

Pressure Indicating Controller Adjustable range type Model KFKB

OVERVIEW

Model KFKB Pressure Indicating Controllers (adjustable range type) indicate and control a process variable by converting its pressure into mechanical displacement of a bellows or a spiral pressure receiving element.

Indicating transmitters and indicating transmitting controllers also are available as well as indicating controllers. The controllers are available either in the local type to set the set-point value with the knob on the instrument or in the cascade type (remote type) to set the set-point value with a pneumatic signal.



FEATURES

- A wide variety of measuring elements and control mechanisms are available to meet various applications.
- A pneumatic circuit board and a heat-resistant weather-proof sturdy case are used, thereby greatly improving the durability and reliability.
- The pneumatic circuit board system allows to readily add or eliminate control mechanisms and units, thereby enhancing the system modifications and expansion flexibility.
- Interchangeable parts are used to the maximum practicable extent, thereby reducing the number of parts to be kept in stock.
- The detecting section is identical with that of the pressure transmitter of Pneumatic Transmitter model KKP __.

SPECIFICATIONS

Standard specifications

Item			Specifications				
Detector							
Model No.	Pressure element	Measuring range	Process connection	Pressure limit	Allowable overload	Suppression (max.)	Elevation (max.)
11	Bourdon tube	0-5 to 0-70 MPa {0-50 to 0-700 kgf/cm ² }	Welding nipple connection (13.6 × 50)	-0.1 to +70 MPa {-1 to +700 kgf/cm ² }	-0.1, 75 MPa {-1, 750 kgf/cm ² }	-100 kPa {-1 kgf/cm ² }	65 MPa {650 kgf/cm ² }
12		0-1.25 to 0-25 MPa {0-12.5 to 0-250 kgf/cm ² }	Rc 1/2 or Rc 1/4 internal Thread 1/2 NPT or 1/4 NPT internal thread	-0.1 to +30 MPa {-1 to +300 kgf/cm ² }	-0.1, 32 MPa {-1, 320 kgf/cm ² }		28.75 MPa {287.5 kgf/cm ² }
13		0-0.35 to 0-7 MPa {0-3.5 to 0-70 kgf/cm ² }		-0.1 to +10.5 MPa {-1 to +105 kgf/cm ² }	-0.1, 14 MPa {-1, 140 kgf/cm ² }		10.15 MPa {101.5 kgf/cm ² }
14		0-0.175 to 0-3.5 MPa {0-1.75 to 0-35 kgf/cm ² }		-0.1 to +5.25 MPa {-1 to +52.5 kgf/cm ² }	-0.1, 7 MPa {-1, 70 kgf/cm ² }		5.075 MPa {50.75 kgf/cm ² }
15	Bellows	0-35 to 0-686 MPa {0-0.35 to 0-7 kgf/cm ² }		-0.1 to +1.05 MPa {-1 to +10.5 kgf/cm ² }	-0.1, 1.4 MPa {-1, 14 kgf/cm ² }	1.015 MPa {10.15 kgf/cm ² }	
16		0-10 to 0-196 kPa {0-0.1 to 0-2 kgf/cm ² }		-100 to +300 kPa {-1 to +3 kgf/cm ² }	-100, 400 kPa {-1, 4 kgf/cm ² }	290 kPa {2.9 kgf/cm ² }	
17		0-3.4 to 0-66.6 kPa {0-25 to 0-500 mmHg}		-66.6 to +66.6 kPa {-500 to +500 mmHg}	-66.6, 300 kPa {-500 mmHg, 4 kgf/cm ² }	-66.6 kPa {-500 mmHg}	63.2 kPa {475 mmHg}
18		0-0.7 to 0-13.3 kPa {0-5 to 0-100 mmHg}		-13.3 to +13.3 kPa {-100 to +100 mmHg}	-13.3, 300 kPa {-100 mmHg, 4 kgf/cm ² }	-13.3 kPa {-100 mmHg}	12.6 kPa {95mmHg}
25	Bellows (absolute pressure)	0-35 to 0-686 kPa abs. {0-0.35 to 0-7 kgf/cm ² } abs.		0 to 686 kPa abs. {0 to 7 kgf/cm ² } abs.	1.4 MPa abs {14 kgf/cm ² } abs.	—	653 kPa abs. {6.65 kgf/cm ² } abs.
26		0-10 to 0-196 kPa abs. {0-0.1 to 0-2 kgf/cm ² } abs.		0 to 196 kPa abs. {0 to 2 kgf/cm ² } abs.	0.6 MPa abs. {6 kgf/cm ² } abs.	—	186 kPa abs. {1.9 kgf/cm ² } abs.
27		0-3.4 to 0-66.6 kPa abs. {0-25 to 0-500 mmHg} abs.		0 to 66.6 kPa abs. {0 to 500 mmHg} abs.	0.4 MPa abs. {4 kgf/cm ² } abs.	—	63.2 kPa abs. {475 mmHg} abs.
28		0-0.7 to 0-13.3 kPa abs. {0-5 to 0-100 mmHg} abs.		0 to 13.3 kPa abs. {0 to 100 mmHg} abs.	0.4 MPa abs. {4 kgf/cm ² } abs.	—	12.6 kPa abs. {95 mmHg} abs.
71	Remote seal diaphragm	0-5 to 0-70 MPa {0-50 to 0-700 kgf/cm ² }	G1-1/2 external thread (34 button diaphragm)	-0.05 to +70 MPa {-0.5 to +700 kgf/cm ² }	-0.05, 70 MPa {-0.5, 750 kgf/cm ² }	-0.05 MPa {-0.5 kgf/cm ² }	65 MPa {650 kgf/cm ² }
72		0-1.25 to 0-25 MPa {0-12.5 to 0-250 kgf/cm ² }	G1-1/2 external thread (34 button diaphragm) or 2 in. ANSI wafer	-0.05 to +30 MPa {-0.5 to +300 kgf/cm ² }	-0.05, 32 MPa {-0.5, 320 kgf/cm ² }		28.75 MPa {287.5 kgf/cm ² }
73		0-0.35 to 0-7 MPa {0-3.5 to 0-70 kgf/cm ² }	2 in. -ANSI wafer	-0.05 to +10.5 MPa {-0.5 to +105 kgf/cm ² }	-0.05, 14 MPa {-0.5, 140 kgf/cm ² }		10.15 MPa {101.5 kgf/cm ² }
74		0-0.175 to 0-3.5 MPa {0-1.75 to 0-35 kgf/cm ² }	2 in. -ANSI wafer	-0.05 to +5.25 MPa {-0.5 to +52.2 kgf/cm ² }	-0.05, 7 MPa {-0.5, 70 kgf/cm ² }		5.075 MPa {50.75 kgf/cm ² }
			80 mm-JIS30K flush diaphragm	-0.05 to +5.1 MPa {-0.5 to +51 kgf/cm ² }	-0.05, 5.1 MPa {-0.5, 51 kgf/cm ² }	4.925 MPa {49.25 kgf/cm ² }	
			100 mm-JIS30K extended diaphragm	-0.05 to +5.1 MPa {-0.5 to +51 kgf/cm ² }	-0.05, 5.1 MPa {-0.5, 51 kgf/cm ² }		
			3 in. -ANSI300 flush diaphragm	-0.05 to +3.82 MPa {-0.5 to +37 kgf/cm ² }	-0.05, 3.82 MPa {-0.5, 37 kgf/cm ² }	3.525 MPa {35.25 kgf/cm ² }	
			4 in. -ANSI300 extended diaphragm				
75		0-35 to 0-686 kPa {0-0.35 to 0-7 kgf/cm ² }	80 mm-JIS10K flush diaphragm	-0.05 to +1.05 MPa {-0.5 to +10.5 kgf/cm ² }	-0.05, 1.4 MPa {-0.5, 14 kgf/cm ² }	-0.05 MPa {-0.5 kgf/cm ² }	1.015 MPa {10.15 kgf/cm ² }
			100 mm-JIS10K extended diaphragm				
			3 in. -ANSI150 flush diaphragm				
	4 in. -ANSI150 extended diaphragm						
76	0-10 to 0-196 kPa {0-01 to 0-2 kgf/cm ² }	80 mm-JIS10K flush diaphragm	-0.05 to +0.3 MPa {-0.5 to +3 kgf/cm ² }	-0.05, 0.4 MPa {-0.5, 4 kgf/cm ² }		0.29 MPa {2.9 kgf/cm ² }	
		100 mm-JIS10K extended diaphragm					
		3 in. -ANSI150 flush diaphragm					
		4 in. -ANSI150 extended diaphragm					

Note) 1. Elevation + Span ≤ Max. span.

