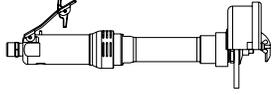
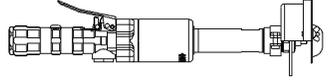
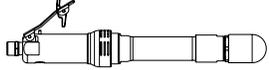
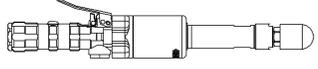
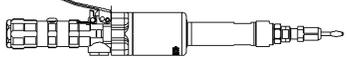
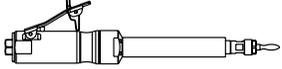
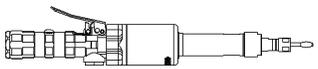


Small Horizontal Grinders

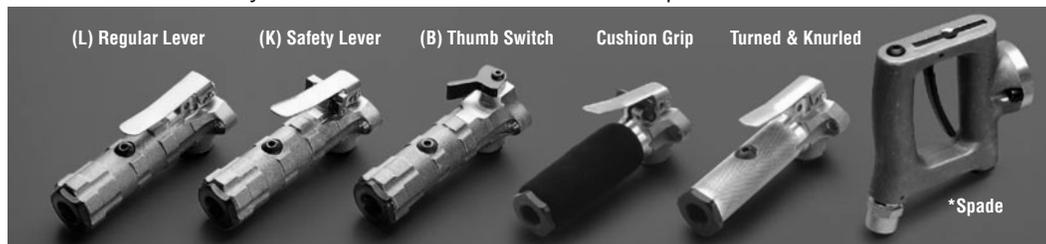
SMALL HORIZONTAL GRINDERS

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		 Type 1 Wheel  Circular Flap Wheel
52	51H	1.5 H.P.	Non-Governed	Horizontal Grinders for use with Smaller Type 1 Wheels	
52	57H		Governed		 Surface Finishing Wheel  Circular Wire Wheel
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	 Type 16 Cone Wheel  Type 17 Cone Wheel  Type 17R Cone Wheel  Type 18 Cone Wheel  Type 18R Cone Wheel	
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				 Mounted Stones
56	300GHD	0.7 H.P.	Non-Governed	Horizontal Die Grinders with Insert Style Collets	
56	400GHD	1.2 H.P.	Non-Governed		 Carbide Burrs
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.



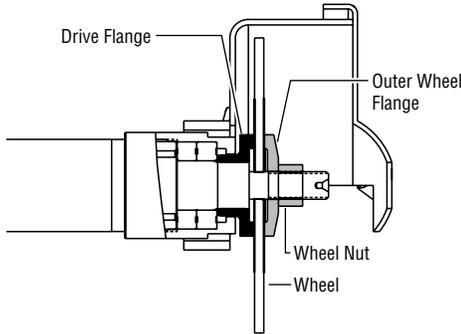
*Only tools of 1.5 H.P. or larger can accept the spade style handle. Tools of 1.2 H.P. and lower have different handle options.

Lever Style

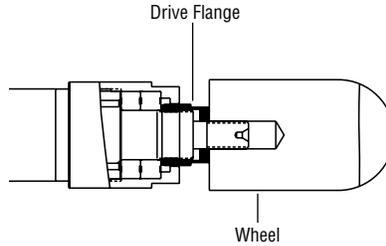


Mounting of Wheels

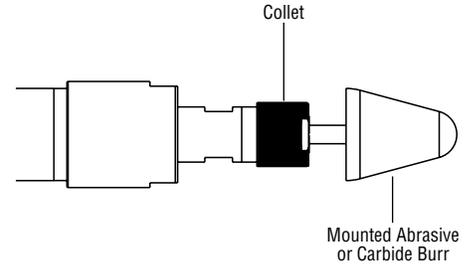
Proper Mounting of Smaller Type 1 Wheels



