

General Specifications

GS 01U10B00-13EN-R

ROTAMASS Total Insight Coriolis Mass Flow and Density Meter Addendum to General Specifications for Marine options

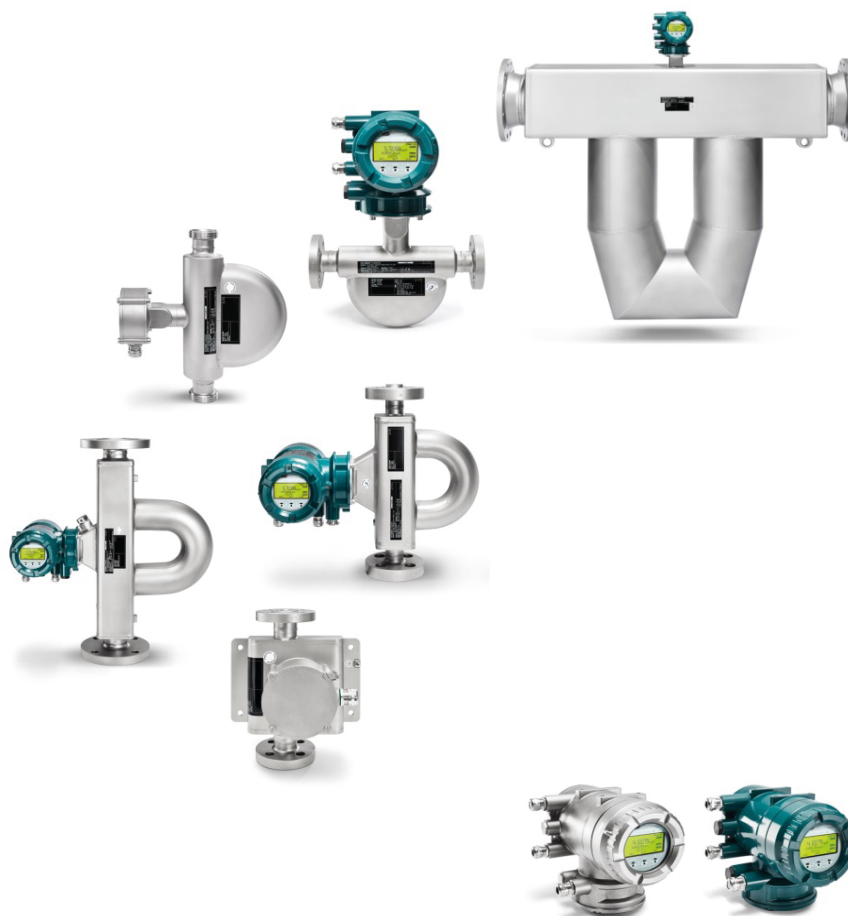


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1 Introduction

1.1 General information

This document is an addendum to the General Specifications GS 01U10B0_-00_-R as defined below. It describes the differences of the delivered product compared to the applicable specification that specifies standard devices of ROTAMASS Total Insight series. The deviations could be model code related, design or configuration only and are described on the next pages.

1.2 Applicable documents

The following table indicates documents chapters supplemented with this addendum:

General Specifications: Nano, Intense, Prime, Hygienic, Supreme and Giga

Original document			Addendum
Title	Document number	Chapter	Chapter
▪ Nano	▪ GS 01U10B01-00_-R ¹⁾	▪ 6.1 Power supply	▪ 2.1 Power supply
▪ Intense	▪ GS 01U10B05-00_-R ¹⁾		
▪ Prime	▪ GS 01U10B04-00_-R ¹⁾	▪ 6.4 Cable specifications	▪ 2.2 Cable specifications
▪ Hygienic	▪ GS 01U10B06-00_-R ¹⁾		
▪ Supreme	▪ GS 01U10B02-00_-R ¹⁾		
▪ Giga	▪ GS 01U10B03-00_-R ¹⁾		

General Specifications: Prime, Supreme and Giga

Original document			Addendum
Title	Document number	Chapter	Chapter
▪ Prime	▪ GS 01U10B04-00_-R ¹⁾	▪ 7.2 Application and industry related standards	▪ 3.1 Application and industry related standards
▪ Supreme	▪ GS 01U10B02-00_-R ¹⁾	▪ 8.1 Model code description	▪ 4.1 Model code description
▪ Giga	▪ GS 01U10B03-00_-R ¹⁾	▪ 8.2 Available model codes per basic model	▪ 4.2 Available model codes per basic model

¹⁾ The "_" symbols are placeholder for the corresponding language version of the document (EN, DE, etc.).

