



The WorkHorse® test assemblies have a long history for proven durability while priced to fit today's budget.

INTRODUCTION

The WorkHorse® Family of coaxial assemblies is a time proven and cost effective group of test assemblies. These ruggedized test cables were specifically designed for use in high volume production environments, where strenuous flexing and numerous mating cycles quickly destroy typical connectors and attachment methods.

Workhorse® assemblies are ideal replacements for OEM test port cables due to their long life and repeatable performance. WorkHorse® and Armored Workhorse® assemblies utilize Carlisle Interconnect Technologies' (CarlisleIT) proven "504" triple shielded cable. Using a solid center conductor, this cable has low loss and excellent phase stability with performance up to 26.5 GHz.

WorkHorse Plus® assemblies utilize CarlisleIT's "524" cable, which has a stranded center conductor and polyurethane jacket for enhanced flexibility with performance capabilities up to 18 GHz.

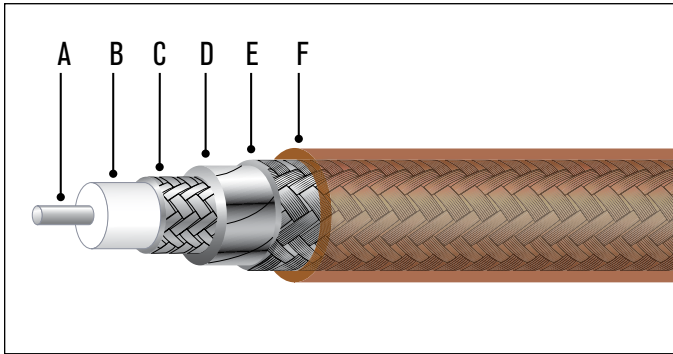
FEATURES

- » DC to 26.5 GHz
- » Durable Construction and Attachment Method
- » Available with Crush-proof Stainless Steel Interlocking Armor
- » Low Loss and Phase Stable for Testing Repeatability
- » Triple Shielded for Reduced Leakage
- » RoHS Compliant

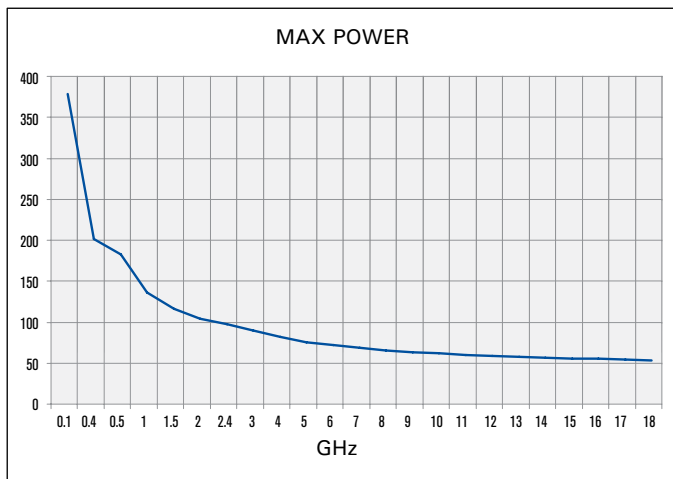
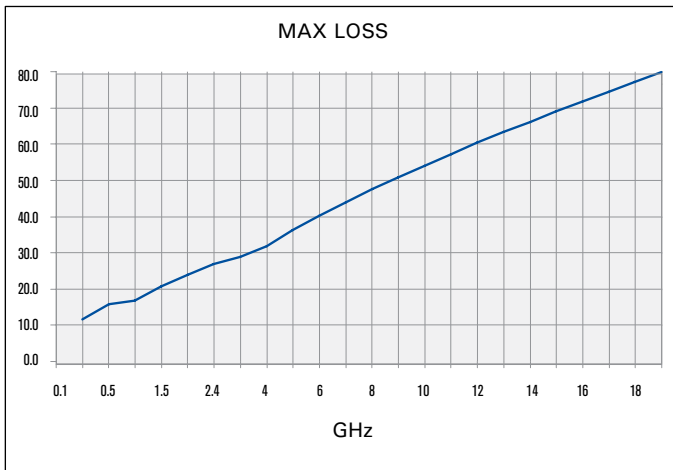


