



### **Recommended installation geometry for proportional valve VPWS**

This application note contains information on the installation geometry for customer-designed VPWS manifold solutions.

VPWS

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## 1 Introduction

This application note contains additional information for an optimized manifold geometry for customers who are designing their own VPWS manifolds.

The following should be noted as well:



### Note

Please observe maximum axial valve mounting force (first line in each picture below). Higher forces can destroy the valve (the two halves of the VPWS valve are pressed into each other, reducing the stroke and thereby the flow).

Maximum axial mounting force:

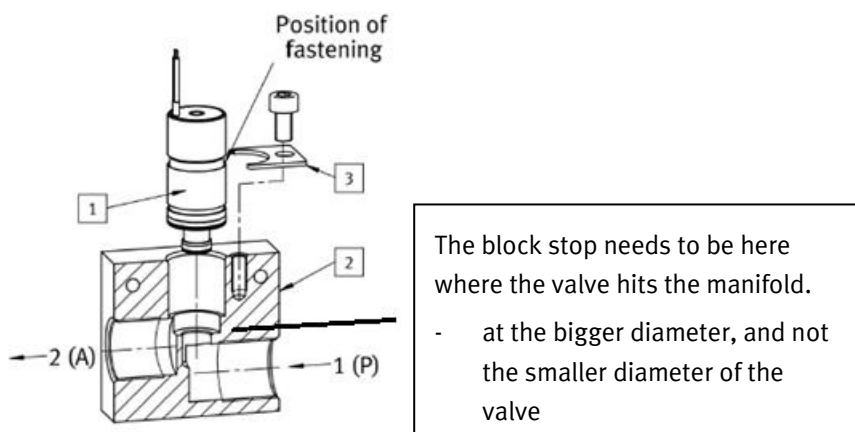
VPWS version	Force, N
VPWS-6	200 N
VPWS-2.2/1.5/1	200 N
VPWS-0.3	30 N

Table 1.1: Mounting forces

It helps to use a little grease at the valve O-rings for the mounting.

Alternatively you can use Isopropanol for the mounting of the valve into the manifold.

When designing the manifold block for the VPWS-6 valves:



The lower part of the valve consists of two parts and it needs to be avoided to push in the smaller diameter part into the main body of the valve.

The drawings on the next pages for the different VPWS valve types especially highlight the edges to allow for an easier mounting of the VPWS valves without damaging the O-rings.

Please check the mounting geometry of the VPWS valve in your manifold.

