

Ratings and Certifications



Underwriters Laboratories. Class I, Groups C & D at 480 Vac, 60/400 Hz, Circuit-Breaking.



CSA International, U.S. and Canadian Standards: Class I, Groups B, C & D and Class II, Groups F & G at 600 Vac, 60/400 Hz, Circuit-Breaking.



0344 Ex II 2 G D, EEx d IIC T6; -20°C ≤ Ta ≤ +50°C; IP 66/67 T70°. For Standard and Reverse Service, 50/60/400 Hz; 500 Vdc, 1000 Vac.

Operation

Receptacles are mated to plugs that feature a quick make and break design. To engage, align plug to receptacle and turn coupling sleeve clockwise. Plug will be injected automatically & close circuit. Continue turning coupling sleeve to solid to provide environmental seal. To disengage, rotate coupling sleeve c.c.w (counterclockwise). Plug will eject automatically. Continue turning coupling sleeve to extract the plug. **Caution:** Do not interfere with cable housing. To prevent shock hazard the receptacle cover must be threaded onto receptacle when receptacle is not in use.

Materials (See Tables 5 and 6 for Material Composition data)

GD Series, Wrought Aluminum 6061-T6, copper-free, with Hardcoating per Mil-A-8625 Type III, black finish.
SD Series, Stainless Steel Type 316.

Assembly

Attachment receptacles are designed for field termination. Vantage crimp tool T-104 insures properly and safely crimped contacts to conductors. Assembly instructions are included. A vise, strap wrench, and blade screw driver are required.

Maintenance

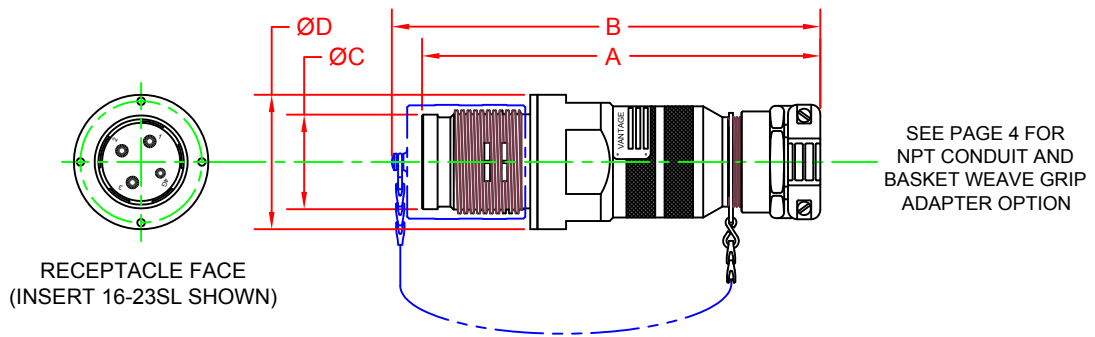
Periodic maintenance consists of inspection for termination integrity and contamination. When conditions require, lubricate coupling threads with silicone oil, Vantage Part Number VT-9400-21D.

Before Ordering

Insert: Table 3 lists the available insert configurations. The insert selection dictates the shell size of the receptacle. Diagrams are available for each insert configuration, request Vantage Product Data Sheet PDS-GD-SD-INSERT.

Grommet: To provide safe environmental sealing, a correctly sized grommet must be selected. Reference Table 4 to determine grommet code.




Options: Attachment receptacles come standard with a mechanical clamp nut. Options include a basket weave grip or a NPT threaded conduit backshells. Table 7 lists the available NPT sizes for each shell size.



SHELL SIZE	DIMENSION IN INCHES (mm)				WEIGHT LBS (kg)	MULTIPLY WEIGHT BY FACTOR OF 2.0 TO OBTAIN WEIGHT OF STAINLESS STEEL VERSION OF CONNECTOR
	A	B	C	D		
16	10.0 (254)	11.8 (300)	1.969 (50.0)	3.063 (77.8)	3.4 (1.5)	
20	10.7 (272)	12.5 (317)	2.468 (62.7)	3.563 (90.5)	4.7 (2.1)	
24	11.1 (283)	12.9 (328)	2.969 (75.4)	4.188 (106.4)	6.4 (2.9)	
28	11.4 (291)	13.2 (336)	3.468 (88.1)	4.688 (119.1)	8.1 (3.7)	

REVISION: B	WTN BY: JOHN NORDECK	TITLE: GD AND SD ATTACHMENT RECEPTACLES	Vantage Technology LLC 4675 South Windermere Street Englewood, Colorado USA 80110 Phone: 303-761-2121 FAX: 303-789-4215 Email: support@vantagexp.com
	CHK BY: DARRIN LOMBARD		
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	ATEX: JOHN NORDECK		
ISSUE DATE: JULY 27, 2005	PRODUCT DATA SHEET		DOCUMENT: PDS-GD-SD-ATR
			SHEET: 1 OF 4

