
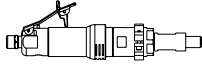
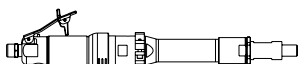

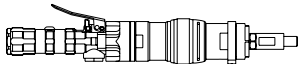

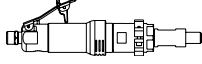
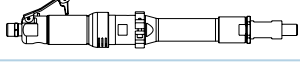
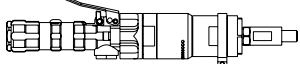
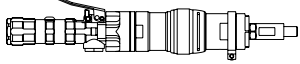


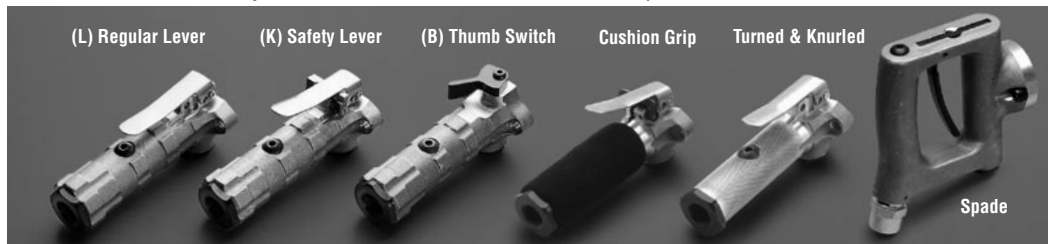
## Horizontal Sanders/Polishers

### Section Contents

SANDERS (Single Planetary Gear Train)					
Page Number	Model Number	Power	Rated Operating Speed	Description	
43	400HGE3M	1.2 H.P.	5500 R.P.M.	<ul style="list-style-type: none"> <li>Non-Governed Motor</li> <li>Collet Output</li> </ul>	
	400HGE5M		4000 R.P.M.		
	400HGE8M		2500 R.P.M.		
44	400GT3M	1.2 H.P.	5500 R.P.M.	<ul style="list-style-type: none"> <li>Non-Governed Motor</li> <li>Threaded or Adapter Output</li> </ul>	
	400GT5M		4000 R.P.M.		
	400GT8M		2500 R.P.M.		
42	400GH3M	1.2 H.P.	5500 R.P.M.	<ul style="list-style-type: none"> <li>Non-Governed Motor</li> <li>Collet, Threaded or Adapter Output</li> </ul>	
	400GH5M		4000 R.P.M.		
	400GH8M		2500 R.P.M.		
45	500H1M	1.5 H.P.	4000 R.P.M.	<ul style="list-style-type: none"> <li>Non-Governed Motor</li> <li>Threaded or Adapter Output</li> </ul>	
	507H1M	1.5 H.P.	1750 - 3600 R.P.M.		
	520H1M	2.0 H.P.	1500 - 3000 R.P.M.	<ul style="list-style-type: none"> <li>Governed Motor</li> <li>Threaded or Adapter Output</li> </ul>	
BUFFERS & POLISHERS (Double Planetary Gear Train)					
Page Number	Model Number	Power	Rated Operating Speed	Description	
43	400HGE21M	1.2 H.P.	900 R.P.M.	<ul style="list-style-type: none"> <li>Non-Governed Motor</li> <li>Collet Output</li> </ul>	
	400HGE36M		525 R.P.M.		
44	400GT21M	1.2 H.P.	900 R.P.M.	<ul style="list-style-type: none"> <li>Non-Governed Motor</li> <li>Threaded or Adapter Output</li> </ul>	
	400GT36M		525 R.P.M.		
42	400GH21M	1.2 H.P.	900 R.P.M.	<ul style="list-style-type: none"> <li>Non-Governed Motor</li> <li>Collet, Threaded or Adapter Output</li> </ul>	
	400GH36M		525 R.P.M.		
45	500H2M	1.5 H.P.	1000 R.P.M.	<ul style="list-style-type: none"> <li>Non-Governed Motor</li> <li>Threaded or Adapter Output</li> </ul>	
	507H2M	1.5 H.P.	500 - 900 R.P.M.		
	520H2M	2.0 H.P.	375 - 750 R.P.M.	<ul style="list-style-type: none"> <li>Governed Motor</li> <li>Threaded or Adapter Output</li> </ul>	

### Handles

Several different handle styles are offered on our vertical tools. The picture below shows each in detail.



\*Only Tools of 1.5 H.P. or Larger can Accept the Spade Style handle. Tools of 1.2 H.P. and Lower have Different Handle Options.

### Lever Style



### Speed Size Selection

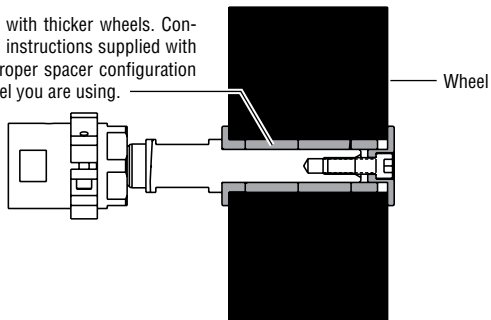
Each model offers various options listed in the Model Number Breakdown and in the chart with each product spread. The choices are based on the characteristics of each model. Please examine the speed size options to select the one that best matches the wheel size you are using.

## Mounting of Wheels

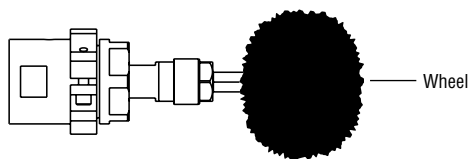
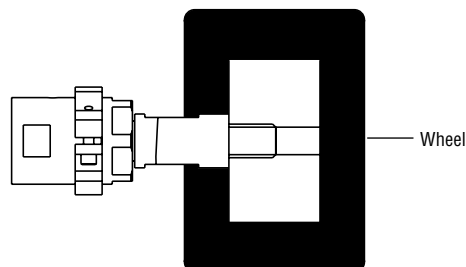
Each wheel type mounts onto the tool in a specific way. Please consult the diagrams below for details on how your particular wheel mounts onto the tool. More details on the mounting of wheels can be found in ANSI B186.1. Mounting wheels in ways other than those shown below are non-compliant and may lead to injury.

### Proper Mounting of Flap and Surface Conditioning Wheels with a 1 Inch or 5/8 Inch Mounting Hole

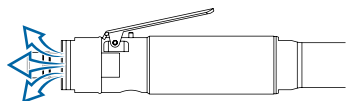
Spacers are used with thicker wheels. Consult the mounting instructions supplied with the tool for the proper spacer configuration based on the wheel you are using.