Check for the edges, check for the tolerances

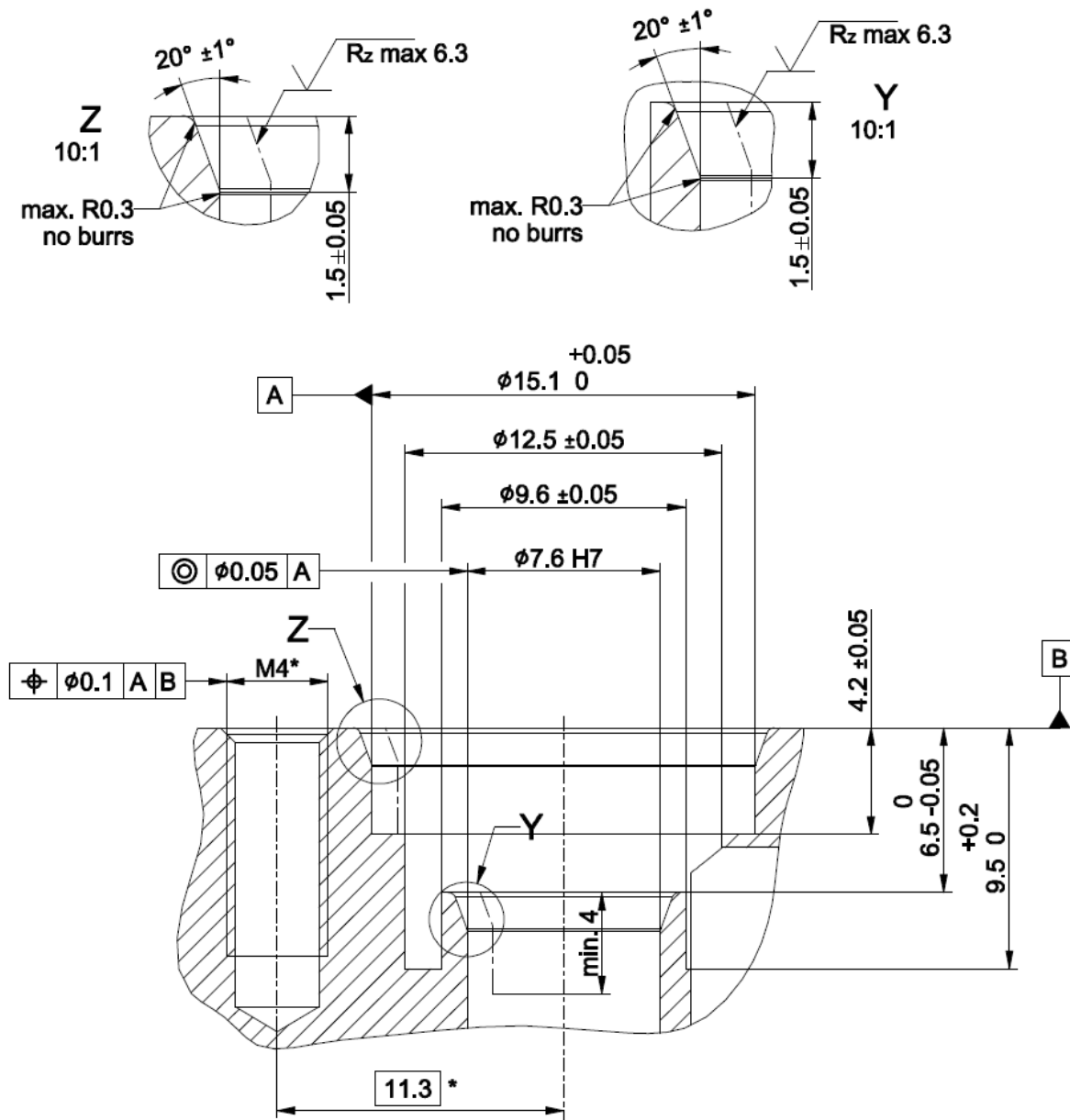
## 2 Recommendation for VPWS-6-...

Manifolds for VPWS-6\_\* (parts 8074537 and 8074538):

