TESCO CONTROLS, INC.

Instrument Data Sheet

Project Name: Monterey Regional Water Pollution Control Agency (MRWPCA)
Blanco Drain & Reclamation Ditc

Project Date: 6/13/2017

Revision Date: 6/15/2018

Project No: 47003

Instrument type: Flowmeter, Magnetic

Loop No.: FIT-271

Manufacturer: ENDRESS+HAUSER

Loop Description: RECLAMATION DITCH PUMP STATION FLOW

Process Data

Process Medium: WATER

Process Connection: 12" 150 LB CS FLANGES

Process Range: 0-10 CFS

Instrument Range: 0.77-23.32 CFS (350-10,600 GPM)

Engineering Units: CFS

Instrument Span:

Transmitter Data

Txmtr Tag Ref. No.: FIT-271

Txmtr. Model No.: 5W4C3H-AAALIP5DUA1K1B+CBZ1

Enclosure: NEMA 4X, SENSOR 6P

Mounting: WALL

Device Power: 100-230 VAC

Signal Input:

Signal Output: 4-20 mA HART

Display: LCD, BACKLIT

Auxillary Input:

Auxillary Output:

Discrete Outputs: 2 OPEN COLLECTOR: PULSE/FREQUENCY/ SWITCH

Sensor Data

Sensor Tag Ref. No.: FE-271

Sensor Model No.: INCLUDED WITH TRANSMITTER

Primary Element: ALLOY C22 ELECTRODES

Sensor Material: POLYURETHANE LINER

Cable Length: 50 FEET

Accuracy: 0.5%

Auxillary Input:

Auxillary Output:

	Flow:	**Temperature:**	**Pressure:**
Minimum:			
Maximum:			

Option

Option 1: 2 EA. 12" 316 S.S. GROUNDING RINGS

Option 1 Model No.: TESCO STOCK

Option 2:

Option 2 Model No.:

Option 3:

Option 3 Model No.:

Special Notes:

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Flow Loop Test Procedure TP-10A

Project Name:	Monterey Regional Water Pollution Control Agency (MRWPCA) Blanco Drain & Reclamation Ditc	Project Date:	6/13/2017
		Revision Date:	6/15/2018
Project No:	47003		

Description: RECLAMATION DITCH PUMP STATION FLOW

Process Range: 0-10 CFS

Totalization Units:

Instrument Range: 0.77-23.32 CFS (350-10,600 GPM)

Pulse Rate:

Instrument Span:

Loop Verification

Prior to commissioning the flow loop. Verify and complete the following tests and calibrations:

- [x] Installation Verified
- [x] Wiring Tested
- [ ] Instrumentation Tubing/Piping Tested N/A
- [x] Instruments Calibrated
- [ ] Totalization Verified N/A

Loop Test Procedure

Test flow loop with instruments, including transmitters, recorders, process controllers and controlled devices, connected and functioning. If it is not possible to vary flow conditions, disconnect the flow transmitter and utilize a NBS traceable signal generator to simulate flow conditions. Verify analog displays, controllers, and chart recorders by varying the flow signal throughout the range. Establish a stable base flow value and verify totalization increments, i.e. 12mA = X GPM whereby Y gallons corresponds to X/Y pulses per minute.

Comments:

Contractor's Representative (Signature) — (Date) 5/10/19

Owner's Representative (Signature) — (Date) 5/10/19

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Magmeter Transmitter Calibration Test Data Form TP-18B

Project Name:	Monterey Regional Water Pollution Control Agency (MRWPCA) Blanco Drain & Reclamation Ditc	Project Date:	6/13/2017
		Revision Date:	6/15/2018
Project No:	47003		

Description:	RECLAMATION DITCH PUMP STATION FLOW		
Instrument Type:	Flowmeter, Magnetic		
Tag Ref No.:	FIT-271	Manufacturer:	ENDRESS+HAUSER
Transmitter Model No.:	5W4C3H-AAALIP5DUA1K1B +CBZ1	Serial No.:	
Process Range:	~~0-10 CFS~~ 0-4500 GPM	Signal Output:	4-20 mA HART
Engineering Units:	CFS	Instrument Span:	

Attach manufacturer calibration certification (flow curves). Simulate transmitter outputs utilizing manufacturers diagnostic tools at the specified values below. Measure output utilizing a calibrated meter and record the results below.

% of Span	Input	Expected Output	Actual Output	% of Deviation
0	4	4mA/1.0V	0	
25	8	8mA/2.0V	1125	
50	12	12mA/3.0V	2250	
75	16	16mA/4.0V	3375	
100	20	20mA/5.0V	4500	

Comments:

Verifyed live values at HMI

Contractor's Representative (Signature) — 5/10/19 (Date)

Owner's Representative (Signature) — 5/10/19 (Date)