

Right Angle Sanders, Buffers & Polishers

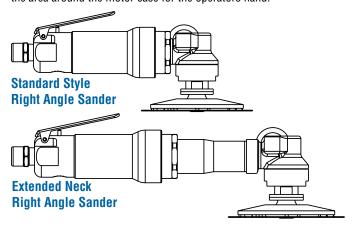
Section Contents

Tool Category	Page Number	Model Number	Power	Sanding Pad Size	Features	
	30	250RA			Durable Head Design with Small Motor	
	31	250RAE	0.4 H.P.		Durable Head Design & Extended Neck with Small Motor	
	33	270RA	0.411.1.		Small Head & Extended Neck with Small Motor	
32	20	280RA			Small Head with Small Motor (Lower Speed)	
	32	290RA		2 Inch or 3 Inch	Small Head with Small Motor (Higher Speed)	
	30	300RA		2 mon or 5 mon	Durable Head Design with Small Motor	
	33 320F	300RAE	0.7 H.P.		Durable Head Design & Extended Neck with Small Motor	
		320RA	0.7 11.11		Small Head & Extended Neck with Small Motor	
		330RA			Small Head with Small Motor (Lower Speed)	
		340RA			Small Head with Small Motor (Higher Speed)	
Right	30	400RA		4 Inch	Durable Head Design with Powerful Motor	
Angle Sanders	31	400RAE			Durable Head Design & Extended Neck with Powerful Motor	
	30	407RA	1.2 H.P.	4 Inch or 5 Inch	Durable Head Design with Powerful Governed Motor	
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	33	420RA		2 Inch or 3 Inch	Small Head & Extended Neck with Powerful Motor	
	36	520RA	2.0 H.P.	7 Inch or 9 Inch	Larger Right Angle Grinder for Larger Applications	
		2601RA	0.4 H.P.		Very Small Head & Extended Neck with Small Motor	
	34	3101RA	0.7 H.P.	2 Inch	very offian flead & Extended Neck with offian worth	
		4101RA			Very Small Head & Extended Neck with Powerful Motor	
		4520RA		Large Head with Powerful Motor (Lower Speed)		
	35	4527RA		7 Inch or 9 Inch	Large Head with Powerful Governed Motor (Lower Speed)	
	33	4620RA		7 IIICII OI 9 IIICII	Large Head with Powerful Motor (Higher Speed)	
		4627RA			Large Head with Powerful Governed Motor (Higher Speed)	
	37	400RA(X)M	1.2 H.P.	Medium	Durable Head Design with Powerful Motor (Planetary Gears)	
Right Angle	37	400RAE(X)M		Polishing Wheels	Durable Head Design & Extended Neck with Powerful Motor (Planetary Gears)	
Buffers & Polishers	38	4520RA(X)M		Larger	Large Head with Powerful Motor (Lower Speed - Planetary Gears)	
	30	4620RA(X)M		Polishing Wheels	Large Head with Powerful Motor (Higher Speed - Planetary Gears)	



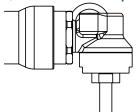
Extend Neck vs Standard

The extended neck option helps in regards to clearance issues when using various types of larger surface finishing abrasives. In these instances, the surface finishing abrasive can interfere with the area around the motor case normally used by the operator to grip the tool. The extended neck option moves the surface finishing abrasive forward which clears the area around the motor case for the operators hand.



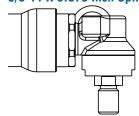
Spindle Options

3/8-24 X 0.980 Inch Spindle (Spindle Size 4)



This spindle is the most versatile. Adapters are available which will allow nearly any wheel to mount on this spindle (See chart below.)

5/8-11 X 0.875 Inch Spindle (Spindle Size 2)



This spindle is commonly used with type 27 (depressed center) wheels with a either a 7/8" mounting hole or built-in flanges with threads. Adapters are available. (See chart below.)

Lever Style

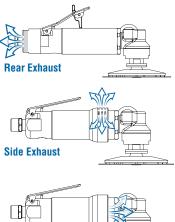


Case Material



The choice of case material affects the weight and durability of the tool. By it's nature, aluminum is lighter in weight than steel. Steel is also more durable in aggressive environments.

