



LowViscosity Housing-Coalescer Diesel LVH-CD

Description

The LowViscosity Housing Coalescer LVH-CD 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 in accordance with AD2000 regulations as standard. Configuration to ASME is possible.

Applications

- Diesel dewatering of large flow rates.

The advantages to you

- Excellent dewatering 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*
Connection inlet/outlet	G 1 1/2"	G 2"	DN 50 to 300
Maximum operating pressure	10 bar	6 bar	10 bar
Permitted temperature range	0 ... 60 °C	0 ... 60 °C	0 ... 60 °C
Material of sealings	FKM (FPM, Viton®)		
Water separation efficiency	>95 %		
Filter elements			
Filter elements used	Optimicron® Diesel	Optimicron® Diesel	Optimicron® Diesel

*external coating of carbon steel housing in accordance with ISO 12944 class C3

Housing design

Filter Size	Maximum flow rate	Orientation	Weight when empty (kg)	Housing volume (Liter)
LVH-CD-120	60 l/min	Vertical	≈ 7	≈ 6
LVH-CD-140	270 l/min	Vertical	≈ 77	≈ 27
LVH-CD-240	500 l/min	Vertical	≈ 240	≈ 200
		Horizontal	*	*
LVH-CD-440	800 l/min	Vertical	≈ 400**	≈ 470
		Horizontal	*	*
LVH-CD-640	1200 l/min	Vertical	≈ 560**	≈ 670
		Horizontal	*	*
LVH-CD-940	1800 l/min	Vertical	≈ 680	≈ 1190
		Horizontal	≈ 880	≈ 1225
LVH-CD-1240	2400 l/min	Horizontal	*	*
LVH-CD-1940	3600 l/min	Horizontal	*	*

* Available on request

** The housing made of material C is around 100 kg heavier than the housing in E (weight specifications in above-named table).

Preferred models (with shorter delivery time)

Size	Part no.	Model code
LVH-CD-120	4032257	LVH-CD-120-AV-BF-FD48
LVH-CD-140	4032261	LVH-CD-140-AV-AG-FB3
LVH-CD-240	3975897	LVH-CD-240-EV-BR-FA
LVH-CD-440	3915147	LVH-CD-440-EV-BV-FA
LVH-CD-640	3931865	LVH-CD-640-EV-BW-FA
LVH-CD-940	3935521	LVH-CD-940-EV-BW-FA
LVH-CD-940	4087642	LVH-CD-940-CH-BV-FA

Model code

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

Type _____
 LVH = LowViscosity Housing

Function _____
 C = Coalescing

Operating fluid _____
 D = Diesel

Size _____
 1 = 1 Coalescer element / Separator element
 2 = 2 Coalescer elements + 1 Separator element
 4 = 4 Coalescer elements + 3 Separator elements
 6 = 6 Coalescer elements + 4 Separator elements
 9 = 9 Coalescer elements + 6 Separator elements
 12 = 12 Coalescer elements + 9 Separator elements
 19 = 19 Coalescer elements + 15 Separator elements

Filter element length _____
 20 = 20" (only for size 1)
 40 = 40"

Housing material _____
 A = Aluminium (only for sizes 120 and 140)
 C = Carbon steel (only for sizes 240...1940)
 E = Stainless steel (only for sizes 240...1940)

Version _____
 V = Vertical (not sizes 1240 and 1940)
 H = Horizontal (not sizes 120 and 140)

Pressure range _____
 A = 6 bar (only size 140)
 B = 10 bar (all sizes, not 140)

Hydraulic connection _____

F = G1 1/2"
 G = G2"
 J = DIN DN50
 R = DIN DN 100
 V = DIN DN 150
 W = DIN DN 200
 Y = DIN DN 300
 ○ = Dimensions on request

	120	140	240	440	640	940	1240	1940
F	●	-	-	-	-	-	-	-
G	-	●	-	-	-	-	-	-
J	-	-	●	●	●	●	-	-
R	-	-	●	●	●	●	●	-
V	-	-	-	●	●	●	●	●
W	-	-	-	○	●	●	●	●
Y	-	-	-	-	○	○	○	●

Version with ANSI flanges *

4 = 3"
 5 = 4"
 7 = 6"
 8 = 8"
 9 = 10"

	120	140	240	440	640	940	1240	1940
4	-	-	●	●	●	●	●	-
5	-	-	●	●	●	●	●	●
7	-	-	-	●	●	●	●	●
8	-	-	-	○	●	●	●	●
9	-	-	-	-	○	○	○	●

* -150 must be entered under supplementary details

Material of sealings
 F = FKM (FPM, Viton®)

Clogging indicator for housing material A
Size 120
 A = No indicator, with holder G1/2" for differential pressure indicator 2.0 bar
 D48 = Differential pressure gauge, visual (VL 2.5 BF.0)
Size 140
 B3 = Differential pressure indicator, visual (B2420BMHFV)

