

| Selection and Ordering data                                                                                                                                                                                                                   | Order No.             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>SITRANS LC500, Threaded or Welded Flange with Cable Sensor</b>                                                                                                                                                                             | <b>7 ML 5 5 1 3 -</b> |
| Inverse frequency shift capacitance level and interface transmitter for extreme and critical process conditions, such as oil and liquid gas, toxic and aggressive chemicals and vapours.                                                      |                       |
| <b>Version<sup>1)</sup></b>                                                                                                                                                                                                                   |                       |
| Cable, 9 mm (0.35") diameter, 316 stainless steel with PFA insulation, weighted                                                                                                                                                               |                       |
| <u>Add order code Y01 and plain text: "Insertion length ... mm"</u>                                                                                                                                                                           |                       |
| - 1000 to 2000 mm (39.37 to 78.74")                                                                                                                                                                                                           | 0 E                   |
| - 2001 to 4000 mm (78.78 to 157.48")                                                                                                                                                                                                          | 1 E                   |
| - 4001 to 6000 mm (157.52 to 236.22")                                                                                                                                                                                                         | 2 E                   |
| - 6001 to 8000 mm (236.26 to 314.96")                                                                                                                                                                                                         | 3 E                   |
| - 8001 to 10000 mm (315 to 393.70")                                                                                                                                                                                                           | 4 E                   |
| Longer lengths possible to a max. of 35000 mm (114.83 ft). Contact <a href="mailto:nacc.smpi@siemens.com">nacc.smpi@siemens.com</a> for details.                                                                                              |                       |
| Cable, 6 mm (0.24") diameter, 316L stainless steel, non-insulated, weighted                                                                                                                                                                   |                       |
| <u>Add order code Y01 and plain text: "Insertion length ... mm"</u>                                                                                                                                                                           |                       |
| - 1000 to 2000 mm (39.37 to 78.74") <sup>2)</sup>                                                                                                                                                                                             | 0 F                   |
| - 2001 to 4000 mm (78.78 to 157.48") <sup>2)</sup> and 3)                                                                                                                                                                                     | 1 F                   |
| - 4001 to 6000 mm (157.52 to 236.22") <sup>2)</sup> and 3)                                                                                                                                                                                    | 2 F                   |
| - 6001 to 8000 mm (236.26 to 314.96") <sup>2)</sup> and 3)                                                                                                                                                                                    | 3 F                   |
| - 8001 to 10000 mm (315 to 393.70") <sup>2)</sup> and 3)                                                                                                                                                                                      | 4 F                   |
| Cable lengths up to 25000 mm (984.25") are possible for non-conductive media. Cable lengths up to 15000 mm (590.55") are possible for conductive media. Contact <a href="mailto:nacc.smpi@siemens.com">nacc.smpi@siemens.com</a> for details. |                       |
| <b>Process connection (316L Stainless steel)</b>                                                                                                                                                                                              |                       |
| <u>Threaded connection</u>                                                                                                                                                                                                                    |                       |
| 1½" NPT [(Taper), ANSI/ASME B1.20.1]                                                                                                                                                                                                          | C 0                   |
| R 1½" [(BSPT), EN 10226/PT (JIS-T), JIS B 0203]                                                                                                                                                                                               | F 0                   |
| 1¼" NPT [(Taper), ANSI/ASME B1.20.1]                                                                                                                                                                                                          | K 0                   |
| G 1½" [(BSPP), EN ISO 228-1/PF (JIS-P), JIS B 0202]                                                                                                                                                                                           | L 0                   |
| <u>Welded flange, raised face</u>                                                                                                                                                                                                             |                       |
| 1½", ASME, 150 lb                                                                                                                                                                                                                             | B 1                   |
| 1½", ASME, 300 lb                                                                                                                                                                                                                             | B 2                   |
| 1½", ASME, 600 lb                                                                                                                                                                                                                             | B 3                   |
| 2", ASME, 150 lb                                                                                                                                                                                                                              | C 1                   |
| 2", ASME, 300 lb                                                                                                                                                                                                                              | C 2                   |
| 2", ASME, 600 lb                                                                                                                                                                                                                              | C 3                   |
| 3", ASME, 150 lb <sup>3)</sup>                                                                                                                                                                                                                | D 1                   |
| 3", ASME, 300 lb <sup>3)</sup>                                                                                                                                                                                                                | D 2                   |
| 3", ASME, 600 lb <sup>3)</sup>                                                                                                                                                                                                                | D 3                   |
| 4", ASME, 150 lb <sup>3)</sup>                                                                                                                                                                                                                | E 1                   |
| 4", ASME, 300 lb <sup>3)</sup>                                                                                                                                                                                                                | E 2                   |
| 4", ASME, 600 lb <sup>3)</sup>                                                                                                                                                                                                                | E 3                   |
| 6", ASME, 150 lb <sup>3)</sup>                                                                                                                                                                                                                | F 1                   |
| 6", ASME, 300 lb <sup>3)</sup>                                                                                                                                                                                                                | F 2                   |
| 6", ASME, 600 lb <sup>3)</sup>                                                                                                                                                                                                                | F 3                   |
| <u>Welded flange, Type A flat faced</u>                                                                                                                                                                                                       |                       |
| DN 40, PN 16                                                                                                                                                                                                                                  | K 4                   |
| DN 40, PN 40                                                                                                                                                                                                                                  | K 5                   |
| DN 50, PN 16                                                                                                                                                                                                                                  | L 4                   |
| DN 50, PN 40                                                                                                                                                                                                                                  | L 5                   |
| DN 80, PN 16                                                                                                                                                                                                                                  | M 4                   |
| DN 80, PN 40 <sup>3)</sup>                                                                                                                                                                                                                    | M 5                   |
| DN 100, PN 16 <sup>3)</sup>                                                                                                                                                                                                                   | N 4                   |
| DN 100, PN 40 <sup>3)</sup>                                                                                                                                                                                                                   | N 5                   |
| DN 125, PN 16 <sup>3)</sup>                                                                                                                                                                                                                   | P 4                   |
| DN 125, PN 40 <sup>3)</sup>                                                                                                                                                                                                                   | P 5                   |
| (Note: Flange bolting patterns and facings dimensionally correspond to the applicable ASME B16.5, or EN 1092-1 standard.)                                                                                                                     |                       |

