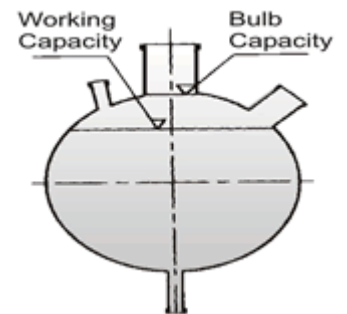


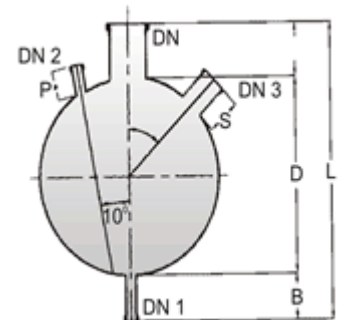
Industrial Glass - Vessels - Spherical Vessels

SPHERICAL VESSELS - General Data.

Nominal Capacity (Ltrs.)	Bulb Cap. (Ltrs.)	Working Cap. (Ltrs.)	Maximum Pressure (Bar)
5	5	4	1
10	10	9	0.8
20	21	20	0.7
50	62	58	0.5
100	118	111	0.4
200	212	200	0.3
300	300	300	0.2

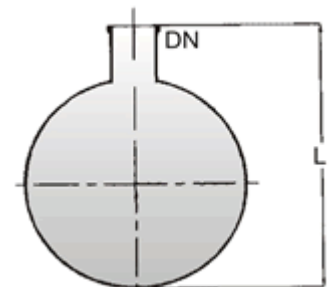


Nominal Capacity (Ltrs.)	L	D	DN	T	DN1	B	DN2	P	DN3	S
5	425	223	50	85	25	125	25	50	40	75
10	500	285	80	100	25	125	25	50	40	75
20	575	350	100	100	25	125	25	50	40	75
50	800	490	150	150	40	200	40	75	100	100
100	900	600	225	150	40	200	40	75	100	100
200	1100	750	300	250	40	200	40	75	100	100
300	1175	860	400	250	50	175	50	75	100	100



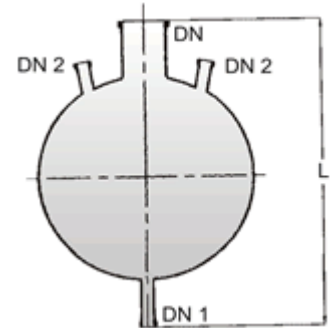
SINGLE NECK SPHERICAL VESSEL

Cat.Ref.	Nominal Capacity	L	DN
VSA5	5 L	300	50
VSA10	10 L	375	80
VSA20	20 L	450	100
VSA50	50 L	600	150
VSA100	100 L	700	225
VSA200	200 L	900	300
VSA300	300 L	1000	400



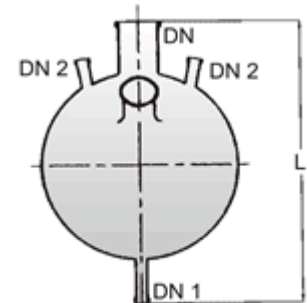
THREE NECK BOTTOM OUTLET SPHERICAL VESSELS

Cat. Ref.	Nominal Capacity	L	DN	DN1	DN2
VSM5	5 L	450	50	25	25
VSM10	10 L	500	80	25	25
VSM20	20 L	575	100	25	25
VSM50	50 L	800	150	40	40
VSM100	100 L	900	225	40	40
VSM200	200 L	1100	300	40	40
VSM300	300 L	1175	400	50	50



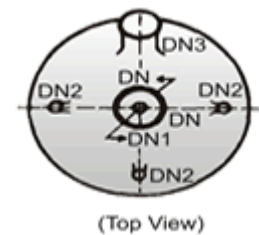
FOUR NECK BOTTOM OUTLET SPHERICAL VESSELS

Cat. Ref.	Nominal Capacity	L	DN	DN1	DN2	DN3
VSPL5	5 L	425	50	25	25	40
VSPL10	10 L	500	80	25	25	40
VSPL20	20 L	575	100	25	25	40
VSPL50	50 L	800	150	40	40	100
VSPL100	100 L	900	225	40	40	100
VSPL200	200 L	1100	300	40	40	100
VSPL300	300 L	1175	400	50	50	100



FIVE NECK BOTTOM OUTLET SPHERICAL VESSEL

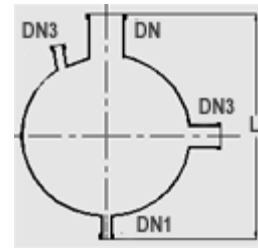
Cat. Ref.	Nominal Capacity	L	DN	DN1	DN2	DN3
VSL5	5 L	425	50	25	25	40
VSL10	10 L	500	80	25	25	40
VSL20	20 L	575	100	25	25	40
VSL50	50 L	800	150	40	40	100
VSL100*	100 L	900	225	40	40	100
VSL200*	200 L	1100	300	40	40	100
VSL300	300 L	1175	400	50	50	100



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.

