

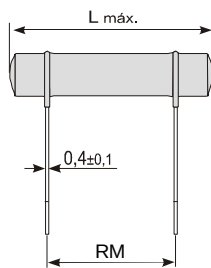
Power Wirewound Resistors  
radial, fibre glass core, coated



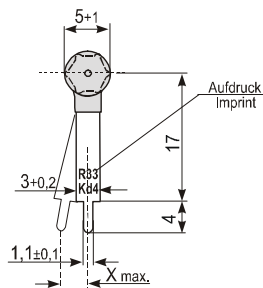
### Specifications

| Type                                                          |                                      | KP290                                                              | KP292                        | KP294                         | KP296                         | KP298                         |
|---------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Styles                                                        |                                      | 0518                                                               | 0523                         | 0533                          | 0543                          | 0553                          |
| Power rating $P_{70}$                                         | W                                    | 2,0                                                                | 4,0                          | 5,0                           | 6,5                           | 8,0                           |
| Resistance range                                              | $\Omega$                             | 0R1 ...<br>7K5                                                     | 0R15 ...<br>11K              | 0R27 ...<br>20K               | 0R39 ...<br>27K               | 0R47 ...<br>36K               |
| E-Series                                                      |                                      | E 24/E 12                                                          | E 24/E 12                    | E 24/E 12                     | E 24/E 12                     | E 24/E 12                     |
| Tolerances                                                    | %                                    | $\pm 10$<br>$\pm 5 \geq 0R2$                                       | $\pm 10$<br>$\pm 5 \geq 0R3$ | $\pm 10$<br>$\pm 5 \geq 0R47$ | $\pm 10$<br>$\pm 5 \geq 0R68$ | $\pm 10$<br>$\pm 5 \geq 0R91$ |
| Temperature coefficient                                       | $10^{-6} \cdot K^{-1}$               | - 80 ... + 500                                                     |                              |                               |                               |                               |
| max. cont. work. voltage                                      | $V_{RMS}$                            | $\sqrt{P_{70} \cdot R}$ for all styles                             |                              |                               |                               |                               |
| Insulation voltage (1min.)                                    | $V_{RMS}$                            | max 75                                                             |                              |                               |                               |                               |
| Insulation resistance                                         | $\Omega$                             | not insulated                                                      |                              |                               |                               |                               |
| Derating linear                                               | $^{\circ}C$                          | 70 ... 350 (0W)                                                    |                              |                               |                               |                               |
| Climatic category                                             |                                      | 55/200/56                                                          |                              |                               |                               |                               |
| Temperature range                                             | $^{\circ}C$                          | - 55 ... 350                                                       |                              |                               |                               |                               |
| Thermal resistance                                            | $KW^{-1}$                            | 110                                                                | 70                           | 60                            | 50                            | 40                            |
| Failure rate<br>(Total, $\vartheta_o$ , max., 60% conf. lev.) | $10^{-9} \cdot h^{-1}$               | appr. 100, depends on value                                        |                              |                               |                               |                               |
| Endurance<br>( $P_{70}$ , 70 $^{\circ}C$ , 1000)              | $\left[\frac{\Delta R}{R}\right] \%$ | $\pm 3,0$ average                                                  |                              |                               |                               |                               |
| Damp heat, steady state<br>(40 $^{\circ}C$ , 93% r.h., 56d)   | $\left[\frac{\Delta R}{R}\right] \%$ | $\pm 2,0$                                                          |                              |                               |                               |                               |
| Climatic sequence                                             | $\left[\frac{\Delta R}{R}\right] \%$ | $\pm 2,0$                                                          |                              |                               |                               |                               |
| Terminal strength                                             | $\left[\frac{\Delta R}{R}\right] \%$ | $\pm 1,0$                                                          |                              |                               |                               |                               |
| Terminal tensile strength                                     | N                                    | 40                                                                 |                              |                               |                               |                               |
| Resistance to soldering heat<br>(260 $^{\circ}C$ , 10s)       | $\left[\frac{\Delta R}{R}\right] \%$ | $\pm 0,2$ typ.                                                     |                              |                               |                               |                               |
| Solderability                                                 | s                                    | solderable according to IEC 60068-2-20 Ta                          |                              |                               |                               |                               |
| Marking                                                       |                                      | on termination; value 3 digits, Tolerance,<br>Production date code |                              |                               |                               |                               |

