



# 734 AV<sup>™</sup> Series Lockbolt Installation Systems



## New Range of Installation Tools for Lockbolt Systems

POP Avdel lockbolt systems are designed for high strength, secure assembly. Quick and simple to place, durable and long lasting, they are the ideal solution where spot welding is not practical and other methods are costly, time consuming or not possible.

We have designed a new range of installation tools, especially suited for high speed installation of larger diameter lockbolts.

To determine the most suitable tool according to fastener size and application requirements, four parts have to be selected:

- 1. Hand tool
- 2. Nose equipment
- 3. Pump unit
- 4. Hydraulic hose

## Placing Tools and Nose Equipment

#### Features

- Robust and highly durable installation tools
- High performance hydraulic seal & wiper technology
- Piston bearing rings
- Ergonomic and compact design
- High-speed operation

#### **Benefits**

- Long working life in extreme conditions
- Increased seal & component life
- Low maintenance
- Optimised operator comfort
- Manoeuvrable in limited access applications
- High speed installation of fasteners





Different AV hand tools suit the fastener size ranges and there is one nose equipment for each fastener size. Please select the model according to the diameter of the respective lockbolt.



AV™ 10



AV™ 15





AV™ 30

AV™ 50

Model Part Number		AV 10 73430-02000	AV 15 73432-02000	AV 30 73434-02000	AV 50 73435-02000			
Pull force		12,364 lbf (55 kN)	17,985 lbf (80 kN)	39,341 lbf (175 kN)	76,435 lbf (340 kN			
Stroke		0.98" (25 mm)	1.26" (32 mm) 1.61" (41 mm)		2.17" (55 mm)			
Weight without nose equipment with nose equipment		7.7 lbs (3.5 kg) 8.6 lbs (3.9 kg)	9.9 lbs (4.5 kg) 11.9 lbs (5.4 kg)	15.0 lbs (6.8 kg) 19.5 lbs (8.75 kg)	29.8 lbs (13.5 kg) 39.5 lbs (17.9 kg)			
Dimensions A		4.61" (117 mm)	5.30" (134.5 mm)	6.55" (166.5 mm)	7.56" (192 mm)			
øC	E A B B	3.11" (79 mm)	3.43" (87 mm)	-	-			
	øc	2.20" (56 mm)	2.60" (66 mm)	3.62" (92 mm)	4.92" (125 mm)			
		9.29" (236 mm)	9.68" (246 mm)	10.63" (270 mm)	12.52" (318 mm			
	E E	3.5 - 3.74" (89 - 95 mm)	4.25" (108 mm)	4.45 - 5.28" (113 - 134 mm)	5.83 - 5.98" (148 - 152 mm)			
Nose Equipm	ent for Fastener-ø	Part Number for above model						
NeoBolt®	1/2" (12.7mm)	-	73432-03300	-	-			
	5/8" (16.0mm)	-	-	73434-03200	-			
	3/4" (19.1mm)	-	-	73434-03300	-			
	1" (25.4mm)	-	-	-	73435-03200			
Avdelok®	3/8" (9.6mm)	73430-03100 <sup>1)</sup>	-	-	-			
Avdelok <sup>®</sup> XT	1/2" (12.7mm)	-	73432-03200 <sup>1)</sup> 73433-03200 <sup>2)</sup>	73412-03100 <sup>2)</sup>	-			
	5/8" (15.9mm)	-	-	73412-03200 <sup>2)</sup>	-			
	3/4" (19.1mm)	-	-	73412-03300 <sup>2)</sup>	-			
	7/8" (22.2mm)	-	-	-	73410-03200 <sup>2)</sup>			
	1" (25.4mm)	-	-	-	73410-03100 <sup>2)</sup>			
	1-1/8" (28.6mm)	-	-	-	73410-03300 <sup>2)</sup>			
Avbolt®	5/16" (8.0mm)	73430-03300 <sup>1)</sup>	-	-	-			
	3/8" (10.0mm)	73430-03200 <sup>1)</sup>	-	-	-			
	1/2" (12.7mm)	-	73432-03100 <sup>1)</sup> 73433-03100 <sup>2)</sup>	73412-03600 <sup>2)</sup>	-			
	5/8" (16.0mm)	-	-	73412-03400 <sup>2)</sup>	-			
Avseal <sup>®</sup> II	16.0 mm 16.0 mm flanged	73430-05000 <sup>1)</sup>	-	-	-			
	18.0 mm	73430-05200 <sup>1)</sup>	-	-	-			

<sup>1)</sup> without jaw release <sup>2)</sup> with jaw release

All AV series tools work with all models of Enerpac PRO Series Pump Units.

