

# Electrical connection technology, for multi-pin plug connection

FESTO

Technical data – KMP1-...

- Plug socket with cable for multi-pin connection (to valve terminal type 02)
- Pre-assembled
- Cable lengths of 5 m, 10 m or by customer request
- 25-pin, 40-pin or 72-pin socket
- Not suitable for chain link trunking

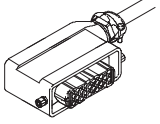


| General technical data                             |      |                                 |
|----------------------------------------------------|------|---------------------------------|
| Type                                               |      | KMP1-...                        |
| Type of mounting                                   |      | Clamping strap                  |
| Mounting position                                  |      | Any                             |
| Operating voltage range                            | [V]  | 300 AC                          |
|                                                    | [V]  | 250 DC                          |
| Current-carrying capacity                          | [A]  | 4                               |
| Protection class to EN 60 529                      |      | IP65 (assembled)                |
| Material of housing                                |      | Die-cast light metal alloy      |
| Material of contacts                               |      | Silver-plated copper base alloy |
| Material of cable sheath                           |      | Polyethylene                    |
| Ambient temperature                                | [°C] | -30 ... +70                     |
| Ambient temperature of flexible cable installation | [°C] | +5 ... +70                      |

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Technical data – KMP1-...

| Ordering data                                                                       |                       |                                         |                        |                |                |                     |                  |          |
|-------------------------------------------------------------------------------------|-----------------------|-----------------------------------------|------------------------|----------------|----------------|---------------------|------------------|----------|
|                                                                                     | Electrical connection | Cable composition<br>[mm <sup>2</sup> ] | Cable diameter<br>[mm] | Product weight |                | Cable length<br>[m] | Type             | Part No. |
|                                                                                     |                       |                                         |                        | Cable<br>[g/m] | Total<br>[g]   |                     |                  |          |
|    | 25-pin plug socket    | 25x0.75                                 | 13                     |                | 1,933          | 5                   | KMP1-02-II-4-5   | 175 654  |
|                                                                                     | 25-pin plug socket    | 25x0.75                                 | 13                     |                | 3,676          | 10                  | KMP1-02-II-4-10  | 175 655  |
|                                                                                     | 25-pin plug socket    | 25x0.75                                 | 13                     | Approx. 370    | Acc. to length | Any                 | KMP1-02-II-4-X   | 158 988  |
|                                                                                     | 40-pin plug socket    | 39x0.75                                 | 17                     |                | 2,995          | 5                   | KMP1-02-II-8-5   | 175 656  |
|                                                                                     | 40-pin plug socket    | 39x0.75                                 | 17                     |                | 5,672          | 10                  | KMP1-02-II-8-10  | 175 657  |
|                                                                                     | 40-pin plug socket    | 39x0.75                                 | 17                     | Approx. 570    | Acc. to length | Any                 | KMP1-02-II-8-X   | 158 989  |
|                                                                                     | 72-pin plug socket    | 50x0.75                                 | 19                     |                | 3,908          | 5                   | KMP1-02-II-10-5  | 175 658  |
|                                                                                     | 72-pin plug socket    | 50x0.75                                 | 19                     |                | 7,300          | 10                  | KMP1-02-II-10-10 | 175 659  |
|                                                                                     | 72-pin plug socket    | 50x0.75                                 | 19                     | Approx. 700    | Acc. to length | Any                 | KMP1-02-II-10-X  | 158 990  |
|                                                                                     | 72-pin plug socket    | 65x0.75                                 | 22                     |                | 6,000          | 5                   | KMP1-02-II-14-5  | 175 660  |
|                                                                                     | 72-pin plug socket    | 65x0.75                                 | 22                     |                | 11,300         | 10                  | KMP1-02-II-14-10 | 175 661  |
|                                                                                     | 72-pin plug socket    | 65x0.75                                 | 22                     | Approx. 930    | Acc. to length | Any                 | KMP1-02-II-14-X  | 158 991  |
|                                                                                     | 72-pin plug socket    | 80x0.75                                 | 24                     |                | 5,326          | 5                   | KMP1-02-II-16-5  | 175 662  |
|                                                                                     | 72-pin plug socket    | 80x0.75                                 | 24                     |                | 10,650         | 10                  | KMP1-02-II-16-10 | 175 663  |
|                                                                                     | 72-pin plug socket    | 80x0.75                                 | 24                     | Approx. 1160   | Acc. to length | Any                 | KMP1-02-II-16-X  | 158 992  |
|  | 25-pin plug socket    | 13x0.75                                 | 10                     |                | 1,200          | 5                   | KMP1-02-VI-6-5   | 175 585  |
|                                                                                     | 25-pin plug socket    | 13x0.75                                 | 10                     |                | 2,188          | 10                  | KMP1-02-VI-6-10  | 175 586  |
|                                                                                     | 25-pin plug socket    | 13x0.75                                 | 10                     | Approx. 180    | Acc. to length | Any                 | KMP1-02-VI-6-X   | 158 984  |
|                                                                                     | 25-pin plug socket    | 25x0.75                                 | 13                     |                | 1,967          | 5                   | KMP1-02-VI-12-5  | 175 587  |
|                                                                                     | 25-pin plug socket    | 25x0.75                                 | 13                     |                | 3,667          | 10                  | KMP1-02-VI-12-10 | 175 588  |
|                                                                                     | 25-pin plug socket    | 25x0.75                                 | 13                     | Approx. 370    | Acc. to length | Any                 | KMP1-02-VI-12-X  | 158 986  |
|                                                                                     | 40-pin plug socket    | 39x0.75                                 | 17                     |                | 3,016          | 5                   | KMP1-02-VI-16-5  | 175 589  |
|                                                                                     | 40-pin plug socket    | 39x0.75                                 | 17                     |                | 5,800          | 10                  | KMP1-02-VI-16-10 | 175 590  |
|                                                                                     | 40-pin plug socket    | 39x0.75                                 | 17                     | Approx. 570    | Acc. to length | Any                 | KMP1-02-VI-16-X  | 158 987  |

