



# Vibraflame®

Cables for extreme temperatures



**axon'**  
cable & interconnect



# Vibraflame®

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temperatures

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VIBRAFLAME®: REGISTERED TRADEMARK OF AXON' CABLE

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# VIBRAFLAME® CABLES

## General information

### Why it pays to use

#### Vibraflame® cables ?

Vibraflame® cables will resist higher temperatures and more rigorous operating conditions than any other kind of flexible cables.

They are ideal for the most demanding applications in steel and aluminum plants, coke mills, glass factories, oil refineries and offshore rigs, and in various military and space installations and equipment.

#### **Vibraflame® cables work where other cables fail**

Vibraflame® cables will maintain electrical circuit integrity at peak temperatures as high as 1565°C. In fires exceeding 1050°C, they will maintain integrity for a minimum of 4 hours. In molten steel or aluminum, they will function for a previously unheard of 15 minutes (min.), allowing you to take steps to prevent costly equipment damage. In addition to heat, Vibraflame® will withstand weather, water, chemicals, acids, and lubricants.

#### **Vibraflame® cables save you money because they last longer and reduce both scheduled and unscheduled downtime**

In actual field use, they have proven to last at least 5 times longer than any other heat-resistant cable. Plants generally experience savings of 60% or more during the first year after switching to Vibraflame® cable. In addition, Vibraflame® often makes new, simpler, and money-saving layouts possible. They may, for instance, eliminate the need for protective conduits.

#### **Vibraflame® cables are safer**

They contain no asbestos. They are fire resistant and will not propagate flame at any temperature. Their high degree of heat resistance and strength prevents accidents that may be caused by extreme temperatures or spillage of molten metal or glass or inflammable materials. If accidents do occur, Vibraflame® cables give you an extra safety margin of time allowing you to take steps to save equipment, shut down operations, and otherwise minimize the damage and danger to life and property occasioned by industrial accidents.

## The concept

Vibraflame® possesses a unique combination of components and construction that no other cable has ever been able to match :

- Insulation: a specially bonded combination of mica, organic polymers (polytetrafluoroethylene), and fiberglass (no asbestos) is fire resistant and incapable of propagating flame. It reacts to flame by creating a thermal barrier that protects the conductor and maintains dielectric characteristics.
- Conductor: nickel plated copper provides excellent resistance to oxidation at high temperatures. Vibraflame® also enjoys flexibility.

## Quality

Teams of quality control specialists supervise every stage of the Vibraflame® process, and Vibraflame® cables are required to surpass the most exacting standards.

Vibraflame® cables more than meet the most rigid international and national tests such as NBN C 30-004 with test conditions of:

- Temperature produced by a gasburner of 900°C ±50°C,
- Duration of 3 hours,
- Mechanical impact every 30 seconds,
- Current leakage not to exceed 1 amp.per conductor,
- Test must be passed by 4 successive samples.



## Partial listing of test standards exceeded by Vibraflame® cables

COUNTRY	STANDARD	DURATION	TEST CONDITIONS	
			TEMP.	OTHERS COND.
International	IEC 331	3 H	750°C	In flame
Belgium	NBN C 30-004 § 3.3	3 H	900°C	In flame mechanical impact every 30 sec.
Germany	VDE 0472-814	20 min to 3 H	800°C	In flame

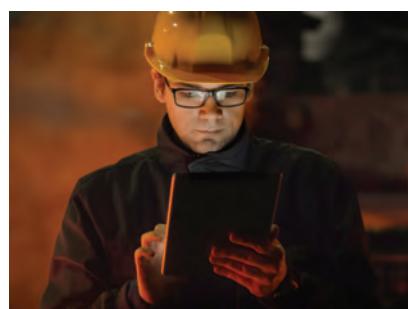


## Extension and compensating cables for thermocouples

This range of cables with Vibraflame® insulation will resist temperatures up to 1050°C.

The conductors available include:

- K = Nickel alloy/ Nickel chrome,
- J = Iron/ Constantan,
- T = Copper/ Constantan,
- SX = Copper/ Cupronickel (alloy 11),
- BX = Copper/ Copper alloy,
- E = Nickel chrome/ Constantan.



Should you need any further information, please ask for our "EXTENSION AND COMPENSATING CABLES FOR THERMOCOUPLES" brochure.

AXON® offers engineering assistance & custom design services to advise customers on the cable configurations best suited to their applications.



## Marking and packaging

- Cables are delivered on reels or drums depending on the cable cross section,
- Minimum ordered quantity: 50 meters.

## Special cables

Vibraflame® cables are available in a wide range of configurations including:

- Coaxials,
- Triaxials,
- High voltage cables.

## General applications

### Examples

- Tundish, offshore oil rigs: power and control cables ..... Fire, blowout, marine & chemical corrosion.
- Overhead cranes (steel plants) : power cables for brakes and motors ..... High temperature, fire, explosion, steel spills.
- Coke oven charging car, pusher and related vehicles for coke batteries: power, control and coaxial cables ..... Extreme temperatures, flames, corrosion, weather.
- Rotory nozzles: power feed cables ..... Operating temperatures : + 1050°C
- Magnetic flux sensor, bof : control cables ..... Extreme heat : + 1400°C
- Electric furnace, bof, blast furnace, plasma furnace: compensating cables ..... Extreme heat.
- Ladle transfer ladle preheater: power cables ..... Heat, fire, steel spills.
- Glassware machinery: power and control cables ..... Fire heat due to hydraulic fluid spills.
- Oil refinery shut-off valve control cables ..... Fire, chemical corrosion.
- Compensation cables for insertion pyrometers ..... Intense heat in a confined space.
- Power lines for electric arc oven sensors ..... Heat in non-circulating air.

