

CLUTCH SERVO

CLUTCH ACTUATION SYSTEM FOR MANUAL TRANSMISSION



AT A GLANCE

- > UNMATCHED PERFORMANCE, QUALITY AND RELIABILITY
- > LIGHTWEIGHT ALUMINUM HOUSING
- > MODULAR DESIGN PERMITS CUSTOMIZATION TO FIT MOST APPLICATIONS AND CONFIGURATIONS
- > PRODUCT FAMILY WITH 4 PNEUMATIC DIMENSIONS, Ø63MM, Ø80MM, Ø100MM AND Ø125MM
- > WIDE RANGE OF ADDITIONAL FEATURES AVAILABLE

PRODUCT DESCRIPTION

The new generation clutch servo developed by Kongsberg Automotive sets a new quality standard in terms of performance, reliability, and component weight.

Using a clutch servo is the most common way of reducing the pedal effort on commercial vehicles with manual transmissions and onboard pressurized air systems. The clutch servo converts the fluid displacement from the master cylinder into a mechanical movement of the clutch lever.

All clutch servos made by Kongsberg Automotive comes with a monoblock aluminum housing precisely machined for perfect dimensional results. The housing is subjected to a surface finishing treatment ensuring toughness and durability. The final assembly is done meticulously by our highly skilled and dedicated employees.

Kongsberg Automotive has produced clutch servos for OEMs across the world since 1975. We take pride in making quality products!



PRODUCT SPECIFICATIONS

PARAMETERS	SPECIFICATIONS
FLUID	BRAKE FLUID: SAE J 1703, DOT3, DOT4 OR DOT 5, EXCEPT SILICON BASE BRAKE FLUID
HYDRAULIC PRESSURE	NORMAL OPERATION 7 - 15 BAR, MAX 120 BAR
PNEUMATIC SUPPLY	6 - 10 BAR
TEMPERATURE	NORMAL USE: -40°C - +100°C SHORT TIME: UP TO +120°C (FRONT OF COVER UP TO +150°C)
DURABILITY	VALIDATED TO 3 MILL ACTUATIONS
CORROSION RESISTANCE	MIN 96 H TO RED RUST (ISO9227)
NOISE	80 DBA MAX

AVAILABLE DIMENSIONS



PNEUMATIC CYLINDER	Ø63mm	Ø80mm	Ø100mm	Ø125mm
MAX OUTPUT FORCE	1.800 N	3.000 N	4.700N	7.300 N
TOTAL STROKE	L 40mm	L 85mm	L 85mm	L 95mm
MOUNTING FLANGE	Ø 130mm	Ø 110mm /Ø 130mm	Ø 130mm	128x96

FEATURES

- > ROBUST AND DURABLE DESIGN
- > AUTOMATIC WEAR ADJUSTMENT
- > SEALING SOLUTIONS WITH LOW STICK SLIP AND HYSTERESIS
- > MODULAR REGULATING VALVE ENABLING TUNING OF THE PEDAL EFFORT
- > OPTIONAL FEATURES:
 - » VISUAL WEAR INDICATOR
 - » SPLIT PROTECTION VALVE
 - » POSITION SENSOR
 - » INTEGRATED QUICK CONNECTORS
 - » SPECIAL SOLUTIONS FOR DIFFICULT OPERATING CONDITIONS

BENEFITS

- > MODULAR DESIGN PERMITS REQUIREMENTS, PACKAGING BOUNDARIES AND INTERFACE NEEDS
- > THE CLUTCH SERVO REMAINS FUNTIONAL IF THE AIR SUPPLY PRESSURE IS LOST
- > NGCS OFFERS UP TO 30% WEIGHT REDUCTION COMPARED TO THE CONVENTIONAL DESIGN
- > SHORT VEHICLE INSTALLATION TIME
- > LOW MAINTENANCE COST
- > THE SPV PROVIDES PROTECTION OF THE TRANSMISSION SYNCHRONIZER RINGS