



GVK(AT) ELECTRO HYDRAULIC ACTUATOR

Total Engineering Solution Service

GVK(AT) Electro Hydraulic Actuator

Total Engineering Solution Service

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Mission

기초에 근거하여 원천 기술을 살리고 원천 기술을
극대화하여 세계 중심에 서는 것

To stand at the centre of the world by
utilizing original technology based on the
foundation and maximizing original technology

Vision

우리는 옳은 일과 가치 있는 일에 주저함이 없이
최선을 다하고 실천하여 세계의 중심에 서자

Let us put ourselves at the center of the world by
doing our best and not hesitating to stand up for
what is right and worthy



GLOBAL VISION KOREA



Value MFG Valve



ACEFLOW

Valve Engineering

Valve Product Service



GVK Limited, founded in June 2020 by a leader with 38 years of experience, focuses on R&D while ensuring quality, price, and functionality through domestic production. The company offers Process Valves, Valve Equipment, and Total Engineering services for industries such as Gas, Refining, Petroleum, Power generation, Environment, and Water treatment. With a management team possessing 30-40 years of experience, GVK has developed numerous patents and adheres to quality standards like ISO 9001, 14001, 45001, and CE. Recognized for its advanced automatic control valves, GVK also supplies a range of Control Valves globally through OEM and ODM partnerships. Although still in the early design and manufacturing stages, GVK has emerged as a leading company in Korea, equipped with skilled personnel and testing capabilities. The company aims to lower production costs, enhance efficiency, and improve quality while accumulating Hyper-Intelligence Valve Engineering (HIVE) technology. GVK Limited is committed to meeting customer needs with competitive pricing and high value-added services.

The Professional Provider of Automatic valve Actuators



Mutually Beneficial Relationships



To Be Your Best Partner



Twenty years experience "one stop" goods and services





AT SERIES

Electro Hydraulic Actuator

Total Engineering Solution Service



GVK / HPY FT Scotch yoke cylinder

Contents

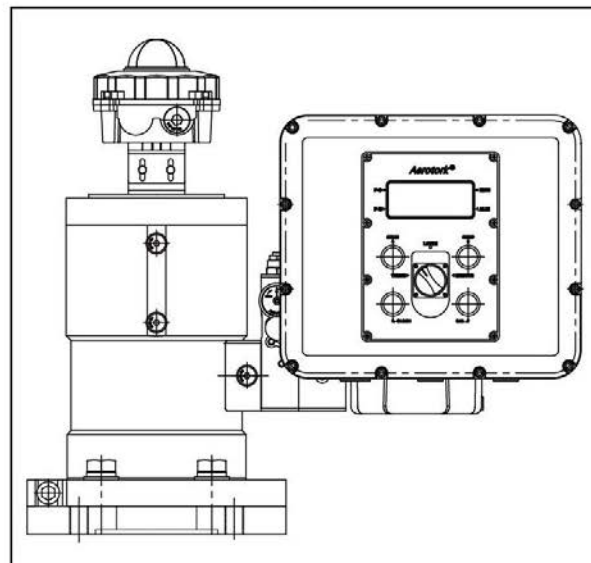
Series HPY

- 04 Structural Features
- 05
- 06

AT10/AT11 Electro-Hydraulic Actuator



Structure



Features

- Intelligent control, Visual interface, Rich function
- Servo pump control, High quality, Low consumption
- Hydraulic power transportation, high torque range, high transportation effect, torque over load protection
- Self-contained power, small volume, no extra hydraulic pipeline connection
- Integration modular design can meet different condition
- Manual hand pump for emergency operation
- Integrated installation or split installation
- Reliably explosion proof protection
- Electrical isolation interface
- Different power option and wide working temperature range

Function

- On/Off type or modulating type option, Linear or Quarter turn type option
- Fail keep last
- Self diagnostic function
- Site verify setup function
- Stroke with different speed control
- FC/ FO or keep last
- FC/FO Strengthen
- Site control
- Remote control and analog control
- PST partial stroke test function
- FO/FC and valve position feedback
- Fail alarm and reset function

Tech data

- Power (option): DC: 24V; 48V; 72V
AC(50/60Hz);
110VAC/1P; 220VAC/1P
380VAC/3P, 400VAC/3P, 415VAC/3P
- Torque range (Quarter turn type): 150Nm~250000Nm
- Thrust range (linear type): 16KN~1250KN
- Accumulator type: FO/FC degree signal
- Protection level: IP66; IP67; IP68
- Explosion proof: ExdIIBT4; ExdIICT4
- Control type: On/Off type Modulating type
- Control signal: Dry Contact or 24VDC 4-20mA or 20-4mA
- Status feedback: Dry Contact Dry Contact
- Valve position feedback: 4-20mA 4-20mA
- Control accuracy: 0.2 0.5
- Tolerance: ≤0.2% ≤0.5%
- Repeatability: ≤0.2% ≤0.5%
- Dead zone adjustment: 0.2% 0.5%
- Action time: ≤0.5S
- Temperature (option): -20 to 70°C; -40 to 70°C
- Interface: NPT3/4(F), NPT1/2(F)

Valve Actuator Product Service

Pneumatic and Hydraulic Scotch Yoke Rotary Motion

Model selection

AT 10 - 01 - ME - 90 – XXXX

AT	1	0	-01	-M	E	-90	-xxxx
Aerotorque	Basic type	Quarter turn Linear	Torque Thrust	Modulating On/Off	Explosion proof Water proof	Rotation Stroke	Special

AT10/AT11 Electro-Hydraulic Actuator

Model	Torque (NM)	90°Stroke speed								Remark
		Power modular	S1	S2	A	B	C	E	F	
		Maxconsumption	200W	300W	600W	1.2KW	3KW	6KW	8KW	
AT10-00	150		4	3	2	/	/	/	/	
AT10-01	500/800		16.8	12.5	7	4.2	/	/	/	
AT10-02	1200/1500		27.3	20.2	11	64	29	/	/	
AT10-03	2000/2500		48.4	35.6	19	10.7	4.5	/	/	
AT10-04	3500/4000		/	54.8	29	16.1	64	/	/	
AT10-05	5000/6300		/	/	41	22.5	87	/	/	
AT10-06	8000/10000		/	/	61	33.3	126	/	/	
AT10-07	16000		/	/	101	54.8	203	10.5	/	
AT10-08	22000		/	/	141	76.3	280	14.1	/	
AT10-09	32000		/	/	201	109	396	19.8	/	
AT10-10	45000		/	/	281	152	551	27.3	22	
AT10-11	64000		/	/	401	216	782	38.6	30.6	
AT10-12	80000		/	/	/	270	975	48	37.9	
AT10-13	125000		/	/	/	431	155	76.3	60.1	
AT10-14	250000		/	/	/	/	310	152	129	

Model selection

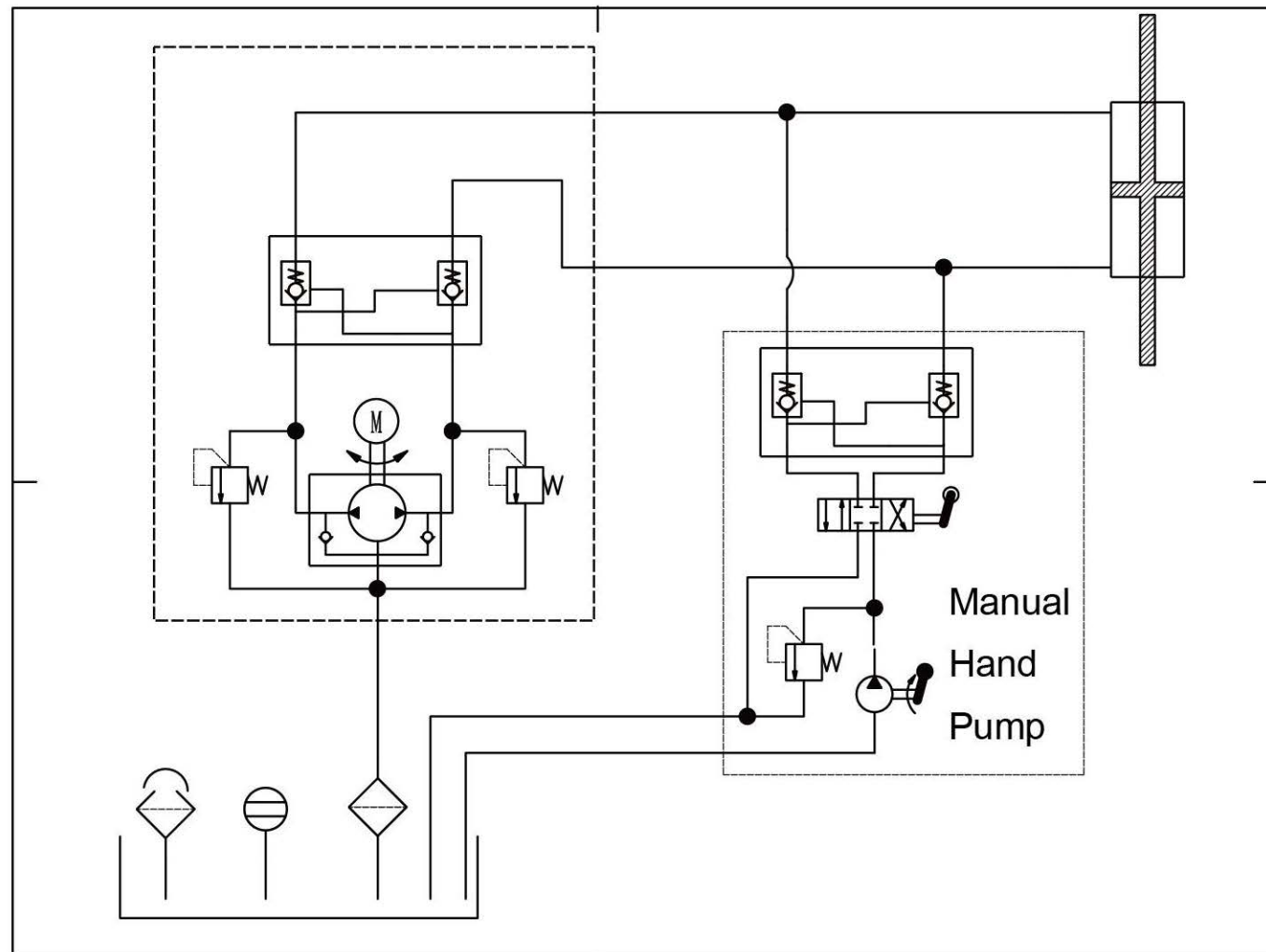
AT11- 01 -ME- 200-XXXX

AT	1	0	-01	-M	E	-90	-xxxx
Aerotorque	Basic type	Quarter turn Linear	Torque Thrust	Modulating On/Off	Explosion proof Water proof	Rotation Stroke	Special

