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Driving tomorrow's technologies today

CABLES FOR ICE VEHICLE APPLICATIONS

SVARN GROUP

TELECOM | AUTOMOTIVE | DEFENCE | RAILWAYS | POWER | PROJECTS

SVARN CABLES FOR ICE VEHICLE APPLICATIONS

Keeping pace with the ever-evolving automotive world

With over 4,000 meters of cables powering its functions, cables are indispensable in today's automobiles. Furthermore, considering the rigorous conditions they endure, including extreme temperatures and constant use, the quality of their construction becomes even more significant.

At Svarn, our nearly two-decade-long expertise positions us as cable specialists. Since 2005, we've been manufacturing cables, initially to support India's telecom industry. Within a decade, Svarn rose to prominence in the telecom cable market, credited to our superior quality and extensive product lineup.

Today, Svarn offers a comprehensive range of cables catering to various industries, including automotive, railways, defence, and renewables. Equipped with multiple production facilities, cutting-edge machinery, efficient processes, and a skilled workforce, we're ready to meet the automotive industry's evolving needs.

Upholding stringent quality standards is ingrained in our ethos. Every Svarn cable is meticulously crafted to meet country-specific or industry-mandated standards, ensuring compliance with international regulations and environmental sustainability, aligning with the automotive sector's commitment to eco-friendly practices.

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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

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AUTOMOTIVE CABLES (Type FLRY-B)

Svarn specializes in manufacturing of thin wall PVC insulated Class-B cables, widely used in all automotive wiring harnesses. These cables are popularly known as FLRY-B in industries. These cable can therefore operate under extreme conditions like electric, mechanical, chemical, fire condition. and also offer very high flexibility.

TECHNICAL DATA

- Cable Type : FLRY-B Thin wall (ISO 6722 Class B)
- Reference Specification : ISO 6722-1:2011(E)
- Conductor Material : Soft Annealed Electrolytic Copper (Cu Purity - > 99.97 %; Conductivity - >101%)
- Insulation Material : HR PVC (Lead Free)
- Voltage Rating : 60 V DC
- Temperature Range : -40°c to +105°c
- Special properties : Long Term Heat Ageing at 3000 Hrs.
- Cable Range : 0.13 to 50.00 mm2
- Product Safety : RoHS & REACH compliance

FEATURES

- Withstand Voltage Test (1 KV for 30 Min.)
- Pressure Test at High Temperature as per ISO 6722
- Low Temperature Winding at –40°C
- Low Temperature Impact at –15°C
- High Abrasion Resistance as per ISO 6722
- Short & Long Term Ageing as per ISO 6722
- Thermal over load ageing
- Heat shrinkage as per ISO 6722
- Highly resistive to chemical fluids as per ISO 6722
- Temperature and Humidity Cycling as per ISO 6722
- Resistance to Hot Water (85°C, 35 Days, 48 V DC)

0.50 SQMM Class-B
50.00 SQMM Class-B

APPLICATION:

- Thin wall low voltage cables are widely used in modern new generation compact automobile wiring harnesses.
- Thick Wall cables are used at 600V battery cable application.

PACKING:

- In coil or bobbin form

COLOR:

- Cables are available in various single & dual stripe color as per customer requirement.

Conductor				Insulated Cable				
Cross section area	No./Strand Diameter (Max.)	Bunch Diameter (Max.)	Resistance @ 20°c (Max.)	Insulation Thickness (Min)	Overall Diameter		Current Carrying Capacity*	Weight Approx.
mm^2	mm	mm	Ω/km	mm	mm (min)	mm (max)	Amp	kg/km
0.13	7/0.16	0.55	136.00	0.20	0.95	1.05	6	2.3
0.22	7/0.21	0.70	84.80	0.20	1.10	1.20	9	3.2
0.35	12/0.21	0.90	54.40	0.20	1.20	1.40	12	4.5
0.50	16/0.21	1.10	37.10	0.22	1.40	1.60	14	6.0
0.75	24/0.21	1.30	24.70	0.24	1.70	1.90	20	8.8
1.00	32/0.21	1.50	18.50	0.24	1.90	2.10	24	11.3
1.50	30/0.26	1.80	12.70	0.24	2.20	2.40	30	16.0
2.50	50/0.26	2.20	7.60	0.28	2.70	3.00	42	26.0
4.00	56/0.31	2.80	4.71	0.32	3.40	3.70	58	41.3
6.00	84/0.31	3.40	3.14	0.32	4.00	4.30	75	60.0
10.00	80/0.41	4.50	1.82	0.48	5.30	6.00	108	106
16.00	126/0.41	5.80	1.16	0.52	6.40	7.20	143	166
25.00	196/0.41	7.20	0.743	0.52	7.90	8.70	189	252
35.00	276/0.41	8.50	0.527	0.64	9.40	10.40	233	355
50.00	396/0.41	10.50	0.368	0.71	11.00	12.20	289	502

- SIPL also manufacture Thick and Ultra thin wall type of automotive cable with symmetrical & asymmetrical conductor construction.
- * At 40°c ambient temperature.
- SIPL also manufacture up to 120 sqmm size of cable.

AUTOMOTIVE CABLES (Type T3)

Svarn is specialized in manufacturing of PVC insulated Class-C (T3) cable with specially formulated PVC compound. These cable are manufactured with 99.9% pure annealed copper. Class-C cable offer very good electrical & mechanical properties. These cables therefore operate under various extreme conditions like.