2. Refer to the annexed table about Max. working pressure on Remote seal diaphragm.

Item		Specifications	
Function			
Accuracy	Model No.	Measuring range	
	KFKB□□11/71	0-5 to 0- less than 10 MPa {0-50 to 0- less than 100 kgf/cm ² }	0-10 to 0-70 MPa {0-100 to 0-700 kgf/cm ² }
	KFKB□□12/72	0-1.25 to 0- less than 2.5 MPa {0-12.5 to 0- less than 25 kgf/cm ² }	0-2.5 to 0-25 MPa {0-25 to 0-250 kgf/cm ² }
	KFKB□□13/73	0-0.35 to 0- less than 0.7 MPa {0-3.5 to 0- less than 7 kgf/cm ² }	0-0.7 to 0-7 MPa {0-7 to 0-70 kgf/cm ² }
	KFKB□□14/74	0-0.175 to 0- less than 0.35 MPa {0-1.75 to 0- less than 3.5 kgf/cm ² }	0-0.35 to 0-3.5 MPa {0-3.5 to 0-35 kgf/cm ² }
	KFKB□□15/75	0-35 to 0- less than 68.6 kPa {0-0.35 to 0- less than 0.7 kgf/cm ² }	0-68.6 to 0-686 kPa {0-0.7 to 0-7 kgf/cm ² }
	KFKB□□16/76	0-10 to 0- less than 19.6 kPa {0-0.1 to 0- less than 0.2 kgf/cm ² }	0-19.6 to 0-196 kPa {0-0.2 to 0-2 kgf/cm ² }
	KFKB□□17	0-3.4 to 0- less than 6.66 kPa {0-25 to 0- less than 50 mmHg}	0-6.66 to 0-66.6 kPa {0-50 to 0-500 kgf/cm ² }
	KFKB□□18	0-0.7 to 0- less than 1.33 kPa {0-5 to 0- less than 10 mmHg}	0-1.33 to 0-less than 9.3 kPa (*1) {0-10 to 0-less than 70 mmHg}
	KFKB□□25	0-35 to 0- less than 68.6 kPa abs. {0-0.35 to 0- less than 0.7 kgf/cm ² } abs.	0-68.6 to 0-686 kPa abs. {0-0.7 to 0-7 kgf/cm ² } [abs.]
	KFKB□□26	0-10 to 0- less than 19.6 kPa abs. {0-0.1 to 0- less than 0.2 kgf/cm ² } abs.	0-19.6 to 0-196 kPa abs. {0-0.2 to 0-2 kgf/cm ² } [abs.]
	KFKB□□27	0-3.4 to 0- less than 6.66 kPa abs. {0-25 to 0- less than 50 mmHg} abs.	0-6.66 to 0-66.6 kPa {0-50 to 0-500 mmHg} [abs.]
	KFKB□□28	0-0.7 to 0- less than 1.33 kPa abs. {0-5 to 0- less than 10 mmHg} abs.	0-1.33 to 0- less than 9.3 kPa abs. (*2) {0-10 to 0- less than 70 mmHg} [abs.]
	Transmission/Indication	±1.0%FS/±1.5%FS ±0.5%FS/±1.0%FS	
	Note) *1. Transmitting accuracy : ± 0.75%FS Indicating accuracy : ± 1.25%FS *2. Transmitting accuracy : ± 0.75%FS Indicating accuracy : ± 1.25%FS		
Repeatability		Within 0.3% FS	
Dead Band		Within 0.1% FS	
Indication			
Angle		44 degrees	
Scale length		150 mm	
Pointer		Process variable : Red Set-point value: Green	
Output indicator (40 mm)		Scale range: 0 to 200 kPa {0 to 2 kgf/cm ² }, Indicator accuracy: 3% FS	
Set-point Section			
Local setting		Internal or external setting by setting knob	
Remote setting		Pneumatic pressure setting of 20 to 100 kPa {0.2 to 1.0 kgf/cm ² }	
Setting range		0 to 100% FS	
Controller			
Control action		P + Manual reset, PI, PID, PD + Manual reset, PI + Batch, On-Off, Differential gap, P + External reset, PD + External reset	
Proportional band (P)		5-500% (direct or reverse action)	
Integral (I)		0.05 to 30 min.	
Derivative (D)		0.05 to 30 min.	
Differential gap		1 to 100% FS, adjustable	
Batch setting pressure		60 to 110 kPa {0.6 to 1.1 kgf/cm ² }, adjustable	
External reset pressure		20 to 100 kPa {0.2 to 1.0 kgf/cm ² }	
Manual reset		0 to 100% FS, adjustable (by pneumatic pressure setting.)	
General Specification			
Output		20 to 100 kPa {0.2 to 1.0 kgf/cm ² }, 0 or Corresponding to supply air pressure (when on-off or differential gap control action)	
Minimum load		I.D. 4 mm × 3 m + 20 cm ³	
Supply air pressure		140 ± 14 kPa {1.4 ± 0.14 kgf/cm ² }	
Air consumption (50% output balanced)		Indicating transmitter : 5 L/min [normal] Indicating controller : 9 L/min [normal] Indicating transmitting controller : 9 L/min [normal] Manual controller : +3 L/min [normal]	
Maximum air deliver flowrate		Transmitter output : 40 L/min [normal] Controller Output : 40 L/min [normal] Manual control output : 30 L/min [normal]	
Air connection		Rc 1/4 or 1/4 NPT internal thread	
Ambient temperature		At meter body (process fluid) : -40 to +120 °C At transmitter (ambient) : -30 to +80 °C	
Relative humidity		10-90% RH	
Case, Door		Enclosure : Rain-tight and dust tight, NEMA 3, IEC IP 54 Materials : CaseAluminum die-cast DoorPolyester with fiberglass Door-glassReinforced glass (3 mm thick) Case finish : Acryl baking finish (for corrosion-resistant and silver finish, refer to the optional specification.) Color of finish : CaseLight beige (munsell 4Y7.2 / 1.3) DoorLight gray (munsell N8)	
Mounting		Panel or 2 inch pipe mounting	
Flange standard (and year)		JIS: JIS B 2220 (1984) ANSI: ANSI B16.5-88 JPI: JPI-7S-15-93	
Weight		Approx. 12 kg (with Options)	

Optional Specifications

Item	Specifications
(1) External SP setting knob (for local setting)	A setting knob is mounted on the door. SP can be adjusted from outside.
(2) Built-in manual controller (with auto/manual transfer switch)	Consists of manual control regulator, two position transfer switch and balance check button.
(3) Elevation, Suppression	Elevation : The lower limit of input range is above zero. Suppression : The lower limit of input range is below zero.
(4) Pressure Regulator with air filter (KZ03) (not applicable to panel mounting type)	Pressure regulator with filter plus 40 mm pressure gauge. (supply pressure : 200 to 970 kPa {2 to 9.7 kgf/cm ² }, output : 140 kPa {1.4 kgf/cm ² }, pressure gauge : 0 to 200 kPa {0 to 2 kgf/cm ² })

Optional Semi-standard and Special Specification

Item	Applicable Models	Specifications
(1) High temperature use (Y62)	Remote seal diaphragm type	Operating temperature : Fluid -10 to +280 °C (Up to 180 °C for Nickel copper alloy or Tantalum) Ambient -10 to +80 °C Sealing liquid : Special silicon oil (*1)
(2) Stainless steel bolts (Y66)	Model : KFKB□□-11 to16	SUS304 stainless steel is used for meter body fixing bolts.
(3) For oil-free (Y67)	Except remote seal diaphragm type	Liquid-contacting sections are degreased.
(4) Corrosion-resistant and silver finish (Y138)	All the KFKB models	Corrosion-resistant finish with baked acryl (Y138A): Resistant against corrosive gases. Corrosion-proof finish with baked epoxy resin (Y138B): Resistant against corrosive liquids. Regular silver finish with baked acryl (Y138C): To suppress temperature rise caused by direct sunlight or other cause. Corrosion-resistant silver finish with baked acryl (Y138D): To suppress temperature rise caused as above and to be resistance against corrosive gases. (note: silver finish is not resistant against alkaline gases.)
(5) For oxygen measurement (Y182)	Remote seal diaphragm type (when measuring element material is SUS316 or SUS316L)	Liquid-fill : Fluorine oil (Specific gravity 1.92 / 25 °C) Operating temperature (both fluid and ambient) : -10 to +60 °C Wet-parts treatment : Treated for degreasing (*1)
(6) For chlorine gas measurement (Y183)	Model : KFKB□□-74 to 76 (when measuring element material is tantalum.)	Liquid-fill : Fluorine oil (Specific gravity 1.92 / 25 °C) Operating temperature (both fluid and ambient) : -10 to +80 °C Wet-parts treatment : Treated for degreasing. (*1)
(7) Special order items (the items mentioned in the right are available as special order items.)	All the KFKB models	SP0039 Topicalization (Field and pneumatic instruments)
		SP0047 Stainless TAG No.plate
		SP0084 KF with door lock
		SP0085 KF with AUTO/MANUAL indicator
		SP0086 KF (transmitting type only) with output gauge
		SP0100-ITEM Submittal of mil sheet for wetted parts.
		SP0106 5-point check
		SP0140 Submittal of documents in accordance with High Pressure Gas Safety Law
		SP0148-ITEM Submittal of pressure withstanding and airtight test reports
		SP0153-ITEM φ40 pressure gauge made with special scale.

