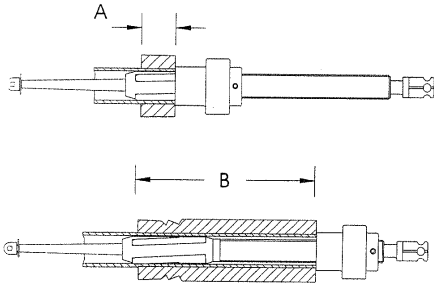


R800 Series Condenser and Heat Exchanger Tube Expander

A Tube Sheet Minimum
B Tube Sheet Maximum



FOR TUBES WITH INTERNAL DIAMETER
FROM 0.334" (8.4 mm) TO 1.43" (36.3 mm)

TUBE EXPANDERS FITTED WITH ROLLER LENGTH	FOR TUBE SHEET ADJUSTABLE RANGE	
	MINIMUM A	MAXIMUM B
1-1/2" (38.1 mm)	1/2" (12.7 mm)	1-1/2" (38.1 mm)
2-1/4" (57.1 mm)	1-1/4" (31.7mm)	2-1/4" (57.1mm)

Tube O.D. In. mm	Tube Thickness bwg. in. mm.	Tube I.D. in. mm.	Minimum I.D. Tool Enters in. mm.	Maximum Expansion of Tool in. mm.	Expander with 1-1/2" (38.10 mm) Long Rollers			Expander with 2-1/4" (57.15 mm) Long Rollers			SQ. DR.
					Complete Tool No.	Mandrel No.	Rollers Set No.	Complete Tool No.	Mandrel No.	Rollers Set No.	
1/2" 12.70	14 .083 (2.10)	.334 (8.4)	.324 (8.2)	.374 (9.5)	R797	797	797				
	15 .072 (1.82)	.356 (9.0)	.348 (8.8)	.398 (10.1)	R799	799	R-1				
	16 .065 (1.65)	.370 (9.4)	.360 (9.1)	.410 (10.4)	R801	M-1	R-1				
	17 .058 (1.47)	.384 (9.7)	.374 (9.5)	.424 (10.7)	R803	M-1	R-2				
	18 .049 (1.24)	.402 (10.2)	.392 (9.9)	.447 (11.3)	R805	M-2	R-3				
	20 .035 (0.88)	.430 (10.9)	.406 (10.3)	.461 (11.7)	R805 S	M-3	R-3				
5/8" 15.88	12 .109 (2.76)	.407 (10.3)	.392 (9.9)	.447 (11.3)	R805	M-2	R-3				in 3/8
	13 .095 (2.41)	.435 (11.0)	.425 (10.8)	.480 (12.1)	R807	M-3	R-4				
	14 .083 (2.10)	.459 (11.6)	.449 (11.4)	.509 (12.9)	R809	M-4	R-4	R810	M-4	R-4-A	
	15 .072 (1.82)	.481 (12.2)	.471 (11.9)	.536 (13.6)	R811	M-5	R-5	R812	M-5	R-5-A	
	16 .065 (1.65)	.495 (12.5)	.485 (12.3)	.550 (13.9)	R813	M-5	R-6	R814	M-5	R-6-A	
	17 .058 (1.47)	.509 (12.9)	.499 (12.6)	.564 (14.3)	R815	M-6	R-6	R816	M-6	R-6-A	
	18 .049 (1.24)	.527 (13.3)	.517 (13.1)	.572 (14.5)	R817	M-7	R-7	R818	M-7	R-7-A	
	19 .042 (1.06)	.541 (13.7)	.522 (13.2)	.582 (14.7)	R819	M-6	R-7	R820	M-6	R-7-A	
	20 .035 (0.88)	.555 (14.1)	.536 (13.6)	.596 (15.1)	R819 S	M-8	R-7	R820-S	M-8	R-7-A	
	22 .028 (0.71)	.569 (14.4)	.536 (13.6)	.596 (15.1)	R819 S	M-8	R-7	R820-S	M-8	R-7-A	
3/4" 19.05	10 .134 (3.40)	.482 (12.2)	.471 (11.9)	.536 (13.6)	R811	M-5	R-5	R812	M-5	R-5-A	mm 9.5
	11 .120 (3.04)	.510 (12.9)	.499 (12.6)	.564 (14.3)	R815	M-6	R-6	R816	M-6	R-6-A	
