COMPONENTS FOR SAFEGUARDING, MEASURING, AND CONTROLLING GASES

Edition 04.22 DE

VINE

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HONEYWELL KROMSCHRÖDER CONTROLS

INNOVATION THAT PAYS

Safety, lower energy consumption, and active environmental protection are issues of the utmost importance.

Safety

Honeywell Kromschröder gas control and safety systems not only make gas installations safe, they provide operating personnel with optimum protection. SIL and PL certification ensure that Honeywell Kromschröder products provide the required level of safety for the installation.

Optimum Value

Honeywell Kromschröder offers technically optimized controls for applications in the heat processing industry providing optimum value. Honeywell Kromschröder products and systems are based on modular platforms, which allows for both logistical and functional flexibility.

High system availability is the prerequisite for cost-effective operation. The design and robust construction of the Honeywell Kromschröder controls ensures a long service life of your installation.

Safety Solutions

When upgrading or expanding existing systems, the modular design of Honeywell Kromschröder products proves to be an advantage since it means that individual system components can be easily retrofitted or replaced. High quality in heat processes is achieved with adapted systems designed by industry control leaders in the Honeywell Engineered Systems Group. The combustion system can be tailored to the specific requirements of the process, enhancing the performance and longevity of the equipment.



INDUSTRIAL APPLICATIONS

- Ceramics
- Metals
- Heat Treating
- Automotive
- Food and Beverage
- Glass

PROTECTIVE SYSTEMS CONTROL FCU 500

Dedicated safety-rated device for controlling and monitoring the combustion system safety devices.

The FCU is designed to monitor and control the central safety functions of the combustion system including safety temperature and multi-burner control.

Features

- Optional valve proving system/
 POC input
- Optional auto-ignition or high/ over temperature protection control
- Front panel PC interface for programming diagnostics, and data logging
- Optional remote display for external panel mounting
- Replaceable load power module for safety outputs
- Safety functions up to SIL 3, corresponding to PL e
- PROFINET Fieldbus connection through optional module

Specifications

- Input power: 120, 230V AC
- Control power: 24V DC
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 20
- Thermocouple input type: K, N, S

Applications

Multi-burner applications where the combustion safeties are monitored and controlled in a single location.

Approvals

- SIL
- CE
- CSA
- FM
- EAC

Type code

FCU	Protective system control
500	Series 500
Q	Mains voltage 120 V AC, 50/60 Hz
W	Mains voltage 230 V AC, 50/60 Hz
CO	No valve proving system
C1	Valve proving system
F0	No capacity control
F1	Modulating with IC interface
F2	Modulating with RBW interface
HO	No temperature monitoring
H1	With temperature monitoring
K0	No connection plugs
K1	Connection plugs with screw terminals
К2	Connection plugs with spring force terminals
-E	Individual packaging

More information

The FCU website contains links to technical documentation, product selection, spare parts, etc.



Burner Control Units

BURNER CONTROL UNITS BCU 570

Burner control providing complete safety control and annunciation in single burner installations.

The BCU 570 burner control unit controls, ignites and monitors directly or pilot-ignited forced draft burners.

Features

- Monitors: low gas, high gas, low air pressure, and air flow switches
- Pre-purge/post-purge fan and air valve control
- Optional Valve Proving System/ POC input
- Optional remote display for external panel mounting
- PROFINET fieldbus connection using optional bus module
- Integrated front panel display indicates fault and operating status
- Manual-mode operation for initial burner set-up
- Front Panel PC interface for programming diagnostics, and data logging

Specifications

- Input power: 120, 230V AC
- Valve output: 1A each
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 20

Applications

Single packaged burner applications where the burner control is located locally to the burner.

Approvals

- SIL
- CE
- UL
- CSA
- FM
- EAC

Type code

•••	
BCU	Burner control unit
570	Series 570
Q	Mains voltage 120 V AC, 50/60 Hz
W	Mains voltage 230 V AC, 50/60 Hz
CO	No valve proving system
C1	Valve proving system
F1	Modulating with IC interface
F2	Modulating with RBW interface
UO	lonization or UV control in case of operation with gas
KO	No connection plugs
K1	Connection plugs with screw terminals
К2	Connection plugs with spring force terminals
-Е	Individual packaging

More information

The <u>BCU 570</u> website contains links to technical documentation, product selection, spare parts, etc.



BCU 560, BCU 565

Burner control for monitoring, control and annunciation of a burner multi-burner installations.

The BCU 560 & 565 burner control units controls, ignites and monitors industrial gas burners in modulating or staged control.

Features

- Multi-flame control in conjunction with flame switch IFW 15
- Optional air valve control
- Optional air flow monitoring for tube-firing burners
- Optional valve proving system/ POC input
- PROFINET fieldbus connection using optional bus module
- Optional remote display for external panel mounting
- Integrated front panel display indicates operating and fault status and provides ease of set-up with manual-mode
- Front panel PC interface for programming, diagnostics, and data logging

Specifications

- Input power: 120, 230V AC
- Control power: 24V DC
- Valve output: 1A each
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 20

Applications

Multi-burner applications where the burner control is located centrally in a control panel. Designed to incorporate control of the air valve in pulse-fire applications.

Approvals

- SIL
- CE
- CSA
- FM
- EAC

Type code

BCU	Burner control unit
5	Series 500
60	Standard version
65	Extended air control
Q	Mains voltage 120 V AC, 50/60 Hz
W	Mains voltage 230 V AC, 50/60 Hz
C 0	No valve proving system
C1	Valve proving system
F0	No capacity control
F1	Modulating with IC interface
F2	Modulating with RBW interface
F3	Air valve control
UO	lonization or UV control in case of operation with gas
DO	No high temperature operation
D1	High temperature operation
KO	No connection plugs
K1	Connection plugs with screw terminals
K2	Connection plugs with spring force terminals
-Е	Individual packaging

More information

The <u>BCU 560, BCU 565</u> website contains links to technical documentation, product selection, spare parts, etc.



BCU 370

Burner control designed in an enclosure suitable for mounting at the burner while providing complete safety control and annunciation of package-type burners.

The BCU 370 burner control unit controls, ignites and monitors directly or pilot-ignited forced draft package burners.

Features

- Monitors: low gas, high gas, and low air pressure switches
- Pre-purge/post-purge fan and air valve control
- Optional integrated ignition transformer
- Optional PROFIBUS communications
- Integrated front panel display indicates fault and operating status
- Manual-mode operation for initial burner set-up
- Front Panel PC interface for programming diagnostics, and data logging

Specifications

- Input power: 120, 230V AC
- Max gas valve output: 2.5A
- Flame sensor: ionization or UV
- Maximum sensor cable length: 164ft (50m)
- Ambient temperature: -4°F to 140°F (-20°C to 60°C)
- Enclosure: IP 54

Applications

Single packaged burner applications where the burner control is located locally to the burner.

Approvals

- CE
- CSA
- FM
- UL

Type code

BCU	Burner control unit
370	Series 370
Q	Mains voltage 120 V AC, 50/60 Hz
W	Mains voltage 230 V AC, 50/60 Hz
-	Without ignition
11	Electronic ignition, single-pole
12	Electronic ignition, double-pole
13	Electronic ignition, double-pole with neutral conductor
F	Fan control
Е	Valve control
UO	onization control (continuous op.) or UV control (intermittent op. with UVS)
U1	UV control (continuous operation with UVC 1)
D1	DGmax. monitoring
D3	Integrated tightness control
B1	PROFIBUS DP interface
-3 Thi	ree-point step control via PROFIBUS DP



More information

The <u>BCU 370</u> website contains links to technical documentation, product selection, spare parts, etc.

BCU 580

Burner control for monitoring the pilot and main flames of industrial burners with two separate sensor inputs.

The BCU 580 burner control unit controls, ignites and monitors directly or pilot ignited industrial gas burners in modulating or staged control.

Features

- Separate pilot and main burner sensor inputs
- Optional air valve control
- Optional valve proving system/ POC input
- PROFINET fieldbus connection using optional bus module
- Optional remote display for external panel mounting
- Integrated front panel display indicates operating and fault status and provides ease of set-up with manual-mode
- Front panel PC interface for programming, diagnostics, and data logging

Specifications

- Input power: 120, 230V AC
- Control power: 24V DC
- Valve output: 1A each
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 20

Applications

Multi-burner applications where the burner control is located centrally in a control enclosure. Primarily designed for Pulse-Fire control applications where the burner is ignited by an interrupted or intermittent pilot.

Approvals

- SIL
- CE
- CSA
- FM
- EAC

Type code

- 7 1	
BCU	Burner control unit
5	Series 500
80	Version for pilot and main burners
Q	Mains voltage 120 V AC, 50/60 Hz
W	Mains voltage 230 V AC, 50/60 Hz
CO	No valve proving system
C1	Valve proving system
FO	No capacity control
F1	Modulating with IC interface
F2	Modulating with RBW interface
F3	Air valve control
UO	Ionization or UV control in case of operation with gas
DO	No high temperature operation
D1	High temperature operation
ко	No connection plugs
K1	Connection plugs with screw terminals
К2	Connection plugs with spring force terminals
-Е	Individual packaging

More information

The <u>BCU 580</u> website contains links to technical documentation, product selection, spare parts, etc.



BCU 460, BCU 465

Honeywell's next-generation Kromschröder® BCU 4 Series burner controls – encompassing BCU 460 and 465 models – feature modular, all-in-one designs that can be mounted close to industrial burners to facilitate system integration, offering good value.

