



## LowViscosity Housing- Coalescer Diesel LVH-CD

### Description

The LowViscosity Housing Coalescer LVH-C is mainly used for the dewatering of diesel. It is especially suitable for applications with large amounts of water that need to be removed in just a single pass.

The Optimicron®-Coalescer- and separator elements ensure that a high volume of water will be separated within just a single pass.

Available in various sizes, the housings can be optimally integrated into new or existing systems.

The filters are designed according to the AD2000 German rules and regulations for pressure vessels or according to ASME.

### Applications

- Diesel dewatering of large flow rates.

### The advantages to you

- Excellent filtration performance in a single pass
- Low pressure loss due to innovative element technology
- Easy to service thanks to intelligent element design
- Easy to adapt to filter housings for the removal of fine particles in diesel.

### Technical specifications

General data			
Filter Size	120	140	240 ... 1940
Material housing	Aluminum	Aluminum	Stainless steel or carbon steel
Maximum operating pressure	10 bar	6 bar	10 bar
INLET connector	G 1 ½"	G 2"	DN 50 to 300
OUTLET connector	G 1 ½"	G 2"	DN 50 to 300
Permitted operating temperature range	0 to 70°C	0 ... 70 °C	0 to 70°C
Permissible ambient temperature range	0 to 50°C	0 ... 50 °C	0 to 50°C
Material of sealings	FKM (FPM, Viton®)	FKM (FPM, Viton®)	FKM (FPM, Viton®)
Filter elements			
Filter elements used	Optimicron® Diesel	Optimicron® Diesel	Optimicron® Diesel

### Filter calculation

Filter Size	Maximum flow rate	Orientation	Weight when empty (kg)	Housing volume (Liter)
LVH-CD-1 20	60 l/min	Vertical	≈ 7	≈ 6
LVH-CD-1 40	270 l/min	Vertical	≈ 77	≈ 27
LVH-CD-2 40	500 l/min	Vertical	≈ 220	≈ 205
LVH-CD-4 40	800 l/min	Vertical	≈ 500	≈ 470
LVH-CD-6 40	1200 l/min	Vertical	≈ 580	≈ 670
LVH-CD-9 40	1800 l/min	Vertical	≈ 780	≈ 1225
LVH-CD-12 40	2400 l/min	Horizontal		
LVH-CD-19 40	3600 l/min	Horizontal		

### Preferred models

Size	Part no.	Model code
LVH-CD-1 20	4032257	LVH-CD-120-NV-AF-FE
LVH-CD-1 40	4032261	LVH-CD-140-NV-AG-FE
LVH-CD-2 40	3975897	LVH-CD-240-EV-BT-FD32
LVH-CD-4 40	3915147	LVH-CD-440-EV-BV-FD32
LVH-CD-6 40	3931865	LVH-CD-640-EV-BW-FD32
LVH-CD-9 40	3935521	LVH-CD-940-EV-BW-FD32

## Model code

LVH - C D - 4 40 - E V - B V - F D32 /-ZA

### Type

LVH = LowViscosity Housing

### Function

C = Coalescence

### Operating fluid

D = Diesel

### Size

- 1 = 1 Coalescing element / separation element
- 2 = 2 Coalescing elements + 1 separation elements
- 4 = 4 Coalescing elements + 3 separation elements
- 6 = 6 Coalescing elements + 4 separation elements
- 9 = 9 Coalescing elements + 6 separation elements
- 12 = 12 Coalescing elements + 9 separation elements
- 19 = 19 Coalescing elements + 15 separation elements

### Filter element length

20 = 20"

40 = 40"

### Housing material

A = Aluminum

C = Carbon steel

E = Stainless steel

### Version

V = vertical

H = horizontal

### Pressure range

A = 6 bar

B = 10 bar

### Hydraulic connection

	120	140	240	440	640	940	1240	1940
F = G 1 1/2"	X	-	-	-	-	-	-	-
G" = G 2"	-	X	-	-	-	-	-	-
L = DIN DN 50	-	-	X	-	-	-	-	-
T = DIN DN 100	-	-	X	X	-	-	-	-
V = DIN DN 150	-	-	-	X	X	X	-	-
W = DIN DN 200	-	-	-	-	X	X	X	X
Y = DIN DN 300	-	-	-	-	-	-	X	X

### Hydraulic connection (ASME)

	120	140	240	440	640	940	1240	1940
3 = 2"	-	-	X	-	-	-	-	-
4 = 3"	-	-	X	X	X	X	-	-
5 = 4"	-	-	-	X	X	X	X	X
8 = 5"	-	-	-	-	X	X	X	X

