

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.

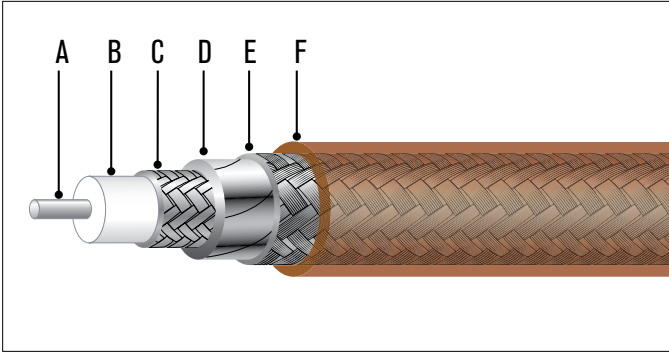
FEATURES

- » 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

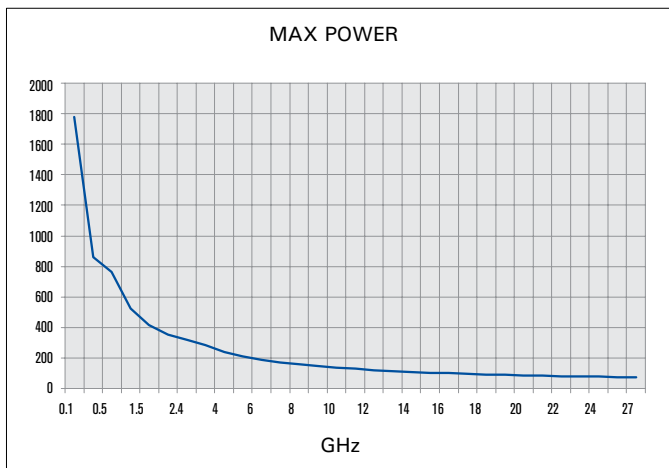
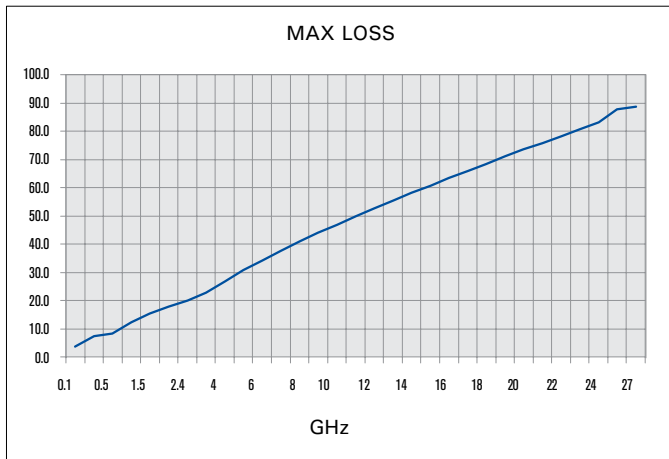


WorkHorse® Cables

504 Cables



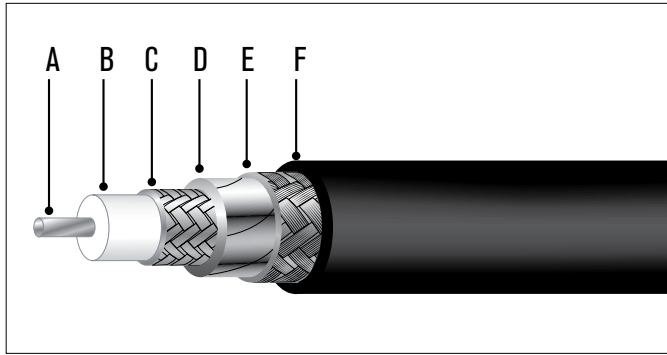
Item	Material	Size
A. CENTER CONDUCTOR	SILVER PLATED COPPER WELD STEEL	0.037
B. DIELECTRIC:	SOLID PTFE	0.117
C. INNER BRAID	FLAT SILVER PLATED COPPER STRIP BRAID	0.127
D. INTERLAYER	ALUMINUM / POLYESTER FOIL	0.134
E. OUTER BRAID	SILVER PLATED COPPER WIRE	0.154
F. JACKET	BROWN TINT FEP / HIGH TEMPERATURE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



