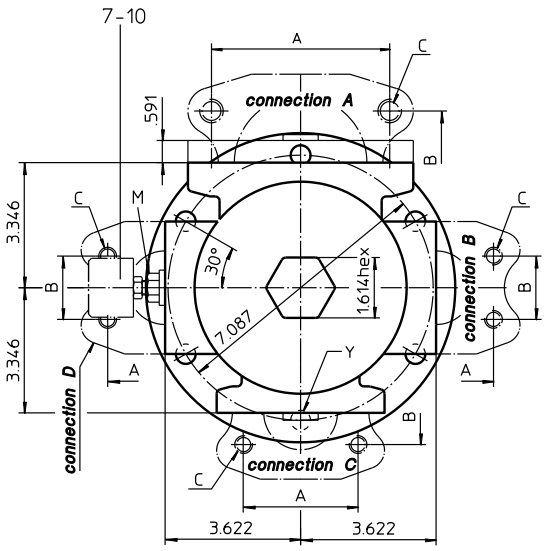
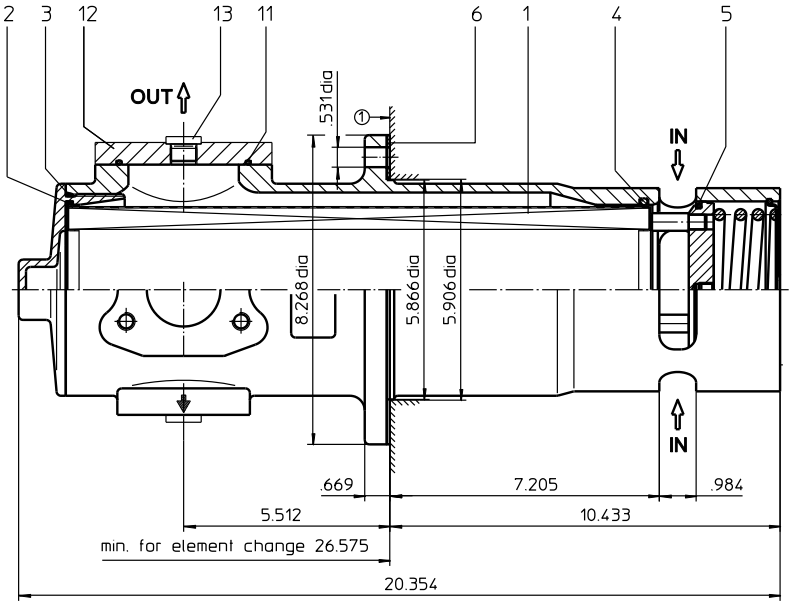
Series AS 632





mounting surface ①

surface quality .12 µin

flatness tolerance ⏥ .01"

Dimensions:

connection size	2“	2 ½“	3“	3 ½“
dimension A	3.07	3.50	4.18	4.76
dimension B	1.69	2.01	2.44	2.76
thread C	M12, .71 deep	M12, .71 deep	M16, .87 deep	M16, .87 deep

Weight approx.: 26 lbs.

Dimensions: inches

Designs and performance values are subject to change

EDV 02/21

Powering Business Worldwide

Suction Filter
Series AS 632

Description:

The AS filters can be installed horizontally or vertically in the tank and connected to the suction line. They are easy to maintain. The filter housing is made of high quality aluminum material.

The filter element consists of a star-shaped pleated filter material which is supported on the inside by a perforated core tube and is bonded to the end caps.

Eaton filter elements are known as stable elements which have excellent filtration capabilities and a high dirt retaining capacity, therefore having a long service life.

To change the filter element, the filter cover is unscrewed. When the filter cover is loosened, a plate valve closes the suction side of the filter and prevents dirty oil from flowing back into the tank or, if the filter is installed horizontally, the fluid from escaping from the tank. After the servicing respectively after changing the element the filter is again ready for operation.

Eaton filter can be used for petroleum-based fluids, HW emulsions, water glycols, most synthetic fluids and lubrication fluids. Consult factory for specific fluid applications.

Type index:

Complete filter: (ordering example)

AS.	632.	40G.	-.	B.	P.	-.	FS.	11.	-.	O1
1	2	3	4	5	6	7	8	9	10	11

1 **series:**
AS = Suction filter

2 **nominal size:** 632

3 **filter-material:**
40G stainless steel wire mesh

4 **filter element collapse rating:**
- = not specified

5 **filter element design:**
B = both sides open

6 **sealing material:**
P = Nitrile (NBR)
V = Viton (FPM)

7 **filter element specification:**
- = standard
VA = stainless steel

8 **process connection:**
FS = SAE-flange connection 3000 PSI

9 **no. of version:**

version		1	5	6	10	11	12	14	21
connection A	**type**	XY	XY	XY	FS	FS	FS	-	FS
	size				A1	A1	A1		A
connection B	**type**	Y	M	M	FS	FS	-	FS	Y
	size				8	9		8	
connection C	**type**	FS	FS	FS	Y	Y	Y	FS	Y
	size	8	9	9				8	
connection D	**type**	FS	FS	-	Y	M	M	FS	FS
	size	8	9					8	8

type: FS = SAE-flange 3000 PSI
M = adapter M18x1,5-R1/8“
Y = drain M18x1,5
X = adapter SAE 3“ – M18x1,5
- = no connection
size: 8 = 2“
9 = 2 ½“
A = 3“
A1 = 3 ½“

