MDM7000-LT

Smart Pressure Transmitter-Differential Pressure

Flange Diaphragm Seal

Range

Nominal range	Minimum range	Lower (LRL)	Upper（URL）
0.4bar	0.1bar	-0.4bar	0.4bar
2.5bar	0.25bar	-2.5bar	2.5bar
LRV/URV setting: the lower limit value (LRV) and upper limit value (URV) are achieved between the upper and lower limits. If | URV | ≥ LRV | , | URV | must be larger than the minimum pressure; if | URV | ≤ | LRV | , | LRV | must be larger than the minimum pressure. It is recommended to choose a range ratio with the minimum possible value.			

Accuracy

1 Stated reference accuracy include best fit straight line(BFSL), hysteresis, and repeatability as per the standard and reference test conditions. Calibration temperature: 20°C ±5°C , based on Zero value.

2 Total performance is based on combined errors of indoor temperature accuracy, ambient temperature effects and static pressure effects, calculated by the following formula:Total performance=$\pm\sqrt{(E1)^2 + (E2)^2 + (E3)^2}$;

E1=Indoor temperature accuracy E2=Ambient temperature effects E3=Static pressure effects

Linear output accuracy	TD ① ≤5	±0.25%+Diaphragm seal system effects	0.4bar, 2.5bar
	TD>5	±(0.025×0.045TD% + Diaphragm seal system effects	
Square root output accuracy is 1.5 times linear output accuracy.			
Note: ① TD(Turn down) represents the range ratio, TD= Maximum range / Current range [Maximum range = URL (range starts with 0, same as factory calibration range); Current range = SPAN (equivalent to |URV-LRV|)].			

Specifications

Accuracy	±0.2% URL + Diaphragm seal system effects
Range	0.4bar~2.5bar, see the specifications for details
Long-term stability	±0.2% Span/5 years
Ambient temperature effects	The total effect per 10ºC in the range of -20ºC ~80ºC: (0.375+0.125TD)%/10ºC of SPAN
Voltage effects	When the power supply voltage changes within 10.5V/16.5V ~55V DC, its zero point and range change should not exceed ±0.005% URL/V
Mounting position effects	The installation of the transmitter may produce a zero point error, which can be corrected by PV (primary value) =0 reset without any effect on the range.
Vibration effects	＜ 0.1% SPAN as per GB/T18271.3/IEC61298-3
Output signal	4mA~20mA DC, HART
IP rating	IP67
Weight	With DN50 flange: About 12.6kg (excluding capillary tube) With DN80 flange: About 15.5kg (excluding capillary tube)
Note: ① The accuracy is dependent on the range. Please consult the engineer for details. ② 16.5V is the voltage required for adding a 250 Ω resistor to the HART carrier.	

EMC Effects

SN	Test items	Basic Standards	Test Conditions	Performance Level
1	Radiated interference (case)	GB/T 9254.1/CISPR 32	30MHz~1000MHz	Qualified
2	Conducted interference (DC power port)	GB/T 9254.1/CISPR 32	0.15MHz~30MHz	Qualified
3	Electrostatic discharge (ESD) immunity test	GB/T 17626.2/IEC61000-4-2	4kV(Contact), 6kV(Air)	B
4	Radiated, radio-frequency, electromag-netic field immunity test	GB/T 17626.3/IEC61000-4-3	10V/m (80MHz~1GHz)	A
5	Power frequency magnetic field immunity test	GB/T 17626.8/IEC61000-4-8	30A/m	A
6	Electrical fast transient / burst immunity test	GB/T 17626.4/IEC61000-4-4	2kV(5/50ns,100kHz)	B
7	Surge immunity test	GB/T 17626.5/IEC61000-4-5	500V(line to line) 1kV (line to ground) (1.2/50μs)	B
8	Immunity to conducted disturbances induced by radio frequency fields	GB/T 17626.6/IEC61000-4-6	3V(150kHz~80MHz)	A
Note: At performance level A, the performance is normal within the limits of the technical specifications. At performance level B, functions or performance are temporarily reduced or lost, but can be restored by themselves, and the actual operating conditions, storage and data remain unchanged.				

Environmental Conditions

Items	Conditions
Operating temperature	Without LCD display: -40°C ~85°C ; with LCD display: -20°C ~70°C
Storage temperature	Without LCD display: -40°C ~100°C ; with LCD display: -40°C ~85°C
Operating humidity	5%RH~100%RH@40°C

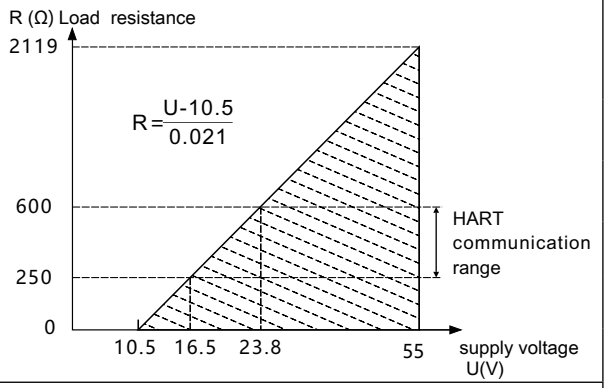
Diaphragm Operating Temperature

Filling oil type ①	Code	Medium temperature	Diaphragm ambient temperature
Normal temperature silicone oil	S	-40°C～ 205°C	-40°C～ 85°C
Inert filling oil	D	-45°C～ 160°C	-40°C～ 85°C
High temperature silicone oil	H	0°C～ 315°C	0°C～ 85°C
Low temperature silicone oil	L	-55°C～ 200°C	-40°C～ 85°C

Note: ① This item is related to the type of silicone oil filled and the o- ring; the temperature range of non-silicone oil is limited to the lowest material temperature range in the system. For short-pipe explosion-proof products, users need to ensure that the surface temperature of the shell is not higher than 80°C. If uncertain, the medium temperature must be ensured not to be higher than the T6/T80°C temperature group.

Power Supply and Load Requirements

Items	Conditions
Power supply voltage	HART communication protocol: 16.5V~55V DC ①
	Intrinsically safe HART communication protocol: 18.5V~28V DC
Load resistance	0Ω~2119Ω ② for operation mode; 250Ω~600Ω for HART communication
Transmission distance	<1000m
Power consumption	
4mA~20mA	≤500mW@24V DC, 20.8mA



Note: ① Non intrinsically safe power supply voltage can be selected as 10.5V. Please consult engineers for details.
② 2119Ω=（55V-10.5V）/21mA

Time Index

Damping time constant: equals to the combined damping time of electronic components and sensor module
Electronic components damping time: 0s~100s configurable
Sensor module damping time(sensor isolated diaphragm and filled silicone oil):≤ 0.2s (**Note**: This item is related to the sensor type and whether there is a diaphragm component.)
Turn-on time: ≤6s
Factory reset time: ≤31s

Hazardous Area

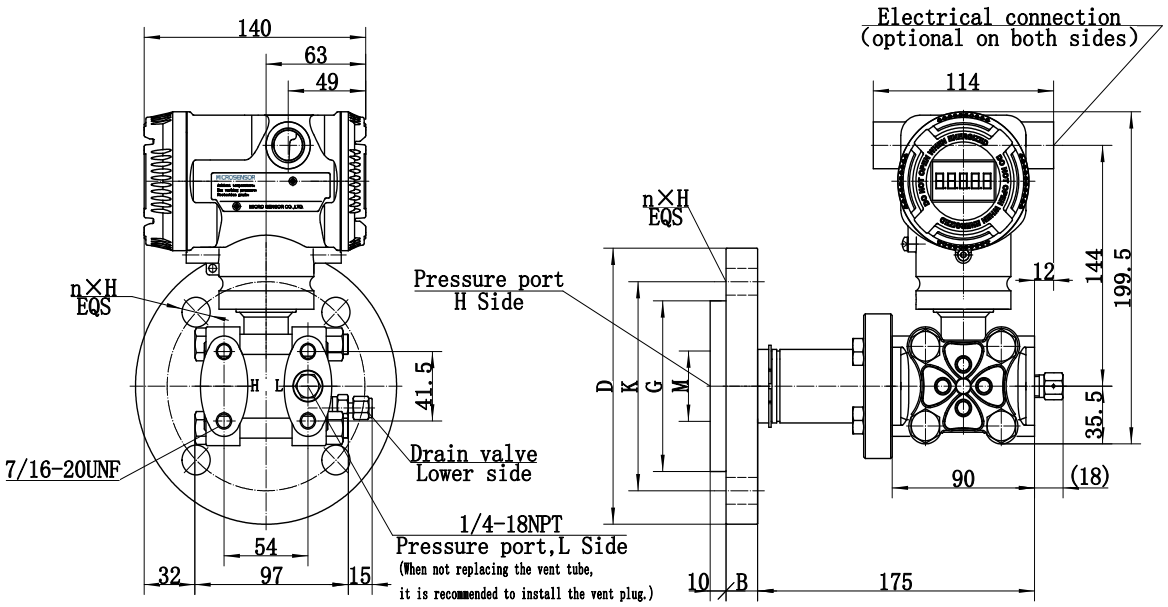
Hazardous area ①	PCEC	Ex db IIC T6 Gb Ex ia IIC T4 Ga
	NEPSI	Ex tb III C T85°C Db
	ATEX	Ex ia IIC T4 Ga II 2G Ex db IIC T6 Gb II 2D Ex tb IIIC T80°C Db
	IECEX	Ex ia IIC T4 Ga Ex db IIC T6 Gb Ex tb IIIC T80°C Db
	CSA	Class I, Division 1, Group A, B, C and D T6 Class II, Division 1 Group E, F and G T80ºC Class III Ex db IIC T6 Gb Class I, Zone 1, AEx db IIC T6 Gb Ex tb IIIC T80°C Db Zone 21, AEx tb IIIC T80°C Db
Note: ① Please consult engineers for details.		

