

Pneumatic Self-Feed Drills

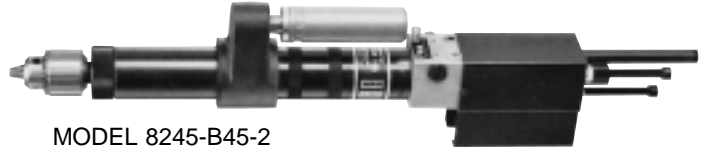
ARO Bant-A-Matic, Par-A-Matic, and Super Par-A-Matic Drills provide the selection, performance, and degree of precision to automate a wide range of secondary machining applications simply and economically. They utilize compressed air for both the spindle rotation and feed / control functions. The reliable rotary-vane air motor offers high power-to-size performance which minimizes tool size and weight for added machine design flexibility. The tools are easily installed, requiring only simple pneumatic circuitry. They can be used individually or in conjunction with other ARO electric and pneumatic tools.

Additional features / benefits include—

- Built-in four-way valve enables both manual and remote operation.
- Double-acting air piston provides smooth, controlled forward and retract strokes.
- Needle valve controls allows adjustment of forward and retract strokes.
- Adjustment screw provides infinite stroke length settings.
- Ball bearing spindle support offers precision and long service life.
- Muffled exhaust for a quieter work environment.

BANT-A-MATIC® SERIES

3/16" (4.8 mm) Capacity, Steel • .25 HP (.20 kW)



MODEL 8245-B45-2

PAR-A-MATIC® SERIES

5/16" (7.9 mm) Capacity, Steel • .50 HP (.37 kW)



MODEL 8255-A14-2

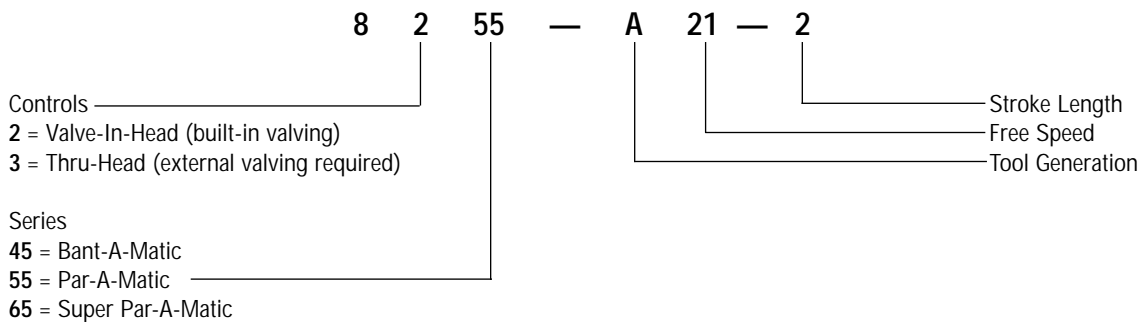
SUPER PAR-A-MATIC® SERIES

1/2" (12.7 mm) Capacity, Steel • .75 HP (.56 kW)



