Black Teknigas Combustion Range

Product Catalogue 2017

WATTS®

Contents

WATTS®

GAS SAFETY SHUT-OFF VALVES

POWERSEAT® ECO ELECTRO HYDRAULIC GAS SAFETY SHUT OFF VALVE

The Powerseat® electro-hydraulic gas shut-off valve allows the control and safety shut-off of low pressure combustible gases in pipes from 40mm to 250mm, whilst focusing on being energy efficient and environmentally friendly. The Powerseat® Eco shut-off valve is kept open by a hydraulic pump where hydraulic fluid is forced into a cylinder driving the valve open.

New and improved features

- LED to display "ON" and "Manual Re-set Required" status
- Increased environmental protection to IP56 equivalent
- Manual re-set switch incorporated on all versions
- IP67 equivalent rating option available. (increased cost)
- Screwless quick connections for installation of electrics
- Volt free contacts for BMS connection

Power consumption

- Uses just 6% of the power of a comparable magnetic solenoid valve
- Reduced electricity running costs: Uses just a fraction of the energy required by permanently energized magnetic solenoid valves
- Improved energy efficiency from previous model, reduced from 26VA to 10VA

Environmental factors

- Around 768kg less carbon emissions than with a comparable magnetic solenoid valve
- Saves equivalent carbon emissions of 3,758 miles in a car.

Quality

- 3 year warranty as standard
- UK manufactured
- EC certified
- IP54 standard:
  - Dust protected - no harmful deposit
  - Splash protected - from any direction
- Certified to EN161, Class A Group 2 construction

POWERSEAT® ECO ELECTRO HYDRAULIC GAS SAFETY SHUT OFF VALVE
Aluminiuim Body - Screwed Connections

PRODUCT CODE	SIZE/STYLE	UNIT
PE6683110V	1.1/2" BSP 110V, Aluminium Body, Screwed	each
PE6684110V	2" BSP 110V, Aluminium Body, Screwed	each
PE6685110V	2.1/2" BSP 110V, Aluminium Body, Screwed	each
PE6686110V	3" BSP 110V, Aluminium Body, Screwed	each
PE6683230V	1.1/2" BSP 230V, Aluminium Body, Screwed	each
PE6684230V	2" BSP 230V, Aluminium Body, Screwed	each
PE6685230V	2.1/2" BSP 230V, Aluminium Body, Screwed	each
PE6686230V	3" BSP 230V, Aluminium Body, Screwed	each

POWERSEAT® ECO ELECTRO HYDRAULIC GAS SAFETY SHUT OFF VALVE
Cast iron Body - Flanged Connections

PRODUCT CODE	SIZE/STYLE	UNIT
PE6685FL4110V	6685 FL 110V 65mm, Cast Iron Body, Flanged	each
PE6686FL4110V	6686 FL 110V 80mm, Cast Iron Body, Flanged	each
PE6687FL4110V	6687 FL 110V 100mm, Cast Iron Body, Flanged	each
PE6689FL4110V	6689 FL 110V 150mm, Cast Iron Body, Flanged	each
PE6685FL4230V	6685 FL 230V 65mm, Cast Iron Body, Flanged	each
PE6686FL4230V	6686 FL 230V 80mm, Cast Iron Body, Flanged	each
PE6687FL4230V	6687 FL 230V 100mm, Cast Iron Body, Flanged	each
PE6689FL4230V	6689 FL 230V 150mm, Cast Iron Body, Flanged	each

POWERSEAT® ELECTRO HYDRAULIC GAS SAFETY SHUT OFF VALVE
Cast iron Body - Flanged Connections. 8" & 10" available in Powerseat® specifications.

PRODUCT CODE	SIZE/STYLE	UNIT
BC66810FL4110V	66810FL 110V 200mm, Cast Iron Body, Flanged	each
BC66811FL4110V	66810FL 110V 250mm, Cast Iron Body, Flanged	each
BC66810FL4230V	66810FL 230V 200mm, Cast Iron Body, Flanged	each
BC66811FL4230V	66810FL 230V 250mm, Cast Iron Body, Flanged	each

WATTS®

GAS SAFETY SHUT-OFF VALVES

Powerseat® ELECTRO-HYDRAULIC VALVES - SPARE PARTS

OPTIONAL EXTRAS	DESCRIPTION	UNIT
BC668*/SWa	Open Position Switch	each
	110V 50Hz AC version +	each

ACCESSORIES	DESCRIPTION	UNIT
BC66RS	PowerSet Manual Reset Switch (Integral)	each
BC66RSR	PowerSet Manual Reset Switch (Remote)	each
BC66ETF	PowerLink Thermal Fuse	each
BC66MRF	PowerLink Resettable Thermal Fuse	each
BC66ESB	PowerSev Emergency Switch (Die-cast)	each
BC66ESB/P	PowerSev Emergency Switch (Plastic)	each
BC66ESB/K	PowerSev Emergency Switch - Key op	each

Spares for series 660x, 662x and 664x are no longer available.

