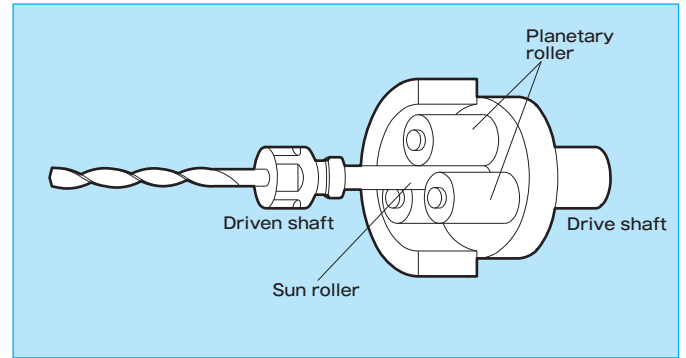


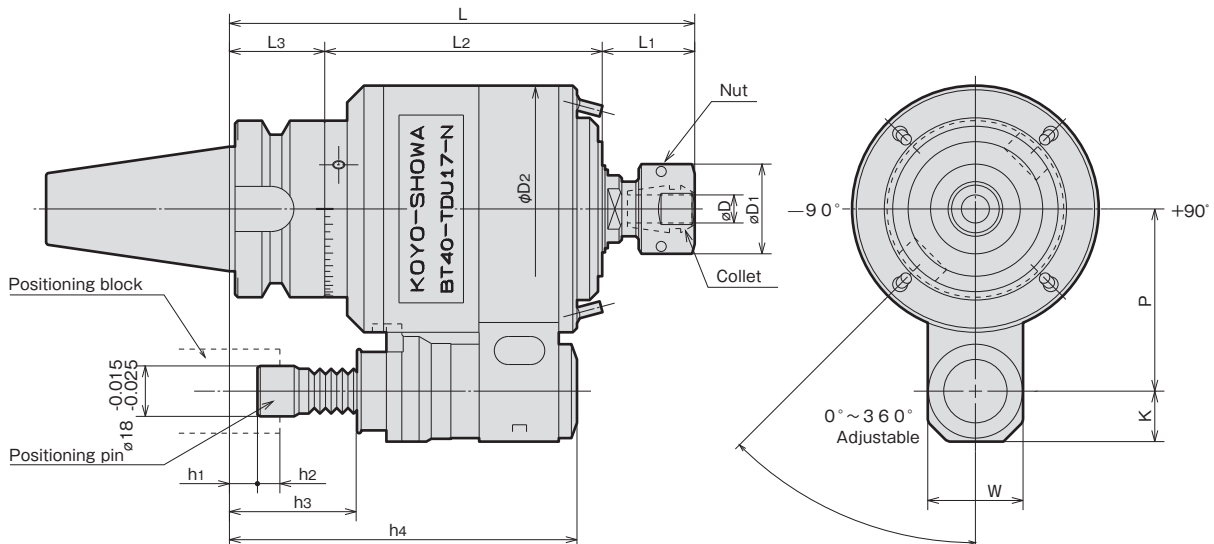
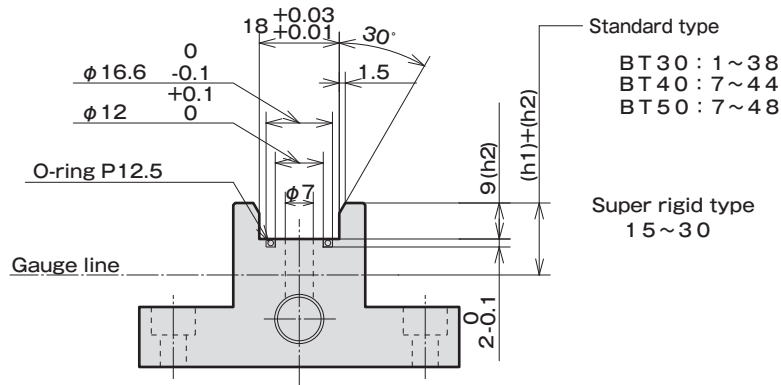
Traction drive (TD) speeder is an A.T.C. type speed accelerator, which employs planetary rollers and is co-developed and introduced to the market by Koyo Seiko and **SHOWA** for the first time in the world.

BT series



- ### FEATURES
- 30,000min⁻¹ is obtainable on normal M/C.
 - High and stable torque transmission enables small diameter drilling and endmilling, as well as deep grooving.
 - Capable even for grinding on M/C, with minimum vibration and noise.
 - Compact and light weight A.T.C. type.
 - Broadly adjustment Positioning Pin "One-touch" adjustment, and a height range of 40 mm.

