

BALL VALVES

Sr#	Description	Qty
1	<u>2 Way Pneumatic ON/OFF Ball Valve</u> <ul style="list-style-type: none"> Size: ND25 RF ANSI 300 Fluid: Steam Material: CS Fail Safe Position: Closed Make: NUTORK, CHINA Please refer to the attached technical specifications sheet for further details 	7
2	<u>2 Way Pneumatic ON/OFF Ball Valve</u> <ul style="list-style-type: none"> Size: ND15 RF ANSI 300 Fluid: Steam Material: CS Fail Safe Position: Closed Make: NUTORK, CHINA Please refer to the attached technical specifications sheet for further details 	9
3	<u>2 Way Pneumatic ON/OFF Ball Valve</u> <ul style="list-style-type: none"> Size: ND25 RF ANSI150 Material: SS316L Fail Safe Position: Closed Make: NUTORK, CHINA Please refer to the attached technical specifications sheet for further details 	7
4	<u>2 Way Pneumatic ON/OFF Ball Valve</u> <ul style="list-style-type: none"> Size: ND150 RF ANSI 150 Material: SS316L Fail Safe Position: Closed Make: NUTORK, CHINA Please refer to the attached technical specifications sheet for further details 	5
5	<u>2 Way Pneumatic ON/OFF Ball Valve</u> <ul style="list-style-type: none"> Size: ND15 RF ANSI 150, Material: SS316L Fail Safe Position: Closed Make: NUTORK, CHINA Please refer to the attached technical specifications sheet for further details 	5
6	<u>2 Way Pneumatic ON/OFF Ball Valve</u> <ul style="list-style-type: none"> Size: ND20 RF ANSI 150 Material: SS316L 	8

BALL VALVES

	<ul style="list-style-type: none"> • Fail Safe Position: Closed • Make: NUTORK, CHINA • Please refer to the attached technical specifications sheet for further details 	
7	<u>2 Way Pneumatic ON/OFF Ball Valve</u> <ul style="list-style-type: none"> • Size: ND40 RF ANSI 300 • Material: CS • Fail Safe Position: Closed • Make: NUTORK, CHINA • Please refer to the attached technical specifications sheet for further details 	5
8	<u>2 Way Pneumatic ON/OFF Ball Valve</u> <ul style="list-style-type: none"> • Size: ND40 RF ANSI 150 • Material: SS316L • Fail Safe Position: Closed • Make: NUTORK, CHINA • Please refer to the attached technical specifications sheet for further details 	3
9	<u>3 Way Pneumatic ON/OFF Ball Valve (L- Port)</u> <ul style="list-style-type: none"> • Size: ND15 RF ANSI 150 • Material: SS304L • Fail Safe Position: Closed • Make: NUTORK, CHINA • Please refer to the attached technical specifications sheet for further details 	8
<u>Notes:</u> <ol style="list-style-type: none"> Technical literature of the offered items must be provided with the quotation. Make and country of origin of the offered items should be mentioned in the quotation. 		

