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GMN



PRELUB GP PLUS



Features

The new developed oil/air lubricator PRE-LUB GP PLUS implements future-looking, technical solutions for an intelligent machine management.

Modular construction

Control and mechanical part separated

Saving of lubricant

Lubrication cycle interruption in the case of spindle standstill

Direct optical filling level indication

Freely visible lubricant container made of limpid plastic that can be filled from the outside

Usable all over the world

Voltage range 90 ... 260 V AC

Electronic control with display

Fast setting of the parameters by simple menu guidance (plain text display)

International understandable

Menu language selection (GER, ENG, SP, FR, IT, JP, CN)

Easy communication

Compatible with IO-Link interfaces for bidirectional communication with the machine control

Accessory

Required accessories for the installation, such as tubes, inspection manometers and filtered lubricating oil are available at GMN.

Reliable and optimal lubrication

With the PRELUB GP PLUS, GMN offers an oil-air lubricator of the latest generation, which supports the maximum power consumption of GMN spindles at the most modern technical level. The successor model of the proven PRELUB GP units expands the function of its predecessor by the smart IDEA-4LUB control system as well as a solenoid valve for automatic venting and two-stage level monitoring.

Like its predecessors, the new PRELUB GP PLUS is optimally adapted for use with GMN motor spindles. After a pre-lubrication cycle has been defined once, the device switches automatically into the normal lubrication cycle. Thus, it is guaranteed that the high-precision ball bearings are supplied with sufficient oil right from the start before the spindles are released for operation. The optical filling level monitoring of the lubricant container is an appropriate way to ensure the continuous oil supply of the bearings during the operation.

Pre-lubrication cycle

Switch on

Enabled

Up to four lubricating points and max. two spindles with two connections each can be supplied by means of one or more mixing distributors.

The lubricant pipes should be run horizontally or slightly inclined.

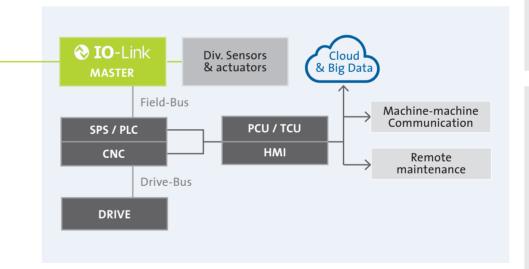
Filtered oils with friction- and wear-reducing additives are recommended for the lubrication of the spindle bearings.

More detailed specifications as well as the determination of cycle time and working pressure can be seen from the operating instructions.

To meet the requirements of a networked industry, the IDEA-4LUB (Integrated Data Acquisition and Evaluation for lubrication units) control system was developed for the PRELUB GP PLUS.

The control system developed by GMN enables data acquisition and evaluation during operation, thus ensuring that the unit performs lubrication optimally.

IDEA-4LUB is integrated in the product variant PRELUB GPI PLUS. The digital interface is equipped with IO-Link to enable a bidirectional communication between the machine control and the lubricator control system. IO-Link leads to a reduced cabling effort significantly and supports the mutual communication with all types of machine control units.



Individual and IIoT Ready

With the IO-Link interface of the PRELUB GPi PLUS, IDEA-4LUB can be used independently from fieldbus systems and can therefore be used universally for all controllers.

Modern IO-Link masters allow seamless connection to IIoT infrastructures, without burdening the performance of the control system. When a spindle is replaced, the new lubrication parameters can be simply transmitted to the unit and optimum supply of the spindle is ensured.

Variants

GMN PRELUB GP PLUS

Communication lubricator > machine with binary control signals

GMN PRELUB GPI PLUS

Communication lubricator > machine with IO-Link (standard acc. to IEC 61131-9)

Both variants are available as

GP4/GPi4 (Standard)

4 lubricating points

or

GPO/GPi0

for external mixing distributors ... with 10 or 30 mm³/stroke

Equipment

Air filter/regulator with manometer:

Filter 5 µm

Lubricating point connections:

For PVC tubing 6 x 1 or 4 x 1

Air supply G 1/4":

 $p_{min} = 5 \text{ bar}, p_{max} = 10 \text{ bar}$

Smart Control:

IDEA-4LUB

Max. fuse protection:

6 A

Connector:

For power supply and communication

Operating voltage:

90 ... 260 V AC, 50/60 Hz

Dimensions:

Appr. 484 x 432 x 222mm (W x H x D)

Protection class: IP 55

Color:

RAL 7032 (grey) Other colors on request