Series 666x and 668x

PRODUCT CODE	SIZE/STYLE	VOLTAGE	UNIT
BC668S 110V	BC6663, 6664, 6683, 6684	110V 50Hz AC	each
BC668S 230V	BC6663, 6664, 6683, 6684	230V 50Hz AC	each
BC668LS 110V	BC6665, 6666, 6685, 6686	110V 50Hz AC	each
BC668LS 230V	BC6665, 6666, 6685, 6686	230V 50Hz AC	each
BC668HS 110V	BC6685FL4, 6686FL4	110V 50Hz AC	each
BC668HS 230V	BC6685FL4, 6686FL4	230V 50Hz AC	each
BC6687S 110V	BC6687FL4	110V 50Hz AC	each
BC6687S 230V	BC6687FL4	230V 50Hz AC	each
BC6689S 110V	BC6689FL4	110V 50Hz AC	each
BC6689S 230V	BC6689FL4	230V 50Hz AC	each
BC66810S 110V	BC66810FL4	110V 50Hz AC	each
BC66810S 230V	BC66810FL4	230V 50Hz AC	each
BC66811S 110V	BC66811FL4	110V 50Hz AC	each
BC66811S 230V	BC66811FL4	230V 50Hz AC	each

Powerseat® Accessories

PRODUCT CODE	SIZE/STYLE	UNIT
N101706000	Thermal Fuse for BC66ETF	each

Provengas Automatic Gas Proving System - Spare Part

PRODUCT CODE	SIZE/STYLE	UNIT
PGLSPAN	Labsafe Control Panel	each
PGCSPAN	Cooksafe Control Panel	each
PGLS/CSTRAN	Pressure Transducer for Labsafe/Cooksafe	each
KEYPGSMED	Spare Key for Labsafe/Cooksafe	each

SOLENOID GAS SAFETY SHUT-OFF VALVES

PROVENGAS AUTOMATIC GAS PROVING AND ISOLATION SYSTEM

A range of gas proving systems for use on schools, laboratories & kitchens.
Used in conjunction with Gas Safety Shut-off Valves approved to BS EN 161.
Essential for use in all locations where manual gas controls can cause the possibility of leakage and/or explosion, etc.

See BS EN 6715 for requirements in catering establishments.

PRODUCT CODE	Description	UNIT
PGCS003	Provengas 'Cooksafe' Proving System	each
PGLS001	Provengas 'Labsafe' Proving System	each

SERIES 2000 SOLENOID OPERATED VALVES

Series 22 - Vent Valve, Normally Open (i.e. not a Safety Shut-off Valve).
Gas Families 1, 2 & 3.
Cast Aluminium Bodies.
Closure within 1 sec. of power being applied.

Fast Opening - Full Wave Rectified, with Flow Adjustment

PRODUCT CODE	SIZE/STYLE	UNIT
2005 230V	3/4" BSP	each
2006 230V	1" BSP	each
2007 230V	1.1/4" BSP	each
2008 230V	1.1/2" BSP	each
2009 230V	2" BSP	each

Fast Opening - Full Wave Rectified, with Flow Adjustment and CPI

PRODUCT CODE	SIZE/STYLE	UNIT
2005 230VC	3/4" BSP	each
2006 230VC	1" BSP	each
2007 230VC	1.1/4" BSP	each
2008 230VC	1.1/2" BSP	each
2009 230VC	2" BSP	each

Other Voltages and Accessories

PRODUCT CODE	SIZE/STYLE	UNIT
110V 50Hz	Change 230V to 110V - extra	each
24V 50Hz	Change 230V to 24V - extra	each
N101717100	PG11 Cable Gland for all Series 2000 Valves	each

SOLENOID GAS SAFETY SHUT-OFF VALVES

TEKNI SOLENOID OPERATED VALVES

Series 24 to 29 - Gas Safety Shut-off Valves, Normally Closed.

Gas Families 1, 2 & 3.

Brass Bodies - 1/8" & 1/4".

Aluminium Bodies - Remainder.

Series 24 - Class "B", Half Wave Rectified (*Class "A")
Single Bodied Valves

PRODUCT CODE	SIZE/STYLE	UNIT
2411001-00	1/8" BSP *	each
2421001-00	1/4" BSP *	each
2431211-00	3/8" BSP	each
2441211-00	1/2" BSP	each

Double Bodied "Multifunctional" Valves

PRODUCT CODE	SIZE/STYLE	UNIT
2432112-00	3/8" BSP - 2 Safety Shut-off Valves	each
2442112-00	1/2" BSP - 2 Safety Shut-off Valves	each
2433112-00	3/8" BSP - 2 Safety Shut-off Valves and Governor	each
2443112-00	1/2" BSP - 2 Safety Shut-off Valves and Governor	each
2435112-00	3/8" BSP - 1 Safety Shut-off Valve and Governor	each
2445112-00	1/2" BSP - 1 Safety Shut-off Valve and Governor	each

Series 25 - Class "B", Full Wave Rectified (* Class "A") - Single Bodied Valves

PRODUCT CODE	SIZE/STYLE	UNIT
2511001-00	1/8" BSP *	each
2521001-00	1/4" BSP *	each
2531211-00	3/8" BSP	each
2541211-00	1/2" BSP	each

Double Bodied "Multifunctional" Valves

PRODUCT CODE	SIZE/STYLE	UNIT
2532000-00	3/8" BSP - 2 Safety Shut-off Valves	each
2542000-00	1/2" BSP - 2 Safety Shut-off Valves	each
2533112-00	3/8" BSP - 2 Safety Shut-off Valves and Governor	each
2543112-00	1/2" BSP - 2 Safety Shut-off Valves and Governor	each

