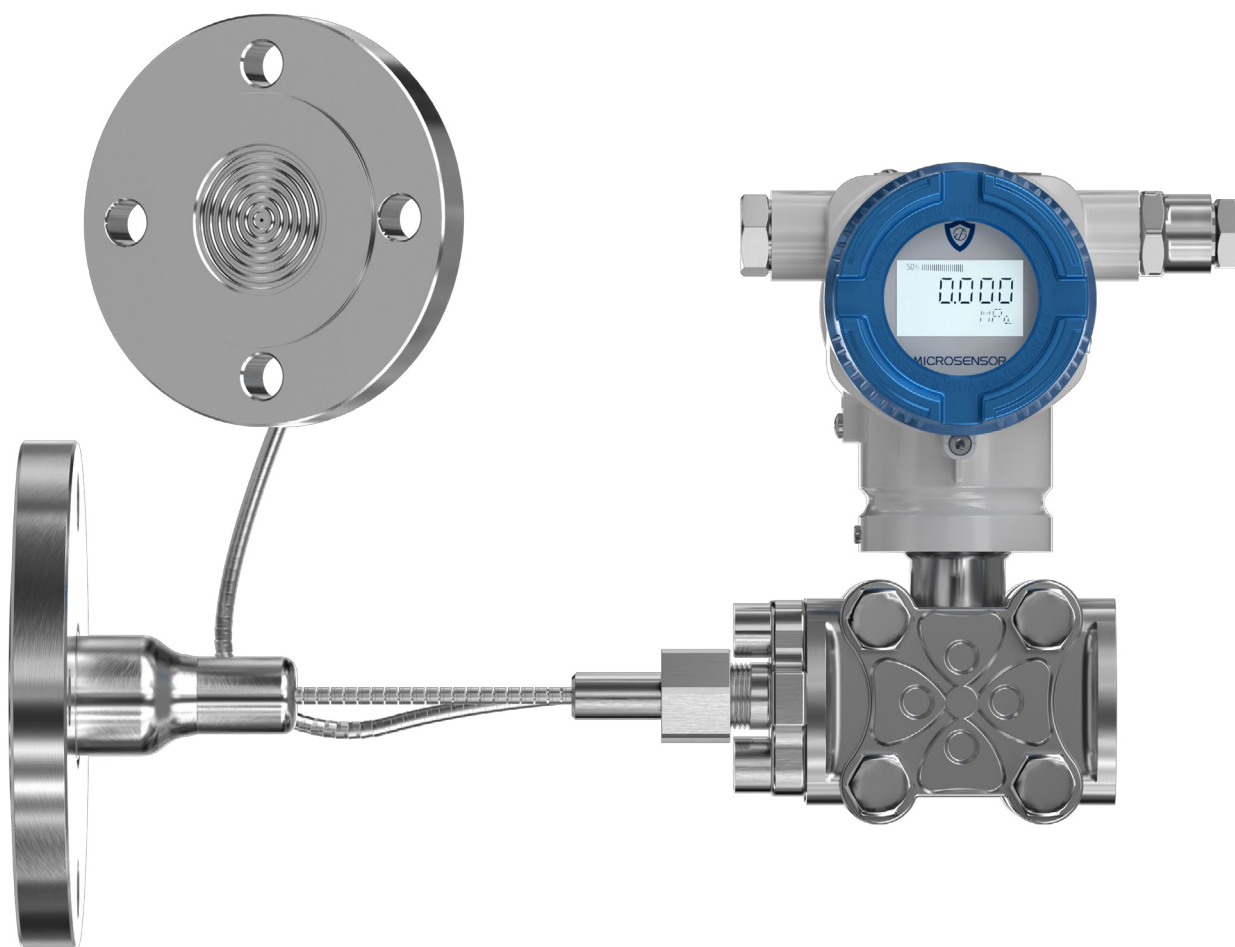


MDM7000-LP

**Smart Differential Pressure Transmitter with
Remote Diaphragm Seals**



Note: Some certificates are still pending.

|| 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 $|URV| \geq LRV$, $|URV|$ must be larger than the minimum pressure; if $|URV| \leq |LRV|$, $|LRV|$ 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≤5	±0.75% +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: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	±0.75% URL + Diaphragm seal system effects
Range	0.4bar~2.5bar, see the specifications for details
Turn down ratio	100:1
Long-term stability	±0.1% Span/10 years
Ambient temperature effects	The total effect per 10°C in the range of -20°C ~80°C: (0.375+0.125TD)%/10°C of SPAN
Voltage effects	When the power supply voltage changes within 18.3V~44V 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, IP66
Weight	About:6.35kg(body)

|| Environmental Conditions ||

Items	Conditions
Operating temperature ^①	Without LCD display: -50°C ~85°C ; with LCD display: -40°C ~70°C
Storage temperature	Without LCD display: -50°C ~100°C ; with LCD display: -40°C ~85°C
Operating humidity	5%RH~100%RH@40°C

Note:^① Short pipeline explosion-proof products shall have a surface temperature ≤80°C. If uncertain, medium temp. shall be ≤T6/T80°C.

|| Diaphragm Operating Temperature ||

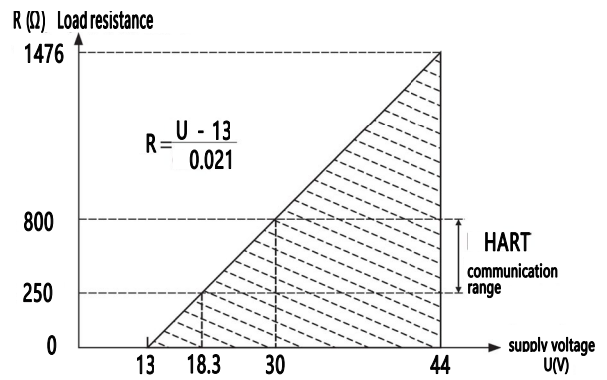
Filling oil type	Code	Medium temperature	Diaphragm ambient temperature
Normal temperature silicone oil	S	-40°C~ 200°C	-40°C~ 85°C
High temperature silicone oil	H	0°C~ 315°C	0°C~ 85°C
Low temperature silicone oil	L	-55°C ~120°C	-40°C ~85°C
Fluorocarbon oil 2	E	-55°C~ 85°C	-40°C~ 85°C

Power Supply and Load Requirements

Items	Conditions
Power supply voltage	HART communication protocol: 18.3V~44V DC ^①
	Intrinsically safe HART communication protocol: 18.3V~30V DC
Load resistance	0Ω~1476Ω ^② for operation mode; 250Ω~800Ω 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 13V. Please consult engineers for details.

^② 1476Ω= (44V-13V) /21mA



EMC Effects

SN	Test items	Basic Standards	Test Conditions	Performance Level
1	Radiated interference (Casing)	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 immunity test	GB/T 17626.2/IEC61000-4-2	8kV (Contact), 15kV (Air)	B
4	Immunity to radio frequency EM-fields	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	B
6	Electrical fast transient / Burst Immunity test	GB/T 17626.4/IEC61000-4-4	4kV (5/50ns, 100kHz)	B
7	Surge immunity requirements	GB/T 17626.5/IEC61000-4-5	2kV (line to line) 4kV (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.

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
Response time: ≤100ms

Hazardous Area

	Ex standards (association)	Mark	Standard
Hazardous area	Ex Intrinsically safe (PCEC)	Ex ia IIC T4 Ga	GB/T 3836.1-2021 GB/T 3836.4-2021
	Ex Flameproof (PCEC)	Ex db IIC T6 Gb	GB/T 3836.1-2021 GB/T 3836.2-2021
	Ex Dust explosion-proof (NEPSI)	Ex tb IIC T85°C Db	GB/T 3836.1-2021 GB/T 3836.31-2021
	ATEX Intrinsically safe (CSA) ^①	II 1G Ex ia IIC T4 Ga	EN IEC 60079-0:2018 EN 60079-11:2012
	ATEX Flameproof (CSA) ^①	II 2G Ex db IIC T6 Gb	EN IEC 60079-0:2018 EN 60079-1: 2014
	ATEX Dust explosion-proof (CSA) ^①	II 2D Ex tb IIIC T80°C Db	EN IEC 60079-0:2018 EN 60079-31: 2014
	IECEx Intrinsically safe (CSA)	Ex ia IIC T4 Ga	IEC 60079-0: 2017 IEC 60079-11: 2011
	IECEx Flameproof (CSA) ^①	Ex db IIC T6 Gb	IEC 60079-0: 2017 IEC 60079-1: 2014
	IECEx Dust explosion-proof (CSA) ^①	Ex tb IIIC T80°C Db	IEC 60079-0: 2017 IEC 60079-31: 2022
	NA Intrinsically safe (CSA)	Class I, Division 1, Groups A, B, C and D T4 Ex ia IIC T4 Ga Class I, Zone 0, AEx ia IIC T4 Ga	CSA C22.2 No. 60079-0:19 CAN/CSA C22.2 No. 60079-11:14(R2023) CAN/CSA C22.2 No. 61010-1-12, UPD1:2015, UPD2:2016, AMD1:2018 ANSI/UL 60079-0-2020 Seventh Edition ANSI/UL 60079-11-2018 (R2023)Sixth Edition ANSI/UL 913-2022 Eighth Edition UL 61010-1, 3rd Edition (2012), AMD1: 2018
	NA Flameproof (CSA) ^①	Class I, Division 1, Group A, B, C and D T6 Class II, Division 1 Group E, F and G T80°C 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	CAN/CSA C22.2 No.61010-1-12. UPD1:2015. UPD2:2016.AMD1:2018 CSA C22.2 No.25-17 CSA C22.2 No.30-20+UPD1(2023) CSA-C22.2 No.60079-0:19 CAN/CSA-C22.2 No.60079-1:16 (R2021) CAN/CSA-C22.2 No.60079-31:15 (R2020) UL 61010-1. 3rd Edition (2012). AMD1:2018 FM 3600:2022 FM 3615:2022 FM 3616:2022 ANSI/UL 60079-0-2020 Seventh Edition ANSI/UL 60079-1-2020 Seventh Edition ANSI/UL 60079-31-2015 Second Edition
	EAC Explosion-proof	1Ex db IIC T6 Gb 0Ex ia IIC T4 Ga	TP TC012/2011 GOST 31610.0-2019 GOST 31610.11-2014 GOST IEC 60079-1-2013

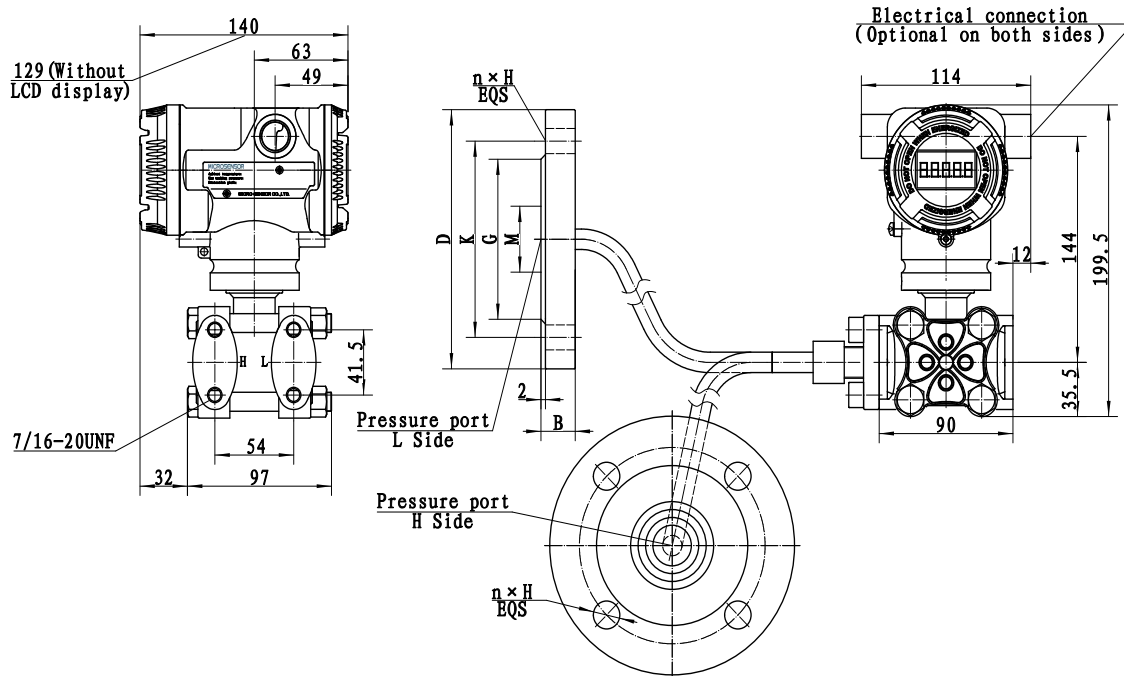
Note: Please consult MICROSENSOR for details.

