GAS CUTTING
AND WELDING EQUIPMENT

Safety Device – DS2000

The safety device DS2000 according to DIN EN ISO 5175-1:

- Avoids dangerous gas mixtures by a gas non-return valve (NV)
- Stops flashback through flame arrestor (FA)
- A temperature-sensitive cut-off valve stops the gas flow when
- A predetermined temperature is exceeded (TV)
- A dust filter protects the gas non-return valve against contamination
- Every safety device is 100% tested
- All metal components in brass 2.0401 / spring 1.4310

Safety elements of the Hi-Lo UK DS2000

- NV Gas Non-return valve
- FA Flame arrestor
- TV Temperature-sensitive cut-off valve
- PV Pressure-sensitive gas cut-off valve

Additional Features:

- DF Dust Filter

Maintenance:

The safety devices are to be tested by a qualified and authorised person at regular intervals according to country specific regulations. The safety device is to be tested for gas tightness, gas flow and gas return at least once a year.

We would be pleased to offer you the flashback arrestor testing unit model PVGD.

It is not allowed to open the safety devices.

Technical Data:

Gas Types:	Acetylene (A)	Hydrogen (H) Industrial Gas (C)	Natural Gas (Methane) (M) Propane (P)	Oxygen (O)	Compressed Air (D)
Working Pressure:	0.15 MPa 1.5 bar	0.40 MPa 4.0 bar	0.50 MPa 5.0 bar	1.50 MPa 15.0 Bar	1.50 MPa 15.0 bar
Cracking Pressure:	50 mbar position-independent				
Gas Temperature:	-20°C up to +70°C (Oxygen -20°C up to +60°C)				
Ambient Temperature:	-20°C up to + 70°C				
Threads: **EN 560** **ISO / TR 28821**	G3/8LH M16x1.5LH UNF9/16-18LH UNF5/8-18LH 1/4NPT			G1/4RH G3/8RH M16x1.5RH UNF9/16-18RH UNF5/8-8RH 1/4NPT	
Measure and weight	Diameter		Length	Weight	
	46.0mm		122.0mm	491.0g	
Applications					
Process:	Welding		Cutting	Heating	
	Up to 30mm		Up to 700mm	>100mm	

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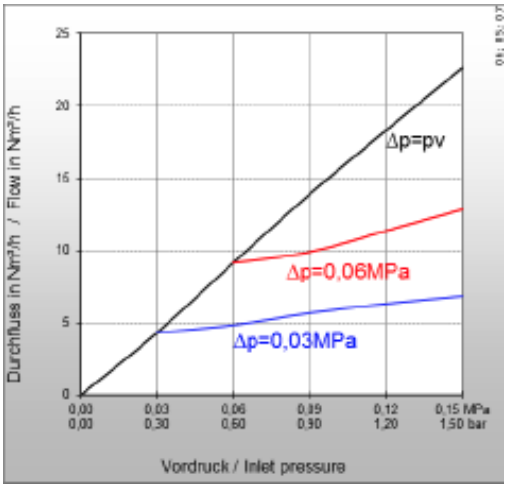
Type: DS2000

Flow rates (air):

Pv= Primary pressure
Ph = Secondary pressure
Δp = Primary pressure minus Secondary pressure

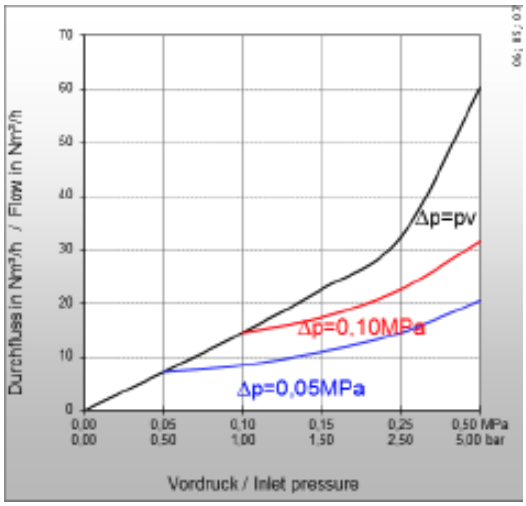


Conversion Factors:

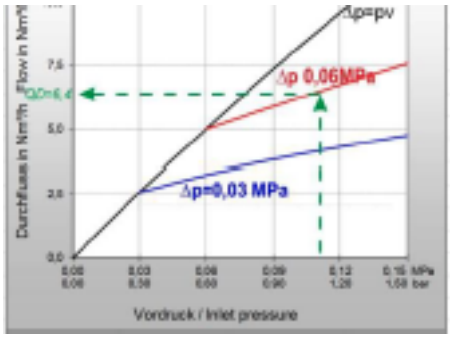
0,1 MPa = 1 bar = 100 kpa = 14,504 psi
1 m3/h = 35,31 cu ft/h

	A	H	P	M	M	O	E	L
QG >	C_2H_2	H_2	C_3H_8	CH_4+C	CH_4	O_2	C_2H_4	C_3H_6
F	1.2	3.8*	0.90	1.25	1.4	0.95	1.02	0.92

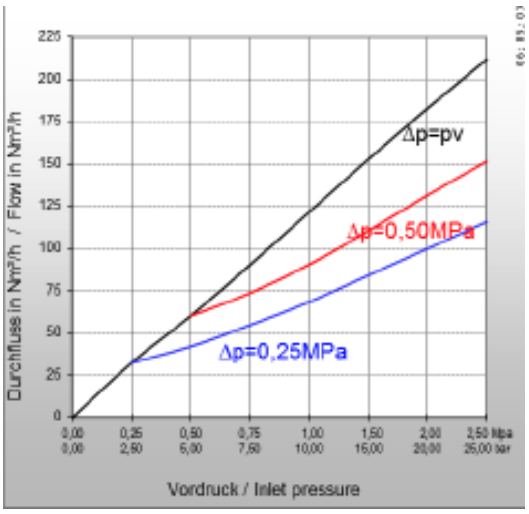
* Conversion factor 2.5 for devices comprising a flame arrestor
The conversion factor for free flow is 3.8 (
Reference: BAM report 220, D .Lietze)



Example:



QG = QD x F
QG ► A = 6,4 x 1,2 = 7,68 m³/h C2H2
QG = flow / gas type
F = conversion factor
QD = flow / air



Certification / Technical Standards / Rules

BAM Federal Institute for Materials Research and Testing, UL Underwriters Laboratories Inc., DGUV employer´s liability insurance association rules and regulations, DVS German Association for Welding, Cutting and Allied Processes, TRBS German Technical rules for operation safety.

Standards/ Approvals

Company certified according to ISO 9001:2015 and ISO 14001:2015, CE-marking according to: Pressure Equipment Directive 2014/68/EU