

Series 990 Reduced Pressure Zone Backflow Preventers 4", 6", 8"

MODELS

NRS RW - with non-rising stem resilient wedge gate valves (Standard)
S - with FDA approved epoxy coated strainer
OSYRW - with (UL/FM) outside stem & yoke resilient wedge gate valves
QT-FDA - with FDA approved epoxy coated, full port, resilient seated ball valve shut-offs

MATERIALS

No. 990 sizes 4" - 8" have FDA approved epoxy coated ductile iron check valve bodies with bronze seats and bronze relief valve with stainless steel trim (4", 6") and FDA approved epoxy coated iron relief valve with stainless steel trim (8"). All sizes furnished with bronze body ball valve test cocks.

FEATURES

- Replaceable bronze seats
- Fused epoxy coated & lined
- Stainless steel reinforced sensing hose
- No special tools required for normal maintenance
- Stainless steel internal parts
- Captured spring assemblies

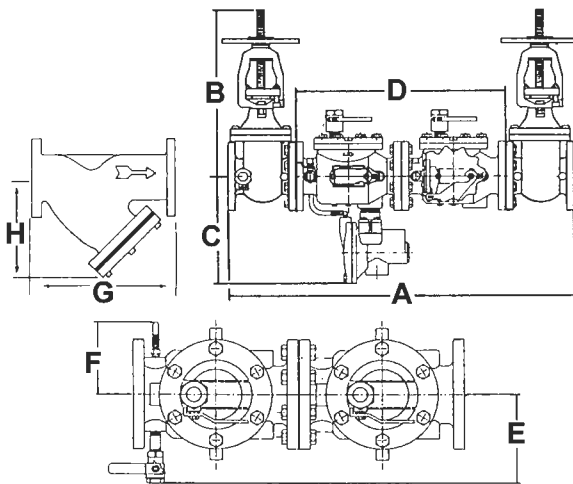
DESCRIPTION

The Watts Series 990 Reduced Pressure Zone Backflow Preventers are designed to provide cross-connection control protection of the potable water supply in accordance with national plumbing codes. This series can be utilized in a variety of installations, including health hazard cross-connections in piping systems or for containment at the water meter service line entrance.

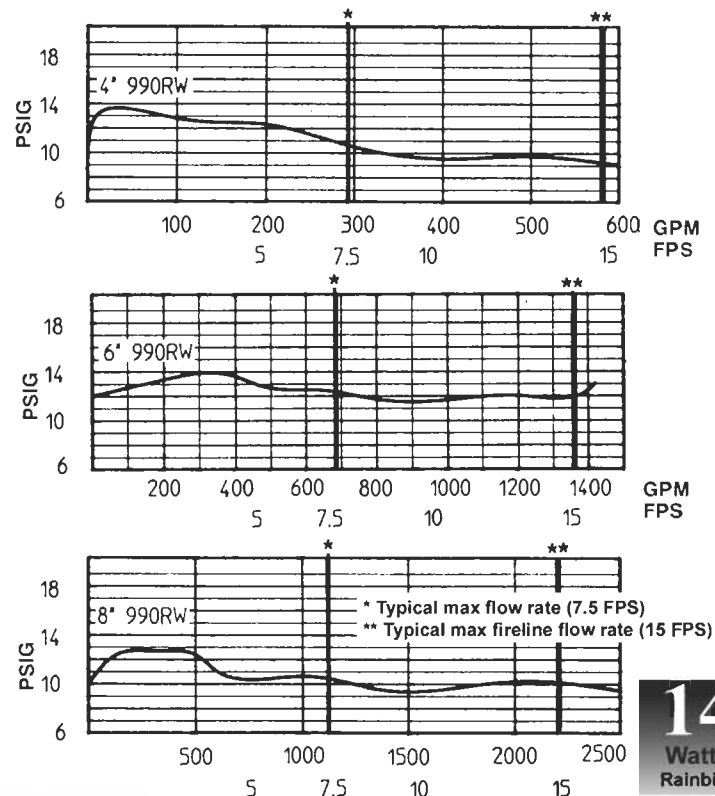
PRESSURE - TEMPERATURE

Suitable for supply pressure up to 175 psi and water temperatures to 110°F.

