

WNK5 Series High Precision Pressure Transmitter

WNK5 series pressure transmitter is the high performance pressure transmitters provided by Anhui WNK Electronic Engineering Co., Ltd. It transforms the physical signal of pressure, differential pressure and level etc into standard signal, by collecting cell sensor and digital processing circuit.

Our WNK5 series has the best precision and signal uniformity by applying advanced specified integrated circuit digital technology. Each set of transmitter is ambient temperature compensated in our factory, to ensure max precision and mini drift in wide working temperature range.

Accurate, Stable, Reliable.



Application

WNK5 series pressure transmitters are suitable for:

- Gauge, absolute and differential pressure measurement in gases, steam or liquids in all areas of process control field.
- Level, volume or mass measurement in liquids.
- Working with detecting element, measure the flow of gases, steam and liquid flow.(volume and mass flow)
- High process temperatures up to 280℃ with diaphragm seals.
- High pressure up to 700bar.

Features

- Accurate, Stable, Reliable.
- High reference accuracy up to 0.075%.
- High long-term stability.
- Range ratio 100:1.
- Module design, electronic module replaceable and display unit free from calibration.
- Menu oriented man-machine interface operation, supporting local display.
- Supporting factory reset
- HART, PROFIBUS-PA, or FF protocol for option.

Specification

Performance and Spec

Reference Accuracy

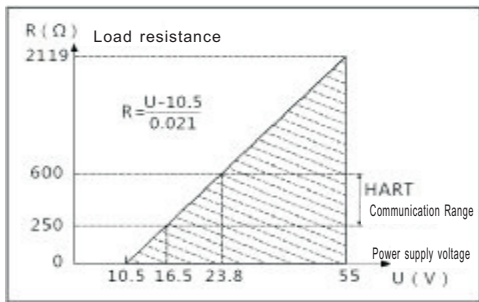
The stated reference accuracy includes linear precision, hysteresis and repeatability.

Model	Reference Accuracy
WNK51,55	Up to $\pm 0.075\%$ of range span. When range ratio is greater than 10:1, the accuracy=the accuracy of set span $\pm [0.015+0.005(\text{URL/set span})]\%$
WNK50,59	Up to $\pm 0.075\%$ of range span When range ratio is greater than 10:1, the accuracy=the accuracy of set span $\pm [0.025+0.005(\text{URL/set span})]\%$
WNK52,57,58	Up to $\pm 0.075\%$ of set span +diaphragm seals impact When range ratio is greater than 10:1, the accuracy=the accuracy of set span $\pm [0.025+0.005(\text{URL/set span})]\% + \text{diaphragm seals impact}$

Long-term Stability

Model	Reference Accuracy
WNK51,55	$\pm 0.15\%$ URL, 5 years
WNK50,59	$\pm 0.25\%$ URL, 5 years
WNK52,57,58	$\pm 0.25\%$ URL, 1 year

Dynamic Performance

Model	4-20mA HART	Typical HART transmitter response time
Total response time (T_d+T_c) ⁽²⁾ :		
WNK51,55	100 millisecond	
WNK50,59	200 millisecond	
WNK52,57,58	266 millisecond	
Stagnation Time (T_d) ⁽¹⁾	45 millisecond(nominal value)	
Update speed	Every second 22 times	
(1) Stagnation time and update speed fit for all models and scope: for analog output only. (2) The nominal total response time under reference 24°C condition.		

Static pressure influence for every 6.9MPa(1000psi)

Model	Pipeline Pressure Influence
Zero error	
WVK55	For 0 to 13.7MPa(2000psi) pipeline pressure, it is 0.1%/68.9bar(1000psi) of URL
WVK50	For 0 to 13.7MPa(2000psi) pipeline pressure, it is 0.25%/68.9bar(1000psi) of URL
WVK57,58	For 0 to 13.7MPa(2000psi) pipeline pressure, it is 0.35%/68.9bar(1000psi) of URL
Full Range error	
WVK55	For 0 to 13.7MPa(2000psi) pipeline pressure, it is 0.2%/68.9bar(1000psi) of URL
WVK50	For 0 to 13.7MPa(2000psi) pipeline pressure, it is 0.4%/68.9bar(1000psi) of URL
WVK57,58	For 0 to 13.7MPa(2000psi) pipeline pressure, it is 0.55%/68.9bar(1000psi) of URL

Influence of Ambient Temperature for Each 10°C

Model	Pipeline Pressure Influence
WVK51,55	$\pm 0.03\%$ URL/10°C
WVK50,59	$\pm 0.045\%$ URL/10°C
WVK52,57,58	$\pm 0.0625\%$ URL/10°C

Influence of the Installation Position

Model	Pipeline Pressure Influence
WVK51,55	Zero point shift max $\pm 0.15\text{kPa}$, reset can eliminate the shift, no influence for full range.
WVK50,59	Zero point shift max $\pm 0.5\text{kPa}$, reset can eliminate the shift, no influence for full range.
WVK52,57,58	The influence varies with the installation position of flange and transmitter, reset can eliminate the shift, no influence for full range.

Power Supply

Items	Operation Condition
Standard Type	10.5-55V DC
Intrinsic Safety Type	10.5-30V DC
HART,PA,FF	10.5-55V DC
Load Resistance	0-2119 Ω is under working , 250-600 Ω HART is under communication
Transfer Distance	<1000 meter
Power Consumption	HART is 20.5mA; PA,FF is 14.5mA

Influence of Power Supply

With the change of Voltage per volt ,the zero and range won't vary more than $\pm 0.005\%$ of calibration range

Influence of Vibration

Per test under GB/T1827.3/IEC61298-3, it is $<0.1\%$ range upper limit.

Range and Sensor limit

WNK51, 52, 59 pressure transmitter with piezoresistive pressure sensor and metallic measuring diaphragm							
Nominal Value (bar)	Order code		Measurement limit		Measurement limit		Max overload (bar)
	Gauge pressure	Absolute pressure	Lower (bar)	Upper (bar)	Recommended value (bar)[min/max]	Mini (bar)	
0.1	1C	2C	-0.1	+0.1	0.05/0.1	0.005	4
0.25	1E	2E	-0.25	+0.25	0.1/0.25	0.005	4
0.4	1F	2F	-0.4	+0.4	0.2/0.4	0.005	6
1	1H	2H	-1	+1	0.4/1	0.01	10
2	1K	2K	-1	+2	0.4/2	0.02	20
4	1M	2M	-1	+4	0.4/4	0.04	28
10	1P	2P	-1	+10	0.67/10	0.1	40
40	1S	2S	-1	+40	2.67/40	0.4	160
100	1U	2U	-1	+100	10/100	1	400
400	1W	2W	-1	+400	80/400	4	600
700	1X	2X	-1	+700	350/700	7	1050
WNK 50,55,57,58 differential pressure transmitter with metallic measuring diaphragm							
Nominal Value (bar)	Order code	Measurement limit		Range		Max overload	
		Lower (mbar)	Upper (mbar)	Recommended value (mbar)[min/max]	Mini (mbar)	Unilateral (bar)	Bilateral (bar)
10	7B	-10	+10	10	0.25	160	240
30	7C	-30	+30	30	0.3	160	240
100	7D	-100	+100	25/100	1	160	240
500	7F	-500	+500	33/500	5	420	640
3000	7H	-3000	+3000	200/3000	30	420	640
16000	7L	-16000	+16000	1066/16000	160	420	640
40000	7M	-40000	+40000	2666/40000	400	420	640

