

GUANGDONG HENTRY CUTTING TOOL TECHNOLOGY CO., LTD.

CARBIDE TAPS

Solid Carbide Threading Tools

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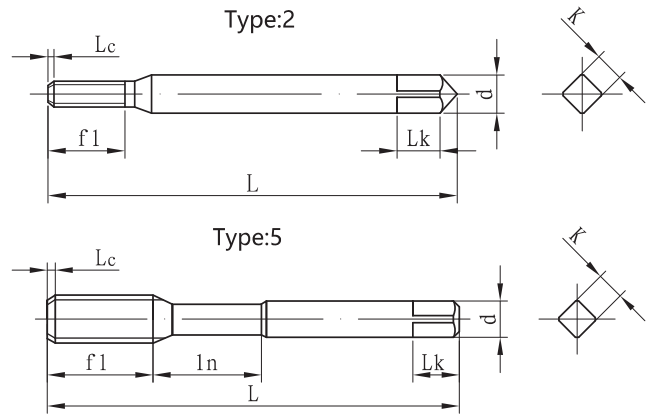
SYMBOLS AND TERMINOLOGY

Tool material	CARBIDE Solid carbide
Thread form	M / MF ISO metric coarse / fine
Thread form	UNC / UNF Unified coarse / fine
Tap tolerance	ISO 6HX / 6H / 2B Retain the stated tolerance for each tool
Hole type	Blind / Through Closed-end / open-ended hole
Dimensional standard	JIS / DIN 371 / 376 / 374 Tool dimensional reference
Coolant direction	Z / C Axial coolant / radial (side) coolant
Coating codes	DLC / YC-C50 / YC-T50 Source coating designations, unchanged
Thread hand	LH Left-hand thread
Stock marks	Filled / open circle In stock / no stock; custom orders accepted
Material suitability	Filled / double circle Best / suitable, as marked in the source

Stock and suitability symbols reproduce the source catalogue, not a live availability statement. Confirm the exact model, material condition and order specification. All technical dimensions and catalogue coating identifiers are retained; coating chemistry is not inferred.

CB-NRT

Solid Carbide Forming Taps (JIS)



2P chamfer: blind holes

4P chamfer: through holes; custom option

Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Flutes	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk		
WN010025B	M1×0.25	RH4	2P	2	37	3.5	—	3	2.5	3	—	○
WN012025B	M1.2×0.25	RH4	2P	2	37	3.5	—	3	2.5	3	—	○
WN014030B	M1.4×0.3	RH4	2P	2	37	6.5	—	3	2.5	3	—	○
WN016035B	M1.6×0.35	RH5	2P	2	36.5	8	—	3	2.5	3	—	○
WN020040B	M2×0.4	RH5	2P	2	47.5	10	—	3	2.5	3	—	○
WN025045B	M2.5×0.45	RH5	2P	2	47.5	13	—	3	2.5	3	—	○
WN030050B	M3×0.5	RH6	2P	2	48	16	—	4	3.2	6	—	○
WN040070B	M4×0.7	RH7	2P	2	52	18	—	5	4	7	—	○
WN050080B	M5×0.8	RH7	2P	2	59.5	20	—	5.5	4.5	7	—	○
WN060100B	M6×1	RH7	2P	5	62	19	10	6	4.5	7	2	○

6H tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

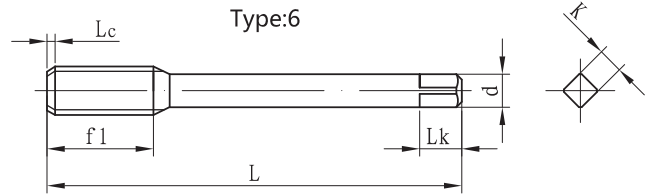
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	-	-	●	●	●	-	-	-

CB-NRT

Solid Carbide Forming Taps (JIS)



2P chamfer: blind holes

4P chamfer: through holes; custom option

Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Flutes	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk		
WN080125B	M8×1.25	RH7	2P	6	75	13	—	6.2	5	8	3	○
WN080100B	M8×1	RH7	2P	6	75	13	—	6.2	5	8	3	○
WN100150B	M10×1.5	RH8	2P	6	75	15	—	7	5.5	8	6	○
WN100125B	M10×1.25	RH7	2P	6	75	15	—	7	5.5	8	6	○
WN100100B	M10×1	RH7	2P	6	75	15	—	7	5.5	8	6	○
WN120175B	M12×1.75	RH9	2P	6	82	17	—	8.5	6.5	9	6	○
WN120150B	M12×1.5	RH8	2P	6	82	17	—	8.5	6.5	9	6	○
WN120125B	M12×1.25	RH7	2P	6	82	17	—	8.5	6.5	9	6	○
WN120100B	M12×1	RH7	2P	6	82	17	—	8.5	6.5	9	6	○
WN140200B	M14×2	RH10	2P	6	100	20	—	10.5	8	11	6	○
WN140150B	M14×1.5	RH8	2P	6	100	20	—	10.5	8	11	6	○
WN140125B	M14×1.25	RH7	2P	6	100	20	—	10.5	8	11	6	○
WN140100B	M14×1	RH7	2P	6	100	20	—	10.5	8	11	6	○
WN160200B	M16×2	RH10	2P	6	100	20	—	12.5	10	13	6	○
WN160150B	M16×1.5	RH8	2P	6	100	20	—	12.5	10	13	6	○
WN160125B	M16×1.25	RH7	2P	6	100	20	—	12.5	10	13	6	○
WN160100B	M16×1	RH7	2P	6	100	20	—	12.5	10	13	6	○

6H tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

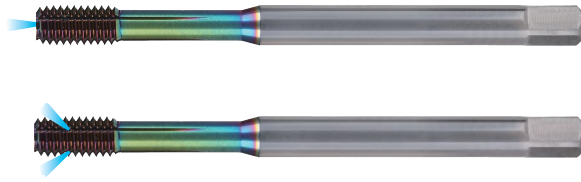
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	-	-	●	●	●	-	-	-

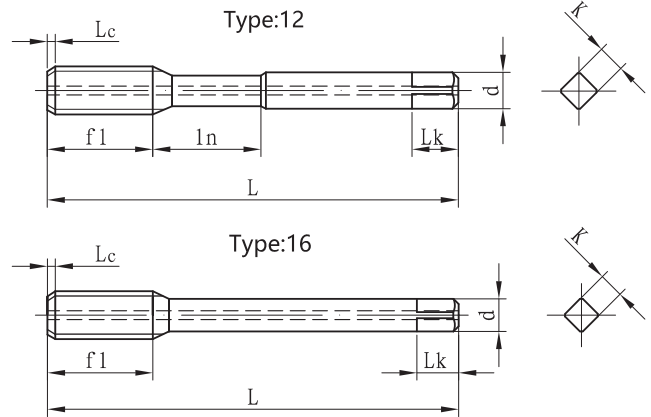
CB-OH-NRT

Solid Carbide Forming Taps with Internal Coolant (JIS)



2P chamfer: blind holes

4P chamfer: through holes; custom option



Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Oilgroovetype	Flutes	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk			
WN060100C	M6×1	RH7	2P	12	62	19	10	6	4.5	7	C	2	○
WN060100Z	M6×1	RH7	2P	12	62	19	10	6	4.5	7	Z	2	○
WN080125C	M8×1.25	RH7	2P	16	75	13	—	6.2	5	8	C	3	○
WN080125Z	M8×1.25	RH7	2P	16	75	13	—	6.2	5	8	Z	3	○
WN080100C	M8×1	RH7	2P	16	75	13	—	6.2	5	8	C	3	○
WN080100Z	M8×1	RH7	2P	16	75	13	—	6.2	5	8	Z	3	○
WN100150C	M10×1.5	RH8	2P	16	75	15	—	7	5.5	8	C	6	○
WN100150Z	M10×1.5	RH8	2P	16	75	15	—	7	5.5	8	Z	6	○
WN100125C	M10×1.25	RH7	2P	16	75	15	—	7	5.5	8	C	6	○
WN100125Z	M10×1.25	RH7	2P	16	75	15	—	7	5.5	8	Z	6	○
WN100100C	M10×1	RH7	2P	16	75	15	—	7	5.5	8	C	6	○
WN100100Z	M10×1	RH7	2P	16	75	15	—	7	5.5	8	Z	6	○
WN120175C	M12×1.75	RH9	2P	16	82	17	—	8.5	6.5	9	C	6	○
WN120175Z	M12×1.75	RH9	2P	16	82	17	—	8.5	6.5	9	Z	6	○
WN120150C	M12×1.5	RH8	2P	16	82	17	—	8.5	6.5	9	C	6	○
WN120150Z	M12×1.5	RH8	2P	16	82	17	—	8.5	6.5	9	Z	6	○
WN120125C	M12×1.25	RH7	2P	16	82	17	—	8.5	6.5	9	C	6	○
WN120125Z	M12×1.25	RH7	2P	16	82	17	—	8.5	6.5	9	Z	6	○
WN120100C	M12×1	RH7	2P	16	82	17	—	8.5	6.5	9	C	6	○
WN120100Z	M12×1	RH7	2P	16	82	17	—	8.5	6.5	9	Z	6	○
WN140200C	M14×2	RH10	2P	16	100	20	—	10.5	8	11	C	6	○
WN140200Z	M14×2	RH10	2P	16	100	20	—	10.5	8	11	Z	6	○
WN140150C	M14×1.5	RH8	2P	16	100	20	—	10.5	8	11	C	6	○
WN140150Z	M14×1.5	RH8	2P	16	100	20	—	10.5	8	11	Z	6	○
WN140125C	M14×1.25	RH7	2P	16	100	20	—	10.5	8	11	C	6	○
WN140125Z	M14×1.25	RH7	2P	16	100	20	—	10.5	8	11	Z	6	○
WN140100C	M14×1	RH7	2P	16	100	20	—	10.5	8	11	C	6	○
WN140100Z	M14×1	RH7	2P	16	100	20	—	10.5	8	11	Z	6	○

6H tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

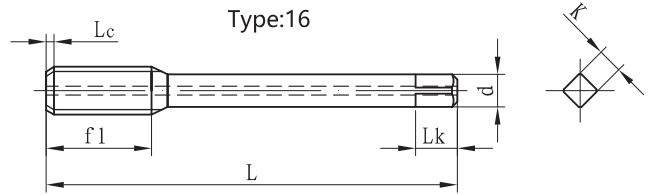
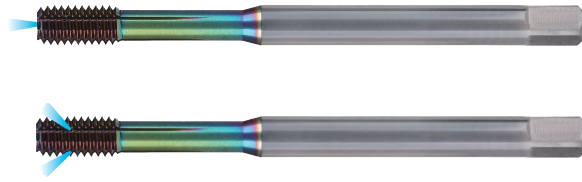
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC≤35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC≥35
-	-	-	-	-	-	-	●	●	●	-	-	-

CB-OH-NRT

Solid Carbide Forming Taps with Internal Coolant (JIS)



2P chamfer: blind holes

4P chamfer: through holes; custom option

Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Oilgroovetype		Flutes	Stock
					OAL L	Thread L fl	Neck L In	Shank d	Square W k	Square L Lk				
WN160200C	M16×2	RH10	2P	16	100	20	—	12.5	10	13	C	C	6	○
WN160200Z	M16×2	RH10	2P	16	100	20	—	12.5	10	13	Z	Z	6	○
WN160150C	M16×1.5	RH8	2P	16	100	20	—	12.5	10	13	C	C	6	○
WN160150Z	M16×1.5	RH8	2P	16	100	20	—	12.5	10	13	Z	Z	6	○
WN160125C	M16×1.25	RH7	2P	16	100	20	—	12.5	10	13	C	C	6	○
WN160125Z	M16×1.25	RH7	2P	16	100	20	—	12.5	10	13	Z	Z	6	○
WN160100C	M16×1	RH7	2P	16	100	20	—	12.5	10	13	C	C	6	○
WN160100Z	M16×1	RH7	2P	16	100	20	—	12.5	10	13	Z	Z	6	○

6H tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

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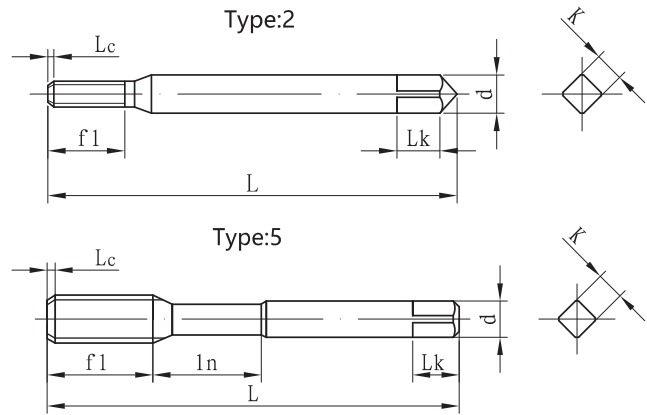
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	-	-	●	●	●	-	-	-

CB-L-NRT

Solid Carbide Long-Shank Forming Taps (JIS)



2P chamfer: blind holes

4P chamfer: through holes; custom option

Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Flutes	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk		
WN020480B	M2×0.4	RH5	2P	2	78	10	—	3	2.5	3	—	○
WN0204100B	M2×0.4	RH5	2P	2	98	10	—	3	2.5	3	—	○
WN0204120B	M2×0.4	RH5	2P	2	118	10	—	3	2.5	3	—	○
WN02504580B	M2.5×0.45	RH5	2P	2	78	13	—	3	2.5	3	—	○
WN025045100B	M2.5×0.45	RH5	2P	2	98	13	—	3	2.5	3	—	○
WN025045120B	M2.5×0.45	RH5	2P	2	118	13	—	3	2.5	3	—	○
WN030580B	M3×0.5	RH6	2P	2	78	16	—	4	3.2	6	—	○
WN0305100B	M3×0.5	RH6	2P	2	98	16	—	4	3.2	6	—	○
WN0305120B	M3×0.5	RH6	2P	2	118	16	—	4	3.2	6	—	○
WN0305150B	M3×0.5	RH6	2P	2	148	16	—	4	3.2	6	—	○
WN040780B	M4×0.7	RH7	2P	2	78	18	—	5	4	7	—	○
WN0407100B	M4×0.7	RH7	2P	2	98	18	—	5	4	7	—	○
WN0407120B	M4×0.7	RH7	2P	2	118	18	—	5	4	7	—	○
WN0407150B	M4×0.7	RH7	2P	2	148	18	—	5	4	7	—	○
WN050880B	M5×0.8	RH7	2P	2	78	20	—	5.5	4.5	7	—	○
WN0508100B	M5×0.8	RH7	2P	2	98	20	—	5.5	4.5	7	—	○
WN0508120B	M5×0.8	RH7	2P	2	118	20	—	5.5	4.5	7	—	○
WN0508150B	M5×0.8	RH7	2P	2	148	20	—	5.5	4.5	7	—	○
WN061080B	M6×1	RH7	2P	5	80	19	10	6	4.5	7	2	○
WN0610100B	M6×1	RH7	2P	5	100	19	10	6	4.5	7	2	○
WN0610120B	M6×1	RH7	2P	5	120	19	10	6	4.5	7	2	○
WN0610150B	M6×1	RH7	2P	5	150	19	10	6	4.5	7	2	○