Exhaust Direction

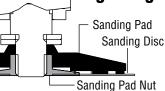


Front Exhaust

Speed/Sanding Pad Selection

The operating speed and sanding pad size are closely linked to promote safety and maximize efficiency of the sanding operation. Each model offers various options listed in the Model Number Breakdown and in the chart with each product spread. The choices are based on the characteristics of each model. Please examine the speed/sanding pad size options that best matches the application.

Sanding Disk Mounting for Right Angle Sanders





iralcool® Pads				
Part Number	Threads	Size	Description	Maximum Speed
889271-A	3/8-24	4 Inch (100mm)	Sanding Pad	12000 R.P.M.
849848-A	3/8-24	5 Inch (125mm)	Sanding Pad	10000 R.P.M
889271	5/8-11	4 Inch (100mm)	Sanding Pad	12000 R.P.M
849848	5/8-11	5 Inch (125mm)	Sanding Pad	10000 R.P.M
849913	5/8-11	7 Inch (180mm)	Sanding Pad	8500 R.P.M
849914	5/8-11	9 Inch (230mm)	Sanding Pad	6500 R.P.M
849259-A	3/8-24		Sanding Pad Nut	
849259	5/8-11		Sanding Pad Nut	
102-SPWR			Pad Nut Wrench	



1" (25 mm) - 5" (125 mm) 0.4 - 1.2 H.P. (300 - 900 W)



Air Inlet Size:

250RA/300RA: 1/4" NPT 400RA/407RA: 3/8" NPT

Hose Size Recommendations: 250RA/300RA: 3/8" (10 mm) 400RA/407RA: 1/2" (13 mm)

Extra Charge Accessories

Type 27 Adapters
 Safety Lever

Standard Equipment

- Tool Operating Instructions and Service Manual
- 2 Wrenches (sizes based on options)

Special Features

· Dual Position Dead Handle Mount

Quick Order Number

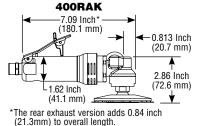
This chart has been provided as a means to quickly identify a particular tool. The ordering numbers listed represent the most common versions of our tools. If more special ized versions are required, please build your model number per the following model number flow chart.

Model	Spindle	Sanding Pad	Maximum	Throttle Type		
Number	Thread	Size	Operating Speed	Standard Throttle	Safety Throttle	
250RA	1/4-20	Maximum 3"	20000 RPM	250RA6	250RA6K	
300RA	External	(Not Supplied)	15000 RPM	300RA6	300RA6K	
400DA	E/O 11	4"	10000 DDM	400RA2;4SP	400RA2K;4SP	
400RA	5/8-11	5"	10000 RPM	400RA2;5SP	400RA2K;5SP	

The tools listed in this chart will be provided with an aluminum housing. Steel housing material is available. See information below for the entire spectrum of options available.



Front view of 250RA/300RA/400RA/407RA Series Tool



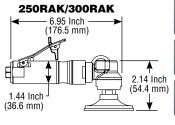
1.2 H.P. (900 W)



2.8 Lb. (1.3 Kg) Aluminum 3.5 Lb. (1.6 Kg) Steel



20 cfm (9.4 L/s) Free Speed 35 cfm (16.5 L/s) Max





250RA - 0.4 H.P. (300 W) 300RA - 0.7 H.P. (525 W)



250RA - 18 cfm (8.5 L/s) Max. 300RA - 25 cfm (11.8 L/s) Max.





1.2 H.P. (900 W)

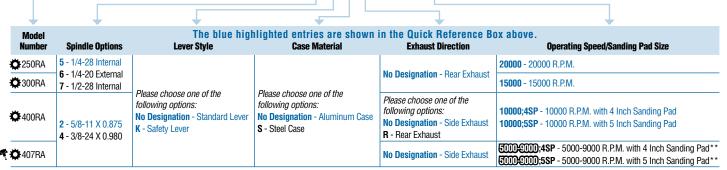


2.8 Lb. (1.3 Kg) Aluminum 3.5 Lb. (1.6 Kg) Steel



20 cfm (9.4 L/s) Free Speed 35 cfm (16.5 L/s) Max

Example Model Number: <u>400RA 4 K S R</u>; <u>10000;4SP</u>

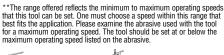


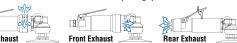
🗬 Governor Controlled Tool













1" (25 mm) - 5" (125 mm) 0.4 H.P. - 1.2 H.P. (300 - 900 w)



Air Inlet Size:

