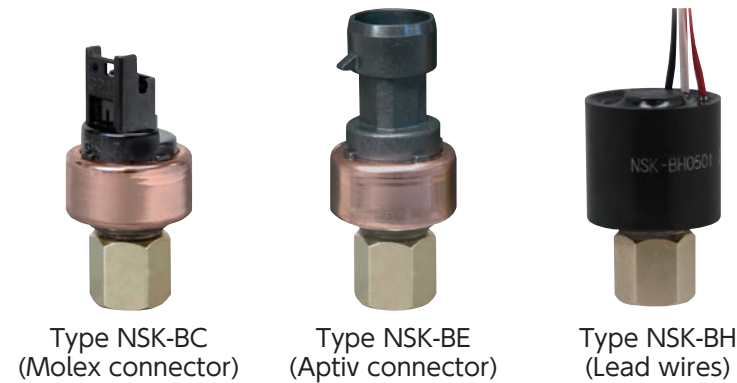


PRESSURE SENSORS / Type NSK (Ratiometric Output)



High Volume OEM Item

Drawings must be exchanged for purchase.
Please contact SAGINOMIYA for more details.

FEATURES

- The pressure detection and signal conversion circuits are integrated into a single chip, delivering high precision and durability.
- Compatible with a variety of connection types.
(Stainless steel wetted parts are also available.)
- Ratiometric output
- Standards : CE (ATEX compliant), UL/cUL, CQC
(Please contact us for details.)

APPLICATIONS

- Room air conditioners
- Packaged air conditioners
- Water boilers
- Water supply pumps
- Chillers, etc.

COMMON SPECIFICATIONS

- Accuracy : $\pm 1.0\%$ F.S. (-40 to 85°C or -20 to 100°C)
 $\pm 1.5\%$ F.S. (-20 to 120°C)
- Fluid temperature : -40 to 135°C
- Ambient temperature : -30 to 100°C
- Maximum power supply voltage : 6 V.DC
- Current consumption : 10mA or less
- Load resistance : 10k Ω or more
- Load capacitance : Capacitor 1000pF or less
- Absolute pressure type :
1 atmosphere (1013 hPa abs) is set as 0 MPa.
- Enclosure : IP66

DESCRIPTION OF CATALOG NUMBER

*Selecting the following options (II to VII) will determine the catalog number.

NSK - B E 030 F - U ***						
I	II	III	IV	V	VI	VII
Type	Output	Electrical connector	Pressure range	Connection type	Standards	Serial number
NSK	Symbol Output signal Power supply voltage B 0.5 to 4.5 V.DC 5 V $\pm$ 0.25 V.DC	Symbol Electrical connector C Molex connector E Aptiv connector H Lead wires	Symbol Pressure range 010 0 to 1.0 MPa 020 0 to 2.0 MPa 030 0 to 3.0 MPa 042 0 to 4.15 MPa 050 0 to 5.0 MPa	Symbol Connection type Brass C3604 Stainless steel SUS304 Copper I 1/4" Female flare (with pin) F 1/4" Female flare B 1/4" Male flare D 1/4" Solder M NPT1/8", R1/8" M NPT1/4", R1/4"	Symbol Standards U CE, UL/cUL, CQC	***

*1 1/4" Solder connections are available only for NSK-BE and BH types.

• Weight: Approximately 0.05kg (not including lead wires)

*Specifications other than those listed above are also available upon request. Please contact us for details.

