

INTERNATIONAL**Clack™  Control Valves***In our 10th year.***Clack versus Fleck and GE 3/4" and 1" Control Valve Comparison****WS1****WS1CI****WS1EI****WS1TC**

SPECIFICATIONS	CLACK WS1 SERIES	FLECK 5600	FLECK 2510	FLECK 2750	FLECK 9000	FLECK 9100	GE 255	GE 263/268
Control Valve Size	1"	3/4"	3/4"	1"	3/4"	3/4"	3/4"	1"
Service @ 1 bar/ 15 psi drop	102 lpm (1) 27 gpm (1)	76 lpm 20 gpm	72 lpm 19 gpm	98 lpm 26 gpm	68 lpm 18 gpm with 3/4" Mechanical Meter 80 lpm 21 gpm with 1" Mechanical Meter	69 lpm 18.2 gpm with 3/4" Mechanical Meter 73 lpm 19.4 gpm with 3/4" Electronic Meter 76 lpm 20.1 gpm with 1" Mechanical Meter	57 lpm 15 gpm	95 lpm 25 gpm
Backwash @ 1.7 bar/ 25 psi drop	102 lpm (2) 27 gpm (2)	27 lpm 7 gpm	64 lpm 17 gpm	95 lpm 25 gpm	32 lpm 8.5 gpm	32 lpm 8.5 gpm	23 lpm 6 gpm	76 lpm 20 gpm
Tank Applications: Softener (3) Filter (4)	6" - 21" dia. 6" - 21" dia.	6" - 12" dia. 6" - 10" dia.	6" - 16" dia. 8" - 16" dia.	10" - 24" dia. 10" - 21" dia.	6" - 16" dia. NA	6" - 16" dia. NA	6" - 14" dia. 6" - 10" dia.	7" - 14" dia. 7" - 18" dia.
Meter Specification	.95 - 102 lpm .25 - 27 gpm ± 5% Accuracy	.95 - 57 lpm .25 - 15 gpm ± 5% Accuracy	.95 - 57 lpm .25 - 15 gpm ± 5% Accuracy	.95 - 57 lpm .25 - 15 gpm with 3/4" Mechanical Meter 2.6 - 151 lpm .7 - 40 gpm with 1" Mechanical Meter	.95 - 57 lpm .25 - 15 gpm with 3/4" Mechanical Meter 2.6 - 151 lpm .7 - 40 gpm with 1" Mechanical Meter	.95 - 57 lpm .25 - 15 gpm with 3/4" Mechanical Meter 2.6 - 151 lpm .7 - 40 gpm with 1" Mechanical Meter	Not Listed	Not Listed
Twin Capability	Yes - WS1CI WS1EI	NA	Yes	Yes	Yes	Yes	Yes	Yes

1. Includes meter and bypass
2. Includes bypass
3. Softener tank size calculated @ 204 lpm per m² of bed area/5 gpm of backwash per square foot of bed depth
4. Filter tank size calculated @ 407 lpm per m² of bed area/10 gpm of backwash per square foot of bed area

All the data acquired for Fleck and GE Control Valves was taken from manufacturers specification sheets from their respective websites on January 20, 2009.

INTERNATIONAL**Clack™  Control Valves***In our 10th year.*

Clack versus Fleck and GE 1.25" Control Valve Comparison

**WS1.25****WS1.25CI****WS1.25EI****WS1.25TC**

SPECIFICATIONS	CLACK WS1.25 SERIES	FLECK 7000	GE 273/278
Control Valve Size	1.25"	1.25"	1"
Service @ 1 bar/ 15 psi drop	129 lpm (1) 34 gpm (1)	106 lpm - Standard Piston 28 gpm - Standard Piston 136 lpm - High Flow Piston 36 gpm - High Flow Piston 140 lpm - Filter Piston 37 gpm - Filter Piston	95 lpm 25 gpm
Backwash @ 1.7 bar/ 25 psi drop	121 lpm (2) 32 gpm (2)	27 lpm - Standard Piston 7 gpm - Standard Piston 61 lpm - High Flow Piston 16 gpm - High Flow Piston 117 lpm - Filter Piston 31 gpm - Filter Piston	76 lpm 20 gpm
Tank Applications: Softener (3) Filter (4)	6" - 21" dia. 6" - 24" dia.	8" - 24" dia. 8" - 24" dia.	7" - 24" dia. 7" - 18" dia.
Meter Specification	.95 - 129 lpm .25 - 34 gpm ± 5% Accuracy	7.6 - 151 lpm 2 - 40 gpm +5 / -8% Accuracy	1.9 - 95 lpm .50 - 25 gpm ± 3% Accuracy
Twin Capability	Yes - WS1.25CI WS1.25EI	NA	Yes

1. Includes meter and bypass
2. Includes bypass
3. Softener tank size calculated @ 204 lpm per m² of bed area/5 gpm of backwash per square foot of bed depth
4. Filter tank size calculated @ 407 lpm per m² of bed area/10 gpm of backwash per square foot of bed area

All the data acquired for Fleck and GE Control Valves was taken from manufacturers specification sheets from their respective websites on January 20, 2009.

