

37-103 Gexol®-HF Flame Retardant 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

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, meeting IEEE 1580 and UL 1309/CSA 245.

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

Application

Smoke, with its toxic and corrosive effects, is becoming more clearly recognized as the real culprit in fire fatalities. And there is increasing concern about smoke evolution in confined spaces or areas of limited egress. Low smoke, Halogen-Free, Gexol-HF should be used in the living quarters area to insure safe egress of personnel during a fire. Gexol-HF does not produce corrosive gases during a fire that might damage expensive electronic equipment, making it ideal for use in control rooms that house this equipment.

Features

- 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)

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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

Flexible Instrumentation Cable – Individually Shielded Triads

Size AWG	mm ²	Number of Triads	Part No. 37-103	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	0.380	75	0.430	144	0.569	199
18	1.0	2	-681	0.649	183	0.699	290	0.880	380
18	1.0	3	-648	0.688	190	0.738	305	0.919	393
18	1.0	4	-682	0.755	281	0.805	408	0.986	551
18	1.0	5	-649	0.871	286	0.921	419	1.102	561
18	1.0	7	-650	0.947	409	0.997	565	1.178	724
18	1.0	8	-683	1.026	515	1.076	680	1.257	870
18	1.0	12	-640	1.244	766	1.294	965	1.475	1195
16	1.3	1	-668	0.399	86	0.449	155	0.588	213
16	1.3	3	-669	0.735	218	0.785	338	0.966	466
16	1.3	4	-698	0.807	410	0.857	530	1.038	700
16	1.3	6	-676	1.012	630	1.062	750	1.243	955
16	1.3	7	-670	1.012	630	1.062	750	1.243	1050
16	1.3	8	-677	1.090	729	1.140	876	1.338	1103

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

#18 Triads

Capacitance = 33 nF/1000 ft.
Inductance = 0.22 mH/1000 ft.
Resistance = 7.21 ohms/1000 ft.

#16 Triads

Capacitance = 37 nF/1000 ft.
Inductance = 0.20 mH/1000 ft.
Resistance = 4.52 ohms/1000 ft.

Ordering Gexol-HF Cables

Example:

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