250RAE/300RAE: 1/4" NPT 400RAE/407RAE: 3/8" NPT

Hose Size Recommendations: 250RAE/300RAE: 3/8" (10 mm) 400RAE/407RAE: 1/2" (13 mm)

Extra Charge Accessories

• Type 27 Adapters • Safety Lever

Standard Equipment

- Tool Operating Instructions and Service Manual
- 2 Wrenches (sizes based on options)

Special Features

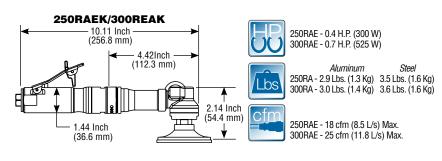
• Dual Position Dead Handle Mount

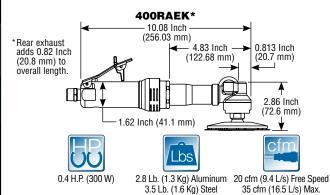
Quick Order Number

This chart has been provided as a means to quickly identify a particular tool. The ordering numbers listed represent the most common versions of our tools. If more specialized versions are required, please build your model number per the following model number flow

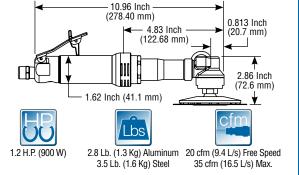
Model	Cuindle	Conding Dod	Maximum	Throttle Type		
Number	Spindle Thread	Sanding Pad Size	Operating Speed	Standard Throttle	Safety Throttle	
250RAE	1/4-20	(Not Supplied)	20000 RPM	250RAE6	250RAE6K	
300RAE	External	(Not Supplied)	15000 RPM	300RAE6	300RAE6K	
400RAE	E/0.11	4"	10000 RPM	400RAE2;4SP	400RAE2K;4SP	
40UNAE	5/8-11	5"	TUUUU KPIVI	400RAE2;5SP	400RAE2K;5SP	

The tools listed in this chart will be provided with an aluminum housing. Steel housing material is available. See information below for the entire spectrum of options available.





407RAEK



that this tool can be set. One must choose a speed within this range that best fits the application. Please examine the abrasive used with the tool

for a maximum operating speed. The tool should be set at or below the

Example Model Number: 400RA 4 K S R; 10000;4SP

1	↓		—	—	↓
Model Number	Spindle Options	The blue higl Lever Style	nlighted entries are shown Case Material	in the Quick Reference B Exhaust Direction	ox above. Operating Speed/Sanding Pad Size
2 50RAE	5 - 1/4-28 Internal			Please choose one of the following options:	20000 - 20000 R.P.M.
☼ 300RAE	6 - 1/4-20 External 7 - 1/2-28 Internal	Please choose one of the following options:	Please choose one of the following options: No Designation - Aluminum Case	No Designation - Side Exhaust R - Rear Exhaust	15000 - 15000 R.P.M.
4 00RAE	2 - 5/8-11 X 0.88	No Designation - Standard Lever No Designation - Aluminum Case No D		No Designation - Side Exhaust R - Rear Exhaust	10000;4SP - 10000 R.P.M. with 4 Inch Sanding Pad 10000;5SP - 10000 R.P.M. with 5 Inch Sanding Pad
₹ 🌣 407RAE	4 - 3/8-24 X 0.98			No Designation - Side Exhaust	5000-2000;4SP - 5000-9000 R.P.M. with 4 Inch Sanding Pad** 5000-2000;5SP - 5000-9000 R.P.M. with 5 Inch Sanding Pad**
Geared To	nol				**The range offered reflects the minimum to maximum operating speeds

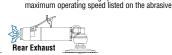
Geared Tool

Tool Governor Controlled Tool









WARNING: Follow all recommendations from component and abrasive manufacturers for speeds and proper usage.



Quick Order Number

Spindle Thread

1/4-20 External

Model Number

280RA

290RA

330RA

340RA

Right Angle Sanders for use with Abrasive Discs

2" (50 mm)

0.4 H.P. - 0.7 H.P. (300 - 525 W)



This chart has been provided as a means to quickly identify a particular tool. The ordering numbers listed represent the most common versions of our tools. If more specialized versions are required, please build your model number per the following model number flow chart.

Rated Speed

16000 RPM

26000 RPM

12000 RPM

20000 RPM

The tools listed in this chart will be provided with an aluminum housing. Steel

housing material is available. See information below for the entire spectrum of

options available.