0.50 SQMM Class-C
50.00 SQMM Class-C

TECHNICAL DATA

- Cable Type : FLRY-C Thin wall (ISO 6722 Class C)
- Reference Specification : ISO 6722-1:2011(E)
- Conductor Material : Soft Annealed Electrolytic Copper (Cu Purity - > 99.97 %; Conductivity - >101%)
- Insulation Material : Specially formulated HR PVC (Lead Free)
- Voltage Rating : 60V DC
- Temperature Range : -40°c to +125°C
- Special properties : Long Term Heat Ageing at 3000 Hrs.
- Cable Range : 0.13 to 50.00 mm2
- Product Safety : RoHS & REACH compliance

FEATURES

- Withstand Voltage Test (1 KV for 30 Min.)
- Pressure Test at High Temperature as per ISO 6722
- Low Temperature Winding at –40°C
- Low Temperature Impact at –15°C
- High Abrasion Resistance as per ISO 6722
- Short & Long Term Ageing as per ISO 6722.
- Thermal over load ageing,
- Heat shrinkage as per ISO 6722
- Highly resistive to chemical fluids as per ISO 6722
- Temperature and Humidity Cycling as per ISO 6722
- Resistance to Hot Water (85°C, 35 Days, 48V DC)

APPLICATION:

- Thin wall low voltage cables are widely used in modern new generation compact automotive wiring harnesses.
- Flexible thin/thick wall battery cable used for battery wire connection.

PACKING:

- In coil or bobbin form

COLOR:

- Cables are available in various single & dual stripe color as per customer requirement.

Conductor				Insulated Cable				
Cross section area	No./Strand Diameter (Max.)	Bunch Diameter (Max.)	Resistance @ 20°c (Max.)	Insulation Thickness (Min)	Overall Diameter		Current Carrying Capacity*	Weight Approx.
mm²	mm	mm	Ω/km	mm	mm (min)	mm (max)	Amp	kg/km
0.13	7/0.16	0.55	136.00	0.20	0.95	1.05	7	2.3
0.22	7/0.21	0.70	84.80	0.20	1.10	1.20	10	3.2
0.35	12/0.21	0.90	54.40	0.20	1.20	1.40	13	4.5
0.50	16/0.21	1.10	37.10	0.22	1.40	1.60	17	6.0
0.75	24/0.21	1.30	24.70	0.24	1.70	1.90	22	8.8
1.00	32/0.21	1.50	18.50	0.24	1.90	2.10	27	11.3
1.50	30/0.26	1.80	12.70	0.24	2.20	2.40	35	16.0
2.50	50/0.26	2.20	7.60	0.28	2.70	3.00	48	26.0
4.00	56/0.31	2.80	4.71	0.32	3.40	3.70	66	41.3
6.00	84/0.31	3.40	3.14	0.32	4.00	4.30	86	60.0
10.00	80/0.41	4.50	1.82	0.48	5.30	6.00	123	106
16.00	126/0.41	5.80	1.16	0.52	6.40	7.20	164	166
25.00	196/0.41	7.20	0.743	0.52	7.90	8.70	216	252
35.00	276/0.41	8.50	0.527	0.64	9.40	10.40	266	355
50.00	396/0.41	10.50	0.368	0.71	11.00	12.20	331	502

- SIPL also manufacture Thick and Ultra thin wall type of automotive cable with symmetrical & asymmetrical conductor construction.
- * At 40°c ambient temperature.
- SIPL also manufacture up to 120 sqmm size of cable.

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AUTOMOTIVE CABLES (Type - AV)

Svarn is specialized in manufacturing of PVC insulated Low Voltage Auto Vinyl (AV) Battery cable. These cable offer good electrical, mechanical and chemical properties during operation. These cables are operate under extreme various weather condition and also offer very high flexibility.

0.50 SQMM AV Cable
50.00 SQMM AV Cable

TECHNICAL DATA

- Cable Type : AV (Auto Vinyl)
- Reference Specification : JIS C 3406:1993
- Conductor Material : Soft Annealed Electrolytic Copper (Cu Purity - > 99.97 %; Conductivity - >101%)
- Insulation Material : HR PVC (Lead Free)
- Voltage Rating : 60 V DC
- Temperature Range : -40°c to +80°c
- Special properties : Heat Ageing at 120 hrs.
- Cable Range : 0.50 to 50.00 mm2
- Product Safety : RoHS & REACH compliance

APPLICATION:

- AV cable offer high heat resistance up to 80° continuous application.
- Low voltage AV cables are widely used in battery cable application.

PACKING:

- In coil or bobbin form

COLOR:

- Cables are available in various single & dual stripe color as per customer requirement.

