

SMART DRIVES FOR ELECTRIC COMMERCIAL VEHICLES

mo
teg

ELECTRICAL
DRIVE
ENGINEERING



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_{RMS} & 400 V_{RMS}
- 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

Typ	Displacement [ccm]	Motor Power [kW]	Motor Voltage [VAC]	Rated Speed [min ⁻¹]	Flow Rate** [l/min]	Pressure Nom/Max [bar]	Noise Level @150 bar [dB(A)]	Dimensions (LxBxH) [mm]	Weight [kg]
eServo CX*-80-60	7	5,2	230/400	3000	18,5	138/180	58	247 x 157 X 226	14
	8				22,8	112/146		250 x 157 X 226	14
	10				28,8	89/116		254 x 157 X 226	14
eServo CX*-80-90	7	7,9	230/400	3000	18,5	209/250***	58	277 x 157 x 226	16
	8				22,8	170/250***		280 x 157 x 226	16
	10				28,8	135/224		284 x 157 X 226	16
	11				31,6	123/204		286 x 157 x 226	16
	13				35,9	108/180		289 x 157 x 226	16
	15				43,3	90/149		294 x 157 X 226	16
eServo CX*-80-120	10	10	230/400	3000	28,8	173/240***	58	324 x 157 x 226	21,5
	11				31,6	157/240***		326 x 157 x 226	21,5
	13				35,9	138/215		329 x 157 x 226	21,5
	15				43,3	115/180		334 x 157 x 226	21,5
eServo CX*-100-100	15	18,8	400	3000	43,3	217/220***	58	378 x 265 x 291	31
	16				45,3	207/250***		372 x 265 x 291	32
	18				51	184/240***		375 x 265 x 291	32
	20				57	165/230***		378 x 265 x 291	32
	22				63	149/230***		381 x 265 x 291	32
	25				71,8	131/220***		385 x 265 x 291	32
eServo CX*-100-150	16	28,5	400	3000	45,3	250***/250***	58	422 x 265 x 291	39
	18				51	240***/240***		425 x 265 x 291	39
	20				57	230***/230***		428 x 265 x 291	39
	22				63	224/230***		431 x 265 x 291	39
	25				71,8	196/220***		435 x 265 x 291	39

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

*** = limit pump

