

Visitors address

IMA Materialforschung und Anwendungstechnik GmbH
Wilhelmine-Reichard-Ring 4 | 01109 Dresden | Germany

Postal address PF 80 01 44 | 01101 Dresden | Germany

Tel. +49(0)351 8837-0

Fax +49(0)351 8837-530

E-Mail ima@ima-dresden.de

Homepage www.ima-dresden.de

Managing directors

Prof. Dr.-Ing. Thomas Fleischer (Spokesman),
Dr.-Ing. Ron Buchholz, Dr.-Ing. Toni Ehrig, Marcos Martija Ortiz

Company's registered office Dresden

Register court Amtsgericht Dresden | HRB 5995

Tax identification number DE 155293995



Test Report

Audit Test (AT) 2022 Press Fittings from Copper for Gas Supply DG-4550CU0137



Deutsche
Akkreditierungsstelle
D-PL-13119-02-00
D-IS-13119-01-00

Test Report No.: V229/22.2-1

Order No.: 232300005

Issued by Department Pipe Systems

Laboratory for Pipe Systems Testing

Recognised test laboratory of DVGW, DIN CERTCO and DIBt

The recognitions are valid for the test methods stated in the attachments of certificates of approval
DVGW LW-BU0023, DIN CERTCO PL121 and DIBt SAC 08

Test Report

Audit Test (AT) 2022 DG-4550CU0137

Test Report No.: V220/22.2-1



Subject of test: Press fitting from **Copper** for gas supply with Copper pipes according to DVGW GW392 R250 and R290 model "**Press Fitting for gas**"

DVGW-Registration No.: **DG-4550CU0137**

Ordering customer: Taizhou Double Winners Copper Co., Ltd.
Unit B-1605, Joyance Tower, JiaoJiang, Taizhou, Zhejiang, 318000, China

Test laboratory: IMA Materialforschung und Anwendungstechnik GmbH
Wilhelmine-Reichard-Ring 4, 01109 Dresden
Laboratory for Pipe System Testing
Am Lagerplatz 4, 01099 Dresden

Audit test: **2022: Ü 230-20-003_1**

Sampling: 2022-06-03

Test period: 2022-06 to 2022-08

Test result: The requirements according to DVGW-Worksheet G 5614 are fulfilled by the system "Press Fitting for gas" in dimension 35 mm.

Person in charge: Dipl.-Ing. (BA) Enrico Marusch

Distribution list: 1 x Ordering customer
1 x DVGW
1 x IMA Dresden

Authorized
Dresden, 2022-08-17
IMA Materialforschung und
Anwendungstechnik GmbH



Dipl.-Ing. Heiko Below
Head of Department Pipe Systems

The test results refer exclusively to the specimen under test.
Rounded measurement or calculation values are based on the rule according to ISO 80000-1 Appendix B, Rule B.
The publication of parts of this test report and any reference to tests for advertising purposes is subject to written permission by IMA Materialforschung und Anwendungstechnik GmbH in any case.
The results contained in this report may only be published or passed on to third parties with reference to the IMA Materialforschung und Anwendungstechnik GmbH. The statement of conformity is based on the binary statement for simple acceptance rule (w=0) acc. to ILAC G8. The measured values are considered without the measurement uncertainty.

Test Report

Audit Test (AT) 2022 DG-4550CU0137

Test Report No.: V220/22.2-1



Table of content

1	Test requirements.....	4
2	Used materials	4
3	Test results.....	6
4	Surveillance of the Factory Production Control (FPC).....	6

Annex 1 O-ring certificate

Annex 2 Technical drawings and dimensions

List of tables

Table 1: Test results - Dimension 35 mm, Copper CW024A; coupling, elbow	6
---	---

List of figures

Fig. 1: received test items (copper articles, DN 35)	4
Fig. 2: Marking of 90° elbow „GAS“	5
Fig. 3: Marking of coupling	5

