

# ST3000 New Ace Electric Pressure Transmitter

## Remote-sealed diaphragm style

Issued: Spt. 15, 2001	Page: 1-4-57
Effective: Dec. 1, 2009	UNIT: 1000YEN

Model	Pressure range/style	Service (Fill fluid)	Process connection
JTH920A	2.5 to 100kPa (250 to ) Lowest pressure	Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil)	Flush diaphragm 3 in. (80mm)
JTH940A	35 to 3500kPa (0.35 to 35kgf/cm2) Low pressure	Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil)	Flush diaphragm 3 in. (80mm)
JTH960A	0.7 to 10MPa (7 to 102 kgf/cm2) High pressure	Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil)	Flush diaphragm 3 in. (80mm)

Options 1, 2 : Refer to page 1-4-70

Basic model No. - I III IV V VI VII VIII - IX XX XI XII XIII XIV -Options 2

Basic Model No.	Measuring span	Basic price
	2.5 to 100kPa(250 to 10,160mmH2O)	438
	35 to 3500kPa(0.35 to 35kgf/cm2)	438
	0.7 to 10MPa(7 to 102 kgf/cm2)	438

Selections		Additional price			
		JTH920A	JTH940A	JTH960A	
I	Output	4 to 20mA	1	0	
		Digital output (DE protocol)	3	*1, *2	0
		4 to 20mA (HART protocol)	5	*3, *4	5
II	Material of wetted part	SUS316 (Diaphragm : SUS316L)	2	0	
		Tantalum	4	139	
		Hastelloy C	H	87	
		SUS316L	8	25	
III	Fill Fluid	Regular type (Silicone oil)	1	0	
		For oxygen service (Fluorine oil)	2	62	
		For High temperature service (Silicon oil)	3	62	
IV	Flange rating *29	JIS 10K	A	0	
		JIS 20K	C	20	
		JIS 30K	D	30	
		JIS 63K	F	60	
		ANSI 150	G	0	
		ANSI 300	H	20	
		ANSI 600	J	30	
		JPI 150	N	0	
		JPI 300	P	20	
		JPI 600	Q	30	
V	Flange size	3 in. /80 mm	2	0	
VI	Flange type	Standard	1	0	
VII	Flange material/bolt and nut	SUS304/Carbon steel	D	0	0
		SUS304/SUS304	E	10	10
		SUS304/SUS630	F	20	30
		SUS316/Carbon steel	G	40	40
		SUS316/SUS304	H	50	50
		SUS316/SUS630	J	60	70
		SUS316L/Carbon steel	K	50	50
		SUS316L/SUS304	L	60	60
SUS316L/SUS630	M	70	80		
VIII	Length of Capillary tube	2m	2	3	
		3m	3	7	
		4m	4	14	
		5m	5	21	
		6m	6	28	
		7m	7	35	
		8m	8	42	
		9m	Q	49	
		10m	A	56	
		Length of capillary tube with Olefin coating	2m	B	18
	3m		C	22	
	4m		H	29	
	5m		D	36	
	6m		J	43	
	7m		E	50	
	8m		F	57	
	9m		K	64	
	10m	G	71		

### Notes

- Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- Digital output (DE protocol) can not be combined with an external zero adjustment function.
- HART Communication can not be combined with Special burn-out feature.
- The lowest output limit is -1.25%(3.8mA).
- Dual diaphragm is not available for JIS63K, ANSI600 and JPI600 for a flange rating.
- Flange rating should be selected based on the operative pressure range.

# ST3000 New Ace Electric Pressure Transmitter

## Remote-sealed diaphragm style

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Model	Pressure range/style	Service (Fill fluid)	Process connection
JTH940A	35 to 3500kPa (0.35 to 35kgf/cm <sup>2</sup> )	Low pressure High temperature and vacuum(Silicon oil), High temperature and high vacuum(Silicon oil)	Flush diaphragm 3 in. (80mm)
JTH960A	0.7 to 10MPa (7 to 102 kgf/cm <sup>2</sup> )	High pressure High temperature and vacuum(Silicon oil), High temperature and high vacuum(Silicon oil)	Flush diaphragm 3 in. (80mm)

Selections Options 1

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

Options 1, 2 : Refer to page 1-4-70

Basic Model No.	Measuring spa	Basic price
	35 to 3500kPa(0.35 to 35kgf/cm <sup>2</sup> )	JTH940A 438
	0.7 to 10MPa(7 to 102 kgf/cm <sup>2</sup> )	JTH960A 438

