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www.aetnoplastics.com
800.634.3074

Discount Code(s): 140 PVC & PP Insert Fittings _____
142 PVC Reinforced Insert Fittings _____
143 CPVC Insert Fittings _____

Item prices may have changed from those shown in this sheet. See Spears® On-line Catalog for most current pricing, updated daily.



Insert Fittings

For Use With Polyethylene Pipe



Quality Systems Certificate No. 293
Corporate Facilities, Sylmar, CA
Assessed to ISO 9001: 2008

Visit our web site:
www.spearsmfg.com

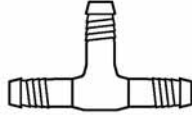
PRICE SCHEDULE INS-1-1009
Effective October 26, 2009
Supersedes INS-1-0308



Insert Fittings

Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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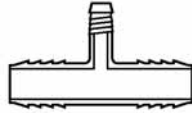
PVC Spiral Barb Tee Spiral Barb



3/8" Spiral Barb accepts .490 Irrigation Pipe.

1401-003	3/8	50	800	140	1.62
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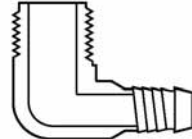
PVC Spiral Barb Tee Insert x Insert x Spiral Barb



3/8" Spiral Barb accepts .490 Irrigation Pipe.

1401-099	3/4X3/8	25	450	140	2.94
1401-129	1X3/8	25	200	140	3.20

PP Spiral Barb 90° Ell Mipt x Spiral Barb



3/8" Spiral Barb accepts .490 Irrigation Pipe.

1413-073	1/2X3/8	50	200	140	1.16
1413-099	3/4X3/8	50	200	140	1.16

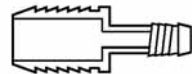
PVC Spiral Barb Coupling Spiral Barb x Spiral Barb



3/8" Spiral Barb accepts .490 Irrigation Pipe.

1429-003	3/8	50	300	140	1.74
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PVC Spiral Barb Coupling Insert x Spiral Barb

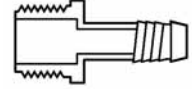


3/8" Spiral Barb accepts .490 Irrigation Pipe.

1429-099	3/4X3/8	50	600	140	1.90
1429-129	1X3/8	50	200	140	2.03

Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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PP Spiral Barb Male Adapter Mipt x Spiral Barb



3/8" Spiral Barb accepts .490 Irrigation Pipe.

1436-073	1/2X3/8	50	300	140	1.16
1436-099	3/4X3/8	50	300	140	1.16

PVC Tee Insert x Insert x Insert



1401-005	1/2	50	400	140	1.88
1401-007	3/4	50	0	140	2.04
1401-010	1	25	150	140	2.65
1401-012	1-1/4	10	80	140	4.15
1401-015	1-1/2	10	0	140	4.70
1401-020	2	10	0	140	9.27

PVC Reducing Tee Insert x Insert x Insert



1401-074	1/2X3/4	25	400	140	5.09
1401-094	3/4X1/2X1/2	25	300	140	2.55
1401-101	3/4X1/2	25	200	140	2.30
1401-102	3/4X1	25	275	140	5.86
1401-124	1X3/4X1/2	25	200	140	3.70
1401-125	1X3/4X3/4	25	200	140	4.40
1401-130	1X1/2	25	200	140	2.70
1401-131	1X3/4	25	200	140	2.73
1401-132	1X1-1/4	25	0	140	8.18
1401-156	1-1/4X1X1/2	25	0	140	5.06
1401-157	1-1/4X1X3/4	25	0	140	5.06
1401-158	1-1/4X1X1	25	0	140	5.06
1401-166	1-1/4X1/2	25	0	140	3.55
1401-167	1-1/4X3/4	25	0	140	3.55
1401-168	1-1/4X1	25	0	140	3.55
1401-201	1-1/2X1-1/4X3/4	10	80	140	6.36
1401-202	1-1/2X1-1/4X1	10	80	140	6.36
1401-203	1-1/2X1-1/4X1-1/4	10	0	140	6.36
1401-209	1-1/2X1/2	10	80	140	6.19
1401-210	1-1/2X3/4	10	80	140	6.19
1401-211	1-1/2X1	10	80	140	6.19
1401-212	1-1/2X1-1/4	10	0	140	6.19
1401-241	2X1-1/2X1-1/2	10	0	140	8.18
1401-247	2X1/2	10	0	140	8.82
1401-248	2X3/4	10	0	140	8.82

