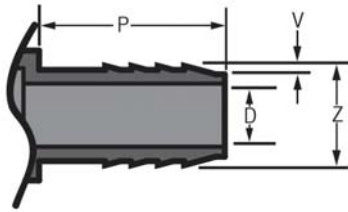




Insert Fittings Technical Barbed Insert Fittings Weights & Dimensions



**Dimensions of Insert Ends
ASTM D 2609**

Nominal Size in.	Insert Length "P" min.	Barb O.D. "Z" max. min.		Barb Depth "V" min.	Inside Diameter "D" min.
1/2	1-1/4	.665	.635	.015	.406
3/4	1-1/4	.865	.835	.015	.562
1	1-1/4	1.095	1.065	.020	.750
1-1/4	1-1/4	1.425	1.395	.025	.995
1-1/2	1-1/2	1.665	1.630	.030	1.125
2	1-1/2	2.125	2.085	.030	1.656
2-1/2	2	2.520	2.487	.030	2.062
3	2-1/8	3.125	3.086	.030	2.600
4	3	4.090	4.044	.030	3.525

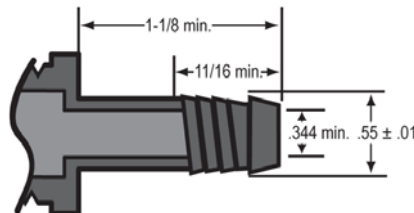
**Dimensions of Polyethylene Pipe
ASTM D 2104 and D 2239**

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	+.015 - .025
3	3.068	+.015 - .030
4	4.026	+.015 - .035

Insert Fittings Dimensions

- G** = (LAYING LENGTH) Intersection of center lines to insert bottom or thread bottom; 90° elbows, tees & crosses; ± 1/32 inch.
- H** = Intersection of center lines to end of insert or face of fitting; 90° elbows, tees & crosses; ± 1/32 inch.
- L** = Overall length of fittings; ± 1/16 inch.
- N** = (LAYING LENGTH) Insert bottom to insert bottom or thread bottom; couplings & straight adapters; ± 1/16 inch.

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, Minimum Cell Classification 12454. CPVC Minimum Cell Classification 23447.

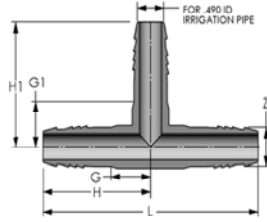
It is the users responsibility to determine the suitability for the intended service application.

Insert Fittings Technical
Barbed Insert Fittings Weights & Dimensions



Spiral Barb Tee - PVC

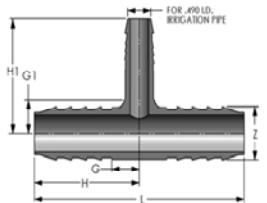
Spiral Barb
 3/8" Spiral Barb accepts .490 Irrigation Pipe.



Part Number	Size	G	G1	H	H1	L	Z	Approx. Wt. (Lbs.)
1401-003	3/8	17/32	17/32	1-3/4	1-3/4	3-1/2	9/16	.03

Spiral Barb Tee - PVC

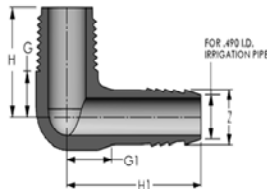
Insert x Insert x Spiral Barb
 3/8" Spiral Barb accepts .490 Irrigation Pipe.



Part Number	Size	G	G1	H	H1	L	Z	Z1	Approx. Wt. (Lbs.)
1401-099	3/4X3/8	17/32	17/32	2- 1/32	1-27/32	4-1/16	27/32	9/16	.05
1401-129	1X3/8	11/16	21/32	2- 3/16	1-31/32	4-3/8	1-3/32	9/16	.08

Spiral Barb 90° EII - PP

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



Part Number	Size	G	G1	H	H1	Z	Approx. Wt. (Lbs.)
1413-073	1/2X3/8	7/16	5/8	1- 1/8	1-13/16	9/16	.02
1413-099	3/4X3/8	1/2	23/32	1- 3/16	1-29/32	9/16	.03

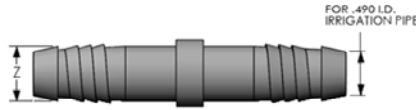


Insert Fittings Technical
Barbed Insert Fittings Weights & Dimensions

Spiral Barb Coupling - PVC

Spiral Barb x Spiral Barb

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

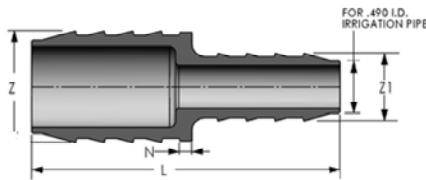


Part Number	Size	L	N	Z	Approx. Wt. (Lbs.)
1429-003	3/8	2- 7/8	1/4	9/16	.01

Spiral Barb Coupling - PVC

Insert x Spiral Barb

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

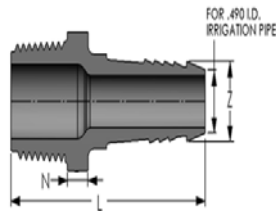


Part Number	Size	L	N	Z	Z1	Approx. Wt. (Lbs.)
1429-099	3/4X3/8	2-31/32	1/16	27/32	9/16	.02
1429-129	1X3/8	3- 3/32	3/16	1-3/32	9/16	.03

Spiral Barb Male Adapter - PP

Mipt x Spiral Barb

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



Part Number	Size	L	N	Z	Approx. Wt. (Lbs.)
1436-073	1/2X3/8	2-3/8	1/4	9/16	.01
1436-099	3/4X3/8	2-3/8	1/4	9/16	.02