SOLENOID GAS SAFETY SHUT-OFF VALVES

TEKNI SOLENOID OPERATED VALVES

Series 28 - Class 'A' - Single Bodied Valves

PRODUCT CODE	SIZE/STYLE	UNIT
2811001-00	1/8" BSP *	each
2821001-00	1/4" BSP *	each
2831211-00	3/8" BSP	each
2841211-00	1/2" BSP	each
2851211-00	3/4" BSP	each

Double Bodied 'Multifunctional' Valves

PRODUCT CODE	SIZE/STYLE	UNIT
2832112-00	3/8" BSP - 2 Safety Shut-off Valves	each
2842112-00	1/2" BSP - 2 Safety Shut-off Valves	each
2833112-00	3/8" BSP - 2 Safety Shut-off Valves and Governor	each
2843112-00	1/2" BSP - 2 Safety Shut-off Valves and Governor	each

Series 29 - Class 'A' - Single Bodied Valves

PRODUCT CODE	SIZE/STYLE	UNIT
2911001-00	1/8" BSP *	each
2921001-00	1/4" BSP *	each
2931211-00	3/8" BSP	each
2941211-00	1/2" BSP	each

SOLENOID OPERATED VALVES - SPARE PARTS

New Series 2000.

Fast Opening.

PRODUCT CODE	SIZE/STYLE	VOLTAGE	UNIT
20056S 230V	BC2005/2006 + 'C' models	230V 50Hz AC	each
20056S 110V	BC2005/2006 + 'C' models	110V 50Hz AC	each
20056S 24V	BC2005/2006 + 'C' models	24V 50Hz AC	each
20078S 230V	BC2007/2008 + 'C' models	230V 50Hz AC	each
20078S 110V	BC2007/2008 + 'C' models	110V 50Hz AC	each
20078S 24V	BC2007/2008 + 'C' models	24V 50Hz AC	each
2009S 230V	BC2009 + 'C' models	230V 50Hz AC	each
2009S 110V	BC2009 + 'C' models	110V 50Hz AC	each
2009S 24V	BC2009 + 'C' models	24V 50Hz AC	each

SOLENOID GAS SAFETY SHUT-OFF VALVES

SOLENOID OPERATED VALVES - SPARE PARTS

Tekni Series 22 to 29.

Series 22 - Vent Valve

PRODUCT CODE	SIZE/STYLE	VOLTAGE	UNIT
25146/FS	All valves	230V 50Hz AC	each

Series 24 - Class 'B' - Half Wave Rectified

PRODUCT CODE	SIZE/STYLE	VOLTAGE	UNIT
2430412/FS	All valves - 1/8" to 1/2"	230V Spade Conn.	each
2430414/FS	All valves - 1/8" to 1/2"	24V Spade Conn.	each
2430422/FS	All valves - 1/8" to 1/2"	230V Flying Lead	each
2430424/FS	All valves - 1/8" to 1/2"	110V Flying Lead	each
2430426/FS	All valves - 1/8" to 1/2"	24V Flying Lead	each

Series 25 - Class 'B' - Full Wave Rectified

PRODUCT CODE	SIZE/STYLE	VOLTAGE	UNIT
25146/FS	All valves - 1/8" to 1/2"	230V Spade Conn.	each
ME/487	DIN plugs to suit spade connections		each

Series 26 - Class '1' - Obsolete

PRODUCT CODE	SIZE/STYLE	VOLTAGE	UNIT
2330125/FS	All valves - 1/8" to 1/4"	230V Spade Conn.	each

Series 28 - Class 'A'

PRODUCT CODE	SIZE/STYLE	VOLTAGE	UNIT
2330125/FS	All valves - 1/8" to 1/4"	230V Spade Conn.	each
C103025900/FS	All valves - 3/8" to 1/2"	230V Spade Conn.	each
ME/428	All valves - 3/4"	230V Spade Conn.	each

Series 29 - Class 'A' - High Pressure

PRODUCT CODE	SIZE/STYLE	VOLTAGE	UNIT
C103025900/FS	All valves - 1/8" to 1/2"	230V Spade Conn.	each

GENERAL PURPOSE SOLENOID VALVES

SERIES 3000 VALVES

Series 3000 - General Purpose Valves, normally closed. (Energise to open).
For Water, Hot Water, Air, Oil, etc. Fast opening and closing.
Brass body with a choice of diaphragm material, Nitrile, EPDM (WRAS certified) or Viton.
Electrical connection by DIN socket. Protection to IP 65.

Nitrile Diaphragm

PRODUCT CODE	SIZE/STYLE	UNIT
3001 230V-N	3/8" BSP	each
3002 230V-N	1/2" BSP	each
3003 230V-N	3/4" BSP	each
3004 230V-N	1" BSP	each
3005 230V-N	1.1/4" BSP	each
3006 230V-N	1.1/2" BSP	each
3007 230V-N	2" BSP	each

EPDM Diaphragm

PRODUCT CODE	SIZE/STYLE	UNIT
3001 230V-E	3/8" BSP	each
3002 230V-E	1/2" BSP	each
3003 230V-E	3/4" BSP	each
3004 230V-E	1" BSP	each
3005 230V-E	1.1/4" BSP	each
3006 230V-E	1.1/2" BSP	each
3007 230V-E	2" BSP	each

Viton Diaphragm

PRODUCT CODE	SIZE/STYLE	UNIT
3001 230V-V	3/8" BSP	each
3002 230V-V	1/2" BSP	each
3003 230V-V	3/4" BSP	each
3004 230V-V	1" BSP	each
3005 230V-V	1.1/4" BSP	each
3006 230V-V	1.1/2" BSP	each
3007 230V-V	2" BSP	each

Coil Only

PRODUCT CODE	SIZE/STYLE	UNIT
3000 A 230V	230 V 50 Hz	each
3000 A 110V	110 V 50 Hz	each
3000 A 24V	24 V 50 Hz	each

FREE FALL FIRE VALVES

FIRE SAFETY SYSTEMS

The Free Fall Fire Valves provide a 100% fuel isolation system that will automatically operate in the event of excessive temperature or alarm signal.

