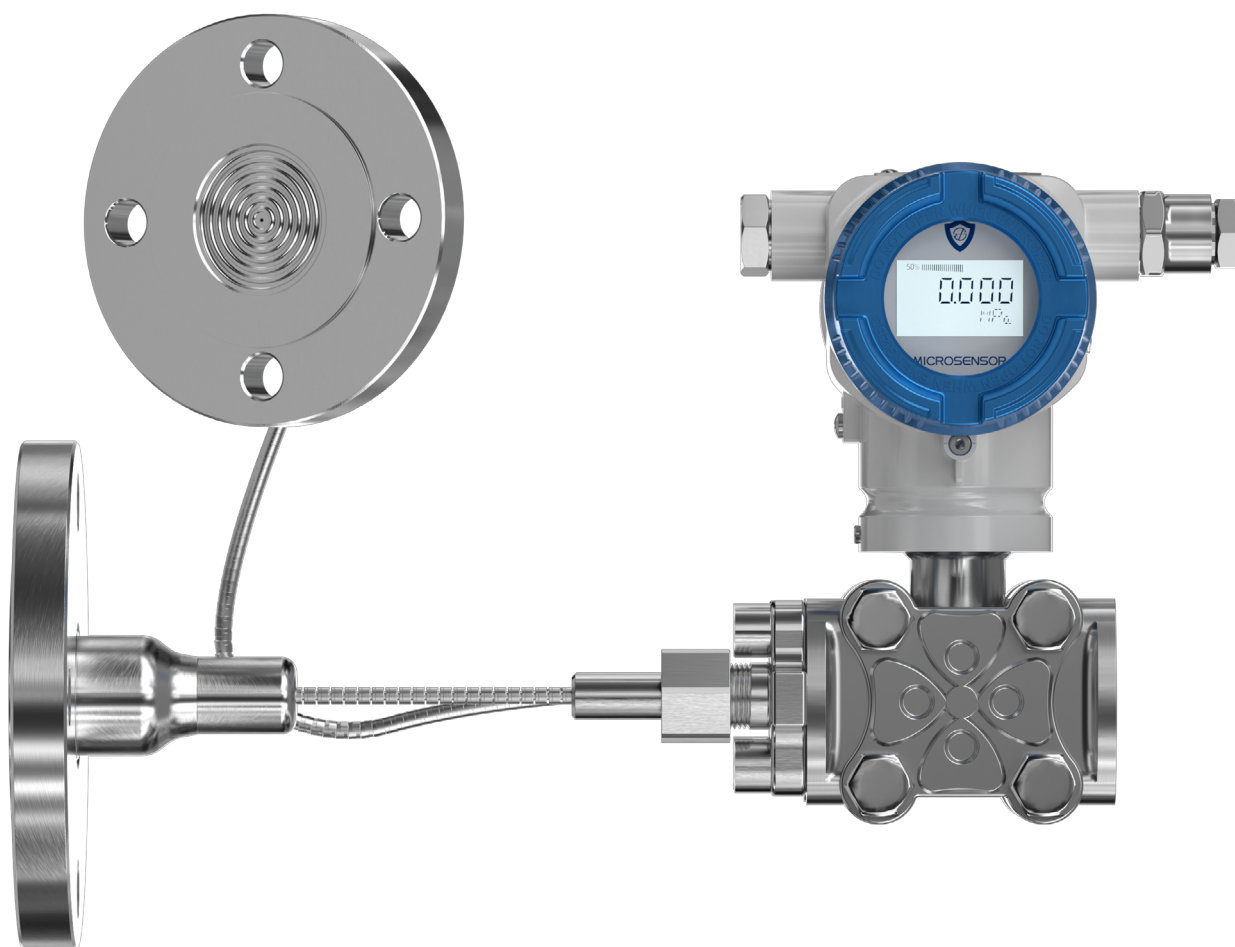


MDM7000-LP

**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
10bar	1bar	-5bar	10bar

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 $\pm$ 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 $\leq$ 5	$\pm 0.2\%$	0.4bar, 2.5bar, 10bar
	TD > 5	$\pm (0.025 + 0.045TD) \%$	

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	$\pm 0.2\%$
Range	0.4bar~10bar, see the specifications for details
Turn down ratio	100:1
Long-term stability	$\pm 0.1\%$ Span/10 years
Ambient temperature effects	The total effect per 10°C in the range of -20°C ~80°C: $(0.375 + 0.125TD)\%/10^\circ\text{C}$ of SPAN
Voltage effects	When the power supply voltage changes within 18.3V~44V DC, its zero point and range change should not exceed $\pm 0.005\%$ 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	Approx. 6.35kg(body)

|| Environmental Conditions ||

Items	Conditions
Ambient 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
Ambient humidity	5%RH~100%RH@40°C

Note: ^① For short-neck explosion-proof models, ensure that the enclosure surface temperature $\leq 80^\circ\text{C}$. If uncertain, the medium temperature shall not exceed the T6 (80°C) temperature class.

|| Diaphragm Operating Temperature ||

Filling oil type	Code	Medium temperature	Ambient temperature
Standard 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
Fluorinated oil	E	-55°C ~85°C	-40°C ~ 85°C

Power Supply and Load Requirements

Items	Conditions
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 (housing)	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	Radiated, radio-frequency, electro-magnetic field immunity test	GB/T 17626.3/IEC61000-4-3	10V/m (80MHz~1GHz)	A
5	Power frequency magnetic field immunity test	GB/T 17626.8/IEC61000-4-8	30A/m	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 : Performance level A: Normal operation within specified limits

Performance level B: Temporary performance degradation permitted, with automatic recovery and no data loss

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)	II 1G Ex ia IIC T4 Ga	EN IEC 60079-0:2018 EN 60079-11:2012
	ATEX Flameproof (CSA)	II 2G Ex db IIC T6 Gb	EN IEC 60079-0:2018 EN 60079-1: 2014
	ATEX Dust explosion-proof (CSA)	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)	Ex db IIC T6 Gb	IEC 60079-0: 2017 IEC 60079-1: 2014
	IECEX Dust explosion-proof (CSA)	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

