

# Whirlwind

## W1 39 Pin Connector System

### Technical Data

#### Materials and Finishes:

- Contacts: Copper alloy, hard gold plate over nickel under plate per MIL-G-45204
- Insulators: Low temperature elastomer
- 'O' Rings and Seals: Low temperature elastomer
- Shells and Dust Caps: All aluminum alloy, black anodized coating
- Chain-Stainless steel

#### Mechanical Data:

- Operating Temperature: -40°C to +105°C  
-40°F to +221°F

- Contacts: #20 AWG Solder type (7.5 Amp rating)
- Contact Retention: 15 lbs. minimum
- Connector Engagement and Separation Forces: 32 in. lbs. maximum
- Polarization: 5 Keyways

#### Electrical Data:

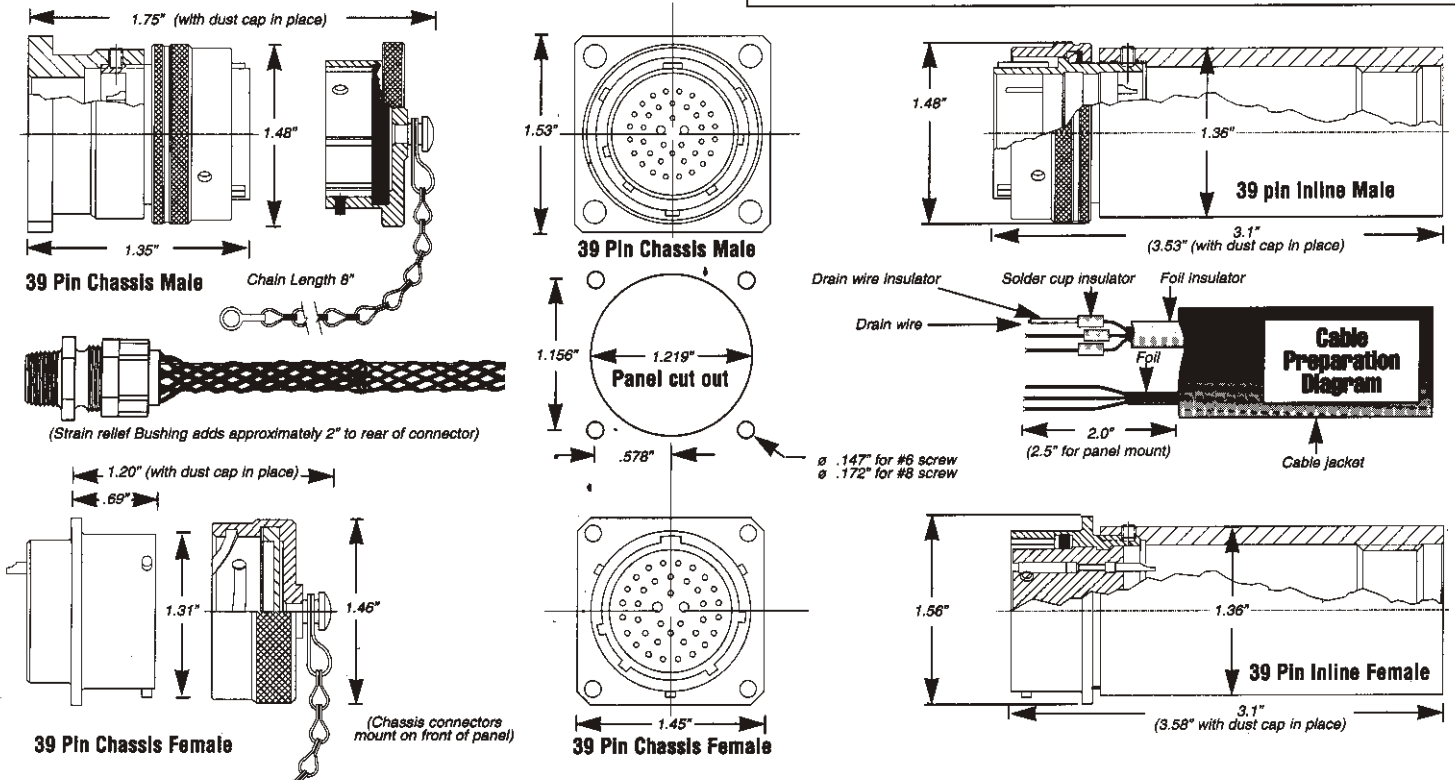
- Operating Voltage: 850 VDC or 600 VAC rms maximum
- Insulation Resistance: 5000 megohm minimum
- Contact Resistance: 6 milliohms maximum

The Whirlwind W1 is a 39 contact, quick disconnect connector system based on the proven MIL-26482 multipin standard. The pin and socket modules are shell size 20 with a standard 39 contact insert arrangement. The solder style contacts are permanently mounted in resilient rubber insulators to provide years of trouble free service. Whirlwind manufactures a robust aluminum backshell to protect the soldered connections and provides a waterproof mesh grip for an absolutely reliable strain relief on the cable.

