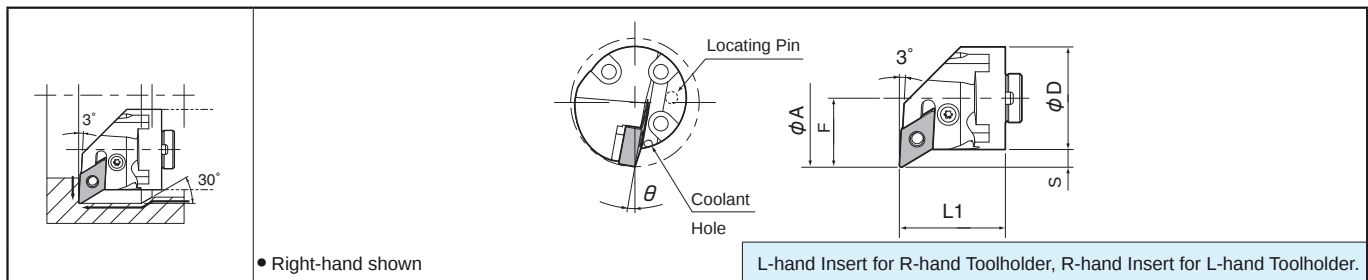


HA...PDUN15 (Copying: with Coolant Hole)



Toolholder Dimensions

Description	Std.		Min. Bore Dia.	Dimension (mm)				θ	Standard Corner-R (r)	Spare Parts						Applicable Boring Adapter F45
	R	L		ϕA	ϕD	L1	F			Lever	Lock Screw	Shim	Shim Pin	* Punch	Wrench	
HA32PDUN ^{R/L} 15-43	●	●	43	32	41	25	9	12°	0.8							AD32U
HA40PDUN ^{R/L} 15-50	●	●	50	40		27	7	10°								AD40V
HA50PDUN ^{R/L} 15-63	●	●	63	50		35	10									AD50W

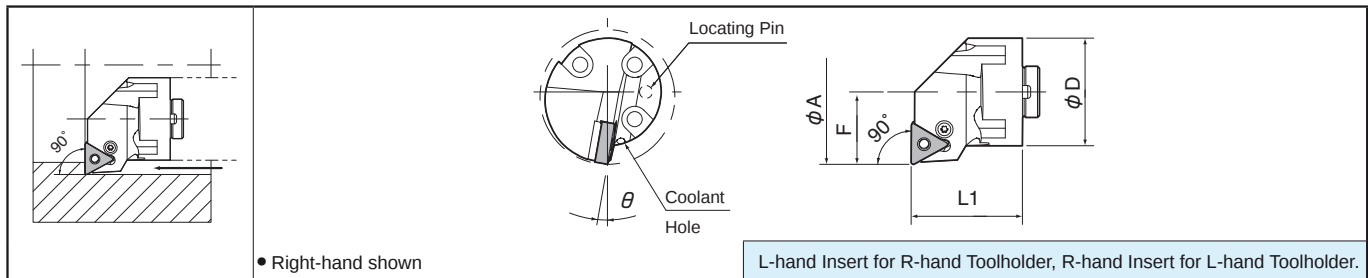
* Punch: Not included. Purchase separately.

* Shim: LD-4K43 is attached to Toolholder. When using DN □ □ 1506 Insert, purchase LD-4K separately.

Applicable Inserts

Toolholder	Description				Ref. Page			
	Shim: LD-4K43		Shim: LD-4K		Cermet / Coated Carbide / Carbide	Ceramic	PCD	CBN
HA32PDUN ^{R/L} 15-43	DN○A		DN○A		B19-B23	B82	C17	C6
HA40PDUN ^{R/L} 15-50	DN○G	1504..	DN○G	1506..				
HA50PDUN ^{R/L} 15-63	DN○M		DN○M					

HA...PTFN16 (Internal: with Coolant Hole)



Toolholder Dimensions

Description	Std.		Min. Bore Dia.	Dimension (mm)				θ	Standard Corner-R (r)	Spare Parts						Applicable Boring Adapter F45
	R	L		ϕA	ϕD	L1	F			Lever	Lock Screw	Shim	Shim Pin	* Punch	Wrench	
HA32PTFN ^{R/L} 16-40	●	●	40	32	41	22		10°	0.8							AD32U
HA40PTFN ^{R/L} 16-50	●	●	50	40		27										AD40V
HA50PTFN ^{R/L} 16-63	●	●	63	50		35		8°								AD50W

* Punch: Not included. Purchase separately.

Applicable Inserts

Toolholder	Description		Ref. Page			
			Cermet / Coated Carbide / Carbide	Ceramic	PCD	CBN
HA32PTFN ^{R/L} 16-40	TN○A	1604..	B28-B32	B86	C17	C7
HA40PTFN ^{R/L} 16-50	TN○G					
HA50PTFN ^{R/L} 16-63	TN○M					

Reference

Wrenches (LTP-10, LTP-15) are **Torx Plus**.

The size of **Torx Plus** is engraved on the long shaft.

Wrench description	LTP-10	LTP-15
Engraved size	10IP	15IP

● : Std. Item ○ : Check Availability R : Std. Item (R-hand Only) L : Std. Item (L-hand Only)