

SMALL PRESSURE CONTROLS (DISC TYPE)

High Volume OEM Item

Type ACB, LCB, HCB, GCB & TCB

SAGINOMIYA

GENERAL DESCRIPTION

- Pressure Control CB series are disc type small pressure controls featuring compact structure and field proven high quality.
- It is designed to suit modern designed application with its compact and various type of connection styles, such application as air conditioning, automobile industries and others.

Type ACB...High & medium pressure range

Type LCB...Low pressure range

Type HCB...High working pressure

Type GCB...Dual pressure controls

Type TCB...Triple pressure controls

CE mark applicable (available upon request)

UL recognized (available upon request)



Type ACB



Type ACB



Type HCB

STANDARD TYPE NUMBER SELECTION

Type ACB & LCB

Unit: MPa {kgf/cm²}

Catalog No.	Range		Max. Pressure	Contact Functions	Pressure Connections	Terminal Construction	Application	Dimension	Wt. (kg)
	Min.	Max.							
ACB	0.7 {7}	4.5 {45}	4.5 {45}	SPST (High Cut)	Female Flare	Open	High Pressure Cut Out	①	0.03
						Water Proof		②	0.06
					1/4" Solder	Open		③	0.03
						Water Proof		④	0.06
				SPDT	Open	⑤		0.03	
					Water Proof	⑥		0.06	
						⑦			
					⑧				
LCB	0.1 {1}	0.7 {7}	1.5 {15}	SPST (Low Cut)	Female Flare	Open	Fan Control	①	0.03
						Water Proof		Low Pressure Cut Out	②
					1/4" Solder	③			
						④			

Type HCB

Catalog No.	Setting		Max. Pressure	Contact Functions	Pressure Connections	Terminal Construction	Application	Wt. (kg)
	Off	On						
HCB	2.5±0.3 {25.5±3}	2.0±0.3 {20.4±3}	8.0 {80}	SPST	Male M10	Direct Coupler	High Working Pressure	0.044

Type GCB & TCB

Catalog No.	Setting		Differential	Max. Pressure	Contact Functions	Pressure Connections	Terminal Construction	Application	Wt. (kg)	
	Off	On								
GCB	Low 0.2±0.02 {2.0±0.2}	—	Less Than 0.03 {0.3}	5.4 {54}	SPST (Low Cut)	Male M11	Direct Coupler	Dual Pressure Controls	0.024	
	High 3.14±0.2 {32±2.0}		0.6±0.2 {6.1±2.0}		SPST (High Cut)					
TCB	Low 0.2±0.02 {2.0±0.2}	0.226 ^{+0.025} / _{-0.03} { 2.3 ^{+0.25} / _{-0.3} }	More Than 0.02 {More Than 0.2}	5.4 {54}	SPST (Low Cut)	Male M11	Direct Coupler	Triple Pressure Controls	0.031	
	Mid. 1.55±0.13 {15.8±1.3}		1.23±0.15 {12.5±1.5}		(0.29) {(3)}					SPST (Low Cut)
	High 3.14±0.2 {32±2.0}		(2.55) {(26)}		0.59±0.2 {6±2}					SPST (High Cut)
										SPST (High Cut)

ELECTRICAL RATINGS

Type ACB, LCB & HCB

Category of Ratings			M Rating			L Rating			T Rating
Rated Voltage (V)	Power Factor (cos φ)	Rated Amps. (A)	125V.AC	250V.AC	12V.DC	125V.AC	250V.AC	12V.DC	12/24V.DC
			Non-Inductive Current			1	1 to 6	1 to 4	0.02 to 2
Inductive Current			0.75	1 to 24	1 to 16	0.02 to 8	0.02 to 4	—	—
Full Load			0.45	1 to 24	1 to 16	0.02 to 8	0.02 to 4	—	—
Locked Rotor			0.45	1 to 24	1 to 16	0.02 to 8	0.02 to 4	—	—

Type GCB & TCB 24V. DC 2.5A (12V. DC 5A)

SMALL PRESSURE CONTROLS

High Volume OEM Item

Type LTB, ETB, HTB & FTB

SAGINOMIYA

GENERAL DESCRIPTION

- Factory set pressure switch designed for use in refrigeration units of quantity production such as room air conditioner (heat pump), packaged air conditioner (heat pump), water chiller etc.
- With SPDT contact mechanism.
- Models identified with electrical rating code L can be used for minimum 0.02A/125V.AC rating.
- Models with 0.78 to 1.96 MPa {8 to 20 kgf/cm²} range are also available for HTB and FTB.
- Models with 0.10 MPa {1 kgf/cm²} differential are also available for HTB (max. range limit: 1.27 MPa {13 kgf/cm²}).

CE mark applicable (available upon request)

UL recognized (available upon request)



Type HTB



Type FTB

TYPE NUMBER SELECTION (SPECIFICATIONS)

Unit: MPa {kgf/cm²}

Catalog No.	Application	Range		Differential		Factory Setting		Max. Working Pressure	Pressure Connections	*Electrical Ratings	Wt. (kg)
		Min.	Max.			On	Off				
LTB-A301	Low Pressure	0	0.392 {4}	0.059 to 0.147 {0.6 to 1.5}		0.294 {3}	0.196 {2}	1.5 {15}	①	H	0.08
LTB-A302										M	
LTB-A303										L	
LTB-A304										H	
LTB-A305										M	
LTB-A306										L	
ETB-A301	Low Pressure	0.098 {1}	0.245 {2.5}	Automatic operation on pressure decrease and manual reset		Manual Reset	0.098 {1}		①	H	0.1
ETB-A302										M	
ETB-A303										L	
ETB-A304										H	
ETB-A305										M	
ETB-A306										L	
HTB-A301	High Pressure	1.96 {20}	2.94 {30}	Lower Limit 0.29 to 0.49 {3 to 5} / Upper Limit 0.29 to 0.69 {3 to 7}		1.96 {20}	2.45 {25}	3.3 {33}	①	H	0.09
HTB-A302										M	
HTB-A303										L	
HTB-A304										H	
HTB-A305										M	
HTB-A306										L	
FTB-A301	High Pressure	1.96 {20}	2.94 {30}	Automatic operation on pressure increase and manual reset		Manual Reset	2.45 {25}	3.3 {33}	①	H	0.1
FTB-A302										M	
FTB-A303										L	
FTB-A304										H	
FTB-A305										M	
FTB-A306										L	

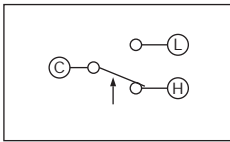
* Refer to Electrical Ratings Table in the list below.