Electromagnetic compatibility

Items	Standard		Function class
Radiated interference	GB/T9254/CISPR22	30MHz-1000 MHz-	Qualified
Conducted interference	GB/T9254/CISPR22	0.15MHz-30MHz-	Qualified
Static discharge point (ESD) immunity	GB/T17626.2/IEC61000-4-2	4kV(contact point), 8kV(air)	B(remark 2)
Radio frequency electromagnetic field immunity	GB/T17626.3/IEC61000-4-3	10V/m(80MHz-1GHz)	A(remark 1)
Electrical Fast Transient immunity	GB/T17626.4/IEC61000-4-4	2kV(5/50ns,100kHz)	B(remark 2)
Surge immunity	GB/T17626.5/IEC61000-4-5	1kV(between the line) 2kV(between the line)	B(remark 2)
Conducted interference immunity of RF induction	GB/T17626.6/IEC61000-4-6	3V (150MHz-80MHz)	A(remark 1)
Power frequency magnetic field	GB/T17626.8/IEC61000-4-8	30A/m	A(remark 1)
Remark 1:For function A class, all the function works per technical spec.; Remark 2:For function B class, the function or the performance reduce or lose temporarily, but it can recovery by the self, the actual working status , memory and data don't change.			

Output

Option Code	Output
A	Two -wire 4-20mA, user can choose linear output or square root output.;
H	Two -wire 4-20mA superimpose HART digit signal, it fit for any main unit of HART protocol.;
P	PROFIBUS-PA communication protocol, it meet PA30 rule.
F	FF foundation fieldbus protocol

Weight

WNK51,59	around 1.7kg(without mounting bracket or process connection
WNK50,55	around 4kg(without mounting bracket or process connection)

Temperature Limit

Ambient	-40 to 85℃, -40 to 80℃for LCD header;
Storage	-45 to 85℃, -40 to 80℃ for LCD header;
Process	-40 to 120℃ for sensor with silicone oil, -30 to 120℃ for sensor with Inert oil

Humidity Limit

0-100% relative humidity

Start Time

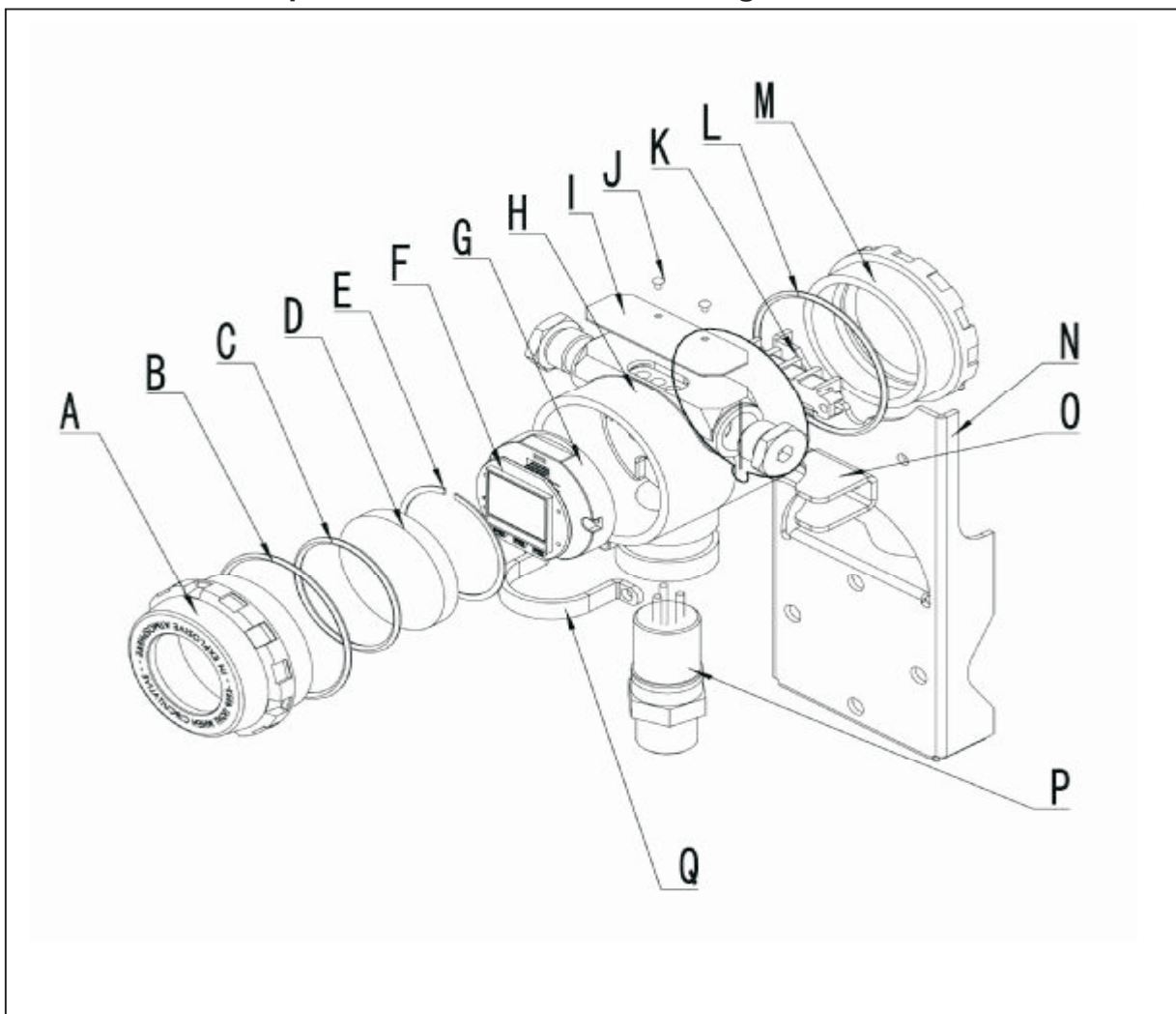
After transmitter electrified, the start time is short than 2.0 second

Damping Time

The user can enter the analog output response to the change of the step input in the range of 0 to 60 seconds, as a time constant. This software damping does not include the response time of the sensor module