The Free Fall Fire Valve kit consists of the fuel isolation valve, lever, weights, free fall link, thermal fuse link, wire cable, tensioners, pulleys, fixings and a warning sign.

Suitable for oil and gas.

Screwed Valves - 15mm to 80mm (1/2" to 3")

PRODUCT CODE	SIZE/STYLE	UNIT
BTFV15S	15 mm (1/2") Screwed	each
BTFV20S	20 mm (3/4") Screwed	each
BTFV25S	25 mm (1") Screwed	each
BTFV32S	32 mm (1.1/4") Screwed	each
BTFV40S	40 mm (1.1/2") Screwed	each
BTFV50S	50 mm (2") Screwed	each
BTFV65S	65 mm (2.1/2") Screwed	each
BTFV80S	80 mm (3") Screwed	each

Flanged Valves - 25mm to 150mm (1" to 6")

PRODUCT CODE	SIZE/STYLE	UNIT
BTFV25F	25 mm (1") Flanged	each
BTFV32F	32 mm (1.1/4") Flanged	each
BTFV40F	40 mm (1.1/2") Flanged	each
BTFV50F	50 mm (2") Flanged	each
BTFV65F	65 mm (2.1/2") Flanged	each
BTFV80F	80 mm (3") Flanged	each
BTFV100F	100 mm (4") Flanged	each
BTFV125F	125 mm (5") Flanged	each
BTFV150F	150 mm (6") Flanged	each

Accessories - Tilt Switch and Quick Release Units

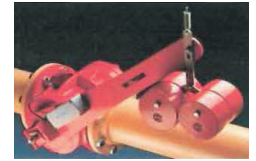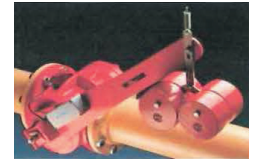| PRODUCT CODE	SIZE/STYLE	UNIT
BTFVTILT	Mercury Tilt Switch - Single Phase	each
BTFVMQR	Manual Quick Release	each
BTFVEMQR	Electrical Manual Quick Release	each
BTFVSQR24VDC	Solenoid Quick Release - 24 VDC	each
BTFVSQR230V	Solenoid Quick Release - 110/230 VAC	each
BTFVSQRR24VDC	Solenoid Quick Release C/W relay - 24 VDC	each
BTFVSQRR230V	Solenoid Quick Release C/W relay - 110/230 VAC	each

FREE FALL FIRE VALVES

FIRE SAFETY SYSTEMS

The Free Fall Fire Valves provide a 100% fuel isolation system that will automatically operate in the event of excessive temperature or alarm signal.

The Free Fall Fire Valve kit consists of the fuel isolation valve, lever, weights, free fall link, thermal fuse link, wire cable, tensioners, pulleys, fixings and a warning sign.

Suitable for oil and gas.

Spares & Extras - Levers

PRODUCT CODE	SIZE/STYLE	UNIT
BTFVLEVERA	Lever A - 1/2" & 1" Valve	each
BTFVLEVERB	Lever B - 1.1/4" & 1.1/2" Valve	each
BTFVLEVERC	Lever C - 2" & 2 1/2" Valve	each
BTFVLEVERD	Lever D - 3" Valve	each
BTFVLEVERE	Lever E - 4" & 5" Valve	each
BTFVLEVERF	Lever F - 6" Valve	each

Weights

PRODUCT CODE	SIZE/STYLE	UNIT
BTFVWEIGHTS	Weight 5lb (2.3kg) - < 1.1/4" Valves	each
BTFVWEIGHTM	Weight 10lb (4.5kg) - 1.1/2" Valve	each
BTFVWEIGHTL	Weight 15lb (6.8kg) - 2" up to 6" Valves	each

Fittings

PRODUCT CODE	SIZE/STYLE	UNIT
BTFVFITS	Bag of Fittings - Small - 1/2" to 1 1/4"	each
BTFVFITM	Bag of Fittings - Medium - 1.1/2" to 3"	each
BTFVFITL	Bag of Fittings - Large - 4" to 6"	each

Cables

PRODUCT CODE	SIZE/STYLE	UNIT
BTFVCABLE9M	Cable 9m (30ft)	each
BTFVCABLE30M	Cable 30m (100ft)	each
BTFVCABLE150M	Cable 150m (500ft)	each
BTFVCABLE300M	Cable 300m (1000ft)	each
BTFVCABLE760M	Cable 760m (2500ft)	each

FREE FALL FIRE VALVES

FIRE SAFETY SYSTEMS

Fuse Links

PRODUCT CODE	SIZE/STYLE	UNIT
BTFVFUSE72C	Fuse Link 72°C (160°F)	each
BTFVFUSE92C	Fuse Link 92°C (198°F)	each
BTFVFUSE104C	Fuse Link 104°C (220°F)	each
BTFVFUSE124C	Fuse Link 124°C (260°F)	each
BTFVFUSE183C	Fuse Link 183°C (360°F)	each

