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2016 ASSEMBLY ARM SELECTION GUIDE

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PA- Series Conventional Arms for AIR TOOLS

MODEL	DESCRIPTION	MAX. TORQUE IN-LBS (Nm)	MAX. WEIGHT lbs (Kg)	BASE
PA506	For VERTICAL Fastening with customer's In-line Air Tool - 1/4 Male NPT Connection - 5/16" ID Tool Supply Hose	550 (62)	6 (2.7)	18"
PA806	For VERTICAL Fastening with customer's In-line Air Tool - 1/4 Male NPT Connection - 3/8" ID Tool Supply Hose		6 (2.7)	18"
PA815	For VERTICAL Fastening with customer's In-line Air Tool - 1/4 Male NPT Connection - 3/8" ID Tool Supply Hose	800 (90)	15 (6.75)	18"
PA806-DF	For VERTICAL Fastening with customer's In-line LEVER PERMIT - Auto-Shut-Off- Air Tool provides up to 15 lbs Downward Force assistance during rundown- 3/8" ID Tool Supply Hose -1/4 Male NPT Tool Connection -Not compatible with Tool Holders	800 (90)	6 (2.7)	18"
PA815-DF	For VERTICAL Fastening with customer's In-line LEVER PERMIT - Auto-Shut-Off- Air Tool provides up to 25 lbs Downward Force assistance during rundown- - 3/8" ID Tool Supply Hose -1/4 Male NPT Tool Connection -Not compatible with Tool Holders	800 (90)	15 (6.75)	18"
PA506-SW	For Fastening with customer's In-line air tool at varying angles from VERTICAL - 1/4 Male NPT Connection - 5/16" ID Tool Supply Hose -includes SW-TH (SWivel -Tool Holder)	180(20)	6 (2.7)	18"
PA506-RAV	**Replaces model PA506-RA.** For VERTICAL Fastening with customer's Right Angle Air Tool - 5/16" ID Tool Supply Hose- includes RAV-TH (Right Angle Vertical-Tool Holder) with indexable handle position.	550 (62)	4.5 (2.0)	12"
PA806-RAV	**Replaces model PA806-RA.** For VERTICAL Fastening with customer's Right Angle Air Tool - 3/8" ID Tool Supply Hose- includes RAV-TH (Right Angle Vertical-Tool Holder) with indexable handle position.	800 (90)	4.5 (2.0)	12"
PA815-RAV	**Replaces model PA815-RA.** For VERTICAL Fastening with customer's Right Angle Air Tool - 3/8" ID Tool Supply Hose- includes RAV-TH (Right Angle Vertical-Tool Holder) with indexable handle position.	800 (90)	13.5(6.1)	12"
PA815-RAH	For HORIZONTAL Fastening with customer's Right Angle Air Tool - 3/8" ID Tool Supply Hose- includes RAH-TH (Right Angle Horizontal-Tool Holder) with indexable handle position.	400 (45)	12.8 (5.8)	12"
PA815-RAHV	Arm with tool holder that locks in both HORIZONTAL and VERTICAL orientation with customer's Right Angle Air Tool- 3/8" ID Tool Supply Hose- includes RAHV-TH (Right Angle Horizontal / Vertical-Tool Holder) with indexable handle position.	400 (45) Horz. 800 (90) Vert.	11.25 (5.1)	12"
PA506-PS	For HORIZONTAL Fastening with customer's Air Tool (In-line or Pistol) - 5/16" ID Tool Supply Hose- includes PSTH (Pistol Spin Tool Holder)	275 (31)	4.8 (2.16)	12"
PA806-PS	For HORIZONTAL Fastening with customer's Air Tool (In-line or Pistol) - 3/8" ID Tool Supply Hose- includes PSTH (Pistol Spin Tool Holder)	400 (45)	4.8 (2.16)	12"
PA815-PS	For HORIZONTAL Fastening with customer's Air Tool (In-line or Pistol) - 3/8" ID Tool Supply Hose- includes PSTH (Pistol Spin Tool Holder)	400 (45)	13.8 (6.2)	12"

