

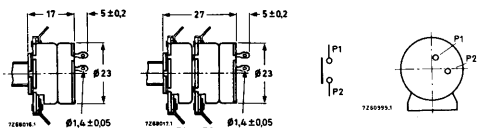
# variable resistors

## control potentiometers

CP23 — carbon  
23 mm — linear and other laws

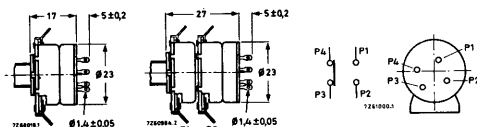
Widely used in video and audio equipment;  
switched versions also available.

|                                             |                        |
|---------------------------------------------|------------------------|
| Max. dissipation at $T_{amb} = 40^{\circ}C$ |                        |
| linear                                      | 0,25 W                 |
| others                                      | 0,125 W                |
| Working temperature                         | - 10 to $+70^{\circ}C$ |
| Climatic category IEC 68                    | 10/070/21              |
| Breaking voltage of switch                  | 250 V (a.c.)           |



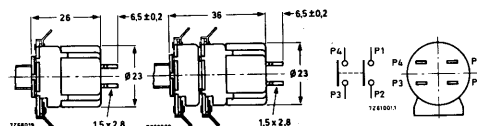
S.P.S.T. rotary  
switch (single)

S.P.S.T. rotary  
switch (tandem or twin)



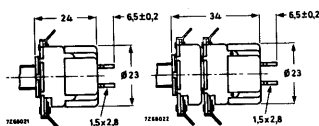
S.P.D.T. rotary  
switch (single)

S.P.D.T. rotary  
switch (tandem)



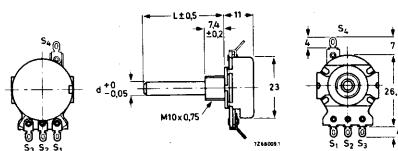
D.P.S.T. rotary  
switch (single)

D.P.S.T. rotary  
switch (tandem or twin)

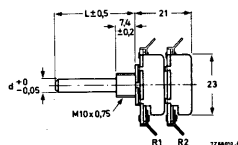


D.P.S.T. push-pull  
switch (single)

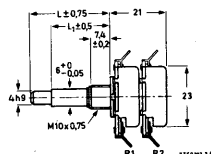
D.P.S.T. push-pull  
switch (tandem or twin)



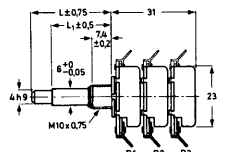
Single



Tandem



Twin

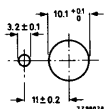


Triple

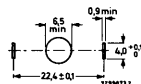
For d, L and L<sub>1</sub> see composition of catalogue no.

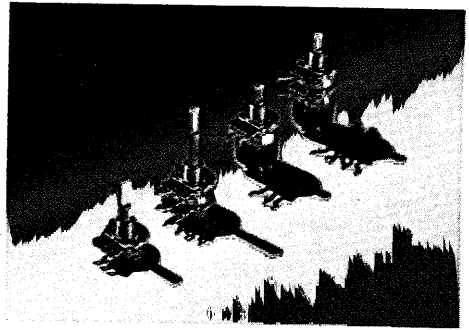
Required mounting holes in chassis

mounting bushing  
M10 x 0,75

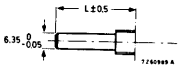
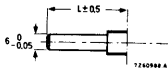


twist tags  
only for single  
and tandem

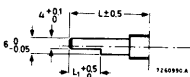




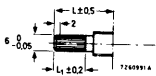
## Spindles



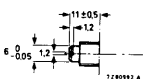
plain



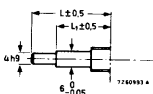
flat faced  
(single only)



knurled  
(single only)



slotted

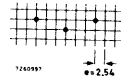
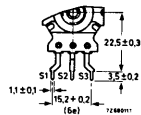
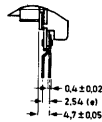
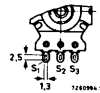


twin/triple

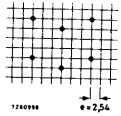
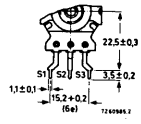
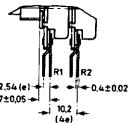
## Connecting terminals



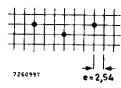
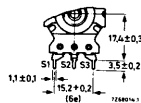
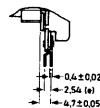
Solder tags



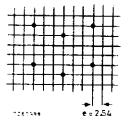
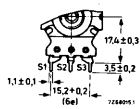
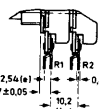
Long printed-wiring pins, pin distance 15,2 mm (6e) (single potentiometer).



