



Yoke Expander UFR Unmeasured-Flow Reducer

PATENT PENDING A.R.I. -LICENSED BY A.R.I. FLOW CONTROL ACCESSORIES LTD.

714U Series - Model Number Explanation

SPACE 1, 2, 3, & 4

Basic UFR valve model number:
714U = UFR Yoke Expander

SPACE 5

size: 2 = 5/8" x 3/4"

SPACE 6 & UP

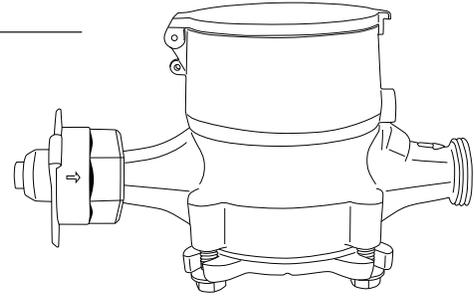
E - Yoke Expander - All Iron Yoke & Non-Ball Valve Yokes Boxes.
EYBV - Yoke Expander - Only for Yoke Box and Long Yokebox w/Ball Valve Inlet

SPACE

Blank Space Precedes "X"

SPACE

- X950 V - Volumetric (Positive Displacement) Meter w/Backflow Prevention
- X951 V - Volumetric (Positive Displacement) Meter No Backflow Prevention (NCV)
- X960 M2 - Multijet Meter w/Backflow Prevention
- X961 M2 - Multijet Meter No Backflow Prevention (NCV)



HOW TO ORDER

Not all sizes or combinations available - contact factory.

UNIT REQUIRED (Example):

- UFR Yoke Expander
- 5/8" x 3/4" size
- Volumetric Meter
- No Backflow Prevention

UNIT REQUIRED (Example):

- UFR Yoke Expander
- 5/8" x 3/4" size
- Volumetric Meter
- With Backflow Prevention
- Yoke Box w/Ball Valve Inlet

Order Model 714U2E X951

SPACE 1,2,3,&4	SPACE 5	SPACE 6 & UP	SPACE	SPACE
714U	2	E		X951

Order Model 714U2EYBV X950

SPACE 1,2,3,&4	SPACE 5	SPACE 6 & UP	SPACE	SPACE
714U	2	EYBV		X950

(Installation and troubleshooting procedures on opposite side)



WARNING: It is unlawful in CALIFORNIA & VERMONT (effective 1/1/2010); MARYLAND (effective 1/1/2012); LOUISIANA (effective 1/1/2013) and the UNITED STATES OF AMERICA (effective 1/4/2014) to use any product in the installation or repair of any public water system or any plumbing in a facility or system that provides water for human consumption if the wetted surface area of the product has a weighted average lead content greater than 0.25%. This prohibition does not extend to service saddles used in California, Louisiana or under USA Public Law 111-380.



Yoke Expander UFR Unmeasured-Flow Reducer

PATENT PENDING A.R.I. -LICENSED BY A.R.I. FLOW CONTROL ACCESSORIES LTD.

714U Series - Model Number Explanation

SPACE 1, 2, 3, & 4

Basic UFR valve model number:
714U = UFR Yoke Expander

SPACE 5

size: 2 = 5/8" x 3/4"

SPACE 6 & UP

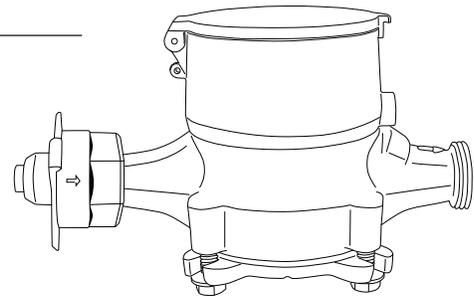
E - Yoke Expander - All Iron Yoke & Non-Ball Valve Yokes Boxes.
EYBV - Yoke Expander - Only for Yoke Box and Long Yokebox w/Ball Valve Inlet

SPACE

Blank Space Precedes "X"

SPACE

- X950 V - Volumetric (Positive Displacement) Meter w/Backflow Prevention
- X951 V - Volumetric (Positive Displacement) Meter No Backflow Prevention (NCV)
- X960 M2 - Multijet Meter w/Backflow Prevention
- X961 M2 - Multijet Meter No Backflow Prevention (NCV)



HOW TO ORDER

Not all sizes or combinations available - contact factory.