Clogging indicator for housing material C and E
 A = No indicator, with holder G1/2" for differential pressure indicator 0.8 bar
 D43 = Differential pressure gauge, visual
 D44 = Differential pressure gauge, visual/electrical
 Z = Without clogging indicator

Supplementary details (only for sizes 240...1940)
 Z = Manufacturer certificate M according to DIN 55350 Part 18
 Test certificate 3.1 according to EN 10204 (material certificate)
 ZA = Manufacturer certificate M according to DIN 55350 Part 18 Test certificate 3.1
 to EN 10204 (material certificate) + calculation according to ASME
 150 = 150 lbs (flange pressure level, for ASME housing design)

Scope of delivery

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

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

Accessories for LVH-CD-120

Designation	Part no.:
Sight glass	6060303
Automatical Water Drain	4101239

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

Designation	Part no.:
Sight glass with 3.1 certificate	6199678
Automatical Water Drain	
1. LVH-CD-240/440	4265781
2. LVH-CD-640/940	4266307
3. LVH-CD-1240/1940	4266082

Coalescing element LVH-CD-120

Designation	Part no.:
N18ON-DCZ-CC63F	4032259

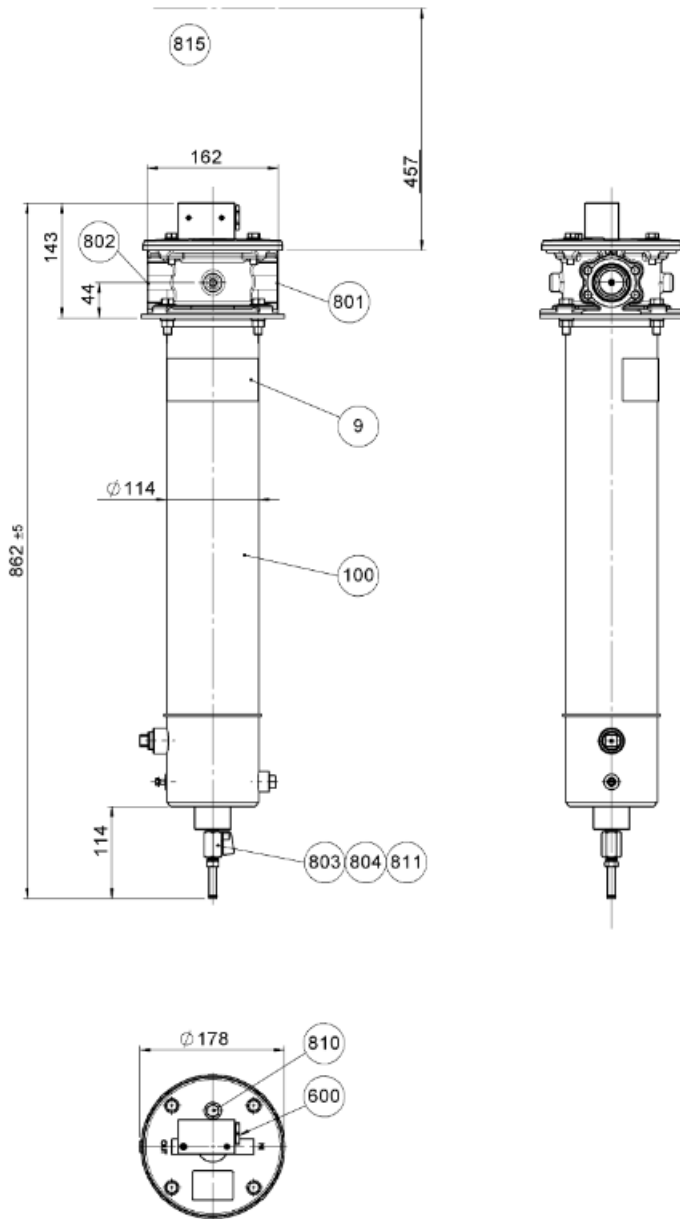
Coalescing element LVH-CD-140

Designation	Part no.:
N40ON-DCZ-CC64F	4032262

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

Designation	Part no.:
Separation Element N32ON-DSZ-SA80F	3910259
Coalescing Element N42ON-DCZ-CA60F	3910257

Dimensions LVH-CD-120

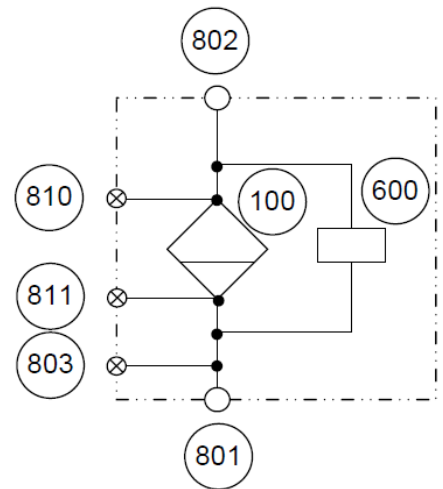


All dimensions in mm.