| Selection and Ordering data                                                                                                                                                              | Order No.             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>SITRANS LC500, Threaded or Welded Flange with Cable Sensor</b>                                                                                                                        | <b>7 ML 5 5 1 3 -</b> |
| Inverse frequency shift capacitance level and interface transmitter for extreme and critical process conditions, such as oil and liquid gas, toxic and aggressive chemicals and vapours. |                       |
| <b>Approvals</b>                                                                                                                                                                         |                       |
| General Purpose                                                                                                                                                                          | 1                     |
| CSA/FM Class 1, Div. 2, Groups A, B, C, D T4;                                                                                                                                            | 2                     |
| ATEX II 3G 2D EExn A [ib] IIC T6 to T4 T100 °C;                                                                                                                                          |                       |
| CSA/FM Class II and III, Div. 1, Groups E, F, G;                                                                                                                                         | 3                     |
| ATEX II 1/2 GD EEx d [ia] T6 to T1                                                                                                                                                       |                       |
| CSA/FM Class I, Div. 1, Groups A, B, C, D T4; ATEX II 1G EEx ia IIC T6 to T4 <sup>4)</sup>                                                                                               | 4                     |
| ATEX II 1/2 GD EEx d [ia] IIC T6 to T1                                                                                                                                                   | 6                     |
| FM Class I, Div.1, Groups A, B, C, D, T4                                                                                                                                                 |                       |
| <b>Enclosure/Cable inlet</b>                                                                                                                                                             |                       |
| <u>Aluminum epoxy coated</u>                                                                                                                                                             |                       |
| 2 x ½" NPT, IP68                                                                                                                                                                         | 1                     |
| 2 x M20x1.5 (IP68, adapter)                                                                                                                                                              | 2                     |
| <b>Options</b>                                                                                                                                                                           |                       |
| No additional options                                                                                                                                                                    | A                     |
| With mounting eye <sup>5)</sup>                                                                                                                                                          | B                     |
| <b>Thermal isolator/remote version</b>                                                                                                                                                   |                       |
| Without thermal isolator or remote electronics                                                                                                                                           | A                     |
| Isolator, only for use when temperature range is outside of -40 to +85 °C (-40 to +185 °F), explosion proof approval -40 to +70 °C (-40 to +158 °F)                                      | B                     |
| <b>Electronic output</b>                                                                                                                                                                 |                       |
| No transmitter supplied                                                                                                                                                                  | 0                     |
| 2-wire loop current 4 to 20 mA                                                                                                                                                           | 1                     |
| (transmitter MSP 2002-2 _3300 pF)                                                                                                                                                        |                       |
| <b>Further designs</b>                                                                                                                                                                   | Order code            |
| Please add "-Z" to Order No. and specify Order code(s).                                                                                                                                  |                       |
| Insertion length, specify in plain text:                                                                                                                                                 | <b>Y01</b>            |
| <b>Y01: ... mm</b>                                                                                                                                                                       |                       |
| Stainless steel tag [69 mm x 50 mm (2.71 x 1.97")]:                                                                                                                                      | <b>Y15</b>            |
| Measuring-point number/identification (max. 16 characters); specify in plain text                                                                                                        |                       |
| Acceptance test certificate: Manufacturer's test certificate M to DIN 55350, Part 18 and ISO 9000                                                                                        | <b>C11</b>            |
| Inspection Certificate Type 3.1 per EN 10204                                                                                                                                             | <b>C12</b>            |
| <b>Instruction manual</b>                                                                                                                                                                | See page 5/213        |
| <b>Accessories</b>                                                                                                                                                                       | See page 5/213        |

1) A minimum span of 3 pF must be maintained

2) Available with non-conductive media only

3) Custom shipping methods required. Contact factory for more details.

