



## JUMO dTRANS p20 Ex d

### Process pressure transmitter with explosion-proof enclosure

#### Brief description

The pressure transmitter with HART® interface combines maximum precision with simple operation. It is used to measure the relative or absolute pressures of gases, vapors, and liquids. The integrated LCD display shows the measured values and device data.

The pressure transmitter with flameproof enclosure can be installed up until zone 0. The housing and sensors are manufactured from high-grade stainless steel. Various flush-mounted process connections are available for applications with hygienic requirements, including PEKA connection system (see data sheet 409711).

Diaphragm seals can also be connected for specific process technology applications (see data sheets 409772 to 409784).

The transmitter is programmable and therefore readily adaptable to a variety of different measurement tasks. An easy-to-use setup program is available as an accessory to enable operation via the interfaces. A rotary knob makes manual operation on-site very convenient and quick.

The pressure transmitter with 4 to 20 mA and HART® protocol was evaluated with regard to functional safety and is certified by TÜV Nord according to DIN EN 61508/-1/-2, edition 2.0. These measuring devices are suitable for monitoring process level and process pressure up to SIL2. Further details can be found in the Safety Manual.

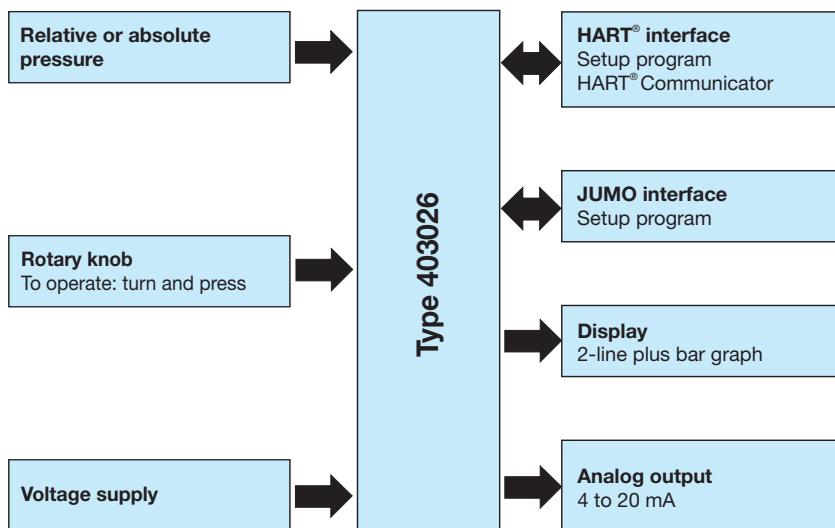
For the „Ex ia“ explosion protection version, see data sheet 403025.

For the differential pressure version, see data sheets 403022 and 403023.



Type 403026

#### Block diagram



#### Special features

- Stainless steel case
- SIL certified (TÜV Nord)
- HART® interface
- Explosion protection Ex d (gas and dust) according to ATEX, NEPSI, and EAC
- Linearity 0.05 %
- Turn down: 1:50
- Simple operation with rotary knob
- Setup program
- LCD display with bar graph
- Display scaling with a choice of measuring units
- Display of sensor temperature
- Display of minimum and maximum pressures
- Current-generator function

#### Approvals/approval marks (see "Technical data")



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## Technical data

### General Information

|  |  |
|--|--|
| Reference conditions                   | DIN EN 60770 and DIN EN 61298  |
| Ambient temperature                    | 22 °C ±5 K   |
| Air pressure                           | 1000 hPa (±25 hPa)   |
| Voltage supply                         | DC 24 V  |
| Burden                                 | 50 Ω   |
| Sensor system                          | Silicon sensor with stainless steel separating diaphragm   |
| Pressure transfer medium               |  |
| For measuring system filling medium 0  | Without transfer medium  |
| For measuring system filling medium 1  | Silicon oil, FDA compliant   |
| Admissible load changes                | > 10 million   |
| Position                               |  |
| Mounting position                      | Any  |
| Calibration position                   | Device upright, process connection at the bottom   |
| Zero offset depending on position      | A zero offset is possible on-site or via setup.  |
| Display <sup>a</sup>                   | LCD, two-line with bar graph   |
| Alignment                              | Display unit rotatable in 90° steps<br>Housing rotatable ±160°   |
| Size                                   | Display 22 × 35 mm, font size 7 mm/5 digits  |
| Color                                  | Black  |
| Portrayable measuring units            |  |
| Input pressure                         | mH <sub>2</sub> O, inH <sub>2</sub> O, inHg, ftH <sub>2</sub> O, mmH <sub>2</sub> O, mmHg, psi, bar, mbar, kg/cm <sup>2</sup> , kPa, Torr, MPa |
| Measured value                         | % or scaled with freely adjustable measuring unit  |
| Output current                         | mA   |
| Sensor temperature                     | °C, °F   |
| Additional display data                | Minimum pressure, maximum pressure, error, overrange, underrange, operating hours, device parameters   |
| Operation                              |  |
| On-site                                | With rotary knob and LCD   |
| Setup program                          | Via interface  |
| Interface                              |  |
| Standard                               | JUMO interface <sup>b</sup>  |
| For output 410 (4 to 20 mA with HART®) | JUMO interface <sup>b</sup> and HART® interface  |

