

Appendix I Calibration Records

Durchflusskalibrierung mit Justierung

30218438-2685344

46596092

Bestellnummer

CA-3004766341-10 / Endress+Hauser Flowtec

Auftragsnummer/Hersteller

50W6H-UL0A1A10B7AA

Bestellcode

PROMAG 50 W 24"

Umformer/Aufnehmer

EC053616000

Fabrikationsnummer

-

Tag-Nr.

FCP-9.B

Kalibrieranlage

10936.72 us.gal/min ($\cong 100\%$)

Kalibrierter Endwert

Service-Schnittstelle

Kalibrierter Ausgang

1.2700

Kalibrierfaktor

0

Nullpunkt

70.9 °F

Wassertemperatur

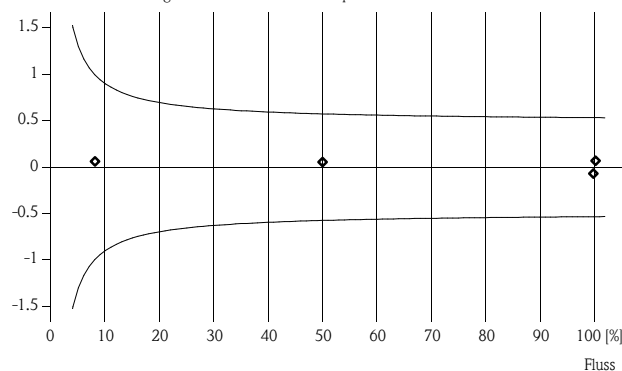
Fluss [%]	Fluss [us.gal/min]	Zeit [s]	V soll [us.gal]	V mess. [us.gal]	Δ v.M.* [%]	Ausg.** [mA]
8.1	880.4	160.1	2349.96	2351.46	0.06	5.29
50.0	5468.4	80.1	7296.67	7300.84	0.06	12.00
99.9	10920	80.1	14572.2	14561.9	-0.07	19.96
100.3	10967	80.1	14634.0	14644.4	0.07	20.06
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-

*v.M.: vom Messwert

**Berechneter Wert (4 - 20 mA)

Messabweichung % v.M.

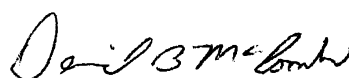
Toleranzgrenze: $\pm 0.5\%$ v.M.* \pm Nullpunktstabilität



Für detaillierte Daten bezüglich Spezifikationen der Signalausgänge des Prüflings siehe Technische Information (TI), Kapitel Messgenauigkeit.

Die Kalibrierung ist rückführbar auf N.I.S.T., durch Kalibrieranlagen, zertifiziert nach festgelegten Intervallen.

Endress+Hauser Flowtec betreibt in Reinach (CH), Cernay (FR), Greenwood (USA), Aurangabad (IN) und Suzhou (CN) nach ISO/IEC 17025 akkreditierte Kalibrieranlagen.



12-16-2011

Kalibrierdatum

Endress+Hauser Flowtec, Division USA
2330 Endress Place
Greenwood, IN 46143

David McCombs

Kalibrierer

Zertifiziert nach
ISO 9001, Reg.-N° 030502.2
ISO 14001, Reg.-N° EMS561046

Flow Calibration with Adjustment

30288715-3162105

3003270840

Purchase order number

CA-3005091558-10 / Endress+Hauser Flowtec

Order N°/Manufacturer

50W4H-UL0A1A10B7AA

Order code

PROMAG 50 W 16"

Transmitter/Sensor

HA09F116000

Serial N°

.