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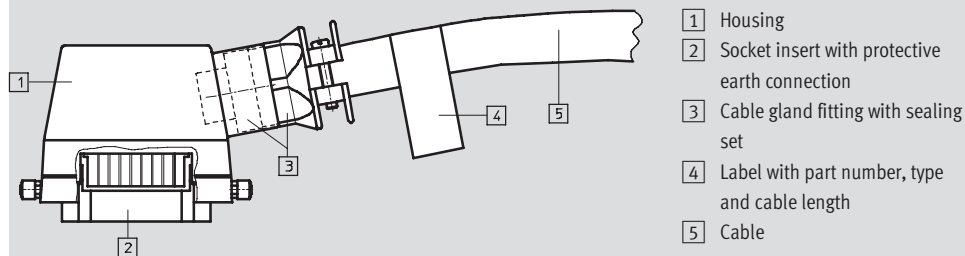
Technical data – KMP1-...

## Dimensions

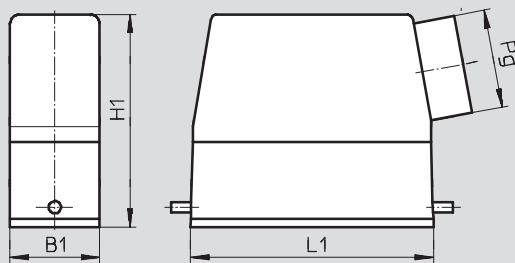
Download CAD data → [www.festo.com](http://www.festo.com)

KMP1-...

Cable assembled

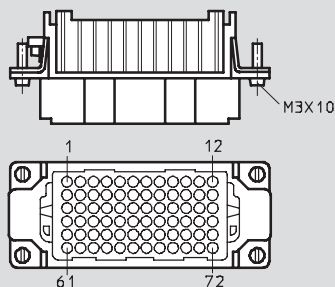


## Housing

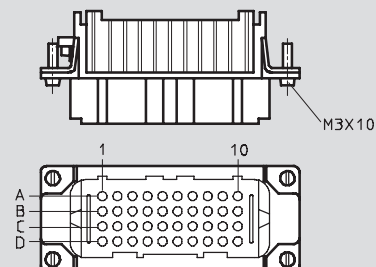


|    | 25-pin  | 40-pin  | 72-pin  |
|----|---------|---------|---------|
| L1 | 79.5 mm | 93.5 mm | 93.5 mm |
| B1 | 29.5 mm | 43 mm   | 43 mm   |
| H1 | 54.5 mm | 60 mm   | 76 mm   |
| Pg | 16      | 21      | 29      |