Conductor				Insulated Cable				
Cross section area	No./Strand Diameter (Max.)	Bunch Diameter (Max.)	Resistance @ 20°c (Max.)	Insulation Thickness (Min)	Overall Diameter		Current Carrying Capacity*	Weight Approx.
mm^2	mm	mm	Ω/km	mm	mm (std)	mm (max)	Amp	kg/km
0.50	7/0.32	1.00	32.70	0.60	2.20	2.40	17	9.4
0.85	11/0.32	1.20	20.80	0.60	2.40	2.60	23	12.6
1.25	16/0.32	1.50	14.30	0.60	2.70	2.90	29	16.2
2.00	26/0.32	1.90	8.81	0.60	3.10	3.40	39	25.6
3.00	41/0.32	2.40	5.59	0.70	3.80	4.10	52	38.8
5.0	65/0.32	3.00	3.52	0.80	4.60	4.90	69	59.3
8.00	50/0.45	3.70	2.32	0.90	5.50	5.80	90	88.4
10.00	63/0.45	4.50	1.84	1.00	6.50	6.90	105	118
15.00	84/0.45	4.80	1.38	1.10	7.00	7.40	125	148
20.00	247/0.32	6.50	0.946	1.10	8.20	8.80	157	218
30.00	361/0.32	7.80	0.647	1.40	10.60	11.30	198	330
40.00	494/0.32	9.10	0.473	1.40	11.40	12.10	238	423
50.00	608/0.32	10.10	0.384	1.60	13.00	13.80	269	---

* At 40°C ambient temperature.

AUTOMOTIVE CABLES (Type - AVS)

Svarn is specialized in manufacturing of PVC insulated Low Voltage Slim Auto Vinyl (AVS) Battery cable. These cable offer high electrical, mechanical and chemical properties during operation. These cables are operate under extreme various weather condition and also offer very high flexibility.

TECHNICAL DATA

- Cable Type : AVS (Auto Vinyl Slim)
- Reference Specification : JASO D 611:2014
- Conductor Material : Soft Annealed Electrolytic Copper (Cu Purity - > 99.97 %; Conductivity - >101%)
- Insulation Material : Plasticized PVC (Lead Free)
- Voltage Rating : 60 V DC
- Temperature Range : -40°c to +80°c
- Special properties : Heat Ageing at 120 hrs.
- Cable Range : 0.30 to 8.00 mm2
- Product Safety : RoHS & REACH compliance

0.50 SQMM AVS Cable

APPLICATION:

- AVS Cable are widely used in all automobile wiring harnesses with continuous heat application @80°C.

PACKING:

- In coil or bobbin form

COLOR:

- Cables are available in various single & dual stripe color as per customer requirement.

Conductor				Insulated Cable				
Cross section area	No./Strand Diameter (Max.)	Bunch Diameter (Max.)	Resistance @ 20°c (Max.)	Insulation Thickness (Min)	Overall Diameter		Current Carrying Capacity*	Weight Approx.
mm^2	mm	mm	Ω/km	mm	mm (std)	mm (max)	Amp	kg/km
0.30	7/0.26	0.80	50.20	0.50	1.80	1.90	13	---
0.50	7/0.32	1.00	32.70	0.50	2.00	2.10	17	8
0.85	11/0.32	1.20	20.80	0.50	2.20	2.30	22	11
1.25	16/0.32	1.50	14.30	0.50	2.50	2.60	28	16
2.00	26/0.32	1.90	8.81	0.50	2.90	3.10	38	24
3.00	41/0.32	2.40	5.59	0.60	3.60	3.80	51	37
5.00	65/0.32	3.00	3.52	0.70	4.40	4.60	69	57
8.00	50/0.45	3.70	2.32	0.80	5.30	5.60	90	88

* At 40°C ambient temperature.

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AUTOMOTIVE CABLES (Type - AVSS)

Svarn is specialized in manufacturing of PVC insulated Super Slim Auto Vinyl (AVSS) cable. These cable offer good electrical, mechanical and chemical properties during operation. These cables are operate under extreme various weather condition and also offer very high flexibility.

0.50 SQMM AVSS Cable

TECHNICAL DATA

- Cable Type : AVSS (Auto Vinyl Super Slim)
- Reference Specification : JASO D 611:2014
- Conductor Material : Soft Annealed Electrolytic Copper (Cu Purity - > 99.97 %; Conductivity - >101%)
- Insulation Material : HR PVC (Lead Free)
- Voltage Rating : 60 V DC
- Temperature Range : -40°c to +80°c
- Special properties : Heat Ageing at 120 hrs.
- Cable Range : 0.30 to 2.00 mm2
- Product Safety : RoHS & REACH compliance

APPLICATION:

- AVSS Cable are widely used in all automobile wiring harnesses with continuous heat application @80°C

PACKING:

- In coil or bobbin form

COLOR:

- Cables are available in various single & dual stripe color as per customer requirement.

Conductor				Insulated Cable				
Cross section area	No./Strand Diameter (Max.)	Bunch Diameter (Max.)	Resistance @ 20°c (Max.)	Insulation Thickness (Min)	Overall Diameter		Current Carrying Capacity*	Weight Approx.
mm^2	mm	mm	Ω/km	mm	mm (std)	mm (max)	Amp	kg/km
0.30	7/0.26	0.80	50.20	0.30	1.40	1.50	12.00	4.5
0.50	7/0.32	1.00	32.70	0.30	1.60	1.70	16.00	6.1
0.85	19/0.24	1.20	21.70	0.30	1.80	1.90	20.00	8.9
0.85	7/0.40	1.10	20.80	0.30	1.80	1.90	21.00	8.9
1.25	19/0.29	1.50	14.90	0.30	2.10	2.20	26.00	13.4
2.00	19/0.37	1.90	9.00	0.40	2.70	2.80	37.00	23.3
0.30f	19/0.16	0.80	48.80	0.30	1.40	1.50	12.00	---
0.50f	19/0.19	1.00	34.60	0.30	1.60	1.70	15.00	---
0.75f	19/0.23	1.20	23.60	0.30	1.80	1.90	20.00	---
1.25f	37/0.21	1.50	14.60	0.30	2.10	2.20	27.00	---
2.00f	37/0.26	1.80	9.50	0.40	2.60	2.70	36.00	---

* At 40°C ambient temperature.