Legend

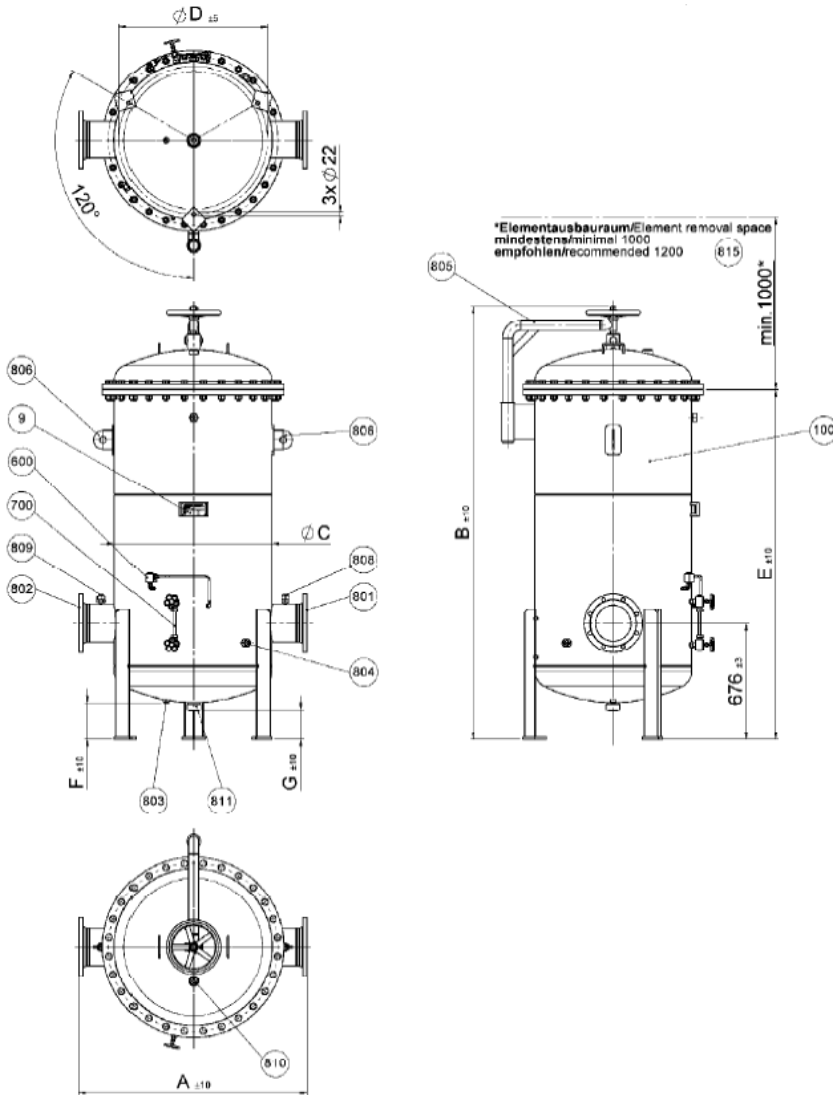
Item	Designation
9	Type label
100	Coalescing housing
600	Clogging indicator
801	Inlet (IN)
802	Outlet (OUT)
803	Water drain (DRAIN WATER)
804	Drain (DRAIN)
810	Bleeding (AIR BLEED)
811	Water drain (DRAIN WATER)
815	Maintenance space for changing the filter elements
818	Sight glass (optional)

Hydraulic diagram



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Dimensions LVH-CD-(2/4/6/9/12/19)40-xV-Bx-xx



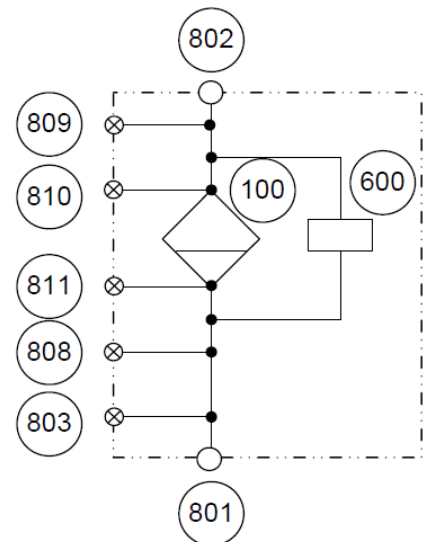
Maße (mm) vertikale Ausführung							
LVH-CD	A	B	C	D	E	F	G
240	740	2290	Ø406	Ø345	2020	325	285
440	1010	2290	Ø610	Ø555	2020	285	235
640	1120	2320	Ø711	Ø655	2040	260	215
940	1320	2525	Ø914	Ø860	2045	220	175

Caution: the dimensions for LVH-CD-240 and 440 in carbon steel may vary
 All dimensions in mm.
 Dimensions not valid for hydraulic connection defined with \odot in table on page 2.

