## Outline

The ZT67 is a Compact Digital Pressure Gauge, part of a lineup of products for the semiconductor industry divided by grade. It is equipped with a highly reliable pressure sensor that is much smaller and easier to read than conventional digital pressure gauges. From UC Grade to general-use options are available for measurement gases.

#### Features

- •The high corrosion resistant pressure sensor made of Co-Ni alloy or SUS316L is directly welded to the 316L st.st. coupling portion, demonstrating excellent corrosion resistance, air-tightness, stability and reliability.
- \*Please confirm that material in contact with gas is suitable for it. •Compact 
  30 mm size
- •Compact [] 30 mm size
- •Large LED, Character height: 10 mm •Comparator with 2 independent outputs
- •Wide variety of fittings

Applications

 Semiconductor equipment Vacuum chamber, dry pump
 Gas supply line Cylinder cabinet, integrated gas panel

## List of grade

Cleanliness These pressure transmitters have been assembled, calibrated, inspected and packaged in a clean room, paying special attention for maintaining cleanliness.

Gra	ade	<b>UC</b> (Ultra Clean)	<b>BA</b> (Bright Annealing)	ng) (Electro Polishing) (General Purpose		General-use
	oughness contact	0.18µm Ra Avg. 0.7µm Rz Max.	Approx. Rz 2.5µm	0.18µm Ra Avg.	0.5µm Ra Avg.	Rule anonymous
Wetted	Pressure sensor	Co-Ni	alloy	SUS316L SUS630 (		SUS630 (17-4PH)
parts	Fitting *1	SUSS	316L	SUS316L SU		SUS316
	imum pressure *2	200% of rate	ed pressure	150% of rated pressure		200% of rated pressure
	kage leak rate)	5 x 10 <sup>-12</sup> Pa•m	<sup>3</sup> /s and under	5 x 10 <sup>-12</sup> Pa•m	<sup>3</sup> /s and under	1 x 10 <sup>-9</sup> Pa•m <sup>3</sup> /s and under
Part	ticle	Zero count for size 0.1µm or greater (In our inspection standard)		Zero count for size 0.1 µm or greater (In our inspection standard)	or greater	
Clea	aning	Ultra clearance (Cleaning)	Degreasing	Ultra clearance (Cleaning) Degreasing		Use no oil & water
	g media <sup>*3</sup> mended)	High-purity gas, semiconductor material gas, etc.	Purge gas, exhaust gas, etc.	semiconductor		Corrosion-resistant gas that does not require the cleanliness rating.

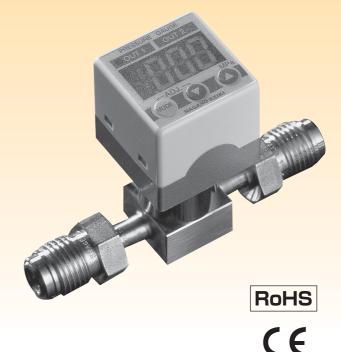
\*1 For UC Grade, the pressure transmitter can be manufactured in DOUBLE MELT material by request. Please contact us.

\*2 Allowable maximum pressure is the upper limit of pressure value which may safely be applied to the product and remain in specification once pressure is returned to the rated pressure range with a couple of times overpressurization for about 10 minutes. Effects of continuous overpressure are not guaranteed.

\*3 Ensure that pressure media is compatible with wetted parts.

\*UC / EP Grade rises with double packing (Filled with N2).