<sup>a</sup> optional; SIL version only available with display

<sup>b</sup> The JUMO interface may not be used in a potentially explosive area! In such a case the device can be operated via the rotary knob or the HART® interface.

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## Input

| Relative pressure       |                  |                |                |                |
|-------------------------|------------------|----------------|----------------|----------------|
| Nominal measuring range | -0.6 to +0.6 bar | -1 to +2.5 bar | -1 to +4 bar   | -1 to +10 bar  |
| Overload capability     | 6 bar            | 15 bar         | 30 bar         | 60 bar         |
| Burst pressure          | 12 bar           | 30 bar         | 60 bar         | 100 bar        |
| Relative pressure       |                  |                |                |                |
| Nominal measuring range | -1 to +25 bar    | -1 to +100 bar | -1 to +250 bar | -1 to +600 bar |
| Overload capability     | 150 bar          | 300 bar        | 600 bar        | 1200 bar       |
| Burst pressure          | 250 bar          | 400 bar        | 700 bar        | 2000 bar       |

| Absolute pressure       |              |              |            |             |             |              |
|-------------------------|--------------|--------------|------------|-------------|-------------|--------------|
| Nominal measuring range | 0 to 0.6 bar | 0 to 2.5 bar | 0 to 4 bar | 0 to 10 bar | 0 to 25 bar | 0 to 100 bar |
| Overload capability     | 6 bar        | 15 bar       | 30 bar     | 60 bar      | 150 bar     | 300 bar      |
| Burst pressure          | 12 bar       | 30 bar       | 60 bar     | 100 bar     | 250 bar     | 400 bar      |

## Output

|   |  |
|---|--|
| Analog output<br>For output 410<br>(4 to 20 mA with HART®)<br>Jump response time T60<br>Attenuation | 4 to 20 mA, two-wire with HART® version 7<br>(optionally with HART® version 5, extra code 932, always with SIL version)<br>≤ 190 ms without attenuation<br>Adjustable 0 to 100 s |
| Burden<br>For output 410<br>(4 to 20 mA with HART®)   | Burden ≤ $(U_B - 12 \text{ V}) \div 0.022 \text{ A}$ ; additional: min. 250 Ω, max. 1100 Ω   |

## Voltage supply

|                |               |
|----------------|---------------|
| Voltage supply | DC 12 to 36 V |
|----------------|---------------|

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## Mechanical features

|   |   |
|---|---|
| Process connection  |   |
| Materials   |   |
| For process connection 20 (stainless steel)   | 316 L for front-flush process connections<br>Otherwise 316 Ti   |
| For process connection 82 (HASTELLOY®)  | 2.4819 NiMo   |
| Surface   | Ra ≤ 0.8 µm   |
| Process seal  |   |
| Process connection 571 G 3/4 front-flush) and process connection 652 (tank connection with grooved union nut) | FPM   |
| For process connection 997 (JUMO PEKA)  | FDA compliant: FPM, VMQ, EPDM as an option, see data sheet 409711   |
| For all other process connections   | No seal   |
| Measuring membranes   |   |
| For material lid 20 (stainless steel)   | 1.4542 for -1 to +250 bar relative pressure (measuring range 508) and -1 to +600 bar relative pressure (measuring range 516)<br>Otherwise 316 L |
| For material lid 82 (plastic)   | 2.4819 NiMo   |
| Surface   | Ra ≤ 0.8 µm   |
| Housing   |   |
| Housing material  | Precision casting 1.4408  |
| Cover material  | Precision casting 1.4408, seal FPM  |
| Material of control knob  | -   |
| For operation 0 (without control knob)  | PA  |
| For operation 1 (with control knob)   |   |
| Explosion protection  | EC type examination certificate SEV 10 ATEX 0127 X<br>II 1/2G Ex d IIC T6 ... T4 Ga/Gb<br>II 2D Ex tb IIIC T105 °C Db                           |
| Weight  | Approximately 1.6 kg  |

