

★ : first recommend grade ☆ : second recommend grade

Insert size	P			M			K			N			S			I	W	S	Fig
	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3				
LXET06T104-DR	★	☆			★	☆	★	☆			★	☆		☆	★	9.5	7.3	2.0	2
LXET080204-DR	★	☆			★	☆	★	☆			★	☆		☆	★	11.0	8.6	2.3	
LXET09T204-DR	★	☆			★	☆	★	☆			★	☆		☆	★	12.0	8.6	2.8	
LXET100305-DR	★	☆			★	☆	★	☆			★	☆		☆	★	13.5	10.6	3.0	
LXET110305-DR	★	☆			★	☆	★	☆			★	☆		☆	★	15.0	11.7	3.3	
LXET13T305-DR	★	☆			★	☆	★	☆			★	☆		☆	★	15.5	13.2	3.75	
LXET140405-DR	★	☆			★	☆	★	☆			★	☆		☆	★	15.5	14.7	4.0	
LXET150405-DR	★	☆			★	☆	★	☆			★	☆		☆	★	16.5	16.2	4.5	
LXET160505-DR	★	☆			★	☆	★	☆			★	☆		☆	★	16.5	17.4	5.0	

SUPPORT PAD



HM3



SM3&IM3

★ : first recommend grade ☆ : second recommend grade

Insert size	P		M		K		N		S		I	W	S
	PM3	IM3	PM3	IM3	PM3	IM3	PM3	IM3	PM3	IM3			
LNXT0418-R055	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	4.0	2.2
LNXT0418-R065	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	4.0	2.2
LNXT0618-R070	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	6.0	3.0
LNXT0618-R075	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	6.0	3.0
LNXT0618-R085	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	6.0	3.0
LNXT0618-R095	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	6.0	3.0
LNXT0618-R105	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	6.0	3.0
LNXT0618-R120	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	6.0	3.0
LNXT0618-R130	★	☆	☆	★	★	☆	☆	★	☆	★	18.0	6.0	3.0
LNXT0720-R140	★	☆	☆	★	★	☆	☆	★	☆	★	20.0	7.0	3.5

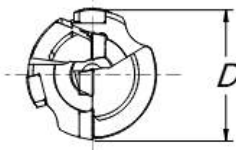
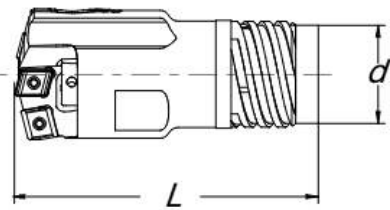
Deep Hole Drilling 800 Series

- Standard diameter range: Diameter 25.00–65.00mm
- High Rigidity: Robust construction minimizes vibration for superior straightness and deep-hole precision
- Efficient chip evacuation: Optimized channels for continuous, clog-free drilling and maximum productivity
- Wide material versatility: Ideal for various materials, including high-alloy steel and difficult-to-cut materials



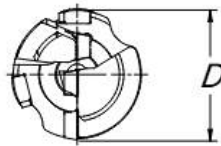
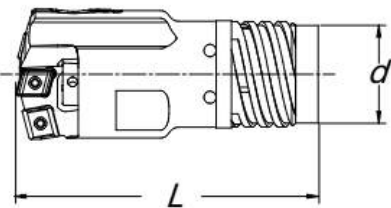
Type	Thread	Diameter	Tube outer Diameter
DHD	13	D65.00	-51

STS SYSTEM Single Tube-STS(800.20)



Diameter Range mm D	Tube outer diameter mm	Order Code	Dimensions mm		Center Insert	Intermediate Insert	Peripheral Insert	Support Pad
			d	L				
25.00~26.40	22.0	DHD-03D***	19.5	73	LPMT050308C-G-L	LPMT050308I-G-L	LPET060308P-G-L	LNXT0618-SUP
26.41~28.70	24.0	DHD-04D***	21	74	LPMT050308C-G-L	LPMT050308I-G-L	LPET060308P-G-L	LNXT0618-SUP
28.71~31.00	26.0	DHD-05D***	23.5	75	LPMT06T308C-G-L	LPMT050308I-G-L	LPET060308P-G-L	LNXT0618-SUP
31.01~33.30	28.0	DHD-06D***	25.5	76	LPMT06T308C-G-L	LPMT06T308I-G-L	LPET08T308P-G-L	LNXT0720-SUP
33.31~36.20	30.0	DHD-07D***	28.0	77	LPMT06T308C-G-L	LPMT06T308I-G-L	LPET08T308P-G-L	LNXT0720-SUP
					LPMT08T308C-G-L	LPMT08T308I-G-L		
36.21~39.60	33.0	DHD-07D***	30.0	89	LPMT08T308C-G-L	LPMT08T308I-G-L	LPET08T308P-G-L	LNXT0720-SUP
							LPET09T308P-G-L	
39.61~43.00	36.0	DHD-09D***	33.0	93	LPMT08T308C-G-L	LPMT08T308I-G-L	LPET09T308P-G-L	LNXT0825-SUP
43.01~47.00	39.0	DHD-10D***	36.0	95	LPMT10T308C-G-L	LPMT08T308I-G-L	LPET09T308P-G-L	LNXT0825-SUP
47.01~51.70	43.0	DHD-11D***	39.0	102	LPMT12T308C-G-L	LPMT08T308I-G-L	LPET09T308P-G-L	LNXT1030-SUP
					LPMT10T308C-G-L		LPET11T308P-G-L	
51.71~56.20	47.0	DHD-12D***	43.0	110	LPMT10T308C-G-L	LPMT08T308I-G-L	LPET11T308P-G-L	LNXT1030-SUP
						LPMT12T308I-G-L		LNXT1235-SUP
56.21~65.00	51.0	DHD-13D***	47.0	115	LPMT10T308C-G-L	LPMT12T308I-G-L	LPET11T308P-G-L	LNXT1235-SUP
					LPMT12T308C-G-L			
60.61~65.00	57.0	DHD-13E***	51.0	115	LPMT12T308C-G-L	LPMT12T308I-G-L	LPET11T308P-G-L	LNXT1235-SUP

EJECTOR SYSTEM (800.24)



Diameter Range mm D	Tube outer diameter mm	Order Code	Dimensions mm		Center Insert	Intermediate Insert	Peripheral Insert	Support Pad
			d	L				
25.00~26.40	23.5	E-DHD-03D***	21.0	74	LPMT050308C-G-L	LPMT050308I-G-L	LPET060308P-G-L	LNXT0618-SUP
26.41~28.70	26.0	E-DHD-04D***	23.5	75	LPMT050308C-G-L	LPMT050308I-G-L	LPET060308P-G-L	LNXT0618-SUP
28.71~31.00	28.0	E-DHD-05D***	25.5	76	LPMT06T308C-G-L	LPMT050308I-G-L	LPET060308P-G-L	LNXT0618-SUP
31.01~33.30	30.5	E-DHD-06D***	28.0	77	LPMT06T308C-G-L	LPMT06T308I-G-L	LPET08T308P-G-L	LNXT0720-SUP
33.31~36.20	33.0	E-DHD-07D***	30.0	89	LPMT06T308C-G-L	LPMT06T308I-G-L	LPET08T308P-G-L	LNXT0720-SUP
					LPMT08T308C-G-L	LPMT08T308I-G-L		
36.21~39.60	35.5	E-DHD-08D***	33.0	93	LPMT08T308C-G-L	LPMT08T308I-G-L	LPET08T308P-G-L	LNXT0720-SUP
							LPET09T308P-G-L	
39.61~43.00	39.0	E-DHD-09D***	36.0	95	LPMT08T308C-G-L	LPMT08T308I-G-L	LPET09T308P-G-L	LNXT0825-SUP
43.01~47.00	42.5	E-DHD-10D***	39.0	102	LPMT10T308C-G-L	LPMT08T308I-G-L	LPET09T308P-G-L	LNXT0825-SUP
47.01~51.70	46.5	E-DHD-11D***	43.0	110	LPMT12T308C-G-L	LPMT08T308I-G-L	LPET09T308P-G-L	LNXT1030-SUP
					LPMT10T308C-G-L		LPET11T308P-G-L	
51.71~56.20	51.0	E-DHD-12D***	47.0	115	LPMT10T308C-G-L	LPMT08T308I-G-L	LPET11T308P-G-L	LNXT1030-SUP
						LPMT12T308I-G-L		LNXT1235-SUP
56.21~65.00	55.5	E-DHD-13D***	51.0	115	LPMT10T308C-G-L	LPMT12T308I-G-L	LPET11T308P-G-L	LNXT1235-SUP
					LPMT12T308C-G-L			

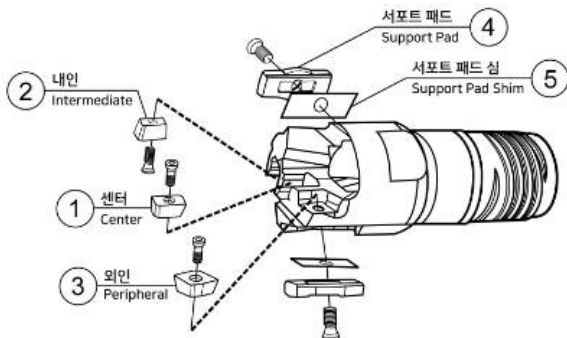
800 Series Diameter Range Insert & Support Pad

Diameter Range mm	Center Insert	Diameter Range mm	Intermediate Insert	Diameter Range mm	Peripheral Insert	Diameter Range mm	Support Pad
25.00~28.70	LPMT050308C-G-L	25.00~31.00	LPMT050308I-G-L	25.00~31.00	LPET060308P-G-L	25.00~31.00	LNXT0618-SUP
28.71~33.99	LPMT06T308C-G-L	31.01~34.99	LPMT06T308I-G-L	31.01~38.99	LPET08T308P-G-L	31.01~39.60	LNXT0720-SUP
34.00~43.00	LPMT08T308C-G-L	35.00~54.99	LPMT08T308I-G-L	39.00~49.99	LPET09T308P-G-L	39.61~47.00	LNXT0825-SUP
43.01~47.00	LPMT10T308C-G-L	55.00~65.00	LPMT12T308I-G-L	50.00~65.00	LPET11T308P-G-L	47.01~54.99	LNXT1030-SUP
47.01~49.99	LPMT12T308C-G-L					55.00~65.00	LNXT1235-SUP
50.00~57.99	LPMT10T308C-G-L						
58.00~65.00	LPMT12T308C-G-L						

800 Series Screw

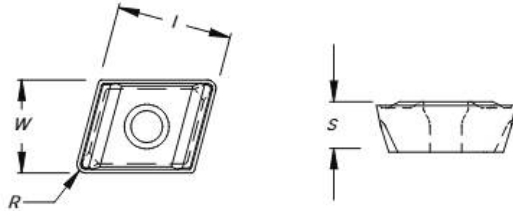
Diameter Range mm	Center	Intermediate	Peripheral	Insert screw driver	Support Pad screw	Support Pad screw driver
25.00~28.70		5513 020-05-M2.2		TORX PLUS T-7	5513 020-20-M2.5	TORX PLUS T-7
28.71~31.00	5513 020-34-M2.5	5513 020-05-M2.2		TORX PLUS T-7	5513 020-20-M2.5	TORX PLUS T-8
31.01~39.60		5513 020-34-M2.5		TORX PLUS T-8	416.1-832-M3.0	TORX PLUS T-9
39.61~47.00		5513 020-34-M2.5		TORX PLUS T-8	5513 020-16-M3.5	TORX PLUS T-10
47.01~65.00		5513 020-34-M2.5		TORX PLUS T-8	416.1-833-M3.5	TORX PLUS T-10

800 Series Parts & Shim set



Support Pad	Size (mm)	Order Code
LNXT 0618-SUP	0.02 (4pcs)	800-060420
	0.03 (4pcs)	
	0.05 (4pcs)	
LNXT 0720-SUP	0.02 (4pcs)	800-070420
	0.03 (4pcs)	
	0.05 (4pcs)	
LNXT 0825-SUP	0.02 (4pcs)	800-080420
	0.03 (4pcs)	
	0.05 (4pcs)	
LNXT 1030-SUP	0.02 (4pcs)	800-100420
	0.03 (4pcs)	
	0.05 (4pcs)	
LNXT 1235-SUP	0.02 (4pcs)	800-120420
	0.03 (4pcs)	
	0.05 (4pcs)	

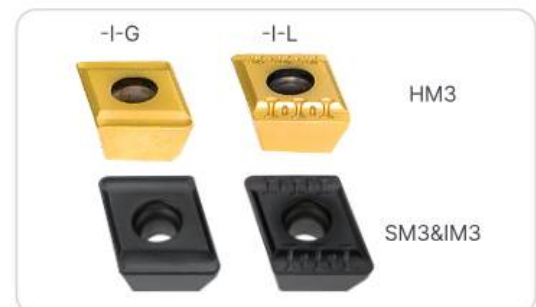
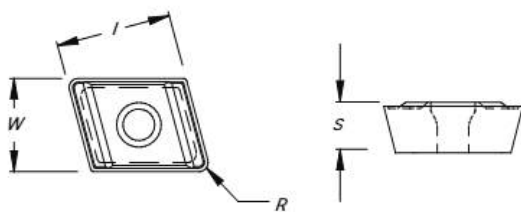
800 Series (Center Insert)