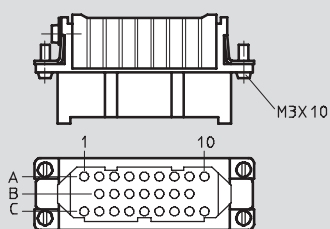
## Socket insert, 72-pin



## Socket insert, 40-pin



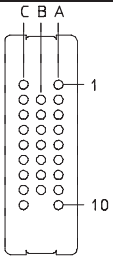
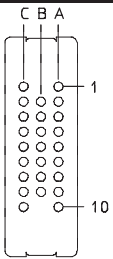
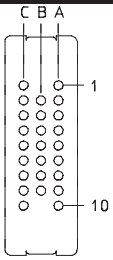
## Socket insert, 25-pin



# Electrical connection technology, for multi-pin plug connection

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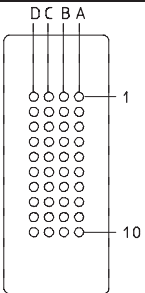
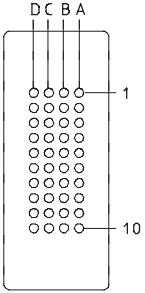
Technical data – KMP1-...

| Wiring allocation (socket view)                                                     |              |             |              |             |              |             |
|-------------------------------------------------------------------------------------|--------------|-------------|--------------|-------------|--------------|-------------|
| KMP1-02-II-4-...                                                                    |              |             |              |             |              |             |
|                                                                                     | Pin<br>Row A | Wire number | Pin<br>Row B | Wire number | Pin<br>Row C | Wire number |
|    | 1            | 4           |              |             | 1            | 20          |
|                                                                                     | 2            | 5           | 2            | 13          | 2            | 21          |
|                                                                                     | 3            | 6           | 3            | 14          | 3            | 22          |
|                                                                                     | 4            | 7           | 4            | 15          | 4            | 23          |
|                                                                                     | 5            | 8           | 5            | 16          | 5            | 24          |
|                                                                                     | 6            | 9           | 6            | 17          | 6            | 25          |
|                                                                                     | 7            | 10          | 7            | 18          | 7            | 1           |
|                                                                                     | 8            | 11          | 8            | 19          | 8            | 2           |
|                                                                                     | 9            | 12          |              |             | 9            | 3           |
| KMP1-02-VI-6-...                                                                    |              |             |              |             |              |             |
|                                                                                     | Pin<br>Row A | Wire number | Pin<br>Row B | Wire number | Pin<br>Row C | Wire number |
|   | 1            | 2           |              |             | 1            | –           |
|                                                                                     | 2            | 3           | 2            | 11          | 2            | –           |
|                                                                                     | 3            | 4           | 3            | 12          | 3            | –           |
|                                                                                     | 4            | 5           | 4            | 13          | 4            | –           |
|                                                                                     | 5            | 6           | 5            | –           | 5            | –           |
|                                                                                     | 6            | 7           | 6            | –           | 6            | –           |
|                                                                                     | 7            | 8           | 7            | –           | 7            | –           |
|                                                                                     | 8            | 9           | 8            | –           | 8            | –           |
|                                                                                     | 9            | 10          |              |             | 9            | 1           |
| KMP1-02-VI-12-...                                                                   |              |             |              |             |              |             |
|                                                                                     | Pin<br>Row A | Wire number | Pin<br>Row B | Wire number | Pin<br>Row C | Wire number |
|  | 1            | 2           |              |             | 1            | 18          |
|                                                                                     | 2            | 3           | 2            | 11          | 2            | 19          |
|                                                                                     | 3            | 4           | 3            | 12          | 3            | 20          |
|                                                                                     | 4            | 5           | 4            | 13          | 4            | 21          |
|                                                                                     | 5            | 6           | 5            | 14          | 5            | 22          |
|                                                                                     | 6            | 7           | 6            | 15          | 6            | 23          |
|                                                                                     | 7            | 8           | 7            | 16          | 7            | 24          |
|                                                                                     | 8            | 9           | 8            | 17          | 8            | 25          |
|                                                                                     | 9            | 10          |              |             | 9            | 1           |

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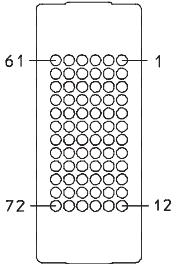
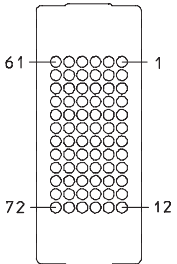
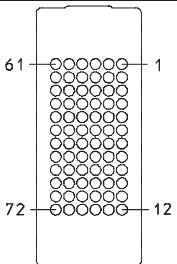
Technical data – KMP1-...

