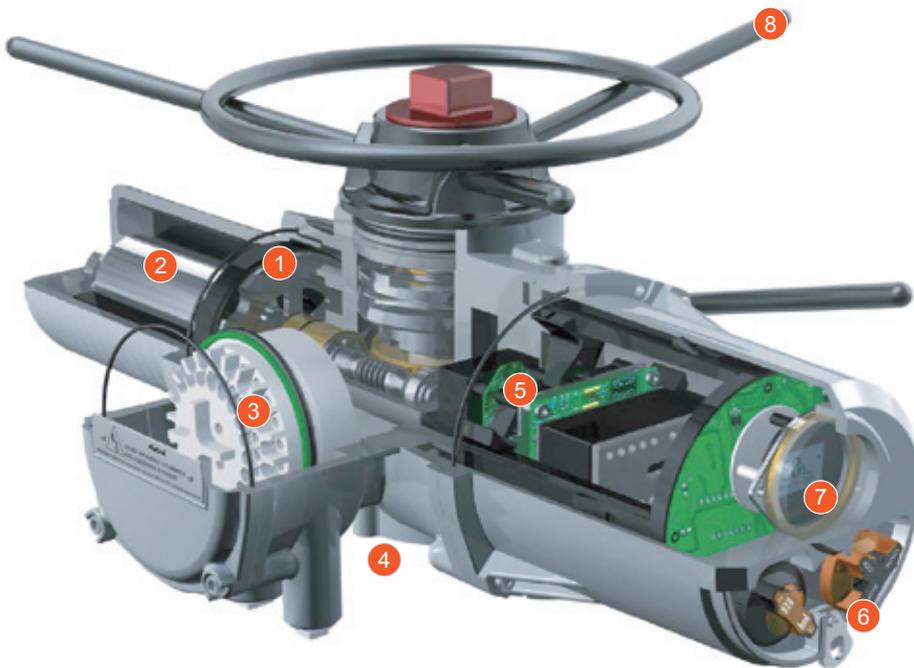


## NTI / NTIT INTERNAL STRUCTURE



### 1 Body

As the handwheel and center column are connected and rotated 1:1, the manual operation time is shortened, which is useful during urgent operations. Motor shafts and worm shafts are separated to allow quick and easy replacement. Worm gears and worm shafts are immersed in oil so that they are not affected by temperature changes.

### 2 Motor

The motor is a class F insulation grade, designed using special software to enable the product to operate normally under worst-case conditions. When the actuator is stop, the motor that outputs high torque with low inertia reaches maximum torque immediately upon starting and minimizes overrun. In addition, the built-in temperature sensor prevents tripping and fire damage if the motor overheats at a certain temperature (132°C).

### 3 Terminal Block

The terminal block consists of 48 connecting elements in a screw type. To protect the internal electronic components when the terminal block cover is opened for field wiring, it is designed as an independent double sealing structure.

### 4 Base

A thrust bearing on the base reduces all frictional forces to ensure the body is not affected. The NTI-06 and lower models and the NTIT series are equipped with a lubed, detachable type A base that allows the product to be removed without changing the position of the valve. The base of NTI-07 and above models is located inside the product. Therefore, the bush can easily be separated and processed.

### 5 PCB

The hole incremental encoder has been introduced to measure valve position, thereby improving accuracy of the existing potentiometer. This optical encoder is optional and accurately

### NTI Series

It is used for multi-turn valves, e.g. globe valve, gate valve, and water gate and can also be used for part-turn valves in combination with a gear box. It is a smart product which has 30-3500Nm torque range.

### NTIT Series

The product is for ball valves, butterfly valves, and other part-turn valves. Torque range is 100-2000Nm, with perfect functionality and reliable quality.

records valve position without a battery when the power is off.

### 6 Local Control

The local control switch and operation switch are magnetic switches. Since moisture penetration is prevented through tight sealing, the product is controlled by the inner magnetic reed switch instead of fastening the switch shaft through the cover.

### 7 Display Window

The valve position change is indicated in the display window in 1% increments. The receiver is mounted in a sealed display window so you can diagnose and set the product without opening the cover with the infrared remote control. The operating distance of this remote control is 0.75M.

### 8 Manual Operation

The product can be operated manually in an emergency using the handwheel. Handwheel design is adopted as it is suitable for efficient manual operation and is designed to facilitate manual operation using the 'Hammer Blow effect' with a half-wheel clearance. It also includes a manual/automatic clutch, which is a locking device for safe operation even when the motor is running.

## NTIR INTERNAL STRUCTURE



### NTIR Series

It is used for small part-turn valves and has a torque range of 50-500Nm, which features a sophisticated design and competitive price.

#### 1 Display Window

The Dot Matrix LCD with a blue background shows the status screen clearly.

#### 2 Main board

With the application of reliable SOC systems, the product detects faults and checks self-protection and information based on the circuit design that includes all functions.

#### 3 Valve position control

A complete hole encoder operated by the main shaft precisely measures the valve position.

#### 4 Button

Set various functions using four kinds of buttons, including control, opening, and closing.

#### 5 Motor

High-power low inertia type F squirrel motor features enamel insulation and two temperature sensing switches.

#### 6 Power board

The power board is equipped with electronic parts used for motor power supply and all other parts.

#### 7 Manual operation

The handwheel used when the power supply is cut off is equipped with the NTIR-200 lever type or NTIR-500 circular type, depending on motor capacity, a clutch is included which is used when switching to manual operation.

#### 8 Worm and Worm shaft

The two-stage worm gear with high gear ratio has low noise of up to 50dB and self-locking functionality.

#### 9 Base

According to ISO 5211, bushings can be processed according to user requirements.

#### 10 Terminal block

The double-sealing terminal block protects internal electronic components from external hazardous gases during field wiring.