Dimensions

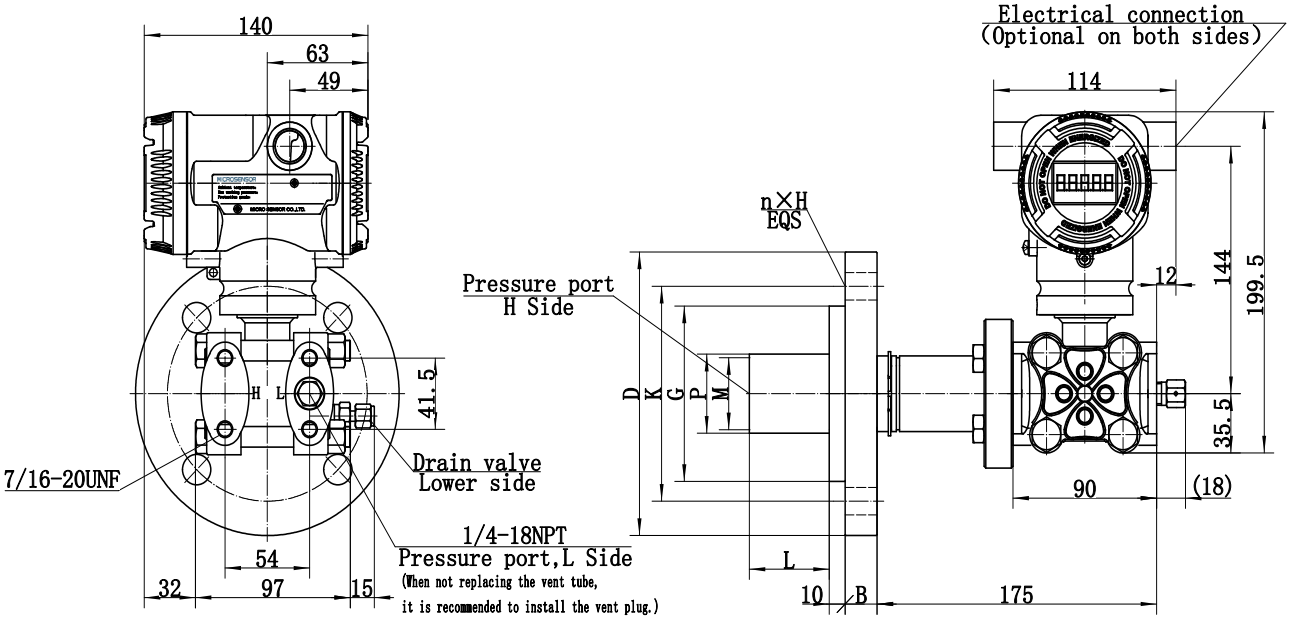
Unit: mm

Note: The gland head is sent as an accessory with the product when it leaves the factory, and it is to be installed by the user.

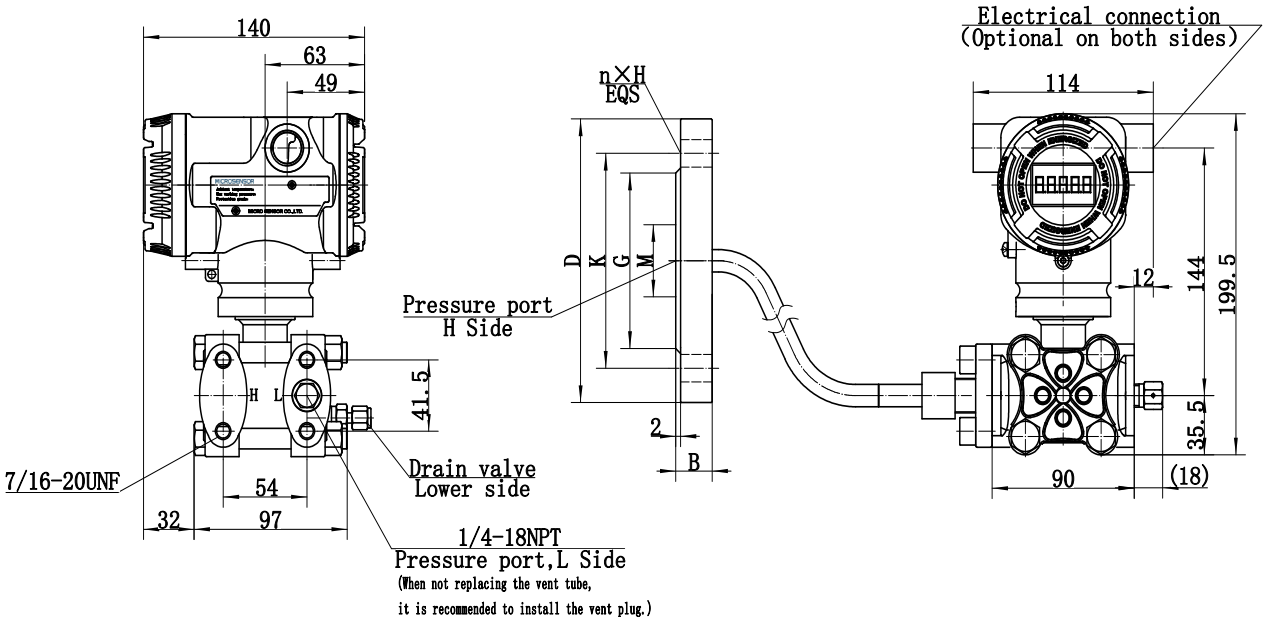
Side Mounted Flange With Display (Same as Without Display)



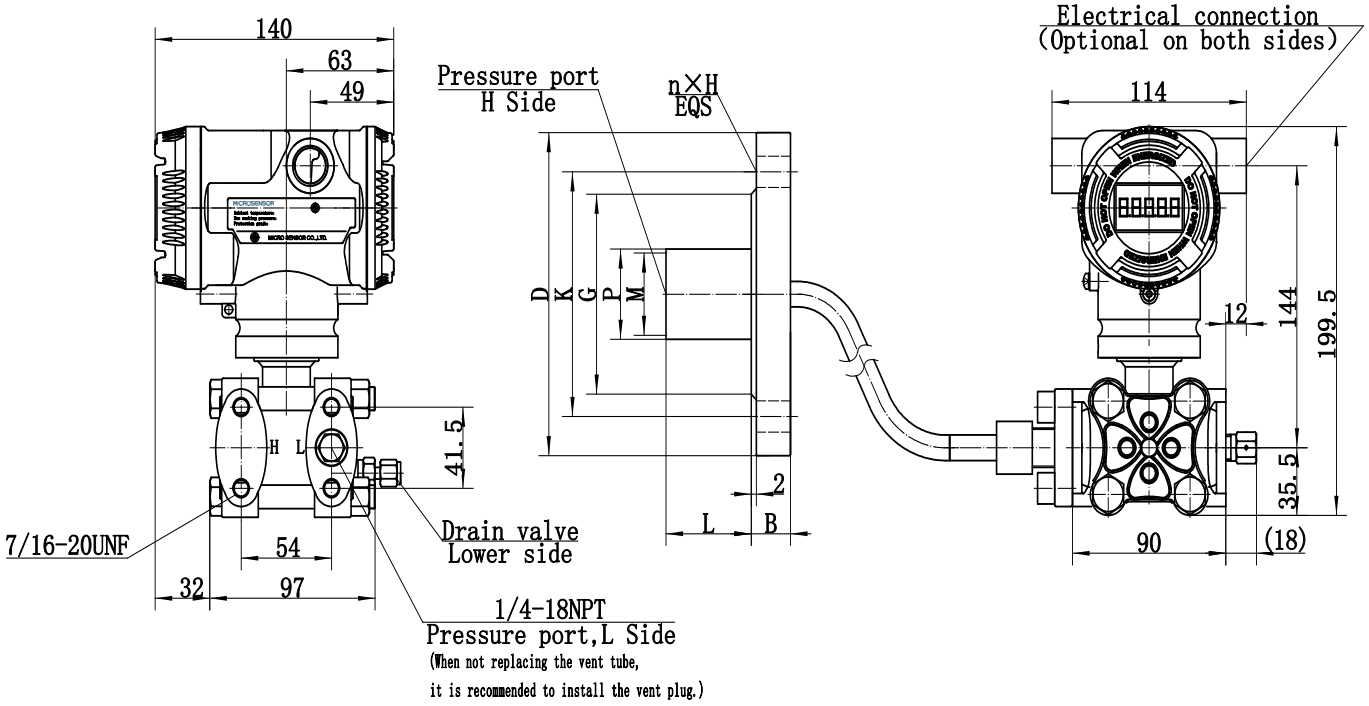
Side Mounted Flange Insertion Sleeve With Display (Same as Without Display)



