

For machine spindle maintenance **TEST BAR CHECKMATE**

The maintaining machine spindle run-out accuracy allows superior machining quality. Maximizes tool holder performance!

Periodically checking the run-out accuracy will result in superior machining.

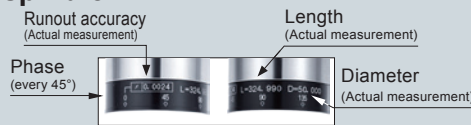
- ▷ Light-weight(20% lighter), hollow design makes it easy to use.
- ▷ The actual measurement values are marked on the body.

Length	Diameter	Runout accuracy	Phase of run-out
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- ▷ Ideal for setting Z axis datum.
- ▷ Reasonable price.

You can recognize the exact run-out accuracy and the highest run-out of the spindle.

You can check the spindle condition more precisely using the run-out value and position marked on the body.



It can be installed into the spindle in every phase.

There is no drive-key groove, so measurements can be made without worrying about the phase.

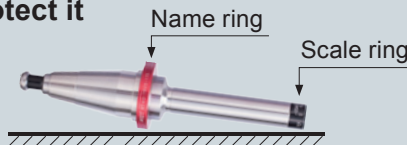


Handy CMA type

Allows you to check the dynamic accuracy thanks to optional balance adjustment.

The name ring and scale ring protect it from scratches and dents.

The taper area and straight area do not touch the table surface even if they are placed horizontally.



Full-fledged CMB type

Z-axis deflection and spindle travel accuracy can be measured.

	CODE	Fig.	φD	φD1	L	L1	L2	L3	Kg
BT / DIN / CAT.	NT30 -CMA20-125	1	20	32	125	45	65	15	0.7
	NT40 -CMA25-175	2	25	42	175	50	110		1.3
	NT50 -CMA30-225		30	53	225	65	145		3.5
	NT30 -CMB30-175	1	30	32	175	45	115	15	1.0
	NT40 -CMB40-325	2	40	42	325		265		2.8
	NT50 -CMB50-325		50	53		60	250		5.7
For both HSK-A and HSK-E	HSK32 -CMA20-125	3	20	26	125	35	75	15	0.4
	HSK40 -CMA20-125			32		45	65		0.5
	HSK50 -CMA25-175		25	42	175	50	110		1.0
	HSK63 -CMA25-175								1.2
	HSK80 -CMA30-225		30	53	225	65	145		2.2
	HSK100-CMA30-225								3.0
	HSK125-CMA30-225								4.1
	HSK32 -CMB25-175	3	25	26	175	35	125	15	0.7
	HSK40 -CMB30-175			30		32	40		120
	HSK50 -CMB40-225		40	42	225	45	165		1.8
	HSK63 -CMB40-325				325		265		2.7
	HSK80 -CMB50-325		50	53		60	250		4.4
	HSK100-CMB50-325								5.2
	HSK125-CMB50-325								6.3
Exclusive use for HSK-F	HSK63F-CMA25-175	3	25	42	175	50	110	15	1.2
	HSK80F-CMA30-225			30		53	225		65
	HSK63F-CMB40-325	3	40	42	325	45	265	15	2.7
	HSK80F-CMB50-325					50	53		60

Fig. 1

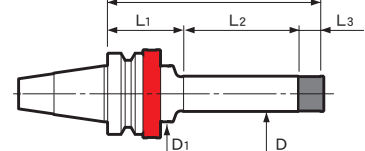


Fig. 2

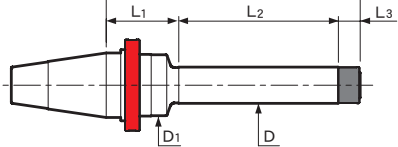
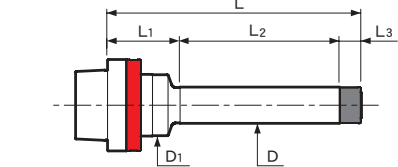


Fig. 3



Exclusive retention knob

CODE	Shank
P-576	CAT.40
-575	CAT.50
-578	DIN40
-577	DIN50

Std. Access.

- Accuracy inspection sheet

Option

- Coolant duct(HSK-A) • Retention knob(BT)
- Special retention knob(CAT. / DIN)
- Balance adjustment (only for CMA type) less than G2.5 / 3000min⁻¹
- *Please order by adding "BL" to the end of the code. (Ex. : HSK63-CMA25-175 BL)

Note

- NT type is available for BT/CAT. and DIN spindle by changing the retention knob.
- HSK type is available for both HSK-A and HSK-E spindles. • HSK-F type is available only for HSK-F spindle.
- A special design retention knob is required for CAT./DIN spindle. A market standard retention knob for ANSI/DIN/ISO is not available. Contact us for the details.

Caution

- Use a market standard retention knob for the BT spindle.
- NT30 type can be installed into a spindle at 0° and 180°.
- A.T.C is not available. (except for NT30)

The sub-zero treatment prevents secular change.