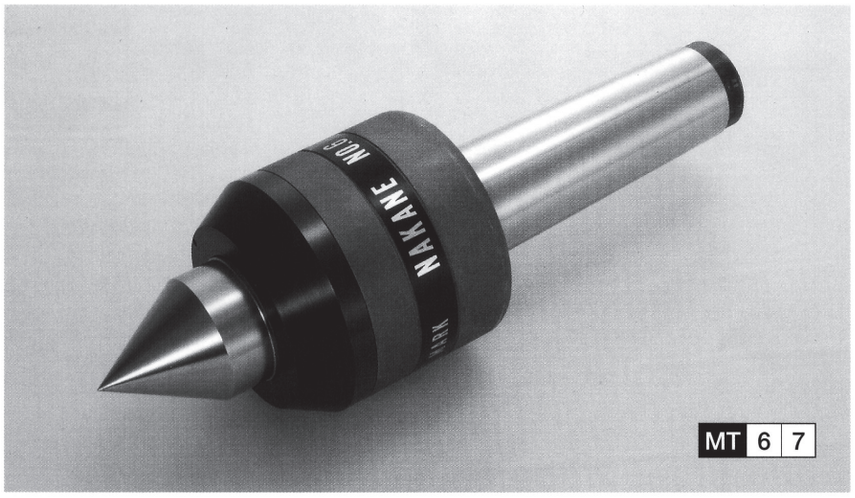
Model M Heavy Duty type

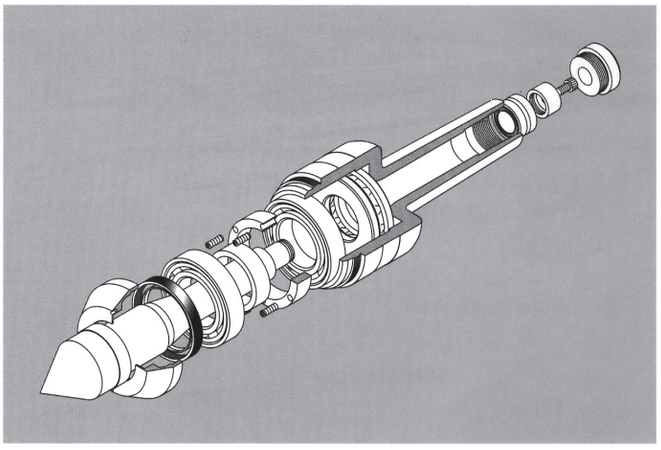


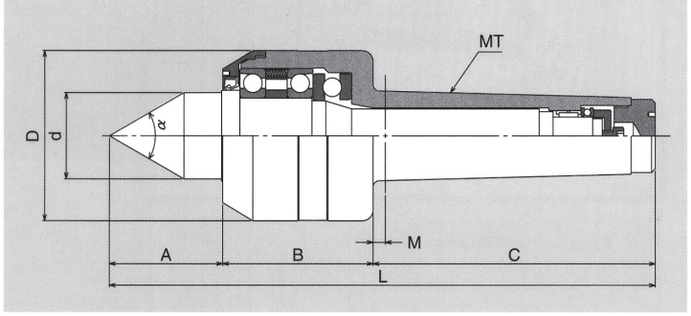
Features

1) High precision
Two angular bearings are used for radial load, and a preloaded spring is provided. Precision is kept within 0.005 mm (T.I.R).

2) Structure
An especially large angular bearing is used to support heavy loads. The radial load on the rear is supported by a needle roller.

3) Waterproof performance
An oil seal is used for complete sealing, thereby protecting against entry of coolant or foreign matter.





Dimensions

(mm)

Model No.	MT	A	B	C	M	L	D	d	α	Wt.(kg)
Model M No.6	6	82	126	192	9.5	400	128	66	60°	15.46
Model M No.7	7	104	148	263.5	11.5	507.5	158	80		28.75

Allowable Load

	Allowable radial load (kgf)						Allowable axial load (kgf)					
Speed (r.p.m.)	30	60	150	300	600	1,000	30	60	150	300	600	1,000
Model M No.6	4,500	3,550	2,500	2,050	1,610	1,410	5,030	3,970	2,800	2,290	1,800	1,570
Model M No.7	6,430	5,080	3,570	2,920	2,300		6,670	5,260	3,700	3,030	2,380	

(When bearing service life is assumed to be 2,000 hours)

