

SCHIEBEL

ab series

issue November 2025

AB CSC Multitum Actuator

**Multitum Modulating-Duty
On-Off-Duty up to 5.000 Nm**



Motor

- AC motor, isolation class F, temperature switches

Operation mode

- ABxx: ON/OFF duty S2-15min & class A and B
- rABxx: Modulating duty S4-1200 cycles/hour with 40% duty cycle & class C

Local control

- Selector switch LOCAL-OFF-REMOTE - lockable
- Control switch OPEN-STOP-CLOSE
- Large LC-display for detailed visualization of status information & parameters - different languages selectable
- Red display backlight for alarms
- 5 RGB LEDs for status indication & control information
- Cover lid with display in 90° steps rotatable
- Bluetooth & infrared interface for data exchange and actuator control with Android App or Windows PC

Remote control

- 5 binary inputs 24VDC: Open - Stop - Close - Emergency Open - Emergency Close, free programmable, 24VDC rated voltage with common ground potential, inputs with jumpers configurable in groups with separated commons

Status signals

- 8 binary outputs 24VDC: Ready - Open - Closed - Opening - Closing - Torque - Local - Remote, free programmable, 24VDC supply, max. load 0,5A/channel

Explosion protection

- Protection class Ex II 2 G Ex de IIC T4
- Certifications ATEX

Features

- Free programmable step mode control for open and close
- 4 intermediate positions definable
- Actuator torque adjustable between 40-100% from max. torque
- Alternative menu structure available
- Different user levels selectable
- Counter values for preventive Maintenance notification

Valve connection

- Flange and output shaft according ISO 5210

Electric connectors

- Power connection via 6pole screw plug Han6E+PE
- Control and status signals via 24pole screw plug Han24E
- Metric cable entries for cable glands, closed with dummy glands
- Ex-design: terminal block

Ambient temperature

- -25°C to +70°C, extended temperature range on request

Enclosure protection

- IP67 according EN 60 529, IP68 on request

Corrosion protection

- C2 according EN ISO 12944-5 for installation in aggressive atmosphere, C3 to C5 on request

Color

- RAL7030 - stonegrey

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Multitum Modulating-Duty / On-Off-Duty up to 5.000 Nm

Size		(r)AB3	(r)AB5	(r)AB8	(r)AB18	(r)AB40	(r)AB80	(r)AB100	(r)AB200	(r)AB500
Max. torque 3ph	Nm	30	60	120	250	500	800	1000	2000	5000
Max. torque 1ph	Nm	30	60	120	250	500	--	--	--	--
Max. torque S4-operation	Nm	15	30	60	125	250	400	500	1000	2500
Speed range 3ph	rpm	1,5 - 200	1,5 - 200	2,5 - 200	2,5 - 200	5 - 200	5 - 60	5 - 200	7,5 - 200	3 - 120
Speed range 1ph	rpm	1,5 - 200	1,5 - 200	2,5 - 40	2,5 - 20	5 - 20	--	--	--	--
Valve flange	ISO 5210	F10	F10	F10	F14	F14	F14/ F16	F16	F25	F35
Max. spindle diameter with output drive A/Am	mm	26	26	36	40	52	52	95	95	132
Weight	kg	16 - 18	16 - 20	24 - 35	42 - 50	70 - 80	70 - 90	130 - 210	140 - 260	300 - 400
AC: 3phase	220VAC / 230VAC / 240VAC / 380VAC / 400VAC / 415VAC / 440VAC / 460VAC / 480VAC / 500VAC / 690VAC									
AC: 1phase	220VAC / 230VAC / 240VAC									

Software Options

Smart Codes	Code
0/4-20 mA position transmission, galvanic separated (no signal isolator required), signal configurable as current sink	ER
Positioner for actuator control with 0/4-20 mA signal from PLC, passiv, potential isolation from thre remaining electronic	SR
PID positioner for two 0/4-20 mA input signals (target value, external actual value, configurable as activ or current sink signal)	PID
Actuator KKS / TAG on display (max. 15 digits)	ID
Customer parametrization (customer specific parametrization of binary input- and output signals in accordance with customer specific wiring diagram)	KP
Torque curve - torque in relation to the stroke	AP
Logic operations of input and output signals	VIRT
KVS valve characteristics - Flow in relation to the position of the actuator	VK
Speed characteristics - speed in relation to the stroke	SC
Advanced service and maintenance capabilities	ADSM
Automatic partial and full stroke test	ST
Multiport valve support - Intermediate positioning	MPIP

SCHIEBEL

cm series

issue November 2025

CM Multiturn Actuator

Modulating-Duty / On-Off-Duty
up to 250 Nm



Power supply

- AC: 1phase 110VAC...240VAC 50/60Hz +/-10%
- DC: 24VDC +/-10% ■ 3-phase: 380...480VAC 50/60Hz +/-10%