Selections		Additional price			
		JTH940A	JTH960A		
I	Output	4 to 20mA	1	0	
		Digital output (DE protocol)	2	*1,*2 0	
		4 to 20mA (HART protocol)	3	*3,*4 5	
II	Material of wetted part	SUS316L	8	0	
		Tantalum *30	4	200	
		Hastellov C	H	125	
III	Fill Fluid	For high temperature vacuum (Silicon oil)	4	296	
		For high temperature high vacuum (Silicon oil)	7	722	
IV	Flange rating *29	JIS 10K	A	0	
		JIS 20K	C	20	
		JIS 30K	D	30	
		JIS 63K	F	60	
		ANSI 150	G	0	
		ANSI 300	H	20	
		ANSI 600	J	30	
		JPI 150	N	0	
		JPI 300	P	20	
		JPI 600	Q	30	
		V	Flange size	3 in. /80 mm	2
VI	Flange type	Standard	1	0	
VII	Flange material/bolt and nut	SUS304/Carbon steel	D	0	0
		SUS304/SUS304	E	10	10
		SUS304/SUS630	F	20	30
		SUS316/Carbon steel	G	40	40
		SUS316/SUS304	H	50	50
		SUS316/SUS630	J	60	70
		SUS316L/Carbon steel	K	50	50
		SUS316L/SUS304	L	60	60
		SUS316L/SUS630	M	70	80
VIII	Length of Cabillarv tube	2m	2	3	
		3m	3	7	
		4m	4	14	
		5m	5	21	
		6m	6	28	
		7m	7	35	
		8m	8	42	
		9m	Q	49	
		10m	A	56	

### Notes

- 1 Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- 2 Digital output (DE protocol) can not be combined with an external zero adjustment function.
- 3 HART Communication can not be combined with Special burn-out feature.
- 4 The lowest outoput limit is -1.25%(3.8mA).
- 3 Analog FSK Communication can not be combined with Intrinsically safe.
- 11 Dual diaphragm is not available for JIS63K, ANSI600 and JPI600 for a flange rating.
- 29 Flange rating should be selected based on the operative pressure range.

# ST3000 New Ace Electric Pressure Transmitter

## Remote-sealed diaphragm style

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Model	Pressure range/style	Service (Fill fluid)	Process connection
JTH920A	2.5 to 100kPa(250 to 10,160mmH <sub>2</sub> O)	Lowest pressure Chlorine service(Fluorine oil)	Flush diaphragm 3 in. (60mm)
JTH940A	35 to 3500kPa(0.35 to 35kgf/cm <sup>2</sup> )	Low pressure Chlorine service(Fluorine oil)	Flush diaphragm 3 in. (60mm)
JTH960A	0.7 to 10MPa(7 to 102 kgf/cm <sup>2</sup> )	High pressure Chlorine service(Fluorine oil)	Flush diaphragm 3 in. (60mm)

### Options 1

Options 1, 2 : Refer to page 1-4-70

Basic model No. - I III IV V VI VII VIII - IX X XI XII XIII XIV - Options 2

Basic Model No.	Measuring spa	Pressure range/style	Service (Fill fluid)	Process connection	Basic price
		2.5 to 100kPa(250 to 10,160mmH <sub>2</sub> O)	JTH920A		438
		35 to 3500kPa(0.35 to 35kgf/cm <sup>2</sup> )	JTH940A		438
		0.7 to 10MPa(7 to 102 kgf/cm <sup>2</sup> )	JTH960A		438

Selections					Additional price			
					JTH920	JTH940	JTH960	
I	Output	4 to 20mA	1				0	
		Digital output (DE protocol)	2	*1, *2			0	
		4 to 20mA (HART protocol)	3	*3, *4			5	
II	Material of	Tantalum	4				139	
III	Fill Fluid	For chlorine service (Fluorine oil)	5				62	
IV	Flange rating *29	JIS 10K	A				0	
		JIS 20K	C				20	
		JIS 30K	D				30	
		JIS 63K	F				60	
		*11	ANSI 150	G				0
			ANSI 300	H				20
			ANSI 600	J				30
		*11	JPI 150	N				0
			JPI 300	P				20
			JPI 600	Q				30
V	Flange size	3 in. /80 mm	2				0	
VI	Flange type	Standard	1				0	
VII	Flange material/bolt and nut	SUS304/Carbon steel	D				0	
		SUS304/SUS304	E				10	
		SUS304/SUS630	F				20	
		SUS316/Carbon steel	G				40	
		SUS316/SUS304	H				50	
		SUS316/SUS630	J				60	
		SUS316L/Carbon steel	K				50	
		SUS316L/SUS304	L				60	
		SUS316L/SUS630	M				70	
VIII	Length of Capillary tube	2m	2				3	
		3m	3				7	
		4m	4				14	
		5m	5				21	
		6m	6				28	
		7m	7				35	
		8m	8				42	
		9m	Q				49	
		10m	A				56	
		Length of capillary tube with Olefin coating	2m	B				18
	3m		C				22	
	4m		H				29	
	5m		D				36	
	6m		J				43	
	7m		E				50	
	8m		F				57	
	9m		K				64	
		10m	G				71	

### Notes

- Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- Digital output (DE protocol) can not be combined with an external zero adjustment function.
- HART Communication can not be combined with Special burn-out feature.
- The lowest output limit is -1.25%(3.8mA).
- Dual diaphragm is not available for JIS63K, ANSI600 and JPI600 for a flange rating.
- Flange rating should be selected based on the operative pressure range.

