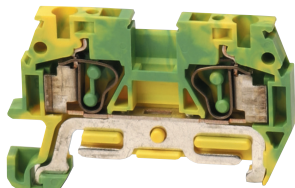# DINnectors®

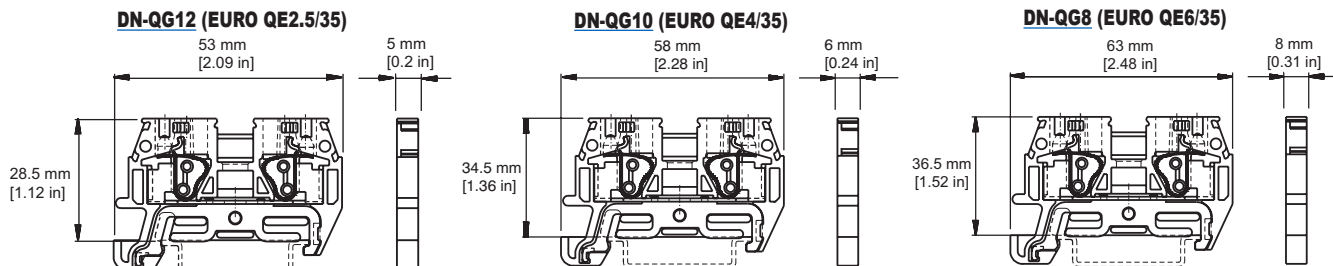# Screwless Ground Terminal Blocks

DN-QG12
(Euro QE2.5/35)

Ground terminal blocks are used to mechanically and electrically connect wires to the DIN rail by means of a conducting clamping foot. In this way, the DIN rail can function as a ground bus bar.

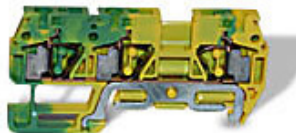Ground blocks are molded in green and yellow per international standards and are 35mm DIN-rail mountable.

Ordering Information								
	Part Number	*Qty*	*Price*	*Part Number*	*Qty*	*Price*	*Part Number*	*Qty*	*Price*
Green/Yellow Block	**DN-QG12**	10	$32.00	**DN-QG10**	10	$33.50	**DN-QG8**	10	$41.00

Technical Specifications			
Stripping Length	12mm [0.47 in]	15mm [0.59 in]	18mm [0.71 in]
Density	200/m [60 pcs/ft]	166/m [50 pcs/ft]	125/m [38 pcs/ft]
UL Approval	24-12 AWG	24-10 AWG	22-8 AWG
VDE Approval	2.5 mm²	4mm²	6mm²
Operating Temperature	Ambient air temperature: -20 to 105°C [-4 to 221°F] / Relative humidity: 50% max at 40°C [104°F]; 90% max at 20°C [68°F]		
SCCR Rating	10kA per Table SB4.1, 2009, UL 508A, Maximum short circuit current rating for unmarked components		
CE Conformity	CE (EN 60947-1 / EN 60947-7-2)		
Agency File #	UL E179129		

Accessories								
End Cover	**DN-QEC12**	50	$21.50	**DN-QEC10**	50	$21.50	**DN-QEC8**	50	$25.50
	DN-QEC12MN	10	$5.25	**DN-QEC10MN**	10	$5.25	**DN-QEC8MN**	10	$5.75
35mm DIN Rail	**DN-R35S1**	10	$39.00	**DN-R35S1**	10	$39.00	**DN-R35S1**	10	$39.00
	DN-R35S1-2	2	$11.00	**DN-R35S1-2**	2	$11.00	**DN-R35S1-2**	2	$11.00
End Brackets	**DN-EB35**	50	$67.00	**DN-EB35**	50	$67.00	**DN-EB35**	50	$67.00
	DN-EB35MN	20	$31.50	**DN-EB35MN**	20	$31.50	**DN-EB35MN**	20	$31.50
	DN-EB35-A	50	$47.50	**DN-EB35-A**	50	$47.50	**DN-EB35-A**	50	$47.50
	DN-EB35-A-10	10	$12.00	**DN-EB35-A-10**	10	$12.00	**DN-EB35-A-10**	10	$12.00
	DN-QEB35	50	$42.50	**DN-QEB35**	50	$42.50	**DN-QEB35**	50	$42.50
	DN-QEB35-10	10	$11.50	**DN-QEB35-10**	10	$11.50	**DN-QEB35-10**	10	$11.50
Angled Support Bracket	**DN-ASB1**	50	$107.00	**DN-ASB1**	50	$107.00	**DN-ASB1**	50	$107.00
Marking Tags	DN-QL Series	500	various	DN-QL Series	500	various	DN-QL Series	500	various

