

Gexol® - 331HF Fire Resistant Shielded Triads Instrumentation Cable Low Smoke Halogen-Free

Extremely Flexible • 0.6/1kV • Rated 110°C

Triads

Each triad is twisted with a bare tinned drain wire. Each triad is shielded with polyester-backed aluminum foil tape to afford 100% coverage. Triad to triad isolation plus overall shielding is provided.

Triad color code:
Black-White-Red

Armor (Optional)

Basket weave wire armor per IEEE 1580 and UL 1309/CSA 245. Bronze standard. Aluminum or tinned copper available by request.

Sheath (Optional)

A black low smoke Halogen-Free flame retardant polyolefin, meeting IEEE 1580 and UL 1309/CSA 245.



Conductor

Soft annealed flexible stranded tinned copper per IEEE 1580 Table 11.

Insulation

Fire resistant tape + GEXOL®-HF low smoke Halogen-Free flame retardant cross-linked polyolefin, meeting the requirements for Type LSX of IEEE 1580 and Type X110 of UL 1309/CSA 245.

Jacket

A black low smoke Halogen-Free flame retardant polyolefin, compound meeting IEEE 1580 and UL 1309/CSA 245.

Cable available with blue jacket or stripe to signify intrinsically safe circuit.

Application

Designed and constructed for the demanding environments of offshore drilling and petroleum facilities located throughout the world. Primarily used on critical circuits that must continue to function even in a fire condition. This product should be used on any circuit dedicated to emergency lighting, fire detection/suppression, alarms and personnel egress.

Features

- Fire resistant: IEC 60331.
- Flame retardant; IEC 332-3 Category A and IEEE 1202.
- Low smoke and Halogen-Free.
- High strand count conductors make this product more flexible and easier to install than IEC 60092-350 Series cables.
- Higher temperature rating results in higher ampacity ratings.
- Severe cold durability: exceeds CSA cold bend/cold impact (-40°C/-35°C).
- Suitable for use in Class I, Division 1 and Zone 1 environments (armored and sheathed).
- Optional braid armor of bronze, aluminum or tinned copper.

Ratings & Approvals

- 110°C Temperature Rating
- American Bureau of Shipping (ABS) 99-BT5905-X
- UL Listed as Marine Shipboard Cable E111461
- Transport Canada (pending)
- Det Norske Veritas (DNV) (pending)
- Lloyd's Register of Shipping (LRS) (pending)

Hawke Gland Types	Unarmored	Armored & Sheathed
Industrial & Safe Area (IP68)	121	153-X
Increased Safety "EExe"	501/421	501/453/U
Explosion Proof	710 Class I, Div. 2 Class I, Zone 2	753 Class I, Div. 1 Class I, Zone 1 & 2
Flameproof "EExd"	501/421 Zone 1 & 2	501/453/U (2 liter or < enclosures) ICG 653/U (2 liter or > enclosures) Zone 1 & 2

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Flexible Instrumentation Cable – Individually Shielded Triads

Size AWG	mm2	Number of Triads	Part No. 37-104	Unarmored		Armored (B)		Armored and Sheath (BS)	
				Nominal Diameter (inches)	Weight (lbs/MFt.)	Nominal Diameter (inches)	Weight (lbs/MFt.)	Nominal Diameter (inches)	Weight (lbs/MFt.)
18	1.0	1	-647	0.431	91	0.481	174	0.620	241
18	1.0	2	-681	0.743	221	0.793	351	0.974	460
18	1.0	3	-648	0.789	230	0.839	369	1.020	476
18	1.0	4	-682	0.867	340	0.917	494	1.098	667
18	1.0	5	-649	0.995	346	1.045	507	1.226	679
18	1.0	7	-650	1.084	495	1.134	684	1.315	876
18	1.0	8	-683	1.176	640	1.226	1007	1.407	1234
18	1.0	12	-640	1.431	927	1.481	1168	1.662	1446
16	1.3	1	-668	0.450	116	0.500	189	0.639	270
16	1.3	3	-669	0.836	264	0.886	409	1.067	564
16	1.3	4	-698	0.919	496	0.969	641	1.150	847
16	1.3	6	-676	1.149	762	1.199	908	1.380	1156
16	1.3	7	-670	1.149	762	1.199	908	1.380	1271
16	1.3	8	-677	1.240	882	1.290	1060	1.471	1335

Cable diameters shown as nominal are subject to a ±5% manufacturing tolerance

#18 Triads

Capacitance = 22 nF/1000 ft.
Inductance = 0.12 mH/1000 ft.
Resistance = 7.21 ohms/1000 ft.

#16 Triads

Capacitance = 22 nF/1000 ft.
Inductance = 0.11 mH/1000 ft.
Resistance = 4.52 ohms/1000 ft.

Ordering Gexol-331HF Cables

Example:

- Instrumentation cable
- 0.6/1kV
- #18 AWG, 4 triad
- bronze armored & sheathed

37-104 - 682

BS

AmerCable
Gexol-331HF Prefix

Specific Cable Number
(from table)

Armor Requirement
BS – armored &
sheathed
Blank – no armor