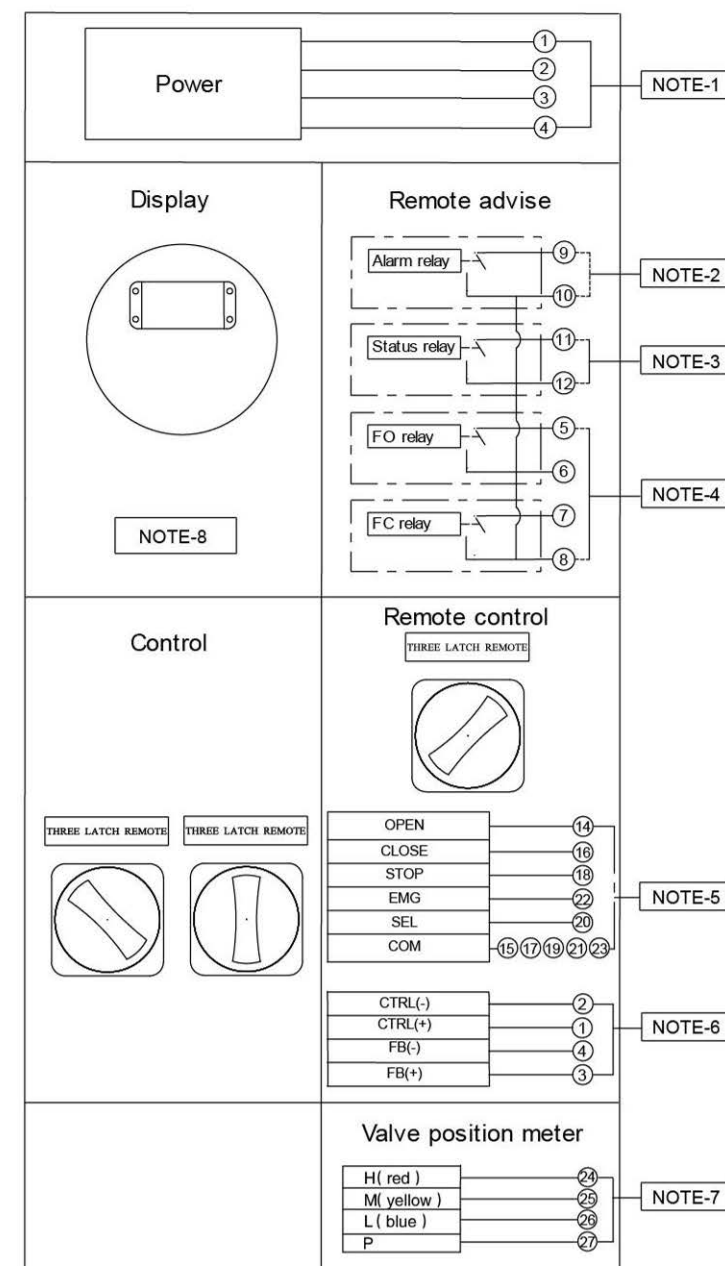
AT11 Electro-Hydraulic Actuator

Model	Thrust (KN)	Stroke speed								Remark
		Powermodular	S1	S2	A	B	C	E	F	
		Maxconsumption	200W	300W	600W	1.2KW	3KW	6KW	8KW	
AT11-00	16		7.72	10.56	20.3	37.78	/	/	/	
AT11-01	32		3.86	5.28	10.16	18.89	/	/	/	
AT11-02	40		3.09	4.23	8.13	15.11	/	/	/	
AT11-03	50		/	3.25	6.25	11.6	32.3	/	/	
AT11-04	80		/	2.03	3.91	7.27	20.2	/	/	
AT11-05	100		/	/	3.25	6.05	16.84	/	/	
AT11-06	125		/	/	2.4	4.47	12.45	/	/	
AT11-07	160		/	/	1.95	3.63	10.1	/	/	
AT11-08	200		/	/	1.63	3.02	8.42	17.2	/	
AT11-09	250		/	/	1.3	2.42	6.73	13.8	/	
AT11-10	320		/	/	/	2.25	6.27	12.8	16.3	
AT11-11	400					1.8	5.02	10.2	13	
AT11-12	500		/	/	/	/	4.01	8.2	10.4	
AT11-13	630		/	/	/	/	3.19	6.5	8.3	
AT11-14	800		/	/	/	/	2.51	5.1	6.5	

AT10/AT11 Hydraulic schematic diagram



AT10/AT11 Electrical interface diagram



NOTE-1

Single phase 220V AC	LIVE	1
	NEUTRAL	2
	FG	3

3 phase 380V AC	R	1
	S	2
	T	3
	N	4

Pls select reasonable power up on request

NOTE-2

Failure open/close degree signal Dry contact output
Max volume: 2A/250V AC
2A/30V DC

NOTE-3

Remote control open/close degree signal Dry contact output
Max volume: 2A/250V AC
2A/30V DC

NOTE-4

FO/FC degree signal Dry contact output
Max volume: 2A/250V AC
2A/30V DC

NOTE-5

Another signal will take effect only after previous signal
Cancelled 50ms
MAX 24VDC
Volume > 10mA
EMG function option, actuator will operate valve
according to different signal when EMG effective

NOTE-6

Remote analog control signal
Control signal range 4-20mA means 0-100% open degree
Output signal range 4-20mA means 0-100% open degree

NOTE-7

Connection the cable of valve position meter

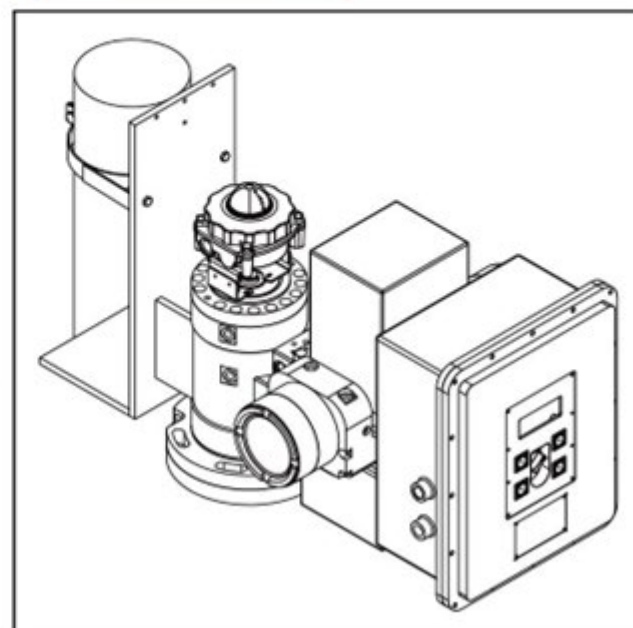
NOTE-8

Screen shows the open degree based on the
whole stroke, shows operation status and
menus

AT20/AT21 Electro-Hydraulic Actuator



Structure



Features

- Intelligent control, Visual interface, Rich function
- Servo pump control, High quality, Low consumption
- Hydraulic power transportation, high torque range, high transportation effect, torque over load protection
- Self-contained power, small volume, no extra hydraulic pipeline connection
- Integration modular design can meet different condition
- Manual hand pump for emergency operation
- Integrated installation or split installation
- Reliably explosion proof protection
- Electrical isolation interface
- Different power option and wide working temperature range

Function

- On/Off type or modulating type option, Linear or Quarter turn type option
- Fail keep last
- Self diagnostic function
- Site verify setup function
- Stroke with different speed control
- FC/ FO or keep last
- FC/FO Strengthen
- Site control
- Remote control and analog control
- PST partial stroke test function
- FO/FC and valve position feedback
- Fail alarm and reset function

Tech data

- Power (option): DC: 24V; 48V; 72V
AC(50/60Hz);
110VAC/1P; 220VAC/1P
380VAC/3P, 400VAC/3P, 415VAC/3P
- Torque range (Quarter turn type): 150Nm~250000Nm
- Thrust range (linear type): 16KN~1250KN
- Accumulator type: FO/FC degree signal
- Protection level: IP66; IP67; IP68
- Explosion proof: ExdIIBT4; ExdIICT4
- Control type: On/Off type Modulating type
Control signal: Dry Contact or 24VDC 4-20mA or 20-4mA
- Status feedback: Dry Contact Dry Contact
- Valve position feedback: 4-20mA 4-20mA
- Control accuracy: 0.2 0.5
- Tolerance: ≤0.2% ≤0.5%
- Repeatability: ≤0.2% ≤0.5%
- Dead zone adjustment: 0.2% 0.5%
- Action time: ≤0.5S
- Temperature (option): -20 to 70°C; -40 to 70°C
- Interface: NPT3/4(F), NPT1/2(F)

