

# ST3000 Series 900

## Electric Differential Pressure Transmitter

### Model STD910 (Standard Type for Lowest Differential Pressure)

Model No. : STD910 - I II III - 00000 - Option I - Option II

Basic Model No.

Measuring Span	0.1 to 2.0kPa (10 to 200mmH <sub>2</sub> O)	STD910
----------------	---	--------

Issued : Jun. 1, 2002	Page : 1-1-1(F)
Effective : Apr. 1, 2003	UNIT : 1000YEN

**Fieldbus**

Selection I				Code	Price	Material Code	
I	Material	Meter Body Cover	Adapter Flange	Vent/Drain Plugs	Wetted Parts of Center Body	E	
		SCS14A *1	SCS14A*1	SUS316	Diaphragm:SUS316L	E	320
II	Fill Fluid	Regular type (Silicone oil)				1	0
		For oxygen service (Fluorine oil) *3				2	18
III	Process Connection	Front Connection	Rc1/2 with adapter flange		J	6	
			1/2NPT internal thread with adapter flange		H	6	
			Rc1/4 with adapter flange		M	6	
			1/4NPT internal thread with adapter flange		N	6	
			1/4NPT internal thread on head		P	0	
				-			
				00000			
				-			
Options I	Built-in indicating smart meter(0 to 100% liner scales)			P	20	✓	
	Built-in indicating smart meter(engineering unit scales)			R	30	✓	
	<b>SUS304 Bolt and nuts material *4</b>			<b>W</b>	0	✓	
	<b>SUS630 Bolt and nuts material *4</b>			<b>U</b>	35	✓	
	Corrosion-resistant finish			A	11	✓	
	Corrosion-proof finish			B	14	✓	
	Corrosion-resistant finish, silver paint			D	16	✓	
	Oil Free finish			K	10	✓	
	Long Vent/drain plugs			J	5	✓	
	FM Explosionproof			3	8	✓	
	ATEX Flameproof			6	7	✓	
				-			
Options II	No options			XX	0	✓	
	Water free finish (with Oil free finish)			A7	17	✓	
	NEPSI Flameproof			C1	8	✓	
	Custom calibration			C7	5	✓	
	FOUNDATION fieldbus *33			D6	75	✓	
	One Elbow			E1	2	✓	
	Two Elbows			E2	4	✓	
	Mounting bracket			E9	2	✓	
	Side vent/drain top			F1	4	✓	
	Side vent/drain bottom			F2	4	✓	
	Material certificate			H2	21	✓	
	Fieldbus communication stack BASIC class (used with option D6) *33			L1	0	✓	
	SI unit			U1	5	✓	

\*1 SCS14A (Equivalent SUS316) or SUS316

\*3 In case "For oxygen or chlorine (Fluorine oil) service" is used, "oil free finish - code K" must be selected

\*4 Notes of "Order Entry" : "W" or "U" must be selected.

\*33 "FOUNDATION™ fieldbus - code D6" and "Fieldbus communication stack BASIC class - code L1" must be selected.

# ST3000 Series 900

## Electric Differential Pressure Transmitter

### Model STD920 (Standard Type for Medium Differential Pressure)

Issued : Jun. 1, 2002	Page : 1-1-2(F)
Effective : Jan. 1, 2006	UNIT : 1000YEN

**Fieldbus**

Model No. : STD920 - I II III - 00000 - Option I - Option II

Basic Model No.

