

# SMART DRIVES FOR ELECTRIC COMMERCIAL VEHICLES



## eSERVO

### STEERING-PUMPS AND ELECTROHYDRAULICS FOR MOBILE APPLICATIONS

- variable speed permanent magnet motor
- compact design & low weight
- low noise & pulsation due to special external gear pump design
- high power density & efficiency
- liquid cooled (water/glycol or oil)
- maximum pressure over whole speed envelope
- low maintenance
- usable in on-/off-road application & freely placeable within the vehicle

# MAXIMUM POWER IN SMALLEST DIMENSIONS

MOTEG steering- and electrohydraulic-pumps have been developed specifically for use in mobile applications. They offer the best solution between power, size, weight, noise, efficiency and costs. In combination with the MOTEG MMA-Series electric motors, that have been especially designed for use in mobile applications, they offer the optimum solution as either steering-pump or “Electrohydraulic Power Take-Off (ePTO)” for the electrification of commercial vehicles.

- operation with HV-frequency inverter, no DC/DC-converter necessary
- suitable battery supply voltage (DC): 300 V – 800 V
- available motor voltages (AC): 230 V<sub>RMS</sub> & 400 V<sub>RMS</sub>
- optional with rotor-position-sensor (sin/cos-encoder)
- very high motor-/pump- dynamics & least possible energy consumption
- patented sensorless, ON-Demand control software (optional)
  - low operating costs
- connection to the CAN-Bus via J1939 and UDS (optional)
- IP 67 protection class
- customizable coolant connectors

Type	Displacement [ccm]	Motor Power (kW)	Motor Voltage [VAC]	Rated Speed [min <sup>-1</sup> ]	Flow-Rate** [l/min]	Pressure Rated/Max [bar]	Noise @150 bar [dB(A)]	Dimensions (l x w x h) [mm]	Weight [kg]
eServo CX*-80-60	5	5,2	230/400	3000	14,3	180/234	58	244 x 197 x 226	13
	8				22,8	112/146		249 x 197 x 226	13
	10				28,8	89/116		254 x 197 x 226	13
eServo CX*-80-90	10	7,9	230/400	3000	28,8	135/224	58	284 x 197 x 226	16
	13				35,9	108/180		289 x 197 x 226	16
	15				43,3	90/149		294 x 197 x 226	16
eServo CX*-80-120	10	10	230/400	3000	28,8	173/240***	58	325 x 197 x 226	19
	13				35,9	138/230***		330 x 197 x 226	19
	15				43,3	115/220***		335 x 197 x 226	19
eServo CX*-100-100	16	20	400	3000	45,3	219/250***	58	365 x 265 x 291	32
	18				51	195/240***		370 x 265 x 291	32
	20				57	174/230***		375 x 265 x 291	32
	22				63	158/220***		380 x 265 x 291	32
	25				71,8	138/220***		385 x 265 x 291	32
eServo CX*-100-150	16	30	400	3000	45,3	240/250***	58	415 x 265 x 291	39
	18				51	230/240***		420 x 265 x 291	39
	20				57	220/230***		425 x 265 x 291	39
	22				63	220/230***		430 x 265 x 291	39
	25				71,8	205/220***		435 x 265 x 291	39

\* X = Displacement, \*\* @ rated speed @ rated pressure

\*\*\* = limit pump