AT20/AT21 Electro-Hydraulic Actuator

Model selection

AT20- 01 -ME- 90-XXXX

AT	1	0	-01	-M	E	-90	-xxxx
Aerotorque	Accumulator type	Quarter turn Linear	Torque Thrust	Modulating On/Off	Explosion proof Water proof	Rotation Stroke	Special

AT20 Electro-Hydraulic Actuator

Model	Torque (NM)	90°Stroke speed								Spring return time (S)
		Power modular	S1	S2	A	B	C	E	F	
		Maxconsumption	200W	300W	600W	12KW	3KW	6KW	8KW	
AT20-00	150		4	3	2	/	/	/	/	0.5~1
AT20-01	500/800		16.8	12.5	7	4.2	/	/	/	0.5~1
AT20-02	1200/1500		273	20.2	11	6.4	29	/	/	1~2
AT20-03	2000/2500		48.4	35.6	19	10.7	4.5	/	/	1~2
AT20-04	3500/4000		/	548	29	16.1	64	/	/	1~2
AT20-05	5000/6300		/	/	41	22.5	8.7	/	/	1~2
AT20-06	8000/10000		/	/	61	33.3	126	/	/	1~3
AT20-07	16000		/	/	101	54.8	203	10.5	/	1~3
AT20-08	22000		/	/	141	76.3	280	14.1	/	2~4
AT20-09	32000		/	/	201	109	396	19.8	/	2~4
AT20-10	45000		/	/	281	152	55.1	27.3	22	3~5
AT20-11	64000		/	/	401	216	782	38.6	30.6	3~5
AT20-12	80000		/	/	/	270	975	48	37.9	4~6
AT20-13	125000		/	/	/	431	155	76.3	60.1	4~6
AT20-14	250000		/	/	/	/	310	152	129	5~8

AT20/AT21 Electro-Hydraulic Actuator

Model selection

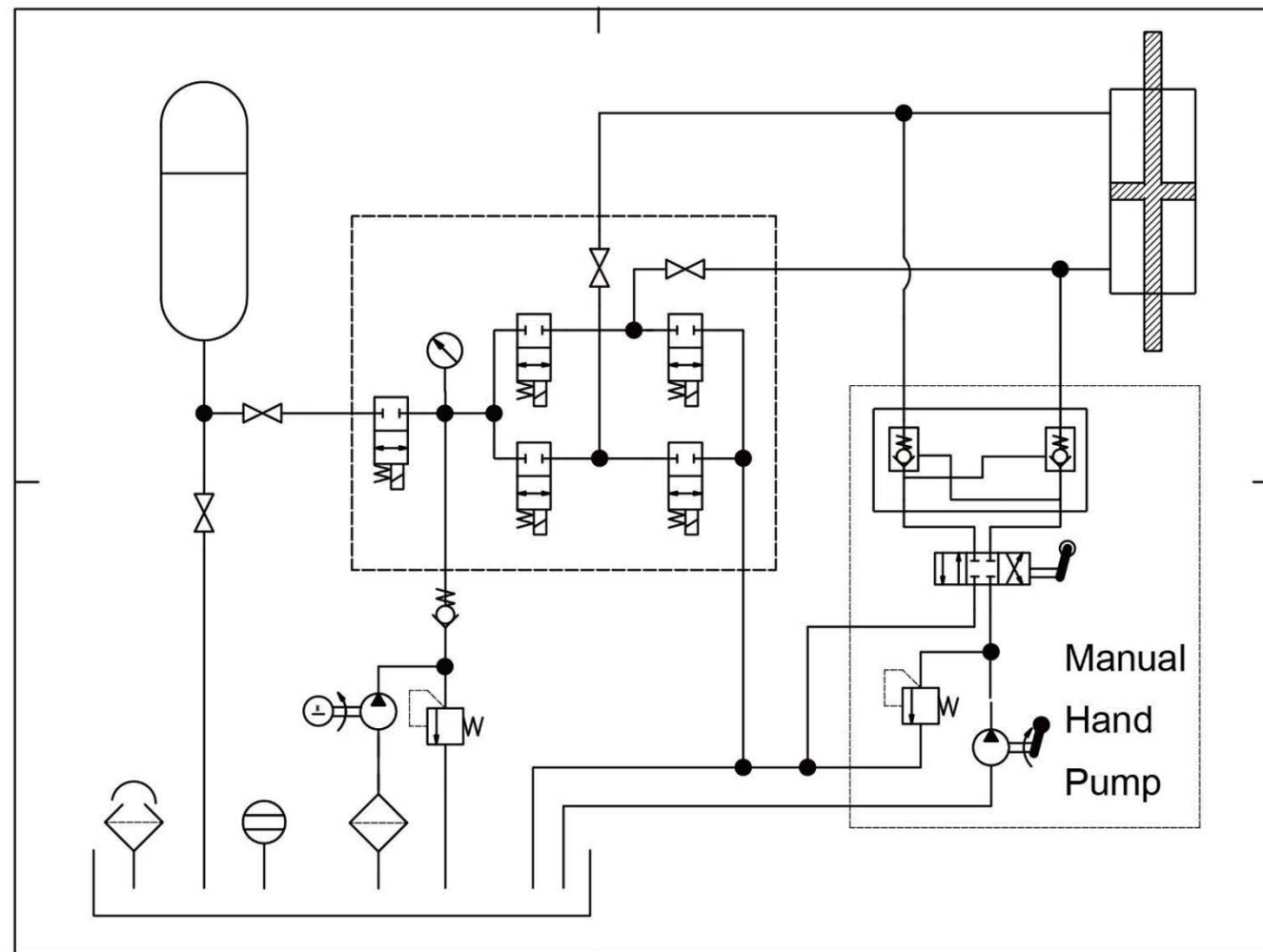
AT21- 01 -ME- 200-XXXX

AT	1	0	-01	-M	E	-90	-xxxx
Aerotorque	Accumulator type	Quarter turn Linear	Torque Thrust	Modulating On/Off	Explosion proof Water proof	Rotation Stroke	Special

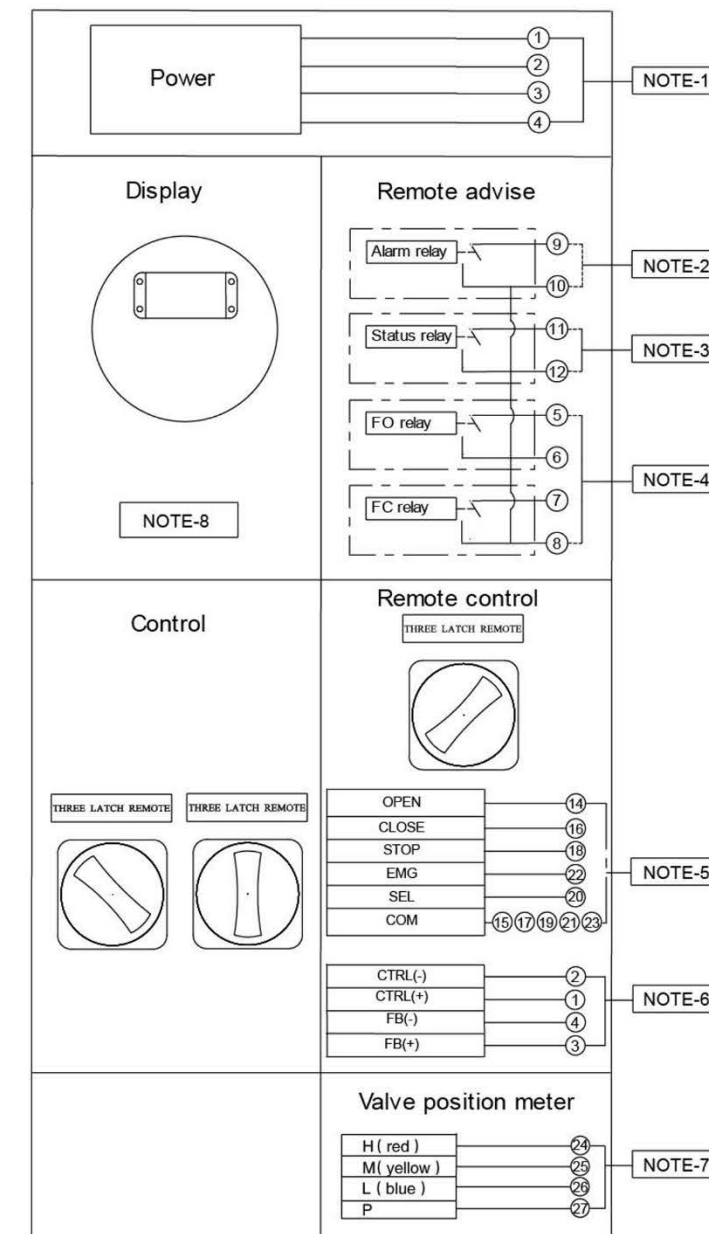
AT20 Electro-Hydraulic Actuator

Model	Thrust (KN)	Stroke speed								Spring return time (S)
		Power modular	S1	S2	A	B	C	E	F	
		Maxconsumption	200W	300W	600W	1.2KW	3KW	6KW	8KW	
AT21-00	16		7.72	1056	203	3778	/	/	/	up on to stroke
AT21-01	32		3.86	5.28	10.16	18.89	/	/	/	up on to stroke
AT21-02	40		3.09	4.23	8.13	15.11	/	/	/	up on to stroke
AT21-03	50		/	3.25	6.25	116	32.3	/	/	up on to stroke
AT21-04	80		/	2.03	3.91	7.27	20.2	/	/	up on to stroke
AT21-05	100		/	/	3.25	6.05	16.84	/	/	up on to stroke
AT21-06	125		/	/	2.4	4.47	12.45	/	/	up on to stroke
AT21-07	160		/	/	1.95	3.63	10.1	/	/	up on to stroke
AT21-08	200		/	/	1.63	3.02	842	17.2	/	up on to stroke
AT21-09	250		/	/	1.3	2.42	6.73	13.8	/	up on to stroke
AT21-10	320		/	/	/	2.25	627	12.8	16.3	up on to stroke
AT21-11	400					1.8	502	10.2	13	up on to stroke
AT21-12	500		/	/	/	/	401	82	10.4	up on to stroke
AT21-13	630		/	/	/	/	3.19	65	8.3	up on to stroke
AT21-14	800		/	/	/	/	2.51	5.1	6.5	up on to stroke

