



Republic of the Philippines
GENERAL SANTOS CITY WATER DISTRICT
 E. Fernandez St., Brgy. Lagao, General Santos City
 Telephone No. (083) 552-3824/ Telefax No. (083) 553-4960
 E-mail Address: gscwaterdistrict@yahoo.com
 www.gensanwater.gov.ph



TECHNICAL SPECIFICATION

TITLE: PURCHASE OF 1 PC 150 mm Ø PRESSURE REDUCING VALVE & 1 PC 300 mm Ø PRESSURE REDUCING AND SUSTAINING VALVE

1. The scope of work for this project of supply, delivery and commissioning of 1 pc 150mm and 1 pc 300mm pressure reducing and sustaining valve to General Santos City Water District.
2. The project duration is Ninety (90) Calendar Days and shall commence after the receipt of Notice to Proceed.
3. The Approved Budget for this Contract is One Million One Hundred Fifty Thousand Pesos (1,150,000.00).

150 mm Ø PRESSURE REDUCING VALVE SPECIFICATIONS

A. Main Valve

Nominal Sizes	:	DN150
Main Valve Pattern	:	Globe (Straight Flow)
Body and Bonnet Material	:	Ductile Iron
Body Coating	:	Epoxy
Connection Type	:	PN16
Position Indicator	:	Stainless Steel 316 or Glass
Nuts	:	Stainless Steel
Ball Valve	:	Stainless Steel
Valve Disc Holder	:	Stainless Steel or Ductile Iron
Drain Plug	:	Stainless Steel
Spring	:	Stainless Steel
Seat	:	Stainless Steel
Guide	:	Brass
Stem	:	Stainless Steel 316
O Rings	:	Elastomer EPDM
Diaphragm	:	Elastomer EPDM

B. Pilot Circuit

Opening Speed Controller	:	Stainless Steel 316
Strainer with G 3/8 Screen	:	Stainless Steel CF8M
Pilot Valve Material	:	Stainless Steel
Tubing and Fittings	:	Stainless Steel
Spring:		
1 to 16/20 bar		
0.3 to 2 bar*	:	Stainless Steel
15 to 25 bar*		

C. Main Valve Features

1. Hydraulically operated, direct sealing diaphragm type.
2. Must be designed for 25 bar maximum pressure rating (PN25).
3. Include isolating cocks for pressure gauges (inlet and outlet) .

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4. All moving parts and seat made entirely from Stainless Steel 316
5. Valve components must be accessible and serviceable without removing the valve from the pipeline.
6. Full hot epoxy coating with minimum thickness 250µm.
7. Visual Position Indicator with high resistance glass and manual air release valve.
8. Includes drain plug in the body.
9. Optional anti-cavitation kit.
10. Operating temperatures from 0°C to 65°C.
11. Includes pressure gauges for upstream and downstream pressure
D. Pilot Circuit Features
1. Completely disassemble in three points using new axial, gasketless, leaktightness connecting pieces for easy service and maintenance.
2. Includes strainer or filter.
3. Outlet pressure is adjustable from 1 to 16/20 bar with one spring only.
4. Includes opening speed controller device.
5. Leak-tightness at nil flow rate
6. Circuit and components entirely made of Stainless Steel 316
E. Performance
1. The valve reduce and stabilize the pressure of a downstream network supplied by a higher pressure upstream network, irrespective of variations in upstream and the flowrate.
2. Ensures stability and set-point precision over the full range of operation.
3. Supply a low-service network with a high-service network.
4. Extend the range of normal use of valve to particularly harsh operating regimes without the risk of damage.
5. Balance the supply of an interconnected network with a number of resources with higher and different pressures.
F. Required/Standard Markings (Compliance upon Delivery)
1. Standard product name plate attached to the valve body containing applicable information such as brand name, serial number, model, pressure rating, etc.
2. Manufacturer's Name/Logo (embossed) (DTI Standard)
G. Terms and Conditions (Compliance upon Delivery)
1. Warranty must be two (2) years from date of acceptance. (Compliance upon delivery)
2. Bidder must submit brochures/product catalog containing Technical Data, Design Specifications, Characteristic and Performance, Shop Drawings, and other pertinent information of the product. (To be submitted during opening of Bids)
3. Training and commissioning for installation, pressure setting, and maintenance of the product is included. (Compliance upon delivery)

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300 mm Ø PRESSURE REDUCING AND SUSTAINING VALVE SPECIFICATIONS

A. Main Valve	
Nominal Sizes	: DN300
Main Valve Pattern	: Globe Pattern
Body and Bonnet	: Ductile Iron
Body Coating	: Fusion Epoxy Bonded
Connection Type	: PN16
Position Indicator	: Stainless Steel 316 or Glass
Nuts	: Stainless Steel
Ball Valve	: Stainless Steel
Valve Disc Holder	: Stainless Steel or Ductile Iron
Spring	: Stainless Steel
Seat	: Stainless Steel
Bonnet	: Ductile Iron
Stem	: Stainless Steel 316
O Rings	: NBR
Diaphragm	: Elastomer EPDM
B. PRV PILOT Circuit	
Opening Speed Controller	: Stainless Steel 316
Strainer	: Stainless Steel
Pilot Valve Material	: Stainless Steel
Tubings and Fittings	: Stainless Steel
Spring 1 to 16/20 bar	: Stainless Steel
0.3 to 2 bar*	
15 to 25 bar*	
C. PSV PILOT Circuit	
Pilot Valve Material	: Stainless Steel
Tubings and Fittings	: Stainless Steel
Spring 1 to 16/20 bar	: Stainless Steel
0.3 to 2 bar*	
15 to 25 bar*	
D. Main Valve Features	
1. Hydraulically operated. Direct sealing diaphragm type.	
2. Must be designed for 25 bar maximum pressure rating (PN25).	
3. Include isolating cocks for pressure gauges (inlet and outlet).	
4. All moving parts and seat made entirely from Stainless Steel 316.	

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5. Valve components must be accessible and serviceable without removing the valve from the pipeline.	
6. Visual Position Indicator with high resistance glass and manual air release valve.	
7. Optional anti-cavitation kit.	
8. Operating temperatures from 0°C to 65°C.	
9. Includes pressure gauges for upstream and downstream pressure	
E. Pilot Circuit Features	
1. Completely disassemble in three point using new axial, gasketsless, leaktightness connecting pieces for easy service and maintenance.	
2. Includes strainer or filter.	
3. Outlet pressure is adjustable from 1 to 16/20 bar with one spring only.	
4. Includes opening speed controller device.	
5. Leak-tightness at nil-flow rate.	
6. Circuit and components entirely made of Stainless Steel 316.	
F. Performance	
1. The sustaining pilot keeps the upstream pressure above the pilot setting regardless of downstream flow.	
2. The valve will reduce the higher upstream pressure and keep the downstream pressure as the pilot setting (adjustable).	
3. Ensures stability and set-point precision over the full range of operation.	
4. Supply a low-service with a high-service network.	
5. Extend the range of normal use of valve to particularly harsh operating regimes without a risk of damage.	
6. Balance the supply of an interconnected network with a number of resources with a higher and different pressures.	
G. Required / Standard Markings (Compliance upon Delivery)	
1. Standard product name plate attached to the valve body containing applicable information such as brand name, serial number, model, pressure rating, etc.	
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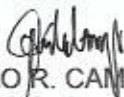
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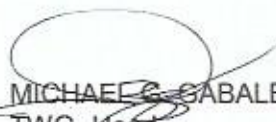


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