

MDM7000-GP-T/AP-T

Smart Pressure Transmitter-Direct Mounted Seal



Note: Some certificates are still pending.

Range

Model	Nominal Range	Min. Range	Lower (LRL)	Upper (URL)	Overload
GP-T	0.4bar	0.1bar	-0.4bar	0.4bar	10bar
	2.5bar	0.25bar	-1bar	2.5bar	40bar
	10bar	1bar	-1bar	10bar	60bar
	30bar	3bar	-1bar	30bar	150bar
	100bar	10bar	-1bar	100bar	200bar
AP-T	0.4bar	0.2bar	0bar	0.4bar	10bar
	2.5bar	0.5bar	0bar	2.5bar	40bar
	10bar	2bar	0bar	10bar	60bar

LRV/URV setting: the lower limit value (LRV) and upper limit value (URV) are achieved between the upper and lower limits. $LRV \leq IURV$ - $LRV \leq URV$.

Overload: This is the sensor overload pressure, and the actual overload pressure depends on the connection specifications during the connection process.

Accuracy

- 1.Stated reference accuracy include best fit straight line(BFSL), hysteresis, and repeatability as per the standard and reference test conditions.
- 2.Total performance include indoor temperature accuracy and ambient temperature effects , based on DN50 flange and 316L material.

Linear output accuracy	GP-T	TD≤5	±0.1%SPAN	0.4bar, 2.5bar,10bar,30bar,100bar
		5<TD<10	±0.2%SPAN	
	AP-T	TD≤5	±0.1%SPAN	0.4bar, 2.5bar,10bar
		5<TD<10	±0.2%SAPN	

Note:TD(Turn down) represents the range ratio, TD= Maximum range / Current range. [Maximum range = URL (same as factory calibration range); Current range = SPAN (equivalent to |URV-LRV|)].

Specifications

GP-T Accuracy	±0.1% , ±0.2%URL
AP-T Accuracy	±0.1% , ±0.2%URL
GP-T Range	0.4bar~100bar, see the Order Guide for details
AP-T Range	0.4bar~10bar, see the Order Guide for details
Turn down ratio	100:1
Long-term stability	±0.2% Span/10 years
Ambient temperature effects	The total effect per 10°C in the range of -20°C ~80°C :± (0.5+0.15TD)%SPAN
Voltage effects	When the power supply voltage changes within 18.3~44V DC, its zero point and range change should not exceed ±0.005% URL/V
Mounting position effects	The installation of the transmitter may produce a zero point error, which can be corrected by PV (primary value) =0 reset without any effect on the range.
Vibration effects	< 0.1% SPAN as per GB/T18271.3/IEC61298-3
Output signal	4mA~20mA DC, HART
IP rating	IP67
Weight	Net: about 1.61kg (body)

|| Environmental Conditions ||

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

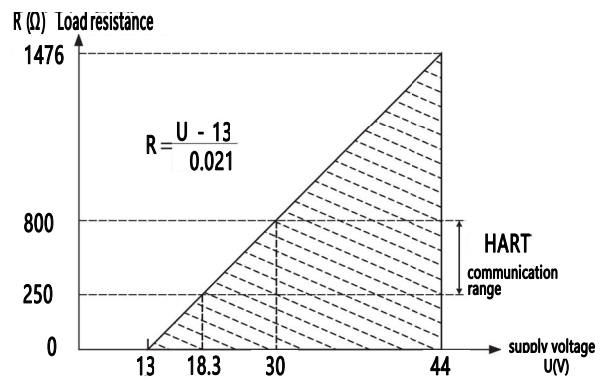
|| Diaphragm Operating Temperature ||

Filling oil type ^①	Code	Medium temperature	Diaphragm ambient temperature
Normal temperature silicone oil	S	-40°C~ 205°C	-40°C~ 85°C
Fluorocarbon oil 1	D	-20°C~ 110°C	-20°C~ 85°C
Fluorocarbon oil 2	E	-55°C~ 85°C	-40°C~ 85°C
High temperature silicone oil	H	0°C~ 315°C	0°C~ 85°C
Low temperature silicone oil	L	-55°C ~200°C	-40°C ~85°C

Note: ^① This item is related to the type of silicone oil filled and the o- ring; the temperature range of non-silicone oil is limited to the lowest material temperature range in the system. Short pipeline explosion-proof products shall have a surface temperature ≤80°C. If uncertain, medium temp. shall be ≤T6/T80°C.

|| Power Supply and Load Requirements ||

Items	Conditions
Power supply voltage	HART communication protocol: 18.3V~44V DC ^① Intrinsically safe HART communication protocol: 18.3V~30V DC
Load resistance	0Ω~1476Ω ^② for operation mode; 250Ω~800Ω for HART communication
Transmission distance	<1000m
Power consumption	
4mA~20mA	≤500mW@24V DC, 20.8mA



Note: ^① Non intrinsically safe power supply voltage can be selected as 13V. Please consult engineers for details.

^② 1476Ω= (44V-13V) /21mA

|| EMC Effects ||

SN	Test items	Basic Standards	Test Conditions	Performance Level
1	Radiated interference (Casing)	GB/T 9254.1/CISPR 32	30MHz~1000MHz	Qualified
2	Conducted interference (DC power port)	GB/T 9254.1/CISPR 32	0.15MHz~30MHz	Qualified
3	Electrostatic discharge immunity test	GB/T 17626.2/IEC61000-4-2	8kV (Contact), 15kV (Air)	B
4	Immunity to radio frequency EM-fields	GB/T 17626.3/IEC61000-4-3	10V/m (80MHz~1GHz)	A
5	Power frequency magnetic field Immunity test	GB/T 17626.8/IEC61000-4-8	30A/m	B
6	Electrical fast transient / Burst Immunity test	GB/T 17626.4/IEC61000-4-4	4kV (5/50ns, 100kHz)	B
7	Surge immunity requirements	GB/T 17626.5/IEC61000-4-5	2kV (line to line) 4kV (line to ground) (1.2/50μs)	B
8	Immunity to conducted disturbances induced by radio frequency fields	GB/T 17626.6/IEC61000-4-6	3V (150kHz~80MHz)	A

Note : At performance level A, the performance is normal within the limits of the technical specifications.

At performance level B, functions or performance are temporarily reduced or lost, but can be restored by themselves, and the actual operating conditions, storage and data remain unchanged.