Dimensions

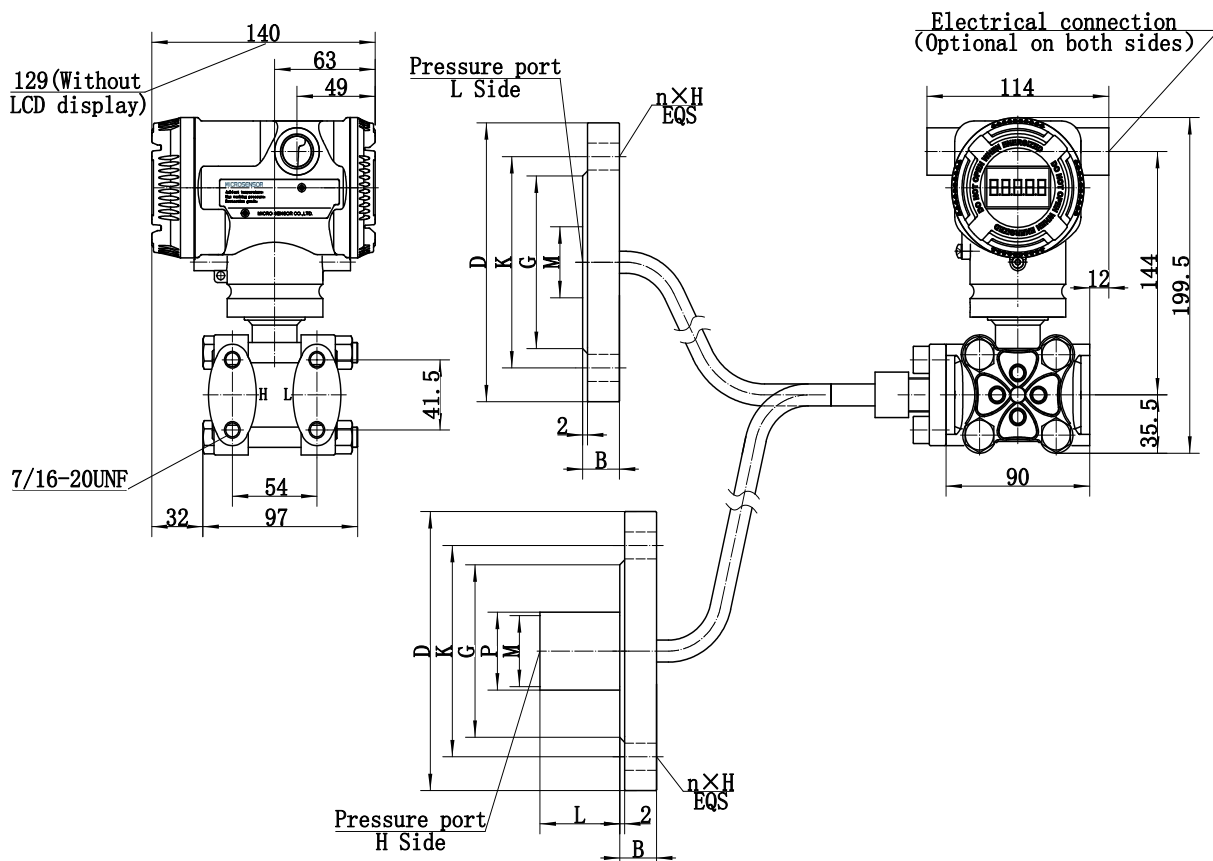
Unit: mm

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.

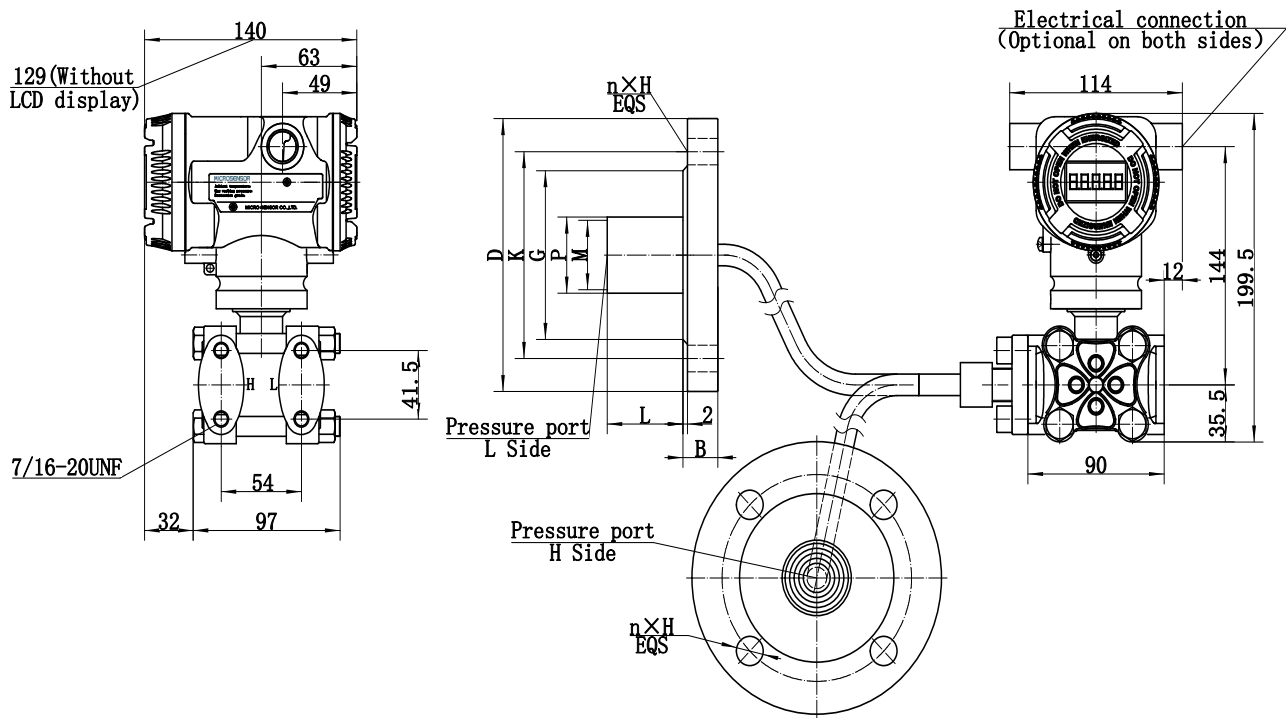
Remote Fixed Flange + Remote Fixed Flange With Display (Same as Without Display)



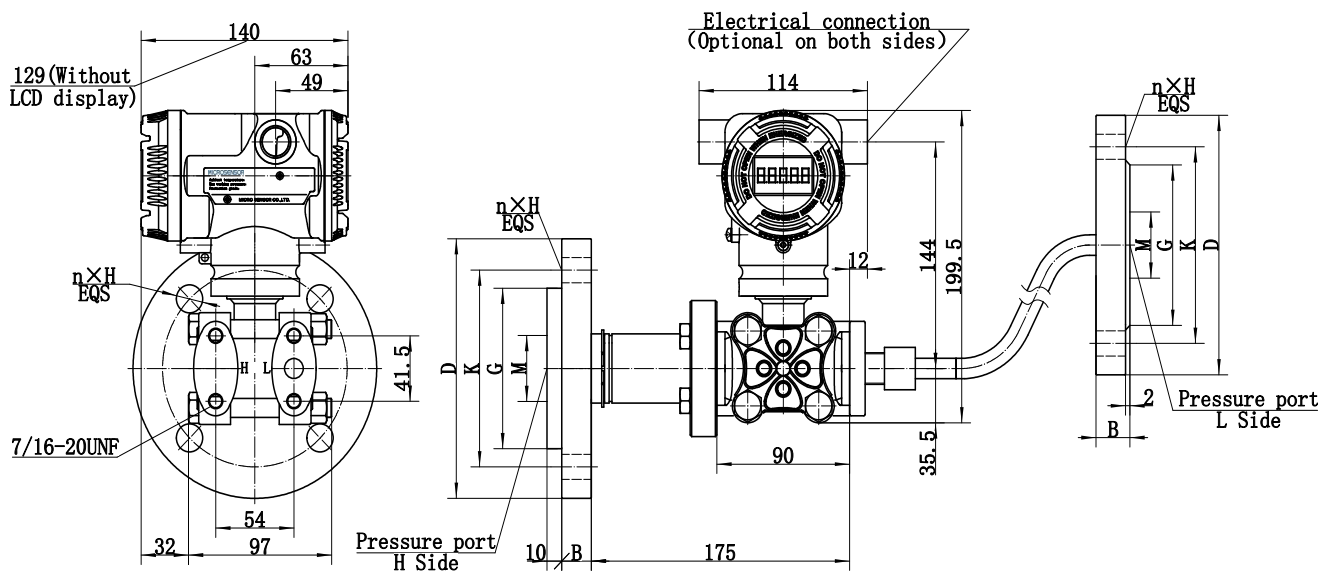
Remote Fixed Flange Insertion Sleeve + Remote Fixed Flange With Display (Same as Without Display)



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

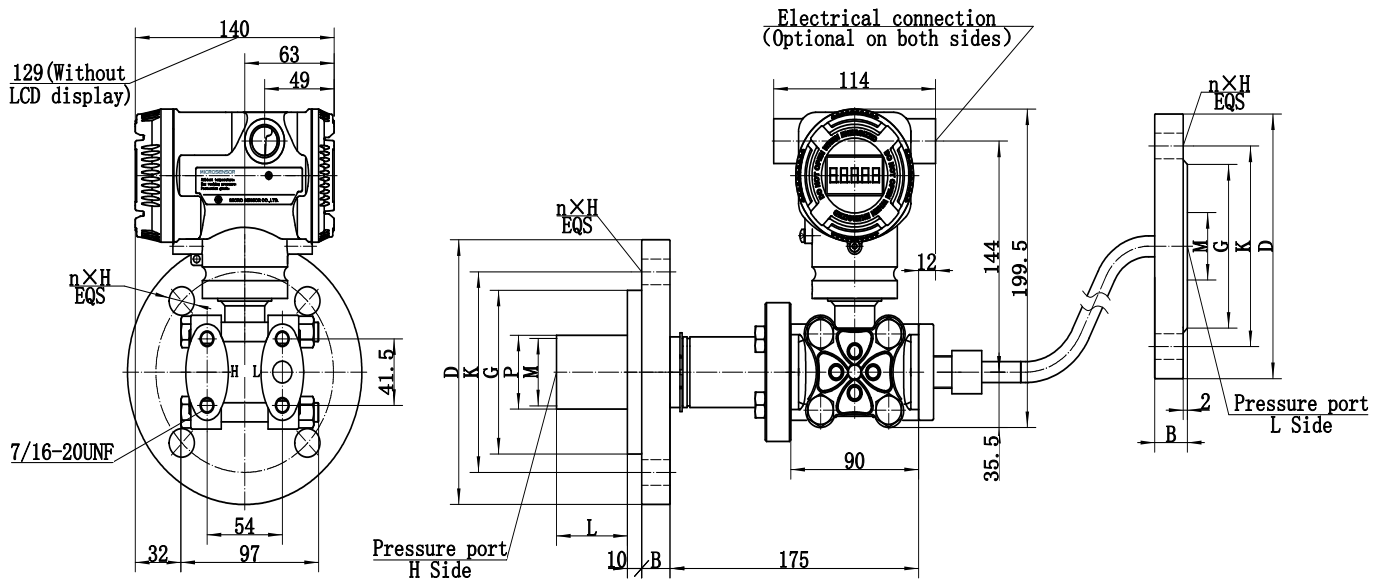


Side Mounted Movable Flange + Remote Fixed Flange With Display (Same as Without Display)