Long printed-wiring pins, pin distance 15,2 mm (6e) (tandem potentiometer).



Short printed-wiring pins, pin distance 15,2 mm (6e) (single potentiometer).

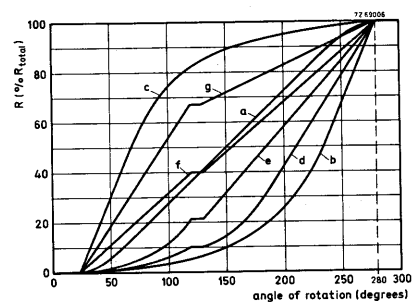


Short printed-wiring pins, pin distance 15,2 mm (6e) (tandem potentiometer).

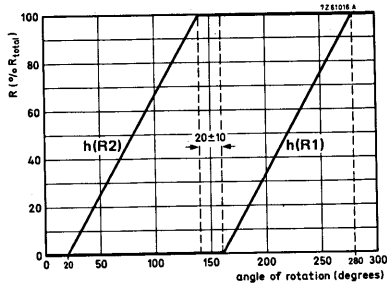
# variable resistors

## control potentiometers

CP23 – carbon  
23 mm – linear and other laws



single and tandem



balance (tandem only)

code in catalogue no.

| nominal resistance | linear law curve a | log. law curve b | rev. log. law curve c | balance curve h |
|--------------------|--------------------|------------------|-----------------------|-----------------|
| 220 Ω              | 02                 |                  |                       |                 |
| 330 Ω              | 19                 |                  | 59                    |                 |
| 470 Ω              | 03                 |                  | 43                    |                 |
| 1 kΩ               | 04                 | 24               | 44                    |                 |
| 2,2 kΩ             | 05                 | 25               | 45                    |                 |
| 4,7 kΩ             | 06                 | 26               | 46                    |                 |
| 10 kΩ              | 07                 | 27               | 47                    |                 |
| 22 kΩ              | 08                 | 28               | 48                    | 92              |
| 47 kΩ              | 09                 | 29               | 49                    | 93              |
| 100 kΩ             | 11                 | 31               | 51                    | 94              |
| 220 kΩ             | 12                 | 32               | 52                    | 95              |
| 470 kΩ             | 13                 | 33               | 53                    | 96              |
| 1 MΩ               | 14                 | 34               | 54                    | 97              |
| 2,2 MΩ             | 15                 | 35               | 55                    |                 |
| 4,7 MΩ             | 16                 | 36               |                       |                 |

code in catalogue no.

| nominal resistance | tap at 10% curve d | tap at 20% curve e | tap at 40% curve f | tap at 67% curve g |
|--------------------|--------------------|--------------------|--------------------|--------------------|
| 20 + 200 kΩ        | 67                 |                    |                    |                    |
| 50 + 420 kΩ        | 73                 |                    |                    |                    |
| 100 + 900 kΩ       | 64                 |                    |                    |                    |
| 0,2 + 2 MΩ         | 68                 |                    |                    |                    |
| 0,5 + 1,7 kΩ       |                    | 81                 |                    |                    |
| 5 + 17 kΩ          |                    | 82                 |                    |                    |
| 10 + 37 kΩ         |                    | 86                 |                    |                    |
| 20 + 80 kΩ         |                    | 77                 |                    |                    |
| 50 + 170 kΩ        |                    | 83                 |                    |                    |
| 100 + 370 kΩ       |                    | 87                 |                    |                    |
| 200 + 800 kΩ       |                    | 78                 |                    |                    |
| 0,5 + 1,7 MΩ       |                    | 84                 |                    |                    |
| 400 + 600 kΩ       |                    |                    | 89                 |                    |
| 200 + 100 kΩ       |                    |                    |                    | 65                 |

**Composition of the catalogue no.  
Single and tandem types**

code for type and switch

2322 ... ..