Note *1) Refer to page 5 for maximum working pressure

Max working pressure

Note 1 : Max working pressure depends on flange rating, flange materials and operating temperature. Please refer to the following data.

Operating range of temperature depends on specification of transmitters.

Note 2 : In case of remote sealed type (KKP75, KFKB□□-75), Max working pressure depends on the smaller value of either 1.05 MPa or following data.

	JIS	JPI/ANSI
Carbon Steel		
SUS304		
SUS316		
SUS316L		

MODEL SELECTION

Basic model no.			Selectable specifications									
Type	Function	Control action	Type of detector	Cover, flange or mounting screw materials	Element materials	Flange or mounting screw rating	Capillary tube length	Length of extended parts of flange	Air connection length	Output pressure unit	Mounting method	Options
KFKB	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII

I	0	Indicating transmitter										
	1	Indicating controller (local type)										
	2	Indicating transmitting controller (local type)										
	3	Indicating controller (cascade type)										
	4	Indicating transmitting controller (cascade type)										

II	0	No selection			5	PI + Batch						
	1	P + Manual reset			6	On-Off						
	2	PI			7	Differential gap						
	3	PID			8	P + External reset						
	4	PD + Manual reset			9	PD + External reset						

III	-11	Bourdon tube type			0-5 to 0-70 MPa {0-50 to 0-700 kgf/cm ² }							
	-12	Bourdon tube type			0-1.25 to 0-25 MPa {0-12.5 to 0-250 kgf/cm ² }							
	-13	Bourdon tube type			0-0.35 to 0-7 MPa {0-3.5 to 0-70 kgf/cm ² }							
	-14	Bourdon tube type			0-0.175 to 0-3.5 MPa {0-1.75 to 0-35 kgf/cm ² }							
	-15	Bellows type			0-35 to 0-686 MPa {0-0.35 to 0-7 kgf/cm ² }							
	-16	Bellows type			0-10 to 0-196 kPa {0-0.1 to 0-2 kgf/cm ² }							
	-17	Bellows type			0-3.4 to 0-66.6 kPa {0-25 to 0-500 mmHg}							
	-18	Bellows type			0-0.7 to 0-13.3 kPa {0-5 to 0-100 mmHg}							
	-25	Bellows type (abs. press.)			0-35 to 0-686 kPa abs. {0-0.35 to 0-7 kgf/cm ² }							
	-26	Bellows type (abs. press.)			0-10 to 0-196 kPa abs. {0-0.1 to 0-2 kgf/cm ² }							
	-27	Bellows type (abs. press.)			0-3.4 to 0-66.6 kPa abs. {0-25 to 0-500 mmHg}							
	-28	Bellows type (abs. press.)			0-0.7 to 0-13.3 kPa abs. {0-5 to 0-100 mmHg} abs.							
	-71	Remote seal diaphragm type			0-5 to 0-70 MPa {0-50 to 0-700 kgf/cm ² }							
	-72	Remote seal diaphragm type			0-1.25 to 0-25 MPa {0-12.5 to 0-250 kgf/cm ² }							
	-73	Remote seal diaphragm type			0-0.35 to 0-7 MPa {0-3.5 to 0-70 kgf/cm ² }							
	-74	Remote seal diaphragm type			0-0.175 to 0-3.5 MPa {0-1.75 to 0-35 kgf/cm ² }							
	-75	Remote seal diaphragm type			0-35 to 0-686 kPa {0-0.35 to 0-7 kgf/cm ² }							
	-76	Remote seal diaphragm type			0-10 to 0-196 kPa {0-0.1 to 0-2 kgf/cm ² }							

IV	1	Carbon steel (SF440A) (applicable to type 17/18/2□/7□ detector excluding wafer type and diaphragm type)										
	2	SUS316 (except flange type and button diaphragm type)										
	7	SUS304 (applicable to type 71/72 detector button diaphragm type)										
		SUSF304 (applicable to type 74/75/76 detector flange type)										
	8	SUS316L (applicable to type 7□ detector except button diaphragm and flange)										

V	2	SUS316 (seal diaphragm : SUS316L)										
	3	(applicable to type 11-28 or 7□ detector except extended flange, wafer and button diaphragm type)										
	4											
	8	SUS316L (applicable to type 7□ detector)										

VI	Blank (applicable to type 1□ or 2□ detector)		(Applicable to type 7□ detector)
01	Flush diaphragm type 80mm-JIS 10K (RF) equiv. flange		
02	Flush diaphragm type 80mm-JIS 30K (RF) equiv. flange		
03	Flush diaphragm type 3 in.-ANSI 150 (RF) equiv. flange		
04	Flush diaphragm type 3 in.-ANSI 300 (RF) equiv. flange		
05	Extended diaphragm type 100 mm-JIS 10K (RF) equiv. flange		
06	Extended diaphragm type 100 mm-JIS 30K (RF) equiv. flange		
07	Extended diaphragm type 4 in.-ANSI 150 (RF) equiv. flange		
08	Extended diaphragm type 4 in.-ANSI 300 (RF) equiv. flange		
09	2 in.-ANSI 1500 (RF) equiv. wafer		
11	G 1-1/2 external thread (button diaphragm type)		

VII		Blank (applicable to type 1□ or 2□ detector)										
	02	2m (applicable to type 7□ detector)										
	03	3m (applicable to type 7□ detector)										
	05	5m (applicable to type 7□ detector)										

VIII		Blank (applicable to type 1□ or 2□ detector)										
	00	Applicable to flush diaphragm, wafer or button diaphragm type.										
	10	Length : 100 mm (applicable to extended diaphragm)										
	15	Length : 150 mm (applicable to extended diaphragm)										

IX	A	Rc1/4 internal thread (instruction plate: Japanese)										
	B	1/4NPT internal thread (instruction plate: English)										

X	1	0.2 to 1.0 kgf/cm ²										
	2	3 to 15 psi										
	3	0.2 to 1.0 bar										
	4	20 to 100 kPa										
	8	19.6 to 98.1 kPa (equality to 0.2 to 1.0 kgf/cm ²)										

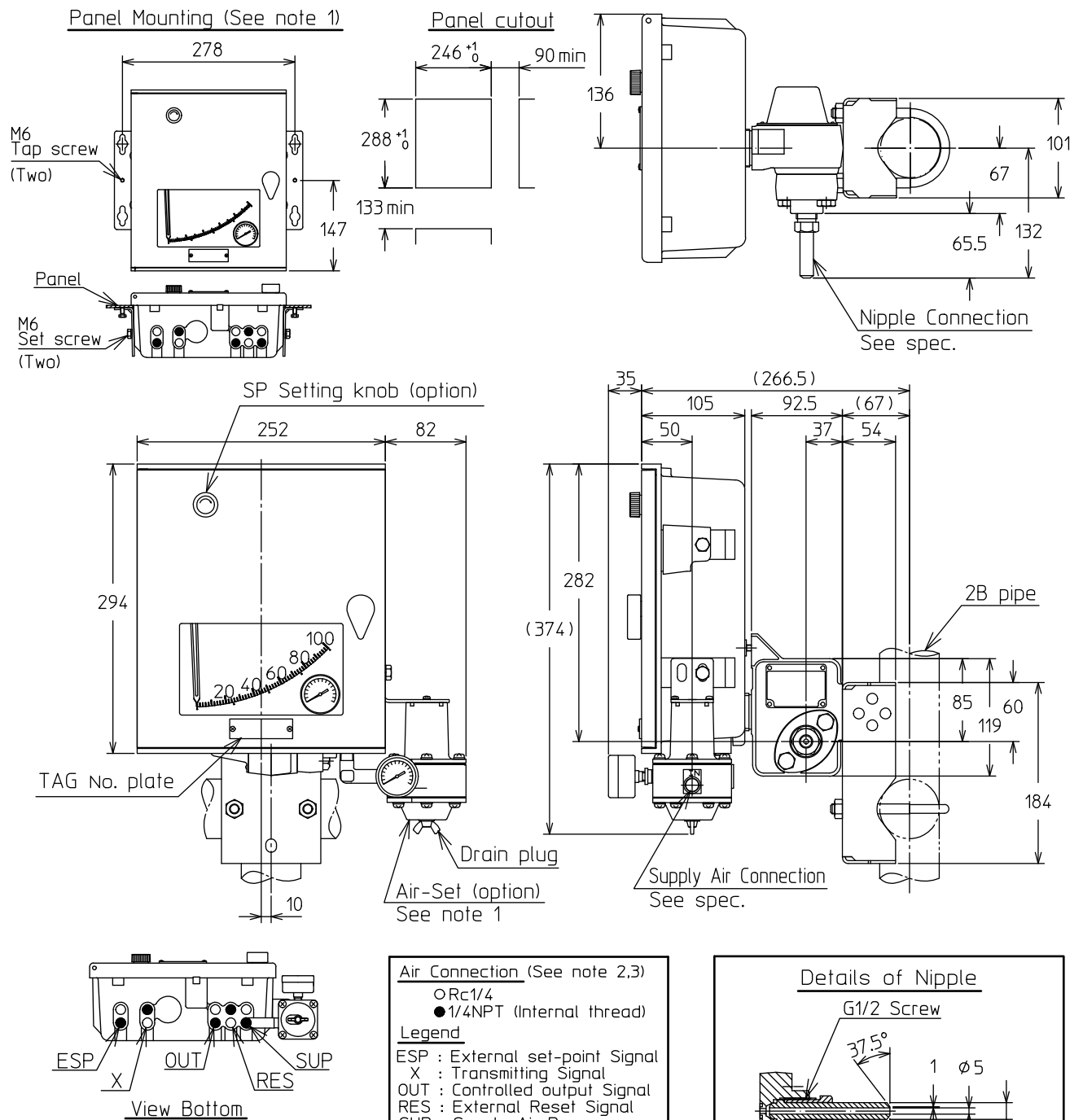
XI	P	Panel mounting (Pressure regulator with filter cannot be installed)										
	T	2-inch pipe mounting										