## NTI PERFORMANCE DATA



### NTI SERIES (380V / 3Ph)

Model	Flange (ISO 5210)	RPM		Torque Nm	Rated Current (A)		Motor Rated Power(KW)		Weight kg
		50Hz	60Hz		50Hz	60Hz	50Hz	60Hz	
NTI-01	F10	18	21	45	1.47	1.53	0.47	0.55	32
		24	29	45	1.48	1.55	0.50	0.56	32
		36	43	35	1.50	1.57	0.51	0.57	32
		48	57	35	1.60	1.60	0.52	0.58	32
		72	86	35	1.90	1.86	0.85	0.86	32
		96	115	30	2.00	2.05	0.87	0.89	32
NTI-02	F10	18	21	80	1.66	1.70	0.53	0.60	32
		24	29	80	1.70	1.73	0.54	0.61	32
		36	43	80	1.72	1.77	0.55	0.63	32
		48	57	80	1.75	1.82	0.55	0.64	32
		72	86	45	2.20	2.30	0.92	1.00	32
		96	115	40	2.30	2.35	0.93	1.06	32
NTI-03	F10	18	21	110	1.86	1.85	0.60	0.63	32
		24	29	110	1.95	1.92	0.62	0.65	32
NTI-04	F14	18	21	250	3.90	3.95	1.75	1.82	52
		24	29	250	4.10	4.15	1.80	1.85	52
		36	43	205	4.20	4.24	1.84	1.95	52
		48	57	205	4.30	4.36	1.90	1.97	52
		72	86	160	3.00	3.50	1.70	1.80	52
		96	115	145	3.10	3.60	1.72	1.85	52
		144	173	100	5.20	5.40	2.50	2.56	52
		18	21	450	5.40	5.50	1.96	2.02	52
NTI-05	F14	24	29	450	5.50	5.60	2.00	2.09	52
		36	43	300	5.60	5.80	2.05	2.11	52
		48	57	240	5.90	6.10	2.12	2.20	52
		72	86	240	5.70	6.00	2.25	2.48	52
		96	115	230	6.60	8.00	2.60	3.30	52
		144	173	150	6.30	6.60	2.90	3.00	52
		18	21	650	7.20	7.50	3.00	3.20	75
		24	29	650	7.60	7.80	3.20	3.40	75
NTI-06	F16	36	43	542	7.74	8.00	3.32	3.50	75
		48	57	450	13.50	14.60	5.06	5.12	75
		72	86	450	12.50	12.80	4.92	4.90	75
		96	115	365	13.20	13.50	4.98	4.91	75
		144	173	270	13.00	14.50	4.96	5.11	75
		18	21	1100	11.00	11.50	5.20	5.30	200
		24	29	1100	12.00	12.60	5.30	5.40	200
		36	43	780	12.30	13.00	5.35	5.46	200
NTI-07	F25	48	57	680	15.80	16.50	7.50	8.20	200
		72	86	550	16.60	17.30	8.10	8.60	200
		96	115	550	17.80	18.20	8.70	9.10	200
		18	21	1500	10.50	11.50	5.70	5.90	230
		24	29	1500	12.60	13.80	6.00	6.80	230
		36	43	1300	13.80	15.00	6.80	7.30	230
NTI-08	F30	48	57	1000	19.00	20.00	9.48	9.67	230
		72	86	800	19.50	21.00	9.60	9.88	230
		96	115	745	21.00	22.00	9.95	10.00	230
		18	21	2000	18.50	19.50	8.50	9.50	230
		24	29	2000	20.00	21.00	9.60	9.80	230
		36	43	1700	22.00	23.00	10.00	11.00	230
NTI-09	F30	48	57	1350	21.00	22.00	9.70	10.00	230
		72	86	1100	23.00	24.00	11.00	11.20	230
		96	115	1000	25.00	26.00	11.60	12.20	230
		24	29	2500	25.00	26.00	13.00	12.60	230
		36	43	2500	26.00	26.50	13.60	12.80	230
		NTI-10	F30	24	21	3000	29.00	33.00	14.00
NTI-10G	F30	18	21	3500	30.00	34.00	14.20	14.90	230
		24	29	3500	32.00	36.00	14.50	15.80	230
		36	43	2000	29.00	32.00	13.80	14.20	230
		48	57	1600	31.00	33.00	15.00	16.80	230
		72	86	1400	32.00	34.00	15.60	17.30	230
		96	115	1200	33.00	35.00	16.20	18.00	230

## NTI PERFORMANCE DATA

### NTIM SERIES (380V / 3Ph)

Model	RPM		Torque (Nm)		Rated Current (A)		Motor Rated Power (KW)		Weight kg	
	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz		
NTIM-02	F10	18	21	50	50	1.46	1.52	0.46	0.49	32
		24	29	50	50	1.50	1.58	0.48	0.52	32
		36	43	50	50	1.53	1.62	0.49	0.54	32
		48	57	40	40	1.60	1.71	0.50	0.58	32
		72	86	25	25	2.00	2.10	0.78	0.92	32
NTIM-03	F10	18	21	90	90	1.65	1.62	0.55	0.56	32
		24	29	90	90	1.68	1.75	0.57	0.62	32
NTIM-04	F14	18	21	180	180	3.50	3.80	1.82	1.83	52
		24	29	180	180	3.75	3.96	1.88	1.86	52
		36	43	125	125	3.90	4.17	1.92	1.92	52
		48	57	125	125	4.00	4.25	1.96	1.98	52
		72	86	80	80	3.00	3.30	1.80	1.78	52
NTIM-05	F14	18	21	360	360	4.00	4.10	1.95	1.90	52
		24	29	360	360	4.10	4.16	2.06	1.98	52
		36	43	240	240	4.18	4.23	2.12	2.04	52
		48	57	200	200	4.26	4.41	2.24	2.08	52
NTIM-06	F16	18	21	600	480	7.80	6.20	3.30	3.06	75
		24	29	600	480	8.30	6.40	3.34	3.15	75
		36	43	300	300	6.50	6.80	3.36	3.24	75
		48	57	260	260	6.30	6.60	3.34	3.32	75
		72	86	220	220	6.50	6.90	3.45	3.49	75