MODEL 8265-25-3

MODEL IDENTIFICATION



SPECIFICATIONS

MODELS & STROKE LENGTHS			FREE SPEED	*NOMINAL DRILLING CAPACITIES				THRUST @90 PSI	AIR CONSP. †	SOUND LEVEL	STD. CHUCK CAPACITY	GEAR REDUCTION	
rpm	Stnls. Type	Steel 304	Steel SAE 1213	Aluminum 2024-T4	Wood, Med. or FRP	lb. (N)	@Working Speed ft ³ /cycle (L/cycle)	dB(A)	in. (mm)				
BANT-A-MATIC SERIES													
1-1/4" (32 mm)	2.0" (51 mm)	3.0" (76 mm)											
*8245-203-1	8245-203-2	8245-203-3	19,000	—	1/64 (0.4)	1/32 (0.8)	1/16 (1.6)				Single		
8245-101-1	8245-101-2	8245-101-3	10,000	—	1/64 (0.4)	1/32 (0.8)	1/16 (1.6)				Double		
8245-B45-1	8245-B45-2	8245-B45-3	4,400	—	1/32 (0.8)	1/16 (1.6)	1/8 (3.2)	5/32 (4.0)	90 (400)	1.5 (42)	77	1/4 (6.4)	Single
8245-B30-1	8245-B30-2	8245-B30-3	2,700	—	1/16 (1.6)	1/8 (3.2)	3/16 (4.8)	3/16 (4.8)					Single
8245-B8-1	8245-B8-2	8245-B8-3	900	—	3/32 (2.4)	3/16 (4.8)	1/4 (6.4)	5/16 (7.9)					Double
PAR-A-MATIC SERIES													
1-1/4" (32 mm)	2.0" (51 mm)	3.0" (76 mm)											
*8255-172-1	8255-172-2	8255-172-3	17,000	—	1/64 (0.4)	1/32 (0.8)	1/16 (1.6)					Single	
8255-101-1	8255-101-2	8255-101-3	10,000	—	1/32 (0.8)	1/16 (1.6)	5/32 (4.0)					Double	
8255-A50-1	8255-A50-2	8255-A50-3	5,000	—	5/64 (2.0)	3/16 (4.8)	3/16 (4.8)					Single	
8255-A28-1	8255-A28-2	8255-A28-3	2,800	—	1/16 (1.6)	9/64 (3.6)	1/4 (6.4)	1/4 (6.4)				Single	
8255-A21-1	8255-A21-2	8255-A21-3	2,100	—	7/64 (2.8)	7/32 (5.6)	9/32 (7.1)	5/16 (7.9)	170 (756)	2.3 (65)	74	5/16 (7.9)	Single
8255-A14-1	8255-A14-2	8255-A14-3	1,450	—	5/32 (4.0)	1/4 (6.4)	5/16 (7.9)	3/8 (9.5)					Double
8255-A8-1	8255-A8-2	8255-A8-3	850	—	11/64 (4.4)	9/32 (7.1)	21/64 (8.3)	25/64 (9.9)					Double
8255-A5-1	8255-A5-2	8255-A5-3	500	—	1/4 (6.4)	5/16 (7.9)	11/32 (8.7)	13/32 (10.3)					Double
SUPER PAR-A-MATIC SERIES													
1-1/2" (38 mm)	3.0" (76 mm)												
*8265-171-1	8265-171-3	17,000	—	1/64 (0.4)	3/32 (2.4)	3/32 (2.4)						Single	
8265-101-1	8265-101-3	10,000	—	3/64 (1.2)	5/32 (4.0)	5/32 (4.0)						Double	
8265-46-1	8265-46-3	4,600	—	1/8 (3.2)	1/4 (6.4)	5/16 (7.9)						Single	
8265-25-1	8265-25-3	2,500	—	3/32 (2.4)	3/16 (4.8)	5/16 (7.9)	7/16 (11.1)	250 (1112)	2.9 (82)	77	1/2 (12.7)	Single	
8265-12-1	8265-12-3	1,200	—	5/32 (4.0)	5/16 (7.9)	3/8 (9.5)	9/16 (14.3)					Double	
8265-6-1	8265-6-3	650	—	17/64 (6.7)	7/16 (11.1)	9/16 (14.3)	5/8 (15.9)					Double	
8265-3-1	8265-3-3	350	—	5/16 (7.9)	1/2 (12.7)	5/8 (15.9)	11/16 (17.5)					Double	

*NOTE: 17,000 & 19,000 RPM units have collet in Spindle. See Pages 52, 54 & 56.

†Consumption in cubic feet during a typical 6 second cycle time. Note: Performance data given at 90 PSI (6.2 bar) operating pressure.

TOOL SERIES	AIR INLET	CONTROL PORTS	SPINDLE THREAD	RECOMMENDED HOSE SIZE	RECOMMENDED OPERATING PRESSURE
Bant-A-Matic	1/8" NPT male	1/8" NPTF female	1/2"-20 male	1/4" ID	90 PSI (6.2 bar)
Par-A-Matic	1/4" NPT male	1/8" NPTF female	1/2"-20 male	5/16" ID	90 PSI (6.2 bar)
Super Par-A-Matic	1/4" NPT male	1/8" NPTF female	1/2"-20 male	3/8" ID	90 PSI (6.2 bar)

To order a "thru-head" tool (requires an external four-way valve for controls), change the "2" in the base model number to "3" (Bant-A-Matic and Par-A-Matic Series tools only). EXAMPLE: 8355-A21-2. Thru-head tools available in Super Par-A-Matic series only as a custom order tool. 47884 Pneumatic Interface Kit contains 2 each of 6045 elbow and 9600 bleeder valve.

