

| Selection and Ordering data                                                                                                                                       |                         | Order-No.          | Ord. code |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------|-----------|
| <b>SITRANS FUS1020 Basic clamp-on, IP65 (NEMA 4)</b>                                                                                                              |                         | A) <b>7ME3570-</b> |           |
| <b>Number of channels/ultrasonic beams</b>                                                                                                                        |                         |                    |           |
| Single channel                                                                                                                                                    | ◆ 1                     |                    |           |
| Dual channel / Dual beam                                                                                                                                          | 2                       |                    |           |
| <b>Flowmeter functions and I/O configurations</b>                                                                                                                 |                         |                    |           |
| <ul style="list-style-type: none"> <li>• Blind system</li> <li>- 1x 4 ... 20 mA <b>per channel</b></li> <li>- 1x pulse out (for single channel only)</li> </ul>   |                         | A                  |           |
| • With display                                                                                                                                                    | ◆                       | E                  |           |
| • With display and 1x additional analog output (single channel only)                                                                                              |                         | F                  |           |
| • With display and with SPST relay                                                                                                                                |                         | G                  |           |
| • With display and 1x additional analog output and SPST relay (single channel only)                                                                               |                         | H                  |           |
| <b>Meter power options</b>                                                                                                                                        |                         |                    |           |
| 90 ... 240 V AC                                                                                                                                                   |                         | A                  |           |
| 9 ... 36 V DC                                                                                                                                                     |                         | B                  |           |
| <b>Transducer for channel 1</b><br>(includes pipe mounting kit for indicated max. outer diameter listed)<br>See „Transducer selection charts“ for specifications. |                         |                    |           |
| no transducer                                                                                                                                                     |                         |                    | A         |
| A2 universal                                                                                                                                                      | to 3"/track mounting    |                    | B         |
| B3 universal                                                                                                                                                      | to 5"/track mounting    | ◆                  | C         |
| C3 universal                                                                                                                                                      | to 13"/mounting frame   | ◆                  | D         |
| D3 universal                                                                                                                                                      | to 24"/mounting frame   | ◆                  | E         |
| E2 universal                                                                                                                                                      | to 48"/mounting frame   | ◆                  | F         |
| A1H (high precision)                                                                                                                                              | to 3"/trackless mount.  |                    | G         |
| A2H (high precision)                                                                                                                                              | to 3"/trackless mount.  |                    | H         |
| A3H (high precision)                                                                                                                                              | to 3"/trackless mount.  |                    | J         |
| B1H (high precision)                                                                                                                                              | to 5"/trackless mount.  |                    | K         |
| B2H (high precision)                                                                                                                                              | to 5"/trackless mount.  | ◆                  | L         |
| C1H (high precision)                                                                                                                                              | to 24"/trackless mount. |                    | M         |
| C2H (high precision)                                                                                                                                              | to 24"/trackless mount. | ◆                  | N         |
| D1H (high precision)                                                                                                                                              | to 48"/trackless mount. | ◆                  | P         |
| D2H (high precision)                                                                                                                                              | to 48"/trackless mount. |                    | Q         |
| Other versions (different size, mount, type or pipe larger than DN 1200 (48"), or corrosion resistant), add Order Code and plain text.                            |                         |                    | P 1 Y     |
| High temperature transducer size 2 for up to 230 °C (446 °F) (30 to 200 mm diam. (1.18 to 7.67 inch diam.))                                                       |                         |                    | Z P 1 A   |
| High temperature transducer size 3 for up to 230 °C (446 °F) (150 to 610 mm diam. (5.90 to 24 inch diam.))                                                        |                         |                    | Z P 1 B   |
| High temperature transducer size 4 for up to 230 °C (446 °F) (400 to 1200 mm diam. (15.75 to 47.25 inch diam.))                                                   |                         |                    | Z P 1 C   |

