

# RadiantPEX+™

Cross-linked Polyethylene Tubing w/EVOH Barrier

RadiantPEX+ Tubing CrimpRing Fittings CinchClamp Fittings Compression Fittings

## Superior Protection

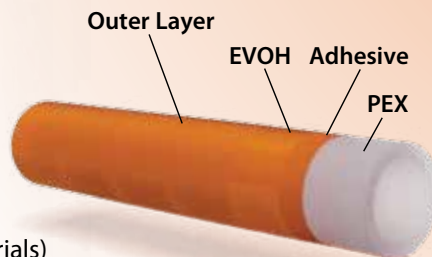
### RadiantPEX+™

Now, all 3/8" through 1" Watts RadiantPEX+ has an **outer layer** for greater protection. This outer layer adds several benefits:

- Easier to pull through joists
- Reduces expansion noise in walls and floors
- Protects the oxygen barrier from job-site abuse
- Protects the oxygen barrier against moisture
- Improves flexibility

#### All of our barrier PEX offers these benefits over traditional piping systems:

- Light and easy to transport and store
- Extremely flexible
- Maintenance free
- Corrosion resistant
- Connection systems that are fast and reliable



#### Commercial Approvals:

- Conforms to UL 263 (fire test of building and construction materials)
- Conforms to ASTM E-84

#### Silane Cross-linking is Better

Our Superior Silane technology enables higher burst strengths and higher anti-oxidant protection than other PEX manufacturing methods. Silane manufacturing is the most widely used process to manufacture PEX, and has been proven world-wide for over 30 years.



**WattsRadiant™**  
Floor Heating & Snow Melting



## Codes, Listings and Standards

- RadiantPEX+ and RadiantPEX are manufactured to American Standard Testing Methods (ASTM F-876 and F-877) and to SDR9 dimensions. These standards include requirements and testing methods for materials, workmanship, dimensions, environmental stress cracking, sustained hydrostatic pressure strength, bend strength, and degree of cross-linking. RadiantPEX and RadiantPEX+ meet or exceed these standards.
- RadiantPEX+ and RadiantPEX are tested and listed by the National Sanitation Foundation to NSF-14 (rfh).
- RadiantPEX+ and RadiantPEX conform to ASTM E-84 (Standard Test Method for Surface Burning Characteristics of Building Materials) and UL 263 (Fire Tests of Building Construction and Materials).
- RadiantPEX+ and RadiantPEX are listed by the International Code Council Evaluation Service (ICC) to Report #ESR-1155, and PMG-1008 which give compliance to IPC, IMC, UMC, and UPC.
- All RadiantPEX+ and RadiantPEX pipe is certified to CSA Standard B137.5.
- All RadiantPEX+ and RadiantPEX carries a 25-year warranty for residential and commercial heating and snowmelting applications.



## RadiantPEX+™ & RadiantPEX® Tubing

**RadiantPEX+ and RadiantPEX® Coils** — Oxygen Barrier PEX tubing for radiant heating, snowmelting, and supply and return piping. Use sticks up to 2" for hydronic supply and return piping

	DESCRIPTION	MODEL #	ORDER #	WT. (lbs)
	3/8" RadiantPEX+ x 600' Coil	PB032061-600	81000850	26
	<b>NEW</b> 1/2" RadiantPEX+ custom length coil	PB032081-1	81010820	-
	1/2" RadiantPEX+ x 100' Coil	PB032081-100	81001680	6
	1/2" RadiantPEX+ x 300' Coil	PB032081-300	81003406	17
	1/2" RadiantPEX+ x 600' Coil	PB032081-600	81001682	27
	1/2" RadiantPEX+ x 1000' Coil	PB032081-1000	81001681	55
	<b>NEW</b> 5/8" RadiantPEX+ custom length coil	PB032101-1	81010815	-
	<b>NEW</b> 5/8" RadiantPEX+ x 100' Coil	PB032101-100	81010422	10
	<b>NEW</b> 5/8" RadiantPEX+ x 300' Coil	PB032101-300	81009852	27
	<b>NEW</b> 5/8" RadiantPEX+ x 500' Coil	PB032101-500	81009711	43
4 Layer Pex	5/8" RadiantPEX+ x 600' Coil	PB032101-600	81001684	51
	5/8" RadiantPEX+ x 1200' Coil	PB032101-1200	81001683	102
	<b>NEW</b> 3/4" RadiantPEX+ custom length coil	PB032121-1	81010819	-
	3/4" RadiantPEX+ x 100' Coil	PB032121-100	81001685	11
	3/4" RadiantPEX+ x 300' Coil	PB032121-300	81005303	27
	<b>NEW</b> 3/4" RadiantPEX+ x 500' Coil	PB032121-500	81001687	44
	3/4" RadiantPEX+ x 600' Coil	PB032121-600	81001688	53
	<b>NEW</b> 3/4" RadiantPEX+ x 1000' Coil	PB032121-1000	81009868	88
	3/4" RadiantPEX+ x 1200' Coil	PB032121-1200	81001686	106
	3/4" RadiantPEX+ x 20' sticks (bundle of 25)	PB32121-20	81007368	42
	<b>NEW</b> 1" RadiantPEX+ custom length coil	PB032161-1	81010965	-
	1" RadiantPEX+ x 100' Coil	PB032161-100	81004923	18