Sperryn Series T2066

PRODUCT CODE	SIZE/STYLE	UNIT
BTFVSPRINGL	Light Spring - 1/2" to 3"	each
BTFVSPRINGH	Heavy Spring - 4" to 6"	each
BTFVLINK	Freefall Link	each
BTFVTENSION	Cable Tensioner	each
BTFVSIGN	Warning Sign	each
BTFVPULLW	Pulley - Wood Screw	each
BTFVPULLBSP	Pulley - 1/4" BSP	each
BTFVEYEW	Eye - Wood Screw	each
BTFVSHOOK	Brass S-Hook	each
BTFVCRIMP	Crimp Connector (x5)	each

GAS GOVERNORS AND REGULATORS

GAS GOVERNORS AND REGULATORS

Class B Group 2 EN88 and EN334 approved.
Gas Families 1, 2 & 3 and other non-aggressive gas.
Operating Temperature -15 to +60°C.
Operation by spring tension.
Materials: Aluminium body, internal parts Aluminium, Steel, Brass and synthetic materials.
Diaphragm and gaskets in Nitrile-butadiene rubber.

Inlet Pressure 200 mb

PRODUCT CODE	SIZE/STYLE	PRESSURE RANGE (MBAR)	UNIT
FGD15/CEN	1/2" BSP	10 - 30	each
FGD20/CEN	3/4" BSP	10 - 30	each
FGD25/CEN	1" BSP	10 - 30	each
FGD32/CEN	1.1/4" BSP	10 - 25	each
FGD40/CEN	1.1/2" BSP	10 - 25	each
FGD50/CEN	2" BSP	10 - 25	each
Springs available for other pressure ratings			

Inlet Pressure 500 mbar

PRODUCT CODE	SIZE/STYLE	PRESSURE RANGE (MBAR)	UNIT
FGDR15/CEN	1/2" BSP	10 - 30	each
FGDR20/CEN	3/4" BSP	10 - 30	each
FGDR25/CEN	1" BSP	10 - 30	each
FGDR32/CEN	1.1/4" BSP	10 - 25	each
FGDR40/CEN	1.1/2" BSP	10 - 25	each
FGDR50/CEN	2" BSP	10 - 35	each
FGDR50/40N	2" BSP	10 - 25	each
STR65D/CEN	65mm Flanged	9 - 25	each
STR80/CEN	80mm Flanged	9 - 25	each
STR100D/CEN	100mm Flanged	15 - 45	each
Springs available for other pressure ratings			

GAS GOVERNORS AND REGULATORS

GAS GOVERNOR SPRINGS

PRODUCT CODE	TO FIT MODELS	COLOUR	PRESSURE RANGE (MBAR)	UNIT
504.0037.020	FGD, FGDR 15/20/25	Green	5 - 15	each
504.0032.020	FGD, FGDR, FGIB 15/20/25	Violet	25 - 80	each
504.0033.020	FGD, FGDR, FGIB 15/20/25	Brown	70 - 160	each
504.0034.020	FGDR, FGIB 15/20/25	Blue	150 - 280	each
E816D	FGD, FGDR, FGIB 32/40 50/40	Green	5 - 15	each
504.0017.020	FGD, FGDR, FGIB 32/40 50/40	Violet	20 - 70	each
E619D	FGD, FGDR, FG1B 50	Violet	30 - 80	each
E631D	FGD 50	Brown	70 - 160	each
E631D	FGDR, FG1B 50	Brown	70 - 220	each
E406	STR 65/80	Red	24 - 70	each
E417D	STR 65/80	Violet	60 - 110	each
E424D	STR 65/80	Brown	100 - 150	each
E535	STR 100	Red	35 - 75	each
E468	STR 100	Violet	70 - 110	each
E475	STDR 100	Brown	100 - 150	each

GAS GOVERNORS AND REGULATORS

PROPORTIONATORS (GAS/AIR RATIO CONTROLS)

Maximum inlet pressure 200mb. Air pressure control 2 - 120mb. Air/gas ratio 1:1
Differential between inlet and outlet - Min 20mb, Max 150mb. Air connection 1/4" BSP
Ambient Temperature -10 to +60°C. Gas families 1, 2 & 3 and non-aggressive gases.
Materials: Aluminium body, internal parts Aluminium, Steel, Brass and synthetic materials.
Diaphragm and gaskets in Nitrile-butadiene Rubber.

PRODUCT CODE	SIZE/STYLE	UNIT
GAVR15	1/2" BSP	each
GAVR20	3/4" BSP	each
GAVR25	1" BSP	each
GAVR32	1.1/4" BSP	each
GAVR40	1.1/2" BSP	each
GAVR50	2" BSP	each
VRGA65	DN65	each
VRGA80	DN80	each
VRGA100	DN100	each

GAS FILTERS AND ELEMENTS

GAS FILTERS

Approval EN 126. Gas Families 1, 2 & 3 and non-aggressive gases.

Working Temperature -10 to +80°C.

Materials - Body and covers Aluminium, Filter Element Viledon P15/500S,
synthetic materials and galvanised steel reinforcements for flanged filters.

