



MP RISER™

Application Guide



**flower beds
& shrub areas**

*optional
pressure
regulation*

The MP Riser is an easy-to-use assembly for connecting the MP Rotator into poly or PVC systems. It is used in:

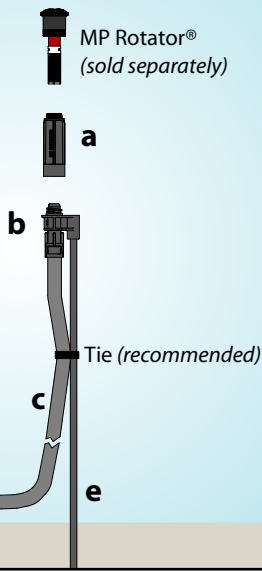
- Temporary systems
- Dust control
- Vegetable gardens
- Container nurseries
- Flower beds & shrub areas
- Sprinkler relocation



**slopes/
revegetation**

MP Riser includes:

- a** MP Rotator Acme Adapter
- b** MP Riser Stake Adapter
- c** MP Riser Tubing 36" (91cm) (comes assembled to b & d)
- d** MP Riser Barb
- e** MP Riser Stake 36" (91cm)



Advantages of the MP Riser:

- Flexible fiberglass stake
- Easy to use
- Ability to relocate heads as plant material grows
- Cost-effective
- Reusable

The MP Riser is compatible with the MP Corner, MP Strips, MP1000s, MP2000s & MP3000s. Please see chart on the following page for details.

See illustration above

MP RISER

Acme Adapter (a), Stake Adapter (b), Tubing 36" (91cm) (c), Barb (d), Stake 36" (91cm) (e)

Stake & Tubing not shown

MP RISER INDIVIDUAL COMPONENTS

- MP Riser Stake, 36" (91cm) long
- MP Riser Tubing, 100' (30.5 m) coil
- MP Riser Stake Adapter — connects MP Riser Tubing to Stake, quick change Acme Thread base
- MP Rotator Acme Adapter — accepts female thread MP Rotator and connects to MP Riser Stake Adapter
- MP Riser Barb — connects MP Riser Tubing to poly tube

MP RISER ACCESSORIES

- MP Riser 1/2" Compression Adapter (for PVC) — connects MP Riser Tubing to PVC system — glue into 1/2" female PVC slip fitting
- MP Riser Goof Plug — plugs hole left when MP Riser Barb removed, insert into poly tube with small steel rod (or dull 16d nail)
- MP Riser Acme Shut-Off Cap — shuts off water flow from MP Riser or MP Regulator
- MP Riser Coupler — splices MP Riser Tubing
- MP Riser Punch Tool — creates hole for MP Riser Barb connection to poly tube
- MP Riser Stake Installation Tool — protects stake when driving into hard ground

MPR/MPRDC — ACME X ACME (FOR MP RISER MOUNT)

- MP Regulator Drain Check (MPRDC) — 30 PSI (2.1 BAR)
- MP Regulator Drain Check (MPRDC) — 40 PSI (2.8 BAR)
- MP Regulator Drain Check (MPRDC) — 50 PSI (3.5 BAR)
- MP Regulator (MPR) — 30 PSI (2.1 BAR)
- MP Regulator (MPR) — 40 PSI (2.8 BAR)
- MP Regulator (MPR) — 50 PSI (3.5 BAR)

MPR/MPRDC — 1/2" FNPT X ACME (FOR PVC RISER MOUNT)

- MP Regulator Drain Check (MPRDC) — 30 PSI (2.1 BAR)
- MP Regulator Drain Check (MPRDC) — 40 PSI (2.8 BAR)
- MP Regulator Drain Check (MPRDC) — 50 PSI (3.5 BAR)
- MP Regulator (MPR) — 30 PSI (2.1 BAR)
- MP Regulator (MPR) — 40 PSI (2.8 BAR)
- MP Regulator (MPR) — 50 PSI (3.5 BAR)



Assembled MP Riser



MP Riser with Acme Shut-Off Cap

MP Rotator Acme Adapter required when using MPR / MPRDC (fits ACME outlet)



MPR (gray)



MPRDC (black)



MPRDC with MP Rotator & Acme Adapter (required)



Installation Information

When installing the MP Riser, additional materials needed are the *Stake Installation Tool* and the *Punch Tool*. If the MP Risers are to be connected to PVC, the *PVC Adapters* will also be needed. When installing the MP Riser Stakes, be sure to wear eye protection. The MP Riser Stake is fiberglass and gloves should be worn when handling the stakes. For installation into poly use 3/4" tubing or larger.

