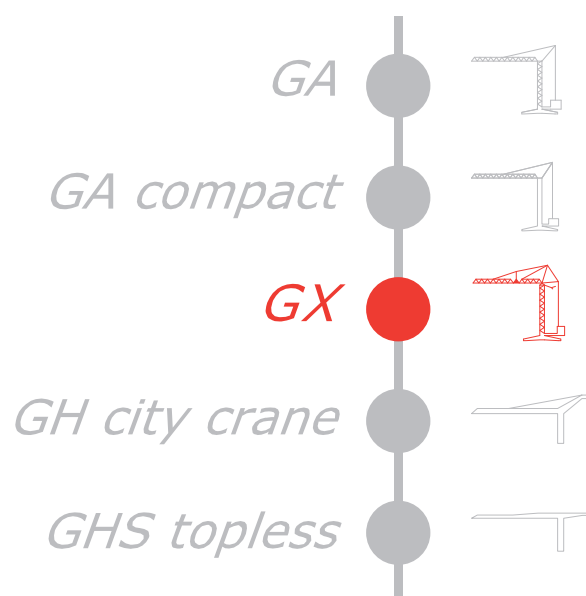


GRU A TORRE

GX 251



FB F.lli Butti s.r.l.

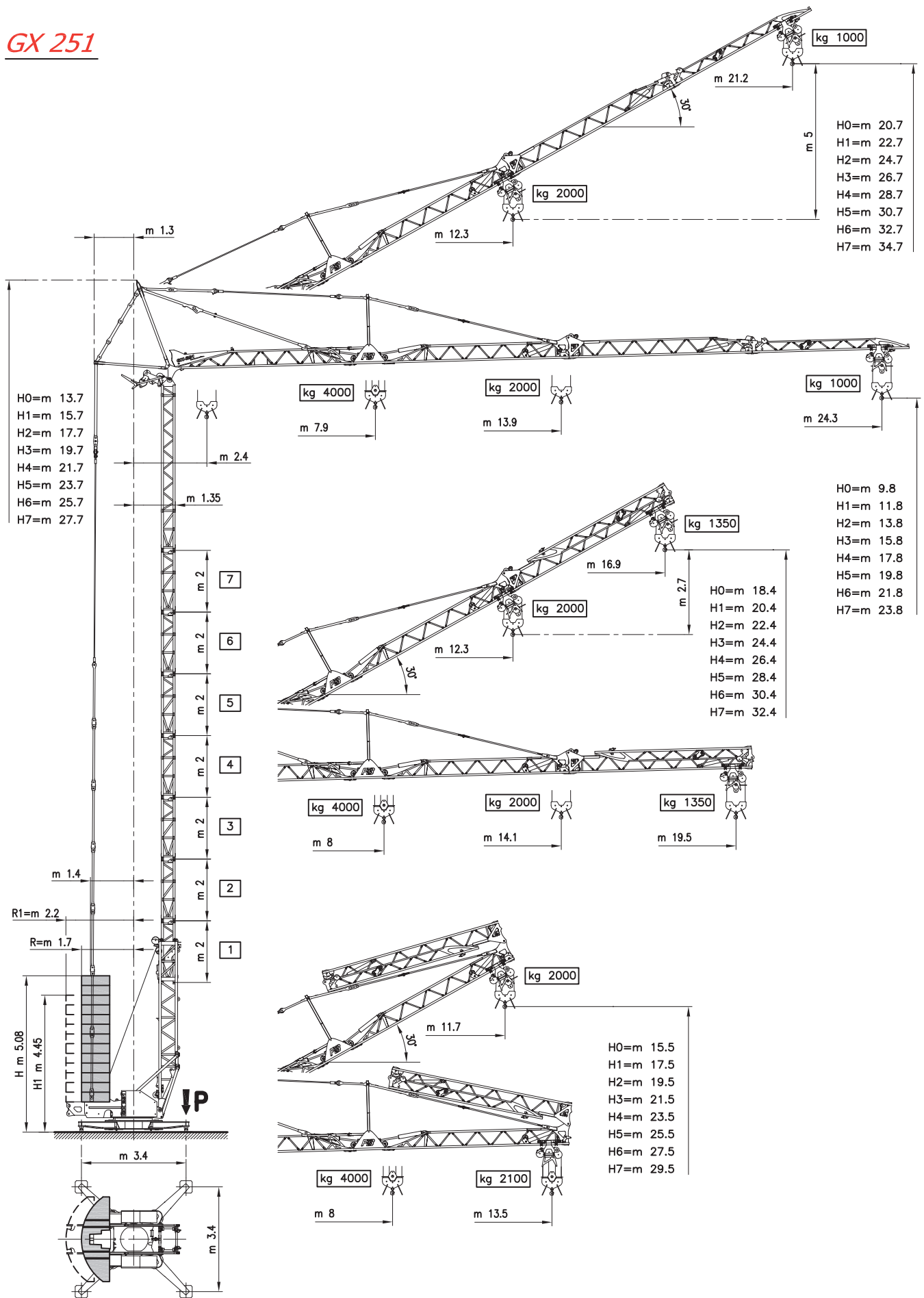
Via XXV Aprile, 58

23868 Valmadrera (LC) - ITALIA

Tel. 0341.581108 - Fax 0341.200253

E-mail : fbgru@fbgru.it - <http://www.fbgru.it>





P	
kg 21300 <i>In servizio</i> En servicio In service In betrieb En service	kg 16000 <i>Fuori servizio</i> Fuera de servicio Out of service Außer betrieb Hors service

R=1.7 m R1=2.2 m	kg 23400 kg 19800
	kg 9350+1620 (Hmax=H7)

MECCANISMI

MECANISMOS — MECHANISMS
ANTRIEBE — MÉCANISMES

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS	
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				1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	kW 9.2
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE INVERTER 	230 V 50 Hz	3 kW		5 ↓ ↑ 2000	15 ↓ ↑ 2000	19 ↓ ↑ 1000	
				3 ↓ ↑ 4000	8 ↓ ↑ 4000	10 ↓ ↑ 2000	
				5 ↓ ↑ 2000	20 ↓ ↑ 2000	24 ↓ ↑ 1000	
		6 kW		3 ↓ ↑ 4000	10 ↓ ↑ 4000	12 ↓ ↑ 2000	
				5 ↓ ↑ 2000	26 ↓ ↑ 2000	40 ↓ ↑ 1000	
				3 ↓ ↑ 4000	13 ↓ ↑ 4000	20 ↓ ↑ 2000	
	400 V 50 Hz			5 ↓ ↑ 2000	26 ↓ ↑ 2000	40 ↓ ↑ 1000	
				3 ↓ ↑ 4000	13 ↓ ↑ 4000	20 ↓ ↑ 2000	
				5 ↓ ↑ 2000	26 ↓ ↑ 2000	40 ↓ ↑ 1000	
				3 ↓ ↑ 4000	13 ↓ ↑ 4000	20 ↓ ↑ 2000	
				5 ↓ ↑ 2000	26 ↓ ↑ 2000	40 ↓ ↑ 1000	
				3 ↓ ↑ 4000	13 ↓ ↑ 4000	20 ↓ ↑ 2000	

				1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	kW 3
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION INVERTER 	230V - 400 V 50 Hz			10	25	40	

				1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	kW 2.2
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION INVERTER 	230V - 400 V 50 Hz			0 → 0.18	0.18 → 0.45	0.45 → 0.9	



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise level

Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

Conforme aux directives CEE
sur le niveau acoustique

CURVE DI CARICO

CURVAS DE CARGAS — LOAD DIAGRAMS
LASTKURVEN — COURBES DE CHARGES

 (0 - 2000 kg)  (2001 - 4000 kg)	m	7.9	9	10	11	12	13.9	16	18	19	21	22	23	24.3
	kg	4000	3393	2980	2651	2382	2000	1689	1460	1365	1203	1134	1071	1000

BRACCIO IMPENNATO

FLECHA IZADA
LUFFING JIB
AUSLEGER IN STEILSTELLUNG
FLÈCHE RELEVÉE

Carrellino distributore

Carrellino distribuidor — Traversing trolley
Verfahrbare laufkatze — Chariot distributeur

kg 1000/2000

POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER
KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

 230 V - 400 V 50 Hz	SOLLEVAMENTO ELEVACION — HOISTING — HEBEN — LEVAGE		kg 2000	kg 4000
	3 kw 230 V - 50 Hz	6 kw 230 V - 50 Hz	12 kw 400 V - 50 Hz	

GX 251

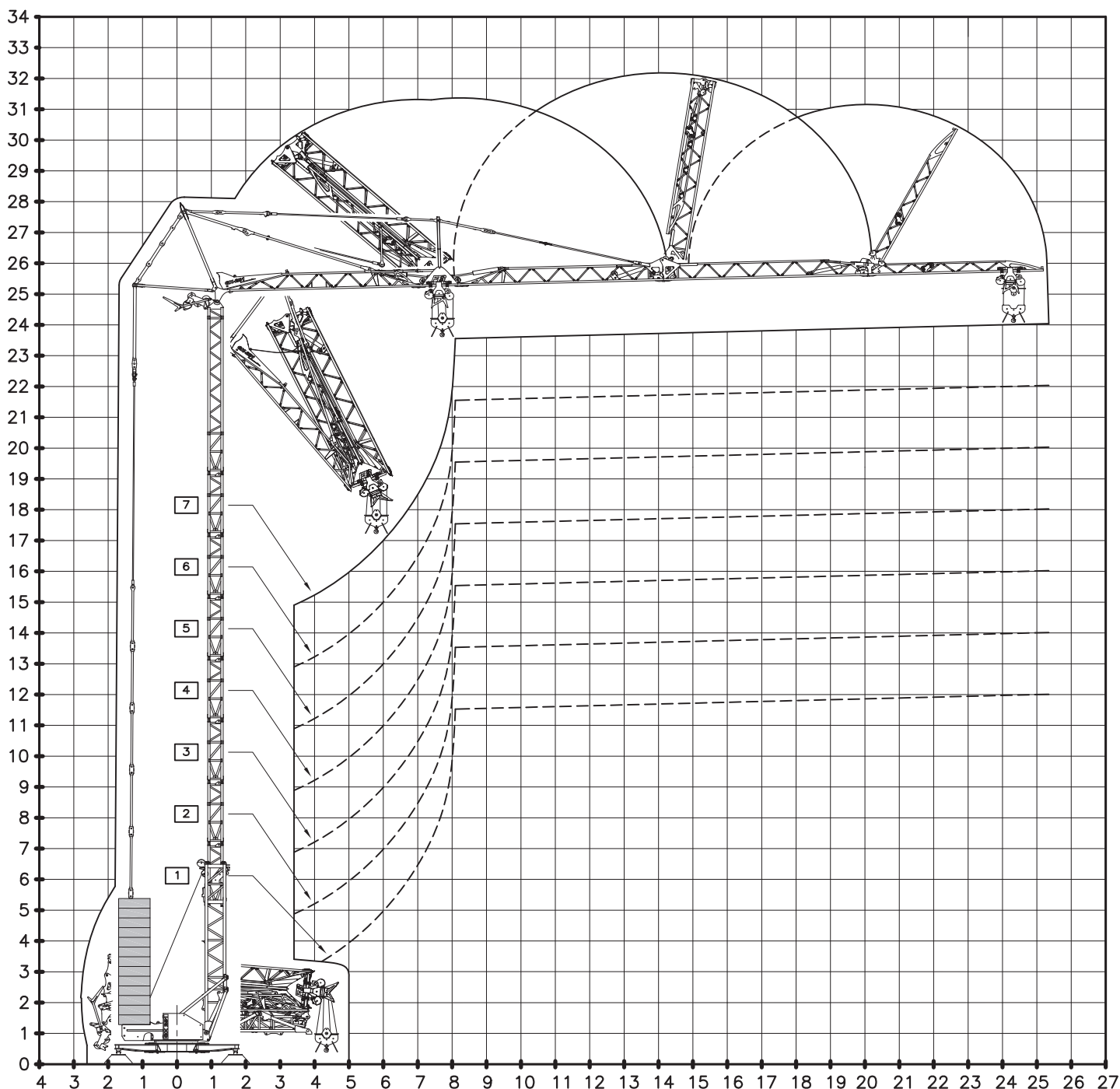
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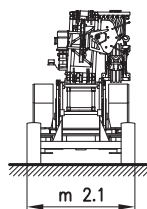
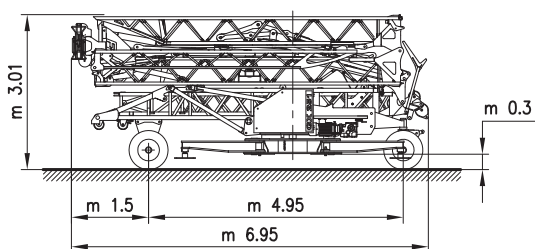
Anderungen vorbehalten
Unverbindliches
Vertriebsdokument

Modifications réservées
document commercial
non contractuel

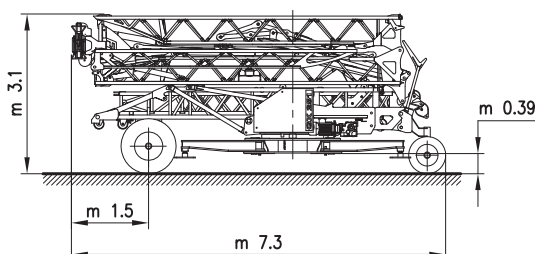


TRASPORTO TRANSPORTE — TRANSPORT
TRANSPORT — TRANSPORT

5
km/h



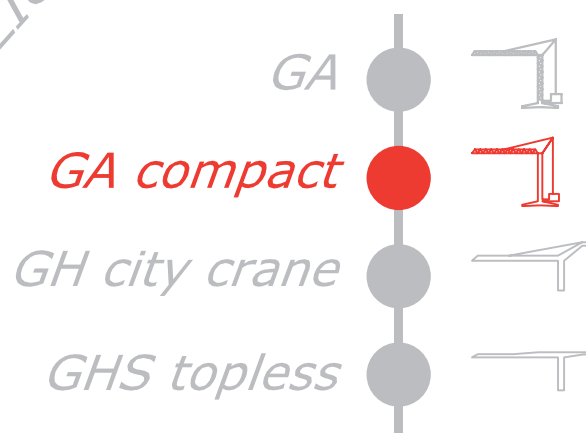
25
km/h



GRU A TORRE

GA 520

GRU AUTOMATICA CON
MONTAGGIO IDRAULICO



FB F.lli Butti s.r.l.

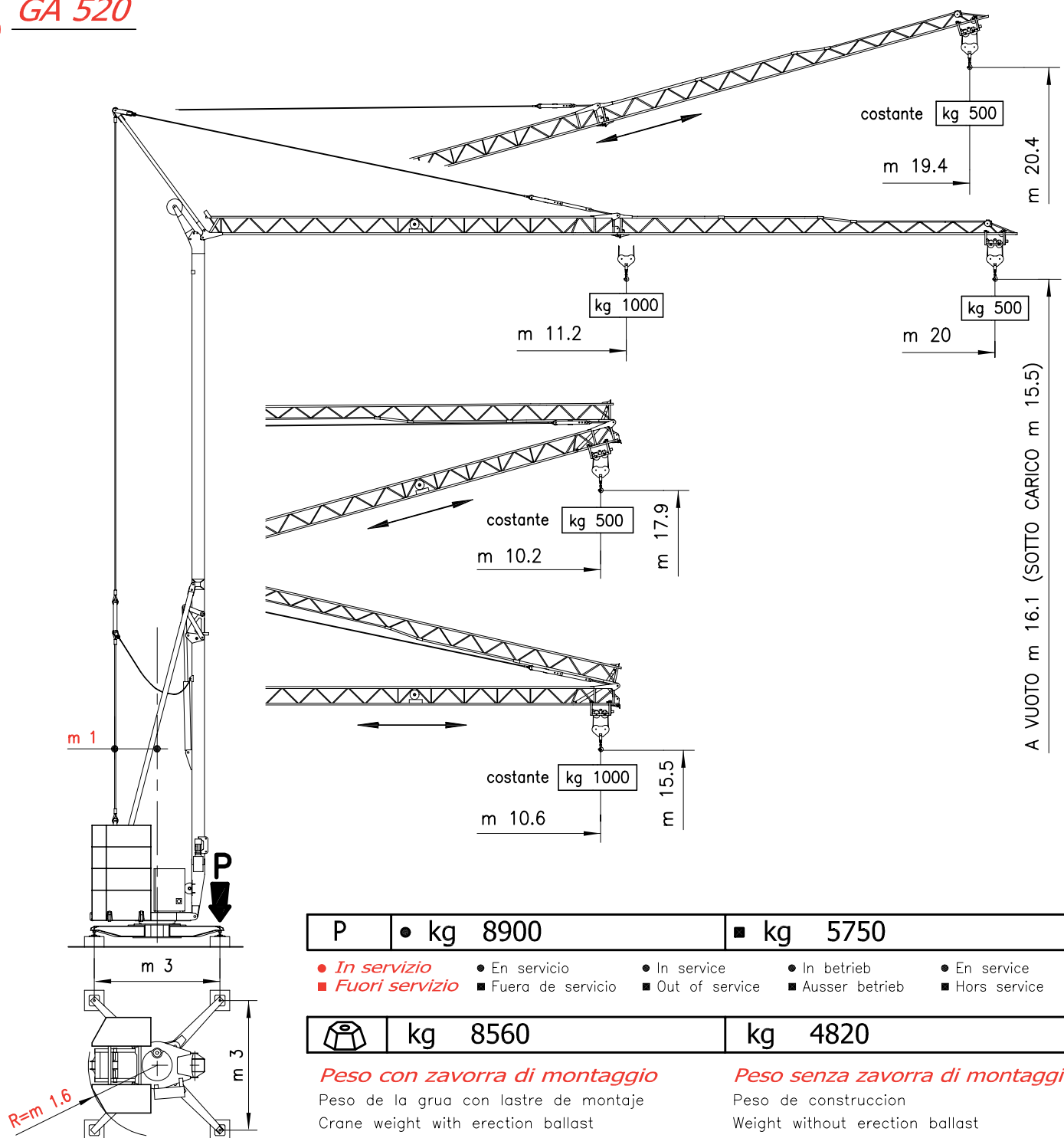
Via XXV Aprile, 58

23868 Valmadrera (LC)

Tel. 0341.581108 - Fax 0341.200253

E-mail : fbgru@fbgru.it - <http://www.fbgru.it>





CURVE DI CARICO

CURVAS DE CARGAS — LOAD DIAGRAMS
LASTKURVEN — COURBES DE CHARGES

m	11.2	12	13	14	15	16	17	18	19	20
kg	1000	922	839	768	707	654	608	568	532	500

BRACCIO IMPENNATO

FLECHA IZADA
LUFFING JIB
AUSLEGER IN STEILSTELLUNG
FLÈCHE RELEVÉE

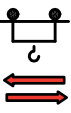
Carrellino distributore

Carrellino distribuidor — Traversing trolley
Verfahrbare laufkatze — Chariot distributeur

kg 500

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS	POTENZA NECESSARIA POTENCIA NECESARIA POWER REQUIREMENT KRAFT DARF PUISSANCE NÉCESSAIRE
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		▷ m/1' - kg	▷▷ m/1' - kg	▷▷▷ m/1' - kg	
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE  INVERTER	230 V 50 Hz	6 ↓↑ 1000	14 ↓↑ 1000	23 ↓↑ 500	kW 4
	400 V 50 Hz	6 ↓↑ 1000	15 ↓↑ 1000	24 ↓↑ 500	

