NAMCO

SNAP-LOCK®

LIMIT SWITCH CATALOG

NAMCO

Because nothing else works better!

www.namcocontrols.com

1-800-NAMTECH

LET'S TALK ABOUT RELIABILITY

Namco Controls grew from the heavy duty side of the industrial world. For decades, Snap Lock® limit switches have been the benchmark in reliability for steel mills, auto factories, foundries, power plants and machine shops.

In 1938, the need for a limit switch of high quality, repeatability, and reliability was pressing – but one didn't exist. Namco Controls was therefore created to design and manufacture limit switches for our own needs. Innovative and reliable from the beginning, they were eagerly sought after by other companies and we branched out into supplying the demand.

Everything that made Namco Snap-Lock Limit Switches the preference of the heavy and machine tool industries of the past is still applicable today. Times may have changed, but our reputation for reliability hasn't.

Today, Snap-Lock still provides unparalleled reliability in the toughest environments and in heavy-duty applications. This superior limit switch provides a huge range of operation, construction, and practical flexibility. You can choose a model, size, and type that will meet and exceed the demands you place on it. In every respect, Snap-Lock has the features and benefits you insist on in a limit switch.

In addition to easily covering all your functional requirements, Snap-Lock Limit Switches will meet practically every application. They have the ruggedness to operate under the most severe conditions and have the durability needed for a long, trouble-free lifespan.

SNAP-LOCK FEATURES FOR YOUR NEEDS:

- Heavy duty butt contacts.
- Wide selection of levers.
- Contact arrangements and choice of materials allows application versatility.
- Available pre-wired to save down-time.
- Totally sealed construction for almost all environmental conditions.
- High and low temperature models, range of operating torques and choice of housing types increase application capabilities.
- Optional sliding contact feature results in self-cleaning benefits.

JUST SOME OF THE REASONS WHY NAMCO/ SNAP-LOCK LIMIT SWITCHES ARE STILL THE PREFERRED CHOICE AFTER SEVENTY YEARS.

SEVERAL PRODUCTS FOR SPECIAL VARIATIONS

Series EA800

This series of hazardous location Snap-Lock Limit Switches utilizes the internal mechanism of the EA700 series, with a significant advantage. The mechanisms are enclosed in UL-listed, NEMA-rated housing available in aluminum or bronze and are perfect for use in use in environments with excessive vibration, dirt and heat. Applications include coal conveyors, mining equipment and machinery, valves located in explosive environments such as oil and gas fields and refineries, grain elevators and storage areas, Navy and Marine deck equipment.

WE CAN BE YOUR ONE SOURCE SENSOR SUPPLIER

> **“A limit switch may not be the best solution to your sensing problem.”**

Our reputation is as durable as our limit switches. Because we have decades of experience in diverse applications, we are able to give you the best advice on whether your particular situation requires one of our switches. If it doesn't, we won't try to sell you something that you don't need.

You can depend on the Namco name for outstanding RELIABILITY, maximized PRODUCTIVITY and UPTIME.

Series EA880

These hazardous location Snap-lock switches can have any of the internal mechanism of the EA080, EA060, or EA040 switches. They are enclosed in UL-listed NEMA-rated aluminum housings. Single-pole contacts and end uses similar to the EA800 series.

EA150

EA150 has dust-tight zinc housing with LED light option. It's ultra-sensitive and has a gravity or spring return for small-part and other light-touch requirements.

CALL: 1-800-NAMTECH

If you have any questions, please do call us at 1-800-NAMTECH (626-8324) There are always qualified application engineers available to give you expert advice, before and after the sale.

Certifications of Namco Switches

The product has been evaluated to the applicable CSA and ANSI/UL standards for use in Canada and U.S. respectively.