AUTOMOTIVE CABLES (Type - AEX)

This AEX cables are used in various wiring Harnesses in Automobiles sector that provide power, control, signal & data communication and safety systems for all vehicles. AEX automotive cables offer high heat resistance capacity specially near vehicle Engine compartment. Also AEX cables operate under various extreme weather conditions and also offer high flexibility

0.50 SQMM Cable

TECHNICAL DATA

- Cable Type : AEX (Cross Linked Polyolefin Insulated)
- Reference Specification : JASO D 611:2014
- Conductor Material : Soft Annealed Electrolytic Copper (Cu Purity - > 99.97 %; Conductivity - >101%)
- Insulation Material : Cross Linked Polyolefin, HFFR
- Voltage Rating : 60 V DC
- Temperature Range : -40°c to +120°c
- Special properties : Heat Ageing at 120 hrs.
- Cable Range : 0.50 to 8.00 mm2
- Product Safety : RoHS & REACH compliance

APPLICATION:

- Wires used in low voltage circuits with heat resistance property (120°C) in automobile wiring harnesses

PACKING:

- In coil or bobbin form

COLOR:

- Cables are available in various single & dual stripe color as per customer requirement.

Conductor				Insulated Cable				
Cross section area	No./Strand Diameter (Max.)	Bunch Diameter (Max.)	Resistance @ 20°c (Max.)	Insulation Thickness (Min)	Overall Diameter		Current Carrying Capacity*	Weight Approx.
mm^2	mm	mm	Ω/km	mm	mm (std)	mm (max)	Amp	kg/km
0.50f	20/0.18	0.509	38.60	0.50	2.00	2.20	18	-
0.50	7/0.32	0.563	34.60	0.50	2.00	2.20	19	-
0.75f	30/0.18	0.763	25.80	0.50	2.20	2.40	23	-
0.85	11/0.32	0.885	22.00	0.50	2.20	2.40	25	-
1.25f	50/0.18	1.273	15.50	0.60	2.70	2.90	32	-
1.25	16/0.32	1.287	15.10	0.60	2.70	2.90	32	-
2.00f	37/0.26	1.964	10.10	0.60	3.00	3.30	41	-
2.00	26/0.32	2.091	9.30	0.60	3.10	3.40	44	-
3.00	41/0.32	3.297	5.90	0.70	3.80	4.10	59	-
5.00	65/0.32	5.228	3.72	0.80	4.60	4.90	79	-
8.00	50/0.45	7.952	2.45	0.80	5.30	5.60	102	-

* At 40°C ambient temperature.

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AUTOMOTIVE CABLES (Type - AESSX)

AESSX wires have thinner insulation than AEX wires. Conformity to JASO D608. Very Thin Cross-linked Polyethylene Insulated. Heat-resistant Low-voltage Wires for Automobiles

TECHNICAL DATA

- Cable Type : AESSX (Polyolefin Insulated) Very Thin wall
- Reference Specification : JASO D 608
- Conductor Material : Soft-annealed electrolytic copper (E-Cu ETP1 according to JIS C 3102) bare
- Insulation Material : Electron beam cross linked polyethylene
- Voltage Rating : 1 kV
- Temperature Range : -40°c to +120°c
- Special properties : Heat Ageing at 3000 hrs.
- Cable Range :
- Product Safety : RoHS & REACH compliance

0.50 SQMM Cable

APPLICATION:

- Wires used in low voltage circuits requiring heat resistance (120°C) such as automobiles (vehicles and motorcycles).

PACKING:

- --

COLOR:

- Cables are available in single core color as per customer requirement.

Conductor				Insulated Cable				
Cross section area	No./Strand Diameter (Max.)	Bunch Diameter (Max.)	Resistance @ 20°c (Max.)	Insulation Thickness (Min)	Overall Diameter		Current Carrying Capacity*	Weight Approx.
mm^2	mm	mm	Ω/km	mm	mm (std)	mm (max)	Amp	kg/km
0.3f	19/0.16	0.38	0.8	0.3	1.4	1.5	120	48.8
0.5f	19/0.19	0.53	1.0	0.3	1.6	1.7	120	34.6
0.75f	19/0.23	0.78	1.2	0.3	1.8	1.9	120	23.6
1.25f	37/0.21	1.28	1.5	0.3	2.1	2.2	120	14.6
2f	37/0.26	1.96	1.8	0.4	2.6	2.7	120	9.50

AUTOMOTIVE CABLES (Type - AESSX f)

AESSX f wires harness of low-tension electric circuits for automobiles.

TECHNICAL DATA

- Cable Type : AESSX f (Low tension cables for automobiles) Polyethylene insulated Very Think wall
- Reference Specification : JASO D 611
- Conductor Material : Soft-annealed electrolytic copper (E-Cu ETP1 according to JIS C 3102) bare
- Insulation Material : Electron beam cross linked polyethylene
- Voltage Rating : 1 kV
- Temperature Range : -40°c to +120°c
- Special properties : Heat Ageing at 3000 hrs.
- Cable Range :
- Product Safety : RoHS & REACH compliance

0.50 SQMM Cable

APPLICATION:

- Used in motorcycles and other motor vehicles for starting, charging, lighting signal and instrument panel circuits.