		▷ m/1'	▷▷ m/1'	
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION  INVERTER	230/400 V 50 Hz	15	34	kW 1

		▷ g/1'	▷▷ g/1'	
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION  INVERTER	230/400 V 50 Hz	0 → 0,3	0,3 → 1	kW 1.5



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise level

Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

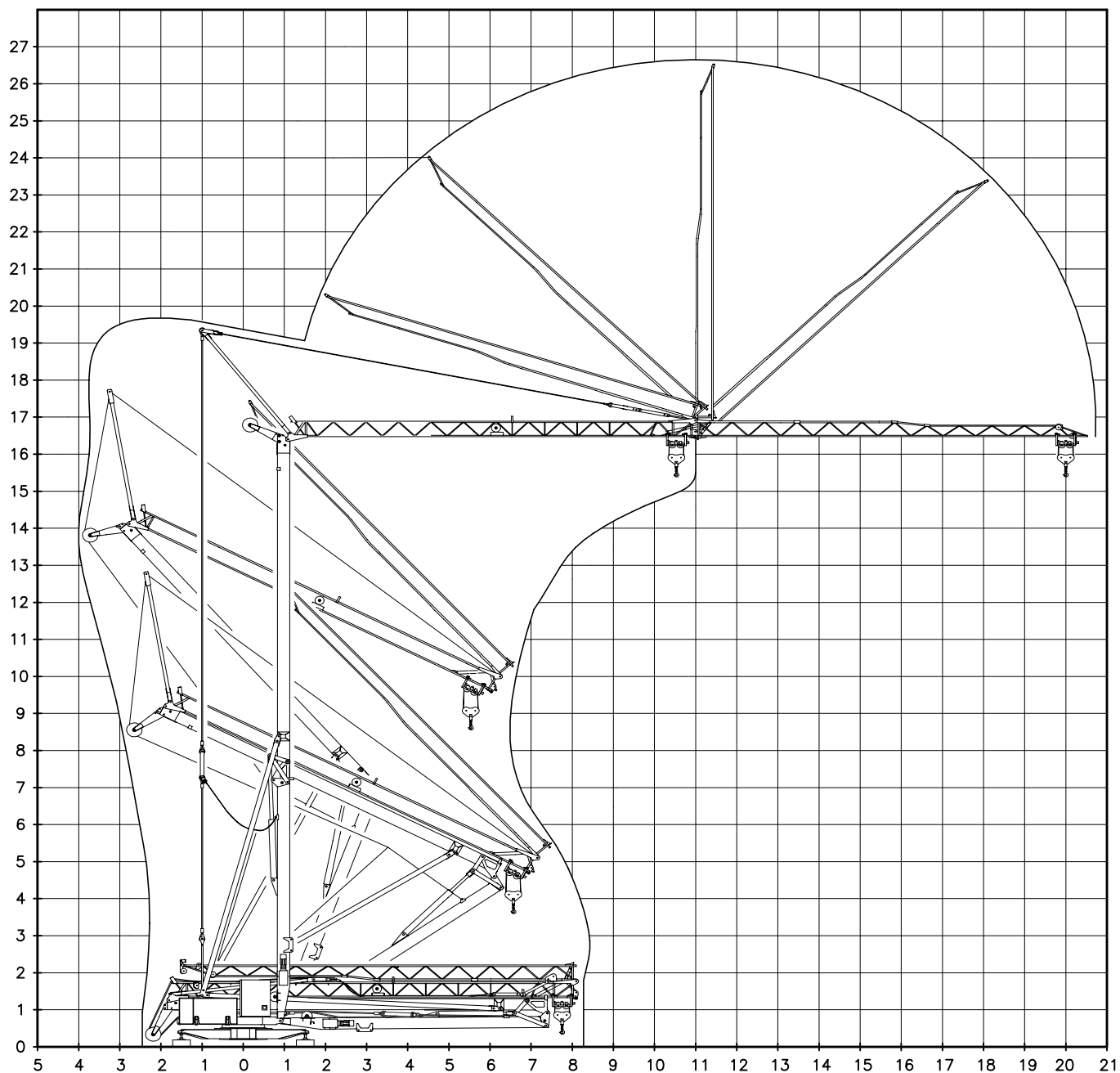
Conforme aux directives CEE
sur le niveau acoustique

POTENZA RICHIESTA

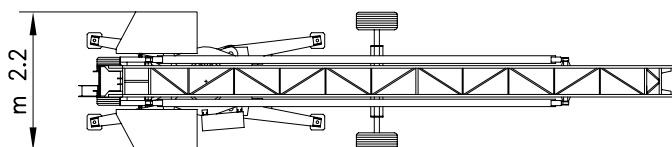
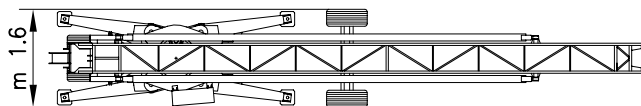
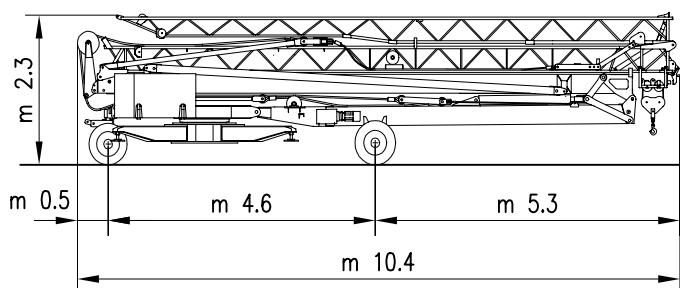
POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER
KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

ALIMENTAZIONE MONO-TRIFASE MONO-TRIFASICA SINGLE PHASE EIN-DREIPHASIGE MONO-TRIPHASE	SOLLEVAMENTO ELEVACION HOISTING HEBEN LEVAGE kg 1000
TRIFASE TRIFASICA THREE PHASE DREIPHASIGE TRIPHASE	6.5 kw 400 V - 50 Hz
MONOFASE MONOFASICA MONO PHASE EINPHASIGE MONOPHASE	3 kw 230 V - 50 Hz

MONTAGGIO MONTAJE — ERECTION
MONTAGE — MONTAGE



TRASPORTO TRANSPORTE — TRANSPORT
TRANSPORT — TRANSPORT



GRU A TORRE

GA 621

GRU AUTOMATICA CON
MONTAGGIO IDRAULICO

GA compact



GX



GHS topless



FB F.lli Butti s.r.l.

Via XXV Aprile, 58

23868 Valmadrera (LC) - Italia

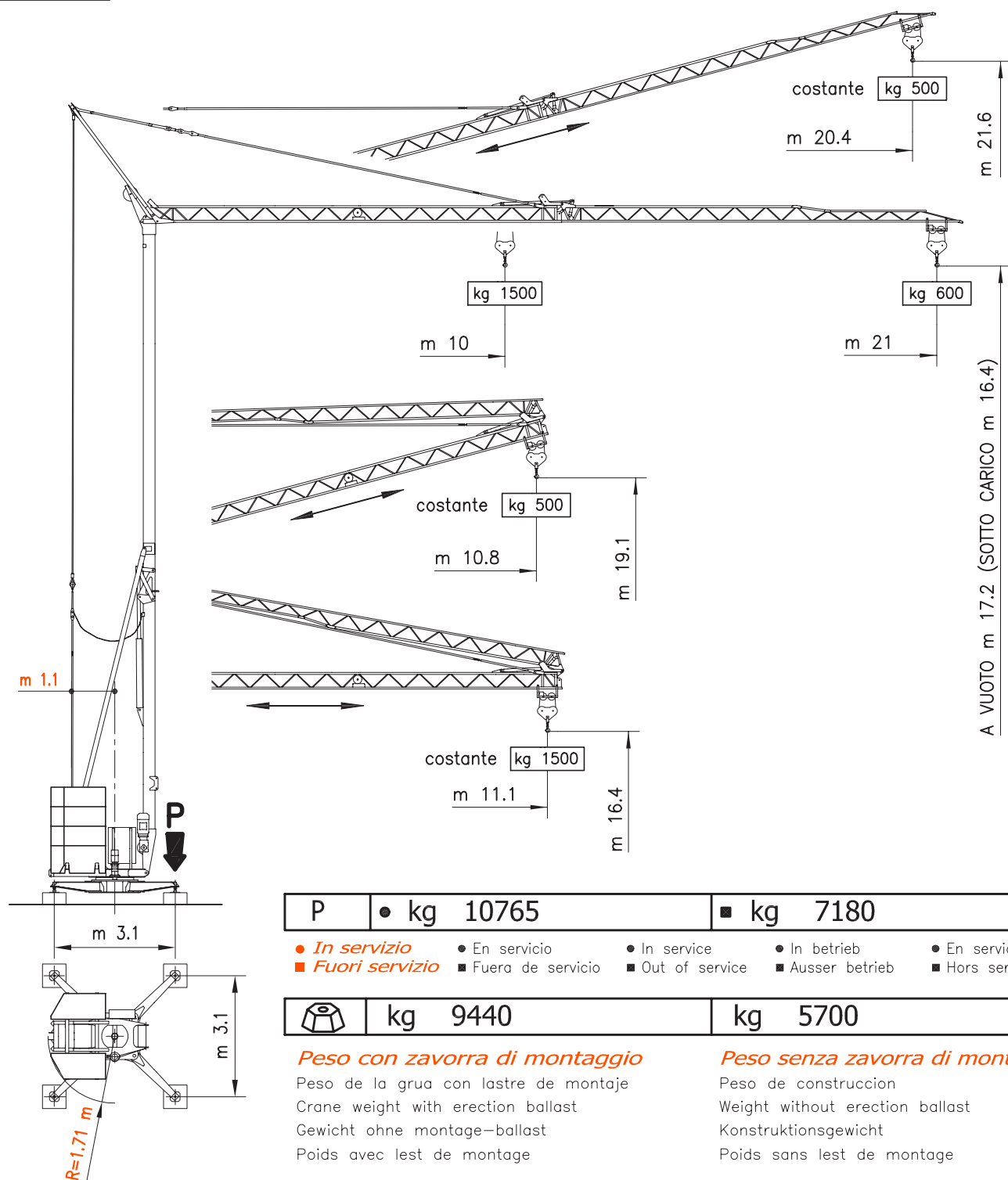
Tel. 0341.581108 - Fax 0341.200253

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FEM 1.001 - A3
EN 14439 - C25

GA 621



CURVE DI CARICO

CURVAS DE CARGAS — LOAD DIAGRAMS
LASTKURVEN — COURBES DE CHARGES

m	10	11	12	13	14	15	16	17	18	19	20	21
kg	1500	1340	1210	1100	1009	930	861	801	748	701	659	600

BRACCIO IMPENNATO

FLECHA IZADA
LUFFING JIB
AUSLEGER IN STEILSTELLUNG
FLÈCHE RELEVÉE

Carrellino distributore

Carrellino distribuidor — Traversing trolley
Verfahrbare laufkatze — Chariot distributeur

kg 500

MECCANISMI

MECANISMOS — MECHANISMS
ANTRIEBE — MÉCANISMES

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS	POTENZA NECESSARIA POTENCIA NECESARIA POWER REQUIREMENT KRAFTE DARF PUISSANCE NÉCESSAIRE
---	---	---	---

		▷ m/1' - kg	▷▷ m/1' - kg	▷▷▷ m/1' - kg	
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE 	230 V 50 Hz	7 ↑ 9 ↓ 1500	12 ↑ 14 ↓ 1500	23 ↑ 24 ↓ 600	kW 4
INVERTER	400 V 50 Hz	7 ↑ 9 ↓ 1500	17 ↑ 19 ↓ 1500	32 ↑ 34 ↓ 600	

		▷ m/1'	▷▷ m/1'	
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION 	230/400 V 50 Hz	15	34	kW 1
INVERTER				

		▷ g/1'	▷▷ g/1'	
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION 	230/400 V 50 Hz	0 → 0.2	0.2 → 0.86	kW 1.5
INVERTER				



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise levell

Gemass EWG-Richtlinien für
den Schall-Leistungspegel

Conforme aux directives CEE
sur le niveau acoustique

POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER
KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

ALIMENTAZIONE MONO-TRIFASE MONO—TRIFASICA SINGLE PHASE EIN—DREIPHASIGE MONO—TRIPHASE	SOLLEVAMENTO ELEVACION HOISTING HEBEN LEVAGE kg 1500
TRIFASE TRIFASICA THREE PHASE DREIPHASIGE TRIPHASE	6.5 kw 400 V - 50 Hz
MONOFASE MONOFASICA MONO PHASE EINPHASIGE MONOPHASE	3 kw 230 V - 50 Hz

Con riserva di modifiche

Derecho de modificaciones reservadas

Subject to change without notice

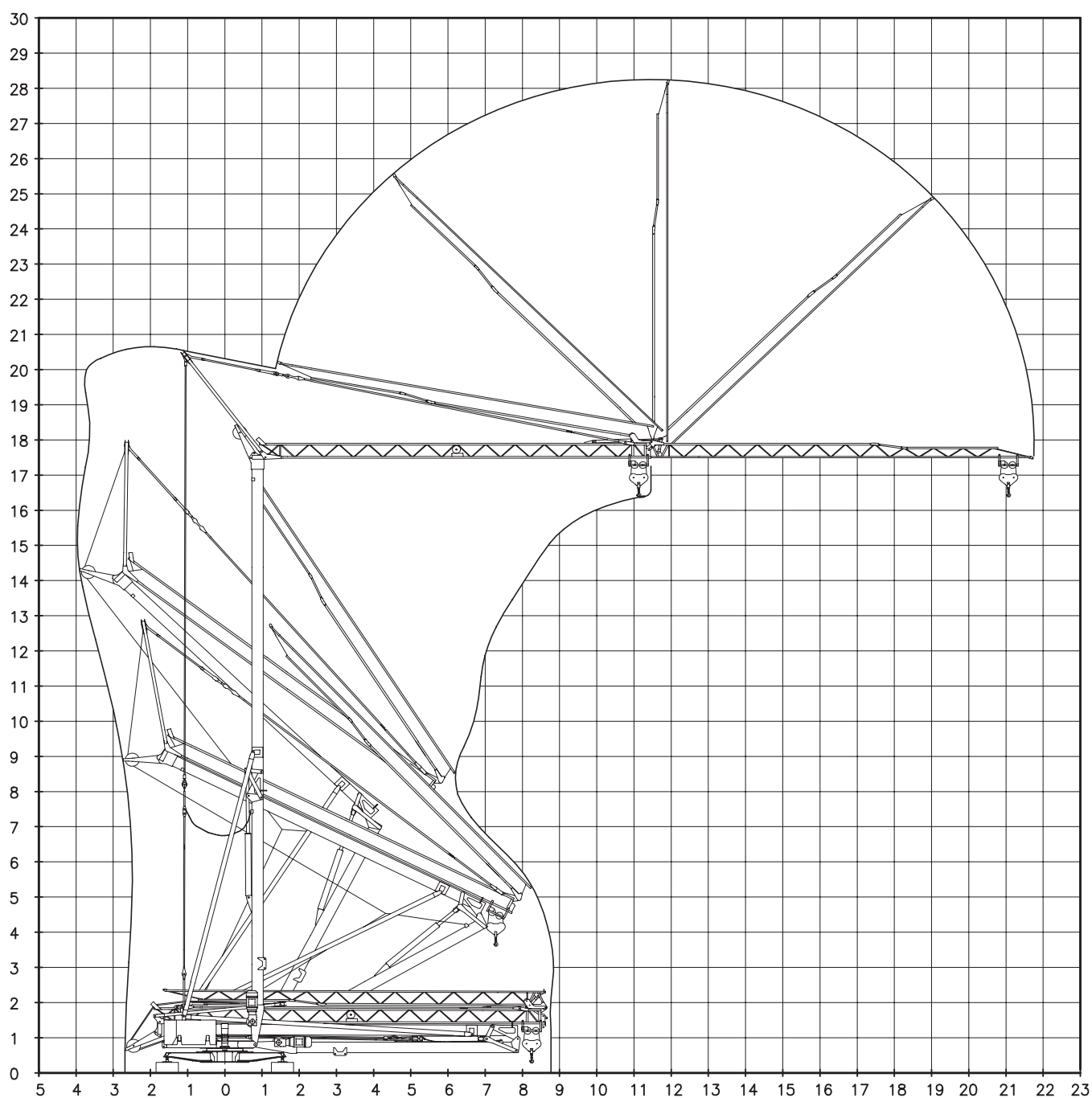
Anderungen vorbehalten

Modifications réservées

MONTAGGIO

MONTAJE — ERECTION

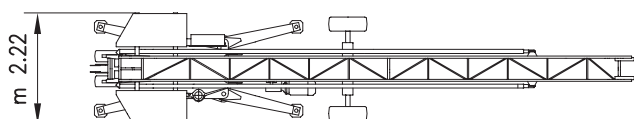
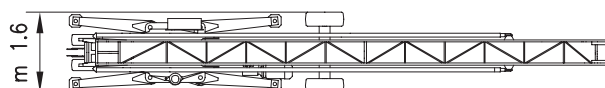
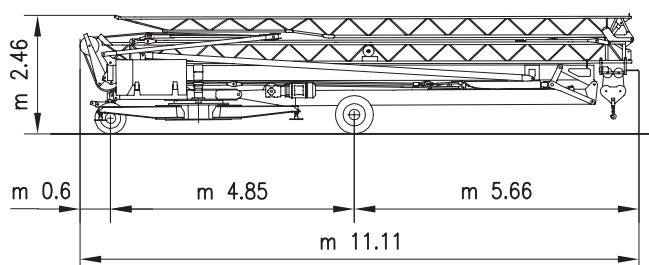
MONTAGE — MONTAGE



TRASPORTO

TRANSPORTE — TRANSPORT

TRANSPORT — TRANSPORT



GRU A TORRE

GA 724 | 2000

GRU AUTOMATICA CON
MONTAGGIO IDRAULICO

GA compact



GX



GHS topless



FB F.lli Butti s.r.l.