★ : first recommend grade ☆ : second recommend grade

Insert size	P			M			K			N			S			I	W	S	R
	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3				
LPMT050308C-G,L	★	☆			★	☆	★	☆			★	☆		☆	★	9.87	5.56	3.18	0.8
LPMT06T308C-G,L	★	☆			★	☆	★	☆			★	☆		☆	★	9.87	6.35	3.97	0.8
LPMT08T308C-G,L	★	☆			★	☆	★	☆			★	☆		☆	★	9.87	7.94	3.97	0.8
LPMT10T308C-G,L	★	☆			★	☆	★	☆			★	☆		☆	★	9.87	9.53	3.97	0.8
LPMT12T308C-G,L	★	☆			★	☆	★	☆			★	☆		☆	★	9.87	12.7	3.97	0.8

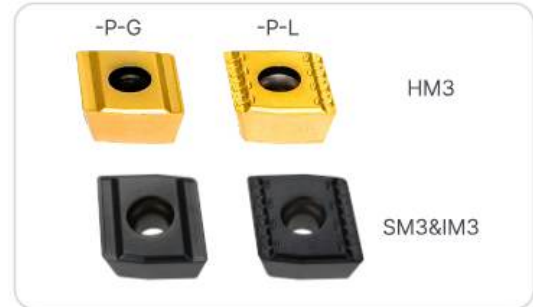
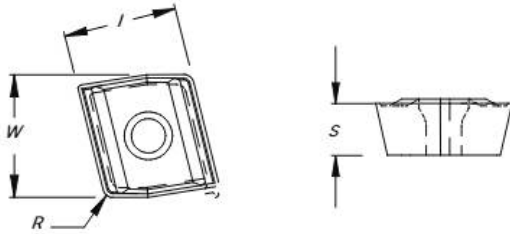
800 Series (Intermediate Insert)



★ : first recommend grade ☆ : second recommend grade

Insert size	P			M			K			N			S			I	W	S	R
	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3				
LPMT050308I-G,L	★	☆			★	☆	★	☆			★	☆		☆	★	9.87	5.56	3.18	0.8
LPMT06T308I-G,L	★	☆			★	☆	★	☆			★	☆		☆	★	9.87	6.35	3.97	0.8
LPMT08T308I-G,L	★	☆			★	☆	★	☆			★	☆		☆	★	9.87	7.94	3.97	0.8
LPMT12T308I-G,L	★	☆			★	☆	★	☆			★	☆		☆	★	9.87	12.7	3.97	0.8

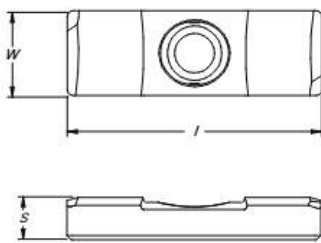
800 Series (Peripheral Insert)



★ : first recommend grade ☆ : second recommend grade

Insert size	P			M			K			N			S			I	W	S	R
	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3				
LPET060308P-G,L	★	☆			★	☆	★	☆			★	☆		☆	★	8.0	6.42	3.18	0.8
LPET08T308P-G,L	★	☆			★	☆	★	☆			★	☆		☆	★	9.0	8.62	3.97	0.8
LPET09T308P-G,L	★	☆			★	☆	★	☆			★	☆		☆	★	9.0	9.63	3.97	0.8
LPET11T308P-G,L	★	☆			★	☆	★	☆			★	☆		☆	★	9.0	12.7	3.97	0.8

800 Series Support Pad



★ : first recommend grade ☆ : second recommend grade

Insert size	P		M		K		N		S		I	W	S
	PM3	IM3	PM3	IM3	PM3	IM3	PM3	IM3	PM3	IM3			
LNXT0618-SUP	★	☆	☆	★	★	☆	☆	★	☆	★	18	6	3.0
LNXT0720-SUP	★	☆	☆	★	★	☆	☆	★	☆	★	20	7	3.4
LNXT0825-SUP	★	☆	☆	★	★	☆	☆	★	☆	★	25	8	4.5
LNXT1030-SUP	★	☆	☆	★	★	☆	☆	★	☆	★	30	10	4.5
LNXT1235-SUP	★	☆	☆	★	★	☆	☆	★	☆	★	35	12	5.5

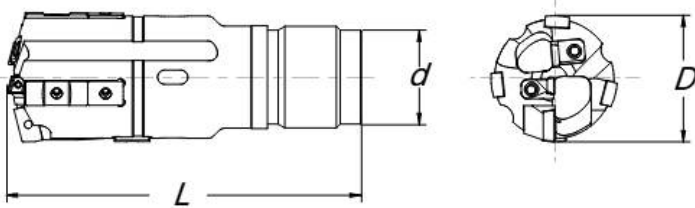
Deep Hole Drilling 801 Series

- Cartridge-type BTA head designed for exceptional chip evacuation, high-speed drilling, and superior durability.
- Diameter range: D65.00-162.00 mm
- Tube : Single Tube (STS) & Ejector Tube (Double)



Advantage		Product Features	
- High machining stability - Extended diameter adjustment range using cartridges and shims - Robust head design for heavy-duty performance - Optimized chip breaker for efficient chip control		- Staggered insert arrangement reduces vibration during drilling - Versatile application across various industries - Customizable solutions to meet specific requirements - Integrated safety pads for head protection	
Type	Thread	Diameter	Tube outer Diameter
LHD	18	D100.00	-82

801 Series LHD



Customized solutions are available for products or tube types not listed in this catalog.

Order Code	Range of radius adjustment	Tube outer diameter mm	Center Insert	Intermediate Insert	Peripheral Insert	S-Safety Pad F-Fiber Pad	Support Pad
LHD-14D065	0.75	56.0	LPMT12T308C 1	LPMT12T308I 1	LPMT13T308 1	142067-S 3 142067-F 1	430.32-12D65.0 LNXT35D065-SUP 3
LHD-15D068	0.75	62.0	LPMT12T308C 1	LPMT12T308I 1	LPMT13T308 1	142067-S 3 142067-F 1	430.32-12D65.0 LNXT35D065-SUP 3
LHD-15D070	0.50	62.0	LPMT08T308C 2 LPMT06T308C 1	LPMT08T308I 1	LPMT13T308 1	142067-S 3 142067-F 1	430.32-12D65.0 LNXT35D065-SUP 3
LHD-15D071	1.50	62.0	LPMT10T308C 1	LPMT12T308I 1	LPMT180608 1	142067-S 3 142067-F 1	430.32-12D70.0 LNXT35D065-SUP 3
LHD-16D073	2.00	68.0	LPMT12T308C 1	LPMT12T308I 1	LPMT180608 1	142067-S 3 142067-F 1	430.32-12D70.0~12D75.0 LNXT35D065-SUP 3
LHD-17D080	2.00	75.0	LPMT08T308C 1 LPMT06T308C 2	LPMT12T308I 1	LPMT180608 1	142067-S 3 142067-F 1	430.32-12D80.0 LNXT35D075-SUP 3
LHD-17D086	2.00	75.0	LPMT08T308C 2 LPMT06T308C 1	LPMT12T308I 1	LPMT180608 1	142067-S 3 142067-F 1	430.32-12D85.0 LNXT35D085-SUP 3
LHD-18D090	2.00	82.0	LPMT08T308C 3	LPMT12T308I 1	LPMT180608 1	142067-S 3 142067-F 1	430.32-12D90.0 LNXT35D085-SUP 3
LHD-18D094	0.75	82.0	LPMT08T308C 3	LPMT12T308I 1	LPMT180608 1	142067-S 3 142067-F 1	430.32-12D90.0 LNXT35D085-SUP 3
LHD-18D095	2.00	82.0	LPMT12T308C 1	LPMT08T308I 2 LPMT12T308I 1	LPMT180608 1	142067-S 3 142067-F 1	430.32-12D95.0 LNXT35D085-SUP 3
LHD-18D098	2.00	82.0	LPMT12T308C 1	LPMT08T308I 2 LPMT12T308I 1	LPMT180608 1	142067-S 3 142067-F 1	430.32-12D95.0 LNXT35D085-SUP 3
LHD-19D105	2.50	94.0	LPMT12T308C 1	LPMT08T308I 1 LPMT12T308I 2	LPMT180608 1	202582-S 3 202582-F 1	430.32-16D110.0~D115.0 430.32-16D105.0 LNXT50D100-SUP 3
LHD-20D120	2.50	106.0	LPMT12T308C 1	LPMT08T308I 4 LPMT12T308I 1	LPMT180608 1	202582-S 3 202582-F 1	430.32-16D120.0 LNXT50D110-SUP 3
LHD-21D125	2.50	118.0	LPMT12T308C 1	LPMT08T308I 4 LPMT12T308I 1	LPMT180608 1	202582-S 3 202582-F 1	430.32-16D125.0 LNXT50D120-SUP 3
LHD-21D130	2.50	118.0	LPMT12T308C 1	LPMT08T308I 3 LPMT12T308I 2	LPMT180608 1	202582-S 3 202582-F 1	430.32-16D130.0 LNXT50D120-SUP 3
LHD-21D135	2.50	118.0	LPMT12T308C 1	LPMT08T308I 3 LPMT12T308I 2	LPMT180608 1	202582-S 3 202582-F 1	430.32-16D130.0 LNXT50D130-SUP 3
LHD-22D141	2.50	130.0	LPMT12T308C 1	LPMT08T308I 2 LPMT12T308I 3	LPMT180608 1	202582-S 3 202582-F 1	430.32-16D140.0 LNXT50D130-SUP 3
LHD-23D150	2.50	142.0	LPMT12T308C 1	LPMT08T308I 1 LPMT12T308I 4	LPMT180608 1	202582-S 3 202582-F 1	430.32-16D150.0 LNXT50D130-SUP 3
LHD-23D157	2.50	142.0	LPMT12T308C 1	LPMT12T308I 5	LPMT180608 1	202582-S 3 202582-F 1	430.32-16D150.0 LNXT50D130-SUP 3
LHD-24D162	2.50	154.0	LPMT12T308C 1	LPMT12T308I 5	LPMT180608 1	202582-S 3 202582-F 1	430.32-16D160.0 LNXT50D130-SUP 3

801 Series LHD Cartridge

Order Code	Center Cartridge		Intermediate Cartridge		Peripheral Cartridge	
LHD-14D065	CLP12T3C-K	1	CLP12T3I-K	1	CLP13T3P-K	1
LHD-15D068	CLP12T3C-K	1	CLP12T3I-K	1	CLP13T3P-K	1
LHD-15D070	CLP06T3C-2-K	1	CLP08T3I-K	1	CLP13T3P-K	1
	CLP06T3C-K	1				
LHD-15D071	CLP10T3C-K	1	CLP12T3I-K	1	CLP1806P-K	1
LHD-16D073	CLP12T3C-K	1	CLP12T3I-K	1	CLP1806P-K	1
LHD-17D080	CLP06T3C-2-K	1	CLP12T3I-K	1	CLP1806P-K	1
	CLP06T3C-K	1				
LHD-17D086	CLP08T3C-K	2	CLP12T3I-K	1	CLP1806P-K	1
	CLP06T3C-K	1				
LHD-18D090	CLP08T3C-K	3	CLP12T3I-K	1	CLP1806P-K	1
LHD-18D094	CLP08T3C-K	3	CLP12T3I-K	1	CLP1806P-K	1
LHD-18D095	CLP12T3C-K	1	CLP08T3I-K	2	CLP1806P-K	1
			CLP12T3I-K	1		
LHD-18D098	CLP12T3C-K	1	CLP08T3I-K	2	CLP1806P-K	1
			CLP12T3I-K	1		
LHD-19D105	CLP12T3C-K	1	CLP08T3I-K	1	CLP1806P-K	1
			CLP12T3I-K	2		
LHD-20D120	CLP12T3C-K	1	CLP08T3I-K	4	CLP1806P-K	1
			CLP12T3I-K	1		
LHD-21D125	CLP12T3C-K	1	CLP08T3I-K	4	CLP1806P-K	1
			CLP12T3I-K	1		
LHD-21D130	CLP12T3C-K	1	CLP08T3I-K	3	CLP1806P-K	1
			CLP12T3I-K	2		
LHD-21D135	CLP12T3C-K	1	CLP08T3I-K	3	CLP1806P-K	1
			CLP12T3I-K	2		
LHD-22D141	CLP12T3C-K	1	CLP08T3I-K	3	CLP1806P-K	1
			CLP12T3I-K	2		
LHD-23D150	CLP12T3C-K	1	CLP08T3I-K	1	CLP1806P-K	1
			CLP12T3I-K	4		
LHD-23D157	CLP12T3C-K	1	CLP12T3I-K	5	CLP1806P-K	1
LHD-24D162	CLP12T3C-K	1	CLP12T3I-K	5	CLP1806P-K	1

801 Series Support Pad Screw & Driver

Diameter Range mm	Support Pad Screw	Support Pad Screw Driver
65.00-99.99	5513 020-01-M3.5	TORX PLUS-T15
100.00-162.00	5513 020-26-M5.0	TORX PLUS-T20

801 Series LHD Center Cartridge

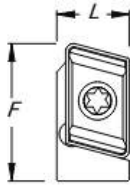


Fig 1

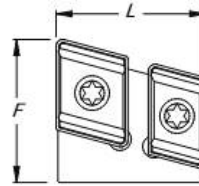
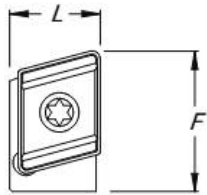


