

Selection and Ordering data

Order No.

**Pressure transmitters for differential pressure and flow,
SITRANS P500 HART, PN 160 (MAWP 2320 psi)**

D) 7MF54 - 0

Enclosure

Die-cast aluminum, dual compartment

Die-cast aluminum, dual compartment

Thread for cable gland

M20x1.5

½-14 NPT

Output

4 ... 20 mA, HART

Measuring cell filling

Silicone oil

Measuring cell cleaning

normal

Measuring span

1.25 ... 250 mbar

(0.5 ... 100.4 inH₂O)

6.25 ... 1250 mbar

(2.5 ... 502 inH₂O)**Wetted parts materials**

(stainless steel process flanges)

Seal diaphragm

Process connection

stainless steel

stainless steel

Hastelloy

stainless steel

Monel

stainless steel

Process connection

Female thread ¼-18 NPT

• Sealing screw opposite process connection

- Mounting thread 7/16 - 20 UNF according to EN 61518

- Mounting thread M10 to DIN 19213

• Vent on side of process flange¹⁾

- Mounting thread 7/16 - 20 UNF according to EN 61518

- Mounting thread M10 to DIN 19213

¹⁾ Not in conjunction with remote seals

D) Subject to export regulations AL: N, ECCN: EAR99H.

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Selection and Ordering data	Order code
Further designs Add "-Z" to Order No. and specify Order Code.	
Attachments	
Mounting bracket made of steel	A01
Mounting bracket made of stainless steel	A02
Display (Standard: no display, cover closed)	
With display and blanking cover	A10
With display and glass cover	A11
Special casing / cover version	
Two coats of lacquer on casing, cover (PU on epoxy)	A20
Electrical connection and cable entry (Standard: no cable gland, only dust protection caps)	
Cable gland made of plastic (IP66/68) ⁴⁾	A50
Cable glands made of metal (IP66/68)	A51
Cable glands made of stainless steel (IP66/68)	A52
M12 connectors without cable socket (IP66/67) ⁴⁾	A60
M12 connectors complete with cable socket (IP66/67) ⁴⁾	A61
Han 7D connectors, plastic, straight (with cable socket) (IP65) ⁴⁾	A71
Han 7D connectors, plastic, angled (with cable socket) (IP65) ⁴⁾	A72
Han 7D connectors, metal enclosure, straight (with cable socket) (IP65) ⁴⁾	A73
Han 7D connectors, metal enclosure, angled (with cable socket) (IP65) ⁴⁾	A74
Han 8D connectors, plastic, straight (with cable socket) (IP65) ⁴⁾⁸⁾	A75
Han 8D connectors, plastic, angled (with cable socket) (IP65) ⁴⁾⁸⁾	A76
Han 8D connectors, metal enclosure, straight (with cable socket) (IP65) ⁴⁾⁸⁾	A77
Han 8D connectors, metal enclosure, angled (with cable socket) (IP65) ⁴⁾⁸⁾	A78
PG 13.5 adapters ⁴⁾	A82
Language for labels, leporellos, menu language default ⁹⁾ (instead of English as standard)	
German	B10
French	B12
Spanish	B13
Italian	B14
Chinese	B15
Russian	B16
Japanese	B17
English with units psi/inH ₂ O/°F	B21
Special version: Supplementary menu languages (Standard: English, German, French, Spanish, Italian)	
Asia language package (in addition: Chinese, Japanese, Russian)	B80
Certificates (available online for downloading) ¹⁾	
Quality inspection certificate (Five-step factory calibration) according to IEC 60770-2 ²⁾	C11
Acceptance test certificate according to EN 10204-3.1 ³⁾	C12