DIMENSIONS & WEIGHTS



FLOW CURVES



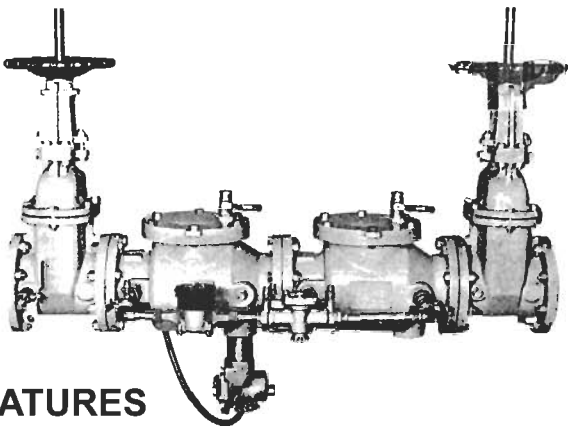
Size (Inches)	Dimensions (Inches)									Weight (lbs.)			(Optional) 77F-D-FDA Strainer
	A	QS&Y	NRS	C	D	E	F	G	H	NRSRW	OSYRW	QTFDA	
4	47 1/8	23 3/8	15 1/2	16 1/2	28 1/8	7 1/8	9 3/16	12	8 1/4	327	349	267	63
6	58 1/2	30	19 3/8	18	37 3/8	8 1/16	10	18 1/2	13 1/2	587	615	521	150
8	70 3/8	40	24	19 13/16	46 3/8	8 3/4	8 9/16	21 5/8	15 1/2	1067	1121	1763	275



990 RPDA

Reduced Pressure Detector Assembly

4", 6", 8"



FEATURES

- Fused epoxy coated ductile iron body
- Stainless steel internal parts
- Design simplicity for easy maintenance
- Furnished with 5/8" x 3/4" meter
- Replaceable seats & discs
- Maximum flow at low pressure drop
- Compact for economy, combined with performance

DESCRIPTION

Series 990 RPDA is designed exclusively for use in accordance with water utility authority containment requirements. It's use prevents the reverse flow of fire protection system substances, i.e., glycerin wetting agents, stagnant water and water of non-potable quality from being pumped or siphoned into the potable water line.

BENEFITS: Detects leaks . . . with emphasis on the cost of unaccountable water; incorporates a meter which allows the water utility to:

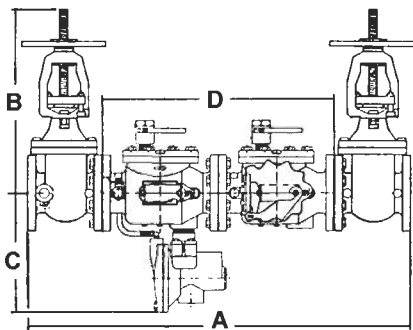
- Detect leaks, minimizing the losses that can occur due to water damage or sprinkler system failure.
- Provide a detection point for unauthorized use.

Modular check design concept facilitates maintenance and assembly access. All sizes are standardly equipped with AWWA epoxy coated UL/FM listed OS&Y resilient wedge gate valves, CFM (cubic feet per minute) meter or optional GPM (gallon per minute) meter and ball type test cocks. A pressure differential relief valve is located in a zone between the check valves.

PRESSURE - TEMPERATURE

Suitable for supply pressure up to 175 psi and water temperatures to 110°F.

DIMENSIONS & WEIGHT



Size	Dimensions (Inches)						WEIGHT(lbs.)
	A	B	C	D	E	F	
4	47 1/8	23 3/8	16 1/2	28 3/8	15	9 3/16	364
6	58 1/2	30	18	37 3/8	17	10	631
8	70 3/8	40	19 13/16	46 3/8	18 1/2	8 13/16	1138

MODELS

Suffix:

OS&Y RW - with outside stem & yoke resilient wedge gate valves

CFM - with cubic feet per minute meter

GPM - with gallons per minute meter

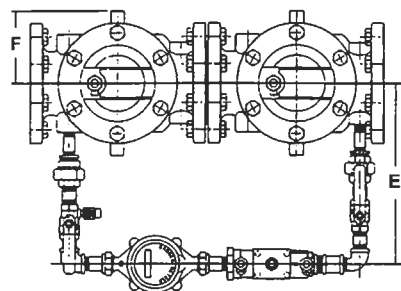
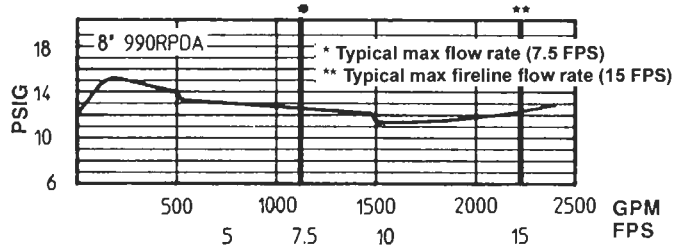
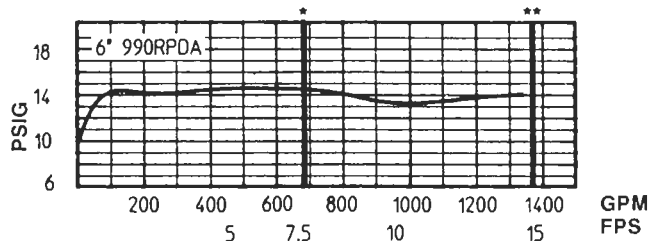
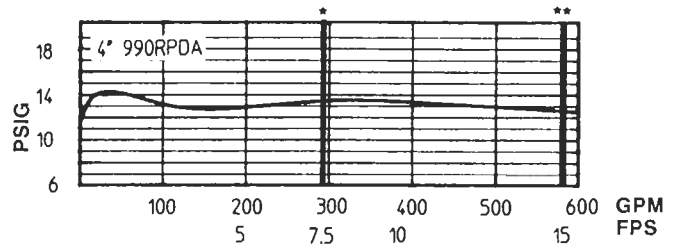
LF - less gate valves

