

# MINSTER

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## P2H-FX Series



63-160 mT Capacity



A Minster-built machine is an asset investment backed by skilled aftermarket service technicians all around the world. Beginning with the raw material in our foundry—to the custom engineering and creation of each machine—you're gaining more than an asset, you're gaining a team of experts ready to meet your exact needs.

## **MINSTER** P2H-FX Series

- 4 Low Inertia Drive  
Liquid Cooling Technology
- 5 Robust Design  
Precision Built  
Equipped with Fieldhawk
- 6 Motion Profiles  
Production Management Control (PMC)
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## P2H-FX SERVO FEATURES

### Low Inertia Drive

Faster Response and Higher Efficiency

Engineered to enable higher acceleration and deceleration rates, Nidec Minster's low inertia drive creates a faster response through each press stroke. Lower torque requirements also result in higher efficiency forming.

### Higher Productivity

Faster response results in significantly higher production rates while running complex modes including pendulum, rapid restrike and multi-hit.

### Reduced Stopping Angle

Increased variability; operational capability to run longer feed lengths/angles at higher production rates.

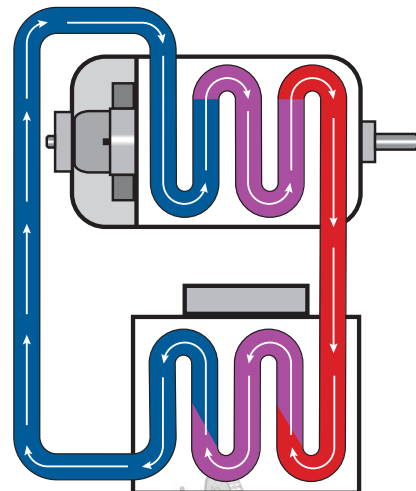
### Higher Efficiency

Comparable speed profiles operated with lower inertia systems significantly reduce power requirements.

### Liquid Cooling Technology

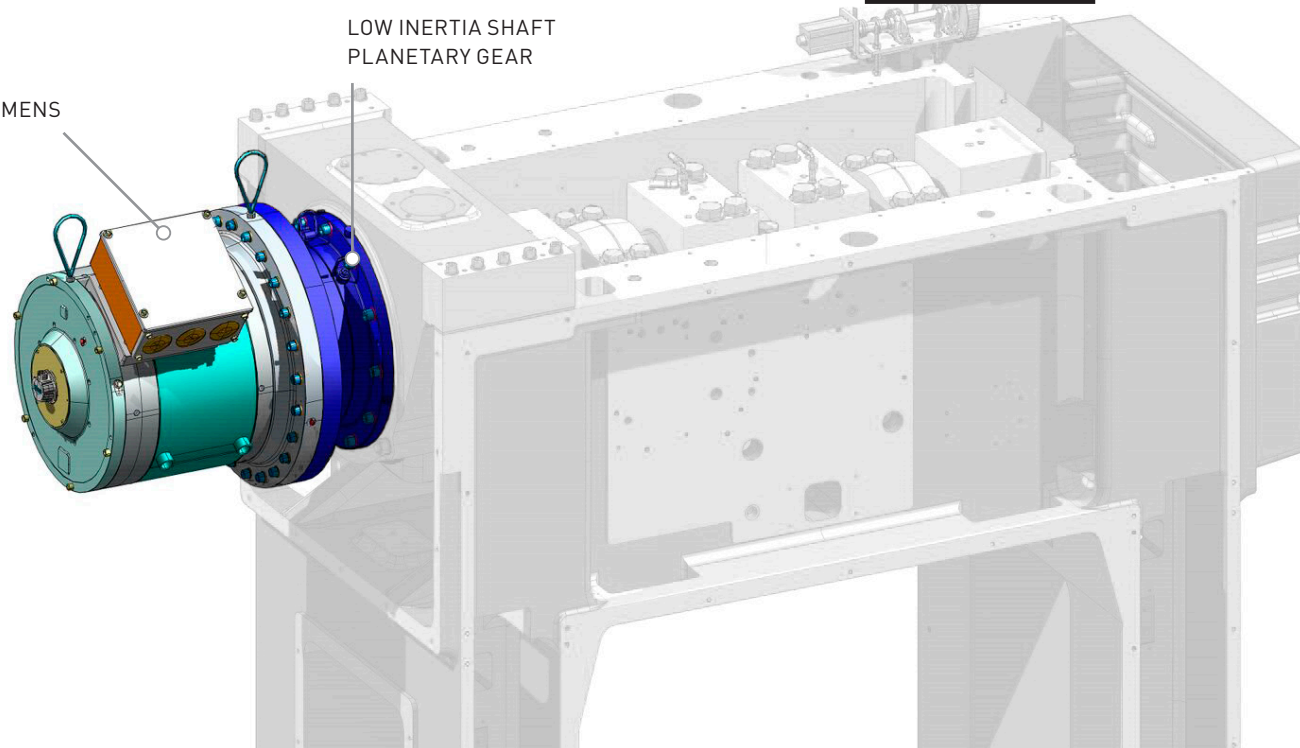
Higher power density and cooler operating temperatures

Nidec Minster's leading Servo technology consistently provides more usable power than comparable air cooled motors, in addition to maintaining thermal stability and cooler operating temperature. These combined features lead to a longer component life and an overall cleaner operating environment.



HIGH TORQUE SIEMENS SERVO MOTOR

LOW INERTIA SHAFT PLANETARY GEAR



### Robust Design

Withstand the increased forces of the new high tensile materials

Nidec Minster presses are built to stand the test of time. Our design configurations are:

- Built from forged high-strength alloy steel drive train components.
- Rated to full press tonnage and 50% reverse load rating.
- Cast iron frame.

### Equipped with Fieldhawk

An app to watch over your Nidec press room equipment

#### Instantly know your Press line Status

Receive real-time updates for: press status, operating condition, production data, and more. Helps you maintain control and stay productive!

#### Receive Service and Maintenance Alerts

Delivered to your mobile device from the Minster Production Management Control (PMC) press control panel inform you of upcoming service intervals required, allows you to proactively schedule genuine Minster parts and service to reduce downtime.

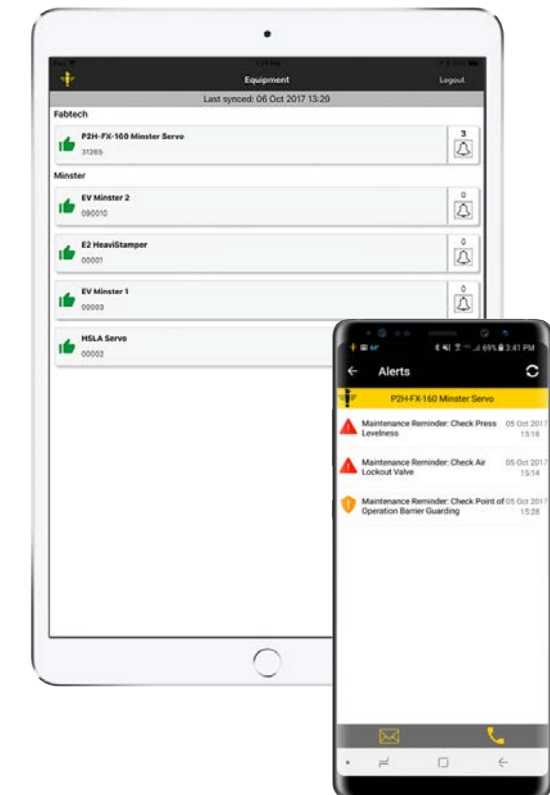
### Precision Built

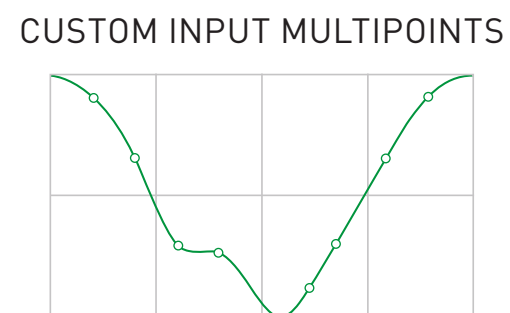
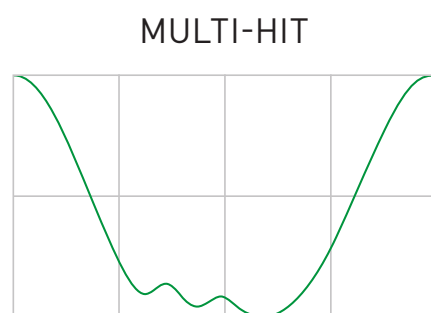
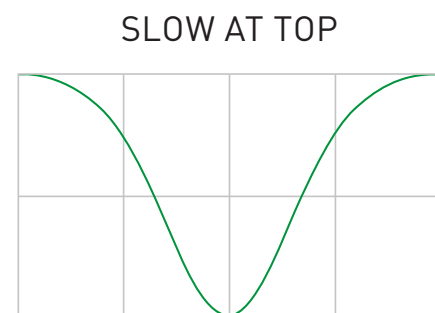
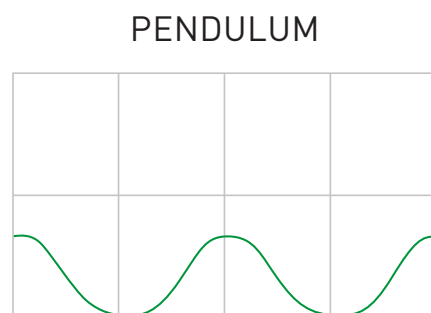
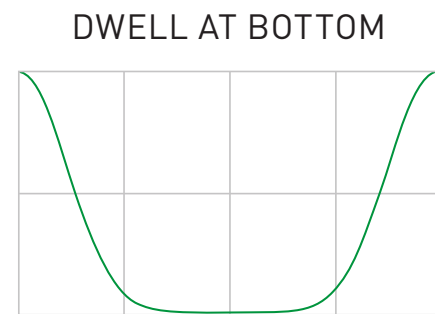
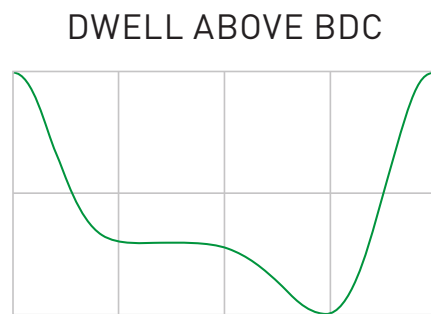
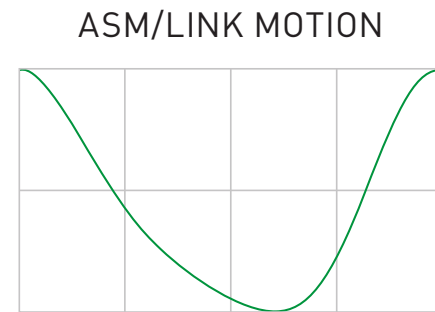
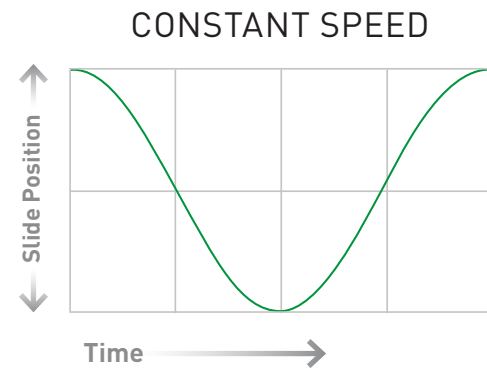
Match your exact needs

With extremely tight tolerances in the crown bearings, hydrostatic pistons and hydraulic slide lock-up, your Minster press will be built with the highest precision.

Drive your ability for end-result accuracy with our low inertia shaft design. This unparalleled approach creates:

- Superior dynamic parallelism and BDC accuracy.
- Minimized backlash for consistent accuracy in pendulum mode.





### Motion Profiles

Flexibility to program your optimum production solution

The operator-friendly HMI provides the ability to quickly chose from any of these highly customizable slide motion profiles (*at left*) to improve productivity, part quality and tool life.

### Production Management Control (PMC)

Features for convenient planning and maintenance

This full featured press control was designed and integrated by Minster and incorporates all press functions including:

- Full machine diagnostics detailing all press and feed line faults.
- Multiple selectable languages.
- Open architecture which allows for greater convenience in planning and maintenance.
- PLC and color touch screen technology; all press and feed line functions can be monitored for efficient diagnosis of production line faults.

Available popular options include: die protection, load monitoring as well as automatic shutheight and counterbalance controls.

**SIEMENS**  
*Ingenuity for life*

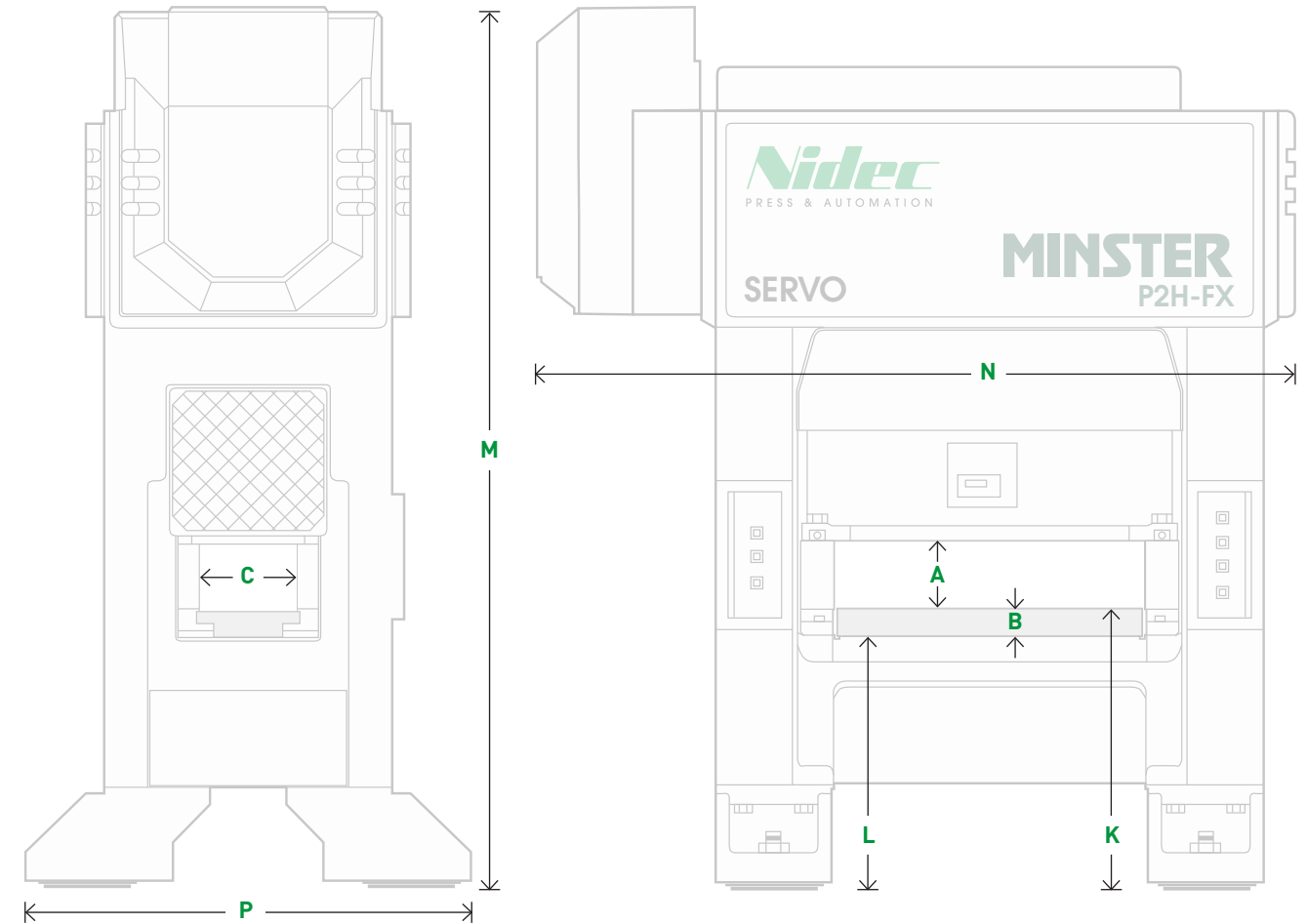
### Siemens Full Energy Management System

Based upon Siemens global power grid technology, it manages and maintains the critical power requirements entirely within the system. This results in the highest efficiency at the lowest overall operating costs.

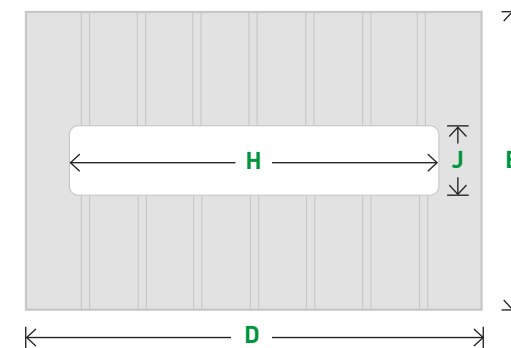
## SPECIFICATIONS & DIMENSIONS P2H-FX HIGH PERFORMANCE

PRESS MODEL	P2H-FX-100-48	P2H-FX-100-63	P2H-FX-160-75
<b>Force Capacity</b>	1000 kN 112 Tons	1000 kN 112 Tons	1600 kN 180 Tons
<b>Shutheight Adjust.</b>	100 mm 3.94 in	100 mm 3.94 in	150 mm 5.91 in
<b>QA Slide Travel (Depending on SH)</b>	12–115 mm .50–4.50 in	12–115 mm .50–4.50 in	12–165 mm .50–6.50 in
<b>A SH Range on Bolster (Std.)</b>	280–380 mm 11.0–14.94 in	280–380 mm 11.0–14.94 in	350–500 mm 13.78–19.69 in
<b>B Bolster Thickness</b>	100 mm 3.94 in	100 mm 3.94 in	125 mm 4.92 in
<b>C Passline Opening (F-B)</b>	560 mm 22.0 in	560 mm 22.0 in	630 mm 24.80 in
<b>D x E Area of Bolster (R-L x F-B) (Std.)</b>	1220 x 800 mm 48.0 x 31.50 in	1600 x 800 mm 63.0 x 31.5 in	1900 x 850 mm 74.8 x 33.50 in
<b>F x G Area of Slide (R-L x F-B) (Std.)</b>	1220 x 660 mm 48.0 x 26.0 in	1600 x 850 mm 63.0 x 26.0 in	1900 x 850 mm 74.8 x 33.50 in
<b>H x J Opening in Bolster (R-L x F-B)</b>	1000 x 190 mm 39.40 x 7.50 in	1300 x 190 mm 51.20 x 7.50 in	1600 x 250 mm 63.0 x 9.80 in
<b>Opening in Bed (R-L x F-B)</b>	1015 x 360 mm 40.0 x 14.20 in	1300 x 360 mm 51.20 x 14.20 in	1600 x 370 mm 63.0 x 14.60 in
<b>K Distance Floor to Top of Bolster</b>	1135 mm 44.70 in	1135 mm 44.70 in	1180 mm 46.40 in
<b>L Distance Floor to Bottom of Bed</b>	430 mm 17.0 in	430 mm 17.0 in	300 mm 11.75 in
<b>M Overall Height</b>	3680 mm 145.0 in	3930 mm 155.0 in	4320 mm 170.0 in
<b>N Overall Width</b>	2640 mm 104.0 in	3022 mm 119.0 in	4042 mm 159.10 in
<b>P Width at Feet</b>	1780 mm 70.0 in	1780 mm 70.0 in	2030 mm 80.0 in
<b>Press Shipping Weight</b>	18.600 kg 41,000 lbs	20.86 kg 46,000 lbs	32.615 kg 77,000 lbs

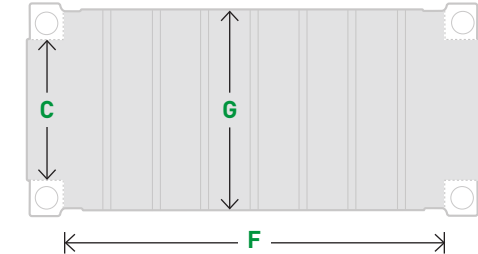
Stroke/Speed Combinations, refer to page 10–11



BOLSTER



SLIDE FACE



## STROKE SPEED MATRIX

## P2H-FX-100

STROKE LENGTH		60 mm (2.36 in)	80 mm (3.15 in)	100 mm (3.94 in)		
Cont. Speed (Reduced Rating)	SPM	250	163	250	163	250
<b>STANDARD POWER SERVO MOTOR 36 kW (1 x #81)</b>						
Rated Distance Off Bottom	mm	3,6	6,1	2,5	4,6	2,0
	in	0.14	0.24	0.10	0.18	0.08
Standard Forming Profile	SPM	165	123	168	123	168
Pendulum 60 mm (2.36 in)	SPM	n/a	105	132	119	155
Pendulum 40 mm (1.57 in)	SPM	150	125	157	141	182
Pendulum 30 mm (1.18 in)	SPM		138	173	n/a	n/a
Pendulum 25 mm (0.98 in)	SPM	183	n/a	n/a	n/a	n/a
Standard Energy	kJ	3.6	4.6	2.0	4.6	2.0
	in-Ton	16	20	9	20	9

## P2H-FX-160

STROKE LENGTH		75 mm (2.95 in)	100 mm (3.94 in)	125 mm (4.92 in)	150 mm (5.91 in)	
Cont. Speed (Reduced Rating)	SPM	163	250	163	250	
<b>STANDARD POWER SERVO MOTOR 36 kW (1 x #81)</b>						
Rated Distance Off Bottom	mm	2,4				
	in	0.09				
Standard Forming Profile	SPM	115				
Pendulum 50 mm (1.97 in)	SPM	111				
Pendulum 30 mm (1.18 in)	SPM	135				
Standard Energy	kJ	9.8				
	in-Ton	43				
<b>STANDARD POWER SERVO MOTOR 36 kW (1 x #83)</b>						
Rated Distance Off Bottom	mm	5,0	2,0	3,5	2,7	2,2
	in	0.20	0.08	0.14	0.11	0.09
Standard Forming Profile	SPM	115	157	115	115	115
Pendulum 100 mm (3.94 in)	SPM	n/a	n/a	n/a	104	114
Pendulum 75 mm (2.95 in)	SPM	n/a	n/a	107	120	128
Pendulum 50 mm (1.97 in)	SPM	111	135	127	140	150
Pendulum 30 mm (1.18 in)	SPM	137	168	153	n/a	n/a
Standard Energy	kJ	8.0	6.0	8.0	8.0	8.0
	in-Ton	35	27	35	35	35
<b>HIGH POWER SERVO MOTOR 55 kW (1 x #85)</b>						
Rated Distance Off Bottom	mm	4,4	7,7	3,1	5,7	4,6
	in	0.17	0.30	0.12	0.22	0.18
Standard Forming Profile	SPM	164	112	164	112	112
Pendulum 100 mm (3.94 in)	SPM	n/a	n/a	n/a	105	116
Pendulum 75 mm (2.95 in)	SPM	n/a	101	142	120	130
Pendulum 50 mm (1.97 in)	SPM	150	130	171	141	153
Pendulum 30 mm (1.18 in)	SPM	186	160	207	n/a	n/a
Standard Energy	kJ	10.2	12.3	10.2	14.5	14.5
	in-Ton	45	54	45	64	64





By combining the expertise, experience and resources of industry leaders in the material forming market, Nidec Press and Automation has established a single source solution for machinery, services and technology.

The Nidec Press and Automation brand brings Minster, Arisa, Kyori and Vamco products to the market, allowing combined synergies to offer efficient, cost-effective and timely solutions and service to manufacturers looking for increased production and profits.

[nidec-pa.com](http://nidec-pa.com)

## MINSTER

With more than 120 years of manufacturing experience, Nidec Minster offers mid-range tonnage presses and related automation equipment with an unprecedented reputation for quality, durability and technology.

Headquartered in the US, Minster is located strategically around the globe. Whether it is equipment design, formation or installation our customers know they are our top priority.

[minster.com](http://minster.com)