

Pro-Series™ Grinders

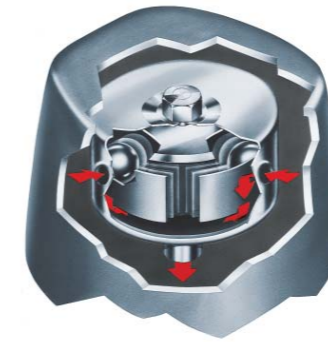


With the Pro-Series grinders, Ingersoll Rand offers a complete line of heavy-duty vertical, horizontal, and angle finishing tools that deliver superior performance, as well as outstanding safety and ergonomic features. Available in 1.25 to 3.0 hp motors, Pro-Series grinders are specially designed for heavy-duty production applications.

Pro-Series grinders reduce air consumption by one-third over competitive models, while removing up to 25 percent more material. When it comes to reliability and safety, no other grinders compare to the Pro-Series. They feature best-in-class vibration dampening, patented integral guards, and self-locking throttle levers to prevent accidental operation.

Motor Controller

Ingersoll Rand Pro-Series finishing tools incorporate a patented motor controller designed to increase productivity while enhancing operator safety. The controller regulates airflow through the endplate and into the motor to control the speed and power of the tool. There is no need for an additional over-speed shut-off device.



Locking Throttle Lever

The Ingersoll Rand locking throttle lever is a spring-loaded latch that resets each time the lever is released. This unique system prevents accidental throttle operation — even if the tool is dropped.



Integral Guards

Pro-Series grinders are equipped with patented integral guards that prevent the tool from operating if they are removed. When removed, the tool's motor is not properly supported, and the tool will not operate. Cup-type grinding tools have the exclusive Ingersoll Rand 180° integral guard for better visibility and greater wheel usage. All guards are made of steel for extra protection.



The unique motor controller design of the Pro-Series increases productivity while enhancing operator safety.

Pro-Series 88 and 99

- Powerful 2 hp and 3 hp motors for efficient high performance.
- Patented stainless-steel motor controller with industry's only lifetime guarantee.
- Self-locking throttle lever prevents accidental operation.
- Integral steel guard provides extra strength for added operator protection.
- Four-position exhaust adds to operator comfort on horizontal models.



Pro-Series 77

- Powerful 1.5 hp motor produces efficient high performance.
- Patented stainless-steel motor controller with industry's only lifetime guarantee.
- Self-locking throttle lever prevents accidental operation.
- Integral steel guard provides extra strength for added operator protection.
- Low-profile angle head improves close-quarter applications.



Pro-Series 61

- Solid steel motor and arbor housing provide maximum durability.
- Powerful 1.25 to 1.33 hp motor produces efficient high performance.
- Patented stainless-steel motor controller is maintenance- and adjustment-free.
- Heavy-duty, double-row ball bearings assure long life and smooth operation.
- Exclusive grit-rejection system keeps motor and bearings clean for extended life.
- Built-in mist lubricator automatically oils motor when throttle is activated.



88 H L 60 H 10 6

Series	Type	Throttle	Free Speed rpm	Type of Wheel	Diameter and Thread of Arbor	Diameter of Collet or Wheel
61	A Angle	L Lever	45 4,500	G Collet	6 3/8" - 24 thread	4 1/4" collet
77	H Horizontal	G Grip	60 6,000	H Type 1 wheel	8 1/2" - 13 thread	3 3" wheel
88	V Vertical		77 7,700	L Cone wheel	10 5/8" - 11 thread	4 4" wheel
99			90 9,000	P Type 27 wheel		6 6" wheel
			120 12,000	S Type 11 wheel		7 7" wheel
			150 15,000			8 8" wheel
						9 9" wheel

Straight Grinders

Carbide Burr and Mounted Wheel

Standard Equipment

- G160HD-700-1/4 1/4" Erickson collet
- DG10-69 collet body wrench
- DG120-69 collet nut wrench

Accessories

- DG120-700-G6 3/8" collet



61H120G4

Model	hp	rpm	Exhaust	Output	lb (kg)	in (mm)	Spindle Housing Diameter in (mm)	cfm
61H120G4	1.25	12,000	Side	1/4" Collet	4.3 (1.9)	15.5" (393)	1.4" (36)	37
61H150G4	1.33	15,000	Side	1/4" Collet	4.3 (1.9)	15.5" (393)	1.4" (36)	40

Air inlet for both models is 3/8".
Size hose recommended for both models is 1/2".
Performance figures are at 90 psi air pressure.