Test Report

Audit Test (AT) 2022 DG-4550CU0137

Test Report No.: V220/22.2-1

1 Test requirements

- DVGW-Worksheet G 5614 | December 2013

2 Used materials

Press fitting „Press Fitting for gas“

- Manufacturer: *CW024A (Copper) Products*: Linhai Yongsgeng Pipe Co. Ltd., Mechanical Industry Area, Duqiao Town, Linhai, Taizhou, Zhejiang, 317016, China



Fig. 1: received test items (copper articles, DN 35)

Test Report

Audit Test (AT) 2022 DG-4550CU0137

Test Report No.: V220/22.2-1

- Marking:
Press body:

Coupling:
Gas
GP
DVGW
35
MOP5/GT1
0322
90° elbow:
Gas
GP DVGW
35
MOP5/GT1
0322



Fig. 2: Marking of 90° elbow „GAS“



Fig. 3: Marking of coupling

- Material:

Basic body:	Copper CW024A
O-ring HNBR 70:	TEC H16 GI-70 giallo (Tecnogomma; NG-5112CL0298)

Copper pipes according to DVGW GW392 hard (R290) and half-hard (R250)

Test Report

Audit Test (AT) 2022 DG-4550CU0137

Test Report No.: V220/22.2-1

3 Test results

Table 1: Test results - Dimension 35 mm, Copper CW024A; coupling, elbow

Seq. No.	Test	Test equipment/ ID- No./ Person in charge	Test result	Evaluation
1	Materials of metal	-	Copper "CW 024 A" is used for basic body.	+
2	Elastomers	-	O-ring is DVGW certified product (see Annex 1).	+
3	Sealing material for threaded connections	-	No thread sealing function existing	n.a.
4	Dimensions	Measuring microscope MM1 9026365, Digital caliper 1023011, Outside caliper 007649, Wall thickness meter 209-607 / A. Müller, N.Burkert	The essential measures are within the tolerance ranges of the constructional drawings	+
5	Surface condition, homogeneity	E. Marusch	Smooth inner and external surfaces	+
6	Labelling	E. Marusch	Labelling is durable, legible and meets the requirements	+

+ meets requirements

n.a. not applicable

Reference note:

In the column *Testing resource / ID-No.* the employed testing resources and their registration by means of ID No. or testing resource card (PMK) are listed, in order to guarantee the traceability of the test results. The overview of the testing resource cards is a component part in the laboratory-specific specifications of the laboratory for Pipe Systems Testing (LSA No. V-1 in the quality management handbook of IMA Dresden).

The statement of conformity is based on the binary statement for simple acceptance rule (w=0) acc. to ILAC G8. The measured values are considered without the measurement uncertainty.

4 Surveillance of the Factory Production Control (FPC)

The inspection of FPC was performed at manufacturing site, dated 2022-05-31.

The customer possesses all test equipment to perform the required tests for internal production control. The personnel is qualified and trained to perform and validate these tests.

The FPC ensures a production in accordance with DVGW-Worksheet G 5614.

Reviewed

gez. Dipl.-Ing. (BA) Carsten Dietze
Pipe Systems Testing

Created

gez. Dipl.-Ing. (BA) Enrico Marusch
Project Manager

Annex 1 O-ring certificate

Audit Test (AT) 2021 DG-4550CU0137

Test Report No.: A1 V212/21.1



DIN-DVGW type examination certificate *DIN-DVGW-Baumusterprüfzertifikat*

NG-5112CL0298
Registration Number
Registriernummer

Field of Application <i>Anwendungsbereich</i>	products of gas supply <i>Produkte der Gasversorgung</i>
Owner of Certificate <i>Zertifikatinhaber</i>	Tecnogomma International S.p.A. Via Castello, 46, I-24060 Adrara S. Martino (BG)
Distributor <i>Vertreiber</i>	Tecnogomma International S.p.A. Via Castello, 46, I-24060 Adrara S. Martino (BG)
Product Category <i>Produktart</i>	greasing and sealing materials: Elastomer material for seals in gas appliances (5112)
Product Description <i>Produktbezeichnung</i>	Homogeneous ozone resistant elastomer material for dynamic and static seals
Model <i>Modell</i>	TEC H16 GI-70 giallo
Test Reports <i>Prüfberichte</i>	supplement test: 20-00591 from 11.12.2020 (EBI) type testing: 10/202/5112/1 from 03.09.2010 (EBI)
Test Basis <i>Prüfgrundlagen</i>	DIN EN 549 (01.09.2019)