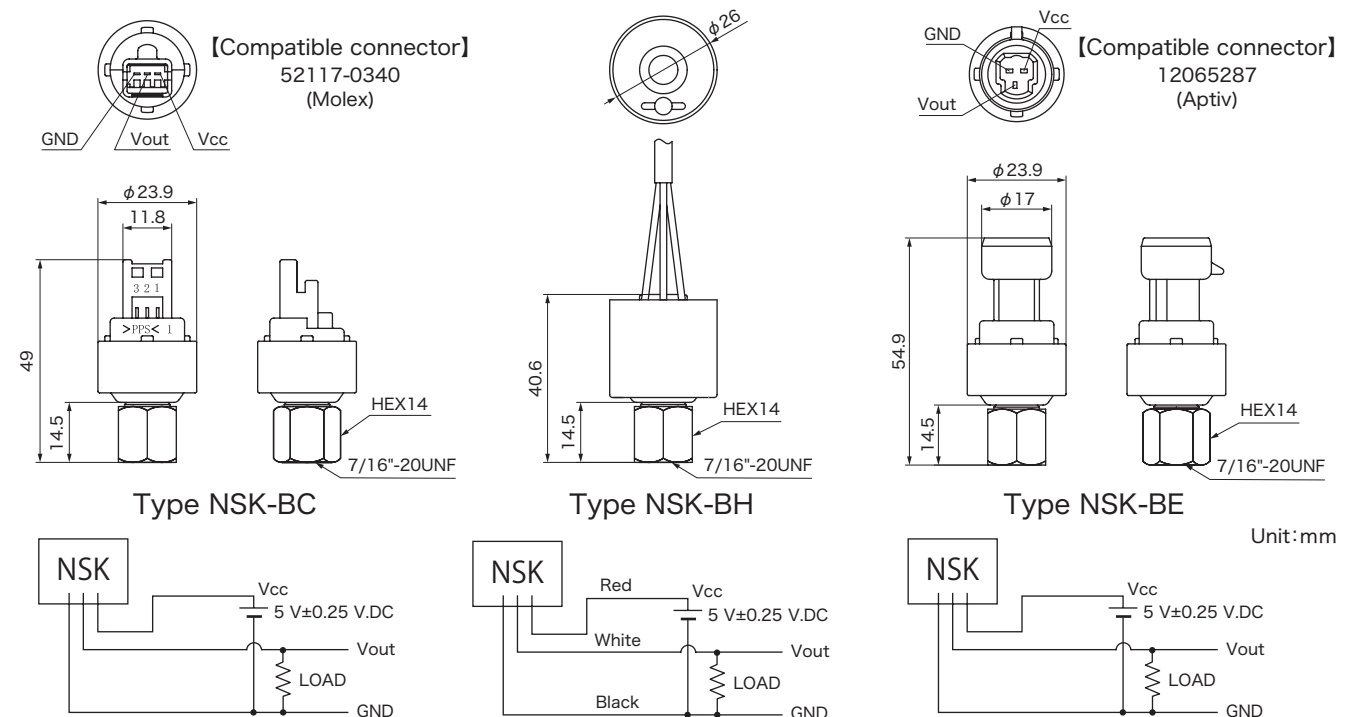
CONNECTION TYPES

I: 1/4" Female flare (with pin)	F: 1/4" Female flare	B: 1/4" Male flare	D: 1/4" Solder
M: NPT1/8"	M: NPT1/4"	M: R1/8"	M: R1/4"

*For connection types other than the above, please contact us.

Unit:mm

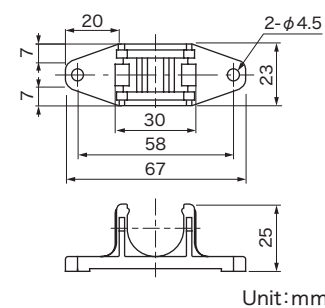
DIMENSIONS / WIRINGS



OPTIONAL PARTS

• Bracket

*Excluding NSK-BH

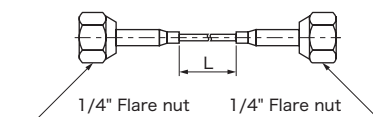


Unit:mm

Part number NSK-PP02

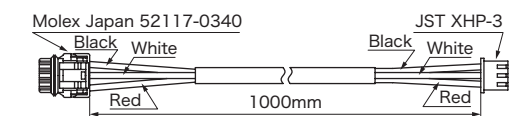
• Assembled capillary tubes

*For connection type B only



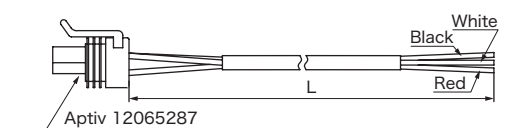
Part number	L (mm)
SNS-AD01	1000
SNS-AD02	1500
SNS-AD03	2000
SNS-AD06	1000 with pin
SNS-AD07	500
SNS-AD10	500 with pin

• Extension cable for NSK-BC



Part number NSK-PP16

• Extension cables for NSK-BE



Part number	L (mm)
NSK-PP1005	1000
NSK-PP1006	3000

*Up to 3000mm

PRESSURE SENSORS / Type NSK



NSK-AEA10B1

NSK-AEA10I1
(Aptiv connector)

NSK-AEA50B1



NSK-AEA50I1

FEATURES

- Accuracy of $\pm 1.0\%$ F.S. across a wide temperature range.
- Compatible with a variety of connection types.
(Stainless steel wetted parts are also available.)
- Compatible with various low-GWP refrigerants.
- Current output type supports wiring up to 100m.
- Standards: CE (ATEX compliant), UL/cUL (Please contact us for details.)

APPLICATIONS

- Packaged air conditioners
- Water boilers
- Water supply pumps
- Chillers
- Large refrigeration equipment, etc.

COMMON SPECIFICATIONS

- Accuracy : $\pm 1.0\%$ F.S. (-40 to 100°C)
- Fluid temperature : -40 to 135°C
- Ambient temperature : -40 to 100°C
- Load resistance : Current output type (Vcc-7) /0.02A (Ω) or less
Voltage output type [0 to 5 V/0 to 10 V] 4.7k Ω or more/1000pF or less (pull-down)
15k Ω or more/1000pF or less (pull-up)
[1 to 5 V/1 to 6 V] 4.7k Ω or more/1000pF or less (pull-down/pull-up)
- Load capacitance : Voltage output type 1000pF or less
- Power supply voltage dependency : $\pm 0.05\%$ F.S./10 V or less
- Fluids : Refrigerant, air, water, oil, inert gas
 - * Please refer to the table on the right for compatible refrigerants.
 - * Not suitable for corrosive fluids.
 - * When using with water, please choose stainless steel connections.
- Absolute pressure type : 1 atmosphere (1013 hPa abs) is set as 0 MPa.
- EMC : EN61000-6-2/EN61000-6-3
- Enclosure : IP66

Safety group	Compatible refrigerants
A1	R1233zd(E), R407A, R407C, R407F, R407H, R448A, R449A, R449B, R449C, R450A, R452A, R463A-J, R513A, R515B, R507A

• For other refrigerants, please contact us.

