



45 SERIES

Limit Switch Box

Technical Data

The Max-Air 45 Series aluminum and stainless steel series limit switch boxes are an extremely reliable, robust, and time tested solution for your position monitoring needs. Switch boxes available with mechanical, proximity and inductive switch types, and fully certified to North American and European standards.

Features and Benefits

- NEMA 4/4X Corrosion Resistant
- Compact Design
- Quick Set Cams
- Easy Wiring Through PCB Terminal, 10pt.
- Single and Dual-Coil Solenoid Valve Options
- High Visibility Open/Close Beacon
- 3-Way T-Port & L-Port Beacon Options
- Inclusive 30x80x30 NAMUR Mounting Bracket
- Other Mounting Brackets Available
- Captive Cover Bolts

Materials of Construction

Enclosure	Die Cast Aluminum, Epoxy Coated AISI 316 Stainless Steel
Bracket	AISI 300 Series Stainless Steel
Indicator	Polycarbonate
Fasteners	Stainless Steel
Seals	BUNA-N
Shaft	AISI 304 Stainless Steel (for Aluminum LSB) AISI 316 Stainless Steel (for SS LSB)
Cams	ABS
Switches	See Available Switch Options

Magnetic Switches

Magnetic Reed Hamlin
(Low Power, 5W Max)



Proximity Switches

IFM NS5002 EEExia
(7.5-30 DC, NC;
Nominal 8.2 DC)

Optional

P&F NJ2-V3-N
Namur 2 Wire
(8.2V, NC, EEExia Rated)

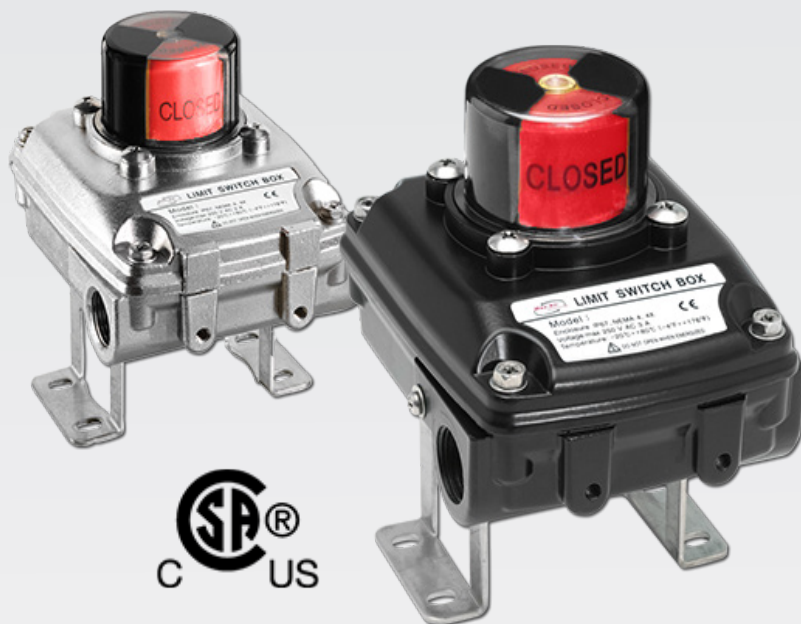


Mechanical Switches

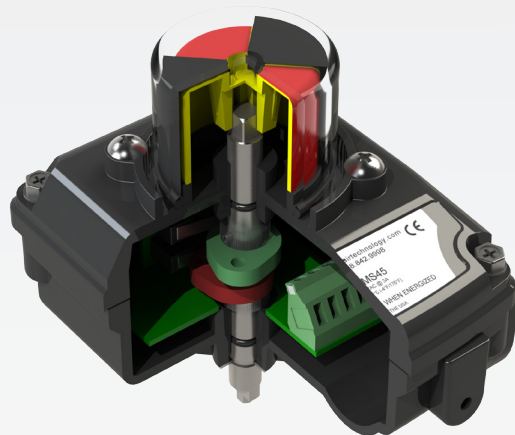
Omron SS-5 or SSG,
SPDT, 5A 250V

Optional

Omron SS-01, SPDT, 0.1A
125VAC 30VDC, Gold
Plated Contacts



NEMA 4/4X enclosure



Cutaway View

***Other Switch
Options Available
See Page 3**

Technical Data Cont.

