

Enhancing the driving experience

# STEERING COLUMNS

Completely tailored from our modular system according to customer specifications with full in-house design, development and validation services.



## STEERING COLUMNS

#### PRODUCT DESCRIPTION

Kongsberg Automotive offers a full range off fixed, tilt and telescopic steering columns, designed to withstand the most challenging environments for off-road vehicles. With our unique modular design, all columns provide best-in-class ergonomic working conditions for the driver.

#### **BENEFITS**

- Fully developed, tooled up and validated concepts
- High component commonality, enables short lead time on launches and modification
- Minimal capital and design investment
- Unique modular design our steering column range enables best-in-class ergonomic working conditions for the driver
- Highly experienced engineering and manufacturing team with over 20 years of market & product knowledge

Kongsberg Automotive offers completely tailored steering columns from our modular system according to customer specifications with full in-house design, development and validation services.

#### **FEATURES**

- KA's unique modular, self-supported designs
- Modular building blocks for tilt and telescope functions
- · Variable steering column length
- Variable position of tilt and telescope
- Variable angles for tilt function and step in and step out positions
- Tilt locking system, incremental or infinity locking
- Telescope function with infinite positioning, low or high telescope positions
- Compatible with all types of steering wheel connections
- Single hand lever, foot pedal or cable operated release
- Compatible with all types of hydraulic pump interfaces
- Vibration damping systems
- Optional driver control modules, switches, horn module, covers an displays

#### **GENERAL SPECIFICATIONS**

KA columns are available with covers, bellow and a range of integrated switches and shifters.

Switches can be fixed direct to the steering tube and positioned with index hole

#### STANDARD ISO 5010 AND SAE J1814

- The specification of all steering columns is according to ISO 5010 and SAE J1814.
- All columns meets Kongsberg Automotive product specification for off road vehicles, agricultural tractors and construction equipment

#### **Test and Validation**

 All columns are tested andvalidated according to Kongsberg Automotive product specification and above mentioned standards



## STEERING COLUMN RANGE SUMMARY



## **STANDARD STEERING COLUMNS**



## FIXED COLUMN F100

Steering Wheel Connection	Part no.	Standard Column Lenghts						Optional Cover/ Bellows		
		in milimeter						With	Without	
A01	21488	-100	-200	-300	-400	-500	-600	-700	-1	-0
A04	21489	-100	-200	-300	-400	-500	-600	-700	-1	-0
A05	21490	-100	-200	-300	-400	-500	-600	-700	-1	-0

<sup>\*</sup>Option of covers/bellow are only available on column lenghts from 500mm.



## TILT COLUMN T400

Steering Wheel Connection	Part no.	St	andard Col	Optional Cover/ Bellows			
		424mm	500mm	600mm	700mm	With	Without
A01	21500	-424	-500	-600	-700	-1	-0
A04	21501	-424	-500	-600	-700	-1	-0
A05	21502	-424	-500	-600	-700	-1	-0

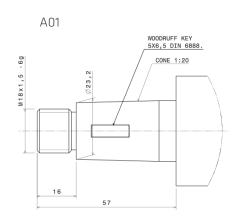


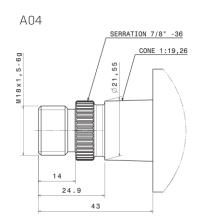
## TILT TELE COLUMN TT600

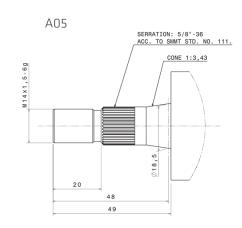
Steering Wheel Connection	Part no.	St	tandard Co	Optional Cover/ Bellows			
		424mm	500mm	600mm	700mm	With	Without
A01	21503	-424	-500	-600	-700	-1	-0
A04	21504	-424	-500	-600	-700	-1	-0
A05	21505	-424	-500	-600	-700	-1	-0

### **STEERING COLUMNS FEATURES**

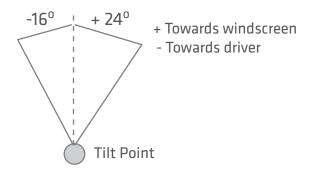
#### **CONNECTION TO STEERING WHEEL**



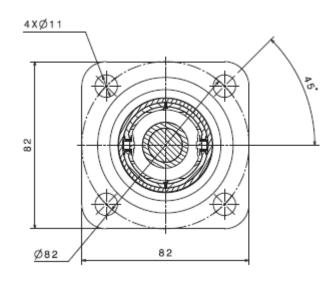


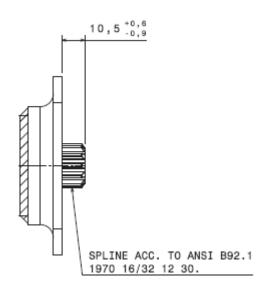


#### **TILT ANGLES**



## CONNECTION TO FLOOR AND PUMP







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