

Ontrac[®]

Intelligent Electric Actuator

For Valve Actuation and Process Automation Solutions



Ontrac Actuator Keeping Your Production Line **On Track**



Power Generation



Iron & Steel



Chemical



Cement



Water Treatment

Ontrac Milestones:

- 2000** ABB launched Ontrac series intelligent electric actuators.
- 2003** Transferred the technology, manufacturing process, production line, supplier base of Ontrac series actuator from ABB Germany.
- 2004** MOE and MME series, first offering to Chinese market through ABB China, with support from ABB Germany.
- 2006** Successful served major customer like China Power Investment Corp., Bao Steel, PetroChina etc.
- 2011** CE and Explosion-proof certificated
- 2012** MOE790 and MME890 launched

Headquartered in Shanghai, ONTRAC manufactures intelligent electric actuators, and provides valve automation solutions for energy, chemical, cements and other industries.

In 2000, ABB launched the Ontrac MME/MOE series intelligent electric actuators. Since its conception, Ontrac have become synonymous with modernity and reliability, and its products have been used in many fields of industry, worldwide. In 2003, due to its strategic adjustment, ABB divest itself of Ontrac brand and technology. After the spin-off, Ontrac Instrument (Shanghai) Co., Ltd. established in China as a legal entity, to keep Ontrac's trademark and electric actuator business. Fully supported by ABB team in training and technology transfer, Ontrac Instrument (Shanghai) start to produce the exact same product starting with ABB's original supplier, production and testing line and quality program.

Key Features:

Broad range self monitoring and diagnosis

Hall sensors are used to measure displacement, velocity and angle. Microprocessor offer a wide range of alarm and diagnosis functions which allow for easy fault localization.

Enhanced valve and motor protection

Measuring and monitoring of both motor current and temperature provide full motor protection. Valves are moved gently in or out of the end positions at full torque.

Integrated frequency converter

The stroke of the actuator can be divided into ranges: an optimal positioning speed can then be selected for different ranges to avoid water hammer and cavitation.

Electrical connection and fieldbus control

Binary and analog signaling are always available, even when utilizing the fieldbus interface. PROFIBUS DP and MODBUS are optional.



- Voltage supply: 3-phase AC, 380/460±10%, 50/60Hz±5%;
1-phase AC, 220±10%, 50/60Hz±5%;
- Duty mode: On-off (MOE series,) a complete stroke, S2 - 15 min;
Modulating (MME series), separate strokes, S4 - 25%, Number of starts ≤1200/h
- Motor control: Variable frequency control technology
- Voltage input: 24V. DC (18-33V), max 500mA;
- Voltage output: 24V. DC (18-33V), max 40mA; short circuit protection.
- Input Signal: (1)Analogue input (optional): 4...20 mA; galvanically isolated; 250Ω inherent resistance; rising characteristic
(2)Digital input (BE1...B4): 4 optocoupler, potential free; freely configurable
- Output Signal: (1)Analogue output (optional): 0/4...20 mA for position signal; load max. 500Ω; galvanical isolated; short circuit proof; rising or falling characteristic;
(2)Digital output: Standard 4 (BA1...4) optional 7 (BA 5...7) or 8 (BA5...8) potential free, gold coated relay contacts,galvanical isolated, freely configurable; max. 50V,overload proof; I_{max}. < 150 mA; I_{min}. > 1 mA;
- Strokes range: Minimum 1 circle for Multi-turn.
- Torque tripping: 40%...100% adjustable,step 5%
- Output Speed: 40%...100% adjustable,step5%
- Accuracy: (1)Multi-turn (stroke≥1 circle) ≤±0.5%
(2)Part-turn ≤±0.5%
(3)Linear (stroke≥25mm) ≤±0.5%
- Dead zone: 1% (0.5...10% adjustable)
- Enclosure protection: IP67 (IP68 optional)
- Explosive protection: ExdIIBT4
- Ambient conditions: (1)Temperature: On-off duty, MOE series, - 25 °C to +70 °C
Modulating duty,MME series, -25 °C to +60 °C
Separate type, MME series, -40°C to +85 °C
(2)Humidity: ≤95%
(3)Air media: without corrosive, flammable or explosive gas
- Anticondensation: Anti condensation heater inside
- CE standard: (1) EN 61000-6-4: 2007, EN 61000-6-2: 2005
(2) EN 61000-3-2:2006 +A1: 2009+A2: 2009, EN 61000-3-3: 2008
(3) EN 60204-1:2006+A1:2009
- Fatigue strength: 0.75g within 5...200Hz; extended strength proof with 5...150Hz,2g sinusoidal



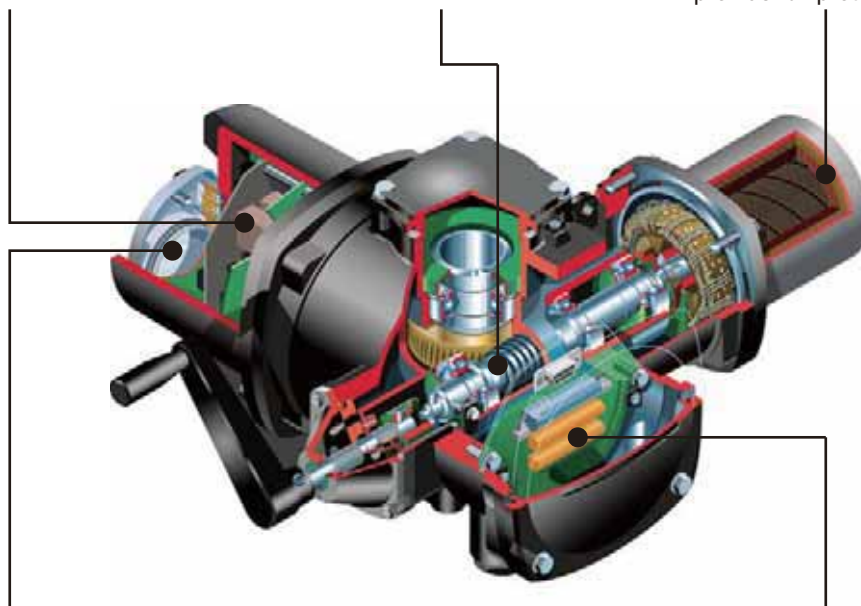
MME/MOE Intelligent Electric Actuators

Main Components

ABB advanced frequency converter and electronics technologies.

