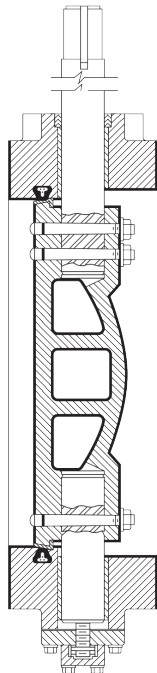


401 S. Highland Avenue  
Aurora, IL 60506  
Phone: 877-436-7977  
moreinfo@henrypratt.com  
www.henrypratt.com



### Design and Construction

- Ductile iron valve body
- 17-4 Stainless steel shaft
- Ductile iron disc



### Scope of Line

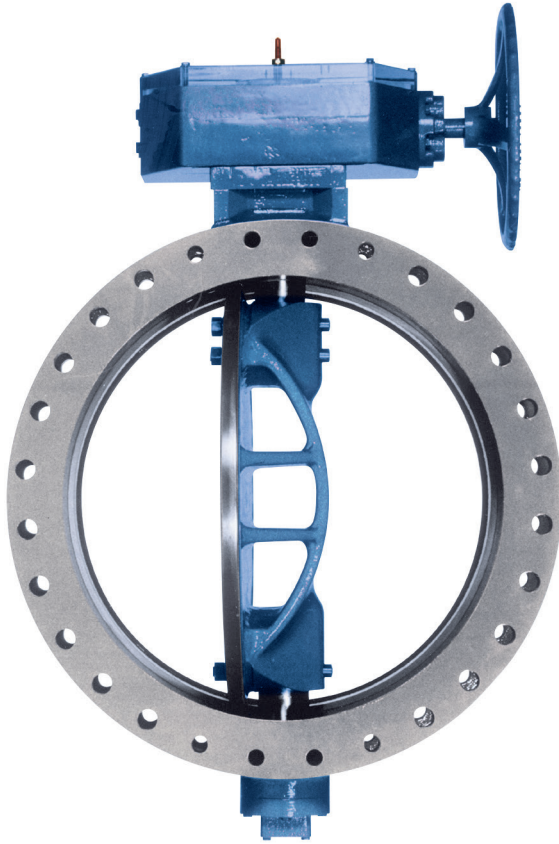
- Sizes: 6" through 48" (FL Ends)  
6" through 36" (MJ Ends)
- Pressure: 350 psi; 525 shell test
- Body Styles: ANSI 250# with 250 drilling
- Actuation Options: Nut; Handwheel; Buried Service

### Features

- Higher Pressure
- Wide size range and end connections
- Rubber seat located in body
- Unique Disc Design
- Nonmetallic bearings
- V-type shaft packing
- Actuators and Accessories

### Benefits

- Working pressures to 350 psi with temperatures to 250° F
- Available in sizes 6" through 48" (FL x FL) and 6" through 36" (MJ x MJ)
- Reduces performance problems related to corrosive buildup in valve body and pipeline
- Provides more strength, less weight, and greater free-flow area than conventional disc design
- Prevents galvanic corrosion and provides lower coefficient of friction
- Self-adjusting, lasts the life of the valve
- Available with manual traveling nut or worm gear, electric motor or cylinder actuator; plus full range of extensions, indicators, positioners, remote controls and other accessories



### Suggested Specification

Butterfly valves shall be manufactured for a full differential pressure of 350 psig. Valves shall be Henry Pratt Model HP350 and comply with the following details.

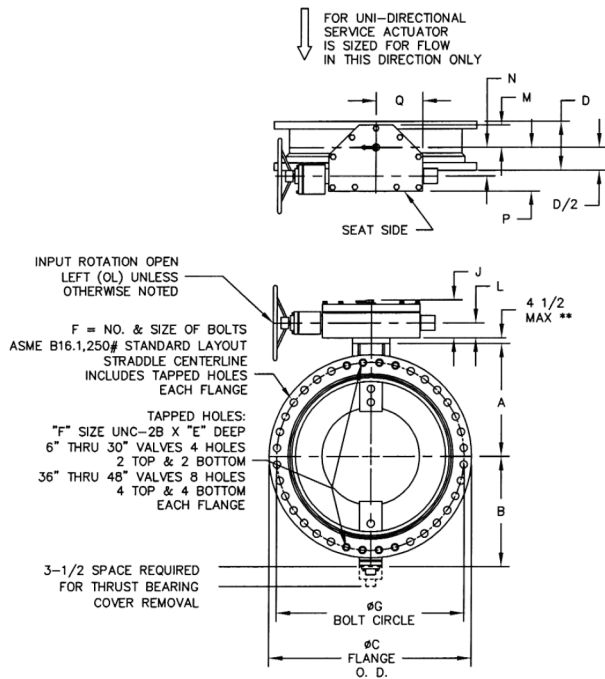
The body shall be constructed of Ductile Iron ASTM A536 Gr. 65-45-12, with flanged end connections drilled in accordance with ANSI B16.1, Class 250, or mechanical joint ends drilled in accordance with AWWA C111. The body wall thickness shall be in strict accordance with AWWA C504, Table #1, for gray iron 250B valves.

