

# MODEL C MECHANICAL ACCELERATOR AND MODEL D ANTI-FLOOD DEVICE

## GENERAL DESCRIPTION

Globe's Model C Accelerator is a precision made device used to reduce the time lag normally associated with the opening of a Water Control Valve after one or more system sprinklers have operated. The Model C Accelerator reduces the normal time to trip of the Water Control Valve resulting in faster water delivery time to the opened sprinkler(s).

The Model C Accelerator monitors the air pressure in the attached dry pipe system. If a loss of system air pressure occurs, as would be expected with the opening of one or more sprinklers, the accelerator senses this loss in pressure. Once this drop in pressure is sensed, the accelerator opens the 1/4" port and discharges the pressurized system air to atmosphere, increasing the rate at which the system air pressure decays. The system air pressure maintains the dry pilot actuator in the closed position. Once enough air pressure is relieved from the system, the dry pilot actuator relieves pressure in the pressure chamber of the RCW Valve allowing the valve to trip.

Globe incorporates the use of its Model D Anti-Flooding Device to help ensure the proper operation of the Model C Accelerator by preventing water-borne foreign objects from entering the Accelerator. Such objects could cause clogging of the Accelerator and hinder its proper operation. Accelerators are precision made devices, and must be kept clean of foreign matter.

The Model D Antiflood Device allows air pressure to pass over the internal ball bearing. Upon system operation, water entering the model D Antiflood Device forces the ball bearing against the body discharge opening, sealing closed, and preventing flooding of the accelerator. The device should return to its normal operating condition upon loss of water pressure.

If the Model C Accelerator is experiencing difficulty in setting, make sure that the spring loaded plunger has been depressed to unseat the ball bearing.



**MODEL C MECHANICAL  
ACCELERATOR**

## TECHNICAL DATA

### Approvals

- cULus
- FM

### Maximum System Working Pressure

- 300 psi (20.6 Bar)

### Maximum System Size

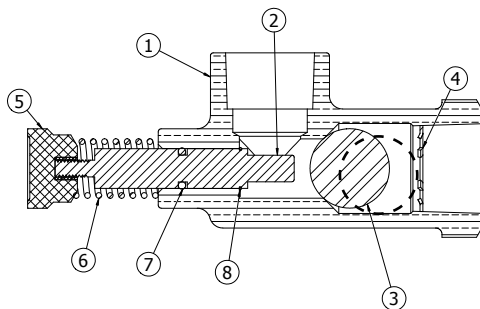
- 2060 gal (7700 liter)

### End Connections

- Model C Accelerator- 1/4" Female NPT Connection
- Model D Antiflood- 1/2" Female NPT Connections

### Materials of Construction

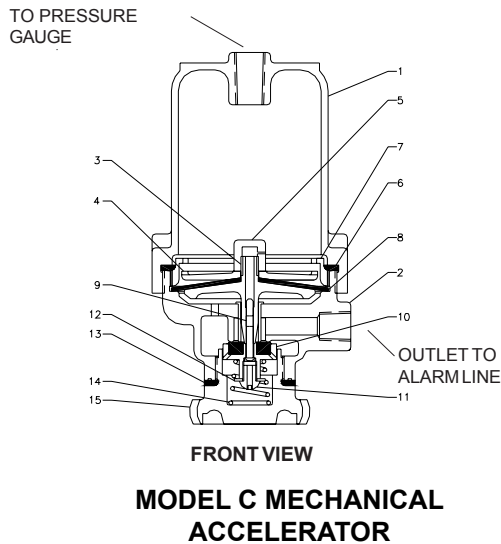
- See Figure 1 and 2



**MODEL D ANTIFLOOD  
DEVICE**

ITEM NO.	Description	Material
1	BODY	BRONZE
2	PLUNGER	STAINLESS STEEL
3	BALL	STAINLESS STEEL
4	RETAINING RING 1/2"	STAINLESS STEEL
5	KNOB 1/2"	ABS
6	SPRING	STAINLESS STEEL
7	O-RING	BUNA N
8	PLUNGER RETAINING RING	STAINLESS STEEL

**FIGURE 1: MODEL D ANTIFLOOD DEVICE MATERIALS OF CONSTRUCTION**



ITEM NO.	Description	Material
1	UPPER CHAMBER	BRONZE
2	LOWER CHAMBER AND VALVE SEAT ASSEMBLY	BRONZE
3	PRESSURE PLATE	BRASS
4	DIAPHRAGM PLATE	BRASS
5	NUT	BRONZE
6	GASKET*	E.P.D.M.
7	CLAMPING RING	BRASS
8	DIAPHRAGM*	NEOPRENE
9	RESTRICTED ORIFICE PIN*	MONEL
10	VALVE DISC AND DISC RETAINER ASSEMBLY*	NEOPRENE/BRASS
11	RETAINING SCREW*	BRONZE
12	SPRING RETAINER DISC*	BRASS
13	GASKET*	E.P.D.M.
14	SPRING*	BRONZE
15	PLUG	BRASS

*Note: Accelerator Clamping Ring Wrench(PN 323489) to be used on Clamping Ring (Item 7) when replacing the Diaphragm (Item 8).*

**FIGURE 2: MODEL C MECHANICAL ACCELERATOR**

## CARE AND MAINTENANCE

Proper operation of the Model C Mechanical Accelerator and Model D Antiflood Device (i.e., opening of the Model RCW Valve as during a fire condition) must be verified, as described by the applicable Inspection Testing and Maintenance Standard (i.e. NFPA 25) or by the Local AHJ. Any impairments with the device must be corrected.

- STEP 1.** Ensure the valve is under normal operating conditions before the trip test.
- STEP 2.** During the valve trip test ensure that air sufficiently flows to the atmosphere from the Model C Accelerator and little water discharges from the accelerator.
- STEP 3.** Refer to appropriate system data sheet for valve trip test instructions.

*Note: Globe recommends a tank mounted air compressor be utilized with a Globe Model H-1 air maintenance device (regulator type).*

## ORDERING INFORMATION

### Model C Mechanical Accelerator

Specify: MODEL C MECHANICAL ACCELERATOR:  
PN .....300400

### Model D Antiflood Device

Specify: MODEL D ANTIFLOOD DEVICE:  
PN .....323340

### Model C Mechanical Accelerator Replacement Part Kit

Specify: MODEL C ACC REPLACEMENT PART KIT:  
PN .....300430

*\*Kit includes Gasket, Diaphragm, Restricted Orifice Pin, Valve Disk and Disc Retainer Assembly, Retaining Screw, Spring Retainer Disk, Gasket and Spring*

### Accelerator Clamping Ring Wrench

Specify: ACCELERATOR CLAMPING RING WRENCH:  
PN .....323489

## GLOBE® PRODUCT WARRANTY

Globe agrees to repair or replace any of its own manufactured products found to be defective in material or workmanship for a period of one year from date of shipment.

For specific details of our warranty please refer to Price List Terms and Conditions of Sale (Our Price List).

