



# PVC & CPVC SCHEDULE 40 & 80 SPECIAL REINFORCED FITTINGS

SR-2-0224

## Avoid Split Threads



### Advanced Reinforced Thread Design U.S. Patent No. 5,582,439

To reduce problems associated with over-tightening of female plastic pipe threads, Spears® developed Schedule 40 & 80 Special Reinforced (SR) Fittings. Not just an added ring, this unique precompression design compensates for expansion forces generated from tapered pipe thread joint make-up. Radial-stress is reduced in normal installations and contained in severe over-tightening situations.

### Improved Sealing Capability

Since fitting expansion is contained, thread contact and corresponding seal is improved.

### Excellent Plastic-to-Metal Transition Fitting — Without Pressure De-Rating

Spears® advanced SR design and manufacturing process allows direct connection to threaded metal pipe through one simple adapter. Superior strength of the SR fitting eliminates the need for pressure de-ratings in system transitions normally associated with traditional non-reinforced plastic threaded fittings. Material thermal expansion/contraction differences are equalized by the restraining collar. You get low-cost, worry-free plastic-to-metal transitions every time.

### Conformance to ASTM Standards

Our PVC Schedule 40 & 80 and CPVC Schedule 80 SR fittings conform to the dimensional and hydrostatic pressure test requirements of their respective ASTM standards.

- PVC Schedule 40 & 80 - ASTM D2467
- CPVC Schedule 80 - ASTM F439

### Chemical & Corrosion Resistant

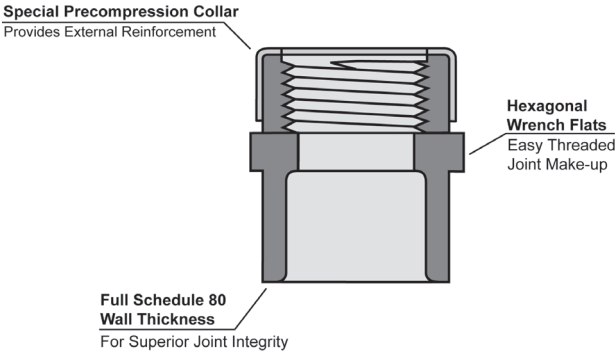
SR fittings are produced in PVC White, PVC Gray and Industrial CPVC thermoplastic compounds for superior chemical and corrosion resistance to system fluids. External special reinforcing ring provides excellent resistance to corrosive environments.

### Versatile 1/4" through 6" Size Availability

Spears® SR fittings are available in slip socket, spigot and reducing configurations of female adapters, tees, 90° elbows, unions and valves.

### Potable Water Approved

Certified by NSF International. Lead-free thermoplastic compounds are safe for use in drinking water systems.



**Sample Engineering Specification**

All threaded plastic connections and threaded plastic-to-metal transition connections shall be made with Spears® Special Reinforced (SR) Fittings. PVC Schedule 40 and 80 (SR) fittings shall conform to ASTM D2467, CPVC Schedule 80 (SR) Fittings shall conform to ASTM F 439. All (SR) fittings shall be approved for potable water service.



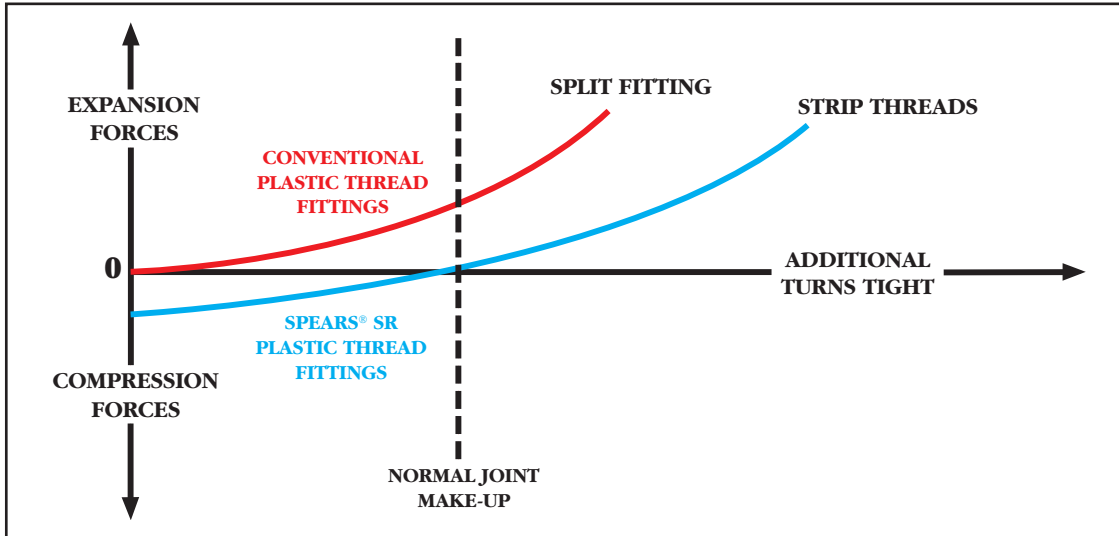
Assessed to ISO 9001:2015  
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## Spears® SR fitting design is one of the most significant improvements in threaded thermoplastic fittings . . .

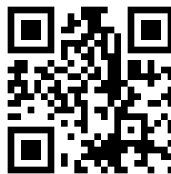
Radial stress, generated by tightening of tapered pipe threads, exerts tremendous forces on female plastic thread fittings. When subjected to over-tightening — even accidentally — these forces can literally split the fitting. Spears® patented SR fitting design not only alleviates this problem by containing expansion forces with its special collar, but additionally compensates for expansion stress through thermoplastic material compression. Stresses are equalized at normal joint make-up. The following graph illustrates this effect in a comparison of conventional plastic female threaded fittings with Spears® SR plastic threaded fittings when taken to failure.



Another quality Spears® product designed for performance, customer satisfaction and service

THREADED CONNECTIONS — Use a quality grade thread sealant. **WARNING:** SOME PIPE JOINT COMPOUNDS OR PTFE PASTES MAY CONTAIN SUBSTANCES THAT COULD CAUSE STRESS CRACKING TO PLASTIC. Spears® Manufacturing Company recommends the use of Spears® BLUE 75™ Thread Sealant which has been tested for compatibility with Spears® products. Please follow the sealant manufacturer's application/installation instructions. Choice of an appropriate thread sealant other than those listed above is at the discretion of the installer. 1 to 2 turns beyond FINGER TIGHT is generally all that is required to make a sound plastic threaded connection. Unnecessary OVERTIGHTENING will cause DAMAGE TO BOTH PIPE AND FITTING.

**NOT FOR DISTRIBUTION OF COMPRESSED AIR OR GASES**



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