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## Environmental influences

| Admissible temperatures       |         |   |                            |                                  |  |
|-------------------------------|---------|---|----------------------------|----------------------------------|--|
| Operation                     |         |   |                            |                                  |  |
| II 1/2G Ex d                  | Version | Temperature class                                     | Maximum medium temperature | Ambient temperature <sup>a</sup> | Expanded ambient temperature (extra code 681) <sup>a, b, c</sup> |
|                               | T6      | 70 °C   | -40 to +60 °C              | -50 to +60 °C                    |  |
|                               | T5      | 85 °C   | -40 to +70 °C              | -50 to +70 °C                    |  |
|                               | T4      | 115 °C  | -40 to +85 °C              | -50 to +85 °C                    |  |
| II 2D Ex tb                   |         | T105 °C   | 100 °C                     | -40 to +85 °C                    | -50 to +85 °C  |
| Storage                       |         | -40 to +85 °C   |                            |                                  |  |
| Admissible humidity           |         |   |                            |                                  |  |
| Operation                     |         | 100 % including condensation on the device outer case |                            |                                  |  |
| Storage                       |         | 90 % without condensation                             |                            |                                  |  |
| Admissible mechanical load    |         |   |                            |                                  |  |
| Vibration strength            |         | 2 g, 10 to 2000 Hz according to DIN EN 60770-3        |                            |                                  |  |
| Shock resistance              |         | 15 g for 6 ms according to IEC 60068-2-27             |                            |                                  |  |
| Electromagnetic compatibility |         | According to EN 61326                                 |                            |                                  |  |
| Interference emission         |         | Class B <sup>d</sup>                                  |                            |                                  |  |
| Interference immunity         |         | Industry  |                            |                                  |  |
| Protection type               |         | IP66 according to DIN EN 60529                        |                            |                                  |  |

- <sup>a</sup> Under -20 °C limited function: stationary use, increased danger of cable break, display without function; under -30 °C operation of the device not possible.
- <sup>b</sup> In the range from -40 to -50 °C the device must be permanently in operation. Furthermore, the lid with the device inspection glass must additionally be protected against mechanical impact and shock effects. Please contact JUMO for further details.
- <sup>c</sup> Without SIL
- <sup>d</sup> The product is suitable for industrial use as well as for households and small businesses.

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## Accuracy

Including non-linearity, hysteresis, non-repeatability, zero point and final value deviation (corresponds to measurement deviations according to IEC 61298-2), calibrated at vertical installation position with the process connection at the bottom

| Relative pressure  |  |                             |                             |                             |
|--|--|-----------------------------|-----------------------------|-----------------------------|
| Nominal measuring range  | -0.6 to +0.6 bar                       | -1 to +2.5 bar <sup>a</sup> | -1 to +4 bar                | -1 to +10 bar <sup>a</sup>  |
| Default measuring range  | 0 to 0.6 bar                           | 0 to 2.5 bar                | 0 to 4 bar                  | 0 to 10 bar                 |
| Smallest MSP <sup>b</sup>  | 0.06 bar                               | 0.1 bar                     | 0.1 bar                     | 0.5 bar                     |
| Turndown ratio (r) <sup>c</sup>                                  | r ≤ 20                                 | r ≤ 50                      | r ≤ 50                      | r ≤ 50                      |
| Non-linearity for reference conditions <sup>d</sup>              | 0.06 %                                 | 0.04 %                      | 0.04 %                      | 0.04 %                      |
| Accuracy in % of the set MSP Range: -20 to +60 °C                | r × 0.12 % for 1 ≤ r ≤ 20              | r × 0.08 % for 1 ≤ r ≤ 50   | r × 0.08 % for 1 ≤ r ≤ 50   | r × 0.08 % for 1 ≤ r ≤ 50   |
| Accuracy in % of the set MSP Range: -40 to -20 °C or 60 to 85 °C | r × 0.18 % for 1 ≤ r ≤ 20 <sup>e</sup> | r × 0.12 % for 1 ≤ r ≤ 50   | r × 0.12 % for 1 ≤ r ≤ 50   | r × 0.12 % for 1 ≤ r ≤ 50   |
| Long-term stability in % as of the nominal measuring range       | 0.1 %/year                             |                             |                             |                             |
| Relative pressure  |  |                             |                             |                             |
| Nominal measuring range  | -1 to +25 bar                          | -1 to +100 bar              | -1 to +250 bar <sup>a</sup> | -1 to +600 bar <sup>a</sup> |
| Default measuring range  | 0 to 25 bar                            | 0 to 100 bar                | 0 to 250 bar                | 0 to 600 bar                |
| Smallest MSP   | 0.5 bar                                | 5 bar                       | 12.5 bar                    | 30 bar                      |
| Turndown ratio (r) <sup>c</sup>                                  | r ≤ 52                                 | r ≤ 20                      | r ≤ 20                      | r ≤ 20                      |
| Non-linearity for reference conditions <sup>d</sup>              | 0.04 %                                 | 0.04 %                      | 0.04 %                      | 0.08 %                      |
| Accuracy in % of the set MSP Range: -20 to +60 °C                | r × 0.08 % for 1 ≤ r ≤ 52              | r × 0.08 % for 1 ≤ r ≤ 20   | r × 0.08 % for 1 ≤ r ≤ 20   | r × 0.16 % for 1 ≤ r ≤ 20   |
| Accuracy in % of the set MSP Range: -40 to -20 °C or 60 to 85 °C | r × 0.12 % for 1 ≤ r ≤ 52              | r × 0.12 % for 1 ≤ r ≤ 20   | r × 0.12 % for 1 ≤ r ≤ 20   | r × 0.24 % for 1 ≤ r ≤ 20   |
| Long-term stability in % as of the nominal measuring range       | 0.1 %/year                             |                             |                             |                             |