### Material of sealings

F = FKM (FPM, Viton®)

### Clogging indicator for housing material A and C

- C = Differential pressure indicator, electrical (VM2C.0)
- D3 = Differential pressure indicator, visual/electrical (VM2D.0/-220)
- D4 = Differential pressure indicator, visual/electrical (VM2D.0/-L24)
- D24 = Differential pressure indicator, visual/electrical (VL2GW.0/-V-113)
- D43 = Differential pressure gauge, visual
- D44 = Differential pressure indicator, visual/electrical
- Z = without Clogging Indicator

### Clogging indicator for housing material E

- C12 = Differential pressure indicator, electrical
- D17 = Differential pressure indicator, visual/electrical (230V)
- D18 = Differential pressure indicator, visual/electrical (24V)
- D32 = Differential pressure indicator, visual/electrical (PVL2GW.0/-V-113)
- D43 = Differential pressure gauge, visual
- D44 = Differential pressure indicator, visual/electrical
- Z = Without clogging indicator

### Supplementary details

- Z = Manufacturer certificate M to DIN 55350 Part 18  
Test certificate 3.1 to EN 10204 (material certificate)
- ZA = Manufacturer certificate M to DIN 55350 Part 18  
Test certificate 3.1 to DIN EN 10204 (material certificate)  
with calculation according ASME
- 150 = 150 lbs (flange pressure level, for ASME housing design)

## Scope of delivery

- LVH-CD (without filter elements)
- Installation and Maintenance Instructions

Filter elements must be ordered separately and installed before initial operation on site.

## Accessories for LVU-CD-240 ... LVU-CD-1940

Designation	Part no.:
Automatic Drain Kit, consist. of: - Level indicator - Electric control - Drain valve	xxxxxxx

## Coalescing element LVH-CD-120

Designation	Part no.:
N18ON-DCZ-CA63F *) on request	4032259

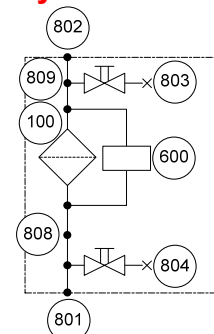
## Coalescing element LVH-CD-140

Designation	Part no.:
N40ON-DCZ-CA64F *) available on request	4032262

## Coalescing element/separation element LVH-CD-240 ... LVH-CD-1940

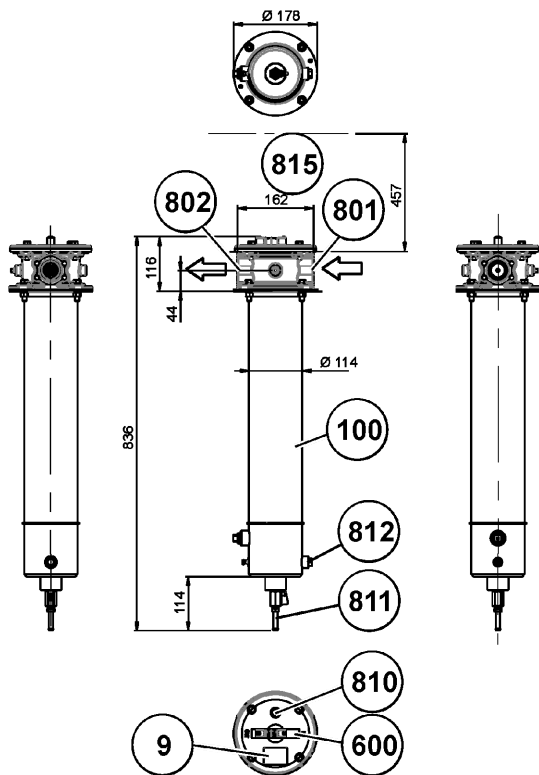
Designation	Part no.:
N32ON-DSZ-SA80F	3910259
N42ON-DCZ-CA60F *) available on request	3910257

## Hydraulic diagram



Item	Designation
100	Filter housing
600	Clogging indicator
801	Inlet (IN)
802	Outlet (OUT)
803	Drain, clean side (DRAIN)
804	Drain, contaminated side (DRAIN)
808	Measurement point (IN)
809	Measurement point (OUT)