DIMENSIONS

WNK51 , WNK59 pressure transmitter drawing

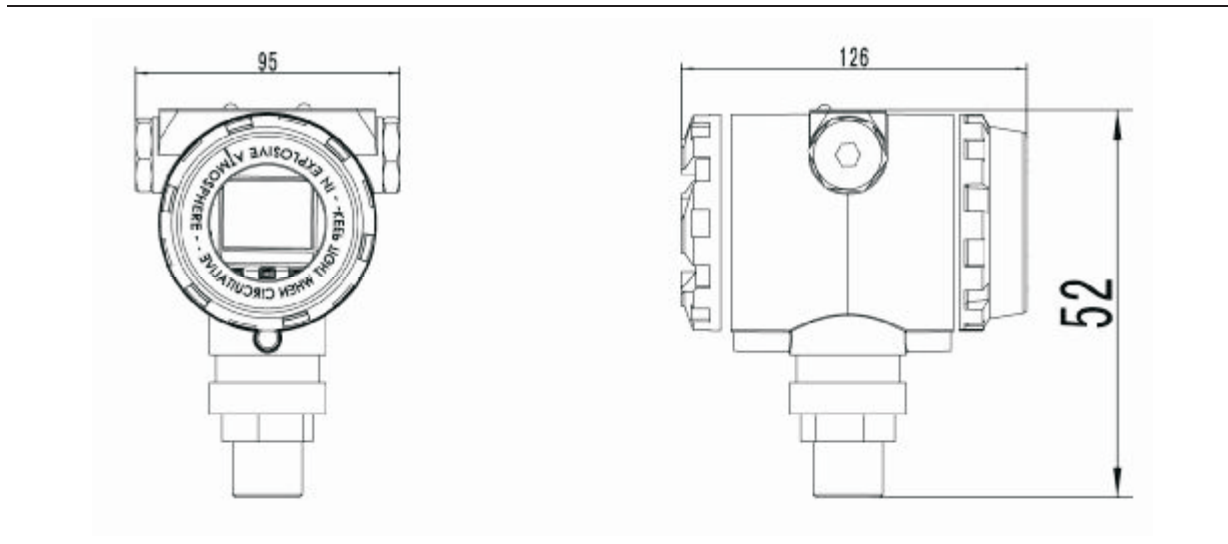


WNK51, WNK59 pressure transmitter drawing details

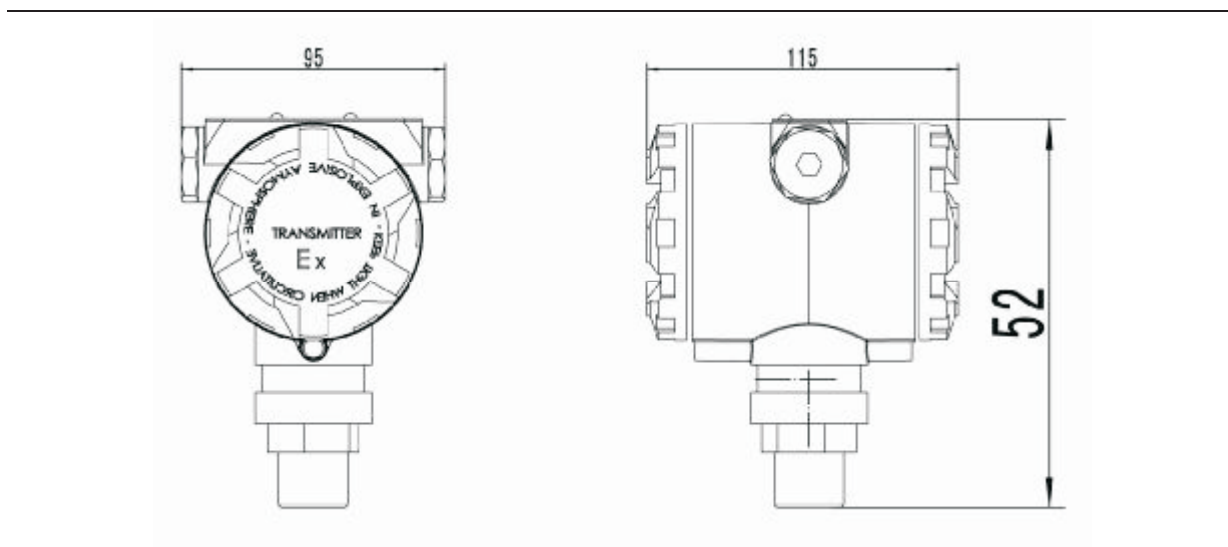
A, Mirror cover	G, Main circuit board	M, Blind cover
B, Mirror cover sealing ring	H, Main housing	N, Mounting bracket
C, Glass sealing ring	I, Nameplate	O, Mounting bracket location clip
D, Explosion-proof glass	J, Nameplate screw	P, Pressure sensor assembly
E, Glass spring	K, Connecting terminal	Q, Fixing clip of mounting bracket
F, Display meter	L, Blind cover sealing	

WNK51,59 pressure transmitter dimension

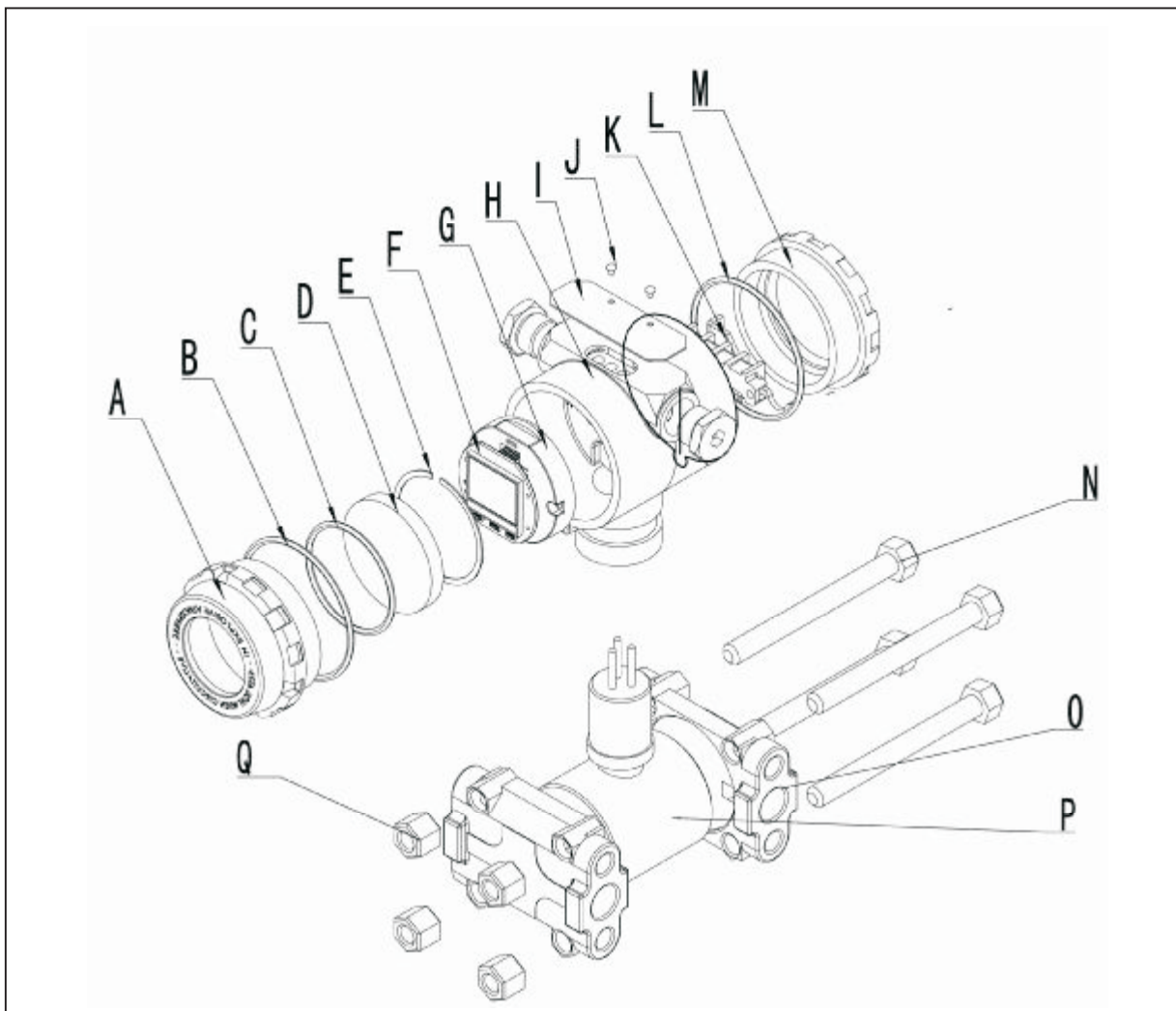
The drawing of the unit with display (unit: mm)