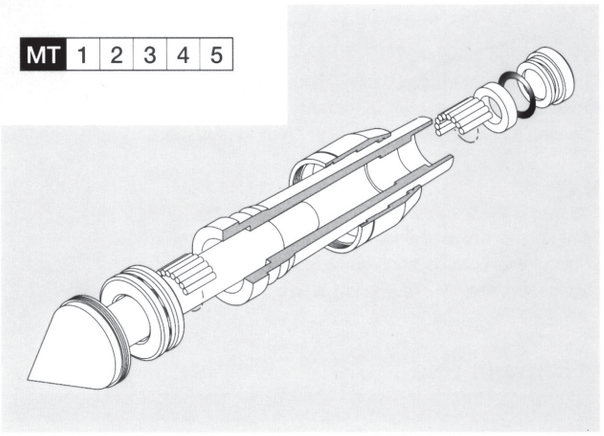
NAKANE

Model LS Standard type

for CNC


Rear gap

MT 1 2 3 4 5



Features

1) Dimensions and rigidity

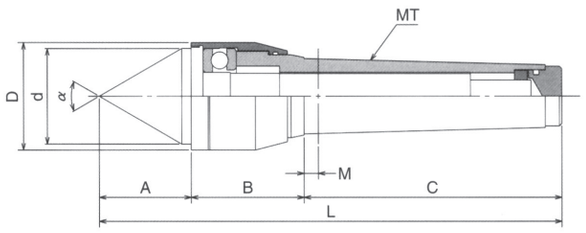
The live center itself is designed as a bearing. This structure ensures a compact configuration and allows the center to be used without worrying about cutter interference. Full complement needle rollers are used to allow the rotary shaft diameter to be increased. Thus, high rigidity and durability are ensured despite the compact configuration.

2) High precision

Runout does not exceed 0.003 mm (T.I.R.). This product covers an extensive range of workpieces from those requiring only rough turning to those requiring high precision turning.

3) Waterproof performance

Coolant is blown off to some extent by the rotating cover, and waterproof performance is provided by the rear gap structure and oil groove.



Dimensions

(mm)

Model No.		MT	A	B	C	M	L	D	d	α	Wt.(kg)
Model LS and LSA	No.1	1	20	25.5	57.5	4	103	25	20	60°	0.13
Model LS , LSA , WP and WPA	No.2	2	23	28	69	4.5	120	27.7	24		0.24
	No.3	3	27.5	32	85.5	5	145	32.3	28		0.46
	No.4	4	37.5	47.5	108.5	6	193.5	45	40		1.12
	No.5	5	51	53	139	8	243	62	54		2.75
Model WP	No.6	6	80	86	191.5	9	358	96	85		9.07

Allowable Load

		Allowable radial load (kgf)							Allowable axial load (kgf)						
Speed (r.p.m.)		50	250	500	1,000	2,000	3,000	4,000	50	250	500	1,000	2,000	3,000	4,000
Model LS and LSA	No.1	240	150	120	100	80	70	60	370	210	170	140	110	90	80
Model LS , LSA , WP and WPA	No.2	300	180	150	120	100	90	80	450	250	210	170	130	120	100
	No.3	440	270	220	180	150	130		740	420	340	280	220	190	
	No.4	710	430	350	290	230	210		970	550	450	360	280	250	
	No.5	1,300	790	650	530	430			1,280	720	590	480	370		
Model WP	No.6	1,500	940	750	620	500			3,500	2,500	1,600	1,400	1,000		

(When bearing service life is assumed to be 2,000 hours)

