

RAC X™ FF LP SwitchTips™

Breakthrough LOW PRESSURE SmartTip™ Technology, engineered to deliver the industry's best finish!



Featuring the patented Graco RAC X Tip with **SmartTip Technology** and exclusive internal tip geometry which delivers the industry's best finish at the lowest airless spray pressure.



Smart Combination

- ▶ Sprays at up to 50% lower pressure
- ▶ Less overspray
- ▶ Easiest pattern overlap
- ▶ Reduces prep and cleanup
- ▶ Up to 2X life

SmartTip Technology is designed to work with Graco's exclusive **SmartControl™ Pressure Management System** to deliver a superior spray fan without pressure fluctuations – at all spraying pressures.

SMARTCONTROL™

Industry First!



SwitchTips

Maximum Quality

In any spray application, the quality of your work is only as good as the quality of your finish. Graco spray tips are built to the highest standards and ensure the best finish in the industry. Each Graco tip is 100% tested for flow rate to meet the tough standards of painting contractors, and these careful processes ensure you of the quality you've come to expect from Graco.

MATERIALS RECOMMENDED TO BE SPRAYED

MATERIALS RECOMMENDED TO BE SPRAYED	TIP SIZES
Oil Base Stains, Lacquers and Clear Coats*	0.009 - 0.013
Oil Base Enamels, Industrial Enamels	0.013 - 0.015
Latex Paint	0.015 - 0.019
Heavy Latex and Smooth Elastomers	0.021 - 0.025
Elastomers and Block Fillers	0.025 - 0.039

This chart is a guide only—actual tip sizes used will vary depending on material.

**Fine Finish tip recommended.*

Choosing the RIGHT TIP for your spraying project is essential.

Graco tips are easy to identify. Choosing a quality tip will determine the quality of your finish and help you save a significant amount of time and money. Each Graco tip is 100% tested for flow rate to meet the tough standards of painting contractors. These careful processes ensure you of the quality you've come to expect from Graco.

For Example: RAC X LTX517

1. The first three digits (LTX) are Graco's identification numbers which differentiate various tip styles. An LTX is a Graco RAC X SwitchTip. The second three digits (517) represent the actual tip size (fan and orifice).
2. The number (5), when doubled, indicates approximate fan width when spraying 12 inches (305 mm) from the surface. The fan width on a 517 tip is approximately 10 to 12 inches (254 mm to 305 mm). All Graco tips are tested 12 inches (305 mm) from the surface with the same test material, at the same spraying pressure (LL5 at 6 inches). Different materials and spraying pressures may slightly change the width of your actual fan pattern.
3. The last two digits (17) indicate the tip has a hole size of 0.017 of an inch (0.43 mm). The hole size is directly related to the amount of paint that will flow through the tip. Your actual flow rate will depend on your spraying pressure and the paint you are using (high pressure equals more flow; heavier paints equals less flow).

Worn Tips Cost Time and Money

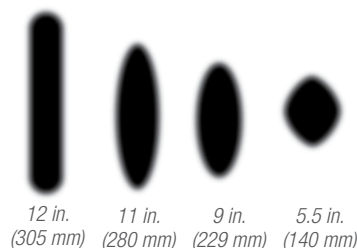
- ▶ A worn tip uses more paint
- ▶ Produces uneven coverage and inconsistent mil build
- ▶ Reduces production – requires more passes
- ▶ Results in a poor quality finish



Rules On Selecting Tip Sizes

- ▶ Use smaller orifice sizes when applying light viscosity materials such as stains and lacquers
- ▶ Use larger orifice sizes for heavier viscosity coatings such as latex or oil base

Tip Wear Chart

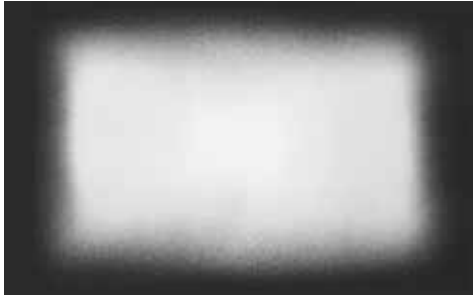


If a contractor is using a worn tip, on average he will spray 25% additional paint and use an additional 20% of labor.

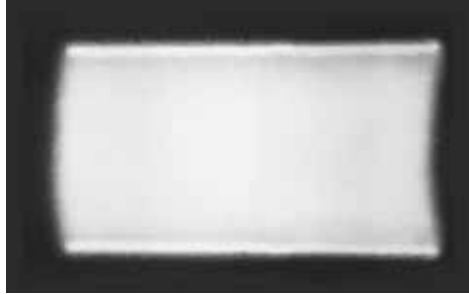
The 518 indicates the tip size:

- The fan size is double the first digit (5), or 10 inches.
- The orifice size is (18) thousandths of an inch or .018.