Time Index

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

Hazardous Area

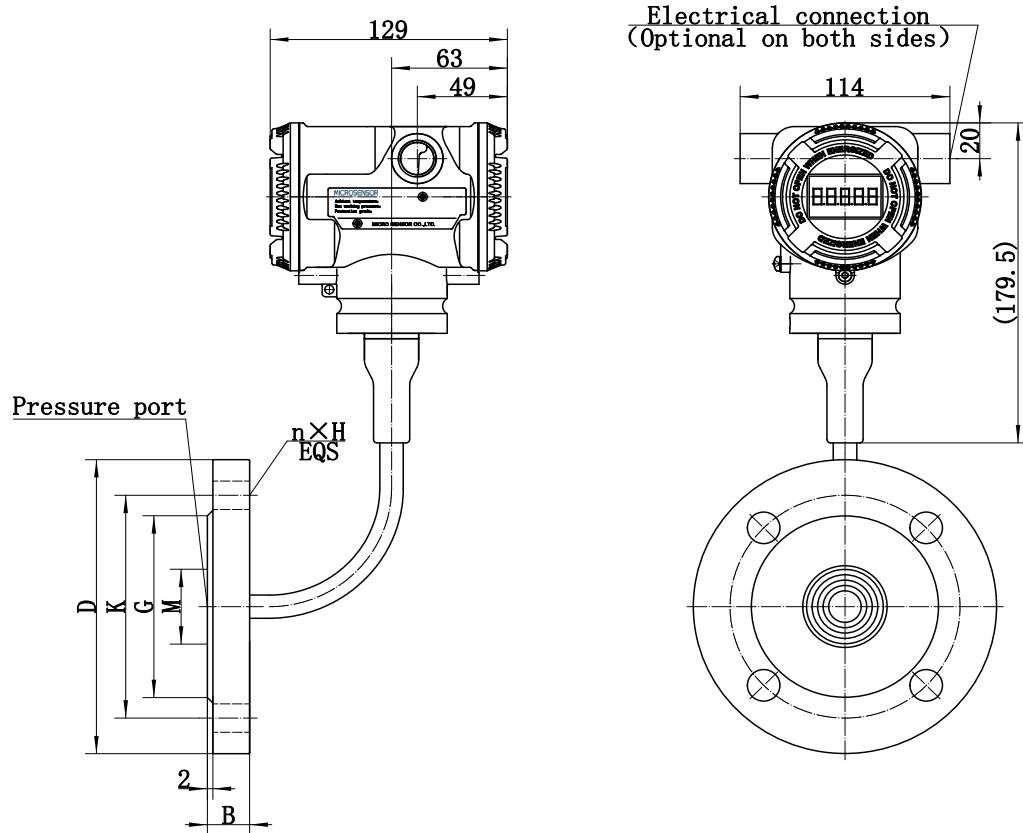
	Ex standards (association)	Mark	Standard
Hazardous area	Ex (PCEC)	Ex ia IIC T4 Ga	GB/T 3836.1-2021 GB/T 3836.4-2021
	Ex (PCEC)	Ex db IIC T6 Gb	GB/T 3836.1-2021 GB/T 3836.2-2021
	Ex (NEPSI)	Ex tb IIC T85°C Db	GB/T 3836.1-2021 GB/T 3836.31-2021
	ATEX (CSA)	II 1G Ex ia IIC T4 Ga	EN IEC 60079-0:2018 EN 60079-11:2012
	ATEX (CSA) ①	II 2G Ex db IIC T6 Gb	EN IEC 60079-0:2018 EN 60079-1: 2014
	ATEX (CSA) ①	II 2D Ex tb IIIC T80°C Db	EN IEC 60079-0:2018 EN 60079-31: 2014
	IECEX (CSA)	Ex ia IIC T4 Ga	IEC 60079-0: 2017 IEC 60079-11: 2011
	IECEX (CSA) ①	Ex db IIC T6 Gb	IEC 60079-0: 2017 IEC 60079-1: 2014
	IECEX (CSA) ①	Ex tb IIIC T80°C Db	IEC 60079-0: 2017 IEC 60079-31: 2022
	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
	CSA	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	CSA C22.2 No.30: 20, CSA C22.2 No.25:17, CSA C22.2 No.213:17+UPD01+UPD02+U PD03:2021 FM 3600:2022, FM 3615:2022, FM 3616:2022, FM 3611:2021 CAN/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) ANSI/UL 60079-0-2020 Seventh Edition ANSI/UL 60079-1-2020 Seventh Edition ANSI/UL 60079-31-2015 Second Edition
	EAC	1Ex db IIC T6 Gb 0Ex ia IIC T4 Ga	TP TC012/2011 GOST 31610.0-2019 GOST 31610.11-2014 GOST IEC 60079-1-2013
Note: Please consult MICROSENSOR for details.			

