

# TEST CERTIFICATE

IBExU Institut für Sicherheitstechnik GmbH has carried out the following examination as a competent company in the field of explosion protection.

**Manufacturer  
Address**

Witt Gasetechnik GmbH & Co. KG  
Salinger Feld 4 – 8  
58454 Witten | GERMANY

**Product  
Product description**

Safety devices and quick-action couplings  
Type series Super, E460, 85-10, 85-30, RF53, SK100  
These products and the various versions are specified in the annex and the test reports listed.

**Product testing was carried  
out experimentally accord-  
ing to**

EN 561:2002  
EN ISO 5175-1:2018  
EN ISO 9090:2020  
EN ISO 9539:2014

**Supplementary in compli-  
ance with the BAM standard  
operating procedures**

BAM-StAA-SE-16 from 2017-11-14  
BAM-StAA-SE-18 from 2018-04-12  
BAM-StAA-SE-19 from 2020-12-08

**Test reports**

IB2440013	IB2440030
IB2440014	IB2440031
IB2440015	IB2440032
IB2440016	IB2440033
IB2440017	IB2440034
IB2440018	IB2440035

**Annexes**

This test certificate consists of this document and an annex.

**Test result**

The products were successfully retested orientating/random on the basis of the BAM type tests in accordance with the standards listed under product testing and documented in separate test reports. The orientating/random monitoring of the products takes place in an annual cycle.

The products may be labeled as follows in conjunction with the number of the test certificate:

**IBExU<sup>®</sup> geprüft und überwacht or IBExU<sup>®</sup> tested and under surveillance**

# TEST CERTIFICATE

Number of the certificate 2405 | Issue 01  
Valid until 2027-11-30  
Issued by IBExU Institut für Sicherheitstechnik GmbH  
Fuchsmühlenweg 7  
09599 Freiberg | Germany

30.01.2025  


Date (checked and released) / Signature  
Prüflaborleiter / Head of test laboratory

Note 1: Test certificates without a signature are not valid. Test certificates may only be reproduced in full and unchanged.

Note 2: This test certificate certifies the result of the test on the product submitted for testing. It is not applicable to other products.

Note 3: If this test certificate does not bear issue 00, it replaces the previous issue including any associated annexes.

# TEST CERTIFICATE - ANNEX

Annex of test certificate 2405 | Issue 01

## Description of product

### Part 1: Safety devices with integrated flame arrester and multiple functions

Depending on the model, these are designed to protect tapping points on distribution lines and/or individual cylinder systems, as well as consumer appliances. The safety devices consist of a housing, a sintered flame arrester and a gas non-return valve. Depending on the model, a temperature-sensitive cut-off and pressure-sensitive cut-off valve are also installed.

The following BZS-process numbers apply to all the listed types in this type series:

- **Super:** BZS-GS/116/16; BZS-GS/027/21; BZS-GS/032/21; BZS-GS/008/22; BZS-GS/044/22; BZS-GS/018/23; BZS-GS/034/23
- **E460:** BZS-GS/116/16; BZS-GS/032/21; BZS-GS/008/22
- **85-10:** BZS-GS/116/16; BZS-GS/032/21; BZS-GS/008/22
- **85-30:** BZS-GS/116/16; BZS-GS/032/21; BZS-GS/008/22
- **RF53:** BZS-GS/116/16; BZS-GS/032/21; BZS-GS/008/22

Table 1

Type series	max. connectable inner tube / hose Ø in mm	additional BAM-test reports	max. operation pressure per gas type <sup>1)</sup>					
			p [MPa]					
Super			A	P	M	H	E	O
Super 66	10	12025/86; 4-4040; II-5127/99; BZS-GS/027/21; 21047408-I	0.2 <sup>2)</sup>	0.5	0.5	0.5		1.0
Super 78	10	7329/88; II-5127/99; 21047408-II	0.15	0.40	0.5	0.40		1.0
Super 55	10	II-3940/2003; II-1099/2006; 2-252/2012	0.15	0.5	0.5	0.3		1.5

## TEST CERTIFICATE - ANNEX

Type series	max. connectable inner tube / hose Ø in mm	additional BAM-test reports	max. operation pressure per gas type <sup>1)</sup>					
			p [MPa]					
E 460			A	P.-an	M	H	P.-en	O
E 460	10	12026/86;4-4041; 7729/88; 4-2607; 597/98; II-542; II-603/2005; II.1/48001	0.15	0.5	0.5	0.4	0.5	
								2.0