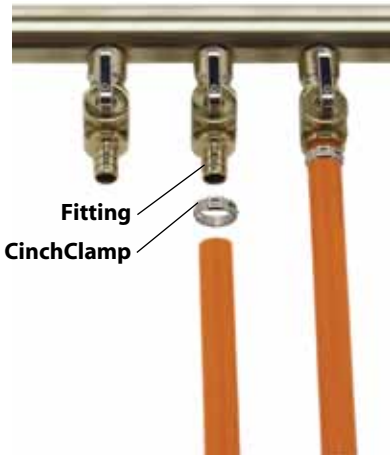
**Note:** 1/2" through 1" RadiantPEX+ is available in custom lengths. Minimum orders apply.

3 Layer Pex	1-1/4" RadiantPEX x 100' Coil	PB032181-100	81009109	26
	1-1/4" RadiantPEX x 300' Coil	PB032181-300	81009110	73
	1-1/4" RadiantPEX x 20' sticks (bundle of 5)	PB032181-20	81009118	24
	<b>NEW</b> 1-1/2" RadiantPEX x 100' Coil	PB032201-100	81009994	32
	<b>NEW</b> 1-1/2" RadiantPEX x 300' Coil	PB032201-300	81009995	95
	<b>NEW</b> 1-1/2" RadiantPEX x 20' sticks (bundle of 5)	PB032201-20	81009993	32
	<b>NEW</b> 2" RadiantPEX x 100' Coil	PB032221-100	81010853	43
	<b>NEW</b> 2" RadiantPEX x 300' Coil	PB032221-300	81010854	129
<b>NEW</b> 2" RadiantPEX x 20' sticks (bundle of 5)	PB032221-20	81010855	43	

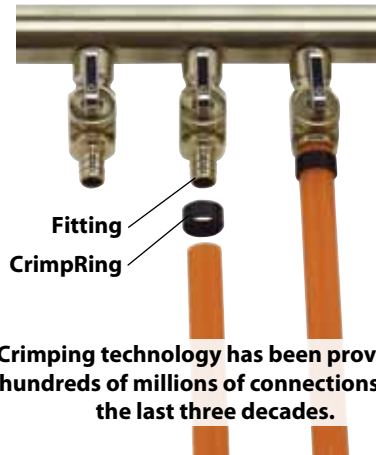


**Unlike some PEX connection systems, our three choices for RadiantPEX+ connections can be quickly made and immediately pressure tested.**

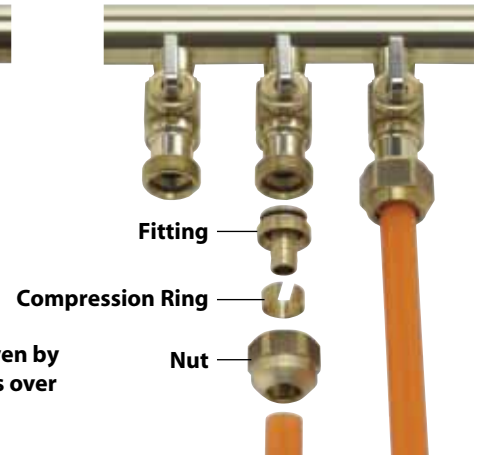
**CinchClamps™** unique stainless steel design allows for easier connections in tight, hard-to-reach spaces.



