



Description

The easy-to-service ion exchange units of the VEU-I series are used for the preparation of phosphate-ester-based (HFD-R) flame-resistant hydraulic and lubrication fluids.

They effectively remove the acidic decomposition products arising from hydrolysis and/or oxidation of the fluid and metal ions. Depending on the resin elements used, water contained in the HFD-R oil can be separated. The units are used offline with flow rates of up to ≈ 1 l/min on hydraulic and lubrication oil tanks.

The VEU-I uses HYDAC Varnish Elimination Elements (VEE-I) filled with ion exchange resin.

Special features

- Effective removal of acids and metal soaps.
- No extractable metals or particles, as in the case of fuller's earth or active aluminum oxide.
- Units are easy to service.
- Available for retrofitting existing bypass circuits or for OEM.
- Due to the water-absorbent resins, there is no need for additional dehydration.

Advantages

- Reduction of function problems, e.g. on servo valves
- Extended service life of the operating fluid
- Increased device and system availability

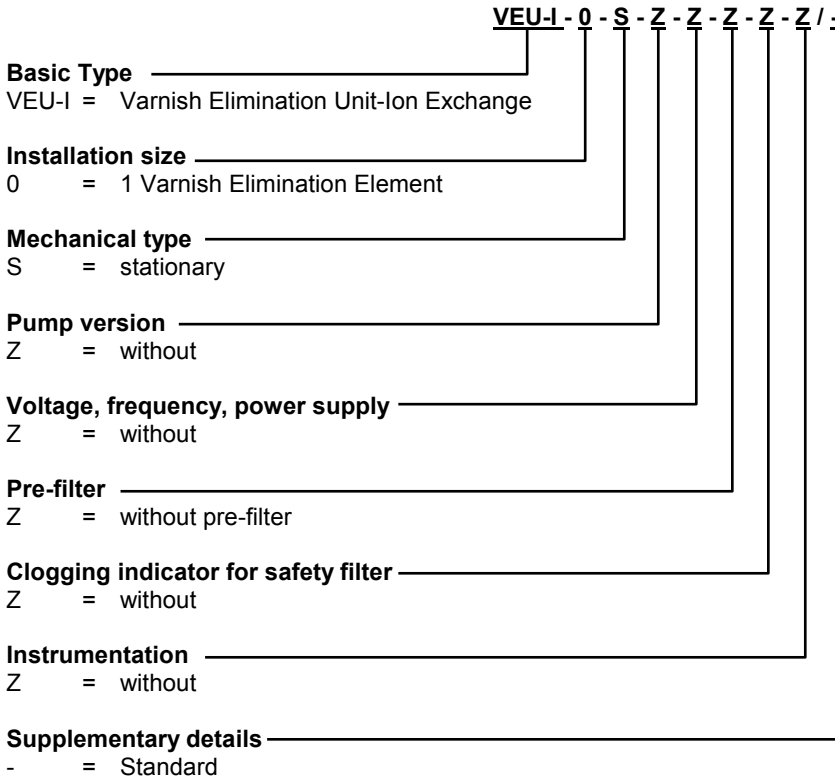
Varnish Elimination Unit – Ion Exchange VEU-I

TECHNICAL DATA

Hydraulic data	
Neutralization number achievable	< 0,1 mg KOH / g
Typically, possible to use up to	max. TAN 1 mg KOH/g oil with HFD-R max. TAN 7 mg KOH/g oil with HFD-U
Flow rate	0.7 ... 1 l/min
Permitted fluid temperature range	30 to 60 °C / 86 to 140 °F
Operating pressure max.	3 ... 6 bar / 43 ... 87 psi
Permissible viscosity range	15 to 80 mm ² /s
Permitted operating fluids	HFD-R Flame-resistant hydraulic fluids based on phosphate ester HFD-U Flame-resistant hydraulic fluids based on polyol ester basis
Connections IN / OUT	12L / M16x1.5
Pump type	without
Ambient conditions	
Permitted operating temperature range	0 to 40 °C / 32 to 104 °F
Permitted storage temperature range	0 ... 60°C / 32 ... 140°F
Relative humidity	0 ... 80%, non-condensing
General data*	
Sealing material	FKM
Empty weight	≈ 8 kg

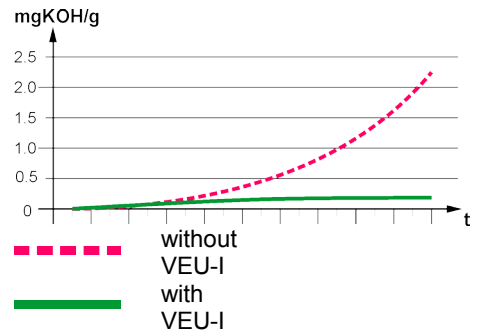
* others on request

Model code:



Diagram

Example of acidification in HFD fluids with and without VEU-I



Scope of delivery

- VEU-I and additional equipment as per model code
- Installation and Maintenance Instructions

Order the VEE-I element separately.

