

**The safety device (non-return valve/ flashback resistant) GRS50:**
**Model for protection of pipelines, tapping points and equipment**

The safety device GRS50:

- avoids dangerous gas mixtures by a gas non-return valve (NV)
- flashback-resistant if compressed air is used as an oxidant
- a dust filter protects the gas non-return valve against contamination
- every safety device is 100 % tested

**Safety elements of the IBEDA non-return valve GRS50:**

- NV Gas non-return valve
- DF Dust filter

**For further information:** <http://www.ibeda.com/en/gas-non-return-valves>
**Maintenance:**

The safety devices have to be tested by a qualified and authorized person at regular intervals according to country specific regulations. They have to be tested for gas tightness and gas return at least once a year.

Safety devices are only to be opened and repaired by the manufacturer.

The dust filter may be replaced by a qualified person.



DG-4390CQ0061

<b>Technical Data:</b>			
<b>Safety device GRS according to EN 730-2: Flashback resistant if compressed air is used as an oxidant.</b>			
<b>Gas types :</b>	Industrial gas (C)	Hydrogen (H)	Natural Gas (Methane) (M)
			Propane (P)
			cleaned Bio gas (M)
<b>Working pressure:</b>	0,1 MPa 1,0 bar	0,5 MPa 5 bar	0,5 MPa 5 bar
<b>Cracking pressure:</b>	4 to 6 mbar position-independent		
<b>Ambient/ working temperature:</b>	-20°C up to +70°C		
<b>Threads: DIN ISO 228</b>	G2 IG RH G1 1/2 IG RH 2 NPT IG RH 1 1/2 NPT IG RH		
<b>Flange connection: EN 1092 Type 04</b>	DN40/PN16 DN50/PN16		
<b>Measure and weight:</b>	diameter:	length:	weight:
Thread G1 1/2:	94 mm	175 mm	6,0 kg
Flange DN 40/PN16:	150 mm	367 mm	12,0 kg
Thread G2:	94 mm	176 mm	6,5 kg
Flange DN 50/PN16:	160 mm	367 mm	12,0 kg
<b>Application:</b>	Heating burner, gas mixing- and control systems, applications according to EN 746-2		

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

## Model: **GRS50**

### Declaration of conformity

We, the manufacturer, hereby declare that the safety devices in accordance with EN 730-2 comply with the requirement of the following directives and standards:

Directive 97/23/EG

Standard: EN 730 Part 2

Safety devices in accordance with EN 730-2 for combustible gases (group 1), Model GRS, are subject to the conformity assessment procedure pursuant to 97/23/EG, Category I, Module A.

### Certification/ Technical Standards/ Rules

BAM Federal Institute for Materials Research and Testing,  
DVGW Deutsche Vereinigung des Gas- und Wasserfaches e.V.  
BGV German Health and Safety Regulations,  
BGR German employer's liability insurance association rules and regulations,  
DVS German Association for Welding, Cutting and Allied Processes

### Standards/ Approvals

Company certified according to  
ISO 9001:2008 and ISO 14001:2004,  
CE-marking according to: Pressure Equipment Directive 97/23/EG

(Subject to change without notice)