## Dimensions LVH-CD-1 20

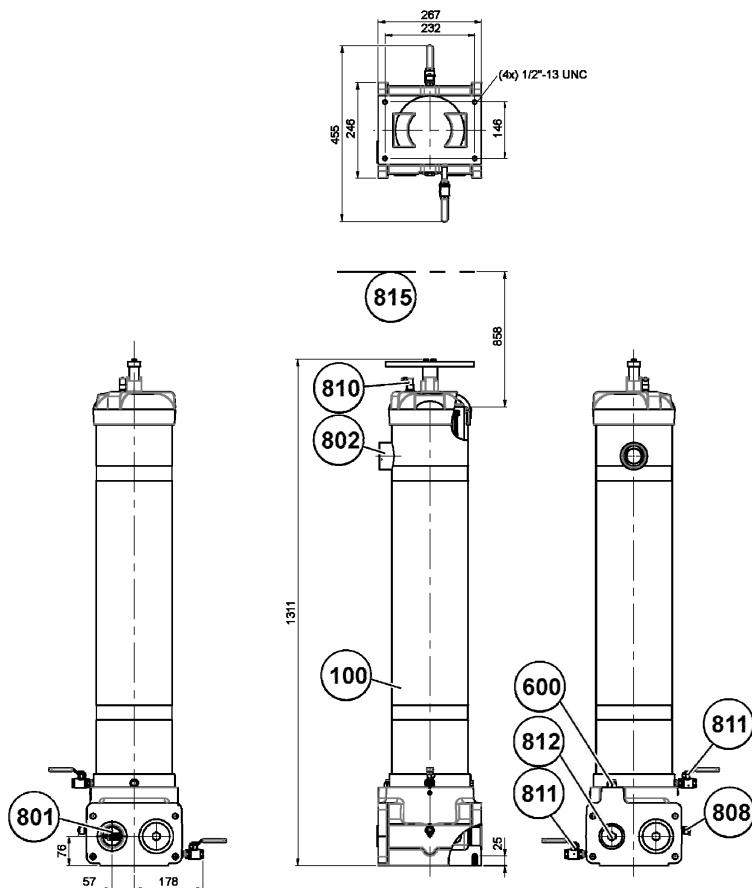


All dimensions in mm.

## Legend

Item	Designation
9	Type label
100	Filter housing
600	clogging indicator (optional)
801	Inlet (IN)
802	Outlet (OUT)
810	Air bleed
811	Outlet Water
812	Filter housing drain
815	Maintenance space for changing the filter elements

## Dimensions LVH-CD-1 40

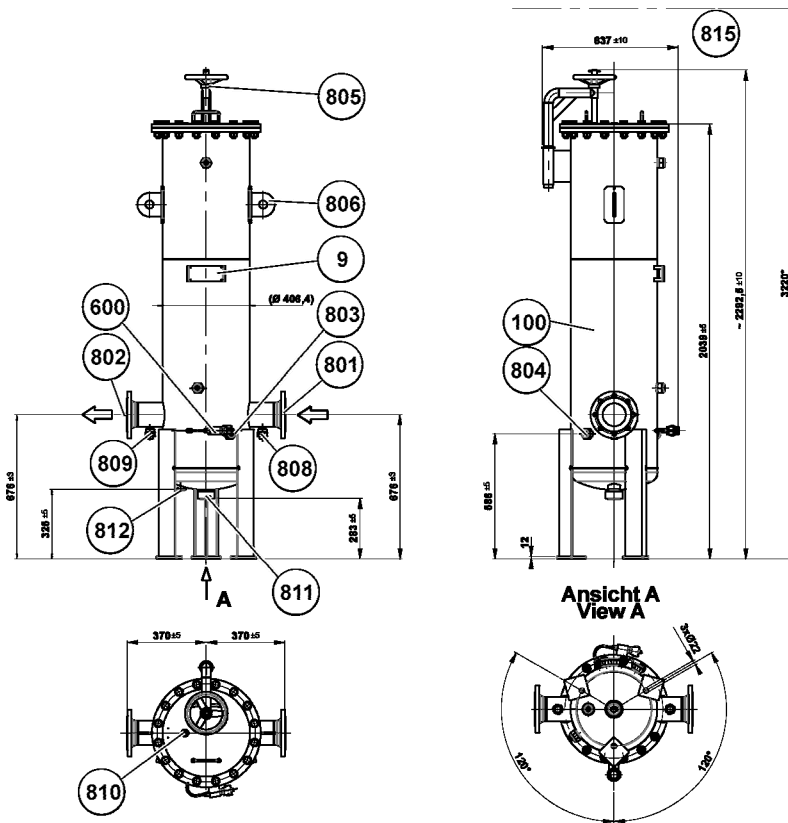


All dimensions in mm.