Insert Fittings



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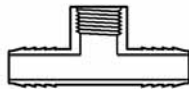
PVC Reducing Tee (continued)

Insert x Insert x Insert

1401-249	2X1	10	0	140	8.82
1401-250	2X1-1/4	10	0	140	9.23
1401-251	2X1-1/2	10	0	140	9.50
1401-335*	3X1	5	0	140	98.59
1401-338*	3X2	5	0	140	108.65
* Fabricated					

PVC Tee

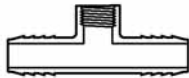
Insert x Insert x Fipt



1402-005	1/2	50	400	140	2.04
1402-007	3/4	50	0	140	3.07
1402-010	1	25	0	140	3.62
1402-012	1-1/4	10	0	140	5.31
1402-015	1-1/2	10	0	140	9.23
1402-020	2	10	0	140	11.45

PVC Reducing Tee

Insert x Insert x Fipt

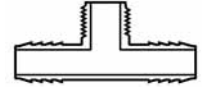


1402-094	3/4X1/2X1/2	25	200	140	3.33
1402-101	3/4X1/2	25	150	140	2.55
1402-124	1X3/4X1/2	25	200	140	4.16
1402-125	1X3/4X3/4	25	0	140	4.96
1402-130	1X1/2	25	200	140	3.34
1402-131	1X3/4	25	200	140	3.34
1402-156	1-1/4X1X1/2	25	0	140	6.16
1402-157	1-1/4X1X3/4	25	0	140	7.20
1402-166	1-1/4X1/2	25	0	140	4.56
1402-167	1-1/4X3/4	25	0	140	5.03
1402-168	1-1/4X1	25	0	140	5.31
1402-199	1-1/2X1-1/4X1/2	25	0	140	9.69
1402-201	1-1/2X1-1/4X3/4	10	0	140	10.79
1402-202	1-1/2X1-1/4X1	10	0	140	12.34
1402-209	1-1/2X1/2	10	80	140	7.01
1402-210	1-1/2X3/4	10	80	140	8.30
1402-211	1-1/2X1	10	0	140	8.30
1402-212	1-1/2X1-1/4	10	0	140	8.51
1402-247	2X1/2	10	0	140	9.40
1402-248	2X3/4	10	0	140	9.93
1402-249	2X1	10	0	140	10.93
1402-251	2X1-1/2	10	0	140	11.45

Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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PVC Tee

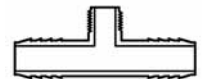
Insert x Insert x Mipt



1403-005	1/2	50	500	140	2.60
1403-007	3/4	50	0	140	3.55
1403-010	1	25	0	140	4.56
1403-012	1-1/4	10	80	140	5.93
1403-015	1-1/2	10	0	140	6.64
1403-020	2	10	0	140	10.32

PVC Reducing Tee

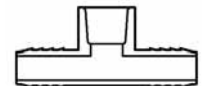
Insert x Insert x Mipt



1403-130	1X1X1/2	25	200	140	4.35
1403-131	1X1X3/4	25	0	140	4.35

PVC Tee

Insert x Insert x Socket



1404-010	1	25	0	140	3.62
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PVC Reducing Tee

Insert x Insert x Socket



1404-102	3/4X3/4X1	100	0	140	5.86
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PVC Side Outlet Tee

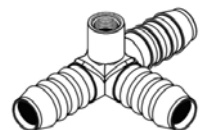
Insert x Insert x Insert x Fipt



1416-007	3/4X3/4	50	0	140	6.39
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PVC Reducing Side Outlet Tee

Insert x Insert x Insert x Fipt



1416-101	3/4X1/2	50	0	140	6.39
1416-130	1X1/2	50	0	140	6.81



Insert Fittings

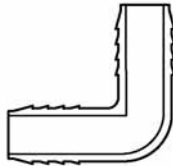
Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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PVC Reducing Side Outlet Tee (continued)

