

# P2H-FX

## HIGH PERFORMANCE SERVO PRESSES

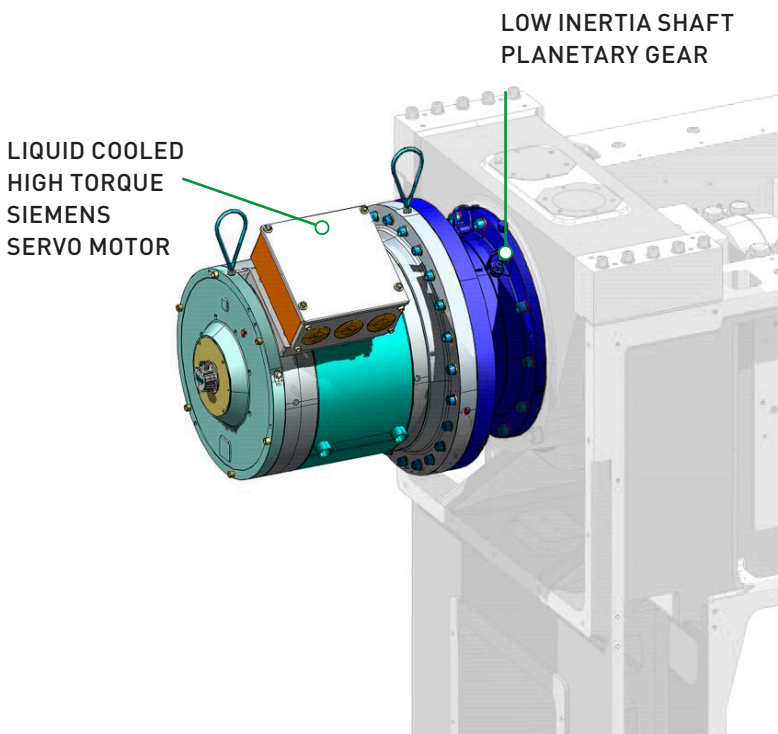
1,000-1,600 kN

100 - 160 Metric Tons Capacity



## PRODUCT OVERVIEW

Designed for applications requiring multiple slide motion profiles, the Minster P2H-FX combines the characteristics of a traditional mechanically driven press with those of a servo drive.

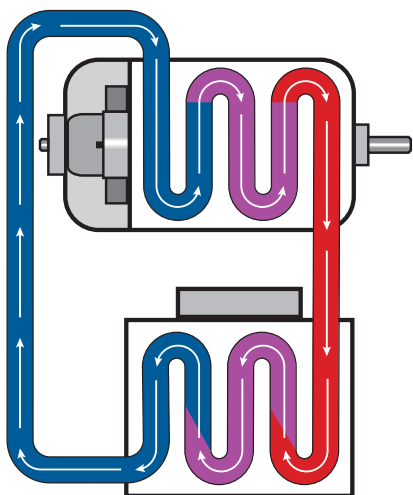


**1** Low Inertia Drive engineered to enable higher acceleration and deceleration rates, Nidec Minster's low inertia drive creates a faster response through each press stroke. Lower torque requirements also result in higher efficiency forming.

- **Higher Productivity**  
Faster response results in significantly higher production rates while running complex profiles including pendulum, rapid restrike and multi-point.
- **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.



**2** 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.



**3 Robust Design** - Nidec Minster presses are built to withstand increased forces of the new high tensile materials and 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.
- Full film lubrication bearings (main & connection).

**4 Precision Built** - With extremely tight tolerances in the crown bearings, hydrostatic pistons and hydraulic slide lock-up, Minster presses will be built with the highest precision to your exact needs. Our low inertia shaft design creates:

- Superior dynamic parallelism and bottom-dead-center accuracy.
- Minimized backlash for consistent accuracy in pendulum mode.

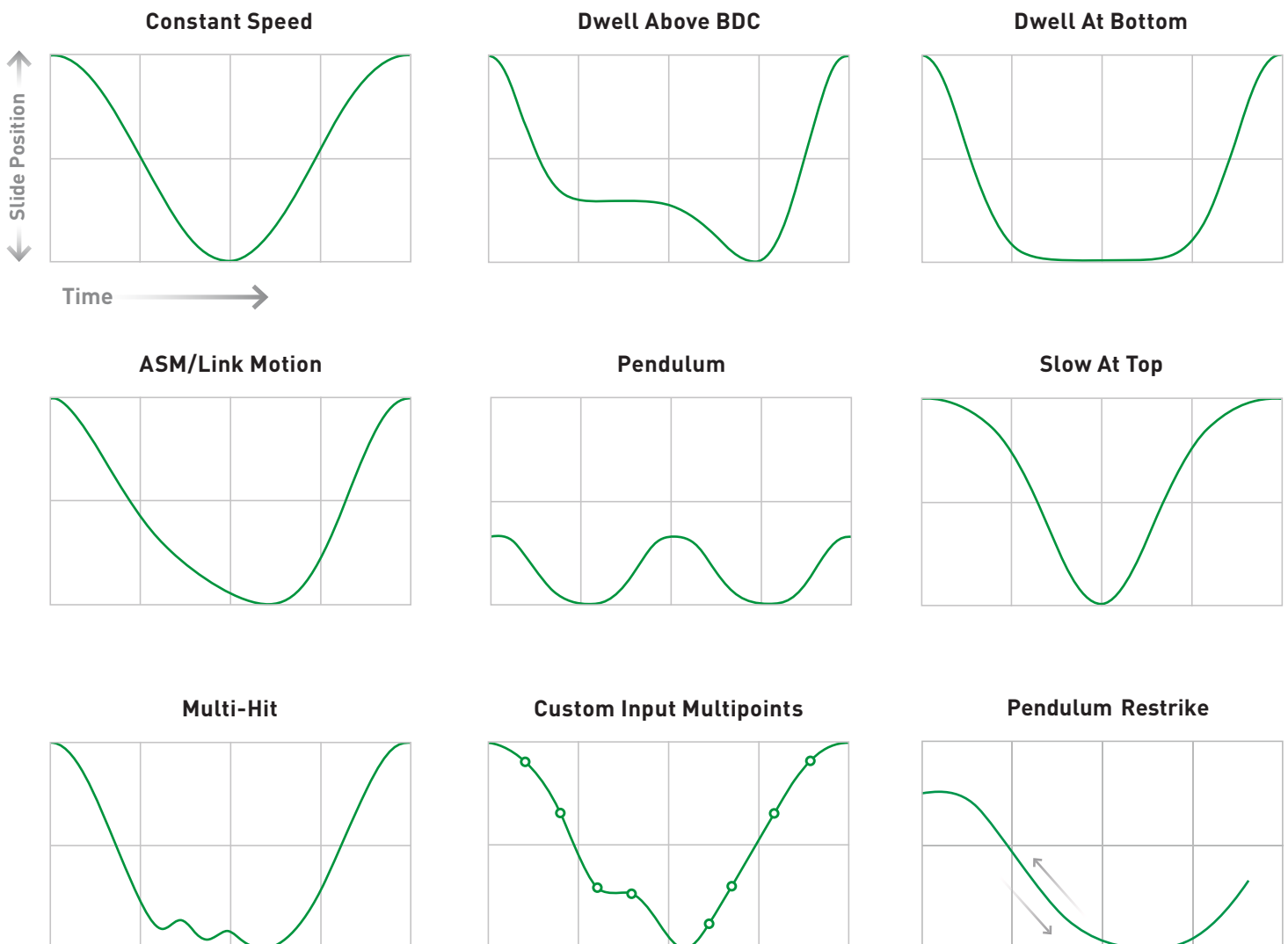
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## STANDARD FEATURES

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### Motion profiles for flexibility to program your optimum production solution

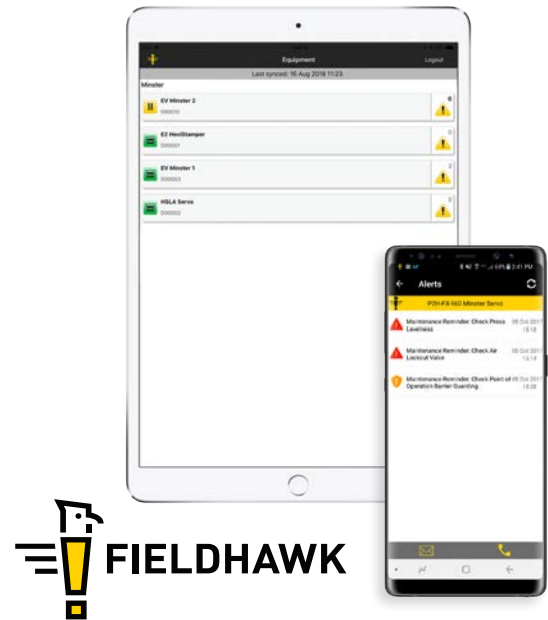
The operator-friendly Human Machine Interface (HMI) provides the ability to quickly choose from any of these highly customizable slide motion profiles below to improve productivity, part quality and tool life.



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## FieldHawk - Industry 4.0

FieldHawk is a cloud-based mobile application designed to communicate with your NP&A stamping press lines from your iOS or Android mobile devices. Cloud-based, secured communications allows all authorized users to check machinery status from anywhere you can get phone service and/or an internet connection, thus reducing downtime.




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## Production Management Control (PMC)

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.

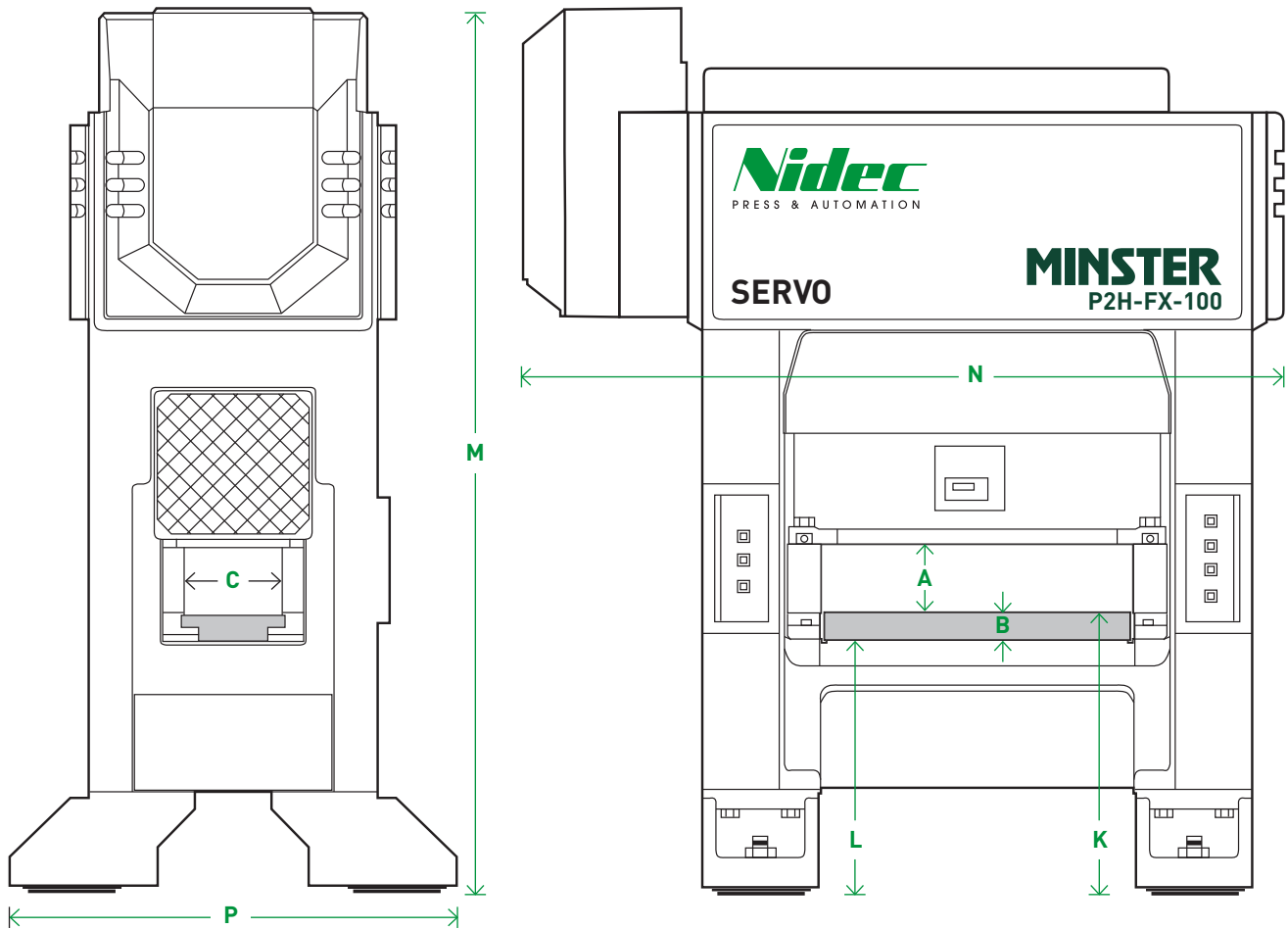
Available popular options include: die protection, load monitoring as well as automatic shutheight and counterbalance controls.

