

Applications
Condensers
Heaters,etc.

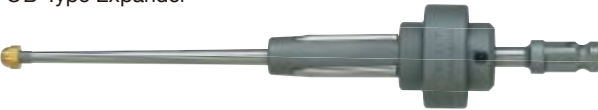
CJ/CB Type Parallel tube expansion can be done accurately and rapidly.

3-roller Type

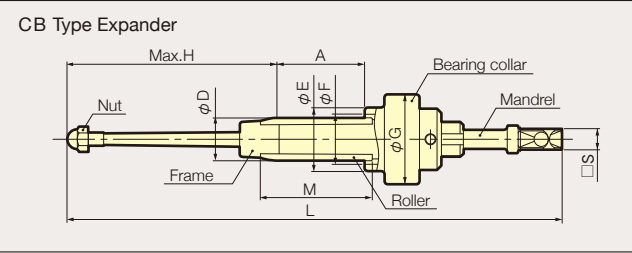
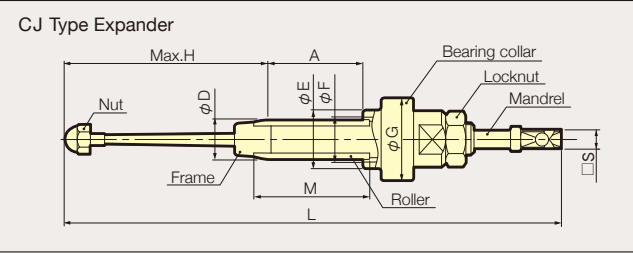
CJ Type Expander



CB Type Expander



Dimensional Drawing



Expander size table (mm)

