Series EDWF 6005 232 PSI

1) Connection for the potential equalization, only for application in the explosive area.

Switch lever standard in the front.

2) On request: The switch lever can be moved to backside of the changeover valve, opposite to the inlet and outlet. Please specify this configuration on the order.

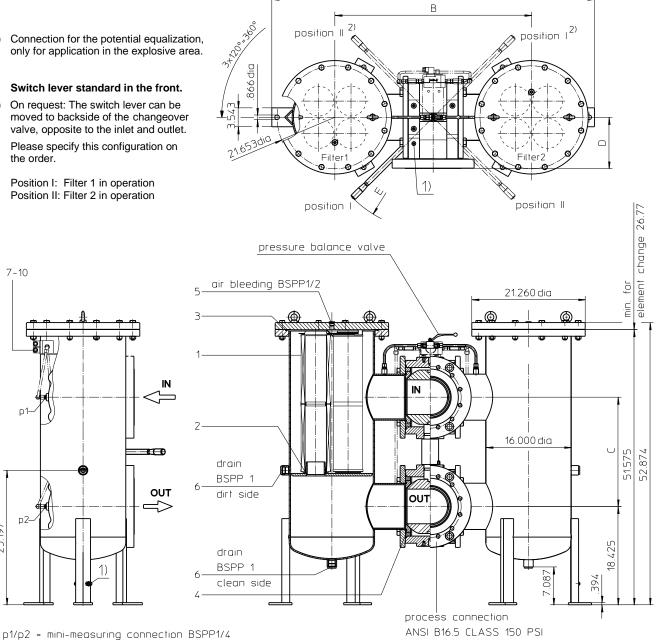
Position I: Filter 1 in operation Position II: Filter 2 in operation

7-10

р1-

р2-

197 23.



А

1)

Dimensions:

process connection	Α	В	С	D	E	weight	volume tank
6"	58.11	34.48	17.32	8.14	16.92	1466 lbs.	2x 34 Gal.
8"	60.47	36.85	20.47	9.60	21.26	1653 lbs.	2x 34 Gal.



Dimensions: inches Designs and performance values are subject to change.

Duplex Pressure Filter Series EDWF 6005 232 PSI

Description:

Stainless steel-duplex pressure filter series EDWF 6005 have a working pressure up to 232 PSI. Pressure peaks can be absorbed with a sufficient safety margin.

A changeover ball valve between the two filter housings makes it possible to switch from the dirty filter side to the clean filter side without interrupting operation. The filters can be installed as a suction filter, pressure filter or return line filter.

The filter element consists of star-shaped, pleated filter material, which is supported on the inside by a perforated core tube and is bonded to the end caps with a high-quality adhesive. The flow direction is from outside to inside.

For cleaning the stainless steel mesh element or changing the element, remove the cover and take out the element. The mesh elements are not guaranteed to maintain 100% performance after cleaning.

For filtration finer than 25 μ m, use the disposable elements made of microglass. Filter elements as fine as 3 μ m are available; finer filter elements are available upon request.

Eaton filter elements are known for high intrinsic stability and an excellent filtration capability, a high dirt-retaining capacity and a long service life.

Eaton filters are suitable for all petroleum based fluids, HWemulsions, most synthetic hydraulic fluids and lubrication oils.

Ship classifications available upon request.

Type index:

Complete filter: (ordering example)

EDWF.	6005.	10VG.	10.	Ε.	Ρ.	VA.	FA11.	Ε.	VA.		
1	2	3	4	5	6	7	8	9	10	11	

KH. OE

12 13

1 series:

EDWF = stainless steel-double welded filter

2 nominal size: 6005

3 filter material:

80G, 40G, 25G, 10G stainless steel wire mesh 25VG, 16VG, 10VG, 6VG, 3VG microglass 25API, 10API microglass according to API

4 | filter element collapse rating:

10 = ∆p 145 PSI

5 | filter element design:

- E = without by-pass
 - = with by-pass valve ∆p 29 PSI
- 6 sealing material:

S

v

- P = Nitrile (NBR)
 - = Viton (FPM)

7 filter element specification:

- = standard
- VA = stainless steel
- IS06 = for HFC application, see sheet-no. 31601

8 process connection:

- FA11 = flange ANSI CLASS 150 PSI,
- sealing surface rough grind 1600-3600 μin FA12 = flange ANSI CLASS 150 PSI,
 - sealing surface rough grind < 640 μin

9 process connection size:

- $D = 6^{\circ}$
- E = 8" (standard)
- 10 **filter housing specification:** VA = stainless steel

11 specification pressure vessel:

- = standard (PED 2014/68/EU)
- IS20 = ASME VIII Div.1 with ASME equivalent material, see sheet-no. 55217
- 12 shut-off : - = without
 - KH = with shut-off ball valve
- 13 clogging indicator or clogging sensor:
 - = without
 - AE = visual-electrical, see sheet-no. 1609
 - OP = visual, see sheet-no. 1614
 - OE = visual-electrical, see sheet-no. 1614
 - VS5 = electronic, see sheet-no. 1641

To add an indicator/sensor to your filter, use the corresponding indicator data sheet to find the indicator details and add them to the filter assembly model code.

Filter element: (ordering example)

01E. 1501. 10VG. 10. E. P. VA

1 series:

- 01E = filter element according to company standard
- 2 nominal size: 1501
- 3 7 see type index-complete filter

Accessories:

- drain- and bleeder connection, see sheet-no. 1651
- lifting mechanism, see sheet-no. 1662

Technical data:

operating temperature: operating medium: max. operating pressure: test pressure: standard process connection: housing material: sealing material: installation position: bleeder connections: drain connections: measure connections: +14 °F to +212 °F mineral oil, other media on request 232 PSI 333 PSI flange ANSI B16.5 CLASS 150 PSI stainless steel Nitrile (NBR) or Viton (FPM), other materials on request vertical BSPP ½ BSPP 1 BSPP 14

Classified under the Pressure Equipment Directive 2014/68/EU for mineral oil (fluid group 2), Article 4, Para. 3. Classified under ATEX Directive 2014/34/EU according to specific application (see questionnaire sheet-no. 34279-4).