WorkHorse® Cables

504 CABLES



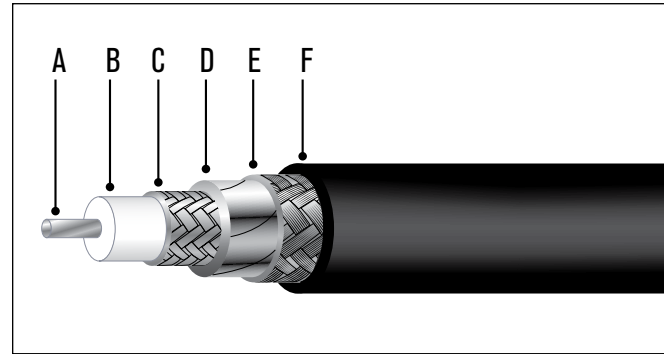
Item	Material	Size
A. CENTER CONDUCTOR	SILVER PLATED COPPER WELD STEEL	0.037
B. DIELECTRIC:	SOLID PTFE	0.117
C. INNER BRAID	FLAT SILVER PLATED COPPER STRIP BRAID	0.127
D. INTERLAYER	ALUMINUM / POLYESTER FOIL	0.134
E. OUTER BRAID	SILVER PLATED COPPER WIRE	0.154
F. JACKET	BROWN TINT FEP / HIGH TEMPERATURE	0.195



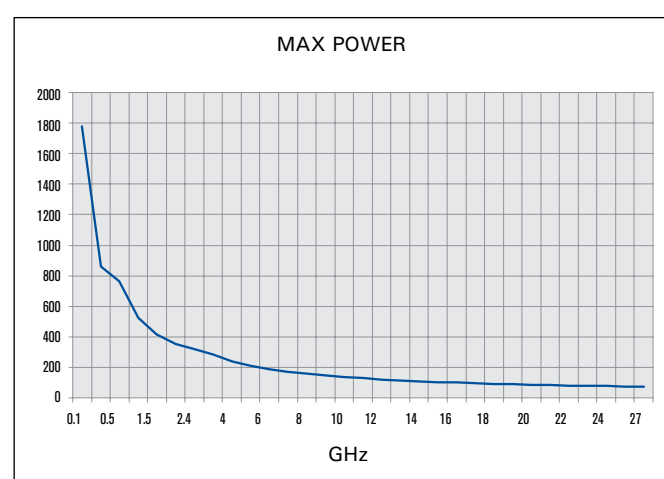
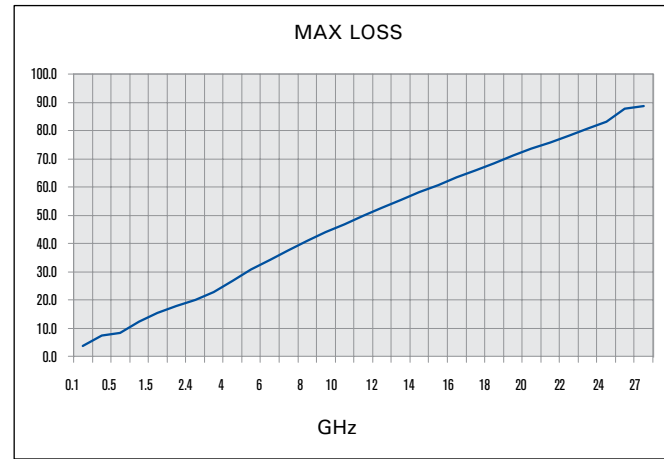
ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	50 Ω
CAPACITANCE NOMINAL:	28.8 pf/FOOT
VELOCITY OF PROPAGATION, NOMINAL:	70.5 %
RELATIVE SHIELDING:	-100.0 dB MIN.
INSULATION RESISTANCE:	1000 MΩ MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1500 VRMS MIN.
ELECTRICAL DELAY, NOMINAL:	1.44 ns/FOOT
ELECTRICAL DELAY, NOMINAL:	120 ps/INCH
F (IN GHz) ----->	1 2 4 6 12 18
MAX. CW WATTS ----->	360 245 164 129 84 64
PHASE STABILITY DEG.	0.3 0.6 1.2 1.8 3.6 5.4
LOSS STABILITY dB---->	0.01 0.01 0.01 0.015 0.03 0.05
CABLE FORMED AND STRAIGHTENED 90° ON A 4" RADIUS	

MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.200 INCHES
MINIMUM BEND RADIUS:	1.17 INCHES
TEMPERATURE RANGE:	-55 to +105° C