# **NAGANO KEIKI**



# Specification 1

	Item	Description					
	Fluid	Process gasses for semiconductor industry					
Pre	ssure range	UC/BA/EP/GP Grade:         General-use:           0 to 0.3, 0.5, 1, 2, 5, 10, 20MPa         0 to 1MPa           -0.1 to 0.3, 0.5, 1, 2MPa         -100 to 100kPa           -0.1 to 1MPa         -0.1 to 1MPa					
Fit	ting shape	Horizontal mounting, Type T Horizontal mounting, Type S Vertical mounting, Type S (Not applicable for general use)					
Connection		1/4, 3/8 UJR, VCR, CVC, etc.					
Power source         12 to 24V DC ±10%		12 to 24V DC ±10%					
Displa	ay accuracy * 1	± (1.0%F.S.+1digit) at 23℃					
Output         NPN open collector x 2 independent outputs (Hysteresis mode, Window comparator mode) Maximum rating: 30V DC, 80 mA DC Response speed: 2.5 ms and under (When no filter) Protection circuit: Short-circuit (Over-current) protection Deadband: Hysteresis mode (Variable) Window mode (1% F.S. fixed) Comparator operation display LED: Red LED (OUT1, 2), Lights when turning on the power.		Maximum rating: 30V DC, 80 mA DC Response speed: 2.5 ms and under (When no filter) Protection circuit: Short-circuit (Over-current) protection Deadband: Hysteresis mode (Variable) Window mode (1% F.S. fixed)					
	Analog output (Option)	1 to 5V DC (Load current 10kΩ or greater) Output accuracy*1: ±3.0%F.S. at 23°C Response time: 1 ms and under					
Consumption current		30 mA DC and under					
Operating temperature and humidity		-10 to 50°C, 35 to 85%RH (No freezing or condensation)					
Storag	ge temperature	-20 to 60°C (No freezing or condensation)					
Tempera	ature coefficient	±0.1%F.S./°C (Zero, Span)					
Pres	sure display	3 1/2 digit LED (Character height: 10 mm)					
Ca	able length	2 m only					
CE	compliance	Applicable Standards: EN61326-1: 2013; EN61326-2-3: 2013 * Please use it to connect to the indoor power distribution network which is not affected by the lightning surge voltage and power supply system switching transients.					
	Display scaling	-1999 to 1999 digits with respect to the ratings range					
Filter         Selectable among No filter, 10ms, 50ms, 200ms, or 600ms		Selectable among No filter, 10ms, 50ms, 200ms, or 600ms					
Function         Hold display         Both the maximum value and the minimum value can be indicated		Both the maximum value and the minimum value can be indicated					
Zero adjustment Zero adjustment on the display by using ADJ key (MODE + DOWN		Zero adjustment on the display by using ADJ key (MODE + DOWN key)					
	Key lock	Operation PB lock					
E	Enclosure	Indoor use					
Weight		Approx. 150 g (Varies depending on the fitting shape)					

\*1 Display and analog output accuracies include the effects of Linearity, Hysteresis and Repeatability.

# Cable

	Environmental	Conc	Cable outer	Minimum bending	
	temperature	Cross-sectional area (mm <sup>2</sup> )	diameter (mm)	radius (mm)	
PVC cable	-60 to 90°C	0.18	7/0.18	φ4.0	17

\*Cable length: 2 m only

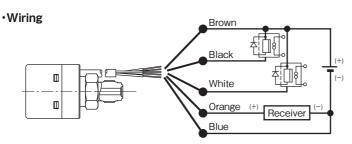
#### Gases for semiconductor industry

#### Category of semiconductor gases (Gases for semiconductor industry)

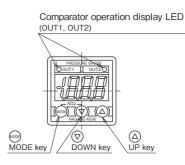
Туре	Description	Recommended grades
Semiconductor material gas	Process gases used for semiconductor manufacture, including silane (SiH <sub>4</sub> ), dichlorosilane (SiH <sub>2</sub> Cl <sub>2</sub> ), and phosphine (PH <sub>3</sub> ), stored in and dispensed from the IC manufacturing plant's internal cylinder cabinet and cylinder box.	
Pure gas	Gas used for purging in cylinder cabinets and cylinder boxes for semiconductor material gas, and set for leak checks. Also known as "zero gas." Includes highly pure nitrogen (N <sub>2</sub> ), helium (He), and argon (Ar).	UC/EP Grade
Bulk gas	Gas used for purging and as a material gas carrier, supplied via the CE and loaders from the gas yards adjacent to the IC manufacturing plant. (Most heavily consumed) nitrogen $(N_2)$ , oxygen $(O_2)$ and argon (Ar).	BA/GP Grade

\* CE (Cold evaporator): Storage, high-pressure gas container

## **Basic functions**



#### Names and functions of the panel controls

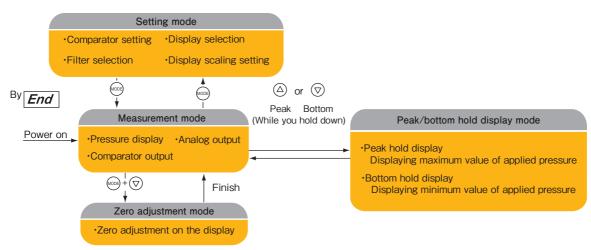


Wiring

Brown ···· Power source (+) Blue ····· Power source (-) COMMON Black ···· Open collector output (OUT1) White ···· Open collector output (OUT2) Orange ··· Analog output (+) (Option)

Cable core Nominal cross-sectional area 0.18mm<sup>2</sup> (AWG25)

#### Modes and functions

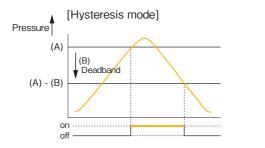


#### Six points related to function

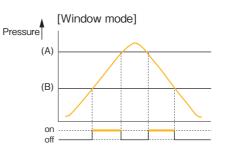
Flexible range application by the high accuracy of display and output scaling.

