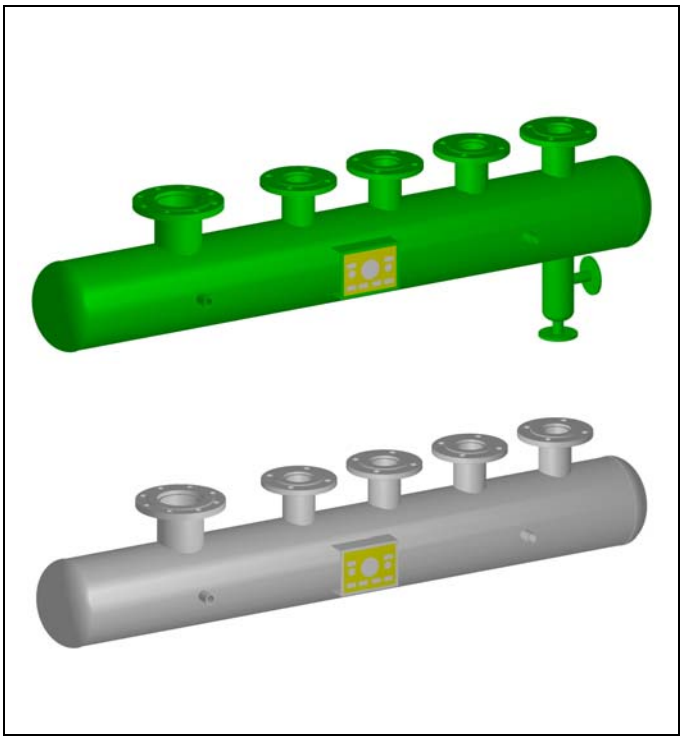
MANIFOLDS UNIT CDVS Series

GREEN line

CD/E	
03	2018



Series CDVS

DESCRIPTION

The CDVS Series distribution manifolds are used in thermal power stations for the distribution of fluids and vapors to the lines of use and for the connection of the lines coming from the return pumps.

They are designed with calculation code EN 13445 Part III and PED compliant 2014/68/UE with different design pressures.

They are built with the following materials:
RAL 6010 painted carbon steel
AISI 304 stainless steel
AISI 316 stainless steel

EN 1092-1 form "A" or ANSI B16.5 150 RF - 300 RF can be flanged with Rp ISO 7 (G.F.) or NPT service sleeves.

The CDV steam version is designed with the condensate collection well, while the CDS fluid versions are designed without a well.

Threaded and flanged connections according to design pressure

Lengths and positioning of configurable connections.

DESIGN PRESSURES

PIPES form DN 50 to DN 500	
Fluids Group 2 Table 9 *Water and Liquidsi*	***Fluids Goup 2 Table 7*** *Steam / Superheated water and Gas*
12 bar @ 110 °C 4/3 SEP DN 50 – DN 400 **12 bar @ 110 °C CAT. I° Module A DN 450 – DN 500**	**12 bar @ 191.7 °C 4/3 SEP DN 50 – DN 80** **12 bar @ 191.7 °C CAT. I° Module A DN 100 – DN 250**

VESSELS Ø 219,1 – Ø 273,4 – Ø 323,9 – Ø 406,4 – Ø 457,2 – Ø 508			
Fluids Group 2 Table 2 *Steam / Superheated water and Gas* ***Module B+F***			
12 bar @ 191.7 °C		***20 bar @ 215 °C***	
II°	**from 17 to 83 liters**	**II°**	**from 11 to 50 liters**
III°	**from 84 to 250 liters**	**III°**	**from 51 to 150 liters**
IV°	**➢ 250 liters**	**IV°**	**➢ 150 liters**
Fluids Group 1 Table 3 *Diathermic Oil* ***Category I Module A***			
10 bar @ 350 °C			

CONNECTIONS *on request* **ANSI B16.5 150 RF - 300 RF and NPT service sleeves.**		
Screwed Rp ISO 7 ≤ Ø 2”	Flanged EN 1092-1 PN16 Form “A”	Flanged EN 1092-1 PN 40 Form “A”

