

Item NO. # 1:		
Complete assembly of 3 way ,15 NB pneumatic actuated plug valve/Ball valve along with actuator, valve, Solenoid & limit switch box as per below details-		
Description	Specification	Vendor to Confirm/Specify
General	Size of valve: 15 NB, 3 way flanged Working temperature: 130 DEG C (Working Temperature of Fluid i.e Furnace oil) Ambient Temperature: 50 DEG C Fail Safe: Failure to Close Operation : On/Off Application: For furnace oil supply pipeline Actuator operating pressure: Suitable for operating air pressure 2.5 - 6 bar (Upto 8 bar maximum).	
Valve Details:	Type of valve: 3-way Plug / ball valve; size- 15 NB, Class- 300, Ends Flanged # 300 as per drawing no. BHEL/BPL/GPX/19-20/01 (Note: Valve to be mounted inline to pipeline and inlet should be from bottom i.e. third port opening of valve should be at bottom, side opening shall not be accepted) MOC body: Cast steel	
Pneumatic actuator:	Spring return single acting actuator, Mechanism: Double Rack & pinion type, Action: Spring to Close Mounting in line with pipeline, Rotation: Clock wise to close & anti clock wise to open. Material of construction: Body - Hard anodized extruded Aluminium alloy, Piston- Die casted aluminum dual piston, Piston Guides Self lubricating	
Solenoid Valve:	3/2 way direct acting solenoid valve, Mounting Namur, Pneumatic connections: ½ "NPT (F), manual operation: Push & turn, Solenoid input power supply: 220 (+/- 10 %) VAC, 50 HZ, Enclosure- IP 65	
Limit switch Box:	Limit switch box type- SPDT type, No. of switches: 1 NO + 1 NC (Micro switches) Enclosure IP 65, Feedback- Limit switch box should provide Feedback signal for open or close, Indicator: Dome type indicator for Open/Close or On/OFF indication, Locked serrated Cam.	

Item NO. # 2		
Complete assembly of 2 way , 15 NB pneumatic actuated ball valve along with actuator, ball valve, Solenoid & limit switch box as per below details-		
Description	Specification	Vendor to Confirm
General	Size of valve: 15 NB, 2 way flanged Working temperature: 180 DEG C (working temp of fluid i.e steam) Ambient Temperature: 60 DEG C Fail Safe: Failure to Close Operation : On/Off Application: For steam supply pipeline (steam pressure upto 10 kg/cm2) Actuator operating pressure: Suitable for operating air pressure 2.5 - 6 bar (Upto 8 bar maximum).	
Valve Details:	Type of valve: 2 way Ball valve (full bore); size- 15 NB, Type of valve: Ball valve, Class- 300, Ends Flanged, MOC body: Cast steel, Ball- Stainless steel	
Pneumatic actuator:	Spring return single acting actuator, Mechanism: Double Rack & pinion type, Action: Spring to Close Mounting in line with pipeline, Rotation: Clock wise to close & anti clock wise to open. Material of construction: Body - Hard anodized extruded Aluminium alloy, Piston- Die casted aluminum dual piston, Piston Guides Self-lubricating.	
Solenoid Valve:	3/2 way direct acting solenoid valve, Mounting Namur, Pneumatic connections: ½ "NPT (F), manual operation: Push & turn, Solenoid input power supply: 220 (+/- 10 %) VAC, 50 Hz, Enclosure- IP 65	
Limit switch Box:	Limit switch box type- SPDT type, No. of switches: 1 NO + 1 NC (Micro switches) ,Enclosure IP 65, Feedback- Limit switch box should provide Feedback signal for open or close, Indicator: Dome type indicator for Open/Close or On/OFF indication, Locked serrated Cam	

Item NO. #3		
Complete assembly of 2 way , 20 NB pneumatic actuated ball valve along with actuator, ball valve, Solenoid & limit switch box as per below details-		
Description	Specification	Vendor to Confirm
General	Size of valve: 20 NB, 2 way flanged Working temperature: 180 DEG C (working temp of fluid i.e steam) Ambient Temperature: 60 DEG C Fail Safe: Failure to Close Operation : On/Off Application: For steam supply pipeline (steam pressure upto 10 kg/cm2) Actuator operating pressure: Suitable for operating air pressure 2.5 - 6 bar (Upto 8 bar maximum).	
Valve Details:	Type of valve: 2 way Ball valve (full bore); size- 20 NB, Type of valve: Ball valve, Class- 300, Ends Flanged, MOC body: Cast steel, Ball- Stainless steel	
Pneumatic actuator:	Spring return single acting actuator, Mechanism: Double Rack & pinion type, Action: Spring to Close Mounting in line with pipeline, Rotation: Clock wise to close & anti clock wise to open. Material of construction: Body - Hard anodized extruded Aluminium alloy, Piston- Die casted aluminum dual piston, Piston Guides Self-lubricating.	
Solenoid Valve:	3/2 way direct acting solenoid valve, Mounting Namur, Pneumatic connections: ½ "NPT (F), manual operation: Push & turn, Solenoid input power supply: 220 (+/- 10 %) VAC, 50 Hz, Enclosure- IP 65	
Limit switch Box:	Limit switch box type- SPDT type, No. of switches: 1 NO + 1 NC (Micro switches) ,Enclosure IP 65, Feedback- Limit switch box should provide Feedback signal for open or close, Indicator: Dome type indicator for Open/Close or On/OFF indication, Locked serrated Cam	