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| <b>SITRANS FUS1020 Basic clamp-on, IP65 (NEMA 4)</b>                                                                                                              |                           | A) <b>7ME3570-</b>                                                                                |               |
|                                                                                                                                                                   |                           |  <b>0 0 - 0</b> |               |
| <b>Transducer for channel 2</b><br>(includes pipe mounting kit for indicated max. outer diameter listed)<br>See „Transducer selection charts“ for specifications. |                           |                                                                                                   |               |
| no transducer                                                                                                                                                     |                           |                                                                                                   | <b>A</b>      |
| A2 universal                                                                                                                                                      | to 3"/track mounting      |                                                                                                   | <b>B</b>      |
| B3 universal                                                                                                                                                      | to 5"/track mounting ◆    |                                                                                                   | <b>C</b>      |
| C3 universal                                                                                                                                                      | to 13"/mounting frame ◆   |                                                                                                   | <b>D</b>      |
| D3 universal                                                                                                                                                      | to 24"/mounting frame ◆   |                                                                                                   | <b>E</b>      |
| E2 universal                                                                                                                                                      | to 48"/mounting frame ◆   |                                                                                                   | <b>F</b>      |
| A1H (high precision)                                                                                                                                              | to 3"/trackless mount.    |                                                                                                   | <b>G</b>      |
| A2H (high precision)                                                                                                                                              | to 3"/trackless mount.    |                                                                                                   | <b>H</b>      |
| A3H (high precision)                                                                                                                                              | to 3"/trackless mount.    |                                                                                                   | <b>J</b>      |
| B1H (high precision)                                                                                                                                              | to 5"/trackless mount.    |                                                                                                   | <b>K</b>      |
| B2H (high precision)                                                                                                                                              | to 5"/trackless mount. ◆  |                                                                                                   | <b>L</b>      |
| C1H (high precision)                                                                                                                                              | to 24"/trackless mount.   |                                                                                                   | <b>M</b>      |
| C2H (high precision)                                                                                                                                              | to 24"/trackless mount. ◆ |                                                                                                   | <b>N</b>      |
| D1H (high precision)                                                                                                                                              | to 48"/trackless mount. ◆ |                                                                                                   | <b>P</b>      |
| D2H (high precision)                                                                                                                                              | to 48"/trackless mount.   |                                                                                                   | <b>Q</b>      |
| Other versions (different size, mount, type or pipe larger than DN 1200 (48"), or corrosion resistant), add Order Code and plain text.                            |                           |                                                                                                   | <b>Z Q1 Y</b> |
| High temperature transducer size 2 for up to 230 °C (446 °F) (30 to 200 mm diam. (1.18 to 7.67 inch diam.))                                                       |                           |                                                                                                   | <b>Z Q1 A</b> |
| High temperature transducer size 3 for up to 230 °C (446 °F) (150 to 610 mm diam. (5.90 to 24 inch diam.))                                                        |                           |                                                                                                   | <b>Z Q1 B</b> |
| High temperature transducer size 4 for up to 230 °C (446 °F) (400 to 1200 mm diam. (15.75 to 47.25 inch diam.))                                                   |                           |                                                                                                   | <b>Z Q1 C</b> |
| <b>Approvals</b>                                                                                                                                                  |                           |                                                                                                   |               |
| no approval options (UL, ULc, CE by default)                                                                                                                      |                           |                                                                                                   | <b>0</b>      |

| Selection and Ordering data                                                                                                                                                                | Order code                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| <b>Further designs</b><br>Please add „-Z“ to Order No. and specify Order code(s).                                                                                                          |                                                        |
| Cable assembly for transducers (add for # of channels)<br>See „Transducer cable selection chart“                                                                                           | <b>K..</b>                                             |
| Cable termination kit (for one cable pair)<br>• Transducer cable termination for standard and plenum cable                                                                                 | <b>T01</b>                                             |
| Languages (Meter, Labels and Documentation), English (default)<br>• German<br>• French<br>• Spanish<br>• Italian                                                                           | ► <b>B10</b><br><b>B12</b><br><b>B13</b><br><b>B14</b> |
| Wet flow transfer calibration<br>• Standard In-house 6 point calibration (up to DN 150 (6")) available                                                                                     | <b>D10</b>                                             |
| Tag name plate<br>• Stainless steel tags with 3.2 mm (0.13 inch) character size (26 characters max.)<br>• Stainless steel tags with 3.2 mm (0.13 inch) character size (68 characters max.) | <b>Y17</b><br><b>Y19</b>                               |
| ◆ Mainstream products (delivery time 4 to 6 weeks)                                                                                                                                         |                                                        |

A) Subject to export regulations AL: 91999, ECCN: EAR99H.

