



**SVARN**  
Inspired by possibilities

# Giving wings to the guardians of the skies

AEROSPACE CABLES FOR DEFENCE AIRCRAFTS



**SVARN GROUP**

TELECOM | AUTOMOTIVE | **DEFENCE** | RAILWAYS | POWER | PROJECTS



## **SVARN AEROSPACE CABLES FOR DEFENCE AIRCRAFTS**

# Reliability and durability to support critical applications

Defence aircrafts rely heavily on crucial avionics and tactical equipment to ensure the delivery of real-time intelligence and seamless communication, vital for mission success, safety, and survivability. Without a doubt, the cables and assemblies linked to these advanced electronics serve as a lifeline for personnel. Whether it's fighter jets or strategic airlifters, these cables and assemblies must maintain flawless functionality at all times.

At Svarn, we boast nearly two decades of expertise in manufacturing cables designed for power, control, and data transmission across a wide range of industry applications. We recognise the necessity for cables to endure rigorous stress, extreme temperatures, and intense vibration. Every cable we produce, therefore, adheres to strict testing standards mandated by industry authorities and international certifications. So, you can rest assured that the cable you utilise is guaranteed to provide the utmost durability, flexibility, and reliability, essential for supporting mission-critical operations.

## ABOUT US

At Svarn, we're pioneers in turning big ideas into real-world solutions. Our legacy of innovation, rooted in the essence of "Svarn" or Gold, has thrived since 2005. With over 3,000 dedicated employees, we're constantly pushing the boundaries of technology to benefit our customers and society. Our impact spans across six key industries, supported by seven cutting-edge manufacturing facilities and global offices in strategic locations. Through relentless innovation, we're shaping a prosperous and sustainable future — **inspired by possibilities.**



Know more at [www.svarn.com](http://www.svarn.com)

## Svarn Aero Unsheathed Single Core Cables 600 Volts

**Svarn Aero Unsheathed Single Core Cables** are designed for wiring between components, instruments and electrical equipment. They are vastly used in aircrafts, computers, military vehicles, military equipment, ships, mass transit, offshore platforms and automobiles.



### CABLE STRUCTURE

- Annealed tinned copper conductor/ Silver coated copper/ Nickel Coated copper.
- Radiation cross linked specially formulated polyalkene insulation

### TECHNICAL DATA

- Nominal voltage: 600 volts
- Temperature range: -65°C to +200°C
- Tensile strength: 28N/mm<sup>2</sup>

### FEATURES

- UV resistant
- Sunlight resistant
- Flame & fire retardant FT2
- Heat & moisture resistant
- Suitable for direct burial/ underground installation
- Oil/ chemical resistant
- Resistant to soldering iron & overload
- High flexibility
- Low smoke emission
- High flame resistant
- RoHS compliant

### STANDARD

- As per Def. Stan 61/12 Part 18
- MIL-W-81044, MIL-C-27500, MIL-C-7078, MIL-W-16878, MIL-W-22759, MIL-STD-104, MIL-STD-1916
- VG 95218 Parts 20, 21, 22, 23 AND 1000
- MSV34401
- BS 4066
- TDE 74/P/74 and TDE 75/R/6
- S424 14751 TDE 74/P/74 and TDE 75/R/6
- S424 14751
- NFC 32070
- NES 714, NES 715
- ASTM E 595
- NEMA WC 27500

PART NUMBER	NOMINAL CROSS SECTIONAL AREA (Sq.mm)	SIZE OF WIRE (AWG)	MINIMUM OVERALL DIA (mm)	NOMINAL WEIGHT (kg/km)
FGCBPCYY1C0.051	0.051	30	0.71	1.1
FGCBPCYY1C0.08	0.08	28	0.79	1.5
FGCBPCYY1C0.13	0.13	26	0.9	2.1
FGCBPCYY1C0.2	0.2	24	1.05	3
FGCBPCYY1C0.33	0.33	22	1.22	4.5
FGCBPCYY1C0.52	0.52	20	1.43	6.8
FGCBPCYY1C0.82	0.82	18	1.68	10.2
FGCBPCYY1C1.31	1.31	16	1.86	13
FGCBPCYY1C2.08	2.08	14	2.29	20
FGCBPCYY1C3.31	3.31	12	2.77	31
FGCBPCYY1C5.26	5.26	10	3.4	47

# Svarn Aero Dual Insulated Single Core Cables 600 to 2500 Volts

**Svarn Aero Dual Insulated Single Core Cables** are designed for wiring between components, instruments and electrical equipment. They are vastly used in aircrafts, computers, military vehicles, military equipment, ships, mass transit, offshore platforms and automobiles.



### CABLE STRUCTURE

- Annealed tinned copper conductor/ Silver coated copper/ Nickel Coated copper
- Radiation cross linked specially formulated polyalkene insulation
- Radiation cross linked improved PVDF

### TECHNICAL DATA

- Nominal voltage: 600 to 2500 volts
- Temperature range: -65°C to +200°C
- Tensile strength: 28N/mm<sup>2</sup>

### FEATURES

- UV resistant
- Sunlight resistant
- Flame & fire retardant FT2
- Heat & moisture resistant
- Suitable for direct burial/ underground installation
- Oil/ chemical resistant
- Resistant to soldering iron & overload
- High flexibility
- Low smoke emission
- High flame resistant
- RoHS compliant

