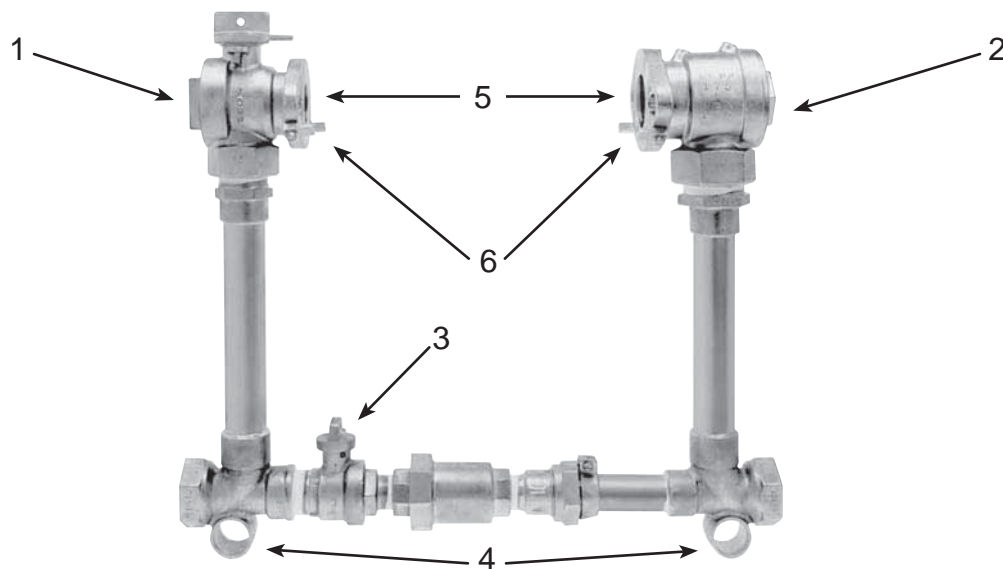


# Coppersetters for 1-1/2" & 2" Flanged Meters

## Information for Ford All Brass and Copper 1-1/2" & 2" Coppersetters



### Specifications:

Ford Coppersetters are constructed from 85-5-5-5 Brass (AWWA specification C-800) and copper tubing.

All Ford 1-1/2" and 2" Coppersetters are individually factory tested for water-tightness before shipment.

Individualized setting requirements can be satisfied using special Ford Coppersetters. We welcome the opportunity to solve your 1-1/2" and 2" setting problems.

1. Inlet valve options are a flanged angle inverted key or flanged angle Ball Valve.
2. All inlet valve options are also available on outlet\* - A Flanged Angle Check Outlet Valve or a Flanged Angle Dual Check Valve may be ordered.
3. By-pass includes a Ford Ball Valve with padlock wings. An optional Dual Check Valve in the By-Pass is available.
4. Brace pipe eyelets are standard - brace pipe not included.
5. Different flange spacing may be specified.
6. All 1-1/2" and 2" Flange Valves on Coppersetters have Meter Support Brackets.

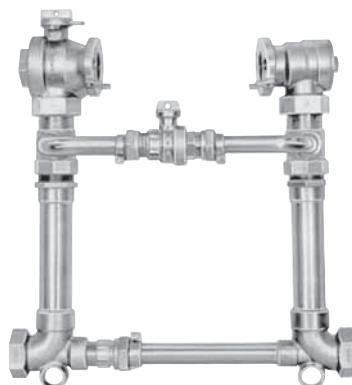
\* **NOTE:** 1-1/2" and 2" outlet Ball Valves may be used as customer shut-offs (on the customer side of the meter) up to 150 psi.

The Flange Inverted Key Angle Valves should not be used as customer shut-off on the customer side of the meter.

### HIGH BY-PASS OPTION

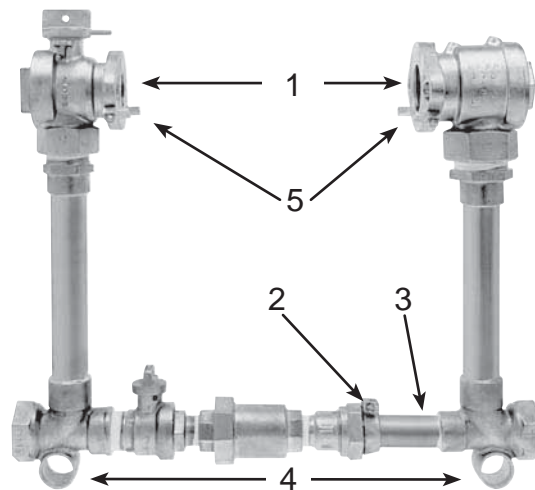
A High By-Pass option is available on 1-1/2" and 2" Ford Coppersetters with a 12" minimum height.

To Order: add "HB" to catalog number. Example: VV77-12HB-11-77



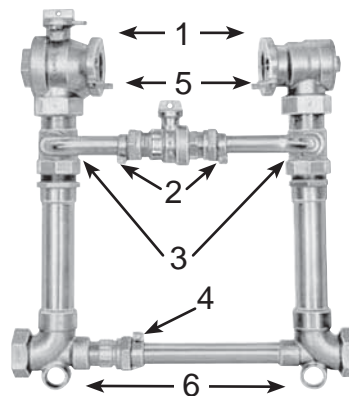
# Coppersettters for 1-1/2" & 2" Flanged Meters

## Coppersetter Installation Instructions



1. **COMPARE LAYING LENGTH OF METER WITH SETTER DIMENSION BETWEEN INLET AND OUTLET (#1).**  
Adjustments to setter meter length may be made as follows:
  - A. **LOOSEN PACK JOINT (#2) AND ADJUST SETTER LENGTH TO FIT METER BY INSTALLING PROPER IDLER OR METER.**
  - B. If a shorter meter is used, cut the copper pipe (#3). Copper pipe should extend a minimum of 1/2" beyond the Pack Joint gasket.
  - C. Tighten Pack Joint (#2) nut and tighten screw.
2. Cut two pieces of 1" pipe 18" long and install through the brace eye supports (#4).
3. Be sure that the Coppersetter is installed in the correct position in relation to the water flow and make sure the bypass valve is in the **OFF** position.
4. Use a good pipe sealant or Teflon tape when attaching fittings to the female iron pipe inlet and outlet threads.
5. Special Ford drop-in gaskets are included with each setter for use when installing the water meter. Meter support brackets (#5) may need to be loosened or removed due to variations in the shape of water meter flanges.

## High Bypass Coppersetter Installation Instructions



1. **COMPARE LAYING LENGTH OF METER WITH SETTER DIMENSION BETWEEN INLET AND OUTLET (#1) AND INSTALL METER OR METER IDLER PRIOR TO CONNECTING THE BYPASS ASSEMBLY AND THE INLET AND OUTLET SERVICE LINES.**
2. The bypass assembly has been removed for shipping and may be re-assembled as follows:
  - A. Loosen Pack Joint (#4) on Coppersetter brace bar.
  - B. Loosen either Pack Joint on bypass ball valve (#2).
  - C. Insert bypass ends completely into the Pack Joint Assemblies (#3).
  - D. Tighten all Pack Joints (#2, #3, and #4) securely with meter or meter idler in place.
3. Cut two pieces of 1" pipe 18" long and install through the brace eye supports (#6).
4. Be sure that the Coppersetter is installed in the correct position in relation to water flow and make certain the bypass valve is **OFF**.
5. Use a good pipe sealant or Teflon tape when attaching fittings to the female iron pipe inlet or outlet.
6. Special Ford drop-in gaskets are included with each Coppersetter for use when installing a water meter. Meter support brackets (#5) may need to be loosened or removed due to variations in shape of water meter flanges.

