







WHEEL FLANGE LUBRICATION

Light Rail

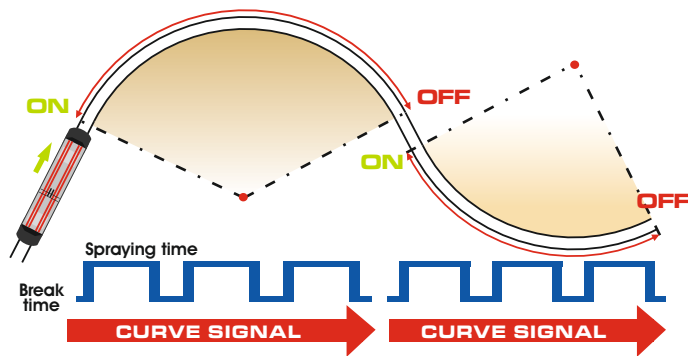


-  Wear reduction of wheels and rails
-  Reduction of the drive power
-  Low Life Cycle Costs
-  Lubrication depending on time, distance or curves
-  Steady mixing of the lubricant
-  Spray nozzle with only one feed line

Wheel flange lubrication

FluiLub wheel flange lubrication systems reduce the wear of rail and wheel as well as the noise load in curves in a very efficient way. FluiLub wheel flange lubrication systems offer innovative technology with tried-and-tested components and best cost-benefit-ratio.

The FluiLub wheel flange lubrication system is designed as single line system. This means: Less wear, little maintenance requirements and therefore low life-cycle costs.



Operating principle: A 3/2-way control valve activates the pneumatic pump for a pre-selected spraying time. During this spraying time, a defined quantity of wheel flange lubricant is delivered by the pump and will be mixed with the spraying air.

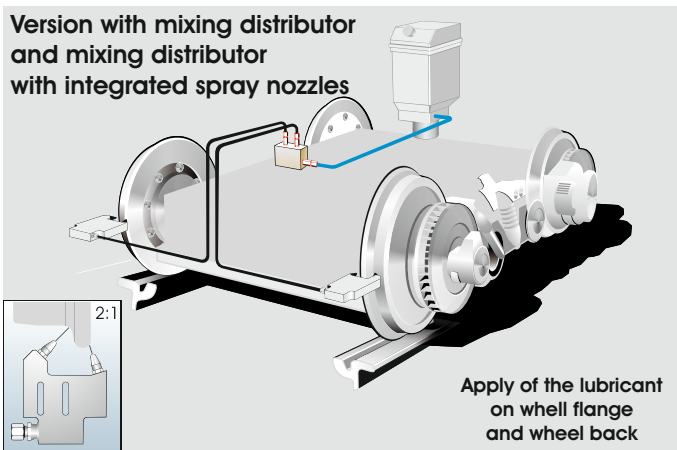
Depending on the application, different systems are available:

Version with mixing distributor with two outlets and mixing distributor with integrated spray nozzles: The mixture of lubricant and compressed air is applied over a mixing distributor with two outlets and mixing distributor with integrated spray nozzles on the wheel flange and wheel back of the respective wheel.

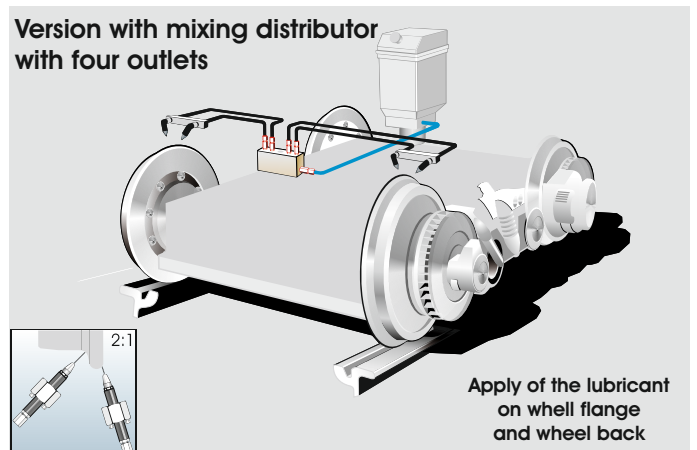
Version with mixing distributor with four outlets: The mixture of lubricant and compressed air is applied over a mixing distributor with four outlets on the wheel flange and wheel back of the respective wheel.

The activation of the wheel flange lubrication system happens depending on time, distance or curves.