### STANDARD

- As per Def. Stan 61/12 Part 18
- MIL-W-81044, MIL-C-27500, MIL-C-7078, MIL-W-16878, MIL-W-22759, MIL-STD-104, MIL-STD-1916
- VG 95218 Parts 20, 21, 22, 23 AND 1000
- MSV34401
- BS 4066
- TDE 74/P/74 and TDE 75/R/6
- S424 14751
- NFC 32070
- NES 714, NES 715
- ASTM E 595
- NEMA WC 27500

## Svarn Aero Dual Insulated Single Core Cables – 600 Volts

PART NUMBER	NOMINAL CROSS SECTIONAL AREA (Sq.mm)	SIZE OF WIRE (AWG)	MINIMUM OVERALL DIA (mm)	NOMINAL WEIGHT (kg/km)
FGCBPCYY1C0.13	0.13	26	1.3	2.7
FGCBPCYY1C0.2	0.2	24	1.45	3.6
FGCBPCYY1C0.33	0.33	22	1.65	5.4
FGCBPCYY1C0.52	0.52	20	1.9	7.8
FGCBPCYY1C0.82	0.82	18	2.2	11.7
FGCBPCYY1C1.31	1.31	16	2.4	14.5
FGCBPCYY1C2.08	2.08	14	2.9	21.9
FGCBPCYY1C3.31	3.31	12	3.3	32.4
FGCBPCYY1C5.26	5.26	10	4.0	51.8
FGCBPCYY1C8.37	8.37	8	5.5	93.2

### Svarn Aero Dual Insulated Single Core Cables – 1000 Volts

PART NUMBER	NOMINAL CROSS SECTIONAL AREA (Sq.mm)	SIZE OF WIRE (AWG)	MINIMUM OVERALL DIA (mm)	NOMINAL WEIGHT (kg/km)
FGCBPCYY1C0.013	0.13	26	1	2.4
FGCBPCYY1C0.2	0.2	24	1.2	3.6
FGCBPCYY1C0.33	0.33	22	1.4	5.3
FGCBPCYY1C0.52	0.52	20	1.6	7.7
FGCBPCYY1C0.82	0.82	18	1.9	11.6
FGCBPCYY1C1.31	1.31	16	2.1	14.7
FGCBPCYY1C2.08	2.08	14	2.6	22
FGCBPCYY1C3.31	3.31	12	3	32.9
FGCBPCYY1C5.26	5.26	10	3.8	53
FGCBPCYY1C8.37	8.37	8	5.3	92

### Svarn Aero Dual Insulated Single Core Cables – 2500 Volts

PART NUMBER	NOMINAL CROSS SECTIONAL AREA (Sq.mm)	SIZE OF WIRE (AWG)	MINIMUM OVERALL DIA (mm)	NOMINAL WEIGHT (kg/km)
FGCBPCYY1C0.013	0.13	26	1.4	3.2
FGCBPCYY1C0.2	0.2	24	1.5	4.6
FGCBPCYY1C0.33	0.33	22	1.8	6.6
FGCBPCYY1C0.52	0.52	20	2	9.5
FGCBPCYY1C0.82	0.82	18	2.3	13
FGCBPCYY1C1.31	1.31	16	2.5	17
FGCBPCYY1C2.08	2.08	14	3	25
FGCBPCYY1C3.31	3.31	12	3.4	37
FGCBPCYY1C5.26	5.26	10	4.2	56
FGCBPCYY1C8.37	8.37	8	5.6	97

# Svarn Aero Twisted Two Core Cables 600 Volts

**Svarn Aero Twisted Two Core Cables** are designed for wiring between components, instruments, hook up signal wire and electrical equipment. They are vastly used in aircrafts, computers, military vehicles, military equipment, military electronics, helicopters, satellites, ships, mass transit and automobiles.



### CABLE STRUCTURE

- Annealed tinned copper conductor/ Silver coated copper/ Nickel Coated copper.
- Radiation cross linked specially formulated polyalkene insulation.

### TECHNICAL DATA

- Nominal voltage: 600 to 1000 volts
- Temperature range: -65°C to +150°C
- Tensile strength: 28N/mm<sup>2</sup>
- As per Def. Stan 61/12 Part 18

### FEATURES

- UV resistant
- Sunlight resistant
- Flame & fire retardant FT2
- Heat & moisture resistant
- Suitable for direct burial/ underground installation
- Oil/ chemical resistant
- Resistant to soldering iron & overload
- High flexibility
- Low smoke emission
- High flame resistant
- RoHS compliant

### STANDARD

- As per Def. Stan 61/12 Part 18
- MIL-W-81044, MIL-C-27500, MIL-C-7078, MIL-W-16878, MIL-W-22759, MIL-STD-104, MIL-STD-1916
- VG 95218 Parts 20, 21, 22, 23 AND 1000
- MSV34401
- BS 4066
- TDE 74/P/74 and TDE 75/R/6
- S424 14751
- NFC 32070
- NES 714, NES 715
- ASTM E 595
- NEMA WC 27500

PART NUMBER	NOMINAL CROSS SECTIONAL AREA (Sq.mm)	SIZE OF WIRE (AWG)	MINIMUM OVERALL DIA (mm)	NOMINAL WEIGHT (kg/km)
FGCBPCYY2C0.013	0.051	30	1.4	2.4
FGCBPCYY2C0.2	0.08	28	1.6	3.2
FGCBPCYY2C0.013	0.13	26	1.8	4.5
FGCBPCYY2C0.2	0.2	24	2.1	6.8
FGCBPCYY2C0.33	0.33	22	2.45	10
FGCBPCYY2C0.52	0.52	20	2.85	15
FGCBPCYY2C0.82	0.82	18	3.34	22.4
FGCBPCYY2C1.31	1.31	16	3.7	28.5
FGCBPCYY2C2.08	2.08	14	4.6	44.6
FGCBPCYY2C3.31	3.31	12	5.6	70

## Svarn Aero Single Core Shielded Cables 600 Volts

**Svarn Aero Single Core Shielded Cables** are designed for wiring between components, instruments and electrical equipment. They are vastly used in aircrafts, computers, military vehicles, military equipment, military electronics, helicopters, satellites, ships, mass transit and automobiles.