Note: For more information on accessories, see the DIN*nector*s Accessories section of this chapter.

DN-QG12 (EURO QE2.5/35)

53 mm [2.09 in]   5 mm [0.2 in]

28.5 mm [1.12 in]

DN-QG10 (EURO QE4/35)

58 mm [2.28 in]   6 mm [0.24 in]

34.5 mm [1.36 in]

DN-QG8 (EURO QE6/35)

63 mm [2.48 in]   8 mm [0.31 in]

36.5 mm [1.52 in]

DINnectors® Screwless Ground Terminal Blocks

DN-QG12-1-2
(EURO QME3-2.5/35)

Ordering Information						
	Part Number	*Qty*	*Price*	*Part Number*	*Qty*	*Price*
Green/Yellow Block	**DN-QG12-1-2**	10	$56.00	**DN-QG12-2-2**	10	$64.00
Technical Specifications						
Stripping Length	12mm [0.47 in]			12mm [0.47 in]		
Density	200/m [60 pcs/ft]			200/m [60 pcs/ft]		
UL Approval	24-12 AWG			24-12 AWG		
VDE Approval	2.5 mm²			2.5 mm²		
Operating Temperature	Ambient air temperature: -20 to 105°C [-4 to 221°F] Relative humidity: 50% max at 40°C [104°F]; 90% max at 20°C [68°F]					
SCCR Rating	10kA per Table SB4.1, 2009, UL 508A, Maximum short circuit current rating for unmarked components					
CE Conformity	CE (EN 60947-1 / EN 60947-7-2)					
Agency File #	UL E179129					
Accessories						
End Cover	**DN-QEC12-1-2**	25	$15.00	**DN-QEC12-2-2**	25	$16.50
35mm DIN Rail	**DN-R35S1**	10	$39.00	**DN-R35S1**	10	$39.00
	DN-R35S1-2	2	$11.00	**DN-R35S1-2**	2	$11.00
End Brackets	**DN-EB35**	50	$67.00	**DN-EB35**	50	$67.00
	DN-EB35MN	20	$31.50	**DN-EB35MN**	20	$31.50
	DN-EB35-A	50	$47.50	**DN-EB35-A**	50	$47.50
	DN-EB35-A-10	10	$12.00	**DN-EB35-A-10**	10	$12.00
	DN-QEB35	50	$42.50	**DN-QEB35**	50	$42.50
	DN-QEB35-10	10	$11.50	**DN-QEB35-10**	10	$11.50
Angled Support Bracket	**DN-ASB1**	50	$107.00	**DN-ASB1**	50	$107.00
Marking Tags	DN-QL-Series	500	various	DN-QL Series	500	various

Note: For more information of accessories, see the DIN*nector*s Accessories section of this chapter.

DN-QG12-1-2 (EURO QME3-2.5/35)

68.5 mm [2.70 in]

5 mm [0.2 in]

28.5 mm [1.12 in]

DN-QG12-2-2 (EURO QME4-2.5/35)

87.5 mm [3.44 in]

5 mm [0.2 in]