85-10			A	P.-an	M	H	P.-en	O
85-10	10	14146/84;4-5145; 6018/87;4-2125; II-5172/99;	0.15	0.5	0.5	0.4	0.5	
		II-2000/2006						2.5
85-10 N/H	10			0.5	1.0	1.0	0.5	

85-30			A	P	M	H	E	O
85-30	40	6247/90;4-2230; II-1639/2000; 2-1871/2011	0.15	0.35	0.5	0.4		
								2.5

RF 53			A	P	M	H	E	O
RF 53	10	4-1544/85; II-5127/99; BZS-GS/065/20; 20022469-I	0.15	0.5	0.5	0.2		
								2.5
RF 53N	10	4-1544/85; II-5127/99	0.15	0.5	0.5	0.3		
								2.5
RF 53 DN	10	4-1544/85; II-5127/99	0.15	0.5	0.5	0.3		
								1.0
RF 53 NSK	10	4-1544/85	0.15	0.5	0.5	0.3		
								2.0
RF 53 N/H	10	II-4295/2003 VI		0.8		0.9	0.5	

<sup>1)</sup> Acetylene (A); Propane (P/P.-an); Methane (M); Hydrogen (H); Propene (P.-en), Ethylene (E); Oxygen/ air (O)

<sup>2)</sup> based on EN ISO 5175-1:20118

## TEST CERTIFICATE - ANNEX

The safety devices listed in Table 1 fulfil the requirements of the operating conditions specified in EN ISO 5175-1:2018. The listed safety devices also fulfil the extensions of section 4.2 'Materials' of EN ISO 5175-1:2018, which are documented in the following BAM standard operating procedures:

- BAM-StAA-SE-16 "Test for resistance for non-metallic materials" (Resistance to solvents) dated 2017-11-14 and
- BAM-StAA-SE-18 "Test for resistance to ageing in oxygen for non-metallic materials" dated 2018-04-12.

Furthermore, the listed safety devices (in so far applicable) fulfil the BAM standard operating procedure:

- BAM-StAA-SE-19 "Test of pressure-sensitive valve for quick opening" dated 2020-12-08.

Furthermore, the non-metallic materials used in the devices were successfully tested for use in gaseous oxygen, at the specified maximum operating pressures and the maximum oxygen temperature of 60 °C (test for reactivity with oxygen when exposed to oxygen pressure surges).

### Part 2: Quick-action couplings

Quick-action couplings with automatic gas shut-off are used on equipment for welding, cutting and related processes to connect gas hoses to pressure regulators and torches. The quick-action coupling consists of a coupling pin and a coupling body. This quick-action coupling is equipped with an automatic gas lock. When disconnected, the gas lock prevents gas from escaping from the coupling body and is opened again by coupling.

The following BZS-process numbers apply to all the listed types in this series:

- **SK100:** BZS-GS/83/05; BZS-GS/032/21; BZS-GS/008/22; BZS-GS/044/22

Table 2

Type series	max. connectable inner tube / hose Ø in mm	additional BAM-test reports	max. operation pressure per gas type		
			p [MPa]		
SK100			Acetylene	Fuel gas	Oxygen
SK100	10	II-4855/99	0.15	2.0	
		II-1260/2005			2.0

## TEST CERTIFICATE - ANNEX

The quick-action couplings listed in Table 2 fulfil the requirements of the operating conditions specified in EN 561:2002. The compliance with the requirements of section 6.5 is extended within BAM Standard Operating Procedures:

- BAM-StAA-SE-16 "Test for resistance for non-metallic materials" (Resistance to solvents) dated 2017-11-14 and
- BAM-StAA-SE-18 "Test for resistance to ageing in oxygen for non-metallic materials" dated 2018-04-12.

Furthermore, the non-metallic materials used in the devices were successfully tested for use in gaseous oxygen, at the specified maximum operating pressures and the maximum oxygen temperature of 60 °C (test for reactivity with oxygen when exposed to oxygen pressure surges).

### Specific conditions of Use

#### Marking and Documentation

The manufacturer is obliged:

- a) to label each safety device / quick-action coupling in accordance with the standards specified under product testing and
- b) to provide corresponding documentation.

#### Connection sizes

The types listed under "Product" may only be used with the cable / hose diameters specified in Tables 1 and 2.

#### Limitation of use

The operator is obliged:

- a) to observe and comply with the specifications in the operating instructions and labelling,
- b) to ensure that the operating temperatures are between -20 °C and +60 °C and
- c) to check the safety devices and quick-action couplings for soiling, damage and corrosion depending on the load and to replace them if necessary.

The safety devices / quick-action couplings may only be used if their materials are resistant to mechanical and/or chemical influences under respective operating conditions, that the function is not invalidated.