Fig 2



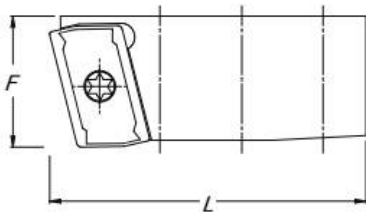
Cartridge	Insert	F	L	Insert screw	Cartridge screw	Insert screw Driver	Cartridge screw Driver	Fig
CLP06T3C-K	LPMT06T308C-G,L	14.30	8.0	5513 020-34-M2.5	5513 020-25-M4	TORX PLUS-T8	TORX PLUS-T15	1
CLP06T3C-2-K	LPMT08T308C-G,L	17.30	17.5	5513 020-34-M2.5	5513 020-26-M5	TORX PLUS-T8	TORX PLUS-T20	2
	LPMT06T308C-G,L							
CLP08T3C-K	LPMT08T308C-G,L	14.30	10.00	5513 020-34-M2.5	5513 020-25-M4	TORX PLUS-T8	TORX PLUS-T15	1
CLP10T3C-K	LPMT10T308C-G,L	15.30	12.00	5513 020-34-M2.5	5513 020-26-M5	TORX PLUS-T8	TORX PLUS-T20	1
CLP12T3C-K	LPMT12T308C-G,L	15.30	15.60	5513 020-34-M2.5	5513 020-26-M5	TORX PLUS-T8	TORX PLUS-T20	1

801 Series LHD Intermediate Cartridge



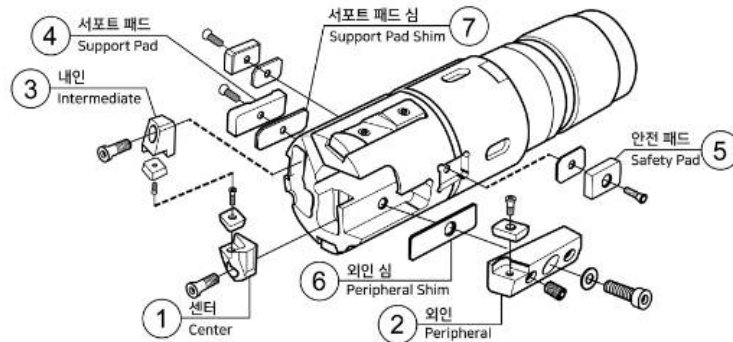
Cartridge	Insert	F	L	Insert screw	Cartridge screw	Insert screw Driver	Cartridge screw Driver
CLP08T3I-K	LPMT08T308I-G,L	14.30	9.70	5513 020-34-M2.5	5513 020-25-M4	TORX PLUS-T8	TORX PLUS-T15
CLP12T3I-K	LPMT12T308I-G,L	15.30	14.60	5513 020-34-M2.5	5513 020-26-M5	TORX PLUS-T8	TORX PLUS-T20

801 Series LHD Peripheral Cartridge



Cartridge	Insert	F	L	Insert screw	Cartridge screw	Insert screw Driver	Cartridge screw Driver
CLP13T3P-K	LPMT13T308-K22,K23	16.10	49.50	5513 020-24-M3	5513-M5*0.8P*15L	TORX PLUS-T9	TORX PLUS-T15
CLP1806P-K	LPMT180608-K22,K23	21.00	50.70	5513 020-25-M4	5513-M6*1P*20L	TORX PLUS-T9	TORX PLUS-T15

801 Series LHD Parts & Shim set



Cartridge	Size (mm)	Order Code
CLP13T3P-K	0.05 (4pcs)	801-130420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
CLP1806P-K	0.05 (4pcs)	801-180420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	

Support Pad	Size (mm)	Order Code
LNXT35DXXX-SUP	0.05 (4pcs)	0350420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
LNXT50DXXX-SUP	0.05 (4pcs)	0500420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	

Fiber Pad	Size (mm)	Order Code
142067-F	0.05 (4pcs)	670420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
202582-F	0.05 (4pcs)	820420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	

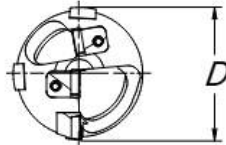
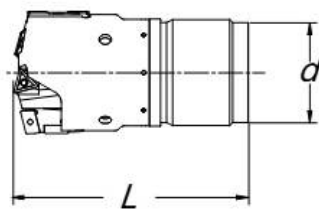
Deep Hole Drilling T-MAX 424.10 Series

- Diameter range: 65.00–183.90mm (Custom larger diameters available)
- Superior straightness and high-quality surface finish
- Enhanced head competitiveness with cartridge-type design
 - Efficient chip evacuation for smooth processing
 - Simple and quick insert replacement



Type	Thread	Diameter	Tube outer Diameter
THD	19	D120.00	-94

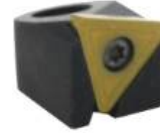
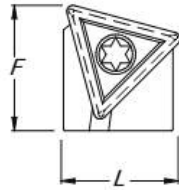
T-MAX 424.10 Series THD



Customized solutions are available for products or tube types not listed in this catalog.

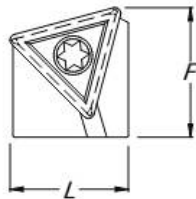
Order Code	Tube Outer diameter	Dimensions mm		Center Cartridge		Intermediate Cartridge		Perripheral Cartridge		Support Pad	
		d	L								
THD-13D63.50~64.99	51.0	47.0	115	CTP16-K-L	1	CTP16-K-R	1	CLP13-K	1	430.32-12D65.0 LNXT35D065-SUP	2
THD-13E63.50~65.00	57.0	51.0	115	CTP16-K-L	1	CTP16-K-R	1	CLP13-K	1	430.32-12D65.0 LNXT35D065-SUP	2
THD-14D63.50~65.00	56.0	52.0	150	CTP16-K-L	1	CTP16-K-R	1	CLP13-K	1	430.32-12D65.0 LNXT35D065-SUP	2
THD-15D65.01~74.99	62.0	58.0	150	CTP16-K-L	1	CTP16-K-R	1	CLP13-K	1	430.32-12D65.0 LNXT35D065-SUP 430.32-12D70.0	2
THD-16D75.00~79.99	68.0	63.0	160	CTP16-K-L	1	CTP16-K-R	1	CLP18-K	1	430.32-12D75.0 LNXT35D075-SUP	2
THD-17D80.00~84.99	75.0	70.0	190	CTP16-K-L	1	CTP16-K-R	1	CLP18-K	1	430.32-12D80.0	2
THD-17D85.00~88.89						CTP22-K-R				LNXT35D085-SUP 430.32-12D85.0	
THD-18D88.90~94.99	82.0	77.0	190	CTP16-K-L	1	CTP22-K-R	1	CLP18-K	1	430.32-12D85.0	2
THD-18D95.00~99.99				CTP22-K-L					LNXT35D085-SUP 430.32-12D90.0 430.32-12D95.0		
THD-19D100.00~107.94	94.0	89.0	195	CTP22-K-L	1	CTP22-K-R	1	CLP18-K	1	430.32-16D100.0 LNXT50D100-SUP 430.32-16D105.0	2
THD-19D107.95~114.29				CTP16-K-L	1	CTP16-K-R	3	CLP13-K	1	LNXT50D110-SUP 430.32-16D110.0	2
THD-20D114.30~120.64	106.0	101.0	220	CTP16-K-L	1	CTP16-K-R	3	CLP13-K	1	430.32-16D110.0 LNXT50D110-SUP	2
THD-20D120.65~124.99								CLP18-K		430.32-16D115.0 430.32-16D120.0 LNXT50D120-SUP	
THD-21D125.00~130.00	118.0	113.0	220	CTP16-K-L	1	CTP16-K-R	3	CLP18-K	1	430.32-16D125.0 LNXT50D120-SUP 430.32-16D130.0 LNXT50D130-SUP	2
THD-22D131.00~147.99				Custom-made							
THD-23D148.00~159.99											
THD-24D160.00~171.99											
THD-25D172.00~183.90											

T-MAX 424.10 Series Center Cartridge



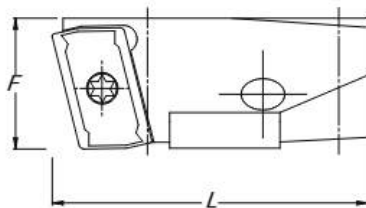
Cartridge	Insert	F	L	Insert screw	Cartridge Screw	Insert screw Driver	Cartridge Screw Driver
CTP16-K-L	TPMT16T312R-K22.K23	15.50	15.50	5513 020-24-M3	5513 020-26-M5	TORX PLUS-T9	TORX PLUS-T20
CTP22-K-L	TPMT220612R-K22.K23	20.80	20.80	5513 020-25-M4	5513 020-26-M5	TORX PLUS-T15	TORX PLUS-T20

T-MAX 424.10 Series Intermediate Cartridge



Cartridge	Insert	F	L	Insert screw	Cartridge Screw	Insert screw Driver	Cartridge Screw Driver
CTP16-K-R	TPMT16T312R-K22.K23	15.50	15.50	5513 020-24-M3	5513 020-26-M5	TORX PLUS-T9	TORX PLUS-T20
CTP22-K-R	TPMT220612R-K22.K23	20.80	20.80	5513 020-25-M4	5513 020-26-M5	TORX PLUS-T15	TORX PLUS-T20

T-MAX 424.10 Series Peripheral Cartridge

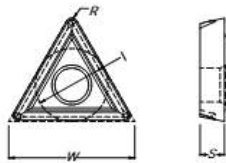


Cartridge	Insert	F	L	Insert screw	Cartridge Screw	Fiber pad Screw	Insert screw Driver
CLP13-K	LPMT13T308-K22.K23	15.60	45.80	5513 020-24-M3	430.21-825-M6	154.3-835-M3.0	TORX PLUS-T9
CLP18-K	LPMT180608-K22.K23	21.00	50.80	5513 020-25-M4	430.21-825-M6	154.3-835-M3.0	TORX PLUS-T15

T-max 424.10 Series Support Pad Screw & Driver

Diameter Range mm	Support Pad Screw	Support Pad Screw Driver
65.00-99.99	5513 020-01-M3.5	TORX PLUS-T15
100.00-183.90	5513 020-26-M5.0	TORX PLUS-T20

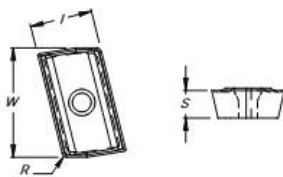
Center & Intermediate Insert



★ : first recommend grade ☆ : second recommend grade

Insert size	P			M			K			N			S			I	W	S	R
	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3				
TPMT16T312R-K22	★	☆			★	☆	★	☆		★	☆		★	☆		9.52	16.5	3.97	1.2
TPMT16T312R-K23	★	☆			★	☆	★	☆		★	☆		★	☆		9.52	16.5	3.97	1.2
TPMT220612R-K22	★	☆			★	☆	★	☆		★	☆		★	☆		12.7	22.0	6.35	1.2
TPMT220612R-K23	★	☆			★	☆	★	☆		★	☆		★	☆		12.7	22.0	6.35	1.2

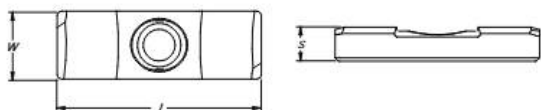
Peripheral Insert (801& T-max 424.10 Series)



★ : first recommend grade ☆ : second recommend grade

Insert size	P			M			K			N			S			I	W	S	R
	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3				
LPMT 13T308-K22	★	☆			★	☆	★	☆		★	☆		★	☆		10.0	14.3	3.96	0.8
LPMT 13T308-K23	★	☆			★	☆	★	☆		★	☆		★	☆		10.0	14.3	3.96	1.2
LPMT 180608-K22	★	☆			★	☆	★	☆		★	☆		★	☆		11.5	19.4	6.35	0.8
LPMT 180608-K23	★	☆			★	☆	★	☆		★	☆		★	☆		11.5	19.4	6.35	0.8

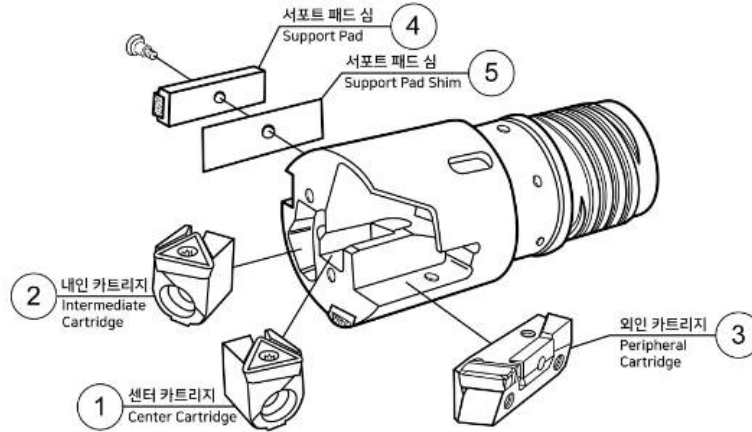
Support Pad (801& T-max 424.10 Series)



★ : first recommend grade ☆ : second recommend grade

Insert size	P		M		K		N		S		I	W	S
	PM3	IM3	PM3	IM3	PM3	IM3	PM3	IM3	PM3	IM3			
LNXT35D065-SUP	★	☆	☆	★	★	☆	☆	★	☆	★	35	14	7.0
LNXT35D075-SUP	★	☆	☆	★	★	☆	☆	★	☆	★	35	14	7.0
LNXT35D085-SUP	★	☆	☆	★	★	☆	☆	★	☆	★	35	14	7.0
LNXT50D100-SUP	★	☆	☆	★	★	☆	☆	★	☆	★	50	20	8.5
LNXT50D110-SUP	★	☆	☆	★	★	☆	☆	★	☆	★	50	20	8.5
LNXT50D120-SUP	★	☆	☆	★	★	☆	☆	★	☆	★	50	20	8.5
LNXT50D130-SUP	★	☆	☆	★	★	☆	☆	★	☆	★	50	20	8.5