AT20/AT21 Hydraulic schematic diagram



AT20/AT21 Electrical interface diagram



NOTE-1

Single phase 220V AC	LIVE	1
	NEUTRAL	2
		3
	FG	4

3 phase 380V AC	R	1
	S	2
	T	3
	N	4

Pls select reasonable power up on request

NOTE-2

Failure open/close degree signal Dry contact output
Max volume: 2A/250V AC
2A/30V DC

NOTE-3

Remote control open/close degree signal Dry contact output
Max volume: 2A/250V AC
2A/30V DC

NOTE-4

FO/FC degree signal Dry contact output
Max volume: 2A/250V AC
2A/30V DC

NOTE-5

Another signal will take effect only after previous signal
Cancelled 50ms
MAX 24VDC
Volume > 10mA
EMG function option, actuator will operate valve
according to different signal when EMG effective

NOTE-6

Remote analog control signal
Control signal range 4-20mA means 0-100% open degree
Output signal range 4-20mA means 0-100% open degree

NOTE-7

Connection the cable of valve position meter

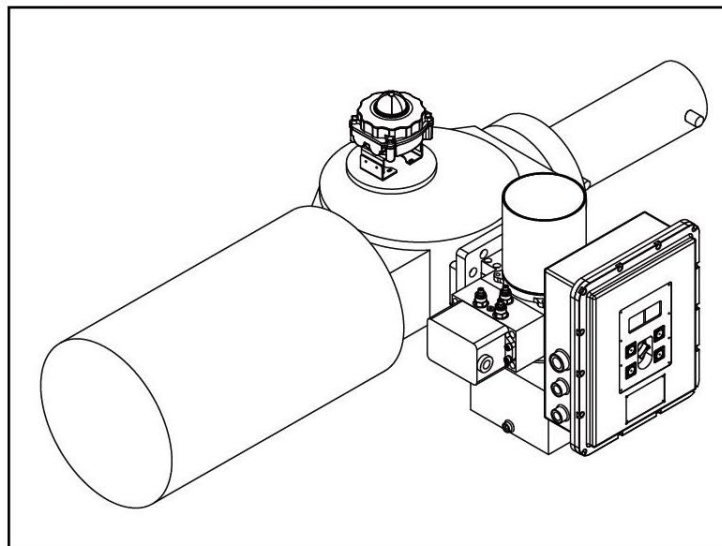
NOTE-8

Screen shows the open degree based on the
whole stroke, shows operation status and
menus

AT30/AT31 Electro-Hydraulic Actuator



Structure



Features

- Intelligent control, Visual interface, Rich function
- Servo pump control, High quality, Low consumption
- Hydraulic power transportation, high torque range, high transportation effect, torque over load protection
- Self-contained power, small volume, no extra hydraulic pipeline connection
- Integration modular design can meet different condition
- Manual hand pump for emergency operation
- Integrated installation or split installation
- Reliably explosion proof protection
- Electrical isolation interface
- Different power option and wide working temperature range

Function

- On/Off type or modulating type option, Linear or
- Quarter turn type option
- Fail keep last
- Self diagnostic function
- Site verify setup function
- Stroke with different speed control
- FC/ FO or keep last
- FC/FO Strengthen
- Site control
- Remote control and analog control
- PST partial stroke test function
- FO/FC and valve position feedback
- Fail alarm and reset function

Tech data

- Power (option): DC: 24V; 48V; 72V
AC(50/60Hz);
110VAC/1P; 220VAC/1P
380VAC/3P, 400VAC/3P, 415VAC/3P
- Torque range (Quarter turn type): 150Nm~250000Nm
- Thrust range (linear type): 16KN~1250KN
- Accumulator type: FO/FC degree signal
- Protection level: IP66; IP67; IP68
- Explosion proof: ExdIIBT4; ExdIICT4
- Control type: On/Off type Modulating type
- Control signal: Dry Contact or 24VDC 4-20mA or 20-4mA
- Status feedback: Dry Contact Dry Contact
- Valve position feedback: 4-20mA 4-20mA
- Control accuracy: 0.2 0.5
- Tolerance: ≤0.2% ≤0.5%
- Repeatability: ≤0.2% ≤0.5%
- Dead zone adjustment: 0.2% 0.5%
- Action time: ≤0.5S
- Temperature (option): -20 to 70°C; -40 to 70°C
- Interface: NPT3/4(F), NPT1/2(F)

Valve Actuator Product Service

Model selection

AT30- 01 -ME- 90-XXXX

AT	1	0	-01	-M	E	-90	-xxxx
Aerotorque	Accumulator type	Quarter turn Linear	Torque Thrust	Modulating On/Off	Explosion proof Water proof	Rotation Stroke	Special

AT30 Electro-Hydraulic Actuator

Model	Torque (NM)	90°Stroke speed								Spring return time (S)
		Powermodular	S1	S2	A	B	C	E	F	
		Maxconsumption	200W	300W	600W	1.2KW	3KW	6KW	8KW	
AT30-00	75		40	3	20	/	/	/	/	1~2
AT30-01	125		16.8	125	7	4.2	/	/	/	1~2
AT30-02	300		27.3	202	110	6.4	2.9	/	/	2~3
AT30-03	630		48.4	356	190	10.7	4.5	/	/	2~3
AT30-04	1000		/	548	290	16.1	6.4	/	/	2~3
AT30-05	1500		/	/	41	22.5	8.7	/	/	2~3
AT30-06	3000		/	/	610	33.3	12.6	/	/	2~4
AT30-07	5000		/	/	101	54.8	20.3	10.5	/	2~4
AT30-08	8000		/	/	141	76.3	28	14.1	/	3~5
AT30-09	10000		/	/	201	109	39.6	19.8	/	3~6
AT30-10	15000		/	/	281	152	55.1	27.3	22	4~7
AT30-11	20000		/	/	401	216	78.2	38.6	30.6	5~8
AT30-12	25000		/	/	/	270	97.5	48	379	5~9
AT30-13	40000		/	/	/	431	155	76.3	60.1	6~10

Pneumatic and Hydraulic Scotch Yoke Rotary Motion

Model selection

AT31-01 -ME-100-XXXX

AT	1	0	-01	-M	E	-90	-xxxx
Aerotorque	Accumulator type	Quarter turn Linear	Torque Thrust	Modulating On/Off	Explosion proof Water proof	Rotation Stroke	Special

