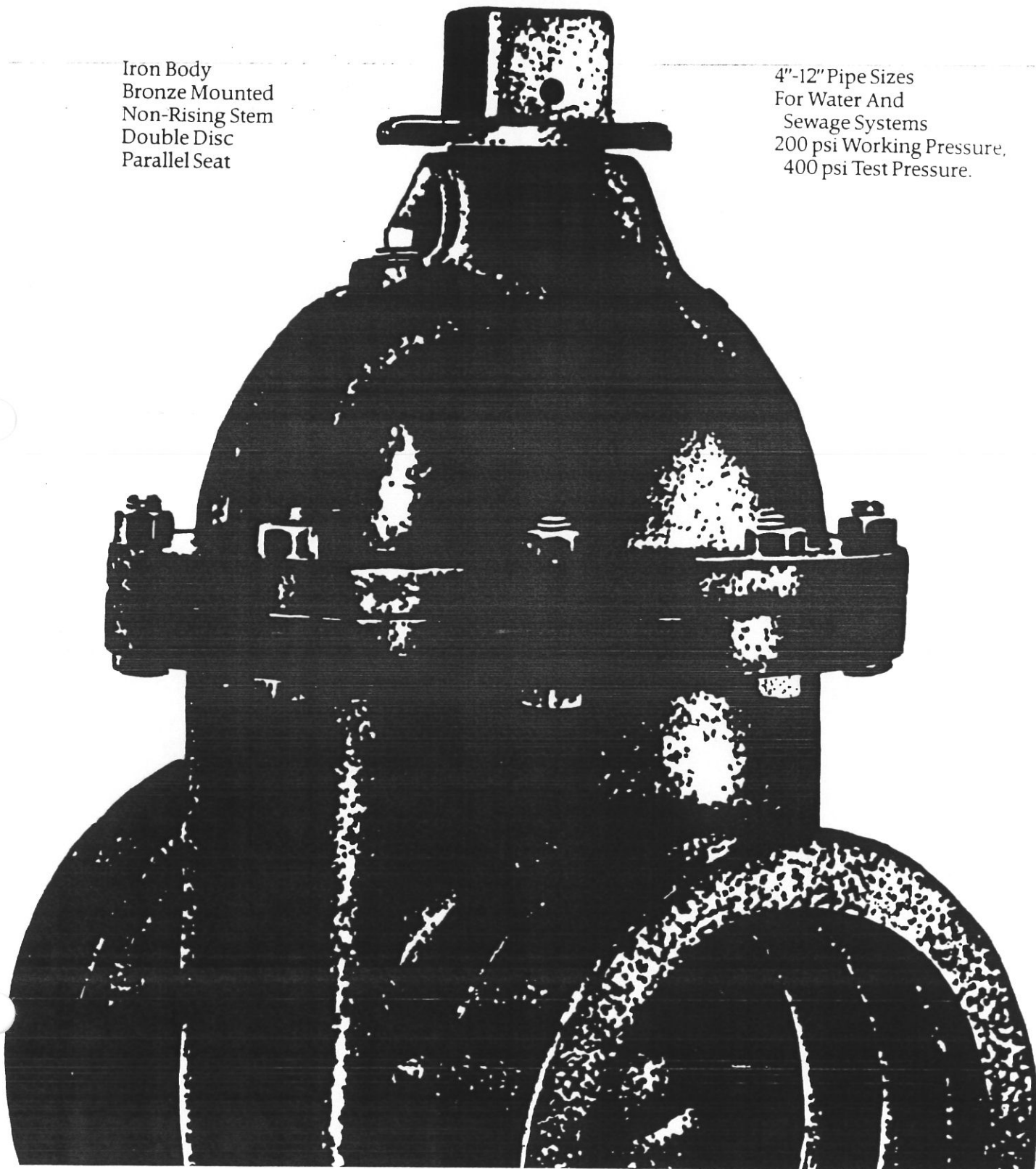


**U.S.
PIPE**

U.S. Pipe Hydra Gate[®] AWWA Gate Valve.