6H tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

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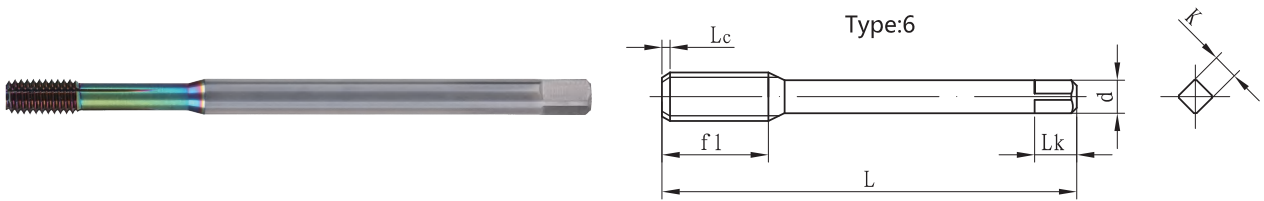
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	-	-	●	●	●	-	-	-

CB-L-NRT

Solid Carbide Long-Shank Forming Taps (JIS)



2P chamfer: blind holes

4P chamfer: through holes; custom option

Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Flutes	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk		
WN08125100B	M8×1.25	RH7	2P	6	100	13	—	6.2	5	8	3	○
WN08125120B	M8×1.25	RH7	2P	6	120	13	—	6.2	5	8	3	○
WN08125150B	M8×1.25	RH7	2P	6	150	13	—	6.2	5	8	3	○
WN0810100B	M8×1	RH7	2P	6	100	13	—	6.2	5	8	3	○
WN0810120B	M8×1	RH7	2P	6	120	13	—	6.2	5	8	3	○
WN0810150B	M8×1	RH7	2P	6	150	13	—	6.2	5	8	3	○
WN1015100B	M10×1.5	RH8	2P	6	100	15	—	7	5.5	8	6	○
WN1015120B	M10×1.5	RH8	2P	6	120	15	—	7	5.5	8	6	○
WN1015150B	M10×1.5	RH8	2P	6	150	15	—	7	5.5	8	6	○

6H tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

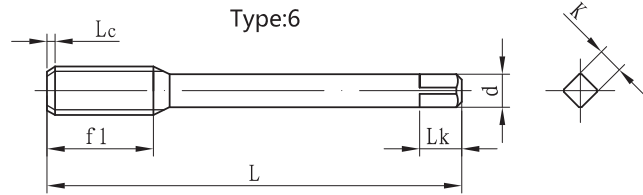
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	-	-	●	●	●	-	-	-

CB-L-NRT

Solid Carbide Long-Shank Forming Taps (JIS)



2P chamfer: blind holes

4P chamfer: through holes; custom option

4

Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Flutes	Stock
					OAL L	Thread L fl	Neck L In	Shank d	Square W k	Square L Lk		
WN10125100B	M10×1.25	RH7	2P	6	100	15	—	7	5.5	8	6	○
WN10125120B	M10×1.25	RH7	2P	6	120	15	—	7	5.5	8	6	○
WN10125150B	M10×1.25	RH7	2P	6	150	15	—	7	5.5	8	6	○
WN1010100B	M10×1	RH7	2P	6	100	15	—	7	5.5	8	6	○
WN1010120B	M10×1	RH7	2P	6	120	15	—	7	5.5	8	6	○
WN1010150B	M10×1	RH7	2P	6	150	15	—	7	5.5	8	6	○
WN12175100B	M12×1.75	RH9	2P	6	100	17	—	8.5	6.5	9	6	○
WN12175120B	M12×1.75	RH9	2P	6	120	17	—	8.5	6.5	9	6	○
WN12175150B	M12×1.75	RH9	2P	6	150	17	—	8.5	6.5	9	6	○
WN1215100B	M12×1.5	RH8	2P	6	100	17	—	8.5	6.5	9	6	○
WN1215120B	M12×1.5	RH8	2P	6	120	17	—	8.5	6.5	9	6	○
WN1215150B	M12×1.5	RH8	2P	6	150	17	—	8.5	6.5	9	6	○
WN12125100B	M12×1.25	RH7	2P	6	100	17	—	8.5	6.5	9	6	○
WN12125120B	M12×1.25	RH7	2P	6	120	17	—	8.5	6.5	9	6	○
WN12125150B	M12×1.25	RH7	2P	6	150	17	—	8.5	6.5	9	6	○
WN1210100B	M12×1	RH7	2P	6	100	17	—	8.5	6.5	9	6	○
WN1210120B	M12×1	RH7	2P	6	120	17	—	8.5	6.5	9	6	○
WN1210150B	M12×1	RH7	2P	6	150	17	—	8.5	6.5	9	6	○
WN1420120B	M14×2	RH10	2P	6	120	20	—	10.5	8	11	6	○
WN1420150B	M14×2	RH10	2P	6	150	20	—	10.5	8	11	6	○
WN1415120B	M14×1.5	RH8	2P	6	120	20	—	10.5	8	11	6	○
WN1415150B	M14×1.5	RH8	2P	6	150	20	—	10.5	8	11	6	○
WN14125120B	M14×1.25	RH7	2P	6	120	20	—	10.5	8	11	6	○
WN14125150B	M14×1.25	RH7	2P	6	150	20	—	10.5	8	11	6	○
WN1410120B	M14×1	RH7	2P	6	120	20	—	10.5	8	11	6	○
WN1410150B	M14×1	RH7	2P	6	150	20	—	10.5	8	11	6	○
WN1620120B	M16×2	RH10	2P	6	120	20	—	12.5	10	13	6	○
WN1620150B	M16×2	RH10	2P	6	150	20	—	12.5	10	13	6	○
WN1615120B	M16×1.5	RH8	2P	6	120	20	—	12.5	10	13	6	○
WN1615150B	M16×1.5	RH8	2P	6	150	20	—	12.5	10	13	6	○
WN16125120B	M16×1.25	RH7	2P	6	120	20	—	12.5	10	13	6	○
WN16125150B	M16×1.25	RH7	2P	6	150	20	—	12.5	10	13	6	○
WN1610120B	M16×1	RH7	2P	6	120	20	—	12.5	10	13	6	○
WN1610150B	M16×1	RH7	2P	6	150	20	—	12.5	10	13	6	○

6H tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

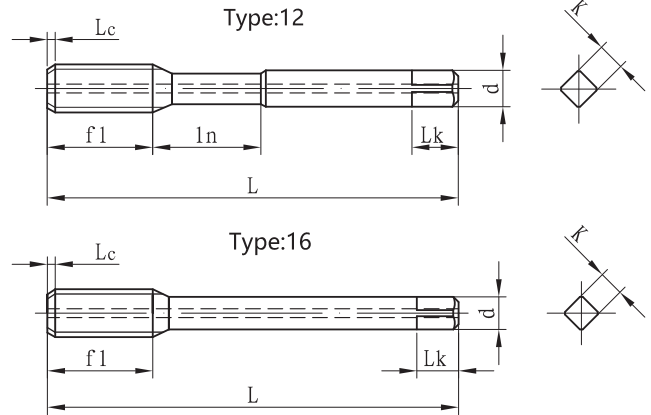
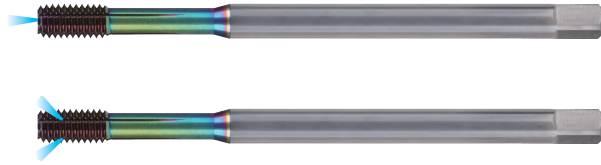
Stock filled cycle in stock per circle in stock. Custom orders accepted.

Pre-hole diameters: see printed pages 32-38.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	-	-	●	●	●	-	-	-

CB-L-OH-NRT

Solid Carbide Long-Shank Forming Taps with Internal Coolant (JIS)



2P chamfer: blind holes

4P chamfer: through holes; custom option

Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Oilgroovetype	Flutes	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk			
WN061080C	M6×1	RH7	2P	12	80	19	10	6	4.5	7	C	2	○
WN061080Z	M6×1	RH7	2P	12	80	19	10	6	4.5	7	Z	2	○
WN0610100C	M6×1	RH7	2P	12	100	19	10	6	4.5	7	C	2	○
WN0610100Z	M6×1	RH7	2P	12	100	19	10	6	4.5	7	Z	2	○
WN0610120C	M6×1	RH7	2P	12	120	19	10	6	4.5	7	C	2	○
WN0610120Z	M6×1	RH7	2P	12	120	19	10	6	4.5	7	Z	2	○
WN0610150C	M6×1	RH7	2P	12	150	19	10	6	4.5	7	C	2	○
WN0610150Z	M6×1	RH7	2P	12	150	19	10	6	4.5	7	Z	2	○
WN08125100C	M8×1.25	RH7	2P	16	100	13	—	6.2	5	8	C	3	○
WN08125100Z	M8×1.25	RH7	2P	16	100	13	—	6.2	5	8	Z	3	○
WN08125120C	M8×1.25	RH7	2P	16	120	13	—	6.2	5	8	C	3	○
WN08125120Z	M8×1.25	RH7	2P	16	120	13	—	6.2	5	8	Z	3	○
WN08125150C	M8×1.25	RH7	2P	16	150	13	—	6.2	5	8	C	3	○
WN08125150Z	M8×1.25	RH7	2P	16	150	13	—	6.2	5	8	Z	3	○
WN0810100C	M8×1	RH7	2P	16	100	13	—	6.2	5	8	C	3	○
WN0810100Z	M8×1	RH7	2P	16	100	13	—	6.2	5	8	Z	3	○
WN0810120C	M8×1	RH7	2P	16	120	13	—	6.2	5	8	C	3	○
WN0810120Z	M8×1	RH7	2P	16	120	13	—	6.2	5	8	Z	3	○
WN0810150C	M8×1	RH7	2P	16	150	13	—	6.2	5	8	C	3	○
WN0810150Z	M8×1	RH7	2P	16	150	13	—	6.2	5	8	Z	3	○
WN1015100C	M10×1.5	RH8	2P	16	100	15	—	7	5.5	8	C	6	○
WN1015100Z	M10×1.5	RH8	2P	16	100	15	—	7	5.5	8	Z	6	○
WN1015120C	M10×1.5	RH8	2P	16	120	15	—	7	5.5	8	C	6	○
WN1015120Z	M10×1.5	RH8	2P	16	120	15	—	7	5.5	8	Z	6	○
WN1015150C	M10×1.5	RH8	2P	16	150	15	—	7	5.5	8	C	6	○
WN1015150Z	M10×1.5	RH8	2P	16	150	15	—	7	5.5	8	Z	6	○
WN10125100C	M10×1.25	RH7	2P	16	100	15	—	7	5.5	8	C	6	○
WN10125100Z	M10×1.25	RH7	2P	16	100	15	—	7	5.5	8	Z	6	○
WN10125120C	M10×1.25	RH7	2P	16	120	15	—	7	5.5	8	C	6	○
WN10125120Z	M10×1.25	RH7	2P	16	120	15	—	7	5.5	8	Z	6	○
WN10125150C	M10×1.25	RH7	2P	16	150	15	—	7	5.5	8	C	6	○

6H tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

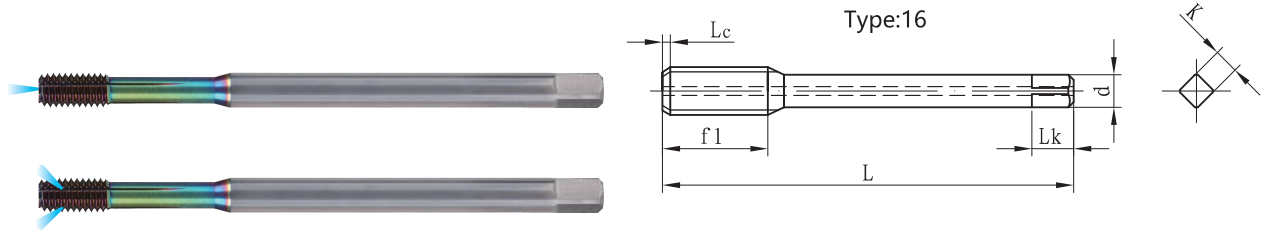
Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

Material: P = low-C steel; M = Med-C steel; H = High-C steel; SCM = Alloy steel; SUS = Stainless steel; FC = Free-cutting steel; FCD = Free-cutting die steel; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC≤35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC≥35
-	-	-	-	-	-	-	●	●	●	-	-	-

CB-L-OH-NRT

Solid Carbide Long-Shank Forming Taps with Internal Coolant (JIS)



