ATTACHMENT A



US00D471428S

United States Design Patent (10) Patent No.: US D471,428 S Mirick (45) Date of Patent: ** Mar. 11, 2003

(54) SLOTTED ARROW QUARTER TURN LATCH

(75) Inventor: Larry Mirick, Manhattan Beach, CA

(US)

(73) Assignee: S.P.E.P. Acquisition Corp., Rancho

Dominguez, CA (US)

(**) Term: 14 Years

(21) Appl. No.: 29/151,739

(22) Filed: Dec. 4, 2001

D8/341, 343; 292/137, 163, 169, 219, DIG. 37; 70/344, 370, 391, 454

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6,113,160	Α	*	9/2000	Johansson et al 292/169
D435,427	\mathbf{S}	*	12/2000	Sokurenko D8/331

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Quad[™] Panel Latch, SOUTHCO Latches and Access Hardware, North American Edition—48 NA, ISO 9001 Quality System, 1998, pp. F13–F16.

Screw-in Quarter Turn (IP 65), B010; Clip-In Quarter Turn, B210; Quarter-Turn (plastic) Clip-In Type, B215, EMKA, Inc., Harrisburg, PA, 1993, 4 pages.

* cited by examiner

Primary Examiner—Brian N. Vinson

(74) Attorney, Agent, or Firm—Christie, Parker & Hale, LLP

(57) CLAIM

The ornamental design for slotted arrow quarter turn latch, as shown and described.

DESCRIPTION

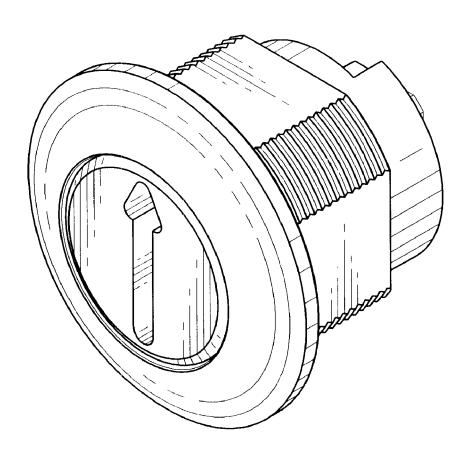
FIG. 1 is a top right perspective view of the slotted arrow quarter turn latch of the invention;

FIG. 2 is a top plan view of the slotted arrow quarter turn latch of FIG. 1.

FIG. 3 is a bottom plan view of the slotted arrow quarter turn latch of FIG. 1; and,

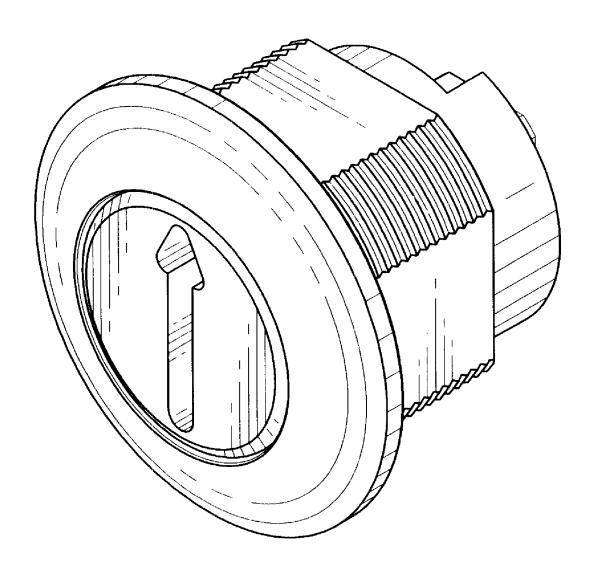
FIG. 4 is a right side view of the slotted arrow quarter turn latch of FIG. 1, the left side view being a mirror image thereof.