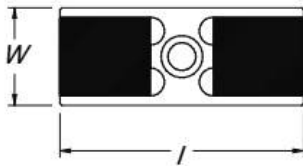
T-MAX 424.10 Series THD Parts & Shim set



Cratridge	Size (mm)	Order Code
CLP13-K	0.05 (4pcs)	424-130420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
CLP18-K	0.05 (4pcs)	424-130420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	

Support Pad	Size (mm)	Order Code
LNXT35DXXX-SUP	0.05 (4pcs)	0350420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
LNXT50DXXX-SUP	0.05 (4pcs)	0500420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	

SUPPORT Pad (801,818,424.10,424.31,424.32,424.41,424.42)



Insert size	Coating			L	W	S
	Non	TiAlN	IM3			
430.32-10D35.0	★	★		35	12	7.0
430.32-10D40.0	★	★		35	12	7.0
430.32-10D45.0	★	★		35	12	7.0
430.32-10D50.0	★	★		35	12	7.0
430.32-10D55.0	★	★		35	12	7.0
430.32-10D60.0	★	★		35	12	7.0
430.32-12D65.0	★	★		35	14	7.0
430.32-12D70.0	★	★		35	14	7.0
430.32-12D75.0	★	★		35	14	7.0
430.32-12D80.0	★	★		35	14	7.0
430.32-12D85.0	★	★		35	14	7.0
430.32-12D90.0	★	★		35	14	7.0
430.32-12D95.0	★	★		35	14	7.0
430.32-16D100.0	★	★		50	20	8.5
430.32-16D105.0	★	★		50	20	8.5
430.32-16D110.0	★	★		50	20	8.5
430.32-16D115.0	★	★		50	20	8.5
430.32-16D120.0	★	★		50	20	8.5
430.32-16D125.0	★	★		50	20	8.5
430.32-16D130.0	★	★		50	20	8.5
430.32-16D140.0	★	★		50	20	8.5
430.32-16D150.0	★	★		50	20	8.5
430.32-16D160.0	★	★		50	20	8.5
430.32-16D170.0	★	★		50	20	8.5
430.32-16D180.0	★	★		50	20	8.5

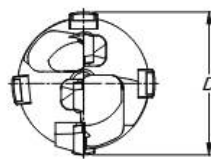
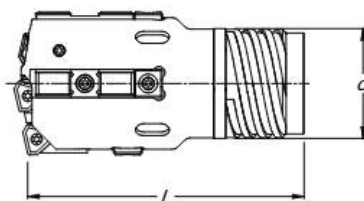
Deep Hole Drilling 500 Series

- Precision machining quality: High dimensional precision even in BTA drilling
 - Efficient chip removal: Smooth chip drain from deep holes
 - Strong durability: High wear resistance to maintain long
- High productivity: High-speed processing improves processing speed and productivity
- Cartridge Type: Adjustable diameter range by changing cartridge
 - Pad: Protect the head with safety pads and sub guide pads



Type	Thread	Diameter	Tube outer Diameter
IHD	19	D120.00	-94

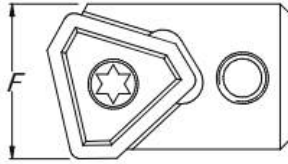
500 Series IHD



Customized solutions are available for products or tube types not listed in this catalog.

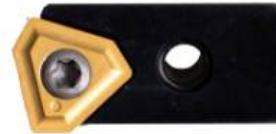
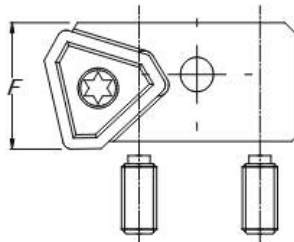
Order Code	Tube Outer diameter mm	Dimensions mm		Center Cartridge	Intermediate Cartridge	Peripheral Cartridge	Support Pad		Sub Support Pad	
		D	L							
IHD-11D46.50~47.99	43.0	39.0	95	CENC04-K	CENC04-K	PERC04-K	GC08	3	SC08	3
IHD-12D48.00~51.70	47.0	43.0	95	CENC04-K	CENC04-K	PERC04-K	GC10	3	SC08	3
IHD-13D51.71~51.99	51.0	47.0	100	CENC04-K	CENC04-K	PERC04-K	GC10	3	SC08	3
IHD-13D52.00~54.99				CENC04-K	CENC04-K	PERC32-K				
IHD-13D55.00~56.20				CENC32-K	CENC04-K	PERC32-K				
IHD-13E56.21~57.99	57.0	51.0	110	CENC32-K	CENC04-K	PERC32-K	GC10	3	SC08	3
IHD-13E58.00~59.99					CENC32-K					
IHD-13E60.00~63.99						SC10	3			
IHD-13E64.00~65.00										
IHD-14D65.00~66.99	56.0	52.0	150	CENC32-K	CENC32-K	PERC43-K	GC14	3	SC10	3
IHD-15D67.00~67.99	62.0	58.0	150	CENC32-K	CENC32-K	PERC43-K	GC14	3	SC10	3
IHD-15D68.00~72.99				CENC43-K	CENC43-K	PERC32-K				
IHD-16D73.00~77.99	68.0	63.0	150	CENC43-K	CENC43-K	PERC32-K	GC14	3	SC10	3
IHD-16D78.00~79.99						PERC43-K				
IHD-17D80.00~84.99	75.0	70.0	180	CENC43-K	CENC43-K	PERC43-K	GC14	3	SC10	3
IHD-17D85.00~86.99						PERC63-K				
IHD-18D87.00~91.99	82.0	77.0	180	CENC43-K	CENC43-K	PERC63-K	GC18	3	SC10	3
IHD-18D92.00~98.99				CENC63-K	CENC63-K	PERC43-K			SC10	3
IHD-18D99.00~99.99						PERC63-K			SC14	3
IHD-19D100.00~106.99	94.0	89.0	180	CENC63-K	CENC63-K	PERC63-K	GC18	3	SC14	3
IHD-19D107.00~111.99				CENC43-K	CENC32-K	PERC43-K				
IHD-20D112.00~117.99	106.0	101.0	205	CENC43-K	CENC32-K	PERC43-K	GC18	5	SC14	3
IHD-20D118.00~123.99					CENC43-K					
IHD-21D124.00~135.99	118.0	113.0	205	CENC43-K	CENC43-K	PERC43-K	GC18	5	SC14	3
IHD-22D136.00~147.99	130.0	125.0	205	CENC63-K	CENC43-K	PERC43-K	GC18	5	SC14	3
IHD-23D148.00~150.99	142.0	137.0	225	CENC63-K	CENC43-K	PERC43-K	GC18	5	SC14	3
IHD-23D151.00~156.99						PERC63-K				
IHD-23D157.00~159.99						PERC63-K				
IHD-24D160.00~162.99	154.0	149.0	225	CENC63-K	CENC43-K	PERC63-K	GC18	5	SC14	3
IHD-24D163.00~168.99					CENC63-K					
IHD-24D169.00~171.99					CENC43-K	CENC43-K				
IHD-25D172.00~183.99	166.0	161.0	230	CENC43-K	CENC43-K	PERC43-K	GC18	5	SC14	3
IHD-26D184.00~188.99	178.0	173.0	250	CENC43-K	CENC43-K	PERC43-K	GC18	5	SC14	3
IHD-26D189.00~195.99				CENC63-K						
IHD-27D196.00~207.99	190.0	185.0	250	CENC63-K	CENC43-K	PERC43-K	GC18	5	SC14	3
IHD-28D208.00~208.99	202.0	197.0	250	CENC63-K	CENC43-K	PERC43-K	GC18	5	SC14	3
IHD-28D209.00~214.99						PERC63-K				
IHD-28D215.00~219.99						PERC63-K				
IHD-29D220.00~226.99	214.0	208.0	270	CENC63-K	CENC43-K	PERC63-K	GC18	5	SC14	3
IHD-29D227.00~231.99					CENC63-K					
IHD-30D232.00~232.99	226.0	220.0	270	CENC63-K	CENC63-K	PERC63-K	GC18	5	SC14	3
IHD-30D233.00~243.99			294	CENC63-K	CENC43-K	PERC43-K				
IHD-31D244.00~247.99	238.0	232.0	294	CENC63-K	CENC43-K	PERC43-K	GC18	5	SC14	3
IHD-31D248.00~255.99				CENC63-K	CENC43-K	PERC63-K				

500 Series Center & Intermediate Cartridge



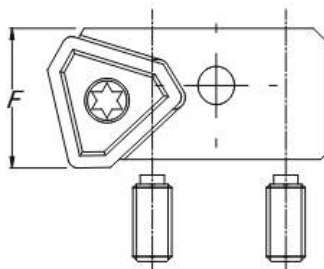
Cartridge	Insert	F	Insert screw	Cartridge screw	Insert screw driver	Cartridge screw driver
CENC04-K	TPGX140308R-G-L	11.50	FTKA02555	FTGA03508	Torx-T8	Torx-T15
CENC32-K	TPGX170408R-G-L	14.50	FTGA03508	FTGA0513-P	Torx-T15	Torx-T20
CENC43-K	TPGX240512R-G-L	19.50	FTKA0410	TSB615560	Torx-T15	Torx-T25
CENC63-K	TPGX280716R-G-L	23.50	FTGA0513-P	TSB615560	Torx-T20	Torx-T25

500 Series Peripheral Cartridge



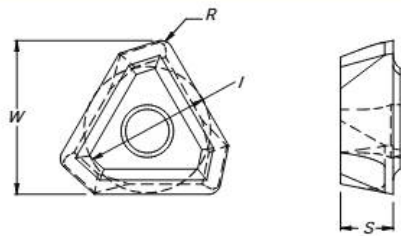
Cartridge	Insert	F	Insert screw	Cartridge screw	Insert screw driver	Cartridge screw driver
PERC04-K	TPGX140308R-G-L	11.50	FTKA02555	D-M3.5*10 (L2.5mm)	Torx-T8	M4*8 (L2mm)
PERC32-K	TPGX170408R-G-L	14.50	FTGA03508	D-M5*15 (L3mm)	Torx-T9	M5*10 (L2.5mm)
PERC43-K	TPGX240512R-G-L	19.50	FTKA0410	D-M6*20 (L4mm)	Torx-T15	M6*15 (L3mm)
PERC63-K	TPGX280716R-G-L	23.50	FTGA0513-P	D-M6*20 (L4mm)	Torx-T20	M6*15 (L3mm)

500 Series Range Expansion Cartridge



Order Code				
F+1mm	F+2mm	F+3mm	F+4mm	F+5mm
PERC04-K+1	PERC04-K+2	PERC04-K+3		
PERC32-K+1	PERC32-K+2	PERC32-K+3	PERC32-K+4	
PERC43-K+1	PERC43-K+2	PERC43-K+3	PERC43-K+4	PERC43-K+5
PERC63-K+1	PERC63-K+2	PERC63-K+3	PERC63-K+4	PERC63-K+5

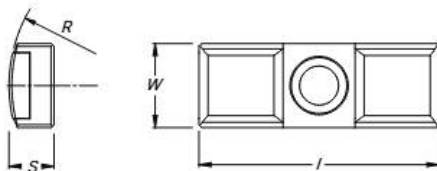
Counter Boring Insert (818, 424.41)



★ : first recommend grade ☆ : second recommend grade

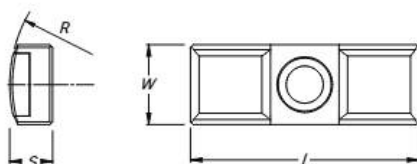
Insert size	P			M			K			N			S			I	W	S	R
	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3				
TPGX140308R-G-L	★	☆			★	☆	★	☆			★	☆		☆	★	8.43	10.26	3.52	0.8
TPGX170408R-G-L	★	☆			★	☆	★	☆			★	☆		☆	★	10.30	12.37	4.00	0.8
TPGX240512R-G-L	★	☆			★	☆	★	☆			★	☆		☆	★	14.20	17.29	5.50	1.2
TPGX280716R-G-L	★	☆			★	☆	★	☆			★	☆		☆	★	17.00	20.46	7.57	1.6

500 Series IHD Support Pad



Order Code	I	W	S	R	Screw	Support Pad Screw Driver
GCC08	25	8	4.5	17.5	ST3072-60H	Torx-T8
GCC10	35	10	6.0	20.0	FTKA0410	Torx-T15
GCC14	40	10	7.5	25.0	FTGA0510-P	Torx-T20
GCC18	40	10	9.0	30.0	TSB612560	Torx-T25

500 Series IHD Range Expansion Support Pad



Order Code				
S+1mm	S+2mm	S+3mm	S+4mm	S+5mm
GCC08+1	GCC08+2	GCC08+3		
GCC10+1	GCC10+2	GCC10+3	GCC10+4	
GCC14+1	GCC14+2	GCC14+3	GCC14+4	GCC14+5
GCC18+1	GCC18+2	GCC18+3	GCC18+4	GCC18+5

