3-WAY VALVE W/ PTFE PLUGS
A stopcock consists of 2 parts: a PTFE plug that sits inside the glass barrel. A PTFE washer, rubber O-ring, and nut thread onto the plug to secure it inside the barrel. The stopcock size is designated by a single number, which is the diameter (in milimeters) of the hole (or holes) going through the plug.

PTFE stopcocks have a 1:5 taper. 2 milimeters of plug diameter for every 10mm of its length

**Typical PTFE Stopcock Sizes:** 2 mm, 4 mm, 6 mm, 8 mm, 10 mm

PTFE stopcock barrels have a smooth clear finish and do not require grease.
A ground glass stopcock consists of 2 parts: a glass plug that sits inside the barrel. The 2 parts are ground to achieve mating surfaces. A metal retaining clip or rubber washer on the bottom of the plug holds it fast in the barrel.

The stopcock size is designated by a single number, which is the diameter (in millimeters) of the hole (or holes) going through the plug.

Ground glass stopcocks have a 1:10 taper. 1 millimeter of plug diameter for every 10mm of length.

Typical Ground Glass Stopcock Sizes: 2 mm, 4 mm, 6 mm, 8 mm, 10 mm

Ground glass surfaces require grease to prevent sticking. Use a grease such as Apiezon brand.
A ground glass stopcock consists of 2 parts: a glass plug that sits inside the barrel. The 2 parts are ground to achieve mating surfaces. A metal retaining clip or rubber washer on the bottom of the plug holds it fast in the barrel.

The stopcock size is designated by a single number, which is the diameter (in millimeters) of the hole (or holes) going through the plug.

**Typical Ground Glass Stopcock Sizes:** 2 mm, 4 mm, 6 mm, 8 mm, 10 mm

Ground glass surfaces require grease to prevent sticking. Use a grease such as Apiezon.

Ground glass stopcocks have a 1:10 taper. 1 millimeters of plug diameter for every 10mm of its length.

Ground glass stopcocks are manufactured in accordance to ASTM standard E675-02.
DOUBLE OBLIQUE STOPCOCK OPERATION

.A.

GAS OR LIQUID FLOW

ARM 1

ARM 2

OUTLET

ARM 1

ROTATE PLUG 180° TO CHANGE THE OUTLET FLOW FROM ARM 1 TO ARM 2

.B.

GAS OR LIQUID FLOW

ARM 1

ARM 2

OUTLET

ARM 2
A stopcock consists of 2 parts: a PTFE plug that sits inside the glass barrel. A PTFE washer, rubber O-ring and nut thread onto the plug to secure it inside the barrel. The stopcock size is designated by a single number, which is the diameter (in milimeters) of the hole (or holes) going through the plug,

PTFE stopcocks have a 1:5 taper. 2 milimeters of plug diameter for every 10mm of its length

**Typical PTFE Stopcock Sizes:** 2 mm, 4 mm, 6 mm, 8 mm, 10 mm

PTFE stopcock barrels have a smooth clear finish and do not require grease.

PTFE stopcocks are manufactured in accordance to **ASTM standard E911-98.**
A ground glass stopcock consists of 2 parts: a glass plug that sits inside the barrel. The 2 parts are ground to achieve mating surfaces. A metal retaining clip or rubber washer on the bottom of the plug holds it fast in the barrel.

The stopcock size is designated by a single number, which is the diameter (in millimeters) of the hole (or holes) going through the plug.

Ground glass stopcocks have a 1:10 taper. 1 millimeter of plug diameter for every 10mm of length.

**Typical Ground Glass Stopcock Sizes:** 2 mm, 4 mm, 6 mm, 8 mm, 10 mm

Ground glass surfaces require grease to prevent sticking. Use a grease such as Apiezon brand.

Ground glass stopcocks are manufactured in accordance to ASTM standard E675-02.
GLASS VALVE

VALVE = PLUG + BARREL

HOW IS THE VALVE SIZED?

D = INTERNAL HOLE DIAMETER AT CONSTRUCTION (IN MILLIMETERS)

SIZE IS DESIGNATED AS 0 - *D*

STANDARD VALVE SIZES:
- 0-4 mm
- 0-8 mm
- 0-12 mm

TYPICAL VALVE TYPES
- 90°
- 180°
- LOW HOLD-UP
NOTES:
O-RINGS NEED TO BE REPLACED.

O-RINGS ON THE TIP ARE RECOMMENDED FOR CRYOGENIC APPLICATIONS WHERE THE O-RING IS BETTER ABLE TO ABSORB PTFE SHRINKAGE IN THE PLUG STEM AND STILL MAINTAIN A GOOD SEAL.
Barnel Thread Types

Coarse (Robust)

Fine (Fine Flow Metering)

Internal (Robust) *Requires a Different Plug*
Check valves can be added to prevent the back-flow of a liquid.