# ST3000 New Ace Electric Pressure Transmitter

## Remote-sealed diaphragm style

Issued: Spt. 15, 2001	Page: 1-4-60
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Model	Pressure range/style	Service (Fill fluid)	Process connection
JTH940A	35 to 3500kPa(0.35 to 35kgf/cm <sup>2</sup> ) Low pressure	Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil)	Flush diaphragm 2 in. (50mm)/1.5 in.(40mm)
JTH960A	0.7 to 10MPa(7 to 102 kgf/cm <sup>2</sup> ) High pressure	Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil)	Flush diaphragm 2 in. (50mm)/1.5 in.(40mm)

Selections                      Options 1

Basic model No.    - I III IIII IV V VI VII VIII    - IX X XI XII XIII XIV    -Options 2

Options 1, 2 : Refer to page 1-4-70

Basic Model No.	Measuring span	Pressure range/style	Model	Basic price
		35 to 3500kPa(0.35 to 35kgf/cm <sup>2</sup> )	JTH940A	438
		0.7 to 10MPa(7 to 102 kgf/cm <sup>2</sup> )	JTH960A	438

Selections				Additional price		
				JTH940A	JTH960A	
I	Output	4 to 20mA	1		0	
		Digital output (DE protocol)	3	*1,*2	0	
		4 to 20mA (HART protocol)	5	*3,*4	5	
II	Material of wetted part	SUS316 (Diaphragm : SUS316L)	2		0	
		Tantalum *30	4		150	
		SUS316L	8		87	
		Hastelloy C	H		25	
III	Fill Fluid	Regular type (Silicone oil)	1		0	
		For oxygen service (Fluorine oil)	2		62	
		For High temperature service (Silicon oil)	3		62	
IV	Flange rating *29	JIS 10K		A	0	
		JIS 20K		C	20	
		JIS 30K		D	30	
		JIS 63K		F	60	
		ANSI 150		G	0	
		ANSI 300		H	20	
		ANSI 600		J	30	
		JPI 150		N	0	
		JPI 300		P	20	
JPI 600		Q	30			
V	Flange size	2 in. /50mm		3	0	
		1.5 in. /40mm *30		4	0	
VI	Flange type	Standard	1		0	
VII	Flange material/bolt and nut	SUS304/Carbon steel		D	0	0
		SUS304/SUS304		E	10	10
		SUS304/SUS630		F	20	30
		SUS316/Carbon steel		G	40	40
		SUS316/SUS304		H	50	50
		SUS316/SUS630		J	60	70
		SUS316L/Carbon steel		K	50	50
		SUS316L/SUS304		L	60	60
		SUS316L/SUS630		M	70	80
VIII	Length of Capillary tube	2m		2	3	
		3m		3	7	
		4m		4	14	
		5m		5	21	
		Length of capillary tube with Olefin				
	2m		B	18		
	3m		C	22		
	4m		H	29		
	5m		D	36		

### Notes

- Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- Digital output (DE protocol) can not be combined with an external zero adjustment function.
- HART Communication can not be combined with Special burn-out feature.
- The lowest output limit is -1.25%(3.8mA).
- Dual diaphragm is not available for JIS63K, ANSI600 and JPI600 for a flange rating.
- Flange rating should be selected based on the operative pressure range.
- If the fill fluid is for high temperature service and wetted part material is Tantalum, 1.5 in. for flange size is not available.

# ST3000 New Ace Electric Pressure Transmitter Remote-sealed diaphragm style

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Model	Pressure range/style	Service (Fill fluid)	Process connection
JTH940A	35 to 3500kPa(0.35 to 35kgf/cm <sup>2</sup> )	Low pressure	Chlorine service(Fluorine oil)
JTH960A	0.7 to 10MPa(7 to 102 kgf/cm <sup>2</sup> )	High pressure	Chlorine service(Fluorine oil)

Selections

Options 1

Options 1, 2 : Refer to page 1-4-70

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

Basic Model No.			Basic price
Measuring span	35 to 3500kPa(0.35 to 35kgf/cm <sup>2</sup> )	JTH940A	438
	0.7 to 10MPa(7 to 102 kgf/cm <sup>2</sup> )	JTH960A	438

Selections				Additional price		
				JTH940A	JTH960A	
I	Output	4 to 20mA	1		0	
		Digital output (DE protocol)	3	*1, *2	0	
		4 to 20mA (HART protocol)	5	*3, *4	5	
II	Material of	Tantalum	4		150	
III	Fill Fluid	For chlorine service (Fluorine oil)	5		62	
IV	Flange rating *29	JIS 10K	A		0	
		JIS 20K	C		20	
		JIS 30K	D		30	
		JIS 63K	F		60	
		ANSI 150	G		0	
		ANSI 300	H		20	
		ANSI 600	J		30	
		JPI 150	N		0	
		JPI 300	P		20	
		JPI 600	Q		30	
V	Flange size	2 in./50mm	3		0	
		1.5 in./40mm	4		0	
VI	Flange type	Standard	1		0	
VII	Flange material/bolt and nut	SUS304/Carbon steel	D		0	0
		SUS304/SUS304	E		10	10
		SUS304/SUS630	F		20	30
		SUS316/Carbon steel	G		40	40
		SUS316/SUS304	H		50	50
		SUS316/SUS630	J		60	70
		SUS316L/Carbon steel	K		50	50
		SUS316L/SUS304	L		60	60
SUS316L/SUS630	M		70	80		
VIII	Length of Capillary tube	2m	2		3	
		3m	3		7	
		4m	4		14	
		5m	5		21	
	Length of capillary tube with Olefin	2m	B		18	
		3m	C		22	
		4m	H		29	
		5m	D		36	

## Notes

- Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- Digital output (DE protocol) can not be combined with an external zero adjustment function.
- HART Communication can not be combined with Special burn-out feature.
- The lowest output limit is -1.25%(3.8mA).
- Dual diaphragm is not available for JIS63K, ANSI600 and JPI600 for a flange rating.
- Flange rating should be selected based on the operative pressure range.