· Display scaling function Digital display can be set at given values within the (+) Display Positive pressure display 1999 limit of a 3-1/2 figure display. maximum maximum value 2 Various kinds of 0.0.0.0 - 0 pressure range (-) Display 4999 Negative pressure display minimum maximum value

The operation mode of comparator output can be selected. OUT1 and OUT2 can be set comparator operation mode independently.



The comparator operation with A setting point's value as (A) and the Deadband as (B). (The comparator output selection is ON.)



The comparator operation where A setting point is (A) and B Setting point is (B). (The comparator output selection is ON.)

[Comparator output selection]

	on		
Operation ON	off		
Operation OFF	off	I	
	on		

Set the comparator output logic. Hysteresis mode and window mode can also be selected. The diagram above shows the ON and OFF operation output. The comparator operation LEDs also change.

3 The digital filter is built in. It is useful, when pressure change is hard and a display is hard to see. Nil, 10ms, 50ms, 200ms, 600ms

Easy zero adjust by opening inlet port to atmospheric pressure and pushing MODE key and down key simultaneously.

(5) The peak and bottom value of measured are memorized. It displays, while pushing up and down keys.

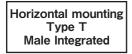
6 An error message is displayed when outside of the zero adjustment and excessive pressure is applied. Key lock function for avoiding incorrect operation is prepared.

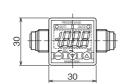
## Dimensions 1

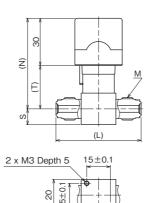


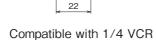
**EP/GP Grade** 

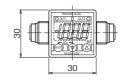
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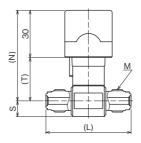


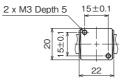




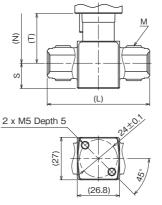








Compatible with 1/4 VCR



Compatible with 1/2 (3/8) VCR

Grade	Connection	Piping	Screw size		Dimer	nsions		Model number	
Graue	Connection	DIA.	М	Ν	Т	S	L	number	
UC	Compatible with VCR Male integrated	1/4	9/16-18UNF	57.5	27.5	10	54	ZT67-136	

Grade	Connection	Piping	Screw size		Dimensions			Model number ZT67-13N
Grade	Connection	DIA.	М	N	Т	S	L	number
BA	Compatible with VCR Male integrated	1/4	9/16-18UNF	57.5	27.5	10	54	ZT67-13N

Grade	Connection	Piping DIA.         Screw size M         Image: M         Dimension           1/4         9/16-18UNF         57.5         27.5	nsions		Model			
Grade	Connection	DIA.	М	N	Т	S	L	number
EP			9/16-18UNF	57.5	27.5	10	54	ZT67-13E
	Compatible with VCR Male integrated	1/2 (3/8)	7/8-14UNF	61.5	31.5	16	65	ZT67-14E

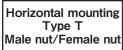
Crodo	Connection	Piping	Screw size		Dimer	nsions		Model
Grade	Connection	DIA.	М	N	Т	S	L	number
GP	Compatible with VCR Male integrated	1/4	9/16-18UNF	57.5	27.5	10	54	ZT67-13G

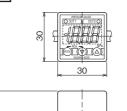
# Dimensions 2

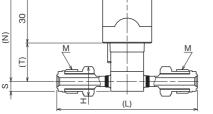
UC Grade

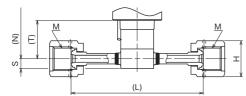
**BA Grade** 

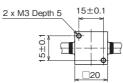
Unit: mm

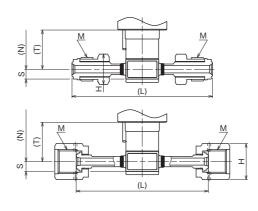












\*BA Grade doesn't have screw.