# 70 Series Coppersetters for 1-1/2" & 2" Flanged Meters

## Horizontal inlet and outlet

UNLESS OTHERWISE SPECIFIED - STANDARD METER SPACING FOR: 1-1/2" COPPERSETTERS = 13"  
2" COPPERSETTERS = 17"

### KEY VALVE INLET AND METER ELL OUTLET

HEIGHT	SERVICE LINE CONNECTION		FOR 1-1/2" METER CATALOG NUMBER	APPROX. Wt. Lbs.	FOR 2" METER CATALOG NUMBER	APPROX. Wt. Lbs.
	INLET	OUTLET				
12"	FIP	FIP	V76-12-11-66	30.0	V77-12-11-77	32.0
	CTS*	FIP	V76-12-41-66	30.0	V77-12-41-77	32.0
	CTS*	CTS*	V76-12-44-66	30.0	V77-12-44-77	32.0
15"	FIP	FIP	V76-15-11-66	31.0	V77-15-11-77	33.0
	CTS*	FIP	V76-15-41-66	31.0	V77-15-41-77	33.0
	CTS*	CTS*	V76-15-44-66	31.0	V77-15-44-77	33.0
18"	FIP	FIP	V76-18-11-66	32.0	V77-18-11-77	34.0
	CTS*	FIP	V76-18-41-66	32.0	V77-18-41-77	34.0
	CTS*	CTS*	V76-18-44-66	32.0	V77-18-44-77	34.0
21"	FIP	FIP	V76-21-11-66	32.0	V77-21-11-77	34.0
	CTS*	FIP	V76-21-41-66	32.0	V77-21-41-77	34.0
	CTS*	CTS*	V76-21-44-66	32.0	V77-21-44-77	34.0
24"	FIP	FIP	V76-24-11-66	33.0	V77-24-11-77	35.0
	CTS*	FIP	V76-24-41-66	33.0	V77-24-41-77	35.0
	CTS*	CTS*	V76-24-44-66	33.0	V77-24-44-77	35.0
27"	FIP	FIP	V76-27-11-66	33.0	V77-27-11-77	35.0
	CTS*	FIP	V76-27-41-66	33.0	V77-27-41-77	35.0
	CTS*	CTS*	V76-27-44-66	33.0	V77-27-44-77	35.0



Note: 1-1/2" & 2" Coppersetter with a meter Ell on the outlet is standard **without** a by-pass.

\* **Grip Joint** for Copper or Plastic tube (CTS) is available. Add "-G" to the catalog number.

### BALL VALVE INLET AND METER ELL OUTLET

HEIGHT	SERVICE LINE CONNECTION		FOR 1-1/2" METER CATALOG NUMBER	APPROX. Wt. Lbs.	FOR 2" METER CATALOG NUMBER	APPROX. Wt. Lbs.
	INLET	OUTLET				
12"	FIP	FIP	VB76-12-11-66	30.0	VB77-12-11-77	32.0
	CTS*	FIP	VB76-12-41-66	30.0	VB77-12-41-77	32.0
	CTS*	CTS*	VB76-12-44-66	30.0	VB77-12-44-77	32.0
15"	FIP	FIP	VB76-15-11-66	31.0	VB77-15-11-77	33.0
	CTS*	FIP	VB76-15-41-66	31.0	VB77-15-41-77	33.0
	CTS*	CTS*	VB76-15-44-66	31.0	VB77-15-44-77	33.0
18"	FIP	FIP	VB76-18-11-66	32.0	VB77-18-11-77	34.0
	CTS*	FIP	VB76-18-41-66	32.0	VB77-18-41-77	34.0
	CTS*	CTS*	VB76-18-44-66	32.0	VB77-18-44-77	34.0
21"	FIP	FIP	VB76-21-11-66	32.0	VB77-21-11-77	34.0
	CTS*	FIP	VB76-21-41-66	32.0	VB77-21-41-77	34.0
	CTS*	CTS*	VB76-21-44-66	32.0	VB77-21-44-77	34.0
24"	FIP	FIP	VB76-24-11-66	33.0	VB77-24-11-77	35.0
	CTS*	FIP	VB76-24-41-66	33.0	VB77-24-41-77	35.0
	CTS*	CTS*	VB76-24-44-66	33.0	VB77-24-44-77	35.0
27"	FIP	FIP	VB76-27-11-66	33.0	VB77-27-11-77	35.0
	CTS*	FIP	VB76-27-41-66	33.0	VB77-27-41-77	35.0
	CTS*	CTS*	VB76-27-44-66	33.0	VB77-27-44-77	35.0



Note: 1-1/2" & 2" Coppersetter with a meter Ell on the outlet is standard **without** a by-pass.

\* **Grip Joint** for Copper or Plastic tube (CTS) is available. Add "-G" to the catalog number.

**OPTIONS:** Options for 1-1/2" and 2" Coppersetters include couplings for adapting FIP to various types of service line material. Options found on pages 42 and 43.

# 70 Series Copper setters for 1-1/2" & 2" Flanged Meters

Horizontal inlet and outlet

UNLESS OTHERWISE SPECIFIED - STANDARD METER SPACING FOR: 1-1/2" COPPERSETTERS = 13"  
2" COPPERSETTERS = 17"

## KEY VALVE INLET AND OUTLET

HEIGHT	SERVICE LINE CONNECTION		FOR 1-1/2" METER CATALOG NUMBER	APPROX. Wt. LBS.	FOR 2" METER CATALOG NUMBER	APPROX. Wt. LBS.
	INLET	OUTLET				
12"	FIP	FIP	VV76-12B-11-66	30.0	VV77-12B-11-77	32.0
	CTS*	FIP	VV76-12B-41-66	30.0	VV77-12B-41-77	32.0
	CTS*	CTS*	VV76-12B-44-66	30.0	VV77-12B-44-77	32.0
15"	FIP	FIP	VV76-15B-11-66	31.0	VV77-15B-11-77	33.0
	CTS*	FIP	VV76-15B-41-66	31.0	VV77-15B-41-77	33.0
	CTS*	CTS*	VV76-15B-44-66	31.0	VV77-15B-44-77	33.0
18"	FIP	FIP	VV76-18B-11-66	32.0	VV77-18B-11-77	34.0
	CTS*	FIP	VV76-18B-41-66	32.0	VV77-18B-41-77	34.0
	CTS*	CTS*	VV76-18B-44-66	32.0	VV77-18B-44-77	34.0
21"	FIP	FIP	VV76-21B-11-66	32.0	VV77-21B-11-77	34.0
	CTS*	FIP	VV76-21B-41-66	32.0	VV77-21B-41-77	34.0
	CTS*	CTS*	VV76-21B-44-66	32.0	VV77-21B-44-77	34.0
24"	FIP	FIP	VV76-24B-11-66	33.0	VV77-24B-11-77	35.0
	CTS*	FIP	VV76-24B-41-66	33.0	VV77-24B-41-77	35.0
	CTS*	CTS*	VV76-24B-44-66	33.0	VV77-24B-44-77	35.0
27"	FIP	FIP	VV76-27B-11-66	33.0	VV77-27B-11-77	35.0
	CTS*	FIP	VV76-27B-41-66	33.0	VV77-27B-41-77	35.0
	CTS*	CTS*	VV76-27B-44-66	33.0	VV77-27B-44-77	35.0



**Note:** 1-1/2" & 2" Copper setters with a valve on the outlet are standard **with** a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VV76-12-11-66

\* **Grip Joint** for Copper or Plastic tube (CTS) is available. Add "-G" to the catalog number.

