



# MODEL APD 900 LOW PRESSURE SURFACE SAFETY VALVE

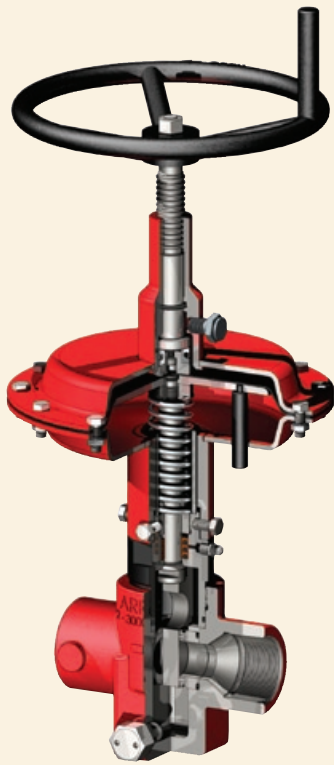
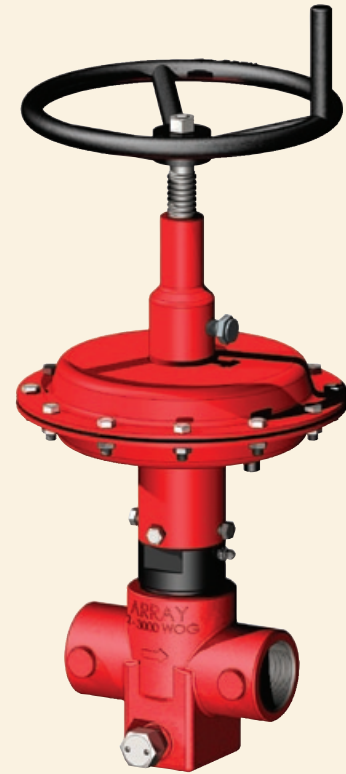
## GENERAL DESCRIPTION:

The APD 900 series diaphragm-actuated gate valve is a low pressure safety shutdown valve suitable for a variety of field applications, including:

- Flowline SDV's
- Automated production manifolds
- Gas lift and dump valve installations
- Low pressure wellhead wing SSV's

The valve operates through application of pneumatic control pressure applied to the actuator. The standard configuration of the valve has 2" LP threaded end connections, a reduced bore size of 1 1/4", a maximum working pressure of 3,000 PSI and is failsafe close upon loss of control pressure.

Additional screwed and flanged end connections as well as failsafe open options are available upon request.



## FEATURES AND BENEFITS:

- Visual Confirmation of Bonnet Packing Integrity: A tattletail port located above the bonnet packing seals provides visual confirmation of the packing integrity. The Bonnet is provided with a port that can be tubed to a containment vessel to prevent escape of fugitive emissions into the atmosphere.
- Process wetted materials meet NACE MR0175
- Metal-to-metal back seating "fire seal" between packing and valve body
- Internal components are stainless steel. Non-stainless components are coated with Xylan and polyester TGIC providing resistance against the corrosive effect of harsh environments.
- Manual hold open device is integral to the upper housing
- 1/4" NPT actuator inlet ports allow use of optional pressure relief valve or rupture disc
- Rugged position indicator on bottom of actuator indicates gate position

