

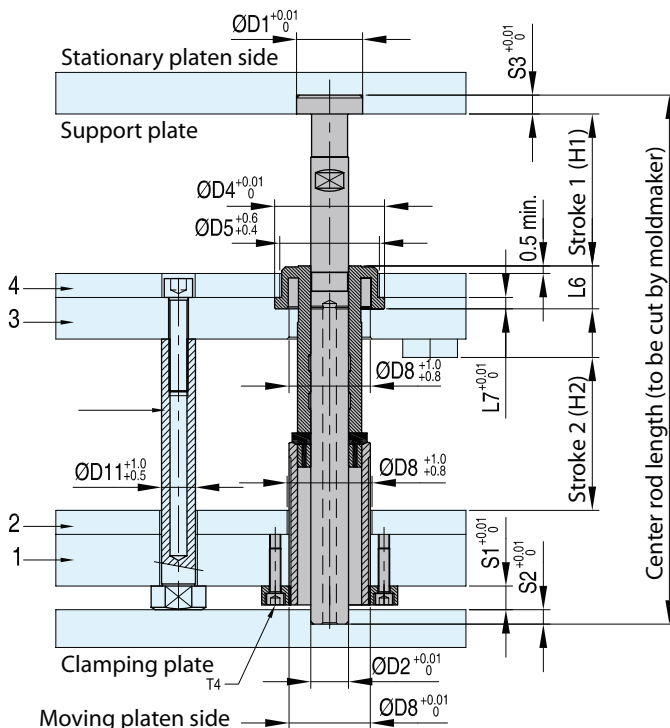


- At end of second stroke, body for cam fingers must seat firmly against center rod head or spacer plate as shown.
- Tolerances depicted here are installation tolerances.
- See component detail drawings for specific component tolerances
- Refer to applicable charts for nominal dimension

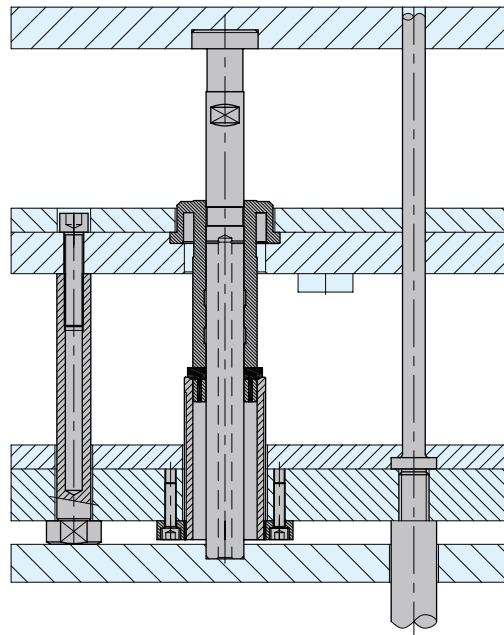
REF	Basic center rod dia	Stroke 1		Stroke 2		Max.mold base width	Max.load values static	Max.load values dynamic
		Min.	Max.	Min.	Max.			
TSBL 20 A	20mm	8	82	12	82	Up to 196mm, 1 TSTL 20	600 kg 5,8 kN	60 kg 0,58 kN
						Up to 446mm, 2 TSTL 20		
TSBL 26 A	26mm	10	92	18	92	Up to 446mm, 1 TSTL 26	1100 kg 10,8 kN	110 kg 08 kN
						Up to 596mm, 2 TSTL 26		
TSBL 32 A	32mm	12	102	24	102	Up to 596mm, 1 TSTL 32	2000 kg 19,6 kN	200 kg 1,96 kN
						Up to 796mm, 2 TSTL 32		

Assembly & installation guidelines:

