

7/32" (5.69 mm) MONOCONDUCTOR 1K22

PROPERTIES:

Cable Diameter:	0.224" +0.005" - 0.002"	(5.69mm +0.13mm -0.05mm)
Minimum Sheave Diameter:	14"	(36mm)
Cable Stretch Coefficient	2.2 ft/kft/Klbs	(2.50 m/Km/5KN)

ELECTRICAL:

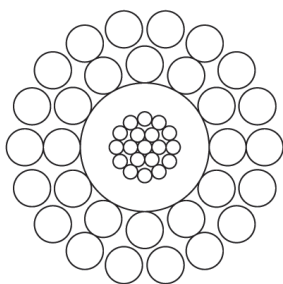
Maximum Conductor Voltage	1,200 VDC	
Conductor AWG Rating	16	
Minimum Insulation Resistance	1,500 Mega Ω /Kft @ 500VDC	(457 Mega Ω /Km @ 500VDC)
Armor Electrical Resistance	4.3 Ω /Kft	(14.1 Ω /Km)

MECHANICAL:

Cable Breaking Strength		
Ends Fixed:	5,400 lbs	(24.0 KN) Nominal
Maximum Suggested Working Tension:	2,700 lbs	(12.0 KN)
Number and Size of Wires:		
Inner Armor	15 x 0.0243"	(0.617 mm)
Outer Armor	15 x 0.0358"	(0.909 mm)
Average Wire Breaking Strength:		
Inner Armor	132 lbs	(0.59 KN)
Outer Armor	286 lbs	(1.27 KN)

Cable Type	Core Description				Cable Weight					
	Temp Rating	Plastic Type	Insulation Thickness	Copper Construction	Res. Typical	Cap. Typical	O.D. Each	in Air	in H2O	Spec. Gravity
	$^{\circ}$ F $^{\circ}$ C		in mm	in mm	Ω /Kft Ω /Kft	pf/ft pf/m	in mm	lbs/Kft Kg/Km		
1K22PP	300 149	Poly	0.0245 0.622	19x0.0119 19x0.302	4.0 13.1	60 197	0.108 2.743	94 140	78 116	6.64
1K22PXZ	420 216	Camtane ETFE	0.0130 0.330 0.0115 0.292	19x0.0119 19x0.302	4.0 13.1	61 200	0.085 2.159 0.108 2.743	96 143	82 122	6.60
1K22PXL	420 216	Camtane ECTFE	0.0145 0.330 0.0100 0.292	19x0.0119 19x0.302	4.0 13.1	61 200	0.085 2.159 0.108 2.743	96 143	82 122	6.60
1K22PZ	500 260	ETFE	0.0245 0.622	19x0.0119 19x0.302	4.0 13.1	69 226	0.108 2.743	97 144	83 124	6.83
1K22PTZ	500 260	FEP ETFE	0.0130 0.330 0.0115 0.292	19x0.0119 19x0.302	4.0 13.1	58 190	0.085 2.159 0.108 2.743	96 143	82 122	6.60

- * The armor wires are high tensile, Galvanized Extra Improved Plow Steel (GEIPS), and coated with anti-corrosion compound for protection during shipping and storing. Wires are preformed.
- * Core assembly – Copper strand consists of a total of nineteen wires. Conductor resistance is measured at 68° F. Voids in the copper strand are filled with a water-blocking agent to reduce water and gas migration.
- * SUPERSEAL, a special pressure seal agent, is applied between armor layers.
- * The temperature rating assumes a normal gradient for both temperature and weight.
- * All values shown are nominal or typical values.