Dimensions

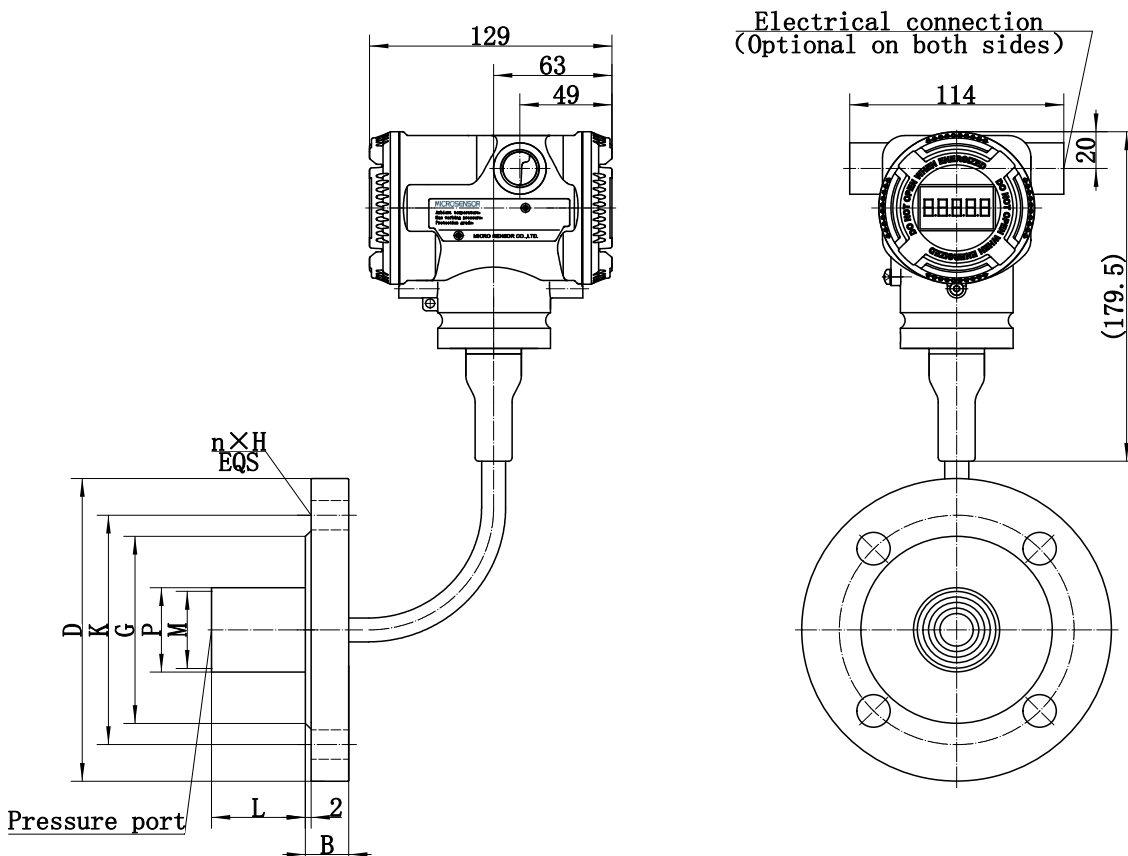
Unit: mm

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

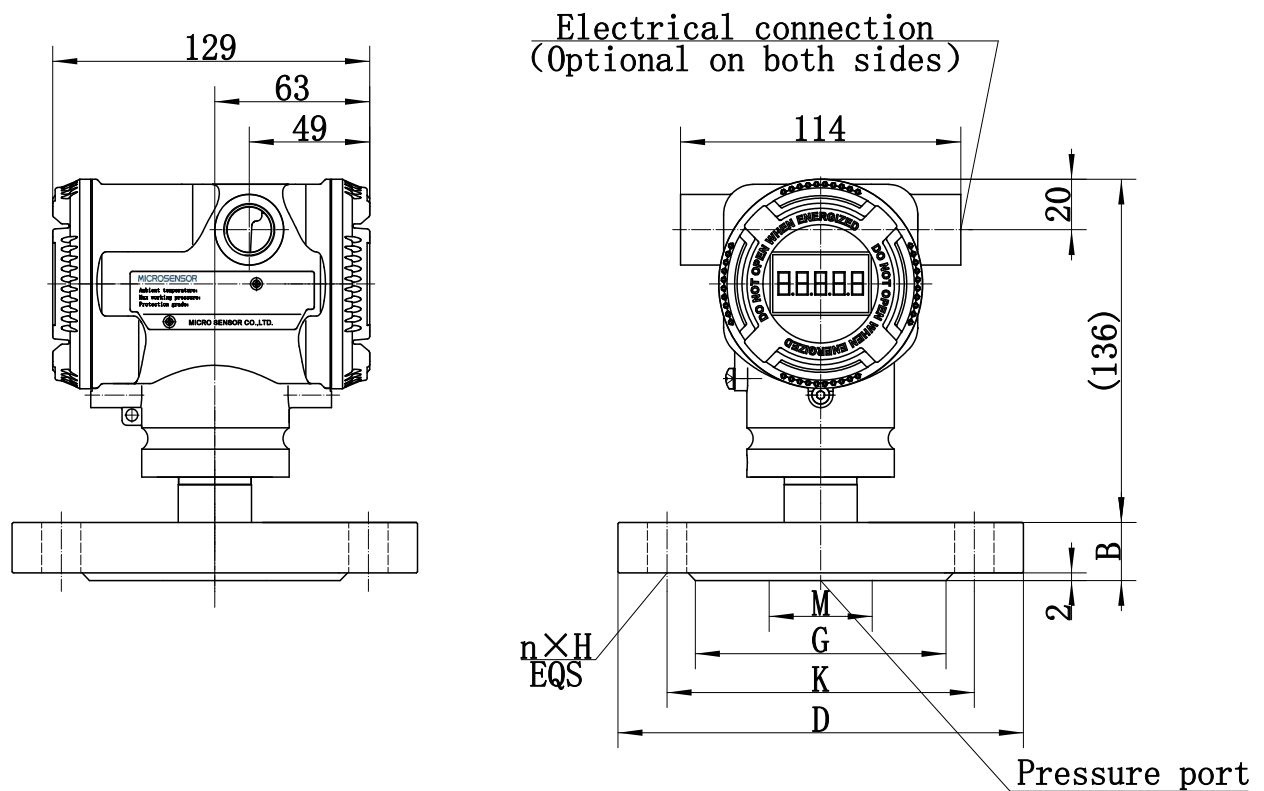
Remote Flange With Display (Same as Without Display)



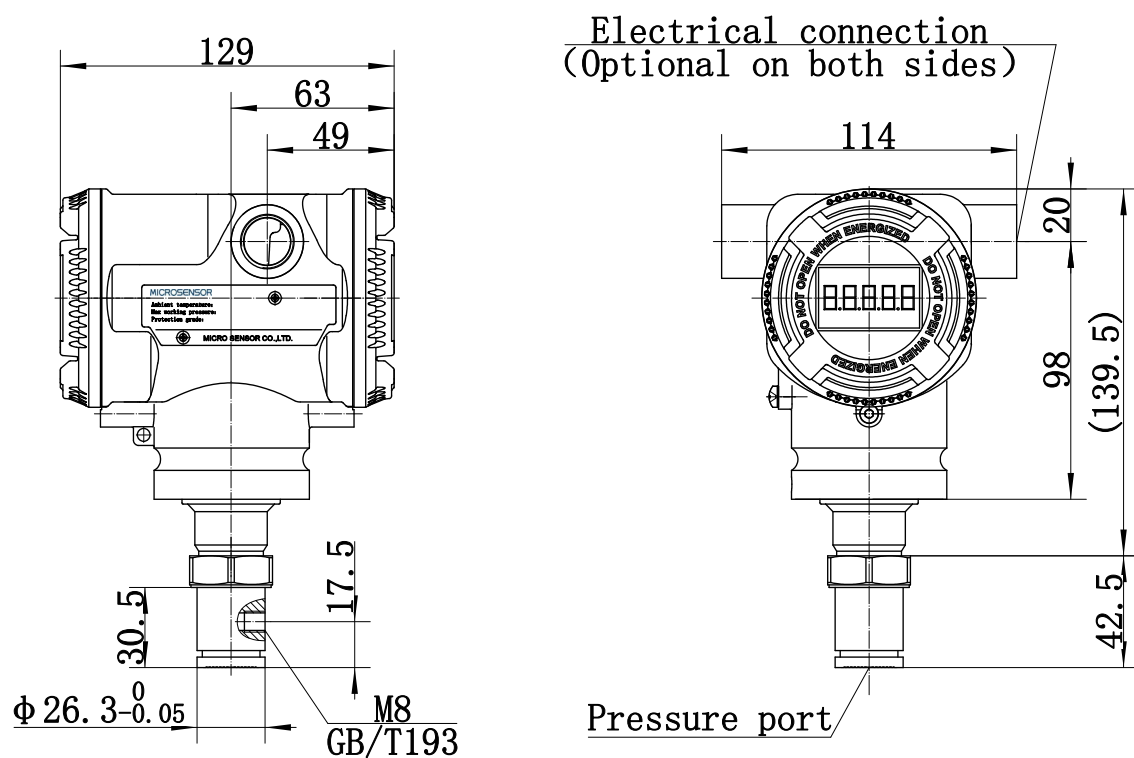
Remote Flange Insertion Sleeve With Display (Same as Without Display)