2P chamfer: blind holes

4P chamfer: through holes; custom option

Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Oilgroovetype	Flutes	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk			
WN10125150Z	M10×1.25	RH7	2P	16	150	15	—	7	5.5	8	Z	6	○
WN1010100C	M10×1	RH7	2P	16	100	15	—	7	5.5	8	C	6	○
WN1010100Z	M10×1	RH7	2P	16	100	15	—	7	5.5	8	Z	6	○
WN1010120C	M10×1	RH7	2P	16	120	15	—	7	5.5	8	C	6	○
WN1010120Z	M10×1	RH7	2P	16	120	15	—	7	5.5	8	Z	6	○
WN1010150C	M10×1	RH7	2P	16	150	15	—	7	5.5	8	C	6	○
WN1010150Z	M10×1	RH7	2P	16	150	15	—	7	5.5	8	Z	6	○
WN12175100C	M12×1.75	RH9	2P	16	100	17	—	8.5	6.5	9	C	6	○
WN12175100Z	M12×1.75	RH9	2P	16	100	17	—	8.5	6.5	9	Z	6	○
WN12175120C	M12×1.75	RH9	2P	16	120	17	—	8.5	6.5	9	C	6	○
WN12175120Z	M12×1.75	RH9	2P	16	120	17	—	8.5	6.5	9	Z	6	○
WN12175150C	M12×1.75	RH9	2P	16	150	17	—	8.5	6.5	9	C	6	○
WN12175150Z	M12×1.75	RH9	2P	16	150	17	—	8.5	6.5	9	Z	6	○
WN1215100C	M12×1.5	RH8	2P	16	100	17	—	8.5	6.5	9	C	6	○
WN1215100Z	M12×1.5	RH8	2P	16	100	17	—	8.5	6.5	9	Z	6	○
WN1215120C	M12×1.5	RH8	2P	16	120	17	—	8.5	6.5	9	C	6	○
WN1215120Z	M12×1.5	RH8	2P	16	120	17	—	8.5	6.5	9	Z	6	○
WN1215150C	M12×1.5	RH8	2P	16	150	17	—	8.5	6.5	9	C	6	○
WN1215150Z	M12×1.5	RH8	2P	16	150	17	—	8.5	6.5	9	Z	6	○
WN12125100C	M12×1.25	RH7	2P	16	100	17	—	8.5	6.5	9	C	6	○
WN12125100Z	M12×1.25	RH7	2P	16	100	17	—	8.5	6.5	9	Z	6	○
WN12125120C	M12×1.25	RH7	2P	16	120	17	—	8.5	6.5	9	C	6	○
WN12125120Z	M12×1.25	RH7	2P	16	120	17	—	8.5	6.5	9	Z	6	○
WN12125150C	M12×1.25	RH7	2P	16	150	17	—	8.5	6.5	9	C	6	○
WN12125150Z	M12×1.25	RH7	2P	16	150	17	—	8.5	6.5	9	Z	6	○
WN1210100C	M12×1	RH7	2P	16	100	17	—	8.5	6.5	9	C	6	○
WN1210100Z	M12×1	RH7	2P	16	100	17	—	8.5	6.5	9	Z	6	○
WN1210120C	M12×1	RH7	2P	16	120	17	—	8.5	6.5	9	C	6	○
WN1210120Z	M12×1	RH7	2P	16	120	17	—	8.5	6.5	9	Z	6	○
WN1210150C	M12×1	RH7	2P	16	150	17	—	8.5	6.5	9	C	6	○
WN1210150Z	M12×1	RH7	2P	16	150	17	—	8.5	6.5	9	Z	6	○

6H tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

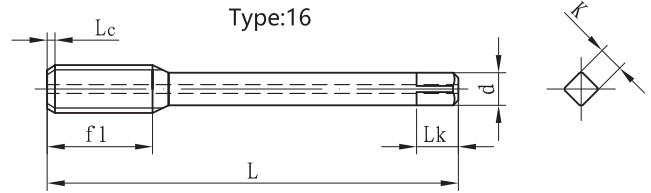
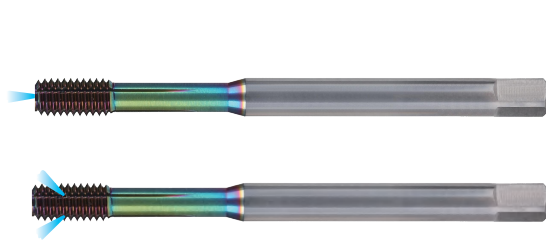
Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

Materials: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.
Hole diameters: see printed pages 32-38.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	-	-	●	●	●	-	-	-

CB-L-OH-NRT

Solid Carbide Long-Shank Forming Taps with Internal Coolant (JIS)



2P chamfer: blind holes

4P chamfer: through holes; custom option

Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Oilgroovetype	Flutes	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk			
WN1420120C	M14×2	RH10	2P	16	120	20	—	10.5	8	11	C	6	○
WN1420120Z	M14×2	RH10	2P	16	120	20	—	10.5	8	11	Z	6	○
WN1420150C	M14×2	RH10	2P	16	150	20	—	10.5	8	11	C	6	○
WN1420150Z	M14×2	RH10	2P	16	150	20	—	10.5	8	11	Z	6	○
WN1415120C	M14×1.5	RH8	2P	16	120	20	—	10.5	8	11	C	6	○
WN1415120Z	M14×1.5	RH8	2P	16	120	20	—	10.5	8	11	Z	6	○
WN1415150C	M14×1.5	RH8	2P	16	150	20	—	10.5	8	11	C	6	○
WN1415150Z	M14×1.5	RH8	2P	16	150	20	—	10.5	8	11	Z	6	○
WN14125120C	M14×1.25	RH7	2P	16	120	20	—	10.5	8	11	C	6	○
WN14125120Z	M14×1.25	RH7	2P	16	120	20	—	10.5	8	11	Z	6	○
WN14125150C	M14×1.25	RH7	2P	16	150	20	—	10.5	8	11	C	6	○
WN14125150Z	M14×1.25	RH7	2P	16	150	20	—	10.5	8	11	Z	6	○
WN1410120C	M14×1	RH7	2P	16	120	20	—	10.5	8	11	C	6	○
WN1410120Z	M14×1	RH7	2P	16	120	20	—	10.5	8	11	Z	6	○
WN1410150C	M14×1	RH7	2P	16	150	20	—	10.5	8	11	C	6	○
WN1410150Z	M14×1	RH7	2P	16	150	20	—	10.5	8	11	Z	6	○
WN1620120C	M16×2	RH10	2P	16	120	20	—	12.5	10	13	C	6	○
WN1620120Z	M16×2	RH10	2P	16	120	20	—	12.5	10	13	Z	6	○
WN1620150C	M16×2	RH10	2P	16	150	20	—	12.5	10	13	C	6	○
WN1620150Z	M16×2	RH10	2P	16	150	20	—	12.5	10	13	Z	6	○
WN1615120C	M16×1.5	RH8	2P	16	120	20	—	12.5	10	13	C	6	○
WN1615120Z	M16×1.5	RH8	2P	16	120	20	—	12.5	10	13	Z	6	○
WN1615150C	M16×1.5	RH8	2P	16	150	20	—	12.5	10	13	C	6	○
WN1615150Z	M16×1.5	RH8	2P	16	150	20	—	12.5	10	13	Z	6	○
WN16125120C	M16×1.25	RH7	2P	16	120	20	—	12.5	10	13	C	6	○
WN16125120Z	M16×1.25	RH7	2P	16	120	20	—	12.5	10	13	Z	6	○
WN16125150C	M16×1.25	RH7	2P	16	150	20	—	12.5	10	13	C	6	○
WN16125150Z	M16×1.25	RH7	2P	16	150	20	—	12.5	10	13	Z	6	○
WN1610120C	M16×1	RH7	2P	16	120	20	—	12.5	10	13	C	6	○
WN1610120Z	M16×1	RH7	2P	16	120	20	—	12.5	10	13	Z	6	○
WN1610150C	M16×1	RH7	2P	16	150	20	—	12.5	10	13	C	6	○
WN1610150Z	M16×1	RH7	2P	16	150	20	—	12.5	10	13	Z	6	○

6H tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

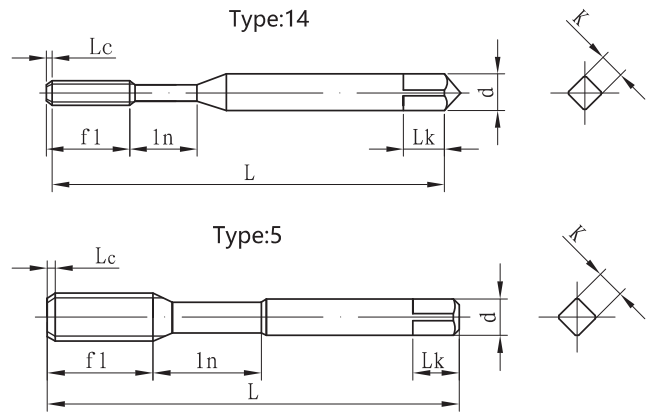
Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.
Material key: FC = cast iron, FCD = ductile iron, Cu = copper, Al = aluminum.

Pre-hole diameters: see printed pages 32-38.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC≤35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC≥35
-	-	-	-	-	-	-	●	●	●	-	-	-

CB-ST-NRT

Solid Carbide STI Forming Taps (JIS)



Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Flutes	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk		
WSTN040070B	M4×0.7	5H	2.5P	14	70	10	15	6	4.9	8	—	○
WSTN050080B	M5×0.8	5H	2.5P	14	80	10	20	6	4.9	8	—	○
WSTN060100B	M6×1	5H	2.5P	5	90	13	22	8	6.2	9	4	○
WSTN080125B	M8×1.25	5H	2.5P	5	100	15	24	10	8	11	6	○
WSTN100150B	M10×1.5	5H	2.5P	5	110	17	32	9	7	10	6	○
WSTN120175B	M12×1.75	5H	2.5P	5	110	20	33	11	9	12	6	○
WSTN140200B	M14×2	5H	2.5P	5	110	20	34	12	9	12	6	○
WSTN160200B	M16×2	5H	2.5P	5	125	25	36	14	11	14	6	○

5H tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

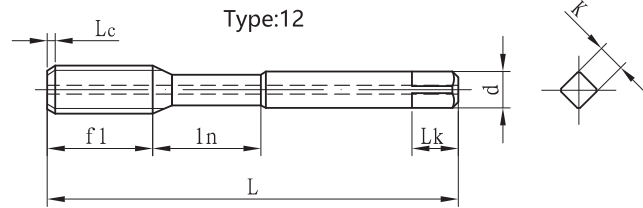
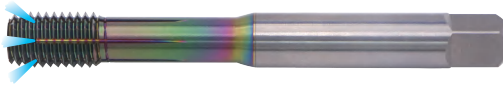
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	-	-	●	●	●	-	-	-

CB-ST-NRT

Solid Carbide STI Forming Taps (JIS)



COMMON SPECIFICATIONS IN THE AUTO PARTS INDUSTRY

Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Flutes	Oil Groove Type	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk			
WSTN080125AC	M8×1.25	5H	2.5P	12	90	14	26	10	8	10	6	C	○
WSTN100150AC	M10×1.5	5H	2.5P	12	100	15	30	12	9	12	6	C	○
WSTN120175AC	M12×1.75	5H	2.5P	12	130	20	33	11	9	12	6	C	○
WSTN140200AC	M14×2	5H	2.5P	12	110	20	34	12	9	12	6	C	○

5H tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

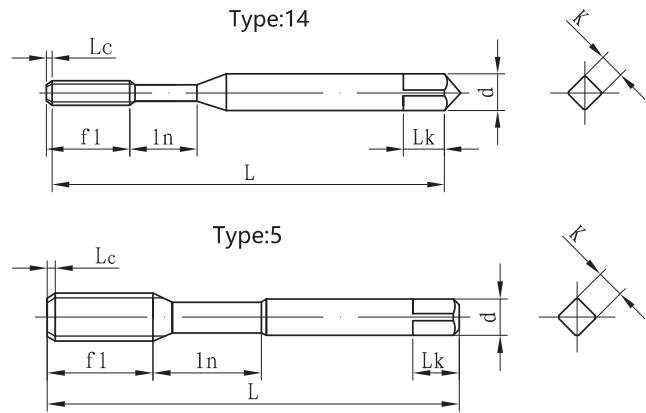
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	-	-	●	●	●	-	-	-

DIN-CB-NRT

Solid Carbide Forming Taps (DIN)



2P chamfer: blind holes

4P chamfer: through holes; custom option

Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Flutes	DIN Standard	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk			
WDN04070B	M4×0.7	6HX	2P	14	63	9	12	4.5	3.4	6	—	DIN371	○
WDN05080B	M5×0.8	6HX	2P	14	70	10	15	6	4.9	8	—	DIN371	○
WDN06100B	M6×1	6HX	2P	14	80	10	20	6	4.9	8	2	DIN371	●
WDN07100B	M7×1	6HX	2P	14	80	10	20	7	5.5	8	2	DIN371	○
WDN08125B	M8×1.25	6HX	2P	5	90	13	22	8	6.2	9	3	DIN371	●
WDN08100B	M8×1	6HX	2P	5	90	13	22	8	6.2	9	3	DIN371	○
WDN10150B	M10×1.5	6HX	2P	5	100	15	24	10	8	11	6	DIN371	●
WDN10125B	M10×1.25	6HX	2P	5	100	15	24	10	8	11	6	DIN371	○
WDN10100B	M10×1	6HX	2P	5	100	15	24	10	8	11	6	DIN371	○
WDN12175B	M12×1.75	6HX	2P	5	110	17	32	9	7	10	6	DIN376	●
WDN12150B	M12×1.5	6HX	2P	5	110	17	32	9	7	10	6	DIN374	●
WDN12125B	M12×1.25	6HX	2P	5	110	17	32	9	7	10	6	DIN374	○
WDN12100B	M12×1	6HX	2P	5	110	17	32	9	7	10	6	DIN374	○
WDN14200B	M14×2	6HX	2P	5	110	20	33	11	9	12	6	DIN376	●
WDN14150B	M14×1.5	6HX	2P	5	110	20	33	11	9	12	6	DIN374	●
WDN14125B	M14×1.25	6HX	2P	5	110	20	33	11	9	12	6	DIN374	○
WDN14100B	M14×1	6HX	2P	5	110	20	33	11	9	12	6	DIN374	○
WDN16200B	M16×2	6HX	2P	5	110	20	34	12	9	12	6	DIN376	●
WDN16150B	M16×1.5	6HX	2P	5	110	20	34	12	9	12	6	DIN374	○
WDN16125B	M16×1.25	6HX	2P	5	110	20	34	12	9	12	6	DIN374	○
WDN16100B	M16×1	6HX	2P	5	110	20	34	12	9	12	6	DIN374	○
WDN18250B	M18×2.5	6HX	2P	5	125	25	36	14	11	14	6	DIN376	○
WDN18200B	M18×2	6HX	2P	5	125	25	36	14	11	14	6	DIN374	○
WDN18150B	M18×1.5	6HX	2P	5	125	25	36	14	11	14	6	DIN374	○
WDN20250B	M20×2.5	6HX	2P	5	140	25	44	16	12	15	8	DIN376	○
WDN20200B	M20×2	6HX	2P	5	140	25	44	16	12	15	8	DIN374	○
WDN20150B	M20×1.5	6HX	2P	5	140	25	44	16	12	15	8	DIN374	○
WDN22250B	M22×2.5	6HX	2P	5	140	25	44	18	14.5	17	8	DIN376	○
WDN22200B	M22×2	6HX	2P	5	140	25	44	18	14.5	17	8	DIN374	○
WDN22150B	M22×1.5	6HX	2P	5	140	25	44	18	14.5	17	8	DIN374	○
WDN24300B	M24×3	6HX	2P	5	160	30	48	18	14.5	17	8	DIN376	○