Grade	Connection	Piping	Screw size			Dir	mensions		Model
Grade	Connection		М	N	Т	S	Н	L	number
	VCR Male nut	1/4	9/16-18UNF	53.5	23.5	6	16 x 18.5 Hex.	86	ZT67-1J6
			7/8-14UNF	59	29	7	24 x 27.7 Hex.	90.5	ZT67-1K6
	VCR Female nut	1/4	9/16-18UNF	53.5	23.5	6	19 x 21.9 Hex.	80.8	ZT67-1L6
	(Bearings are not included)	3/8	7/8-14UNF	59	29	7	27 x 31.2 Hex.	81.8	ZT67-1M6
	UJR Male nut	1/4	9/16-18UNF	53.5	23.5	6	17 x 19.6 Hex.	87	ZT67-1N6
UC		3/8	7/8-14UNF	59	29	7	23 x 26.6 Hex.	100	ZT67-1P6
00	UJR Female nut	1/4	9/16-18UNF	53.5	23.5	6	19 x 21.9 Hex.	87	ZT67-1Q6
	(With pure ring)	3/8	7/8-14UNF	59	29	7	26 x 30 Hex.	100	ZT67-1R6
	CVC Male nut	1/4	9/16-18UNF	53.5	23.5	6	15.8 x 18.2 Hex.	86	ZT67-1W6
			7/8-14UNF	59	29	7	23.8 x 27.5 Hex.	90.6	ZT67-1X6
	CVC Female nut	1/4	9/16-18UNF	53.5	23.5	6	19 x 21.9 Hex.	80.8	ZT67-1Y6
	(Bearings are not included)	3/8	7/8-14UNF	59	29	7	27 x 31.2 Hex.	82	ZT67-1Z6

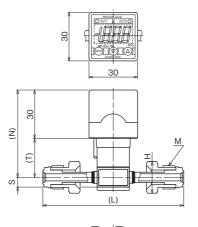
Grade	Connection	Piping	Screw size	Dimensions					Model
Grade	Connection	DIA.	М	N	Т	S	Н	L	number
	VCR Male nut						16 x 18.5 Hex.	86	ZT67-1JN
	VCR Female nut (Bearings are not included)						19 x 21.9 Hex. 17 x 19.6 Hex.	80.8	ZT67-1LN
ВА	UJR Male nut	1/4	9/16-18UNF	54	04	6	17 x 19.6 Hex.	92	ZT67-1NN
ВА	UJR Female nut (Without pure ring)	1/4	9/16-180INF	54	24	0	19 x 21.9 Hex.	81	ZT67-1QN
	CVC Male nut						15.8 x 18.2 Hex.	86	ZT67-1WN
	CVC Female nut (Bearings are not included)						19 x 21.9 Hex.	80.8	ZT67-1YN

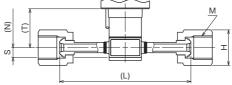
# Dimensions 3

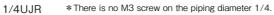
#### EP/GP Grade

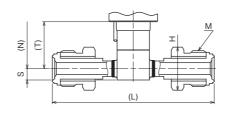
Unit: mm

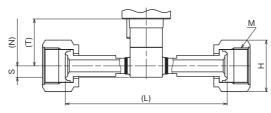
Horizontal mounting
Туре Т
Male nut/Female nut

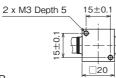












3/8UJR

Grade	Connection	Piping	Screw size			Dir	nensions		Model
Grade	Connection	DIA.	М	N	Т	S	Н	L	number
	UJR Male nut	1/4	9/16-18UNF	54	24	6	17 x 19.6 Hex.	87	ZT67-1NE
EP		3/8	7/8-14UNF	59	29	7	23 x 26.6 Hex.	100	ZT67-1PE
	UJR Female nut	1/4	9/16-18UNF	54	24	6	19 x 21.9 Hex.	81	ZT67-1QE
	(Without pure ring)	3/8	7/8-14UNF	59	29	7	26 x 30 Hex.	100	ZT67-1RE

Grade	Connection	Piping	Screw size			Dir	nensions		Model
Graue	Connection	DIA.	М	Ν	Т	S	н	L	number
	UJR Male nut	1/4	9/16-18UNF	E 4	24	6	17 x 19.6 Hex.	87	ZT67-1NG
GP	UJR Female nut (Without pure ring)	1/4	9/10-18UNF	54	24	U	19 x 21.9 Hex.	81	ZT67-1QG

## UC/BA/EP/GP Grade

6 Compact Digital Pressure Gauge for Semiconductor Industry

Vertical mounting Type S

Male nut/Female nut

8

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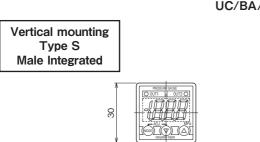
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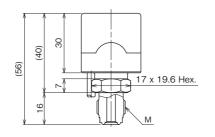
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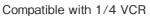
Unit: mm



Dimensions 4



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Screw size M

9/16-18UNF

Piping DIA.

