



# Mini Merkur™ ES

Air-Assisted and Airless Efficient Spray Packages



Ready-to-spray finishing package with a new pump at an affordable price

- Quick flush system reduces material and solvent use
- Very low material volume required to fill the system
- Graco proven reliability on key system components
- Delivers a superior, consistent spray finish

PROVEN QUALITY. LEADING TECHNOLOGY.

# Mini Merkur™ ES



## 1) Pump Mount

- Converts from stand mount to wall mount

## 2) G15/G40 Spray Gun

- Delivers superior spray performance
- Maximizes operator comfort with ergonomic design

## 3) Air Motor

- Provides consistent finishes with smooth, rapid changeover
- Minimizes air usage

## 4) Control Panel

- Easily set and monitor air controls
- Integrated carrying handle for easy transporting

## 5) Pump Lower

- Proven reliability
- Available in plated or stainless steel

## 6) Gun Hook

- Located on both sides of pump stand for flexibility



## 7) 1/8" Fluid Hose

- Reduces material and solvent usage
- Lightweight and flexible for operator convenience

## 8) Suction Hose and Strainer

- Leaves less material in the supply container
- Reduces material and solvent usage with its small diameter

## Ordering Information

Part No.	Plated Steel	Stainless Steel	Wall Mount	Stand Mount	G15 Gun	G40 Gun	Silver Plus™ Gun
<b>Mini Merkur ES 15:1 Air-Assisted Packages</b>							
24F150	•		•		•		
24F151	•			•	•		
24F158		•	•		•		
24F159		•		•	•		

\*All Air-Assisted Packages include a 7.5 m (25 ft) fluid hose and air hose, suction hose and an AAF412 tip

<b>Mini Merkur ES 30:1 Air-Assisted Packages*</b>							
24F156	•		•			•	
24F157	•			•		•	
24F152		•	•			•	
24F153		•		•		•	

\*All Air-Assisted Packages include a 7.5 m (25 ft) fluid hose and air hose, suction hose and an AAF412 tip

<b>Mini Merkur ES 30:1 Airless Packages**</b>							
24F154	•		•				•
24F155	•			•			•

\*\*All Airless Packages include a 7.5 m (25 ft) fluid hose, suction hose and a 163515 tip

# New Pump Technology at an Affordable Price

## Kits and Accessories

### Guns

24C853	G15 Air-Assisted Gun
24C855	G40 Air-Assisted Gun
235460	Silver Plus Airless Gun

### Hoses

241811	7.5 m (25 ft) Air Hose
24F165	7.5 m (25 ft) Fluid Hose with Plated Steel Fittings
24F166	7.5 m (25 ft) Fluid Hose with SST Fittings

### Regulators

15T499	Air Regulator
108190	Regulator Gauge

### Repair Kits

24H006	Plated Steel Pump Repair Kit
24G705	SST Pump Repair Kit
24A537	Air Valve Repair Kit
24A535	Air Valve Seal Kit
24A360	Air Valve and Cap Kit

### Other Kits

24F160	Standard Push-on Strainer Kit
24F161	Airless to Air-Assisted Conversion Kit
256426	Screw-on Strainer Kit (for 24F149 5/8" Suction Hose Kit)
24H665	Alternate U-Cup Pump Packing Kit (UHMWPE)

### Accessories

24F147	Suction Tube for 3.8 l (1 gal) Pail, Stainless Steel
24F148	Standard Suction Hose, 19 l (5 gal), 10 mm (3/8") OD
24F149	Suction Hose, 19 l (5 gal), 16 mm (5/8") OD
24F271	Inline Fluid Filter, Stainless Steel (stand 60#)
24F272	Inline Fluid Filter, Plated Steel
287032	Replacement Filter, 60 mesh (qty 1) for 24F271 and 24F272
287033	Replacement Filter, 100 mesh (qty 1) for 24F271 and 24F272
287034	Replacement Filter, 60 mesh (qty 1) and 100 mesh (qty 1) for 24F271 and 24F272
224453	100 mesh Fluid Filter Kit (qty 5) for G15/G40 Gun
238563	60 mesh Fluid Filter Kit (qty 3) for G15/G40 Gun
241804	Tip Filter Kit, Replacement Filter for Spray Tip Orifice Sizes 0.007 - 0.009 and 0.011 (qty 10)
193199	Gauge Lens Covers
24H005	Hose Clips - Pack of 7
24F160	Suction Strainer - Pack of 3
238049	Throat Seal Liquid (TSL™), 118 ml (4 oz)
206994	Throat Seal Liquid (TSL), 236 ml (8 oz)