STANDARD EQUIPMENT

Bant-A-Matic Series

- 33906 1/4" (6.4 mm) Cap. Chuck*
- 47884 Pneumatic Controls Interface Kit*
- Necessary wrenches
- 203 UNITS have collet built-in spindle instead of chuck. See page 63 for selection of collet

Par-A-Matic Series

- 33907 3/8" (9.5 mm) Cap. Chuck*
- 47884 Pneumatic Controls Interface Kit*
- Necessary wrenches
- 172 UNITS have collet built-in spindle instead of chuck. See page 63 for selection of collet

Super Par-A-Matic Series

- 30018 1/2" (12.7 mm) Cap. Chuck*
- 47884 Pneumatic Controls Interface Kits*
- Necessary wrenches
- 171 UNITS have collet built-in spindle instead of chuck. See page 63 for selection of collet

ACCESSORIES AT EXTRA COST

Bant-A-Matic Series

- 40301-() Hydraulic Checks
- 39486 Flange Bracket
- 39485-1 Foot Bracket
- 45053 H.D. Foot Bracket
- 36042 Split-Block Clamp
- Nose Housings
- Drill Bushing Adapters
- Control Kits
- Service Kits

Par-A-Matic Series

- 40591-() Hydraulic Checks
- 38877 Flange Bracket
- 38875-1 Foot Bracket
- 45055 H.D. Foot Bracket
- 35283 Split-Block Clamp
- Nose Housings
- Drill Bushing Adapters
- Control Kits
- Service Kits

Super Par-A-Matic Series

- 40591-() Hydraulic Checks
- 40589 Flange Bracket
- 40588-1 Foot Bracket
- 45056 H.D. Foot Bracket
- 41454 Collet-Type Foot Bracket
- Nose Housings
- Nose Housing Adapters
- Drill Bushing Adapters
- Control Kits
- Service Kits

ARO Twin Drills perform two machining operations per cycle for holes with center distances from 3/8" to 3 3/4". They're ideal for many close-center machining problems. But even more important, ARO Twin Drills significantly reduce machining time and parts handling while improving quality.

Three series of standard tools are available, equipped with adjustable dual spindle heads. Like the other ARO Automatic Production Tools, each Twin Drill is a completely self-contained unit with built-in cycle, feed rate, and motor controls. They can be operated individually or in conjunction with other tools and machine components.

Additional features / benefits include—

- Adjustable spindles allow reapplication as machining requirements change.
- Comprehensive range of American and metric collets available to meet a wide variety of hole specifications.
- Double-acting air piston provides smooth, controlled forward and retract strokes.
- Needle valve controls allow adjustment of forward and retract strokes.
- Adjustment screw provides infinite stroke length settings up to 3.0" maximum.
- Muffled exhaust for a quieter work environment.

BANT-A-MATIC® SERIES

1/8" (3.2 mm) Capacity, Steel • .25 HP (.19 kW)



MODEL 8248-B30-2

PAR-A-MATIC® SERIES

1/4" (6.4 mm) Capacity, Steel • .50 HP (.37 kW)



MODEL 8258-C21-2

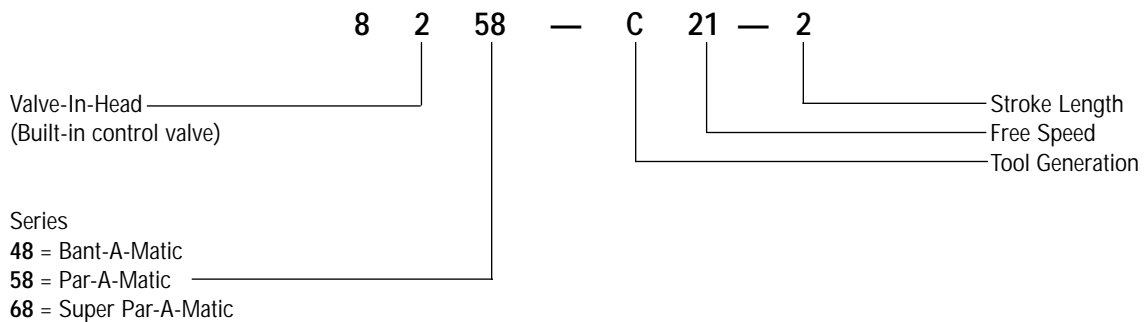
SUPER PAR-A-MATIC® SERIES

3/8" (9.5 mm) Capacity, Steel • .75 HP (.56 kW)



