SIEMENS

Data Sheet
Fire Safety Products

Sinorix™ Engineered Fire Suppression Systems

Flapper Check Valves

Models CPY- FCV2, CPY- FCV3, CPY- FCV4; CPY-TGF-1.5, CPY-TGF-2.5, CPY-TGF-4

ARCHITECT AND ENGINEER SPECIFICATIONS

- **Prevents back flow in 'Main / Reserve' or 'Manifold' configuration**
- **Low-friction coefficient**
- **Acceptable for vertical 'UpFlow' applications**
- **Available in 2-inch, 3-inch and 4-inch sizes**
- **1-1/2" -x- 2" thread-by-groove adapter available**
- **2-1/2" -x- 3" thread-by-groove adapter available**
- **4"-x- 4" thread-by-groove adapter available**
- **ULUL Listed and ULCULC Listed**
  FM and NYC Fire Department Approved

Product Overview

A flapper check valve is used when two (2) equivalent cylinder valve assemblies are configured with one (1) common discharge pipe – via a 'Main / Reserve' or Manifold configuration – in the event one (1) or more cylinder valve assemblies are removed for servicing.

Each flapper check valve serves as a 'stop gap,' preventing loss of agent in the event any of the agent-storage cylinder valves are not connected to the manifold at the time of agent discharge. Additionally, check valves put a stop to agent back-flow in a 'Main / Reserve' or 'Manifold' configuration.

Flapper check valves offer a lower friction co-efficient than legacy valves, and are available in 2-inch, 3-inch and 4-inch sizes.

Specifications

Each flapper check valve used in a 'Main / Reserve' configuration must be used on pipe sizes 1-1/2 inches and larger, and is connected between the discharge port and the tee slave of the respective cylinder / valve assembly.

A 2-inch, female NPT threaded flapper check valve (Model CPY-FCV2) is used on a 1-1/2" discharge port; a 3", female NPT threaded flapper check valve (Model CPY-FCV3) is used on a 2-1/2" discharge port, and a 4", female NPT threaded flapper check valve (Model CPY-FCV4) is used on a 4" discharge port.

Models CPY-FCV2, CPY-FCV3 and CPY-FCV4 can be aligned in a horizontal or vertical plane. Any intended vertical flow must move in an upward direction since the flapper check valve is not designed to force the agent to release.

Models CPY-TGF-1.5, CPY-TGF-2.5 and CPY-TGF-4 make the transition from a 'groove' fitting into a 'threaded' adapter on the flapper check valve.

All flapper check valves have a working pressure of 720 psig (4965 kPa).

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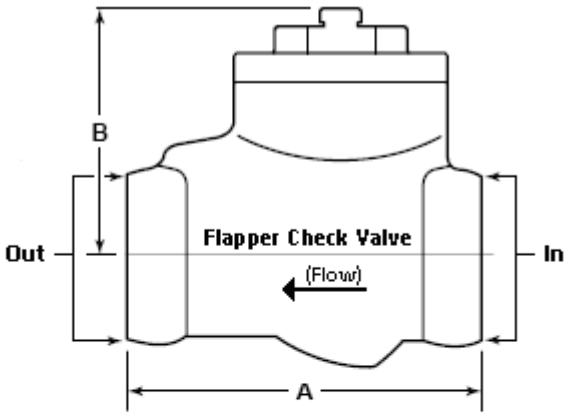
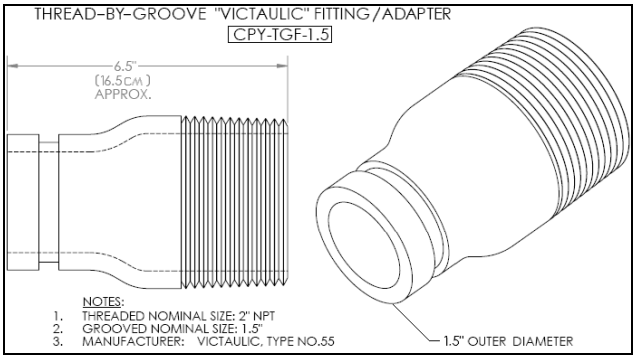
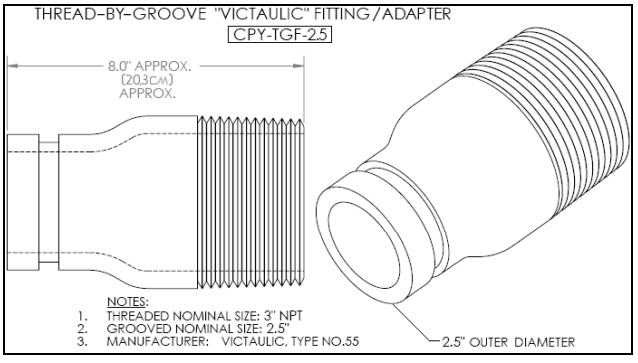
Mounting Diagrams

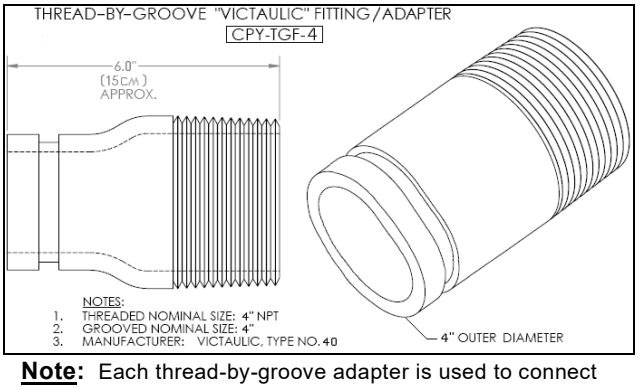


	2˝ Size		3˝ Size		4˝ Size	
'A' (Ductile Iron)	6˝	(15.24 cm.)	8˝	(20.32 cm.)	10˝	(25.4 cm.)
Weight	10 lbs.	(4.5 kg)	23 lbs.	(10.4 kg)	46 lbs.	(20.9 kg)

	2˝ Size		3˝ Size		4˝ Size	
'B' (All Materials)	3-5/8˝	(9.21 cm.)	6˝	(15.24 cm.)	7˝	(17.78 cm.)







Technical Data

Product	Sizes	Equivalent Length
Flapper Check Valve	2 inches (5.1 cm.)	4 feet (122 cm.)
	3 inches (7.6 cm.)	4 feet (122 cm.)
	4 inches (10.1 cm.)	6 feet (183 cm.)

Note: Flapper check valves have a working pressure of 720 psig (4965 kPa).

Note: Each thread-by-groove adapter is used to connect the output from the main valve to the input of the Flapper check valve.

Details for Ordering

Model	Part Number	Description
CPY-FCV2	712-050476BG	2" Flapper Check Valve
CPY-FCV3	712-050477BG	3" Flapper Check Valve
CPY-FCV4	712-050478BG	4" Flapper Check Valve
CPY-TGF-1.5	731-050480BG	1.5" Thread-By-Groove Adapter
CPY-TGF-2.5	731-050481BG	2.5" Thread-By-Groove Adapter
CPY-TGF-4	731-050482BG	4" Thread-By-Groove Adapter

Notice: This marketing data sheet is not intended to be used for system design or installation purposes. For the most up-to-date information, refer to each product's installation instructions.

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