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|  |  |                           |                           |                           |
|--|--|---------------------------|---------------------------|---------------------------|
| Absolute pressure  |  |                           |                           |                           |
| Nominal measuring range  | 0 to 0.6 bar                           | 0 to 2.5 bar <sup>a</sup> | 0 to 4 bar                | 0 to 10 bar <sup>a</sup>  |
| Default measuring range  | 0 to 0.6 bar                           | 0 to 2.5 bar              | 0 to 4 bar                | 0 to 10 bar               |
| Smallest MSP <sup>b</sup>  | 0.06 bar                               | 0.1 bar                   | 0.1 bar                   | 0.5 bar                   |
| Turndown ratio (r) <sup>c</sup>                                  | r ≤ 10                                 | r ≤ 20                    | r ≤ 40                    | r ≤ 20                    |
| Non-linearity for reference conditions <sup>d</sup>              | 0.12 %                                 | 0.04 %                    | 0.04 %                    | 0.04 %                    |
| Accuracy in % of the set MSP Range: -20 to +60 °C                | r × 0.24 % for 1 ≤ r ≤ 10              | r × 0.08 % for 1 ≤ r ≤ 20 | r × 0.08 % for 1 ≤ r ≤ 40 | r × 0.08 % for 1 ≤ r ≤ 20 |
| Accuracy in % of the set MSP Range: -40 to -20 °C or 60 to 85 °C | r × 0.36 % for 1 ≤ r ≤ 10 <sup>e</sup> | r × 0.16 % for 1 ≤ r ≤ 20 | r × 0.16 % for 1 ≤ r ≤ 40 | r × 0.16 % for 1 ≤ r ≤ 20 |
| Long-term stability in % as of the nominal measuring range       | 0.1 %/year                             |                           |                           |                           |
| Absolute pressure  |  |                           |                           |                           |
| Nominal measuring range  | 0 to 25 bar                            | 0 to 100 bar              |                           |                           |
| Default measuring range  | 0 to 25 bar                            | 0 to 100 bar              |                           |                           |
| Smallest MSP <sup>b</sup>  | 0.5 bar                                | 5 bar                     |                           |                           |
| Turndown ratio (r) <sup>c</sup>                                  | r ≤ 50                                 | r ≤ 20                    |                           |                           |
| Non-linearity for reference conditions <sup>d</sup>              | 0.04 %                                 | 0.04 %                    |                           |                           |
| Accuracy in % of the set MSP Range: -20 to +60 °C                | r × 0.08 % for 1 ≤ r ≤ 50              | r × 0.08 % for 1 ≤ r ≤ 20 |                           |                           |
| Accuracy in % of the set MSP Range: -40 to -20 °C or 60 to 85 °C | r × 0.16 % for 1 ≤ r ≤ 50              | r × 0.12 % for 1 ≤ r ≤ 20 |                           |                           |
| Long-term stability in % as of the nominal measuring range       | 0.1 %/year                             |                           |                           |                           |