MODEL 8268-A25-3

MODEL IDENTIFICATION



SPECIFICATIONS

MODELS & STROKE LENGTHS			FREE SPEED rpm	*NOMINAL DRILLING CAPACITIES				THRUST @90 PSI lb. (N)	AIR CONSP. † @Working Speed ft ³ /cycle (L/cycle)	SOUND LEVEL dB(A)	STD. CHUCK CAPACITY in. (mm)	GEAR REDUCTION
				*Stnls. Steel Type 304	Steel SAE 1213	Aluminum 2024-T4	Wood, Med. or FRP					
BANT-A-MATIC SERIES												
1-1/4" (32 mm)	2.0" (51 mm)	3.0" (76 mm)										
8248-B45-1	8248-B45-2	8248-B45-3	4,400	1/32 (.78)	1/16 (1.6)	3/32 (2.4)	3/32 (2.4)				Single	
8248-B30-1	8248-B30-2	8248-B30-3	2,700	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)	1/8 (3.2)	90 (400)	1.5 (42)	77	5/32 (4.0) Single	
8248-B8-1	8248-B8-2	8248-B8-3	900	1/8 (3.2)	1/8 (3.2)	3/16 (4.8)	3/16 (4.8)				Double	
PAR-A-MATIC SERIES												
1-1/4" (32 mm)	2.0" (51 mm)	3.0" (76 mm)										
8258-C50-1	8258-C50-2	8258-C50-3	5,000		1/16 (1.6)	1/8 (3.2)	1/8 (3.2)				Single	
8258-C28-1	8258-C28-2	8258-C28-3	2,800	3/64 (1.2)	1/8 (3.2)	3/16 (4.5)	3/16 (4.5)				Single	
8258-C21-1	8258-C21-2	8258-C21-3	2,100	5/64 (1.9)	5/32 (4.0)	7/32 (5.6)	7/32 (5.6)	170 (756)	2.3 (65)	74	1/4 (6.4) Single	
8258-C14-1	8258-C14-2	8258-C14-3	1,450	7/64 (2.7)	3/16 (4.5)	1/4 (6.4)	1/4 (6.4)				Double	
8258-C8-1	8258-C8-2	8258-C8-3	850	11/64 (4.3)	1/4 (6.4)	9/32 (7.1)	9/32 (7.1)				Double	
8258-C5-1	8258-C5-2	8258-C5-3	500	1/4 (6.4)	1/4 (6.4)	5/16 (7.9)	5/16 (7.9)				Double	
SUPER PAR-A-MATIC SERIES												
1-1/2" (38 mm)	3.0" (76 mm)											
8268-A46-1	8268-A46-3		4,600			1/4 (6.4)	3/16 (4.8)				Single	
8268-A25-1	8268-A25-3		2,500	1/16 (1.6)	1/4 (6.4)	5/16 (7.9)	5/16 (7.9)				Single	
8268-A12-1	8268-A12-3		1,200	1/8 (3.2)	5/16 (7.9)	11/32 (8.7)	3/8 (9.5)	250 (1112)	2.9 (82)	77	3/8 (9.5) Double	
8268-A6-1	8268-A6-3		650	13/64 (5.2)	11/32 (8.7)	3/8 (9.5)	7/16 (11.1)				Double	
8268-A3-1	8268-A3-3		350	5/16 (7.9)	3/8 (9.5)	13/32 (10.3)	15/32 (11.9)				Double	

*Speed Sensitive Material †Consumption in cubic feet during a typical 6 second cycle time. Note: Performance data given at 90 PSI (6.2 bar) operating pressure.

TOOL SERIES	SPINDLE ADJUSTMENT	AIR INLET	CONTROL PORTS	RECOMMENDED HOSE SIZE	RECOMMENDED OPERATING PRESSURE
Bant-A-Matic	3/8" to 2 1/8" centers (9.5 to 54 mm)	1/8" NPT male	1/8" NPTF female	1/4" ID	90 PSI (6.2 bar)
Par-A-Matic	1/2" to 2 1/2" centers (12.7 to 63.5 mm)	1/4" NPT male	1/8" NPTF female	5/16" ID	90 PSI (6.2 bar)
Super Par-A-Matic	3/4" to 3 3/4" centers (19 to 95 mm)	1/4" NPT male	1/8" NPTF female	3/8" ID	90 PSI (6.2 bar)

STANDARD EQUIPMENT

Bant-A-Matic Series

- 46394 Twin Drill Head
- 47884 Pneumatic Controls Interface Kit*
- Necessary Wrenches

*Contains (2) 6045 90° street elbows and (2) 9600 pilot bleeder valves.