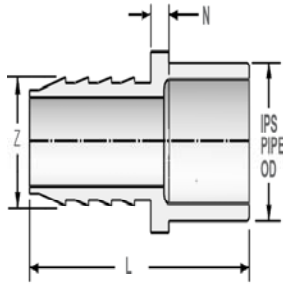
Insert Fittings Technical
Barbed Insert Fittings Weights & Dimensions



Insert Adapter - PVC White

Insert x I.P.S. Spigot

Dimensions Also Applicable to
 460-XXXG PVC Gray Adapters

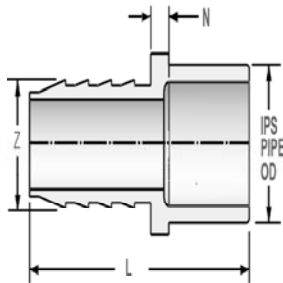


Part Number	Size	L	N	Z	Approx. Wt. (Lbs.)
460-005	1/2	2- 7/16	3/16	21/32	.02
460-007	3/4	2-23/32	5/32	27/32	.04
460-010	1	2- 9/16	1/16	1-3/32	.05
460-012	1-1/4	3- 1/32	9/32	1-13/32	.10
460-012N	1-1/4X1-1/4X1	3-1/32	9/32	1-13/32	.11
460-015	1-1/2	3-1/4	3/16	1-21/32	.11
460-020	2	3- 1/2	3/8	2-3/32	.20
460-030	3	4-9/16	13/32	3-3/32	.57
460-040	4	5-3/8	5/16	4-1/16	.72
460-131N	3/4X1X3/4	2- 7/8	1/4	27/32	.06
460-132N	1X1-1/4X1	3-1/32	9/32	1-3/32	.10
1432-060	6	8-1/4	1	6-3/32	1.74
1432-080*	8	9- 7/8	N/A	8-5/32	7.10

N = Nesting
 * Fabricated

Insert Adapter - CPVC

Insert x I.P.S. Spigot



Part Number	Size	L	N	Z	Approx. Wt. (Lbs.)
460-005C	1/2	2-7/16	3/16	21/32	.02
460-007C	3/4	2-23/32	5/32	27/32	.04
460-010C	1	2-9/16	1/16	1-3/32	.05
460-015C	1-1/2	3-1/4	3/16	1-21/32	.15
460-020C	2	3-1/2	3/8	2-3/32	.20
460-030C	3	4-9/16	13/32	3-3/32	.58

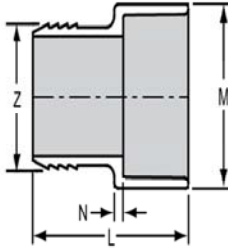


Insert Fittings Technical Barbed Insert Fittings Weights & Dimensions

Insert Adapter - PVC White

Insert x Socket

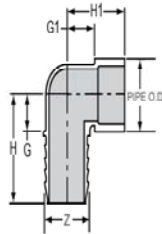
Dimensions Also Applicable to
474-XXXG PVC Gray Adapters



Part Number	Size	L	M	N	Z	Approx. Wt. (Lbs.)
474-005	1/2	2- 3/8	1- 1/8	5/32	21/32	.03
474-007	3/4	2- 7/16	1-13/32	5/32	27/32	.04
474-010	1	2-9/16	1- 5/8	3/16	1-3/32	.07
474-012	1-1/4	2-11/16	2-5/32	5/32	1-13/32	.10
474-015	1-1/2	3- 1/16	2-5/16	5/16	1-21/32	.13
474-020	2	3	2-13/16	3/16	2-3/32	.16
474-030	3	4- 3/4	4-1/32	9/32	3-3/32	.50
474-040	4	5-21/32	5-1/16	5/16	4-1/16	.81

Insert Adapter 90° EII - PVC White

Insert x I.P.S. Spigot

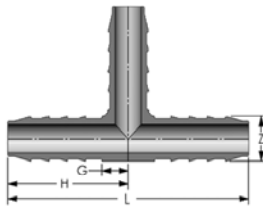


Part Number	Size	G	G1	H	H1	Z	Approx. Wt. (Lbs.)
460A-015	1-1/2	1-1/16	1-1/16	2-13/16	2-3/16	1-21/32	.16

Tee - PVC

Insert x Insert x Insert

Dimensions Also Applicable to
1401-XXXC CPVC Inserts



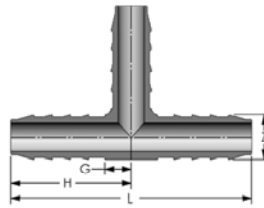
Part Number	Size	G	H	L	Z	Approx. Wt. (Lbs.)
1401-005	1/2	7/16	1-29/32	3-13/16	21/32	.03
1401-007	3/4	19/32	2-3/32	4-3/16	27/32	.06
1401-010	1	11/16	2-7/32	4-15/32	1-3/32	.10
1401-012	1-1/4	27/32	2-11/32	4-11/16	1-13/32	.15
1401-015	1-1/2	15/16	2-11/16	5-3/8	1-21/32	.22
1401-020	2	1-5/16	3-3/8	6-3/4	2-3/32	.42

