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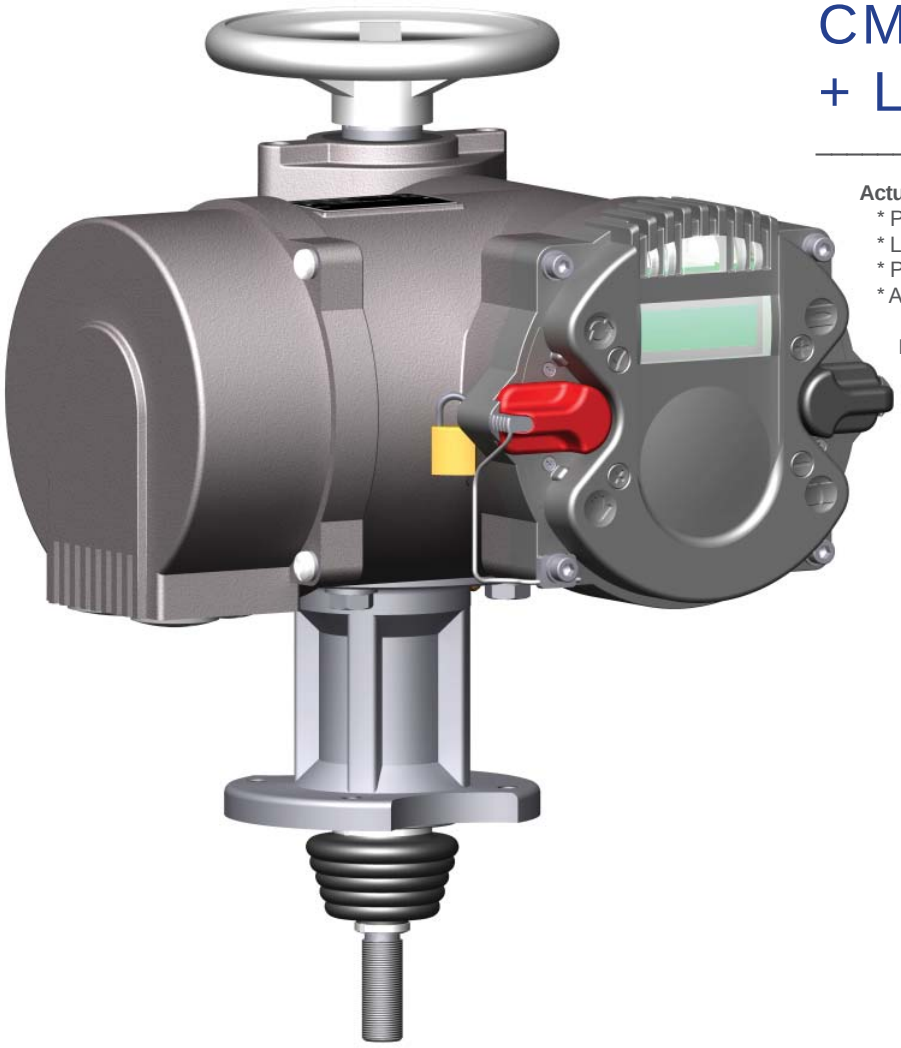


DATA SHEET

CM03/rCM03 + LINEAR-UNIT

Actuator speed adjustable
* Planning phase simplif ed
* Later process optimization simplif ed
* Protection of valve seats
* Avoiding pressure shocks

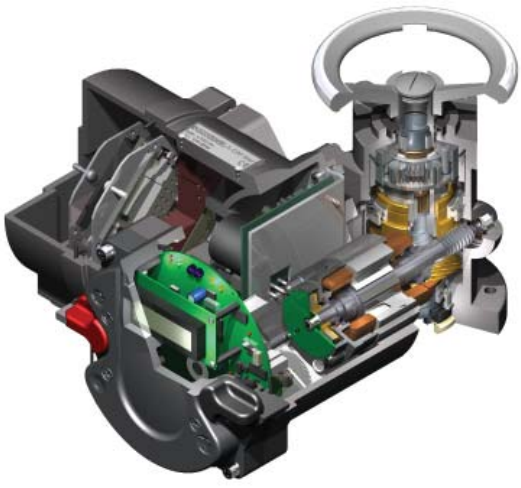
Many built-in software options
* Minimal effort for later adaptations in PLC system
* Short activation of customer-specif c functions

Minimal maintenance costs
* Mechanical and electrical components are reduced to a minimum
* Reduction of spare-part versions to a minimum

Construction
* Very low volume & weight by compact construction
* High protection degree up to IP67/IP68
* A planetary gearbox ensure optimum actuator eff ciency
* Handwheel with reaction torque block (no change-over lever)
* LC-Display in 90° steps rotatable

