

# **GORE® Turbine Filters**

More Power, Less Wear

# Hydrophobic HEPA Cylindrical Filters Maintain Clean Turbines

# **Maintain High Power Output**

GORE® Turbine Filters provide filtration through use of a patented multi-layer construction to capture ≥99.5% of all contaminants and block water ingestion. This eliminates power losses and maintains clean compressor efficiency.

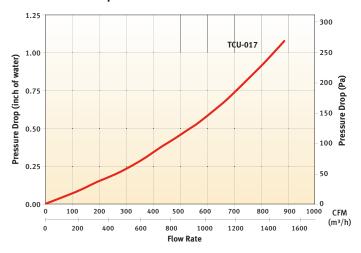


Liquid and particles are repelled.

#### **Eliminate Off-Line Washes**

By capturing or blocking all particulate, many users are able to eliminate shutdowns for water washing. This increases machine availability and reliability. Many turbines that use Gore filters have been running for tens of thousands of hours without the need to shut down for water washing.

#### **Low Pressure Drop**



#### **Stop Salt and Water Ingress**

- 1. Gore's high efficiency (≥99.5%) multi-layer composite removes salt crystals and other submicron particulates from passing through the filter.
- Gore's hydrophobic membrane blocks both water and dissolved salts from entering the compressor. This prevents corrosion damage which can contribute to unexpected failures and major outages.



### **KEY FEATURES**

- E12 filtration efficiency ≥99.5% at MPPS
- Hydrophobic membrane prevents water ingress
- Stops penetration of particles and dissolved salts
- High burst pressure
- Proven lifetime
- Low initial pressure drop

#### **KEY BENEFITS**

- Eliminates compressor fouling and associated power loss
- Reduces turbine wear
- Eliminates off-line water washings
- Maintains consistent low heat rate
- Reduces salt induced corrosion



# **GORE** Turbine Filters

More Power, Less Wear

#### **Construction Materials**

Filter Media	Fully synthetic composite with ePTFE membrane
Structural Components	Galvanized (ASTM A653) G60 standard, G90 available upon request
Potting	Polyurethane
Gasket	EPDM rubber

## **Application Performance**

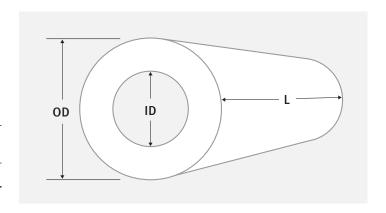
Efficiency	E12 according to EN 1822 Min. 99.5 % @ MPPS		
Wet Burst Pressure	> 7500 Pa (30 in wg)		
Initial Pressure Drop			
TCU017	220 Pa @ 1250 m <sup>3</sup> /h (0.9 in wg @ 736 cfm)		
TCU018	195 Pa @ 1050 m <sup>3</sup> /h (0.8 in wg @ 618 cfm)		
TCU019	225 Pa @ 1300 m <sup>3</sup> /h (0.9 in wg @ 765 cfm)		
TCU037	285 Pa @ 1650 m <sup>3</sup> /h (1.2 in wg @ 971 cfm)		
Recommended Maximum dP	1000 Pa (4 in wg)		
Temperature Range	-40 °C to +65 °C (-40 °F to +149 °F)		

Dimensions	Outside Diameter	Inside Diameter	Length
TCU017	324 mm	213 mm	660 mm
	(12.75 in)	(8.39 in)	(26 in)
TCU018	324 mm	213 mm	560 mm
	(12.75 in)	(8.39 in)	(22 in)
TCU019	324 mm	213 mm	680 mm
	(12.75 in)	(8.39 in)	(26.75 in)
TCU037	324 mm	213 mm	864 mm
	(12.75 in)	(8.39 in)	(34 in)

Direct replacement of most conventional filters with no modifications required to filter housing.

## **Operational Mode**

Static or pulse cleanable (for arctic or desert environments)



Contact a Gore application engineer for assistance in determining the appropriate GORE® Turbine Filter for your specific application.

Not for use in food, drug, cosmetic or medical device manufacturing,

All data expressed as typical values. Please contact W. L. Gore & Associates directly to confirm current information and to verify data for a specific part number. Specifications are subject to change.

#### www.gore.com/turbinefilters

E-Mail: turbinefilters@wlgore.com

GORE and designs are trademarks of W. L. Gore & Associates © 2014, 2016 W. L. Gore & Associates, Inc.
Covered by the following patents: EP 16741441, US 7501003, US 8147583

#### W. L. Gore & Associates

#### Americas

W. L. Gore & Associates, Inc. 101 Lewisville Road Elkton, MD 21921 USA

Phone: +1 410 392 3300 Fax: +1 410 398 6624

#### Europe

W. L. Gore & Associates GmbH Hermann-Oberth-Str. 26 D-85640 Putzbrunn Germany

Phone: +49 89 4612-2211 Fax: +49 89 4612-2302

#### Middle East

W. L. Gore & Associates GmbH Middle East - Abu Dhabi P. O. Box 11 44 70 Al Reem Island, Sky Tower, Office 609 Abu Dhabi UAE

FOR INDUSTRIAL USE ONLY.

processing, or packaging operations.

Tel: +971 2 5089444 Fax +971 2 5089445