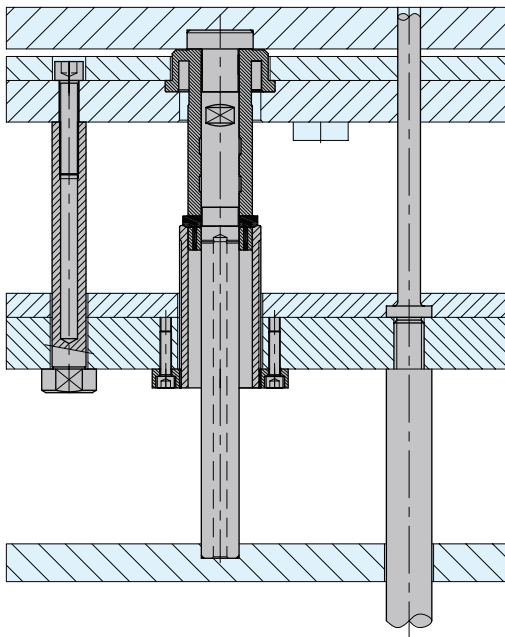
- All 2-Stage Ejectors in a mold must be cut to the same strokes.
- It is recommended that guided ejection be used.
- Ejector speed must be controlled, ensuring that excessive shock loading does not occur.
- 2-Stage Ejectors are not suitable for severe load conditions.
- 2-Stage Ejectors must not be exposed to temperatures that exceed 150°C (300°F) at any time.
- Lubricate all metal-to-metal contact areas initially and periodically as required. A good grade of moldmakers non-melting type grease for the appropriate temperature should be used.
- A minimum of (4) Puller Pins should be used with each mold. Larger molds may require additional Puller Pins.
- The moldmaker must cut and/or grind the Puller Pins to the required length.
- Puller Pins are not included with Bottom Last Assemblies and must be ordered separately. At end of second stroke, Body for Cam Fingers must seat firmly against Center Rod head or spacer plate.
- The moldmaker must cut and/or grind the Center Rod to the required length prior to installation of the 2-Stage Ejector assembly into the mold base. Do not cut off more than the minimum stroke (H2). The recommended tolerance on the Center Rod length after the customer has cut the Center Rod is +0/-0.02mm or less.
- The moldmaker must cut and/or grind the Travel Sleeve to the required length prior to installation of the 2-Stage Ejector assembly into the mold base. Do not cut off more than the minimum stroke (H2).
- Stroke 1 (H1) is reduced by adding stop buttons to the stationary platen side spacer plate in order to restrict motion of the top (stationary platen side) ejector plate assembly. The moldmaker must manufacture a suitable set of stop buttons that are of the required height to achieve the desired stroke (H1).
- Stroke 2 (H2) is reduced by cutting and/or grinding the moving platen end of both the Center Rod and the Travel Sleeve.



REF	Center rod length	H1-Stroke 1		H2-Stroke 2		1	2	3	4	S1	S2	S3	S4
		Min.	Max.	Min.	Max.								
TSBL 20 A	262,96	8	82	12	82	26	12	26	12	11	8	10	4
TSBL 26 A	285,32	10	92	18	92	26	12	26	12	14	10	12	9
TSBL 32 A	316,68	12	102	24	102	26	16	26	16	17	12	14	10