Insert Fittings Technical
Barbed Insert Fittings Weights & Dimensions



Tee - CPVC

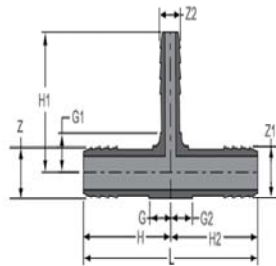
Insert x Insert x Insert



Part Number	Size	G	H	L	Approx. Wt. (Lbs.)
1401-005C	1/2	7/16	1-29/32	3-13/16	.03

Tee, Reducing - PVC

Insert x Insert x Insert



Part Number	Size	G	G1	H	H1	L	Z	Z1	Z2	Approx. Wt. (Lbs.)
1401-074	1/2X3/4	21/32	9/16	2- 5/32	2- 1/16	4- 5/16	21/32	21/32	27/32	.05
1401-094	3/4X1/2X1/2	9/16	9/16	2- 1/16	2- 1/16	4-1/8	27/32	21/32	21/32	.05
1401-101	3/4X1/2	17/32	17/32	2- 1/32	2- 1/32	4- 1/16	27/32	27/32	21/32	.05
1401-102	3/4X1	5/8	11/16	2-1/8	2-3/16	4- 1/4	27/32	27/32	1-3/32	.07
1401-124	1X3/4X1/2	9/16	9/16	2- 1/16	2- 1/16	4-1/8	1-3/32	27/32	21/32	.06
1401-125	1X3/4X3/4	9/16	21/32	2-1/16	2-5/32	4-1/8	1-3/32	27/32	27/32	.07
1401-130	1X1/2	13/32	5/8	1-29/32	2-1/8	3-13/16	1-3/32	1-3/32	21/32	.07
1401-131	1X3/4	9/16	21/32	2-1/32	2-1/8	4-1/16	1-3/32	1-3/32	27/32	.08
1401-132	1X1-1/4	13/16	21/32	2-5/16	2-5/32	4-5/8	1-3/32	1-3/32	1-13/32	.11
1401-156	1-1/4X1X1/2	9/16	23/32	2- 1/16	2-7/32	4-1/8	1-13/32	1-3/32	21/32	.10
1401-157	1-1/4X1X3/4	21/32	23/32	2-5/32	2-7/32	4-5/16	1-13/32	1-3/32	27/32	.11
1401-158	1-1/4X1X1	3/4	3/4	2- 1/4	2-1/4	4-1/2	1-13/32	1-3/32	1-3/32	.13
1401-166	1-1/4X1/2	9/16	23/32	2- 1/16	2- 7/32	4- 1/8	1-13/32	1-13/32	21/32	.08
1401-167	1-1/4X3/4	27/32	13/16	2-11/32	2-5/16	4-11/16	1-13/32	1-13/32	27/32	.13
1401-168	1-1/4X1	11/16	11/16	2-3/16	2-3/16	4-3/8	1-13/32	13/32	1-3/32	.13
1401-169	1-1/4X1-1/2	31/32	13/16	2-15/32	2-9/16	4-15/16	1-13/32	1-13/32	1-21/32	.17
1401-201	1-1/2X1-1/4X3/4	21/32	1-3/32	2-13/32	2- 9/16	4- 9/16	1-21/32	1-13/32	27/32	.15
1401-202	1-1/2X1-1/4X1	3/4	1-3/32	2-1/2	2-9/16	4-3/4	1-21/32	1-13/32	1-3/32	.16
1401-203	1-1/2X1-1/4X1-1/4	15/16	1- 1/16	2-7/16	2- 9/16	5- 1/8	1-21/32	1-13/32	1-13/32	.18
1401-209	1-1/2X1/2	9/16	1-1/16	2-5/16	2-9/16	4-5/8	1-21/32	1-21/32	21/32	.15
1401-210	1-1/2X3/4	21/32	1-1/16	2-13/32	2-9/16	4-13/16	1-21/32	1-21/32	27/32	.15
1401-211	1-1/2X1	3/4	1-1/16	2-1/2	2-9/16	5	1-21/32	1-21/32	1-3/32	.17
1401-212	1-1/2X1-1/4	15/16	1-3/32	2-11/16	2-19/32	5- 3/8	1-21/32	1-21/32	1-13/32	.19
1401-241	2X1-1/2X1-1/2	1-1/16	1-5/16	2-13/16	3-1/16	5- 5/8	2-3/32	1-21/32	1-21/32	.26
1401-247	2X1/2	9/16	1- 5/16	2-5/16	2-13/16	4-5/8	2-3/32	2-3/32	21/32	.20
1401-248	2X3/4	21/32	1-5/16	2-13/32	2-13/16	4-13/16	2-3/32	2-3/32	27/32	.21
1401-249	2X1	3/4	1-5/16	2- 1/2	2-13/16	5	2-3/32	2-3/32	1-3/32	.22
1401-250	2X1-1/4	15/16	1-5/16	2-11/16	2-13/16	5-3/8	2-3/32	2-3/32	1-13/32	.25
1401-251	2X1-1/2	1-1/16	1-5/16	2-13/16	3-1/16	5-5/8	2-3/32	2-3/32	1-21/32	.26
1401-338 ¹	3X2	3-3/4	3-9/16	6-5/32	5-5/16	12-5/16	3-3/32	3-3/32	2-3/32	2.39

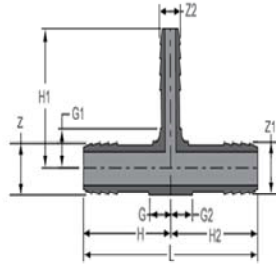


Insert Fittings Technical Barbed Insert Fittings Weights & Dimensions

Tee, Reducing - PVC

Insert x Insert x Insert

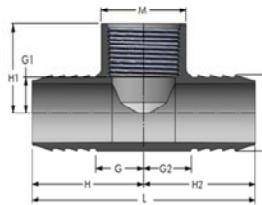
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¹ Assembled molded components

