

(or male Adapter for membrane element with female permeate tube, in this case all measurements must be changed, see note 7)

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

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	W weight kg, lb.	Article number
21	765	559	410	485	12	42451-21
	30,1	22,0	16	19,1	26	
22	1298	1092	940	1019	14	42451-22
	51,1	43,0	37	40,1	31	
23	1832	1626	1480	1552	17	42451-23
	72,1	64,0	58	61,1	37	
24	2365	2159	2000	2086	19	42451-24
	93,1	85,0	79	82,1	42	
25	2900	2694	2540	2620	21	42451-25
	114,2	106,1	100	103,1	46	
26	3434	3228	3070	3154	24	42451-26
	135,2	127,1	121	124,2	53	
27	3968	3762	3600	3689	26	42451-27
	156,2	148,1	142	145,2	57	
28	4503	4297	4140	4223	28	42451-28
	177,3	169,2	163	166,3	62	
29	5038	4832	4670	4758	30	42451-29
	198,3	190,2	184	187,3	66	
30	5573	5367	5200	5293	33	42451-30
	219,4	211,3	205	208,4	73	
31	6108	5902	5740	5828	35	42451-31
	240,5	232,4	226	229,4	77	
32	6641	6435	6270	6362	37	42451-32
	261,5	253,3	247	250,5	82	

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	1250	1044	710	1020	970	14	42450-1
	49,2	41,1	28	40,2	38,2	31	
2	2266	2060	1550	2036	1986	19	42450-2
	89,2	81,1	61	80,2	78,2	42	
3	3282	3076	2550	3052	3002	23	42450-3
	129,2	121,1	100	120,2	118,2	51	
4	4298	4092	3250	4068	4018	27	42450-4
	169,2	161,1	128	160,2	158,2	60	
5	5315	5109	4250	5085	5035	32	42450-5
	209,3	201,1	167	200,2	198,2	71	
6	6333	6127	5250	6103	6053	36	42450-6
	249,3	241,2	207	240,3	238,3	79	

**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 450 psi. (31 bar).
4. Permeate internal pressure not to exceed 125 psi. (8.6 bar).
5. Operating temperature not to exceed 65°C (150°F).

**Notes:**

1. All dimensions are for reference only, not for construction unless certified.
2. \*Item 13 & 14 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	42450-0	1	Body of Pressure Vessel	Glass/Epoxy		
2	040-156-0604	2	Sideport 1.5"	Stainless steel		
3	014-150-0506	2	Seal for Sideport 1.5"	EPDM		
4	006-156-0452	2	Disk for Sideport 1.5"	Stainless steel		
5	011-150-1202	4	R.Ring for Sideport 1.5"	Stainless steel		
6	55410208	2	Retaining ring	Stainless steel		
7	003-400-0005	2	Base plate	Engineering plastic		
8	55412360	2	Seal for base plate	EPDM		
9	as required	2	Membrane Adapter LONG	Engineering plastic		
10	as required	2	Membrane seal	EPDM		
11	55412367	2	Seal for adapter	EPDM		
12	55412377	6	Disk spacer	Engineering plastic		
<b>Vessel support parts - optional -</b>						
13*	55410352	2-3	Saddle	Engineering plastic		
14*	55410246	2	Strap	Stainless steel		
BEL	TITLE: BEL4-S(1.5")-450 psi. RO PRESSURE VESSEL			DESIGN	VMLS	06/08/2024
	DRAWING NO.: BEL4-S(1.5")-450			CHECK	SRS	06/08/2024
				APPR.	VMLS	06/08/2024
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# 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:**

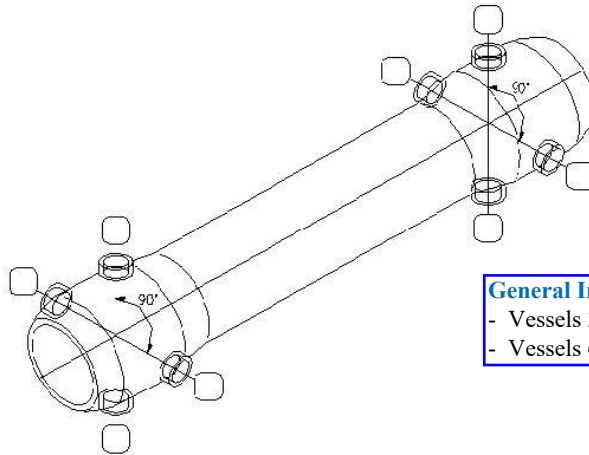
**Customer name:**

**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)**