

HP250

PRATT
Henry Pratt Company

401 S. Highland Avenue
Aurora, Illinois 60506-5563
www.henrypratt.com
phone: 877.436.7977
fax: 630.844.4160



Scope of Line: Pratt HP250 Butterfly Valve

Sizes: 3" through 20"

Pressure Class:

- AWWA 250 B

Body Styles*:

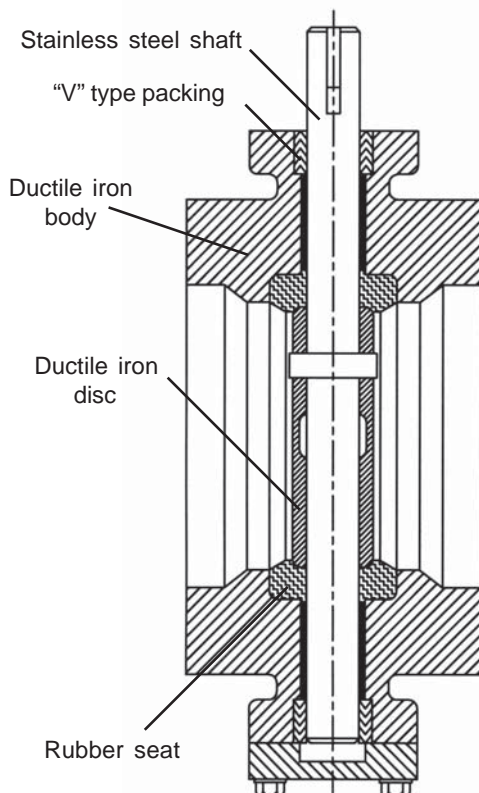
- Class 125 Flanged
- Class 250 Flanged
- Mechanical Joint

Actuation Options*:

- Nut
- Handwheel
- Buried Service

*Consult factory for other end connections and actuation options

DESIGN AND CONSTRUCTION



- Ductile iron valve body
- Stainless steel shaft
- Ductile iron disc

Suggested Specification:

Butterfly valves shall be manufactured in accordance with the latest revision of AWWA Standard C504 Class 250B, shall be suitable for a differential pressure of 250 psig, and be certified to NSF Standard 61. Valves shall be Henry Pratt Model HP250 and comply with the following details.

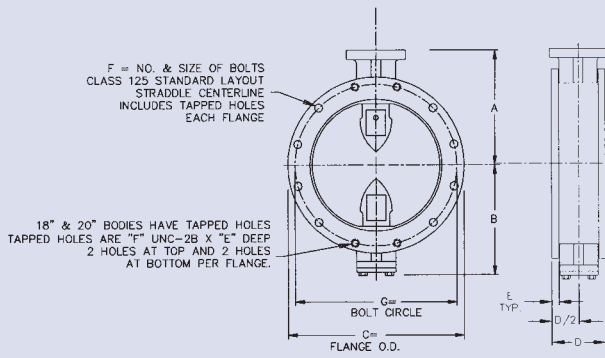
The body shall be constructed of Ductile Iron ASTM A536 Gr. 65-45-12, with flanged end connections drilled in accordance with ANSI B16.1, Class 125, Class 250 or Mechanical Joint ends. The body wall thickness shall be in strict accordance with AWWA C504.

The disc shall utilize an on-center shaft and symmetrical design, cast from Ductile Iron ASTM A536 Gr. 65-45-12. The disc edge shall be stainless steel type 316. Discs shall be retained by pins that extend through the full diameter of the shaft. The pin material shall be the same as the shaft material. Torque plugs or tangential fasteners shall not be allowed. For valve sizes 3" through 20" the rubber body seat shall be of one-piece construction, simultaneously molded and bonded directly into the body. The seat material shall be either Buna-N or EPDM rubber.

The shaft shall be made of ASTM A-564 Type 630 condition H-1150. The shaft seals shall be "V" type packing. Shaft seals shall be of a design allowing replacement without removing the valve shaft. No O-ring or "U" cup packing shall be allowed. The bearing shall be a stainless steel backed teflon material. Bearing load shall not exceed 1/5 of the compressible strength of the bearing or shaft material.

Manual actuators shall be of the traveling nut, self-locking type and shall be designed to hold the valve in any intermediate position between fully open and fully closed without fluttering or creeping. The actuator shall have mechanical stops that will withstand an input torque of 450 lb./ft. against each stop. Manual actuators shall conform to AWWA Standard C504 and shall be Pratt MDT or an approved equal.