ELECTRICAL RATINGS

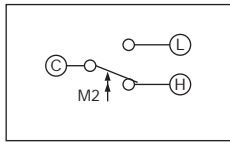
Rated Voltage (V)	Rated Amps. (A)	Terminal	Power Factor (cosφ)	H Rating		M Rating		L Rating		
				125V.AC	250V.AC	125V.AC	250V.AC	125V.AC	250V.AC	
Non-Inductive Current		C-L	1	1 to 10	1 to 10	1 to 3	0.5 to 1.5	0.02 to 2	0.02 to 1	
Inductive Current	Full Load		0.75	1 to 6	1 to 6	1 to 2	0.5 to 1			
	Locked Rotor		0.45	1 to 24	1 to 24	1 to 8	0.5 to 4			0.02 to 8
Non-Inductive Current		C-H	1	1 to 16	1 to 16		1 to 6	0.5 to 5	0.02 to 2	0.02 to 1
Inductive Current	Full Load		0.75	1 to 64	1 to 64	1 to 24		0.5 to 4		
	Locked Rotor		0.45					0.5 to 16		

CONTACT FUNCTIONS

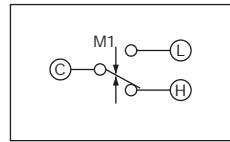
Type LTB & HTB



Type ETB (M2 : Manual Reset)



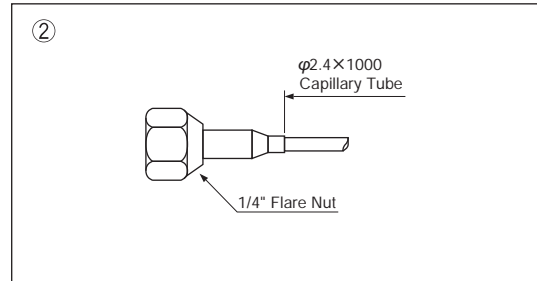
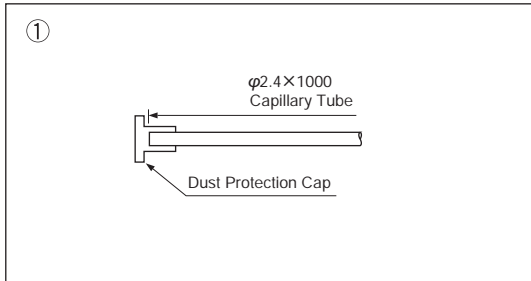
Type FTB (M1 : Manual Reset)



C	Common Terminal
L	Close on Pressure Increase
H	Close on Pressure Decrease

↑: Operating direction on press. increase at High Press.Side
 M1 ↓, M2 ↑: Operating direction on manual reset

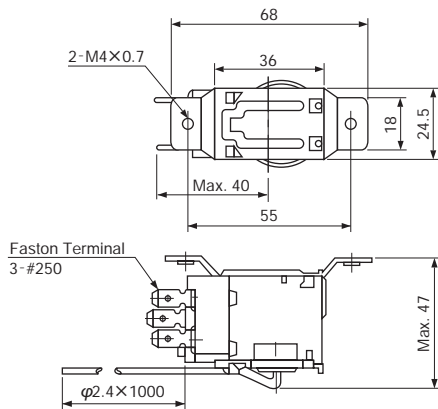
PRESSURE CONNECTIONS



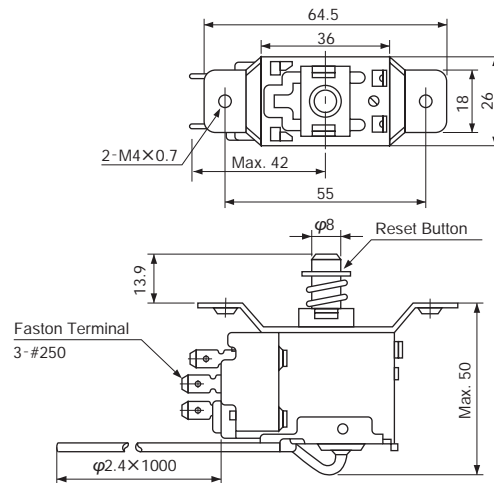
• 1/4" Solder Connection is also available upon request.