7/32" (5.69 mm) MONOCONDUCTOR 1K22 CORROSION RESISTANT S75

PROPERTIES:

Cable Diameter:	0.224" +0.005" - 0.002"	(5.69mm + 0.13mm -0.05mm)
Minimum Sheave Diameter:	14"	(36 cm)
Cable Stretch Coefficient	2.7 ft/Kft/Klbs	(3.0 m/Km/5KN)

ELECTRICAL:

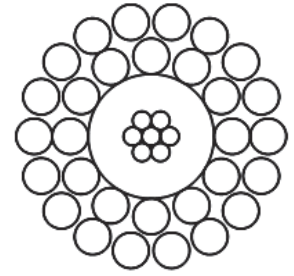
Maximum Conductor Voltage	1,200 VDC	
Conductor AWG Rating	18	
Minimum Insulation Resistance	1,500 MegaΩ/Kft @ 500VDC	(457 MegaΩ/Km @ 500VDC)
Armor Electrical Resistance:	16.0 Ω/Kft	(52.5 Ω/Km)

MECHANICAL:

Cable Breaking Strength:			
Ends Fixed:	4,800 lbs	(21.4 KN)	Nominal
Maximum Suggested Working Tension:	2,400 lbs	(10.7 KN)	
Number and Size of Wires:			
Inner Armor	15 x 0.0243"	(0.617 mm)	
Outer Armor	15 x 0.0358"	(0.909 mm)	
Average Wire Breaking Strength:			
Inner Armor	113 lbs	(0.50 KN)	
Outer Armor	246 lbs	(1.10 KN)	

Cable Type	Core Description							Cable Weight		
	Temp Rating	Plastic Type	Insulation Thickness	Copper Construction	Res Typical	Cap. Typical	O.D. Each	in Air	in H2O	Spec. Gravity
	°F °C		in mm	in mm	Ω/Kft Ω/Km	pf/ft pf/m	in mm	lbs/Kft Kg/Km		
1K22SA - S75	SEE BELOW	PFA	0.031 0.419 0.078	7x0.0159 7x0.404	6.7 22.0	43 141	0.108 2.743	94 140	80 119	6.60

- * Insulation is rated to 500°F. Armor wires are rated to 325° F at "low" levels of H2S + CO2.
- * The armor wires are made of UNS N08926, a corrosion resistant stainless steel and coated with anti-corrosion compound for protection during shipping and storing. Wires are preformed and cables are post tensioned.
- * The nickel coated copper wires are made of ASTMB355 Class 10 and they are used to increase corrosion protection.
- * Core assembly – Copper strand consists of six wires around one center wire. Conductor resistance is measured at 68° F. Voids in the copper strand are filled with a water-blocking agent to reduce water and gas migration.
- * SUPERSEAL, a special pressure seal agent, is applied between armor layers.
- * The insulation temperature rating assumes a normal gradient for both temperature and weight.
- * All values shown are nominal or typical values.



**7/32" (5.69 mm) MONOCONDUCTOR
1K22 CORROSION RESISTANT
S77**

PROPERTIES:

Cable Diameter:	0.224" +0.005" – 0.002"	(5.69mm + 0.13mm -0.05mm)
Minimum Sheave Diameter:	14"	(36 cm)
Cable Stretch Coefficient	3.0 ft/Kft/Klbs	(3.4 m/Km/5KN)

ELECTRICAL:

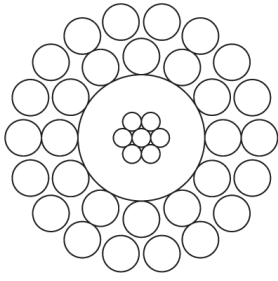
Maximum Conductor Voltage	1,200 VDC	
Conductor AWG Rating	18	
Minimum Insulation Resistance	1,500 MegaΩ/Kft @ 500VDC	(457 Mega Ω/Km @ 500VDC)
Armor Electrical Resistance:	18.5 Ω/Kft	(60.4 Ω/Km)

MECHANICAL:

Cable Breaking Strength:			
Ends Fixed:	5,000 lbs	(21.2 KN)	Nominal
Maximum Suggested Working Tension:	2,500 lbs	(10.6 KN)	
Number and Size of Wires:			
Inner Armor	15 x 0.0243"	(0.617 mm)	
Outer Armor	15 x 0.0358"	(0.909 mm)	
Average Wire Breaking Strength:			
Inner Armor	116 lbs	(0.52 KN)	
Outer Armor	251 lbs	(1.12 KN)	

