

# PRESSURE



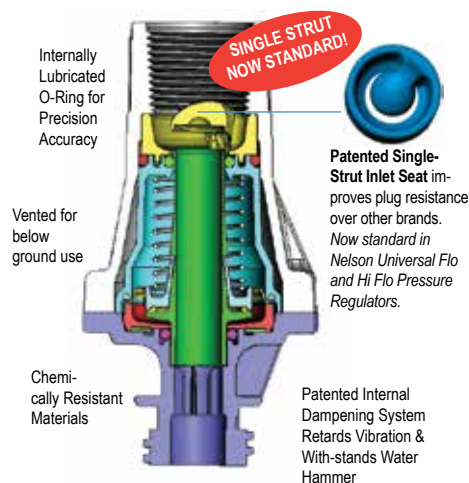
improved plug-resistant design

# REGULATION



precision accuracy in tough field environments

## Cut-away of Pressure Regulator



## TECHNICAL TIPS FOR REGULATING SYSTEMS

**IMPORTANT:** Allow approximately 5 PSI (.35 BAR) extra pressure in order for the regulator to function properly. For example, the minimum design pressure for a 20 PSI (1.4 BAR) pressure regulator is 25 PSI (1.7 BAR).

**IMPORTANT:** If your system is designed with Nelson sprinklers, use Nelson Pressure Regulators. Individual manufacturers' pressure regulator performance varies. Interchanging could result in inaccurate nozzle selection.

## NELSON'S UNIVERSAL FLO AND HI FLO REGULATORS

The function of a pressure regulator is to fix a varying inlet pressure to a set outlet pressure, regardless of changes in the system pressure due to hydraulic conditions, elevation changes, pumping scenarios, etc. The benefits include a uniform depth of water application, controlled sprinkler performance (droplet size and throw distance), and flexibility in system operation.

### FEATURES & BENEFITS:

**SINGLE STRUT SEAT DESIGN STANDARD WITH UNIVERSAL FLO.** The new "single-strut" technology in the Universal Flo regulator minimizes "hair-pinning" of debris around the inlet seat, providing more plug resistance for systems operating in dirty water conditions.

**PATENTED DAMPENING SYSTEM.** The patented o-ring dampening system of all Nelson pressure regulators handles severe pressure surges to withstand water hammer.

**WIDE FLOW RANGE.** The Nelson Universal Pressure Regulator has a flow up to 12 GPM (2.7 M<sup>3</sup>/H) at 15 PSI (1.0 BAR) and above.

**EXTENDED PERFORMANCE AND PRECISION ACCURACY.** Precision components coupled with an internally lubricated o-ring minimize frictional drag and hysteresis.

**PRECISION MANUFACTURED.** Made of the toughest chemically resistant materials. 100% tested for accuracy.

**UNIVERSAL 3000 SERIES CONNECTION OPTION.** Integral adapter connects directly into all Nelson 3000 Series Pivot Sprinklers and creates an easy to assemble, economical pivot sprinkler package.

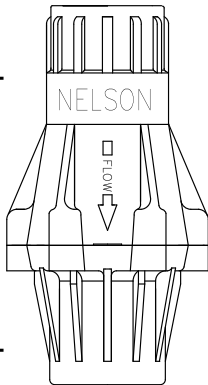


SAVE WATER, SAVE ENERGY AND  
DO A BETTER JOB OF IRRIGATING

# > UNIVERSAL FLO and HIGH FLO — CONNECTIONS & PERFORMANCE

## PIPE THREAD CONNECTION

**INLET**  
3/4" FNPT

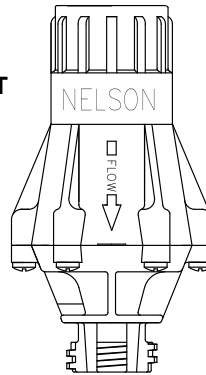


**OUTLET**  
3/4" FNPT

## 3000 SERIES PIVOT CONNECTION

(Integral adapter for 3000 Series Pivot Products)

**INLET**  
3/4" FNPT

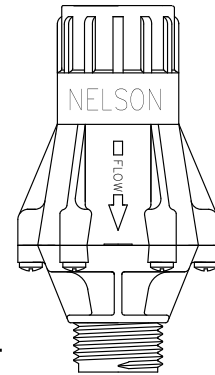


**OUTLET**  
3000 ST

## HOSE THREAD CONNECTION

(Connections for Micro/Drip)

**INLET**  
3/4" FHT



**OUTLET**  
3/4" MHT

**ORDERING SPECIFICATIONS:** When ordering Nelson Pressure Regulators specify Pressure, Flow (Universal Flo or Hi Flo) & Connection (Inlet x Outlet). (Example: 10 PSI Hi Flo 3/4"FNPT x 3/4"FNPT.) **More connection options available — please contact Nelson factory for more information.**

### UNIVERSAL FLO REGULATOR

#### CONNECTIONS AVAILABLE

PSI	BAR	GPM	M <sup>3</sup> /HR
6	0.41	0.5-8	0.11-1.82
10	0.70	0.5-10	0.11-2.27
15	1.0	0.5-12	0.11-2.72
20	1.4	0.5-12	0.11-2.72
25	1.7	0.5-12	0.11-2.72
30	2.0	0.5-12	0.11-2.72
40	2.8	0.5-12	0.11-2.72
50	3.4	0.5-12	0.11-2.72

3/4" FNPT 3/4" FNPT	3/4" FNPT 3/4" ST	3/4" FHT 3/4" MHT
■	■	■
■	■	■
■	■	■
■	■	■
■	■	■
■	■	■
■	■	■
■	■	■

### HI-FLO REGULATOR

#### CONNECTIONS AVAILABLE

PSI	BAR	GPM	M <sup>3</sup> /HR
6	0.41	4-16	.91-3.63
10	0.70	4-16	.91-3.63
15	1.0	2-20	.45-4.54
20	1.4	2-20	.45-4.54
25	1.7	2-20	.45-4.54
30	2.0	2-20	.45-4.54
40	2.8	2-20	.45-4.54
50	3.4	2-20	.45-4.54

3/4" FNPT 3/4" FNPT	3/4" FNPT 3/4" ST
■	■
■	■
■	■
■	■
■	■
■	■
■	■
■	■

### APPLICATION NOTES

**Nelson Pressure Regulators can be used in a variety of applications (e.g. Center Pivot, Solid Set, Tree & Vine). Choose the proper pressure rating for your application.**

**Performance Tables.** Contact the Nelson factory for detailed performance information.

**Design Considerations.** Maintain a 5 PSI (0.35 BAR) threshold above the nominal spring rated pressure.

**CAUTION!** Pressure regulators should be installed downstream from all shut-off valves.

**WARRANTY AND DISCLAIMER:** Nelson Pressure Regulators are warranted for one year from date of original sale to be free of defective materials and workmanship when used within the working specifications for which the products were designed and under normal use and service. The manufacturer assumes no responsibility for installation, removal or unauthorized repair of defective parts. The manufacturer's liability under this warranty is limited solely to replacement or repair of defective parts and the manufacturer will not be liable for any crop or other consequential damages resulting from defects or breach of warranty. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES AND OF ALL OTHER OBLIGATIONS OR LIABILITIES OF MANUFACTURER. No agent, employee or representative of the manufacturer has authority to waive, alter or add to the provisions of this warranty, nor to make any representations or warranty not contained herein.

This product may be covered by one or more of the following U.S. Patent No. 5257646 and other U.S. Patents pending or corresponding issued or pending foreign patents.



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