Measuring span		0.75 to 100kPa (75 to 10,160mmH <sub>2</sub> O)				STD920							
Selection I						Code	Price	Material Code					
I	Material	Meter Body cover	Adapter Flange	Vent/Drain Plugs	Wetted Parts of Center Body			E	F	H	U	M	P
		SCS14A*1	SCS14A*1	SUS316	Diaphragm:SUS316L Others : SUS316	E	310						
		SCS14A*1	SCS14A*1	SUS316	Diaphragm : Hastelloy C Others : Hastelloy C	F	398						
		SCS14A*1	SCS14A*1	SUS316	Diaphragm : Tantalum Others : Tantalum	H	500						
		SCS14A*1	SCS14A*1	SUS316	Diaphragm:SUS316L Others : SUS316L	U	500						
		PVC	PVC	PVC	Diaphragm : Hastelloy C Others : Hastelloy C *8	M	418						
		PVC	PVC	PVC	Diaphragm : Tantalum Others : Tantalum *8	P	490						
		II		Fill Fluid									
		Regular type (Silicone oil)				1	0	✓	✓	✓	✓	✓	✓
		For oxygen service (Fluorine oil) *3				2	18	✓	✓	✓	✓	✓	✓
		For chlorine service (Fluorine oil) *3				5	18		✓				✓
III	Process Connection	Front Connection	Rc1/2 with adapter flange			J	6	✓	✓				
			1/2NPT internal thread with adapter flange			H	6	✓	✓				
			Rc1/4 with adapter flange			M	6	✓	✓				
			1/4NPT internal thread with adapter flange			N	6	✓	✓				
			1/4NPT internal thread on head			P	0	✓	✓				
	Top or Bottom Connection	Front Connection	Rc1/2 with adapter flange *7			Q	6			✓	✓	✓	✓
			1/2NPT internal thread with adapter flange *7			R	6			✓	✓	✓	✓
			Rc1/4 with adapter flange *7			S	6			✓	✓		
			1/4NPT internal thread with adapter flange *7			T	6			✓	✓		
			1/4NPT internal thread on head *7			U	0			✓	✓		
		-											
		00000											
		-											
Options I		No options				X	0	✓	✓	✓	✓	✓	✓
		Built-in indicating smart meter(0 to 100% liner scales)				P	20	✓	✓	✓	✓	✓	✓
		Built-in indicating smart meter(engineering unit scales)				R	30	✓	✓	✓	✓	✓	✓
		SUS304 Bolt and nuts material				W	11	✓	✓	✓	✓	✓	✓
		SUS630 Bolt and nuts material				U	35	✓	✓	✓	✓	✓	✓
		Corrosion-resistant finish				A	11	✓	✓	✓	✓	✓	✓
		Corrosion-proof finish				B	14	✓	✓	✓	✓	✓	✓
		Corrosion-resistant finish, silver paint				D	16	✓	✓	✓	✓	✓	✓
		Oil Free finish				K	10	✓	✓	✓	✓	✓	✓
		Long Vent/drain plugs				J	5	✓	✓	✓	✓	✓	✓
		FM Explosionproof				3	8	✓	✓	✓	✓	✓	✓
		ATEX Flameproof				6	7	✓	✓	✓	✓	✓	✓
		-											
Options II		No option				XX	0	✓	✓	✓	✓	✓	✓
		Adapter flange for corrosion -resistant application *6				A1	15			✓			✓
		Water free finish (with Oil free finish)				A7	17	✓	✓	✓	✓	✓	✓
		NEPSI Flameproof				C1	8	✓	✓	✓	✓	✓	✓
		Custom calibration				C7	5	✓	✓	✓	✓	✓	✓
		FOUNDATION fieldbus *33				D6	75	✓	✓	✓	✓	✓	✓
		One Elbow				E1	2	✓	✓	✓	✓	✓	✓
		Two Elbows				E2	4	✓	✓	✓	✓	✓	✓
		Mounting bracket				E9	2	✓	✓	✓	✓	✓	✓
		Side vent/drain top				F1	4	✓	✓				
		Side vent/drain bottom				F2	4	✓	✓				
		PED (97/23/EC) Conformity *34 *35				H1	40	✓	✓	✓	✓		
		Material certificate				H2	21	✓	✓	✓	✓	✓	✓
		Max working pressure 20MPa *35 *37				H3	0	✓	✓	✓	✓	✓	✓
		Fieldbus communication stack BASIC class (used with option D6) *33				L1	0	✓	✓	✓	✓	✓	✓
		SI unit				U1	5	✓	✓	✓	✓	✓	✓

\*1 SCS14A (Equivalent SUS316) or SUS316

\*3 In case "For oxygen or chlorine (Fluorine oil) service" is used, "oil free finish - code K" must be selected.

\*6 In case Manifold valve is used and in case code D, H, U or P is used, please select code A1 of OptionII

\*7 Applicable for wetted parts of center body material ;Tantalum,SUS316L

\*8 SUS304 bolts and nuts material (-W) must be selected when PVC meterbody cover is selected (-M or -P).The max. working pressure is 1.5MPa.

\*33 "FOUNDATION™ fieldbus - code D6" and "Fieldbus communication stack BASIC class - code L1" must be selected.

