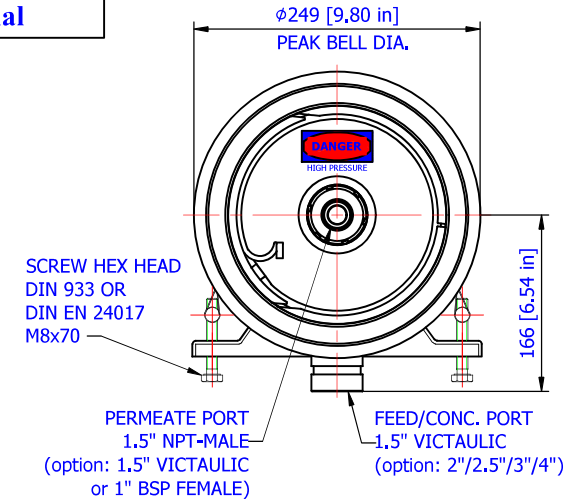
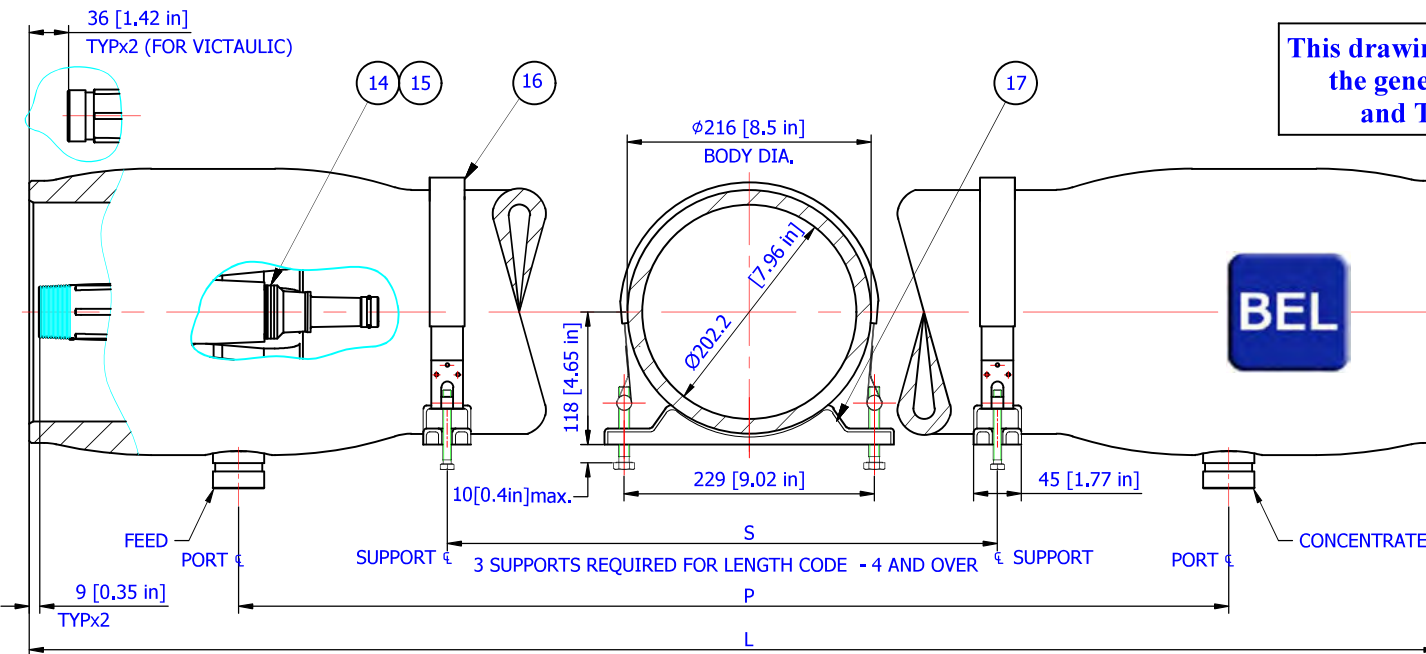


This drawing is an integral part of the general statement of use and Technical Manual