10 **filter housing specification:**
- = standard

11 **clogging indicator:**
- = without
O1 = visual, see sheet-no. 1616
E4.-0,25 = pressure switch, see sheet-no. 1616

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)

01AS.	631.	40G.	-.	B.	-.	-
1	2	3	4	5	6	7

1 **series:**
01AS = suction filter element according to company standard

2 **nominal size:** 631

3 - 5 / 7 see type index-complete filter

6 **seling material:**
- = without

Accessories:

- SAE-counter flanges, see sheet-no. 1652

Technical data:

operating temperature:	+14°F to +212°F
operating medium	mineral oil, other media on request
process connection:	SAE-flange 3000 PSI
housing material standard:	G-AlSi10Mgwa DIN 1725 (3.2381.61)
sealing material:	Nitrile (NBR) or Viton (FPM), other materials on request
installation position:	optional
volume tank:	1.6 Gal.

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 ∆p and the element ∆p and is calculated as follows:

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

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

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

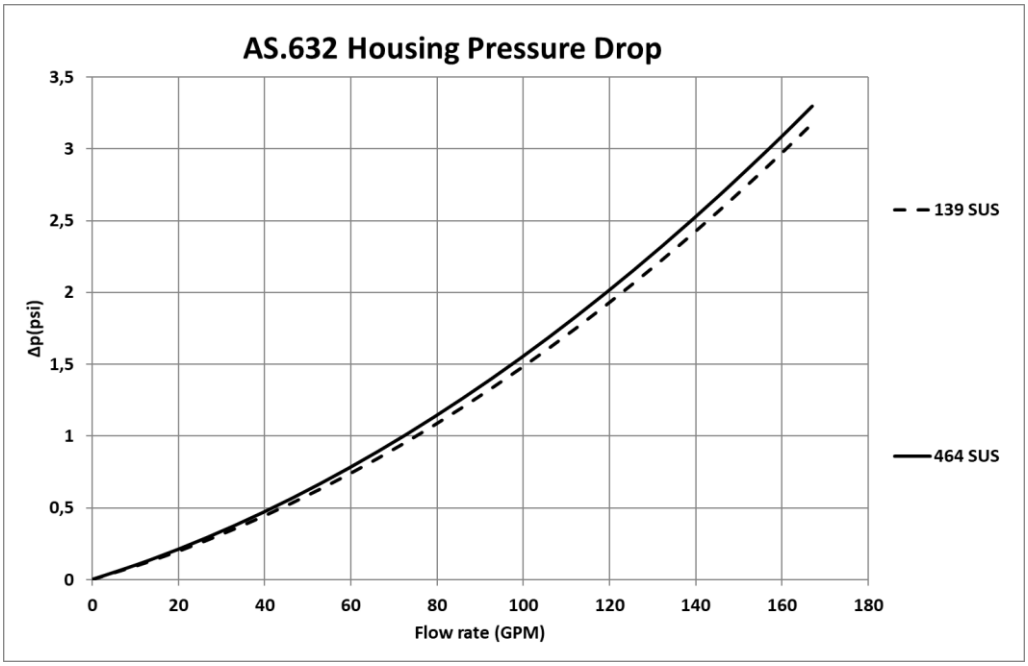
Material gradient coefficients (MSK) for filter elements

The material gradient coefficients in mbar/(l/min) 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.

AS 632	40G
	0.0193

∆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:

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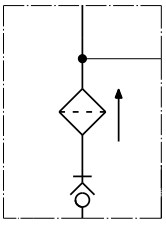
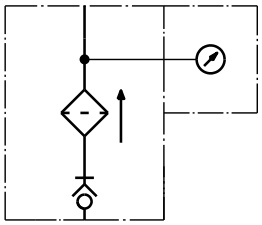
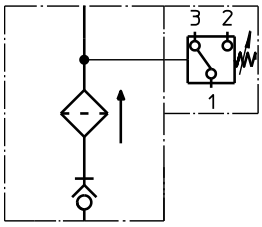


visual O



electric E4.-0,25



Spare parts:

item	qty.	designation	dimensions	article-no.	
1	1	filter element	01AS.631…		
2	1	O-ring	115 x 3	303963 (NBR)	307762 (FPM)
3	1	O-ring	125 x 3	306025 (NBR)	307358 (FPM)
4	1	O-ring	115 x 5	306640 (NBR)	310287 (FPM)
5	1	O-ring	104,37 x 3,53	304339 (NBR)	304390 (FPM)
6	1	gasket	.078 thick	305160	
7	1	adapter M18x1,5 - R1/8“	30505-4	317114	
8	2	gasket	A18x24x1,5	305136	
9	1	clogging indicator, visual	O1	301722	
10	1	pressure switch, electric	E4.-0,25	301725	
11	1	O-ring	85,32 x 3,53	305590 (NBR)	306308 (FPM)
12	1	adapter SAE 3“ - M18 x 1,5	30294-3	317048	
13	1	screw plug	M18x1,5	305193	

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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