\*34 "PED Conformity" is not applicable for the combination with FM, CSA or NEPSI approvals.

\*35 Not applicable for the combination with "SUS304 Bolts/Nuts"

\*37 Not applicable for the combination with "PED Conformity"

# ST3000 Series 900

## Electric Differential Pressure Transmitter

### Model STD930 (Standard Type for High Differential Pressure)

Model No. : STD930 - I II III - 00000 - Option I - Option II

Basic Model No.

Issued : Jun. 1, 2002	Page : 1-1-3(F)
Effective : Jan. 1, 2006	UNIT : 1000YEN

**Fieldbus**

Measuring span		35 to 700kPa (0.35 to 7kgf/cm <sup>2</sup> )			STD930										
Selection I					Code	Price	Material Code								
I	Material	Meter Body Cover	Adapter Flange	Vent/Drain Plugs	Wetted Parts of Center Body			E	F	H	U	M	P		
		SCS14A*1	SCS14A*1	SUS316	Diaphragm:SUS316L Others : SUS316	E	323								
SCS14A*1	SCS14A*1	SUS316	Diaphragm : Hastelloy C Others : Hastelloy C	F	411										
SCS14A*1	SCS14A*1	SUS316	Diaphragm : Tantalum Others : Tantalum	H	513										
SCS14A*1	SCS14A*1	SUS316	Diaphragm:SUS316L Others : SUS316L	U	513										
PVC	PVC	PVC	Diaphragm : Hastelloy C Others : Hastelloy C *8	M	431										
PVC	PVC	PVC	Diaphragm : Tantalum Others : Tantalum *8	P	503										
II	Fill Fluid	Regular type (Silicone oil)			1	0									
		For oxygen service (Fluorine oil) *3			2	18									
		For chlorine service (Fluorine oil) *3			5	18									
III	Process Connection	Front Connection	Rc1/2 with adapter flange		J	6									
			1/2NPT internal thread with adapter flange		H	6									
			Rc1/4 with adapter flange		M	6									
			1/4NPT internal thread with adapter flange		N	6									
			1/4NPT internal thread on head		P	0									
	Top or Bottom Connection		Rc1/2 with adapter flange *7		Q	6									
			1/2NPT internal thread with adapter flange *7		R	6									
			Rc1/4 with adapter flange *7		S	6									
			1/4NPT internal thread with adapter flange *7		T	6									
			1/4NPT internal thread on head *7		U	0									
					00000										
Options I		No options			X	0									
		Built-in indicating smart meter(0 to 100% liner scales)			P	20									
		Built-in indicating smart meter(engineering unit scales)			R	30									
		SUS304 Bolt and nuts material			W	11									
		SUS630 Bolt and nuts material			U	35									
		Corrosion-resistant finish			A	11									
		Corrosion-proof finish			B	14									
		Corrosion-resistant finish, silver paint			D	16									
		Oil Free finish			K	10									
		Long Vent/drain plugs			J	5									
		FM Explosionproof			3	8									
		ATEX Flameproof			6	7									
					-										
Options II		No option			XX	0									
		Adapter flange for corrosion -resistant application *6			A1	15									
		Water free finish (with Oil free finish)			A7	17									
		NEPSI Flameproof			C1	8									
		Custom calibration			C7	5									
		FOUNDATION fieldbus *33			D6	75									
		One Elbow			E1	2									
		Two Elbows			E2	4									
		Mounting bracket			E9	2									
		Side vent/drain top			F1	4									
		Side vent/drain bottom			F2	4									
		PED (97/23/EC) Conformity *34 *35			H1	40									
		Material certificate			H2	21									
		Max working pressure 20MPa *35 *37			H3	0									
		Fieldbus communication stack BASIC class (used with option D6) *33			L1	0									
		SI unit			U1	5									

\*1 SCS14A (Equivalent SUS316) or SUSF316

\*3 In case "For oxygen or chlorine (Fluorine oil) service" is used, "oil free finish - code K" must be selected.

\*6 In case Manifold valve is used and in case code D, H, U or P is used, please select code A1 of OptionII

\*7 Applicable for wetted parts of center body material ;Tantalum,SUS316L

\*8 SUS304 bolts and nuts material (-W) must be selected when PVC meterbody cover is selected (-M or -P).The max. working pressure is 1.5MPa.

