

# Aircraft 400 Hz Ground Power Supply Cable with Extreme abrasion resistance

*Amo-Spiral*

Type: RXY-FS 4G50  
Article: 5061



Patent pending

| <b>50 mm<sup>2</sup> Conductor acc. to IEC 60228,5</b> |                                  |           |       |
|--|----------------------------------|-----------|-------|
| Properties   | Nominal value                    | Tolerance | Unit  |
| Wires in conductor, bare                               | 378 * 0,4 mm                     | -         | Pcs.  |
| Resistance   | 0,36                             | +0,006    | Ω/Km  |
| Lay length   | 150                              | -         | mm    |
| Copper weight  | 446                              | -         | Kg/km |
| <b>Insulation of 50 mm<sup>2</sup> acc. to HD 603</b>  |                                  |           |       |
| Properties   | Nominal value                    | Tolerance | Unit  |
| Material   | XLPE 90°C                        | -         | -     |
| Temperature range                                      | -45 to +90                       |           | °C    |
| Wall thickness   | 1,2                              | + 0,2     | mm    |
| Outer diameter   | 11,8                             | + 0,4     | mm    |
| Colour   | Blue, Black, Yellow/Green, Brown |           |       |
| <b>Laying up of cores and tape</b>                     |                                  |           |       |
| Properties   | Nominal value                    | Tolerance | Unit  |
| Lay Length   | 280                              | -50       | mm    |
| Centre core  | 5,2                              |           |       |
| Lapping helical tape                                   | 60                               |           | mm    |

| <b>Inner sheath acc. to HD 603</b> |            |       |     |
|------------------------------------|------------|-------|-----|
| Material                           | TPE        | -     | -   |
| Temperature range                  | -45 to +85 |       | °C  |
| Outer diameter                     | 33,7       | + 0,6 | mm  |
| Colour                             | Black      |       |     |
| <b>Braiding of anti twist yarn</b> |            |       |     |
| Braiding yarn                      | 16         |       | Pcs |

| <b>Outer sheath acc. to HD 603</b>             |               |           |      |
|--|---------------|-----------|------|
| Material                                       | TPE           | -         | -    |
| Temperature range                              | -45 to +80    |           | °C   |
| Outer diameter                                 | 37,0          | +1,0      | mm   |
| Colour   | Orange        |           |      |
| <b>SPIRAL by bounded abrasion resistant PA</b> |               |           |      |
| Properties                                     | Nominal value | Tolerance | Unit |
| Material                                       | Polyamid      | -         | -    |
| Temperature range                              | -55 till +100 |           | °C   |
| Wall thickness                                 | 1,0           | +0,5      | mm   |
| Outer diameter                                 | 39,0          | + 1,0     | mm   |
| Colour   | Natural       |           |      |

| <b>Specific properties</b>                                 |                      |          |             |
|--|----------------------|----------|-------------|
| Properties   | Nominal value        | Unit     | Standard    |
| Voltage range  | 600/1000             | V        |             |
| Routine voltage test, 5 min.                               | 2.000                | V        | IEC 811     |
| Type voltage test, 15 min. in water                        | 4.000                | V        | IEC 811     |
| Max. continuously current at ambient temp +30°C, per phase | 404                  | A        | IEC 204-1   |
| Max. temperature for 5 sec                                 | 250                  | °C       |             |
| Max. short-circuit current for 5 seconds                   | 6,0                  | kA       |             |
| Permissible minimum bending radius.                        | 234                  | mm       | DIN 0298-3  |
| Flame Properties   | Pass                 | Vertical | IEC 60332-1 |
| Resistance at +20°C  | 0,363±0,01           | Ω/Km     |             |
| Resistance at +70°C  | 0,436±0,01           | Ω/Km     |             |
| Inductance   | 0,193                | mH/km    |             |
| Impedance 400 Hz   | 0,61                 | Ω/Km     |             |
| Voltage drop, $\varphi=0,8$ , 90kW, 25m, $U_0$             | 3,2                  | V        |             |
| Weight, total  | 2,4                  | Kg/m     |             |
| Marking, ink printed                                       | amokabel RXY-FS 4G50 |          |             |