

## Barbed Insert Fittings Barbed Insert Fittings



### STANDARDS & SPECIFICATIONS

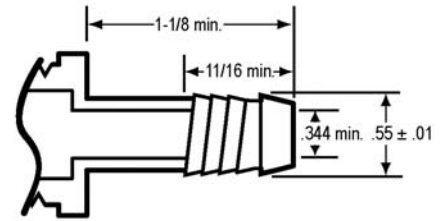


**ASTM D 2609** Plastic Insert Fittings for Polyethylene (PE) Plastic Pipe.

**Material** Spears® Insert Fittings are produced from PVC Type 1, Cell Classification 12454, CPVC Cell Classification 23447 or Polypropylene (PP).

It is the user's responsibility to determine the suitability for the intended service application.

### Dimensions of Spiral Barb Ends

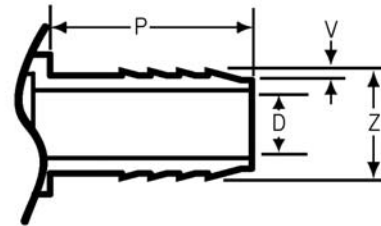


### Dimensions of Polyethylene Pipe ASTM D 2104 and D 2239

Spears® Manufacturing Company Insert Fittings are designed for use with polyethylene pipe produced with average inside diameter as shown in the chart below.

Nominal Size in.	Average I.D. in.	Tolerance in.
1/2	.622	+ .010 - .010
3/4	.824	+ .010 - .015
1	1.049	+ .010 - .020
1-1/4	1.380	+ .010 - .020
1-1/2	1.610	+ .015 - .020
2	2.067	+ .015 - .020
2-1/2	2.469	+ .010 - .025
3	3.068	+ .015 - .030
4	4.026	+ .015 - .035

### Dimensions of Insert Ends ASTM D 2609



Nominal Size in.	Insert Length "P" min.	Barb O.D. "Z"		Barb Depth "V" min.	Inside Diameter "D" min.
		max.	min.		
1/2	1-1/4	0.665	0.635	0.015	0.406
3/4	1-1/4	0.865	0.835	0.015	0.562
1	1-1/4	1.095	1.065	0.020	0.750
1-1/4	1-1/4	1.425	1.395	0.025	0.995
1-1/2	1-1/2	1.665	1.630	0.030	1.125
2	1-1/2	2.125	2.085	0.030	1.656
2-1/2	2	2.520	2.487	0.030	2.062
3	2-1/8	3.125	3.086	0.030	2.600
4	3	4.090	4.044	0.030	3.525

### INSERT FITTING INSTALLATION

Pipe is cut to length with handsaw or knife. When installing flexible lines, (a) snake line one foot or more per 100 lineal feet, (b) cold water should be run through lines prior to backfilling to permit pipe to contract, (c) care should be taken to prevent large and sharp-edged rocks from being in position to crush pipe. Insert fittings are used to join lengths of flexible pipe. Stainless steel clamps are first slipped over ends of pipe, fitting is inserted and steel clamps are tightened securely over barbs on fittings. DO NOT use oil or detergent on any fittings. Use plain water or soapy water as lubricant on fitting. For attachment to previously installed metallic systems or threaded fixtures, the insert adapter is utilized. Apply thread sealant to the threaded end of adapter and tighten into female connection. Steel clamp is then slipped over pipe end and pipe slipped over serrated end of insert adapter. Steel clamp is then positioned over serrations on insert adapter and securely tightened with a screwdriver.

### TWIST LOCK INSERT INSTALLATION

Twist Lock Fittings with built in lock ring are installed the same as regular Insert Fittings, but do not require steel clamps. Check that lock ring component is fully threaded onto fitting. Slip pipe over serrated end of insert adapter. Twist lock ring back over pipe and barb to seal.

### SPIRAL BARB FITTING INSTALLATION

Spiral Barb fittings are designed for use with 1/2" (.490) polyethylene irrigation hose and do not require steel clamps. Install with a twisting motion to fully engage barbs.