Cable Type	Core Description							Cable Weight		
	Temp Rating	Plastic Insulation	Type Thickness	Copper Construction	Res Typical	Cap. Typical	O.D. Each	in Air	in H2O	Spec. Gravity
	°F °C		in mm	in mm	Ω/Kft Ω/Km	pf/ft pf/m	in mm	lbs/Kft Kg/Km		
1K22SA – S77	See Below	PFA	0.0305 0.7747	7x0.0159 7x0.404	6.7 22.0	43 141	0.108 2.743	94 140	80 119	6.60

- * Insulation is rated to 500°F. Armor wires are rated to 425° F at “elevated” levels of H2S + CO2.
- * The armor wires are made of UNS S31277, a corrosion resistant stainless steel and coated with anti-corrosion compound for protection during shipping and storing. Wires are preformed and cables are post tensioned.
- * The nickel coated copper wires are made of ASTM B355 Class 10 and they are used to increase corrosion protection.
- * Core assembly – Copper strand consists of six wires around one center wire. Conductor resistance is measured at 68° F. Voids in the copper strand are filled with a water-blocking agent to reduce water and gas migration.
- * SUPERSEAL, a special pressure seal agent, is applied between armor layers.
- * The temperature rating assumes a normal gradient for both temperature and weight.



**7/32" (5.69 mm) MONOCONDUCTOR
1K22 CORROSION RESISTANT
MP-35N**

PROPERTIES:

Cable Diameter:	0.224" +0.005" - 0.002"	(5.69mm + 0.13mm -0.05mm)
Minimum Sheave Diameter:	14"	(36 cm)
Cable Stretch Coefficient	2.4 ft/Kft/Klbs	(2.70 m/Km/5KN)

ELECTRICAL:

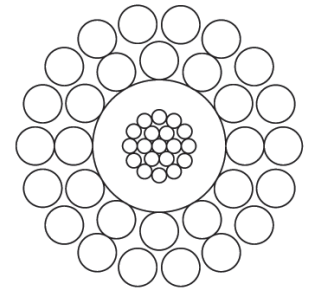
Maximum Conductor Voltage	1,200 VDC	
Conductor AWG Rating	18	
Minimum Insulation Resistance	1,500 MegaΩ/Kft @ 500VDC	(457 MegaΩ/Km @ 500VDC)
Armor Electrical Resistance:	22.0 Ω/Kft	(72.2 Ω/Km)

MECHANICAL:

Cable Breaking Strength:			
Ends Fixed:	5,200 lbs	(23.0 KN)	Nominal
Maximum Suggested Working Tension:	2,600 lbs	(11.6 KN)	
Number and Size of Wires:			
Inner Armor	15 x 0.0243"	(0.617 mm)	
Outer Armor	15 x 0.0358"	(0.909 mm)	
Average Wire Breaking Strength:			
Inner Armor	125 lbs	(0.56 KN)	
Outer Armor	272 lbs	(1.21 KN)	

Cable Type	Core Description							Cable Weight		
	Temp Rating	Plastic Type	Insulation Thickness	Copper Construction	Res Typical	Cap. Typical	O.D. Each	in Air	in H2O	Spec. Gravity
	°F °C		in mm	in mm	Ω/Kft Ω/Km	pf/ft pf/m	in mm	lbs/Kft Kg/Km		
1K22SA - MP-35N	500 260	PFA	0.031 0.078	7x0.0159 7x0.404	6.7 22.0	43 141	0.108 2.743	100 149	86 128	6.92

- * The armor wires are made of UNS R30035 (MP35N), a nickel-cobalt corrosion resistant stainless steel and coated with anti-corrosion compound for protection during shipping and storing. Wires are preformed and cables are post tensioned.
- * The nickel coated copper wires are made of ASTMB355 Class 10 and they are used to increase corrosion protection. Core assembly – Copper strand consists of six wires around one center wire. Conductor resistance is measured at 68° F. Voids in the copper strand are filled with a water-blocking agent to reduce water and gas migration.
- * SUPERSEAL, a special pressure seal agent, is applied between armor layers.
- * The temperature rating assumes a normal gradient for both temperature and weight.
- * All values shown are nominal or typical values.
- * Note: Nickel coated copper wire used to increase corrosion protection. Gauge reduced to approx. AWG 18.