Direct Mounted Single Flange With Display (Same as Without Display)



Direct Mounted Single Thread With Display (Same as Without Display)



Order Guide

MDM7000-GP-T/AP-T —□□□□□—□—SF—□□□□□□□

Body

Remote Fixed Flange Diaphragm

Items	Code	Description
MDM7000-GP-T	—	Monocrystalline Silicon Pressure Transmitter With Remote Diaphragm Seal (Remote Fixed Flange)
MDM7000-AP-T	—	Monocrystalline Silicon Pressure Transmitter With Remote Diaphragm Seal (Remote Fixed Flange)



Application of hazardous area

1	China, Flameproof, No.CE23.6650 Ex db IIC T6 Gb, GB/T3836.1-2021, GB/T3836.2-2021	
2	China, Intrinsically safe, No.CE23.7688X Ex ia IIC T4 Ga, GB/T3836.1-2021, GB/T3836.4-2021	
3	China, Dust explosion-proof, GYB24.1215X Ex tb III C T85°C Db, GB/T3836.1-2021, GB/T 3836.31-2021	
4	China, Flameproof, Intrinsically safe	
5	China, Flameproof, Dust explosion-proof, Intrinsically safe	
A	CSA, Flameproof	※
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	※
F	ATEX, Intrinsically safe, CSANe 24ATEX1178X II 1G Ex ia IIC T4 Ga	
G	ATEX, Flameproof, Intrinsically safe	※
J	IECEx, Flameproof	※
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	
Case	S	316L Stainless steel case with two outlet ports (F) M20×1.5	
	U	316L Stainless steel case with two outlet ports (F) 1/2NPT	
	P	Aluminum alloy case (Polyester resin coating) with two outlet ports (F) M20×1.5	
	N	Aluminum alloy case(Polyester resin coating) with two outlet ports (F) 1/2NPT	

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

Waterproof/explosion-proof connector	Specification	Material	Applicable wire diameter	IP rating
0	Without cable glands			
A	Single-ended with a flameproof metal plug	316 SS		
1	M20×1.5 waterproof connector, with plug	PVC	6mm~12mm	IP67
2	Non-flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~8mm	IP67
3	Flameproof adapter M20x1.5 (M) to 1/2 NPT (F) , with plug	316 SS	6mm~12mm	IP67
4	Flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~12mm	IP67
5	Flameproof adapter M20x1.5 (M) to G1/2 (F) , with plug	316 SS	6mm~12mm	IP67

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

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

Range		Nominal range	Minimum range	Lower (LRL)	Upper (URL)	Overload
GP-T	2	0.4bar	20mbar	-0.4bar	0.4bar	10bar
	3	2.5bar	125mbar	-1bar	2.5bar	40bar
	4	10bar	0.5bar	-1bar	10bar	60bar
	5	30bar	1.5bar	-1bar	30bar	150bar
	6	100bar	5bar	-1bar	100bar	200bar
AP-T	2	0.4bar	0.2bar	0bar	0.4bar	10bar
	3	2.5bar	0.5bar	0bar	2.5bar	40bar
	4	10bar	2bar	0bar	10bar	60bar
Sensor structure	T	Single flange diaphragm seal				
Diaphragm connection position	S	Pressure transmitter				
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	Please see the material list of wetted parts for details				
		Flange	Measuring diaphragm		
	6A	316 SS	316L		
	6B	316 SS	Hastelloy C-276		
	6C	316 SS	Tantalum (Only available for range > 2.5bar)		
	6D	316 SS	Titanium		
	6E	316 SS	Monel(Only available for range > 2.5bar)		
Capillary connection location	K	Rear connection			
Capillary type	U	3.5mm OD (or 1/8 inch), armored 316L SS, PVC gray sheath			
	L	3.5mm OD (or 1/8 inch), armored 316L SS, stainless steel bellows sheath			
Capillary length		Applicable flange diameter			
		DN25/1inch	DN40	DN50/2inch	DN80/3inch
		DN100/4inch			
	1	1m			
	2	2m			
	3	3m			
	4	4m			
	5	5m			
	6	6m			
	7	7m			
	8	8m			
	9	9m			
	A	10m			
Note: For high and low-temperature conditions with capillary lengths of 6m-10m, flanges of DN80 or above are recommended; the part beyond the length will be selected according to the next level of meters.					
Low pressure side fill oil	S	Normal temperature silicone oil (Medium temperature : -40℃ ~205℃ ,ambient temperature: -40℃ ~85℃)			
	D	Fluorocarbon oil 1 (Medium temperature: -20℃ ~110℃ ,ambient temperature:-20℃ ~85℃)			
	E	Fluorocarbon oil 2 (Medium temperature: -55℃ ~85℃ ,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℃ ~200℃ ,ambient temperature: -40℃ ~85℃)			
Factory calibration range	CAL	Provides MICROSENSOR standard verification report according to the range, and the default linear output Contract specifies: LRL - URL, display unit*			
Options		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	/G1	Bend bracket,316 SS			
	/G2	Bend bracket, Q195 carbon steel			
	/G3	Flat bracket, 316 SS			
	/G4	Flat bracket, Q195 carbon steel			
	/G7	L-shaped brackets (sq), 316 SS			
	/G8	L-shaped brackets (sq), Q234 carbon steel			
Verification report	/Q1	Provide the MICROSENSOR verification data according to user requirements Contract specifies: LRL - URL, display unit and other requirements*			
Note: Standard format follows the MICROSENSOR's specifications. Select this option and provide the template if the customer specifies a format.					
Damping time setting	/ST	Adjustable range 0s~100s, default 0s Contract specifies: Damping time*			