Features

- Optional integrated ignition
 transformer
- Fieldbus connection (PROFIBUS, PROFINET, EtherNet/IP) using optional bus module
- Integrated front panel display indicates operating and fault status
- Versions available with air control, air flow monitoring, valve proving system, auto ignition flame control bypass, and operating modes to reduce thermal NO_X
- Front Panel PC interface for programming, diagnostics, and data logging
- Manual-mode operation for initial burner set-up

Specifications

- Input power: 120, 230V AC
- Max gas and air valve output: 2.5A
- Flame sensor: ionization or UV
- Maximum sensor cable length: 164ft (50m)
- Ambient temperature: -4°F to 140°F (-20°C to 60°C)
- Enclosure: IP 65/Nema 4

Applications

Multi-burner applications where the burner control is located locally to the burner. Primarily designed for Pulse-Fire control applications.

Approvals

- SIL
- CE
- CSA
- FM
- EAC

Type code

- JPC	
BCU	Burner control unit
4	Series 400
60	Standard version
65	Extended air control
Q	Mains voltage 120 V AC, 50/60 Hz
W	Mains voltage 230 V AC, 50/60 Hz
0	No ignition transformer
-	tion transformer 5 kV, 15 mA, ED 100 %
-	hition transformer 8 kV, 20 mA, ED 19 %
-	ion transformer 8 kV, 12 mA, ED 100 %
-	nition transformer 8 kV, 20 mA, ED 33 %
P0	No flange plate
P1	Flange plate: standard
P2	Flange plate: M32
Р3	Flange plate: 16-pin industrial plug connector
P6	Flange plate: PROFIBUS
P7	Flange plate: conduit
C 0	No valve proving system
C1	Valve proving system: TC and POC
C2	Valve proving system: POC
D0	No high temperature operation
D1	High temperature operation
D2	Flameless operation
0	No input function
1	Input function: auxiliary gas
2	Input function: LDS
3	Input function: auxiliary gas and LDS
0	Without pressure switch
1	Pressure switch for air
2	Pressure switch for gas
3	Pressure switches for gas and air
0	
К0	No connection plugs
К1	Connection plugs with screw terminals
K2	Connection plugs with spring force terminals
E0-	Energy supply: via safety interlocks
E1-	Energy supply: via L1
/LM	



Q	Mains voltage 120 V AC, 50/60 Hz
W	Mains voltage 230 V AC, 50/60 Hz
FO	Air actuator: none
F1	Air actuator: with IC 40 interface
F3	Air actuator: with air valve control
00	Optional output: none
01	Optional output: not fail-safe
0 ₂	Optional output: fail-safe
E0-	Energy supply: via safety interlocks
E1-	Energy supply: via L1

More information

The <u>BCU 460, BCU 465</u> website contains links to technical documentation, product selection, spare parts, etc.

BCU 480

Honeywell's next-generation Kromschröder® BCU 4 Series burner controls BCU 480 models – feature modular, all-in-one designs that can be mounted close to industrial burners to facilitate system integration, offering good value.

Features

- Separate pilot and main burner sensor inputs
- Optional integrated ignition transformer
- Fieldbus connection (PROFIBUS, PROFINET, EtherNet/IP) using optional bus module
- Integrated front panel display indicates operating and fault status
- Versions available with air control, valve proving system and auto ignition flame control bypass
- Front panel PC interface for programming, diagnostics, and data logging
- Manual-mode operation for initial burner set-up

Specifications

- Input power: 120, 230V AC
- Max gas and air valve output: 2.5A
- Flame sensor: Ionization or UV
- Maximum sensor cable length: 164ft (50m)
- Ambient temperature: -4°F to 140°F (-20°C to 60°C)
- Enclosure: IP 65 / Nema 4

Applications

Multi-burner applications where the burner control is located locally to the burner. Primarily designed for Pulse-Fire control applications where the burner is ignited by an interrupted or intermittent pilot.

Approvals

- SIL
- CE
- FM
- EAC
- CSA

Type code

BCU	Burner control unit	
4	Series 400	
80	Version for pilot and main burners	
Q	Mains voltage 120 V AC, 50/60 Hz	
W	Mains voltage 230 V AC, 50/60 Hz	
0	No ignition transformer	
1 Ignition transformer 5 kV, 15 mA, ED 100 $\%$		
Ŭ	2 Ignition transformer 8 kV, 20 mA, ED 19 %	
U	${\bf 3}$ Ignition transformer 8 kV, 12 mA, ED 100 $\%$	
8 Ignit	ion transformer 8 kV, 20 mA, ED 33 %	
P0	No flange plate	
P1	Flange plate: standard	
P2	Flange plate: M32	
P3	Flange plate: 16-pin industrial plug connector	
P6	Flange plate: PROFIBUS	
P7	Flange plate: conduit	
C 0	No valve proving system	
C1	Valve proving system: TC and POC	
C2	Valve proving system: POC	
DO	No high temperature operation	
D1	High temperature operation	
D2	Flameless operation	
0	No input function	
1	Input function: auxiliary gas	
2	Input function: LDS	
3	Input function: auxiliary gas and LDS	
0	Without pressure switch	
1	Pressure switch for air	
2	Pressure switch for gas	
3	Pressure switches for gas and air	
0		



к0	No connection plugs
K1	Connection plugs with screw terminals
K2	Connection plugs with spring force terminals
E0-	Energy supply: via safety interlocks
E1-	Energy supply: via L1
/LM	400 Power module
Q	Mains voltage 120 V AC, 50/60 Hz
W	Mains voltage 230 V AC, 50/60 Hz
F0	Air actuator: none
F1	Air actuator: with IC 40 interface
F3	Air actuator: with air valve control
00	Optional output: none
01	Optional output: not fail-safe
0 ₂	Optional output: fail-safe
E0-	Energy supply: via safety interlocks
E1-	Energy supply: via L1

More information

The <u>BCU 480</u> website contains links to technical documentation, product selection, spare parts, etc.

PF - 19"

High density burner control system which can be customized to meet the requirements of the combustion system.

The PF-19 Process Firing system controls multiple burners through various configurations. The combination of burner control, flame switch, and contact relay cards permit the control of complex systems with a single control.

Features

- Space to allow for up to 9 burner control cards
- Through-the-enclosure door mounting allows access to the burner control cards while maximizing usable control enclosure area
- Optional PROFIBUS communications with the burner control cards
- 24V DC power supply card
- Optional Pulse Fire program control card, control of up to 8 burners in up to two zones of control

Specifications

- Input power: 110/120V AC, 220/240V AC
- Control power: 24V DC
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 00

Applications

Multi-burner systems where space and function are top priorities.

Approvals

- CE
- FM

More information

The <u>PF 19</u>["] website contains links to technical documentation, product selection, spare parts, etc.



PFU 760

Burner control providing safety, control and annunciation in multi-burner applications, to be mounted in the PF-19 system.

The PFU 760 burner control units controls, ignites and monitors industrial gas burners in modulating or staged control as part of the PF-19 Process Firing system.

Features

- Optional air valve control
- Optional multi-flame control in conjunction with the PFF 704 flame switch card.
- Integrated front panel display indicates operating and fault status and provides ease of set-up with manual-mode
- Front panel PC interface for programming, diagnostics, and data logging

Specifications

- Input power: 110/120V AC, 220/240V AC
- Control power: 24V DC
- Valve output: 1A
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 00

Applications

Multi-burner applications with the PF-19 rack mounted in a control enclosure. Primarily designed for Pulse-Fire control applications with directly ignited burners.

Approvals

- SIL
- CE
- FM
- AGA Australia

Type code

PFU	Burner control unit
7	Series 700
60	Standard version
L	Air valve control
	age 220/240V AC, 50/60 Hz, for grounded and ungrounded mains
N Mains volta	age 110/120V AC, 50/60 Hz, for grounded and ungrounded mains
D Digital inp	ut for high temperature operation
U Co	onfigured and prepared for UVC 1
K1	Replacement for PFS/PFD
K2	Replacement for PFU 778/798

More information

The <u>PFU 760</u> website contains links to technical documentation, product selection, spare parts, etc.



PFU 780

Burner control providing safety, control and annunciation in multi-burner applications, to be mounted in the PF-19 system.

The PFU 780 burner control unit controls, ignites and monitors directly or pilot ignited industrial gas burners in modulating or staged control as part of the PF-19 Process Firing system.

Features

- Separate pilot and main burner sensor inputs
- Optional air valve control
- Integrated front panel display indicates operating and fault status and provides ease of set-up with manual-mode
- Front panel PC interface for programming, diagnostics, and data logging

Specifications

- Input power: 110/120V AC, 220/240V AC
- Control power: 24V DC
- Valve output: 1A
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 00

Applications

Multi-burner applications with the PF-19 rack mounted in a control enclosure. Primarily designed for Pulse-Fire control applications where the burner is ignited by an interrupted or intermittent pilot.

Approvals

- SIL
- CE
- FM
- AGA Australia

Type code

PFU	Burner control unit			
7	Series 700			
80	Version for pilot and main burners			
L	Air valve control			
T Mains vo	ltage 220/240V AC, 50/60 Hz, for grounded and ungrounded mains			
N Mains vo	ltage 110/120V AC, 50/60 Hz, for grounded and ungrounded mains			
D Digital input for high temperature operat				
U	Configured and prepared for UVC 1			
K1	Replacement for PFS/PFD			
К2	Replacement for PFU 778/798			

More information

The <u>PFU 780</u> website contains links to technical documentation, product selection, spare parts, etc.



