

Installation Guide

# Pressure Transmitters

MBS 33, MBS 33M, MBS 3000, MBS 3050, MBS 3200, MBS 3250, MBS 3300,  
MBS 3350, MBS 4000, MBS 4050, MBS 4003, MBS 4010, DST P300, DST P30M,  
MBS 1700, MBS 1750

060R9348

060R9348

	<p>Elektrisk tilslutning Electrical connection: Elektrischer Anschluss: Raccordement électrique: Conexión eléctrica: Connessione elettrica:</p>		<p>Se produktskilt See product label Siehe Produktschild Voir étiquette du produit Ver la pegatina en el producto Vedi etichetta sulla confezione</p>		<p>Omgivelsestemperatur Ambient temperature Umgebungstemperatur Temperatura ambiente Temperatura ambiente</p>			
	<p>EN 175301-803  II 3G C RU US</p>	<p>Screened cable or Flying leads (wire)  II 3G C RU US</p>	<p>AMP Econoseal J series, male  C RU US</p>	<p>ISO 15170 Bayonet  II 3G C RU US</p>	<p>EN60947-5-2 M12 x 1 (4-pin)  C RU US</p>	<p>Metri Pack  C RU US</p>	<p>Amphenol 6-pin  C RU US</p>	<p>Lumberg RS 20-03 (on cable)  C RU US</p>
<p>4-20 mA: -40 – 100 °C Voltage: -40 – 114 °C Ratiom. 10-90%: -40 – 114 °C</p>	<p>4-20 mA/Voltage/ Ratiom. 10-90%: Cable: -30 – 85 °C Wire: -30 – 100 °C</p>	<p>4-20 mA: -30 – 100 °C Voltage: -30 – 105 °C Ratiom. 10-90%: -30 – 105 °C</p>	<p>4-20 mA: -40 – 100 °C Voltage: -40 – 125 °C Ratiom. 10-90%: -40 – 125 °C</p>	<p>4-20 mA: -25 – 90 °C Voltage: -25 – 90 °C Ratiom. 10-90%: -25 – 90 °C</p>	<p>4-20 mA: -40 – 100 °C Voltage: -40 – 125 °C Ratiom. 10-90%: -40 – 125 °C</p>	<p>4-20 mA: -30 – 100 °C Voltage: -30 – 100 °C Ratiom. 10-90%: -30 – 100 °C</p>	<p>4-20 mA: -30 – 90 °C Voltage: -30 – 90 °C Ratiom. 10-90%: -30 – 90 °C</p>	<p>4-20 mA: -30 – 90 °C Voltage: -30 – 90 °C Ratiom. 10-90%: -30 – 90 °C</p>
<p>AMP superseal 1.5 series (on cable)  C RU US</p>	<p>Deutsch DT04-3p (on wire)  C RU US</p>	<p>Deutsch DT04-4p  C RU US</p>	<p>Universal Mate-N-Lock (on wire)  C RU US</p>	<p>AMP Econoseal (AMP 173065) (on wire)  C RU US</p>	<p>Molex 5527-2p (on wire)  C RU US</p>	<p>ITT cannon sure seal ss 2-p (on cable)  C RU US</p>	<p>ITT cannon circular (on cable)  C RU US</p>	
<p>4-20 mA/Voltage/ Ratiometric 10-90%: -30 – 100 °C</p>	<p>4-20 mA/Voltage/ Ratiometric 10-90%: -30 – 100 °C</p>	<p>All outputs: On wire: -30 – 100 °C On cable: -30 – 85 °C</p>	<p>4-20 mA/Voltage/ Ratiometric 10-90%: -30 – 100 °C</p>	<p>4-20 mA/Voltage/ Ratiometric 10-90%: -30 – 105 °C</p>	<p>4-20 mA: -40 – 100 °C Voltage/Ratiometric 10-90%: -40 – 114 °C</p>	<p>4-20 mA/Voltage/ Ratiometric 10-90%: -30 – 80 °C</p>	<p>4-20 mA/Voltage/ Ratiometric 10-90%: -30 – 100 °C</p>	
<p>IEC 947-5-2, M12 x 1 (5-pin)  C RU US</p>	<p>Pin 5: Forbundet til kapsling Connected to enclosure Pin 5: Anschluss an Gehäuse Anschluss an Gehäuse Broche 5: Connecté au boîtier Connecté au boîtier Pin 5: Conectado a la cubierta Conectado a la cubierta Polo 5: Collegato al corpo</p>		<p>MBS 33, MBS 33M, MBS 3000, MBS 3200, MBS 3300, MBS 4000  C RU US</p>	<p>MBS 3050, MBS 3250, MBS 3350, MBS 4050  C RU US</p>	<p>MBS 4010  C RU US</p>			
	<p>MBS 3300, MBS 3350</p>							
	<p>MBS 4010</p> <p>DANFOSS A6GG204.10</p> <p>DANFOSS A6GG203.10</p>							