## BALL VALVE INLET AND OUTLET

HEIGHT	SERVICE LINE CONNECTION		FOR 1-1/2" METER CATALOG NUMBER	APPROX. Wt. LBS.	FOR 2" METER CATALOG NUMBER	APPROX. Wt. LBS.
	INLET	OUTLET				
12"	FIP	FIP	VBB76-12B-11-66	30.0	VBB77-12B-11-77	32.0
	CTS*	FIP	VBB76-12B-41-66	30.0	VBB77-12B-41-77	32.0
	CTS*	CTS*	VBB76-12B-44-66	30.0	VBB77-12B-44-77	32.0
15"	FIP	FIP	VBB76-15B-11-66	31.0	VBB77-15B-11-77	33.0
	CTS*	FIP	VBB76-15B-41-66	31.0	VBB77-15B-41-77	33.0
	CTS*	CTS*	VBB76-15B-44-66	31.0	VBB77-15B-44-77	33.0
18"	FIP	FIP	VBB76-18B-11-66	32.0	VBB77-18B-11-77	34.0
	CTS*	FIP	VBB76-18B-41-66	32.0	VBB77-18B-41-77	34.0
	CTS*	CTS*	VBB76-18B-44-66	32.0	VBB77-18B-44-77	34.0
21"	FIP	FIP	VBB76-21B-11-66	32.0	VBB77-21B-11-77	34.0
	CTS*	FIP	VBB76-21B-41-66	32.0	VBB77-21B-41-77	34.0
	CTS*	CTS*	VBB76-21B-44-66	32.0	VBB77-21B-44-77	34.0
24"	FIP	FIP	VBB76-24B-11-66	33.0	VBB77-24B-11-77	35.0
	CTS*	FIP	VBB76-24B-41-66	33.0	VBB77-24B-41-77	35.0
	CTS*	CTS*	VBB76-24B-44-66	33.0	VBB77-24B-44-77	35.0
27"	FIP	FIP	VBB76-27B-11-66	33.0	VBB77-27B-11-77	35.0
	CTS*	FIP	VBB76-27B-41-66	33.0	VBB77-27B-41-77	35.0
	CTS*	CTS*	VBB76-27B-44-66	33.0	VBB77-27B-44-77	35.0



**Note:** 1-1/2" & 2" Copper setters with a valve on the outlet are standard **with** a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VBB76-12-11-66

\* **Grip Joint** for Copper or Plastic tube (CTS) is available. Add "-G" to the catalog number.

**OPTIONS:** Options for 1-1/2" and 2" Copper setters include couplings for adapting FIP to various types of service line material.  
Optional high by-pass for use when standard by-pass is difficult to reach.  
Options found on pages 42 and 43.

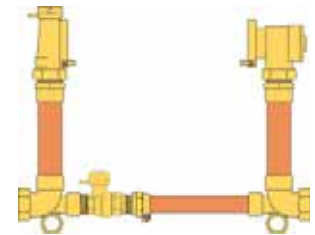
# 70 Series Copper setters for 1-1/2" & 2" Flanged Meters

## Horizontal inlet and outlet

UNLESS OTHERWISE SPECIFIED - STANDARD METER SPACING FOR: 1-1/2" COPPERSETTERS = 13"  
2" COPPERSETTERS = 17"

### KEY VALVE INLET AND ANGLE CHECK VALVE OUTLET

HEIGHT	SERVICE LINE CONNECTION		FOR 1-1/2" METER CATALOG NUMBER	APPROX. Wt. Lbs.	FOR 2" METER CATALOG NUMBER	APPROX. Wt. Lbs.
	INLET	OUTLET				
12"	FIP	FIP	VH76-12B-11-66	30.0	VH77-12B-11-77	32.0
	CTS*	FIP	VH76-12B-41-66	30.0	VH77-12B-41-77	32.0
	CTS*	CTS*	VH76-12B-44-66	30.0	VH77-12B-44-77	32.0
15"	FIP	FIP	VH76-15B-11-66	31.0	VH77-15B-11-77	33.0
	CTS*	FIP	VH76-15B-41-66	31.0	VH77-15B-41-77	33.0
	CTS*	CTS*	VH76-15B-44-66	31.0	VH77-15B-44-77	33.0
18"	FIP	FIP	VH76-18B-11-66	32.0	VH77-18B-11-77	34.0
	CTS*	FIP	VH76-18B-41-66	32.0	VH77-18B-41-77	34.0
	CTS*	CTS*	VH76-18B-44-66	32.0	VH77-18B-44-77	34.0
21"	FIP	FIP	VH76-21B-11-66	32.0	VH77-21B-11-77	34.0
	CTS*	FIP	VH76-21B-41-66	32.0	VH77-21B-41-77	34.0
	CTS*	CTS*	VH76-21B-44-66	32.0	VH77-21B-44-77	34.0
24"	FIP	FIP	VH76-24B-11-66	33.0	VH77-24B-11-77	35.0
	CTS*	FIP	VH76-24B-41-66	33.0	VH77-24B-41-77	35.0
	CTS*	CTS*	VH76-24B-44-66	33.0	VH77-24B-44-77	35.0
27"	FIP	FIP	VH76-27B-11-66	33.0	VH77-27B-11-77	35.0
	CTS*	FIP	VH76-27B-41-66	33.0	VH77-27B-41-77	35.0
	CTS*	CTS*	VH76-27B-44-66	33.0	VH77-27B-44-77	35.0

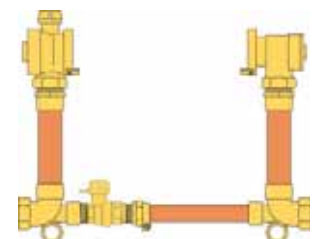


**Note:** 1-1/2" & 2" Copper setters with a valve on the outlet are standard **with** a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VH76-12-11-66.

\* **Grip Joint** for Copper or Plastic tube (CTS) is available. Add "-G" to the catalog number.

