



BR 5/1 Z1
BR 6/1 Z1
BR 9/1 Z1
BR -GS/1 Z1

1. Type of construction Z1

This type is designed for the use in hazardous areas zone 1 according DIN EN 1127-1 and is labelled **II 2G e IIB T6**.

2. Assembling

- 2.1 When selecting the place of erection the values as below stated have to be respected:

Atmospheric pressure $p_{\min} = 0,8 \text{ bar}$, $p_{\max} = 1,1 \text{ bar}$,

Temperature $T_{\min} = -20^{\circ}\text{C}$, $T_{\max} = +40^{\circ}\text{C}$.

- 2.2 When selecting the place of erection it must also be considered that according to TRBS 2153 the hose reel must not operated close to processes generating high electric charge due to small components ungrounded.

- 2.3 During the assembling it must be secured that no potentially explosive atmosphere is developing.

- 2.4 The assembly has to ensure a permanent grounding of the device. If necessary a ground cable has to be fixed to the provided grounding screw with marked . The grounding must be checked and tested.

- 2.5 For the use as working hose as well as connection hose to the pipe line only electric conductive hoses are allowed. **These hoses have to be**

labelled with $R \leq 10^6 \Omega/\text{m}$

In doing so it is indispensable to secure the grounding of hose as well as of all connected nozzles and tools.

- 2.6 When working with hose assemblies it is indispensable to guarantee the secure and safe operation according to information sheet T002 (Or national safety advices comparable to this).

- 2.7 All nozzles and tools which are installed at the end of the hose must be made of metals which do not generate sparks or must be furnished with a same permanent surface. For other materials the user has to make a separate risk assessment. Alternatively the weight of the fixed parts has to be chosen the way that in case of unintentional dropping it is secured that the hose does not bounce back in high speed.

3. Operation

When reeling in the hose by means of spring the hose end must always be guided manually. Bouncing back of hose in high speed caused by dropping the hose must be avoided, as it might happen that sparks are emitting when the nozzles or tools fixed to the hose will hit a metal surface.

4. Maintenance

- 4.1 The grounding of the hose reels has to be checked regularly.

- 4.2 Parts must be replaced by spare parts corresponding to type of construction Z 1.

- 4.3 Cleaning of hose reel, especially the hose bumper, must be made the way that no electrostatic charging happens.

5. Safety Advice

- 5.1 Hose reels type of construction Z1 can only be fitted with appropriate labelled conductive Ω - hoses as well as conductive accessories, which obviate the risk of sparks caused by electrostatic charging and which are adequate for the use specified in chapter 1
- 5.2 Hose reels type of construction Z1 are not allowed in areas with explosive risk caused by medias of hazardous group IIC (acetylene, hydrogen, carbon disulphides and hydrogen sulphide, ethylene oxide and carbon monoxide.)
- 5.3 To avoid ignition source within areas with explosive risk all persons must respect protective measures according to TRBS 2152 part 3 (BGR 104) and TRBS 2153 (Or national safety advices comparable to this).
- 5.4 When filling and emptying container, tanks or similar protective measures have to be taken according to TRBS 2153 (Or national safety advices comparable to this).
- 5.5 The flow speed within in the hoses may not exceed 7m/s
- 5.6 Flowing liquids may charge themselves at the ambient walls or may generate charged fog by atomizing. This must be avoided.
- 5.7 When working with hose lines safe use according to information sheet T002 (Or national safety advices comparable to this) must be guaranteed.

LOCAL LAWS AND REGLUATIONS HAVE TO BE RESPECTED!!