# ST3000 New Ace Electric Pressure Transmitter

## Remote-sealed diaphragm style

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Model	Pressure range/style	Service (Fill fluid)	Process connection
JTH920A	2.5 to 100kPa (250 to 10,160mmH2O)	Lowest pressure Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil)	Extended flange type 4 in.(100mm)
JTH940A	35 to 3500kPa (0.35 to 35kgf/cm2)	Low pressure Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil)	Extended flange type 4 in.(100mm)
JTH960A	0.7 to 10MPa (7 to 102 kgf/cm2)	High pressure Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil)	Extended flange type 4 in.(100mm)

Selections                      Options 1

Options 1, 2 : Refer to page 1-4-70

Basic model No.    - I III IIII V VI VII VIII    - IX X XI XII XIII XIV    -Options 2

Basic Model No.			Basic price
Measuring span	2.5 to 100kPa(250 to 10,160mmH2O)	JTH920A	438
	35 to 3500kPa(0.35 to 35kgf/cm2)	JTH940A	438
	0.7 to 10MPa(7 to 102 kgf/cm2)	JTH960A	438

Selections				Additional price		
				JTH920A	JTH940A	JTH960A
I	Output	4 to 20mA	1			0
		Digital output (DE protocol)	3	*1, *2		0
		4 to 20mA (HART protocol)	5	*3, *4		5
II	Material of wetted part	SUS316 (Diaphragm : SUS316L)	2			0
		SUS316L	8			75
III	Fill Fluid	Regular type (Silicone oil)	1			0
		For oxygen service (Fluorine oil)	2			62
		For High temperature service (Silicon oil)	3			62
IV	Flange rating *29	JIS 10K	A			0
		JIS 20K	C			20
		JIS 30K	D			30
		ANSI 150	G			0
		ANSI 300	H			20
		JPI 150	N			0
		JPI 300	P			20
V	Flange size	4 in./100mm	1			0
VI	Flange type	Length of extended part 50mm	2			62
		Length of extended part 100mm	3			68
		Length of extended part 150mm	4			75
		Length of extended part 200mm	5			83
		Length of extended part 250mm	6			93
		Length of extended part 300mm	7			103
		VII	Flange material/bolt and nut	SUS304/Carbon steel	D	
SUS304/SUS304	E					10
SUS304/SUS630	F					20
SUS316/Carbon steel	G					40
SUS316/SUS304	H					50
SUS316/SUS630	J					60
SUS316L/Carbon steel	K					50
SUS316L/SUS304	L					60
SUS316L/SUS630	M					70
VIII	Length of Capillary tube	2m	2			3
		3m	3			7
		4m	4			14
		5m	5			21
		6m	6			28
		7m	7			35
		8m	8			42
		9m	Q			49
		10m	A			56
		Length of capillary tube with Olefin connection	2m	B		
	3m		C			22
	4m		H			29
	5m		D			36
	6m		J			43
	7m		E			50
	8m		F			57
	9m		K			64
	10m		G			71

### Notes

- 1 Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- 2 Digital output (DE protocol) can not be combined with an external zero adjustment function.
- 3 HART Communication can not be combined with Special burn-out feature.
- 4 The lowest output limit is -1.25%(3.8mA).
- 29 Flange rating should be selected based on the operative pressure range.

# ST3000 New Ace Electric Pressure Transmitter

## Remote-sealed diaphragm style

Issued: Spt. 15, 2001	Page: 1-4-64
Effective: Dec. 1, 2009	UNIT: 1000YEN

Model	Pressure range/style	Service (Fill fluid)	Process connection
JTH940A	35 to 3500kPa (0.35 to 35kgf/cm <sup>2</sup> )	Low pressure High temperature and vacuum(Silicon oil), High temperature and high vacuum(Silicon oil)	Extended flange type 4 in.(100mm)
JTH960A	0.7 to 10MPa (7 to 102 kgf/cm <sup>2</sup> )	High pressure High temperature and vacuum(Silicon oil), High temperature and high vacuum(Silicon oil)	Extended flange type 4 in.(100mm)

Basic model No.    - I II III IV V VI VII VIII    - IX X XI XII XIII XIV    -Options 2

Options 1, 2 : Refer to page 1-4-70

Basic Model No.			Basic price
Measuring span	35 to 3500kPa(0.35 to 35kgf/cm <sup>2</sup> )	JTH940A	438
	0.7 to 10MPa(7 to 102 kgf/cm <sup>2</sup> )	JTH960A	438