XII	-X	No option										
	-M	Built-in manual controller (with auto/manual switch) (applicable to type 1, 2, 3, 4 controller.)										
	-K	With external SP setting knob (applicable to type 1, 2 controller)										
	-5	Elevation or high elevation										
	-6	Suppression										
	-7	Pressure Regulator with air filter (KZ03)										

Note) When specifying semi-standard option (Y□) not listed in model no table, please write as: KFKB12-1122A1T-M, K, 6, R (Y67, Y 138) (Please consult with factory in case of a multiple of "Y" spec. are required.)

DIMENSIONS**Model KFKB__-11/22**

(Unit:mm)

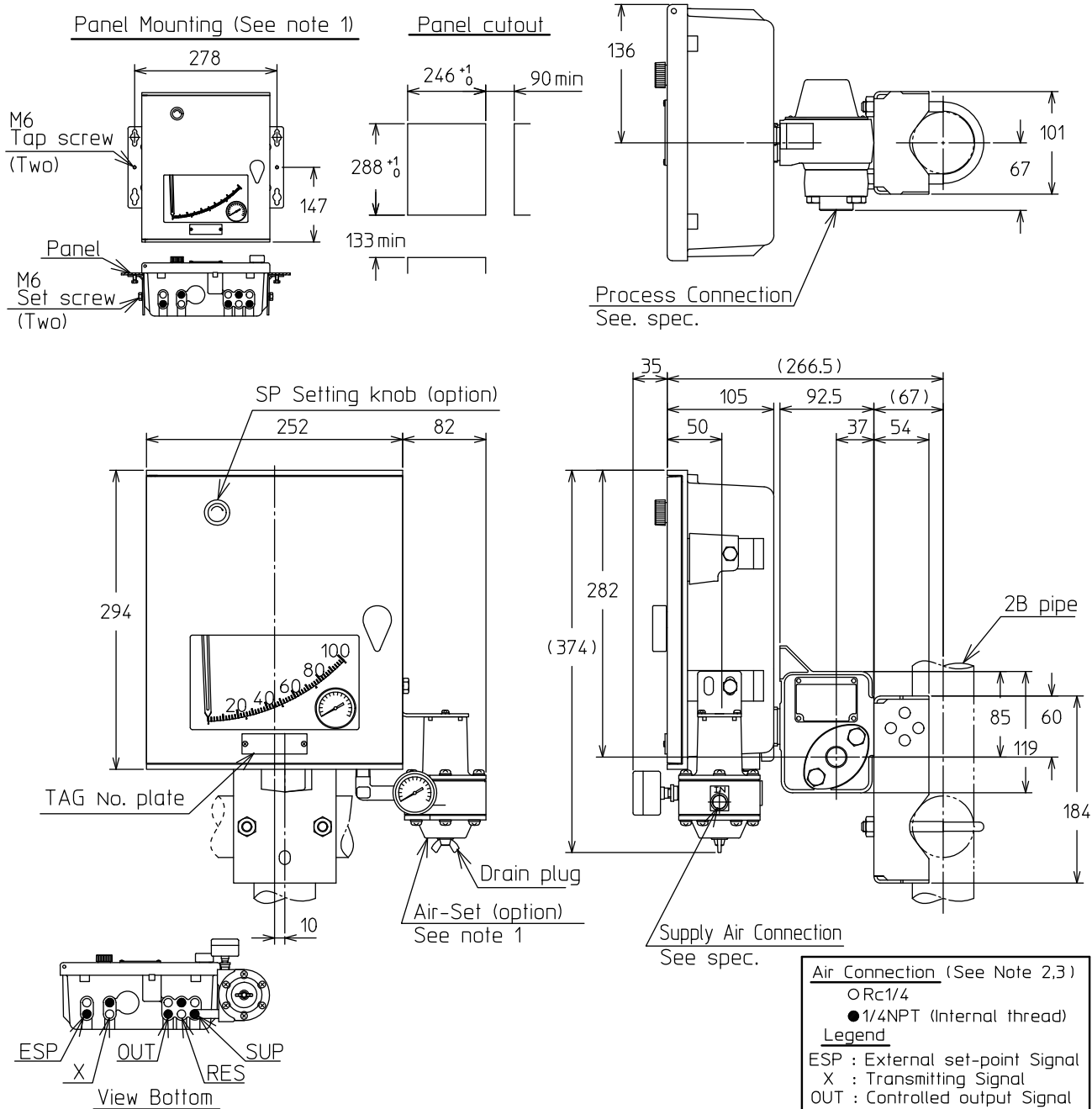


Note)

1. The Air-set is not applicable to Panel Mounting type.
2. The Holes not to be used for Air Connection are plugged.
3. For Manual Reset Provision SUP and RES have been Preconnected.

Model KFKB__-12/13/14

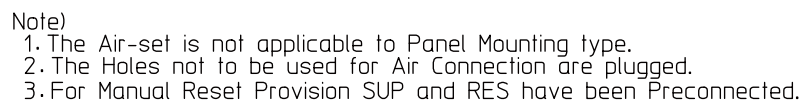
(Unit:mm)



Note)

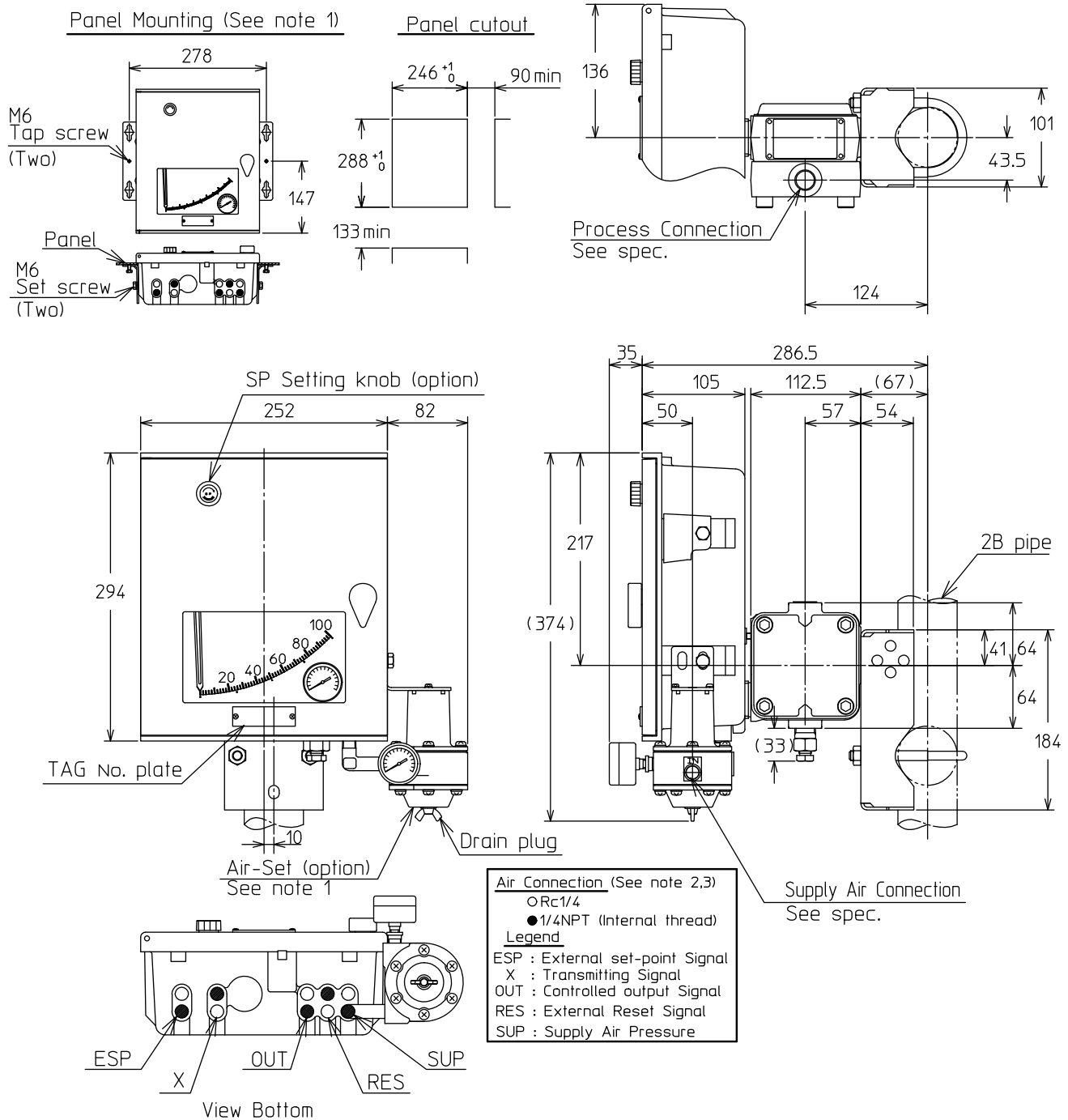
1. The Air-set is not applicable to Panel Mounting type.
2. The Holes not to be used for Air Connection are plugged.
3. For Manual Reset Provision SUP and RES have been Preconnected.