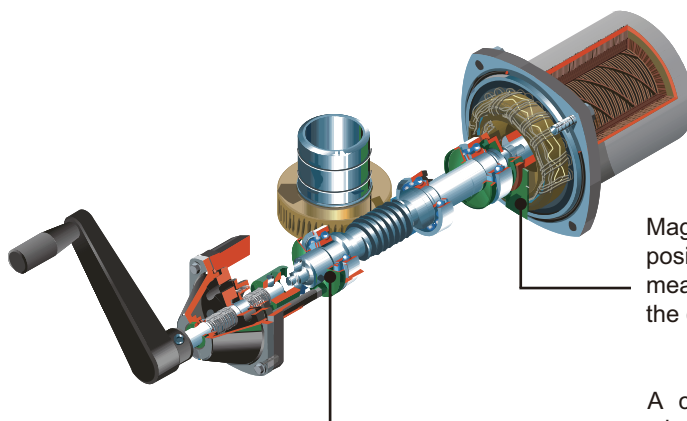
The gear unit provides high efficiency, maintenance free operation.

Motor in insulation class F. Measuring and monitoring of both current and temperature provide full protection.



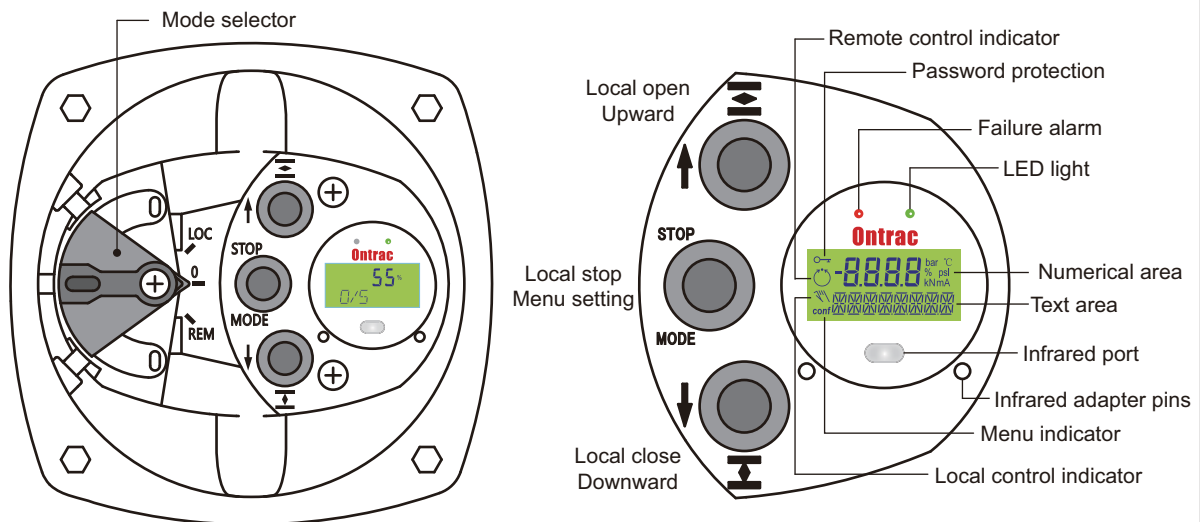
Introduction of efficient Man-machine interface simplifies commissioning with user guidance.

Motor and control cables are connected by using screw-type terminals or PCB plug-in terminals to ensure reliable electrical contact.



Magnetic angle sensors for contact-less position detection, are operated by means of the signaling gear to detect the current valve position and torque.

A centrifugal lock prevents the hand wheel from engaging before the motor has come to a standstill.



Menu Group

■ SETUP

- travel dependent
- torque dependent
- valve control speed
- switch off mode
- switch off position
- end position
- limit value

