

HOSE APPLIANCES

INTRODUCTION

Hose appliances are any devices designed to adapt threads, reduce or enlarge coupling diameter, divide or unite hose lines, apply or remove water, or aid in accomplishing these tasks. Unlike hose tools water flows through hose appliances.

In order for the fire apparatus to be used to its fullest potential, it must be equipped with a sufficient quantity of fire hose and appliances which are designed to allow for a variety of hose evolutions at the fire ground.

A list of hose appliances suggested to be carried by fire apparatus can be found in the latest edition of Pamphlet 19, National Fire Protection Association.

CONSTRUCTION:

Hose appliances are constructed from high quality, close grained brass, or light weight aluminum alloys. They are cast in molds, or forged and machined to close tolerances. Each is designed to give many years of dependable service if properly maintained.

Brass appliances are produced with a sand cast or satin finish. Some are chrome plated to reduce maintenance.

Aluminum alloys are produced with a natural finish that is usually protected by a sprayed hardener coating. Appliances fabricated from this alloy weigh about one half as much as those fabricated from brass.

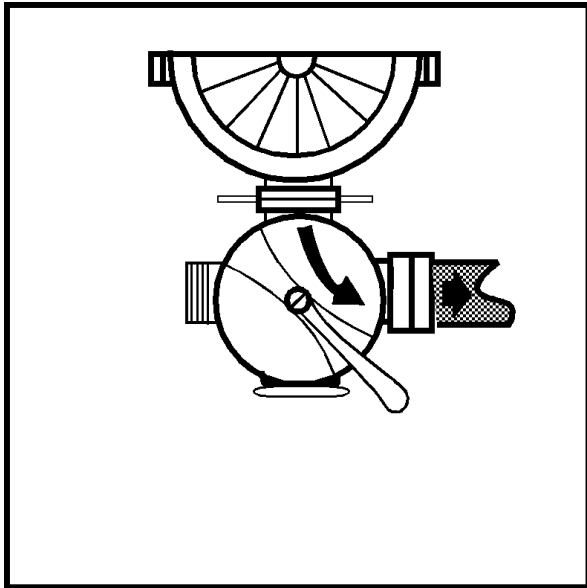
COUPLING THREADS:

Hose coupling thread standards for the fire service were adopted in 1960. All couplings and appliances manufactured after that year with a diameter of 1-1/2 inch or larger must have a thread cut known as "National Hose". Those appliances and couplings with a diameter of less than 1-1/2 inch may use any thread cut suitable for service as long as the proper adapters are carried on the apparatus to the "National Hose" thread. CDF uses National Pipe Straight Hose thread for threads less than 1 1/2".

