

I. DESCRIPTION

COMPOSITE CABLE CONSISTING OF THE FOLLOWING COMPONENTS:

ELEMENT 1: JACKETED PAIR FROM DS608
ELEMENT 2: BELDEN 1302E
OVERALL: 8 X ELEMENT ONE AND 3 X ELEMENT TWO BUNDLED UNDER A PVC JACKET

II. ELECTRICAL CHARACTERISTICS (DS608 JACKETED PAIR):

NOM. CHARACTERISTIC IMPEDANCE: 110 OHM
NOM. CAPACITANCE CONDUCTOR TO CONDUCTOR: 14 PF/FT
NOM. CAPACITANCE BETWEEN ONE CONDUCTOR AND OTHER TIED TO SHIELD: 27 PF/FT
NOM. CONDUCTOR DC RESISTANCE: 38.5 OHM/1000 FT
ATTENUATION:

1MHz	3MHz	6MHz	12MHz	25MHz
1.25	1.85	2.40	3.16	4.20

III. ELECTRICAL CHARACTERISTICS (1302E):

NOM. CHARACTERISTIC IMPEDANCE: 100 OHM
MAX. CAPACITANCE CONDUCTOR TO CONDUCTOR: 17.1 PF/FT
NOM. VELOCITY OF PROPAGATION: 77%
NOM. DELAY:

Freq. (MHz)	Delay (ns/ft)
1.000	1.737
4.000	1.682
10.000	1.661
16.000	1.655
31.200	1.646
62.500	1.643
100.000	1.640
125.000	1.637
200.000	1.634
250.000	1.634
300.000	1.634
500.000	1.634

MAX. DELAY SKEW: 25.000 NS/100M
MAX. CONDUCTOR DC RESISTANCE: 9.5 OHM/100M
MAX. OPERATING VOLTAGE – OTHER: 72 VDC
MAX. RECOMMENDED CURRENT: 1.5A
MAX. DC UNBALANCE CONDUCTOR TO CONDUCTOR: 2.0% @ 20°C
MAX. DC UNBALANCE PAIR TO PAIR: 4.0% @ 20°C

PREMISE CABLE ELECTRICAL TABLE 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)
1	2.500	75.3	72.3	72.8	69.8	20.000
4	4.600	66.3	63.3	61.7	58.7	23.000
10	7.100	60.3	57.3	53.2	50.2	25.000
16	9.000	57.2	54.2	48.3	45.3	25.000
31.2	12.600	52.9	49.9	50.4	47.3	23.600
62.5	18.000	48.4	45.4	30.4	27.4	21.500
100	23.000	45.3	42.3	22.3	19.3	20.100
125	25.800	43.8	40.8	18	15	19.400
200	33.100	40.8	37.8	7.7	4.7	18.000
250	37.300	39.3	36.3	2	-1	17.300
300	41.100	38.1	35.1	-3	-6	17.300
500	54.300	34.8	31.8	-19.5	-22.5	17.300

PREMISE CABLE ELECTRICAL TABLE 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ACRF (dB)	Min. PSACRF (dB)
1	100 ± 15	105 ± 10	68	65
4	100 ± 15	100 ± 15	56	53
10	100 ± 15	100 ± 15	48	45
16	100 ± 15	100 ± 15	43.9	40.9
31.2	100 ± 15	100 ± 10	38.1	35.1
62.5	100 ± 15	100 ± 10	32.1	9.1
100	100 ± 15	100 ± 10	28	25
125	100 ± 32	100 ± 10	26.1	23.1
200	100 ± 22	100 ± 10	22	19
250	100 ± 32	100 ± 10	20	17
300	100 ± 32	100 ± 10	18.5	15.5
500	100 ± 32	100 ± 10	14	11

PREMISE CABLE ELECTRICAL TABLE 4:

Frequency (MHz)	Min. PSANEXT (dB)	Min. PSAACRF (dB)	Min. TCL (dB)	Min. ELTCTL (dB)
1.000	67.000	67.000	40.000	35.000
4.000	67.000	66.200	34.000	23.000
10.000	67.000	58.200	30.000	15.000
16.000	67.000	54.100	28.000	10.900
31.200	67.000	48.300	25.100	5.100
62.500	65.600	42.300	22.000	
100.000	62.500	38.200	20.000	
125.000	61.000	36.300	19.000	
200.000	58.000	32.200	17.000	
250.000	56.500	30.200	16.000	
300.000	55.300	28.700		
500.000	52.000	24.200		

III. PHYSICAL CHARACTERISTICS (DS608 JACKETED PAIR):

AWG	26
STRANDING	7X34
CONDUCTOR MATERIAL	TC - TINNED COPPER
INSULATION MATERIAL	FOAM PP
NOM. INSULATION THICKNESS	.015"
CONDUCTOR COLOR CODE	BLACK, WHITE
OUTER SHIELD TYPE	TAPE
OUTER SHIELD MATERIAL	ALUMINUM FOIL-POLYESTER TAPE
OUTER SHIELD DRAIN WIRE AWG	24
OUTER SHIELD DRAIN WIRE STRANDING	7X32
OUTER SHIELD DRAIN WIRE MATERIAL	TC - TINNED COPPER