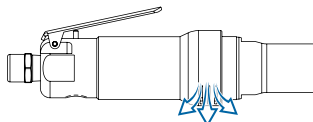
### Proper Mounting of Inflatable and Expanding Wheels with a Threaded Mounting (1/2-13 or 5/8-11)



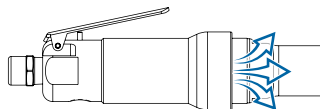
## Exhaust Direction



**Rear Exhaust**  
(0.7 HP & 1.2 HP Tools Only)



**Side Exhaust**



**Front Exhaust**

## Horizontal Sanders & Polishers

525 R.P.M. to 5500 R.P.M.  
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**

- Safety Lever
- Standard Equipment**
- Tool • Wheel Flange
- Wheel Nut • Wrench
- Operating Instructions and Service Manual

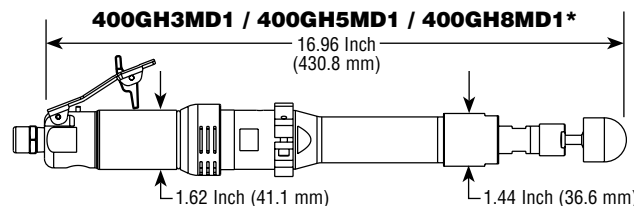
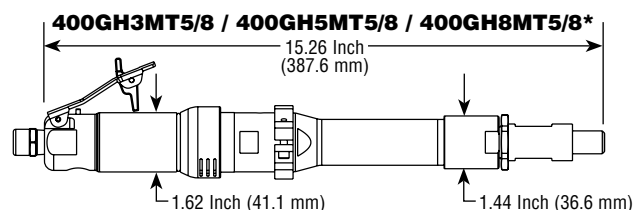


### Quick Order Number

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 Number	Rated Speed	Output Type		
		T5/8 - 5/8-11 Spindle	S1 - 1 or 5/8 Inch Adapter	D - Collet
400GH3M	5500 RPM	400GH3MT5/8	400GH3MS1	400GH3MD;1/4
400GH5M	4000 RPM	400GH5MT5/8	400GH5MS1	400GH5MD;1/4
400GH8M	2500 RPM	400GH8MT5/8	400GH8MS1	400GH8MD;1/4
400GH21M	900 RPM	400GH21MT5/8	400GH21MS1	400GH21MD;1/4
400GH36M	525 RPM	400GH36MT5/8	400GH36MS1	400GH36MD;1/4

All the versions listed in the table will be supplied with a standard lever throttle (class 1).  
A safety lever throttle (class 2) is also available.

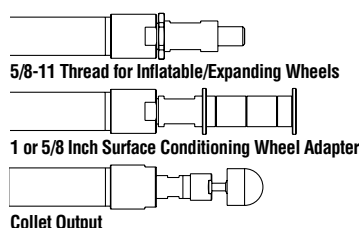
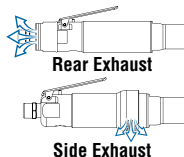


\*Versions 400GH21M & 400GH36M add 0.51 Inch (13.0mm) to the overall length.  
Rear exhaust adds 0.82 Inch (20.8mm) to overall length.

Example Model Number: **400GH3M K S R D ; 5500 ; 1/4**

Model Number	Lever Style	The blue highlighted entries are shown in the Quick Reference Box above. Case Material	Exhaust Direction	Output Type	Operating Speed	Collet Size*
400GH3M	Please choose one of the following options: <b>No Designation</b> - Standard Lever <b>K</b> - Safety Lever	Please choose one of the following options: <b>No Designation</b> - Aluminum Case <b>S</b> - Steel Case	Please choose one of the following options: <b>No Designation</b> - Side Exhaust <b>R</b> - Rear Exhaust	<b>T5/8 : 5/8-11 Thread for Inflatable/Expanding Wheels</b> <b>S1 : 1 or 5/8 Inch Surface Conditioning Wheel Adapter</b> <b>D : Collet Output</b>	5500 - 5500 R.P.M.	1/8 - 1/8 Inch
400GH5M					4000 - 4000 R.P.M.	1/4 - 1/4 Inch
400GH8M					2500 - 2500 R.P.M.	3/8 - 3/8 Inch
400GH21M					900 - 900 R.P.M.	3MM - 3 mm
400GH36M					525 - 525 R.P.M.	6MM - 6 mm

Geared Tool



\*An entry from this column is only necessary when the D (Collet Output) option is chosen.

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

## Horizontal Sanders & Polishers



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

- Safety Lever
- Standard Equipment**
- Tool • Wheel Flange
- Wheel Nut • Wrench
- Operating Instructions and Service Manual

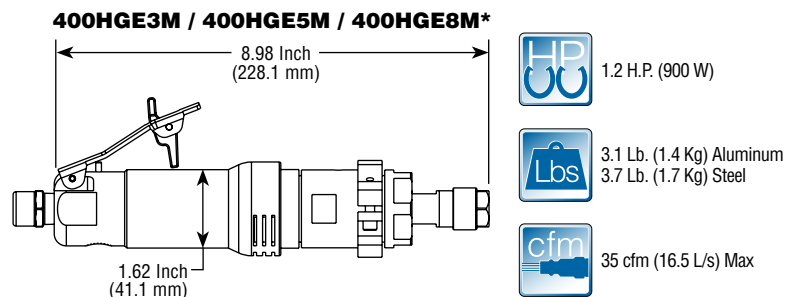
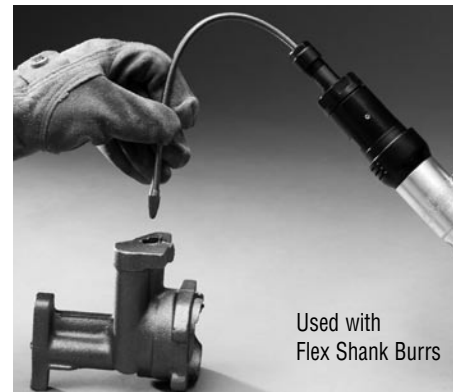
\*The (X) is representative of gear train number (3, 5 or 8).  
The outer appearance of the tool is the same regardless of the gear train number.

### 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 Number	Collet Size	Rated Speed	Throttle Type	
			Standard Throttle	Safety Throttle
400HGE3M	1/4 Inch	5500 RPM	400HGE3M;1/4	400HGE3MK;1/4
400HGE5M		4000 RPM	400HGE5M;1/4	400HGE5MK;1/4
400HGE8M		2500 RPM	400HGE8M;1/4	400HGE8MK;1/4
400HGE21M		900 RPM	400HGE21M;1/4	400HGE21MK;1/4
400HGE36M		525 RPM	400HGE36M;1/4	400HGE36MK;1/4

All the versions listed in the table will be supplied with a standard lever throttle (class 1).  
A safety lever throttle (class 2) is also available.



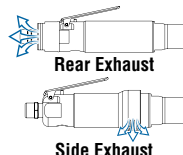
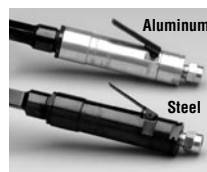
\*Versions 400HGE21M & 400HGE36M add 0.51 Inch (13.0mm) to the overall length.  
Rear exhaust adds 0.82 Inch (20.8mm) to overall length.

Example Model Number: **400HGE3M K S R ; 5500 ; 1/4**

The blue highlighted entries are shown in the Quick Reference Box above.