Insert x Insert x Insert x Fipt

1416-131	1X3/4	50	0	140	6.81
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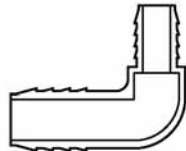
PVC 90° EII Insert x Insert



1406-005	1/2	50	600	140	1.72
1406-007	3/4	50	400	140	2.11
1406-010	1	25	200	140	2.33
1406-012	1-1/4	10	190	140	2.60
1406-015	1-1/2	10	80	140	3.07
1406-020	2	10	0	140	4.29
1406-025	2-1/2	10	0	140	19.35
1406-040*	4	1	2	140	64.06

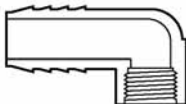
* Assembled

PVC 90° Reducing EII Insert x Insert



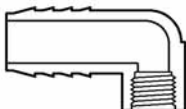
1406-101	3/4X1/2	25	300	140	1.99
1406-131	1 X 3/4	25	300	140	2.44
1406-168	1-1/4X1	25	0	140	3.62
1406-212	1-1/2X1-1/4	10	80	140	4.29
1406-251	2X1-1/2	10	0	140	4.72

PVC 90° EII Insert x Fipt



1407-005	1/2	50	400	140	1.94
1407-007	3/4	50	0	140	2.11
1407-010	1	25	0	140	2.70
1407-012	1-1/4	10	140	140	4.00
1407-015	1-1/2	10	0	140	4.56
1407-020	2	10	0	140	7.70

PVC 90° Reducing EII Insert x Fipt



1407-074	1/2X3/4	50	400	140	1.99
1407-101	3/4X1/2	50	400	140	1.99

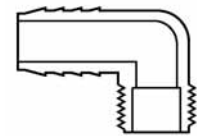
Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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PVC 90° Reducing EII (continued)

Insert x Fipt

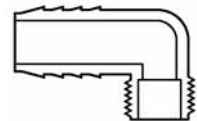
1407-130	1X1/2	25	300	140	2.11
1407-131	1X3/4	25	200	140	2.44
1407-166	1-1/4X1/2	25	200	140	3.62
1407-167	1-1/4X3/4	25	250	140	3.62
1407-168	1-1/4X1	25	0	140	3.62
1407-211	1-1/2X1	10	80	140	4.12
1407-212	1-1/2X1-1/4	10	80	140	4.47
1407-251	2X1-1/2	10	0	140	7.30

PVC 90° EII Insert x Mipt



1413-005	1/2	50	600	140	2.16
1413-007	3/4	50	400	140	2.99
1413-010	1	25	200	140	3.93
1413-012	1-1/4	10	120	140	5.23
1413-015	1-1/2	10	80	140	6.94
1413-015H	1-1/2	10	80	140	6.94
1413-020	2	10	0	140	10.95

PVC 90° Reducing EII Insert x Mipt



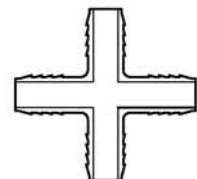
1413-055	3/8X3/4	50	200	140	2.33
1413-101	3/4X1/2	50	300	140	3.74
1413-130	1X1/2	50	400	140	4.26
1413-131	1X3/4	50	0	140	4.57

PVC 90° Side Outlet EII Insert x Insert x Fipt



1414-101	3/4X3/4X1/2	50	0	140	4.96
1414-130	1X1X1/2	25	200	140	5.33
1414-131	1X3/4	50	0	140	5.33

PVC Cross Insert



1420-005	1/2	50	0	140	3.64
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Insert Fittings



Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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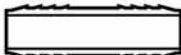
PVC Cross (continued)

Insert

1420-007	3/4	25	150	140	4.93
1420-010	1	25	0	140	6.13

PVC Coupling

Insert x Insert



1429-005	1/2	50	600	140	.87
1429-007	3/4	50	600	140	1.05
1429-010	1	50	400	140	1.10
1429-012	1-1/4	25	200	140	1.63
1429-015	1-1/2	25	0	140	1.93
1429-020	2	25	0	140	3.65
1429-025	2-1/2	10	0	140	9.45
1429-030	3	10	0	140	16.05
1429-040	4	10	0	140	21.85
1429-060	6	8	0	140	61.90
1429-080*	8	4	0	140	134.01