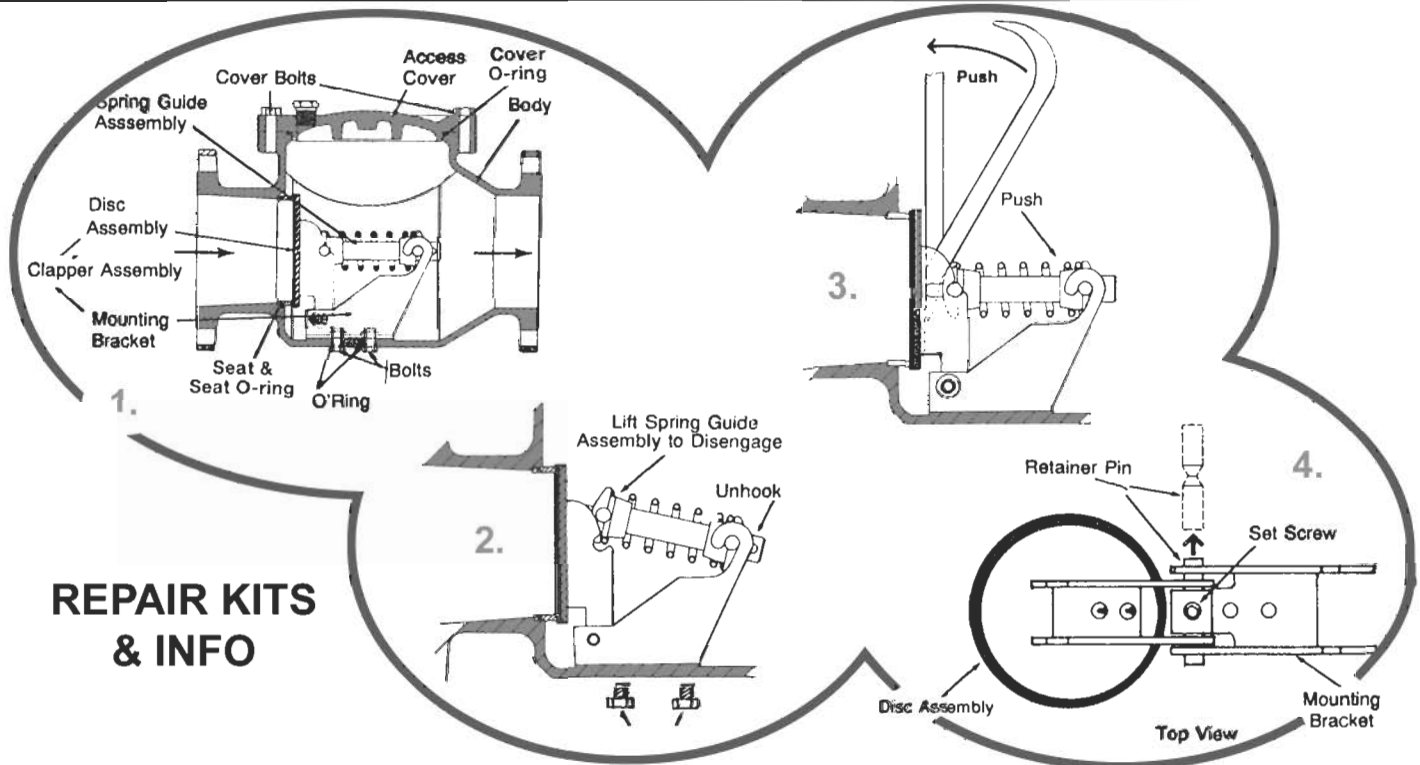
MATERIALS

No. 990RPDA sizes 4" - 8" have FDA approved epoxy coated ductile iron check valve bodies with bronze seats and bronze relief valve with stainless steel trim (4", 6") and FDA approved epoxy coated iron relief valve with stainless steel trim (8").

All sizes furnished with bronze body ball valve test cocks.

FLOW CURVES





REPAIR KITS & INFO

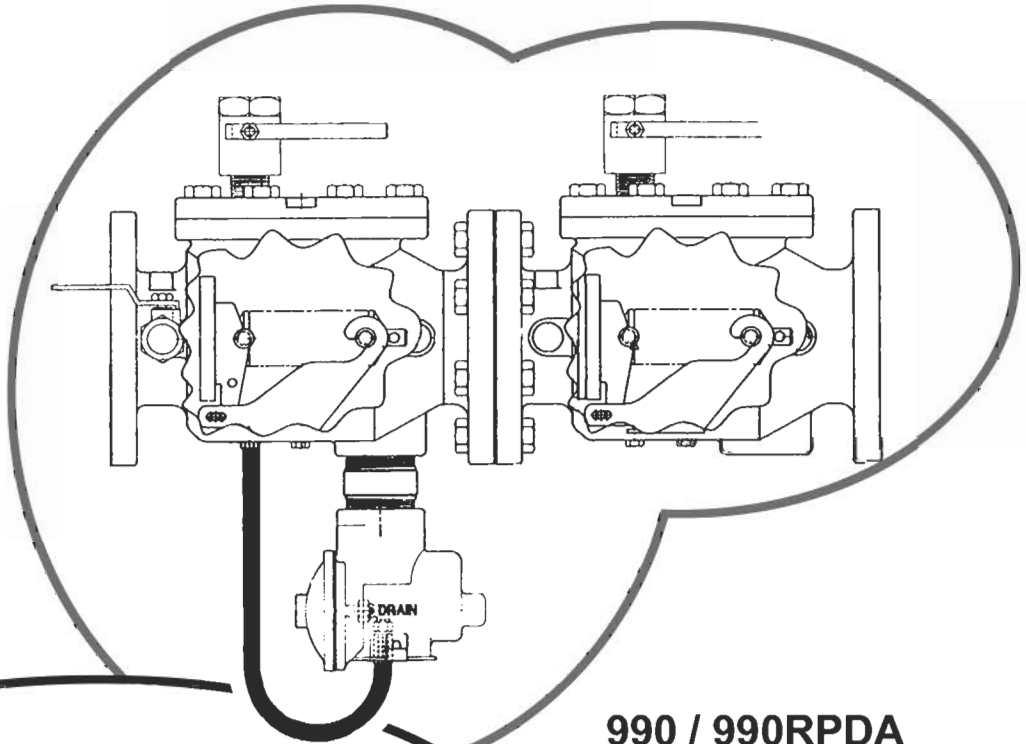
Series 990

EDP No.	Kit No.	Size
First Check Repair Kits:		
887315	RK 990 CK1	4"
887316	RK 990 CK1	6"
887317	RK 990 CK1	8"
Second Check Repair Kits:		
887318	RK 990 CK2	4"
887319	RK 990 CK2	6"
887320	RK 990 CK2	8"
Kit consists of: spring assembly and cover o-ring.		
Check Rubber Parts:		
887321	RK 990 RC4	4"
887322	RK 990 RC4	6"
887323	RK 990 RC4	8"
Kit consists of: cover o-ring, two bolt o-rings and disc assembly for one check.		
Seat Kits:		
887330	RK 990 S	4"
887331	RK 990 S	6"
887332	RK 990 S	8"
Kit consists of: seat and seat o-ring for one check.		
Total Kits		
Complete Rubber Parts:		
887333	RK 990 RT	4"
887334	RK 990 RT	6"
887335	RK 990 RT	8"
Kit consists of: two cover o-rings, four bolt o-rings, two disc assemblies, one relief valve diaphragm, relief valve cover o-ring, piston o-ring, relief valve seat disc and seat o-ring.		
Complete Repair Kits:		
887336	RK 990 T	4"
887337	RK 990 T	6"
887338	RK 990 T	8"
Kit consists of: two cover o-rings, four bolt o-rings, two disc assemblies, two spring assemblies, relief valve, stem assembly, seat o-ring and cover o-ring.		

