

Lifeline RHW Conduit Sizing Chart

Using electrical design and local codes, determine the proper ampacity. Use the following procedure and table to find the AWG and conduit size required for 3 or 4 insulated conductors at a 40% fill per chapter 9 of the National Electric Code.

Procedure

- From 75°C or 90°C Ampacity column, select proper AWG size
- Conduit Sizing
 - For Lifeline RHW (RHH/RHW-2 composite insulation system) go to the Lifeline RHW Column
 - For Lifeline RHH (RHH insulation with cover system) go to the Lifeline RHH Column
- Move over to select 3 conductor or 4 conductor minimum EMT conduit size

EMT CONDUIT SIZE (MINIMUM)

90°C MAX AMPACITY (Amps)	Lifeline RHW (No Outer Covering)				Lifeline RHH (With Covering)			75°C MAX AMPACITY (Amps)	
	SIZE AWG/MCM	OVERALL CABLE DIA. (INCHES)	EMT SIZE 3 COND	EMT SIZE 4 COND	EMT SIZE 4 COND	EMT SIZE 3 COND	OVERALL CABLE DIA. (INCHES)		SIZE AWG/MCM
15**	14	0.163	½"	½"	¾"	½"	0.193	14	15**
20**	12	0.181	½"	½"	¾"	½"	0.212	12	20**
30**	10	0.205	½"	¾"	¾"	¾"	0.236	10	30**
55	8	0.264	¾"	1"	1¼"	1"	0.326	8	50
75	6	0.330	1"	1"	1¼"	1"	0.364	6	65
95	4	0.377	1"	1¼"	1¼"	1¼"	0.412	4	85
110	3	0.404	1¼"	1¼"	1½"	1¼"	0.440	3	100
130	2	0.435	1¼"	1¼"	1½"	1¼"	0.472	2	115
150	1	0.524	1½"	2"	2"	2"	0.582	1	130
170	1/0	0.564	1½"	2"	2"	2"	0.622	1/0	150
195	2/0	0.607	2"	2"	2½"	2"	0.668	2/0	175
225	3/0	0.658	2"	2½"	2½"	2"	0.720	3/0	200
260	4/0	0.714	2"	2½"	2½"	2½"	0.778	4/0	230
290	250	0.820	2½"	2½"	3"	2½"	0.895	250	255
350	350	0.923	2½"	3"	3"	3"	1.001	350	310
430	500	1.051	3"	3"	3½"	3"	1.133	500	380
475	600	1.158	3"	3½"	4"	3½"	1.234	600	420
535	750	1.260	3½"	4"	4"	3½"	1.348	750	475



Notes: ** See National Electrical Code (NFPA 70) section 240-3

- 75°C and 90°C ampacity based on three current carrying conductors in a conduit and a 30°C (85°F) ambient temperature.
- See NEC Table 310.16 for 60°C ampacity.
- Electrical metallic tubing (EMT) per NFPA 70. For rigid metal conduit see NFPA 70 Chapter 9
- Table does not take voltage drop into consideration.

Example: 4 Conductor, 3 phase wye system requiring 120 amps

	Size	EMT
1. Lifeline RHW @ 90°C	2AWG	1¼"
2. Lifeline RHH @ 90°C	2AWG	1½"
3. Lifeline RHH @ 75°C	1AWG	2"