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.

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 Teflon® lined fiberglass backed bearing. 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.

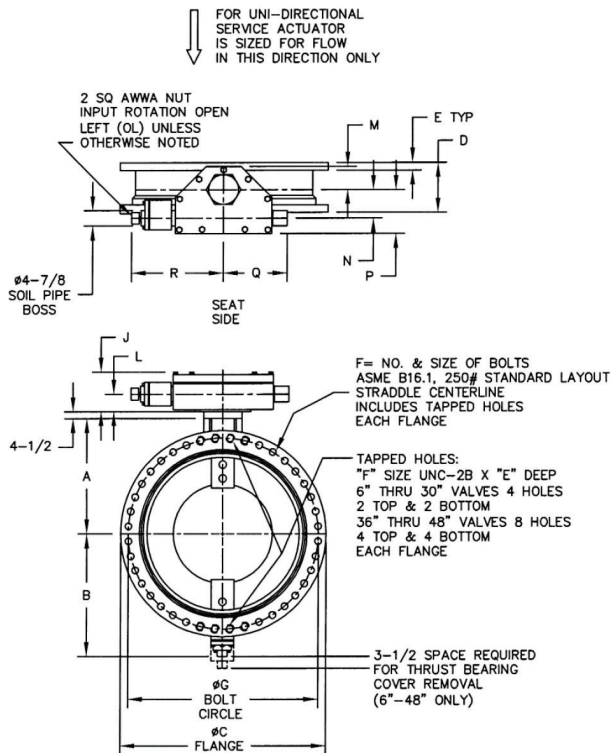
## 6" - 48" HP350 Flanged Ends, Manual Actuator



Valve Size	A	B	C	D	E	F	G
6"	7-1/4	8-3/8	12-1/2	6	1-7/16	12-3/4	10-5/8
8"	8-1/2	9-5/8	15	8	1-5/8	12-7/8	13
10"	9-3/4	11	17-1/2	8	1-7/8	16 - 1	15-1/4
12"	11-1/2	12-5/8	20-1/2	8	2	16 - 1-1/8	17-3/4
14"	12-3/4	13-7/8	23	12	2-1/8	20 - 1-1/8	20-1/4
16"	14	15-1/8	25-1/2	12	2-1/4	20 - 1-1/4	22-1/2
18"	15-1/4	16-3/8	28	12	2-3/8	24 - 1-1/4	24-3/4
20"	17	17-5/8	30-1/2	12	2-1/2	24 - 1/14	27
24"	19-3/4	20-1/4	36	12	2-3/4	24 - 1-1/2	32
30"	25-5/8	26	43	12	3	28 - 1-3/4	39-1/4
36"	28-1/8	31-1/8	50	15	3-3/8	32 - 2	46
42"	32-1/8	35-1/8	57	15	3-11/16	36 - 2	52-3/4
48"	36-1/4	39-5/8	65	15	4	40 - 2	60-3/4

\*See page 4 for MDT manual actuation dimensions.

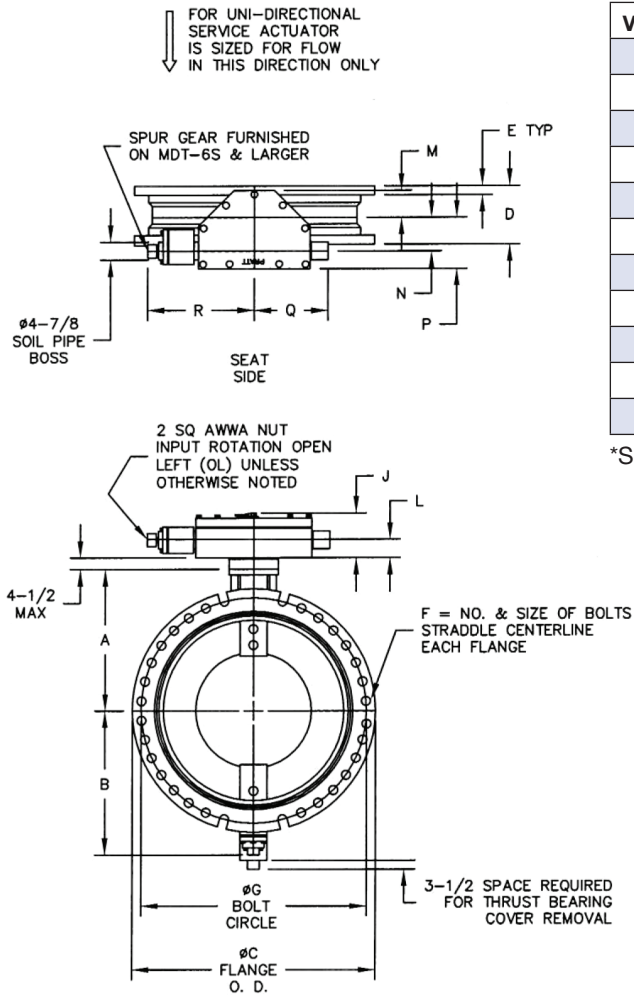
## 6" - 48" HP350 Flanged Ends, Buried Service Actuator



