

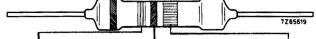
# fixed resistors

## carbon film

**CR16 CR25 CR37**  
**CR52 CR68 CR93**

For detailed information  
 Handbook CM2a

Resistance ranges	from 1 Ω to 10 MΩ; E12 or E24 series			
Resistance tolerance	5 and 10%			
Abs. max. dissipation	CR16	0,2 W	CR52	0,67 W
at T <sub>amb</sub> = 70 °C	CR25	0,33 W	CR68	1,15 W
	CR37	0,5 W	CR93	2 W
Basic specification	IEC 115-1, 115-2			
Climatic category (IEC 68)	55/155/56			
Stability after load	see nomogram			



colour	first two digits of resistance value	multiplier	tolerance
black	0	1 x	
brown	1	10 x	
red	2	100 x	
orange	3	1 000 x	
yellow	4	10 000 x	
green	5	100 000 x	
blue	6	1 000 000 x	
violet	7		
grey	8		
white	9		
silver			± 10%
gold			0,1 x      ± 5%

style	limiting voltage	rated dissipation at 70 °C	resistance range	tolerance	series	catalogue no.
	V(r.m.s.)	W		%		
CR16	150	0,2	10 Ω - 220 kΩ	5	E24	2322 210 13 ...
			270 kΩ - 1 MΩ	10	E12	2322 210 12 ...
CR16 on reel			10 Ω - 220 kΩ	5	E24	2322 210 23 ...
			270 kΩ - 1 MΩ	10	E12	2322 210 22 ...
CR25	150	0,33	1 Ω - 1 MΩ	5	E24	2322 211 13 ...
			1,2 MΩ - 10 MΩ	10	E12	2322 211 12 ...
CR25 on reel			1 Ω - 1 MΩ	5	E24	2322 211 23 ...
			1,2 MΩ - 10 MΩ	10	E12	2322 211 22 ...
CR25A	250	0,33	1 Ω - 1 MΩ	5	E24	2322 106 33 ...
			1,2 MΩ - 10 MΩ	10	E12	2322 106 32 ...
CR37	350	0,5	1 Ω - 1 MΩ	5	E24	2322 212 13 ...
			1,2 MΩ - 10 MΩ	10	E12	2322 212 12 ...
CR37 on reel			1 Ω - 1 MΩ	5	E24	2322 212 23 ...
			1,2 MΩ - 10 MΩ	10	E12	2322 212 22 ...
CR52 <sup>1)</sup>	500	0,67	1 Ω - 1 MΩ	5	E24	2322 213 13 ...
CR68 <sup>1)</sup>	750	1,15	1 Ω - 1 MΩ	5	E24	2322 214 13 ...
CR93 <sup>1)</sup>	1000	2	10 Ω - 1 MΩ	5	E24	2322 215 13 ...

<sup>1)</sup> For values > 1 MΩ see high-voltage resistors VR37 and VR68

### Composition of the catalogue no.

In the above-mentioned catalogue no., replace the first two dots by the first two digits of the resistance value.

Replace the third dot by a figure according to the following table:

1 -	9,1 Ω	8	10 -	91 kΩ	3
10 -	91 Ω	9	100 -	910 kΩ	4
100 -	910 Ω	1	1 -	9,1 MΩ	5

Example

Style CR25 (not on reel) 10 Ω, 5% cat. no. 2322 211 13109

1 - 9,1 kΩ 2      10 MΩ 6