UNIT REQUIRED (Example):

- UFR Yoke Expander
- 5/8" x 3/4" size
- Volumetric Meter
- No Backflow Prevention

UNIT REQUIRED (Example):

- UFR Yoke Expander
- 5/8" x 3/4" size
- Volumetric Meter
- With Backflow Prevention
- Yoke Box w/Ball Valve Inlet

Order Model 714U2E X951

SPACE 1,2,3,&4	SPACE 5	SPACE 6 & UP	SPACE	SPACE
714U	2	E		X951

Order Model 714U2EYBV X950

SPACE 1,2,3,&4	SPACE 5	SPACE 6 & UP	SPACE	SPACE
714U	2	EYBV		X950

(Installation and troubleshooting procedures on opposite side)



WARNING: It is unlawful in CALIFORNIA & VERMONT (effective 1/1/2010); MARYLAND (effective 1/1/2012); LOUISIANA (effective 1/1/2013) and the UNITED STATES OF AMERICA (effective 1/4/2014) to use any product in the installation or repair of any public water system or any plumbing in a facility or system that provides water for human consumption if the wetted surface area of the product has a weighted average lead content greater than 0.25%. This prohibition does not extend to service saddles used in California, Louisiana or under USA Public Law 111-380.



Yoke Expander UFR Unmeasured-Flow Reducer

GENERAL INFORMATION

- **WARNING** - Do **NOT** use UFR with improper meter. The type of meter the UFR is to be used with is marked on the UFR as follows:
V = Volumetric Meter M2 = Multi-Jet Meter
If uncertain of meter type being used, contact factory with meter manufacturer and model number. The marking for "-NCV" will follow the "V" or "M2" for UFR's without backflow prevention.
- The Yoke Expander UFR **MUST** be installed so that the arrow on the UFR points in the direction of water flow. The UFR expander will be before the meter.
- The UFR can be installed in either the horizontal or vertical position.
- The UFR requires a minimum line pressure of 14.5 PSI to operate correctly.
- If used in a system with a pressure regulating valve, best results will be obtained by locating the pressure regulating valve before the UFR or at least 25 feet after the UFR.
- The UFR does not require regular maintenance.
- Do **NOT** attempt to repair or replace internal components.
- Replacing the UFR at time the meter is changed out is recommended.

ASSEMBLY INSTRUCTIONS

- Service lines should be thoroughly flushed before installing device. Excessive pipe sealant or Teflon tape may prevent the UFR from working properly. A suitable strainer should be installed upstream of the device.
- The UFR **MUST** be installed so that the arrow on the UFR points in the direction of water flow.
- Always install UFR using a **Smooth Jaw Wrench**.
- Assemble UFR expander to meter and any other devices attached to the meter prior to placing them into yoke or box. Place needed gaskets at each end connection. Tilt UFR expander nose into gasket and level meter into place. Turn UFR expander until snug fit is achieved (Note: Excessive torque applied to expander while lengthening it, or attaching it to the meter can result in damage or failure of the UFR expander).

ASSEMBLY INSTRUCTIONS CONT'D

- A pressure relief valve or an expansion tank is recommended downstream of the UFR if thermal expansion conditions are possible. Not required for No Check Valve (NCV) UFR's (X951 and X961).
- Use only on cold water service lines under 110°F. Protect from freezing.
- The UFR is not recommended for pressures exceeding 175 PSI.