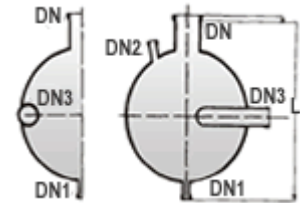
Cat. Ref.	Nominal Capacity	L	DN	DN1	DN2	DN3
VSD5	5 L	425	50	25	25	50
VSD10	10 L	500	80	25	25	50
VSD20	20 L	575	100	25	25	50
VSD50	50 L	800	150	40	40	80
VSD100	100 L	900	225	40	40	80
VSD200	200 L	1100	300	40	40	150
VSD300	300 L	1175	400	50	50	150



SPHERICAL CYCLONES

Cyclones can be used for the separation of droplets and solids from gases and vapours. Cyclones are to be supported on a vessel holder. A dip pipe should be used on the top neck.

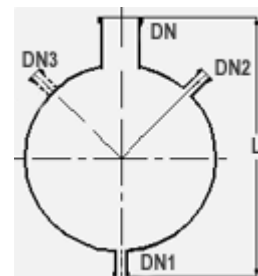
Cat. Ref.	Nominal Capacity	L	DN	DN1	DN2	DN3
VSCY5	5 L	425	50	25	25	40
VSCY10	10 L	500	80	25	25	40
VSCY20	20 L	575	100	25	25	50
VSCY50	50 L	800	150	40	40	50



SPHERICAL RECEIVERS

Receivers are provided with builtin drip pipe. These are to be supported on a vessel holding ring.

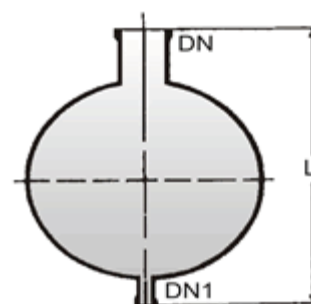
Cat. Ref.	Nominal Capacity	L	DN	DN1	DN2 (10°)	DN3 (10°)
VR5*	5 L	350	25	25	25	
VR10*	10 L	425	25	25	25	
VR20*	20 L	500	25	25	25	
VRB5	5 L	350	25	25	25	25
VRB10	10 L	425	25	25	25	25
VRB20	20 L	500	25	25	25	25



ADDITION VESSELS

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

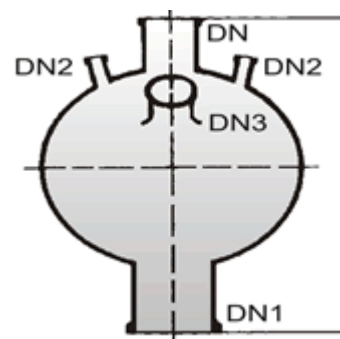
Cat. Ref.	Nominal Capacity	L	DN	DN1 va5
5L	375	360	50	
VA10*	10 L	435	80	25
VA20	20 L	510	100	25
VA50	50 L	675	150	40
VA100	100 L	775	225	40
VA200	200 L	975	300	40
VA300	300 L	1075	400	50



SPHERICAL VESSELS WITH WIDE BOTTOM OUTLET

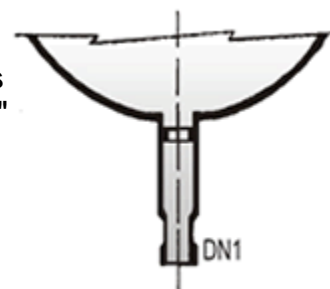
These vessels are generally used to fit immersion exchangers in the bottom. Special heating mantle or bath should be used if used with.

Cat. Ref.	Nominal Capacity	L	DN	DN1	DN2	DN3
VSR50	50 L	750	150	150	40	100
VSR100	100 L	850	225	150	40	100
VSR200	200 L	1050	300	150	40	100
VSE50	50 L	800	150	225	40	100
VS E100	100 L	900	225	225	40	100
VSE200	200 L	1100	300	225	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 :

1. 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.
2. 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.
3. The small side nozzles, referred as DN2 in all types, are used

- (a) to fix thermometer pocket or
- (b) to fix dip pipe for liquid inlet or,
- (c) to fix sparger for gas purging or,
- (d) to fix vacuum control or vent valve or,
- (e) for solid addition.

4. 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 etc in case centre neck is used for vapour outlet.

5. Vessels having long bottom outlet, viz VSM, VSPL, VSL, VS etc, can be supported in a heating mantle of heating bath. However, vessels having short bottom outlet, viz VSD, VSCY, 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.

* marked items are available fast.