## Technical Specifications

Maximum fluid working pressure	
15:1 pumps.....	103 bar (10.3 MPa, 1500 psi)
30:1 pumps.....	207 bar (20.7 MPa, 3000 psi)
Maximum tip orifice size.....	0.483 mm (0.019")
Fluid flow @ 240 cpm.....	1.5 l/min (0.4 gpm)
Volume per cycle.....	6 cc (0.2 oz)
Maximum air inlet pressure.....	7.0 bar (0.7 MPa, 100 psi)
Air consumption @ 7.0 bar (0.7 MPa, 100 psi) @ 90 cpm	
15:1.....	113 l/min (4 scfm)
30:1.....	198 l/min (7 scfm)
Package air inlet size.....	3/8 npt(f)
Package fluid outlet size.....	1/4 npsm(m)
Wetted parts	
Plated steel pumps.....	SST, CS, nickel plating, tungsten carbide, PTFE, acetal, leather, UHMWPE
Stainless steel pumps.....	SST, tungsten carbide, PTFE, acetal, leather, UHMWPE
Minimum compressor size.....	1.5 HP
Instruction manual.....	3A0732

# Spray Tip Selection Chart

## AAM Air-Assisted Spray Tip Selection Chart

Fine Finish Tips recommended for *high finish quality* applications at *low and medium pressures*.

Order desired tip (part no. AAMxxx) from matrix below. *xxx = 3 digit number below Maximum Pattern Width. (Example: AAM409)*

Orifice Size mm (in)	Fluid Output, l/min (fl oz/min)		Maximum Pattern Width at 300 mm (12 in)							
	at 41 bar (4.1 MPa, 600 psi)	at 70 bar (7.0 MPa, 1000 psi)	100 (2 to 4)	150 (4 to 6)	200 (6 to 8)	250 (8 to 10)	300 (10 to 12)	350 (12 to 14)	400 (14 to 16)	450 (16 to 18)
0.178 (0.007)	0.1 (4.0)	0.15 (5.2)		207	307					
0.229 (0.009)	0.2 (7.0)	0.27 (9.1)	109	209	309	409	509			
0.279 (0.011)	0.3 (10.0)	0.4 (13.0)	111	211	311	411	511	611		
0.330 (0.013)	0.4 (13.0)	0.5 (16.9)		213	313	413	513	613	713	
0.381 (0.015)	0.5 (17.0)	0.7 (22.0)		215	315	415	515	615	715	815
0.432 (0.017)	0.7 (22.0)	0.85 (28.5)		217	317	417	517	617	717	817
0.483 (0.019)	0.8 (28.0)	1.09 (36.3)		219	319	419	519	619	719	819

## AAF Air-Assisted Fine Finish Pre-Orifice Spray Tip Selection Chart

Fine Finish Tips recommended for *high finish quality* applications at *low and medium pressures*. AAF tips have a pre-orifice which assists in atomizing shear thinning materials, including waterbornes and lacquers.

Order desired tip (part no. AAFxxx) from matrix below.

Orifice Size mm (in)	Fluid Output, l/min (fl oz/min)		Maximum Pattern Width at 305 mm (12 in)				
	at 41 bar (4.1 MPa, 600 psi)	at 70 bar (7.0 MPa, 1000 psi)	200 (6 to 8)	250 (8 to 10)	300 (10 to 12)	350 (12 to 14)	400 (14 to 16)
0.011 (0.279)	0.28 (9.5)	0.37 (12.5)	310	410	510	610	710
0.013 (0.330)	0.35 (12.0)	0.47 (16.0)	312	412	512	612	712
0.015 (0.381)	0.47 (16.0)	0.62 (21.0)		414	514	614	714
0.017 (0.432)	0.59 (20.0)	0.78 (26.5)		416	516	616	716

## 163xxx Silver Fine Finish Spray Tip Selection Chart

Order desired tip (part no. 163xxx) from matrix below.

Orifice Size mm (in)	Flow Rate l/min (gpm)	Fan Width mm (in)								
		2-4 (51-102)	4-6 (102-152)	6-8 (152-203)	8-10 (203-254)	10-12 (254-305)	12-14 (305-356)	14-16 (356-406)	16-18 (406-457)	18-20 (457-508)
0.178 (0.007)	0.20 (0.053)	107	207	307	407					
0.228 (0.009)	0.33 (0.087)	109	209	309	409	509	609			
0.280 (0.011)	0.49 (0.13)	111	211	311	411	511	611	711		
0.330 (0.013)	0.69 (0.18)	113	213	313	413	513	613	713	813	
0.381 (0.015)	0.91 (0.24)	115	215	315	415	515	615	715	815	
0.432 (0.017)	1.17 (0.31)	117	217	317	417	517	617	717	817	917
0.483 (0.019)	1.47 (0.39)	119	219	319	419	519	619	719	819	919

 = recommended tips

All written and visual data contained in this document are based on the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.

Graco is certified ISO 9001.

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