

**KROHNE** KROHNE Ltd  
Wellingborough UK

**OPTIMASS 6400C S08**  
Manufactured: 2015-02-26  
S/N: G150000007100376  
TAG:



Primary -1/60barg -70/230C  
Secondary -1/100barg -70/20C  
Not certified

PED/G1

Wetted Material: 316/L

See handbook for additional application conditions  
See calibration certificate for calibration details

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**OPTIMASS 6400C S08**

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TAG:

Electronics Revision: ER1.0.5

CG: CG330814AA HART®



VE714S0AC0K000000G03000

VE5344106200104AA000060

12 - 24 VDC 12 W

Primary -1/60barg -70/230C

-1/100barg -70/20C

Secondary Not certified

PED/G1

⚠ DO NOT OPEN WHEN ENERGISED

See sticker inside terminal cover for output connections and parameters

See handbook for additional application conditions

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Protection Class: IP66/67

PE (FE) L(L+) N(L-) POWER	S/N: G150000007100376		CG: CG330814AA		A = Active P = Passive NC = Not connected	
	PULSE OUT / STATUS OUT		I <sub>max</sub> = 100 mA @ f <sub>c</sub> ≤ 10 Hz; I <sub>0</sub> = 20 mA @ f <sub>c</sub> = 12 kHz		V <sub>0</sub> = 1.5 V @ 10 mA; V <sub>nom</sub> = 24 VDC	
	CURRENT OUT (HART)		I <sub>0</sub> = 22 mA; RL <sub>max</sub> = 1 kohm		CURRENT OUT	
	CURRENT OUT		I <sub>0</sub> = 22 mA; RL <sub>max</sub> = 1 kohm		CURRENT OUT	
INPUT / OUTPUT	D <sup>-</sup>	D	A	A	A	TEMP
	C <sup>-</sup>	C	A	A	A	DENSITY
	B <sup>-</sup>	B	A	A	A	FLOW
	A <sup>+</sup>	A	A	A	A	

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C TEMPERATURE

4 mA = 0 °C

20 mA = -15 °C

A FLOW

4 mA = 1.4 gr/sec

20 mA = 150 gr/s

B DENSITY

4 mA = 0 Kg/l

20 mA = 1.005 Kg/l

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## Converter Configuration – Messumformer-Konfiguration – Configuration Convertisseur

Type / Typ / Type	: OPTIMASS 6400C S08	
Sales Order / VK-Auftrag / Commande de vente	: 380013011	
Serial Number / Seriennummer / Numéro de série	: G150000007100376	
Tag Number / Tagnummer / Repère	:	
C1.1	Zero Calibration %	Zero and Offset
C1.1.1	Zero Add. Offset	-0.010 %
C1.1.2	Pipe Diameter	+0 g/s
C1.1.3	Flow Correction	5.60 mm
C1.1.4	C1.2	+0.00 %
C1.2.2	Density Mode Sel.	Density
C1.3.1	C1.3	Actual
C1.3.2	Flow Direction	Filters
C1.3.3	Press. Supp. Time	Forwards
C1.3.4	Press. Supp. Cutoff	0.0 s
C1.4.1	Low Flow Cutoff	0.0 %
C1.4.2	C1.4	0.2 %
C1.4.3	Function	System Control
C1.4.4	Condition	No Action
C1.5.3	Max. Temp.	Temperature
C1.5.4	Min. Temp.	+100.0 °C
C1.5.5	C1.5	+0.0 °C
C1.5.7	2 Ph. Threshold	Diagnostics
C1.5.8	Diagnosis 1	0
C1.5.9	Diagnosis 2	Off
C1.5.10	Proc: Signal Low	Off
C1.5.11	Proc: Signal Search	Out Of Specification
C1.5.12	Proc: Current Input	Failure
C1.5.13	Proc: 2 Phase Flow	Failure
C1.5.14	Proc: System Control	Out Of Specification
C1.6.1	Config: Totaliser	Information
C1.6.2	Config: Totaliser	Out Of Specification
C1.6.3	Electr: IO Connection	Out Of Specification
C1.6.4	C1.6	Information
C1.6.5	Sensor Type	OPTIMASS 6400C S08
C1.6.6	Sensor ID	1000
C1.6.7	Nominal Mass Flow	166.7 g/s
C1.6.8	Max. Allowed Temp.	+230.0 °C
C1.6.9	Min. Allowed Temp.	-70.0 °C
C1.7.1	Calibration Date	2015-02-26
C1.7.2	V No. Sensor	VE714S0AC0K000000G03000
C1.7.3	Sensor Serial No.	G150000007100376
C1.7.4	V No. Converter	VE5344106200104AA000060