Tee - PVC

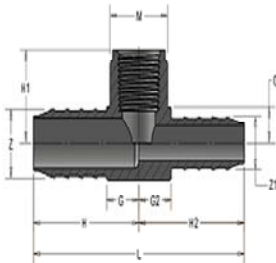
Insert x Insert x Fipt



Part Number	Size	G	G1	H	H1	H2	L	M	Z	Approx. Wt. (Lbs.)
1402-005	1/2	17/32	5/16	2-1/32	1-1/32	2-5/32	4-1/16	1	21/32	.04
1402-007	3/4	21/32	13/32	2-5/32	1-1/8	2-5/32	4-5/16	1-1/4	27/32	.07
1402-010	1	13/16	17/32	2-5/16	1-7/16	2-5/16	4-5/8	1-17/32	1-3/32	.12
1402-012	1-1/4	1-1/8	21/32	2-5/8	1-11/16	2-5/8	5-1/4	2-3/32	1-13/32	.21
1402-015	1-1/2	1-1/4	25/32	3	1-13/16	3	6	2-11/32	1-21/32	.27
1402-020	2	1-1/2	1	3-1/8	2-1/16	3-1/8	6-1/4	2-27/32	2-3/32	.41

Tee, Reducing - PVC

Insert x Insert x Fipt



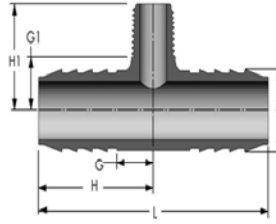
Part Number	Size	G	G1	G2	H	H1	L	M	Z	Z1	Approx. Wt. (Lbs.)
1402-094	3/4X1/2X1/2	21/32	13/32	21/32	2-5/32	1-5/32	4-5/16	1-3/16	27/32	21/32	.07
1402-101	3/4X1/2	17/32	13/32	17/32	2-1/32	1-1/8	4-1/16	1-3/16	27/32	27/32	.05
1402-124	1X3/4X1/2	23/32	17/32	23/32	2-7/32	1-1/4	4-7/16	1-3/16	1-3/32	27/32	.10
1402-125	1X3/4X3/4	27/32	1/2	23/32	2-11/32	1-9/32	4-11/16	1-13/32	1-3/32	27/32	.11
1402-130	1X1/2	17/32	1/2	17/32	2-1/32	1-7/32	4-1/16	1	1-3/32	1-3/32	.07
1402-131	1X3/4	21/32	1/2	21/32	2-5/32	1-1/4	4-9/32	1-1/4	1-3/32	1-3/32	.09
1402-156	1-1/4X1X1/2	21/32	21/32	21/32	2-5/32	1-13/32	4-5/16	1-3/16	1-13/32	1-3/32	.13
1402-157	1-1/4X1X3/4	25/32	21/32	25/32	2-9/32	1-7/16	4-9/16	1-7/16	1-13/32	1-3/32	.15
1402-166	1-1/4X1/2	21/32	21/32	21/32	2-5/32	1-7/16	4-5/16	1-1/8	1-13/32	1-13/32	.13
1402-167	1-1/4X3/4	27/32	21/32	27/32	2-9/32	1-7/16	4-9/16	1-13/32	1-13/32	1-13/32	.14
1402-168	1-1/4X1	15/16	23/32	15/16	2-7/16	1-5/8	4-7/8	1-5/8	1-13/32	1-13/32	.17

Insert Fittings Technical
Barbed Insert Fittings Weights & Dimensions



Tee, Reducing - PVC

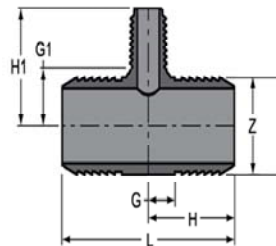
Insert x Insert x Mipt



Part Number	Size	G	G1	H	H1	L	Z	Approx. Wt. (Lbs.)
1403-130	1X1X1/2	11/16	23/32	2-3/16	1-3/8	4-3/8	1-3/32	.08
1403-131	1X1X3/4	11/16	23/32	2-3/16	1-3/8	4-3/8	1-3/32	.09

Tee - PVC

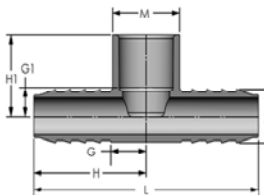
Insert x Insert x Mipt



Part Number	Size	G	G1	H	H1	L	Z	Approx. Wt. (Lbs.)
1403-005	1/2	9/16	5/8	2- 1/16	1-5/16	4-1/8	21/32	.04
1403-007	3/4	5/8	13/16	2- 5/32	1- 7/16	4- 5/16	27/32	.06
1403-010	1	11/16	11/16	2- 3/16	1- 5/8	4- 3/8	1-3/32	.09
1403-012	1-1/4	15/16	1- 1/16	2- 7/16	2- 1/16	4- 7/8	1-13/32	.16
1403-015	1-1/2	1-1/16	1-5/32	2-13/16	2- 3/16	5- 5/8	1-21/32	.22
1403-020	2	1-5/16	1-7/16	3-1/16	2-1/2	6-1/8	2-3/32	.31

Tee - PVC

Insert x Insert x Socket



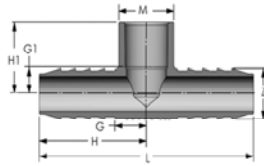
Part Number	Size	G	G1	H	H1	L	M	Z	Approx. Wt. (Lbs.)
1404-007	3/4	11/16	13/32	2-3/16	1-5/16	4-3/8	1-5/16	27/32	.07
1404-010	1	1	1/2	2- 1/2	1-15/32	5	1-21/32	1-3/32	.14