### BALL VALVE INLET AND ANGLE CHECK VALVE OUTLET

HEIGHT	SERVICE LINE CONNECTION		FOR 1-1/2" METER CATALOG NUMBER	APPROX. Wt. Lbs.	FOR 2" METER CATALOG NUMBER	APPROX. Wt. Lbs.
	INLET	OUTLET				
12"	FIP	FIP	VBH76-12B-11-66	30.0	VBH77-12B-11-77	32.0
	CTS*	FIP	VBH76-12B-41-66	30.0	VBH77-12B-41-77	32.0
	CTS*	CTS*	VBH76-12B-44-66	30.0	VBH77-12B-44-77	32.0
15"	FIP	FIP	VBH76-15B-11-66	31.0	VBH77-15B-11-77	33.0
	CTS*	FIP	VBH76-15B-41-66	31.0	VBH77-15B-41-77	33.0
	CTS*	CTS*	VBH76-15B-44-66	31.0	VBH77-15B-44-77	33.0
18"	FIP	FIP	VBH76-18B-11-66	32.0	VBH77-18B-11-77	34.0
	CTS*	FIP	VBH76-18B-41-66	32.0	VBH77-18B-41-77	34.0
	CTS*	CTS*	VBH76-18B-44-66	32.0	VBH77-18B-44-77	34.0
21"	FIP	FIP	VBH76-21B-11-66	32.0	VBH77-21B-11-77	34.0
	CTS*	FIP	VBH76-21B-41-66	32.0	VBH77-21B-41-77	34.0
	CTS*	CTS*	VBH76-21B-44-66	32.0	VBH77-21B-44-77	34.0
24"	FIP	FIP	VBH76-24B-11-66	33.0	VBH77-24B-11-77	35.0
	CTS*	FIP	VBH76-24B-41-66	33.0	VBH77-24B-41-77	35.0
	CTS*	CTS*	VBH76-24B-44-66	33.0	VBH77-24B-44-77	35.0
27"	FIP	FIP	VBH76-27B-11-66	33.0	VBH77-27B-11-77	35.0
	CTS*	FIP	VBH76-27B-41-66	33.0	VBH77-27B-41-77	35.0
	CTS*	CTS*	VBH76-27B-44-66	33.0	VBH77-27B-44-77	35.0



**Note:** 1-1/2" & 2" Copper setters with a valve on the outlet are standard **with** a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VBH76-12-11-66

\* **Grip Joint** for Copper or Plastic tube (CTS) is available. Add "-G" to the catalog number.

**OPTIONS:** Options for 1-1/2" and 2" Copper setters include couplings for adapting FIP to various types of service line material.

Optional high by-pass for use when standard by-pass is difficult to reach.

Options found on pages 42 and 43.

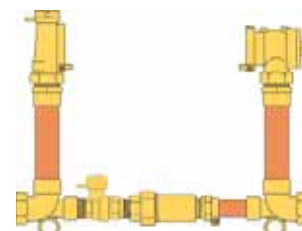
# 70 Series Coppersetters for 1-1/2" & 2" Flanged Meters

Horizontal inlet and outlet

UNLESS OTHERWISE SPECIFIED - STANDARD METER SPACING FOR: 1-1/2" COPPERSETTERS = 13"  
2" COPPERSETTERS = 17"

## KEY VALVE INLET AND ASSE APPROVED ANGLE DUAL CHECK VALVE OUTLET

HEIGHT	SERVICE LINE CONNECTION		FOR 1-1/2" METER CATALOG NUMBER	APPROX. WT. LBS.	FOR 2" METER CATALOG NUMBER	APPROX. WT. LBS.
	INLET	OUTLET				
12"	FIP	FIP	VHH76-12B-11-66	30.0	VHH77-12B-11-77	32.0
	CTS*	FIP	VHH76-12B-41-66	30.0	VHH77-12B-41-77	32.0
	CTS*	CTS*	VHH76-12B-44-66	30.0	VHH77-12B-44-77	32.0
15"	FIP	FIP	VHH76-15B-11-66	31.0	VHH77-15B-11-77	33.0
	CTS*	FIP	VHH76-15B-41-66	31.0	VHH77-15B-41-77	33.0
	CTS*	CTS*	VHH76-15B-44-66	31.0	VHH77-15B-44-77	33.0
18"	FIP	FIP	VHH76-18B-11-66	32.0	VHH77-18B-11-77	34.0
	CTS*	FIP	VHH76-18B-41-66	32.0	VHH77-18B-41-77	34.0
	CTS*	CTS*	VHH76-18B-44-66	32.0	VHH77-18B-44-77	34.0
21"	FIP	FIP	VHH76-21B-11-66	32.0	VHH77-21B-11-77	34.0
	CTS*	FIP	VHH76-21B-41-66	32.0	VHH77-21B-41-77	34.0
	CTS*	CTS*	VHH76-21B-44-66	32.0	VHH77-21B-44-77	34.0
24"	FIP	FIP	VHH76-24B-11-66	33.0	VHH77-24B-11-77	35.0
	CTS*	FIP	VHH76-24B-41-66	33.0	VHH77-24B-41-77	35.0
	CTS*	CTS*	VHH76-24B-44-66	33.0	VHH77-24B-44-77	35.0
27"	FIP	FIP	VHH76-27B-11-66	33.0	VHH77-27B-11-77	35.0
	CTS*	FIP	VHH76-27B-41-66	33.0	VHH77-27B-41-77	35.0
	CTS*	CTS*	VHH76-27B-44-66	33.0	VHH77-27B-44-77	35.0



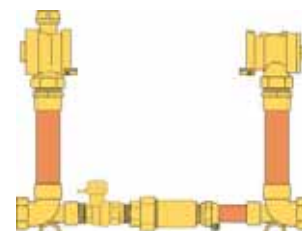
Shown with Cartridge Style Dual Check Valve in By-Pass. See information below to order this feature.

**Note:** 1-1/2" & 2" Coppersetters with a valve on the outlet are standard **with** a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VHH76-12-11-66. For By-Pass with 1" Cartridge Style Dual Check Valve, insert "HC" after the "B." Example: VHH77-12BHC-11-77.

\* **Grip Joint** for Copper or Plastic tube (CTS) is available. Add "-G" to the catalog number.

## BALL VALVE INLET AND ASSE APPROVED ANGLE DUAL CHECK VALVE OUTLET

HEIGHT	SERVICE LINE CONNECTION		FOR 1-1/2" METER CATALOG NUMBER	APPROX. WT. LBS.	FOR 2" METER CATALOG NUMBER	APPROX. WT. LBS.
	INLET	OUTLET				
12"	FIP	FIP	VBHH76-12B-11-66	30.0	VBHH77-12B-11-77	32.0
	CTS*	FIP	VBHH76-12B-41-66	30.0	VBHH77-12B-41-77	32.0
	CTS*	CTS*	VBHH76-12B-44-66	30.0	VBHH77-12B-44-77	32.0
15"	FIP	FIP	VBHH76-15B-11-66	31.0	VBHH77-15B-11-77	33.0
	CTS*	FIP	VBHH76-15B-41-66	31.0	VBHH77-15B-41-77	33.0
	CTS*	CTS*	VBHH76-15B-44-66	31.0	VBHH77-15B-44-77	33.0
18"	FIP	FIP	VBHH76-18B-11-66	32.0	VBHH77-18B-11-77	34.0
	CTS*	FIP	VBHH76-18B-41-66	32.0	VBHH77-18B-41-77	34.0
	CTS*	CTS*	VBHH76-18B-44-66	32.0	VBHH77-18B-44-77	34.0
21"	FIP	FIP	VBHH76-21B-11-66	32.0	VBHH77-21B-11-77	34.0
	CTS*	FIP	VBHH76-21B-41-66	32.0	VBHH77-21B-41-77	34.0
	CTS*	CTS*	VBHH76-21B-44-66	32.0	VBHH77-21B-44-77	34.0
24"	FIP	FIP	VBHH76-24B-11-66	33.0	VBHH77-24B-11-77	35.0
	CTS*	FIP	VBHH76-24B-41-66	33.0	VBHH77-24B-41-77	35.0
	CTS*	CTS*	VBHH76-24B-44-66	33.0	VBHH77-24B-44-77	35.0
27"	FIP	FIP	VBHH76-27B-11-66	33.0	VBHH77-27B-11-77	35.0
	CTS*	FIP	VBHH76-27B-41-66	33.0	VBHH77-27B-41-77	35.0
	CTS*	CTS*	VBHH76-27B-44-66	33.0	VBHH77-27B-44-77	35.0



Shown with Cartridge Style Dual Check Valve in By-Pass. See information below to order this feature.