7/32" (5.69 mm) MONOCONDUCTOR 1N22

PROPERTIES:

Cable Diameter:	0.224" +0.005" - 0.002"	(5.69mm + 0.13mm -0.05mm)
Minimum Sheave Diameter:	13"	(33 cm)
Cable Stretch Coefficient	2.5 ft/Kft/Klbs	(2.81 m/Km/5KN)

ELECTRICAL:

Maximum Conductor Voltage	1,200 VDC	
Conductor AWG Rating	16	
Minimum Insulation Resistance	1,500 MegaΩ/Kft @ 500VDC	(457 MegaΩ/Km @ 500VDC)
Armor Electrical Resistance:	4.4 Ω/Kft	(14.4 Ω/Km)

MECHANICAL:
Cable Breaking Strength:

Ends Fixed:	5,400 lbs	(24.0 KN)	Nominal
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Maximum Suggested Working Tension:

2,700 lbs	(12.0 KN)
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Number and Size of Wires:

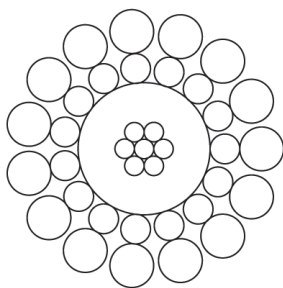
Inner Armor	12 x 0.0310"	(0.787 mm)
Outer Armor	18 x 0.0310"	(0.787 mm)

Average Wire Breaking Strength:

Inner Armor	215 lbs	(0.96 KN)
Outer Armor	215 lbs	(0.96 KN)

Cable Type	Core Description							Cable Weight		
	Temp Rating	Plastic Type	Insulation Thickness	Copper Construction	Res Typical	Cap. Typical	O.D. Each	in Air	in H2O	Spec. Gravity
	°F °C							in mm	in mm	
1N22PP	300 149	Poly	0.0245 0.622	19x0.0119 19x0.302	4.1 13.5	58 190	0.108 2.743	94 140	79 118	6.48
1N22PXZ	420 216		0.0130 0.330 0.0115 0.292	19x0.0119 19x0.302	4.1 13.5	59 194	0.085 2.159 0.108 2.743	95 141	80 119	
1N22PZ	500 260	Tefzel	0.0245 0.622	19x0.0119 19x0.302	4.1 13.5	68 223	0.108 2.743	97 144	82 119	6.67
1N22PTZ	500 260	Teflon Tefzel	0.0130 0.330 0.0115 0.292	19x0.0119 19x0.302	4.1 13.5	58 190	0.085 2.159 0.108 2.743	97 144	82 119	6.69

- * The armor wires are high tensile, Galvanized Extra Improved Plow Steel (GEIPS), and coated with anti-corrosion compound for protection during shipping and storing. Wires are preformed.
- * Core assembly – Copper strand consists of a total of nineteen wires. Conductor resistance is measured at 68° F. Voids in the copper strand are filled with a water-blocking agent to reduce water and gas migration.
- * SUPERSEAL, a special pressure seal agent, is applied between armor layers.
- * The temperature rating assumes a normal gradient for both temperature and weight.
- * All values shown are nominal or typical values.