Throttle Type

Safety Lever

280RA6K

290RA6K

330RA6K

340RA6K

Standard Lever

280RA6

290RA6

330RA6

340RA6

Air Inlet Size: 1/4" NPT

Hose Size Recommendations: 3/8" (10mm) **Extra Charge Accessories**

· Safety Lever

Standard Equipment

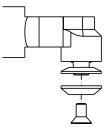
- Tool Operating Instructions and Service Manual
- 2 Wrenches (sizes based on options)

Special Features

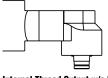
Small Right Angle Head for Limited Space Sanding







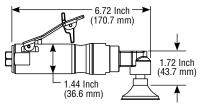
Internal Thread Output w/Flanges to Mount 1/4" ID Surface Conditioning Discs



Internal Thread Output w/o Flanges to **Mount Cartridge Rolls**

Very Small RA Head for **Applications** where Size is Critical Type 5 or 7 Type 6 **Internal Threads External Threads**

280RAK/290RAK/330RAK/340RAK





280RA/290RA - 0.4 H.P. (300 W) 330RA/340RA - 0.7 H.P. (525 W)

Lbs

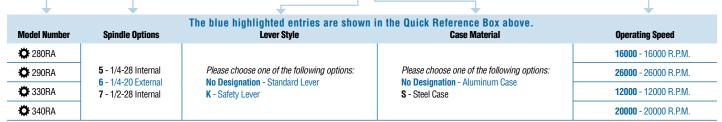
Aluminum Steel 280RA - 1.3 Lbs. (0.6 Kg) 1.8 Lbs. (0.8 Kg) 290RA - 1.3 Lbs. (0.6 Kg) 1.8 Lbs. (0.8 Kg) 330RA - 1.4 Lbs. (0.6 Kg) 2.0 Lbs. (0.9 Kg) 340RA - 1.4 Lbs. (0.6 Kg) 2.0 Lbs. (0.9 Kg)



280RA/290RA - 18 cfm (8.5 L/s) Max. 330RA/340RA - 25 cfm (11.8 L/s) Max.

Example Model Number:

330RA 6 K S ; 12000









2" (50 mm) 0.4 H.P. - 1.2 H.P. (300 - 900 W)



Air Inlet Size:

270RA/320RA: 1/4" NPT

420RA: 3/8" NPT

Hose Size Recommendations:

270RA/320RA: 3/8" (10mm)

420RA: 1/2" (13mm)

Extra Charge Accessories

270RA - 18 cfm (8.5 L/s) Max

320RA - 25 cfm (11.8 L/s) Max

· Safety Lever

Standard Equipment

• Tool with Wrench • Operating Instructions and Service Manual

Special Features

· Small Right Angle Head for Limited Space Sanding

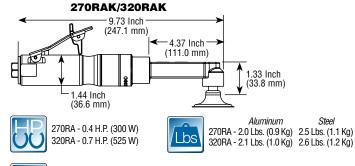
Quick Order Number

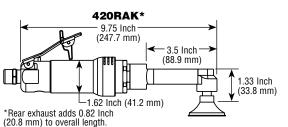
This chart has been provided as a means to quickly identify a particular tool. The ordering numbers listed represent the most common versions of our tools. If more specialized versions are required, please build your model number per the following model number flow chart.

Model			Throttle Type		
Model Number	Spindle Thread	Rated Speed	Standard Lever	Safety Lever	
270RA	1/4-20 External	26000 RPM	270RA6	270RA6K	
320RA		20000 RPM	320RA6	320RA6K	
420RA		13000 RPM	420RA6	420RA6K	
	^				

The tools listed in this chart will be provided with an aluminum housing. Steel housing material is available. See information below for the entire spectrum of options available.











2.7 Lb. Aluminum 3.2 Lb. Steel

35 cfm (16.5 L/s) Max

Example Model Number: 320RA 6 K S R; 20000

—	+		▼		+
Model Number	Spindle Options	The blue high Lever Style	nlighted entries are shown Case Material	in the Quick Reference Bo Exhaust Direction	ox above. Operating Speed
☼ 270RA	5 - 1/4-28 Internal	Please choose one of the	Please choose one of the	Please choose one of the	26000 - 26000 R.P.M.
	6 - 1/4-20 External	following options: No Designation - Standard Lever	following options: No Designation - Aluminum Case	following options: No Designation - Side Exhaust	20000 - 20000 R.P.M.
420 RA	7 - 1/2-28 Internal	K - Safety Lever	S - Steel Case	R - Rear Exhaust	13000 - 13000 R.P.M.