Date of Expiry / File No. 03.09.2025 / 21-0130-GNA
Ablaufdatum / Aktenzeichen

02.03.2021 Rie A-1/2

Date, Issued by, Sheet, Head of Certification Body
Datum, Bearbeiter, Blatt, Leiter der Zertifizierungsstelle

DVGW CERT GmbH is an accredited body by DAkkS according to DIN EN ISO/IEC 17065:2013 for certification of products for energy and water supply industry.

DVGW CERT GmbH ist von der DAkkS nach DIN EN ISO/IEC 17065:2013 akkreditierte Stelle für die Zertifizierung von Produkten der Energie- und Wasserversorgung.



Deutsche
Akkreditierungsstelle
D-ZE-16028-01-05

DVGW CERT GmbH
Zertifizierungsstelle

Josef-Wirmer-Str. 1-3
53123 Bonn

Tel. +49 228 91 88 - 888
Fax +49 228 91 88 - 993

www.dvgw-cert.com
info@dvgw-cert.com

Annex 1 O-ring certificate

Audit Test (AT) 2021 DG-4550CU0137

Test Report No.: A1 V212/21.1

A-2/2

NG-5112CL0298

Type Typ	Technical Data Technische Daten	Remarks Bemerkungen
TEC H16 GI-70 giallo	hardness range class: H3 temperature range: -30...+100 °C temperature class: C3	

Annex 2 Technical drawings and dimensions

Audit Test (AT) 2021 DG-4550CU0137

Test Report No.: A2 V212/21.1



台州市双赢铜业有限公司

TAIZHOU DOUBLE WINNERS COPPER CO., LTD

Address: Unit B-1605, Joyance Tower, Jiaojiang Taizhou Zhejiang 318000 China.

Tel: 0086-576-88220319 Fax: 0086-576-88203455

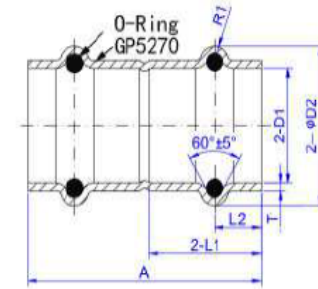
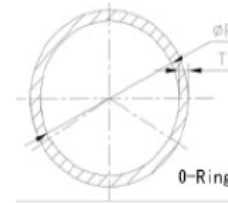
Web: www.double-winners.com Email: info@double-winners.com

受控

Model: GP5270

Apply: GAS/Water

O-Ring: GAS:Yellow Water: Black



GP Artikel Nr.	规格	GP5270sMaterial/Sur face Treatment	O-Ring Material	O- Ring QTY	R±0.3	T±0.8	D1		D2		L1		L2	A		R1	T ±0.10
							尺寸	公差	尺寸	公差	尺寸	公差		尺寸	公差		
GP5270 01200000	12mm	CW024/copper color	EPDM	2	12.2	2.4	12.2	+0.00 +0.15	19.3	±0.15	18	±0.5	7	38	±1.5	2.6	1.25
GP5270 01500000	15mm	CW024/copper color	EPDM	2	15.2	2.5	15.2	+0.00 +0.15	22.8	±0.15	22	±0.5	9.4	46	±1.5	2.7	1.3
GP5270 01800000	18mm	CW024/copper color	EPDM	2	18.2	2.5	18.2	+0.00 +0.15	25.9	±0.15	22	±1.0	9.6	48	±1.5	2.75	1.3
GP5270 02200000	22mm	CW024/copper color	EPDM	2	22.3	3.2	22.2	+0.00 +0.20	31	+0.20 -0.10	23	±0.5	9.6	50	±1.5	3.1	1.4
GP5270 02800000	28mm	CW024/copper color	EPDM	2	28.3	3	28.2	+0.00 +0.20	37	±0.15	24	±1.0	10	52	±1.5	3.05	1.4
GP5270 03500000	35mm	CW024/copper color	EPDM	2	35.4	3	35.2	±0.20	44	±0.15	26	±1.0	10	57	±1.5	3.05	1.4
GP5270 04200000	42mm	CW024/copper color	EPDM	2	42.4	4	42.25	+0.00 +0.25	53.8	±0.15	36	±1.0	13	75	±1.5	3.93	1.7
GP5270 05400000	54mm	CW024/copper color	EPDM	2	54.4	4	54.25	+0.00 +0.25	65.7	±0.15	40	±1.0	16	82	±1.5	3.93	1.7