Legend

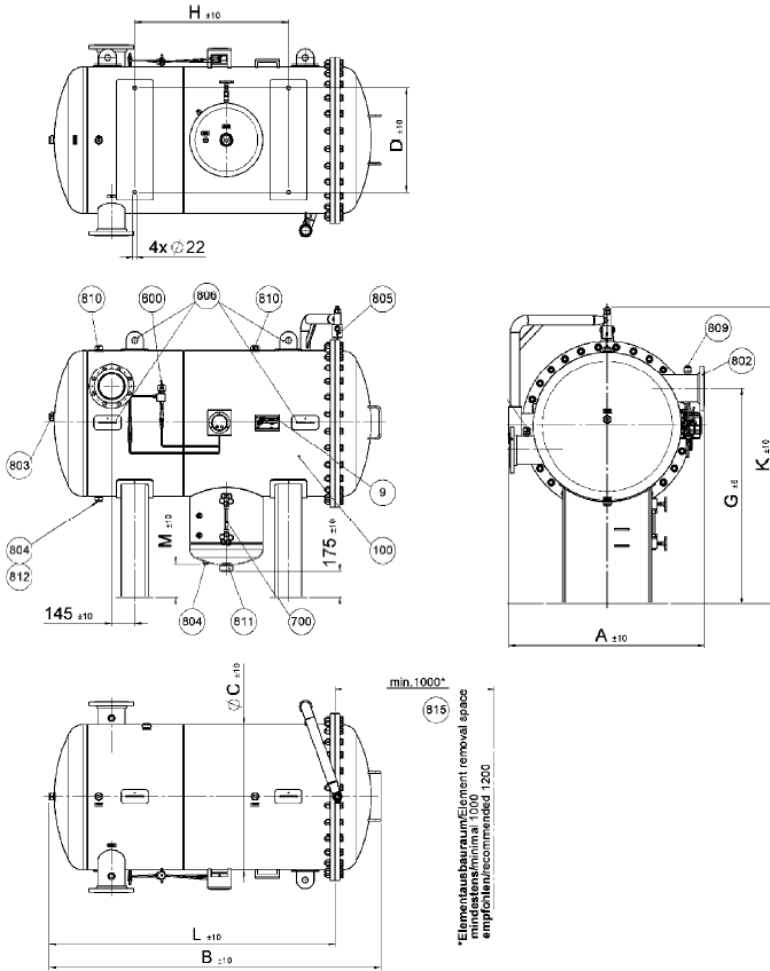
Item	Designation
9	Type label
100	Coalescing housing
600	clogging indicator (optional)
801	Inlet (IN)
802	Outlet (OUT)
803	Drain, clean side (DRAIN)
804	Drain, contaminated side (DRAIN)
805	Cover lifting device
806	Eyelets for transportation / Lifting eyes
808	Measurement point (IN)
809	Measurement point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

Hydraulic diagram



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Dimensions LVH-CD-(2/4/6/9/12/19)40-xH-Bx-xx



Maße (mm) horizontale Ausführung										
LVH-CD	A	B	C	F	G	D	H	K	L	M
240	660	1780	Ø406	700	850	320	965	1185	1680	205
440	*	*	Ø610	*	*	*	*	*	*	*
640	1000	1870	Ø711	865	1185	600	965	1610	1750	225
940	1200	2080	Ø914	950	1330	650	965	1835	1795	220
1240	*	*	*	*	*	*	*	*	*	*
1940	*	*	*	*	*	*	*	*	*	*

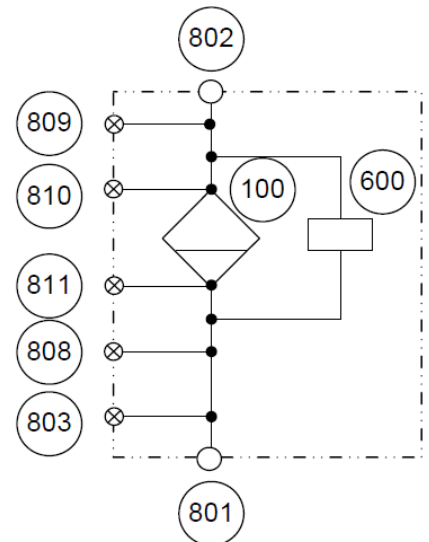
* Auf Anfrage

All dimensions in mm.
Dimensions not valid for hydraulic connection defined with ○ in table on page 2.

Legend

Item	Designation
9	Type label
100	Coalescing 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

Hydraulic diagram



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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