The W1 system utilizes a 39 pin male insert in a plug shell, with a quarter-turn locking ring and a 39 socket female insert in a receptacle shell with studs, that mates with the male plug shell.

Whirlwind provides the W1 in four standard configurations, male and female inline and male and female chassis mount. The W1 can be used to interconnect up to 12 balanced, shielded signal lines.

W1CF	Female Panel Connector / Cap, Wiring Kit Complete	
AB39FP	39 Pin Female Panel Mount Body with Studs	1
AB39CAP	Dust Cap with Ring For Female 39 Pin	1
PT1-16BK-1.5	Drain Wire Insulator 1/16" Blk Shrink Tube 1.5"	13
PT3-16BK-1.0	Mylar / Foil Insulator 3/16" Blk Shrink Tube 1.0"	13
PT1-16BK-0.5	Solder Cup Insulator 1/16" Blk Shrink Tube 0.5"	39
W1 Pin Out	Wiring Diagram For 39 Pin	1
W1CM	Male Panel Connector / Cap, Wiring Kit Complete	
AB39MI	39 Pin Male Inline Body with Ring	1
AB39MPA	Panel Mount 39 Pin Blk Flange with Set Screw	1
AB39CAPWT	Dust Cap with Studs For Male 39 Pin	1
PT1-16BK-1.5	Drain Wire Insulator 1/16" Blk Shrink Tube 1.5"	13
PT3-16BK-1.0	Mylar / Foil Insulator 3/16" Blk Shrink Tube 1.0"	13
PT1-16BK-0.5	Solder Cup Insulator 1/16" Blk Shrink Tube 0.5"	39
W1 Pin Out	Wiring Diagram For 39 Pin	1
W1IF	Female Inline Connector / Cap, Wiring Kit Complete	
AB39FI	39 Pin Female Inline Body with Studs	1
AB39CAP	Dust Cap with Ring For Female 39 Pin	1
AB39H	39 Pin Inline Housing with Set Screws	1
AB60G	39-61 Inline Strain Relief Grip Range .375"-.50"	1
ABKR	16mm Split Ring For Dust Cap Chain	1
PT1-16BK-1.1	Drain Wire Insulator 1/16" Blk Shrink Tube 1.1"	13
PT3-16BK-0.5	Mylar / Foil Insulator 3/16" Blk Shrink Tube 0.5"	13
PT1-16BK-0.5	Solder Cup Insulator 1/16" Blk Shrink Tube 0.5"	39
W1 Pin Out	Wiring Diagram For 39 Pin	1
W1IM	Male Inline Connector / Cap, Wiring Kit Complete	
AB39MI	39 Pin Male Inline Body with Ring	1
AB39CAPWT	Dust Cap with Studs For Male 39 Pin	1
AB39H	39 Pin Inline Housing with Set Screws	1
AB60G	39-61 Inline Strain Relief Grip Range .375"-.50"	1
ABKR	16mm Split Ring For Dust Cap Chain	1
PT1-16BK-1.1	Drain Wire Insulator 1/16" Blk Shrink Tube 1.1"	13
PT3-16BK-0.5	Mylar / Foil Insulator 3/16" Blk Shrink Tube 0.5"	13
PT1-16BK-0.5	Solder Cup Insulator 1/16" Blk Shrink Tube 0.5"	39
W1 Pin Out	Wiring Diagram For 39 Pin	1



