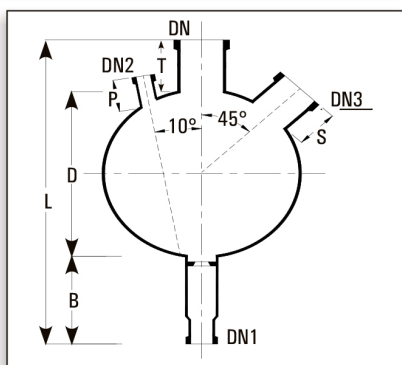
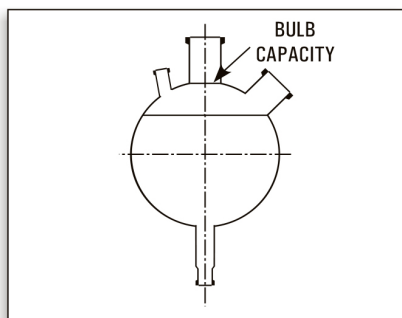


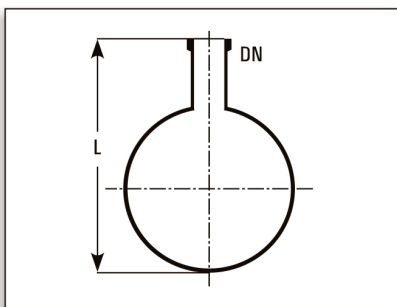
SPHERICAL VESSEL - GENERAL DATA



Nominal Capacity (Ltrs.)	Maximum Pressure (Bar)
5	1
10	0.8
20	0.7
50	0.5
100	0.4
200	0.3
300	0.2
500	0.1

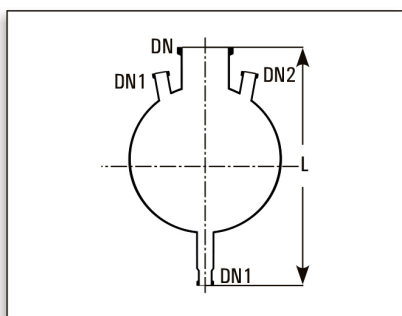
Nominal Capacity (Ltrs.)	L	D	DN	T	DN1	B	DN2	P	DN3	S
5	425	225	50	75	25	125	25	50	40	75
10	575	285	80	90	25	200	25	50	40	75
20	650	350	100	100	25	200	25	50	40	75
50	840	490	100	100	40	200	40	75	100	100
50A	840	490	150	150	40	200	40	75	100	100
100	950	600	150	150	40	200	40	75	100	100
100A	950	600	225	150	40	200	40	75	100	100
200	1200	750	225	225	40	200	40	75	100	100
200A	1200	750	300	250	40	200	40	75	100	100
300	1310	860	300	300	50	200	50	75	100	100
300A	1310	860	400	300	50	200	50	75	100	100
500	1450	1000	450	250	50	200	50	75	150	165

SINGLE NECK SPHERICAL VESSELS



Cat. Ref.	Nominal Capacity	L	DN
VSA5	5 L	300	50
VSA10	10 L	375	80
VSA20	20 L	450	100
VSA50	50 L	640	100
VSA50A	50 L	640	150
VSA100	100 L	750	150
VSA100A	100 L	750	225
VSA200	200 L	1000	225
VSA200A	200 L	1000	300
VSA300	300 L	1110	300
VSA300A	300 L	1110	400
VSA500	500 L	1250	450

THREE NECK BOTTOM OUTLET SPHERICAL VESSELS

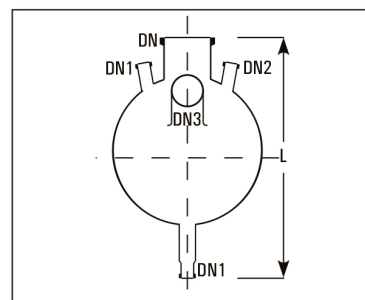


Cat. Ref.	Nominal Capacity	L	DN	DN1	DN2
VSM5	5 L	425	50	25	25
VSM10	10 L	575	80	25	25
VSM20*	20 L	650	100	25	25
VSM50*	50 L	840	100	40	40
VSM50A	50 L	840	150	40	40
VSM100	100 L	950	150	40	40
VSM100A	100 L	950	225	40	40
VSM200	200 L	1200	225	40	40
VSM200A	200 L	1200	300	50	50
VSM300	300 L	1310	300	50	50
VSM300A	300 L	1310	400	50	50
VSM500	500 L	1450	450	50	50