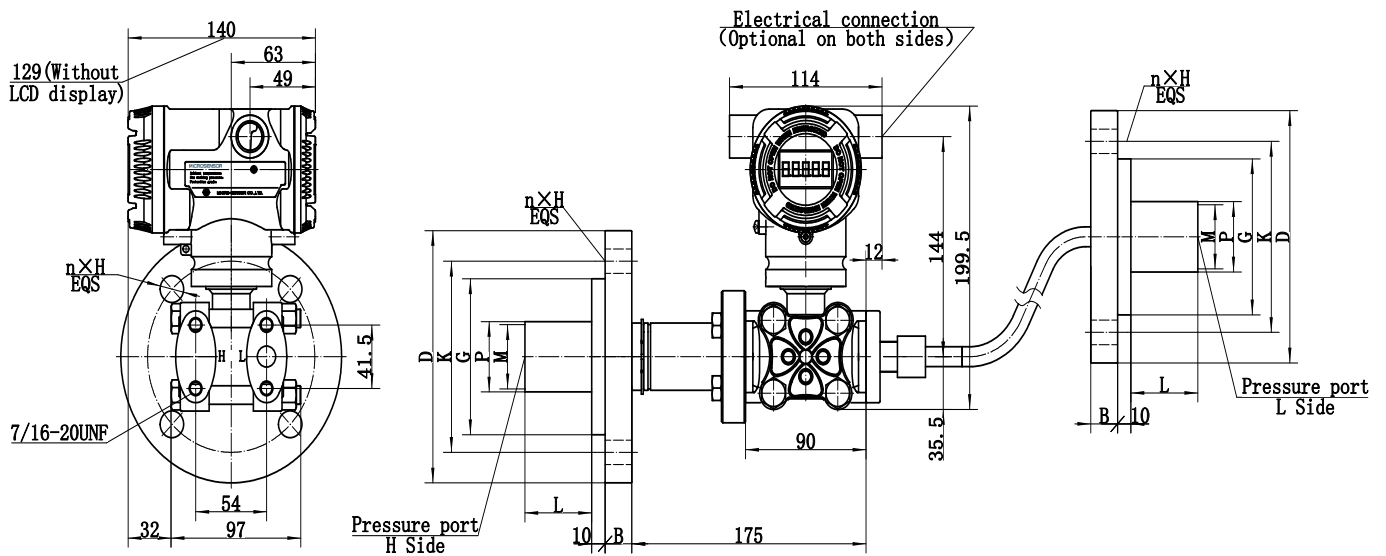
Side Mounted Movable Flange Insertion Sleeve+ Remote Fixed Flange With Display

(Same as Without Display)

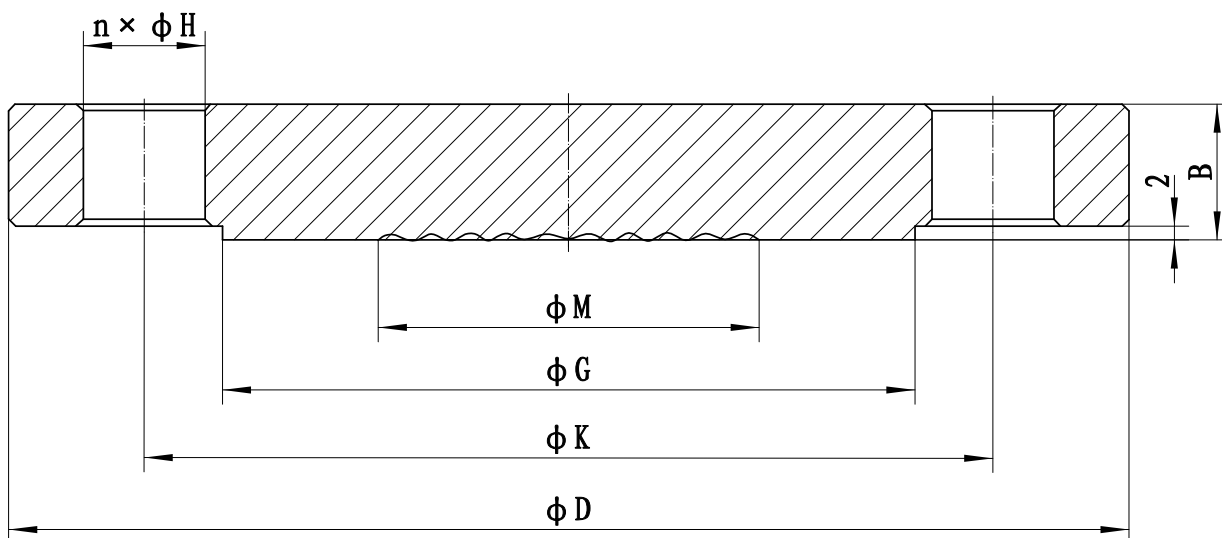


Side Mounted Flange Insertion Sleeve+Remote Flange Insertion Sleeve With Display

(Same as Without Display)

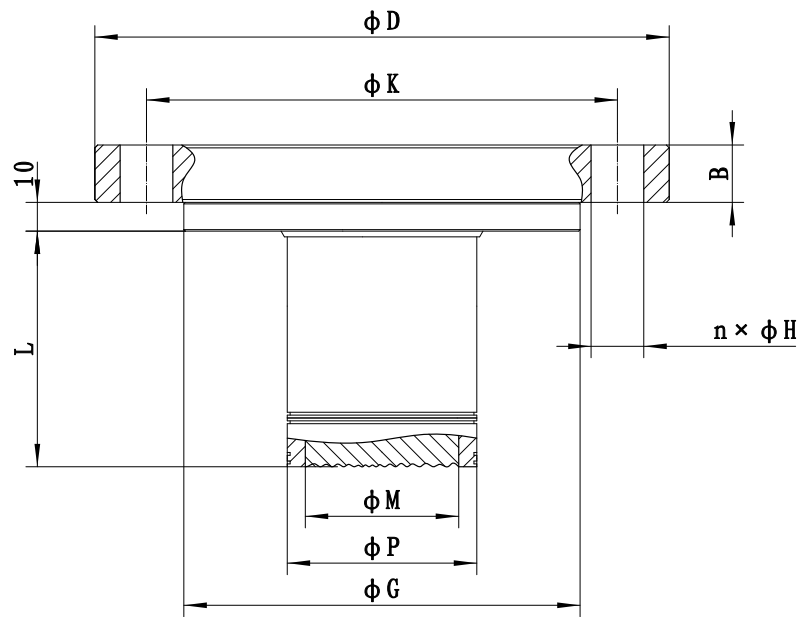


Process Connection



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 ||

MDM7000-LP — — — HF — — LF —

Body

Remote Flange+Remote Flange Diaphragm

Item	Code	Description
MDM7000-LP	—	Monocrystalline Silicon Differential Pressure Transmitter with Diaphragm Seals(Remote Fixed Flange + Remote Fixed Flange)



■ Basic options

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		
	5	China, Flameproof, Dust explosion-proof, Intrinsically safe		
	A	CSA, Flameproof, CSA 25CA80192884X Class I, Division 1, Group A, B, C and D T6 Class II, Division 1 Group E, F and G T80°C 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		※
	B	CSA, Intrinsically safe, CSA24CA80156531X Class I, Division 1, Groups A, B, C and D T4 Ex ia IIC T4 Ga Class I, Zone 0, AEx ia IIC T4 Ga		
	C	CSA, Flameproof, Intrinsically safe		
	E	ATEX, Flameproof, CSANe 25ATEX1107X II 2G Ex db IIC T6 Gb, II 2D Ex tb IIIC T80°C Db		※
	F	ATEX, Intrinsically safe, CSANe 24ATEX1178X II 1G Ex ia IIC T4 Ga		
	G	ATEX, Flameproof, Intrinsically safe		
	J	IECEX, Flameproof, IECEX CSA 25.0059X Ex db IIC T6 Gb, Ex tb IIIC T80°C Db		※
	K	IECEX, Intrinsically safe, IECEX CSA 24.0045X Ex ia IIC T4 Ga		
	L	IECEX, Flameproof, Intrinsically safe		
	M	EAC, Explosion-proof, RU C-CN.AX58.B.05884/24 1Ex db IIC T6 Gb, 0Ex ia IIC T4 Ga		
	0	Non-hazardous area		
Output signal	H	4mA~20mA DC, HART		
	B	4mA~20mA DC, HART, Bluetooth		
	R	Modbus-RS485		

Note: The default is HART5, please select in Options-Specifications if HART7 is required.

Case	S	316L Stainless steel case with two outlet ports (F) M20×1.5	
	U	316L Stainless steel case with two outlet ports (F) 1/2NPT	
	P	Aluminum alloy case (Polyester resin coating) with two outlet ports (F) M20×1.5	
	N	Aluminum alloy case(Polyester resin coating) with two outlet ports (F) 1/2NPT	

Note: The outlet port, (F) 1/2NPT, without cable glands. The explosion-proof conduit is directly connected. The default material for the nameplate is 304 stainless steel. Please consult MICROSENSOR for other materials.

Waterproof/explosion-proof connector	Specification	Material	Applicable wire diameter	IP rating
0	Without cable glands			
A	Single-ended with a flameproof metal plug	316 SS		
1	M20×1.5 waterproof connector, with plug	PVC	6mm~12mm	IP67
2	Non-flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~8mm	IP67

	3	Flameproof adapter M20x1.5 (M) to 1/2 NPT (F) , with plug	316 SS	6mm~12mm	IP67
	4	Flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~12mm	IP67
	5	Flameproof adapter M20x1.5 (M) to G1/2 (F) , with plug	316 SS	6mm~12mm	IP67
Note: Flameproof configuration is applicable to PCEC/ATEX/IECEX standards.Flameproof adapter obtained CCC certificate. Please contact MICROSENSOR if double sealing is required.					
Display	N	Without LCD display, explosion proof type -40℃ ~70℃ , non-explosion proof type -50℃ ~85℃			
	L	With LCD display, explosion proof type/ non-explosion proof type -40℃ ~70℃			
—					
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
Clamp flange fastener					
	1	Bolts, nuts, and other components, 35CrMo			

■ Diaphragm seal options - high pressure side

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	
	A	DN25	HG/T-20592, EN1092-1(Recommended diaphragm materials: 316L or HC. For others, please consult MICROSENSOR)	※
	J	DN40	HG/T-20592, EN1092-1	※
	B	DN50	HG/T-20592, EN1092-1	
	C	DN80	HG/T-20592, EN1092-1	
	D	DN100	HG/T-20592, EN1092-1	
	1	1inch	HG/T-20615, ANSI/ASME B16.5 (Recommended diaphragm materials: 316L or HC. For others, please consult MICROSENSOR)	※
	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	DN25, DN40, DN50, DN80, DN100
	2	PN25/PN40	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100
	3	PN63	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100
	4	PN100	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100
	A	Class 150	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch
	B	Class 300	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch
	C	Class 600	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch
				※

