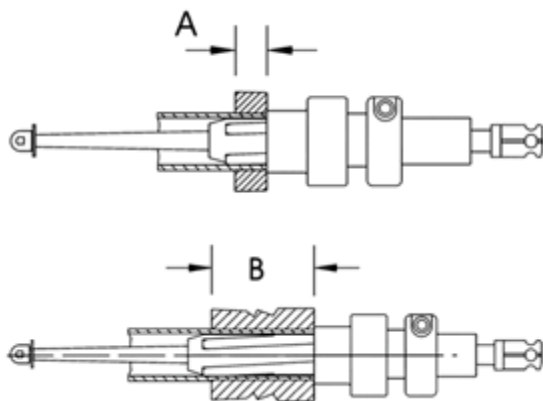




900 SERIES TUBE EXPANDERS

FOR OIL COOLERS, AIR COOLERS, PRE HEATERS & RADIATORS
RANGE 1/4" TO 3/8" (6.30 TO 9.50 MM)

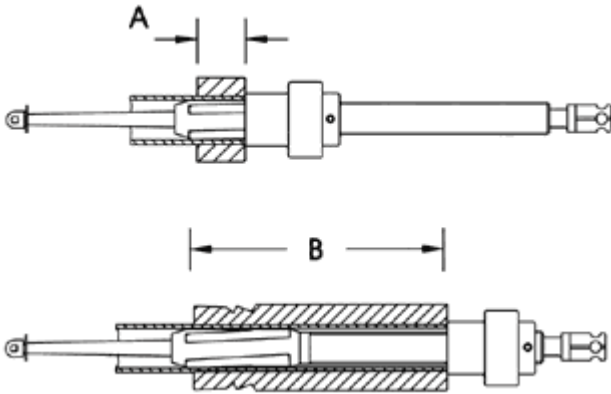


RANGE	FITTED WITH 3/4" (19.0) LG. ROLLER	FITTED WITH 1 1/4" (31.7) LG. ROLLER
MINIMUM A.	6.3 MM (1/4")	19.0 MM (3/4")
MAXIMUM B.	19.0 MM (3/4")	31.7 MM (1 1/4")

Tube OD in. (mm)	Tube Gauge bwg. in. (mm)	Tube ID in. (mm)	Min. ID Tool Enters in. (mm)	Maximum Expansion of Tool in. (mm)	Tube Sheet Thickness				Mandrel No.	Mandrel Square Drive in. (mm)	
					1/4 in. to 3/4 in.		3/4 in. to 1 1/4 in.				
					Tool No. with Rolls 3/4 in. (19.0 mm) long.	Roll no.	Tool No. with Rolls 1- 1/4 in. (31.70 mm) long.	Roll no.			
1/4 (6.3)	18 .049 (1.24)	.152 (3.8)	.151 (3.8)	.173 (4.3)	921	921			M-39	1/4 (6.3)	
	19 .042 (1.06)	.166 (4.2)	.165 (4.1)	.185 (4.7)	922	923					
	20 .035 (0.88)	.180 (4.5)	.175 (4.4)	.205 (5.2)	923						
	21 .032 (0.81)	.186 (4.7)	.180 (4.5)	.212 (5.3)	924	924			M-40		
	22 .028 (0.71)	.194 (4.9)	.190 (4.8)	.220 (5.5)	925	925					
	23 .025 (0.63)	.200 (5.0)	.195 (4.9)	.226 (5.7)	926	923			M-41		
	24 .022 (0.55)	.206 (5.2)	.201 (5.1)	.232 (5.8)	927	924					
	28 .014 (0.35)	.222 (5.6)	.222 (5.6)	.238 (6.0)	928	903			928		
	29 .013 (0.33)	.224 (5.7)									
30 .012 (0.30)	.226 (5.7)										
3/8 (9.5)	14 .083 (2.10)	.209 (5.3)	.201 (5.1)	.232 (5.8)	927	924			M-41	1/4 (6.3)	
	15 .072 (1.82)	.231 (5.8)	.230 (5.8)	.265 (6.7)	915	903			M-42		
	16 .065 (1.65)	.245 (6.2)	.240 (6.1)	.275 (6.9)	916	916			M-36		
							916L	916L	M-36L		
	17 .058 (1.47)	.259 (6.5)	.255 (6.4)	.289 (7.3)	918	903	920		M-38		
	18 .049 (1.24)	.277 (7.0)	.272 (6.9)	.307 (7.8)	901		902	904			M-30
	19 .042 (1.06)	.291 (7.3)	.286 (7.2)	.320 (8.1)	903		904				M-31
	20 .035 (0.88)	.305 (7.7)	.300 (7.6)	.334 (8.4)	905	907	906	908	M-32		
	21 .032 (0.81)	.311 (7.9)	.306 (7.7)	.340 (8.6)	907		908				M-33
	22 .028 (0.71)	.319 (8.1)	.314 (7.9)	.349 (8.8)	909	909	910	910	M-34		
	23 .025 (0.63)	.325 (8.2)	.320 (8.1)	.357 (9.0)	911	911	912	912			
24 .022 (0.55)	.331 (8.4)										

