

PRODUCT INFORMATION BULLETIN



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.

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.

Designs include:

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



Tees – Male
(UTC x UTC x UTC)

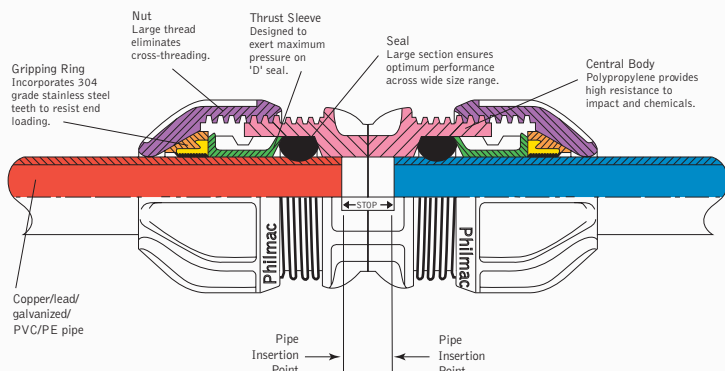
Tees – Female
(UTC x UTC x FIPT)

Elbows
(UTC x UTC)

Reducing Couplings
(UTC x UTC)

Adapters
(UTC x MIPT)

Couplings
(UTC x UTC)



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UNIVERSAL TRANSITION COUPLINGS AND ASSORTED FITTINGS

SIZING CHART

Pipe Material – Standard	A	B	C	D	E	F	G
	0.59" – 0.83" 15 – 21mm	0.83" – 1.06" 21 – 27mm	1.06" – 1.34" 27 – 34mm	1.34" – 1.54" 34 – 39mm	1.54" – 1.69" 39 – 43mm	1.85" – 1.93" 47 – 49mm	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 SIDR 7	1/2	3/4	–	1	–	–	–
PE SIDR 9	1/2	3/4	1	–	1-1/4	–	–
PE SIDR 11.5	1/2	3/4	1	–	1-1/4	1-1/2	–
PE SIDR 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

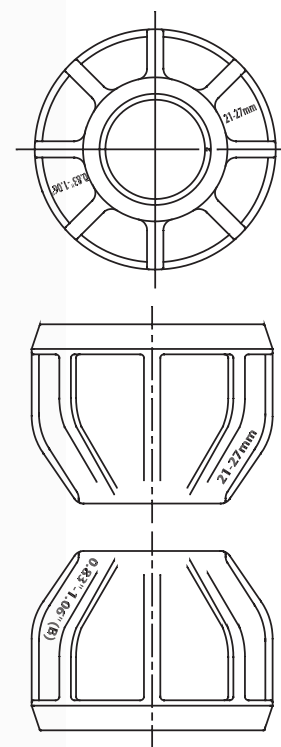
1. Insert the pipe into the fitting to the depth indicated by the 'STOP' markings.
2. Tighten the nut hand-tight, then a quarter turn with a strap wrench.

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)