\*33 "FOUNDATION™ fieldbus - code D6" and "Fieldbus communication stack BASIC class - code L1" must be selected.

\*34 "PED Conformity" is not applicable for the combination with FM, CSA or NEPSI approvals.

\*35 Not applicable for the combination with "SUS304 Bolts/Nuts"

\*37 Not applicable for the combination with "PED Conformity"

**ST3000 Series 900**  
**Electric Differential Pressure Transmitter**

Issued : Jun. 1, 2002	Page : 1-1-4(F)
Effective : Jan. 1, 2006	UNIT : 1000YEN

**Model STD960 (Standard Type for Super-high Differential Pressure)**

**Fieldbus**

Model No. : STD960 - I II III - 00000 - Option I - Option II

Basic Model No.

Measuring span	0.25 to 14MPa (2.5 to 140kgf/cm <sup>2</sup> )	STD960
----------------	--	--------

Selection I				Code	Price	Material code				
I	Material	Meter Body Cover	Adapter Flange	Vent/Drain Plugs	Wetted Parts of Center Body		E	F	H	U
		SCS14A*1	SCS14A*1	SUS316	Diaphragm:SUS316L Others : SUS316	E	382			
		SCS14A*1	SCS14A*1	SUS316	Diaphragm : Hastelloy C Others : Hastelloy C	F	470			
		SCS14A*1	SCS14A*1	SUS316	Diaphragm : Tantalum Others : Tantalum	H	572			
		SCS14A*1	SCS14A*1	SUS316	Diaphragm:SUS316L Others : SUS316L	U	572			
II	Fill Fluid	Regular type (Silicone oil)			1	0	✓	✓	✓	✓
		For oxygen service (Fluorine oil) *3			2	18	✓	✓	✓	✓
		For chlorine service (Fluorine oil) *3			5	18	✓	✓	✓	✓
III	Process Connection	Front Connection	Rc1/2 with adapter flange		J	6	✓			
			1/2NPT internal thread with adapter flange		H	6	✓			
			Rc1/4 with adapter flange		M	6	✓			
			1/4NPT internal thread with adapter flange		N	6	✓			
			1/4NPT internal thread on head		P	0	✓			
		Top or Bottom Connection	Rc1/2 with adapter flange *9		Q	6		✓	✓	✓
			1/2NPT internal thread with adapter flange *9		R	6		✓	✓	✓
			Rc1/4 with adapter flange *9		S	6		✓	✓	✓
			1/4NPT internal thread with adapter flange *9		T	6		✓	✓	✓
			1/4NPT internal thread on head *9		U	0		✓	✓	✓
					00000					
Options I		No options			X	0	✓	✓	✓	✓
		Built-in indicating smart meter(0 to 100% liner scales)			P	20	✓	✓	✓	✓
		Built-in indicating smart meter(engineering unit scales)			R	30	✓	✓	✓	✓
		SUS304 Bolt and nuts material			W	11	✓	✓	✓	✓
		SUS630 Bolt and nuts material			U	35	✓	✓	✓	✓
		Corrosion-resistant finish			A	11	✓	✓	✓	✓
		Corrosion-proof finish			B	14	✓	✓	✓	✓
		Corrosion-resistant finish, silver paint			D	16	✓	✓	✓	✓
		Oil Free finish			K	10	✓	✓	✓	✓
		Long Vent/drain plugs			J	5	✓	✓	✓	✓
		FM Explosionproof			3	8	✓	✓	✓	✓
		ATEX Flameproof			6	7	✓	✓	✓	✓
					-					
Options II		No option			XX	0	✓	✓	✓	✓
		Adapter flange for corrosion -resistant application *6			A1	15	✓	✓	✓	✓
		Water free finish (with Oil free finish)			A7	17	✓	✓	✓	✓
		NEPSI Flameproof			C1	8	✓	✓	✓	✓
		Custom calibration			C7	5	✓	✓	✓	✓
		FOUNDATION fieldbus *33			D6	75	✓	✓	✓	✓
		One Elbow			E1	2	✓	✓	✓	✓
		Two Elbows			E2	4	✓	✓	✓	✓
		Mounting bracket			E9	2	✓	✓	✓	✓
		Side vent/drain top			F1	4	✓			
		Side vent/drain bottom			F2	4	✓			
		PED (97/23/EC) Conformity *34 *35			H1	40	✓	✓	✓	✓
		Material certificate			H2	21	✓	✓	✓	✓
		Max working pressure 20MPa *35 *37			H3	0	✓	✓	✓	✓
		Fieldbus communication stack BASIC class (used with option D6) *33			L1	0	✓	✓	✓	✓
		SI unit			U1	5	✓	✓	✓	✓