**Note:** 1-1/2" & 2" Coppersetters with a valve on the outlet are standard **with** a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VBHH76-12-11-66. For by-pass with 1" Cartridge Style Dual Check Valve, insert "HC" after the "B." Example: VBHH77-12BHC-11-77.

\* **Grip Joint** for Copper or Plastic tube (CTS) is available. Add "-G" to the catalog number.

**OPTIONS:** Options for 1-1/2" and 2" Coppersetters include couplings for adapting FIP to various types of service line material. Optional high by-pass for use when standard by-pass is difficult to reach. Options found on pages 42 and 43.

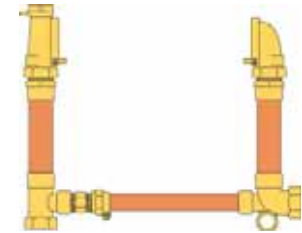
# 70-80 Series Copper setters for 1-1/2" & 2" Flanged Meters

## Vertical inlet and Horizontal outlet

UNLESS OTHERWISE SPECIFIED - STANDARD METER SPACING FOR: 1-1/2" COPPERSETTERS = 13"  
2" COPPERSETTERS = 17"

### KEY VALVE INLET AND METER ELL OUTLET

HEIGHT	FOR 1-1/2" METER		FOR 2" METER	
	CATALOG NUMBER	APPROX. WT. LBS.	CATALOG NUMBER	APPROX. WT. LBS.
12"	V76-86-12-11-66	30.0	V77-87-12-11-77	32.0
15"	V76-86-15-11-66	31.0	V77-87-15-11-77	33.0
18"	V76-86-18-11-66	32.0	V77-87-18-11-77	34.0
21"	V76-86-21-11-66	32.0	V77-87-21-11-77	34.0
24"	V76-86-24-11-66	33.0	V77-87-24-11-77	35.0
27"	V76-86-27-11-66	33.0	V77-87-27-11-77	35.0



Note: 1-1/2" & 2" Copper setter with a Meter Ell on the outlet is standard *without* a by-pass.

### BALL VALVE INLET AND METER ELL OUTLET

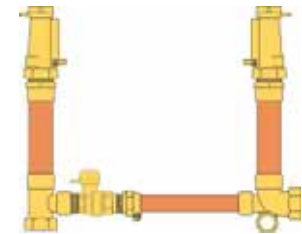
HEIGHT	FOR 1-1/2" METER		FOR 2" METER	
	CATALOG NUMBER	APPROX. WT. LBS.	CATALOG NUMBER	APPROX. WT. LBS.
12"	VB76-86-12-11-66	30.0	VB77-87-12-11-77	32.0
15"	VB76-86-15-11-66	31.0	VB77-87-15-11-77	33.0
18"	VB76-86-18-11-66	32.0	VB77-87-18-11-77	34.0
21"	VB76-86-21-11-66	32.0	VB77-87-21-11-77	34.0
24"	VB76-86-24-11-66	33.0	VB77-87-24-11-77	35.0
27"	VB76-86-27-11-66	33.0	VB77-87-27-11-77	35.0



Note: 1-1/2" & 2" Copper setter with a Meter Ell on the outlet is standard *without* a by-pass.

### KEY VALVE INLET AND OUTLET

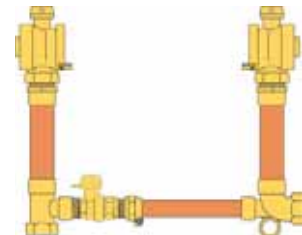
HEIGHT	FOR 1-1/2" METER		FOR 2" METER	
	CATALOG NUMBER	APPROX. WT. LBS.	CATALOG NUMBER	APPROX. WT. LBS.
12"	VV76-86-12B-11-66	32.0	VV77-87-12B-11-77	36.0
15"	VV76-86-15B-11-66	33.0	VV77-87-15B-11-77	37.0
18"	VV76-86-18B-11-66	34.0	VV77-87-18B-11-77	38.0
21"	VV76-86-21B-11-66	34.0	VV77-87-21B-11-77	40.0
24"	VV76-86-24B-11-66	35.0	VV77-87-24B-11-77	40.0
27"	VV76-86-27B-11-66	35.0	VV77-87-27B-11-77	41.0



Note: 1-1/2" & 2" Copper setters with a valve on the outlet are standard *with* a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VV76-86-15-11-66

### BALL VALVE INLET AND OUTLET

HEIGHT	FOR 1-1/2" METER		FOR 2" METER	
	CATALOG NUMBER	APPROX. WT. LBS.	CATALOG NUMBER	APPROX. WT. LBS.
12"	VBB76-86-12B-11-66	32.0	VBB77-87-12B-11-77	37.0
15"	VBB76-86-15B-11-66	33.0	VBB77-87-15B-11-77	38.0
18"	VBB76-86-18B-11-66	34.0	VBB77-87-18B-11-77	39.0
21"	VBB76-86-21B-11-66	36.0	VBB77-87-21B-11-77	41.0
24"	VBB76-86-24B-11-66	37.0	VBB77-87-24B-11-77	42.0
27"	VBB76-86-27B-11-66	39.0	VBB77-87-27B-11-77	43.0



Note: 1-1/2" & 2" Copper setters with a valve on the outlet are standard *with* a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VBB76-86-15-11-66.

**OPTIONS:** Options for 1-1/2" and 2" Copper setters include couplings for adapting FIP to various types of service line material.  
Optional high by-pass for use when standard by-pass is difficult to reach.  
Options found on pages 42 and 43.

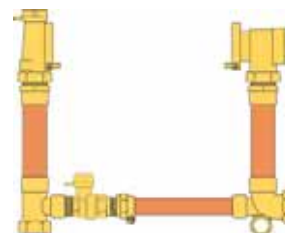
# 70-80 Series Copper setters for 1-1/2" & 2" Flanged Meters

Vertical inlet and Horizontal outlet

UNLESS OTHERWISE SPECIFIED - STANDARD METER SPACING FOR: 1-1/2" COPPERSETTERS = 13"  
2" COPPERSETTERS = 17"

## KEY VALVE INLET AND ANGLE CHECK VALVE OUTLET

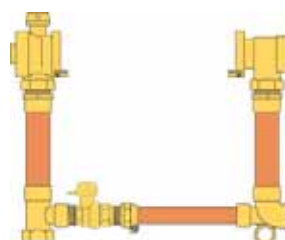
HEIGHT	FOR 1-1/2" METER		FOR 2" METER	
	CATALOG NUMBER	APPROX. WT. LBS.	CATALOG NUMBER	APPROX. WT. LBS.
12"	VH76-86-12B-11-66	27.0	VH77-87-12B-11-77	37.0
15"	VH76-86-15B-11-66	28.0	VH77-87-15B-11-77	38.0
18"	VH76-86-18B-11-66	29.0	VH77-87-18B-11-77	39.0
21"	VH76-86-21B-11-66	30.0	VH77-87-21B-11-77	41.0
24"	VH76-86-24B-11-66	31.0	VH77-87-24B-11-77	42.0
27"	VH76-86-27B-11-66	32.0	VH77-87-27B-11-77	43.0



**Note:** 1-1/2" & 2" Copper setters with a valve on the outlet are standard **with** a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VH76-86-12-11-66.

