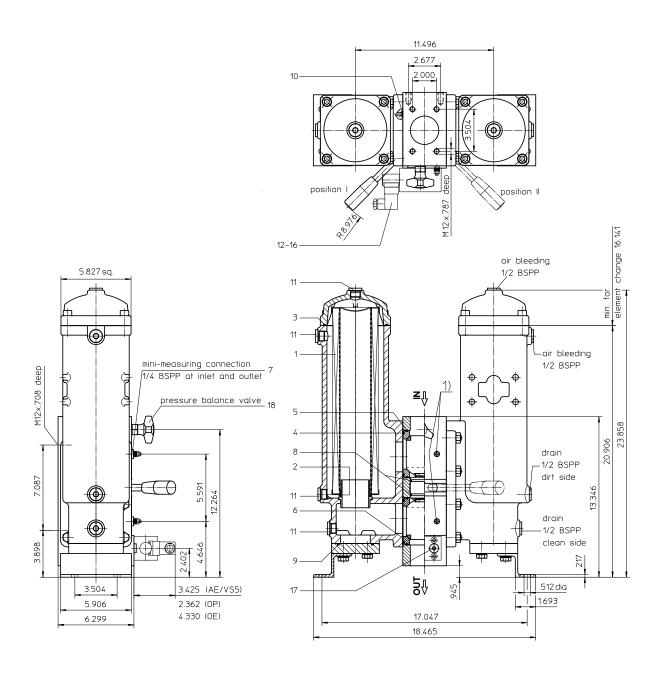
Series DUV 635 464 PSI



Position I: Left filter-side in operation Position II: Right filter-side in operation

1) Connect the stand grounding tab to a suitable earth ground point.

Weight: approx. 200 lbs. Dimensions: inches

Designs and performance values are subject to change.



Pressure Filter Series DUV 635 464 PSI

Description:

Duplex filter series DUV 635 have a working pressure up to 464 PSI. Pressure peaks can be absorbed with a sufficient safety margin.

A change over 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 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 mesh element or changing the microglass 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 40 µm, use the disposable elements made of microglass. Filter elements as fine as 5 µm(c) are available; finer filter elements are available upon request.

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

Eaton filter elements are suitable for all petroleum based fluids, HW-emulsions, most synthetic hydraulic fluids and lubrication oils.

Ship classifications available upon request.

Type index:

Complete filter: (ordering example)

DUV. 635. 10VG. 30. E. P. -, FS. 9. -, -, AE 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12

1 series:

DUV = pressure filter, change over with vertical connecting pipe

2 nominal size: 635

3 | filter-material and filter-fineness:

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

4 | filter element collapse rating:

 $30 = \Delta p \, 435 \, PSI$

5 filter element design:

= single end open

6 sealing material:

P = Nitrile (NBR)

V = Viton (FPM)

7 | filter element specification: (see catalog)

= standard

- = standardVA = stainless steel

IS06 = for HFC application, see sheet-no. 31601

IS07 = for oil/amonia mixtures (NH₃), see sheet-no. 31602

8 process connection:

FS = SAE-flange 3000 PSI

9 process connection size:

9 $= 2 \frac{1}{2}$

10 filter housing specification: (see catalog)

= standard

IS06 = for HFC application, see sheet-no. 31605

IS12 = for stailess steel ball valve, see sheet-no. 41028

IS20 = ASME VIII Div.1 with ASME equivalent material,

see sheet-no. 55217 (operating pressure max. 232 PSI)

11 internal valve:

= without

= with by-pass valve Δp 29 PSI

S1 = with by-pass valve ∆p 51 PSI

12 clogging indicator or clogging sensor:

- = without AE = visual-electric, see sheet-no.1609

OP = visual, see sheet-no.1628

OE = visual-electric, see sheet-no.1628

VS5 = electronic, see sheet-no.1641

To add an indicator 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)

01NL, 630, 10VG, 30, E. P. 3 | 4 | 5 | 6 | 7 |

1 series:

01NL. = standard filter element according to DIN 24550, T3

2 nominal size: 630

3 - 7 see type index complete filter

Accessories:

- gauge port and bleeder connection, see sheet-no. 1650
- drain- and bleeder connection, see sheet-no. 1651
- SAE-counter flange, see sheet-no. 1652
- shut-off valve, see sheet-no. 1655