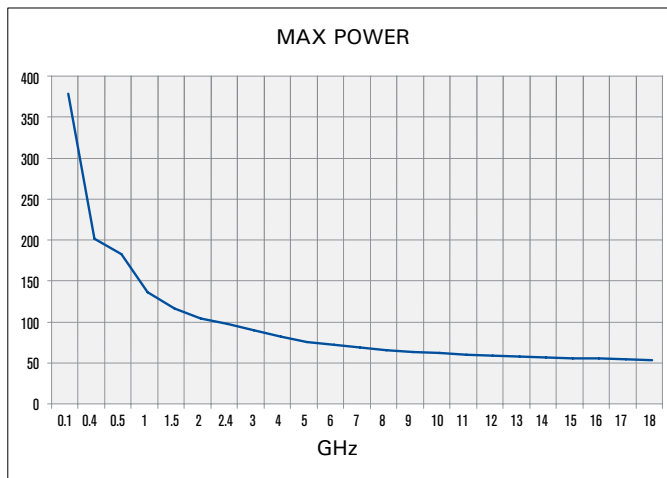
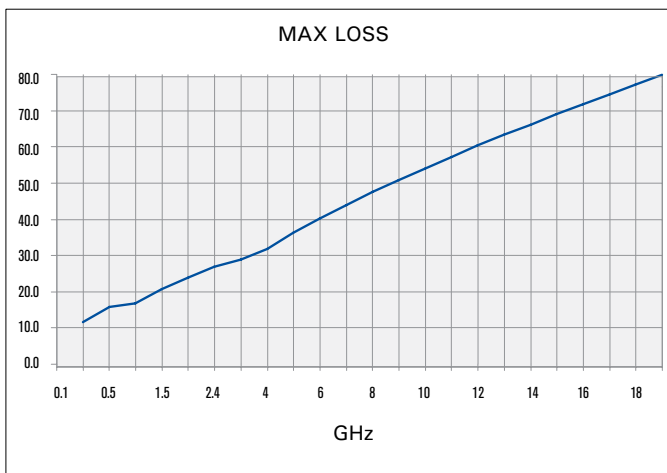
ELECTRICAL SPECIFICATIONS						
IMPEDANCE, NOMINAL:	50 Ω					
CAPACITANCE NOMINAL:	28.8 pf/FOOT					
VELOCITY OF PROPAGATION, NOMINAL:	70.5 %					
RELATIVE SHIELDING:	-100.0 dB MIN.					
INSULATION RESISTANCE:	1000 MΩ MIN.					
DIELECTRIC WITHSTANDING VOLTAGE:	1500 VRMS MIN.					
ELECTRICAL DELAY, NOMINAL:	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 WorkHorse Plus® 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
WorkHorse Plus®	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

- Length in Inches (i.e 036 for 36" or 120 for 120")
- Connector B. Choose from the connector Codes Shown Above
- Connector A. Choose from the connector Codes Shown Above
- Frequency in GHz. Choose from "04", "18" or "26.5" depending on the chosen connectors
- Enter "U" for Unarmored or "A" for Armored

WorkHorse Plus® Assemblies

X-XX XX-524-WHXX

- Length in Inches or Feet (i.e 36 for 36" or 10 for 120")
- Connector B. Choose from the connector codes Shown Above
- Connector A. Choose from the connector Codes Shown Above
- Enter "1" if measured in Inches or "2" if measured in Feet (for assemblies over 99")

All WorkHorse and WorkHorse Plus Cables are Manufactured ROHS Compliant.

Note:

Connector codes should be listed in increasing numerical sequence. Examples: WHU18-1836-036 and 1-1836-524-WH36