28.5 mm [1.12 in]
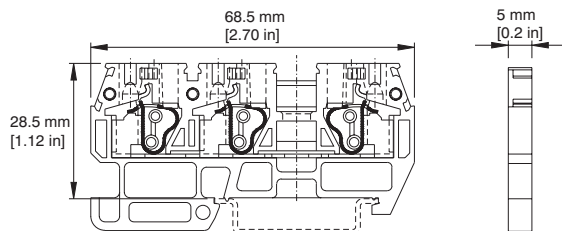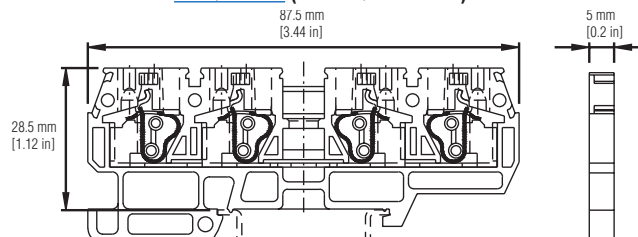
Screwless Terminal Blocks Overview

Why go screwless?

Screwless clamping technology offers several benefits:

- Speed: On average, screwless connections can be made in half the time of screw type connections, cutting installation labor costs in half.
- Ease: No need for twisting and turning screws, so screwless terminal blocks are much easier on the installer's hands and arms. Also, wiring from the top of the terminal blocks allow installers to accurately and reliably see the wire fully inserted into the spring clamp.
- Safety: Never have a problem with faulty connections from loose screws again! Meets the same UL, and IEC standards as screw-type terminal blocks.
- Maintenance-free: The screwless spring clamp conforms to the wire with constant tension, making it maintenance-free.

Are there any trade-offs of going screwless versus screw-type?

Unless you need to clamp multiple wires to the same connection point, the answer is no. If you do, then there may be a slight trade-off in requiring more panel space than with screw terminal blocks. Unlike screw terminal blocks, screwless terminal block spring-clamps are designed to clamp a single wire, only. This is why multiple versions exist like the "one-to-two" or "two-to-two." These versions allow multiple wires to be connected together via multiple spring clamps.

How does it work?

Well, it's pretty simple: Push, Insert, Release. Just push your screwdriver into the spring clamp (a rectangular shaped hole) to open the spring clamp; insert the stripped wire into the clamp a circular shaped hole), and pull out your screwdriver to release the clamp against the wire. That's it. The connection is made.
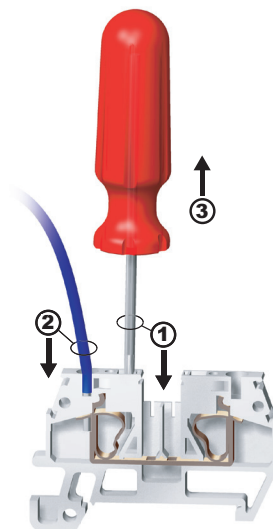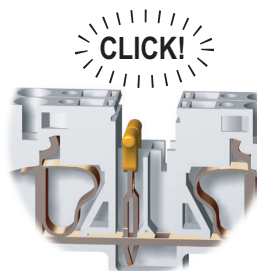
How do the jumpers work?

①

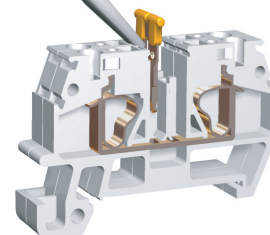Properly align jumper bar with terminal block center jumper slots.
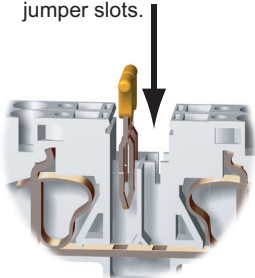
②

Push down until firmly seated.

CLICK!

Removal

✔ **Yes**   ✖ **No**

Yes = Good, acceptable jumper
No = Bad, damaged jumper

# ▲DIN*nectors*® Accessories

Steel DIN Rail (One-Meter Length)

Features

35mm wide
• 7.5 mm-high rails primarily used to mount terminal blocks, relays, timers and small PLCs such as the BRX, CLICK, DirectLogic and Productivity series. 15mm-high rails for mounting larger and heavier components such as contactors and larger PLCs