\*1 SCS14A (Equivalent SUS316) or SUS316

\*3 In case "For oxygen or chlorine (Fluorine oil) service" is used, "oil free finish - code K" must be selected.

\*6 In case Manifold valve is used and in case code D, H, U or P is used, please select code A1 of OptionII

\*9 Applicable for wetted parts of center body material ; HastelloyC or Tantalum

\*33 "FOUNDATION™ fieldbus - code D6" and "Fieldbus communication stack BASIC class - code L1" must be selected.

\*34 "PED Conformity" is not applicable for the combination with FM, CSA or NEPSI approvals.

\*35 Not applicable for the combination with "SUS304 Bolts/Nuts"

\*37 Not applicable for the combination with "PED Conformity"

# ST3000 Series 900

## Electric Differential Pressure Transmitter

Issued : Jun. 1, 2002	Page : 1-1-5(F)
Effective : Jul. 1, 2005	UNIT : 1000YEN

**Model STD921 (High Static Pressure Type for Medium Differential Pressure)**

**Fieldbus**

**Model STD931 (High Static Pressure Type for High Differential Pressure)**

Model No. : STD921 - I II III - 00000 - Option I - Option II

Model No. : STD931 - I II III - 00000 - Option I - Option II

Basic Model No.

Measuring span	2.5 to 100kPa (250 to 10,160mmHzO)	STD921
	35 to 700kPa (0.35 to 7kgf/cm <sup>2</sup> )	STD931

Selection I			Code	Price	Material Code			
I	Material	Meter Body Cover						
		Vent/Drain Plugs			A	E	9	
		Wetted Parts of Center Body						
		Carbon steel	SUS316	Diaphragm:SUS316L Others : SUS316	A		380	
		SCS14A*1	SUS316	Diaphragm:SUS316L Others : SUS316	E		396	
II	Fill Fluid	Regular type (Silicone oil)		1	0	✓	✓	✓
		For oxygen service (Fluorine oil) *3		2	18		✓	
III	Process Connection	Top or Bottom Connection	Rc1/2	Q	0	✓	✓	✓
			1/2NPT internal thread	R	0	✓	✓	✓
			Rc1/4	S	0	✓	✓	✓
			1/4NPT internal thread	T	0	✓	✓	✓
			-					
			00000					
			-					
Options I	No options		X	0	✓	✓	✓	
	Built-in indicating smart meter(0 to 100% liner scales)		P	20	✓	✓	✓	
	Built-in indicating smart meter(engineering unit scales)		R	30	✓	✓	✓	
	SUS304 Bolt and nuts material *12		W	20	✓	✓	✓	
	SUS630 Bolt and nuts material		U	100	✓	✓	✓	
	Corrosion-resistant finish		A	11	✓	✓	✓	
	Corrosion-proof finish		B	14	✓	✓	✓	
	Corrosion-resistant finish, silver paint		D	16	✓	✓	✓	
	Oil Free finish		K	10		✓		
	Long Vent/drain plugs		J	5	✓	✓	✓	
	FM Explosionproof		3	8	✓	✓	✓	
	ATEX Flameproof		6	7	✓	✓	✓	
			-					
Options II	No option		XX	0	✓	✓	✓	
	Water free finish (with Oil free finish)		A7	17		✓		
	NEPSI Flameproof		C1	8	✓	✓	✓	
	Custom calibration		C7	5	✓	✓	✓	
	FOUNDATION fieldbus *33		D6	75	✓	✓	✓	
	One Elbow		E1	2	✓	✓	✓	
	Two Elbows		E2	4	✓	✓	✓	
	Mounting bracket		E9	2	✓	✓	✓	
	PED (97/23/EC) Conformity *34		H1	40	✓	✓	✓	
	Material certificate		H2	21	✓	✓	✓	
	Max working pressure 20MPa *37		H3	0	✓	✓	✓	
	Fieldbus communication stack BASIC class (used with option D6) *33		L1	0	✓	✓	✓	
	SI unit		U1	5	✓	✓	✓	

\*1 SCS14A (Equivalent SUS316) or SUSF316

\*3 In case "For oxygen or chlorine (Fluorine oil) service" is used, "oil free finish - code K" must be selected.