PRODUCT CODE	SIZE/STYLE	RATING	UNIT
70609/CE	1/2" BSP	500 mb	each
70611/CE	1/2" BSP	1 Bar	each
70612/CE	3/4" BSP	1 Bar	each
70602/CE	1" BSP	1 Bar	each
70604/CE	1.1/4" BSP	1 Bar	each
70603/CE	1.1/2" BSP	1 Bar	each
70631/CE	2" BSP	1 Bar	each

FILTER ELEMENTS

PRODUCT CODE	SIZE/STYLE	UNIT
3216	70611/CE - 70612/CE	each
3217	79692/CE - 70604/CE - 70603/CE	each
3218	70631/CE	each

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THERMO-ELECTRIC VALVES AND ANCILLARY PRODUCTS

THERMO-ELECTRIC VALVES

Series 37 and G840 Thermo-electric Valves.

Gas Families 1, 2 & 3. Cast Aluminium Bodies.

For use with Black Teknigas Thermocouples.

Single Burner Applications, Integral Pilot Fitted Upstream of any Governor or Pilot

PRODUCT CODE	SIZE/STYLE	UNIT
3703/3/8IN	3/8" BSP	each
3703/1/2IN	1/2" BSP	each
3702/3/4IN	3/4" BSP	each
3702/1IN	1" BSP	each
G840 HA	1/2" BSP	each

Multi Burner Application, Independent Pilot Supply

PRODUCT CODE	SIZE/STYLE	UNIT
3705/3/8IN	3/8" BSP	each
3705/1/2IN	1/2" BSP	each
3706/3/4IN	3/4" BSP	each
3706/1IN	1" BSP	each

PILOT TUBE KITS

PRODUCT CODE	SIZE/STYLE	UNIT
PTK4MM	1 Metre x 4 mm Tube plus Fittings	each
PTK6MM	1 Metre x 6 mm Tube plus Fittings	each

THERMOCOUPLES

High Quality Universal, specific duty and replacement type thermocouples.

Normal working temp. range 400 to 600°C. Max. operating temp. 1000°C.

Drop out time typically 30 to 40 seconds.

Series 7000 - Universal Thermocouples including Fittings Pack

PRODUCT CODE	SIZE/STYLE	UNIT
7000/EL/600MM	24" (600mm) Ext. Life	each
7000/EL/900MM	36" (900mm) Ext. Life	each
7000/EL/1200MM	48" (1200mm) Ext. Life	each
7000/EL/1800MM	72" (1800mm) Ext. Life	each
7001/S/900MM	36" (900mm) with Interrupter	each
7002/900MM	36" (900mm) Long Life	each
7003/900MM	36" (900mm) Super Universal	each
7003/1200MM	48" (1200mm) Super Universal	each
7003/900MMPLUS	36" (900mm) Superfit Plus Universal	each
7004/900MM	36" (900mm) Gas Fire Universal	each

THERMO-ELECTRIC VALVES AND ANCILLARY PRODUCTS

THERMOCOUPLES

High Quality Universal, specific duty and replacement type thermocouples.
Normal working temp. range 400 to 600°C. Max. operating temp. 1000°C.
Drop out time typically 30 to 40 seconds.

Additional Adaptor Packs for Universal Thermocouples

PRODUCT CODE	SIZE/STYLE	UNIT
7000/04	Perl, Black 5503	each
7000/05	Perl A, B, C, D & E	each
7000/12	Evered 9189, White Rodgers, Robertshaw	each
7000/13	Teddington TJ	each
7000/15	Speryn T582	each
7000/26	Junkers, S.I.T.	each
7000/304	M10 Split Nut	each
7000/305	M9 Split Nut	each
7000/306	11/32" Split Nut	each
7000/307	M8 Split Nut	each

Customer Specific Series Thermocouples

PRODUCT CODE	SIZE/STYLE	UNIT
701062	36" (900mm) 9mm Fixed Nut	each
701082	48" (1200mm) 9mm Fixed Nut	each
701092	60" (1500mm) 9mm Fixed Nut	each

Sperryn Series T2066

PRODUCT CODE	SIZE/STYLE	UNIT
710022	320mm	each
710042	600mm	each
710072	1000mm	each
710092	1500mm	each

THERMO-ELECTRIC VALVES AND ANCILLARY PRODUCTS

THERMOCOUPLES

High Quality Universal, specific duty and replacement type thermocouples.
Normal working temp. range 400 to 600°C. Max. operating temp. 1000°C.
Drop out time typically 30 to 40 seconds.

Replacement Type Thermocouples

PRODUCT CODE	SIZE/STYLE	UNIT
7/S38	Thorn Apollo	each
7S/39A	Burco 54561	each
703044	24" (600mm) Q309A Type	each
703064	36" (900mm) Q309A Type	each
703084	48" (1200mm) Q309A Type	each
705060	36" (900)mm ITT Type	each
705080	48" (1200mm) ITT Type	each
712044	Thorn Olympic	each
717033	Robinson Willey Bantam	each
717052	Ideal Mexico	each
721202A	Potterton 8929547	each
7220212A	Main Medway Super	each
722213	Main Medway	each
724223	Valor Dream	each
725171	Glowworm Fireblaze	each
726041	Valor Heartbeat	each
727064	Thorn M	each
728143	Cannon Carress	each
728214	Vokera Flowmatic	each

SPARE PARTS FOR GAS SAFETY SHUT OFF VALVES, ETC

BLACK 'SUPERSEAL' SOLENOID VALVES - SPARE PARTS

Series 69 - Obsolete, no spares available.

Series 79 - Obsolete, no spares available.

Series 89 - Obsolete, no spares available.

No further spares available for obsolete Blacks Solenoid valves of any Series.