Via XXV Aprile, 58

23868 Valmadrera (LC) - Italia

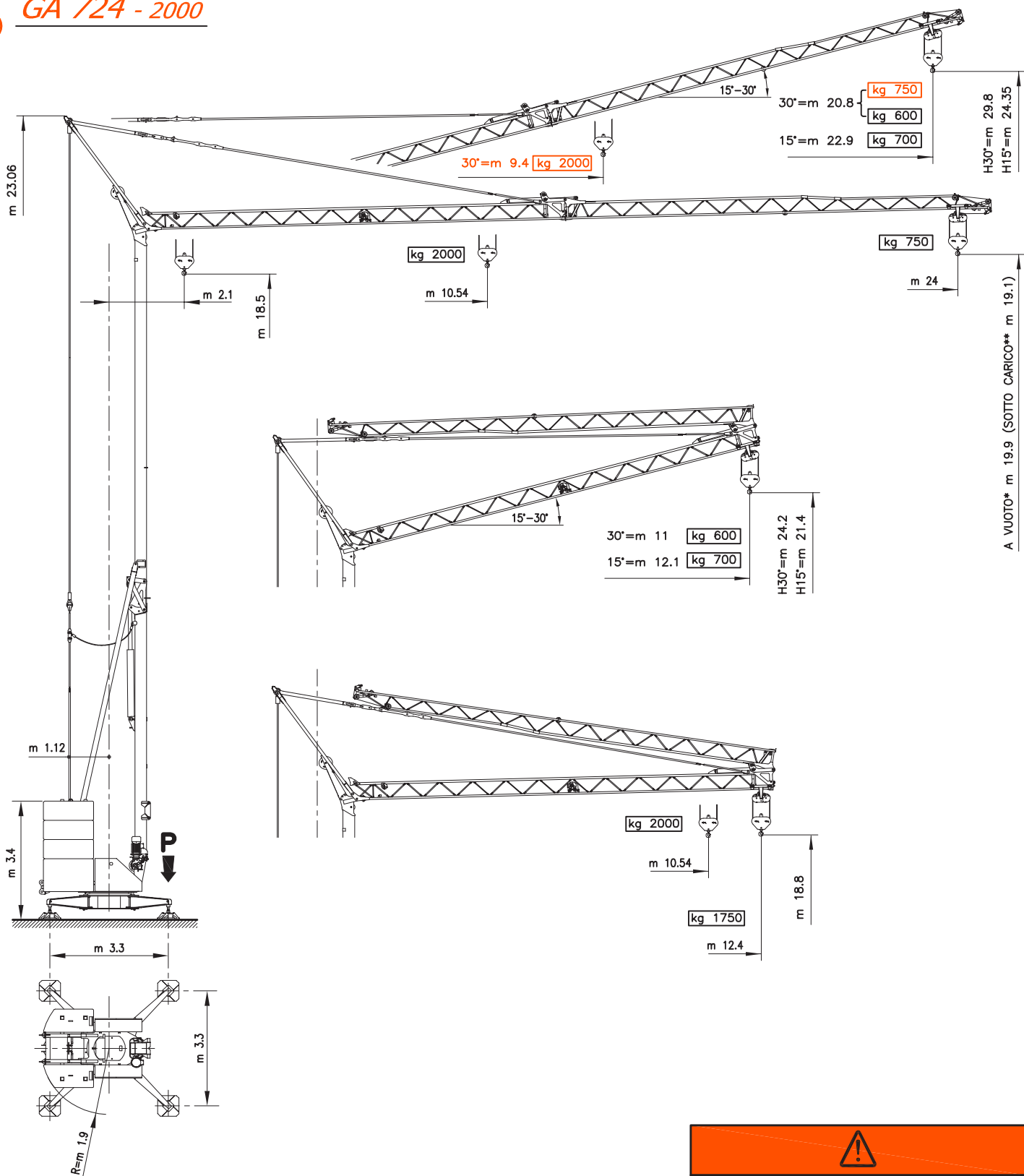
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E-mail : fbgru@fbgru.it - <http://www.fbgru.it>



FEM 1.001 - A3
EN 14439 - C25

GA 724 - 2000



* SIN CARGA
OFF-LOAD
UNBELASTET
A VIDE

** CARGADO
LOADED
BELASTET
EN CHARGE

!

In arancione valori configurazione con dispositivo per 30°
En valores de configuracion naranja con dispositivo para 30°
In orange, configuration values with device for 30°
In orange, Konfigurationswerte mit Einrichtung für 30°
En rouge le valeurs de configuration avec dispositif pour 30°

P	
kg 13050 <i>In servizio</i> En servicio In service In betrieb En service	kg 10500 <i>Fuori servizio</i> Fuera de servicio Out of service Außer betrieb Hors service

N° 6x1519 N° 2x2620 kg 22004	kg 7650

MECCANISMI

MECANISMOS — MECHANISMS

ANTRIEBE — MÉCANISMES

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS	
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			1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg	
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE INVERTER 	230 - 400 V 50 Hz	230 V	4	12	20		kW 9.2
			2000	2000	750		
		400 V	4	24	37	46	
			2000	2000	750	600	

			1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	
CARRILLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION INVERTER 	230 - 400 V 50 Hz		19	30	54	kW 2.2

			1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION INVERTER 	230 - 400 V 50 Hz		0 → 0.15	0.15 → 0.60	0.60 → 0.85	kW 2.2



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acústico

In compliance with the EEC
instructions on noise level

Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

Conforme aux directives CEE
sur le niveau acoustique

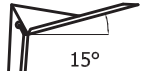
CURVE DI CARICO

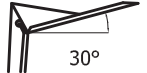
CURVAS DE CARGAS — LOAD DIAGRAMS

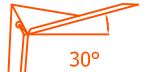
LASTKURVEN — COURBES DE CHARGES

V24 

	m	2.1	5	10.5	11	12	13	15	17	19	21	22	23	24
	kg	2000			1907	1720	1565	1321	1138	996	883	834	790	750

	m	2.1	5	7	9	11	13	15	17	19	20	21	22	22.9
	kg	700												

	m	2.1	5	7	9	11	13	15	16	17	18	19	20	20.8
	kg	600												

	m	2.1	5	7	9.4	11	13	15	16	17	18	19	20	20.8
	kg	2000				1790	1462	1229	1055	919	863	811	765	750

POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER

KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

	3 kW 230 V - 50 Hz	12 kW 400 V - 50 Hz
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GA 724 - 2000

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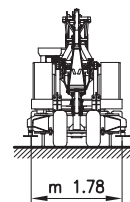
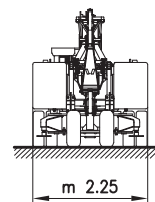
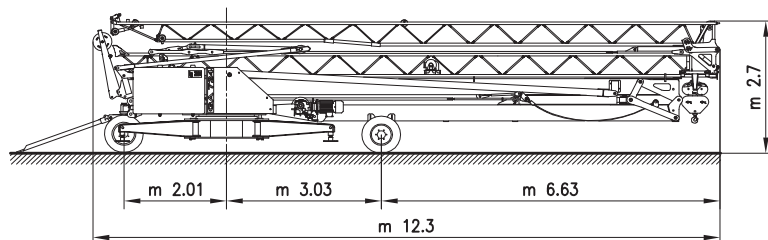
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Unverbindliches
Vertriebsdokument

Modifications réservées
document commercial
non contractuel

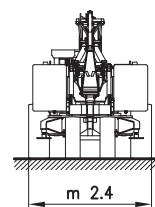
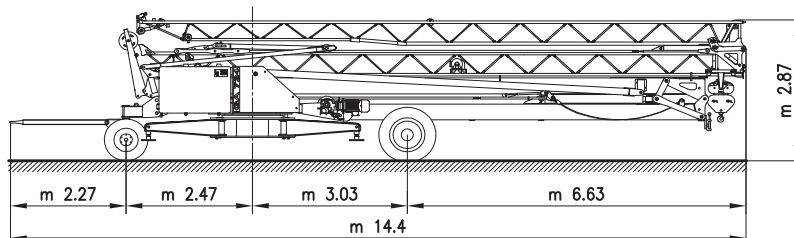
TRASPORTO TRANSPORTE — TRANSPORT TRANSPORT — TRANSPORT

5
km/h

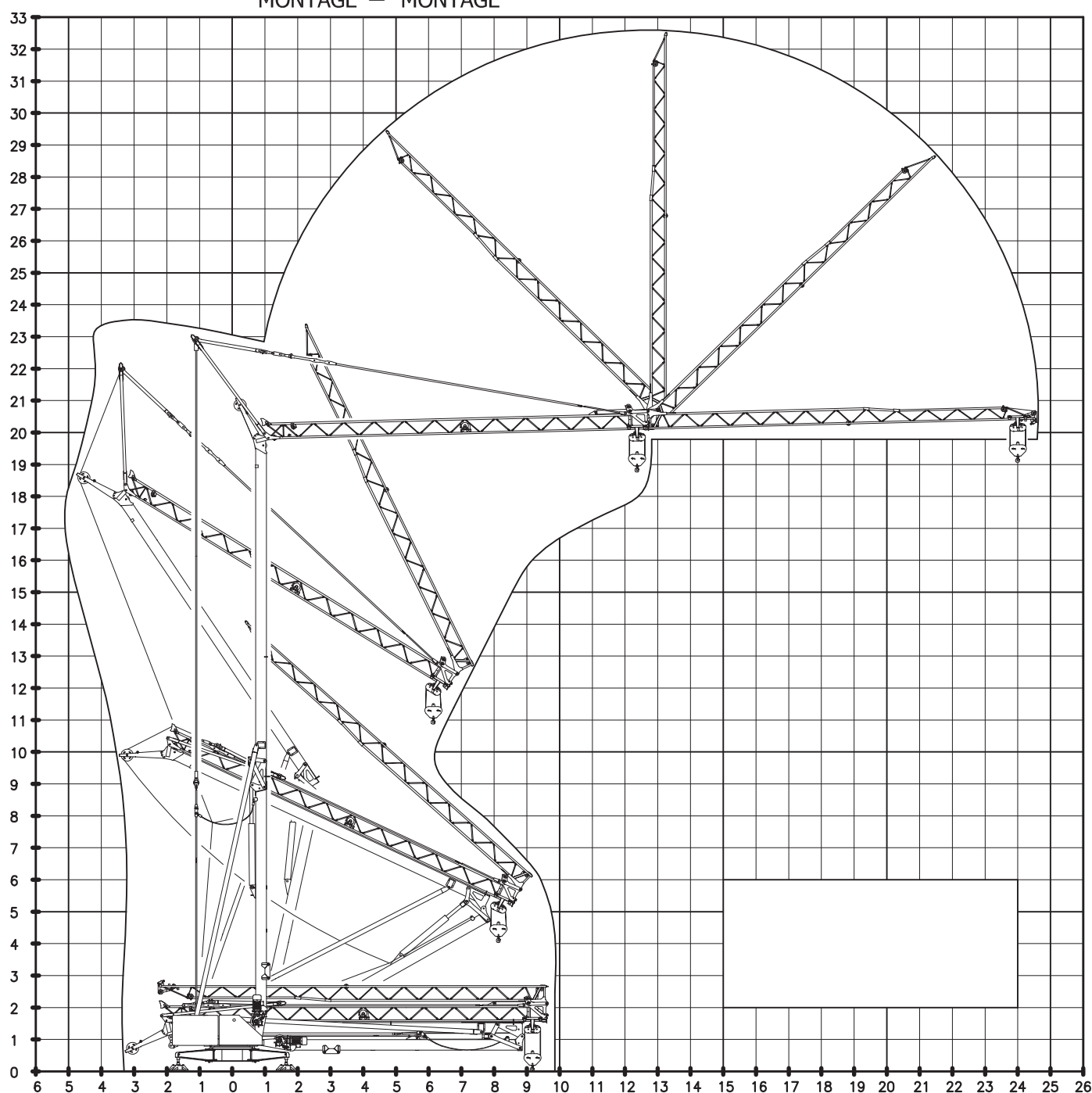


FB25K2

25
km/h



MONTAGGIO MONTAJE — ERECTION MONTAGE — MONTAGE



GRU A TORRE

GA 727 | 2500

GRU AUTOMATICA CON
MONTAGGIO IDRAULICO

GA compact



GX



GHS topless



FBGRU

LIFT YOUR GOALS!

FB F.lli Butti s.r.l.

Via XXV Aprile, 58

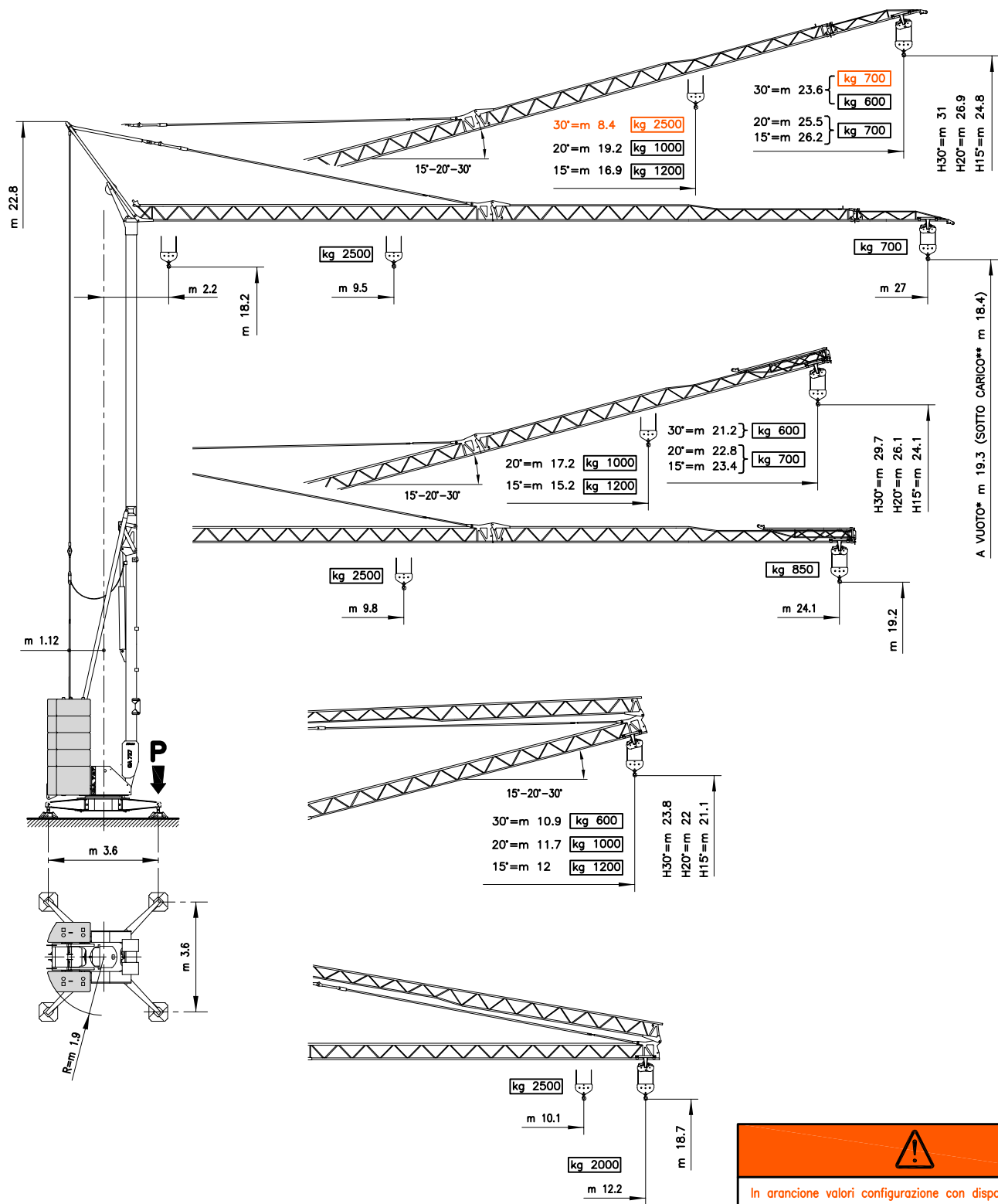
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E-mail : fbgru@fbgru.it - <http://www.fbgru.it>

CE

FEM 1.001 - A3
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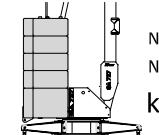
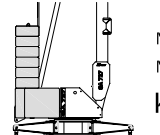
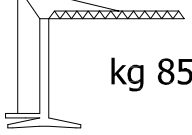
* SIN CARGA
OFF-LOAD
UNBELASTET
A VIDE

** CARGADO
LOADED
BELASTET
EN CHARGE



In arancione valori configurazione con dispositivo per 30°
En valores de configuracion naranja con dispositivo para 30°
In orange, configuration values with device for 30°
In orange, Konfigurationswerte mit Einrichtung für 30°
En rouge le valeurs de configuration avec dispositif pour 30°

P	
kg 15900 <i>In servizio</i> En servicio In service In betrieb En service	kg 13150 <i>Fuori servizio</i> Fuera de servicio Out of service Außer betrieb Hors service

		
 A N° 8x1519 N° 2x2620 kg 25902	 B N° 6x1500 N° 2x2620 kg 22750	 kg 8510

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS	
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		1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg	kW 9.2
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE INVERTER 	230 V 50 Hz	3 kW	3.2 ↑ 6 ↓	8 ↑ 11 ↓	19 ↑ 20 ↓	
			2500	2500	700	
		6 kW	3.2 ↑ 6 ↓	8 ↑ 11 ↓	30 ↑ 32 ↓	
			2500	2500	700	
	400 V 50 Hz	3.2 ↑ 6 ↓		21 ↑ 25 ↓	39 ↑ 42 ↓	46 ↑ 50 ↓
		2500		2500	700	600

		1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	kW 2.2
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION INVERTER 	230 - 400 V 50 Hz	15	23	41	

		1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	kW 2.2
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION INVERTER 	230 - 400 V 50 Hz	0 → 0.19	0.19 → 0.47	0.47 → 0.87	



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise levell

Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

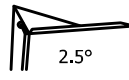
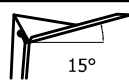
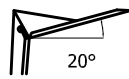
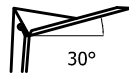
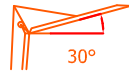
Conforme aux directives CEE
sur le niveau acoustique

CURVE DI CARICO

CURVAS DE CARGAS — LOAD DIAGRAMS

LASTKURVEN — COURBES DE CHARGES

V27 

 2.5°	m	2.2	5	9.5	11	13	15	17	19	21	23	24.1	25	27
	kg	2500			2085	1707	1438	1237	1082	957	856	808	771	700
 15°	m	2.2	5	8	11	13	15	16.9	19	21	23	24	25	26.2
	kg	1200							1043	923	825	778	743	700
 20°	m	2.2	5	8	11	13	15	17	19.2	21	23	24	25	25.5
	kg	1000								893	797	756	718	700
 30°	m	2.2	5	7	9	11	13	15	17	19	20	21	22	23.6
	kg	600												
 30°	m	2.2	5	7	8.4	11	13	15	17	19	20	21	22	23.6
	kg	2500				1790	1462	1229	1055	919	863	811	765	700

POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER

KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

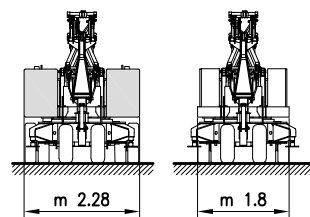
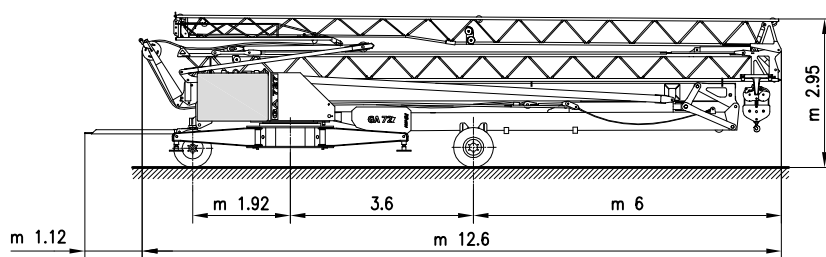
	3 kW 230 V - 50 Hz	6 kW 230 V - 50 Hz	12 kW 400 V - 50 Hz
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TRASPORTO

TRANSPORTE — TRANSPORT

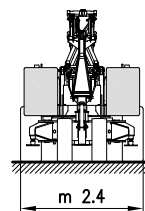
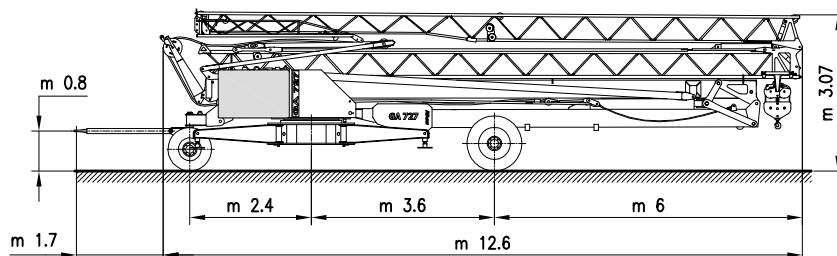
TRANSPORT — TRANSPORT

5
km/h



FB25K2

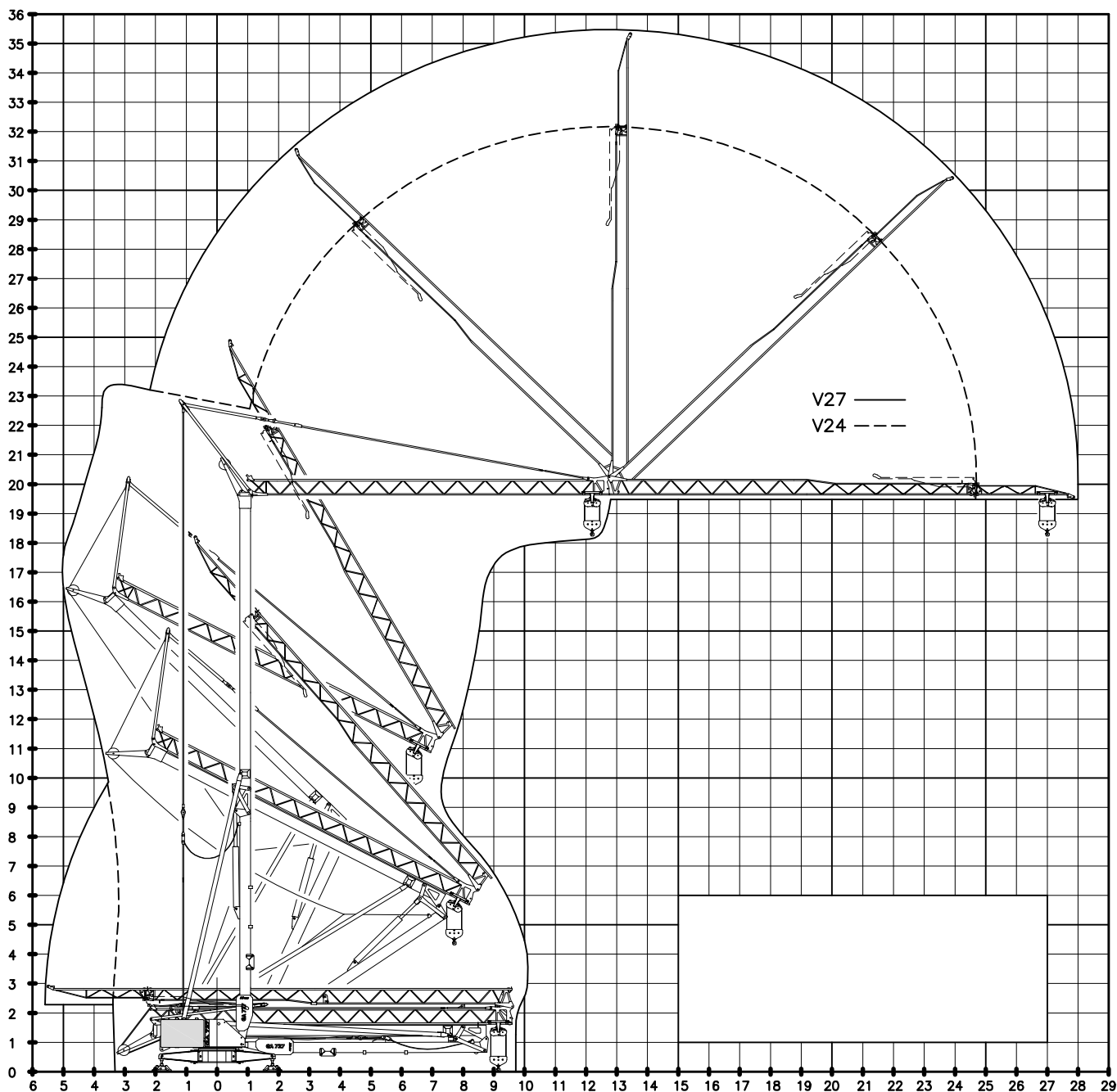
25
km/h



MONTAGGIO

MONTAJE — ERECTION

MONTAGE — MONTAGE



GRU A TORRE

GA 727D80 | 2500

GRU AUTOMATICA CON
MONTAGGIO IDRAULICO

GA compact



GX



GHS topless



FB F.lli Butti s.r.l.

Via XXV Aprile, 58

23868 Valmadrera (LC) - Italia

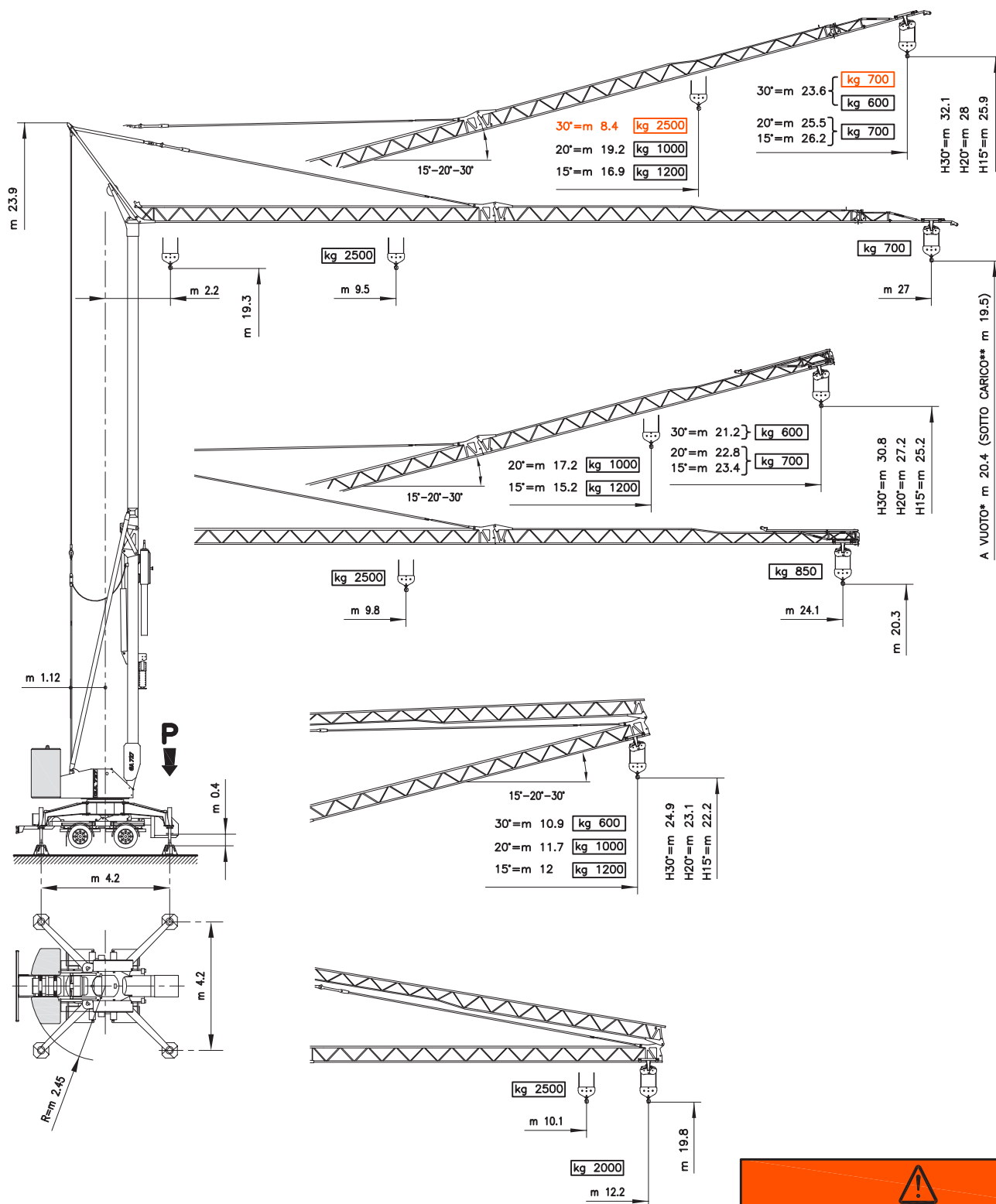
Tel. 0341.581108 - Fax 0341.200253

E-mail : fbgru@fbgru.it - <http://www.fbgru.it>



FEM 1.001 - A3
EN 14439 - C25

GA 727D80 - 2500



* SIN CARGA
OFF-LOAD
UNBELASTET
A VIDE

** CARGADO
LOADED
BELASTET
EN CHARGE

!

In arancione valori configurazione con dispositivo per 30°
En valores de configuracion naranja con dispositivo para 30°
In orange, configuration values with device for 30°
In orange, Konfigurationswerte mit Einrichtung für 30°
En rouge le valeurs de configuration avec dispositif pour 30°

P	
kg 14780 <i>In servizio</i> En servicio In service In betrieb En service	kg 14380 <i>Fuori servizio</i> Fuera de servicio Out of service Außer betrieb Hors service

MECCANISMI

MECANISMOS — MECHANISMS

ANTRIEBE — MÉCANISMES

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS	
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			1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg	
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE  INVERTER	230 V 50 Hz	3 kW	3.2 ↑ 6 ↓	8 ↑ 11 ↓	19 ↑ 20 ↓		kW 9.2
			2500	2500	700		
	400 V 50 Hz	6 kW	3.2 ↑ 6 ↓	8 ↑ 11 ↓	30 ↑ 32 ↓		
			2500	2500	700		
			3.2 ↑ 6 ↓	21 ↑ 25 ↓	39 ↑ 42 ↓	46 ↑ 50 ↓	
			2500	2500	700	600	

			1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION  INVERTER	230 - 400 V 50 Hz		15	23	41	kW 2.2

			1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION  INVERTER	230 - 400 V 50 Hz		0 → 0.19	0.19 → 0.47	0.47 → 0.87	kW 2.2



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise level

Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

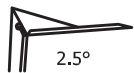
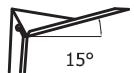
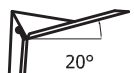
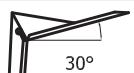
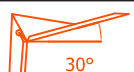
Conforme aux directives CEE
sur le niveau acoustique

CURVE DI CARICO

CURVAS DE CARGAS — LOAD DIAGRAMS

LASTKURVEN — COURBES DE CHARGES

V27 

	m	2.2	5	9.5	11	13	15	17	19	21	23	24.1	25	27
	kg	2500			2085	1707	1438	1237	1082	957	856	808	771	700
	m	2.2	5	8	11	13	15	16.9	19	21	23	24	25	26.2
	kg	1200							1043	923	825	778	743	700
	m	2.2	5	8	11	13	15	17	19.2	21	23	24	25	25.5
	kg	1000								893	797	756	718	700
	m	2.2	5	7	9	11	13	15	17	19	20	21	22	23.6
	kg	600												
	m	2.2	5	7	8.4	11	13	15	17	19	20	21	22	23.6
	kg	2500				1790	1462	1229	1055	919	863	811	765	700

POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER

KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

	3 kW 230 V - 50 Hz	6 kW 230 V - 50 Hz	12 kW 400 V - 50 Hz
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Con riserva di modifiche
documento commerciale
non vincolante

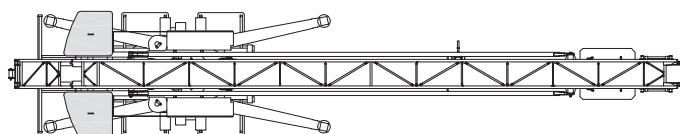
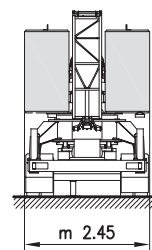
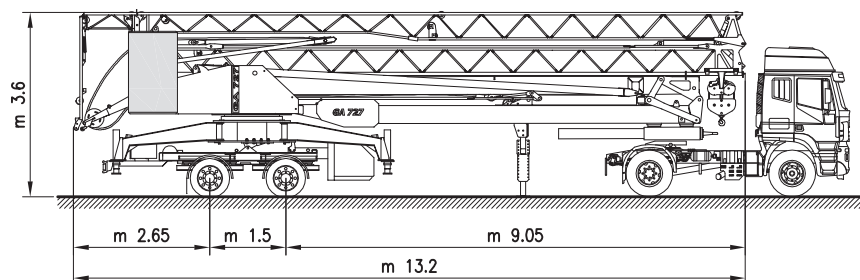
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documento comercial no contractual

