

126 – Thrust Restraint Tie Rod Chart.dwg March 17, 2026 – 1:21pm

TABLE 126-1 TIE ROD CHART				
FITTING	PIPE SIZE (IN.)	ROD DIAMETER (IN.)	NUMBER OF RODS	TOTAL THRUST (LBS)
TEES, PLUGS & VALVES	6	$\frac{3}{4}$	$\frac{2}{3}$	5,655
	8	$\frac{3}{4}$	$\frac{2}{3}$	10,055
	10	$\frac{3}{4}$	3	15,710
	12	$\frac{3}{4}$	4	22,620
	14	$\frac{3}{4}$	6	30,800
	16	$\frac{3}{4}$	4	40,215
	20	$\frac{3}{4}$	6	62,835
	24	$\frac{3}{4}$	8	90,480
	30	1	6	141,375
	36	1	6	203,595
11.25° BEND	6	$\frac{3}{4}$	2	1,110
	8	$\frac{3}{4}$	2	1,970
	10	$\frac{3}{4}$	2	3,080
	12	$\frac{3}{4}$	2	4,435
	14	$\frac{3}{4}$	2	6,035
	16	$\frac{3}{4}$	2	7,885
	20	$\frac{3}{4}$	2	12,320
	24	$\frac{3}{4}$	2	17,740
	30	1	2	27,720
22.5° BEND	6	$\frac{3}{4}$	2	2,210
	8	$\frac{3}{4}$	2	3,925
	10	$\frac{3}{4}$	2	6,130
	12	$\frac{3}{4}$	2	8,825
	14	$\frac{3}{4}$	2	12,015
	16	$\frac{3}{4}$	2	15,690
	20	$\frac{3}{4}$	2	24,515
	24	$\frac{3}{4}$	2	35,305
	30	1	2	55,160
	36	1	2	79,435
45° BEND	6	$\frac{3}{4}$	$\frac{2}{3}$	4,430
	8	$\frac{3}{4}$	$\frac{2}{3}$	7,700
	10	$\frac{3}{4}$	2	12,025
	12	$\frac{3}{4}$	4	17,312
	14	$\frac{3}{4}$	4	23,565
	16	$\frac{3}{4}$	4	30,780
	20	$\frac{3}{4}$	4	48,090
	24	$\frac{3}{4}$	6	69,250
	30	1	4	108,205
	36	1	6	155,810

TABLE 126-1 TIE ROD CHART				
FITTING	PIPE SIZE (IN.)	ROD DIAMETER (IN.)	NUMBER OF RODS	TOTAL THRUST (LBS)
90° BEND	6	$\frac{3}{4}$	$\frac{2}{3}$	8,000
	8	$\frac{3}{4}$	3	14,220
	10	$\frac{3}{4}$	4	22,214
	12	$\frac{3}{4}$	6	32,000
	14	$\frac{3}{4}$	6	43,540
	16	$\frac{3}{4}$	4	56,870
	20	$\frac{3}{4}$	6	88,860
	24	$\frac{3}{4}$	8	127,960
	30	1	6	199,930
	36	1	6	287,900

- NOTES:
- ON PIPE SIZES 6-IN. TO 14-IN., ROD AND NUT WILL HAVE MIN. YIELD STRENGTH OF 50,000 PSI. ON PIPE SIZES 16-IN. TO 24-IN., ROD AND NUT WILL HAVE MIN. YIELD STRENGTH OF 100,000 PSI.
 - RODS SHALL HAVE 6 IN. OF THREAD ON EACH END.
 - ALL METAL TO BE CLEANED AND COATED WITH AN APPROVED PROTECTIVE COATING FOLLOWING INSTALLATION AND PRIOR TO BACKFILLING. SEE NOTE 4, DWG. NO. 127.

FULTON COUNTY STANDARD DETAIL 126

THRUST RESTRAINT TIE ROD CHART

DATE	REVISIONS	DATE	REVISIONS

DGS/DRN/CHKD: MB/EB/ML
APPROVED: TM
DATE: 02-18-2026



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DRAWING NO.

126