



DV

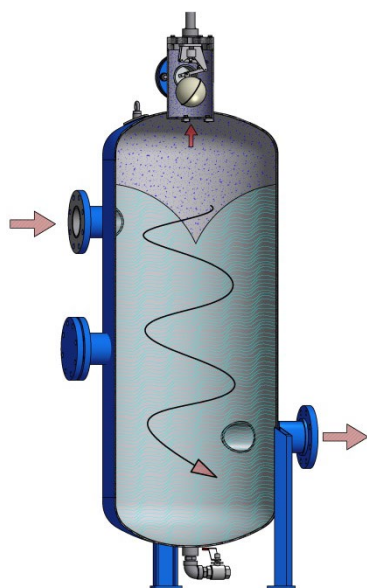
Centrifugal gas separator

Data sheet: DS/FD/0001/EN Ed. 01-2021

The ISOIL DV centrifugal gas separator can be installed in measuring systems (both for petrol and aviation but also for other products) and it is designed to eliminate air/gas in the fluid in order to grant high accuracy in measurement of the downstream pd meter.

Working principle

The DV gas separator is designed with input and output tangent to the body, so that the fluid is set into rotary motion. This motion together with the long-lasting permanence inside the equipment allow for efficient separation of air/gas from the fluid.



If there is no air/gas, the level of product inside the DV centrifugal gas separator makes the sphere of the air vent valve float thus keeping the air vent valve closed.

If air is flowing through the strainer air separator, gas separates from the product and moves to the upper part thus making the level of fluid decrease.

The sphere is no longer supported by the fluid and when it goes down the air vent valve opens. In this way gas is discharged.

Moreover, should there be foreign particles in the product, these are dropped on the bottom of the centrifugal air separator and they can be removed through the lower drain plug.

Approval

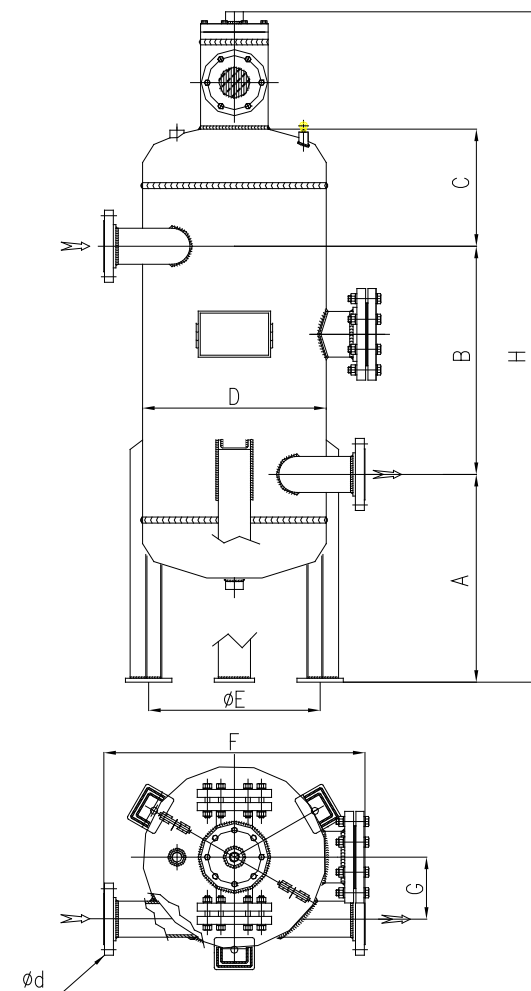
The ISOIL DV series is in compliance with OIML R117 for use in MID measuring systems.

The parts under pressure are designed in accordance with PED Directive for pressure vessel. The DV centrifugal gas separator can be installed in ATEX zone 1.

