

3-Inch Discharge Valve

FEATURES

- *Large Capacity Agent Cylinder*
- *Grooved Fitting Connection*
- *FM Approved*
- *UL Listed*
- *RoHS Compliant*

DESCRIPTION

The Kidde Fire Systems 3-inch valve is designed to facilitate high capacity discharge flow from larger cylinders. The valve has been redesigned to shift the location of the supervisory pressure switch port to ease installation of the supervisory pressure switch on ADS systems.

The pressure relief device for the 3-inch valve is located on the cylinder shoulder, not the valve.

OPERATION

The Kidde Fire Systems 3-inch valve can be operated by all existing Kidde Fire Systems control heads, except the 82-486500-010 electric control head. The 82-486500-010 control head does not have the capability of operating the 3-inch valve and must not be used on this component.

Actuation of the control head displaces the valve piston, allowing agent to flow through the discharge port of the valve.

The valve must be rebuilt with all the o-rings replaced every 15 years or after a discharge.

INSTALLATION

The valve must be installed in the cylinder neck ring prior to filling the cylinder. Upon assembly of the valve and siphon tube arrangement the valve should be torqued to 100 - 110 ft-lbs (135.5 -149.1 Nm).

SPECIFICATION

Valve body:	Brass
Piston:	Brass
Finish:	Natural
Valve seat:	Rubber
Nominal operating pressure:	360 psig at 70°F (2.48 Mpa at 21°C)
Operating temperature range:	32 to 130°F (0 to 54°C)
Weight:	46 lb. (21 kg)
Outlet:	3-inch groove fitting