(Unit:mm)



Model KFKB__-17/18

(Unit:mm)

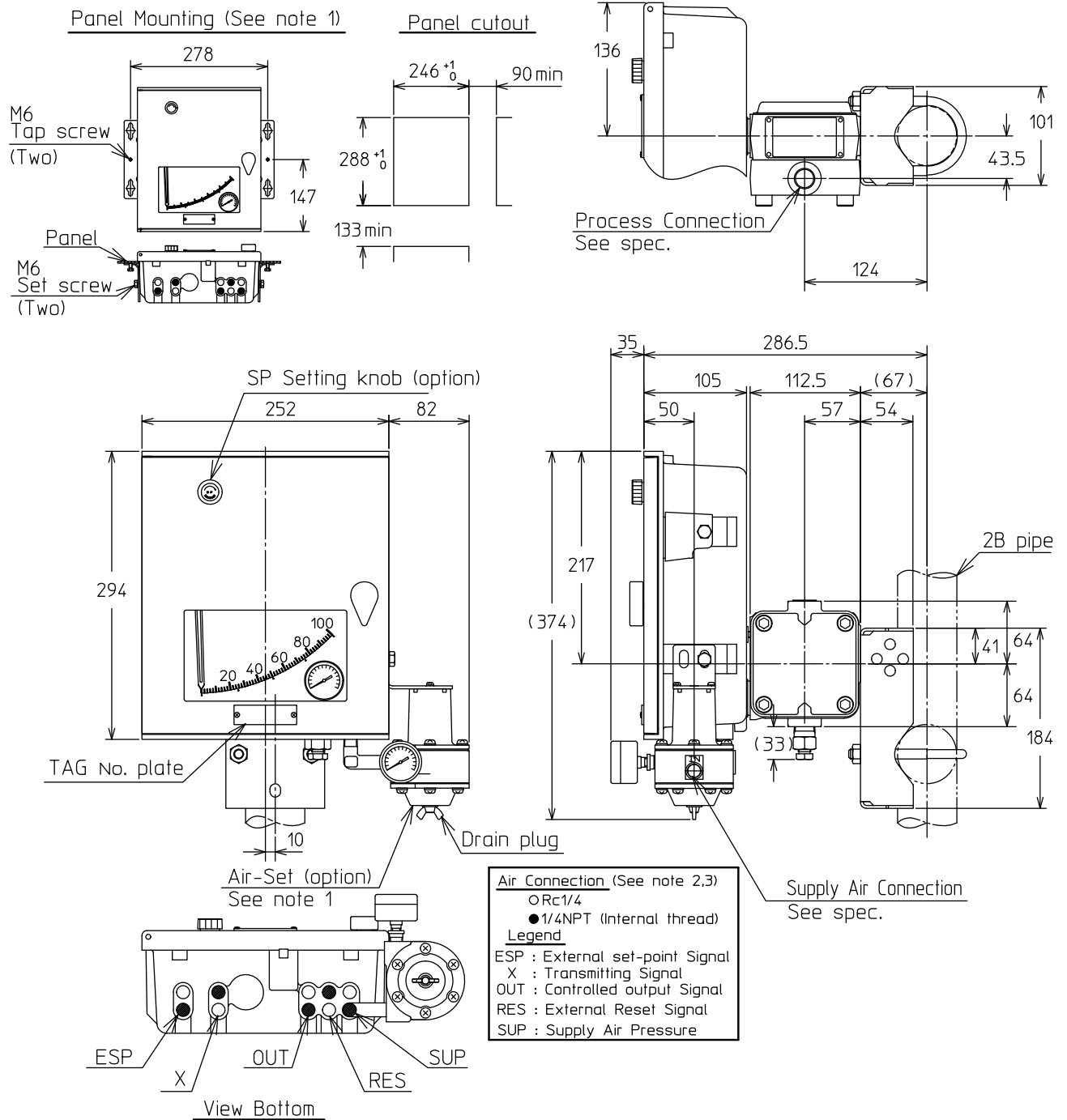


Note)

1. The Air-set is not applicable to Panel Mounting type.
2. The Holes not to be used for Air Connection are plugged.
3. For Manual Reset Provision SUP and RES have been Preconnected.

Model KFKB__-2_

(Unit:mm)

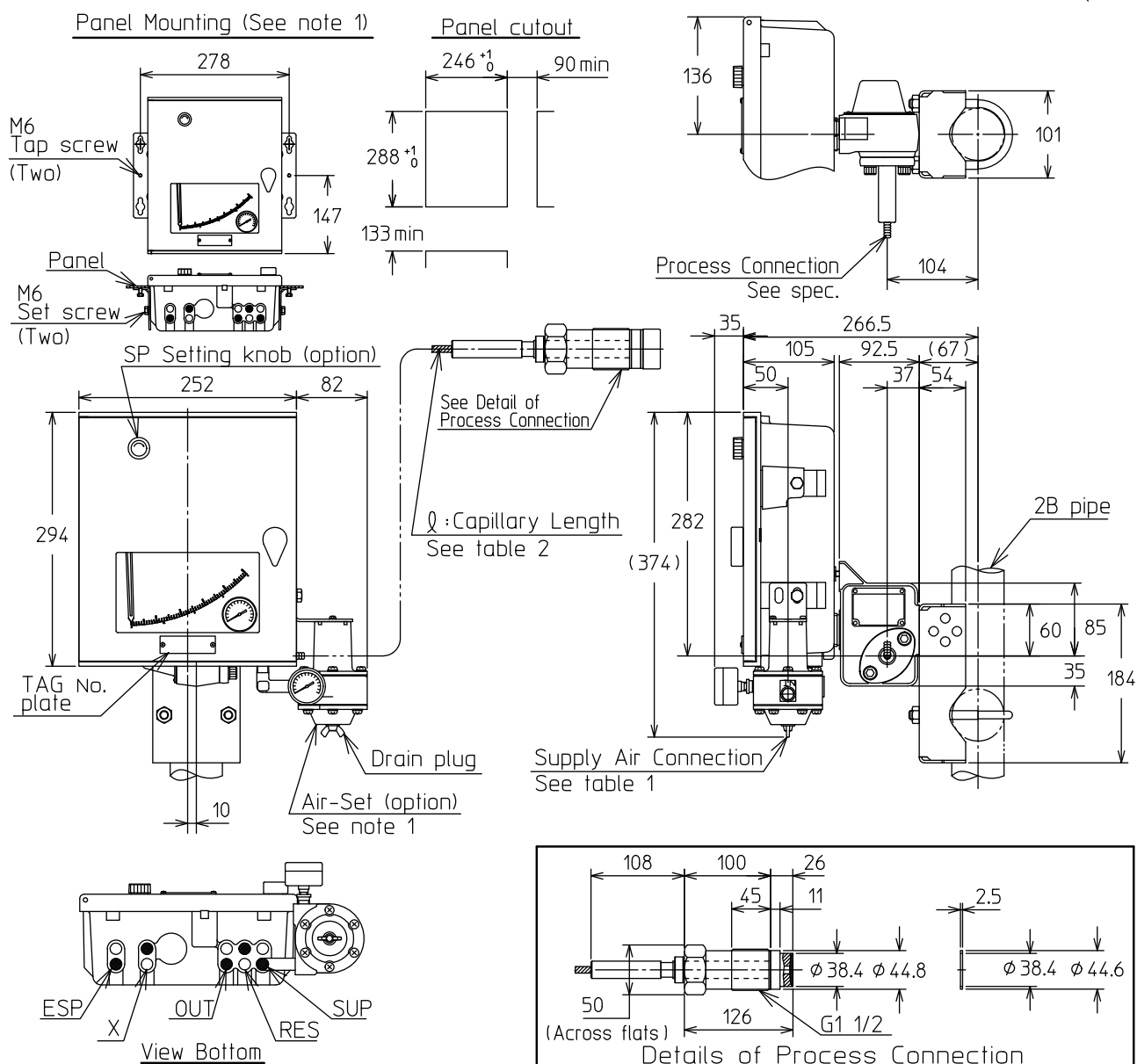


Note)

1. The Air-set is not applicable to Panel Mounting type.
2. The Holes not to be used for Air Connection are plugged.
3. For Manual Reset Provision SUP and RES have been Preconnected.