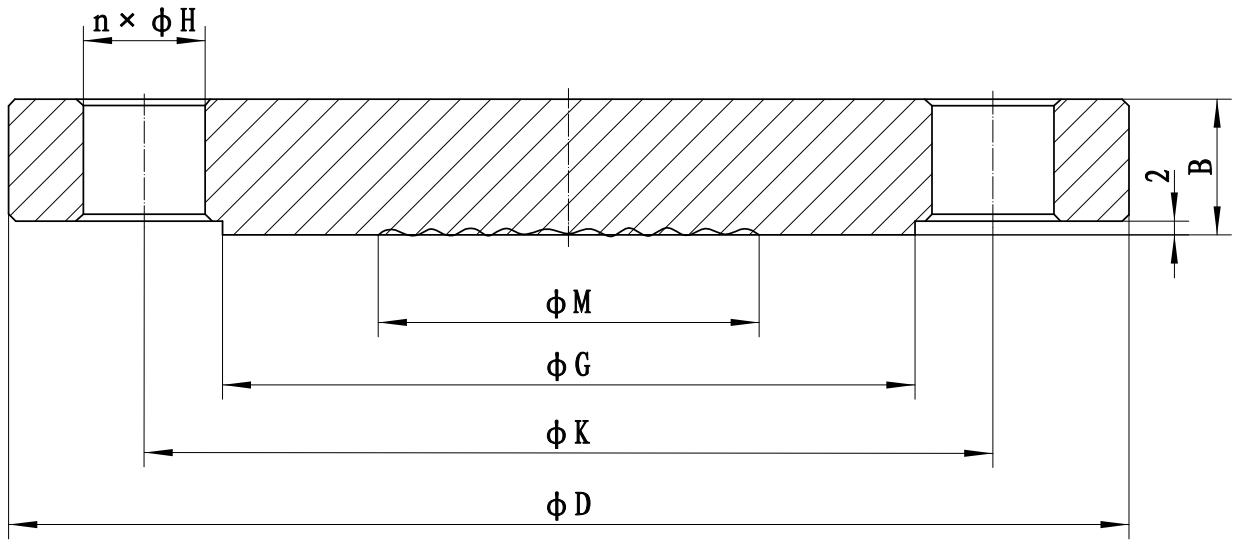
Remote Flange With Display (Same as Without Display)



Remote Flange Insertion Sleeve With Display (Same as Without Display)

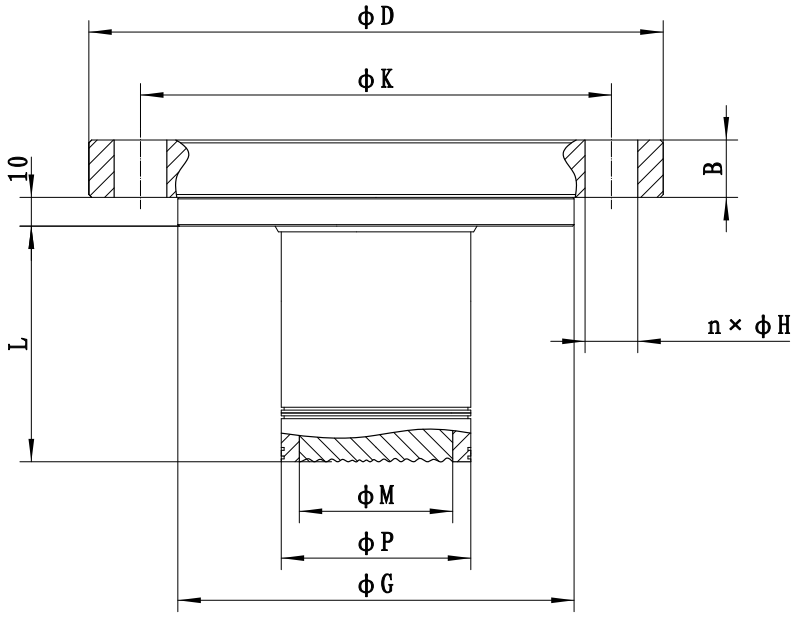


Process Connection



Standard	Specification	Outer diameter (φD)	Thickness（B）	Hole circumference (φK)
HG/T20592-2009	DN50PN10	165	20	125
HG/T20592-2009	DN80PN10	200	20	160
HG/T20592-2009	DN100PN10	220	20	180
RF diameter（φG）	Hole diameter（φH）	Quantity（n）	Corrugation diameter（φM）	
102	18	4	56	
138	18	8	56	
158	18	8	56	

Process Connection



Standard	Specification	Outer diameter(φD)	Thickness(B)	RF diameter(φG)	Hole circumference (φK)
HG/T20592-2009	DN80PN10	200	20	138	160
HG/T20592-2009	DN80PN10	200	20	138	160
HG/T20592-2009	DN80PN10	200	20	138	160
HG/T20592-2009	DN50PN10	165	20	102	125
HG/T20592-2009	DN50PN10	165	20	102	125
HG/T20592-2009	DN50PN10	165	20	102	125

Quantity（n）	Hole diameter（φH）	Insertion sleeve diameter（φP）	Insertion sleeve length（L）	Corrugation diameter （φM）
8	18	66	50	42
8	18	66	100	42
8	18	66	150	42
4	18	46	150	42
4	18	46	50	42
4	18	46	100	42

Order Guide

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Body | **Side Mounted Movable Flange Diaphragm**

Item	Code	Description
MDM7000-LT	——	Monocrystalline Silicon Differential Pressure Transmitter Side Mounted Diaphragm Seal (Side Mounted Movable Flange Insertion Sleeve)
	——	
Application of hazardous area		
	1	China, Flameproof, No.CE23.6650 Ex db IIC T6 Gb, GB/T3836.1-2021, GB/T3836.2-2021
	2	China, Intrinsically safe, No.CE23.7688X Ex ia IIC T4 Ga, GB/T3836.1-2021, GB/T3836.4-2021
	3	China，Dust explosion-proof, GYB24.1215X Ex tb III C T85°C Db, GB/T3836.1-2021, GB/T 3836.31-2021
	4	China, Flameproof, Intrinsically safe
	A	CSA, Flameproof
	B	CSA, Intrinsically safe
	C	CSA, Flameproof, Intrinsically safe
	E	ATEX, Flameproof
	F	ATEX, Intrinsically safe
	G	ATEX, Flameproof, Intrinsically safe
	J	IECEx, Flameproof
	K	IECEx, Intrinsically safe
	L	IECEx, Flameproof, Intrinsically safe
	0	Non-hazardous area
Output signal	H	4mA ～ 20mA DC, HART
Case	S	Stainless steel case with two outlet ports (F) M20×1.5
	U	Stainless steel case with two outlet ports (F) 1/2NPT
	P	Aluminum alloy case with two outlet ports (F) M20×1.5
	N	Aluminum alloy case with two outlet ports (F) 1/2NPT

Note: Please pay attention to the item of lithium battery (Code: LD)

Waterproof/Explosion-proof connector

	Specification	Material	Applicable wire diameter	IP rating
1	M20×1.5 waterproof connector, with plug	PVC	6mm~8mm	IP67
2	Non-flameproof adapter (F) M20×1.5, with plug	316 SS	6mm~8mm	IP67
3	Flameproof adapter (F) 1/2NPT, with plug	316 SS	6mm~8mm	IP67
4	Flameproof adapter (F) M20×1.5, with plug	316 SS	6mm~8mm	IP67
5	Flameproof adapter (F) G1/2, with plug	316 SS	6mm~8mm	IP67

Note: Flameproof configuration is applicable to PCEC/ATEX/IECEx standards. Flameproof adapter with CCC certificate.Please contact the engineer if double sealing is required.