500 Series IHD Pad

Safety Pad

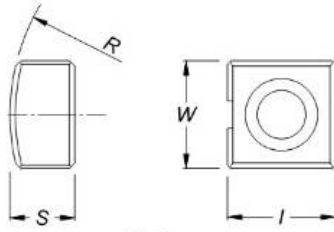


Fig 1

Sub Support Pad

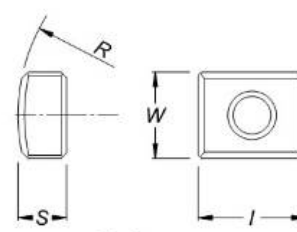
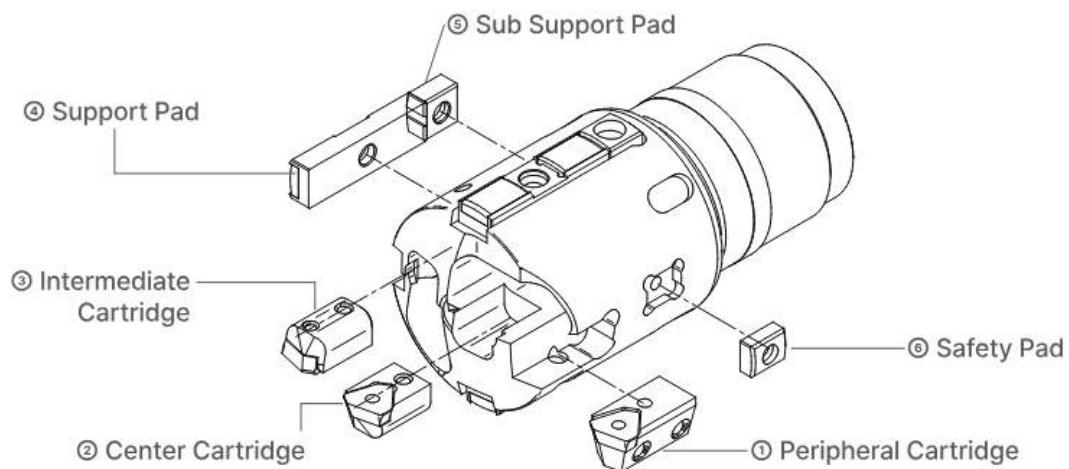


Fig 2

Pad	I	W	S	R	Fig	Pad Screw	Pad Screw Driver
PC08	8	8	4.5	17.5	1	ST3072-60H	Torx-T8
PC10	10	10	6.0	20.0	1	FTKA0410	Torx-T15
PC14	14	14	7.5	25.0	1	FTGA0510-P	Torx-T20
PC18	18	18	9.0	30.0	1	TSB612560	Torx-T25
SC08	10	8	4.5	17.5	2	ST3072-60H	Torx-T8
SC10	10	10	5.0	29.0	2	FTKA0410	Torx-T8
SC14	20	14	7.0	45.0	2	FTGA0510-P	Torx-T20

500 Series IHD Parts



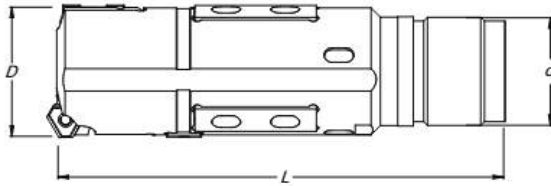
Counter Boring Head 818 Series

- A single tool allows you to process different diameters, greatly reducing work time
- Maximize processing precision by maintaining accurate diameter and shape
 - Suitable for a wide range of materials, especially steel, stainless steel, aluminum, etc.
- A fiber pad is mounted on the head for stable and deep hole drilling
 - It can be manufactured in a wide diameter range



Type	Thread	Diameter	Tube outer Diameter
TBH	19	D120.00	-94

Counter Boring Head 818 Series TBH



Customized solutions are available for products or tube types not listed in this catalog.

Order Code	Tube Outer diameter mm	Dimensions mm		Range of diameter adjustment	Pad Shoes	Pad Shoes Shime Set	Cartridge	Insert	Support Pad
		d	L						
TBH-08D38.10-42.30	33.0	30.0	168.00	-	818-10-0720-S	-	CTX16-K-R	TXN 160408	LNXT 0720-SUP
				2mm	818-10-0720-S1	-			
				4.2mm	818-10-0720-S2	-			
TBH-08D42.30-46.50	33.0	30.0	168.00	-	818-10-0720-S	-	CTX16-K-R	TXN 160408	LNXT 0720-SUP
				2mm	818-10-0720-S1	-			
				4.2mm	818-10-0720-S2	-			
TBH-08D46.50-50.80	33.0	30.0	168.00	-	818-10-0720-S	-	CTX16-K-R	TXN 160408	LNXT 0720-SUP
				2mm	818-10-0720-S1	-			
				4.2mm	818-10-0720-S2	-			
TBH-11D50.80-55.00	43.0	39.0	186.00	-	818-10-1030-S	-	CTX16-K-R	TXN 160408	LNXT 1030-SUP
				2mm	818-10-1030-S1	-			
				4.2mm	818-10-1030-S2	-			
TBH-11D55.00-59.20	43.0	39.0	186.00	-	818-10-1030-S	-	CTX16-K-R	TXN 160408	LNXT 1030-SUP
				2mm	818-10-1030-S1	-			
				4.2mm	818-10-1030-S2	-			
TBH-11D59.20-63.50	43.0	39.0	186.00	-	818-10-1030-S	-	CTX16-K-R	TXN 160408	LNXT 1030-SUP
				2mm	818-10-1030-S1	-			
				4.2mm	818-10-1030-S2	-			
TBH-13D63.50-67.70	51.0	47.0	186.00	-	818-10-1235-S	-	CTX16-K-R	TXN 160408	LNXT 1235-SUP
				2mm	818-10-1235-S1	-			
				4.2mm	818-10-1235-S2	-			
TBH-13D67.70-71.90	51.0	47.0	190.50	-	818-10-1235-S	-	CTX16-K-R	TXN 160408	LNXT 1235-SUP
				2mm	818-10-1235-S1	-			
				4.2mm	818-10-1235-S2	-			
TBH-13D71.90-76.20	51.0	47.0	190.50	-	818-10-1235-S	-	CTX16-K-R	TXN 160408	LNXT 1235-SUP
				2mm	818-10-1235-S1	-			
				4.2mm	818-10-1235-S2	-			
TBH-16D76.20-88.90	68.0	63.0	270.00	6.35mm	818-12-065-S	818-12-650420	CTX25-K-R	TXN 250408	LNXT35 D075-SUP
				12.7mm	818-12-065-S1				
TBH-18D88.90-101.60	82.0	77.0	310.00	6.35mm	818-12-065-S	818-12-650420	CTX25-K-R	TXN 250408	LNXT35 D085-SUP
				12.7mm	818-12-065-S1				
TBH-19D101.60-117.60	94.0	89.0	330.00	8.0mm	818-16-110-S	818-16-110420	CTX40-K-R	TXN 400408	LNXT50 D100-SUP
				16.0mm	818-16-110-S1				
TBH-19D117.60-133.60	94.0	89.0	330.00	8.0mm	818-16-110-S	818-16-110420	CTX40-K-R	TXN 400408	LNXT50 D100-SUP
				16.0mm	818-16-110-S1				
TBH-19D133.60-149.60	94.0	89.0	380.00	8.0mm	818-16-110-S	818-16-110420	CTX40-K-R	TXN 400408	LNXT50 D130-SUP
				16.0mm	818-16-110-S1				
TBH-20D149.60-165.60	106.0	101.0	400.00	8.0mm	818-16-110-S	818-16-110420	CTX40-K-R	TXN 400408	430.32-16D140.00
				16.0mm	818-16-110-S1				

Counter Boring Head 818 Series TBH Parts

Ordering Code	Support Pad Screw	Sub Support Pad	Blank Fiber Pad	Seat protection plate	Sub Support Pad Screw	Blank Fiber Pad Screw	Seat protection Plate Screw
TBH-08D38.10-42.30	416.1-832-M3.0	142030-F	5571 001-05	-	5513 020-01-M3.5	CML-0306	-
TBH-08D42.30-46.50	416.1-832-M3.0	142030-F	5571 001-05	-	5513 020-01-M3.5	CML-0306	-
TBH-08D46.50-50.80	416.1-832-M3.0	142030-F	5571 001-05	-	5513 020-01-M3.5	CML-0306	-
TBH-11D50.80-55.00	416.1-833-M3.5	142067-F	5571 001-06	-	5513 020-01-M3.5	CML-0410	-
TBH-11D55.00-59.20	416.1-833-M3.5	142067-F	5571 001-06	-	5513 020-01-M3.5	CML-0410	-
TBH-11D59.20-63.50	416.1-833-M3.5	142067-F	5571 001-06	-	5513 020-01-M3.5	CML-0410	-
TBH-13D63.50-67.70	416.1-833-M3.5	142067-F	5571 001-06	-	5513 020-01-M3.5	CML-0410	-
TBH-13D67.70-71.90	416.1-833-M3.5	142067-F	5571 001-06	5549 029-01	5513 020-01-M3.5	CML-0410	3212 020-259
TBH-13D71.90-76.20	416.1-833-M3.5	142067-F	5571 001-06	5549 029-02	5513 020-01-M3.5	CML-0410	3212 020-309
TBH-16D76.20-88.90	5513 020-01-M3.5	142067-F	5571 001-07	5549 029-03	5513 020-01-M3.5	CML-0512	3212 020-360
TBH-18D88.90-101.60	5513 020-01-M 3.5	142067-F	5571 001-08	5549 029-04	5513 020-01-M3.5	CML-0614	3212 020-410
TBH-19D101.60-117.60	5513 020-26-M5.0	142067-F	5571 001-09	5549 029-04	5513 020-01-M3.5	CML-0614	3212 020-410
TBH-19D117.60-133.60	5513 020-26-M5.0	202582-F	5571 001-09	5549 029-05	5513 020-26-M5.0	CML-0614	3212 020-462
TBH-19D133.60-149.60	5513 020-26-M5.0	202582-F	5571 001-10	5549 029-05	5513 020-26-M5.0	CML-0816	3212 020-462
TBH-20D149.60-165.60	5513 020-26-M5.0	202582-F	5571 001-10	5549 029-05	5513 020-26-M5.0	CML-0816	3212 020-462

Pull-counter Boring & Conter Boring 818 Series Pad shoes

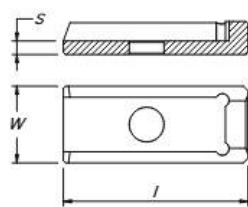


Fig 1

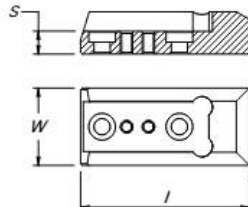
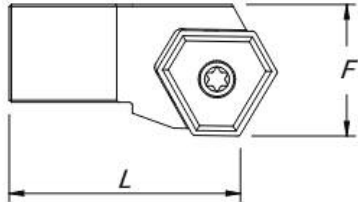


Fig 2



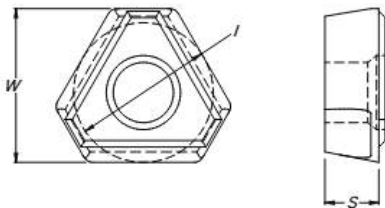
Ordering Code	I	W	S	Fig	Screw	Driver
818-10-0720-S	26	10	1.5	1	-	
818-10-0720-S1	26	10	2.5	1	-	
818-10-0720-S2	26	10	3.6	1	-	
818-10-1030-S	36	15	2	1	-	
818-10-1030-S1	36	15	3	1	-	
818-10-1030-S2	36	15	4.1	1	-	
818-10-1235-S	41	17	2	1	-	
818-10-1235-S1	41	17	3	1	-	
818-10-1235-S2	41	17	4.1	1	-	
818-12-065-S	48	22	6.5	2	CML-0410	L-3.0
818-12-065-S1	48	22	10	2	CML-0410	L-3.0
818-16-110-S	65	32	11	2	CML-0515	L-3.0
818-16-110-S1	65	32	15	2	CML-0515	L-3.0

Counter Boring Cartridge (818 Series)



Cartridge	Insert	F	L	Insert Screw	Insert Screw Driver	Cartridge Screw	Cartridge Screw Driver
CTX16-K	TXN160408-G-L	16.00	32.00	5513 020-02-M4	TORX PLUS-T15	CML-0515	L-4.0
CTX25-K	TXN250408-G-L	24.00	54.00	5513 020-55-M5	TORX PLUS-T20	CML-0825	L-6.0
CTX40-K	TXN400708-G-L	32.00	56.00	5513 020-14-M6	TORX PLUS-T25	CML-1030	L-8.0

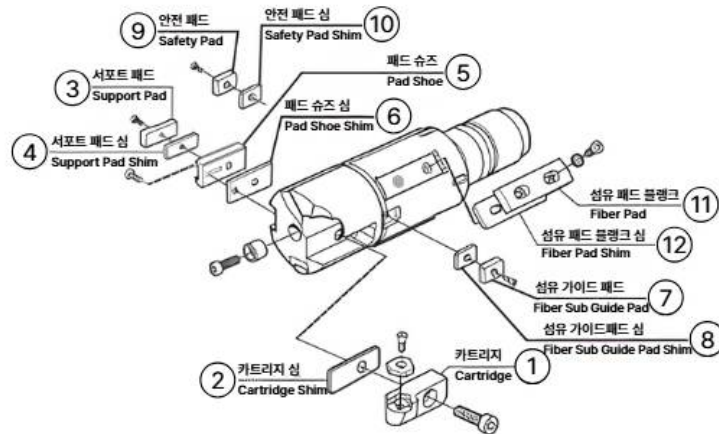
Counter Boring Insert(818 Series)