Selections			Additional price		
			JTH940A	JTH960A	
I	Output	4 to 20mA	1	0	
		Digital output (DE protocol)	3 *1, *2	0	
		4 to 20mA (HART protocol)	5 *3, *4	5	
II	Material of wetted part	SUS316 (Diaphragm : SUS316L)	2	0	
		SUS316L	8	75	
III	Fill Fluid	For high temperature vacuum (Silicon oil)	4	296	
		For high temperature high vacuum (Silicon oil)	7	722	
IV	Flange rating *29	JIS 10K	A	0	
		JIS 20K	C	20	
		JIS 30K	D	30	
		ANSI 150	G	0	
		ANSI 300	H	20	
		JPI 150	N	0	
		JPI 300	P	20	
V	Flange size	4 in./100A	1	0	
VI	Flange type	Length of extended part 50mm	2	62	
		Length of extended part 100mm	3	68	
		Length of extended part 150mm	4	75	
		Length of extended part 200mm	5	83	
		Length of extended part 250mm	6	93	
		Length of extended part 300mm	7	103	
VII	Flange material/bolt and nut	SUS304/Carbon steel	D	0	0
		SUS304/SUS304	E	10	10
		SUS304/SUS630	F	20	30
		SUS316/Carbon steel	G	40	40
		SUS316/SUS304	H	50	50
		SUS316/SUS630	J	60	70
		SUS316L/Carbon steel	K	50	50
		SUS316L/SUS304	L	60	60
VIII	Length of Capillary tube	2m	2	3	
		3m	3	7	
		4m	4	14	
		5m	5	21	
		6m	6	28	
		7m	7	35	
		8m	8	42	
		9m	Q	49	
		10m	A	56	

### Notes

- 1 Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- 2 Digital output (DE protocol) can not be combined with an external zero adjustment function.
- 3 *HART Communication can not be combined with Special burn-out feature.*
- 4 The lowest output limit is -1.25%(3.8mA).
- 29 Flange rating should be selected based on the operative pressure range.

# ST3000 New Ace Electric Pressure Transmitter

## Remote-sealed diaphragm style

Issued: Spt. 15, 2001	Page: 1-4-65
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Model	Pressure range/style	Service (Fill fluid)	Process connection
JTH940A	35 to 3500kPa (0.35 to 35kgf/cm <sup>2</sup> )	Low pressure Regular service (Silicon oil), High temperature (Silicon oil), Oxygen service (Fluorine oil)	Extended flange type 3 in.(80mm)/2 in.(50mm)
JTH960A	0.7 to 10MPa (7 to 102 kgf/cm <sup>2</sup> )	High pressure Regular service (Silicon oil), High temperature (Silicon oil), Oxygen service (Fluorine oil)	Extended flange type 3 in.(80mm)/2 in.(50mm)

Selections

Options 1

Options 1, 2 : Refer to page 1-4-70

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

Basic Model No.

Basic Model No.			Basic price
Measuring span	35 to 3500kPa(0.35 to 35kgf/cm <sup>2</sup> )	JTH940A	438
	0.7 to 10MPa(7 to 102 kgf/cm <sup>2</sup> )	JTH960A	438

Selections			Additional price		
			JTH940A	JTH960A	
I	Output	4 to 20mA	1	0	
		Digital output (DE protocol)	3 *1, *2	0	
		4 to 20mA (HART protocol)	5 *3, *4	5	
II	Material of wetted part	SUS316 (Diaphragm : SUS316L)	2	0	
		SUS316L	8	75	
III	Fill Fluid	Regular type (Silicone oil)	1	0	
		For oxygen service (Fluorine oil)	2	62	
		For High temperature service (Silicon oil)	3	62	
IV	Flange rating *29	JIS 10K	A	0	
		JIS 20K	C	20	
		JIS 30K	D	30	
		ANSI 150	G	0	
		ANSI 300	H	20	
		JPI 150	N	0	
		JPI 300	P	20	
V	Flange size	3 in./80 mm	2	0	
		2 in./ 50 mm	3	0	
VI	Flange type	Length of extended part 50mm	2	62	
		Length of extended part 100mm	3	68	
		Length of extended part 150mm	4	75	
		Length of extended part 200mm	5	83	
		Length of extended part 250mm	6	93	
		Length of extended part 300mm	7	103	
VII	Flange material/bolt and nut	SUS304/Carbon steel	D	0	0
		SUS304/SUS304	E	10	10
		SUS304/SUS630	F	20	30
		SUS316/Carbon steel	G	40	40
		SUS316/SUS304	H	50	50
		SUS316/SUS630	J	60	70
		SUS316L/Carbon steel	K	50	50
		SUS316L/SUS304	L	60	60
SUS316L/SUS630	M	70	80		
VIII	Length of Capillary tube	2m	2	3	
		3m	3	7	
		4m	4	14	
		5m	5	21	
		2m	B	18	
	Length of capillary tube with Olefin coating	3m	C	22	
		4m	H	29	
		5m	D	36	

Notes

- Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- Digital output (DE protocol) can not be combined with an external zero adjustment function.
- HART Communication can not be combined with Special burn-out feature.
- The lowest output limit is -1.25%(3.8mA).
- Flange rating should be selected based on the operative pressure range.