OUTER JACKET MATERIAL PVC - POLYVINYL CHLORIDE
OVERALL NOM. DIAMETER .143"

III. PHYSICAL CHARACTERISTICS (1302E) :

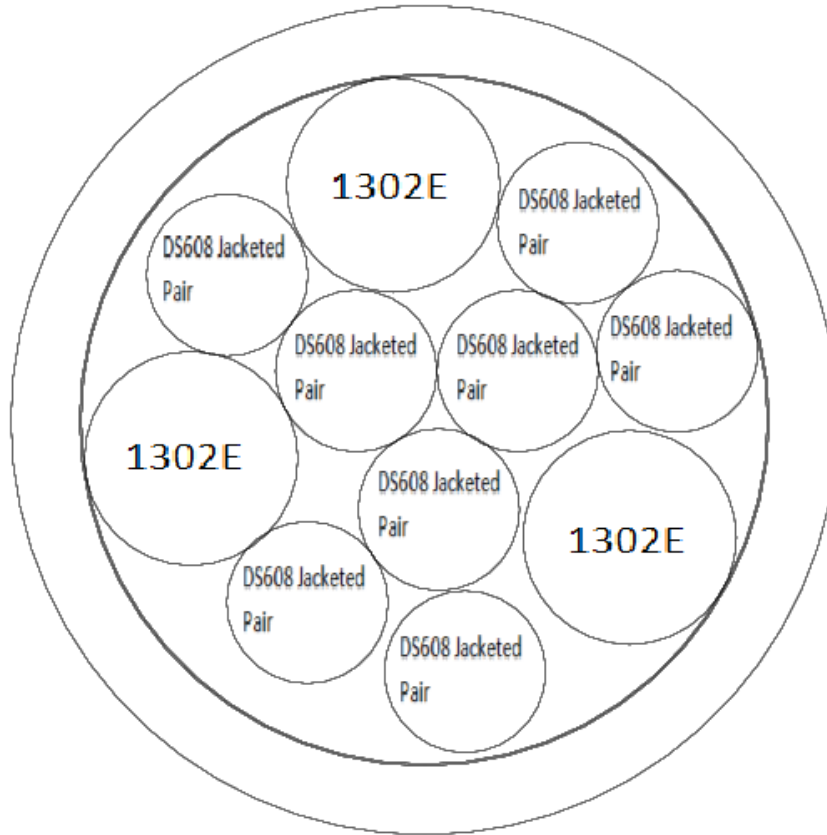
PAIRS 4
AWG 24
STRANDING 7X32
CONDUCTOR MATERIAL BC - BARE COPPER
INSUALTION MATERIAL FPE - FOAMED POLYETHYLENE
NOM. INSULATION DIAMETER .055"
INNER SHIELD MATERIAL TYPE TAPE
INNER SHIELD MATERIAL ALUMINUM/POLYESTER (AL OUT)
INNER SHIELD COVERAGE 100%
INNER SHIELD DESCRIPTION EACH PAIR INDIVIDIUALLY SHIELDED
INNER SHIELD DRAIN WIRE AWG 26
INNER SHIELD DRAIN WIRE STRANDING 7X34
INNER SHIELD DRAIN WIRE MATERIAL TC - TINNED COPPER (ONE DRAIN FOR 4 PAIRS)
OUTER SHIELD TYPE BRAID
OUTER SHIELD MATERIAL TC - TINNED COPPER
OUTER SHIELD COVERAGE 80%
OUTER JACKET MATERIAL MATTE PVC
OUTER JACKET NOM. DIAMETER .311"
PAIR COLOR CODE WHITE & BLUE, WHITE & ORANGE, WHITE & GREEN, WHITE & BROWN

IV. PHYSICAL CHARACTERISTICS (OVERALL) :

OUTER JACKET MATERIAL: FLEXIBLE MATTE PVC
NOM. DIAMETER; .905" ESTIMATED*
APPLICABLE SPECIFICATION: ANSI/TIA/EIA 568-B.2-10 (2008)
FLAME RESISTANCE: NONE SPECIFIED

V. COLOR CODE (OVERALL) :

DS608 JACKETED PAIR OVERALL JACKET WHITE JACKETS WITH NUMBERING
1302E OVERALL JACKET BLUE JACKETS WITH NUMBERING
OVERALL CABLE JACKET TBD



*SAMPLE BEFORE ORDER REQUIRED TO VERIFY DIMENSIONAL CAPABILITY & COMPLIANCE TO TIA ELECTRICAL REQUIREMENTS.