### Hazards

## Customer buying guide

The following data gives you a basic pattern of technical information which is essential to our technical department in order to meet the exact customer requirement:

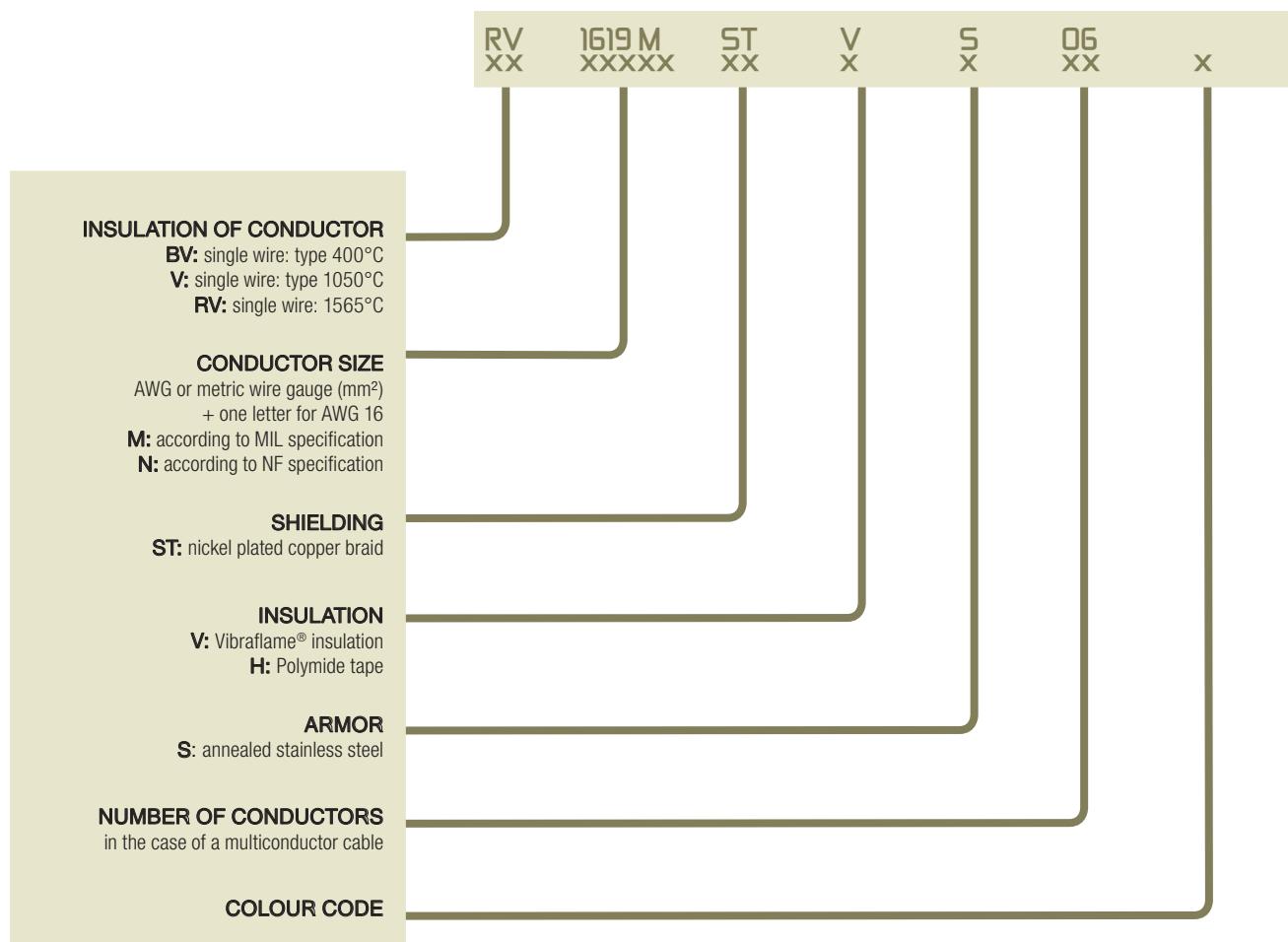
- › Operating temperature,
- › Peak temperature,
- › Operating voltage,
- › Conductor section,
- › Precise description of conditions of use (reeled, static, mechanical constraints, stifling or ventilated atmosphere, heating, flame,...).



For any detailed information on the outer diameter of the cables, do not hesitate to contact our sales engineers.

## Order code

**Example:** 6 conductors RV 1619 M twisted - a nickel plated copper braid - a Vibraflame® insulation - a stainless steel armor.



## VIBRAFLAME® international colour code

	<b>B</b>	<b>H</b>	<b>F</b>	<b>C</b>	<b>D</b>	<b>L</b>	<b>E</b>	<b>G</b>	<b>J</b>	<b>K</b>
Number of conductors	Black	Blue	Yellow	Brown	Red	White	Orange	Green	Violet	Grey
2	▲	▲								
3	▲	▲	▲							
4	▲	▲	▲	▲						
5	▲	▲	▲	▲	▲					
6	▲	▲	▲	▲	▲	▲				
7	▲	▲	▲	▲	▲	▲				
8	▲	▲	▲	▲	▲	▲	▲			
9	▲	▲	▲	▲	▲	▲	▲	▲		
10	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲

Standard colour of primary wires: red - Standard colour of outer jacket: red.