1300 SERIES TUBE EXPANDERS

FOR OIL COOLERS, AIR COOLERS, PRE HEATERS & RADIATORS
RANGE 3/8" (9.5 mm) OD

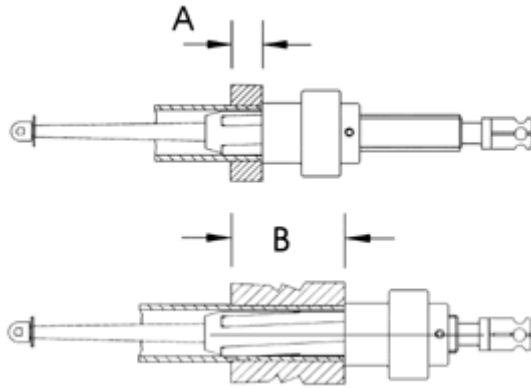


RANGE	FITTED WITH 3/4" (19.0) LG. ROLLER	FITTED WITH 1 1/4" (31.7) LG. ROLLER
MINIMUM A.	19.0 MM (3/4")	31.7 MM (1 1/4")
MAXIMUM B.	76.2 MM (3")	88.9 MM (3 1/2")

Tube OD in. (mm)	Tube Gauge bwg. in. (mm)	Tube ID in. (mm)	Min. ID Tool Enters in. (mm)	Maximum Expansion of Tool in. (mm)	Tube Sheet Thickness				Mandrel No.	Mandrel Square Drive in. (mm)
					3/4 in. to 3 in. (19.0mm) (76.2mm)		1 1/4 in. to 3-1/2 in. (31.7mm) (88.9mm)			
					Tool No. with Rolls 3/4 in. (19.0mm) long.	Roll no.	Tool No. with Rolls 1-1/4 in. (31.70 mm) long.	Roll no.		
3/8 (9.5)	15 .072 (1.82)	.231 (5.8)	.230 (5.8)	.265 (6.7)	1315	1315	1316	1316	M-86	1/4 (6.3)
	16 .065 (1.65)	.245 (6.2)	.240 (6.1)	.275 (6.9)	1319		1319-L	916-L		
	17 .058 (1.47)	.259 (6.5)	.255 (6.4)	.289 (7.3)	1317	903	1318	904	M-88	
	18 .049 (1.24)	.277 (7.0)	.272 (6.9)	.307 (7.8)	1301				1302	
	19 .042 (1.06)	.291 (7.3)	.286 (7.2)	.320 (8.1)	1303		1304		M-81	
	20 .035 (0.88)	.305 (7.7)	.300 (7.6)	.334 (8.4)	1305	907	1306	908	M-82	
	21 .032 (0.81)	.311 (7.9)	.306 (7.7)	.340 (8.6)	1307		1308		M-83	
	22 .028 (0.71)	.319 (8.1)	.314 (7.9)	.349 (8.8)	1309	909	1310	910	M-84	
	23 .025 (0.63)	.325 (8.2)	.320 (8.1)	.357 (9.0)	1311	911	1312	912		
	24 .022 (0.55)	.331 (8.4)								