## Legend

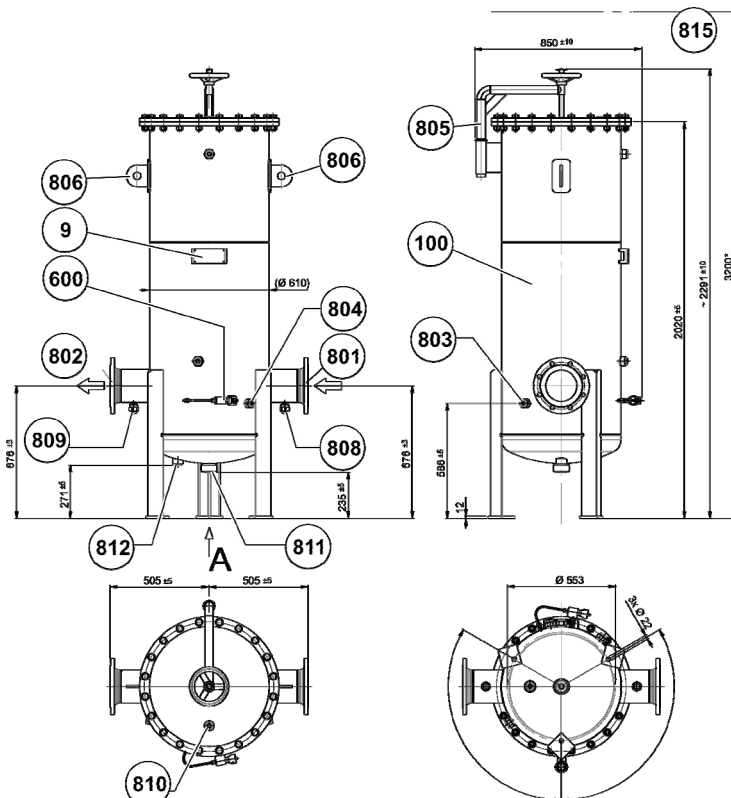
Item	Designation
9	Type label
100	Filter housing
600	clogging indicator (optional)
801	Inlet (IN)
802	Outlet (OUT)
808	Measurement point (IN)
810	Air bleed
811	Outlet Water
812	Filter housing drain
815	Maintenance space for changing the filter elements

## Dimensions LVH-CD-2 40



All dimensions in mm.

## Dimensions LVH-CD-4 40



All dimensions in mm.

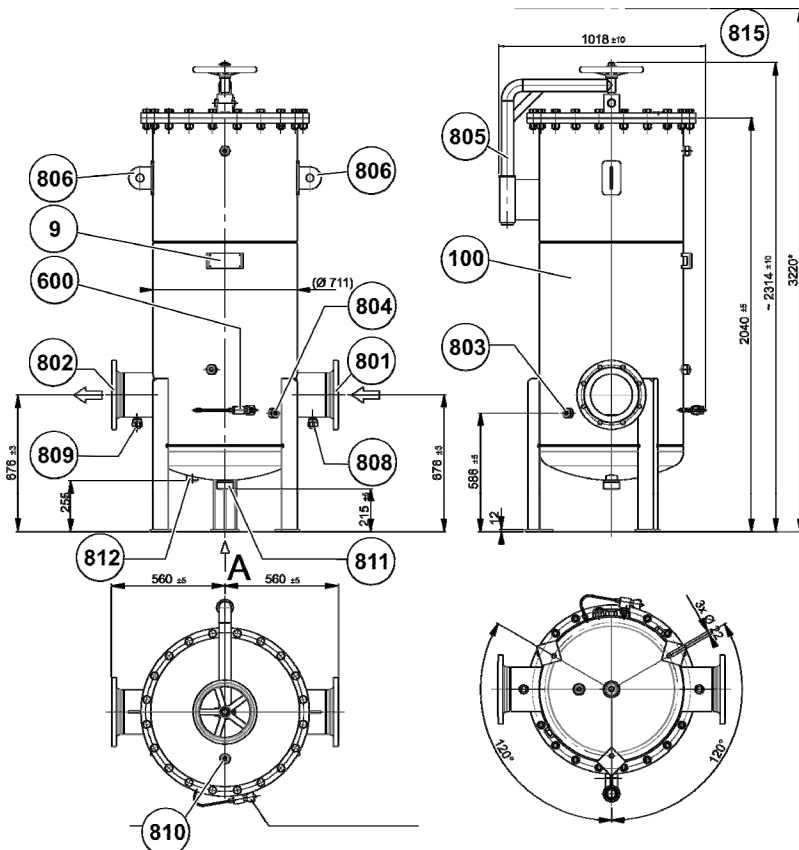
## Legend

Item	Designation
9	Type label
100	Filter housing
600	clogging indicator (optional)
801	Inlet (IN)
802	Outlet (OUT)
803	Drain, clean side (DRAIN)
804	Drain, contaminated side (DRAIN)
805	Cover lifting device
806	Eyelets for transportation / Lifting eyes
808	Measurement point (IN)
809	Measurement point (OUT)
810	Air bleed
811	Outlet Water
812	Drain Housing
815	Maintenance space for changing the filter elements

