Introduction

BRILLIANCE®

Maximum Transmission Distance at Serial Digital Data Rates

Data Rate:	143 Mb/s		177 Mb/s		270 Mb/s		360 Mb/s		540 Mb/s		1.5 Gb/s		1.5 Gb/s		3.0 Gb/s	
Spec:	SMPTE 259M		ITU-R BT .601		SMPTE 259M		SMPTE 259M		SMPTE 344M		SMPTE 292M		Independent Test		SMPTE 424M	
Application:	Composite NTSC		Composite PAL		Composite Video		Component Widescreen		Component Widescreen		HDTV		HDTV		Prog. Scan HDTV	
Part No.	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m
179DT	500	152	450	137	380	116	340	104	280	85	110	**34**	132	**40** +6	80	24
1855A	980	299	950	290	790	241	680	207	560	171	260	**79**	263	**80** +1	150	46
1855ENH	–	–	–	–	–	–	–	–	–	–	–	**–**	328	**100** –	–	–
1505A	1430	436	1360	415	1110	338	970	296	790	241	310	**94**	394	**120** +26	220	67
1505F	1200	366	1071	327	857	261	732	223	588	179	225	**69**	328	**100** +31	–	–
1694A	1880	573	1710	521	1.430	436	1240	378	1010	308	400	**122**	459	**140** +18	270	82
7731A	2750	838	2480	756	2.040	622	1760	536	1430	436	550	**168**	656	**200** +32	360	110

Crush Resistance

Manufacturers may provide very good cable and test data for their product in the laboratory or on the package spool. However, the rigors of installation can have a serious affect on the actual physical layer performance.

Any change in impedance at any point would cause a reflection. This reflection may have serious repercussions on the cable's performance.

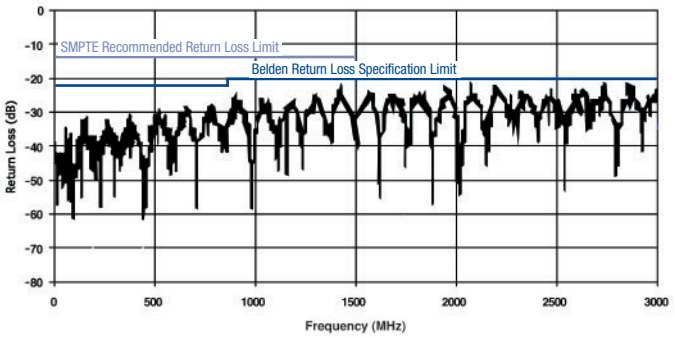
Belden products maintain superiority in crush resistance. Belden products use a gas-injected foam high-density polyethylene dielectric material in precision video cables in order to maintain:

- Better field ruggedness
- The ability to handle tighter bend radii
- More weight in cable trays
- Bending/flexing without pushing out the center pin and/or damaging attached equipment
- More rugged installation practices
- Plus various other environmental and installation benefits

Return Loss (dB)

The tested cables were loaded with 50 N (50 Newton = 5 kilograms), according to EN50289-3-5.

75 Ohm Brilliance® precision video cable 1505A: RL 28 dB - 850 MHz, 22dB - 3 GHz



Manufacturer X: RL 12 dB - 850 MHz, 11 dB - 3 GHz