## BALL VALVE INLET AND ANGLE CHECK VALVE OUTLET

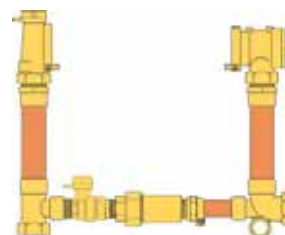
HEIGHT	FOR 1-1/2" METER		FOR 2" METER	
	CATALOG NUMBER	APPROX. WT. LBS.	CATALOG NUMBER	APPROX. WT. LBS.
12"	VBH76-86-12B-11-66	33.0	VBH77-87-12B-11-77	41.0
15"	VBH76-86-15B-11-66	34.0	VBH77-87-15B-11-77	42.0
18"	VBH76-86-18B-11-66	35.0	VBH77-87-18B-11-77	43.0
21"	VBH76-86-21B-11-66	36.0	VBH77-87-21B-11-77	44.0
24"	VBH76-86-24B-11-66	36.0	VBH77-87-24B-11-77	44.0
27"	VBH76-86-27B-11-66	37.0	VBH77-87-27B-11-77	45.0



**Note:** 1-1/2" & 2" Copper setters with a valve on the outlet are standard **with** a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VBH76-86-12-11-66.

## KEY VALVE INLET AND ASSE APPROVED ANGLE DUAL CHECK VALVE OUTLET

HEIGHT	FOR 1-1/2" METER		FOR 2" METER	
	CATALOG NUMBER	APPROX. WT. LBS.	CATALOG NUMBER	APPROX. WT. LBS.
12"	VHH76-86-12B-11-66	27.0	VHH77-87-12B-11-77	37.0
15"	VHH76-86-15B-11-66	28.0	VHH77-87-15B-11-77	38.0
18"	VHH76-86-18B-11-66	29.0	VHH77-87-18B-11-77	39.0
21"	VHH76-86-21B-11-66	30.0	VHH77-87-21B-11-77	41.0
24"	VHH76-86-24B-11-66	31.0	VHH77-87-24B-11-77	42.0
27"	VHH76-86-27B-11-66	32.0	VHH77-87-27B-11-77	43.0

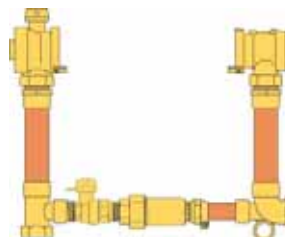


Shown with Cartridge Style Dual Check Valve in By-Pass. See information at left to order this feature.

**Note:** 1-1/2" & 2" Copper setters with a valve on the outlet are standard **with** a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VHH76-86-12-11-66. For By-Pass with 1" Cartridge Style Dual Check Valve, insert "HC" after the "B." Example: VHH76-86-12BHC1166.

## BALL VALVE INLET AND ASSE APPROVED ANGLE DUAL CHECK VALVE OUTLET

HEIGHT	FOR 1-1/2" METER		FOR 2" METER	
	CATALOG NUMBER	APPROX. WT. LBS.	CATALOG NUMBER	APPROX. WT. LBS.
12"	VBHH76-86-12B-1166	33.0	VBHH77-87-12B-1177	41.0
15"	VBHH76-86-15B-1166	34.0	VBHH77-87-15B-1177	42.0
18"	VBHH76-86-18B-1166	35.0	VBHH77-87-18B-1177	43.0
21"	VBHH76-86-21B-1166	36.0	VBHH77-87-21B-1177	44.0
24"	VBHH76-86-24B-1166	36.0	VBHH77-87-24B-1177	44.0
27"	VBHH76-86-27B-1166	37.0	VBHH77-87-27B-1177	45.0



Shown with Cartridge Style Dual Check Valve in By-Pass. See information at left to order this feature.

**Note:** 1-1/2" & 2" Copper setters with a valve on the outlet are standard **with** a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VBHH76-86-12-1166. For By-Pass with 1" Cartridge Style Dual Check Valve, insert "HC" after the "B." Example: VBHH76-8612BHC1166.

**OPTIONS:** Options for 1-1/2" and 2" Copper setters include couplings for adapting FIP to various types of service line material.  
Optional high by-pass for use when standard by-pass is difficult to reach.  
Options found on pages 42 and 43.

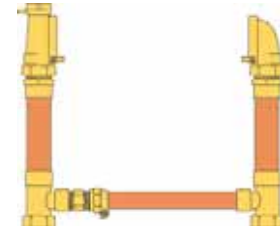
# 80 Series Copper setters for 1-1/2" & 2" Flanged Meters

## Vertical inlet and Vertical outlet

UNLESS OTHERWISE SPECIFIED - STANDARD METER SPACING FOR: 1-1/2" COPPERSETTERS = 13"  
2" COPPERSETTERS = 17"

### KEY VALVE INLET AND METER ELL OUTLET

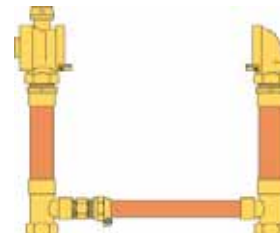
HEIGHT	FOR 1-1/2" METER		FOR 2" METER	
	CATALOG NUMBER	APPROX. WT. LBS.	CATALOG NUMBER	APPROX. WT. LBS.
12"	V86-12-11-66	30.0	V87-12-11-77	32.0
15"	V86-15-11-66	31.0	V87-15-11-77	33.0
18"	V86-18-11-66	32.0	V87-18-11-77	34.0
21"	V86-21-11-66	32.0	V87-21-11-77	34.0
24"	V86-24-11-66	33.0	V87-24-11-77	35.0
27"	V86-27-11-66	33.0	V87-27-11-77	35.0



Note: 1-1/2" & 2" Copper setter with a Meter Ell on the outlet is standard *without* a by-pass.

### BALL VALVE INLET AND METER ELL OUTLET

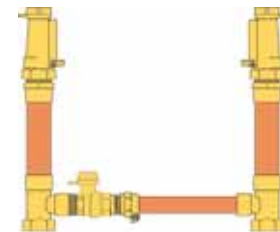
HEIGHT	FOR 1-1/2" METER		FOR 2" METER	
	CATALOG NUMBER	APPROX. WT. LBS.	CATALOG NUMBER	APPROX. WT. LBS.
12"	VB86-12-11-66	30.0	VB87-12-11-77	32.0
15"	VB86-15-11-66	31.0	VB87-15-11-77	33.0
18"	VB86-18-11-66	32.0	VB87-18-11-77	34.0
21"	VB86-21-11-66	32.0	VB87-21-11-77	34.0
24"	VB86-24-11-66	33.0	VB87-24-11-77	35.0
27"	VB86-27-11-66	33.0	VB87-27-11-77	35.0



Note: 1-1/2" & 2" Copper setter with a Meter Ell on the outlet is standard *without* a by-pass.