4) Barrier required for Intrinsically Safe protection

5) Available in PFA insulated version only

| Selection and Ordering data                                                                                                                                                              | Order No.              |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--|--|--|
| <b>SITRANS LC500, Threaded or Welded Flange, with Rod Sensor</b>                                                                                                                         | <b>7 M L 5 5 1 5 -</b> |  |  |  |
| Inverse frequency shift capacitance level and interface transmitter for extreme and critical process conditions, such as oil and liquid gas, toxic and aggressive chemicals and vapours. |                        |  |  |  |
| <b>Version</b>                                                                                                                                                                           |                        |  |  |  |
| Rod, 16 mm (0.63"), PFA insulated                                                                                                                                                        |                        |  |  |  |
| Add order code Y01 and Y02 and plain text: "Insertion length ... mm and active shield length ... mm"                                                                                     |                        |  |  |  |
| - 200 to 1000 mm (7.87 to 39.37") <sup>1)</sup>                                                                                                                                          | 0 A                    |  |  |  |
| - 1001 to 2000 mm (39.41 to 78.74")                                                                                                                                                      | 1 A                    |  |  |  |
| - 2001 to 3000 mm (78.78 to 118.11") <sup>2)</sup>                                                                                                                                       | 2 A                    |  |  |  |
| - 3001 to 3500 mm (118.15 to 137.80") <sup>2)</sup>                                                                                                                                      | 3 A                    |  |  |  |
| Rod, 16 mm (0.63"), PFA insulated with 35 mm (1.38") stilling well in 316L stainless steel                                                                                               |                        |  |  |  |
| Add order code Y01 and Y02 and plain text: "Insertion length ... mm and active shield length ... mm"                                                                                     |                        |  |  |  |
| - 200 to 1000 mm (7.87 to 39.37") <sup>1) and 3)</sup>                                                                                                                                   | 0 B                    |  |  |  |
| - 1001 to 2000 mm (39.41 to 78.74") <sup>3)</sup>                                                                                                                                        | 1 B                    |  |  |  |
| - 2001 to 3000 mm (78.78 to 118.11") <sup>2) and 3)</sup>                                                                                                                                | 2 B                    |  |  |  |
| - 3001 to 3500 mm (118.15 to 137.80") <sup>2) and 3)</sup>                                                                                                                               | 3 B                    |  |  |  |
| Rod, 24 mm (0.94"), PFA insulated                                                                                                                                                        |                        |  |  |  |
| Add order code Y01 and Y02 and plain text: "Insertion length ... mm and active shield length ... mm"                                                                                     |                        |  |  |  |
| - 200 to 1000 mm (7.87 to 39.37") <sup>4)</sup>                                                                                                                                          | 0 C                    |  |  |  |
| - 1001 to 2000 mm (39.41 to 78.74") <sup>4)</sup>                                                                                                                                        | 1 C                    |  |  |  |
| - 2001 to 3000 mm (78.78 to 118.11") <sup>2) and 4)</sup>                                                                                                                                | 2 C                    |  |  |  |
| - 3001 to 4000 mm (118.15 to 137.80") <sup>2) and 4)</sup>                                                                                                                               | 3 C                    |  |  |  |
| - 4001 to 5000 mm (173.26 to 196.88") <sup>2) and 4)</sup>                                                                                                                               | 4 C                    |  |  |  |
| - 5001 to 5500 mm (196.89 to 216.54") <sup>2) and 4)</sup>                                                                                                                               | 5 C                    |  |  |  |
| Rod, 24 mm (0.94"), PFA insulated with 48 mm (1.89") stilling well in 316L stainless steel                                                                                               |                        |  |  |  |
| Add order code Y01 and Y02 and plain text: "Insertion length ... mm and active shield length ... mm"                                                                                     |                        |  |  |  |
| - 200 to 1000 mm (7.87 to 39.37") <sup>5)</sup>                                                                                                                                          | 0 D                    |  |  |  |
| - 1001 to 2000 mm (39.41 to 78.74") <sup>4)</sup>                                                                                                                                        | 1 D                    |  |  |  |
| - 2001 to 3000 mm (78.78 to 118.11") <sup>2) and 5)</sup>                                                                                                                                | 2 D                    |  |  |  |
| - 3001 to 3500 mm (118.15 to 137.80") <sup>2) and 5)</sup>                                                                                                                               | 3 D                    |  |  |  |
| - 4001 to 5000 mm (173.26 to 196.88") <sup>2) and 5)</sup>                                                                                                                               | 4 D                    |  |  |  |
| - 5001 to 5500 mm (196.89 to 216.54") <sup>2) and 5)</sup>                                                                                                                               | 5 D                    |  |  |  |
| Rod, 16 mm (0.63"), Glassteel Enamel insulated                                                                                                                                           |                        |  |  |  |
| Add order code Y01 and Y02 and plain text: "Insertion length ... mm and active shield length ... mm"                                                                                     |                        |  |  |  |
| - 250 to 1500 mm (9.84 to 59.06") <sup>2) and 5)</sup>                                                                                                                                   | 0 E                    |  |  |  |
| Rod, 16 mm (0.63"), Glassteel Enamel insulated, with 40 mm (1.57") stilling well in 316L stainless steel                                                                                 |                        |  |  |  |
| Add order code Y01 and Y02 and plain text: "Insertion length ... mm and active shield length ... mm"                                                                                     |                        |  |  |  |
| - 250 to 1500 mm (9.84 to 59.06") <sup>2) and 5)</sup>                                                                                                                                   | 0 F                    |  |  |  |
| <b>Process connection (316L Stainless steel)</b>                                                                                                                                         |                        |  |  |  |
| <b>Threaded connection</b>                                                                                                                                                               |                        |  |  |  |
| ¾" NPT [(Taper), ANSI/ASME B1.20.1]                                                                                                                                                      | A 0                    |  |  |  |
| 1" NPT [(Taper), ANSI/ASME B1.20.1]                                                                                                                                                      | B 0                    |  |  |  |
| 1½" NPT [(Taper), ANSI/ASME B1.20.1]                                                                                                                                                     | C 0                    |  |  |  |
| 2" NPT [(Taper), ANSI/ASME B1.20.1]                                                                                                                                                      | D 0                    |  |  |  |
| R ¾" [(BSPT), EN 10226/PT (JIS-T), JIS B 0203]                                                                                                                                           | E 0                    |  |  |  |
| R 1" [(BSPT), EN 10226/PT (JIS-T), JIS B 0203]                                                                                                                                           | F 0                    |  |  |  |
| R 1½" [(BSPT), EN 10226/PT (JIS-T), JIS B 0203]                                                                                                                                          | J 0                    |  |  |  |
| R 2" [(BSPT), EN 10226/PT (JIS-T), JIS B 0203]                                                                                                                                           | K 0                    |  |  |  |
| 1¼" NPT [(Taper), ANSI/ASME B1.20.1]                                                                                                                                                     | N 0                    |  |  |  |
| G ¾" [(BSPP), EN ISO 228-1/PF (JIS-P), JIS B 0202]                                                                                                                                       | P 0                    |  |  |  |
| G 1" [(BSPP), EN ISO 228-1/PF (JIS-P), JIS B 0202]                                                                                                                                       | R 0                    |  |  |  |
| G 1½" [(BSPP), EN ISO 228-1/PF (JIS-P), JIS B 0202]                                                                                                                                      | S 0                    |  |  |  |
| G 2" [(BSPP), EN ISO 228-1/PF (JIS-P), JIS B 0202]                                                                                                                                       | T 0                    |  |  |  |

