

Quick-action coupling

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

Type NKD for tapping points and pressure regulators

The quick-action coupling NKD:

- 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 NKD:

- 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	
Gas temperature:	-20°C up to +70°C (Oxygen -20°C up to +60°C)				
Ambient temperature:	-20°C up to +70°C				
Threads: EN 560 ISO / TR 28821	G3/8LH M16x1,5LH UNF9/16-18LH UNF5/8-18LH		G1/4RH G3/8RH M16x1,5RH UNF9/16-18RH UNF5/8-18RH		
Measure and weight:	diameter:	length:		weight:	
	20,0 mm	60,0 mm		91,0 g	
Compatible with:	Coupling pin N1, N2 and N4				

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

Type: NKD

Flow rates [air]:

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

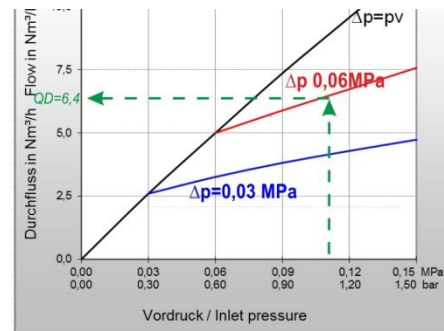
Conversion Factors:

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

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)