ISA FORM S20.50				Specification Sheet # 1				Project				Project	
Customer				2 Way Pneumatic ON/OFF Ball Valve		2 Way Pneumatic ON/OFF Ball Valve		2 way Pneumatic ON/OFF Ball Valve		2 way Pneumatic ON/OFF Ball Valve			
Equipment													
Plant													
Requisition.													
Contract No.													
GENERAL	1	Quantity (nos.)		07 Nos.		09 Nos.		07Nos.		05 Nos.			
	2	Service		Steam		Steam							
	3	Tag No.											
	4	Line No.											
	5	Line Size	schedule	ND 25	Sch.40s	ND 15	Sch.40s	ND 25	Sch.40s	ND 150	Sch.10s		
VALVE BODY	7	Type of Body		MFG REM		MFG REM		MFG REM		MFG REM			
	8	Body Size	Port Size	MFG REM	ND 25	MFG REM	ND15	MFG REM	ND25	MFG REM	ND150		
	9	Guiding	No. of Ports										
	10	End Conn. & Rating		RF Flanged ANSI# 300		RF Flanged ANSI#300		RF Flanged ANSI#150		RF Flanged ANSI#150			
	11	Body Material		CS		CS		SS 316L		SS 316L			
	12	Paking Material		PTFE		PTFE		PTFE		PTFE			
	13	Lubricator	Isolating Valve										
	14	Bonet Type		MFG REM		MFG REM		MFG REM		MFG REM			
	15	Trim Form		Quick opening		Quick opening		Quick opening		Quick opening			
	16	Trim Material Seat/Plug		.SS 316		SS 316		SS 316		SS 316			
	17	Shaft Material		SS 316		SS 316		SS 316		SS 316			
	18	Required Seat Thickness		ANSI IV		ANSI IV		ANSI IV		ANSI IV			
	19	Maximum allowable Sound Leve		85 dBA		85 dBA		85 dBA		85 dBA			
ACTUATOR	20	Model No. and size											
	21	Type of Actuator		Single Acting		Single Acting		Single Acting		Single Acting			
	22	Close at	Open at										
	23	Flow action to		MFG REM		MFG REM		MFG REM		MFG REM			
	24	Security position		CLOSE		CLOSE		CLOSE		CLOSE			
	25	Fail position		Closed		Closed		Closed		Closed			
	26	Hand wheel	Position	Yes	MFG	Yes	MFG	Yes	MFG	Yes	MFG		
	27	Filter & Regulator Gauge		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
28	Air Supply Pressure		6 Bar		6 Bar		6 Bar		6 Bar				
SOLENOID	29	Power Supply		24 VDC		24 VDC		24 V DC		24 V DC			
	30	3 Way Valve		Universal Type		Universal Type		Universal Type		Universal Type			
	31	Style of Coil		MFG REM		MFG REM		MFG REM		MFG REM			
	32	Connection		1/4" NPT		1/4" NPT		1/4" NPT		1/4" NPT			
	33	Body Material		Stainless Steel		Stainless Steel		Stainless Steel		Stainless Steel			
	34	Conduit Connection		1/2" with Gland		1/2" with Gland		1/2" with Gland		1/2" with Gland			
LIMIT SWITCH	35	Type	Quantity	Lever Arm	02 No.	Lever Arm	02 No.	Lever Arm	02 No.	Lever Arm	02 No.		
	36	Contacts	Rating	DPDT	2A @ 24V DC	DPDT	2A @ 24V DC	DPDT	2A @ 24V DC	DPDT	2A @ 24V DC		
	37	Acting Points		Full Open Full Close		Full Open Full Close		Full Open Full Close		Full Open Full Close			
	38	Enclosure Type/CSA Rating		Intrinsically Safe/IP 65		Intrinsically Safe/IP 65		Intrinsically Safe/IP 65		Intrinsically Safe/IP 65			
SERVICE CONDITION	39	Fluid Unit		m ³ /hr		m3/hr		m3/hr		m3/hr			
	40	Fluid		Steam		Steam							
	41	Flow Max / Min											
	42	Inlet Pressure Max / Nom.		10 bar		10 Bar		8 Bar		8 Bar			
	43	Estim. Min. dP / Max. dP											
	44	Valve Min. dP / Max. dP											
	45	Max T°	Oper. T°	250 °C		250 °C		150°C		150 °C			
	46	Spec. Gravity @ Oper. T°											
	47	Max. Viscosity @ Oper. T°											
	48	% Solids											
49	Area Clasification												
50	Required CV												
51	Valve CV												
52	Installation Orientation		Horizontal line		Horizontal line		Horizontal line		Horizontal line				

NOTES: 1. Coil must be rated for continious service
 2. Cable entry must be 1/2" NPT

ISA FORM S20.50			Specification Sheet # 2				Project			
Customer			2 Way Pneumatic ON/OFF Ball Valve				2 Way Pneumatic ON/OFF Ball		2 way Pneumatic ON/OFF Ball Valve	
Equipment										
Plant										
GENERAL	1	Quantity (nos.)		05 Nos.		08 Nos.		05Nos.		
	2	Service								
	3	Tag No.								
	4	Line No.								
	5	Line Size	schedule	ND 15	Sch.40s	ND 20	Sch.40s	ND 40	Sch.40s	
VALVE BODY	7	Type of Body		MFG REM		MFG REM		MFG REM		
	8	Body Size	Port Size	MFG REM	ND 15	MFG REM	ND20	MFG REM	ND40	
	9	Guiding	No. of Ports							
	10	End Conn. & Rating		RF Flanged ANSI# 150		RF Flanged ANSI#150		RF Flanged ANS#300		
	11	Body Material		SS 316L		SS 316L		CS		
	12	Paking Material		PTFE		PTFE		PTFE		
	13	Lubricator	Isolating Valve							
	14	Bonet Type		MFG REM		MFG REM		MFG REM		
	15	Trim Form		Quick opening		Quick opening		Quick opening		
	16	Trim Material Seat/Plug		SS 316		SS 316		SS 316		
	17	Shaft Material		SS 316		SS 316		SS 316		
	18	Required Seat Thickness		ANSI IV		ANSI IV		ANSI IV		
	19	Maximum allowable Sound Level		85 dBA		85 dBA		85 dBA		
ACTUATOR	20	Model No. and size								
	21	Type of Actuator		Single Acting		Single Acting		Single Acting		
	22	Close at	Open at							
	23	Flow action to		MFG REM		MFG REM		MFG REM		
	24	Security position		CLOSE		CLOSE		CLOSE		
	25	Fail position		Closed		Closed		Closed		
	26	Hand wheel	Position	Yes	MFG	Yes	MFG	Yes	MFG	
	27	Filter & Regul Gauge		Yes	Yes	Yes	Yes	Yes	Yes	
	28	Air Supply Pressure		6 Bar		6 Bar		6 Bar		
SOLENOID	29	Power Supply		24 VDC		24 VDC		24 V DC		
	30	3 Way Valve		Universal Type		Universal Type		Universal Type		
	31	Style of Coil		MFG REM		MFG REM		MFG REM		
	32	Connection		1/4" NPT		1/4" NPT		1/4" NPT		
	33	Body Material		Stainless Steel		Stainless Steel		Stainless Steel		
	34	Conduit Connection		1/2" with Gland		1/2" with Gland		1/2" with Gland		
LIMIT SWITCH	35	Type	Quantity	Lever Arm	02 No.	Lever Arm	02 No.	Lever Arm	02 No.	
	36	Contacts	Rating	DPDT	2A @ 24V DC	DPDT	2A @ 24V DC	DPDT	2A @ 24V DC	
	37	Acting Points		Full Open Full Close		Full Open Full Close		Full Open Full Close		
	38	Enclosure Type/CSA Rating		Intrinsically Safe/IP 65		Intrinsically Safe/IP 65		Intrinsically Safe/IP 65		
SERVICE CONDITION	39	Fluid Unit								
	40	Fluid								
	41	Flow Max / Min								
	42	Inlet Pressure Max / Nom.		10 bar		10 Bar		10 Bar		
	43	Estim. Min. dP / Max. dP								
	44	Valve Min. dP / Max. dP								
	45	Max T°	Oper. T°	150 °C		150 °C		250°C		
	46	Spec. Gravity @ Oper. T°								
	47	Max. Viscosity @ Oper. T°								
	48	% Solids								
	49	Area Clasification								
	50	Required CV								
51	Valve CV									
52	Installation Orientation		Horizontal line		Horizontal line		Horizontal line			