| Selection and Ordering data                                                                                                                                                              | Order No.              |  |  |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--|--|---|
| <b>SITRANS LC500, Threaded or Welded Flange, with Rod Sensor</b>                                                                                                                         | <b>7 M L 5 5 1 5 -</b> |  |  |   |
| Inverse frequency shift capacitance level and interface transmitter for extreme and critical process conditions, such as oil and liquid gas, toxic and aggressive chemicals and vapours. |                        |  |  |   |
| <b>Welded flange, raised face</b>                                                                                                                                                        |                        |  |  |   |
| 1½", ASME, 150 lb                                                                                                                                                                        | B 1                    |  |  |   |
| 1½", ASME, 300 lb                                                                                                                                                                        | B 2                    |  |  |   |
| 1½", ASME, 600 lb                                                                                                                                                                        | B 3                    |  |  |   |
| 2", ASME, 150 lb                                                                                                                                                                         | C 1                    |  |  |   |
| 2", ASME, 300 lb                                                                                                                                                                         | C 2                    |  |  |   |
| 2", ASME, 600 lb                                                                                                                                                                         | C 3                    |  |  |   |
| 3", ASME, 150 lb <sup>2)</sup>                                                                                                                                                           | D 1                    |  |  |   |
| 3", ASME, 300 lb <sup>2)</sup>                                                                                                                                                           | D 2                    |  |  |   |
| 3", ASME, 600 lb <sup>2)</sup>                                                                                                                                                           | D 3                    |  |  |   |
| 4", ASME, 150 lb <sup>2)</sup>                                                                                                                                                           | E 1                    |  |  |   |
| 4", ASME, 300 lb <sup>2)</sup>                                                                                                                                                           | E 2                    |  |  |   |
| 4", ASME, 600 lb <sup>2)</sup>                                                                                                                                                           | E 3                    |  |  |   |
| 6", ASME, 150 lb <sup>2)</sup>                                                                                                                                                           | F 1                    |  |  |   |
| 6", ASME, 300 lb <sup>2)</sup>                                                                                                                                                           | F 2                    |  |  |   |
| 6", ASME, 600 lb <sup>2)</sup>                                                                                                                                                           | F 3                    |  |  |   |
| <b>Welded flange, Type A flat faced</b>                                                                                                                                                  |                        |  |  |   |
| DN 40, PN 16                                                                                                                                                                             | K 4                    |  |  |   |
| DN 40, PN 40                                                                                                                                                                             | K 5                    |  |  |   |
| DN 50, PN 16                                                                                                                                                                             | L 4                    |  |  |   |
| DN 50, PN 40                                                                                                                                                                             | L 5                    |  |  |   |
| DN 80, PN 16                                                                                                                                                                             | M 4                    |  |  |   |
| DN 80, PN 40 <sup>2)</sup>                                                                                                                                                               | M 5                    |  |  |   |
| DN 100, PN 16 <sup>2)</sup>                                                                                                                                                              | N 4                    |  |  |   |
| DN 100, PN 40 <sup>2)</sup>                                                                                                                                                              | N 5                    |  |  |   |
| DN 125, PN 16 <sup>2)</sup>                                                                                                                                                              | P 4                    |  |  |   |
| DN 125, PN 40 <sup>2)</sup>                                                                                                                                                              | P 5                    |  |  |   |
| (Note: Flange bolting patterns and facings dimensionally correspond to the applicable ASME B16.5, or EN 1092-1 standard.)                                                                |                        |  |  |   |
| <b>Approvals</b>                                                                                                                                                                         |                        |  |  |   |
| General Purpose                                                                                                                                                                          | 1                      |  |  |   |
| CSA/FM Class 1, Div. 2, Groups A, B, C, D T4;                                                                                                                                            | 2                      |  |  |   |
| ATEX II 3G 2D EExn A [ib] IIC T6 to T4 T100 °C;                                                                                                                                          |                        |  |  |   |
| CSA/FM Class II and III, Div. 1, Groups E, F, G;                                                                                                                                         |                        |  |  |   |
| ATEX II 1/2 GD EEx d [ia] T6 to T1                                                                                                                                                       | 3                      |  |  |   |
| CSA/FM Class I, Div. 1, Groups A, B, C, D T4; ATEX II 1G EEx ia IIC T6 to T4 <sup>6)</sup>                                                                                               |                        |  |  |   |
| ATEX II 1/2 GD EEx d [ia] IIC T6 to T1                                                                                                                                                   | 4                      |  |  |   |
| FM Class I, Div.1, Groups A, B, C, D, T4                                                                                                                                                 | 6                      |  |  |   |
| <b>Enclosure/Cable inlet</b>                                                                                                                                                             |                        |  |  |   |
| <b>Aluminum epoxy coated</b>                                                                                                                                                             |                        |  |  |   |
| 2 x ½" NPT, IP68                                                                                                                                                                         | 1                      |  |  |   |
| 2 x M20x1.5 (IP68, adapter)                                                                                                                                                              | 2                      |  |  |   |
| <b>Options</b>                                                                                                                                                                           |                        |  |  |   |
| No additional options                                                                                                                                                                    |                        |  |  | A |
| Slotted holes instead of standard vent holes in stilling well (Refer to instruction manual for dimensions.) <sup>7)</sup>                                                                |                        |  |  | B |
| <b>Thermal isolator/remote version</b>                                                                                                                                                   |                        |  |  |   |
| Without thermal isolator or remote electronics                                                                                                                                           |                        |  |  | A |
| Thermal isolator, only for use when temperature range is outside of -40 to +85 °C (-40 to +185 °F), explosion proof approval -40 to +70 °C (-40 to +158 °F)                              |                        |  |  | B |
| Remote electronics with mounting bracket and cable <sup>8)</sup>                                                                                                                         |                        |  |  |   |
| • Length: 2 m (79")                                                                                                                                                                      |                        |  |  | C |
| • Length: 3 m (118")                                                                                                                                                                     |                        |  |  | D |
| • Length: 4 m (158")                                                                                                                                                                     |                        |  |  | E |
| • Length: 5 m (197")                                                                                                                                                                     |                        |  |  | F |

