HYVA CRANE M SERIES

CE

Crane model	Max. outreach m	Outreach lifting cap. kg H1B3	Outreach lifting cap. kg H2B3	Rot. (°)	X
HA10 M E1	1,89	490	390	328	OPT.
HA10 M E2	2,77	315	250	328	OPT.
HA15 M E1	1,89	675	540	335	OPT.
HA15 M E2	2,77	440	350	335	OPT.
HA22 M E1	2,15	930	740	335	OPT.
HA22 M E2	3,16	620	500	335	OPT.
HA22 M E3	4,16	410	330	335	OPT.
HA28 M E1	2,25	1220	980	335	OPT.
HA28 M E2	3,24	820	660	335	OPT.
HA28 M E3	4,24	605	480	335	OPT.
HA33 M E1	2,48	1390	1110	395	OPT.
HA33 M E2	3,62	930	740	395	OPT.
HA33 M E3	4,75	675	540	395	OPT.
HA33 M E4	5,89	520	420	395	OPT.
HA70 M E2	5,10	1300	1040	380	OPT.
HA70 M E3	6,75	935	750	380	OPT.
HA70 M E4	8,40	690	550	380	OPT.
HA110 M E2	6,05	1655	1320	395	OPT.
HA110 M E3	8,05	1180	940	395	OPT.
HA110 M E4	9,60	935	745	395	OPT.
HA160 M E2	5,51	2590	2070	380	OPT.
HA160 M E4	8,97	1415	1130	380	OPT.
HA160 M E6	12,55	870	700	380	OPT.
HA180 M E2	5,51	2765	2210	380	OPT.
HA180 M E4	8,97	1525	1220	380	OPT.
HA180 M E6	12,55	945	760	380	OPT.
HB31 M E1	4,53	575	460	370	OPT.
HB31 M E2	5,98	405	320	370	OPT.
HB31 M E3	7,38	300	240	370	OPT.
HB41 M E1	4,95	770	620	380	OPT.
HB41 M E2	6,36	550	440	380	OPT.
HB41 M E3	7,82	410	330	380	OPT.
HB41 M E4	9,28	300	240	380	OPT.
HB51 M E1	4,84	905	720	380	OPT.
HB51 M E2	6,30	650	520	380	OPT.
HB51 M E3	7,76	480	380	380	OPT.
HB51 M E4	9,22	360	290	380	OPT.
HB60 M E1	5,34	1230	980	400	OPT.
HB60 M E2	7,00	885	710	400	OPT.
HB60 M E3	8,64	655	520	400	OPT.
HB60 M E4	10,30	495	400	400	OPT.
HB70 M E1	5,40	1300	1040	400	OPT.
HB70 M E2	7,02	945	760	400	OPT.
HB70 M E3	8,66	705	560	400	OPT.
HB70 M E4	10,30	530	420	400	OPT.
HB80 M E1	5,40	1445	1160	400	OPT.
HB80 M E2	7,05	1050	840	400	OPT.
HB80 M E3	8,66	790	630	400	OPT.
HB80 M E4	10,35	600	480	400	OPT.
HB100 M E1	5,84	1615	1290	410	OPT.
HB100 M E2	7,64	1140	910	410	OPT.
HB100 M E3	9,60	815	650	410	OPT.
HB100 M E4	11,70	595	480	410	OPT.
HB100 M E5	13,65	435	350	410	OPT.
HB120 M E1	6,04	1940	1550	380	OPT.
HB120 M E2	8,00	1375	1100	380	OPT.
HB120 M E3	10,06	1005	800	380	OPT.
HB120 M E4	12,13	735	590	380	OPT.
HB120 M E5	14,21	545	440	380	OPT.
HB150 M E1	6,04	2275	1820	380	OPT.
HB150 M E2	8,00	1620	1300	380	OPT.
HB150 M E3	10,06	1190	950	380	OPT.
HB150 M E4	12,13	885	710	380	OPT.
HB150 M E5	14,21	615	485	380	OPT.
HB170 M E1	6,13	2560	2050	390	OPT.
HB170 M E2	8,00	1850	1480	390	OPT.
