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:

Project No: 47003

Instrument type: Flowmeter, Magnetic

Loop No.: FIT-171

Manufacturer: ENDRESS+HAUSER

Loop Description: BLANCO DRAIN PUMP STATION FLOW

Process Data

Process Medium: WATER

Process Connection: 12" 150 LB CS FLANGES

Process Range:

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

Engineering Units: CFS

Instrument Span:

Transmitter Data

Txmtr Tag Ref. No.: FIT-171

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-171

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:

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:

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:

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:

Endress+Hauser

People for Process Automation

Flow Calibration with Adjustment

21662572-4460154

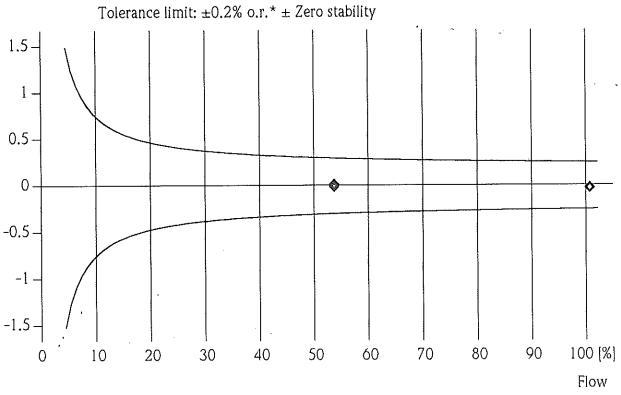
3800387999 Purchase order number	FCP-7.1.2 Calibration rig
US-3006017783-20 / Endress+Hauser Flowtec AG Order N°/Manufacturer	185 l/s (≙ 100%) Calibrated full scale
5W4C2F-7DA0/0 Order code	Service interface Calibrated output
Promag W 400 10" Sensor/Transmitter	1.1583 Calibration factor
N6038A19000 Serial N°	-3 Zero point
FE/FIT 171 Tag N°	82.3 °F Water temperature

Flow [%]	Flow [l/s]	Duration [s]	V target [l]	V meas. [l]	Δ o.r.* [%]	Outp.** [mA]
53.5	98.884	60.1	5938.82	5939.75	0.02	12.55
53.5	98.914	60.1	5940.38	5939.84	-0.01	12.55
100.6	186.189	60.1	11182.1	11179.3	-0.03	20.10
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*o.r.: of reading

**Calculated value (4 - 20 mA)

Measured error % o.r.



For detailed data concerning output specifications of the unit under test, see Technical Information (TI), chapter Performance characteristics.

Traceability to the national standard for all test instruments used for the calibration is guaranteed.

Endress+Hauser Flowtec operates ISO/IEC 17025 accredited calibration facilities in Reinach (CH), Cernay (FR), Greenwood (USA), Aurangabad (IN), Suzhou (CN) and Itatiba (BR).

Leroy

26.07.2018

Date of calibration

A. Leroy

Operator

Endress+Hauser Flowtec AG
Rue de l'Europe 35 / Kägenstrasse 7
F-68700 Cernay / CH-4153 Reinach

Certified acc. to
ISO 9001

Endress+Hauser
People for Process Automation

Parameter Settings

Order information	
Customer	TESCO CONTROLS INC US-95828 SACRAMENTO
Customer purchase order	0215512
Sales order number / Item	3800387999
Internal order number / Item	US-3006017783-20

Device information	
Description	Promag W 400 10"
TAG	FE/FIT 171
Serial number	N6038A19000
Order code	5W4C2F-7DA0/0
Extended order code	5W4C2F-AAALIP5DUA1K1B+CBZ1

Device	
Device software	02.00.01
Communication type	HART
Device revision	Dev.Rev.: 8
Application package code	29225535
MAC Address 1	00-07-05-13-85-FD
Bus address	0

Expert → Sensor → System units	
Volume flow unit	gal/min (us)
Volume unit	gal (us)
Mass flow unit	lb/min
Mass unit	lb
Density unit	kg/l
Temperature unit	°F
Conductiv. unit	µS/cm

Expert → System → Display	
Display language	English
Format display	1 value, max.
Value 1 display	Volume flow
Value 2 display	None
Value 3 display	None
Value 4 display	None
Display damping	0 s

Operator
Cernay, 2018-07-26, A. Leroy

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Endress+Hauser Flowtec AG
Rue de l'Europe 35
F-68700 Cernay

Endress+Hauser
People for Process Automation

Parameter Settings

Device information	
Description	Promag W 400 10"
TAG	FE/FIT 171
Serial number	N6038A19000

Expert → Application → Totalizer 1	
Assign variable	Volume flow
Unit totalizer1	gal (us)
Operation mode	Net flow total
Failure mode	Stop

Expert → Application → Totalizer 2	
Assign variable	Volume flow
Unit totalizer2	gal (us)
Operation mode	Net flow total
Failure mode	Stop

Expert → Application → Totalizer 3	
Assign variable	Volume flow
Unit totalizer3	gal (us)
Operation mode	Net flow total
Failure mode	Stop

Expert → Output → Curr.output 1	
Assign curr. 1	Volume flow
Current span	4...20 mA US
0/4 mA value	0 gal/min (us)
20 mA value	1500 gal/min (us)
Failure mode	Max.
Damping out. 1	1 s

Expert → Output → PFS output 1	
Assign pulse 1	Volume flow
Value per pulse	15 gal (us)
Pulse width	100 ms
Failure mode	No pulses

Expert → Output → PFS output 2	
Assign pulse 2	Off

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