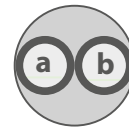


# CORE IDENTIFICATION ACCORDING TO VDE 0815

## Installation cables

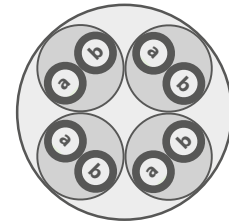
|           |            |             |        |           |
|-----------|------------|-------------|--------|-----------|
| JE-Y(ST)Y | JE-Y(ST)Yv | JE-Y(ST)YY  | JE-YCY | RD-Y(ST)Y |
| JE-LIYCY  | JE-LIYY    | JE-LIY(ST)Y |        |           |
| JE-LIHCH  | JE-LIHH    | JE-H(ST)H   | JE-HCH |           |

## PAIR



| Basic colours of insulating covers in installation cables with 2 pairs as star quads |      |     |      |        |  |  |  |  |
|--|------|-----|------|--------|--|--|--|--|
| Circuit  | 1    |     | 2    |        |  |  |  |  |
| Core   | a    | b   | a    | b      |  |  |  |  |
| Basic colour   | blue | red | grey | yellow |  |  |  |  |

## PAIRS FORMED TO UNITS

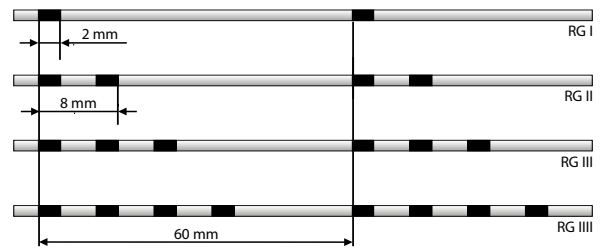


| Basic colours of insulating covers of unit pairs |      |     |      |        |       |       |       |       |
|--|------|-----|------|--------|-------|-------|-------|-------|
| Circuit  | 1    |     | 2    |        | 3     |       | 4     |       |
| Core   | a    | b   | a    | b      | a     | b     | a     | b     |
| Basic colour                                     | blue | red | grey | yellow | green | brown | white | black |

To distinguish individual units, cores must be identified by smear-resistant coloured rings, or units by spirals of plastic tape with printed unit number.

When applying the ring identification to distinguish the units, the coloured cores must be identified according to table 2 above and picture 1 on the right. The dimensions in picture 1 should be observed to ensure clear distinction of the units. A slight blurring at the edge of the ring identification and a minor misalignment of the 2 semirings are permitted.

## IDENTIFICATION BY RINGS



## IDENTIFICATION OF UNITS BY RING GROUPS

| Unit no. | Ring colour | Ring group       |                           | Spiral colour |
|----------|-------------|------------------|---------------------------|---------------|
|          |             | Units of 4 cores | Units of 8 cores/ 4 pairs |               |
| 1        | pink        | I                | I                         |               |
| 2        |             | I                | II                        |               |
| 3        |             | II               | III                       |               |
| 4        |             | II               | IIII                      |               |
| 5        | orange      |                  | I                         |               |
| 6        |             |                  | II                        |               |
| 7        |             |                  | III                       |               |
| 8        |             |                  | IIII                      |               |
| 9        | violet      |                  | I                         |               |
| 10       |             |                  | II                        |               |
| 11       |             |                  | III                       |               |
| 12       |             |                  | IIII                      |               |

| Unit no. | Ring colour | Ring group       |                           | Spiral colour |
|----------|-------------|------------------|---------------------------|---------------|
|          |             | units of 4 cores | Units of 8 cores/ 4 pairs |               |
| 13       | pink        |                  | I                         | blue          |
| 14       |             |                  | II                        |               |
| 15       |             |                  | III                       |               |
| 16       |             |                  | IIII                      |               |
| 17       | orange      |                  | I                         | red           |
| 18       |             |                  | II                        |               |
| 19       |             |                  | III                       |               |
| 20       |             |                  | IIII                      |               |

In cables with more than 12 units, additional units are identified by a coloured plastic spiral. The counting of units starts with the inner layer and continues in the same direction throughout all layers to the outside.



# CORE IDENTIFICATION ACCORDING TO DIN 47100

## Electronic control cables and computer cables LIYY and LIYCY

The first colour is the basic core colour.

If cores are multi-coloured, identification is composed of one basic colour and one contemporary colour. Counting from the outside to the inside continuing throughout all layers.