### CABLE STRUCTURE

- Annealed tinned copper conductor/ Silver coated copper/ Nickel coated copper
- Radiation cross linked specially formulated polyalkene insulation
- Annealed tinned copper shielding
- Radiation cross linked improved PVDF outer sheath

### TECHNICAL DATA

- Nominal voltage: 600 to 1000 volts
- Temperature range: -65°C to +150°C
- Tensile strength: 28N/mm<sup>2</sup>

### FEATURES

- UV resistant
- Sunlight resistant
- Flame & fire retardant FT2
- Heat & moisture Resistant
- Suitable for direct burial/ underground installation
- High chemical resistance to acids, lubricants, missile fuel etc.
- Resistant to soldering iron & overload
- High flexibility
- Low smoke emission & high flame resistant
- RoHS compliant

### STANDARD

- As per Def. Stan 61/12 Part 18
- MIL-W-81044, MIL-C-27500, MIL-C-7078, MIL-W-16878, MIL-W-22759, MIL-STD-104, MIL-STD-1916
- VG 95218 Parts 20, 21, 22, 23 AND 1000
- MSV34401
- BS 4066
- TDE 74/P/74 and TDE 75/R/6
- S424 14751
- NFC 32070
- NES 714, NES 715
- ASTM E 595
- NEMA WC 27500

PART NUMBER	NOMINAL CROSS SECTIONAL AREA (Sq.mm)	SIZE OF WIRE (AWG)	MINIMUM OVERALL DIA (mm)	NOMINAL WEIGHT (kg/km)
FGCBPCYISC0.051	0.051	30	1.2	5.0
FGCBPCYISC0.08	0.08	28	1.3	5.6
FGCBPCYISC0.013	0.13	26	1.4	6.64
FGCBPCYISC0.2	0.2	24	1.65	8.4
FGCBPCYISC0.33	0.33	22	1.90	10.5
FGCBPCYISC0.52	0.52	20	2.00	14.5
FGCBPCYISC0.82	0.82	18	2.40	20.4
FGCBPCYISC1.31	1.31	16	2.64	24.2
FGCBPCYISC2.08	2.08	14	3.00	33.8
FGCBPCYISC3.31	3.31	12	3.5	47.5



## Svarn Aero Double Insulated Screened Single Core Cables — 600 to 1000 Volts

**Svarn Aero Double Insulated Screened Single Core Cables** are designed for wiring between components, instruments and electrical equipment. They are vastly used in aircrafts, computers, military vehicles, military equipment, ships, mass transit, offshore platforms and automobiles.



### CABLE STRUCTURE

- Annealed tinned copper conductor/ Silver coated copper/ Nickel Coated copper
- Radiation cross linked specially formulated polyalkene insulation.
- Second layer of insulation of cross linked improved PVDF
- Annealed tinned copper shielding
- Radiation cross linked improved PVDF outer sheath

### TECHNICAL DATA

- Nominal voltage: 600 to 1000 volts
- Temperature range: -65°C to +150°C
- Tensile strength: 28N/mm<sup>2</sup>

### FEATURES

- UV resistant
- Sunlight resistant
- Flame & fire retardant FT2
- Heat & moisture Resistant
- Suitable for direct burial/ underground installation
- High chemical resistance to acids, lubricants, missile fuel etc
- Resistant to soldering iron & overload
- High flexibility
- Low smoke emission & high flame resistant
- RoHS compliant

### STANDARD

- As per Def. Stan 61/12 Part 18
- MIL-W-81044, MIL-C-27500, MIL-C-7078, MIL-W-16878, MIL-W-22759, MIL-STD-104, MIL-STD-1916
- VG 95218 Parts 20, 21, 22, 23 AND 1000
- MSV34401
- BS 4066
- TDE 74/P/74 and TDE 75/R/6
- S424 14751
- NFC 32070
- NES 714, NES 715
- ASTM E 595
- NEMA WC 27500

### Svarn Aero Double Insulated Screened Single Core Cables – 600 Volts

PART NUMBER	NOMINAL CROSS SECTIONAL AREA (Sq.mm)	SIZE OF WIRE (AWG)	MINIMUM OVERALL DIA (mm)	NOMINAL WEIGHT (kg/km)
FGCBPCYYSC0.2	0.2	24	2.1	11.5
FGCBPCYYSC0.33	0.33	22	2.45	15.2
FGCBPCYYSC0.52	0.52	20	2.6	18.9
FGCBPCYYSC0.82	0.82	18	2.8	23.9
FGCBPCYYSC1.31	1.31	16	3.0	27.9
FGCBPCYYSC2.08	2.08	14	3.5	38.50
FGCBPCYYSC3.31	3.31	12	4.1	52.1

