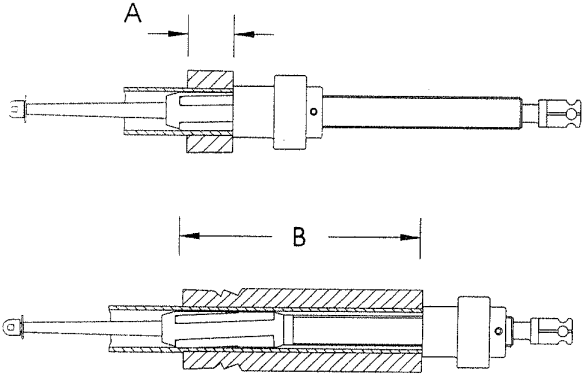


R800-5 Series (5 Roll Expander) Condenser and Heat Exchanger Tube Expander

A Tube Sheet Minimum
B Tube Sheet Maximum



FOR TUBES WITH INTERNAL DIAMETER
FROM 0.509" (12.9 mm) TO 1.44" (36.7 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.		
5/8"	17 .058 (1.47)	.509 (12.9)	.499 (12.6)	.564 (14.3)	R815-5	816-5	R-4-5	R816-5	816-5	R-4-A-5	in 3/8	
	18 .049 (1.24)	.527 (13.4)	.517 (13.1)	.576 (14.6)	R817-5	M-9	R-4-5	R820-5	820-5	R-4-A-5		
	19 .042 (1.06)	.541 (13.7)	.522 (13.3)	.582 (14.8)	R819-5	820-5	R-4-5	R820-5	820-5	R-4-A-5		
15.88	20 .035 (0.88)	.555 (14.1)	.536 (13.6)	.596 (15.1)	R819-5-S	820-5-S	R-4-5	R820-5-S	820-5-S	R-4-A-5		
	21 .032 (0.81)	.561 (14.2)	.536 (13.6)	.596 (15.1)	R819-5-S	820-5-S	R-4-5	R820-5-S	820-5-S	R-4-A-5		
	22 .028 (0.71)	.569 (14.5)	.536 (13.6)	.596 (15.1)	R819-5-S	820-5-S	R-4-5	R820-5-S	820-5-S	R-4-A-5		
3/4"	13 .095 (2.41)	.560 (14.2)	.550 (13.9)	.615 (15.6)	R821-5	822-5	R-5-5	R822-5	822-5	R-5-A-5		mm 9.5
	14 .083 (2.10)	.584 (14.8)	.574 (14.5)	.629 (15.9)	R823-5	824-5	R-6-5	R824-5	824-5	R-6-A-5		
	15 .072 (1.82)	.606 (15.3)	.590 (14.9)	.661 (16.8)	R825-5	826-5	R-7-5	R826-5	826-5	R-7-A-5		
19.05	16 .065 (1.65)	.620 (15.7)	.605 (15.3)	.680 (17.2)	R827-5	M-13	R-7-5	R828-5	M-13	R-7-A-5		
	17 .058 (1.47)	.634 (16.1)	.619 (15.7)	.699 (17.8)	R829-5	830-5	R-7-5	R830-5	830-5	R-7-A-5		
	18 .049 (1.24)	.652 (16.5)	.619 (15.7)	.699 (17.8)	R829-5	830-5	R-7-5	R830-5	830-5	R-7-A-5		
7/8"	19 .042 (1.06)	.666 (16.9)	.642 (16.3)	.729 (18.5)	R831-5	M-13	R-9-5	R832-5	M-13	R-9-A-5		
	20 .035 (0.88)	.680 (17.2)	.642 (16.3)	.729 (18.5)	R831-5	M-13	R-9-5	R832-5	M-13	R-9-A-5		
	21 .032 (0.81)	.686 (17.4)	.642 (16.3)	.729 (18.5)	R831-5	M-13	R-9-5	R832-5	M-13	R-9-A-5		
22.22	22 .028 (0.71)	.694 (17.6)	.642 (16.3)	.729 (18.5)	R831-5	M-13	R-9-5	R832-5	M-13	R-9-A-5		
	23 .025 (0.64)	.700 (17.8)	.670 (17.0)	.747 (18.9)	R833-5	M-14-3/8	R-9-5	R834-5	M-14-3/8	R-9-A-5		
	24 .022 (0.56)	.706 (17.9)	.670 (17.0)	.747 (18.9)	R833-5	M-14-3/8	R-9-5	R834-5	M-14-3/8	R-9-A-5		
22.22	25 .020 (0.51)	.710 (18.0)	.685 (17.4)	.750 (19.0)	R833-5	M-14-3/8	R-10-5	R836-5	M-14-3/8	R-10-A-5		
	13 .095 (2.41)	.685 (17.4)	.670 (17.0)	.747 (18.9)	R833-5	M-14-3/8	R-9-5	R834-5	M-14-3/8	R-9-A-5		
	14 .083 (2.10)	.709 (18.0)	.685 (17.4)	.750 (19.0)	R835-5	M-15-3/8	R-10-5	R836-5	M-15-3/8	R-10-A-5		
7/8"	16 .065 (1.65)	.745 (18.9)	.726 (18.4)	.800 (20.3)	R839-5	840-5	R-11-5	R840-5	840-5	R-11-A-5		