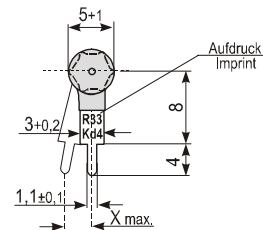
Dimensions in mm:



Type 290-0... 298-0

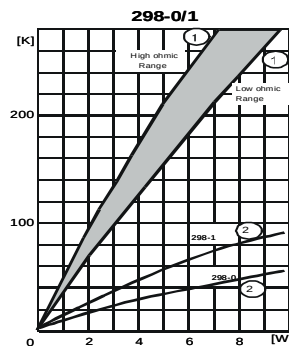
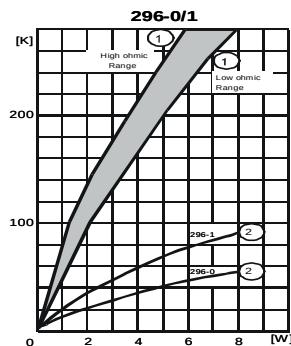
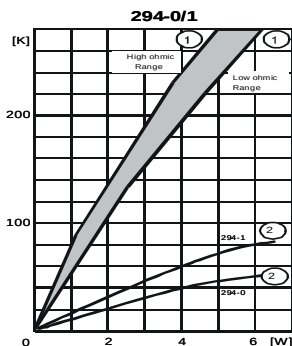
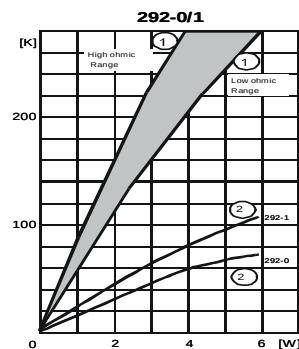
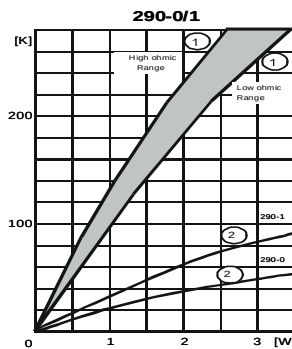
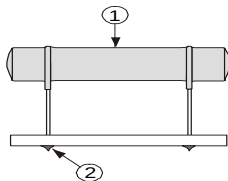


Type 290-1... 298-1



| Type      | L    | RM |
|-----------|------|----|
| KP290-0/1 | 18,2 | 10 |
| KP292-0/1 | 23,3 | 15 |
| KP294-0/1 | 33,4 | 25 |
| KP296-0/1 | 43,5 | 35 |
| KP298-0/1 | 53,7 | 45 |

| Type    | RM Tolerance | Xmax. |
|---------|--------------|-------|
| KP29x-0 | +1,0         | 3,0   |
| KP29x-1 | +0,8         | 1,7   |

Temperature rise:  
(solder joints)

Packaging:

| Type    | Packaging | Pieces | Pack.-Code |
|---------|-----------|--------|------------|
| KP290-0 | bulk      | 500    | B          |
| KP290-1 | bulk      | 1000   | B          |
| KP292-0 | bulk      | 500    | B          |
| KP292-1 | bulk      | 1000   | B          |
| KP294-0 | bulk      | 250    | B          |
| KP294-1 | bulk      | 500    | B          |
| KP296-0 | bulk      | 250    | B          |
| KP296-1 | bulk      | 500    | B          |
| KP298-0 | bulk      | 250    | B          |
| KP298-1 | bulk      | 250    | B          |

Ordering example:

KP294-1  
Type

5

Tolerance

B

Pack.-Code

1K3

R-Value

Revision 200807