■ PARAMETER

- inchmode
- holdmode
- remote digital control
- increasing effective torque

■ SERVICE

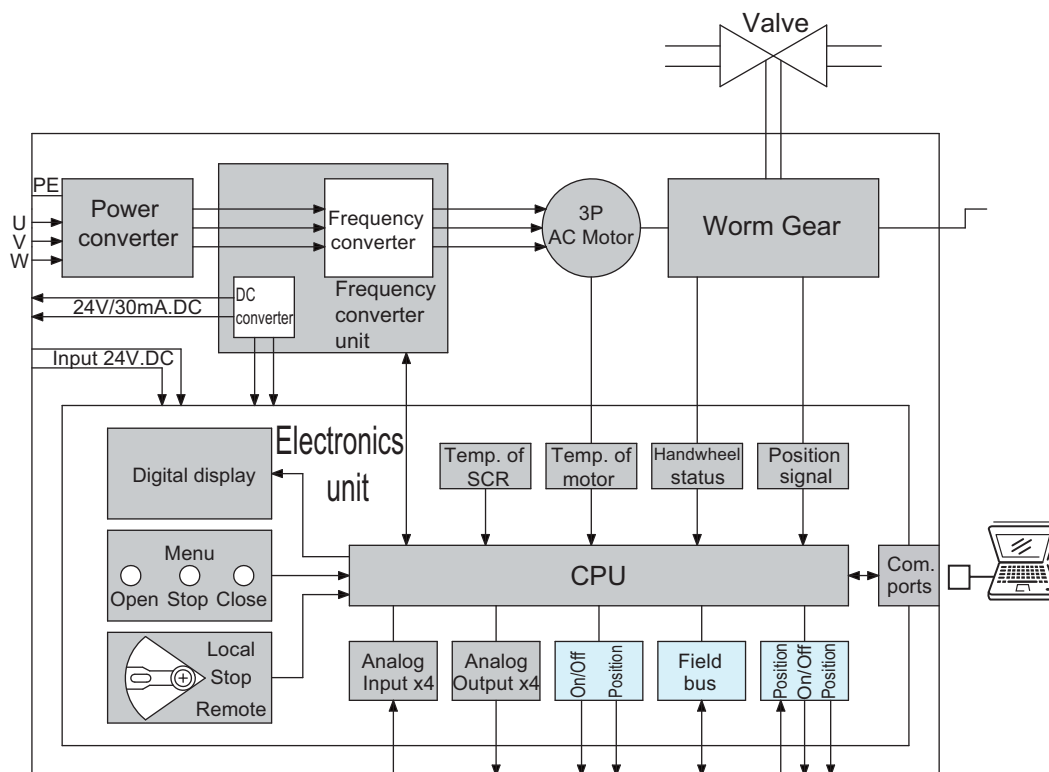
- 4mA input calibration
- 20mA input calibration
- 4mA output calibration
- 20mA output calibration
- delete current range
- dead-zone adjustment
- output polarity setting
- analog signal range
- ESD target position
- reset
- SELF-DIAGNOSIS
- error info.
- alarm info.

■ SYSTEM INFO.

- travel time
- maximum torque
- software version
- hardware version
- actuator model
- phases of AC power
- extended func. board
- temperature
- valve position
- PASSWORD PROTECTION
- INPUT PORTS SETTING
- OUTPUT PORTS SETTING

MME/MOE Intelligent Electric Actuators

Functional Block



Note: the blocks in light blue are optional, and order no. are 385, 386 and 387 respectively.

BE1 ~ BE4 digital input ports can be set from "01" to "10" function. See table below.

Menu
Open
Close
Shutdown
Alarm reset
Allow to open
Allow to close
Local lock
Analog/ON/OFF control switch
ESD
Fast run

Input Ports
BE1
BE2
BE3
BE4

Status output
BA1
BA2
BA3
BA4
BA5
BA6
BA7
BA8

BA1 ~ BA8 digital output ports can set from "01" to "20" function. See table right.

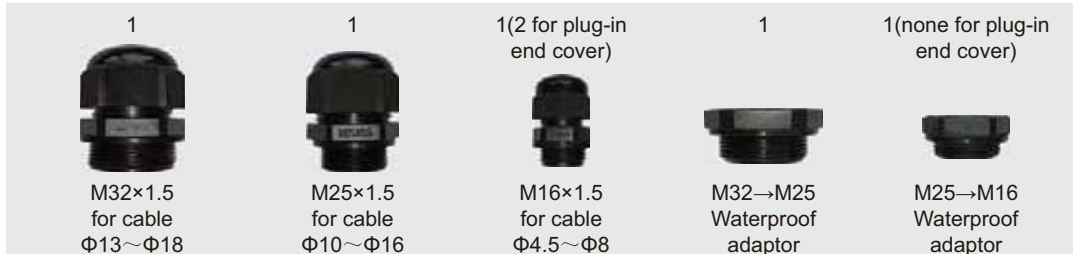
Basic: Four digital output ports.
 385: Four digital output ports and one analog output for valve position.
 386: Fieldbus system, Profibus-DP or MODBUS.
 387: Analog input and output of valve position and three digital output.

Menu
Ready to run
Failure alarm
Open to end position
Closed to end position
Exceeded torque in OPEN
Exceeded torque in CLOSED
Intermediate position 1
Intermediate position 2
Remote control
Local control
Continuous signal
Pulse signal
OPEN (pulse signal)
end (continuous signal)
CLOSED (pulse signal)
end (continuous signal)
Analog/digital control
"OPEN" indication
"CLOSED" indication
ESD indication
Manual/automatic state
Alarm if analog failure

MME/MOE Intelligent Electric Actuators

Electrical Wiring

Waterproof cable connector is provided in the attached zipper bag, protection class is IP67.
There are several connectors available:



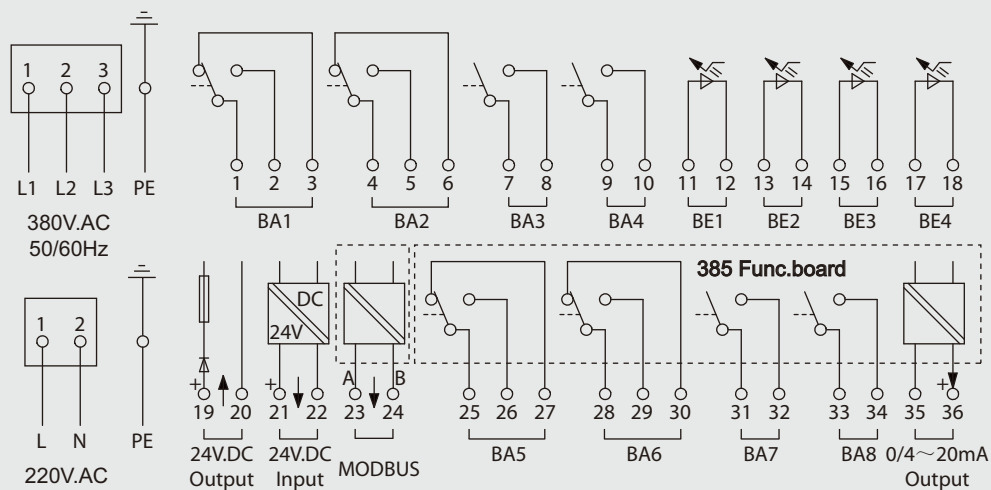
Note 1: Exclusively use same protection level cable connector with Ontrac actuator in order to ensure stated protection level.