CSA International
- Certificate: 1269954 (LR38127)
- Class 3211-07 Industrial Control Equipment, Miscellaneous Apparatus
- Class 3211-87 Industrial Control Equipment, Miscellaneous Apparatus - Certified to U.S. Standards

Series EA170, and EA180 enclosed limit switches, form Z double pole, double-break, double throw rated:
Electrical: 5A, 125V dc, 1.5A, 250V dc, 5A, 600V ac, 10A, 480V ac, 15A, 250V ac, 20A, 125V ac; heavy pilot duty, 20A, 600V ac; AC make/break: 120 to 600V, 10800/1080va; dc: N600
Environmental rating: 90°C max., Type 1, 3, 4, 12, 13

Series EA700 and EA740 special-use switch, single pole, single or multiple circuit, double throw, double break, rated:
Electrical: 5A, 125V, dc, 1.5A, 250V dc, 5A, 600V ac, 10A, 480V ac, 15A, 250V ac, 20A, 125V ac; heavy pilot duty, 20A, 600V ac; AC make/break: 120 to 600V, 10800/1080va; dc: N600
Environmental: 55°C max.

Series EA040, EA060, and EA080 machine-operated switches, single pole, double throw, double throw, double break, rated:
Electrical: 5A. 125V dc, 1.5A, 250V dc, 5A, 600V ac, 10A, 480V ac, 15A, 250V ac, 20A, 125V ac; heavy pilot duty, 20A, 600V ac; AC make/break: 120 to 600V, 10800/1080va; dc: N600
Environmental rating: Type 1 or 13

Series EA880 SPDT machine operated switches rated:
Electrical: 5A, 125V dc, 1.5A, 250V dc, 5A, 600V ac, 10A, 480V ac, 15A, 250V ac, 20A, 125V ac; Heavy pilot duty, 600V ac max.
Environmental rating: Type 1, 4, 4X

Series EA800 snap switch, single pole, 1 N.O./N.C. contact rated: 5A, 125V dc, 1.5A, 250V dc, 5A, 600V ac, 10A, 480V ac, 15A, 250V ac, 20A, 125V ac
Environmental rating: Type 1, 4

Note: These switches are for ordinary location use only.

Applicable Requirements
- CSA C22.2 No. 14-95 — Industrial Control Equipment
- CSA C22.2 No. 94-M91 — Special Purpose Enclosures
- UL 508 — Industrial Control Equipment
- UL 50 — Enclosures for Electrical Equipment

ROCKER-LEVER TYPE
EA080 Series

ELECTRICAL SIDE

MECHANICAL SIDE

CAM-OPERATED TYPE
EA700 Series

ELECTRICAL SIDE

MECHANICAL SIDE

- Housings have separate compartment enclosures for mechanical and electrical components.
- Ample space inside switch for wiring up to No. 12 AWG conductors.

For Quick Accurate Reference

Comparison Chart

Chart Guide

Temp. Range St. Temp.: – 20°C- +90°C (For All Switches).
(Note: FOR EA700, 780, 790, 800 and 880 Special High and Low Temp.Versions Available)

• Consult Factory for UL Listing.
• **Meet MIL-C-2212 and IEEE 45 Spec. and High Shock.**
Δ **Hazardous Location Switches.**
† **Maintained Contacts/Neutral Position.**
** 2 N.O./2 N.C., 4 N.O./4 N.C., 1 N.O./1 N.C., 2 N.O./2 N.C.

	ROCKER TYPE					
	EA040 NEUTRAL POSITION	**EA060 SHORT TRAVEL**	**EA080 STANDARD**	**EA170 STANDARD**	**EA170 SHORT TRAVEL**	**EA170 REVERSE SHAFT**
SNAP LOCK	•	•	•	•	•	•
CONTACT	FORM Z 2 N.O.	FORM Z 1 N.O. 1 N.C.	FORM Z 1 N.O. 1 N.C.	FORM Z 2 N.O. 2 N.C.	FORM Z 2 N.O. 2 N.C.	FORM Z 2 N.O. 2 N.C.
PRE-TRAVEL	7°	6°30'	10°	10°	6°30'	10°
DIFF. TRAVEL	6°	4°	8°	8°	4°	8°
REC. TRAVEL	7°30'	7°	13°	13°	7°	13°
TOTAL TRAVEL	33°	35°	38°	37°	36°	37°
MAX TORQUE	22 IN. - LB.	24 IN. - LB.	14 IN. - LB.	23 IN. - LB.	32 IN.-LB.	30 IN.-LB.
MAX TORQUE (AT TOTAL TRAVEL)	50 IN. - LB.	45 IN. - LB.	38 IN. - LB.	33 IN. - LB.	45 IN.-LB.	33 IN.-LB.
WT (LB)	2.3	2.3	2.3	3.5	3.5	3.5
UL/CSA	•	•	•	—	—	—
NEMA RATING	1,4,13	1,4,13	1,4,13	1,4,13	1,4,13	1,4,13
ENCLOSURE	ZINC	ZINC	ZINC	AL/ZINC	AL/ZINC	AL/ZINC