Special colour coding available on request.

## Table of equivalents

AWG	CROSS-SECTION in mm <sup>2</sup>
2607	0.14
2407	0.226
2207	0.354
2019	0.616
1819	0.962
1619 M (*)	1.229
1619 N (*)	1.34
1419	1.938
1219	3.10
1037	4.74
8133	8.60
6133	13.60
4133	21.70
2665	33.70
1817	41.40
01045	52.95

(\*) M: according to MIL specification - N: according to NF specification

Thermal protection

# Single wires

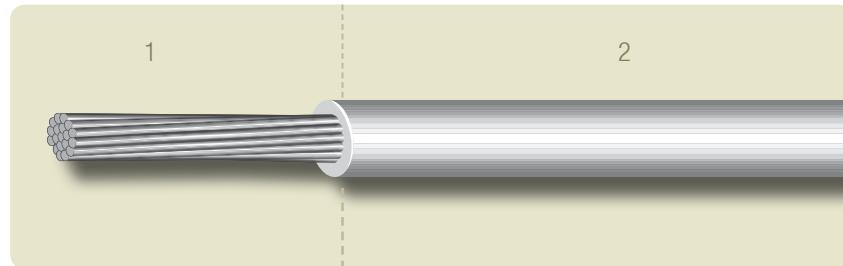
## TYPE BV xxxx

Peak temperatures: -196°C / +400°C

Test voltage: 2200 V RMS

Standard colour: red

Operating voltage: 600 V RMS



### Construction

1 - Conductor: nickel plated copper

2 - Insulation: Vibraflame® type BV

AXON' REFERENCE	CONSTRUCTION (Nb x Ø mm)	CONDUCTOR			INSULATED WIRE	
		Ø mm	AREA mm²	LINEIC MAX. RESISTANCE Ω / 100 m	OUTER Ø (mm)	APPROX. WEIGHT (g/m)
BV 2607	7 x 0.16	0.48	0.14	13.62	1.61	5.7
BV 2407	7 x 0.203	0.61	0.226	8.46	1.74	6.8
BV 2207	7 x 0.254	0.76	0.354	5.43	1.89	8.3
BV 0.50	16 x 0.20	0.90	0.50	3.80	2.03	10.0
BV 2019	19 x 0.203	1.01	0.616	3.116	2.14	11.4
BV 0.75	24 x 0.20	1.10	0.75	2.50	2.23	12.7
BV 1.00	32 x 0.20	1.25	1.00	1.90	2.38	15.4
BV 1819	19 x 0.254	1.27	0.962	1.96	2.40	15.2
BV 1619 M*	19 x 0.287	1.42	1.229	1.53	2.55	18.1
BV 1619 N*	19 x 0.30	1.50	1.34	1.40	2.63	18.3
BV 1.50	30 x 0.25	1.50	1.50	1.30	2.63	20.3
BV 1419	19 x 0.36	1.80	1.938	0.96	2.93	25.8
BV 2.50	50 x 0.25	2.00	2.50	0.78	3.13	30.4
BV 1219	19 x 0.455	2.27	3.10	0.60	3.40	37.8
BV 1037	37 x 0.405	2.80	4.74	0.41	3.93	54.9
BV 4.00	133 x 0.20	3.00	4.31	0.45	4.13	49.6
BV 6.00	133 x 0.25	3.80	6.70	0.28	4.93	79.4