### CORE STRANDING

(cables with 4 cores are stranded in the colour order white, yellow, brown, green)

| Core | Colour      | Core | Colour      | Core | Colour    | Core | Colour      | Core | Colour      |
|------|-------------|------|-------------|------|-----------|------|-------------|------|-------------|
| 1    | white       | 19   | whitegrey   | 37   | greyblue  | 55   | greypink    | 73   | pinkgreen   |
| 2    | brown       | 21   | pinkbrown   | 38   | pinkblue  | 56   | redblue     | 74   | yellowpink  |
| 3    | green       | 21   | whiteblue   | 39   | greyred   | 57   | whitegreen  | 75   | pinkgreen   |
| 4    | yellow      | 22   | brownblue   | 40   | pinkred   | 58   | browngreen  | 76   | yellowblue  |
| 5    | grey        | 23   | whitered    | 41   | greyblack | 59   | whiteyellow | 77   | greenred    |
| 6    | pink        | 24   | brownred    | 42   | pinkblack | 60   | yellowbrown | 78   | yellowred   |
| 7    | blue        | 25   | whiteblack  | 43   | blueblack | 61   | whitegrey   | 79   | greenblack  |
| 8    | red         | 26   | brownblack  | 44   | redblack  | 62   | greybrown   | 80   | yellowblack |
| 9    | black       | 27   | greygreen   | 45   | white     | 63   | whitepink   | 81   | greyblue    |
| 10   | violet      | 28   | yellowgrey  | 46   | brown     | 64   | pinkbrown   | 82   | pinkblue    |
| 11   | greypink    | 29   | pinkgreen   | 47   | green     | 65   | whiteblue   | 83   | greyred     |
| 12   | redblue     | 30   | yellowpink  | 48   | yellow    | 66   | brownblue   | 84   | pinkred     |
| 13   | whitegreen  | 31   | greenblue   | 49   | grey      | 67   | whitered    | 85   | greyblack   |
| 14   | browngreen  | 32   | yellowblue  | 50   | pink      | 68   | brownred    | 86   | pinkblack   |
| 15   | whiteyellow | 33   | greenred    | 51   | blue      | 69   | whiteblack  | 87   | blueblack   |
| 16   | yellowbrown | 34   | yellowred   | 52   | red       | 70   | brownblack  | 88   | redblack    |
| 17   | whitegrey   | 35   | greenblack  | 53   | black     | 71   | greygreen   |      |             |
| 18   | yellowbrown | 36   | yellowblack | 54   | violet    | 72   | yellowgrey  |      |             |

### PAIRED STRANDING

| Pair | Core | Colour                               | Pair | Core | Colour                              | Pair | Core                                 | Colour | Pair                                | Core | Colour |
|------|------|--------------------------------------|------|------|-------------------------------------|------|--------------------------------------|--------|-------------------------------------|------|--------|
| 1    | 45   | a<br>b<br>white<br>brown             | 12   | 56   | a<br>b<br>whitered<br>brownred      | 23   | a<br>b<br>white<br>brown             | 34     | a<br>b<br>whitered<br>brownred      |      |        |
| 2    | 46   | a<br>b<br>green<br>yellow            | 13   | 57   | a<br>b<br>whiteblack<br>brownblack  | 24   | a<br>b<br>green<br>yellow            | 35     | a<br>b<br>whiteblack<br>brownblack  |      |        |
| 3    | 47   | a<br>b<br>grey<br>pink               | 14   | 58   | a<br>b<br>greygreen<br>yellowgrey   | 25   | a<br>b<br>grey<br>pink               | 36     | a<br>b<br>greygreen<br>yellowgrey   |      |        |
| 4    | 48   | a<br>b<br>blue<br>red                | 15   | 59   | a<br>b<br>pinkgreen<br>yellowpink   | 26   | a<br>b<br>blue<br>red                | 37     | a<br>b<br>pinkgreen<br>yellowpink   |      |        |
| 5    | 49   | a<br>b<br>black<br>violet            | 16   | 60   | a<br>b<br>greenblue<br>yellowblue   | 27   | a<br>b<br>black<br>violet            | 38     | a<br>b<br>pinkgreen<br>yellowblue   |      |        |
| 6    | 50   | a<br>b<br>greypink<br>redblue        | 17   | 61   | a<br>b<br>greenred<br>yellowred     | 28   | a<br>b<br>greypink<br>redblue        | 39     | a<br>b<br>greenred<br>yellowred     |      |        |
| 7    | 51   | a<br>b<br>whitegreen<br>browngreen   | 18   | 62   | a<br>b<br>greenblack<br>yellowblack | 29   | a<br>b<br>whitegreen<br>browngreen   | 40     | a<br>b<br>greenblack<br>yellowblack |      |        |
| 8    | 52   | a<br>b<br>whiteyellow<br>yellowbrown | 19   | 63   | a<br>b<br>greyblue<br>pinkblue      | 30   | a<br>b<br>whiteyellow<br>yellowbrown | 41     | a<br>b<br>greyblue<br>pinkblue      |      |        |
| 9    | 53   | a<br>b<br>whitegrey<br>greybrown     | 20   | 64   | a<br>b<br>greyred<br>pinkred        | 31   | a<br>b<br>whitegrey<br>greybrown     | 42     | a<br>b<br>greyred<br>pinkred        |      |        |
| 10   | 54   | a<br>b<br>whitepink<br>pinkbrown     | 21   | 65   | a<br>b<br>greyblack<br>pinkblack    | 32   | a<br>b<br>whitepink<br>pinkbrown     | 43     | a<br>b<br>greyblack<br>pinkblack    |      |        |
| 11   | 55   | a<br>b<br>whiteblue<br>brownblue     | 22   | 66   | a<br>b<br>blueblack<br>redblack     | 33   | a<br>b<br>whiteblue<br>brownblue     | 44     | a<br>b<br>blueblack<br>redblack     |      |        |