HB170 M E3	9,95	1380	1100	390	OPT.
HB170 M E4	11,9	1045	840	390	OPT.
HB170 M E5	14,0	795	640	390	OPT.
HB170 M E6	16,1	600	480	390	OPT.
HB200 M E1	6,13	3200	2560	390	OPT.
HB200 M E2	8,00	2325	1860	390	OPT.
HB200 M E3	9,95	1740	1390	390	OPT.
HB200 M E4	11,9	1325	1060	390	OPT.
HB200 M E5	14,0	1005	800	390	OPT.
HB200 M E6	16,10	775	620	390	OPT.
HB230 M E1	6,13	3370	2700	390	OPT.
HB230 M E2	8,00	2490	1990	390	OPT.
HB230 M E3	9,95	1905	1520	390	OPT.
HB230 M E4	11,9	1470	1180	390	OPT.
HB230 M E5	14,0	1145	920	390	OPT.
HB230 M E6	16,10	905	720	390	OPT.
HB250 M E1	6,07	4065	3250	400	OPT.
HB250 M E2	7,93	2895	2320	400	OPT.
HB250 M E3	9,83	2160	1730	400	OPT.
HB250 M E4	11,82	1620	1300	400	OPT.
HB250 M E5	13,88	1255	1000	400	OPT.
HB250 M E6	15,92	965	770	400	OPT.
HB280 M E1	6,07	4245	3400	400	OPT.
HB280 M E2	7,93	3055	2440	400	OPT.
HB280 M E3	9,83	2300	1840	400	OPT.
HB280 M E4	11,82	1750	1400	400	OPT.
HB280 M E5	13,88	1365	1090	400	OPT.
HB280 M E6	15,92	1065	850	400	OPT.
HB460 M E2	7,75	5590	4470	400	NO
HB460 M E3	9,80	4220	3380	400	NO
HB460 M E4	11,80	3270	2620	400	NO
HB460 M E5	13,90	2565	2050	400	NO
HB460 M E6	16,00	2040	1630	400	NO
HB460 M E7	18,20	1605	1280	400	NO
HB460 M E8	20,40	1260	1010	400	NO
HC331 M E2	7,60	3900	3120	400	OPT.
HC331 M E3	9,60	2895	2320	400	OPT.
HC331 M E4	11,70	2195	1760	400	OPT.
HC331 M E5	14,00	1680	1340	400	OPT.
HC331 M E6	16,30	1295	1040	400	OPT.
HC331 M E7	18,65	1005	800	400	OPT.
HC331 M E8	20,95	785	630	400	OPT.
HC361 M E2	7,60	4080	3260	400	OPT.
HC361 M E3	9,60	3070	2460	400	OPT.
HC361 M E4	11,70	2355	1880	400	OPT.
HC361 M E5	14,00	1825	1460	400	OPT.
HC361 M E6	16,30	1425	1140	400	OPT.
HC361 M E7	18,65	1120	900	400	OPT.
HC361 M E8	20,95	885	710	400	OPT.
HC501X M E2	7,75	5805	4640	400	STD.
HC501X M E3	9,80	4425	3540	400	STD.
HC501X M E4	11,80	3460	2770	400	STD.
HC501X M E5	13,90	2735	2190	400	STD.
HC501X M E6	16,00	2195	1760	400	STD.
HC501X M E7	18,20	1745	1400	400	STD.
HC501X M E8	20,40	1380	1100	400	STD.
HB700 M E2	7,55	9250	7400	420	NO
HB700 M E4	11,45	5640	4510	420	NO
HB700 M E6	15,60	3640	2910	420	NO
HB700 M E8	19,60	2420	1940	420	NO
HB700 M E10	24,15	1610	1290	420	NO
HC801X M E2	7,55	9800	7840	ENDLESS	STD.
HC801X M E4	11,45	5920	4740	ENDLESS	STD.
HC801X M E6	15,60	3845	3080	ENDLESS	STD.
HC801X M E8	19,60	2605	2080	ENDLESS	STD.
HC801X M E10	24,15	1760	1410	ENDLESS	STD.

