

Notes:

This drawing is an integral part of the general statement of use and technical manual

| Shell length code | L (l.o.a.) mm/inch | P (port to port) mm/inch | S # (span) mm/inch | M, mm/in length for membranes elements | W weight kg./lb. | Article number |
|-------------------|--------------------|--------------------------|--------------------|----------------------------------------|------------------|----------------|
| 21                | 841                | 559                      | 410                | 485                                    | 21               | 421201-21      |
|                   | 33,1               | 22,0                     | 16                 | 19,1                                   | 46               |                |
| 22                | 1375               | 1092                     | 940                | 1019                                   | 26               | 421201-22      |
|                   | 54,1               | 43,0                     | 37                 | 40,1                                   | 57               |                |
| 23                | 1908               | 1626                     | 1480               | 1552                                   | 30               | 421201-23      |
|                   | 75,1               | 64,0                     | 58                 | 61,1                                   | 66               |                |
| 24                | 2442               | 2159                     | 2000               | 2086                                   | 35               | 421201-24      |
|                   | 96,1               | 85,0                     | 79                 | 82,1                                   | 77               |                |
| 25                | 2976               | 2694                     | 2540               | 2620                                   | 40               | 421201-25      |
|                   | 117,2              | 106,1                    | 100                | 103,1                                  | 88               |                |
| 26                | 3510               | 3228                     | 3070               | 3154                                   | 45               | 421201-26      |
|                   | 138,2              | 127,1                    | 121                | 124,2                                  | 99               |                |
| 27                | 4045               | 3762                     | 3600               | 3689                                   | 50               | 421201-27      |
|                   | 159,3              | 148,1                    | 142                | 145,2                                  | 110              |                |
| 28                | 4579               | 4297                     | 4140               | 4223                                   | 55               | 421201-28      |
|                   | 180,3              | 169,2                    | 163                | 166,3                                  | 121              |                |
| 29                | 5114               | 4832                     | 4670               | 4758                                   | 59               | 421201-29      |
|                   | 201,3              | 190,2                    | 184                | 187,3                                  | 130              |                |
| 30                | 5649               | 5367                     | 5200               | 5293                                   | 64               | 421201-30      |
|                   | 222,4              | 211,3                    | 205                | 208,4                                  | 141              |                |
| 31                | 6184               | 5902                     | 5740               | 5828                                   | 69               | 421201-31      |
|                   | 243,5              | 232,4                    | 226                | 229,4                                  | 152              |                |
| 32                | 6718               | 6435                     | 6270               | 6362                                   | 74               | 421201-32      |
|                   | 264,5              | 253,3                    | 247                | 250,5                                  | 163              |                |

Table №1 for membrane length 21" ( 533.4mm. ).  
Table №2 for membrane length 40" ( 1016mm. ).

| Shell length code | L (l.o.a.) mm/inch | P port to port, mm/Inch | S # (span) mm/Inch | M, mm/in length for membranes elements (with membrane type) |       | W weight kg./lb. | Article number |
|-------------------|--------------------|-------------------------|--------------------|-------------------------------------------------------------|-------|------------------|----------------|
|                   |                    |                         |                    |                                                             |       |                  |                |
| 1                 | 1326               | 1044                    | 710                | 1020                                                        | 970   | 28               | 411200-1       |
|                   | 52,2               | 41,1                    | 28                 | 40,2                                                        | 38,2  | 62               |                |
| 2                 | 2342               | 2060                    | 1550               | 2036                                                        | 1986  | 37               | 411200-2       |
|                   | 92,2               | 81,1                    | 61                 | 80,2                                                        | 78,2  | 82               |                |
| 3                 | 3358               | 3076                    | 2550               | 3052                                                        | 3002  | 46               | 411200-3       |
|                   | 132,2              | 121,1                   | 100                | 120,2                                                       | 118,2 | 101              |                |
| 4                 | 4374               | 4092                    | 3250               | 4068                                                        | 4018  | 56               | 411200-4       |
|                   | 172,2              | 161,1                   | 128                | 160,2                                                       | 158,2 | 123              |                |
| 5                 | 5391               | 5109                    | 4250               | 5085                                                        | 5035  | 65               | 411200-5       |
|                   | 212,2              | 201,1                   | 167                | 200,2                                                       | 198,2 | 143              |                |
| 6                 | 6409               | 6127                    | 5250               | 6103                                                        | 6053  | 74               | 411200-6       |
|                   | 252,3              | 241,2                   | 207                | 240,3                                                       | 238,3 | 163              |                |

**Warning.**

1. Never pressurize a pressure vessel that was not loaded with membrane elements.
2. Wrong manifolding may cause an excessive pressure on port what can lead to leaks.
3. Max. allowable working pressure not to exceed 1200 psi. (82.7 bar).
4. Permeate internal pressure not to exceed 125 psi. (8.6 bar).
5. Operating temperature not to exceed 65°C (150°F).

