

Figures 1730-D, 1730-U, 1740-D, 1740-U “Electric Check” Pump Control Valves

Data Sheet ECV.01B

Description

GA Industries “Electric Check” pump control valves are installed on the discharge of water pumps to minimize pressure surges associated with pump starting and stopping. They are self-contained differential piston actuated valves and utilize electro-hydraulic controls to sequence the operation of the valve with that of the pump motor.

The valve’s unique V-port trim provides semi-linear flow control plus full port capacity to minimize head loss when fully open. Normal and emergency controls provide independently adjustable slow opening and closing for ideal surge control at pump start and normal shutdown and adjustable fast close upon power failure or other unexpected stoppages of pumping.



Standard Features

- Heavy duty cast iron body with lead-free bronze internals for long term dependable service
- V-port trim for excellent flow control plus full port capacity
- 120VAC/60Hz 3-Way solenoid pilot with independently adjustable normal opening and closing speed controls
- 120VAC/60hz 2-Way emergency solenoid pilot with independent emergency closing speed control
- Visual position indicator and limit switch
- Wye strainer and pilot isolating valves

Standard Materials

- Body Cast Iron, ASTM A126 Class B
- Cover Steel, ASTM A36
- Internal Trim Lead-free Bronze
- Renewable Seat Buna-N
- Internal Fasteners Stainless Steel
- External Fasteners Steel, A307, Zinc Plated
- Pilot System Lead Free Brass, Bronze or Copper

Corrosion Protection

- Standard: Internal and External Carboline 891 NSF-61 Certified Epoxy, min 6 mil DFT
- Option P2: 316 SS External Fasteners

Accessories

- With Pump Director Pre-Wired Control Panel

Ordering Data

- Figure Number (1730-D, 1730-U, 1740-D, 1740-U)
- Size
- Accessories
- Installation Orientation

Non-Shock Working Water Pressure Up to 125F (52C)			
Figure Number	1730-D (Globe Body)		1730-U (Globe Body)
	1740-D (Angle Body)		1740-U (Angle Body)
Flanges	ANSI B16.1 Class 125		ANSI B16.1 Class 250
Size	3" – 12"	14" to 20"	3" – 20"
Max Inlet	200 PSI	150 PSI	300 PSI
Hydro Test	300 PSI	225 PSI	450 PSI