STANLEY Engineered Fastening has partnered with Enerpac, the World Leader in Hydraulic Equipment to offer a specialized selection of reliable, durable and versatile high-pressure hydraulic pumps to power all AV Hydro-Electric Power Tools.

#### **Features and Benefits**

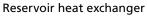
- High-efficiency hydraulic pump design; higher oil flow and bypass pressure, cooler running and requires 18% less current draw than comparable pumps
- Powerful electric motor provides high power-toweight ratio and excellent low-voltage operating characteristics
- High-strength, molded composite shroud protects electric pump motor and electronics, while providing an ergonomic, non-conductive handles for easy portability

- Full sight oil level glass & durable steel reservoir
- All pump configurations able to power all AV series tools
- Accessories kit for heat exchanger and roll cage available











LCD screen



Full sight oil level glass

To help you find the suitable pump unit according to your requirements and working environment, please use the selection guide below:

Model Part Number	PRO115E 76506-02000	PRO220E 76507-02000	PRO115 76501-02000	PRO220 76502-02000	PRO240 76503-02000	PRO415 76504-02000	PRO480 76505-02000
Tool Cycle Time* - High - Medium - Low	Low - Med.	Low - Med.	Med High				
Production Level - High volume - Medium volume - Small batch	Small - Med.	Small - Med.	Med High				
Portability - High - Medium	High	High	Medium	Medium	Medium	Medium	Medium

\* Tool cycle time is dependent on fastener placing size and hydraulic hose length

Note: Pump Specifications as noted provide guidance on capability. STANLEY Engineered Fastening offers many options and system configurations beyond the standard offering as noted, including larger tank reservoirs, heat exchangers, 3 Phase Motor options, etc. Please call our Technical Applications team to discuss specific needs and recommendations.

#### **Technical Data**

Par	Model t Number	PRO115E 76506-02000	PRO220E 76507-02000	PRO115 76501-02000	PRO220 76502-02000	PRO240 76503-02000	PRO415 76504-02000	PRO480 76505-02000	
Motor hp (kW	/)	1.7 (1.25)	1.7 (1.25)	1.5 (1.12)	1.5 (1.12)	1.5 (1.12)	1.5 (1.12)	1.5 (1.12)	
Motor type		Universal	Universal	Induction	Induction	Induction	Induction	Induction	
Reservoir gal.	(litre)	2.0 (8.0)	2.0 (8.0)	2.5 (10.0)	2.5 (10.0)	2.5 (10.0)	2.5 (10.0)	2.5 (10.0)	
Output flow rate in³/min (l/min)	100 psi	700 (11.5)	700 (11.5)	650 (8.9)	650 (8.9)	650 (8.9)	650 (8.9)	650 (8.9)	
	700 psi	535 (8.8)	535 (8.8)	600 (8.2)	600 (8.2)	600 (8.2)	600 (8.2)	600 (8.2)	
	5000 psi	76 (1.2)	76 (1.2)	62 (0.84)	62 (0.84)	62 (0.84)	62 (0.84)	62 (0.84)	
	10000 psi	60 (1.0)	60 (1.0)	60 (0.82)	60 (0.82)	60 (0.82)	60 (0.82)	60 (0.82)	
Max. operatin pressure	ıg	10,000 psi (700 bar)							
Motor Electrical Specification	Volts	115	208 - 240	115	208 - 240	208 - 240	380 - 415	460 - 480	
	Phase	1	1	1	1	3	3	3	
	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	
Sound (dBA)		85 - 90	85 - 90	75	75	75	75	75	
Weight		70 lbs (32 kg)	70 lbs (32 kg)	112 lbs (51 kg)	112 lbs (51 kg)	112 lbs (51 kg)	112 lbs (51 kg)	112 lbs (51 kg)	
Dimensions	L	19" (48	33 mm)			22" (559 mm)			
	W	9.5" (241 mm)		15" (381 mm)					
Н		17" (432 mm)		18" (457 mm)					
Plug style		USA	European	USA	European	European	European	USA	
Accessories available <sup>1)</sup>		No	No	Yes	Yes	Yes	Yes	Yes	