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

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

Wetted parts material		Flange	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				
		DN25/1inch	DN40	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: For high and low-temperature conditions with capillary lengths of 6m~10m, flanges of DN80 or above are recommended; 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℃ ~200℃ , ambient temperature: -40℃ ~85℃)	
	H	High temperature silicone oil (Medium temperature: 0℃ ~315℃ , ambient temperature: 0℃ ~85℃)	
	L	Low temperature silicone oil (Medium temperature: -55℃ ~120℃ , ambient temperature:-40℃ ~85℃)	※
	E	Fluorocarbon oil 2 (Medium temperature: -55℃ ~85℃ ,ambient temperature:-40℃ ~85℃)	※

■ Diaphragm seal options - low pressure side

Diaphragm connection position	L	Differential pressure transmitter low 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			
	A	DN25	HG/T-20592, EN1092-1(Recommended diaphragm materials: 316L or HC. For others, please consult MICROSENSOR)		※
	J	DN40	HG/T-20592, EN1092-1		※
	B	DN50	HG/T-20592, EN1092-1		
	C	DN80	HG/T-20592, EN1092-1		
	D	DN100	HG/T-20592, EN1092-1		

	1	1inch	HG/T-20615, ANSI/ASME B16.5 (Recommended diaphragm materials: 316L or HC. For others, please consult MICROSENSOR)	※
	2	2inch	HG/T-20615, ANSI/ASME B16.5	
	3	3inch	HG/T-20615vANSI/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	DN25, DN40, DN50, DN80, DN100
	2	PN25/PN40	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100
	3	PN63	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100
	4	PN100	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100 ※
	A	Class 150	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch
	B	Class 300	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch
	C	Class 600	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch ※

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

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

Wetted parts material		Flange	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				
		DN25/1inch	DN40	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: For high and low-temperature conditions with capillary lengths of 6m~10m, flanges of DN80 or above are recommended.; the part beyond the length will be selected according to the next level of meters.

Low pressure side fill oil	S	Normal temperature silicone oil (Medium temperature : -40°C ~200°C , ambient temperature: -40°C ~85°C)	
	H	High temperature silicone oil (Medium temperature: 0°C ~315°C , ambient temperature: 0°C ~85°C)	
	L	Low temperature silicone oil (Medium temperature: -55°C ~120°C , ambient temperature: -40°C ~85°C)	※
	E	Fluorocarbon oil 2: (Medium temperature : -55°C ~85°C , ambient temperature: -40°C ~85°C)	※
Factory calibration range	CAL	Provides MICROSENSOR standard verification report according to the range, and the default linear output Contract specifies: LRL - URL, display unit*	

■ Options-Certificates		Description (Detailed specifications as following, multiple options or null)	
Approvals	/CS1	CCS, China Classification Society, XA25PTB00010	
	/CS2	DNV, Det Norske Veritas, TAA00000Y1	
	/CS3	BV, Bureau Veritas, 77759/A0 BV	
	/CS4	ABS, American Bureau of Shipping, 24-2536413-PDA	
	/CS5	LR, Lloyd's Register, LR2520052TA	
	/CS6	KR, Korean Register, NAK50160-AE001	
	/CS7	NK, Nippon Kaiji Kyokai, TA24376M	
	/CS8	RS, Russian Maritime Register of Shipping, 24.44.01.01398.266	
Metrological certification (Russia & CIS)	/PAC	Pattern Approval Certificate of Measuring Instruments, Russia, 94159-24	
	/PBY	Pattern Approval Certificate of Measuring Instruments, Belarus, 18634	

■ Options-Specifications		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	/G7	L-shaped brackets (sq), 316 SS	
	/G8	L-shaped brackets (sq), Q235 carbon steel	
Verification report	/Q1	Provide data according to the customer's template requirements. Contract specifies: LRL - URL, display unit*	※
Damping time setting	/ST	Adjustable range 0s~100s, default 0s Contract specifies: Damping time*	
Fault alarm setting	/WH	High alarm current value, 20.8mA (HART5), 21mA (HART7)	
	/WL	Low alarm current value, 3.8mA (HART5), 3.7mA (HART7), default	
Identification plate	/PT	Supplied with 316L SS hanging nameplate Contract specifies: Complete model of MICROSENSOR valve manifold*	
Leakage test report	/QD4	PN10/PN16 (class150), Nitrogen (N ₂) or air, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report	※
	/QD5	PN25/PN40 (class300), Nitrogen (N ₂) or air, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report	※
	/QD6	PN63, Nitrogen (N ₂) or air, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report	※
	/QD7	PN100 (class600), Nitrogen (N ₂) or air, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report	※
Note: The test pressure is the same as the flange pressure class			
HART configuration	/H5	HART5 configuration, default	
	/H7	HART7 configuration	
Diaphragm with gold plated	/J3	Single diaphragm on high pressure side (8μ)	 ※
	/J4	Double diaphragms on high and low pressure sides (8μ)	 ※

Diaphragm spraying	/T1	High pressure side single flange PTFE coating	※
	/T2	High-low pressure side double flanges PTFE coating	※
Diaphragm sticking	/PFA	The diaphragm is covered with PFA film (protective cover), applicable to corrosion-resistant conditions (non-vacuum, pressure ≥ 0)	※
Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts	※
Note: Select this item; fluorocarbon oil is needed in oxygen environments (code: D, E)			
Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry	
Language	/LE	English nameplate, operation manual, certificate of conformity, factory inspection report.	
	/LR	Russian nameplate, operation manual, certificate of conformity, factory inspection report.	
Delivery service	/XM	Additional acceptance documents (to be specified in the order), in addition to standard supply (product certificate, operation manual, factory verification report)	
Warranty period	/Y2	2-year warranty	
	/Y3	3-year warranty	
	/Y5	5-year warranty	

***Note:** The specifications required for these options should be specified in the contract. Products with ※ have longer delivery times.

Example: MDM7000-LP-1HP1L-26-HF-2B1614AKU3S-LF-2B1614AKU3S/G1- 【CAL: 0-0.4bar】

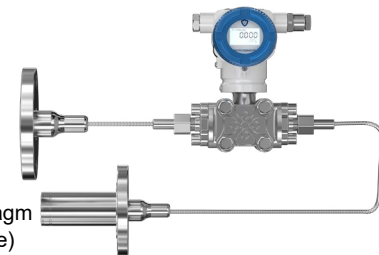
Order Guide

MDM7000-LP — ☐☐☐☐☐ — ☐ — HE — ☐☐☐☐☐☐ — LF — ☐☐☐☐☐☐

Body

Remote Fixed Flange Insertion Sleeve + Remote Fixed Flange Diaphragm

Item	Code	Description
MDM7000-LP	—	Monocrystalline Silicon Differential Pressure Transmitter with Diaphragm Seals(Remote Fixed Flange Insertion Sleeve + Remote Fixed Flange)



Basic options

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	
	5	China, Flameproof, Dust explosion-proof, Intrinsically safe	
	A	CSA, Flameproof, CSA 25CA80192884X Class I, Division 1, Group A, B, C and D T6 Class II, Division 1 Group E, F and G T80°C 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	
	B	CSA, Intrinsically safe, CSA24CA80156531X Class I, Division 1, Groups A, B, C and D T4 Ex ia IIC T4 Ga Class I, Zone 0, AEx ia IIC T4 Ga	
	C	CSA, Flameproof, Intrinsically safe	※
	E	ATEX, Flameproof, CSANe 25ATEX1107X II 2G Ex db IIC T6 Gb, II 2D Ex tb IIIC T80°C Db	※
	F	ATEX, Intrinsically safe, CSANe 24ATEX1178X II 1G Ex ia IIC T4 Ga	
	G	ATEX, Flameproof, Intrinsically safe	※
	J	IECEX, Flameproof, IECEX CSA 25.0059X Ex db IIC T6 Gb, Ex tb IIIC T80°C Db	
	K	IECEX, Intrinsically safe, IECEX CSA 24.0045X Ex ia IIC T4 Ga	
	L	IECEX, Flameproof, Intrinsically safe	※
	M	EAC, Explosion-proof, RU C-CN.AXK58.B.05884/24 1Ex db IIC T6 Gb, 0Ex ia IIC T4 Ga	
	0	Non-hazardous area	
Output signal	H	4mA~20mA DC, HART	
	B	4mA~20mA DC, HART, Bluetooth	
	R	Modbus-RS485	

Note: The default is HART5, please select in Options-Specifications if HART7 is required.

Case	S	316L Stainless steel case with two outlet ports (F) M20×1.5	
	U	316L Stainless steel case with two outlet ports (F) 1/2NPT	
	P	Aluminum alloy case (Polyester resin coating) with two outlet ports (F) M20×1.5	
	N	Aluminum alloy case(Polyester resin coating) with two outlet ports (F) 1/2NPT	

Note: The outlet port, (F) 1/2NPT, without cable glands. The explosion-proof conduit is directly connected. The default material for the nameplate is 304 stainless steel. Please consult MICROSENSOR for other materials.

Waterproof/explosion-proof connector	Specification	Material	Applicable wire diameter	IP rating
0	Without cable glands			
A	Single-ended with a flameproof metal plug	316 SS		
1	M20×1.5 waterproof connector, with plug	PVC	6mm~12mm	IP67
2	Non-flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~8mm	IP67

3	Flameproof adapter M20x1.5 (M) to 1/2 NPT (F) , with plug	316 SS	6mm~12mm	IP67
4	Flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~12mm	IP67
5	Flameproof adapter M20x1.5 (M) to G1/2 (F) , with plug	316 SS	6mm~12mm	IP67

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

Display	N	Without LCD display, explosion proof type -40℃ ~70℃ , non-explosion proof type -50℃ ~85℃			
	L	With LCD display, explosion proof type/ non-explosion proof type -40℃ ~70℃			
—					
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
Clamp flange fastener	1	Bolts, nuts, and other components, 35CrMo			

■ Diaphragm seal options - high pressure side

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, DN100	
	4	PN100	HG/T-20592, EN1092-1	DN50, DN80, DN100	※
	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, 4inch	※	

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

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

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		Flange	Insertion sleeve	Measuring diaphragm	
	6A	316 SS	316 SS	316L	
	6B	316 SS	316 SS	Hastelloy C-276	
	6C	316 SS	316 SS	Tantalum	※
	6D	316 SS	316 SS	Titanium	※
	6E	316 SS	316 SS	Monel	※
Capillary connection location					
	K	Rear connection			
Capillary type					
	U	3.5mm OD (or 1ss/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
		S-46mm			
	1	1m	M-66mm		
		L-77mm			
		S-46mm			
	2	2m	M-66mm		
		L-77mm			
		S-46mm			
	3	3m	M-66mm		
		L-77mm			
		S-46mm			
	4	4m	M-66mm		
		L-77mm			
		S-47mm			
	5	5m	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: For high and low-temperature conditions with capillary lengths of 6m~10m, flanges of DN80 or above are recommended; 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 ~200°C , ambient temperature: -40°C ~85°C)	
	H	High temperature silicone oil (Medium temperature: 0°C ~315°C , ambient temperature: 0°C ~85°C)	
	L	Low temperature silicone oil (Medium temperature: -55°C ~120°C , ambient temperature: -40°C ~85°C)	※
	E	Fluorocarbon oil 2 (Medium temperature: -55°C ~85°C , ambient temperature: -40°C ~85°C)	※

■ Diaphragm seal options - low pressure side

Diaphragm connection position	L	Differential pressure transmitter low 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	
	A	DN25	HG/T-20592, EN1092-1(Recommended diaphragm materials: 316L or HC. For others, please consult MICROSENSOR)	※
	J	DN40	HG/T-20592, EN1092-1	※
	B	DN50	HG/T-20592, EN1092-1	
	C	DN80	HG/T-20592, EN1092-1	
	D	DN100	HG/T-20592, EN1092-1	
	1	1inch	HG/T-20615, ANSI/ASME B16.5 (Recommended diaphragm materials: 316L or HC. For others, please consult MICROSENSOR)	※
	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	DN25, DN40, DN50, DN80, DN100
	2	PN25/PN40	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100
	3	PN63	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100
	4	PN100	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100
	A	Class 150	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch
	B	Class 300	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch
	C	Class 600	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch

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

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

Wetted parts material		Flange	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					
			DN25/1inch	DN40	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: For high and low-temperature conditions with capillary lengths of 6m~10m, flanges of DN80 or above are recommended; the part beyond the length will be selected according to the next level of meters							
Low pressure side fill oil	S	Normal temperature silicone oil（Medium temperature：-40℃~200℃，ambient temperature: -40℃~85℃）					
	H	High temperature silicone oil（Medium temperature: 0℃~315℃，ambient temperature: 0℃~85℃）					
	L	Low temperature silicone oil（Medium temperature: -55℃~120℃，ambient temperature: -40℃~85℃）					
	E	Fluorocarbon oil 2（Medium temperature: -55℃~85℃，ambient temperature:-40℃~85℃）					
Factory calibration range	CAL	Provides MICROSENSOR standard verification report according to the range, and the default linear output Contract specifies: LRL - URL, display unit*					

Options-Certificates		Description (Detailed specifications as following, multiple options or null)	
Approvals	/CS1	CCS, China Classification Society XA25PTB00010	
	/CS2	DNV, Det Norske Veritas, TAA00000Y1	
	/CS3	BV, Bureau Veritas, 77759/A0 BV	
	/CS4	ABS, American Bureau of Shipping, 24-2536413-PDA	
	/CS5	LR, Lloyd's Register, LR2520052TA	
	/CS6	KR, Korean Register, NAJ50160-AE001	
	/CS7	NK, Nippon Kaiji Kyokai, TA24376M	
	/CS8	RS, Russian Maritime Register of Shipping, 24.44.01.01398.266	

Metrological certification (Russia & CIS)	/PAC	Pattern Approval Certificate of Measuring Instruments, Russia, 94159-24	
	/PBY	Pattern Approval Certificate of Measuring Instruments, Belarus, 18634	

Options-Specifications		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 accessories	/G7	L-shaped brackets (sq), 316 ss		
	/G8	L-shaped brackets (sq), Q235 carbon steel		
Verification report	/Q1	Provide data according to the customer's template requirements. Contract specifics: LRL - URL, display unit*	※	
Damping time setting	/ST	Adjustable range 0s~100s, default 0s Contract specifics: Damping time*		
Fault alarm setting	/WH	High alarm current value, 20.8mA (HART5), 21mA (HART7)		
	/WL	Low alarm current value, 3.8mA (HART5), 3.7mA (HART7), default		
Identification plate	/PT	Supplied with 316L SS hanging nameplate Contract specifics: Identification number, not exceeding 16 characters		
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 MICROSENSOR standard leakage test report	※	
	/QD7	PN100 (class600), Nitrogen (N ₂) or air, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report	※	
Note: The test pressure is the same as the flange pressure class				
HART configuration	/H5	HART5 configuration, default		
	/H7	HART7 configuration		
Diaphragm with gold plated	/J3	Single diaphragm on high pressure side (8μ)		※
	/J4	Double diaphragms on high and low pressure sides (8μ)		※
Diaphragm spraying	/T3	High pressure side single insertion sleeve PTFE coating		※
	/T4	High pressure side single insertion sleeve and low pressure side single flange PTFE coating		※
	/T9	High pressure side single insertion sleeve PFA coating		※
	/T10	High pressure side single insertion sleeve and low pressure side single flange PFA coating		※
Diaphragm sticking	/PFA	The diaphragm is covered with PFA film (protective cover), applicable to corrosion-resistant conditions (non-vacuum, pressure ≥ 0)		※
Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts		※
Note: Select this item; fluorocarbon oil is needed in oxygen environments (code: D, E)				
Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry		
Language	/LE	English nameplate, operation manual, certificate of conformity, factory inspection report.		
	/LR	Russian nameplate, operation manual, certificate of conformity, factory inspection report.		
Delivery service	/XM	PAdditional acceptance documents (to be specified in the order), in addition to standard supply (product certificate, operation manual, factory verification report)		
Warranty period	/Y2	2-year warranty		
	/Y3	3-year warranty		
	/Y5	5-year warranty		

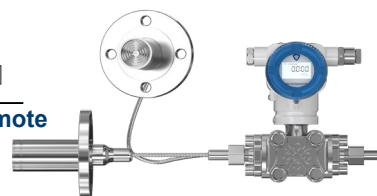
***Note:** The specifications required for these options should be specified in the contract. Products with ※ have longer delivery times.

Example: MDM7000-LP-1HP1L-26-HE-2B1614A6AKU3S-LF-2B1616AKU3S/G1- 【CAL: 0-40kPa】

|| Order Guide ||

MDM7000-LP — □□□□□ — □ — HE — □□□□□□ — LE — □□□□□□

Body

Remote Fixed Flange Insertion Sleeve+Remote
Fixed Flange Insertion Sleeve Diaphragm

Item	Code	Description
MDM7000-LP	—	Monocrystalline Silicon Differential Pressure Transmitter with Diaphragm Seals (Remote Fixed Flange Insertion Sleeve+Remote Fixed Flange Insertion Sleeve)

■ Basic options

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	
	5	China, Flameproof, Dust explosion-proof, Intrinsically safe	
	A	CSA, Flameproof, CSA 25CA80192884X Class I, Division 1, Group A, B, C and D T6 Class II, Division 1 Group E, F and G T80°C 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	
	B	CSA, Intrinsically safe, CSA24CA80156531X Class I, Division 1, Groups A, B, C and D T4 Ex ia IIC T4 Ga	
	C	CSA, Flameproof, Intrinsically safe	
	E	ATEX, Flameproof, CSANe 25ATEX1107X II 2G Ex db IIC T6 Gb, II 2D Ex tb IIIC T80°C Db	
	F	ATEX, Intrinsically safe, CSANe 24ATEX1178X II 1G Ex ia IIC T4 Ga	
	G	ATEX, Flameproof, Intrinsically safe	
	J	IECEx, Flameproof, IECEx CSA 25.0059X Ex db IIC T6 Gb, Ex tb IIIC T80°C Db	
	K	IECEx, Intrinsically safe, IECEx CSA 24.0045X Ex ia IIC T4 Ga	
	L	IECEx, Flameproof, Intrinsically safe	
	M	EAC, Explosion-proof, RU C-CN.AK58.B.05884/24 1Ex db IIC T6 Gb, 0Ex ia IIC T4 Ga	
	0	Non-hazardous area	
Output signal	H	4mA~20mA DC, HART	
	B	4mA~20mA DC, HART, Bluetooth	
	R	Modbus-RS485	

Note: The default is HART5, please select in Options-Specifications if HART7 is required.

Case	S	316L Stainless steel case with two outlet ports (F) M20×1.5	
	U	316L Stainless steel case with two outlet ports (F) 1/2NPT	
	P	Aluminum alloy case (Polyester resin coating) with two outlet ports (F) M20×1.5	
	N	Aluminum alloy case(Polyester resin coating) with two outlet ports (F) 1/2NPT	

Note: The outlet port, (F) 1/2NPT, without cable glands. The explosion-proof conduit is directly connected. The default material for the nameplate is 304 stainless steel. Please consult MICROSENSOR for other materials.

Waterproof/explosion-proof connector	Specification	Material	Applicable wire diameter	IP rating
0	Without cable glands			
A	Single-ended with a flameproof metal plug	316 SS		
1	M20×1.5 waterproof connector, with plug	PVC	6mm~12mm	IP67
2	Non-flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~8mm	IP67

3	Flameproof adapter M20x1.5 (M) to 1/2 NPT (F) , with plug	316 SS	6mm~12mm	IP67
4	Flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~12mm	IP67
5	Flameproof adapter M20x1.5 (M) to G1/2 (F) , with plug	316 SS	6mm~12mm	IP67

Note: Flameproof configuration is applicable to PCEC/ATEX/IECEX standards. Flameproof adapter obtained CCC certificate. Please contact MICROSENSOR if double sealing is required.

Display	N	Without LCD display, explosion proof type -40℃ ~70℃ , non-explosion proof type -50℃ ~85℃			
	L	With LCD display, explosion proof type/ non-explosion proof type -40℃ ~70℃			
—					
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
Clamp flange fastener	1	Bolts, nuts, and other components, 35CrMo			

■ Diaphragm seal options - high pressure side

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, DN100	
	4	PN100	HG/T-20592, EN1092-1	DN50, DN80, DN100	※
	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, 4inch	※

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

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

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		Flange	Insertion sleeve	Measuring diaphragm				
	6A	316 SS	316 SS	316L				
	6B	316 SS	316 SS	Hastelloy C-276				
	6C	316 SS	316 SS	Tantalum		※		
	6D	316 SS	316 SS	Titanium		※		
	6E	316 SS	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		S-46mm					
		1m	M-66mm					
			L-77mm					
	2		S-46mm					
		2m	M-66mm					
			L-77mm					
	3		S-46mm					
		3m	M-66mm					
			L-77mm					
	4		S-46mm					
		4m	M-66mm					
			L-77mm					
	5		S-47mm					
		5m	M-66mm					
			L-77mm					
	6		M-66mm					※
		6m	L-77mm					※
	7		M-66mm					※
		7m	L-77mm					※
	8		M-66mm					※
		8m	L-77mm					※
	9		M-66mm					※
		9m	L-77mm					※

A	M-66mm	※
	L-77mm	※

Note: For high and low-temperature conditions with capillary lengths of 6m~10m, flanges of DN80 or above are recommended; 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 ~200°C, ambient temperature: -40°C ~85°C)	
	H	High temperature silicone oil (Medium temperature: 0°C ~315°C, ambient temperature: 0°C ~85°C)	
	L	Low temperature silicone oil (Medium temperature: -55°C ~120°C, ambient temperature: -40°C ~85°C)	※
	E	Fluorocarbon oil 2 (Medium temperature: -55°C ~85°C, ambient temperature: -40°C ~85°C)	※

■ Diaphragm seal options - low pressure side

Diaphragm connection position	L	Differential pressure transmitter low 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, DN100	
4	PN100		HG/T-20592, EN1092-1	DN50, DN80, DN100	※
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, 4inch	※

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

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

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		Flange	Insertion sleeve	Measuring diaphragm	
	6A	316 SS	316 SS	316L	
	6B	316 SS	316 SS	Hastelloy C-276	
	6C	316 SS	316 SS	Tantalum	※
	6D	316 SS	316 SS	Titanium	※
	6E	316 SS	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: For high and low-temperature conditions with capillary lengths of 6m~10m, flanges of DN80 or above are recommended. the part beyond the length will be selected according to the next level of meters.