Model Number	Lever Style	Case Material	Exhaust Direction	Operating Speed	Collet Size
400HGE3M	Please choose one of the following options: <b>No Designation</b> - Standard Lever <b>K</b> - Safety Lever	Please choose one of the following options: <b>No Designation</b> - Aluminum Case <b>S</b> - Steel Case	Please choose one of the following options: <b>No Designation</b> - Side Exhaust <b>R</b> - Rear Exhaust	5500 - 5500 R.P.M.	1/8 - 1/8 Inch
400HGE5M				4000 - 4000 R.P.M.	1/4 - 1/4 Inch
400HGE8M				2500 - 2500 R.P.M.	3/8 - 3/8 Inch
400HGE21M				900 - 900 R.P.M.	3MM - 3 mm
400HGE36M				525 - 525 R.P.M.	6MM - 6 mm

Geared Tool



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

## Horizontal Sanders & Polishers

525 R.P.M. to 5500 R.P.M.  
1.2 H.P. (900 W)



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

- Safety Lever
- Standard Equipment**
- Tool • Wheel Flange
- Wheel Nut • Wrench
- Operating Instructions and Service Manual

\*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.

### Quick Order Number

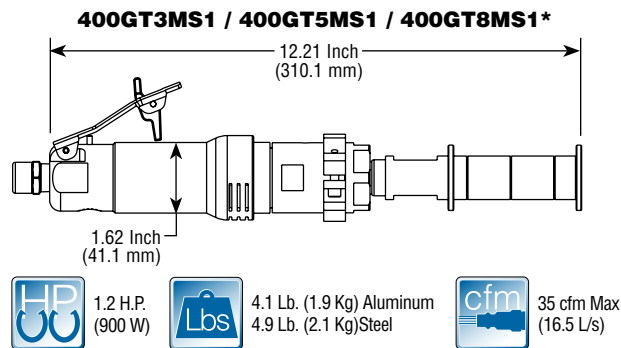
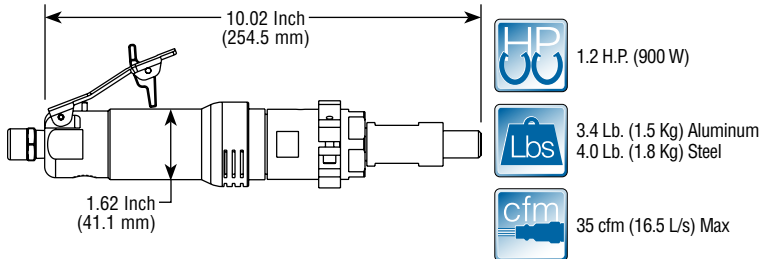
This chart has been provided as a means to quickly identify a particular tool. The ordering numbers listed represent the most common versions of our tools. If more specialized versions are required, please build your model number per the following model number flow chart.

Model Number	Rated Speed	Output Type	
		T5/8 - 5/8-11 Spindle	S1 - 1 or 5/8 Inch Adapter
400GT3M	5500 RPM	400GT3MT5/8	400GT3MS1
400GT5M	4000 RPM	400GT5MT5/8	400GT5MS1
400GT8M	2500 RPM	400GT8MT5/8	400GT8MS1
400GT21M	900 RPM	400GT21MT5/8	400GT21MS1
400GT36M	525 RPM	400GT36MT5/8	400GT36MS1

All the versions listed in the table will be supplied with a standard lever throttle (class 1).  
A safety lever throttle (class 2) is also available.



### 400GT3MT5/8 / 400GT5MT5/8 / 400GT8MT5/8\*

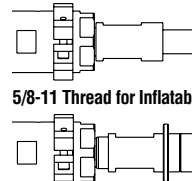
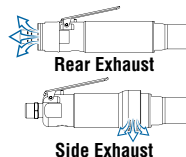


\*Versions 400GT21M & 400GT36M add 0.51 Inch (13.0mm) to the overall length.  
Rear exhaust adds 0.82 Inch (20.8mm) to overall length.

Example Model Number: **400GT3M K S R ; T5/8 ; 5500**

Model Number	Lever Style	Case Material	Exhaust Direction	Output Type	Operating Speed
400GT3M	Please choose one of the following options: <b>No Designation</b> - Standard Lever <b>K</b> - Safety Lever	Please choose one of the following options: <b>No Designation</b> - Aluminum Case <b>S</b> - Steel Case	Please choose one of the following options: <b>No Designation</b> - Side Exhaust <b>R</b> - Rear Exhaust	<b>T5/8 - 5/8-11 Thread for Inflatable/Expanding Wheels</b> <b>S1 - 1 or 5/8 Inch Surface Conditioning Wheel Adapter</b>	5500 - 5500 R.P.M.
400GT5M					4000 - 4000 R.P.M.
400GT8M					2500 - 2500 R.P.M.
400GT21M					900 - 900 R.P.M.
400GT36M					525 - 525 R.P.M.

Geared Tool



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

## Horizontal Sanders &amp; Polishers

375 R.P.M. to 4000 R.P.M.  
1.5-2 H.P. (1500-2250 W)

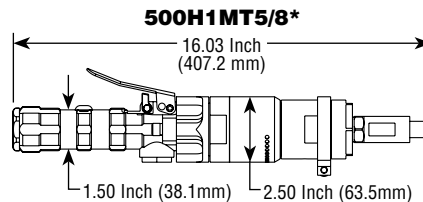
**Air Inlet Size: 1/2" NPT (1/2" BSP Available)**  
**Hose Size Recommendations: 1/2" (13 mm)**  
**Extra Charge Accessories**

- Safety Lever
- Standard Equipment**
- Tool • Wheel Flange • Wheel Nut • Wrench
- Operating Instructions and Service Manual
- Side Handle

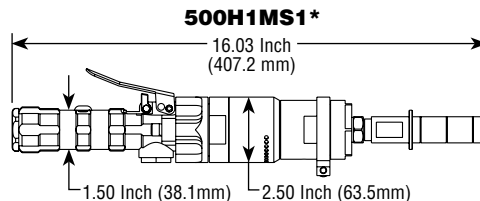
## Quick Order Number

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 Number	Rated Speed	Output Type	
		T5/8 - 5/8-11 Spindle	S1 - 1 or 5/8 Inch Adapter
500H1M	4000 RPM	500H1MT5/8	500H1MS1
500H2M	1000 RPM	500H2MT5/8	500H2MS1