Latex Wall Paint at Half the Typical Pressure



FF LP PRODUCES A SUPERIOR FINISH



OTHER TIPS PRODUCE TAILS AT SAME PRESSURE

Features

RAC X – Fine Finish Low Pressure (Green Handle) Spray With Up to 50% Less Pressure!

- ▶ Sprays at lower pressures with less overspray
- ▶ Patent pending SmartTip geometry produces a perfect airless finish
- ▶ Up to 2X life
- ▶ Finer atomization and soft edges for easier overlapping
- ▶ Reduces prep and cleanup
- ▶ Includes solvent seal for hot solvents



RAC X – Premium Quality Tip (Blue Handle)

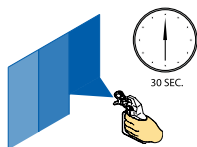
- ▶ Premium airless tip line includes 107 RAC X SwitchTips for every application
- ▶ Longest lasting fan pattern
- ▶ Highest quality finish
- ▶ Available in the most common tip sizes



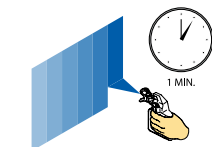
RAC X – WideRAC (Blue Handle)

- ▶ Spray double the area in half the time while ensuring proper mil build
- ▶ Ideal for high production and new construction applications which may require larger airless sprayers

WideRAC can cover the same area in 3 passes and in half the time!



24 in (610 mm)
Pattern with WideRAC



12 in (305 mm)
Pattern with Standard Tip



RAC X – WideRAC Tips Spray Double...

WideRAC Tips – Complete jobs in half the time.
Extra wide pattern, 24 in (61 cm) (WRxxxx).

SwitchTips

RAC X

Graco has developed a full-range RAC X SwitchTip product line to cover every application on the market today! RAC X SwitchTips include larger sizes for heavy-duty applications requiring 4000 psi (276 bar) and below, and smaller sizes for the finishing work.

DESCRIPTION
RAC X

PART #
LTXxxx

APPLICATIONS
Residential, Commercial
or Industrial

MATERIALS
Lacquers to Mastics

DESCRIPTION
WIDERAC™

PART #
WRXxxx

APPLICATIONS
High Production,
New Construction

MATERIALS
Lacquers to Mastics

DESCRIPTION
FINE FINISH

PART #
FF LPxxx

APPLICATIONS
Metal, Woodwork
Residential, and Commercial

MATERIALS
Lacquer, Varnish, Stain,
Enamel, Oil Base Paint,
Latex Paint

SUPERIOR FEATURES OF ALL RAC X TIPS

- ▶ Locking tab ensures tip stays securely in guard
- ▶ “Snaps” tip in spray or reverse position
- ▶ OneSeal™ tip installs with no tools
- ▶ Solvent seal available when using extremely hot solvents
- ▶ Large raised tip size numbers are always legible, even when covered with paint

SwitchTips

RAC 5

RAC 5 SwitchTips are high-performance tips and are one of the most popular reversible spray tips on the market today. RAC 5 provides excellent fan pattern life and a high quality finish. Easy-to-identify laser stamped tip sizes ensure you'll always know what tip size you're using.

DESCRIPTION
RAC 5

PART #
286xxx

APPLICATIONS
Residential, Commercial or Industrial

MATERIALS
Lacquers to Mastics

DESCRIPTION
LINELAZER®

PART #
LL5xxx

APPLICATIONS
Pavement, Concrete, Turf

MATERIALS
Water Base, Alkyd

DESCRIPTION
XHD™ RAC

PART #
XHDxxx

APPLICATIONS
Steel, Roofing

MATERIALS
Industrial Paints, Coatings



RAC 5 LineLazer SwitchTip (LL5xxx)



XHD RAC SwitchTip (XHDxxx)

Features

RAC 5 SwitchTip (Black Handle)

- ▶ For residential and commercial applications
- ▶ Includes OneSeal for most common coatings
- ▶ Solvent seal available when using extremely hot solvents









RAC 5 SwitchTip (Yellow Handle – for LineLazer)

- ▶ Creates clean, laser-sharp lines with no fuzzy edges or thin spots
- ▶ Designed specifically for parking lots, roads, warehouse floors, crosswalks and athletic fields
- ▶ Sprays heavy water-based to thin alkyd traffic paints
- ▶ Ensures consistent paint thickness from edge to edge, less overspray, and long-lasting lines

XHD RAC SwitchTip (Gray Handle)

- ▶ Recommended for Xtreme® Sprayers and XTR Airless Spray Guns
- ▶ Interchangeable with GHD guards and tips
- ▶ Change tip in seconds, no tools required
- ▶ Locking tab ensures tip stays securely in tip guard