制表: 王锋

审核: 金宗明

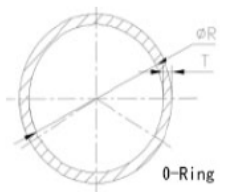
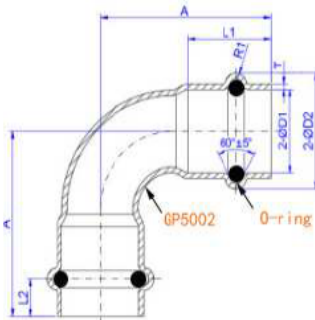
核准: 冯建航

Annex 2 Technical drawings and dimensions

Audit Test (AT) 2021 DG-4550CU0137

Test Report No.: A2 V212/21.1



 台州市双赢铜业有限公司 TAIZHOU DOUBLE WINNERS COPPER CO., LTD Address: Unit B-1605, Joyance Tower, Jiaojiang Taizhou Zhejiang 318000 China. Tel: 0086-576-88220319 Fax: 0086-576-88203455 Web: www.double-winners.com Email: info@double-winners.com																	
受控 Model: GP5002 Apply: GAS/Water O-Ring: GAS:Yellow Water: Black  																	
GP Artikel Nr.	规格	GP5002 Material/Surface Treatment	O-Ring Material	O-Ring QTY	R±0.3	T±0.8	D1		D2		L1		L2	A		R1	T min
							尺寸	公差	尺寸	公差	尺寸	公差		尺寸	公差		
GP5002 01200000	12mm	CW024/copper color	EPDM	2	12.2	2.4	12.2	+0.00 +0.15	19.3	±0.15	18	±0.5	7	32.5	±2.0	2.6	1.25
GP5002 01500000	15mm	CW024/copper color	EPDM	2	15.2	2.5	15.2	+0.00 +0.15	22.8	±0.15	22	±0.5	9.4	40	±2.0	2.7	1.3
GP5002 01800000	18mm	CW024/copper color	EPDM	2	18.2	2.5	18.2	+0.00 +0.15	25.9	±0.15	22	±1.0	9.6	40	±2.0	2.75	1.3
GP5002 02200000	22mm	CW024/copper color	EPDM	2	22.3	3.2	22.2	+0.00 +0.20	31	+0.20 -0.10	23	±0.5	9.6	48.5	±2.0	3.1	1.4
GP5002 02800000	28mm	CW024/copper color	EPDM	2	28.3	3	28.2	+0.00 +0.20	37	±0.15	24	±1.0	10	53	±2.0	3.05	1.4
GP5002 03500000	35mm	CW024/copper color	EPDM	2	35.4	3	35.2	±0.20	44	±0.15	26	±1.0	10	68	±2.0	3.05	1.4
GP5002 04200000	42mm	CW024/copper color	EPDM	2	42.4	4	42.25	+0.00 +0.25	53.8	±0.15	36	±1.0	13	86	±2.0	3.93	1.7
GP5002 05400000	54mm	CW024/copper color	EPDM	2	54.4	4	54.25	+0.00 +0.25	65.7	±0.15	40	±1.0	16	104.5	±2.0	3.93	1.7

制表: 王锋

审核: 宋崇明

核准: 项建航