1 Claim, 4 Drawing Sheets



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FIG. 1



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FIG.2

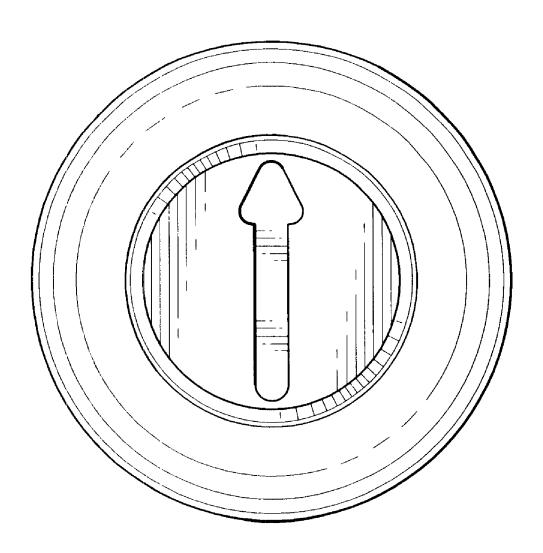


FIG.3

Mar. 11, 2003

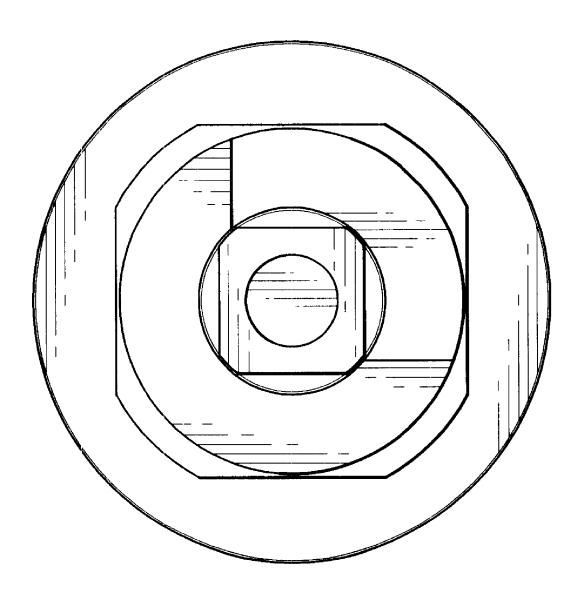
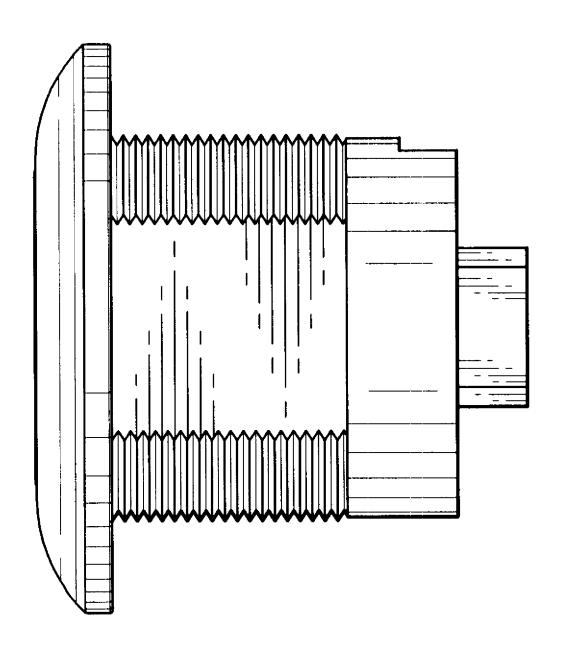
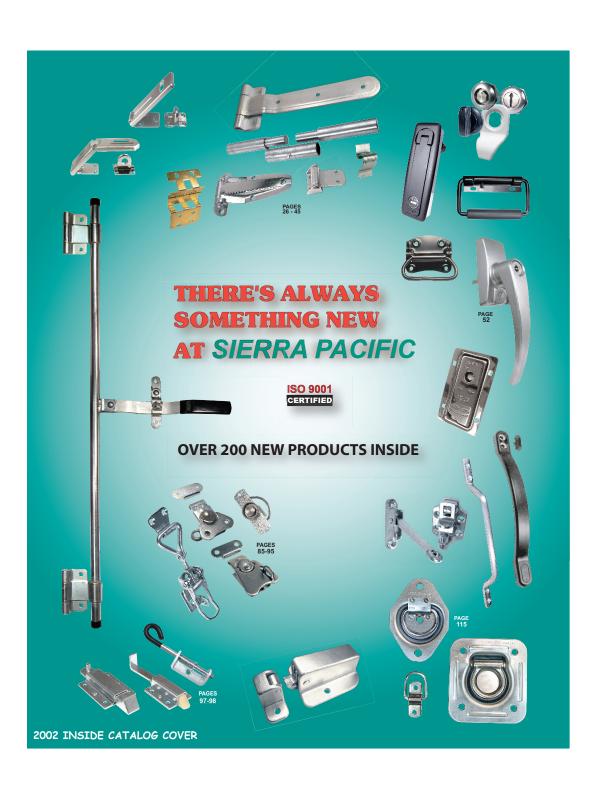


