IBEDA SOLUTIONS FOR GASES

Safety device with multiple function: DG

Type DG for connecting at cylinder regulators and tapping points

The safety device DG 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 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

CERTIFIED SAFETY · BAM Certified and under surveillance Certification N°: BAM/ZBA/007/03 · UL

Safety elements of the IBEDA safety device DG:

- NV Gas non-return valve
- FA Flame arrestor

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	0,35 MPa 3,5 bar	0,50 MPa 5,0 bar	2,5 MPa 25 bar	2,5 MPa 25 bar
Cracking pressure:	50 to 70 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 UNF5/8-18RH 1/4NPT	

Measure and weight:	diameter:	length:	weight:
	22,0 mm	85,0 mm	150,0 g

Applications:			
Process:	welding	cutting	heating
	up to 30 mm	up to 200 mm	up to 100 mm

Other materials, surface finishing, gas types and additional connections available on request.
The flashback arrestor meets the test criteria of the Australian standard AS4603:1999
The working pressures approved by the UL are different to what is stated above.
Further information in this regard can be provided on request

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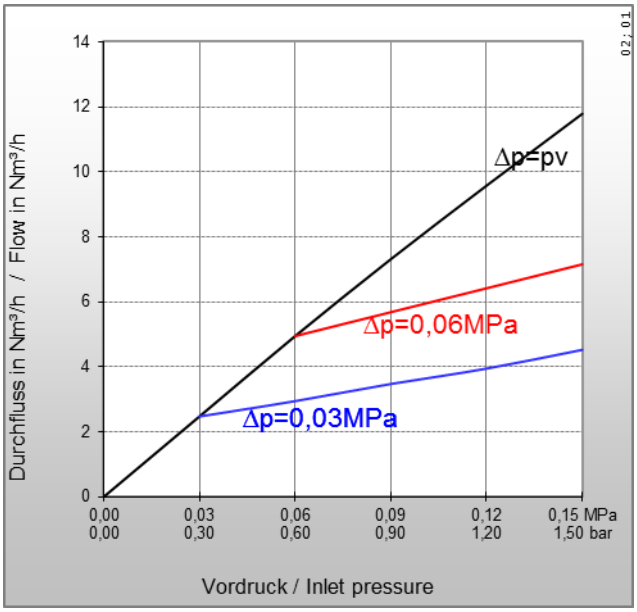
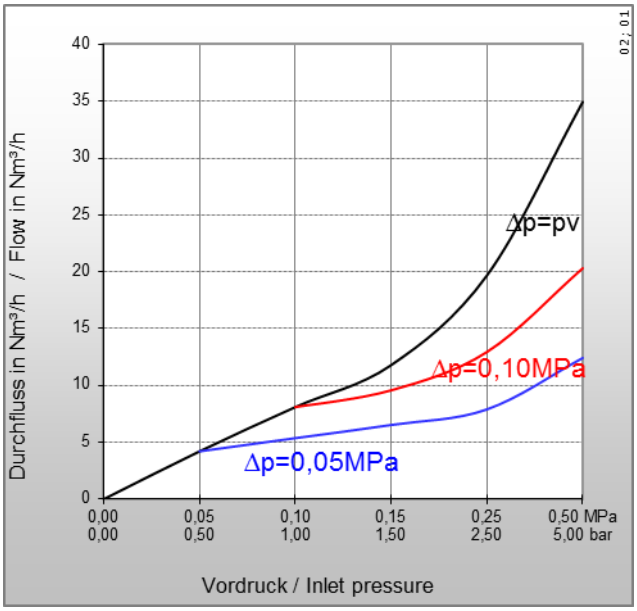
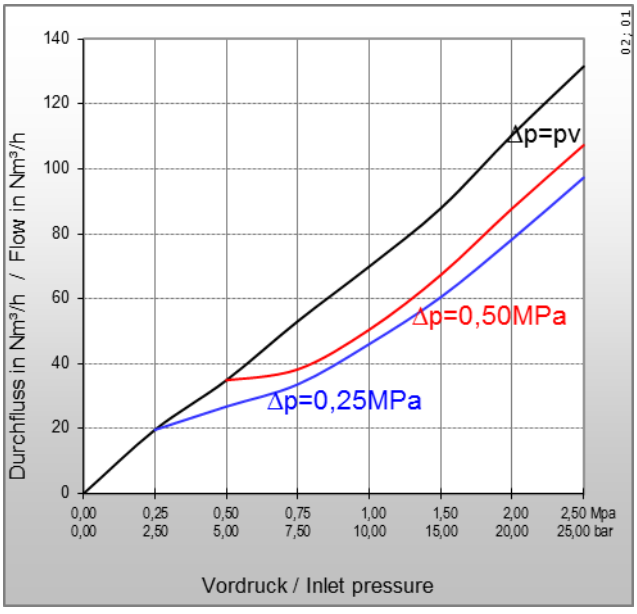






Type*:* **DG**

Flow rates [air]:

pv = Primary pressure
ph = Secondary pressure
Δp = Primary pressure minus Secondary pressure

Conversion Factors:

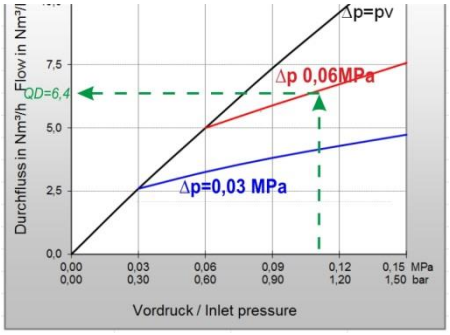
0,1 MPa = 1 bar = 100 kpa = 14,504 psi

1 m^3/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 C_2H_2

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

(Subject to change without notice)

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