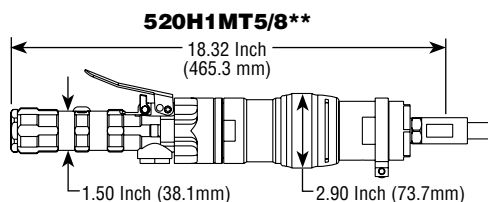


**HP** 1.5 H.P. (1500 W)  
**Lbs** 6.5 Lb. (2.9 Kg)  
**cfm** 35 cfm Max (16.5 L/s)

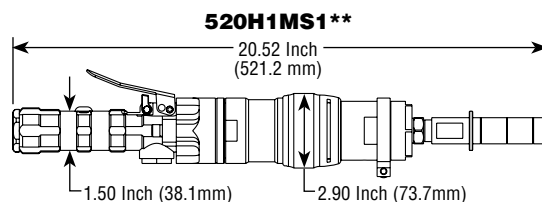


**HP** 1.5 H.P. (1500 W)  
**Lbs** 6.5 Lb. (2.9 Kg)  
**cfm** 35 cfm Max (16.5 L/s)

\*The Spade Handle (G) Adds 1 Lb. (0.45 Kg) To Weight Of Tool



**HP** 2.0 H.P. (2250 W)  
**Lbs** 8.5 Lb. (3.8 Kg)  
**cfm** 20 cfm (9.4 L/s) Free Speed  
 40 cfm (18.9 L/s) Max



**HP** 2.0 H.P. (2250 W)  
**Lbs** 8.5 Lb. (3.8 Kg)  
**cfm** 20 cfm (9.4 L/s) Free Speed  
 40 cfm (18.9 L/s) Max

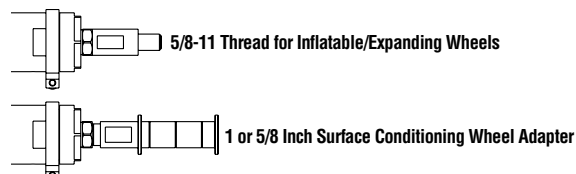
\*\* The 520H2 double planetary geared tools adds 2.15 Inch (54.6mm) to overall length.  
 The Spade Handle (G) Adds 1 Lb. (0.45 Kg) To Weight Of Tool

Example Model Number: **500H1M K S1 ; 4000**

The blue highlighted entries are shown in the Quick Reference Box above.

Model Number	Lever Style	Output Type	Operating Speed
500H1M	Please choose one of the following options: <b>L</b> - Standard Lever	Please choose one of the following options: <b>T5/8 - 5/8-11 Thread for Inflatable/Expanding Wheels</b> <b>S1 - 1 or 5/8 Inch Surface Conditioning Wheel Adapter</b>	<b>4000 - 4000 R.P.M.</b>
500H2M	<b>K</b> - Safety Lever		<b>1000 - 1000 R.P.M.</b>
507H1M	<b>B</b> - Thumb Switch		<b>1750 - 3600 - 1750 - 3600 R.P.M.</b>
507H2M	<b>G</b> - Spade Handle		<b>500 - 900 - 500 - 900 R.P.M.</b>
520H1M	<b>LTK</b> - Turned/Knurled Standard Lever		<b>1500 - 3000 - 1500 - 3000 R.P.M.</b>
520H2M	<b>KTKW</b> - Turned/Knurled/Cushioned Safety Lever		<b>375 - 750 - 375 - 750 R.P.M.</b>

- ⚙️ Geared Tool
- ⚙️ Governor Controlled Tool



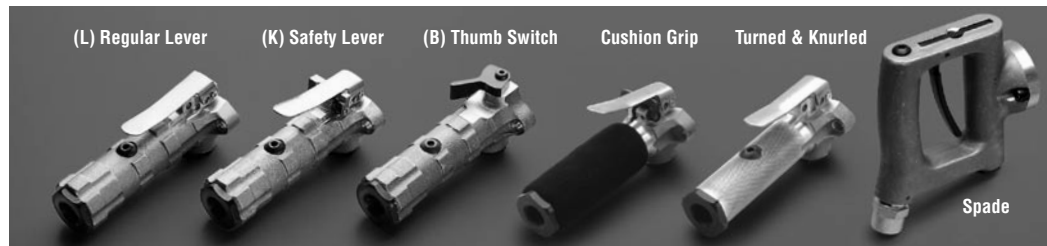
**WARNING: Follow all recommendations from component and abrasive manufacturers for speeds and proper usage.**

# Large Horizontal Grinders

## Section Contents

Page Number	Model Number	Power	Description			
47	5201H	2.0 H.P.	Horizontal Grinders for use with Larger (6 Inch - 8 Inch) Type 1 Wheels	Type 1 Wheel	Circular Flap Wheels	
47	56H	3.0 H.P.	Horizontal Grinders for use with Larger (6 Inch - 8 Inch) Type 1 Wheels	Surface Finishing Wheels	Circular Wire Wheels	
47	65H	4.0 H.P.				
48	400GH	1.2 H.P.	Horizontal Grinders for use with 5/8-11 Cone Wheels	Type 16 Cone Wheel	Type 17 Cone Wheel	
48	511H	1.5 H.P.	Horizontal Grinders for use with 5/8-11 Cone Wheels	Type 17R Cone Wheel	Type 18 Cone Wheel	
48	5201H	2.0 H.P.	Horizontal Grinders for use with 5/8-11 Cone Wheels			
48	56H	3.0 H.P.	Horizontal Grinders for use with 5/8-11 Cone Wheels	Type 18R Cone Wheel		
48	65H	4.0 H.P.				

## Handles



Several different handle styles are offered on our horizontal tools. The picture above shows each in detail.

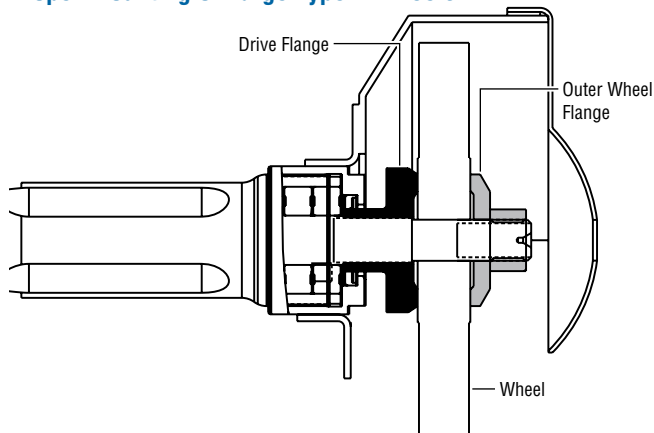
## Speed/Guard Size Selection

The operating speed and guard size are closely linked to promote safety and maximize efficiency of the grinding 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/guard size options to select the one that matches the wheel speed/size you are using.

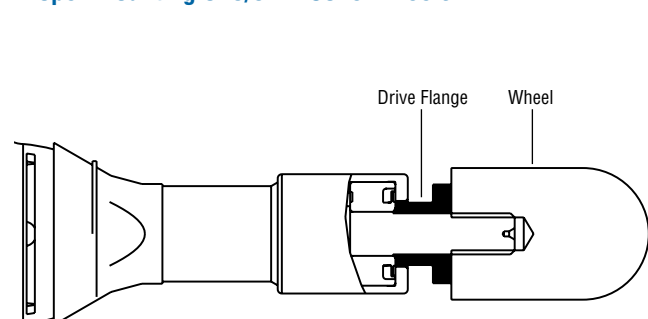
## Mounting of Wheels

Each wheel type mounts onto the tool in a specific way. Please consult the diagrams below for details on how your particular wheel mounts onto the tool. More details on the mounting of wheels can be found in ANSI B7.1 and ANSI B186. Mounting wheels in ways other than those shown below are non-compliant and may lead to injury.