Pressure drop flow curves:

Filter calculation/sizing

The pressure drop of the assembly at a given flow rate Q is the sum of the housing Δp and the element Δp and is calculated as follows:

 Δp assembly = Δp housing + Δp element Δp housing = (see $\Delta p = f(Q)$ - characteristics)

$$\Delta p_{element}(PSI) = Q (GPM) x \frac{MSK}{1000} \left(\frac{PSI}{GPM}\right) x v(SUS) x \frac{\rho}{0.876} \left(\frac{kg}{dm^3}\right)$$

For ease of calculation, our Filter Selection tool is available online at: www.eaton.com/hydraulic-filter-evaluation

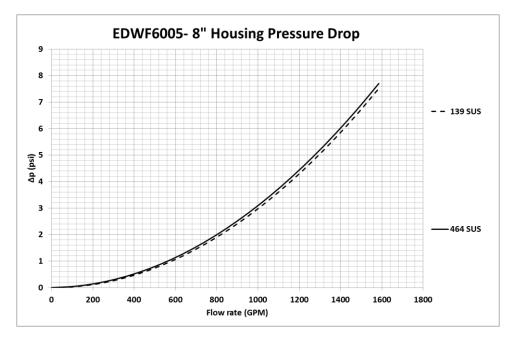
Material gradient coefficients (MSK) for filter elements

The material gradient coefficients in psi/gpm apply to mineral oil (HLP) with a density of 0.876 kg/dm³ and a kinematic viscosity of 139 SUS (30 mm²/s). The pressure drop changes proportionally to the change in kinematic viscosity and density.

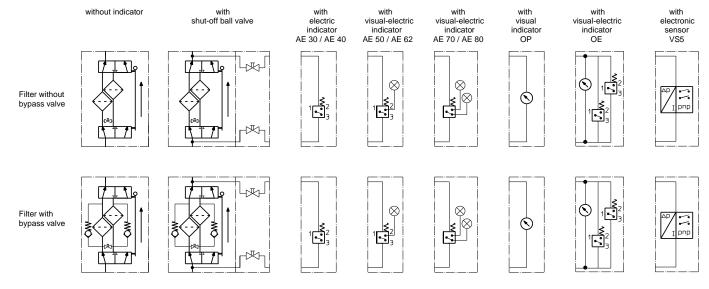
EDWF	VG				G				API		
	3VG	6VG	10VG	16VG	25VG	10G	25G	40G	80G	10 API	25 API
6005	0.048	0.033	0.021	0.019	0.013	0.0018	0.0013	0.0012	0.0008	0.012	0.005

△p=f(Q) – characteristic according ISO 3968

The pressure drop characteristics apply to mineral oil (HLP) with a density of 0.876 kg/dm³. The pressure drop changes proportionally to the density. The flow curve for 6" available on request.



Symbols:



Spare parts:

item	qty.	designation	dimension	artikle-	no.
1	8	filter element	01E.1501		
2	8	O-ring	93 x 5	307588 (NBR)	307589 (FPM)
3	2	O-ring	429 x 6	308659 (NBR)	310273 (FPM)
4	4	gasket kit of changeover UKK	6"		
	4	gasket kit of changeover UKK	8"		
5	2	screw plug	BSPP 1/2	30696	66
6	4	screw plug	BSPP 1	30530)3
7	1	clogging indicator, visual-electric	AE	see sheet-n	io. 1609
8	1	clogging indicator, visual	OP	see sheet-n	io. 1614
9	1	clogging indicator, visual-electric	OE	see sheet-n	io. 1614
10	1	clogging sensor, electronic	VS5	see sheet-n	10. 1641

Test methods:

Filter elements are tested according to the following ISO standards:

ISO 2941	Verification of collapse/burst resistance
ISO 2942	Verification of fabrication integrity
ISO 2943	Verification of material compatibility with fluids
ISO 3723	Method for end load test
ISO 3724	Verification of flow fatigue characteristics
ISO 3968	Evaluation of pressure drop versus flow characteristics
ISO 16889	Multi-pass method for evaluating filtration performance

North America 44 Apple Street Tinton Falls, NJ 07724 Toll Free: 800 656-3344 (North America only) Tel: +1 732 212-4700

Europe/Africa/Middle East Auf der Heide 2 53947 Nettersheim, Germany Tel: +49 2486 809-0

Friedensstraße 41 68804 Altlußheim, Germany Tel: +49 6205 2094-0

An den Nahewiesen 24 55450 Langenlonsheim, Germany Tel: +49 6704 204-0

Greater China

No. 7, Lane 280, Linhong Road Changning District, 200335 Shanghai, P.R. China Tel: +86 21 5200-0099

Asia-Pacific

100G Pasir Panjang Road #07-08 Interlocal Centre Singapore 118523 Tel: +65 6825-1668

For more information, please email us at *filtration*@eaton.com or visit www.eaton.com/filtration

© 2021 Eaton. All rights reserved. All trademarks and registered trademarks are the property of their respective owners. All information and recommendations appearing in this brochure concerning the use of products described herein are based on tests believed to be reliable. However, it is the user's responsibility to determine the suitability for his own use of such products. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by Eaton as to the effects of such use or the results to be obtained. Eaton assumes no liability arising out of the use by others of such products. Nor is the information herein to be construed as absolutely complete, since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.