(\*) M: according to MIL specification - N: according to NF specification

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+1050°C

Thermal protection



# Single wires

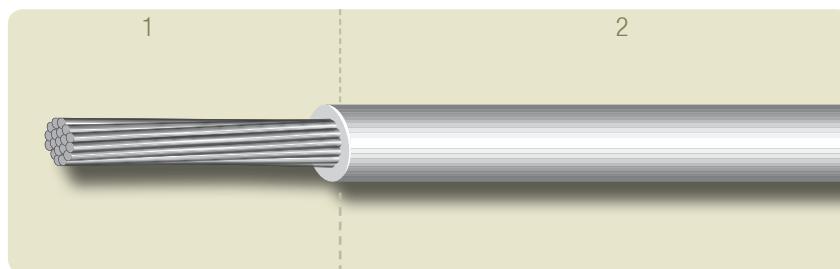
## TYPE V xxxx

**Peak temperatures:** -196°C / +1050°C

**Test voltage:** 2200 V RMS

**Standard colour:** red

**Operating voltage:** 600 V RMS



### Construction

1 - Conductor: nickel plated copper

2 - Insulation: Vibraflame® type V

AXON' REFERENCE	CONSTRUCTION (Nb x Ø mm)	CONDUCTOR			INSULATED WIRE	
		Ø mm	AREA mm²	LINEIC MAX. RESISTANCE Ω / 100 m	OUTER Ø (mm)	APPROX. WEIGHT (g/m)
V 2607	7 x 0.16	0.48	0.14	13.62	2.05	7.5
V 2407	7 x 0.203	0.61	0.226	8.46	2.18	8.8
V 2207	7 x 0.254	0.76	0.354	5.43	2.33	10.5
V 0.50	16 x 0.20	0.90	0.50	3.80	2.47	12.3
V 2019	19 x 0.203	1.01	0.616	3.116	2.58	13.8
V 0.75	24 x 0.20	1.10	0.75	2.50	2.67	15.2
V 1.00	32 x 0.20	1.25	1.00	1.90	2.82	18.1
V 1819	19 x 0.254	1.27	0.962	1.96	2.84	17.9
V 1619 M*	19 x 0.287	1.42	1.229	1.53	2.99	21.0
V 1619 N*	19 x 0.30	1.50	1.34	1.40	3.07	21.3
V 1.50	30 x 0.25	1.50	1.50	1.30	3.07	23.3
V 1419	19 x 0.36	1.80	1.938	0.96	3.37	29.4
V 2.50	50 x 0.25	2.00	2.50	0.78	3.57	34.2
V 1219	19 x 0.455	2.27	3.10	0.60	3.84	41.7
V 1037	37 x 0.405	2.80	4.74	0.41	4.37	59.9
V 4.00	133 x 0.20	3.00	4.31	0.45	4.57	54.9
V 6.00	133 x 0.25	3.80	6.70	0.28	5.37	85.1
V 8133	133 x 0.287	4.10	8.60	0.23	5.67	99.9
V 10.00	210 x 0.25	4.50	10.50	0.186	6.07	121.0
V 6133	133 x 0.36	5.16	13.60	0.150	7.17	159.0
V 16.00	513 x 0.20	6.15	16.60	0.115	8.16	199.0
V 4133	133 x 0.455	6.50	21.70	0.09	8.51	238.0
V 25.00	361 x 0.30	7.50	25.50	0.074	9.51	292.0
V 2665	665 x 0.254	8.30	33.70	0.06	10.31	363.0
V 35.00	703 x 0.25	8.90	35.60	0.053	10.91	400.0
V 1817	817 x 0.254	9.40	41.40	0.050	11.41	442.0
V 50.00	703 x 0.30	10.50	49.70	0.038	12.51	540.0
V 01045	1045 x 0.254	10.55	52.95	0.035	12.56	555.0

(\*) M: according to MIL specification - N: according to NF specification

Thermal protection

# Single wires

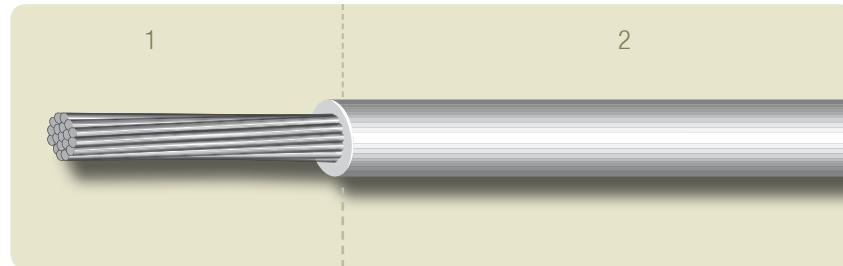
## TYPE RV xxxx

**Peak temperatures:** -196°C / +1565°C

**Test voltage:** 2200 V RMS

**Standard colour:** red

**Operating voltage:** 600 V RMS



### Construction

1 - Conductor: nickel plated copper

2 - Insulation: Vibraflame® type RV

AXON' REFERENCE	CONSTRUCTION (Nb x Ø mm)	CONDUCTOR			INSULATED WIRE	
		Ø mm	AREA mm²	LINEIC MAX. RESISTANCE Ω / 100 m	OUTER Ø (mm)	APPROX. WEIGHT (g/m)
RV 2607	7 x 0.16	0.48	0.14	13.62	2.25	8.0
RV 2407	7 x 0.203	0.61	0.226	8.46	2.38	9.3
RV 2207	7 x 0.254	0.76	0.354	5.43	2.53	11.0
RV 0.50	16 x 0.20	0.90	0.50	3.80	2.67	12.9
RV 2019	19 x 0.203	1.01	0.616	3.116	2.78	14.4
RV 0.75	24 x 0.20	1.10	0.75	2.50	2.87	15.9
RV 1.00	32 x 0.20	1.25	1.00	1.90	3.02	18.8
RV 1819	19 x 0.254	1.27	0.962	1.96	3.04	18.6
RV 1619 M*	19 x 0.287	1.42	1.229	1.53	3.19	21.7
RV 1619 N*	19 x 0.30	1.50	1.34	1.40	3.27	23.4
RV 1.50	30 x 0.25	1.50	1.50	1.30	3.27	24.3
RV 1419	19 x 0.36	1.80	1.938	0.96	3.57	30.0
RV 2.50	50 x 0.25	2.00	2.50	0.78	3.77	35.0
RV 1219	19 x 0.455	2.27	3.10	0.60	4.04	42.6
RV 1037	37 x 0.405	2.80	4.74	0.41	4.57	61.0
RV 4.00	133 x 0.20	3.00	4.31	0.45	4.77	56.0
RV 6.00	133 x 0.25	3.80	6.70	0.28	5.57	86.4

