Nidec MINSTER

BULLETIN 184A
(5-23-17 .pdf)

MMC PRESSES

MMC CX1 & CX2 SERIES

SINGLE & 2-POINT GAP FRAME PRESSES
45-315 METRIC TONS

Material Forming Solutions

AFFORDABLE QUALITY WITH MINSTER'S
INDUSTRY-LEADING SERVICE AND SUPPORT

MMC PRESSES

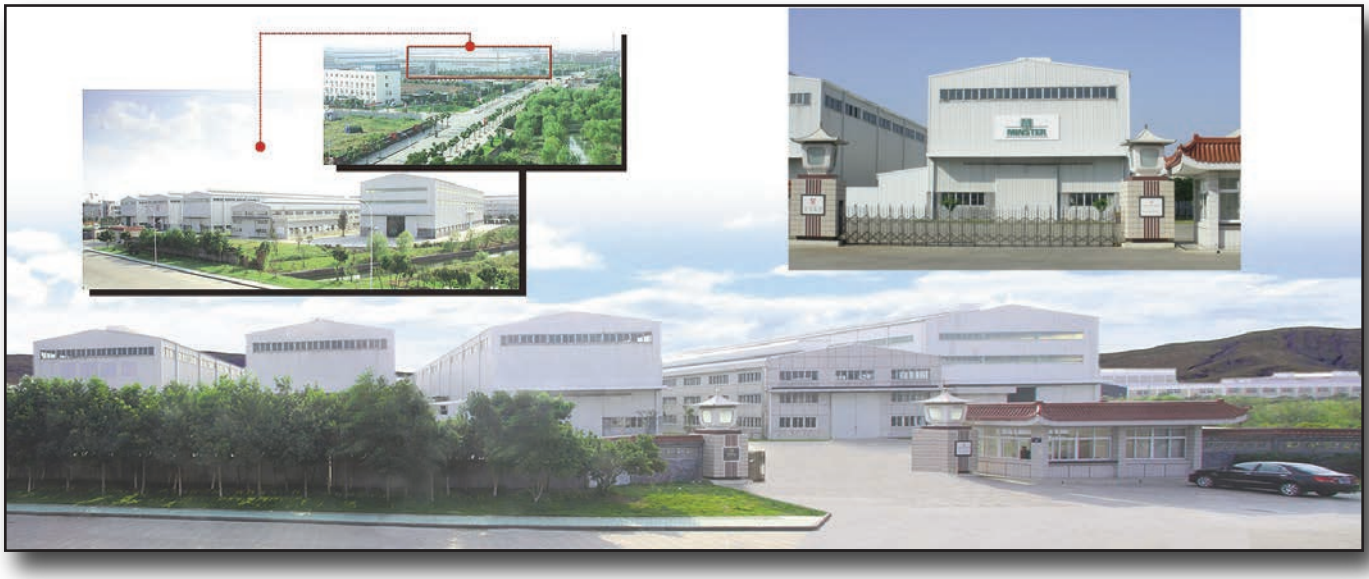
Nidec Minster Corporation, which has been in operation since 1896, has achieved legendary status amongst press users worldwide by providing innovative solutions backed with unmatched service and support for the life of the machine.

As a member of the Nidec Group of Companies (180+ companies as of April, 2012), Minster has the financial and technical strength of a 9-billion dollar manufacturing powerhouse behind it to ensure ongoing innovation, growth and stability well into the future.

As a result of our continuing efforts to bring affordable quality and high performance to our customers, Minster has teamed with one of our strategic partners, Ningbo CFG Machinery (located in the port city of Ningbo, China), to introduce the new "MMC Presses" brand. With decades of experience building a wide range of presses, management has not only invested in the facilities infrastructure necessary to be a leading producer of metal stamping presses, but has also assembled a dedicated and innovative team of associates with the skills necessary to provide metal stampers with high quality, reliable, and affordable mechanical presses up to 1,200 tons capacity.

We invite you to compare the quality, support, and value of MMC Presses to the competition.

Many models of MMC Presses are available from stock for fast delivery.