FIG.4

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ATTACHMENT B

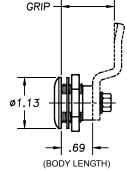


QUARTER TURN LATCHES

- Cam rotates 90°
- Cam locators designed into inserts
- Intended for NEMA type 4, 4X & 12 enclosures
- Assembly includes:
 - Neoprene face gasket
 - Body nut
 - Cam retaining screw
 - Disc washer
 - (2) Internal o-rings
 - Available with UL rated seals (o-rings & face gasket)

Note: Cams sold separately. See page 81 for cams & grip dimension







SLOTTED TURN LATCHES

PART NUMBER	MATE	RIAL	FINISH	
	HOUSING	PLUG	HOUSING	SLOTTED PLUG
41-00	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-00BK	Die cast zinc	Die cast zinc	Black powder coated	Black powder coated
41-00SS	Stainless steel	Stainless steel	Machine polished	Machine polished
41BK-00	Die Cast Zinc	Die Cast Zinc	Black powder coated	Chrome plated
41-00P	Thermo-plastic*	Thermo-plastic*	Black textured	Black textured
41P-00SS	Thermo-plastic*	Stainless steel	Black textured	Machine polished



Slotted Plug

HEX TURN LATCHES

PART NUMBER	MATE	RIAL	FINISH	
	HOUSING	PLUG	HOUSING	BELLCORE HEX PLUG
41-04	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-04BK	Die cast zinc	Die cast zinc	Black powder coated	Black powder coated
41-04SS	Stainless steel	Stainless steel	Machine polished	Machine polished
41P-04SS	Thermo-plastic*	Stainless steel	Black textured	Machine polished



Bellcore Hex Plug

■ Activated with a 7/16" socket

THUMB TURN LATCHES

PART NUMBER	MATE	RIAL	FINISH	
TAKTNOMBEK	HOUSING	PLUG	HOUSING	THUMB TURN PLUG
41-05	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-05BK	Die cast zinc	Die cast zinc	Black powder coated	Black powder coated



Thumb Turn Plug

^{*} Glass reinforced

^{*} Glass reinforced



SIERRA PACIFIC **ENGINEERING AND PRODUCTS**

THREE LOCATIONS NATIONALLY

Los Angeles, CA 3144 E. Maria Street Rancho Dominguez, CA 90221

Dallas, TX Chicago, IL

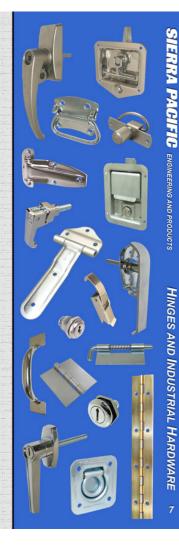
Call Toll-free 800-433-5554

In California (310) 608-0693

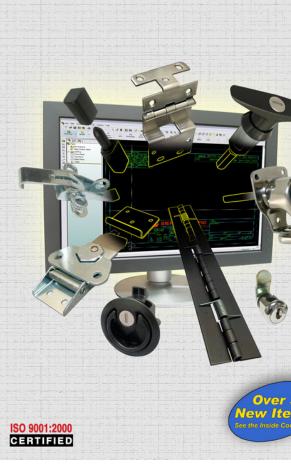
Fax (310) 608-0952

Web site www.spep.com

2004 CATALOG COVER



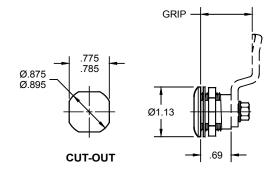
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QUARTER TURN LATCHES

