

8012 Series

KRAIS 8012 series expanders are intended for larger tube diameters in heat exchanger work. They bridge the gap where the 800 and 1200 ranges are no longer sufficient, yet controlled expansion for exchanger joints remains necessary. These tools provide the robust torque and precise control required for larger scale industrial heat exchangers.



WORKING RANGE

TUBE ID	TUBE OD	TUBE SHEET
8,48 - 36,32 mm	44,4 - 76,2 mm	12,7 - 101,6 mm
0,334 - 1,430"	1-3/4" to 3"	1-1/2" to 2-1/4"

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TUBE OD		TUBE GAUGE			TUBE ID		EXPANSION RANGE				TOOL NO.	ROLL NO.	MANDREL	MANDREL	PNEUMATIC MOTOR *	ELECTRIC MOTOR *
							[INCH]		[MM]							
[INCH]	[MM]	[BWG]	[INCH]	[MM]	[INCH]	[MM]	MIN	MAX	MIN	MAX				[INCH]		
1-3/4	44,4	8	0,165	4,19	1,42	36,07	1,368	1,55	34,75	39,37	8012-1-3/4-8	R-33-A	M-90	3/4	K60-400	TESMini2 DU1
		10	0,134	3,40	1,482	37,64	1,420	1,607	36,07	40,82	8012-1-3/4-10	R-37-A	M-90	3/4		
		11	0,120	3,05	1,510	38,35	1,454	1,635	36,93	41,53	8012-1-3/4-11	R-42	M-90	3/4		
		12	0,109	2,77	1,532	38,91	1,482	1,657	37,64	42,09	8012-1-3/4-12	R-44	M-90	3/4		
		13	0,095	2,41	1,560	39,62	1,510	1,685	38,35	42,80	8012-1-3/4-13	R-46	M-90	3/4		
		14	0,083	2,11	1,584	40,23	1,532	1,709	38,91	43,41	8012-1-3/4-14	R-48	M-90	3/4	K60-900	
2	50,8	8	0,165	4,19	1,670	42,42	1,595	1,795	40,51	45,59	8012-2-8	R-48	M-91	3/4	K60-250	TESMini2 K90-E-190
		10	0,134	3,40	1,732	43,99	1,640	1,857	41,66	47,17	8012-2-10	R-50	M-91	3/4		
		11	0,120	3,05	1,760	44,70	1,670	1,885	42,42	47,88	8012-2-11	R-52	M-91	3/4		
		12	0,109	2,77	1,782	45,26	1,704	1,907	43,28	48,44	8012-2-12	R-54	M-91	3/4		
		13	0,095	2,41	1,810	45,97	1,732	1,956	43,99	49,68	8012-2-13-18	R-56	M-91	3/4		
		14	0,083	2,11	1,834	46,58	1,732	1,956	43,99	49,68	8012-2-13-18	R-56	M-91	3/4		
		15	0,072	1,83	1,856	47,14	1,732	1,956	43,99	49,68	8012-2-13-18	R-56	M-91	3/4		
		16	0,065	1,65	1,870	47,50	1,732	1,956	43,99	49,68	8012-2-13-18	R-56	M-91	3/4		
		17	0,058	1,47	1,884	47,85	1,732	1,956	43,99	49,68	8012-2-13-18	R-56	M-91	3/4		
18	0,049	1,24	1,902	48,31	1,732	1,956	43,99	49,68	8012-2-13-18	R-56	M-91	3/4				
2-1/4	57,1	10	0,134	3,40	1,982	50,34	1,890	2,107	48,01	53,52	8012-2-1/4-10	R-56	M-92	3/4	K60-250	TESMini2 K90-E-190
		11	0,120	3,05	2,010	51,05	1,920	2,135	48,77	54,23	8012-2-1/4-11	R-58	M-92	3/4		
		12	0,109	2,77	2,032	51,61	1,954	2,157	49,63	54,79	8012-2-1/4-12	R-60	M-92	3/4		
		13	0,095	2,41	2,060	52,32	1,982	2,185	50,34	55,50	8012-2-1/4-13-16	R-62	M-92	3/4		
		14	0,083	2,11	2,084	52,93	1,982	2,185	50,34	55,50	8012-2-1/4-13-16	R-62	M-92	3/4		
		15	0,072	1,83	2,106	53,49	1,982	2,185	50,34	55,50	8012-2-1/4-13-16	R-62	M-92	3/4		
		16	0,065	1,65	2,120	53,85	1,982	2,185	50,34	55,50	8012-2-1/4-13-16	R-62	M-92	3/4		

