PRODUCT SPECIFICATION
PVC SCHEDULE 80 PRESSURE NIPPLES AND RISERS

APPLICATION:

Corrosion resistant injection molded PVC pipe nipples and risers , IPS sizes 1/2” through 2” produced to Schedule 80 dimensions, for use at temperatures up to and including 140°F. Pressure rating varies with pipe size and temperature. Generally resistant to most acids, bases, salts, aliphatic solutions, oxidants and halogens. Chemical resistance data must be referenced by the design authority for proper material selection prior to use. Typical applications include chemical processing, plating, chilled water, potable water, water and wastewater treatment, chemical drainage, and other industrial applications where corrosive fluids are conveyed.

SCOPE:

This specification establishes minimum manufacturing requirements for Poly (Vinyl Chloride) (PVC) Schedule 80 nipples and risers . These irrigation components are intended for use in pressure applications where the temperature of the fluid conveyed does not exceed 140°F. These fittings meet or exceed the industry standards set forth by the American Society for Testing and Materials (ASTM) and NSF International ANSI/NSF Standard No. 61 and ANSI/NSF Standard No. 14.

MATERIALS:

The materials used in the manufacture of the nipples/risers shall be a dark gray in color Rigid Poly (Vinyl Chloride) (PVC) Type 1 PVC compound having a Cell Classification of 12454 per ASTM D1784 (also known as Type I, Grade I PVC; PVC 1120.) Materials used in the manufacture of these fittings shall meet the health and safety requirements of ANSI/NSF Standard 61 as being safe for use with potable water.

DIMENSIONS AND PROPERTIES:

All sizes of PVC Schedule 80 injection molded pressure fittings shall be manufactured in strict accordance to the requirements of ASTM D2464 (Schedule 80 threaded nipples/risers) as applicable for physical dimensions and tolerances. All schedule 80 PVC injection molded nipples/risers shall consistently meet and/or exceed the Quality Assurance and other requirements of ASTM D2467 or D2464 with regard to material, workmanship, burst pressure, dimensions and product marking.. All PVC Schedule 80 risers/nipples must also be certified to meet the requirements of ANSI/NSF Standard 61 and ANSI/NSF Standard 14 for use with potable water and shall bear the mark of the Listing agency. These products shall also be certified to NSF/ ANSI 372 conforming to the lead content requirements for “lead free” plumbing as defined by the U.S. Safe Drinking Water act and the state laws of California, Vermont, Maryland, and Louisiana.

GPH Irrigation Products, Inc. PVC Sch 80 Nipples/Risers Conform to the Following Standards and Specifications as applicable:

ASTM D1784 (Material)	Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds. Cell Classification 12454 Type I PVC (formerly known as Type I, Grade I PVC) PVC 1120
ASTM D2464	Threaded Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings , Schedule 80
ANSI/ASME B1.20.1	American National Standard Tapered Pipe Threads, General Purpose, Inch
NSF Standard 61	Drinking Water System Components – Health Effects (Third Party Certification materials are suitable for potable water applications)
NSF Standard 14	Plastics Piping System Components and Related Materials (Third Party Certification products meet applicable ASTM performance requirements and are suitable for potable water applications per NSF Std 61)
Made in the USA	Manufactured bY GPH Irrigation

PRODUCT SPECIFICATION
PVC SCHEDULE 80 PRESSURE NIPPLES AND RISERS

PRESSURE RATINGS

Nominal Size	* Pipe Maximum W.P. Rating (non-shock) @73°F
½”	850
¾”	690
1”	630
1¼”	520
1½”	470
2”	400

* Pressure ratings stated are for pipe. PVC Sch 80 meeting the requirements of ASTM D2467 or D2464 meet the same burst pressure as the same size Sch 80 pipe. There are no working pressure ratings established per these standards.

TEMPERATURE DE-RATING

The pipe pressure ratings shown are the maximum allowable working pressure for water, non-shock, at 73°F. Allowable pressure ratings decrease with an increase in temperature. The following temperature de-rating factors must be applied to the working pressure ratings shown to determine the maximum allowable pressure rating at elevated temperatures. Multiply the working pressure rating shown at 73°F by the appropriate de-rating factor for the elevated temperature selected to determine the maximum allowable pressure rating at that temperature.

PVC TEMPERATURE DE-RATING FACTORS