AMES
FIRE & WATERWORKS

COLT SERIES EXCELLENCE MATTERS – SPECIFY IT!

400 REDUCED PRESSURE PRINCIPLE ASSEMBLY

500 REDUCED PRESSURE PRINCIPLE DETECTOR ASSEMBLY

COLT FEATURES

BACKFLOW ASSEMBLIES

- Closest competitor is more than 200% heavier
- Most compact design in the industry
- Entire valve body and closure sleeve manufactured from 300 Series Stainless Steel

THE AMES CHALLENGE

AMES offers the best performing, easiest to service, lowest installed cost backflow assemblies in the industry. We challenge any backflow manufacturer to disprove these claims, through authorized, 3rd party testing.

- Approved with gate valves or UL/FM butterfly valves
- Approved in horizontal, "N" pattern or "Z" pattern installations

CHECK OUR WEBSITE FOR APPROVAL UPDATES!

- Utilizes groove connections for ease of installation & pipe alignment
- Patented Link-check assemblies allow ease of serviceability
- Smallest enclosure
- Made in USA

The AMES Challenge

Lay Length
Compare 4" Reduced Pressure Assembly w/ Shutoff Valves

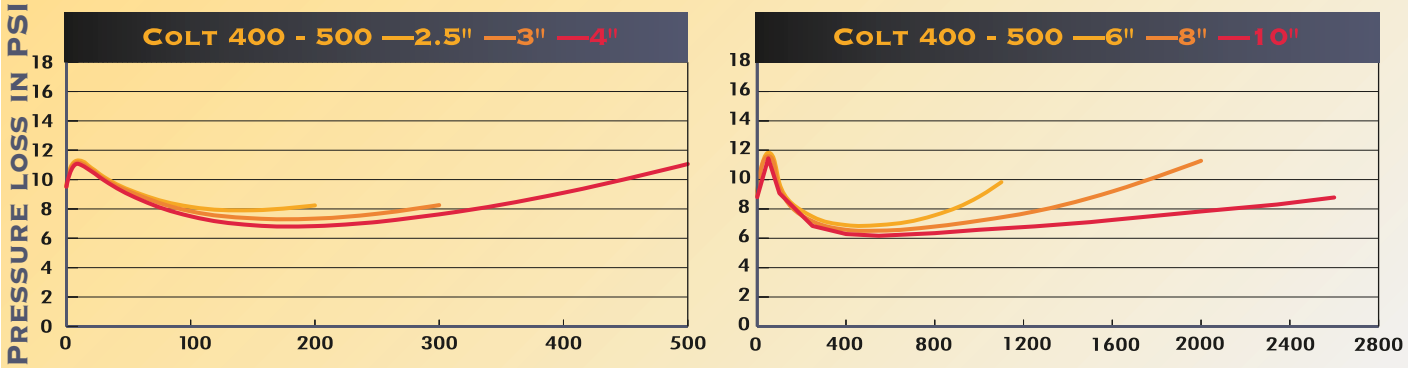
Backflow Assembly	Lay Length (in)	% Longer Than AMES
Colt 400N W/BFG	35.62	
Febco 860 W/OS&Y - GPC 3/01	46.25	23%
Wilkins 375 W/OS&Y - BF 375	37.5	5%

Assembly Weight
Compare 4" Reduced Pressure Assembly w/ Shutoff Valves

Backflow Assembly	Assembly Weight (LBS)	% Heavier Than AMES
Colt 400N W/BFG	87	
Febco 860 W/OS&Y - GPC 3/01	334	384%
Wilkins 375 W/OS&Y - BF 375	288	202%

Engineering the Curve

Colt 400/500 Certified Flow Characteristics (Including OS&Y shut-offs)



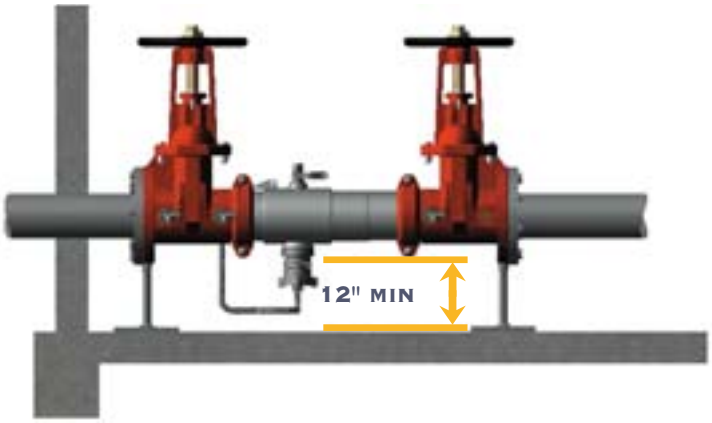
Installation Guidelines

Most field problems occur because dirt or debris present in the system at the time of installation becomes trapped in the 1st check seating area resulting in a low or zero differential across the 1st check. **The system should be flushed before the backflow valve is installed.** If the system is not flushed until after the backflow valve is installed, remove both check modules from the valve and open the inlet shut-off to allow water to flow for a sufficient time to flush debris from the water line. If debris in the water system continues to cause fouling, a strainer can be installed upstream of the backflow assembly.