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	C1.7	Flow Calibration
C1.7.1	CF1	20.4
C1.7.2	CF2	750
C1.7.3	CF3	300
C1.7.4	CF4	0
C1.7.5	CF5	3174.804
C1.7.6	CF6	-44.68655
C1.7.7	CF7	0
C1.7.8	CF8	0
C1.7.9	CF11	0
C1.7.10	CF12	-41.77522
C1.7.11	CF13	0
C1.7.12	CF14	0
C1.7.13	CF15	0
C1.7.14	CF16	0
C1.7.15	CF17	0
C1.7.16	CF18	0
C1.7.17	CF19	0
C1.7.18	CF20	0
C1.7.19	CF21	0
C1.7.20	CF22	0
C1.7.21	CF23	0
C1.7.22	CF24	0
C1.7.23	CF25	0
C1.7.24	CF26	0
C1.7.25	CF27	0
	C1.8	Density Calibration
C1.8.1	DCF1	Town Water
C1.8.2	DCF2	998.6866
C1.8.3	DCF3	1
C1.8.4	DCF4	230.305
C1.8.5	DCF5	Empty
C1.8.6	DCF6	0
C1.8.7	DCF7	1
C1.8.8	DCF8	201.873
	C2	Concentration
	C3.1	Hardware
C3.1.1	Terminals A	Current Output → POINTA
C3.1.2	Terminals B	Current Output → DENSITY
C3.1.3	Terminals C	Current Output → TEMP.
C3.1.4	Terminals D	Pulse Output
	C3.2	Current Out A
C3.2.1	Range 0%...100%	4.0 ... 20.0 mA
C3.2.2	Extended Range	3.8 ... 20.5 mA
C3.2.3	Error Current	3.5 mA
C3.2.4	Error Condition	Failure
C3.2.5	Measurement	Mass Flow
C3.2.6	Range	+1.40 ... +150 g/s ←
C3.2.7	Polarity	Positive Polarity
C3.2.8	Limitation	-120 ... +120 %
C3.2.9	Low Flow Cutoff	0.0 ± 0.0 %
C3.2.10	Time Constant	4.0 s
C3.2.11	Special Function	Off
C3.2.15	4mA Trimming	4.0000 mA
C3.2.16	20mA Trimming	20.000 mA

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	C3.4	Current Out C	→ TEMPERATURE
C3.4.1	Range 0%...100%	4.0 ... 20.0 mA	
C3.4.2	Extended Range	3.8 ... 20.5 mA	
C3.4.3	Error Current	3.5 mA	
C3.4.4	Error Condition	Failure	
C3.4.5	Measurement	Temperature	
C3.4.6	Range	+0.0 ... -15.0 °C	←
C3.4.7	Polarity	Absolute Value	
C3.4.8	Limitation	-120 ... +120 %	
C3.4.9	Low Flow Cutoff	0.0 ± 0.0 %	
C3.4.10	Time Constant	4.0 s	
C3.4.11	Special Function	Off	
C3.4.15	4mA Trimming	4.0000 mA	
C3.4.16	20mA Trimming	20.0000 mA	
	C3.5	Pulse Output D	
C3.5.1	Pulse Shape	Symmetric	
C3.5.3	Max. Pulse Rate	10000 Hz	
C3.5.4	Measurement	Mass Flow	
C3.5.5	Pulse Value Unit	g	
C3.5.6	Value Per Pulse	1 g	
C3.5.7	Polarity	Positive Polarity	
C3.5.8	Low Flow Cutoff	0 ± 0 g/s	
C3.5.9	Time Constant	0.0 s	
C3.5.10	Invert Signal	Off	
	C4.1	Totaliser 1	
C4.1.1	Totaliser Function	Incremental Total	
C4.1.2	Measurement	Mass Flow	
C4.1.3	Low Flow Cutoff	0 ± 0 g/s	
C4.1.4	Time Constant	0.0 s	
C4.1.5	Preset Value	1 kg	
	C4.2	Totaliser 2	
C4.2.1	Totaliser Function	Incremental Total	
C4.2.2	Measurement	Volume Flow	
C4.2.3	Low Flow Cutoff	0 ± 0 L/h	
C4.2.4	Time Constant	0.0 s	
C4.2.5	Preset Value	1 L	
	C4.3	Totaliser 3	
C4.3.1	Totaliser Function	Incremental Total	
C4.3.2	Measurement	Mass Flow	
C4.3.3	Low Flow Cutoff	0 ± 0 g/s	
C4.3.4	Time Constant	0.0 s	
C4.3.5	Preset Value	1 kg	
	C5.1	PV is	
C5.1.1	Current Out C	Temperature	
	C5.2	SV is	
C5.2.2	HART Dynamic Var.	Volume Flow	
	C5.3	TV is	
C5.3.1	Current Out A	Mass Flow	kg/h
	C5.4	4V is	
C5.4.1	Current Out B	Density	
	C6.1	Device Info	
C6.1.1	Tag		
C6.1.2	V No. Sensor	VE714S0AC0K000000G03000	
C6.1.3	Sensor Serial No.	G150000007100376	
C6.1.4	Sensor Revision		

