

Energy-efficient on all road types Air compressors





1 The Actros from Daimler
2 Volvo Bus 8900

Energy-efficient on the road

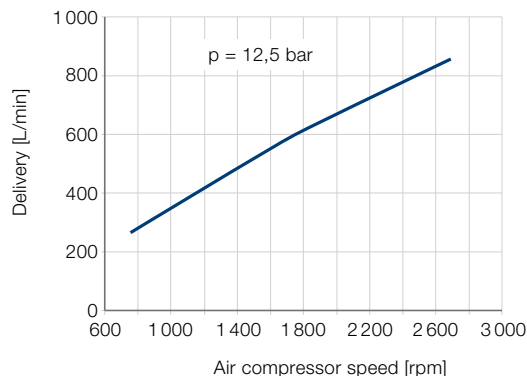
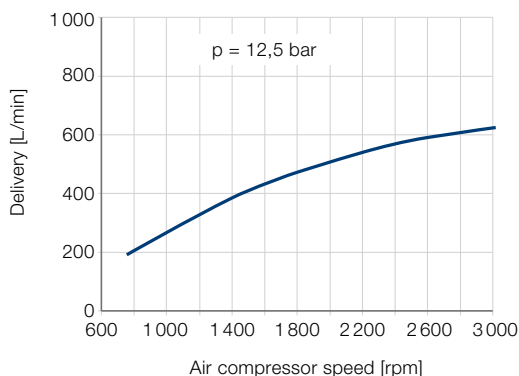
Air compressors from Voith

At the historic vehicle manufacturing location of Zschopau in Saxony, Voith is developing and producing a new generation of air compressors for trucks, buses and special vehicles.

These compressors are characterized above all by substantially higher energy efficiency, low-emissions operation, reduced mass and extended maintenance intervals.

Voith benefits not only from the experienced engineers at the location, but also from higher educational institutions and technical institutes in the immediate vicinity.

Delivery 2-cylinder and 3-cylinder air compressors



Operation principle

The pre-charging process of the system with its unique intercooling system results in a significantly reduced power uptake during delivery operation. At the same time, the compression temperature drops, which allows longer duty cycles and therefore increases the air delivery per hour, while the stroke volume remains the same.

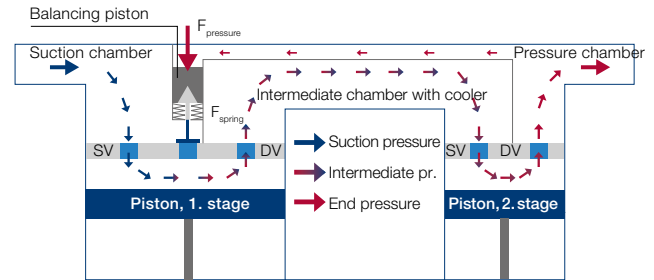
Outside delivery operation, the newly developed idle system SLS significantly reduces fuel consumption.

As a result of reduced temperatures, the engine oil is subjected to less stress. Oil cracking and the formation of harmful substances are therefore prevented.

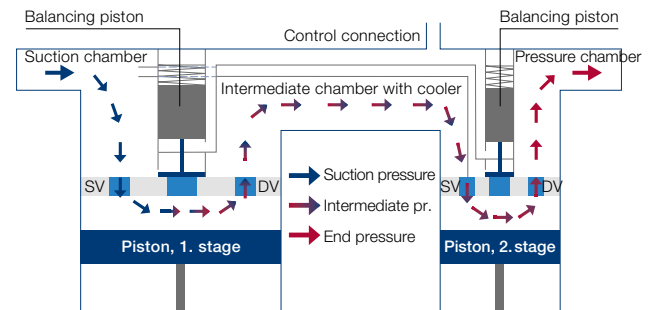
The newly developed TwinSave technology is also applicable to various other Voith compressors. TwinSave comes with an additional control valve in the second compressor stage and external actuation. These features allow for operation with a closed pressure line.

In delivery operation, both control valves are closed (normally closed) in order for the compressor to compress and deliver the air in both stages. In idling mode, the control valves are open, which means that neither of the two compressor stages compresses the air and it is circulating inside the unit. Compared to the self-actuating idle system (SLS), Twin Save enables further energy savings of up to 25 percent. In addition, TwinSave technology contributes to the reduction of the mechanical strain on the pressurized components and thus helps to extend their lifetime.