### NTI SERIES (220V / 1Ph)

Model	RPM		Torque	Rated Current (A)		Actuator Rated Power (KW)		Weight kg	
	50Hz	60Hz	Nm	50Hz	60Hz	50Hz	60Hz		
NTI-03	F10	18	21	65	2.30	2.10	0.35	0.37	32
		24	29	60	2.30	2.10	0.35	0.37	32
NTI-04	F14	18	21	165	6.70	7.50	0.90	1.10	52
		24	29	140	6.70	7.50	0.90	1.10	52
		36	43	120	6.70	7.50	0.90	1.10	52
		48	57	70	6.70	7.50	0.90	1.10	52
		72	86	60	9.00	9.80	1.40	1.60	52
NTI-05	F14	96	115	50	9.00	9.80	1.40	1.60	52
		18	21	200	8.00	8.30	1.20	1.30	52
		24	29	200	8.00	8.30	1.20	1.30	52
		36	43	150	8.00	8.30	1.20	1.30	52
		48	57	80	8.00	8.30	1.20	1.30	52
NTIM-06	F16	72	86	70	11.50	12.70	1.60	1.90	52
		96	115	60	11.50	12.70	1.60	1.90	52
		18	21	400	12.60	14.00	2.00	2.25	75
		24	29	350	12.60	14.00	2.00	2.25	75
		36	43	300	12.60	14.00	2.00	2.25	75
NTIM-06	F16	48	57	270	12.60	14.00	2.00	2.25	75
		72	86	200	16.00	19.00	2.60	2.80	75
		96	115	170	16.00	19.00	2.60	2.80	75

## NTI PERFORMANCE DATA

### NTIM SERIES (220V / 1Ph)

Model	RPM		Torque	Rated Current (A)		Motor Rated Power (KW)		Weight	
	50Hz	60Hz	Nm	50Hz	60Hz	50Hz	60Hz	kg	
NTIM-03	F10	18	21	40	1.80	1.90	0.34	0.35	32
		24	29	40	1.80	1.90	0.34	0.35	32
NTIM-04	F14	18	21	100	6.40	7.30	0.92	1.05	52
		24	29	85	6.40	7.30	0.92	1.05	52
		36	43	70	6.40	7.30	0.92	1.05	52
		48	57	50	6.40	7.30	0.92	1.05	52
		72	86	40	8.20	10.00	1.43	1.65	52
NTIM-05	F14	18	21	120	7.20	7.60	1.24	1.32	52
		24	29	120	7.20	7.60	1.24	1.32	52
		36	43	90	7.20	7.60	1.24	1.32	52
		48	57	60	7.20	7.60	1.24	1.32	52
		72	86	50	9.60	11.00	1.63	1.73	52
NTIM-06	F16	18	21	240	11.30	13.00	2.23	2.30	75
		24	29	210	11.30	13.00	2.23	2.30	75
		36	43	180	11.30	13.00	2.23	2.30	75
		48	57	160	14.50	18.00	2.67	2.85	75
		72	86	140	14.50	18.00	2.67	2.85	75

### Mechanical Interface Size

Model		NTI - 01/02/03	NTI - 04/05	NTI - 06	NTI-07 NTI-09.1	NTI-08 NTI-10	NTI-09 NTI-10G
Flange	ISO 5210	F10	F14	F16	F25		F30
	Mss sp-102	FA10	FA14	FA16	FA25		FA30
<b>STEM ACCEPTANCE DIAMETER</b>							
A Type	Rising	mm	32	38	54	70	83
	Non-rising	mm	26	32	45	60	73
Z Type	Rising	mm	-	51	67	-	-
	Non-rising	mm	-	38	51	-	-
B4 Type	Non-rising	mm	26	32	45	60	73

Model		NTIT - 01	NTIT - 02	NTIT - 03	NTIT - 04 / 05	NTIT - 06	NTIR - 200	NTIR - 500
Flange	ISO 5210	F07	F07 / F10	F10	F12 / F14	F14	F05 / F07	F07 / F10
	Mss sp-102	FA07	FA07 / FA10	FA10	FA12 / FA14	FA14	FA05 / FA07	FA07 / FA10
<b>STEM ACCEPTANCE DIAMETER</b>								
Key	mm	28	28 / 42	42	50 / 60	60	22	33
Square	mm	19	19 / 27	27	32 / 36	36	15	23



## NTIT PERFORMANCE DATA

### NTIT SERIES (380V / 3Ph)

Model	Stem Dia (mm)		90°time (s)		Torque Nm	Rated Current (A)		Motor Rated Power (KW)		Weight kg	
	Key	Square	50Hz	60Hz		50Hz	60Hz	50Hz	60Hz		
NTIT-01	F07	28	19	18-20	16-18	125	0.47	0.50	0.13	0.17	24
NTIT-02	F07	28	19	18-20	16-18	250	0.49	0.56	0.13	0.17	24
	F10	42	27	18-20	16-18	250	0.49	0.56	0.13	0.17	24
NTIT-03	F10	42	27	26-30	19-22	500	0.53	0.59	0.14	0.18	35
NTIT-04	F12	50	32	27-30	23-26	1000	0.56	0.62	0.14	0.18	35
	F14	60	36	27-30	23-26	1000	0.56	0.62	0.14	0.18	35
NTIT-05	F12	50	32	46-50	42-45	1500	0.60	0.65	0.15	0.19	35
	F14	60	36	46-50	42-45	1500	0.60	0.65	0.15	0.19	35
NTIT-06	F14	60	36	58-60	45-50	2000	0.62	0.69	0.15	0.19	35

### NTITM SERIES (380V / 3Ph)

Model	Stem Dia (mm)		90°time (s)		Torque Nm	Rated Current (A)		Motor Rated Power (KW)		Weight kg	
	Key	Square	50Hz	60Hz		50Hz	60Hz	50Hz	60Hz		
NTIT-01	F07	28	19	18-20	16-18	125	0.42	0.45	0.12	0.16	24
NTIT-02	F07	28	19	18-20	16-18	215	0.45	0.48	0.12	0.16	24
	F10	42	27	18-20	16-18	215	0.45	0.48	0.12	0.16	24
NTIT-03	F10	42	27	26-30	19-22	300	0.50	0.53	0.13	0.17	35
NTIT-04	F12	50	32	38-40	23-26	700	0.53	0.58	0.13	0.17	35
	F14	60	36	38-40	23-26	700	0.53	0.58	0.13	0.17	35
NTIT-05	F12	50	32	46-50	42-45	1100	0.57	0.61	0.14	0.18	35
	F14	60	36	46-50	42-45	1100	0.57	0.61	0.14	0.18	35
NTIT-06	F14	60	36	58-60	45-50	1500	0.60	0.66	0.14	0.18	35