524 CABLES



Item	Material	Size
A. CENTER CONDUCTOR	STRANDED SILVER PLATED COPPER WIRE	0.037
B. DIELECTRIC:	SOLID PTFE	0.117
C. INNER BRAID	FLAT SILVER PLATED COPPER STRIP	0.127
D. INTERLAYER	ALUMINUM / POLYESTER FOIL	0.134
E. OUTER BRAID	SILVER PLATED COPPER WIRE	0.154
F. JACKET	BLACK POLYURETHANE	0.212



ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	50 Ω
CAPACITANCE NOMINAL:	28.8 pf/FOOT
VELOCITY OF PROPAGATION, NOMINAL:	70.5 %
RELATIVE SHIELDING:	-100.0 dB MIN.
INSULATION RESISTANCE:	1000 MΩ MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1500 VRMS MIN.
ELECTRICAL DELAY, NOMINAL:	1.44 ns/FOOT
ELECTRICAL DELAY, NOMINAL:	120 ps/INCH
F (IN GHz) ----->	1 2 4 6 12.4 18
MAX. CW WATTS ----->	50 33 22 17.3 11.4 8.50
PHASE STABILITY DEG.	0.3 0.6 1.2 1.8 3.6 5.4
LOSS STABILITY dB---->	0.01 0.01 0.01 0.015 0.031 0.045
CABLE FORMED AND STRAIGHTENED 90° ON A 4" RADIUS	

MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.222 INCHES
MINIMUM BEND RADIUS:	1.17 INCHES
TEMPERATURE RANGE:	-55 to +85° C

HOW TO ORDER

1) Choose your product from the table below:

Workhorse® and WorkhorsePlus® Cable Information						
Product	Cable Code	Jacket Type	Center Conductor	Max. Frequency	Max. Insertion Loss (dB p/ft.)	Return Loss @ Max Freq.
Workhorse®	504	FEP	Solid SPCW	26.5GHz	0.89	-22.0 dB
WorkhorsePlus®	524	Polyurethane	Stranded SPCW	18GHz	0.719	-20.0 dB

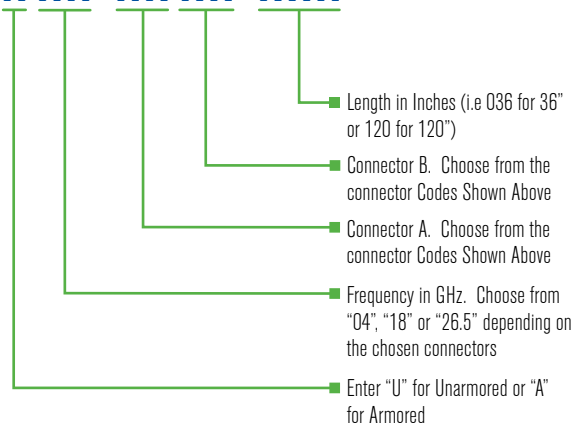
2) Choose your connector codes from the table below:

Series:	BNC	TNC	Type N	7mm	SMA	3.5mm
Max Freq. (GHz)	4	18	18	18	26.5	33
CODES						
Plug	24	30	18	78	36	72
Right Angle Plug	-	31	19	-	37	-
Jack	-	-	20	78	38	74
Bulkhead Jack	-	-	22	-	40	-

3) Build your assembly part number:

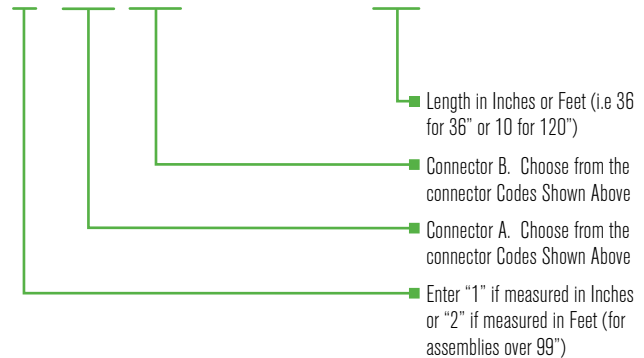
Workhorse® Assemblies

WHX XX-XX XX-XXX



WorkhorsePlus® Assemblies

X-XX XX-524-WHXX



All Workhorse and WorkhorsePlus Cables are Manufactured ROHS Compliant.

Note:

Connector codes should be listed in increasing numerical sequence.

Examples: WHU18-1836-036 and 1-1836-524-WH36