1. All dimensions are for reference only, not for construction unless certified.
2. \*Item 17 & 18 are optional. Delivered upon request. Priced separately.
3. Drawing unit: mm. (inches).
4. Saddles can be shimmed if required.
5. Do not scale drawing, may be reprinted on any paper size or copied.
6. The vessel should be supported with two straps for external saddles.
7. For further information please contact BEL.
8. Storage & installation: Indoor.
9. Vessel's ports diameters according to ANSI Standards.

| Item | Part Number  | Q-ty | Description               | Material                     |
|------|--------------|------|---------------------------|------------------------------|
| 1    | 421200-0     | 1    | Body of Pressure Vessel   | Glass/Epoxy                  |
| 2    | 040-155-1204 | 2    | Sideport 1.5"             | Super Duplex Stainless steel |
| 3    | 006-156-1203 | 2    | Seal for Sideport 1.5"    | EPDM                         |
| 4    | 014-150-0506 | 2    | Disk for Sideport 1.5"    | Stainless steel              |
| 5    | 011-150-1202 | 4    | R.Ring for Sideport 1.5"  | Stainless steel              |
| 6    | 005-461-1200 | 2    | Support Ring              | Aluminium                    |
| 7    | 011-401-1202 | 2    | Retaining ring for S.Ring | 316 Stainless steel          |
| 8    | 008-400-1215 | 2    | Permeate tube             | Engineering plastic          |
| 9    | 55412369     | 2    | R.Ring for permeate port  | 316 Stainless steel          |
| 10   | 003-420-1215 | 2    | Base plate                | Aluminium                    |
| 11   | 003-400-0005 | 2    | Sealing plate             | Engineering plastic          |
| 12   | 55412360     | 2    | Seal for sealing plate    | EPDM                         |
| 13   | 55412367     | 2    | Seal for adapter          | EPDM                         |
| 14   | 55412377     | 0-6  | Disk spacer               | Engineering plastic          |
| 15   | as required  | 2    | Membrane seal             | EPDM                         |
| 16   | as required  | 2    | Membrane Adapter LONG     | Engineering plastic          |

| Vessel support parts - optional - |          |     |        |                     |
|-----------------------------------|----------|-----|--------|---------------------|
| 17*                               | 55410352 | 2-3 | Saddle | Engineering plastic |
| 18*                               | 55410246 | 2   | Strap  | Stainless steel     |

|                                                                                                                                                                         |                                               |        |      |            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--------|------|------------|
| BEL                                                                                                                                                                     | BEL4-S(1.5'')-1200 psi.<br>RO PRESSURE VESSEL | DESIGN | VMLS | 20/09/2024 |
|                                                                                                                                                                         |                                               | CHECK  | SRS  | 20/09/2024 |
|                                                                                                                                                                         |                                               | APPR.  | VMLS | 20/09/2024 |
| DRAWING NO.: BEL4-S(1.5'')-1200                                                                                                                                         |                                               |        |      |            |
| THIS DRAWING IS PROPERTY OF BEL GROUP LIMITED IT IS STRICTLY FORBIDDEN TO USE, COPY, REPRODUCE OR DISCLOSE ANY PART OF IT TO THIRD PARTY WITHOUT WRITTEN AUTHORIZATION. |                                               |        |      |            |
|                                                                                                                                                                         |                                               |        |      | REV.: 0    |

# ORDER / R.F.Q. FORM - 4" SIDE PORT PRESSURE VESSELS

Please fill and send it to your contact at BEL

**P.O. / R.F.Q. Number:**

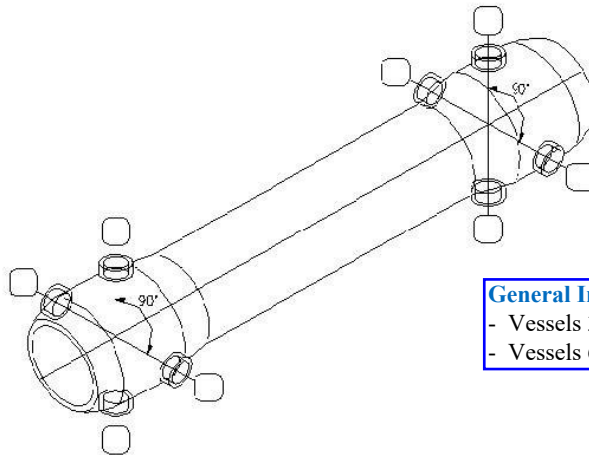
**Customer name:**

**1. F/C PORTS CONFIGURATION:** Please indicate side port requirement on each side of the vessel  
(Mark the letter indicating port diameter in the box at each required port location)

**A – 1" Victaulic      B – 1.5" Victaulic** (Except for 1500 psi models)

**Vessel's Port diameters, according to ANSI Standards.**

*(Ports with a diameter of 1.5" cannot be mounted in 90° with any other port)*



**General Information for Permeate ports:**

- Vessels 300 psi & 450 psi: ½" NPT Female.
- Vessels 600 psi up to 1500 psi: ½" NPT Male.

**2. NUMBER OF VESSELS:**

*(Please use separate forms for each type in case of multi-type orders)*

**3. WORKING PRESSURE RATE (PSI):** 300 / 450 / 600 / 1,000 / 1,200 / 1500

**4. NUMBER OF MEMBRANE ELEMENTS IN EACH VESSEL:**

For 40" membranes length: (1to 6)

For 21" membranes length: (1 to 12)

**5. MEMBRANE BRAND AND TYPE:**

**6. CONFIRM TYPE – BEL4-S- (    x    ) -    - M**

# of ports    diam. Port    pressure    #membranes

**7. SADDLES & STRAPS (Optional):** NO / YES *(please contact for pricing)*

**8. ADAPTERS OPTIONS:** Two Standard adapters / Standard & Solid (blind) adapter

**9. COLOR:** Standard (white, RAL 9010) / Other    RAL number: *(contact for pricing)*

Customer signature:

Date:

**FOR DETAILS PLEASE VISIT OUR WEBSITE: [www.belvessels.com](http://www.belvessels.com)**