Insert Fittings Technical Barbed Insert Fittings Weights & Dimensions

Tee, Reducing - PVC

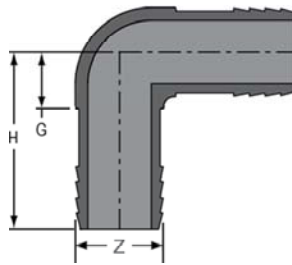
Insert x Insert x Socket



Part Number	Size	G	G1	H	H1	L	M	Z	Approx. Wt. (Lbs.)
1404-101	3/4X1/2	5/8	7/16	2-1/8	1-3/16	4-1/4	1-3/32	27/32	.06
1404-102	3/4X3/4X1	27/32	13/32	2-11/32	1-17/32	4-11/16	1-5/8	27/32	.10

90° EII - PVC

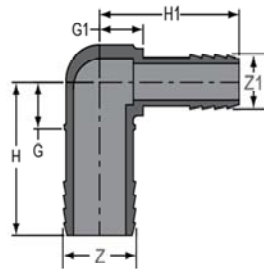
Insert x Insert



Part Number	Size	G	H	Z	Approx. Wt. (Lbs.)
1406-005	1/2	7/16	1-15/16	21/32	.02
1406-007	3/4	17/32	2-1/32	27/32	.04
1406-010	1	11/16	2-3/16	1-3/32	.07
1406-012	1-1/4	27/32	2-11/32	1-13/32	.11
1406-015	1-1/2	15/16	2-11/16	1-21/32	.16
1406-020	2	1-3/16	2-15/16	2-3/32	.23
1406-025	2-1/2	1-5/8	3-13/16	2-1/2	.46
1406-040 ¹	4	4-25/32	7-13/16	4-1/16	3.17

90° EII, Reducing - PVC

Insert x Insert



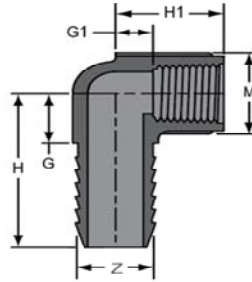
Part Number	Size	G	G1	H	H1	Z	Z1	Approx. Wt. (Lbs.)
1406-101	3/4X1/2	9/16	9/16	2-1/16	2-1/16	27/32	21/32	.03
1406-131	1X3/4	11/16	21/32	2-3/16	2-5/32	1-3/32	27/32	.06
1406-168	1-1/4X1	3/4	3/4	2-1/4	2-1/4	1-13/32	1-3/32	.10
1406-212	1-1/2X1-1/4	15/16	25/32	2-11/16	2-9/32	1-21/32	1-13/32	.14
1406-251	2X1-1/2	1-1/16	1	2-13/16	2-3/4	2-3/32	1-21/32	.20

Insert Fittings Technical
Barbed Insert Fittings Weights & Dimensions



90° EII - PVC

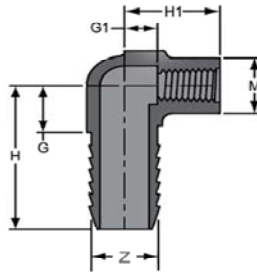
Insert x Fipt
 Dimensions Also Applicable to 1407-XXXX CPVC Inserts



Part Number	Size	G	G1	H	H1	M	Z	Approx. Wt. (Lbs.)
1407-005	1/2	21/32	5/16	2-5/32	1-1/32	1-1/8	21/32	.04
1407-007	3/4	3/4	13/32	2- 1/4	1-1/8	1-3/8	27/32	.06
1407-010	1	29/32	1/2	2-13/32	1-13/32	1-11/16	2-3/32	.10
1407-012	1-1/4	1-1/8	23/32	2-5/8	1- 3/4	2-1/8	1-13/32	.17
1407-015	1-1/2	1-1/4	27/32	3	1-7/8	2-3/8	1-21/32	.23
1407-020	2	1-1/2	1-3/32	3-1/8	2-5/32	2-7/8	2-3/32	.35

90° EII, Reducing - PVC

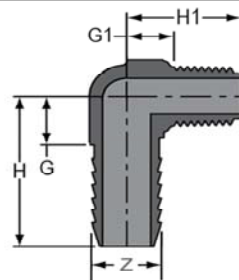
Insert x Fipt
 Dimensions Also Applicable to 1407-XXXX CPVC Inserts



Part Number	Size	G	G1	H	H1	M	Z	Approx. Wt. (Lbs.)
1407-074	1/2X3/4	13/16	13/32	2- 5/16	1- 1/8	1-3/8	21/32	.05
1407-101	3/4X1/2	11/16	7/16	2-3/16	1- 5/32	1-1/8	27/32	.05
1407-130	1X1/2	11/16	17/32	2- 3/16	1- 1/4	1-1/8	1-3/32	.07
1407-131	1X3/4	27/32	9/16	2-11/32	1- 5/16	1-3/8	1-3/32	.09
1407-166	1-1/4X1/2	21/32	11/16	2- 5/32	1-13/32	1-3/16	1-13/32	.09
1407-167	1-1/4X3/4	25/32	15/16	2- 9/32	1-23/32	1-13/32	1-13/32	.10
1407-168	1-1/4X1	29/32	21/32	2-13/32	1-21/32	1-11/16	1-13/32	.13
1407-211	1-1/2X1	15/16	25/32	2-11/16	1-25/32	1-23/32	1-21/32	.17
1407-212	1-1/2X1-1/4	1- 1/8	25/32	2- 7/8	1-25/32	2-3/32	1-21/32	.20
1407-251	2X1-1/2	1-1/4	1	3	2- 1/32	2-11/32	2-3/32	.29