SIZING

For a quick selection of the diameter use the following formula

$$D\,(mm) = \sqrt{\frac{\text{Sum of the surfaces of the outlet pipes } (mm^2) + 50\%}{0.785}}$$

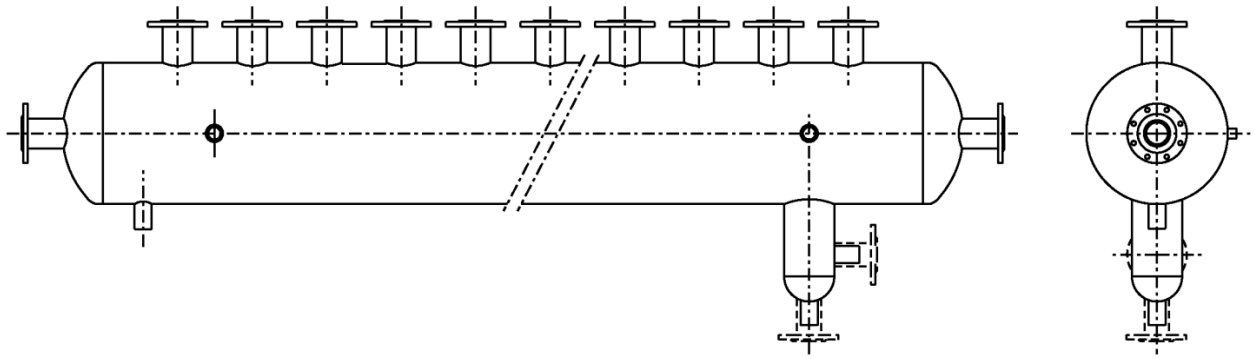
Example :

Square root of
2 output connections DN 50 ($r^2 \times \pi$) + 50% x 2
4 output connections DN 65 ($r^2 \times \pi$) + 50% x 2
n ° 1 output connections DN 100 ($r^2 \times \pi$) + 50%
All divided 0.785
D = mm 218 mm so I will choose a diameter of 219 mm