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Dimensions

Indicative dimensions in mm



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VERSION	Ø	A	B	C	D	E	F	G	H	Working Volume (litres)	Total Volume (litres)	Flowrate (l/min)
DV80-01	3"	450	570	300	460	466	650	155	1620	88	170	1300
DV100-01	4"	500	730	320	590	596	750	195	1850	160	335	2000
DV100-02	4"	550	780	400	635	645	750	195	2030	200	440	2500
DV100-03	4"	600	890	440	720	726	850	250	2230	290	620	3000
DV150-01	6"	600	890	440	720	726	850	250	2230	290	620	3600
DV150-02	6"	800	1200	600	980	996	1100	350	2900	730	1560	5000
DV200-01	8"	800	1200	600	980	996	1100	350	2900	730	1560	7500
DV200-02	8"	900	1565	700	1270	1276	1400	450	3550	1600	3250	10000
DV250-01	10"	900	1565	700	1270	1276	1400	450	3550	1600	3250	14000
DV250-02	10"	1000	1890	800	1530	1536	1800	500	4190	2800	5700	16000
DV300-01	12"	1000	1890	800	1530	1536	1800	500	4190	2800	5700	20000
DV350-01	14"	1100	2030	900	1650	1656	1900	550	4530	3500	7100	22000
DV400-01	16"	1100	2125	950	1720	1726	2000	550	4675	4000	8100	25000

Configurations

The below drawings show inlet/outlet flange position.