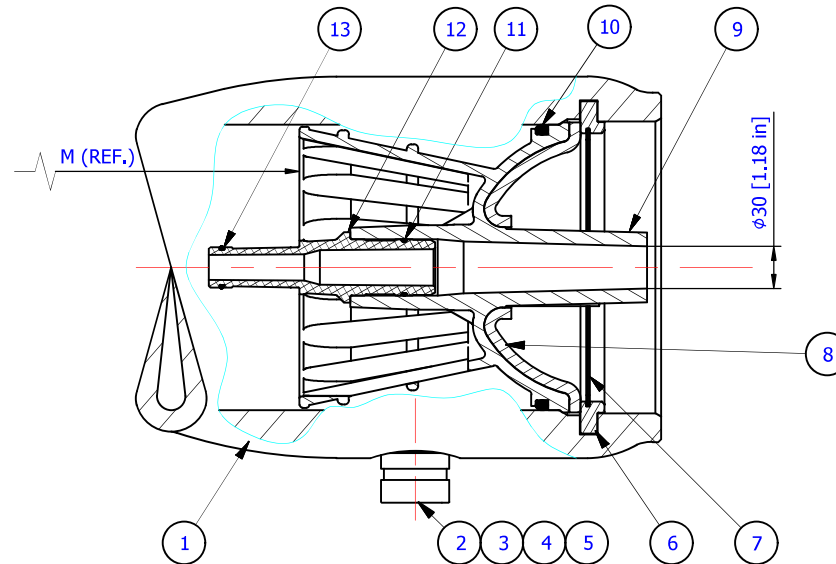


Notes:

1. All dimensions are for reference only, not for construction unless certified.
2. Item 14 & 15 should be located on feed side.
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. Length between ports (P) can be changed to adapt old dimension - with customer's special request.
7. The vessel is supplied with two strap assembly.
8. For tolerances & sizes, please check the drawing in page 2.

LENNTECH

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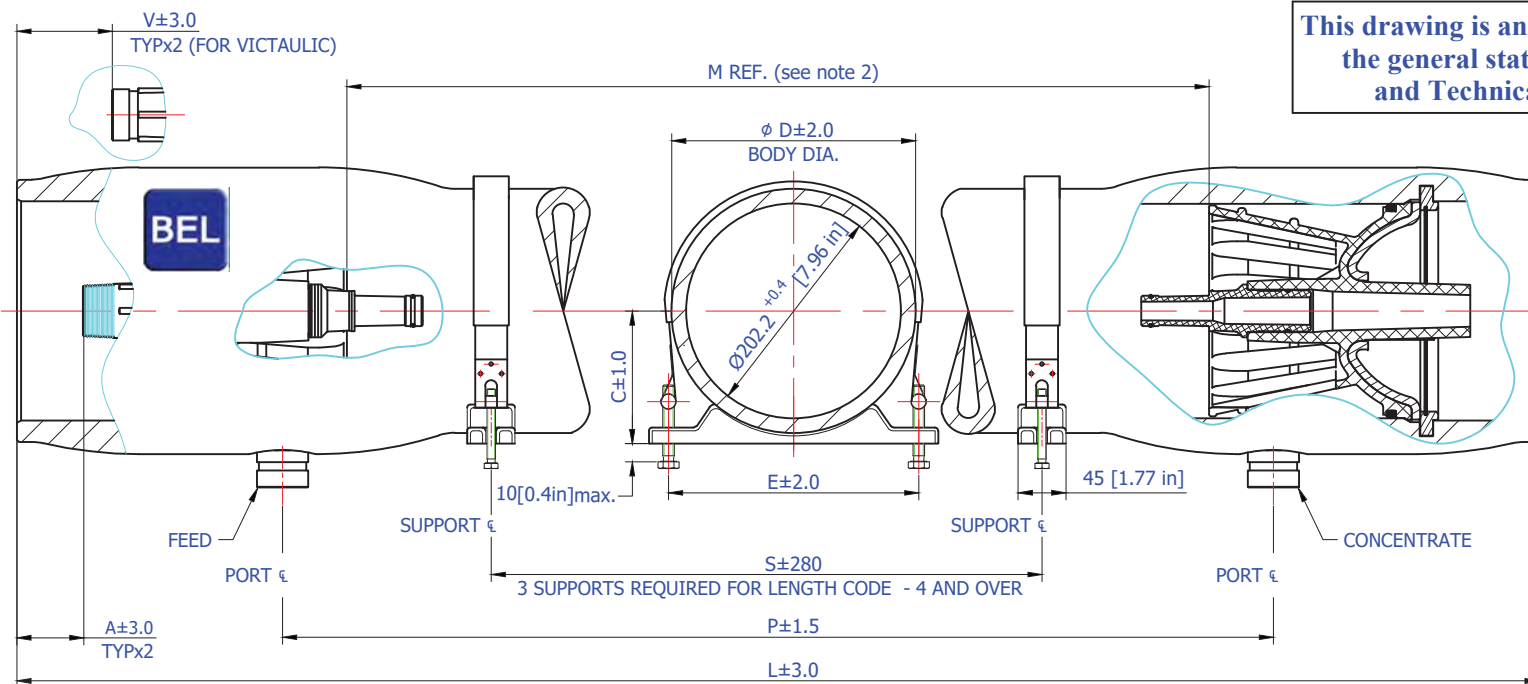


Warning.