MANUFACTURING CONFIGURATION

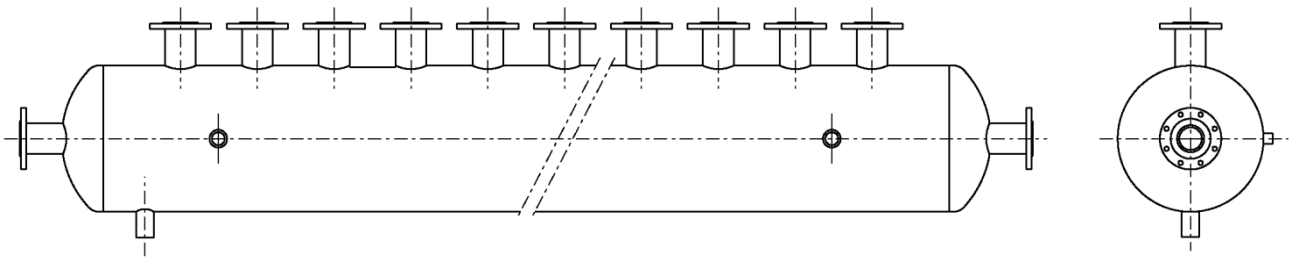
Type CDV

Steam version with condensation well



Type CDS

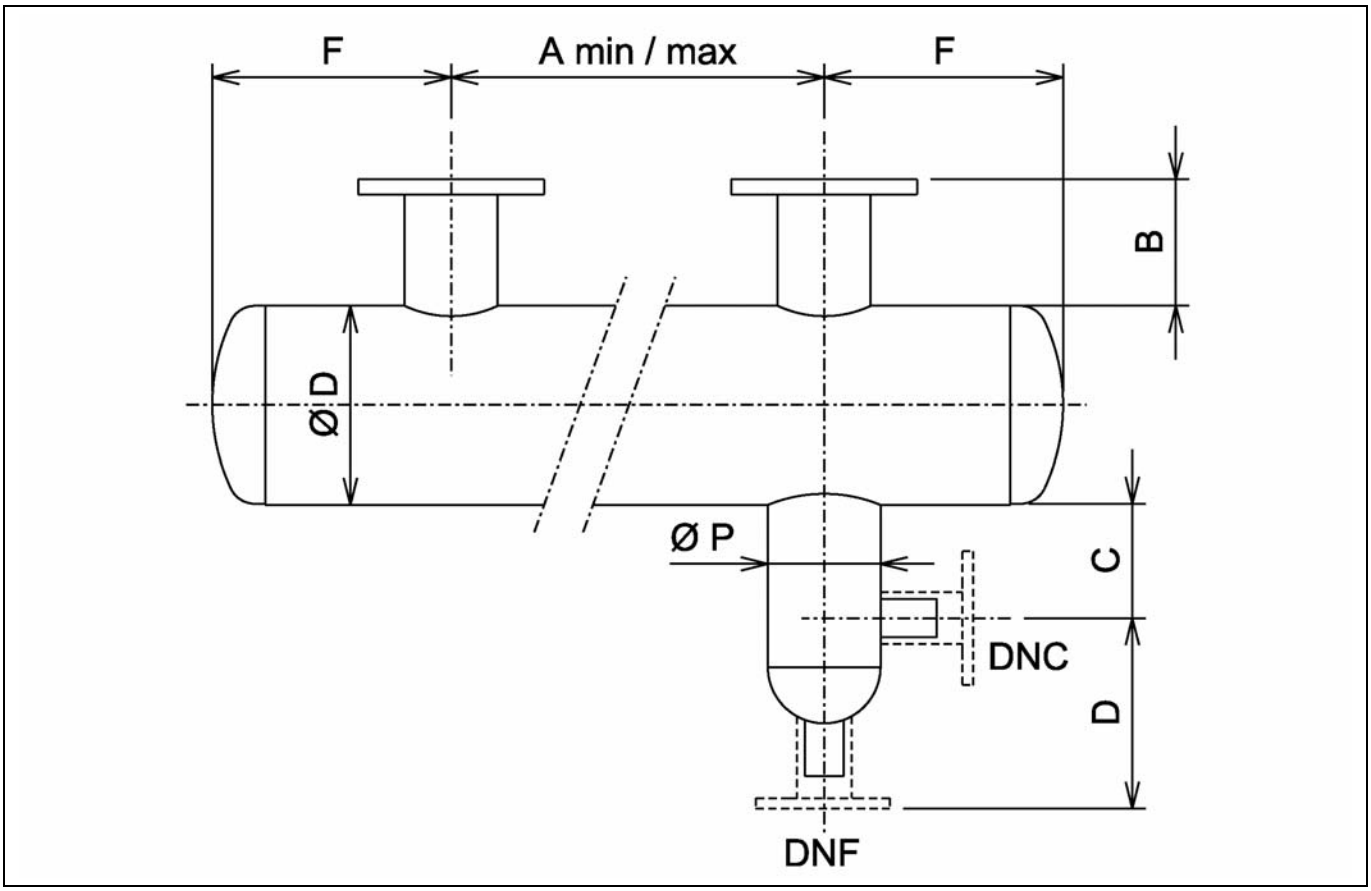
Version for liquids without well



The manifolds can be configured according to the customer's request, can have the number of desired connections with limitation of the connection diameter according to the main diameter (see table)

They can have connections in the upper part, lower and also on the bottoms.

CONNECTIONS AND DISTANCES ACCORDING TO DIAMETERS - CDV VERSION with well



TIPO											
CDC	**CDB**	**CDA**	**CD0**	**CD1**	**CD2**	**CD3**	**CD4**	**CD5**	**CD7**	**CD8**	**CD9**
Ø D											
60,3	76,3	88,9	114,3	139,7	168,3	219,1	273,4	323,9	406,4	457,2	508

B			
There are 4 nozzle heights that can also be positioned on the bottoms			
160	200	250	300

