

A photograph of several black, flexible power cables. One cable is coiled into a large loop, while others are laid out straight. The ends of the cables are cut, showing the internal copper conductors. The background is a dark blue gradient.

FDR25S FLEXIBLE DIESEL-RESISTANT POWER CABLES

EXCELLENT FLUID RESISTANCE IN A POWER CABLE ALLOWS ROUTING IN EXTREMELY TIGHT SPACES WITH NO WRINKLING OR CRACKING OF INSULATION

iS Rayfast

FDR25S FLEXIBLE DIESEL-RESISTANT POWER CABLES

Excellent Fluid Resistance and Flexibility



HIGHLY FLEXIBLE

- Small bend radius for easier routing
- No wrinkling or cracking of insulation
- Reduces contact stress and mating/demating forces
- Excellent low temperature flexibility

HIGH PERFORMANCE

- Allows larger gauges to eliminate the need to split power
- Resists hot diesel fuels and aggressive fluids

LONG LIFE CYCLE

- Vibration stability extends life cycle in engine compartments
- Mechanically tough polymer based material

FDR25S diesel fluid-resistant power cables are mechanically tough and highly flexible to allow bending and routing in extremely tight areas with no wrinkling or cracking of the insulation.

This allows the cable to be run shorter distances, reducing stress on the contacts, and reducing the mating and demating forces normally associated with various connectors.

The ability to route the cable in tight spaces may allow the user to increase AWG size and eliminate the need to split power.

FDR25S multiconductor power cables provide an exceptional range of properties, including excellent low temperature flexibility, vibration stability, and resistance to a wide range of aggressive fluids—including hot diesel fuels.

Typical applications include both primary and secondary power distribution in aerospace, defense and marine applications such as in military ground vehicles where high amperage pass through is needed.

TE Components . . . TE Technology . . . TE Know-how . . .

AMP | Agastat | CII | Hartman | Kilovac | Microdot | Nanonics | Polamco | Raychem | Rochester | DEUTSCH
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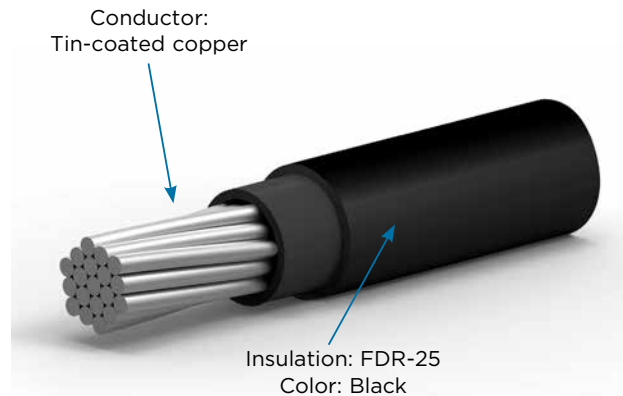


MATERIALS

- **Insulation:** FDR25
- **Conductors:** Tin-plated copper

ENVIRONMENTAL/MECHANICAL PERFORMANCE

- **Temperature Range:** -55°C to +125°C
- **Aging Stability:** 150°C for 168 hours
- **Cold Bend:** -55°C for 4 hours
- **Insulation Elongation:** 300% min.
- **Tensile Strength:** 2000 psi min.
- **Dynamic Cut Through:** 10 lbs. min. (14 gauge, 30 mil wall)
- **Flammability, 60° Flame:** Exceeds test requirements
- **Fluid Immersion:** Applies to a number of military standards



ELECTRICAL PERFORMANCE

- **Voltage:** 1000 V_{rms} at sea level and room temperature

SPECIFICATIONS

- **Product Specification:** WCD3304



Part Numbering/Ordering Information

Part No.	AWG	Conductor Stranding (No. x AWG)	Construction Details			Finished Wire			
			Stranded Conductor Dia.		Max. Resistance at 20°C (ohms/1000 ft.) (ohms/km)	Diameter			Max. Weight (lbs./1000 ft.) (kg/km)
			Min.	Max.		Min.	Nom.	Max.	
FDR25S-8	8	1078 x 38	4.06 .160	4.57 .180	.711 (2.33)	6.20 .244	6.50 .256	6.81 .268	77.6 (115)
FDR25S-4	4	1666 x 36	6.35 .250	7.37 .290	.275 (.902)	9.37 .369	9.75 .384	10.1 .399	176 (262)
FDR25S-2	2	2646 x 36	8.20 .323	8.81 .347	.171 (.561)	12.6 .498	13.1 .515	13.5 .532	306 (455)
FDR25S-0	0	4256 x 36	9.91 .390	10.9 .430	.110 (.361)	14.8 .582	15.3 .602	15.8 .622	442 (658)
FDR25S-00	00	5320 x 36	11.2 .440	12.2 .480	.087 (.285)	16.4 .644	17.0 .668	17.6 .692	551 (820)
FDR25S-000	000	6783 x 36	13.0 .510	14.0 .550	.068 (.223)	18.5 .730	19.2 .754	19.8 .778	699 (1040)
FDR25S-0000	0000	8379 x 36	16.3 .640	17.3 .680	.055 (.180)	21.8 .860	22.5 .884	23.1 .908	933 (1388)

Dimensions: **Millimeters** inches.

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