TROUBLESHOOTING

Problem	Possible Causes	Solutions
No flow in the line	<ol style="list-style-type: none"> 1. Shut off valves have not been opened after installation. 2. The product is installed the wrong way round (against the flow direction). 3. Mains pressure is less than 14.5 PSI 	<ol style="list-style-type: none"> 1. Check shut off valves. 2. Check direction of the product, and if necessary invert it in accordance with the flow direction. 3. The UFR requires a minimum mains pressure of 14.5 PSI to work normally.
There is a leak in the house but the UFR is not working.	<ol style="list-style-type: none"> 1. There is a lot of air in the the system following the installation. 2. The leak in the house is more than 7.9 gallons per hour (cumulative). 3. Sealant has entered the sealing area of the UFR. 	<ol style="list-style-type: none"> 1. Purge air from the system by opening the taps in the house and check again. 2. The UFR is designed to pulsate for leaks between 0 and 7.9 gallons per hour. For flows above 7.9 gallons per hour the UFR is fully open and meter should register full flow on its own. 3. Remove the UFR from the line and clean out the sealant.



Yoke Expander UFR Unmeasured-Flow Reducer

GENERAL INFORMATION

- **WARNING** - Do **NOT** use UFR with improper meter. The type of meter the UFR is to be used with is marked on the UFR as follows:
V = Volumetric Meter M2 = Multi-Jet Meter
If uncertain of meter type being used, contact factory with meter manufacturer and model number. The marking for "-NCV" will follow the "V" or "M2" for UFR's without backflow prevention.
- The Yoke Expander UFR **MUST** be installed so that the arrow on the UFR points in the direction of water flow. The UFR expander will be before the meter.
- The UFR can be installed in either the horizontal or vertical position.
- The UFR requires a minimum line pressure of 14.5 PSI to operate correctly.
- If used in a system with a pressure regulating valve, best results will be obtained by locating the pressure regulating valve before the UFR or at least 25 feet after the UFR.
- The UFR does not require regular maintenance.
- Do **NOT** attempt to repair or replace internal components.
- Replacing the UFR at time the meter is changed out is recommended.

ASSEMBLY INSTRUCTIONS

- Service lines should be thoroughly flushed before installing device. Excessive pipe sealant or Teflon tape may prevent the UFR from working properly. A suitable strainer should be installed upstream of the device.
- The UFR **MUST** be installed so that the arrow on the UFR points in the direction of water flow.
- Always install UFR using a **Smooth Jaw Wrench**.
- Assemble UFR expander to meter and any other devices attached to the meter prior to placing them into yoke or box. Place needed gaskets at each end connection. Tilt UFR expander nose into gasket and level meter into place. Turn UFR expander until snug fit is achieved (Note: Excessive torque applied to expander while lengthening it, or attaching it to the meter can result in damage or failure of the UFR expander).

ASSEMBLY INSTRUCTIONS CONT'D

- A pressure relief valve or an expansion tank is recommended downstream of the UFR if thermal expansion conditions are possible. Not required for No Check Valve (NCV) UFR's (X951 and X961).
- Use only on cold water service lines under 110°F. Protect from freezing.
- The UFR is not recommended for pressures exceeding 175 PSI.

TROUBLESHOOTING

Problem	Possible Causes	Solutions
No flow in the line	<ol style="list-style-type: none"> 1. Shut off valves have not been opened after installation. 2. The product is installed the wrong way round (against the flow direction). 3. Mains pressure is less than 14.5 PSI 	<ol style="list-style-type: none"> 1. Check shut off valves. 2. Check direction of the product, and if necessary invert it in accordance with the flow direction. 3. The UFR requires a minimum mains pressure of 14.5 PSI to work normally.
There is a leak in the house but the UFR is not working.	<ol style="list-style-type: none"> 1. There is a lot of air in the the system following the installation. 2. The leak in the house is more than 7.9 gallons per hour (cumulative). 3. Sealant has entered the sealing area of the UFR. 	<ol style="list-style-type: none"> 1. Purge air from the system by opening the taps in the house and check again. 2. The UFR is designed to pulsate for leaks between 0 and 7.9 gallons per hour. For flows above 7.9 gallons per hour the UFR is fully open and meter should register full flow on its own. 3. Remove the UFR from the line and clean out the sealant.