Iron Body
Bronze Mounted
Non-Rising Stem
Double Disc
Parallel Seat

4"-12" Pipe Sizes
For Water And
Sewage Systems
200 psi Working Pressure,
400 psi Test Pressure.



U.S. PIPE HYDRA

The HYDRA GATE® Valve is an iron body bronze mounted double disc gate valve designed and constructed to the requirements of AWWA C-500.

The HYDRA GATE® Valve has a number of features which assure easier and more reliable operation than valves of traditional design.

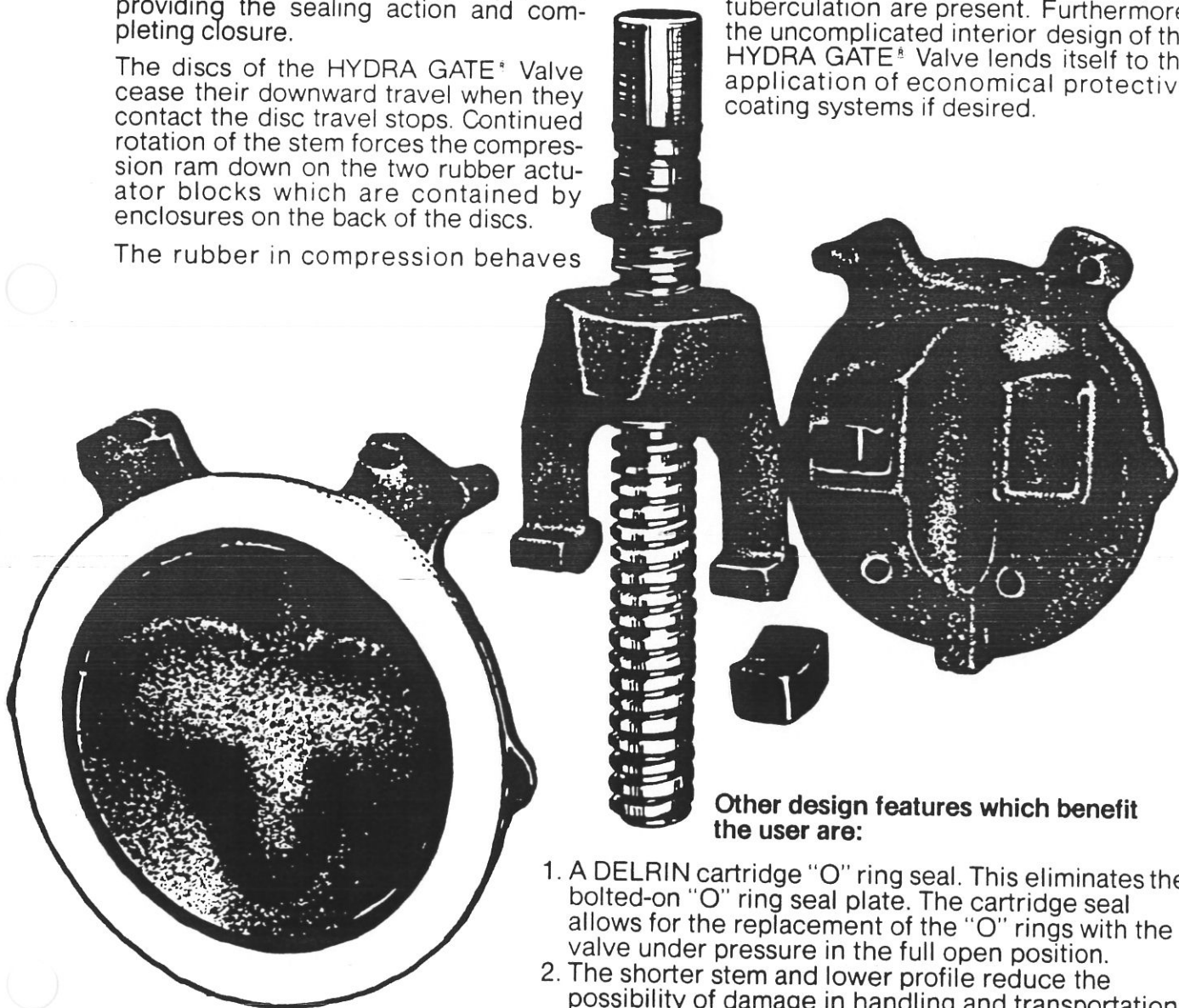
A double disc gate valve closes in two stages. In the first step, the downward travel of the two discs stops at a point where the disc and body rings coincide. In the next step, the disc actuating mechanism moves against the discs and pushes them apart so they press against the body rings, thus providing the sealing action and completing closure.

