

Product

WTA34 - Inta Tenant Hub - Tenant Water Meter Assembly

Technical Specification

Max Inlet Pressure (static):	16 Bar
Max Inlet Temperature:	65°C
Pressure Adjustment Range:	1 - 6 Bar
Pre-set Pressure:	4 Bar
Installation:	Vertical or Horizontal

Introduction

The Inta Tenant Hub is a combination valve providing a stop valve, pressure reducing valve, pressure gauge, class D water meter carrier and double check valve in one convenient and easy to fit unit. The Inta Tenant Hub valve is provided complete with a whole assembly moulded insulation cover.



Additional Information

Class D water meter carrier

Combines an isolation valve, double check valve, pressure reducing valve, and water meter all-in-one unit

Pressure reducing valve is pre-set to 4 bar, but can be manually adjusted to suit site conditions

Supplied with a whole assembly insulation jacket as standard

Double check valve to eliminate the chance of backflow

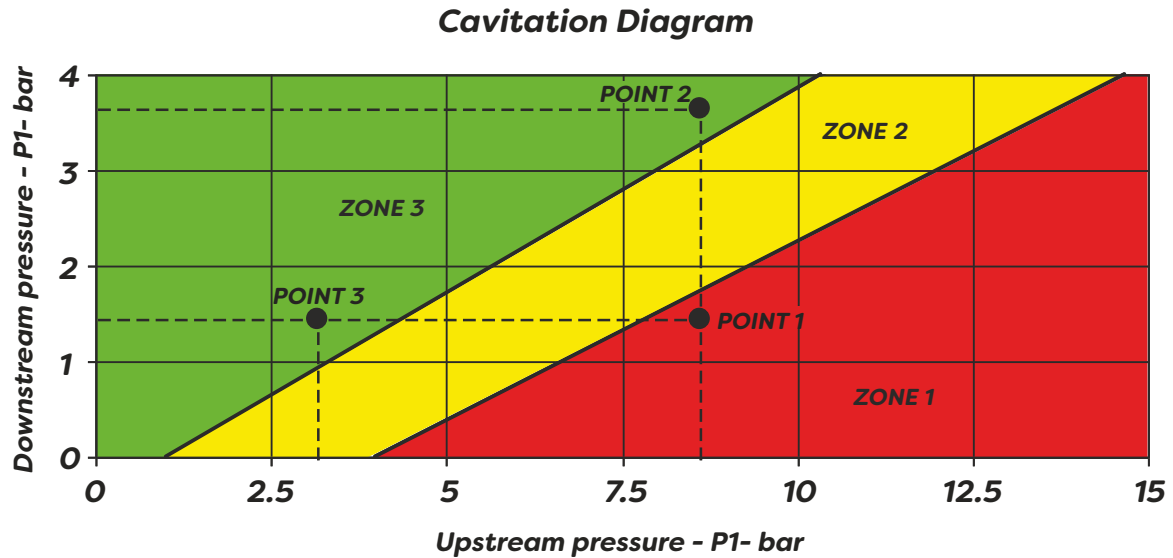
Stop valve included to allow isolation from the rest of the system, ideal for multi-dwelling properties

Kiwa Reg 4 Approved

Cavitation

In order to prevent cavitation, which can cause excessive noise, vibration and damage to the valve and downstream pipe, in certain pressure situations with high inlet pressures and low outlet pressures (high pressure loss) then a number of pressure reducing valves may be required.

The cavitation diagram shows three areas of operation depending upon the upstream and downstream (outlet) pressures.



- ZONE 1: Damage and Noise - The characteristics of cavitation are clearly audible and visible inside the pressure reducing valve and pipework. The valve should not be used under these conditions.
- ZONE 2: Critical Zone - Highlights the possibility of cavitation of occurring inside the pressure reducing valve or pipework. Using the valve under these conditions should be avoided and is not recommended.
- ZONE 3: Operating Zone - The pressure reducing valve works under its optimum conditions. The valve can safely be used under these conditions.

In order to avoid cavitation occurring the ratio between the maximum upstream pressure and the outlet pressure should not exceed a value of 2.5.

* NOTE: The cavitation diagram has the sole purpose of supplying the technician with a quick reference for the system conditions to determine if cavitation will be present and the likely level.

Example

If the pressure reducing valve is used under the following conditions;

- Upstream pressure: $P_m = 8.5$ bar
- Outlet pressure: $P_v = 1.5$ bar

On the Cavitation Diagram these pressures correspond to POINT 1 in ZONE 1.

Ratio $P_m/P_v = 8.5/1.5 = 5.67$.

Solution

Use 2x pressure reducing valves in series, if a second pressure reducing valve is required we recommend that this is installed upstream of the tenant flow valve at a distance of at least 30cm.

First valve using the following conditions;

- Upstream pressure: $P_m = 8.5$ bar
 - Outlet pressure: $P_v = 3.5$ bar
- Pressure ratio $8.5/3.5 = 2.42 < 2.5$

On the Cavitation Diagram these pressures correspond to POINT 2 in ZONE 3.

Second valve using the following conditions;

- Upstream pressure: $P_m = 3.5$ bar
 - Outlet pressure: $P_v = 1.5$ bar
- Pressure ratio $3.5/1.5 = 2.33 < 2.5$

On the Cavitation Diagram these pressures correspond to POINT 3 in ZONE 3.

NOTE: The outlet pressure of the pressure reducing valve MUST NEVER be higher than the maximum pressure of components and outlets (tap and showers) downstream of the valve.