X Radio Remote Control

Single hand proportional system

Pressure compensated inlet section: BOSCH

HA10
HA15
HA22
HA28
HA33
HA70
HB31
HB41
HB51
HB60
HB70

Multifunction radio control

Pressure compensated control valve: SAUER DANFOSS PVG32

HA110 HB170
HA160 HB200
HA180 HB230
HB250
HB80 HB280
HB100 HC331
HB120 HC361
HB150 HC501X
HC801X*

*) HC801X is standard equipped with CANBUS version.

www.hyvacrane.com
www.hyva.com

M SERIES

HYVA CRANE

HYVA Holding B.V.
Antonie van Leeuwenhoekweg 37
2408 AK Alphen aan den Rijn
The Netherlands
Telephone: (31)172 - 42 35 55
Telefax: (31)172 - 43 31 96
info@hyva.com

Dealer:

DATE OF PRINTING: 01/12/2013 REV. 1

MARINE CRANES
M SERIES

HYVA CRANE

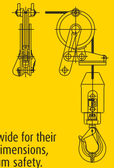
www.hyva.com

EQUIPMENT

- Square base with double rack and pinion system. Powerful rotation system especially designed for marine conditions (No HA 10-15-22-28-33-HB700-HC801X)
- Stationary base for easy installation on vessel
- Counterbalance valves are direct mounted to each cylinder
- Hexagonal shaped telescopic booms are stronger and self-aligning, offering greater load handling control
- Control valve is plumbed and shipped unmounted with sufficient hose for mounting in stand-up position near crane
- Fixed base with shearball slewing bearing rotation system with 2 gearmotors (Only: HB700 - HC801X)
- Optional: third gearmotor (Only: HB700 - HC801X)
- Optional: hydraulic winch.

Winch (optional)

ROTZLER TITAN



Rotzler winches are famous worldwide for their unique characteristics: compact dimensions, low weight, high power, maximum safety. A wide range of accessories is included as a standard in the Winch Kit. Other winches' brands are available.

1 SURFACE PREPARATION
WHOLE STRUCTURE SHOT BLASTED:
SA 2 ½ ISO 8501-1 (BS 4232)
[M1, M2, M3, M4]

2 ANTICORROSION PAINTING
1ST LAYER: EPOXY ZINC (average th. 75µm)
2ND LAYER: BICOMPONENT EPOXY PRIMER (average th. 180µm)
[M2, M3, M4]

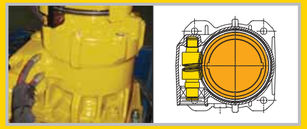
3 FINAL PAINTING
BICOMPONENT POLYURETHANE FINISHING COAT (average th. 80µm)
[M2, M3, M4]

4 CYLINDER AND PIN PROTECTION
DOUBLE CROSS CHROME PLATING ON CYLINDER RODS AND ON INSIDE DIAMETER OF SLEWING BARRELS (average th. 50 µm) [M3, M4]
CARBONITRIDING ON ARTICULATION PINS (Tenifer-QPQ, average th. 15µm + 0,4mm nitriding depth) [M1, M2, M3, M4]

5 STAINLESS STEEL FITTINGS FOR RUBBER HOSES
[M4]

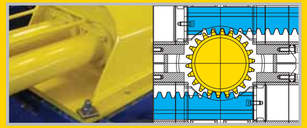
HYVA CRANE
M SERIES

BASE



Worm and gear rotation

(Only HA10-15-22-28-33)
Completely enclosed cast housing with lubrication bath (no HA10).



Double rack and pinion slewing

Marine and fixed base version cranes utilize a double rack and pinion system. It has many advantages where the crane requires extra torque or is not operating in leveled conditions.

Strength
By doubling the number of racks and cylinders, the force of the slewing system is also doubled. The slewing has more strength for difficult situations.

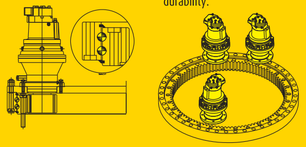
Reliable
The use of two racks spreads the force across twice as many teeth on the pinion. A more even distribution of stress results in longer component life.

Precise
The backlash in the slewing system is shared across the teeth of both racks. The result is reduced play at the load hook for more precise operation.

Slewing Bearing

First and only to use up to 3 planetary hydraulic motors.

Our HB700 - HC801X models use a shearball slewing bearing at the heart of its rotation system.
Our continuous slewing system is driven by **up to 3 planetary hydraulic motors** (on request). This system has very low play for high precision operation. Each motor has automatic braking integrated inside for the highest safety and durability.

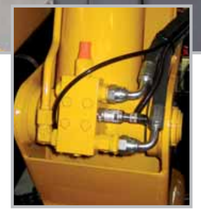


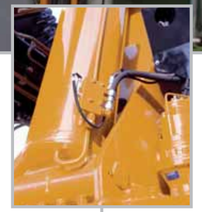
The bearing races are joined by two layers of ball bearings. By spreading the load across two layers, the strength and durability are greatly improved.