DIAGRAMS

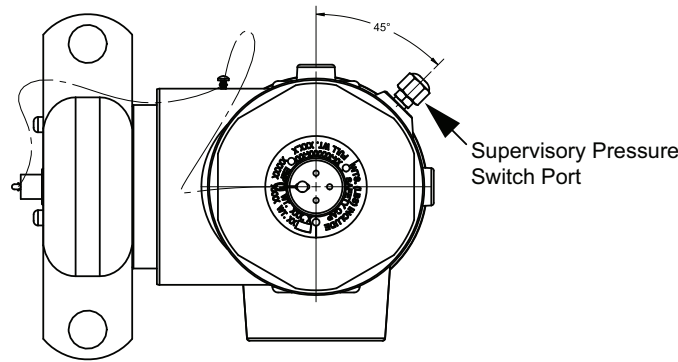


Figure 1. Location of Supervisory Pressure Switch Port

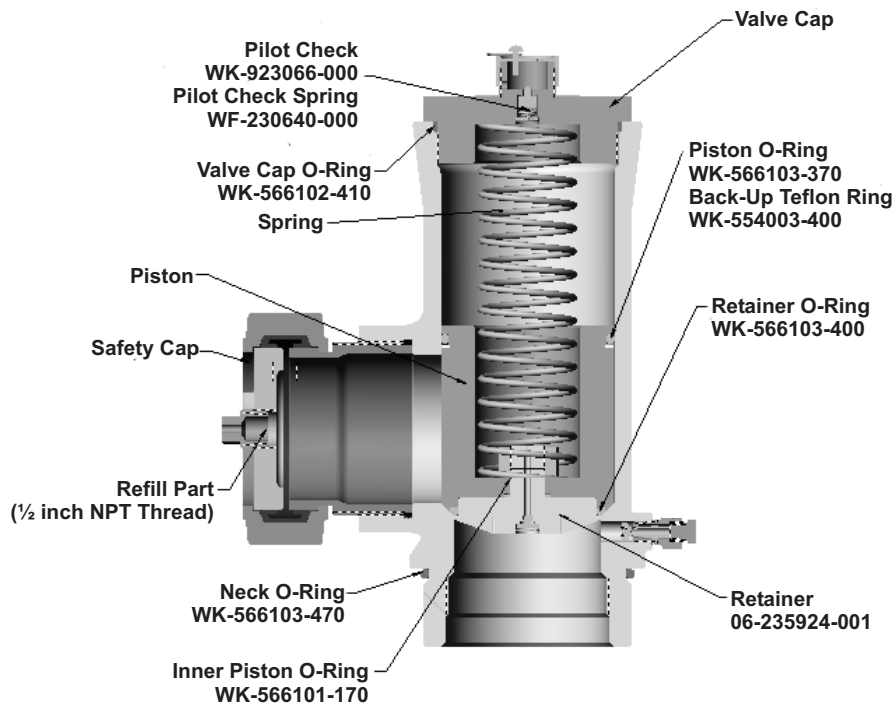


Figure 2. Valve Component Locations

RECHARGE/REPLACEMENT PARTS

The following components are required to be replaced after the cylinder valve has discharged or if existing components show signs of damage or wear and tear. The components are included in rebuild kit P/N: 85-170200-000. For more information, see datasheet K-85-0504

Refer to the Design Installation Operation and Maintenance manual for full instructions on valve overhaul and maintenance.

Description	Part Number	Description	Part Number
O-ring, Cap	WK-566102-410	O-ring, Neck	WK-566103-470
O-ring, Piston	WK-566103-370	Pilot Check Assembly	WK-923066-000
O-ring, Retainer	WK-566103-400	Back-up Ring	WK-554003-400

ORDERING INFORMATION

The 3-inch valve can be purchased as a separate component to replace existing valves on 600 lb. cylinders manufactured after 8/01, all 900 lb. cylinders, and Kidde Fire Systems ECS-500™ 1100 lb. cylinders. When ordering a replacement valve, please order the correct valve for the system. Using a valve that is not listed with the system will invalidate any agency approvals. The part number for the valve is listed in the following table:

Part Number	Description
85-174001-550	3" Valve for Kidde Fire Systems ECS-500™ systems using Fluoro-K™ Fire Suppression Clean Agent
85-170001-550	3" Valve for Kidde Fire Systems ECS-500™ systems using 3M™ Novec™ 1230 Fire Protection Fluid
85-174001-500	3" Valve for Kidde Fire Systems ADS™ using Fluoro-K™ Fire Suppression Clean Agent
85-170001-500	3" Valve for Kidde Fire Systems ADS™ using 3M™ Novec™ 1230 Fire Protection Fluid
85-174001-100	3" Valve for Kidde Fire Systems ECS™ using Fluoro-K™ Fire Suppression Clean Agent
85-170001-100	3" Valve for Kidde Fire Systems ECS™ using 3M™ Novec™ 1230 Fire Protection Fluid
85-170001-000	3" Valve for Kidde Fire Systems ECS™ using HFC-227ea Agent
85-170001-200	3" Valve with no pressure gauge for Kidde Fire Systems Fire Suppression Systems
90-170001-100	3" Valve for Kidde Fire Systems ADS™ using HFC-227ea Agent
85-170200-000	3" Valve Rebuild Kit

COMPATIBILITY

Series	DIOM P/N	Approvals
Kidde Fire Systems ECS-500™ System	06-237585-001	UL, ULC, FM
Kidde Fire Systems ECS-500™ Marine System	06-237589-001	UL, ULC, USCG
Kidde Fire Systems ADS™ for use with Fluoroketone Fire Suppression Agents	06-237256-001	UL, ULC, FM
Kidde Fire Systems ADS™ Marine for use with Fluoroketone Fire Suppression Agents	06-237257-001	UL, ULC, USCG
Kidde Fire Systems ADS™ with HFC-227ea Agent	06-236068-001	UL, ULC, FM
Kidde Fire Systems ADS™ Marine with HFC-227ea Agent	06-236595-001	UL, ULC, USCG
Kidde Fire Systems ECS™ 360 for use with Fluoroketone Fire Suppression Agents	06-236553-001	UL, ULC, FM
Kidde Fire Systems ECS™ 360 Marine for use with Fluoroketone Fire Suppression Agents	06-236559-001	UL, ULC, USCG
Kidde Fire Systems ECS™ 360 with HFC-227ea Agent	06-236115-001	UL, ULC, FM
Kidde Fire Systems ECS™ 360 Marine with HFC-227ea Agent	06-236225-001	UL, USCG

EXPORT INFORMATION (USA)

Jurisdiction: EAR
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