# ST3000 New Ace Electric Pressure Transmitter

## Remote-sealed diaphragm style

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Model	Pressure range/style	Service (Fill fluid)	Process connection
JTH940A	35 to 3500kPa (0.35 to 35kgf/cm <sup>2</sup> )	Low pressure High temperature and vacuum(Silicon oil), High temperature and high vacuum(Silicon oil)	Extended flange type 3 in.(80mm)/2 in.(50mm)
JTH960A	0.7 to 10MPa (7 to 102 kgf/cm <sup>2</sup> )	High pressure High temperature and vacuum(Silicon oil), High temperature and high vacuum(Silicon oil)	Extended flange type 3 in.(80mm)/2 in.(50mm)

Selections Options 1

Options 1, 2 : Refer to page 1-4-7C

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

Basic Model No.	Measuring span	Basic price
	35 to 3500kPa(0.35 to 35kgf/cm <sup>2</sup> )	JTH940A 438
	0.7 to 10MPa(7 to 102 kgf/cm <sup>2</sup> )	JTH960A 438

Selections		Additional price			
		JTH940A	JTH960A		
I	Output	4 to 20mA	1	0	
		Digital output (DE protocol)	3	*1, *2 0	
		4 to 20mA (HART protocol)	5	*3, *4 5	
II	Material of wetted part	SUS316 (Diaphragm : SUS316L)	2	0	
		SUS316L	8	75	
III	Fill Fluid	For high temperature vacuum (Silicon oil)	4	296	
		For high temperature high vacuum (Silicon oil)	7	722	
IV	Flange rating *29	JIS 10K	A	0	
		JIS 20K	C	20	
		JIS 30K	D	30	
		ANSI 150	G	0	
		ANSI 300	H	20	
		JPI 150	N	0	
		JPI 300	P	20	
V	Flange size	3 in. /80 mm	2	0	
		2 in./50 mm	3	0	
VI	Flange type	Length of extended part 50mm	2	62	
		Length of extended part 100mm	3	68	
		Length of extended part 150mm	4	75	
VII	Flange material/bolt and nut	SUS304/Carbon steel	D	0	0
		SUS304/SUS304	E	10	10
		SUS304/SUS630	F	20	30
		SUS316/Carbon steel	G	40	40
		SUS316/SUS304	H	50	50
		SUS316/SUS630	J	60	70
		SUS316L/Carbon steel	K	50	50
		SUS316L/SUS304	L	60	60
SUS316L/SUS630	M	70	80		
VIII	Length of Capillary tube	2m	2	3	
		3m	3	7	
		4m	4	14	
		5m	5	21	

### Notes

- Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- Digital output (DE protocol) can not be combined with an external zero adjustment function.
- HART Communication can not be combined with Special burn-out feature.
- The lowest output limit is -1.25%(3.8mA).
- 29 Flange rating should be selected based on the operative pressure range.

# ST3000 New Ace Electric Pressure Transmitter Remote-sealed diaphragm style

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Model	Pressure range/style	High pressure	Service (Fill fluid)	Process connection
JTH960A	0.7 to 10MPa (7 to 102 kgf/cm <sup>2</sup> )	High pressure	Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil)	Button diaphragm type 1 1/2 in. external screw
JTH980A	0.7 to 42MPa (7 to 420kgf/cm <sup>2</sup> )	Super high pressure	Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil)	Button diaphragm type 1 1/2 in. external screw

Selections

Options 1

Options 1, 2 : Refer to page 1-4-70

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

Basic Model No.		Basic price
Measuring span	0.7 to 10MPa(7 to 102 kgf/cm <sup>2</sup> ) JTH960A	438

Selections						Additional price
I	Output	4 to 20mA	1			0
		Digital output (DE protocol)	3	*1,*2		0
		4 to 20mA (HART protocol)	5	*3,*4		5
II	Material of wetted part	SUS316 (Diaphragm : SUS316L)	2			0
		SUS316L	8			25
III	Fill Fluid	Regular type (Silicone oil)	1			0
		For oxygen service (Fluorine oil)	2			62
IV	Flange rating	No flange used	W			0
V	Flange size	G 11/2 Button diaphragm 11/2in. External screw	V			0
VI	Flange type	Standard	1			0
VII	Flange material/bolt and nut	SUS304/Carbon steel		D		0
		SUS304/SUS304 *31		E		10
		SUS304/SUS630		F		30
VIII	Length of Capillary tube	2m	2			3
		3m	3			7
		4m	4			14
		5m	5			21
	Length of capillary tube with Olefin coating	2m			B	
3m				C		22
4m				H		29
5m				D		36

## Notes

- Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- Digital output (DE protocol) can not be combined with an external zero adjustment function.
- HART Communication can not be combined with Special burn-out feature.
- The lowest output limit is -1.25%(3.8mA).
- Available only for JTH960A.

# ST3000 New Ace Electric Pressure Transmitter Remote-sealed diaphragm style

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Model	Pressure range/style	Service (Fill fluid)	Process connection
JTH920A	2.5 to 100kPa (250 to 10,160mmH2O) Lowest pressure	Regular service(Silicon oil), Oxygen service(Fluorine oil)	2in. Wafer diaphragm
JTH940A	35 to 3500kPa (0.35 to 35kgf/cm2) Low pressure	Regular service(Silicon oil), Oxygen service(Fluorine oil)	2in. Wafer diaphragm
JTH960A	0.7 to 10MPa (7 to 102 kgf/cm2) High pressure	Regular service(Silicon oil), Oxygen service(Fluorine oil)	2in. Wafer diaphragm
JTH980A	0.7 to 42MPa (7 to 420kgf/cm2) Super high pressure	Regular service(Silicon oil), Oxygen service(Fluorine oil)	2in. Wafer diaphragm

Selections

Options 1

Options 1, 2 : Refer to page 1-4-70

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

Basic Model No.