1/4

Grade

UC

Connection

Compatible with VCR Male integrated

//	4 VCR		<u>v v</u>	<u>م</u> ے۔				H M	
	Model	Grade	Connection	Piping	Screw size		Dir	nensions	Model
	number	Grade	Connection	DIA.	М	L	S	н	number
	ZT67-236		VCR Male nut			70	34	16 x 18.5 Hex.	ZT67-2J6
-	2107-230		VCR Female nut (Bearings are not included)			67.4	31.4	19 x 21.9 Hex.	ZT67-2L6
		UC	UJR Male nut	1/4	9/16-18UNF	73	37	17 x 19.6 Hex.	ZT67-2N6
			UJR Female nut (With pure ring)	1/4	9/10-160INF	70.5	34.5	19 x 21.9 Hex.	ZT67-2Q6
			CVC Male nut			72	36	15.8 x 18.2 Hex.	ZT67-2W6
			CVC Female nut (Bearings are not included)			67.4	31.4	19 x 21.9 Hex.	ZT67-2Y6

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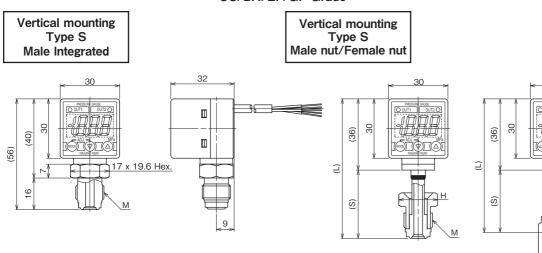
Grade	Connection	Piping	Screw size	Model	Grade	Connection	Piping	Screw size		Dir	nensions	Model
Graue	Connection	DIA.	М	number	Graue	Connection	DIA.	М	L	S	Н	number
	Compatible with					VCR Male nut			70	34	16 x 18.5 Hex.	ZT67-2JN
BA	VCR Male integrated	1/4	9/16-18UNF	ZT67-23N		VCR Female nut (Bearings are not included)			57.8	21.8	19 x 21.9 Hex.	ZT67-2LN
					BA	UJR Male nut	1/4	9/16-18UNF	73	37	17 x 19.6 Hex.	ZT67-2NN
					BA	UJR Female nut (Without pure ring)	1/4	9/10-160INF	57.7	21.7	19 x 21.9 Hex.	ZT67-2QN
						CVC Male nut			72	36	15.8 x 18.2 Hex.	ZT67-2WN
						CVC Female nut (Bearings are not included)			67.4	31.4	19 x 21.9 Hex.	ZT67-2YN

Grade	Connection	Piping	Screw size	Model	Grade	Connection	Piping	Screw size		Dir	nensions	Model
Grade	Connection	DIA.	М	number	Grade	Connection	DIA.	М	L	S	Н	number
	Compatible with	1/4	9/16-18UNF	ZT67-23E	EP	UJR Male nut	1/4	9/16-18UNF		34.5	17 x 19.6 Hex.	ZT67-2NE
EP	VCR Male integrated	1/4	9/10-16UNF	2107-23E		UJR Female nut (Without pure ring)	1/4			31.5	19 x 21.9 Hex.	ZT67-2QE

Grade	Connection	Piping	Screw size	Model	Grade	Connection	Piping	Screw size		Din	nensions	Model
Graue	Connection	DIA.	М	number	Graue	Connection	DIA.	М	L	S	Н	number
GP	Compatible with	1/4	9/16-18UNF	7767 020	GP	UJR Male nut	1/4	9/16-18UNF		34.5	17 x 19.6 Hex.	ZT67-2NG
GP	VCR Male integrated	1/4	9/10-18UNF	2107-230	GP	UJR Female nut (Without pure ring)	1/4	3/10-180NF		31.5	19 x 21.9 Hex.	ZT67-2QG