(\*) M: according to MIL specification - N: according to NF specification



# Multicore cables

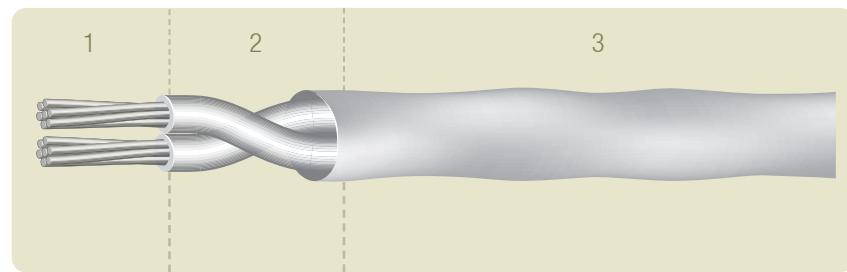
## TYPE BV xxxx V x

**Peak temperatures: -196°C / +400°C**

**Test voltage: 2200 V RMS**

**Standard colour: single wires colour coded / outer jacket: red**

**Operating voltage: 600 V RMS**



### Construction

1 - Conductor: nickel plated copper

2 - Insulation: Vibraflame® type BV

3 - Jacket: Vibraflame®

AXON' REFERENCE	SIZE CROSS SECTION/AWG	NUMBER OF WIRES	
		MIN.	MAX.
BV 2607 V x	AWG 26	2	25
BV 2407 V x	AWG 24	2	24
BV 2207 V x	AWG 22	2	21
BV 0.50 V x	0.50 mm <sup>2</sup>	2	12
BV 2019 V x	AWG 20	2	12
BV 0.75 V x	0.75 mm <sup>2</sup>	2	12
BV 1.00 V x	1.00 mm <sup>2</sup>	2	12
BV 1819 V x	AWG 18	2	12
BV 1619 M* V x	AWG 16	2	12
BV 1619 N* V x	AWG 16	2	12
BV 1.50 V x	1.50 mm <sup>2</sup>	2	12
BV 1419 V x	AWG 14	2	9
BV 1219 V x	2.50 mm <sup>2</sup>	2	7
BV 2.50 V x	AWG 12	2	8
BV 1037 V x	AWG 10	2	7
BV 4.00 V x	4.00 mm <sup>2</sup>	2	7
BV 6.00 V x	6.00 mm <sup>2</sup>	2	4

x: number of primary wires.

(\*) M. according to MIL specification - N. according to NF specification

Thermal protection

# Multicore cables

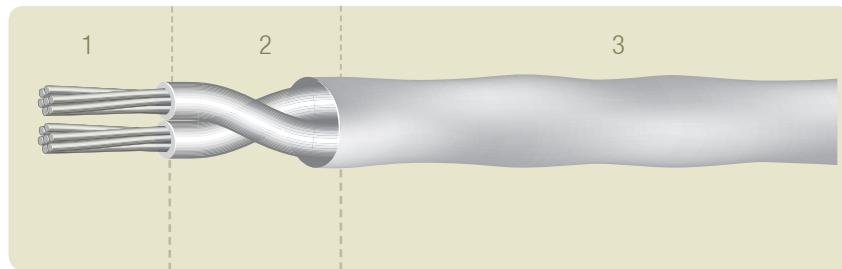
## TYPE RV xxxx V x

**Peak temperatures:** -196°C / +1565°C

**Test voltage:** 2200 V RMS

**Standard colour:** single wires colour coded / outer jacket: red

**Operating voltage:** 600 V RMS



### Construction

1 - Conductor: nickel plated copper

2 - Insulation: Vibraflame® type RV

3 - Jacket: Vibraflame®

AXON' REFERENCE	SIZE CROSS SECTION/AWG	NUMBER OF WIRES	
		MIN.	MAX.
RV 2607 V x	AWG 26	2	19
RV 2407 V x	AWG 24	2	19
RV 2207 V x	AWG 22	2	19
RV 0.50 V x	0.50 mm <sup>2</sup>	2	12
RV 2019 V x	AWG 20	2	12
RV 0.75 V x	0.75 mm <sup>2</sup>	2	12
RV 1.00 V x	1.00 mm <sup>2</sup>	2	12
RV 1819 V x	AWG 18	2	12
RV 1619 M* V x	AWG 16	2	12
RV 1619 N* V x	AWG 16	2	12
RV 1.50 V x	1.50 mm <sup>2</sup>	2	12
RV 1419 V x	AWG 14	2	7
RV 1219 V x	2.50 mm <sup>2</sup>	2	7
RV 2.50 V x	AWG 12	2	7
RV 1037 V x	AWG 10	2	7
RV 4.00 V x	4.00 mm <sup>2</sup>	2	4
RV 6.00 V x	6.00 mm <sup>2</sup>	2	3

(\*) M: according to MIL specification - N: according to NF specification

x: number of primary wires.