Note 2: All of the signal cable must be shielded.

Note 3: cable connecting separate type actuators should not exceed more than 15 meters.

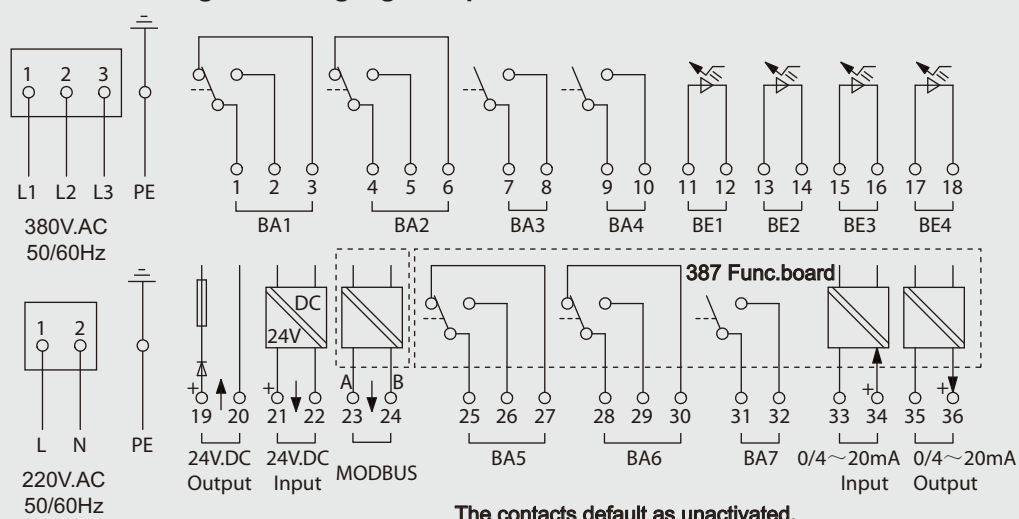
Note 4: After wiring, please use the plastic cover in attached zipper bag to screw unused cable hole.

Electrical wiring for digital signal input:

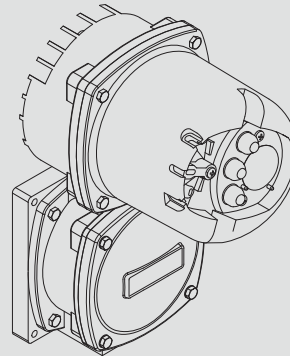
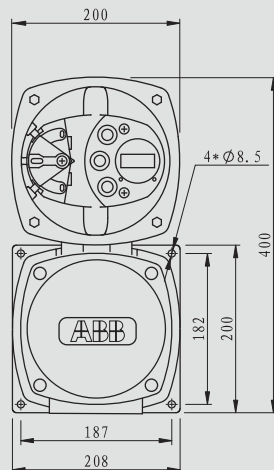


The contacts default as unactivated.

Electrical wiring for analog signal input:

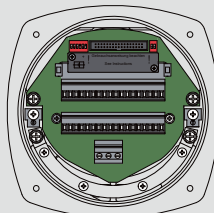


The contacts default as unactivated.

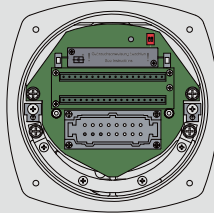


In some strong vibration or super high/low temperature fields, Ontrac split actuator is recommended, to ensure the normal operation.

