

For use in China, Europe, Middle East, North America and South East Asia only.

Keystone Figure 89

Pneumatic Quarter-Turn Actuators

| Model / Series | Actuator Size | Pneumatic Actuator Variant | Actuator Action | Spring Rating | Air Connection | Temperature Service | Travel Stops | Flange Threading | Operator Mounting Flange | Stem Connection | Bolting Options | Coating / Painting | Nameplate Tagging | Country of Origin | Positive Material Identification | Functional Testing |
|----------------|---------------|----------------------------|-----------------|---------------|----------------|---------------------|--------------|------------------|--------------------------|-----------------|-----------------|--------------------|-------------------|-------------------|----------------------------------|--------------------|
| 89U | 002 | 0 | 1 | 04 | N14 | H | 2 | M | F05 | S14 | B04 | COA | NPZ | CRZ | MEZ | TF1 |

Model / Series

| Code | Description |
|------|-------------------------------------|
| 89C | Chemical Specs |
| 89D | ISO 5211 (Metric threaded) |
| 89E | Keystone ISO (Metric threaded) |
| 89U | Keystone Imperial + Metric threaded |

Pneumatic Actuator Variant

| Code | Description |
|------|---|
| 0 | Standard |
| R | Reduced Spring Length |
| L | Hybrid-SR Left (Seen from the label side) |
| S | Hybrid-SR Right (Seen from the label side) |

Air Connection

| Code | Description |
|------|-------------|
| N14 | ¼" NPT |
| N12 | ½" NPT |
| P14 | ¼" BSPP |
| P12 | ½" BSPP |
| ZZZ | Special |

Actuator Size

| Code | Description |
|------|-------------|
| 002 | Model 002 |
| 003 | Model 003 |
| 004 | Model 004 |
| 006 | Model 006 |
| 009 | Model 009 |
| 014 | Model 014 |
| 020 | Model 020 |
| 032 | Model 032 |
| 033 | Model 033 |
| 051 | Model 051 |
| 052 | Model 052 |
| 084 | Model 084 |
| 085 | Model 085 |
| 086 | Model 086 |
| 139 | Model 139 |
| 140 | Model 140 |
| 141 | Model 141 |
| 240 | Model 240 |

Actuator Action

| Code | Description |
|------|--------------------|
| 1 | DA |
| 3 | SR Fail Close (CW) |
| 4 | SR Fail Open (CWW) |

Spring Rating

| Code | Description |
|------|----------------|
| 04 | 4 Springs |
| 05 | 5 Springs |
| 06 | 6 Springs |
| 07 | 7 Springs |
| 08 | 8 Springs |
| 09 | 9 Springs |
| 10 | 10 Springs |
| 11 | 11 Springs |
| 12 | 12 Springs |
| XX | Not Applicable |

Temperature Service

| Code | Description |
|------|---|
| H | High Temperature (-15°C to +150°C / +5°F to +302°F) |
| N | Standard (-20°C to +80°C / -4°F to +176°F) |
| L | Low Temperature (-40°C to +65°C / -40°F to +149°F) |
| E | Extreme Low Temperature (-52°C to +65°C / -62°F to +149°F) |

| | | | | | | | | | | | | | | | | |
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Travel Stops

| Code | Description |
|------|--|
| 2 | Dual Shaft (Std) |
| 3 | Single STROKE LIMITER™ (Single ≤ 5.5 Bar) |
| 4 | Double STROKE LIMITER™ (Double > 5.5 Bar) |

Flange Threading

| Code | Description |
|------|-------------|
| M | Metric |
| U | Imperial |

Operator Mounting Flange

| Code | Description |
|------|--------------------------------------|
| F05 | PCD F05 - 50 mm (ISO 5211) |
| F07 | PCD F07 - 70 mm (ISO 5211) |
| F10 | PCD F10 - 102 mm (ISO 5211) |
| F12 | PCD F12 - 125 mm (ISO 5211) |
| F14 | PCD F14 - 140 mm (ISO 5211) |
| F16 | PCD F16 - 165 mm (ISO 5211) |
| M05 | F03 + F05 (ISO 5211) |
| M07 | F05 + F07 (ISO 5211) |
| M10 | F07 + F10 (ISO 5211) |
| M11 | F07 + F10 + F12 (ISO 5211) |
| M12 | F10 + F12 (ISO 5211) |
| M14 | F10 + F14 (ISO 5211) |
| M16 | F12 + F16 (ISO 5211) |
| M25 | F16 + F25 (ISO 5211) |
| U1C | PCD 1.75" (Keystone 45 degrees) |
| U34 | PCD 3.25" (Keystone 45 degrees) |
| U50 | PCD 5.00" (Keystone 45 degrees) |
| U68 | PCD 6.50" (Keystone 45 degrees) |
| C34 | PCD 1.75+3.25" (Keystone 45 degrees) |
| C50 | PCD 3.25+5.00" (Keystone 45 degrees) |
| C68 | PCD 5.00+6.50" (Keystone 45 degrees) |