Proper Mounting of 3/8-24 Cone Wheels



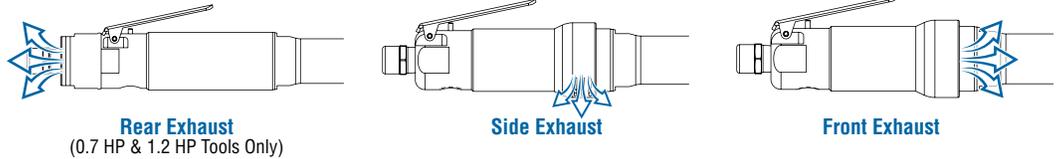
Proper Mounting of Inserted Tooling (Burrs/Mounted Stones)



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

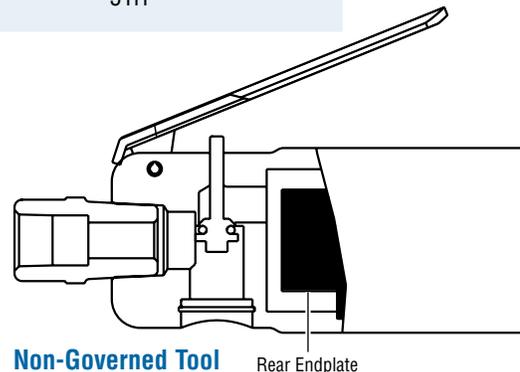
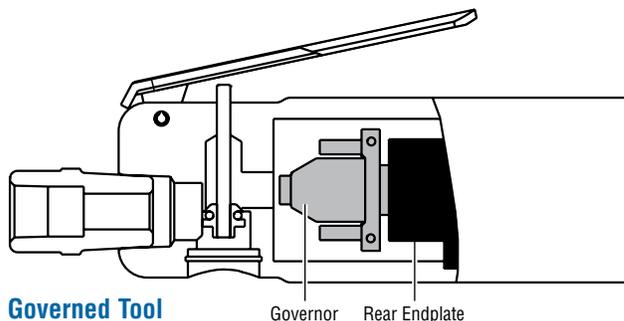
The operating speed and guard size are closely linked to promote safety and maximize efficiency of the grinding operation. Each model offers various options listed in the Model Number Breakdown and in the chart with each product spread. The choices are based on the characteristics of each model. Please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

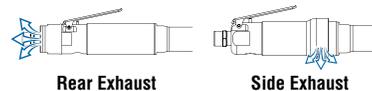
All the versions listed in the table will be supplied with a standard lever throttle (class 1). A safety lever throttle (class 2) is also available.

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.

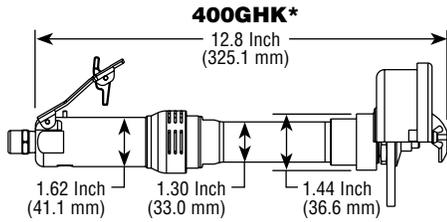
Example Model Number: **400GH4 K S R ; 18000**

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				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		No Designation - Side Exhaust	18000 - 18000 R.P.M. with 3 Inch T1 Guard
57H				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)

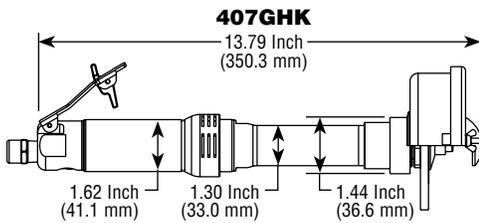


3.5 Lb. (1.6 Kg) Aluminum
4.7 Lb. (2.1 Kg) Steel



35 cfm (16.5 L/s) Max

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



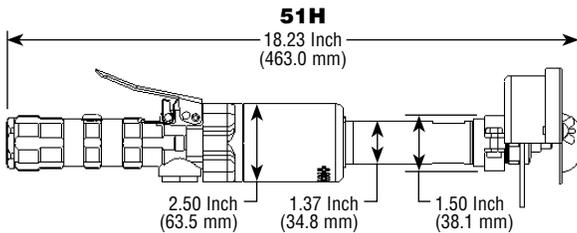
1.2 H.P.
(900 W)



