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CL50 Column Light

Features

Multi-Color General Purpose or Audible Indicators



- Rugged, cost-effective, and easy-to-install multicolor indicators
- Illumination provides easy-to-see operator guidance and equipment status indication
- 1-, 2-, or 3-color models available
- Available in black or light gray housing
- Audible models available with standard, sealed, or omni-directional audible element
- Continuous, pulsed, and staccato tones available
- 18 V DC to 30 V DC operation
- Compact devices are completely self-contained, no controller needed
- No assembly required

Non-Audible Models

Models[1]	# of LED Colors	LED Colors[2]			Connection[3]	Inputs
		Color 1	Color 2	Color 3		
CL50GXXPQ	1	Green	-	-	Integral 4-pin M12 male quick-disconnect connector	PNP
CL50GXXNQ		Green	-	-		NPN
CL50XRXPQ		-	Red	-		PNP
CL50XRXNQ		-	Red	-		NPN
CL50GRXPQ	2	Green	Red	-		PNP
CL50GRXNQ		Green	Red	-		NPN
CL50GRYPQ	3	Green	Red	Yellow		PNP
CL50GRYNQ		Green	Red	Yellow		NPN

Audible Models

Standard Audible

Models[1]	# of LED Colors	LED Colors[2]			Connection[3]	Inputs
		Color 1	Color 2	Color 3		
CL50GXXAPQ	1	Green	–	–	Integral 5-pin M12 male quick-disconnect connector	PNP
CL50GXXANQ		Green	–	–		NPN
CL50XRXAPQ		–	Red	–		PNP
CL50XRXANQ		–	Red	–		NPN
CL50GRXAPQ	2	Green	Red	–		PNP
CL50GRXANQ		Green	Red	–		NPN
CL50GRYAPQ	3	Green	Red	Yellow		PNP
CL50GRYANQ		Green	Red	Yellow		NPN

Sealed Audible

Models[1]			# of LED Colors	LED Colors[2]			Connection[3]	Inputs
Continuous	Pulsed at 1.6 Hz	Staccato		Color 1	Color 2	Color 3		
CL50GXXALSPQ	CL50GXXALS3PQ	CL50GXXALS4PQ	1	Green	-	-	Integral 5-pin M12 male quick-disconnect connector	PNP
CL50GXXALSNQ	CL50GXXALS3NQ	CL50GXXALS4NQ		Green	-	-		NPN
CL50XRXALSPQ	CL50XRXALS3PQ	CL50XRXALS4PQ		-	Red	-		PNP
CL50XRXALSNQ	CL50XRXALS3NQ	CL50XRXALS4NQ		-	Red	-		NPN
CL50GRXALSPQ	CL50GRXALS3PQ	CL50GRXALS4PQ	2	Green	Red	-		PNP

Continued on page 2

[1] Models with black housing are listed. For gray housing, add the suffix "C" at the end of the cabled model number or before the "Q" of quick-disconnect model numbers. For example, CL50GXXAPC or CL50GXXAPCQ.
[2] Available colors include: Green (G), Red (R), Yellow (Y), Blue (B), and White (W). Contact Banner Engineering for other colors and color combinations.
[3]

- To order the 150 mm (6 in) PVC cable model with an M12 quick-disconnect connector, replace the suffix "Q" with "QP" in the model number. For example, CL50GXXAPQP.
- To order the 2 m (6.5 ft) PVC cable model, omit the suffix "Q" in the model number. For example, CL50GXXAP.
- Models with a quick-disconnect connector require a mating cordset.