6HX tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

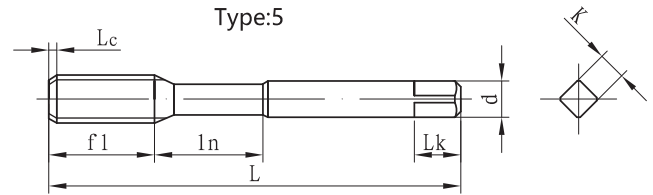
Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.
Pre-hole diameters: see printed pages 32-38.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC≤35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC≥35
-	-	-	-	-	-	-	●	●	●	-	-	-

DIN-CB-NRT

Solid Carbide Forming Taps (DIN)



2P chamfer: blind holes

4P chamfer: through holes; custom option

Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Flutes	DIN Standard	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk			
WDN24250B	M24×2.5	6HX	2P	5	160	30	48	18	14.5	17	8	DIN374	○
WDN24200B	M24×2	6HX	2P	5	160	30	48	18	14.5	17	8	DIN374	○
WDN27300B	M27×3	6HX	2P	5	160	30	48	20	16	19	8	DIN376	○
WDN27250B	M27×2.5	6HX	2P	5	160	30	48	20	16	19	8	DIN374	○
WDN27200B	M27×2	6HX	2P	5	160	30	48	20	16	19	8	DIN374	○
WDN30350B	M30×3.5	6HX	2P	5	180	35	53	22	18	21	8	DIN376	○
WDN30300B	M30×3	6HX	2P	5	180	35	53	22	18	21	8	DIN374	○
WDN30250B	M30×2.5	6HX	2P	5	180	35	53	22	18	21	8	DIN374	○
WDN30200B	M30×2	6HX	2P	5	180	35	53	22	18	21	8	DIN374	○

6HX tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

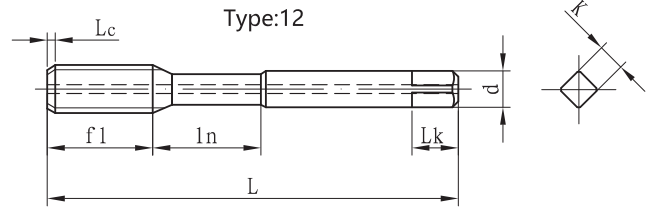
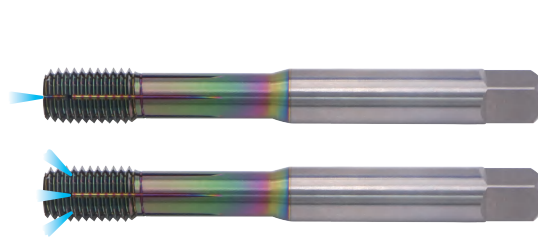
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC≤35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC≥35
-	-	-	-	-	-	-	●	●	●	-	-	-

DIN-CB-OH-NRT

Solid Carbide Forming Taps with Internal Coolant (DIN)



2P chamfer: blind holes

4P chamfer: through holes; custom option

Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Oil groove type	Flutes	DIN Standard	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk				
WDN04070C	M4×0.7	6HX	2P	12	63	9	12	4.5	3.4	6	C	2	DIN371	○
WDN04070Z	M4×0.7	6HX	2P	12	63	9	12	4.5	3.4	6	Z	2	DIN371	○
WDN05080C	M5×0.8	6HX	2P	12	70	10	15	6	4.9	8	C	2	DIN371	○
WDN05080Z	M5×0.8	6HX	2P	12	70	10	15	6	4.9	8	Z	2	DIN371	○
WDN06100C	M6×1	6HX	2P	12	80	10	20	6	4.9	8	C	2	DIN371	○
WDN06100Z	M6×1	6HX	2P	12	80	10	20	6	4.9	8	Z	2	DIN371	●
WDN07100C	M7×1	6HX	2P	12	80	10	20	7	5.5	8	C	2	DIN371	○
WDN07100Z	M7×1	6HX	2P	12	80	10	20	7	5.5	8	Z	2	DIN371	○
WDN08125C	M8×1.25	6HX	2P	12	90	13	22	8	6.2	9	C	3	DIN371	○
WDN08125Z	M8×1.25	6HX	2P	12	90	13	22	8	6.2	9	Z	3	DIN371	●
WDN08100C	M8×1	6HX	2P	12	90	13	22	8	6.2	9	C	3	DIN371	○
WDN08100Z	M8×1	6HX	2P	12	90	13	22	8	6.2	9	Z	3	DIN371	○
WDN10150C	M10×1.5	6HX	2P	12	100	15	24	10	8	11	C	6	DIN371	●
WDN10150Z	M10×1.5	6HX	2P	12	100	15	24	10	8	11	Z	6	DIN371	●
WDN10125C	M10×1.25	6HX	2P	12	100	15	24	10	8	11	C	6	DIN371	●
WDN10125Z	M10×1.25	6HX	2P	12	100	15	24	10	8	11	Z	6	DIN371	●
WDN10100C	M10×1	6HX	2P	12	100	15	24	10	8	11	C	6	DIN371	○
WDN10100Z	M10×1	6HX	2P	12	100	15	24	10	8	11	Z	6	DIN371	●
WDN12175C	M12×1.75	6HX	2P	12	110	17	32	9	7	10	C	6	DIN376	●
WDN12175Z	M12×1.75	6HX	2P	12	110	17	32	9	7	10	Z	6	DIN376	●
WDN12150C	M12×1.5	6HX	2P	12	110	17	32	9	7	10	C	6	DIN374	●
WDN12150Z	M12×1.5	6HX	2P	12	110	17	32	9	7	10	Z	6	DIN374	●
WDN12125C	M12×1.25	6HX	2P	12	110	17	32	9	7	10	C	6	DIN374	●
WDN12125Z	M12×1.25	6HX	2P	12	110	17	32	9	7	10	Z	6	DIN374	●
WDN12100C	M12×1	6HX	2P	12	110	17	32	9	7	10	C	6	DIN374	○
WDN12100Z	M12×1	6HX	2P	12	110	17	32	9	7	10	Z	6	DIN374	○
WDN14200C	M14×2	6HX	2P	12	110	20	33	11	9	12	C	6	DIN376	●
WDN14200Z	M14×2	6HX	2P	12	110	20	33	11	9	12	Z	6	DIN376	●
WDN14150C	M14×1.5	6HX	2P	12	110	20	33	11	9	12	C	6	DIN374	●
WDN14150Z	M14×1.5	6HX	2P	12	110	20	33	11	9	12	Z	6	DIN374	●
WDN14125C	M14×1.25	6HX	2P	12	110	20	33	11	9	12	C	6	DIN374	○

6HX tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

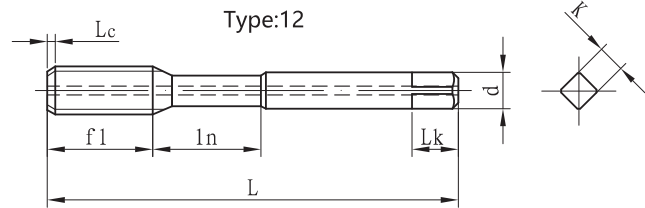
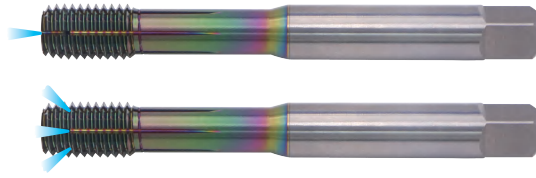
Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

Material keys: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.
Pre-hole diameters: see printed pages 32-36.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	-	-	●	●	●	-	-	-

DIN-CB-OH-NRT

Solid Carbide Forming Taps with Internal Coolant (DIN)



2P chamfer: blind holes

4P chamfer: through holes; custom option

Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Oil groove type	Flutes	DIN Standard	Stock
					OAL L	Thread L fl	Neck L In	Shank d	Square W k	Square L Lk				
WDN14125Z	M14×1.25	6HX	2P	12	110	20	33	11	9	12	Z	6	DIN374	○
WDN14100C	M14×1	6HX	2P	12	110	20	33	11	9	12	C	6	DIN374	○
WDN14100Z	M14×1	6HX	2P	12	110	20	33	11	9	12	Z	6	DIN374	○
WDN16200C	M16×2	6HX	2P	12	110	20	34	12	9	12	C	6	DIN376	○
WDN16200Z	M16×2	6HX	2P	12	110	20	34	12	9	12	Z	6	DIN376	○
WDN16150C	M16×1.5	6HX	2P	12	110	20	34	12	9	12	C	6	DIN374	○
WDN16150Z	M16×1.5	6HX	2P	12	110	20	34	12	9	12	Z	6	DIN374	○
WDN16125C	M16×1.25	6HX	2P	12	110	20	34	12	9	12	C	6	DIN374	○
WDN16125Z	M16×1.25	6HX	2P	12	110	20	34	12	9	12	Z	6	DIN374	○
WDN16100C	M16×1	6HX	2P	12	110	20	34	12	9	12	C	6	DIN374	○
WDN16100Z	M16×1	6HX	2P	12	110	20	34	12	9	12	Z	6	DIN374	○
WDN18250C	M18×2.5	6HX	2P	12	125	25	36	14	11	14	C	6	DIN376	○
WDN18250Z	M18×2.5	6HX	2P	12	125	25	36	14	11	14	Z	6	DIN376	○
WDN18200C	M18×2	6HX	2P	12	125	25	36	14	11	14	C	6	DIN374	○
WDN18200Z	M18×2	6HX	2P	12	125	25	36	14	11	14	Z	6	DIN374	○
WDN18150C	M18×1.5	6HX	2P	12	125	25	36	14	11	14	C	6	DIN374	○
WDN18150Z	M18×1.5	6HX	2P	12	125	25	36	14	11	14	Z	6	DIN374	○
WDN20250C	M20×2.5	6HX	2P	12	140	25	44	16	12	15	C	8	DIN376	○
WDN20250Z	M20×2.5	6HX	2P	12	140	25	44	16	12	15	Z	8	DIN376	○
WDN20200C	M20×2	6HX	2P	12	140	25	44	16	12	15	C	8	DIN374	○
WDN20200Z	M20×2	6HX	2P	12	140	25	44	16	12	15	Z	8	DIN374	○
WDN20150C	M20×1.5	6HX	2P	12	140	25	44	16	12	15	C	8	DIN374	○
WDN20150Z	M20×1.5	6HX	2P	12	140	25	44	16	12	15	Z	8	DIN374	○
WDN22250C	M22×2.5	6HX	2P	12	140	25	44	18	14.5	17	C	8	DIN376	○
WDN22250Z	M22×2.5	6HX	2P	12	140	25	44	18	14.5	17	Z	8	DIN376	○
WDN22200C	M22×2	6HX	2P	12	140	25	44	18	14.5	17	C	8	DIN374	○
WDN22200Z	M22×2	6HX	2P	12	140	25	44	18	14.5	17	Z	8	DIN374	○
WDN22150C	M22×1.5	6HX	2P	12	140	25	44	18	14.5	17	C	8	DIN374	○
WDN22150Z	M22×1.5	6HX	2P	12	140	25	44	18	14.5	17	Z	8	DIN374	○
WDN24300C	M24×3	6HX	2P	12	160	30	48	18	14.5	17	C	8	DIN376	○
WDN24300Z	M24×3	6HX	2P	12	160	30	48	18	14.5	17	Z	8	DIN376	○

6HX tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

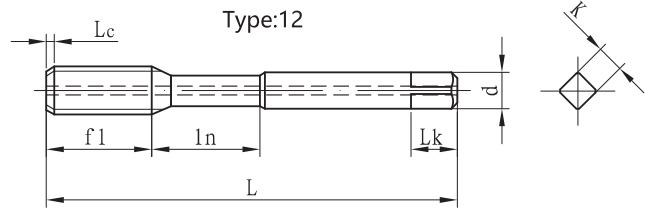
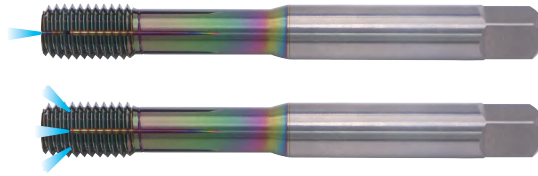
Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

Material: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	-	-	●	●	●	-	-	-

DIN-CB-OH-NRT

Solid Carbide Forming Taps with Internal Coolant (DIN)



2P chamfer: blind holes

4P chamfer: through holes; custom option

Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Oil groove type	Flutes	DIN Standard	Stock
					OAL L	Thread L fl	Neck L In	Shank d	Square W k	Square L Lk				
WDN24250C	M24×2.5	6HX	2P	12	160	30	48	18	14.5	17	C	8	DIN374	○
WDN24250Z	M24×2.5	6HX	2P	12	160	30	48	18	14.5	17	Z	8	DIN374	○
WDN24200C	M24×2	6HX	2P	12	160	30	48	18	14.5	17	C	8	DIN374	○
WDN24200Z	M24×2	6HX	2P	12	160	30	48	18	14.5	17	Z	8	DIN374	○
WDN27300C	M27×3	6HX	2P	12	160	30	48	20	16	19	C	8	DIN376	○
WDN27300Z	M27×3	6HX	2P	12	160	30	48	20	16	19	Z	8	DIN376	○
WDN27250C	M27×2.5	6HX	2P	12	160	30	48	20	16	19	C	8	DIN374	○
WDN27250Z	M27×2.5	6HX	2P	12	160	30	48	20	16	19	Z	8	DIN374	○
WDN27200C	M27×2	6HX	2P	12	160	30	48	20	16	19	C	8	DIN374	○
WDN27200Z	M27×2	6HX	2P	12	160	30	48	20	16	19	Z	8	DIN374	○
WDN30350C	M30×3.5	6HX	2P	12	180	35	53	22	18	21	C	8	DIN376	○
WDN30350Z	M30×3.5	6HX	2P	12	180	35	53	22	18	21	Z	8	DIN376	○
WDN30300C	M30×3	6HX	2P	12	180	35	53	22	18	21	C	8	DIN374	○
WDN30300Z	M30×3	6HX	2P	12	180	35	53	22	18	21	Z	8	DIN374	○
WDN30250C	M30×2.5	6HX	2P	12	180	35	53	22	18	21	C	8	DIN374	○
WDN30250Z	M30×2.5	6HX	2P	12	180	35	53	22	18	21	Z	8	DIN374	○
WDN30200C	M30×2	6HX	2P	12	180	35	53	22	18	21	C	8	DIN374	○
WDN30200Z	M30×2	6HX	2P	12	180	35	53	22	18	21	Z	8	DIN374	○

