

Direct-Link® harsh-duty, unmanaged switches with Ultra-Lock® push/pull technology provide customers with an IP67-sealed, fast, simple and secure on-machine Ethernet switch solution that can reduce network cabling and installation costs for rugged industrial applications

As our world becomes more connected, an increasing number of manufacturers and installers are specifying Ethernet devices for their harsh applications. The Brad® family of rugged connectivity products is a leading product line provider of Ethernet infrastructure for Molex.

Protected cabinet Ethernet switch installations away from machinery require long wiring runs, enclosures and glanding. The Molex Direct-Link® harsh-duty Ethernet switches have been developed to allow customers to convert from traditional in-cabinet to on-machine mounting, moving the switch closer to the machine and thereby reducing cabling and installation costs.

The Molex Ultra-Lock® system of connectors and cordsets is a major component in the Direct-Link Harsh-Duty Switches line. Available in 5-port and 8-port versions, the Molex durable switches with push/pull connectors save cabling and reduce installation time and cost compared with existing cabinet installations. They provide easier system maintenance and produce a seal when connected regardless of labour skill. The connections are tested to IP67 ratings to ensure operation through dust, pressure-wash and immersion in water. Mechanical keying and radial seals eliminate the risk for operator error commonly found in other systems.

For additional information visit <http://www.molex.com/link/directlink750-780.html>

Brad® Direct-Link® Harsh-Duty Ethernet Unmanaged Switches

112111
112105

5-Port Modules
8-Port Modules



Brad® Direct-Link® Harsh Duty Switches

FEATURES AND BENEFITS

- Ultra-Lock® Connection system - faster, simpler and more secure connections than any other system on the market
- NEMA 6 and IP67 rated environmental protection - withstands dust, pressure-wash and submersion in water
 - Operating temperature to -20 to +75°C enables installation in extreme temperature applications
- 30mm and 60mm formats with standard hole patterns - allows use of standard extrusion members and mounting holes for installation
- Auto-learning with no software or configuration required - plug-and-play capabilities and less-skilled labour able to install systems

APPLICATIONS

- Industrial Automation
 - Manufacturing cells
 - Plant-floor data networks
- Machine Builders
 - Robots, CNC, packaging machines, textiles, presses
- Entertainment
 - Theme parks, rides
 - Concerts and carnivals
- Signage and advertising
 - Traffic signs, billboards
- Non-Automotive Transportation
 - Railways, subways, marinas



SPECIFICATIONS

Characteristics and Performance

Switch Type: Unmanaged
(Store and Forward)

Ports: 10BaseT/100Base Tx M12

Latency (10Mb): 16 μ s + frame time
Latency(100Mb): 5 μ s + frame time

Duplex Operation: Full or half
Mounting: Screw Mount

Power input: Redundant input
terminals

Input power(max): 2.0W (DRL-75x),
2.4W(DRL-78x)

Voltage: 9-36VDC (continuous)

Isolation: 1500 VRMS 1 minute

Operating temp: -20 to +75°C

Storage temp: -40 to +85°C

Humidity: 5 – 95% RH non
condensing

Dimensions (mm): 176x30x34
(DRL-75x)
220x60x37
(DRL-78x)

Weight: 230g (DRL-75x)
580g (DRL-78x)

References

Vibration: 7g (IEC68-2-29)

Shock: 50g (IEC68-2-29)

Electrical Safety: EN61010-1
(IEC61010)

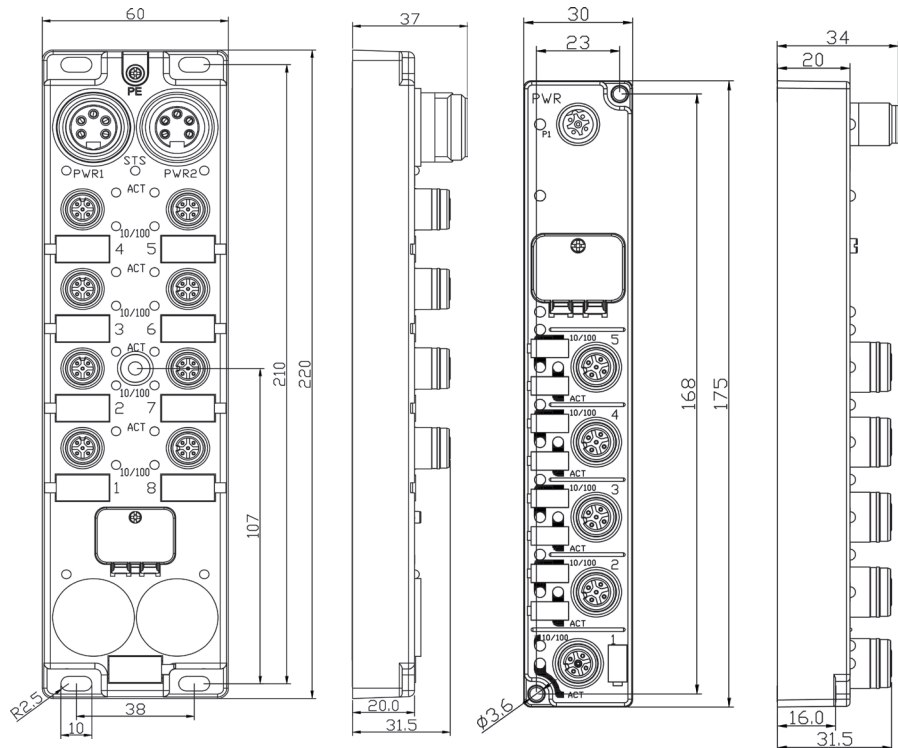
EMI emissions: EN55011Class A
(DRL-78x), Class B (DRL-750)

EMC immunity: EN61326,
EN61000-4-4, EN61000-4-5,
EN61000-4-2;
8Kv contact/16Kv Air (DRL-75x)
4Kv contact/8Kv Air (DRL-78x)

UL: File number - pending

Brad® Direct-Link® Harsh-Duty Ethernet Unmanaged Switches

112111 5-Port Modules
112105 8-Port Modules



Direct-Link® Model
780/781

Direct-Link® Model 750

ORDERING INFORMATION

Order No.	Material Number	Description	Degree of Protection	# of Ports (M12)	Power
112111-5001	DRL-750	Fast Ethernet Unmanaged Switch	IP67	5	M12
112105-5002	DRL-780			8	Mini-Change® (5-pin)
112105-5004	DRL-781				Mini-Change® (4-pin)