Type	Roller length M			Tube Expansion range D			Effective roller length A				Mandrel			Bearing Collar			Max. Projection Length	
	38			Max.			M=38				Total Length L			E			Max.H	
	57			M=57			M=57				Shank □S			F			M=57	
	Number	Number	Number	Min.	M=38	M=57	Min.	Max.	Min.	Max.	Tool No.	□S	Length L	Min.	Max.	G	M=38	M=57
CJ	101	-	-	9.2	10.9	-	-	-	-	-	CJ 1M	9.5	235	11.2	12.0	30	129	-
	103	-	-	10.0	11.7	-	-	-	-	-	CJ 2M	9.5	235	12.8	13.8	30	129	-
	105	-	-	10.8	12.5	-	-	-	-	-	CJ 4M	9.5	236	14.6	15.4	33	130	111
	107	207	-	11.6	13.5	13.2	-	-	-	-	CJ 6M	9.5	237	16.5	17.3	38	130	111
	109	209	-	12.4	14.3	14.0	-	-	-	-	CJ 8M	9.5	242	18.1	19.2	41	136	117
	111	211	-	13.2	15.1	14.8	-	-	-	-	CJ10M	9.5	243	20.8	21.9	44	137	118
	113	213	313	14.0	16.2	15.8	15.4	-	-	-	CJ11M	12.7	253	22.6	23.5	52	149	130
	115	215	315	14.8	17.0	16.6	16.2	-	-	-	CJ11M	12.7	253	24.3	25.3	52	149	130
	117	217	317	15.6	17.8	17.4	17.0	-	-	-	CJ11M	12.7	253	26.1	26.9	52	149	130
	119	219	319	16.4	18.9	18.4	18.0	-	-	-	CJ11M	12.7	253	27.7	28.5	52	149	130
	121	221	321	17.1	19.7	19.2	18.8	-	-	-	CJ11M	12.7	253	29.9	30.7	57	151	132
	123	223	323	17.9	20.5	20.0	19.6	-	-	-	CJ11M	12.7	253	31.5	32.3	57	151	132
	125	225	325	18.7	21.5	21.1	20.6	-	-	-	CJ11M	12.7	253	33.1	34.5	57	151	132
	127	227	327	19.5	22.3	21.9	21.4	-	-	-	CJ11M	12.7	253	35.2	36.0	62	157	138
	129	229	329	20.3	23.1	22.6	22.1	-	-	-	CJ11M	12.7	253	36.8	37.6	62	157	138
	131	231	331	21.1	23.9	23.4	22.9	-	-	-	CJ11M	12.7	253	38.4	40.0	62	157	138
	132	232	332	21.5	25.0	24.4	23.8	-	-	-	CJ11M	12.7	253	41.6	43.2	71	-	144
	134	234	334	22.3	25.8	25.2	24.6	-	-	-	CJ11M	12.7	253	46.4	49.6	81	-	166
	136	236	336	23.1	26.5	26.0	25.4	-	-	-	CJ11M	12.7	253	55.9	59.1	90	-	185
	138	238	338	23.9	27.3	26.8	26.2	-	-	-	CJ11M	12.7	253	65.5	68.6	100	-	204
CB	140	240	340	24.7	28.1	27.6	27.0	-	-	-	CJ11M	12.7	253	75.6	78.8	110	-	238
	142	242	342	25.5	29.5	28.8	28.2	-	-	-	CJ11M	12.7	253	82.0	85.2	119	-	238
	144	244	344	26.3	30.3	29.6	29.0	-	-	-	CJ11M	12.7	253	88.4	94.8	129	-	276
	146	246	346	27.1	31.1	30.4	29.8	-	-	-	CJ11M	12.7	253	94.8	101.1	129	-	276
	148	248	348	27.9	31.9	31.2	30.6	-	-	-	CJ11M	12.7	253	101.1	107.5	129	-	276
	150	250	350	28.7	32.7	32.0	31.4	-	-	-	CJ11M	12.7	253	107.5	113.9	129	-	276
	152	252	352	29.5	34.1	33.3	32.6	-	-	-	CJ11M	12.7	253	113.9	120.3	129	-	276
	154	254	354	30.3	34.9	34.1	33.4	-	-	-	CJ11M	12.7	253	120.3	126.7	129	-	276
	156	256	356	31.1	35.7	34.9	34.2	-	-	-	CJ11M	12.7	253	126.7	133.1	129	-	276
	158	258	358	31.9	36.5	35.7	35.0	-	-	-	CJ11M	12.7	253	133.1	139.5	129	-	276
	160	260	360	32.6	37.2	36.5	35.7	-	-	-	CJ11M	12.7	253	139.5	145.9	129	-	276
	162	262	362	33.4	38.0	37.3	36.5	-	-	-	CJ11M	12.7	253	145.9	152.3	129	-	276
	-	264	364	35.1	-	39.7	38.9	-	-	-	CJ11M	12.7	253	152.3	158.7	129	-	276
	-	266	366	36.6	-	41.3	40.5	-	-	-	CJ11M	12.7	253	158.7	165.1	129	-	276
	-	268	368	38.2	-	42.9	42.1	-	-	-	CJ11M	12.7	253	165.1	171.5	129	-	276
	-	270	370	40.7	-	46.1	45.3	-	-	-	CJ11M	12.7	253	171.5	177.9	129	-	276
	-	272	372	43.9	-	49.2	48.4	-	-	-	CJ11M	12.7	253	177.9	184.3	129	-	276
	-	274	374	47.0	-	52.4	51.6	-	-	-	CJ11M	12.7	253	184.3	190.7	129	-	276
	-	276	376	49.5	-	55.6	54.8	-	-	-	CJ11M	12.7	253	190.7	197.1	129	-	276
	-	278	378	52.7	-	58.8	58.0	-	-	-	CJ11M	12.7	253	197.1	203.5	129	-	276
	-	280	380	55.9	-	61.9	61.1	-	-	-	CJ11M	12.7	253	203.5	209.9	129	-	276
	-	282	382	58.2	-	65.1	64.3	-	-	-	CJ11M	12.7	253	209.9	216.3	129	-	276
	-	284	384	61.4	-	68.3	67.5	-	-	-	CJ11M	12.7	253	216.3	222.7	129	-	276
	-	286	386	64.6	-	71.5	70.7	-	-	-	CJ11M	12.7	253	222.7	229.1	129	-	276
	-	288	388	67.1	-	75.4	74.5	-	-	-	CJ11M	12.7	253	229.1	235.5	129	-	276
	-	290	390	70.3	-	78.6	77.7	-	-	-	CJ11M	12.7	253	235.5	241.9	129	-	276
	-	292	392	73.5	-	81.8	80.9	-	-	-	CJ11M	12.7	253	241.9	248.3	129	-	276
	-	294	394	76.6	-	84.9	84.0	-	-	-	CJ11M	12.7	253	248.3	254.7	129	-	276
	-	296	396	79.8	-	88.1	87.3	-	-	-	CJ11M	12.7	253	254.7	261.1	129	-	276
	-	298	398	84.6	-	94.5	93.7	-	-	-	CJ11M	12.7	253	261.1	267.5	129	-	276
	-	300	400	90.9	-	100.8	100.0	-	-	-	CJ11M	12.7	253	267.5	273.9	129	-	276

Note: Other sizes expanders are available upon request.

