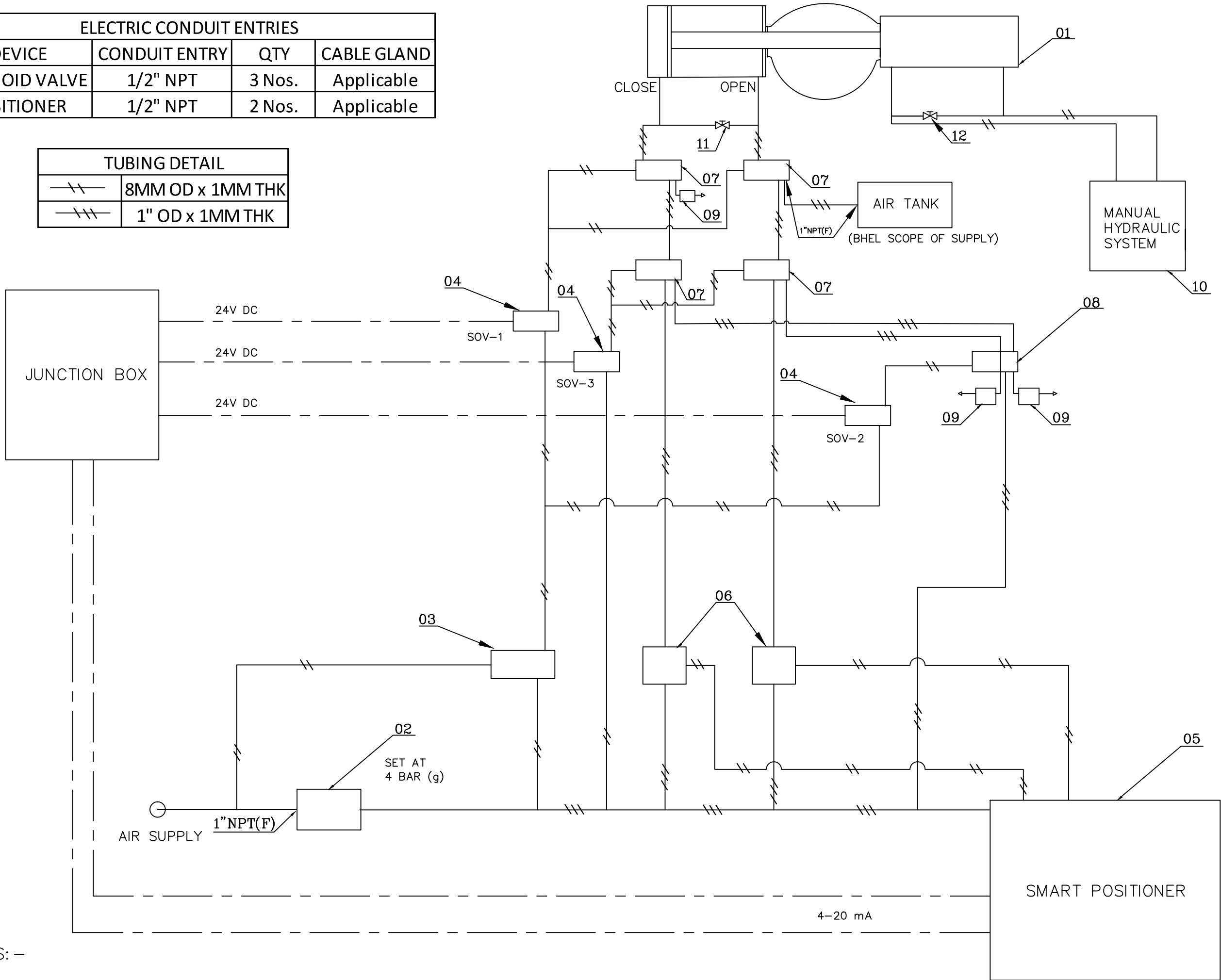


ELECTRIC CONDUIT ENTRIES			
DEVICE	CONDUIT ENTRY	QTY	CABLE GLAND
SOLENOID VALVE	1/2" NPT	3 Nos.	Applicable
POSITIONER	1/2" NPT	2 Nos.	Applicable