### KEY VALVE INLET AND OUTLET

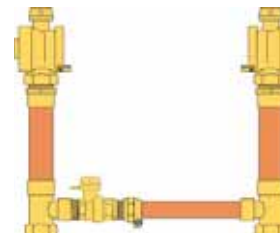
HEIGHT	FOR 1-1/2" METER		FOR 2" METER	
	CATALOG NUMBER	APPROX. WT. LBS.	CATALOG NUMBER	APPROX. WT. LBS.
12"	VV86-12B-11-66	32.0	VV87-12B-11-77	36.0
15"	VV86-15B-11-66	33.0	VV87-15B-11-77	37.0
18"	VV86-18B-11-66	34.0	VV87-18B-11-77	38.0
21"	VV86-21B-11-66	34.0	VV87-21B-11-77	40.0
24"	VV86-24B-11-66	35.0	VV87-24B-11-77	40.0
27"	VV86-27B-11-66	35.0	VV87-27B-11-77	41.0



Note: 1-1/2" & 2" Copper setters with a valve on the outlet are standard *with* a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VV86-12-11-66

### BALL VALVE INLET AND OUTLET

HEIGHT	FOR 1-1/2" METER		FOR 2" METER	
	CATALOG NUMBER	APPROX. WT. LBS.	CATALOG NUMBER	APPROX. WT. LBS.
12"	VBB86-12B-11-66	32.0	VBB87-12B-11-77	37.0
15"	VBB86-15B-11-66	33.0	VBB87-15B-11-77	38.0
18"	VBB86-18B-11-66	34.0	VBB87-18B-11-77	39.0
21"	VBB86-21B-11-66	36.0	VBB87-21B-11-77	41.0
24"	VBB86-24B-11-66	37.0	VBB87-24B-11-77	42.0
27"	VBB86-27B-11-66	39.0	VBB87-27B-11-77	43.0



Note: 1-1/2" & 2" Copper setters with a valve on the outlet are standard *with* a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VBB86-12-11-66.

**OPTIONS:** Options for 1-1/2" and 2" Copper setters include couplings for adapting FIP to various types of service line material.  
Optional high by-pass for use when standard by-pass is difficult to reach.  
Options found on pages 42 and 43.

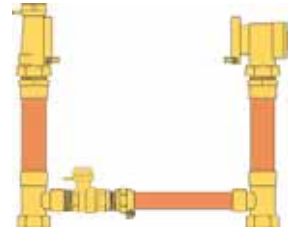
# 80 Series Copper setters for 1-1/2" & 2" Flanged Meters

Vertical inlet and Vertical outlet

UNLESS OTHERWISE SPECIFIED - STANDARD METER SPACING FOR: 1-1/2" COPPERSETTERS = 13"  
2" COPPERSETTERS = 17"

## KEY VALVE INLET AND ANGLE CHECK VALVE OUTLET

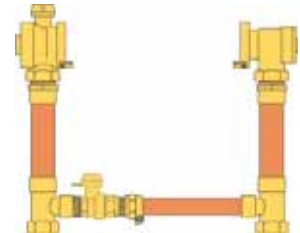
HEIGHT	FOR 1-1/2" METER		FOR 2" METER	
	CATALOG NUMBER	APPROX. WT. LBS.	CATALOG NUMBER	APPROX. WT. LBS.
12"	VH86-12B-11-66	27.0	VH87-12B-11-77	37.0
15"	VH86-15B-11-66	28.0	VH87-15B-11-77	38.0
18"	VH86-18B-11-66	29.0	VH87-18B-11-77	39.0
21"	VH86-21B-11-66	30.0	VH87-21B-11-77	41.0
24"	VH86-24B-11-66	31.0	VH87-24B-11-77	42.0
27"	VH86-27B-11-66	32.0	VH87-27B-11-77	43.0



**Note:** 1-1/2" & 2" Copper setters with a valve on the outlet are standard **with** a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VH86-12-11-66.

## BALL VALVE INLET AND ANGLE CHECK VALVE OUTLET

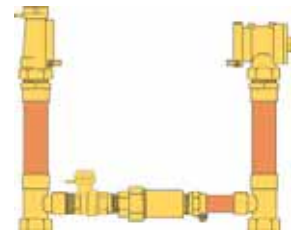
HEIGHT	FOR 1-1/2" METER		FOR 2" METER	
	CATALOG NUMBER	APPROX. WT. LBS.	CATALOG NUMBER	APPROX. WT. LBS.
12"	VBH86-12B-11-66	33.0	VBH87-12B-11-77	41.0
15"	VBH86-15B-11-66	34.0	VBH87-15B-11-77	42.0
18"	VBH86-18B-11-66	35.0	VBH87-18B-11-77	43.0
21"	VBH86-21B-11-66	36.0	VBH87-21B-11-77	44.0
24"	VBH86-24B-11-66	36.0	VBH87-24B-11-77	44.0
27"	VBH86-27B-11-66	37.0	VBH87-27B-11-77	45.0



**Note:** 1-1/2" & 2" Copper setters with a valve on the outlet are standard **with** a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VBH86-12-11-66.

## KEY VALVE INLET AND ASSE APPROVED ANGLE DUAL CHECK VALVE OUTLET

HEIGHT	FOR 1-1/2" METER		FOR 2" METER	
	CATALOG NUMBER	APPROX. WT. LBS.	CATALOG NUMBER	APPROX. WT. LBS.
12"	VHH86-12B-11-66	27.0	VHH87-12B-11-77	37.0
15"	VHH86-15B-11-66	28.0	VHH87-15B-11-77	38.0
18"	VHH86-18B-11-66	29.0	VHH87-18B-11-77	39.0
21"	VHH86-21B-11-66	30.0	VHH87-21B-11-77	41.0
24"	VHH86-24B-11-66	31.0	VHH87-24B-11-77	42.0
27"	VHH86-27B-11-66	32.0	VHH87-27B-11-77	43.0

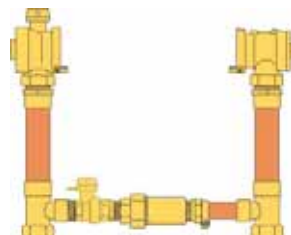


Shown with Cartridge Style Dual Check Valve in By-Pass. See information at left to order this feature.

**Note:** 1-1/2" & 2" Copper setters with a valve on the outlet are standard **with** a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VHH86-12-11-66. For By-Pass with 1" Cartridge Style Dual Check Valve, insert "HC" after the "B." Example: VHH86-12BHC-11-66.

## BALL VALVE INLET AND ASSE APPROVED ANGLE DUAL CHECK VALVE OUTLET

HEIGHT	FOR 1-1/2" METER		FOR 2" METER	
	CATALOG NUMBER	APPROX. WT. LBS.	CATALOG NUMBER	APPROX. WT. LBS.
12"	VBHH86-12B-11-66	33.0	VBHH87-12B-11-77	41.0
15"	VBHH86-15B-11-66	34.0	VBHH87-15B-11-77	42.0
18"	VBHH86-18B-11-66	35.0	VBHH87-18B-11-77	43.0
21"	VBHH86-21B-11-66	36.0	VBHH87-21B-11-77	44.0
24"	VBHH86-24B-11-66	36.0	VBHH87-24B-11-77	44.0
27"	VBHH86-27B-11-66	37.0	VBHH87-27B-11-77	45.0



Shown with Cartridge Style Dual Check Valve in By-Pass. See information at left to order this feature.

