**IBEDA**®
SOLUTIONS FOR GASES

# Quick-action coupling (Coupling with gas shut-off valve): GKG-8

## Type GKG-8 for in-hose or torch side connection

The quick-action coupling GKG-8:

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

## Safety elements of the IBEDA quick-action coupling GKG-8:

- 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) Industrial gas (C) | Natural Gas (Methane) (M) Propane (P) | Oxygen (O) | Compressed Air (D) Nitrogen (N) Carbon dioxide (N) Argon (N) Helium (N) |
|---|---|---|---|---|---|
| Working pressure: | 0,15 MPa 1,5 bar | 2,0 MPa 20 bar | 2,0 MPa 20 bar | 2,0 MPa 20 bar | |
| Coupling pressure: | 2,0 MPa 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 | | | | |
| Nominal diameter: | free cross section: 8 mm | | | | |
| Threads: EN 560 ISO / TR 28821 | G1/2LH | | | G1/2RH | |
| Measure and weight: | diameter: | | length: | weight: | |
| | 35,0 mm | | 93,0 mm | 317,0 g | |
| Compatible with: | | | | | |
| Coupling pin G2-8 and G4-8 | | | | | |

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

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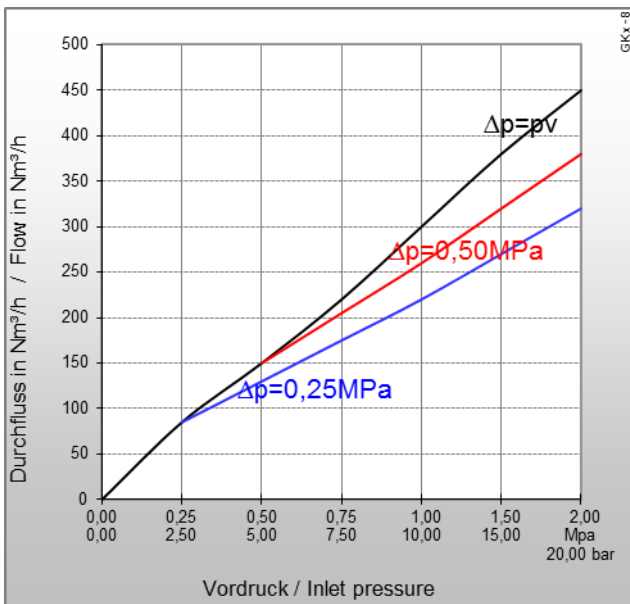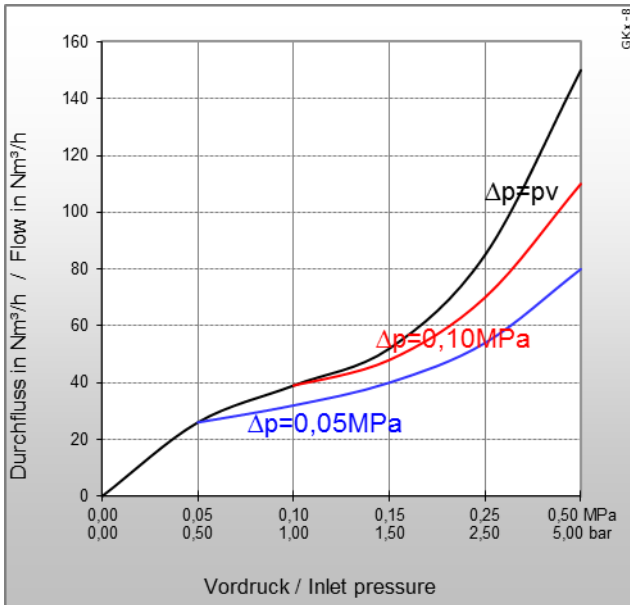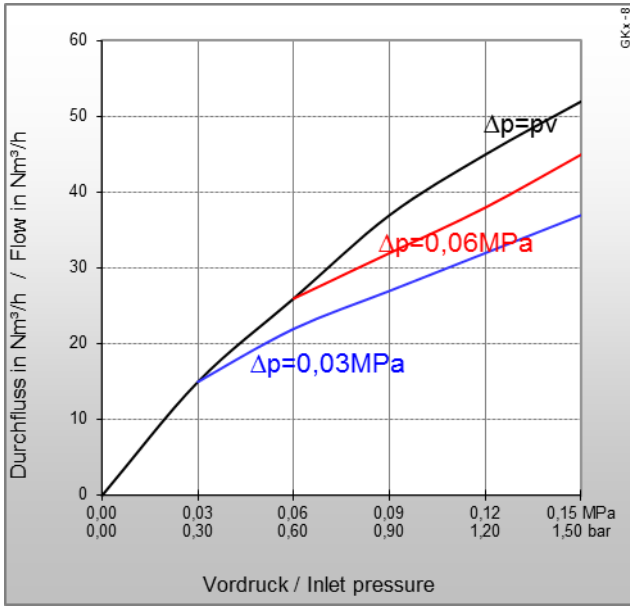
# Type: **GKG-8**



## Flow rates [air]:

pv = Primary pressure

ph = Secondary pressure

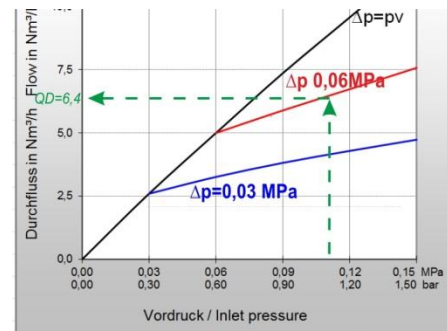Δp = Primary pressure minus Secondary pressure

## 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

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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