DIMENSIONS

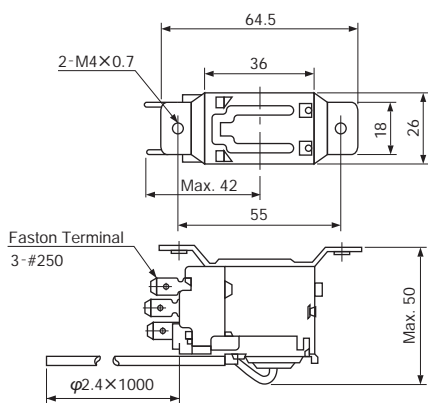
Type LTB



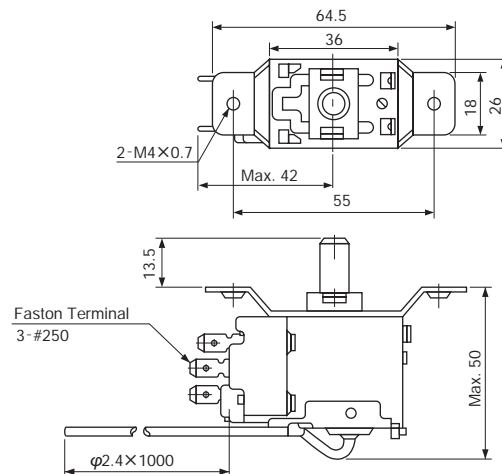
Type ETB



Type HTB



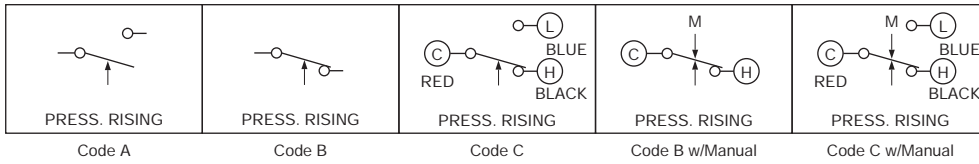
Type FTB



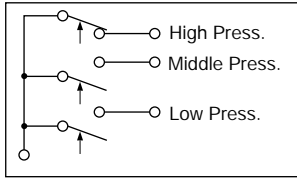
Unit: mm

CONTACT FUNCTIONS

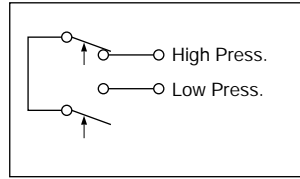
Type ACB, LCB & HCB



Type TCB



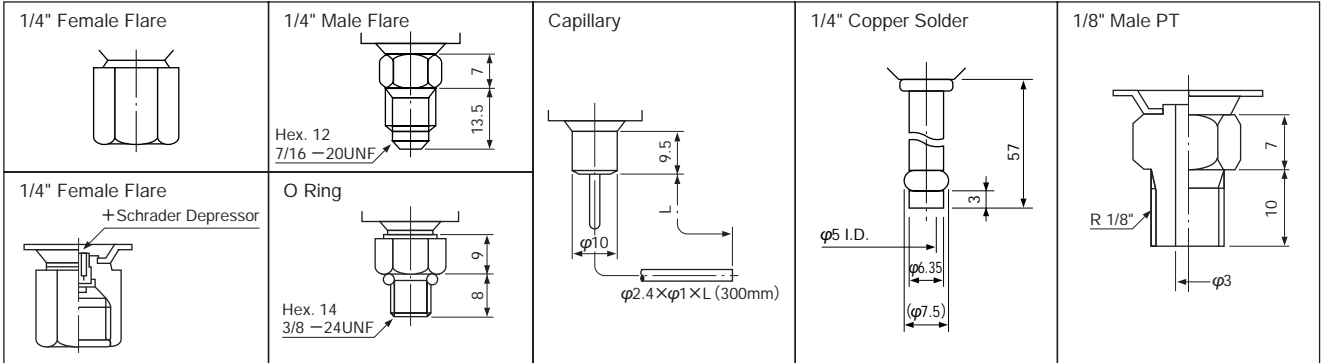
Type GCB



↑ Operating direction on press. increase at High Press.Side
M ↓ Operating direction on manual reset

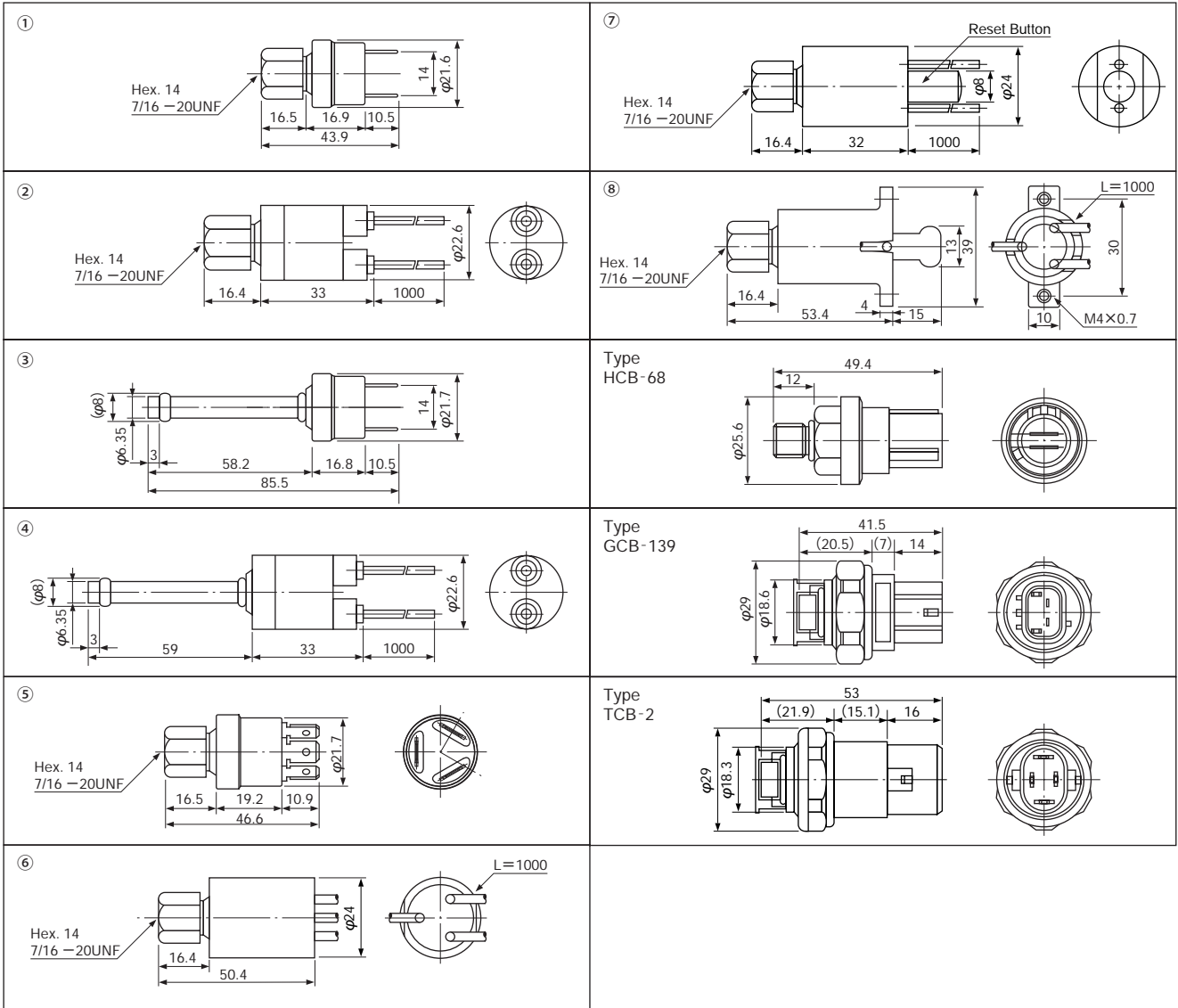
PRESSURE CONNECTIONS

Unit: mm



DIMENSIONS

Unit: mm



SINGLE FUNCTION PRESSURE CONTROLS

Type **SNS & HNS**

SAGINOMIYA

GENERAL DESCRIPTION

- For use with fluorinated refrigerants as well as with air and water. (Allowable fluid temp.: -20 to 120°C)
- Type SNS for universal application.
- Type HNS for high pressure safety cut out.
- Available drip proof enclosure for marine application or explosion proof enclosure for special application.
- Mounting bracket is supplied as standard.
- With SPDT contact mechanism.
- IP44 with upper lid (option).
- Ammonia Models: Available upon request.