Fault alarm setting	/WH	High alarm current value, 20.8mA (HART5), 21mA (HART7)		
	/WL	Low alarm current value, 3.8mA (HART5), 3.6mA (HART7), default		
Identification plate	/PT	Product is shipped with an identification plate, 316 SS Contract specifies: Identification number, not exceeding 16 characters		
Leakage test report	/QS1	Nitrogen (N ₂) or air, 10bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report (Applicable to nominal range 0.4bar)		※
	/QS2	Nitrogen (N ₂) or air, 40bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report (Applicable to nominal range 2.5bar)		※
	/QS3	Nitrogen (N ₂) or air, 60bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report (Applicable to nominal range 10bar)		※
	/QS4	Nitrogen (N ₂) or air, 150bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report (Applicable to nominal range 30bar)		※
	/QS5	Nitrogen (N ₂) or air, 200bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report (Applicable to nominal range 100bar)		※
HART configuration	/H5	HART5 configuration		
	/H7	HART7 configuration		
Diaphragm with gold plated	/J1	Single diaphragm with gold plated (5μ)		※
Diaphragm spraying	/T1	High pressure side single flange PTFE coating		※
Diaphragm sticking	/PFA	The diaphragm is covered with PFA film (protective cover), applicable to corrosion-resistant conditions (non-vacuum, pressure ≥ 0)		※
Note: Only available for diaphragm selection with flange size ≥ 50mm				
Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts		※
Note: Select this item; fluorocarbon oil is needed in oxygen environments (code: D)				
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		※
	/CS6	KR, Korean Register, NAJ50160-AE001		
	/CS7	NK, Nippon Kaiji Kyokai, TA24376M		
	/CS8	RS, Russian Maritime Register of Shipping, 24.44.01.01398.266		
Russia meteorological certificate	/PAC	Pattern Approval Certificate of Measuring Instruments		※
	/PBY	Republic of Belarus (RB) Certificate of Conformity		※
Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry		
High-accuracy	/HAC	High-accuracy calibration according to the user's specified range Contract specifies: Range of use (within sensor's limit), LRL - URL, display unit, accuracy*		※
Language	/LE	English nameplate, operation manual, product certificate, etc.		
Delivery service	/XM	Provide customer requested content according to project delivery standards		
Warranty period	/Y2	2-year warranty		
	/Y3	3-year warranty		
	/Y5	5-year warranty		

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

Example: MDM7000-GP-T-0HP1L-2T-SF-2B1616AKU3S/CS1- 【CAL: 0-0.4bar】

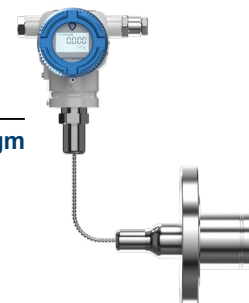
Order Guide

MDM7000-GP-T/AP-T —□□□□□—□—SE—□□□□□□□

Body

Remote Fixed Flange Insertion Sleeve Diaphragm

Items	Code	Description
MDM7000-GP-T	—	Monocrystalline Silicon Pressure Transmitter With Remote Diaphragm Seal (Remote Fixed Flange Insertion Sleeve)
MDM7000-AP-T	—	Monocrystalline Silicon Pressure Transmitter With Remote Diaphragm Seal (Remote Fixed Flange Insertion Sleeve)



Application of hazardous area

1	China, Flameproof, No.CE23.6650 Ex db IIC T6 Gb, GB/T3836.1-2021, GB/T3836.2-2021		
2	China, Intrinsically safe, No.CE23.7688X Ex ia IIC T4 Ga, GB/T3836.1-2021, GB/T3836.4-2021		
3	China, Dust explosion-proof, GYB24.1215X Ex tb III C T85°C Db, GB/T3836.1-2021, GB/T 3836.31-2021		
4	China, Flameproof, Intrinsically safe		
5	China, Flameproof, Dust explosion-proof, Intrinsically safe		
A	CSA, Flameproof		※
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		※
F	ATEX, Intrinsically safe, CSANe 24ATEX1178X II 1G Ex ia IIC T4 Ga		
G	ATEX, Flameproof, Intrinsically safe		
J	IECEX, Flameproof		※
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	
Case	S	316L Stainless steel case with two outlet ports (F) M20×1.5	
	U	316L Stainless steel case with two outlet ports (F) 1/2NPT	
	P	Aluminum alloy case (Polyester resin coating) with two outlet ports (F) M20×1.5	
	N	Aluminum alloy case(Polyester resin coating) with two outlet ports (F) 1/2NPT	

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

Waterproof/explosion-proof connector	Specification	Material	Applicable wire diameter	IP rating
0	Without cable glands			
A	Single-ended with a flameproof metal plug	316 SS		
1	M20×1.5 waterproof connector, with plug	PVC	6mm~12mm	IP67
2	Non-flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~8mm	IP67
3	Flameproof adapter M20x1.5 (M) to 1/2 NPT (F) , with plug	316 SS	6mm~12mm	IP67
4	Flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~12mm	IP67
5	Flameproof adapter M20x1.5 (M) to G1/2 (F) , with plug	316 SS	6mm~12mm	IP67

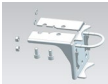
Note: Flameproof configuration is applicable to PCEC/ATEX/IECEX standards.Flameproof adapter obtained CCC certificate. Please contact MICROSENSOR if double sealing is required.

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

Range		Nominal range	Minimum range	Lower (LRL)	Upper (URL)	Overload
GP-T	2	0.4bar	20mbar	-0.4bar	0.4bar	10bar
	3	2.5bar	125mbar	-1bar	2.5bar	40bar
	4	10bar	0.5bar	-1bar	10bar	60bar
	5	30bar	1.5bar	-1bar	30bar	150bar
	6	100bar	5bar	-1bar	100bar	200bar
AP-T	2	0.4bar	0.2bar	0bar	0.4bar	10bar
	3	2.5bar	0.5bar	0bar	2.5bar	40bar
	4	10bar	2bar	0bar	10bar	60bar
Sensor structure	T	Single flange diaphragm seal				
Diaphragm connection position	S	Pressure transmitter				
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			
	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			
	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		DN40, DN50, DN80, DN100	
	2	PN25/PN40	HG/T-20592, EN1092-1		DN40, DN50, DN80, DN100	
	3	PN63	HG/T-20592, EN1092-1		DN40, DN50, DN80, DN100	
	4	PN100	HG/T-20592, EN1092-1		DN40, 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	
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	DN40, DN50, 2inch			
	6	66mm	DN80, 3inch			
	7	77mm	DN100, 4inch			

Insertion sleeve length	A	50mm					
	B	100mm					
	C	150mm					
	D	200mm					
Insertion sleeve material	6	316 SS					
Wetted parts material		Please see the material list of wetted parts for details					
		Flange	Measuring diaphragm				
	6A	316 SS	316L				
	6B	316 SS	Hastelloy C-276				
	6C	316 SS	Tantalum(Only available for range > 2.5bar)				※
	6D	316 SS	Titanium				※
	6E	316 SS	Monel(Only available for range > 2.5bar)				※
Capillary connection location	K	Rear connection					
Capillary type	U	3.5mm OD (or 1/8 inch), armored 316L SS, PVC gray sheath					
	L	3.5mm OD (or 1/8 inch), armored 316L SS, stainless steel bellows sheath					
Capillary length		Insertion sleeve diameter	Adaptable measuring diaphragm				
			6A-316L	6B-HastelloyC-276	6C-Tantalum	6D-Titanium	6D-Monel
1	1m	S-46mm					
		M-66mm					
		L-77mm					
2	2m	S-46mm					
		M-66mm					
		L-77mm					
3	3m	S-46mm					
		M-66mm					
		L-77mm					
4	4m	S-46mm			×	×	×
		M-66mm					
		L-77mm					
5	5m	S-47mm			×	×	×
		M-66mm					
		L-77mm					
6	6m	M-66mm					※
		L-77mm					※
7	7m	M-66mm					※
		L-77mm					※
8	8m	M-66mm					※
		L-77mm					※
9	9m	M-66mm					※
		L-77mm					※
A	10m	M-66mm					※
		L-77mm					※