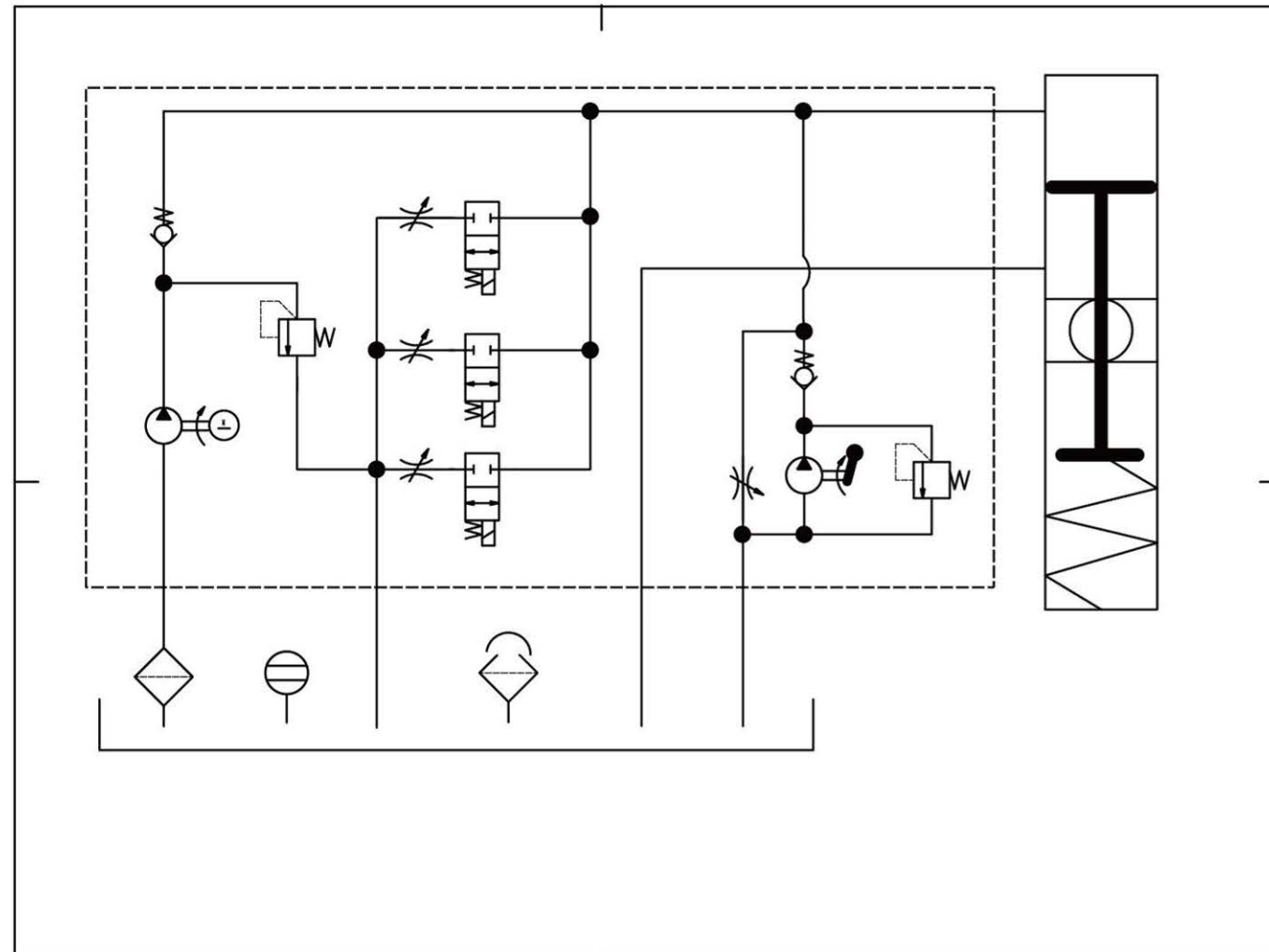
AT31 Electro-Hydraulic Actuator

Model	Thrust (KN)	Stroke speed								Spring return time (S)
		Powermodular	S1	S2	A	B	C	E	F	
		Max consumption	200W	300W	600W	1.2KW	3KW	6KW	8KW	
AT31-01	10		3.86	5.28	10.16	18.89	/	/	/	upon to stroke
AT31-02	12.5		3.09	4.23	8.13	15.11	/	/	/	upon to stroke
AT31-03	16		/	3.25	6.25	11.6	32.3	/	/	upon to stroke
AT31-04	25		/	2.03	3.91	7.27	20.2	/	/	upon to stroke
AT31-05	32		/	/	3.25	6.05	16.84	/	/	upon to stroke
AT31-06	125		/	/	2.4	4.47	12.45	/	/	upon to stroke
AT31-07	40		/	/	1.95	3.63	10.1	/	/	upon to stroke
AT31-08	63		/	/	1.63	3.02	8.42	17.2	/	upon to stroke
AT31-09	80		/	/	1.3	2.42	6.73	13.8	/	upon to stroke
AT31-10	100		/	/	/	2.25	6.27	12.8	16.3	upon to stroke
AT31-11	125					1.80	5.02	10.2	13.0	upon to stroke
AT31-12	160		/	/	/	/	4.01	8.2	10.4	upon to stroke
AT31-13	200		/	/	/	/	3.19	6.5	8.3	upon to stroke
AT31-14	250		/	/	/	/	2.51	5.1	6.5	upon to stroke

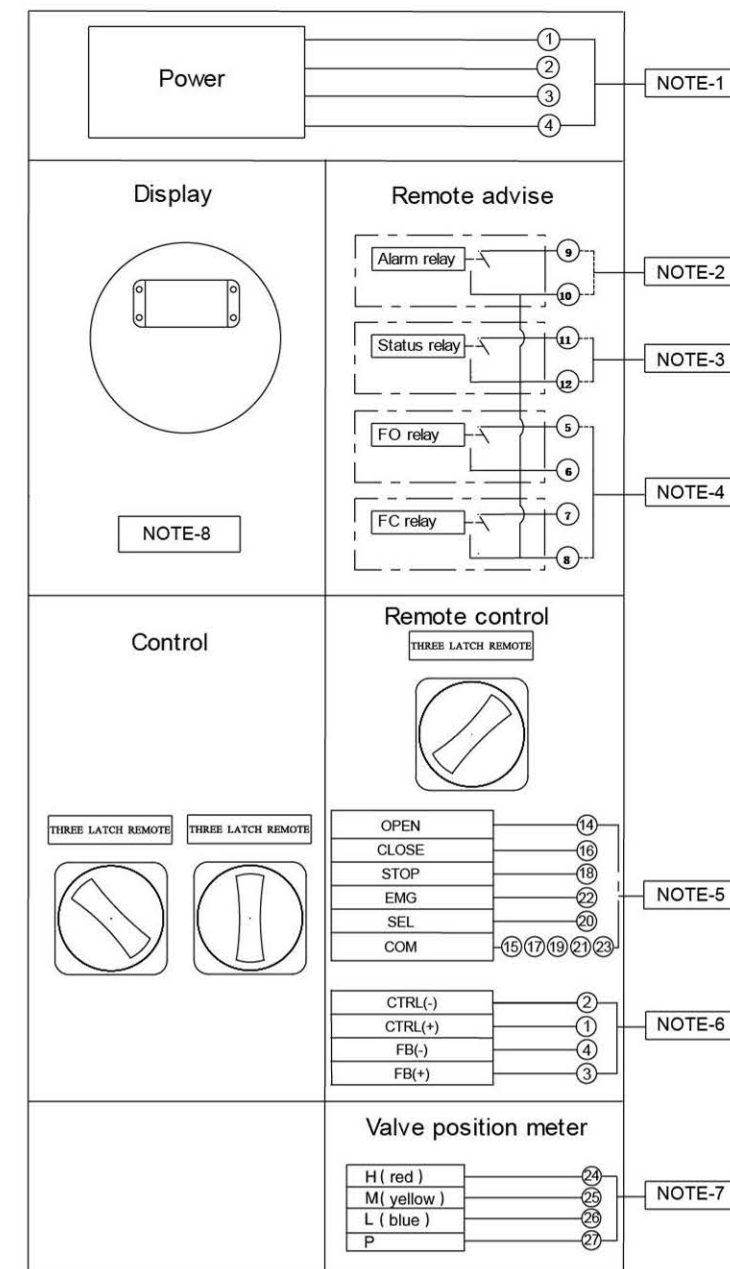
Valve Actuator Product Service

Pneumatic and Hydraulic Scotch Yoke Rotary Motion

AT30/AT31 hydraulic schematic diagram



AT30/AT31 Electric principle diagram



NOTE-1

Single phase 220V AC	LIVE	1
	NEUTRAL	2
		3
	FG	4

3 phase 380V AC	R	1
	S	2
	T	3
	N	4

Pls select reasonable power up on request

NOTE-2

Failure open/close degree signal Dry contact output
Max volume: 2A/250V AC
2A/30V DC

NOTE-3

Remote control open/close degree signal Dry contact output
Max volume: 2A/250V AC
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FO/FC degree signal Dry contact output
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Another signal will take effect only after previous signal
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according to different signal when EMG effective

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Remote analog control signal
Control signal range 4-20mA means 0-100% open degree
Output signal range 4-20mA means 0-100% open degree

NOTE-7

Connection the cable of valve position meter

NOTE-8

Screen shows the open degree based on the whole stroke,
shows operation status and menus

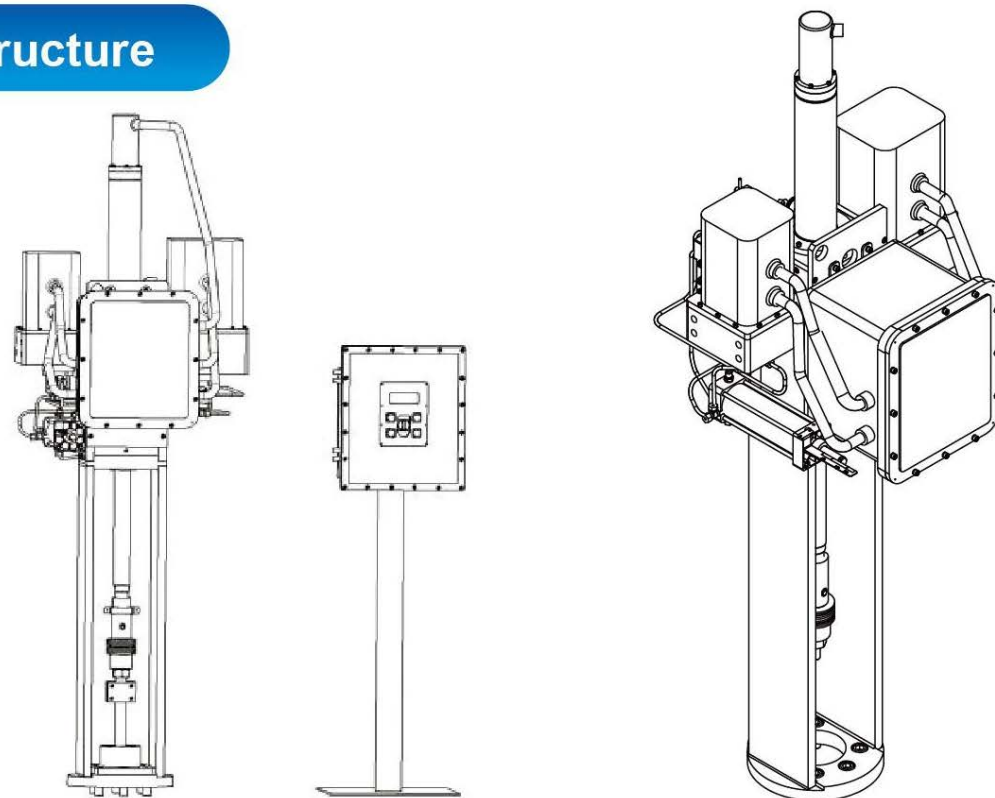
Valve Actuator Product Service

Pneumatic and Hydraulic Scotch Yoke Rotary Motion

AT51 Electro-Hydraulic Actuator



Structure



Features

- Intelligent control, Visual interface, Rich function
- Servo pump control, High quality, Low consumption
- Hydraulic power transportation, high torque range, high transportation effect, torque over load protection
- Self-contained power, small volume, no extra hydraulic pipeline connection
- Integration modular design can meet different condition
- Manual hand pump for emergency operation
- Integrated installation or split installation
- Reliably explosion proof protection
- Electrical isolation interface
- Different power option and wide working temperature range

