

Hose Coupling ISO 7289 - EN 561

Every hose coupling meets the requirements of ISO 7289 - EN 561 certified by IBExU, Test certificate-No.: 2412. The hose coupling is tested before despatch for safe function.

OPERATING INSTRUCTION

Hose coupling with automatic gas cut-off valve for welding, cutting and associated processes.

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Foreword

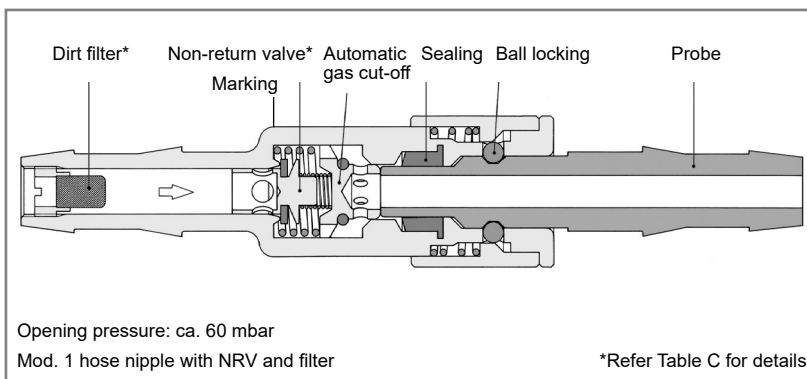
These operating instructions make the correct operation and safe use of the safety device possible. Attention to the instructions reduces danger and downtime, whilst operational life and certification will be increased.

The operating instructions should be kept in an accessible place within reach at all times. All persons working with the hose coupling should read and observe the operating instructions.

If in doubt contact the manufacturer. In addition to specific instructions there may be mandatory regulations or codes of practice regarding the installation or use of the equipment which must be complied with.

All particulars marked with an Δ are important safety recommendations.

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1 Description

The hose coupling consists of a probe and a body. The body and probe can be coupled together under pressure.

When disconnected the gas flow is cut off automatically by the cut-off valve in the coupling body. When re-coupled the gas flow is automatically restored.

Hose-to-hose coupling bodies are equipped with a non-return valve and for Acetylene gas service, a filter is included. Refer to Table C for details.

The non-return valve prevents the gas flowing in the reverse direction to the normal flow. The direction of flow is marked with an arrow on the coupling body.

2 Operating and fundamental safety recommendations

2.1 Authorised use

The hose couplings are designed to connect equipment and extend gas hoses quickly without tools.

They are designed specifically for use with gases under pressure.

(see Table A)

Table A

Gases max. working pressure [bar]	
Fuel gas	20.0
Acetylene (A)	1.5
Oxygen (O)	20.0
other gases *	20.0

* Non certified

2.2 Unauthorised use (examples)

Incorrect and unauthorised use could result in injury to the operator and other persons as well as damage to the equipment.

Some examples:

The coupling must not be used with liquified gases or outside of temperatures between minus 20 °C to plus 60 °C.

Δ A mixture of couplings to ISO 7289 – EN 561 with coupling systems to other standards is not permitted.

Δ The hose coupling does not replace an isolation valve.

Δ Modification and dismantling of the device is not permitted.

3 Marking

The coupling probes and the coupling bodies have stamped markings see drawing. Explanation, see Table B.

Table B

Standard	ISO 7289
Type for Oxygen	O
Type for Fuel gas	F
Type for other gases	N
Month and year of the production	Letter / Combination of numbers
Brand logo	UNITOR™ by Wilhelmsen
Flow direction	→

4 Recommendations for operation and maintenance

4.1 Installation

Δ For safety reasons, the coupling bodies to be attached to the regulator/flashback arrestors are supplied with a removable white cap with a safety reminder sticker to help prevent incorrect use.

Δ All components coming into contact with oxygen must be oil and grease free to avoid the risk of explosion.

Δ Marking of the devices eg. part number or date of purchase, must not be done with punches or any other method requiring force.

