ATEX Safety Instructions DYNHRT3MMSS Line Rider



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| Title | ATEX Safety Instructions, DYNHRT3MMSS Line Rider | Doc No | MAN-1125 | Ver | А |
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SCOPE

This Ex instruction manual must be read and used by qualified personnel during system design and installation of the HRT3MM Line Rider.

These instructions are provided as an addendum to the standard product manuals.



The HRT3MM Line rider may only be installed in

Group IIC T4, $-20^{\circ}C \leq \text{Tamb} \leq +75^{\circ}C$ Zone 2.

The HRT3MM Transmitter must be operated within environmental limitations.

The HRT3MM line rider must only be installed by qualified personnel in accordance with the relevant international installation standards

SAFETY ANALYSIS

In a system safety analysis, always check that the Hazardous Area / Hazardous location devices conform to the relevant standards and regulations governing the installation and safe use.

INSTALLATION

The HRT3MM is fully self-contained.



The HRT3MM must be installed such that there **CANNOT** be metal-to-metal impact. This may be accomplished by firmly fixing the HRT3MM to a structure using mounting feet.

If the HRT3MM is to be used with a swing arm then measures MUST be put in place preventing the HRT3MM from impacting any metal structure at any time.

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NOTE: There are restrictions on the surface area of plastics installed in an Ex atmosphere. If pads or bumpers are to be employed it is the installers responsibility to ensure the local regulations are followed for a Zone 2 installation. Grounding techniques conforming to local regulations must be employed.

CABLING

The HRT3MM Line Rider must only be used with an intrinsic safety barrier which has been evaluated for the given installation. All relevant installation guidelines must be followed.

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SERVICE LIFE



The bearings have a rated life which varies with load according to the table below. Note that the service life hours vary widely with load for the HRT3MM line rider. The worst case limitation at full load is 145 hours of running time.

The maximum line pull of the HRT3MM is 6 metric tonnes. This equates to a maximum center bearing load of 8.25 metric tonnes (there are two center sheave bearings). Thus the maximum possible load on each center sheave bearing is 8.1 kN.

It is the owner/operator's responsibility to monitor use and ensure the bearings are inspected periodically and replaced when the end of their service life is reached. Contact LSI for bearing replacement parts and procedures.

Declaration of Conformity in accordance with EN 45014 (ISO/IEC22)

LSI-Robway Pty Limited

| Declares that: | | | | |
|----------------|------------------------|--|--|--|
| MODEL | DESCRIPTION | | | |
| HRT3MM | Line Rider Tensiometer | | | |

is in accordance with the following European Directives:

| 94/9/EC | Equipment intended for use in potentially explosive atmospheres (ATEX) |
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|---------|--|

and have been designed and manufactured according to one or more following standards:

| EN 60079-0 | Electrical apparatus for explosive gas atmospheres. Part 0: General Requirements |
|---------------|---|
| EN 60079-11 | Explosive atmospheres. Part 11: Equipment protection by intrinsic safety 'i' |
| ISO 9001:2008 | Quality Management System |
| EN13463-1 | Non-electrical equipment for use in potentially explosive atmospheres – Basic Method and Requirements |
| EN13463-5 | Non-electrical equipment for use in potentially explosive atmospheres – Protection by Constructional Safety |
| ISO 281 | Roller Bearings – Dynamic Load Ratings and Rating Life |

| | and are covered by: | | | |
|---------|--|--|--|--|
| SAF0019 | Safety Analysis, Kelba Beam Cell, BARD1063 I/S barrier, CABBSHLD4CBL | | | |
| SAC011 | Simple Apparatus Assessment, Kelba Beam Cell | | | |
| | HRT3MM, Ignition Hazard Assessment Report | | | |

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Jonathan P. Koval Hazardous Area Systems Manager

Revision History

| Rev | Description | Approved |
|-----|-----------------|----------|
| А | Initial Release | J. Koval |

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