



**domnick hunter**

## Trouble Shooter (TS) filters and elements – for high temperature applications

**domnick hunter** Trouble Shooter (TS) filters and elements are designed to solve difficult filtration problems where operating temperatures are higher than normal conditions in compressed air systems.

Additionally, **domnick hunter** Trouble Shooter (TS) filters use special materials and are constructed to give extra strength and high chemical resistance.

Trouble Shooter (TS) filters and elements are available in **domnick hunter** AO, AA and AR grades so that the same level of compressed air system protection is maintained.

### Special Features

- Trouble Shooter (TS) filter elements can be retro-fitted into standard specification **domnick hunter OIL-XPLUS** filter housings (\*5)
- Interchangeable with standard specification **domnick hunter OIL-XPLUS** filter elements
- Proven tie-rod fixing gives positive element location
- Special high-temperature and highly chemically resistant anti re-entrainment barrier

### Applications

#### High Temperatures

Trouble Shooter (TS) elements should be used where filtration temperatures exceed 66°C, and where the maximum operating temperature does not exceed 100°C.

#### Special Gases

Trouble Shooter (TS) elements are ideal for filtering special gas applications (i.e. where the process gases are different from compressed air). However, it is important to check with **domnick hunter** to confirm TS element suitability for use with special gases.



### Important Notes

#### Caution!

Trouble Shooter (TS) elements are NOT suitable for use with Ammonia or Methyl Chloride. However, **domnick hunter** produces special filter elements for these gases. Please contact **domnick hunter** for further assistance.

#### Chemical Attack

Where a compressed air installation has suffered from chemical attack even at standard temperatures (ie below 66°C), then use of the TS grade elements should be investigated with **domnick hunter**.

# Technical Specifications

	Grade AO	Grade AA	Grade AR
Particle removal down to	1µ	0.01µ	1µ
Maximum remaining oil content @ 21°C & 0.7 MPa	0.5 ppm	0.01 ppm	N/A
Initial dry pressure differential	0.007 MPa 70 m bar	0.01 MPa 100 m bar	0.007 MPa 70 m bar
Initial saturated pressure differential at rated flow	~0.014 MPa ~140 m bar	~0.02 MPa ~200 m bar	N/A
Maximum operating pressure	1.6 MPa	1.6 MPa	1.6 MPa
Maximum recommended pressure differential for element change	0.035 MPa 350 m bar	0.035 MPa 350 m bar	0.035 MPa 350 m bar
Maximum recommended operating temperature	100°C	100°C	100°C
Minimum recommended operating temperature	1.5°C	1.5°C	1.5°C

## Notes

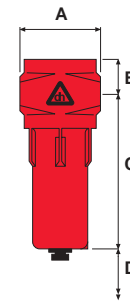
- When using TS filters for gases other than compressed air the stated flows may vary dependent upon the physical properties of the gas. Please contact **domnick hunter** for advice in this respect.
- When ordering a complete filter or replacement element the required grade must be specified together with the TS identifier. e.g. if a 1" filter is required in Grade AA, specify AA-0080GXTS for the complete filter, and K145-AATS for the replacement element.
- Automatic drains are not suitable for use above 66°C and manual drains should be specified for use above this temperature. Similarly, pressure gauges (DPG/J), differential pressure indicators (DPI), and Sight Glasses are not fitted to TS filter housings.
- The filtration characteristics of TS filters are the same as standard specification **domnick hunter** filters, however it should be noted that the maximum remaining oil content is specified at 21°C and if TS elements are used at higher temperatures then oil carryover levels will be higher due to the increased level of oil vapour present. Please contact **domnick hunter** for further information.
- Where TS elements are to be retro-fitted into standard specification **domnick hunter** housings, the maximum operating temperature of 66°C. must be observed.

Stated flows are for air at 0.7 MPa g for flows at other pressures apply the correction factor shown below.

