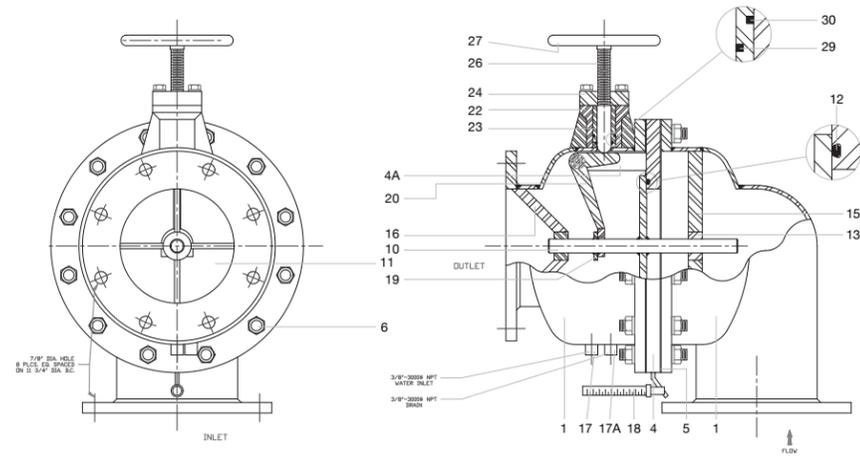


**GENERAL DESCRIPTION**

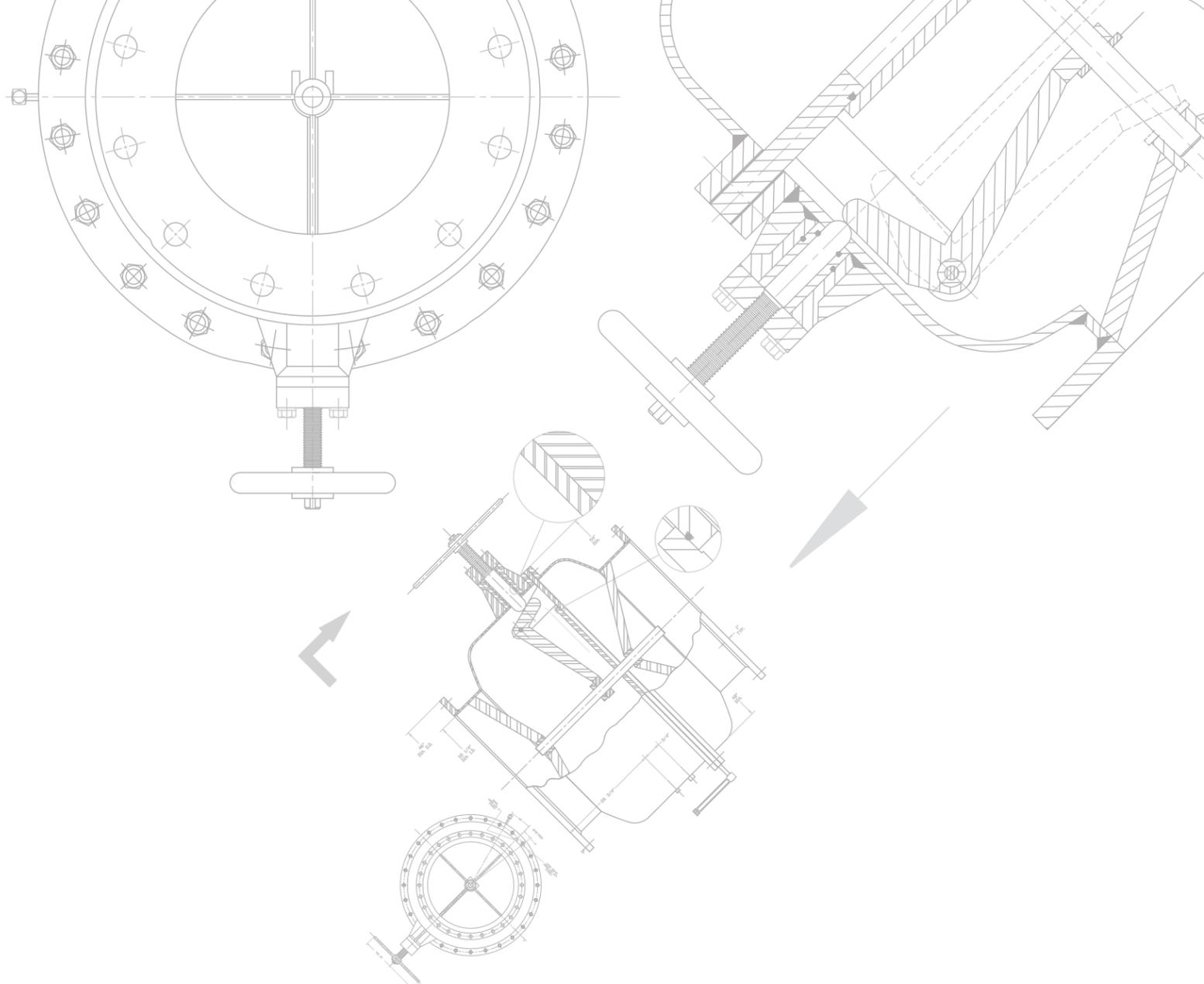
Manufactured in 6" through 60" valve sizes. There are two types of angle valves:

- Angle flow inlet and straight flow outlet
- Straight flow inlet and angle flow outlet



8" Angle Atmospheric Relief Valve (EARA-1008)

Item No.	Part Name	Type of Mat'l
1	Valve Body	A516 GR-70
4	Seat Ring	A516 GR-70
4A	Lev. Support	C.S.
5	Gasket	NON-ASB.
6	Valve Bolt	A193-B7
10	Shaft	17-4PH S/S
11	Disc	A516 GR-70
12	Seat Seal	VITON
13	Hub	C.S.
15	Inlet Hub Support	C.S.
16	Outlet Hub Support	C.S.
17	Water Inlet	A105
17A	Drain	A105
18	Water Level Gauge	GLASS
19	Shaft Shoulder	304 S/S
20	Lever	C.S.
22	Stuffing Box	C.S.
23	Bushing	Bronze-660
24	Special Gland	Bronze-660
26	Handwheel Shaft	17-4PH S/S
27	Handwheel	C.S.
29	Bushing O-Ring	VITON
30	Bushing O-Ring	VITON



**HEAT EXCHANGE INSTITUTE  
ATMOSPHERIC RELIEF VALVE SIZES**

Sizes of Atmospheric Relief Valve (inches)

Maximum Stream Flow Pounds Per Hour	For Protection*	For Maximum Non-Condensing Operation*
up to 7,500	6	8
7,501 to 11,800	8	10
11,801 to 17,000	8	12
17,001 to 20,000	8	14
20,001 to 23,100	10	14
23,101 to 30,200	10	16
30,201 to 38,200	12	18
38,201 to 45,000	12	20
45,001 to 47,200	14	20
47,201 to 62,000	14	24
62,001 to 68,000	16	24
68,001 to 82,000	16	30
82,001 to 106,000	18	30
106,001 to 120,000	18	...
120,001 to 170,000	20	...
170,001 to 250,000	24	...
250,001 to 380,000	30	...
380,001 to 550,000	36	...

\*The sizes listed "For Protection" are normally used under ordinary condensing operation and are for general reference only. If it is desired to operate the turbine temporarily noncondensing at its maximum noncondensing capacity, the sizes listed under "For Maximum Noncondensing Operation" should be used. Actual design conditions, i.e., flow, relieving pressure, should be established by the user and condenser manufacturer. The valve relieving capacity and design should be certified by the valve supplier.

**VALVE SIZING**

The piping and valve size should be large enough to protect the condenser from exceeding 10 psig + 10% accumulation.

Tolerance on set pressure of relief valve not to exceed ±5%.