### NTIT SERIES (220V / 1Ph)

Model	Stem Dia (mm)		90°time (s)		Torque Nm	Rated Current (A)		Motor Rated Power (KW)		Weight kg	
	Key	Square	50Hz	60Hz		50Hz	60Hz	50Hz	60Hz		
NTIT-01	F07	28	19	14-16	13-15	100	1.60	1.70	0.25	0.26	24
NTIT-02	F07	28	19	18-20	16-18	200	1.60	1.70	0.25	0.26	24
	F10	42	27	18-20	16-18	200	1.60	1.70	0.25	0.26	24
NTIT-03	F10	42	27	18-20	16-18	400	1.86	1.98	0.28	0.30	35
NTIT-04	F12	50	32	25-30	19-22	800	1.86	1.98	0.28	0.30	35
	F14	60	36	25-30	19-22	800	1.86	1.98	0.28	0.30	35
NTIT-05	F12	50	32	27-30	23-26	1200	1.70	1.92	0.27	0.29	35
	F14	60	36	27-30	23-26	1200	1.70	1.92	0.27	0.29	35
NTIT-06	F14	60	36	58-62	45-50	1600	1.70	1.92	0.27	0.29	35

### NTIM SERIES (220V / 1Ph)

Model	Stem Dia (mm)		90°time (s)		Torque Nm	Rated Current (A)		Motor Rated Power (KW)		Weight kg	
	Key	Square	50Hz	60Hz		50Hz	60Hz	50Hz	60Hz		
NTIT-01	F07	28	19	14-16	13-15	100	1.50	1.65	0.26	0.27	24
NTIT-02	F07	28	19	18-20	16-18	150	1.50	1.65	0.26	0.27	24
	F10	42	27	18-20	16-18	150	1.50	1.65	0.26	0.27	24
NTIT-03	F10	42	27	18-20	16-18	200	1.70	1.85	0.28	0.30	35
NTIT-04	F12	50	32	25-30	19-22	600	1.70	1.85	0.28	0.30	35
	F14	60	36	25-30	19-22	600	1.70	1.85	0.28	0.30	35
NTIT-05	F12	50	32	27-30	23-26	1000	1.60	1.76	0.27	0.29	35
	F14	60	36	27-30	23-26	1000	1.60	1.76	0.27	0.29	35
NTIT-06	F14	60	36	58-62	45-50	1300	1.60	1.76	0.27	0.29	35

## NTIR PERFORMANCE DATA

### NTIR SERIES (380V / 3Ph)

Model	Flange (ISO 5211)	Time (S)		Torque	Motor Poles	Rated Current (A)		Starting Current (A)		Motor Rated Power (KW)		Power Factor		Efficiency (%)		Weight (kg)
		50Hz	60Hz	Nm		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	
NTIR - 200	NTIR-05	F05 / F07	20	17	50	0.50	0.51	1.6	1.5	0.16	0.16	0.83	0.72	57	67	14
	NTIR-10				100	0.53	0.54			0.16	0.16					
	NTIR-15				150	0.56	0.58			0.17	0.17					
	NTIR-20				200	0.62	0.63			0.17	0.17					
NTIR - 500	NTIR-30	F07 / F10	30	26	300	1.03	0.95	2.2	1.9	0.30	0.29	0.74	0.75	61	64	17
	NTIR-40				400	1.08	1.02			0.30	0.29					
	NTIR-50				500	1.12	1.12			0.31	0.29					

### NTIRM SERIES (380V / 3Ph)

Model	Flange (ISO 5211)	Time (S)		Torque	Motor Poles	Rated Current (A)		Starting Current (A)		Motor Rated Power (KW)		Power Factor		Efficiency (%)		Weight (kg)
		50Hz	60Hz	Nm		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	
NTIRM - 200	NTIRM-05	F05 / F07	20	17	50	0.48	0.50	1.5	1.4	0.14	0.15	0.80	0.74	60	68	14
	NTIRM-10				75	0.50	0.52			0.14						
	NTIRM-15				100	0.52	0.55			0.15						
	NTIRM-20				140	0.56	0.60			0.15						
NTIRM - 500	NTIRM-30	F07 / F10	30	26	180	0.92	0.86	2.1	1.8	0.29	0.28	0.75	0.78	63	65	17
	NTIRM-40				240	0.96	0.93			0.29						
	NTIRM-50				300	1.02	1.05			0.30						

### NTIR SERIES (220V / 1Ph)

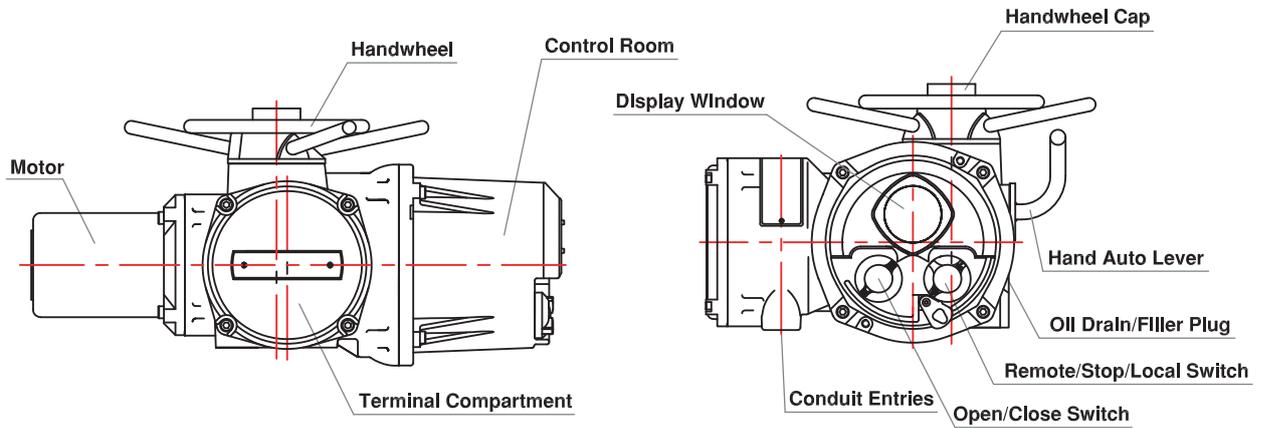
Model	Flange (ISO 5211)	Time (S)		Torque	Motor Poles	Rated Current (A)		Starting Current (A)		Motor Rated Power (KW)		Power Factor		Efficiency (%)		Weight (kg)
		50Hz	60Hz	Nm		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	
NTIR - 200	NTIR-05	F05 / F07	20	17	40	0.86	0.90	1.20	1.10	0.10	0.12	0.96	0.94	52	70	14
	NTIR-10				60											
	NTIR-15				80											
	NTIR-20				100											
NTIR - 500	NTIR-30	F07 / F10	30	26	150	1.30	1.50	2.20	2.10	0.17	0.20	0.96	0.93	58	62	17
	NTIR-40				175											
	NTIR-50				220											