**CrimpRings™** are precision-formed, ductile copper connectors. When crimped to brass crimp fittings, these connectors form a permanent seal.



**SST-20 Compression** fittings do not require any special tools. A simple crescent wrench is all that is needed.



**Crimping technology has been proven by hundreds of millions of connections over the last three decades.**

**Non-Oxygen Barrier PEX Tubing**

**Non-barrier PEX** — for heating and snow melting.

DESCRIPTION	MODEL #	ORDER #	WT. (lbs)
5/8" WaterPEX x 600' Coil, White	P022101-600W	81004125	48
5/8" WaterPEX x 1200' Coil, White	P022101-1200W	81004126	96
1/2" WaterPEX x 300' Coil, White	P022081-300W	81006282	16
1/2" WaterPEX x 1000' Coil, White	P022081-1000W	81006287	55
3/4" WaterPEX x 500' Coil, White	P022121-500W	81006288	45
3/4" WaterPEX x 1000' Coil, White	P022121-1000W	81004122	106
1" WaterPEX x 100' Coil, White	P022161-100W	81006292	18
1" WaterPEX x 500' Coil, White	P022161-500W	81004124	106
1-1/4" WaterPEX x 100' Coil, White	P022181-100W	81006293	25
1-1/4" WaterPEX x 300' Coil, White	P022181-300W	81004140	72


**Note:** If using non-barrier WaterPEX for heating or snow melting systems, use a heat exchanger to isolate ferrous components or use a suitable water or glycol treatment.



## PEX Crimp Fittings

**Copper CrimpRings** — for securing PEX to brass crimp fittings.



DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
3/8" CrimpRing	100	PCCR2X-100	81001071	1
1/2" CrimpRing	100	PCCR3X-100	81001075	1
5/8" CrimpRing	100	PCCR6X-100	81004508	2
3/4" CrimpRing	100	PCCR4X-100	81001080	2
1" CrimpRing	100	PCCR5X-100	81001084	3
1-1/4" CrimpRing	10	PCCR7X-10	81011152	3
 1-1/2" CrimpRing	10	PCCR9X-10	81011129	1

**Copper CrimpRings** are precision-formed, ductile copper connectors. When crimped, these connections form a simple, fast, and permanent seal between PEX and CrimpRing fittings. 1-1/2" CrimpRings require a Power Crimp Tool.

**Stainless Steel CinchClamps™** — for fast, easy, one-tool connections.



DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
3/8" CinchClamps	10	PCCC2X-10	81004993	1
3/8" CinchClamps	100	PCCC2X-100	81004994	1
1/2" CinchClamps	10	PCCC3X-10	81004995	1
1/2" CinchClamps	100	PCCC3X-100	81004996	1
5/8" CinchClamps	10	PCCC6X-10	81005114	2
5/8" CinchClamps	100	PCCC6X-100	81005115	3
3/4" CinchClamps	10	PCCC4X-10	81004997	2
3/4" CinchClamps	100	PCCC4X-100	81004998	3
1" CinchClamps	10	PCCC5X-10	81005001	2
1" CinchClamps	100	PCCC5X-100	81005002	3

**CinchClamps** have been proven in millions of connections.

## PEX SST20 Fittings

**SST20 Crimp Swivel Fittings** — for connecting PEX to Watts Radiant's Stainless Steel and Custom Tubular Compression manifolds.

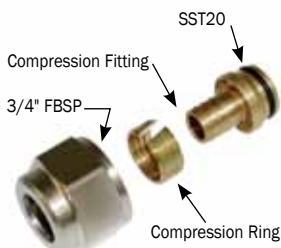


DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
3/8" Crimp x 3/4" SST20 Swivel BSP Fitting	10	PC690001-10	81005160	1
1/2" Crimp x 3/4" SST20 Swivel BSP Fitting	10	PC690002-10	81005162	1
5/8" Crimp x 3/4" SST20 Swivel BSP Fitting	10	PC690003-10	81005164	2
3/4" Crimp x 3/4" SST20 Swivel BSP Fitting	10	PC690004-10	81005395	2

Use these **SST20 Crimp Fittings** to connect PEX to our Stainless Steel or T20 Custom Tubular Manifolds. Order CrimpRings or CinchClamps separately.

**Note:** BSP Stands for British Standard Pipe (threads). These threads are not compatible with NPT (National Pipe Threads).