Display	N	Without LCD display
	L	Display module, -20°C ~70°C
	—	

Sensor module range

	Nominal range	Minimum range	Lower (LRL)	Upper (URL)
2	0.4bar	0.1bar	-0.4bar	0.4bar
3	2.5bar	0.25bar	-2.5bar	2.5bar

Low pressure side wetted parts					
		Diaphragm	Flange block	Discharge valve/plug	Sealings
	A	316L	316	316	FKM
	B	316L	316	316	Stainless steel frame PTFE
	C	HC-276	316	316	FKM
	D	HC-276	316	316	Stainless steel frame PTFE

Low pressure side clamp flange process connection		Specifications	Drain/vent valve position	Thread	Mounting method	
	2	Female 1/4-18NPT	Above the side of flange	7/16-20UNF (F)	Horizontal	
	3	Female 1/4-18NPT	Under the side of flange	7/16-20UNF(F)	Horizontal	

Low pressure side fill oil	S	Normal temperature silicone oil（Medium temperature : -40°C ~205°C ,diaphragm ambient environment: -40°C ~85°C）
	D	Inert oil（Medium temperature : -45°C ~160°C ,diaphragm ambient environment: -40°C ~85°C）
	H	High temperature silicone oil（Medium temperature: 0°C ~315°C , diaphragm ambient environment: 0°C ~85°C）
	L	Low temperature silicone oil（Medium temperature: -55°C ~200°C , diaphragm ambient environment: -40°C ~85°C）
Clamp flange fastener	6	Bolts, nuts and other assemblies, 316 SS
	—	
Diaphragm connection position	H	Differential pressure transmitter high pressure side
Diaphragm seal system code	N	Side mounted movable flange
	—	

Flange standard	2	HG/T-20592	
	1	EN1092-1	
	5	HG/T-20615	
	6	ANSI/ASME B16.5	
Flange diameter			Applicable standard
	B	DN50	HG/T-20592, EN1092-1
	C	DN80	HG/T-20592, EN1092-1
	D	DN100	HG/T-20592, EN1092-1
	2	2inch	HG/T-20615, ANSI/ASME B16.5
	3	3inch	HG/T-20615, ANSI/ASME B16.5
	4	4inch	HG/T-20615, ANSI/ASME B16.5

Pressure class			Applicable standard	Applicable flange diameter
	1	PN10/PN16	HG/T-20592, EN1092-1	DN50, DN80, DN100
	2	PN25/PN40	HG/T-20592, EN1092-1	DN50, DN80, DN100
	3	PN63	HG/T-20592, EN1092-1	DN50, DN80
	4	PN100	HG/T-20592, EN1092-1	DN50, DN80
	A	Class 150	HG/T-20615, ANSI/ASME B16.5	2inch, 3inch, 4inch
	B	Class 300	HG/T-20615, ANSI/ASME B16.5	2inch, 3inch, 4inch
	C	Class 600	HG/T-20615, ANSI/ASME B16.5	2inch, 3inch

Note: The maximum static pressure or overload depends on the flange pressure class

Flange material	6	316 SS
Blind sealing face	1	RF Raised face (Flange diameter DN25~DN100 or 2in~4in, flange pressure PN10~PN160 or Class 150~Class 2500)
	A	FM Female face (Flange diameter DN25~DN100 or 2in~4in, flange pressure PN10~PN160 or Class300~Class2500)
	B	M Male face (Flange diameter DN25~DN100 or 2in~4in, flange pressure PN10~PN160 or Class300~Class2500）
	C	RJ Ring joint face (Flange diameter DN25~DN100 or 2in~4in, flange pressure PN63~PN160 or Class150~Class2500）

Note: For details about FM, M, RJ faces, please consult the engineer

Wetted parts material		Please see the material list of wetted parts for details	
		Blind	Measuring diaphragm
	6A	316 SS	316L
	6B	316 SS	Hastelloy C-276
	6C	316 SS	Tantalum
	6D	316 SS	Titanium
	6E	316 SS	Monel
High pressure side fill oil	S	Normal temperature silicone oil（Medium temperature : -40℃ ~205℃ ,diaphragm ambient environment：-40℃ ~85℃）	
	D	Inert oil（Medium temperature :-45℃ ~160℃ ,diaphragm ambient environment:-40℃ ~85℃）	
	H	High temperature silicone oil（Medium temperature:0℃ ~315℃ ,diaphragm ambient environment:0℃ ~85℃）	
	L	Low temperature silicone oil（Medium temperature:-55℃ ~200℃ ,diaphragm ambient environment:-40℃ ~85℃）	
Factory calibration range	CAL	Provides Micro Sensor standard verification report according to the range, and the default linear output **Contract specifies:** LRL - URL, display unit*	
Options		Description (Detailed specifications as following, multiple options or null)	
High vacuum high temperature	/V	High vacuum and high temperature process diaphragm (if this option is selected, the accuracy will be affected and can only up to 0.2%)	
Process connection accessories	/D1	T-shaped adapter (M) M20×1.5 and vent tube Φ14mm× 2mm× 30mm, 30, 316 SS	
	/D2	Waist-shaped adapter, 1/2-14NPT (F), 316SS	
Verification report	/Q1	Provide the Micro Sensor verification data according to user requirements **Contract specifies:** LRL - URL, display unit*	
Note: Standard format follows the Micro Sensor's specifications. Select this option and provide the template if the customer specifies a format			
Damping time setting	/ST	Adjustable range 0s~100s, default 0s **Contract specifies:** Damping time*	
Fault alarm setting	/WH	High alarm current value，20.8mA	
	/WL	Low alarm current value，3.8mA，default	
	/WS	Other saturation current values, specified within the range of 3.6mA~3.8mA or 20mA~22mA **Contract specifies:** saturation current values *	
Product certificate	/QE	Standard format follows the Micro Sensor's specifications. Select this option and provide the template if the customer specifies a format	
Identification plate	/PT	Product is shipped with an identification plate **Contract specifies:** Identification number, not exceeding 16 characters	
Integrated valve manifold	/VT	Differential pressure transmitter is factory assembled with Micro Sensor valve manifold See attachment for order guide of valve manifold **Contract specifies:** Complete model of Micro Sensor valve manifold*	
Leakage test report	/QD4	PN10/PN16 (class150), Nitrogen (N_2) or air, pressure holding for 10 minutes, provide Micro Sensor standard leakage test report	
	/QD5	PN25/PN40(class300),Nitrogen (N_2) or air, pressure holding for 10 minutes, provide Micro Sensor standard leakage test report	
	/QD6	PN63, Nitrogen (N_2) or air, pressure holding for 10 minutes, provide Micro Sensor standard leakage test report	
	/QD7	PN100(class600),Nitrogen (N_2) or air, pressure holding for 10 minutes, provide Micro Sensor standard leakage test report	
Note: The test pressure is the same as the flange pressure class			
HART configuration	/H5	HART5 configuration	
Diaphragm with gold plated	/J3	Single diaphragm on high pressure side（5μ）	
	/J4	Double diaphragms on high and low pressure sides（5μ）	
Diaphragm spraying	/T1	High pressure side single flange	
Diaphragm sticking	/PFA	The diaphragm is stuck with PFA film, applicable to non-vacuum situations (pressure ≥ 0)	

Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts

Note: Please check the fill oil. Determine whether the inert filling oil is required (code: D)

Approvals	/CS1	CCS, China Classification Society, TJ23PTB00014
	/CS2	DNV, Det Norske Veritas
	/CS3	BV, Bureau Veritas
	/CS4	ABS, American Bureau of Shipping, 24-2536413-PDA
	/CS5	LR, Lloyd's Register
	/CS6	KR, Korean Register
	/CS7	NK, Nippon Kaiji Kyokai
	/CS8	RS, Russian Maritime Register of Shipping

Note: Except for the CCS approval, please consult the engineer for others.

Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry
High-accuracy	/HAC	High-accuracy calibration according to the user's specified range **Contract specifies:** Range of use (within sensor's limit), LRL-URL, display unit, accuracy *
Language	/LE	English nameplate, operation manual, product certificate, etc.
Delivery service	/XM	Provide customer requested content according to project delivery standards
Extended warranty period	/Y3	3-year warranty
	/Y5	5-year warranty

***Note:** The specifications required for these options should be specified in the contract

Example : MDM7000-LT-0HP1L-2A2S1-HN-2B14616AS/D1-【CAL: 0-0.4bar】

Order Guide

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Body | **Side Mounted Movable Flange Diaphragm**

Item	Code	Description
MDM7000-LT	——	Monocrystalline Silicon Differential Pressure Transmitter Side Mounted Diaphragm Seal (Side Mounted Movable Flange Insertion Sleeve)
	——	
Application of hazardous area		
	1	China, Flameproof, No.CE23.6650 Ex db IIC T6 Gb，GB/T3836.1-2021，GB/T3836.2-2021
	2	China, Intrinsically safe, No.CE23.7688X Ex ia IIC T4 Ga，GB/T3836.1-2021，GB/T3836.4-2021
	3	China，Dust explosion-proof，GYB24.1215X Ex tb III C T85°C Db, GB/T3836.1-2021, GB/T 3836.31-2021
	4	China, Flameproof, Intrinsically safe
	A	CSA, Flameproof
	B	CSA, Intrinsically safe
	C	CSA, Flameproof, Intrinsically safe
	E	ATEX, Flameproof
	F	ATEX, Intrinsically safe
	G	ATEX, Flameproof, Intrinsically safe
	J	IECEx, Flameproof
	K	IECEx, Intrinsically safe
	L	IECEx, Flameproof, Intrinsically safe
	0	Non-hazardous area
Output signal	H	4mA~20mA DC, HART
Case	S	Stainless steel case with two outlet ports (F) M20×1.5
	U	Stainless steel case with two outlet ports (F) 1/2NPT
	P	Aluminum alloy case with two outlet ports (F) M20×1.5
	N	Aluminum alloy case with two outlet ports (F) 1/2NPT

Note: Please pay attention to the item of lithium battery (Code: LD)

Waterproof/explosion-proof connector

	Specification	Material	Applicable wire diameter	IP rating
1	M20×1.5 waterproof connector, with plug	PVC	6mm~8mm	IP67
2	Non-flameproof adapter (F) M20×1.5, with plug	316 SS	6mm~8mm	IP67
3	Flameproof adapter (F) 1/2NPT, with plug	316 SS	6mm~8mm	IP67
4	Flameproof adapter (F) M20×1.5, with plug	316 SS	6mm~8mm	IP67
5	Flameproof adapter (F) G1/2, with plug	316 SS	6mm~8mm	IP67

Note: Flameproof configuration is applicable to PCEC/ATEX/IECEx standards.Flameproof adapter with CCC certificate. Please contact the engineer if double sealing is required.

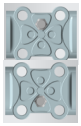
Display	N	Without LCD display
	L	Display module, -20°C ~70°C
	——	

Sensor module range

	Nominal range	Minimum range	Lower (LRL)	Upper (URL)
2	0.4bar	0.1bar	-0.4bar	0.4bar
3	2.5bar	0.25bar	-2.5bar	2.5bar

Low pressure side wetted parts		Diaphragm	Flange block	Discharge valve/plug	Sealings
	A	316L	316	316	FKM
	B	316L	316	316	Stainless steel frame PTFE
	C	HC-276	316	316	FKM
	D	HC-276	316	316	Stainless steel frame PTFE

Low pressure side clamp flange process connection		Specifications	Drain/vent valve position	Thread	Mounting method
	2	Female 1/4-18NPT	Above the side of flange	7/16-20UNF (F)	Horizontal
	3	Female 1/4-18NPT	Under the side of flange	7/16-20UNF(F)	Horizontal



Low pressure side fill oil	S	Normal temperature silicone oil（Medium temperature :-40°C ~205°C ,diaphragm ambient environment：-40°C ~85°C）
	D	Inert oil（Medium temperature : -45°C ~160°C ,diaphragm ambient environment: -40°C ~85°C）
	H	High temperature silicone oil（Medium temperature: 0°C ~315°C , diaphragm ambient environment: 0°C ~85°C）
	L	Low temperature silicone oil（Medium temperature: -55°C ~200°C , diaphragm ambient environment: -40°C ~85°C）
Clamp flange fastener	6	Bolts, nuts and other assemblies, 316 SS
—		
Diaphragm connection position	H	Differential pressure transmitter high pressure side
Diaphragm seal system code	M	Side mounted movable flange insertion sleeve
—		

Flange standard	2	HG/T-20592	
	1	EN1092-1	
	5	HG/T-20615	
	6	ANSI/ASME B16.5	
Flange diameter			Applicable standard
	B	DN50	HG/T-20592, EN1092-1
	C	DN80	HG/T-20592, EN1092-1
	D	DN100	HG/T-20592, EN1092-1
	2	2inch	HG/T-20615, ANSI/ASME B16.5
	3	3inch	HG/T-20615, ANSI/ASME B16.5
	4	4inch	HG/T-20615, ANSI/ASME B16.5

Pressure class			Applicable standard	Applicable flange diameter
	1	PN10/PN16	HG/T-20592, EN1092-1	DN50, DN80, DN100
	2	PN25/PN40	HG/T-20592, EN1092-1	DN50, DN80, DN100
	3	PN63	HG/T-20592, EN1092-1	DN50, DN80
	4	PN100	HG/T-20592, EN1092-1	DN50, DN80
	A	Class 150	HG/T-20615, ANSI/ASME B16.5	2inch, 3inch, 4inch
	B	Class 300	HG/T-20615, ANSI/ASME B16.5	2inch, 3inch, 4inch
	C	Class 600	HG/T-20615, ANSI/ASME B16.5	2inch, 3inch

Note: The maximum static pressure or overload depends on the flange pressure class

Flange material	6	316 SS
Blind sealing face	1	RF Raised face (Flange diameter DN25~DN100 or 2in~4in, flange pressure PN10~PN160 or Class 150~Class 2500)
	A	FM Female face (Flange diameter DN25~DN100 or 2in~4in, flange pressure PN10~PN160 or Class300~Class2500)
	B	M Male face (Flange diameter DN25~DN100 or 2in~4in, flange pressure PN10~PN160 or Class300~Class2500）
	C	RJ Ring joint face (Flange diameter DN25~DN100 or 2in~4in, flange pressure PN63~PN160 or Class150~Class2500）

Note: For details about FM, M, RJ faces, please consult the engineer

Insertion sleeve diameter			Applicable flange diameter
	4	46mm	DN50, 2inch
	6	66mm	DN80, 3inch
	7	77mm	DN100, 4inch
Insertion sleeve length	A	50mm	
	B	100mm	
	C	150mm	
	D	200mm	
Insertion sleeve material	6	316 SS	
Wetted parts material		Please see the material list of wetted parts for details	
		Blind	Measuring diaphragm
	6A	316 SS	316L
	6B	316 SS	Hastelloy C-276
	6C	316 SS	Tantalum
	6D	316 SS	Titanium
	6E	316 SS	Monel
High pressure side fill oil	S	Normal temperature silicone oil（Medium temperature : -40°C ~205°C ,diaphragm ambient environment：-40°C ~85°C）	
	D	Inert oil（Medium temperature :-45°C ~160°C ,diaphragm ambient environment:-40°C ~85°C）	
	H	High temperature silicone oil（Medium temperature:0°C ~315°C ,diaphragm ambient environment:0°C ~85°C）	
	L	Low temperature silicone oil（Medium temperature:-55°C ~200°C ,diaphragm ambient environment:-40°C ~85°C）	
Factory calibration range	CAL	Provides Micro Sensor standard verification report according to the range, and the default linear output **Contract specifies:** LRL - URL, display unit*	
Options		Description (Detailed specifications as following, multiple options or null)	
High vacuum high temperature	/V	High vacuum and high temperature process diaphragm (if this option is selected, the accuracy will be affected and can only up to 0.2%)	
Process connection accessories	/D1	T-shaped adapter (M) M20×1.5 and vent tube Φ14mm× 2mm× 30mm, 316 SS	
	/D2	Waist-shaped adapter, 1/2-14NPT (F), 316SS	
Verification report	/Q1	Provide the Micro Sensor verification data according to user requirements **Contract specifies:** LRL - URL, display unit*	
Note: Standard format follows the Micro Sensor's specifications. Select this option and provide the template if the customer specifies a format			
Damping time setting	/ST	Adjustable range 0s~100s, default 0s **Contract specifies:** Damping time*	
Fault alarm setting	/WH	High alarm current value，20.8mA	
	/WL	Low alarm current value，3.8mA，default	
	/WS	Other saturation current values, specified within the range of 3.6mA~3.8mA or 20mA~22mA **Contract specifies:** saturation current values *	
Product certificate	/QE	Standard format follows the Micro Sensor's specifications. Select this option and provide the template if the customer specifies a format	
Identification plate	/PT	Product is shipped with an identification plate **Contract specifies:** Identification number, not exceeding 16 characters	
Integrated valve manifold	/VT	Differential pressure transmitter is factory assembled with Micro Sensor valve manifold See attachment for order guide of valve manifold **Contract specifies:** Complete model of Micro Sensor valve manifold*	

Leakage test report	/QD4	PN10/PN16（class150), Nitrogen (N_2) or air, pressure holding for 10 minutes, provide Micro Sensor standard leakage test report
	/QD5	PN25/PN40（class300), Nitrogen (N_2) or air, pressure holding for 10 minutes, provide Micro Sensor standard leakage test report
	/QD6	PN63, Nitrogen (N_2) or air, pressure holding for 10 minutes, provide Micro Sensor standard leakage test report
	/QD7	PN100（class600), Nitrogen (N_2) or air, pressure holding for 10 minutes, provide Micro Sensor standard leakage test report

Note: The test pressure is the same as the flange pressure class

HART configuration	/H5	HART5 configuration
Diaphragm with gold plated	/J3	Single diaphragm on high pressure side（5μ）
	/J4	Double diaphragms on high and low pressure sides（5μ）
Diaphragm spraying	/T3	High pressure side single flange
Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts

Note: Please check the fill oil. Determine whether the inert filling oil is required (code: D).