6HX tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

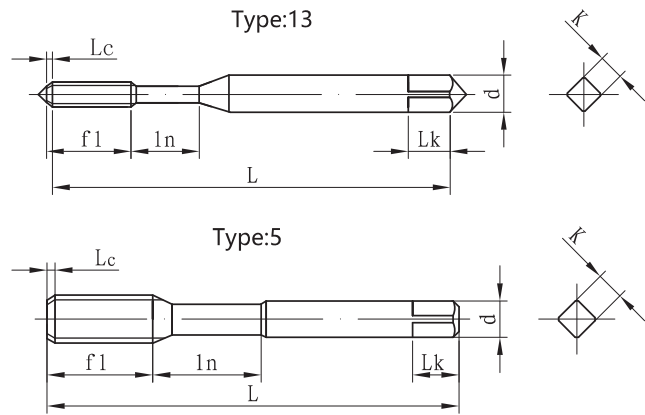
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC≤35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC≥35
-	-	-	-	-	-	-	●	●	●	-	-	-

DIN-CB-SFT

Solid Carbide Spiral Flute Taps (DIN)



Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Flutes	DIN Standard	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk			
WDS040070	M4×0.7	6HX	2.5P	13	63	13	8	4.5	3.4	6	3	DIN371	○
WDS050080	M5×0.8	6HX	2.5P	13	70	15	10	6	4.9	8	3	DIN371	○
WDS060100	M6×1	6HX	2.5P	13	80	17	13	7	5.5	8	3	DIN371	●
WDS070100	M7×1	6HX	2.5P	13	80	17	13	7	5.5	8	3	DIN371	○
WDS080100	M8×1	6HX	2.5P	5	90	16	19	8	6.2	9	3	DIN371	○
WDS080125	M8×1.25	6HX	2.5P	5	90	16	19	8	6.2	9	3	DIN371	●
WDS100150	M10×1.5	6HX	2.5P	5	100	18	21	10	8	11	3	DIN371	●
WDS100125	M10×1.25	6HX	2.5P	5	100	18	21	10	8	11	3	DIN371	○

6HX tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

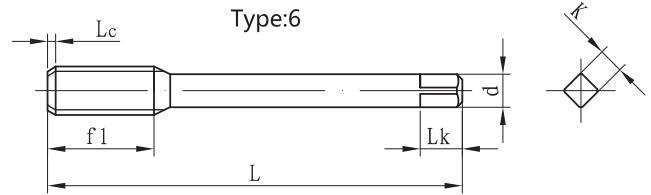
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	-	-	●	●	●	-	-	-

DIN-CB-SFT

Solid Carbide Spiral Flute Taps (DIN)



Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Flutes	DIN Standard	Stock
					OAL L	Thread L fl	Neck L In	Shank d	Square W k	Square L Lk			
WDS120175	M12×1.75	6HX	2.5P	6	110	22	—	9	7	10	3	DIN376	●
WDS120150	M12×1.5	6HX	2.5P	6	110	22	—	9	7	10	3	DIN374	○
WDS120125	M12×1.25	6HX	2.5P	6	110	22	—	9	7	10	3	DIN374	○
WDS140200	M14×2	6HX	2.5P	6	110	26	—	11	9	12	3	DIN376	○
WDS140150	M14×1.5	6HX	2.5P	6	110	22	—	11	9	12	3	DIN374	○
WDS140125	M14×1.25	6HX	2.5P	6	110	22	—	11	9	12	3	DIN374	○
WDS160200	M16×2	6HX	2.5P	6	110	27	—	12	9	12	3	DIN376	○
WDS160150	M16×1.5	6HX	2.5P	6	110	22	—	12	9	12	3	DIN374	○
WDS160125	M16×1.25	6HX	2.5P	6	110	18	—	12	9	12	3	DIN374	○
WDS180250	M18×2.5	6HX	2.5P	6	125	30	—	14	11	14	4	DIN376	○
WDS180200	M18×2	6HX	2.5P	6	125	26	—	14	11	14	4	DIN374	○
WDS180150	M18×1.5	6HX	2.5P	6	125	25	—	14	11	14	4	DIN374	○
WDS200250	M20×2.5	6HX	2.5P	6	140	32	—	16	12	15	4	DIN376	○
WDS200200	M20×2	6HX	2.5P	6	140	27	—	16	12	15	4	DIN374	○
WDS200150	M20×1.5	6HX	2.5P	6	140	25	—	16	12	15	4	DIN374	○
WDS220250	M22×2.5	6HX	2.5P	6	140	32	—	18	14.5	17	4	DIN376	○
WDS220200	M22×2	6HX	2.5P	6	140	27	—	18	14.5	17	4	DIN374	○
WDS220150	M22×1.5	6HX	2.5P	6	140	25	—	18	14.5	17	4	DIN374	○
WDS240300	M24×3	6HX	2.5P	6	140	34	—	18	14.5	17	4	DIN376	○
WDS240200	M24×2	6HX	2.5P	6	140	27	—	18	14.5	17	4	DIN374	○
WDS240150	M24×1.5	6HX	2.5P	6	140	27	—	18	14.5	17	4	DIN374	○
WDS270300	M27×3	6HX	2.5P	6	160	36	—	20	16	19	4	DIN376	○
WDS300350	M30×3.5	6HX	2.5P	6	180	40	—	22	18	21	4	DIN376	○

6HX tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

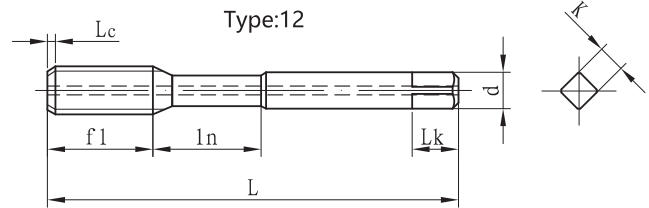
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC≤35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC≥35
-	-	-	-	-	-	-	●	●	●	-	-	-

DIN-CB-OH-SFT

Solid Carbide Spiral Flute Taps with Internal Coolant (DIN)



Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Oil groove type	Flutes	DIN Standard	Stock
					OAL L	Thread L fl	Neck L In	Shank d	Square W k	Square L Lk				
WDS04070C	M4×0.7	6HX	2.5P	12	63	13	8	4.5	3.4	6	C	3	DIN371	○
WDS04070Z	M4×0.7	6HX	2.5P	12	63	13	8	4.5	3.4	6	Z	3	DIN371	○
WDS05080C	M5×0.8	6HX	2.5P	12	70	15	10	6	4.9	8	C	3	DIN371	○
WDS05080Z	M5×0.8	6HX	2.5P	12	70	15	10	6	4.9	8	Z	3	DIN371	○
WDS06100C	M6×1	6HX	2.5P	12	80	17	13	6	4.9	8	C	3	DIN371	●
WDS06100Z	M6×1	6HX	2.5P	12	80	17	13	6	4.9	8	Z	3	DIN371	●
WDS07100C	M7×1	6HX	2.5P	12	80	17	13	7	5.5	8	C	3	DIN371	○
WDS07100Z	M7×1	6HX	2.5P	12	80	17	13	7	5.5	8	Z	3	DIN371	○
WDS08100C	M8×1	6HX	2.5P	12	90	16	19	8	6.2	9	C	3	DIN371	○
WDS08100Z	M8×1	6HX	2.5P	12	90	16	19	8	6.2	9	Z	3	DIN371	○
WDS08125C	M8×1.25	6HX	2.5P	12	90	16	19	8	6.2	9	C	3	DIN371	●
WDS08125Z	M8×1.25	6HX	2.5P	12	90	16	19	8	6.2	9	Z	3	DIN371	●
WDS10150C	M10×1.5	6HX	2.5P	12	100	18	21	10	8	11	C	3	DIN371	●
WDS10150Z	M10×1.5	6HX	2.5P	12	100	18	21	10	8	11	Z	3	DIN371	●
WDS10125C	M10×1.25	6HX	2.5P	12	100	18	21	10	8	11	C	3	DIN371	○
WDS10125Z	M10×1.25	6HX	2.5P	12	100	18	21	10	8	11	Z	3	DIN371	○

6HX tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

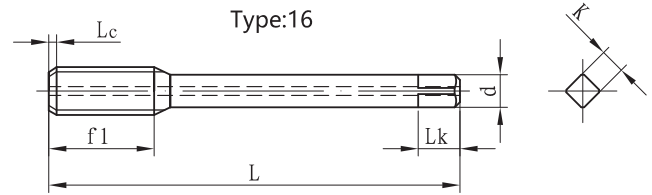
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC≤35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC≥35
-	-	-	-	-	-	-	●	●	●	-	-	-

DIN-CB-OH-SFT

Solid Carbide Spiral Flute Taps with Internal Coolant (DIN)



Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Oil groove type	Flutes	DIN Standard	Stock
					OAL L	Thread L fl	Neck L In	Shank d	Square W k	Square L Lk				
WDS12175C	M12×1.75	6HX	2.5P	16	110	22	—	9	7	10	C	3	DIN376	●
WDS12175Z	M12×1.75	6HX	2.5P	16	110	22	—	9	7	10	Z	3	DIN376	●
WDS12150C	M12×1.5	6HX	2.5P	16	110	22	—	9	7	10	C	3	DIN374	○
WDS12150Z	M12×1.5	6HX	2.5P	16	110	22	—	9	7	10	Z	3	DIN374	○
WDS12125C	M12×1.25	6HX	2.5P	16	110	22	—	9	7	10	C	3	DIN374	○
WDS12125Z	M12×1.25	6HX	2.5P	16	110	22	—	9	7	10	Z	3	DIN374	○
WDS14200C	M14×2	6HX	2.5P	16	110	26	—	11	9	12	C	3	DIN376	○
WDS14200Z	M14×2	6HX	2.5P	16	110	26	—	11	9	12	Z	3	DIN376	○
WDS14150C	M14×1.5	6HX	2.5P	16	110	22	—	11	9	12	C	3	DIN374	○
WDS14150Z	M14×1.5	6HX	2.5P	16	110	22	—	11	9	12	Z	3	DIN374	○
WDS14125C	M14×1.25	6HX	2.5P	16	110	22	—	11	9	12	C	3	DIN374	○
WDS14125Z	M14×1.25	6HX	2.5P	16	110	22	—	11	9	12	Z	3	DIN374	○
WDS16200C	M16×2	6HX	2.5P	16	110	27	—	12	9	12	C	3	DIN376	○
WDS16200Z	M16×2	6HX	2.5P	16	110	27	—	12	9	12	Z	3	DIN376	○
WDS16150C	M16×1.5	6HX	2.5P	16	110	22	—	12	9	12	C	3	DIN374	○
WDS16150Z	M16×1.5	6HX	2.5P	16	110	22	—	12	9	12	Z	3	DIN374	○
WDS16125C	M16×1.25	6HX	2.5P	16	110	18	—	12	9	12	C	3	DIN374	○
WDS16125Z	M16×1.25	6HX	2.5P	16	110	18	—	12	9	12	Z	3	DIN374	○
WDS18250C	M18×2.5	6HX	2.5P	16	125	30	—	14	11	14	C	4	DIN376	○
WDS18250Z	M18×2.5	6HX	2.5P	16	125	30	—	14	11	14	Z	4	DIN376	○
WDS18200C	M18×2	6HX	2.5P	16	125	26	—	14	11	14	C	4	DIN374	○
WDS18200Z	M18×2	6HX	2.5P	16	125	26	—	14	11	14	Z	4	DIN374	○
WDS18150C	M18×1.5	6HX	2.5P	16	125	25	—	14	11	14	C	4	DIN374	○
WDS18150Z	M18×1.5	6HX	2.5P	16	125	25	—	14	11	14	Z	4	DIN374	○
WDS20250C	M20×2.5	6HX	2.5P	16	140	32	—	16	12	15	C	4	DIN376	○
WDS20250Z	M20×2.5	6HX	2.5P	16	140	32	—	16	12	15	Z	4	DIN376	○
WDS20020C	M20×2	6HX	2.5P	16	140	27	—	16	12	15	C	4	DIN374	○
WDS20200Z	M20×2	6HX	2.5P	16	140	27	—	16	12	15	Z	4	DIN374	○
WDS20150C	M20×1.5	6HX	2.5P	16	140	25	—	16	12	15	C	4	DIN374	○
WDS20150Z	M20×1.5	6HX	2.5P	16	140	25	—	16	12	15	Z	4	DIN374	○

6HX tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

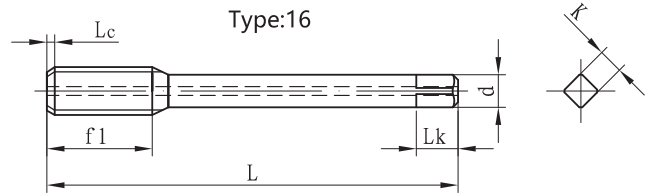
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	-	-	●	●	●	-	-	-

DIN-CB-OH-SFT

Solid Carbide Spiral Flute Taps with Internal Coolant (DIN)



Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Oil groove type	Flutes	DIN Standard	Stock
					OAL L	Thread L fl	Neck L In	Shank d	Square W k	Square L Lk				
WDS22250C	M22×2.5	6HX	2.5P	16	140	32	—	18	14.5	17	C	4	DIN376	○
WDS22250Z	M22×2.5	6HX	2.5P	16	140	32	—	18	14.5	17	Z	4	DIN376	○
WDS22200C	M22×2	6HX	2.5P	16	140	27	—	18	14.5	17	C	4	DIN374	○
WDS22200Z	M22×2	6HX	2.5P	16	140	27	—	18	14.5	17	Z	4	DIN374	○
WDS22150C	M22×1.5	6HX	2.5P	16	140	25	—	18	14.5	17	C	4	DIN374	○
WDS22150Z	M22×1.5	6HX	2.5P	16	140	25	—	18	14.5	17	Z	4	DIN374	○
WDS24300C	M24×3	6HX	2.5P	16	140	34	—	18	14.5	17	C	4	DIN376	○
WDS24300Z	M24×3	6HX	2.5P	16	140	34	—	18	14.5	17	Z	4	DIN376	○
WDS24200C	M24×2	6HX	2.5P	16	140	27	—	18	14.5	17	C	4	DIN374	○
WDS24200Z	M24×2	6HX	2.5P	16	140	27	—	18	14.5	17	Z	4	DIN374	○
WDS24150C	M24×1.5	6HX	2.5P	16	140	27	—	18	14.5	17	C	4	DIN374	○
WDS24150Z	M24×1.5	6HX	2.5P	16	140	27	—	18	14.5	17	Z	4	DIN374	○
WDS27300C	M27×3	6HX	2.5P	16	160	36	—	20	16	19	C	4	DIN376	○
WDS27300Z	M27×3	6HX	2.5P	16	160	36	—	20	16	19	Z	4	DIN376	○
WDS30350C	M30×3.5	6HX	2.5P	16	180	40	—	22	18	21	C	4	DIN376	○
WDS30350Z	M30×3.5	6HX	2.5P	16	180	40	—	22	18	21	Z	4	DIN376	○