Model KFKB__-71/72 Button diaphragm type

(Unit:mm)

**Air Connection (See note 2,3)**

○Rc1/4

●1/4NPT (Internal thread)

Legend

ESP : External set-point Signal

X : Transmitting Signal

OUT : Controlled output Signal

RES : External Reset Signal

SUP : Supply Air Pressure

Table 1.

Model	Air piping Connection
A	Rc1/4
B	1/4NPT (Internal thread)

Table 2.

Model	Capillary Length
02	$\phi=2m$
03	$\phi=3m$
05	$\phi=5m$

Note)

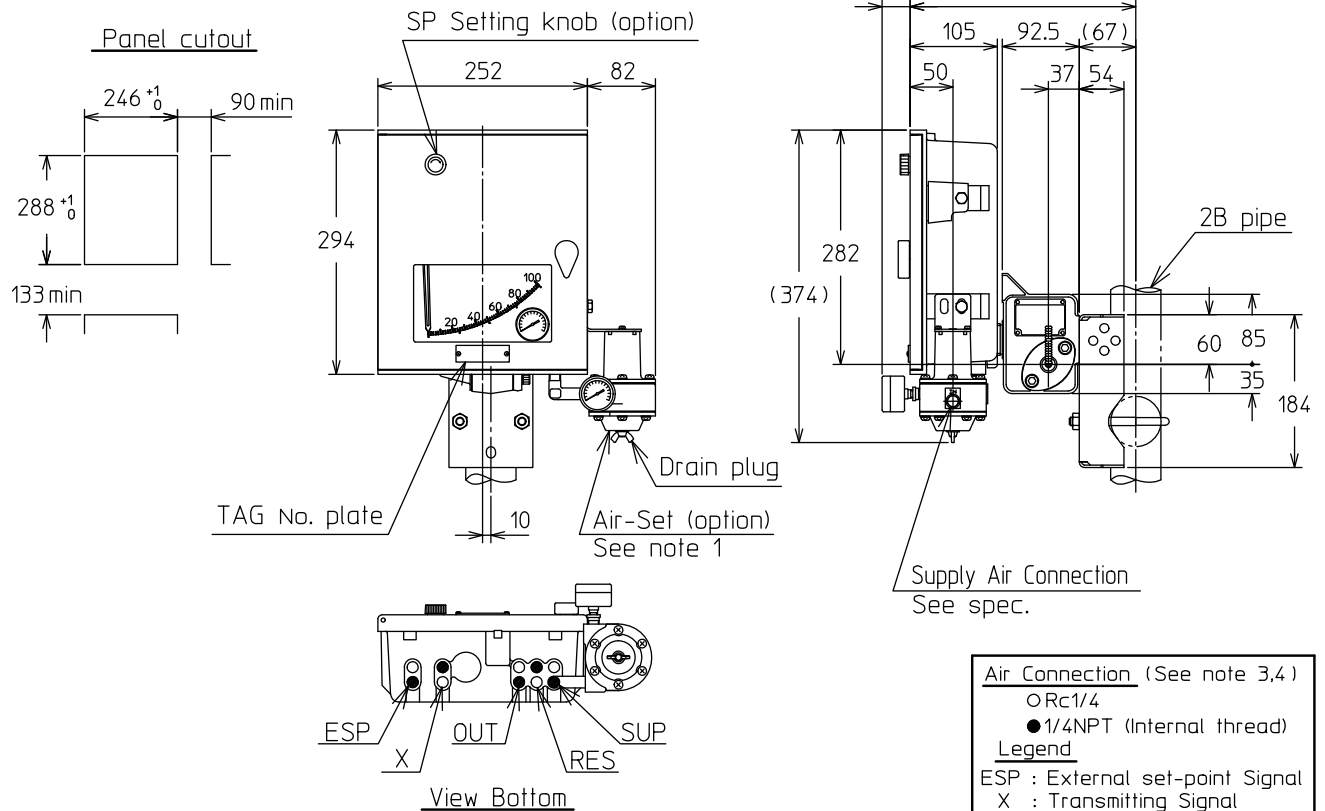
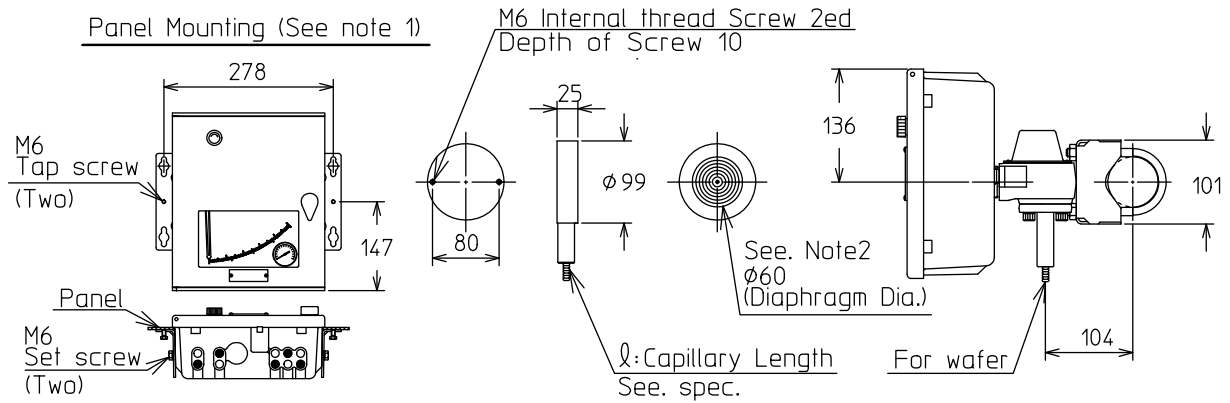
1. The Air-set is not applicable to Panel Mounting type.

2. The Holes not to be used for Air Connection are plugged.

3. For Manual Reset Provision SUP and RES have been Preconnected.

Model KFKB__-72/73/74 Wafer type

(Unit:mm)

Wafer details

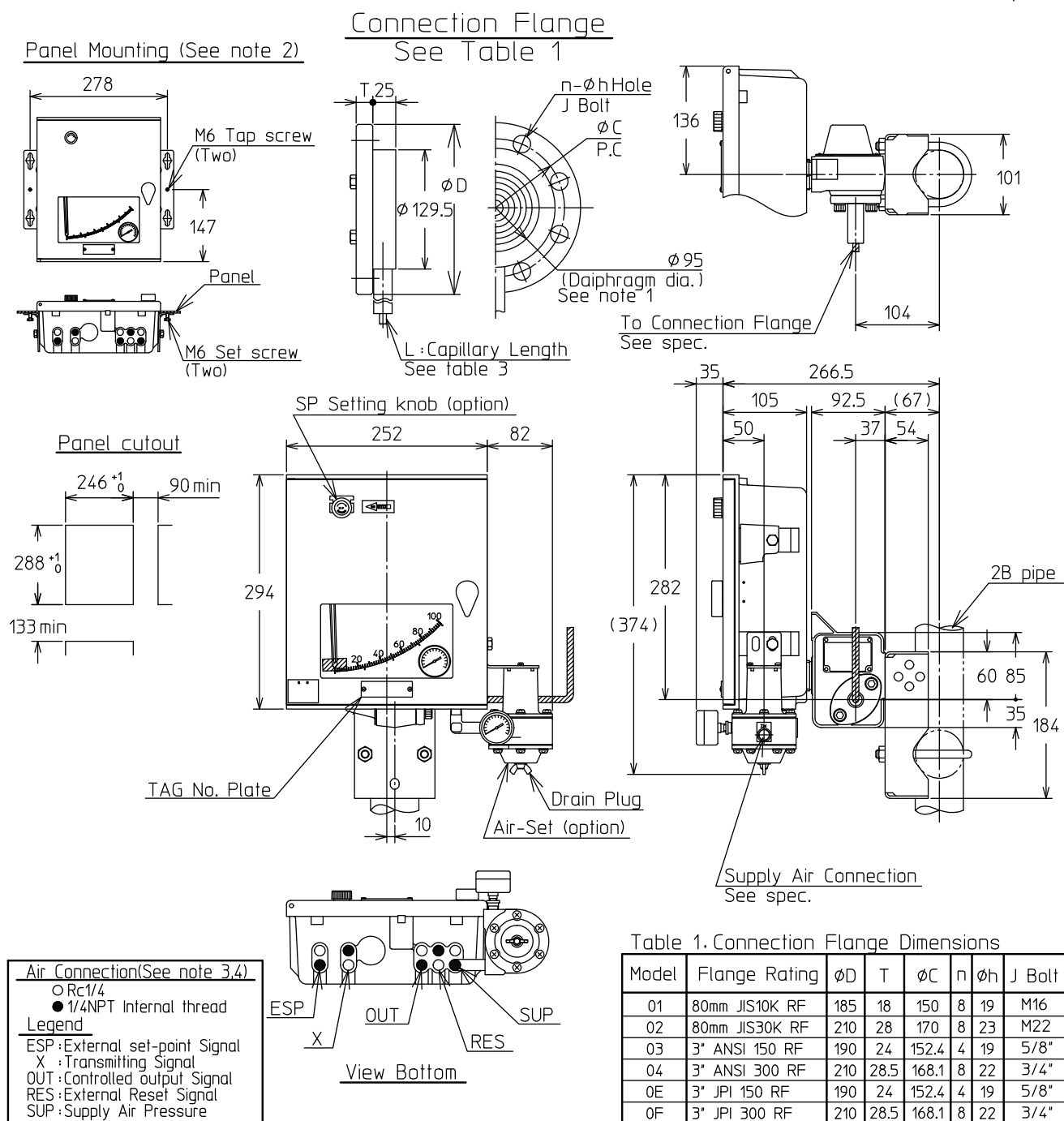
Note)