The drawing of the unit without display (unit: mm)



WNK50,55 differential pressure transmitter drawing

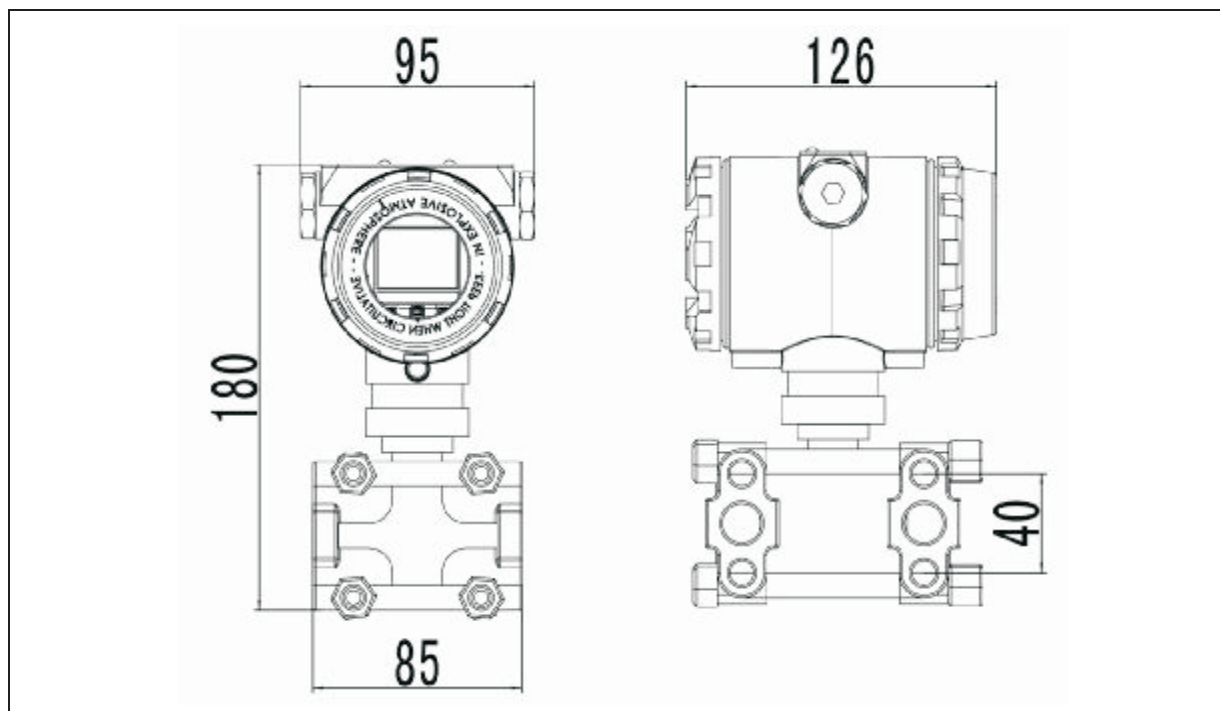


WNK50,55 differential pressure transmitter drawing details

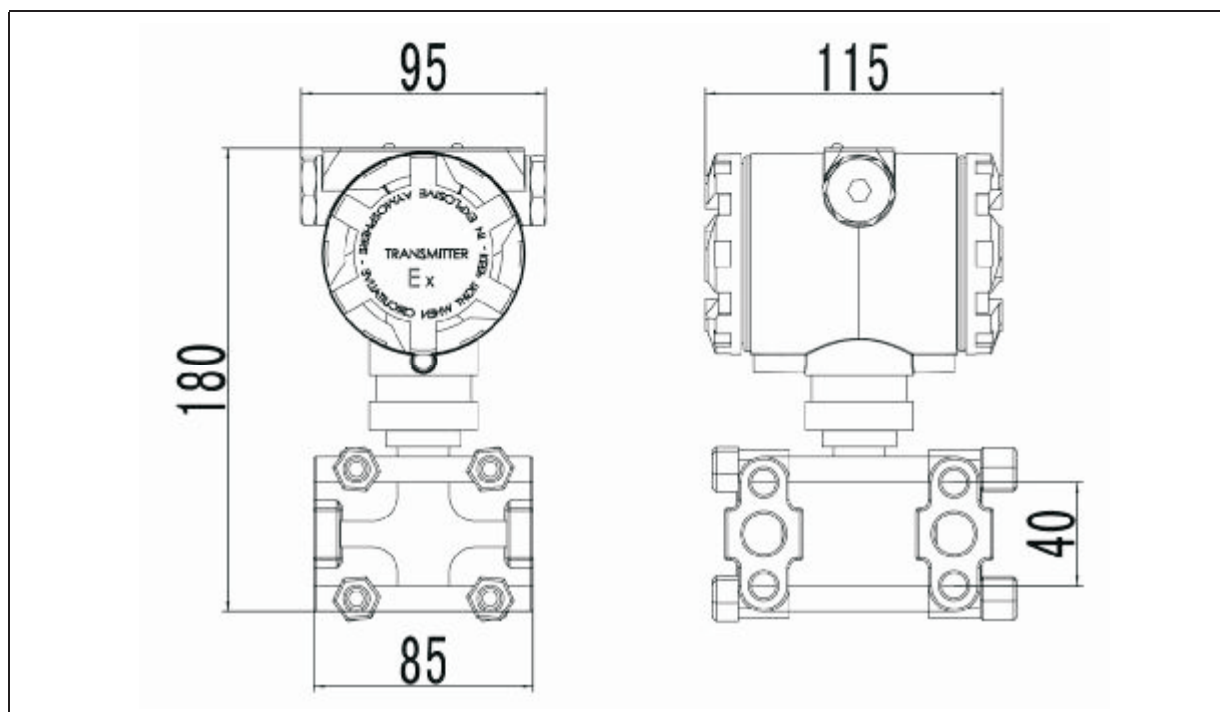
A, Mirror cover	G, Main circuit board	M, Blind cover
B, Mirror cover sealing ring	H, Main housing	N, Clamp bolt
C, Glass sealing ring	I, Nameplate	O, Sensor Clamp
D, Explosion-proof glass	J, Nameplate screw	P, Differential pressure sensor
E, Glass spring	K, Connecting terminal	Q, Clamp screw
F, Display meter	L, Blind cover sealing	