| Wiring allocation (socket view)                                                    |              |             |              |             |              |             |              |             |
|------------------------------------------------------------------------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| KMP1-02-II-8-...                                                                   |              |             |              |             |              |             |              |             |
|                                                                                    | Pin<br>Row A | Wire number | Pin<br>Row B | Wire number | Pin<br>Row C | Wire number | Pin<br>Row D | Wire number |
|   | 1            | 4           | 1            | 14          | 1            | 22          | 1            | 32          |
|                                                                                    | 2            | 5           | 2            | 15          | 2            | 23          | 2            | 33          |
|                                                                                    | 3            | 6           | 3            | 16          | 3            | 24          | 3            | 34          |
|                                                                                    | 4            | 7           | 4            | 17          | 4            | 25          | 4            | 35          |
|                                                                                    | 5            | 8           | 5            | 18          | 5            | 26          | 5            | 36          |
|                                                                                    | 6            | 9           | 6            | 19          | 6            | 27          | 6            | 37          |
|                                                                                    | 7            | 10          | 7            | 2           | 7            | 28          | 7            | 38          |
|                                                                                    | 8            | 11          | 8            | 21          | 8            | 29          | 8            | 39          |
|                                                                                    | 9            | 12          | 9            | –           | 9            | 30          | 9            | 2           |
|                                                                                    | 10           | 13          | 10           | 1           | 10           | 31          | 10           | 3           |
| KMP1-02-VI-16-...                                                                  |              |             |              |             |              |             |              |             |
|                                                                                    | Pin<br>Row A | Wire number | Pin<br>Row B | Wire number | Pin<br>Row C | Wire number | Pin<br>Row D | Wire number |
|  | 1            | 3           | 1            | 13          | 1            | 23          | 1            | 33          |
|                                                                                    | 2            | 4           | 2            | 14          | 2            | 24          | 2            | 34          |
|                                                                                    | 3            | 5           | 3            | 15          | 3            | 25          | 3            | 35          |
|                                                                                    | 4            | 6           | 4            | 16          | 4            | 26          | 4            | 36          |
|                                                                                    | 5            | 7           | 5            | 17          | 5            | 27          | 5            | 37          |
|                                                                                    | 6            | 8           | 6            | 18          | 6            | 28          | 6            | 38          |
|                                                                                    | 7            | 9           | 7            | 19          | 7            | 29          | 7            | 39          |
|                                                                                    | 8            | 10          | 8            | 20          | 8            | 30          | 8            | –           |
|                                                                                    | 9            | 11          | 9            | 21          | 9            | 31          | 9            | 1           |
|                                                                                    | 10           | 12          | 10           | 22          | 10           | 32          | 10           | 2           |

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Technical data – KMP1-...

