

# Compressed Air Filters

TFGE / TFHE / TFDE Ranges  
for Railway Applications



## Coalescing and dust removal filters

Coalescing filters are probably the single most important purification equipment in a compressed air system. They are designed to not only remove aerosols (droplets) of oil and water using mechanical filtration techniques, but also to remove solid particulate to very low levels (as small as 0.01micron in size). Installed in pairs, the first filter is a 'general purpose filter' which protects the second 'high efficiency filter' from bulk contamination. The dual filter installation from Parker domnick hunter ensures a continuous supply of high quality compressed air with the additional benefits of low operational costs and minimal maintenance.

Dust removal filters are used for the removal of dry particulates which may be carried over from the desiccant material in the dryer. They provide identical particulate removal performance to the equivalent coalescing filter and use the same mechanical filtration techniques to provide up to 99.9999% particle removal efficiency.

A filter package combining high-efficiency water separation (better than 94% efficiency) with high-efficiency coalescing technology (oil removal down to 0.01 mg/m<sup>3</sup> and particle retention down to 0.01 micron), ensures that compressed air can be filtered to meet the requirements of both the NF F11-100 standards for rolling stock and the international ISO8573-1 compressed air quality standards.



## The Parker domnick hunter Design Philosophy

Parker domnick hunter has been supplying its' customers with high efficiency compressed air purification products since 1963. Our philosophy 'Designed for Air Quality & Energy Efficiency' ensures products that not only provide the user with clean, oil-free and dry compressed air, but also with low lifetime costs and reduced CO<sub>2</sub> emissions.



## Contact Information:

**Parker Hannifin Manufacturing Limited**  
domnick hunter Filtration and Separation Division  
Dukesway, Team Valley Trading Estate  
Gateshead, Tyne and Wear  
England NE11 0PZ

Tel: +44 (0)191 402 9000  
Fax: +44 (0)191 482 6296  
Email: [dhindsales@parker.com](mailto:dhindsales@parker.com)  
[www.parker.com/dhfn](http://www.parker.com/dhfn)

## Benefits:

- Delivered Air quality in accordance with NF F11-100 and ISO8573-1:2010, the international standard for compressed air quality
- Continued protection of downstream equipment and applications
- Reduce unplanned maintenance and set out for service costs
- Filtration performance independently verified by Lloyds Register
- Coalescing filters performance tested to the stringent requirements of ISO12500-1
- Low operational costs
- Dust removal filters tested in accordance with the test methods of the ISO8573 Series
- Suitable for all compressor types
- Pressure losses start low and stay low to save energy,
- Filters are covered by one year compressed air quality guarantee which is automatically renewed with annual maintenance
- All filter housings are covered by a 10 year housing guarantee
- Peace of mind



ENGINEERING YOUR SUCCESS.



## Technical Data

Filtration Grade	Filter Type	Particle removal (inc water & oil aerosols)	Max Remaining Oil Content at 21°C 70°F)	Filtration Efficiency	Initial Dry Differential Pressure	Initial Saturated Differential Pressure	Change Element Every	Precede with Filtration Grade
GE	High Efficiency General Purpose Protection	Down to 1 micron	0.6 mg/m <sup>3</sup> 0.5 ppm(w)	99.925%	<70 mbar (1psi)	<140 mbar (2psi)	12 months	TFSE (for bulk liquid)
HE	High Efficiency Oil Removal Filtration	Down to 0.01 micron	0.01 mg/m <sup>3</sup> 0.01 ppm(w)	99.9999%	<140 mbar (2psi)	<200 mbar (3psi)	12 months	TFGE
DE	General Purpose Dust Filtration Dry Particle	Down to 1 micron	N/A	99.925%	<70 mbar (1psi)	N/A	12 months	N/A

## Filter Coding Example

GRADE	MODEL	PIPE SIZE	CONNECTION TYPE	DRAIN OPTION
GE HE DE	MODEL IDENTIFIED	LETTER DENOTES PIPE SIZE	B=BSPT N=NPT	S1 TO S14 F=FLOAT M=MANUAL
GE	060	A	B	F

Filter Models	Min Operating Pressure		Max Operating Pressure		Min Operating Temp**		Max Operating Temp	
	bar g	psi g	bar g	psi g	°C	°F	°C	°F
TF[Grade] float drain*	1	15	16	232	1.5	35	80	176
TF[Grade] manual drain*	1	15	20	290	1.5	35	100	212

\*Other drain options available.

\*\*Lower operating temperatures when fitted with trace heating. Please ask for details.