| Selection and Ordering data                                                                                                                                                                                                                                                                                                 |                                                                                                                            | Order No.                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| <b>SITRANS LC500, Threaded or Welded Flange, with Rod Sensor</b><br><br>Inverse frequency shift capacitance level and interface transmitter for extreme and critical process conditions, such as oil and liquid gas, toxic and aggressive chemicals and vapours.                                                            | <b>7 ML 5 5 1 5 -</b><br>                                                                                                  |                                                |
|                                                                                                                                                                                                                                                                                                                             | <b>Electronic output</b><br>No transmitter supplied<br>2-wire loop current 4 to 20 mA<br>(transmitter MSP 2002-2 _3300 pF) |                                                |
| <b>Further designs</b><br>Please add <b>"-Z"</b> to Order No. and specify Order code(s).                                                                                                                                                                                                                                    |                                                                                                                            | <b>0</b><br><b>1</b>                           |
| Insertion length, specify in plain text:<br>Y01: ... mm <b>[minimum 200 mm (7.87")]</b><br>Active shield length, specify in plain text [min. length is 50 mm (2")]: Y02: ... mm<br>Stainless steel tag [69 mm x 50 mm (2.71 x 1.97")]:<br>Measuring-point number/identification (max. 16 characters); specify in plain text |                                                                                                                            | <b>Y01</b><br><br><b>Y02</b><br><br><b>Y15</b> |
| Acceptance test certificate: Manufacturer's test certificate M to DIN 55350, Part 18 and ISO 9000<br>Inspection Certificate Type 3.1 per EN 10204<br>Manufacturing Test Report (Electrode Test)                                                                                                                             |                                                                                                                            | <b>C11</b><br><br><b>C12</b><br><br><b>C18</b> |
| <b>Instruction manual</b>                                                                                                                                                                                                                                                                                                   |                                                                                                                            | <b>See page 5/213</b>                          |
| <b>Accessories</b>                                                                                                                                                                                                                                                                                                          |                                                                                                                            | <b>See page 5/213</b>                          |

- 1) A minimum span of 3 pF must be maintained
- 2) Custom shipping methods required. Contact factory for more details.
- 3) Available with process connection 1½" or larger
- 4) Available with process connection 1" or larger
- 5) Available with process connection 2" or larger
- 6) Barrier required for Intrinsically Safe protection
- 7) Available with version 0B to 3B, 0D to 5D and 0F only
- 8) Available with approval option 1 only

| Selection and Ordering data                                                                                                                                                              | Order No.             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>SITRANS LC500, Single Piece Flanged with Rod Sensor</b>                                                                                                                               | <b>7 ML 5 5 1 7 -</b> |
| Inverse frequency shift capacitance level and interface transmitter for extreme and critical process conditions, such as oil and liquid gas, toxic and aggressive chemicals and vapours. |                       |
| <b>Version</b>                                                                                                                                                                           |                       |
| Rod, 16 mm (0.63"), PFA insulated                                                                                                                                                        |                       |
| <u>Add order code Y01 and Y02 and plain text: "Insertion length ... mm and active shield length ... mm"</u>                                                                              |                       |
| - 250 to 1000 mm (9.84 to 39.37") <sup>1)</sup>                                                                                                                                          | 0 A                   |
| - 1001 to 2000 mm (39.41 to 78.74")                                                                                                                                                      | 1 A                   |
| - 2001 to 3000 mm (78.78 to 118.11") <sup>2)</sup>                                                                                                                                       | 2 A                   |
| - 3001 to 3500 mm (118.15 to 137.80") <sup>2)</sup>                                                                                                                                      | 3 A                   |
| Rod, 16 mm (0.63"), PFA insulated with 35 mm (1.34") stilling well in 316L stainless steel                                                                                               |                       |
| <u>Add order code Y01 and Y02 and plain text: "Insertion length ... mm and active shield length ... mm"</u>                                                                              |                       |
| - 250 to 1000 mm (9.84 to 39.37") <sup>3)</sup>                                                                                                                                          | 0 B                   |
| - 1001 to 2000 mm (39.41 to 78.74") <sup>3)</sup>                                                                                                                                        | 1 B                   |
| - 2001 to 3000 mm (78.78 to 118.11") <sup>2)</sup> and 3)                                                                                                                                | 2 B                   |
| - 3001 to 3500 mm (118.15 to 137.80") <sup>2)</sup> and 3)                                                                                                                               | 3 B                   |
| Rod, 24 mm (0.94"), PFA insulated                                                                                                                                                        |                       |
| <u>Add order code Y01 and Y02 and plain text: "Insertion length ... mm and active shield length ... mm"</u>                                                                              |                       |
| - 250 to 1000 mm (9.84 to 39.37") <sup>4)</sup>                                                                                                                                          | 0 C                   |
| - 1001 to 2000 mm (39.41 to 78.74") <sup>4)</sup>                                                                                                                                        | 1 C                   |
| - 2001 to 3000 mm (78.78 to 118.11") <sup>2)</sup> and 4)                                                                                                                                | 2 C                   |
| - 3001 to 4000 mm (118.15 to 137.80") <sup>2)</sup> and 4)                                                                                                                               | 3 C                   |
| - 4001 to 5000 mm (173.26 to 196.88") <sup>2)</sup> and 4)                                                                                                                               | 4 C                   |
| - 5001 to 5500 mm (196.89 to 216.54") <sup>2)</sup> and 4)                                                                                                                               | 5 C                   |
| Rod, 24 mm (0.94"), PFA insulated with 48 mm (1.89") stilling well in 316L stainless steel                                                                                               |                       |
| <u>Add order code Y01 and Y02 and plain text: "Insertion length ... mm and active shield length ... mm"</u>                                                                              |                       |
| - 250 to 1000 mm (9.84 to 39.37")                                                                                                                                                        | 0 D                   |
| - 1001 to 2000 mm (39.41 to 78.74") <sup>2)</sup> and 5)                                                                                                                                 | 1 D                   |
| - 2001 to 3000 mm (78.78 to 118.11") <sup>2)</sup> and 5)                                                                                                                                | 2 D                   |
| - 3001 to 3500 mm (118.15 to 137.80") <sup>2)</sup> and 5)                                                                                                                               | 3 D                   |
| - 4001 to 5000 mm (173.26 to 196.88") <sup>2)</sup> and 5)                                                                                                                               | 4 D                   |
| - 5001 to 5500 mm (196.89 to 216.54") <sup>2)</sup> and 5)                                                                                                                               | 5 D                   |
| Rod, 16 mm (0.63"), Glassteel Enamel insulated                                                                                                                                           |                       |
| <u>Add order code Y01 and Y02 and plain text: "Insertion length ... mm and active shield length ... mm"</u>                                                                              |                       |
| - 300 to 1500 mm (11.81 to 59.01") <sup>2)</sup> and 6)                                                                                                                                  | 0 E                   |
| Rod, 16 mm (0.63"), Glassteel Enamel insulated, with 40 mm (1.57") stilling well in 316L stainless steel                                                                                 |                       |
| <u>Add order code Y01 and Y02 and plain text: "Insertion length ... mm and active shield length ... mm"</u>                                                                              |                       |
| - 300 to 1500 mm (11.81 to 59.01") <sup>2)</sup> and 6)                                                                                                                                  | 0 F                   |
| <b>Process connection (316L Stainless steel)</b>                                                                                                                                         |                       |
| <u>Single piece flange, raised face</u>                                                                                                                                                  |                       |
| 1½", ASME, 150 lb                                                                                                                                                                        | B 1                   |
| 1½", ASME, 300 lb                                                                                                                                                                        | B 2                   |
| 1½", ASME, 600 lb                                                                                                                                                                        | B 3                   |
| 2", ASME, 150 lb                                                                                                                                                                         | C 1                   |
| 2", ASME, 300 lb                                                                                                                                                                         | C 2                   |
| 2", ASME, 600 lb                                                                                                                                                                         | C 3                   |
| 3", ASME, 150 lb <sup>2)</sup>                                                                                                                                                           | D 1                   |
| 3", ASME, 300 lb <sup>2)</sup>                                                                                                                                                           | D 2                   |
| 3", ASME, 600 lb <sup>2)</sup>                                                                                                                                                           | D 3                   |
| 4", ASME, 150 lb <sup>2)</sup>                                                                                                                                                           | E 1                   |
| 4", ASME, 300 lb <sup>2)</sup>                                                                                                                                                           | E 2                   |
| 4", ASME, 600 lb <sup>2)</sup>                                                                                                                                                           | E 3                   |
| 6", ASME, 150 lb <sup>2)</sup>                                                                                                                                                           | F 1                   |
| 6", ASME, 300 lb <sup>2)</sup>                                                                                                                                                           | F 2                   |
| 6", ASME, 600 lb <sup>2)</sup>                                                                                                                                                           | F 3                   |
| <u>Single piece flange, Type B1 raised face</u>                                                                                                                                          |                       |
| DN 40, PN 16                                                                                                                                                                             | K 4                   |
| DN 40, PN 40                                                                                                                                                                             | K 5                   |
| DN 50, PN 16                                                                                                                                                                             | L 4                   |
| DN 50, PN 40                                                                                                                                                                             | L 5                   |
| DN 80, PN 16                                                                                                                                                                             | M 4                   |
| DN 80, PN 40 <sup>2)</sup>                                                                                                                                                               | M 5                   |