PACKING:

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COLOR:

- Cables are available in single core color as per customer requirement.

Conductor				Insulation Wall Thickness Nom.	Cable			Max. Conductor Resistance at 20°C	Current Carrying Capacity*	Standard Length*
Nominal Cross-Section	No. of Strand	Dia. of Single wire (Max.)	Conductor Diameter Approx.		Overall Diameter		Weight Approx.			
mm²	nos	mm	mm	mm	(nom) mm	(max) mm	kg/km	Ω/km	Amp	mtrs
0.3	19	0.16	0.8	0.30	1.4	1.5	5	48.8	12	1000
0.5	19	0.19	1.0	0.30	1.6	1.7	7	34.6	15	1000
0.75	19	0.23	1.2	0.30	1.8	1.9	9	23.6	19	1000
1.25	37	0.21	1.5	0.30	2.1	2.2	14	14.6	26	1000
2	37	0.26	1.8	0.40	2.6	2.7	22	9.50	35	500

• Other length as per Customer order.
• Current Carrying capacity given is for the maximum conductor operating temperature of 120°C and ambient air temperature of 40°C.

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AUTOMOTIVE CABLES (Type - EB)

EB wires have low-tension electric circuits of battery for automobiles.

TECHNICAL DATA

- Cable Type : EB (Earth bond low voltages cables for automobiles
- Reference Specification : JASO D 611
- Conductor Material : Soft-annealed electrolytic copper (E-Cu ETP1 according to JIS C 3102) bare
- Insulation Material : Lead free PVC
- Voltage Rating : 1 kV
- Temperature Range : -40°c to +80°c
- Special properties : Heat Ageing at 3000 hrs.
- Cable Range :
- Product Safety : RoHS & REACH compliance

0.50 SQMM Cable

APPLICATION:

- Used in motorcycles and other motor vehicles for starting, charging, lighting signal and instrument panel circuits.

PACKING:

- --

COLOR:

- Cables are available in single core color as per customer requirement

Conductor				Insulation Wall Thickness Nom.	Cable		Max. Conductor Resistance at 20°C	Current Carrying Capacity*	Standard Length*
Nominal Cross-Section	No. of Strand	Dia. of Single wire (Max.)	Conductor Diameter Approx.		Overall Diameter	Weight Approx.			
mm^2	nos	mm	mm	(nom)mm	(max)mm	kg/km	Ω/km	Amp	mtrs
5	7/9/0.32	3.1	0.60	4.3	4.7	57	3.71	50	500
9	7/16/0.32	4.2	0.60	5.4	5.8	94	2.09	72	500
10	19/6/0.32	4.2	0.60	5.5	5.9	96	2.05	72	500
15	19/9/0.32	5.3	0.60	6.5	6.9	140	1.37	94	500
20	19/13/0.32	6.5	0.60	7.7	8.1	191	0.946	119	500
30	19/19/0.32	7.8	0.60	9.0	9.4	275	0.647	150	500
40	19/26/0.32	9.1	0.60	10.3	10.8	371	0.473	182	500
50	19/32/0.32	10.1	0.60	11.3	11 .9	454	0.384	207	500
60	19/39/0.32	11.1	0.60	12.3	12.9	548	0.315	233	500
85	19/56/0.32	13.1	0.60	14.3	15.0	773	0.220	229	500

• Other length as per Customer order.
• Current Carrying capacity given is for the maximum conductor operating temperature of 120°C and ambient air temperature of 40°C.

AUTOMOTIVE CABLES (TXL)

(Low Voltage Primary Cable as per SAE J 1128)

Svarn is specialized in manufacturing of thin wall cross linked polyolefin insulated cable for high temperature application. TXL wire are naturally cured under control hot humidity chamber to enhance high temperature resistance and good mechanical strength. Since SIPL believes in green energy, our cables meet stringent environmental norms.

TXL 18 AWG SAE J 1128

TECHNICAL DATA

- Cable Type : TXL (Thin Wall, Cross Linked Polyolefin Insulation)
- Reference Specification : SAE J 1128 DEC 2015
- Conductor Material : Soft Annealed Electrolytic Copper (Cu Purity - > 99.97 %; Conductivity - >101%)
- Insulation Material : Cross Linked Polyolefin (HFFR)
- Voltage Rating : 60 V DC / 25 V AC
- Temperature Range : -40°c to +125°c
- Special properties : Heat Ageing at 3000 hrs.
- Cable Range : 24 to 8 AWG (0.22 to 8.00 mm2)
- Product Safety : RoHS & REACH compliance

APPLICATION:

- Heat Resistance thin wall low voltage cables are widely used in modern new generation compact automobile wiring harnesses

PACKING:

- In coil or bobbin form

COLOR:

- Cables are available in various single & dual stripe color as per customer requirement

