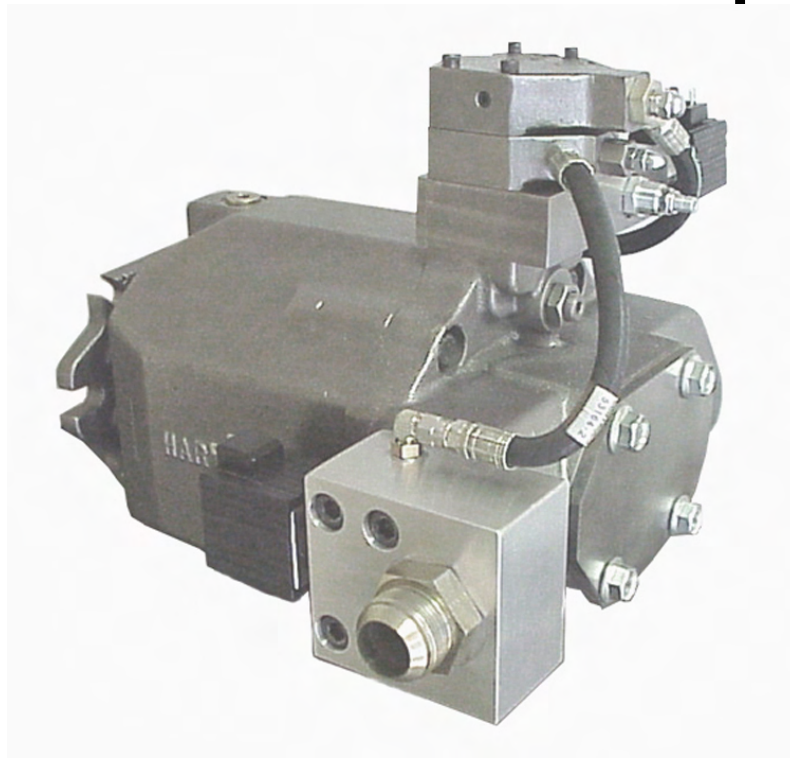
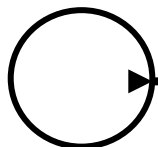




# FB-HB, Fixed Bias, Bleed Down Load Sensor for PVX Series Pumps