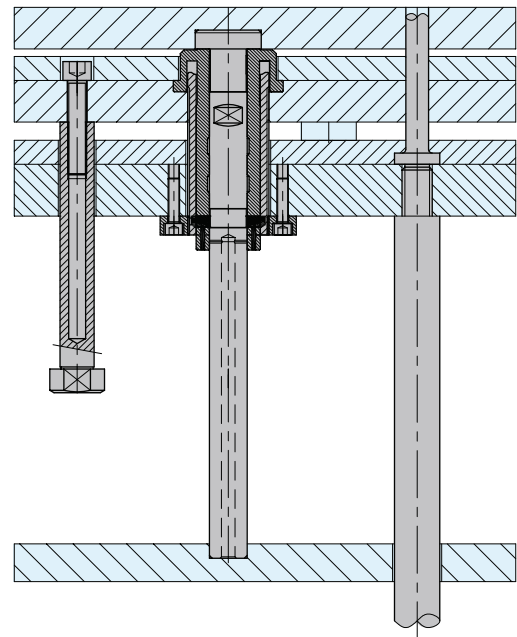


1 Ejector Plates Back



2 First Ejector Stroke

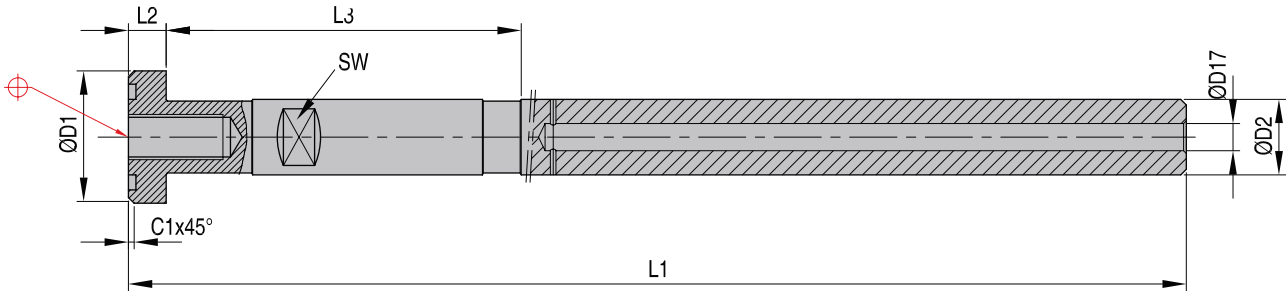
After a predetermined amount of travel, the latch mechanism latches onto the Center Rod, thereby fixing the position of the bottom (moving platen side) ejector plate assembly.



3 Second Ejector Stroke

The top (stationary platen side) ejector plate assembly continues to move through the "second" or remaining stroke until the top ejector plate assembly contacts the top of the ejector box housing.

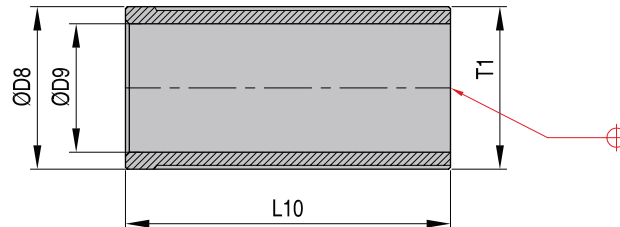




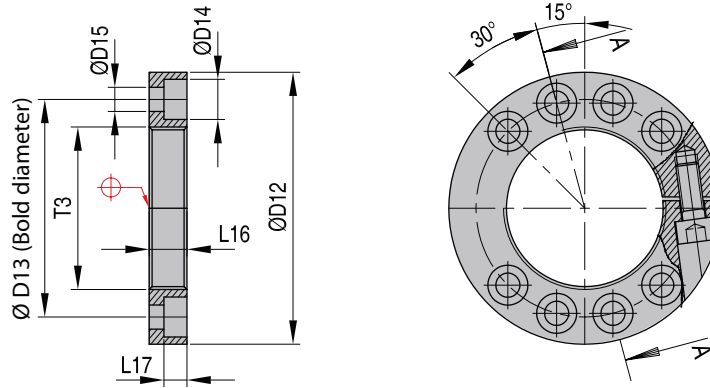
REF	D1	D2	D17	L1*	L2	L3	C1
TSBL 20 CR	34 ⁰ _{-0,01}	20 ⁰ _{-0,01}	7,2	280 ^{+0,5} ₀	10 ^{+0,02} ₀	93,66	1,0
TSBL 26 CR	44 ⁰ _{-0,01}	26 ⁰ _{-0,01}	8,5	314 ^{+0,5} ₀	12 ^{+0,02} ₀	105,67	1,0
TSBL 32 CR	58 ⁰ _{-0,01}	32 ⁰ _{-0,01}	10,5	354 ^{+0,5} ₀	14 ^{+0,02} ₀	118,18	1,5

* Cutoff on both ends of center pin only per installation data.