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Degree of protection approvals: Ex ia/ib (intrinsic safety)	
Ex ia/ib protection (ATEX) (T4)	E00
Ex IS protection (FM) (T4)	E01
Ex IS protection (C _{CSA} US) (T4)	E02
Ex ia/ib protection (NEPSI) (T4)	E06
Degree of protection approvals: Ex d (flameproof)	
Ex d explosion-proof (ATEX)(T4/T6)	E20
Ex XP explosion-proof and DIP (FM)(T4/T6)	E21
Ex XP explosion-proof and DIP (C _{CSA} US)(T4/T6)	E22
Ex d explosion-proof (NEPSI)(T4/T6)	E26
Degree of protection approvals: n/NI	
Zone 2 (nA, nL, ic) (ATEX) (T4/T6)	E40
Div2 NI, Div2 NI-field wiring (FM) (T4/T6)	E41
Zone 2 (nA, nL), Div2 NI (C _{CSA} US) (T4/T6)	E42
Zone 2 (nA, nL) (NEPSI) (T4/T6)	E46
Degree of protection approvals: Dust Zone 20/21/22	
Use in Zone 21/22 (Ex tD) (ATEX)	E60
Use in Zone 20/21/22 (Ex iaD) (ATEX)	E61
Use in Zone 21/22 (Ex DIP) (NEPSI)	E66
Degree of protection approvals: Combinations	
IS protection and XP and DIP (FM)	E71
IS protection and XP and DIP (C _{CSA} US)	E72
IS protection and XP and DIP (FM/C _{CSA} US)	E73
Supplementary approvals/degree of protection	
Dual Seal approval ⁵⁾	E85
Special process connection versions (diff. pressure)	
Side vents for gas measurements ⁷⁾	L32
Swap process connection: high-pressure side at front	L33
Process flanges, O-rings, special material Standard: Viton (FKM (FPM))	
Process connection sealing rings made of PTFE (Teflon), virginal	L60
Process connection sealing rings made of PTFE (Teflon), glass fiber-reinforced	L61
Process connection sealing rings made of FFKM (Kalrez)	L62
Process connection sealing rings made of NBR	L63
Drain/Vent valve (1 set = 2 units)	
2 ventilation valves 1/4- 18 NPT, in material of process flanges)	L80
Remote seals	
Transmitters with connection of remote seal ⁶⁾ (For premounted valve manifolds see page 2/188)	V00

- 1) Enclosed in print or as CD: see page 2/186.
- 2) When also ordering the quality inspection certificate (factory calibration) according to IEC 60770-2 for transmitters with mounted diaphragm seals: Order this certificate only together with the remote seals. The measuring accuracy of the total combination is certified here.
- 3) When also ordering the acceptance test certificate according to EN 10204-3.1 for transmitters with mounted diaphragm seals: Order this certificate as well in addition to the respective remote seals.
- 4) Not together with types of protection "Explosion-proof", "Ex nA" and "Intrinsic safety and explosion-proof"
- 5) Only in conjunction with FM and/or C_{CSA}US
- 6) Please select a remote seal separately. Also refer to the information under 2).
- 7) Only in conjunction with process connection "Vent on side".
- 8) The Han 8D plug is identical with the former Han 8U version.
- 9) For option B15, B16 and B17 the menu language default is english. Otherwise the Option B80 (Asia language package) is necessary.

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Additional data

Please add "-Z" to Order No. and specify Order code(s) and plain text.

Measuring range to be set

Specify in plain text:

- in the case of linear characteristic curve (max. 5 characters):
Y01: ... up to ... mbar, bar, kPa, MPa, psi **Y01**
- in the case of square rooted characteristic (max. 5 characters):
Y02: ... up to ... mbar, bar, kPa, MPa, psi **Y02**

Measuring point number and measuring point identifier (only standard ASCII character set)

Specify in plain text:

Measuring point number (TAG No.), max. 16 characters
Y15: **Y15**

Measuring point text (max. 27 char.)
Y16: **Y16**

Entry of HART address (TAG), max. 32 characters
Y17: **Y17**

Setting of pressure indication in pressure units **Y21**

Specify in plain text (standard setting: mbar)

Y21: bar, kPa, MPa, psi, ...

Note: The following pressure units are selectable:
bar, mbar, mm H₂O^{*}, in H₂O^{*}, ftH₂O^{*}, mmHG, inHG, psi, Pa, kPa, MPa, g/cm², kg/cm², Torr, ATM, % or mA

*) Reference temperature 20 °C

Setting of pressure indication in non-pressure units **Y22 +**

Specify in plain text:

Y22: ... up to ... l/min, m³/h, m, USgpm, ...
(specification of measuring range in pressure units "Y01" is essential, unit with max. 5 characters) **Y01 or Y02**

Customer-specific settings

Damping setting (range: 0 ... 100 s)
(Standard setting: 2 s) **Y30**