Basic Model No.			Basic price
Measuring span	2.5 to 100kPa(250 to 10,160mmH2O)	JTH920A	438
	35 to 3500kPa(0.35 to 35kgf/cm2)	JTH940A	438
	0.7 to 10MPa(7 to 102 kgf/cm2)	JTH960A	438
	0.7 to 42MPa (7 to 420kgf/cm2)	JTH980A	492

Selections				Additional price				
				JTH920A	JTH940A	JTH960A	JTH980A	
I	Output	4 to 20mA	1				0	
		Digital output (DE protocol)	3	*1, *2				0
		4 to 20mA (HART protocol)	5	*3, *4				5
II	Material of wetted part	SUS316 (Diaphragm : SUS316L)	2				0	
		SUS316L	8				25	
III	Fill Fluid	Regular type (Silicone oil)	1				0	
		For oxygen service (Fluorine oil)	2				62	
IV	Flange rating	No flange used	W				0	
V	Flange size	2 in. wafer	W				0	
VI	Flange type	Standard	1				0	
VII	Material of Bolt/nut	Carbon steel	N				0	
		SUS630	Q				20	
VIII	Length of Capillary	2m	2				3	
		3m	3				7	
		4m	4				14	
		5m	5				21	
		6m	6				28	
		7m	7				35	
		8m	8				42	
		9m	Q				49	
		10m	A				56	
			Length of capillary tube with Olefin	2m	B			
3m	C						22	
4m	H						29	
5m	D						36	
6m	J						43	
7m	E						50	
8m	F						57	
9m	K						64	
10m	G						71	

Notes

- Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- Digital output (DE protocol) can not be combined with an external zero adjustment function.
- HART Communication can not be combined with Special burn-out feature.
- The lowest output limit is -1.25%(3.8mA).

# ST3000 New Ace Electric Pressure Transmitter Remote-sealed diaphragm style

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Model	Pressure range/style		Service (Fill fluid)	Process connection
JTH940A	35 to 3500kPa(0.35 to 35kgf/cm <sup>2</sup> )	Low pressure	High temperature and vacuum(Silicon oil), High temperature and high vacuum(Silicon oil)	2in. Wafer diaphragm
JTH960A	0.7 to 10MPa(7 to 102 kgf/cm <sup>2</sup> )	High pressure	High temperature and vacuum(Silicon oil), High temperature and high vacuum(Silicon oil)	2in. Wafer diaphragm

### Selections

### Options 1

Options 1, 2 : Refer to page 1-4-70

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

Basic Model No.	Measuring span	35 to 3500kPa(0.35 to 35kgf/cm <sup>2</sup> )	JTH940A	Basic price
		0.7 to 10MPa(7 to 102 kgf/cm <sup>2</sup> )	JTH960A	438

Selections					Additional price	
					JTH940A	JTH960A
I	Output	4 to 20mA	1		0	
		Digital output (DE protocol)	3	*1, *2	0	
		4 to 20mA (HART protocol)	5	*3, *4	5	
II	Material of wetted part	SUS316L	8		0	
III	Fill Fluid	For high temperature vacuum (Silicon oil)	4		296	
		For high temperature high vacuum (Silicon oil)	7		722	
IV	Flange rating	No flange used	W		0	
V	Flange size	2 in. wafer	W		0	
VI	Flange type	Standard	1		0	
VII	Material of Bolt/nut	Carbon steel	N		0	0
		SUS630	Q		20	30
VIII	Length of Capillary tube	2m	2		3	
		3m	3		7	
		4m	4		14	
		5m	5		21	
		6m	6		28	
		7m	7		35	
		8m	8		42	
		9m	Q		49	
		10m	A		56	

### Notes

- 1 Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- 2 Digital output (DE protocol) can not be combined with an external zero adjustment function.
- 3 HART Communication can not be combined with Special burn-out feature.
- 4 The lowest output limit is -1.25%(3.8mA).

# ST3000 New Ace Electric Pressure Transmitter Remote-sealed diaphragm style

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		Selections	Options 1	Options 2	Additional price
Basic model No.		- I II III IV V VI VII VIII	- IX X XI XII XIII XIV	-Options 2	
<b>Options 1</b>					
IX	Electrical connection / explosion-proof	G1/2, Watertight	X		0
		G1/2, TIS Flameproof with 1 pc. Of cable gland attach	2		14
		G1/2, TIS Flameproof with 2 pcs. Of cable gland attach	3		23
		G1/2, TIS intrinsically safe	K		5
		G1/2 KOSA Explosionproof	P		5
		1/2 NPT, Watertight	A		0
X	Building indicatina smart	None	X		0
		0 to 100 % liner scales	1		25
		Engineering unit scales	2		30
XI	Finish	Standard	X		0
		Corrosion-resistant	A		11
		Corrosion-proof	B		14
		Corrosion-resistant (Silver coating)	D		16
XII	Finish of gasket	Standard (JISRa3,2(12,5S))	X		0
XIII	Burnout feature *1	None	X		0
		Upper limit of output at abnormal condition	U		7
		Lower limit of output at abnormal condition	D		7
XIV	Mounting bracket	None	X		0
		Carbon steel	1		3
		Direct mounting *14 *11	P		30
		SUS304	2		10