<sup>1)</sup> Available accessories: Heat Exchanger Part No. ZHE-E10, Roll Cage Part No. ZRB-10



## **Specifications**

## Hydraulic Hose Assemblies

There are different hose lengths available. Please select the length according to your application:

Hose Assembly Length	Part Number
5 metre	07008-00448
10 metre	07008-00449
15 metre	07008-00450



#### Oil

Pump units are already supplied filled and primed with hydraulic oil. For future maintenance you can order the following:

Hydraulic Oil Volume	Part Number
1 litre	07992-00081
5 litres	07992-00082
20 litres	07992-00083



# 

## **Powerful Brands. Breakthrough Solutions.**

At STANLEY Engineered Fastening we believe in seeking ways to serve our customers better. We create the future by anticipating our customers needs. Through diversifying our product lines, creating unique assembly technologies and offering a breadth of service to meet the demands of industry worldwide, STANLEY Engineered Fastening provides technological solutions to over 100 different industries.



**Avdel**<sup>®</sup> Avdel has been producing assembly systems since 1936 and offers a comprehensive range of fasteners and tooling.



#### POP®

From 2mm micro rivets to 1/4" structural rivets, POP blind rivets meet the needs of multiple markets.



## Dodge®

With a focus on high-quality threaded inserts for plastics products, Dodge has been a leader in the fastening market since the 1950s.



### Spiralock<sup>®</sup>

Spiralock is a technologically superior fastening system ideally suited for threaded joint applications subjected to heavy shock and vibration.



## **Gripco**<sup>®</sup>

Gripco has been providing quality nut and threaded assembled products since 1904.



### Heli-Coil<sup>®</sup>

Based on a long history that began in the aerospace industry, Heli-Coil offers a vast range of high-quality thread inserts.

#### iForm®



iForm continues a proud heritage since 1969 and represents over 40 years of creative threaded fastener application engineering.



#### STANLEY Assembly Technologies

STANLEY Assembly Technologies supplies production solutions to the global assembly market.



## Tucker®

A one-sided drawn-arc welding process is the foundation of the Tucker No-Hole assembly solution.



### Warren®

Whether it's plastic, metal, or a combination of the two, Warren can design a product that will suit your environment.



# **STANLEY** Engineered Fastening



STANLEY Engineered Fastening, a Stanley Black & Decker Inc. Company has been revolutionizing fastening and assembly technologies for a variety of industries for more than 40 years.

For more information, please visit our website www.StanleyEngineeredFastening.com

## Quick Links:

- Our locations http://www.stanleyengineeredfastening.com/contact/global-locations
- Request Information http://www.stanleyengineeredfastening.com/econtact/request-information

#### Resource Center http://www.stanleyengineeredfastening.com/resource-center

© 2013 Stanley Black & Decker, Inc., Rev. 03a.2015

AV<sup>™</sup>, Avdel<sup>®</sup>, Avbolt<sup>®</sup>, Avdelok<sup>®</sup>, Avseal<sup>®</sup>, NeoBolt<sup>®</sup> and the 'AV'-symbol are trademarks of Avdel UK Limited. POP<sup>®</sup> is a trademark of Emhart Teknologies. Enerpac<sup>®</sup> is a trademark of Actuant Corporation. Data shown is subject to change without prior notice as a result of continuous product development and improvement policy. Your local representative is at your disposal should you need to confirm latest information.