### NTIRM SERIES (220V / 1Ph)

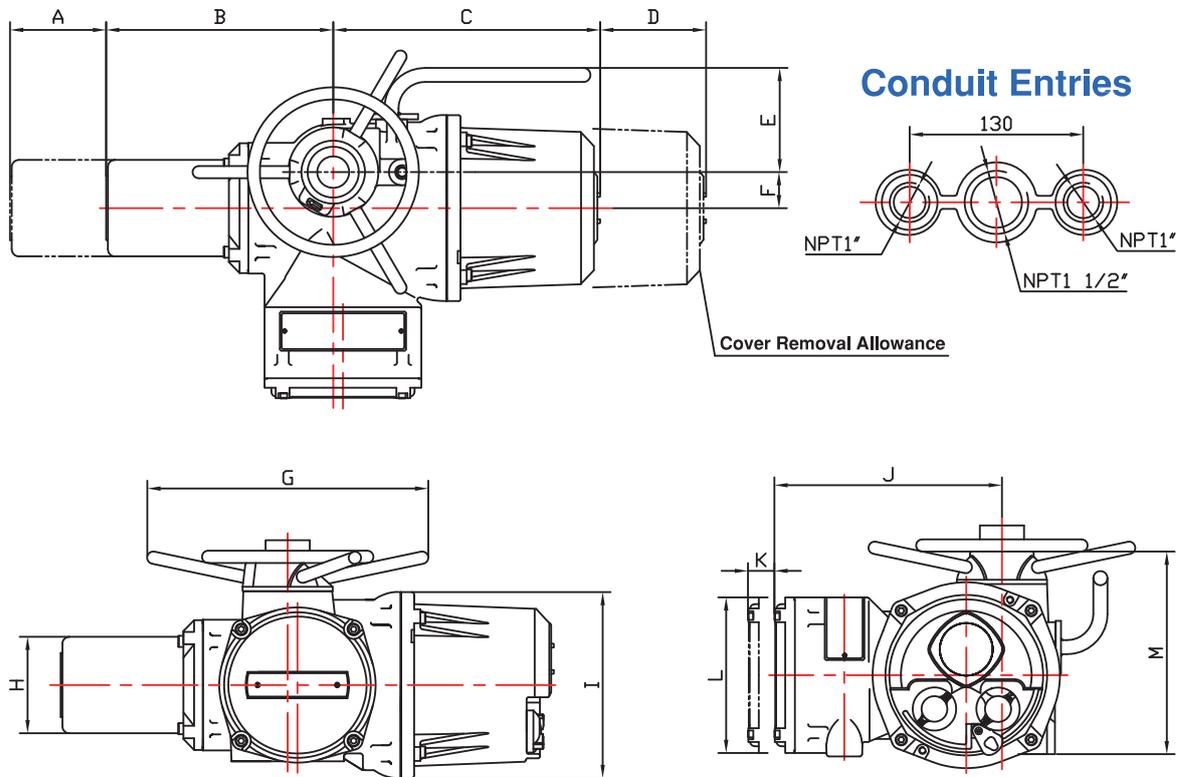
Model	Flange (ISO 5211)	Time (S)		Torque	Motor Poles	Rated Current (A)		Starting Current (A)		Motor Rated Power (KW)		Power Factor		Efficiency (%)		Weight (kg)
		50Hz	60Hz	Nm		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz			
NTIRM - 200	NTIRM-05	F05 / F07	20	17	30	0.76	0.82	1.10	1.00	0.11	0.12	0.97	0.95	68	71	14
	NTIRM-10				40											
	NTIRM-15				55											
	NTIRM-20				70											
NTIRM - 500	NTIRM-30	F07 / F10	30	26	100	1.22	1.35	2.00	1.90	0.16	0.17	0.95	0.93	63	64	17
	NTIRM-40				140											
	NTIRM-50				180											

