OTHERS

TCP, CF , PGV , NBK .....

TCP TOOL TIGHTENING FIXTURE CF MEASURING PROBE PGV PRECISION HYDRAULIC VISE NBK ROUND SUPER THIN CHUCKS

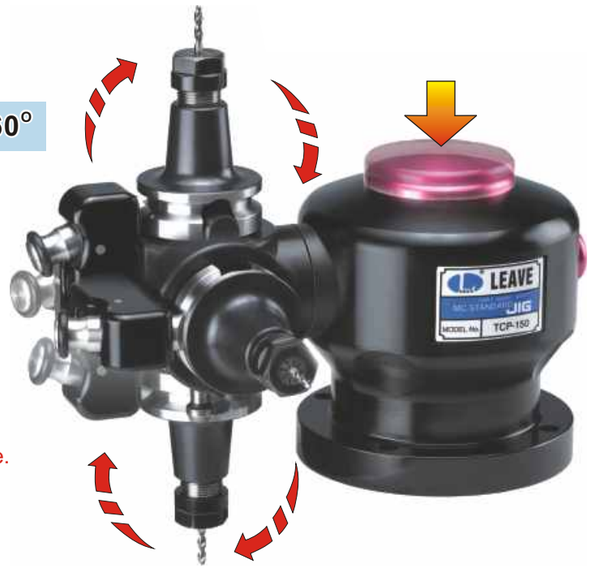
TCP TOOL TIGHTENING FIXTURE

Tool Holder is Changeable

Easy assemble and dis-assemble tool holder from main body while pressing the valve on the right hand side of the unit.

Tool Holder is Adjustable up to 360°

Easily adjusts tool holders for a full 360° (45° increments) by pushing the valve on the top of the tightening fixture.



4pcs of M10x40mm bolt can be fastened from the top of the mounting flange or 4pcs of M12 bolt can be fastened from the bottom of the mounting flange.

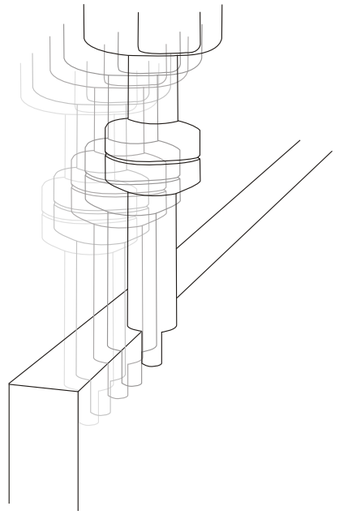
Tightening Fixture Main Body

Model No.	kg
TCP-150	6

Tool Holder

Model No.	kg	Model No.	kg
TCP-BT30	2.3	TCP-HSK-A-100	3.8
TCP-BT40	2.8	TCP-HSK-E-25	2.3
TCP-BT50	4.8	TCP-HSK-E-32	2.5
TCP-HSK-A-40	3.3	TCP-HSK-E-40	2.8
TCP-HSK-A-63	2.3	TCP-HSK-E-50	3.0
TCP-HSK-A-80	3.5	TCP-HSK-F-63	3.2

CF MEASURING PROBE



MEASURING PROBE

CF-0110T	Model：CF-0110T Material：STEEL + Tin Hardness：HV2200 Shank Dia：ϕ 10mm Probe Dia：ϕ 10mm Repeatability：$\pm 2\mu$
CF-0110N	Model：CF-0110N Material：STEEL + Crn Hardness：HV2700 Shank Dia：ϕ 10mm Probe Dia：ϕ 10mm Repeatability：$\pm 2\mu$
CF-0110C	Model：CF-0110C Material：STEEL + Cr Hardness：HV700 Shank Dia：ϕ 10mm Probe Dia：ϕ 10mm Repeatability：$\pm 2\mu$
CF-0104T	Model：CF-0104T Material：STEEL + Tin Hardness：HV2200 Shank Dia：ϕ 10mm Probe Dia：ϕ 10mm / ϕ 4mm Repeatability：$\pm 2\mu$
CF-0104N	Model：CF-0104N Material：STEEL + CrN Hardness：HV2700 Shank Dia：ϕ 10mm Probe Dia：ϕ 10mm / ϕ 4mm Repeatability：$\pm 2\mu$
CF-0104C	Model：CF-0104C Material：STEEL + Cr Hardness：HV700 Shank Dia：ϕ 10mm Probe Dia：ϕ 10mm / ϕ 4mm Repeatability：$\pm 2\mu$

OPERATION：

1.Spindle runs about 450~600rpm.
Move spindle closed to measuring surface.