Certifications & Test Protocol

- CE
- ATEX II 3 D
- ATEX II 2 G D EEx ia IIC T6
(Gold-plated contacts or EExia rated switches only)
- SIL-2 Rating
- CSA C22.2 No 14-13
- ANSI/UL 508 (17th Ed)
- CSA C22.2 No 94.1-07 / ANSI/UL 50 (12th Ed)
- CSA C22.2 No 94.2-07 / ANSI/UL 50E

Specifications

IP67/NEMA4/4X Protection Rating

Cable Entry	Standard 1/2" NPT (2 places) Optional M20x1.5 (2 places)
Temperature	-4°F to +176°F Standard (-20°C to +80°C) -40°F to +185°F Gold-plated Contacts (-40°C to +85°C)
Terminal Strip	10 Pt. Single Coil Solenoid Valve (7-8-7-8) 10 Pt. Dual Coil Solenoid Valve (7-8-7-9)
Weights	Aluminum LBS 1.62lbs (0.74kg) SS LSB 3.94lbs (1.79kg)



Exploded View

High Visibility
Beacon & Cover

Top (Open)
Easy Set Cam

Bottom (Close)
Easy Set Cam

Integrated PCB
w/ Terminal Strip
& Switches

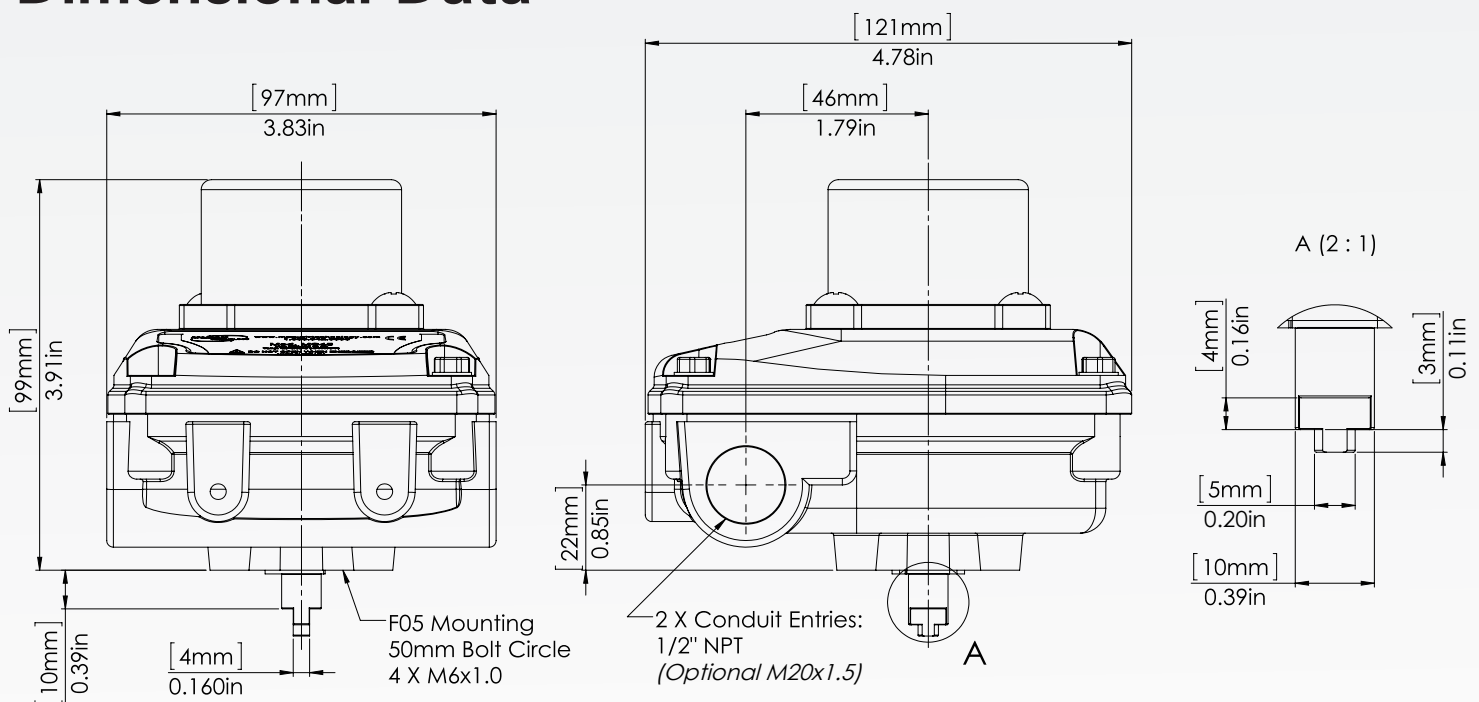
304/316
SS Shaft

Gasket

Enclosure w/
2X Conduit Entries

300 Series SS
Bracket Standard
30x80x30 Namur

Dimensional Data



Product Ordering Matrix

Part No.