| Wiring allocation (socket view)                                                     |     |             |     |             |     |             |     |             |     |             |     |             |
|-------------------------------------------------------------------------------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|
| KMP1-02-II-10-...                                                                   |     |             |     |             |     |             |     |             |     |             |     |             |
|                                                                                     | Pin | Wire number | Pin | Wire number | Pin | Wire number | Pin | Wire number | Pin | Wire number | Pin | Wire number |
|    | 1   | 4           | 13  | 16          | 25  | –           | 37  | 26          | 49  | 38          | 61  | 50          |
|                                                                                     | 2   | 5           | 14  | 17          | 26  | –           | 38  | 27          | 50  | 39          | 62  | –           |
|                                                                                     | 3   | 6           | 15  | 18          | 27  | –           | 39  | 28          | 51  | 40          | 63  | –           |
|                                                                                     | 4   | 7           | 16  | 19          | 28  | –           | 40  | 29          | 52  | 41          | 64  | –           |
|                                                                                     | 5   | 8           | 17  | 20          | 29  | –           | 41  | 30          | 53  | 42          | 65  | –           |
|                                                                                     | 6   | 9           | 18  | 21          | 30  | –           | 42  | 31          | 54  | 43          | 66  | –           |
|                                                                                     | 7   | 10          | 19  | 22          | 31  | –           | 43  | 32          | 55  | 44          | 67  | –           |
|                                                                                     | 8   | 11          | 20  | 23          | 32  | –           | 44  | 33          | 56  | 45          | 68  | –           |
|                                                                                     | 9   | 12          | 21  | 24          | 33  | –           | 45  | 34          | 57  | 46          | 69  | –           |
|                                                                                     | 10  | 13          | 22  | 25          | 34  | –           | 46  | 35          | 58  | 47          | 70  | –           |
|                                                                                     | 11  | 14          | 23  | –           | 35  | –           | 47  | 36          | 59  | 48          | 71  | 2           |
|                                                                                     | 12  | 15          | 24  | –           | 36  | 1           | 48  | 37          | 60  | 49          | 72  | 3           |
| KMP1-02-II-14-...                                                                   |     |             |     |             |     |             |     |             |     |             |     |             |
|                                                                                     | Pin | Wire number | Pin | Wire number | Pin | Wire number | Pin | Wire number | Pin | Wire number | Pin | Wire number |
|   | 1   | 4           | 13  | 16          | 25  | 28          | 37  | 34          | 49  | 46          | 61  | 58          |
|                                                                                     | 2   | 5           | 14  | 17          | 26  | 29          | 38  | 35          | 50  | 47          | 62  | 59          |
|                                                                                     | 3   | 6           | 15  | 18          | 27  | 30          | 39  | 36          | 51  | 48          | 63  | 60          |
|                                                                                     | 4   | 7           | 16  | 19          | 28  | 31          | 40  | 37          | 52  | 49          | 64  | 61          |
|                                                                                     | 5   | 8           | 17  | 20          | 29  | 32          | 41  | 38          | 53  | 50          | 65  | 62          |
|                                                                                     | 6   | 9           | 18  | 21          | 30  | 33          | 42  | 39          | 54  | 51          | 66  | 63          |
|                                                                                     | 7   | 10          | 19  | 22          | 31  | –           | 43  | 40          | 55  | 52          | 67  | 64          |
|                                                                                     | 8   | 11          | 20  | 23          | 32  | –           | 44  | 41          | 56  | 53          | 68  | 65          |
|                                                                                     | 9   | 12          | 21  | 24          | 33  | –           | 45  | 42          | 57  | 54          | 69  | –           |
|                                                                                     | 10  | 13          | 22  | 25          | 34  | –           | 46  | 43          | 58  | 55          | 70  | –           |
|                                                                                     | 11  | 14          | 23  | 26          | 35  | –           | 47  | 44          | 59  | 56          | 71  | 2           |
|                                                                                     | 12  | 15          | 24  | 27          | 36  | 1           | 48  | 45          | 60  | 57          | 72  | 3           |
| KMP1-02-II-16-...                                                                   |     |             |     |             |     |             |     |             |     |             |     |             |
|                                                                                     | Pin | Wire number | Pin | Wire number | Pin | Wire number | Pin | Wire number | Pin | Wire number | Pin | Wire number |
|  | 1   | 4           | 13  | 16          | 25  | 28          | 37  | 38          | 49  | 50          | 61  | 62          |
|                                                                                     | 2   | 5           | 14  | 17          | 26  | 29          | 38  | 39          | 50  | 51          | 62  | 63          |
|                                                                                     | 3   | 6           | 15  | 18          | 27  | 30          | 39  | 40          | 51  | 52          | 63  | 64          |
|                                                                                     | 4   | 7           | 16  | 19          | 28  | 31          | 40  | 41          | 52  | 53          | 64  | 65          |
|                                                                                     | 5   | 8           | 17  | 20          | 29  | 32          | 41  | 42          | 53  | 54          | 65  | 66          |
|                                                                                     | 6   | 9           | 18  | 21          | 30  | 33          | 42  | 43          | 54  | 55          | 66  | 67          |
|                                                                                     | 7   | 10          | 19  | 22          | 31  | 34          | 43  | 44          | 55  | 56          | 67  | 68          |
|                                                                                     | 8   | 11          | 20  | 23          | 32  | 35          | 44  | 45          | 56  | 57          | 68  | 69          |
|                                                                                     | 9   | 12          | 21  | 24          | 33  | 36          | 45  | 46          | 57  | 58          | 69  | 70          |
|                                                                                     | 10  | 13          | 22  | 25          | 34  | 37          | 46  | 47          | 58  | 59          | 70  | 71          |
|                                                                                     | 11  | 14          | 23  | 26          | 35  | 72          | 47  | 48          | 59  | 60          | 71  | 2           |
|                                                                                     | 12  | 15          | 24  | 27          | 36  | 1           | 48  | 49          | 60  | 61          | 72  | 3           |

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