	12 .109 (2.76)	.532 (13.5)	.522 (13.2)	.582 (14.7)	R819	M-6	R-7	R820	M-6	R-7-A	
	13 .095 (2.41)	.560 (14.2)	.550 (13.9)	.615 (15.6)	R821	M-8	R-8	R822	M-8	R-8-A	
	14 .083 (2.10)	.584 (14.8)	.574 (14.5)	.639 (16.2)	R823	M-8	R-9	R824	M-8	R-9-A	
	15 .072 (1.82)	.606 (15.3)	.596 (15.1)	.661 (16.7)	R825	M-8	R-10	R826	M-8	R-10-A	
	16 .065 (1.65)	.620 (15.7)	.605 (15.3)	.685 (17.4)	R827	M-9	R-10	R828	M-9	R-10-A	
	17 .058 (1.47)	.634 (16.1)	.619 (15.7)	.699 (17.7)	R829	M-9	R-11	R830	M-9	R-11-A	
	18 .049 (1.24)	.652 (16.5)	.619 (15.7)	.699 (17.7)	R829	M-9	R-11	R830	M-9	R-11-A	
	19 .042 (1.06)	.666 (16.9)	.642 (16.3)	.722 (18.3)	R831	M-9	R-12	R832	M-9	R-12-A	
	20 .035 (0.88)	.680 (17.2)	.642 (16.3)	.722 (18.3)	R831	M-9	R-12	R832	M-9	R-12-A	
	21 .032 (0.81)	.686 (17.4)	.642 (16.3)	.722 (18.3)	R831	M-9	R-12	R832	M-9	R-12-A	
	22 .028 (0.71)	.694 (17.6)	.642 (16.3)	.722 (18.3)	R831	M-9	R-12	R832	M-9	R-12-A	
	7/8"	10 .134 (3.40)	.607 (15.4)	.596 (15.1)	.661 (16.7)	R825	M-8	R-10	R826	M-8	
11 .120 (3.04)		.635 (16.1)	.619 (15.7)	.699 (17.7)	R829	M-9	R-11	R830	M-9	R-11-A	
12 .109 (2.76)		.657 (16.6)	.642 (16.3)	.722 (18.3)	R831	M-9	R-12	R832	M-9	R-12-A	
13 .095 (2.41)		.685 (17.4)	.670 (17.0)	.750 (19.0)	R833	M-10	R-13	R834	M-10	R-13-A	
14 .083 (2.10)		.709 (18.0)	.685 (17.4)	.774 (19.6)	R835	M-11	R-14	R836	M-11	R-14-A	
15 .072 (1.82)		.731 (18.5)	.712 (18.0)	.801 (20.3)	R837	M-11	R-15	R838	M-11	R-15-A	

22.22	16	.065 (1.65)	.745 (18.9)	.726 (18.4)	.815 (20.7)	R839	M-12	R-15	R840	M-12	R-15-A	in 3/8
	17	.058 (1.47)	.759 (19.2)	.740 (18.8)	.829 (21.0)	R843	M-12	R-16	R844	M-12	R-16-A	
	18	.049 (1.24)	.777 (19.7)	.740 (18.8)	.829 (21.0)	R843	M-12	R-16	R844	M-12	R-16-A	
1"	8	.165 (4.19)	.670 (17.0)	.655 (16.6)	.735 (18.6)	R841	M-9	R-13	R842	M-9	R-13-A	mm 9.5
	9	.148 (3.75)	.704 (17.8)	.685 (17.4)	.774 (19.6)	R835	M-11	R-14	R836	M-11	R-14-A	
	10	.134 (3.40)	.732 (18.5)	.712 (18.0)	.801 (20.3)	R837	M-11	R-15	R838	M-11	R-15-A	
	11	.120 (3.04)	.760 (19.3)	.740 (18.8)	.829 (21.0)	R843	M-12	R-16	R844	M-12	R-16-A	
	12	.109 (2.76)	.782 (19.8)	.763 (19.3)	.852 (21.6)	R845	M-12	R-17	R846	M-12	R-17-A	
	13	.095 (2.41)	.810 (20.5)	.791 (20.0)	.880 (22.3)	R847	M-12	R-18	R848	M-12	R-18-A	