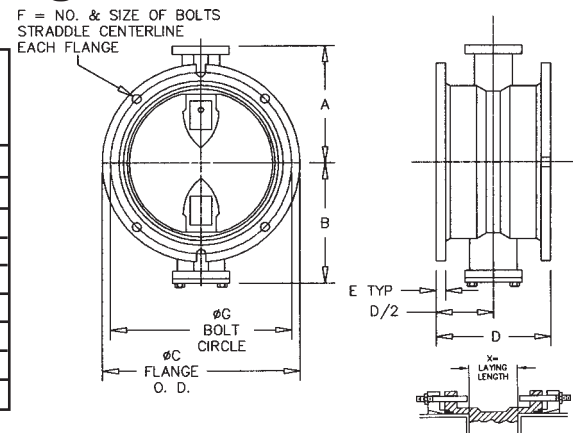
3" - 20" HP250 AWWA Ductile Body Design Class 125 Flanges



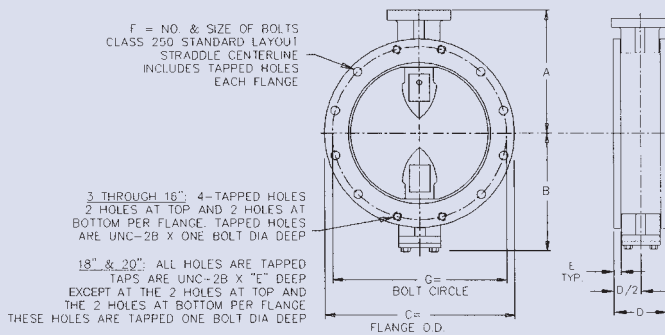
Valve Size	A	B	C	D	E	F	G
3"	4 3/4	3 1/4	7 1/2	5	3/4	4-5/8	6
4	5 1/2	3 1/2	9	5	15/16	8-5/8	7 1/2
6	6 1/2	5 1/8	11	5	1	8-3/4	9 1/2
8	7 3/4	6 1/2	13 1/2	6	1 1/8	8-3/4	11 3/4
10	9	9 7/8	16	8	1 3/16	12-7/8	14 1/4
12	10 1/2	11 3/8	19	8	1 1/4	12-7/8	17
14	11 7/8	12 3/4	21	8	1 3/8	12-1	18 3/4
16	13 1/2	14 3/8	23 1/2	8	1 7/16	16-1	21 1/4
18	14 3/8	15 1/4	25	8	1 9/16	16-1 1/8	22 3/4
20	16	16 7/8	27 1/2	8	1 11/16	20-1 1/8	25

4" - 20" HP250 AWWA Ductile Body Design Mechanical Joint

Valve Size	A	B	C	D	E	F	G	X
4"	5 1/2	3 1/2	9	8 1/8	1	4-3/4	7 1/2	3 1/8
6	6 1/2	5 1/8	11	8 1/2	1 1/16	6-3/4	9 1/2	3 1/2
8	7 3/4	6 1/2	13 1/4	8 5/8	1 1/8	6-3/4	11 3/4	3 5/8
10	9	9 3/4	15 9/16	9 1/4	1 3/16	8-3/4	14	4 1/4
12	10 1/2	11 3/8	17 15/16	9 1/4	1 1/4	8-3/4	16 1/4	4 1/4
14	11 7/8	12 3/4	20 5/16	11 1/2	1 5/16	10-3/4	18 3/4	4 1/2
16	13 1/2	14 1/2	22 9/16	12	1 3/8	12-3/4	21	5
18	14 3/8	15 3/8	24 11/16	12 1/4	1 3/8	12-3/4	23 1/4	5 1/4
20	16	17	27 3/32	12 1/2	1 1/2	14-3/4	25 1/2	5 1/2



3" - 20" HP250 AWWA Ductile Body Design Class 250 Flanges



Valve Size	A	B	C	D	E	F	G
3"	4 3/4	3-1/4	8-1/4	5	1-1/8	8-3/4	6-5/8
4	5 1/2	3-1/2	10	5	1-1/4	8-3/4	7-7/8
6	6 1/2	5-1/8	12-1/2	5	1-7/16	12--3/4	10-5/8
8	7 3/4	6-1/2	15	6	1-5/8	12--7/8	13
10	9	9-7/8	17-1/2	8	1-7/8	16--1	15-1/4
12	10 1/2	11-3/8	20-1/2	8	2	16--1-1/8	17-3/4
14	11 7/8	12-3/4	23	8	2-1/8	20--1-1/8	20-1/4
16	13 1/2	14-3/8	25-1/2	8	2-1/4	20--1-1/4	22-1/2
18	14 3/8	15-1/4	28	8	2-3/8	24--1-1/4	24-3/4
20	16	16-7/8	30-1/2	8	2-1/2	24--1-1/4	27

MDT Manual Actuator Dimensional Data

Valve Size	MDT Size	J	L	M	N	P	Q	R	S	T	V	W	# Turns to Close
3 to 8"	MDT-2S	4 11/16	2	2 1/8	2	4 1/2	4 1/4	8 1/4	7 7/8	7 7/8	8	9 1/8	32
10 to 14"	MDT-3S	5 5/8	2 7/16	3 1/4	3 5/32	5 5/8	5 3/8	10 3/8	10 1/2	10 1/8	12	9 1/8	30
16 to 18"	MDT-4S	6 3/8	2 27/32	3 3/8	4	7 5/16	6 3/4	11 5/16	11 1/2	11	12	9 1/8	40
20"	MDT-5	7 9/16	3 15/32	4 1/2	5 1/2	8 3/4	10	17	17 3/16	17 3/16	18	16 7/16	44

Notes:

- 1) All dimensions shown in inches
- 2) Furnished in standard position. Contact factory for other mounting positions