## Dimensions 5

#### UC/BA/EP/GP Grade

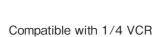


Unit: mm

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Н

M



Grade

UC

	Connection	Piping	Screw size	Model	Grade	Connection	Piping	Screw size		Dir	nensions	Model
,	Connection	DIA.	М	number	Grade	Connection	DIA.	М	L	S	н	number
	Compatible with	1/4	9/16-18UNF	ZT67-A36		VCR Male nut			70	34	16 x 18.5 Hex.	ZT67-AJ6
	VCR Male integrated	1/4	9/16-180NF	Z107-A30		VCR Female nut (Bearings are not included)			67.4	31.4	19 x 21.9 Hex.	ZT67-AL6
					UC	UJR Male nut	1/4	9/16-18UNF	73	37	17 x 19.6 Hex.	ZT67-AN6
						UJR Female nut (With pure ring)	1/4	9/10-180MF	70.5	34.5	19 x 21.9 Hex.	ZT67-AQ6
						CVC Male nut			72	36	15.8 x 18.2 Hex.	ZT67-AW6
						CVC Female nut (Bearings are not included)			67.4	31.4	19 x 21.9 Hex.	ZT67-AY6

Grade	Connection	Piping	Screw size	Model	Grade	Connection	Piping	Screw size		Dir	nensions	Model
Graue	Connection	DIA.	М	number	Grade	CONNECTION	DIA.	М	L	S	Н	number
ВА	Compatible with	1/4	9/16-18UNF	ZT67-A3N		VCR Male nut			70	34	16 x 18.5 Hex.	ZT67-AJN
DA	VCR Male integrated	1/4	9/10-180NF	2167-A3N		VCR Female nut (Bearings are not included)			57.8	21.8	19 x 21.9 Hex.	ZT67-ALN
					BA	UJR Male nut	1/4	9/16-18UNF	73	37	17 x 19.6 Hex.	ZT67-ANN
					DA	UJR Female nut (Without pure ring)	1/4	9/10-100MF	57.7	21.7	19 x 21.9 Hex.	ZT67-AQN
						CVC Male nut			72	36	15.8 x 18.2 Hex.	ZT67-AWN
						CVC Female nut (Bearings are not included)			67.4	31.4	19 x 21.9 Hex.	ZT67-AYN

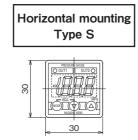
Grade	Connection	Piping	Screw size	Model	Grade	Connection	Piping	Screw size		Dir	nensions	Model
Graue	Connection	DIA.	М	number	Graue	CONNECTION	DIA.	М	L	S	н	number
EP	Compatible with	1/4	9/16-18UNF	7767 425	EP	UJR Male nut	1/4	9/16-18UNF		34.5	17 x 19.6 Hex.	ZT67-ANE
	VCR Male integrated	1/4	9/10-100INF	2107-A3E		UJR Female nut (Without pure ring)	1/4	9/10-160INF		31.5	19 x 21.9 Hex.	ZT67-AQE

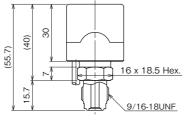
Grade	Connection	Piping	Screw size	Model	Grade	Connection	Piping	Screw size		Dir	nensions	Model
Grade	Connection	DIA.	М	number	Grade	Connection	DIA.	М	L	S	н	number
GP	Compatible with	1/4	9/16-18UNF	7767 420	GP	UJR Male nut	1/4	9/16-18UNF		34.5	17 x 19.6 Hex.	ZT67-ANG
GP	VCR Male integrated	1/4	9/10-100INF	2107-A3G	GP	UJR Female nut (Without pure ring)	1/4			31.5	19 x 21.9 Hex.	ZT67-AQG