Geared Tool

Internal Thread Output w/Flanges to Mount 1/4" ID

Surface Conditioning Discs

Internal Thread Output w/o Flanges to Mount Cartridge Rolls









1" (25 mm) - 2" (50 mm) 0.4 H.P. - 1.2 H.P. (300 - 900 W)



Air Inlet Size:

2601RA/3101RA: 1/4" NPT

4101RA: 3/8" NPT

Hose Size Recommendations:

2601/3101RA: 3/8" (10mm)

4101RA: 1/2" (13mm) **Extra Charge Accessories**

Safety Lever

Standard Equipment

• Tool with Wrench • Operating Instructions and Service Manual

Special Features

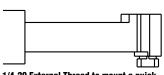
- · Small Right Angle Head for Limited Space Sanding
- · Extended Neck for Better Reach

Quick Order Number

This chart has been provided as a means to quickly identify a particular tool. The ordering numbers listed represent the most common versions of our tools. If more specialized versions are required, please build your model number per the following model number flow chart.

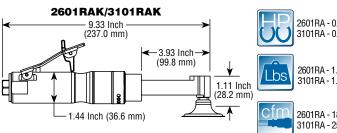
Model	Spindle Thread	Datad Cuand	Throttle Type	
Number	Spiniale Thread	Rated Speed	Standard Lever	Safety Lever
2601RA		30000 RPM	2601RA6	2601RA6K
3101RA	1/4-20 External	23000 RPM	3101RA6	3101RA6K
4101RA		15000 RPM	4101RA6	4101RA6K

The tools listed in this chart will be provided with an aluminum housing. Steel housing material is available. See information below for the entire spectrum of options available.



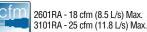
1/4-20 External Thread to mount a quick change sanding pad directly to tool.

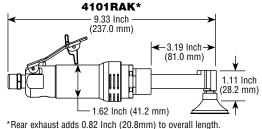












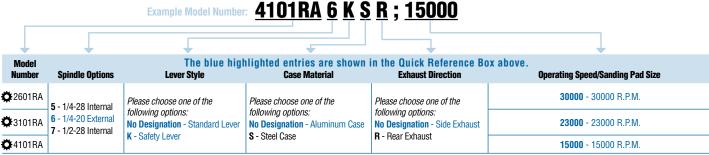






1.2 H.P. (900 W) 2.8 Lb. (1.6 Kg) Steel

2.3 Lb. (1.3 Kg) Aluminum 35 cfm (16.5 L/s) Max.











5" (125 mm) - 9" (230 mm) 1.2 H.P. (900 W)



Air Inlet Size: 3/8" NPT

Hose Size Recommendations: 1/2" (13 mm) **Extra Charge Accessories**

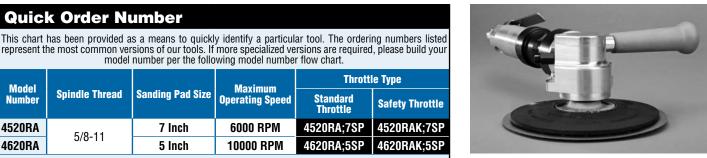
· Safety Lever

Standard Equipment

- Tool
 Operating Instructions and Service Manual
- 1 Wrench and 1 Pad Nut Wrench

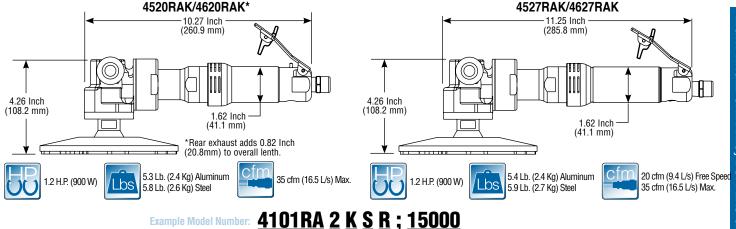
SPECIAL FEATURES

- 1.2 H.P. Motor
- · Dual Position Dead Handle Mount

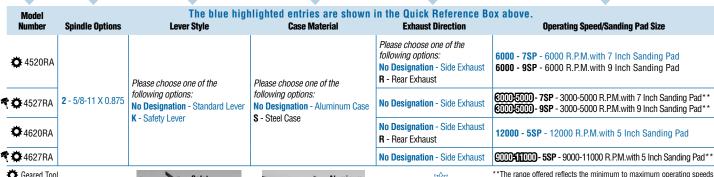


The tools listed in this chart will be provided with an aluminum housing. Steel housing material is available See information below for the entire spectrum of options available.

