

# HYflex™ Power Distribution Cables

## TECHNICAL INFORMATION

HYflex™ power distribution cables are specifically engineered to handle the high voltage and temperatures inherent with today's diesel hybrid vehicles. Independently tested to meet the requirements of SAE J 1654 and 1127, the HYflex™ line of cables is rated for use at 125°C and up to 600 volts.

HYflex™ incorporates a uniquely designed, high performance compound specifically formulated for use in heavy duty diesel hybrid vehicles and high strand count, flexible conductors to produce cables ideally suited for applications where flexibility, long life and performance is critical. These cables have also been tested to meet the stringent flame test requirements of VW-1 flame test per Underwriters Laboratories Standard for Safety UL1581.

HYflex™ cables are manufactured using high strand count tinned copper conductors. Standard sizes and constructions are listed below, however ultra flexible strandings and a variety of conductor materials are also available. Please contact our design team to discuss your specific requirement.

## PRODUCT ADVANTAGES

- \* Extra flexible high strand count, tinned copper conductors
- \* Meets SAE J 1654 & 1127 for 600 volt and 125° C diesel applications
- \* Improved flexibility over XLPO insulations
- \* Improved chemical resistance, temperature rating and cold weather performance vs. PVC
- \* Available in shielded and multiconductor configurations
- \* RoHS compliant
- \* Available in 10 standard colors

Part Number*	CONDUCTOR INFORMATION				INSULATION INFORMATION			WEIGHT
	Equivalent Size	Number of Strands	AWG of Strand	Nominal Outside Diameter**	Wall Thickness	Nominal Outside Diameter	Tolerance	LBS per 1000 FT
N48-30T-802	250 kCMA	2499	30	0.635"	0.088"	0.811"	+/- .020"	880.1
N48-30T-801	4/0 AWG	2121	30	0.585"	0.088"	0.761"	+/- .020"	754.0
N48-30T-752	3/0 AWG	1680	30	0.521"	0.088"	0.697"	+/- .020"	606.2
N48-30T-751	2/0 AWG	1344	30	0.466"	0.088"	0.642"	+/- .020"	492.9
N48-30T-753	1/0 AWG	1071	30	0.416"	0.088"	0.592"	+/- .020"	400.2
N48-30T-700	1 AWG	833	30	0.367"	0.066"	0.499"	+/- .016"	300.8
N48-30T-701	2 AWG	665	30	0.319"	0.066"	0.451"	+/- .016"	245.6
N48-30T-650	3 AWG	525	30	0.283"	0.066"	0.415"	+/- .016"	196.4
N48-30T-651	4 AWG	413	30	0.251"	0.066"	0.383"	+/- .016"	158.2
N48-30T-600	5 AWG	329	30	0.224"	0.066"	0.356"	+/- .016"	129.4
N48-30T-601	6 AWG	259	30	0.199"	0.066"	0.331"	+/- .016"	105.1
N48-30T-550 ^	7 AWG	210	30	0.179"	0.066"	0.311"	+/- .016"	98.9
N48-30T-551 ^	8 AWG	168	30	0.160"	0.066"	0.292"	+/- .016"	73.0

\*Multiconductor, shielded and unshielded cables also available. Please contact our design team for your specific application.

\*\*Conductor O.D. is determined when the cable is under tension during the extrusion process. Please request a sample of cable for evaluation prior to making decisions regarding connectors to be used with these cables.

^Manufactured and tested in accordance with SAE J 1127, however these sizes are not included in the specification.

**Reference documents:** ASTM B3-specification for soft or annealed copper wire; ASTM B 33-specification for tinned soft or annealed copper for electrical purposes; ASTM B 286-specification for copper conductors in hook-up wire for electronic equipment; SAE J 1127-Battery cable; SAE J 1654-High voltage primary cable and UL 1581 Standard for Safety of Electrical Wires, Cables and Flexible cords.

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