2.When measuring probe touches workpiece, it looks in " one part."

3.When the pribe and shank are in alignment, probe will slide out of roating center. Now, the center spindle is located 5mm away form measuring surface.

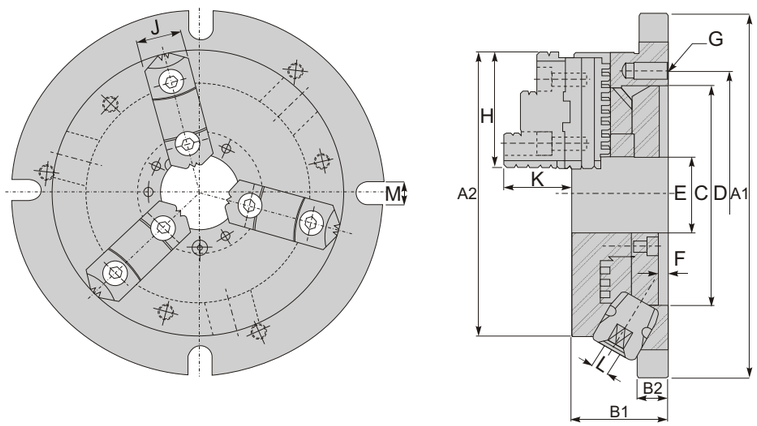
PGV PRECISION HYDRAULIC VISE

- Super precision: // ±0.005 / 100mm
  ⊥ ±0.005 / 100mm
- Hardness: HRC 58°~60°.
- Application: Multifunction tool makers vise,
  ideally suited for: inspection, grinding or edm work.

Model No.	A	B	C	D	E	F	G	H	L		T	kg
									MIN	MAX		
PGV-100	220	100	80	40	40	40	110	50	355	470	9 X 7	10.0
PGV-125	300	125	90	40	50	60	165	70	420	590	11 X 7	19.5

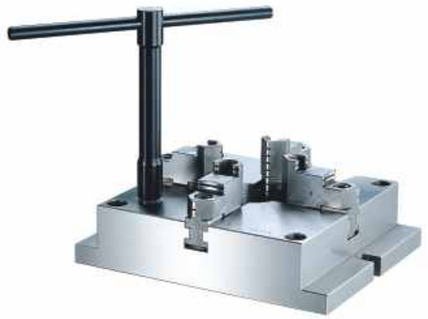
NBK ROUND SUPER THIN CHUCK

- The angle between ''HANDLE'' and ''BASE OF CHUCK'' is 30 degree, therefore, it is much more convenient for ''HANDLE'' rotation.
- This ''POWER SUPER THIN'' design of chuck may increase the ''allowable length'' of machining operation.
- The flanged design makes it easy to load.
- ''POWERFUL TYPE'' design can be used with hard or soft jaws.