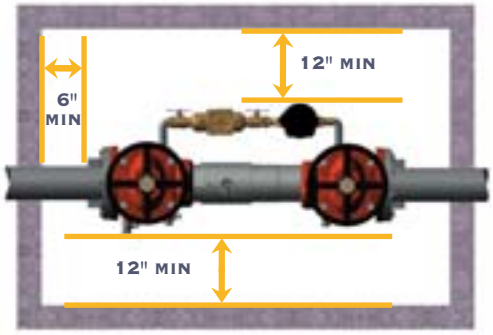
AMES models 400 & 500 may be installed in either **horizontal, "N" pattern, or "Z" pattern** as long as the backflow assembly is installed in accordance with the direction of the flow arrow on the assembly and the local water authority approves the installation.

The assembly should be installed with adequate clearance around the valve to allow for inspection, testing, and servicing. Twelve inches should be the minimum clearance between the lower portion of the assembly and the floor or grade.

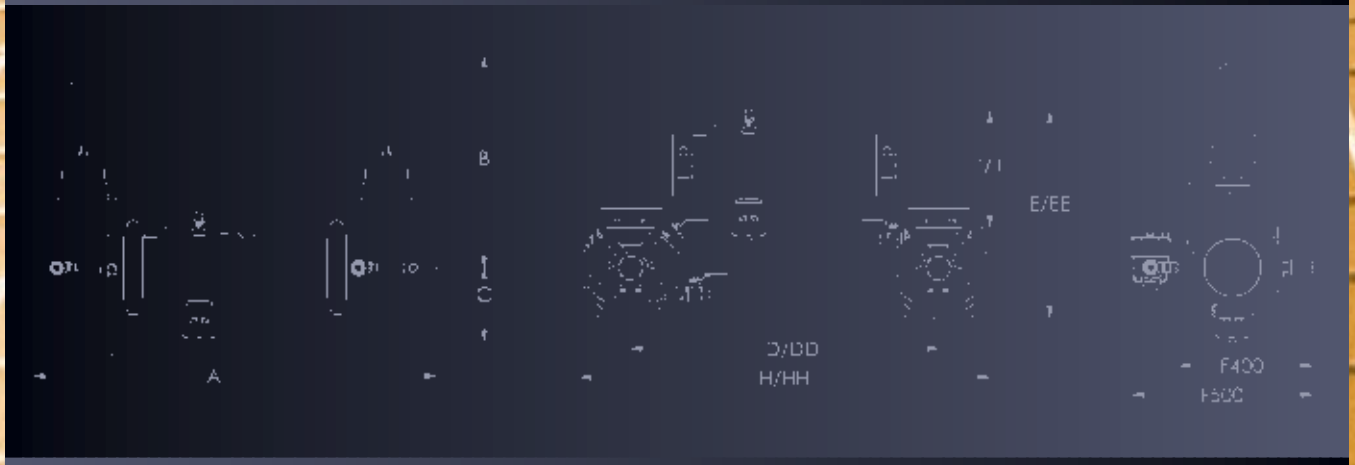
Interior Installation



Enclosure Installation



Colt 400/500 Dimensions & Weight

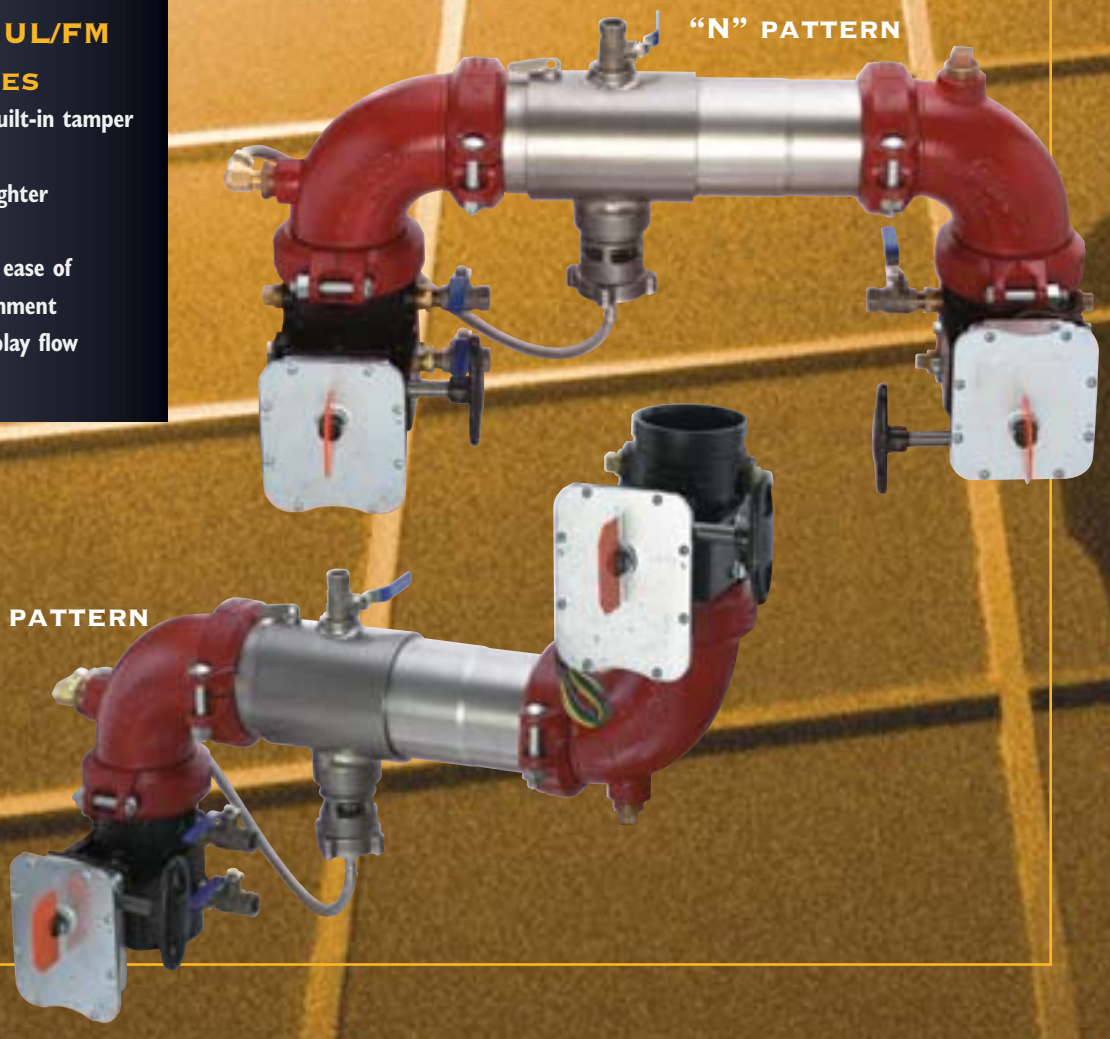


	W/ Gate Valves (in.)											W/ UL/FM Butterfly Valves (in.)						