Low pressure side fill oil	S	Normal temperature silicone oil (Medium temperature : -40°C ~200°C , ambient temperature: -40°C ~85°C)	
	H	High temperature silicone oil (Medium temperature: 0°C ~315°C , ambient temperature: 0°C ~85°C)	※
	L	Low temperature silicone oil (Medium temperature: -55°C ~120°C , ambient temperature: -40°C ~85°C)	※
	E	Fluorocarbon oil 2 (Medium temperature: -55°C ~85°C , ambient temperature: -40°C ~85°C)	※
Factory calibration range	CAL	Provides MICROSENSOR standard verification report according to the range, and the default linear output Contract specifies: LRL - URL, display unit*	

Options-Certificates		Description (Detailed specifications as following, multiple options or null)	
Approvals	/CS1	CCS, China Classification Society, TJ23PTB00014	
	/CS2	DNV, Det Norske Veritas, TAA00000Y1	
	/CS3	BV, Bureau Veritas, 77759/A0 BV	
	/CS4	ABS, American Bureau of Shipping, 24-2536413-PDA	
	/CS5	LR, Lloyd's Register, LR2520052TA	
	/CS6	KR, Korean Register, NAJ50160-AE001	
	/CS7	NK, Nippon Kaiji Kyokai, TA24376M	
	/CS8	RS, Russian Maritime Register of Shipping, 24.44.01.01398.266	
Metrological certification (Russia & CIS)	/PAC	Pattern Approval Certificate of Measuring Instruments, Russia, 94159-24	
	/PBY	Pattern Approval Certificate of Measuring Instruments, Belarus, 18634	

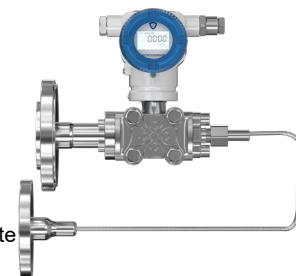
Options-Specifications		Description (Detailed specifications as following, multiple options or null)	
High vacuum high temperature	/V	High vacuum and high temperature process diaphragm (if this option is selected, the accuracy will be affected and can only up to 0.2%)	※
Mounting bracket accessories	/G7	L-shaped brackets (sq), 316 SS	
	/G8	L-shaped brackets (sq), Q235 carbon steel	
Verification report	/Q1	Provide data according to the customer's template requirements. Contract specifies: LRL - URL, display unit*	※
Damping time setting	/ST	Adjustable range 0s~100s, default 0s Contract specifies: Damping time*	
Fault alarm setting	/WH	High alarm current value, 20.8mA (HART5), 21mA (HART7)	
	/WL	Low alarm current value, 3.8mA (HART5), 3.7mA (HART7), default	
Identification plate	/PT	Supplied with 316L SS hanging nameplate Contract specifies: Identification number, not exceeding 16 characters	
Leakage test report	/QD4	PN10/PN16 (class150), Nitrogen (N ₂) or air, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report	※
	/QD5	PN25/PN40 (class300), Nitrogen (N ₂) or air, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report	※
	/QD6	PN63, Nitrogen (N ₂) or air, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report	※
	/QD7	PN100 (class600), Nitrogen (N ₂) or air, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report	※

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

HART configuration	/H5	HART5 configuration, default		
	/H7	HART7 configuration		
Diaphragm with gold plated	/J3	Single diaphragm on high pressure side (8μ)		※
	/J4	Double diaphragms on high and low pressure sides (8μ)		※
Diaphragm spraying	/T3	High pressure side single insertion sleeve PTFE coating		※
	/T5	High-low pressure side double insertion sleeve PTFE coating		※
	/T9	High pressure side single insertion sleeve PFA coating		※
	/T10	High-low pressure side double insertion sleeve PFA coating		※
Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts		※
Note: Select this item; fluorocarbon oil is needed in oxygen environments (code: D, E)				
Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry		
Language	/LE	English nameplate, operation manual, certificate of conformity, factory inspection report.		
	/LR	Russian nameplate, operation manual, certificate of conformity, factory inspection report.		
Delivery service	/XM	Additional acceptance documents (to be specified in the order), in addition to standard supply (product certificate, operation manual, factory verification report)		
Warranty period	/Y2	2-year warranty		
	/Y3	3-year warranty		
	/Y5	5-year warranty		
*Note: The specifications required for these options should be specified in the contract. Products with ※ have longer delivery times.				
Example: MDM7000-LP-1HP1L-26-HE-2B1614A6AKU3S-LE-2B1614A6AKU3S/G1- 【CAL: 0-0.4bar】				

|| Order Guide ||

MDM7000-LP — □□□□□ — □ — HN — □□□□□ — LF — □□□□□



Item	Body		Side Mounted Movable Flange+Remote Fixed Flange Diaphragm
	Code	Description	
MDM7000-LT	—	Monocrystalline Silicon Differential Pressure Transmitter Side Mounted Remote Diaphragm Seals (Side Mounted Movable Flange + Remote Fixed Flange)	

Basic options

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		
	5	China, Flameproof, Dust explosion-proof, Intrinsically safe		
	A	CSA, Flameproof, CSA 25CA80192884X Class I, Division 1, Group A, B, C and D T6 Class II, Division 1 Group E, F and G T80°C 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		
	B	CSA, Intrinsically safe, CSA24CA80156531X Class I, Division 1, Groups A, B, C and D T4 Ex ia IIC T4 Ga		
	C	CSA, Flameproof, Intrinsically safe		
	E	ATEX, Flameproof, CSANe 25ATEX1107X II 2G Ex db IIC T6 Gb, II 2D Ex tb IIIC T80°C Db		
	F	ATEX, Intrinsically safe, CSANe 24ATEX1178X II 1G Ex ia IIC T4 Ga		
	G	ATEX, Flameproof, Intrinsically safe		
	J	IECEX, Flameproof, IECEX CSA 25.0059X Ex db IIC T6 Gb, Ex tb IIIC T80°C Db		
	K	IECEX, Intrinsically safe, IECEX CSA 24.0045X Ex ia IIC T4 Ga		
	L	IECEX, Flameproof, Intrinsically safe		
	M	EAC, Explosion-proof, RU C-CN.AXK58.B.05884/24 1Ex db IIC T6 Gb, 0Ex ia IIC T4 Ga		
	0	Non-hazardous area		
Output signal	H	4mA~20mA DC, HART		
	B	4mA~20mA DC, HART, Bluetooth		
	R	Modbus-RS485		

Note: The default is HART5, please select in Options-Specifications if HART7 is required.

Case	S	316L Stainless steel case with two outlet ports (F) M20×1.5	
	U	316L Stainless steel case with two outlet ports (F) 1/2NPT	
	P	Aluminum alloy case (Polyester resin coating) with two outlet ports (F) M20×1.5	
	N	Aluminum alloy case(Polyester resin coating) with two outlet ports (F) 1/2NPT	

Note: The outlet port, (F) 1/2NPT, without cable glands. The explosion-proof conduit is directly connected. The default material for the nameplate is 304 stainless steel. Please consult MICROSENSOR for other materials.

Waterproof/explosion-proof connector	Specification	Material	Applicable wire diameter	IP rating
0	Without cable glands			
A	Single-ended with a flameproof metal plug	316 SS		
1	M20×1.5 waterproof connector, with plug	PVC	6mm~12mm	IP67
2	Non-flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~8mm	IP67

	3	Flameproof adapter M20x1.5 (M) to 1/2 NPT (F) , with plug	316 SS	6mm~12mm	IP67
	4	Flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~12mm	IP67
	5	Flameproof adapter M20x1.5 (M) to G1/2 (F) , with plug	316 SS	6mm~12mm	IP67
Note: Flameproof configuration is applicable to PCEC/ATEX/IECEX standards.Flameproof adapter obtained CCC certificate. Please contact MICROSENSOR if double sealing is required.					
Display	N	Without LCD display, explosion proof type -40°C ~70°C , non-explosion proof type -50°C ~85°C			
	L	With LCD display, explosion proof type/ non-explosion proof type -40°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
Clamp flange fastener	1	Bolts, nuts, and other components, 35CrMo			

■ Diaphragm seal options - high pressure side

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	
	A	DN25	HG/T-20592, EN1092-1(Recommended diaphragm materials: 316L or HC. For others, please consult MICROSENSOR)	※
	J	DN40	HG/T-20592, EN1092-1	※
	B	DN50	HG/T-20592, EN1092-1	
	C	DN80	HG/T-20592, EN1092-1	
	D	DN100	HG/T-20592, EN1092-1	
	1	1inch	HG/T-20615, ANSI/ASME B16.5 (Recommended diaphragm materials: 316L or HC. For others, please consult MICROSENSOR)	※
	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	DN25, DN40, DN50, DN80, DN100
	2	PN25/PN40	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100
	3	PN63	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100
	4	PN100	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100
	A	Class 150	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch
	B	Class 300	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch
	C	Class 600	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch

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

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

Wetted parts material		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 ~200°C , ambient temperature: -40°C ~85°C)		
	H	High temperature silicone oil (Medium temperature: 0°C ~315°C , ambient temperature: 0°C ~85°C)		
	L	Low temperature silicone oil (Medium temperature: -55°C ~120°C , ambient temperature: -40°C ~85°C)		
	E	Fluorocarbon oil 2 (Medium temperature: -55°C ~85°C , ambient temperature: -40°C ~85°C)		

■ Diaphragm seal options - low pressure side

Diaphragm connection position	L	Differential pressure transmitter low 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	
	A	DN25	HG/T-20592, EN1092-1(Recommended diaphragm materials: 316L or HC. For others, please consult MICROSENSOR)	※
	J	DN40	HG/T-20592, EN1092-1	※
	B	DN50	HG/T-20592, EN1092-1	
	C	DN80	HG/T-20592, EN1092-1	
	D	DN100	HG/T-20592, EN1092-1	
	1	1inch	HG/T-20615, ANSI/ASME B16.5 (Recommended diaphragm materials: 316L or HC. For others, please consult MICROSENSOR)	※
	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	DN25, DN40, DN50, DN80, DN100
	2	PN25/PN40	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100
	3	PN63	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100
	4	PN100	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100 ※
	A	Class 150	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch
	B	Class 300	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch
	C	Class 600	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch ※
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 1in~4in, flange pressure PN10~PN160 or Class 150~Class 2500)
	A	FM Female face (Flange diameter DN25~DN100 or 1in~4in, flange pressure PN10~PN160 or Class300~Class2500)
	B	M Male face (Flange diameter DN25~DN100 or 1in~4in, flange pressure PN10~PN160 or Class300~Class2500)
	C	RJ Ring joint face (Flange diameter DN25~DN100 or 1in~4in, flange pressure PN63~PN160 or Class150~Class2500)

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

Wetted parts material	Flange	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				
		DN25/1inch	DN40	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: For high and low-temperature conditions with capillary lengths of 6m-10m, flanges of DN80 or above are recommended; the part beyond the length will be selected according to the next level of meters.

Low pressure side fill oil	S	Normal temperature silicone oil (Medium temperature: -40°C ~200°C , ambient temperature: -40°C ~85°C)	
	H	High temperature silicone oil (Medium temperature: 0°C ~315°C , ambient temperature: 0°C ~85°C)	
	L	Low temperature silicone oil (Medium temperature: -55°C ~120°C , ambient temperature: -40°C ~85°C)	※
	E	Fluorocarbon oil 2 (Medium temperature: -55°C ~85°C , ambient temperature: -40°C ~85°C)	※
Factory calibration range	CAL	Provides MICROSENSOR standard verification report according to the range, and the default linear output	
		Contract specifies: LRL - URL, display unit*	

Options-Certificates		Description (Detailed specifications as following, multiple options or null)	
Approvals	/CS1	CCS, China Classification Society, XA25PTB00010	   
	/CS2	DNV, Det Norske Veritas, TAA00000Y1	
	/CS3	BV, Bureau Veritas, 77759/A0 BV	
	/CS4	ABS, American Bureau of Shipping, 24-2536413-PDA	

	/CS5	LR, Lloyd's Register, LR2520052TA	
	/CS6	KR, Korean Register, NAJ50160-AE001	
	/CS7	NK, Nippon Kaiji Kyokai, TA24376M	
	/CS8	RS, Russian Maritime Register of Shipping, 24.44.01.01398.266	
Metrological certification (Russia & CIS)	/PAC	Pattern Approval Certificate of Measuring Instruments, Russia, 94159-24	
	/PBY	Pattern Approval Certificate of Measuring Instruments, Belarus, 18634	