Technical data:

design temperature: 14 °F to +212 °F operating temperature: 14 °F to +176 °F

operating medium mineral oil, other media on request

max. operating pressure: 464 PSI max. operating pressure at IS20: 232 PSI test pressure: 900 PSI test pressure at IS20: 464 PSI

process connection: SAE-flange 3000 PSI housing material: EN-GJS-400-18-LT switching housing material: S355J2+N

sealing material: Nitrile (NBR) or Viton (FPM), other materials on request

installation position: vertical measure connections: BSPP ½ drain- and bleeder connections: BSPP ½ volume tank: 2x 1.5 Gal.

Classified under the Pressure Equipment Directive 2014/68/EC for mineral oil (fluid group 2), Article 4, Para. 3. Classified under ATEX Directive 2014/34/EC 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:

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

$$\varDelta p_{\, \textit{element}} \left(\textit{PSI}\right) = \;\; Q \; \left(\textit{GPM}\right) \, x \; \frac{\textit{MSK}}{1000} \left(\frac{\textit{PSI}}{\textit{GPM}}\right) x \; \nu \left(\textit{SUS}\right) \, x \; \frac{\rho}{0.876} \; \left(\frac{kg}{dm^3}\right)$$

For ease of calculation our Filter Selection tool is available online at www.eatonpowersource.com/calculators/filtration/

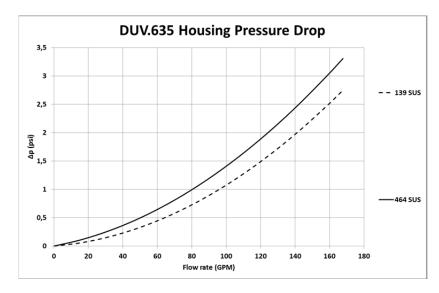
Material gradient coefficients (MSK) for filter elements

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.

DUV	VG				G			P A		PI	
	3VG	6VG	10VG	16VG	25VG	25G	40G	80G	10P	10API	25API
635	0.534	0.371	0.237	0.207	0.141	0.1735	0.1619	0.1109	0.112	0.121	0.056

$\Delta p = f(Q)$ – characteristics according to ISO 3968

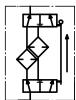
The pressure drop characteristics apply to mineral oil (HLP) with a density of 0,876 kg/dm³. The pressure drop changes proportionally to the density.

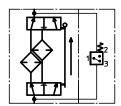


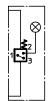
Symbols:

without indicator

with electric indicator AE 30 and AE 40 with visualelectric indicator AE 50 and AE 62 with visualelectric indicator AE 70 and AE 80 with visual indicator AOR/AOC/OP with visualelectric indicator OE with electronic sensor VS5

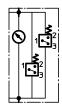


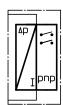












Spare parts:

item	qty.	designation	dimension	article-no.				
1	2	filter element	01NL.630					
2	2	O-ring	60 x 3,5	304377 (NBR) 304398 (FPM)				
3	2	O-ring	125 x 3	306025 (NBR)	307358 (FPM)			
4	4	O-ring	85 x 4	305685 (NBR)	310285 (FPM)			
5	4	O-ring	95 x 3	305808 (NBR)	304828 (FPM)			
6	4	gasket		317651				
7	2	screw plug	1/4 BSPP	305003				
8	2	O-ring	54 x 3	304657 (NBR) 304720 (FPM)				
9	2	O-ring	69,45 x 3,53	305868 (NBR) 307357 (FPM)				
10	4	O-ring	8 x 2	310004 (NBR) 316530 (FPM)				
11	8	screw plug	½ BSPP	304678				
12	1	clogging indicator, visual	OP	see sheet no. 1628				
13	1	clogging indicator, visual-electric	OE	see sheet no. 1628				
14	1	clogging indicator, visual-electric	AE	see sheet no. 1609				
15	1	clogging sensor, electronic	VS5	see sheet no. 1641				
16	2	O-ring	14 x2	304342 (NBR) 304722 (FPM)				
17	2	screw plug	1/4 BSPP	305003				
18	1	pressure balance valve	3/8"	3/8" 305000				

item 17 execution only without clogging indicator or clogging sensor

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

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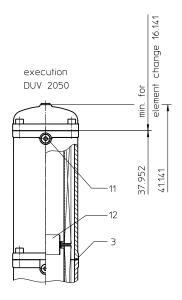
Brazil