- Cam rotates 90°
- Cam locators designed into inserts
- Intended for NEMA type 4, 4X & 12 enclosures
- Assembly includes:
 - Body nut
 - Cam retaining screw
 - Disc washer
 - UL rated seals (o-ring & face gasket)

Note: Cams sold separately. See page 94 for cams & grip dimension



SLOTTED PLUG TURN LATCHES

PART NUMBER	MATE	RIAL	FINISH	
	HOUSING	PLUG	HOUSING	SLOTTED PLUG
41-00	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-00BK	Die cast zinc	Die cast zinc	Black powder coated	Black powder coated
41-00SS	Stainless steel	Stainless steel	Machine polished	Machine polished
41BK-00	Die Cast Zinc	Die Cast Zinc	Black powder coated	Chrome plated
41-00P	Thermo-plastic*	Thermo-plastic*	Black textured	Black textured
41P-00SS	Thermo-plastic*	Stainless steel	Black textured	Machine polished



Note: * Thermo-plastic material is glass reinforced

10MM RECESSED HEX PLUG TURN LATCHES

PART NUMBER	MATE	RIAL	FINISH	
	HOUSING	PLUG	HOUSING	BELLCORE HEX PLUG
41-03	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-03BK	Die cast zinc	Die cast zinc	Black powder coated	Black powder coated
41BK-03	Die cast zinc	Die cast zinc	Black powder coated	Chrome plated
41P-03	Thermo-plastic*	Die cast zinc	Black textured	Chrome plated



Note: * Thermo-plastic material is glass reinforced

HEX PLUG TURN LATCHES

PART NUMBER	MATER	RIAL	FINISH	
	HOUSING	PLUG	HOUSING	BELLCORE HEX PLUG
41-04	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-04BK	Die cast zinc	Die cast zinc	Black powder coated	Black powder coated
41-04SS	Stainless steel	Stainless steel	Machine polished	Machine polished
41P-04SS	Thermo-plastic*	Stainless steel	Black textured	Machine polished



Note: * Thermo-plastic material is glass reinforced

[■] Activated with a 7/16" socket

SIERRA PAGIFIC ENGINEERING AND PRODUCTS









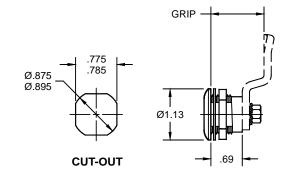
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QUARTER TURN LATCHES

- Cam rotates 90°
- Cam locators designed into inserts
- Intended for NEMA type 4, 4X & 12 enclosures
- Assembly includes:
 - Body nut
 - Cam retaining screw
 - Disc washer
 - UL rated seals (o-ring & face gasket)

Note: Cams sold separately. See page 120 for cams & grip dimension



SLOTTED PLUG TURN LATCHES

PART NUMBER	MATE	RIAL	FINISH	
	HOUSING	PLUG	HOUSING	SLOTTED PLUG
41-00	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-00BK	Die cast zinc	Die cast zinc	Matte black painted	Matte black painted
41-00SS	Stainless steel	Stainless steel	Machine polished	Machine polished
41BK-00	Die Cast Zinc	Die Cast Zinc	Matte black painted	Chrome plated
41-00P	Thermo-plastic	Thermo-plastic*	Black textured	Black textured
41P-00SS	Thermo-plastic	Stainless steel	Black textured	Machine polished