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

High pressure side fill oil	S	Normal temperature silicone oil (Medium temperature : -40°C ~205°C ,ambient temperature: -40°C ~85°C)	
	D	Fluorocarbon oil 1 (Medium temperature: -20°C ~110°C ,ambient temperature:-20°C ~85°C)	※
	E	Fluorocarbon oil 2 (Medium temperature: -55°C ~85°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 ~200 °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		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	/G1	Bend bracket,316 SS	
	/G2	Bend bracket, Q195 carbon steel	
	/G3	Flat bracket, 316 SS	
	/G4	Flat bracket, Q195 carbon steel	
	/G7	L-shaped brackets (sq), 316 SS	
	/G8	L-shaped brackets (sq), Q234 carbon steel	
Verification report	/Q1	Provide the MICROSENSOR verification data according to user requirements Contract specifies: LRL - URL, display unit*	※
Note: Standard format follows the MICROSENSOR's specifications. Select this option and provide the template if the customer specifies a format			
Damping time setting	/ST	Adjustable range 0s~100s, default 0s Contract specifies: Damping time*	
Fault alarm setting	/WH	High alarm current value, 20.8mA (HART5), 21mA (HART7)	
	/WL	Low alarm current value, 3.8mA (HART5), 3.6mA (HART7), default	
Identification plate	/PT	Product is shipped with an identification plate, 316 SS Contract specifies: Identification number, not exceeding 16 characters	
Leakage test report	/QS1	Nitrogen (N ₂) or air, 10bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report (Applicable to nominal range 0.4bar)	※
	/QS2	Nitrogen (N ₂) or air, 40bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report (Applicable to nominal range 2.5bar)	※
	/QS3	Nitrogen (N ₂) or air, 60bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report (Applicable to nominal range 10bar)	※
	/QS4	Nitrogen (N ₂) or air, 150bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report (Applicable to nominal range 30bar)	※
	/QS5	Nitrogen (N ₂) or air, 200bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report (Applicable to nominal range 100bar)	※
HART configuration	/H5	HART5 configuration	
	/H7	HART7 configuration	
Diaphragm with gold plated	/J1	Single diaphragm with gold plated (5μ)	 ※
Diaphragm spraying	/T3	High pressure side single insertion sleeve PTFE coating	※
Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts	※
Note: Select this item; fluorocarbon oil is needed in oxygen environments (code: D, E)			
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	※
	/CS6	KR, Korean Register, NAJ50160-AE001	※

	/CS7	NK, Nippon Kaiji Kyokai, TA24376M		
	/CS8	RS, Russian Maritime Register of Shipping, 24.44.01.01398.266		
Russia meteorological certificate	/PAC	Pattern Approval Certificate of Measuring Instruments		※
	/PBY	Republic of Belarus (RB) Certificate of Conformity		※
Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry		
High-accuracy	/HAC	High-accuracy calibration according to the user's specified range Contract specifies: Range of use (within sensor's limit), LRL - URL, display unit, accuracy*		※
Language	/LE	English nameplate, operation manual, product certificate, etc.		
Delivery service	/XM	Provide customer requested content according to project delivery standards		
Warranty period	/Y2	2-year warranty		
	/Y3	3-year warranty		
	/Y5	5-year warranty		

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

Example: MDM7000-GP-T-0HP1L-2T-SE-2B1614A66AKU3S/G1- 【CAL: 0-0.4bar】

|| Order Guide ||

MDM7000-GP-T/AP-T — □□□□□ — □ — ST — □□□□□□□

Body

Direct Mounted Flange

Items	Code	Description
MDM7000-GP-T	—	Monocrystalline Silicon Pressure Transmitter Direct Mounted Seal
MDM7000-AP-T	—	Monocrystalline Silicon Pressure Transmitter Direct Mounted Seal



Application of hazardous area

1	China, Flameproof, No.CE23.6650 Ex db IIC T6 Gb, GB/T3836.1-2021, GB/T3836.2-2021		
2	China, Intrinsically safe, No.CE23.7688X Ex ia IIC T4 Ga, GB/T3836.1-2021, GB/T3836.4-2021		
3	China, Dust explosion-proof, GYB24.1215X Ex tb III C T85°C Db, GB/T3836.1-2021, GB/T 3836.31-2021		
4	China, Flameproof, Intrinsically safe		
5	China, Flameproof, Dust explosion-proof, Intrinsically safe		
A	CSA, Flameproof		※
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		※
F	ATEX, Intrinsically safe, CSANe 24ATEX1178X II 1G Ex ia IIC T4 Ga		
G	ATEX, Flameproof, Intrinsically safe		
J	IECEX, Flameproof		※
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	
Case	S	316L Stainless steel case with two outlet ports (F) M20×1.5	
	U	316L Stainless steel case with two outlet ports (F) 1/2NPT	
	P	Aluminum alloy case (Polyester resin coating) with two outlet ports (F) M20×1.5	
	N	Aluminum alloy case(Polyester resin coating) with two outlet ports (F) 1/2NPT	

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

Waterproof/explosion-proof connector	Specification	Material	Applicable wire diameter	IP rating
0	Without cable glands			
A	Single-ended with a flameproof metal plug	316 SS		
1	M20×1.5 waterproof connector, with plug	PVC	6mm~12mm	IP67
2	Non-flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~8mm	IP67
3	Flameproof adapter M20x1.5 (M) to 1/2 NPT (F) , with plug	316 SS	6mm~12mm	IP67
4	Flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~12mm	IP67
5	Flameproof adapter M20x1.5 (M) to G1/2 (F) , with plug	316 SS	6mm~12mm	IP67

