



ALT *mass* series - dedicated distributor

OVAL 2-wire solution

- The existing 2-wire cable can be used as it is.
- •The existing host system can be used as it is.

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ALTI mass

- Coriolis flowmeter ALTImass series can be used as it is.
- •No restrictions on the compatible bore size and high cost performance.
- Simultaneous 4 to 20 mA output and pulse output are possible.
 Mechanical flowmeters (contact pulse output) that do not require a power supply can be replaced with our Coriolis flowmeters.
- Cable cost can be reduced in the case of new installation.

Japanese patent granted

We add value to the flow



-CASE 1- At the consideration new installation of Coriolis flowmeter ...

ALTI

We want to adopt high-accuracy / high-reliability OVAL ALTImass series with abundant supply reference!, but ...

Long-distance cables need to be laid between the factory floor and the host system. Cables are steeping price rise, so we want to use a 2-wire system... **ALTImass series (with output) requires at least a 3-wire cable...**

With a 2-wire system, only analog signals (instantaneous flow rate) can be obtained. **If possible, I would also like a real-time pulse signal...**

The installation cost can be reduced!

You can use a 2-wire cable!

Please leave it to OVAL 2-wire solution!

2-wire transmission system using Coriolis flowmeter (ALTImass series) can be constructed by inserting "ALTImass series dedicated distributor" near the host system!



• The cost can be reduced by adopting a 2-wire cable for the long-distance laying cable between the field and the host system.

A dedicated distributor provides general-purpose analog and also pulse outputs. It is also possible to manage integrated flow in real-time, which is difficult to handle with a general "2-wire dedicated Coriolis flowmeter".

● It can also handle "large bore" applications that cannot be handled with general "2-wire dedicated Coriolis flowmeter".

● Instead of "2-wire dedicated Coriolis", the proven, high-performance, and reliable "ALTImass series" can be used.



- This instrument allows 2-wire cable Coriolis flowmeters to be upgraded to the ALTImass series without having to re-lay the cables.
- It can also be used for "large bore" applications that cannot be handled by the common "2-wire dedicated Coriolis flowmeter".
- Despite the 2-wire transmission, not only analog signals but also flow pulses and flow alarms can be acquired.
- As a pulse output can be obtained, mechanical totalizing flowmeter of the type with pulse output without an external power supply can also be updated to the ALTImass series. (2-wire cable for pulse transmission can be diverted.)
- Instead of "2-wire dedicated Coriolis", the proven, high-performance, and reliable "ALTImass series" can be used.

Difference from general 2-wire dedicated Coriolis flowmeter

Comparison item	General 2-wire dedicated Coriolis flowmeter	OVAL 2-wire solution (ALTImass series + dedicated distributor)
4 to 20mA analog output	0	0
Flow rate pulse output	×	Simultaneous output available
Upper / lower limit flow rate alarm output	×	0
Large bore exceeding 100mm supported	×	0

This is not a dedicated 2-wire flowmeter. It is a revolutionary 2-wire solution that allows you to use the proven ALTImass series!



ALTImass series dedicated distributor

Features

- 1. It can configure a 2-wire system, by using it in combination with the ALTImass series Coriolis flowmeter, which is renowned for its high performance, reliability, and abundant supply reference.
- 2. It can provide pulse output, analog output (source or sink), and upper/lower limit alarms.
- 3. Distributors can be applied to replace existing 2-wire flow meters such as differential pressure and area flow meters with precision Coriolis flow meters.
- 4. A mechanical totalizing flowmeter that outputs pulses without an external power supply can also be upgraded to a high-precision Coriolis flowmeter by applying a 2-wire cable for pulse transmission.
- 5. The 2-wire system configuration reduces cabling costs, even for new installations of the ALTImass series.



Distributor (SU1522)

General Specifications

Item	Description	
Combinable flowmeter	ALTImass (PA0K transmitter) or ALTImass II (PA2K transmitter) satisfying all the following specifications • DC power supply • Open collector pulse output (Note) If the flowmeter is used in explosionproof areas, only ALTImass (PA0K) transmitter are available.	
Analog output (Instantaneous flow rate output)	Signal: 4 to 20mA output (can be switched to sink output or source output depending on the wiring method)	
Digital output 1	Signal: Open collector output (NPN transistor output) Assignment: ① Input synchronization pulse (synchronized with the pulse output of the ALTImass series) or ② Instantaneous flow rate upper or lower limit alarm	
Digital output 2	Signal: Open collector output (NPN transistor output) Assignment: ① Factored pulse (input synchronous pulses output in arbitrary units after dividing) or ② Instantaneous flow rate upper or lower limit alarm	
LED display	POWER lamp and digital output monitor lamp	
Power supply	85 to 264VAC or 20 to 30VDC	
Operating temperature range	-10 to +50°C	
Installation	Plug-in type (attached to wall or DIN rail)	
Housing	Resin (black)	

[Notes]

•The relevant solution and product are under development. The described content of the relevant document may be changed. •Transferring, copying, or reprinting whole or a part of the relevant document without permission of our company is prohibited.



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