15mm wide
• DN-R15S1 exclusively for mounting mini terminal blocks such as the DN-M10-A
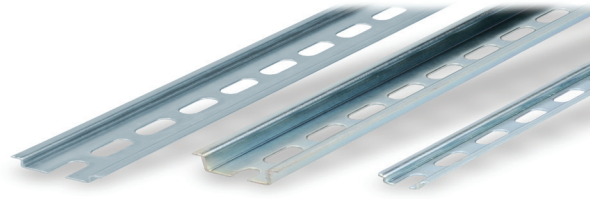
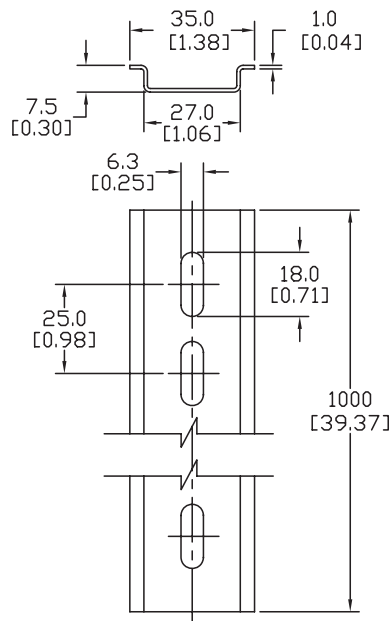| Steel DIN Rails Specifications									
	Part Number	*Qty*	*Price*	**Part Number**	*Qty*	*Price*	**Part Number**	*Qty*	*Price*
DIN Rail	**DN-R35S1**	10	$39.00	**DN-R35HS1**	10	$68.00	**DN-R15S1**	10	$36.00
	DN-R35S1-2	2	$11.00	**DN-R35HS1-2**	2	$16.50	**DN-R15S1-2**	2	$10.00
Description	DINnector DIN rail, slotted, 35mm width, 7.5mm height, 1m length, plated steel. Package of 10.			DINnector DIN rail, slotted, 35mm width, 15mm height, 1m length, plated steel. Package of 10.			DINnector DIN rail, slotted, 15mm width, 5.5mm height, 1m length, plated steel. Package of 2.		
Plating	Zinc-plated and chromated								
International Standards	EN 60715, RoHs								
Suggested Mounting Screw Type	M6			M6			M4		

Dimensions

mm [inches]

DN-R35S1
DN-R35HS1
DN-R15S1
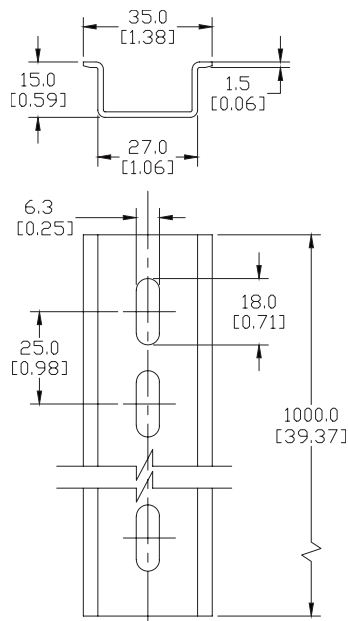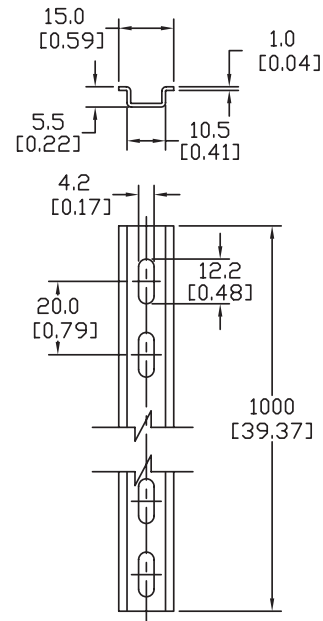
⏚DINnectors® Accessories