90° EII - PVC

Insert x Mipt
 Dimensions Also Applicable to 1413-XXXX CPVC Inserts



Part Number	Size	G	G1	H	H1	Z	Approx. Wt. (Lbs.)
1413-005	1/2	1/2	9/16	2	1-3/16	21/32	.02
1413-007	3/4	17/32	21/32	2-1/32	1- 9/32	27/32	.04



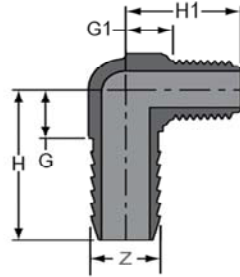
Insert Fittings Technical Barbed Insert Fittings Weights & Dimensions

90° EII - PVC

(Continued)

Insert x Mipt

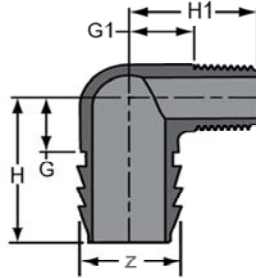
Dimensions Also Applicable to
1413-XXXX CPVC Inserts



Part Number	Size	G	G1	H	H1	Z	Approx. Wt. (Lbs.)
1413-010	1	11/16	23/32	2- 3/16	1-19/32	1-3/32	.07
1413-012	1-1/4	27/32	31/32	2-11/32	1-7/8	1-13/32	.11
1413-015	1-1/2	15/16	1- 3/32	2-25/32	2-1/8	1-21/32	.17
1413-020	2	1-5/16	1-13/32	3-1/16	2-1/2	2-3/32	.24

90° EII Reducing - PVC

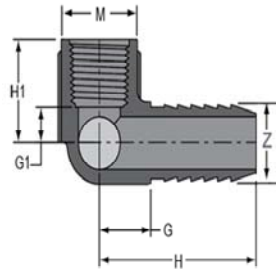
Insert x Mipt



Part Number	Size	G	G1	H	H1	Approx. Wt. (Lbs.)
1413-055	3/8X3/4	15/32	3/4	1-5/16	1-7/16	.02
1413-101	3/4X1/2	17/32	17/32	2-1/32	1- 7/32	.03
1413-130	1X1/2	23/32	23/32	2- 3/16	1-3/8	.05
1413-131	1X3/4	11/16	11/16	2-3/16	1-13/32	.06

90° Side Outlet EII - PVC

Insert x Insert x Fipt



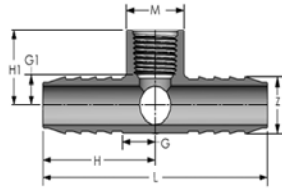
Part Number	Size	G	G1	H	H1	M	Z	Approx. Wt. (Lbs.)
1414-101	3/4X3/4X1/2	5/8	13/32	2- 1/8	1- 1/8	1-3/32	27/32	.06
1414-130	1X1X1/2	11/16	9/16	2- 3/16	1- 1/4	1-5/16	1-3/32	.09
1414-131	1X3/4	25/32	1/2	2- 9/32	1-7/32	1-5/16	1-3/32	.10

Insert Fittings Technical
Barbed Insert Fittings Weights & Dimensions



Side Outlet Tee - PVC

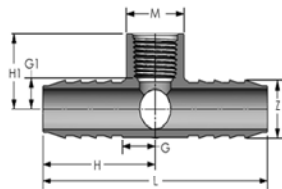
Insert x Insert x Insert x Fipt



Part Number	Size	G	G1	H	H1	L	M	Z	Approx. Wt. (Lbs.)
1416-007	3/4X3/4	3/4	13/32	2-1/4	1-1/8	4-1/2	1-5/16	27/32	.08

Side Outlet Tee, Reducing - PVC

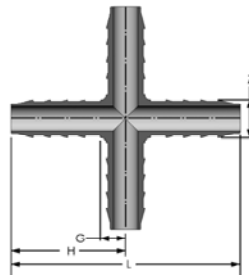
Insert x Insert x Insert x Fipt



Part Number	Size	G	G1	H	H1	L	M	Z	Approx. Wt. (Lbs.)
1416-101	3/4X1/2	5/8	13/32	2-1/8	1-1/8	4-1/4	1-3/32	27/32	.08
1416-130	1X1/2	11/16	1/2	2-3/16	1-7/32	4-3/8	1-3/32	1-3/32	.11
1416-131	1X3/4	23/32	1/2	2-7/32	1-7/32	4-7/16	1-5/16	1-3/32	.11

Cross - PVC

Insert



Part Number	Size	G	H	L	Z	Approx. Wt. (Lbs.)
1420-005	1/2	13/32	1-29/32	3-13/16	21/32	.05
1420-007	3/4	17/32	2-1/32	4-1/16	27/32	.07
1420-010	1	11/16	2-3/16	4-3/8	1-3/32	.12