| Selection and Ordering data                                                                                                                                                              | Order No.       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <b>SITRANS LC500, Single Piece Flanged with Rod Sensor</b>                                                                                                                               | <b>7ML5517-</b> |
| Inverse frequency shift capacitance level and interface transmitter for extreme and critical process conditions, such as oil and liquid gas, toxic and aggressive chemicals and vapours. |                 |
| DN 100, PN 16 <sup>(2)</sup><br>DN 100, PN 40 <sup>(2)</sup>                                                                                                                             | N 4<br>N 5      |
| DN 125, PN 16 <sup>(2)</sup><br>DN 125, PN 40 <sup>(2)</sup>                                                                                                                             | P 4<br>P 5      |
| <u>Single piece flange with PTFE flange facing (applicable with versions 0A to 3A and 0C to 5C)<sup>(7)</sup></u>                                                                        |                 |
| 1½", ASME, 150 lb                                                                                                                                                                        | B 4             |
| 1½", ASME, 300 lb                                                                                                                                                                        | B 5             |
| 1½", ASME, 600 lb                                                                                                                                                                        | B 6             |
| 2", ASME, 150 lb                                                                                                                                                                         | C 4             |
| 2", ASME, 300 lb                                                                                                                                                                         | C 5             |
| 2", ASME, 600 lb                                                                                                                                                                         | C 6             |
| 3", ASME, 150 lb <sup>(2)</sup>                                                                                                                                                          | D 4             |
| 3", ASME, 300 lb <sup>(2)</sup>                                                                                                                                                          | D 5             |
| 3", ASME, 600 lb <sup>(2)</sup>                                                                                                                                                          | D 6             |
| 4", ASME, 150 lb <sup>(2)</sup>                                                                                                                                                          | E 4             |
| 4", ASME, 300 lb <sup>(2)</sup>                                                                                                                                                          | E 5             |
| 4", ASME, 600 lb <sup>(2)</sup>                                                                                                                                                          | E 6             |
| 6", ASME, 150 lb <sup>(2)</sup>                                                                                                                                                          | F 4             |
| 6", ASME, 300 lb <sup>(2)</sup>                                                                                                                                                          | F 5             |
| 6", ASME, 600 lb <sup>(2)</sup>                                                                                                                                                          | F 6             |
| <u>Single piece flange with PTFE flange facing (applicable with versions 0A to 3A, 0C to 5C)<sup>(7)</sup></u>                                                                           |                 |
| DN 40, PN 16                                                                                                                                                                             | K 6             |
| DN 40, PN 40                                                                                                                                                                             | K 7             |
| DN 50, PN 16                                                                                                                                                                             | L 6             |
| DN 50, PN 40                                                                                                                                                                             | L 7             |
| DN 80, PN 16                                                                                                                                                                             | M 6             |
| DN 80, PN 40 <sup>(2)</sup>                                                                                                                                                              | M 7             |
| DN 100, PN 16 <sup>(2)</sup>                                                                                                                                                             | N 6             |
| DN 100, PN 40 <sup>(2)</sup>                                                                                                                                                             | N 7             |
| DN 125, PN 16 <sup>(2)</sup>                                                                                                                                                             | P 6             |
| DN 125, PN 40 <sup>(2)</sup>                                                                                                                                                             | P 7             |
| (Note: Flange bolting patterns and facings dimensionally correspond to the applicable ASME B16.5, or EN 1092-1 standard.)                                                                |                 |
| <b>Approvals</b>                                                                                                                                                                         |                 |
| General Purpose                                                                                                                                                                          | 1               |
| CSA/FM Class 1, Div. 2, Groups A, B, C, D T4;                                                                                                                                            | 2               |
| ATEX II 3G 2D EExn A [ib] IIC T6 to T4 T100 °C;                                                                                                                                          |                 |
| CSA/FM Class II and III, Div. 1, Groups E, F, G;                                                                                                                                         |                 |
| ATEX II 1/2 GD EEx d [ia] T6 to T1                                                                                                                                                       |                 |
| CSA/FM Class I, Div. 1, Groups A, B, C, D T4; ATEX II 1G EEx ia IIC T6 to T4 <sup>(8)</sup>                                                                                              | 3               |
| ATEX II 1/2 GD EEx d [ia] IIC T6 to T1                                                                                                                                                   | 4               |
| FM Class I, Div.1, Groups A, B, C, D, T4                                                                                                                                                 | 6               |
| <b>Enclosure/Cable inlet</b>                                                                                                                                                             |                 |
| <u>Aluminum epoxy coated</u>                                                                                                                                                             |                 |
| 2 x ½" NPT, IP68                                                                                                                                                                         | 1               |
| 2 x M20x1.5 (IP68, adapter)                                                                                                                                                              | 2               |
| <b>Options</b>                                                                                                                                                                           |                 |
| None                                                                                                                                                                                     | A               |
| Slotted holes instead of standard vent holes in stilling well (Refer to manual for dimensions.)                                                                                          | B               |
| <b>Thermal isolator/remote version</b>                                                                                                                                                   |                 |
| Without thermal isolator or remote electronics                                                                                                                                           | A               |
| Isolator, only for use when temperature range is outside of -40 to +85 °C (-40 to +185 °F), explosion proof approval -40 to +70 °C (-40 to +158 °F)                                      | B               |
| Remote electronics with mounting bracket and cable <sup>(9)</sup>                                                                                                                        |                 |
| • Length: 2 m (79")                                                                                                                                                                      | C               |
| • Length: 3 m (118")                                                                                                                                                                     | D               |
| • Length: 4 m (158")                                                                                                                                                                     | E               |
| • Length: 5 m (197")                                                                                                                                                                     | F               |



