



INNOVATIVE  
IRRIGATION

komet | *Pivot*

## Komet Precision Regulator (KPR-X)

**All-Flow Pivot Pressure Regulator**

Engineered precision: pivot pressure regulator with innovative anti-plugging design. Ensures an even outlet pressure in all conditions and terrains; performs reliably over many growing seasons



### The Product

It is generally agreed that any pivot irrigation system that is geared towards high levels of accuracy and performance, must include a pivot pressure regulator - be it in hilly or flat terrain. Variations in outlet pressures will change the original distribution pattern and application rate of the sprinklers - leading to over or under-watering and, consequently, a lower yield. This can also reduce the lifespan of the respective sprinklers, as they are designed to operate within specific flow and pressure ranges.

To solve this problem, a pressure regulator is installed into the system, to maintain a consistent outlet pressure at all

times. It is a vital component of successful irrigation, whose significance is all-too-often overlooked.

The Komet Precision Regulator (KPR-X) ensures reliable, high-performance pressure regulation for many growing seasons. When designing the KPR-X, our engineers focused on any pivot pressure regulator's most common challenges. Pitfalls that commonly affect pressure regulators - such as plugging, wear or premature drops in performance - are effectively combated by the Komet Precision Regulator (KPR-X) ingenious construction and innovative design.



**KPR-X**  
All-Flow  
6 PSI



**KPR-X**  
All-Flow  
10 PSI



**KPR-X**  
All-Flow  
15 PSI



**KPR-X**  
All-Flow  
20 PSI

## Features and Benefits

- ▶ Axial Design: allowing for the concentric arrangement of components
- ▶ Flow Deviation Fins: evenly direct the water towards the center of the device
- ▶ Large Inlet Chamber: allows for an optimal amount of inlet flow to accommodate all nozzle sizes 8 - 52 1/128" Flow force is applied to the plunger in a uniform manner, preventing premature one-sided wear
- ▶ Optimal Plunger Diameter: enables the largest possible gap between valve seat and plunger - creating an unimpeded water flow, and reducing the risk of plugging
- ▶ Diaphragm Chamber: contains a progressive dampening system designed to minimize friction, and ensure low hysteresis for a continuously smooth operation. The diaphragm chamber will adapt to existing conditions compensating for phenomena such as water hammer, and thereby limiting pressure fluctuations
- ▶ Self-Cleaning Mechanism: the Komet Precision Regulator (KPR-X) automatically flushes out sand and debris ensuring long-term durability and performance

## Key features

Large entrance chamber with unique flow deviation fins

Optimal plunger diameter

Precision manufacturing

Diaphragm chamber with innovative progressive dampening system and self-flushing capability at shutdown



Pat. Pending

All Flow Pivot Regulator Suitable for flow of nozzle sizes 8 - 52/128"

Technical polymers shock absorbing, UV protected, hard wearing

Laser markings for long lasting identification

Very low hysteresis

Very low friction loss

Technical Specifications Komet Precision Regulator (KPR-X)

Model	Flow Range covers complete Nozzle Range	Flow Range		Nominal Regulated Outlet Pressure	Max. Inlet Pressure	Connection Inlet / Outlet
	in	min gpm	max gpm	psi	psi	
<b>KPR-X 6</b>	8 - 52 / 128"	0.28	12.0	6	120	3/4" x 3/4" FNPT
<b>KPR-X 10</b>	8 - 52 / 128"	0.37	15.0	10	120	3/4" x 3/4" FNPT
<b>KPR-X 15</b>	8 - 52 / 128"	0.45	18.0	15	120	3/4" x 3/4" FNPT
<b>KPR-X 20</b>	8 - 52 / 128"	0.52	20.0	20	120	3/4" x 3/4" FNPT

The pressure regulators will operate at the preset operating pressure over the whole nozzle range provided that the inlet pressure is at least 5 psi higher than the nominal rated pressure.