FLAME SAFETY MATRIX

Ту	vpe Application		cation	В	urn	er		apac ontr		of	ements the dards		Fla	ame	conti	rol						Feat	ures							Replacement for
l		Single burner	Multiple burners	Direct ignition	Burner with pilot burner	Burner/pilot burner controlled separately	Staged, in cycles	For radiant tube burners	Modulating	EN 298, continuous operation	SIL 3	lonization, single-electrode operation	lonization, double-electrode operation	UV intermittent/UVS	UV continuous operation/UVD	High temperature operation	Multi-flame control	Number of gas valve outputs	Integrated ignition	Integrated valve proving system	Maximum flame signal cable length	PROFIBUS fieldbus connection	Profinet fieldbus connection	Programmable via BCSoft	24 V activation	DIN rail	Housing for on-site mounting	19"	Enclosure [IP]	
IF	D 244		•	•						•			•					1	0		1 m/75 m ¹⁾ 3.3 ft/246 ft ¹⁾					•			54	IFS 244
IF	D 258		٠	•						•		•	•	•				1	0		1 m/75 m ¹⁾ 3.3 ft/246 ft ¹⁾					•			54	IFS 258, IFS 13x
В	CU 460		•	•			0			•	•	•	•	•	•	0		2	0		5 m/50 m ¹⁾ 16.4 ft/164 ft ¹⁾	0		•			•		65, Nema 4	
В	CU 465		٠	•				•		•	•	•	•	•	•	0		2	0		5 m/50 m ¹⁾ 16.4 ft/164 ft ¹⁾	0		•			•		65, Nema 4	
В	CU 480		•		•	•	•			•	•	•	•	•	•	0		2	0		5 m/50 m ¹⁾ 16.4 ft/164 ft ¹⁾	0		•			•		65, Nema 4	
Ρ	FU 760		٠	•			0			•	•	•	•	•	•	0	•	2			100 m 328 ft	0		•	•			•	00	PFS, PFD, PFU 778
P	FU 780		•		•	•	•			•	•	•	•	•	•	0		2			100 m 328 ft	0		•	•			•	00	PFU 798
В	CU 560		٠	•			•		•	•	•	•	•	•	•	0	•	3		0	100 m 328 ft		0	•	•	•			20	IFS 11x, IFD 45x
В	CU 565		•	•			•	•	•	•	•	•	•	•	•	0		3		0	100 m 328 ft		0	•	•	•			20	IFS 11x, IFD 45x
В	CU 580		•		•	•	•		•	•	•	•	•	•	•	0		4		0	100 m 328 ft		0	•	•	•			20	IFS 11x, IFD 45x
В	CU 370	•		•	•				•	•		•2)	•	•	•			3	0	0	$\frac{1\text{m}/50\text{m}^{1)}}{3.3\text{ft}/164\text{ft}^{1)}}$	0		•			•		54	
В	CU 570	•		•	•				•	•	•	•	•	•	•			4		0	100 m 328 ft		0	•		•			20	IFS 11x

 \bullet = standard, \circ = available

 $^{1)}$ The lower value applies to units with integrated ignition transformers, the higher to units with external ignition. $^{2)}$ Single-electrode operation is only possible for BCU 370 with external ignition.

FCU 500, FCU 505

For monitoring and controlling central safety functions in multiple burner systems:

- Gas and air pressure monitoring
- Pre-purge
- Tightness test or proof of closure function (optional)
- Temperature monitoring (optional)
- Fieldbus connection (optional)

FCU 500:

central protective system control for multiple furnace zones.

FCU 505:

is used for protective system and capacity control in individual furnace zones.

SOLENOID VALVES VALVARIO VAS 1-3

Compact modular valve designed to adapt to the installation.

Modular single safety shut-off valve which can be bolted into a mono-block assembly.

Features

- Modular design allows for the gas train to be designed as necessary
- Integrated flow control limits flow rate from 100%-20%
- Upstream and downstream ports are located on both sides of the valve
- Optional Proof of Closure/Visual Position Indicator to meet necessary code requirements
- Optional dampening device to meet requirements for slow opening valves
- Wide array of modular accessories

Specifications

- Inlet pressure: 7psi (500mbar), CSA: 5psi (350mbar)
- Fuels: natural gas, LPG (gaseous), bio methane (<0.1% H₂S), air
- Non-operation inlet pressure: 10psi (700mbar)
- Input power: 24V DC, 100, 120, 200, 230V AC
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 65
- Cycle rate: >10,000,000

Applications

Industrial and Commercial Process and Heating applications: Boilers, air make-up, furnaces, kilns, ovens, and oxidizers.

Approvals

- SIL, PL
- CE
- UL
- CSA
- FM
- EAC
- AGA Australia

Type code

VAS	Solenoid valve for gas
1-3	Sizes
10-65	Inlet and outlet flange nominal size
R	Rp internal thread
F	Flange to ISO 7005
05	p _u max. 500 mbar
/N	Quick opening, quick closing
/L	Slow opening, quick closing
W	Mains voltage 230 V AC, 50/60 Hz
Q	Mains voltage 120 V AC, 50/60 Hz
К	Mains voltage 24 V DC
A Mai	ns voltage 120-230 V AC, 50/60 Hz
S With P	OC/CPS and visual position indicator
G With F	POC/CPS for 24 V and visual position indicator
R	Viewing side: right

Viewing side: left

More information

L

The <u>VAS, VCS</u> website contains links to technical documentation, product selection, spare parts, etc.



VALVARIO VAS, VCS 6-9

Dual seat valve offering high flow rates in a compact form factor.

A single or dual safety shut-off valve(s) in a single flanged body.

Features

- Integrated flow control limits flow rate from 100%-20%
- Upstream and downstream ports are located on both sides of the valve
- Optional proof of closure/visual position indicator to meet necessary code requirements
- Optional dampening device to meet requirements for slow opening valves
- Wide array of modular accessories

Specifications

- Inlet pressure: 7psi (500mbar), CSA: 5psi (350mbar)
- Fuels: natural gas, LPG (gaseous), bio methane (<0.1% H2S), air
- Non-operation inlet pressure: 10psi (700mbar)
- Input power: 24V DC, 120, 230V AC
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 65
- Cycle rate: >5,000,000

Applications

Industrial and Commercial Process and Heating applications: Boilers, air make-up, furnaces, kilns, ovens, and oxidizers.

Approvals

- SIL, PL
- CE
- UL
- CSA
- FM
- EAC
- AGA Australia

Type code

V	AS Solenoid valve for gas
6-	0
65	5–125 Inlet and outlet flange nominal size
R	Rp internal thread
F	Flange to ISO 7005
0	5 p _u max. 500 mbar
/1	N Quick opening, quick closing
/۱	Slow opening, quick closing
W	Mains voltage 230 V AC, 50/60 Hz
Q	Mains voltage 120 V AC, 50/60 Hz
Κ	Mains voltage 24 V DC
A	Mains voltage 120-230 V AC, 50/60 Hz
S	With POC/CPS and visual position indicator
G	With POC/CPS for 24 V and visual position indicator
R	Viewing side: right
L	Viewing side: left
3	Electrical connection via cable gland
В	Basic
Ε	Prepared for adapter plates
	Accessory, right, inlet
/	coron prag
/	
/1	
12	
/ : / 4	I
/-	Accessory, right, outlet
Р	screw plug
м	
1	pressure switch DG 17/VC
2	pressure switch DG 40/VC
3	pressure switch DG 110/VC
4	pressure switch DG 300/VC
T	he same accessories can be selected for the left- or right-hand side.

More information

The <u>VAS, VCS</u> website contains links to technical documentation, product selection, spare parts, etc.



VALVARIO VAA 1-3

Solenoid valves for air for staged control of industrial burners in cold-air operating mode.

Features

- Suitable for a max. inlet pressure of 7psi (500mbar)
- Compact design saves space
- No extra valve required owing to integrated flow adjustment
- Check indication by blue LED
- Position switch with visual position indicator
- Bypass can be adjusted as desired
- Suitable for high-duty cycling

Specifications

- Inlet pressure: 7psi (500mbar)
- Fuels: natural gas, LPG (gaseous), bio methane (<0.1% H₂S), air
- Input power: 24V DC, 100, 120, 200, 230V AC
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 65

Applications

Industrial and Commercial Process and Heating applications: Boilers, air make-up, furnaces, kilns, ovens, and oxidizers.

Approvals

- CE
- EAC

Type code

VAA	Solenoid valve for air
1-3	Sizes
10-65	Inlet and outlet flange nominal size
R	Rp internal thread
F	Flange to ISO 7005
05	p _u max. 500 mbar
/N	Quick opening, quick closing
/L	Slow opening, quick closing
W	Mains voltage 230 V AC, 50/60 Hz
Q	Mains voltage 120 V AC, 50/60 Hz
κ	Mains voltage 24 V DC
A Mai	ns voltage 120-230 V AC, 50/60 Hz
S With P	OC/CPS and visual position indicator
G With F	POC/CPS for 24 V and visual position indicator
D	Viewing side: right

Viewing side: right Viewing side: left

More information

L

The <u>VAA</u> website contains links to technical documentation, product selection, spare parts, etc.



