## Quick-action coupling (Coupling with gas shut-off valve): NKG

### Type NKG for in-hose or torch side connection

The quick-action coupling NKG:

- safe interruption of gas flow by automatic gas cut-off when disconnecting
- no mixing up by different coding of coupling pins
- prevents accidental disconnection
- quick connection with one click
- all metal components in brass 2.0401 / spring 1.4310

### Safety elements of the IBEDA quick-action coupling NKG:

- SV Shut-off valve

### Maintenance:

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.

It is not allowed to open the quick-action couplings.

## Technical Data:

| **Gas types:** | Acetylene (A) | Hydrogen (H)<br>Industrial gas (C) | Natural Gas (Methane) (M)<br>Propane (P) | Oxygen (O) | Compressed Air (D)<br>Nitrogen (N)<br>Carbon dioxide (N)<br>Argon (N)<br>Helium (N) |
|---|---|---|---|---|---|
| **Working pressure:** | 0,15 MPa<br>1,5 bar | 2,0 MPa<br>20 bar | 2,0 MPa<br>20 bar | 2,0 MPa<br>20 bar | |
| **Gas temperature:** | -20°C up to +70°C ( Oxygen -20°C up to +60°C) | | | | |
| **Ambient temperature:** | -20°C up to +70°C | | | | |
| **Threads:**<br>EN 560<br>ISO / TR 28821 | G3/8LH<br>M16x1,5LH<br>UNF9/16<br>UNF5/8 | | | G1/4RH<br>G3/8RH<br>M16x1,5RH<br>UNF9/16<br>UNF5/8 | |

| **Measure and weight:** | diameter: | length: | weight: |
|---|---|---|---|
| | 20,0 mm | 59,0 mm | 87,0 g |

| **Compatible with:** |
|---|
| Coupling pin N1, N2 and N4 |

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

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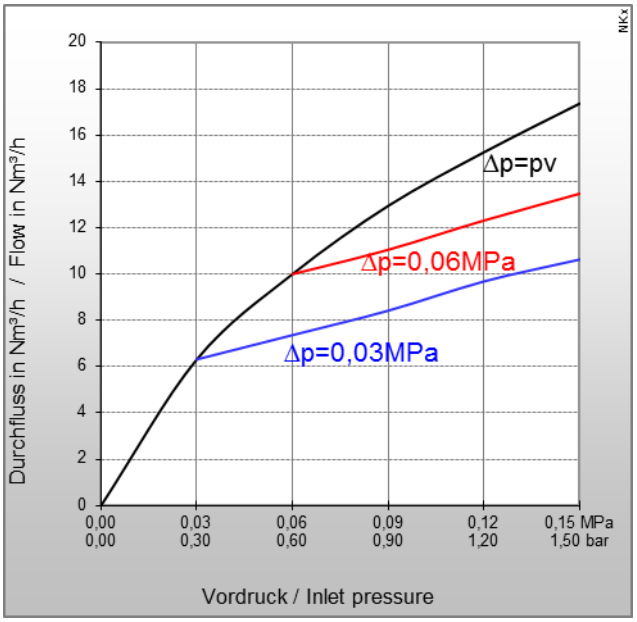
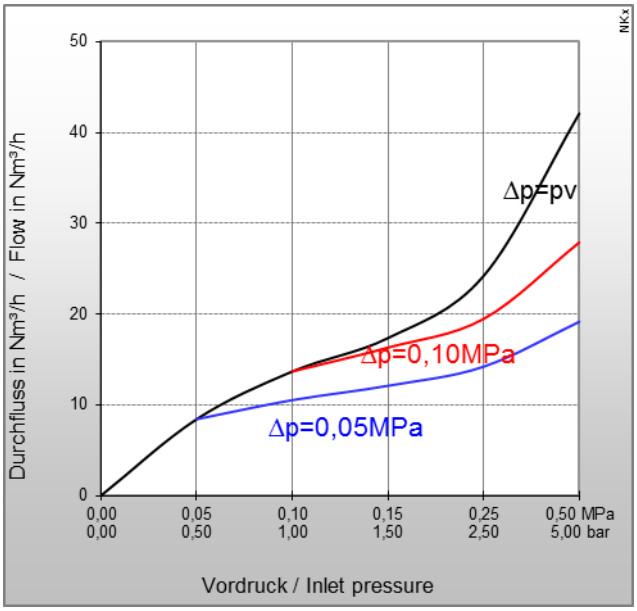
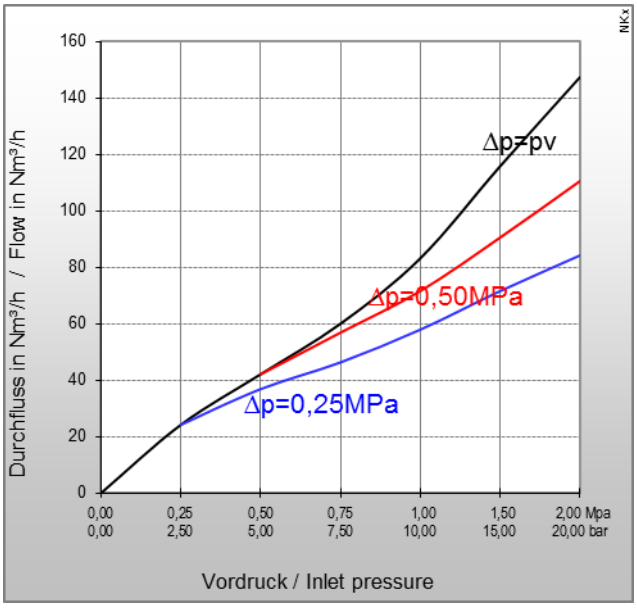



# Type: **NKG**

### Flow rates [air]:

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

### Conversion Factors:

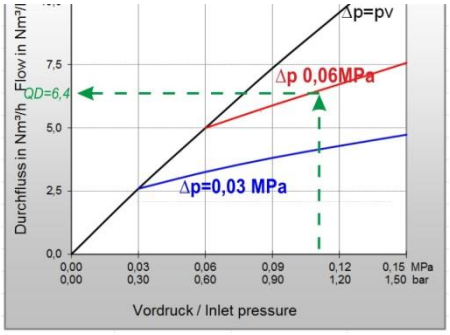
0,1 MPa = 1 bar = 100 kpa = 14,504 psi

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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