

FEATURES OF "AN" SERIES TUBE EXPANDERS :

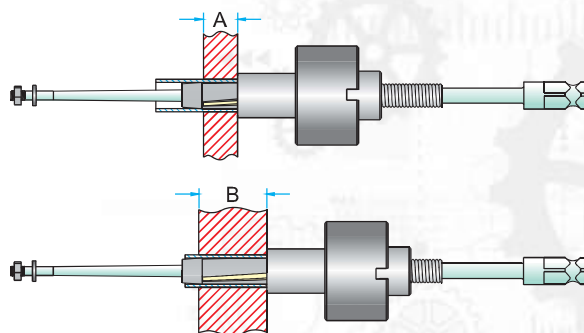
- Use: Oil Coolers, Radiators and other apparatus with small Diameter tubes.
- Advantages: Captive Mandrel –eliminates nut on mandrel tip which prevents scratching of tube ID.
- Increased feed angle makes it the fastest operating tool on the market, ideal for high production environments.

FOR TUBES INTERNAL DIAMETER
From 0.152" (3.8mm) to 0.331 (8.4mm)

Tube Expander Fitted With Roller Length	Minimum A	Maximum B
1" (25.4mm)	1/4" (6.35mm)	1" (25.4mm)

TUBE EXPANDERS SPECIFICATION

TUBE OD (mm) Inch	Tube Thickness			Tube I.D.		Tube I.D. Tool Enters		Maximum Expansion of Tool		EXPANDER with (25.4 mm) 1" Long Rollers		
	BWG	mm	inch	mm	inch	mm	Inch	mm	inch	Complete Tool Model	Mandrel Model	Rollers Model
6.35 1/4 "	18	1.24	0.049	3.8	0.152	3.7	0.148	4.2	0.167	25018	M- 21819	R- 20018
	19	1.06	0.042	4.2	0.166	4.0	0.160	4.5	0.180	25019	M- 21819	R- 21920
	20	0.88	0.035	4.5	0.180	4.4	0.177	4.9	0.196	25020	M- 21821	R- 21920
	21	0.81	0.032	4.7	0.186	4.5	0.180	5.1	0.202	25021	M- 21821	R- 22124
	22	0.71	0.028	4.9	0.194	4.8	0.190	5.4	0.213	25022	M- 21822	R- 22124
	23	0.63	0.025	5.0	0.200	4.9	0.195	5.5	0.216	25023	M- 21824	R- 21920
	24	0.55	0.022	5.2	0.206	5.1	0.201	5.7	0.224	25024	M- 21824	R- 22124
	28	0.53	0.021	5.6	0.222	5.4	0.217	6.1	0.243	25028	M- 21830	R- 22830
	29	0.33	0.013	5.7	0.224	5.4	0.217	6.1	0.243	25028	M- 21830	R- 22830
	30	0.30	0.012	5.7	0.226	5.4	0.217	6.1	0.243	25028	M- 21830	R- 22830
9.53 3/8 "	14	2.1	0.083	5.3	0.209	5.1	0.204	5.8	0.230	387 14	M- 22830	R- 21920
	15	1.82	0.072	5.8	0.231	5.6	0.225	6.6	0.265	387 15	M- 22830	R- 31516
	16	1.65	0.065	6.2	0.245	6.0	0.238	7.0	0.278	387 16	M- 31671	R- 31516
	17	1.47	0.058	6.5	0.259	6.4	0.253	7.4	0.293	387 17	M- 31671	R- 31720
	18	1.24	0.049	7.0	0.277	6.8	0.270	7.8	0.310	387 18	M- 30018	R- 31720
	19	1.06	0.042	7.3	0.291	7.1	0.285	8.1	0.325	387 19	M- 30019	R- 31720
	20	0.88	0.035	7.7	0.305	7.4	0.295	8.4	0.335	387 20	M- 32021	R- 31720
	21	0.81	0.032	7.9	0.311	7.5	0.305	8.6	0.345	387 21	M- 32021	R- 32722
	22	0.71	0.028	8.1	0.319	7.9	0.312	8.9	0.353	387 22	M- 32024	R- 32722
	23	0.63	0.025	8.2	0.325	8.1	0.318	9.2	0.363	387 23	M- 32024	R- 32242
	24	0.55	0.022	8.4	0.331	8.1	0.318	9.2	0.363	387 23	M- 32024	R- 32242