TECHNICAL DETAILS

Switch-off force:	max. 15kN
Modulating force:	max. 7,5kN
Stroking speed:	0,24 up to 4,7mm/sec - free adjustable
Valve stroke:	max. 100mm, atuator turns measuring via multi-turn sensor
Power supply:	1x115V-230V +/-10% AC
Control unit:	Integrated actuator control unit with frequency inverter technology and PM-motor



COMPACT MULTI-TURN ACTUATOR CM03 / rCM03 with LINEAR-UNIT
Technical data

TYPE	On/Off duty Modulating duty	CM03 + L50 rCM03 + L50	CM03 + L100 rCM03 + L100
Switch-off force, adjustable	max. kN	15	15
	min. kN	4	4
Modulating force with rCM3	max. kN	7,5	7,5
Travel speed	mm / sec	0,24 up to 4,7- free adjustable	0,24 up to 4,7- free adjustable
Stroke	max.	50mm	100mm
Operation mode	On/Off duty	On/Off duty S2-15minutes	
	Modulating duty	Modulating duty S4 - 1200cycles/hour - 40% duty cycle	
Manual operation		switching free, overlayed, without lever	
Valve-mounting			
Flange		F10 nach ISO 5210	
Spindle end work		M16 x 1,5	
Rotation		Spindle of Linear-Unit moves out of casing with clockwise actuator rotation	
Operating conditions			
Protection degree acc.EN 60 529		IP67	
Ambient temperature		-25°C bis + 60°C	
Corrosion protection		K2 for installation in power plants, industries- and waste water plants with aggressive atmosphere	
Painting / Colour		2 components painting / RAL7024	
Weight		12,5 kg	16,5 kg
Motor		PM-Motor	
Isolation class		Isolation class F, max. 155°C permanent temperature	
Power supply	V	1 x 115V-230V +/- 10%; 50/60Hz AC	
Current consumption	A	ca. 2,25	
Power	W	ca. 250W	
Actuator control			
Electronic with frequency-technology		Integrated processor control unit with frequency-technology for variable speed control	
Control unit			
Control elements		with additional language independent symbols Selector switch LOCAL - OFF - REMOTE, contact free with GMR-technology (lockable) Control switch OPEN - STOP - CLOSE, contact free with GMR-technology	
Indication		lighted LC-display, Lid with display in 90° steps turnable	
Signal lamps		4 LED's for operation-, readiness-, warning- and error-messages	
Communication		Infrared communication interface for programming and saving operation data	
Control			
Inputs		5 binary control inputs: OPEN - STOP - CLOSE - EMERGENCY OPEN - EMERCENCY CLOSE - free parametrizable Power supply: 24VDC (max. 30VDC) - current consumption with 24VDC: typical 5mA The common ground of the inputs is optical isolated from the rest of the electronic	
Status indication			
Outputs		8 binary outputs: READY - OPEN - CLOSE - RUNNING OPEN - RUNNING CLOSE - TORQUE - LOCAL - REMOTE - free parametrizable power supply 24VDC +/- 6V (per actuator or through control system) max. allowed current per output: 50mA (short-circuit-proof) max. allowed current for all outputs with power supplied by actuator: 150mA max. allowed current for all outputs with power supplied by control system: 250mA All outputs are optical isolated if power is supplied by control system.	
Voltage- In- & Ouput			
Power supply - external		Input power range: 20-30VDC max. current consumption 320mA or 100mA in current save mode - status indication also in case of a main power supply failure.	
Power supply - by actuator		Output voltage: typical 22V, max. output current 150mA Reference ground is the common ground of the control unit and of the analog inputs and outputs	
Functions			
Standard		Switch-off mode adjustable: travel- or torque dependent, in reference to valve type Torque/Force adjustable: 25-100% of max. torque/force 4 intermediate positions between 0 and 100% in both directions parametrizable Step-mode operation with adjustable step-start, step-stop, running- & break time in both directions Writing- and reading protection via password Multi-lingual display indication: German - English - Czech - Russia - Danish, ... Status indication of binary inputs and outputs and also of the analog signals on LC-display History data for Service-planning and Error-analyses Motor protection with thermo switches in motor	
Electric connection			
motor		Industry-screw plug Han6E with 6pols in round plug casing	
Control signals		Industry-screw plug Han24E with 24pols in round plug casing	
Boreholes for cable entries		3 metric threaded boreholes for cable glands: M40x1,5 / M32x1,5 / M25x1,5	

Important Options

- Protection degee according EN 60 529 IP68
- Ex proof design according ATEX 94/9/EG
- Bus connection (Prof bus DP-V0, DeviceNet, Powerlink)
- Relay board for 250VAC, 2A with 4 or 8 outputs
- Analog position indication 0/4-20mA (2-wire)
- Positioner for analog 0/4-20mA input signal from control system
- PID positioner for 2 input signals 0/4-20mA (setpoint, external actual value)
- Signal isolator for galvanic isolation of the 0/4-20mA position feedback signal
- Signal isolator for galvanic isolation of the 0/4-20mA positioner signal