Original Instructions
21-Oct-25

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145315
p/n: 145315 Rev. P

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Continued from page 1

Models[1]			# of LED Colors	LED Colors[2]			Connection[3]	Inputs
Continuous	Pulsed at 1.6 Hz	Staccato		Color 1	Color 2	Color 3		
CL50GRXALSNQ	CL50GRXALS3NQ	CL50GRXALS4NQ		Green	Red	-		NPN
CL50GRYALSPQ	CL50GRYALS3PQ	CL50GRYALS4PQ	3	Green	Red	Yellow		PNP
CL50GRYALSNQ	CL50GRYALS3NQ	CL50GRYALS4NQ		Green	Red	Yellow		NPN

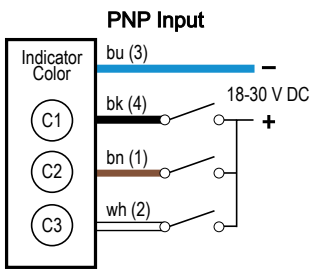
Omni-Directional Sealed Audible

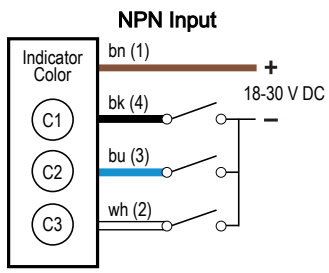
Models[1]			# of LED Colors	LED Colors [2]			Connection[3]	Inputs
Continuous	Pulsed at 1.6 Hz	Staccato		Color 1	Color 2	Color 3		
CL50GXXAOSPQ	CL50GXXAOS3PQ	CL50GXXAOS4PQ	1	Green	-	-	Integral 5-pin M12 male quick-disconnect connector	PNP
CL50GXXAOSNQ	CL50GXXAOS3NQ	CL50GXXAOS4NQ		Green	-	-		NPN
CL50XRXAOSPQ	CL50XRXAOS3PQ	CL50XRXAOS4PQ		-	Red	-		PNP
CL50XRXAOSNQ	CL50XRXAOS3NQ	CL50XRXAOS4NQ		-	Red	-		NPN
CL50GRXAOSPQ	CL50GRXAOS3PQ	CL50GRXAOS4PQ	2	Green	Red	-		PNP
CL50GRXAOSNQ	CL50GRXAOS3NQ	CL50GRXAOS4NQ		Green	Red	-		NPN
CL50GRYAOSPQ	CL50GRYAOS3PQ	CL50GRYAOS4PQ	3	Green	Red	Yellow		PNP
CL50GRYAOSNQ	CL50GRYAOS3NQ	CL50GRYAOS4NQ		Green	Red	Yellow		NPN

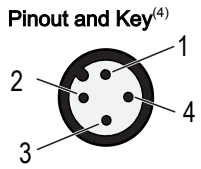
Omni-Directional Sealed Audible with Intensity Adjustment

Models[1]			# of LED Colors	LED Colors[2]			Connection[3]	Inputs
Continuous	Pulsed at 1.6 Hz	Staccato		Color 1	Color 2	Color 3		
CL50GXXAOSIPQ	CL50GXXAOS3IPQ	CL50GXXAOS4IPQ	1	Green	-	-	Integral 5-pin M12 male quick-disconnect connector	PNP
CL50GXXAOSINQ	CL50GXXAOS3INQ	CL50GXXAOS4INQ		Green	-	-		NPN
CL50XRXAOSIPQ	CL50XRXAOS3IPQ	CL50XRXAOS4IPQ		-	Red	-		PNP
CL50XRXAOSINQ	CL50XRXAOS3INQ	CL50XRXAOS4INQ		-	Red	-		NPN
CL50GRXAOSIPQ	CL50GRXAOS3IPQ	CL50GRXAOS4IPQ	2	Green	Red	-		PNP
CL50GRXAOSINQ	CL50GRXAOS3INQ	CL50GRXAOS4INQ		Green	Red	-		NPN
CL50GRYAOSIPQ	CL50GRYAOS3IPQ	CL50GRYAOS4IPQ	3	Green	Red	Yellow		PNP
CL50GRYAOSINQ	CL50GRYAOS3INQ	CL50GRYAOS4INQ		Green	Red	Yellow		NPN

Wiring — Non-Audible Models





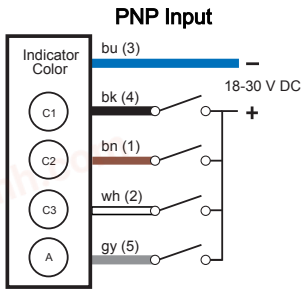


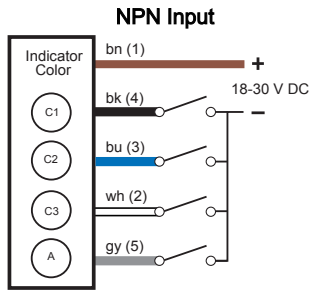
[4] If there is an "X" in the model number, the corresponding wire will not be used.

