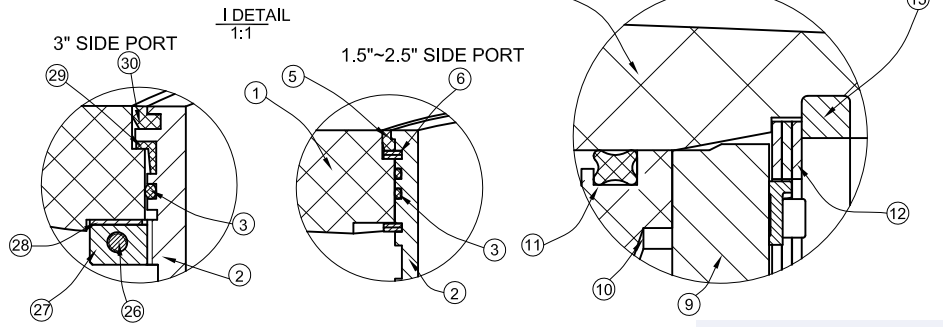
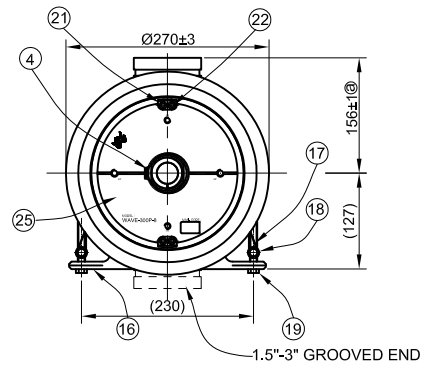


**WARNING!**  
 PRESSURE IN THE PERMEATE PORT SHALL NOT EXCEED 125 PSI (0.86MPa)

PERMEATE PORT  
 OPTION F---NPT 1" FEMALE THREAD;  
 OPTION G---Rp 1" FEMALE THREAD;  
 OPTION H--- UNION ADAPTOR;  
 FIT 32mm(O.D) PIPE  
 OPTION J---UNION ADAPTOR;  
 FIT 1.32"(O.D) PIPE  
 OPTION V---Mechanical Coupling 1"-ABS;  
 OPTION S---Mechanical Coupling 1"-SS;



1.Flexible piping should be used on permeate connection to manifold.  
 2.Side port misalignment can not exceed 0.7mm in any direction.  
 3.MPV is not designed for negative pressures.

| SIDEPORT SEAL GASKET     | DRAWING NO. | CODE | SIZE   | COMPUTER CODE | QTY |
|--------------------------|-------------|------|--------|---------------|-----|
| 23450-26-01              |             |      | 3"     | 10447         | 2   |
| 080(LD,1"Ø2.65           |             |      | 3"     | 10392         | 2   |
| 070(LD,1"Ø2              |             |      | 2.5"   | 10425         | 4   |
| 055(LD,1"Ø2              |             |      | 2"     | 10424         | 4   |
| 042(LD,1"Ø2              |             |      | 1.5"   | 10423         | 4   |
| CURVED SIDEPORT SEAL     |             |      | 3"     | 10499         | 2   |
| 23300-04-02-01           |             |      | 2.5"   | 10614         | 2   |
| 23300-04-01-01           |             |      | 2"     | 10613         | 2   |
| 23300-04-03-01           |             |      | 1.5"   | 10615         | 2   |
| RETAINING RING           |             |      | 2.5"   | 20112         | 4   |
| 23300-06-02IEC30-08-06/2 |             |      | 2.5"   | 20111         | 4   |
| 23300-06-01IEC30-08-06/1 |             |      | 1.5"   | 20113         | 4   |
| 23300-06-03IEC30-08-06/3 |             |      | 1.5"   | 20113         | 4   |
| SIDE PORT                |             |      | U 3"   | 20385         | 2   |
| 23300-02-05-03           |             |      | T 2.5" | 20294         | 2   |
| 23300-02-02-2            |             |      | S 2"   | 20292         | 2   |
| 23300-02-01-2            |             |      | R 1.5" | 20296         | 2   |
| 23300-02-03-2            |             |      |        |               |     |