800 SERIES TUBE EXPANDERS

FOR CONDENSERS, HEAT EXCHANGER, CHILLERS & AIR COOLERS
 RANGE : 1/2" TO 1 1/2" (12.7 TO 38.1 mm) OD

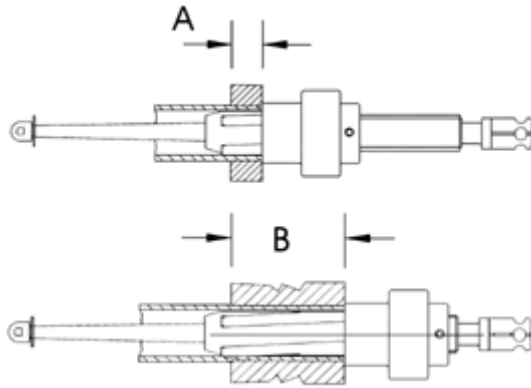


RANGE	FITTED WITH 1 1/2" (38.1) LG. ROLLER	FITTED WITH 2 1/4" (57.1) LG. ROLLER
MINIMUM A.	12.7 MM (1/2")	38.1 MM (1 1/2")
MAXIMUM B.	31.7 MM (1 1/4")	57.1 MM (2 1/4")

Tube OD in. (mm)	Tube Gauge bwg. in. (mm)	Tube ID in. (mm)	Min. ID Tool Enters in. (mm)	Maximum Expansion of Tool in. (mm)	Tube Sheet Thickness				Mandrel No.	Mandrel Square Drive in (mm)
					1/2 in. to 1-1/2 in. (12.7mm) (38.1mm)		1-1/4 in. to 2-1/4 in. (31.7mm) (57.1mm)			
					Tool No. with Rolls 1- 1/2 in. (38.1mm) long.	Roll no.	Tool No. with Rolls 2- 1/4 in. (57.1mm) long.	Roll no.		
1/2 (12.7)	14 .083 (2.10)	.334 (8.4)	.324 (8.2)	.374 (9.5)	797	797			797	3/8 (9.5)
	15 .072 (1.82)	.356 (9.0)	.348 (8.8)	.398 (10.1)	799	R-1			799	
	16 .065 (1.65)	.370 (9.4)	.360 (9.1)	.410 (10.4)	801				M-51	
	17 .058 (1.47)	.384 (9.7)	.374 (9.5)	.424 (10.7)	803	R-2				
	18 .049 (1.24)	.402 (10.2)	.392 (9.9)	.447 (11.3)	805				M-52	
	20 .035 (0.88)	.430 (10.9)	.406 (10.3)	.461 (11.7)	805 (spec)				M-53	
5/8 (15.8)	12 .109 (2.76)	.407 (10.3)	.392 (9.9)	.447 (11.3)	805	R-3			M-52	
	13 .095 (2.41)	.435 (11.0)	.425 (10.8)	.480 (12.1)	807				M-53	
	14 .083 (2.10)	.459 (11.6)	.449 (11.4)	.509 (12.9)	809	R-4	810	R-4-A	M-54	
	15 .072 (1.82)	.481 (12.2)	.471 (11.9)	.536 (13.6)	811	R-5	812	R-5 A		
	16 .065 (1.65)	.495 (12.5)	.485 (12.3)	.550 (13.9)	813		814		M-55	
	17 .058 (1.47)	.509 (12.9)	.499 (12.6)	.564 (14.3)	815	R-6	815	R-6 A	M-56	
	18 .049 (1.24)	.527 (13.3)	.517 (13.1)	.572 (14.5)	817		818		M-57	
	19 .042 (1.06)	.541 (13.7)	.522 (13.2)	.582 (14.7)	819		820		M-56	
	20 .035 (0.88)	.555 (14.1)				R-7		R-7-A		
	21 .032 (0.81)	.561 (14.2)	.536 (13.6)	.596 (15.1)	819 (spec)		820 (spec)		M-58	
22 .028 (0.71)	.569 (14.4)									