*Hydraulic pumps & motors with a **hart of gold**™*



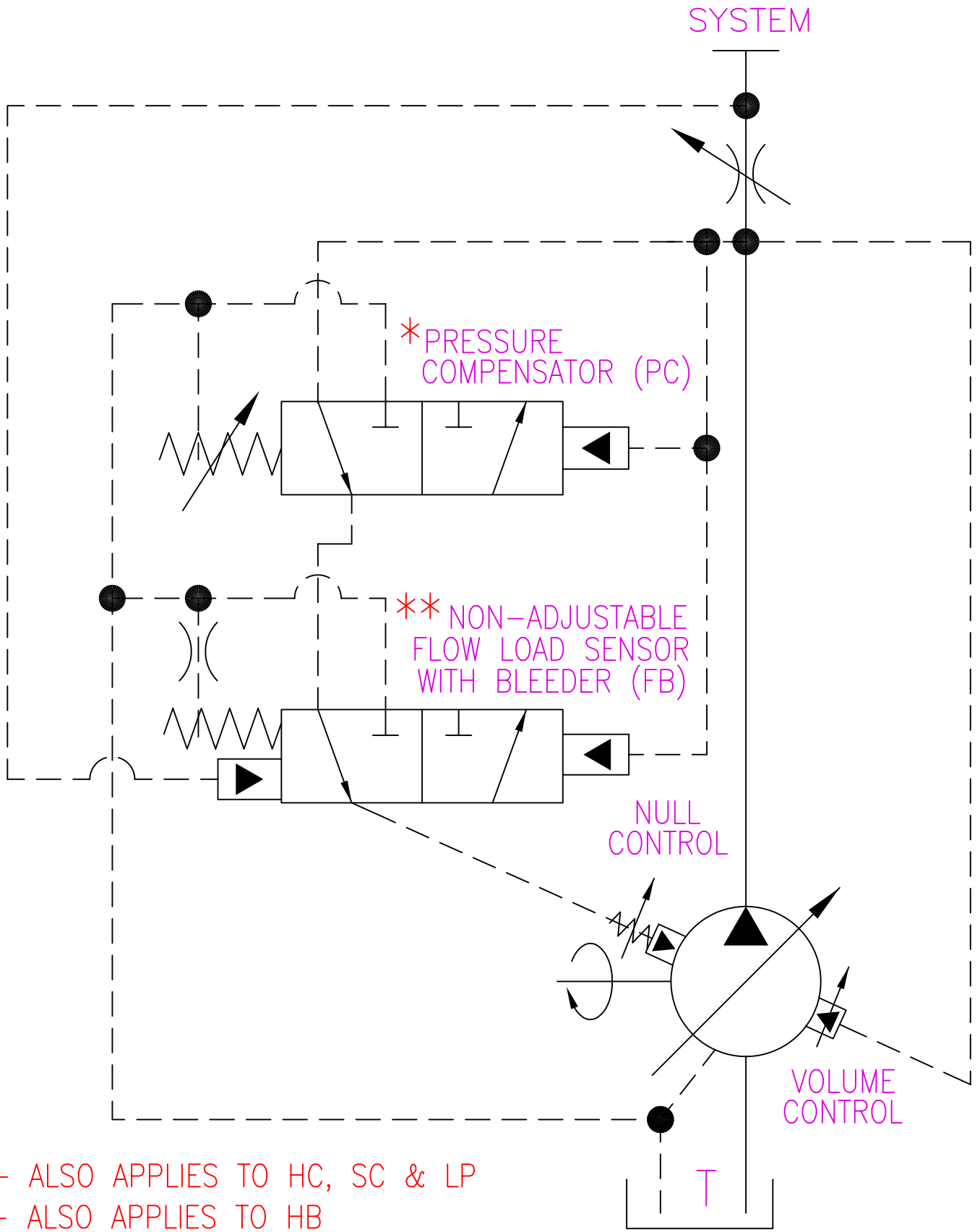
**604 PROGRESS DRIVE, HARTLAND, WI 53029  
USA**