Par-A-Matic Series

- 46023 Twin Drill Head
- 47884 Pneumatic Controls Interface Kit*
- Necessary Wrenches

Super Par-A-Matic Series

- 46063 Twin Drill Head
- 47884 Pneumatic Controls Interface Kit*
- Necessary Wrenches

NOTE: Collets for Twin Drills must be ordered separately at extra cost. See page 28.

ACCESSORIES AT EXTRA COST

Bant-A-Matic Series

- 47368-() Collets
- 40301-() Hydraulic Checks
- 39486 Flange Bracket
- 39485-1 Foot Bracket
- 45053 H.D. Foot Bracket
- 36042 Split-Block Clamp
- Control Kits
- Service Kits

Par-A-Matic Series

- 45998-() Collets
- 40591-() Hydraulic Checks
- 38877 Flange Bracket
- 38875-1 Foot Bracket
- 45055 H.D. Foot Bracket
- 35283 Split-Block Clamp
- Control Kits
- Service Kits

Super Par-A-Matic Series

- 46033-() Collets
- 40591-() Hydraulic Checks
- 40589 Flange Bracket
- 40588-1 Foot Bracket
- 45056 H.D. Foot Bracket
- 41454 Collet-Type Foot Bracket
- Control Kits
- Service Kits

ARO Automatic Offset Drills are offered to accommodate unusual part or fixture configurations. They also may be grouped in a fixture to produce holes with a center-line distance as low as 1.5".

Offset drills are easily installed, requiring only simple pneumatic circuitry. They may also be used in conjunction with other pneumatic or electric ARO Automatic Production Tools.

Additional features / benefits include—

- Built-in four-way valve for both manual and remote operation.
- Double-acting air piston provides smooth, controlled forward and retract strokes.
- Infinite stroke length adjustment up to 2.0" maximum.
- Feed rate adjustment screws for the forward and retract strokes provide optimum hole quality and cycle time.
- Muffled exhaust for a more comfortable work environment.
- Selection of mounting brackets to meet installation requirements.

PAR-A-MATIC® SERIES

3/16" (4.8 mm) Capacity, Steel • 50 HP (.37 kW)



MODEL 8266-A17-2

SPECIFICATIONS

MODELS	FREE SPEED rpm	NOMINAL DRILLING CAPACITIES				THRUST @90 PSI lb. (N)	AIR CONSP.‡ @Working Speed ft ³ /cycle (L/cycle)	SOUND LEVEL dB(A)	STD. CHUCK CAPACITY in. (mm)	GEAR REDUCTION
		Stnls. Steel Type 304	Steel SAE 1213	Aluminum 2024-T4	Wood, Med. or FRP					
8266-A23-2	2,300	N/A	1/16 (1.6)	1/8 (3.2)	3/16 (4.8)					Double
8266-A17-2	1,750	N/A	3/32 (2.4)	5/32 (4.0)	7/32 (5.6)	170 (756)	2.3 (65)	74	3/8 (9.5)	Double
8266-A12-2	1,200	N/A	5/32 (4.0)	3/16 (4.8)	1/4 (6.4)					Double
8266-A7-2	700	N/A	3/16 (4.8)	7/32 (5.6)	9/32 (7.2)					Double

‡Consumption in cubic feet during a typical 6 second cycle time. Note: Performance data given at 90 PSI (6.2 bar) air pressure.

AIR INLET	CONTROL PORTS	SPINDLE THREAD	RECOMMENDED HOSE SIZE	RECOMMENDED OPERATING PRESSURE
1/4" NPT male	1/8" NPTF female	3/8"-24 male	5/16" ID	90 PSI (6.2 bar)

STANDARD EQUIPMENT

- 47341 3/8" (9.5 mm) Cap. Chuck
- 47884 Pneumatic Controls Interface Kit—contains (2) 6045 90° street elbows and (2) 9600 pilot bleeder valves
- Necessary Wrenches

ACCESSORIES AT EXTRA COST

- 40591-() Hydraulic Checks
- 38877 Flange Bracket
- 38875-1 Foot Bracket
- 45055 H.D. Foot Bracket
- 35283 Split-Block Clamp
- Control Kits
- Service Kits

ARO Peck-Feed Drills are designed specifically for applications where the hole depth exceeds four times the diameter of the drill bit. They offer the advantages of deep-hole chip clearance with close diameter and axial controls.