Subject to change without notice
commercial document not legally
binding

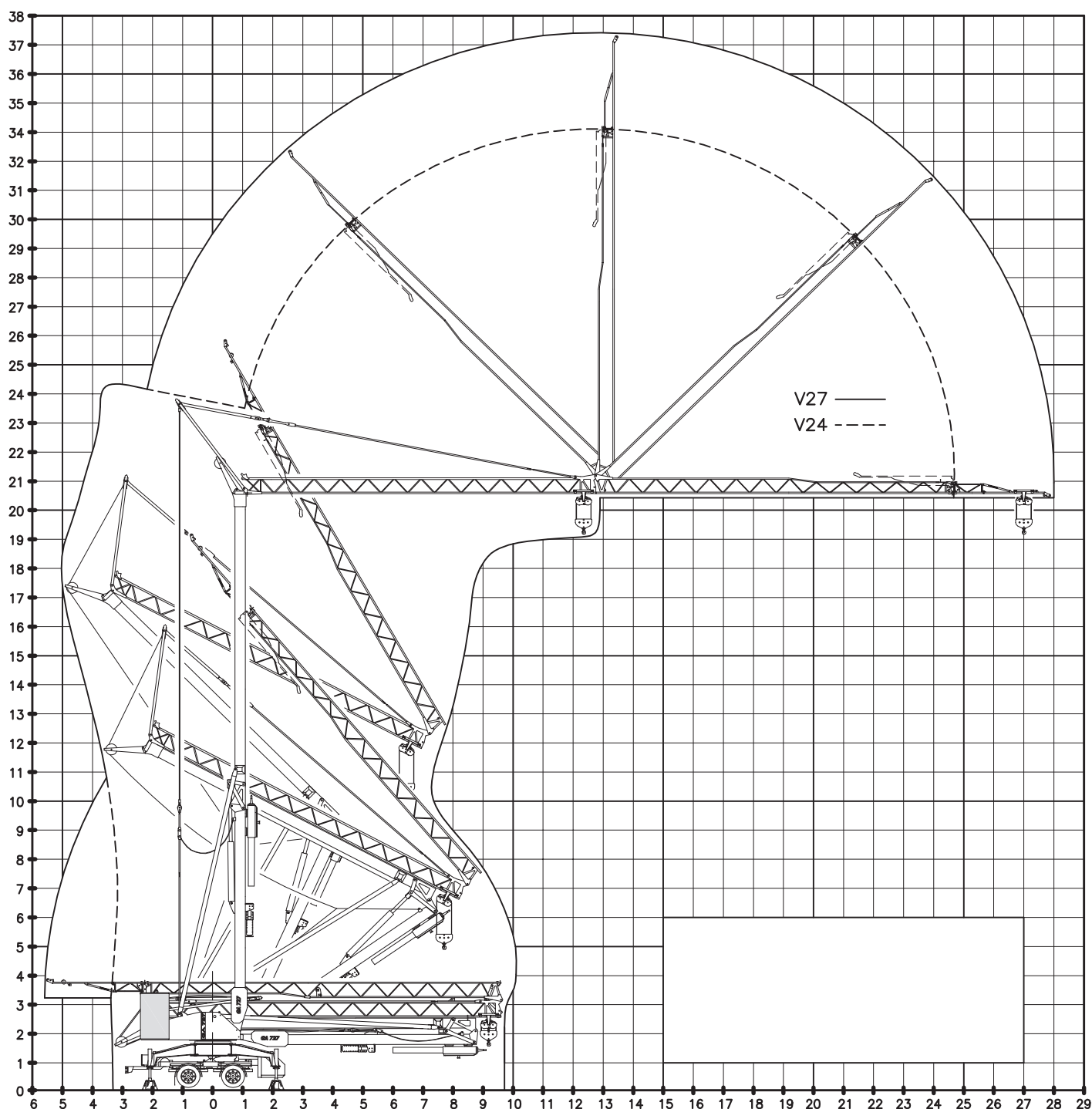
Anderungen vorbehalten
Unverbindliches
Vertriebsdokument

Modifications réservées
document commercial
non contractuel

TRASPORTO TRANSPORTE — TRANSPORT TRANSPORT — TRANSPORT



MONTAGGIO MONTAJE — ERECTION MONTAGE — MONTAGE



GRU A TORRE

GA 132

GRU AUTOMATICA CON
MONTAGGIO IDRAULICO

GA compact



GX



GH city crane



GHS topless



FB F.lli Butti s.r.l.

Via XXV Aprile, 58

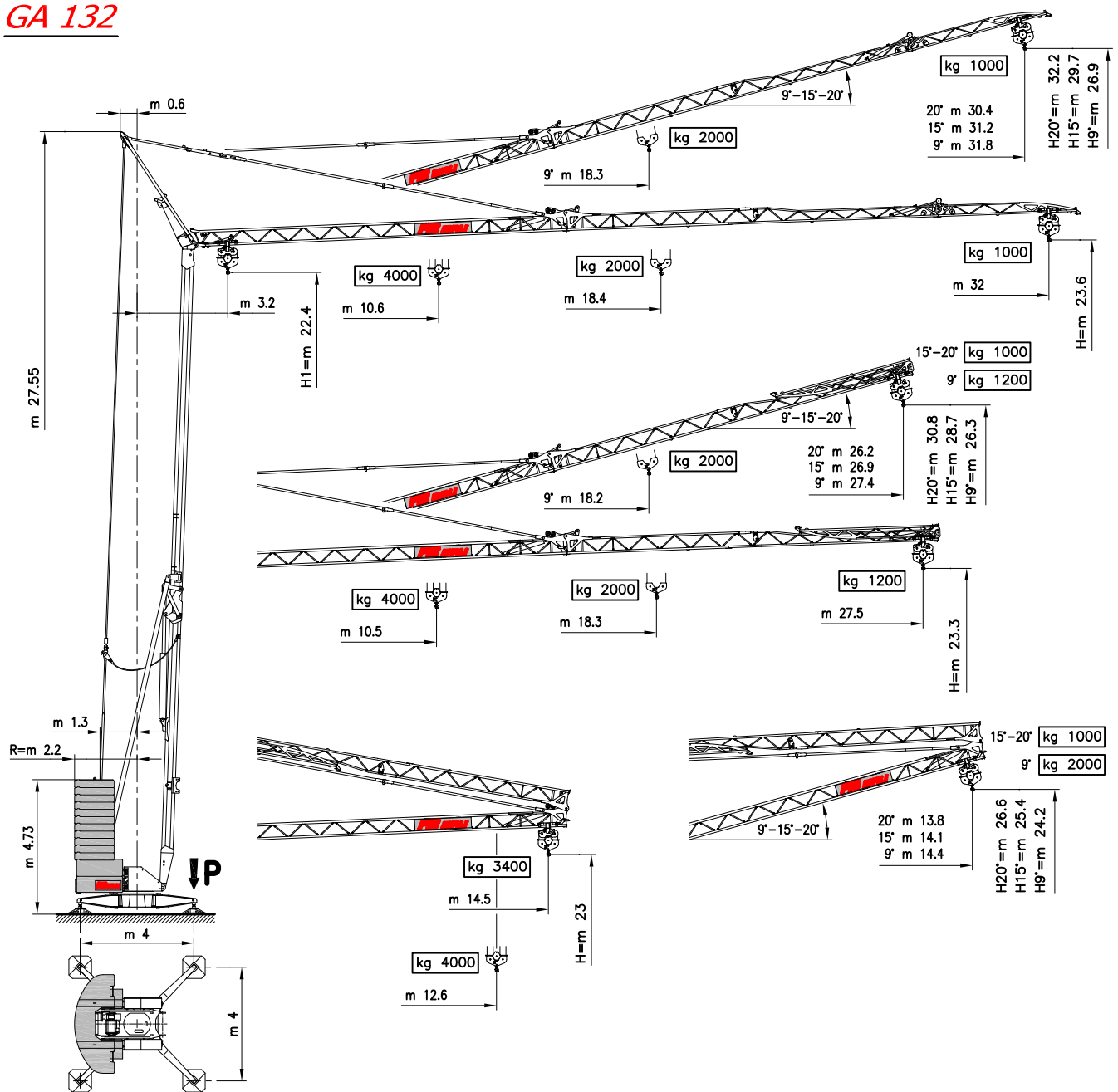
23868 Valmadrera (LC) - Italia

Tel. 0341.581108 - Fax 0341.200253

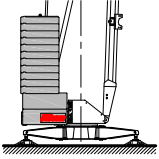
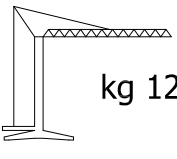
E-mail : fbgru@fbgru.it - <http://www.fbgru.it>



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EN 14439 - C25



P	
kg 24600 <i>In servizio</i> En servicio In service In betrieb En service	kg 21700 <i>Fuori servizio</i> Fuera de servicio Out of service Außer betrieb Hors service

G	
	

LA GRU

LA GRÚA — CRANE
KRAN — GRUE



MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS	
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			1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg	
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE INVERTER		400 V 50 Hz	5 ↓ ↑	24 ↑ 26 ↓	38 ↑ 40 ↓	45 ↑ 48 ↓	kW 9.2
			2000	2000	1000	600	
			3 ↓ ↑	12 ↑ 13 ↓	19 ↑ 20 ↓	23 ↑ 24 ↓	
			4000	4000	2000	1200	

			1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION INVERTER		400 V 50 Hz	19	42	61	kW 3

			1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION INVERTER		400 V 50 Hz	0 → 0.15	0.15 → 0.45	0.45 → 0.89	kW 3



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise level

Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

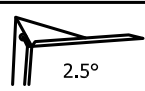
Conforme aux directives CEE
sur le niveau acoustique

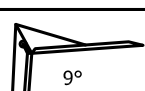
CURVE DI CARICO

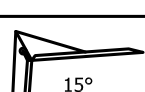
CURVAS DE CARGAS — LOAD DIAGRAMS

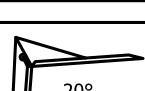
LASTKURVEN — COURBES DE CHARGES

V32 

 2.5°	m	3	4	5	6	8	10.6	12	14	16	17	18.4	20	22	24	26	28	30	32
	kg	4000						3413	2803	2369	2195	2000	1808	1606	1440	1303	1186	1086	1000

 9°	m	3	4	5	6	8	10	12	14	16	17	18.3	20	22	24	26	28	30	31.8
	kg	2000											1795	1594	1429	1293	1177	1078	1000

 15°	m	3	5	10	15	20	25	30	31.2
	kg	1000							

 20°	m	3	5	10	15	20	25	30.4
	kg	1000						

(0 - 2000 kg)


(2001 - 4000 kg)


(0 - 2000 kg)



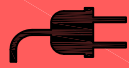
(2001 - 4000 kg)



POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER

KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

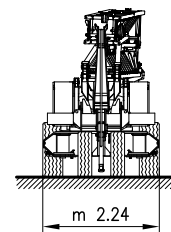
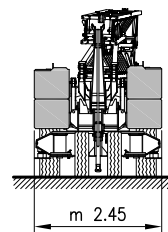
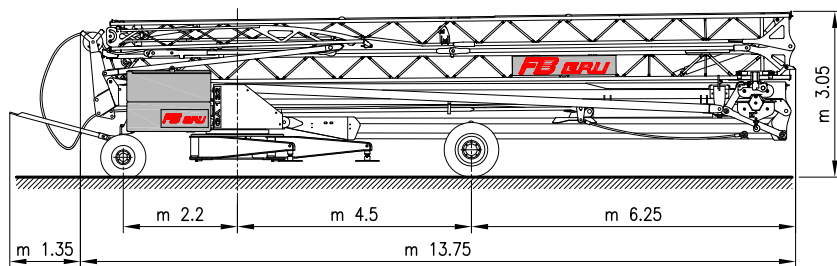
	SOLLEVAMENTO ELEVACION — HOISTING — HEBEN — LEVAGE	 kg 2000	 kg 4000
	12 kW 400 V - 50 Hz		

TRASPORTO

TRANSPORTE — TRANSPORT

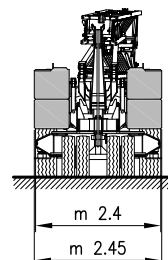
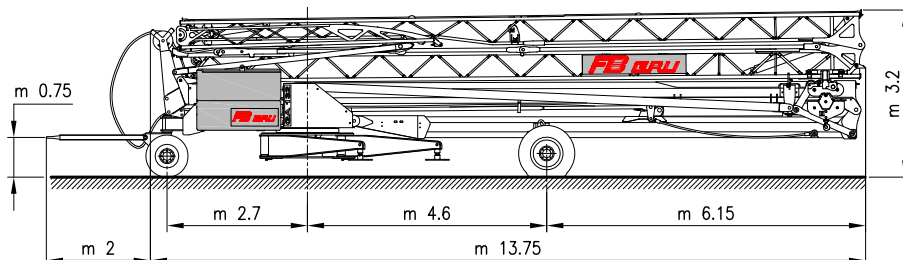
TRANSPORT — TRANSPORT

5
km/h



FB25K1

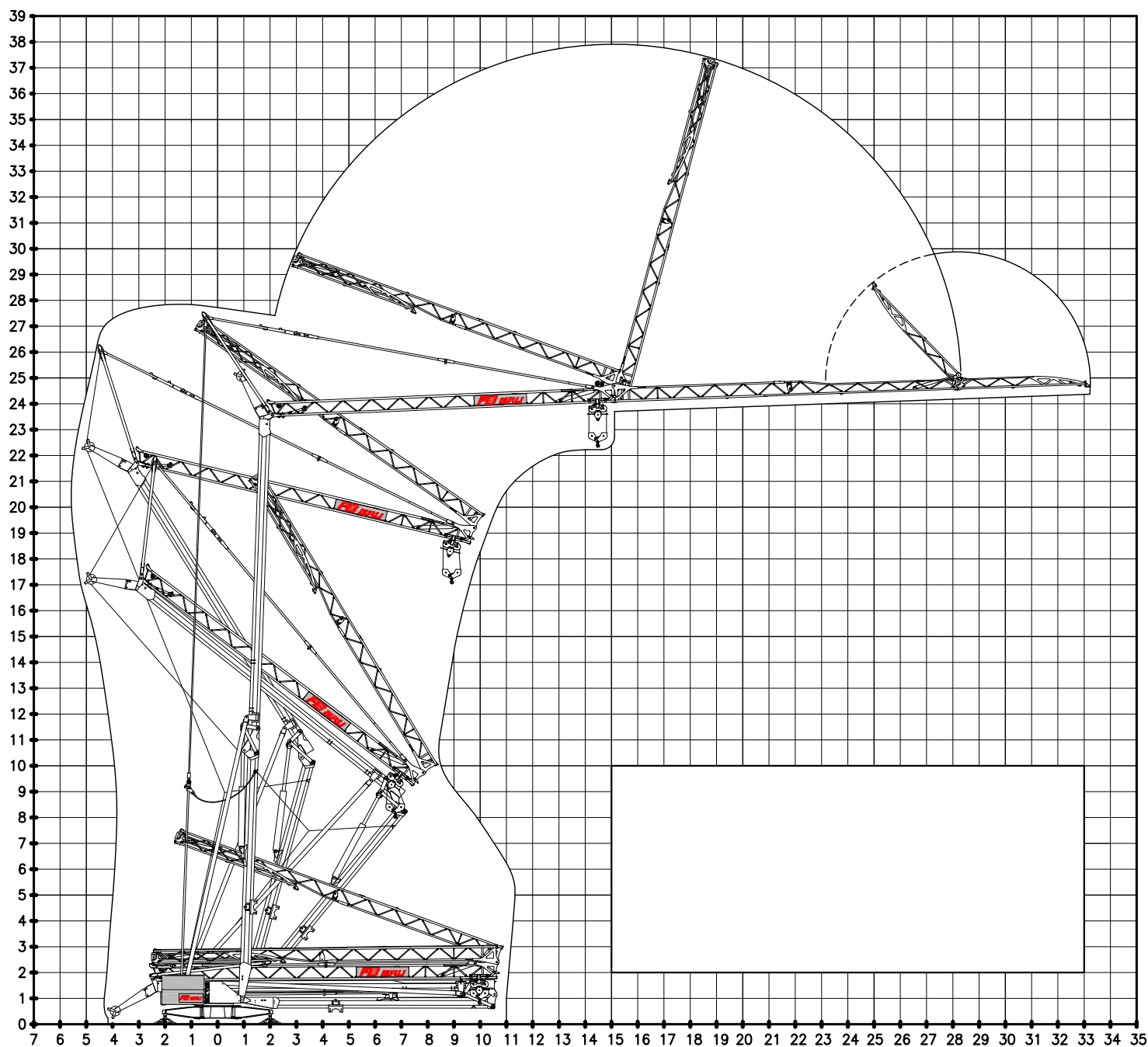
25
km/h



MONTAGGIO

MONTAJE — ERECTION

MONTAGE — MONTAGE



GRU A TORRE

GA 132H

GRU AUTOMATICA CON
MONTAGGIO IDRAULICO

GA compact



GX



GH city crane



GHS topless



FB F.lli Butti s.r.l.