* Fabricated

PVC Reducer Coupling

Insert x Insert



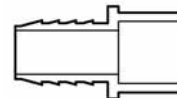
1429-101	3/4X1/2	50	600	140	1.43
1429-130	1X1/2	50	400	140	1.96
1429-131	1X3/4	50	400	140	1.47
1429-1315	1X7/8	50	400	140	3.00
1429-167	1-1/4X3/4	25	300	140	3.00
1429-168	1-1/4X1	25	200	140	2.33
1429-210	1-1/2X3/4	25	275	140	3.65
1429-211	1-1/2X1	25	200	140	3.51
1429-212	1-1/2X1-1/4	25	0	140	2.73
1429-249	2X1	10	80	140	4.96
1429-250	2X1-1/4	10	80	140	4.62
1429-251	2X1-1/2	10	80	140	4.39
1429-291	2-1/2X1-1/2	10	0	140	12.57
1429-338*	3X2	12	0	140	35.53
1429-422	4X3	18	0	140	62.46
1429-532	6X4	8	0	140	71.05

* Fabricated

Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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Insert Adapter (White PVC)

Insert x I.P.S. Spigot



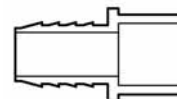
460-005	1/2	50	300	040	2.02
460-007	3/4	50	200	040	2.65
460-007N	3/4X3/4X1/2	50	200	040	2.65
460-010	1	50	0	040	2.77
460-012	1-1/4	20	160	040	2.86
460-012N	1-1/4X1-1/4X1	20	160	040	2.86
460-015	1-1/2	25	0	040	3.07
460-020	2	10	0	040	5.10
460-030	3	25	0	040	17.24
460-040	4	10	0	040	19.86
460-131N	3/4X1X3/4	20	160	040	3.09
460-132N	1X1-1/4X1	20	160	040	3.34
1432-060*	6	8	0	140	85.38
1432-080*	8	4	0	140	169.51

N = Nesting

* Fabricated

Insert Adapter (PVC Gray)

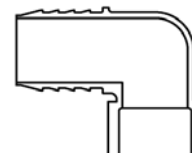
Insert x I.P.S. Spigot



460-005G	1/2	50	300	043	2.24
460-007G	3/4	50	200	043	2.95
460-010G	1	50	0	043	3.07
460-012G	1-1/4	20	160	043	3.18
460-015G	1-1/2	25	0	043	3.41
460-020G	2	10	0	043	5.68

Insert Adapter 90° Ell (White PVC)

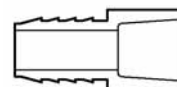
Insert x I.P.S. Spigot



460A-015	1-1/2	10	80	040	6.10
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Insert Adapter (White PVC)

Insert x Soc



474-005	1/2	50	600	040	1.84
474-007	3/4	50	400	040	2.21
474-010	1	50	0	040	2.34
474-012	1-1/4	25	0	040	3.71



Insert Fittings

Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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Insert Adapter (White PVC) (continued)

Insert x Soc

474-015	1-1/2	25	0	040	4.12
474-020	2	25	0	040	7.62
474-030	3	15	0	040	22.73
474-040	4	15	0	040	25.98

Insert Adapter (PVC Gray)

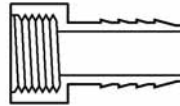
Insert x Soc



474-005G	1/2	16000	0	043	2.04
474-007G	3/4	50	400	043	2.46
474-010G	1	50	0	043	2.60
474-012G	1-1/4	25	0	043	4.13
474-015G	1-1/2	25	0	043	4.28
474-020G	2	25	0	043	8.47

PVC Female Adapter

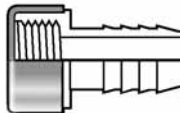
Fipt x Insert



1435-005	1/2	50	300	140	3.83
1435-007	3/4	50	400	140	4.16
1435-010	1	50	0	140	4.62
1435-012	1-1/4	25	0	140	5.67
1435-015	1-1/2	25	0	140	7.20
1435-020	2	10	0	140	12.15