Conductor			Insulated Cable				
Size	Bunch Diameter (Max.)	No./Strand Diameter (Max.)	Insulation Thickness (nom)	Overall Diameter		Current Carrying Capacity*	Weight Approx.
AWG/mm²	mm	mm	mm	mm (min)	mm (max)	Amp	kg/km
24 (0.22)	0.70	7/0.20	0.40	1.40	1.50	11.00	3.98
22 (0.35)	0.90	7/0.26	0.40	1.50	1.70	14.00	5.39
20 (0.50)	1.10	16/0.21	0.40	1.70	1.90	19.00	7.63
18 (0.80)	1.30	24/0.21	0.40	2.00	2.20	25.00	10.68
16 (1.00)	1.50	36/0.21	0.40	2.20	2.40	32.00	14.84
14 (2.00)	2.00	26/0.32	0.40	2.50	2.70	42.00	21.71
12 (3.00)	2.40	41/0.32	0.46	3.10	3.30	57.00	33.55
10 (5.00)	3.10	65/0.32	0.50	3.80	4.00	77.00	52.00
8 (8.00)	4.30	101/0.32	0.55	4.60	4.90	99.00	79.55

• SIPL also manufacture GXL (General Purpose) & SXL (Special Purpose) automotive cable as per SAE J 1128 Standard.
• At 40°c ambient temperature.

SVARN
Inspired by possibilities

AUTOMOTIVE CABLES (GXL)

(Low Voltage Primary Cable as per SAE J 1128)

Svarn is specialized in manufacturing of General purpose cross linked polyolefin insulated cable for high temperature application. GXL wire are naturally cured under control hot humidity chamber to enhance high temperature resistance and good mechanical strength. Since SIPL believes in green energy, our cables meet stringent environmental norms.

GXL 18 AWG SAE J 1128

TECHNICAL DATA

- Cable Type : GXL (General Purpose, Cross Linked Polyolefin Insulation)
- Reference Specification : SAE J 1128 DEC 2015
- Conductor Material : Soft Annealed Electrolytic Copper (Cu Purity - > 99.97 %; Conductivity ->101%)
- Insulation Material : Cross Linked Polyolefin Insulated
- Voltage Rating : 60 V DC / 25 V AC
- Temperature Range : -40°c to +125°c
- Special properties : Heat Ageing at 3000 hrs.
- Cable Range : 20 to 8 AWG (0.50 to 8.00 mm2)
- Product Safety : RoHS & REACH compliance

APPLICATION:

- This low voltage GXL cables are widely used in modern new generation compact automobile wiring harnesses

PACKING:

- In coil or bobbin form

COLOR:

- Cables are available in various single & dual stripe color as per customer requirement

Conductor			Insulated Cable				
Size	Bunch Diameter (Max.)	No./Strand Diameter (Max.)	Insulation Thickness (nom)	Overall Diameter		Current Carrying Capacity*	Weight Approx.
AWG/mm²	mm	mm	mm	mm (min)	mm (max)	Amp	kg/km
20 (0.50)	1.10	16/0.21	0.58	2.10	2.40	20	9.74
18 (0.80)	1.30	24/0.21	0.58	2.30	2.50	26	12.48
16 (1.00)	1.50	36/0.21	0.58	2.60	2.90	33	17.46
14 (2.00)	2.00	26/0.32	0.58	2.90	3.20	44	24.63
12 (3.00)	2.40	41/0.32	0.66	3.50	3.80	59	37.07
10 (5.00)	3.10	65/0.32	0.79	4.40	4.70	80	58.28
8 (8.00)	4.30	101/0.32	0.94	5.40	6.00	106	90.93

• SIPL also manufacture GXL (General Purpose) & SXL (Special Purpose) automotive cable as per SAE J 1128 Standard.
• At 40°c ambient temperature.

AUTOMOTIVE CABLES (SXL)

(Low Voltage Primary Cable as per SAE J 1128)

Svarn is specialized in manufacturing of Special purpose cross linked polyolefin insulated cable for high temperature application. SXL wire are naturally cured under control hot humidity chamber to enhance high temperature resistance and good mechanical strength. Since SIPL believes in green energy, our cables meet stringent environmental norms.

18 AWG SAE J 1128

TECHNICAL DATA

- Cable Type : SXL (Special Purpose, Cross Linked Polyolefin Insulation)
- Reference Specification : SAE J 1128 DEC 2015
- Conductor Material : Soft Annealed Electrolytic Copper (Cu Purity - > 99.97 %; Conductivity ->101%)
- Insulation Material : Cross Linked Polyolefin (HFFR)
- Voltage Rating : 60 V DC / 25 V AC
- Temperature Range : -40°c to +125°c
- Special properties : Heat Ageing at 3000 hrs.
- Cable Range : 20 to 8 AWG (0.50 to 8.00 mm2)
- Product Safety : RoHS & REACH compliance

APPLICATION:

- SXL low voltage cables are widely used for special purpose and modern new generation compact automobile wiring harnesses

PACKING:

- In coil or bobbin form

COLOR:

- Cables are available in various single & dual stripe color as per customer requirement

Conductor			Insulated Cable				
Size	Bunch Diameter (Max.)	No./Strand Diameter (Max.)	Insulation Thickness (nom)	Overall Diameter		Current Carrying Capacity*	Weight Approx.
AWG/mm²	mm	mm	mm	mm (min)	mm (max)	Amp	kg/km
20 (0.50)	1.10	16/0.21	0.74	2.40	2.80	21	11.72
18 (0.80)	1.30	24/0.21	0.76	2.60	3.00	27	14.90
16 (1.00)	1.50	36/0.21	0.81	3.00	3.40	34	20.58
14 (2.00)	2.00	26/0.32	0.89	3.50	3.90	46	29.74
12 (3.00)	2.40	41/0.32	0.94	4.20	4.60	61	44.11
10 (5.00)	3.10	65/0.32	1.04	4.90	5.30	81	64.47
8 (8.00)	4.30	101/0.32	1.09	5.80	6.20	106	95.02

• SIPL also manufacture TXL (Thin wall) & GXL (General Purpose) automotive cable as per SAE J 1128 Standard.
• At 40°c ambient temperature.