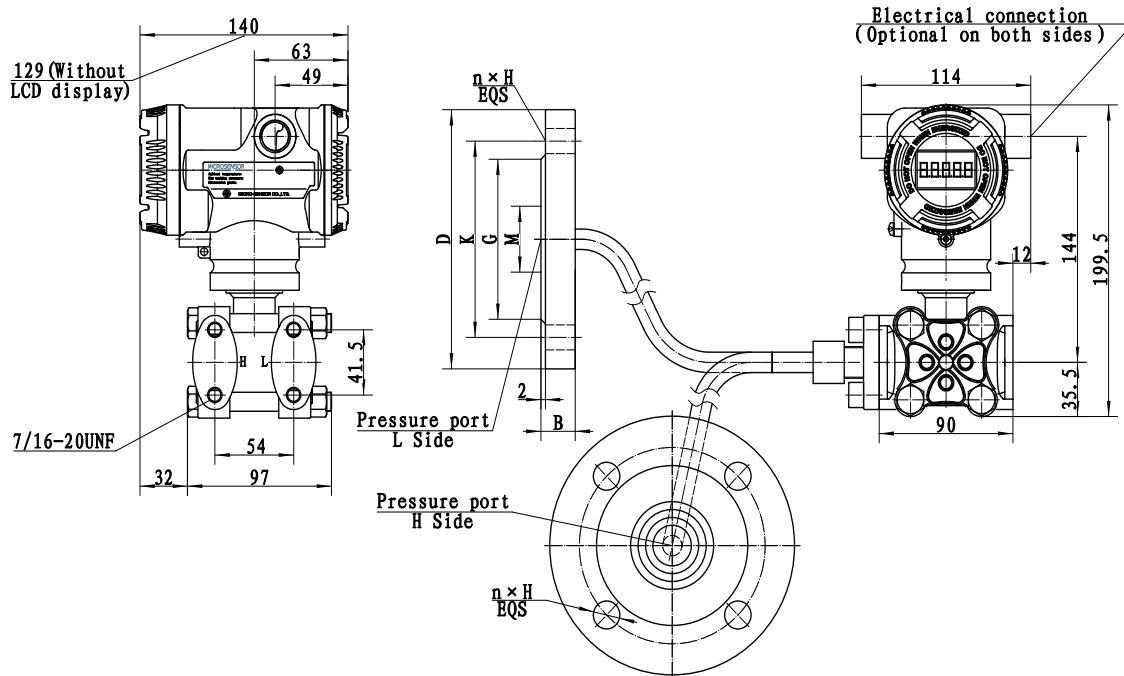
Note: Please consult MICROSENSOR for details.

Dimensions

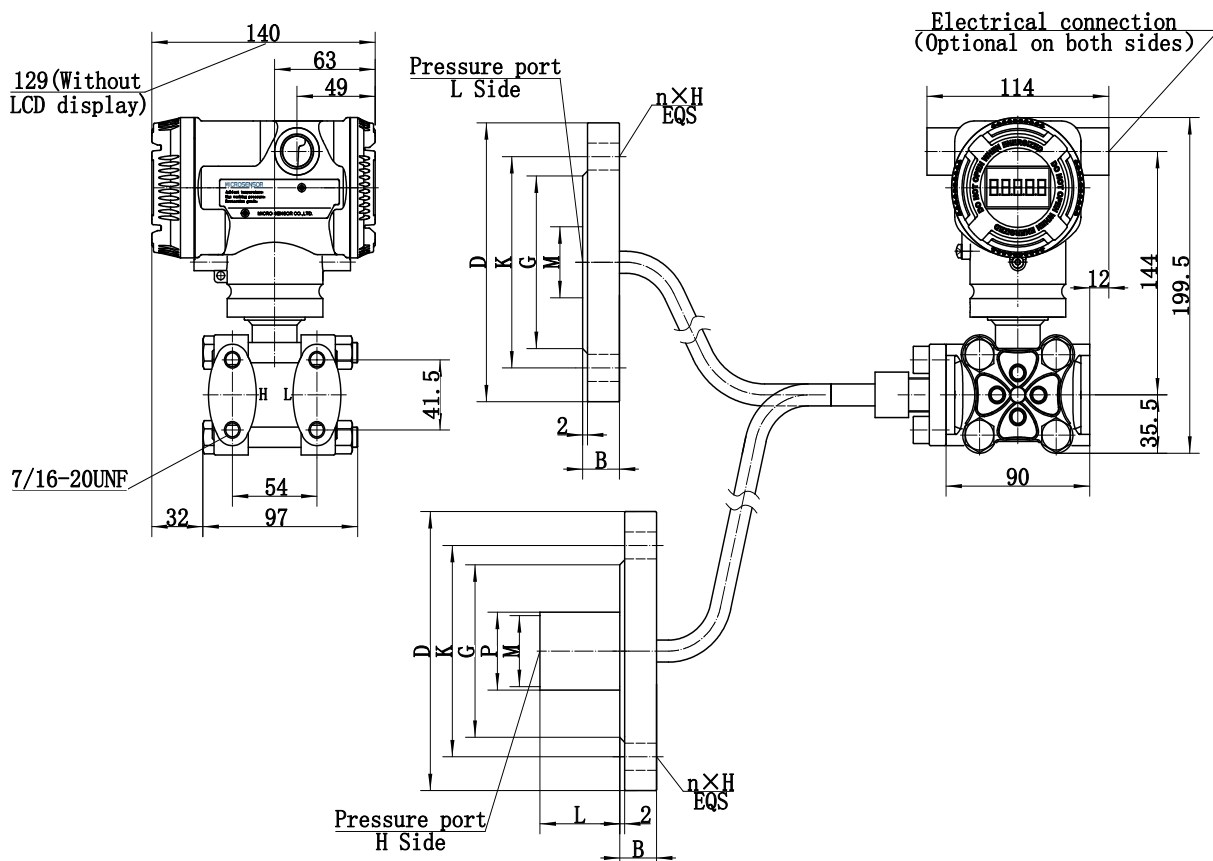
Unit: mm

Note: The cable gland is supplied as an accessory and is to be installed by the user.

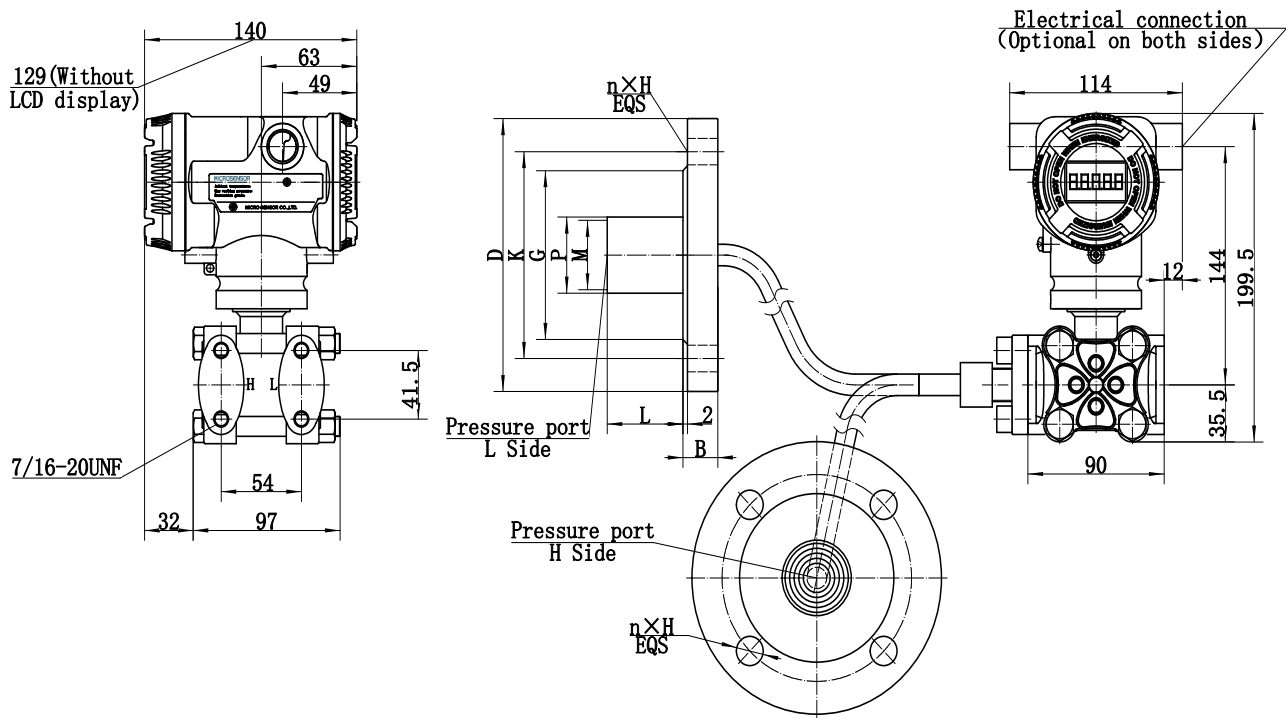
Remote Fixed Flange + Remote Fixed Flange With Display