# Shielded signal cables

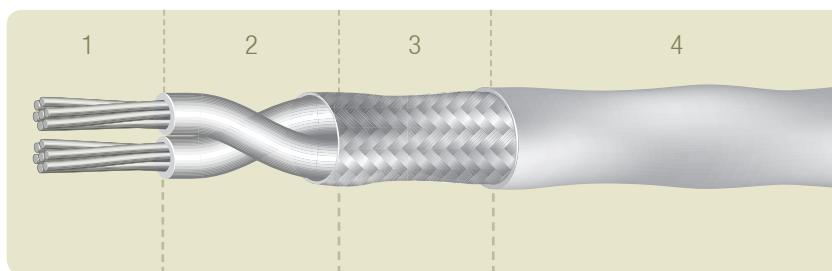
## TYPE BV xxxx ST V x

**Peak temperatures: -196°C / +400°C**

**Test voltage: 2200 V RMS**

**Standard colour: single wires colour coded / outer jacket: red**

**Operating voltage: 600 V RMS**



### Construction

1 - Conductor: nickel plated copper  
2 - Insulation: Vibraflame® type BV

3 - Braid: nickel plated copper  
4 - Jacket: Vibraflame®

AXON' REFERENCE	SIZE CROSS SECTION/AWG	NUMBER OF WIRES	
		MIN.	MAX.
BV 2607 ST V x	AWG 26	2	25
BV 2407 ST V x	AWG 24	2	24
BV 2207 ST V x	AWG 22	2	21
BV 0.50 ST V x	0.50 mm²	2	12
BV 2019 ST V x	AWG 20	2	12
BV 0.75 ST V x	0.75 mm²	2	12
BV 1.00 ST V x	1.00 mm²	2	12
BV 1819 ST V x	AWG 18	2	12
BV 1619 M* ST V x	AWG 16	2	12
BV 1619 N* ST V x	AWG 16	2	12
BV 1.50 ST V x	1.50 mm²	2	12
BV 1419 ST V x	AWG 14	2	9
BV 1219 ST V x	2.50 mm²	2	7
BV 2.50 ST V x	AWG 12	2	8
BV 1037 ST V x	AWG 10	2	7
BV 4.00 ST V x	4.00 mm²	2	7
BV 6.00 ST V x	6.00 mm²	2	4

x: number of primary wires.

(\*) M: according to MIL specification - N: according to NF specification

Thermal &amp; electromagnetic protection

# Shielded signal cables

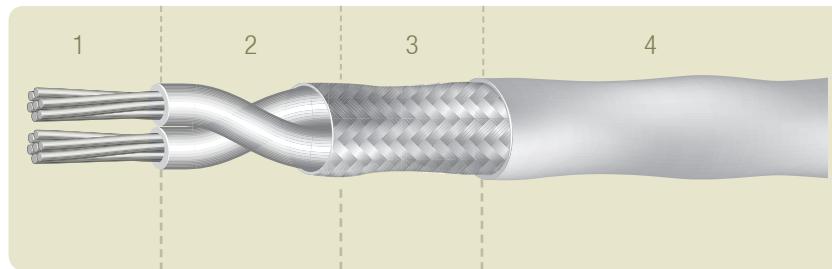
## TYPE RV xxxx ST V x

Peak temperatures: -196°C / +1565°C

Test voltage: 2200 V RMS

Standard colour: single wires colour coded / outer jacket: red

Operating voltage: 600 V RMS



### Construction

1 - Conductor: nickel plated copper

2 - Insulation: Vibraflame® type RV

3 - Braid: nickel plated copper

4 - Jacket: Vibraflame®

AXON' REFERENCE	SIZE CROSS SECTION/AWG	NUMBER OF WIRES	
		MIN.	MAX.
RV 2607 ST V x	AWG 26	2	19
RV 2407 ST V x	AWG 24	2	19
RV 2207 ST V x	AWG 22	2	19
RV 0.50 ST V x	0.50 mm <sup>2</sup>	2	12
RV 2019 ST V x	AWG 20	2	12
RV 0.75 ST V x	0.75 mm <sup>2</sup>	2	12
RV 1.00 ST V x	1.00 mm <sup>2</sup>	2	12
RV 1819 ST V x	AWG 18	2	12
RV 1619 M* ST V x	AWG 16	2	12
RV 1619 N* ST V x	AWG 16	2	12
RV 1.50 ST V x	1.50 mm <sup>2</sup>	2	12
RV 1419 ST V x	AWG 14	2	7
RV 1219 ST V x	2.50 mm <sup>2</sup>	2	7
RV 2.50 ST V x	AWG 12	2	7
RV 1037 ST V x	AWG 10	2	7
RV 4.00 ST V x	4.00 mm <sup>2</sup>	2	4
RV 6.00 ST V x	6.00 mm <sup>2</sup>	2	3

(\*) M: according to MIL specification - N: according to NF specification

x: number of primary wires.