## Legend

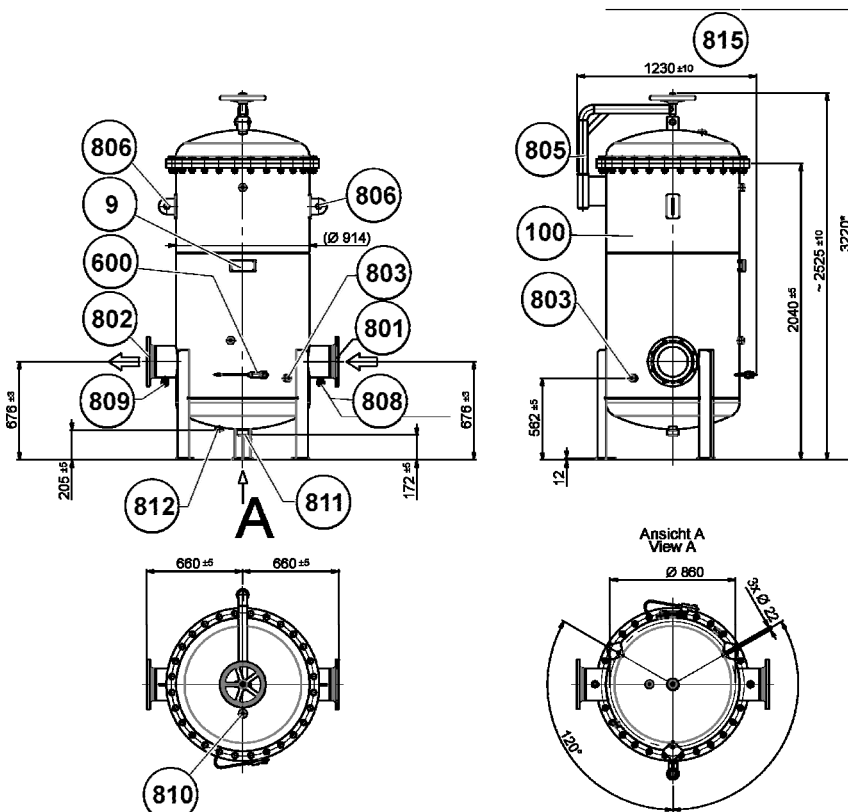
Item	Designation
9	Type label
100	Filter housing
600	Clogging indicator (optional)
801	Inlet (IN)
802	Outlet (OUT)
803	Drain, clean side (DRAIN)
804	Drain, contaminated side (DRAIN)
805	Cover lifting device
806	Eyelets for transportation / Lifting eyes
808	Measurement point (IN)
809	Measurement point (OUT)
810	Air bleed
811	Outlet Water
812	Drain Housing
815	Maintenance space for changing the filter elements

## Dimensions LVH-CD-6 40



All dimensions in mm.

## Dimensions LVH-CD-9 40



All dimensions in mm.

## Legend

Item	Designation
9	Type label
100	Filter housing
600	Clogging indicator (optional)
801	Inlet (IN)
802	Outlet (OUT)
803	Drain, clean side (DRAIN)
804	Drain, contaminated side (DRAIN)
805	Cover lifting device
806	Eyelets for transportation / Lifting eyes
808	Measurement point (IN)
809	Measurement point (OUT)
810	Air bleed
811	Outlet Water
812	Drain Housing
815	Maintenance space for changing the filter elements

## Legend

Item	Designation
9	Type label
100	Filter housing
600	Clogging indicator (optional)
801	Inlet (IN)
802	Outlet (OUT)
803	Drain, clean side (DRAIN)
804	Drain, contaminated side (DRAIN)
805	Cover lifting device
806	Eyelets for transportation/lifting eyes
808	Measurement point (IN)
809	Measurement point (OUT)
810	Air bleed
811	Outlet Water
812	Drain Housing
815	Maintenance space for changing the filter elements

**Note:**

The information in this brochure relates to the operating conditions and applications described.

In the event of deviating applications and/or operating conditions, please contact the respective HYDAC department concerned.

Subject to technical modifications.

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