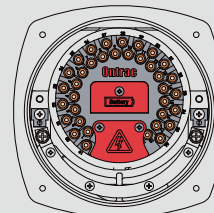
Standard terminals



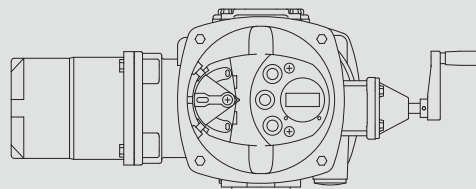
Plug-in terminals



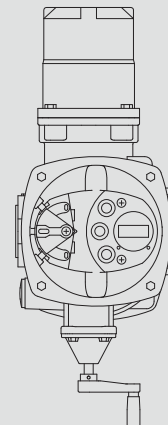
Screw terminals

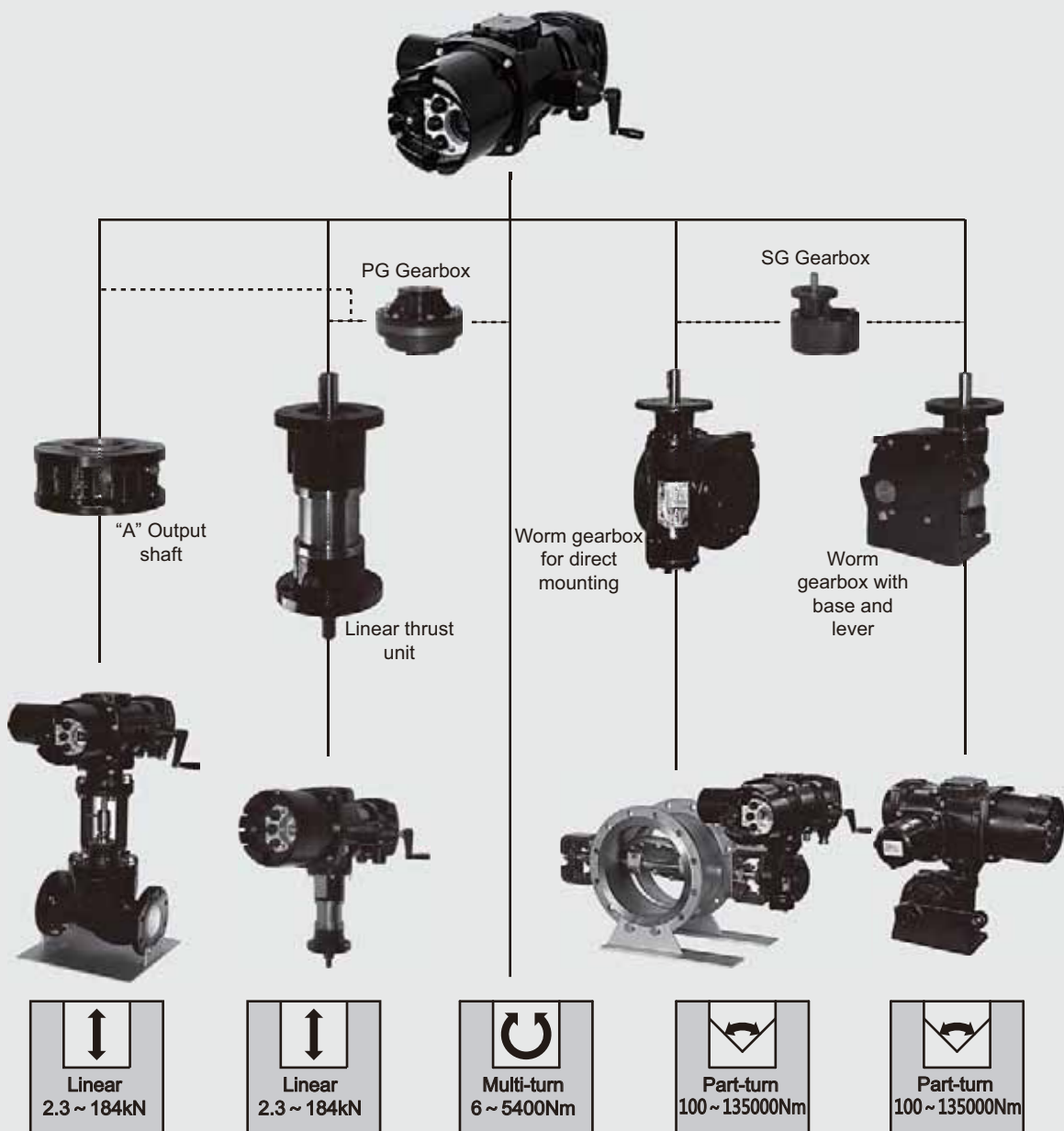


We offer three terminals connections as the following pictures. Standard terminals connection is fast and reliable, plug-in terminals easy to maintain, and screw terminals for explosion-proof products.



For different installation sites, Ontrac' operation panel is designed to be rotatable four directions. See the pictures above. When actuator is side-mounted, the operation panel still faces to the operator.





According to the mechanical interfaces, Ontrac electric actuators are divided into three categories:

- 1 Multi-turn:** Actuator outputs at least 360° of angular displacement and torque. If equipped with A type output shaft can realize a linear thrust motion.
- 2 Linear:** Equipped with a linear thrust, actuator can output linear displacement and thrust, and valve stem directly connected to the linear thrust rod.
- 3 Part-turn:** Equipped with worm gear, actuator can output 90° of angular displacement and torque. Part-turn are divided into two categories according to their installation.
 - 3.1 Direct mounting:** Worm gearbox is connected with the flange and output shaft hole.
 - 3.2 With base and lever:** Worm gearbox is mounted on the base, and valve is driven by lever and rod.

MME/MOE Intelligent Electric Actuators

Technical Data

Multi-turn Actuators (Modulating)

Combination	Tripping torque (Nm)	Switch-off torque (Nm)	Speed (r.p.m)	Rising valve stem (mm)	Flange (ISO5210)	Power (kW)	Current (A)	Fuse (A)
MME806	25	20...50	35	38	F10	0.24	0.9	3×16A
MME808	40	32...80	35	38	F10	0.48	1.8	3×16A
MME812	75	60...150	35	38	F10	0.85	2.9	3×16A
MME825	150	120...300	35	55	F14	1.71	4.75	3×16A
MME850	300	240...600	35	55	F14	2.72	7.6	3×16A
MME808+PG80/4	150	120...300	8.8	38	F10/F14	0.48	1.8	3×16A
MME808+PG80/5	180	144...360	7	38	F10/F14	0.48	1.8	3×16A
MME812+PG80/4	270	216...540	8.8	38	F10/F14	0.85	2.9	3×16A
MME812+PG80/5	338	270...675	7	38	F10/F14	0.85	2.9	3×16A
MME890	600	480...1200	35	68	F16	6.7	10.3	3×20A
MME825+PG80/5	675	540...1350	7	55	F10/F14	1.71	4.75	3×16A
MME850+PGZ/4	1080	864...2160	8.8	65	F25	2.72	7.6	3×16A
MME890+PGZ/3	1620	1296...3240	11.7	75	F25	6.7	10.3	3×20A
MME890+PGZ/6	3240	2592...6480	5.8	80	F30	6.7	10.3	3×20A

Multi-turn Actuators (On-Off)