6HX tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

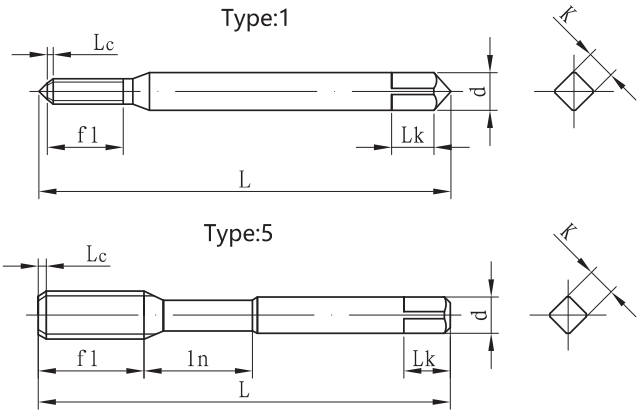
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	-	-	●	●	●	-	-	-

CB-HT

Solid Carbide Straight Flute Taps (JIS)



Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Flutes	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk		
WH050080	M5×0.8	P3	2.5P	1	62	16	—	5.5	4.5	7	3	○
WH060100	M6×1	P3	2.5P	5	62	19	10	6	4.5	7	3	○

6H tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

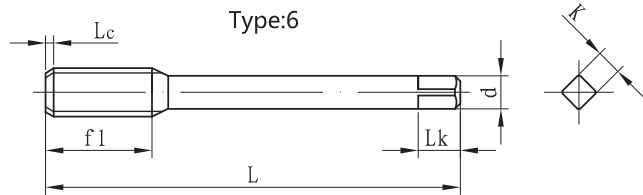
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	●	●	-	-	-	-	-	-

CB-HT

Solid Carbide Straight Flute Taps (JIS)



Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Flutes	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk		
WH080125	M8×1.25	P4	2.5P	6	75	22	—	6.2	5	8	3	○
WH100150	M10×1.5	P5	2.5P	6	75	24	—	7	5.5	8	4	○
MH100125	M10×1.25	P4	2.5P	6	75	24	—	7	5.5	8	4	○
WH120175	M12×1.75	P5	2.5P	6	82	29	—	8.5	6.5	9	4	○
WH120150	M12×1.5	P5	2.5P	6	82	29	—	8.5	6.5	9	4	○
WH120125	M12×1.25	P5	2.5P	6	82	29	—	8.5	6.5	9	4	○
WH140200	M14×2	P6	2.5P	6	88	20	—	10.5	8	11	4	○
WH140150	M14×1.5	P5	2.5P	6	88	20	—	10.5	8	11	4	○
WH160200	M16×2	P6	2.5P	6	95	20	—	12.5	10	13	4	○
WH160150	M16×1.5	P5	2.5P	6	95	20	—	12.5	10	13	4	○

6H tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

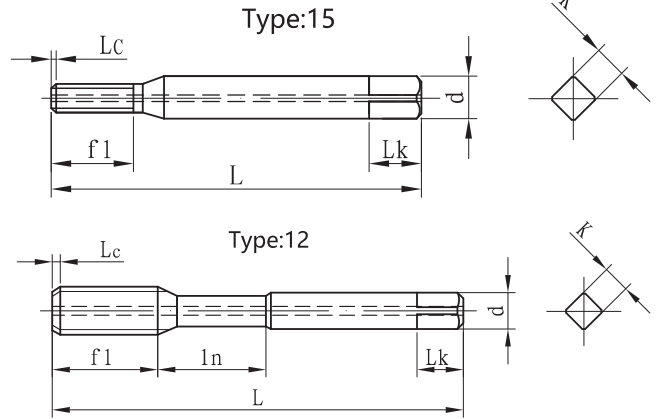
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC≤35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC≥35
-	-	-	-	-	●	●	-	-	-	-	-	-

CB-OH-HT

Solid Carbide Straight Flute Taps with Internal Coolant (JIS)



Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Oilgroovetype	Flutes	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk			
WH050080C	M5×0.8	P3	2.5P	15	57	16	—	5.5	4.5	7	C	3	○
WH050080Z	M5×0.8	P3	2.5P	15	57	16	—	5.5	4.5	7	Z	3	○
WH060100C	M6×1	P3	2.5P	12	62	19	10	6	4.5	7	C	3	○
WH060100Z	M6×1	P3	2.5P	12	62	19	10	6	4.5	7	Z	3	○

6H tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

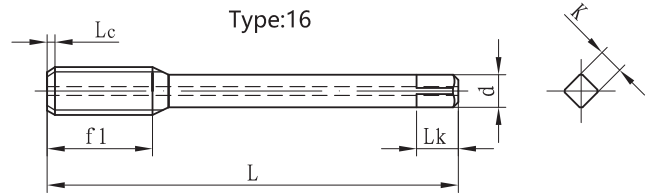
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC≤35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC≥35
-	-	-	-	-	●	●	-	-	-	-	-	-

CB-OH-HT

Solid Carbide Straight Flute Taps with Internal Coolant (JIS)



Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Oilgroovetype	Flutes	Stock
					OAL L	Thread L fl	Neck L In	Shank d	Square W k	Square L Lk			
WH080125C	M8×1.25	P4	2.5P	16	75	22	—	6.2	5	8	C	3	○
WH080125Z	M8×1.25	P4	2.5P	16	75	22	—	6.2	5	8	Z	3	○
WH100150C	M10×1.5	P5	2.5P	16	75	24	—	7	5.5	8	C	4	○
WH100150Z	M10×1.5	P5	2.5P	16	75	24	—	7	5.5	8	Z	4	○
WH100125C	M10×1.25	P4	2.5P	16	75	24	—	7	5.5	8	C	4	○
WH100125Z	M10×1.25	P4	2.5P	16	75	24	—	7	5.5	8	Z	4	○
WH120175C	M12×1.75	P5	2.5P	16	82	29	—	8.5	6.5	9	C	4	○
WH120175Z	M12×1.75	P5	2.5P	16	82	29	—	8.5	6.5	9	Z	4	○
WH120150C	M12×1.5	P5	2.5P	16	82	29	—	8.5	6.5	9	C	4	○
WH120150Z	M12×1.5	P5	2.5P	16	82	29	—	8.5	6.5	9	Z	4	○
WH120125C	M12×1.25	P5	2.5P	16	82	29	—	8.5	6.5	9	C	4	○
WH120125Z	M12×1.25	P5	2.5P	16	82	29	—	8.5	6.5	9	Z	4	○
WH140200C	M14×2	P6	2.5P	16	88	20	—	10.5	8	11	C	4	○
WH140200Z	M14×2	P6	2.5P	16	88	20	—	10.5	8	11	Z	4	○
WH140150C	M14×1.5	P5	2.5P	16	88	20	—	10.5	8	11	C	4	○
WH140150Z	M14×1.5	P5	2.5P	16	88	20	—	10.5	8	11	Z	4	○
WH160200C	M16×2	P6	2.5P	16	95	20	—	12.5	10	13	C	4	○
WH160200Z	M16×2	P6	2.5P	16	95	20	—	12.5	10	13	Z	4	○
WH160150C	M16×1.5	P5	2.5P	16	95	20	—	12.5	10	13	C	4	○
WH160150Z	M16×1.5	P5	2.5P	16	95	20	—	12.5	10	13	Z	4	○

6H tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

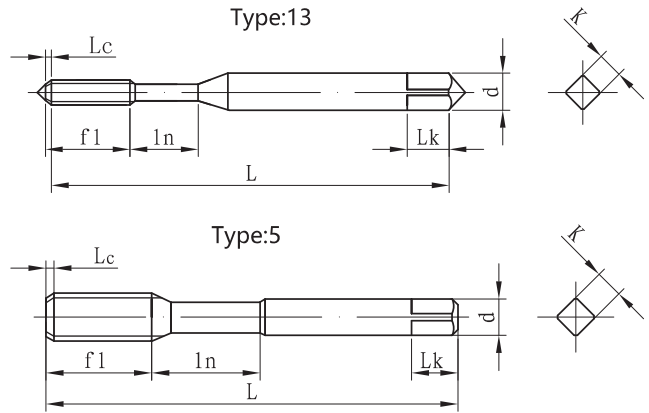
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	●	●	-	-	-	-	-	-

DIN-CB-HT

Solid Carbide Straight Flute Taps (DIN)



Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Flutes	DIN Standard	Stock
					OAL L	Thread L fl	Neck L ln	Shank d	Square W k	Square L Lk			
WDH040070	M4x0.7	6HX	2.5P	13	63	13	8	4.5	3.4	6	3	DIN371	○
WDH050080	M5x0.8	6HX	2.5P	13	70	15	10	6	4.9	8	3	DIN371	○
WDH060100	M6x1	6HX	2.5P	13	80	17	13	6	4.9	8	3	DIN371	●
WDH070100	M7x1	6HX	2.5P	13	80	17	13	7	5.5	8	3	DIN371	○
WDH080125	M8x1.25	6HX	2.5P	5	90	16	19	8	6.2	9	4	DIN371	●
WDH080100	M8x1	6HX	2.5P	5	90	16	19	8	6.2	9	4	DIN371	○
WDH100150	M10x1.5	6HX	2.5P	5	100	18	21	10	8	11	4	DIN371	●
WDH100125	M10x1.25	6HX	2.5P	5	100	18	21	10	8	11	4	DIN371	●

6HX tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

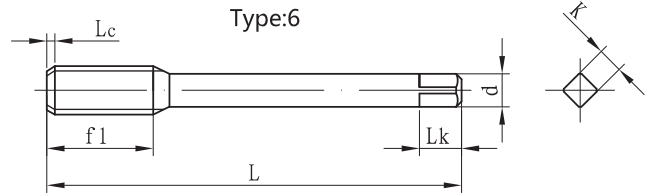
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	●	●	-	-	-	-	-	-

DIN-CB-HT

Solid Carbide Straight Flute Taps (DIN)



Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Flutes	DIN Standard	Stock
					OAL L	Thread L fl	Neck L In	Shank d	Square W k	Square L Lk			
WDH120175	M12x1.75	6HX	2.5P	6	110	22	-	9	7	10	4	DIN376	●
WDH120150	M12x1.5	6HX	2.5P	6	110	22	-	9	7	10	4	DIN374	●
WDH120125	M12x1.25	6HX	2.5P	6	110	22	-	9	7	10	4	DIN374	○
WDH140200	M14x2	6HX	2.5P	6	110	26	-	11	9	12	4	DIN376	●
WDH140150	M14x1.5	6HX	2.5P	6	110	22	-	11	9	12	4	DIN374	○
WDH140125	M14x1.25	6HX	2.5P	6	110	22	-	11	9	12	4	DIN374	○
WDH160200	M16x2	6HX	2.5P	6	110	27	-	12	9	12	4	DIN376	●
WDH160150	M16x1.5	6HX	2.5P	6	110	22	-	12	9	12	4	DIN374	○
WDH160125	M16x1.25	6HX	2.5P	6	110	18	-	12	9	12	4	DIN374	○
WDH180250	M18x2.5	6HX	2.5P	6	125	30	-	14	11	14	4	DIN376	○
WDH180200	M18x2	6HX	2.5P	6	125	26	-	14	11	14	4	DIN374	○
WDH180150	M18x1.5	6HX	2.5P	6	125	25	-	14	11	14	4	DIN374	○
WDH200250	M20x2.5	6HX	2.5P	6	140	32	-	16	12	15	4	DIN376	○
WDH200200	M20x2	6HX	2.5P	6	140	27	-	16	12	15	4	DIN374	○
WDH200150	M20x1.5	6HX	2.5P	6	140	25	-	16	12	15	4	DIN374	○
WDH220250	M22x2.5	6HX	2.5P	6	140	32	-	18	14.5	17	4	DIN376	○
WDH220200	M22x2	6HX	2.5P	6	140	27	-	18	14.5	17	4	DIN374	○
WDH220150	M22x1.5	6HX	2.5P	6	140	25	-	18	14.5	17	4	DIN374	○
WDH240300	M24x3	6HX	2.5P	6	140	34	-	18	14.5	17	4	DIN376	○
WDH240200	M24x2	6HX	2.5P	6	140	27	-	18	14.5	17	4	DIN374	○
WDH240150	M24x1.5	6HX	2.5P	6	140	27	-	18	14.5	17	4	DIN374	○
WDH270300	M27x3	6HX	2.5P	6	160	36	-	20	16	19	4	DIN376	○
WDH300350	M30x3.5	6HX	2.5P	6	180	40	-	22	18	21	4	DIN376	○

6HX tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

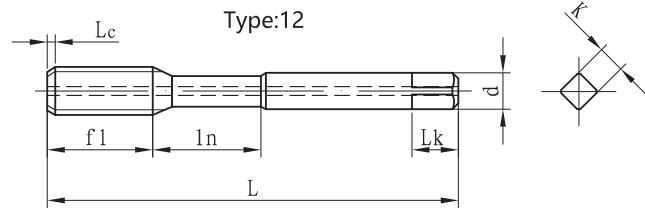
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	●	●	-	-	-	-	-	-

DIN-CB-OH-HT

Solid Carbide Straight Flute Taps with Internal Coolant (DIN)



Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Oil groove type	Flutes	DIN Standard	Stock
					OAL L	Thread L fl	Neck L In	Shank d	Square W k	Square L Lk				
WDH05080C	M5x0.8	6HX	2.5P	12	70	15	10	6	4.9	8	C	3	DIN371	○
WDH05080Z	M5x0.8	6HX	2.5P	12	70	15	10	6	4.9	8	Z	3	DIN371	○
WDH06100C	M6x1	6HX	2.5P	12	80	17	13	6	4.9	8	C	3	DIN371	●
WDH06100Z	M6x1	6HX	2.5P	12	80	17	13	6	4.9	8	Z	3	DIN371	●
WDH07100C	M7x1	6HX	2.5P	12	80	17	13	7	5.5	8	C	3	DIN371	○
WDH07100Z	M7x1	6HX	2.5P	12	80	17	13	7	5.5	8	Z	3	DIN371	○
WDH08125C	M8x1.25	6HX	2.5P	12	90	16	19	8	6.2	9	C	4	DIN371	●
WDH08125Z	M8x1.25	6HX	2.5P	12	90	16	19	8	6.2	9	Z	4	DIN371	●
WDH08100C	M8x1	6HX	2.5P	12	90	16	19	8	6.2	9	C	4	DIN371	○
WDH08100Z	M8x1	6HX	2.5P	12	90	16	19	8	6.2	9	Z	4	DIN371	○
WDH10150C	M10x1.5	6HX	2.5P	12	100	18	21	10	8	11	C	4	DIN371	●
WDH10150Z	M10x1.5	6HX	2.5P	12	100	18	21	10	8	11	Z	4	DIN371	●
WDH10125C	M10x1.25	6HX	2.5P	12	100	18	21	10	8	11	C	4	DIN371	●
WDH10125Z	M10x1.25	6HX	2.5P	12	100	18	21	10	8	11	Z	4	DIN371	●

6HX tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

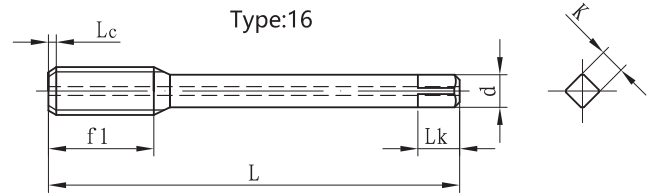
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
=	-	-	-	-	●	●	-	-	-	-	-	-

DIN-CB-OH-HT

Solid Carbide Straight Flute Taps with Internal Coolant (DIN)



Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Oil groove type	Flutes	DIN Standard	Stock
					OAL L	Thread L fl	Neck L In	Shank d	Square W k	Square L Lk				
WDH12175C	M12x1.75	6HX	2.5P	16	110	22	—	9	7	10	C	4	DIN376	●
WDH12175Z	M12x1.75	6HX	2.5P	16	110	22	—	9	7	10	Z	4	DIN376	●
WDH12150C	M12x1.5	6HX	2.5P	16	110	22	—	9	7	10	C	4	DIN374	●
WDH12150Z	M12x1.5	6HX	2.5P	16	110	22	—	9	7	10	Z	4	DIN374	●
WDH12125C	M12x1.25	6HX	2.5P	16	110	22	—	9	7	10	C	4	DIN374	●
WDH12125Z	M12x1.25	6HX	2.5P	16	110	22	—	9	7	10	Z	4	DIN374	●
WDH14200C	M14x2	6HX	2.5P	16	110	26	—	11	9	12	C	4	DIN376	●
WDH14200Z	M14x2	6HX	2.5P	16	110	26	—	11	9	12	Z	4	DIN376	●
WDH14150C	M14x1.5	6HX	2.5P	16	110	22	—	11	9	12	C	4	DIN374	●
WDH14150Z	M14x1.5	6HX	2.5P	16	110	22	—	11	9	12	Z	4	DIN374	●
WDH14125C	M14x1.25	6HX	2.5P	16	110	22	—	11	9	12	C	4	DIN374	○
WDH14125Z	M14x1.25	6HX	2.5P	16	110	22	—	11	9	12	Z	4	DIN374	○
WDH16200C	M16x2	6HX	2.5P	16	110	27	—	12	9	12	C	4	DIN376	●
WDH16200Z	M16x2	6HX	2.5P	16	110	27	—	12	9	12	Z	4	DIN376	●
WDH16150C	M16x1.5	6HX	2.5P	16	110	22	—	12	9	12	C	4	DIN374	●
WDH16150Z	M16x1.5	6HX	2.5P	16	110	22	—	12	9	12	Z	4	DIN374	●
WDH16125C	M16x1.25	6HX	2.5P	16	110	18	—	12	9	12	C	4	DIN374	○
WDH16125Z	M16x1.25	6HX	2.5P	16	110	18	—	12	9	12	Z	4	DIN374	○
WDH18250C	M18x2.5	6HX	2.5P	16	125	30	—	14	11	14	C	4	DIN376	○
WDH18250Z	M18x2.5	6HX	2.5P	16	125	30	—	14	11	14	Z	4	DIN376	○
WDH18200C	M18x2	6HX	2.5P	16	125	26	—	14	11	14	C	4	DIN374	○
WDH18200Z	M18x2	6HX	2.5P	16	125	26	—	14	11	14	Z	4	DIN374	○
WDH18150C	M18x1.5	6HX	2.5P	16	125	25	—	14	11	14	C	4	DIN374	○
WDH18150Z	M18x1.5	6HX	2.5P	16	125	25	—	14	11	14	Z	4	DIN374	○
WDH20250C	M20x2.5	6HX	2.5P	16	140	32	—	16	12	15	C	4	DIN376	○
WDH20250Z	M20x2.5	6HX	2.5P	16	140	32	—	16	12	15	Z	4	DIN376	○
WDH20200C	M20x2	6HX	2.5P	16	140	27	—	16	12	15	C	4	DIN374	○
WDH20200Z	M20x2	6HX	2.5P	16	140	27	—	16	12	15	Z	4	DIN374	○
WDH20150C	M20x1.5	6HX	2.5P	16	140	25	—	16	12	15	C	4	DIN374	○
WDH20150Z	M20x1.5	6HX	2.5P	16	140	25	—	16	12	15	Z	4	DIN374	○

6HX tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

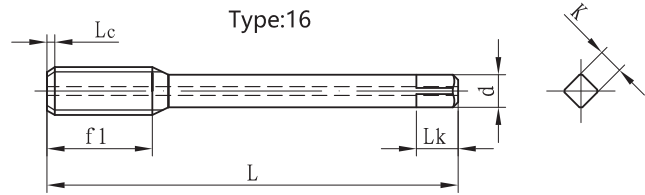
Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
=	-	-	-	-	●	●	-	-	-	-	-	-

DIN-CB-OH-HT

Solid Carbide Straight Flute Taps with Internal Coolant (DIN)



Unit: mm

EDP No.	Thread Size	Limit	LC	Type	Dimensions (mm)						Oil groove type	Flutes	DIN Standard	Stock
					OAL L	Thread L fl	Neck L In	Shank d	Square W k	Square L Lk				
WDH22250C	M22x2.5	6HX	2.5P	16	140	32	—	18	14.5	17	C	4	DIN376	○
WDH22250Z	M22x2.5	6HX	2.5P	16	140	32	—	18	14.5	17	Z	4	DIN376	○
WDH22200C	M22x2	6HX	2.5P	16	140	27	—	18	14.5	17	C	4	DIN374	○
WDH22200Z	M22x2	6HX	2.5P	16	140	27	—	18	14.5	17	Z	4	DIN374	○
WDH22150C	M22x1.5	6HX	2.5P	16	140	25	—	18	14.5	17	C	4	DIN374	○
WDH22150Z	M22x1.5	6HX	2.5P	16	140	25	—	18	14.5	17	Z	4	DIN374	○
WDH24300C	M24x3	6HX	2.5P	16	140	34	—	18	14.5	17	C	4	DIN376	○
WDH24300Z	M24x3	6HX	2.5P	16	140	34	—	18	14.5	17	Z	4	DIN376	○
WDH24200C	M24x2	6HX	2.5P	16	140	27	—	18	14.5	17	C	4	DIN374	○
WDH24200Z	M24x2	6HX	2.5P	16	140	27	—	18	14.5	17	Z	4	DIN374	○
WDH24150C	M24x1.5	6HX	2.5P	16	140	27	—	18	14.5	17	C	4	DIN374	○
WDH24150Z	M24x1.5	6HX	2.5P	16	140	27	—	18	14.5	17	Z	4	DIN374	○
WDH27300C	M27x3	6HX	2.5P	16	160	36	—	20	16	19	C	4	DIN376	○
WDH27300Z	M27x3	6HX	2.5P	16	160	36	—	20	16	19	Z	4	DIN376	○
WDH30350C	M30x3.5	6HX	2.5P	16	180	40	—	22	18	21	C	4	DIN376	○
WDH30350Z	M30x3.5	6HX	2.5P	16	180	40	—	22	18	21	Z	4	DIN376	○

6HX tolerance. Other tolerances and chamfer lengths: confirm availability and custom requirements.

Stock: filled circle = in stock; open circle = no stock. Custom orders accepted.

Pre-hole diameters: see printed pages 32-38.

Material key: FC = cast iron; FCD = ductile iron; Cu = copper; Al = aluminum.

P	P	P	Alloy steel SCM	M	K	K	N	N	N	S	S	H
Low-C steel	Med-C steel	High-C steel	HRC<=35	SUS	FC	FCD	Al	Cu	Cast Al	Ti	Ni	HRC>=35
-	-	-	-	-	●	●	-	-	-	-	-	-

Forming Tap Pre-hole Diameters

Metric Screw Threads (NRT)				Unit: mm
Thread Size	JIS class 1 pre-hole diameter		JIS class 2 pre-hole diameter	
	RH	Min. - Max.	RH	Min. - Max.
	Precision	Thread Overlap Ratio:%	Precision	Thread Overlap Ratio:%
M1 × 0.25	2	0.87~0.89(100~85)	4	0.90~0.92(100~80)
M1.2 × 0.25	2	1.07~1.09 (100~85)	4	1.10~1.12 (100~80)
M1.4 × 0.3	2	1.244~1.263(100~85)	4	1.270~1.294(100~80)
M1.6 × 0.35	2	1.40~1.44 (100~80)	4	1.44 ~1.48 (100~75)
M1.7 × 0.35	2	1.51~1.54 (100~80)	4	1.54 ~1.58 (100~75)
M2 × 0.4	2	1.78~1.82(100~80)	4	1.81~1.85(100~75)
M2.3 × 0.4	2	2.08~2.12 (100~80)	4	2.11~2.15(100~75)
M2.5 × 0.45	2	2.25~2.29 (100~80)	4	2.28~2.33(100~75)
M2.6 × 0.45	2	2.35~2.39 (100~80)	4	2.38~2.43(100~75)
M3 × 0.5	3	2.74~2.78 (100~80)	5	2.76~2.81(100~75)
M3.5 × 0.6	3	3.18 ~3.21 (100~85)	5	3.20~3.26 (100~75)
M4 × 0.7	4	3.63~3.67(100~85)	6	3.65~3.70(100~85)
M5 × 0.8	4	4.57~4.62(100~85)	6	4.59~4.66 (100~80)
M6 × 1.0	4	5.45~5.51(100~85)	7	5.48~5.57(100~80)
M7 × 1.0	4	6.45~6.51(100~85)	7	6.48~6.57(100~80)
M8 × 1.25	5	7.31~7.38 (100~85)	7	7.34~7.41 (100~85)
M10 × 1.5	5	9.16~9.22 (100~90)	7	9.18~9.28(100~85)
M12 × 1.75	5	11.01~11.08(100~90)	8	11.05~11.15(100~85)
M14 × 2.0	6	12.83~12.95(100~90)	10	12.92~13.04(100~85)
M16 × 2.0	6	14.87~14.95(100~90)	10	14.92~15.04(100~85)

Forming Tap Pre-hole Diameters

Unified threads (UNC / UNF)						
Thread Size	Class 2B pre-hole diameter				Class 3B pre-hole diameter	
	Major dia. Major Diameter	Pitch pitch Thread	RH	Min. - Max.	RH	Min. - Max.
			Precision	Thread Overlap Ratio:%	Precision	Thread Overlap Ratio:%
NO.0~80UNF	1.524	0.3175	4	1.38~1.41(100~65)	3	1.36~1.40(100~65)
1~72UNF	1.854	0.3528	4	1.68~1.72(100~65)	3	1.67~1.71(100~65)
1~64UNC	1.854	0.3969	4	1.66~1.70(100~65)	3	1.65~1.69(100~65)
2~56UNC	2.184	0.4536	4	1.96~2.02(100~65)	3	1.95~2.01 (100~65)
2~64UNF	2.184	0.3969	4	1.98~2.04 (100~65)	3	1.97~2.03 (100~65)
3~48UNC	2.514	0.5292	4	2.25~2.32(100~65)	3	2.23~2.31(100~65)
3~56UNF	2.514	0.4536	4	2.29~2.35 (100~65)	3	2.28~2.34 (100~65)
4~40UNC	2.844	0.635	5	2.52~2.60 (100~70)	3	2.50~2.58 (100~70)
4~48UNF	2.844	0.5292	4	2.57~2.64 (100~70)	3	2.56~2.63 (100~70)
6~32UNC	3.504	0.7938	5	3.09~3.17 (100~75)	3	3.06~3.14 (100~75)
6~40UNF	3.504	0.635	5	3.19~3.26(100~70)	3	3.16~3.22 (100~75)
8~32UNC	4.164	0.7938	6	3.75~3.83 (100~75)	4	3.74~3.82(100~75)
8~36UNF	4.164	0.7056	5	3.80~3.88 (100~75)	4	3.79~3.86 (100~75)
10~24UNC	4.824	1.0583	6	4.26~4.35 (100~80)	4	4.24~4.32(100~80)
10~32UNF	4.824	0.7938	5	4.41~4.48 (100~80)	4	4.40~4.46 (100~80)
12~24UNC	5.484	1.0583	6	4.92~5.01 (100~80)	4	4.90~4.96(100~85)
12~28UNF	5.484	0.9071	5	5.00~5.08 (100~80)	4	4.99~5.06(100~80)
1/4~20UNC	6.35	1.27	6	5.66~5.76(100~80)	4	5.64~5.74 (100~80)
1/4~28UNF	6.35	0.9071	5	5.86~5.93 (100~80)	4	5.85~5.92 (100~80)
5/16~18UNC	7.9375	1.4111	7	7.18~7.29 (100~80)	5	7.15~7.24 (100~85)
5/16~24UNF	7.9375	1.0583	6	7.38~7.46(100~80)	5	7.36~7.43 (100~85)
3/8~16UNC	9.525	1.5875	7	8.66~8.78 (100~80)	5	8.63~8.73 (100~85)
3/8~24UNF	9.525	1.0583	6	8.96~9.05 (100~80)	5	8.95~9.02 (100~85)
7/16~14UNC	11.1125	1.814	7	10.11~10.25(100~80)	5	10.08~10.19[100~85)
7/16~20UNF	11.1125	1.27	7	10.44~10.54 (100~80)	5	10.41~10.49(100~85)
1/2~13UNC	12.7	1.9538	8	11.62~11.78 (100~80)	6	11.60~11.68 (100~90)
1/2~20UNF	12.7	1.27	7	12.02~12.12(100~80)	5	12.00~12.05 (100~90)
5/8~11UNC	15.875	2.3091	11	14.62~14.76(100~85)	8	14.58~14.67(100~90)
5/8~18UNF	15.875	1.4111	9	15.14~15.25 (100~80)	7	15.11~15.17 (100~90)