PA- Series Conventional Arms for AIR TOOLS - continued from Page 2

MODEL	DESCRIPTION	MAX. TORQUE IN-LBS (Nm)	MAX. WEIGHT lbs (Kg)	BASE
PA506-PT	For HORIZONTAL Fastening with customer's Air Tool (In-line or Pistol). - 5/16" ID Tool Supply Hose - includes PTTH (Pistol Tilt Tool Holder) which allows tilt +/- 20 degrees off horizontal plane.	275 (31)	4.8 (2.16)	12"
PA806-PT	For HORIZONTAL Fastening with customer's Air Tool (In-line or Pistol). - 3/8" ID Tool Supply Hose - includes PTTH (Pistol Tilt Tool Holder) which allows tilt +/- 20 degrees off horizontal plane.	400 (45)	4.8 (2.16)	12"
PA815-PT	For HORIZONTAL Fastening with customer's Air Tool (In-line or Pistol). - 3/8" ID Tool Supply Hose - includes PTTH (Pistol Tilt Tool Holder) which allows tilt +/- 20 degrees off horizontal plane.	400 (45)	13.8 (6.2)	12"
PA815-IPHV	Arm with tool holder that locks in both HORIZONTAL and VERTICAL orientation with customer's In-Line or Pistol Air Tool- 3/8" ID Tool Supply Hose -includes IPHV-TH (In-line & Pistol Horizontal / Vertical-Tool Holder)	400 (45) Horz. 800 (90) Vert.	12.1 (5.5)	12"
PA506-FR	For Fastening with customer's Air Tool (In-line or Pistol) at any angle Vertical to Horizontal -5/16" ID Tool Supply Hose- includes FRTH (Flip & Rotate Tool Holder).	275 (31)	4.6 (2.1)	12"
PA806-FR	For Fastening with customer's Air Tool (In-line or Pistol) at any angle Vertical to Horizontal - 3/8" ID Tool Supply Hose - includes FRTH (Flip & Rotate Tool Holder).	400 (45)	4.6 (2.1)	12"
PA815-FR	For Fastening with customer's Air Tool (In-line or Pistol) at any angle Vertical to Horizontal - 3/8" ID Tool Supply Hose - includes FRTH (Flip & Rotate Tool Holder).	400 (45)	13.6 (6.1)	12"

ACCESSORIES & OPTIONS FOR PA-Series Conventional Arms

MODEL	DESCRIPTION
FSK	Feedback Signal Kit. Provides NO & NC electrical contacts to monitor Air Tool fastening cycle. Model example; PA506-FSK . Can be added to any PA-Series.
-OM	Conversion to Overhead Mount for any PA-Series conventional Tool Arm including DF models. Model Example PA506-OM . All PA-Series are field convertible to Overhead Mount except DF models (must be ordered as PA8xx-DF-OM).
-EX	Extendable Parallels are adjustable to increase reach from 1 to 8 additional inches (25 to 200mm)in 1" increments. **Only available at the time the Tool Arm is purchased.** Only available on 806 & 815 frames. *Note; Minimum reach and maximum tooling weight are affected.*
RS2	Rotation Stop for Shoulder (rear) Pivot Point. Fully adjustable. Attaches to 1-1/4 NPT Base Pipe of any ETA Arm.

PA-Series Smart-Arms for AIR TOOLS

MODEL	DESCRIPTION	MAX. TORQUE IN-LBS (Nm)	MAX. WEIGHT lbs (Kg)	BASE
PA506-SA	X & Y position feedback for VERTICAL fastening with customer's Auto-Shut-Off, In-Line Air Tool - 1/4" Male NPT Connection - includes 5/16" ID Tool Supply Hose, FSK (Feedback Signal Kit) and 2-way Tool Supply 24VDC Solenoid Valve.	550 (62)	6 (2.7)	18"
PA806-SA	X & Y position feedback for VERTICAL fastening with customer's Auto-Shut-Off, In-Line Air Tool - 1/4" Male NPT Connection - includes 3/8" ID Tool Supply Hose, FSK (Feedback Signal Kit) and 2-way Tool Supply 24VDC Solenoid Valve.	800 (90)	6 (2.7)	18"
PA815-SA	X & Y position feedback for VERTICAL fastening with customer's Auto-Shut-Off, In-Line Air Tool - 1/4" Male NPT Connection - includes 3/8" ID Tool Supply Hose, FSK (Feedback Signal Kit) and 2-way Tool Supply 24VDC Solenoid Valve.	800 (90)	15 (6.75)	18"
PA506-RAV-SA	X & Y position feedback for VERTICAL fastening with customer's Auto-Shut-Off, Right-Angle Air Tool - includes 5/16" ID Tool Supply Hose, RAV-TH (Right Angle Vertical- Tool Holder), FSK (Feedback Signal Kit) and 2-way Tool Supply 24VDC Solenoid Valve.	550 (62)	4.5 (2.0)	12"
PA806-RAV-SA	X & Y position feedback for VERTICAL fastening with customer's Auto-Shut-Off, Right-Angle Air Tool - includes 3/8" ID Tool Supply Hose, RAV-TH (Right Angle Vertical- Tool Holder), FSK (Feedback Signal Kit) and 2-way Tool Supply 24VDC Solenoid Valve.	800 (90)	4.5 (2.0)	12"
PA815-RAV-SA	X & Y position feedback for VERTICAL fastening with customer's Auto-Shut-Off, Right-Angle Air Tool - includes 3/8" ID Tool Supply Hose, RAV-TH (Right Angle Vertical- Tool Holder), FSK (Feedback Signal Kit) and 2-way Tool Supply 24VDC Solenoid Valve.	800 (90)	13.5(6.1)	12"