The standard Snap-Lock, 1 N.O.-1 N.C

(Series EA080 standard, EA060 short travel, EA040 neutral position.)

This series was designed by the Electrical Manufacturing Division of National Acme to fill a need for limit switches offering a high degree of repeatability, life and reliability for use on machine tools. This series of single pole limit switches remains one of Namco's most popular lines. It has numerous applications on machine controls, conveyors, material-handling systems and valve controls.

The quick make and break, positive latching mechanism coined the trade name, "Snap-Lock".

EA700
CAM OPERATED TYPE

THE SAME SNAP-LOCK BUT 2 N.O.-2 N.C

(Series EA170, same standard and short travel as others but also comes with reverse shaft.)

This series was developed to provide two-pole (2 N.O.,2 N.C.) switches while retaining repeatability, reliability, and durable long life. Applications include machine and valve controls, conveyor and material handling systems. An important derivative is Namco's EA180: one of Namco's two limit switches qualified for use inside containment areas of nuclear power plants.

EA080
ROCKER-LEVER TYPE

THE SAME SNAP-LOCK BUT CAM-OPERATED

(Series EA700, available in 1 N.O. - 1 N.C., 2 N.O. - 2 N.C., and 3 N.O. - 3 N.C.)

This series is Namco's most versatile line of Snap-Lock Limit Switches. It has many significant derivatives, all exhibiting ruggedness, high reliability, and repeatability. This important series was developed as a result of the need for lower trip torque and greater total actuating lever travel. The important derivative switches include Namco's EA740 nuclear switches, EA770 sealed switch and the EA730, 780, and 790 Navy and Marine switches.

	CAM OPERATED						
EA880Δ	**EA700 STANDARD**	**EA700 (M.C./N.P†)**	**EA770 (SLT)**	**EA780***	**EA790***	**EA800Δ**
•	•	•	•	•	•	•
FORM Z SAME AS EA040, 080 OR 060	FORM Z 1 N.O. 1N.C. 2 N.O. 2 N.C. 3 N.O. 3 N.C.	FORM Z **	FORM Z 1 N.O. 1 N.C. 2 N.O. 2 N.C.	FORM Z 1 N.O. 1 N.C. 2 N.O. 2 N.C.	FORM Z 1 N.O. 1 N.C. 2 N.O. 2 N.C.	FORM Z 1 N.O. 1 N.C. 2 N.O. 2 N.C.
	18˚	SEE CAT.	18˚	18˚	18˚	18
SAME AS EA040, 060, OR 080	14˚	DEPENDS ON CW OR CCW ROTATION	14˚	14˚	14˚	14
	30˚		30˚	30˚	30˚	30
	90˚		90˚	90˚	90˚	90
	15-33 IN.-LB.		15-33 IN.-LB.	15-27 IN.-LB.	15-27 IN.-LB.	15-33 IN.-LB.
	DEPENDS ON # OF CONTACTS		DEPENDS ON # OF CONTACTS	DEPENDS ON # OF CONTACTS	DEPENDS ON # OF CONTACTS	DEPENDS ON # OF CONTACTS
•	•	—	—	—	—	•
1,4,7,9,13	1,4,13	1,4,13	1,4,6,13	1,4,4X,6,6P,13	1,4,4X,6,6P,13	4X,6,6P,7,9
AL	ZINC	ZINC	ZINC	BRONZE	BRONZE	AL, BRONZE