



## KUNKLE MODEL 299 DRIP PAN ELBOW

SAFETY AND RELIEF PRODUCTS

Provides a means to handle condensate from safety valves used in steam applications



### FEATURES

- Model 0299-H: used for safety valve outlet size of 2" (DN 50).
- Model 0299-J: used for safety valve outlet size of 2½" (DN 65).
- Model 0299-K: used for safety valve outlet size of 3" (DN 80).
- Model 0299-M: used for safety valve outlet size of 4" (DN 100).
- Model 0299-P: used for safety valve outlet size of 6" (DN 150).
- Model 0299-Q: used for safety valve outlet size of 8" (DN 200).

### GENERAL APPLICATION

Recommended installation on outlet/discharge pipe for safety valves used on steam service.

### TECHNICAL DATA

Material: Cast iron  
Sizes: 2" to 8"  
Connections: 2" to 4" NPT  
6" and 8" (DN 150 and DN 200)  
integrally flanged

## SAFETY AND RELIEF PRODUCTS

A - Pipe size riser supported overhead

Bowl drains

C

1½" min. clearance

D

E

F Nom. pipe size

G 0299-H to -M

G 0299-P and -Q

Hold to minimum

Drain to waste

The illustration shows a discharge elbow and drip pan unit attached to a safety valve with female NPT outlet. For safety valves with flanged outlets - 2" to 4" - use companion flange, short nipple and drip pan elbow, all same size as valve outlet. 6" and 8" elbows have integral 125# ANSI B16.1 flange.

Important - length of discharge piping must be kept to a minimum. For design considerations see articles: 'Steam flow through safety valve vent pipes' by H.E. Brandmaier and M.E. Knebel (Dec. 1975) and 'Analysis of power plant safety and relief valve vent stacks' by G.S. Liao (Nov. 1974) available through ASME publications.

Dimensions – inches		Dimensions, in							Weight
Model	Size <sup>(1)</sup>	A	B	C	D	E	F	G	(lb)
0299-H	2"	3	6¼	2⅝	3⅝	1⅝	½ NPT	2¼	7½
0299-J	2½"	3½ / 4	7⅞	3	4⅝ <sup>1/16</sup>	1 <sup>15</sup> / <sub>16</sub>	¾ NPT	2 <sup>11</sup> / <sub>16</sub>	14
0299-K	3"	4	8	3½	4⅞	2⅝ <sup>1/16</sup>	¾ NPT	3⅞	19
0299-M	4"	6	9⅝	4½	5¼	2⅞	¾ NPT	3¾	36
0299-P	6"	8	12¾	6⅝	7⅞ <sup>1/16</sup>	4⅝ <sup>1/16</sup>	¾ NPT	8	98
0299-Q	8"	10	16½	7½	9⅞ <sup>1/16</sup>	5⅝	1 NPT	10¾	180

Dimensions are for reference only.

1. Safety valve outlet and drip pan elbow size.