



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 1,6 - 10,3 mm 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 1,6 - 10,3 mm

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
	mm	min l/h	max l/h	bar	bar	
KPR-X 6	1.6 - 10.3	63.6	2726	0.4	8.3	3/4" x 3/4" FNPT
KPR-X 10	1.6 - 10.3	84.0	3407	0.7	8.3	3/4" x 3/4" FNPT
KPR-X 15	1.6 - 10.3	90.8	4088	1.0	8.3	3/4" x 3/4" FNPT
KPR-X 20	1.6 - 10.3	118.1	4543	1.4	8.3	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 0.35 bar higher than the nominal rated pressure.