FEATURES OF "900" SERIES TUBE EXPANDERS :

- USE: Oil Coolers, Radiators and other apparatus with small diameter tubes.
- This tool has been the workhorse for several years for use on small diameter tubes.

FOR TUBES INTERNAL DIAMETER

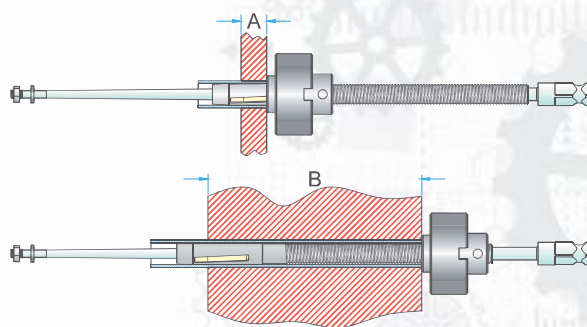
From 0.152" (3.8mm) to 0.331" (8.4mm)

Tube Expander Fitted With Roller Length	Minimum A	Maximum B
3/4" (19.05mm)	3/4" (19.05mm)	3/4" (19.05mm)
1 1/4" (31.75mm)	1 1/4" (31.75mm)	1 1/4" (31.75mm)

TUBE EXPANDERS SPECIFICATION

TUBE OD (mm) Inch	Tube Thickness			Tube I.D.		Tube I.D. Tool Enters		Maximum Expansion of Tool		EXPANDER with(19.05 mm) 3/4" Long Rollers			EXPANDER with(31.87 mm) 1 1/4" Long Rollers		
	BWG	mm	inch	mm	inch	mm	Inch	Mm	inch	Complete Tool No	Mandrel No	Rollers Set No.	Complete Tool No	Mandrel No	Rollers Set No.
6.35 1/4"	18	1.24	0.049	3.8	0.152	3.8	0.151	4.4	0.173	921	M- 39	921	-	-	-
	19	1.06	0.042	4.2	0.166	4.1	0.165	4.7	0.185	922	M- 39	923	-	-	-
	20	0.88	0.035	4.5	0.180	4.4	0.187	5.1	0.200	923	M- 40	923	-	-	-
	21	0.81	0.032	4.7	0.186	4.5	0.180	5.2	0.207	924	M- 40	924	-	-	-
	22	0.71	0.028	4.9	0.194	4.8	0.190	5.5	0.216	925	M- 41	925	-	-	-
	23	0.63	0.025	5.0	0.200	4.9	0.195	5.6	0.222	926	M- 41	923	-	-	-
	24	0.55	0.022	5.2	0.206	5.1	0.201	5.8	0.230	927	M- 41	924	-	-	-
	28	0.53	0.021	5.6	0.222	5.4	0.222	6.0	0.238	928	928	903	-	-	-
	29	0.33	0.013	5.7	0.224	5.4	0.222	6.0	0.238	928	928	903	-	-	-
	30	0.30	0.012	5.7	0.226	5.4	0.222	6.0	0.238	928	928	903	-	-	-
9.53 3/8"	14	2.1	0.083	5.3	0.209	5.1	0.201	5.8	0.232	927	M- 41	924	-	-	-
	15	1.82	0.072	5.8	0.231	5.6	0.230	6.7	0.265	915	M- 42	903	-	-	-
	16	1.65	0.065	6.2	0.245	6.0	0.240	6.9	0.287	916	M- 36	916	916 L	M- 36 L	916 L
	17	1.47	0.058	6.5	0.259	6.4	0.255	7.3	0.289	917	M- 38	903	920	M- 38	904
	18	1.24	0.049	7.0	0.277	6.8	0.272	7.8	0.307	901	M- 30	903	902	M- 30	904
	19	1.06	0.042	7.3	0.291	7.1	0.286	8.1	0.320	903	M- 31	903	904	M- 31	904
	20	0.88	0.035	7.7	0.305	7.4	0.300	8.4	0.334	905	M- 32	907	906	M- 32	908
	21	0.81	0.032	7.9	0.311	7.5	0.306	8.6	0.340	907	M- 33	907	908	M- 33	908
	22	0.71	0.028	8.1	0.319	7.9	0.314	8.8	0.349	909	M- 34	909	910	M- 34	910
	23	0.63	0.025	8.2	0.325	8.1	0.320	9.0	0.357	911	M- 34	911	912	M- 34	912
	24	0.55	0.022	8.4	0.331	8.1	0.320	9.0	0.357	911	M- 34	911	912	M- 34	912