PATENTED

Note: * Thermo-plastic plug is glass reinforced

8MM RECESSED HEX PLUG TURN LATCHES

PART NUMBER	MATE	RIAL	FINISH	
	HOUSING	PLUG	HOUSING	BELLCORE HEX PLUG
41-02	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-02BK	Die cast zinc	Die cast zinc	Matte black painted	Matte black painted



10MM RECESSED HEX PLUG TURN LATCHES

PART NUMBER	MATE	RIAL	FINISH	
PART NOMBER	HOUSING	PLUG	HOUSING	BELLCORE HEX PLUG
41-03	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-03BK	Die cast zinc	Die cast zinc	Matte black painted	Matte black painted
41BK-03	Die cast zinc	Die cast zinc	Matte black painted	Chrome plated
41P-03	Thermo-plastic	Die cast zinc	Black textured	Chrome plated



HEX PLUG TURN LATCHES

NEW

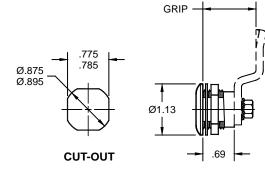
PART NUMBER	MATE	RIAL	FINISH	
	HOUSING	PLUG	HOUSING	BELLCORE HEX PLUG
41-04	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-04BK	Die cast zinc	Die cast zinc	Matte black painted	Matte black painted
41-04SS	Stainless steel	Stainless steel	Machine polished	Machine polished
41P-04SS	Thermo-plastic	Stainless steel	Black textured	Machine polished



QUARTER TURN LATCHES

- Cam rotates 90°
- Cam locators designed into inserts
- Intended for NEMA type 4, 4X & 12 enclosures
- Assembly includes:
 - Body nut
 - Cam retaining screw
 - Disc washer
 - UL rated seals (o-ring & face gasket)

Note: Cams sold separately. See page 124 for cams & grip dimension



SLOTTED PLUG TURN LATCHES

PART NUMBER	MATE	RIAL	FINISH	
	HOUSING	PLUG	HOUSING	SLOTTED PLUG
41-00	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-00BK	Die cast zinc	Die cast zinc	Matte black painted	Matte black painted
41-00SS	Stainless steel	Stainless steel	Machine polished	Machine polished
41BK-00	Die Cast Zinc	Die Cast Zinc	Matte black painted	Chrome plated
41-00P	Thermo-plastic	Thermo-plastic*	Black textured	Black textured
41P-00SS	Thermo-plastic	Stainless steel	Black textured	Machine polished



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Note: * Thermo-plastic plug is glass reinforced

8MM RECESSED HEX PLUG TURN LATCHES

PART NUMBER	MATERIAL		FINISH	
TART NOMBER	HOUSING	PLUG	HOUSING	BELLCORE HEX PLUG
41-02	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-02BK	Die cast zinc	Die cast zinc	Matte black painted	Matte black painted

■ Hex tool key available separately as part no. **392-K** (see page 103)

10MM RECESSED HEX PLUG TURN LATCHES

PART NUMBER	MATERIAL		FINISH	
	HOUSING	PLUG	HOUSING	BELLCORE HEX PLUG
41-03	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-03BK	Die cast zinc	Die cast zinc	Matte black painted	Matte black painted
41BK-03	Die cast zinc	Die cast zinc	Matte black painted	Chrome plated
41P-03	Thermo-plastic	Die cast zinc	Black textured	Chrome plated



HEX PLUG TURN LATCHES

PART NUMBER	MATERIAL		FINISH	
	HOUSING	PLUG	HOUSING	BELLCORE HEX PLUG
41-04	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-04BK	Die cast zinc	Die cast zinc	Matte black painted	Matte black painted
41-04SS	Stainless steel	Stainless steel	Machine polished	Machine polished
41P-04SS	Thermo-plastic	Stainless steel	Black textured	Machine polished

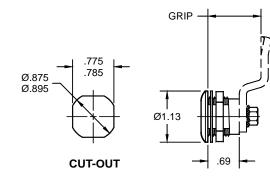


■ Activated with a 7/16" socket

QUARTER TURN LATCHES

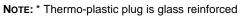
- Cam rotates 90°
- Cam locators designed into inserts
- Intended for NEMA type 4, 4X, 12 and IP66 enclosure requirements
- Assembly includes:
 - Body nut
 - Cam retaining screw
 - Disc washer
 - UL rated seals (o-ring & face gasket)