a Without SIL

b MSP = measuring span

c r = span of the nominal measuring range ÷ adjusted measuring span

d Reference conditions: ambient temperature 20 °C (±3 K), air pressure 1000 hPa (±25 hPa)

e Only up to -30 °C

## Approvals/approval marks

| Approval mark | Test facility                                 | Certificates/certification numbers | Inspection basis                                       | Valid for                    |
|---------------|---|------------------------------------|--|------------------------------|
| ATEX          | Electrosuisse                                 | SEV 10 ATEX 0127 X                 | EN 60079-0<br>EN 60079-1<br>EN 60079-26<br>EN 60079-31 | 403026/...                   |
| EAC           | RU  | RU C-DE.ME92.B.00440               | -  | Extra code 226               |
| SIL           | TÜV Nord (German Technical Inspection Agency) | No. SEBS-A.<br>140944/16 V1.0      | DIN EN 61508/-1/-2                                     | Basic type extension 2 and 3 |

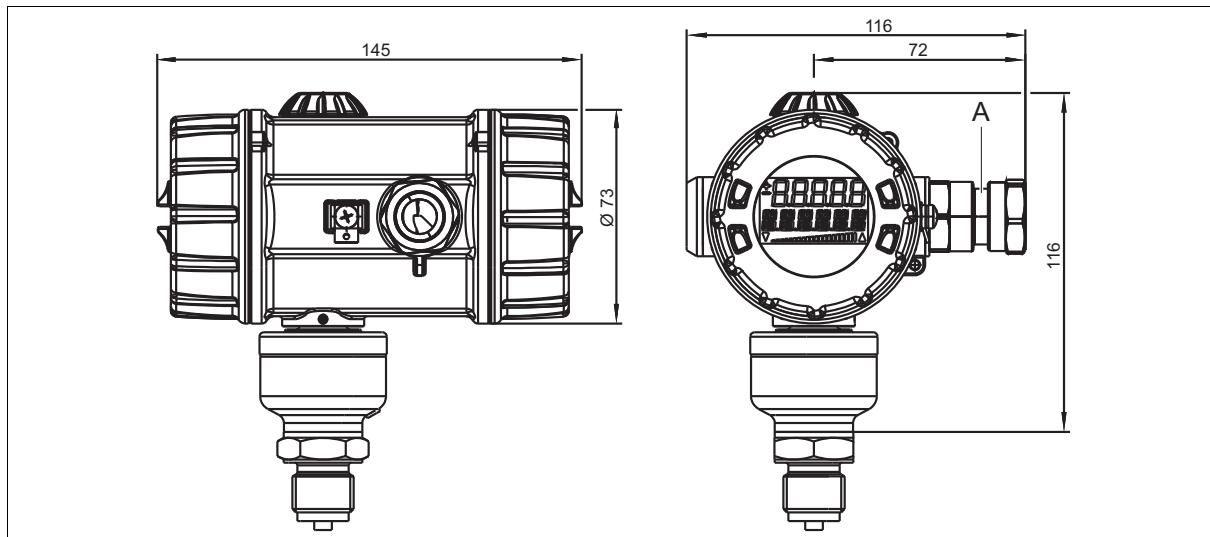
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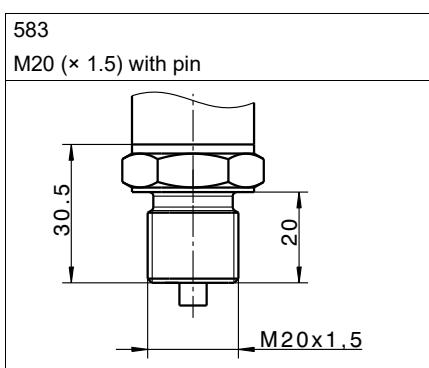
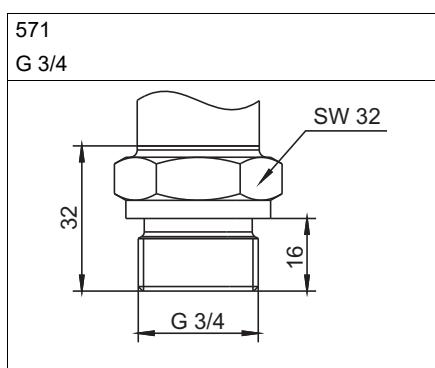
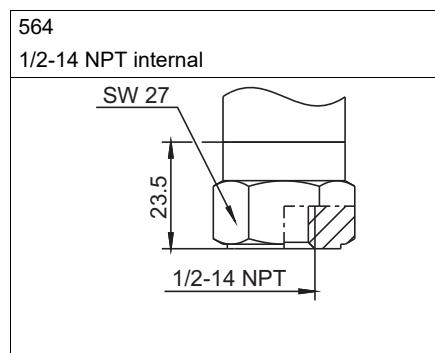
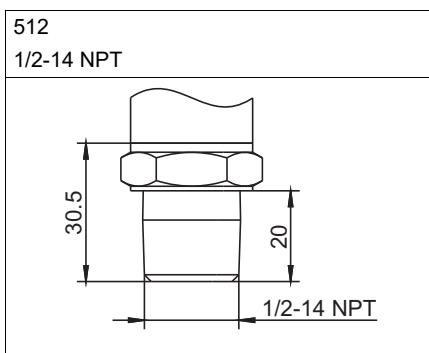
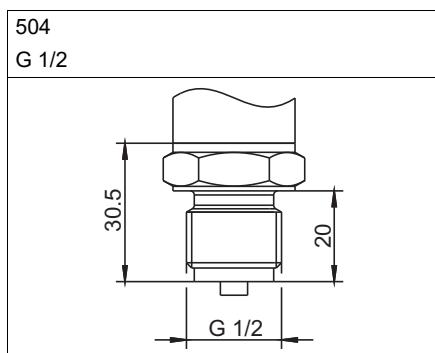