### Svarn Aero Double Insulated Screened Single Core Cables – 1000 Volts

PART NUMBER	NOMINAL CROSS SECTIONAL AREA (Sq.mm)	SIZE OF WIRE (AWG)	MINIMUM OVERALL DIA (mm)	NOMINAL WEIGHT (kg/km)
FGCBPCYYSC0.08	0.08	28	1.6	5.4
FGCBPCYYSC0.013	0.13	26	1.65	6.6
FGCBPCYYSC0.2	0.2	24	1.9	9.4
FGCBPCYYSC0.33	0.33	22	2.1	12.1
FGCBPCYYSC0.52	0.52	20	2.4	17.2
FGCBPCYYSC0.82	0.82	18	2.8	22.4
FGCBPCYYSC1.31	1.31	16	3	26.4
FGCBPCYYSC2.08	2.08	14	3.4	35.9
FGCBPCYYSC3.31	3.31	12	3.9	49.2

## Svarn Aero Two Core Shielded Cables 600 Volts

**Svarn Aero Two Core Shielded Cables** are designed for wiring between components, instruments and electrical equipment. They are vastly used in aircrafts, computers, military vehicles, military equipment, military electronics, helicopters, satellites, ships, mass transit and automobiles.



### CABLE STRUCTURE

- Annealed tinned copper conductor/ Silver coated copper/ Nickel Coated copper
- Radiation cross linked specially formulated polyalkene insulation
- Annealed tinned copper shielding
- Radiation cross linked improved PVDF outer sheath

### TECHNICAL DATA

- Nominal voltage: 600 volts
- Temperature range: -65°C to +150°C
- Tensile strength: 28N/mm<sup>2</sup>
- As per Def. Stan 61/12 Part 18

### FEATURES

- UV resistant
- Sunlight resistant
- Flame & fire retardant FT2
- Heat & moisture Resistant
- Suitable for direct burial/ underground installation
- High chemical resistance to acids, lubricants, missile fuel etc.
- Resistant to soldering iron & overload
- High flexibility
- Low smoke emission & high flame resistant
- RoHS compliant

### STANDARD

- As per Def. Stan 61/12 Part 18
- MIL-W-81044, MIL-C-27500, MIL-C-7078, MIL-W-16878, MIL-W-22759, MIL-STD-104, MIL-STD-1916
- VG 95218 Parts 20, 21, 22, 23 AND 1000
- MSV34401
- BS 4066
- TDE 74/P/74 and TDE 75/R/6
- S424 14751
- NFC 32070
- NES 714, NES 715
- ASTM E 595
- NEMA WC 27500

PART NUMBER	NOMINAL CROSS SECTIONAL AREA (Sq.mm)	SIZE OF WIRE (AWG)	MINIMUM OVERALL DIA (mm)	NOMINAL WEIGHT (kg/km)
FGCBPCYY2C0.2	0.2	24	2.1	11.5
FGCBPCYY2C0.33	0.33	22	2.45	15.2
FGCBPCYY2C0.52	0.52	20	2.6	18.9
FGCBPCYY2C0.82	0.82	18	2.8	23.9
FGCBPCYY2C1.31	1.31	16	3.0	27.9
FGCBPCYY2C2.08	2.08	14	3.5	38.50
FGCBPCYY2C3.31	3.31	12	4.1	52.1

## Svarn Aero Two Core Shielded Cables 600 Volts

**Svarn Aero Two Core Shielded Cables** are designed for wiring between components, instruments and electrical equipment. They are vastly used in aircrafts, computers, military vehicles, military equipment, military electronics, helicopters, satellites, ships, mass transit and automobiles.



### CABLE STRUCTURE

- Annealed tinned copper conductor/ Silver coated copper/ Nickel coated copper
- Radiation cross linked specially formulated ETFE

### TECHNICAL DATA

- Nominal voltage: 600 volts
- Temperature range: -65°C to +200°C
- Tensile strength: 28N/mm<sup>2</sup>
- As per Def. Stan 61/12 Part 33

### FEATURES

- UV resistant
- Sunlight resistant
- Flame & fire retardant FT2
- Heat & moisture resistant
- Suitable for direct burial/ underground installation
- High chemical resistance to acids, lubricants, missile fuel etc.
- Resistant to soldering iron & overload
- High flexibility
- Low smoke emission & high flame resistant
- RoHS compliant

### STANDARD

- SAE AS227759/32-35 and /41 to /46
- NEMA WC-27500 (Cables)
- Def-stan 61-12 Part 33 Issue 5
- VDE 9426, 9427, 9428
- British standard 3G233
- Boeing BMS 13-48
- Airbus ABS 0820 to 0826
- ASTM D150

PART NUMBER	NOMINAL CROSS SECTIONAL AREA (Sq.mm)	SIZE OF WIRE (AWG)	MINIMUM OVERALL DIA (mm)	NOMINAL WEIGHT (kg/km)
FGCBPCYY1C0.051	0.051	30	0.65	1.1
FGCBPCYY1C0.08	0.08	28	0.71	1.5
FGCBPCYY1C0.13	0.13	26	0.97	3.0
FGCBPCYY1C0.2	0.2	24	1.12	4.4
FGCBPCYY1C0.33	0.33	22	1.30	6.6
FGCBPCYY1C0.52	0.52	20	1.55	9.9
FGCBPCYY1C0.82	0.82	18	1.76	12.6
FGCBPCYY1C1.31	1.31	16	2.23	19.5
FGCBPCYY1C2.08	2.08	14	2.66	29.7
FGCBPCYY1C3.31	3.31	12	3.3	47.5
FGCBPCYY1C5.26	5.26	10	4.8	47.5
FGCBPCYY1C8.38	5.26	10	4.8	87.8

# Svarn Aero Two Core ETFE Insulated Cables 600 Volts

**Svarn Aero Two Core ETFE Insulated Cables** are designed for wiring between components, instruments and electrical equipment. They are vastly used in aircrafts, computers, military vehicles, military equipment, military electronics, helicopters, satellites, ships, mass transit and automobiles.