Installation into Poly Tubing



1 Punch Hole



2 Insert Barb



3 Drive Stake



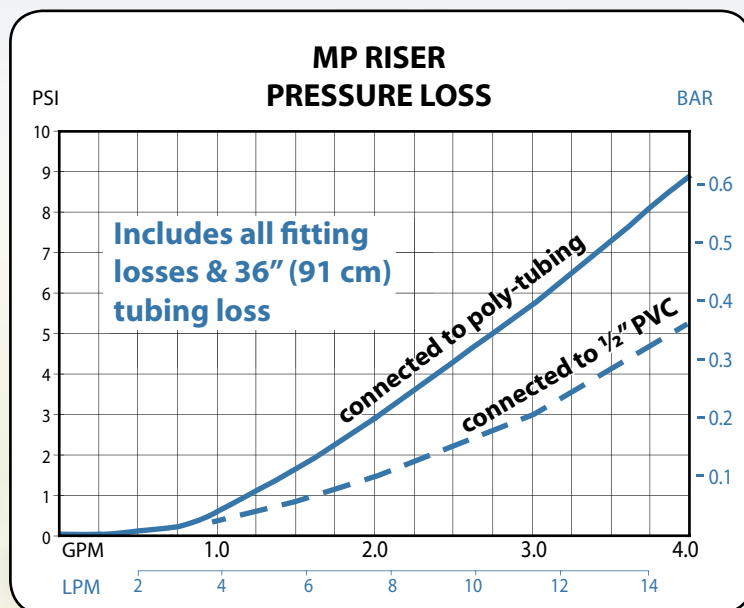
4 Mount to Stake



5 Install Adapter



6 Install MP Rotator



Installation into PVC



1 Glue brown compression adapter into 1/2" PVC slip fitting

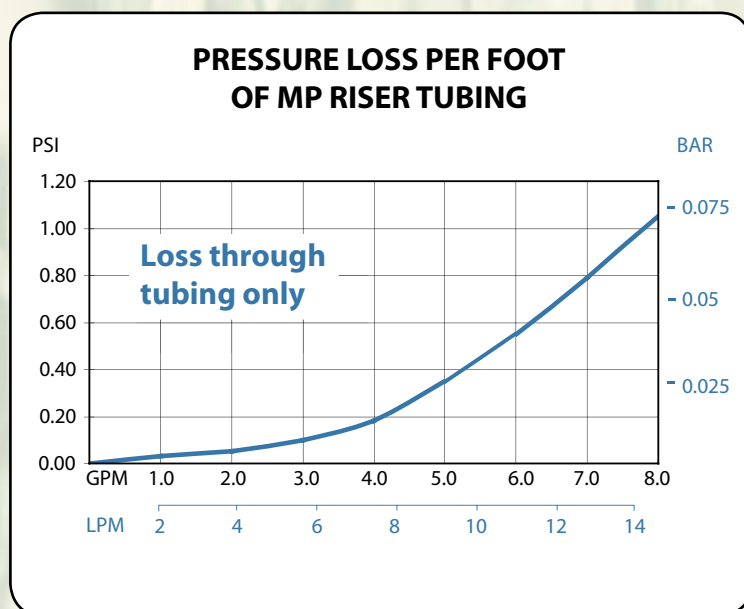


2 Cut off Barb



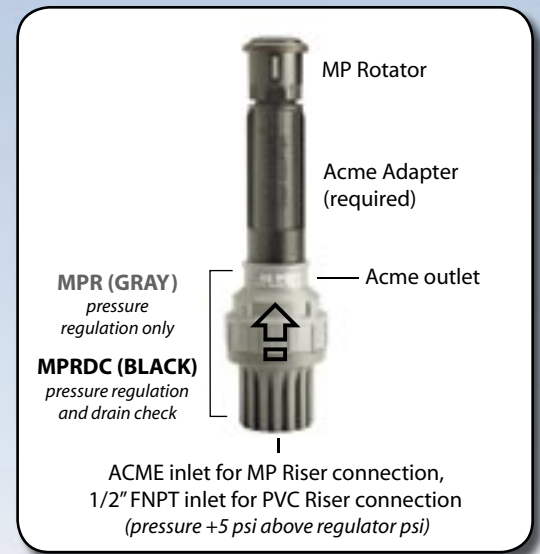
3 Insert Tube

Now proceed with steps 3-6 above. Use MP Riser Tubing and brown compression adapters to relocate sprinklers. Consult pressure loss charts at right.