Electrohydraulic Power Pack

Electrohydraulic power packs allow the installer to use the crane in special locations or where there is no power take-off available.

Electro-hydraulic powerpack
HA10 - HA15 - HA22 - HA28 - HA33





No HA10 - HA15 - HA22 - HA28 - HA33

TREATMENTS

M1

Fixed Base
- flange-mounted square base and double slewing cylinder (NO HA10-15-22-28-33 - HB700 - HC801X)
- flange-mounted round base with slewing ring bearing and planetary gearmotors (ONLY HB700 - HC801X)
- whole structure shot blasted: Sa 2 ½ ISO 8501-1 (BS 4232)
- **Standard painting**
  1st layer: bicomponent polyurethane primer with parts assembled (average th. 60µm)
  2nd layer: bicomponent polyurethane finishing coat (average th. 60µm)
- **Standard chrome plating**
  single layer chrome plating on cylinder rods and on inside diameter of slewing barrels (average th. 25µm)
  carbonitriding on articulation pins (Tenifer-QPQ, average th. 15µm + 0,4mm nitriding depth)
- **Standard fittings**
  zinc plated fittings for all hoses Fe/Zn 12 IV S (average th. 12µm)

M2

Fixed base and marine painting
- flange-mounted square base and double slewing cylinder (NO HA10-15-22-28-33 - HB700 - HC801X)
- flange-mounted round base with slewing ring bearing and planetary gearmotors (ONLY HB700 - HC801X)
- whole structure shot blasted: Sa 2 ½ ISO 8501-1 (BS 4232)
- **Marine painting**
  1st layer: epoxy zinc primer applied with parts disassembled (average th. 75µm)
  2nd layer: bicomponent epoxy primer applied with parts disassembled (average th. 180µm)
  3rd layer: bicomponent polyurethane finishing coat (average th. 80µm)
- **Standard chrome plating**
  single layer chrome plating on cylinder rods and on inside diameter of slewing barrels (average th. 25µm)
  carbonitriding on articulation pins (Tenifer-QPQ, average th. 15µm + 0,4mm nitriding depth)
- **Standard fittings**
  zinc plated fittings for all hoses Fe/Zn 12 IV S (average th. 12µm)

M3

Fixed base and marine treatment
- flange-mounted square base and double slewing cylinder (NO HA10-15-22-28-33 - HB700 - HC801X)
- flange-mounted round base with slewing ring bearing and planetary gearmotors (ONLY HB700 - HC801X)
- whole structure shot blasted: Sa 2 ½ ISO 8501-1 (BS 4232)
- **Marine painting**
  1st layer: epoxy zinc primer applied with parts disassembled (average th. 75µm)
  2nd layer: bicomponent epoxy primer applied with parts disassembled (average th. 180µm)
  3rd layer: bicomponent polyurethane finishing coat (average th. 80µm)
- **Marine chrome plating**
  double cross chrome plating on cylinder rods and on inside diameter of slewing barrels (average th. 50µm)
  carbonitriding on articulation pins (Tenifer-QPQ, average th. 15µm + 0,4mm nitriding depth)
- **Standard fittings**
  zinc plated fittings for all hoses Fe/Zn 12 IV S (average th. 12µm)

M4

Fixed base, marine treatment and stainless steel fittings
- flange-mounted square base and double slewing cylinder (NO HA10-15-22-28-33 - HB700 - HC801X)
- flange-mounted round base with slewing ring bearing and gearmotors (ONLY HB700 - HC801X)
- whole structure shot blasted: Sa 2 ½ ISO 8501-1 (BS 4232)
- **Marine painting**
  1st layer: epoxy zinc primer applied with parts disassembled (average th. 75µm)
  2nd layer: bicomponent epoxy primer applied with parts disassembled (average th. 180µm)
  3rd layer: bicomponent polyurethane finishing coat (average th. 80µm)
- **Marine chrome plating**
  double cross chrome plating on cylinder rods and on inside diameter of slewing barrels (average th. 50µm)
  carbonitriding on articulation pins (Tenifer-QPQ, average th. 15µm + 0,4mm nitriding depth)
- **Stainless steel fittings AISI 316 for rubber hoses**