WNK50,WNK55 differential pressure transmitter dimension

The drawing of the unit with display (unit: mm)

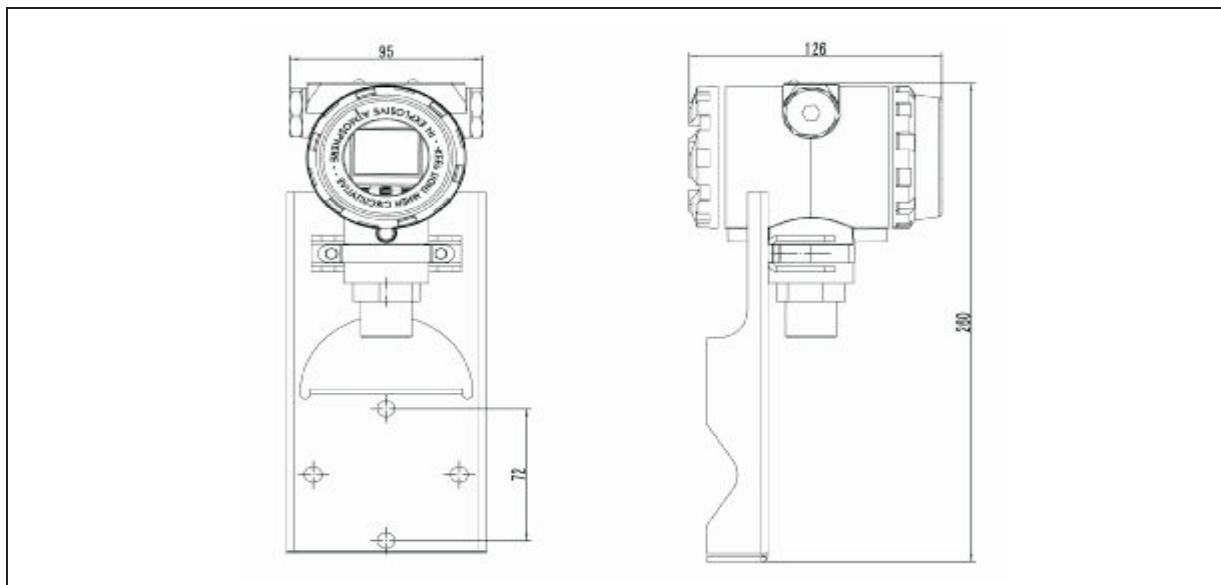


The drawing of the unit without display (unit: mm)

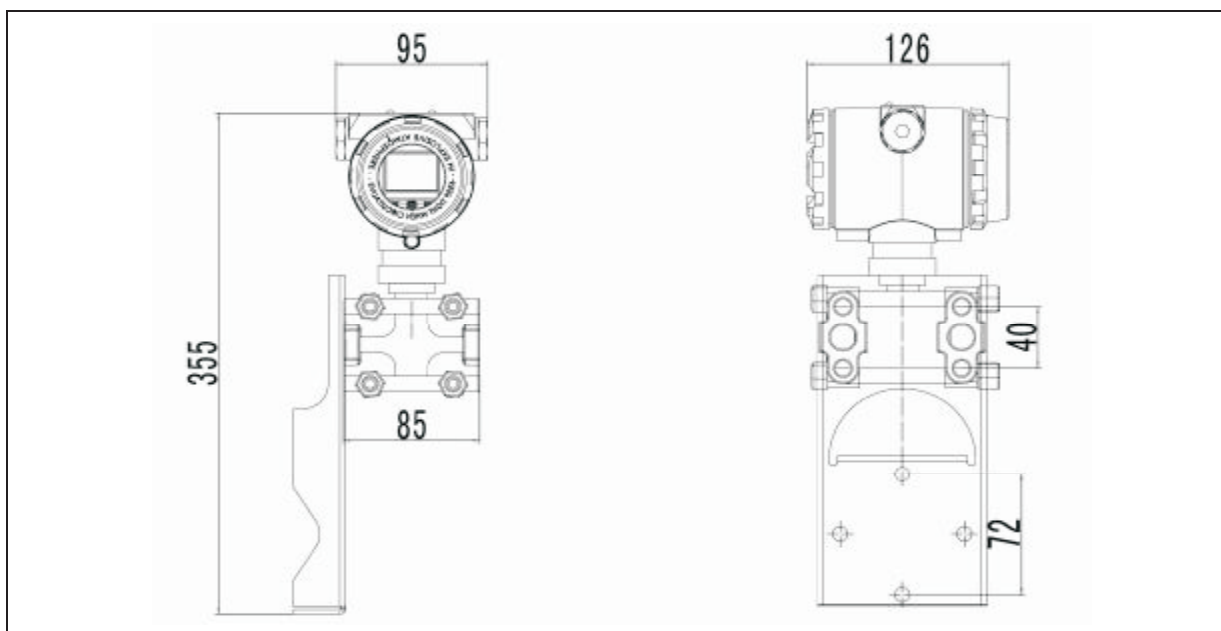


WNK5 series pressure transmitter installation diagram

WNK51, WNK59 pressure transmitter installation diagram (unit : mm)



WNK50, WNK55, WNK57, WNK58 differential pressure transmitter installation diagram (unit : mm)



WNK51 Smart High Precision Pressure Transmitter



- Gauge, absolute pressure measurement in gases, steam or liquids in all areas of process control field.
- Level, volume or mass measurement in liquids.
- High pressure up to 700bar.
- Accuracy:
High accuracy up to +0.075% of calibration range.
When range ratio is greater than 10:1, the accuracy=the accuracy of set range $\pm$ [0.015+0.005(URL/set range)]%.

Ordering information

Model	Product Details		
WNK51	Smart High Precision Pressure Transmitter		
Code	Approval		
A	For non-hazardous areas		
1	Exia II CT6		
2	Exia II CT4		
3	Exd II BT6		
For other approvals or more information, please contact with us			
Code	Output Code		
A	4...20mA		
H	4...20mA, HART		
P	PROFIBUS-PA		
F	FF		
Code	Display		
A	No display		
L	LCD		
Code	Housing; Cable entry; Protection		
A	Aluminum14, M20×1.5, IP66/67		
Code	Sensor range, for gauge pressure	Code	Sensor range, for absolute pressure
1C	100mbar (10kPa/1mH ₂ O)	2C	100mbar (10kPa/1mH ₂ O)
1E	250mbar (25kPa/2.5mH ₂ O)	2E	250mbar (25kPa/2.5mH ₂ O)
1F	400mbar (40kPa/4mH ₂ O)	2F	400mbar (40kPa/4mH ₂ O)
1H	1bar (100kPa/10mH ₂ O)	2H	1bar (100kPa/10mH ₂ O)
1K	2bar (200kPa/20mH ₂ O)	2K	2bar (200kPa/20mH ₂ O)
1M	4bar (400kPa/40mH ₂ O)	2M	4bar (400kPa/40mH ₂ O)
1P	10bar (1MPa/100mH ₂ O)	2P	10bar (1MPa/100mH ₂ O)
1S	40bar (4MPa/400mH ₂ O)	2S	40bar (4MPa/400mH ₂ O)
1U	100bar (10MPa/1000mH ₂ O)	2U	100bar (10MPa/1000mH ₂ O)
1W	400bar (40MPa/4000mH ₂ O)	2W	400bar (40MPa/4000mH ₂ O)
1X	700bar (70MPa/7000mH ₂ O)	2X	700bar (70MPa/7000mH ₂ O)