Via XXV Aprile, 58

23868 Valmadrera (LC) - Italia

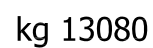
Tel. 0341.581108 - Fax 0341.200253

E-mail : fbgru@fbgru.it - <http://www.fbgru.it>



FEM 1.001 - A3
EN 14439 - C25





LA GRU

LA GRUA — CRANE
KLAN — GRUE



MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS	
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			1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg	
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE  INVERTER	400 V 50 Hz		5 ↓ ↑	24 ↑ 26 ↓	38 ↑ 40 ↓	45 ↑ 48 ↓	kW 9.2
			2000	2000	1000	600	
			3 ↓ ↑	12 ↑ 13 ↓	19 ↑ 20 ↓	23 ↑ 24 ↓	
			4000	4000	2000	1200	

			1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION  INVERTER	400 V 50 Hz		19	42	61	kW 3

			1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION  INVERTER	400 V 50 Hz		0 → 0.15	0.15 → 0.45	0.45 → 0.89	kW 3



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise level

Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

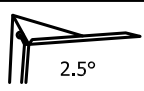
Conforme aux directives CEE
sur le niveau acoustique

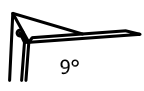
CURVE DI CARICO

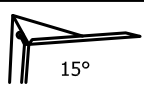
CURVAS DE CARGAS — LOAD DIAGRAMS

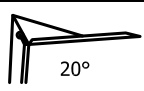
LASTKURVEN — COURBES DE CHARGES

V32 

	m	3	4	5	6	8	10.6	12	14	16	17	18.4	20	22	24	26	28	30	32
	kg	4000						3413	2803	2369	2195	2000	1808	1606	1440	1303	1186	1086	1000

	m	3	4	5	6	8	10	12	14	16	17	18.3	20	22	24	26	28	30	31.8
	kg	2000											1795	1594	1429	1293	1177	1078	1000

	m	3	5	10	15	20	25	30	31.2
	kg	1000							

	m	3	5	10	15	20	25	30.4
	kg	1000						

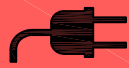
(0 - 2000 kg) (2001 - 4000 kg)



POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER

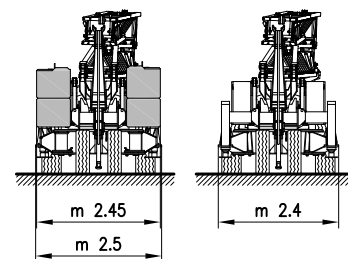
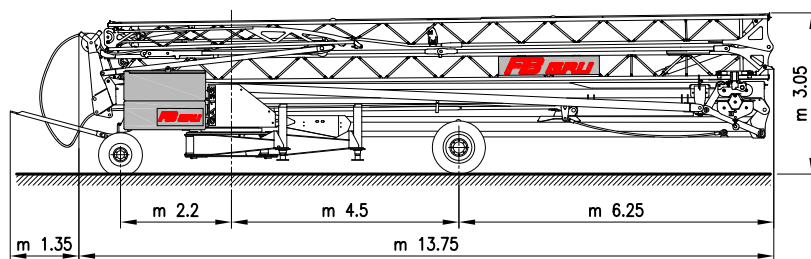
KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

	SOLLEVAMENTO ELEVACION — HOISTING — HEBEN — LEVAGE	 kg 2000	 kg 4000
	12 kW 400 V - 50 Hz		

GA 132H

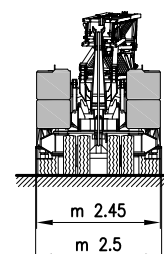
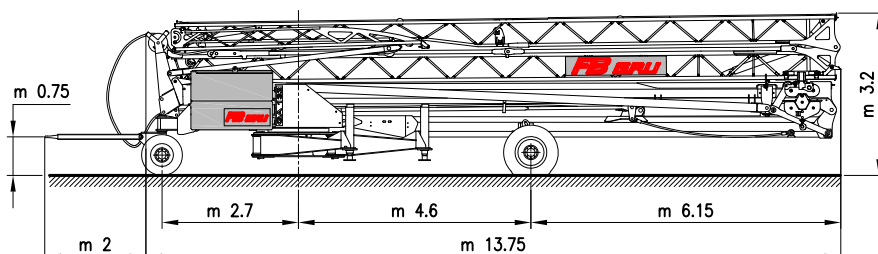
TRASPORTO TRANSPORTE — TRANSPORT TRANSPORT — TRANSPORT

5
km/h

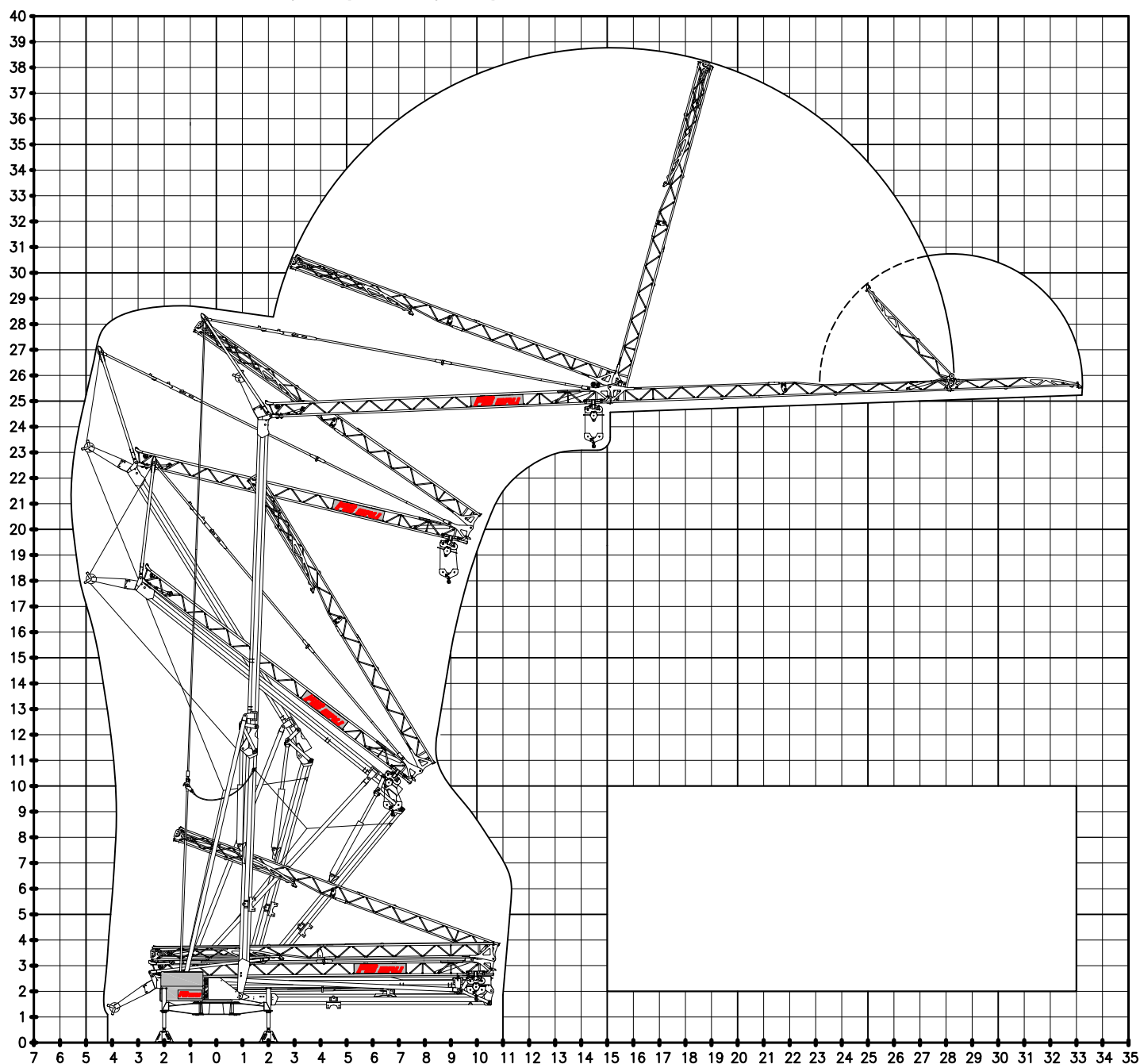


FB25K1

25
km/h



MONTAGGIO MONTAJE — ERECTION MONTAGE — MONTAGE



GRU A TORRE

GA 138

GRU AUTOMATICA CON
MONTAGGIO IDRAULICO

GA compact



GX



GHS topless



FB F.lli Butti s.r.l.

Via XXV Aprile, 58

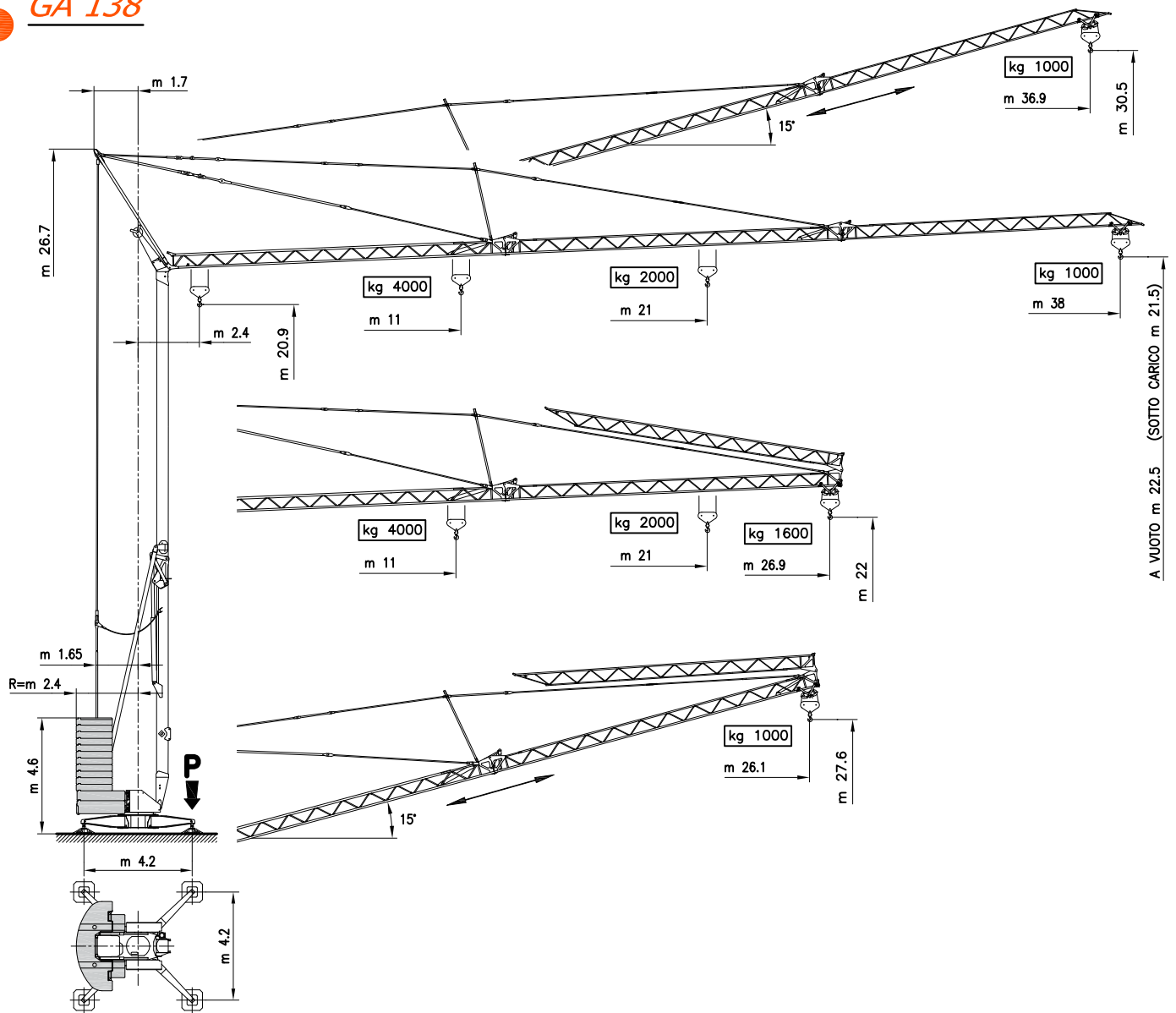
23868 Valmadrera (LC) - Italia

Tel. 0341.581108 - Fax 0341.200253

E-mail : fbgru@fbgru.it - <http://www.fbgru.it>

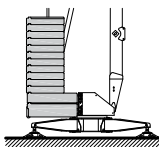
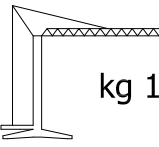


FEM 1.001 - A3
EN 14439 - C25



A VUOTO m 22.5 (SOTTO CARICO m 21.5)

P	
kg 26100 <i>In servizio</i> En servicio In service In betrieb En service	kg 19400 <i>Fuori servizio</i> Fuera de servicio Out of service Außer betrieb Hors service

 N° 11x1800 N° 2x1850 N° 2x1550 kg 40750	 kg 14150

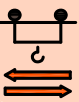
LA GRU

LA GRÚA — CRANE
KRAN — GRUE



MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS	
---	---	---	---

			1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg	
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE 	400 V 50 Hz		4	16	34	46	kW 15
INVERTER			4000	4000	2000	1000	

			1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION 	400 V 50 Hz		18	30	56	kW 3
INVERTER						

			1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION 	400 V 50 Hz		0 → 0.15	0.15 → 0.6	0.6 → 0.85	kW 3
INVERTER						



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

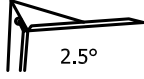
In compliance with the EEC
instructions on noise level

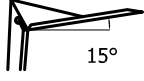
Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

Conforme aux directives CEE
sur le niveau acoustique

CURVE DI CARICO

CURVAS DE CARGAS — LOAD DIAGRAMS
LASTKURVEN — COURBES DE CHARGESV38 

	m	2.4	7	11	12.5	14	16	18	20	21	22	24	26.9	28	30	32	34	36	38
2.5°	kg	4000			3745	3289	2815	2454	2169	2000	1924	1750	1527	1456	1339	1238	1149	1070	1000

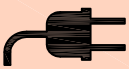
	m	2.4	5	8	11	14	17	19	20	23	26	29	32	35	38
15°	kg	1000													

(0 - 4000 kg)



POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER
KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

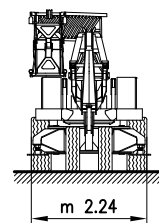
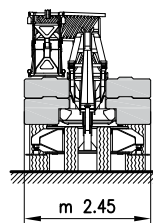
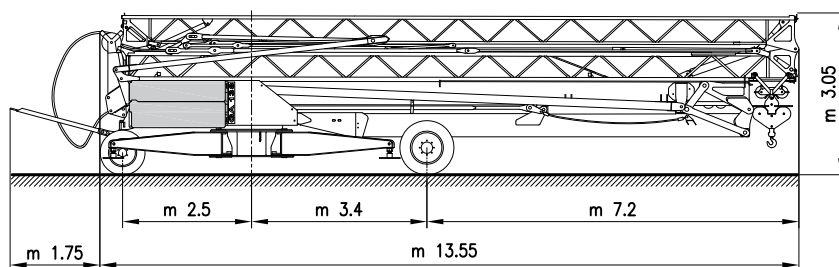
	SOLLEVAMENTO ELEVACION — HOISTING — HEBEN — LEVAGE	 kg 4000
	14 kw 400 V - 50 Hz	

TRASPORTO

TRANSPORTE — TRANSPORT

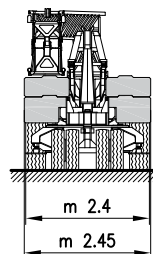
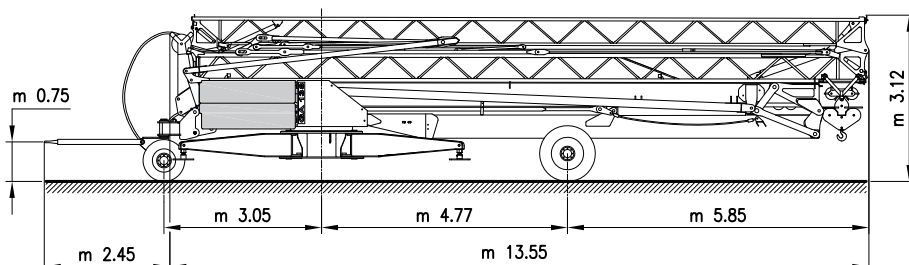
TRANSPORT — TRANSPORT

