

F1 : COMPRESSION
F2 : TENSION
F3 : BACK TENSION

MODEL	CODE	φD1	L1	ℓ1	φC1	φC2	φC3	H1	F1	F2	F3	φD2	D	TAP COLLET CODE	N/W (kg)	
BT40	-ADC20-150	11292	20	123	109	32	40	47	14	6	10	6	3~12.5	M2.5~M16	TC20-(D)	1.6
	-ADC29-195	11294	29	163	143	45	55	63	20	8	15	10	8.5~20	M 12~M27	TC29-(D)	2.6
BT50	-ADC20-165	13602	20	138	124	32	40	47	14	6	10	6	3~12.5	M2.5~M16	TC20-(D)	4.2
	-ADC29-195	13604	29	163	143	45	55	63	20	8	15	10	8.5~20	M12~M27	TC29-(D)	4.9
	-ADC40-225	13606	40	173	153	60	80	80	20	10	15	12	14~30	M18~M39	TC40-(D)	6.0

ORDERING EXAMPLE

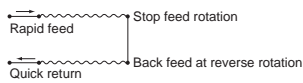
① **BT40** - ② **ADC** ③ **20** - ④ **150**

① Shank Size
② Holder's Name
③ φD1
④ L1

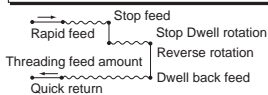
(Depth limit device) How to set

- The ADC taper, in which the limit device is incorporated to determine thread depth automatically, can decide thread depth accurately. Variations in accuracy of depth tapping is ±0.1.
- Please use TC type tap, which has no torque limiter. In addition, traditional TCC collet having torque limiter can be used.
- It automatically corrects the error in the machine and feed tap pitch by the action of the float mechanism (tension-compression), which can make it tapping with high accuracy.

Example: through-hole program



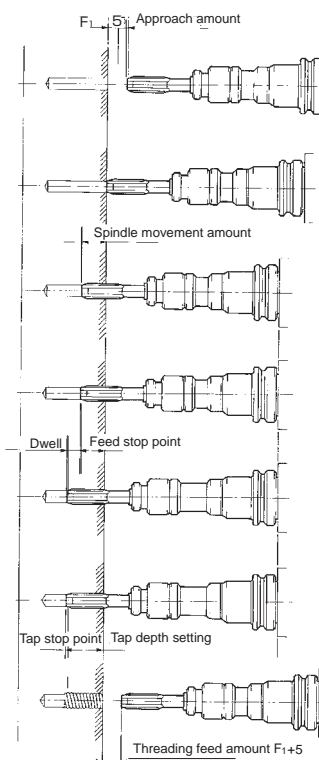
Example: blind hole program



Calculation method of dwell time

[Example] taper: ADC20 (threading feed amount 6)
Tap: M12×1.75
Rotational speed: 180min⁻¹ (3RPS)

$$\text{Dwell time} = \frac{6}{1.75 \times 180 / 60} \times 2 = 2.3 \text{ seconds}$$



① approach amount setting

Set to F1-5mm. Set slightly slower or equal to the speed of travel of the tap.

② Start tapping

③ Spindle movement amount

Amount obtained by subtracting the threading feed amount (F1) by the tap depth setting amount.

④ Feed stop point

Stop the feed of the machine, and let only the spindle (Dwell) turn.

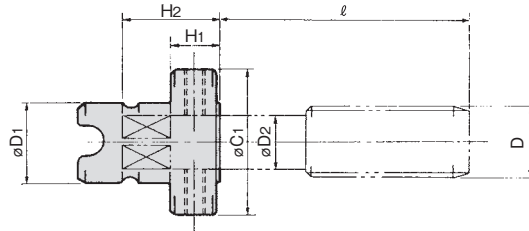
⑤ Dwell time

$$\text{Dwell time} = \frac{\text{Tapper threading feed amount (mm)}}{\text{Tap Pitch(mm)} \times \text{Rotation (R,P,S)}} \times 2$$

⑥ Tap stop point

Stop spindle rotation, reverse spindle rotation (Dwell), and feed back (setting to the same as the rate at which the tap is fed back.).

⑦ Tapping complete



CODE	⌀D1	D	⌀C1	H1
TC20-(D)	20	M3~M16	32	14
TC29-(D)	29	M12~M27	45	20
TC40-(D)	40	M18~M39	60	20

TC20 TAP COLLET

TC20-(D)																		
D	M	—	※M2	M3	M4	M5	M6	—	M8	M10	—	M12	—	M14	—	—	—	M16
	UNC	—	No.4	—	No.8	No.10	1/4	5/16	—	3/8	—	7/16	—	1/2	—	9/16	—	5/8
	PT·PF	—										P1/8	—			P1/4	—	
D2	3	4	5	5.5	6	6.1	6.2	7	8	8.5	9	10.5	11	12	12.5			
H2	19.5	20.5	21.5	22		23			24		25	26		27		28		
ℓ	24.5	23.5	25.5	30.5	38	40	47		52	31	56	58	60	62	64	35	68	67

TC29 TAP COLLET

TC29-(D)																			
D	M	M12	—	M14	—			M16	M18	—	M20	—	M22	—	M24	—	M27	—	
	UNC	—	1/2	—	9/16	—	5/8	3/4		7/8			—				1		
	PT·PF	—				P1/4			—			P3/8		—		P1/2	—	P5/8	—
D2	8.5	9	10.5	11	12	12.5	14		15	17	18	19	20						
H2	29	30	31	32		33	34		35	36	37	38							
ℓ	53	55	57	59	30	63	62	66	71	31	70	79	43	82	44	92	87		

TC40 TAP COLLET

TC40-(D)																					
D	M	M18	—		M20	—	M22	—	M24	—	M27	—	M30	—		M33	—	M36	—	M39	—
	UNC	—	3/4	—		7/8	—			1	P1/8	—		—		13/8	—			11/2	
	PT·PF	—		P3/8	—			P1/2	—	P5/8	—		P3/4	—	P7/8	—	P1	—	P11/8	—	
D2	14	15	17	18	19	20	22	23	24	25	26	28	30								
H2	34	35	36	42	43			45		47		49			51						
ℓ	66	71	31	70	79	38	77	39	87	82	90	40	98	43	98	106	46	106	51	114	109

NOTE : 1. For JIS standard taps only.
* mark tap collet is manufactured to order.

ORDERING EXAMPLE

TC
20
- M5

① Holder's Name
② ⌀D1
③ Tap Size

BT series
 HSK series
 ST series
 Versatile Tool
 Cutting Tool
 Accessories