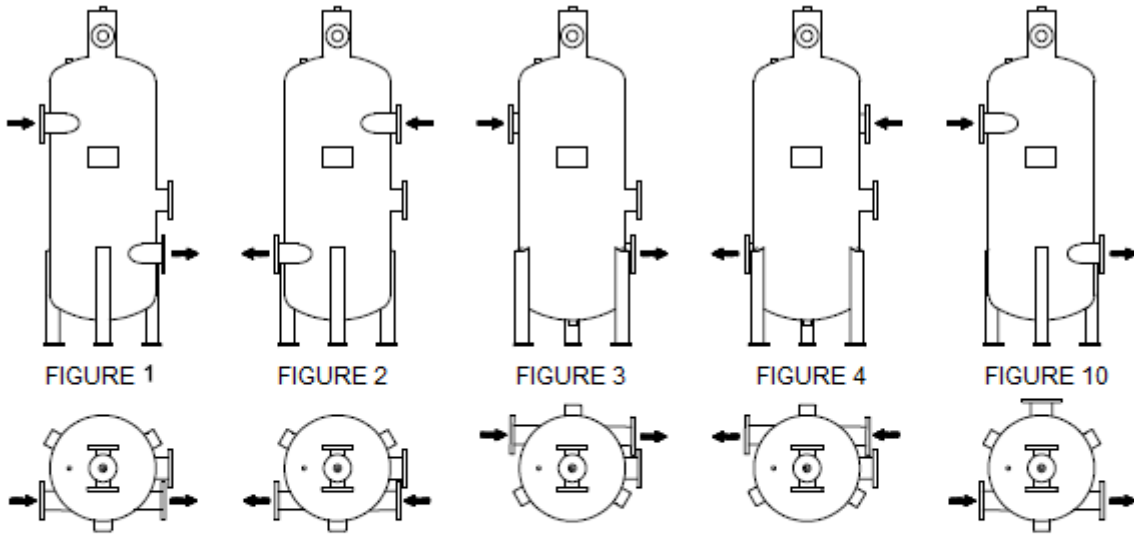


FIGURE 1

FIGURE 2

FIGURE 3

FIGURE 4

FIGURE 10

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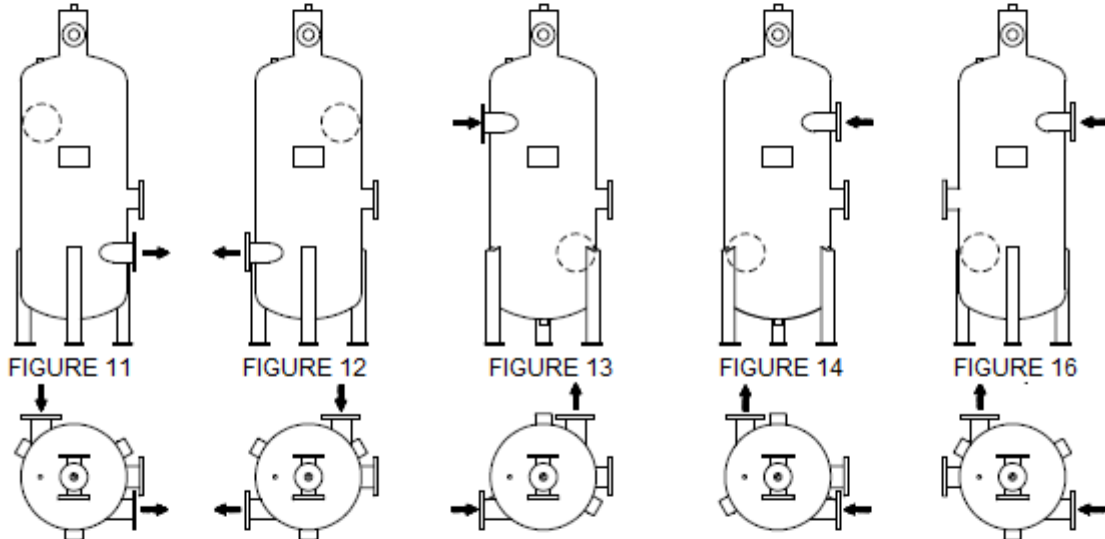


FIGURE 11

FIGURE 12

FIGURE 13

FIGURE 14

FIGURE 16

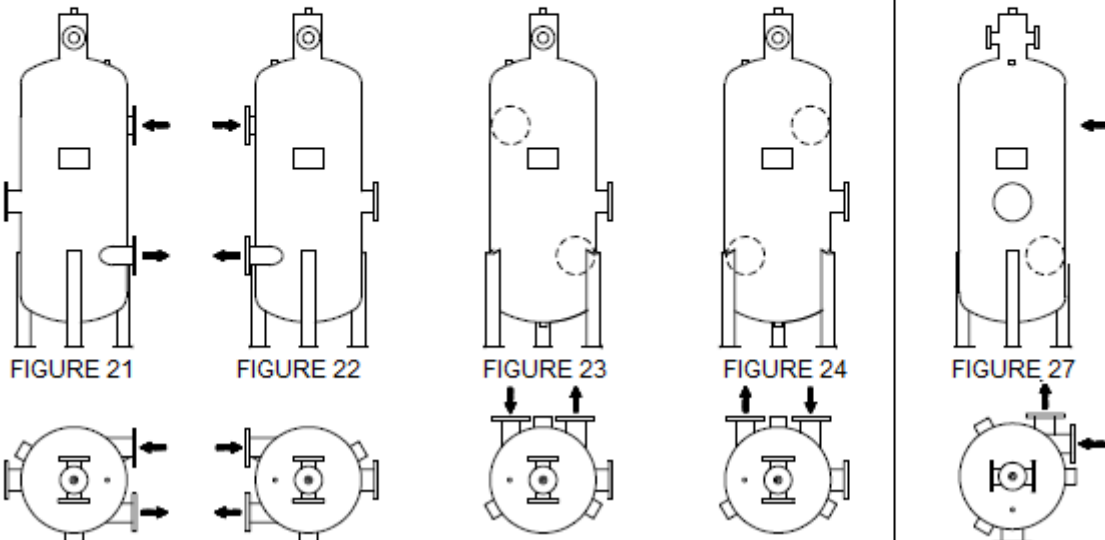


FIGURE 21

FIGURE 22

FIGURE 23

FIGURE 24

FIGURE 27

Technical data

Maximum working pressure:	1000 kPa
Extended pressure range (upon request):	Up to 3200 kPa
Minimum working pressure:	200 kPa
Standard working temperature:	From -10°C to +50 °C
Extended temperature range (upon request):	From -30°C to +100°C

Construction

Flanges:	ANSI 150 RF (other flanges upon request)
Strainer body:	Carbon steel (stainless steel upon request)
Air vent valve:	Aluminum body with corrosion prevention treatment Membrane in FKM Stainless steel sphere and levers

Number of air vent valves

DV80-01, DV100-01, DV100-02	1
DV100-03, DV150, DV200-01	2
DV200-02, DV250-01	3
DV250-02, DV300-01, DV350-01, DV400-01	4