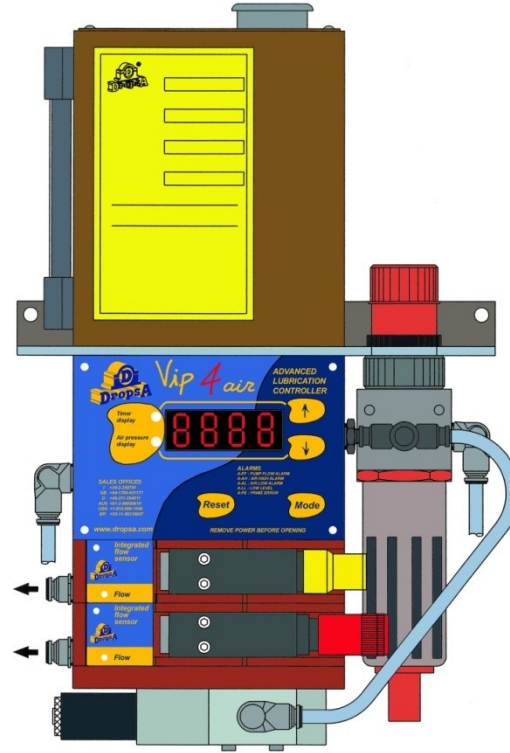
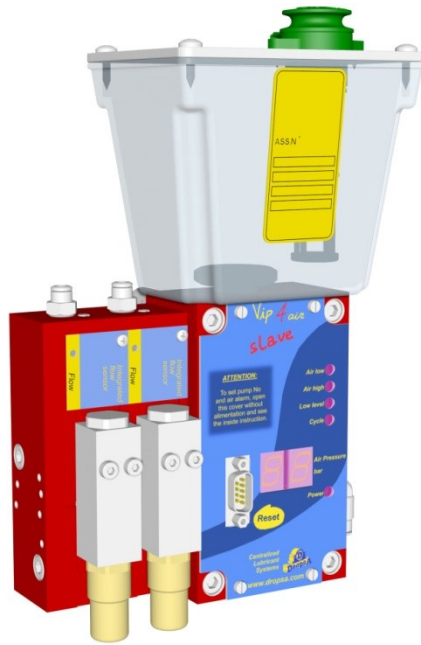




VIP4Air - VIP4Air/Slave

Minimal Air/Oil Micro-lubrication



Product Features and Variants



VIP4Air - VIP4Air/Slave

Minimal Air/Oil Micro-lubrication

- Why use Air/Oil Lubrication ?

Air/Oil lubrication is a rapidly expanding lubrication technique replacing both Mist Systems and Oil recirculation systems for numerous applications with substantial cost savings.

It consists of a continuous Air Stream used to provide cooling to the lubrication point and as a transport medium to carry small quantities of oil to the lubrication point.

It is particularly suited to Spindle Lubrication



VIP4Air - VIP4Air/Slave

Minimal Air/Oil Micro-lubrication

Air/oil – Key Elements

- Continuous Air Flow to bearings:
 - Provides Cooling
 - Provides Transport Medium
 - Prevents Contamination and ingress of water or dirt.
- Micro oil lubrication:
 - Reduces friction
 - Minimal quantities avoids ‘churning’ and heat generation.
 - Frequent lubrication intervals helps thermal stability



VIP4Air - VIP4Air/Slave

Minimal Air/Oil Micro-lubrication

Dropsa's Vip4Air integrates all the key elements required for optimum Air/Oil Lubrication:

- 1-8 Micro Dosing Pumps from 5 – 30 mm³ - Tamperproof
- Air Mixing Pressure monitoring – detects blockages or leaks
- Full Electronic Control allows Expandability, Low cost Interfacing, Easy set-up and Guaranteed operation.
- Differentially set flow detection guarantees correct injection of oil into Air Stream.
- **Vip4Air** is Self-controlled and provides Remote Alarm Signal.
- **Vip4Air/Slave** is Remotely Controlled and provides full remote diagnosis and local condition monitoring