VALVARIO VAD

Compact pressure reducing regulator integred into a safety shut-off valve maximizing configuration options.

Modular single safety shut-off valve with integrated pressure reducing regulator which can be bolted together with other valVario valves to form a mono-block assembly.

Features

- Modular design allows for the gas train to be designed as necessary
- Internal fuel pressure sensing line, no external refence lines required
- Standard pressure test point to confirm outlet pressure setting
- Upstream and downstream ports are located on both sides of the valve
- Optional closed position switch/ visual position indicator to meet necessary code requirements
- Wide array of modular accessories

Specifications

- Inlet pressure: 7psi (500mbar), CSA: 5psi (350mbar)
- Fuels: natural gas, LPG (gaseous), bio methane (<0.1% H2S), air
- Outlet pressure range: 1-10", 8-20", and 17-40" w.c.
- Non-operation inlet pressure: 10psi (700mbar)
- Input power: 24V DC, 100, 120, 200, 230V AC
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 65
- Cycle rate: >5,000,000

Applications

Industrial and Commercial Process and Heating applications: Boilers, air make-up, furnaces, kilns, ovens, and oxidizers.

Approvals

- SIL, PL
- CE
- UL
- CSA
- FM
- EAC
- AGA Australia

Type code

VAD	Pressure regulator with solenoid valve
1-3	Sizes
15-50	Inlet and outlet flange nominal size
R	Rp internal thread
/N	Quick opening, quick closing
W	Mains voltage 230 V AC, 50/60 Hz
Q	Mains voltage 120 V AC, 50/60 Hz
Κ	Mains voltage 24 V DC
SR Clos	sed position switch with visual position indicator, right
SL Clos	sed position switch with visual position indicator, left
GR Clo	sed position switch for 24 V and visual position indicator, right
GL Clo	sed position switch for 24 V and visual position indicator, left
-25 Ou	utlet pressure p_d for VAD: 2.5–25 mbar
-50 0	utlet pressure p _d for VAD: 20–50 mbar
-100	Outlet pressure p _d for VAD: 35–100 mbar
Α	Standard valve seat
В	Reduced valve seat

More information



VALVARIO VAG

Compact gas/air ratio regulator integred into a safety shut-off valve minimizing installed footprint.

Modular single safety shut-off valve with fuel/air ratio regulator which can be bolted together with other valVario valves to form a mono-block assembly.

Features

- Modular design allows for the gas train to be designed as necessary
- Internal fuel pressure sensing line, no exteral reference lines required
- Standard pressure test point to confirm outlet pressure setting and impulse pressure
- Upstream and downstream ports are located on both sides of the valve
- Optional closed position switch/ visual position indicator to meet necessary code requirements
- Wide array of modular accessories

Specifications

- Inlet pressure: 7psi (500mbar), CSA: 5psi (350mbar)
- Fuels: natural gas, LPG (gaseous), bio methane (<0.1% H2S), air
- Outlet pressure range: 0.2-40"w.c. (0.5-100mbar)
- Air impulse pressure range: 0.2-40"w.c. (0.5-100mbar)
- Non-operation inlet pressure: 10psi (700mbar)
- Input power: 24V DC, 100, 120, 200, 230V AC
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 65
- Cycle rate: >5,000,000

Applications

Industrial and Commercial Process and Heating applications: Boilers, air make-up, furnaces, kilns, ovens, and oxidizers.

Approvals

- SIL, PL
- CE
- UL
- CSA
- FM
- EAC
- AGA Australia

Type code

.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	040
VAG Ai	ir/gas ratio control with solenoid valve
VAH F	-low rate regulator with solenoid valve
VAV	Variable air/gas ratio control with solenoid valve
1-3	Sizes
15-50	Inlet and outlet flange nominal size
R	Rp internal thread
/N	Quick opening, quick closing
W	Mains voltage 230 V AC, 50/60 Hz
Q	Mains voltage 120 V AC, 50/60 Hz
Κ	Mains voltage 24 V DC
SR Close	ed position switch with visual position indicator, right
SL Close	ed position switch with visual position indicator, left
GR Clos	sed position switch for 24 V and visual position indicator, right
GL Clos	sed position switch for 24 V and visual position indicator, left
Α	Standard valve seat
В	Reduced valve seat
E VA	G: connection for air control pressure: compression fitting
к	VAG, VAV: connection for air control pressure: plastic hose coupling
Ν	VAG: zero governor
Morei	nformation

More information



VALVARIO VAV

Compact variable gas/air ratio regulator integred into a safety shut-off valve offering increased adapability to operational conditions.

Modular single safety shut-off valve with integrated variable fuel/air ratio regulator which can be bolted together with other valVario valves to form a mono-block assembly. This ratio regulator has an additional imulse line to adjust for chamber pressure.

Features

- Modular design allows for the gas train to be designed as necessary
- Internal fuel pressure sensing line, no exteral reference lines required
- Standard pressure test point to confirm outlet pressure setting
- Upstream and downstream ports are located on both sides of the valve
- Optional closed position switch/ visual position indicator to meet necessary code requirements
- Wide array of modular accessories

Specifications

- Inlet pressure: 7psi (500mbar), CSA: 5psi (350mbar)
- Fuels: natural gas, LPG (gaseous), bio methane (<0.1% H₂S), air
- Outlet pressure range: 0.2-11.7"w.c. (0.5-30mbar)
- Air impulse pressure range: 0.15-11.7"w.c. (0.4-30mbar)
- Combustion chamber control pressure: -7.8 - +7.8"w.c. (-20 -+20mbar)
- Transmission ratio of gas to air: 0.6:1 to 3:1

- Non-operation inlet pressure: 10psi (700mbar)
- Input power: 24V DC, 100, 120, 200, 230V AC
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 65
- Cycle rate: >5,000,000

Applications

Industrial and Commercial Process and Heating applications: Boilers, air make-up, furnaces, kilns, ovens, and oxidizers.

Approvals

- SIL, PL
- CE
- UL
- CSA
- FM
- EAC
- AGA Australia

Type code

VAG	Air/gas ratio control with solenoid valve
VAH	Flow rate regulator with solenoid valve
VAV	Variable air/gas ratio control with solenoid valve
1-3	Sizes
15-5	• Inlet and outlet flange nominal size
R	Rp internal thread
/N	Quick opening, quick closing
W	Mains voltage 230 V AC, 50/60 Hz
Q	Mains voltage 120 V AC, 50/60 Hz
K	Mains voltage 24 V DC
SR Clo	osed position switch with visual position indicator, right
SL Clo	osed position switch with visual position indicator, left
GR C	losed position switch for 24 V and visual position indicator, right
GL C	losed position switch for 24 V and visual position indicator, left
Α	Standard valve seat
В	Reduced valve seat
E \	VAG: connection for air control pressure: compression fitting
К	VAG, VAV: connection for air control pressure: plastic hose coupling
Ν	VAG: zero governor



More information

VALVARIO VAH

Precise gas/air flow regulator integrated into a safety shut-off valve providing constant ratio with varying air volumes.

Modular single safety shut-off valve with integrated fuel/air flow regulator which can be bolted together with other valVario valves to form a mono-block assembly. This valve has the ability to maintain fuel/air ratio regardless of changes in air volume.

Features

- Modular design allows for the gas train to be designed as necessary
- Optional integrated limiting orifice valve with sensing line assembly
- Standard pressure test point to confirm pressure settings
- VRH version is without solenoid
- Upstream and downstream ports are located on both sides of the valve
- Optional closed position switch/ visual position indicator to meet necessary code requirements
- Wide array of modular accessories

Specifications

- Inlet Pressure: 7psi (500mbar), CSA: 5psi (350mbar)
- Fuels: natural gas, LPG (gaseous), bio methane (<0.1% H₂S), air
- Differential gas pressure range: 0.24-19.7"w.c. (0.6-50mbar)
- Differential air pressure range: 0.24-19.7"w.c. (0.6-50mbar)
- Air impulse pressure range: 0.24-40"w.c. (0.5-100mbar)
- Non-operation inlet pressure: 10psi (700mbar)
- Input power: 24V DC, 100, 120, 200, 230V AC

- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 65
- Cycle rate: >5,000,000

Applications

Industrial and Commercial Process and Heating applications: Boilers, air make-up, furnaces, kilns, ovens, and oxidizers.

Approvals

- SIL, PL
- CE
- UL
- CSA
- FM
- EAC
- AGA Australia

Type code

VAG	Air/gas ratio control with solenoid valve
VAH	Flow rate regulator with solenoid valve
VAV	Variable air/gas ratio control with solenoid valve
1-3	Sizes
15-5	50 Inlet and outlet flange nominal size
R	Rp internal thread
/N	Quick opening, quick closing
W	Mains voltage 230 V AC, 50/60 Hz
Q	Mains voltage 120 V AC, 50/60 Hz
Κ	Mains voltage 24 V DC
SR Cl	osed position switch with visual position indicator, right
SL CI	osed position switch with visual position indicator, left
GR C	losed position switch for 24 V and visual position indicator, right
GL C	losed position switch for 24 V and visual position indicator, left
Α	Standard valve seat
В	Reduced valve seat
E	VAG: connection for air control pressure: compression fitting
к	VAG, VAV: connection for air control pressure: plastic hose coupling
Ν	VAG: zero governor



More information

Filter Module

FILTER MODULE VMF

Thorough gas particulate filtering in a compact housing.