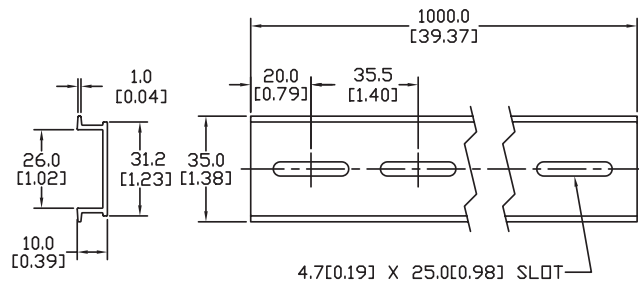## Aluminum DIN Rail (One-Meter Length)

Features

35mm wide
• Non-anodized finish
• Terminal blocks only
• Maximum mounting screw #10-32 or M5
• Available in 1-meter standard length
• Quantity per pack: 2 or 10

Dimensions
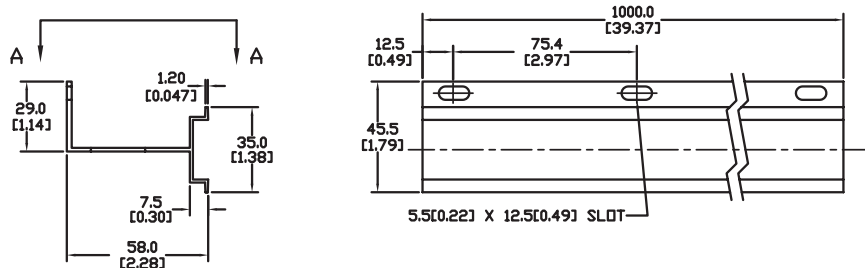
mm [inches]

DN-R35SAL1
DN-R35SAL1-2

Features

35mm wide raised
• Non-anodized finish
• Enables users to raise terminal blocks 2¼" above the back panel
• Terminal blocks only
• Available in 1-meter standard length
• Bushing or grommet recommended for wire access hole (example Heyco UB-875 not sold by ADC)
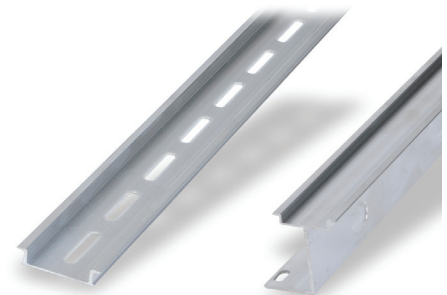• Quantity per pack: 2

DN-R35SAL2-2

VIEW A-A
ROTATED 90°
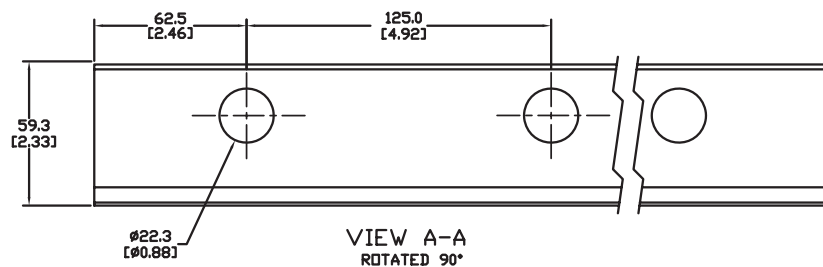
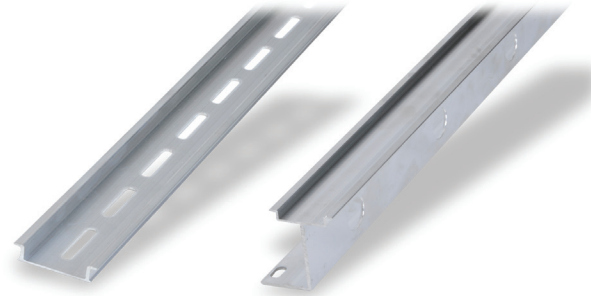| Aluminum DIN Rails Specifications (One-Meter Length)					
	Part Number	**Qty**	**Price**	**Part Number**	**Qty**	**Price**
DIN Rail	**DN-R35SAL1**	10	$60.00	**DN-R35SAL2-2**	2	$38.00
	DN-R35SAL1-2	2	$16.00			
Description	DINnector DIN rail, slotted, 35mm width, 10mm height, 1m length, aluminum. Package of 10.			DINnector DIN rail, slotted, 2in raised 35mm width, 7.5mm height, 1m length, aluminum. Package of 2.		
International Standards	DIN 50960, RoHs					
Suggested Mounting Screw Type	#10-32 or M5					