Size	A	OS&Y B	NRS B	C	D	E	H	I	F/400	F/500	OS&Y Weight	DD	EE	HH	II	F/400	F/500	N BFG Weight
2½"	31	16 3/8	9 3/8	6 1/2	22	15 1/2	29 1/16	8 13/16	9 3/16	13 3/16	128 lbs	23 1/2	15 1/2	32 1/2	9 1/2	11 13/16	15 13/16	67 lbs
3"	31 11/16	18 7/4	10 1/4	6 11/16	22 3/4	17 1/8	30 1/4	9 3/16	10 1/2	14 1/2	148 lbs	24 1/2	16 5/16	34	10 1/16	12 1/8	16 1/8	70 lbs
4"	33 11/16	22 3/4	12 3/16	7	24	18 1/2	33	9 15/16	11 3/16	15 3/16	164 lbs	26	17 3/16	35 5/8	10 15/16	12 5/8	16 5/8	87 lbs
6"	43½	30 1/8	16	8 1/2	33 3/4	23 3/16	44 3/4	13 1/16	15	19	298 lbs	35 3/4	20 1/2	46 1/2	13 1/2	15	19	160 lbs
8"	50	37 3/4	19 15/16	9 11/16	40 5/8	27 7/16	54 1/8	15 11/16	17 3/16	21 3/16	483 lbs							
10"	57 1/2	45 3/4	23 13/16	11 3/16	50	32 1/2	66	17 5/16	20	24	783 lbs							