	 	<p><b>Australian approvals:</b> According to N1297.</p> <p><b>American and Canadian approvals:</b></p> <ol style="list-style-type: none"> <li>Automatic electrical controls acc. to UL 60730-1 and part 2-6 / CAN/CSA E60730 and part 2-6, file E31024.</li> <li>Equipment for process measurement and control acc. to UL 61010-1 / CSA C22.2 No. 61010-12, file E494625.</li> <li>Nonincendive electrical equipment for use in Class I, Div. 2, Groups A, B, C, and D, hazardous locations in acc. To UL 121201 / C22.2 No. CSA-213, file E227388 and E510763. Combinations of equipment in systems are subject to investigation by the local Authority Having Jurisdiction at the time of installation. These components are to be installed within a suitable tool-secured enclosure in end application.</li> </ol> <p><b>WARNING - EXPLOSION HAZRD</b> – Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous.</p> <ol style="list-style-type: none"> <li>The MWP (max. working pressure) in the range from 1 to 600 bar depending on sensor pressure range. Refer to product lable, (E494625)</li> <li>Evaluated for pollution Degree 3.</li> <li>Altitude up to 8,000 m.</li> <li>Max. R.H. 95% non-condensing.</li> <li>Overvoltage category I.</li> <li>Powered by class 2 supply.</li> </ol> <table border="1" data-bbox="400 651 1463 808"> <tr> <td><b>Type</b></td> <td>MBS 33, MBS 33M, MBS 1700, MBS 1750, MBS 3000, MBS 3050, MBS 4000, MBS 4003, MBS 4010</td> <td>MBS 3200, MBS 3250, MBS 3300, MBS 3350, DST P300, DST P30M</td> </tr> <tr> <td><b>Max ambient temperature /T-code</b></td> <td>85 °C / T4</td> <td>125 °C / T4</td> </tr> <tr> <td><b>Electrical connectors</b></td> <td colspan="2">For UL approved see overview page 1</td> </tr> </table> <table border="1" data-bbox="400 819 1463 891"> <tr> <td><b>Output signal</b></td> <td>Current</td> <td>Ratio-metric</td> <td>Absolute voltage</td> </tr> <tr> <td><b>Supply voltage</b></td> <td>9-32 V DC</td> <td>4,5 - 5,5 V DC (5V nom)</td> <td>9-32 V DC</td> </tr> </table>	<b>Type</b>	MBS 33, MBS 33M, MBS 1700, MBS 1750, MBS 3000, MBS 3050, MBS 4000, MBS 4003, MBS 4010	MBS 3200, MBS 3250, MBS 3300, MBS 3350, DST P300, DST P30M	<b>Max ambient temperature /T-code</b>	85 °C / T4	125 °C / T4	<b>Electrical connectors</b>	For UL approved see overview page 1		<b>Output signal</b>	Current	Ratio-metric	Absolute voltage	<b>Supply voltage</b>	9-32 V DC	4,5 - 5,5 V DC (5V nom)	9-32 V DC
<b>Type</b>	MBS 33, MBS 33M, MBS 1700, MBS 1750, MBS 3000, MBS 3050, MBS 4000, MBS 4003, MBS 4010	MBS 3200, MBS 3250, MBS 3300, MBS 3350, DST P300, DST P30M																	
<b>Max ambient temperature /T-code</b>	85 °C / T4	125 °C / T4																	
<b>Electrical connectors</b>	For UL approved see overview page 1																		
<b>Output signal</b>	Current	Ratio-metric	Absolute voltage																
<b>Supply voltage</b>	9-32 V DC	4,5 - 5,5 V DC (5V nom)	9-32 V DC																