Cone and Plug Wheel

Standard Equipment

- Tool wrench



61H120L6



88HL90L10

Model	hp	rpm	Exhaust	Output	lb (kg)	in (mm)	Spindle Housing Diameter in (mm)	cfm
61H120L6	1.25	12,000	Side	3/8" - 24 Thread	4.3 (1.9)	14.8" (376)	1.4" (36)	37
61H150L6	1.33	15,000	Side	3/8" - 24 Thread	4.3 (1.9)	14.8" (376)	1.4" (36)	40
77H90L10	1.5	9,000	Side	5/8" - 11 Thread	6.0 (2.7)	16.4" (417)	1.9" (48)	37
77H120L10	1.5	12,000	Side	5/8" - 11 Thread	6.0 (2.7)	16.4" (417)	1.9" (48)	39
88HL90L10	2.2	9,000	Side	5/8" - 11 Thread	8.4 (3.8)	18.3" (465)	2.3" (58)	66

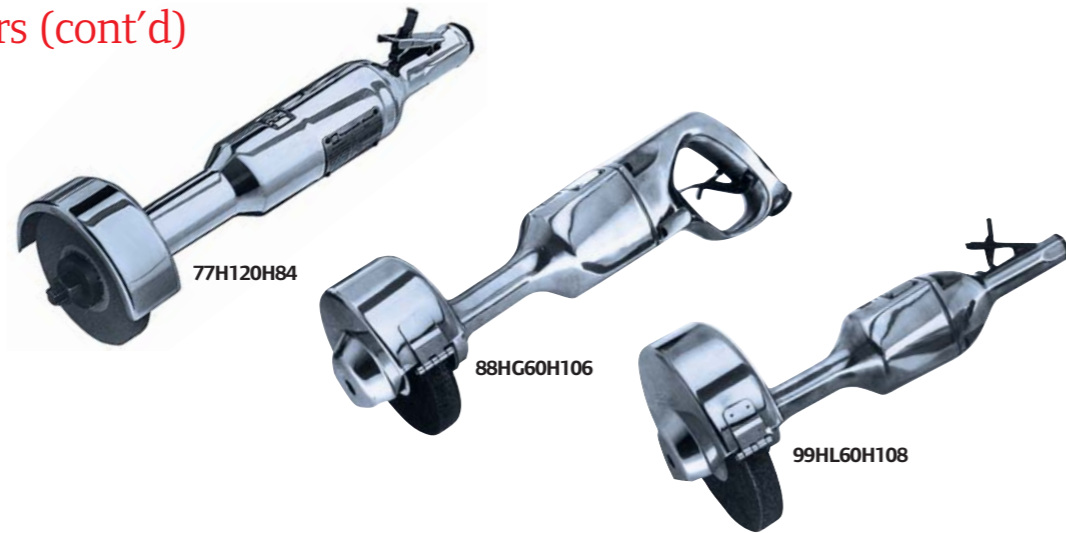
Air inlet for Series 88H is 1/2" NPT. All others 3/8" NPT.
Size hose recommended for Series 88H is 3/4". All others 1/2".
Performance figures are at 90 psi air pressure.
Maximum wheel diameter is 3".

Straight Grinders (cont'd)