MOTOR VEHICLE (Battery Cable)

Svarn specializes in manufacturing of PVC insulated battery cable for automotive vehicle. These cables are widely used in all automotive and industrial wiring application.

SIPL IS-2465 Flexible cables are manufactured with high conductive annealed Class-5 copper as per IS 8130 standard for better electrical performance over a long period life. Bunched conductors are insulated with Lead Free PVC compound complying to IS 5831 standard. These cables are confirming to IS 2465:1984 standard with ISI mark.

TECHNICAL DATA

- Cable Type : PVC Insulated Cable for Motor Vehicle (Battery Cable)
- Reference Specification : IS 2465:1984
- Conductor Material : Flexible Class 5 conductor as per IS 8130 (Cu Purity - > 99.97 %; Conductivity ->101%)
- Insulation Material : Type A (Lead free) PVC as per IS 5831
- Voltage Rating : Up to 100 V
- Temperature Range : -15°c to 70°c
- Special properties : Heat Ageing at 168 hrs.
- Cable Range : 0.50 to 50.00 mm2
- Product Safety : RoHS & REACH compliance

APPLICATION:

- PVC Insulated Battery cables are commonly used in automotive Vehicle for battery & engine application.
- These cables are also used in industrial wiring application.

PACKING:

- In coil or bobbin form

COLOR:

- Cables are available in various single & dual stripe color as per customer requirement

Conductor			Insulated Cable			
Size	Bunch Diameter (Max.)	No./Strand Diameter (Max.)	Insulation Thickness (nom)	Overall Diameter	Current Carrying Capacity*	Weight Approx.
mm^2	mm	Ω/km	mm	mm	Amp	kg/km
0.50	16/0.20	39.00	0.60	2.20	11	9.1
0.75	24/0.20	26.00	0.60	2.40	14	11.9
1.00	32/0.20	19.50	0.70	2.60	17	15.9
1.50	48/0.20	13.30	0.70	2.90	21	21.3
2.50	80/0.20	7.98	0.70	3.60	30	31.0
4.00	56/0.30	4.95	0.80	4.10	40	48.2
6.00	84/0.30	3.30	0.80	4.70	51	67.9
10.00	140/0.30	1.91	1.00	6.30	72	109.7
16.00	126/0.40	1.21	1.00	7.30	96	164.2
25.00	196/0.40	0.780	1.20	9.10	125	255.4
35.00	276/0.40	0.554	1.20	10.30	154	345.6
50.00	396/0.40	0.386	1.40	12.20	191	490.5

- * At 40°c ambient temperature.

VALIDATION OF EXCELLENCE

IATF 16949:2016

Certificate

Standard: IATF 16949:2016 (1st edition, 2016-10-01)
Certificate Registr. No.: 01 111 2336372
IATF Certificate No.: 0502755

Certificate Holder: SVARN INFRATEL PRIVATE LIMITED
74th Milestone, Delhi Mathura Road, Next to Gulab Public School, Before Hodal Toll Plaza, Mitrol, Palwal, Haryana, 121105
India

IATF USI: LLWLRP
With remote location(s) according to annex

Scope: Manufacture of Wires, Cable & Connecting systems (Wiring Harness Assemblies & Battery Cables)
Excluding Product Design
Proof has been furnished by means of an audit that the requirements of IATF 16949:2016 are met.

Validity: The certificate is valid from 2024-02-27 until 2027-02-26.

Release date: 2024-02-27

TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln
Germany - NRW

2-IAO-QMC 01003

1 / 2

www.tuv.com

ISO 9001:2015

Certificate

Standard: ISO 9001:2015
Certificate Registr. No.: 01 100 2336372

Certificate Holder: SVARN INFRATEL PRIVATE LIMITED
74th Milestone, Delhi Mathura Road
District-Palwal, Haryana 121105
India

Scope: Design, Development, Manufacture of Sheet Metal Enclosures & components and various types of Metal Fixtures/Display units, Data Cables,Control & Instrumental Cables, LT Power Cables, Signal Cables, Fiber Optics Cables Assembly, Railway underground Jelly Filled Quad Cables,Signalling Cables, Power Cables, Flexible Wire, Cables, Cable Harness, Multi Core Cables
Proof has been furnished by means of an audit that the requirements of ISO 9001:2015 are met.

Validity: The certificate is valid from 2024-02-27 until 2027-02-26.
First certification 2024

2024-02-27

TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln

www.tuv.com

ISO 45001:2018

Certificate

Standard: ISO 45001:2018
Certificate Registr. No.: 01 213 1836337

Certificate Holder: SVARN INFRATEL PRIVATE LIMITED
74th Milestone, Delhi Mathura Road
District-Palwal, Haryana 121105
India

Scope: **Design, Development, Manufacture of Sheet Metal Enclosures & components and various types of Metal Fixtures/Display units, Data Cables, Control & Instrumental Cables, LT Power Cables, Signal Cables, Fiber Optics Cables Assembly, Railway underground Jelly Filled Quad Cables, Signaling Cables, Power Cables, Flexible Wire, Cables, Cable Harness, Multi Core Cables and Submersible Cables & PVC Compounds.**
Proof has been furnished by means of an audit that the requirements of ISO 45001:2018 are met.