▲DIN*nectors*® Accessories

Aluminum DIN Rail (Pre-Cut Lengths)
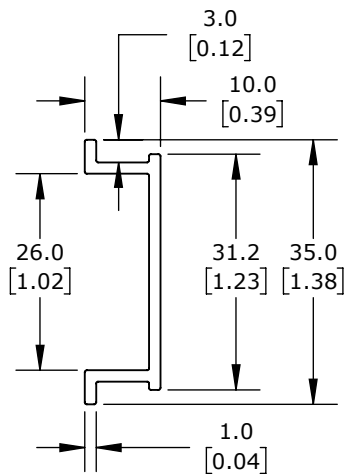
Features

35mm wide
- Non-anodized finish
- Terminal blocks only
- Maximum mounting screw #10-32 or M5
- Available in variable lengths (see chart)
- Quantity per pack: 5

Dimensions

mm [inches]

3.0 [0.12]

10.0 [0.39]

26.0 [1.02]

31.2 [1.23]

35.0 [1.38]

1.0 [0.04]

Aluminum DIN Rails Specifications (Pre-Cut Lengths)			
Part Number	Length mm [in]	Number of Slots	Price
DN-R35SAL1-072-5	72 [2.83]	2	$9.75
DN-R35SAL1-143-5	143 [5.63]	4	$12.00
DN-R35SAL1-215-5	215 [8.46]	6	$14.00
DN-R35SAL1-286-5	286 [11.26]	8	$16.50
DN-R35SAL1-358-5	358 [14.09]	10	$19.00
DN-R35SAL1-429-5	429 [16.89]	12	$20.50
DN-R35SAL1-500-5	500 [19.69]	14	$22.00
DN-R35SAL1-572-5	572 [22.52]	16	$24.50
DN-R35SAL1-644-5	644 [25.35]	18	$26.00
DN-R35SAL1-715-5	715 [28.15]	20	$27.00
DN-R35SAL1-787-5	787 [30.98]	22	$28.50
DN-R35SAL1-858-5	858 [33.78]	24	$30.50

SEE CHART

20.3 [0.80] TYP.

M-SLOT 4.7X25.0 TYP.

15.2 [0.60] TYP.
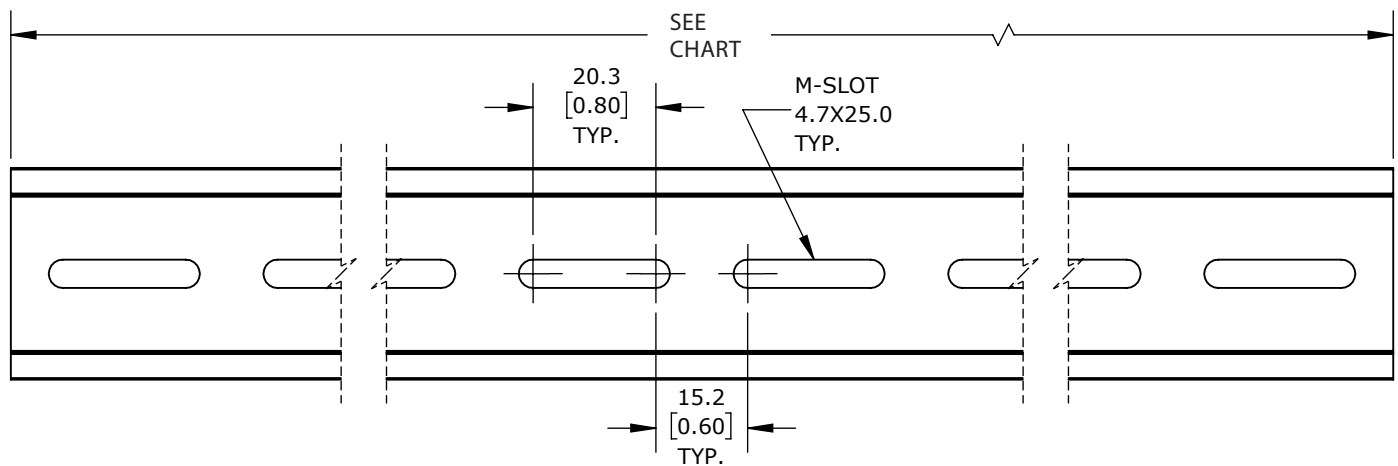
See our website: www.AutomationDirect.com for complete engineering drawings
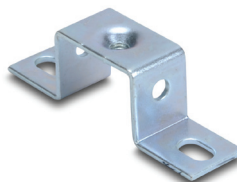
◼DINnectors® Accessories