Version with mixing distributor and mixing distributor with integrated spray nozzles

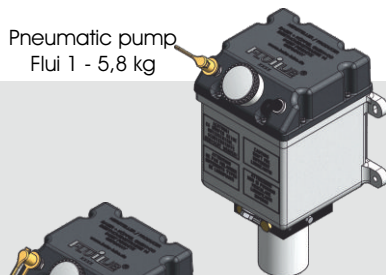


Version with mixing distributor with four outlets

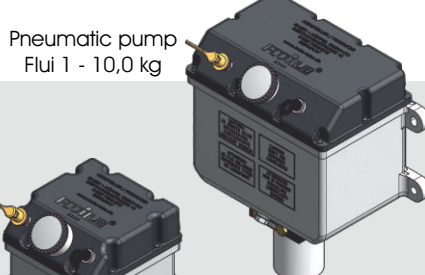


FluiLub pumps

- Extremely rugged pneumatic pump
- Admission according to DIN EN 61 373 cat. 2
- Reservoir made of aluminium, steel or special steel
- Level monitoring with dipstick, optional electronic
- Delivery rate 50 - 1000 mm³/stroke
- Special design possible



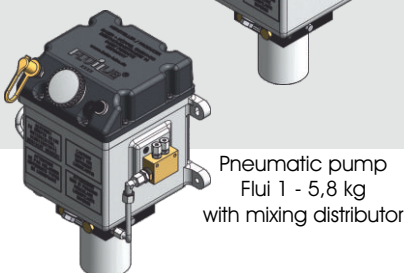
Pneumatic pump
Flui 1 - 5,8 kg



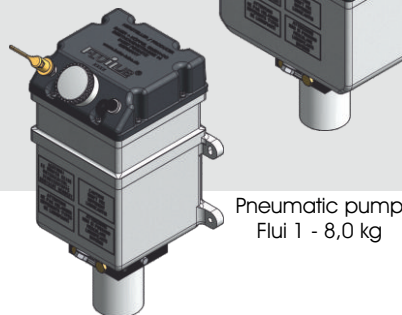
Pneumatic pump
Flui 1 - 10,0 kg



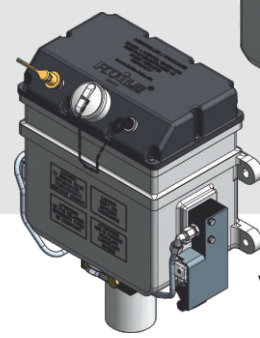
Pneumatic pump
Flui 1 - 13,0 kg



Pneumatic pump
Flui 1 - 5,8 kg
with mixing distributor

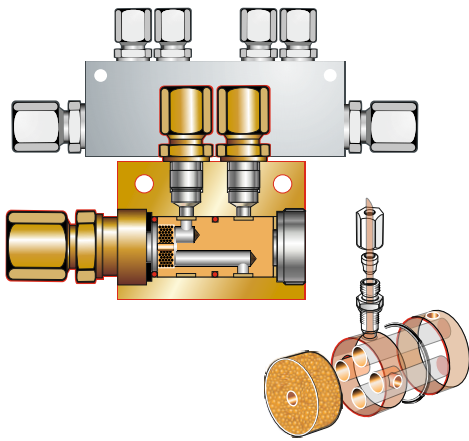


Pneumatic pump
Flui 1 - 8,0 kg



Pneumatic pump
Flui 1 - 13,0 kg
with directional valve

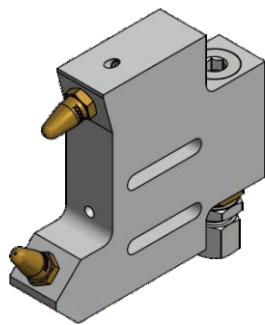
Excerpt from the FluiLub program



FluiLub mixing distributor

The splitting insert of the FluiLub mixing distributor cares for the division of the mixture of lubricant and compressed air. A porous insert collects the liquid particles and distributes them like a drizzle to the airstream.

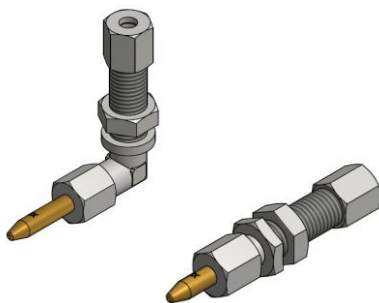
This principle guarantees a homogeneous mixing ratio even with several spray nozzles.