5
km/h



FB25K1

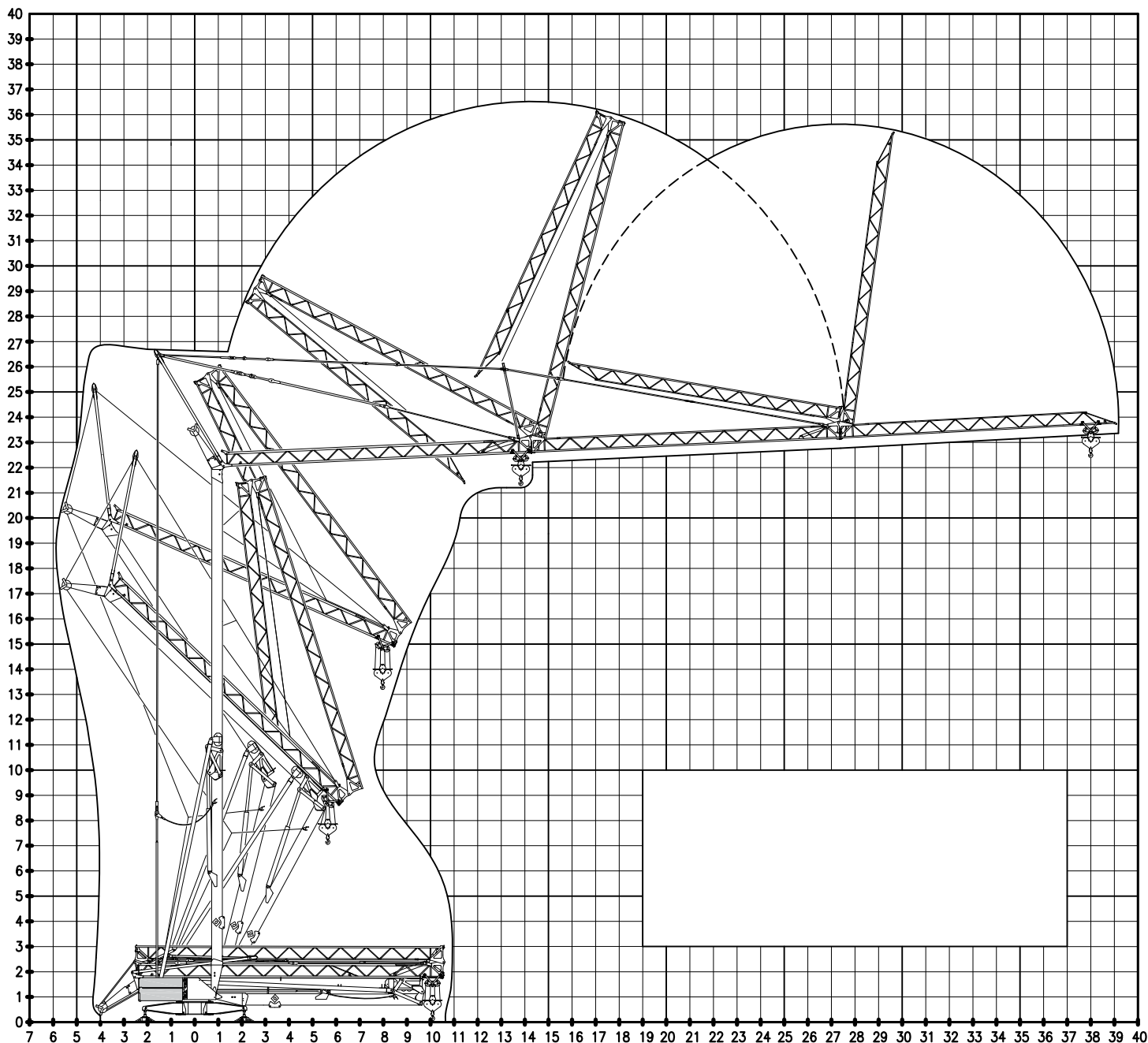
25
km/h



MONTAGGIO

MONTAJE — ERECTION

MONTAGE — MONTAGE



GRU A TORRE

GA 138K

GRU AUTOMATICA CON
MONTAGGIO IDRAULICO

GA compact



GX



GHS topless



FB F.lli Butti s.r.l.

Via XXV Aprile, 58

23868 Valmadrera (LC) - Italia

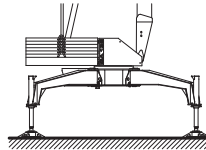
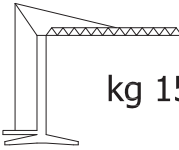
Tel. 0341.581108 - Fax 0341.200253

E-mail : fbgru@fbgru.it - <http://www.fbgru.it>



FEM 1.001 - A3
EN 14439 - C25



	
 N° 10x1300 N° 2x4000 kg 36150	 kg 15150

MECCANISMI

MECANISMOS — MECHANISMS

ANTRIEBE — MÉCANISMES

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS	
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			1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg	
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE 			5 ↓↑	24 ↑ 26 ↓	38 ↑ 40 ↓	45 ↑ 48 ↓	
INVERTER	400 V 50 Hz		2000	2000	1000	600	
			3 ↓↑	12 ↑ 13 ↓	19 ↑ 20 ↓	23 ↑ 24 ↓	
			4000	4000	2000	1200	kW 9.2

			1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION 	400 V 50 Hz		18	30	56	kW 3
INVERTER						

			1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION 	400 V 50 Hz		0 → 0.15	0.15 → 0.6	0.6 → 0.85	kW 3
INVERTER						



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise level

Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

Conforme aux directives CEE
sur le niveau acoustique

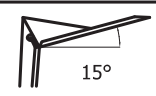
CURVE DI CARICO

CURVAS DE CARGAS — LOAD DIAGRAMS

LASTKURVEN — COURBES DE CHARGES

V38 

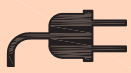
	m	2.4	7	12.5	14	16	18	20	22.1	24	26.9	28	30	32	34	36	38
2.5°	kg	4000			3504	3001	2618	2316	2000	1822	1594	1521	1402	1298	1207	1127	1000

	m	2.4	7	10	13	16	19	22	25	28	31	34	36.9	(0 - 2000 kg)	(2001 - 4000 kg)
15°	kg	1000													

POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER

KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

	SOLLEVAMENTO ELEVACION — HOISTING — HEBEN — LEVAGE  kg 2000  kg 4000
	12 kw 400 V - 50 Hz

GA 138K

Con riserva di modifiche
documento commerciale
non vincolante

Derecho de modificaciones reservadas
documento commercial no contractual

Subject to change without notice
commercial document not legally
binding

Anderungen vorbehalten
Unverblindliches
Vertriebsdokument

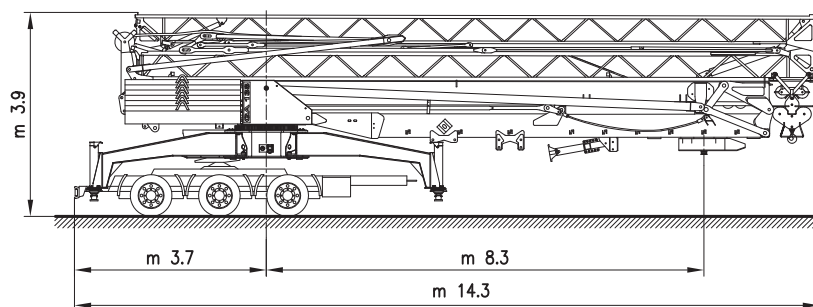
Modifications réservées
document commercial
non contractuel

Rev. 0010319-138K

TRASPORTO TRANSPORTE — TRANSPORT

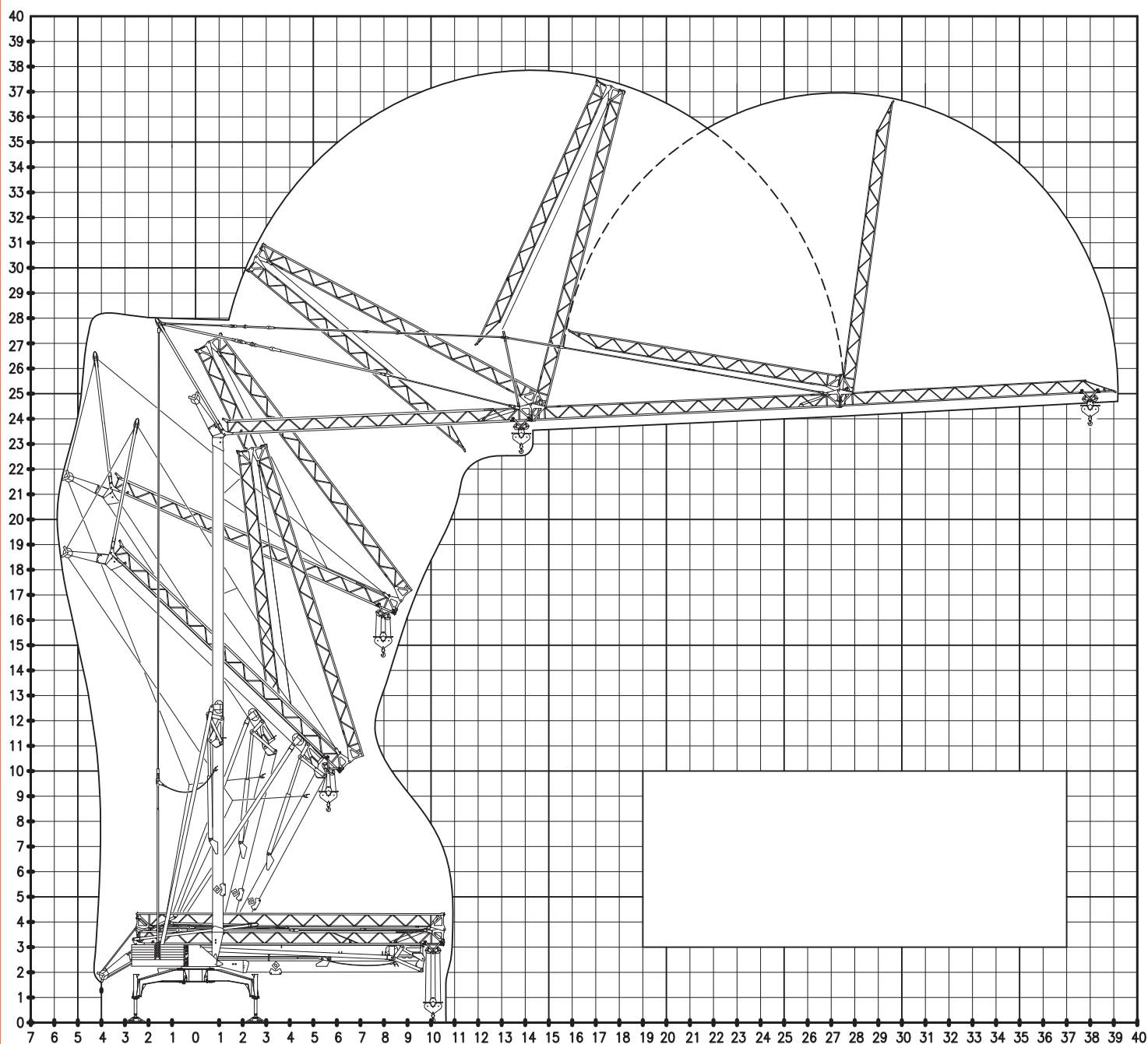
TRANSPORT — TRANSPORT

80
km/h



MONTAGGIO MONTAJE — ERECTION

MONTAGE — MONTAGE



GRU A TORRE

GA 143

GRU AUTOMATICA CON
MONTAGGIO IDRAULICO

GA compact



GX



GHS topless



FB F.lli Butti s.r.l.

Via XXV Aprile, 58

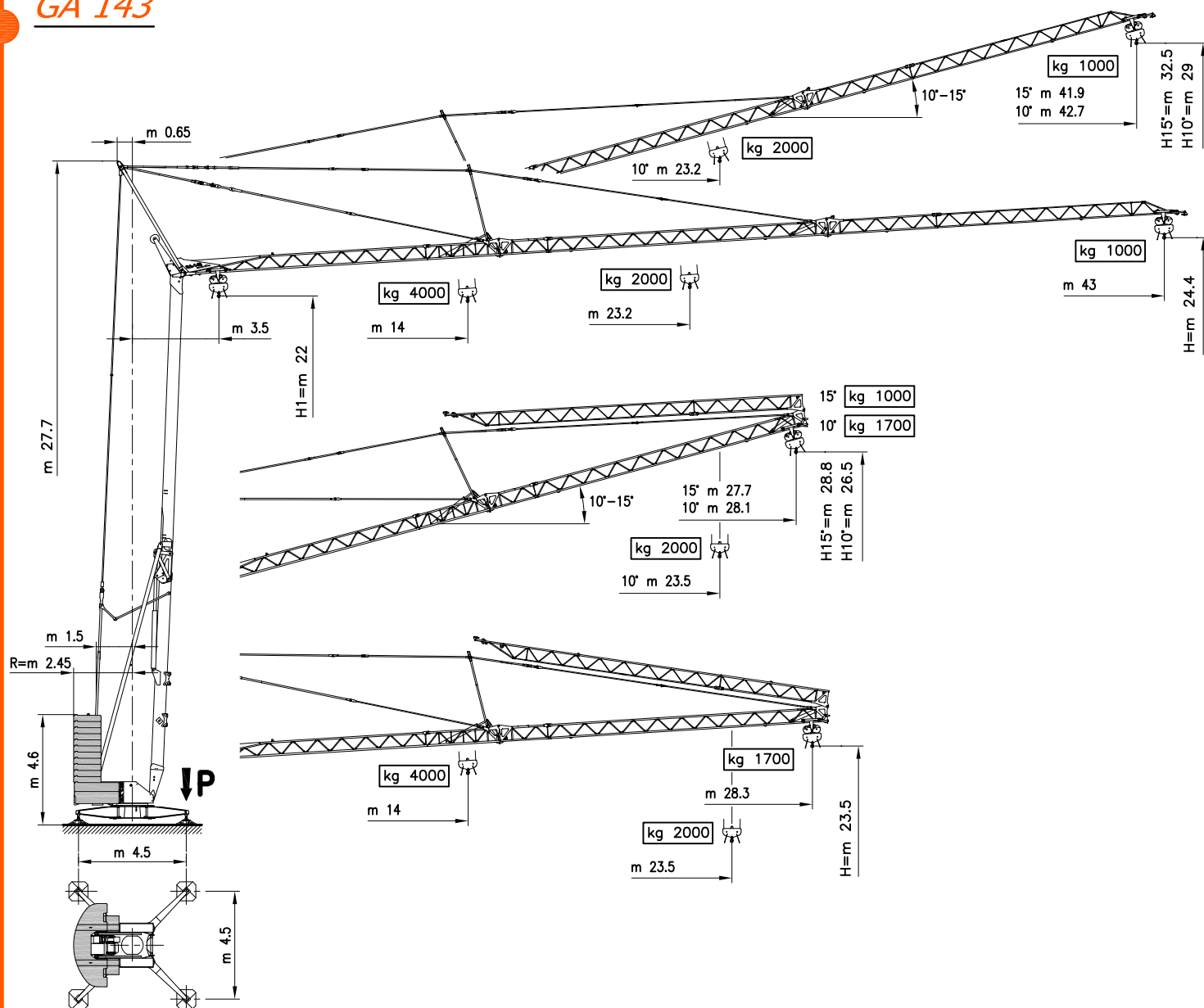
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E-mail : fbgru@fbgru.it - <http://www.fbgru.it>



FEM 1.001 - A3
EN 14439 - C25



P

kg 30480

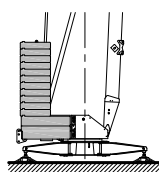
In servizio

En servicio
In service
In betrieb
En service

kg 21815

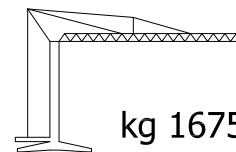
Fuori servizio

Fuera de servicio
Out of service
Außer betrieb
Hors service



N° 11x2180
N° 2x1850
N° 2x1550

kg 47530



kg 16750

LA GRU

LA GRUA — CRANE
KRAN — GRUE



MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS	
---	---	---	---

			1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg	
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE 	INVERTER	400 V 50 Hz	4	16	34	46	kW 15
			4000	4000	2000	1000	

			1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION 	INVERTER	400 V 50 Hz	18	30	56	kW 3

			1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION 	INVERTER	400 V 50 Hz	0 → 0.15	0.15 → 0.45	0.45 → 0.85	kW 3



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

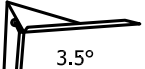
In compliance with the EEC
instructions on noise level

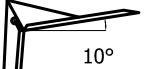
Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

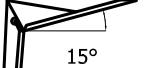
Conforme aux directives CEE
sur le niveau acoustique

CURVE DI CARICO CURVAS DE CARGAS — LOAD DIAGRAMS
LASTKURVEN — COURBES DE CHARGES

V43 

	m	3.5	5	14	16	18	20	22	23.2	26	28	30	32	34	36	38	40	41	43
	kg	4000			3400	2940	2584	2300	2000	1828	1670	1536	1419	1317	1228	1148	1076	1044	1000

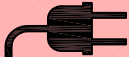
	m	3.5	5	10	20	22	23.2	24	26	28	30	32	34	36	38	39	40	41	42.7
	kg	2000						1960	1795	1639	1505	1389	1288	1199	1120	1084	1049	1016	1000

	m	3.5	5	10	20	22	23.8	26	28	30	32	34	36	41.9
	kg	1000												

(0 - 4000 kg)



POTENZA RICHIESTA POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER
KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

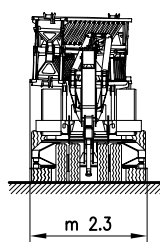
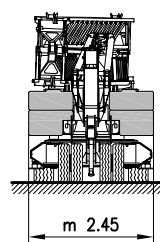
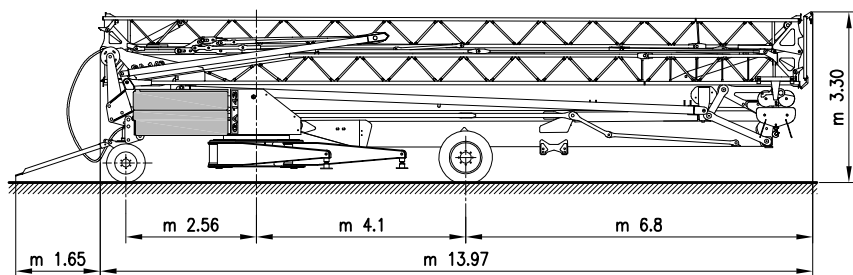
	SOLLEVAMENTO ELEVACION — HOISTING — HEBEN — LEVAGE	 kg 4000
	14 kw 400 V - 50 Hz	