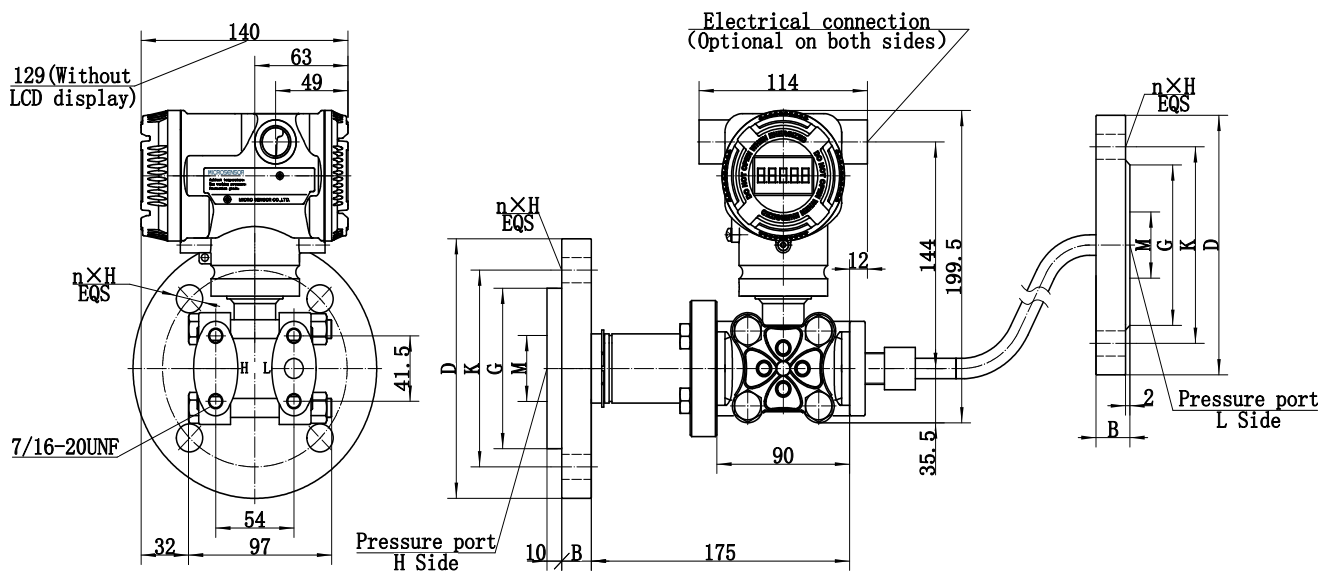
Remote Fixed Flange Insertion Sleeve + Remote Fixed Flange With Display



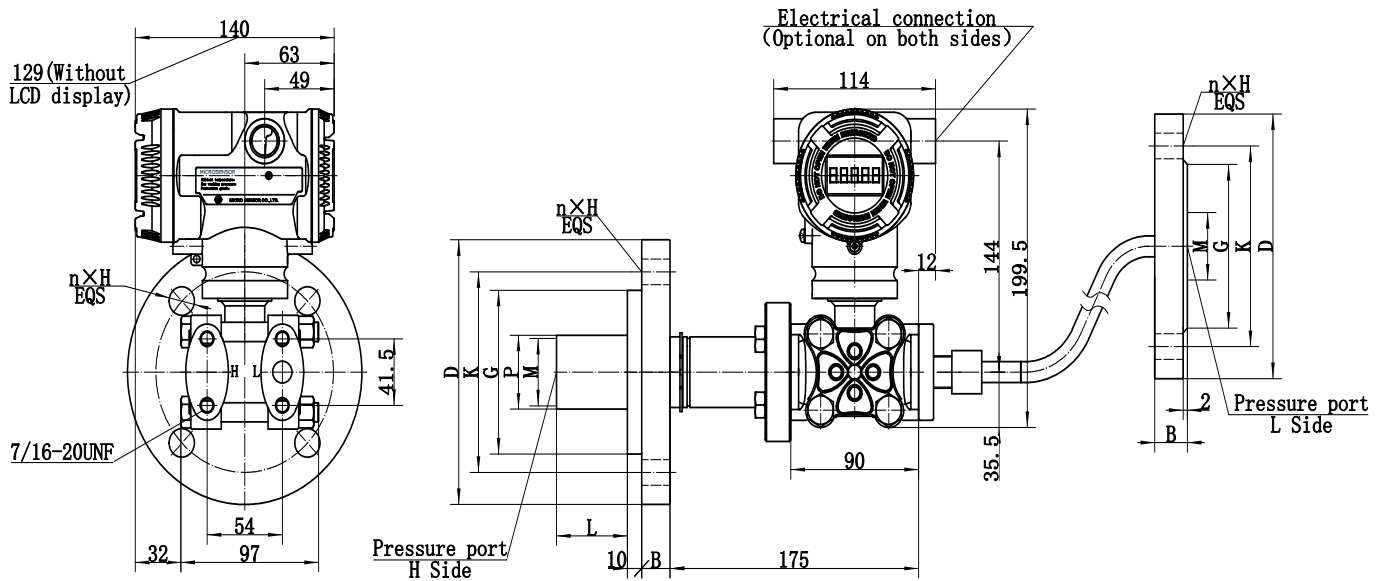
Remote Fixed Flange Insertion Sleeve + Remote Fixed Flange Insertion Sleeve With Display