QUALITY FEATURES

All MMC Presses have been engineered to provide high levels of performance, functionality, and reliable operation under demanding conditions. Some of the many features of the MMC line of single and two-point gap machines include:

- Built to meet or exceed JIS Class 1 accuracy standards.
- Rigid, fabricated steel frame helps to maintain better accuracy and provides increased tooling life by minimizing deflection.
- Precision-machined gears, forged steel crankshafts and other drive train components are designed for smooth power transmission, quiet operation, and long life.
- Our own MMC-PC1 Mitsubishi PLC-based control with 10" color touch screen provides safe and simple operation, with many standard features and available options.
- Ross brand dual air valves meet all safety requirements, and are easily serviceable if required.
- Electrical components are name-brand, and readily sourced locally.
- T-stand mounted operator station (not depicted here) provides more flexibility for press operators.
- Yaskawa variable frequency drive allows fine-tuning the press speed to best suit the application.
- Low-inertia air actuated wet clutch & brake is responsive and long-lasting.
- Powered die height adjustment in .1 mm/.004" increments provides fast, accurate tooling setups.
- Cast connection rod and slide with 6-point gibs helps to dampen vibration (CX1-3150 and all CX2 series have fabricated steel slides).
- Fast-acting hydraulic overload protection system helps to prevent damage due to tonnage overload.
- Automatic monitored grease lubrication system helps to increase the life of bearings and slide ways.
- T-slotted slide face and bolster helps to provide easier clamping of tooling.
- Leveling mounts help dampen vibration and increase tooling life by helping maintain slide-to-bolster parallelism.
- Comprehensive warranty and world-class Minster service for peace of mind.

AVAILABLE WITH LINK MOTION AND IN SINGLE POINT STRAIGHTSIDE CONFIGURATIONS

1, 2 & 4-POINT STRAIGHTSIDES ALSO AVAILABLE FROM 110 TO 1,200 TONS CAPACITY

CONTACT MINSTER OR YOUR LOCAL REPRESENTATIVE FOR MORE INFORMATION

MMC PRESSES

45 THRU 315 TON CX1 PRESSES

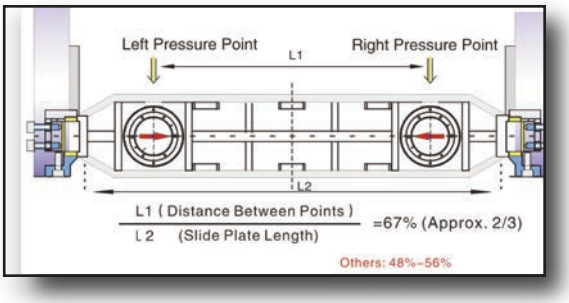
MMC Presses Quality Feature:
All 80-ton and larger CX1 series presses feature a standard extra wide (approx. 40% wider) flanged ram for easier mounting and better support of tooling, providing better part quality and longer tooling life.

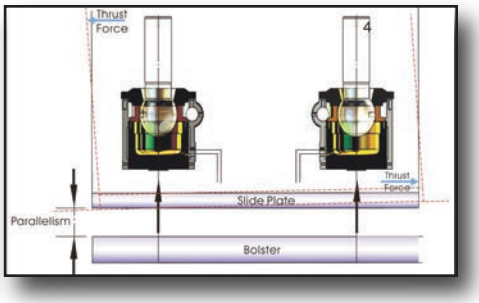
CX1 SERIES BASIC SPECIFICATIONS

All specifications are subject to change without notice. If you have critical dimensions that must be maintained, please confirm before ordering.