Note: All "900" series expanders come with 1/4" Square Mandrel Drives.
Round Mandrel Drives are Optional.



FEATURES OF "1300" SERIES TUBE EXPANDERS :

FOR TUBES INTERNAL DIAMETER From 0.231" (5.8mm) to 0.331 (8.4mm)

- Use: Oil Coolers, Radiators and other apparatus with small diameter tubes.
- This tool has been the workhorse for several years for use on small diameter tubes.

Tube Expander Fitted With Roller Length	Minimum A	Maximum B
3/4" (19.05mm)	3/4" (19.05mm)	3" (76.20mm)
1.1/4" (31.75mm)	1.1/4" (31.75mm)	3.1/2" (88.90mm)

1300 SERIES

TUBE EXPANDERS SPECIFICATION

	Tube Thickness			Tube I.D.		Tube I.D. Tool Enters		Max. Expansion of Tool		EXPANDER with(19.05 mm) 3/4" Long Rollers			EXPANDER with(31.87 mm) 1.1/4" Long Rollers		
	BWG	mm	inch	mm	inch	Mm	inch	mm	Inch	Complete Tool No	Mandrel No	Rollers No.	Complete Tool No	Mandrel No	Rollers No.
9.53 3/8"	15	1.82	0.072	5.8	0.231	5.6	0.230	6.7	0.265	1315	M- 86	1315	1316	M- 86	1316
	16	1.65	0.065	6.2	0.245	6.0	0.240	6.9	0.287	1319	M- 86	1315	1319 L	M- 86	916 L
	17	1.47	0.058	6.5	0.259	6.4	0.255	7.3	0.289	1317	M- 88	903	1318	M- 88	904
	18	1.24	0.049	7.0	0.277	6.8	0.272	7.8	0.307	1301	M- 80	903	1302	M- 80	904
	19	1.06	0.042	7.3	0.291	7.1	0.286	8.1	0.320	1303	M- 81	903	1304	M- 81	904
	20	0.88	0.035	7.7	0.305	7.4	0.300	8.4	0.334	1305	M- 82	907	1306	M- 82	908
	21	0.81	0.032	7.9	0.311	7.5	0.306	8.6	0.340	1307	M- 83	907	1308	M- 83	908
	22	0.71	0.028	8.1	0.319	7.9	0.314	8.8	0.349	1309	M- 84	909	1310	M- 84	910
	23	0.63	0.025	8.2	0.325	8.1	0.320	9.0	0.357	1311	M- 84	911	1312	M- 84	912
	24	0.55	0.022	8.4	0.331	8.1	0.320	9.0	0.357	1311	M- 84	911	1312	M- 84	912

Note: All "1300" series expanders come with 1/4" Square Mandrel Drives.
Round Mandrel Drives are Optional.