2 Electrical specification

2.1 Power supply

Power supply

Alternating-current voltage (rms):

- Power supply¹⁾: $24 V_{AC} +20 \% -15 \%$ or $100 - 240 V_{AC} +10 \% -20 \%$
- Power frequency: 47 – 63 Hz

Direct-current voltage:

- Power supply¹⁾: $24 V_{DC} +20 \% -15 \%$ or $100 - 120 V_{DC} +8.3 \% -10 \%$

¹⁾ for option MC₋ (Marine approval) supply voltage is limited to 24 V; in addition NE21 testing indicates a tolerable area of $24 V_{DC} \pm 20 \%$ under NE21 test conditions.

2.2 Cable specifications

For remote type devices, a connecting cable has to be used to connect the sensor to the transmitter. The device specifications, stated in this document, are valid only if one of the original Rota Yokogawa connecting cables is used.

Cable length limitations to be considered:

Cable type	Option code	Maximum length to keep the specification	Maximum allowable length in hazardous areas
Fire retardant connecting cable	Y ₋₋₋	30 m (98.4 ft)	95 m (311.7 ft)

Cables longer than 30 m must be ordered as separate item. For this purpose please check the “Customer Maintenance Parts List” (CMPL 01U10B01-00EN-R) or consult our Yokogawa Service team.

If Marine option /MC2.../MC7 is ordered, a Marine certified cable will be delivered.

3 Approvals and declarations of conformity

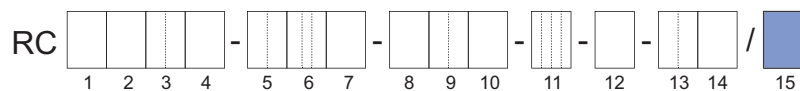
3.1 Application and industry related standards

Approval type	Approval or certificate
IMO	Material Declaration and Ship recycling compliances to IMO Resolution MEPC.269 (68)
DNV	Marine type approval according to DNV Type approval scheme DNV-CP-0338 and EU RO Mutual Recognition type approval required by article 10.1 of EU regulation 391/2009. For thermal oil applications please consider X-ray inspection (option /RT or /RTA)
KR	Marine type approval according to KR Rules for Classification of Steel Ships Pt.6, Ch.2, Art.301
ABS	Product device assessment according to ABS rules for building and classing <ul style="list-style-type: none">Marine Vessels 4-8-3/1.7, 1.9, 1.11.1, 1.17.1 & 13.1, 4-8-4/27.1, 4-9-9/13.1, 13.5 and Table 1Offshore units 4-3-1/9, 11, 15 & 17.1, 4-3-3/9.1.1 and 9.1.2
LR	Marine type approval according to Lloyd's Register's Type Approval System (LR), test specification Number 1 – December 2021 including Marine, offshore and industrial applications for use in environmental categories ENV1, ENV2, ENV3 and ENV4
BV	Marine type approval according to Bureau Veritas (BV) test specification with the main rules NR467 Rules for the classification of steel ships and NR445 Rules for the classification of offshore units

4 Ordering information

4.1 Model code description

Device options (item 15) can be selected and specified individually by separating them with slashes.



