

Model 106-EPDV-A-10506A Electric/Pneumatically Operated Deluge Valve



KEY FEATURES

- UL listed for fire extinguishing systems
- Reliable diaphragm actuated
- Hydraulically operated design
- ANSI class 150, 300 flanges and grooved ends
- Stainless steel fasteners
- Heat fused red epoxy coating
- Available in globe style, 3 in/80mm – 8 in/200mm



106-EPDV A-10506A Globe

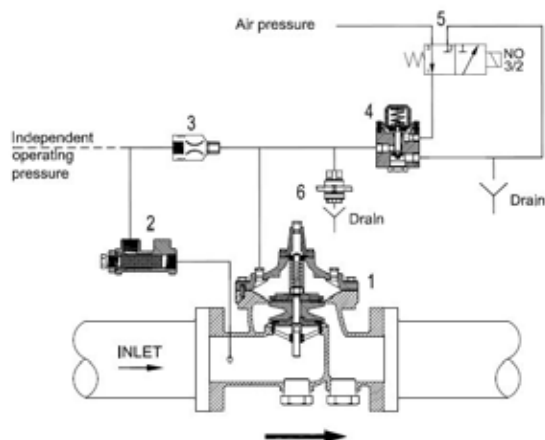
PRODUCT OVERVIEW

Singer Model 106 EPDV-A-10506A Pneumatic/Electric Solenoid control valve is based on the Singer Model 106 PG-UL Deluge main valve.

The solenoid pilot provides on-off position operation. The solenoid, using an independent air supply, either admits inlet pressure into the main valve operating chamber from the inlet of the main valve via a high capacity relay valve or releases pressure from the relay valve and therefore the main valve operating chamber. This either opens or closes the main valve. The pilot system is usually piped to discharge to drain (atmosphere).

The 106 EPDV-A-10506A is available with the main valve closed when the solenoid is de-energized (NC-normally closed. This refers to the main valve, not the solenoid).

SCHEMATIC DRAWING



Schematic A-10506A

1. Main Valve – Model 106-PG-UL-Deluge
2. Strainer
3. Fixed Restriction
4. 82-PR-UL Pilot
5. Solenoid Valve – normally open
6. Manual Emergency Override – normal position closed

STANDARD MATERIALS

Standard materials for pilot system components are:

- ASTM B62 bronze or ASTM B16 brass
- AISI 303 / 316 stainless steel trim
- Buna-N / EPDM diaphragm and seals

All valves have HFE coating AKZO RAL 3000 Fire Red (not intended for drinking water).

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Electric/Pneumatically Operated Deluge Valve

ANSI Valve Data (US Units)

Size	DWG	US Units					Metric Units			
Inches	REF	ANSI	3 in	4 in	6 in	8 in	80 mm	100 mm	150 mm	200 mm
Globe Dimensions		<i>All figures shown in mm unless otherwise indicated</i>					<i>All figures shown in mm unless otherwise indicated</i>			
Lay Length	A	150F	12.00	15.00	20.00	25.38	305	381	508	645
Centerline to Bottom	D	150F	3.75	4.60	5.60	7.63	95	117	142	200
Lay Length	A	300F	.25	15.63	21.00	26.38	337	397	533	670
Centerline to Bottom	D	300F	4.13	5.09	6.34	7.88	105	129	161	200
Width	C	-	9.25	10.88	12.75	16.09	235	276	324	409
Height (To Stem Cap)	E	-	8.00	9.15	15.43	20.19	203	232	392	513
Pilot System Clearance	G	-	9.84	10.62	11.81	13.38	250	270	300	340
Body Port Tapping		FNPT	3/8	3/8	3/8	1/2	3/8	3/8	3/8	1/2
Stem Cap Plug		MNPT	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Cover Port Tapping		FNPT	3/8	3/8	1/2	1/2	3/8	3/8	1/2	1/2
Valve Stroke			1-1/8	1-7/16	1-11/16	2-7/8	29	37	43	73
Displaced Bonnet Volume (Gallons/Litres)			0.1	0.2	0.50	1.00	0.3	0.8	2	4
Flow Capacities USGPM						L/S				
C _v			110	200	460	800	26	47	110	190
Continuous			460	800	1800	3100	29	50	114	196
Intermittent			575	1000	2250	3875	36	63	142	244
Momentary			1030	1800	4000	7000	65	114	252	442
Maximum Temperature										
Fahrenheit/Celsius			180°	180°	180°	180°	82°	82°	82°	82°