## Barbed Insert Fittings Barbed Insert Fittings



Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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### CPVC Female Adapter

Fipt x Insert



1435-005C	1/2	50	300	143	4.87
1435-007C	3/4	50	400	143	6.65
1435-010C	1	50	0	143	7.56
1435-012C	1-1/4	25	0	143	8.29
1435-015C	1-1/2	25	0	143	10.47
1435-020C	2	10	0	143	13.72

### Special Reinforced PVC Female Adapter

SR Fipt x Insert



1435-005SR	1/2	50	400	142	5.73
1435-007SR	3/4	50	400	142	6.77
1435-010SR	1	50	0	142	8.07
1435-015SR	1-1/2	20	0	142	22.78

### PVC Reducing Female Adapter

Fipt x Insert



1435-074	1/2X3/4	50	500	140	5.97
1435-101	3/4X1/2	50	600	140	5.53
1435-102	3/4X1	50	0	140	6.17
1435-131	1X3/4	50	0	140	4.07

### PVC Male Adapter

Mipt x Insert



1436-005	1/2	50	600	140	.96
1436-007	3/4	50	400	140	1.18
1436-010	1	50	0	140	1.22
1436-012	1-1/4	20	160	140	1.93
1436-015	1-1/2	25	0	140	2.16
1436-015W	1-1/2	20	0	001	2.16
1436-020	2	10	0	140	4.14
1436-025	2-1/2	10	0	140	17.00
1436-030	3	10	0	140	19.61
1436-040	4	10	0	140	27.26
1436-060G <sup>1</sup>	6	1	4	140	153.72
1436-060 <sup>2</sup>	6	4	0	140	138.35

1 Fabricated - Gray PVC  
2 Fabricated - White PVC

### CPVC Male Adapter

Mipt x Insert



1436-005C	1/2	1400	0	143	1.39
1436-007C	3/4	50	400	143	1.69
1436-010C	1	50	0	143	1.74
1436-012C	1-1/4	20	160	143	2.61
1436-015C	1-1/2	25	0	143	3.11
1436-020C	2	10	0	143	5.92
1436-030C	3	10	0	143	26.77
1436-040C	4	10	0	143	41.38
1436-060C	6	4	0	001	139.49
1436-080CF	8	1	0	001	160.42

### PVC Reducing Male Adapter

Mipt x Insert



1436-074	1/2X3/4	50	300	140	3.05
1436-075	1/2X1	50	200	140	3.17
1436-101	3/4X1/2	50	600	140	2.76
1436-102	3/4X1	50	400	140	3.17
1436-131	1X3/4	50	0	140	2.85

Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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### PVC Reducing Male Adapter (continued)

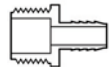
Mipt x Insert

1436-132	1X1-1/4	25	200	140	3.85
1436-133	1X1-1/2	25	0	140	5.80
1436-167	1-1/4X3/4	25	200	140	3.36
1436-168	1-1/4X1	25	200	140	3.61
1436-169	1-1/4X1-1/2	10	120	140	5.80
1436-211	1-1/2X1	25	0	140	4.40
1436-212	1-1/2X1-1/4	25	0	140	4.40
1436-213	1-1/2X2	10	80	140	7.46
1436-251	2X1-1/2	10	80	140	7.40
1436-252 <sup>1</sup>	2X2-1/2	10	0	140	13.44
1436-292 <sup>2</sup>	2-1/2X2	10	0	140	59.29

\*Assembled molded components

### CPVC Reducing Male Adapter

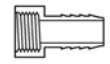
Mipt x Insert



1436-073C	1/2X3/8	50	300	143	1.53
1436-074C	1/2X3/4	50	300	142	3.48
1436-101C	3/4X1/2	50	600	142	3.93
1436-212C	1-1/2X1-1/4	25	0	143	6.09

### PVC Female Hose Adapter

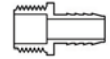
Female Hose Thread x Insert



1435-007FHT	3/4	50	400	140	5.56
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### PVC Male Hose Adapter

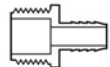
Male Hose Thread x Insert



1436-007MHT	3/4	50	400	140	2.87
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### PVC Reducing Male Hose Adapter

Male Hose Thread x Insert



1436-101MHT	3/4X1/2	50	600	140	2.74
1436-102MHT	3/4X1	50	400	140	3.14

### PVC Pool Adapter

Mipt x Hose ID

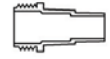


Not NSF Approved

1436-204	1-1/2X1-1/2X1-1/4	25	0	140	5.52
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### PP Pool Adapter

Mipt x Hose ID

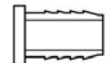


Not NSF Approved

1436-204P	1-1/2X1-1/2X1-1/4	25	0	140	5.52
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### PVC Plug

Insert



1449-005	1/2	100	600	140	1.75
1449-007	3/4	100	1200	140	1.82
1449-010	1	50	600	140	2.46
1449-012	1-1/4	25	300	140	3.13
1449-015	1-1/2	25	300	140	3.40
1449-020	2	10	120	140	5.99