TUBING DETAIL	
	8MM OD x 1MM THK
	1" OD x 1MM THK



CONTROL LOGICS:-	
EMERGENCY SIGNAL - QUICK OPEN (LESS THAN 10 SECONDS)	
AIR FAILURE - QUICK OPEN (LESS THAN 10 SECONDS)	
POWER FAILURE - QUICK OPEN (LESS THAN 10 SECONDS)	
SIGNAL FAILURE - QUICK OPEN (LESS THAN 10 SECONDS)	

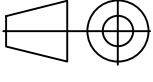
SOV CONDITION -->	SOV-1	SOV-2	SOV-3	POS
OPERATION				
QUICK OPEN	0	N/A	N/A	N/A
OPEN	#	#	0	N/A
CLOSE	#	0	0	N/A
CONTROL	#	N/A	#	#
# - SOV ENERGISED CONDITION				
0 - SOV DE-ENERGISED CONDITION				
N/A - CONDITION NOT IMPORTANT				

SL.NO.	ITEM	QTY
01	SCOTCH-YOKE ACTUATOR (DOUBLE ACTING)	1 No.
02	AIR FILTER REGULATOR	1 No.
03	AIR LOCK RELAY	1 No.
04	SOLENOID VALVE (SOV)	3 Nos.
05	SMART POSITIONER	1 No.
06	VOLUME BOOSTER (1")	2 Nos.
07	AIR OPERATED VALVE	4 Nos.
08	AIR OPERATED VALVE	1 No.
09	FLOW CONTROL VALVE (1")	3 Nos.
10	MANUAL HYDRAULIC OVER RIDE SYSTEM	1 No.
11	BALL VALVE (1")	1 No.
12	BALL VALVE (3/8")	1 No.

NOTES: –

- CIRCUIT DIAGRAM GIVEN ABOVE IS REPRESENTATIVE ONLY. THIS CIRCUIT SHALL BE SUITABLY MODIFIED BY VENDOR & IF REQUIRED WITH ADDITIONAL ACCESSORIES (LIKE PRESSURE SWITCH, AIR LOCK RELAYS & SOLENOID VALVES) TO MEET ABOVE CONTROL LOGICS REQUIREMENTS & SUBMITTED DURING ENQUIRY STAGE FOR TECHNICAL EVALUATION.
- FITTINGS & TUBINGS - SS304.
- AIR PRESSURE - 4 BAR.
- JUNCTION BOX IS IN VENDOR SCOPE OF SUPPLY.
- 4mA - Damper Close; 20mA - Damper Open.

OPERATION:-	
1. SOLENOID VALVE (SOV-1) - QUICK OPEN (NORMAL CONDITION IS ENERGISED).	
2. SOLENOID VALVE (SOV-2) - NORMAL OPERATION (OPEN/CLOSE).	
3. SOLENOID VALVE (SOV-3) - MODE SELECTION (STEPPING CONTROL MODE/NORMAL OPEN & CLOSE MODE) STEPPING MODE WHEN SOV-3 IS ENERGISED.	

 355-055	Bharat Heavy Electricals Ltd UNIT: BOILER AUXILIARIES PLANT RANIPET – 632 406	DRN	NAME M.SURESH	SIGNATURE	DATE 22.07.19
		CHD	ASHWIN		22.07.19
		APPD	ASHWIN		22.07.19
DEPT GD	ALL DIMENSIONS ARE IN MM	PROJECTION 	SCALE N.T.S.	WEIGHT (Kg) ----	DRAWING NO : 2-57-999-2508900
CODE 877	TITLE SCOTCH-YOKE PNEUMATIC ACTUATOR CIRCUIT FOR FGD BYPASS DAMPER				REV 00