

■ Specifications

Common specifications for Ultrasonic Flowmeter for air ATZTA TRX/TRZ ver. 5

Nominal diameter	25A	32A	40A	50A	65A	80A	100A	150A	200A	
Measurable fluids	Air (mainly factory air), or Nitrogen (Note 1) *Please select at the time of placing an order									
Compensation	NORMAL compensation: Flow amount that actual flow is compensated at 0°C, 1 atm. Standard compensation: Flow amount that actual flow is compensated at the designated temperature (set at the flowmeter), 1 atm.									
Fluid temperature	-10 ~ 60 °C									
Working pressure	0 ~ Less than 1MPa (Gauge pressure)									
Normal flow-rate (Nm ³ /h)	Qmax	260.0	480.0	600.0	1100.0	1800.0	2200.0	3700.0	9000.0	14800.0
	1/10Qmax	26.0	48.0	60.0	110.0	180.0	220.0	370.0	900.0	1480.0
	Qmin	4.3	8.0	10.0	18.3	30.0	36.7	74.0	180.0	296.0
※1	Qcut	0.7	1.5	1.5	2.9	4.4	5.9	19.2	36.9	66.3
Accuracy ※2	Qcut ~ Qmin		Qmin ~ 1/10Qmax		1/10Qmax ~ Qmax					
	±0.05%F.S.(25A~80A) ±0.06%F.S.(100A~200A)		±3.2%R.D.		±1.3%R.D.					
Connection	Rc1	Rc1-1/4	Wafer (put into place between JIS10K flanges)				JIS10K flange			
Installation position	Alarm indication: Flow measurement alarm, pressure value alarm, temperature value alarm, communication circuit alarm, external memory alarm, low battery voltage alarm (for built-in battery type), flowmeter replacement timing (for built-in battery type)									
Materials in contact with fluid	Aluminum Alloy, PPS, Fluorosilicone rubber, etc.						Stainless steel alloy, PPS, Fluorosilicone rubber, etc.			
Installation	Indoors/outdoors (protection class: IP64)									
Storage temperature	-20~70°C, No dew condensation									

※1.This is normal flow-rate indicated under the condition of 20°C as the temperature and 700kPa as the pressure.
※2.At our shipping test facility.

Specifications for External Power Supply Type (D) / Built-in Battery Type(B)

Model	ATZTA TRX25D-C(N)/SP	ATZTA TRX32D-C(N)/SP	ATZTA TRX40D-C(N)/SP	ATZTA TRX50D-C(N)/SP	ATZTA TRX65D-C(N)/SP	ATZTA TRX80D-C(N)/SP	ATZTA TRZ100D-C/SP	ATZTA TRZ150D-C/SP	ATZTA TRZ200D-C/SP
External power supply specification	24VDC±10%, Power consumption 1.1W MAX(Electric current consumption 40mA MAX)								
Built-in battery specification	Built-in lithium battery with a battery life of 10 years (At environmental temperature 20°C)								
Nominal diameter	25mm	32mm	40mm	50mm	65mm	80mm	100mm	150mm	200mm
	Electric Power Supply								
Output	4-20mA(±0.5%FS), Load resistance 400 ohm or less, Upper limit output current 22mA Output of instantaneous flow-rate, pressure, meter alarms, or temperature is selectable by the button Note) An electric power supply device (24VDC±10%) shall be prepared separately, in case of use of electric current output with the built-in battery specification type.								
	Output range (4-20mA) : Instantaneous flow-rate 0 ~ □□□□Nm ³ /h(Forward flow indication mode), □□□□ ~ □□□□Nm ³ /h(Forward/reverse flow indication mode) □□□□ is setting value set by the button Pressure 0 ~ 1000kPa, Temperature -10 ~ 60°C								
Contact output	2 open drain outputs, MAX load: 24VDC 10mA, MAX frequency: 10Hz, Duty ratio: 35 ~ 65%, or One-shot (Select ON-Time from 50,100,125,250,500ms) ※Note 2)(Possible to change the setting at site)								
	Output 1: Unit pulse (Forward flow) Output 2: Selection from Unit pulse (Reverse flow), Flow upper and lower limit alarm, or telegram statement signal Pulse output unit 0.1Nm ³ /P, 1Nm ³ /P Pulse output unit 1Nm ³ /P, 10Nm ³ /P								
Mass	1.5kg	1.4kg	1.0kg	1.2kg	1.4kg	1.7kg	9.8kg	18.1kg	23.9kg
	1.7kg	1.6kg	1.1kg	1.3kg	1.6kg	1.8kg	10.0kg	18.3kg	24.1kg
Conformed standard	CE marking conformity (EN61000-6-2:2005, EN61000-6-4:2007)								