TABLE 2: ATTACHMENT RECEPTACLE PART NUMBER CODE LOGIC											
AF	-	B	15	16	-	23	S	L	01	-	XX
1		2	3	4		5	6	7	8		9
1	CLASSIFICATION	GD = ALUMINUM SD = STAINLEES STEEL									
2	COVER	B = RECEPTACLE COVER									
3	SHELL STYLE	15 = RECEPTACLE, ATTACHMENT									
4	SHELL SIZE	16 = SHELL SIZE 16 24 = SHELL SIZE 24 20 = SHELL SIZE 20 28 = SHELL SIZE 28									
5	INSERT	SEE INSERT TABLE, TABLE 3									
6	GENDER	S = FEMALE (SOCKET) INSERT P = MALE (PIN) INSERT									
7	CONTACT PLATING	L = SILVER PLATE (STANDARD) GROUND CONTACTS ARE GOLD OVER SILVER									
8	INSERT KEYING	SEE VANTAGE INSERT PRODUCT DATA SHEET									
9	ACCESSORY	XX = CABLE DIAMETER CODE, SEE TABLE 4 TC = TAPPED CONDUIT, SEE TABLE 5 B = BASKET WEAVE GRIP, INSERT AFTER 'XX'									

TABLE 3: INSERTS AND AMPERE RATINGS								
CONTACTS	AMPERES			CONNECTOR PREFIX	SHELL SIZE	INSERT CODE NUMBER		KEY POSITIONS
						PIN	SOCKET	
2 POLE, 3 WIRE	30	30	32	GD or SD	16	51PL	51SL	N + 5
3 POLE, 4 WIRE	30	30	32	GD or SD	16	23PL	23SL	N + 5
4 POLE, 5 WIRE	30	30	32	GD or SD	20	36PL	36SL	N + 2
2 POLE, 3 WIRE	60	60	63	GD or SD	20	61PL	61SL	N + 7
3 POLE, 4 WIRE	60	60	63	GD or SD	20	40PL	40SL	N + 4
4 POLE, 5 WIRE	60	60	63	GD or SD	24	29PL	29SL	N + 3
2 POLE, 3 WIRE	100	100	125	GD or SD	24	60PL	60SL	N + 7
3 POLE, 4 WIRE	100	100	125	GD or SD	24	39PL	39SL	N + 5
4 POLE, 5 WIRE	100	100	125	GD or SD	28	23PL	23SL	N + 3
2 POLE, 3 WIRE	200	200	260	GD or SD	28	30PL	30SL	N + 9
3 POLE, 4 WIRE	200	200	260	GDU or SDU	28	31PL	31SL	N + 4
5 POLE, 6 WIRE	200	200	260	GDT or SDT	28	42PL	42SL	N + 10

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TABLE 4: CABLE DIAMETER GROMMET CODES						
CODE NUMBER	CABLE DIAMETER, INCHES (mm)		SHELL SIZE			
	MINIMUM	MAXIMUM	16	20	24	28
06	0.250 (6.35)	0.375 (9.53)	X			
08	0.375 (9.53)	0.500 (12.70)	X			
10	0.500 (12.70)	0.625 (15.88)	X	X		
12	0.625 (15.88)	0.750 (19.05)	X	X		
14	0.750 (19.05)	0.875 (22.23)	X	X		
16	0.875 (22.23)	1.000 (25.40)	X	X	X	
18	1.000 (25.40)	1.125 (28.58)	X	X	X	
20	1.125 (28.58)	1.250 (31.75)	X	X	X	
22	1.250 (31.75)	1.375 (34.93)	X	X	X	
23	1.375 (34.93)	1.437 (36.50)	X	X	X	
24	1.375 (34.93)	1.500 (38.10)		X	X	X
26	1.500 (38.10)	1.625 (41.28)		X	X	X
28	1.625 (41.28)	1.750 (44.45)		X	X	X
30	1.750 (44.45)	1.875 (47.63)		X	X	X
31	1.875 (47.63)	1.937 (49.20)		X	X	X
32	1.875 (47.63)	2.000 (50.80)			X	X
34	2.000 (50.80)	2.125 (53.98)			X	X
36	2.125 (53.98)	2.250 (57.15)			X	X
38	2.250 (57.15)	2.375 (60.33)			X	X
39	2.375 (60.33)	2.437 (61.90)			X	X
40	2.375 (60.33)	2.500 (63.50)				X
42	2.500 (63.50)	2.625 (66.68)				X
44	2.625 (66.68)	2.750 (69.85)				X
46	2.750 (69.85)	2.875 (73.03)				X