## Product Selection

Stated flows are for operation at 7 bar g (100 psi g) with reference to 20°C, 1 bar a, 0% relative water vapour pressure.

Model	Pipe Size BSPT	L/sec	cfm	Replacement Element kit	No.
TF[Grade]060AB <input type="checkbox"/>	1/4"	600	21	TE060 <input type="checkbox"/> grade	1
TF[Grade]060BB <input type="checkbox"/>	3/8"	600	21	TE060 <input type="checkbox"/> grade	1
TF[Grade]060CB <input type="checkbox"/>	1/2"	600	21	TE060 <input type="checkbox"/> grade	1
TF[Grade]120BB <input type="checkbox"/>	3/8"	1200	42	TE120 <input type="checkbox"/> grade	1
TF[Grade]120CB <input type="checkbox"/>	1/2"	1200	42	TE120 <input type="checkbox"/> grade	1
TF[Grade]180CB <input type="checkbox"/>	1/2"	1800	64	TE180 <input type="checkbox"/> grade	1
TF[Grade]180DB <input type="checkbox"/>	3/4"	1800	64	TE180 <input type="checkbox"/> grade	1
TF[Grade]180EB <input type="checkbox"/>	1"	1800	64	TE180 <input type="checkbox"/> grade	1
TF[Grade]360DB <input type="checkbox"/>	3/4"	3600	127	TE360 <input type="checkbox"/> grade	1
TF[Grade]360EB <input type="checkbox"/>	1"	3600	127	TE360 <input type="checkbox"/> grade	1
TF[Grade]660EB <input type="checkbox"/>	1"	6600	233	TE660 <input type="checkbox"/> grade	1
TF[Grade]660FB <input type="checkbox"/>	1 1/4"	6600	233	TE660 <input type="checkbox"/> grade	1
TF[Grade]660GB <input type="checkbox"/>	1 1/2"	6600	233	TE660 <input type="checkbox"/> grade	1
TF[Grade]960FB <input type="checkbox"/>	1 1/4"	9600	339	TE960 <input type="checkbox"/> grade	1
TF[Grade]960GB <input type="checkbox"/>	1 1/2"	9600	339	TE960 <input type="checkbox"/> grade	1

**Shock and Vibration**  
Tested to BS EN 61373:1999

## Weights and Dimensions

Model	Pipe Size BSPT	Height (H)		Width (W)		Depth (D)		Weight	
		mm	ins	mm	ins	mm	ins	kg	lbs
TF[Grade]060AB <input type="checkbox"/>	1/4"	181	7.2	76	3.0	64	2.5	0.6	1.3
TF[Grade]060BB <input type="checkbox"/>	3/8"	181	7.2	76	3.0	64	2.5	0.6	1.3
TF[Grade]060CB <input type="checkbox"/>	1/2"	181	7.2	76	3.0	64	2.5	0.6	1.3
TF[Grade]120BB <input type="checkbox"/>	3/8"	235	9.3	97	3.8	84	3.3	1.1	2.4
TF[Grade]120CB <input type="checkbox"/>	1/2"	235	9.3	97	3.8	84	3.3	1.1	2.4
TF[Grade]180CB <input type="checkbox"/>	1/2"	235	9.3	97	3.8	84	3.3	1.1	2.4
TF[Grade]180DB <input type="checkbox"/>	3/4"	235	9.3	97	3.8	84	3.3	1.1	2.4
TF[Grade]180EB <input type="checkbox"/>	1"	235	9.3	97	3.8	84	3.3	1.1	2.4
TF[Grade]360DB <input type="checkbox"/>	3/4"	275	10.8	129	5.1	115	4.5	2.2	4.8
TF[Grade]360EB <input type="checkbox"/>	1"	275	10.8	129	5.1	115	4.5	2.2	4.8
TF[Grade]660EB <input type="checkbox"/>	1"	364	14.3	129	5.1	115	4.5	2.7	5.9
TF[Grade]660FB <input type="checkbox"/>	1 1/4"	364	14.3	129	5.1	115	4.5	2.7	5.9
TF[Grade]660GB <input type="checkbox"/>	1 1/2"	364	14.3	129	5.1	115	4.5	2.7	5.9
TF[Grade]960FB <input type="checkbox"/>	1 1/4"	432	17.0	170	6.7	156	6.1	5.1	11.2
TF[Grade]960GB <input type="checkbox"/>	1 1/2"	432	17.0	170	6.7	156	6.1	5.1	11.2