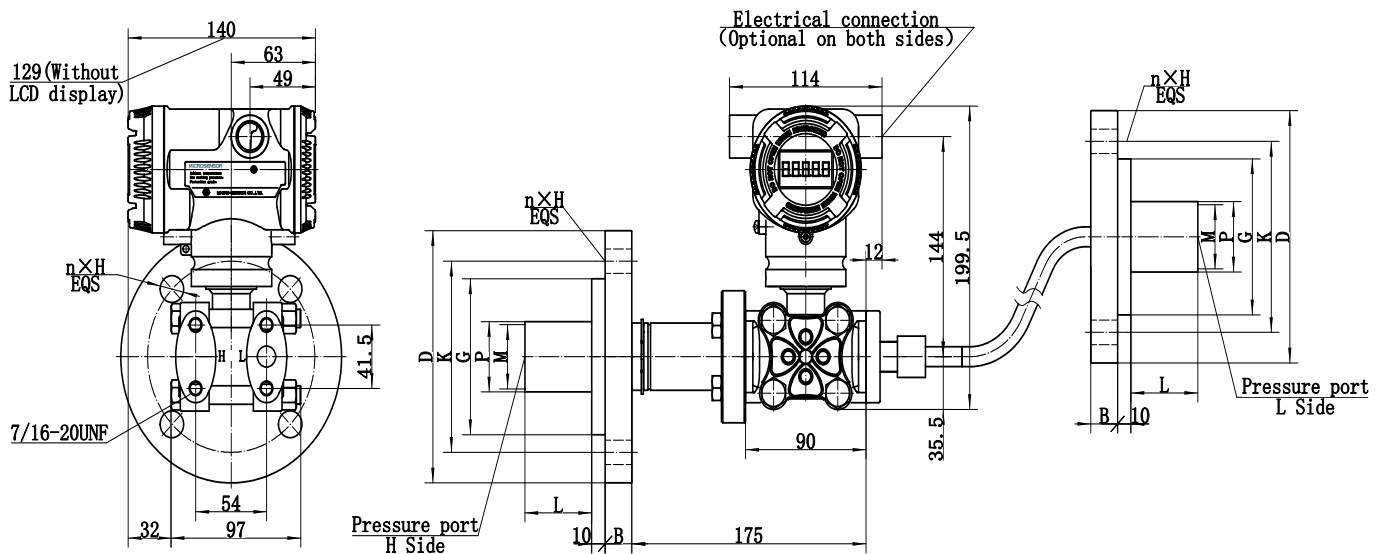
Side Mounted Movable Flange + Remote Fixed Flange With Display



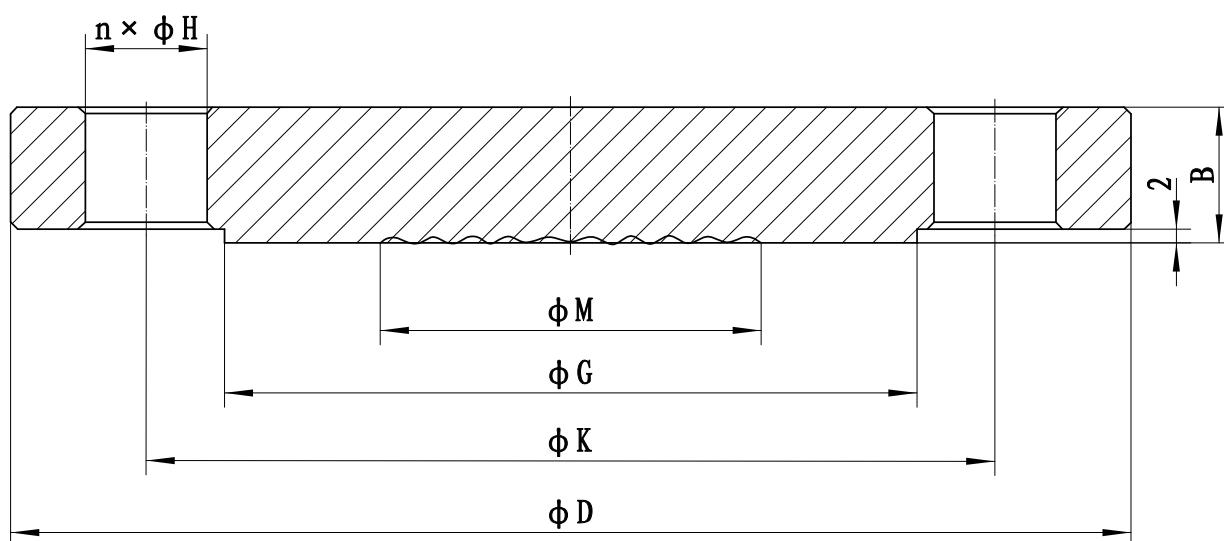
Side Mounted Movable Flange Insertion Sleeve+ Remote Fixed Flange With Display