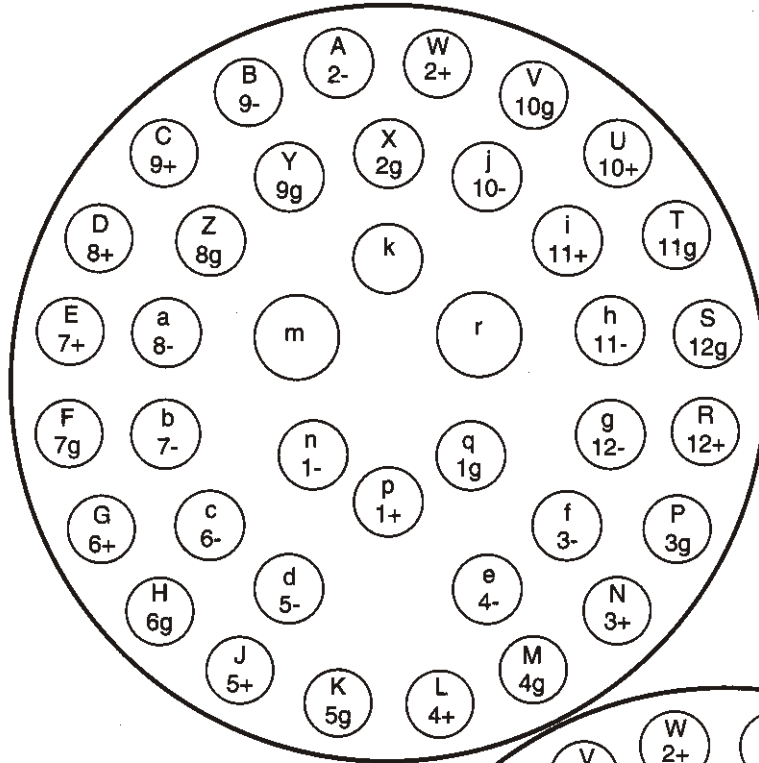
# 39 Pin

## 56 Pair Color Code

XLR Pair #	Pin 3 (-)	Pin 2 (+)	Pin 1 (g)
1	Black	Red	
2	Black	White	
3	Black	Green	
4	Black	Blue	
5	Black	Yellow	
6	Black	Brown	
7	Black	Orange	
8	Red	White	
9	Red	Green	
10	Red	Blue	
11	Red	Yellow	
12	Red	Brown	
13	Red	Orange	
14	Green	White	
15	Green	Blue	
16	Green	Yellow	
17	Green	Brown	
18	Green	Orange	
19	White	Blue	
20	White	Yellow	
21	White	Brown	
22	White	Orange	
23	Blue	Yellow	
24	Blue	Brown	
25	Blue	Orange	
26	Brown	Yellow	
27	Brown	Orange	
28	Orange	Yellow	
29	Purple	Orange	
30	Purple	Red	
31	Purple	White	
32	Purple	Green	
33	Purple	Blue	
34	Purple	Yellow	
35	Purple	Brown	
36	Purple	Black	
37	Gray	White	
38	Gray	Brown	
39	Gray	Red	
40	Gray	Green	
41	Gray	Orange	
42	Gray	Yellow	
43	Gray	Black	
44	Gray	Blue	
45	Pink	White	
46	Pink	Green	
47	Pink	Blue	
48	Pink	Yellow	
49	Pink	Brown	
50	Pink	Orange	
51	Pink	Purple	
52	Pink	Gray	
53	Beige	White	
54	Beige	Green	
55	Beige	Blue	
56	Beige	Yellow	

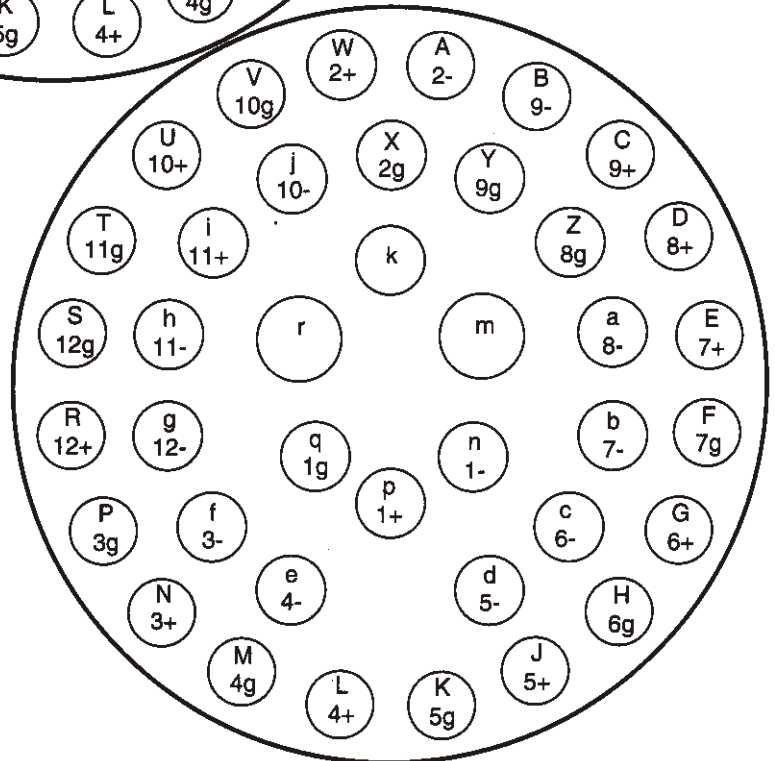
# Whirlwind W1 39 Pin Connector Male And Female Wiring Code

1. Use these drawings for wiring 39 contact connectors both Male (Pins) and Female (Sockets).
2. The standard Whirlwind layout begins at the stage box. Chassis mount Female connectors with studs are the first choice for panel or box mounting. Inline Males with locking rings are the first choice for cable connectors.
3. Systems using connectors of this series require only that a Male connector with ring plugs into a Female connector with studs.



**Solder Side of  
MALE Connector  
(Pins)**

**Solder Side of  
FEMALE  
Connector  
(Sockets)**



**Drawing can be used for mating face of opposite sex connector  
Effective 11/93**



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