POSITIONING BLOCK



ORDERING EXAMPLE		
①	BT50	-
②	TDU	
③	17-N	
①	Shank Size	
②	Name	
③	Type	

STANDARD TYPE

MODEL	CODE	SPEED RATIO	MAX. (min ⁻¹)	L	L ₁	L ₂	L ₃	φD	φD1	φD2	h ₁	h ₂	h ₃	h ₄	P	K	W	N/W (kg)	MAX. POWER (kw)	STATIC RIGIDITY (N/μm)	COLLET (AA GRADE)	NUT CODE	
BT30	-TDU17-N	10180	1:6	30,000	159	31	100	28	0.5~10	30	88	-6~29	7~9	39.5~42.5	118	65	18	34	4.3	3.1	8.8	CR10-(D)	RSN10NB
BT40	-TDU17-N	11496	1:6	30,000	165	31	100	34	0.5~10	30	88	-4~35	7~9	45.5~48.5	124	65	18	34	5.4	3.1	9.8	CR10-(D)	RSN10NB
BT50	-TDU17-N	13896	1:6	30,000	169	31	100	38	0.5~10	30	88	0~39	7~9	49.5~52.5	128	80	18	34	7.9	3.1	12.7	CR10-(D)	RSN10NB

SUPER RIGID TYPE

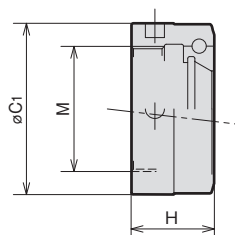
MODEL	CODE	SPEED RATIO	MAX. (min ⁻¹)	L	L ₁	L ₂	L ₃	φD	φD1	φD2	h ₁	h ₂	h ₃	h ₄	P	K	W	N/W (kg)	MAX. POWER (kw)	STATIC RIGIDITY (N/μm)	COLLET (AA GRADE)	NUT CODE	
BT50	-TDU40	13894	1:3.4	12,000	200	42	120	38	1.5~20	50	120	6~21	9	15~30	112	80	22	37	11.5	8.8	30.4	CR20-(D)	RSN20NB

ACCESSORIES for TRACTION DRIVE SPEED ACCELERATOR



NUT FOR TAP HOLDER FOR SYNCHRONIZED MACHINE & TRACTION DRIVE SPEED ACCELERATOR

RSN^{No.}



CODE	M	φC1	H	TDU No.
RSN10NB 30898	21 × 1.0	30	15.5	(TDU17)
RSN20NB 30899	40 × 1.0	50	17.5	(TDU40)

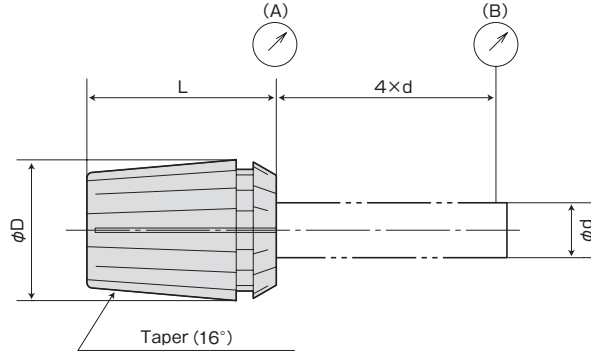
ACCESSORIES
P.53 COLLETS

ACCESSORIES
P.57 CHUCK WRENCH



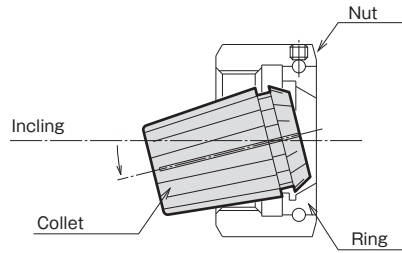
CR COLLET

CR[®]-D



Easy collet setting

- A half of ID of the ring is enlarged. Collet can be mounted easily by inclining it.



GRADE	RUNOUT (MAX. μm)	
	NOSE (A)	POINT (B)
(AA)	1	3
(A)	2	5
(STD)	5	15

Grade	application
AA grade · A grade	Reamer · Center drill Carbide small diameter drill, Endmill Whetstone for internal cylindrical grinding, Tool for high frequency motors Carbide drill Rotating tool for lathes (the tool rotation)
Standard	General drill, tap Rotating tool for lathes (Work rotating)