800 TYPE FIVE ROLL EXPANDER

RANGE : 1/2 TO 1 1/2 IN. (12.7 TO 38.1 MM) OD



RANGE	FITTED WITH 1 1/2" Long ROLLER (38.1)	FITTED WITH 2 1/4" Long ROLLER (57.1)
MINIMUM A.	12.7 MM (1/2")	31.75 MM (1 1/4")
MAXIMUM B.	38.1 MM (1 1/2")	57.1 MM (2 1/4")

Tube Size		Tube I. D.	Expander Range		Tube Sheet Thickness				Mandrel No.	Mandrel Sq. Drive.
O. D.	Gage		Min. Dia.	Max. Expn.	1/2" to 1 1/2" 1		1/4" to 2 1/4"			
					Tool No.	Roll No.	Tool No.	Roll No.		
5/8"	17	.509"	.499"	.564"	815-5	R-4-5	816-5	R-4-A-5	816-5	3/8"
	18	.527"	.517"	.572"	817-5		-		M - 9	
	19	.541"	.522"	.582"	819-5		820-5		820-5	
	20	.555"	.536"	.596"	819 - spec-5		820 - spec-5		820 - spec-5	
	21	.561"								
	22	.569"								
3/4"	13	.560"	.550"	.615"	821-5	R-5-5	822-5	R-5-A-5	821-5	
	14	.584"	.574"	.639"	823-5	R-6-5	824-5	R-6-A-5	824-5	
	15	.606"	.590"	.661"	-	R-7-5	826-5		826-5	
	16	.620"	.605"	.685"	827 5-		828-5		827-5	
	17	.634"	.619"	.699"	829-5		830-5	R-7-A-5	830-5	
	18	.652"								
	19	.666"	.642"	.722"	831-5	R-9-5	832-5	R-9-A-5	M - 13	
	20	.680"								
	21	.686"								
	22	.694"								
7/8"	13	.685"	.670"	.750"	833-5		834-5		M-14-3/8	3/8"
	14	.709"	.685"	.774"	835-5	R-10-5	836-5	R-10-A-5	M - 13	
	16	.745"	.726"	.815"	839-5	R-11-5	840-5	R-11-A-5	840-5	
	17	.759"	.740"	.829"	843-5		844-5		M-17-3/8	
	18	.777"								

800 TYPE FIVE ROLL EXPANDER

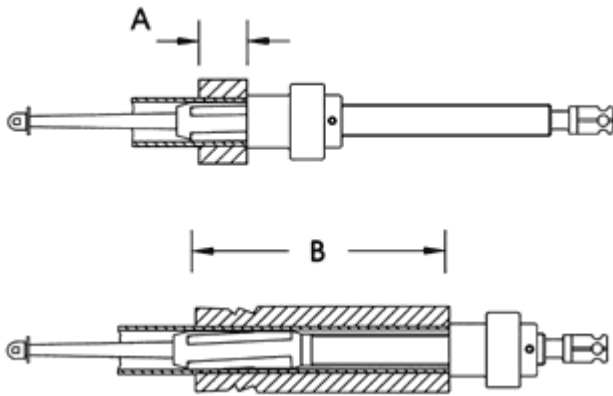
RANGE : 1/2 TO 1 1/2 IN. (12.7 TO 38.1 MM) OD

