

Fisher™ SS-264 Thrust Washer; Semi-Finished Blank vs. Finished Machined

Overview

The SS-264 valve body assembly contains a thrust washer (PN GE50801Xxxx) that is machined-to-fit from a blank semi-finished part (PN GE48568Xxxx), for each unique valve assembly. If the semi-finished blank is installed during the valve assembly process, internal surfaces and parts may be irreversibly damaged. These instructions cover how to store the blank part and subsequently machine the finished part from the blank. For all other information regarding the SS-264 rotary control valve refer to the SS-264 instruction manual ([D103565X012](#)), available at Fisher.com or from your [Emerson Process Management sales office](#).



These instructions are applicable to both inventories and first-time builds at Fisher facilities as well as spare parts inventories for replacement/refurbishment at AP1000 customer plant facilities.

CAUTION

This Instruction Manual Supplement must remain with the blank at all times during storage.

Storage - Thrust Washer Blank

The blank will be stored in a cardboard box with this instruction manual supplement until a finished thrust washer is needed. The blank can be identified by the words 'THRUST WASHER BLANK – DO NOT INSTALL IN VALVE UNTIL MACHINED' which are laser etched on a surface of the blank. The blank OD and ID are at their final dimensions; only the thickness needs to be machined.

Procedure to Calculate Thrust Washer Thickness

When a thrust washer is called for in a valve body assembly, certain component part dimensions are needed to be able to calculate the final machined thickness. This thickness is based on existing dimensions of the body, bonnet, ball and drive bearing of the unique valve assembly for which it is intended to be installed in. Once the calculation is completed and a thrust washer is machined to final thickness, it can only be used in that valve assembly, due to its' unique fit with existing parts.

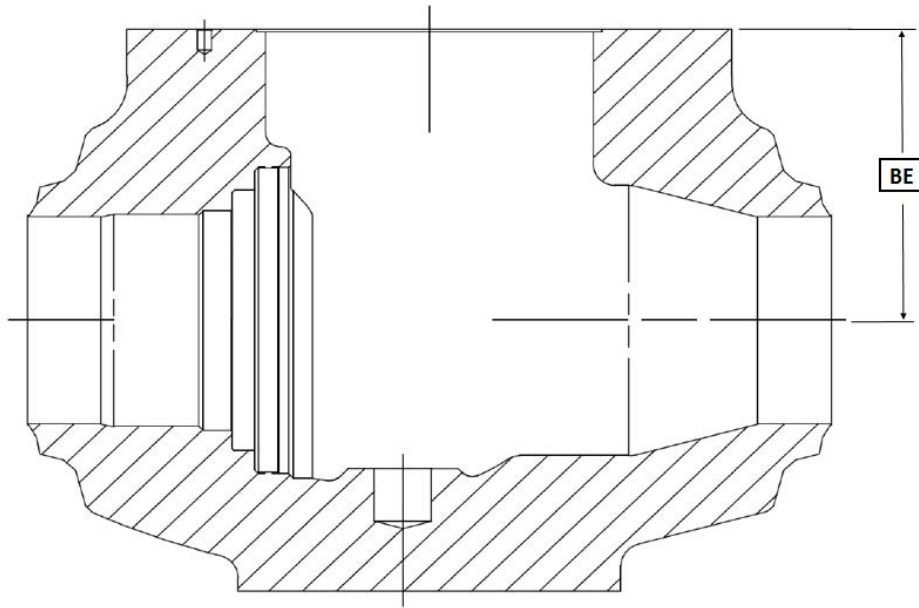
1. Record the piece serial numbers and dimension values BE, AM, C, and G in Table 1. See the images on the following pages for measurement locations. If the parts are new or unworn (original build), the dimensions can be taken from part inspection documentation taken during part production. However, if the valve is undergoing refurbishment, the parts may be worn and original inspection values will not be valid. Measure dimensions carefully in the field.
2. Calculate the thrust washer thickness, DIM A, by subtracting AM, C, and G from BE.
3. Record DIM A in Table 1, and retain this work instruction with appropriate engineering plant records as evidence the thrust washer calculation was completed.
4. Machine the thrust washer thickness to DIM A, as calculated in Table 1. Thickness tolerance is ± 0.001 inches; face-to-face parallelism is 0.002 inches; a 32 Ra surface finish on both sides applies.
5. The finished thrust washer is now complete and ready for installation.