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TUBE OD		TUBE GAUGE			TUBE ID		EXPANSION RANGE				TOOL NO.	ROLL NO.	MANDREL	MANDREL	PNEUMATIC MOTOR *	ELECTRIC MOTOR *
							[INCH]		[MM]							
[INCH]	[MM]	[BWG]	[INCH]	[MM]	[INCH]	[MM]	MIN	MAX	MIN	MAX				[INCH]		
2-1/2	63,5	10	0,134	3,40	2,232	56,69	2,140	2,407	54,36	61,14	8012-2-1/2-10-12	R-64	M-93	3/4	K60-250	TESMini2 K90-E-190
		11	0,120	3,05	2,260	57,40	2,140	2,407	54,36	61,14	8012-2-1/2-10-12	R-64	M-93	3/4		
		12	0,109	2,77	2,282	57,96	2,140	2,407	54,36	61,14	8012-2-1/2-10-12	R-64	M-93	3/4		
		13	0,095	2,41	2,310	58,67	2,232	2,450	56,69	62,23	8012-2-1/2-13-18	R-64	M-94	3/4		
		14	0,083	2,11	2,334	59,28	2,232	2,450	56,69	62,23	8012-2-1/2-13-18	R-64	M-94	3/4		
		15	0,072	1,83	2,356	59,84	2,232	2,450	56,69	62,23	8012-2-1/2-13-18	R-64	M-94	3/4		
		16	0,065	1,65	2,370	60,20	2,232	2,450	56,69	62,23	8012-2-1/2-13-18	R-64	M-94	3/4		
		17	0,058	1,47	2,384	60,55	2,232	2,450	56,69	62,23	8012-2-1/2-13-18	R-64	M-94	3/4		
		18	0,049	1,24	2,402	61,01	2,232	2,450	56,69	62,23	8012-2-1/2-13-18	R-64	M-94	3/4		
2-3/4	69,8	10	0,134	3,40	2,482	63,04	2,390	2,702	60,71	68,63	8012-2-3/4-10-16	R-66	M-96	1	K72-RT-90	TESMini2 K90-E-90
		11	0,120	3,05	2,510	63,75	2,390	2,702	60,71	68,63	8012-2-3/4-10-16	R-66	M-96	1		
		12	0,109	2,77	2,532	64,31	2,390	2,702	60,71	68,63	8012-2-3/4-10-16	R-66	M-96	1		
		13	0,095	2,41	2,560	65,02	2,390	2,702	60,71	68,63	8012-2-3/4-10-16	R-66	M-96	1		
		14	0,083	2,11	2,584	65,63	2,390	2,702	60,71	68,63	8012-2-3/4-10-16	R-66	M-96	1		
		15	0,072	1,83	2,606	66,19	2,390	2,702	60,71	68,63	8012-2-3/4-10-16	R-66	M-96	1		
		16	0,065	1,65	2,620	66,55	2,390	2,702	60,71	68,63	8012-2-3/4-10-16	R-66	M-96	1		
3	76,2	8	0,165	4,19	2,670	67,82	2,560	2,829	65,02	71,86	8012-3-8-9	R-67	M-97	1	K72-RT-90	TESMini2 K90-E-90
		9	0,148	3,76	2,704	68,68	2,560	2,829	65,02	71,86	8012-3-8-9	R-67	M-97	1		
		10	0,134	3,40	2,732	69,39	2,640	2,952	67,06	74,98	8012-3-10-18	R-67	M-96	1		
		11	0,120	3,05	2,760	70,10	2,640	2,952	67,06	74,98	8012-3-10-18	R-67	M-96	1		
		12	0,109	2,77	2,782	70,66	2,640	2,952	67,06	74,98	8012-3-10-18	R-67	M-96	1		
		13	0,095	2,41	2,810	71,37	2,640	2,952	67,06	74,98	8012-3-10-18	R-67	M-96	1		
		14	0,083	2,11	2,834	71,98	2,640	2,952	67,06	74,98	8012-3-10-18	R-67	M-96	1		
		15	0,072	1,83	2,856	72,54	2,640	2,952	67,06	74,98	8012-3-10-18	R-67	M-96	1		
		16	0,065	1,65	2,870	72,90	2,640	2,952	67,06	74,98	8012-3-10-18	R-67	M-96	1		
		17	0,058	1,47	2,884	73,25	2,640	2,952	67,06	74,98	8012-3-10-18	R-67	M-96	1		
		18	0,049	1,24	2,902	73,72	2,640	2,952	67,06	74,98	8012-3-10-18	R-67	M-96	1		

* Motor recommendation applies only to most popular cases with a standard percentage of the wall reduction. The recommendation can be different for thicker tube sheet, harder and exotic metal tube and a higher percentage of wall reduction.

i RECOMMENDATION

When rolling a pipe in a thick tube sheet, we recommend initial rolling to a minimum of 1/2 inch, followed by rolling deeper into the pipe in subsequent steps.