1. The Air-set is not applicable to Panel Mounting type.
2. The Gasket shall be such as will never touch the Diaphragm after installed.
3. The Holes not to be used for Air Connection are plugged.
4. For Manual Reset Provision SUP and RES have been Preconnected.

Air Connection (See note 3,4)	
○	Rc1/4
●	1/4NPT (Internal thread)
Legend	
ESP	: External set-point Signal
X	: Transmitting Signal
OUT	: Controlled output Signal
RES	: External Reset Signal
SUP	: Supply Air Pressure

Model KFKB__-74 Flush diaphragm type

(Unit:mm)



- Note) 1. The Gasket shall be such as will never touch the Diaphragm after installed.
 2. The Air-set is not applicable to Panel Mounting type.
 3. The Holes not to be used for Air Connection are plugged.
 4. For Manual Reset Provision SUP and RES have been Preconnected.

Table 1. Connection Flange Dimensions

Model	Flange Rating	φD	T	φC	n	φh	J Bolt
01	80mm JIS10K RF	185	18	150	8	19	M16
02	80mm JIS30K RF	210	28	170	8	23	M22
03	3" ANSI 150 RF	190	24	152.4	4	19	5/8"
04	3" ANSI 300 RF	210	28.5	168.1	8	22	3/4"
0E	3" JPI 150 RF	190	24	152.4	4	19	5/8"
0F	3" JPI 300 RF	210	28.5	168.1	8	22	3/4"

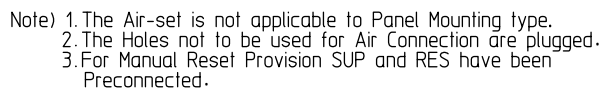
Table 2.

Model	Air piping Connection
A	Rc1/4
B	1/4NPT (Internal thread)

Table 3.

Model	Capillary Length
02	L=2m
03	L=3m
05	L=5m

(Unit:mm)



Model	Flange Rating	øD	T	øC	n	øh	J Bolt
05	100mm JIS10K RF	210	18	175	8	19	M16
06	100mm JIS30K RF	240	32	195	8	25	M22
07	4" ANSI 150 RF	229	24	190.5	8	19	5/8"
08	4" ANSI 300 RF	254	32	200.2	8	22	3/4"
0M	4" JPI 150 RF	229	24	190.5	8	19	5/8"
0N	4" JPI 300 RF	254	32	200.2	8	22	3/4"

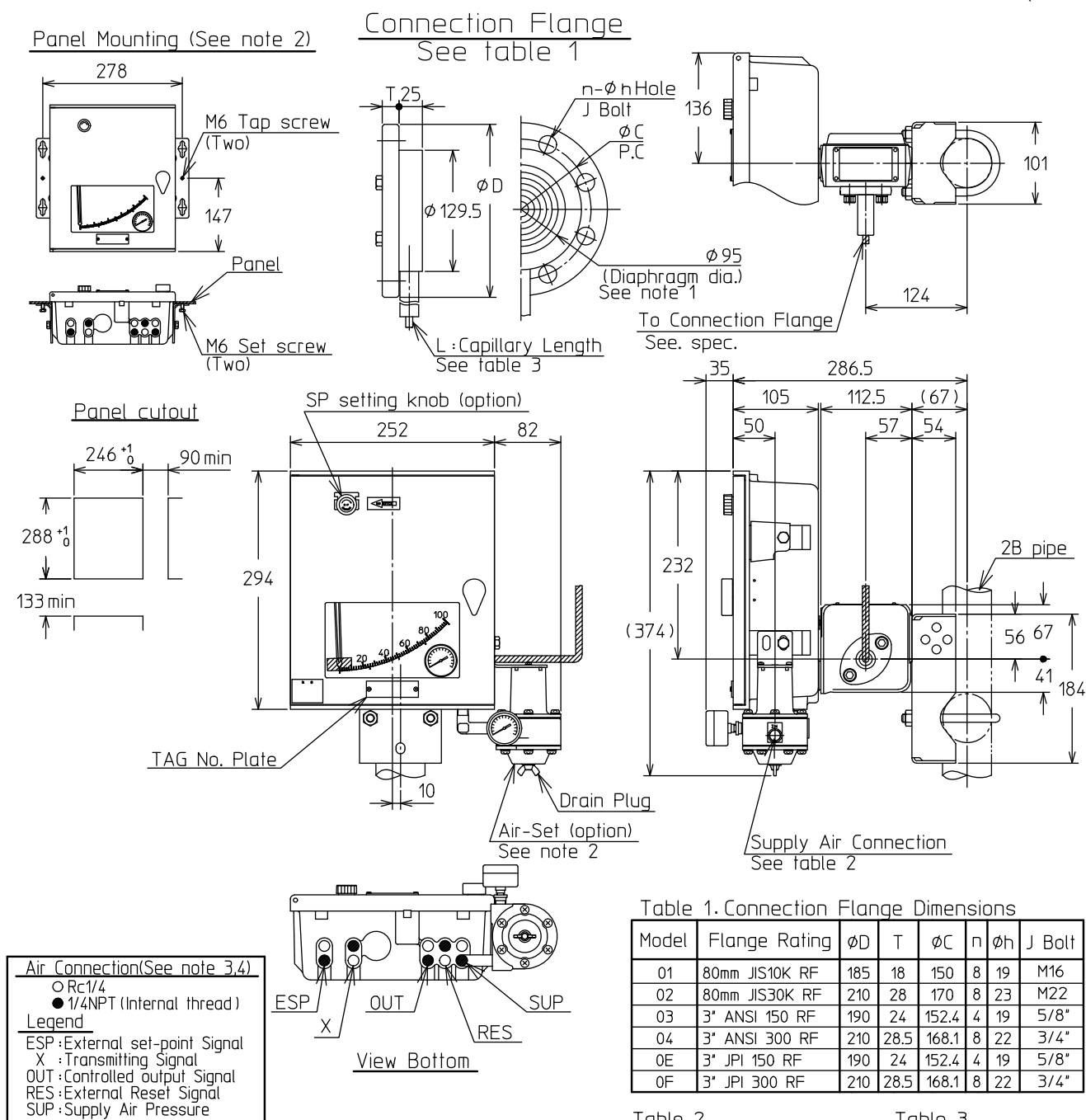
Model	Air piping Connection
A	Rc1/4
B	1/4NPT (Internal thread)