### CABLE STRUCTURE

- Annealed tinned copper conductor/ Silver coated copper/ Nickel Coated copper
- Radiation cross linked specially formulated ETFE

### TECHNICAL DATA

- Nominal voltage: 600 volts
- Temperature range: -65°C to +200°C

### FEATURES

- UV resistant
- Sunlight resistant
- Flame & fire retardant FT2
- Heat & moisture Resistant
- Suitable for direct burial/ underground installation
- High chemical resistance to acids, lubricants, missile fuel etc.
- Resistant to soldering iron & overload
- High flexibility
- Low smoke emission & high flame resistant
- RoHS compliant

### STANDARD

- SAE AS227759/32-35 and /41 to /46
- NEMA WC-27500 (Cables)
- Def-stan 61-12 Part 33 Issue 5
- VDE 9426, 9427, 9428
- British standard 3G233
- Boeing BMS 13-48
- Airbus ABS 0820 to 0826
- ASTM D150

PART NUMBER	NOMINAL CROSS SECTIONAL AREA (Sq.mm)	SIZE OF WIRE (AWG)	MINIMUM OVERALL DIA (mm)	NOMINAL WEIGHT (kg/km)
FGCBPCYY2C0.013	0.051	30	1.4	2.4
FGCBPCYY2C0.2	0.08	28	1.6	3.2
FGCBPCYY2C0.013	0.13	26	1.8	4.5
FGCBPCYY2C0.2	0.2	24	2.1	6.8
FGCBPCYY2C0.33	0.33	22	2.45	10
FGCBPCYY2C0.52	0.52	20	2.85	15
FGCBPCYY2C0.82	0.82	18	3.34	22.4
FGCBPCYY2C1.31	1.31	16	3.7	28.5
FGCBPCYY2C2.08	2.08	14	4.6	44.6
FGCBPCYY2C3.31	3.31	12	5.6	70

## Svarn Aero Single Core Unsheathed Cables 600 Volts

**Svarn Aero Single Core Unsheathed Cables** are designed for wiring between components, instruments and electrical equipment. They are vastly used in aircrafts, computers, military vehicles, military equipment, military electronics, helicopters, satellites, ships, mass transit and automobiles.



### CABLE STRUCTURE

- Annealed tinned copper conductor/ Silver coated copper/ Nickel coated copper
- Radiation cross linked specially formulated ETFE

### TECHNICAL DATA

- Nominal voltage: 600 volts
- Temperature range: -65°C to +200°C
- Tensile strength: 28N/mm<sup>2</sup>
- As per Def. Stan 61/12 Part 33

### FEATURES

- UV resistant
- Sunlight resistant
- Flame & fire retardant FT2
- Heat & moisture resistant
- Suitable for direct burial/ underground installation
- High chemical resistance to acids, lubricants, missile fuel etc.
- Resistant to soldering iron & overload
- High flexibility
- Low smoke emission & high flame resistant
- RoHS compliant

### STANDARD

- SAE AS227759/32-35 and /41 to /46
- NEMA WC-27500 (Cables)
- Def-stan 61-12 Part 33 Issue 5
- VDE 9426, 9427, 9428
- British standard 3G233
- Boeing BMS 13-48
- Airbus ABS 0820 to 0826
- ASTM D150

PART NUMBER	NOMINAL CROSS SECTIONAL AREA (Sq.mm)	SIZE OF WIRE (AWG)	MINIMUM OVERALL DIA (mm)	NOMINAL WEIGHT (kg/km)
FGCBPCYY1C0.051	0.051	30	0.65	1.1
FGCBPCYY1C0.08	0.08	28	0.71	1.5
FGCBPCYY1C0.13	0.13	26	0.84	3.0
FGCBPCYY1C0.2	0.2	24	0.97	4.4
FGCBPCYY1C0.33	0.33	22	1.12	6.6
FGCBPCYY1C0.52	0.52	20	1.30	9.9
FGCBPCYY1C0.82	0.82	18	1.55	12.6
FGCBPCYY1C1.31	1.31	16	1.76	19.5
FGCBPCYY1C2.08	2.08	14	2.23	29.7
FGCBPCYY1C3.31	3.31	12	2.66	47.5
FGCBPCYY1C5.26	5.26	10	3.3	47.5
FGCBPCYY1C8.38	8.38	10	4.8	87.8

## Svarn Aero Multi-core Sheathed Cables 600 Volts

**Svarn Aero Multi-core Sheathed Cables** are designed for wiring between components, instruments and electrical equipment. They are vastly used in aircraft, computers, military vehicles, military equipment, military electronics, helicopters, satellites, ships, mass transit and automobiles.