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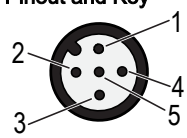
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Wiring — Audible Models





Pinout and Key[4]



1 = Brown
2 = White
3 = Blue
4 = Black
5 = Gray
C1 = Color 1
C2 = Color 2
C3 = Color 3
A = Audible

Functional Truth Table: PNP Models

LED Function	Pin 4 (Black Wire)	Pin 1 (Brown Wire)	Pin 2 (White Wire)	
Color 1 On	+V DC			Pin 3 (blue wire) connected to ground (–) . **Alarm models:** Alarm function is independent of light functions.
Color 2 On		+V DC		
Color 3 On			+V DC	
Color 3 On (color 3 inhibits color 1)	+V DC		+V DC	
Color 2 On (color 2 inhibits color 1)	+V DC	+V DC		
Color 3 On (color 3 inhibits color 2)		+V DC	+V DC	
Color 3 On (color 3 inhibits colors 1 & 2)	+V DC	+V DC	+V DC	

Functional Truth Table: NPN Models

LED Function	Pin 4 (Black Wire)	Pin 3 (Blue Wire)	Pin 2 (White Wire)	
Color 1 On	–V DC			Pin 1 (brown wire) connected to +V DC. **Alarm models:** Alarm function is independent of light functions.
Color 2 On		–V DC		
Color 3 On			–V DC	
Color 3 On (color 3 inhibits color 1)	–V DC		–V DC	
Color 2 On (color 2 inhibits color 1)	–V DC	–V DC		
Color 3 On (color 3 inhibits color 2)		–V DC	–V DC	
Color 3 On (color 3 inhibits colors 1 & 2)	–V DC	–V DC	–V DC	

Specifications

Supply Voltage and Current

18 V DC to 30 V DC

Indicators–maximum current per LED color:

- 100 mA at 18 V DC
- 70 mA at 30 V DC

Standard Audible Alarm: 25 mA maximum current

Sealed Audible Alarm: 35 mA maximum current

Omni-Directional Sealed Audible Alarm: 45 mA maximum current

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Indicator Response Time

Indicator On/Off: 10 milliseconds maximum

Construction

Bases and Covers: ABS

Light Segment: Polycarbonate

Connections

Integral 4-pin or 5-pin M12 male quick-disconnect connector, 150 mm (6 in) PVC-jacketed cable with a 4-pin or 5-pin M12 male quick-disconnect connector, or 2 m (6.5 ft) integral PVC-jacketed cable, depending on model

Models with a quick-disconnect connector require a mating cordset

Vibration and Mechanical Shock

Meets IEC 60068-2-6 requirements (Vibration: 10 Hz to 55 Hz, 1.0 mm amplitude, 5 minutes sweep, 30 minutes dwell)

Meets IEC 60068-2-27 requirements (Shock: 30G 11 ms duration, half sine wave)

Operating Conditions

Non-Audible: –40 °C to +50 °C (–40 °F to +122 °F)

Standard and Sealed Audible: –20 °C to +50 °C (–4 °F to +122 °F)

95% at +50 °C maximum relative humidity (non-condensing)

Environmental Rating

UL Type 4X Indoor and UL Type 13

Non-Audible and Sealed Audible: IP67

Standard Audible: IP50

Audible Alarm

Standard Audible Alarm: 2.7 KHz ± 500 Hz oscillation frequency; maximum intensity 92 db at 1 meter (3.3 ft) (typical)

Sealed Audible Alarm: 2.9 KHz ± 250 Hz oscillation frequency; maximum intensity 94 db at 1 meter (3.3 ft) (typical)