Valve Size	A	B	C	D	E	F	G
6"	7-1/4	8-3/8	12-1/2	6	1-7/16	12-3/4	10-5/8
8"	8-1/2	9-5/8	15	8	1-5/8	12-7/8	13
10"	9-3/4	11	17-1/2	8	1-7/8	16 - 1	15-1/4
12"	11-1/2	12-5/8	20-1/2	8	2	16 - 1-1/8	17-3/4
14"	12-3/4	13-7/8	23	12	2-1/8	20 - 1-1/8	20-1/4
16"	14	15-1/8	25-1/2	12	2-1/4	20 - 1-1/4	22-1/2
18"	15-1/4	16-3/8	28	12	2-3/8	24 - 1-1/4	24-3/4
20"	17	17-5/8	30-1/2	12	2-1/2	24 - 1/14	27
24"	19-3/4	20-1/4	36	12	2-3/4	24 - 1-1/2	32
30"	25-5/8	26	43	12	3	28 - 1-3/4	39-1/4
36"	28-1/8	31-1/8	50	15	3-3/8	32 - 2	46
42"	32-1/8	35-1/8	57	15	3-11/16	36 - 2	52-3/4
48"	36-1/4	39-5/8	65	15	4	40 - 2	60-3/4

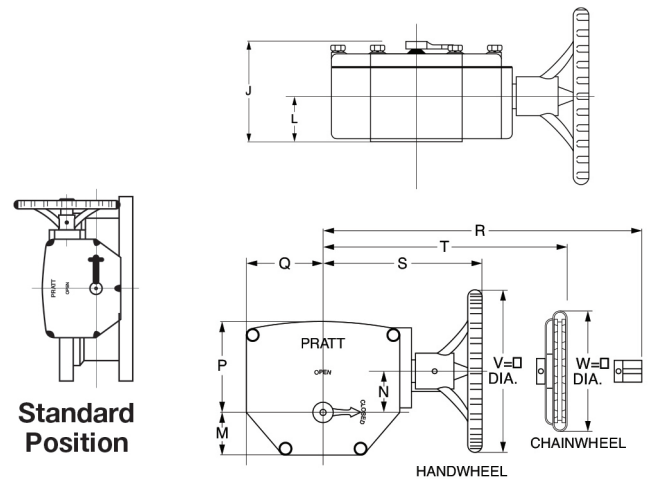
\*See page 4 for MDT manual actuation dimensions.

## 6" - 36" HP350 Mechanical Joint Ends, Manual Actuator



Valve Size	A	B	C	D	E	F	G
6"	7-1/4	8-3/8	11-1/16	10	1-1/16	6-3/4	9-1/2
8"	8-1/2	9-5/8	13-5/16	10	1-1/8	6-3/4	11-3/4
10"	9-3/4	11	15-5/8	10	1-3/16	8-3/4	14
12"	11-1/2	12-5/8	17-7/8	10	1-1/4	8-3/4	16-1/4
14"	12-3/4	13-7/8	20-1/4	12-1/2	1-5/16	10-3/4	18-3/4
16"	14	15-1/8	22-1/2	12-1/2	1-3/8	12-3/4	21
18"	15-1/4	16-3/8	24-3/4	13-1/4	1-7/16	12-3/4	23-1/4
20"	17	17-5/8	27	13-1/4	1-1/2	14-3/4	25-1/2
24"	19-3/4	20-1/4	31-1/2	13-1/4	1-5/8	16-3/4	30
30"	25-5/8	25-1/2	39	18	1-13/16	20 - 1-1/8	36-7/8
36"	28-1/8	30-5/8	45-7/8	22	2	24 - 1-1/8	43-3/4

\*See below for MDT manual actuation dimensions.



## MDT Manual Actuator Dimensional Data

MDT Size	J	L	M	N	P	Q	R	S	T	V	W	# Turns to Close
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
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
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
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	10-7/16	44
MDT-5S	8-5/16	3-15/16	5-1/2	3-5/8	10-1/2	15-15/16	18-5/8	-	-	-	-	136
MDT-6S	10-3/16	5-1/16	7	8-1/4	12-5/8	18-9/16	26-1/2	-	-	-	-	215

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