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

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

Range		Nominal range	Minimum range	Lower (LRL)	Upper (URL)	Overload		
GP-T	2	0.4bar	20mbar	-0.4bar	0.4bar	10bar		
	3	2.5bar	125mbar	-1bar	2.5bar	40bar		
	4	10bar	0.5bar	-1bar	10bar	60bar		
	5	30bar	1.5bar	-1bar	30bar	150bar		
	6	100bar	5bar	-1bar	100bar	200bar		
AP-T	2	0.4bar	0.2bar	0bar	0.4bar	10bar		
	3	2.5bar	0.5bar	0bar	2.5bar	40bar		
	4	10bar	2bar	0bar	10bar	60bar		
Sensor structure	T	Single flange diaphragm seal						
	—							
Diaphragm connection position	S	Pressure transmitter						
Diaphragm seal system code	T	Direct mounted 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					
	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					
Pressure class			Applicable standard			Applicable flange diameter		
	1	PN10/PN16	HG/T-20592, EN1092-1			DN25, DN40, DN50, DN80		
	2	PN25/PN40	HG/T-20592, EN1092-1			DN25, DN40, DN50, DN80		
	3	PN63	HG/T-20592, EN1092-1			DN25, DN40, DN50, DN80		
	4	PN100	HG/T-20592, EN1092-1			DN25, DN40, DN50, DN80		※
	A	Class 150	HG/T-20615, ANSI/ASME B16.5			1inch, 2inch, 3inch		
	B	Class 300	HG/T-20615, ANSI/ASME B16.5			1inch, 2inch, 3inch		
	C	Class 600	HG/T-20615, ANSI/ASME B16.5			1inch, 2inch, 3inch		※
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		Please see the material list of wetted parts for details		
		Blind	Measuring diaphragm	
	6A	316 SS	316L	
	6B	316 SS	Hastelloy C-276	
	6C	316 SS	Tantalum	※
	6D	316 SS	Titanium	※
	6E	316 SS	Monel	※
Capillary type	0	Normal temperature		
	1	High-temperature heat exchange parts, ≤ 150℃		
	2	Ultra-high temperature heat exchange parts, ≤ 300℃ (only high-temperature silicone oil (code: H) option is available)		
Fill oil	S	Normal temperature silicone oil (Medium temperature : -40℃ ~205℃ , ambient temperature: -40℃ ~85℃)		
	D	Fluorocarbon oil 1: (Medium temperature : -20℃ ~110℃ , ambient temperature: -20℃ ~85℃)		
	E	Fluorocarbon oil 2: (Medium temperature : -55℃ ~85℃ , 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℃ ~200℃ , ambient temperature:-40℃ ~85℃)		
Factory calibration range	CAL	Provides MICROSENSOR standard verification report according to the range, and the default linear output Contract specifies: LRL - URL, display unit*		
Options		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 MICROSENSOR verification data according to user requirements Contract specifies: LRL - URL, display unit and other requirements*		
Note: Standard format follows the Micro Sensor's specifications. Select this option and provide the template if the customer specifies a format.				
Damping time setting	/ST	Adjustable range 0s~100s, default 0s Contract specifies: Damping time*		
Fault alarm setting	/WH	High alarm current value, 20.8mA (HART5), 21mA (HART7)		
	/WL	Low alarm current value, 3.8mA (HART5), 3.6mA (HART7), default		
Identification plate	/PT	Product is shipped with a identification plate, 316 SS Contract specifies: Identification number, not exceeding 16 characters		
Leakage test report	/QS1	Nitrogen (N ₂) or air, 10bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report(Applicable nominal range 0.4bar)		
	/QS2	Nitrogen (N ₂) or air, 40bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report(Applicable nominal range 2.5bar)		
	/QS3	Nitrogen (N ₂) or air, 60bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report(Applicable nominal range 10bar)		
	/QS4	Nitrogen (N ₂) or air, 150bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report(Applicable nominal range 30bar)		
	/QS5	Nitrogen (N ₂) or air, 200bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report(Applicable nominal range 100bar)		
HART configuration	/H5	HART5 configuration		
	/H7	HART7 confihuration		
Diaphragm with gold plated	/J1	Single diaphragm with gold plated (5μ)		
Diaphragm spraying	/T1	High pressure side single flange PTFE coating		
Diaphragm sticking	/PFA	The diaphragm is stuck with PFA film, applicable to non-vacuum situations (pressure ≥ 0)		
Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts		
Note: Select this item; fluorocarbon oil is needed in oxygen environments (code: D, E)				

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		※
	/CS6	KR, Korean Register, NAJ50160-AE001		
	/CS7	NK, Nippon Kaiji Kyokai, TA24376M		
	/CS8	RS, Russian Maritime Register of Shipping, 24.44.01.01398.266		
Russia meteorological certificate	/PAC	Pattern Approval Certificate of Measuring Instruments		※
	/PBY	Republic of Belarus (RB) Certificate of Conformity		※
Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry		
High-accuracy	/HAC	High-accuracy calibration according to the user's specified range Contract specifies: Range of use (within sensor's limit), LRL - URL, display unit, accuracy*		※
Language	/LE	English nameplate, operation manual, product certificate, etc.		
Delivery service	/XM	Provide customer requested content according to project delivery standards		
Warranty period	/Y2	2-year warranty		
	/Y3	3-year warranty		
	/Y5	5-year warranty		

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

Example: MDM7000-GP-T-0HP1L-2T-ST-2B1616AS/CS1- 【CAL: 0-0.4bar 】

Order Guide

MDM7000-GP-T/AP-T — ☐☐☐☐☐☐ — ☐ — SR — ☐☐☐☐☐☐



		Body	Direct Mounted Thread
Items	Code	Description	
MDM7000-GP-T	—	Monocrystalline Silicon Pressure Transmitter Direct Mounted Single Thread Diaphragm Seal	
MDM7000-AP-T	—	Monocrystalline Silicon Pressure Transmitter Direct Mounted Single Thread Diaphragm Seal	

Application of hazardous area

1	China, Flameproof, No.CE23.6650 Ex db IIC T6 Gb, GB/T3836.1-2021, GB/T3836.2-2021		
2	China, Intrinsically safe, No.CE23.7688X Ex ia IIC T4 Ga, GB/T3836.1-2021, GB/T3836.4-2021		
3	China, Dust explosion-proof, GYB24.1215X Ex tb III C T85°C Db, GB/T3836.1-2021, GB/T 3836.31-2021		
4	China, Flameproof, Intrinsically safe		
5	China, Flameproof, Dust explosion-proof, Intrinsically safe		
A	CSA, Flameproof		※
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		※
F	ATEX, Intrinsically safe, CSANe 24ATEX1178X II 1G Ex ia IIC T4 Ga		
G	ATEX, Flameproof, Intrinsically safe		※
J	IECEX, Flameproof		※
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	
Case	S	316L Stainless steel case with two outlet ports (F) M20×1.5	
	U	316L Stainless steel case with two outlet ports (F) 1/2NPT	
	P	Aluminum alloy case (Polyester resin coating) with two outlet ports (F) M20×1.5	
	N	Aluminum alloy case(Polyester resin coating) with two outlet ports (F) 1/2NPT	