★ : first recommend grade ☆ : second recommend grade

Insert size	P			M			K			N			S			I	W	S
	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3			
TXN160408-G-L	★	☆			★	☆	★	☆			★	☆		☆	★	10.9	11.9	4.76
TXN250408-G-L	★	☆			★	☆	★	☆			★	☆		☆	★	17.2	18.8	4.76
TXN400708-G-L	★	☆			★	☆	★	☆			★	☆		☆	★	23.5	25.5	7.00

Counter Boring Head 818 Series TBH Parts & Shim Set



Cartridge (Main)	Size (mm)	Order Code	Cartridge (Compatible)	Size (mm)	Order Code
CTX16-K	0.05 (4pcs)	CX-160420	CTP17-K-SP	0.05 (4pcs)	CX-170420
	0.1 (4pcs)			0.1 (4pcs)	
	0.2 (4pcs)			0.2 (4pcs)	
	0.3 (4pcs)			0.3 (4pcs)	
	0.5 (4pcs)			0.5 (4pcs)	
CTX25-K	0.05 (4pcs)	CX-250420	CTP24-K-SP	0.05 (4pcs)	CX-240420
	0.1 (4pcs)			0.1 (4pcs)	
	0.2 (4pcs)			0.2 (4pcs)	
	0.3 (4pcs)			0.3 (4pcs)	
	0.5 (4pcs)			0.5 (4pcs)	
CTX40-K	0.05 (4pcs)	CX-400420	CTP28-K-SP	0.05 (4pcs)	CX-280420
	0.1 (4pcs)			0.1 (4pcs)	
	0.2 (4pcs)			0.2 (4pcs)	
	0.3 (4pcs)			0.3 (4pcs)	
	0.5 (4pcs)			0.5 (4pcs)	

Support Pad	Size (mm)	Order Code	Brazed Pad	Size (mm)	Order Code
LNXT 0618-SUP	0.02 (4pcs)	800-060420	430.32-10DXX.XX	0.05 (4pcs)	0120420
	0.03 (4pcs)				
	0.05 (4pcs)				
LNXT 0720-SUP	0.02 (4pcs)	800-070420		0.2 (4pcs)	
	0.03 (4pcs)			0.3 (4pcs)	
	0.05 (4pcs)			0.5 (4pcs)	
LNXT 0825-SUP	0.02 (4pcs)	800-080420	430.32-12DXX.XX	0.05 (4pcs)	0350420
	0.03 (4pcs)			0.1 (4pcs)	
	0.05 (4pcs)			0.2 (4pcs)	
	0.02 (4pcs)			0.3 (4pcs)	
LNXT 1030-SUP	0.03 (4pcs)	800-100420		0.5 (4pcs)	
	0.05 (4pcs)			430.32-16DXX.XX	0.05 (4pcs)
	0.02 (4pcs)		0.1 (4pcs)		
0.03 (4pcs)	0.2 (4pcs)				
LNXT 1235-SUP	0.05 (4pcs)	800-120420	0.3 (4pcs)		0500420
	0.05 (4pcs)		0.5 (4pcs)		
	0.05 (4pcs)		430.32-16DXX.XX	0500420	
	0.1 (4pcs)				
0.2 (4pcs)					
0.3 (4pcs)					
LNXT35DXXX-SUP	0.3 (4pcs)	0350420			
	0.5 (4pcs)				
	0.05 (4pcs)				0500420
	0.1 (4pcs)				
0.2 (4pcs)					
LNXT50DXXX-SUP	0.3 (4pcs)	0500420			
	0.5 (4pcs)				
	0.05 (4pcs)				
	0.1 (4pcs)				

818 Series TBH Shim Set

Pad shoes	Size (mm)	Order Code	Safety Pad	Size (mm)	Order Code
818-12-065-S	0.05 (4pcs)	818-12-650420	142030-S	0.05 (4pcs)	300420S
	0.1 (4pcs)			0.1 (4pcs)	
	0.2 (4pcs)			0.2 (4pcs)	
	0.3 (4pcs)			0.3 (4pcs)	
	0.5 (4pcs)			0.5 (4pcs)	
818-16-110-S	0.05 (4pcs)	818-16-110420	142067-S	0.05 (4pcs)	670420S
	0.1 (4pcs)			0.1 (4pcs)	
	0.2 (4pcs)			0.2 (4pcs)	
	0.3 (4pcs)			0.3 (4pcs)	
	0.5 (4pcs)			0.5 (4pcs)	
818-18-300-R	0.05 (4pcs)	818-18-300420	202582-S	0.05 (4pcs)	820420S
	0.1 (4pcs)			0.1 (4pcs)	
	0.2 (4pcs)			0.2 (4pcs)	
	0.3 (4pcs)			0.3 (4pcs)	
	0.5 (4pcs)			0.5 (4pcs)	
818-26-500-R	0.05 (4pcs)	818-26-500420			
	0.1 (4pcs)				
	0.2 (4pcs)				
	0.3 (4pcs)				
	0.5 (4pcs)				
Fiber Pad	Size (mm)	Order Code	Blank fiber Pad	Size (mm)	Order Code
142067-F	0.05 (4pcs)	670420F	5571 001-08	1.0 (3pcs)	00108-1
	0.1 (4pcs)		5571 001-09	1.0 (3pcs)	00109-1
	0.2 (4pcs)		5571 001-10	1.0 (3pcs)	00110-1
	0.3 (4pcs)		5571 001-11	1.0 (3pcs)	00111-1
	0.5 (4pcs)		5571 001-12	1.0 (3pcs)	00112-1
202582-F	0.05 (4pcs)	820420F			
	0.1 (4pcs)				
	0.2 (4pcs)				
	0.3 (4pcs)				
	0.5 (4pcs)				

Pull-Counter Bore BBH Series

- Superior Concentricity and Straightness

By using the pre-drilled hole as a guide and machining through a pulling action, this method significantly reduces vibration compared to the conventional push-type, ensuring the center axis remains perfectly aligned.

- Excellent Surface Finish

Equipped with fiber pads as shown, the head absorbs vibrations during machining and smooths the internal bore walls for a superior finish.

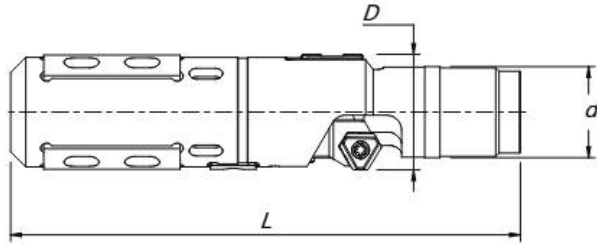
- Stability in Deep-Hole Machining

The pull-boring structure applies tensile force to the tool, preventing bending and ensuring high stability even when machining extremely deep holes.



Type	Thread	Diameter	Tube outer Diameter
BBH	19	D120.00	-94

Pull-Counter Bore (BBH Seires)



Customized solutions are available for products or tube types not listed in this catalog.

Order Code	Tube Outer diameter mm	Dimensions mm		Range of diameter adjustment	Pad Shoes	Cartridge	Insert	Support Pad
		d	L					
BBH-08D38.10-42.30	33.0	30.0	168.00	-	818-10-0720-S	CTX16-K-LS	TXN 160408	LNXT 0720-SUP
				2mm	818-10-0720-S1			
				4.2mm	818-10-0720-S2			
BBH-08D42.30-46.30	33.0	30.0	168.00	-	818-10-0720-S	CTX16-K-LS	TXN 160408	LNXT 0720-SUP
				2mm	818-10-0720-S1			
				4.2mm	818-10-0720-S2			
BBH-08D46.30-50.80	33.0	30.0	168.00	-	818-10-0720-S	CTX16-K-LS	TXN 160408	LNXT 0720-SUP
				2mm	818-10-0720-S1			
				4.2mm	818-10-0720-S2			
BBH-11D50.80-55.00	43.0	39.0	186.00	-	818-10-1030-S	CTX16-K-LS	TXN 160408	LNXT 1030-SUP
				2mm	818-10-1030-S1			
				4.2mm	818-10-1030-S2			
BBH-11D55.00-59.20	43.0	39.0	186.00	-	818-10-1030-S	CTX16-K-LS	TXN 160408	LNXT 1030-SUP
				2mm	818-10-1030-S1			
				4.2mm	818-10-1030-S2			
BBH-11D59.20-63.50	43.0	39.0	186.00	-	818-10-1030-S	CTX16-K-LS	TXN 160408	LNXT 1030-SUP
				2mm	818-10-1030-S1			
				4.2mm	818-10-1030-S2			
BBH-13D63.50-67.70	51.0	47.0	186.00	-	818-10-1235-S	CTX16-K-LS	TXN 160408	LNXT 1235-SUP
				2mm	818-10-1235-S1			
				4.2mm	818-10-1235-S2			
BBH-13D67.70-71.90	51.0	47.0	190.50	-	818-10-1235-S	CTX16-K-LS	TXN 160408	LNXT 1235-SUP
				2mm	818-10-1235-S1			
				4.2mm	818-10-1235-S2			
BBH-13D71.90-76.20	51.0	47.0	190.50	-	818-10-1235-S	CTX16-K-LS	TXN 160408	LNXT 1235-SUP
				2mm	818-10-1235-S1			
				4.2mm	818-10-1235-S2			
BBH-16D76.20-88.90	68.0	63.0	270.00	6.35mm	818-12-065-S	CTX25-K-LS	TXN 250408	LNXT35 D075-SUP
				12.7mm	818-12-065-S1			
BBH-18D88.90-101.60	82.0	77.0	310.00	6.35mm	818-12-065-S	CTX25-K-LS	TXN 250408	LNXT35 D085-SUP
				12.7mm	818-12-065-S1			
BBH-19D101.60-117.60	94.0	89.0	330.00	8.0mm	818-16-110-S	CTX40-K-LS	TXN 400408	LNXT50 D100-SUP
				16.0mm	818-16-110-S1			
BBH-19D117.60-133.60	94.0	89.0	330.00	8.0mm	818-16-110-S	CTX40-K-LS	TXN 400408	LNXT50 D100-SUP
				16.0mm	818-16-110-S1			
BBH-19D133.60-149.60	94.0	89.0	380.00	8.0mm	818-16-110-S	CTX40-K-LS	TXN 400408	LNXT50 D130-SUP
				16.0mm	818-16-110-S1			
BBH-20D149.60-165.60	106.0	101.0	400.00	8.0mm	818-16-110-S	CTX40-K-LS	TXN 400408	430.32-16D140.00
				16.0mm	818-16-110-S1			

Pull-Counter Boring Head 818 Series BBH Parts

Ordering Code	Support Pad Screw	Sub Support Pad	Blank Fiber Pad	Sub Support Pad Screw	Sub Support Pad Screw	Shape
BBH-08D38.10-42.30	416.1-832-M3.0	142030-F	5571 001-05	5513 020-01-M3.5	CML-0306	Fig.1
BBH-08D42.30-46.50	416.1-832-M3.0	142030-F	5571 001-05	5513 020-01-M3.5	CML-0306	
BBH-08D46.50-50.80	416.1-832-M3.0	142030-F	5571 001-05	5513 020-01-M3.5	CML-0306	
BBH-11D50.80-55.00	416.1-833-M3.5	142067-F	5571 001-06	5513 020-01-M3.5	CML-0410	
BBH-11D55.00-59.20	416.1-833-M3.5	142067-F	5571 001-06	5513 020-01-M3.5	CML-0410	
BBH-11D59.20-63.50	416.1-833-M3.5	142067-F	5571 001-06	5513 020-01-M3.5	CML-0410	
BBH-13D63.50-67.70	416.1-833-M3.5	142067-F	5571 001-06	5513 020-01-M3.5	CML-0410	
BBH-13D67.70-71.90	416.1-833-M3.5	142067-F	5571 001-06	5513 020-01-M3.5	CML-0410	
BBH-13D71.90-76.20	416.1-833-M3.5	142067-F	5571 001-06	5513 020-01-M3.5	CML-0410	Fig.2
BBH-16D76.20-88.90	5513 020-01-M3.5	142067-F	5571 001-07	5513 020-01-M3.5	CML-0512	
BBH-18D88.90-101.60	5513 020-01-M 3.5	142067-F	5571 001-08	5513 020-01-M3.5	CML-0614	
BBH-19D101.60-117.60	5513 020-26-M5.0	142067-F	5571 001-09	5513 020-01-M3.5	CML-0614	
BBH-19D117.60-133.60	5513 020-26-M5.0	202582-F	5571 001-09	5513 020-26-M5.0	CML-0614	
BBH-19D133.60-149.60	5513 020-26-M5.0	202582-F	5571 001-10	5513 020-26-M5.0	CML-0816	
BBH-20D149.60-165.60	5513 020-26-M5.0	202582-F	5571 001-10	5513 020-26-M5.0	CML-0816	

