

## Philmac® Universal Transition Coupling (UTC™)

Replacing old water mains can be tedious work. When existing residential or building services are made from materials such as old lead or galvanized iron pipe – and in unusual sizes – connecting them to new services can pose all sorts of problems. To deal with the variety of sizes and materials, contractors and distributors typically stock a multitude of different brass fittings just to handle each different configuration.

Not anymore. With the Universal Transition Coupling (UTC™), virtually any type of pipe can be connected to any other type of pipe. Rather than servicing specific materials, the new couplings service a range of pipe sizes, regardless of the piping material.

Versatility coupled with simple slide-and-tighten installation make the Philmac® UTC™ the practical choice.

### UNIVERSAL TRANSITION COUPLING

With its universal design, the UTC™ can join copper, lead, stainless, galvanized iron, PVC, CPVC, ABS and even PE and PEX pipes, in sizes ranging from 0.6" to 2.4".

All these configurations are serviced using only 7 different Universal Transition Couplings.

### CONVENTIONAL EQUIPMENT

Conventionally, brass fittings are used to join dissimilar pipes – with each fitting designed specifically for a certain size and type of piping material.

To service this wide variety of configurations, a large number of fittings must be kept in stock.

### Designs include:

- Standard Couplings
- Reducing Couplings
- Elbows, Tees & Adapters



**Tees – Male**  
(UTC x UTC x UTC)

**Tees – Female**  
(UTC x UTC x FIPT)



**Elbows**  
(UTC x UTC)



**Reducing Couplings**  
(UTC x UTC)



**Adapters**  
(UTC x MIPT)



**Couplings**  
(UTC x UTC)

### Standards:



### Simplify Installation

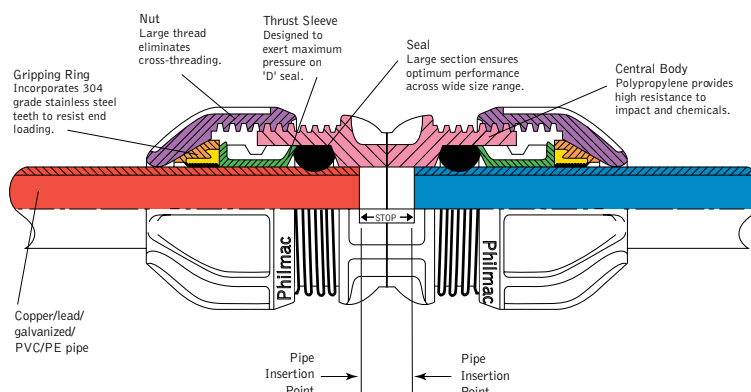
No loose components. No pipe preparation. No nut removal.

The UTC™'s slip-style design simplifies installation for most pipe sizes, even in confined spaces. Simply insert the pipes directly into the fitting and tighten the nuts. Special tools are not required.

### Ensure Peak Performance

Rated at 200psi @ 73°F, and must be de-rated at higher temperatures, e.g. 100psi @ 140°F.

The UTC™ is suitable for both above and below ground use on potable water supplies. It is available in a number of different configurations to service a broad range of conditions.



## UNIVERSAL TRANSITION COUPLINGS AND ASSORTED FITTINGS

### SIZING CHART

Pipe Material – Standard	A 0.59" – 0.83" 15 – 21mm	B 0.83" – 1.06" 21 – 27mm	C 1.06" – 1.34" 27 – 34mm	D 1.34" – 1.54" 34 – 39mm	E 1.54" – 1.69" 39 – 43mm	F 1.85" – 1.93" 47 – 49mm	G 2.32" – 2.40" 59 – 61mm
	Nominal Pipe Size (inches)						
PE / PEX CTS OD	1/2	3/4	1	1-1/4	1-1/2	–	–
PE IPS OD	–	1/2 or 3/4	1	–	1-1/4	1-1/2	2
PE SDR 7	1/2	3/4	–	1	–	–	–
PE SDR 9	1/2	3/4	1	–	1-1/4	–	–
PE SDR 11.5	1/2	3/4	1	–	1-1/4	1-1/2	–
PE SDR 15	1/2	3/4	1	–	1-1/4	–	2
Copper CTS OD	1/2	3/4	1	1-1/4	1-1/2	–	–
PVC IPS OD	–	1/2 or 3/4	1	–	1-1/4	1-1/2	2
Galvanized Iron IPS OD	–	1/2 or 3/4	1	–	1-1/4	1-1/2	2
ABS IPS OD	–	1/2 or 3/4	1	–	1-1/4	1-1/2	2
Lead – Strong	1/2	5/8	3/4	1	1-1/4	–	–
Lead – Extra Strong	–	1/2	5/8 or 3/4	1	–	–	–
Lead – Double Extra Strong	–	1/2	5/8 or 3/4*	3/4*	1	1-1/4	–

\* If 3/4" XXS Lead Pipe OD is larger than 1.34", the pipe needs to be shaved if using a Size C UTC™ fitting. Otherwise, a size D UTC™ Coupling can be used when OD is larger than 1.34".

This chart is intended as a quick reference guide only. If you have any doubt regarding the pipe size, then select the correct UTC™ fitting by measuring the actual OD of the pipe.

### PRE-ASSEMBLY

1. Refer to the table above to select the correct UTC™ fitting for the job.
2. Cut pipes to required length using the 'STOP' markings on the outside of the fitting as a guide.
3. Ensure the end of the connecting pipe is undamaged and clean. Lubrication is unnecessary.

**NOTE:** Each UTC™ accepts a range of pipe diameters.

4. Ensure the nut is at least 3 threads back from the flange of the fitting for pipe sizes at the lower end of the range, and 4-5 threads back for pipe sizes at the upper end of the range.

**NOTE:** Unlike other types of fittings, it is not necessary to remove the UTC™ nut prior to installation.

### ASSEMBLY

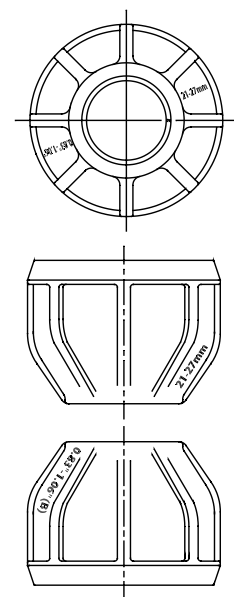
1. Insert the pipe into the fitting to the depth indicated by the 'STOP' markings.
2. Tighten the nut hand-tight, then a quarter turn with a strap wrench.

**NOTE:** The nut will not necessarily reach the body flange, especially on pipe sizes at the upper end of each range.

### DISASSEMBLY

1. Unscrew the nut.
2. Withdraw the pipe from the fitting.

**NOTE:** For pipes at the very top end of the UTC™ range, it may be necessary to disassemble the fitting to aid pipe insertion and removal.



Philmac® Universal Transition  
Coupling 0.9" – 1.0" OD  
(21mm – 27mm OD)

### Contact us

Visit our website: [ipexna.com](http://ipexna.com)

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