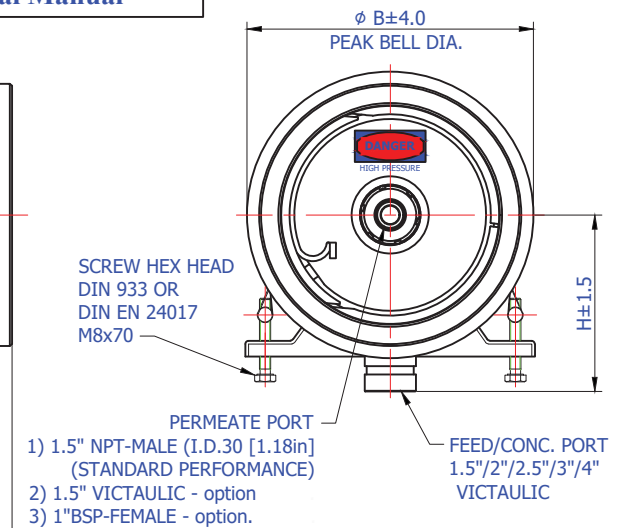
1. Never pressurize a pressure vessel that was not loaded with membrane elements.
2. Wrong manifolding may cause an excessive load on port what can lead to leaks.
3. Max. allowable working pressure not to exceed 450 psi. (31 bar).
4. Permeate internal pressure not to exceed 125 psi. (8.6 bar).
5. Operating temperature not to exceed 49°C (120°F).

Item	Q-ty	Part Number	Description	Material
1	1	81450-0	Body of Pressure Vessel	Glass/Epoxy
2	2	040-156-3458	F/C port 1,5"	Stainless steel
3	2	006-156-3452	Disk for sideport	Stainless steel
4	2	014-150-3506	Seal for sideport	EPDM
5	4	011-150-1202	Retaining ring for SP	Stainless steel
6	2	55410289	Support ring	Aluminum
7	2	011-801-1202	Retaining ring (finger hook)	Stainless steel
8	2	285453033	Metal cap 3mm	Stainless steel
9	2	285779010/vg	End cap	Engineering plastic
10	2	007-080-3092	Seal for End cap	EPDM
11	2	285773918	Seal for Adapter	EPDM
12	2	As required	Adapter	Engineering plastic
13	2-4	As required	Membrane seal	EPDM
14	0-3	285779231	Disk spacer - 1mm	Engineering plastic
15	0-7	285779233	Disk spacer - 3mm	Engineering plastic
16	2	55410310	Strap Assy.	Stainless steel
17	2-3	55410351	Saddle	Engineering plastic
18				

	TITLE: BEL8-S-450 psi. RO PRESSURE VESSEL		DESIGN	DMG	20/06/2017
			CHECK	JMEP	20/06/2017
DRAWING NO: BEL8-S(1,5")-450			APPR.	MAF	20/06/2017
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This drawing is an integral part of the general statement of use and Technical Manual



Membranes quantity	Length between ports, supports & internal space for membranes elements, mm./inch							
	1	2	3	4	5	6	7	8
P, port to port	1194	2210	3226	4242	5258	6274	7290	8306
S, supports span	47	87	127	167	207	247	287	327
M, space of membranes	500	1500	2500	3250	4250	5250	6250	7250
	19.7	59.1	98.4	128	167.3	206.7	246.1	285.4
	1032	2048	3064	4080	5096	6112	7128	8144
	40.6	80.6	120.6	160.6	200.6	240.6	280.6	320.6

Notes:

1. All dimensions are for reference only, not for construction unless certified.
2. For membranes shimming (if needed) use disks spacers on feed side of the vessels.
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 is supplied with two strap assembly.

\* Ports with special height (H) in vessel and Length between ports (P) can be changed to adapt old dimension - with customer's special request.  
 \*\* NC (Non Code)

Membranes quantity	L (Length of pressure vessels), mm./inch							
	1	2	3	4	5	6	7	8
300 NC** (20.7)	1526	2542	3558	4574	5590	6606	7622	8638
300 code (20.7)	60.08	100.08	140.08	180.08	220.08	260.08	300.08	340.08
450 (31)	1542	2558	3574	4590	5606	6622	7638	8654
450 (31)	60.71	100.71	140.71	180.71	220.71	260.71	300.71	340.71
600 (41.4)	1566	2582	3598	4614	5630	6646	7662	8678
600 (41.4)	61.65	101.65	141.65	181.65	221.65	261.65	301.65	341.65
1000 (69)	1612	2628	3644	4660	5676	6692	7708	8724
1000 (69)	63.46	103.46	143.46	183.46	223.46	263.46	303.46	343.46
1200 (82.7)	1652	2668	3684	4700	5716	6732	7748	8764
1200 (82.7)	65.04	105.04	145.04	185.04	225.04	265.04	305.04	345.04
1500 (103.4)	1698	2714	3730	4746	5762	6778	7794	8810
1500 (103.4)	66.85	106.85	146.85	186.85	226.85	266.85	306.85	346.85