Modular gas filter where you can vary both inlet and outlet to meet plumbing requirements. The inlet filter can also be bolted directly to the valve inlet.

Features

- Replaceable filter media
- Taps upstream and downstream of the filter element.
- Standard valVario series adapter plates
- Optional version with integrated pressure switch

Specifications

- Inlet pressure: 7psi (500mbar), CSA: 5psi (350mbar)
- Fuels: natural gas, LPG (gaseous), bio methane (<0.1% H₂S), air
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).

Applications

To remove particulate matter from the fuel stream.

Type code

Filter module
Sizes
p _u max. 500 mbar
Test nipple

More information

The <u>valVario accessories</u> website contains links to technical documentation, product selection, spare parts, etc.



MEASURING ORIFICE VMO

Compact flow measure device.

Compact orifice meter with readily available flow charts.

Features

- Easily replacable orifice plates
- Pressure taps to measure flow
- Standard valVario series adapter plates
- Charts provided for orifice plates

Specifications

- Inlet pressure: 7psi (500mbar), CSA: 5psi (350mbar)
- Fuels: natural gas, LPG (gaseous), bio methane (<0.1% H₂S), air
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).

Applications

To measure fuel flow rate.

Type code

VMO	Measuring orifice
1-3	Sizes
10-65	Inlet and outlet flange nominal size
R	Rp internal thread
F	Flange to ISO 7005
05	p _u max. 500 mbar
М	Test nipple
04-54	Orifice diameter in mm

More information

The <u>valVario accessories</u> website contains links to technical documentation, product selection, spare parts, etc.



FINE-ADJUSTING VALVE

Precise control in a modular housing for maximum flexibility.

Modular limiting orifice valve where the inlet and outlet can be varied to meet the plumbing requirements. The adjust gate is characterized to provide a linear flow chartacteristic.

Features

- Fine adjusting screw to adjust slide-gate
- Pressure taps to measure upstream and downstream pressures
- Standard valVario series adapter plates

Specifications

- Inlet pressure: 7psi (500mbar), CSA: 5psi (350mbar)
- Fuels: natural gas, LPG (gaseous), bio methane (<0.1% H2S), air
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).

Applications

• To adjust fuel flow in the system.

Type code

VMV	Fine-adjusting valve
1-3	Sizes
10-65	Inlet and outlet flange nominal size
R	Rp internal thread
F	Flange to ISO 7005
05	p _u max. 500 mbar
Ρ	Screw plugs

More information

The <u>valVario accessories</u> website contains links to technical documentation, product selection, spare parts, etc.



VALVE PROVING CONTROL TC 1-3

Intelligent and efficient valve leakage testing.

The TC uses the pressure degrade method to test the leakage rate of the valves. The TC uses an initial test state in order to minimize the test period. Various models for mounting directly to the vavles, or remote cabinet installation.

Features

- Tests both safety shut-off valves
- Short test period thanks to sequential program logic
- Adjustable test period which can be adapted to different systems
- Multiple mounting options for adapting to different systems
- Maximum safety through self-monitoring electronics

Specifications

- Inlet pressure: 7psi (500mbar), CSA: 5psi (350mbar)
- Fuels: natural gas, LPG (gaseous), bio methane (<0.1% H₂S), air
- Input power: 24V DC, 120, 230v AC
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 54

Applications

Leak check the safety shut-off valves before or after the system operation.

Type code

тс	Tightness control
1 V	For attachment to valVario
2	For quick opening individual valves
3	For quick or slow opening individual valves
R	Rp internal thread
Ν	NPT internal thread
05	p _u max. 500 mbar
W	Mains voltage 230 V AC, 50/60 Hz
Q	Mains voltage 120 V AC, 50/60 Hz
κ	Mains voltage 24 V DC
/W	Control voltage: 230 VAC, 50/60 Hz
/Q	Control voltage: 120 VAC, 50/60 Hz
/K	Control voltage: 24 V DC

More information

The <u>TC</u> website contains links to technical documentation, product selection, spare parts, etc.



LINEAR FLOW CONTROL VFC, IFC

Linear flow controls for controlling continuously regulated burner processes, linear ratio between input signal and flow rate.

The IFC is composed of linear flow control VFC and actuator IC 20 or IC 40.

Features

- Linear relationship between adjustment angle and flow rate
- Large control ratio of 25:1
- Actuators IC 20 or IC 40 mounted directly
- Actuator IC 30 (24 V DC) can be mounted
- For gas and air
- Low leakage rates
- High control accuracy

Specifications

- Gas types: natural gas, LPG (gaseous), biogas (max. 0.1%. H₂S) or clean air
- Max. inlet pressure: 7psi (500mbar)
- Ambient temperature: -4 to +140°F (-20 to +60°C)

Applications

Lambda control, Adjusting the burner capacity, Zone control, Excess air burner

Approvals

- CE
- EAC

Type code

Type coue	
VFC	Linear flow control
1, 3	Sizes
-	No inlet flange
10-65	Inlet flange nominal size
-	No outlet flange
/10-/65	Outlet flange nominal size
R	Rp internal thread
05-	p _u max. 500 mbar
08-40	Cylinder
	Accessory, right, inlet
Ρ	screw plug
М	pressure test point
1	pressure switch DG 17/VC
2	pressure switch DG 40/VC
3	pressure switch DG 110/VC
4	pressure switch DG 300/VC
4	Accessory, right, outlet
Р	screw plug
М	pressure test point
1	pressure switch DG 17/VC
2	pressure switch DG 40/VC
3	pressure switch DG 110/VC
4	pressure switch DG 300/VC
P, M, 1, 2, 3 be selected	9,4 The same accessories can d for the left- or right-hand side.

More information

The <u>IFC, VFC</u> website contains links to technical documentation, product selection, spare parts, etc.



VALVE MATRIX

Туре			Туре	of gas							Type of contro						Mains voltage		
	Natural gas	LPG	Air	Hot air	Biologically produced methane	Contaminated gas	Closed when de-energized	Open when de-energized	DN	One-stage	Two-stage	Modulating	Slow opening	Slow closing	Pressure control	230 V	120 V	24 V	Max.inlet pressure p _u [mbar (psig)]
VAS	•	•	•		٠		•		10-125	•			0			•	٠	•	500(7)
VAD	•	•	•		٠		٠		15-50	•					٠	•	٠	•	500(7)
VAG	•	•	•		•		•		15-50	•					•	•	•	•	500(7)
VAV	•	•	•		٠		٠		15-50	•					•	•	٠	•	500(7)
VAH	•	•	•		•		•		15-50	•					•	•	•	•	500(7)
VAN	•	•	•		٠			•	10-50	٠						•	٠	•	500(7)
VAA			•				•		15-65	•			0	0		•	•	•	500(7)
BVHM + MB7			•	•			٠		40-100	•			0	0		•	•	•	150(2)
BVG + IC	•	•	•						40-150	•	•	•				•	•		500(7)
BVA + IC			•						40-150	•	•	•				•	٠		500(7)
BVH + IC			•	•			0		40-100	•	•	•				•	•		150(2)
IFC	•	•	•		•				25 - 40		•	•				•	•	•	500(7)

 \bullet = standard, \circ = available

PRESSURE SWITCH - AIR & GAS DG

Precision accuracy with unmatched in-class safety features.

Highly accurate gas static or air static/differential pressure switch. Electrical connections are in an isolated space above the diaphragm, eliminating the need for isolation barriers.

Features

- High repeatability
- Low hysteresis
- Cable conduit connection, electrical connections are gas separated from the space above the diaphragm
- Integrated media filter, vent limiter, test point, and indicator lamp

Specifications

- Inlet pressure: 8.5psi (600mbar), CSA: 5psi (350mbar)
- Fuels: natural gas, LPG (gaseous), bio methane (<0.1% H₂S), air, flue gas
- Switching capacity: 30-240V AC 5A, gold contacts 30V 0.05A
- Ambient temperature: -40°F to 140°F (-40°C to 60°C).
- Enclosure: IP 54

Applications

Monitoring gas and air pressure in various applications.

Approvals

- SIL, PL
- CE
- UL
- FM
- EAC
- AGA Australia

Type code

DG	Pressure switch for gas
	Adjusting range
6	0.22.4 "WC (0.5-6 mbar)
10	0.44 "WC (1-10 mbar)
50	120 "WC (2.5-50 mbar)
15	D 1260 "WC (30-150 mbar)
50	0 40200 "WC (100-500 mbar)
Н	Switches and locks off with rising pressure
N 3	Switches and locks off with falling pressure
F	Switches with falling pressure
S risir	Switches with ng/falling positive pressure, for oxygen and ammonia only, no approval
Т	T-product
G	With gold-plated contacts
-2	Electrical connection via screw terminals and 1/2 NPT conduit, IP 65
1	One 1/4 NPT connection
2	Two 1/4 NPT connections
Ν	Blue pilot lamp for 120 V AC

More information

The <u>DG</u> website contains links to technical documentation, product selection, spare parts, etc.



Pressure Switch - Air & Gas

DG..C

Accurate pressure sensing in a compact form-factor.

For monitoring the static pressures of gas or air. Versions available for flange mounting to valVario valves and Rp and NPT pipe connections.