Type 1 Wheel

Standard Equipment

- Wheel guard, flanges, and nut



Model	Handle	hp	rpm	Exhaust	Output	lb (kg)	in (mm)	Spindle Housing Diameter	in (mm)	in (mm)	cfm
61H120H63	Lever	1.25	12,000	Side	3/8" - 24 Thread, 3" guard	4.8" (2.2)	15.8" (401)	1.4" (36)	3" x 1/2" (75 x 13)	37	
61H120H64	Lever	1.25	12,000	Side	3/8" - 24 Thread, 4" guard	4.8" (2.2)	15.8" (401)	1.4" (36)	4" x 1/2" (100 x 13)	37	
61H150H63	Lever	1.33	15,000	Side	3/8" - 24 Thread, 3" guard	4.8" (2.2)	15.8" (401)	1.4" (36)	3" x 1/2" (75 x 13)	40	
77H120H63	Lever	1.5	12,000	Side	3/8" - 24 Thread, 3" guard	6.1" (2.8)	16.6" (422)	2.6" (66)	3" x 1/2" (75 x 13)	39	
77H90H84	Lever	1.5	9,000	Side	1/2" - 13 Thread, 4" guard	6.5" (2.9)	17.3" (439)	2.6" (66)	4" x 1" (100 x 25)	37	
77H120H84	Lever	1.5	12,000	Side	1/2" - 13 Thread, 4" guard	6.5" (2.9)	17.3" (439)	2.6" (66)	4" x 1" (100 x 25)	39	
88HL60H106*	Lever	2	6,000	Side	5/8" - 11 Thread, 6" guard	11.3" (5.1)	20.0" (508)	3.4" (86)	6" x 1" (150 x 25)	61	
88HG60H106*	Grip	2	6,000	Side	5/8" - 11 Thread, 6" guard	11.7" (5.3)	19.8" (503)	3.4" (86)	6" x 1" (150 x 25)	61	
99HL60H106*	Lever	3	6,000	Side	5/8" - 11 Thread, 6" guard	13.5" (6.1)	20.5" (520)	3.9" (99)	6" x 1" (150 x 25)	84	
99HG60H106*	Grip	3	6,000	Side	5/8" - 11 Thread, 6" guard	15.3" (6.9)	20.4" (518)	3.9" (99)	6" x 1" (150 x 25)	84	
99HL45H108**	Lever	2.35	4,500	Side	5/8" - 11 Thread, 8" guard	14.9" (6.8)	20.3" (516)	3.9" (99)	8" x 1" (203 x 25)	70	
99HG45H108**	Grip	2.35	4,500	Side	5/8" - 11 Thread, 8" guard	15.6" (7.1)	20.1" (511)	3.9" (99)	8" x 1" (203 x 25)	70	
99HL60H108**	Lever	3	6,000	Side	5/8" - 11 Thread, 8" guard	14.8" (6.7)	20.3" (516)	3.9" (99)	8" x 1" (203 x 25)	84	

*Net weight of guard and flanges is 3.2 lb.

**Net weight of guard and flanges is 4.5 lb.

Air inlet for Series 61H and 77H is 3/8" NPT. For Series 88H and 99H, 1/2" NPT.

Size hose recommended for Series 61H and 77H is 1/2". For Series 88H and 99H, 3/4".

Performance figures are at 90 psi air pressure.

Angle Grinders

Depressed Center Wheel Type 27 and 28 Wheel

Standard Equipment

- Wheel guard, flanges, and nut for threaded and plain depressed center wheels

Accessories

- Piped-away exhaust kit 88V60-K184 (for 88V)
- Piped-away exhaust kit 99V60-K184 (for 99V)



Model	hp	rpm	Exhaust	Output	lb (kg)	in (mm)	in (mm)	in (mm)	in (mm)	m/s ²	cfm
ANGLE GRINDERS*											
77A60P107	1.5	6,000	Side	5/8" - 11 Thread, 7" guard	9.0 (4.1)	17.6" (447)	3.9" (99)	1.3" (33)	7" (177)	1.9	39
77A60P109	1.5	6,000	Side	5/8" - 11 Thread, 9" guard	9.2 (4.2)	17.6" (447)	3.9" (99)	1.3" (33)	9" (228)	1.8	39
77A75P107	1.5	7,500	Side	5/8" - 11 Thread, 7" guard	9.2 (4.2)	17.6" (447)	3.9" (99)	1.3" (33)	7" (177)	2	39
VERTICAL GRINDERS**											
88V60P107	2.1	6,000	Side	5/8" - 11 Thread, 7" guard	8.8 (4.0)	N/A	6.1" (155)	2.1" (54)	7" (177)	1.5	61
88V60P109	2.1	6,000	Side	5/8" - 11 Thread, 9" guard	9.1 (4.1)	N/A	6.1" (155)	2.1" (54)	9" (228)	1	61
88V77P107	2.2	7,700	Side	5/8" - 11 Thread, 7" guard	8.8 (4.0)	N/A	6.1" (155)	2.1" (54)	7" (177)	1.2	68
88V85P107	2.2	8,500	Side	5/8" - 11 Thread, 7" guard	8.8 (4.0)	N/A	6.1" (155)	2.1" (54)	7" (177)	1.5	66
99V60P107	3.0	6,000	Side	5/8" - 11 Thread, 7" guard	11.3 (5.1)	N/A	6.9" (175)	2.9" (74)	7" (177)	1.5	84
99V60P109	3.0	6,000	Side	5/8" - 11 Thread, 9" guard	11.3 (5.1)	N/A	6.9" (175)	2.9" (74)	9" (228)	0.9	84
99V77P107	3.0	7,700	Side	5/8" - 11 Thread, 7" guard	11.3 (5.1)	N/A	6.9" (175)	2.9" (74)	7" (177)	0.9	84
99V85P107	3.0	8,500	Side	5/8" - 11 Thread, 7" guard	11.3 (5.1)	N/A	6.9" (175)	2.9" (74)	7" (177)	0.9	84