**MONOCONDUCTOR
1N22 CORROSION RESISTANT
S75**

PROPERTIES:

Cable Diameter:	0.224" +0.005" – 0.002"	(5.69mm + 0.13mm -0.05mm)
Minimum Sheave Diameter:	13"	(33 cm)
Cable Stretch Coefficient	2.9 ft/Kft/Klbs	(3.30 m/Km/5KN)

ELECTRICAL:

Maximum Conductor Voltage	1,200 VDC	
Conductor AWG Rating	18	
Minimum Insulation Resistance	1,500 MegaΩ/Kft @ 500VDC	(457 MegaΩ/Km @ 500VDC)
Armor Electrical Resistance:	16.0 Ω/Kft	(52.5 Ω/Km)

MECHANICAL:

Cable Breaking Strength:

Ends Fixed: 4,800 lbs (21.4 KN) Nominal

Maximum Suggested Working Tension: 2,400 lbs (10.7 KN)

Number and Size of Wires:

Inner Armor 12 x 0.0310" (0.787 mm)

Outer Armor 18 x 0.0310" (0.787 mm)

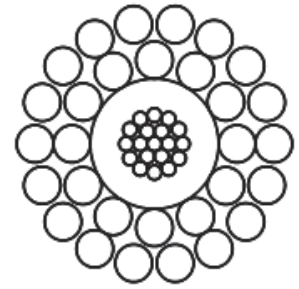
Average Wire Breaking Strength:

Inner Armor 185 lbs (0.82 KN)

Outer Armor 185 lbs (0.82 KN)

Cable Type	Core Description							Cable Weight		
	Temp Rating	Plastic Type	Insulation Thickness	Copper Construction	Res Typical	Cap. Typical	O.D. Each	in Air	in H2O	Spec. Gravity
	°F °C							lbs/Kft	Kg/Km	
1N22SA- S75	See Below	PFA	0.031 0.078	7x0.0159 7x0.404	6.7 22.0	43 141	0.108 2.743	96 143	81 121	6.63

- * Insulation is rated to 500 deg. F. Armor wires are rated to 325° F at “low exposure” to H2S & CO2.
- * The armor wires are made of UNS N08926, a corrosion resistant stainless steel and coated with anti-corrosion compound for protection during shipping and storing. Wires are preformed and cables are post tensioned.
- * The nickel coated copper wires are made of ASTMB355 Class 10 and they are used to increase corrosion protection.
- * Core assembly – Copper strand consists of six wires around one center wire. Conductor resistance is measured at 68° F. Voids in the copper strand are filled with a water-blocking agent to reduce water and gas migration.
- * SUPERSEAL, a special pressure seal agent, is applied between armor layers.
- * The temperature rating assumes a normal gradient for both temperature and weight.
- * All values shown are nominal or typical values.



**7/32" (5.69 mm) MONOCONDUCTOR
1N22 CORROSION RESISTANT
S77**

PROPERTIES:

Cable Diameter:	0.224" +0.005" – 0.002"	(5.69mm + 0.13mm -0.05mm)
Minimum Sheave Diameter:	13"	(33 cm)
Cable Stretch Coefficient	3.1 ft/Kft/Klbs	(3.5 m/Km/5KN)

ELECTRICAL:

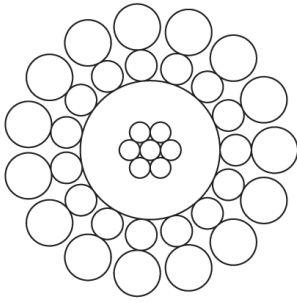
Maximum Conductor Voltage	1,200 VDC	
Conductor AWG Rating	18	
Minimum Insulation Resistance	1,500 MegaΩ/Kft @ 500VDC	(457 MegaΩ/Km @ 500VDC)
Armor Electrical Resistance:	18.1 Ω/Kft	(59.4 Ω/Km)

MECHANICAL:

Cable Breaking Strength:			
Ends Fixed:	5,200 lbs	(21.1 KN)	Nominal
Maximum Suggested Working Tension:	2,600 lbs	(10.6 KN)	
Number and Size of Wires:			
Inner Armor	12 x 0.0310"	(0.787 mm)	
Outer Armor	18 x 0.0310"	(0.787 mm)	
Average Wire Breaking Strength:			
Inner Armor	188.6 lbs	(0.84 KN)	
Outer Armor	188.6 lbs	(0.84 KN)	