# NTI DIMENSION

## NTI SERIES EACH PART AND NAME



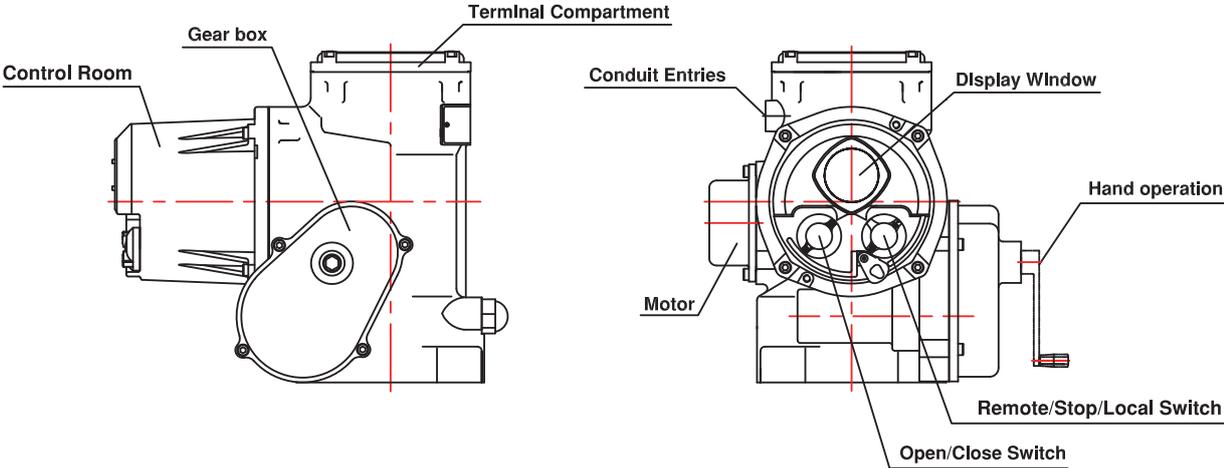
## NTI SERIES DIMENSIONS



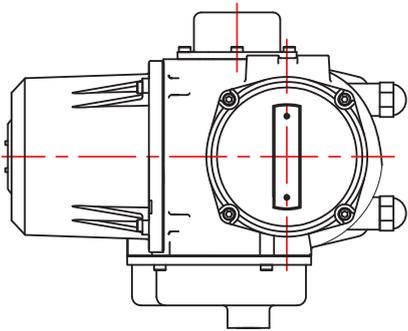
Specification	Parameter	A	B	C	D	E	F	ØG	ØH	ØI	J	K	ØL	M
	NTI-01 / 02 / 03	165	250	300	200	119	41	357	104	212	250	30	177	240
	NTI-04 / 05	230	350	330	200	150	40	542	125	212	270	30	177	275
	NTI-06	247	352	401	230	119	42	793	145	212	301	30	177	353

# NTIT DIMENSION

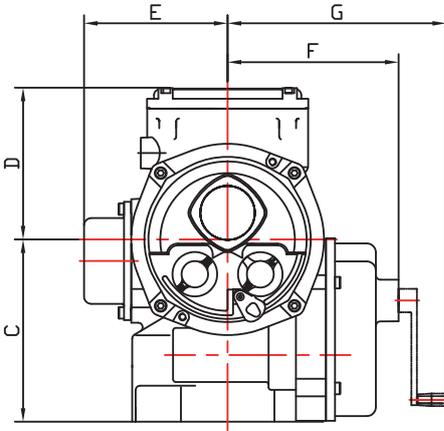
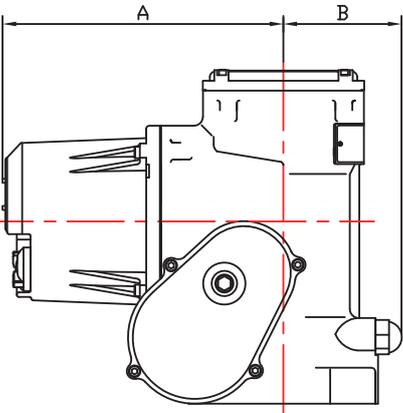
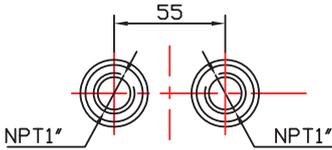
## NTIT SERIES EACH PART AND NAME