**APPROXIMATE FINISHED WEIGHT**

Valve Size	Vertical Type	Horizontal Type
6"	165#	220#
8"	258#	340#
10"	325#	460#
12"	476#	652#
14"	563#	760#
16"	605#	823#
18"	751#	1095#
20"	812#	1206#
24"	1118#	1698#
30"	1726#	2537#
36"	2908#	3776#

**ORDERING NEW VALVES**

1. Valve size and steam flow required
2. Vertical, angle or horizontal type
3. Materials of construction
4. Number of valves required
5. Acceptable delivery time

**ORDERING SPARE VALVES OR PARTS**

1. Provide valve size and serial numbers of the existing valves in your plant.
2. Check valve drawings and provide the part

**ATMOSPHERIC RELIEF VALVES**



**EVEREST VALVE  
C O M P A N Y**

# EVEREST VALVE C O M P A N Y

## OUR MISSION

Everest Valve Company is dedicated to engineering and fabricating valves for demanding customer specifications including:

- Chemical Processing
- Refining
- Power Generation
- Pipeline
- Food Processing
- Manufacturing

Unlike most valve manufacturers, Everest does not stock a standard line that may have to be modified. Rather, we respond rapidly to exact customer needs and produce valves tailored precisely to the service application including:

- High and Low Temperature
- High Pressure
- Vacuum
- Severe Fluid Service

From order entry, through design, manufacturing, fabrication, and testing, our dedication is evident in producing high quality, application-specific valves for exacting customer specifications.

## APPLICATIONS

All of our products are manufactured for specific customer applications, using designs that have been proven successful in the most severe service. Our valves have been in wide use in Petro-Chem, Pipe Line, Refinery, Oil Field, Pulp & Paper, Power Plant, Chemical Processing, Manufacturing & Water industries. We supply products made from alloys (including exotic types), and sizes that are unavailable from the average valve manufacturer. You will find our quotations reasonable and our delivery rapid with guaranteed dates.

## VALVE AND DISC MATERIALS

A516 GR-70  
Non-Asbestos  
A193-B7  
17-4PH S/S  
A516 GR-70/S.S.  
EPDM/VITON  
C.S.  
A105  
304 S/S  
Bronze-660  
Nitronic 60  
or Customer Specification

## PURPOSE

Atmospheric Relief Valves provide Automatic Protection of costly Turbine Condenser equipment. These valves are as important as Trip Throttle Valves, Overspeed Governors and other devices for Power Plant Protection. EVEREST Atmospheric Relief Valves are designed and manufactured with the finest materials and highest quality workmanship. They are completely dependable to relieve built up steam in case of emergency.

## OPERATION AND MAINTENANCE

EVEREST ATMOSPHERIC RELIEF VALVES open and close automatically. Each valve needs to be installed vertically and properly leveled for smooth operation. Special "O"-ring seals and a water seal is provided for zero leakage in full vacuum conditions. Each valve opens as soon as the pressure increases slightly above atmospheric pressure.

Higher than atmospheric at pressure can be provided with internally spring loaded discs.

During regular maintenance and as many times as possible, each Atmospheric Relief Valve needs to be opened by turning the handwheel clockwise and then closing the valve by turning the handwheel counterclockwise. This process ensures non-binding and self cleaning valve action