| PERMEATE PORT 150 PSI | DRAWING NO. | CODE | PERMEATE PORT SPECS              | COMPUTER CODE |
|-----------------------|-------------|------|----------------------------------|---------------|
| 23300-10-08           |             | UF   | CONNECTED WITH VICTAULIC         | 10501         |
| 23300-10-09           |             | N    | NPT 1 1/2" MALE THREAD           | 10843         |
| 23300-10-06           |             | M    | NPT 1 1/4" MALE THREAD           | 10084         |
| 23300-10-05           |             | S    | MECHANICAL COUPLING 1"-SS        | 10069         |
| 23300-10-05           |             | V    | MECHANICAL COUPLING 1"-ABS       | 10069         |
| 23300-10-05           |             | J    | UNION ADAPTOR(American Standard) | 10069         |
| 23300-10-05           |             | F    | NPT 1" FEMALE THREAD             | 10069         |
| 23300-10-05           |             | G    | Rp 1" FEMALE THREAD              | 10069         |
| 23300-10-05           |             | H    | UNION ADAPTOR(National Standard) | 10069         |

| ITEM | DESCRIPTION               | DRAWING NO.                        | QTY           | MATERIAL                         | COMPUTER CODE |
|------|---------------------------|------------------------------------|---------------|----------------------------------|---------------|
| 30   | CURVED SIDE PORT SEAL(3") | 23450-03-04                        | 2             | EPDM                             | 10499         |
| 29   | SIDE PORT SEAL(3")        | 23450-26-01                        | 2             | EPDM                             | 10447         |
| 28   | SIDE PORT GASKET(3")      | 23100-46-04                        | 2             | SA-213.TP316L                    | 20286         |
| 27   | SIDE PORT NUT(3")         | 23100-45-04                        | 2             | 316                              | 20456         |
| 26   | SIDE PORT BOLT IN NUT     |                                    | 4             | M4*16 STAINLESS STEEL, GRADE 8.8 | 20193         |
| 25   | ALUMINUM PLATE LABEL      |                                    | 2             | ADHESIVE LABEL                   | 40757         |
| 24   | LOGO LABEL                |                                    | 2             | ADHESIVE LABEL                   | 40255         |
| 23   | SERIAL NO. LABEL          | GBR19-65                           | 1             | ART.PAPER 20*33                  | 40425         |
| 22   | SCREW                     | 23300-36-01                        | 8             | M5*14 STAINLESS STEEL            | 20633         |
| 21   | RETAINING BLOCK           | 23300-36-01                        | 4             | 316                              | 20183-1       |
| 20   | STRAP PROTECTIVE JACKET   | 23300-19IEC30-08-19                | 2or3          | SOFT PVC                         | 10188         |
| 19   | STRAP SCREW               | 23300-18IEC30-08-18                | 4or6          | M8*30 STAINLESS STEEL, GRADE 8.8 | 20124         |
| 18   | STRAP NUT                 | 23300-17IEC30-08-17                | 2or3          | A666 .304                        | 20123         |
| 17   | STRAP                     | 23300-16IEC30-08-16                | 2or3          | TPU (S600)                       | 10141         |
| 16   | EMBDEDDED RING            | 23300-15IEC30-08-15                | 2             | SA-312 . TP316L                  | 20072         |
| 15   | ADAPTOR O RING            | 23300-14IEC30-08-14                | 4             | EPDM                             | 10182         |
| 14   | ADAPTOR(O2B.1)            | 23300-13IEC30-08-13                | 2             | ABS CHIMEI 757K                  | 10125         |
| 13   | RETAINING RING            | 23300-12IEC10-08-12                | 2             | SA-479.316                       | 20024         |
| 12   | HEAD SEAL                 | 23300-08                           | 2             | EPDM                             | 10175         |
| 11   | PERMEATE PORT(150PSI)     | SEE "PERMEATE PORT CONFIGURATIONS" | 2             | PF062-3                          |               |
| 9    | BEARING PLATE             | 23150-09IEC15-08-09                | 2             | SB-211 8061-76                   | 20058         |
| 8    | PERMEATE PORT O RING      | 23300-09IEC30-08-09                | 2             | EPDM                             | 10181         |
| 7    | THRUST CONE               | 23300-07IEC30-08-07                | 1             | PF062-3                          | 10192         |
| 6    | SIDE PORT RETAINING RING  | SEE "SIDE PORT CONFIGURATIONS"     | 4             | SA-479.316                       | SEE THE CHART |
| 5    | CURVED SIDE PORT SEAL     | SEE "SIDE PORT CONFIGURATIONS"     | 2             | EPDM                             | SEE THE CHART |
| 4    | PERMEATE RETAINING RING   | 23300-03IEC30-08-03                | 2             | AS60.316                         | 20107         |
| 3    | SIDE PORT O RING          | SEE "SIDE PORT CONFIGURATIONS"     | SEE THE CHART | EPDM                             | SEE THE CHART |
| 2    | SIDE PORT                 | SEE "SIDE PORT CONFIGURATIONS"     | 2             | SA-312 . TP316L                  | SEE THE CHART |
| 1    | SHELL                     | 23150-01-04                        | 1             | FIBER GLASS + EPOXY              |               |