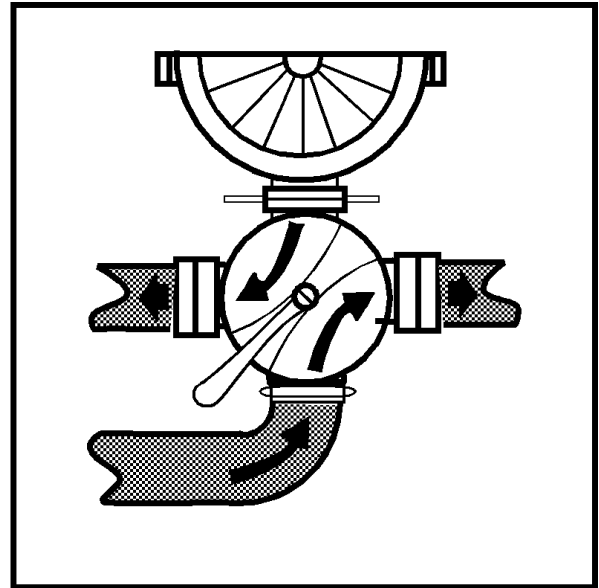
THREAD TYPES

NH	National Hose
NPT	National Pipe Tapered
NPSH	National Pipe Straight Hose

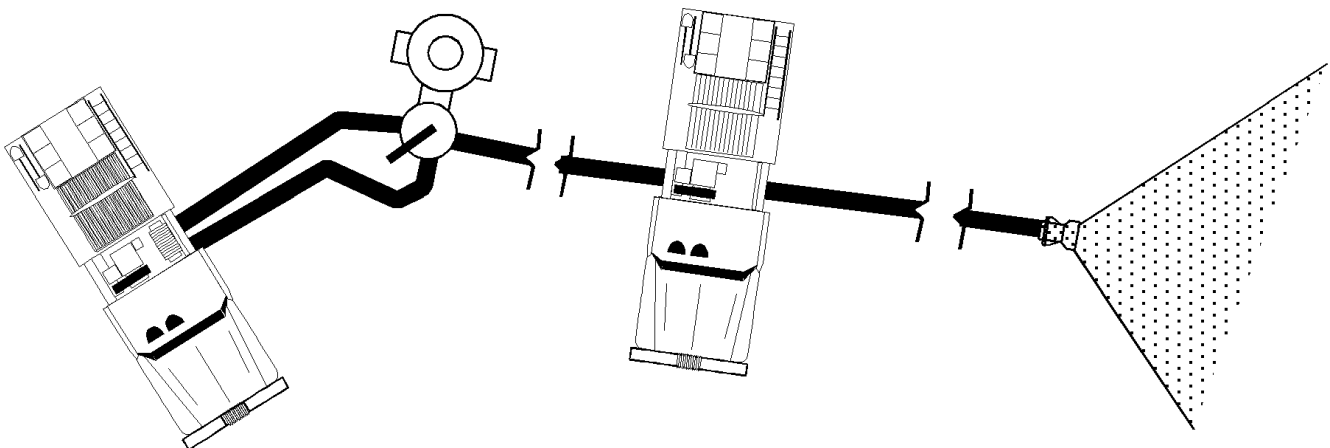
FOUR-WAY HYDRANT VALVE



With valve in this position water is routed from the hydrant directly into the supply line.



With the valve in this position water is routed into a second engine where pressure is boosted then routed into the supply line.



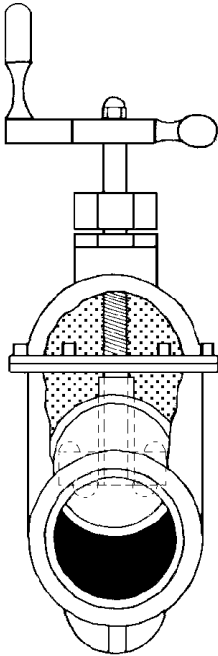


Figure 1. Gate valve.

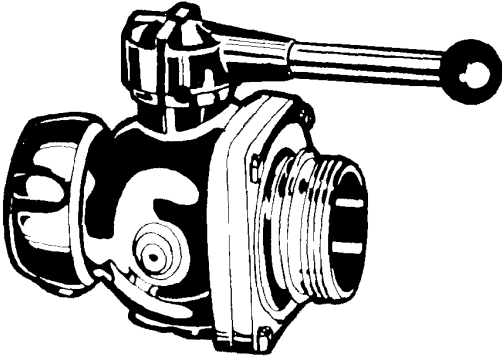


Figure 2. Ball valve.

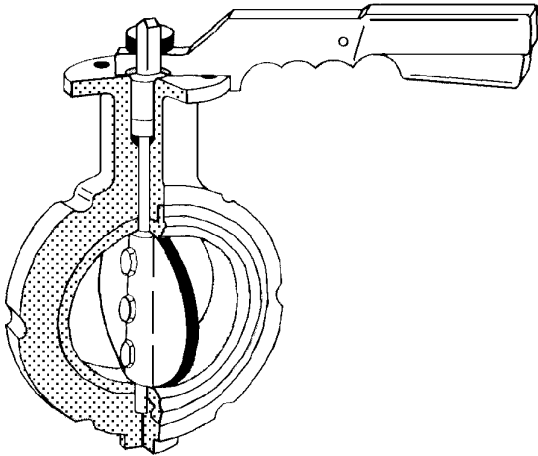


Figure 3. Butterfly valve.