No.	Feature	Unit	CX1-450		CX1-600		CX1-800		CX1-1100		CX1-1600		CX1-2000		CX1-2500		CX1-3150	
1	Capacity	Metric Ton	45		60		80		110		160		200		250		315	
		US Ton	50		66		88		121		176		220		275		347	
2	Model Designation	Type L or H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H
3	Tonnage Rating Above BDC	mm	3.2	1.6	4.0	2.0	4.0	4.0	6.0	6.0	6.0	6.0	6.0	6.0	6.5	6.5	8.0	8.0
		inch	0.13	0.06	0.16	0.08	0.16	0.16	0.24	0.24	0.24	0.24	0.24	0.24	0.26	0.26	0.31	0.31
4	Stroke Length	mm	80	50	120	60	150	100	180	110	200	130	200	150	250	150	250	150
		inch	3.15	1.97	4.72	2.36	5.91	3.94	7.09	4.33	7.87	5.12	7.87	5.91	9.84	5.91	9.84	5.91
5	Speed Range	SPM	40~100	100~150	35~90	80~120	45~75	50~90	35~60	45~80	30~50	35~65	25~45	35~55	20~40	30~50	20~40	30~50
6	Die height over bolster SDAU	mm	250	265	310	340	330		350		450		450		450		450	
		inch	9.84	10.43	12.20	13.39	12.99		13.78		17.72		17.72		17.72		17.72	
7	Slide Adjustment	mm	60		75		80		80		100		110		120		120	
		inch	2.36		2.95		3.15		3.15		3.94		4.33		4.72		4.72	
8	Max. Upper Die Weight	Kg	300		300		500		650		750		950		1300		1400	
		lb	660		660		1100		1430		1650		2090		2860		3080	
9	Bolster Area (R-L x F-B)	mm	850	440	900	500	1000	600	1150	680	1250	760	1400	840	1500	900	1600	900
		inch	33.46	17.32	35.43	19.69	39.37	23.62	45.28	26.77	49.21	29.92	55.12	33.07	59.06	35.43	62.99	35.43
10	Bolster Thickness	mm	90		90		100		120		150		170		180		180	
		inch	3.54		3.54		3.94		4.72		5.91		6.69		7.09		7.09	
11	Slide Area (R-L x F-B)	mm	400	300	500	360	770	460	960	520	980	580	1100	650	1200	700	1200	700
		inch	15.75	11.81	19.69	14.17	30.31	18.11	37.80	20.47	38.58	22.83	43.31	25.59	47.24	27.56	47.24	27.56
12	Throat Depth	mm	225		255		310		350		390		430		460		460	
		inch	8.86		10.04		12.20		13.78		15.35		16.93		18.11		18.11	
13	Die Shank Hole Diameter	mm	38.1		50.0		50.0		50.0		65.0		65.0		65.0		65.0	
		inch	1.50		1.97		1.97		1.97		2.56		2.56		2.56		2.56	
14	Main Motor (VFD)	Kw	3.7		5.5		5.5		7.5		11.0		15.0		18.5		22.0	
		hp	5.0		7.4		7.4		10.1		14.7		20.1		24.8		29.5	
15	Slide Adjust Motor	Kw	0.2		0.3		0.4		0.4		0.8		0.8		1.1		1.1	
		hp	0.3		0.4		0.5		0.5		1.0		1.0		1.5		1.5	
16	Compressed Air Requirement	Mpa	0.55		0.55		0.55		0.55		0.55		0.55		0.55		0.55	
		psi	80		80		80		80		80		80		80		80	
17	Accuracy Standard	JIS	Class 1		Class 1		Class 1		Class 1		Class 1		Class 1		Class 1		Class 1	
18	Approx. Press Weight	Kg	3,800		5,600		7,000		10,000		14,000		22,000		25,000		29,000	
		lb	8,360		12,320		15,400		22,000		30,800		48,400		55,000		63,800	
19	OPTIONAL Die Cushion																	
20	Capacity	kN	23	n/a	36	n/a	36	n/a	63	n/a	100	n/a	140	n/a	140	n/a	140	n/a
		US Ton	2.5	n/a	4.0	n/a	4.0	n/a	6.9	n/a	11.0	n/a	15.4	n/a	15.4	n/a	15.4	n/a
21	Compressed Air Requirement	Mpa	0.55	n/a	0.55	n/a	0.55	n/a	0.55	n/a	0.55	n/a	0.55	n/a	0.55	n/a	0.55	n/a
		psi	80	n/a	80	n/a	80	n/a	80	n/a	80	n/a	80	n/a	80	n/a	80	n/a
22	Stroke Length	mm	50	n/a	70	n/a	70	n/a	80	n/a	90	n/a	90	n/a	110	n/a	110	n/a
		inch	1.97	n/a	2.76	n/a	2.76	n/a	3.15	n/a	3.54	n/a	3.54	n/a	4.33	n/a	4.33	n/a
23	Pad Area (L-R x F-B)	mm	300	230	350	300	410	330	500	460	540	460	640	510	700	510	700	510
		inch	11.81	9.06	13.78	11.81	16.14	12.99	19.69	18.11	21.26	18.11	25.20	20.08	27.56	20.08	27.56	20.08

110 THRU 315 TON CX2 PRESSES





MMC Presses Quality Feature:

All CX2 series presses feature widely spaced connections (spaced at 2/3 of total slide width) and a responsive hydraulic overload which monitors and trips both valves simultaneously in the event of an overload, helping reduce the chance of press and tooling damage.