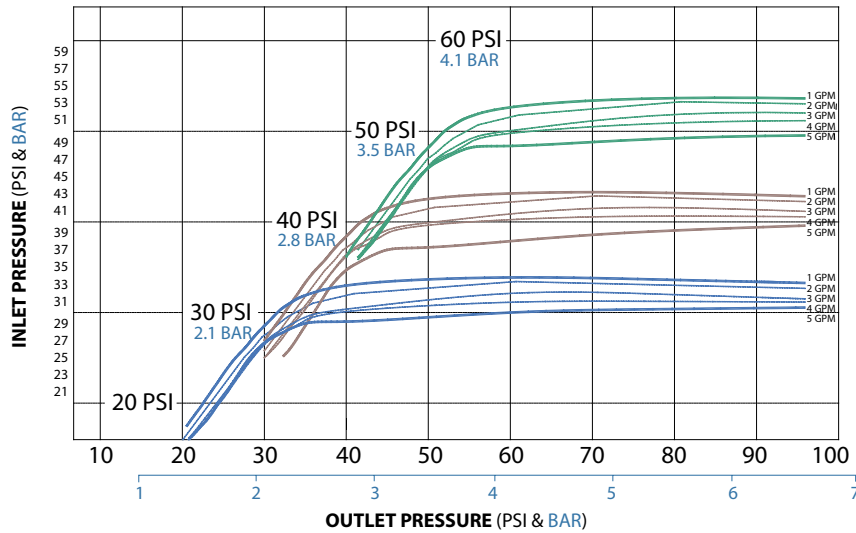


Pressure Regulators

MP Regulators (MPR) are designed to accurately deliver a set outlet pressure when inlet pressures are higher than desired. The MP Regulator Drain Check (MPRDC) adds a “check valve” function that prevents low head drainage but without any incremental pressure loss. MPRDCs also ensure that when the valve opens, all sprinklers turn on at once and at full radius. The **ACME X ACME** models are for the **MP Riser**. The **1/2" FNPT X ACME** models are for 1/2" PVC Risers.



MP REGULATOR PERFORMANCE GRAPH



Pressure Options: 30 PSI (2.1 BAR), 40 PSI (2.8 BAR), 50 PSI (3.5 BAR)
Recommended Flow Range: 0.15 GPM (0.6 LPM) to 5 GPM (18.9 LPM)
Maximum Inlet Pressure: 130 PSI (9.0 BAR)
Minimum Inlet Pressure: 5 PSI (0.4 BAR) *above regulator pressure*

Opening & Closing Pressures for the MP Rotator Regulator Drain Check :

PRESSURE OPTION	PRESSURE TO OPEN	PRESSURE TO CLOSE	HOLD BACK ELEVATION
30 PSI (2.1 BAR)	23 PSI (1.6 BAR)	15 PSI (1.0 BAR)	35 ft. (10.7 M)
40 PSI (2.8 BAR)	28 PSI (1.9 BAR)	19 PSI (1.3 BAR)	44 ft. (13.4 M)
50 PSI (3.4 BAR)	38 PSI (2.6 BAR)	29 PSI (2.0 BAR)	67 ft. (20.4 M)

FLOW LIMITS

Do not exceed 5 GPM (18.9 LPM) flow. Inlet pressure must always be at least 5 PSI (0.4 BAR) higher than the desired, regulated pressure.

FILTRATION REQUIREMENTS

The regulator has small openings in the seat and plunger area. Debris smaller than 1/16" (1.58 mm) in diameter may easily pass through the regulator. Larger material and stringy fibers can plug inside the regulator seat area. Access to remove the plug is gained through the inlet of the regulator.

MPR / MPRDC DIFFERENCES

The MP Regulator (MPR) is normally open. This means that water passes through the regulator and sprinkler as the system pressurizes. The MP Regulator Drain Check (MPRDC) is normally closed. As the system is pressurized the MPRDC remains closed until the pressure reaches approximately 13 PSI (0.9 BAR) below the labeled pressure. *Example: a 40 PSI (2.8 BAR) MPRDC opens at 27 PSI (1.9 BAR) and provides accurate pressure regulation at 45 PSI (3.1 BAR).*



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This product may be covered by one or more of the following U.S. Patent Nos. 4842201, 4867379, 4898332, 4967961, 5058806, 5288022, 6244521, 6499672, 6651905, 6688539, 6736332, 7032836 and other U.S. Patents pending or corresponding issued or pending foreign patents.