### CABLE STRUCTURE

- Annealed tinned copper conductor/ Silver coated copper/ Nickel Coated copper
- Radiation cross linked specially formulated ETFE insulation
- Radiation cross linked specially formulated ETFE outer sheath

### FEATURES

- UV resistant
- Sunlight resistant
- Flame & fire retardant FT2
- Heat & moisture Resistant
- Suitable for direct burial/ underground installation
- High chemical resistance to acids, lubricants, missile fuel etc.
- Resistant to soldering iron & overload
- High flexibility
- Low smoke emission & high flame resistant
- RoHS compliant

### STANDARD

- SAE AS227759/32-35 and /41 to /46
- NEMA WC-27500(Cables)
- Def-stan 61-12 Part 33 Issue 5
- VDE 9426, 9427, 9428
- British standard 3G233
- Boeing BMS 13-48
- Airbus ABS 0820 to 0826
- ASTM D150

### TECHNICAL DATA

- Nominal voltage: 600 volts
- Temperature range: -65°C to +150°C

PART NUMBER	NUMBER OF CORES	NOMINAL CROSS SECTIONAL AREA (Sq.mm)	SIZE OF WIRE (AWG)	MINIMUM OVERALL DIA (mm)	NOMINAL WEIGHT (kg/km)
FGCBPCYY2C0.52	2	0.52	20	3.8	12.8
FGCBPCYY4C0.33	4	0.33	22	3.8	25.9
FGCBPCYY5C0.52	5	0.52	20	4.7	26.3
FGCBPCYY9C0.33	9	0.33	22	5.5	51.9

## Svarn Aero Single Core Shielded Cables 600 Volts

**Svarn Aero Single Core Shielded Cables** are designed for wiring between components, instruments and electrical equipment. They are vastly used in aircrafts, computers, military vehicles, military equipment, military electronics, helicopters, satellites, ships, mass transit and automobiles.



### CABLE STRUCTURE

- Annealed tinned copper conductor/ Silver coated copper/ Nickel Coated copper
- Radiation cross linked specially formulated ETFE insulation
- Annealed tinned copper shielding
- Radiation cross linked specially formulated ETFE outer sheath

### FEATURES

- UV resistant
- Sunlight resistant
- Flame & fire retardant FT2
- Heat & moisture resistant
- Suitable for direct burial/ underground installation
- High chemical resistance to acids, lubricants, missile fuel, etc
- Resistant to soldering iron & overload
- High flexibility
- Low smoke emission & high flame resistant
- RoHS compliant

### STANDARD

- SAE AS227759/32-35 and /41 to /46
- NEMA -WC-27500(Cables)
- Def-stan 61-12 Part 33 Issue 5
- VDE 9426, 9427, 9428
- British standard 3G233
- Boeing BMS 13-48
- Airbus ABS 0820 to 0826
- ASTM D150

### TECHNICAL DATA

- Nominal voltage: 600 to 1000 volts
- Temperature range: -65°C to +150°C
- Tensile strength: 28N/mm<sup>2</sup>

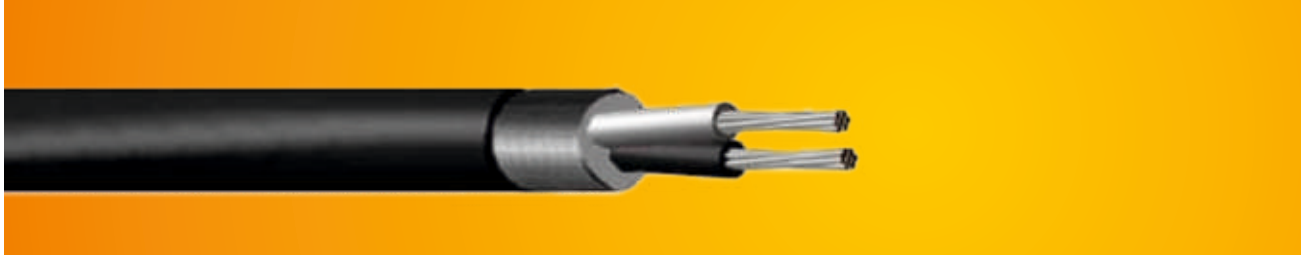
PART NUMBER	NOMINAL CROSS SECTIONAL AREA (Sq.mm)	SIZE OF WIRE (AWG)	MINIMUM OVERALL DIA (mm)	NOMINAL WEIGHT (kg/km)
FGCBPCYISC0.051	0.051	30	1.56	5.1
FGCBPCYISC0.08	0.08	28	.64	5.85
FGCBPCYISC0.013	0.13	26	1.75	6.90
FGCBPCYISC0.2	0.2	24	1.88	8.24
FGCBPCYISC0.33	0.33	22	2.03	10.32
FGCBPCYISC0.52	0.52	20	2.25	13.45
FGCBPCYISC0.82	0.82	18	2.50	17.90
FGCBPCYISC1.31	1.31	16	2.71	21.78
FGCBPCYISC2.08	2.08	14	3.15	30.41
FGCBPCYISC1.31	3.31	12	3.60	42.49
FGCBPCYISC2.08	5.26	10	4.25	62.70
FGCBPCYISC3.31	8.37	8	5.85	110.47



# Svarn Aero Two Core Shielded Cables

## 600 Volts

**Svarn Aero Two Core Shielded Cables** are designed for wiring between components, instruments and electrical equipment. They are vastly used in aircrafts, computers, military vehicles, military equipment, military electronics, helicopters, satellites, ships, mass transit and automobiles.



