--<< GD2A = 01 >>--

20150319

specification document

Remote measurement 2-wire transmitter unit

Model：ＧＤ２Ａ

Azbil Kimmon Co., Ltd.

Overview

This transmitter is a 2-wire no-voltage contact transmitter required to connect a water meter to an electronic counter (KDC-811), a centralized meter reading board for pulses, or a computer.

Structure

GD2A has a built-in reed switch, the shape of which is shown in a separate figure.

Technical specification

・Transmitter

Contact capacity	２.５ＶＡ
Max. contact voltage	ＤＣ５０Ｖ
Max. contact current	ＤＣ１００ｍＡ
Contact withstand voltage	DC250V for 1 minute
Bounce time	10msec or less
Ambient operating temperature	Below 55℃ ※

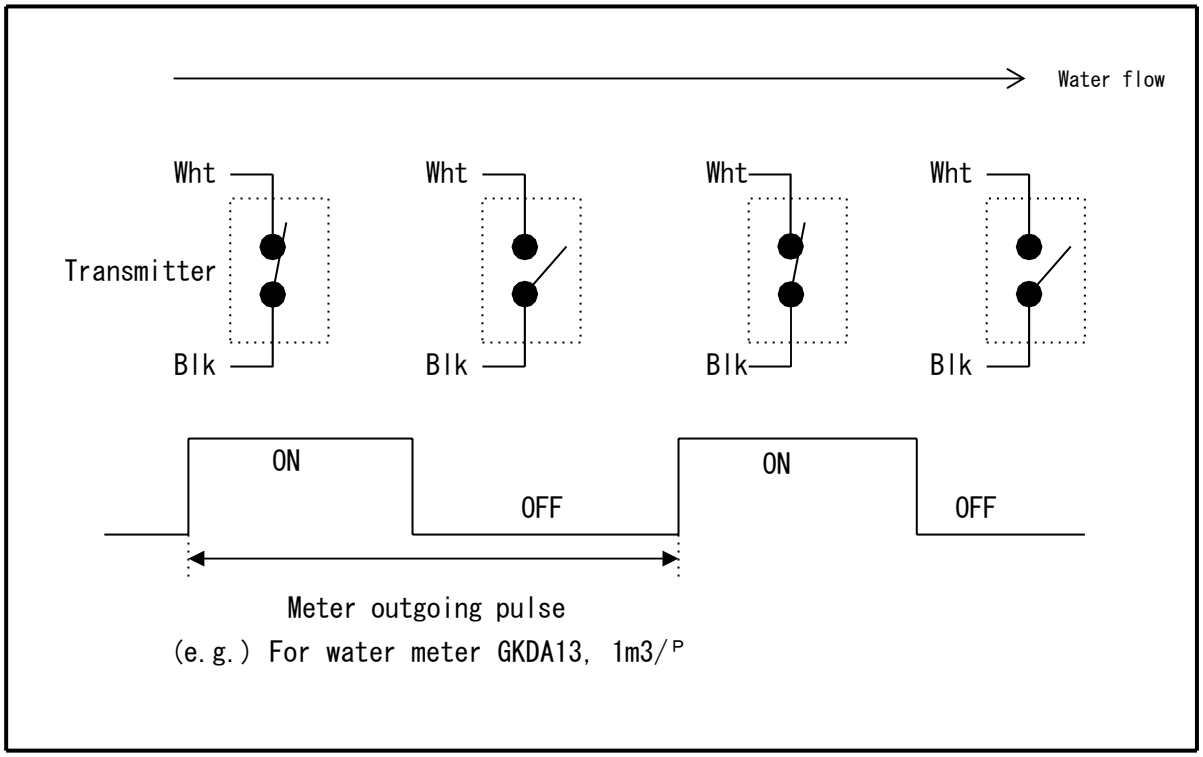
※ Complies with JIS B 8570-2 “Water meters and hot water meters”

・Vinyl Cabtire Tire Cord (VCTF)

Wire Core Thickness	Ｏ．５ｍｍ^2
Wire Number	2
Wire Color	Black and white
Length	１．５ｍ　or　１０ｍ
Standard Terminal Processing	With fork terminal for M3 screw

Operation

The GD2A (2-wire transmitter) reed switch is operated by a magnet built into the water meter as shown in the figure below.



Attention

1) Pulse width (time it is ON) varies depending on the flow rate.

2) If the water meter stops when the reed switch is in the ON state, the reed switch will remain in the ON state as long as there is no water flow.

Similarly, if the water meter stops when the reed switch is in the OFF state, the reed switch will remain in the OFF state as long as there is no water flow.

3) Using the GT-ER2 pulse relay (manufactured by us), the meter's outgoing pulse can be output as a stable one-shot (approx. 0.1 second) no-voltage contact. It is recommended to use the GT-ER2 when inputting to computers, data loggers, etc. (For details, refer to the GT-ER2. (For details, refer to the specifications of GT-ER2.) Also, when inputting directly to a computer, data logger, or other device, make sure that the input specifications of the computer or other device match the specifications of the above-mentioned transmitter unit.

Meter type and outgoing pulse

・Refer to the specifications of the meter to be used for the type of meter and the pulse unit to be transmitted.