3.6 Lb. (1.6 Kg) Aluminum
4.9 Lb. (2.2 Kg) Steel



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



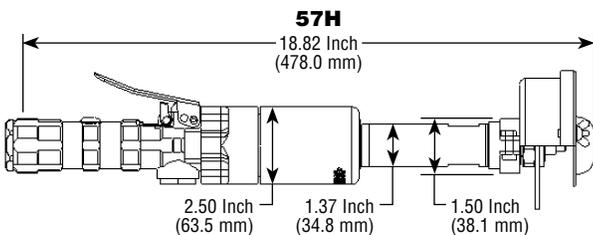
1.5 H.P.
(1125 W)



6.0 Lb. (2.7 Kg) Aluminum
7.6 Lb. (3.4 Kg) Steel



35 cfm (16.5 L/s) Max



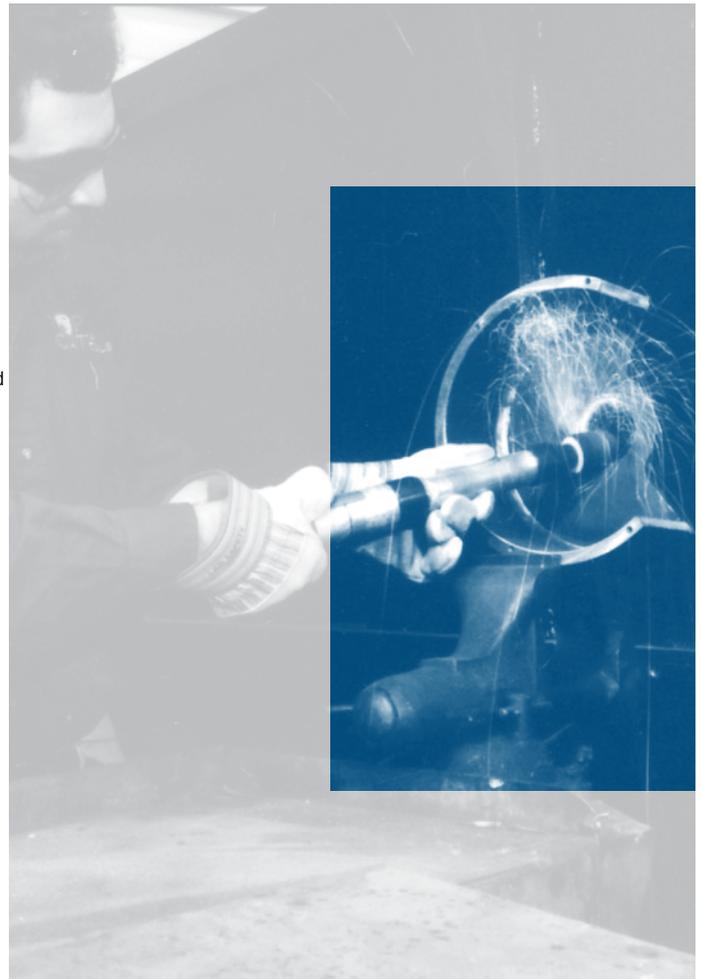
1.5 H.P.
(1125 W)



6.1 Lb. (2.8 Kg) Aluminum
7.7 Lb. (3.5 Kg) Steel



20 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

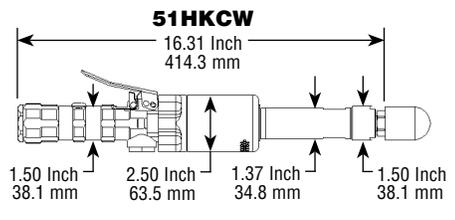
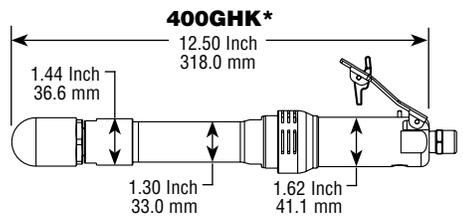


Air Inlet Size:
400GH1: 3/8" NPT
51HCW: 1/2" NPT
Hose Size Recommendations: 1/2" (13 mm)
Extra Charge Accessories

- 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.