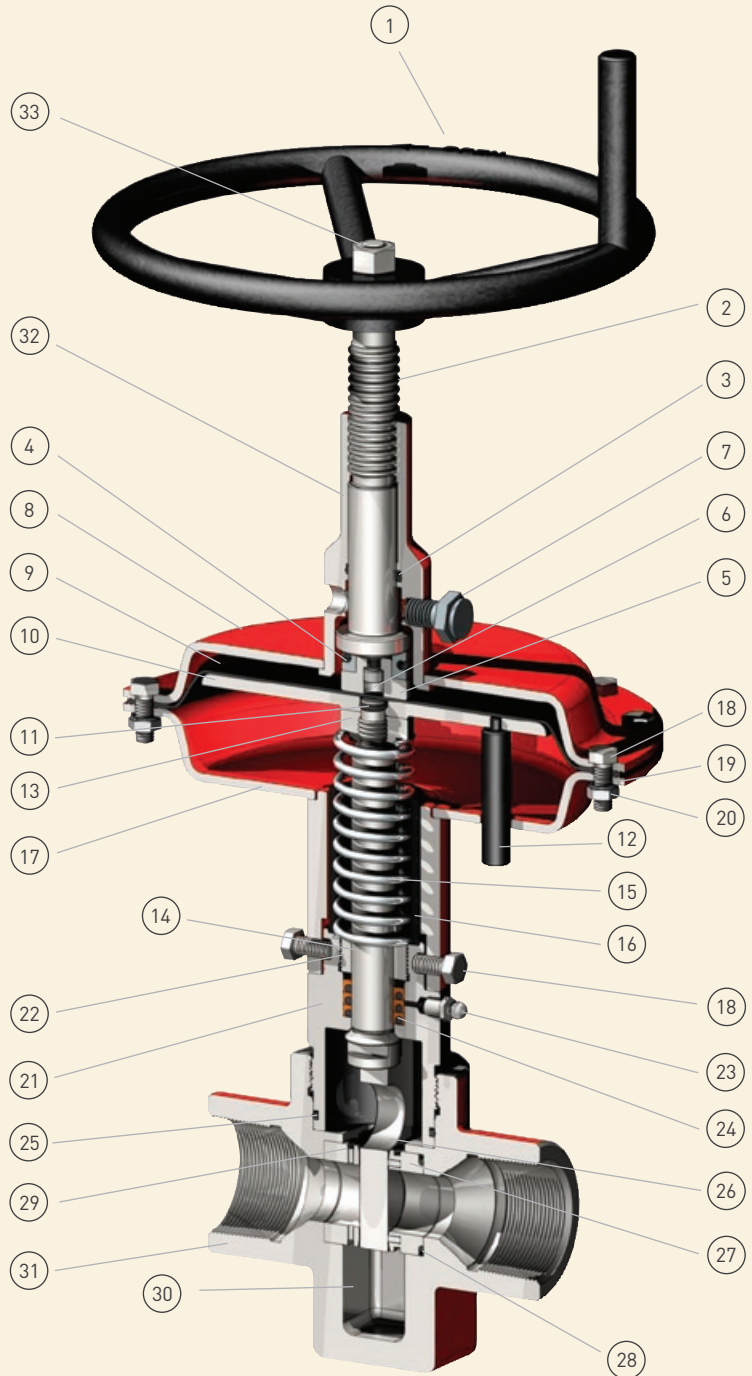


# MODEL APD 900 LOW PRESSURE SURFACE SAFETY VALVE

## PARTS LIST

#	DESCRIPTION
1	Override Handwheel
2	Override Stem
3	Override Stem Seal (RK)
4	Override Bearing
5	Override Bearing Retainer Plate
6	Socket Head Shoulder Cap Screw
7	Pressure Relief Fitting (RK)
8	Actuator Upper Housing Assembly
9	Diaphragm (RK)
10	Diaphragm Retainer Plate
11	Retainer Plate Restrictor Ring (RK)
12	Position Indicator
13	Stem Nut / Spring Retainer
14	Bonnet Stem
15	Spring
16	Downstop Tube
17	Actuator Lower Housing Assembly
18	Hex HD Bolt - 3/8" - 16 x 1.00 LG (RK)
19	Lock Washer - 3/8" (RK)
20	Hex Nut - 3/8" - 16 (RK)
21	Bonnet
22	Packing Retainer
23	Bonnet Weep Fitting
24	Polypak™ Seal (RK)
25	Bonnet Seal (RK)
26	Reverse Acting Slab Gate
27	Downstream Seat
28	Downstream Seat Seal O-ring (RK)
29	Upstream Seat Spacer
30	Body Grease Fitting
31	Gate Valve Body
32	Fitting
33	Handwheel Nut