Model	Capillary Length
02	$l = 2\text{m}$
03	$l = 3\text{m}$
05	$l = 5\text{m}$

Model	Extension length
10	L=100mm
15	L=150mm

Model KFKB__-75/76 Flush diaphragm type

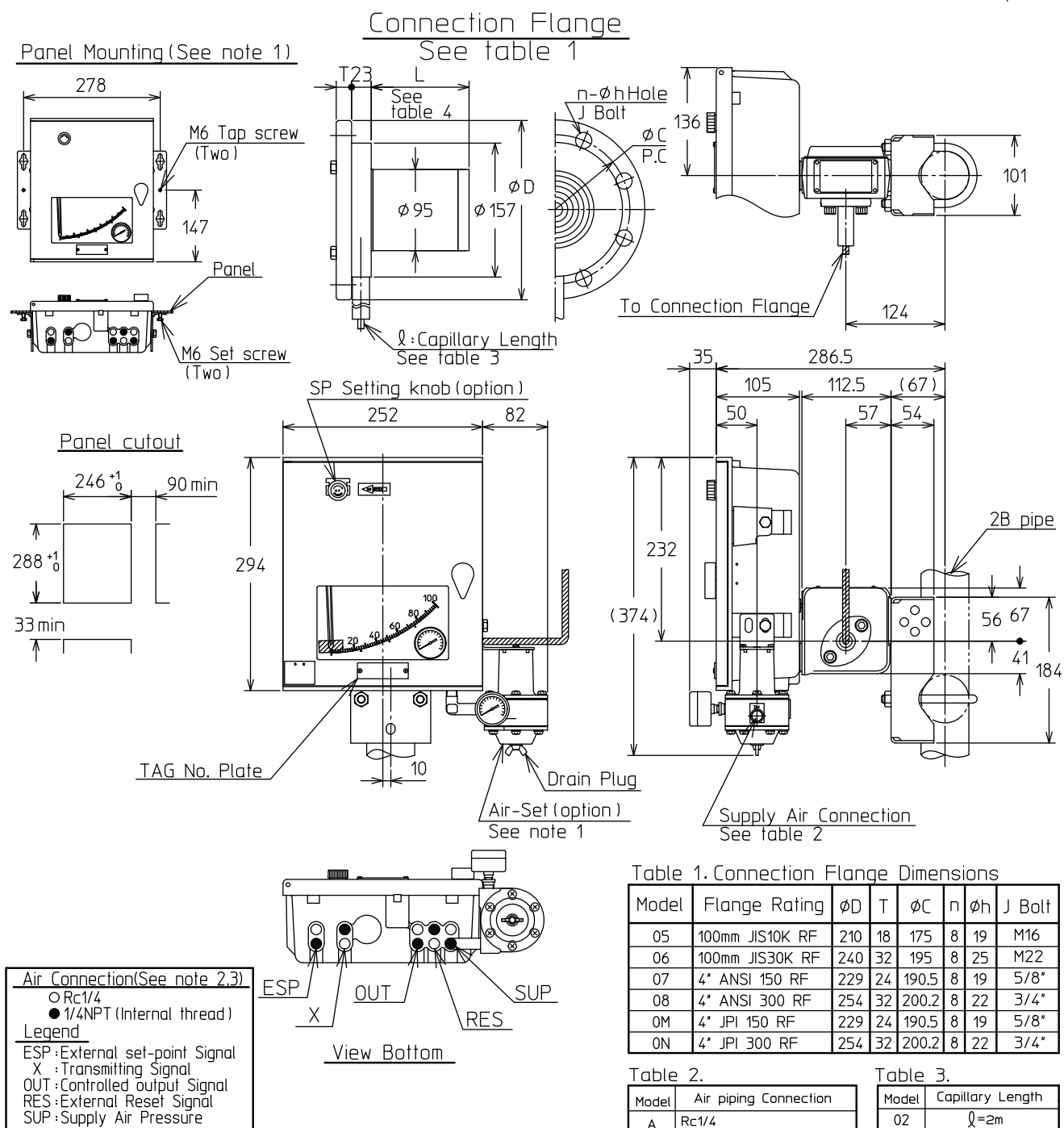
(Unit:mm)



- Note) 1. The Gasket shall be such as will never touch the Diaphragm after installed.
 2. The Air-set is not applicable to Panel Mounting type.
 3. The Holes not to be used for Air Connection are plugged.
 4. For Manual Reset Provision SUP and RES have been Preconnected.

Model KFKB__-75/76 Extended diaphragm type

(Unit:mm)



- Note) 1. The Air-set is not applicable to Panel Mounting type.
2. The Holes not to be used for Air Connection are plugged.
3. For Manual Reset Provision SUP and RES have been Preconnected.

Flushing Ring

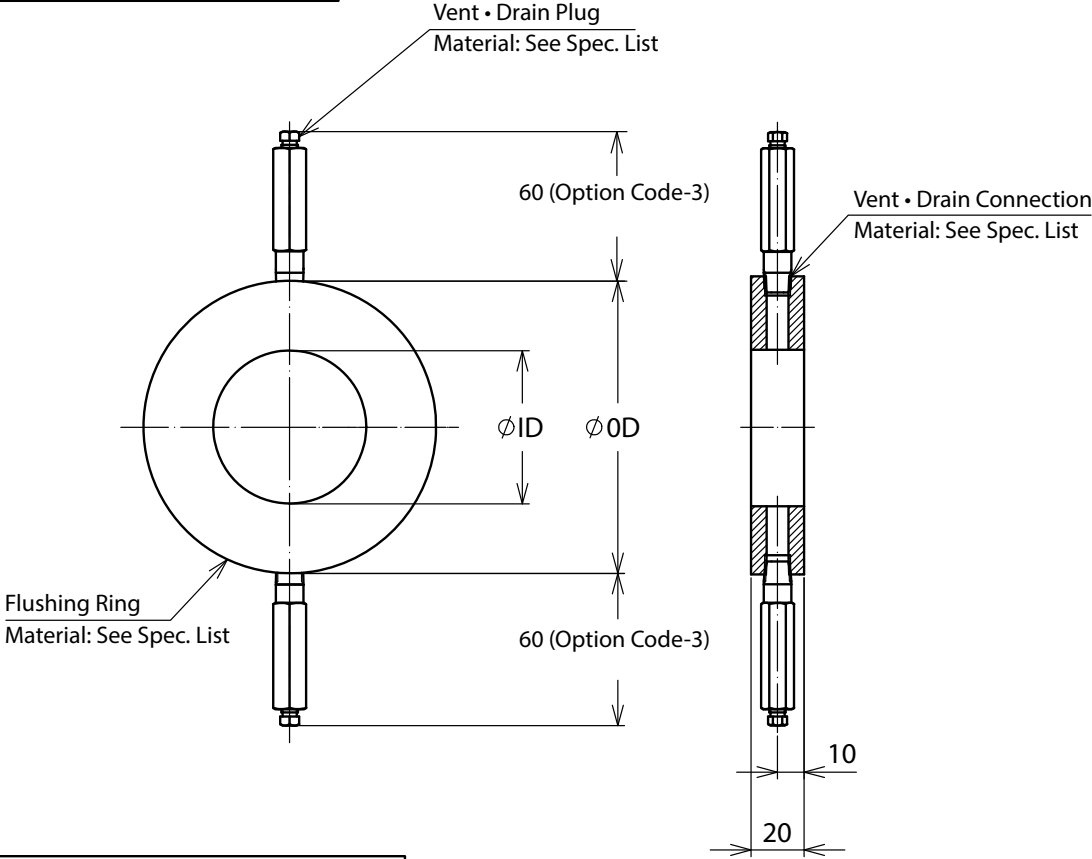
Model No.			DV-		I	II	III	IV	V	VI	-	VII
I	Flushing Ring quantity	For Flushing Ring 2 pieces	E									
II	Ring material	316 SST		2								
		316L SST		8								
III	Flange rating	JIS10K			A							
		JIS20K			C							
		JIS30K			D							
		JIS63K			F							
		ANSI 150			G							
		ANSI 300			H							
		ANSI 600			J							
		JPI 150			N							
		JPI 300			P							
IV	Flange size	3 in / 80A Ring type				B						
		2 in. / 50A Ring type				C						
		V	Ring finish	None, Standard JISRa3.2 equivalent					X			
VI	Screw size	Rc1/4								1		
		1/4NPT									2	
											-	
VII	Options	Long Vent (60mm)* ¹										3
		Oil and water finish* ²										5
		Oil free finish* ²										6
		Mill certificate* ²										7
		Strength calculation sheet* ²										B
		Withstand pressure and air tight test (general-purpose use)* ²										C
		Oil and water finish, high-grade* ²										D

*1. Code 3:Long Vent (60mm) of Options must be selected.

*2. When this option is selected, the same option for transmitter must be selected.

DIMENSIONAL DRAWING

unit: mm



DIMENSIONS and WEIGHTS

Flange Size		Flange Type		OD	ID	Weight [kg]
Description	Code	Description	Code			
50A 2"	C	JIS10K/20K ANSI/JPI 150#	A,C,G,N	104	65	0.9
		JIS30K	D	114		1.2
		JIS63K	F	125		1.5
		ANSI/JPI 300#/600#	H,J,P,Q	110		1.0
80A 3"	B	JIS10K ANSI/JPI 150#	A,G,N	135	100	1.1
		JIS20K	C	140		1.3
		JIS30K	D	150		1.6
		JIS63K	F	163		2.1
		ANSI/JPI 300#/600#	H,J,P,Q	148		1.5

Ordering Information

When ordering, please specify;

- 1) Model No.
- 2) Pressure range
- 3) Options

Please read "Terms and Conditions" from the following URL
before ordering and use.

<https://www.azbil.com/products/factory/order.html>

Specifications are subject to change without notice.

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