

Section 7. Technical Specifications

Supply installation testing commissioning of HP bypass to CRH control valve actuator and it accessories:

Sl. No.	Name of Item	Technical Specification and Standards	Qty.
1	2	3	4
01.	1.Actuator	Brand: Copes-Vulcan/SPXFLOW or equivalent Model: PISTON P800 16DA or Equivalent. Type: Double Hand wheel: yes Fail position: Fail to close Frame material: Cast steel Force to close: 5964, Force to open: 11319 ibf. Connection large flange, Air pressure available:5.5/4.0 bar Full open to full close distance: Above 5 inch(Actuator will be adjusted in the range between 0 to 5 inch as per mechanical valve position) Shaft Dia: 1.25 inch Normal Opening Speed < 10 sec (Full stroke) Normal Closing Speed < 10 sec (Full stroke) Quantity : 1 pcs	1 Set
	2. Accessories		
	(a) Positioner	Copes SIPART PS2-Remote mounted or Equivalent. Input range: 4-20 mA, 24V DC HART module. Feed back: 4-20 mA, 24V DC, SIEMENS NCS Position sensor, 6DR4004-6NN10 or equivalent. Quantity: 1 set	
	(b) Booster	RK3000 or Equivalent. Brand: RK control instrument PVT ltd or equivalent Volume booster SWP: 150 psig Pipe conns:3/4 inch NPT EXT PORT: 1/2 inch, supply port: 1/2 inch Quantity: 4 pcs (2 pcs for use and 2 pcs for spare)	
	(c) Spool valve	Brand: SMC Air operated valve or equivalent Model: VGA342-04NA or equivalent Main Press: 02-0.9 MPa Pilot Press: 0.2- 0.9 MPa Quantity:6 pcs(4 pcs for use and 2 pcs for spare)	
	(d) Solenoid valve with coil	Brand: ASCO or equivalent Rebuilt kit no:131237 or equivalent Air, Inert gas (psi):150 Watta:11.6 Pipe:1/4 Serial: A101841, Date:1142 Valve catalog no: JKF8327G052 This solenoid valve will be used for emergency close.	

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		Quantity: 2 pcs	
	(e) Limit switch	Brand: Telemecanique or equivalent Model: XCK-J,C or equivalent IEC 60947-5-1 GB14048.5 Ui:500V, Uimp:6 kv AC15 240V 3A IP66 Quantity: 2 pcs	
	(f) Air Lock	Brand: Fisher LOC 105 or equivalent Type:167DA or equivalent Switching valve Max supply:125 psi Spring: A/C IN; 40-125 PSI Spring-B IN:40-90 PSI Quantity: 1 pcs	
	(g) Air Filter Regulator	Brand: SMC or equivalent Model: AW40-N06H-Z or equivalent Set Press: 7~125 PSI Quantity: 1 pcs	
		<p>*One coupler for coupling actuator-valve shaft and feedback positioner spindle.</p> <p>*Impulse line with necessary support.</p> <p>*Contractor must provide all other auxiliary equipment (if necessary) for normalize the actuator.</p> <p>*This actuator will be used for control steam for converting at a maximum pressure 135 bar to 35 bar.</p> <p>*For equivalent brand of actuator all other accessories' equipment can be selected as per requirement.</p> <p>*Contractor can provide hydraulic oil operated actuator but in that case contractor must provide hydraulic oil tank, actuator and other auxiliaries with control system.</p> <p>*This actuator will be used for control HP Bypass Valve. Link with DCS 4-20 mA, 24V DC input and position feedback 4-20 mA, 24V DC. Valve open close limit (24V DC) and emergency close.</p> <p>*Supply, installation, testing, commissioning will be conductor scope. This actuator will be used for controlling COPES-VULCAN/SPXFLOW Valve Model No: 1/8 DSCV-SA.</p>	
	Country of Origin	(For Actuator and all other accessories) : G7	

Note 1. Quality will be certified after one month of successful Supply installation testing commissioning in the field.

Note 2. Contractor can visit CCPP South plant at APSCL site for taking information about this actuator.

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