code for terminals, mounting facility,  
type, and length of plastic spindle

code for resistance law and nominal  
resistance, see table previous page

|                                   |                              | solder tags                                                                                                                         |                                                                                                       | long p.w. pins                                                                                                                               |               | short p.w. pins                                                                                              |               |
|-----------------------------------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------------------------------------------------------------------------------------------------------|---------------|
|                                   |                              | mounting<br>bushing                                                                                                                 | twist<br>tags                                                                                         | mounting<br>bushing                                                                                                                          | twist<br>tags | mounting<br>bushing                                                                                          | twist<br>tags |
| without switch                    | single = 350<br>tandem = 360 |                                                                                                                                     |                                                                                                       | 3 ..                                                                                                                                         | 5 ..          | 2 ..                                                                                                         | 6 ..          |
| with s.p.d.t. rotary switch       | single = 352<br>tandem = 363 | 17 mm = 713<br>18 mm = 708<br>19 mm = 714<br>20 mm = 715<br>22 mm = 717                                                             | 17 mm = 433<br>18 mm = 426<br>19 mm = 434<br>20 mm = 435<br>22 mm = 437                               | 17 mm = . 63<br>18 mm = . 56<br>19 mm = . 64<br>20 mm = . 65<br>22 mm = . 67                                                                 |               | 17 mm = . 83<br>18 mm = . 76<br>19 mm = . 84<br>20 mm = . 85<br>22 mm = . 87                                 |               |
| with s.p.s.t. rotary switch       | single = 353<br>tandem = 362 | 25 mm = 701<br>30 mm = 703<br>35 mm = 704<br>40 mm = 705<br>60 mm = 707<br>70 mm = 708<br>90 mm = 709                               | 25 mm = 421<br>30 mm = 423<br>35 mm = 424<br>40 mm = 425<br>60 mm = 427<br>70 mm = 428<br>90 mm = 429 | 25 mm = . 51<br>30 mm = . 53<br>35 mm = . 54<br>40 mm = . 55<br>60 mm = . 57<br>70 mm = . 58<br>90 mm = . 59                                 |               | 25 mm = . 71<br>30 mm = . 73<br>35 mm = . 74<br>40 mm = . 75<br>60 mm = . 77<br>70 mm = . 78<br>90 mm = . 79 |               |
| with d.p.s.t. push-pull switch 2A | single = 355<br>tandem = 365 | plain<br>φ 6 mm                                                                                                                     | plain<br>φ 6,35 mm                                                                                    | plain<br>φ 6 mm                                                                                                                              |               | plain<br>φ 6,35 mm                                                                                           |               |
| with d.p.d.t. rotary switch       | single = 357<br>tandem = 366 | 18 mm = 740<br>25 mm = 741<br>28 mm = 742<br>30 mm = 743<br>35 mm = 744<br>40 mm = 745<br>60 mm = 747<br>70 mm = 748<br>90 mm = 749 | 18 mm = 411<br>30 mm = 412<br>60 mm = 431                                                             | 18 mm = . 90<br>25 mm = . 91<br>28 mm = . 92<br>30 mm = . 93<br>35 mm = . 94<br>40 mm = . 95<br>60 mm = . 97<br>70 mm = . 98<br>90 mm = . 99 |               | 18 mm = . 61<br>knurled 30 mm = . 62<br>70 mm = . 81                                                         |               |
|                                   |                              | flat faced                                                                                                                          | slotted                                                                                               | flat faced                                                                                                                                   |               | slotted                                                                                                      |               |
|                                   |                              |                                                                                                                                     | = 410                                                                                                 |                                                                                                                                              |               | = 60                                                                                                         |               |

**Composition of the catalogue no.  
Twin and triple types**

code for type, switch and hollow spindle

2322 ... ..

code for resistance law and nominal resistance of  
potentiometer R<sub>2</sub>, see table previous page

code for resistance law and nominal resistance of  
potentiometer R<sub>1</sub>, see table previous page

code for spindle lengths

| steel hollow spindle              |                            | plastic hollow spindle            |                            |                      |                        |
|-----------------------------------|----------------------------|-----------------------------------|----------------------------|----------------------|------------------------|
| without switch                    | twin = 370<br>triple = 378 | without switch                    | twin = 470<br>triple = 478 |                      |                        |
| with s.p.d.t. rotary switch       | twin = 372                 | with s.p.d.t. rotary switch       | twin = 472                 | steel hollow spindle | plastic hollow spindle |
| with s.p.s.t. rotary switch       | twin = 373                 | with s.p.s.t. rotary switch       | twin = 473                 | 18 and 30,5 mm = 6   | 18 and 30,5 mm = 0     |
| with d.p.s.t. push-pull switch 2A | twin = 375                 | with d.p.s.t. push-pull switch 2A | twin = 475                 | 30 and 42,5 mm = 7   | 30 and 42,5 mm = 1     |
| with d.p.s.t. rotary switch       | twin = 376                 | with d.p.s.t. rotary switch       | twin = 476                 |                      |                        |