Note: Cams sold separately. See page 58 for cams & grip dimension



SLOTTED PLUG TURN LATCHES

PART NUMBER	MATERIAL		FINISH	
	HOUSING	PLUG	HOUSING	SLOTTED PLUG
41-00	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-00BK	Die cast zinc	Die cast zinc	Matte black painted	Matte black painted
41-00SS	Stainless steel	Stainless steel	Machine polished	Machine polished
41BK-00	Die Cast Zinc	Die Cast Zinc	Matte black painted	Chrome plated
41-00P	Thermo-plastic	Thermo-plastic*	Black textured	Black textured
41P-00SS	Thermo-plastic	Stainless steel	Black textured	Machine polished
41-00SST N	₩ 316SS	316SS	Passivated	Passivated



8MM RECESSED HEX PLUG TURN LATCHES

PART NUMBER	MATERIAL		FINISH	
	HOUSING	PLUG	HOUSING	BELLCORE HEX PLUG
41-02	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-02BK	Die cast zinc	Die cast zinc	Matte black painted	Matte black painted

■ Hex tool key available separately as part no. 392-K (see page 23)

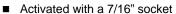


10MM RECESSED HEX PLUG TURN LATCHES

PART NUMBER	MATERIAL		FINISH	
	HOUSING	PLUG	HOUSING	BELLCORE HEX PLUG
41-03	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-03BK	Die cast zinc	Die cast zinc	Matte black painted	Matte black painted
41BK-03	Die cast zinc	Die cast zinc	Matte black painted	Chrome plated
41P-03	Thermo-plastic	Die cast zinc	Black textured	Chrome plated



PART NUMBER	MATERIAL		FINISH	
	HOUSING	PLUG	HOUSING	BELLCORE HEX PLUG
41-04	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-04BK	Die cast zinc	Die cast zinc	Matte black painted	Matte black painted
41-04SS	Stainless steel	Stainless steel	Machine polished	Machine polished
41P-04SS	Thermo-plastic	Stainless steel	Black textured	Machine polished



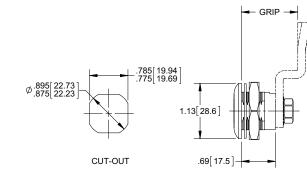




QUARTER-TURN LATCHES

- Cam rotates 90°
- Cam locators designed into inserts
- Intended for NEMA type 4, 4X, 12 and IP66 enclosure requirements
- Assembly includes:
 - Body nut
 - Cam retaining screw
 - Disc washer
 - UL rated seals (o-ring & face gasket)

Note: Cams sold separately. See page 67 for cams & grip dimension



SLOTTED PLUG QUARTER-TURN LATCHES

PART NUMBER -	MATERIAL		FINISH	
	HOUSING	PLUG	HOUSING	SLOTTED PLUG
41-00	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-00BK	Die cast zinc	Die cast zinc	Matte black painted	Matte black painted
41-00SS	304SS	304SS	Machine polished	Machine polished
41BK-00	Die Cast Zinc	Die Cast Zinc	Matte black painted	Chrome plated
41-00P	Thermo-plastic	Thermo-plastic*	Black textured	Black textured
41P-00SS	Thermo-plastic	304SS	Black textured	Machine polished
41-00SST	316SS	316SS	Passivated	Passivated



PATENTED

Note: * Thermo-plastic plug is glass reinforced

Note: Parts with thermo-plastic materials have UV stabilizers

8MM RECESSED HEX PLUG QUARTER-TURN LATCHES

PART NUMBER	MATERIAL		FINISH	
	HOUSING	PLUG	HOUSING	BELLCORE HEX PLUG
41-02	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-02BK	Die cast zinc	Die cast zinc	Matte black painted	Matte black painted

■ Hex tool key available separately as part no. **392-K** (see page 21)