## NTIT SERIES DIMENSIONS



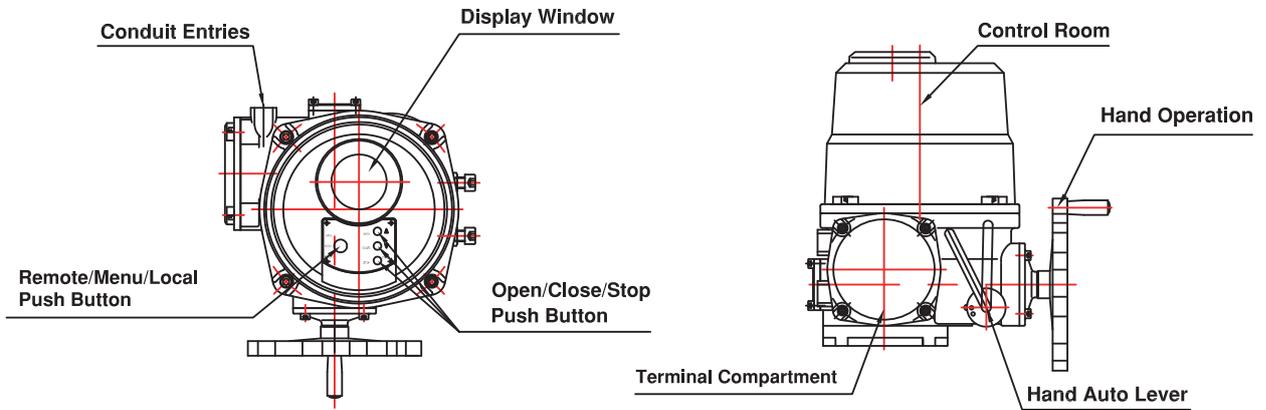
### Conduit Entries



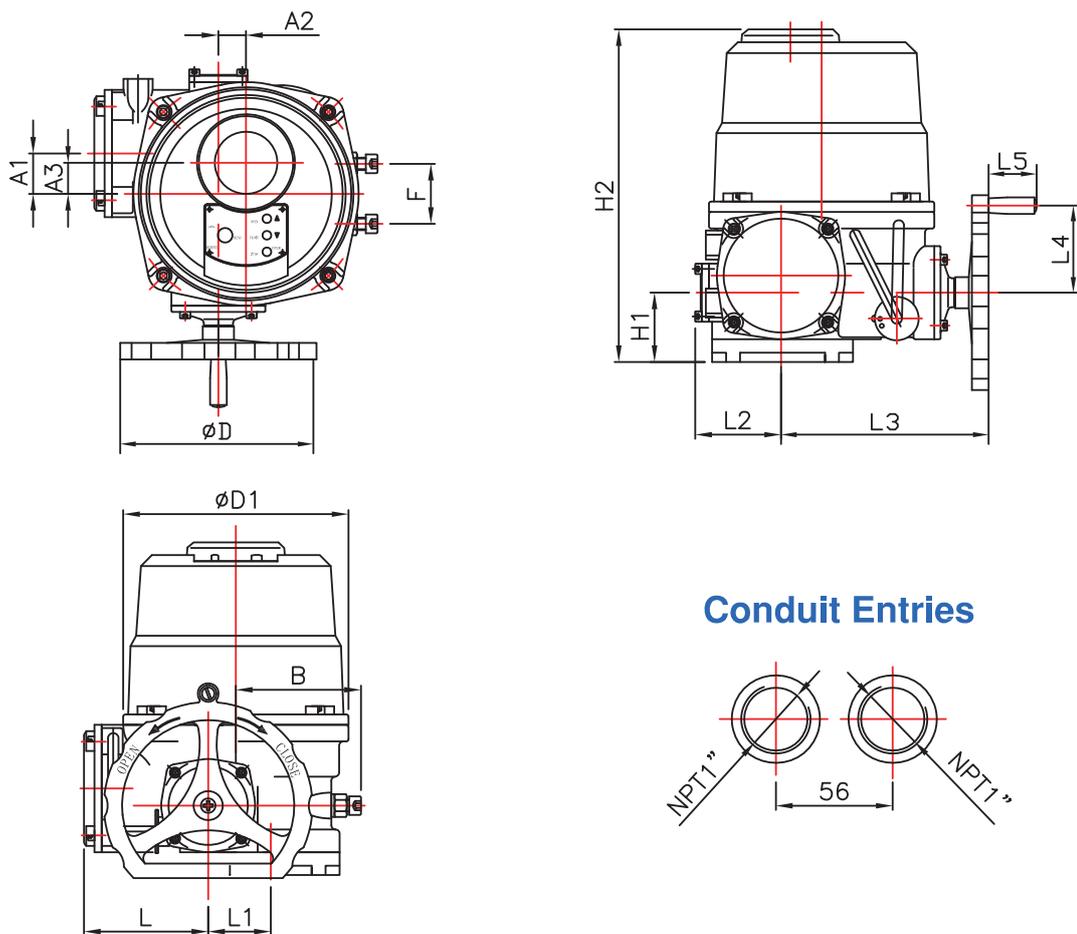
Specification	Parameter	A	B	C	D	E	F	G
	NTIT - 01 / 02	308	110	146	162	158	160	210
	NTIT - 03 / 04 / 05 / 06 / 07	380	135	202	168	158	188	275

# NTIR DIMENSION

## NTIR SERIES EACH PART AND NAME

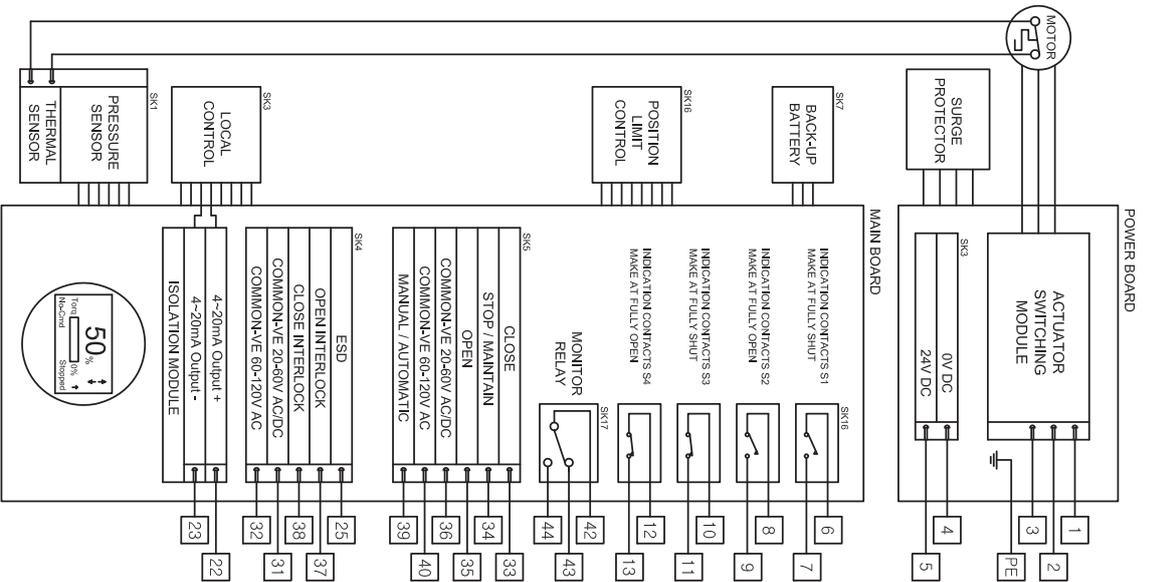


## NTIR SERIES DIMENSIONS



Specification	Parameter	A1	A2	A3	B	ØD	ØD1	E	H1	H2	L	L1	L2	L3	L4	L5	F
	<b>NTIR-200</b>	35	26.5	30	90	140	170	16.5	67	323	122	45	68	143	60	44	42
	<b>NTIR-500</b>	39	26.5	30	120	200	216	16.5	67	321	119	60	82	204	78	44	58

# NTI / NTIT WIRING DIAGRAM



Note 2-1

Internal power supply voltage is 24VDC.

When the external control voltage is 20~60V DC/AC, the common terminal is 36. When the external control voltage is 20~120V DC/AC, the common terminal is 40.

Note 2-2

Valve open when contact closed valve closed when contact open the function require that opening valve is set to be preferential.

Note 2-3

Valve open when contact open the function require that closing the function require that closing valve is set to be preferential.

Note 2-4

ESD can be set to close valve, open valve and stay up.

Note 2-5

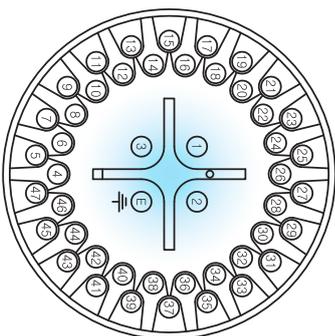
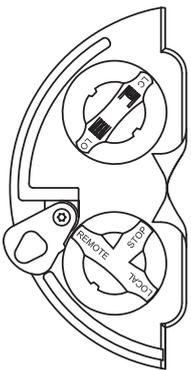
Connect terminals 1 and 2 when the power for the actuator is single.