Front view of 4520RA/4527/4620RA/4627RA Series Tools





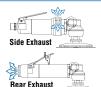


Geared Tool

Governor Controlled Tool







**The range offered reflects the minimum to maximum operating speeds that this tool can be set. One must choose a speed within this range that best fits the application. Please examine the abrasive used with the tool for a maximum operating speed. The tool should be set at or below the maximum operating speed listed on the abrasive.



7" (180 mm) - 9" (230 mm) 2 H.P. (1500 W)



Air Inlet Size: 1/2" NPT Hose Size Recommendations: 1/2" (13 mm) **Standard Equipment**

- Tool Operating Instructions and Service Manual
- 2 Wrenches (sizes based on options)

Quick Reference

Quick Order Number This chart has been provided as a means to quickly identify a particular tool. The ordering numbers listed represent the most common versions of our tools. If more specialized versions are required, please build your model number per the following model number flow chart. **Throttle Type** Model Maximum **Spindle Thread Sanding Pad Size** Standard Throttle **Operating Speed Safety Throttle** 520RA 5/8-11 X 0.9 Inch 7 Inch 8000 RPM 520RAXL:7SP 520RAXK:7SP The tools listed in this chart will be provided with an aluminum housing. Steel housing material is available

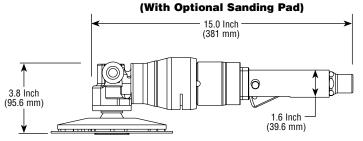
See information below for the entire spectrum of options available

520RAK

Back Mountable Dead Handle



Spindle Lock

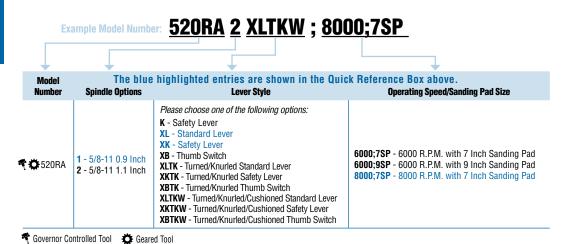




8.0 Lb. (3.6 Kg)

2.0 H.P. (1500 W)







7" (180 mm) 1.2 H.P. (900 w)



*The (X) is representative of gear train number (3, 5 or 8). The outer appearance of the tool is the same regardless of the gear train number.

Air Inlet Size: 3/8" NPT (3/8" BSP Available) **Hose Size Recommendations:** 1/2" (13 mm)

Extra Charge Accessories

Type 27 Adapters • Safety Lever

Standard Equipment

- Tool Operating Instructions and Service Manual
- 2 Wrenches (sizes based on options)

Special Features

• 1.2 H.P. Motor • Dual Position Dead Handle Mount

Quick Order Number

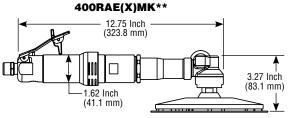
This chart has been provided as a means to quickly identify a particular tool. The ordering numbers listed repre sent the most common versions of our tools. If more specialized versions are required, please build your model number per the following model number flow chart.

Model	Spindle	Sanding Pad Size	Maximum	Throttle Type		
Number	Thread		Operating Speed	Standard Throttle	Safety Throttle	
400RA3M	5/8-11	7 Inch	2700 RPM	400RA3M;7SP	400RA3MK;7SP	
400RA5M			2000 RPM	400RA5M;7SP	400RA5MK;7SP	
400RA8M			1200 RPM	400RA8M;7SP	400RA8MK;7SP	
400RAE3M			2700 RPM	400RAE3M;7SP	400RAE3MK;7SP	
400RAE5M			2000 RPM	400RAE5M;7SP	400RAE5MK;7SP	
400RAE8M			1200 RPM	400RAE8M;7SP	400RAE8MK;7SP	

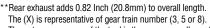
The tools listed in this chart will be provided with an aluminum housing. Steel housing material is available. See information below for the entire spectrum of options available