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

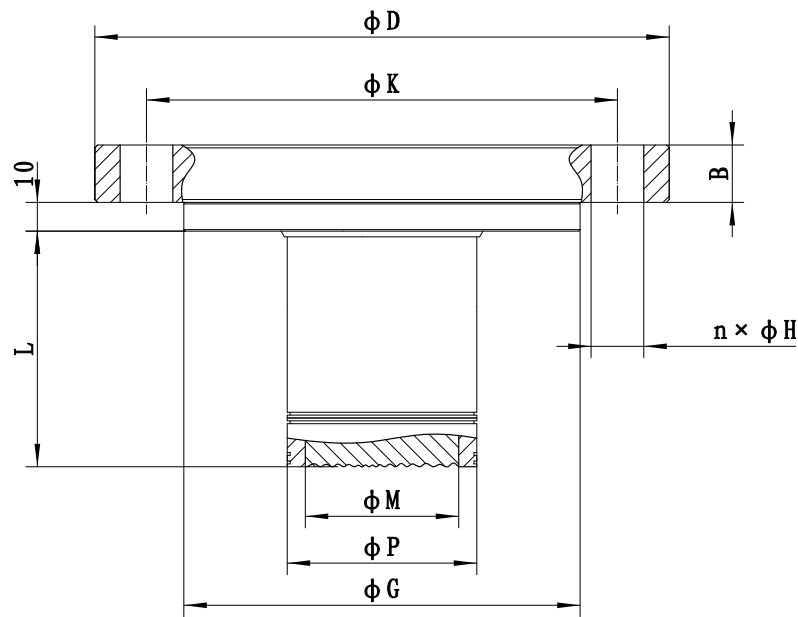


Process Connection



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



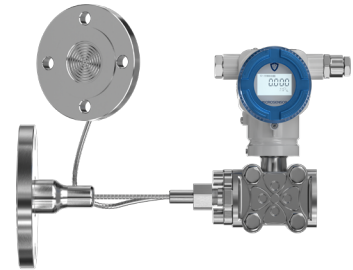
Standard	Specification	Outer diameter(ϕD)	Thickness(B)	RF diameter(ϕG)	Hole circumference (ϕK)
HG/T20592-2009	DN80PN10	200	20	138	160
HG/T20592-2009	DN80PN10	200	20	138	160
HG/T20592-2009	DN80PN10	200	20	138	160
HG/T20592-2009	DN50PN10	165	20	102	125
HG/T20592-2009	DN50PN10	165	20	102	125
HG/T20592-2009	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, CE23.6650 Ex db IIC T6 Gb, GB/T3836.1-2021, GB/T3836.2-2021		
	2	China, Intrinsically safe, CE23.7688X Ex ia IIC T4 Ga, GB/T3836.1-2021, GB/T3836.4-2021		
	3	China, Dust ignition protection, 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 ignition protection, Intrinsically safe		
	A	CSA, Flameproof, Dust ignition protection, CSA26CA80192884X 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, Dust ignition protection, 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, Dust ignition protection, 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		
	V	1V~5V DC low power		
	R	Modbus-RS485		
Housing	S	Cast 316L SS housing, 2 × M20×1.5 female entries		
	U	Cast 316L SS housing, 2 × 1/2 NPT female entries (no glands)		
	P	Aluminum alloy housing (polyester resin coated), 2 × M20×1.5 female entries		
	N	Aluminum alloy housing (polyester resin coated), 2 × 1/2 NPT female entries (no glands)		
Note: 1/2 NPT female entries (without glands) for direct connection with explosion-proof conduits. 304 SS nameplate as standard; consult MICROSENSOR for other materials				
Glands & adapters	Specification	Material	Applicable wire diameter	IP rating
	0	None (No cable glands)		
	A	Single-ended flameproof plug, M20×1.5	316 SS	
	B	Single-ended flameproof plug, 1/2NPT	316 SS	
	1	M20×1.5 Cable gland (watertight) 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 configurations are compliant with PCEC, ATEX, and IECEx standards. Flameproof adapters are CCC Ex certified. Please consult MICROSENSOR for double-seal requirements.					
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
	4	10bar	1bar	-5bar	10bar
Process flange bolting					
	1	Bolts, nuts, and other components, 35CrMo Alloy steel			

■ 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	1	1m		
	2	2m		
	3	3m		
	4	4m		
	5	5m		
	6	6m	For high and low-temperature conditions, flanges of DN80 or above are recommended	※
	7	7m	For high and low-temperature conditions, flanges of DN80 or above are recommended	※
	8	8m	For high and low-temperature conditions, flanges of DN80 or above are recommended	※
	9	9m	For high and low-temperature conditions, flanges of DN80 or above are recommended	※
	A	10m	For high and low-temperature conditions, flanges of DN80 or above are recommended	※
Note: The part beyond the length will be selected according to the next level of meters.				
High pressure side fill oil	S	Standard 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 (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-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
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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	1	1m		
	2	2m		
	3	3m		
	4	4m		
	5	5m		
	6	6m	For high and low-temperature conditions, flanges of DN80 or above are recommended	※
	7	7m	For high and low-temperature conditions, flanges of DN80 or above are recommended	※
	8	8m	For high and low-temperature conditions, flanges of DN80 or above are recommended	※
	9	9m	For high and low-temperature conditions, flanges of DN80 or above are recommended	※
	A	10m	For high and low-temperature conditions, flanges of DN80 or above are recommended	※

Note: The part beyond the length will be selected according to the next level of meters.

Low pressure side fill oil	S	Standard 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	Fluorinated oil (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*		
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■ 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	/G10	L-shaped brackets (sq), 316 SS	
	/G11	L-shaped brackets (sq), Q235 carbon steel	
	/G12	L-shaped brackets (sq), 316L SS	
Verification report	/Q1	Provide data according to the customer's template requirements. Contract specifies: LRL - URL, display unit*	※
Note: Standard Micro Sensor format. For custom formats, please select this option and provide a template.			
Damping time setting	/ST	Adjustable range 0s~100s, default 0s Contract specifies: Damping time*	
Fault alarm setting	/WH	High alarm current value, 21mA	
	/WL	Low alarm current value, 3.7mA, default	
Tag plate	/PT	Supplied with 316L SS hanging tag plate Contract specifies: Tag content (max. 16 characters)*	
Leakage test report	/QD4	PN10/PN16 (class150), N ₂ or air, 1min hold. Standard Micro Sensor leak test report	※
	/QD5	PN25/PN40 (class300), N ₂ or air, 1min hold. Standard Micro Sensor leak test report	※
	/QD6	PN63, N ₂ or air, 1min hold. Standard Micro Sensor leak test report	※
	/QD7	PN100 (class600), N ₂ or air, 1min hold. Standard Micro Sensor leak test report	※
Note: The test pressure is the same as the flange pressure class			
Bluetooth	/B	Integrated Bluetooth communication	
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, flange size ≥50mm)	※
Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts	※
Note: Fluorinated oil (Code: E) shall be selected for oxygen condition			

Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry (Cu <0.1%, Zn <0.15%)	
Painting	/P1	PUR coating	※
Language	/LE	English nameplate, operation manual, certificate of conformity, factory verification report.	
	/LR	Russian nameplate, operation manual, certificate of conformity, factory verification report.	
Delivery service	/XM	In addition to standard documents (certificate of conformity, operation manual, and factory verification report), any documentation required for project acceptance shall be specified with a detailed list upon ordering	
Accuracy	/AL6	±0.2%	
	/AL7	±0.5%	
Warranty period	/Y2	2-year warranty	
	/Y3	3-year warranty	
	/Y5	5-year warranty	

Note: Specifications for options shall be specified in the contract. Products marked with (※) have extended lead times.

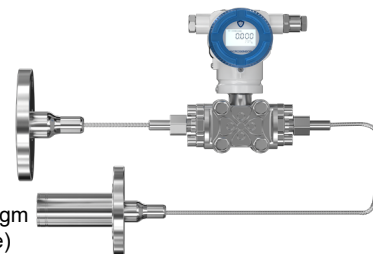
Example: MDM7000-LP-1HP1L-26-HF-2B1614AKU3S-LF-2B1614AKU3S/G1- 【CAL: 0bar~0.4bar】

|| 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, CE23.6650 Ex db IIC T6 Gb, GB/T3836.1-2021, GB/T3836.2-2021			
	2	China, Intrinsically safe, CE23.7688X Ex ia IIC T4 Ga, GB/T3836.1-2021, GB/T3836.4-2021			
	3	China, Dust ignition protection, 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 ignition protection, Intrinsically safe			
	A	CSA, Flameproof, Dust ignition protection, CSA26CA80192884X 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, Dust ignition protection, 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, Dust ignition protection, 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			
	V	1V~5V DC low power			
	R	Modbus-RS485			
Housing	S	Cast 316L SS housing, 2 × M20×1.5 female entries			
	U	Cast 316L SS housing, 2 × 1/2 NPT female entries (no glands)			
	P	Aluminum alloy housing (polyester resin coated), 2 × M20×1.5 female entries			
	N	Aluminum alloy housing (polyester resin coated), 2 × 1/2 NPT female entries (no glands)			
Note: 1/2 NPT female entries (without glands) for direct connection with explosion-proof conduits. 304 SS nameplate as standard; consult MICROSENSOR for other materials					
Glands & adapters		Specification	Material	Applicable wire diameter	IP rating
	0	None (No cable glands)			
	A	Single-ended flameproof plug, M20×1.5	316 SS		
	B	Single-ended flameproof plug, 1/2NPT	316 SS		
	1	M20×1.5 Cable gland (watertight) 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 configurations are compliant with PCEC, ATEX, and IECEx standards. Flameproof adapters are CCC Ex certified. Please consult MICROSENSOR for double-seal requirements.					
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
	4	10bar	1bar	-5bar	10bar
Process flange bolting	1	Bolts, nuts, and other components, 35CrMo Alloy steel			