Optional Model 7700A Pump Director



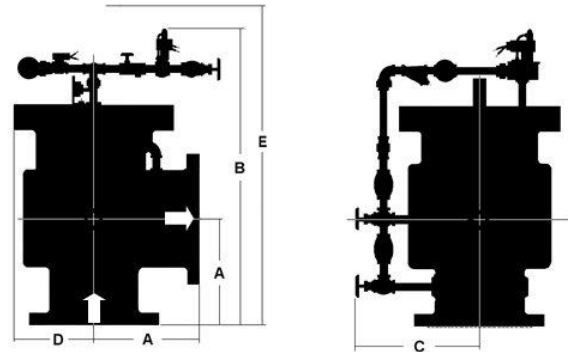
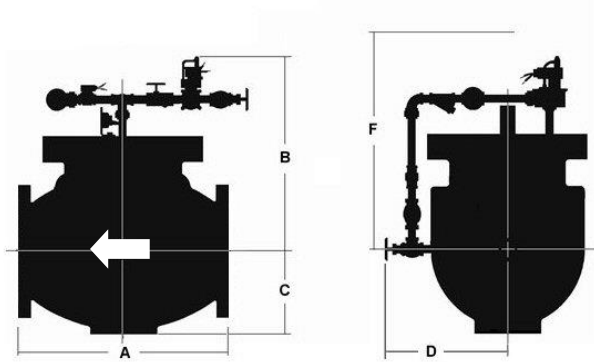
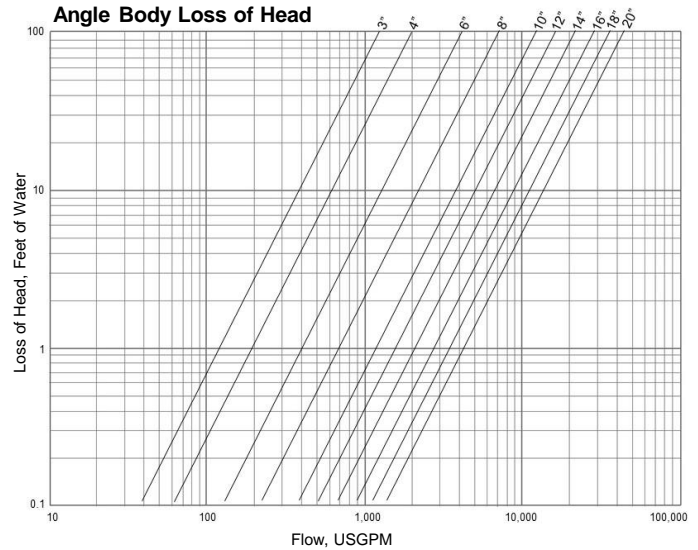
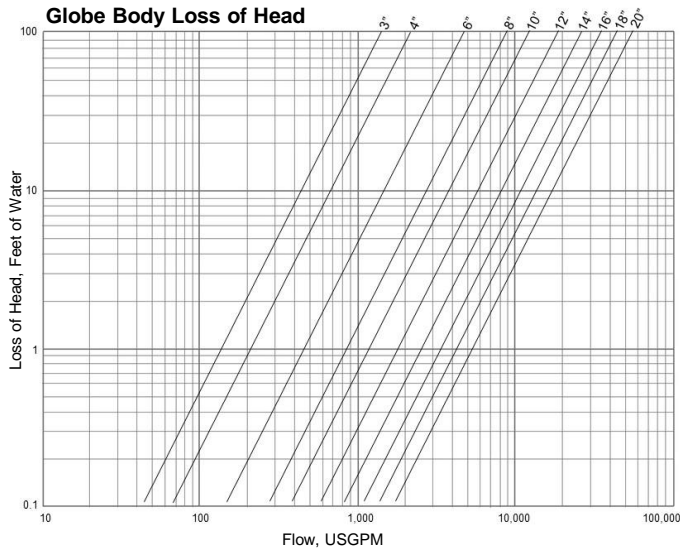
The operation of the Electric Check Valve and the pump motor must be sequenced for proper surge control. The optional GA Industries Model 7700A is a user friendly and SCADA compatible PLC based control panel interfaces between the Motor Control Center and the Electric Check Valve to provide the necessary electrical logic.

See Data Sheet 7700A.01 for more information.

Variations

- With Pump Discharge or Suction Pressure Sustaining Feature – See Data Sheet PSECV.01

Data Sheet ECV.01B



Globe Body Installation Dimensions

	A	B	C	D	F	WGT
3"	12	25	4¼	15	10	290
4"	13	26	5¼	16	12	420
6"	18	28	6½	20	14	600
8"	24½	30	8¼	22	18	800
10"	26	31	9¼	24	21	1,175
12"	31	32	13	26	25	1,850
14"	33	34	12¼	27	28	2,000
16"	36	37	13½	30	33	2,530
18"	40	40	17	32	38	3,700
20"	40	40	17	32	38	3,900

Angle Body Installation Dimensions

	A	B	C	D	E	WGT
3"	6	25	15	5	16	290
4"	6½	26½	16	5	18½	420
6"	8¾	29¾	20	6	22¾	600
8"	11¼	34¼	22	9	29¼	800
10"	14¼	43¼	24	11	35¼	1,175
12"	15½	45½	27	12	40½	1,850
14"	16½	50½	30	15	44½	2,000
16"	18	54	32	16	51	2,530
18"	20½	60½	33	18	58½	3,700
20"	20½	60½	33	18	58½	3,900

- Dimension A same for both Class 125 and Class 250 flanged valves, Class 250 supplied with flat face
- Dimensions are in inches, weight in pounds and are approximate. Consult factory if critical.
- Angle body valves can be configured for vertical or horizontal inlet, advise orientation at time of order
- 24" and larger valves available, consult factory

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