Option 2		Additional prices
XX	No options	0
A2	External Zero adjustment *2	30
A4	Lightning arrestor	18
B7	For mounting a high load resistance smart meter	0
C1	Color : Red (Munsell 5R4/13)	20
C2	Color : Yellow (Munsell 2.5Y8/16))	20
C3	Color : Blue (Munsell 7.5BG7/2)	20
C7	Process connection ; reverse	0
D1	Water free finish (included oil free finish) *16 *17	29
D2	Oil free finish *16 *17	19
D3	FEP protective film *24 *14	11
G1	One elbow (left)	2
G2	One elbow (right)	2
G3	2 elbows	4
G6	Adapter for dual diaphragm	Refer to page 1-4-71,72
J8	Special burn-out feature (3.2mA) *18	20
T1	Test report	2
T2	Material certificate *19	21
T5	Strength calculation sheet *20	15
T6	Withstand pressure and air tight test *21	40
T8	Traceability certificate	10
U2	Non-SI unit conformance	0

## Notes

- Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- Digital output (DE protocol) can not be combined with an external zero adjustment function.
- HART Communication can not be combined with Special burn-out feature.
- Dual diaphragm is not available for JIS63K, ANSI600 and JPI600 for a flange rating.
- This selection is not available for high temperature service/high temperature vacuum service/high temperature high vacuum service
- When the fill fluid is for oxygen or chlorine service, there is not needed to select this.
- The carbon steel for meterbody cover material is not available for this option.
- "Lower limit of output at abnormal condition" - code D must be selected for Options 1 "V", Burnout feature.
- Available only for material of wetted part.
- When ordering, designed pressure and designed temperature are required.
- When ordering, withstand pressure and airtight test pressure are required.
- Not available for extended diaphragm type or dual diaphragm.

# ST3000 New Ace Electric Pressure Transmitter

## Remote-sealed diaphragm style

Dual diaphragm adapter (Flush flange 3 in.),

For regular service (fill fluid : silicon oil), oxygen service and chlorine service (fill fluid : I

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Selections      Options

HH - I II III IV V VI VII - VIII

Basic Model No.				Basic price
Adapter for dual diaphragm      HH				72
				Additional price
Selections				
I	Transmitter model number	JTH with 1 adapter	H	0
II	Material of wetted part	SUS316 (Diaphragm:SUS316)	2	0
		Tantalum	4	68
		Hasterlloy C	H	38
		SUS316L	8	3
III	Fill fluid	Regular type (Silicone oil)	1	0
		For oxygen service (Fluorine oil)	2	0
		For Chlorine service (Fluorine oil)	5	0
IV	Flange rating	JIS 10K	A	0
		JIS 20K	C	0
		JIS 30K	D	0
		ANSI 150	G	0
		ANSI 300	H	0
		JPI 150	N	0
		JPI 300	P	0
V	Flange size	3 in. /80 mm	2	0
VI	Flange type	Standard (Flush diaphragm)	1	0
VII	Finish of gasket	Standard	X	0
Options				
VIII		No options	XX	0
	*13	Water free and oil free treatment	D1	0
	*13	Oil free treatment	D2	0
	*13	Material certificate	T2	0
	*13	Pressure test	T7	0

### Notes

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

# ST3000 New Ace Electric Pressure Transmitter

## Remote-sealed diaphragm style

Dual diaphragm adapter (Flush flange 2 in.),

For regular service (fill fluid : silicon oil), oxygen service and chlorine service(fill fluid : FI

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Selections      Options  
 HH - I II III IV V VI VII - VIII

Basic Model No.				Basic price
Adpater for dual diaphragm      HH				72
				Additional price
Selections				
I	Transmitter model number	JTE with 1 adapter	H	0
II	Material of wetted part	SUS316 (Diaphragm:SUS316L)	2	0
		Tantalum	4	88
		SUS316L	8	3
III	Fill fluid	Regular type (Silicone oil)	1	0
		For oxygen service (Fluorine oil)	2	0
		For Chlorine service (Fluorine oil)	5	0
IV	Flange rating	JIS 10K	A	0
		JIS 20K	C	0
		JIS 30K	D	0
		ANSI 150	G	0
		ANSI 300	H	0
		JPI 150	N	0
		JPI 300	P	0
V	Flange size	2 in. /50 mm	3	0
VI	Flange type	Standard (Flush diaphragm)	1	0
VII	Finish of gasket	Standard	X	0
Options				
VIII		No options	XX	0
	*13	Water free and oil free treatment	D1	0
	*13	Oil free treatment	D2	0
	*13	Material certificate	T2	0
	*13	Pressure test	T7	0

Notes

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