| Selection and Ordering data                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Order No.                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SITRANS LC500, Extended Cable version with Rod Sensor, threaded connection or welded flange<sup>1)</sup></b><br>Inverse frequency shift capacitance level and interface transmitter for short range continuous measurement in large storage vessels.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>7 M L 5 5 2 3 -</b><br>                                                                                                                                                             |
| <b>Version<sup>2)</sup></b><br>Rod, 16 mm (0.63"), PFA insulated and 316L stainless steel flexible extension tube<br>Total insertion length:<br><u>Add order code Y01 and plain text: "Total insertion length ... mm and Y02 and plain text: Active shield length ... mm"</u> <sup>3)</sup> and 4)<br>- 5000 to 10 000 mm (196.85 to 393.70") <sup>1)</sup><br>- 10001 to 15000 mm (393.74 to 590.55") <sup>1)</sup><br>- 15001 to 20000 mm (590.59 to 787.40") <sup>1)</sup><br>- 20001 to 25000 mm (787.44 to 984.25") <sup>1)</sup><br>- 25001 to 30000 mm (984.29 to 1181.10") <sup>1)</sup><br>- 30001 to 35000 mm (1181.14 to 1377.95") <sup>1)</sup><br>Rod, 24 mm (0.94"), PFA insulated and 316L stainless steel flexible extension tube<br>Total insertion length:<br><u>Add order code Y01 and plain text: "Total insertion length ... mm and Y02 and plain text: Active shield length ... mm"</u> <sup>3)</sup> and 4)<br>- 5000 to 10 000 mm (196.85 to 393.70") <sup>1)</sup><br>- 10001 to 15000 mm (393.74 to 590.55") <sup>1)</sup><br>- 15001 to 20000 mm (590.59 to 787.40") <sup>1)</sup><br>- 20001 to 25000 mm (787.44 to 984.25") <sup>1)</sup><br>- 25001 to 30000 mm (984.29 to 1181.10") <sup>1)</sup><br>- 30001 to 35000 mm (1181.14 to 1377.95") <sup>1)</sup> | <b>0 A</b><br><b>1 A</b><br><b>2 A</b><br><b>3 A</b><br><b>4 A</b><br><b>5 A</b><br><b>0 B</b><br><b>1 B</b><br><b>2 B</b><br><b>3 B</b><br><b>4 B</b><br><b>5 B</b>                                                                                                   |
| <b>Process connection (316L stainless steel)</b><br><u>Threaded connection</u><br>2" NPT [(Taper), ANSI/ASME B1.20.1]<br>R 2" [(BSPT), EN 10226/PT (JIS-T), JIS B 0203]<br>G 2" [(BSPP), EN ISO 228-1/PF (JIS-P) JIS B 0202]<br><u>Welded flange, raised face</u><br>2", ASME, 150 lb<br>2", ASME, 300 lb<br>3", ASME, 150 lb <sup>1)</sup><br>3", ASME, 300 lb <sup>1)</sup><br>4", ASME, 150 lb <sup>1)</sup><br>4", ASME, 300 lb <sup>1)</sup><br>6", ASME, 150 lb <sup>1)</sup><br>6", ASME, 300 lb <sup>1)</sup><br><u>Welded flange, Type A flat faced</u><br>DN 50, PN 16<br>DN 50, PN 40<br>DN 80, PN 16<br>DN 80, PN 40 <sup>1)</sup><br>DN 100, PN 16 <sup>1)</sup><br>DN 100, PN 40 <sup>1)</sup><br>DN 125, PN 16 <sup>1)</sup><br>DN 125, PN 40 <sup>1)</sup><br>(Note: Flange bolting patterns and facings dimensionally correspond to the applicable ASME B16.5, or EN 1092-1 standard.)                                                                                                                                                                                                                                                                                                                                                                                     | <b>A 0</b><br><b>B 0</b><br><b>D 0</b><br><b>C 1</b><br><b>C 2</b><br><b>D 1</b><br><b>D 2</b><br><b>E 1</b><br><b>E 2</b><br><b>F 1</b><br><b>F 2</b><br><b>L 4</b><br><b>L 5</b><br><b>M 4</b><br><b>M 5</b><br><b>N 4</b><br><b>N 5</b><br><b>P 4</b><br><b>P 5</b> |
| <b>Approvals</b><br>General Purpose<br>CSA/FM Class 1, Div. 2, Groups A, B, C, D T4;<br>ATEX II 3G 2D EExn A [ib] IIC T6 to T4 T100 °C;<br>CSA/FM Class II and III, Div. 1, Groups E, F, G;<br>ATEX II 1/2 GD EEx d [ia] T6 to T1<br>CSA/FM Class I, Div. 1, Groups A, B, C, D T4; ATEX II 1G EEx ia IIC T6 to T4 <sup>5)</sup><br>ATEX II 1/2 GD EEx d [ia] IIC T6 to T1<br>FM Class I, Div. 1, Groups A, B, C, D, T4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>1</b><br><b>2</b><br><b>3</b><br><b>4</b><br><b>6</b>                                                                                                                                                                                                               |
| <b>Enclosure/Cable inlet</b><br><u>Aluminum epoxy coated</u><br>2 x 1/2" NPT, IP68<br>2 x M20x1.5 (IP68, adapter)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>1</b><br><b>2</b>                                                                                                                                                                                                                                                   |
| <b>Options</b><br>No additional options<br>With mounting eye                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>A</b><br><b>B</b>                                                                                                                                                                                                                                                   |