Motor

- PM-motor ■ Controlled via BLDC motor control board
- Isolation class F

Absolut encoder

- (magnetic based) for high precision control with an accuracy of 0,1%

Operation mode

- CMxx: ON/OFF duty S2-15min & class A and B ■ rCMxx: Modulating duty S4-1200 cycles/hour with 40% duty cycle & class C

Local control

- Selector switch LOCAL-OFF-REMOTE - lockable
- Control switch OPEN-STOP-CLOSE ■ Large LC-display for detailed visualization of status information & parameters - different languages selectable ■ Red display backlight for alarms ■ 5 RGB LEDs for status indication & control information ■ Cover lid with display in 90° steps rotatable ■ Bluetooth & infrared interface for data exchange and actuator control with Android App or Windows PC

Remote control

- 5 binary inputs 24VDC: Open - Stop - Close - Emergency Open - Emergency Close, free programmable, 24VDC rated voltage with common ground potential, inputs with jumpers configurable in groups with separated commons

Status signals

- 8 binary outputs 24VDC: Ready - Open - Closed - Opening - Closing - Torque - Local - Remote, free programmable, 24VDC supply, max. load 0,5A/channel

Explosion protection

- Protection class Ex II 2 G Ex de IIC T4
- Certifications ATEX, IECEx, NEC

Features

- Free programmable step mode control for open and close
- 4 intermediate positions definable ■ Actuator torque adjustable between 25-100% from max. torque ■ Alternative menu structure available ■ Different user levels selectable ■ Counter values for preventive Maintenance notification

Valve connection

- Flange and output shaft according ISO 5210

Electric connectors

- Power connection via 6pole screw plug Han6E+PE
- Control and status signals via 24pole screw plug Han24E
- Metric cable entries for cable glands, closed with dummy glands
- Ex-design: terminal block

Ambient temperature

- -25°C up to +60°C, extended temperature range on request

Enclosure protection

- IP67 according EN 60 529, IP68 on request

Corrosion protection

- C2 according EN ISO 12944-5 for installation in aggressive atmosphere, C3 to C5 on request

Color

- RAL7024 - graphite grey, all others on request

CM Multiturn Actuator

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Modulating-Duty / On-Off-Duty up to 250 Nm

Size		(r)CM03	(r)CM06	(r)CM12	(r)CM25
Torque range 1phase or 3phase, free adjustable	Nm	8-32	16-64	32-125	64-250
Torque range 24VDC, up to 5rpm with 20rpm	Nm	8-32 8-32	19-55 19-35	--	--
Max. torque S4-operation	Nm	16	32	64	125
Max. torque S9-operation	Nm	10	20	30	60
Speed range 1ph or 3ph, free adjustable	rpm	1-72	1-60	2,5-70	1,5-33
Speed range 24VDC, free adjustable	rpm	1-20	1-20	--	--
Travel sensor range	Turns	0,25-105 0,25-1600	0,25-105 1-300 0,25-1600	1-300 0,25-1600	0,25-1600
Valve flange	ISO 5210	F07 / F10 / G0	F10 / G0	F10 / G0	F14 / G1/2
Output drive	ISO 5210 / DIN 3210 / DIN 3338 A / Am / B / B1 / BSo / C / CSo / D / E-DO / DO / E / B3 / ESo / X				
Weight	kg	11,5	17,5	22	29
Motor	M	Brushless DC motor controlled by integrated control unit			
Power factor	cos ϕ	> 0,95			
Power supply 1ph (Standard)		1phase 110VAC...240VAC 50/60Hz +/- 10%			
Nominal current @1x230VAC	A	1,5A (16Nm / 72rpm)	1,9A (32Nm / 60rpm)	3,8A (64Nm / 60rpm)	3,8A (18Nm / 30rpm)
Power supply 3ph (Option)		AC: 3phase 380...480VAC 50/60Hz +/- 10%			
Nominal current @3x400VAC	A	0,5A (16Nm / 72rpm)	0,9A (32Nm / 60rpm)	1,4A (64Nm/60rpm)	1,4A (128Nm/30rpm)
Power supply 24VDC (Option)		DC: 24VDC +/- 10%		--	--
Nominal current	A	8,6A (10Nm / 20rpm)	14,0A (32Nm / 20rpm)	--	--

Software Options	Code
0/4-20 mA position transmission, galvanic separated (no signal isolator required), signal configurable as current sink	ER
Positioner for actuator control with 0/4-20 mA signal from PLC, passiv, potential isolation from thre remaining electronic	SR
PID positioner for two 0/4-20 mA input signals (target value, external actual value, configurable as activ or current sink signal)	PID
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Speed characteristics - speed in relation to the stroke	SC
Advanced service and maintenance capabilities	ADSM
Automatic partial and full stroke test	ST
Multiport valve support - Intermediate positioning	MPIP

All informations are subject to change without notice. Values provided for guidance only.
Due to production tolerance variation, the electrical values are averages compiled from actuator production test data.