**Phone: (262) 367-4299**

**URL: [www.hartmanncontrols.com](http://www.hartmanncontrols.com)**

**FAX: (262) 367-5645**

**E-mail: [sales@hartmanncontrols.com](mailto:sales@hartmanncontrols.com)**



\* - ALSO APPLIES TO HC, SC & LP  
 \*\* - ALSO APPLIES TO HB

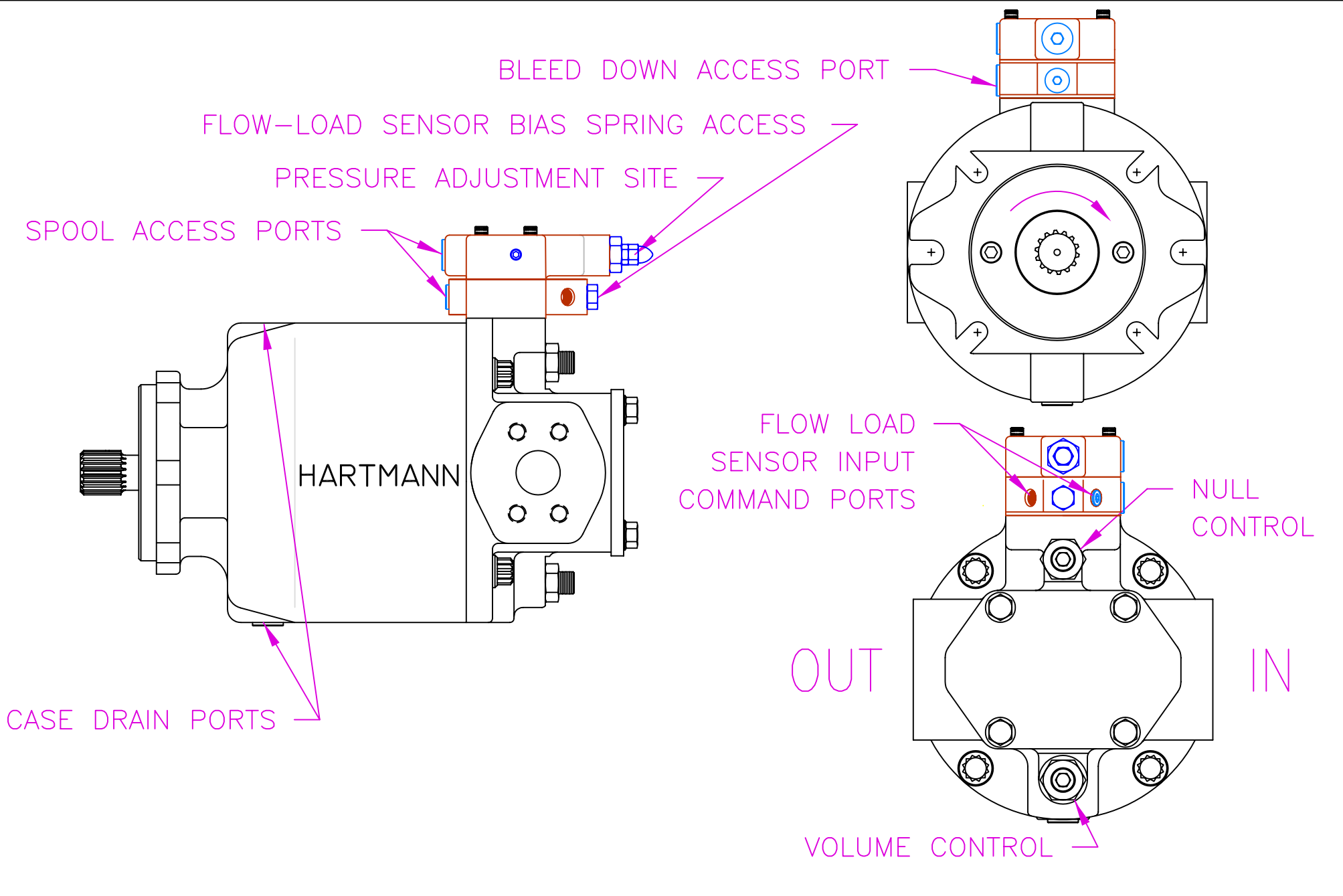
NOT TO SCALE

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DWG: SCMPCFBHB

TITLE: NON-ADJUSTABLE  
 LOAD SENSOR+BLEED  