## Dimensions



A Kabelverschraubung M20 x 1,5

## Process connections



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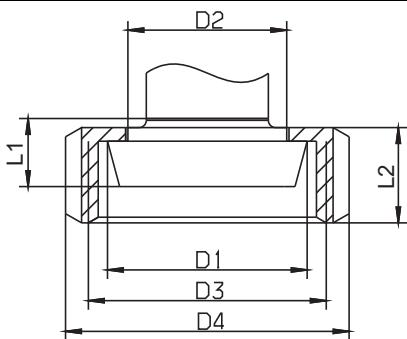
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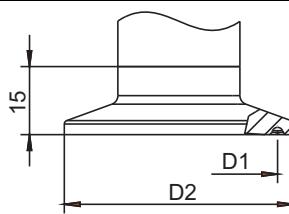
**604 and 606**

Taper socket with grooved union nut according to DIN 11851



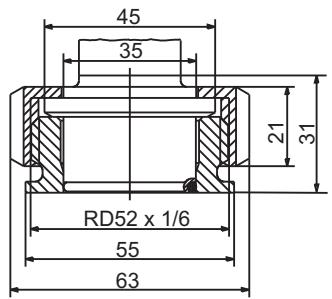
**613 and 616**

Clamp according to DIN 32676



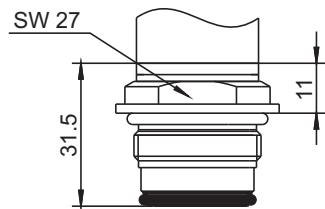
**652**

Tank connection with grooved union nut  
 DN 25



**997**

JUMO PEKA



**Dimensions of the process connections 604, 606, 613, and 616**

| Connection | DN | D1     | D2     | D3           | D4   | L1 | L2 |
|------------|----|--------|--------|--------------|------|----|----|
| 604        | 25 | Ø 44   | Ø 35   | Rd 52 × 1/6" | Ø 63 |    |    |
| 606        | 40 | Ø 56   | Ø 48   | Rd 65 × 1/6" | Ø 78 |    |    |
| 613        | 25 | Ø 43,5 | Ø 50,5 |              |      |    |    |
| 616        | 50 | Ø 56,5 | Ø 64   |              |      |    |    |