Features

- Compact size
- High repeatability
- Low hysteresis
- Electrical connection isolated from the upper side of the diaphragm
- Integrated vent limiter

Specifications

- Inlet pressure: 8.5psi (600mbar), CSA: 5psi (350mbar)
- Fuels: natural gas, LPG (gaseous), bio methane (<0.1% H₂S), air, flue gas
- Switching capacity: For T products: 30-240VAC 5A, gold contacts 30V AC 0.05A
 For all others: 24-250VAC 0.05-5A, gold contacts 5-250V AC 0.01-5A
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 54

Applications

Monitoring static gas and air pressure in various applications. Primary use on with the valVario valve series.

Approvals

- SIL, PL
- CE
- UL
- FM
- EAC
- AGA Australia

Type code

Type c	oue								
DG	Pressure switch for gas								
15	Adjusting range 3-15 mbar								
17	Adjusting range 2-17 mbar								
30	Adjusting range 8-30 mbar								
35	Adjusting range 5-35 mbar								
40	Adjusting range 5-40 mbar								
45	Adjusting range 10-45 mbar								
60	Adjusting range 10-60 mbar								
110	Adjusting range 33-110 mbar								
150	Adjusting range 40-150 mbar								
250	Adjusting range 70-250 mbar								
300	Adjusting range 100-300 mbar								
360	Adjusting range 100-360 mbar								
500	Adjusting range 150-500 mbar								
/60	2 nd adjusting range 10-60 mbar								
/150	2 nd adjusting range 40-150 mbar								
/300	2 nd adjusting range 100-300 mbar								
V Swit	ching point adjustable on hand wheel								
C EU v	version, switches with falling pressure								
CT US	version, switches with rising pressure								
CFT	US version, switches with falling pressure								
1 (Connection for valVario at the bottom, pressure tap on the plug side								
4 2 ×	Rp 1/4 internal thread, pressure test point								
5	Rp 1/4 internal thread								
6	R 1/8 external thread								
8	R 1/4 external thread								
9 the bott	Connection for valVario controls at om, pressure tap on the side opposite to the plug								
D	Sealant								
-5	4-pin plug, without socket								
-6	4-pin plug, with socket								
S	NO contact								
W	Change-over contact								

More information

The <u>DG..C</u> website contains links to technical documentation, product selection, spare parts, etc.



C6097

The pressure switch monitors extremely low pressure differentials and triggers switch-on, switch-off or switch-over operations if a set switching point is reached. The switching point can be adjusted using a hand wheel.

Features

- Monitoring of gas and air pressures (positive, negative and differential pressures)
- Switches with falling or rising pressure
- FM and UL certified: With lockoff and hand wheel with "WC/ mbar scale
- EU certified pursuant to EN 1854: Hand wheel with mbar scale

Specifications

- Gas type: natural gas, town gas, LPG (gaseous), flue gas, biogas (max. 0.1 %-by-vol. H2S) and air.
- Switching capacity: CE: U = 24-250 V AC, $I = 0,05-5 A at \cos \phi = 1$, $I = 0,05-1 A at \cos \phi = 0.6$.

UL, FM: U = 24-240 V AC, I = max. 5 A at cos φ = 1

I = max. 0,5 A at cos φ = 0,6.

- Ambient temperature: CE: -4 to +176°F (-20 to +80°C). UL, FM: -40°F to 140°F (-40°C to 60°C).
- Enclosure: IP 65

Applications

The pressure switch monitors positive and negative gas pressures on various industrial gas and air appliances, such as boiler fan monitoring and differential pressure monitoring in firing, ventilation and air-conditioning systems.

Approvals

- CE
- UL
- FM

More information

The <u>C6097</u> website contains links to technical documentation, product selection, spare parts, etc.



PRESSURE SWITCH - AIR

DL

Precision air switch for static and differential sensing.

The low pressure sensing range of this switch permits a wide range of applications. The switch is capable of static, vacuum, or differential pressure sensing.

Features

- High repeatability
- Low hysteresis
- Cable conduit connection, electrical connections are gas separated from the space above the diaphragm.
- Integrated filter media, vent limiter, test point, and indicator lamp

Specifications

- Inlet pressure: 8.5psi (600mbar), CSA: 5psi (350mbar)
- Switching capacity: CE version: Siver contacts, 24-250V AC, 0.05-5A Gold contacts, 5-250V AC, 0.01-5A UL versions: Siver contacts, 30-240V AC, 5A Gold contacts, max 30V AC, 0.05A
- Ambient temperature: -40°F to 140°F (-40°C to 60°C).
- Enclosure: IP 54

Applications

Monitoring air pressure in various applications.

Approvals

- SIL, PL
- CE
- UL
- FM
- EAC
- AGA Australia

DL	Pressure switch for air
	Adjusting range
1	0.08–0.4 "WC (0.2–1 mbar)
2	0.12–0.8 "WC (0.2–2 mbar)
3	0.12–1.2 "WC (0.3–3 mbar)
3,5	0.12–4.4 "WC (0.3–3.5 mbar)
4	0.2–1.6 "WC (0.5–4 mbar)
4,5	0.12–2 "WC (0.3–5 mbar)
5	0.2–2 "WC (0.5–5 mbar)
6	0.22.4 "WC (0.5-6 mbar)
8	0.2–3.2 "WC (0.5–8 mbar)
10	0.4–4 "WC (1.0–10 mbar)
11	0.4–4.4 "WC (1.0–11 mbar)
14	1.2–5.6 "WC (3–14 mbar)
16	1.6–6.4 "WC (4–16 mbar)
24	0.8–9.6 "WC (2–24 mbar)
35	4.8–14 "WC (12–35 mbar)
40	2–16 "WC (5–40 mbar)
50	1.0–20 "WC (2.5–50 mbar)
150	
500	
E	With flat plug, tube connection, setscrew
AW	ith screw terminals, 1/4" NPT connection, tube connection, hand wheel
Κ	With tube connection, hand wheel
Т	T-product
G	With gold contacts for voltages 12–250 V
-1	AMP plug connection (DLE, DLK only) (UR recognized)
-2	Electrical connection via screw terminals and 1/2 NPT conduit, IP 65
-3	Electrical connection via screw terminals (DLA, DLK only) (UL listed)
1	One 1/4 NPT connection
2	Two 1/4 NPT connections
K2	Red/green pilot LED for 24 V DC/AC
Ν	Blue pilot lamp for 120 V AC

More information

The <u>DL</u> website contains links to technical documentation, product selection, spare parts, etc.



DL..ALT

DL..ALT is used for industrial pressure and differential pressure monitoring wherever a robust aluminium housing and fast reaction to pressure changes are required.

It monitors extremely low pressure differentials and triggers switch-on, switch-off or switchover operations if a set switching point is reached. The switching point can be adjusted using a hand wheel.

Features

- Monitoring of air, flue gas and other non-aggressive gases
- Robust aluminium lower housing section
- High switching point stability
- Fast reaction to pressure changes
- Switching point selection via hand wheel
- Visual status indication as an option

Specifications

- Gas types: air or flue gas, no flammable gases, no aggressive gases.
- Max. inlet pressure: 8.5 psi (600 mbar).
- Switching capacity: U = 24-250V AC, $I = 0.05-5A at \cos \phi = 1$, $I = 0.05-1A at \cos \phi = 0.6$. U = < 30V
 - $I = \max . 0.1 A at \cos \Phi = 1$
 - $I = max. 0,05A at \cos \phi = 0,6.$
- Ambient temperature: -40 to +140°F (-40 to +60°C).
- Enclosure: NEMA 4 (IP 65)

Applications

Monitoring air pressure in various applications.

Approvals

- UL
- FM

Type code

DL	Pressure switch for air
	Adjusting range
6	0.22.4 "WC (0.5-6 mbar)
10	0.4–4 "WC (1.0–10 mbar)
50	1.0–20 "WC (2.5–50 mbar)
150	1260 "WC (30-150 mbar)
500	40200 "WC (100-500 mbar)
AL	Aluminium lower housing section, 1/4" NPT connection, hand wheel
Т	T-product
G V	Vith gold contacts for voltages 12–250 V
-2	Electrical connection via screw terminals and 1/2 NPT conduit, IP 65
2	Two 1/4 NPT connections
K2	Red/green pilot LED for 24 V DC/AC
Ν	Blue pilot lamp for 120 V AC

More information

The <u>DL</u> website contains links to technical documentation, product selection, spare parts, etc.



Butterfly Valves

BUTTERFLY VALVES BVG, BVA

Control of gas or air via hand lever or direct coupled IC actuator.

Flange mounted butterfly valve for controlling fuel and air flows.

Features

- Available in full and reduced ports
- Adapter kits available to connect to other actuators
- Hand lever available for manual control

Specifications

- Inlet pressure: 7psi (500mbar), CSA: 5psi (350mbar)
- Gas Type: natural gas, LPG (gaseous), bio methane (<0.1% H2S), air; BVA: air only
- Body material: AlSi
- Valve disc: aluminum
- Drive shaft: stainless steel
- Seals: NBR
- Medium temperature: -4°F to 140°F (-20°C to 60°C).

Applications

For controlling gas and air streams.

Approvals

- CE
- FM
- EAC

Type code

BVG		Butterfly valve for gas
BVA		Butterfly valve for air
F		Clearance-free
40-1	50	Nominal size
/25-/	/125	Reduced to nominal size
W	For fitti	ing between two ANSI flanges
Z	For fi	tting between two EN flanges
05	p _u max.	500 mbar, Δ p max. 150 mbar
н		With manual adjustment
F		With free shaft end
V		With square shaft

More information



BVGF, BVAF

Precise control of gas or air when directly coupled IC actuator with almost zero hysteresis.