# Armored multicore cables

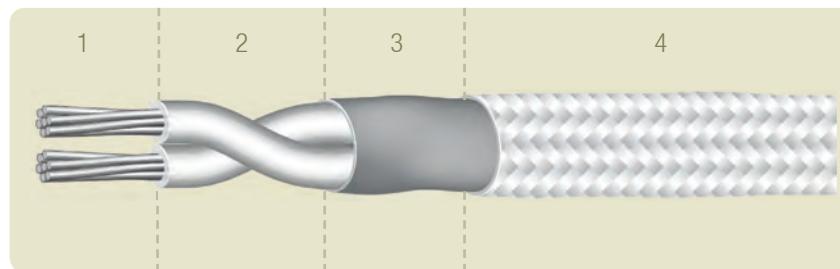
## TYPE BV xxxx VS x

Peak temperatures: -196°C / +400°C

Test voltage: 2200 V RMS

Standard colour: single wires colour coded / outer jacket: red

Operating voltage: 600 V RMS



### Construction

1 - Conductor: nickel plated copper

2 - Insulation: Vibraflame® type BV

3 - Jacket: Vibraflame®

4 - Armor: annealed stainless steel

AXON' REFERENCE	SIZE CROSS SECTION/AWG	NUMBER OF WIRES	
		MIN.	MAX.
BV 2607 VS x	AWG 26	2	19
BV 2407 VS x	AWG 24	2	19
BV 2207 VS x	AWG 22	2	19
BV 0.50 VS x	0.50 mm²	2	12
BV 2019 VS x	AWG 20	2	12
BV 0.75 VS x	0.75 mm²	2	12
BV 1.00 VS x	1.00 mm²	2	12
BV 1819 VS x	AWG 18	2	12
BV 1619 M* VS x	AWG 16	2	12
BV 1619 N* VS x	AWG 16	2	12
BV 1.50 VS x	1.50 mm²	2	12
BV 1419 VS x	AWG 14	2	7
BV 1219 VS x	2.50 mm²	2	7
BV 2.50 VS x	AWG 12	2	7
BV 1037 VS x	AWG 10	2	7
BV 4.00 VS x	4.00 mm²	2	4
BV 6.00 VS x	6.00 mm²	2	3

(\*) M: according to MIL specification - N: according to NF specification

x: number of primary wires.

## Thermal &amp; mechanical protection

## Armored multicore cables

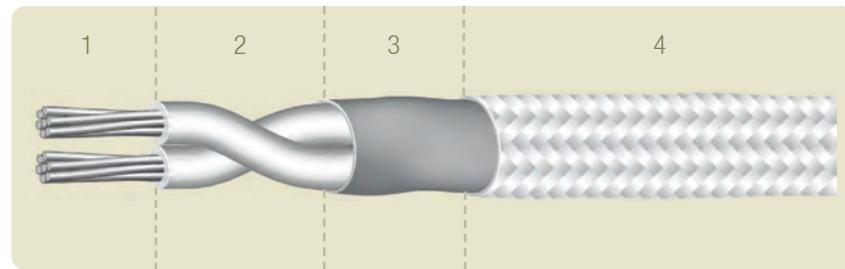
## TYPE RV xxxx VS x

Peak temperatures: -196°C / +1565°C

Test voltage: 2200 V RMS

Standard colour: single wires colour coded / outer jacket: red

Operating voltage: 600 V RMS



## Construction

1 - Conductor: nickel plated copper

2 - Insulation: Vibraflame® type RV

3 - Jacket: Vibraflame®

4 - Armor: annealed stainless steel

AXON' REFERENCE	SIZE CROSS SECTION/AWG	NUMBER OF WIRES	
		MIN.	MAX.
RV 2607 VS x	AWG 26	2	19
RV 2407 VS x	AWG 24	2	19
RV 2207 VS x	AWG 22	2	19
RV 0.50 VS x	0.50 mm <sup>2</sup>	2	12
RV 2019 VS x	AWG 20	2	12
RV 0.75 VS x	0.75 mm <sup>2</sup>	2	12
RV 1.00 VS x	1.00 mm <sup>2</sup>	2	12
RV 1819 VS x	AWG 18	2	12
RV 1619 M* VS x	AWG 16	2	12
RV 1619 N* VS x	AWG 16	2	12
RV 1.50 VS x	1.50 mm <sup>2</sup>	2	12
RV 1419 VS x	AWG 14	2	7
RV 1219 VS x	2.50 mm <sup>2</sup>	2	7
RV 2.50 VS x	AWG 12	2	7
RV 1037 VS x	AWG 10	2	7
RV 4.00 VS x	4.00 mm <sup>2</sup>	2	4
RV 6.00 VS x	6.00 mm <sup>2</sup>	2	3

(\*) M: according to MIL specification - N: according to NF specification

x: number of primary wires.



