

# **Tyre Inflation Systems**

for agricultural tractors and self-propelled machines

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#### **PTG Tyre Inflation Systems** "for professionals from professionals"

For more then 30 years PTG designs, produces and sells Central Tyre Inflation Systems (CTIS) for agricultural vehicles. We are one of the world market leaders in this segment and export our products worldwide. The core markets are Western Europe and North America. PTG is part of the Michelin Group since 2018.

#### **Our Services for OEMs:**

- Tyre inflation systems in single- and dual-line technology
- Wide range of air supply systems (piston and vane compressors)
- Tailor-made solutions for specific requirements
- Technical documentation
- 3D data of all PTG components available for installation space investigations
- Installation trainings offered by PTG
- Technical support and high availability of spare parts
- Certified according to DIN EN ISO 9001:2015

#### The advantages of an adjusted Tyre Pressure

- Reduced fuel consumption for tractors in the field and on the road (10 % 15 %)
- Example: 5 cm depth of track = + 10 % diesel consumption
- Reduced rolling resistance in the field and on the road
- Higher ride stability on the road at higher speeds
- Reduction of the track depth caused through bigger footprint of the tyre
- Strong increase of towing force due to better interlocking of the tyre profile with the ground
- None/reduced soil compaction
- Higher yields
- Self cleaning effect of the profile through flexing tyres
- Less tyre damages/less tyre wear

This does not effect tractors only, but also trailers and trailed implements. The necessary towing force of the trailer is reduced by reducing the track depth (no Bulldozing-Effect).

Furthermore CTIS is a competitive advantage for a contractor. Farmers as their customers often demand low tyre pressures on their fields. Also, the usage time in the season can be extended because an operation under difficult soil conditions could be still possible with reduced tyre pressure.

#### The advantages of the dual-line technology

- High operational reliability due to automatically switching wheel valves with check functionality
- No pressure loss in the event of line breakage
- No manually closing of ball valves (single-line (1L) technology)



#### AIRBOX/drive 2L, RDS/radial 2L with digital- or ISOBUS-control dual-line tyre inflation system for agricultural tractors

Pressure change while driving for all tractors and self-propelled vehicles. Safe universal solution.

- Front axle: AIRBOX/drive line routing outside around the wheel, can be uncoupled
- Rear axle: RDS/radial internal rotary union
- Dual-line technology, simple (self-) assembly
- With precision control in the range 0.5 bar to 2.5 bar
- Line system pressureless when switched off

#### Telescopic tube

- Sturdy design with locking system
- Disconnecting the lines and parking on the mudguard possible with a few simple steps

#### Digital or ISOBUS control for AIRBOX/drive and RDS/radial

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RDS

• Available for all dual-line systems

• Storage of field and road pressures for 3 different control circuits (front axle, rear axle, trailer)

#### **Rotary union**

- Particularly high air passage due to enlarged cross-sections and flow-optimised design
- Quick assembly due to new screw brackets, no welding during assembly
- Maintenance free

#### PTG 2L Speed wheel valve for AIRBOX/drive and RDS/radial

- Automatically switching wheel valves with check functionality according to the patented and proven dual-line principle (unpressurised lines!)
- Flow-optimised design enables venting times to be cut in half
- Integrated filter-sieve protects against dirt entering from the tyre
- Maintenance free



#### **RDS/radial**

- Patented internal rotary union, no external lines
- Dual-line technology, no pressure when system is switched off
- With precision control in the range of 0.5 to 2.5 bar
- Service life of seals achieved: more than 10,000 tractor operating hours

Talk to us, we will offer you a suitable Tyre Inflation System for your tractor

### Air supply system V2000 AS

The hydraulically driven V2000 AS compressor is used on tractors and self-propelled machines where the inflation time with the standard air compressor takes too long. The unit is characterised by its compact design and low power requirement.



Control panel of the air supply system-ISOBUS ready

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### V2000 AS

• Vane compressor, pmax: 7.5 bar

- Effective delivery capacity: 1,800 2,000 l/min at 2 bar counterpressure
- Oil requirement of the hydraulic motor: approx. 55 l/min

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#### AIRBOX/drive 2L with digital or ISOBUS controls dual-line Tyre Inflation System for all self-propelled machines

• Pressure change while driving

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- Line routing outside around the wheel, can be uncoupled
- Dual-line technology, simple (self-) assembly
- With precision control in the range from 0.5 bar to 2.5 bar (up to 6.0 bar on request)
- Line system pressureless when switched off

The AIRBOX/drive dual-line Tyre Inflation System with digital or ISOBUS control can be configured for all self-propelled machines. The possible pressure range can be between 0.5 bar - 6.0 bar and is adapted to the existing tyre variant. Couplable lines continue to enable road travel of extra-wide machines.