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C6.3	Function	1st Meas. Page
C6.3.1	1st Line Variable	Two Lines
C6.3.2	Range	Mass Flow
C6.3.3	Limitation	+0 ... +166.7 g/s
C6.3.4	Low Flow Cutoff	-120 ... +120 %
C6.3.5	Time Constant	0.0 ± 0.0 %
C6.3.6	1st Line Format	4.0 s
C6.3.7	2nd Line Variable	Automatic
C6.3.8	2nd Line Format	Totaliser 1 Mass
C6.3.9	C6.4	#X.XX
C6.4.1	Function	2nd Meas. Page
C6.4.2	1st Line Variable	Three Lines
C6.4.3	Range	Density
C6.4.4	Limitation	0.500 ... 2.500 kg/L
C6.4.5	Low Flow Cutoff	-120 ... +120 %
C6.4.6	Time Constant	0.0 ± 0.0 %
C6.4.7	1st Line Format	4.0 s
C6.4.8	2nd Line Variable	#X.X
C6.4.9	2nd Line Format	Temperature
C6.4.10	3rd Line Variable	Automatic
C6.4.11	3rd Line Format	Volume Flow
C6.5		Automatic
C6.5.1	Select Range	Graphic Page
C6.5.2	Range	Manual
C6.5.3	Time Scale	+0 ± 100 %
C6.6		2 min
C6.6.4	Password Quick Set	Special Functions
C6.6.5	Password Setup	0
C6.7		0
C6.7.1	Volume Flow	Units
C6.7.4	Mass Flow	L/h
C6.7.7	Flow Velocity	g/s
C6.7.9	Temperature	m/s
C6.7.10	Volume	°C
C6.7.13	Mass	L
C6.7.16	Density	kg
C6.8		kg/L
C6.8.1	HART	HART
C6.8.2	Address	HART On
C6.8.3	Message	0
C6.8.4	Description	HART MESSAGE
C6.8.5	HART long tag	HART DESCRIPTOR
C6.9		Hart_Long_Tag?????????????
C6.9.1	Reset Totaliser 1	Quick Setup
C6.9.2	Reset Totaliser 2	Yes
C6.9.3	Reset Totaliser 3	Yes
C6.9.4	Reset all Totalisers	Yes

## Calibration Certificate – Kalibrierzertifikat – Certificat d'étalonnage

### DIN 55 350-18-4.2.2

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#### Calibration Method / Kalibriermethode / Méthode d'étalonnage

The calibration was performed in mass flow rigs using weighing scales in start / stop operation. All weighing scales are periodically calibrated by internationally accredited laboratories.

Die Kalibrierung wurde an Massedurchflussständen mit Waagen im Start / Stop-Betrieb durchgeführt. Alle Waagen werden regelmäßig durch international akkreditierte Prüflabore kalibriert.

L'étalonnage a été réalisé sur un banc utilisant des pesons de référence avec plusieurs pesées successives. Tous les pesons sont contrôlés périodiquement par des laboratoires internationaux accrédités.

#### Test Equipment Data / Kalibrierstand / Données du banc d'étalonnage

Serial Number / Seriennummer / Numéro de série : 2750857/2030707  
 Calibration fluid / Kalibrierflüssigkeit / Fluide d'étalonnage : Water / Wasser / Eau  
 Uncertainty / Messunsicherheit / Incertitude : 0.035%

#### Calibration Results / Kalibrierergebnis / Résultats d'étalonnage

Set Flow rate gewählter Durchfluss Débit réglé (kg/h)	Measured Mass gemessene Masse Masse mesurée (kg)	Actual Mass tatsächliche Masse Masse réelle (kg)	Deviation Abweichung Ecart %
97	18.99611	18.98252	0.072
331	21.98241	21.97688	0.025
615	22.79318	22.79779	-0.020

#### Calibration Data / Kalibrierdaten / Données d'étalonnage

CF1: 20.4	CF2: 750.00	CF3: 300.00	CF4: 0.0000000	CF5: 3174.8042
CF6: -44.686546	CF7: 0.0000000	CF8: 0.0000000		
CF11: 0.0000000	CF12: -41.775215	CF13: 0.0000000	CF14: 0.0000000	CF15: 0.0000000
CF16: 0.0000000	CF17: 0.0000000	CF18: 0.0000000	CF19: 0.0000000	CF20: 0.0000000
CF21: 0.0000000	CF22: 0.0000000	CF23: 0.0000000	CF24: 0.0000000	CF25: 0
CF26: 0.0000000	CF27: 0.0000000			
DCF1: 2	DCF2: 998.68665	DCF3: 1.0000000	DCF4: 230.30499	DCF5: 0
DCF6: 0.0000000	DCF7: 1.0000000	DCF8: 201.87296		

#### Additional Data / Zusatzdaten / Données complémentaires

Process Connections / Prozessanschlüssen / Raccords process: DN10  
 PN100 to DIN 2501  
 Electronic Revision / Elektronik Revision / Version électronique : ER1.0.5 S/N: 11204213

Calibration Date / Kalibrierdatum / Date d'étalonnage : 2015-02-26

This certificate is produced with EDP and valid without signature / Dieses Zertifikat wurde maschinell erstellt und ist ohne Unterschrift gültig / Ce certificat a été géré par un système automatisé, il est valide sans signature