Pull-counter Boring & Conter Boring 818 Series Pad shoes

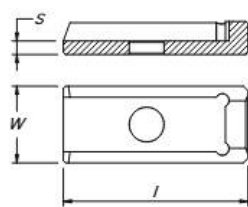


Fig 1

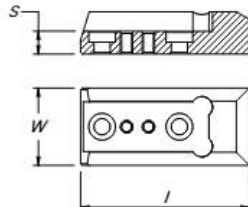
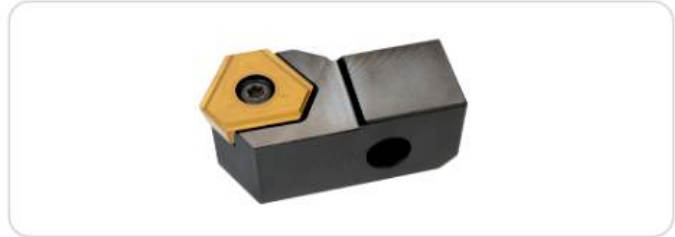
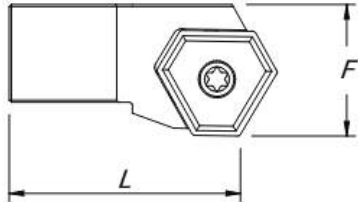


Fig 2



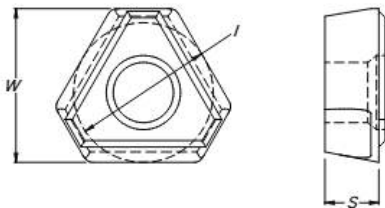
Ordering Code	L	W	S	Fig	Screw	Driver
818-10-0720-S	26	10	1.5	1	-	
818-10-0720-S1	26	10	2.5	1	-	
818-10-0720-S2	26	10	3.6	1	-	
818-10-1030-S	36	15	2	1	-	
818-10-1030-S1	36	15	3	1	-	
818-10-1030-S2	36	15	4.1	1	-	
818-10-1235-S	41	17	2	1	-	
818-10-1235-S1	41	17	3	1	-	
818-10-1235-S2	41	17	4.1	1	-	
818-12-065-S	48	22	6.5	2	CML-0410	L-3.0
818-12-065-S1	48	22	10	2	CML-0410	L-3.0
818-16-110-S	65	32	11	2	CML-0515	L-3.0
818-16-110-S1	65	32	15	2	CML-0515	L-3.0

Pull-Counter Boring Cartridge (818 Series)



Cartridge	Insert	F	L	Insert Screw	Insert Screw Driver	Cartridge Screw	Cartridge Screw Driver
CTX16-K-LS	TXN160408-G-L	16	32	5513 020-02-M4	TORX PLUS-T15	CML-0515	L-4.0
CTX25-K-LS	TXN250408-G-L	24	54	5513 020-55-M5	TORX PLUS-T20	CML-0825	L-6.0
CTX40-K-LS	TXN400708-G-L	32	56	5513 020-14-M6	TORX PLUS-T25	CML-1030	L-8.0

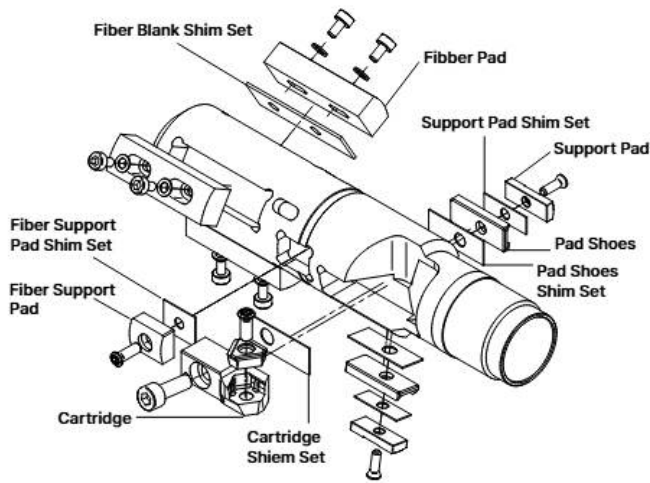
Pull-Counter Boring Insert(818 Series)



★ : first recommend grade ☆ : second recommend grade

Insert size	P			M			K			N			S			I	W	S
	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3	HM3	SM3	IM3			
TXN160408-G-L	★	☆			★	☆	★	☆			★	☆		☆	★	10.9	11.9	4.76
TXN250408-G-L	★	☆			★	☆	★	☆			★	☆		☆	★	17.2	18.8	4.76
TXN400708-G-L	★	☆			★	☆	★	☆			★	☆		☆	★	23.5	25.5	7.00

Counter Boring Head 818 Series TBH Parts & Shim Set



Cartridge	Size (mm)	Order Code
CTX16-K	0.05 (4pcs)	CX-160420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
CTX25-K	0.05 (4pcs)	CX-250420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
CTX40-K	0.05 (4pcs)	CX-400420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	

Support Pad	Size (mm)	Order Code
LNXT 0618-SUP	0.02 (4pcs)	800-060420
	0.03 (4pcs)	
	0.05 (4pcs)	
LNXT 0720-SUP	0.02 (4pcs)	800-070420
	0.03 (4pcs)	
	0.05 (4pcs)	
LNXT 0825-SUP	0.02 (4pcs)	800-080420
	0.03 (4pcs)	
	0.05 (4pcs)	
LNXT 1030-SUP	0.02 (4pcs)	800-100420
	0.03 (4pcs)	
	0.05 (4pcs)	
LNXT 1235-SUP	0.02 (4pcs)	800-120420
	0.03 (4pcs)	
	0.05 (4pcs)	

Support Pad	Size (mm)	Order Code
LNXT35DXXX-SUP	0.05 (4pcs)	0350420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
LNXT50DXXX-SUP	0.05 (4pcs)	0500420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	

Fiber Blank	Size (mm)	Order Code
5571 001-08	1.0 (3pcs)	00108-1
5571 001-09	1.0 (3pcs)	00109-1
5571 001-10	1.0 (3pcs)	00110-1
5571 001-11	1.0 (3pcs)	00111-1
5571 001-12	1.0 (3pcs)	00112-1

Pad Shoes	Size (mm)	Order Code
818-12-065-S	0.05 (4pcs)	818-12-650420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
818-16-110-S	0.05 (4pcs)	818-16-110420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
818-18-300-R	0.05 (4pcs)	818-18-300420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
818-26-500-R	0.05 (4pcs)	818-26-500420
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	

Fiber Support Pad	Size (mm)	Order Code
142067-F	0.05 (4pcs)	670420F
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	
202582-F	0.05 (4pcs)	820420F
	0.1 (4pcs)	
	0.2 (4pcs)	
	0.3 (4pcs)	
	0.5 (4pcs)	

INSERT HM3 Features

IL JIN TOOL's HM3 grade is optimized for processing carbon steel, alloy steel, forged steel, etc. Also, it is basically the grade that is used a lot among gun drill inserts.

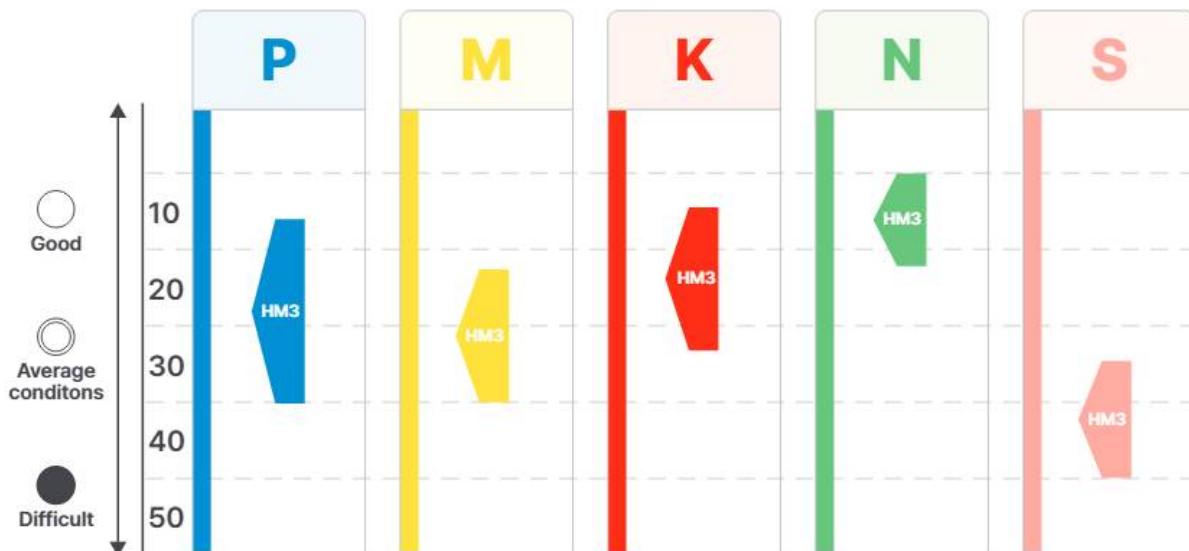
This grade has the following characteristics.

- Excellent wear resistance: It is resistant to friction and heat generated during processing, so it has a long tool life and boasts high wear resistance.
- Maintain hot hardness: Excellent hardness at high temperatures makes it suitable for high-speed processing.
- Coverage: Mostly used for various processing, such as cutting and milling of general steel, alloy steel, cast steel, etc.
- Suitable for high-speed and high-load machining: provides stable performance even under high cutting speeds and strong machining conditions.

HM3 grade provides high efficiency and productivity in a variety of metalworking operations, especially in continuous machining operations, which greatly helps extend tool life.

HM3 Grade

ISO P	- Range 25-40 - Best for P material. - PVD coating general grade that balances wear resistance and toughness.	ISO M	- Range 20-30 - Suitable for stainless steel but low toughness.
ISO K	- Range 20-35 - 주철 가공에서 고속 절삭 성능을 발휘.	ISO N	- Range 10-20 - Good wear resistance in nonferrous metals.
ISO S	- Range 10-25 - Inconel and titanium materials show low performance, but provide moderate wear resistance		



INSERT SM3 Features

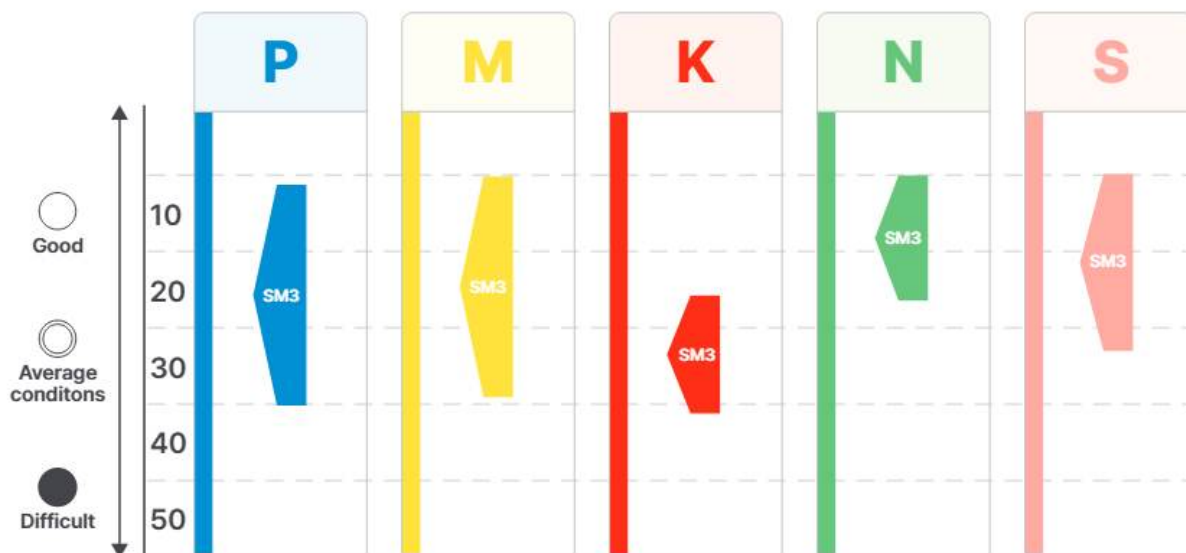
IL JIN TOOL's SM3 grade is mainly a high-performance cutting tool material optimized for stainless steel and stainless steel and hard to process processing. SM3 performs well, especially in gun drill operations.

This grade has the following characteristics.

- Excellent oxidation resistance: Excellent oxidation resistance at high temperatures, resulting in longer tool life.
- High heat resistance: It maintains stable cutting performance even at high temperatures and is suitable for high-speed processing or high-load operations.
- Optimized hard to process materials: Excellent performance in hard-to-process materials such as stainless steel and inconels.
- Reduce cutting resistance: Minimize cutting resistance to reduce tool wear and friction during machining.
- Uniform machining performance: Stable uniform performance under various cutting conditions.

If HM3 grade is a commonly used re-type, SM3 grade is primarily used to work on hard-to-work materials, especially in the machining of high-level materials to reduce heat generation and wear, which is excellent for extending tool life.

SM3 Grade	
ISO P	- Range 20-30 - Very good wear resistance. - Excellent performance at medium to high cutting speeds.
ISO K	- Range 15-25 - A combination of excellent wear resistance.
ISO S	- Range 40-50 - Processing-optimized grades, high wear and tear, and toughness.
ISO M	- Range 30-40 - Suitable for stainless steel. - Outstanding wear resistance and toughness.
ISO N	- Range 10-20 - Good wear resistance in nonferrous metals.