## Dimensions 6

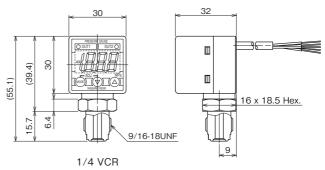
#### General-use

Unit: mm





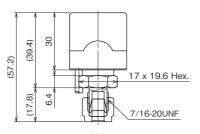




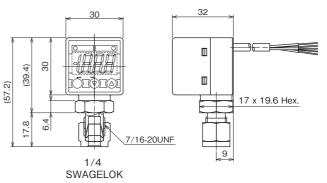
Vertical mounting

Type S





1/4 SWAGELOK

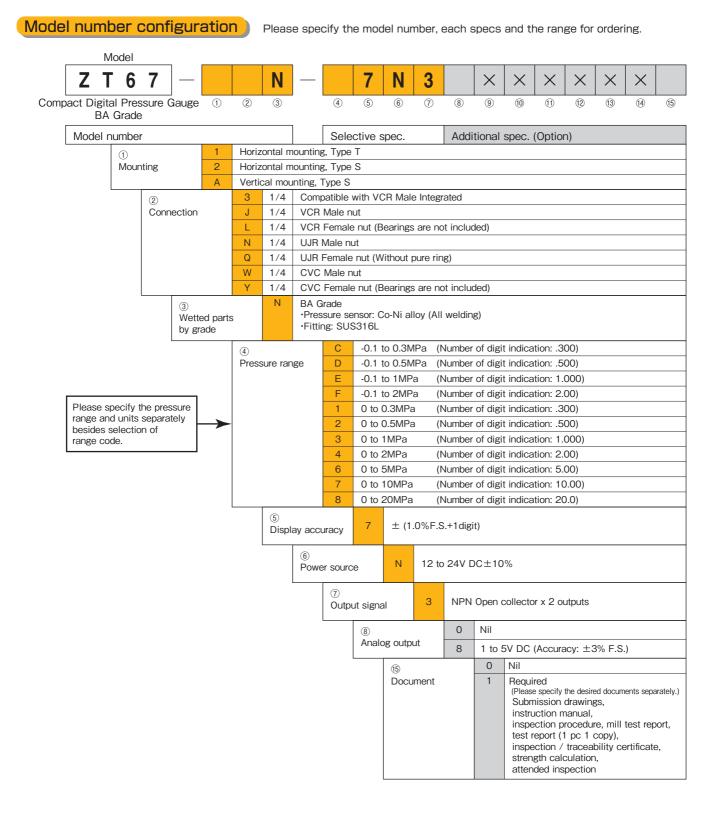


Fitting shape	Connection	Piping DIA.	Screw size M	Model number
Horizontal mounting, Type S	VCB Male		9/16-18UNF	ZT67-V01
Vertical mounting, Type S	VCh Wale	1/4	9/10-100INF	ZT67-V02
Horizontal mounting, Type S	SWAGELOK	1/4	7/16-20UNF	ZT67-V03
Vertical mounting, Type S	SWAGELUK		7710-200NF	ZT67-V04

## **UC Grade**

		Mode	I		_				_		_						_				
	Ζ.	Гб	<b>5</b> 7	-	-			6	—		7	Ν	3		$\times$	$\times$	×	×	$  \times$	×	
Comp	ompact Digital Pressure Gauge 1 2 3       4 6 6 7 8 9 0 1 2 3 4         UC Grade       Model number         Image: Selective spec.       Additional spec. (Option)         Image: Ima				14	Œ															
		1					Hori	zontal n	nountir	ng, Type	Т										
		Mc	unting				Hori	zontal n	nountir	ng, Type	S										
						Α	Vert	ical mou	unting,	Type S											
			-																	Type S	-
			Cor	nnectio	n			_	Corr	npatible	with V	CR Male	e integr	ated						-	
								_	VCF	R Male r	nut										
								_													
									VCF	R Femal	e nut (E	learings	are no	t inclu	ded)						
									UJR	Male n	ut										
								_	UJR	Female	e nut (N	ith pure	e ring)							-	
										C Male r	nut									-	
							Y	1/4												0	
							Z	3/8		: Femal	e nut (E	Searings	s are no	ot inclu	ded)					×	
							(4)		∙Fitt	ing: SU	S316L	to 0.3N	IPa (I	Number	of digi						
							Fies	sure rai	ige												
					_																
										1											
				rately		->	-			2	0 to	0.5MPa	1) a	lumber	of digi	t indica	ation: .5	600)			
										3	0 to	1MPa	1)	lumber	of digi	t indica	ation: 1	.000)			
										4	0 to :	2MPa	1)	lumber	of digi	t indica	ation: 2	.00)			
										-	0 to	5MPa	1)	lumber	of digi	t indica	ation: 5	.00)			
										8	0 to	20MPa	1)	lumber	of digi	t indica	ation: 2	0.0)			
									lay acc	curacy	7	± (1.	.0%F.S	S.+1digi	it)						
							er sourc	e	N	12 to	0 24V E	DC±10	1%								
										-	ut signa	al	3	NPN	Open o	collecto	or x 2 o	utputs			
											- ×			0	Nil						
											Analo	og outpi	ut	8	1 to 5	5V DC	(Accura	acy: ±:	3% F.	S.)	
												~	ments			Requi (Please Subn instru inspe test r	e specify nission uction r ection p report (	drawin nanual, procedu 1 pc 1	gs, re, mil copy),	ll test re	eport,