Combination	Switch-off torque (Nm)	Speed (r.p.m)	Rising valve stem (mm)	Flange (ISO5210)	Power (kW)	Current (A)	Fuse (A)
MOE706S	6...15	180	38	F10	0.5	1.8	3×16A
MOE706R	10...25	92	38	F10	0.5	1.8	3×16A
MOE706M	25...50	35	38	F10	0.24	0.9	3×16A
MOE708S	12...30	180	38	F10	1	3.5	3×16A
MOE708R	20...50	92	38	F10	1	3.5	3×16A
MOE708M	32...80	35	38	F10	0.48	1.8	3×16A
MOE712S	24...60	180	38	F10	1.76	4.8	3×16A
MOE712R	40...100	92	38	F10	1.76	4.8	3×16A
MOE712M	60...150	35	38	F10	0.85	2.9	3×16A
MOE725S	50...125	180	55	F14	3.52	8	3×16A
MOE708S+PG80/5	51...127	36	38	F10/F14	1	3.5	3×16A
MOE708R+PG80/4	68...170	23	38	F10/F14	1	3.5	3×16A
MOE725R	80...200	92	55	F14	3.52	8	3×16A
MOE708M+PG80/4	82...204	8.8	38	F10/F14	0.48	1.8	3×16A
MOE712S+PG80/4	82...204	45	38	F10/F14	1.76	4.8	3×16A
MOE708R+PG80/5	85...212	18.4	38	F10/F14	1	3.5	3×16A
MOE725M	120...300	35	55	F14	1.71	4.75	3×16A
MOE708M+PG80/5	102...255	7	38	F10/F14	0.48	1.8	3×16A
MOE712S+PG80/5	144...360	36	38	F10/F14	1.76	4.8	3×16A

MME/MOE Intelligent Electric Actuators

Technical Data

Multi-turn Actuators (On-Off cont.)

Combination	Switch-off torque (Nm)	Max.Speed (r.p.m)	Rising valve stem (mm)	Flange (ISO5210)	Power (kW)	Current (A)	Fuse (A)
MOE750R	120...300	92	55	F14	4.1	12	3×16A
MOE712R+PG80/4	136...340	23	38	F10/F14	1.76	4.8	3×16A
MOE750P	216...400	72	55	F14	4.1	12	3×16A
MOE712M+PG80/4	163...540	8.8	38	F10/F14	0.85	2.9	3×16A
MOE712R+PG80/5	170...425	18.4	38	F10/F14	1.76	4.8	3×16A
MOE725S+PG80/4	270...675	45	55	F10/F14	3.52	8	3×16A
MOE712M+PG80/5	204...510	7	38	F10/F14	0.85	2.9	3×16A
MOE725S+PG80/5	212...531	36	55	F10/F14	3.52	8	3×16A
MOE725R+PG80/4	272...680	23	55	F10/F14	3.52	8	3×16A
MOE790M	480...1200	35	68	F16	6.7	10.3	3× 20A
MOE725R+PG80/5	340...850	18.4	55	F10/F14	3.52	8	3×16A
MOE750R+PGZ/4	432...1080	23	65	F25	4.1	12	3×16A
MOE750P+PGZ/4	576...1440	18	65	F25	4.1	12	3×16A
MOE750R+PGZ/6	648...1620	15.3	75	F25	4.1	12	3×16A
MOE750P+PGZ/6	864...2000	12	75	F25	4.1	12	3×16A
MOE790R+PGZ/8	1368...3420	11.5	80	F30	7.5	14.5	3×20A
MOE790R+PGZ/12	2160...5400	7.5	80	F30	7.5	14.5	3×20A

Note 1: All actuators are self-locking except MOE7...S.

Note 2: Switch-off torque 10% variations due to mechanical efficiency alteration, 40% to 100% adjustable.

Equipped with "A" output shaft, actuator can drive valve rod to have a linear motion. All axial force is sustained by "A" output shaft. The following table is the transmission factor for stem trapezoidal thread.



Valve transmission factors (Output torque=Axial forces*Factor)

Thread size	Factor	Thread size	Factor	Thread size	Factor	Thread size	Factor
Tr18×4	0.00190	Tr32×6	0.00323	Tr46×8	0.00457	Tr70×10	0.00666
Tr20×4	0.00205	Tr34×6	0.00339	Tr48×8	0.00472	Tr75×10	0.00704
Tr22×5	0.00234	Tr36×6	0.00354	Tr50×8	0.00487	Tr80×10	0.00741
Tr24×5	0.00250	Tr38×6	0.00369	Tr52×8	0.00502	Tr85×12	0.00806
Tr26×5	0.00265	Tr40×6	0.00384	Tr55×8	0.00525	Tr90×12	0.00844
Tr28×5	0.00279	Tr42×6	0.00399	Tr60×8	0.00563	Tr95×12	0.00882
Tr30×6	0.00309	Tr44×8	0.00441	Tr65×10	0.00628	Tr100×12	0.00920

Note: For inside screw non-rising gate valve, factors will be multiplied by 1.5, and the sluice, factors be multiplied by 1.25, to ensure that the thrust 3 times larger than the weight of valve.