Tube Size		Tube I. D.	Expander Range		Tube Sheet Thickness				Mandrel No.	Mandrel Sq. Drive.	
O. D.	Gage		Min. Dia.	Max. Expn.	1/2" to 1 1/2" 1		1/4" to 2 1/4"				
					Tool No.	Roll No.	Tool No.	Roll No.			
7/8"	19	.791"	.763"	.852"	845-5	R-11-5	846-5	R-11-A-5	M-18-3/8		
	20	.805"									
	21	.811"									
	22	.819"									
1"	12	.782"	.791"	.880"	847-5	R-13-5	848-5	R-13-A-5	3/8"		
	13	.810"									
	14	.834"	.810"	.909"	849-5	R-12-5	850-5	R-12-A-5			850-5
	15	.856"	.837"	.936"	851-5	R-13-5	852-5	R-13-A-5			852-5
	16	.870"									
	17	.884"	.865"	.964"	855-5	R-13-5	856-5	R-13-A-5			856-5
	18	.902"									
	19	.916"									
	20	.930"									
	21	.936"	.883"	.982"	857-5	R-15-A	858.5	R-15-A-5			M-21-3/8
22	.944"										
1 1/8"	12	.907"	.916"	1.015"	859-5	R-16-5	860-5	R-16-A-5	860-5		
	13	.935"									
1 1/4"	14	.959"	.935"	1.044"	861-5	R-17-5	862-5	R-17-A-5	862-5	1/2"	
	15	1.106"	1.087"	1.196"	875-5	R-21-5	876-5	R-21-A-5	876-5		
	16	1.120"									
	17	1.134"	1.115"	1.231"	879-5	R-21-5	880-5	R-21-A-5	880-5		
	18	1.152"									
	19	1.166"									
	20	1.180"									
	21	1.186"									
22	1.194"										
1 3/8"	12	1.157"	1.133"	1.242"	881-5		882-5		882-5		
	14	1.209"	1.179"	1.294"	885-5	R-23-5	886-5	R-23-A-5			
1 1/2"	17	1.384"	1.331"	1.472"	899-5	R-29-5	900-5	R-29-A-5	900-5		
	18	1.402"									
	19	1.416"									
	20	1.430"									
	21	1.436"									
	22	1.444"									

1200 SERIES TUBE EXPANDERS

FOR OIL COOLERS, AIR COOLERS, PRE HEATERS & RADIATORS

RANGE : 1/2" TO 1 1/2" (12.7 TO 38.1 mm) OD

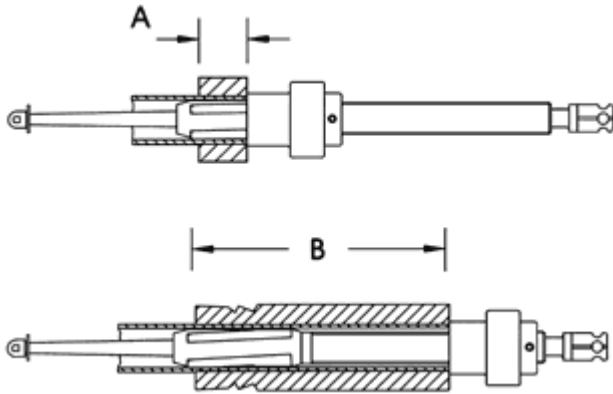


RANGE	FITTED WITH 1 1/2" (38.1) LG. ROLLER	FITTED WITH 2 1/4" (57.1) LG. ROLLER
MINIMUM A.	12.7 MM (1/2")	38.1 MM (1 1/2")
MAXIMUM B.	31.7 MM (1 1/4")	57.1 MM (2 1/4")