 DOWN & PRESSURE  
 COMPENSATOR





NOT TO SCALE

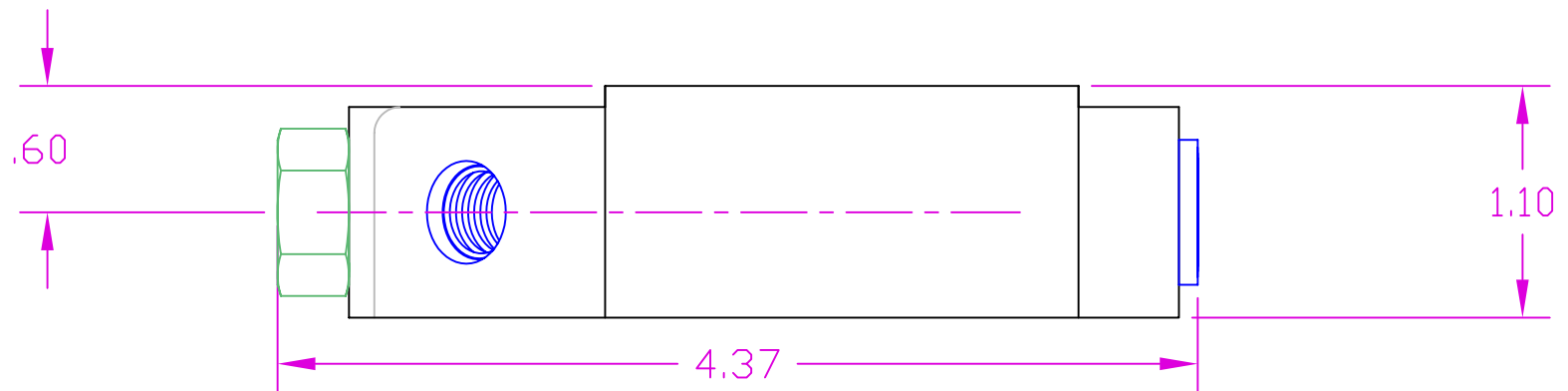
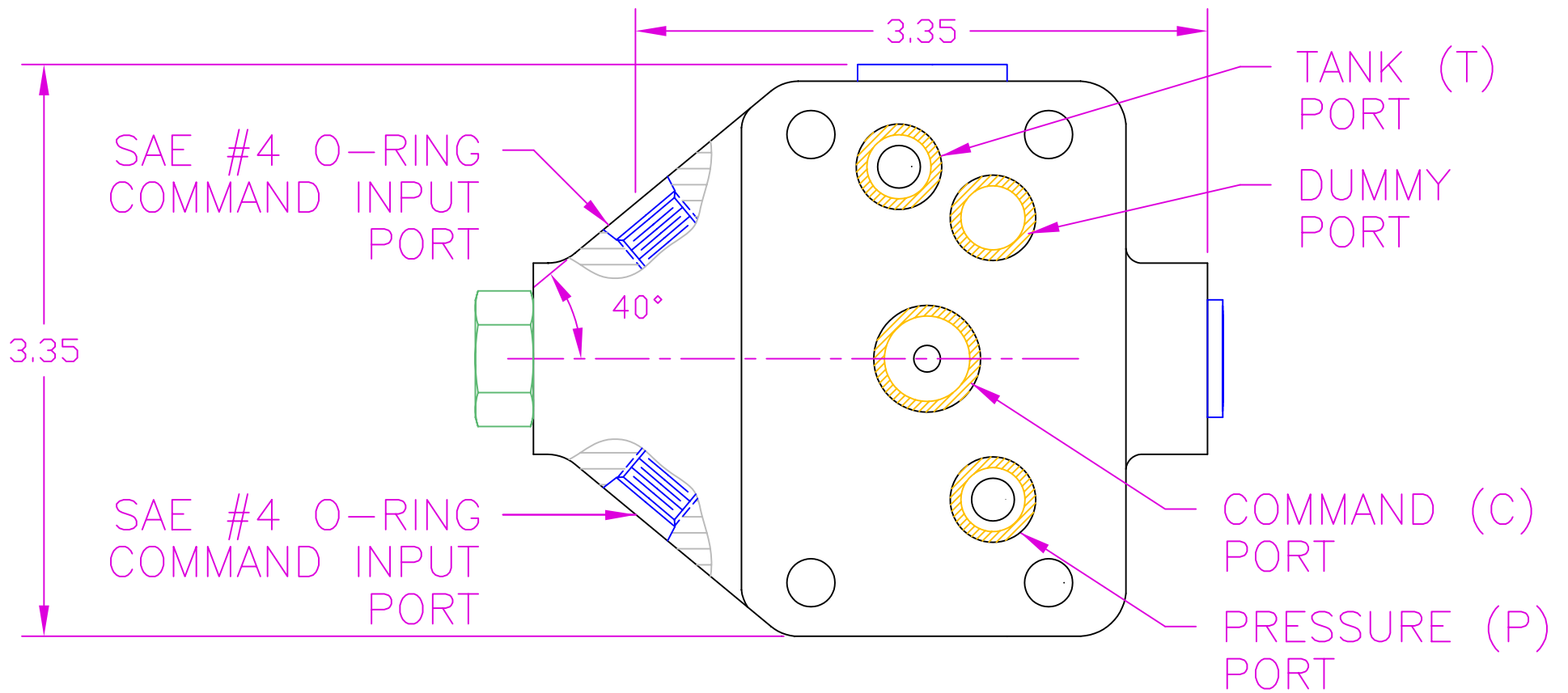
THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF HARTMANN CONTROLS INC., AND IS NOT TO BE USED IN A MANNER DETRIMENTAL TO HARTMANN CONTROLS INC.

DWG NO: PCFBHBPUMP

TITLE: PVX WITH A FIXED BIAS LOAD SENSOR & BLEEDER & PRESSURE COMPENSATOR

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CONTROLS INC.