	<p><b>ATEX ZONE 2</b></p>	<table border="1" data-bbox="384 898 1479 1055"> <tr> <td style="text-align: center;">   <b>II 3G</b>  <b>Ex ec IIA T4 Gc</b>  <b>-20°C&lt;Ta&lt;+85°C</b> </td> <td style="text-align: center;">           EN60079-0; EN60079-7         </td> </tr> <tr> <td colspan="2" style="text-align: center;">           Applicable in Zone 2 electrical connectors see overview page 1.         </td> </tr> </table> <p><b>Applicable in ATEX Zone 2 with medias classified as IIA in accordance to EN 60079-20-1:</b></p> <p>Alle elektriske tilslutninger skal udføres iht. ATEX Zone 2 regulativet - samt EN 60079-14.        All electrical connections must comply with the ATEX requirements for Zone 2 - and EN 60079-14.        Alle elektrischen Anschlüsse müssen gemäß ATEX Zone2 Regeln und EN 60079-14 durchgeführt werden.        Tous les raccordements électriques doivent être effectués conformément aux règles ATEX zone 2 et EN 60079-14.        Todas las conexiones eléctricas deben ser realizadas de acuerdo a los requerimientos de la normativa ATEX zona 2 y EN 60079-14.        Tutti i collegamenti elettrici devono essere eseguiti secondo le normative ATEX Zone e EN 60079-14.</p> <p>Ved anvendelser i ATEX Zone 2 områder ved temperaturer &lt;-10 °C skal kabel og stik beskyttes mod slag.        When used in ATEX Zone2 areas at temperatures &lt;-10 °C the cable and plug must be protected against impact.        Wenn in ATEX Zone 2 bei Temperaturen &lt;-10 °C verwendet werden, müssen die Kabel und Stecker gegen Stöße geschützt werden.        Lorsqu'ils sont utilisés en zone 2 ATEX à des températures &lt;-10 °C, le câble et le connecteur doivent être protégés contre les chocs.        Cuando se usa en áreas ATEX Zona 2, a temperaturas &lt;-10 °C, el cable y conector deben protegerse contra impactos.        Per l'uso in ATEX Zona 2 a temperature &lt;-10 °C, il cavo ed il connettore devono essere protetti contro gli urti.</p>	 <b>II 3G</b> <b>Ex ec IIA T4 Gc</b> <b>-20°C&lt;Ta&lt;+85°C</b>	EN60079-0; EN60079-7	Applicable in Zone 2 electrical connectors see overview page 1.														
 <b>II 3G</b> <b>Ex ec IIA T4 Gc</b> <b>-20°C&lt;Ta&lt;+85°C</b>	EN60079-0; EN60079-7																		
Applicable in Zone 2 electrical connectors see overview page 1.																			
		<table border="1" data-bbox="384 1391 1479 1966"> <tr> <td data-bbox="384 1391 932 1966"> <p>Locking screw M3: 0.4 Nm</p> <p>Coupling ring: 1 Nm</p> <p>Stikket må ikke fjernes, når transmitteren er tilsluttet.            Plug must not be removed when sensor is energized.            Stecker darf nicht entfernt werden, wenn der sensor aktiviert ist.            Le connecteur ne doit pas être retiré lorsque le capteur est encore sous tension.            El conector no debe retirarse cuando el sensor esté activado.            Il connettore elettrico non deve essere scollegato quando il sensore è in funzione.</p> </td> <td data-bbox="932 1391 1479 1966"> <p>DANFOSS A60C48.1.2</p> <p>Kablet må ikke udsættes for nogen mekaniske skader, korrosion, vibration, varme eller UV stråling.            Cable must neither be exposed for any mechanical damage, corrosion, vibration, heat nor UV radiation.            