

## **ASSEMBLY PROCEDURES - 80mm Vacuum Relief Valve**

### **Tooling required**

Thread tape  
Pliers  
Torque wrench  
Socket 15mm  
Allen key no 4

### **Assembly Jigs required**

80mm PRE/VAC assembly jig

### **Testing Jigs required**

80mm PRE/VAC TEST jig (seat tightness 7kPa)

### **ASSEMBLY PROCEDURE**

Fitment and assembly of sealing disc rod, top spring guide, spring and bottom spring guide

- 1 Thread the thread type around the thread of the sealing disc rod (#3).
- 2 Place the sealing disc rod (#3) so it stands up right with the thread on top. Fit the top spring guide (#13) over the sealing disc rod with the spring guide facing upwards.
- 3 Fit the spring (#4) with the smaller inner diameter over the sealing disc rod (#3) followed by the bottom spring guide (#12)

Fitment and assembly of main body, sealing disc rod assembly and sealing disc

- 4 Place the main body (#6/7) on top of the sealing disc rod assembly with the shaft guide (#8) centered on the sealing disc rod.
- 5 Fit BS337 o-ring (#9) onto sealing disc groove (#2)
- 6 Push the main body (#6/7) down with one hand and screw the sealing disc (#10) onto the sealing disc rod (#3)
- 7 Fit the main flange (#7) over the four legs of the 80mm PRE/VAC assembly jig.
- 8 Tighten the sealing disc (#10) with torque wrench (set at 50Nm)
- 9 Insert and secure split pin (#11) with pliers.

AFTER TESTING - fit and secure hood

- 10 Fit the main flange (#7) over the four legs of the 80mm PRE/VAC assembly jig.
- 11 Place the hood (#2) onto the main body assembly and align the hood with lid and body ring (#14) slots.
- 12 Fit into place using 3 x spring washer (#17) and 3 x allen cap screws (#16) using allen key no 4.

## **TESTING PROCEDURE - 80mm Vacuum Relief Valve**

- 1 Fit and secure the "80PRE/VAC TEST JIG" jig to the "TEST FL 150" jig with washers and nuts.
- 2 Fit and secure the 80mm pressure relief valve onto the "80PRE/VAC TEST JIG" with washers and nuts ensure nuts are fully and securely fastened to the jig
- 3 Test the Seat tightness at 7kPa for 5 minutes
- 4 Check for leaks
  - a - internal sealing area - sealing disc/main body sealing area

As per EN12266-1:2012 testing regulations Table A.5

criteria:	"A"	No visually detectable leaks for the duration of the test
	"B"	DN32 x 0.01 cubic millimetres per second

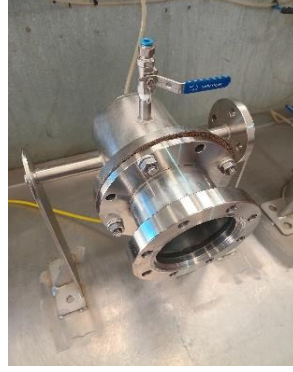
## **ASSEMBLY & TESTING PROCEDURES - 80mm Vacuum Relief Valve**



1 - 3 sealing disc rod, top spring guide, spring and bottom spring guide



4 - 9 main body, sealing disc assembly, spring top and bottom retainer and spring



Test 1: Seat Tightness @ 7kPa



18 - 19 Hood fitment