Code	Calibration, Unit
1	Sensor range, mbar/bar
2	Sensor range, kPa/MPa
3	Sensor range, mmH ₂ O/mH ₂ O
4	Sensor range, psi
Code	Diaphragm material
1	316L SST
2	Alloy C-276
X	Other special requirement
For other special kind of diaphragm, please contact with us.	
Code	Process connection screw thread
GA	Male thread G1/2, inner hole 3mm, 316 SST
GB	Male thread G1/2, inner hole 11.4mm, 316 SST
GC	Female thread G1/2, inner hole 3mm, 316 SST
GD	Female thread G1/2, inner hole 11.4mm, 316 SST
NA	Male thread 1/2NPT, inner hole 3mm, 316 SST
NB	Male thread 1/2NPT, inner hole 11.4mm, 316 SST
NC	Female thread 1/2NPT, inner hole 3mm, 316 SST
ND	Female thread 1/2NPT, inner hole 11.4mm, 316 SST
MA	Male thread M20×1.5, inner hole 3mm, 316 SST
MB	Male thread M20×1.5, inner hole 11.4mm, 316 SST
JX	Other special requirement
For other special connection screw thread, please contact with us.	
Code	Process connection material
2	304 SST
3	316 SST
H	Alloy C
Code	Overvoltage protection
A	No
M	Overvoltage protection
Code	Mounting bracket
A	No
U	Mounting bracket for pipe
Typical model#: WNK51 AHLA1P21 MA2 AU	

WNK59 Smart Pressure Transmitter

- Gauge, absolute pressure measurement in gases, steam or liquids in all areas of process control field.
- Level, volume or mass measurement in liquids.
- High pressure up to 700bar.
- Accuracy:
High accuracy up to +0.075% of calibration range.
When range ratio is greater than 10:1, the accuracy= the accuracy of set range $\pm [0.025 + 0.005(\text{URL/set range})]\%$.



Ordering information

Model	Product details		
WNK59	Smart Pressure Transmitter		
Code	Approval		
A	For non explosion-proof areas		
1	Exia II CT6		
2	Exia II CT4		
3	Exd II BT6		
For other approvals or more information, please contact with us			
Code	Output code		
A	4...20mA		
H	4...20mA, HART		
P	PROFIBUS-PA		
F	FF		
Code	Display		
A	No display		
L	LCD		
Code	Housing; Cable entry; Protection		
A	Aluminum14, M20×1.5, IP66/67		
Code	Sensor range, for gauge pressure	Code	Sensor range, for absolute pressure
1C	100mbar (10kPa/1mH ₂ O)	2C	100mbar (10kPa/1mH ₂ O)
1E	250mbar (25kPa/2.5mH ₂ O)	2E	250mbar (25kPa/2.5mH ₂ O)
1F	400mbar (40kPa/4mH ₂ O)	2F	400mbar (40kPa/4mH ₂ O)
1H	1bar (100kPa/10mH ₂ O)	2H	1bar (100kPa/10mH ₂ O)
1K	2bar (200kPa/20mH ₂ O)	2K	2bar (200kPa/20mH ₂ O)
1M	4bar (400kPa/40mH ₂ O)	2M	4bar (400kPa/40mH ₂ O)
1P	10bar (1MPa/100mH ₂ O)	2P	10bar (1MPa/100mH ₂ O)
1S	40bar (4MPa/400mH ₂ O)	2S	40bar (4MPa/400mH ₂ O)
1U	100bar (10MPa/1000mH ₂ O)	2U	100bar (10MPa/1000mH ₂ O)
1W	400bar (40MPa/4000mH ₂ O)	2W	400bar (40MPa/4000mH ₂ O)
1X	700bar (70MPa/7000mH ₂ O)	2X	700bar (70MPa/7000mH ₂ O)

Code	Calibration, Unit
1	Sensor range, mbar/bar
2	Sensor range, kPa/MPa
3	Sensor range, mmH ₂ O/mH ₂ O
4	Sensor range, psi
Code	Diaphragm material
1	316L SST
2	Alloy C-276
X	Other special requirement
For other special kind of diaphragm, please contact with us.	
Code	Process connection screw thread
GA	Male thread G1/2, inner hole 3mm, 316 SST
GB	Male thread G1/2, inner hole 11.4mm, 316 SST
GC	Female thread G1/2, inner hole 3mm, 316 SST
GD	Female thread G1/2, inner hole 11.4mm, 316 SST
NA	Male thread 1/2NPT, inner hole 3mm, 316 SST
NB	Male thread 1/2NPT, inner hole 11.4mm, 316 SST
NC	Female thread 1/2NPT, inner hole 3mm, 316 SST
ND	Female thread 1/2NPT, inner hole 11.4mm, 316 SST
MA	Male thread M20×1.5, inner hole 3mm, 316 SST
MB	Male thread M20×1.5, inner hole 11.4mm, 316 SST
JX	Other special requirement
For other special connection screw thread, please contact with us.	
Code	Process connection material
2	304 SST
3	316 SST
H	Alloy C
Code	Overvoltage protection
A	No
M	Overvoltage protection
Code	Mounting bracket
A	No
U	Mounting bracket for pipe
Typical model#: WNK59AHLA1P21 MA2AU	

WNK52 Smart Diaphragm Pressure Transmitter



- Gauge, absolute pressure measurement in gases, steam or liquids in all areas of process control field.
- Level, volume or mass measurement in liquids.
- High pressure up to 100bar.
- High process temperatures up to 280°C with diaphragm seals

Ordering information

Model	Product details		
WNK52	Smart Diaphragm Pressure Transmitter		
Code	Approval		
A	For non explosion-proof areas		
1	Exia II CT6		
2	Exia II CT4		
3	Exd II BT6		
For other approvals or more information, please contact with us			
Code	Output code		
A	4...20mA		
H	4...20mA, HART		
P	PROFIBUS-PA		
F	FF		
Code	Display		
A	No display		
L	LCD		
Code	Housing; Cable entry; Protection		
A	Aluminum14, M20×1.5, IP66/67		
Code	Sensor range, for gauge pressure	Code	Sensor range, for absolute pressure
1C	100mbar (10kPa/1mH ₂ O)	2C	100mbar (10kPa/1mH ₂ O)
1E	250mbar (25kPa/2.5mH ₂ O)	2E	250mbar (25kPa/2.5mH ₂ O)
1F	400mbar (40kPa/4mH ₂ O)	2F	400mbar (40kPa/4mH ₂ O)
1H	1bar (100kPa/10mH ₂ O)	2H	1bar (100kPa/10mH ₂ O)
1K	2bar (200kPa/20mH ₂ O)	2K	2bar (200kPa/20mH ₂ O)
1M	4bar (400kPa/40mH ₂ O)	2M	4bar (400kPa/40mH ₂ O)
1P	10bar (1MPa/100mH ₂ O)	2P	10bar (1MPa/100mH ₂ O)
1S	40bar (4MPa/400mH ₂ O)	2S	40bar (4MPa/400mH ₂ O)
1U	100bar (10MPa/1000mH ₂ O)	2U	100bar (10MPa/1000mH ₂ O)