### Proper Mounting of Large Type 1 Wheels



### Proper Mounting of 5/8-11 Cone Wheels



### Large Horizontal Grinders For Type 1 Wheels, Flap Wheels and Wire Wheels

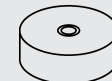
4" (100 mm) – 8" (200 mm)  
2-4 H.P. (1500–3000 W)



Type 1 Wheel



Circular Flap Wheel



Surface Finishing Wheel



Circular Wire Wheel

**Air Inlet Size: 1/2" NPT**

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

#### Extra Charge Accessories

- +2" and +3" spindles for use with wire buffing wheels (56H & 65H Series Only)
- Cone Wheel Adapters • Adapters for Surface Finishing Wheels
- Reinforced Guards (56H & 65H Series Only)

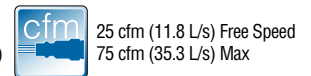
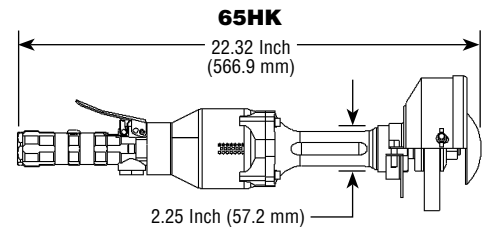
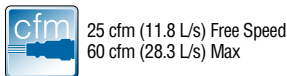
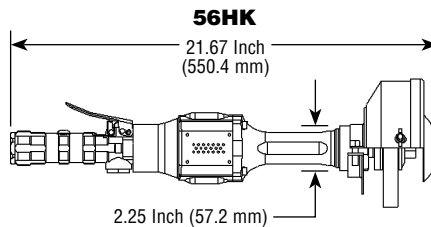
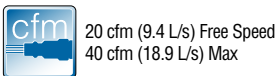
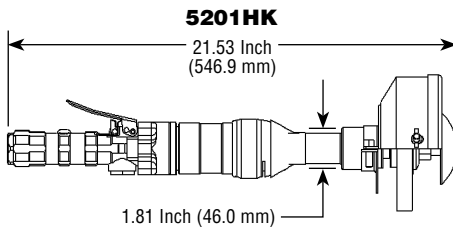
#### Standard Equipment

- Tool with Wheel Guard of Choice • Wheel Flange • Wheel Nut
- Wrench • Operating Instructions and Service Manual

### Quick Order Number

Model Number	Guard Size	Maximum Operating Speed	Throttle Handle Type		
			Standard	Safety	Spade
5201H	6	8000 RPM	5201HL;601	5201HK;601	5201HG;601
56H	6		56HL;601	56HK;601	56HG;601
	8	6000 RPM	56HL;801	56HK;801	56HG;801
65H	6	8000 RPM	65HL;601	65HK;601	65HG;601
	8	6000 RPM	65HL;801	65HK;801	65HG;801

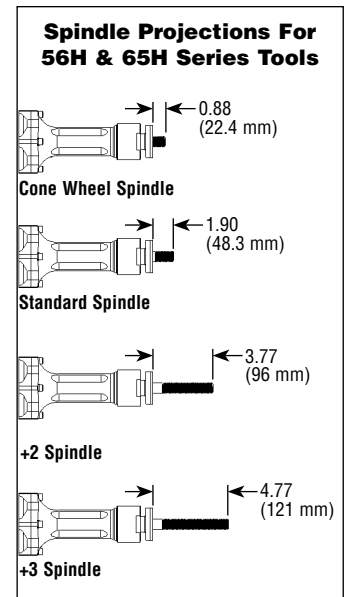
This chart has been provided as a means to quickly identify a particular tool. The ordering numbers listed represent the most common versions of our tools. If more specialized versions are required, please build your model number per the following model number flow chart.



Example Model Number: **56H G ; 6000;601**

Model Number	Lever Style	Operating Speed/Guard Size
The blue highlighted entries are shown in the Quick Reference Box above.		
5201H	Please choose one of the following options: <b>L</b> - Standard Lever <b>K</b> - Safety Lever <b>B</b> - Thumb Switch <b>G</b> - Spade Handle	Please choose one of the following options: <b>12000;401</b> - 12000 R.P.M. with 4 Inch T1 Wheel Guard <b>6000;601</b> - 6000 R.P.M. with 6 Inch T1 Wheel Guard <b>8000;601</b> - 8000 R.P.M. with 6 Inch T1 Wheel Guard
56H	<b>LTK</b> - Turned/Knurled Standard Lever <b>KTK</b> - Turned/Knurled Safety Lever <b>BTK</b> - Turned/Knurled Thumb Switch <b>LTKW</b> - Turned/Knurled/Cushioned Standard Lever <b>KTKW</b> - Turned/Knurled/Cushioned Safety Lever <b>BTKW</b> - Turned/Knurled/Cushioned Thumb Switch	Please choose one of the following options: <b>6000;601</b> - 6000 R.P.M. with 6 Inch T1 Wheel Guard <b>8000;601</b> - 8000 R.P.M. with 6 Inch T1 Wheel Guard <b>6000;801</b> - 6000 R.P.M. with 8 Inch T1 Wheel Guard
65H		

⚙️ Geared Tool    ⚙️ Governor Controlled Tool



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

## Large Horizontal Grinders For 5/8-11 Cone Wheels



**Air Inlet Size:**  
**400GH: 3/8" NPT**  
**511H, 5201HCW, 56HCW & 65HCW: 1/2" NPT**  
**Hose Size Recommendations: 1/2" (13 mm)**  
**Standard Equipment**

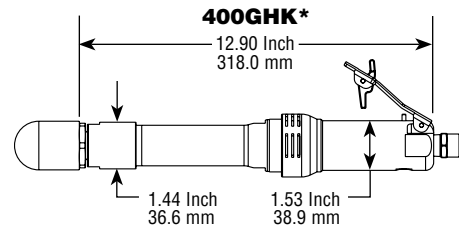
- Tool • Wheel Nut • Wrench
- Operating Instructions and Service Manual

### 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 Number	Maximum Operating Speed	Throttle Handle Type	
		Standard	Safety
400GH2*	20000 RPM	400GH2S	400GH2SK
511H*	18000 RPM	511HLS	511HKS
5201H*	12000 RPM	5201HLCW	5201HKCW
56H	9000 RPM	56HLCW	56HKCW
65H	8000 RPM	65HLCW	65HKCW

\*The 400GH2 and 511H tools ordered under the numbers in this chart will be supplied with steel case material. Aluminum case material is available for these models. Please see the chart at the bottom of this page.



