
Customer reference case

Agriculture

SKF Electronic Steering Input Unit



Image Valtra

Valtra equips TwinTrac reverse-drive system with SKF Electronic Steering Input Unit



Image Valtra

To fulfill their customers' needs the Finnish company Valtra, which belongs to the AGCO group, global leader focused on the designing and manufacturing of agricultural machinery, has decided to specifically equip their tractors so that they are as effective in

the forest as they are in the fields, thus being versatile and very manoeuvrable.

One of the unique features of this tractor is the ability to drive in both directions comfortably, while maintaining the same level of visibility and safety.





Image Valtra

Features

- Compact design
- Redundant position signal for steering wheel
- Contactless sensors
- Controllable resistive steering feedback

Customer benefits

- Enables more ergonomic vehicle interior design
- Enables more accurate, comfortable and safe steering for better vehicle maneuverability
- Integrated and virtually maintenance free technology reduces cost of ownership

The TwinTrac reverse-drive system includes additional controls in the rear of the cab: an extra steering wheel, forward-reverse shuttle, accelerator, clutch and brake pedals.

When the driver's seat is rotated 180 degrees from its forward driving position, the steering and transmission controls are automatically transferred to the rear driving position so that the driver can easily change direction without leaving the seat.

This reverse-drive system is controlled electronically through the "steer-by-wire" concept thanks to the SKF Electronic Steering Input Unit.

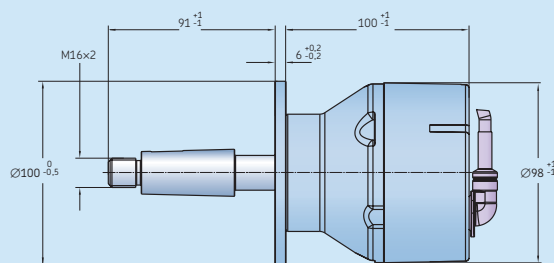
SKF unit allows to simplify the hydraulics, thus optimizing the whole tractor layout.

This mechatronic solution with integrated Electronic Control Unit (ECU) and embedded software is integrated into the tractor's electronics network via CAN bus.

This unit provides a flexible, light-weight and compact solution with smart functions for drivers' comfort such as programmable end-stops and controllable resistive steering feedback. The SKF Electronic Steering Input Unit opens new possibilities to improve steering system performance, in particular better steering feel and lower power consumption. The compact size and low weight help to

improve ergonomics of the tractor's interior design.

Moreover the steering feedback can be dynamically adapted to different driving conditions. For example, the steering wheel "resistance" can be controlled proportionally to the steering wheel turning speed: this enables more accurate, comfortable and safe steering.



SKF Electronic Steering Input Unit

Weight	Brake torque	Rotational speed	Power supply	Specification Electronics	Resolution	Protection level	Designation
Kg	Nm	r/min	V	bit	Interface	-	-
2,0	0,3-12	up to 180	12/24	12	2,0 B	IP67	ADD-6208

Ask your local SKF representative for detailed specifications

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