NOTES: 1. Coil must be rated for continious service
 2. Cable entry must be 1/2" NPT

ISA FORM S20.50			Specification Sheet # 3				
			2 Way Pneumatic ON/OFF Ball Valve		3 Way Pneumatic ON/OFF Ball Valve(L-PORT)		
GENERAL	1	Quantity (nos.)	03 Nos.		08 Nos.		
	2	Service					
	3	Tag No.					
	4	Line No.					
	5	Line Size schedule	ND 40 Sch.40s		ND 15 Sch.40s		
VALVE BODY	7	Type of Body	MFG REM		MFG REM		
	8	Body Size Port Size	MFG REM ND 40		MFG REM ND15		
	9	Guiding No. of Ports					
	10	End Conn. & Rating	RF Flanged ANSI# 150		RF Flanged ANSI#150		
	11	Body Material	SS 316L		SS304L		
	12	Packing Material	PTFE		PTFE		
	13	Lubricator Isolating Valve					
	14	Bonnet Type	MFG REM		MFG REM		
	15	Trim Form	Quick opening		Quick opening		
	16	Trim Material Seat/Plug	SS 316		SS 304		
	17	Shaft Material	SS 316		SS 304		
	18	Required Seat Thickness	ANSI IV		ANSI IV		
	19	Maximum allowable Sound Lev	85 dBA		85 dBA		
	ACTUATOR	20	Model No. and size				
		21	Type of Actuator	Single Acting		Single Acting	
		22	Close at Open at				
		23	Flow action to	MFG REM		MFG REM	
		24	Security position	CLOSE		CLOSE	
		25	Fail position	Closed		Closed	
26		Hand wheel Position	Yes MFG		Yes MFG		
27		Filter & Regul Gauge	Yes Yes		Yes Yes		
28		Air Supply Pressure	6 Bar		6 Bar		
SOLENOID	29	Power Supply	24 VDC		24 VDC		
	30	3 Way Valve	Universal Type		Universal Type		
	31	Style of Coil	MFG REM		MFG REM		
	32	Connection	1/4" NPT		1/4" NPT		
	33	Body Material	Stainless Steel		Stainless Steel		
	34	Conduit Connection	1/2" with Gland		1/2" with Gland		
LIMIT SWITCH	35	Type Quantity	Lever Arm 02 No.		Lever Arm 02 No.		
	36	Contacts Rating	DPDT 2A @ 24V DC		DPDT 2A @ 24V DC		
	37	Acting Points	Full Open Full Close		Full Open Full Close		
SERVICE CONDITION	38	Enclosure Type/CSA Rating	Intrinsically Safe/IP 65		Intrinsically Safe/IP 65		
	39	Fluid Unit					
	40	Fluid					
	41	Flow Max / Min					
	42	Inlet Pressure Max / Nom.	10 bar		10 Bar		
	43	Estim. Min. dP / Max. dP					
	44	Valve Min. dP / Max. dP					
	45	Max T° Oper. T°	150 °C		150 °C		
	46	Spec. Gravity @ Oper. T°					
	47	Max. Viscosity @ Oper. T°					
	48	% Solids					
	49	Area Classification					
	50	Required CV					
	51	Valve CV					
	52	Installation Orientation	Horizontal line		Horizontal line		

NOTES:

1. Coil must be rated for continous service
2. Cable entry must be 1/2" NPT