THE COUPLING.

R+W®
A POPPE + POTTHOFF COMPANY

FOR USE IN HAZARDOUS AREAS

ATEX

INDUSTRIAL COUPLINGS

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MARKING EXAMPLE

Based on the ATEX markings the product can be certified for suitability under certain conditions.

CE	Ex	II	2G	Ex h	IIA T6	Gb	X
		II	2D	Ex h	IIIA T85°C	DB	X
		Equipment group	Category	Protection type	Explosion subgroup / Temperature class / max. surface temperature	Equipment protection level (EPL)	Additional features

Equipment group	Approval type
I	Approved for underground operation
II	Approved for all other applications

Category	Approved for zone	Zone description
1G	0	Area in which an explosive atmosphere consisting of a mixture of air and flammable gases, vapors, or mists is present continuously, frequently or for long periods of time.
2G	1	Area in which the potential exists for an explosive mixture of air and flammable gases, vapors or mists to occur.
3G	2	Area in which the potential for an explosive mixture of air and flammable gases, vapors, or mists to occur is unlikely and only for a brief duration.
1D	20	Area with the same conditions as zone 0, with powder or dust.
2D	21	Area with the same conditions as zone 1, with powder or dust.
3D	22	Area with the same conditions as zone 2, with powder or dust.

Protection type	Definition
Ex h	Design safety level: ignition hazard is avoided by the product design.

Example classification by occurring gases, mists and vapors according to temperature class and explosion group

Temperature class / max. surface temperature	IIA	IIB (includes IIA)	IIC (includes IIA + IIB)
T1 / 450°C	Acetone, Ammonia, Methane, ...	City gas (gas lamp)	Hydrogen
T2 / 300°C	Ethyl alcohol, n-butane, cyclohexane, ...	Ethylene, Ethylene oxide	Ethine (acetylene)
T3 / 200°C	Gasoline, diesel, heating oil, ...	ethylene glycol, hydrogen sulfide	
T4 / 135°C	Acetaldehyde	ethyl ether	
T5 / 100°C			
T6 / 85°C			Carbon disulphide

MARKING EXAMPLE

Equipment protection level according to IEC 60079	Importance
Ga	Very high protection level
Gb	High protection level
Gc	Extended protection level
Da	Very high protection level
Db	High protection level
Dc	Extended protection level

Additional mark	Importance
X	special operating conditions (from description)
U	Part is a component. Conformity must be declared after installation in a device.

GENERAL INFORMATION

The use of devices and components in potentially explosive atmospheres areas is governed by the European directives 2014/34/EU (ATEX). According to this they are with CE and receive an EU declaration of conformity as a device. The presented products are non-electrical equipment of category 2.

According to directive 2014/34/EU each delivery of an ATEX coupling requires the inclusion of special installation and operating manuals and the EU declaration of conformity issued by the manufacturer. All necessary values and specifications for installation and operation can be found in these documents.

In accordance with the Machinery Directive 2006/42/EC and the guideline for the application of the Machinery Directive 2006/42/EC of the European Commission For Enterprise and Industry, 2nd edition June 2010, editor Ian Fraser, R+W couplings are components and therefore not a machine or an incomplete machine. As a component within the meaning of the Machinery Directive, R+W couplings are not to be marked with a CE marking, receive neither CE declaration of conformity nor installation and no serial number, and is therefore not covered by the Machinery Directive.

All models of BX, LP, EK and ST are available with ATEX certification on request. The Model BZ coupling is not intended for use in potentially explosive atmospheres.

All R+W ATEX couplings are designed for use in general suitable for industry (device group II). The operation is in the explosion endangered zones 1 and 2 (category 2G) and 21 and 22 (category 2D).

Product specific information about ATEX certified couplings, such as temperature class, are available on request.

All statements made about ATEX conforming products are based on our present knowledge and experience. R+W reserves the right to change technical specifications.