Precautions for use

1) The reed switch incorporated inside is made of a very thin glass tube, so it should be handled with special care and not subjected to shocks, etc.
2) The terminal connections should be waterproof.
3) Avoid storing power cables in or near other cables (power lines) in the same conduit, as this may cause malfunctions.。
4) If there is a possibility of inductive interference, use a shielded wire, etc. to prevent interference. (The shield should be grounded at the receiving end.)
5) If there is a possibility that the back EMF generated by the operation of the receiving side may exceed the rated voltage, be sure to insert a prevention circuit. (This is not necessary when using our receiver.)
6) If the meter is installed outdoors, it should be protected from direct sunlight by a sunshade or racking, as is the case with the water meter itself.
7) Install in a location where there is no danger of freezing. In winter, consider heat insulation to prevent the meter and transmitter from freezing (freezing with rainwater, etc. on the transmitter may cause malfunction). (If the transmitter freezes with rainwater, etc. adhering to it, it may malfunction.)

Pulse width at maximum flowrate (ON time)

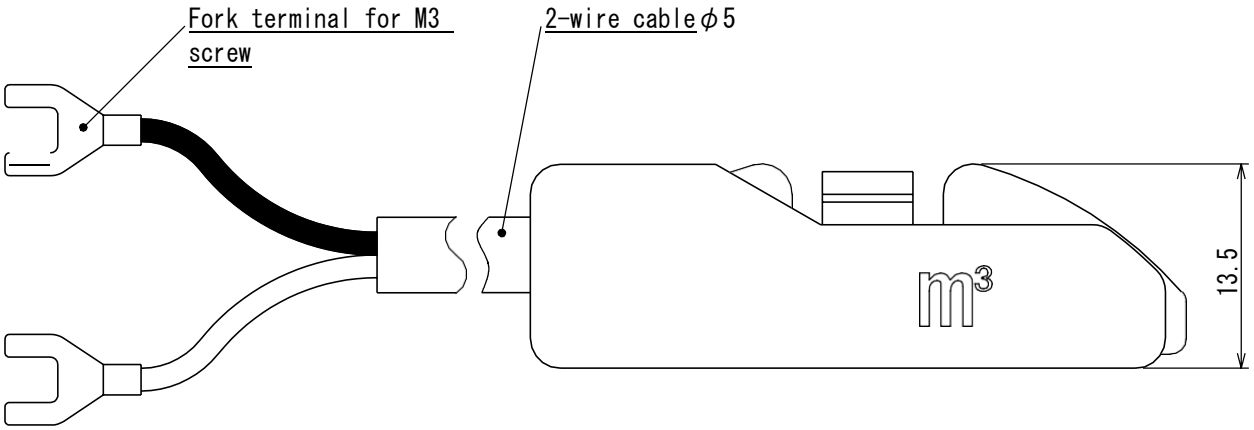
Type	Meter Type	Pulse unit	ON time
water meter	GKDA(L)13	1m³／Pulse	115 seconds or more
	GKDA20	1m³／Pulse	72 seconds or more
	GKDA(L)25	1m³／Pulse	45 seconds or more
	GKDA30,40	1m³／Pulse	28 seconds or more
	GKDS40,50	1m³／Pulse	18 seconds or more
	GFDW(T)50	1m³／Pulse	7 seconds or more
	GFDW(T)65,75	1m³／Pulse	4 seconds or more
	GFDW(T)100	1m³／Pulse	2 seconds or more

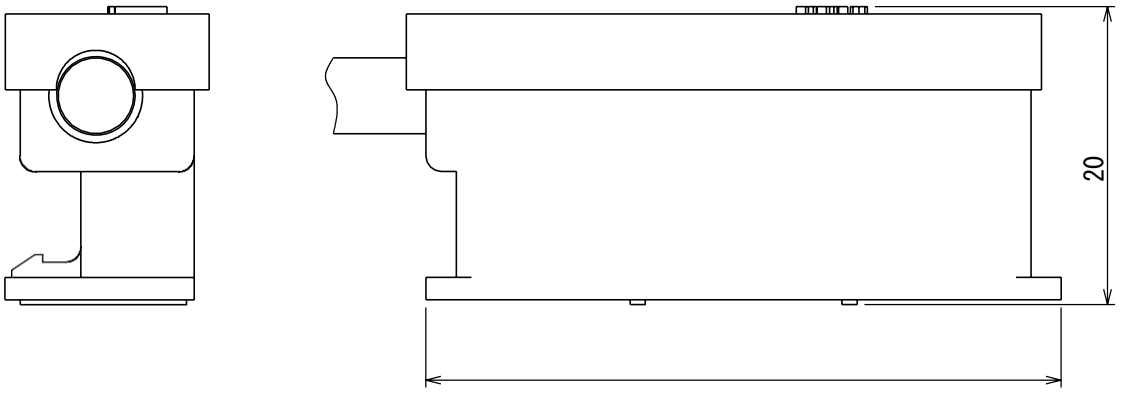
Attention

・Since the ON time varies depending on the flow velocity, the ON time shown here is the ON time when the maximum instantaneous flow rate (Q4) is applied. Normally, the ON time will be longer than this.

※ ON and OFF times are determined by flow velocity and transmitter duty ratio.

※ The duty ratio may vary slightly depending on the individual reed switch.





MARK	COUNT	DATE	REVISION
3		. .	
2		. .	
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APPROVED	CHECKED	DRAWN	DATE
Ogyu	Otsuka	Takano	2012.09.06

MATERIAL

PROJECTION

SCALE

REMARK *GD2A*

2-wire pulse generator

NAME

OUTLINE VIEW AND SPECIFICATION

Azbil Kimmon Co.,Ltd. JAPAN

DRAWING No.

Y-GD2A-A110B-000A00