Tech data

- Power (option): DC: 24V; 48V; 72V AC(50/60Hz); 110VAC/1P; 220VAC/1P 380VAC/3P, 400VAC/3P, 415VAC/3P
- Thrust range (linear type): 16KN~800KN
- open/close control signal: Dry contact or 24VDC
- analog control signal: 4-20 mA/dc or 20-4mA/ DC
- open/close feedback signal: Dry contact SPDT/3A
- position feedback signal: 4~20mA/DC
- Control accuracy: $\leq 0.1\%$
- Control linearity: $\leq 0.1\%$
- Repeatability mistake: $\leq 0.1\%$
- Signal control accuracy: $\leq 0.1\%$
- Position feedback accuracy: $\leq 0.1\%$
- dead zone setting: 0.05%~5.0%
- delay time: $\leq 0.2S$
- frequency: $> 3Hz$
- noise: $\leq 80dB$
- protection level: IP66
- Explosion proof: ExdIIBT4
- nature heating trace: $10\sim 18^{\circ}C$
- environment temperature: $-40\sim 60^{\circ}C$
- interface: NPT1/2(F), NPT3/4(F), NPT1/2(F)

Function

- Super high accuracy modulating
- Keep last when no action. Power failures keep last
- Self diagnostic function
- Site verify setup function
- Stroke with different speed control
- MIN open degree limit function
- Failure linkage function
- Site control
- Remote control and analog control
- PST partial stroke test function
- FO/FC and valve position feedback
- Fail alarm and reset function

Valve Actuator Product Service

Pneumatic and Hydraulic Scotch Yoke Rotary Motion

Model selection

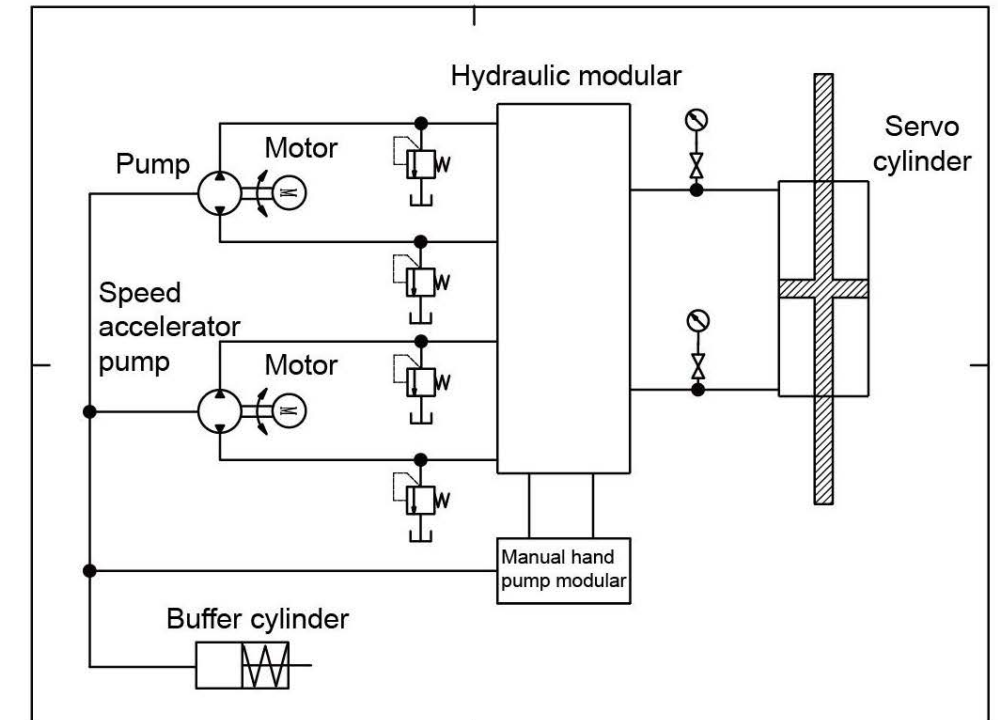
AT51-80-ME-400-XXXX

AT	1	0	-01	-M	E	-90	-xxxx
Aerotorque	Accumulator type	Quarter turn Linear	Torque Thrust	Modulating On/Off	Explosion proof Water proof	Rotation Stroke	Special

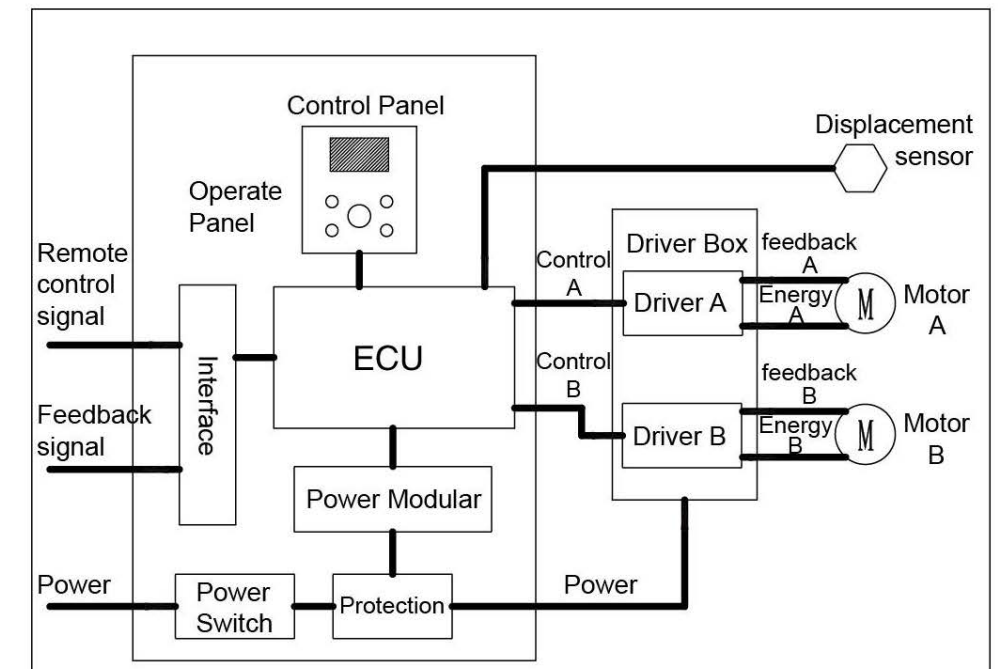
AT51 Electro-Hydraulic Actuator

Model	Thrust (KN)	Stroke speed										
		Power modular	A	B	C	D	2A	2B	2C	B+C	C+D	2D
		Max consumption	500W	1KW	2KW	5KW	1KW	2KW	4KW	3KW	7KW	10KW
AT51-16	16		2167	47.67			4333					
AT51-30	32		1083	23.83	45.5		2167	47.67				
AT51-40	40		867	19.07	36.4		1733	38.13		55.47		
AT51-50	50		693	15.25	29.12		1387	30.51	58.24	44.37		
AT51-63	63		550	12.11	23.11	46.22	1101	24.21	46.22	35.22		
AT51-80	80			9.53	18.2	36.4	8.67	19.07	36.4	27.73	5460	
AT51-100	100			7.63	14.56	29.12	693	15.25	29.12	22.19	4368	
AT51-125	125			6.1	11.65	23.3	5.55	12.2	23.3	17.75	34.94	46.59
AT51-160	160				9.1	18.2		953	18.2	13.87	2730	36.4
AT51-200	200				7.28	14.56		7.63	14.56	11.09	21.84	29.12
AT51-250	250				5.82	11.65		610	11.65	8.87	1747	23.3
AT51-320	320					9.10			9.1	6.93	13.65	18.2
AT51-400	400					728			7.28	5.55	1092	14.56
AT51-500	500					582			5.82		8.74	11.65
AT51-630	630					462					6.93	9.24
AT51-800	800					364					5.46	7.28