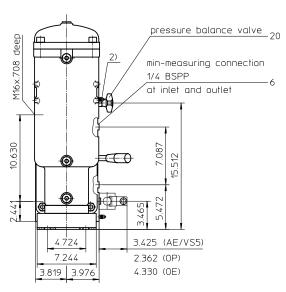
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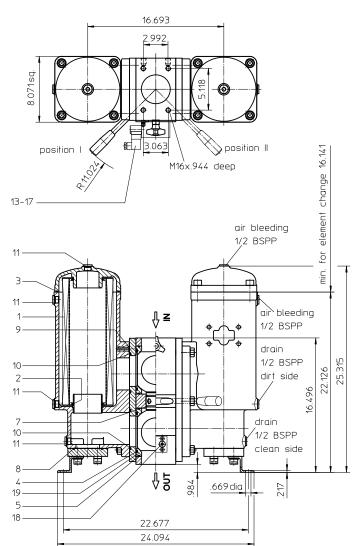
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Series DUV 1050-2050 464 PSI







2) Connect the stand grounding tab to a suitable earth ground point.

Position I: Left filter-side in operation Position II: Right filter-side in operation

Dimensions:

type	connection	SAE-connection size	weight
DUV 1050	SAE 3" 1)	SAE 4" 3000 PSI	330 lbs.
DUV 1050	SAE 4"	SAE 4" 3000 PSI	330 lbs.
DUV 2050	SAE 3" 1)	SAE 4" 3000 PSI	440 lbs.
DUV 2050	SAE 4"	SAE 4" 3000 PSI	440 lbs.

¹⁾ with reducing flange BFS.B.E.88,9x3,2.St.P.3000 / Instead of P (Nitrile) also V (Viton) can be chosen.

Dimensions: inches

Designs and performance values are subject to change.



Pressure Filter Series DUV 1050-2050 464 PSI

Description:

Duplex filter series DUV 1050-2050 have a working pressure up to 464 PSI. Pressure peaks can be absorbed with a sufficient safety margin.

A change over 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 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 mesh element or changing the microglass 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 40 µm, use the disposable elements made of microglass. Filter elements as fine as 5 µm(c) are available; finer filter elements are available upon request.

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

Eaton filter elements are suitable for all petroleum based fluids, HW-emulsions, most synthetic hydraulic fluids and lubrication oils.

The internal valve is integrated in the filter cover. After reaching the opening pressure the by-pass valve causes that an unfiltered partial flow passes the filter.

Ship classifications available upon request.

Type index:

Complete filter: (ordering example)

DUV. 1050. 10VG. 10. B. P. -. FS. B. -. -. AE 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12

1 series:

DUV = pressure filter, change over with vertical connecting pipe

2 | nominal size: 1050, 2050

3 | filter-material and filter-fineness:

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

4 | filter element collapse rating:

 $10 = \Delta p 145 PSI$

5 | filter element design:

= both sides open

6 sealing material:

P = Nitrile (NBR)

V = Viton (FPM)

7 | filter element specification: (see catalog)

= standardVA = stainless steel

IS06 = for HFC application, see sheet-no. 31601

IS07 = for oil/amonia mixtures (NH₃), see sheet-no. 31602

8 process connection:

FS = SAE-flange 3000 PSI

9 process connection size:

В = 4"

10 filter housing specification: (see catalog)

= standard

IS06 = for HFC application, see sheet-no. 31605

IS12 = for stailess steel ball valve, see sheet-no. 41028

IS20 = ASME VIII Div.1 with ASME equivalent material,

see sheet-no. 55217 (operating pressure max. 232 PSI)

11 internal valve:

= without

= with by-pass valve Δp 29 PSI

S1 = with by-pass valve ∆p 51 PSI

12 clogging indicator or clogging sensor:

- = without AE = visual-electric, see sheet-no.1609

OP = visual, see sheet-no.1628

OE = visual-electric, see sheet-no.1628

VS5 = electronic, see sheet-no.1641

To add an indicator 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)

01NR.1000.10VG. 10. B. P. 2 3 4 5 6 7

1 series:

= standard-return-line filter element 01NR. according to DIN 24550, T4

2 nominal size: 1000

3 - 7 see type index complete filter

Accessories:

- gauge port and bleeder connection, see sheet-no. 1650
- drain- and bleeder connection, see sheet-no. 1651
- SAE-counter flange, see sheet-no. 1652
- shut-off valve, see sheet-no. 1655

Technical data:

design temperature: 14 °F to +212 °F operating temperature: 14 °F to +176 °F

operating medium mineral oil, other media on request

max. operating pressure: 464 PSI max. operating pressure at IS20: 232 PSI test pressure: 900 PSI test pressure at IS20: 464 PSI

process connection: SAE-flange 3000 PSI housing material: EN-GJS-400-18-LT switching housing material: S355J2+N

sealing material: Nitrile (NBR) or Viton (FPM), other materials on request

installation position: vertical measure connections: BSPP ½ drain- and bleeder connections: BSPP ½ volume tank DUV 1050: 2x 3.6 Gal. DUV 2050: 2x 6.3 Gal.

Classified under the Pressure Equipment Directive 2014/68/EC for mineral oil (fluid group 2), Article 4, Para. 3. Classified under ATEX Directive 2014/34/EC 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 Δp = f (Q) - characteristics)

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

For ease of calculation our Filter Selection tool is available online at www.eatonpowersource.com/calculators/filtration/

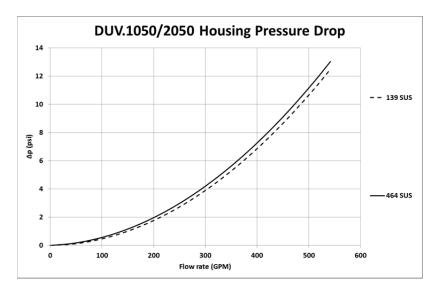
Material gradient coefficients (MSK) for filter elements

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.

DUV	VG					G			P API		PI
	3VG	6VG	10VG	16VG	25VG	25G	40G	80G	10P	10API	25API
1050	0.237	0.165	0.105	0.092	0.063	0.0061	0.0057	0.0039	0.051	0.053	0.024
2050	0.118	0.082	0.053	0.046	0.031	0.0030	0.0028	0.0019	0.026	0.027	0.012

$\Delta p = f(Q)$ – characteristics according to 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.



Symbols:

without indicator



with visual indicator OP/AOR/AOC



with by-pass valve



with visual-electrical indicator



with electric indicator AE 30 and AE 40



with electronic clogging sensor VS5



with visual-electric indicator AE 50 and AE 62



with visual-electric indicator AE 70 and AE 80



Spare parts:

item	designation	qty.	dim	ension and article	e-no.	qty.	dimension and article-no. DUV 2050			
1	filter element	2		01NR.1000		4	01NR.1000			
2	O-ring	4	90 x 4	306941 (NBR)	307031 (FPM)	8	90 x 4	306941 (NBR)	307031 (FPM)	
3	O-ring	2	185 x 4	305593 (NBR)	306309 (FPM)	4	185 x 4	305593 (NBR)	306309 (FPM)	
4	O-ring	4	114 x 6	314419 (NBR)	316531 (FPM)	4	114 x 6	314419 (NBR)	316531 (FPM)	
5	O-ring	4	140 x 4	305145 (NBR)	305201 (FPM)	4	140 x 4	305145 (NBR)	305201 (FPM)	
6	screw plug	2	1/4 BSPP	305	003	2	1/4 BSPP	305	003	
7	O-ring	2	54 x 3	304657 (NBR)	304720 (FPM)	2	54 x 3	304657 (NBR)	304720 (FPM)	
8	O-ring	2	85,32 x 3,53	305590 (NBR)	306308 (FPM)	2	85,32 x 3,53	305590 (NBR)	306308 (FPM)	
9	O-ring	8	8 x 2	310004 (NBR)	316530 (FPM)	8	8 x 2	310004 (NBR)	316530 (FPM)	
10	O-ring	4	115 x 5	306640 (NBR)	310287 (FPM)	4	115 x 5	306640 (NBR)	310287 (FPM)	
11	screw plug	8	1/2 BSPP	304	678	10	1/2 BSPP	304678		
12	slip coupling	1		-		2	3.543 dia 313233			
13	clogging indicator visual	1	OP			see	sheet-no. 1628			
14	clogging indicator visual-electric	1	OE			see	sheet-no. 1628			
15	clogging indicator visual-electric	1	AE	see sheet-no. 1609						
16	clogging sensor electronic	1	VS5			see	sheet-no. 1641			
17	O-ring	2	14 x 2		304342 (NBR)			304722 (FPM))	
18	screw plug	2	1/4 BSPP		305003					
19	gasket	4	DN 90		•		312275			
20	pressure balance valve	1	3/8"				305000			

