Safety Device according to DIN EN ISO 5175-1, AS 4603
with Hose Coupling

IBEDA
SOLUTIONS FOR GASES

Safety device: NKST

Type NKST for in-hose or torch side connection

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

- avoids dangerous gas mixtures by a gas non-return valve (NV)
- stops flashback through flame arrestor (FA)
- safe interruption of gas flow by automatic gas cut-off when disconnecting
- 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 NKST:

- NV Gas non-return valve
- FA Flame arrestor
- SV Shut-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.

Couplings are wearing parts and have to be tested by a qualified and authorised person (at least once a year). The tests have to be performed when the couplings are connected as well as disconnected.
Leakage tests are to be performed with inert gas or air (free from oil and grease) or the operating gas.

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)
Working pressure:	0,15 MPa 1,5 bar	0,35 MPa 3,5 bar	0,40 MPa 4,0 bar	2,0 MPa 20 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			
Outlet:	IBEDA-coupling series N			

Measure and weight:	diameter:	length:	weight:
	20,0 mm	88,0 mm	114,0 g

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

Compatible with:
Coupling pin N1, N2 and N4

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

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EN/03/18/012

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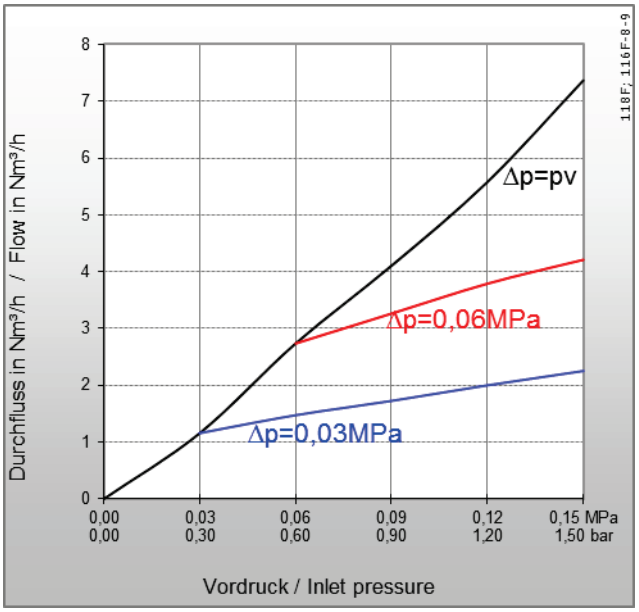
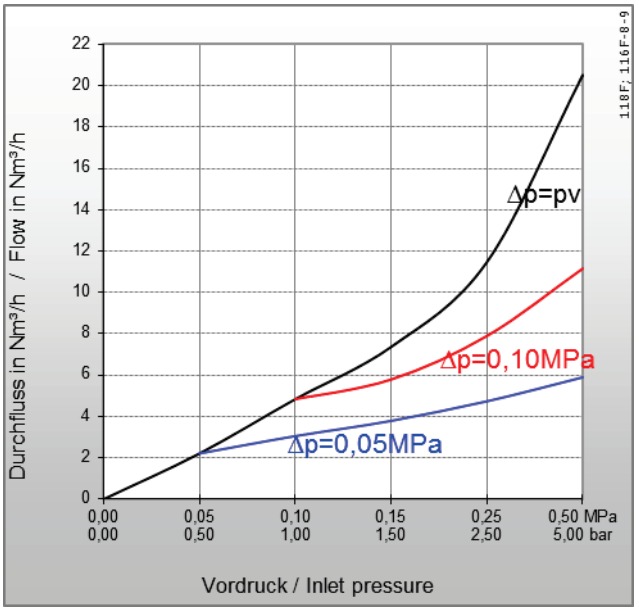
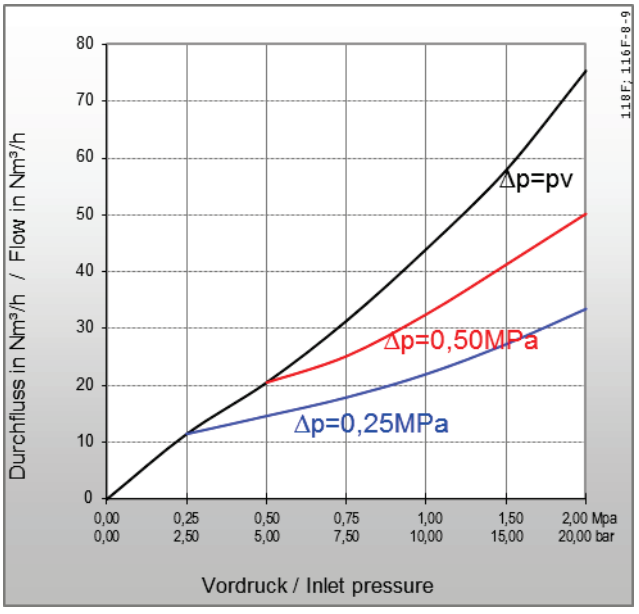






Type: **NKST**

Flow rates [air]:

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

Conversion Factors:

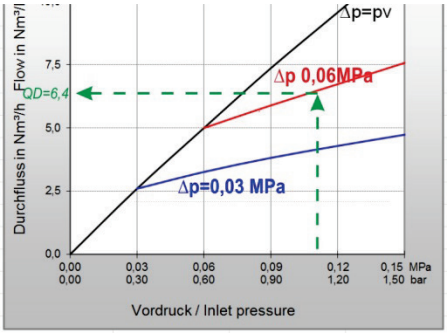
0,1 MPa = 1 bar = 100 kpa = 14,504 psi

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 m^3/h C_2H_2

QG = flow / gas type
F = conversion factor
QD = flow / air

Certification/ Technical Standards/ Rules

TRBS German Technical rules for operation safety, DVS German Association for Welding, Cutting and Allied Processes, DGUV German Employer´s liability insurance association rules and regulations.

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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