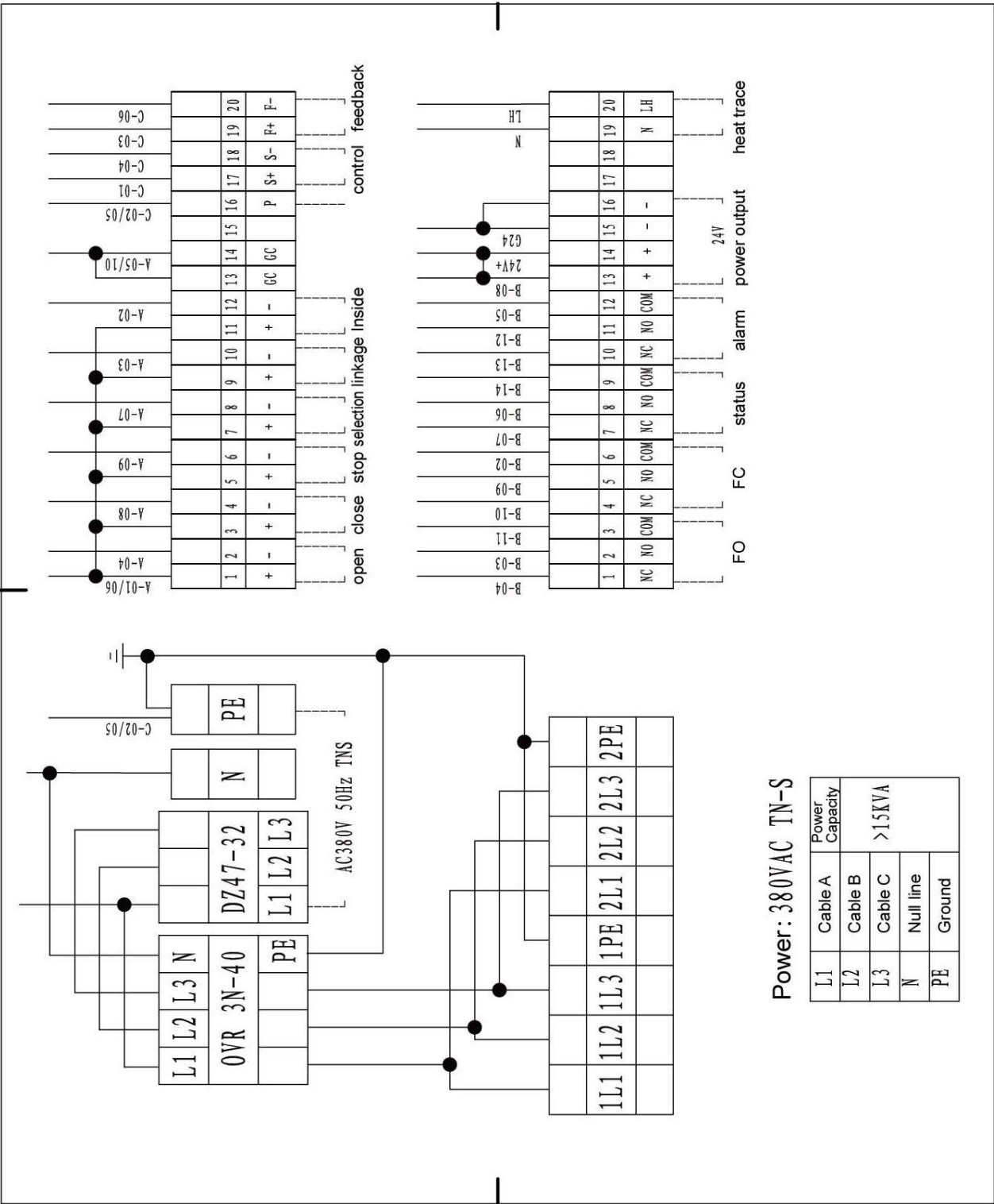
AT51 hydraulic schematic diagram



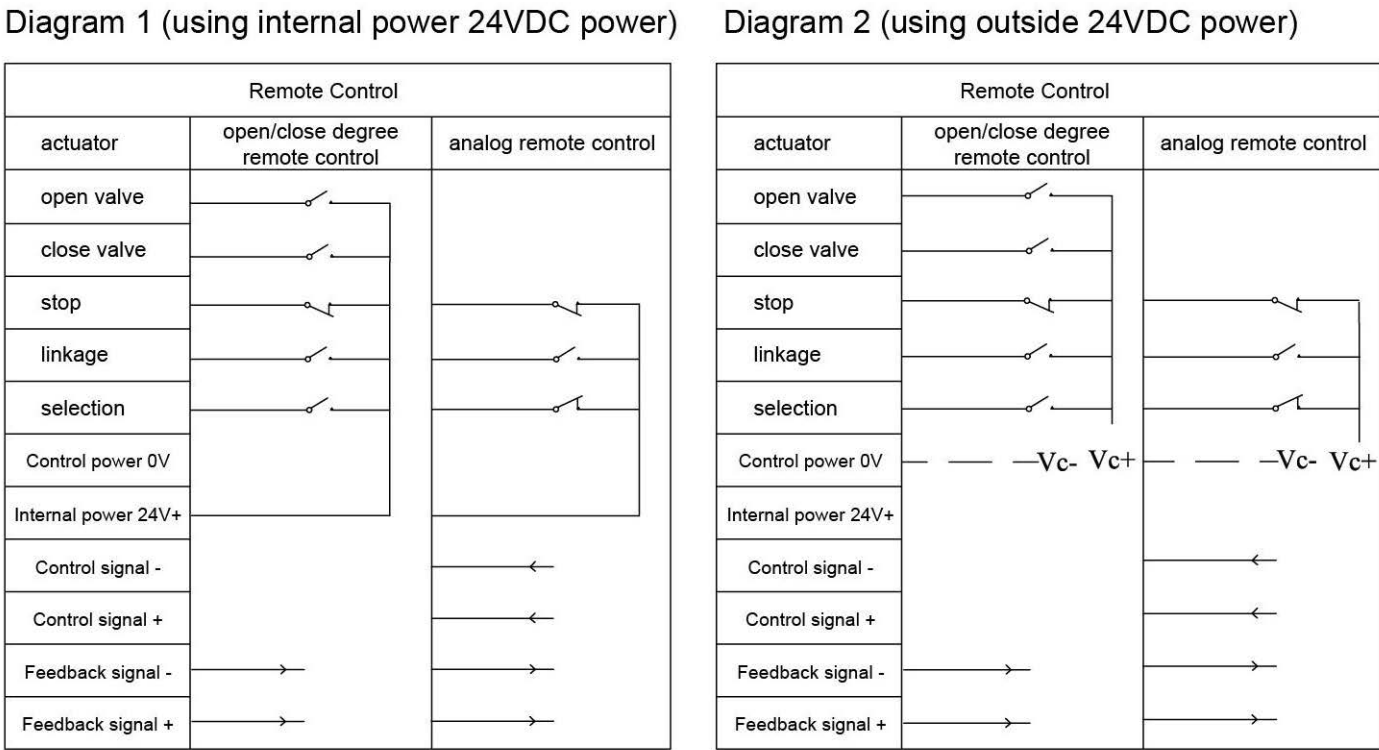
AT51 Electric principle diagram



AT51 wiring



AT51 Interface diagram



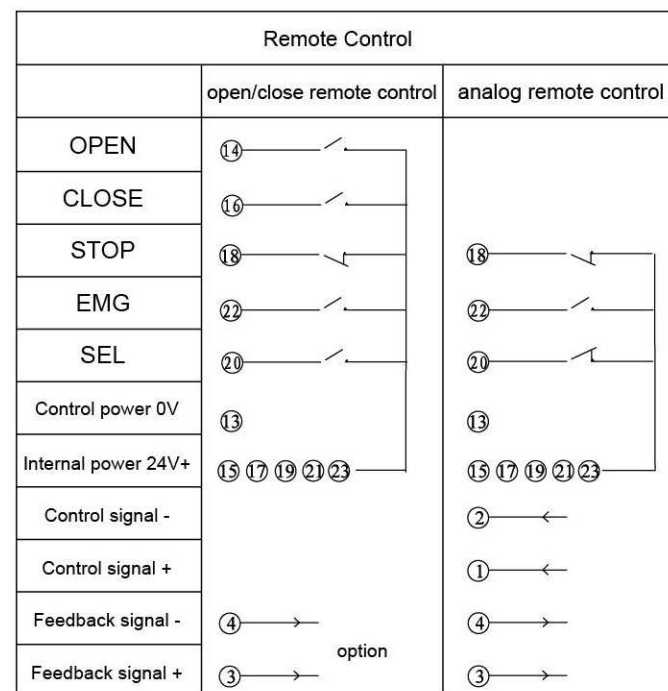
Attention: select switch application for DI or AI

Valve Actuator Product Service

Pneumatic and Hydraulic Scotch Yoke Rotary Motion

Interface diagram

Diagram 1 (using internal power 24VDC power)



NOTE-1

Above wiring diagram 1&2 under remote control mode while Open/Close/Cal buttons take no effect

Diagram 1: by using internal power 24VDC

Diagram 1: by using outside power 24VDC

NOTE-2

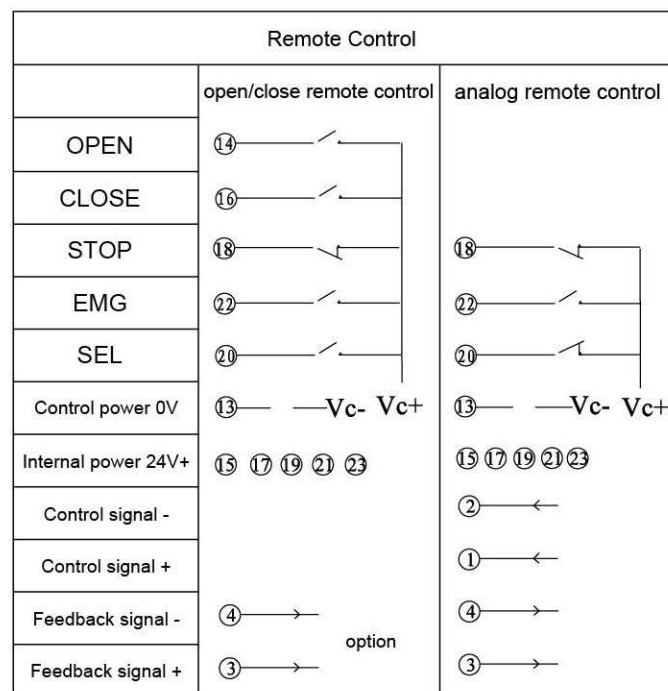
It is latch mode when in-stop of remote normally close button breaks off. Press open or close button to control valve operation.