ELEMENTAL COMPOSITIONS

TABLE 5: ELEMENTAL COMPOSITION OF ALUMINUM 6061-T6 PERCENTAGE BY WEIGHT											
	Al	Cr	Cu	Fe	Mg	Mn	Si	Ti	Zn	Other Each	Other Total
MIN	REM	0.04	0.15	-	0.80	-	0.40	-	-	-	-
MAX	REM	0.35	0.40	0.70	1.20	0.15	0.80	0.15	0.25	0.05	0.15

TABLE 6: ELEMENTAL COMPOSITION OF STAINLESS STEEL TYPE 316 PERCENTAGE BY WEIGHT											
	Fe	C	Mn	Si	P	S	Cr	Mo	Ni	N	Other
MIN	REM	-	-	-	0	-	16.0	2.0	10.0	-	-
MAX	REM	0.08	2.0	0.75	0.045	0.03	18.0	3.0	14.0	0.10	-

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CHK BY: DARRIN LOMBARD		DOCUMENT: PDS-GD-SD-ATR
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TABLE 7: TAPPED CONDUIT ATTACHMENT RECEPTACLE			
SHELL SIZE	THREAD 'A'	E IN INCHES (mm)	F IN INCHES (mm)
16	1 1/4 -11 1/2 NPT	9.5 (241)	11.3 (287)
20	1 1/2 -11 1/2 NPT	10.2 (259)	12.0 (305)
24	2 -11 1/2 NPT	10.6 (269)	12.4 (315)
28	2 1/2 - 8 NPT	10.9 (277)	12.7 (323)

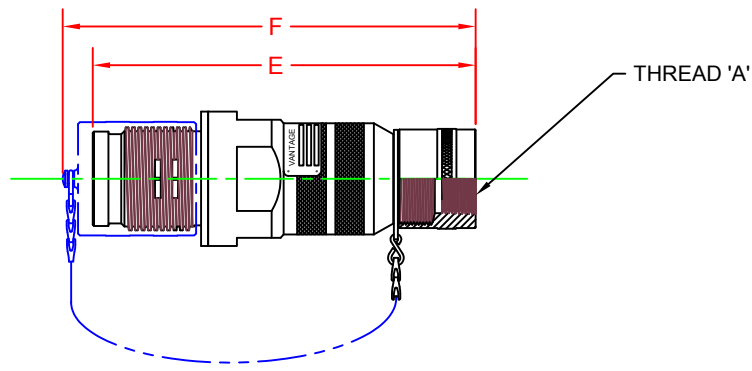
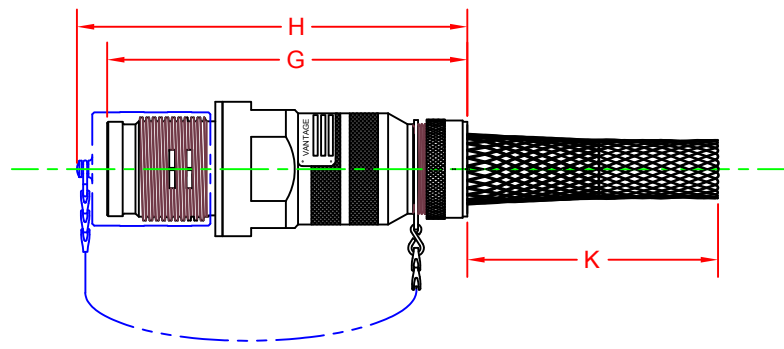


TABLE 8: BASKET WEAVE ATTACHMENT RECEPTACLE			
SHELL SIZE	G IN INCHES (mm)	H IN INCHES (mm)	K IN INCHES (mm)
16	10.0 (254)	11.8 (300)	3.75 - 10.25 (95 - 260)
20	10.7 (272)	12.5 (317)	5.75 - 14.25 (146 - 362)
24	11.1 (283)	12.9 (328)	8.25 - 17.25 (210 - 438)
28	11.4 (291)	13.2 (336)	13.75 - 19.75 (349 - 502)



NOTE: UL 1010, *Receptacle-Plug Combinations for Use in Hazardous (Classified) Locations*, REQUIRES THE USE OF A "MECHANICAL CORD CLAMP" STRAIN RELIEF ON CABLE ATTACHMENT CONNECTORS. CONNECTORS WITH BASKET WEAVE GRIPS ARE AVAILABLE WITH CSA AND ATEX CERTIFICATION.