PA-Series Smart-Arm ACCESSORIES & OPTIONS

MODEL	DESCRIPTION
SA-GUI-2	PC Based 2 Axis (X & Y), GUI (Graphical User Interface) Smart Arm Control. I/O -Network Enclosure and Software License included. Smart-Arm purchased separately. Computer and monitor not included.
-VPF	Vertical Position Feedback - adds 3rd (Z) Axis of position feedback to ETA Smart-Arms. Includes cable. NOTE; VPF option is NOT intended for use as fastener depth control device.
-OM	Conversion to Overhead Mount for any PA-Series Smart-Arm. PA-Series Smart-Arms are NOT field convertible to Overhead Mount (must be ordered as PAxxx-SA-OM). Note; On Overhead Mount the Rear Encoder is mounted below Shoulder Block and has Impact Guard added.
-EX	Extendable Parallels are adjustable to increase reach from 1 to 8 additional inches (25 to 200mm)in 1" increments. **Only available at the time the Tool Arm is purchased.** Only available on 806 & 815 frames. *Note; Minimum reach and maximum tooling weight are affected.*
RS2	Rotation Stop for Shoulder (rear) Pivot Point. Fully adjustable. Attaches to 1-1/4 NPT Base Pipe of any ETA Arm.

EL-Series Conventional Arms for ELECTRIC TOOLS

NOTE: All ETA Tool Arms, including EL-Series for electric tools, require compressed air connection for arm flotation .

MODEL	DESCRIPTION	MAX. TORQUE IN-LBS (Nm)	MAX. WEIGHT lbs (Kg)	BASE
EL506 (PA506-EL)	For VERTICAL Fastening with customer's In-line Electric Tool - includes UVTH (Universal Vertical Tool Holder)	550 (62)	5 (2.25)	12"
EL806 (PA806-EL)	For VERTICAL Fastening with customer's In-line Electric Tool - includes UVTH (Universal Vertical Tool Holder)	800 (90)	5 (2.25)	12"
EL815 (PA815-EL)	For VERTICAL Fastening with customer's In-line Electric Tool - includes UVTH (Universal Vertical Tool Holder)	800 (90)	14 (6.3)	12"
EL506-N (PA506-N)	Basic Tool Arm without Tool Holder - for use with custom tool holder or fixture.	550 (62)	6 (2.7)	12"
EL806-N (PA806-N)	Basic Tool Arm without Tool Holder - for use with custom tool holder or fixture.	800 (90)	6 (2.7)	12"
EL815-N (PA815-N)	Basic Tool Arm without Tool Holder - for use with custom tool holder or fixture.	800 (90)	15 (6.75)	12"
EL506-RAV	**Replaces model EL506-RA.** For VERTICAL Fastening with customer's Right Angle Electric Tool - includes RAV-TH (Right Angle Vertical-Tool Holder) with indexable handle position.	550 (62)	4.5 (2.0)	12"
EL806-RAV	**Replaces model EL806-RA.** For VERTICAL Fastening with customer's Right Electric Air Tool - includes RAV-TH (Right Angle Vertical-Tool Holder) with indexable handle position.	800 (90)	4.5 (2.0)	12"
EL815-RAV	**Replaces model EL815-RA.** For VERTICAL Fastening with customer's Right Angle Electric Tool - includes RAV-TH (Right Angle Vertical-Tool Holder) with indexable handle position.	800 (90)	13.5(6.1)	12"
EL815-RAH	For HORIZONTAL Fastening with customer's Right Angle Electric Tool - includes RAH-TH (Right Angle Horizontal-Tool Holder) with indexable handle position.	400 (45)	12.8 (5.8)	12"
EL815-RAHV	Arm with tool holder that locks in both HORIZONTAL and VERTICAL orientation with customer's Right Angle Electric Tool- includes RAHV-TH (Right Angle Horizontal / Vertical-Tool Holder) with indexable handle position.	400 (45) Horz. 800 (90) Vert.	11.25 (5.1)	12"
EL506-PS	For HORIZONTAL Fastening with customer's Electric Tool (In-line or Pistol) - includes PSTH (Pistol Spin- Tool Holder)	275 (31)	4.8 (2.16)	12"
EL806-PS	For HORIZONTAL Fastening with customer's Electric Tool (In-line or Pistol) - includes PSTH (Pistol Spin -Tool Holder)	400 (45)	4.8 (2.16)	12"
EL815-PS	For HORIZONTAL Fastening with customer's Electric Tool (In-line or Pistol) - includes PSTH (Pistol Spin Tool Holder)	400 (45)	13.8 (6.2)	12"
EL506-PT	For HORIZONTAL Fastening with customer's Electric Tool (In-line or Pistol). - includes PTTH (Pistol Tilt Tool Holder) which allows tilt +/- 20 degrees off horizontal plane.	275 (31)	4.8 (2.16)	12"
EL806-PT	For HORIZONTAL Fastening with customer's Electric Tool (In-line or Pistol). - includes PTTH (Pistol Tilt Tool Holder) which allows tilt +/- 20 degrees off horizontal plane.	400 (45)	4.8 (2.16)	12"