## MLFB example

### Application example

A basic clamp-on meter is required for a DN 150 (6" schedule 40) carbon steel waste water line, with a pipe wall thickness of 7.1 mm (0.28"). Meter electronics is to be located in an instrumentation shed with available AC power. 36 m (120 ft) of transducer cable is needed to reach pipe location.

Single beam is sufficient for 3% accuracy requirement and a local display with only one 4 ... 20 mA analog output is specified.

MLFB Order No.: **7ME3570-1EA00-0NA0-Z**  
**K04**

| Selection and Ordering data    | Order-No.         | Ord. code        |
|--------------------------------|-------------------|------------------|
| <b>FUS1020 meter family</b>    | <b>7 ME 3 5 7</b> | <b>0 0 - 0 0</b> |
| IP65 (NEMA 4) enclosure        | <b>0</b>          | <b>0</b>         |
| Single channel                 | <b>1</b>          | <b>E</b>         |
| Standard I/O option            | <b>A</b>          | <b>N</b>         |
| 90 ... 240 V AC power option   |                   | <b>A</b>         |
| Transducer code for channel 1  |                   | <b>K 0 4</b>     |
| Second transducer not required |                   |                  |
| 46 m (150 ft) transducer cable |                   |                  |

## Transducer selection charts

### Universal transducers for any pipe material

| Transducer type (universal) | Order Code | Outer diameter range (mm) |      | Outer diameter range (inches) |      |
|-----------------------------|------------|---------------------------|------|-------------------------------|------|
|                             |            | min.                      | max. | min.                          | max. |
| A2                          | <b>B</b>   | 12.7                      | 50.8 | 0.5                           | 2    |
| B3                          | <b>C</b>   | 19                        | 127  | 0.75                          | 5    |
| C3                          | <b>D</b>   | 51                        | 305  | 2                             | 12   |
| D3                          | <b>E</b>   | 203                       | 610  | 8                             | 24   |
| E2                          | <b>F</b>   | 254                       | 6096 | 10                            | 249  |

### High precision transducers for steel pipe with outer diameter/wall thickness ratio > 10

| Transducer type (high precision) | Order Code | Pipe Wall (mm) |       | Pipe Wall (inches) |      |
|----------------------------------|------------|----------------|-------|--------------------|------|
|                                  |            | min.           | max.  | min.               | max. |
| A1H                              | <b>G</b>   | 0.64           | 1.02  | 0.025              | 0.04 |
| A2H                              | <b>H</b>   | 1.02           | 1.52  | 0.04               | 0.06 |
| A3H                              | <b>J</b>   | 1.52           | 2.03  | 0.06               | 0.08 |
| B1H                              | <b>K</b>   | 2.03           | 3.05  | 0.08               | 0.12 |
| B2H                              | <b>L</b>   | 3.05           | 4.06  | 0.12               | 0.16 |
| C1H                              | <b>M</b>   | 4.06           | 5.84  | 0.16               | 0.23 |
| C2H                              | <b>N</b>   | 5.84           | 8.13  | 0.23               | 0.32 |
| D1H                              | <b>P</b>   | 8.13           | 11.18 | 0.32               | 0.44 |
| D2H                              | <b>Q</b>   | 11.18          | 15.75 | 0.44               | 0.62 |

### Transducer cable selection chart

#### Transducer cable codes for length and type options

| Cable length<br>m (ft) | Standard (PVC jacket)<br>-40 ... + 80 °C<br>(-40 ... +176 °F) | Plenum rated (Teflon jacket)<br>-40 ... + 200 °C<br>(-40 ... +392 °F) |
|------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------|
|                        | Order Code                                                    |                                                                       |
| 6 (20)                 | <b>K01</b>                                                    | <b>K21</b>                                                            |
| 15 (50)                | <b>K02</b>                                                    | <b>K22</b>                                                            |
| 30 (100)               | <b>K03</b>                                                    | <b>K23</b>                                                            |
| 46 (150)               | <b>K04</b>                                                    | <b>K24</b>                                                            |
| 61 (200)               | <b>K05</b>                                                    | <b>K25</b>                                                            |
| 91 (300)               | <b>K06</b>                                                    | <b>K26</b>                                                            |