DESCRIPTION OF CATALOG NUMBER

*Selecting the following options (II to VII) will determine the catalog number.

I Type		NSK - A E A10 B1 - U 05							VII Accuracy			
NSK		I		A	E	A10	B1	-	U	05	Symbol	Accuracy
II Output				II	III	IV	V		VI	VII	05	±1.0%F.S. (-40 to 100℃)
Symbol	Output signal	Power supply voltage									VI Standards	
A	4 to 20 mA DC	7 to 35 V.DC									Symbol	Standards
C	0 to 5 V.DC	7 to 35 V.DC									U	CE, UL/cUL
D	0 to 10 V.DC	11.5 to 35 V.DC									V Connection type	
E	1 to 5 V.DC	7 to 35 V.DC									Symbol	Connection type
III Electrical connector				IV Pressure range								
Symbol	Electrical connector			Symbol	Pressure range <td colspan="6"></td>							
E	Aptiv connector			A07	-0.1 to 0.7 MPa							
• Compatible connector: 12065287				A10	-0.1 to 1.0 MPa							
				A20	-0.1 to 2.0 MPa							
				A30	0 to 3.0 MPa							
				A50	0 to 5.0 MPa							

*Current output types with an accuracy of $\pm 0.5\%$ F.S. (at 25°C) and $\pm 1.5\%$ F.S. (-40°C to 100°C) are also available upon request.

*Specifications other than those listed above are also available upon request. Please contact us for details.

• Weight: Approximately 0.05kg

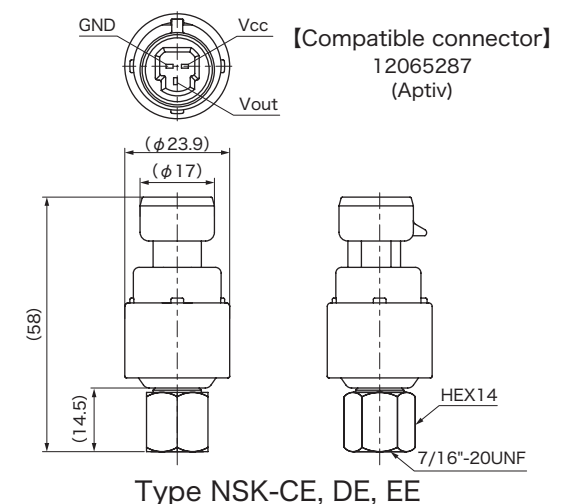
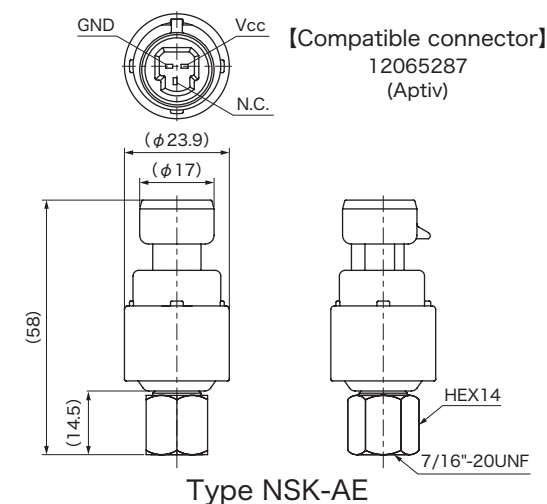
CONNECTION TYPES

B1: 1/4" Male flare (Stainless steel)	D1: 1/4" Solder		I1: 1/4" Female flare (with pin) (Stainless steel)
R1: R1/8" (Stainless steel)	R2: R1/4" (Stainless steel)	N1: NPT1/8" (Stainless steel)	N2: NPT1/4" (Stainless steel)

*For connection types other than the above, please contact us.

Unit:mm

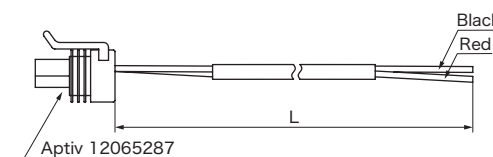
DIMENSIONS / WIRINGS



Unit:mm

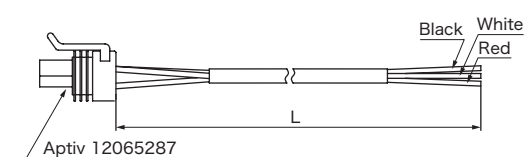
OPTIONAL PARTS

- Extension cables for current output type



Part number	L (mm)
NSK-PP1001	1000
NSK-PP1002	3000
NSK-PP1003	5000
NSK-PP1004	10000

- Extension cables for voltage output type



Part number	L (mm)
NSK-PP1005	1000
NSK-PP1006	3000

*Up to 3000mm