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HARTLAND, WI 53029



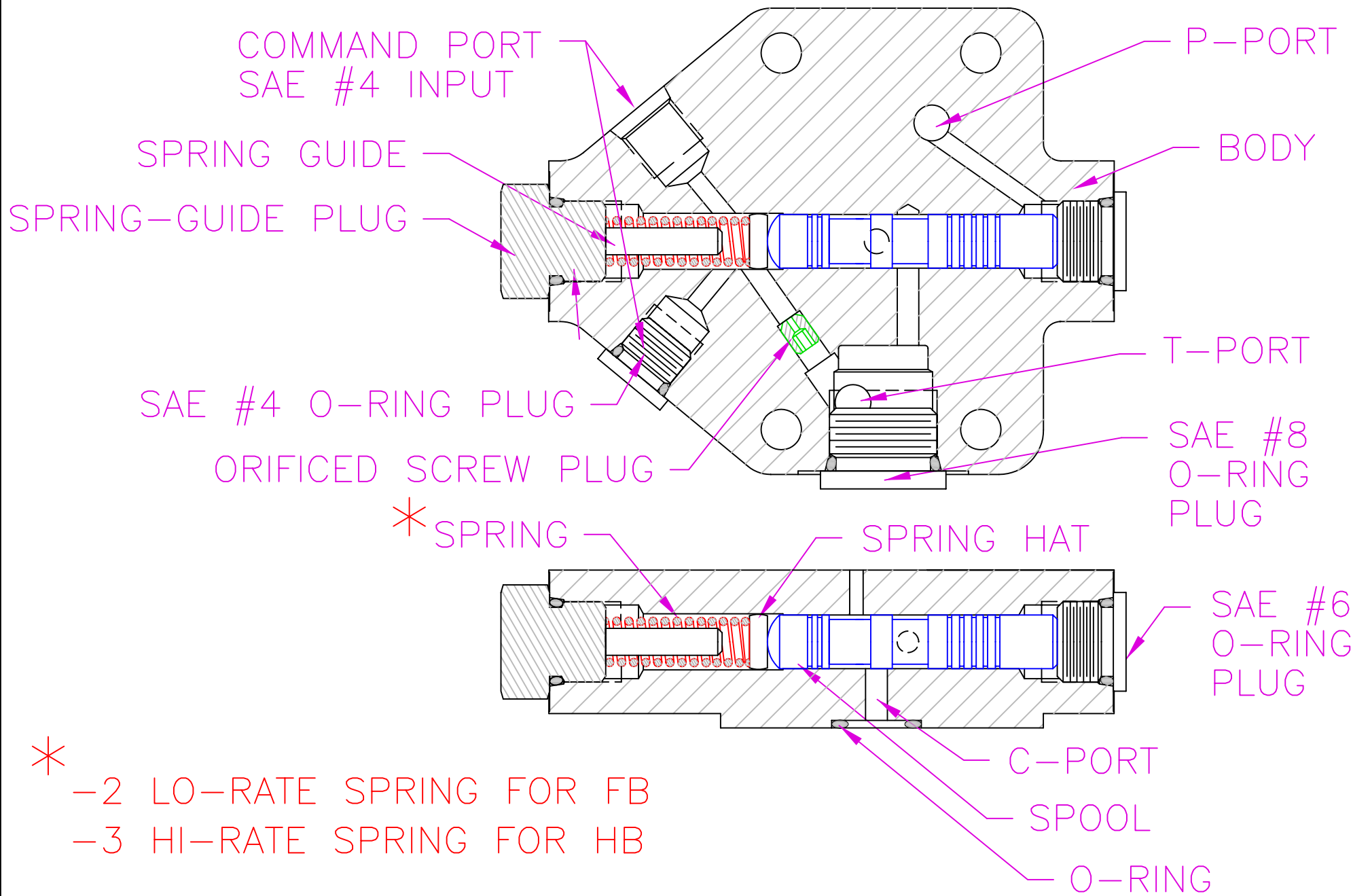
NOT TO SCALE

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HARTMANN CONTROLS INC., AND IS NOT TO BE USED IN A  
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DWG NO: 52125-2DIM

TITLE: OUTLINE OF A NON-  
ADJUSTABLE FLOW-LOAD  
SENSOR WITH BLEEDER

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CONTROLS INC.  
604 PROGRESS DRIVE  
HARTLAND, WI 53029