Tube OD in. (mm)	Tube Gauge bwg. in. (mm)	Tube ID in. (mm)	Min. ID Tool Enters in. (mm)	Maximum Expansion of Tool in. (mm)	Tube Sheet Thickness				Mandrel No.	Mandrel Square Drive in (mm)
					1-1/2 in. to 6 in. (38.1mm) (152.4mm)		2-1/4 in. to 6-3/4 in. (57.1mm) (171.4mm)			
					Tool No. with Rolls 1- 1/2 in. (38.1mm) long.	Roll no.	Tool No. with Rolls 2- 1/4 in. (57.1mm) long.	Roll no.		
1/2 (12.7)	14 .083 (2.10)	.334 (8.4)	.324 (8.2)	.374 (9.5)	1197	797			1197	3/8 (9.5)
	15 .072 (1.82)	.356 (9.0)	.348 (8.8)	.398 (10.1)	1199	R-1			1199	
	16 .065 (1.65)	.370 (9.4)	.360 (9.1)	.410 (10.4)	1201					
	17 .058 (1.47)	.384 (9.7)	.374 (9.5)	.424 (10.7)	1203	R-2				
	18 .049 (1.24)	.402 (10.2)	.392 (9.9)	.447 (11.3)	1205	R-3			M-52	
	20 .035 (0.88)	.430 (10.9)	.406 (10.3)	.461 (11.7)	1205 (spec)					
5/8 (15.8)	12 .109 (2.76)	.407 (10.3)	.392 (9.9)	.447 (11.3)	1205	R-3			M-52	
	13 .095 (2.41)	.435 (11.0)	.425 (10.8)	.480 (12.1)	1207	R-4			M-53	
	14 .083 (2.10)	.459 (11.6)	.449 (11.4)	.509 (12.9)	1209		1210	R-4-A	M-54	
	15 .072 (1.82)	.481 (12.2)	.471 (11.9)	.536 (13.6)	1211	R-5	1212	R-5 A	M-55	
	16 .065 (1.65)	.495 (12.5)	.485 (12.3)	.550 (13.9)	1213	R-6	1214	R-6 A		
	17 .058 (1.47)	.509 (12.9)	.499 (12.6)	.564 (14.3)	1215				1215	
	18 .049 (1.24)	.527 (13.3)	.517 (13.1)	.572 (14.5)	1217		1218		M-57	
	19 .042 (1.06)	.541 (13.7)	.522 (13.2)	.582 (14.7)	1219		1220		M-56	
	20 .035 (0.88)	.555 (14.1)				R-7		R-7-A		
	21 .032 (0.81)	.561 (14.2)	.536 (13.6)	.596 (15.1)	1219 (spec)		1220 (spec)			M-58
	22 .028 (0.71)	.569 (14.4)								

1200 TYPE FIVE ROLL EXPANDER

FOR CONDENSERS, HEAT EXCHANGER, CHILLERS & AIR COOLERS
 RANGE : 1/2 TO 1 1/2 IN. (12.7 TO 38.1 MM) OD

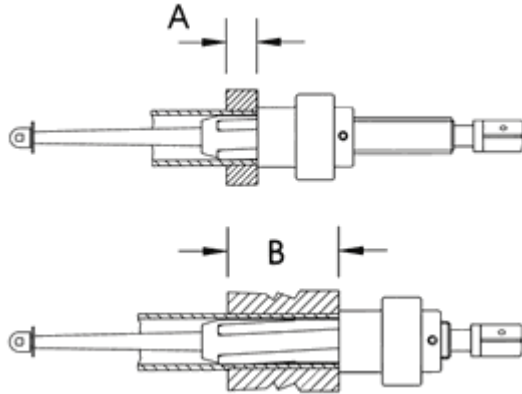


RANGE	FITTED WITH 3/4" (19.0) LG. ROLLER	FITTED WITH 1 1/4" (31.7) LG. ROLLER
MINIMUM A.	38.1 MM (1 1/2")	152.4 MM (6")
MAXIMUM B.	57.1 MM (2 1/4")	171.4 MM (6 3/4")
LONGER REACHES AVAILABLE UPON REQUEST IN 2" (50.8MM) INCREMENT		

