



TYPE APPROVAL CERTIFICATE

Certificate No. : HMB34800-AE003 **Initial Approval** : 2nd February, 2017
Product : Pressure Transmitter
Manufacturer : Endress+Hauser Conducta GmbH + Co.KG
 Dieselstrasse 24, D-70839 Gerlingen, Germany
Product Description : Pressure transmitter, Gerabar S (Type : PMC71, PMP71, PMP75)
 " See Appendix 1, 2 "

Approval Condition : 1. This approval is granted on the basis of the approved drawing & test reports in Appendix 1.
 2. The product or packing is to be marked with the manufacturer's name and type designation on a suitable position.
 3. Individual Product Certification is not required.

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt. 6, Ch. 2, Art. 301 of the Rules for Classification, Steel Ships.

This Certificate is valid until 1st February, 2022

Issued at Busan, Korea on 2nd February, 2017



KOREAN REGISTER OF SHIPPING

*General Manager of
Marine & Ocean Equipment Team*

*Note : 1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.*

Appendix 1

Product Description and/or Approval Condition

Certificate No : HMB34800-AE003

Date of Issue : 2nd February, 2017

A. Production Description :

- Pressure transmitter, Cerabar S (Type : PMC71, PMP71, PMP75)
- : Absolute pressure or gauge pressure measurement.

1. Main Characteristics :

Cerabar S	PMC71	PMP71	PMP75
Field of application	- Gauge pressure and absolute pressure - Level		
Process connections	- Diverse threads - DN25-80 - ASME 1 1/2" -4" - JIS 50-100A	- Diverse threads - DN25-80 - ASME 1 1/2" -4" - JIS 25-100A - over flange adapter - Prepared for diaphragm seal mount	- Wide range of diaphragm seals
Measuring ranges	From -100/0 to 100mbar to -1/0 to 40bar	From -400/0 to 400mbar to -1/0 to 700bar	From -400/0 to 400mbar to -1/0 to 400bar
Over Pressure Limit	Max. 60bar	Max. 1050bar	Max. 600bar
Temperature ranges	-20 to 125°C -20 to 150°C	-40 to 125°C	-70 to 400°C Depend on the fill oil
Supply voltage	- Version for non-hazardous area : · 4 to 20 mA HART : 10.5 to 45V DC · PROFIBUS PA and FOUNDATION Fieldbus : 9 to 32V DC - Ex ia : 10.5 to 30V DC		
Output	- 4 to 20 mA with superimposed HART protocol, PROFIBUS PA or FOUNDATION Fieldbus		
Options	- PMP71, PMP75 : gold-rhodium coated process isolating diaphragm - PMC71, PMP75 : NACE-compliant materials - PMC71, PMP71, PMP75 : inspection certificate 3.1 - HistoROM®/M-DAT memory module - Separate housing		

2. Model variants.

1) Cerabar M PMC71

010 = Approval	Any single letter and/or number
020 = Output, Operation	A, B, C, D, E, F, M, N, O, P, Q, R, Y
030 = Housing, Cable Entry	A, B, C, D, E, F, R, S, T, U, V, 1, 2, 3, 4, 5, 6, 7, 8
040 = Sensor Range	Any double letter and/or number combination
050 = Calibration, Unit	Any letter and/or number combination
070 = Process connection	Any double letter and/or number combination Except for thread < 1/2"
080 = Seal	A, B, D, E, F, G, L, M, Y, 1, 2
100 = Additional option 1	Any letter and/or number combination, except for T
110 = Additional option 1	Any letter and/or number combination, except for T

Appendix 2

Product Description and/or Approval Condition

Certificate No : HMB34800-AE003

Date of Issue :2nd February, 2017

- 2) Cerabar M PMP71
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|----------------------------|---|
| 010 = Approval | Any single letter and/or number |
| 020 = Output, Operation | A, B, C, D, E, F, M, N, O, P, Q, R, Y |
| 030 = Housing, Cable Entry | A, B, C, D, E, F, R, S, T, U, V, 1, 2, 3, 4, 5, 6, 7, 8 |
| 040 = Sensor Range | Any double letter and/or number combination |
| 050 = Calibration, Unit | Any letter and/or number combination |
| 060 = Membrane Material | 1, 2, 6, 9 |
| 070 = Process connection | Any double letter and/or number combination
Except for thread < 1/2" |
| 090 = Fill Fluid | A, F, K, N, Y |
| 100 = Additional option 1 | Any letter and/or number combination |
| 110 = Additional option 2 | Any letter and/or number combination |

- 3) Cerabar M PMP75
- | | |
|----------------------------|---|
| 010 = Approval | Any single letter and/or number |
| 020 = Output, Operation | A, B, C, D, E, F, M, N, O, P, Q, R, Y |
| 030 = Housing, Cable Entry | A, B, C, D, E, F, R, S, T, U, V, 1, 2, 3, 4, 5, 6, 7, 8 |
| 040 = Sensor Range | Any double letter and/or number combination |
| 050 = Calibration, Unit | Any letter and/or number combination |
| 060 = Membrane Material | 1, 2, 6, 9 |
| 070 = Process connection | Any double letter and/or number combination
Except for thread < 1/2" |
| 090 = Fill Fluid | A, F, K, N, Y |
| 100 = Additional option 1 | Any letter and/or number combination, except for T |
| 110 = Additional option 2 | Any letter and/or number combination, except for T |

3. Documentation :

- 1) Drawings : 960535-0001A, 960535-0054A, 960006411-B1, 960006411-B1, 960015113--, 960015114--
- 2) Test Reports : PTC_E_05_031_GL, PTC_E_05_032_GL, 0722A-05, 960017767
S-class_FF_04_00_01_0028, S-class_PA_04_01_00_0028, S-class_H_02_20_00_0026
- 3) Technical Information : TI383P/00/EN/20.14
- 4) Software : SW_Revision_History_2, SW_Revision_History_PAFF

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