

FILTER ELEMENT – OHI new

(Particulate, Coalescing, Oil vapour removal)

DESCRIPTION

We have designed OHI new filter elements for high efficient removal of solid particles, oil aerosols, water, hydrocarbons, vapours and odours from compressed air⁽¹⁾.

OHI new filter elements will fit into HIROS

APPLICATIONS ⁽²⁾

- Automotive
- Electronics
- Food & Beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application



⁽¹⁾ For any other technical gas please contact us or your local dealer

⁽²⁾ DONALDSON 90' filter element can be used in variety of applications. For applications not listed please contact us or your local dealer.

FILTER ELEMENT RATING ACCORDING TO ISO8573-1

| | Solid particles | Water | Oil |
|-----|-----------------|-------|-----------|
| Q/P | Class 6 | - | - |
| P/M | Class 2 | - | Class 2 |
| S/S | Class 1 | - | Class 1 |
| C/A | Class 1 | - | Class 0/1 |

Validated according to ISO12500-1 and ISO12500-3

TECHNICAL SPECIFICATION

| Filtration grade name | Q/P ⁽⁶⁾ | P/M ⁽⁶⁾ | S/S ⁽⁶⁾ | C/A ⁽⁶⁾ |
|--|----------------------|----------------------------|-------------------------|----------------------------|
| Operating temperature | | 1,5 - 65 °C 35 - 149 °F | | 1,5 - 45 °C 35 - 113 °F |
| Differential pressure (dry) | 10 mbar 0,290 PSI | 50 mbar 0,725 psi | 80 mbar 1,160 PSI | 60 mbar 0,870 PSI |
| Differential pressure (wet) | 20 mbar 0,290 PSI | 120 mbar 1,740 PSI | 190 mbar 2,756 PSI | N/A |
| Particle Retention (nominal) | 99,99% (3 µm) | 99,9999% (0,1 µm) | 99,9999% (0,01 µm) | N/A |
| Particle retention rate ISO ⁽³⁾ | 95 % | 99,98 % | 99,998 % | N/A |
| Residual oil content ⁽⁴⁾ | N/A | < 0,1mg/m | < 0,01mg/m ³ | < 0,005mg/m ³ |
| Capacity (ISO12500-2) ⁽⁵⁾ | | N/A | | 20 min |

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

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

⁽⁵⁾ Tested according to ISO12500-2, 06050 C/A, tested with n-Hexane, test concentration 100mg/kg, 80% Saturation

⁽⁶⁾ Cross reference Omega Air – HirosS filtration grades: P=Q/P=Q, M=P/M=P, S=S/S=S, A=C/A=C

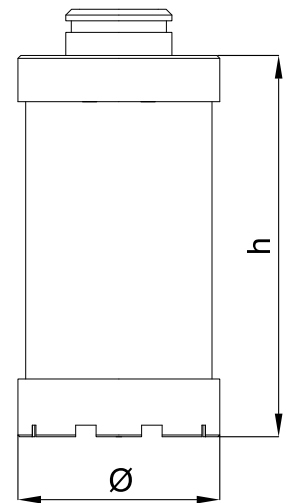
FILTER CARTRIDGE NAMES

Filter cartridge names consist of cartridge size and filtration grade. For aluminium end caps add “/AL” at the end.

For plastic endcaps: “OHI 135 Q/P”, for aluminium endcaps: “OHI 135 Q/P AL”.

SIZES

| SIZES | DIMENSIONS [mm] | FLOW CAPACITY | |
|---------|--------------------|----------------------|--------|
| | | [Nm ³ /h] | [scfm] |
| OHI 005 | ∅=35; h=66 | 32 | 19 |
| OHI 010 | ∅=50; h=77,5 | 61 | 36 |
| OHI 016 | ∅=50; h=126 | 107 | 63 |
| OHI 022 | ∅=50; h=151 | 132 | 78 |
| OHI 030 | ∅=62; h=156 | 166 | 98 |
| OHI 045 | ∅=62; h=225 | 252 | 148 |
| OHI 072 | ∅=62; h=372 | 429 | 252 |
| OHI 135 | ∅=87; h=382 | 620 | 365 |
| OHI 175 | ∅=87; h=512 | 843 | 496 |
| OHI 205 | ∅=87; h=610 | 290 | 171 |
| OHI 250 | ∅=87; h=760 | 1264 | 744 |
| OHI 300 | ∅=108; h=550 | 1129 | 665 |
| OHI 370 | ∅=108; h=750 | 1558 | 917 |



∅=Diameter; h=Height, *For plastic endcaps leave empty.

MATERIALS

| | Q/P | P/M | S/S | C/A |
|------------------------------|---------------------------|------------------------------|---|---|
| Filter media | Acrylic fibers, cellulose | Borosilicate micro fibers | Borosilicate micro fibers | Glass fiber, borosilicate microfibres |
| Drainage media | Polyester | Polyester based polyurethane | Polyester based polyurethane | |
| Adsorption media | / | / | | Activated carbon granulate PES (Polyester) |
| Support (inner-outer) | | | Stainless steel 1.4301 | |
| Bonding | | | Polyurethane | |
| Endcaps | | | PA6 with 30% glass fibers OR Aluminium | |
| Sealing | | | NBR | |

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 C_{OP}

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 |
| C _{OP} | 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

Replace filter element grade Q/P, P/M and S/S at least once per year or when pressure drop reaches 350mbar.

Replace filter element grade C/A at least every 6 months.

INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE

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|  | Our quality management system is certified by BUREAU VERITAS in conformity with ISO 9001:2008 Reg. number: 200285 |
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