### CABLE STRUCTURE

- Annealed tinned copper conductor/ Silver coated copper/ Nickel Coated copper
- Radiation cross linked specially formulated polyalkene insulation
- Annealed tinned copper shielding
- Radiation cross linked improved PVDF outer sheath

### FEATURES

- UV resistant
- Sunlight resistant
- Flame & fire retardant FT2
- Heat & moisture resistant
- Suitable for direct burial/ underground installation
- High chemical resistance to acids, lubricants, missile fuel etc.
- Resistant to soldering iron & overload
- High flexibility
- Low smoke emission & high flame resistant
- RoHS compliant

### STANDARD

- SAE AS227759/32-35 and /41 to /46
- NEMA WC-27500 (Cables)
- Def-stan 61-12 Part 33 Issue 5
- VDE 9426, 9427, 9428
- British standard 3G233
- Boeing BMS 13-48
- Airbus ABS 0820 to 0826
- ASTM D150

### TECHNICAL DATA

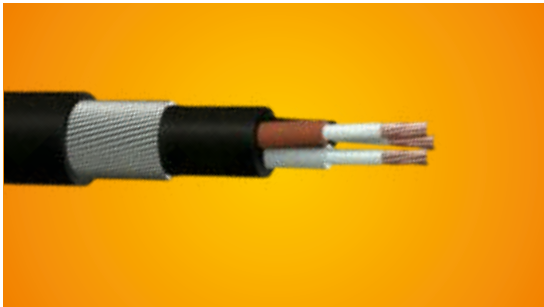
- Nominal voltage: 600 volts
- Temperature range: -65°C to +150°C

PART NUMBER	NOMINAL CROSS SECTIONAL AREA (Sq.mm)	SIZE OF WIRE (AWG)	MINIMUM OVERALL DIA (mm)	NOMINAL WEIGHT (kg/km)
FGCBPCYY2C0.051	0.051	30	2.16	8.05
FGCBPCYY2C0.08	0.08	28	2.31	9.39
FGCBPCYY2C0.013	0.13	26	2.57	11.77
FGCBPCYY2C0.2	0.2	24	2.84	14.6
FGCBPCYY2C0.33	0.33	22	2.11	18.17
FGCBPCYY2C0.52	0.52	20	3.54	24.12
FGCBPCYY2C0.82	0.82	18	4.14	32.62
FGCBPCYY2C1.31	1.31	16	4.47	39.75
FGCBPCYY2C2.08	2.08	14	5.34	57.15
FGCBPCYY2C3.31	3.31	12	6.34	82
FGCBPCYY2C5.26	5.26	10	7.44	123.65
FGCBPCYY2C8.37	8.37	8	10.64	226.17

# COMPREHENSIVE CABLING SOLUTIONS FOR DEFENCE AIRCRAFT APPLICATIONS

## CONTROL CABLES

Svarn flexible shielded cables, ranging from 2 to 100 cores, efficiently transport energy, ranging from 300 volts to 1kV, along with low-frequency signals essential for controlling motor drives or generators. These cables play a crucial role in tasks such as breaking, positioning, or optimising rotor RPMs. Special sheathing is available for ultra-low temperatures, while smaller cables are halogen-free. Our torsion- and oil-resistant cables are designed to last for 20 years and more.

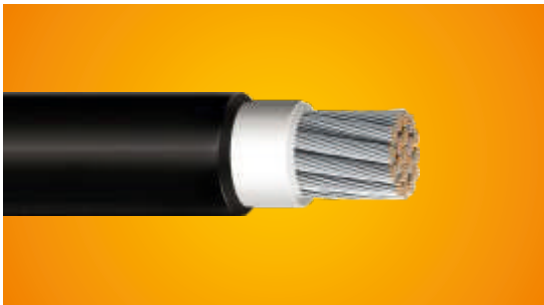
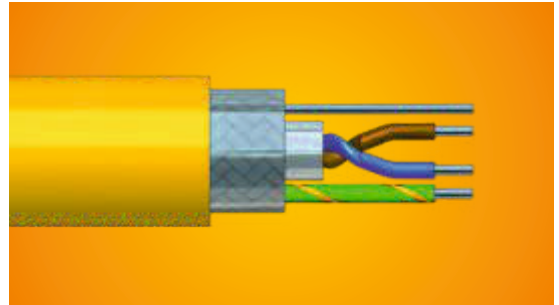


## FIRE RESISTANT CABLES

Ensuring continuous functionality during emergencies is critical in any projects. Svarn leads in fire-resistant cable technology, crafting control and power cables specifically for safety systems like emergency lighting, fire detection, and door-opening mechanisms. These cables maintain electrical circuit integrity for a defined duration post-fire, enhancing safety for both personnel and the plant itself. Svarn's fire-resistant cables are instrumental in safeguarding lives and infrastructure within defence facilities.

## FIELDBUS, COAXIAL CABLES

Can Bus or Profibus cables ensure precise control over functions such as motor operation, rudder adjustment, and hydraulic systems with their fixed impedance and accurate digital signal transmission. Coaxial cables handle high-frequency data transmission for communication equipment, and instrumentation onboard, while also delivering video signals for surveillance cameras.



## LOW-VOLTAGE 120°C FLEXIBLE CABLES WITH EMC

Svarn manufactures LV silicone cables designed specifically for military applications, and ideal for connecting generators to transformers. These cables are engineered to withstand extreme heat up to 120°C and are available in a Low-Smoke Zero-Halogen (LSZH) version for added safety.

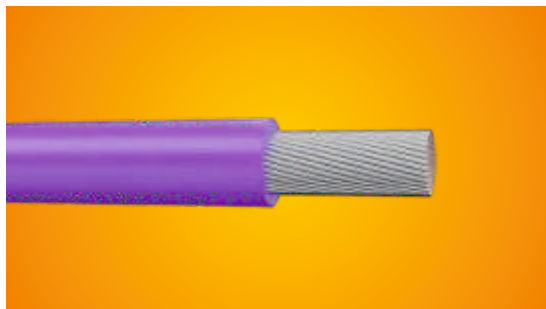
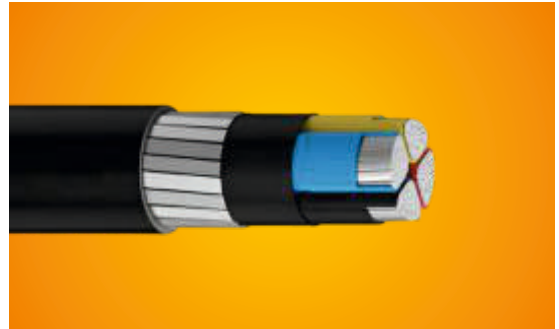
## FIBER-OPTIC CABLES

To ensure high data transmission capacity for monitoring and control, Svarn's rugged, halogen-free fibre-optic cables offer Electromagnetic Compatibility (EMC) in energy-dense areas. They are very flexible and can handle high torsion. Large cores (200 microns) make connectivity easier.



