



TECHNICAL SPECIFICATION 15 MM Ø WATER METER

TITLE: SUPPLY AND DELIVERY OF FOUR THOUSAND (4,000) PIECES OF 15 MM Ø MULTI-JET BRASS WATER METER.

SCOPE OF WORK:

THE SCOPE OF WORK SHALL BE THE SUPPLY AND DELIVERY OF WATER METERS TO GENERAL SANTOS CITY WATER DISTRICT.

I. GENERAL REQUIREMENTS		STATEMENT OF COMPLIANCE
A. NOMINAL DIAMETER	15 MM	
B. METER TYPE	Multijet	
C. METROLOGICAL CLASS	"B"	
D. METER DESIGN	Flow is bi-directional (<i>no non-returned valve at outlet portion</i>)	
	Meter registry is irreversible	
	Hermetically or vacuum sealed register	
	Solid and Robust design, high impact glass lens & pressure resistance.	
	Anti-magnetic type	
	Water meter body and register box ring shall be made of brass.	
E. DIMENSION	Meter register in cubic meters (m ³)	
	Length without tailpieces = 165mm with ±5mm tolerance	
	Tailpiece length = 75 mm with ±5mm tolerance, 2 pcs	
	Width of 85mm to 105mm	
	Height of 90mm to 120mm (including cap in closed position)	
	Weight without tailpiece = 1.0 to 1.5 kg	


F. WORKING CONDITION	Working Pressure: 10-17 Bars	
	Water Temperature: The meter can work without deterioration on temperature at local climate	
G. METROLOGICAL CHARACTERISTICS (MINIMUM PERFORMANCE)	Minimum Flow Rate (Q_{min}) = 0.03 m ³ /hr; Allowable error in accuracy is $\pm 5\%$	
	Transitional Flow Rate (Q_t) = 0.12 m ³ /hr; Allowable error in accuracy is $\pm 2\%$	
	Maximum Flow Rate (Q_{max}) = 3.0 m ³ /hr; Allowable error in accuracy is $\pm 2\%$	
	Nominal Flow Rate (Q_n) = 1.5 m ³ /hr; Allowable error in accuracy is $\pm 2\%$	
H. EFFICIENCY TEST	<p>a.) The bidders are required to submit ten (10) water meters all with tailpiece per model/brand. Eight (8) water meters will be tested for Efficiency Test using GSCWD Test Bench at Transitional and Minimum Flow. The ninth water meter shall be a cut-out model and expected to reveal the inner mechanism. The tenth water meter will be dismantled for examination.</p> <p>The GSCWD test bench shall be the official measuring equipment to be used for Efficiency Test at Transitional and Minimum Flow. The said testing shall undergo once only, thus results are final.</p> <p>The ten (10) water meter is part of the pass/fail criterion. All water meters presented must have tailpieces. If ever the bidder is not able to present the water meters on the Deadline for Submission of bids, they shall be declared failed in the said criteria and the other requisite requirements.</p>	
	b.) At least six (6) out of eight (8) water meters submitted for Efficiency Test using GSCWD Test Bench shall pass all testing at Transitional and Minimum flows.	
	c.) The GSCWD test bench shall be the official measuring equipment to be used for Efficiency Test hence, the results are final.	
I. STRAINER SCREEN	Meter fitted with strainer on inlet to protect against dirt	
J. METER SEAL	Steel cable or stainless steel wire (plastic coated) with tamper proof meter seal with GSCWD marking. Lead meter seal is not acceptable.	

K. BIDDERS QUALIFICATION	Bidder shall be an authorized dealer / reseller of the offered product for after sales and support.	
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II. ADDITIONAL REQUIREMENTS		STATEMENT OF COMPLIANCE
A. METER BODY MARKINGS	Flow Direction Arrow	
	Meter Size: 15mm	
	Marked with "GSCWD" at top plate of register assembly and top brass printed in Bold and all written in Capital Letters	
B. SERIAL NUMBERING	Shall be provided by GSCWD which shall be unique or no duplication in every meter. Minimum of six (6) digits and shall be engraved in block type by the supplier. Shall be permanent and only one serial number will appear on the external top surface of the register box ring. Note: GSCWD will provide the serial numbering.	
C. PAINTING	Automotive finished; Blue	
D. WARRANTY	All water meters shall be guaranteed against defects in workmanship and material contents. The winning bidder shall guarantee to replace defective water meters within one (1) year from the date of final testing. For verification purposes, GSCWD technician shall also be allowed to open a reported malfunctioning water meter, without effect on the one year warranty.	
E. OTHER PACKAGE	With plastic end cap installed to both meter body thread ends.	
	Each meter individually packed in a small box containing 2 threaded tailpieces and 2 rubber gasket that fitted to its outlet design of the manufacturer.	
	Also, the winning bidder must provide an additional 10% rubber gasket of the total delivered water meter.	
	It shall be packed by 10's per batch with the meter serial numbers indicated in four sides of the external portion of carton/box.	
	The tailpieces shall be of the same material composition as the meter body.	

Prepared by:

TECHNICAL WORKING GROUP FOR WATER METER

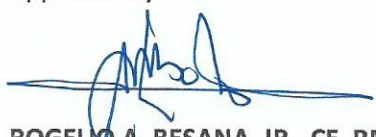

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