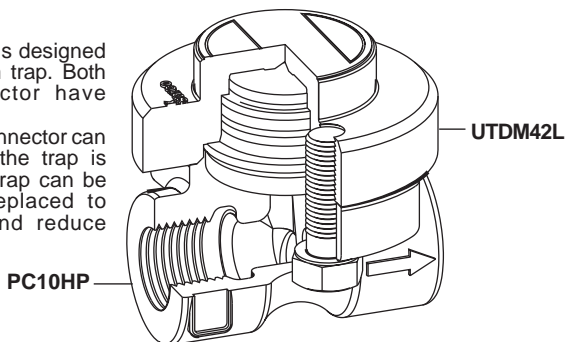


## PC10HP Pipeline Connector (ANSI/ASME 600) Installation and Maintenance Instructions

### Description

The PC10HP pipeline connector is designed for use with the UTM42L steam trap. Both the trap and pipeline connector have ANSI/ASME 600 rating.

The principle is that the pipeline connector can be fitted into the pipeline, and the trap is connected using two bolts. The trap can be simply and quickly removed/replaced to minimise system down-time and reduce maintenance resource.



### General

There are two criteria which must be satisfied to ensure that the swivel connector trap will operate correctly and ensure effective condensate removal.

- The PC10HP shall be installed with flow in the direction of the arrow. Flow should be in the horizontal plane.
- The connection face for the swivel connector steam trap must always be in the horizontal plane. After installation it is recommended that the pipeline connector is insulated to minimise radiated heat losses and to protect personnel from burns risk.

The PC10HP and trap are joined by a high integrity spirally wound gasketed joint. It is important that no damage is caused, e.g. by weld, weld splatter, knocks, etc.. to the trap gasket face.

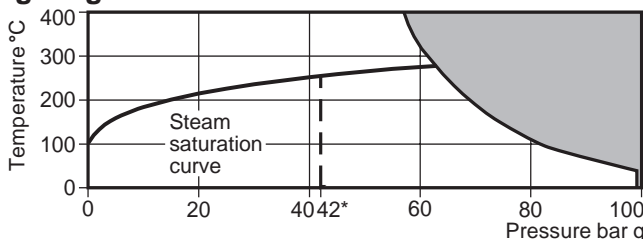
Hence care must be taken when installing the PC10HP into the pipework. It is recommended that the trap is installed immediately the PC10HP is in the pipework. Alternatively, the trap can be joined to the PC10HP prior to installation.

Suitable isolation valves must be installed to allow for safe maintenance/replacement.

### Limiting conditions

Maximum body design conditions	ANSI/ASME 600	
PMA - Maximum allowable pressure	99.3 bar g	(1 439 psi g)
TMA - Maximum allowable temperature	400°C	(752°F)
Cold hydraulic test pressure	149 bar g	(2 160 psi g)

### Operating range



 The product must not be used in this region.

\* PMO Maximum operating pressure recommended for saturated steam.

## Welding into pipeline of socket weld variants

A universal weld procedure covering the requirements of different national and international standards and practices is difficult to provide - specifically regarding the welding procedure, welding conditions (run number, consumable size, current, voltage, polarity), storage of consumables and make/type of consumables due to the abundance of appropriate consumable suppliers. Therefore, this is only advice based on British standards to be used for guidance on the essential requirements of welding socket weld pipeline connectors into the pipeline.

This will allow a user to select an appropriate weld procedure from those available to that user.

**This advice is not intended to be a substitute for a weld procedure: it is for guidance only.**

### The welding of pipeline connector DN15, DN20, DN25 socket weld to pipe DN15, DN20 and DN25 Schedule 80

#### Parent material(s)

##### Description

**PC10HP** - Austenitic stainless steel with minimum tensile strength up to and including 485 N/mm<sup>2</sup>.

**Pipe** - Carbon steel with minimum tensile strength up to and including 430 N/mm<sup>2</sup>.

##### Specification(s)

ASTM A351 CF8 - PC10HP

ASTM A106 Gr. B - pipe

##### Material group(s)

R - PC10HP

A1 - Pipe

#### Parent material(s) dimensions

	DN15		DN20		DN25	
	PC10HP	Pipe	PC10HP	Pipe	PC10HP	Pipe
Thickness (mm)	8.85	3.73	5.50	3.91	5.0	4.55
O/D (mm)	39.00	21.30	39.00	26.70	45.0	33.40

Pipe is to BS 1600 Schedule 80

#### Joint type

Socket joint to ANSI B16.11 Class 3000 lb (This is equivalent to BS 3799)

#### Welding process(es)

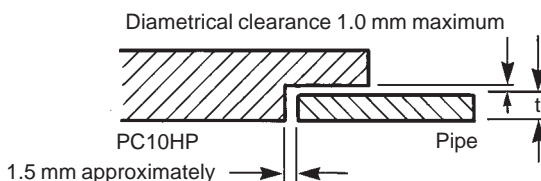
Manual Metal Arc (MMA)

#### Welding position(s)

All: site welded

#### Weld preparation

##### Dimensioned sketch



Ref. - BS 2633 : 1987 : Section 3.1 and Fig. 9

#### Welding consumables

##### Filler material: -

Composition - Low C: 23% Cr: 12% Ni:

Specification - BS 2926: 1984: 23-12 L BR

##### Shielding gas / flux:

Not applicable

#### Method of preparation and cleaning

**Socket** : As supplied and wire brushed.

**Pipe** : Mechanically cut and wire brushed.

#### Additional information

1. Fit-up using tack welds.

---

## Parent material temperature

### Preheat temperature

Only required when ambient is below 5°C then 'warm to touch'

### Interpass temperature

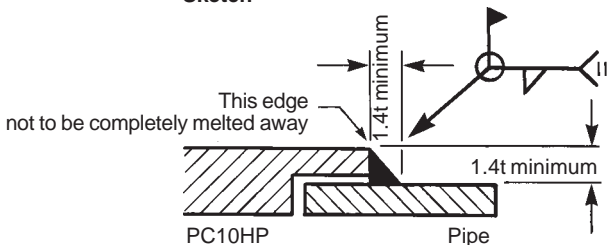
Not applicable

## Post-weld heat treatment

None required

## Run sequence and completed weld dimensions

### Sketch



Ref.- BS 806 : 1990 : Section 4 : Clause 4.7.3

---

## Maintenance

All work must be carried out by a suitably competent person. Before starting work, ensure that suitable tools are available. Use only Spirax Sarco replacement parts.

## Safety information

### Isolation

Consider whether closing isolating valves will put any other part of the system or personnel at risk. Dangers might include; isolation of vents, protective devices or alarms. Ensure isolation valves are turned on and off in a gradual way to avoid system shocks.

### Pressure

Before attempting any maintenance of the steam trap, consider what is or may have been in the pipeline. Ensure that any pressure is isolated and safely vented to atmospheric pressure before attempting to maintain the steam trap. This is easily achieved by fitting Spirax Sarco depressurisation valves type DV (see separate literature for details). Do not assume that the system is depressurised even when a pressure gauge indicates zero.

### Temperature

Allow time for temperature to normalise after isolation to avoid the danger of burns and consider whether protective clothing (including safety glasses) is required.

## Disposal

The product is recyclable. No ecological hazard is anticipated with the disposal of this product providing due care is taken.