Omni-Directional Sealed Audible Alarm: 2.1 KHz ± 250 Hz oscillation frequency; maximum intensity 99 db at 1m (3.3 ft) (typical)

Omni-Directional Sealed Audible Alarm with Intensity Adjustment: 2.1 KHz ± 250 Hz oscillation frequency; maximum intensity 95 dB at 1m (3.3 ft) (typical)

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Certifications

Banner Engineering BV
Park Lane, Culliganlaan 2F bus 3
1831 Diegem, BELGIUM

Audible Adjustment

Standard Audible Alarm: Unscrew the cover (up to 1.5 turns maximum) to adjust the audible intensity. Do not exceed 1.5 turns or the cover may detach during operation. For maximum intensity, rotate the center plug 180° counterclockwise to remove it.

Sealed Audible Alarm and Omni-Directional Sealed Audible Alarm with Intensity Adjustment: Rotate the front cover until the desired intensity is reached

Typical Reduction in Sound Intensity with Audible Adjustment (maximum to minimum):

- **Standard Audible:** 30 dB
- **Sealed Audible:** 20 dB
- **Omni-Directional Sealed Audible:** 12 dB

Indicators

LEDs or audible are independently selected

Indicator Characteristics

Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Lumen Output (Typical at 25 °C)
Green	525 nm	72
Red	625 nm	38
Yellow	590 nm	30
Blue	475 nm	28
White	5000 K	85

Required Overcurrent Protection

WARNING: Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

Overcurrent protection is required to be provided by end product application per the supplied table.

Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.

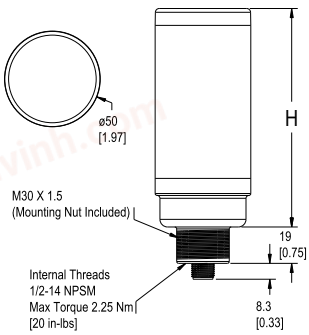
Supply wiring leads < 24 AWG shall not be spliced.

For additional product support, go to www.bannerengineering.com.

Supply Wiring (AWG)	Required Overcurrent Protection (A)	Supply Wiring (AWG)	Required Overcurrent Protection (A)
20	5.0	26	1.0
22	3.0	28	0.8
24	2.0	30	0.5

Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.



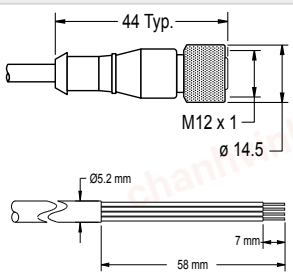
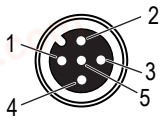
Column Light Height (H)

Non-Audible	114.2 mm (4.5 in)
Standard Audible[5]	145.3 mm (5.7 in)
Sealed Audible	168.2 mm (6.6 in)
Omni-Directional Sealed Audible	182.2 mm (7.2 in)

Accessories

Cordsets

4-Pin Single-Ended M12 Female Cordsets

Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	2 m (6.56 ft)	Straight		
MQDC-415	5 m (16.4 ft)			
MQDC-430	9 m (29.5 ft)			
MQDC-450	15 m (49.2 ft)			

1 = Brown
2 = White
3 = Blue
4 = Black
5 = Not used

Continued on page 5

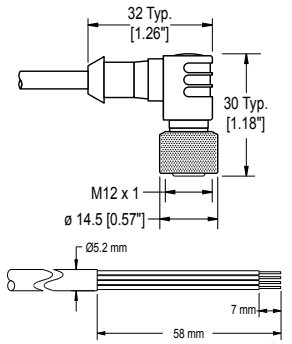
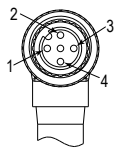
[5] Column Light (H) with top unscrewed approximately 3.5 mm to allow sound to escape