EL-Series Conventional Arms for ELECTRIC TOOLS -continued from Page 5

NOTE: All ETA Tool Arms, including EL-Series for electric tools, require compressed air connection for arm flotation .

MODEL	DESCRIPTION	MAX. TORQUE IN-LBS (Nm)	MAX. WEIGHT lbs (Kg)	BASE
EL815-PT	For HORIZONTAL Fastening with customer's Electric Tool (In-line or Pistol). - includes PTTH (Pistol Tilt Tool Holder) which allows tilt +/- 20 degrees off horizontal plane.	400 (45)	13.8 (6.2)	12"
EL815-IPHV	Arm with tool holder that locks in both HORIZONTAL and VERTICAL positions for customer's In-Line or Pistol Electric Tool- includes IPHV-TH (In-line & Pistol Horizontal / Vertical-Tool Holder)	400 (45) Horz. 800 (90) Vert.	12.1 (5.5)	12"
EL506-FR	For Fastening with customer's Electric Tool (In-line or Pistol) at any angle Vertical to Horizontal -includes FRTH (Flip & Rotate Tool Holder)	275 (31)	4.6 (2.1)	12"
EL806-FR	For Fastening with customer's Electric Tool (In-line or Pistol) at any angle Vertical to Horizontal -includes FRTH (Flip & Rotate Tool Holder)	400 (45)	4.6 (2.1)	12"
EL815-FR	For Fastening with customer's Electric Tool (In-line or Pistol) at any angle Vertical to Horizontal -includes FRTH (Flip & Rotate Tool Holder)	400 (45)	13.6 (6.1)	12"

ACCESSORIES & OPTIONS for EL-Series Conventional Arms

MODEL	DESCRIPTION
-OM	Conversion to Overhead Mount for any EL-Series conventional Tool Arm. Model Example EL506-OM . All EL-Series are field convertible to Overhead Mount.
-EX	Extendable Parallels are adjustable to increase reach from 1 to 8 additional inches (25 to 200mm)in 1" increments. **Only available at the time the Tool Arm is purchased.** Only available on 806 & 815 frames. *Note; Minimum reach and maximum tooling weight are affected.*
RS2	Rotation Stop for Shoulder (rear) Pivot Point. Fully adjustable. Attaches to 1-1/4 NPT Base Pipe of any ETA Arm.

EL-Series Smart-Arms for ELECTRIC TOOLS

NOTE: All ETA Tool Arms, including EL-Series Smart-Arms, require compressed air connection for arm flotation .

MODEL	DESCRIPTION	MAX. TORQUE IN-LBS (Nm)	MAX. WEIGHT lbs (Kg)	BASE
EL506-SA	X & Y position feedback for VERTICAL fastening with customer's In-line DC Tool - includes UVTH (Universal Vertical Tool Holder)	550 (62)	5 (2.25)	12"
EL806-SA	X & Y position feedback for VERTICAL fastening with customer's In-line DC Tool - includes UVTH (Universal Vertical Tool Holder)	800 (90)	5 (2.25)	12"
EL815-SA	X & Y position feedback for VERTICAL fastening with customer's In-line DC Tool - includes UVTH (Universal Vertical Tool Holder)	800 (90)	14 (6.3)	12"
EL506-N-SA	X & Y position feedback Tool Arm without Tool Holder - for use with custom tool holder or fixture.	550 (62)	6 (2.7)	12"

NOTE: All ETA Tool Arms, including EL-Series Smart-Arms, require compressed air connection for arm flotation .