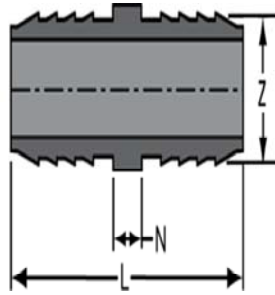


Insert Fittings Technical Barbed Insert Fittings Weights & Dimensions

Coupling - PVC

Insert x Insert

Dimensions Also Applicable to
1429-XXXX CPVC Inserts

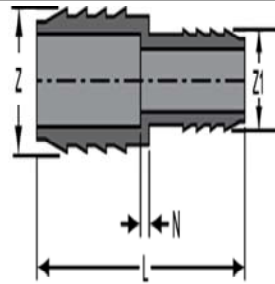


Part Number	Size	L	N	Z	Approx. Wt. (Lbs.)
1429-005	1/2	3- 1/8	1/8	21/32	.02
1429-007	3/4	3- 1/16	1/16	27/32	.03
1429-010	1	3- 3/16	3/16	1-3/32	.05
1429-012	1-1/4	3- 3/16	3/16	1-13/32	.08
1429-015	1-1/2	3-19/32	3/32	1-21/32	.10
1429-020	2	3-9/16	1/16	2-3/32	.12
1429-025	2-1/2	4-19/32	1/4	2-1/2	.23
1429-030	3	4-3/4	1/4	3-3/32	.30
1429-040	4	6-7/16	3/8	4-1/16	.59
1429-060	6	8-5/8	13/32	6-3/32	1.73
1429-080*	8	9- 7/8	7/32	8-5/32	7.10

* Fabricated

Coupling, Reducer - PVC

Insert x Insert



Part Number	Size	L	N	Z	Z1	Approx. Wt. (Lbs.)
1429-101	3/4X1/2	3-1/16	1/16	27/32	21/32	.02
1429-130	1X1/2	3- 1/8	1/8	1-3/32	21/32	.04
1429-131	1X3/4	3-1/4	1/4	1-3/32	27/32	.04
1429-1315	1X7/8	3- 1/4	1/4	1-3/32	15/16	.05
1429-167	1-1/4X3/4	3- 1/8	1/8	1-13/32	27/32	.05
1429-168	1-1/4X1	3- 1/16	1/16	1-13/32	1-3/32	.06
1429-210	1-1/2X3/4	3- 3/8	1/8	1-21/32	27/32	.08
1429-211	1-1/2X1	3-5/16	1/16	1-21/32	1-3/32	.07
1429-212	1-1/2X1-1/4	3-3/8	1/8	1-21/32	1-13/32	.09
1429-249	2X1	3- 3/8	1/8	2-3/32	1-3/32	.11
1429-250	2X1-1/4	3-3/8	3/16	2-3/32	1-13/32	.13
1429-251	2X1-1/2	3- 5/8	1/8	2-3/32	1-21/32	.13
1429-291	2-1/2X1-1/2	4	1/8	2-1/2	1-21/32	.17
1429-422	4X3	5-17/32	1/4	4-1/16	3-3/32	.50
1429-532	6X4	8-7/8	2-1/8	6-3/32	4-1/16	1.54

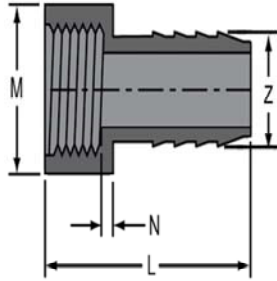
Insert Fittings Technical
Barbed Insert Fittings Weights & Dimensions



Female Adapter - PVC

Fipt x Insert

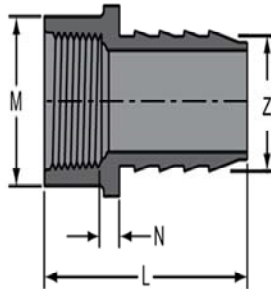
Dimensions Also Applicable to
 1435-XXXX CPVC Adapters



Part Number	Size	L	M	N	Z	Approx. Wt. (Lbs.)
1435-005	1/2	2-3/8	1-3/16	3/16	21/32	.03
1435-007	3/4	2-7/16	1-13/32	9/32	27/32	.05
1435-010	1	2-9/16	1-21/32	3/16	1-3/32	.08
1435-012	1-1/4	2-11/16	2-5/32	5/32	1-13/32	.11
1435-015	1-1/2	3-1/16	2-5/16	5/16	1-21/32	.15
1435-020	2	3	2-13/16	3/16	2-3/32	.19

Female Adapter, Reducing - PVC

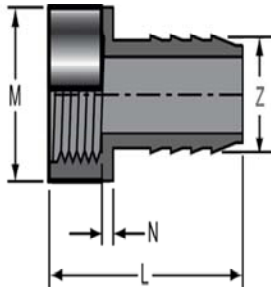
Fipt x Insert



Part Number	Size	L	M	N	Z	Approx. Wt. (Lbs.)
1435-074	1/2X3/4	2-3/8	1-3/32	5/32	27/32	.03
1435-101	3/4X1/2	2-3/8	1-5/16	5/32	21/32	.04
1435-102	3/4X1	2-3/8	1-5/16	5/32	1-3/32	.05
1435-131*	1X3/4	2-9/16	1-5/8	3/16	27/32	.07

Female Adapter, Special Reinforced - PVC

SR Fipt x Insert



Part Number	Size	L	M	N	Z	Approx. Wt. (Lbs.)
1435-005SR	1/2	2-3/8	1-3/16	1/4	21/32	.05
1435-007SR	3/4	2-7/16	1-3/8	9/32	27/32	.06
1435-010SR	1	2-5/8	1-23/32	9/32	1-3/32	.10