	17 .058 (1.47)	.759 (19.2)	.740 (18.8)	.824 (20.9)	R843-5	M-17-3/8	R-11-5	R844-5	M-17-3/8	R-11-A-5		
	18 .049 (1.24)	.777 (19.7)	.740 (18.8)	.824 (20.9)	R843-5	M-17-3/8	R-11-5	R844-5	M-17-3/8	R-11-A-5		
22.22	19 .042 (1.07)	.791 (20.1)	.763 (19.4)	.851 (21.6)	R845-5	M-18-3/8	R-11-5	R846-5	M-18-3/8	R-11-A-5		
	20 .035 (0.89)	.805 (20.4)	.763 (19.4)	.851 (21.6)	R845-5	M-18-3/8	R-11-5	R846-5	M-18-3/8	R-11-A-5		
	21 .032 (0.81)	.811 (20.6)	.763 (19.4)	.851 (21.6)	R845-5	M-18-3/8	R-11-5	R846-5	M-18-3/8	R-11-A-5		
22.22	22 .028 (0.71)	.819 (20.8)	.763 (19.4)	.851 (21.6)	R845-5	M-18-3/8	R-11-5	R846-5	M-18-3/8	R-11-A-5		
	23 .025 (0.64)	.825 (20.9)	.791 (20.1)	.880 (22.4)	R847-5	M-18-3/8	R-13-5	R848-5	M-18-3/8	R-13-A-5		
24 .022 (0.56)	.831 (21.1)	.791 (20.1)	.880 (22.4)	R847-5	M-18-3/8	R-13-5	R848-5	M-18-3/8	R-13-A-5			

1"	12	.109 (2.76)	.782 (19.8)	.763 (19.4)	.852 (21.6)	R845-5	M-18-3/8	R-11-5	R846-5	M-18-3/8	R-11-A-5	mm 9.5
	13	.095 (2.41)	.810 (20.5)	.791 (20.1)	.880 (22.4)	R847-5	M-18-3/8	R-13-5	R848-5	M-18-3/8	R-13-A-5	
	14	.083 (2.10)	.834 (21.2)	.810 (20.5)	.879 (22.3)	R849-5	850-5	R-12-5	R850-5	850-5	R-12-A-5	
	15	.072 (1.82)	.856 (21.7)	.837 (21.3)	.936 (23.8)	R851-5	852-5	R-13-5	R852-5	852-5	R-13-A-5	
	16	.065 (1.65)	.870 (22.0)	.837 (21.3)	.936 (23.8)	R851-5	852-5	R-13-5	R852-5	852-5	R-13-A-5	
	17	.058 (1.47)	.884 (22.4)	.865 (22.0)	.965 (24.5)	R855-5	856-5	R-13-5	R856-5	856-5	R-13-A-5	
	18	.049 (1.24)	.902 (22.9)	.865 (22.0)	.965 (24.5)	R855-5	856-5	R-13-5	R856-5	856-5	R-13-A-5	
25.40	19	.042 (1.06)	.916 (23.2)	.865 (22.0)	.965 (24.5)	R855-5	856-5	R-13-5	R856-5	856-5	R-13-A-5	
	20	.035 (0.88)	.930 (23.6)	.865 (22.0)	.965 (24.5)	R855-5	856-5	R-13-5	R856-5	856-5	R-13-A-5	
	21	.032 (0.81)	.936 (23.8)	.883 (22.4)	.997 (25.3)	R857-5	M-21-3/8	R-15-5	R858-5	M-21-3/8	R-15-A-5	
	22	.028 (0.71)	.944 (24.0)	.883 (22.4)	.997 (25.3)	R857-5	M-21-3/8	R-15-5	R858-5	M-21-3/8	R-15-A-5	
	23	.025 (0.64)	.950 (24.4)	.883 (22.4)	.997 (25.3)	R857-5	M-21-3/8	R-15-5	R858-5	M-21-3/8	R-15-A-5	
	24	.022 (0.56)	.956 (24.3)	.883 (22.4)	.997 (25.3)	R857-5	M-21-3/8	R-15-5	R858-5	M-21-3/8	R-15-A-5	
	25	.020 (0.51)	.960 (24.4)	.883 (22.4)	.997 (25.3)	R857-5	M-21-3/8	R-15-5	R858-5	M-21-3/8	R-15-A-5	
1-1/8"	12	.109 (2.76)	.907 (23.0)	.883 (22.4)	.997 (25.3)	R857-5	M-21-3/8	R-15-5	R858-5	M-21-3/8	R-15-A-5	mm 12.7
	13	.095 (2.41)	.935 (23.7)	.916 (23.2)	1.000 (25.4)	R859-5	860-5	R-16-5	R860-5	860-5	R-16-A-5	
	14	.083 (2.11)	.959 (24.3)	.935 (23.7)	1.039 (26.4)	R861-5	862-5	R-17-5	R862-5	862-5	R-17-A-5	