MODEL	DESCRIPTION	MAX. TORQUE	MAX. WEIGHT	BASE
		IN-LBS (Nm)	lbs (Kg)	
EL806-N-SA	X & Y position feedback Tool Arm without Tool Holder - for use with custom tool holder or fixture.	800 (90)	6 (2.7)	12"
EL815-N-SA	X & Y position feedback Tool Arm without Tool Holder - for use with custom tool holder or fixture.	800 (90)	15 (6.75)	12"
EL506-RAV-SA	**Replaces model EL506-RA-SA**. X & Y position feedback for VERTICAL fastening with customer's Right-Angle DC Tool - includes RAV-TH (<u>R</u>ight <u>A</u>ngle <u>V</u>ertical- <u>T</u>ool <u>H</u>older) with indexable handle position.	550 (62)	4.5 (2.0)	12"
EL806-RAV-SA	**Replaces model EL806-RA-SA**. X & Y position feedback for VERTICAL fastening with customer's Right-Angle DC Tool - includes RAV-TH (<u>R</u>ight <u>A</u>ngle <u>V</u>ertical- <u>T</u>ool <u>H</u>older) with indexable handle position.	800 (90)	4.5 (2.0)	12"
EL815-RAV-SA	**Replaces model EL815-RA-SA**. X & Y position feedback for VERTICAL fastening with customer's Right-Angle DC Tool - includes RAV-TH (<u>R</u>ight <u>A</u>ngle <u>V</u>ertical- <u>T</u>ool <u>H</u>older) with indexable handle position.	800 (90)	13.5 (6.1)	12"

EL-Series Smart-Arm ACCESSORIES & OPTIONS

MODEL	DESCRIPTION
SA-GUI-2	PC Based 2 Axis (X & Y), GUI (<u>G</u>raphical <u>U</u>ser <u>I</u>nterface) Smart Arm Control. I/O -Network Enclosure and Software License included. Smart-Arm purchased separately. Computer and monitor not included.
-VPF	<u>V</u>ertical <u>P</u>osition <u>F</u>eedback - adds 3rd (Z) Axis of position feedback to ETA Smart-Arms. Includes cable. NOTE; VPF option is NOT intended for use as fastener depth control device.
-OM	Conversion to <u>O</u>verhead <u>M</u>ount for any **EL-Series Smart-Arm**. EL-Series **Smart-Arms are NOT field convertible to Overhead Mount** (must be ordered as ELxxx-SA-OM). *Note; On Overhead Mount the Rear Encoder is mounted below Shoulder Block and has Impact Guard added.*
-EX	Extendable Parallels are adjustable to increase reach from 1 to 8 additional inches (25 to 200mm)in 1" increments. **Only available at the time the Tool Arm is purchased.** Only available on 806 & 815 frames. *Note; Minimum reach and maximum tooling weight are affected.*
RS2	Rotation Stop for Shoulder (rear) Pivot Point. Fully adjustable. Attaches to 1-1/4 NPT Base Pipe of any ETA Arm.

MODEL	DESCRIPTION
TOOL HOLDERS & ACCESSORIES - Tool Holders fit all ETA models	
NOTE; all Standard ETA Tool Holders below clamp 1-1/8" (28,58mm) to 2.0" (50,8mm) diameter tools.	
Custom Tool Holders Quoted Upon Request.	
SW-TH	SWivel -Tool Holder
FR-TH	Flip & Rotate- Tool Holder
UV-TH	Universal Vertical -Tool Holder (included with models EL506, EL806, EL815)
RATH	Replaced by RAV-TH
RAV-TH	Right Angle Vertical- Tool Holder with indexable handle position
RAH-TH	Right Angle Horizontal- Tool Holder with indexable handle position
RAHV-TH	Right Angle Horizontal & Vertical- Tool Holder with indexable handle position
PS-TH	Pistol Spin Tool Holder
PT-TH	Pistol Tilt Tool Holder
IPHV-TH	In-Line & Pistol Horizontal & Vertical -Tool Holder
B250-0	8" Dia Heavy Duty Base Plate for 2-1/2" NPT Iron Pipe and includes Reducing Coupler 2-1/2 to 1-1/4 NPT Threads. Used for higher torques and/or extended mounts on floor or overhead.
RS2	Rotation Stop for Shoulder (rear) Pivot Point. Fully adjustable. Attaches to 1-1/4 NPT Base Pipe of any ETA Arm.