# Armored signal cables

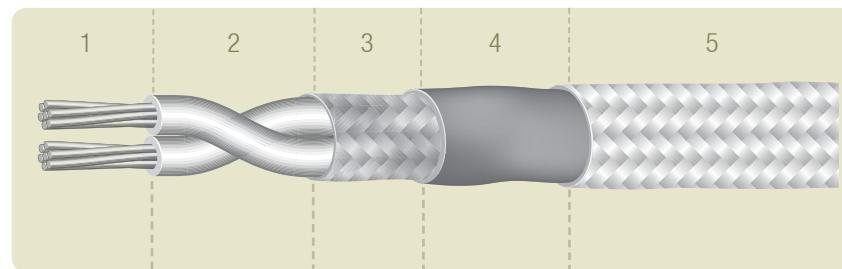
## TYPE BV xxxx ST VS x

Peak temperatures: -196°C / +400°C

Test voltage: 2200 V RMS

Standard colour: single wires colour coded / outer jacket: red

Operating voltage: 600 V RMS



### Construction

1 - Conductor: nickel plated copper

4 - Jacket: Vibraflame®

2 - Insulation: Vibraflame® type BV

5 - Armor: annealed stainless steel

3 - Braid: nickel plated copper

AXON' REFERENCE	SIZE CROSS SECTION/AWG	NUMBER OF WIRES	
		MIN.	MAX.
BV 2607 ST VS x	AWG 26	2	19
BV 2407 ST VS x	AWG 24	2	19
BV 2207 ST VS x	AWG 22	2	19
BV 0.50 ST VS x	0.50 mm²	2	12
BV 2019 ST VS x	AWG 20	2	12
BV 0.75 ST VS x	0.75 mm²	2	12
BV 1.00 ST VS x	1.00 mm²	2	12
BV 1819 ST VS x	AWG 18	2	12
BV 1619 M* ST VS x	AWG 16	2	12
BV 1619 N* ST VS x	AWG 16	2	12
BV 1.50 ST VS x	1.50 mm²	2	12
BV 1419 ST VS x	AWG 14	2	7
BV 1219 ST VS x	2.50 mm²	2	7
BV 2.50 ST VS x	AWG 12	2	7
BV 1037 ST VS x	AWG 10	2	7
BV 4.00 ST VS x	4.00 mm²	2	4
BV 6.00 ST VS x	6.00 mm²	2	3

x: number of primary wires.

(\*) M: according to MIL specification - N: according to NF specification

# Armored signal cables

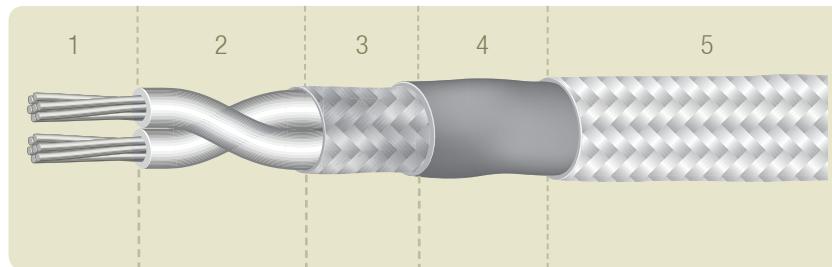
## TYPE RV xxxx ST VS x

Peak temperatures: -196°C / +1565°C

Test voltage: 2200 V RMS

Standard colour: single wires colour coded / outer jacket: red

Operating voltage: 600 V RMS



### Construction

1 - Conductor: nickel plated copper

4 - Jacket: Vibraflame®

2 - Insulation: Vibraflame® type RV

5 - Armor: annealed stainless steel

3 - Braid: nickel plated copper

AXON' REFERENCE	SIZE CROSS SECTION/AWG	NUMBER OF WIRES	
		MIN.	MAX.
RV 2607 ST VS x	AWG 26	2	19
RV 2407 ST VS x	AWG 24	2	19
RV 2207 ST VS x	AWG 22	2	19
RV 0.50 ST VS x	0.50 mm <sup>2</sup>	2	12
RV 2019 ST VS x	AWG 20	2	12
RV 0.75 ST VS x	0.75 mm <sup>2</sup>	2	12
RV 1.00 ST VS x	1.00 mm <sup>2</sup>	2	12
RV 1819 ST VS x	AWG 18	2	12
RV 1619 M* ST VS x	AWG 16	2	12
RV 1619 N* ST VS x	AWG 16	2	12
RV 1.50 ST VS x	1.50 mm <sup>2</sup>	2	12
RV 1419 ST VS x	AWG 14	2	7
RV 1219 ST VS x	2.50 mm <sup>2</sup>	2	7
RV 2.50 ST VS x	AWG 12	2	7
RV 1037 ST VS x	AWG 10	2	7
RV 4.00 ST VS x	4.00 mm <sup>2</sup>	2	4
RV 6.00 ST VS x	6.00 mm <sup>2</sup>	2	3

x: number of primary wires.

(\*) M: according to MIL specification - N: according to NF specification

20

+1050°C

Thermal &amp; mechanical protection

# Large cross section multicore cables

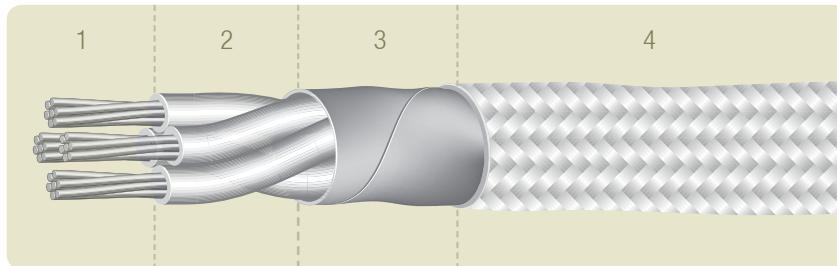
## TYPE V xxxx HS x

**Peak temperatures:** -196°C / +1050°C

**Test voltage:** 2200 V RMS

**Standard colour:** single wires colour coded

**Operating voltage:** 600 V RMS



### Construction

1 - Conductor: nickel plated copper

2 - Insulation: Vibraflame® type V

3 - Polyimide tape

4 - Armor: annealed stainless steel

AXON® REFERENCE	SIZE CROSS SECTION/AWG	NUMBER OF WIRES	
		MIN.	MAX.
V 8133 HS x	AWG 8	2	5
V 10.00 HS x	10.00 mm²	2	5
V 6133 HS x	AWG 6	2	5
V 16.00 HS x	16 mm²	2	5
V 4133 HS x	AWG 4	2	4
V 25.00 HS x	25 mm²	2	4
V 2665 HS x	AWG 2	2	4
V 35.00 HS x	35 mm²	2	4
V 50.00 HS x	50 mm²	2	2
V 01045 HS x	AWG 0	2	2

x: number of primary wires.

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