	14	.083 (2.10)	.834 (21.1)	.810 (20.5)	.909 (23.0)	R849	M-13	R-18	R850	M-13	R-18-A	
	15	.072 (1.82)	.856 (21.7)	.837 (21.2)	.936 (23.7)	R851	M-13	R-19	R852	M-13	R-19-A	
	16	.065 (1.65)	.870 (22.1)	.837 (21.2)	.936 (23.7)	R851	M-13	R-19	R852	M-13	R-19-A	
	17	.058 (1.47)	.884 (22.4)	.865 (21.9)	.964 (24.4)	R855	M-13	R-21	R856	M-13	R-21-A	
18	.049 (1.24)	.902 (22.9)	.865 (21.9)	.964 (24.4)	R855	M-13	R-21	R856	M-13	R-21-A		
25.40	19	.042 (1.06)	.916 (23.2)	.865 (21.9)	.964 (24.4)	R855	M-13	R-21	R856	M-13	R-21-A	
	20	.035 (0.88)	.930 (23.6)	.865 (21.9)	.964 (24.4)	R855	M-13	R-21	R856	M-13	R-21-A	
	8	.165 (4.19)	.795 (20.1)	.776 (19.7)	.875 (22.2)	R853	M-13	R-20	R854	M-13	R-20-A	mm 9.5
	9	.148 (3.75)	.829 (21.0)	.810 (20.5)	.909 (23.0)	R849	M-13	R-18	R850	M-13	R-18-A	
	10	.134 (3.40)	.857 (21.7)	.837 (21.2)	.936 (23.7)	R851	M-13	R-19	R852	M-13	R-19-A	
	11	.120 (3.04)	.885 (22.4)	.865 (21.9)	.964 (24.4)	R855	M-13	R-21	R856	M-13	R-21-A	
	12	.109 (2.76)	.907 (23.0)	.883 (22.4)	.982 (24.9)	R857	M-14	R-21	R858	M-14	R-21-A	
	13	.095 (2.41)	.935 (23.7)	.916 (23.2)	1.015(25.7)	R859	M-14	R-22	R860	M-14	R-22-A	
	14	.083 (2.10)	.959 (24.3)	.935 (23.7)	1.044(26.5)	R861	M-15	R-23	R862	M-15	R-23-A	
	15	.072 (1.82)	.981 (24.9)	.962 (24.4)	1.071(27.2)	R863	M-15	R-24	R864	M-15	R-24-A	
16	.065 (1.65)	.995 (25.2)	.962 (24.4)	1.071(27.2)	R863	M-15	R-24	R864	M-15	R-24-A		
17	.058 (1.47)	1.010(25.6)	.990 (25.1)	1.009(27.9)	R867	M-16	R-26	R868	M-16	R-26-A		
18	.049 (1.24)	1.027(26.0)	.990 (25.1)	1.009(27.9)	R867	M-16	R-26	R868	M-16	R-26-A		
1-1/8	8	.165 (4.19)	.920 (23.3)	.901 (22.8)	1.010(25.6)	R865	M-15	R-25	R866	M-15	R-25-A	mm 9.5
	9	.148 (3.75)	.954 (24.2)	.935 (23.7)	1.044(26.5)	R861	M-15	R-23	R862	M-15	R-23-A	
	10	.134 (3.40)	.982 (24.9)	.962 (24.4)	1.071(27.2)	R863	M-15	R-24	R864	M-15	R-24-A	
	11	.120 (3.04)	1.010(25.6)	.990 (25.1)	1.099(27.9)	R867	M-16	R-26	R868	M-16	R-26-A	
	12	.109 (2.76)	1.032(26.2)	1.013 (25.7)	1.122(28.5)	R869	M-16	R-27	R870	M-16	R-27-A	
	13	.095 (2.41)	1.060(26.9)	1.039 (26.4)	1.150(29.2)	R871	M-17	R-28	R872	M-17	R-28-A	
	14	.083 (2.10)	1.084(27.5)	1.060 (26.9)	1.169(29.6)	R873	M-17	R-29	R874	M-17	R-29-A	
	15	.072 (1.82)	1.106(28.0)	1.087 (27.6)	1.196(30.3)	R875	M-17	R-30	R876	M-17	R-30-A	