INSERT IM3 Features

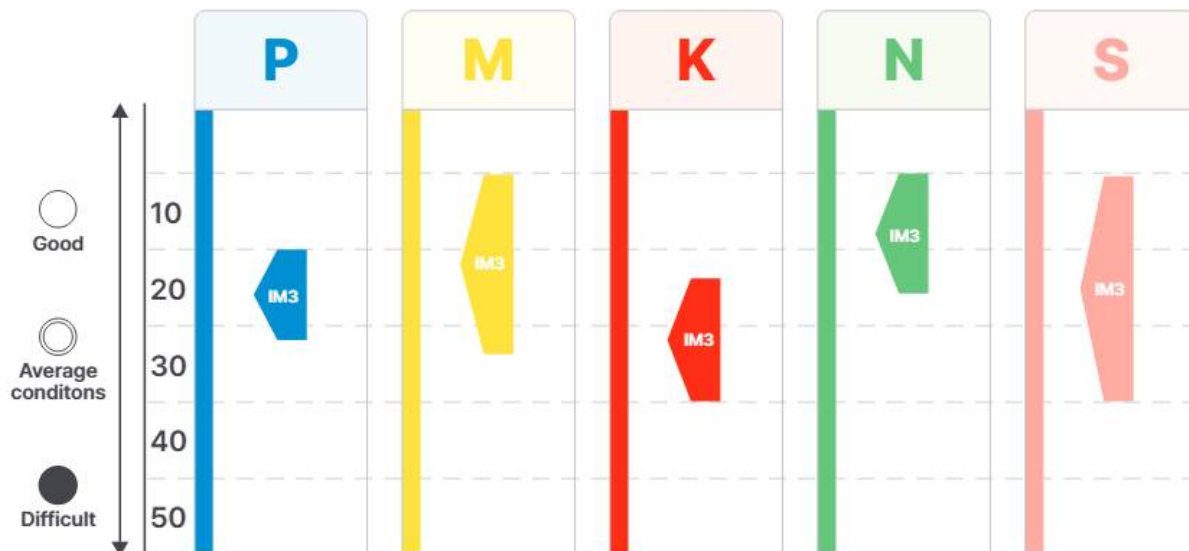
IL JIN TOOL's IM3 grade is a premium-grade coating used, which further enhances durability through double coating. The IM3 coating performs well in high-temperature and high-speed processing environments.

This grade has the following characteristics.

- **Durability enhanced by double coating:** Unlike conventional coating, IM3 uses double coating technology to significantly improve the durability of the tool, providing a long life even in extreme processing conditions.
- **Smooth surface:** Despite double coating, it maintains a very smooth surface to reduce friction and improve the surface quality of the workpiece.
- **Premium grade performance:** It is the most premium grade of the coatings used in ILJIN TOOL, and it performs so well that it achieves the best performance in difficult cutting and high-level processing operations.
- **Optimized for hard to materials:** IM3 coatings are especially used for hard to materials such as INCONEL 718, ensuring high cutting performance and tool life even in these highly difficult materials.

IM3 grade performs best, especially in high-speed and high-load machining, and is the highest-performing coating that can significantly extend the lifespan of the tool to reduce machining costs.

IM3 Grade	
ISO P	- Range 30-45 - High abrasion resistance makes it suitable for steel processing.
ISO K	- Range 20-40 - Show excellent wear resistance in cast iron.
ISO S	- Range 40-50 - Best performance in hard to materials, very high wear resistance.
ISO M	- Range 30-50 - Highly suitable for stainless steel and high-speed processing.
ISO N	- Range 20-35 - High durability of non-ferrous metal processing.



INSERT PM3 Features

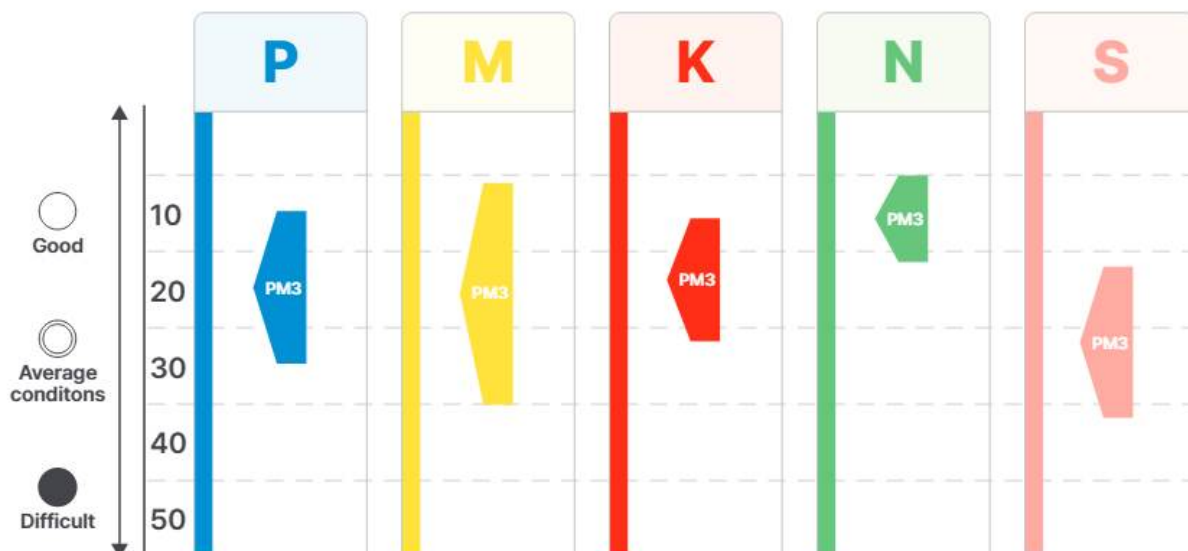
IL JIN TOOL's PM3 grade is a CVD coated carbide material used, which is used for the gun drill guide pad. This grade is specialized for the machining of hard to materials such as nickel alloy, stainless steel, etc.

This grade has the following characteristics.

- **Excellent wear resistance:** Provides excellent wear resistance and heat resistance, providing stable performance even in high-speed and high-volume processing environments.
- **High Lifetime:** High wear resistance extends the life of the guide pad, especially in cutting. This is also very advantageous in high speed machining environments.
- **Coverage:** It can be used in a variety of processing conditions and is a very versatile grade. It can be used extensively in various industries and shows excellent performance in many processing environments.
- **Coating:** CVD coating is applied to maximize wear resistance, greatly extending the life of the guide pad.

The PM3 grade excels in high-level processing and is widely used as a versatile product.

PM3 Grade	
ISO P	- Range 25-35 - Wear-resistant coating support pad.
ISO K	- Range 40-50 - Show excellent wear resistance in cast iron.
ISO S	- Range 35-45 - Balancing toughness and wear resistance in hard to materials.
ISO M	- Range 30-45 - Suitable for stainless steel.
ISO N	- Range 20-35 - Good wear resistance in nonferrous metals



Deep Hole Drilling

Cutting data for STS & Ejector drill heads 700

ISO	Workpiece materials	Grade	Cutting Speed Vc (m/min)	Feed, f_n (mm/r)		
				Drill diameter (mm)		
				$\phi 11.80$ - $\phi 18.00$	$\phi 18.01$ - $\phi 25.00$	$\phi 25.01$ - $\phi 33.30$
P	Non-alloyed steel	HM3	80-120	0.05-0.10	0.08-0.18	0.10-0.22
	Low alloy steel	HM3	80-120	0.06-0.12	0.08-0.19	0.10-0.23
	High alloy steel	HM3	70-100	0.04-0.10	0.06-0.14	0.08-0.18
M	Stainless steel	SM3	70-130	0.08-0.20	0.04-0.10	0.05-0.12
K	Gray iron Nodular	HM3	80-140	0.05-0.15	0.08-0.20	0.10-0.25
N	Aluminium alloy Copper alloy	HM3	100-200	0.08-0.15	0.10-0.20	0.12-0.25
S	Heat resistant super alloys	IM3	20.-50	0.02-.0.08	0.03-0.10	0.04-0.12

Deep Hole Drilling

Cutting data for STS & Ejector drill heads 800

ISO	Workpiece materials	Grade	Cutting Speed Vc (m/min)	Feed, f_n (mm/r)		
				Drill diameter (mm)		
				ø25.00- ø30.00	ø30.01- ø45.00	ø45.01- ø65.00
P	Non-alloyed steel	HM3	60-120	0.10-0.30	0.10-0.35	0.12-0.45
	Low alloy steel	HM3	60-110	0.10-0.30	0.13-0.40	0.18-0.45
	High alloy steel	HM3	50-110	0.10-0.30	0.13-0.40	0.18-0.45
M	Stainless steel	SM3	40-100	0.10-0.30	0.13-0.40	0.18-0.45
K	Gray iron Nodular	HM3	60-100	0.10-0.30	0.15-0.35	0.20-0.40
N	Aluminium alloy Copper alloy	HM3	60-140	0.07-0.30	0.13-0.30	0.20-0.35
S	Heat resistant super alloys	IM3	10-50	0.09-0.30	0.15-0.32	0.20-0.33

Deep Hole Drilling

Cutting data for STS & Ejector drill heads 801

ISO	Workpiece materials	Grade	Cutting Speed Vc (m/min)	Feed, f_n (mm/r)
				Drill diameter (mm)
				≥ 65.00
P	Non-alloyed steel	HM3	70-100	0.08-0.18
	Low alloy steel	HM3	60-100	0.08-0.19
	High alloy steel	HM3	60-100	0.06-0.14
M	Stainless steel	SM3	40-80	0.04-0.10
K	Gray iron Nodular	HM3	60-100	0.08-0.20
N	Aluminium alloy Copper alloy	HM3	60-120	0.10-0.20
S	Heat resistant super alloys	IM3	10-40	0.15-0.30

Deep Hole Drilling

Cutting data for STS&Ejector drill heads T-max 424.10

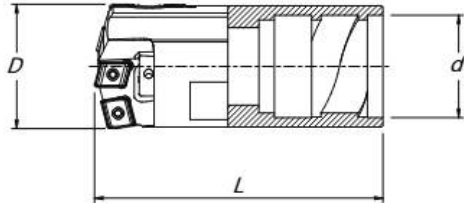
ISO	Workpiece materials	Grade	Cutting Speed Vc (m/min)	Feed, f_n (mm/r)		
				Drill diameter (mm)		
				≥ 65.00		
P	Non-alloyed steel	HM3	70-100	0.10-0.30	0.10-0.35	0.16-0.33
	Low alloy steel	HM3	60-100	0.10-0.30	0.13-0.40	0.16-0.33
	High alloy steel	HM3	60-100	0.10-0.30	0.13-0.40	0.15-0.30
M	Stainless steel	SM3	55-90	0.10-0.30	0.13-0.40	0.15-0.35
K	Gray iron Nodular	HM3	60-100	0.10-0.30	0.15-0.35	0.15-0.35
N	Aluminium alloy Copper alloy	HM3	65-130	0.07-0.30	0.13-0.30	0.10-0.30
S	Heat resistant super alloys	IM3	20-65	0.09-0.30	0.15-0.32	0.15-0.30

Counter Boring Head Cutting data for 818 Series

ISO	Workpiece materials	Grade	Cutting Speed Vc (m/min)	Feed, f_n (mm/r)		
				Cutting depth (mm)		
				1-3	3-8	≥ 8
P	Non-alloyed steel	HM3	70-100	0.20-0.35	0.18-0.35	0.18-0.35
	Low alloy steel	HM3	60-110	0.20-0.35	0.18-0.35	0.18-0.35
	High alloy steel	HM3	60-100	0.20-0.30	0.18-0.30	0.18-0.30
M	Stainless steel	SM3	55-90	0.20-0.35	0.15-0.35	0.15-0.35
K	Gray iron Nodular	HM3	60-100	0.20-0.35	0.15-0.35	0.15-0.35
N	Aluminium alloy Copper alloy	HM3	65-130	0.20-0.45	0.18-0.45	0.18-0.45
S	Heat resistant super alloys	IM3	20-65	0.09-0.30	0.15-0.32	0.12-0.30

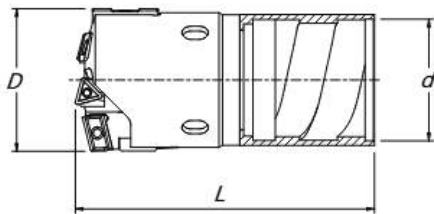
BTA & Counter Boing Head [Single-Start Thread]

* A minimum order quantity (MOQ) applies to single-start thread BTA heads.



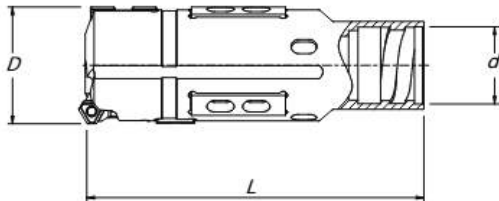
I 800 Series

- Diameter : _____
- Tube outer diameter : _____



I T-MAX 424.10 Series

- Diameter : _____
- Tube outer diameter : _____

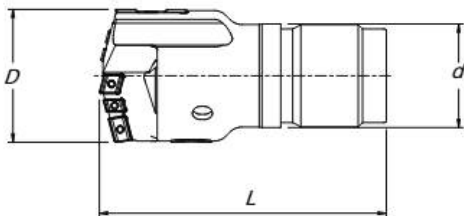


I 818 Series

- Diameter : _____
- Tube outer diameter : _____

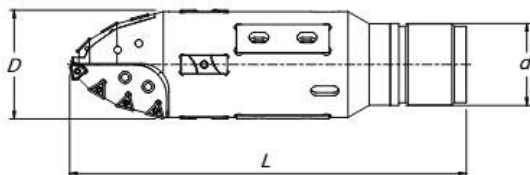
Special BTA

* A minimum order quantity (MOQ) applies to custom BTA heads.



I 800 Series

- Diameter : _____
- Tube outer diameter : _____



I Taper Series

- Diameter : _____
- Tube outer diameter : _____
- Taper Angle : _____