■ 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			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		
			M-66mm		※
	6	6m	L-77mm		※
			M-66mm		※
	7	7m	L-77mm		※
			M-66mm		※
	8	8m	L-77mm		※
			M-66mm		※
	9	9m	L-77mm		※
			M-66mm		※
A	10m	L-77mm		※	
		M-66mm		※	

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	Standard 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	Fluorinated oil (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	1	1m	
	2	2m	
	3	3m	
	4	4m	
	5	5m	
	6	6m	For high and low-temperature conditions, flanges of DN80 or above are recommended ※
	7	7m	For high and low-temperature conditions, flanges of DN80 or above are recommended ※
	8	8m	For high and low-temperature conditions, flanges of DN80 or above are recommended ※
	9	9m	For high and low-temperature conditions, flanges of DN80 or above are recommended ※
	A	10m	For high and low-temperature conditions, flanges of DN80 or above are recommended ※
Note: The part beyond the length will be selected according to the next level of meters.			
Low pressure side fill oil	S	Standard 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	Fluorinated oil (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 specifics: 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	/G10	Standard L-bracket, 316 SS	
	/G11	Standard L-bracket, Q235 Carbon steel	
	/G12	Standard L-bracket, 316L SS	
Verification report	/Q1	Provide data according to the customer's template requirements. Contract specifics: LRL - URL, display unit*	※

Note: Standard Micro Sensor format. For custom formats, please select this option and provide a template.

Damping time setting	/ST	Adjustable range 0s~100s, default 0s Contract specifies: Damping time*		
Fault alarm setting	/WH	High alarm current value, 21mA		
	/WL	Low alarm current value, 3.7mA, default		
Tag plate	/PT	Supplied with 316L SS hanging tag plate Contract specifies: Tag content (max. 16 characters)*		
Leakage test report	/QD4	PN10/PN16 (class150), N ₂ or air, 1 min hold. Standard Micro Sensor leak test report		※
	/QD5	PN25/PN40 (class300), N ₂ or air, 1 min hold. Standard Micro Sensor leak test report		※
	/QD6	PN63, N ₂ or air, 1 min hold. Standard Micro Sensor leak test report		※
	/QD7	PN100 (class600), N ₂ or air, 1 min hold. Standard Micro Sensor leak test report		※
Note: The test pressure is the same as the flange pressure class				
Bluetooth	/B	Integrated bluetooth communication		
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, flange size ≥ 50mm)		※
Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts		※
Note: Fluorinated oil (Code: E) shall be selected for oxygen condition				
Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry (Cu <0.1%, Zn <0.15%)		
Painting	/P1	PUR coating		
Language	/LE	English nameplate, operation manual, certificate of conformity, factory verification report.		
	/LR	Russian nameplate, operation manual, certificate of conformity, factory verification report.		
Delivery service	/XM	In addition to standard documents (certificate of conformity, operation manual, and factory verification report), any documentation required for project acceptance shall be specified with a detailed list upon ordering		
Accuracy	/AL6	±0.2%		
	/AL7	±0.5%		
Warranty period	/Y2	2-year warranty		
	/Y3	3-year warranty		
	/Y5	5-year warranty		

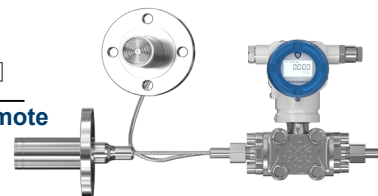
***Note:** Specifications for options shall be specified in the contract. Products marked with (※) have extended lead times.

Example: MDM7000-LP-1HP1L-26-HE-2B1614A6AKU3S-LF-2B1616AKU3S/G1- 【CAL: 0bar~0.4bar】

|| 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, CE23.6650 Ex db IIC T6 Gb, GB/T3836.1-2021, GB/T3836.2-2021	
	2	China, Intrinsically safe, CE23.7688X Ex ia IIC T4 Ga, GB/T3836.1-2021, GB/T3836.4-2021	
	3	China, Dust ignition protection, 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 ignition protection, Intrinsically safe	
	A	CSA, Flameproof, Dust ignition protection, CSA26CA80192884X 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, Dust ignition protection, 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, Dust ignition protection, 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	
	V	1V~5V DC low power	
	R	Modbus-RS485	
Housing	S	Cast 316L SS housing, 2 × M20×1.5 female entries	
	U	Cast 316L SS housing, 2 × 1/2 NPT female entries (no glands)	
	P	Aluminum alloy housing (polyester resin coated), 2 × M20×1.5 female entries	
	N	Aluminum alloy housing (polyester resin coated), 2 × 1/2 NPT female entries (no glands)	

Note: 1/2 NPT female entries (without glands) for direct connection with explosion-proof conduits. 304 SS nameplate as standard; consult MICROSENSOR for other materials

Glands & adapters	Specification	Material	Applicable wire diameter	IP rating
0	None (No cable glands)			
A	Single-ended flameproof plug, M20×1.5	316 SS		
B	Single-ended flameproof plug, 1/2NPT	316 SS		
1	M20×1.5 Cable gland (watertight) 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 configurations are compliant with PCEC, ATEX, and IECEx standards. Flameproof adapters are CCC Ex certified. Please consult MICROSENSOR for double-seal requirements					
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
	4	10bar	1bar	-5bar	10bar
Process flange bolting	1	Bolts, nuts, and other components, 35CrMo Alloy steel			

■ 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		S-46mm		
	1	1m	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.

High pressure side fill oil	S	Standard 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	Fluorinated oil (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 Class150~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		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	
		M-66mm		
	6	6m		※
			L-77mm	※
		M-66mm		
	7	7m		※
			L-77mm	※
		M-66mm		
	8	8m		※
			L-77mm	※
		M-66mm		
	9	9m		※
			L-77mm	※
		M-66mm		
	A	10m		※
			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	Standard 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	Fluorinated oil (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	/G10	Standard L-bracket, 316 SS	
	/G11	Standard L-bracket, Q235 Carbon steel	
	/G12	Standard L-bracket, 316L SS	
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, 21mA	
	/WL	Low alarm current value, 3.7mA, default	
Tag plate	/PT	Supplied with 316L SS hanging tag plate Contract specifies: Tag content (max. 16 characters)*	
Leakage test report	/QD4	PN10/PN16 (class150), N ₂ or air. 1 min hold. Standard Micro Sensor leak test report	※
	/QD5	PN25/PN40 (class300), N ₂ or air. 1 min hold. Standard Micro Sensor leak test report	※
	/QD6	PN63, N ₂ or air. 1 min hold. Standard Micro Sensor leak test report	※
	/QD7	PN100 (class600), N ₂ or air. 1 min hold. Standard Micro Sensor leak test report	※
Note: The test pressure is the same as the flange pressure class			
Bluetooth	/B	Integrated Bluetooth communication	
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: Fluorinated oil (Code: E) shall be selected for oxygen condition			

Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry	
Painting	/P1	PUR coating	※
Language	/LE	English nameplate, operation manual, certificate of conformity, factory verification report.	
	/LR	Russian nameplate, operation manual, certificate of conformity, factory verification report.	
Delivery service	/XM	In addition to standard documents (certificate of conformity, operation manual, and factory verification report), any documentation required for project acceptance shall be specified with a detailed list upon ordering	
Accuracy	/AL6	±0.2%	
	/AL7	±0.5%	
Warranty period	/Y2	2-year warranty	
	/Y3	3-year warranty	
	/Y5	5-year warranty	

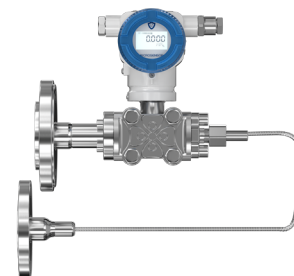
***Note:** Specifications for options shall be specified in the contract. Products marked with (※) have extended lead times.

