# FILTER ELEMENT - OAT

## Alternative filter elements for Ats

## DESCRIPTION

OAT filter elements have been developed for high efficient removal of solid particles, oil aerosols, water, hydrocarbons, vapours and odours from compressed air(1).

## FILTER ELEMENT RATING ACCORDING TO ISO8573-1

| Filtration grade | Solid particles class | Water class | Oil class |
|---|---|---|---|
| P/P | 6 | / | / |
| M/R | 3 | / | / |
| H/S | 1 | / | 1 |
| C/A | 1 | / | 0/1 |

*Validated according to ISO12500-1 and ISO12500-3

## TEHNICAL SPECIFICATION

| | P/P (5) | M/R (5) | H/S (5) | C/A (5) |
|---|---|---|---|---|
| Operating temperature | 65 | 65 | 65 | 65 |
| Operating pressure | / | / | 1 | 0/1 |
| Differential pressure (dry) | 10 | 20 | 80 | 60 |
| Differential pressure (wet) | 20 | 40 | 190 | |
| Particle retention (nominal) | 99.99% (3 µm) | 99.9999% (1 µm) | 99.9999% (0.01 µm) | |
| Particle retention rate ISO (3) | 95% | 99.8% | 99.998% | |
| Residual oil content (4) | / | / | < 0.01 | < 0.005 |
| Flow direction | INSIDE to OUTSIDE | INSIDE to OUTSIDE | INSIDE to OUTSIDE | INSIDE to OUTSIDE |

(3) Tested according to ISO12500-3, 1bar(a), nominal flow, 06050 P/P, MPPS - (5µm); 06050 M/R, , H/S, MPPS - (0,3µm)

(4) Tested according to ISO12500-1, 06050 and H/S Oil aerosol viscosity 32mm2/s, inlet concentration 10mg/m3

(5) Cross reference Omega Air – Ats filtration grades: P=P/P=P, R=M/R=M, S=H/S=H, A=C/A=C

## MATERIALS

| | P/P | M/R | H/S | C/A |
|---|---|---|---|---|
| Filter media | Acrylic fibres, cellulose | Borosilicate micro fibres | Borosilicate micro fibres | Activated carbon granulate PES (Polyester) |
| Drainage media | / | Polyester based polyurethane | Polyester based polyurethane | / |
| Adsorption media | / | / | / | Activated carbon granulate |
| Protection media | Polyester fleece | Polyester fleece | Polyester fleece | Polyester fleece |
| Support | Stainless steel 1.4301 | Stainless steel 1.4301 | Stainless steel 1.4301 | Stainless steel 1.4301 |
| Endcaps | Plastic | Plastic | Plastic | Plastic |
| Bonding | Polyurethane | Polyurethane | Polyurethane | Polyurethane |
| Sealing | NBR | NBR | NBR | NBR |

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## SIZES

| Model | Ø [mm] | Height [mm] |
|---|---|---|
| OAT 34 | 50 | 61 |
| OAT 77 | 50 | 76 |
| OAT 119 | 50 | 110 |
| OAT 170 | 50 | 141 |
| OAT 212 | 76 | 121 |
| OAT 306 | 76 | 151 |
| OAT 451 | 76 | 191 |
| OAT 629 | 76 | 231 |
| OAT 875 | 100 | 342 |
| OAT 1267 | 100 | 523 |
| OAT 1800 | 122 | 602 |
| OAT 2176 | 122 | 652 |
| OAT 2805 | 122 | 751 |

Ø - Diameter

## CORRECTION FACTORS

To calculate the correct capacity of a given filter based on actual operating conditions, multiply the nominal flow capacity by the appropriate correction factor(s).
CORRECTED CAPACITY = NOMINAL FLOW CAPACITY x Cop

OPERATING PRESSURE

| [bar] | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [psi] | 29 | 44 | 58 | 72 | 87 | 100 | 115 | 130 | 145 | 160 | 174 | 189 | 203 | 218 | 232 |
| Cop | 0,38 | 0,5 | 0,63 | 0,75 | 0,88 | 1 | 1,13 | 1,25 | 1,38 | 1,50 | 1,63 | 1,75 | 1,88 | 2,00 | 2,13 |

## MAINTENANCE

P/P - Replace filter element at least once per year or when pressure drop reaches 350 mbar
M/R - Replace filter element at least once per year or when pressure drop reaches 350 mbar
H/S - Replace filter element at least once per year or when pressure drop reaches 350 mbar
C/A - Replace filter element at least every 6 months or when pressure drop reaches 350 mbar

| INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANEGE WITHOUT NOTICE | | |
|---|---|---|
| | Our quality management system is certified by BUREAU VERITAS in conformity with ISO 9001:2008<br>Reg. number: 200285 | |

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