DIN rail support brackets

- Angled support brackets raise and tilt mounting rails 30 degrees from mounting surface for easier wiring
- DN-ASB1 plated steel support bracket
- DN-ASB2-10 cold-rolled steel treated with galvanic zinc plating and passivation

DIN rail mounting clips

- Snap small devices not made for mounting onto 35mm DIN rails
- Zinc plated steel

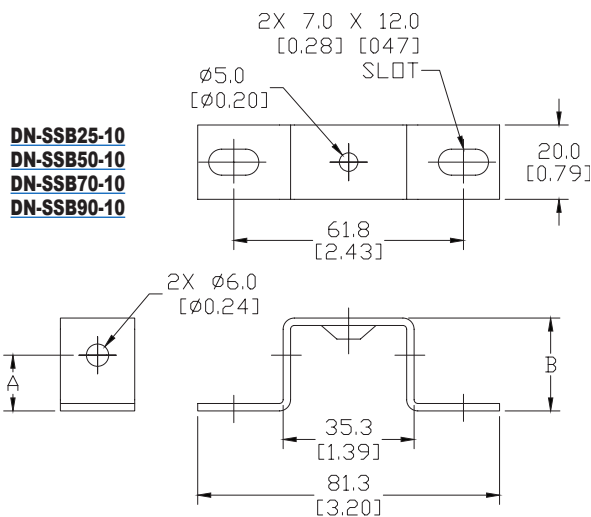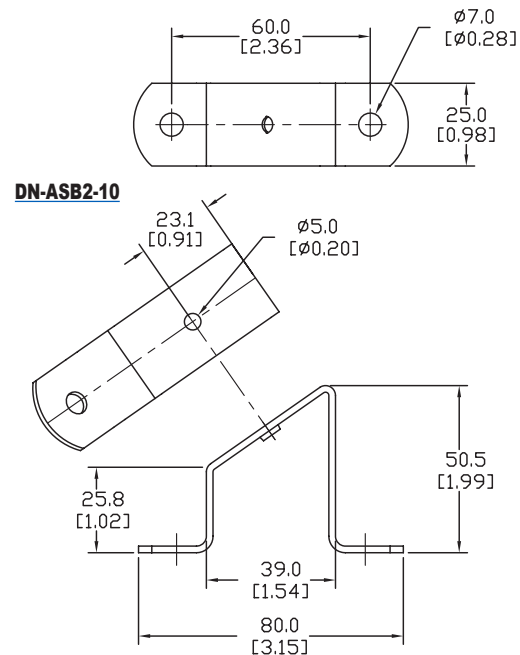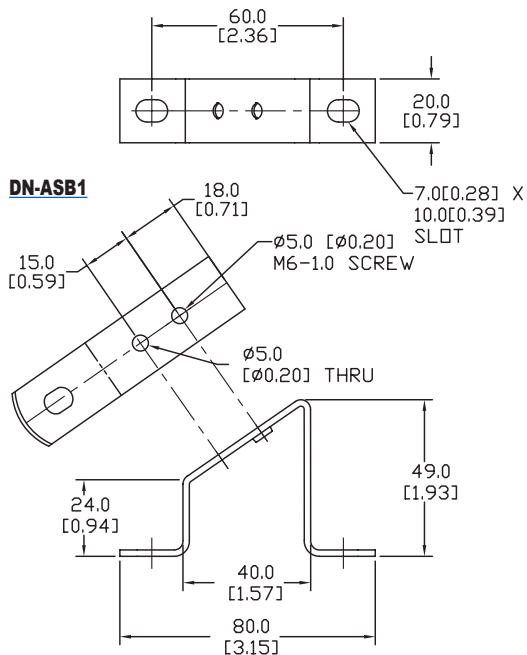| DIN Rail Support Brackets and Mounting Clips			
Part Number	Description	Qty	Price
DN-ASB1	30˚angled DIN rail support bracket (M6-1.0 screws not included)	50	$107.00
DN-ASB2-10	30˚angled DIN rail support bracket (M6-1.0 screws included)	10	$18.00
DN-SSB25-10	1" (25mm) DIN rail support bracket (M6-1.0 screws included)	10	$24.50
DN-SSB50-10	2" (50mm) DIN rail support bracket (M6-1.0 screws included)	10	$25.50
DN-SSB70-10	2.75" (70mm) DIN rail support bracket (M6-1.0 screws included)	10	$32.00
DN-SSB90-10	3.5" (90mm) DIN rail support bracket (M6-1.0 screws included)	10	$34.50
DN-CLIP-FM4	DIN rail mounting clip with M4 x 0.7 mm threaded hole (Screws not included)	40	$66.00
DN-CLIP-FM4-5		5	$9.50
DN-CLIP-FM5	DIN rail mounting clip with M5 x 0.8 mm threaded hole (Screws not included)	40	$66.00
DN-CLIP-FM5-5		5	$9.50