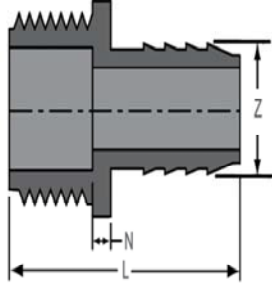


Insert Fittings Technical
Barbed Insert Fittings Weights & Dimensions

Male Adapter - PVC

Mipt x Insert

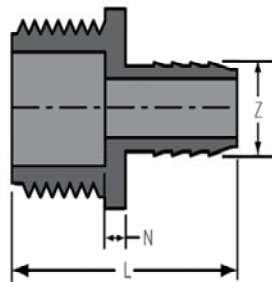
Dimensions Also Applicable to
 1436-XXXX CPVC Inserts



Part Number	Size	L	N	Z	Approx. Wt. (Lbs.)
1436-002	1/4	1-19/32	5/32	15/32	.00
1436-005	1/2	2-7/16	1/4	21/32	.02
1436-007	3/4	2- 7/16	1/4	27/32	.03
1436-010	1	2- 5/8	1/4	1-3/32	.06
1436-012	1-1/4	2-21/32	1/4	1-13/32	.08
1436-015	1-1/2	2-31/32	5/16	1-21/32	.11
1436-020	2	3-1/16	3/8	2-3/32	.16
1436-025	2-1/2	4-1/16	3/8	2-1/2	.32
1436-030	3	4-9/32	3/8	3-3/32	.46
1436-040	4	5-7/16	3/8	4-1/16	.82

Male Adapter, Reducing - PVC

Mipt x Insert



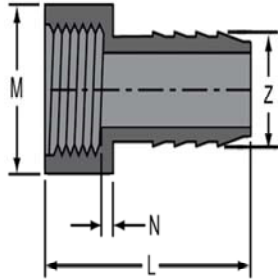
Part Number	Size	L	N	Z	Approx. Wt. (Lbs.)
1436-074	1/2X3/4	2- 5/16	1/8	27/32	.02
1436-075	1/2X1	2- 5/8	1/4	1-3/32	.04
1436-101	3/4X1/2	2- 5/16	1/8	21/32	.02
1436-102	3/4X1	2- 9/16	1/4		.03
1436-131	1X3/4	2- 9/16	3/16	27/32	.04
1436-132	1X1-1/4	2- 5/8	1/4	1-13/32	.07
1436-133	1X1-1/2	3	9/32	1-21/32	.10
1436-167	1-1/4X3/4	2-11/16	9/32	27/32	.07
1436-168	1-1/4X1	2-25/32	9/32	1-3/32	.08
1436-169	1-1/4X1-1/2	3-1/32	9/32	1-21/32	.10
1436-211	1-1/2X1	2-13/16	5/16	1-3/32	.11
1436-212	1-1/2X1-1/4	2-27/32	11/32	1-13/32	.11
1436-213	1-1/2X2	3- 3/32	5/16	2-3/32	.13
1436-251	2X1-1/2	3-3/16	3/8	1-21/32	.17

Insert Fittings Technical
Barbed Insert Fittings Weights & Dimensions



Female Hose Adapter - PVC

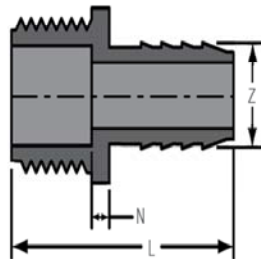
Female Hose Thread x Insert



Part Number	Size	L	M	N	Z	Approx. Wt. (Lbs.)
1435-007FHT	3/4	2- 7/16	1-13/32	9/32	27/32	.04

Male Hose Adapter - PVC

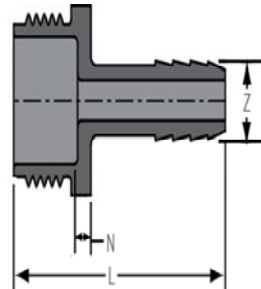
Male Hose Thread x Insert



Part Number	Size	L	N	Z	Approx. Wt. (Lbs.)
1436-007MHT	3/4	2- 3/8	7/32	27/32	.03

Male Hose Adapter, Reducing - PVC

Male Hose Thread x Insert



Part Number	Size	L	N	Z	Approx. Wt. (Lbs.)
1436-101MHT	3/4X1/2	2- 3/8	7/32	21/32	.04
1436-102MHT	3/4X1	2-3/8	3/16	1-3/32	.04

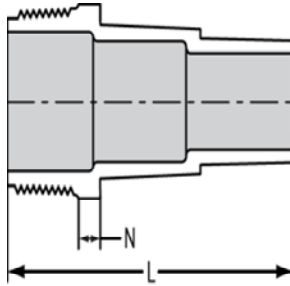


Insert Fittings Technical
Barbed Insert Fittings Weights & Dimensions

Pool Adapter - PVC

Mipt x Hose ID

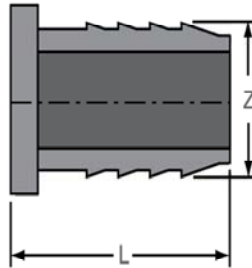
Dimensions Also Applicable to
 1436-XXXX PP Adapters



Part Number	Size	L	N	Approx. Wt. (Lbs.)
1436-204	1-1/2X1-1/2X1-1/4	4-1/16	5/16	.14

Plug - PVC

Insert



Part Number	Size	L	Z	Approx. Wt. (Lbs.)
1449-005	1/2	1-9/32	21/32	.01
1449-007	3/4	1-19/32	27/32	.01
1449-010	1	1-5/8	1-3/32	.02
1449-012	1-1/4	1- 5/8	1-13/32	.05
1449-015	1-1/2	1-7/8	1-21/32	.06
1449-020	2	1-7/8	2-3/32	.10