Cable Type	Core Description							Cable Weight		
	Temp Rating	Plastic Insulation	Type Thickness	Copper Construction	Res Typical	Cap. Typical	O.D. Each	in Air	in H2O	Spec. Gravity
	°F °C		In Mm	In mm	Ω/Kft Ω/Km	pf/ft pf/m	In Mm	Lbs/Kft Kg/Km		
1N22SA – S77	See Below	PFA	0.0305 0.7747	7x0.0159 7x0.404	6.7 22.0	43 141	0.108 2.743	97 144	81 119	6.63

- * Insulation is rated to 500°F. Armor wires are rated to 425° F at “elevated” levels of H2S + CO2.
- * The armor wires are made of UNS S31277, a corrosion resistant stainless steel and coated with anti-corrosion compound for protection during shipping and storing. Wires are preformed and cables are post tensioned.
- * The nickel coated copper wires are made of ASTMB355 Class 10 and they are used to increase corrosion protection.
- * Core assembly – Copper strand consists of six wires around one center wire. Conductor resistance is measured at 68° F. **Voids in the copper strand are filled with a water-blocking agent to reduce water and gas migration.**
- * SUPERSEAL, a special pressure seal agent, is applied between armor layers.
- * The temperature rating assumes a normal gradient for both temperature and weight.



**7/32" (5.69 mm) MONOCONDUCTOR
1N22 CORROSION RESISTANT
MP-35N**

PROPERTIES:

Cable Diameter:	0.224" +0.005" - 0.002"	(5.69mm + 0.13mm -0.05mm)
Minimum Sheave Diameter:	13"	(33 cm)
Cable Stretch Coefficient	2.9 ft/Kft/Klbs	(3.30 m/Km/5KN)

ELECTRICAL:

Maximum Conductor Voltage	1,200 VDC	
Conductor AWG Rating	18	
Minimum Insulation Resistance	1,500 MegaΩ/Kft @ 500VDC	(457 MegaΩ/Km @ 500VDC)
Armor Electrical Resistance:	22.0 Ω/Kft	(72.2 Ω/Km)

MECHANICAL:

Cable Breaking Strength:

Ends Fixed:	5,200 lbs	(23.0 KN)	Nominal
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Maximum Suggested Working Tension:

2,600 lbs	(11.6 KN)
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Number and Size of Wires:

Inner Armor	12 x 0.0310"	(0.787 mm)
Outer Armor	18 x 0.0310"	(0.787 mm)

Average Wire Breaking Strength:

Inner Armor	204 lbs	(0.91 KN)
Outer Armor	204 lbs	(0.91 KN)

Cable Type	Core Description							Cable Weight		
	Temp Rating	Plastic Type	Insulation Thickness	Copper Construction	Res Typical	Cap. Typical	O.D. Each	in Air	in H2O	Spec. Gravity
	°F °C							lbs/Kft	Kg/Km	
1N22SA - MP-35N	500 260	PFA	0.031 0.078	7x0.0159 7x0.404	6.7 22.0	43 141	0.108 2.743	100 149	86 128	6.92

- * The armor wires are made of UNS R30035 (MP35N), a nickel-cobalt corrosion resistant stainless steel and coated with anti-corrosion compound for protection during shipping and storing. Wires are preformed and cables are post tensioned.
- * The nickel coated copper wires are made of ASTMB355 Class 10 and they are used to increase corrosion protection. Core assembly – Copper strand consists of six wires around one center wire. Conductor resistance is measured at 68° F. Voids in the copper strand are filled with a water-blocking agent to reduce water and gas migration.
- * SUPERSEAL, a special pressure seal agent, is applied between armor layers.
- * The temperature rating assumes a normal gradient for both temperature and weight.
- * All values shown are nominal or typical values.