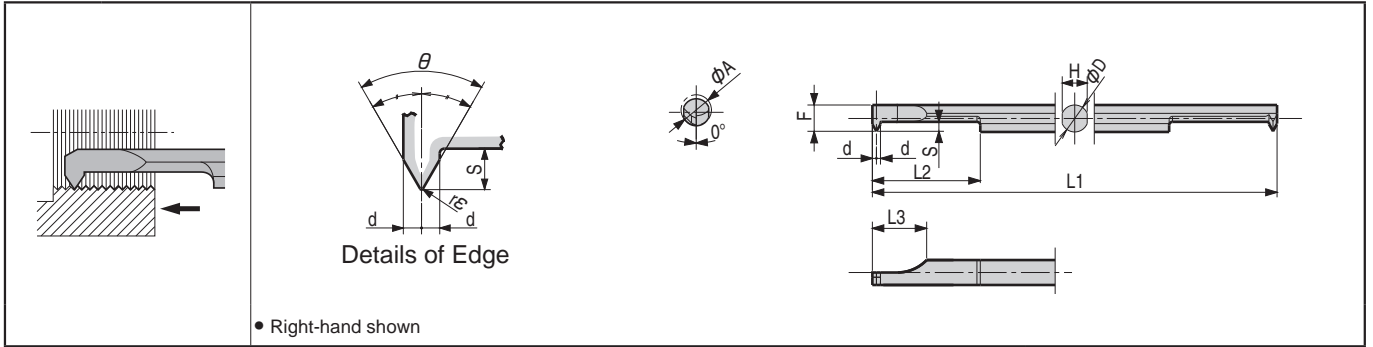


# 2 Edges Tip-Bar for Micro Internal Threading HPT

## HPT (Micro Internal Threading)



### Dimensions

Description	Min. Bore Dia.	Dimension (mm)										Insert Grade		Applicable Thread				
		øA	øD	H	L1	L2	L3	F	S	d	rε	θ	PVD Coated Carbide	Carbide	Metric		Unified	
													PR930	KW10	Nominal Thread	Pitch (mm)	Nominal Thread	Pitch (TPI)
HPTR 04504-60-005	4.5	4	3.7	60	16	8	3.9	1.3	0.6	0.05	60°	●	●	M6 and over	P0.75 ~P1.25	1/4-20UNC 1/4-28UNF and over	28~20	
	6	5	4.6	70	21		4.9	1.6	0.8			●	●	M8 and over	P0.75 ~P1.50	5/16-18UNC 5/16-24UNF and over	24~18	
	7.5	7	6.4	80	26		6.9	2	1			●	●	M10 and over	P0.75 ~P1.50	3/8-16UNC 3/8-24UNF and over	24~16	
HPTR 06005-55-010	6	5	4.6	70	21	8	4.9	1.6	0.8	0.1	55°	●	●	W10 TPI 20 W10 TPI 24 and over	24~20	G1/16 and over R1/16 and over	28	
												●	●	W11 TPI 18 W11 TPI 20 and over	20~18	G1/8 and over R1/8 and over	28~19	
												Whitworth		Parallel Pipe Tapered Pipe				

### Description Table for Tip-Bars and Applicable Sleeves

Description	Applicable Sleeve J26
HPTR 04504-60-005	PSH 04.....
06005-60-005	05.....
07507-60-005	07.....
HPTR 06005-55-010	PSH 05.....
08007-55-010	07.....

### Recommended Cutting Conditions

Workpiece Material	Recommended Insert Grade (Cutting Speed: m/min)	
	PVD Coated Carbide	Carbide
	PR930	KW10
Carbon Steel / Alloy Steel	★ 30~100	—
Stainless Steel	★ 30~80	—
Non-ferrous Metals	—	★ ~300

★: 1st Recommendation ☆: 2nd Recommendation

<Note>

- The standard cutting speed is Vc=30~50m/min. The table feed may not follow the expected conditions when machining small diameter workpieces at high speeds.
- Coolant is recommended.

### Depth of Cut & Number of Passes (Metric / M)

Pitch (mm)	Total ap (mm)	No. of Passes	1 Pass	2 Pass	3 Pass	4 Pass	5 Pass	6 Pass	7 Pass	8 Pass	9 Pass	10 Pass	11 Pass	12 Pass	13 Pass	14 Pass	15 Pass	16 Pass	17 Pass
0.75	0.44	10	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.03	0.03	0.03							
1.00	0.60	12	0.07	0.07	0.06	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03					
1.25	0.76	14	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.03			
1.50	0.92	17	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.03

### Depth of Cut & Number of Passes (Whitworth / W)

TPI	Total ap (mm)	No. of Passes	1 Pass	2 Pass	3 Pass	4 Pass	5 Pass	6 Pass	7 Pass	8 Pass	9 Pass	10 Pass	11 Pass	12 Pass	13 Pass	14 Pass	15 Pass	16 Pass	17 Pass
24	0.65	13	0.07	0.07	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.03	0.03				
20	0.81	15	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.03	0.03		
18	0.91	17	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.03	0.03	0.03

### Depth of Cut & Number of Passes (Unified / UN. UNC. UNF. UNEF)

TPI	Total ap (mm)	No. of Passes	1 Pass	2 Pass	3 Pass	4 Pass	5 Pass	6 Pass	7 Pass	8 Pass	9 Pass	10 Pass	11 Pass	12 Pass	13 Pass	14 Pass	15 Pass	16 Pass	17 Pass	18 Pass
28	0.54	12	0.07	0.06	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03						
24	0.64	12	0.07	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.04	0.03						
20	0.77	14	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.03				
18	0.87	17	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	
16	0.98	18	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.03	

Tip-Bars are sold in 1 piece boxes.

● : Std. Item □ : Check Availability