WNK5 Series High Precision Pressure Transmitter

Code	Calibration, Unit		
1	Sensor range, mbar/bar		
2	Sensor range, kPa/MPa		
3	Sensor range, mmH2O/mH2O		
4	Sensor range, psi		
Code	Diaphragm material		
1	316L SST		
2	Alloy C-276		
3	Monel		
4	Tantalum diaphragm		
6	316L with PTFE coating(not fit for vacuum situation, only for non-explosive proof)		
X	Other special requirements		
For other special diaphragm, please contact with us.			
Code	Process connection EN/DIN flange	Code	Process connection ANSI flange
EA1	DN25 PN10/40 B1	NA1	1"300 lbs RF
EA2	DN25 PN64/160 E	NA2	1"400/600 lbs RF
EA3	DN25 PN250 E	NA3	1"900/1500 lbs RF
EA4	DN25 PN400 E	NA4	1"2500 lbs RF
EH1	DN50 PN25/40 A	NH1	2"300 lbs RF
EH2	DN50 PN100/160 E	NH2	2"400/600 lbs RF
EH3	DN50 PN250 E	NH3	2"900/1500 lbs RF
EH4	DN50 PN400 E	NH4	2"2500 lbs RF
EQ1	DN80 PN25/40 A	NQ1	3"300 lbs RF
EQ2	DN80 PN100 B1	Nm1	4"300 lbs RF
EM1	DN100 PN100 B1E		
EAX	Other special requirement		
For other special screw thread connection, please contact with us.			
Code	Depth of the diaphragm insert	Code	Depth of the diaphragm insert
C0	No	C4	2"
C1	50mm	C5	4"
C2	100mm	C6	6"
C3	200mm	C7	8"
Code	Fluid filled	Code	Fluid filled
A	Silicon oil	C	Inert oil
B	Vegetable oil	D	High temperature oil
Code	Capillary length		
A	No		
XX	XX, to fill the digit, 01says 1m, 99says 99m		
Code	Mounting bracket		
A	No		
U	Mounting bracket for pipe		
Typical model#: WNK52 AHL A1H21 EHC0 AAA			



WNK55 Smart High Precision Differential Pressure Transmitter

- Gauge, absolute and differential pressure measurement in gases, steam or liquids in all areas of process control field.
- Level, volume or mass measurement in liquids.
- Working with detecting element, measure the flow of gases, steam and liquid flow. (volume and mass flow)
- Accuracy:
High accuracy up to +0.075% of calibration range.
When range ratio is greater than 10:1, the accuracy = the accuracy of set range $\pm [0.015 + 0.005(\text{URL/set range})]\%$

Ordering information

Model	Product details
WNK55	Smart High Precision Differential Pressure Transmitter
Code	Approval
A	For non explosion-proof areas
1	Exia II CT6
2	Exia II CT4
3	Exd II BT6
For other approvals or more information, please contact with us	
Code	Output code
A	4...20mA
H	4...20mA, HART
P	PROFIBUS-PA
F	FF
Code	Display
A	No display
L	LCD
Code	Housing; Cable entry; Protection
A	Aluminum14, M20×1.5, IP66/67
Code	Sensor range, for gauge pressure
7B	10mbar, PN160 (1kPa/100mH ₂ O)
7C	30mbar, PN160 (3kPa/300mH ₂ O)
7D	100mbar, PN160 (10kPa/1mH ₂ O)
7F	500mbar, PN160 (50kPa/5mH ₂ O)
7H	3bar, PN160 (300kPa/30mH ₂ O)
7L	16bar, PN160 (1.6MPa/160mH ₂ O)
7M	40bar, PN160 (4MPa/400mH ₂ O)
8F	500mbar, PN420 (50kPa/5mH ₂ O)
8H	3bar, PN420 (300kPa/30mH ₂ O)
8L	16bar, PN420 (1.6MPa/160mH ₂ O)
8M	40bar, PN420 (4MPa/400mH ₂ O)
8W	300bar, PN420 (30MPa/3000mH ₂ O)



Code	Calibration, Unit
1	Sensor range, mbar/bar
2	Sensor range, kPa/MPa
3	Sensor range, mmH ₂ O/mH ₂ O
4	Sensor range, psi
Code	Diaphragm material
1	316L SST
2	Alloy C-276
X	Other special requirement
For any other special diaphragm, please contact with us.	
Code	Process connection thread, drain valve
A	Female thread 1/4NPT, emission exit at tail
B	Female thread 1/4NPT, emission exit at side
C	Female thread 1/2NPT, emission exit at tail
D	Female thread 1/2NPT, emission exit at side
E	Male thread M20×1.5, emission exit at tail
F	Male thread M20×1.5, emission exit at side
Code	Process connection material
2	304 SST
3	316 SST
H	Alloy C
Code	Mounting bracket
A	No
U	Mounting bracket for pipe
Typical model#: WNK55 AHL A7D 21A2U	

WNK50 Smart Differential Pressure Transmitter

- Gauge, absolute and differential pressure measurement in gases, steam or liquids in all areas of process control field.
- Level, volume or mass measurement in liquids.
- Working with detecting element, measure the flow of gases, steam and liquid flow. (volume and mass flow).
- Accuracy:
High accuracy up to +0.075% of calibration range.
When range ratio is greater than 10:1, the accuracy= the accuracy of set range $\pm [0.025 + 0.005(\text{URL/set range})\%]$.



Ordering information

Model	Product details
WNK50	Smart Differential Pressure Transmitter
Code	Approval
A	For non explosion-proof areas
1	Exia II CT6
2	Exia II CT4
3	Exd II BT6
For other approvals or more information, please contact with us	
Code	Output code
A	4...20mA
H	4...20mA, HART
P	PROFIBUS-PA
F	FF
Code	Display
A	No display
L	LCD
Code	Housing; Cable entry; Protection
A	Aluminum 14, M20×1.5, IP66/67
Code	Sensor range, for gauge pressure
7B	10mbar, PN160 (1kPa/100mH ₂ O)
7C	30mbar, PN160 (3kPa/300mH ₂ O)
7D	100mbar, PN160 (10kPa/1mH ₂ O)
7F	500mbar, PN160 (50kPa/5mH ₂ O)
7H	3bar, PN160 (300kPa/30mH ₂ O)
7L	16bar, PN160 (1.6MPa/160mH ₂ O)
7M	40bar, PN160 (4MPa/400mH ₂ O)
8F	500mbar, PN420 (50kPa/5mH ₂ O)
8H	3bar, PN420 (300kPa/30mH ₂ O)
8L	16bar, PN420 (1.6MPa/160mH ₂ O)
8M	40bar, PN420 (4MPa/400mH ₂ O)
8W	300bar, PN420 (30MPa/3000mH ₂ O)