BLACK 'SUPERSEAL' SOLENOID VALVES - SPARE PARTS

Series 37 and G840

PRODUCT CODE	SIZE/STYLE	UNIT
3701/110	Push Button Assembly - 3701/3703/3705	each
3702/127	Push Button Assembly - 3702/3706	each
T3622	Push Button Assembly - G840/880 1/2"	each
T1941	Push Button Assembly - G840/880 3/4"	each
MB1/FS	Electro-mag.hood assy. - 3701/3703 and G840/880 1/2"	each
3702/140	Pilot Assembly - 3702	each
3705/100	Pilot Assembly - 3705	each
3706/104	Pilot Assembly - 3706	each

ACTUATORS FOR MOTORISED BALL VALVES

MANUAL BALL VALVES AND ACTUATORS

Art. 77 - Cast Iron Body, PTFE Seats, Brass Ball and Stem.

Max Working Pressure 16 bar. Lever Handle.

Art. 77 - Flanged

PRODUCT CODE	SIZE/STYLE	UNIT
1.1/2" ART77 LH	11/2" - 40mm	each
2" ART77 LH	2" - 50mm	each
2.1/2" ART77 LH	2.1/2" - 65mm	each
3" ART77 LH	3" - 80mm	each
4" ART77 LH	4" - 100mm	each
5" ART77 LH	5" - 125mm	each
6" ART77 LH	6" - 150mm	each

ACTUATORS FOR MOTORISED BALL VALVES

JOVENTA ACTUATORS

230 Volt - Modulating Operation.

Ball Valve price from Page 15 to be added to give complete valve price.

PRODUCT CODE	TORQUE	OPENING TIME	OPERATING ANGLE	AUXILIARY SWITCHES	INPUT	UNIT
DMS2.2	8 Nm	30 sec	90	N/A	(1)	each
DMS2.2s	8 Nm	30 sec	90	2	(1)	each
DM 2.2	16 Nm	80 sec	90	N/A	(2)	each
DM 2.2s	16 Nm	80 sec	90	2	(2)	each
(1) 0-10V, 0(4)-20mA			(2) 0(2)-10V, 0(4)-20mA			

BURNERS, PILOTS, INJECTORS, BURNER CONTROLLERS, ACCESSORIES, ETC

ELECTRONIC BURNER SEQUENCE CONTROLLERS

Atmospheric and Forced Draught Burners.

Series 'Microflat' - Fully Automatic Control.

Integral Spark, Flame Rectification (Ionisation) only

PRODUCT CODE	SIZE/STYLE	UNIT
SE 11 F 230V	2 valve, 2 probe control for atmos. burners	each
SM 11 KIT	Electrical Termination kit for above	each
SM 11 RS	Reset Button for above - if required	each

Atmospheric and Forced Draught Burners

Series SM - Fully Automatic Control

PRODUCT CODE	SIZE/STYLE	UNIT
SM592-230V	Fully Automatic - Flame Rectification only - 230V	each
SM592-110V	Fully Automatic - Flame Rectification only - 110V	each

Accessories for above

PRODUCT CODE	SIZE/STYLE	UNIT
1201/230V	Spark Generator - 230V	each
1201/110V	Spark Generator - 110V	each
UV1	Ultra Violet Detector Head	each
ME39/FS	Electrode (probe) - 6"	each
ME233/FS	Electrode (probe) - 12"	each

BURNERS, PILOTS, INJECTORS, BURNER CONTROLLERS, ACCESSORIES, ETC

PILOT BURNERS

Various models and Styles for Domestic, Commercial and Industrial applications.

Industrial Pilot Assemblies for Natural Gas and LPG.

Series 1300 - for use with Flame Rectification Units, includes 2 Probes

PRODUCT CODE	SIZE/STYLE	UNIT
1300/N	Natural Gas	each
1300/LPG	Liquified Petroleum Gas	each

Series 1101 - for use with Tekni 7000 series Thermocouples in arduous conditions

PRODUCT CODE	SIZE/STYLE	UNIT
1300/N	Natural Gas	each
1300/LPG	Liquified Petroleum Gas	each

Commercial/Domestic Pilot Assemblies for Natural Gas and LPG

Series 'Y' - Compact aerated, low consumption burner.

Available in three styles:

Type 'A' - Horizontal Flame with Vertical Flame at 90°.

Type 'B' - Horizontal Flame with Upward Flame at 120°.

Type 'C' - Two Horizontally Opposed Flames.

PRODUCT CODE	SIZE/STYLE	UNIT
Y100	Type 'A' - Natural Gas	each
Y104	Type 'B' - Natural Gas	each
Y108	Type 'C' - Natural Gas	each
Y166	Type 'A' - Liquified Petroleum Gas	each
Y177	Type 'A' - Liquified Petroleum Gas	each
Y175	Type 'A' - Liquified Petroleum Gas	each

Series CTB Monogas and Universal Pilot Burners 1, 2, & 3 Flame Models

PRODUCT CODEs consist of four elements, as follows.

First Element - 'CTB/'' - i.e. series.

Second Element - either 'MV/' (Monogas or 'U/' (Universal).

Third Element - '1/', '2/' or '3/' - i.e. No. of flames required".

Fourth Element - Bracket type 'STD' (Standard) or 'EXT' (Extended).

In addition orders for Monogas Pilots should indicate if pilot is for "/LPG".