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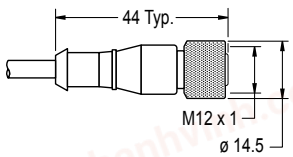
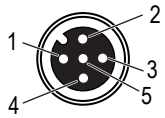
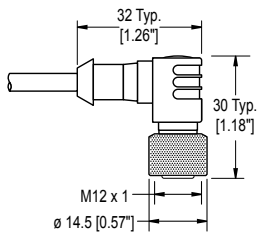
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Continued from page 4

4-Pin Single-Ended M12 Female Cordsets

Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406RA	2 m (6.56 ft)	Right-Angle		
MQDC-415RA	5 m (16.4 ft)			
MQDC-430RA	9 m (29.5 ft)			
MQDC-450RA	15 m (49.2 ft)			

5-Pin Single-Ended M12 Female Cordsets

Model	Length	Style	Dimensions	Pinout (Female)
MQDC1-501.5	0.5 m (1.5 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
MQDC1-503	0.9 m (2.9 ft)			
MQDC1-506	2 m (6.5 ft)			
MQDC1-515	5 m (16.4 ft)			
MQDC1-530	9 m (29.5 ft)			
MQDC1-560	18 m (59 ft)			
MQDC1-5100	31 m (101.7 ft)			
MQDC1-506RA	2 m (6.5 ft)	Right-Angle		
MQDC1-515RA	5 m (16.4 ft)			
MQDC1-530RA	9 m (29.5 ft)			
MQDC1-560RA	19 m (62.3 ft)			

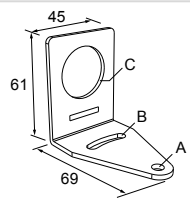
Mounting Brackets

All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.

SMB30A

- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- 12-gauge stainless steel

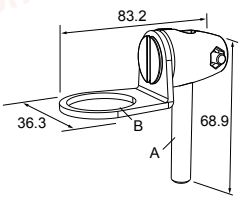
Hole center spacing: A to B=40
Hole size: A=ø 6.3, B= 27.1 × 6.3, C=ø 30.5



SMB30FA

- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-gauge 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric- and inch-size bolt available

Bolt thread: SMB30FA, A= 3/8 - 16 × 2 in; SMB30FAM10, A= M10 - 1.5 × 50
Hole size: B= ø 30.1



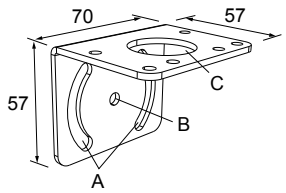
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SMB30MM

- 12-gauge stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor

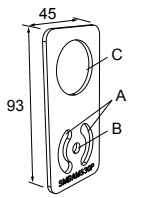
Hole center spacing: A = 51, A to B = 25.4
Hole size: A = 42.6 × 7, B = ø 6.4, C = ø 30.1



SMBAMS30P

- Flat SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90°+ rotation
- 12-gauge 300 series stainless steel

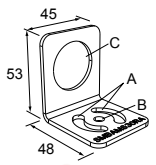
Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 × 7.0, B=ø 6.5, C=ø 31.0



SMBAMS30RA

- Right-angle SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90°+ rotation
- 12-gauge (2.6 mm) cold-rolled steel

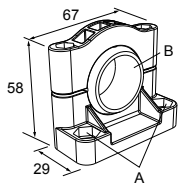
Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 × 7.0, B=ø 6.5, C=ø 31.0



SMB30SC

- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included

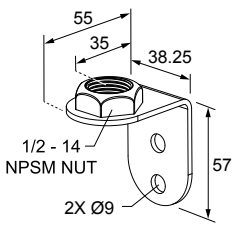
Hole center spacing: A=ø 50.8
Hole size: A=ø 7.0, B=ø 30.0



LMBE12RA35

- Direct mounting of stand-off pipe, with common bracket type
- Zinc-plated steel
- 1/2-14 NPSM nut
- Mounting distance from the wall to the center of the 1/2-14 NPSM nut is 35 mm