CE mark applicable (available upon request)

UL recognized (available upon request)



Type SNS



Type HNS

TYPE NUMBER SELECTION (SPECIFICATIONS)

Type SNS—Automatic Reset Type

Unit: MPa {kgf/cm²}

Catalog No.	Range		Differential		Factory Setting		Max. Working Pressure	Contact Function	Wt. (kg)
	Min.	Max.	Min.	Max.	Off (On)	On (Off)			
SNS-C101X	-0.06 {-50cmHg}	0.1 {1}	0.015 {0.15}	0.05 {0.5}	0.025 {0.25}	0.05 {0.5}	0.3 {3}	Diagram 1	0.33
SNS-C102X	-0.02 {-20cmHg}	0.2 {2}	0.025 {0.25}	0.15 {1.5}			0.5 {5}		
SNS-C103X	-0.06 {-50cmHg}	0.3 {3}	0.035 {0.35}	0.2 {2}	0.05 {0.5}	0.15 {1.5}	1 {10}		
SNS-C104X	-0.06 {-50cmHg}	0.4 {4}	0.04 {0.4}		0.1 {1}	0.2 {2}	1.5 {15}		
SNS-C106X	-0.06 {-50cmHg}	0.6 {6}	0.06 {0.6}	0.2 {2}	0.3 {3}				
SNS-C110X	0.1 {1}	1 {10}	0.1 {1}	0.3 {3}	0.4 {4}	0.6 {6}			
SNS-C120X	0.5 {5}	2 {20}	0.2 {2}	0.5 {5}	1.2 {12}	1.5 {15}	3 {30}		
SNS-C130X		3 {30}	0.3 {3}	1 {10}	2 {20}	2.5 {25}	3.3 {33}		
SNS-C135X	1 {10}	3.5 {35}	0.5 {5}	1.5 {15}	2.5 {25}	3 {30}	3.8 {38}		

Type SNS—Manual Reset Type

Unit: MPa {kgf/cm²}

Catalog No.	Range		Manual Reset	* Factory Setting		Max. Working Pressure	Contact Function	Wt. (kg)
	Min.	Max.		Off	On			
SNS-C102XM2	-0.02 {-20cmHg}	0.2 {2}	Automatic operation on pressure decrease, and manual reset.	0.025 {0.25}	manual reset	0.5 {5}	Diagram 2	0.33
SNS-C106XM2	-0.06 {-50cmHg}	0.6 {6}		0.2 {2}		1.5 {15}		
SNS-C130XM2	0.5 {5}	3 {30}		2 {20}		3.3 {33}		

* Based on the 1-3 terminal connection.

Type HNS—Automatic Reset Type

Unit: MPa {kgf/cm²}

Catalog No.	Range		Differential	* Factory Setting		Max. Working Pressure	Contact Function	Wt. (kg)
	Min.	Max.		Off	On			
HNS-C130X	0.8 {8}	3 {30}	0.3 to 0.5 fixed {3 to 5 fixed}	2 {20}	1.6 {16}	3.3 {33}	Diagram 3	0.24

* Based on the 1-3 terminal connection.

Type HNS—Manual Reset Type

Unit: MPa {kgf/cm²}

Catalog No.	Range		Manual Reset	* Factory Setting		Max. Working Pressure	Contact Function	Wt. (kg)
	Min.	Max.		Off	On			
HNS-C130XM1	0.8 {8}	3 {30}	Automatic operation on pressure increase, and manual reset.	2 {20}	manual reset	3.3 {33}	Diagram 4	0.24

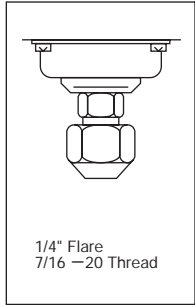
* Based on the 1-3 terminal connection.

- Enclosure: IP20
- Drip Proof Models: Available upon request. (Refer to Pages 48, 49.)

ELECTRICAL RATINGS

Rated Voltage (V)		Power Factor (cos φ)	125/250V. AC
Rated Amps. (A)			
Non-Inductive Current		1	12
Inductive Current	Full Load	0.75	
	Locked Rotor	0.45	72

PRESSURE CONNECTIONS



Standard

Refer to Pages 45, 46

CONTACT FUNCTIONS

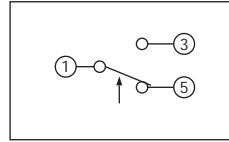


Diagram 1

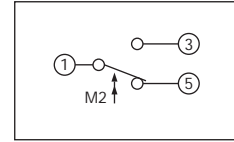


Diagram 2

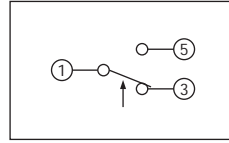


Diagram 3

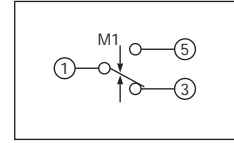


Diagram 4

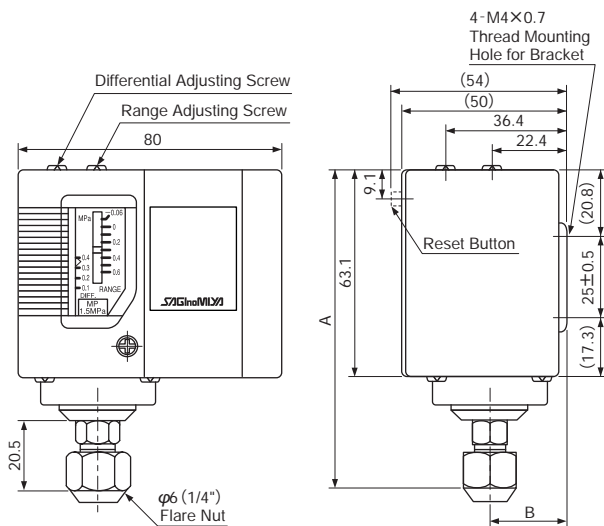
	Diagram 1 & 2	Diagram 3 & 4
1	Common Terminal	Common Terminal
3	Close on Pressure Increase	Open on Pressure Increase
5	Close on Pressure Decrease	Open on Pressure Decrease

↑: Operating direction on press. increase at High Press. Side
M1 ↓, M2 ↑: Operating direction on manual reset

DIMENSIONS

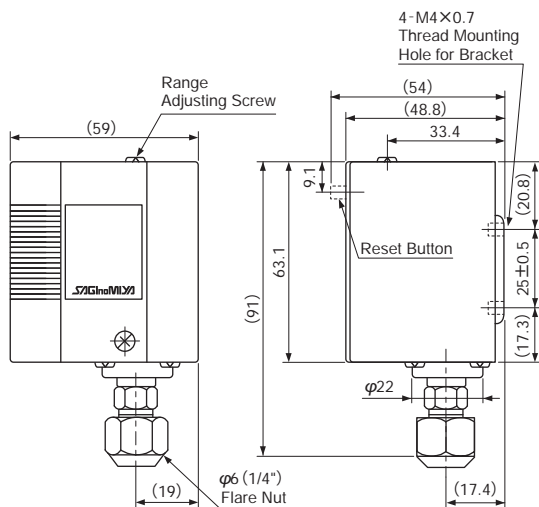
Standard Model

Type SNS



Catalog No.	Unit: mm	
	A	B
SNS-C101X	113	22.4
SNS-C102X	99.4	
SNS-C103X		
SNS-C104X		
SNS-C106X		
SNS-C110X	96.5	18.4
SNS-C120X		
SNS-C130X		
SNS-C135X	93.2	
SNS-C102XM2	99.4	22.4
SNS-C106XM2	96.5	
SNS-C130XM2	93.2	