CHUCK COLLET CODE	RSC07		RSC10		RSC13		RSC16		RSC20	
	CR07-d	GRADE	CR10-d	GRADE	CR13-d	GRADE	CR16-d	GRADE	CR20-d	GRADE
φd	φd	RANGE	φd	RANGE	φd	RANGE	φd	RANGE	φd	RANGE
	1.0	0.5~1.0	1.0	0.5~1.0	1.0	0.5~1.0	1.5	1.0~1.5	2.0	1.5~2.0
	1.5	1.0~1.5	1.5	1.0~1.5	1.5	1.0~1.5	2.0	1.5~2.0	2.5	2.0~2.5
	2.0	1.5~2.0	2.0	1.5~2.0	2.0	1.5~2.0	2.5	2.0~2.5	3.0	2.5~3.0
	2.5	2.0~2.5	2.5	2.0~2.5	2.5	2.0~2.5	3.0	2.5~3.0	4.0	3.0~4.0
	3.0	2.5~3.0	3.0	2.5~3.0	3.0	2.5~3.0	4.0	3.0~4.0	5.0	4.0~5.0
	3.5	3.0~3.5	4.0	3.0~4.0	4.0	3.0~4.0	5.0	4.0~5.0	6.0	5.0~6.0
	4.0	3.5~4.0	5.0	4.0~5.0	5.0	4.0~5.0	6.0	5.0~6.0	7.0	6.0~7.0
	4.5	4.0~4.5	6.0	5.0~6.0	6.0	5.0~6.0	7.0	6.0~7.0	8.0	7.0~8.0
	5.0	4.5~5.0	7.0	6.0~7.0	7.0	6.0~7.0	8.0	7.0~8.0	9.0	8.0~9.0
	5.5	5.0~5.5	8.0	7.0~8.0	8.0	7.0~8.0	9.0	8.0~9.0	10.0	9.0~10.0
	6.0	5.5~6.0	9.0	8.0~9.0	9.0	8.0~9.0	10.0	9.0~10.0	11.0	10.0~11.0
	6.5	6.0~6.5	10.0	9.0~10.0	10.0	9.0~10.0	11.0	10.0~11.0	12.0	11.0~12.0
	7.0	6.5~7.0			11.0	10.0~11.0	12.0	11.0~12.0	13.0	12.0~13.0
					12.0	11.0~12.0	13.0	12.0~13.0	14.0	13.0~14.0
					13.0	12.0~13.0	14.0	13.0~14.0	15.0	14.0~15.0
						15.0	14.0~15.0	16.0	15.0~16.0	
						16.0	15.0~16.0	17.0	16.0~17.0	
								18.0	17.0~18.0	
								19.0	18.0~19.0	
								20.0	19.0~20.0	
φD	11		16		20		25		32	
L	18		27		31		35		40	

Collet for through the groove (produce by order) are also available.

ORDERING EXAMPLE

① CR07 - ② 1.5 ③ AA

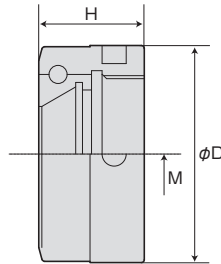
- ① Chuck Type
- ② φd
- ③ Grade

ACCESSORIES for COLLET CHUCK



NUT FOR COLLET CHUCK

RSN (No.) - TYPE



for BT, ST

Through-Coolant use

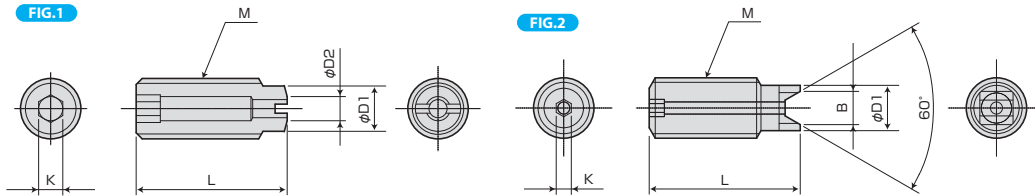
CODE	M	φD	H	CHUCK
RSN07NB (Ni) 30891	M16×1.0	24	11.5	RSC07
RSN10NB (Ni) 30892	M21×1.0	30	15.5	RSC10
RSN13NB (Ni) 30893	M26×1.0	36	17.5	RSC13
RSN16NB (Ni) 30894	M32×1.0	42	17.5	RSC16
RSN20NB (Ni) 30895	M40×1.0	50	17.5	RSC20

CODE	M	φD	H	CHUCK
RSN10NB-OH 30870	M21×1.0	30	15.5	RSC10
RSN13NB-OH 30871	M26×1.0	36		RSC13
RSN16NB-OH 30872	M32×1.0	42	17.5	RSC16
RSN20NB-OH 30873	M40×1.0	50		RSC20

Note: Single use of OH nut can not cope with the thru-the-tool coolant.



ADJUST SCREW (For COLLET CHUCK)



MODEL	FIG	M	L	D1	D2	K	B	HOLDER
M6×20L-CTW 1)	1	M6×1.0	20	4.5	3	3	—	RSC07
RAS10-25-2.5 2)	2	M10×1.5	25	7.5	—	2.5	5.5	RSC10
RAS13-25-2.5 2)		M12×1.5		9.5			7.2	RSC13
RAS16-25-5 2)		M18×1.5		13.5			9.5	RSC16
RAS20-25-5 2)		M24×1.5		17.5			—	RSC20

Note 1: Drill less than φ3 cannot be used for adjustment protrusion in order to enter the coolant hole.

CTW is not in the two pieces shape

Note 2: Drill less than φ2 cannot be used for adjustment protrusion in order to enter the coolant hole.



CHUCK WRENCH (For COLLET CHUCK)

CODE	CHUCK
FP25 35844	RSC07
FP30 35845	RSC10
FP35 35846	RSC13
FP42 35847	RSC16
FP50 35848	RSC20