1.2 H.P.  
(900 W)






3.5 Lb. (1.6 Kg) Aluminum  
4.6 Lb. (2.1 Kg) Steel



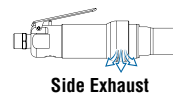
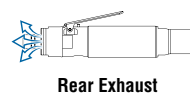
35 cfm (16.5 L/s) Max

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

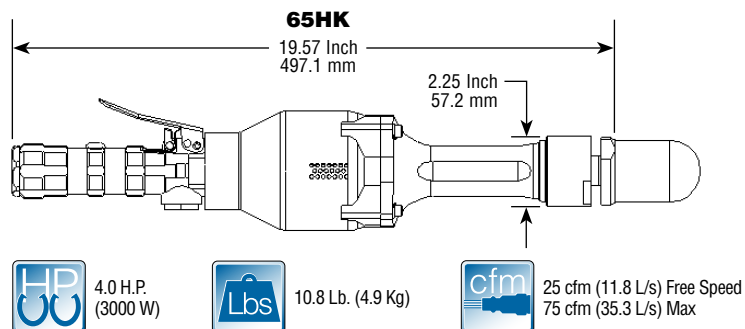
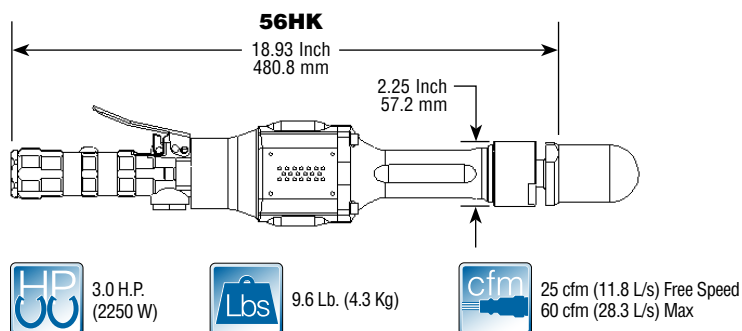
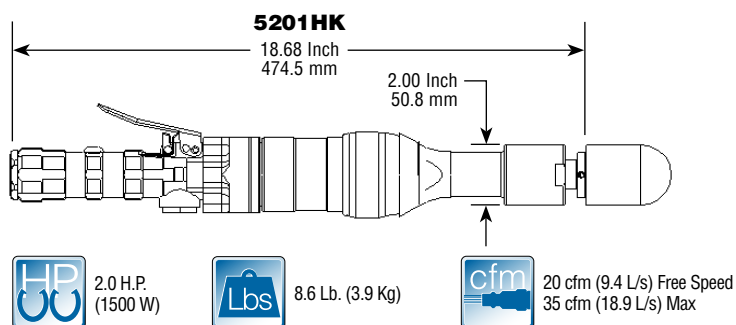
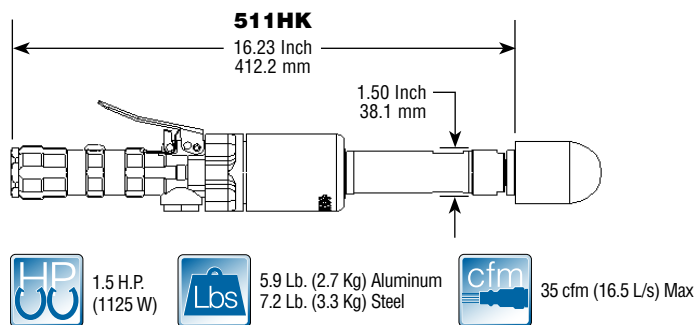
Example Model Number: **400GH2 K S R ; 20000**

The blue highlighted entries are shown in the Quick Reference Box above.				
Model Number	Lever Style	Case Material	Exhaust Direction	Operating Speed
400GH2	<i>Please choose one of the following options:</i> <b>L</b> - Standard Lever <b>K</b> - Safety Lever	<i>Please choose one of the following options:</i> <b>No Designation</b> - Aluminum Case <b>S</b> - Steel Case	<i>Please choose one of the following options:</i> <b>No Designation</b> - Side Exhaust <b>R</b> - Rear Exhaust	<b>20000</b> - 20000 R.P.M.
511H	<i>Please choose one of the following options:</i> <b>L</b> - Standard Lever <b>K</b> - Safety Lever	Steel	Side	<b>18000</b> - 18000 R.P.M.
 5201HCW	<b>B</b> - Thumb Switch <b>G</b> - Spade Handle <b>LTK</b> - Turned/Knurled Standard Lever			<i>Please choose one of the following options:</i> <b>9000</b> - 9000 R.P.M. <b>12000</b> - 12000 R.P.M.
 56HCW	<b>KTK</b> - Turned/KnurledSafety Lever <b>BTK</b> - Turned/Knurled Thumb Switch <b>LTKW</b> - Turned/Knurled/Cushioned Standard Lever	Aluminum		<b>9000</b> - 9000 R.P.M.
 65HCW	<b>KTKW</b> - Turned/Knurled/Cushioned Safety Lever <b>BTKW</b> - Turned/Knurled/Cushioned Thumb Switch			<b>8000</b> - 8000 R.P.M.

Governor Controlled Tool

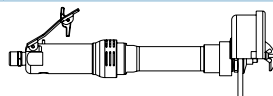
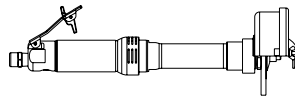


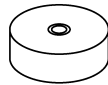

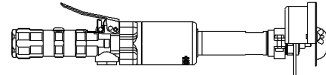
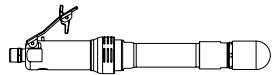





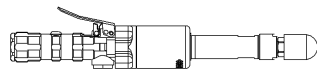
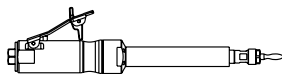
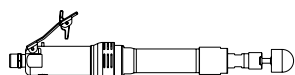
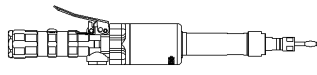


**WARNING:** Follow all recommendations from component and abrasive manufacturers for speeds and proper usage.



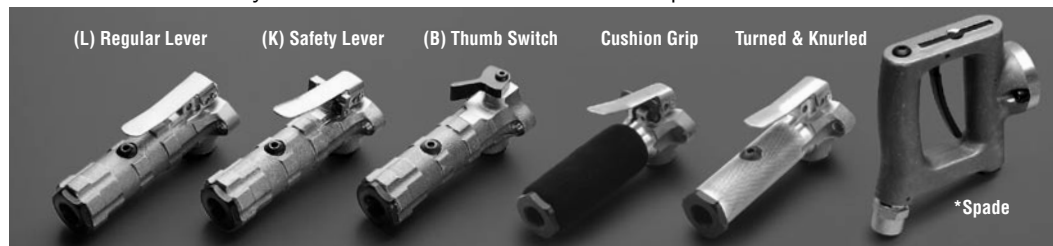
## Small Horizontal Grinders

### Section Contents

Page Number	Model Number	Power	Motor Style	Description	
52	400GH4	1.2 H.P.	Non-Governed	Horizontal Grinders for use with Smaller Type 1 Wheels	
52	407GH4		Governed		
52	51H	1.5 H.P.	Non-Governed	<div> Type 1 Wheel</div> <div> Circular Flap Wheel</div> <div> Surface Finishing Wheel</div> <div> Circular Wire Wheel</div>	
52	57H		Governed		
54	400GH1	1.2 H.P.	Non-Governed	Horizontal Grinders for use with 3/8" Cone Wheels	
54	51HCW	1.5 H.P.	Non-Governed	<div> Type 16 Cone Wheel</div> <div> Type 17 Cone Wheel</div> <div> Type 17R Cone Wheel</div> <div> Type 18 Cone Wheel</div> <div> Type 18R Cone Wheel</div>	
56	51H		Non-Governed	Horizontal Die Grinders with Fixed Size Collets	
56	250EH	0.4 H.P.	Non-Governed	Horizontal Die Grinders with Narrow Neck	
56	300EH	0.7 H.P.	Non-Governed		
56	300GHD			Horizontal Die Grinders with Insert Style Collets	
56	400GHD	1.2 H.P.	Non-Governed		
56	5102H	1.5 H.P.	Non-Governed		

### Handles

Several different handle styles are offered on our horizontal tools. The picture below shows each in detail.