Applications
Condensers
Heaters,etc.

CJ-E5/CB-E5 Type Parallel tube expansion of extremely thin tubes can be done accurately and rapidly in 5 roller types.

5-roller Type

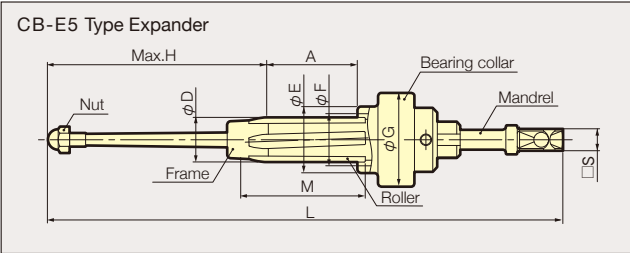
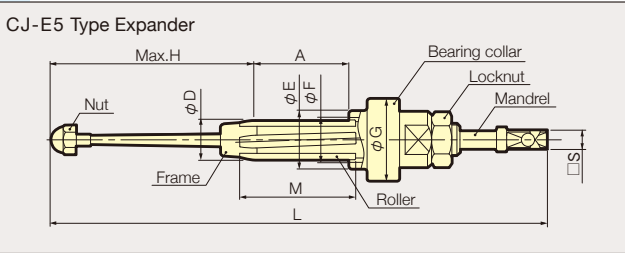
CJ-E5 Type Expander



CB-E5 Type Expander



Dimensional Drawing



Expander size table (mm)

Type	Roller length M		Min.		Max.		M=38		M=57		Mandrel			Bearing Collar			Max. Projection Length		
	Tool No.	Shank □S									Total Length L	E	F		G	Max.H			
			M=38	M=57	M=38	M=57													
							Number	Number	M=38	M=57									
CJ	107E5	—	11.5	13.3	—	14	33	—	—	CJ5- 2M	9.5	246	23	13.8	—	33	139	—	
	109E5	—	12.3	14.1	—			—	—	CJ5- 3M	9.5	230	23	14.6	—	33	124	—	
	111E5	—	13.1	14.9	—			—	—	CJ5- 4M	9.5	251	25	15.4	—	38	144	125	
	113E5	213E5	13.9	16.0	15.7	13	32	32	51	CJ5- 5M	9.5	259	29	16.5	41	152	133		
	115E5	215E5	14.7	16.8	16.5					17.3	18.1	18.8		122		122			
	117E5	217E5	15.5	17.8	17.5					19.2	20.0	141		122					
	119E5	219E5	16.3	18.7	18.3					20.8	21.9	151	132						
	121E5	221E5	17.1	19.5	19.1					22.6	23.5	148	129						
	123E5	223E5	17.9	20.5	20.1	11	30	30	49	CJ5- 7M	9.5	247	29	24.3	52	—	142		
	125E5	225E5	18.7	21.5	21.1					—	26.1	—	148						
	127E5	227E5	19.5	22.3	21.9					—	26.9	—	148						
	129E5	229E5	20.2	23.2	22.7	10	29	29	48	CJ5- 9M	9.5	254	32	—	57	—	135		
	131E5	231E5	21.0	24.0	23.5					—	27.7	—	142						
	—	232E5	21.4	—	24.1					—	28.5	—	142						
	—	234E5	22.2	—	24.9	—	—	29	46	CJ5-10M	12.7	267	38	—	62	—	143		
—	236E5	23.0	—	25.9	—	29.9	—			143									
—	238E5	23.8	—	26.9	—	31.5	—			143									
CB	—	240E5	24.6	—	27.6	—	—	29	46	C5-12	12.7	248	38	—	57	—	142		
	—	242E5	25.4	—	28.6					—	28.5	—		142					
	—	244E5	26.2	—	29.4					—	29.9	—		135					
	—	246E5	27.0	—	30.4					43	—	31.5	—	143					
	—	248E5	27.8	—	31.2						C5-14	12.7	249	—		32.3	—	155	
	—	250E5	28.6	—	32.0						—	33.1	—	155					
	—	252E5	29.4	—	33.2						C5-15	12.7	261	48		—	34.0	—	155
	—	—	—	—	—						—	—	—	—		—	—	—	—