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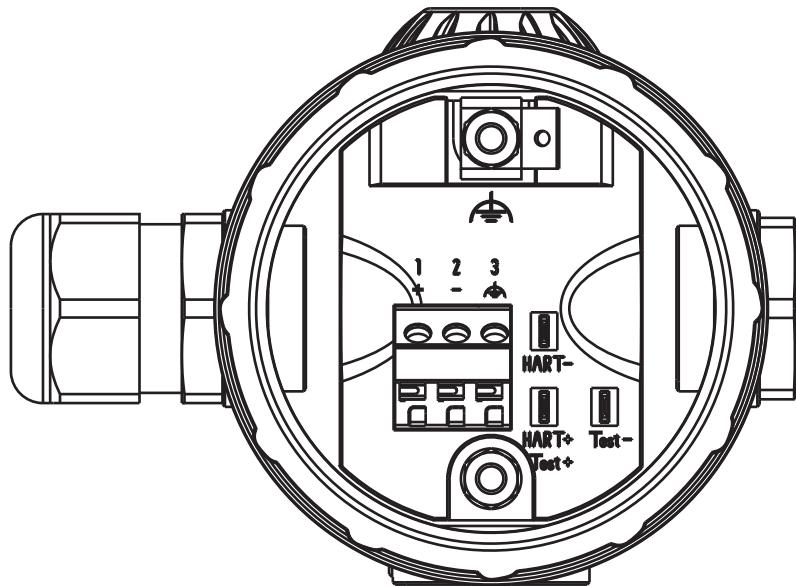


## Connection diagram

The connection diagram in the data sheet provides preliminary information about the connection options. For the electrical connection, only use the installation instructions or the operating manual. The knowledge and the correct technical compliance with the safety information and warnings contained in these documents are mandatory for mounting, electrical connection, and startup as well as for safety during operation.

| Connection  | Terminal assignment    |
|---|------------------------|
| Voltage supply<br>DC 12 to 36 V   | 1 L+<br>2 L-           |
| Output<br>4 to 20 mA, two-wire<br>Load-independent current: 4 to 20 mA                    | 1 L+<br>2 L-           |
| In voltage supply   |                        |
| Test connection for current output<br>Internal resistance of the ammeter $\leq 10 \Omega$ | TEST +<br>TEST -       |
| Test connection for HART®<br>The burden must be present!                                  | HART +<br>HART -       |
| FE (functional grounding conductor)   | 3                      |
| Grounding or potential equalization   | Outside of the housing |

### Cable gland



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## Order details

|   |  |
|---|--|
| <b>(1) Basic type</b>   |  |
| 403026 JUMO dTRANS p20 Ex d - process pressure transmitter with flameproof enclosure      |  |
| <b>(2) Basic type extension</b>   |  |
| 0 None  |  |
| 2 SIL <sup>a</sup>  |  |
| 3 SIL, customer-specific <sup>a</sup>   |  |
| 9 Special version   |  |
| <b>(3) Display</b>  |  |
| 0 None  |  |
| 1 With display  |  |
| <b>(4) Operation</b>  |  |
| 0 None  |  |
| 1 With control knob   |  |
| <b>(5) Input – nominal measuring range</b>  |  |
| 450 -600 to +600 mbar relative pressure   |  |
| 473 -1 to +2.5 bar relative pressure <sup>b</sup>   |  |
| 513 -1 to +4 bar relative pressure  |  |
| 472 -1 to +10 bar relative pressure <sup>b</sup>  |  |
| 514 -1 to +25 bar relative pressure   |  |
| 515 -1 to +100 bar relative pressure <sup>d</sup>   |  |
| 508 -1 to +250 bar relative pressure <sup>b, c, d</sup>                                   |  |
| 516 -1 to +600 bar relative pressure <sup>b, d, e</sup>                                   |  |
| 487 0 to 0.6 bar absolute pressure  |  |
| 490 0 to 2.5 bar absolute pressure <sup>b</sup>   |  |
| 491 0 to 4 bar absolute pressure  |  |
| 493 0 to 10 bar absolute pressure <sup>b</sup>  |  |
| 495 0 to 25 bar absolute pressure   |  |
| 507 0 to 100 bar absolute pressure <sup>d</sup>   |  |
| <b>(6) Output</b>   |  |
| 410 4 to 20 mA, two-wire with HART® protocol  |  |
| <b>(7) Process connection</b>   |  |
| 504 G 1/2 according to DIN EN 837   |  |
| 512 1/2-14 NPT according to DIN 837   |  |
| 564 1/2-14 NPT internal   |  |
| 571 G 3/4 front-flush according to DIN EN ISO 228-1                                       |  |
| 583 M20 (x 1.5) with pin  |  |
| 604 Taper socket with grooved union nut DN 25 according to DIN 11851 (dairy pipe fitting) |  |
| 606 Taper socket with grooved union nut DN 40 according to DIN 11851 (dairy pipe fitting) |  |
| 613 Clamping socket (clamp) DN 25/32/40 according to DIN32676                             |  |
| 616 Clamping socket (clamp) DN 50 according to DIN 32676/2" ISO 2852                      |  |
| 652 Tank connection with grooved union nut DN 25  |  |
| 997 JUMO PEKA hygienic process connection   |  |
| 998 Diaphragm seal process connection   |  |
| <b>(8) Process connection material</b>  |  |
| 20 CrNi (stainless steel)   |  |
| 82 NiMo   |  |
| 99 According to customer specifications   |  |
| <b>(9) Measuring system, filling medium</b>   |  |
| 00 Without filling medium <sup>f</sup>  |  |