Model code position 15 (device options)

Model code position	Model code	Description
Marine Approval		
15	/MC4	Marine approval according LR TAC piping class 2
15	/MC5	Marine approval according LR TAC piping class 3
15	/MC6	Marine approval according BV piping class 2
15	/MC7	Marine approval according BV piping class 3
Connecting cable type and length		
15	/Y000	Without fire retardant connecting cable
15	/Y005	5 meter (16.4 ft) remote fire retardant connecting cable, terminated
15	/Y010	10 meter (32.8 ft) remote fire retardant connecting cable, terminated
15	/Y015	15 meter (49.2 ft) remote fire retardant connecting cable, terminated
15	/Y020	20 meter (65.6 ft) remote fire retardant connecting cable, terminated
15	/Y030	30 meter (98.4 ft) remote fire retardant connecting cable, terminated

4.2 Available model codes per basic model



For complete product configuration, please refer to the FlowConfigurator online sizing and configuration tool: <http://www.FlowConfigurator.com>

Prime

Stainless Steel Devices															
Code	Essential Transmitter					Ultimate Transmitter					Spare Sensor				
	RCEP25S	RCEP40S	RCEP50S	RCEP80S	RCEP1HS	RCUP25S	RCUP40S	RCUP50S	RCUP80S	RCUP1HS	RCNP25S	RCNP40S	RCNP50S	RCNP80S	RCNP1HS
Marine Approval															
/MC6	•	•	•	•	•	•	•	•	•	•					
/MC7	•	•	•	•	•	•	•	•	•	•					
Connecting cable type and length															
/Y000	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
/Y005	•	•	•	•	•	•	•	•	•	•					
/Y010	•	•	•	•	•	•	•	•	•	•					
/Y015	•	•	•	•	•	•	•	•	•	•					
/Y020	•	•	•	•	•	•	•	•	•	•					
/Y030	•	•	•	•	•	•	•	•	•	•					

Supreme

	Stainless Steel Devices												Hastelloy C Devices											
	Essential Transmitter				Ultimate Transmitter				Spare Sensor				Essential Transmitter				Ultimate Transmitter				Spare Sensor			
Code	RCES34S	RCES36S	RCES38S	RCES39S	RCUS34S	RCUS36S	RCUS38S	RCUS39S	RCNS34S	RCNS36S	RCNS38S	RCNS39S	RCES34H	RCES36H	RCES38H	RCES39H	RCUS34H	RCUS36H	RCUS38H	RCUS39H	RCNS34H	RCNS36H	RCNS38H	RCNS39H
Marine Approval																								
/MC6	●		●	●	●	●	●	●					●	●	●	●	●	●	●	●				
/MC7	●	●	●	●	●	●	●	●					●	●	●	●	●	●	●	●				
Connecting cable type and length																								
/Y000	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
/Y005	●	●	●	●	●	●	●	●					●	●	●	●	●	●	●	●				
/Y010	●	●	●	●	●	●	●	●					●	●	●	●	●	●	●	●				
/Y015	●	●	●	●	●	●	●	●					●	●	●	●	●	●	●	●				
/Y020	●	●	●	●	●	●	●	●					●	●	●	●	●	●	●	●				
/Y030	●	●	●	●	●	●	●	●					●	●	●	●	●	●	●	●				

Giga

	Stainless Steel Devices								Hastelloy C Devices		
	Essential Transmitter			Ultimate Transmitter			Spare Sensor		Essential Transmitter	Ultimate Transmitter	Spare Sensor
Code	RCEG1FS	RCEG2HS	RCEG2FS	RCUG1FS	RCUG2HS	RCUG2FS	RCNG1FS	RCNG2HS	RCEG1FH	RCUG1FH	RCNG1FH
Marine Approval											
/MC6	●			●					●	●	
/MC7	●			●					●	●	
Connecting cable type and length											
/Y000	●	●	●	●	●	●	●	●	●	●	●
/Y005	●	●	●	●	●	●			●	●	
/Y010	●	●	●	●	●	●			●	●	
/Y015	●	●	●	●	●	●			●	●	
/Y020	●	●	●	●	●	●			●	●	
/Y030	●	●	●	●	●	●			●	●	

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Manufacturer:

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Germany

For the actual manufacturing location of your device refer to the model code and/or serial number.