VEE-I Elements

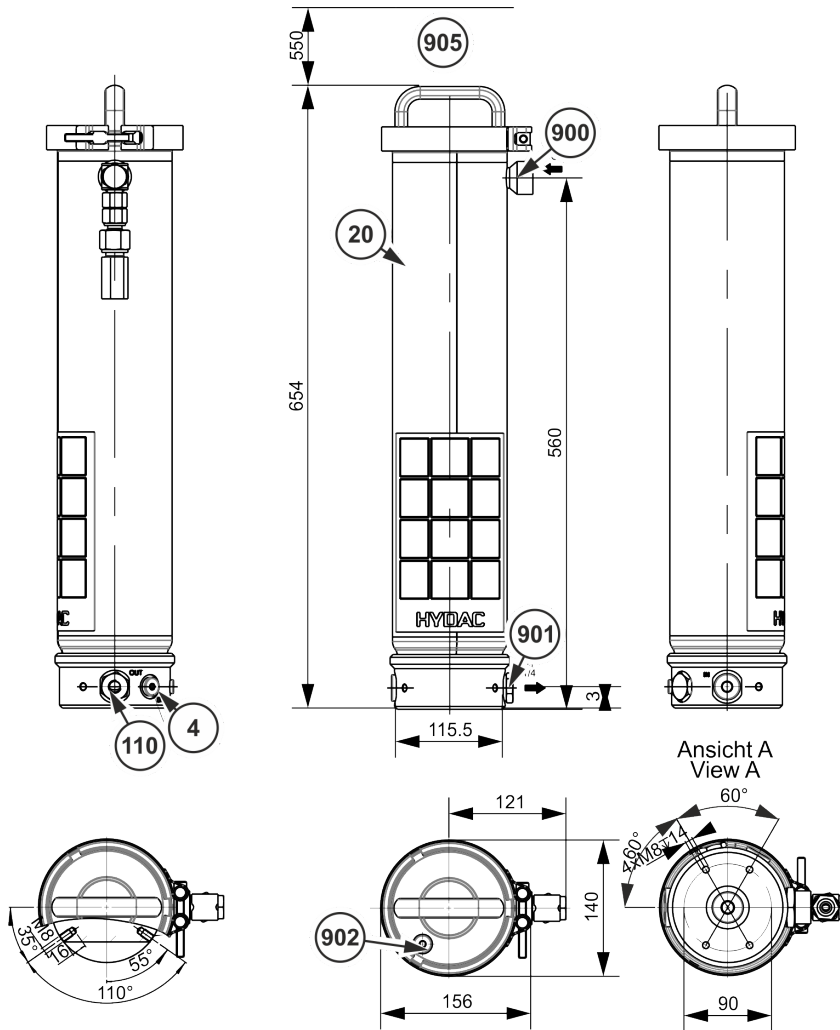
VEE-I-120D:
removes acids and metal soaps.
Part number: 3908990

VEE-I-140:
removes water.
Part number: 4131110

Example of required order quantity:

VEU-I-0-S-Z-Z-Z-Z-Z/-
1 x VEE-I-120D

Dimensions VEU-I-0-S-Z-Z-Z-Z-Z

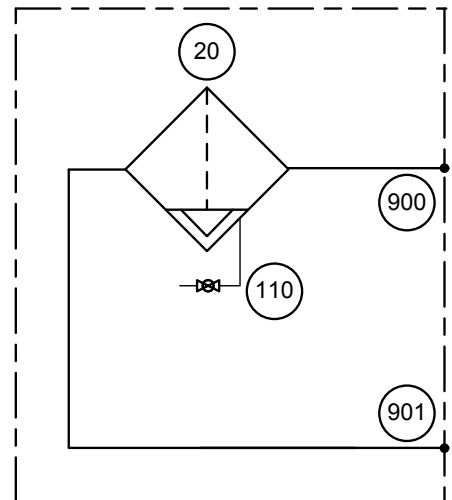


All dimensions in mm.

Legend

Item	Designation
20	VEU-I vacuum column
110	Drain (DRAIN)
900	Inlet (IN)
901	Outlet (OUT)
902	Bleeding (BLEED)
905	Required room to change the element

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 department concerned. Subject to technical modifications.

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