INTERNATIONAL**Clack™  Control Valves***In our 10th year.*

Clack versus Fleck and GE 1.5" Control Valve Comparison

**WS1.5CI****WS1.5EI**

SPECIFICATIONS	CLACK WS1.5CI WS1.5EI	FLECK 2850	FLECK 9500	GE 150	GE MAGNUM Cv
Control Valve Size	1.5"	1.5"	1.5"	1.5"	1.5"
Service @ 1 bar/ 15 psi drop	227 lpm 60 gpm	193 lpm 51 gpm	163 lpm 43 gpm	216 lpm 57 gpm	288 lpm 76 gpm
Backwash @ 1.7 bar/ 25 psi drop	189 lpm 50 gpm	185 lpm 49 gpm	61 lpm 16 gpm	271 lpm 71.5 gpm	337 lpm 89 gpm
Tank Applications:					
Softener (1)	12" - 24" dia.	10" - 30" dia.	10" - 24" dia.	14" - 30" dia.	14" - 36" dia.
Filter (2)	12" - 30" dia.	10" - 24" dia.	10" - 14" dia.	14" - 36" dia.	14" - 36" dia.
Meter Specification	2 - 284 lpm .5 - 75 gpm ± 5% Accuracy	5.7 - 284 lpm 1.5 - 75 gpm ± 5% Accuracy	5.7 - 284 lpm 1.5 - 75 gpm ± 5% Accuracy	2 - 95 lpm .5 - 25 gpm 1" Flow Meter ± 3% Accuracy 19 - 568 lpm 5 - 150 gpm 2" Flow Meter ± 3% Accuracy	2 - 95 lpm .5 - 25 gpm 1" Flow Meter ± 3% Accuracy 19 - 568 lpm 5 - 150 gpm 2" Flow Meter ± 3% Accuracy
Twin Capability	Yes	Yes	Yes	Yes	Yes

1. Softener tank size calculated @ 204 lpm per m² of bed area/5 gpm of backwash per square foot of bed depth
2. Filter tank size calculated @ 407 lpm per m² of bed area/10 gpm of backwash per square foot of bed area

All the data acquired for Fleck and GE Control Valves was taken from manufacturers specification sheets from their respective websites on January 20, 2009.

INTERNATIONAL**Clack[™]  Control Valves***In our 10th year.*

Clack versus Fleck and GE 2" Control Valve Comparison

**WS2CI****NEW!
Available Now****WS2EI****NEW!
Available Now****WS2QC****Available
April 2009****WS2H**

SPECIFICATIONS	CLACK WS2CI WS2EI	CLACK WS2QC	CLACK WS2H	FLECK 2900	FLECK 3150	GE MAGNUM IT
Control Valve Size	2"	2"	2"	2"	2"	2"
Service @ 1 bar/ 15 psi drop	435 lpm 115 gpm	473 lpm 125 gpm	473 lpm (1) 125 gpm (1)	401 lpm 106 gpm Downflow Regeneration 394 lpm 104 gpm Upflow Regeneration	360 lpm 95 gpm	288 lpm 76 gpm
Backwash @ 1.7 bar/ 25 psi drop	303 lpm 80 gpm	322 lpm 80 gpm	473 lpm 125 gpm	136 lpm 36 gpm Downflow Regeneration 98 lpm 26 gpm Upflow Regeneration	397 lpm 105 gpm	337 lpm 89 gpm
Tank Applications: Softener (2) Filter (3)	12" - 48" dia. 12" - 36" dia.	12" - 48" dia. 12" - 36" dia.	18" - 63" dia. 18" - 48" dia.	14" - 36" dia. 14" - 30" dia.	24" - 63" dia. 24" - 42" dia.	14" - 36" dia. 14" - 36" dia.
Meter Specification	5.7 - 568 lpm 1.5 - 150 gpm ± 5% Accuracy	5.7 - 568 lpm 1.5 - 150 gpm ± 5% Accuracy	5.7 - 473 lpm 1.5 - 125 gpm ± 5% Accuracy	11.4 - 568 lpm 3 - 150 gpm ± 5% Accuracy	11.4 - 568 lpm 3 - 150 gpm ± 5% Accuracy	7.6 - 303 lpm 2 - 80 gpm ± 3% Accuracy
Multi-Tank Capability	Twin	Twin	Quad	Quad	Twin	Twin

1. Includes meter

2. Softener tank size calculated @ 204 lpm per m² of bed area/5 gpm of backwash per square foot of bed depth3. Filter tank size calculated @ 407 lpm per m² of bed area/10 gpm of backwash per square foot of bed area

All the data acquired for Fleck and GE Control Valves was taken from manufacturers specification sheets from their respective websites on January 20, 2009.

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INTERNATIONAL**Clack™  Control Valves***In our 10th year.*

Clack versus Fleck 3" Control Valve Comparison

**WS3****Available May 2009**

SPECIFICATIONS	CLACK WS3	FLECK 3900
Control Valve Size	3"	3"
Service @ 1 bar/ 15 psi drop	946 lpm 250 gpm	946 lpm 250 gpm
Backwash @ 1.7 bar/ 25 psi drop	946 lpm 250 gpm	379 lpm 100 gpm
Tank Applications:		
Softener (1)	18" - 96" dia. (3)	24" - 63" dia.
Filter (2)	18" - 66" dia.	24" - 42" dia.
Meter Specification	13 - 1,325 lpm 3.5 - 350 gpm ± 5% Accuracy	26.5 - 1,136 lpm 7 - 300 gpm ± 5% Accuracy
Multi-Tank Capability	Quad	Quad

1. Softener tank size calculated @ 204 lpm per m² of bed area/5 gpm of backwash per square foot of bed depth
2. Filter tank size calculated @ 407 lpm per m² of bed area/10 gpm of backwash per square foot of bed area
3. Brine Pump necessary for tanks larger than 63" diameter

All the data acquired for the Fleck 3900 Control Valve was taken from manufacturers specification sheet from their website on January 20, 2009.