TIP SPECIFICATIONS

PART #	COLOR	MAXIMUM WPR	TYPICAL APPLICATIONS	BEST USED WITH THESE MATERIALS	TIP GUARD PART #
RAC X SwitchTip					
LTXxxx 	Blue	4050 psi (280 bar, 28.0 MPa)	Residential, Commercial or Industrial	Lacquers to Mastics Latex Paints	RAC X HandTite 246215
WideRAC RAC X SwitchTip					
WRxxxx 	Blue	4050 psi (280 bar, 28.0 MPa)	High Production, New Construction for Top Coats, Large Concrete and Block Surfaces	Lacquers to Mastics Latex Paints	RAC X HandTite 246215
Fine Finish Low Pressure RAC X SwitchTip					
FFLPxxx 	Green	4050 psi (280 bar, 28.0 MPa)	Residential, Commercial or Industrial, Cabinetry, Woodworking, Metal and Fine Finish Surfaces	Latex Paints, Lacquers, Varnishes, Urethanes and Other Fine Finish Materials	RAC X HandTite 246215
RAC 5 SwitchTip					
286xxx 	Black	4050 psi (280 bar, 28.0 MPa)	Residential, Commercial or Industrial	Lacquers to Mastics Latex Paints	RAC 5 HandTite 243161
RAC 5 SwitchTip (for LineLazer®)					
LL5xxx 	Yellow	4050 psi (280 bar, 28.0 MPa)	Parking Lots, Roads, Warehouse Floors, Crosswalks, Athletic Fields	Heavy Waterbase to Thin Alkyd Traffic Paints	RAC 5 HandTite 243161
XHD RAC SwitchTip					
XHDxxx 	Gray	7250 psi (500 bar, 34.5 MPa)	Bridges, Tanks, Farms, Structural Steel and Roofing	Virtually All Paints and Coatings – Solvent and Waterbase	XHD XHD001
Contractor Flat Tip					
269xxx 	Silver	7250 psi (500 bar, 34.5 MPa)	Residential, Commercial	Architectural Coatings or Industrial	Flat Tip 220251
Fine Finish Flat Tip					
163xxx 	Black	5000 psi (345 bar, 34.5 MPa)	Residential, Commercial	Architectural Coatings or Industrial	Flat Tip 220247

Tip Charts



RAC X SwitchTips (LTXxxx)

Orifice Size - Inches

Fan Width	IN	(MM)	.007	.009	.011	.013	.015	.017	.019	.021	.023	.025	.027	.029	.031	.033	.035	.037	.039	.041	.043	.045	.051	.055	.061	.065	.071
	2-4 (51-102)				109	111		115																			
4-6 (102-152)	207		209	211	213	215	217	219	221			225	227		231		235										
6-8 (152-203)			309	311	313	315	317	319	321	323	325	327	329	331			335										
8-10 (203-254)			409	411	413	415	417	419	421	423	425	427	429	431	433	435			439	441	443	445	451	455			
10-12 (254-305)			509	511	513	515	517	519	521	523	525	527	529	531	533	535	537	539	541	543	545	551	555	561			
12-14 (305-356)				611	613	615	617	619	621	623	625	627	629	631	633	635	637	639	641	643	645	651	655	661	665	671	
14-16 (356-406)									721	723			729			735											
16-18 (406-XXX)							817	819	821			827		831	833	835											
Flow Rate (gpm)			.05	.09	.12	.18	.24	.31	.38	.47	.57	.67	.77	.90	1.03	1.17	1.31	1.47	1.63	1.8	1.98	2.17	2.79	3.25	4.0	4.53	5.41
Flow Rate (lpm)			.20	.33	.49	.69	.91	1.17	1.47	1.79	2.15	2.54	2.96	3.42	3.90	4.42	4.98	5.56	6.18	6.83	7.51	8.23	10.57	12.29	15.12	17.17	20.48

Water at 2000 psi (138 bar, 13.8 MPa); paints with a higher viscosity will decrease the flow rate. **Example:** For a tip with a .015 orifice and a 6 in (152 mm) pattern, order LTX315.



WideRAC RAC X SwitchTips (WRxxxx)

Orifice Size - Inches

Fan Width	IN	(MM)	.021	.023	.025	.027	.029	.031	.033	.035	.037	.039
	24 (610)			1221	1223	1225	1227	1229	1231	1233	1235	1237
Flow Rate (gpm)			.47	.57	.67	.77	.90	1.03	1.17	1.31	1.47	1.63
Flow Rate (lpm)			1.79	2.15	2.54	2.96	3.42	3.90	4.42	4.98	5.56	6.18

WideRAC Conversion

RAC 5 or RAC X	WideRAC
415 or 515	1221 or 1223
417 or 517	1223 or 1225
419 or 519	1225 or 1227
421 or 621	1229 or 1231
523 or 623	1233 or 1235
525 or 625	1235 or 1237

When you use WideRAC, be sure to increase the orifice size of the tip to ensure the same mil build and rate of application (air speed). Also, make sure your airless sprayer can support the larger tip size.