F											
160	180	190	200	210	220	242	269	315	345	345	375

MAX APPLICABLE NOZZLE											
32	40	50	65	80	100	125	150	200	250	300	350

Ø P							
42,2	48,3	60,3	73,02	88,9	141,3	168,3	219,1

C
200

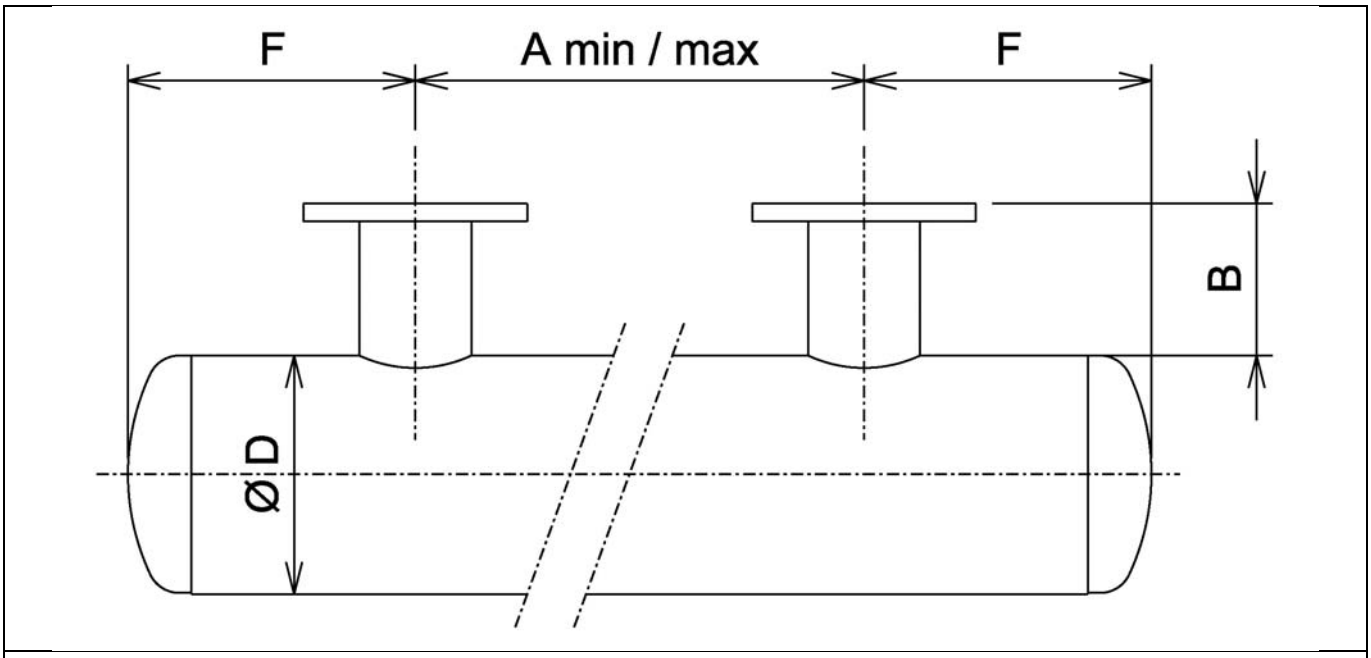
D						
230	236	236	220	220	232	232

DNC – DNF ALTERNATIVE (note 1)		
Ø 3/4"	Ø 1”	Ø 1.1/2”
DN 20 PN 16/40	DN 25 PN 16/40	DN 40 PN 40

Note 1 - Smaller connections can also be mounted

DIMENSIONS A min (m) e Max (M)															
	15	**20**	**25**	**32**	**40**	**50**	**65**	**80**	**100**	**125**	**150**	**200**	**250**	**300**	**350**
m	**175**	**175**	**175**	**220**	**220**	**220**	**290**	**290**	**340**	**410**	**460**	**570**	**670**	**720**	**750**
M	**180**	**200**	**200**	**240**	**260**	**300**	**340**	**380**	**430**	**460**	**500**	**620**	**680**	**750**	**780**

CONNECTIONS AND DISTANCES ACCORDING TO DIAMETERS - CDS VERSION without well



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Specifications given are only indicative and not binding for the manifacturer who reserve the right to carry-out any modifications deemed necessary without prior notice. **All data sheets by CONFLOW SpA, are available last update on our internet web site www.conflow.it.**