## **BA Grade**



## **EP** Grade

N	lodel		-																		
Ζ1	6	7	—			E	_		7	Ν	3		$\times$	$\times$	$ \times $	$ \times $	$\times$	$\times$			
act Digit EP	al Pres Grade		] Gauge	e 1	2	3	J	4	5	6	7	8	9	10	1)	(12)	(3)	(14)	Œ		
Model number						]	Sele	ctive s	spec.		Addi	tional	spec.	(Optio	n)						
1					Hori	zontal n	nountir	ng, Type	Т												
	Mounting 2				Horizontal mounting, Type S Vertical mounting, Type S																
				A	verti													ype S	Tun		
		2 Conr	nectior	า	3	1/4	Corr	patible	with V	CR Mal	e Integr	ated							Тур		
					4	1/2									×	(					
				N	N     1/4       P     3/8       Q     1/4       LLB Female put (Without pure ring)									0	(						
				Р										×	(						
														F	0	(					
					R	R 3/8 Contractinate national pare ning/									×	(					
	③ Wetted part by grade				3		•Pre		sensor: SUS316L (All welding) JS316L												
								С	-0.1 to 0.3MPa (Number of digit indication: .300)												
Please specify the pressure				④ Pres	sure rar	nge	D	-0.1 to 0.5MPa (Number of digit indication: .500)													
								E													
				1					F -0.1 to 2MPa (Number of digit indication: 2.00)												
range an	d units	separa				1 0 to 0.3MPa 2 0 to 0.5MPa						(Number of digit indication: .300) (Number of digit indication: .500)									
	besides selection of range code.								3         0 to 1MPa         (Number of digit indication: 1.000)												
10.180.00	ise code.							4													
								6	6 0 to 5MPa (Number of digit indication: 5.00)												
								7	0 to 10MPa (Number of digit indication: 10.00)												
						8 0 to 20MPa							(Number of digit indication: 20.0)								
						5 Disp	lay acc	curacy	7	7 $\pm$ (1.0%F.S.+1digit)											
						⑥ Power s				ce N 12 to 24V DC±10%											
								⑦ Outp	Dutput signal 3 NPN Open collector x 2 outputs												
									8 Analog output			0	Nil								
												8	1 to 5V DC (Accuracy: ±3% F.S.)								
											15				0 Nil						
										Docu	iments		1	Subn instru inspe test i	e specify nission uction r ection p	the desire drawing nanual, procedu 1 pc 1	gs, re, mill copy),	test re	port		

## **GP** Grade

_	Ν	lodel		-																_		
	ΖΤ	6	7				G	—		7	Ν	3		$\times$	×	×	$ \times $	X	×			
Compa	ct Digita GP	al Pres Grade		J Gauge	1	2	3	1	4	5	6	7	8	9	10	1)	12	(13)	14			
	Model number							]	Selective spec. Additional spec. (Option)													
		1			1	Horiz	Horizontal mounting, Type T															
		Mounting			2	Horiz	ontal n	nountin	ig, Type	S												
					Α	Verti	cal mou	unting,	Type S													
			2			3	1/4 Compatible with VCR Male integrated															
			Conr	nection		N	1/4	UJR	JJR Male nut													
						Q	1/4	UJR	UJR Female nut (Without pure ring)													
		(3)					G	GP (	Grade													
	Wetted p					6			Pressure sensor: SUS316L (All welding)													
				by g	ade			•Fitt	ing: SU	IS316L												
									С	-0.1	to 0.3N	IPa (N	lumber	of digi	t indica	ation: .3	00)					
						④ Pres	sure range		D	-0.1	-0.1 to 0.5MPa (Number of digit indication: .500)											
									Е	-0.1	-0.1 to 1MPa (Number of digit indication: 1.000)											
_								F -0.1 to 2MPa (Number of digit indication: 2.00)														
	Please specify the pressure range and units separately besides selection of range code.								1 0 to 0.3MPa (Number of digit indication: .300)													
									2 0 to 0.5MPa (Number of digit indication: .500)													
										3 0 to 1MPa (Number of digit indication: 1.000)												
									4 0 to 2MPa (Number of digit indication: 2.00)													
									6	0 to	0 to 5MPa (Number of digit indication: 5.00)											
									7 0 to 10MPa (Number of digit indication: 10.00)													
									8	0 to 20MPa (Number of digit indication: 20.0)												
							⑤ Disp	lay acc	y accuracy 7 ± (1.0%F.S					S.+1 digit)								
								⑥ Pow	er sourc	e	N	12 to	) 24V C	24V DC±10%								
								L	⑦ Outp	ut signal 3			NPN Open collector x 2 output									
									L	8			0	Nil								
									Analog outp			ut	8	1 to 5V DC (Accuracy: ±3% F.S.)								
		(6)																				
												ments		1		e specify	the desir drawin	ed docum	ients sepa	ara		

### **General-use**