Example: MDM7000-LP-1HP1L-26-HE-2B1614A6AKU3S-LE-2B1614A6AKU3S/G1- 【CAL: 0bar~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, CE23.6650 Ex db IIC T6 Gb, GB/T3836.1-2021, GB/T3836.2-2021		
	2	China, Intrinsically safe, CE23.7688X Ex ia IIC T4 Ga, GB/T3836.1-2021, GB/T3836.4-2021		
	3	China, Dust ignition protection, 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 ignition protection, Intrinsically safe		※
	A	CSA, Flameproof, Dust ignition protection, CSA26CA80192884X 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, Dust ignition protection, 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, Dust ignition protection, 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		
	V	1V~5V DC low power		
	R	Modbus-RS485		
Housing	S	Cast 316L SS housing, 2 × M20×1.5 female entries		
	U	Cast 316L SS housing, 2 × 1/2 NPT female entries (no glands)		
	P	Aluminum alloy housing (polyester resin coated), 2 × M20×1.5 female entries		
	N	Aluminum alloy housing (polyester resin coated), 2 × 1/2 NPT female entries (no glands)		

Note: 1/2 NPT female entries (without glands) for direct connection with explosion-proof conduits. 304 SS nameplate as standard; consult MICROSENSOR for other materials

Glands & adapters	Specification		Material	Applicable wire diameter	IP rating
	0	None (No cable glands)			
	A	Single-ended flameproof plug, M20×1.5	316 SS		
	B	Single-ended flameproof plug, 1/2NPT	316 SS		
	1	M20×1.5 Cable gland (watertight) 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 configurations are compliant with PCEC, ATEX, and IECEx standards. Flameproof adapters are CCC Ex certified. Please consult MICROSENSOR for double-seal requirements.					
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
	4	10bar	1bar	-5bar	10bar
Process flange bolting	1	Bolts, nuts, and other components, 35CrMo Alloy steel			

■ 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	Standard 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	Fluorinated oil (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	1	1m		
	2	2m		
	3	3m		
	4	4m		
	5	5m		
	6	6m	For high and low-temperature conditions, flanges of DN80 or above are recommended	※
	7	7m	For high and low-temperature conditions, flanges of DN80 or above are recommended	※
	8	8m	For high and low-temperature conditions, flanges of DN80 or above are recommended	※
	9	9m	For high and low-temperature conditions, flanges of DN80 or above are recommended	※
	A	10m	For high and low-temperature conditions, flanges of DN80 or above are recommended	※

Note: The part beyond the length will be selected according to the next level of meters.

Low pressure side fill oil	S	Standard 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	Fluorinated oil (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*	※
Note: Standard Micro Sensor format. For custom formats, please select this option and provide a template.			
Damping time setting	/ST	Adjustable range 0s~100s, default 0s Contract specifies: Damping time*	
Fault alarm setting	/WH	High alarm current value, 21mA	
	/WL	Low alarm current value, 3.7mA, default	
Tag plate	/PT	Supplied with 316L SS hanging tag plate Contract specifies: Tag content (max. 16 characters)*	
Leakage test report	/QD4	PN10/PN16 (class150), N ₂ or air, 1 min hold. Standard Micro Sensor leak test report	※
	/QD5	PN25/PN40 (class300), N ₂ or air, 1 min hold. Standard Micro Sensor leak test report	※
	/QD6	PN63, N ₂ or air, 1 min hold. Standard Micro Sensor leak test report	※
	/QD7	PN100 (class600), N ₂ or air, 1 min hold. Standard Micro Sensor leak test report	※
Note: The test pressure is the same as the flange pressure class			
Bluetooth	/B	Integrated Bluetooth communication	
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, flange size ≥ 50mm)	※
Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts	※
Note: Fluorinated oil (Code: E) shall be selected for oxygen condition			
Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry (Cu <0.1%, Zn <0.15%)	
Language	/LE	English nameplate, operation manual, certificate of conformity, factory verification report.	
	/LR	Russian nameplate, operation manual, certificate of conformity, factory verification report.	
Delivery service	/XM	In addition to standard documents (certificate of conformity, operation manual, and factory verification report), any documentation required for project acceptance shall be specified with a detailed list upon ordering	
Accuracy	/AL6	±0.2%	
	/AL7	±0.5%	
Warranty period	/Y2	2-year warranty	
	/Y3	3-year warranty	
	/Y5	5-year warranty	

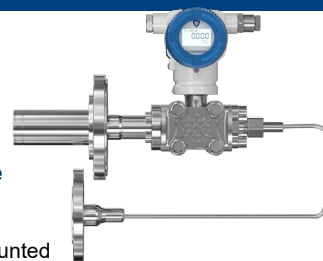
***Note:** Specifications for options shall be specified in the contract. Products marked with (※) have extended lead times.

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

|| Order Guide ||

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

Item	Code	Description
		Body
		Side Mounted Movable Flange Insertion Sleeve + Remote Fixed Flange Diaphragm
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, CE23.6650 Ex db IIC T6 Gb, GB/T3836.1-2021, GB/T3836.2-2021			
	2	China, Intrinsically safe, CE23.7688X Ex ia IIC T4 Ga, GB/T3836.1-2021, GB/T3836.4-2021			
	3	China, Dust ignition protection, 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 ignition protection, Intrinsically safe			
	A	CSA, Flameproof, Dust ignition protection, CSA26CA80192884X 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, Dust ignition protection, 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, Dust ignition protection, 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			
	V	1V~5V DC low power			
	R	Modbus-RS485			
Housing	S	Cast 316L SS housing, 2 × M20×1.5 female entries			
	U	Cast 316L SS housing, 2 × 1/2 NPT female entries (no glands)			
	P	Aluminum alloy housing (polyester resin coated), 2 × M20×1.5 female entries			
	N	Aluminum alloy housing (polyester resin coated), 2 × 1/2 NPT female entries (no glands)			
Note: 1/2 NPT female entries (without glands) for direct connection with explosion-proof conduits. 304 SS nameplate as standard; consult MICROSENSOR for other materials					
Glands & adapters		Specification	Material	Applicable wire diameter	IP rating
	0	None (No cable glands)			
	A	Single-ended flameproof plug, M20×1.5	316 SS		
	B	Single-ended flameproof plug, 1/2NPT	316 SS		
	1	M20×1.5 Cable gland (watertight) 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 configurations are compliant with PCEC, ATEX, and IECEx standards. Flameproof adapters are CCC Ex certified. Please consult MICROSENSOR for double-seal requirements					
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
	4	10bar	1bar	-5bar	10bar
Process flange bolting	6	Bolts, nuts, and other components, 35CrMo Alloy steel			

■ 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	Standard 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 (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-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			
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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	1	1m			
	2	2m			
	3	3m			
	4	4m			
	5	5m			
	6	6m	For high and low-temperature conditions, flanges of DN80 or above are recommended		※
	7	7m	For high and low-temperature conditions, flanges of DN80 or above are recommended		※
	8	8m	For high and low-temperature conditions, flanges of DN80 or above are recommended		※
	9	9m	For high and low-temperature conditions, flanges of DN80 or above are recommended		※
	A	10m	For high and low-temperature conditions, flanges of DN80 or above are recommended		※

Note: The part beyond the length will be selected according to the next level of meters.

