



Safety device with multiple function: **DGN**

Model DGN for protection of cylinder regulators, tapping points and distribution lines

The safety device DGN according to EN 730-1, ISO 5175:

- 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

Safety elements of the IBEDA safety device DGN :

- NV Gas non-return valve
- FA Flame arrestor
- TV Temperature-sensitive cut-off valve
- Dust filter



Maintenance:

The safety devices have to be tested by a qualified and authorized person at regular intervals according to country specific regulations. They have to be tested for gas tightness and gas return at least once a year.

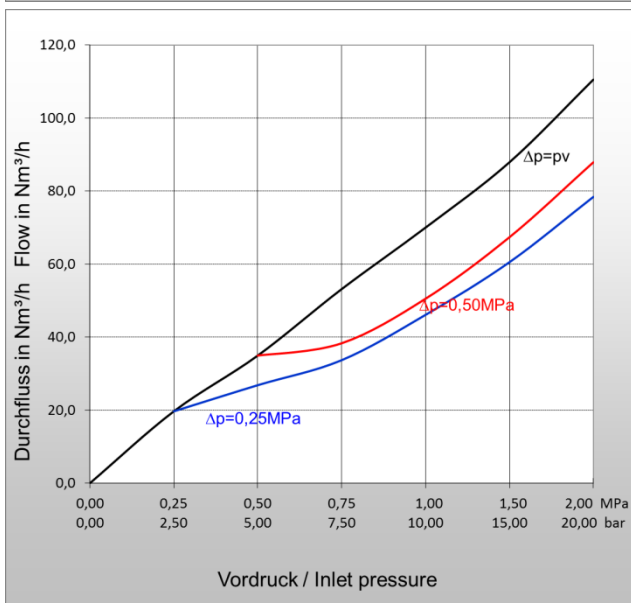
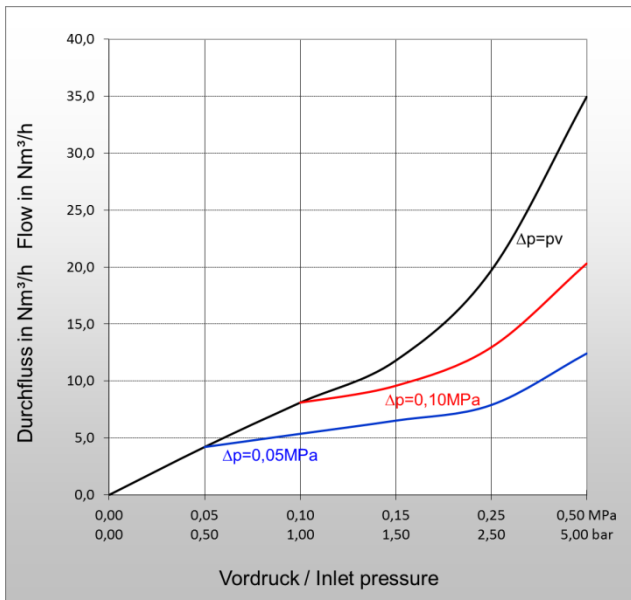
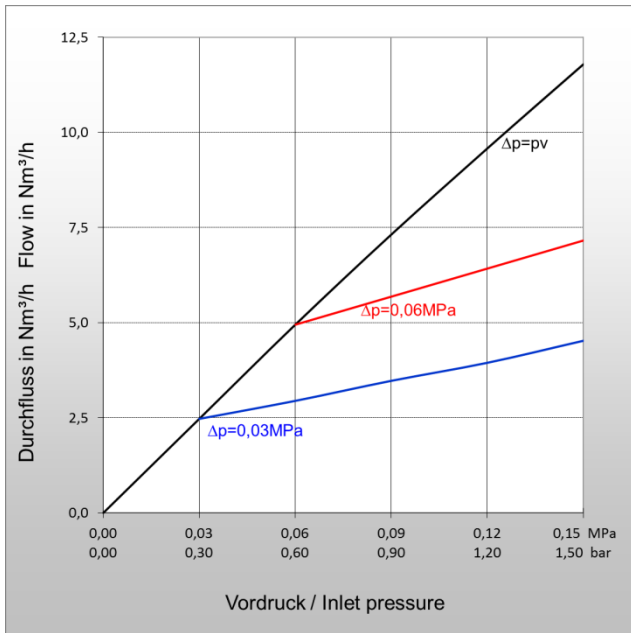
We would be pleased to offer you the flashback arrestor testing unit model: PVGD.

Safety devices are only to be opened and repaired by the manufacturer.

The dust filter may be replaced by a qualified person.

Technical Data:				
Gas types:	Acetylene (A)	Hydrogen (H)	Industrial Gas (C) Ethylene (E) Natural Gas (Methane), (P)	Compressed Air (D) Oxygen (O)
Working pressure:	0,15 MPa 1,5 bar	0,35 MPa 3,5 bar	0,50 MPa 5,0 bar	1,5 MPa (2,5 MPa) 15 bar (25 bar)
Ambient/ working temperature:	max. 100 °C			
Threads: EN 560 ISO 3253	G 3/8 LH M16x1,5 LH UNF 9/16-18LH UNF 5/8-18LH 1/4 NPT			G 1/4 RH G 3/8 RH M16x1,5 RH UNF 9/16-18RH UNF 5/8-18RH 1/4 NPT
Measure and weight:	diameter:	length:	weight:	
	22,00 mm	83,00 mm	152,00 g	
Applications:				
Process:	welding	cutting	heating	
	up to 30 mm	up to 200 mm	up to 100 mm	

Other materials, surface finishing and additional connections available on request.



Model: DGN

Flow rates:

pv = Primary pressure

ph = Secondary pressure

Δp = Primary pressure minus Secondary pressure

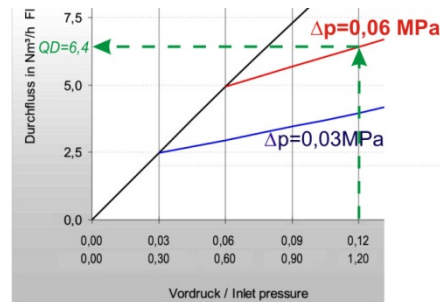
Conversion Factors:

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

1 m³/h = 35,31 cu ft

	A	H	P	M	M	O
QG ►	C ₂ H ₂	H ₂	C ₃ H ₈	CH ₄ +C	CH ₄	O ₂
F	1,2	2,5	0,90	1,25	1,4	0,95

Example:



$$QG = QD \times F$$

$$QG \blacktriangleright A = 6,4 \times 1,2 = 7,68 \text{ m}^3/\text{h C}_2\text{H}_2$$

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., TRAC Technical regulations for acetylene and calcium carbide systems, BGV German Health and Safety Regulations, BGR German employer's liability insurance association rules and regulations, DVS German Association for Welding, Cutting and Allied Processes

Standards/ Approvals

Company certified according to ISO 9001:2000 and ISO 14001, CE-marking according to: Pressure Equipment Directive 97/23/EG

(Subject to change without notice)