Approvals	/CS1	CCS, China Classification Society , TJ23PTB00014
	/CS2	DNV, Det Norske Veritas
	/CS3	BV, Bureau Veritas
	/CS4	ABS, American Bureau of Shipping, 24-2536413-PDA
	/CS5	LR, Lloyd's Register
	/CS6	KR, Korean Registe
	/CS7	NK, Nippon Kaiji Kyokai
	/CS8	RS, Russian Maritime Register of Shipping

Note: Except for the CCS approval, please consult the engineer for others.

Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry
High-accuracy	/HAC	High-accuracy calibration according to the user's specified range **Contract specifies:** Range of use (within sensor's limit), LRL - URL, display unit, accuracy*
Language	/LE	English nameplate, operation manual, product certificate, etc.
Delivery service	/XM	Provide customer requested content according to project delivery standards
Extended warranty period	/Y3	3-year warranty
	/Y5	5-year warranty

***Note:** The specifications required for these options should be specified in the contract.

Example: MDM7000-LT-1HP1L-2A1S1-HM-2B14614A66AS/D1-【CAL: 0-0.4bar】

Order Guide

MDM7000-LT — □□□□□ — □ — HF — □□□□□□□□ — □□□□□

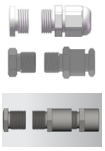
Body | Remote Fixed Flange Diaphragm

Item	Code	Description
MDM7000-LT	——	Monocrystalline Silicon Differential Pressure Transmitter With Remote Diaphragm Seal (Remote Fixed Flange)
	——	
Application of hazardous area		
	1	China, Flameproof, No.CE23.6650 Ex db IIC T6 Gb，GB/T3836.1-2021，GB/T3836.2-2021
	2	China, Intrinsically safe, No.CE23.7688X Ex ia IIC T4 Ga，GB/T3836.1-2021，GB/T3836.4-2021
	3	China，Dust explosion-proof，GYB24.1215X Ex tb III C T85°C Db, GB/T3836.1-2021, GB/T 3836.31-2021
	4	China, Flameproof, Intrinsically safe
	A	CSA, Flameproof
	B	CSA, Intrinsically safe
	C	CSA, Flameproof, Intrinsically safe
	E	ATEX, Flameproof
	F	ATEX, Intrinsically safe
	G	ATEX, Flameproof, Intrinsically safe
	J	IECEx, Flameproof
	K	IECEx, Intrinsically safe
	L	IECEx, Flameproof, Intrinsically safe
	0	Non-hazardous area
Output signal	H	4mA~20mA DC, HART
Case	S	Stainless steel case with two outlet ports (F) M20×1.5
	U	Stainless steel case with two outlet ports (F) 1/2NPT
	P	Aluminum alloy case with two outlet ports (F) M20×1.5
	N	Aluminum alloy case with two outlet ports (F) 1/2NPT

Note: Please pay attention to the item of lithium battery (Code: LD)

Waterproof/explosion-proof connector

	Specification	Material	Applicable wire diameter	IP rating
1	M20×1.5 waterproof connector, with plug	PVC	6mm~8mm	IP67
2	Non-flameproof adapter (F) M20×1.5, with plug	316 SS	6mm~8mm	IP67
3	Flameproof adapter (F) 1/2NPT, with plug	316 SS	6mm~8mm	IP67
4	Flameproof adapter (F) M20×1.5, with plug	316 SS	6mm~8mm	IP67
5	Flameproof adapter (F) G1/2, with plug	316 SS	6mm~8mm	IP67



Note: Flameproof configuration is applicable to PCEC/ATEX/IECEx standards. Flameproof adapter with CCC certificate.Please contact the engineer if double sealing is required.

Display	N	Without LCD display
	L	Display module, -20°C ~70°C

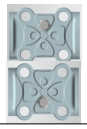
——

Sensor module range

	Nominal range	Minimum range	Lower (LRL)	Upper (URL)
2	0.4bar	0.1bar	-0.4bar	0.4bar
3	2.5bar	0.25bar	-2.5bar	2.5bar

Low pressure side wetted parts		Diaphragm	Flange block	Discharge valve/plug	Sealings
	A	316L	316	316	FKM
	B	316L	316	316	Stainless steel frame PTFE
	C	HC-276	316	316	FKM
	D	HC-276	316	316	Stainless steel frame PTFE

Low pressure side clamp flange process connection		Specifications	Drain/vent valve position	Thread	Mounting method
	2	Female 1/4-18NPT	Above the side of flange	7/16-20UNF (F)	Horizontal
	3	Female 1/4-18NPT	Under the side of flange	7/16-20UNF(F)	Horizontal



Low pressure side fill oil	S	Normal temperature silicone oil（Medium temperature :-40°C ~205°C ,diaphragm ambient environment：-40°C ~85°C）
	D	Inert oil（Medium temperature : -45°C ~160°C ,diaphragm ambient environment: -40°C ~85°C）
	H	High temperature silicone oil（Medium temperature: 0°C ~315°C , diaphragm ambient environment: 0°C ~85°C）
	L	Low temperature silicone oil（Medium temperature: -55°C ~200°C , diaphragm ambient environment: -40°C ~85°C）
Clamp flange fastener	6	Bolts, nuts and other assemblies, 316 SS
	—	
Diaphragm connection position	H	Differential pressure transmitter high pressure side
Diaphragm seal system code	F	Remote fixed flange
	—	

Flange standard	2	HG/T-20592	
	1	EN1092-1	
	5	HG/T-20615	
	6	ANSI/ASME B16.5	
Flange diameter			Applicable standard
	B	DN50	HG/T-20592, EN1092-1
	C	DN80	HG/T-20592, EN1092-1
	D	DN100	HG/T-20592, EN1092-1
	2	2inch	HG/T-20615, ANSI/ASME B16.5
	3	3inch	HG/T-20615, ANSI/ASME B16.5
	4	4inch	HG/T-20615, ANSI/ASME B16.5

Pressure class			Applicable standard	Applicable flange diameter
	1	PN10/PN16	HG/T-20592, EN1092-1	DN50, DN80, DN100
	2	PN25/PN40	HG/T-20592, EN1092-1	DN50, DN80, DN100
	3	PN63	HG/T-20592, EN1092-1	DN50, DN80
	4	PN100	HG/T-20592, EN1092-1	DN50, DN80
	A	Class 150	HG/T-20615, ANSI/ASME B16.5	2inch, 3inch, 4inch
	B	Class 300	HG/T-20615, ANSI/ASME B16.5	2inch, 3inch, 4inch
	C	Class 600	HG/T-20615, ANSI/ASME B16.5	2inch, 3inch

Note: The maximum static pressure or overload depends on the flange pressure class

Flange material	6	316 SS
Flange sealing face	1	RF Raised face (Flange diameter DN25~DN100 or 2in~4in, flange pressure PN10~PN160 or Class 150~Class 2500)
	A	FM Female face (Flange diameter DN25~DN100 or 2in~4in, flange pressure PN10~PN160 or Class300~Class2500)
	B	M Male face (Flange diameter DN25~DN100 or 2in~4in, flange pressure PN10~PN160 or Class300~Class2500）
	C	RJ Ring joint face (Flange diameter DN25~DN100 or 2in~4in, flange pressure PN63~PN160 or Class150~Class2500）

Note: For details about FM, M, RJ faces, please consult the engineer

Wetted parts material		Please see the material list of wetted parts for details	
		Blind	Measuring diaphragm
	6A	316 SS	316L
	6B	316 SS	Hastelloy C-276
	6C	316 SS	Tantalum
	6D	316 SS	Titanium
	6E	316 SS	Monel
Capillary connection location	K	Rear connection	
Capillary type	U	3.5mm OD (or 1/8 inch), armored 316L SS, PVC gray sheath	
	L	3.5mm OD (or 1/8 inch), armored 316L SS, stainless steel bellows sheath	

Capillary length		Applicable flange diameter			
			DN50/2inch	DN80/3inch	DN100/4inch
	1	1m			
	2	2m			
	3	3m			
	4	4m			
	5	5m			
	6	6m	×		
	7	7m	×		
	8	8m	×		
	9	9m	×		
	A	10m	×		

Note: "×" means unavailable; the part beyond the length will be selected according to the next level of meters.