| Selection and Ordering data                                                                                                                                                                                                                             | Order No.                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>SITRANS LC500, Extended Cable version with Rod Sensor, threaded connection or welded flange<sup>1)</sup></b><br>Inverse frequency shift capacitance level and interface transmitter for short range continuous measurement in large storage vessels. | <b>7 M L 5 5 2 3 -</b><br> |
| <b>Thermal isolator</b><br>Without thermal isolator<br>Isolator, only for use when temperature range is outside of -40 to +85 °C (-40 to +185 °F), explosion proof approval -40 to +70 °C (-40 to +158 °F)                                              | <b>A</b><br><b>B</b>                                                                                         |
| <b>Electronic output</b><br>No transmitter supplied<br>2-wire loop current 4 to 20 mA<br>(transmitter MSP 2002-2 _3300 pF)                                                                                                                              | <b>0</b><br><b>1</b>                                                                                         |
| <b>Further designs</b><br>Please add <b>"-Z"</b> to Order No. and specify Order code(s).                                                                                                                                                                | Order code                                                                                                   |
| Total Insertion length, specify in plain text:<br>Y01: ... mm <b>[min. PFA rod length 200 mm (7.87")]</b> <sup>3)</sup>                                                                                                                                 | <b>Y01</b>                                                                                                   |
| Active shield length, specify in plain text: Y02: ... mm <b>[min. length 50 mm (2")]</b> <sup>4)</sup>                                                                                                                                                  | <b>Y02</b>                                                                                                   |
| Stainless steel tag [69 mm x 50 mm (2.71 x 1.97")]:<br>Measuring-point number/identification (max. 16 characters); specify in plain text                                                                                                                | <b>Y15</b>                                                                                                   |
| Acceptance test certificate: Manufacturer's test certificate M to DIN 55350, Part 18 and ISO 9000                                                                                                                                                       | <b>C11</b>                                                                                                   |
| Inspection Certificate Type 3.1 per EN 10204                                                                                                                                                                                                            | <b>C12</b>                                                                                                   |
| <b>Instruction manual</b>                                                                                                                                                                                                                               | <b>See page 5/213</b>                                                                                        |
| <b>Accessories</b>                                                                                                                                                                                                                                      | <b>See page 5/213</b>                                                                                        |

- 1) Custom shipping methods required. Contact factory for more details.
- 2) A minimum span of 3 pF must be maintained.
- 3) See dimension drawings on page 5/224 for further explanation of Y01.
- 4) Inactive length is equal to the flexible extension plus transition. See dimension drawings on page 5/224 for further explanation of Y02.
- 5) Barrier required for Intrinsically Safe protection

| Selection and Ordering data                                                                                                                                                                                                                                                                                             | Order No.                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| <b>Instruction manual for SITRANS LC500</b><br>English<br>French<br>Spanish<br>German<br>Note: The instruction manual should be ordered as a separate line item on the order.<br>This device is shipped with the Siemens Milltronics manual CD containing the complete ATEX Quick Start and instruction manual library. | <b>7ML1998-5GE01</b><br><b>7ML1998-5GE11</b><br><b>7ML1998-5GE21</b><br><b>7ML1998-5GE31</b> |
| <b>Accessories</b><br>Transmitter, MSP 2002-1, 330 PF<br>Transmitter, MSP 2002-2, 3300 PF<br>Transmitter, MSP 2002-3, 6600 PF (used with conductive fluids and probe lengths >10 000 mm)                                                                                                                                | <b>H) 7ML1830-1JP</b><br><b>H) 7ML1830-1JQ</b><br><b>H) 7ML1830-1JR</b>                      |
| H) Subject to export regulations AL: N, ECCN: 3A991                                                                                                                                                                                                                                                                     |                                                                                              |

Please contact [nacc.smpi@siemens.com](mailto:nacc.smpi@siemens.com) for special requests.