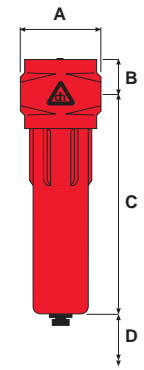
Line Pressure MPa g	0.1	0.3	0.5	0.7	0.9	1.1	1.3	1.5	1.6
Correction Factor	0.38	0.65	0.85	1.0	1.13	1.25	1.36	1.46	1.51

FILTER TYPE	PIPE SIZE	FLOW RATES @ 0.7 MPa g		DIMENSIONS (mm)				WEIGHT (kg)	REPLACEMENT ELEMENT KIT	
		L/S	m <sup>3</sup> /hr	A	B	C	D		Type	No.
(grade) 0009GXTS	G¼	9	32	76	34.5	133	70	0.5	K009 (grade)TS	1
(grade) 0017GXTS	G½	17	61	89	42	158	95	1.0	K017 (grade)TS	1
(grade) 0030GXTS	G¾	30	108	89	42	194	130	1.1	K030 (grade)TS	1
(grade) 0058GXTS	G¾	60	216	120	58	251	172	2.4	K058 (grade)TS	1
(grade) 0080GXTS	G1	80	288	120	58	351	272	2.9	K145 (grade)TS	1
(grade) 0125GXTS	G1¼	120	432	120	58	351	272	2.9	K145 (grade)TS	1
(grade) 0145GXTS	G1½	145	522	120	58	351	272	2.9	K145 (grade)TS	1
(grade) 0205GXTS	G1½	200	720	160	66.5	511	320	9.1	K220 (grade)TS	1
(grade) 0220GXTS	G2	220	792	160	66.5	511	320	9.1	K220 (grade)TS	1
(grade) 0330GXTS	G2	330	1188	160	66.5	816	625	12.9	K330 (grade)TS	1
(grade) 0405GXTS	G2½	400	1440	202	79	602	400	12.1	K430 (grade)TS	1
(grade) 0430GXTS	G3	430	1548	202	79	602	400	11.9	K430 (grade)TS	1
(grade) 0620GXTS	G3	620	2232	202	79	844	625	20.9	K620 (grade)TS	1
(grade) 1000GXTS	G4	1000	3600	420	82	1095	570	44.5	K330 (grade)TS	3
(grade) 0205FXTS	DN40	200	720	304	115	624	350	29	K220 (grade)TS	1
(grade) 0330FXTS	DN50	330	1188	304	120	934	650	37	K330 (grade)TS	1
(grade) 0620FXTS	DN80	620	2232	390	177	1077	650	64	K620 (grade)TS	1
(grade) 1000FXTS	DN100	1000	3600	450	201	1140	650	95	K330 (grade)TS	3
(grade) 1300FXTS	DN100	1300	4680	500	230	1220	650	135	K330 (grade)TS	4
(grade) 1950FXTS	DN150	1950	7020	580	273	1294	650	177	K330 (grade)TS	6
(grade) 3250FXTS	DN200	3250	11700	750	361	1519	650	368	K330 (grade)TS	10
(grade) 5200FXTS	DN250	5200	18720	740	410	1684	800	515	K330 (grade)TS	16
(grade) 7800FXTS	DN300	7800	28080	1000	485	1777	850	684	K330 (grade)TS	24

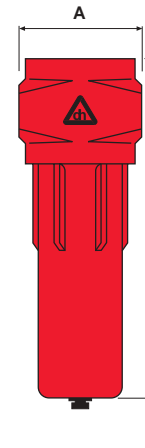
0009G-0145G



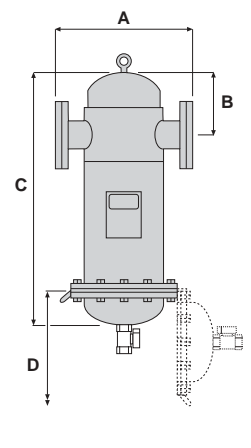
0205G-0620G



1000G



0205F-7800F



*Your Partner in  
Compressed Air Treatment*

dh and domnick hunter and OIL-X are registered trademarks of domnick hunter limited

domnick hunter limited has a continuous policy of product development and although the Company reserves the right to change specifications, it attempts to keep customers informed of any alterations. This publication is for general information only and customers are requested to contact our Industrial Division Sales Department for detailed information and advice on a products suitability for specific applications. All products are sold subject to the Company's standard conditions of sale.



**domnick hunter limited**  
Dukesway, Team Valley Trading Estate,  
Gateshead, Tyne and Wear, England NE11 0PZ  
Tel: +44 (0)191 402 9000  
Telefax: +44 (0)191 482 6296  
<http://www.domnickh.co.uk>

pure innovation

a member of the domnick hunter group plc

UK • AUSTRALIA • BRAZIL • CANADA • CHINA • DENMARK • FRANCE • GERMANY • INDIA • INDONESIA • JAPAN • MALAYSIA • NORWAY • SINGAPORE • SPAIN • SWEDEN • THAILAND • USA



Copyright domnick hunter limited 2000

Publication Reference: