

INTERNORMEN

Watersorp - Waterabsorption



internormen 
 *filter technology*



Watersorp

field of application:

- hydraulic oils on mineral oil basis
- lubrication oils on mineral oil basis
- organic ester oils
- poly-alpha-olefines
- vegetable based oils
- heating oils and diesel fuels

Type code:

01.WS. 250. 3WVG.10.B.P. -

1	2	3	4	5	6	7
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- 1 01.WS = finefilter-watersorp combination
- 2 nominal size: 250, 630, 1000
- 3 filter fineness:
3WVG = 5µm(c) / 10WVG = 10µm(c)
- 4 pressure drop resistance: 145 PSI
- 5 B = both sides open
- 6 P = buna N
- 7 - = standard

These elements may be used in following filters and filter units:

nominal size	data sheet N°	element size
NF250	1100	1x 01.WS.250
NF 631	1115	1x 01.WS.630
NF 1000	1116	1x 01.WS.1000
US 20/ UM 20/ USP 20	4008/4013/4020	1x 01.WS.250
US 40/ UM 40/ USP 41	4011/4014/4021	1x 01.WS.630
US 80/ UM 80/ USP 81	4009/4015/4022	1x 01.WS.630
US 161/ USP 161/	4010/4023	1x 01.WS.630
US 320/ USP 320	4012/4024	1x 01.WS.1000

We recommend to use the watersorp elements only in off-line filtration.

Calculation of the necessary amount of watersorp elements (at 139 sus):

$$\frac{\text{system volume (gal)} \times \text{H}_2\text{O} \%}{100\%} = \text{quantity of elements}$$

water absorption capacity (gal)

INTERNORMEN Fluid Purifier Systems



The INTERNORMEN - IFPM / IFPS fluid purification systems are userfriendly to operate and self contained systems that will:

- Remove free, dissolved and emulsified water
- Remove free and dissolved gases
- Remove particulate contamination down to 1 micron
- Reduce machine equipment / System downtimes
- Reduce component failures
- Less fluid changes
- Increased equipment reliability / improved productivity



NF 1000



US 40



UM 40



UM 80

Watersorp

filter elements for water absorption:

Technical data:

elements:	01.WS250	01.WS630	01.WS1000
Art.Nr. 3WVG	322233	320911	322223
Art.Nr. 10WVG	322225	319982	322220
filter surface:	1139 in ²	1628 in ²	1938 in ²
water absorbing capacity at $\Delta p = 87$ PSI		1,045 ml/in ²	
spec.water absorbing capacity at $\Delta p = 29; 58; 87$ PSI	615ml 925ml 1190ml	875ml 1320ml 1700ml	1045ml 1575ml 2025ml

retention rate according to ISO 16889
3WVG $\beta_{5(c)} \geq 200$
10WVG $\beta_{10(c)} \geq 200$

dirt-holding capacity according to ISO 16889 at $\Delta p_{end} = 87$ PSI
 3WVG = 45 mg/in²
 10WVG = 55,5 mg/in²

spec.dirt-holding capacity 3WVG at $\Delta p = 29; 58; 87$ PSI	34g 43g 51g	49g 61g 74g	58g 73g 88g
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spec.dirt-holding capacity 10WVG at $\Delta p = 29; 58; 87$ PSI	42g 52g 63g	60g 75g 90g	71g 89g 108g
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max. accepted pressure difference (referring to water absorbing): $\Delta p_{max} = 87$ PSI

Collapse pressure resistance according to ISO 2941 $\Delta p_{max} = 145$ PSI