Special Reinforced PVC Female Adapter

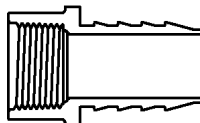
SR Fipt x Insert



1435-005SR	1/2	50	400	142	5.11
1435-007SR	3/4	50	400	142	6.04
1435-010SR	1	50	0	142	7.21

PVC Reducing Female Adapter

Fipt x Insert

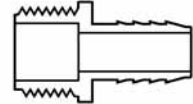


1435-074	1/2X3/4	50	500	140	5.33
1435-102	3/4X1	50	0	140	5.51

Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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PVC Male Adapter

Mipt x Insert

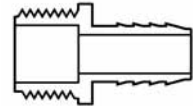


1436-005	1/2	50	600	140	.86
1436-007	3/4	50	400	140	1.05
1436-010	1	50	0	140	1.09
1436-012	1-1/4	20	160	140	1.72
1436-015	1-1/2	25	0	140	1.93
1436-020	2	10	0	140	3.69
1436-025	2-1/2	10	0	140	15.18
1436-030	3	10	0	140	17.51
1436-040	4	10	0	140	24.35
1436-060*	6	1	4	140	123.54

* Fabricated

CPVC Male Adapter

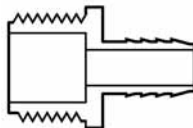
Mipt x Insert



1436-005C	1/2	1400	0	143	1.24
1436-007C	3/4	50	400	143	1.51
1436-010C	1	50	0	143	1.55
1436-012C	1-1/4	20	160	143	2.33
1436-015C	1-1/2	25	0	143	2.77
1436-020C	2	10	0	143	5.28
1436-040C	4	10	0	143	36.95

PVC Reducing Male Adapter

Mipt x Insert



1436-074	1/2X3/4	50	300	140	2.73
1436-075	1/2X1	50	200	140	2.83
1436-101	3/4X1/2	50	600	140	2.46
1436-102	3/4X1	50	400	140	2.83
1436-131	1X3/4	50	0	140	2.55
1436-132	1X1-1/4	25	200	140	3.44
1436-133	1X1-1/2	25	0	140	5.18
1436-167	1-1/4X3/4	25	200	140	3.00
1436-168	1-1/4X1	25	200	140	3.22
1436-169	1-1/4X1-1/2	10	120	140	5.18
1436-211	1-1/2X1	25	0	140	3.93
1436-212	1-1/2X1-1/4	25	0	140	3.93
1436-213	1-1/2X2	10	80	140	6.66
1436-251	2X1-1/2	10	80	140	6.61

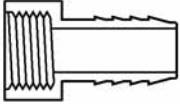
* Fabricated

Insert Fittings



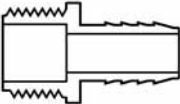
Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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PVC Female Hose Adapter
Female Hose Thread x Insert



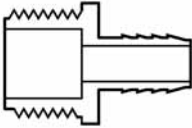
1435-007FHT	3/4	50	400	140	4.96
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PVC Male Hose Adapter
Male Hose Thread x Insert



1436-007MHT	3/4	50	400	140	2.57
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PVC Reducing Male Hose Adapter
Male Hose Thread x Insert



1436-101MHT	3/4X1/2	50	600	140	2.44
1436-102MHT	3/4X1	50	400	140	2.80

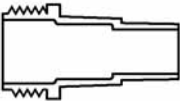
PVC Pool Adapter
Mipt x Hose ID



Not NSF Approved

1436-204	1-1/2X1-1/2X1-1/4	25	0	140	4.93
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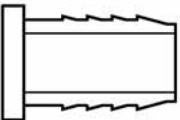
PP Pool Adapter
Mipt x Hose ID



Not NSF Approved

1436-204P	1-1/2X1-1/2X1-1/4	25	0	140	4.93
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PVC Plug
Insert



1449-005	1/2	100	600	140	1.56
1449-007	3/4	100	1200	140	1.63
1449-010	1	50	600	140	2.20
1449-012	1-1/4	25	300	140	2.79

Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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PVC Plug (continued)
Insert