PRODUCT CODE	SIZE/STYLE	UNIT
See above	See above	each
Standard connection is 6mm comp. But 4mm can be supplied to special order		

BURNERS, PILOTS, INJECTORS, BURNER CONTROLLERS, ACCESSORIES, ETC

PILOT BURNERS

Accessories

PRODUCT CODE	SIZE/STYLE	UNIT
MG18	CTB Electrode	each
MG20	Piezo Ignitor	each
MG21	H.T. Cable	metre
MG22	Flat Connector	each
MG25	Ring Connector	each

TEKNI GAS INJECTORS

Series 117 Single Arm - Die Cast Body, Brass Jet (Pilot Drilled)

PRODUCT CODE	SIZE/STYLE	UNIT
117/.75IN	3/4" connection, 3/8" inlet, 1/4" jet, 30,000 BTU	each
117/1IN	1" connection, 3/8" inlet, 1/4" jet, 45, 000 BTU	each
117/1.25IN	1.1/4" connection, 1/2" inlet, 3/8" jet, 80,000 BTU	each
117/1.5IN	1.1/2" connection, 3/4" inlet, 3/8" jet, 135,000 BTU	each
117/2IN	2" connection, 1" inlet, 1/2" jet, 180,000 BTU	each

Jets - Type 117 Injectors - Pilot Drilled Only

PRODUCT CODE	SIZE/STYLE	UNIT
123/210	for 3/4" and 1"	each
123/211	for 1.1/4" and 1.1/2"	each
123/212	for 2"	each

Series 168 - Fabricated Steel Body, Brass Jet (Pilot Drilled)

PRODUCT CODE	SIZE/STYLE	UNIT
168/1IN	1" connection, 1/2" inlet, 1/4" jet, 30,000 BTU	each
168/1.25IN	1.1/4" connection, 3/4" inlet, 3/8" jet, 45,000 BTU	each
168/1.5IN	1.1/2" connection, 3/4" inlet, 3/8" jet, 135,000 BTU	each
168/2IN	2" connection, 1" inlet, 1/2" jet, 180,000 BTU	each

Jets - Type 168 Injectors - Pilot Drilled Only

PRODUCT CODE	SIZE/STYLE	UNIT
201/102	for 1"	each
201/104	for 1.1/4" and 1.1/2"	each
201/106	for 2"	each

PRESSURE, FLOW, LEVEL AND PHOTO-ELECTRIC CONTROLS

PRESSURE SWITCHES - LOW PRESSURE

Low Pressure Switches for Positive, Negative and Differential Pressure applications.
Range from 0.25 mbar to 2.1 bar.

Black Series 80 - Positive, Negative and Differential Pressure Switch

PRODUCT CODE	SIZE/STYLE	UNIT
BC8039A	0.25 to 2.5 mbar	each
BC8062	2.3 to 15 mbar	each

Black Series 80 - Mounting Bracket

PRODUCT CODE	SIZE/STYLE	UNIT
BC17512	Mounting Bracket	each

Actu Series LDH - Positive, Negative and Differential Pressure Switch

PRODUCT CODE	SIZE/STYLE	UNIT
ACTU020001	LDH/0 - 0.25 to 0.63 mbar	each
ACTU020002	LDH/1 - 0.63 to 3.24 mbar	each
ACTU020003	LDH/7 - 2.50 to 17.5 mbar	each
ACTU020004	LDH/28 - 17.00 to 70.00 mbar	each

Actu Series LDH - Mounting Bracket

PRODUCT CODE	SIZE/STYLE	UNIT
ACTU320400	LDH Mounting Bracket	each

Series C6097 - Positive, Negative and Differential Pressure Switch

Inlet Pressure Pipe Connection: Rp 1/4" female.

Differential Pressure Connection Rp 1/8" female.

PRODUCT CODE	SIZE/STYLE	UNIT
C6097A2110	1.0 to 10.0 mbar	each
C6097A2210	2.5 to 50.0 mbar	each
C6097A2310	30 to 150 mbar	each
C6097A2410	100 to 500 mbar	each

PRESSURE, FLOW, LEVEL AND PHOTO-ELECTRIC CONTROLS

PRESSURE SWITCHES - HIGH PRESSURE

Series Supermin - Miniature Positive and Negative Pressure Switches

PRODUCT CODE	SIZE/STYLE	UNIT
5600001	SM1 - 0.1 to 1.0 bar	each
5600002	SM2 - 0.4 to 2.5 bar	each
5600003	SM3 - 1.0 to 10 bar	each
5600004	SM4 - 4.0 to 25 bar	each
	Degreased Version of any above	extra

LONDEX LEVEL CONTROLS

Air and Liquid Flow Switches and Controllers

Series Supermin - Miniature Positive and Negative Pressure Switches

PRODUCT CODE	SIZE/STYLE	UNIT
4831001	EAF 110, 24v, 0.6-15m/s	each
4832001	EAF 180, 24v, 0.6-15m/s, t/o	each
4880001	EAF 250, 24v, 0.3min to 2-15max	each
4880004	EAF 250 Sensor Only	each
4880006	EAF 250 Control Unit Only	each
4880003	EAF 260, 24v, 0-20m/s	each

LONDEX PHOTO-ELECTRIC DEVICES

Series Minilux - Night/Day Photo Switches

PRODUCT CODE	SIZE/STYLE	UNIT
7400003	41018, 240v, 2-2000lux	each
7400004	41047, 240v, on 45, off 90lux	each
7430003	36096, 200/240v, 2 - 20,000lux	each

bar BLÜCHER® MICROFLEX® SOCLA valpes

WATTS®