10MM RECESSED HEX PLUG QUARTER-TURN LATCHES

PART NUMBER	MATERIAL		FINISH	
	HOUSING	PLUG	HOUSING	BELLCORE HEX PLUG
41-03	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-03BK	Die cast zinc	Die cast zinc	Matte black painted	Matte black painted
41BK-03	Die cast zinc	Die cast zinc	Matte black painted	Chrome plated
41P-03	Thermo-plastic	Die cast zinc	Black textured	Chrome plated

Note: Parts with thermo-plastic materials have UV stabilizers



HEX PLUG QUARTER-TURN LATCHES

PART NUMBER	MATERIAL		FINISH	
	HOUSING	PLUG	HOUSING	BELLCORE HEX PLUG
41-04	Die cast zinc	Die cast zinc	Chrome plated	Chrome plated
41-04BK	Die cast zinc	Die cast zinc	Matte black painted	Matte black painted
41-04SS	304SS	304SS	Machine polished	Machine polished
41P-04SS	Thermo-plastic	304SS	Black textured	Machine polished

■ Activated with a 7/16" socket

Note: Parts with thermo-plastic materials have UV stabilizers

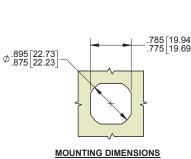


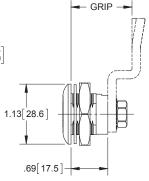
Quarter-turn Latches











Features

- ▶ cam rotates 90°
- cam locators designed into inserts
- ▶ intended for NEMA type 4, 4X, 12 and IP66 enclosure requirements
- assembly includes:
 - ▶ body nut
 - cam retaining screw
- ▶ disc washer
- ▶ UL rated seals (o-ring & face gasket)
- ▶ cams sold separately. See pg. 95 for cams & grip dimension



Slotted Plug Quarter-turn Latches



patented

Part	Material		Finish	
Number	Housing	Slotted Plug	Housing	Slotted Plug
41-00	die cast zinc	die cast zinc	chrome plated	chrome plated
41-00BK	die cast zinc	die cast zinc	matte black painted	matte black painted
41-00SS	304SS	304SS	machine polished	machine polished
41BK-00	die cast zinc	die cast zinc	matte black painted	chrome plated
41-00P	thermoplastic	thermoplastic*	black textured	black textured
41P-00SS	thermoplastic	304SS	black textured	machine polished
41-00SST	316SS	316SS	passivated	passivated

- ▶ * thermoplastic plug is glass reinforced
- parts with thermoplastic materials have UV stabilizers



Part Number	Material		Finish	
	Housing	Hex Plug	Housing	Hex Plug
41-02	die cast zinc	die cast zinc	chrome plated	chrome plated
41-02BK	die cast zinc	die cast zinc	matte black painted	matte black painted

▶ hex tool key sold separately as part no. **392-K** pg. **31**



10mm Recessed Hex Plug Quarter-turn Latches

8mm Recessed Hex Plug Quarter-turn Latches

Part Number	Material		Finish	
	Housing	Hex Plug	Housing	Hex Plug
41-03	die cast zinc	die cast zinc	chrome plated	chrome plated
41-03BK	die cast zinc	die cast zinc	matte black painted	matte black painted
41BK-03	die cast zinc	die cast zinc	matte black painted	chrome plated
41P-03	thermoplastic	die cast zinc	black textured	chrome plated

▶ parts with thermoplastic materials have UV stabilizers



Hex Plug Quarter-turn Latches

Part Number	Material		Finish	
	Housing	Bellcore Hex Plug	Housing	Bellcore Hex Plug
41-04	die cast zinc	die cast zinc	chrome plated	chrome plated
41-04BK	die cast zinc	die cast zinc	matte black painted	matte black painted
41-04SS	304SS	304SS	machine polished	machine polished
41P-04SS	thermoplastic	304SS	black textured	machine polished

- ▶ activated with a 7/16" socket
- parts with thermoplastic materials have UV stabilizers