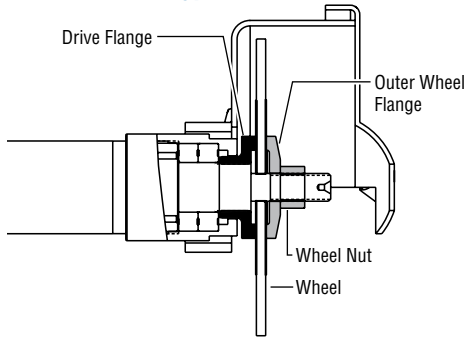
\*Only tools of 1.5 H.P. or larger can accept the spade style handle. Tools of 1.2 H.P. and lower have different handle options.

### Lever Style

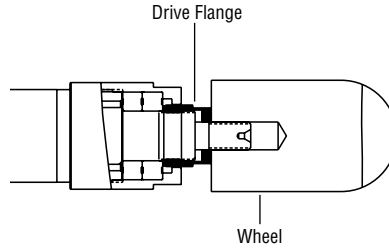


## Mounting of Wheels

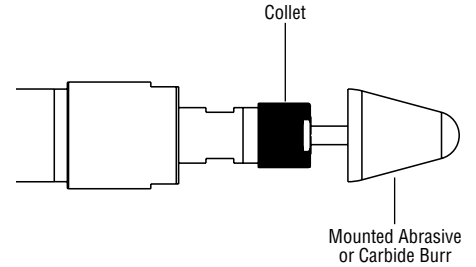
### Proper Mounting of Smaller Type 1 Wheels



### Proper Mounting of 3/8-24 Cone Wheels



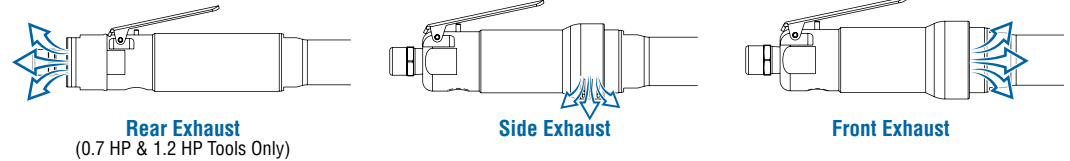
### Proper Mounting of Inserted Tooling (Burrs/Mounted Stones)



## Case Material

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

## Exhaust Direction



## Speed/Guard Size Selection

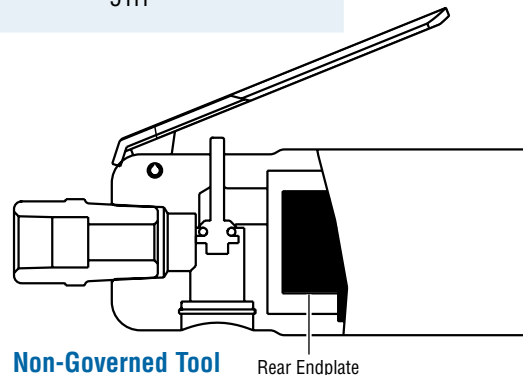
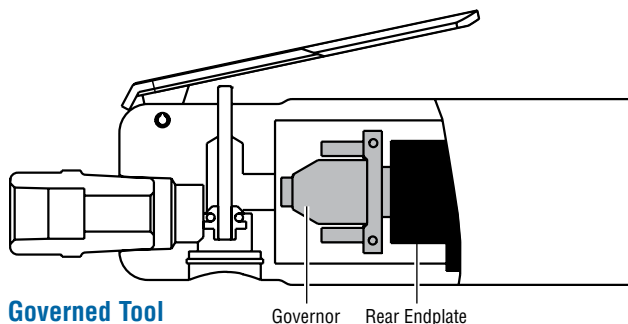
The operating speed and guard size are closely linked to promote safety and maximize efficiency of the grinding operation. Each model offers various options listed in the Model Number Breakdown and in the chart with each product spread. The choices are based on the characteristics of each model. Please examine the speed/guard size options to select the one that matches the wheel speed/size you are using.



## Governed vs. Non-Governed Tools

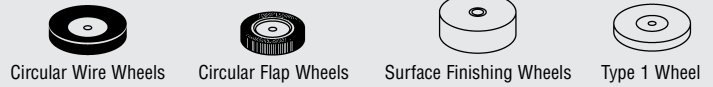
A governor on a tool will help to maintain a high level of torque at lower operating speeds. If your application requires a lower operating speed, then a governor may be to your benefit. Tools set to higher rated speeds will not benefit from the use of a governor. The following chart will act as a guide based on the operating speed required by your application.

R.P.M.	Speeds Normally Deemed for Surface Finishing Abrasives			4 Inch Type 1 Wheels	Speeds Normally Deemed for Burrs/Mounted Stones & Small Cut-off Wheels				
	12000	13000	14000	15000	16000	17000	18000	19000	20000
1.2 H.P.		407GH					400GH		
1.5 H.P.		57H				51H			



## Grinders For 3/8" I.D. Type 1 Wheels, Flap Wheels And Wire Wheels

SMALL HORIZONTAL GRINDERS



- Air Inlet Size:**  
**400GH4 & 407GH4: 3/8" NPT**  
**51H & 57H: 1/2" NPT**  
**Hose Size Recommendations: 1/2" (13 mm)**  
**Extra Charge Accessories**  
 • Cone Wheel Adapters • Heavy-Duty 2-pc. Collets  
 • Erickson Style Collets • Safety Lever  
**Standard Equipment**  
 • Tool • Operating Instructions and Service Manual  
 • 2 Wrenches (sizes based on options)



### Quick Order Number

Model Number	Guard Size	Maximum Operating Speed	Case Material	
			Aluminum	Steel
400GH4	3 Inch	18000 RPM	400GH4;301	400GH4S;301
407GH4	4 Inch	15000 RPM	407GH4;401	407GH4S;401
51H	3 Inch	18000 RPM	51HL;301	51HLS;301
57H	4 Inch	15000 RPM	57HL;401	57HLS;401

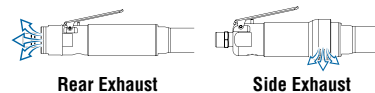
All the versions listed in the table will be supplied with a standard lever throttle (class 1). A safety lever throttle (class 2) is also available.

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.