**SST20 PEX Compression Fittings** — for connecting PEX to Stainless Steel manifolds, and Custom Tubular T20 compression manifolds, or 3/4" male BSP x male sweat fittings.



DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
3/8" PEX Compression x 3/4" SST20 Swivel BSP	10	PX690001-10	81005166	1
1/2" PEX Compression x 3/4" SST20 Swivel BSP	10	PX690002-10	81005168	1
5/8" PEX Compression x 3/4" SST20 Swivel BSP	10	PX690003-10	81005170	2
3/4" PEX Compression x 3/4" SST20 Swivel BSP	10	PX690004-10	81005172	2

## PEX Crimp Fittings

**Crimp x Male Sweat Adapters** — for connecting PEX to sweat fittings or manifolds.



Male Sweat

DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
3/8" Crimp x 1/2" Male Sweat Adapter	10	PC637X-10	81001027	1
1/2" Crimp x 1/2" Male Sweat Adapter	10	PC650X-10	81001030	1
5/8" Crimp x 1/2" Male Sweat Adapter	10	PC660X-10	81003685	1
5/8" Crimp x 3/4" Male Sweat Adapter	10	PC670X-10	81003427	1
3/4" Crimp x 3/4" Male Sweat Adapter	10	PC675X-10	81001034	2
1" Crimp x 1" Male Sweat Adapter	10	PC700X-10	81001037	2
1-1/4" Crimp x 1-1/4" Male Sweat Adapter	10	PC725X-10	81005381	3
<b>NEW</b> 1-1/2" Crimp x 1-1/2" Male Sweat Adapter	10	PC795X-10	81011130	4

**Note:** All 1-1/4" crimp fittings are equipped with O-rings. 1-1/2" CrimpRings require a Power Crimp Tool. 3/8" - 1" PEX fittings can be used with either Crimp or Cinch connector. 1-1/4" and larger can only be used with Crimp connectors.

**Crimp x Female Sweat Adapters** — for connecting PEX to sweat fittings or manifolds.



Female Sweat

DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
1/2" Crimp x 1/2" Female Sweat Adapter	10	PC750X-10	81001040	1
3/4" Crimp x 3/4" Female Sweat Adapter	10	PC775X-10	81001043	1
1" Crimp x 1" Female Sweat Adapter	10	PC780X-10	81003031	2
1-1/4" Crimp x 1-1/4" Female Sweat Adapter	10	PC785X-10	81009387	2
<b>NEW</b> 1-1/2" Crimp x 1-1/2" Female Sweat Adapter	10	PC790X-10	81011131	3

**Note:** All 1-1/4" crimp fittings are equipped with O-rings. 1-1/2" CrimpRings require a Power Crimp Tool.

**Crimp x Male NPT Adapters** — for connecting PEX to female fittings and valves.



DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
3/8" Crimp x 1/2" MPT Adapter	10	PCMC23X-10	81005382	2
1/2" Crimp x 1/2" MPT Adapter	10	PCMC33X-10	81005383	2
1/2" Crimp x 3/4" MPT Adapter	10	PCMC34X-10	81005384	2
5/8" Crimp x 3/4" MPT Adapter	10	PCMC64X-10	81005385	2
3/4" Crimp x 1/2" MPT Adapter	10	PCMC43X-10	81005386	2
3/4" Crimp x 3/4" MPT Adapter	10	PCMC44X-10	81005387	2
1" Crimp x 1" MPT Adapter	10	PCMC55X-10	81005388	3
1-1/4" Crimp x 1-1/4" MPT Adapter	10	PCMC78X-10	81005389	3
<b>NEW</b> 1-1/2" Crimp x 1-1/2" MPT Adapter	10	PCMC99X-10	81011132	4

**Note:** All 1-1/4" crimp fittings are equipped with O-rings. 1-1/2" CrimpRings require a Power Crimp Tool.

**Crimp x Male NPT Elbows**



DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
1/2" Crimp x 1/2" MPT Elbow	10	PCE33BTX-10	81005390	2
1/2" Crimp x 3/4" MPT Elbow	10	PCE34BTX-10	81005391	3
3/4" Crimp x 3/4" MPT Elbow	10	PCE44BTX-10	81005392	3

**Crimp x Female Sweat Elbow**

Female Sweat



DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
1/2" Crimp x 3/4" Female Sweat Elbow	10	PCE34-10	81005393	3
5/8" Crimp x 3/4" Female Sweat Elbow	10	PCE64-10	81004786	3
3/4" Crimp x 3/4" Female Sweat Elbow	10	PCE44-10	81005394	3

Use these **Crimp x Sweat Elbow Fittings** to speed the connection of PEX supply lines to baseboard and hydro-air units.