Water at 2000 psi (138 bar, 13.8 MPa); paints with a higher viscosity will decrease the flow rate. **Example:** For a tip with a .027 orifice and a 24 in (610 mm) pattern, order WR1227.

Fine Finish Low Pressure RAC X SwitchTips (FFLPxxx)



- ▶ **SPRAYS AT UP TO 50% LOWER PRESSURE**
- ▶ **LESS OVERSPRAY**
- ▶ **EASIEST PATTERN OVERLAP**



Orifice Size - Inches

Fan Width	IN	(MM)	.008	.010	.012	.014	.016	.018	.020
	2-4 (51-102)			108	110	112			
4-6 (102-152)			208	210	212	214			
6-8 (152-203)			308	310	312	314			
8-10 (203-254)				410	412	414			
10-12 (254-305)				510	512	514	516	518	520
12-14 (305-356)							616	618	620
Flow Rate (gpm)			.07	.11	.15	.21	.27	.35	.43
Flow Rate (lpm)			.26	.41	.59	.80	1.04	1.32	1.63

Water at 2000 psi (138 bar, 13.8 MPa); paints with a higher viscosity will decrease the flow rate.

Example: For a tip with a .010 orifice and a 8 in (203 mm) pattern, order FFLP410.

LOWERING SPRAY PRESSURE CAN REDUCE FLOW IN SOME MATERIALS.

Increase tip orifice size to maintain speed and material flow if needed.



RAC 5 SwitchTips (286xxx)

Orifice Size - Inches

Fan Width	IN	(MM)	.007	.009	.011	.013	.015	.017	.019	.021	.023	.025	.027	.029	.031	.033	.035	.039	.043	.045	.051	.055	.063	.065
	2-4 (51-102)				109	111	113	115	119	121								235						
4-6 (102-152)	207		209	211	213	215	217	219	211	223	225													
6-8 (152-203)	307		309	311	313	315	317	319	321	323	325	327			331									
8-10 (203-254)			409	411	413	415	417	419	421	423	425	427	429		433	435	439	443			451	455		
10-12 (254-305)			509	511	513	515	517	519	521	523	525	527	529	531	533	535		543			551	555	563	
12-14 (305-356)			609	611	613	615	617	619	621	623	625	627	629	631	633	635			645			655		665
14-16 (356-406)									721	723	725		729											
16-18 (406-457)						815	817	819	821			827		831	833	835								
18-20 (457-508)							917									935								
Flow Rate (gpm)			.05	.09	.12	.18	.24	.31	.38	.47	.57	.67	.77	.90	1.03	1.17	1.31	1.63	1.98	2.17	2.79	3.25	4.26	4.53
Flow Rate (lpm)			.20	.33	.49	.69	.91	1.17	1.47	1.79	2.15	2.54	2.96	3.42	3.90	4.42	4.98	6.18	7.51	8.23	10.57	12.29	16.13	17.17

Water at 2000 psi (138 bar, 13.8 MPa); paints with a higher viscosity will decrease the flow rate.

Example: For a tip with a .011 orifice and a 6 in (152 mm) pattern, order 286311.

Tip Guards

Proven quality and maximum performance are designed and built into every tip guard made by Graco.

TIP GUARDS	PART #s	THREAD SIZES	GUNS	TIPS
	246215	7/8 in (22 mm)	Standard Graco thread	RAC X, FFLP, FFT, WR
	246437	11/16 in (17.5 mm)	Older style Graco Pole Guns, Fits Competitive Guns with 11/16 in threads	RAC X, FFLP, FFT, WR
	243161	7/8 in (22 mm)	Standard Graco thread	RAC 5, RAC IV
	243263	11/16 in (17.5 mm)	Older style Graco Pole Guns	LineLazer RAC 5
	XHD001	7/8 in (22 mm)	Standard Graco thread	XHD RAC
	220251	7/8 in (22 mm)	Standard Graco thread	Contractor
	220255	11/16 in (17.5 mm)	Older style Graco Pole Guns, Fits Competitive Guns with 11/16 in threads	Contractor
	220247	7/8 in (22 mm)	Standard Graco thread	Fine Finish Flat
	220249	11/16 in (17.5 mm)	Older style Graco Pole Guns, Fits Competitive Guns with 11/16 in threads, Tip Filter Housings and Swivel Adapters	Fine Finish Flat