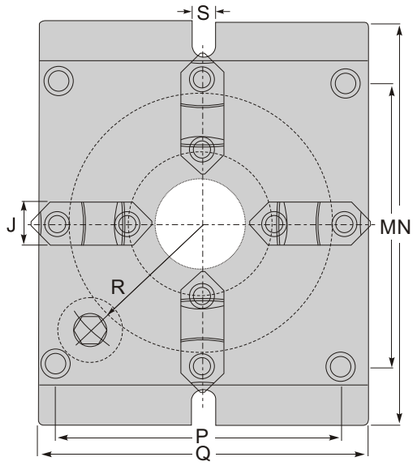


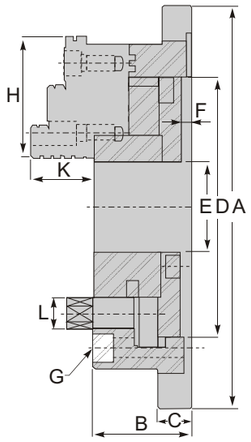
SPEC./MODEL	A1	A2	B1	B2	C	D	E	F	G	H	J	K	L	M	kg	External	Internal
NBK-6	220	170	58	18	130	147	45	6	3-M10	68	26	40	10	13	11.0	ϕ8-ϕ160	ϕ48-ϕ150
NBK-8	270	210	65	20	155	172	60	6	3-M10	82	28	45	11	13	19.5	ϕ11-ϕ200	ϕ62-ϕ190
NBK-10	315	255	73	20	190	210	80	6	3-M12	93	32	52	12	16	29.5	ϕ12-ϕ250	ϕ72-ϕ240
NBK-12	370	305	80	22	250	285	105	6	3-M12	117	40	59	14	18	42.5	ϕ15-ϕ300	ϕ86-ϕ290

MCA SUPER THIN SQUARE CHUCKS



- End-surface Clamping design
- Super thin design
- Convex design
- Unified height for reference point
- Alignment key on bottom of chuck.
- Soft-jaws are available
- MCA square chucks





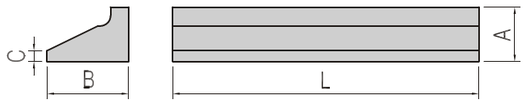
SPEC./MODEL	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	Max. Dia Gripped by		kg
																		external	internal	
MCA-6	215	57	18	130	40	5	4-M10	68	26	39	14	144	165	144	165	66	18	ϕ4-ϕ128	ϕ55-ϕ128	13.7
MCA-8	250	65	20	160	55	5	4-M12	82	28	43	17	174	200	174	200	83	18	ϕ5-ϕ162	ϕ62-ϕ162	21.5
MCA-10	310	72	22	200	70	6	4-M14	93	32	50	21	218	250	218	250	103	18	ϕ6-ϕ200	ϕ72-ϕ200	35.6
MCA-12	380	85	25	260	100	7	4-M16	117	40	56	23	274	310	274	310	135	22	ϕ10-ϕ265	ϕ90-ϕ265	61.7

GP-102 GROUND PARALLEL SET

- Material: S45C(JIS) / CK45(DIN)
- Hardness: HRC 45°.
- Accuracy: A ± 0.01
  B ± 0.01
  C ± 0.5

BASE

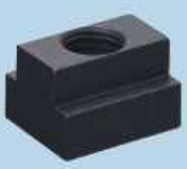
PARTS



Model No.	BASE SIZE			PARTS SIZE				kg (1)
	A	B	C	A	B	C	L	
GP102-05	5	16	100	-	-	-	-	1 SET/11.6
GP102-06	6	18	100	-	-	-	-	
GP102-08	8	24	100	-	-	-	-	
GP102-10	10	30	100	-	-	-	-	
GP102-12	12	36	150	-	-	-	-	
GP102-14	14	48	150	-	-	-	-	
GP102-18	18	60	150	-	-	-	-	
GP102-22	22	62	150	-	-	-	-	
GP102-24	———			15	31	2.5	200	

MK CLAMPING KITS WITH METAL RACKS

MODEL NO.	Fit T-Type Groove	Bolts	kg
MK-1210	12	M10	8.0
MK-1412	14	M12	9.5
MK-1614	16	M14	10.5
MK-1816	18	M16	19.0
MK-2018	20	M18	21.0

Kind		Specification
	FLANGE NUT	6 PCS
	EXTENSION NUT	4 PCS
	CLAMPING STUD	75.100.125. 150.175.200 SIX KIND / EACH 4 PCS
	STEP BLOCK	THREE KIND / EACH 4 PCS
	STEP CLAMP	THREE KIND / EACH 2 PCS
	T-SLOT NUT	6 PCS
TOTAL : 58 PCS		