

MIL-DTL-38999 Series I Type 231-100-H0 and MS27469 Wall-mount hermetic receptacle



MATERIAL/FINISH:

- Shell, nut: CRES/passivated, carbon steel/fused tin-plated or CRES/nickel plated.
- Contacts: nickel iron alloy 52 / gold plated
- Socket: copper alloy / gold plated
- Insulator: fused vitreous glass
- Socket insulator: high-grade rigid dielectric
- Seals: fluorosilicone rubber

PERFORMANCE SPECIFICATIONS

- Hermeticity: $<1 \times 10^{-7}$

NOTES

- Glenair 231-100-H0 receptacle connector is designed to mate with any QPL manufacturer's DTL-38999 Series III plug connector having the same shell size, polarization, and arrangement except for shielded contact arrangements. Consult factory for mating plug options
- Insert arrangements in accordance with MIL-STD-1560. Arrangements which specify shielded contacts will be built with appropriately sized power / signal contacts. Crimp-removable shielded contacts are not available in standard hermetic connectors. Consult factory for special hermetic shielded contact option

HOW TO ORDER							
COTS Sample Part No.	231-100	-H0	Z1	11	-35	P	N
Series	231-100						
Shell Type	H0						
Material and Finish	ZL, Z1, FT						
Shell Size	9 thru 25						
Insert Arrangement	Per MIL-STD-1560; see page C-2						
Contact Termination	P, X, C, S, Z, D						
Keyway Position	A, B, C, D; (N for Normal)						

MS Sample Part No.	MS27469	Y	11	N	35	P	A
MS Number and CI	MS27469						
Class	Y						
Shell Size	9 thru 25						
Material and Finish	D, E, N						
Insert Arrangement	Per MIL-STD-1560; see page C-2						
Contact Termination	P, X, C, S, Z, D						
Keyway Position	A, B, C, D; (Omit for Normal)						

MS PART NUMBER DETAILS	
Shell Style and Class	
MS27469Y = hermetic, Jam-nut mount receptacle	
Shell Size	
9, 11, 13, 15, 17, 19, 21, 23, 25	
Connector Material and Finish	
D = carbon steel, fused tin finish, 150° C, conductive	
E = stainless steel, passivate finish, 200° C, conductive	
N = stainless steel, nickel finish (electrodeposited), 200° C conductive	
Insert Arrangement	
MIL-DTL-38999 Series I hermetic inserts per MIL-STD-1560; Refer to Insert Arrangements on page B-2	
Contact Termination (500-cycle contacts)	
P = pin, solder cup X = pin, eyelet C = pin, feedthru S = socket, solder cup Z = socket, eyelet D = socket, feedthru	
Alternate Key Position	
A, B, C, D; (N for normal)	

HERMETIC LEAK RATE MODIFICATION CODES	
Designator	Required Leak Rate
-585A	1x10 ⁻¹⁰ atm ccHe/s per sec
-585B	1x10 ⁻⁹ ccHe/s per sec
-585C	1x10 ⁻⁸ ccHe/s per sec

COTS PART NUMBER DETAILS	
Shell Style and Class	
231-100-H0 = hermetic, solder-mount receptacle	
Connector Material and Finish	
ZL = carbon steel, fused tin finish, 150° C, conductive Z1 = stainless steel, passivate finish, 200° C, conductive FT = stainless steel, nickel finish (electrodeposited), 200° C, conductive	
Shell Size	
9, 11, 13, 15, 17, 19, 21, 23, 25	
Insert Arrangement	
MIL-DTL-38999 Series I hermetic inserts per MIL-STD-1560; Refer to Insert Arrangements on page B-2	
Contact Termination (500-cycle contacts)	
P = pin, solder cup X = pin, eyelet C = pin, feedthru S = socket, solder cup Z = socket, eyelet D = socket, feedthru	
Alternate Key Position	
A, B, C, D; (N for normal)	

WIRE ACCOMMODATION	
Contact Size	Wire Gauge
22D	#22 - #28
20	#20 - #24
16	#16 - #20
12	#12 - #14

