

Safety device with multiple function: **TT**

Type TT for in-hose installation

The safety device TT 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

Safety elements of the IBEDA Safety Device TT:

- 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	0,40 MPa 4,0 bar	0,40 MPa 4,0 bar	2,0 MPa 20,0 bar	2,0 MPa 20,0 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				
Connection-hose pin:	4,0 mm; 5,0 mm; 6,3 mm; 8,0 mm; 9,0 mm				
Measure and weight:	diameter:		length:		weight:
	19,5 mm		82,0 mm		66,0 g
Applications:					
Process:	welding		cutting		heating
	up to 30 mm		up to 200 mm		up to 30 mm

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

Type: TT

Flow rates [air]:

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

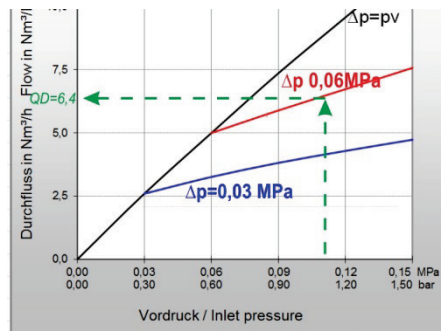
Conversion Factors:

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 ₂ H ₂	H ₂	C ₃ H ₈	CH ₄ +C	CH ₄	O ₂	C ₂ H ₄	C ₃ H 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 arrester
 The conversion factor for free flow is 3.8.
 (Reference: BAM report 220, D. Lietze)

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

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)