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**TECHNICAL REQUIREMENT**  
 1. MANUFACTURED IN CONFORMITY TO « ASME BOILER&PRESSURE VESSEL CODE »  
 SECTION X : « FIBER REINFORCED PLASTIC PRESSURE VESSELS » -CLASS I VESSELS:  
 2. MAX OPERATING PRESSURE: 150Psi (1.0342MPa) .  
 ALLOWABLE TEMPERATURE RANGE: 20°F(-7°C) ~ 120°F(49°C).  
 NOT APPLICABLE TO CORROSIVE LIQUID .  
 3. LEAKAGE TEST: HYDRO TEST, TESTED AT 1.1 TIMES ITS OPERATING PRESSURE.  
 I.E.: 165Psi (1.1376MPa) . SAMPLE RATE: 100% .  
 NOTE: DIMENSIONS IN PARENTHESIS ARE REFERENCE ONLY.

| REVISION | DESCRIPTION   | SIGNATURE | DATE       |
|----------|---|-----------|------------|
| 7        | ADD THE NOTES'  |           | 2013/02/05 |
| 6        | RETAINING BLOCKS AND SCREW CHANGED; HEAD SEAL CHANGED;                              |           | 2011/07/04 |
| 5        | INCREASE TOLERANCE;   |           | 2011/07/04 |
| 4        | HEAD SEAL CHANGED;  |           | 2011/01/28 |
| 3        | THICKNESS OF SHELL END PORT CHANGED; DISTANCE OF TWO SADDLES IN DASH 1 MPV CHANGED; |           | 2010/04/13 |

| SIGNATURE  |      | THE DIMENSIONS ARE FOR REFERENCE ONLY |                              |
|--|------|---------------------------------------|------------------------------|
| NAME   | DATE | WAVE CYBER (SHANGHAI) CO., LTD.       |                              |
| DESIGN   |      | SCALE                                 | 1:7                          |
| INSPECTION   |      | MATERIAL                              |                              |
| APPROVAL   |      | QUANTITY                              |                              |
| THIS PRODUCT DRAWING CAN NOT BE COPIED AND/OR USED WITHOUT PRIOR WRITTEN APPROVAL OF WAVE CYBER. |      | SMOOTHNESS                            |                              |
| DO NOT MEASURE THE DIMENSIONS.   |      | COMPUTER CODE                         |                              |
| UNIT: MM   |      | DRAWING NO.                           | 23150-00-01                  |
| TOTAL PAGE: 1  |      | DESCRIPTION                           | 150P-8 MEMBRANE HOUSING (3") |
|  |      | VERSION NO.                           | 7                            |