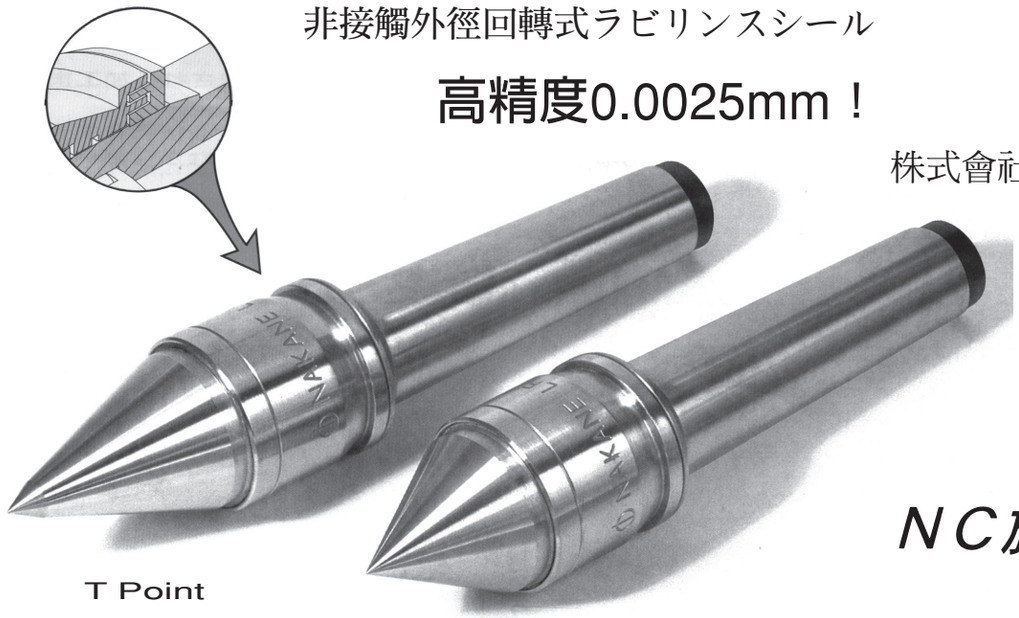
高速防水タイプ ライブセンター

LF型

非接觸外徑回轉式ラビリンスシール

高精度0.0025mm！

株式會社 三洋製作所



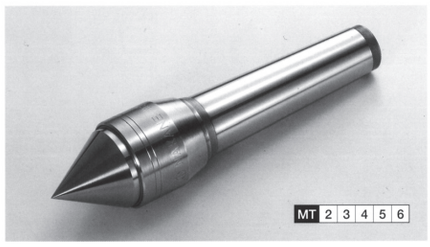
T Point

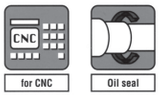
S Point

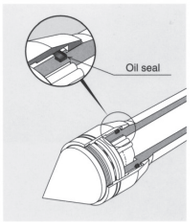
NC旋盤に最適

LIVE CENTER

Model FP Oil seal type

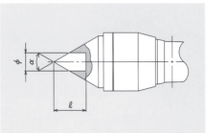


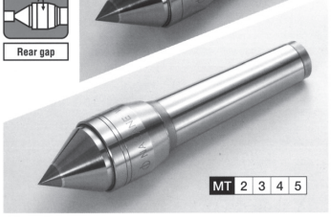




- The wear resistant oil seal ensures by far the best sealing at low and intermediate speeds.
- A high RPM, waterproof type (LF) is recommended for high speed CNC lathes.

Model LSA Standard Type, Carbide Tip





- When the spindle startup speed is very high or the workpiece is mounted and dismounted frequently, the tip will wear very quickly. So it is recommended that the center be used with a carbide tip.

■ Carbide tip Dimensions (mm)

Model No.		MT	ϕ	ℓ	α
Model LSA	No.1	1	6	12	60°
	No.2	2	8	16	
Model LSA and WPA	No.3	3	10	20	
	No.4	4	14	25	
	No.5	5	18	35	