High pressure side fill oil	S	Normal temperature silicone oil（Medium temperature : -40°C ~205°C , diaphragm ambient environment: -40°C ~85°C）
	D	Inert oil（Medium temperature: -45°C ~160°C ,diaphragm ambient environment:-40°C ~85°C）
	H	High temperature silicone oil（Medium temperature: 0°C ~315°C , diaphragm ambient environment: 0°C ~85°C）
	L	Low temperature silicone oil（Medium temperature: -55°C ~200°C , diaphragm ambient environment: -40°C ~85°C）
Factory calibration range	CAL	Provides Micro Sensor standard verification report according to the range, and the default linear output **Contract specifies:** LRL - URL, display unit*
Options		Description (Detailed specifications as following, multiple options or null)
High vacuum high temperature	/V	High vacuum and high temperature process diaphragm (if this option is selected, the accuracy will be affected and can only up to 0.2%)
Mounting bracket	/G1	Bent bracket, 316 SS
Process connection accessories	/D1	T-shaped adapter (M) M20×1.5 and vent tube Φ14mm× 2mm× 30mm, 30, 316 SS
	/D2	Waist-shaped adapter, 1/2-14NPT (F), 316SS
Verification report	/Q1	Provide the Micro Sensor verification data according to user requirements **Contract specifies:** LRL - URL, display unit*

Note: Standard format follows the Micro Sensor's specifications. Select this option and provide the template if the customer specifies a format

Damping time setting	/ST	Adjustable range 0s~100s, default 0s **Contract specifies:** Damping time*

Fault alarm setting	/WH	High alarm current value，20.8mA
	/WL	Low alarm current value，3.8mA，default
	/WS	Other saturation current values, specified within the range of 3.6mA~3.8mA or 20mA~22mA **Contract specifies:** saturation current values *
Product certificate	/QE	Standard format follows the Micro Sensor's specifications. Select this option and provide the template if the customer specifies a format
Identification plate	/PT	Product is shipped with an identification plate **Contract specifies:** Identification number, not exceeding 16 characters
Integrated valve manifold	/VT	Differential pressure transmitter is factory assembled with Micro Sensor valve manifold See attachment for order guide of valve manifold **Contract specifies:** Complete model of Micro Sensor valve manifold*
Leakage test report	/QD4	PN10/PN16 (class150), Nitrogen (N_2) or air, pressure holding for 10 minutes, provide Micro Sensor standard leakage test report
	/QD5	PN25/PN40 (class300), Nitrogen (N_2) or air, pressure holding for 10 minutes, provide Micro Sensor standard leakage test report
	/QD6	PN63, Nitrogen (N_2) or air, pressure holding for 10 minutes, provide Micro Sensor standard leakage test report
	/QD7	PN100 (class600), Nitrogen (N_2) or air, pressure holding for 10 minutes, provide Micro Sensor standard leakage test report

Note: The test pressure is the same as the flange pressure class

HART configuration	/H5	HART5 configuration
Diaphragm with gold plated	/J3	Single diaphragm on high pressure side（5μ）
	/J4	Double diaphragms on high and low pressure sides（5μ）
Diaphragm spraying	/T1	High pressure side single flange
Diaphragm sticking	/PFA	The diaphragm is stuck with PFA film, applicable to non-vacuum situations (pressure ≥ 0)
Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts

Note: Please check the fill oil. Determine whether the inert filling oil is required (code: D).

Approvals	/CS1	CCS, China Classification Society, TJ23PTB00014
	/CS2	DNV, Det Norske Veritas
	/CS3	BV, Bureau Veritas
	/CS4	ABS, American Bureau of Shipping, 24-2536413-PDA
	/CS5	LR, Lloyd's Register
	/CS6	KR, Korean Register
	/CS7	NK, Nippon Kaiji Kyokai
	/CS8	RS, Russian Maritime Register of Shipping

Note: Except for the CCS approval, please consult the engineer for others.

Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry
High-accuracy	/HAC	High-accuracy calibration according to the user's specified range **Contract specifies:** Range of use (within sensor's limit), LRL - URL, display unit, accuracy*
Language	/LE	English nameplate, operation manual, product certificate, etc.
Delivery service	/XM	Provide customer requested content according to project delivery standards
Extended warranty period	/Y3	3-year warranty
	/Y5	5-year warranty

***Note:** The specifications required for these options should be specified in the contract.

Example: MDM7000-LT-1HP1L-2A1S1-HF-2B1614AKU3S/D1-【CAL: 0-0.4bar】

Order Guide

MDM7000-LT — □□□□□ — □ — HE — □□□□□□□□ — □□□□□

Body | Remote Fixed Flange Insertion Sleeve Diaphragm

Item	Code	Description
MDM7000-LT	——	Monocrystalline Silicon Differential Pressure Transmitter With Remote Diaphragm Seal (Remote Fixed Flange Insertion Sleeve)
	——	
Application of hazardous area		
	1	China, Flameproof, No.CE23.6650 Ex db IIC T6 Gb, GB/T3836.1-2021, GB/T3836.2-2021
	2	China, Intrinsically safe, No.CE23.7688X Ex ia IIC T4 Ga, GB/T3836.1-2021, GB/T3836.4-2021
	3	China，Dust explosion-proof，GYB24.1215X Ex tb III C T85°C Db, GB/T3836.1-2021, GB/T 3836.31-2021
	4	China, Flameproof, Intrinsically safe
	A	CSA, Flameproof
	B	CSA, Intrinsically safe
	C	CSA, Flameproof, Intrinsically safe
	E	ATEX, Flameproof
	F	ATEX, Intrinsically safe
	G	ATEX, Flameproof, Intrinsically safe
	J	IECEx, Flameproof
	K	IECEx, Intrinsically safe
	L	IECEx, Flameproof, Intrinsically safe
	0	Non-hazardous area
Output signal	H	4mA~20mA DC, HART
Case	S	Stainless steel case with two outlet ports (F) M20×1.5
	U	Stainless steel case with two outlet ports (F) 1/2NPT
	P	Aluminum alloy case with two outlet ports (F) M20×1.5
	N	Aluminum alloy case with two outlet ports (F) 1/2NPT

Note: Please pay attention to the item of lithium battery (Code: LD)

Waterproof/explosion-proof connector

	Specification	Material	Applicable wire diameter	IP rating
1	M20×1.5 waterproof connector, with plug	PVC	6mm~8mm	IP67
2	Non-flameproof adapter (F) M20×1.5, with plug	316 SS	6mm~8mm	IP67
3	Flameproof adapter (F) 1/2NPT, with plug	316 SS	6mm~8mm	IP67
4	Flameproof adapter (F) M20×1.5, with plug	316 SS	6mm~8mm	IP67
5	Flameproof adapter (F) G1/2, with plug	316 SS	6mm~8mm	IP67

Note: Flameproof configuration is applicable to PCEC/ATEX/IECEx standards. Flameproof adapter with CCC certificate.Please contact the engineer if double sealing is required.