item 18 execution only without clogging indicator or clogging sensor

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

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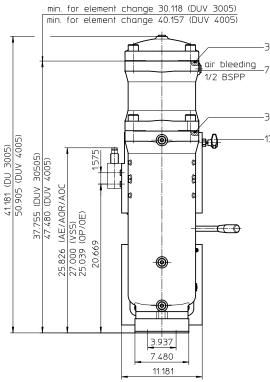
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Series DUV 2005-4005 493 PSI

execution
DUV 3005/DUV 4005

min. for element change 30.118 (DUV 3005)
min. for element change 40.157 (DUV 4005)



7.559 (AE/AOR/AOC/VS5) 31.299 20.748 8-15 16 sq. 10.236 position II 20.472 М16х.866 деер element change execution **DUV 2005** pressure balance valve 7 air bleeding 1/2 BSPP fo Ë air bleeding 1/2 BSPP 27.835 28.031 drain 1/2 BSPF dirt side drain 1/2 BSPP clean side ₽₽ .689 dia 27.913 29.331

1) Connect the stand grounding tab to a suitable earth ground point.

Position I: Filter 1 in operation
Position II: Filter 2 filter-side in operation

Weight DUV 2005: approx. 750 lbs. Weight DUV 3005: approx. 886 lbs. Weight DUV 4005: approx. 961 lbs.

Dimensions: inches

Designs and performance values are subject to change.



Pressure Filter Series DUV 2005-4005 493 PSI

Description:

Duplex filter series DUV 1050-2050 have a working pressure up to 493 PSI. Pressure peaks can be absorbed with a sufficient safety margin.

A change over 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 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 mesh element or changing the microglass 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 40 μm , use the disposable elements made of microglass. Filter elements as fine as 5 $\mu m(c)$ are available; finer filter elements are available upon request.

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

Eaton filter elements are suitable for all petroleum based fluids, HW-emulsions, most synthetic hydraulic fluids and lubrication oils.

Ship classifications available upon request.

Type index:

Complete filter: (ordering example)

DUV. 2005. 10VG. 10. E. P. -. FS. C. -. AE1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11

1 series:

DUV = pressure filter, change over with vertical connecting pipe

2 nominal size: 2005, 3005, 4005

3 filter-material and filter-fineness:

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

4 | filter element collapse rating:

10 = $\Delta p 145 PSI$

5 | filter element design:

E = single end open

S = with by-pass valve ∆p 29 PSI

6 sealing material:

P = Nitrile (NBR)

V = Viton (FPM)

7 | filter element specification: (see catalog)

= standard

VA = stainless steel

IS06 = for HFC application, see sheet-no. 31601

8 process connection:

FS = SAE-flange 3000 PSI

9 process connection size:

C = 5"

10 filter housing specification: (see catalog)

= standard

IS06 = for HFC application, see sheet-no. 31605

IS12 = for stailess steel ball valve, see sheet-no. 41028

IS20 = ASME VIII Div.1 with ASME equivalent material,

see sheet-no. 55217 (operating pressure max. 232 PSI)

11 clogging indicator or clogging sensor:

= without

AOR = visual, see sheet-no.1606

AOC = visual, see sheet-no.1606

AE = visual-electric, see sheet-no.1609

OP = visual, see sheet-no.1628

OE = visual-electric, see sheet-no.1628

VS5 = electronic, see sheet-no.1641

To add an indicator 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. 2001.10VG. 10. E. P. - 1 2 3 4 5 6 7

1 series:

01E. = filter element according to company standard

2 nominal size: 2001, 3001, 4001

3 - 7 see type index complete filter

Accessories:

- gauge port and bleeder connection, see sheet-no. 1650
- drain- and bleeder connection, see sheet-no. 1651
- SAE-counter flange, see sheet-no. 1652
- shut-off valve, see sheet-no. 1655

Technical data:

design temperature: 14 °F to +212 °F operating temperature: 14 °F to +176 °F to +176 °F

operating medium mineral oil, other media on request

max. operating pressure: 493 PSI max. operating pressure at IS20: 232 PSI test pressure: 986 PSI test pressure at IS20: 464 PSI

process connection: SAE-flange 3000 PSI housing material: EN-GJS-400-18-LT switching housing material: S355J2+N

sealing material: Nitrile (NBR) or Viton (FPM), other materials on request

installation position: vertical measure connections: BSPP ½ drain- and bleeder connections: BSPP ½ volume tank DUV 2005: 2x 8 Gal. DUV 3005: 2x 10 Gal. DUV 4005 2x 12 Gal.

Classified under the Pressure Equipment Directive 2014/68/EC for mineral oil (fluid group 2), Article 4, Para. 3. Classified under ATEX Directive 2014/34/EC 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 Δp = f (Q) - characteristics)

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

For ease of calculation our Filter Selection tool is available online at www.eatonpowersource.com/calculators/filtration/

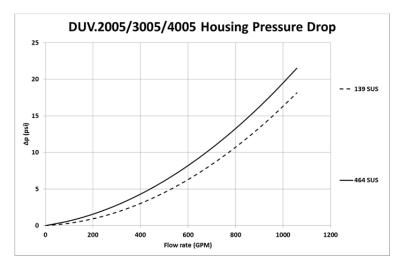
Material gradient coefficients (MSK) for filter elements

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.

DUV	VG					G			P	API	
	3VG	6VG	10VG	16VG	25VG	25G	40G	80G	10P	10API	25API
2005	0.177	0.123	0.079	0.068	0.047	0.0059	0.0055	0.0038	0.041	0.040	0.018
3005	0.118	0.082	0.052	0.046	0.031	0.0040	0.0037	0.0025	0.027	0.027	0.012
4005	0.088	0.061	0.039	0.034	0.023	0.0030	0.0028	0.0019	0.020	0.020	0.009

$\Delta p = f(Q)$ – characteristics according to 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.



Symbols:

without indicator



with visual indicator OP/AOR/AOC



with by-pass valve



with visual-electrica indicator



with electric indicator AE 30 and AE 40



with electronic clogging sensor VS5



with visual-electric indicator AE 50 and AE 62



with visual-electric indicator AE 70 and AE 80



Spare parts:

item	qty.	designation	dimension and article-no. DUV 2005		dimension and article-no. DUV 3005	dimension and article-no. DUV 4005		
1	2	filter element	01E.2001		01E.3001	01E.4001		
2	1	gasket kit of change over		5"	322726 (NBR)	322727 (FPM)		
3	2	O-ring (DU 2005)	24	40 x 5	307592 (NBR)	328793 (FPM)		
	4	O-ring (DU 3005/4005)						
4	2	O-ring	135	5 x 10	306016 (NBR)	307045 (FPM)		
5	2	O-ring		5 x 10	304388 (NBR)	306006 (FPM)		
6	2	O-ring	136,12	x 3,53	320162 (NBR)	320163 (FPM)		
7	8	screw plug (DU 2005)	BS	BSPP ½ 304678				
	10	screw plug (DU 3005/4005)						
8	1	clogging indicator visual	AOR or	AOC	see seet-no. 1606			
9	1	clogging indicator visual-electric		OE	see seet-no. 1628			
10	1	clogging indicator visual		OP	see seet-no. 1628			
11	1	clogging indicator visual-electric		ΑE	see seet-no. 1609	ee seet-no. 1609		
12	1	clogging sensor electronic		VS5	see seet-no. 1641			
13	1	O-ring	15	x 1,5	315357 (NBR)	315427 (FPM)		
14	1	O-ring	2	22 x 2	304708 (NBR)	304721 (FPM)		
15	2	O-ring	,	14 x 2	304342 (NBR)	304722 (FPM)		
16	2	screw plug	BS	PP ¼	305003			
17	1	pressure balance valve	3/8" 305000					

item 16 execution only without clogging indicator or clogging sensor

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

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