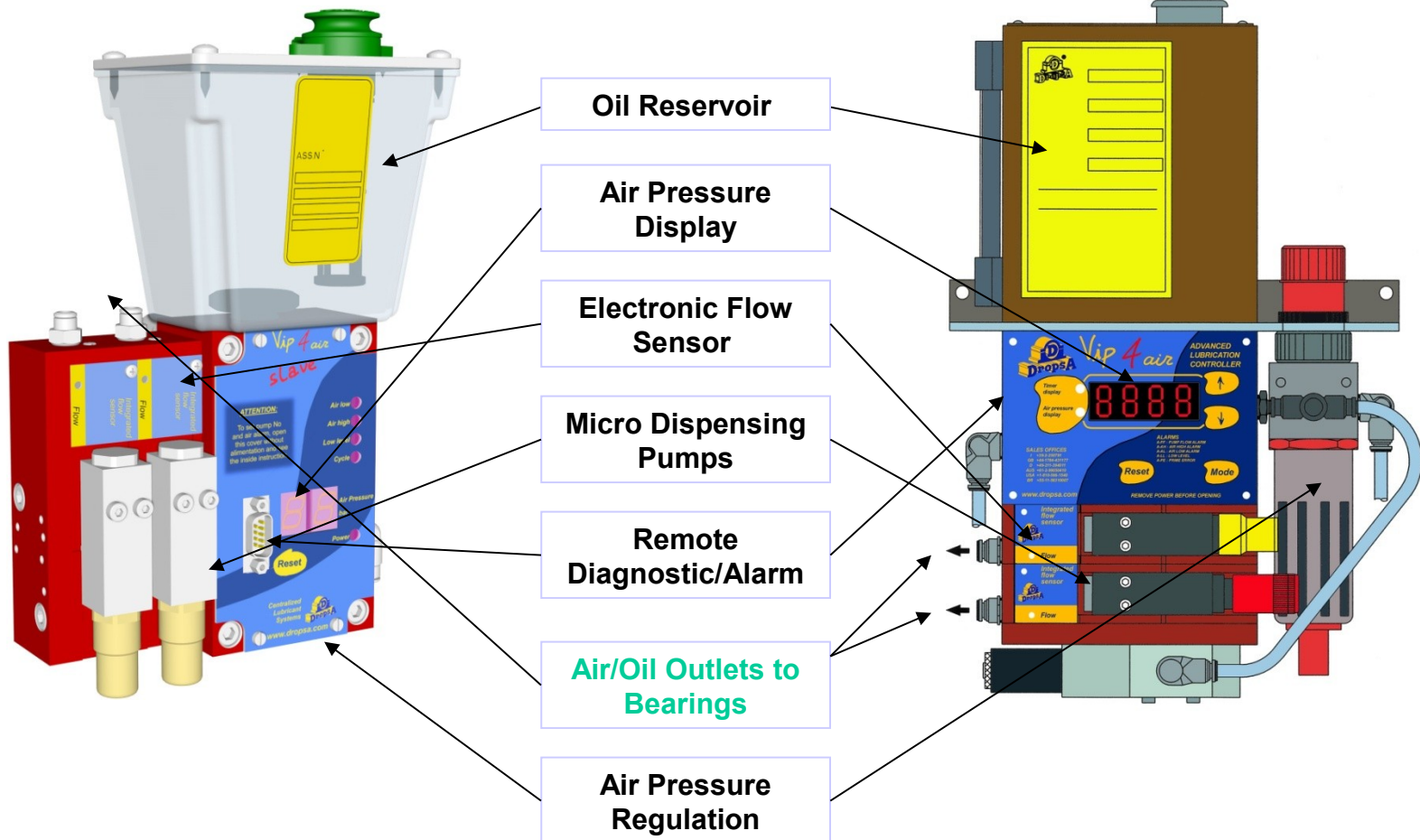
VIP4Air - VIP4Air/Slave

Minimal Air/Oil Micro-lubrication

Vip4Air/Slave

PRODUCT FEATURES

Vip4Air

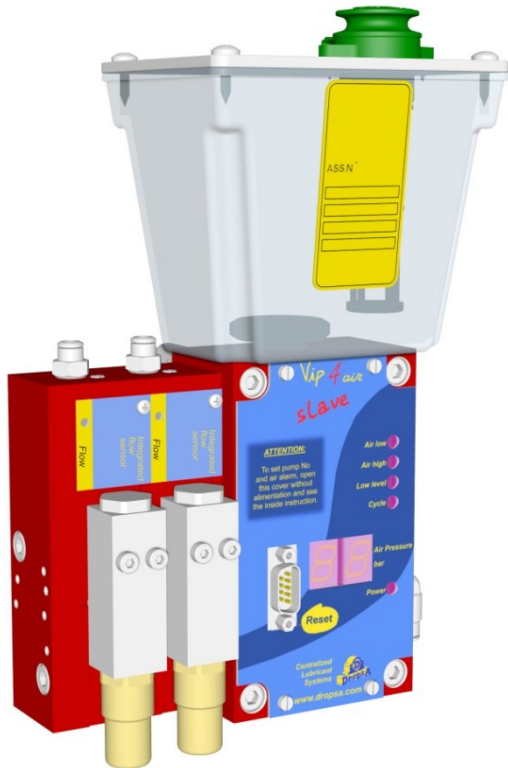




VIP4Air - VIP4Air/Slave

Minimal Air/Oil Micro-lubrication

Vip4Air/Slave



PRODUCT FEATURES SUMMARY

Oil Reservoir

Air Pressure Display

Electronic Flow Sensor