Type HNS



Unit: mm

PRESSURE CONTROLS WITH NARROW DIFFERENTIAL

Type FNS & ANS

SAGINOMIYA

GENERAL DESCRIPTION

- For use with fluorinated refrigerants as well as with air and water. (Allowable fluid temp.: -20 to 120°C)
- Type FNS with fixed narrow differential
- Type ANS with adjustable narrow differential
- Available drip proof enclosure for marine application or explosion proof enclosure for special application.
- Mounting bracket is supplied as standard.
- With SPDT contact mechanism.
- IP44 with upper lid (option).Type FNS
- Ammonia models: Available upon request.

CE mark applicable (available upon request)



Type FNS



Type ANS

TYPE NUMBER SELECTION (SPECIFICATIONS)

Type FNS—Fixed narrow differential

Unit: MPa {kgf/cm²}

Catalog No.	Range		Differential Fixed	Factory Setting		Max. Working Pressure	Wt. (kg)
	Min.	Max.		Off	On		
FNS-C101X	-0.06 {-50cmHg}	0.1 {1}	0.006 approx. {0.06 approx.}	(0.019) {(0.19)}	0.025 {0.25}	0.3 {3}	0.32
FNS-C102X	-0.02 {-20cmHg}	0.2 {2}	0.008 approx. {0.08 approx.}	(0.042) {(0.42)}	0.05 {0.5}	0.5 {5}	
FNS-C106X	-0.06 {-50cmHg}	0.6 {6}	0.02 approx. {0.2 approx.}	(0.28) {(2.8)}	0.3 {3.0}	1.5 {15}	
FNS-C110X	0.1 {1}	1 {10}	0.025 approx. {0.25 approx.}	(0.575) {(5.75)}	0.6 {6.0}		
FNS-C130X	0.5 {5}	3 {30}	0.12 approx. {1.2 approx.}	(2.38) {(23.8)}	2.5 {25}	3.3 {33}	

Type ANS—Adjustable narrow differential

Unit: MPa {kgf/cm²}

Catalog No.	Range		Differential				Factory Setting		Max. Working Pressure	Wt. (kg)
			Min.		Max.					
	Min.	Max.	Bottom	Top	Bottom	Top	Off	On		
ANS-C101XB	-0.06 {-50cmHg}	0.1 {1}	0.007 {0.07}	0.007 {0.07}	0.014 {0.14}	0.015 {0.15}	0.018 {0.18}	0.025 {0.25}	0.3 {3}	0.32
ANS-C103XB	-0.02 {-20cmHg}	0.3 {3}	0.008 {0.08}	0.01 {0.1}	0.018 {0.18}	0.027 {0.27}	0.141 {1.41}	0.15 {1.5}	1 {10}	
ANS-C106XB	-0.06 {-50cmHg}	0.6 {6}	0.015 {0.15}	0.018 {0.18}	0.03 {0.3}	0.045 {0.45}	0.28 {2.84}	0.3 {3.0}	1.5 {15}	
ANS-C110XB	0.1 {1}	1 {10}	0.02 {0.2}	0.03 {0.3}	0.045 {0.45}	0.07 {0.7}	0.575 {5.75}	0.6 {6.0}		
ANS-C130XB	0.5 {5}	3 {30}	0.12 {1.2}	0.2 {2.0}	0.23 {2.3}	0.37 {3.7}	2.32 {23.2}	2.5 {25}	3.3 {33}	
ANS-C135XB	1 {10}	3.5 {35}			0.24 {2.4}	0.39 {3.9}	2.82 {28.2}	3 {30}	3.8 {38}	

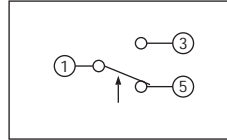
• Enclosure: IP20

• Drip Proof Models: Available upon request. (Refer to Pages 48, 49.)

ELECTRICAL RATINGS

Rated Voltage (V)		Power Factor (cos φ)	125/250V. AC
Rated Amps. (A)			
Non-Inductive Current		1	12
Inductive Current	Full Load	0.75	
	Locked Rotor	0.45	72

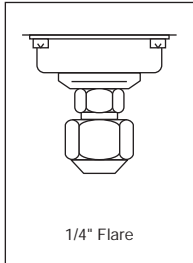
CONTACT FUNCTIONS



1	Common Terminal
3	Close on Pressure Increase
5	Close on Pressure Decrease

↑: Operating direction on press. increase at High Press. Side

PRESSURE CONNECTIONS



1/4" Flare

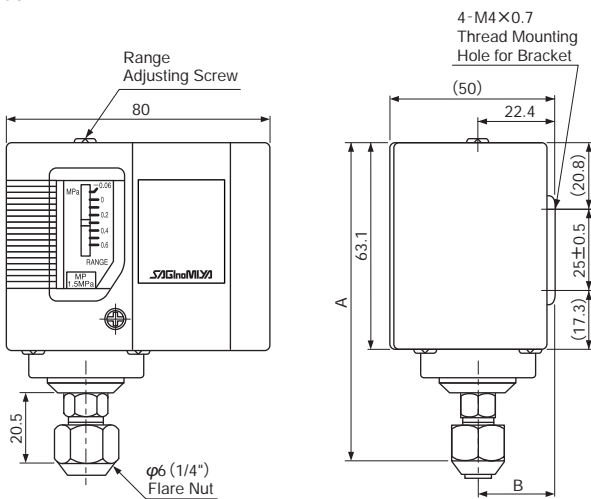
Standard

Refer to Pages 45, 46

DIMENSIONS

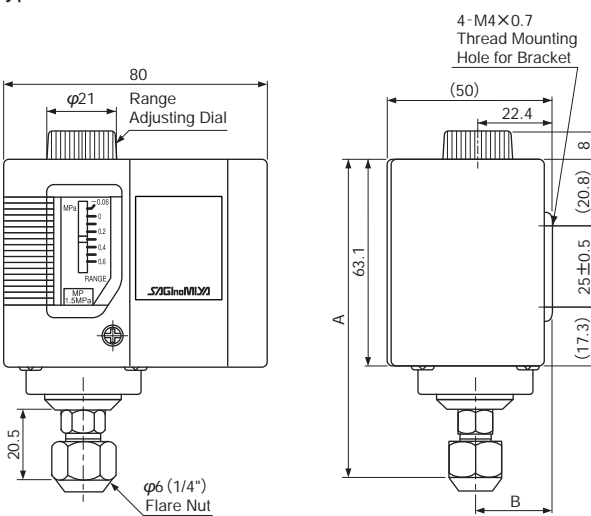
Standard Model

Type FNS



Catalog No.	Unit: mm	
	A	B
FNS-C101X	113	22.4
FNS-C102X	99.4	
FNS-C106X	96.5	
FNS-C110X	93.2	
FNS-C130X	93.2	18.4

