

# T 90 AND T 90 PRE COMPACT POCKET FILTERS

FILTRATION AT ITS FINEST  
FOR THE SUPPLY AIR OF TURBOMACHINERY

FILTER TYPE	FILTER CLASS TO ISO 16890	FILTER CLASS TO EN 779:2012
T 90 PRE	ISO ePM10 75%	M 6
T 90	ISO ePM2,5 65%	F 7



## The application

T 90 Compact pocket filters featuring innovative media technology are used for supply, exhaust and recirculated-air filtration in ventilation systems posing special safety requirements for arresstance capability, such as

- in supply air filtration for gas turbines and turbo-compressors on- and off-shore
- in sophisticated air-conditioning systems (hospitals, laboratories, libraries, museums, airports, etc.)
- in industrial processes (chemicals, pharmaceuticals, foods and beverages, optics, electronics, paint shops, etc.)

## The characteristics and benefits

The Compact T 90 series is highly robust and offers maximum performance. This gives them not only a high resilience but also low pressure differences and excellent efficiency. The optimized high-performance filter medium made from tear resistant synthetic-organic fibers

is responsible for the unique inherent stiffness of the pockets. The filter's high dust-holding capacity and moisture resistance result in a long service life and impressive economic efficiency.

- T 90 pocket filters can be relied upon for continuously excellent mechanical filtration performance under all duty conditions.
- High functional dependability, thanks to the leakproof-welded configuration of the filter pockets, foam-sealed into a PUR front frame, with aerodynamically optimized welded-in spacers and dimensionally stable construction of the filter element as a whole.
- T 90 Compact pocket filters are free of glass fibers, non-corroding and thus defy the most adverse conditions.
- The filters' consistently high quality is assured by our state-of-the-art ISO 9001-compliant quality management system, and by type-testing to EN 779 and ISO 16890.

## The special features

- In the supply air for turbomachinery, T 90 pocket filters can be relied upon to arrest aggressive, abrasive particles, thus minimizing blade fouling and erosion, and upgrading the efficiency and availability of the turbomachinery involved.
- Thanks to their 12 pockets, T90 12L and T90 PRE 12L pocket filters are suitable for applications with the highest service life requirements.
- T 90 und T 90 PRE ensure safe operation due to their high moisture resistance.

GEOMETRIES AVAILABLE		T 90 PRE 1/1 12L	T 90 PRE 1/2 4L	T 90 1/1 12L	T 90 1/1 8L	T 90 1/2 4L
Nominal volume flow rate	m <sup>3</sup> /h	4,250	2,125	4,250	3,400	1,700
Front frame	mm	592×592	289×592	592×592	592×592	289×592
Overall depth	mm			650		
Number of pockets		12	4	12	8	4
Filtering area	m <sup>2</sup>	9.0	3.1	9	6	3.1
Weight, approx.	kg	3.1	1.1	3	2.3	1.2
Thermal stability	°C			70		
Moisture-resistance (rel. hum.)	%			100		
Suitable for standard mounting frame	mm	610×610	305×610	610×610	610×610	305×610

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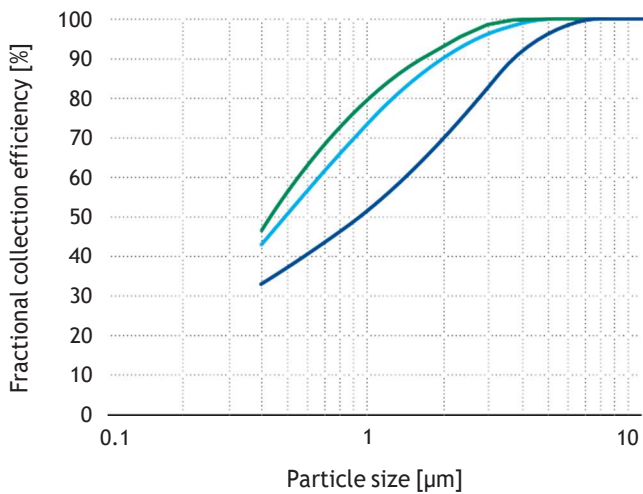
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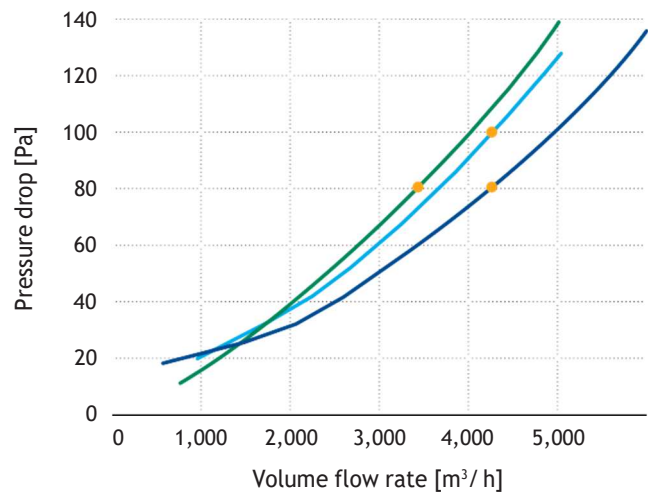
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# TECHNICAL FILTER TEST DATA TO EN 779 AND ISO 16890

Fractional collection efficiency curves



Initial pressure drop curves



— T 90 PRE 1/1 12L    — T 90 1/1 12L    — T 90 1/1 8L    ● Nominal volume flow rate

KEY DATA		T 90 PRE 1/1 12L	T 90 1/1 12L	T 90 1/1 8L
Nominal volume flow rate	● m <sup>3</sup> /h	4,250	4,250	3,400
Face velocity	m/s	3.2	3.2	2.5
Initial pressure drop	Pa	80	100	80
Class to ISO 16890		ISO ePM10 75%	ISO ePM2,5 65%	ISO ePM2,5 65%
Particulate matter efficiency				
ISO ePM1		38	54	53
ISO ePM2,5	%	47	66	65
ISO ePM10		77	86	86
Cut-off particle size	µm	8	5	5
Filter class to EN 779:2012		M6	F7	F7
Recom. final pressure drop*	Pa	450	450	450
Bursting strength	Pa	> 3,000	> 6,000	> 6,000
Dust holding capacity approx. AC Fine / 800 Pa	g	3,300	2,800	1,900

\* For cost-efficiency or system-specific reasons it may be appropriate to change the filters before reaching the final pressure drop stated. It can also be exceeded in certain applications.

The figures given are mean values subject to tolerances due to normal production fluctuations. Our explicit written confirmation is always required for the correctness and applicability of the information involved in any particular case. Subject to technical alterations.

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