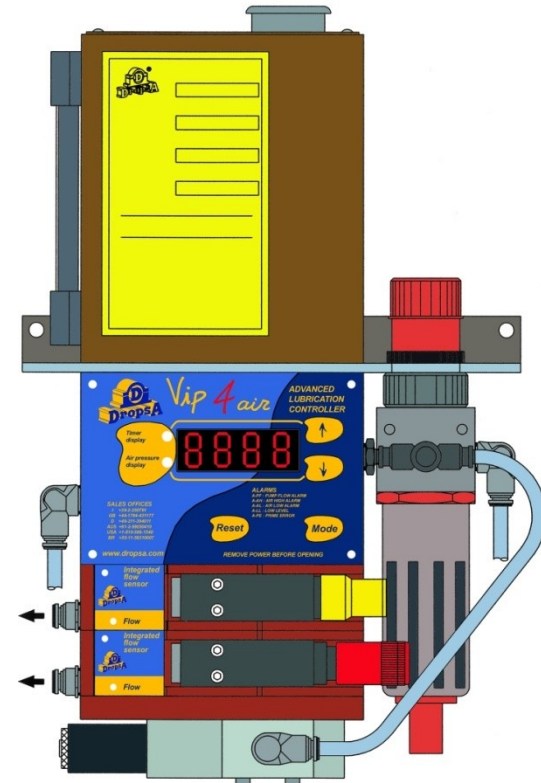
Micro Dispensing Pumps

Remote Diagnostic/Alarm

Air/Oil Outlets to Bearings

Air Pressure Regulation

Vip4Air

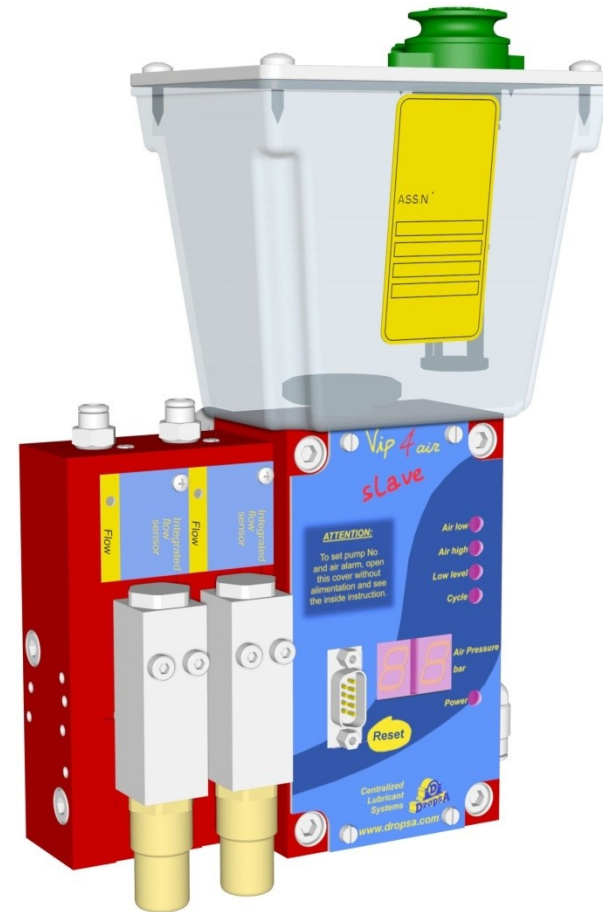




VIP4Air - VIP4Air/Slave

Minimal Air/Oil Micro-lubrication

VIP4 OPERATING PRINCIPLE





VIP4Air - VIP4Air/Slave

Minimal Air/Oil Micro-lubrication

The Vip4 is a modular device and allows easy assembly and expandability