Low pressure side fill oil	S	Standard 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	Fluorinated oil (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%)	※
Verification report	/Q1	Provide data according to the customer's template requirements. Contract specifies: LRL - URL, display unit*	※
Note: Standard Micro Sensor format. For custom formats, please select this option and provide a template.			
Damping time setting	/ST	Adjustable range 0s~100s, default 0s Contract specifies: Damping time*	
Fault alarm setting	/WH	High alarm current value, 21mA	
	/WL	Low alarm current value, 3.7mA, 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), N ₂ or air, 1 min hold. Standard Micro Sensor leak test report	※
	/QD5	PN25/PN40 (class300), N ₂ or air, 1 min hold. Standard Micro Sensor leak test report	※
	/QD6	PN63, N ₂ or air, 1 min hold. Standard Micro Sensor leak test report	※
	/QD7	PN100 (class600), N ₂ or air, 1 min hold. Standard Micro Sensor leak test report	※
Note: The test pressure is the same as the flange pressure class			
Bluetooth	/B	Integrated Bluetooth communication	
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 covered with PFA film (protective cover), applicable to corrosion-resistant conditions (non-vacuum, pressure ≥ 0, flange size ≥ 50mm)	※
Note: Sticking is not available on the insertion sleeve			
Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts	※
Note: Fluorinated oil (Code: E) shall be selected for oxygen condition			
Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry (Cu <0.1%, Zn <0.15%)	
Painting	/P1	PUR coating	※

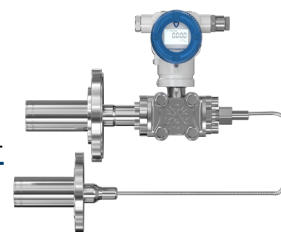
Language	/LE	English nameplate, operation manual, certificate of conformity, factory verification report.
	/LR	Russian nameplate, operation manual, certificate of conformity, factory verification report.
Delivery service	/XM	In addition to standard documents (certificate of conformity, operation manual, and factory verification report), any documentation required for project acceptance shall be specified with a detailed list upon ordering
Accuracy	/AL6	±0.2%
	/AL7	±0.5%
Warranty period	/Y2	2-year warranty
	/Y3	3-year warranty
	/Y5	5-year warranty

***Note:** Specifications for options shall be specified in the contract. Products marked with (※) have extended lead times.

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

|| Order Guide ||

MDM7000-LP — □□□□□ — □ — HM — □□□□□□ — LE □□□□□□□



Item	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, CE23.6650 Ex db IIC T6 Gb, GB/T3836.1-2021, GB/T3836.2-2021	
	2	China, Intrinsically safe, CE23.7688X Ex ia IIC T4 Ga, GB/T3836.1-2021, GB/T3836.4-2021	
	3	China, Dust ignition protection, 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 ignition protection, Intrinsically safe	
	A	CSA, Flameproof, Dust ignition protection, CSA26CA80192884X 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, Dust ignition protection, 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, Dust ignition protection, 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	
	V	1V~5V DC low power	
	R	Modbus-RS485	
Housing	S	Cast 316L SS housing, 2 × M20×1.5 female entries	
	U	Cast 316L SS housing, 2 × 1/2 NPT female entries (no glands)	
	P	Aluminum alloy housing (polyester resin coated), 2 × M20×1.5 female entries	
	N	Aluminum alloy housing (polyester resin coated), 2 × 1/2 NPT female entries (no glands)	

Note: 1/2 NPT female entries (without glands) for direct connection with explosion-proof conduits. 304 SS nameplate as standard; consult MICROSENSOR for other materials

Glands & adapters	Specification	Material	Applicable wire diameter	IP rating
0	None (No cable glands)			
A	Single-ended flameproof plug, M20×1.5	316 SS		
B	Single-ended flameproof plug, 1/2NPT	316 SS		
1	M20×1.5 Cable gland (watertight) 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 configurations are compliant with PCEC, ATEX, and IECEx standards. Flameproof adapters are CCC Ex certified. Please consult MICROSENSOR for double-seal requirements.					
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
	4	10bar	1bar	-5bar	10bar
Process flange bolting	1	Bolts, nuts, and other components, 35CrMo Alloy steel			

■ 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	Standard 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	Fluorinated oil (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	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	
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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	
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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	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	Standard 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	Fluorinated oil (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*	※

Note: Standard Micro Sensor format. For custom formats, please select this option and provide a template.

Damping time setting	/ST	Adjustable range 0s~100s, default 0s Contract specifies: Damping time*	
Fault alarm setting	/WH	High alarm current value, 21mA	
	/WL	Low alarm current value, 3.7mA, default	
Tag plate	/PT	Supplied with 316L SS hanging tagplate Contract specifies: Tag content (max. 16 characters)*	

Leakage test report	/QD4	PN10/PN16 (class150), N ₂ or air, 1 min hold. Standard Micro Sensor leak test report	※
	/QD5	PN25/PN40 (class300), N ₂ or air, 1 min hold. Standard Micro Sensor leak test report	※
	/QD6	PN63, N ₂ or air, 1 min hold. Standard Micro Sensor leak test report	※
	/QD7	PN100 (class600), N ₂ or air, 1 min hold. Standard Micro Sensor leak test report	※

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

Bluetooth	/B	Integrated Bluetooth communication		
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: Fluorinated oil (Code: E) shall be selected for oxygen condition.

Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry (Cu <0.1%, Zn <0.15%)	
Painting	/P1	PUR coating	※
Language	/LE	English nameplate, operation manual, certificate of conformity, factory verification report.	
	/LR	Russian nameplate, operation manual, certificate of conformity, factory verification report.	
Delivery service	/XM	In addition to standard documents (certificate of conformity, operation manual, and factory verification report), any documentation required for project acceptance shall be specified with a detailed list upon ordering	
Accuracy	/AL6	±0.2%	
	/AL7	±0.5%	
Warranty period	/Y2	2-year warranty	
	/Y3	3-year warranty	
	/Y5	5-year warranty	

***Note:** Specifications for options shall be specified in the contract. Products marked with (※) have extended lead times.

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