# CORE IDENTIFICATION ACCORDING TO DIN VDE 0293

## CORE IDENTIFICATION IN MULTICORE CABLES

| Number of cores | Cables with green-yellow marked core (protection core)<br>Code "J" |             |       |       |      | Cables without green-yellow marked core (protection core)<br>Code "O" |       |       |      |       |
|-----------------|--|-------------|-------|-------|------|---|-------|-------|------|-------|
|                 | Protection core  | Active core |       |       |      | Active core   |       |       |      |       |
| 2               | -  |             |       |       |      | blue  | brown |       |      |       |
| 3               | green-yellow   | blue        | brown |       |      | -   | brown | black | grey |       |
| 4               | green-yellow   | -           | brown | black | grey | blue  | brown | black | grey |       |
| 5               | green-yellow   | blue        | brown | black | grey | blue  | brown | black | grey | black |

## COLOUR CODES

### CODE COLOUR IDENTIFICATION

| acc. to IEC 757<br>Colour | Code |      | RAL       |
|---------------------------|------|------|-----------|
|                           | old  | new  |           |
| black                     | sw   | BK   | 9005      |
| white                     | ws   | WH   | 9010      |
| blue                      | bl   | BU   | 5015      |
| red                       | rt   | RD   | 3000      |
| brown                     | bn   | BN   | 8003      |
| grey                      | gr   | GY   | 7001      |
| yellow                    | ge   | YE   | 1021      |
| green                     | gn   | GN   | 6018      |
| violet                    | vio  | VT   | 4005      |
| green-yellow              | gnge | GNYE | 6018/1021 |
| orange                    | org  | OG   | 2003      |
| pink                      | rs   | PK   | 3015      |
| darkblue                  | dbl  |      | 5010      |
| darkbrown                 | dbn  |      | 8014      |
| transparent               | tr   |      | -         |
| ultramarine blue          | ubl  |      | 5002      |

### COLOUR CODE FOR VEHICLE CABLES

| Cores | Core colours                   |
|-------|--------------------------------|
| 1     | rd                             |
| 2     | wh, bk                         |
| 3     | wh, bk, bn                     |
| 4     | wh, bk, bn, ye                 |
| 5     | wh, bk, bn, ye, gn             |
| 6     | wh, bk, bn, ye, gn, rd         |
| 7     | wh, bk, bn, ye, gn, rd, bu     |
| 8     | wh, bk, bn, ye, gn, rd, bu, vt |

### COLOUR CODE FOR YR-CABLES

| Cores    | Core colours  |
|----------|---|
| 2 x 0.8  | bk, bu  |
| 3 x 0.8  | bk, bu, bn  |
| 4 x 0.8  | bk, bu, bn, ye  |
| 5 x 0.8  | bk, bu, bn, ye, gn  |
| 6 x 0.8  | bk, bu, bn, ye, gn, vt  |
| 8 x 0.8  | bk, bu, bn, ye, gn, vt, wh, og                                      |
| 10 x 0.8 | bk, bu, bn, ye, gn, vt, wh, og, tr, gy                              |
| 12 x 0.8 | bk, bu, bn, ye, gn, vt, wh, og, tr, gy, rd, lbu                     |
| 14 x 0.8 | bk, bu, bn, ye, gn, vt, wh, og, tr, gy, rd, lbu, cog, lgn           |
| 16 x 0.8 | bk, bu, bn, ye, gn, vt, wh, og, tr, gy, rd, lbu, cog, lgn, lrd, lye |

### COLOUR CODE FOR YYSCH-CABLES

| Cores    | Core colours   |
|----------|--|
| 2 x 0.6  | ye, bn   |
| 3 x 0.6  | ye, gn, bn   |
| 4 x 0.6  | ye, gn, bn, bk   |
| 5 x 0.6  | ye, gn, bn, bk, bu   |
| 6 x 0.6  | ye, gn, bn, gy, pk, wh   |
| 10 x 0.6 | wh, bk, hbu, bn, gn, ye, gy, pk, bu, rd  |
| 16 x 0.6 | 1st layer: wh, bk, lbu, bn, gn<br>2nd layer: ye, lgy, pk, bu, rd, tr, gy, vt, lgn, og, elf   |
| 26 x 0.6 | core: wh, bk + 2 drain wires<br>1st layer: lbu, bn, gn, ye, lgy, pk, bu, rd, tr<br>2nd layer: gy, vt, lgn, og, elf, whbu, whye, whgn, whbn, whbk, rdbu, rdye, rdgn, rdbn, rdbk |