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HERMETIC CONNECTORS

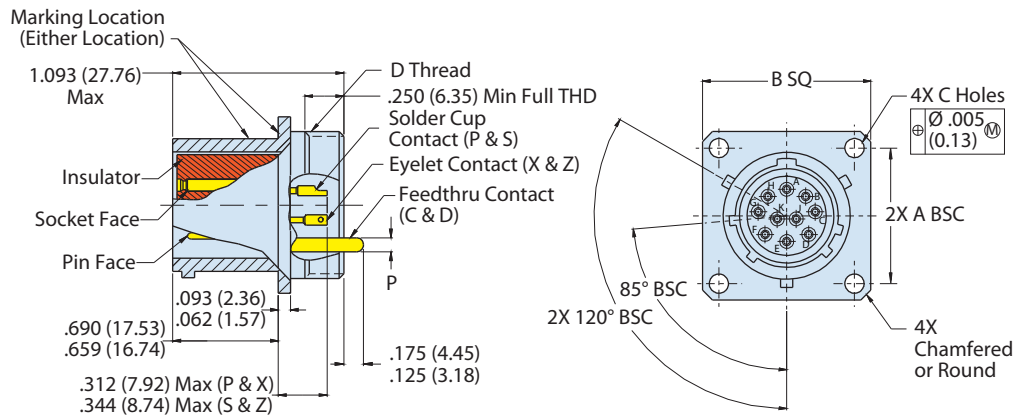
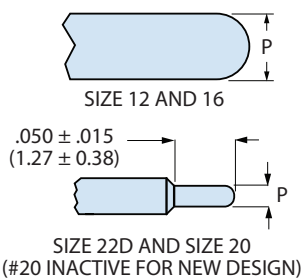
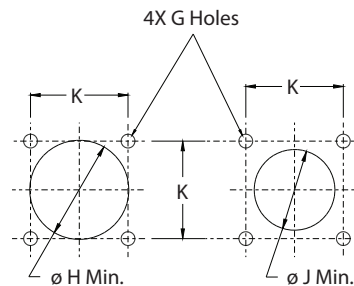


TABLE II: CONTACT SIZE

PCB CONTACT STYLE C AND D



Size	Ø P
22D	.011 (0.28) .015 (0.38)
20	.024 (0.61) .028 (0.71)
16	.0635 (1.61) .0615 (1.56)
12	.095 (2.41) .093 (2.36)



INSERT ARRANGEMENTS				
Shell Size - Insert Arrangement	22D	20	16	12
9-98		3		
9-35	6			
11-4		4		
11-5		5		
11-98		6		
11-99		7		
11-35	13	7		
11-2			2	
13-4			4	
13-8		8		
13-98		10		
13-35	22			
15-5			5	
15-15		14	1	
15-18		18		
15-19		19		
15-35	37			
15-97		8	4	
17-6				6
17-8			8	
17-26		26		
17-99		21	2	
17-35	55			
19-11			11	
19-28		26	2	
19-30		29	1	
19-32		32		
19-35	66			
19-45	67			
21-11				11
21-16			16	
21-24		24		
21-25		25		
21-27		27		
21-41		41		
21-29		19	4	4
21-39		37	2	
21-35	79			
23-35	100			
23-21			21	
23-32		32		
23-34		34		
23-36		36		
23-53		53		
23-97			16	
23-99			11	
23-55		55		
25-35	128			
25-29			29	
25-37			37	
25-61		61		
25-4		48	8	
25-43		23	20	
25-19				19
25-24			12	12

CONNECTOR DIMENSIONS								
SHELL SIZE	A BSC	B SQ ±.016 (0.4)	Ø C HOLES	D THREADS	Ø G HOLES ±.005 (0.1)	Ø H MIN	Ø J MIN	K ±.005 (0.1)
9	.719 (18.3)	.938 (23.8)	.133 (3.4) .123 (3.1)	.6875-24 UNEF-2A	.128 (3.3)	.656 (16.7)	.697 (17.7)	.719 (18.3)
11	.812 (20.6)	1.031 (26.2)	.133 (3.4) .123 (3.1)	.8125-20 UNEF-2A	.128 (3.3)	.796 (20.2)	.822 (20.9)	.812 (20.6)
13	.906 (23.0)	1.125 (28.6)	.133 (3.4) .123 (3.1)	.9375-20 UNEF-2A	.128 (3.3)	.921 (23.4)	.947 (24.1)	.906 (23.0)
15	.969 (24.6)	1.219 (31.0)	.133 (3.4) .123 (3.1)	1.0625-18 UNEF-2A	.128 (3.3)	1.047 (26.6)	1.072 (27.2)	.968 (24.6)
17	1.062 (27.0)	1.312 (33.3)	.133 (3.4) .123 (3.1)	1.1875-18 UNEF-2A	.128 (3.3)	1.218 (30.9)	1.197 (30.4)	1.062 (27.0)
19	1.156 (29.4)	1.438 (36.5)	.133 (3.4) .123 (3.1)	1.3125-18 UNEF-2A	.128 (3.3)	1.296 (32.9)	1.322 (33.6)	1.156 (29.4)
21	1.250 (31.8)	1.562 (39.7)	.133 (3.4) .123 (3.1)	1.4375-18 UNEF-2A	.128 (3.3)	1.421 (36.1)	1.447 (36.8)	1.250 (31.8)
23	1.375 (34.9)	1.688 (42.9)	.157 (4.0) .142 (3.6)	1.5625-18 UNEF-2A	.154 (3.9)	1.546 (39.3)	1.572 (39.9)	1.375 (34.9)
25	1.500 (38.1)	1.812 (46.0)	.157 (4.0) .142 (3.6)	1.6875-18 UNEF-2A	.154 (3.9)	1.672 (42.5)	1.697 (43.1)	1.500 (38.1)