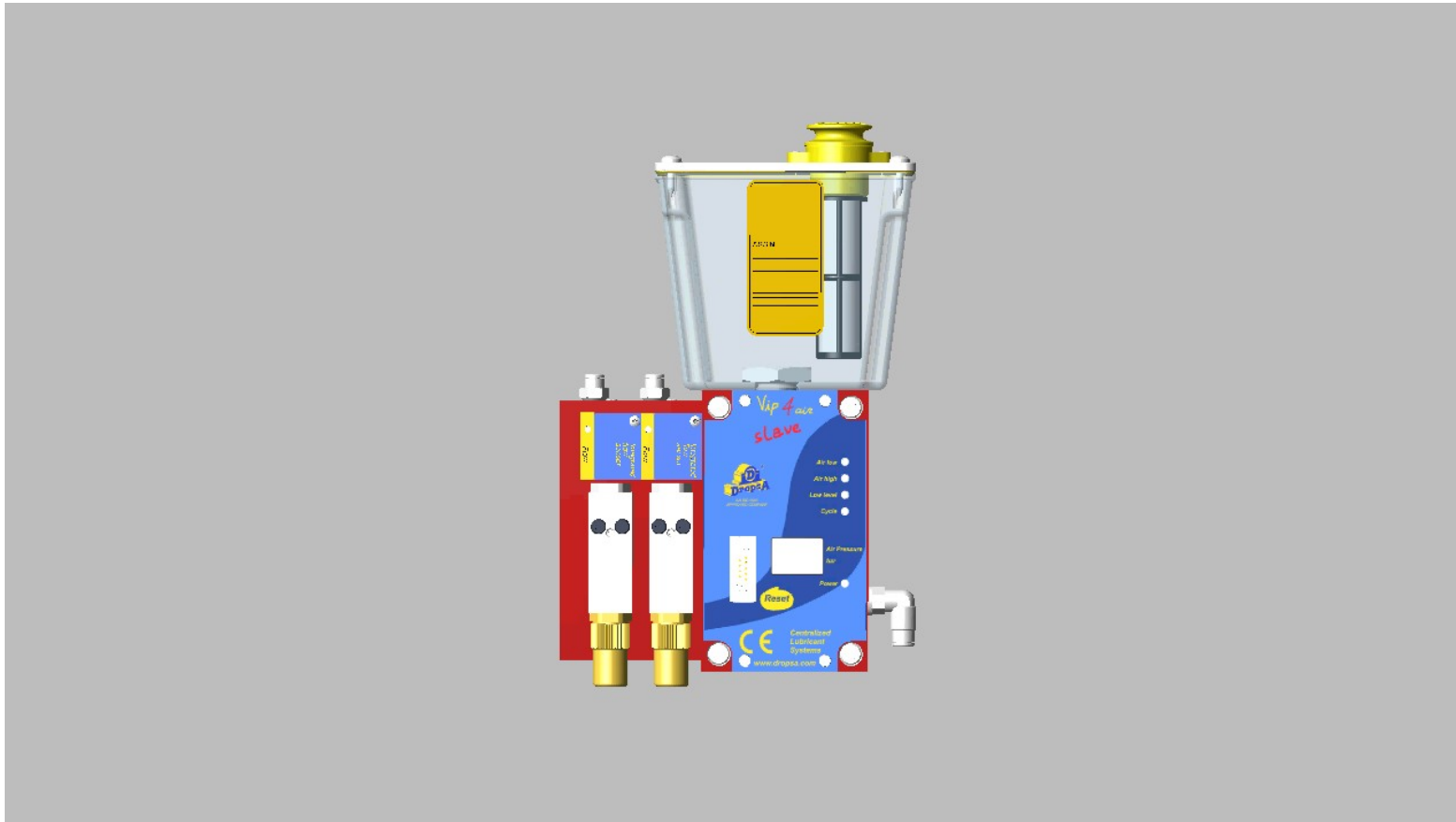




VIP4Air - VIP4Air/Slave

Minimal Air/Oil Micro-lubrication

The Vip4 is fully integrated with all the electronics, pneumatic and hydraulic circuits. This eliminates all external connections which could potentially cause problems and protects the device from interference and tampering.