NOT TO SCALE

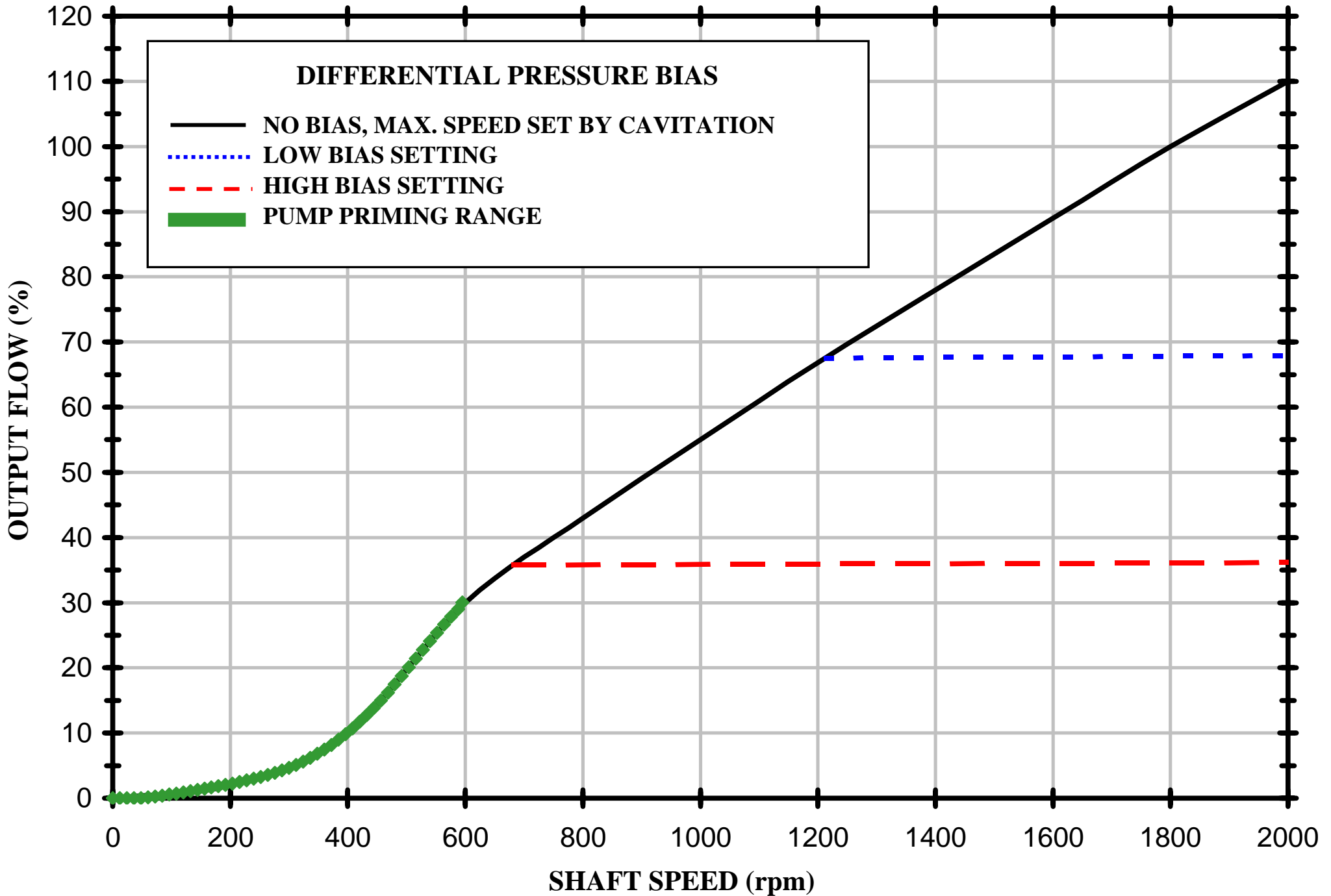
TITLE: LAYOUT OF A NON-  
ADJUSTABLE FLOW-LOAD  
SENSOR WITH BLEEDER

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MANNER DETRIMENTAL TO HARTMANN CONTROLS INC.