**SIEMENS**  
*Ingenuity for life*

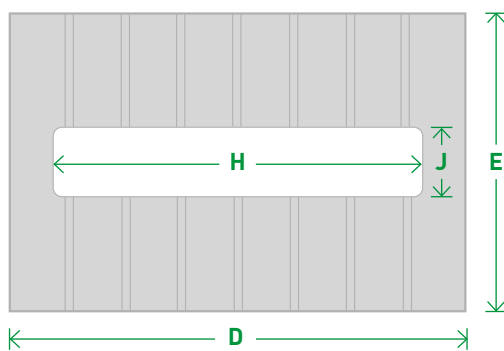
### Siemens Full Energy Management System

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

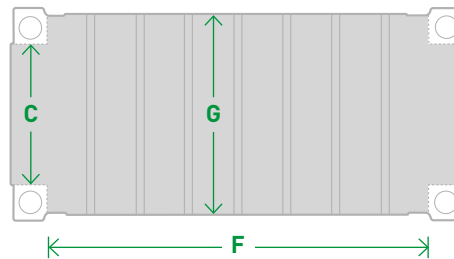
## SPECIFICATIONS & DIMENSIONS



BOLSTER



SLIDE FACE



		<b>P2H-FX-100-48</b>	<b>P2H-FX-100-63</b>	<b>P2H-FX-160-75</b>
	Force Capacity	1,000 kN 112 Tons	1,000 kN 112 Tons	1,600 kN 180 Tons
	Shutheight Adjustment	100 mm 3.94 in	100 mm 3.94 in	150 mm 5.91 in
	QA Slide Travel (Depending on SH)	15–115 mm 0.56–4.50 in	15–115 mm 0.56–4.50 in	15–165 mm 0.56–6.50 in
<b>A</b>	SH Range on Bolster (Std.)	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</b>	Bolster Thickness	100 mm 3.94 in	100 mm 3.94 in	125 mm 4.92 in
<b>C</b>	Passline Opening (F-B)	560 mm 22.0 in	560 mm 22.0 in	630 mm 24.80 in
<b>D x E</b>	Area of Bolster (R-L x F-B) (Std.)	1,220 x 800 mm 48.0 x 31.50 in	1,600 x 800 mm 63.0 x 31.5 in	1,900 x 850 mm 74.8 x 33.50 in
<b>F x G</b>	Area of Slide (R-L x F-B) (Std.)	1,220 x 660 mm 48.0 x 26.0 in	1,600 x 660 mm 63.0 x 26.0 in	1,900 x 850 mm 74.8 x 33.50 in
<b>H x J</b>	Opening in Bolster (R-L x F-B)	1,000 x 190 mm 39.40 x 7.50 in	1,300 x 190 mm 51.20 x 7.50 in	1,600 x 250 mm 63.0 x 9.80 in
	Opening in Bed (R-L x F-B)	1,015 x 360 mm 40.0 x 14.20 in	1,400 x 360 mm 55 x 14.20 in	1,600 x 370 mm 63.0 x 14.60 in
<b>K</b>	Distance Floor to Top of Bolster	1,135 mm 44.70 in	1,135 mm 44.70 in	1,180 mm 46.40 in
<b>L</b>	Distance Floor to Bottom of Bed	430 mm 17.0 in	430 mm 17.0 in	300 mm 11.75 in
<b>M</b>	Overall Height	3,680 mm 145.0 in	3,680 mm 145 in	4,320 mm 170.0 in
<b>N</b>	Overall Width	3,378 mm 133 in	3,760 mm 148 in	4,042 mm 159.10 in
<b>P</b>	Width at Feet	1,780 mm 70.0 in	1,780 mm 70.0 in	2,030 mm 80.0 in
	Press Shipping Weight	18,600 kg 41,000 lbs	20,860 kg 46,000 lbs	34,000 kg 75,000 lbs

## P2H-FX-100

STROKE LENGTH		60 mm (2.36 in)	80 mm (3.15 in)		100 mm (3.94 in)	
Cont. Speed (Reduced Rating)	<b>SPM</b>	250	163	250	163	250
<b>STANDARD POWER SERVO MOTOR 36 kW (1 x #81)</b>						
Rated Distance Off Bottom	<b>mm</b>	3.6 mm	6.1	2.5	4.6	2.0
	<b>in</b>	0.14	0.24	0.10	0.18	0.08
Standard Forming Profile	<b>SPM</b>	165	123	168	123	168
Pendulum 60 mm (2.36 in)	<b>SPM</b>	n/a	105	132	119	155
Pendulum 40 mm (1.57 in)	<b>SPM</b>	150	125	157	141	182
Pendulum 30 mm (1.18 in)	<b>SPM</b>		138	173	n/a	n/a
Pendulum 25 mm (0.98 in)	<b>SPM</b>	183	n/a	n/a	n/a	n/a
Standard Energy	<b>kJ</b>	3.6	4.6	2.0	4.6	2.0
	<b>in-Ton</b>	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



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