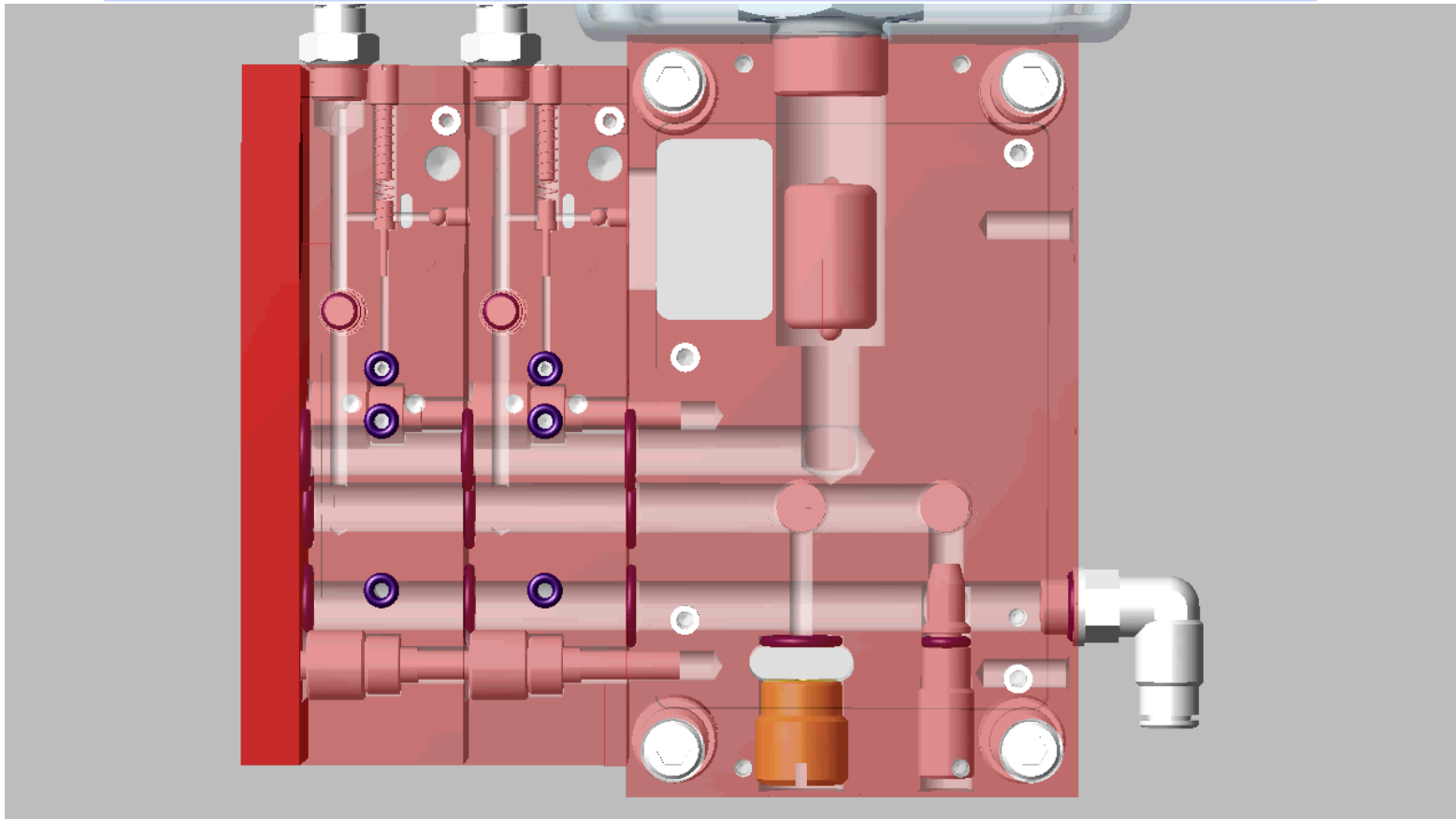


VIP4Air - VIP4Air/Slave

Minimal Air/Oil Micro-lubrication

The lubricant displaces a Minute Magnet. The local micro-processor and Hall-effect sensor calculate Magnetic Field change during the lubrication cycle caused by the Oil Injection

The oil is mixed into the Air Stream and sent to the Bearing.