Δ Coupling bodies and coupling probes must be free from dirt.

Δ Check that all connecting threads and seating surfaces are clean and without damage.

Δ Hose should be fitted with hose connections with suitable hose clamps. Use only hoses conform to DIN EN ISO 3821.

The hose coupling may only be fitted to clean and tested pipelines.

Δ Check that the flow direction arrows are correctly aligned.

Δ After installation all connections should be tested under pressure for leak tightness to atmosphere. Suitable leak protection fluids should be used.

Leak detection should not be carried out with a naked flame.

4.2 Commissioning

Pay attention to the operating instructions for the equipment to be connected. To connect the couplings it is not necessary to free the ball locks.

Note!

In case of use a keymark coupling an in and out coupling is only possible with corresponding keymark.

4.3 De-commissioning

In the event of an outlet point not being used for a long time carefully close the isolation valve before the coupling.

5 Maintenance

The hose coupling should be tested for leak tightness to the atmosphere and correct function at least once per year.

The testing may be carried out by the operator with nitrogen.

5.1 Testing for leak tightness

Apply working pressure to both coupling elements, seal the outlet and immerse in water or use a leak detection spray.

No test gas must be discharged.

5.2 Testing the cut-off valve for leak tightness

Disconnect the elements whilst under working pressure, immerse the body in water or use a leak spray where the probe fits.

No test gas must be discharged.

5.3 Testing the operation of the non-return valve

Couple both elements together and pressurize the opposite direction to the normal gas flow increasing the pressure slowly from 0 to maximum working pressure whilst immersing in water. The non-return valve is defective if the test gas flows from the inlet.

6 Repair

Δ Repair may only be carried out by the manufacturer.

Cleaning and replacement of the dirt filters may be carried out by the operator. Only the original manufacturers filter may be used.

Δ Unauthorised repair or modification by the user or third party will result in any warranty issued by or liability upon the manufacturer or agent becoming null and void.

Part No.	Description	Safety devices			Volume flow Nm³/h (1013 mbar / 0 °C)
		Automatic cut-off valve	Non-return valve	Filter	
Oxygen					
734001	Quick Coupling OX Regulator/FBA to Hose 1/4 inch	✓			70
734010	Quick Coupling OX Hose to Hose 1/4 inch	✓	✓		41
734019	Quick Coupling OX Regulator/FBA to Hose 3/8 inch	✓			70
734022	Quick Coupl. OX Hose to Hose 3/8 inch	✓	✓		41
734028	Quick Coupling OX Hose to Hose 1/4 or 3/8 inch	✓	✓		49
Acetylene					
734007	Quick Coupling AC Regulator/FBA to Hose 1/4 inch	✓			70
734004	Quick Coupling AC Hose to Hose 1/4 inch	✓	✓	✓	32
734016	Quick Coupling AC Regulator/FBA to Hose 3/8 inch	✓			70
734013	Quick Coupl. AC Hose to Hose 3/8 inch	✓	✓	✓	32
734025	Quick Coupling AC Hose to Hose 1/4 or 3/8 inch	✓	✓		49
Oxygen / Acetylene					
734031	Probe Oxygen torch, Probe Acetylene torch				As per couplings
Shielding Gases					
734200	Quick Coupling AR Regulator to Hose 1/4 inch	✓			70
734205	Quick Coupling AR Hose to Hose 1/4 inch	✓	✓		41



