# MOTIONLEAD

#### **MotionLead family**

Devices of the MotionLead can be designed as driver's brake valves, traction controllers and master controllers. They are used in a range of different train operations and installed in locomotives, EMUs/DMUs, high-speed trains and metros all over the world. **MotionLead** is tailored to suit the operator's specific needs, providing reliable, extensively proven technology and tested solutions. Its modular kit design enables Knorr-Bremse to offer project-specific solutions.

### Customer benefits

- Configurable man-machine interface as perfect connection to the market leader's brake systems
- Functional, modular units for flexible adaption
- Optimal space utilization
- According to common standards, e.g. UIC 612
- Short development and manufacturing times
- Easy and cheap overhaul/repair



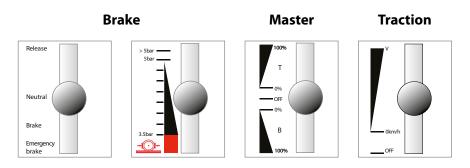
#### Applications

- High-speed trains
- Light rail vehicles
- Locomotives
- Metros
- Regional & commuter trains
- Simulators
- Special vehicles



# Applications

Devices of MotionLead can be used for position- or time-dependent brake and/or traction controller.



## ۲Öğ

## Key features

| A range of different driver's handle forms such as ball knob, press button or twist handle are available.  | 1        |  |
|--|----------|--|
| Pneumatic functions available in 2/2 or 3/2 way versions or with pressure regulator.   | 1        |  |
| Standard angle sensor output signal is 420 mA or PWM encoder. Further signals are available on request.  | <b>√</b> |  |
| Top or bottom mounting on driver's console possible.   | 1        |  |
| All functions are available at ambient temperatures of -40 $^\circ C$ to +70 $^\circ C$ .  | 1        |  |
| Additional switches, pneumatic and electric cut-off functions, colors, inscriptions, mounting points, e/p-connections, locking function and directional lever can be included on demand. | 1        |  |

## High quality standards

Devices of MotionLead meet the shock and vibration specifications according to EN61373 class 1B and GOST17516.1-90, group M25. In addition to endurance testing with 3 million cycles, tests have also been conducted for corrosion, dust and temperature resistance. This leads to best reliability and safety at the highest level!



Knorr-Bremse Systeme für Schienenfahrzeuge GmbH

Moosacher Straße 80 80809 Munich Germany Phone: +49 89 3547-0 Fax: +49 89 3547-2767 rail.knorr-bremse.com