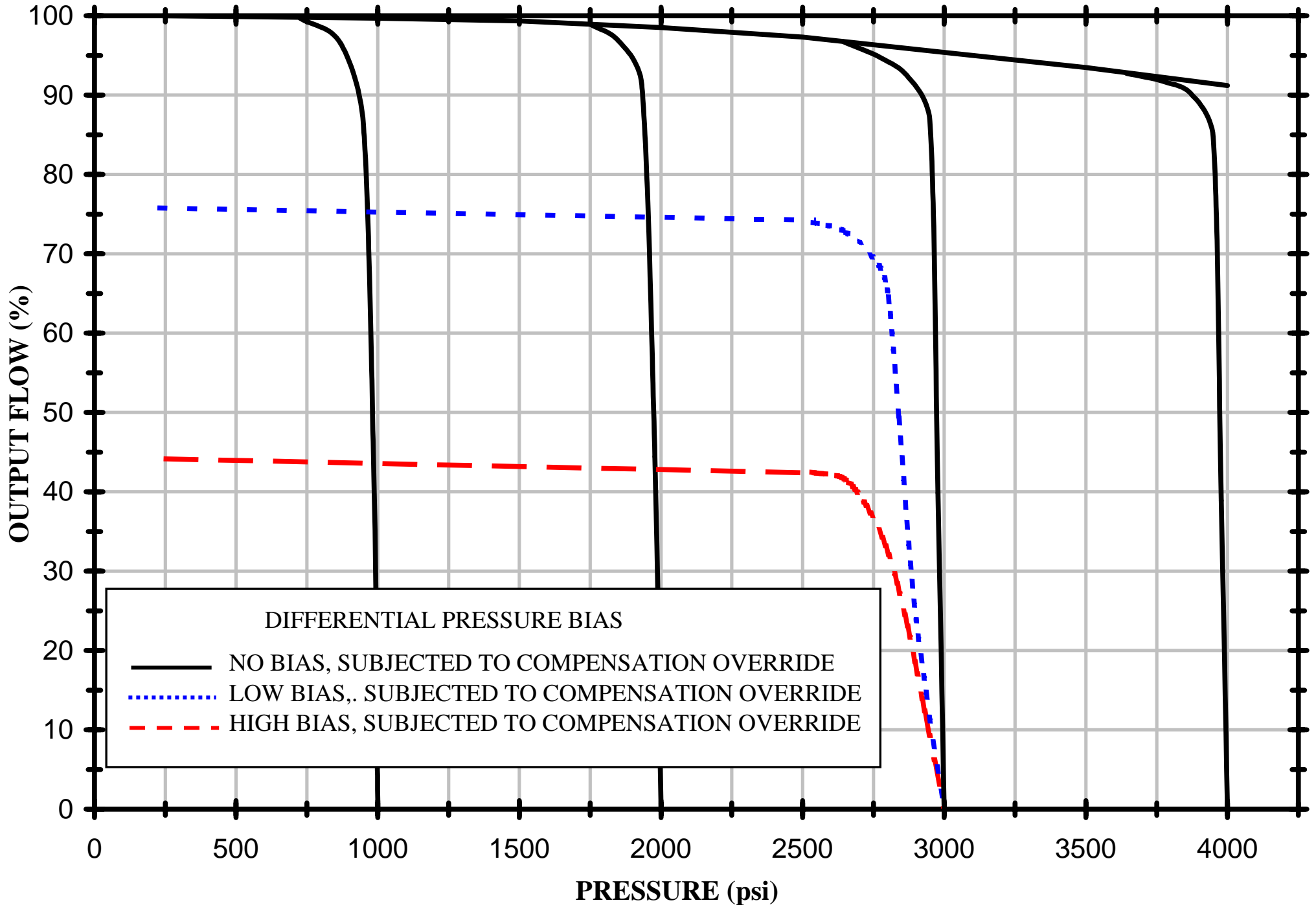
DWG NO: 52125-2LAY

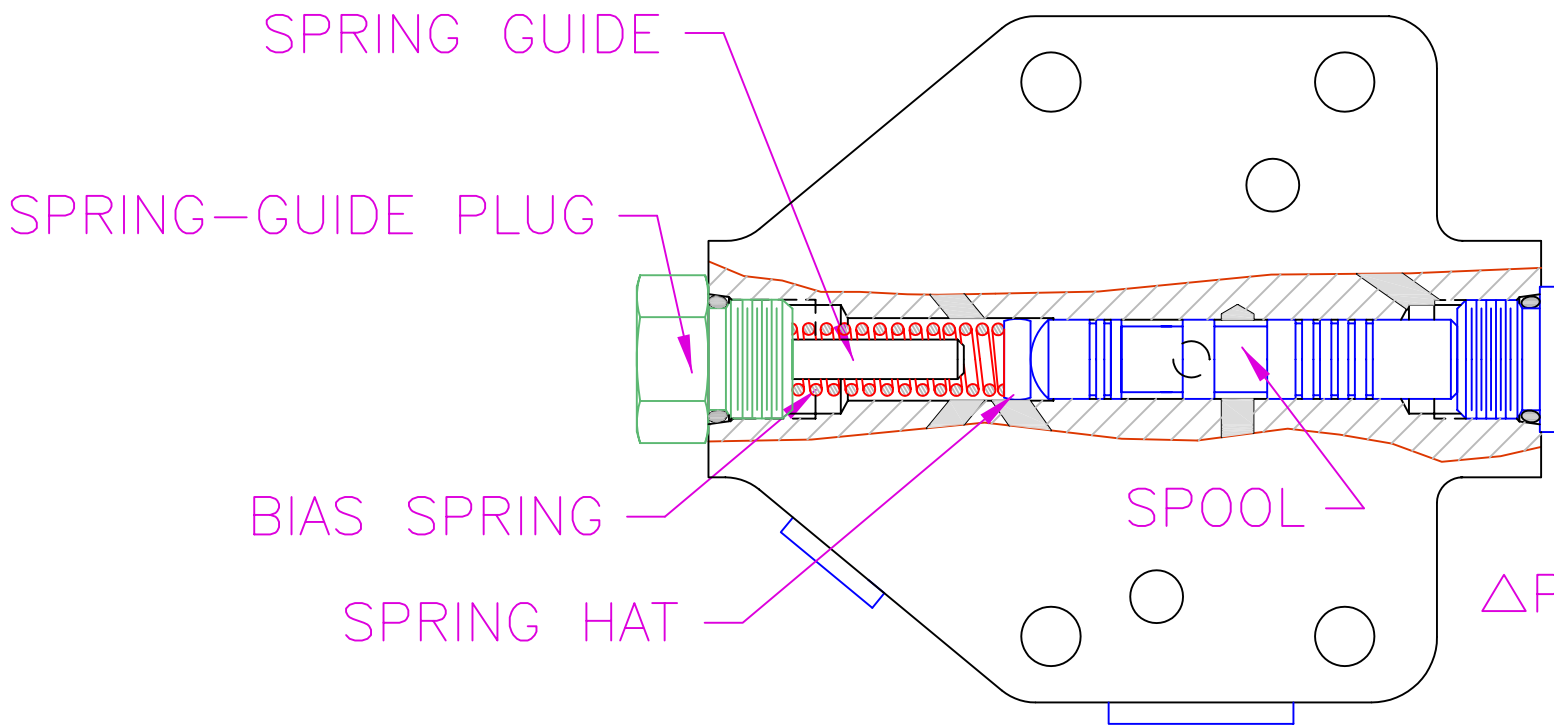


**SPEED LOADING RESPONSE OF A LOAD-SENSOR GOVERNED  
VARIABLE DISPLACEMENT PUMP; ISO 32 OIL @ 115° F**

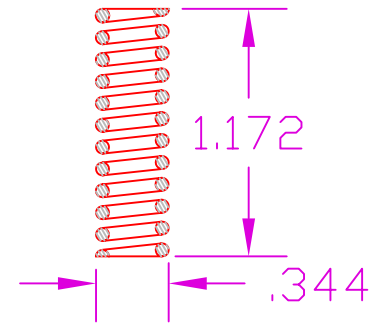


# PRESSURE LOADING RESPONSE OF A LOAD-SENSOR GOVERNED VARIABLE DISPLACEMENT PUMP; ISO 32 OIL @ 115° F



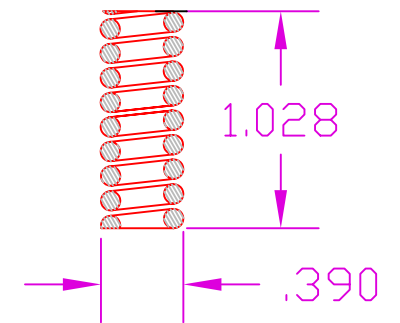


LOW-RATE  
SPRING



$\Delta P: 170-400$  PSI

HIGH-RATE  
SPRING



$\Delta P: 400-700$  PSI

1. UNJAM SPRING-GUIDE PLUG
2. UNSCREW IT AND PULL OUT THE PLUG AND SPRING
3. REMOVE THE CURRENT SPRING
4. ENGAGE THE DESIRED SPRING ON THE GUIDE
5. INSERT PLUG ASSEMBLY BACK INTO THE BODY
6. SLOWLY SREW IN THE ASSEMBLY
7. JAM THE SPRING-GUIDE PLUG

NOT TO SCALE

TITLE: BIAS-SPRING CHANGE IN  
A FIXED BIAS FLOW-LOAD  
SENSOR WITH BLEEDER

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MANNER DETRIMENTAL TO HARTMANN CONTROLS INC.

DWG NO: 52125-2SERVICE

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CONTROLS INC.  
604 PROGRESS DRIVE  
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