## POWER & CONTROL CABLES

Svarn unarmoured power and control cables are used for wiring fixed installations not subject to mechanical risks, while armoured cables are recommended for areas where enhanced mechanical protection and electrical screening (Electromagnetic Compatibility) are required. The highly flexible range of cables is recommended for installations and connections in narrow spaces where an optimal bending radius is required. The sectoral conductors of multicore cables provide further space and weight savings on the cable trays.

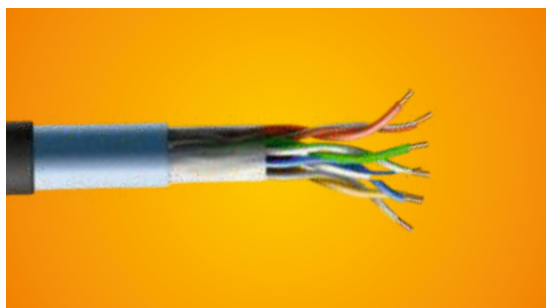


## LOW-VOLTAGE LOOP RUBBER CABLES

These cables (up to 1kV) reliably transmit energy produced in the generator to the transformer. They come in Low-Smoke Zero-Halogen (LSZH) versions and are also oil, abrasion, UV and ozone-resistant. Before supply, Svarn rigorously tests these cables for lifetime durability, adhering to strict movement and torsion standards.

## LOW-VOLTAGE FIXED INSTALLATION CABLES

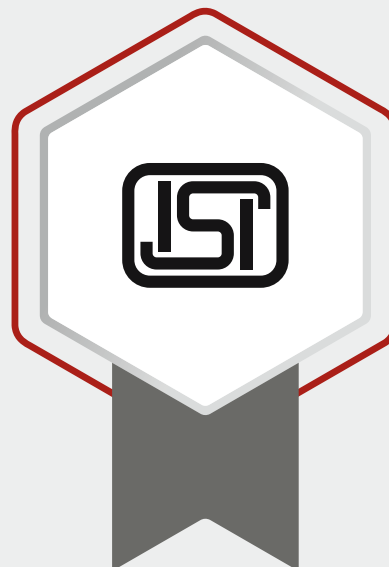
Svarn LV aluminum cables, whether single or multicore, offer EMC screening. Compared to copper, aluminum single cores are larger yet weigh half as much, making them cost-effective and easier to handle during installation.



## ELECTRONIC AND DATA TRANSMISSION CABLES

Thermoplastic Modified (TPM) 2 to 5-core sensor multicore and multipair cables measure water speed, temperatures, and performance parameters, while 2-core Fieldbus cables are used in parallel with energy cables to digitally control all electronic and mechanical devices. 2-core Profibus cables deliver up to 12 Mbit/s for complex control services; and data transmission Cat cables (Cat 6, Cat 6e, Cat 7) offer industrial ethernet speed. Increasingly, all cables are shielded for EMC protection in defence application.

# QUALITY PAR EXCELLENCE







# SVARN GROUP

Inspired by possibilities



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### CORPORATE OFFICE

Plot No. 1, Site No. 1, 14/3, Mathura Road,  
Faridabad - 121003, Haryana

### WORKS

**Haryana**  
74th Milestone, Delhi-Mathura Road,  
Hodal Toll Plaza, Distt. Palwal-121005

### Rajasthan

Plot No. SP5 - 249, 250, RIICO Industrial Area,  
Ghiloth, Neemrana, Alwar - 301705

### Maharashtra

Gat No. 153/1/1, Village Ambethan, Taluka Khed  
(near Dwarka School), Pune - 410501

### Uttarakhand

Plot No. 68, 69, 71, 72 & 73, Sector-5, IIE,  
Sidcul, Haridwar-249403

## ASIA

### SINGAPORE

SVARN PTE. LTD.: 7 Temasek Boulevard, #12-07,  
Suntec Tower One, Downtown Core, 038987, Singapore

### THAILAND

SVARN INFRA (THAILAND) CO LTD: 3656/50,  
Green Tower Building, Floor 16th, Rama 4 Road,  
Klongton Subdistrict, Klongton District, Bangkok 10110

### INDONESIA

PT SVARN GROUP INDONESIA: Innovation Center,  
Jababeka Industrial Estate 6, Jl. Samsung,  
Block A 3A, Cikarang Utara 17530

### VIETNAM

SVARN GROUP LLC: 12B Floor, Cienco 4 Building,  
180 Nguyen Thi Minh Khai, Vo Thi Sau Ward,  
District 3, Ho Chi Minh City, Vietnam

Contact: Paresh Gupta

M: +91 98107 94010 | E: paresh@svarn.com

## MIDDLE EAST

### DUBAI

SVARN MIDDLE EAST DWC-LLC  
O465, Floor C4, Office Park,  
Dubai South, UAE

Contact: J.K. Mishra

M: +971 50118 7209

E: jkmishra@svarn.com