MS 45 - 1 2 0 M 0 3

MS	Mechanical
IS	Inductive Proximity
PS	Magnetic

Switch Type

45	NEMA 4/4X, IP67
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Series

1	1/2" NPT (2 Places)
2	M20 x 1.5 (2 Places)

Conduit Entries

2	Two (2) Switches
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Switch Quantity

0	STD, Open/Closed, Yellow/Red
2	Lport, 3way
3	Tport, 3way
4	Arrow, 3way

Indicator Type

M	Aluminum, black
7	Stainless Steel

Material & Color

Code	Ref	Switches & Sensors
O	MS	Omron SS-5 or SSG, SPDT, 5A 250V
S	MS	Omron SS-01, SPDT, 0.1A 125VAC 30VDC, Gold Plated Contacts
0	PS	Magnetic Reed Hamlin (Low Power, 5W Max)
A	IS	IFM NS5002 EEExia (7.5-30 DC, NC; Nominal 8.2 DC)
B	IS	IFM IS5001 DC 3 Wire PNP Switch (10-36V, NO)
D	IS	IFM IS5026 DC 2 Wire PNP or NPN (5-36V, Programmable)
E	IS	IFM IS0003 AC/DC 2 Wire Inductive (20-140VAC/10-140VDC, NO)
F	IS	P&F NJ2-V3-N Namur 2 Wire (8.2V, NC, EEExia Rated)
G	IS	P&F NBB2-V3-E2 DC 3 Wire PNP (10-30V, NO)
H	IS	P&F NBB3-V3-Z4 DC 2 Wire (5-60V, NO)
K	IS	P&F NBB2-V3-E3 DC 3 Wire PNP (10-30V, NC)
L	IS	P&F NBB2-V3-E0 DC 3 Wire NPN (10-30V, NO)
N	IS	P&F NCB2-V3-N0 Namur (8.2V, NC, EEExia Rated)

Switches & Sensors

0	None
3	80x30 Namur 30 STD
6	Universal Bracket
A	MS-LSB-01 (30x80x20 Namur)
B	MS-LSB-02 (30x80x30 Namur)

Bracket

Blank	Standard 7-8-7-8 (Single Coil)
1	Circuit Board 7-8-7-9 (Dual Coil)
2	Circuit board 7-8-9-10

Special Options

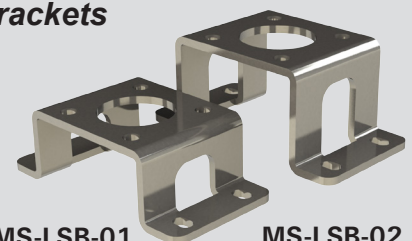
Note:

Intrinsically Safe Applications

PS and IS models, and MS model with gold-plated contacts suitable for use in intrinsically safe applications w/ appropriate barriers.

*Optional Heavy Duty SS Brackets

Heavier gauge 300 series SS brackets available for demanding, high vibration applications. Standard Namur 20mm/30mm heights, and custom options also available



MS-LSB-01

MS-LSB-02



The Best Way To Automate Your Process

Crossover Guide

Max-Air	Westlock	Soldo	Moniteur	Topworx
MS45-120M03	2004NBY2A2M0200 3245ABYN00022FAN0	SF01200-10U07A3	FMYB-E120	DXPM2GNEB
PS45-120M03	3249ABYN00022FAN0	SFC4200-10U07A3	FMYB-E220	DXPR2GNEB
IS45-120MF3	3247ABYN00022FAN0	SF70200-10U07A3	FMYB-E820	DXPE2GNEB
MS45-120703	3245SBYN00022FAN0	SS01200-10U07A7	-	DXSM2GMEB
PS45-120703	3247SBYN00022FAN0	SSC4200-10U07A7	-	DXSR2GMEB
IS45-1207F3	3249SBYN00022FAN0	SS70200-10U07A7	-	DXSE2GMEB

Notes: 1. Max-Air 45 Series limit switches come standard with Yellow/Red indicator
 2. Crossovers listed have standard Yellow/Black or Red/Green indicators
 3. Topworx has 3/4" NPT conduit entries