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|                         |  |
|-------------------------|--|
| 01                      | Silicon oil  |
| <b>(10) Extra codes</b> |  |
| 000                     | None   |
| 100                     | Customer-specific factory setting <sup>g</sup>                               |
| 226                     | With GOST/EAC approval <sup>h</sup>  |
| 374                     | Inspection certificate 3.1 DIN EN 10204 material                             |
| 452                     | Wetted, electrolytically polished parts, surface roughness Ra ≤ 0.8 mm       |
| 591                     | Choke in the pressure channel  |
| 624                     | Oil and grease free  |
| 630                     | Enlarged pressure channel  |
| 634                     | With TAG number  |
| 635                     | With NACE manufacturer's declaration <sup>i</sup>                            |
| 681                     | Expanded admissible ambient temperature <sup>c</sup>                         |
| 932                     | With HART® version 5, always with SIL version (basic type extension 2 and 3) |

<sup>a</sup> SIL version always with LCD display (display 1), connection 4 to 20 mA (output 410) and HART® version 5 (extra code 932)

<sup>b</sup> Without SIL

<sup>c</sup> Not available for order with process connections 571, 604, 606, 613, 616, 997 or with increased medium temperature (medium temperature 2).

<sup>d</sup> These inputs are not available with process connections 604, 606, 613, 616, 997.

<sup>e</sup> This input is not available with process connections 571, 604, 606, 613, 616, 997.

<sup>f</sup> Only for input nominal measuring range 508 (-1 to +250 bar relative pressure) and measuring range 516 (-1 to +600 bar relative pressure)

<sup>g</sup> Please specify the setting you want in plain text. For default setting see "Accuracy" section in the data sheet.

<sup>h</sup> Upon request

<sup>i</sup> Only with material process connection 82 (NiMo) and with process connection 512 or 564; not for input nominal measuring range 450 (-0.6 to +0.6 bar relative pressure) and input nominal measuring range 487 (0 to 0.6 bar absolute pressure)

|               | (1)    | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |     |   |     |   |    |   |    |   |     |
|---------------|--------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|---|-----|---|----|---|----|---|-----|
| Order code    | [ ]    | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] | [ ]  |     |   |     |   |    |   |    |   |     |
| Order example | 403026 | /   | 0   | -   | 1   | -   | 1   | -   | 514 | -    | 410 | - | 504 | - | 20 | - | 01 | / | 000 |

## Accessories

| Designation                                      | Part no. |
|--|----------|
| PC interface with USB/TTL converter <sup>a</sup> | 00456352 |
| HART® modem USB <sup>b</sup>                     | 00443447 |
| Measuring device holder for wall and 2" pipe     | 00597711 |

| Designation   | Data sheet |
|---|------------|
| Valve manifolds   | 409706     |
| Diaphragm seal with dairy pipe fitting DIN 11851  | 409772     |
| Diaphragm seal with clamp connection  | 409774     |
| Druckmittler mit DRD-Flansch oder VARIVENT®-Stutzen                                       | 409776     |
| Diaphragm seal with ISS/SMS/RJT socket and (grooved) union nut                            | 409778     |
| Membrane diaphragm seal 4MDV-10   | 409780     |
| Diaphragm seal with screw-in thread DIN ISO 228/1 or ANSI B1.201                          | 409782     |
| Diaphragm seal with flange connection DIN EN 1092-1 with sealing strip form B1            | 409784     |
| Diaphragm seal with flange connection according to ANSI B 16.5 with sealing strip form RF | 409786     |

<sup>a</sup> The PC interface cable is the connection between the JUMO interface of the differential pressure transmitter and the USB interface of a PC.

<sup>b</sup> The HART® modem is the connection between the HART® interface of the differential pressure transmitter and the USB interface of a PC.

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## Software

| Description                  | Part no. |
|------------------------------|----------|
| JUMO setup dTRANS p20 series | 00537577 |

|   |              |
|---|--------------|
| JUMO dTRANS p20 series, DD (device description)   | Upon request |
| JUMO dTRANS p20 series, DTM (device type manager) | Upon request |