Options-Specifications		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%)	※
Verification report	/Q1	Provide data according to the customer's template requirements. Contract specifics: LRL - URL, display unit*	※
Damping time setting	/ST	Adjustable range 0s~100s, default 0s Contract specifics: Damping time*	
Fault alarm setting	/WH	High alarm current value, 20.8mA (HART5), 21mA (HART7)	
	/WL	Low alarm current value, 3.8mA (HART5), 3.7mA (HART7), default	
Identification plate	/PT	Supplied with 316L SS hanging nameplate Contract specifics: Identification number, not exceeding 16 characters	
Leakage test report	/QD4	PN10/PN16 (class150), Nitrogen (N ₂) or air, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report	※
	/QD5	PN25/PN40 (class300), Nitrogen (N ₂) or air, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report	※
	/QD6	PN63, Nitrogen (N ₂) or air, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report	※
	/QD7	PN100 (class600), Nitrogen (N ₂) or air, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report	※
Note: The test pressure is the same as the flange pressure class			
HART configuration	/H5	HART5 configuration, default	
	/H7	HART7 configuration	
Diaphragm with gold plated	/J3	Single diaphragm on high pressure side (8μ)	※
	/J4	Double diaphragms on high and low pressure sides (8μ)	※
Diaphragm spraying	/T1	High pressure side single flange PTFE coating	※
	/T2	High-low pressure side double flange PTFE coating	※
	/T7	High pressure side single flange PFA coating	※
	/T8	High-low pressure side double flange PFA coating	※
Diaphragm sticking	/PFA	The diaphragm is covered with PFA film (protective cover), applicable to corrosion-resistant conditions (non-vacuum, pressure ≥ 0)	※
Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts	※
Note: Select this item; fluorocarbon oil is needed in oxygen environments (code: D, E)			
Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry	
Language	/LE	English nameplate, operation manual, certificate of conformity, factory inspection report.	
	/LR	Russian nameplate, operation manual, certificate of conformity, factory inspection report.	
Delivery service	/XM	Additional acceptance documents (to be specified in the order), in addition to standard supply (product certificate, operation manual, factory verification report)	
Warranty period	/Y2	2-year warranty	
	/Y3	3-year warranty	
	/Y5	5-year warranty	



***Note:** The specifications required for these options should be specified in the contract. Products with ※ have longer delivery times.

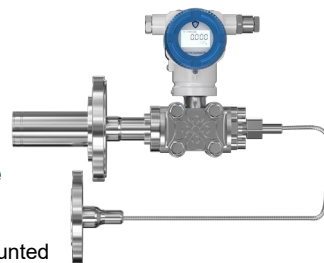
Example: MDM7000-LP-1HP1L-2A1S1-HN-22B1616AS-LF-2B1614AKU3S/CS1- 【CAL: 0-0.4bar】

Order Guide

MDM7000-LP — ☐☐☐☐☐ — ☐ — HM — ☐☐☐☐☐ LF — ☐☐☐☐

Body

Side Mounted Movable Flange Insertion Sleeve +Remote Fixed Flange Diaphragm



Item	Code	Description
MDM7000-LP	—	Monocrystalline Silicon Differential Pressure Transmitter Side Mounted Remote Diaphragm Seals (Side Mounted Movable Flange Insertion Sleeve + Remote Fixed Flange)

Basic options

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	
	5	China, Flameproof, Dust explosion-proof, Intrinsically safe	
	A	CSA, Flameproof, CSA 25CA80192884X Class I, Division 1, Group A, B, C and D T6 Class II, Division 1 Group E, F and G T80°C 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	
	B	CSA, Intrinsically safe, CSA24CA80156531X Class I, Division 1, Groups A, B, C and D T4 Ex ia IIC T4 Ga Class I, Zone 0, AEx ia IIC T4 Ga	
	C	CSA, Flameproof, Intrinsically safe	
	E	ATEX, Flameproof, CSANe 25ATEX1107X II 2G Ex db IIC T6 Gb, II 2D Ex tb IIIC T80°C Db	
	F	ATEX, Intrinsically safe, CSANe 24ATEX1178X II 1G Ex ia IIC T4 Ga	
	G	ATEX, Flameproof, Intrinsically safe	
	J	IECEx, Flameproof, IECEx CSA 25.0059X Ex db IIC T6 Gb, Ex tb IIIC T80°C Db	
	K	IECEx, Intrinsically safe, IECEx CSA 24.0045X Ex ia IIC T4 Ga	
	L	IECEx, Flameproof, Intrinsically safe	
	M	EAC, Explosion-proof, RU C-CN.AK58.B.05884/24 1Ex db IIC T6 Gb, 0Ex ia IIC T4 Ga	
	0	Non-hazardous area	
Output signal	H	4mA~20mA DC, HART	
	B	4mA~20mA DC, HART, Bluetooth	
	R	Modbus-RS485	

Note: The default is HART5, please select in Options-Specifications if HART7 is required.

Case	S	316L Stainless steel case with two outlet ports (F) M20×1.5	
	U	316L Stainless steel case with two outlet ports (F) 1/2NPT	
	P	Aluminum alloy case (Polyester resin coating) with two outlet ports (F) M20×1.5	
	N	Aluminum alloy case(Polyester resin coating) with two outlet ports (F) 1/2NPT	

Note: The outlet port, (F) 1/2NPT, without cable glands. The explosion-proof conduit is directly connected. The default material for the nameplate is 304 stainless steel. Please consult MICROSENSOR for other materials.

Waterproof/explosion-proof connector	Specification	Material	Applicable wire diameter	IP rating
0	Without cable glands			
A	Single-ended with a flameproof metal plug	316 SS		
1	M20×1.5 waterproof connector, with plug	PVC	6mm~12mm	IP67
2	Non-flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~8mm	IP67

3	Flameproof adapter M20x1.5 (M) to 1/2 NPT (F) , with plug	316 SS	6mm~12mm	IP67
4	Flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~12mm	IP67
5	Flameproof adapter M20x1.5 (M) to G1/2 (F) , with plug	316 SS	6mm~12mm	IP67

Note: Flameproof configuration is applicable to PCEC/ATEX/IECEX standards. Flameproof adapter obtained CCC certificate. Please contact MICROSENSOR if double sealing is required.

Display	N	Without LCD display, explosion proof type -40°C ~70°C , non-explosion proof type -50°C ~85°C			
	L	With LCD display, explosion proof type/ non-explosion proof type -40°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
Clamp flange fastener	6	Bolts, nuts, and other components, 35CrMo			

■ Diaphragm seal options - high pressure side

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, DN100
	4	PN100	HG/T-20592, EN1092-1	DN50, DN80, DN100
	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, 4inch

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 1in~4in, flange pressure PN10~PN160 or Class 150~Class 2500)			
	A	FM Female face (Flange diameter DN25~DN100 or 1in~4in, flange pressure PN10~PN160 or Class 300~Class 2500)			
	B	M Male face (Flange diameter DN25~DN100 or 1in~4in, flange pressure PN10~PN160 or Class 300~Class 2500)			
	C	RJ Ring joint face (Flange diameter DN25~DN100 or 1in~4in, flange pressure PN63~PN160 or Class 150~Class 2500)			

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

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		Blind	Insertion sleeve	Measuring diaphragm
	6A	316 SS	316 SS	316L
	6B	316 SS	316 SS	Hastelloy C-276
	6C	316 SS	316 SS	Tantalum ※
	6D	316 SS	316 SS	Titanium ※
	6E	316 SS	316 SS	Monel ※
High pressure side fill oil	S	Normal temperature silicone oil (Medium temperature : -40°C ~200°C , ambient temperature: -40°C ~85°C)		
	H	High temperature silicone oil (Medium temperature: 0°C ~315°C , ambient temperature: 0°C ~85°C)		
	L	Low temperature silicone oil (Medium temperature: -55°C ~120°C , ambient temperature: -40°C ~85°C)		
	E	Fluorocarbon oil 2 (Medium temperature: -55°C ~85°C , ambient temperature: -40°C ~85°C)		

■ Diaphragm seal options - low pressure side

Diaphragm connection position	L	Differential pressure transmitter low 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	
	A	DN25	HG/T-20592, EN1092-1 (Recommended diaphragm materials: 316L or HC. For others, please consult MICROSENSOR)	※
	J	DN40	HG/T-20592, EN1092-1	※
	B	DN50	HG/T-20592, EN1092-1	
	C	DN80	HG/T-20592, EN1092-1	
	D	DN100	HG/T-20592, EN1092-1	
	1	1inch	HG/T-20615, ANSI/ASME B16.5 (Recommended diaphragm materials: 316L or HC. For others, please consult MICROSENSOR)	※
	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	DN25, DN40, DN50, DN80, DN100
	2	PN25/PN40	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100

3	PN63	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100
4	PN100	HG/T-20592, EN1092-1	DN25, DN40, DN50, DN80, DN100 ※
A	Class 150	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch
B	Class 300	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch
C	Class 600	HG/T-20615, ANSI/ASME B16.5	1inch, 2inch, 3inch, 4inch ※

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 1in~4in, flange pressure PN10~PN160 or Class 150~Class 2500)
	A	FM Female face(Flange diameter DN25~DN100 or 1in~4in, flange pressure PN10~PN160 or Class 300~Class 2500)
	B	M Male face(Flange diameter DN25~DN100 or 1in~4in, flange pressure PN10~PN160 or Class 300~Class 2500)
	C	RJ Ring joint face(Flange diameter DN25~DN100 or 1in~4in, flange pressure PN63~PN160 or Class 150~Class 2500)

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

Wetted parts material		Flange	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				
	DN25/1inch	DN40	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: For high and low-temperature conditions with capillary lengths of 6m-10m, flanges of DN80 or above are recommended; the part beyond the length will be selected according to the next level of meters.

Low pressure side fill oil	S	Normal temperature silicone oil (Medium temperature : -40°C ~200°C , ambient temperature: -40°C ~85°C)	
	H	High temperature silicone oil (Medium temperature: 0°C ~315°C , ambient temperature: 0°C ~85°C)	
	L	Low temperature silicone oil (Medium temperature: -55°C ~120°C , ambient temperature: -40°C ~85°C)	※
	E	Fluorocarbon oil 2 (Medium temperature: -55°C ~85°C , ambient temperature:-40°C ~85°C)	※
Factory calibration range	CAL	Provides MICROSENSOR standard verification report according to the range, and the default linear output Contract specifies: LRL - URL, display unit*	

Options-Certificates		Description (Detailed specifications as following, multiple options or null)	
Approvals	/CS1	CCS, China Classification Society, XA25PTB00010	
	/CS2	DNV, Det Norske Veritas, TAA00000Y1	
	/CS3	BV, Bureau Veritas, 77759/A0 BV	
	/CS4	ABS, American Bureau of Shipping, 24-2536413-PDA	
	/CS5	LR, Lloyd's Register, LR2520052TA	
	/CS6	KR, Korean Register, NAJ50160-AE001	
	/CS7	NK, Nippon Kaiji Kyokai, TA24376M	
	/CS8	RS, Russian Maritime Register of Shipping, 24.44.01.01398.266	
Metrological certification (Russia & CIS)	/PAC	Pattern Approval Certificate of Measuring Instruments, Russia, 94159-24	
	/PBX	Pattern Approval Certificate of Measuring Instruments, Belarus, 18634	

Options-Specifications		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%)	※
Verification report	/Q1	Provide data according to the customer's template requirements. Contract specifies: LRL - URL, display unit*	※
Damping time setting	/ST	Adjustable range 0s~100s, default 0s Contract specifies: Damping time*	
Fault alarm setting	/WH	High alarm current value, 20.8mA (HART5), 21mA (HART7)	
	/WL	Low alarm current value, 3.8mA (HART5), 3.7mA (HART7), default	
Identification plate	/PT	Supplied with 316L SS hanging nameplate Contract specifies: Identification number, not exceeding 16 characters	
Leakage test report	/QD4	PN10/PN16 (class150), Nitrogen (N ₂) or air, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report	※
	/QD5	PN25/PN40 (class300), Nitrogen (N ₂) or air, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report	※
	/QD6	PN63, Nitrogen (N ₂) or air, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report	※
	/QD7	PN100 (class600), Nitrogen (N ₂) or air, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report	※
Note: The test pressure is the same as the flange pressure class			
HART configuration	/H5	HART5 configuration, default	
	/H7	HART7 configuration	
Diaphragm with gold plated	/J3	Single diaphragm on high pressure side (8μ)	 ※
	/J4	Double diaphragms on high and low pressure sides (8μ)	※
Diaphragm spraying	/T3	Single insertion sleeve on high pressure side PTFE coating	※
	/T4	Single insertion sleeve on high pressure side and single flange on low pressure side PTFE coating	※
	/T9	Single insertion sleeve on high pressure side PFA coating	※
	/T10	Single insertion sleeve on high pressure side and single flange on low pressure side PFA coating	※
Diaphragm sticking	/PFA	The diaphragm is stuck with PFA film, applicable to non-vacuum situations (pressure ≥ 0)	※
Note: Sticking is not available on the insertion sleeve			
Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts	※
Note: Select this item; fluorocarbon oil is needed in oxygen environments (code: D, E)			

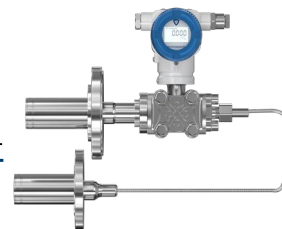
Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry
Language	/LE	English nameplate, operation manual, certificate of conformity, factory inspection report.
	/LR	Russian nameplate, operation manual, certificate of conformity, factory inspection report.
Delivery service	/XM	Additional acceptance documents (to be specified in the order), in addition to standard supply (product certificate, operation manual, factory verification report)
Warranty period	/Y2	2-year warranty
	/Y3	3-year warranty
	/Y5	5-year warranty

***Note:** The specifications required for these options should be specified in the contract. Products with ※ have longer delivery times.