Tube Size		Tube I. D.	Expander Range		Tube Sheet Thickness 1 1/2" to 6" 2 1/4" to 6 3/4"				Mandrel No.	Mandrel Sq. Drive.
O. D.	Gage		Min. Dia.	Max. Expn.	Tool No.	Roll No.	Tool No.	Roll No.		
3/4"	14	.584"	.574"	.639"	1223-5	R-6-5	1224-5	R-6-A-5	1224-5	3/8"
	15	.606"	.590"	.661"	-	R-7-5	1226-5	R-7-A-5	1226-5	
	16	.620"	.605"	.685"	1227 5-		1228-5		1227-5	
	17	.634"	.619"	.699"	1229-5		1230-5		1230-5	
	18	.652"								
	19	.666"								
	20	.680"								
	21	.686"	.642"	.722"	1231-5	R-9-5	1232-5	R-9-5	M - 63	
	22	.694"								
	1"	14	.834"	.810"	.909"	1249-5	R-12-5	1250-5	R-12-A-5	
15		.856"	.837"	.936"	1251-5	R-14-5	1252-5	R-14-A-5	1251-5	
16		.870"								
17		.884"								
18		.902"	.865"	.964"	1255-5	R-13-5	1256-5	R-13-A-5	1256-5	
19		.916"								
20		.930"								
1 1/8"	21	.936"								
	22	.944"	.883"	.982"	1257-5	R-15-A	1258-5	R-15-A-5	M-71-3/8	
	12	.907"								
1 1/8"	15	.981"	.962"	1.071"	1263-5	R-18-5	-	-	1263-5	1/2"
	16	.995"								
1 1/2"	17	1.384"	1.331"	1.472"	1299-5	R-29-5	1300-5	R-29-A-5	1299-5	
	18	1.402"								
	19	1.416"								
	20	1.430"								

8012 SERIES TUBE EXPANDERS

FOR HEAT EXCHANGER, CONDENSERS, AIR HEATERS & BOILERS
RANGE 1 3/4" TO 3" (44.4 TO 76.2) OD



RANGE	FITTED WITH 2 1/4" (57.1) LG. ROLLER
MINIMUM A.	12.7 MM (1/4")
MAXIMUM B.	101.6 MM (4")

Tube OD in. (mm)	Tube Gauge Bwg. in. (mm)	Tube ID in. (mm)	Min. ID Tool Enters in. (mm)	Maximum Expansion Of Tool in. (mm)	Tube Sheet Thickness		Mandrel no.	Mandrel Square Drive in. (mm)
					1/2 in. to 4 in. (12.7 mm) (101.6 mm)			
					Tool No. with Rolls 2- 1/4 in. (57.1 mm) long.	Roll no.		
1 3/4 (44.4)	10 .134 (3.4)	1.482 (37.6)	1.420 (36.0)	1.607 (40.8)	8012-1 3/4 -10	R-37-A	M - 90	3/4 (19.0)
	11 .120 (3.0)	1.510 (38.3)	1.454 (36.9)	1.635 (41.5)	8012-1 3/4 -11	R-42		
	12 .109 (2.7)	1.532 (38.9)	1.482 (37.6)	1.657 (42.0)	8012-1 3/4 -12	R-44		
	13 .095 (2.4)	1.560 (39.6)	1.510 (38.3)	1.685 (42.7)	8012-1 3/4 -13	R-46		
	14 .083 (2.1)	1.584 (40.2)	1.532 (38.9)	1.709 (43.4)	8012-1 3/4 -14	R-48		
2 (50.8)	10 .134 (3.4)	1.732 (43.9)	1.640 (41.6)	1.857 (47.1)	8012-2-10	R-50	M - 91	3/4 (19.0)
	11 .120 (3.0)	1.760 (44.7)	1.670 (42.4)	1.885 (47.8)	8012-2-11	R-52		
	12 .109 (2.7)	1.782 (45.2)	1.704 (43.2)	1.907 (48.4)	8012-2-12	R-54		
	13 .095 (2.4)	1.810 (45.9)	1.732 (43.9)	1.956 (49.6)	8012-2-13-18	R-56		
	14 .083 (2.1)	1.834 (46.5)						
	15 .072 (1.8)	1.856 (47.1)						
	16 .065 (1.6)	1.870 (47.4)						
	17 .058 (1.5)	1.884 (47.9)						
	18 .049 (1.2)	1.902 (48.3)						
	2 1/4	10 .134 (3.4)	1.982 (50.3)	1.890 (48.0)	2.107 (53.5)	8012-2 1/2 -10		
11 .120 (3.0)		2.010 (51.0)	1.920 (48.7)	2.135 (54.2)	8012-2 1/4 -11	R-58		
12 .109 (2.7)		2.032 (51.6)	1.954 (49.6)	2.157 (54.7)	8012-2 1/4 -12	R-60		
13 .095 (2.4)		2.060 (52.3)	1.982 (50.3)	2.185 (55.4)	8012-2 1/4 -13-16	R-62		
14 .083 (2.1)		2.084 (52.9)						
15 .072 (1.8)		2.106 (53.4)						
16 .065 (1.6)		2.120 (53.8)						