MME/MOE Intelligent Electric Actuators

Technical Data

Linear Actuator (Modulating)

Combination	Modulating force(N)	Switch-off force(N)	Factory force setting	40% Switch-off force (N)	Full speed	Max.stroke (mm)
MME806+LE12.1	5768	11536	100%	4614	2.92mm/s	50/100/200/400/500
MME808+LE25.1	11536	23072	100%	9229	2.92mm/s	50/100/200/400/500
MME812+LE50.1	18749	37498	100%	14999	3.5mm/s	63/100/200/400
MME825+LE70.1	32051	64102	100%	25641	4.08mm/s	100/160/320/400
MME850+LE100.1	50000	100000	100%	41025	4.08mm/s	100/160/320/400
MME825+PG80/4+LE200.1	92391	184782	100%	73913	1.17mm/s	100/200/400/500

Linear Actuator (On-Off)

Combination	Switch-off force(N)	Factory force setting	40% Switch-off force (N)	Full speed	Max.stroke (mm)
MOE706S+LE12.1	5768	100%	2307	15mm/s	50/100/200/400/500
MOE706R+LE12.1	9613	100%	3845	7.67mm/s	50/100/200/400/500
MOE706M+LE12.1	11536	100%	4614	2.92mm/s	50/100/200/400/500
MOE708S+LE12.1	11536	100%	4614	15mm/s	50/100/200/400/500
MOE708R+LE25.1	19227	100%	7691	7.67mm/s	50/100/200/400/500
MOE708M+LE25.1	23072	100%	9229	2.92mm/s	50/100/200/400/500
MOE712S+LE25.1	23072	100%	9229	15mm/s	50/100/200/400/500
MOE712R+LE50.1	31248	100%	12499	9.2mm/s	63/100/200/400
MOE712M+LE50.1	37498	100%	14999	3.5mm/s	63/100/200/400
MOE725R+LE70.1	51282	100%	20513	10.73mm/s	100/160/320/400
MOE725M+LE70.1	64102	100%	25641	4.08mm/s	100/160/320/400
MOE750R+LE70.1	69230	90%	30769	10.73mm/s	100/160/320/400
MOE750R+LE100.1	76922	100%	30769	10.73mm/s	100/160/320/400
MOE750P+LE100.1	100000	100%	41025	8.4mm/s	100/160/320/400
MOE725R+PG80/4+LE200.1	147826	100%	59130	3.07mm/s	100/200/400/500
MOE725M+PG80/4+LE200.1	184782	100%	73913	1.17mm/s	100/200/400/500

Note 1: Switch-off force and speed adjustable, from 40% to 100%, at 5% step.

Note 2: Linear units are robust, entirely encapsulated unit.

Note 3: If listed in the above tables do not meet your requirements, we can provide customized products.



MME/MOE Intelligent Electric Actuators

Technical Data

Part-turn Actuators (Modulating)

Combination	Modulating torque (Nm)	Switch-off torque (Nm)	Factory torque setting	40% torque setting (Nm)	Whole stroke time
MME806+ASNG50	248	495	100%	198	22s
MME808+ASNG100	485	970	70%	554	30s
MME808+ASNG200	743	1485	100%	594	33s
MME812+ASNG200	966	1931	65%	1188	33s
MME808+SG65/2+ASNG300	2106	2633	100%	1054	60s
MME812+ASNG300	2218	2772	100%	1109	30s
MME808+SG65/3+ASNG300	2400	3000	80%	1580	90s
MME808+SG65/3+ASNG600	3160	3950	100%	1580	90s
MME812+SG65/2+ASNG600	4214	5267	100%	2107	60s
MME808+SG65/4+ASNG600	4214	5267	100%	2107	120s
MME825+ASNG600	4620	5775	100%	2310	30s
MME812+SG65/3+ASNG600	4800	6000	80%	3160	90s
MME850+ASNG1000	7392	9240	100%	3696	30s
MME825+SG65/2+ASNG1000	8000	10000	95%	4389	60s
MME812+SG65/4+ASNG1000	8000	10000	95%	4214	120s
MME812+SG80/6+ASNG2000	13406	16758	100%	6703	180s
MME825+SG80/3+ASNG2000	13965	17456	100%	6983	90s
MME850+SG80/2+ASNG2000	14896	18620	100%	7448	60s
MME890+ASNG2000	15680	19600	100%	7840	30s
MME850+SG80/3+ASNG3500	20748	25935	100%	10374	84s
MME825+SG80/5+ASNG3500	21613	27016	100%	10806	140s
MME825+SG80/6+ASNG3500	25935	32419	100%	12967	168s
MME850+SG80/4+ASNG3500	27664	34580	100%	13832	112s
MME850+SG80/5+ASNG6500	34048	42560	100%	17024	138s
MME850+SG80/6+ASNG6500	40858	51072	100%	20429	165s
MME890+SG80/4+ASNG6500	52000	65000	100%	26240	110s

Part-turn Actuators (On-Off)

Combinaiton	Switch-off torque (Nm)	Factory torque setting	40% torque setting (Nm)	Whole stroke time
MOE706S+ASNG50	248	100%	99	5s
MOE706R+ASNG50	413	100%	165	9s
MOE706M+ASNG50	495	100%	198	22s
MOE708R+ASNG50	495	100%	330	9s
MOE708S+ASNG50	495	100%	198	5s
MOE708M+ASNG50	693	100%	277	6s

MME/MOE Intelligent Electric Actuators

Technical Data

Part-turn Actuators (On-Off cont.)