Validity: The certificate is valid from 2021-12-23 until 2024-10-25.
First certification 2018

2021-12-23

TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln

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ISO 14001:2015

Certificate

Standard: ISO 14001:2015
Certificate Registr. No.: 01 104 1836337

Certificate Holder: SVARN INFRATEL PRIVATE LIMITED
74th Milestone, Delhi Mathura Road
District-Palwal, Haryana 121105
India

Scope: **Design, Development, Manufacture of Sheet Metal Enclosures & components and various types of Metal Fixtures/Display units, Data Cables, Control & Instrumental Cables, LT Power Cables, Signal Cables, Fiber Optics Cables Assembly, Railway underground Jelly Filled Quad Cables, Signaling Cables, Power Cables, Flexible Wire, Cables, Cable Harness, Multi Core Cables and Submersible Cables & PVC Compounds.**
Proof has been furnished by means of an audit that the requirements of ISO 14001:2015 are met.

Validity: The certificate is valid from 2021-12-23 until 2024-10-25.
First certification 2018

2021-12-23

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RoHS Screening

ARAI The Automotive Research Association of India

TEST REPORT

ISO 6722-1

ARAI The Automotive Research Association of India

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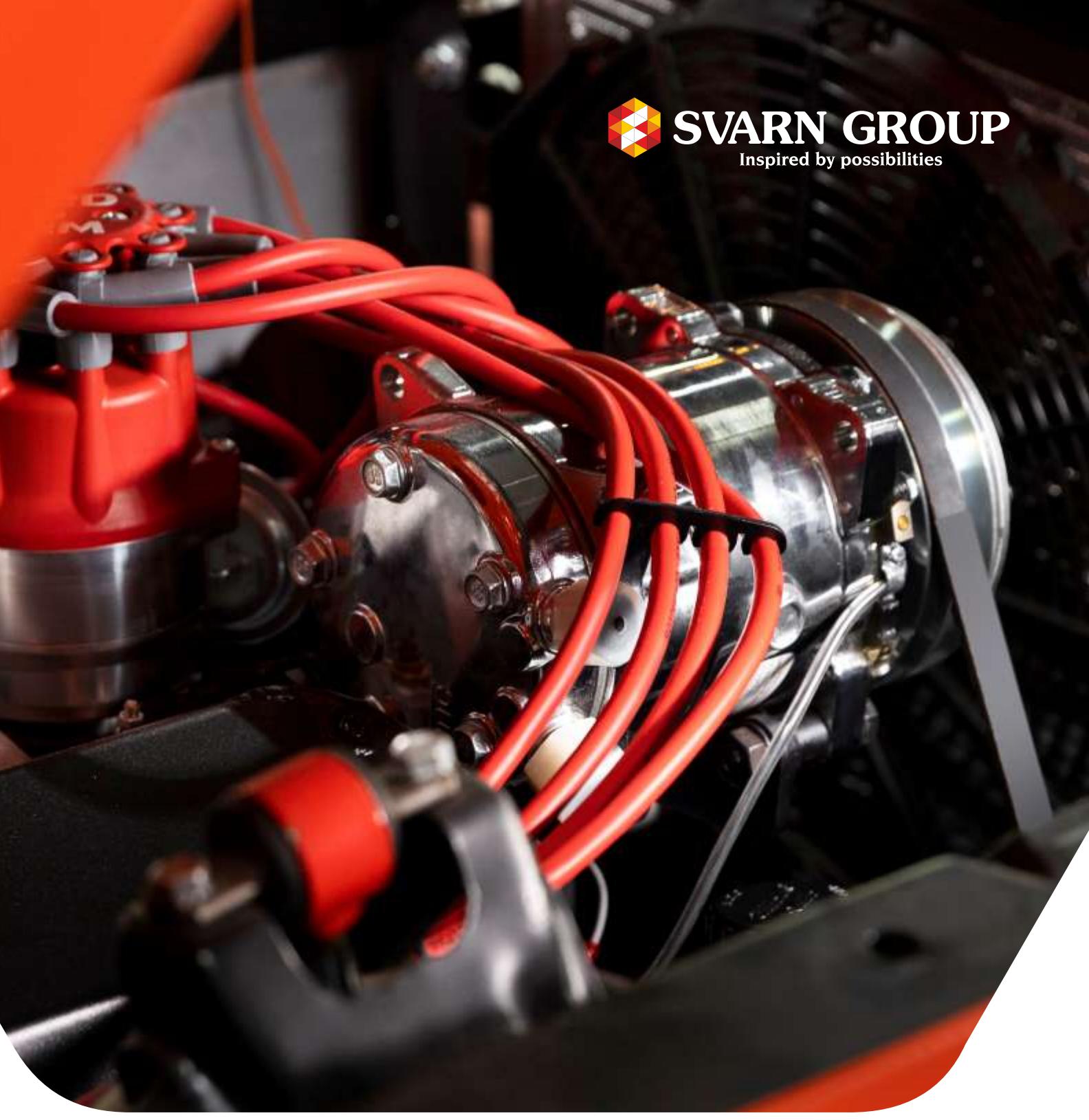
Inspired by possibilities



BHARAT (INDIA)

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

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