**Note:** 1-1/2" & 2" Copper setters with a valve on the outlet are standard **with** a by-pass. The by-pass feature can be deleted by omitting the "B" from the middle of the catalog number. Example: VBHH86-12-11-66. For By-Pass with 1" Cartridge Style Dual Check Valve, insert "HC" after the "B." Example: VBHH86-12BHC-11-66.

**OPTIONS:** Options for 1-1/2" and 2" Copper setters include couplings for adapting FIP to various types of service line material. Optional high by-pass for use when standard by-pass is difficult to reach. Options found on pages 42 and 43.

# Coppersetters for 1-1/2" & 2" Flanged Meters

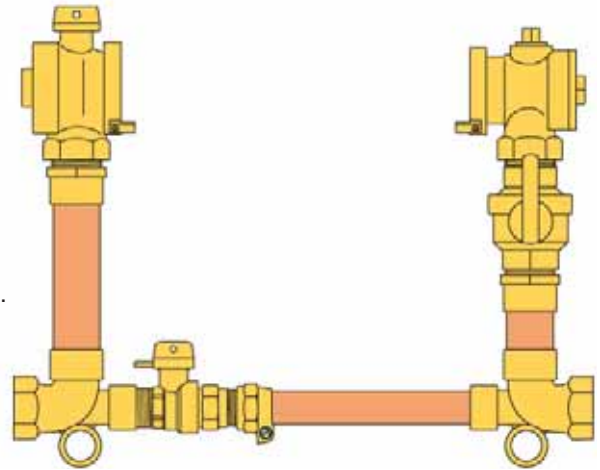
## Options

### Dual Check Valve with Test Port Option

1-1/2" & 2" Coppersetters with an angle dual check valve with a convenient integral 1-1/2" test port for on-site testing, allows the utility to confirm meter accuracy without removal of the meter, saving time and money. This option includes a shut-off Ball Valve (with handle) directly beneath the dual check valve. The shut-off valve isolates the meter from service use. It will also permit service use during the meter test by opening an optional by-pass.

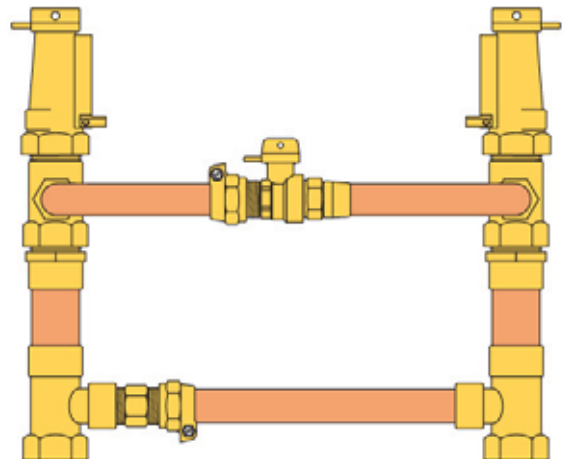
To order add "-TP6" to the catalog number. Example: VBHH77-14B-11-77-TP6.

**Note:** Minimum height with standard by-pass (or no by-pass) is 14".  
Minimum height with high by-pass is 18".



### High By-Pass Option

1-1/2" & 2" Coppersetters (minimum 12" height) are available with an optional "high by-pass." This option is popular with taller Coppersetters or when a standard by-pass is difficult to reach. To order add "HB" to catalog number. Example: VV86-12HB-11-66.



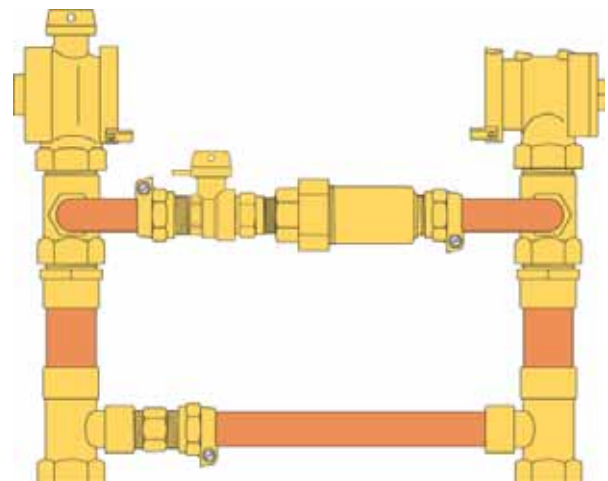
### By-Pass With Cartridge Style Dual Check Valve Option (Available with Standard or High By-Pass Options)

**To Order:** Place "HC" after the "B" By-Pass designator.

Examples: Standard By-Pass – VBHH87-12BHC-11-77

High By-Pass – VBHH87-18HBHC-1177

**Note:** Dual Check Valve option shown with Dual Check Valve in By-Pass.



# Coppersettters for 1-1/2" & 2" Flanged Meters

Options

## 1-1/2" & 2" 70 Series Coppersetter Tees

CATALOG NUMBER	DESCRIPTION
CSTEE-6-T	1-1/2" Horizontal Inlet Coppersetter Tee
CSTEE-7-T	2" Horizontal Inlet Coppersetter Tee
CSTEE-6B-T	1-1/2" Horizontal Inlet Coppersetter Tee for by-pass
CSTEE-7B-T	2" Horizontal Inlet Coppersetter Tee for by-pass
CSTEE-6-S	1-1/2" Horizontal Outlet Coppersetter Tee
CSTEE-7-S	2" Horizontal Outlet Coppersetter Tee
CSTEE-6B-S	1-1/2" Horizontal Outlet Coppersetter Tee for by-pass
CSTEE-7B-S	2" Horizontal Outlet Coppersetter Tee for by-pass

## 1-1/2" & 2" 80 Series Coppersetter Tees

CATALOG NUMBER	DESCRIPTION
T1S1-664	1-1/2" Vertical Inlet/Outlet Coppersetter tee for By-Pass
T1S1-774	2" Vertical Inlet/Outlet Coppersetter tee for By-Pass

## 1-1/2" & 2" Coppersetter Bushings and High By-Pass Tees

CATALOG NUMBER	DESCRIPTION
CSSB-6	1-1/2" Solder valve bushing for 1-1/2" copper
CSSB-7	2" Solder valve bushing for 2" copper
T184-664	High By-Pass tee for 1-1/2" Coppersetter
T184-774	High By-Pass tee for 2" Coppersetter

## Optional Couplings

1-1/2" & 2" Coppersettters with FIP only end connections can be connected to other types of service lines by use of the couplings listed below.  
(complete listing in Catalog Section J)

FOR CONNECTING TO:	1-1/2" COUPLING	2" COUPLING
Copper or Plastic Tube*	C84-66	C84-77
PVC Pipe	C87-66	C87-77
PE Pipe	C86-66-IDR7	C86-77-IDR7
Iron Pipe	C85-66	C85-77
Flared Copper	C28-66	C28-77

\* **Grip Joint** for Copper or Plastic tube (CTS\*) is available.  
Add "-G" to the catalog number.