25.58	22	.028 (0.71)	1.069 (27.2)	1.039 (26.4)	1.157 (29.4)	R871-5	872-5	R-19-5	R872-5	872-5	R-19-A-5	
	24	.022 (0.56)	1.081 (26.4)	1.039 (26.4)	1.157 (29.4)	R871-5	872-5	R-19-5	R872-5	872-5	R-19-A-5	
1-1/4"	15	.072 (1.82)	1.106 (28.1)	1.087 (27.6)	1.196 (30.4)	R875-5	876-5	R-21-5	R876-5	876-5	R-21-A-5	in 1/2
	16	.065 (1.65)	1.120 (28.4)	1.087 (27.6)	1.196 (30.4)	R875-5	876-5	R-21-5	R876-5	876-5	R-21-A-5	
	17	.058 (1.47)	1.134 (28.8)	1.115 (28.3)	1.231 (31.3)	R879-5	880-5	R-21-5	R880-5	880-5	R-21-A-5	
	18	.049 (1.24)	1.152 (29.3)	1.115 (28.3)	1.231 (31.3)	R879-5	880-5	R-21-5	R880-5	880-5	R-21-A-5	
	19	.042 (1.07)	1.166 (29.6)	1.115 (28.3)	1.231 (31.3)	R879-5	880-5	R-21-5	R880-5	880-5	R-21-A-5	
	20	.035 (0.88)	1.180 (30.0)	1.115 (28.3)	1.231 (31.3)	R879-5	880-5	R-21-5	R880-5	880-5	R-21-A-5	
	21	.032 (0.81)	1.186 (30.1)	1.115 (28.3)	1.231 (31.3)	R879-5	880-5	R-21-5	R880-5	880-5	R-21-A-5	
31.75	22	.028 (0.71)	1.194 (30.3)	1.115 (28.3)	1.231 (31.3)	R879-5	880-5	R-21-5	R880-5	880-5	R-21-A-5	
	23	.025 (0.64)	1.200 (30.5)	1.133 (28.8)	1.242 (31.5)	R881-5	882-5	R-21-5	R882-5	882-5	R-21-A-5	
	24	.022 (0.56)	1.206 (30.6)	1.133 (28.8)	1.242 (31.5)	R881-5	882-5	R-21-5	R882-5	882-5	R-21-A-5	
	12	.109 (2.76)	1.154 (29.3)	1.133 (28.8)	1.242 (31.5)	R881-5	882-5	R-21-5	R882-5	882-5	R-21-A-5	
1-3/8"	14	.083 (2.11)	1.209 (30.7)	1.179 (29.9)	1.296 (32.9)	R885-5	882-5	R-23-5	R886-5	882-5	R-23-A-5	mm 12.7
	20	.035 (0.88)	1.305 (33.2)	1.257 (31.9)	1.385 (35.2)	R893-5	894-5	R-26-5	R894-5	894-5	R-26-A-5	
	22	.028 (0.71)	1.319 (33.5)	1.285 (32.6)	1.417 (36.0)	R895-5	896-5	R-26-5	R896-5	896-5	R-26-A-5	
34.92	24	.022 (0.56)	1.331 (33.8)	1.285 (32.6)	1.417 (36.0)	R895-5	896-5	R-26-5	R896-5	896-5	R-26-A-5	
	17	.058 (1.47)	1.384 (35.1)	1.331 (33.8)	1.489 (37.8)	R899-5	900-5	R-29-5	R900-5	900-5	R-29-A-5	
1-1/2"	18	.049 (1.24)	1.402 (35.6)	1.331 (33.8)	1.489 (37.8)	R899-5	900-5	R-29-5	R900-5	900-5	R-29-A-5	
	19	.042 (1.06)	1.416 (36.0)	1.331 (33.8)	1.489 (37.8)	R899-5	900-5	R-29-5	R900-5	900-5	R-29-A-5	
	20	.035 (.089)	1.430 (36.3)	1.331 (33.8)	1.489 (37.8)	R899-5	900-5	R-29-5	R900-5	900-5	R-29-A-5	
38.10	21	.032 (0.81)	1.436 (36.5)	1.331 (33.8)	1.489 (37.8)	R899-5	900-5	R-29-5	R900-5	900-5	R-29-A-5	
	22	.028 (0.71)	1.444 (36.7)	1.331 (33.8)	1.489 (37.8)	R899-5	900-5	R-29-5	R900-5	900-5	R-29-A-5	
	23	.025 (0.64)	1.450 (36.8)	1.331 (33.8)	1.489 (37.8)	R899-5	900-5	R-29-5	R900-5	900-5	R-29-A-5	
	24	.022 (0.56)	1.456 (37.0)	1.331 (33.8)	1.489 (37.8)	R899-5	900-5	R-29-5	R900-5	900-5	R-29-A-5	