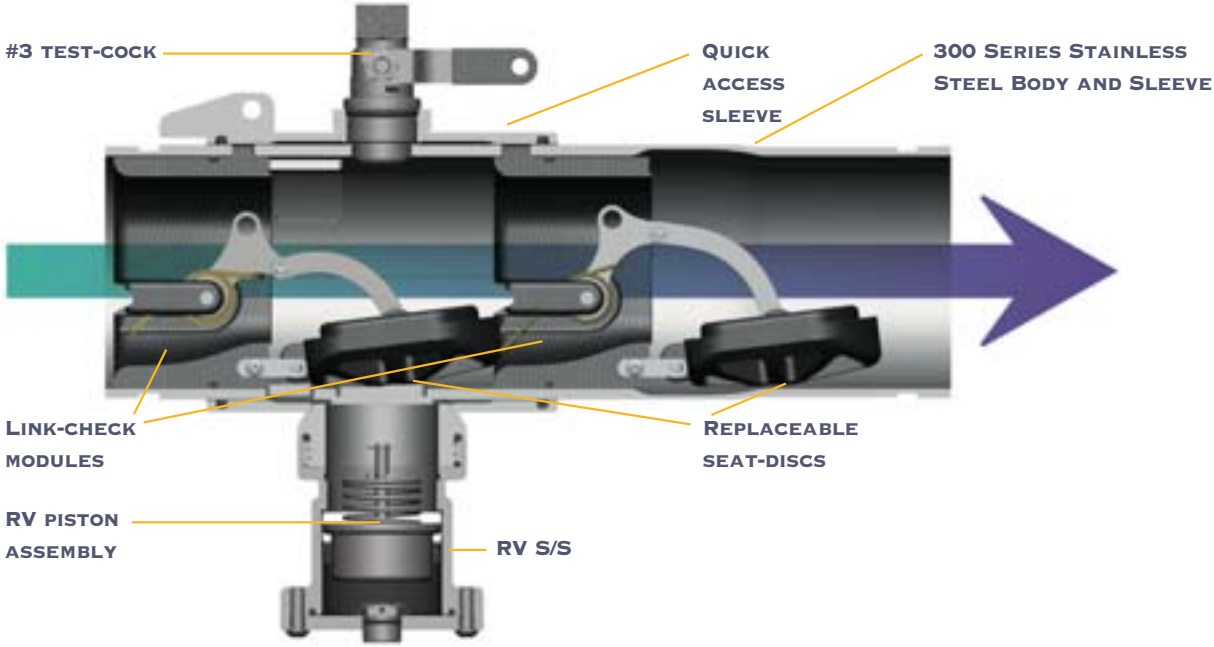
UL/FM Butterfly Valves Available for Shutoff Valves

Advantages of UL/FM Butterfly Valves

- Butterfly valves have built-in tamper switch wiring
- Backflow assembly is lighter & more compact
- Groove couplings allow ease of installation & pipe alignment
- All butterfly valves display flow indicator flag



Cutaway View - Full Flow Operation



Normal Operation

In normal flowing operation the independent check valves will be open and the pressure differential relief valve located between the two check valves, the area called the zone, will automatically open and close to maintain the zone pressure at least 2psi lower than the inlet pressure. If demand for flow stops, the differential pressure relief valve will automatically open and discharge water to maintain the zone at a pressure of 2psi lower than the inlet pressure. After the pressure differential is reestablished, the differential pressure relief valve will automatically close.

Applications – Colt 400

Reduced Pressure Principle Backflow Assemblies (RP's) provide protection to the potable water system from contamination in accordance with national plumbing codes. RP's are normally used in high-hazard applications for protection against both back siphonage, backpressure and the fouling of either check valve.

Applications – Colt 500

Reduced Pressure Principle Detector Assemblies (RPDA) are installed on fire protection systems connected to the public water supply in a high-hazard application. In addition to the features of the Colt 400, the Colt 500 is used to monitor unauthorized use of water from the fire protection system.

Specifications

The Reduced Pressure Backflow Assembly shall consist of two independent Link-check modules, a differential pressure relief valve located between and below the two modules, drip tight inlet and outlet shutoff valves, and required test cocks. Both check modules and the relief valve shall be contained within a sleeve accessible single housing constructed from 300 series stainless steel with groove end connections. Link-checks shall have reversible elastomer disks and in operation shall produce drip tight closure against the reverse flow of liquid caused by back pressure or back siphonage. Assembly shall be manufactured in the USA. Assembly shall be COLT 400/500 manufactured by AMES of Sacramento, California.

Characteristics and Materials

Rated Working Pressure
175psi

Temperature Range
33°F – 110°F

Body Construction
300 Series Stainless Steel

End Connection
Groove per AWWA C-606 (IPS) or Flange per ANSI B16.1, Class 125

AMES™
FIRE & WATERWORKS

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Patent Pending