Type ANS



Catalog No.	Unit: mm	
	A	B
ANS-C101XB	113	22.4
ANS-C103XB	99.4	
ANS-C106XB	96.5	
ANS-C110XB	93.2	
ANS-C130XB	93.2	18.4
ANS-C135XB		

Unit: mm

DUAL PRESSURE CONTROLS

Type DNS

SAGINOMIYA

GENERAL DESCRIPTION

- For use with fluorinated refrigerants as well as with air and water. (Allowable Fluid Temp.: -20 to 120°C)
- Various contact functions are available.
- Available drip proof enclosure for marine application or explosion proof enclosure for special application.
- Mounting bracket is supplied as standard.
- IP44 with upper lid (option).
- Ammonia models: Available upon request.

CE mark applicable (available upon request)

UL recognized (available upon request)



TYPE NUMBER SELECTION (SPECIFICATIONS)

Automatic Reset Type

Unit: MPa {kgf/cm²}

Catalog No.	Pressure Side	Range		Differential		Factory Setting		Max. Working Pressure	Contact Function	Wt. (kg)	
		Min.	Max.	Min.	Max.	Off	On				
DNS-D304X	Low Side	-0.06 {-50cmHg}	0.4 {4}	0.04 {0.4}	0.2 {2}	0.1 {1}	0.2 {2}	1.5 {15}	Diagram 1	0.49	
	High Side	0.8 {8}	3 {30}	Approx. 0.4 fixed {Approx. 4 fixed}		2 {20}	1.6 {16}	3.3 {33}			
DNS-D306X	Low Side	-0.06 {-50cmHg}	0.6 {6}	0.06 {0.6}	0.4 {4}	0.2 {2}	0.3 {3}	1.5 {15}			
	High Side	0.8 {8}	3 {30}	Approx. 0.4 fixed {Approx. 4 fixed}		2 {20}	1.6 {16}	3.3 {33}			
DNS-D604X	Low Side	-0.06 {-50cmHg}	0.4 {4}	0.04 {0.4}	0.2 {2}	0.1 {1}	0.2 {2}	1.5 {15}			Diagram 3
	High Side	0.8 {8}	3 {30}	Approx. 0.4 fixed {Approx. 4 fixed}		2 {20}	1.6 {16}	3.3 {33}			
DNS-D606X	Low Side	-0.06 {-50cmHg}	0.6 {6}	0.06 {0.6}	0.4 {4}	0.2 {2}	0.3 {3}	1.5 {15}			
	High Side	0.8 {8}	3 {30}	Approx. 0.4 fixed {Approx. 4 fixed}		2 {20}	1.6 {16}	3.3 {33}			

Manual Reset Type

Unit: MPa {kgf/cm²}

Catalog No.	Pressure Side	Range		Differential		Factory Setting		Max. Working Pressure	Contact Function	Wt. (kg)
		Min.	Max.	Min.	Max.	Off	On			
DNS-D304XM	Low Side	-0.06 {-50cmHg}	0.4 {4}	0.04 {0.4}	0.2 {2}	0.1 {1}	0.2 {2}	1.5 {15}	Diagram 2	0.49
	High Side	0.8 {8}	3 {30}	Automatic operation on pressure rise, and manual reset.		2 {20}	manual reset	3.3 {33}		
DNS-D306XM	Low Side	-0.06 {-50cmHg}	0.6 {6}	0.06 {0.6}	0.4 {4}	0.2 {2}	0.3 {3}	1.5 {15}	Diagram 2	0.51
	High Side	0.8 {8}	3 {30}	Automatic operation on pressure rise, and manual reset.		2 {20}	manual reset	3.3 {33}		
DNS-D604XM	Low Side	-0.06 {-50cmHg}	0.4 {4}	0.04 {0.4}	0.2 {2}	0.1 {1}	0.2 {2}	1.5 {15}	Diagram 4	0.49
	High Side	0.8 {8}	3 {30}	Automatic operation on pressure rise, and manual reset.		2 {20}	manual reset	3.3 {33}		
DNS-D606XM	Low Side	-0.06 {-50cmHg}	0.6 {6}	0.06 {0.6}	0.4 {4}	0.2 {2}	0.3 {3}	1.5 {15}		
	High Side	0.8 {8}	3 {30}	Automatic operation on pressure decrease, and manual reset.		2 {20}	manual reset	3.3 {33}		
DNS-D606XMM	Low Side	-0.06 {-50cmHg}	0.6 {6}	Automatic operation on pressure rise, and manual reset.		0.2 {2}	manual reset	1.5 {15}	Diagram 5	
	High Side	0.8 {8}	3 {30}	Automatic operation on pressure rise, and manual reset.		2 {20}	manual reset	3.3 {33}		

• Enclosure: IP20

• Drip Proof Models: Available upon request. (Refer to Pages 48, 49.)