Flange mounted butterfly valve for controlling fuel and air flows. An internal spring keeps the valve in tension with the actuator to ensure immediate response to the actuator. The IC actuators can be directly coupled to the valve.

Features

- Available in full and reduced ports
- Tensioning spring to eliminate hysteresis between the actuator and the valve
- Adapter kits available to connect to other actuators
- Hand lever available for manual control

Specifications

- Inlet pressure: 7psi (500mbar), CSA+C23:F28: 5psi (350mbar)
- Gas type: natural gas, LPG (gaseous), bio methane (<.1% H2S), air; BVAF: air only
- Body material: AlSi
- Valve disc: aluminum
- Drive shaft: stainless steel
- Seals: NBR
- Medium temperature: -4°F to 140°F (-20°C to 60°C).

Applications

For precise modulating control of gas and air streams.

Approvals

- CE
- EAC

Type code

BVG		Butterfly valve for gas
BVA		Butterfly valve for air
F		Clearance-free
40-1	50	Nominal size
/25-	/125	Reduced to nominal size
W	For fittir	ng between two ANSI flanges
Z	For fit	ting between two EN flanges
05	p _u max. 5	00 mbar, Δ p max. 150 mbar
н		With manual adjustment
F		With free shaft end
V		With square shaft

More information

The <u>BVG, BVA, BVH</u> website contains links to technical documentation, product selection, spare parts, etc.



Butterfly Valves

BVH, BVHR, BVHS

Precise control of hot air or flue gases via hand lever or direct coupled IC actuator with almost zero hysteresis.

Flange mounted butterfly valve for controlling hot air or flue gas flows. The IC and MB actuators can be directly coupled to the valve.

Features

- TwinDisk[®] technology for low leakage rate
- Tension spring for almost zero hysteresis
- Extended shaft for use with hot air and flue gases
- Capable of high cycling rate for Pulse Fire applications

Specifications

- Inlet pressure: 7psi (500mbar), CSA: 5psi (350mbar)
- Gas type: air, flue gas
- Body material: GGG
- Valve disc: stainless steel
- Drive shaft: stainless steel
- Seals: NBR
- Medium temperature, BVH -4°F to 840°F (-20°C to 450°C).; BVHR: -4°F to 1020°F (-20°C to 550°C).

Applications

For controlling air and flue gas streams. Primarily used in Pulse Fire applications.

Approvals

- CE
- FM
- EAC

Type code

BVH	Butterfly valve for air and flue gas
BVHS	Like BVH, but with additional emergency closing function
BVHR	Like BVH, for medium temperatures of up to 550°C
40-10	O Nominal size
W	For fitting between two ANSI flanges
z	For fitting between two EN flanges
01	p _u max. 150 mbar
Α	With stop

More information

The <u>BVG, BVA, BVH</u> website contains links to technical documentation, product selection, spare parts, etc.



ACTUATORS IC 20

Low-torque rotary actuator with 3-point step or continuous control equipped with auto/manual switch for commissioning.

90° rotary actuator designed to direct-couple to the BV and VFC-series valves for precise control of the media.

Features

- Precision servo motor
- Auto/manual mode to facilitate valve setup
- Adjustable cams for high and low positions, plus two free-floating cams
- Optional feedback potentiometer

Specifications

- Input voltage: 120, 230V AC
- Control voltage: Mains voltage, IC 20..E: 4-20mA
- Contact rating: 24-230V
- Torque: 22-26in lbf (2.5-3Nm)
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 65

Applications

For the operation of low torque gas and air control valves where precise positioning of the valve is critical to the process.

Approvals

- CE
- EAC
- CSA

Type code

IC 20	Actuator
07-6	D Running time in s/90°
W	Mains voltage 230 V AC, 50/60 Hz
Q	Mains voltage 120 V AC, 50/60 Hz
2	Torque 2.5 Nm
3	Torque 3 Nm
E	Controlled by continuous signal
т	Three-point step control
R10	With 1000 Ω feedback potentiometer

More information

The <u>IC</u> website contains links to technical documentation, product selection, spare parts, etc.



IC 40

Low-torque programmable rotary actuator with 3-point step or continuous control for use in complex applications.

90° rotary actuator designed to direct-couple to the BV and VFC-series valves for precise control of the media.

Features

- Precision step-motor
- Programmable opening and closing profiles
- 2 programmable outputs

Specifications

- Input voltage: 100-230V AC
- Control voltage: mains voltage, IC 40..A: 4-20mA
- Digital input rating: 24V DC 100-230V AC
- Digital output rating: 2A max
- Torque: 22-26in lbf (2.5-3Nm)
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 65

Applications

For the operation of low torque gas and air control valves where precise positioning of the valve is critical to the process.

Approvals

- CE
- CSA
- UL
- EAC

Type code

 S Emergency closing function A Mains voltage 100–230 V AC, 50/60 Hz 2 Torque 2.5 Nm 3 Torque 3 Nm A 4–20 mA analogue input D Digital input R10 With 1000 Ω feedback potentiometer 	IC 4	•O Actuator
 2 Torque 2.5 Nm 3 Torque 3 Nm A 4–20 mA analogue input D Digital input 	S	Emergency closing function
3Torque 3 NmA4–20 mA analogue inputDDigital input	Α	Mains voltage 100–230 V AC, 50/60 Hz $$
A4-20 mA analogue inputDDigital input	2	Torque 2.5 Nm
D Digital input	3	Torque 3 Nm
v ,	Α	4–20 mA analogue input
R10 With 1000Ω feedback potentiometer	D	Digital input
	R10	With 1000 Ω feedback potentiometer

More information

The <u>IC</u> website contains links to technical documentation, product selection, spare parts, etc.



IC 50

High-torque rotary actuator with 3-point step or continuous control equipped with auto/manual switch for commissioning.

90° rotary actuator designed to direct-couple to the BV and VFC-series valves for precise control of the media.

Features

- Precision servo motor
- Auto/manual mode to facilitate valve setup
- Adjustable cams for high and low positions, plus two free-floating cams
- Optional feedback potentiometer

Specifications

- Input voltage: 24, 110, 230V AC
- Control voltage: mains voltage, IC 50..E: 4-20mA
- Contact rating: 24-230V
- Torque: 26-265in lbf (3-30Nm)
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 65

Applications

For the operation of low torque gas and air control valves where precise positioning of the valve is critical to the process.

Approvals

- CE
- EAC
- CSA

Type code

IC 50	Actuator
03-60	D Running time in s/90°
W	Mains voltage 230 V AC, 50/60 Hz
Q	Mains voltage 120 V AC, 50/60 Hz
н	Mains voltage 24 V AC, 50/60 Hz
3–30	Torque [Nm]
Е	Controlled by continuous signal
Т	Three-point step control
R10	With 1000 Ω feedback potentiometer

More information

The <u>IC</u> website contains links to technical documentation, product selection, spare parts, etc.



SOLENOID ACTUATOR MB FOR BUTTERFLY VALVE BVHM

Two-position solenoid butterfly valve actuator ultra-high duty cycle for use in pulse fire applications.

Approvals

- CE
- CSA
- EAC

Ultra high duty cycle actuator designed to mount directly to the BVHM butterfly valve for use in pulse fire applications.

Features

- Adjustable high and low positions
- >5million cycles
- Optional slow-opening and slow-closing functions

Specifications

- Input voltage: 24, 110, 230V AC
- Opening time: <1s 4s
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Enclosure: IP 65

Applications

For use with the BVHM butterfly valve in high/low control scenarios; particularly pulse fire.

Type codeBVHMButterfly valve for air and flue gas40-100Nominal sizeTWFor fitting between two ANSI flangesZFor fitting between two EN flanges01pu max. 150 mbarAWith stop

MB	Solenoid actuator
7	Actuator size 7 for DN 40-100
Ν	Quick opening, quick closing
R	Slow opening, slow closing
L	Slow opening, quick closing
W	Mains voltage 230 V AC, 50/60 Hz
Q	Mains voltage 120 V AC, 50/60 Hz
Κ	Mains voltage 24 V DC
3	Terminal connection box, IP 65
6	Connection box with 3-pin standard socket, IP 65

More information

The <u>MB 7/BVHM</u> website contains links to technical documentation, product selection, spare parts, etc.



REGULATORS GDJ

Low inlet pressure control regulator for use on gas or air systems.

Pressure reducing regulator used to reduce line pressure up to 5psi to operating pressures at the appliance.

Features

- Internal sensing pitot
- Integral safety diaphragm
- Optional vent-limiting device
- Zero pressure shut-off

Specifications

- Gas type: natural gas, LPG (gaseous), bio methane (<0.1% H₂S); GDJ..L: air
- Max inlet pressure: 5psi (400mbar)
- Outlet pressure range: up to 64"w.c. (160mbar)
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Housing & seat: aluminum
- Valve disk: plastic
- Disk seal and diaphragm: perbunan

Applications

Used as an appliance or pressure control regulator.

Approvals

- CE
- EAC

Type code

GDJ	Pressure regulator for gas
15-50	Nominal size
R	Rp internal thread
04	p _u max. 400 mbar
-0	No pressure test point
-4	Pressure test point at the inlet
L	Only for air (without approval)
Z	Special outlet pressure range

More information

The <u>GDJ</u> website contains links to technical documentation, product selection, spare parts, etc.