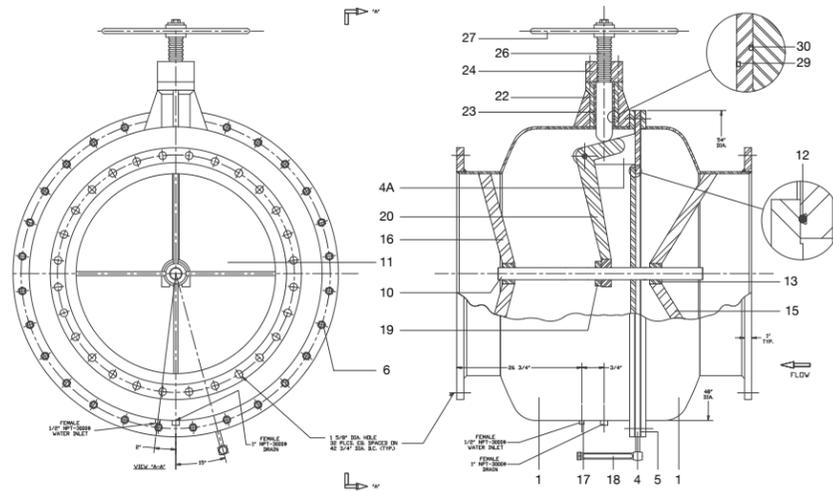
## WARRANTY

All products manufactured by Everest Valve are guaranteed free of defects in material and workmanship, when used within the range recommended, for a period of one year from shipment. When authorized, any defective part or product may be returned to the factory. If found defective, it will be repaired or replaced free of charge, F.O.B. our factory. No charge for labor or other expenses incurred will be allowed as the liability of Everest is limited to the refund price of the defective part or product only.

## VERTICAL ATMOSPHERIC RELIEF VALVES

### GENERAL DESCRIPTION

Manufactured in 6" through 60" valve sizes. These are the most readily available valves. the flow enters the bottomflange, pops open the disc upwards and flows out from the topency.



36" Vertical Atmospheric Relief Valve (EARV-1036)

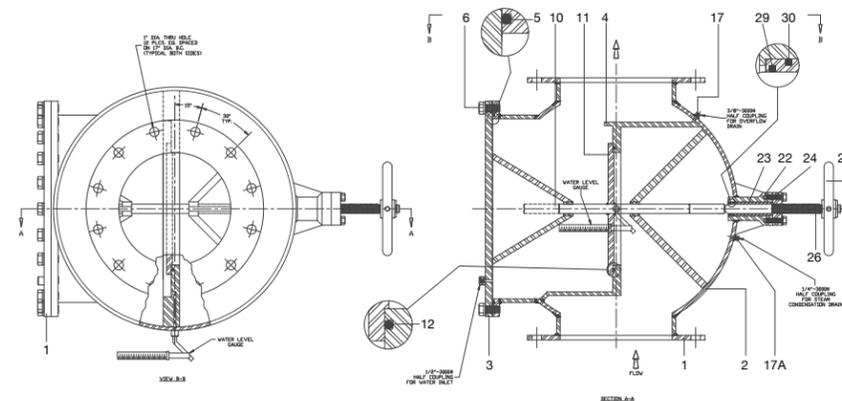


Item No.	Part Name	Type of Mat'l
1	Valve Body	A516 GR-70
4	Seat Ring	A516 GR-70
4A	Lev. Support	A516 GR-70
5	Gasket	Non-Asbestos
6	Valve Bolt	A193-B7
10	Shaft	17-4PH S/S
11	Disc	A516 GR-70
12	Seat Seal	EPDM
13	Hub	C.S.
15	Inlet Hub Support	C.S.
16	Outlet Hub Support	C.S.
17	Water Inlet	A105
17A	Drain	A105
18	Water Level Gauge	Brass Male Elbow with Level Gauge
19	Shaft Shoulder	304 S/S
20	Lever	C.S.
22	Stuffing Box	C.S.
23	Bushing	Bronze-660
24	Special Gland	Bronze-660
26	Handwheel Shaft	17-4PH S/S
27	Handwheel	C.S.
29	Bushing O-Ring	EPDM
30	Bushing O-Ring	EPDM

## HORIZONTAL ATMOSPHERIC RELIEF VALVES

### GENERAL DESCRIPTION

Manufactured in 6" through 60" valve sizes. in these valves the inlet is at a 90° angle, and the outlet is at a 90° angle also. The inlet and outlet can be oriented at any angle to suit customer's piping.



12" Horizontal Atmospheric Relief Valve (EARH-1012)



Item No.	Part Name	Type of Mat'l
1	Flange	C.S.
2	Valve Body	C.S.
3	Blind Flange	C.S.
4	Seat Ring	C.S.
6	Valve Body	A193-B7
10	Shaft	304 S/S
11	Disc	C.S.
12	Seat Seal	EPDM
17	Water Overflow	A105
17A	Drain	A105
22	Stuffing Box	C.S.
23	Bushing	Bronze-660
24	Special Gland	Bronze-660
26	Handwheel Shaft	304 S/S
27	Handwheel	C.S.
29	Bushing O-Ring	EPDM
30	Bushing O-Ring	EPDM