ELECTRICAL RATINGS

Rated Voltage (V)		Power Factor (cos φ)	125/250V. AC
Rated Amps. (A)			
Non-Inductive Current		1	12
Inductive Current	Full Load	0.75	
	Locked Rotor	0.45	72

CONTACT FUNCTIONS

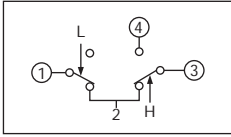


Diagram 1

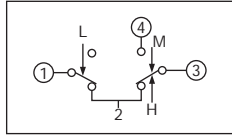


Diagram 2

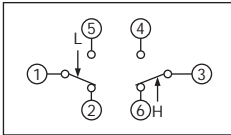


Diagram 3

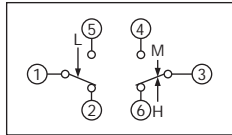


Diagram 4

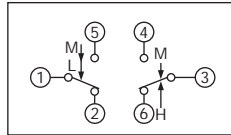
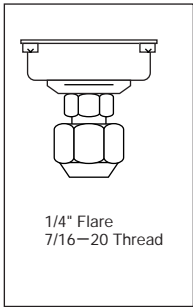


Diagram 5

↓ L: Operating direction on press. increase at Low Press. Side
 ↑ H: Operating direction on press. increase at High Press. Side
 ↓ M: Operating direction on manual reset

PRESSURE CONNECTIONS

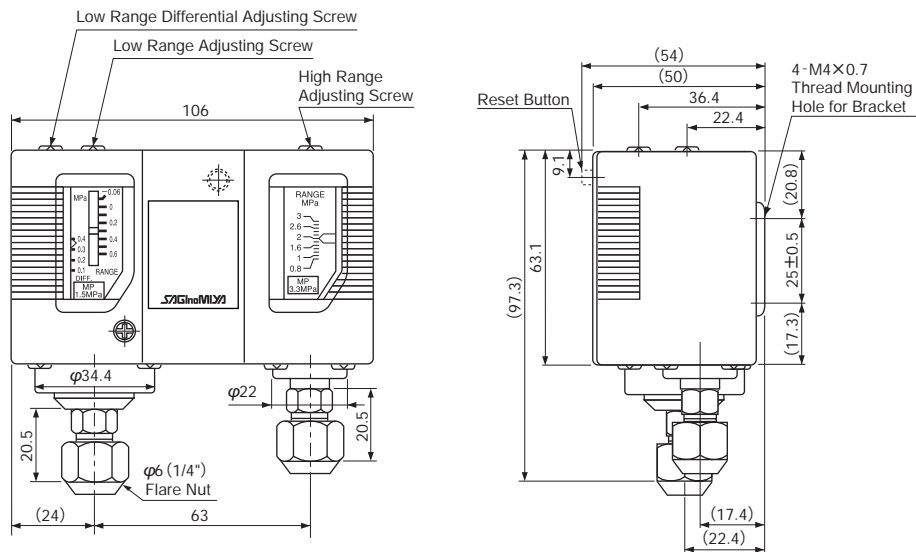


Standard

Refer to Pages 45, 46

DIMENSIONS

Standard Model



Unit: mm

OIL PROTECTION CONTROLS

Type ONS

SAGINOMIYA

GENERAL DESCRIPTION

- Provides dependable protection against major breakdown on pressure lubricated refrigeration compressors by guarding against low lubrication oil pressure.
- With manual reset.
- Built in time delay switch.
- Mounting bracket is supplied as standard.
- Ammonia models, drip proof models are available upon request.

CE mark applicable (available upon request)



TYPE NUMBER SELECTION (SPECIFICATIONS)

Unit: MPa {kgf/cm²}

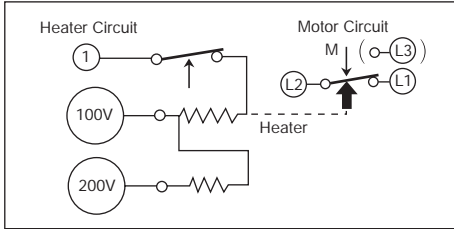
Catalog No.	Range		Differential	Timer Specification			Connection	Wt. (kg)			
	Min.	Max.		Delay Time(sec.)	Timer Voltage	Timer Circuit					
ONS-C106XQ1	0.05 {0.5}	0.35 {3.5}	Approx. 0.05 fixed	45	100/200V. AC	Standard (SPST) without Alarm Contact	1/4" Flare Nut	0.55			
ONS-C106XQ2				90							
ONS-C106XQ3				110							
ONS-C106XQ4				45	110/220V. AC				1/4" Flare Nut		
ONS-C106XQ5				90							
ONS-C106XQ6				110							
ONS-C106XQ7				45	115/230V. AC					1000mm Capil. Tube with 1/4" Flare Nut	
ONS-C106XQ8				90							
ONS-C106XQ9				110							
ONS-C106XQ10				45	120/240V. AC						0.62
ONS-C106XQ11				90							
ONS-C106XQ12				110							
ONS-C106XL1Q1				45	100/200V. AC		1/4" Flare Nut				
ONS-C106XL1Q2				90							
ONS-C106XL1Q3				110							
ONS-C106XL1Q4				45	110/220V. AC				1000mm Capil. Tube with 1/4" Flare Nut		
ONS-C106XL1Q5				90							
ONS-C106XL1Q6				110							
ONS-C106XL1Q7				45	115/230V. AC					0.55	
ONS-C106XL1Q8				90							
ONS-C106XL1Q9				110							
ONS-C106XL1Q10				45	120/240V. AC						1/4" Flare Nut
ONS-C106XL1Q11				90							
ONS-C106XL1Q12				110							
ONS-C106XQ25				45	100/200V. AC		1/4" Flare Nut				
ONS-C106XQ26				90							
ONS-C106XQ27				110							
ONS-C106XQ28				45	110/220V. AC				1/4" Flare Nut		
ONS-C106XQ29				90							
ONS-C106XQ30				110							
ONS-C106XQ31				45	115/230V. AC					1000mm Capil. Tube with 1/4" Flare Nut	
ONS-C106XQ32				90							
ONS-C106XQ33				110							
ONS-C106XQ34				45	120/240V. AC						0.62
ONS-C106XQ35				90							
ONS-C106XQ36				110							
ONS-C106XL1Q25	45	100/200V. AC	1/4" Flare Nut								
ONS-C106XL1Q26	90										
ONS-C106XL1Q27	110										
ONS-C106XL1Q28	45	110/220V. AC		1000mm Capil. Tube with 1/4" Flare Nut							
ONS-C106XL1Q29	90										
ONS-C106XL1Q30	110										
ONS-C106XL1Q31	45	115/230V. AC			0.55						
ONS-C106XL1Q32	90										
ONS-C106XL1Q33	110										
ONS-C106XL1Q34	45	120/240V. AC				1/4" Flare Nut					
ONS-C106XL1Q35	90										
ONS-C106XL1Q36	110										

- Max. Working Pressure: 1.5 MPa {15 kgf/cm²}
- Limit of Pressure Diff. $H_p \geq L_p$: 1.5 MPa {15 kgf/cm²}, H_p represents oil pump discharge pressure and L_p crank case pressure.
- Enclosure: IP20
- Drip Proof Construction type is available upon request. Please, add "W" into the catalog number on ordering; for example, ONS-C106XWQ30.
- Ammonia Application type ONS-C106XN is also available upon request (Differential to be 0.06 MPa {0.6 kgf/cm²} fixed).