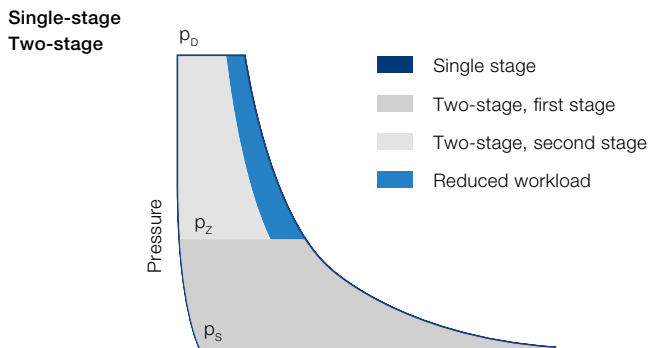
Self-Actuating Idling System (SLS) in delivery mode (Two-Stage)



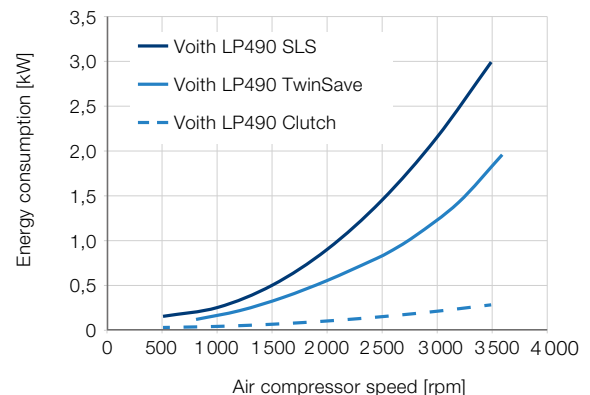
TwinSave



Reduced workload and therefore less power consumption



Energy consumption of the LP 490 in non-delivery mode



Your advantages at a glance

Traveling economically and saving the environment at the same time – auxiliary units such as air compressors in trucks and buses contribute significantly to this. Unique applied at Voith: two-stage compression with inter-cooling system. This results in significantly reduced power uptake during delivery operation.

The portfolio covers pre-charged two and three-cylinder air compressors made from gray-cast iron or cast aluminium. The

pre-charging process of the system with its unique inter-cooling system results in a significantly reduced power uptake during delivery operation. At the same time, the reduction of the compression temperature allows for longer duty cycles and thus increases the air delivery per hour, while the stroke volume remains the same. Lowering the temperature prevents the oil from cracking and the formation of harmful substances.



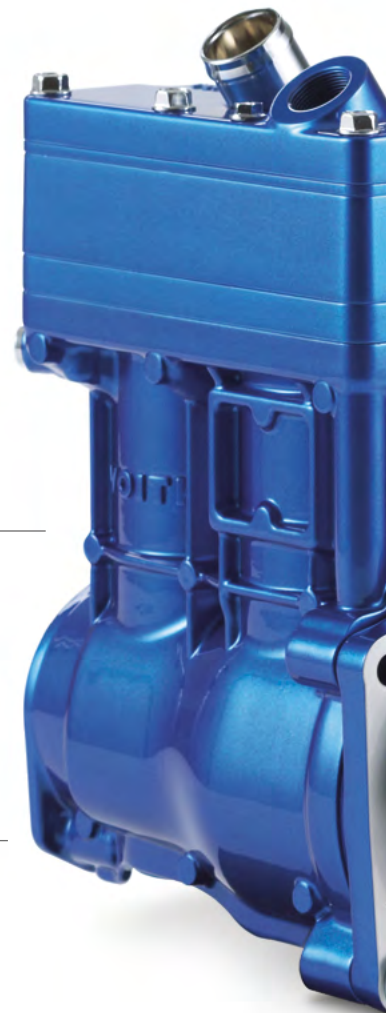
Low energy consumption in non-delivery mode thanks to innovative idling systems



Longer duty cycles (up to 85 %) due to innovative cooling concept



Significant weight reduction due to die-cast aluminum leads to an increased load capacity





Lower fuel consumption of up
to 1 L/100 km



Energy recovery in braking and
coasting mode



Better air quality, higher availability
of the air system as a result



The product family at a glance

The portfolio covers pre-charged two and three-cylinder air compressors made from gray-cast iron or cast aluminium.

Customer	Engine	Application
Daimler	OM457	Bus
	OM47x	Truck
	OM936	
Volvo	D5	Bus
	D9	
	D12	
	D11	
MAN	D0863LOH	Bus
	D20/D26	
MTU	BR1600	Agricultural machines
	BR2000	Rail vehicles

LP 490 for MAN D08



LP 490 for Daimler OM457



LP 490 for Daimler OM93x/47x



LP 700 for Daimler OM457



LP 725 for Daimler OM47x





Our service – part of your business

Service for air compressors

Our service portfolio

- Voith retrofit compressors available for selected vehicle / engine combinations
- Technical support when replacing compressors from other manufacturers
- Upon request, delivery of the necessary retrofit parts

Technical support

Phone +49 7951/32-1555
compressor@voith.com

Ordering spare parts

Phone +49 7951/32-1644
VTSparepartsCV@voith.com

Voith Group
St. Poeltener Str. 43
89522 Heidenheim, Germany

Contact:
Phone + 49 3725 344 86 -0
compressor@voith.com
www.voith.com



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