1.2 H.P. (900 W)
 2.8 Lb. (1.3 Kg) Aluminum / 3.9 Lb. (1.8 Kg) Steel
 35 cfm (16.5 L/s) Max

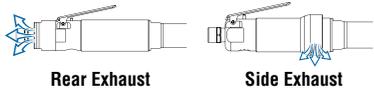
1.5 H.P. (1125 W)
 5.0 Lb. (2.3 Kg) Aluminum / 6.6 Lb. (3.0 Kg) Steel
 35 cfm (16.5 L/s) Max

*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: L - Standard Lever K - Safety Lever		Please choose one of the following options: No Designation - Side Exhaust R - Rear Exhaust	20000 - 20000 R.P.M.
51HCW	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	Please choose one of the following options: No Designation - Aluminum Case S - Steel Case	No Designation - Side Exhaust	18000 - 18000 R.P.M.



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



SMALL HORIZONTAL GRINDERS

Extended Grinders with Erickson® Style Collets for Carbide Burrs, Mounted Points

SMALL HORIZONTAL GRINDERS



Detail of 250EHK/300EHK

Air Inlet Size:
 250EH, 300EH & 300GHD: 1/4" NPT
 400GHD: 3/8" NPT
 5102H: 1/2" NPT

Hose Size Recommendations:
 250EH, 300EH & 300GHD: 3/8" (10 mm)
 400GHD & 5102H: 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	Collet Size	Maximum Operating Speed	Case Material	
			Aluminum	Steel
250EH	1/4 Inch	40000 RPM	250EH;1/4	250EHS;1/4
300EH		30000 RPM	300EH;1/4	300EHS;1/4
300GHD		30000 RPM	300GHD;1/4	300GHDS;1/4
400GHD		20000 RPM	400GHD;1/4	400GHDS;1/4
5102H		18000 RPM	5102HL;1/4	5102HLS;1/4

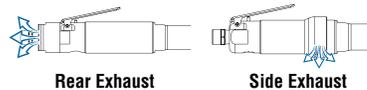
This chart has been provided as a means to quickly identify a particular tool. The ordering numbers listed represent the most common versions of our tools. If more specialized versions are required, please build your model number per the following model number flow chart.

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.

Example Model Number: **300GHD K S R ; 30000 ; 1/4**

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

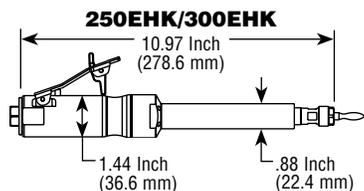
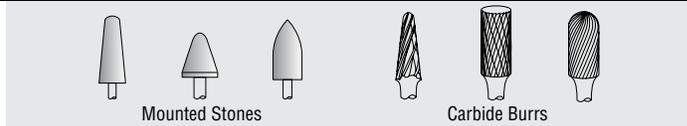
Model Number	Lever Style	Case Material	Exhaust Direction	Operating Speed	Collet Size
250EH				4000 - 40000 R.P.M.	Please choose one of the following options: 1/8 - 1/8 Inch Collet 1/4 - 1/4 Inch Collet 3/8 - 3/8 Inch Collet 3MM - 3mm Collet 6MM - 6mm Collet 8MM - 8mm Collet
300EH	Please choose one of the following options: L - Standard Lever K - Safety Lever		Please choose one of the following options: No Designation - Side Exhaust R - Rear Exhaust	30000 - 30000 R.P.M.	
300GHD				20000 - 20000 R.P.M.	
400GHD					
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	Please choose one of the following options: No Designation - Aluminum Case S - Steel Case			Please choose one of the following options: 1/8 - 1/8 Inch Collet 1/4 - 1/4 Inch Collet 3/8 - 3/8 Inch Collet
5102H	BTK - Turned/Knurled Thumb Switch LTKW - Turned/Knurled/Cushioned Standard Lever KTKW - Turned/Knurled/Cushioned Safety Lever BTKW - Turned/Knurled/Cushioned Thumb Switch		No Designation - Side Exhaust	18000 - 18000 R.P.M.	Please choose one of the following options: 1/8 - 1/8 Inch Collet 1/4 - 1/4 Inch Collet 3/8 - 3/8 Inch Collet 3MM - 3mm Collet 6MM - 6mm Collet 8MM - 8mm Collet