Ships Service

AC-OX Quick Coupling System EN 561 / ISO 7289

From the gas supply point to the torch/burner - connection examples

IBEXU[®] tested and under surveillance
Test certificate no. 2412

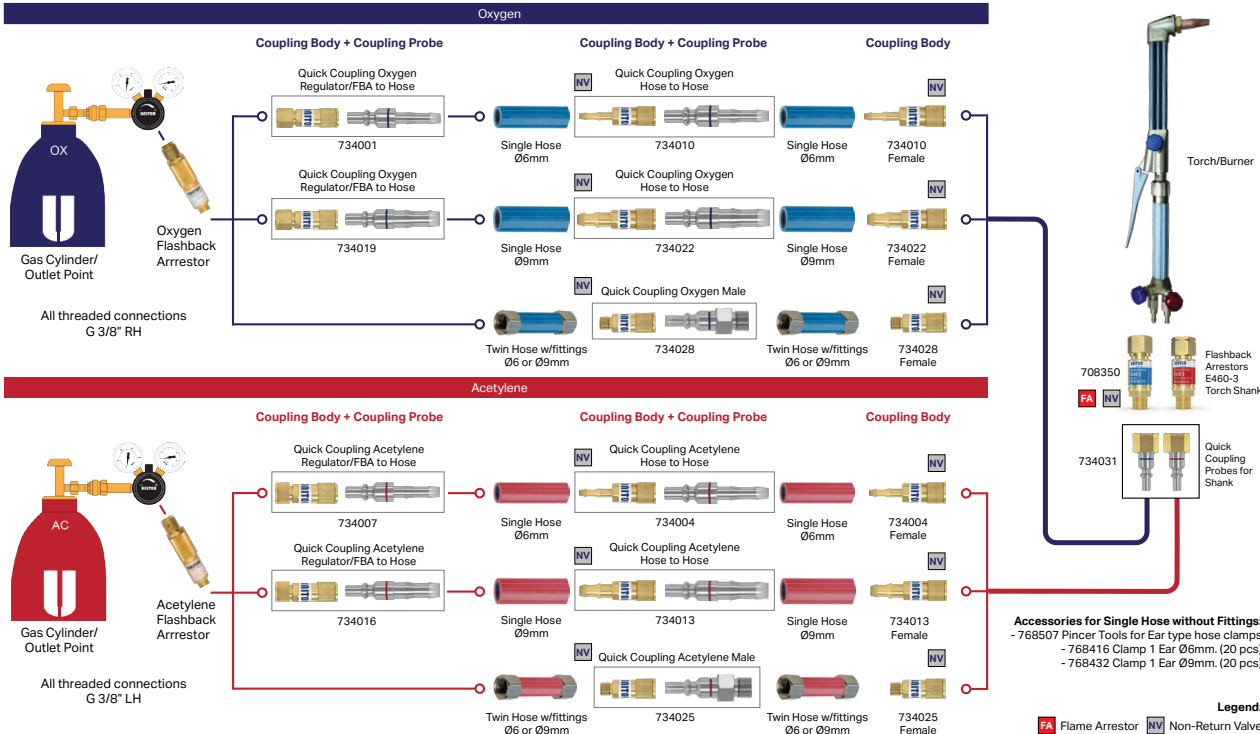


Table C

Volume flow value according to EN 561 / ISO 7289 $\Delta p=10\%$:

Test condition: $P_1=20$ bar; $P_2=18$ bar for air

1 = Inlet pressure

2 = Outlet pressure

Conversion factors:

Air	x 1.00
Acetylene	x 1.04
Argon	x 1.27
Butane	x 0.68
Ethylene	x 1.02
Natural Gas	x 1.25
Methane	x 1.33
Propane	x 0.80
Oxygen	x 0.95
Town gas	x 1.54
Hydrogen	x 3.75



Institut für Sicherheitstechnik GmbH
Your first point of contact for explosion protection

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

Wilhelmsen Ships Service AS
Strandvn 20, Lysaker
NO-1324 Lysaker I NORWAY



Product
Product description

Safety devices and quick-action couplings
Type series Super, E460-3, 85-10, Unitor Quick Coupling
These products and the various versions are specified in the annex and the test report listed.

Product testing was carried out experimentally according to
Supplementary in compliance with the BAM standard operating procedures

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

IB2440037
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 report. The orientating/sampling 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[®] geprüft und überwacht or IBEXU[®] tested and under surveillance

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Verfahren 00000003/70, 170117 | referenz
30/000/16/40_24128

Number of the test certificate 2412-02 | valid until 2027-11-30

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