Note 2-6

The indication content of four feedback relay is set freely. Refer to instruction.

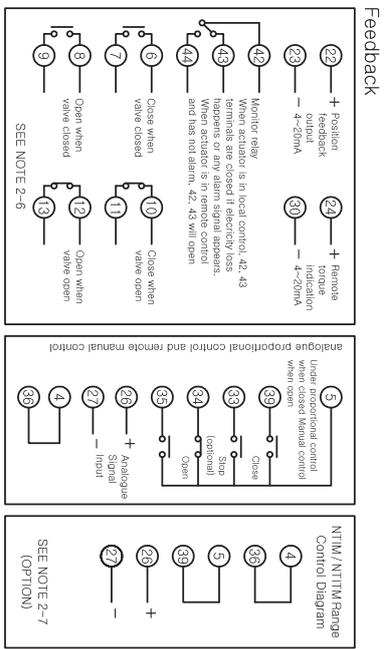
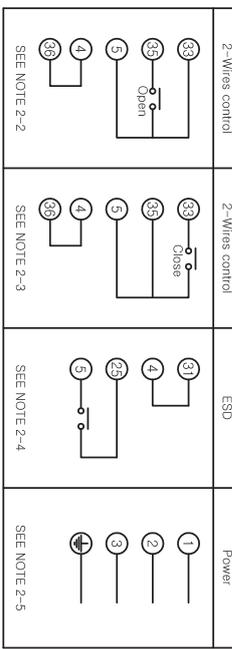
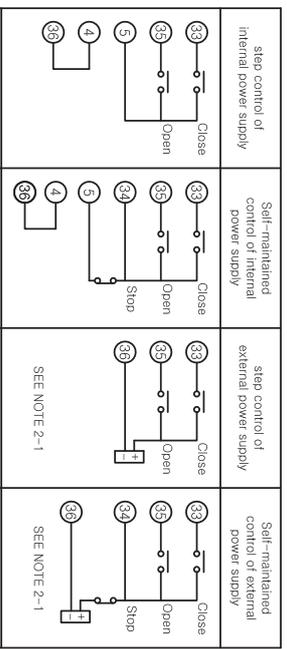
Note 2-7 (OPTION)

Analogue input signal can be 4~20mA, 0~20mA, 0~5V, 0~10V. The default is 4~20mA. Please refer to instruction if changes are required.



LIMIT SWITCH POSITION

NUM	NAME	CONTACT	90%	100%	VALVE POSITION
S1	Q.L.S	6-7	Close	Open	INTERNAL
S2	Q.L.S	8-9	Close	Open	INTERNAL
S3	Q.L.S	10-11	Close	Open	INTERNAL
S4	Q.L.S	12-13	Close	Open	INTERNAL



TAPPING

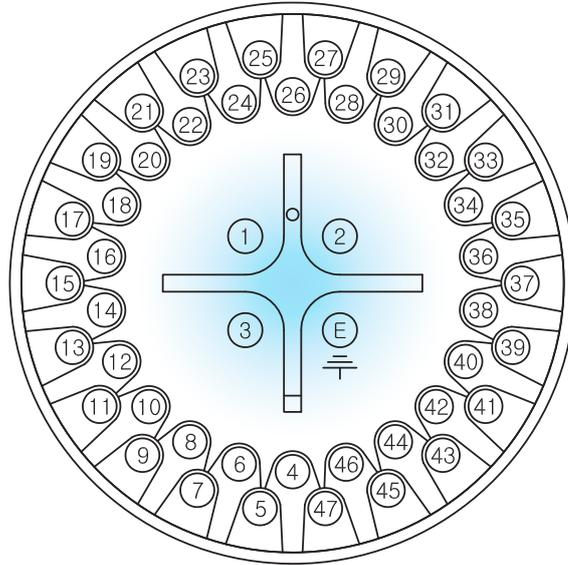
	50HZ	60HZ
W	220V	230V
X	380V	400V
Y	415V	420V
Z	440V	460V

FUSE F1 - 250MA ANTI SURGE

DRAWN	DATE	NTI/NTIT SERIES
JWCHAE	05E0C16	NTI/NTIT SERIES
CHK	DATE	WIRING DIAGRAM
YSKIM	05E0C16	
APP	DATE	
EMHJH	05E0C16	
DRAWING NUMBER		FOR



## TERMINAL COMPOSITION



**Warning :** Please refer to the rated voltage stamped on the actuator nameplate before connection power. Connect terminals 1, 2, and 3 when the power is three phases 380VAC. Connect terminals 1 and 2 when the power is single phase 220VAC

① Power Line 1#	②⑤ ESD
② Power Line 2#	②⑥ Analogue Input Signal +Ve
③ Power Line 3#	②⑦ Analogue Input Signal -Ve
④ 24vdc-Ve	②⑧
⑤ 24vdc+Ve	②⑨
⑥ Monitor Relay S1-1	③⑩ Remote Torque Feedback -
⑦ Monitor Relay S1-2	③⑪ Common -Ve 20~60v Ac/Dc
⑧ Monitor Relay S2-1	③⑫ common -Ve 20~120v AC
⑨ Monitor Relay S2-2	③⑬ Remote Closing Signal Input End
⑩ Monitor Relay S3-1	③⑭ Remote Stopping / Maintaining Signal Input End
⑪ Monitor Relay S3-2	③⑮ Remote Opening Signal Input End
⑫ Monitor Relay S4-1	③⑯ Common -Ve 20~60v Ac/Dc
⑬ Monitor Relay S4-2	③⑰ Open Interlock
⑭	③⑱ Close Interlock
⑮	③⑲ Manual / Automatic
⑯	④⑰ Common +Ve 20~120v Ac
⑰	④⑱
⑱	④⑲ Common Monitor Relay
⑲	④⑳ Common Monitor Relay Normally Closed
⑳	④㉑ Common Monitor Relay Normally Open
㉑	④㉒
㉒ Remote Position Feedback +	④㉓
㉓ Remote Position Feedback -	④㉔
㉔ Remote Torque Feedback +	④㉕
	④㉖ Grounding