The ARO Peck-Feed Drill is a complete, self-contained unit. The pecking operation is controlled by a pre-set, timed sequence. Upon receiving a start signal, the tool automatically advances, drills to a selected peck depth and retracts, continuing the cycle until the total hole depth is reached. This sequential pecking action clears the hole and drill flutes of chips that produce frictional heat, drag, and drill skew. It also greatly increases the life of small drills (3/32 thru No. 80) that are sensitive to excessive thrust and radial loading.

Additional features / benefits include—

- Manual and remote operation.
- Muffled exhaust for a more comfortable work environment.
- Selection of mounting brackets to meet installation requirements.

PAR-A-MATIC® SERIES

5/16" (7.9 mm) Capacity, Steel • .50 HP (.37 kW)



MODEL 8360-A28-3



SPECIFICATIONS

MODELS	FEED SPEED rpm	THRUST @90 PSI lb. (N)	FREE RATE in./m (mm/m)	STROKE LENGTH in. (mm)	PECK RANGE in. (mm)	RAPID ADVANCE RANGE in. (mm)	AIR CONSP.† @WORKING SPEED ft³/cycle (L/cycle)	SOUND LEVEL dB(A)	STD. CHUCK CAPACITY in. (mm)	GEAR REDUCTION
*8360-172-3	17,000									Single
8360-A50-3	5,000									Single
8360-A28-3	2,800		0 min to 40 max.	29/32 to 2 1/4	5/16 min to 1-21/32 max					Single
8360-A21-3	2,100	170 (756)	(0 to 1016)	2.75 (6.99)	(23 to 57)	(7.9 to 42)	2.3 (65)	74	3/8 (9.5)	Single
8360-A14-3	1,450									Double
8360-A8-3	850									Double
8360-A5-3	500									Double

*NOTE: 17,000 RPM unit has collet in spindle. See page 59.

†Consumption in cubic feet for a full minute of operation. Note: Performance data given at 90 PSI (6.2 bar) air pressure.

Tool	AIR INLET Peck Box	CONTROL PORTS Peck Box	SPINDLE THREAD	RECOMMENDED HOSE SIZE	RECOMMENDED OPERATING PRESSURE
1/4" NPT male	5/32" Tubing	5/32" Tube Connection	1/2"-20 male	5/16" ID	90 PSI (6.2 bar)

STANDARD EQUIPMENT

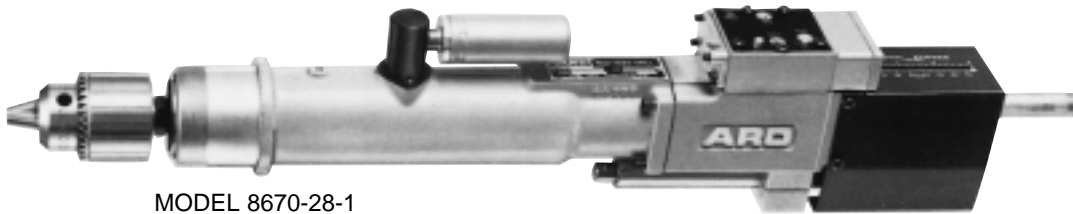
- 33907 3/8" (9.5 mm) Cap. Chuck
- Peck-Feed Control
- Necessary Wrenches

ACCESSORIES AT EXTRA COST

- 38877 Flange Bracket
- 38875-1 Foot Bracket
- 45055 H.D. Foot Bracket
- 35283 Split-Block Clamp
- Nose Housing
- Drill Bushing Adapter
- Service Kits

HIGH-THRUST 8670 SERIES

5/8" (15.9 mm) Capacity, Steel • 1.25 HP (.93 kW)



MODEL 8670-28-1

ARO Hi-Thrust Automatic Feed Drills are designed for increased material removal rates of standard alloys and non-ferrous materials. Their high power and thrust also enable the machining of even the most demanding materials, including titanium and high-nickel alloys.