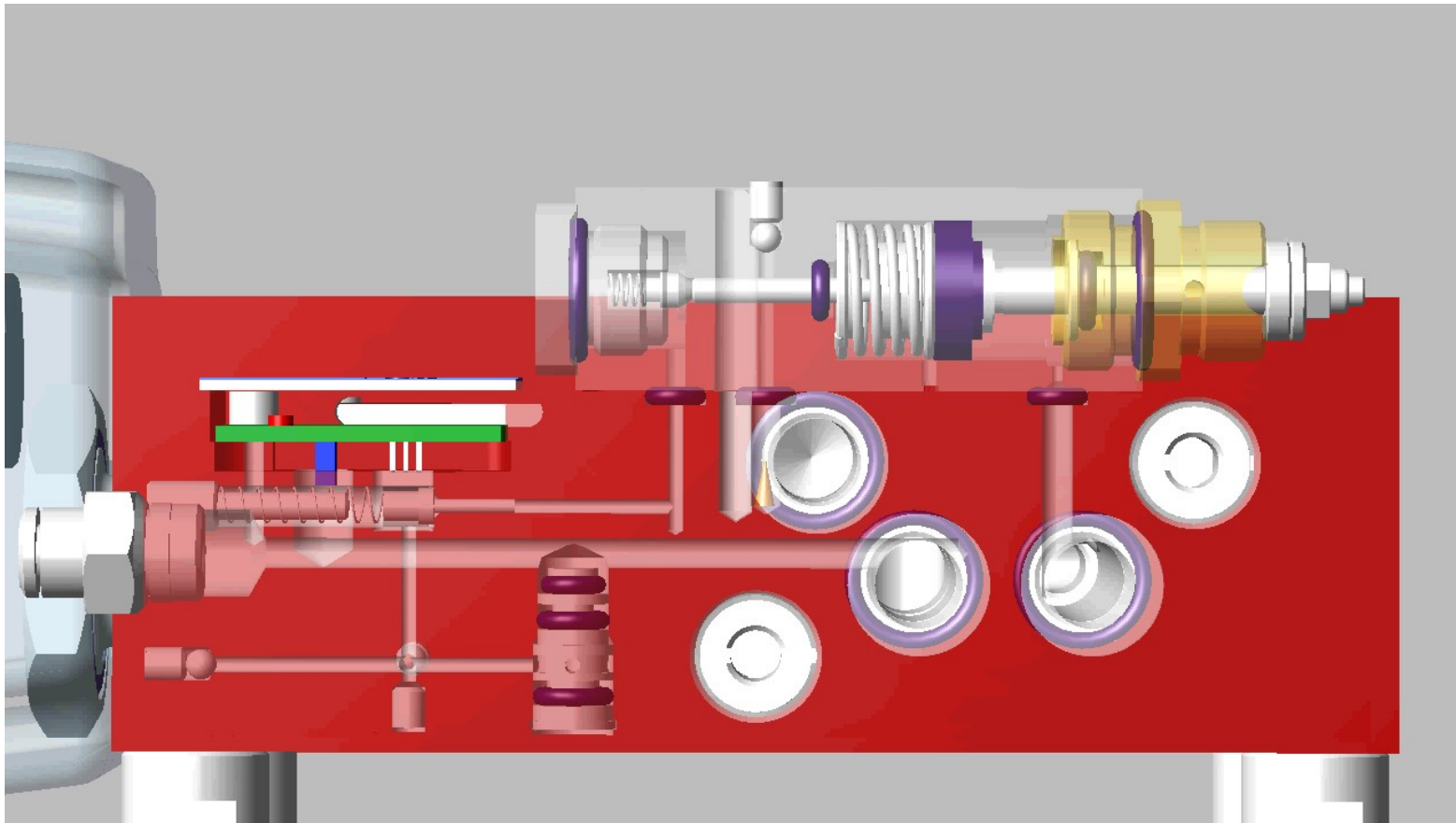




VIP4Air - VIP4Air/Slave

Minimal Air/Oil Micro-lubrication

The lubrication cycle is repeated at regular intervals.





VIP4Air - VIP4Air/Slave

Minimal Air/Oil Micro-lubrication

Presentation Summary

Air/Oil & Vip4Air Advantages:

- Fully Integrated Monitoring
- Modular concept
- Guaranteed Operation
- Integrated or Remote Cycle Control. Simple Interfacing.
- Low Cost
- Cooler bearing
- Higher Speeds

Ideal For :

- Bearings
- High Speed Bearings
- Spindles
- Gears
- Guides

- Integration with Other Pneumatic Systems (Slave Version)



VIP4Air - VIP4Air/Slave

Minimal Air/Oil Micro-lubrication

End of Presentation

Thank you