1449-015	1-1/2	25	300	140	3.04
1449-020	2	10	120	140	5.35



Insert Fittings

RECOMMENDATIONS FOR INSTALLERS AND USERS

Plastic piping systems should be ENGINEERED, INSTALLED, and OPERATED in accordance with ESTABLISHED DESIGN AND ENGINEERING STANDARDS AND PROCEDURES for plastic piping systems. Suitability for the intended service application should be determined prior to installation. PRIOR TO ASSEMBLY, all piping system components should be inspected for damage or irregularities. Mating components should be checked to assure that tolerances and engagements are compatible. Do not use any components that appear irregular or do not fit properly. Contact the appropriate manufacturer of the component product in question to determine usability. Spears® Manufacturing Company, Inc., recommends that all PVC and CPVC plastic piping systems be designed and constructed to AVOID EXCESSIVE WATER HAMMER. Water hammer can cause damage and failure to pipe, valves, and fittings within the piping system. Consult all applicable codes and regulations for compliance prior to installation.

CAUTION - Spears® Manufacturing Company WILL NOT ACCEPT RESPONSIBILITY for damage or impairment of its products, or other consequential or incidental damages caused by misapplication, incorrect assembly, and/or exposure to harmful substances or conditions.

SOLVENT WELD CONNECTIONS - Use a quality grade of primer and solvent cement formulated for the type of connection, with the CORRECT SIZE APPLICATOR. Read and follow all of the solvent cement MANUFACTURER'S APPLICATION AND CURE TIME INSTRUCTIONS THOROUGHLY. BEFORE APPLYING PRIMER AND CEMENT, appropriate safety precautions should be taken. Primer and Cement should be stored in the shade between 40°F and 110°F. Eliminate all ignition sources. Avoid breathing of vapors. Use only with adequate ventilation; explosion-proof general mechanical ventilation or local exhaust is recommended to maintain vapor concentrations below recommended exposure limits. In confined or partially enclosed areas, a NIOSH-approved organic vapor cartridge respirator with full face-piece is recommended. Containers should be kept tightly closed when not in use, and covered as much as possible when in use. Avoid frequent contact with skin; wearing PVA coated protective gloves and impervious apron are recommended. Avoid any contact with eyes; splash-proof chemical goggles are recommended.

THREADED CONNECTIONS - Use a quality grade thread sealant. WARNING: SOME PIPE JOINT COMPOUNDS OR TEFLON® 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 manufacturers' 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 OVER TIGHTENING will cause DAMAGE TO BOTH PIPE AND FITTING.

WARNING: DO NOT USE COMPRESSED AIR OR GAS TO TEST ANY PVC OR CPVC THERMOPLASTIC PIPING PRODUCT OR SYSTEM, AND DO NOT USE DEVICES PROPELLED BY COMPRESSED AIR OR GAS TO CLEAR SYSTEMS. THESE PRACTICES MAY RESULT IN EXPLOSIVE FRAGMENTATION OF SYSTEM PIPING AND COMPONENTS CAUSING SERIOUS OR FATAL BODILY INJURY.

THIS PRODUCT IS ONLY TO BE USED FOR ITS INTENDED PURPOSE.

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.

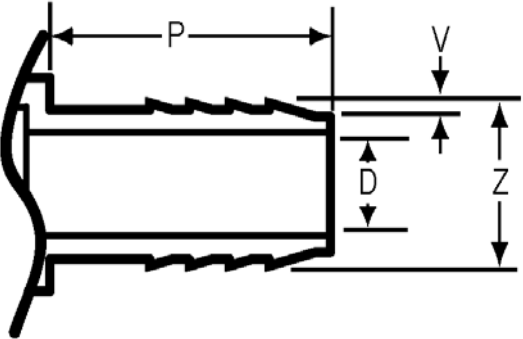
SPIRAL BARB FITTING INSTALLATION

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.