*Air inlet for all models is 3/8" NPT. Size hose recommended for all models is 1/2".

**Air inlet for all models is 1/2" NPT. Size hose recommended for all models is 3/4".

Performance figures are at 90 psi air pressure.

Vertical Grinders

Cup Wheel Type 6 and 11 Wheel

Standard Equipment

- Wheel guard, flanges, and nut

Accessories

- For vertical grinder
- Piped-away exhaust kit 88V60-K184 (for 88V)
- Piped-away exhaust kit 99V60-K184 (for 99V)



Model	hp	rpm	Exhaust	Output	lb (kg)	in (mm)	in (mm)	in (mm)	m/s ²	cfm
88V60S106	2.1	6,000	Side	5/8"– 11 spindle, 6" guard	8.4 (3.8)	6.1" (155)	2.1" (53)	5" or 6" (127 or 152)	0.8	61
99V45S106	2.5	4,500	Side	5/8"– 11 spindle, 6" guard	10.8 (4.9)	6.9" (175)	2.9" (74)	5" or 6" (127 or 152)	1.1	70
99V60S106	3.0	6,000	Side	5/8"– 11 spindle, 6" guard	10.8 (4.9)	6.9" (175)	2.9" (74)	5" or 6" (127 or 152)	0.6	84

Air inlet for all models is 1/2" NPT.
Size hose recommended for all models is 3/4".

Performance figures are at 90 psi air pressure.

Pro Series Grinder Accessories

Collet Accessories

Description	Series 61H	Series 77H	Series 88H
1/4" Erickson collet	G160-HD-700-1/4	N/A	N/A
1/4" Erickson collet assembly	DG220-A290-G4	N/A	N/A
3/8" Erickson collet	DG120-700-G6	N/A	N/A
3/8" Erickson collet assembly	DG220-A290-G6	N/A	N/A
Collet body wrench	DG10-69	N/A	N/A
Collet nut wrench	DG120-69	N/A	N/A
3/8"-24 cone wheel spindle	DG220-104-L6	N/A	N/A
Cone wheel spindle wrench	DG20-69A	7RAQT4-254	7RAQT4-254
Controller wrench	R15-169	77H-950	88V60-950

Type 27 and 28 Wheel Accessories

Description	Series 77A	Series 88V	Series 99V
6" type 6 or 11 cup wheel guard	N/A	88V60-A216	99V60-A216A
Piped-away exhaust kit	N/A	88V60-K184	99V60-K184
Wheel retaining screw wrench	88V-562	88V-562	88V-562
Controller wrench	77H-950	88V60-950	99V60-950

Type 6 and 11 Wheel Accessories

Description	Series 88V	Series 99V
7" type 27 wheel guard	88V60-106-7	99V77-106-7
9" type 27 wheel guard	88V60-106-9	99V60-106-9
7" and 9" type 27 wheel adapter kit*	R3F-AS337	R3F-AS337
Piped-away exhaust kit	88V60-K184	99V60-K184
Wheel retaining screw wrench	88V-562	88V-562
Controller wrench	88V60-950	99V60-950

*For use with Type 27 plain hole depressed center wheels.

Maintenance Kits

Part Number	For Use With
GRINDER TUNE-UP KITS	
61H-TK1	61H Series
66H-TK3	66H Series
77H/77A-TK3	77H and 77A Series
7S60-TK2	7S60L (Pro-Series grinder)
88V/88H-TK3	88V and 88H Series
99V/99H-TK3	99V and 99H Series