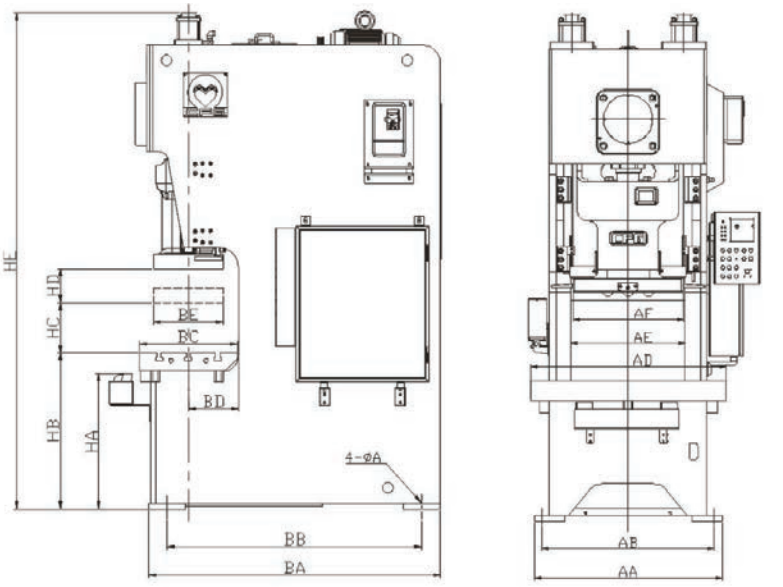
CX2 SERIES BASIC SPECIFICATIONS

All specifications are subject to change without notice. If you have critical dimensions that must be maintained, please confirm before ordering.

No.	Feature	Unit	CX2-1100		CX2-1600		CX2-2000		CX2-2500		CX2-3150	
1	Capacity	Metric Ton	110		160		200		250		315	
		US Ton	121		176		220		275		347	
2	Model Designation	Type L or H	L	H	L	H	L	H	L	H	L	H
3	Tonnage Rating Above BDC	mm	5.0	3.0	6.0	3.0	6.0	3.0	7.0	3.5	7.0	3.5
		inch	0.20	0.12	0.24	0.12	0.24	0.12	0.28	0.14	0.28	0.14
4	Stroke Length	mm	180	110	200	130	250	150	280	170	280	170
		inch	7.09	4.33	7.87	5.12	9.84	5.91	11.02	6.69	11.02	6.69
5	Speed Range	SPM	35~65	50~100	30~55	40~85	25~45	35~70	20~35	30~60	20~35	30~50
6	Die height over bolster SDAU	mm	400		450		500		550		550	
		inch	15.75		17.72		19.69		21.65		21.65	
7	Slide Adjustment	mm	100		100		120		120		120	
		inch	3.94		3.94		4.72		4.72		4.72	
8	Max. Upper Die Weight	Kg	800		1270		1470		1560		1560	
		lb	1760		2794		3234		3432		3432	
9	Bolster Area (R-L x F-B)	mm	1800	650	2000	760	2400	840	2700	900	2700	920
		inch	70.87	25.59	78.74	29.92	94.49	33.07	106.30	35.43	106.30	36.22
10	Bolster Thickness	mm	130		150		170		170		180	
		inch	5.12		5.91		6.69		6.69		7.09	
11	Slide Area (R-L x F-B)	mm	1400	500	1600	550	1850	650	2100	700	2100	700
		inch	55.12	19.69	62.99	21.65	72.83	25.59	82.68	27.56	82.68	27.56
12	Throat Depth	mm	335		390		430		460		460	
		inch	13.19		15.35		16.93		18.11		18.11	
13	Die Shank Hole Diameter & Spacing (Qty. 3)	mm	50	280	50	325	50	375	50	430	50	450
		inch	1.97	11.02	1.97	12.80	1.97	14.76	1.97	16.93	1.97	17.72
14	Main Motor (VFD)	Kw	11		11		15		19		22	
		hp	15		15		20		25		29	
15	Slide Adjust Motor	Kw	0.8		1.1		1.5		1.5		2.0	
		hp	1.0		1.5		2.0		2.0		2.7	
16	Compressed Air Requirement	Mpa	0.55		0.55		0.55		0.55		0.55	
		psi	80		80		80		80		80	
17	Accuracy Standard	JIS	Class 1		Class 1		Class 1		Class 1		Class 1	
18	Approx. Press Weight	Kg	13,500		19,500		28,000		35,000		42,000	
		lb	29,700		42,900		61,600		77,000		92,400	
19	OPTIONAL Die Cushions	1 Pad / 2 Cylinders										
20	Capacity	kN	36	n/a	63	n/a	100	n/a	140	n/a	140	n/a
		US Ton	4.0	n/a	6.9	n/a	11.0	n/a	15.4	n/a	15.4	n/a
21	Compressed Air Requirement	Mpa	0.6	n/a	0.6	n/a	0.6	n/a	0.6	n/a	0.6	n/a
		psi	87	n/a	87	n/a	87	n/a	87	n/a	87	n/a
22	Stroke Length	mm	70	n/a	70	n/a	80	n/a	100	n/a	100	n/a
		inch	2.76	n/a	2.76	n/a	3.15	n/a	3.94	n/a	3.94	n/a
23	Pad Area (L-R x F-B)	mm	1058	346	1268	470	1470	546	1680	654	1680	654
		inch	41.65	13.62	49.92	18.50	57.87	21.50	66.14	25.75	66.14	25.75
19	OPTIONAL Die Cushions	2 Pads / 2 Cylinders										
20	Capacity (Each Cylinder)	kN	36	n/a	63	n/a	100	n/a	140	n/a	140	n/a
		US Ton	4.0	n/a	6.9	n/a	11.0	n/a	15.4	n/a	15.4	n/a
21	Compressed Air Requirement	Mpa	0.6	n/a	0.6	n/a	0.6	n/a	0.6	n/a	0.6	n/a
		psi	87	n/a	87	n/a	87	n/a	87	n/a	87	n/a
22	Stroke Length	mm	70	n/a	70	n/a	80	n/a	100	n/a	100	n/a
		inch	2.76	n/a	2.76	n/a	3.15	n/a	3.94	n/a	3.94	n/a
23	Pad Area (L-R x F-B) x 2	mm	410	330	500	460	540	460	700	510	700	510
		inch	16.14	12.99	19.69	18.11	21.26	18.11	27.56	20.08	27.56	20.08

MMC PRESSES

REFERENCE DIMENSIONS CX1 SERIES

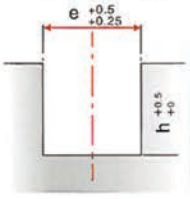


CX1 SERIES DIMENSIONS

All specifications are subject to change without notice. If you have critical dimensions that must be maintained, please confirm before ordering.

Model	CX1-450	CX1-600	CX1-800	CX1-1100	CX1-1600	CX1-2000	CX1-2500	CX1-3150
AA	860	910	1060	1110	1250	1410	1600	1690
AB	790	840	970	1020	1150	1310	1480	1570
AD	850	900	1000	1150	1250	1400	1500	1600
AE	500	570	675	670	720	870	930	1020
AG	700	750	865	930	1030	1200	1340	1430
BA	1230	1495	1635	1790	1960	2270	2460	2715
BB	1040	1305	1435	1540	1660	1920	2040	2295
BC	440	500	600	680	760	840	900	900
BD	225	255	310	350	390	430	460	460
BE	350	360	460	520	580	650	700	700
HA	690	690	690	690	705	770	840	880
HB	800	800	835	840	900	1020	1100	1140
HC	275	310	330	240	450	450	450	450
HD	110	120	150	180	200	200	250	250
HE	2245	2550	2950	2970	3480	4000	4220	4455
HF	810	810	1380	1500	1580	1600	1635	1650
ØA	Ø28	Ø28	Ø28	Ø28	Ø45	Ø45	Ø45	Ø45

