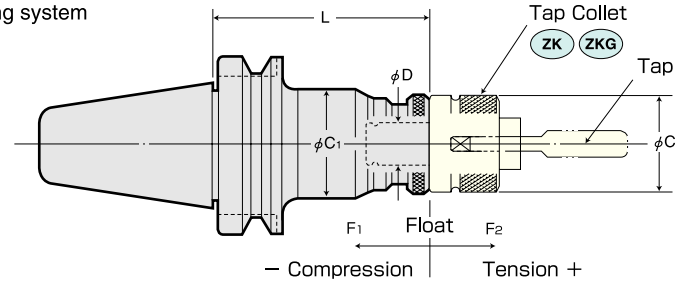
FLOATING TAPPER CHUCK

NIKKEN

Z

Suitable Tapper Chuck for Conversational M/C

- More convenient in tapping, thanks to stable torque and slim body
- Good Run-out, No Pull-out and No Tap Breakage with NIKKEN Tapper Chuck
  Ideal for Unmanned System
- With the axial floating system



TAPER	Code No.	Tapping Capability M	Tapping Capability U	Tapping Capability P	D	L	C	C1	Float F1	Float F2	Tap Collet	Weight (kg)
No.30	BT30-Z 8- 90*1	M 2～ 8	1/8～1/4	—	13	90	23	33	5	15	ZK 8 *1	1.2
	-Z12-105	M 2～ 12	1/8～1/2	P1/16～1/4	19	105	38.5	45	5	15	ZKG12	1.2
No.40	BT40-Z 8- 90*1	M 2～ 8	1/8～1/4	—	13	90	23	33	5	15	ZK 8 *1	1.4
	(IT40) -Z12- 90	M 2～ 12	1/8～1/2	P1/16～1/4	19	90	38.5	45	5	15	ZKG12	1.5
	-Z12-130					130			15			1.6
	-Z16-109	M 3～ 20	1/8～3/4	P1/8～3/8	25	109	48	55	8	20	ZKG16	2.0
	-Z24-100	M 8～ 24	1/2～ 1	P1/4～5/8	30	100	56	68	10	20	ZKG24	2.1
	-Z24-187					187		63	20			3.5
	-Z38-140	M18～ 38	3/4～13/8	P3/8～ 1	45	140	78	85	8	22	ZK 38	6.7
No.50	BT50-Z 8-105*1	M 2～ 8	1/8～1/4	—	13	105	23	33	5	15	ZK 8 *1	4.2
	(IT50) -Z12-130	M 2～ 12	1/8～1/2	P1/16～1/4	19	130	38.5	45	15	15	ZKG12	4.3
	-Z12-175					175						4.8
	-Z12-220					220						5.0
	-Z16-135	M 3～ 20	1/8～3/4	P1/8～3/8	25	135	48	55	8	20	ZKG16	5.2
	-Z24-142	M 8～ 24	1/2～ 1	P1/4～5/8	30	142	56	63	20	20	ZKG24	5.8
	-Z24-187					187						6.2
	-Z38-175	M18～ 38	3/4～13/8	P3/8～ 1	45	175	78	98	10	25	ZK 38	8.3
	-Z65-160	M36～100	1 ～33/8	P1 ～31/4	68	160	110 *2 (125)	110	10	25	ZK 65	9.0

★In Case of IT40, **IT40-Z8-95*1** and **IT40-Z24-125** are standard.
★In Case of IT50, **IT50-Z8-105*1**, **IT50-Z38-187** and **IT50-Z65-165** are standard.
★Marked ∗1 **Z8** Tapper Chuck and **ZK8** Tap Collet are available as semi-standard.
★Please refer ☞ **P.51** for **ZKG** Tap Collet, ☞ **P.52** for **ZK** Tap Collet, and ☞ **P.53** for **Long Size Tap Collet.**
★Marked ∗2 ( ) dimension is for M65 or more size of **ZK** Tap Collet.

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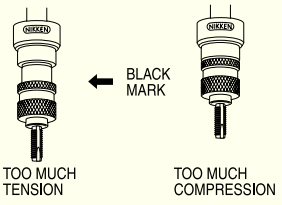
① Caution for Floating Mechanism

(1). Too Much Tension
When tension movement exceeds the limitation, the black line will appear. In this case increase machine feed.

(2). Too Much Compression
When machine feed is too fast for the tap thread pitch, the compression floating mechanism will work. The machine program should be modified to slow feed rate down.



② When the drilled hole diameter is too small (this is often caused by the drilling of the tough materials, extended drilling diameter is not large enough.), the tap will slip before the breakage due to torque limitter mechanism. In this case enlarge the drilled hole and do not adjust the torque setting.

③ For a blind hole tapping, the tap might hit the bottom of the hole and the floating shaft will not extend any further, if the Z point is too close to the component. And the point of reversing the floating shaft could compress further than the extension, it may cause damage to the tapped hole. In this case, make the drilled hole deeper or restrict Z point at the higher position.

④ When the R point is too close to the component, the spindle will moves upwards with the fully extended float mechanism at reversing operation, and it might cause damage to the tapped hole as the tap may be still in the hole when the spindle try to return to the initial point at the rapid feed. In this case, give further distance between the R point and the component.

⑤ In case of the tapping with Z type tapper chuck, since the Z Axis stroke will move upwards after reversing operation starts at the Z point due to the machine tapping cycle features, it may cause damage to the tapped hole. In this case, input the dwell command at the Z point on the program in order to make the upward movement of Z Axis with the tapper chuck as its extended float mechanism.