The discs of the HYDRA GATE® Valve cease their downward travel when they contact the disc travel stops. Continued rotation of the stem forces the compression ram down on the two rubber actuator blocks which are contained by enclosures on the back of the discs.

The rubber in compression behaves

much like hydraulic fluid in a cylinder. The downward force from the ram is transmitted through the rubber actuator blocks out against the discs, pressing them firmly against the disc rings in the valve body. Upon opening, the compression ram lifts, releasing pressure on the actuator blocks. The rubber relaxes and the discs in turn are released from their pressure against the body rings and can move upward freely.

Rubber actuator blocks are a simpler means of spreading the discs than metal wedges. Also, rubber blocks operate without friction, therefore, the HYDRA GATE® Valve operates more easily and reliably where sediment and tuberculation are present. Furthermore, the uncomplicated interior design of the HYDRA GATE® Valve lends itself to the application of economical protective coating systems if desired.

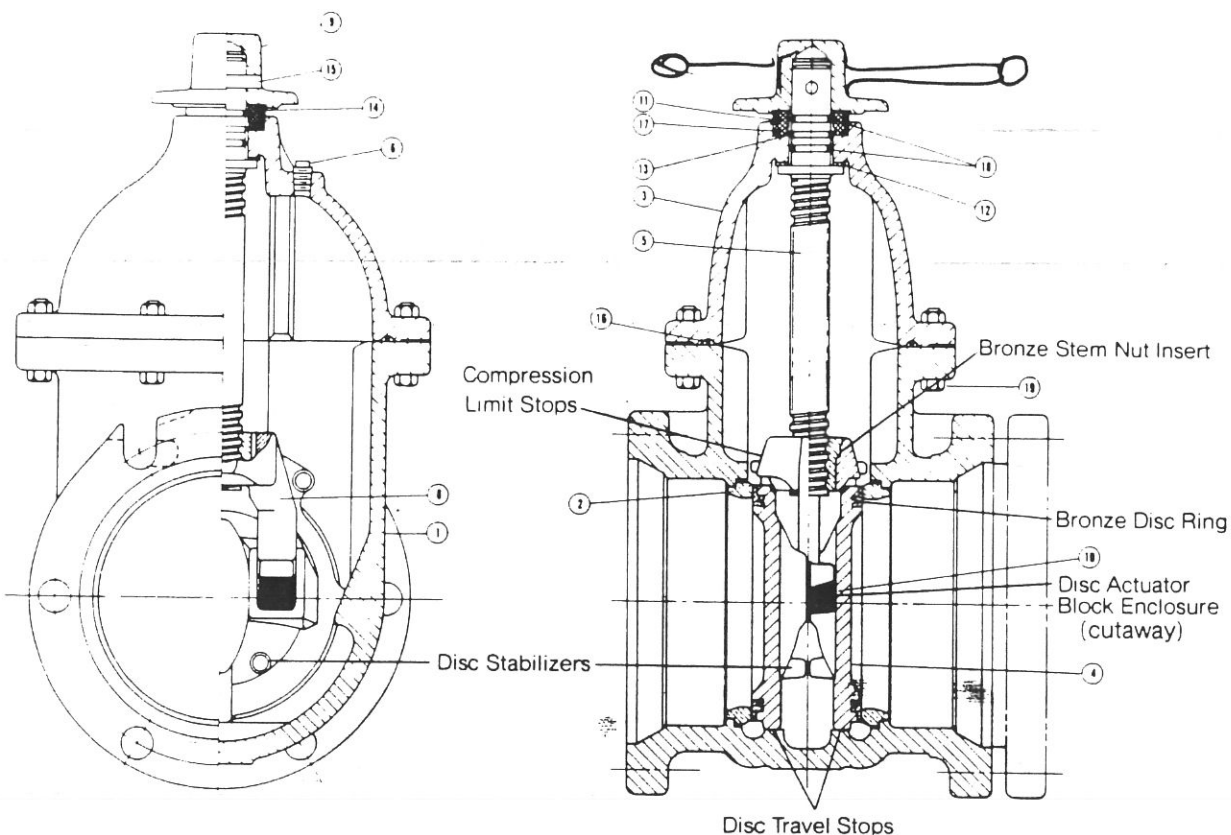


Other design features which benefit the user are:

1. A DELRIN cartridge "O" ring seal. This eliminates the bolted-on "O" ring seal plate. The cartridge seal allows for the replacement of the "O" rings with the valve under pressure in the full open position.
2. The shorter stem and lower profile reduce the possibility of damage in handling and transportation.
3. Disc stabilizers provide for exceptional performance under high velocity flow conditions.

HYDRA GATE® Valves are designed for a working pressure of 200 psi and tested at 400 psi.

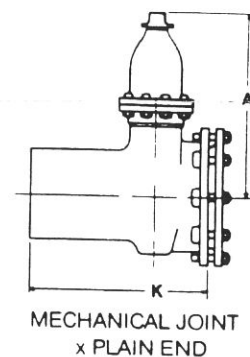
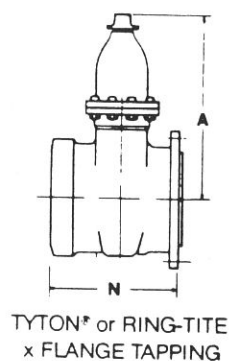
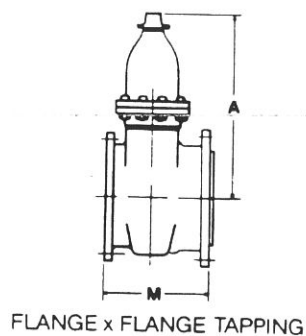
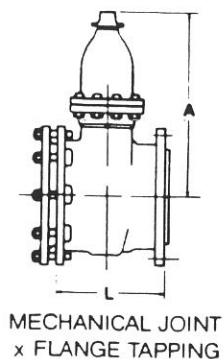
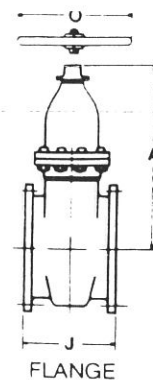
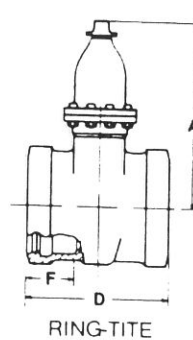
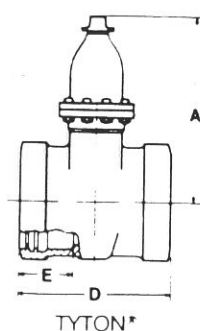
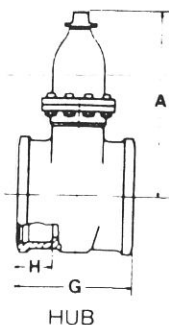
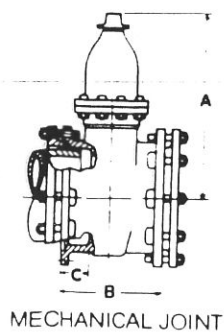
A GATE[®] VALVE