Stem Connection

| Code | Description |
|------|---|
| S14 | Star 14 |
| S17 | Star 17 |
| S22 | Star 22 |
| S27 | Star 27 |
| S36 | Star 36 |
| S46 | Star 46 |
| Q14 | Square 14 - 45 degrees (Diagonal) |
| D16 | DD16.0 x 11.0 |
| D20 | DD20.0 x 14.0 |
| D25 | DD25.0 x 18.0 |
| M35 | 35.0K10.0 x 8.0 |
| M45 | 45.0K14.0 x 9.0 |
| M50 | 50.0K14.0 x 9.0 |
| M70 | 70.0K20.0 x 12.0 |
| MS0 | 30.0K8.0 x 8.0 (F89E020 Special) |
| P06 | DD $\frac{3}{8}$ " x $\frac{1}{4}$ " (9.53 x 6.35 mm) |
| P09 | DD9/16" x $\frac{3}{8}$ " (14.29 x 9.53 mm) |
| P0A | DD $\frac{3}{8}$ " x 7/16" (15.88 x 11.1 mm) |
| P0C | DD $\frac{3}{4}$ " x $\frac{1}{2}$ " (19.05 x 12.7 mm) |
| P0E | DD $\frac{7}{8}$ " x $\frac{9}{8}$ " (22.2 x 15.88 mm) |
| U0D | Dia 13/16"; K3/16 x 3/16 (20.6K4.78 mm) |
| U10 | Dia 1"; K $\frac{1}{4}$ x 3/16" (25.4K6.35 mm) |
| U12 | Dia 1 $\frac{1}{8}$ "; K $\frac{1}{4}$ x $\frac{1}{4}$ " (28.6K6.35 mm) |
| U16 | Dia 1 $\frac{3}{8}$ "; K5/16 x 5/16 (34.9K7.94 mm) |
| U1A | Dia 1 $\frac{1}{2}$ "; K $\frac{3}{8}$ x $\frac{3}{8}$ " (41.3K9.53 mm) |
| U1E | Dia 1 $\frac{7}{8}$ "; K $\frac{1}{2}$ x $\frac{3}{8}$ " (47.6K12.7 mm) |
| U24 | Dia 2 $\frac{1}{4}$ "; K $\frac{1}{2}$ x $\frac{3}{8}$ " (57.2K12.7 mm) |

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Bolting Options

| Code | Description |
|------|----------------------|
| B04 | SS A4 Screws / Bolts |

Coating / Painting

| Code | Description |
|------|---|
| PR1 | Paint RAL3028 Red |
| PG1 | Paint RAL6038 Green |
| PY1 | Paint RAL1026 Yellow |
| C0A | C5M - PU Coating (RAL5010) |
| C0B | RAL 5013 Cobalt Blue (C5M + A4 Option) |
| PZZ | Special Painting / Coating (per Purchase order) |

Nameplate Tagging

| Code | Description |
|------|---|
| NPZ | Special Tag / Nameplate (per Customer PO) |

Country of Origin

| Code | Description |
|------|---|
| CRZ | Country of Origin Restrictions (per Purchase Order) |

Positive Material Identification

| Code | Description |
|------|--------------------------|
| MEZ | PMI (per Purchase Order) |

Functional Testing

| Code | Description |
|------|--|
| TF1 | Functional Test Report (Open/close Manufacturer Standard) |
| TF2 | Functional Test Report (Automated, per Customer Operating Conditions, Manufacturer standard) |
| TFZ | Special Functional Testing |

NOTES

1. This document is intended for product model code decodification, not product configuration. Option availability and compatibility may be dependent on the selection of another option. For product configuration support, consult your local Emerson representative.
2. This list of options is not exhaustive. Consult your local Emerson representative for additional options.

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