RS485 Output Type Specifications

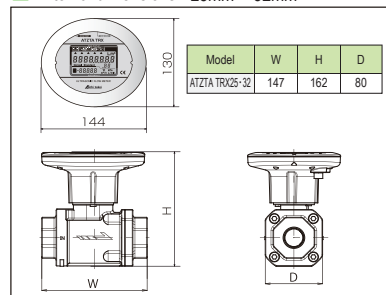
Model	ATZTA TRX25R-C(N)/SP	ATZTA TRX32R-C(N)/SP	ATZTA TRX40R-C(N)/SP	ATZTA TRX50R-C(N)/SP	ATZTA TRX65R-C(N)/SP	ATZTA TRX80R-C(N)/SP	ATZTA TRZ100R-C/SP	ATZTA TRZ150R-C/SP	ATZTA TRZ200R-C/SP
Nominal diameter	25mm	32mm	40mm	50mm	65mm	80mm	100mm	150mm	200mm
Power supply	24VDC±10%, 24VDC±10%, Power consumption not more than 1.5W								
Current output	Same as the specifications for External Power Supply Type (D) and Built-in Battery Type(B)								
Contact pulse output	Unit pulse Nch Open-drain output 1 line : Maximum load: 24VDC 50mA Output type: Duty ratio (35 to 65% maximum frequency) or One-shot (Select ON-Time from 50,100,125,250,500ms)								
	Pulse output unit 100L (normal) / P, 1000L (normal) / P ※Note 1 Pulse output unit 1m ³ (normal) / P, 10m ³ (normal)/P ※Note 1								
Communication ※Note 3	1 line: Conform to Modbus/RTU Communication bit rate: Selection from 9600,19200,38400,57600,115200bps by button operation								
Weight	1.5kg	1.4kg	1.0kg	1.2kg	1.4kg	1.7kg	9.8kg	18.1kg	23.9kg

Note 1) Nominal diameters 25 ~ 80mm correspond measurement of Nitrogen.
Note 2) At the actual flow measurement setting, number of digits for accumulated flow volumes, number of digits for instantaneous flow-rate, and pulse output unit differ from the above table.
*Piping conditions : 25mm & 32mm: Finishing of straight pipe of 20D or more at the upstream side and 5D or more at the downstream side (In case of utilization of forward/reverse flow indication mode, 20D or more for the both upstream and downstream)
40mm and above: Finishing of straight pipe of 10D or more at the upstream side and 5D or more at the downstream side (In case of utilization of forward/reverse flow indication mode, 10D or more for the both upstream and downstream)
Note 3)Communication specifications can be downloaded from our company website.
Note 4)In case of connection with a logger device, command sending interval shall be set to 200msec or longer.

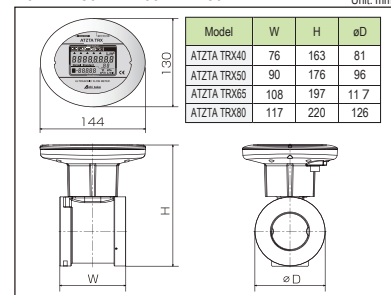
■ Actual Flow Volume – Normal Flow Volume Conversion Table

Conversion condition	25mm	32mm	40mm	50mm	65mm	80mm	100mm	150mm	200mm											
										Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	
Temperature (°C)	Gauge pressure (MPa)	0.7 (Nm ³ /h)	4.4	260	8.1	480	9.6	590	18	1100	30	1770	37	2210	74	3680	180	8840	290	14700
		0.5 (Nm ³ /h)	3.2	190	5.9	350	7	430	13	800	21	1280	27	1600	53	2670	130	6420	210	10700
30	0.7 (Nm ³ /h)	4.3	250	7.8	460	9.3	570	18	1070	29	1710	36	2140	71	3560	170	8550	290	14250	
		0.5 (Nm ³ /h)	3.5	210	6.5	380	7.8	480	15	900	24	1200	30	1800	50	2400	120	4800	160	8000
Actual flow (m ³ /h)		0.6	35	1.1	65	1.3	80	2.5	150	4	240	5	300	10	500	24	1200	40	2000	

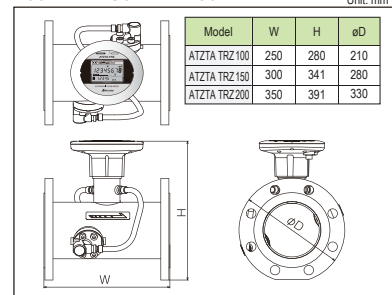
■ External dimensions 25mm • 32mm



40mm • 50mm • 65mm • 80mm



100mm • 150mm • 200mm



Global brand **ATZTA**

"ATZTA (Atsuta)" is the head letter of "A to Z to Aichitokei", and such thought that "Aichi Tokei Denki solves all the issues of fluid measurements" is put in it. Also, whereas "Atsuta" has been the location of the headquarter since the establishment, "ATZTA (Atsuta)" is the starting point of our manufacturing.

Manufactured and Distributed by

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To Our Customers

Please understand that product specifications may be changed without notice in order to improve performance. We are always happy to provide the latest catalogs and brochures, and respond to inquiries made to our offices.

1.8

202002-TRXTRZ-000

For Compressed Air and Nitrogen

Ultrasonic Flowmeter ATZTA TRX/TRZ

For appropriate management of
Compressor Air!

Introducing a new flow meter with higher cost performance!!



Standard equipping of Conversion-to-NORMAL
(Temperature & Pressure Compensation) function

Energy-saving Tool

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