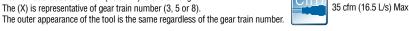


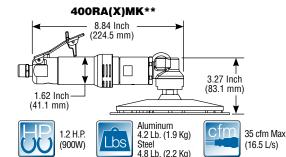
Front view of 400RA(X)M Series Tools





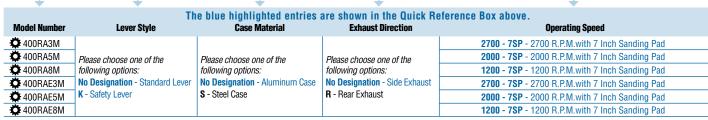






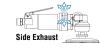


1.2 H.P. (900 W)











WARNING: Follow all recommendations from component and abrasive manufacturers for speeds and proper usage.



7" (180 mm) 1.2 H.P. (900 w)



*The (X) is representative of gear train number (3, 5 or 8).
The outer appearance of the tool is the same regardless of the gear train number.

Air Inlet Size: 3/8" NPT

Hose Size Recommendations: 1/2" (13 mm)

Extra Charge Accessories

• Type 27 Adapters • Safety Lever

Standard Equipment

- Tool Operating Instructions and Service Manual
- 2 Wrenches (sizes based on options)

Special Features

- Front, Side or Rear Exhaust Available
- 1.2 H.P. Motor Dual Position Dead Handle Mount

Quick Order Number

This chart has been provided as a means to quickly identify a particular tool. The ordering numbers listed represent the most common versions of our tools. If more specialized versions are required, please build your model number per the following model number flow chart.

Model	Spindle	Sanding Maximum		Throttle Type		
Number	Thread	Pad Size	Operating Speed	Standard Throttle	Safety Throttle	
4520RA3M	5/8-11	7 Inch	2000 RPM	4520RA3M;7SP	4520RA3MK;7SP	
4520RA5M			1200 RPM	4520RA5M;7SP	4520RA5MK;7SP	
4520RA8M			750 RPM	4520RA8M;7SP	4520RA8MK;7SP	
4620RA3M			4000 RPM	4620RA3M;7SP	4620RA3MK;7SP	
4620RA5M			2400 RPM	4620RA5M;7SP	4620RA5MK;7SP	
4620RA8M			1500 RPM	4620RA8M;7SP	4620RA8MK;7SP	

The tools listed in this chart will be provided with an aluminum housing. Steel housing material is available. See information below for the entire spectrum of options available.

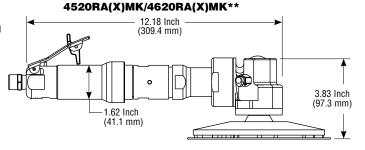


Front view of 4520RA(X)M/4620RA(X)M Series Tools

**Rear exhaust adds 0.82 Inch (20.8mm) to overall length.

The (X) is representative of gear train number (3, 5 or 8).

The outer appearance of the tool is the same regardless of the gear train number





1.2 H.P. (900 W)



Aluminum Steel 4520RA(X)MK - 6.1 Lbs. (2.8 Kg) 6.7 Lbs. (3.0 Kg) 4620RA(X)MK - 6.2 Lbs. (2.8 Kg) 6.8 Lbs. (3.1 Kg)



35 cfm (16.5 L/s) Max

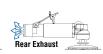
Example Model Number: 4520RA3M K S R; 2000;7SP

The blue highlighted entries are shown in the Quick Reference Box above. **Model Number Lever Style** Case Material **Exhaust Direction Operating Speed** 4520RA3M 2000;7SP - 2000 R.P.M.with 7 Inch Sanding Pad 4520RA5M 1200;7SP - 1200 R.P.M.with 7 Inch Sanding Pad Please choose one of the Please choose one of the Please choose one of the 4520RA8M 750;7SP - 750 R.P.M.with 7 Inch Sanding Pad following options: following options: following options: No Designation - Aluminum Case No Designation - Side Exhaust 4620RA3M No Designation - Standard Lever 4000;7SP - 4000 R.P.M.with 7 Inch Sanding Pad **☆** 4620RA5M K - Safety Lever S - Steel Case R - Rear Exhaust 2400;7SP - 2400 R.P.M.with 7 Inch Sanding Pad **4**620RA8M 1500;7SP - 1500 R.P.M.with 7 Inch Sanding Pad









WARNING: Follow all recommendations from component and abrasive manufacturers for speeds and proper usage.