The Problem Solver
The Swiss army knife of pipe fittings

The Swiss army knife of pipe fittings provides the ultimate connection you can trust

The Philmac UTC® (Universal Transition Coupling) is a unique range of mechanical compression fittings that provide the ultimate in pipe connection flexibility.

Without modification the same fitting connects to a variety of materials including PVC, copper, galvanised iron, ABS, lead, stainless steel and polyethylene. Each size fitting covers a range of pipe diameters providing a “Universal” solution.

Introduction

Philmac, the global leader in the design and manufacture of plastic compression fittings that provide the ultimate in pipe connection flexibility.

The UTC® range is especially designed for connecting pipes that are made from a variety of different materials, such as polyethylene, galvanized iron, PVC, copper, ABS, lead and stainless steel.

In addition to winning an Australian Design Award in 1999 for innovation in product development, the UTC® has been embraced globally by water utilities including Australia, the UK, Europe and North America.
Benefits

Complete Flexibility
Universal Design: Through its wide tolerance, the Philmac UTC® is designed to accommodate a range of different diameters on most pipe material (including copper, PE, PVC, lead, steel, galvanized iron, ABS and stainless steel).

Fast and Easy Installation
Simply witness mark the pipe against the flange on the fitting, and then insert the pipe to the correct depth. The nut can then be tightened using a wrench. The UTC® is fully installed when the nut can no longer be tightened with reasonable force. No special tools are required.

How it works

PRINCIPALS OF OPERATION - COMPRESSION FITTINGS

Fitting is pre-assembled in the ready to use position with 3 threads showing.

FULLY OPEN - UTC® END

Pipe is inserted up to the flange on the fitting.

Clearance between the pipe and fitting allows for easy insertion of the pipe.

Split ring – is in a relaxed position

Seal – is in a relaxed position

Fully inserted into the fitting.

The nut is tightened with a wrench firmly to ensure proper installation. Some threads may be exposed, depending on the size of pipe inserted into the fitting.

The fitting is pre-assembled and ready to use. Cut pipe square and to length using the flange on the central body as a guide. Ensure the end of the connecting pipe is undamaged and clean.

To ensure adequate insertion depth, witness mark the pipe to the back of the flange.

Insert the pipe to the correct depth. Always ensure the nut is backed off and 3 threads are showing. Some threads may be exposed, depending on the size of pipe inserted into the fitting.

Tighten nut deeply with a wrench. Nut will not butt against the body flange when the pipe diameter is at the top end of the tolerance.

Particulars of operation

Split ring with the stainless grippers bites into the pipe providing end load resistance.

Seal ring compression is achieved by exploiting the mechanical advantage of the thread.

Approvals:
The Philmac UTC® holds a number of approvals
WaterMark (Australia); WRAS (UK) for above and below ground use; ACS (France), CSA (Canada) and NSF (USA). The fittings are also manufactured to the highest standards in accordance with the company’s ISO 9001:2000 Quality Endorsed status.

High Performance Materials
Made from advanced thermoplastic materials: The Philmac UTC® is manufactured from lightweight high performance thermoplastic materials with outstanding impact, UV, chemical and corrosion resistance. The UTC® end contains hard stainless steel grippers which provide superior end load resistance.

Complete Coverage
The Philmac UTC® range is comprehensive: Straight and reducing joiners, elbows, tees and male adapters, in both transition (PE to UTC®) and double ended versions (UTC® to UTC®) ranging from 15mm to 61mm.

Rated to 1250KPa (181 PSI, 12.5 Bar):
The Philmac UTC® is pressure rated to 1250KPa (12.5 bar) to meet the needs of high pressure systems.

50 year + design life: Built to withstand the toughest conditions to ensure longevity and durability, Philmac UTC® has a 50 year+ design life.

EASY INSTALLATION

1. The fitting is pre-assembled and ready to use. Cut pipe square and to length using the flange on the central body as a guide. Ensure the end of the connecting pipe is undamaged and clean.

2. To ensure adequate insertion depth, witness mark the pipe to the back of the flange.

3. Insert the pipe to the correct depth. Always ensure the nut is backed off and 3 threads are showing. Some threads may be exposed, depending on the size of pipe inserted into the fitting.

4. Tighten nut deeply with a wrench. Nut will not butt against the body flange when the pipe diameter is at the top end of the tolerance.