Example: MDM7000-LP-1HP1L-21-HM-2B14614A66AS-LF-2B1614AKU3S/CS1- 【CAL: 0-0.4bar】

Order Guide

MDM7000-LP — ☐☐☐☐☐ — ☐ — HM — ☐☐☐☐☐ — LE ☐☐☐☐☐☐



Item	Body		Side Mounted Movable Flange Insertion Sleeve + Remote Fixed Flange Insertion Sleeve
	Code	Description	
MDM7000-LP	—	Monocrystalline Silicon Differential Pressure Transmitter Side Mounted Remote Diaphragm Seals (Side Mounted Movable Flange Insertion Sleeve + Remote Fixed Flange Insertion Sleeve)	

Basic options

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	
	5	China, Flameproof, Dust explosion-proof, Intrinsically safe	
	A	CSA, Flameproof, CSA 25CA80192884X Class I, Division 1, Group A, B, C and D T6 Class II, Division 1 Group E, F and G T80°C 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	
	B	CSA, Intrinsically safe, CSA24CA80156531X Class I, Division 1, Groups A, B, C and D T4 Ex ia IIC T4 Ga	
	C	Class I, Zone 0, AEx ia IIC T4 Ga CSA, Flameproof, Intrinsically safe	
	E	ATEX, Flameproof, CSANe 25ATEX1107X II 2G Ex db IIC T6 Gb, II 2D Ex tb IIIC T80°C Db	
	F	ATEX, Intrinsically safe, CSANe 24ATEX1178X II 1G Ex ia IIC T4 Ga	
	G	ATEX, Flameproof, Intrinsically safe	
	J	IECEX, Flameproof, IECEX CSA 25.0059X Ex db IIC T6 Gb, Ex tb IIIC T80°C Db	
	K	IECEX, Intrinsically safe, IECEX CSA 24.0045X Ex ia IIC T4 Ga	
	L	IECEX, Flameproof, Intrinsically safe	
	M	EAC, Explosion-proof, RU C-CN.AK58.B.05884/24 1Ex db IIC T6 Gb, 0Ex ia IIC T4 Ga	
	0	Non-hazardous area	
Output signal	H	4mA~20mA DC, HART	
	B	4mA~20mA DC, HART, Bluetooth	
	R	Modbus-RS485	

Note: The default is HART5, please select in Options-Specifications if HART7 is required.

Case	S	316L Stainless steel case with two outlet ports (F) M20×1.5	
	U	316L Stainless steel case with two outlet ports (F) 1/2NPT	
	P	Aluminum alloy case (Polyester resin coating) with two outlet ports (F) M20×1.5	
	N	Aluminum alloy case (Polyester resin coating) with two outlet ports (F) 1/2NPT	

Note: The outlet port, (F) 1/2NPT, without cable glands. The explosion-proof conduit is directly connected. The default material for the nameplate is 304 stainless steel. Please consult MICROSENSOR for other materials.

Waterproof/explosion-proof connector	Specification	Material	Applicable wire diameter	IP rating
0	Without cable glands			
A	Single-ended with a flameproof metal plug	316 SS		
1	M20×1.5 waterproof connector, with plug	PVC	6mm~12mm	IP67

	2	Non-flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~8mm	IP67
	3	Flameproof adapter M20x1.5 (M) to 1/2 NPT (F) , with plug	316 SS	6mm~12mm	IP67
	4	Flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~12mm	IP67
	5	Flameproof adapter M20x1.5 (M) to G1/2 (F) , with plug	316 SS	6mm~12mm	IP67

Note: Flameproof configuration is applicable to PCEC/ATEX/IECEX standards. Flameproof adapter obtained CCC certificate. Please contact MICROSENSOR if double sealing is required.

Display	N	Without LCD display, explosion proof type -40°C ~70°C , non-explosion proof type -50°C ~85°C
	L	With LCD display, explosion proof type/ non-explosion proof type -40°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

Clamp flange fastener	1	Bolts, nuts, and other components, 35CrMo
-----------------------	---	---

■ Diaphragm seal options - high pressure side

Diaphragm connection position	H	Differential pressure transmitter high pressure side
-------------------------------	---	--

Diaphragm 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, DN100
	4	PN100 HG/T-20592, EN1092-1	DN50, DN80, DN100 ※
	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, 4inch ※

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 1in~4in, flange pressure PN10~PN160 or Class 150~Class 2500)
	A	FM Female face(Flange diameter DN25~DN100 or 1in~4in, flange pressure PN10~PN160 or Class 300~Class 2500)
	B	M Male face(Flange diameter DN25~DN100 or 1in~4in, flange pressure PN10~PN160 or Class 300~Class 2500)
	C	RJ Ring joint face(Flange diameter DN25~DN100 or 1in~4in, flange pressure PN63-PN160 or Class 150~Class 2500)

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

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		Blind	Insertion sleeve	Measuring diaphragm
	6A	316 SS	316 SS	316L
	6B	316 SS	316 SS	Hastelloy C-276
	6C	316 SS	316 SS	Tantalum ※
	6D	316 SS	316 SS	Titanium ※
	6E	316 SS	316 SS	Monel ※
High pressure side fill oil	S	Normal temperature silicone oil (Medium temperature: -40°C ~200°C , ambient temperature: -40°C ~85°C)		
	H	High temperature silicone oil (Medium temperature: 0°C ~315°C , ambient temperature: 0°C ~85°C)		
	L	Low temperature silicone oil (Medium temperature: -55°C ~120°C , ambient temperature: -40°C ~85°C)		
	E	Fluorocarbon oil 2 (Medium temperature: -55°C ~85°C , ambient temperature: -40°C ~85°C)		

■ Diaphragm seal options - low pressure side

Diaphragm connection position	L	Differential pressure transmitter low 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, DN100
	4	PN100	HG/T-20592, EN1092-1	DN50, DN80, DN100

※

	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, 4inch	※

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 1in~4in, flange pressure PN10~PN160 or Class 150~Class 2500)
	A	FM Female face(Flange diameter DN25~DN100 or 1in~4in, flange pressure PN10~PN160 or Class 300~Class 2500)
	B	M Male face(Flange diameter DN25~DN100 or 1in~4in, flange pressure PN10~PN160 or Class 300~Class 2500)
	C	RJ Ring joint face(Flange diameter DN25~DN100 or 1in~4in, flange pressure PN63-PN160 or Class 150~Class 2500)

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

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		Flange	Insertion sleeve	Measuring diaphragm	
	6A	316 SS	316 SS	316L	
	6B	316 SS	316 SS	Hastelloy C-276	
	6C	316 SS	316 SS	Tantalum	※
	6D	316 SS	316 SS	Titanium	※
	6E	316 SS	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						

		S-47mm	
5	5m	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: For high and low-temperature conditions with capillary lengths of 6m-10m, flanges of DN80 or above are recommended; the part beyond the length will be selected according to the next level of meters.

Low pressure side fill oil	S	Normal temperature silicone oil (Medium temperature : -40°C ~200°C , ambient temperature: -40°C ~85°C)	
	H	High temperature silicone oil (Medium temperature: 0°C ~315°C , ambient temperature: 0°C ~85°C)	
	L	Low temperature silicone oil (Medium temperature: -55°C ~120°C , ambient temperature: -40°C ~85°C)	※
	E	Fluorocarbon oil 2 (Medium temperature: -55°C ~85°C , ambient temperature: -40°C ~85°C)	※
Factory calibration range	CAL	Provides MICROSENSOR standard verification report according to the range, and the default linear output Contract specifies: LRL - URL, display unit*	

Options-Certificates		Description (Detailed specifications as following, multiple options or null)	
Approvals	/CS1	CCS, China Classification Society, XA25PTB00010	
	/CS2	DNV, Det Norske Veritas, TAA00000Y1	
	/CS3	BV, Bureau Veritas, 77759/A0 BV	
	/CS4	ABS, American Bureau of Shipping, 24-2536413-PDA	
	/CS5	LR, Lloyd's Register, LR2520052TA	
	/CS6	KR, Korean Register, NAJ50160-AE001	
	/CS7	NK, Nippon Kaiji Kyokai, TA24376M	
	/CS8	RS, Russian Maritime Register of Shipping, 24.44.01.01398.266	
Metrological certification (Russia & CIS)	/PAC	Pattern Approval Certificate of Measuring Instruments, Russia, 94159-24	
	/PBY	Pattern Approval Certificate of Measuring Instruments, Belarus, 18634	

Options-Specifications		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%)	※
Verification report	/Q1	Provide data according to the customer's template requirements. Contract specifies: LRL - URL, display unit*	※
Damping time setting	/ST	Adjustable range 0s~100s, default 0s Contract specifies: Damping time*	

Fault alarm setting	/WH	High alarm current value, 20.8mA (HART5), 21mA (HART7)		
	/WL	Low alarm current value, 3.8mA (HART5), 3.7mA (HART7), default		
Identification plate	/PT	Supplied with 316L SS hanging nameplate Contract specifies: Identification number, not exceeding 16 characters		
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 MICROSENSOR 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, default		
	/H7	HART7 configuration		
Diaphragm with gold plated	/J3	Single diaphragm on high pressure side (8μ)		※
	/J4	Double diaphragms on high and low pressure sides (8μ)		※
Diaphragm spraying	/T3	High pressure side single insertion sleeve PTFE coating		※
	/T5	High-low pressure side double insertion sleeve PTFE coating		※
	/T9	High pressure side single insertion sleeve PFA coating		※
	/T11	High-low pressure side double insertion sleeve PFA coating		※
Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts		※
Note: Select this item; fluorocarbon oil is needed in oxygen environments (code: D, E)				
Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry		
Language	/LE	English nameplate, operation manual, certificate of conformity, factory inspection report.		
	/LR	Russian nameplate, operation manual, certificate of conformity, factory inspection report.		
Delivery service	/XM	Additional acceptance documents (to be specified in the order), in addition to standard supply (product certificate, operation manual, factory verification report)		
Warranty period	/Y2	2-year warranty		
	/Y3	3-year warranty		
	/Y5	5-year warranty		

***Note:** The specifications required for these options should be specified in the contract. Products with ※ have longer delivery times.

Example: MDM7000-LP-1HP1L-21-HM-2B1614A6AKU3S-LE-2B1614A6AKU3S/CS1- 【CAL: 0-0.4bar】