

TEST FILTRO GRADO ULPA 15



PERFORMANCE TEST OF ULPA FILTER ELEMENT

Code 001.1615
Ø 320 x 500 mm
Glass fiber media

Grade >U15 (300 m³/h)



TEST REPORT: NET 200701 - PT1

August 18th, 2020

according to EN 1822-1:2019
and EN ISO 29463-5:2018

initiated by:

NETCO srl

Filter Class

Grade ULPA 15

Test report according to EN 1822:2019 (ISO 29463-5:2018)
Report number: NET 200701 - PT1



Data tables, new filter element

Table 2: Efficiencies and lower limit of 95%-level of confidence

| Particle size [µm] | Efficiency [%] | Efficiency, 95% min [%] | Penetration [%] | Penetration, 95% [%] |
|-----------------------|-------------------|----------------------------|--------------------|-------------------------|
| 0,026 | >99,99995 | * | <0,00005 | * |
| 0,029 | >99,99995 | * | <0,00005 | * |
| 0,034 | >99,99995 | * | <0,00005 | * |
| 0,039 | >99,99995 | * | <0,00005 | * |
| 0,045 | >99,99995 | * | <0,00005 | * |
| 0,052 | >99,99995 | * | <0,00005 | * |
| 0,060 | >99,99995 | * | <0,00005 | * |
| 0,070 | >99,99995 | 99,99991 | <0,00005 | 0,00009 |
| 0,081 | >99,99995 | 99,99992 | <0,00005 | 0,00008 |
| 0,093 | >99,99995 | 99,99993 | <0,00005 | 0,00007 |
| 0,108 | >99,99995 | 99,99993 | <0,00005 | 0,00007 |
| 0,124 | >99,99995 | 99,99992 | <0,00005 | 0,00008 |
| 0,143 | >99,99995 | 99,99992 | <0,00005 | 0,00008 |
| 0,166 | >99,99995 | 99,99992 | <0,00005 | 0,00008 |
| 0,191 | >99,99995 | 99,99993 | <0,00005 | 0,00007 |
| 0,221 | >99,99995 | 99,99993 | <0,00005 | 0,00007 |
| 0,255 | >99,99995 | 99,99993 | <0,00005 | 0,00007 |
| 0,294 | >99,99995 | 99,99994 | <0,00005 | 0,00006 |
| 0,340 | >99,99995 | 99,99997 | <0,00005 | 0,00003 |
| 0,392 | >99,99995 | 99,99996 | <0,00005 | 0,00004 |
| 0,453 | >99,99995 | 99,99994 | <0,00005 | 0,00006 |

Comment: The setup was made for an expected filter grade of H14. But even with 10 scans on the downstream side we got only very less particle counts. In the smaller and larger particle size ranges zero particles were detected. The E95% values are calculated based on the Poisson distribution in which a minimum of 3,7 particles is assumed (instead of 0). Therefore these values >70 nm are not reported. To measure exactly the efficiency in U16 range an other detector with higher sampling volume or a much smaller particle size range would be needed (if using SMPS).