	16	.065 (1.65)	1.120(28.4)	1.087 (27.6)	1.196(30.3)	R875	M-17	R-30	R876	M-17	R-30-A	
	17	.058 (1.47)	1.134(28.8)	1.115 (28.3)	1.224(31.0)	R879	M-18	R-30	R880	M-18	R-30-A	
18	.049 (1.24)	1.152(29.2)	1.115 (28.3)	1.224(31.0)	R879	M-18	R-30	R880	M-18	R-30-A		
1-1/4	8	.165 (4.19)	1.045(26.5)	1.026 (26.0)	1.135(28.8)	R877	M-17	R-31	R878	M-17	R-31-A	mm 12.7
	9	.148 (3.75)	1.079(27.4)	1.060 (26.9)	1.169(29.6)	R873	M-17	R-29	R874	M-17	R-29-A	
	10	.134 (3.40)	1.107(28.1)	1.087 (27.6)	1.196(30.3)	R875	M-17	R-30	R876	M-17	R-30-A	
	11	.120 (3.04)	1.135(28.8)	1.115 (28.3)	1.224(31.0)	R879	M-18	R-30	R880	M-18	R-30-A	
	12	.109 (2.76)	1.157(29.3)	1.133 (28.7)	1.242(31.5)	R881	M-18	R-32	R882	M-18	R-32-A	
	13	.095 (2.41)	1.185(30.1)	1.160 (29.4)	1.275(32.3)	R883	M-19	R-33	R884	M-19	R-33-A	
	14	.083 (2.10)	1.209(30.7)	1.179 (29.9)	1.294(32.8)	R885	M-20	R-34	R886	M-20	R-34-A	
	15	.072 (1.82)	1.231(31.2)	1.206 (30.6)	1.321(33.5)	R887	M-20	R-35	R888	M-20	R-35-A	
	16	.065 (1.65)	1.245(31.6)	1.206 (30.6)	1.321(33.5)	R887	M-20	R-35	R888	M-20	R-35-A	
	17	.058 (1.47)	1.170(29.7)	1.145 (29.0)	1.260(32.0)	R889	M-19	R-34	R890	M-19	R-34-A	
1-3/8	9	.148 (3.75)	1.204(30.5)	1.177 (29.9)	1.294(32.8)	R885	M-20	R-34	R886	M-20	R-34-A	
	10	.134 (3.40)	1.232(31.2)	1.206 (30.6)	1.321(33.5)	R887	M-20	R-35	R888	M-20	R-35-A	
	11	.120 (3.04)	1.260(32.0)	1.235 (31.3)	1.350(34.2)	R891	M-20	R-36	R892	M-20	R-36-A	
	12	.109 (2.76)	1.282(32.5)	1.257 (31.9)	1.372(34.8)	R893	M-20	R-37	R894	M-20	R-37-A	
	13	.095 (2.41)	1.310(33.2)	1.285 (32.6)	1.400(35.5)	R895	M-21	R-37	R896	M-21	R-37-A	
	14	.083 (2.10)	1.334(33.8)	1.285 (32.6)	1.400(35.5)	R895	M-21	R-37	R896	M-21	R-37-A	
	15	.072 (1.82)	1.356(34.4)	1.331 (33.8)	1.446(36.7)	R897	M-21	R-38	R898	M-21	R-38-A	
	16	.065 (1.65)	1.370(34.8)	1.331 (33.8)	1.446(36.7)	R897	M-21	R-38	R898	M-21	R-38-A	
	17	.058 (1.47)	1.384(35.1)	1.331 (33.8)	1.472(37.3)	R899	M-22	R-38	R900	M-22	R-38-A	
	18	.049 (1.24)	1.402(35.6)	1.331 (33.8)	1.472(37.3)	R899	M-22	R-38	R900	M-22	R-38-A	
34.92	19	.042 (1.06)	1.416(35.9)	1.331 (33.8)	1.472(37.3)	R899	M-22	R-38	R900	M-22	R-38-A	mm 12.7
	20	.035 (0.88)	1.430(36.3)	1.331 (33.8)	1.472(37.3)	R899	M-22	R-38	R900	M-22	R-38-A	