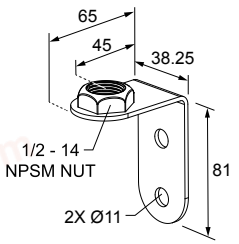
Hole center spacing: 20.0



LMBE12RA45

- Direct mounting of stand-off pipe, with common bracket type
- Zinc-plated steel
- 1/2-14 NPSM nut
- Mounting distance from the wall to the center of the 1/2-14 NPSM nut is 45 mm

Hole center spacing: 35.0



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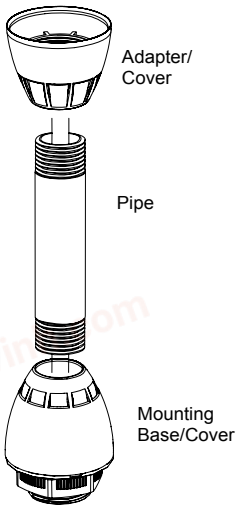
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LMB Sealed Right-Angle Bracket

Model	Description	
LMB30RA - Black polycarbonate **LMB30RAC** - Gray polycarbonate	• **Direct-Mount Models** • Bracket kit with base, 30 mm adapter, set screw, fasteners, O-rings, and gaskets.	
LMBE12RA - Black polycarbonate **LMBE12RAC** - Gray polycarbonate	• **Pipe-Mount Models** • Bracket kit with base, ½-14 pipe adapter, set screw, fasteners, O-rings, and gaskets • For use with stand-off pipe (listed and sold separately)	

Elevated Mount System

Example Assembly



This example uses:

1. Adapter/Cover
2. Pipe
3. Mounting Base

Other compatible parts are listed in the following tables.

Adapters/Covers



Adapter/Cover Model	Description
SA-M30TE12 - Black acetal	• Streamlined black acetal or white UHMW stand-off pipe adapter/cover • Adapter from 30 mm light base to ½ in. NPSM/DN15 pipe • Mounting hardware included
SA-M30TE12C - White UHMW	

Pipes



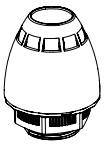
Black Anodized Aluminum, ½ in. NPT Pipe Models	Clear Anodized Aluminum, ½ in. NPT Pipe Models	Description
SOP-E12-150A, 150 mm (6 in) long	**SOP-E12-150AC**, 150 mm (6 in) long	• Elevated-use stand-off pipe • Threaded at both ends • Compatible with most industrial environments
SOP-E12-300A, 300 mm (12 in) long	**SOP-E12-300AC**, 300 mm (12 in) long	
SOP-E12-600A, 600 mm (24 in) long	-	
SOP-E12-900A, 900 mm (36 in) long	**SOP-E12-900AC**, 900 mm (36 in) long	

304 Stainless Steel, ¼ in. NPT Pipe Models	Description
SOP-E12-150SS, 150 mm (6 in) long	• Elevated-use stand-off pipe • Threaded at both ends • Compatible with most industrial environments
SOP-E12-300SS, 300 mm (12 in) long	
SOP-E12-600SS, 600 mm (24 in) long	
SOP-E12-900SS, 900 mm (36 in) long	

Bottom Covers and Mounting Bases

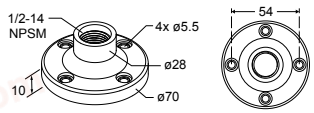
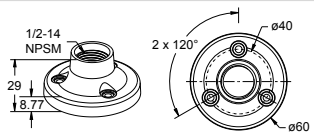
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Base Adapter/Cover Model	Description
SA-E12M30 - Black acetal	• Streamlined black acetal or white UHMW mounting base adapter/cover • Adapter from ½ in. NPSM/DN15 pipe to 30 mm (1-3/16 in) drilled hole • Mounting hardware included
SA-E12M30C - White UHMW	

Pipe Mounting Flange

Pipe Mounting Flange			
Model	**Description**	**Construction**	
SA-F12	• Elevated-use stand-off pipes (½ in, NPSM/ DN15) • M5 mounting hardware and nitrile gasket included	Die-cast zinc base with black paint	
SA-F12-3	• Elevated-use stand-off pipes (½ in, NPSM/ DN15) • M4 mounting hardware and nitrile blend gasket included	Black Polycarbonate	

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