Table 1. Calculation to Find Thrust Washer Final Thickness Value

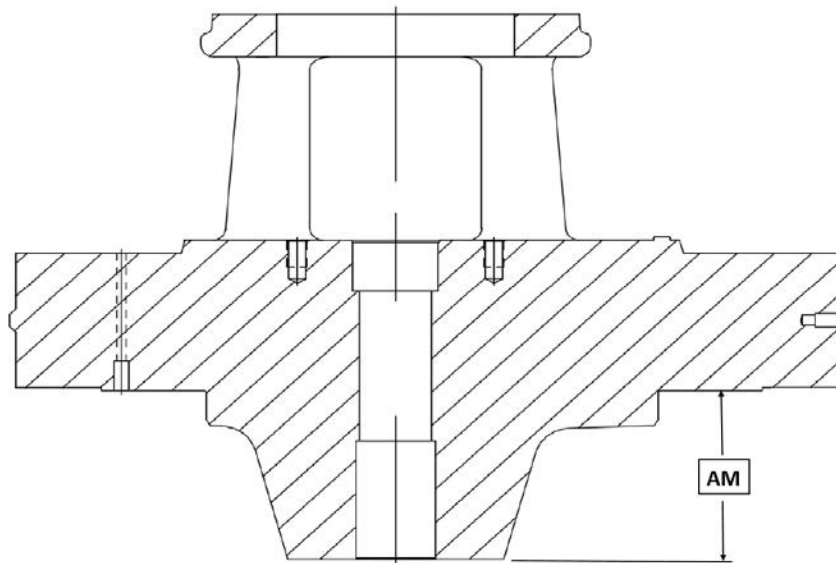
Part Description	Part Number	Dimension	Measured Value	Piece Serial Number
Valve Body	GE48000XXXX	BE		
Bonnet	GE48043XXXX	AM		
Drive Bearing	GE46775XXXX	C		
Ball	GE46770XXXX	G		
Dim A = BE-AM-C-G				

NOTE

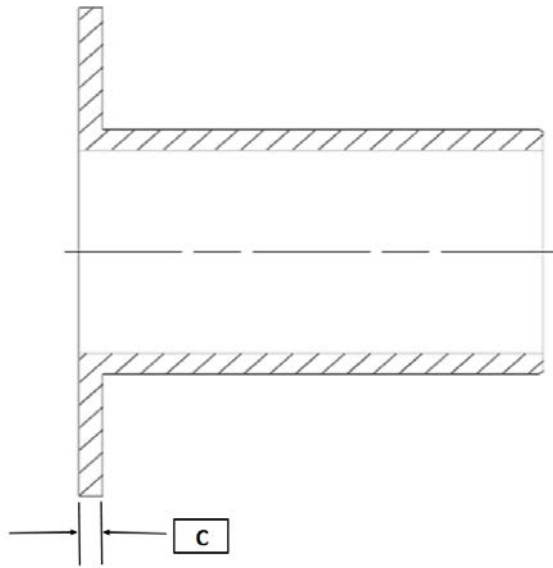
The parts measured as well as the finished thrust washer must remain together until assembled. The thrust washer thickness is now unique to that particular assembly.



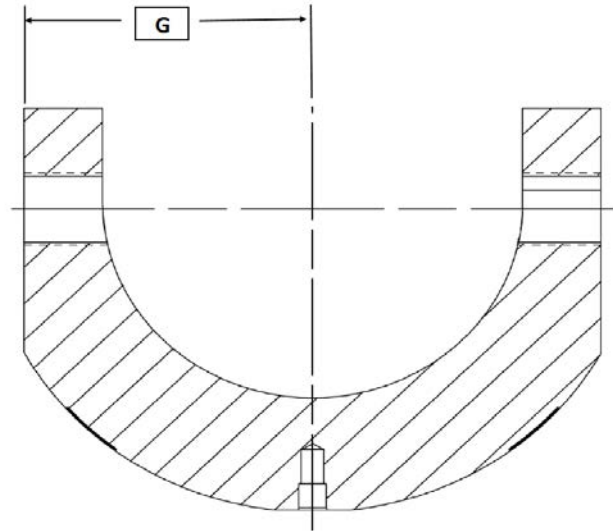
BODY



BONNET



DRIVE BEARING



BALL

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