Tag N°

FCP-9.B

Calibration rig

9959.059 us.gal/min (\cong 100%)

Calibrated full scale

Service interface

Calibrated output

1.2481

Calibration factor

-9

Zero point

74.2 °F

Water temperature

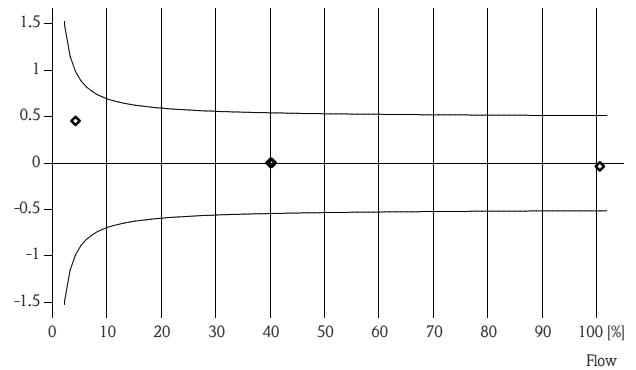
Flow [%]	Flow [us.gal/min]	Duration [s]	V target [us.gal]	V meas. [us.gal]	Δ o.r.* [%]	Outp.** [mA]
4.0	398.945	120.1	798.296	801.991	0.46	4.64
39.9	3977.91	60.1	3981.67	3981.77	0.00	10.39
40.2	4005.39	60.1	4009.28	4009.41	0.00	10.44
100.7	10030.8	60.1	10041.5	10037.9	-0.04	20.11
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-

*o.r.: of rate

**Calculated value (4 - 20 mA)

Measured error % o.r.

Tolerance limit: $\pm 0.5\%$ o.r.* \pm Zero stability



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

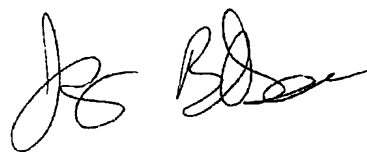
The calibration is traceable to the N.I.S.T. through standards certified at preset intervals.

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

11-22-2013

Date of calibration

Endress+Hauser Flowtec, Division USA
2330 Endress Place
Greenwood, IN 46143



Jay Bledsoe

Operator

Certified acc. to
ISO 9001, Reg.-N° 030502.2
ISO 14001, Reg.-N° EMS561046

Flow Calibration with Adjustment

30059038-1296890

46531756

Purchase order number

CA-49311465-10 / Endress+Hauser Flowtec

Order N°/Manufacturer

10W50-UL0A1RA0B4AA

Order code

PROMAG 10 W 2"

Transmitter/Sensor

6C010816000

Serial N°

FIT-01

Tag N°

FCP-6.C

Calibration rig

155.6102 GPM (\pm 100%)

Calibrated full scale

Calibration Interface

Calibrated output

0.8249

Calibration factor

0

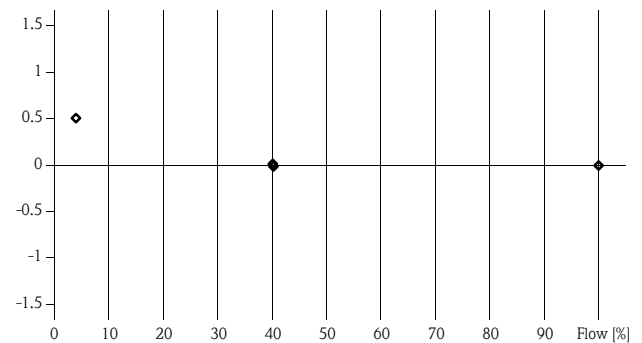
Zero point

71.7 °F

Water temperature

Flow [%]	Flow [GPM]	Duration [sec]	V target [US GAL]	V meas. [US GAL]	Δ o.r.* [%]
3.9	6.13	30.0	3.0711	3.0868	0.51
40.2	62.5	30.0	31.263	31.269	0.02
40.2	62.6	30.0	31.335	31.331	-0.01
100.1	155.7	30.0	77.909	77.907	0.00
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

*o.r.: of rate



Please note: This replacement document was established electronically, the most important data are extracted from the original document.

12-27-2004

Date of calibration

Endress+Hauser Flowtec, Division USA
2330 Endress Place
Greenwood, IN 46143

Jim Baase

Operator

Certified acc. to
MIL-STD-45662A
ISO 9001, Reg.-N° 030502.2