ELECTRICAL RATINGS

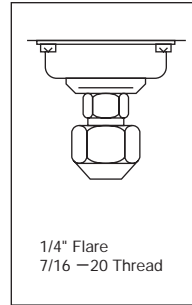
Rated Voltage. (V)		Power Factor ($\cos\phi$)	125/250 V. AC
Rated Amps. (A)			
Non-Inductive Current		1	3.5
Inductive Current	Full Load	0.75	3
	Locked Rotor	0.45	10

CONTACT FUNCTIONS



- ↑ : Operating direction of pressure increase
- ⬆ : Operating direction of timer when energized
- M ↓ : Operating direction of manual reset
- (L3: Alarm Contact provided with a lead wire approx.)
φ3.5×100mm with a soldered terminal.

PRESSURE CONNECTIONS



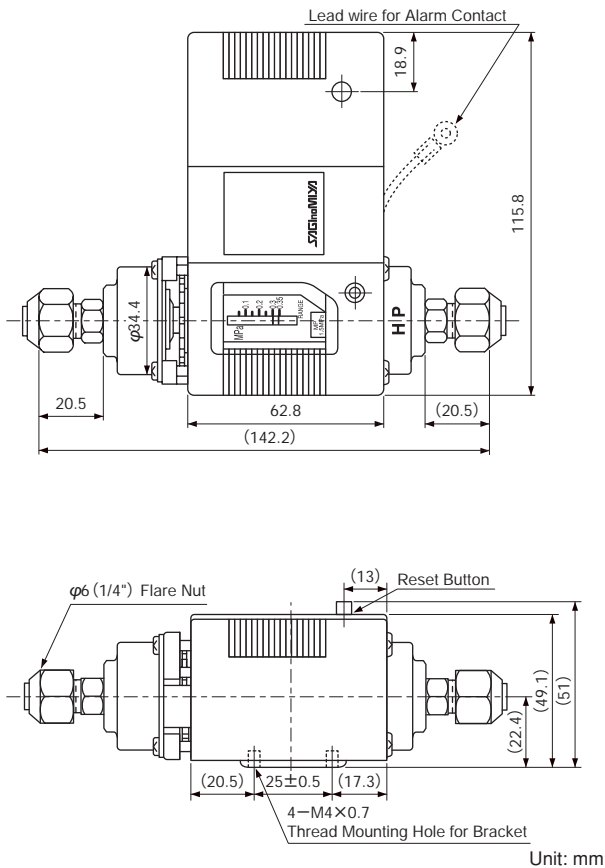
Standard

Refer to Pages 45, 46

1	Heater Circuit	Common Terminal
100		100V Power Supply Terminal
200		200V Power Supply Terminal
L1	Motor Circuit	Open on Decrease of Pressure Difference
L2		Main Contact
L3		Alarm Contact

110/220V. AC, 120/240V. AC etc. available

DIMENSIONS



DIFFERENTIAL PRESSURE CONTROLS

Type WNS

SAGINOMIYA

GENERAL DESCRIPTION

- For use on any application where the relationship between two pressure is critical to proper equipment operation.
- With SPDT contact mechanism.
- Available drip proof enclosure for marine application or explosion proof enclosure for special application.
- Mounting bracket is supplied as standard.
- Ammonia models are also available.

CE mark applicable (available upon request)

UL recognized (available upon request)



TYPE NUMBER SELECTION (SPECIFICATIONS)

For water, air and fluorinated refrigerant.

Unit: MPa {kgf/cm²}

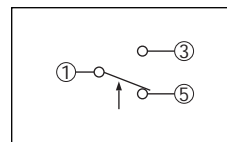
Catalog No.	Range		Differential		Factory Setting		Max. Working Pressure	Limit of Press. Differential (HP > LP)	Wt. (kg)
	Min.	Max.	Min.	Max.	Off	On			
WNS-C102X	0.03 {0.3}	0.2 {2}	0.03 {0.3}	0.15 {1.5}	0.05 {0.5}	0.02 {0.2}	0.5 {5}	0.5 {5}	0.43
WNS-C106X	0.05 {0.5}	0.35 {3.5}	0.05 {0.5}	0.25 {2.5}	0.1 {1.0}	0.05 {0.5}	1.5 {15}	1.5 {15}	

- Allowable Fluid Temp.: -20 to 120°C
- HP.....High Side Press. LP.....Low Side Press.
- Enclosure: IP20
- Drip proof models: Available upon request. (Refer to Pages 48, 49.)

ELECTRICAL RATINGS

Rated Voltage. (V)		Power Factor (cos φ)	125/250 V. AC
Rated Amps. (A)			
Non-Inductive Current		1	12
Inductive Current	Full Load	0.75	
	Locked Rotor	0.45	72

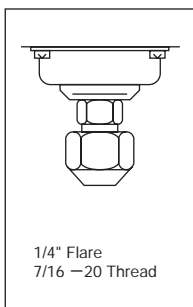
CONTACT FUNCTIONS



1	Common Terminal
2	Close on Pressure Increase
3	Close on Pressure Decrease

↑: Operating direction on press. increase at High Press. Side

PRESSURE CONNECTIONS

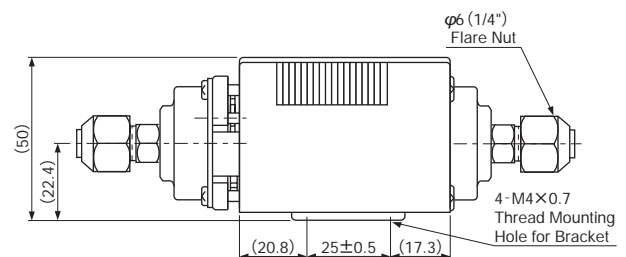
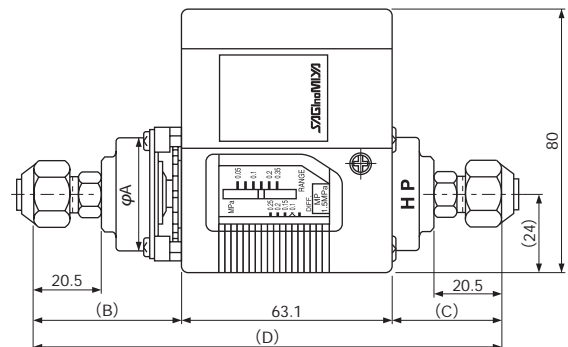


Standard

Refer to Pages 45, 46

Catalog No.	Unit: mm			
	φA	B	C	D
WNS-C102X	38.5	50.2	39.2	147.6
WNS-C106X	34.4	47.5	36.5	142.2

DIMENSIONS



Unit: mm