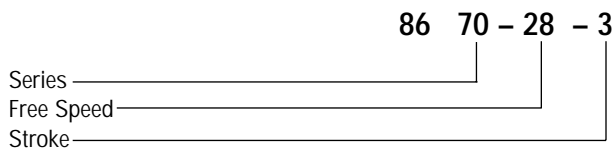
ARO Hi-Thrust Drills feature a dual piston which develops the increased thrust for fast penetration and reduced cycle times. The tools are fully automatic, with all cycle and motor functions regulated by a single control module. They are easily installed, requiring only simple pneumatic circuitry. Hi-Thrust Drills can also be used in conjunction with other pneumatic and electric ARO Automatic Production Tools.

Additional features / benefits include—

- Adjustable hydraulic check provides positive feed rate control for fine adjustment of chip size or breakthrough control.

- "Dead stop" and "dwell" control offer repeatable depth accuracy within .001".
- Heavy-duty cast iron housing for rigid mounting.
- Constant tool length, regardless of spindle speed, allows speed change without repositioning the tool.
- Both coarse and fine stroke length adjustments enables quick, accurate setups.
- Control module is a complete, replaceable unit and can be easily removed without tool disassembly.
- Modular motor and gearing units enable fast, easy speed changes and servicing.
- Single exterior lubrication point for entire gear train simplifies preventative maintenance.
- Muffled exhaust for a more comfortable work environment.
- Exhaust may be piped away.

MODEL IDENTIFICATION



- Exhaust
 - M = 43874-1 Muffler
 - B = 22827 Barbed Insert for 1/2" I.D. exhaust hose
- Drive Options
 - A = 45177 3/4" Cap. Chuck
 - B = 45176 3/8" Cap. Chuck
 - C = 46090 No. 1 Morse Taper Adapter
 - D = 46091 No. 2 Morse Taper Adapter

8670 SPECIFICATIONS

MODEL	FREE SPEED rpm	NOMINAL DRILLING CAPACITIES				THRUST @90 PSI lb. (N)	AIR CONSP.† @Working Speed ft ³ /cycle (L/cycle)	SOUND LEVEL dB(A)	STD. CHUCK CAPACITY in. (mm)	STROKE LENGTH in. (mm)
		Stnls. Steel Type 304	Steel SAE 1213	Aluminum 2024-T4	Wood, Med. or FRP					
8670-47-3	4,700	—	3/16 (4.75)	7/16 (11.1)	1/2 (12.7)					
8670-28-3	2,800	3/16 (4.8)	1/4 (6.35)	9/16 (14.3)	5/8 (15.9)					
8670-13-3	1,350	5/16 (7.9)	11/32 (8.73)	5/8 (15.9)	3/4 (19.0)	500 (2224)	5.0 (142)	80	3/4 (19.0) 3.0 (76)	
8670-8-3	800	3/8 (9.5)	7/16 (11.11)	3/4 (19.0)	7/8 (22.2)					
8670-4-3	450	1/2 (12.7)	5/8 (15.87)	7/8 (22.2)	1.0 (25.4)					

†Consumption in cubic feet during a typical 6 second cycle time. Note: Performance data given at 90 PSI (6.2 bar) air pressure.

AIR INLET	CONTROL PORTS	SPINDLE THREAD	RECOMMENDED HOSE SIZE	RECOMMENDED OPERATING PRESSURE	COUPLER/CONNECTION	F/R/L
3/8" NPT male	1/8" NPTF female	5/8"-16 male	5/8" I.D.	90 PSIG (6.2 bar)	1/2"	1/2"

STANDARD EQUIPMENT (As ordered. See model identification.)

- 45177 3/4" (19 mm) Cap. Chuck
- 38922-1 2.0" Hydraulic Check
- 45940 Exhaust Manifold
- 43874-1 Muffler or 2632 Barbed Insert
- Necessary wrenches
- 45176 3/8" (9.5 mm) Cap. Chuck
- 46090 No. 1 Morse Taper Adapter
- 46091 No. 2 Morse Taper Adapter

ACCESSORIES AT EXTRA COST

- 38922-2 3.0" Hydraulic Check
- 46133-() Twin Hydraulic Check Assembly
- 45185 Foot Bracket
- 45188 Nose Housing
- 46093-() Collets