Code	Calibration, Unit
1	Sensor range, mbar/bar
2	Sensor range, kPa/MPa
3	Sensor range, mmH ₂ O/mH ₂ O
4	Sensor range, psi
Code	Diaphragm material
1	316L SST
2	Alloy C-276
X	Other special requirement
For any other special diaphragm, please contact with us.	
Code	Process connection thread, drain valve
A	Female thread 1/4NPT, emission exit at tail
B	Female thread 1/4NPT, emission exit at side
C	Female thread 1/2NPT, emission exit at tail
D	Female thread 1/2NPT, emission exit at side
E	Male thread M20×1.5, emission exit at tail
F	Male thread M20×1.5, emission exit at side
Code	Process connection material
2	304 SST
3	316 SST
H	Alloy C
Code	Mounting bracket
A	No
U	Mounting bracket for pipe
Typical model#: WNK50 AHL A7D 21A2U	

WNK57 Smart Single Flange Liquid Level Transmitter

- Gauge, absolute and differential pressure measurement in gases, steam or liquids in all areas of process control field.
- Level, volume or mass measurement in liquids.
- Working with detecting element, measure the flow of gases, steam and liquid flow.(volume and mass flow)



Ordering information

Model	Product details
WNK57	Smart Single Flange Differential Pressure Transmitter
Code	Approval
A	For non explosion-proof areas
1	Exia II CT6
2	Exia II CT4
3	Exd II BT6
For other approvals or more information, please contact with us	
Code	Output code
A	4...20mA
H	4...20mA, HART
P	PROFIBUS-PA
F	FF
Code	Display
A	No display
L	LCD
Code	Housing; Cable entry; Protection
A	Aluminum 14, M20×1.5, IP66/67
Code	Sensor range, for gauge pressure
7D	100mbar, PN160 (10kPa/1mH ₂ O)
7F	500mbar, PN160 (50kPa/5mH ₂ O)
7H	3bar, PN160 (300kPa/30mH ₂ O)
7L	16bar, PN160 (1.6MPa/160mH ₂ O)
7M	40bar, PN160 (4MPa/400mH ₂ O)
Code	Calibration, Unit
1	Sensor range, mbar/bar
2	Sensor range, kPa/MPa
3	Sensor range, mmH ₂ O/mH ₂ O
4	Sensor range, psi



Code	Diaphragm material
1	316L SST
2	Alloy C-276
3	Monel
4	Tantalum diaphragm
6	316L with PTFE coating(not fit for vacuum situation, only for non-explosive proof)
X	Other special requirements

For other special diaphragm, please contact with us.

Code	Process connection EN/DIN flange	Code	Process connection ANSI flange
EA1	DN25 PN10/40 B1	NA1	1"300 lbs RF
EA2	DN25 PN64/160 E	NA2	1"400/600 lbs RF
EA3	DN25 PN250 E	NA3	1"900/1500 lbs RF
EA4	DN25 PN400 E	NA4	1"2500 lbs RF
EH1	DN50 PN25/40 A	NH1	2"300 lbs RF
EH2	DN50 PN100/160 E	NH2	2"400/600 lbs RF
EH3	DN50 PN250 E	NH3	2"900/1500 lbs RF
EH4	DN50 PN400 E	NH4	2"2500 lbs RF
EQ1	DN80 PN25/40 A	NQ1	3"300 lbs RF
EQ2	DN80 PN100 B1	Nm1	4"300 lbs RF
EM1	DN100 PN100 B1E		
EAX	Other special requirement		

For other special diaphragm, please contact with us.

Code	Low voltage process connection thread		
A	Female thread 1/4NPT		
C	Female thread 1/2NPT		
E	Male thread M20×1.5		
Code	Depth of the diaphragm insert	Code	Depth of the diaphragm insert
C0	No	C4	2”
C1	50mm	C5	4”
C2	100mm	C6	6”
C3	200mm	C7	8”
Code	Fluid filled	Code	Fluid filled
A	Silicon oil	C	Inert oil
B	Vegetable oil	D	High temperature oil
Code	Capillary length		
A	No		
XX	XX, to fill the digit, 01says 1m, 99says 99m		
Code	Mounting bracket		
A	No		
U	Mounting bracket for pipe		

Typical model#: WNK57 AHL A7H21 EH2AC0 AAA

Wnk58 Smart Double Flange Liquid Level Transmitter



- Gauge, absolute and differential pressure measurement in gases, steam or liquids in all areas of process control field.
- Level, volume or mass measurement in liquids.
- Working with detecting element, measure the flow of gases, steam and liquid flow.(volume and mass flow)

Ordering information

Model	Product details
Wnk58	Smart Double Flange Differential Pressure Transmitter
Code	Approval
A	For non explosion-proof areas
1	Exia II CT6
2	Exia II CT4
3	Exd II BT6
For other approvals or more information, please contact with us.	
Code	Output code
A	4...20mA
H	4...20mA, HART
P	PROFIBUS-PA
F	FF
Code	Display
A	No display
L	LCD
Code	Housing; Cable entry; Protection
A	Aluminum 14, M20×1.5, IP66/67
Code	Sensor range, for gauge pressure
7D	100mbar, PN160 (10kPa/1mH ₂ O)
7F	500mbar, PN160 (50kPa/5mH ₂ O)
7H	3bar, PN160 (300kPa/30mH ₂ O)
7L	16bar, PN160 (1.6MPa/160mH ₂ O)
7M	40bar, PN160 (4MPa/400mH ₂ O)
Code	Calibration, Unit
1	Sensor range, mbar/bar
2	Sensor range, kPa/MPa
3	Sensor range, mmH ₂ O/mH ₂ O
4	Sensor range, psi



WNK5 Series High Precision Pressure Transmitter

Code	Diaphragm material
1	316L SST
2	Alloy C-276
3	Monel
4	Tantalum diaphragm
6	316L with PTFE coating(not fit for vacuum situation, only for non-explosive proof)
X	Other special requirements

For other special diaphragm, please contact with us.

Code	Process connection EN/DIN flange	Code	Process connection ANSI flange
EA1	DN25 PN10/40 B1	NA1	1"300 lbs RF
EA2	DN25 PN64/160 E	NA2	1"400/600 lbs RF
EA3	DN25 PN250 E	NA3	1"900/1500 lbs RF
EA4	DN25 PN400 E	NA4	1"2500 lbs RF
EH1	DN50 PN25/40 A	NH1	2"300 lbs RF
EH2	DN50 PN100/160 E	NH2	2"400/600 lbs RF
EH3	DN50 PN250 E	NH3	2"900/1500 lbs RF
EH4	DN50 PN400 E	NH4	2"2500 lbs RF
EQ1	DN80 PN25/40 A	NQ1	3"300 lbs RF
EQ2	DN80 PN100 B1	Nm1	4"300 lbs RF
EM1	DN100 PN100 B1E		
EAX	Other special requirement		

For any more option, please kindly contact with us

Code	Depth of the diaphragm insert	Code	Depth of the diaphragm insert
C0	No	C4	2"
C1	50mm	C5	4"
C2	100mm	C6	6"
C3	200mm	C7	8"
Code	Fluid filled	Code	Fluid filled
A	Silicon oil	C	Inert oil
B	Vegetable oil	D	High temperature oil
Code	Capillary length		
A	No		
XX	XX, to fill the digit, 01says 1m, 99says 99m		
Code	Mounting bracket		
A	No		
U	Mounting bracket for pipe		

Typical model#: WNK58 AHL A7H21 EH2C0 A02A