8012 SERIES TUBE EXPANDERS

FOR HEAT EXCHANGER, CONDENSERS, AIR HEATERS & BOILERS
RANGE 1 3/4" TO 3" (44.4 TO 76.2) OD

Tube OD in. (mm)	Tube Gauge Bwg. in. (mm)	Tube ID in. (mm)	Min. ID Tool Enters in. (mm)	Maximum Expansion Of Tool in. (mm)	Tube Sheet Thickness		Mandrel no.	Mandrel Square Drive in. (mm)
					1/2 in. to 4 in. (12.7 mm) (101.6 mm)			
					Tool No. with Rolls 2- 1/4 in. (57.1 mm) long.	Roll no.		
2 1/2 (63.5)	10 .134 (3.4)	2.232 (56.6)	2.140 (54.3)	2.407 (61.1)	8012-2 1/2 -10-12	R-64	M - 93	3/4 (19.0)
	11 .120 (3.0)	2.260 (57.4)						
	12 .109 (2.7)	2.282 (57.9)						
	13 .095 (2.4)	2.310 (58.6)	2.232 (56.6)	2.450 (62.2)	8012-2 1/2 -13-18	M - 94		
	14 .083 (2.1)	2.334 (59.2)						
	15 .072 (1.8)	2.356 (59.8)						
	16 .065 (1.6)	2.370 (60.1)						
	17 .058 (1.5)	2.384 (60.6)						
18 .049 (1.2)	2.402 (61.0)							
2 3/4 (69.8)	10 .134 (3.4)	2.232 (56.6)	2.390 (60.7)	2.702 (68.6)	8012-2 3/4 -10-16	R-66	M - 96	1 (25.4)
	11 .120 (3.0)	2.260 (57.4)						
	12 .109 (2.7)	2.282 (57.9)						
	13 .095 (2.4)	2.310 (58.6)						
	14 .083 (2.1)	2.334 (59.2)						
	15 .072 (1.8)	2.356 (59.8)						
	16 .065 (1.6)	2.370 (60.1)						
	17 .058 (1.5)	2.384 (60.6)						
18 .049 (1.2)	2.402 (61.0)							
3 (76.2)	8 .165 (4.1)	2.670 (67.8)	2.560 (65.0)	2.829 (71.8)	8012-3-8-9	R-67	M - 97	1 (25.4)
	9 .148 (3.7)	2.704 (68.6)						
	10 .134 (3.4)	2.732 (69.3)	2.640 (67.0)	2.952 (74.9)	8012-3-10-18	M - 96		
	11 .120 (3.0)	2.760 (70.1)						
	12 .109 (2.7)	2.782 (70.6)						
	13 .095 (2.4)	2.810 (71.3)						
	14 .083 (2.1)	2.834 (71.9)						
	15 .072 (1.8)	2.856 (72.5)						
	16 .065 (1.6)	2.870 (72.8)						
	17 .058 (1.5)	2.884 (73.3)						
	18 .049 (1.2)	2.092 (73.7)						