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

Waterproof/explosion-proof connector	Specification	Material	Applicable wire diameter	IP rating
0	Without cable glands			
A	Single-ended with a flameproof metal plug	316 SS		
1	M20×1.5 waterproof connector, with plug	PVC	6mm~12mm	IP67
2	Non-flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~8mm	IP67
3	Flameproof adapter M20x1.5 (M) to 1/2 NPT (F) , with plug	316 SS	6mm~12mm	IP67
4	Flameproof adapter M20x1.5 (M) to M20x1.5 (F) , with plug	316 SS	6mm~12mm	IP67
5	Flameproof adapter M20x1.5 (M) to G1/2 (F) , with plug	316 SS	6mm~12mm	IP67

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

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

Range		Nominal range	Minimum range	Lower (LRL)	Upper (URL)	Overload	
GP-T	2	0.4bar	20mbar	-0.4bar	0.4bar	10bar	
	3	2.5bar	125mbar	-1bar	2.5bar	40bar	
	4	10bar	0.5bar	-1bar	10bar	60bar	
	5	30bar	1.5bar	-1bar	30bar	150bar	
	6	100bar	5bar	-1bar	100bar	200bar	
AP-T	2	0.4bar	0.2bar	0bar	0.4bar	10bar	
	3	2.5bar	0.5bar	0bar	2.5bar	40bar	
	4	10bar	2bar	0bar	10bar	60bar	
Sensor structure	T	Single flange diaphragm seal					
Diaphragm connection position	S	Pressure transmitter					
Diaphragm seal system code	R	Direct mounted thread					
Process connection	1M	Male M44×1.25, GB/T193-2003, ISO261					
	2M	Male M20×1.5 (Integrated)					
	1G	Male G1, GB/T7307, ISO228, DIN16288, BS2779					
	2G	Male G2, GB/T7307, ISO228, DIN16288, BS2779					
	3G	Male G1-1/2, GB/T7307, ISO228, DIN16288, BS2779					
	4G	Male G1/2 (Integrated)					
	1N	Female 1/2 inch NPT					
	2N	Male 1/2 inch NPT (Contains 1/4" NPT)					
Sealing type	R	Root					
	A	Axial					
	U	Root and axial					
Wetted parts material		Measuring diaphragm	Thread	Sealings			
	6A	316L	316	FKM			
	6B	HC-276	316	FKM			
Capillary / vent tube	0	Normal temperature					
	1	High-temperature heat exchange parts, ≤ 150℃					
	2	Ultra-high temperature heat exchange parts, ≤ 300℃ (only high-temperature silicone oil (code: H) option is available)					
High pressure side fill oil	S	Normal temperature silicone oil (Medium temperature : -40℃ ~205℃ , ambient temperature: -40℃ ~85℃)					
	D	Fluorocarbon oil 1 (Medium temperature: -20℃ ~110℃ , ambient temperature:-20℃ ~85℃)					※
	E	Fluorocarbon oil 2 (Medium temperature: -55℃ ~85℃ , 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℃ ~200℃ , ambient temperature: -40℃ ~85℃)					※
Factory calibration range	CAL	Provides MICROSENSOR standard verification report according to the range, and the default linear output Contract specifies: LRL - URL, display unit*					
Options		Description (Detailed specifications as following, multiple options or null)					
High vacuum high temperature	N	High vacuum and high temperature process diaphragm (if this option is selected, the accuracy will be affected and can only up to 0.2%)					※

Welding mounting parts	/WP1	1MR matching welding mounting parts, sealings	
	/WP2	1MA matching welding mounting parts, sealings	
	/WP3	1GR matching welding mounting parts, sealings	
	/WP4	1GA matching welding mounting parts, sealings	
	/WP5	2GR matching welding mounting parts, sealings	
	/WP6	2GA matching welding mounting parts, sealings	
	/WP7	3GR matching welding mounting parts, sealings	
	/WP8	3GA matching welding mounting parts, sealings	
	/WP9	2MR matching welding mounting parts, sealings	
Note: 1MR\1MA\1GR\1GA\2GR\2GA\3GR\3GA in the options is a combination of process connection and sealing type codes; welding protection parts need to be purchased separately.			
Verification report	/Q1	Provide the MICROSENSOR verification data according to user requirements Contract specifies: LRL - URL, display unit and other requirements*	※
Note: Standard format follows the MICROSENSOR's specifications. Select this option and provide the template if the customer specifies a format.			
Damping time setting	/ST	Adjustable range 0s~100s, default 0s Contract specifies: Damping time*	
Fault alarm setting	/WH	High alarm current value, 20.8mA (HART5), 21mA (HART7)	
	/WL	Low alarm current value, 3.8mA (HART5), 3.6mA (HART7), default	
Identification plate	/PT	Product is shipped with a identification plate, 316 SS Contract specifies: Identification number, not exceeding 16 characters	
Leakage test report	/QS1	Nitrogen (N ₂) or air, 10bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report (Applicable to nominal range 0.4bar)	※
	/QS2	Nitrogen (N ₂) or air, 40bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report (Applicable to nominal range 2.5bar)	※
	/QS3	Nitrogen (N ₂) or air, 60bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report (Applicable to nominal range 10bar)	※
	/QS4	Nitrogen (N ₂) or air, 150bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report (Applicable to nominal range 30bar)	※
	/QS5	Nitrogen (N ₂) or air, 200bar, pressure holding for 10 minutes, provide MICROSENSOR standard leakage test report (Applicable to nominal range 100bar)	※
HART configuration	/H5	HART5 configuration	
	/H7	HART7 configuration	
Diaphragm with gold plated	/J1	Single diaphragm with gold plated (5μ)	 ※
Diaphragm spraying	/T6	Thread diaphragm spraying PTFE coating	※
Oil-free treatment	/CL1	Degreasing and cleaning treatment of the wetted parts	※
Note: Select this item; fluorocarbon oil is needed in oxygen environments (code: D, E)			
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	※
	/CS6	KR, Korean Register, NAJ50160-AE001	
	/CS7	NK, Nippon Kaiji Kyokai, TA24376M	
	/CS8	RS, Russian Maritime Register of Shipping, 24.44.01.01398.266	
Russia meteorological certificate	/PAC	Pattern Approval Certificate of Measuring Instruments	 ※
	/PBY	Republic of Belarus (RB) Certificate of Conformity	 ※
Lithium battery	/LD	General requirements for low copper and zinc in the lithium battery industry	
High-accuracy	/HAC	High-accuracy calibration according to the user's specified range Contract specifies: Range of use (within sensor's limit), LRL - URL, display unit, accuracy*	※

Language	/LE	English nameplate, operation manual, product certificate, etc.
Delivery service	/XM	Provide customer requested content according to project delivery standards
Warranty period	/Y2	2-year warranty
	/Y3	3-year warranty
	/Y5	5-year warranty

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

Example: MDM7000-GP-T-0HP1L-2T-SR-1MR6A0S/WP1- 【CAL: 0-0.4bar】