VGBF

High inlet pressure control regulator for use in primary gas manifolds.

Pressure reducing regulator used to reduce incoming line pressure up to 60 psi for use in the system manifold.

Features

- External sensing line
- Integral safety diaphragm
- Zero pressure shut-off
- Compensating diaphragm for smooth control of the gas flow

Specifications

- Gas type: natural gas, LPG (gaseous), bio methane (<0.1% H₂S)
- Max inlet pressure: 7, 14.5, 58psi (0.5, 1, 4bar)
- Outlet pressure range: up to 137" w.c. (350mbar)
- Ambient temperature: 5°F to 140°F (-15°C to 60°C).
- Housing, stem, & seat: aluminum
- Wetted diaphragms and valve disk: perbunan; VGBF..V: Viton

Applications

Used as the primary pressure reducing regulator in large systems and able to maintain a constant outlet pressure over a wide operating range.

Approvals

- CE
- EAC

Type code

VGBF	Pressure regulator for gas
15-100	Nominal size
т	T-product
Α	ANSI flange
Ν	NPT internal thread
10	p _u max. 15 psig (1 bar)
40	p _u max. 60 psig (4 bar)
-2	Screw plug at the outlet
-3	Screw plug at the inlet and outlet
Z	Special outlet pressure range

More information

The <u>VGBF</u> website contains links to technical documentation, product selection, spare parts, etc.



OVER PRESSURE SHUT-OFF VALVE: JSAV

Protects the downstream components from line pressure above the service rating of the components.

Mechanical over pressure shutoff designed to protect down stream components from high line pressure in the event of catastrophic failure of the main line regulator.

Features

- High pressure, high flow design
- Manual reset handle
- Visual trip indicator
- External sensing tap
- Optional under-pressure trip version

Specifications

- Fuels: natural gas, LPG (gaseous), bio methane (<0.02% H₂S), air
- Inlet pressure: 58psi (4bar)
- Over pressure trip pressure: up to 8psi, (550mbar)
- Under pressure trip pressure: up to 58.5"w.c. (150mbar)
- Housing: JASV 25-40: AlSi; JSAV 50-100: GGG40
- Diaphragm: NBR
- Ambient temperature: -5°F to 140°F (-15°C to 60°C).

Applications

Used to protect downstream components in industrial fuel train. Under-pressure systems are used to detect line breaks and shut-off the flow of gas.

Approvals

- CE
- EAC

Type code

JSAV	Overpressure shut-off valve
25-100	Nominal size
т	T-product
Α	ANSI flange
Ν	NPT internal thread
40	p _u max. 60 psig (4 bar)
50	p _u max. 70 psig (5 bar)
/1	Over-pressure shut-off p _{do}
-0	No pressure test point
-3	Screw plug at the inlet and outlet
Z	Special adjusting range



More information

The <u>JSAV</u> website contains links to technical documentation, product selection, spare parts, etc.

OVER PRESSURE RELIEF VALVE: VSBV

Relieves surges in line pressure to prevent over-pressure shutdowns.

Approvals

More information

The VSBV website contains links to

technical documentation, product

selection, spare parts, etc.

- CE
- EAC

Over pressure relief valve used to momentarily relieve spikes in the line pressure to reduce nuisance trip of the high pressure limit devices.

Features

- Pressure test point to accurately adjust trip pressure
- Multiple spring ranges to meet application needs

Specifications

- Fuels: Natural Gas, LPG (gaseous), Bio Methane (<0.02% H₂S), air
- Inlet pressure: 58psi (4bar)
- Trip pressure: up to 7psi (500mbar)
- Housing: aluminum
- Diaphragm: perbunan
- Ambient temperature: -5°F to 140°F (-15°C to 60°C).

Applications

For primary gas manifolds in commercial and industrial applications.



Regulators

GIK

Gas/air ratio regulator with integrated low-fire bypass orifice. Designed for high duty-cycle operation in pulse fire systems.

Gas/air ratio regulator used to control gas flow in parallel to the air flow. Integrated low fire bypass allows for a fixed low-fire rate.

Features

- Internal sensing line
- Integrated low-fire bypass orifice
- Optional variable low fire bypass (GIK 15-25)
- Integrated pressure test points
- Zero pressure shut-off
- Optional zero-governor (negative regulation) conversion kit

Specifications

- Fuels: natural gas, LPG (gaseous), bio methane (<0.02% H₂S); GIK..L: air
- Inlet pressure: 2.9psi (200mbar)
- Outlet pressure range: 0.2-47"w.c. (0.5-119mbar)
- Air impulse pressure range: 0.2-48"w.c. (0.5-120mbar)
- Transmission range: 1:1
- Low fire bias: GIK 15-50: -1.2 to +1.2"w.c. (-3 to +3mbar), GIK 65-150: -0.8 to +0.8"w.c. (-2 to +2mbar)
- Ambient temperature: -4°F to 140°F (-20°C to 60°C).
- Control range: 101:1
- Diaphragm: NBR

Applications

For use in controlling the gas flow in relation to the air supply to the burner in industrial applications.

Approvals

- CE
- EAC

Type code

GIK	Air/gas ratio control
15-100	Nominal size
т	T-product
Α	ANSI flange
Ν	NPT internal thread
02	p _u max. 3 psig (200 mbar)
-3	Screw plug at the inlet and outlet
-5	Pressure test point at the outlet
В	With bypass screw

More information

The <u>GIK</u> website contains links to technical documentation, product selection, spare parts, etc.



ACCESSORIES FLOW METERS: DM, DE

Turbine flow meter for accurately measuring gas and air streams.

Gas or air flow meter used to measure the process flow in order to calculate efficiency or equipment usage.

Features

- Mechanical or digital counter
 head
- Integrated pulse generators for remote output
- Optional M-Bus interface

Specifications

- Fuels: natural gas, air
- Inlet pressure: 175psi (16bar)
- Housing: aluminum
- Display: 7-digit display with resolution of: DN 25: 0.01m3, DN40-150:0.1 m3
- Ambient temperature: 14°F to 140°F (-10°C to 60°C).
- Enclosure: IP52

Applications

The measurement of gas or air in industrial applications.

Approvals

- CE
- EAC

Type code

-)	
DM	Mechanical index
DE	Electronic index
Non	ninal flow, measuring range
16	16 m ³ /h, 2-25 m ³ /h(b)
25	25 m ³ /h, 2.5-40 m ³ /h(b)
40	40 m ³ /h, DN 25: 3,3-65 m ³ /h(b)
40	40 m ³ /h, DN 40: 5-65 m ³ /h(b)
65	65 m ³ /h, 6-100 m ³ /h(b)
100	100 m ³ /h, 10-160 m ³ /h(b)
160	160 m ³ /h, 13-250 m ³ /h(b)
250	250 m ³ /h, 20-400 m ³ /h(b)
400	400 m ³ /h, 32-650 m ³ /h(b)
650	650 m ³ /h, 50-1000 m ³ /h(b)
т	T-product
Ν	NPT internal thread
W	For fitting between two ANSI flanges
25-15	O Nominal size
-120	p _u max. 175 psig (12 bar)
В	M-Bus interface

More information

The <u>DM</u>, <u>DE</u> website contains links to technical documentation, product selection, spare parts, etc.



Accessories

GAS FILTERS: GFK

High efficiency and purification of gaseous media.

Gaseous media particulate filter used to remove fine contaminants from the media stream.

Features

- Highly efficient media stream purification
- Easily replicable filter media
- Upstream and downstream test
 ports
- Optional high purity media
- Standard 50 micron filter
- Optional 10 micron filter

Specifications

- Fuels: natural gas, LPG (gaseous), bio methane (<0.02% H₂S); GIK..L: air
- Inlet pressure: 60psi (4bar)
- Housing material: AlSi
- Ambient temperature: -5°F to 176°F (-15°C to 80°C).

Applications

To clean gaseous media streams in any application.

Approvals

- CE
- EAC

Type code

GFK	Gas filter
15-100	Nominal size
т	T-product
Α	ANSI flange
Ν	NPT internal thread
40	p _u max. 60 psig (4 bar)
-3	Screw plug at the inlet and outlet

More information

The <u>GFK</u> website contains links to technical documentation, product selection, spare parts, etc.



IGNITION TRANSFORMER: TZI, TGI

High voltage ignition transformer capable of single-electrode control.

High voltage ignition transformer used to ignite burners. Required when using the Kromschröder burner controls for single-electrode operation.

Features

- Full wave, iron-core ignition transformer
- Standard flame signal feedback wire for single electrode operation.
- Various VA output and duty cycle to match application

Specifications

- Input: 115, 230V AC
- Output: 5,000 or 7,500V
- Enclosure: TZI: IP 20; TGI: IP65

Applications

To ignite industrial and commercial burners.

Approvals

• CSA

Type code

J I I I I I	
TZI	Ignition transformer
TGI	Ignition transformer, enclosed
5	5 kV high voltage
7	7 kV high voltage
7,5	7.5 kV high voltage
-12	Output current 12 mA at 50 Hz
-15	Output current 15 mA at 50 Hz
-20	Output current 20 mA at 50 Hz
-25	Output current 25 mA at 50 Hz
/20	20% duty cycle
/33	33% duty cycle
/100	100% duty cycle
R	Mains voltage 115 V AC

More information

The <u>TZI, TGI</u> website contains links to technical documentation, product selection, spare parts, etc.



For more information: thermalsolutions.honeywell.com

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