NO	DESCRIPTION	NO REQUIRED	MATERIAL
1	BODY	1	DUCTILE IRON
2	RING, BODY	2	BRONZE
3	BONNET	1	DUCTILE IRON
4	DISC WITH BRONZE DISC RING	2	CAST IRON & BRONZE
5	STEM	1	BRONZE
6	TEST PLUG	1	IRON
8	6-12" COMPRESSION RAM ASSEMBLY WITH BRONZE INSERT (4" SIZE IS ALL BRONZE)	1	DUCTILE IRON
9	OPERATING NUT	1	CAST IRON
10	ACTUATOR BLOCKS	2	RUBBER
11	CARTRIDGE SEAL PACK	1	DELFIN
12	THRUST WASHER	1	DELFIN (8" BRONZE)
13	RETAINER RING	1	DELFIN
14	DIRT SEAL	1	RUBBER
15	SHEAR PROOF PIN	1	STEEL-RUST PROOFED
16	BODY/BONNET SEAL	1	RUBBER
17	"O" RING	1	RUBBER
18	"O" RING	2	RUBBER
19	BODY/BONNET BOLTS & NUTS		STEEL-RUST PROOFED

All parts conform to AWWA C-500

See back cover for exterior dimensions.



SIZES	4	6	8	10	12
A Centerline to top	12 $\frac{7}{16}$	15 $\frac{1}{16}$	19	24 $\frac{3}{16}$	27
B MECHANICAL JOINT—end to end	9 $\frac{5}{8}$	10 $\frac{1}{2}$	11 $\frac{1}{2}$	13	14
C MECHANICAL JOINT—socket depth	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$
D TYTON* & RING-TITE—end to end	11	12 $\frac{3}{4}$	14 $\frac{1}{4}$	15 $\frac{5}{8}$	16 $\frac{5}{8}$
E TYTON*—socket depth	3 $\frac{5}{16}$	3 $\frac{5}{16}$	3 $\frac{7}{8}$	3 $\frac{7}{8}$	3 $\frac{7}{8}$
F RING-TITE—socket depth	3 $\frac{5}{16}$	4	4 $\frac{1}{2}$	5	5 $\frac{5}{16}$
G HUB—end to end	11 $\frac{5}{8}$	12 $\frac{3}{4}$	13 $\frac{1}{4}$	13 $\frac{5}{8}$	14 $\frac{1}{4}$
H HUB—socket depth	4	4	4	4	4
J FLANGE—end to end	9	10 $\frac{1}{2}$	11 $\frac{1}{2}$	13	14
K MECHANICAL JOINT x PLAIN END—end to end	15 $\frac{5}{16}$	17 $\frac{5}{16}$	18 $\frac{5}{16}$	19 $\frac{5}{16}$	20 $\frac{13}{16}$
L MECHANICAL JOINT x TAPPING FLANGE—end to end	11 $\frac{1}{4}$	14 $\frac{1}{8}$	15 $\frac{5}{8}$	16 $\frac{3}{8}$	16 $\frac{5}{8}$
M FLANGE x TAPPING FLANGE—end to end	11 $\frac{1}{4}$	13 $\frac{3}{8}$	15 $\frac{5}{8}$	16 $\frac{3}{8}$	16 $\frac{5}{8}$
N TYTON* or RING-TITE x TAPPING FLANGE	11 $\frac{1}{4}$	14 $\frac{1}{8}$	15 $\frac{5}{8}$	16 $\frac{3}{8}$	16 $\frac{5}{8}$
O HANDWHEEL O.D.	9	11	13	15	19
P No. turns to operate	14 $\frac{1}{4}$	20 $\frac{1}{4}$	26 $\frac{1}{2}$	33	39



Valve & Hydrant Products
United States Pipe & Foundry Company
 Birmingham, Alabama 35202 Telephone: (205)254-7215

02-005031
 HGV1-86