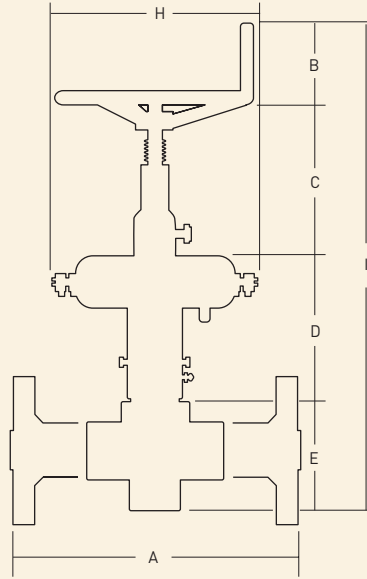
(RK) = Included In Redress Kit





# MODEL APD 900 LOW PRESSURE SURFACE SAFETY VALVE

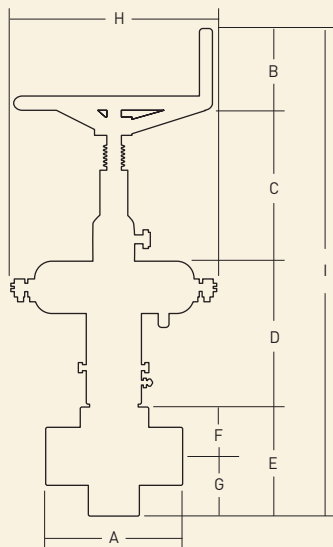
## DIMENSIONS AND FLANGE OPTIONS



FLANGED

### FLANGE OPTIONS:

END CONNECTION	VALVE WORKING PRESSURE	ACTUATOR CONTROL PRESS.	VALVE BORE SIZE	DIMENSION "A"	
	psi	psi	in	in	mm
SE 2" LP	3,000	56	1.25	7.50	190
150 RF	285	10	1.25	7.00	177
300 RF	740	18	1.25	8.50	215
600 RF	1,480	30	1.25	11.50	292
900 RF	2,160	42	1.25	14.50	368
600 RTJ	1,480	30	1.25	11.62	295
900 RTJ	2,160	42	1.25	14.62	371
3000 RTJ	3,000	56	1.25	14.62	371



SCREWED END

### DIMENSIONS:

CONNECTION	in	mm
A	(see chart)	
B	4.25	107
C	8.57	217
D	8.05	204
E	6.10	154
F	2.70	68
G	3.40	86
H	13.00	330
I	27.00	685



# MODEL APD 900 LOW PRESSURE SURFACE SAFETY VALVE

## TECHNICAL DATA

Valve Body	ASTM A487-4C Steel – NACE
Gate Material	17-4 ph Stainless Steel – NACE – Nitrided
Stem Material	17-4 ph Stainless Steel – NACE
Rear Seat Seal	Viton 75 Durometer
Temperature Rating	P -20° F to 180° F (-29° C to 82° C)
Gate Valve Maximum Operating Pressure	3,000 psi ( 207 bar)
Test Pressure	6,000 psi (414)
Actuator Maximum working Pressure	75 psi (5 bar)
Actuator Test Pressure	113 psi (8 bar)
Actuator Diaphragm	Buna-N w/Nylon Backing
Actuator Housing	Carbon Steel
Spring	Alloy Spring Steel – Plastic Coated

## LIMITED PRODUCT WARRANTY

The following warranty is exclusive and in lieu of all other warranties. Whether express, implied or statutory, including, but not by way of limitation, any warranty of merchantability or fitness for any particular purpose.

ARRAY Products Company, LLC warrants to each original Buyer of Products manufactured by ARRAY that such products are free from defects in material and workmanship under normal use and service for a period of one (1) year from the date of shipment provided that no warranty is made with respect to:

- a. Any product which has been repaired or altered in such a way in ARRAY's judgement, as to affect the product adversely;
- b. Any product which has, in ARRAY's judgement, been subject to negligence, accident or improper storage;
- c. Any product which has not been operated or maintained in accordance with normal practice and in conformity with recommendations and public specifications of ARRAY.

ARRAY's obligation under this Warranty is limited to use reasonable efforts to repair, replace or, at its option, refunding the purchase price. The cost of labor for installing a repaired or replacement product shall be borne by purchaser. Replacement parts provided under the terms of this Warranty are warranted for the remainder of the warranty period of the products upon which they are installed to the same extent as if such parts were original components thereof. Warranty services provided hereunder do not assume any liability for damages caused by any delays involving warranty service.

For complete specification information, prices and the name, address and telephone number of the ARRAY representative nearest you, call or write to us at the address below.

---

### ARRAY HOLDINGS, INC., D.B.A. ARRAY PRODUCTS

4520 E. Chandler Road, Muskogee, Oklahoma 74403

Phone: 918.682.7952 • Fax: 918.682.7904 • Toll Free: 866.445.1837 • [www.arrayproducts.com](http://www.arrayproducts.com)