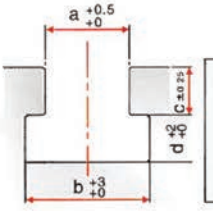
U-Slot Detail



U-Slot

Size \ Type	A2	B2
e	28	50
h	43	53

T-Slot Detail



T-Slot

Size \ Type	A1	B1	C1
a	22	28	18
b	37	48	30
c	24	28	18
d	16	20	12

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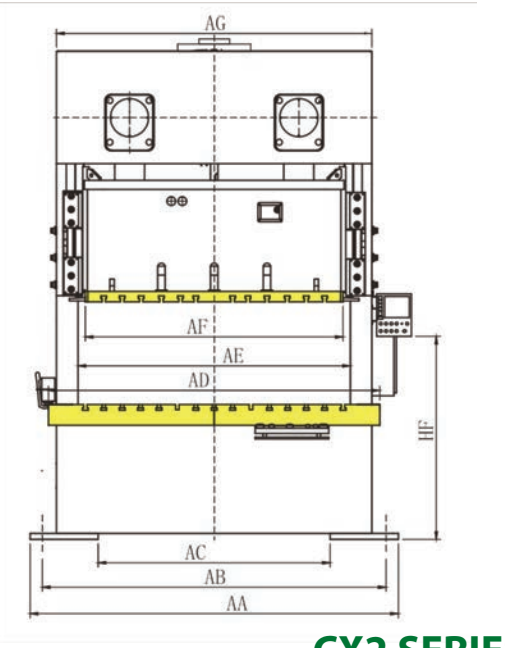
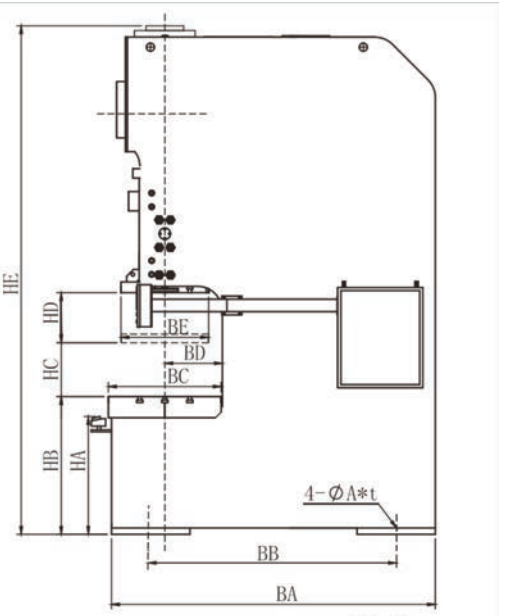
MMC PRESSES

REFERENCE DIMENSIONS CX2 SERIES



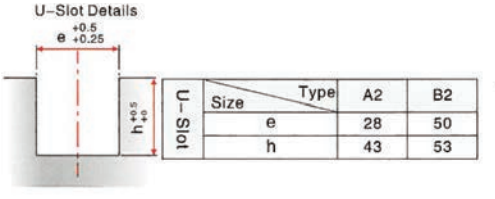


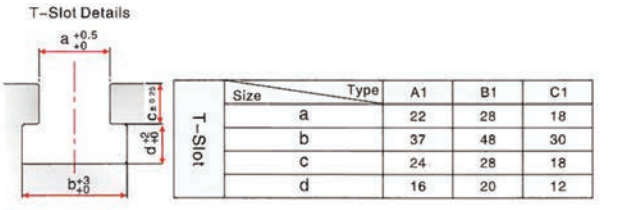
CX2 SERIES DIMENSIONS

Unit: mm

All specifications are subject to change without notice. If you have critical dimensions that must be maintained, please confirm before ordering.

Model	CX2-1100		CX2-1600		CX2-2000		CX2-2500		CX2-3150	
	L	H	L	H	L	H	L	H	L	H
AA	1900		2200		2550		3000		3000	
AB	1800		2080		2400		2700		2700	
AD	1800		2000		2400		2700		2700	
AE	1440		1660		1920		2220		2220	
AF	1400		1600		1850		2100		2100	
AG	1700		1970		2275		2585		2585	
BA	1745		1970		2275		2585		2585	
BB	1365		1580		1885		2195		2195	
BC	650		760		840		900		920	
BD	335		390		430		460		460	
BE	500		550		650		700		700	
HA	630		680		770		870		870	
HB	830	860	905	1025	1000	860	1100	860	1100	860
HC	400		450		500		550		550	
HD	830	860	905	1025	1000	860	1100	860	1100	860
HE	2765		3185		3660		4070		4070	
HF	1400		1570		1670		1670		1670	
ØA*T (Plate Thickness)	Ø35 x 40		Ø41 x 45		Ø41 x 45		Ø47 x 50		Ø47 x 50	





NOTE:

All specifications are subject to change without notice. If you have critical dimensions that must be maintained, please confirm before ordering. Special slide and bolster machining is available. For cost and lead time, please contact Minster.

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