DN-ASB1

DN-ASB2-10

DN-SSB25-10

DN-SSB50-10

DN-SSB70-10

DN-SSB90-10

**DN-CLIP-FM4
DN-CLIP-FM4-5**

**DN-CLIP-FM5
DN-CLIP-FM5-5**

DINnectors® Accessories

DIN Rail Support Brackets and Mounting Clips

Dimensions

mm [inches]

DN-ASB1

60.0 [2.36]
20.0 [0.79]
7.0[0.28] X 10.0[0.39] SLOT
18.0 [0.71]
15.0 [0.59]
Ø5.0 [Ø0.20] M6-1.0 SCREW
Ø5.0 [Ø0.20] THRU
49.0 [1.93]
24.0 [0.94]
40.0 [1.57]
80.0 [3.15]

DN-ASB2-10

60.0 [2.36]
Ø7.0 [Ø0.28]
25.0 [0.98]
23.1 [0.91]
Ø5.0 [Ø0.20]
50.5 [1.99]
25.8 [1.02]
39.0 [1.54]
80.0 [3.15]

DN-SSB25-10
DN-SSB50-10
DN-SSB70-10
DN-SSB90-10

2X 7.0 X 12.0 [0.28] [047] SLOT
Ø5.0 [Ø0.20]
20.0 [0.79]
61.8 [2.43]
2X Ø6.0 [Ø0.24]
A
B
35.3 [1.39]
81.3 [3.20]

DIN Rail Support Brackets		
Part Number	DIM A mm [inches]	DIM B mm [inches]
DN-SSB25-10	15.0 [0.59]	25.0 [0.98]
DN-SSB50-10	40.0 [1.58]	50.0 [1.97]
DN-SSB70-10	60.0 [2.36]	70.0 [2.76]
DN-SSB90-10	80.0 [3.15]	90.0 [3.54]

See our website: www.AutomationDirect.com for complete engineering drawings

DN-CLIP-FM4

14.0 [0.55]
Ø3.1 [Ø0.12] M4-0.7 SCREW
51.0 [2.01]
6.8 [0.27]
2.0[0.08] X 6.7[0.27] SLOT

DN-CLIP-FM5

14.0 [0.55]
Ø4.4 [Ø0.17] M5-0.8 SCREW
51.0 [2.01]
6.8 [0.27]
2.0[0.08] X 6.7[0.27] SLOT

Terminal Blocks tTBL-70