Insert Fittings



Dimensions of Insert Ends ASTM D 2609



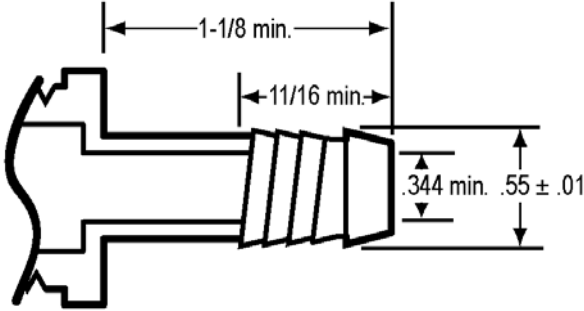
Nominal Size in.	Insert Length "P" min.	Barb O.D. "Z"		Barb Depth "V" min.	Inside Diameter "D" min.
		max.	min.		
1/2	1-1/4	0.665	0.635	0.015	0.406
3/4	1-1/4	0.865	0.835	0.015	0.562
1	1-1/4	1.095	1.065	0.02	0.75
1-1/4	1-1/4	1.425	1.395	0.025	0.995
1-1/2	1-1/2	1.665	1.63	0.03	1.125
2	1-1/2	2.125	2.085	0.03	1.656
2-1/2	2	2.52	2.487	0.03	2.062
3	2-1/8	3.125	3.086	0.03	2.6
4	3	4.09	4.044	0.03	3.525

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 Spiral Barb Ends



STANDARDS & SPECIFICATIONS

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



National Sanitation Foundation (NSF) Standard 14 Plastic Fittings for Potable Water.

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.

Prices subject to change without notice. Possession of this price schedule shall not be construed as an offer to sell the products listed.

Product drawings are representative and may not fully reflect product configurations.



Insert Fittings

CONTENT

PRODUCTS

PVC Spiral Barb Tee Spiral Barb	1
PVC Spiral Barb Tee Insert x Insert x Spiral Barb	1
PP Spiral Barb 90° Ell Mipt x Spiral Barb	1
PVC Spiral Barb Coupling Spiral Barb x Spiral Barb	1
PVC Spiral Barb Coupling Insert x Spiral Barb	1
PP Spiral Barb Male Adapter Mipt x Spiral Barb	1
PVC Tee Insert x Insert x Insert	1
PVC Reducing Tee Insert x Insert x Insert	1
PVC Tee Insert x Insert x Fipt	2
PVC Reducing Tee Insert x Insert x Fipt	2
PVC Tee Insert x Insert x Mipt	2
PVC Reducing Tee Insert x Insert x Mipt	2
PVC Tee Insert x Insert x Socket	2
PVC Reducing Tee Insert x Insert x Socket	2
PVC Side Outlet Tee Insert x Insert x Insert x Fipt	2
PVC Reducing Side Outlet Tee Insert x Insert x Insert x Fipt	2
PVC 90° Ell Insert x Insert	3
PVC 90° Reducing Ell Insert x Insert	3
PVC 90° Ell Insert x Fipt	3
PVC 90° Reducing Ell Insert x Fipt	3
PVC 90° Ell Insert x Mipt	3
PVC 90° Reducing Ell Insert x Mipt	3
PVC 90° Side Outlet Ell Insert x Insert x Fipt	3
PVC Cross Insert	3
PVC Coupling Insert x Insert	4
PVC Reducer Coupling Insert x Insert	4
Insert Adapter (White PVC) Insert x I.P.S. Spigot	4
Insert Adapter (PVC Gray) Insert x I.P.S. Spigot	4
Insert Adapter 90° Ell (White PVC) Insert x I.P.S. Spigot	4
Insert Adapter (White PVC) Insert x Soc	4
Insert Adapter (PVC Gray) Insert x Soc	5
PVC Female Adapter Fipt x Insert	5
Special Reinforced PVC Female Adapter SR Fipt x Insert	5
PVC Reducing Female Adapter Fipt x Insert	5
PVC Male Adapter Mipt x Insert	5
CPVC Male Adapter Mipt x Insert	5
PVC Reducing Male Adapter Mipt x Insert	5
PVC Female Hose Adapter Female Hose Thread x Insert	6

Insert Fittings



CONTENT

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NOTES

Authorized Distributor:

Aetna Plastics Corp. 1702 St. Clair Ave. Cleveland, Ohio 44114 • Tel: 800-634-3074
216-781-4421 • Fax: 216-781-4474 • sales@aetnaplastics.com • www.aetnaplastics.com