Combination	Switch-off torque (Nm)	Factory torque setting	40% torque torque (Nm)	Whole stroke time
MOE708M+ASNG100	970	70%	554	30s
MOE712S+ASNG100	970	70%	554	6s
MOE708R+ASNG100	982	85%	462	12s
MOE708R+ASNG200	1238	100%	495	13s
MOE708M+ASNG200	1485	100%	594	33s
MOE712S+ASNG200	1485	100%	594	7s
MOE712M+ASNG200	1931	65%	1188	33s
MOE712R+ASNG200	1980	80%	990	13s
MOE725S+ASNG200	2000	65%	1238	7s
MOE712R+ASNG300	2310	100%	924	12s
MOE708S+SG65/4+ASNG300	2633	100%	1053	24s
MOE712M+ASNG300	2772	100%	1109	30s
MOE708S+SG65/5+ASNG300	2963	90%	1317	30s
MOE712S+SG65/3+ASNG300	3000	80%	1580	18s
MOE708R+SG65/4+ASNG600	4389	100%	1756	46s
MOE712R+SG65/2+ASNG600	4389	100%	1756	23s
MOE725R+ASNG600	4620	100%	1848	12s
MOE712M+SG65/2+ASNG600	5267	100%	2107	60s
MOE725M+ASNG600	5775	100%	2310	30s
MOE708R+SG65/6+ASNG600	5925	90%	2633	69s
MOE712S+SG65/5+ASNG600	5925	90%	2633	30s
MOE725R+SG65/2+ASNG600	6000	70%	3511	23s
MOE712R+SG65/3+ASNG1000	6584	100%	2633	35s
MOE712S+SG65/6+ASNG1000	7900	100%	3160	35s
MOE725S+SG65/3+ASNG1000	8229	100%	3292	18s
MOE712R+SG65/4+ASNG1000	8778	100%	3511	46s
MOE750M+ASNG1000	9240	100%	3696	30s
MOE712R+SG65/5+ASNG1000	9875	90%	4389	58s
MOE725S+SG65/4+ASNG1000	9875	90%	4389	24s
MOE712R+SG80/6+ASNG2000	13965	100%	5586	69s
MOE725R+SG80/3+ASNG2000	13965	100%	5586	35s
MOE712R+SG80/7+ASNG2000	16293	100%	6517	80s
MOE725R+SG80/4+ASNG2000	18620	100%	7448	46s
MOE725S+SG80/7+ASNG2000	20000	100%	8146	41s
MOE712R+SG80/9+ASNG2000	20000	100%	8379	103s
MOE725S+SG80/12+ASNG3500	32419	100%	12968	65s
MOE725R+SG80/8+ASNG3500	34580	100%	13832	85s
MOE750P+SG80/5+ASNG6500	42560	100%	17024	67s

MME/MOE Intelligent Electric Actuators

Technical Data

Part-turn Actuators (On-Off cont.)

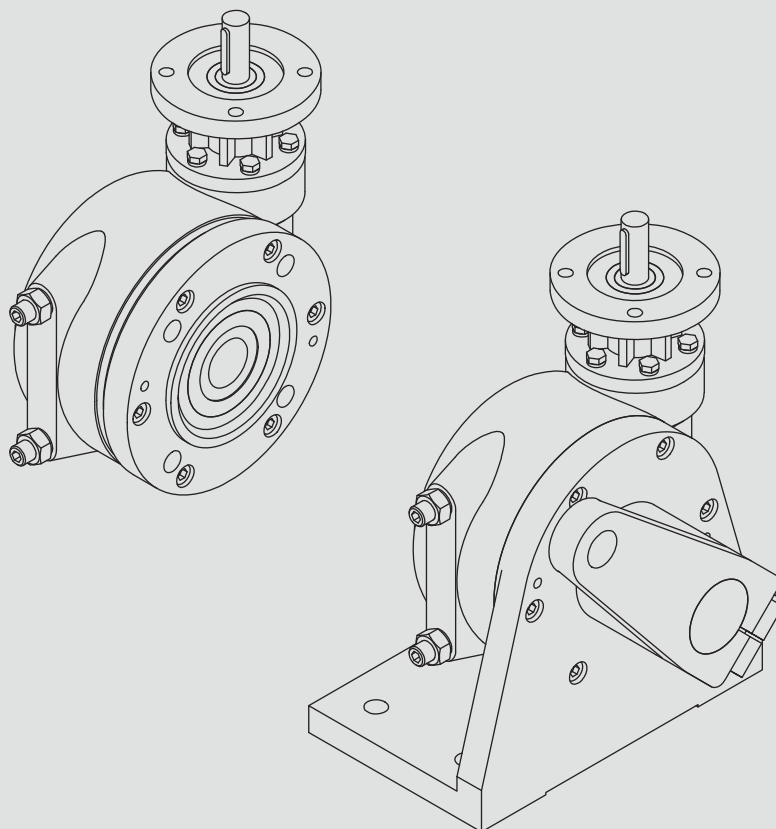
Combination	Switch-off torque (Nm)	Factory torque setting	40% torque setting (Nm)	Whole stroke time
MOE725R+SG80/11+ASNG6500	46816	100%	18726	115s
MOE750P+SG80/6+ASNG6500	51072	100%	20429	80s
MOE790R+SG80/6+ASNG6500	63800	100%	25536	63s
MOE750P+SG80/8+ASNG6500	65000	100%	27238	107s
MOE790R+SG80/7+ASNG13500	95000	100%	38000	125s
MOE790R+SG80/10+ASNG13500	135000	100%	54400	178s

Note 1: All products stroke can be adjusted within a range of 85° to 95° (mechanical limit).

Note 2: Switch-off variations of 10% due to mechanical efficiency alteration, and switch-off torque adjustable from 40% to 100%.

Note 3: Speed adjustable from 40% to 100%.

Note 4: If listed in the above table does not meet your requirements, we can provide customized products.



Ontrac[®]

Ontrac Actuator Keeping Your Production Line **On Track**

Chemical



Power Generation



Refining



Water
Treatment



Food &
Beverage



Ontrac Instrument (Shanghai) Co.,Ltd.

Add: 3F, 2 Suite, 278 Jinhu Road, Pudong, Shanghai, China

Tel: +86 21 5032 3029

Fax: +86 21 5032 3027

Web: www.ontracinstrument.com (In English)

www.ontracactuator.com (In Chinese)

Under ABB Trademark in Chinese Market