Cutting Tap Pre-hole Diameters

Metric Screw Threads			Unit: mm	
Specification (M)		Standard Hole Dia	JIS class 2 pre-hole diameter	
			Max.	Min.
M1	0.25	0.75	0.785	0.729
M1.1	0.25	0.85	0.885	0.829
M1.2	0.25	0.95	0.985	0.929
M1.4	0.3	1.1	1.142	1.075
M1.6	0.35	1.25	1.321	1.221
M1.7	0.35	1.35	1.421	1.321
M1.8	0.35	1.45	1.521	1.421
M2	0.4	1.6	1.679	1.567
M2.2	0.45	1.75	1.838	1.713
M2.3	0.4	1.9	1.979	1.867
M2.5	0.45	2.1	2.138	2.013
M2.6	0.45	2.2	2.238	2.113
M3	0.5	2.5	2.599	2.459
M3.5	0.6	2.9	3.01	2.85
M4	0.7	3.3	3.422	3.242
M4.5	0.75	3.8	3.878	3.688
M5	0.8	4.2	4.334	4.134
M6	1	5	5.153	4.917
M7	1	6	6.153	5.917
M8	1.25	6.8	6.912	6.647
M8	1	7	7.153	6.917
M9	1.25	7.8	7.912	7.647
M10	1.5	8.5	8.676	8.376
M10	1.25	8.8	8.912	8.647
M10	1	9	9.153	8.917
M11	1.5	9.5	9.676	9.376
M12	1.75	10.3	10.441	10.106
M12	1.5	10.5	10.676	10.376
M12	1.25	10.8	10.912	10.647
M12	1.0	11	11.153	10.917
M14	2.0	12	12.21	11.835
M14	1.5	12.5	12.676	12.376
M14	1.0	13	13.153	12.917
M16	2.0	14	14.21	13.835
M16	1.5	14.5	14.676	14.376
M16	1.0	15	15.153	14.917

Cutting Tap Pre-hole Diameters

Unified Coarse Screw threads					Unit: mm
Specification (UNC)		Standard Hole Dia	Class 2 pre-hole diameter		
			Max.	Min.	
NO.1	-64	1.55	1.582	1.425	
NO.2	-56	1.8	1.871	1.695	
NO.3	-48	2.05	2.146	1.941	
NO.4	-40	2.3	2.385	2.157	
NO.5	-40	2.6	2.697	2.487	
NO.6	-32	2.8	2.895	2.642	
NO.8	-32	3.4	3.53	3.302	
NO.10	-24	3.9	3.962	3.683	
NO.12	-24	4.5	4.597	4.344	
1/4	-20	5.1	5.257	4.979	
5/16	-18	6.6	6.731	6.401	
3/8	-16	8	8.153	7.798	
7/16	-14	9.4	9.55	9.144	
1/2	-13	10.9	11.023	10.592	
9/16	-12	12.2	12.466	11.989	
5/8	-11	13.6	13.868	13.386	

Unified fine threads (UNF)					Unit: mm
Size Specification (UNF)		Standard Hole Dia	Class 2 pre-hole diameter		
			Max.	Min.	
NO.0	-80	1.25	1.305	1.182	
NO.1	-72	1.55	1.612	1.474	
NO.2	-64	1.85	1.912	1.756	
NO.3	-56	2.1	2.197	2.025	
NO.4	-48	2.4	2.458	2.271	
NO.5	-44	2.7	2.74	2.551	
NO.6	-40	2.9	3.022	2.82	
NO.8	-36	3.5	3.606	3.404	
NO.10	-32	4.1	4.165	3.963	
NO.12	-28	4.6	4.724	4.496	
1/4	-28	5.5	5.588	5.36	
5/16	-24	6.9	7.035	6.782	
3/8	-24	8.5	8.636	8.382	
7/16	-20	9.90	10.033	9.729	
1/2	-20	11.5	11.607	11.329	
9/16	-18	12.9	13.081	12.751	
5/8	-18	14.5	14.681	14.351	

STI Cutting Tap Pre-hole Diameters

Metric Screw Threads							Unit: mm
Coarse Thread size Specification (M)	Pre-hole dia.drilling size		Drill dia. Suitable Drill dia.	Fine Thread size Specification (M)	Pre-hole dia.drilling size		Drill dia. Suitable Drill dia.
	Min.	Max.			Min.	Max.	
ST2.5×0.45	2.6	2.69	2.65	ST10×1	10.25	10.4	10.3
ST2.6×0.45	2.7	2.79	2.75	ST10×1.25	10.31	10.48	10.4
ST3×0.5	3.12	3.2	3.15	ST 12×1.25	12.28	12.48	12.4
ST4×0.7	4.17	4.3	4.25	ST 12×1.5	12.33	12.56	12.5
ST5×0.8	5.18	5.33	5.25	ST14×1.5	14.33	14.56	14.5
ST6×1	6.22	6.4	6.3	ST16×1.5	16.33	16.56	16.5
ST8×1.25	8.28	8.48	8.4	ST18×1.5	18.33	18.56	18.5
ST10×1.5	10.33	10.56	10.45	ST20×1.5	20.33	20.56	20.5
ST12×1.75	12.38	12.64	12.5	ST20×2	20.44	20.73	20.5
ST14×2	14.44	14.73	14.6	ST22×1.5	22.33	22.56	22.5
ST16×2	16.44	16.73	16.66	ST24×1.5	24.33	24.56	24.5
ST18×2.5	18.55	18.89	18.87	ST24×2	24.44	24.73	24.6
ST20×2.5	20.55	20.89	20.07	ST27×1.5	27.33	27.56	27.4
ST22×2.5	22.55	22.89	22.7	ST30×1.5	30.33	30.56	30.5
ST24×3	24.65	25.05	24.8				
ST27×3	27.65	28.05	27.8				
ST30×3.5	30.76	31.2	31				

Unified Coarse Screw threads							Unit: mm
Coarse Thread size Specification (U)	Pre-hole dia.drilling size		Drill dia. Suitable Drill dia.	Fine Thread size Specification (U)	Pre-hole dia.drilling size		Drill dia. Suitable Drill dia.
	Min.	Max.			Min.	Max.	
STNO.2-56UNC	2.29	2.44	2.35	STNO.4-48UNF	2.97	3.15	3.05
STNO.3-48	2.64	2.83	2.75	STNO.6-40	3.66	3.81	3.75
STNO.4-40	2.99	3.18	3.1	STNO.8- 36	4.33	4.49	4.4
STNO.5-40	3.31	3.52	3.4	STNO.10- 32	5	4.18	5.1
STNO.6-32	3.68	3.87	3.75	ST1/4-28	6.55	6.72	6.65
STNO.8-32	4.33	4.52	4.45	ST5/16-24	8.17	8.35	8.25
STNO.10-24	5.06	5.25	5.2	ST3/8-24	9.78	9.96	9.85
STNO.12-24	5.72	5.92	5.8	ST7/16-20	11.39	11.58	11.5
ST1/4 - 20	6.63	6.86	6.75	ST1/2-20	12.98	13.17	13.1
ST5/16-18	8.33	8.48	8.4	ST9/16-18	14.58	14.8	14.7
ST3/8 - 16	9.87	10.12	10	ST5/8-18	16.18	16.38	16.3
ST7/16-14	11.51	11.78	11.65	ST3/4-16	19.4	19.6	19.5
ST1/2 -13	13.13	13.39	13.3	ST7/8-14	22.62	22.84	22.7
ST9/16-12	14.74	15.05	14.9	ST1-12	25.86	26.11	26

Pipe Thread Pre-hole Diameters

Tapered pipe threads Unit: mm

Pipe thread		Internal taper Rc (PT)		Internal parallel Rp (PS)	
Size	Major dia.	Calculated	Pre-hole dia.	Calculated	Pre-hole dia.
1/16	7.723	6.23	6.2	6.49	6.5
1/8	9.728	8.235	8.2	8.495	8.5
1/4	13.157	10.941	10.9	11.341	11.4
3/8	16.662	14.428	14.4	14.846	14.9
1/2	20.955	17.95	18	18.489	18.5
3/4	26.441	23.349	23	23.975	24
1	33.249	29.423	29	30.111	30
1-1/4	41.91	37.94	38	38.772	39
1-1/2	47.803	43.833	44	44.565	45
2	59.614	55.412	55	56.476	56

G(PF) cylindrical pipe threads Unit: mm

Size	Major dia.	Max. pre-hole	Max. pre-hole
1/16	7.723	6.561	6.843
1/8	9.728	8.566	8.848
1/4	13.157	11.445	11.89
3/8	16.662	14.95	15.395
1/2	20.955	18.631	19.172
3/4	26.441	24.117	24.658
1	33.249	30.291	30.931
1-1/4	41.91	38.952	39.592
1-1/2	47.803	44.845	45.485
2	59.614	56.656	57.296

American pipe threads: NPT / NPSC

Size		Major dia.		Taper thread (NPT)				Parallel thread	
				Drill dia.				Drill dia.	
				With reaming		Without reaming			
1/16	7.77	—	5.94		6.15			6.35	
1/8	10.117	21/64	8.33		8.43			8.74	
1/4	13.426	27/64	10.72	7/16	11.13	7/16		11.13	
3/8	16.866	9/16	14.27	9/16	14.27	44820		14.68	
1/2	20.98	11/16	17.48	45/64	17.86	23/32		18.26	
3/4	26.325	57/64	22.63	29/32	23.01	59/64		23.42	
1	32.934	1-1/8	28.58	1-9/64	28.98	1-5/32		29.36	
1-1/4	41.689	1-15/32	37.31	1-31/64	37.69	1-1/2		38.1	
1-1/2	47.76	1-45/64	43.26	1-23/32	43.66	1-3/4		44.45	
2	59.797	2-11/64	55.17	2-3/16	55.58	2-7/32		56.36	

Aerospace UNJ Thread Pre-hole Diameters

Unit: mm			
Size Specification	Recommend drill hole dia	Class 3B Class 3B pre-hole	
		Min. Min	Max. Max
N0.6 - 32UNJC	2.84	2.74	2.93
6 - 40UNJF	2.97	2.89	3.05
8 - 32UNJC	3.5	3.4	3.59
8 - 36UNJF	3.57	3.48	3.66
10 - 24UNJC	3.93	3.8	4.06
10 - 32UNJF	4.16	4.06	4.25
1/4 - 20UNJC	5.25	5.12	5.38
1/4 - 28UNJF	5.57	5.47	5.66
5/16 - 18UNJC	6.7	6.57	6.83
5/16 - 24UNJF	7.01	6.91	7.1
3/8 - 16UNJC	8.12	7.98	8.25
3/8 - 24UNJF	8.59	8.5	8.67
7/16 - 14UNJC	9.49	9.35	9.63
7/16 - 20UNJF	9.98	9.88	10.08
1/2 - 13UNJC	10.95	10.8	11.09
1/2 - 20UNJF	11.57	11.47	11.66

Pitch and Major Diameter Conversions

CONVERSION TABLE	
25.4mm)Threads per inch	Pitch (mm)
100	0.254
80	0.3175
72	0.3528
64	0.3969
60	0.4233
56	0.4536
48	0.5292
44	0.5773
40	0.635
36	0.7056
32	0.7938
28	0.9071
24	1.0583
20	1.27
18	1.4111
16	1.5875
14	1.8143
13	1.9538
12	2.1167

UNC external diameter conversion table		
Size Specification (UNC)	Inch Inch	Metric (mm) Metric
NO. 0	0.06	1.524
1	0.073	1.854
2	0.086	2.184
3	0.099	2.515
4	0.112	2.845
5	0.125	3.175
6	0.138	3.505
8	0.164	4.166
10	0.19	4.826
12	0.216	5.486

Cutting Speeds and Calculation Formulas

Tapping Speed						Unit: m/min
Series / material	Low- and medium-carbon steel	High-carbon and alloy steel	Quenched / tempered steel HRC 0-35	Stainless steel	Cast iron	Aluminum alloy
X30-NRT	10-25	8-20	5-15	10-25		20-50
X31-NRT	15-30	15-25	5-15	15-30		30-60
JX10-NRT	5-15	5-10		5-10		20-40
X20-SFT	15-25	10-20	5-15	10-25		20-50
X21-SFT	15-30	15-25	5-15	10-30		20-60
JX10-SFT	5-15	5-10		5-10		20-40
DS-SFT		8-20	5-15			
X20-POT	15-25	10-20	5-15	10-25		20-50
JX10-POT	5-15	5-10		5-10		20-40
HHS-POTX			3-8			
X20-RLT	15-25	10-20	5-15	10-25		
X20-HT					10-20	20-50
X21-HT			5-20		10-20	20-50
JX10-HT					5-15	20-40

Calculation formulafor cutting conditions		
Spindle speed (N)	Feed rate	Cutting speed (V)
$N = \frac{1,000V}{\pi d} \text{ (rpm)}$	$F = \frac{f \cdot Z \cdot N(D \pm d)}{D} \text{ (mm/min)}$	$V = \frac{\pi d N}{1,000} \text{ (M/min)}$

1. Internal thread: minus (-)
2. External thread: plus (+)

Tapping speed of TIN coated tap can increase by 30%.

Tapping speed should reduce by 20-30% when tapping depth > =2D.

D: Workpiece diameter (mm)

d: Tool diameter (mm)

z: Number of cutting edges

f: Feed amount per revolution (mm)

V: Cutting speed (m/min)

N: Spindle speed (rpm)

π:3.1415

Source formulas and speed ranges are reproduced for reference. Confirm operation, feed definition, tool series and material before applying them.

HENTRY

Guangdong Hentry Cutting Tool Technology Co., Ltd.

COMPANY PROFILE

Hentry provides CNC cutting tools for drilling, milling, reaming and boring. Its core team brings together university professors and professionals with decades of technical and application experience.

The company focuses on new materials and machining processes, combining precision production equipment with application support. Its tooling and services cover semiconductor packaging, medical ceramics, aerospace, 3C electronics, AI robotics and automotive components, including wheel hubs, connecting rods, crankshafts and steering knuckles.

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For tool selection or a quotation, send the thread size, workpiece material, hole type, thread depth and required quantity.