NOTE-3

It is THREE mode when IN-STOP of remote normally close button close
Three mode divide the whole stroke of open and close into 3 parts.
Speed can be set during each part. So that buffer protection can be provided to avoid water hammer effect.

- press OPEN, actuator will keep action till FO
- press CLOSE, actuator will keep action till FC
- press STOP, actuator will stop action.

Diagram 2 (using outside 24VDC power)



NOTE-4

Select switch is used for choosing DI or AI

-AI: actuator will be acting according to 4-20mA sent by AI terminal

-AI: actuator will stop if press STOP from remote control panel or local button or toggle local rotation switch, Force STOP alarm will be gave

Open degree feedback signal 4-20mA means 00100% stroke

NOTE-5

EMG signal will take effect only during REMOTE status, actuator will be set to close or open valve when EMG signal effective.

Field of application



Power plant



Iron & Steel



Oil & Gas transportation



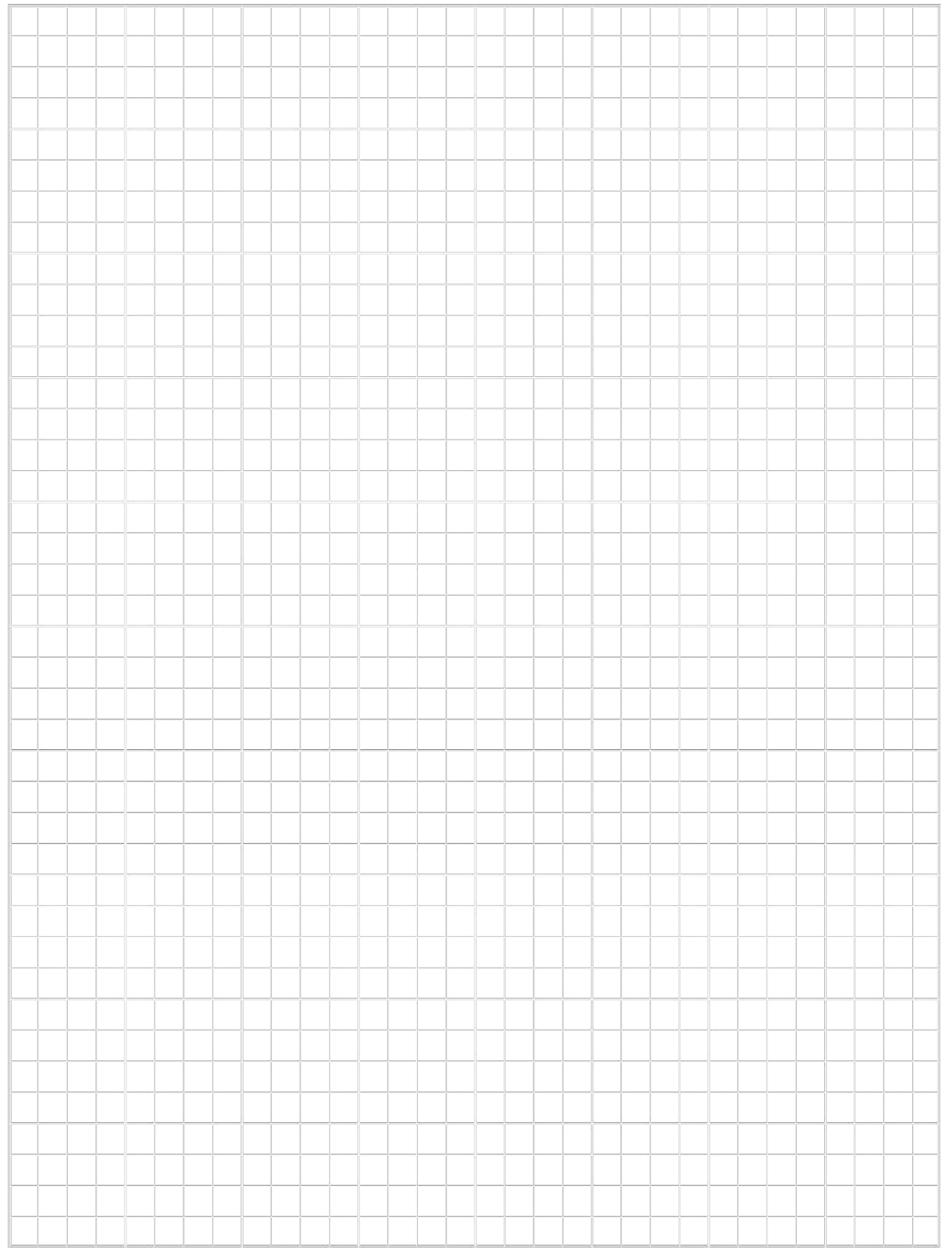
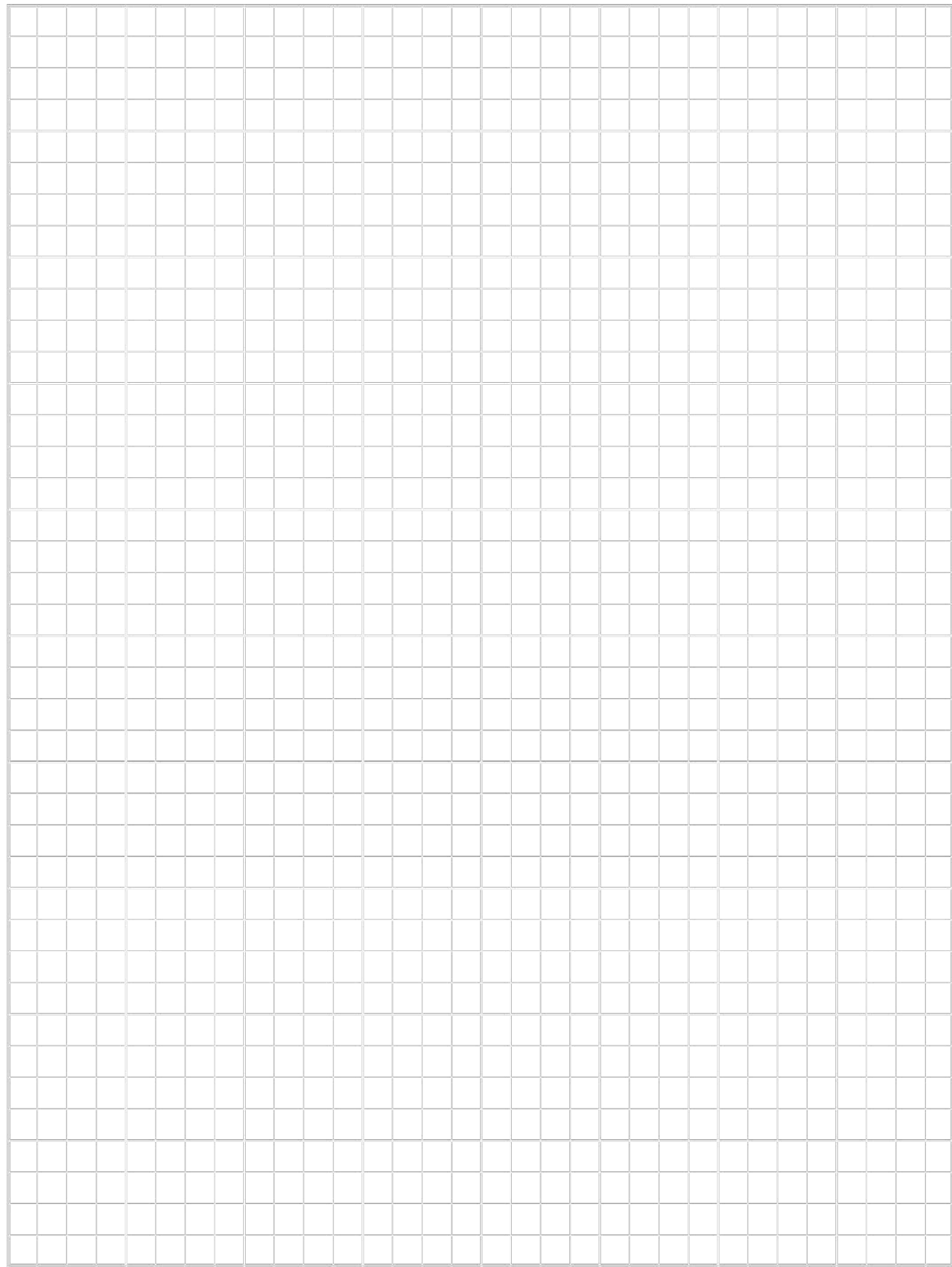
Coking



Chemical



Water treatment



Product Service Qualified Certificate

ISO 9001:2015

ISO 14001:2015

ISO 45001:2018

ASME U, PP Stemp

EAC : RUSSIA TRCU

API 6D / 600 By KSM



CE: Globe Control Valve

CE : Ball Valve

Research Institute

Venture company

Material · Part · Equipment

Rooting Enterprise

