

Accessories Requirement for Control Valve/Pneumatic On-Off Ball Valves

Pneumatic Actuator

Make	: Own make/Rotex
Model Number	: Bidder to Specify
Type	: Preferably Spring Return Actuator
Sizing Pressure / Air Pressure	: 3.5 kg/cm2(g)
Ingress Protection	: IP-65 as min.
Manual Override/Handwheel	: Yes, Required
Location	: Top/Side Mounted
Air Fail	: As per P&ID
Air to	: Bidder to Specify
Shut-off Pressure	: Design pressure as per P&ID
Diaphragm Material	: nylon reinforced neoprene or Buna N rubber
Actuator Colour	: Green/Red
Stroke Time	: <10 sec

Solenoid Valve

Make	: As per Vendor List
Model Number	: Bidder to Specify
Body Material	: Anodised Aluminium
Reset Type	: Auto
Supply Voltage	: 24 VDC
Design	: IS Design
Enclosure	: Ex-proof
Ex-Proof	: IIA/IIB, Temp Class T3 as min.
Ingress Protection	: IP-65 as min.
Cable Entry	: 1/2" NPT
SIL	: --
Type of Coil	: Single Coil
Insulation Type	: H class insulation
Redundancy of SOV	: No
Command Philosophy	: SOV shall be energized under normal conditions and de-energized which will drive the valve to failsafe condition. All SOVs shall be de energized to trip.

Air Filter Regulator

Make	:	As per Vendor List
Model Number	:	Bidder to Specify
Body Material	:	Anodised Aluminium
Enclosure	:	Weather Proof
Ingress Protection	:	IP-65
Filter Element Material	:	phosphor bronze filter element
Filter element Size	:	5 micron
Pneumatic Connection size	:	1/4" NPT(F)
Drain	:	Standard

Pressure Gauge

Make	:	as per Vendor List
Model No	:	Bidder to Specify
Casing material	:	as per Vendor List
Internals material	:	as per Vendor List
Pressure Gauge Dial Size	:	2" Dial size

Limit Switches

Make	: As per vendor list
Model Number	: Bidder to Specify
Type	: Proximity Type with metallic enclosure
Design	: Intrinsic Safe
Ex-Proof	: IIA/IIB, Temp Class T3 as min.
Switch Make	: P&F Make
Cable Entry	: 1/2" NPT
Cable Gland Material	: SS
Cable Gland Type	: Flareless Double compression
Supply Voltage	: 8VDC, 1 AMPS
Barriers	: BHEL's Scope
SIL	--

Junction Box

Make	: As per Vendor list.
Model Number	: Bidder to Specify
Material of Construction	: Die Cast Aluminium
Cable Gland Material	: Ni/brass plated/SS
Cable Gland Type	: Flareless Double compression
Enclosure	: Exproof
Ex-Proof	: IIA/IIB, Temp Class T3 as min.
Cable Entry/Exit size	: 1/2" NPT
Number of Terminals	: Bidder to Specify

Pneumatic Tube & Tube Fittings

Make : Swagelok / Parker
Material : SS316
Type : double ferrule type

Positioner

Make : As Per Vendor List
Type : ELECTRO-PNEUMATIC WITH SMART(IN
BUILT POSITION TRANSMITTER)
Diagnostic Software : NA
SIL : --
Enclosure : Metallic
Ingress Protection : IP-65 as min.

Misc

Body Stud/Nut Material : As per PMS

Volume Booster

Make : As per Vendor Std.
Model : As per Vendor Std.
Tubing size : As per Vendor Std.

Quick Exhaust Valve

Make : As per Vendor Std.
Model : As per Vendor Std.
Tubing size : As per Vendor Std.

Note:

Exproof/Intrinsic safe Certification : Yes

CCOE approval required: Yes (for exproof application: Junction Box,Limit Switch & Solenoid Valve)