\*12 When SUS304 bolt/nut is selected, max working pressure rating is 23MPa(230kgf/cm<sup>2</sup>).

\*33 "FOUNDATION™ fieldbus - code D6" and "Fieldbus communication stack BASIC class - code L1" must be selected.

\*34 "PED Conformity" is not applicable for the combination with FM, CSA or NEPSI approvals.

\*37 Not applicable for the combination with "PED Conformity"

**ST3000 Series 900**  
**Electric Differential Pressure Transmitter**

Issued : Jun. 1, 2002	Page : 1-1-6(F)
Effective : Jul. 1, 2005	UNIT : 1000YEN

**Model STD961 (High Static Pressure Type for Super-high Differential Pressure) Fieldbus**

Model No. : STD961 - I II III - 00000 - Option I - Option II

Basic Model No.

Measuring Span	0.25 to 14MPa (2.5 to 140kgf/cm <sup>2</sup> )	STD961
----------------	--	--------

Selection I				Code	Price	Material Code			
I	Material	Meter Body Cover	Vent/Drain Plugs	Wetted Parts of Center Body			A	E	9
		Carbon steel	SUS316	Diaphragm : SUS316L Others : SUS316	A	452			
		SCS14A*1	SUS316	Diaphragm : SUS316L Others : SUS316	E	468			
II	Fill Fluid	Regular type (Silicone oil)			1	0	✓	✓	✓
		For oxygen service (Fluorine oil) *3			2	18		✓	
III	Process Connection	Top or Bottom	Rc1/2		Q	0	✓	✓	✓
			1/2NPT internal thread		R	0	✓	✓	✓
			Rc1/4		S	0	✓	✓	✓
			1/4NPT internal thread		T	0	✓	✓	✓
				-					
				00000					
				-					
Options I		No options			X	0	✓	✓	✓
		Built-in indicating smart meter(0 to 100% liner scales)			P	20	✓	✓	✓
		Built-in indicating smart meter(engineering unit scales)			R	30	✓	✓	✓
		SUS304 Bolt and nuts material			W	20	✓	✓	✓
		SUS630 Bolt and nuts material			U	100	✓	✓	✓
		Corrosion-resistant finish			A	11	✓	✓	✓
		Corrosion-proof finish			B	14	✓	✓	✓
		Corrosion-resistant finish, silver paint			D	16	✓	✓	✓
		Oil Free finish			K	10		✓	
		Long Vent/drain plugs			J	5	✓	✓	✓
		FM Explosionproof			3	8	✓	✓	✓
		ATEX Flameproof			6	7	✓	✓	✓
					-				
Options II		No option			XX	0	✓	✓	✓
		Water free finish (with Oil free finish)			A7	17		✓	
		NEPSI Flameproof			C1	8	✓	✓	✓
		Custom calibration			C7	5	✓	✓	✓
		FOUNDATION fieldbus *33			D6	75	✓	✓	✓
		One Elbow			E1	2	✓	✓	✓
		Two Elbows			E2	4	✓	✓	✓
		Mounting bracket			E9	2	✓	✓	✓
		PED (97/23/EC) Conformity *34			H1	40	✓	✓	✓
		Material certificate			H2	21	✓	✓	✓
		Max working pressure 20MPa *37			H3	0	✓	✓	✓
		Fieldbus communication stack BASIC class (used with option D6)*33			L1	0	✓	✓	✓
		SI unit			U1	5	✓	✓	✓

\*1 SCS14A (Equivalent SUS316) or SUSF316

\*3 In case "For oxygen or chlorine (Fluorine oil) service" is used, it's recommended to select "oil free finish - code K"

\*33 "FOUNDATION™ fieldbus - code D6" and "Fieldbus communication stack BASIC class - code L1" must be selected.

\*34 "PED Conformity" is not applicable for the combination with FM, CSA or NEPSI approvals.

\*37 Not applicable for the combination with "PED Conformity"