

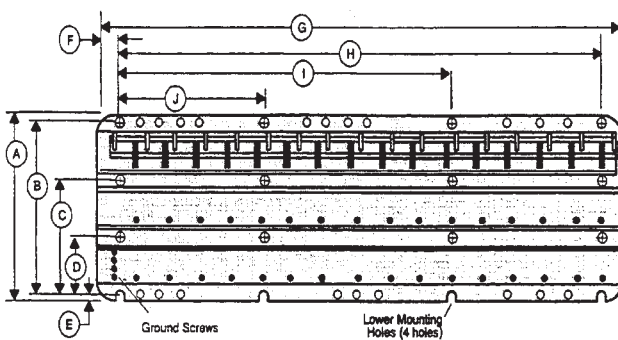
# Modicon

## 140 XBP 016 00

### 16 Position Backplane

Publication # 043507397 Version 3.0

The backplane is designed to mechanically secure and electrically connect all modules used in the drops. It contains a passive circuit board which permits modules to communicate with each other and to identify their slot numbers without further switch settings. Refer to the following table for a front view illustration and also the dimensions of the backplane (all backplane dimensions are nominal).




Note: Backplane weight = 3.5 lbs (1.6 kg)

#### Legend

Callout	Millimeters	Inches
A	290	11.42
B	270	10.63
C	175.5	6.91
D	94.5	3.72
E	10	0.39
F	15	0.59
G	670.74	26.41
H	641.4	25.25
I	427.6	16.83
J	213.8	8.42

Callout	Millimeters	Inches
<b>Mounting holes</b>		
⊕	8 (dia.)	0.31
Optional locations for Modbus Plus communication cable grounding		
○	8 (dia.)	0.31
Threaded mounting holes for half and full height modules		
●	4 (dia.)	0.16

 **Note:** To meet vibration/shock specifications, the backplane must be mounted using all specified mounting holes. The backplane is mounted using standard hardware (described below).

The recommended length for the mounting screws should be within the range of 0.24 in (6 mm) – 0.52 in (13 mm). The head height of the screws should not exceed 0.14 in (3.5 mm).

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Quantum Automation Series equipment is protected by U.S. Patent number 5,302,136, and by European Patent number 93202982.0-.

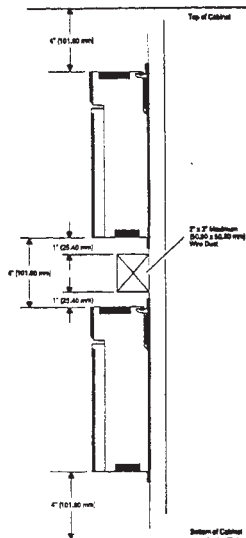


## Space Requirements for the Quantum System

When mounting Quantum systems in a cabinet, a 4" (101.60 mm) space should be maintained above and below the modules. Side spacing should be 1" (25.40 mm) minimum. Wiring ducts up to 2" (50.80 mm) square may be centered horizontally between backplanes. Ductwork or similar items mounted in this manner that extend further out than 2" require a 4" space (instead of 1") between them and the upper and lower modules to allow for air movement. Refer to the table below for an a summary of the spacing requirements for a Quantum system and also the illustration.

Minimum Spacing	Location
4" (101.60 mm)	Between the top of the cabinet and the top of the modules in the upper backplane.
4"	Between the cabinet bottom and the bottom of the lower modules in the lower backplane.
4"	Between the upper and lower modules when the backplanes are mounted one above the other.
1" (25.40 mm)	On either side between the cabinet walls and end modules.

**Note:** Wiring ducts up to 2" x 2" (50.80 mm x 50.80 mm) may be centered between backplanes. If the duct extends further than 2" out from the mounting panel, there must be 4" space between the modules and duct on the top and bottom.



For more information regarding the Quantum Automation Series, please obtain a copy of the *Quantum Automation Series Hardware Reference Guide* (840 USE 100 00) from your distributor or your local Square D office.