Model WPA Oil Seal Type, Carbide Tip

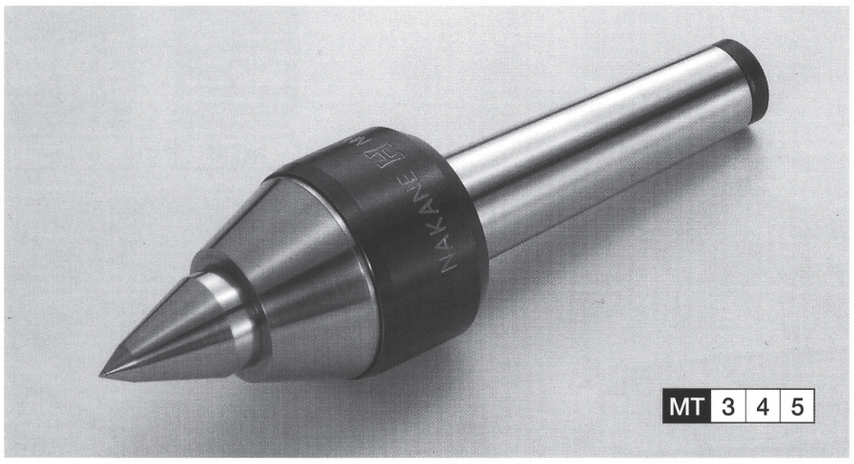
LIVE CENTER

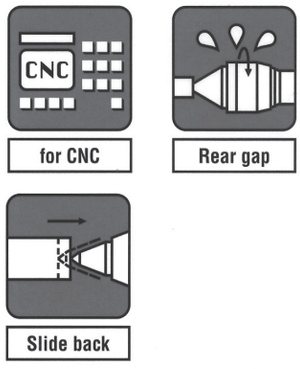
NAKANE 高速CNC車床回轉頂針

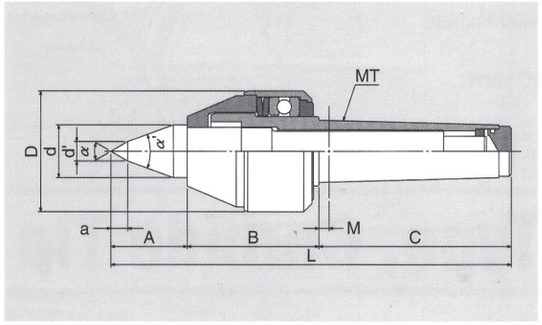
規格 ＼ 型號	LS-標準型	LF-高速防水型	FP-高速油封型	LSA-鎢鋼標準型
M.T – 1	11,600 00			23,100 00
M.T – 2	10,800 00	SP-N 16,900 00	SP 13,700 00	22,900 00
M.T – 3	12,800 00	SP-N 19,600 00	SP 15,900 00	26,200 00
M.T – 4	17,500 00	SP-N 25,600 00	SP 21,800 00	36,800 00
M.T – 5	31,500 00	SP-N 42,500 00	SP 39,200 00	58,700 00

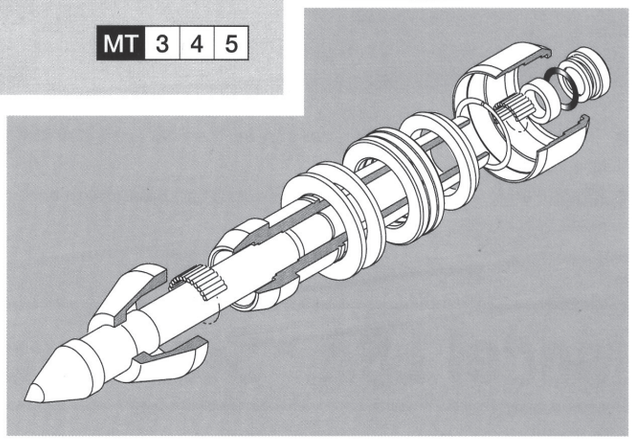
NAKANE

Model H Slide Back type

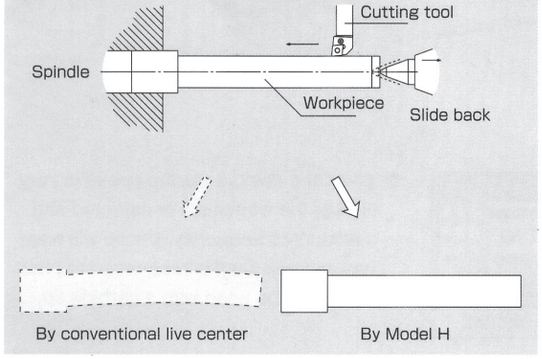








Variations caused by thermal expansion when turning long workpieces



Features

1) Slide-back structure
The slide-back structure utilizing a disc spring to prevent deformation of the workpiece due to thermal expansion as well as abrasion of the center hole. The structure is also designed so that excessive load is not applied to the thrust bearing (patented in several countries).

2) Rigidity
The needle roller is placed closer to the tip, thanks to the larger thrust bearing employed, so as to withstand heavy cutting.

3) Shape
The shape in the vicinity of the tip forms an acute angle (40°) so as not to interrupt bite intrusion.

4) High precision
It is ideal for precision turning, and its run-out accuracy is within 0.003 mm (T.I.R).

Dimensions

(mm)

Model No.	MT	a	A	B	C	M	L	D	d'	d	α	α'	Wt.(kg)
Model H No.3	3	7	32	55.5	85.5	5	173	46.5	8	22	60°	40°	0.79
Model H No.4	4	8	40	68	108.5	6	216.5	60	10	27.5			1.61
Model H No.5	5	11	54	95	139	8	288	87	14	38			4.79

Allowable Load

	Allowable radial load (kgf)						Allowable axial load (kgf)					
Speed (r.p.m.)	50	250	500	1,000	2,000	3,000	50	250	500	1,000	2,000	3,000
Model H No.3	520	320	260	210	170	150	850	480	390	320	250	220
Model H No.4	820	500	410	330	270	240	1,300	730	600	490	380	330
Model H No.5	1,420	860	710	580	460		2,110	1,190	970	790	610	

(When bearing service life is assumed to be 2,000 hours)