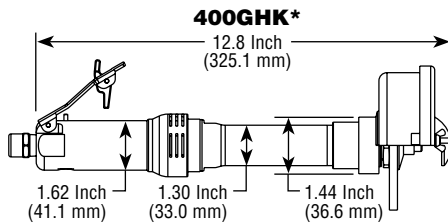
Example Model Number: **400GH4 K S R ; 18000**

The blue highlighted entries are shown in the Quick Reference Box above.					
Model Number	Lever Style	Case Material	Exhaust Direction	Operating Speed	
400GH4	Please choose one of the following options: L - Standard Lever K - Safety Lever	Please choose one of the following options: No Designation - Aluminum Case S - Steel Case	Please choose one of the following options: No Designation - Side Exhaust R - Rear Exhaust	18000 - 18000 R.P.M. with 3 Inch T1 Guard	
 407GH4			No Designation - Side Exhaust	15000 - 15000 R.P.M. with 4 Inch T1 Guard	
51H	Please choose one of the following options: L - Standard Lever K - Safety Lever B - Thumb Switch G - Spade Handle LTK - Turned/Knurled Standard Lever KTK - Turned/Knurled Safety Lever BTK - Turned/Knurled Thumb Switch LTKW - Turned/Knurled/Cushioned Standard Lever KTKW - Turned/Knurled/Cushioned Safety Lever BTKW - Turned/Knurled/Cushioned Thumb Switch				
 57H				18000 - 18000 R.P.M. with 3 Inch T1 Guard	
			No Designation - Side Exhaust	15000 - 15000 R.P.M. with 4 Inch T1 Guard	

Governor Controlled Tool

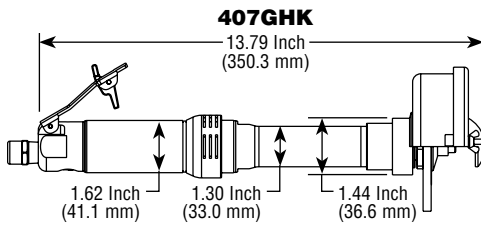
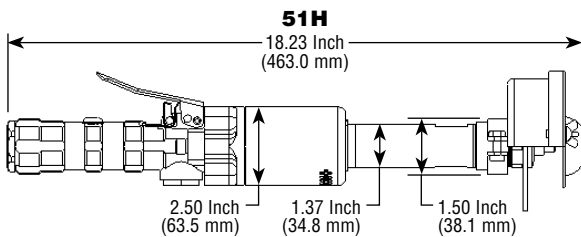


**WARNING:** Follow all recommendations from component and abrasive manufacturers for speeds and proper usage.

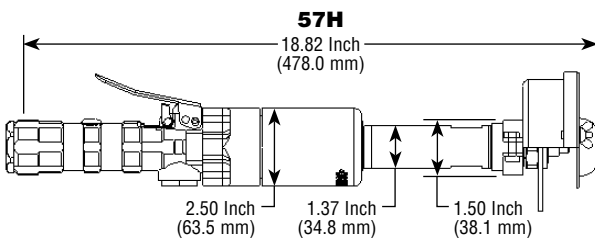
1.2 H.P.  
(900 W)3.5 Lb. (1.6 Kg) Aluminum  
4.7 Lb. (2.1 Kg) Steel

35 cfm (16.5 L/s) Max

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

1.2 H.P.  
(900 W)3.6 Lb. (1.6 Kg) Aluminum  
4.9 Lb. (2.2 Kg) Steel20 cfm (9.4 L/s) Free Speed  
35 cfm (16.5 L/s) Max1.5 H.P.  
(1125 W)6.0 Lb. (2.7 Kg) Aluminum  
7.6 Lb. (3.4 Kg) Steel

35 cfm (16.5 L/s) Max

1.5 H.P.  
(1125 W)6.1 Lb. (2.8 Kg) Aluminum  
7.7 Lb. (3.5 Kg) Steel20 cfm (9.4 L/s) Free Speed  
35 cfm (16.5 L/s) Max

### Horizontal Extended Grinders For 3/8-24 Cone Wheels

1.2 - 1.5 H.P. (900-1130 W)

SMALL HORIZONTAL GRINDERS



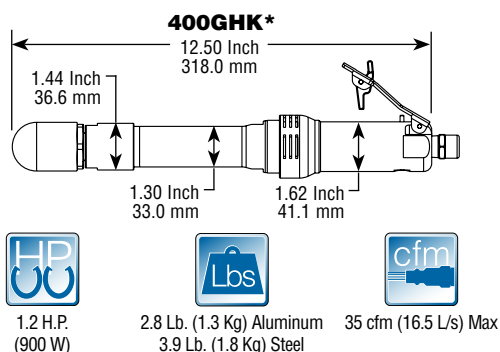
**Air Inlet Size:**  
**400GH1: 3/8" NPT**  
**51HCW: 1/2" NPT**  
**Hose Size Recommendations: 1/2" (13 mm)**  
**Extra Charge Accessories**

- Safety Lever
- Standard Equipment**
- Tool • Operating Instructions and Service Manual
- 2 Wrenches (sizes based on options)

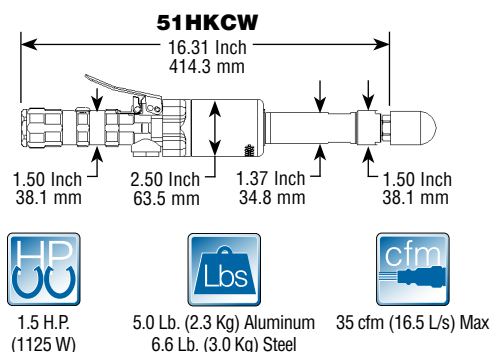
#### Quick Order Number

Model Number	Spindle Size	Maximum Operating Speed	Throttle Type	
			Standard	Safety
400GH1	3/8-24 X 0.580	20000 RPM	400GH1	400GH1K
51H		18000 RPM	51HLCW	51HLKCW

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.

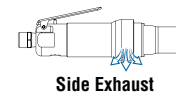
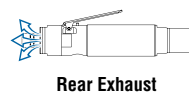


\*Rear exhaust adds 0.82 Inch (20.8mm) to overall length.



Example Model Number: **400GH1 K S R ; 20000**

The blue highlighted entries are shown in the Quick Reference Box above.				
Model Number	Lever Style	Case Material	Exhaust Direction	Operating Speed
400GH1	Please choose one of the following options: <b>L</b> - Standard Lever <b>K</b> - Safety Lever		Please choose one of the following options: <b>No Designation</b> - Side Exhaust <b>R</b> - Rear Exhaust	<b>20000</b> - 20000 R.P.M.
51HCW	Please choose one of the following options: <b>L</b> - Standard Lever <b>K</b> - Safety Lever <b>B</b> - Thumb Switch <b>G</b> - Spade Handle <b>LTK</b> - Turned/Knurled Standard Lever <b>KTK</b> - Turned/Knurled Safety Lever <b>BTK</b> - Turned/Knurled Thumb Switch <b>LTKW</b> - Turned/Knurled/Cushioned Standard Lever <b>KTKW</b> - Turned/Knurled/Cushioned Safety Lever <b>BTKW</b> - Turned/Knurled/Cushioned Thumb Switch	Please choose one of the following options: <b>No Designation</b> - Aluminum Case <b>S</b> - Steel Case	<b>No Designation</b> - Side Exhaust	<b>18000</b> - 18000 R.P.M.



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