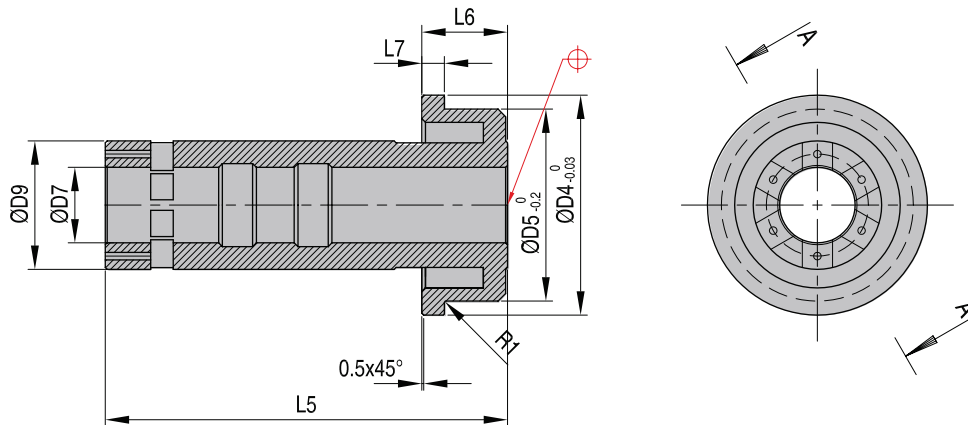
** Final length must have tolerance of 0/-0,2mm after moldmaker has cut the center pin to the desired length.



REF	D8	D9	L10	T1
TSBL 20 TS	43 ⁰ _{-0,03}	34	86 ^{+0,2} ₀	M43,5x1,25
TSBL 26 TS	54 ⁰ _{-0,03}	43	94 ^{+0,2} ₀	M54,5x1,25
TSBL 32 TS	68 ⁰ _{-0,03}	54	105 ^{+0,2} ₀	M68,6x1,5



REF	D12	D13	D14	D15	L16	L17	T3
TSBL 20 LR	72,0	57,4	10,6	6,4	10,0	6,0	M43,2 x 1,25
TSBL 26 LR	90,0	72,0	13,7	8,6	13,0	8,1	M54,2 x 1,25
TSBL 32 LR	112,0	90,0	16,8	10,8	16,0	10,1	M68,25 x 1,5



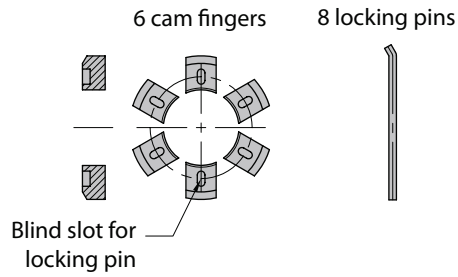
REF	D4	D5	D6	D7	L5	L6	L7	C2	R1
TSBL 20 BD	58,2	50,8	34,0	20,0	106,46	22,7	6,0	0,3	0,4
TSBL 26 BD	70,0	62,8	43,0	26,0	121,22	22,7	6,0	0,4	0,4
TSBL 32 BD	87,0	78,0	54,0	32,0	139,7	28,88	7,0	0,5	0,4

CAD reference point

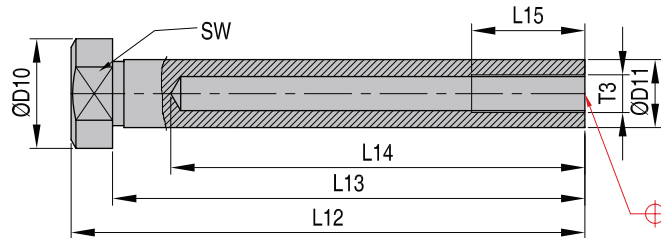




1 3



REF
TSBL 20 KT
TSBL 26 KT
TSBL 32 KT



REF	D10	D11	L12	L13	L14	L15	SW	T3
TSBL 20 PP	29	18	136	125	107	30	26	M10
TSBL 26 PP	34	21	153	139	120	40	30	M12
TSBL 32 PP	43	26	171	154	138	50	36	M16