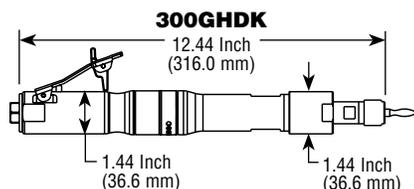
WARNING: Follow all recommendations from component and abrasive manufacturers for speeds and proper usage.

0.4-1.5 H.P. (300-1130 W)

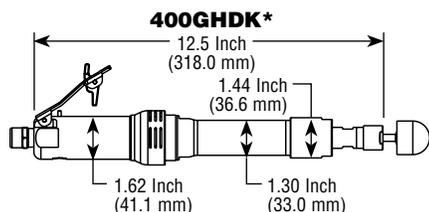
SMALL HORIZONTAL GRINDERS



- 250EH - 0.4 H.P. (300 W)
300EH - 0.7 H.P. (525 W)
- Aluminum* 250EH - 2.0 Lb. (0.9 Kg) *Steel* 250EH - 2.5 Lb. (1.1 Kg)
300EH - 2.1 Lb. (1.0 Kg) 300EH - 2.7 Lb. (1.2 Kg)
- 250EH - 18 cfm (8.5 L/s) Max
300EH - 25 cfm (11.8 L/s) Max

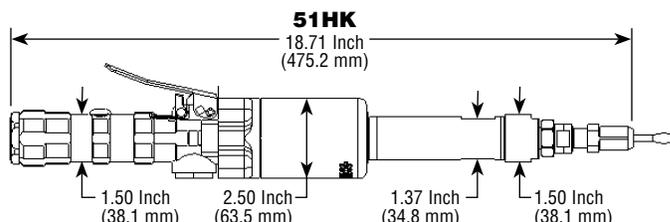


- 0.7 H.P. (525 W)
- 2.4 Lb. (1.1 Kg) Aluminum
3.4 Lb. (1.5 Kg) Steel
- 25 cfm (11.8 L/s) Max

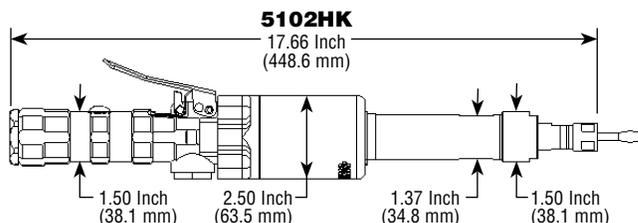


*Rear exhaust adds 0.82 Inch (20.8mm) to overall length.

- 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



- 1.5 H.P. (1125 W)
- 5.9 Lb. (2.7 Kg) Aluminum
7.2 Lb. (3.3 Kg) Steel
- 35 cfm (16.5 L/s) Max



- 1.5 H.P. (1125 W)
- 5.9 Lb. (2.7 Kg) Aluminum
7.2 Lb. 3.3 Kg) Steel
- 35 cfm (16.5 L/s) Max



The ER Heavy Duty Collet Is Available On 400GH Series

Overhang is the distance between the grinder chuck and the abrasive on the spindle. The larger the overhang, the lower the maximum safe operation speed.