Kabel müssen weder auf mechanische Beschädigungen, Korrosion, Vibration, Hitze noch UV-Strahlung ausgesetzt werden.            Le câble ne doit être exposé à aucun dommage mécaniques, à la corrosion, àux vibrations, à la chaleur ou aux radiations UV.            El cable no deber estar expuesto a ningún tipo de radiación, daños mecánicos, corrosión, vibraciones, calor ó UV.            Il cavo non deve essere esposto a danni meccanici, corrosione, vibrazioni, fonti di calore o raggi UV.</p> </td> </tr> </table>	<p>Locking screw M3: 0.4 Nm</p> <p>Coupling ring: 1 Nm</p> <p>Stikket må ikke fjernes, når transmitteren er tilsluttet.            Plug must not be removed when sensor is energized.            Stecker darf nicht entfernt werden, wenn der sensor aktiviert ist.            Le connecteur ne doit pas être retiré lorsque le capteur est encore sous tension.            El conector no debe retirarse cuando el sensor esté activado.            Il connettore elettrico non deve essere scollegato quando il sensore è in funzione.</p>	<p>DANFOSS A60C48.1.2</p> <p>Kablet må ikke udsættes for nogen mekaniske skader, korrosion, vibration, varme eller UV stråling.            Cable must neither be exposed for any mechanical damage, corrosion, vibration, heat nor UV radiation.            Kabel müssen weder auf mechanische Beschädigungen, Korrosion, Vibration, Hitze noch UV-Strahlung ausgesetzt werden.            Le câble ne doit être exposé à aucun dommage mécaniques, à la corrosion, àux vibrations, à la chaleur ou aux radiations UV.            El cable no deber estar expuesto a ningún tipo de radiación, daños mecánicos, corrosión, vibraciones, calor ó UV.            Il cavo non deve essere esposto a danni meccanici, corrosione, vibrazioni, fonti di calore o raggi UV.</p>															
<p>Locking screw M3: 0.4 Nm</p> <p>Coupling ring: 1 Nm</p> <p>Stikket må ikke fjernes, når transmitteren er tilsluttet.            Plug must not be removed when sensor is energized.            Stecker darf nicht entfernt werden, wenn der sensor aktiviert ist.            Le connecteur ne doit pas être retiré lorsque le capteur est encore sous tension.            El conector no debe retirarse cuando el sensor esté activado.            Il connettore elettrico non deve essere scollegato quando il sensore è in funzione.</p>	<p>DANFOSS A60C48.1.2</p> <p>Kablet må ikke udsættes for nogen mekaniske skader, korrosion, vibration, varme eller UV stråling.            Cable must neither be exposed for any mechanical damage, corrosion, vibration, heat nor UV radiation.            Kabel müssen weder auf mechanische Beschädigungen, Korrosion, Vibration, Hitze noch UV-Strahlung ausgesetzt werden.            Le câble ne doit être exposé à aucun dommage mécaniques, à la corrosion, àux vibrations, à la chaleur ou aux radiations UV.            El cable no deber estar expuesto a ningún tipo de radiación, daños mecánicos, corrosión, vibraciones, calor ó UV.            Il cavo non deve essere esposto a danni meccanici, corrosione, vibrazioni, fonti di calore o raggi UV.</p>																		