Working pressure, psi (bar)	B (Peak bell diameter), mm./inch				
	Side port dia. 1.5"	2"	2.5"	3"	4"
300 (20.7)	249	257	266	282	288
450 (31)	9.80	10.12	10.43	11.10	11.34
600 (41.4)	249	257	266	282	288
600 (41.4)	9.80	10.12	10.47	11.10	11.34
1000 (69)	276	286	291	301	312
1000 (69)	10.87	11.26	11.46	11.85	12.28
1200 (82.7)	278	288	292	303	314
1200 (82.7)	10.94	11.34	11.50	11.93	12.36
1500 (103.4)	292	302	305	312	318
1500 (103.4)	11.50	11.89	12.01	12.28	12.52

Working pressure, psi (bar)	H (Height of side port), mm./inch				
	Side port dia. 1.5"	2"	2.5"	3"	4"
300 (20.7)	166	166	166	166	175
300 (20.7)	6.54	6.54	6.54	6.54	6.89
450 (31)	166	166	166	166	175
450 (31)	6.54	6.54	6.54	6.54	6.89
600 (41.4)	171	171	171	171	180
600 (41.4)	6.73	6.73	6.73	6.73	7.09
1000 (69)	175	175	175	175	183
1000 (69)	6.89	6.89	6.89	6.89	7.20
1200 (82.7)	175	175	175	175	183
1200 (82.7)	6.89	6.89	6.89	6.89	7.20
1500 (103.4)	183	183	183	183	188
1500 (103.4)	7.20	7.20	7.20	7.20	7.4

Warning.

1. Never pressurize a pressure vessel that was not loaded with membrane elements.
2. Wrong manifolding may effect an excessive load on port what can lead to leaks.
3. Max. allowable pressure not to exceed the indicated working pressure.
4. Permeate internal pressure not to exceed 125 psi. (8.6 bar).
5. Operating temperature not to exceed 49°C (120°F).

	TITLE:	BEL8 8" Side Port RO PRESSURE VESSEL	DESIGN	DMG	20/06/2017
	DRAWING NO:	BEL8-S-PV	CHECK	JMEP	20/06/2017
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					REV.: 11



**ORDER / R.F.Q. FORM - 8" SIDE PORT PRESSURE VESSELS**

*Please fill and send it to your contact at BEL*

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

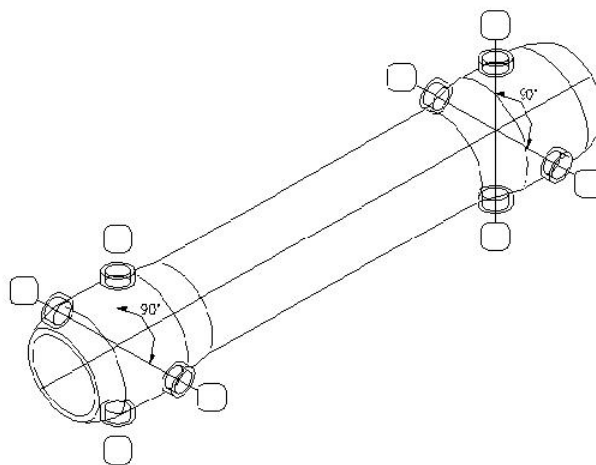
**Customer name:**

**1. NEW SYSTEM / EXISTING SYSTEM or Replacement , please provide details:**

**2. 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 – 1.5"      B – 2"      C – 2.5"      D – 3"      E – 4"**

*(Ports with a diameter of 2.5" & 3" & 4" cannot be mounted in 90° from with any other port)*



**3. NUMBER OF VESSELS:      Units**

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

**4. WORKING PRESSURE RATE (PSI):** 300    450    600    1,000    1,200    1,500

**5. NUMBER OF MEMBRANE ELEMENTS IN EACH VESSEL:**    (1,,,,,,8)

**6. MEMBRANE BRAND AND TYPE:**

**7. CONFIRM TYPE: BEL8-S - (    x    ) -    - M**  
# of ports dia. of port pressure # of membranes - *(Example: BEL8 - S(4 x 2.5") – 1,000 - 7M)*

**8. PERMEATE PORTS OUTLET:** 1.5" NPT male    1.5" Victaulic grooved    1" BSP female

**9. ASME code SEC. X, RP stamped vessel:** NO    YES    *(please contact for pricing)*

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

**11. 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)**