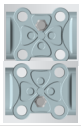
Display	N	Without LCD display
	L	Display module, -20°C ~70°C

Sensor module range

	Nominal range	Minimum range	Lower (LRL)	Upper (URL)
2	0.4bar	0.1bar	-0.4bar	0.4bar
3	2.5bar	0.25bar	-2.5bar	2.5bar

——

Low pressure side wetted parts					
		Diaphragm	Flange block	Discharge valve/plug	Sealings
	A	316L	316	316	FKM
	B	316L	316	316	Stainless steel frame PTFE
	C	HC-276	316	316	FKM
	D	HC-276	316	316	Stainless steel frame PTFE

Low pressure side clamp flange process connection		Specifications	Drain/vent valve position	Thread	Mounting method	
	2	Female 1/4-18NPT	Above the side of flange	7/16-20UNF (F)	Horizontal	
	3	Female 1/4-18NPT	Under the side of flange	7/16-20UNF(F)	Horizontal	

Low pressure side fill oil	S	Normal temperature silicone oil（Medium temperature :-40°C ~205°C ,diaphragm ambient environment：-40°C ~85°C）
	D	Inert oil（Medium temperature : -45°C ~160°C ,diaphragm ambient environment: -40°C ~85°C）
	H	High temperature silicone oil（Medium temperature: 0°C ~315°C , diaphragm ambient environment: 0°C ~85°C）
	L	Low temperature silicone oil（Medium temperature: -55°C ~200°C , diaphragm ambient environment: -40°C ~85°C）
Clamp flange fastener	6	Bolts, nuts and other assemblies, 316 SS
	—	
Diaphragm connection position	H	Differential pressure transmitter high pressure side
Diaphragm seal system code	E	Remote fixed flange insertion sleeve
	—	

Flange standard	2	HG/T-20592		
	1	EN1092-1		
	5	HG/T-20615		
	6	ANSI/ASME B16.5		
Flange diameter			Applicable standard	
	B	DN50	HG/T-20592, EN1092-1	
	C	DN80	HG/T-20592, EN1092-1	
	D	DN100	HG/T-20592, EN1092-1	
	2	2inch	HG/T-20615, ANSI/ASME B16.5	
	3	3inch	HG/T-20615, ANSI/ASME B16.5	
	4	4inch	HG/T-20615, ANSI/ASME B16.5	
Pressure class			Applicable standard	Applicable flange diameter
	1	PN10/PN16	HG/T-20592, EN1092-1	DN50, DN80, DN100
	2	PN25/PN40	HG/T-20592, EN1092-1	DN50, DN80, DN100
	3	PN63	HG/T-20592, EN1092-1	DN50, DN80
	4	PN100	HG/T-20592, EN1092-1	DN50, DN80
	A	Class 150	HG/T-20615, ANSI/ASME B16.5	2inch, 3inch, 4inch
	B	Class 300	HG/T-20615, ANSI/ASME B16.5	2inch, 3inch, 4inch
	C	Class 600	HG/T-20615, ANSI/ASME B16.5	2inch, 3inch

Note: The maximum static pressure or overload depends on the flange pressure class

Flange material	6	316 SS
Flange sealing face	1	RF Raised face (Flange diameter DN25~DN100 or 2in~4in, flange pressure PN10~PN160 or Class 150~Class 2500)
	A	FM Female face (Flange diameter DN25~DN100 or 2in~4in, flange pressure PN10~PN160 or Class300~Class2500)
	B	M Male face (Flange diameter DN25~DN100 or 2in~4in, flange pressure PN10~PN160 or Class300~Class2500）
	C	RJ Ring joint face (Flange diameter DN25~DN100 or 2in~4in, flange pressure PN63~PN160 or Class150~Class2500）

Note: For details about FM, M, RJ faces, please consult the engineer

Insertion sleeve diameter			Applicable flange diameter
	4	46mm	DN50, 2inch
	6	66mm	DN80, 3inch
	7	77mm	DN100, 4inch
Insertion sleeve length	A	50mm	
	B	100mm	
	C	150mm	
	D	200mm	
Insertion sleeve material	6	316 SS	
Wetted parts material		Please see the material list of wetted parts for details	
		Blind	Measuring diaphragm
	6A	316 SS	316L
	6B	316 SS	Hastelloy C-276
	6C	316 SS	Tantalum
	6D	316 SS	Titanium
	6E	316 SS	Monel
Capillary connection location	K	Rear connection	
Capillary type	U	3.5mm OD (or 1/8 inch), armored 316L SS, PVC gray sheath	
	L	3.5mm OD (or 1/8 inch), armored 316L SS, stainless steel bellows sheath	

Capillary length		Insertion sleeve diameter		Adaptable measuring diaphragm				
				6A-316L	6B-HastelloyC-276	6C-Tantalum	6D-Titanium	6E-Monel
	1	1m	S-46mm					
			M-66mm					
			L-77mm					
	2	2m	S-46mm					
			M-66mm					
			L-77mm					
	3	3m	S-46mm					
			M-66mm					
			L-77mm					
	4	4m	S-46mm			×	×	×
			M-66mm					
			L-77mm					
	5	5m	S-47mm			×	×	×
			M-66mm					
			L-77mm					
	6	6m	M-66mm					
			L-77mm					
	7	7m	M-66mm					
			L-77mm					
	8	8m	M-66mm					
			L-77mm					
	9	9m	M-66mm					
			L-77mm					

	A	10m	M-66mm L-77mm

Note: "×" means unavailable; the part beyond the length will be selected according to the next level of meters.

High pressure side fill oil	S	Normal temperature silicone oil（Medium temperature : -40°C ~205°C , diaphragm ambient environment: -40°C ~85°C）
	D	Inert oil（Medium temperature: -45°C ~160°C ,diaphragm ambient environment:-40°C ~85°C）
	H	High temperature silicone oil（Medium temperature: 0°C ~315°C , diaphragm ambient environment: 0°C ~85°C）
	L	Low temperature silicone oil（Medium temperature: -55°C ~200°C , diaphragm ambient environment: -40°C ~85°C）
Factory calibration range	CAL	Provides Micro Sensor standard verification report according to the range, and the default linear output **Contract specifies:** LRL - URL, display unit*
Options		Description (Detailed specifications as following, multiple options or null)
High vacuum high temperature	/V	High vacuum and high temperature process diaphragm (if this option is selected, the accuracy will be affected and can only up to 0.2%)
Mounting bracket	/G1	Bent bracket, 316 SS
Process connection accessories	/D1	T-shaped adapter (M) M20×1.5 and vent tube Φ14mm× 2mm× 30mm, 30, 316 SS
	/D2	Waist-shaped adapter, 1/2-14NPT (F), 316SS
Verification report	/Q1	Provide the Micro Sensor verification data according to user requirements **Contract specifies:** LRL - URL, display unit*

Note: Standard format follows the Micro Sensor's specifications. Select this option and provide the template if the customer specifies a format

Damping time setting	/ST	Adjustable range 0s~100s, default 0s **Contract specifies:** Damping time*
Fault alarm setting	/WH	High alarm current value，20.8mA
	/WL	Low alarm current value，3.8mA，default
	/WS	Other saturation current values, specified within the range of 3.6mA~3.8mA or 20mA~22mA **Contract specifies:** saturation current values *
Product certificate	/QE	Standard format follows the Micro Sensor's specifications. Select this option and provide the template if the customer specifies a format
Identification plate	/PT	Product is shipped with an identification plate **Contract specifies:** Identification number, not exceeding 16 characters
Integrated valve manifold	/VT	Differential pressure transmitter is factory assembled with Micro Sensor valve manifold See attachment for order guide of valve manifold **Contract specifies:** Complete model of Micro Sensor valve manifold*
Leakage test report	/QD4	PN10/PN16 (class150), Nitrogen (N_2) or air, pressure holding for 10 minutes, provide Micro Sensor standard leakage test report
	/QD5	PN25/PN40 (class300), Nitrogen (N_2) or air, pressure holding for 10 minutes, provide Micro Sensor standard leakage test report
	/QD6	PN63, Nitrogen (N_2) or air, pressure holding for 10 minutes, provide Micro Sensor standard leakage test report
	/QD7	PN100 (class600), Nitrogen (N_2) or air, pressure holding for 10 minutes, provide Micro Sensor standard leakage test report

Note: The test pressure is the same as the flange pressure class

HART configuration	/H5	HART5 configuration
Diaphragm with gold plated	/J3	Single diaphragm on high pressure side（5μ）
	/J4	Double diaphragms on high and low pressure sides（5μ）
Diaphragm spraying	/T3	High pressure side single insertion sleeve
Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts

Note: Please check the fill oil. Determine whether the inert filling oil is required (code: D).

Approvals	/CS1	CCS, China Classification Society, TJ23PTB00014
	/CS2	DNV, Det Norske Veritas
	/CS3	BV, Bureau Veritas
	/CS4	ABS, American Bureau of Shipping, 24-2536413-PDA
	/CS5	LR, Lloyd's Register
	/CS6	KR, Korean Register
	/CS7	NK, Nippon Kaiji Kyokai
	/CS8	RS, Russian Maritime Register of Shipping

Note: Except for the CCS approval, please consult the engineer for others.

Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry
High-accuracy	/HAC	High-accuracy calibration according to the user's specified range **Contract specifies:** Range of use (within sensor's limit), LRL - URL, display unit, accuracy*
Language	/LE	English nameplate, operation manual, product certificate, etc.
Delivery service	/XM	Provide customer requested content according to project delivery standards
Extended warranty period	/Y3	3-year warranty
	/Y5	5-year warranty

***Note:** The specifications required for these options should be specified in the contract.

Example: MDM7000-LT-1HP1L-2A1S1-HE-2B1614A6AKU3S/G1-【CAL: 0-0.4bar】