Max. valve mounting force 200N

Tolerancing ISO 8015

Edges +/-0,2 acc. ISO 13715



\* only needed if mounting VAME-P4-PC15-P-P10 is used

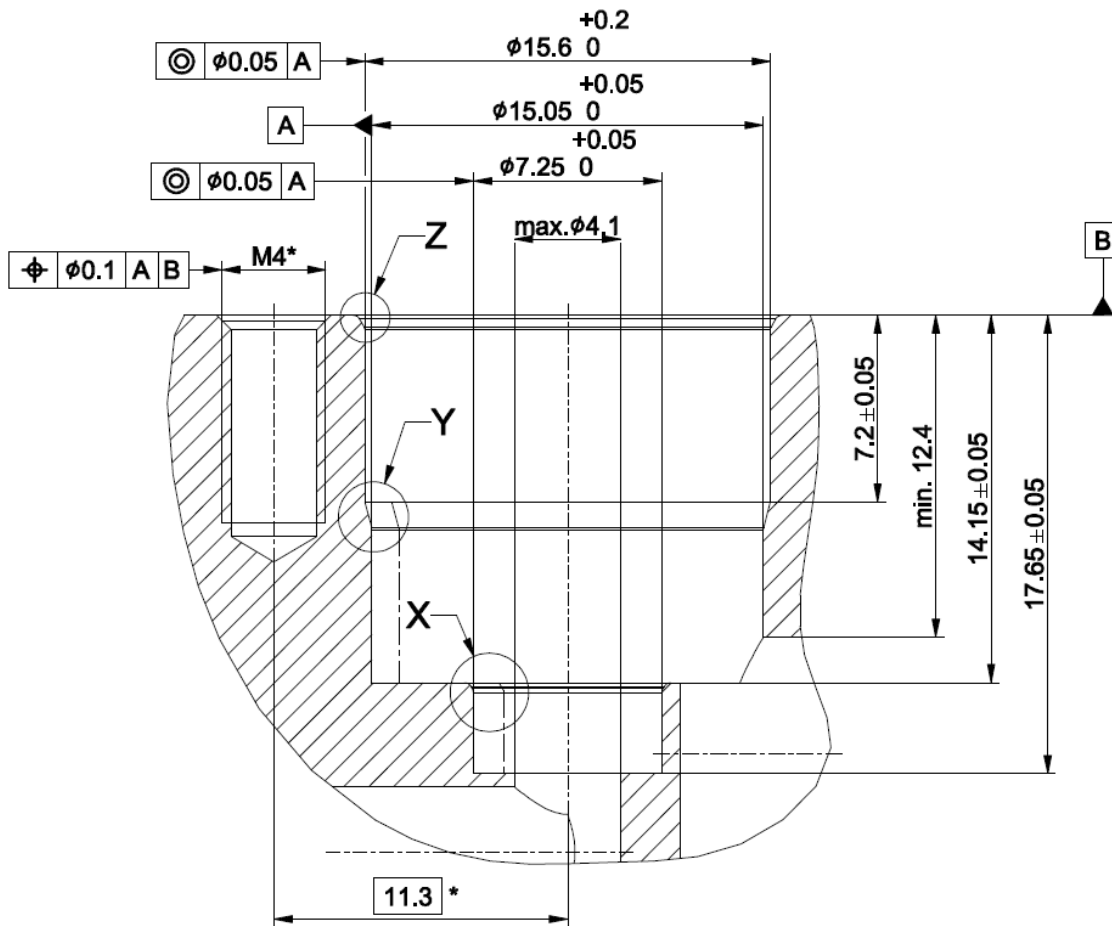
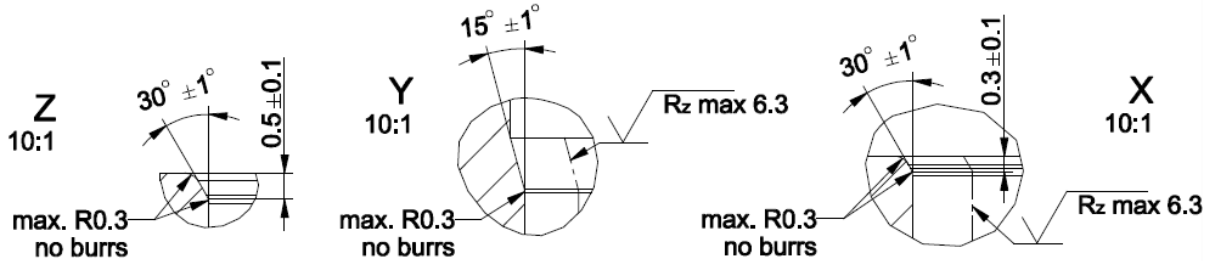
### 3 Recommendation for VPWS-1-.../ VPWS-1.5-.../ VPWS-2.2-...

Manifolds for VPWS-1-\*/1.5-\*/2.2-\* (parts 8186783, 8074075 and 8074074):

Max. valve mounting force 200N

Tolerancing ISO 8015

Edges +/-0,2 acc. ISO 13715



\* only needed if mounting VAME-P4-PC15-P-P10 is used