#### **Rotary Union**

- Particularly high air passage due to enlarged cross-sections and flow-op timised design
- Quick assembly due to new screw brackets, no welding during assembly
- Maintenance free

#### **Telescopic tube**

- Sturdy design with locking system
- Disconnecting the lines and parking on the mudguard possible with a few simple steps

#### PTG 2L Wheel valve for AIRBOX/drive

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RDS

- Automatically switching wheel valves with check functionality according to the patented and proven dual-line principle (unpressurised lines!)
- Integrated filter-sieve protects against dirt entering from the tyre

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ADDRESS IN CONTRACTOR

• Maintenance-free



- Available for all dual-line systems
- Storage of field and road pressures for 3 different control circuits (front axle, rear axle, trailer)

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#### AIRBOX/drive 1L with pneumatic control single-line Tyre Inflation System for agricultural tractors

Pressure change while driving for all tractors and self-propelled vehicles.

- Inexpensive universal solution.
- Line routing outside around the wheel, can be uncoupled
- Single-line technology, simple (self-) assembly
- With precision control in the range of 0 bar to 2.5 bar

#### **Rotary union**

- Particularly high air passage due to enlarged cross-sections and flow-optimised design
- Quick assembly due to new screw brackets, no welding during assembly

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• Maintenance free

#### PTG 1L Wheel valve for AIRBOX/drive

• Hand-operated ball valve

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LANSING THE TRANS

• Must be closed manually before parking the vehicle

### Telescopic tube

- Sturdy design with locking system
- Disconnecting the lines and parking on the mudguard possible with a few simple steps



• Field and road pressures are set via the pressure regulators and selected via lever

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#### **Digital control for Dual-Line Tyre Inflation Systems**

**ISOBUS** control for **Dual-Line Tyre Inflation Systems** 

The tyre pressure control system is operated via the digital PTG control terminal, which can be used for any vehicle.

## **V1.10** the new generation of PTG ISOBUS software

The tyre pressure control system is operated via the vehicle's ISOBUS control terminal. As the system is internally connected to the vehicle via ISOBUS, the ISOBUS rear socket is not occupied by the tyre pressure control system.

• Up to 18 storable machine profiles

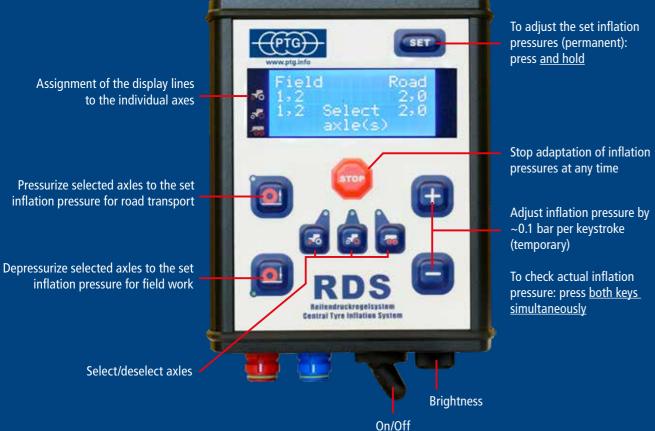
Current pressure

measured in the

Road/Field

**Tractor & Trailer** 

- Speed warning in case of low tyre pressure
- Tyre pressure monitoring and warning in case of deviations
- Configurable soft keys on the ISOBUS joystick
- Simple temporary pressure adjustment in steps of 0.1 bar



Adjust inflation pressure by

To check actual inflation pressure: press both keys <u>simultaneously</u>

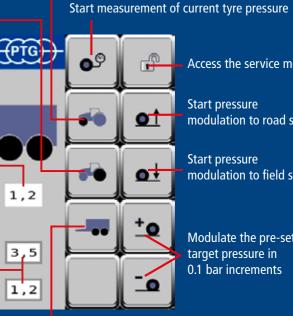
Activate control circuit for rear axle



tyres, Tractor & Trailer °° 0,8 1,0 bar Target pressure 1,2 1,6 bar 0+ 0,8 1,0 bar



#### Activate control circuit for front axle



Access the service menu

Start pressure modulation to road setting

Start pressure modulation to field setting

Modulate the pre-set target pressure in 0.1 bar increments

Activation control loop trailer

#### AIRBOX/mobil Tyre Quick Inflation/Deflation Kit

Pressure change at standstill. One suitcase for all vehicles on your farm

- With automatic control (setpoint setting)
- Carrying case for per axle tyre pressure adjustment
- Can be used immediately after installing the PTG quick coupler
- Precision control in the range 0 bar to 2.5 bar



#### **AIRBOOSTER**<sup>®</sup>**plus** Tyre Quick Inflation/Deflation Kit

Pressure change at standstill. AIRBOOSTER<sup>®</sup> plus for all vehicles • Can be used immediately after installing the PTG quick coupler • Deflation in one minute, inflation in two minutes (per wheel) • Unbeatable price-performance ratio





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