## PEX Crimp Fittings



### Crimp x Male Sweat Elbow

DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
1/2" Crimp x 3/4" Male Sweat Elbow	10	PCE34M-10	81009374	3
3/4" Crimp x 3/4" Male Sweat Elbow	10	PCE44M-10	81009378	3

Use these **Crimp x Sweat Elbow Fittings** to speed the connection of PEX supply lines to baseboard and hydro-air units.



### Crimp x Crimp Elbows (Equal Elbows)

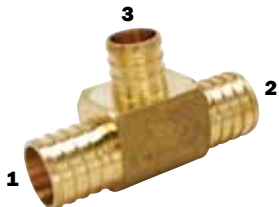
DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
1/2" Crimp Elbow	10	PCE33X-10	81001104	1
3/4" Crimp Elbow	10	PCE44X-10	81001119	1
1" Crimp Elbow	10	PCE55X-10	81003049	2
1-1/4" Crimp Elbow	10	PCE77X-10	81009365	3

### Crimp x Crimp Tees (Equal Tees)



DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
1/2" Crimp Tee	10	PCT333X-10	81001186	1
3/4" Crimp Tee	10	PCT444X-10	81001200	2
1" Crimp Tee	10	PCT555X-10	81003075	3
1-1/4" Crimp Tee	10	PCT777X-10	81009793	3


### Crimp x Crimp Tees (Unequal Tees) — Run x Run x Branch (1x2x3)



DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
1/2" x 1/2" x 3/4" Crimp Tee	10	PCT334X-10	81003069	1
3/4" x 3/4" x 1/2" Crimp Tee	10	PCT443X-10	81001197	2
1" x 1" x 3/4" Crimp Tee	10	PCT554X-10	81001208	3
1-1/4" x 1-1/4" x 1" Crimp Tee	10	PCT775X-10	81009794	3

### Crimp x Crimp Brass Couplings — for making field repairs or extending PEX lines.



DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
3/8" Crimp Coupling	10	PCC22X-10	81005374	1
1/2" Crimp Coupling	10	PCC33X-10	81005375	1
5/8" Crimp Coupling	10	PCC66X-10	81005376	1
3/4" Crimp Coupling	10	PCC44X-10	81005377	2
1" Crimp Coupling	10	PCC55X-10	81005378	2
1-1/4" Crimp Coupling	10	PCC77X-10	81005380	3
 1-1/2" Crimp Coupling	10	PCC99X-10	81011154	5

Use **Crimp x Crimp Brass Couplings** to make field repairs and connections when necessary. Be sure to closely follow all guidelines when making field repairs or connections. All 1-1/4" crimp fittings are equipped with O-rings.

## PEX Crimp Fittings

**CinchClamp Repair Kits** — for making PEX repairs in the field.



DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
3/8" CinchClamp Repair Kit	1 Kit	PCCCA2K	81005022	1
1/2" CinchClamp Repair Kit	1 Kit	PCCCA3K	81005023	1
5/8" CinchClamp Repair Kit	1 Kit	PCCCA6K	81005326	1
3/4" CinchClamp Repair Kit	1 Kit	PCCCA4K	81005024	1
1" CinchClamp Repair Kit	1 Kit	PCCCA5K	81005025	1

Each **CinchClamp Repair Kit** contains two double-ended barbs and four CinchClamps, enough for two splices. Each kit includes instructions to help insure that the repair is done properly.

**CrimpRing Repair Kits** — for making PEX repairs in the field.



DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
3/8" CrimpRing Repair Kit	1 Kit	PCCA2K	81001063	1
1/2" CrimpRing Repair Kit	1 Kit	PCCA3K	81001064	1
5/8" CrimpRing Repair Kit	1 Kit	PCCA6K	81003429	1
3/4" CrimpRing Repair Kit	1 Kit	PCCA4K	81001065	1
1" CrimpRing Repair Kit	1 Kit	PCCA5K	81001066	1
1-1/4" CrimpRing Repair Kit	1 Kit	PCCA7K	81004450	1
1-1/2" CrimpRing Repair Kit (2 couplings, 4 rings)	1 Kit	PCCA9K	81011155	1

Each **CrimpRing Repair Kit** contains two double-ended barbs and four CrimpRings, enough for two splices. Each kit includes instructions to help insure that the repair is done properly.