VESSELS

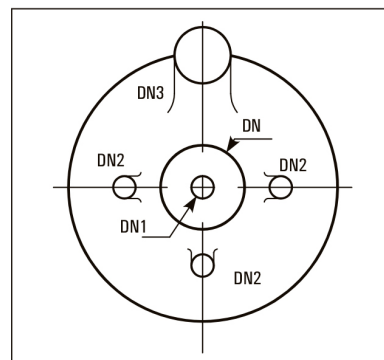
FOUR NECK BOTTOM OUTLET SPHERICAL VESSELS

Cat. Ref.	Nominal Capacity	L	DN	DN1	DN2	DN3
VSPL5	5 L	425	50	25	25	40
VSPL10	10 L	575	80	25	25	40
VSPL20	20 L	650	100	25	25	40
VSPL50	50 L	840	100	40	40	100
VSPL50A	50 L	840	150	40	40	100
VSPL100	100 L	950	150	40	40	100
VSPL100A	100 L	950	225	40	40	100
VSPL200	200 L	1200	225	40	40	100
VSPL200A	200 L	1200	300	40	40	100
VSPL300	300 L	1310	300	50	50	100
VSPL300A	300 L	1310	400	50	50	100
VSPL500	500 L	1450	450	50	50	150



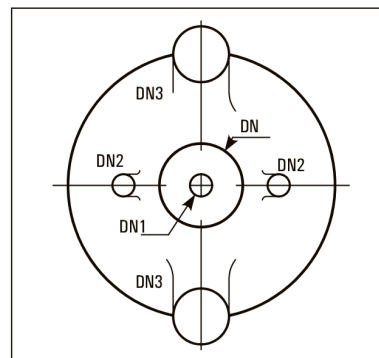
FIVE NECK BOTTOM OUTLET SPHERICAL VESSEL

Cat. Ref.	Nominal Capacity	L	DN	DN1	DN2	DN3
VSL5	5 L	425	50	25	25	40
VSL10	10 L	575	80	25	25	40
VSL20	20 L	650	100	25	25	40
VSL50*	50 L	840	100	40	40	100
VSL50A	50 L	840	150	40	40	100
VSL100*	100 L	950	150	40	40	100
VSL100A	100 L	950	225	40	40	100
VSL200*	200 L	1200	225	40	40	100
VSL200A	200 L	1200	300	50	50	100
VSL300	300 L	1310	300	50	50	100
VSL300A	300 L	1310	400	50	50	100
VSL500	500 L	1450	450	50	50	150



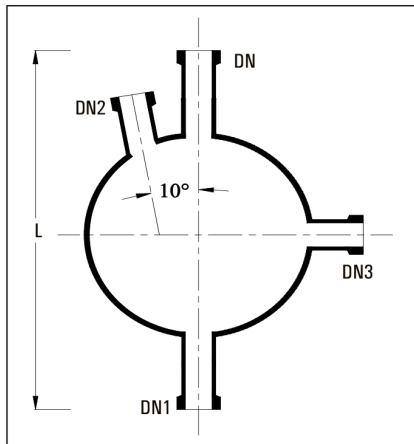
FIVE NECK BOTTOM OUTLET SPHERICAL VESSEL

Cat. Ref.	Nominal Capacity	L	DN	DN1	DN2	DN3
VS 5	5 L	425	50	25	25	40
VS 10	10 L	575	80	25	25	40
VS 20	20 L	650	100	25	25	40
VS 50*	50 L	840	100	40	40	100
VS 50A	50 L	840	150	40	40	100
VS 100*	100 L	950	150	40	40	100
VS 100A	100 L	950	225	40	40	100
VS 200*	200 L	1200	225	40	40	100
VS 200A	200 L	1200	300	40	40	100
VS 300	300 L	1310	300	50	50	100
VS 300A	300 L	1310	400	50	50	100
VS 500	500 L	1450	450	50	50	150



* marked items are available fast.

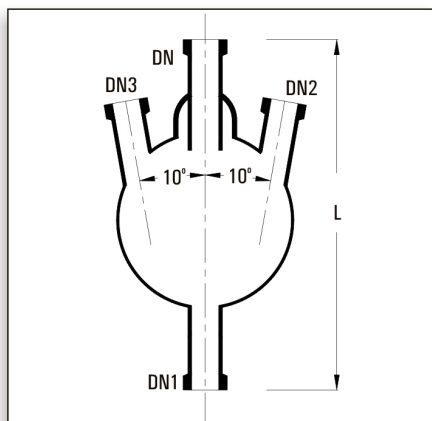
SPHERICAL VESSELS WITH NOZZLE AT 90°



These vessels are used in Circulatory Boiler System and are to be supported on a vessel holder. More nozzles can be provided on the equator on request for special requirements.

Cat. Ref.	Nominal Capacity	L	DN	DN1	DN2	DN3
VSD5	5 L	425	50	25	25	40
VSD10	10 L	500	80	25	25	40
VSD20	20 L	575	100	25	25	40
VSD50	50 L	765	100	40	40	100
VSD50A	50 L	765	150	40	40	100
VSD100	100 L	875	150	40	40	100
VSD100A	100 L	875	225	40	40	100
VSD200	200 L	1125	225	40	40	100
VSD200A	200 L	1125	300	40	40	100
VSD300	300 L	1235	300	50	50	100
VSD300A	300 L	1235	400	50	50	100
VSD500	500 L	1375	450	50	50	150

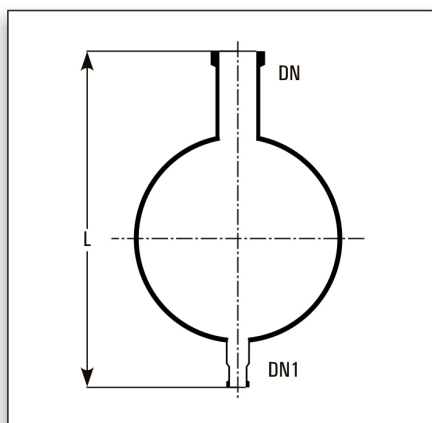
SPHERICAL RECEIVERS



Receivers are provided with builtin Dip Pipe. These are to be supported on a vessel holding ring.

Cat. Ref.	Nominal Capacity	L	DN	DN1	(100) DN2	(100) DN3
VR5*	5 L	350	25	25	25	
VR10*	10 L	425	25	25	25	
VR20*	20 L	500	25	25	25	
VR50	50 L	675	40	25	25	
VRB5*	5 L	350	25	25	25	25
VRB10*	10 L	425	25	25	25	25
VRB20*	20 L	500	25	25	25	25
VRB50	50 L	675	40	25	25	25

ADDITION VESSELS



These vessels are provided with a short bottom outlet. These should be supported on a vessel holder/ holding ring.

Cat. Ref.	Nominal Capacity	L	DN	DN1
VA5	5 L	375	50	25
VA10	10 L	450	80	25
VA20	20 L	525	100	25
VA50	50 L	715	100	40
VA50A	50 L	715	150	40
VA100	100 L	875	150	40
VA100A	100 L	875	225	40
VA200	200 L	1125	225	40
VA200A	200 L	1125	300	40
VA300	300 L	1235	300	50
VA300A	300 L	1235	400	50
VA500	500 L	1375	450	50

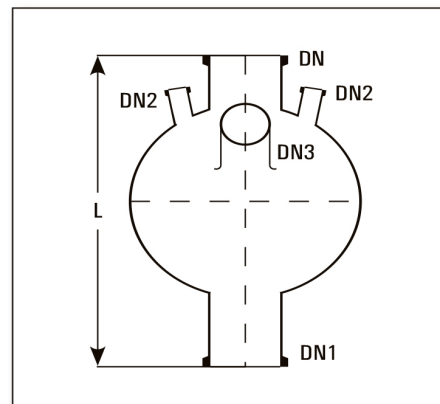
* marked items are available fast.

VESSELS

SPHERICAL VESSELS WITH WIDE BOTTOM OUTLET

These vessels are generally used to fit immersion exchangers in the bottom. Special heating mantle or bath should be used if used with.

Cat. Ref.	Nominal Capacity	L	DN	DN1	DN2	DN3
VSR50	50 L	790	100	150	40	100
VSR50A	50 L	790	150	150	40	100
VSR100	100 L	900	150	150	40	100
VSR100A	100 L	900	225	150	40	100
VSR200	200 L	1150	225	150	40	100
VSR200A	200 L	1150	300	150	40	100
VSE50	50 L	840	100	100	40	100
VSE50A	50 L	840	150	150	40	100
VSE100	100 L	950	150	150	40	100
VSE100A	100 L	950	225	225	40	100
VSE200	200 L	1200	225	225	40	100
VSE200A	200 L	1200	300	300	40	100



VESSELS WITH BOTTOM OUTLET VALVE SEAT

To fit a bottom outlet valve (BAL type) all spherical and cylindrical vessels can be supplied with valve seat in bottom outlet. For this, Add a suffix "/B" to the catalogue reference of a vessel, for e.g. 'VSL50' should be mentioned as 'VSL50/B'.

Notes on use of Spherical vessels.

- Generally, the centre nozzle, referred as DN in all types of vessels, is used for either stirrer fixing or if stirrer is not fixed, for vapour outlet.
- The bottom outlet, referred as DN1 in all types is used for drain. However, in type VSR & VSE, it is also used for fixing immersion heat exchanger.
- The small side nozzles, referred as DN2 in all types, are used
 - to fix thermometer pocket or,
 - to fix dip pipe for liquid inlet or,
 - to fix sparger for gas purging or,
 - to fix vacuum control or vent valve or,
 - for solid addition.
- The bigger side nozzle, referred as DN3, is used for vapour outlet where stirrer is fixed on centre neck. It can also be used for cleaning in case centre neck is used for vapour outlet.
- Vessels having long bottom outlet, viz VSM, VSPL, VSL, VS etc, can be supported in a heating mantle or heating bath. However, vessels having short bottom outlet, viz VSD, VR, VA etc. are to be supported on a vessel holder only. In case of vessels upto 20L size, vessel holding rings can be used instead of vessel holder.