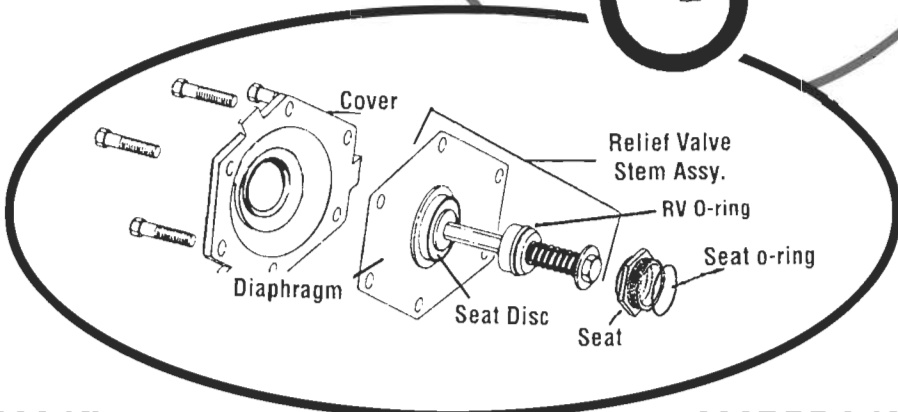
Series 990RPDA

EDP No.	Kit No.	Size
First Check Repair Kits:		
887340	RK 990RPDA CK1	4"
887341	RK 990RPDA CK1	6"
887342	RK 990RPDA CK1	8"
Second Check Repair Kits:		
887343	RK 990RPDA CK2	4"
887344	RK 990RPDA CK2	6"
887345	RK 990RPDA CK2	8"
Kit consists of: spring assembly and cover o-ring.		
Check Rubber Parts:		
887346	RK 990RPDA RC4	4"
887347	RK 990RPDA RC4	6"
887348	RK 990RPDA RC4	8"
Kit consists of: cover o-ring, two bolt o-ring and disc assembly for one check.		
Seat Kits:		
887352	RK 990RPDA S	4"
887353	RK 990RPDA S	6"
887354	RK 990RPDA S	8"
Kit consists of: seat and seat o-ring for one check.		
Total Kits		
Complete Rubber Parts:		
887361	RK 990RPDA RT	4"
887362	RK 990RPDA RT	6"
887363	RK 990RPDA RT	8"
Kit consists of: two cover o-rings, four bolt o-rings, two disc assemblies, one relief valve diaphragm, relief valve cover o-ring, piston o-ring, relief valve seat disc and seat o-ring.		
Complete Repair Kits:		
887349	RK 990RPDA T	4"
887350	RK 990RPDA T	6"
887351	RK 990RPDA T	8"
Kit consists of: two cover o-rings, four bolt o-rings, two disc assemblies, two spring assemblies, relief valve, stem assembly, seat o-ring and cover o-ring.		

REPAIR KITS CONTINUED



**990 / 990RPDA
Relief Valve**



990 Kits

EDP No.	Kit No.	Size
Relief Valve Total:		
887327	RK 990 VT	4"
887328	RK 990 VT	6"
887329	RK 990 VT	8"
Kit consists of: relief valve stem assembly, seat o-ring.		
Relief Valve Rubber Parts:		
887324	RK 990 RV	4"
887325	RK 990 RV	6"
887326	RK 990 RV	8"
Kit consists of: relief valve diaphragm, piston o-rings, seat disc, seat o-ring.		

990RPDA Kits

EDP No.	Kit No.	Size
Relief Valve Total:		
887358	RK 990RPDA VT	4"
887359	RK 990RPDA VT	6"
887360	RK 990RPDA VT	10"
Kit consists of: relief valve stem assembly, seat o-ring.		
Relief Valve Rubber Parts:		
887361	RK 990RPDA RV	4"
887362	RK 990RPDA RV	6"
887363	RK 990RPDA RV	8"
Kit consists of: relief valve diaphragm, piston o-rings, seat disc, seat o-ring.		