**Mini Ball and Balancing Valves** — for circuit isolation and balancing on field-built manifolds.



1/2" Crimp x 1/2" Male Sweat MBV



1/2" Crimp x 1/2" Male Sweat MBV-BAL

DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
1/2" Crimp x 1/2" Male Sweat Mini Ball Valve (0.44" bore)	1	P12123PX3	81000783	2
1/2" Crimp x 1/2" Male Sweat Mini Balancing Valve (0.44" bore)	1	P12123PX3-BAL	81005416	4

Use **Mini Ball Valves** to isolate and/or regulate the flow of individual tubing circuits. For more exact flow balancing, use **Mini Balancing Valves**, where balancing is accomplished by rotating the threaded spindle below the brass safety cap. Each turn represents approximately 10% of full flow. Approximate Cv is 3.0 (These ball valves are not available in other sizes.)

## PEX Compression Fittings

**SST20 3/4" Male BSP x Male Sweat Fittings** — for use with SST20 Crimp or Compression fittings.



3/4" Male BSP x  
1/2" Male Sweat

DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
3/4" Male BSP x 1/2" Male Sweat Fitting	10	PX690500-10	81001507	1
3/4" Male BSP x 3/4" Male Sweat Fitting	10	PX690750-10	81001510	2

These fittings are manufactured for use with SST20 fittings (threaded female) and are offered in two sizes to fit 1/2" or 3/4" copper fittings. Male fittings are also available pre-installed on all styles of Watts Radiant manifolds.

**Note:** BSP threads are not compatible with NPT (National Pipe Threads).

## PEX Compression Fittings



**SST20 Compression Coupling Kits** — for joining lengths of PEX.

DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
SST20 Comp. Coupling Kit for 3/8" PEX	1 Kit	PXCASST2K	81005174	1
SST20 Comp. Coupling Kit for 1/2" PEX	1 Kit	PXCASST3K	81005175	1
SST20 Comp. Coupling Kit for 5/8" PEX	1 Kit	PXCASST4K	81005176	1
SST20 Comp. Coupling Kit for 3/4" PEX	1 Kit	PXCASST5K	81005177	2

**Compression Coupling Kits** consist of two Compression Couplings and four female Compression fittings.

**Note:** BSP stands for British Standard Pipe (threads). These threads are not compatible with NPT (National Pipe Threads).

**Note:** Most building codes do not allow compression couplings in inaccessible locations. Do not bury compression fittings.



## PEX Compression Fittings for Large Diameter PEX

*Note: These fittings are not designed for use with R-flex insulated pipe.*

**PEX Compression Couplings for Large Diameters** — for connecting PEX lines.



DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
1-1/2" x 1-1/2" PEX Compression Coupling	1	PCMP99	81011477	4
2" x 2" PEX Compression Coupling	1	PCMP110	81011488	5

Brass fittings with EPDM gasket, locking split clamp, and insert stiffener.

**PEX Compression x MPT for Large Diameters** — for connecting PEX to fittings or valves.



DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
1-1/2" PEX Compression x 1-1/2" MPT	1	PCMM99	81011478	3
2" PEX Compression x 2" MPT	1	PCMM110	81011490	3

Brass fittings with EPDM gasket, locking split clamp, and insert stiffener.

**PEX Compression Elbows for Large Diameters** — for making tight bends with large PEX.



DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
1-1/2" PEX Compression Elbow	1	PCEC99	81011479	5
2" PEX Compression Elbow	1	PCEC110	81011489	10

Brass fittings with EPDM gasket, locking split clamp, and insert stiffener.

**PEX Compression x MPT Elbows for Large Diameters**



DESCRIPTION	QTY	MODEL #	ORDER #	WT. (lbs)
1-1/2" PEX Compression x 1-1/2" MPT Elbow	1	PCEM99	81011480	3
2" PEX Compression x 2" MPT Elbow	1	PCEM110	81011491	4

Brass fittings with EPDM gasket, locking split clamp, and insert stiffener.