Mixing distributor with integrated spray nozzles

For mixing distributor with integrated spray nozzles, only one feed line from the mixing distributor is necessary. The position of the spray nozzles is adapted to the specified wheel profile.

During routine maintenance, spray nozzles shall not be adjusted separately. Because of the cramped space at the bogie, it is a great advantage.



FluiLub spray nozzles

The FluiLub spray nozzles guarantee the lubrication of the wheel flanges even with very high velocities, without polluting other components like the brakes. The design of the spray nozzles depends on the application.



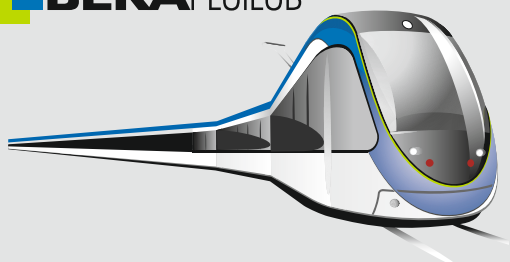
FluiLub controller

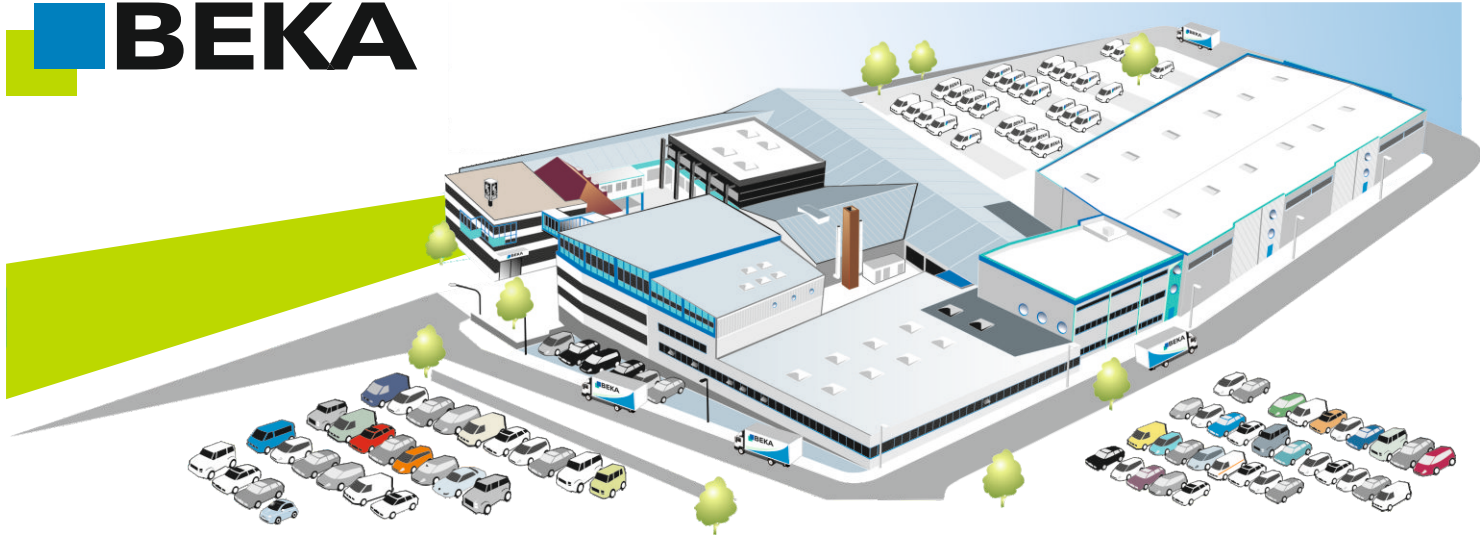
With the compact control unit Fluicontrol, the FluiLub wheel flange lubrication system can be operated best. Activation and evaluation of the system can be adapted to the required operating conditions.

The optional curve sensor allows the curve-dependant activation of the system. Conventional devices use inclination and centrifugal force, but the FluiLub sensor detects the effective rotary motion in $^{\circ}/\text{sec}$.

The complete product program around rails:

- Wheel flange lubrication systems for Light Rail and Heavy Rail, EMU, DMU and Highspeed
- Rail Head Maintenance
- Special Lubricants





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