TRASPORTO

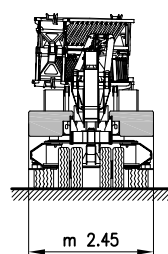
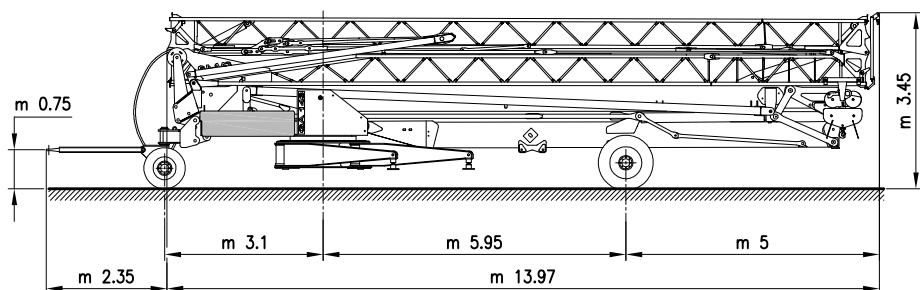
TRANSPORTE — TRANSPORT

TRANSPORT — TRANSPORT

5
km/h



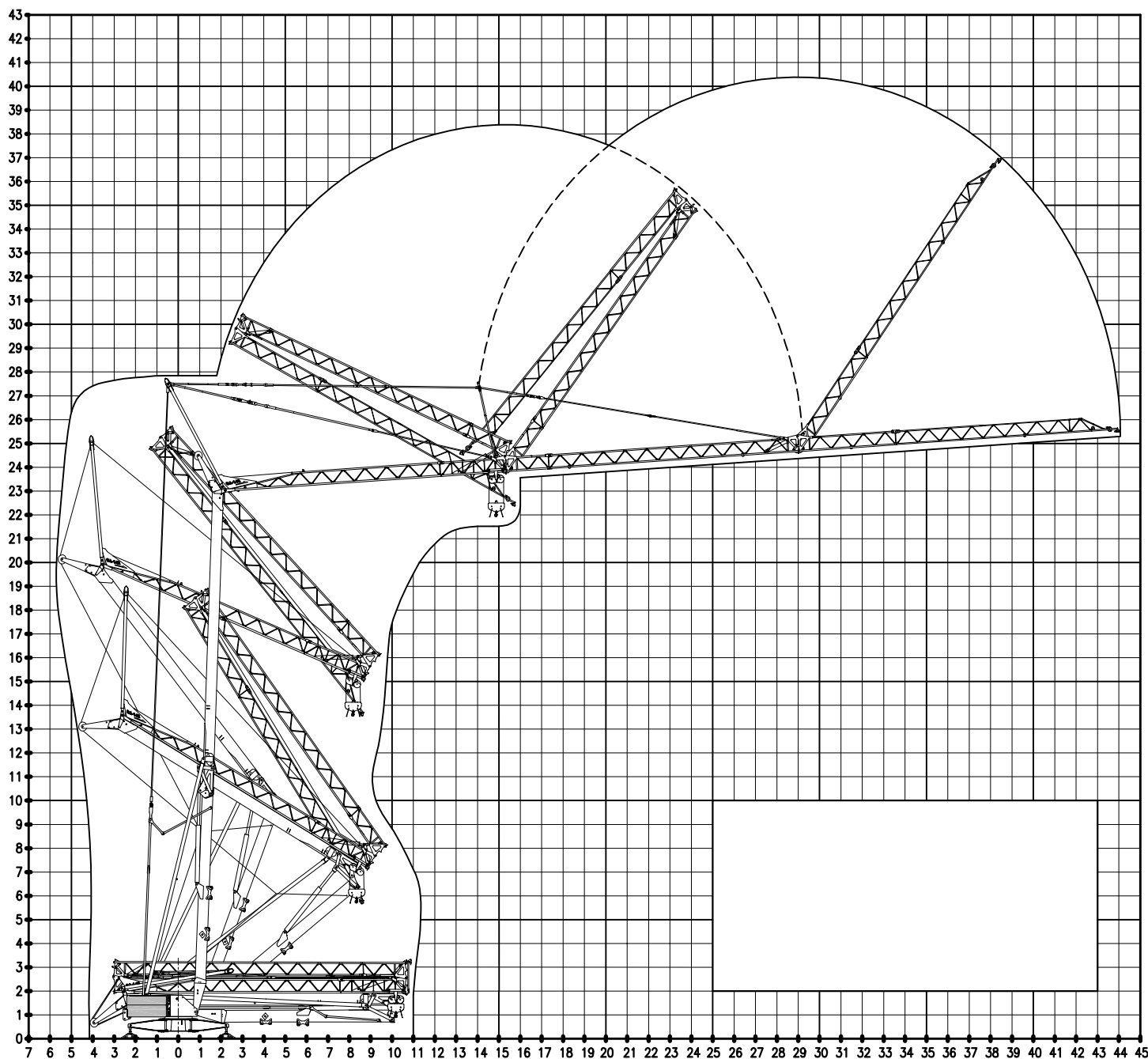
25
km/h



MONTAGGIO

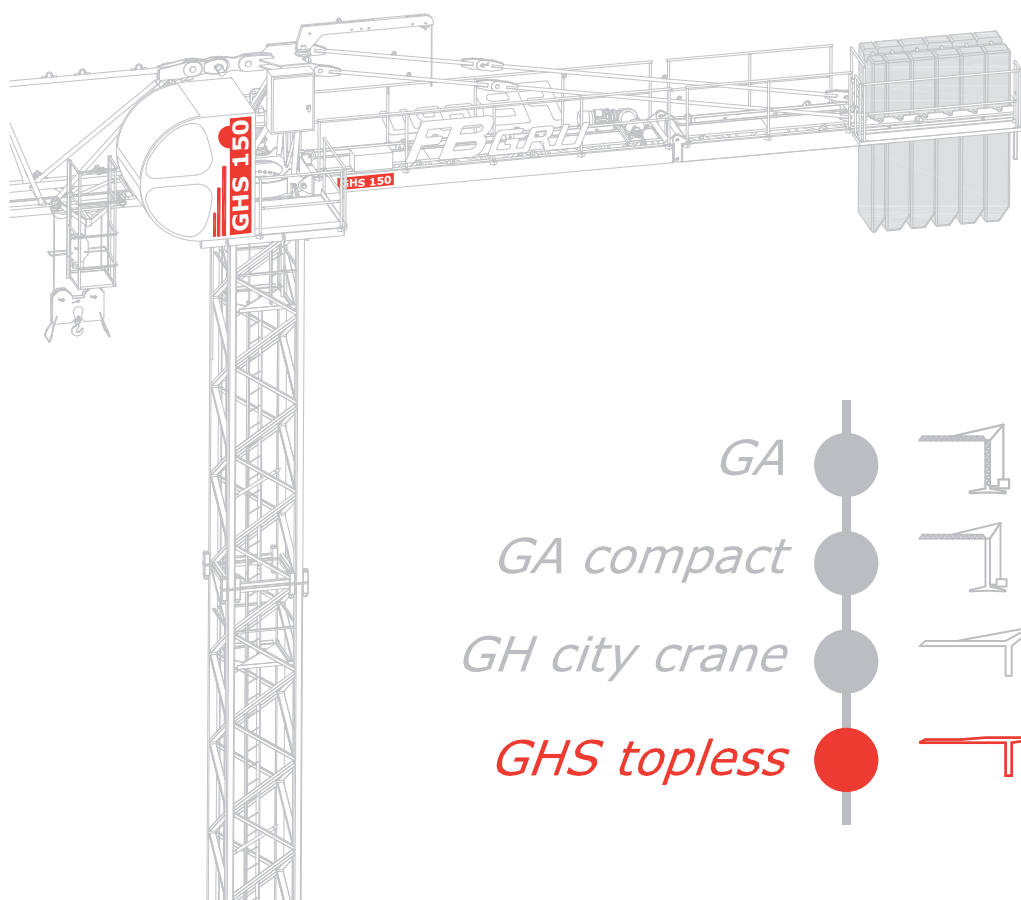
MONTAJE — ERECTION

MONTAGE — MONTAGE



GRU A TORRE

GHS 150 | 6000



- GA ● 
- GA compact ● 
- GH city crane ● 
- GHS topless ● 

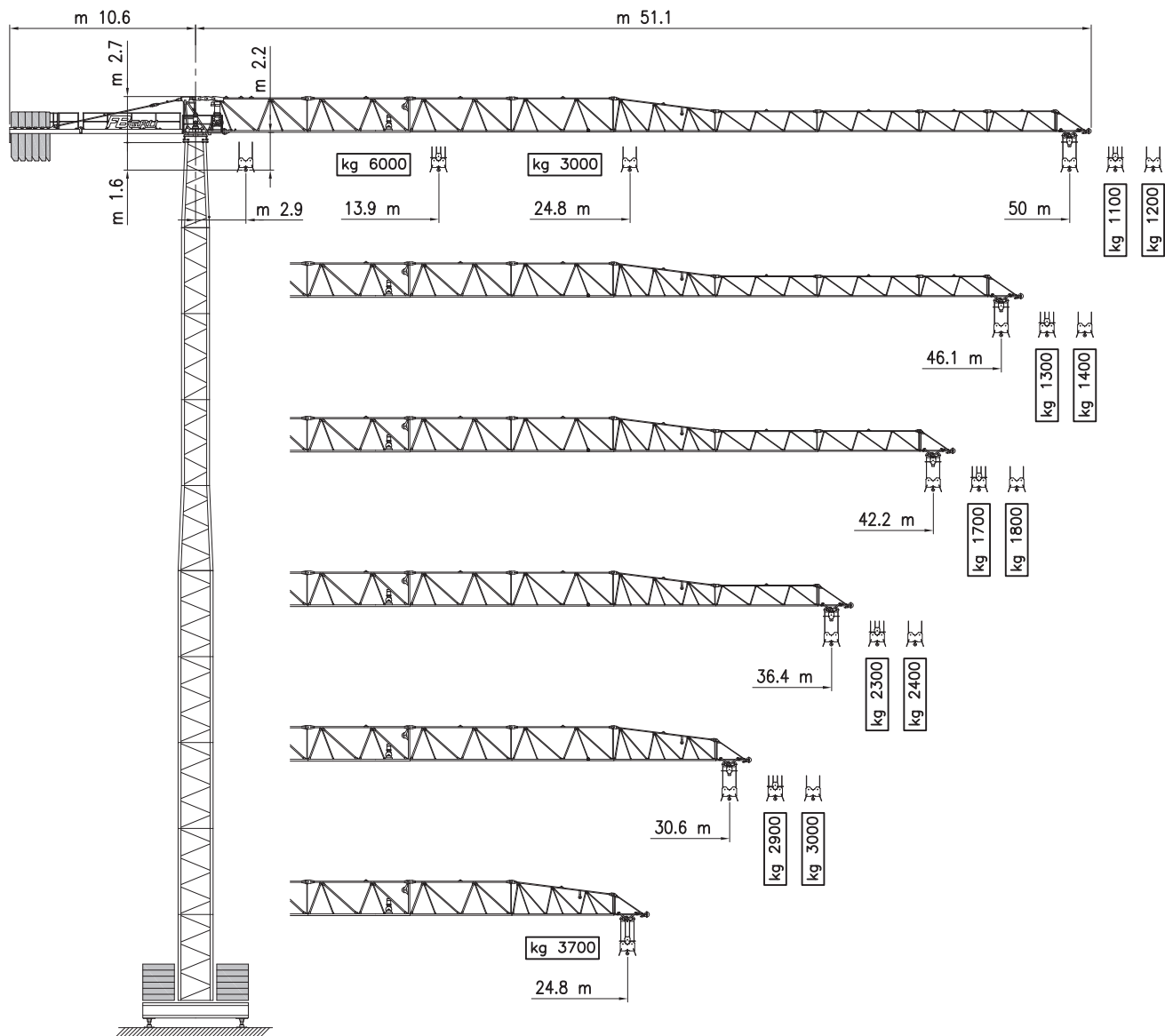


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E-mail : fbgru@fbgru.it - <http://www.fbgru.it>



FEM 1.001 - A4
EN 14439 - C25



CURVE DI CARICO

CURVAS DE CARGAS — LOAD DIAGRAMS
LASTKURVEN — COURBES DE CHARGES

m	13.9	14.4	14.9	16.3	16.4	16.6	18	20	22	24.8	25.8	26.7	27.6	29.2	29.7	30.1	30.6	32	34	36.4	38	40	42.2	44	46.1	47	48	50
kg	6000	5746	5523	4974	4939	4869	4427	3905	3482	3000	2859	2744	2636	2462	2411	2372	2324	2199	2038	1869	1768	1654	1541	1457	1234	1201	1167	1100
											3000	2878	2768	2591	2539	2500	2451	2324	2160	1989	1886	1770	1655	1570	1336	1303	1267	1200
	6000	5763	5193	5156	5084	4624	4083	3642	3148	3000	2870	2758	2577	2524	2484	2434	2304	2137	1961	1857	1738	1620	1533	1300				
										3000	2855	2742	2637	2467	2418	2380	2333	2211	2055	1890	1792	1680	1570	1488	1400			
	6000			5420	5382	5307	4829	4266	3803	3295	3140	3000	2885	2696	2642	2599	2548	2413	2239	2056	1948	1824	1700					
													3000	2805	2750	2707	2665	2519	2344	2160	2050	1925	1800					
	6000				5962	5879	5355	4738	4237	3674	3503	3361	3228	3000	2943	2897	2840	2692	2502	2300								
															3000	2944	2795	2603	2400									
							6000	5463	4835	4324	3751	3577	3432	3297	3077	3000	2957	2900										
																		3000										
	6000				5913	5387	4767	4262	3700																			
											3000																	

(0 - 3000 kg)

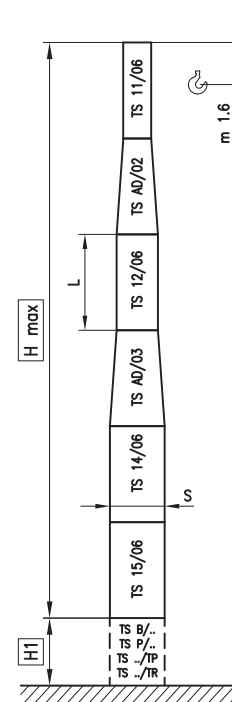


(3001 - 6000 kg)

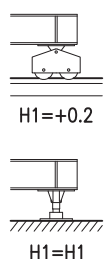
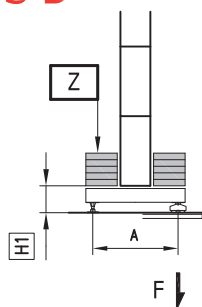


	TS 11	TS AD/02	TS 12	TS AD/03	TS 14	TS 15	H max (m)
S	m 1.2	m 1.2 → 1.6	m 1.6	m 1.6 → 2.1	m 2.1	m 2.1	
L	m 5.92	m 5.92	m 5.97	m 5.97	m 5.97	m 5.97	
TS B/03	5	1	1				41.49 ■
TS B/04	5	1	2				47.46 ■
TS B/05	4	1	2	1	3		65.42 ■
TS B/06	4	1	2	1	3		65.42 ■
	3	1	2	1	4	2	77.41** ■
TS P/03	5						29.6
TS P/04	5	1					35.52
TS P/05	5	1	2				47.46
TS 11/TP	5						29.6
TS 12/TP	5	1	2				47.46
TS 14/TP	4	1	2	1	3		65.42
TS 15/TP	3	1	2	1	4	2	77.41**

** Senza cabina — Sin cabina — Whitout cabin — Ohne kabine — Sans cabine



TS B



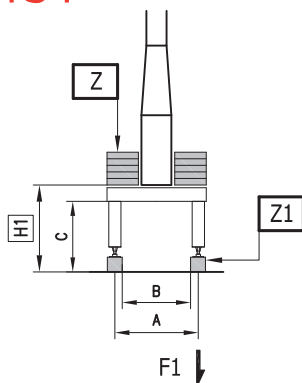
□ TR 02/02

■ TR 02/04

■ AP/02

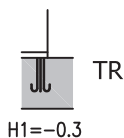
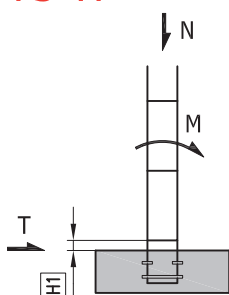
		F (kN)	Z (kg)	A (m)	H1(m)
TS B/03	●	541	72000	3.8x3.8	1
	○	583			
TS B/04	●	559	84000	4.5x4.5	1.2
	○	641			
TS B/05	●	700	126000	6x6	1.4
	○	944			
TS B/06	●	689	126000	8x8	1.6
	○	1033			

TS P



		F1 (kN)	Z (kg)	Z1 (kg)	A (m)	B (m)	C (m)	H1 (m)
TS P/03	●	463	40000	4x4000	3.8x3.8	3	4.52	5.31
	○	433						
TS P/04	●	473	48000	4x4000	4.5x4.5	3.72	4.47	5.5
	○	493						
TS P/05	●	527	70000	4x4000 4x7000	6x6	5.2 5	4.5 4.65	5.8 5.95
	○	630						

TS TP



TR

		N (kN)	T (kN)	M (kNm)	H1 (m)
TS 11/TP	●	339	16	1087	0.65
	○	297	50	824	
TS 12/TP	●	402	21	1425	0.65
	○	361	74	2166	
TS 14/TP	●	507	28	1886	0.65
	○	467	111	4227	
TS 15/TP	●	593	34	2292	0.65
	○	552	139	6208	

IN SERVIZIO

EN SERVICE — IN SERVICE
IN BETRIEB — EN SERVICE

FUORI SERVIZIO

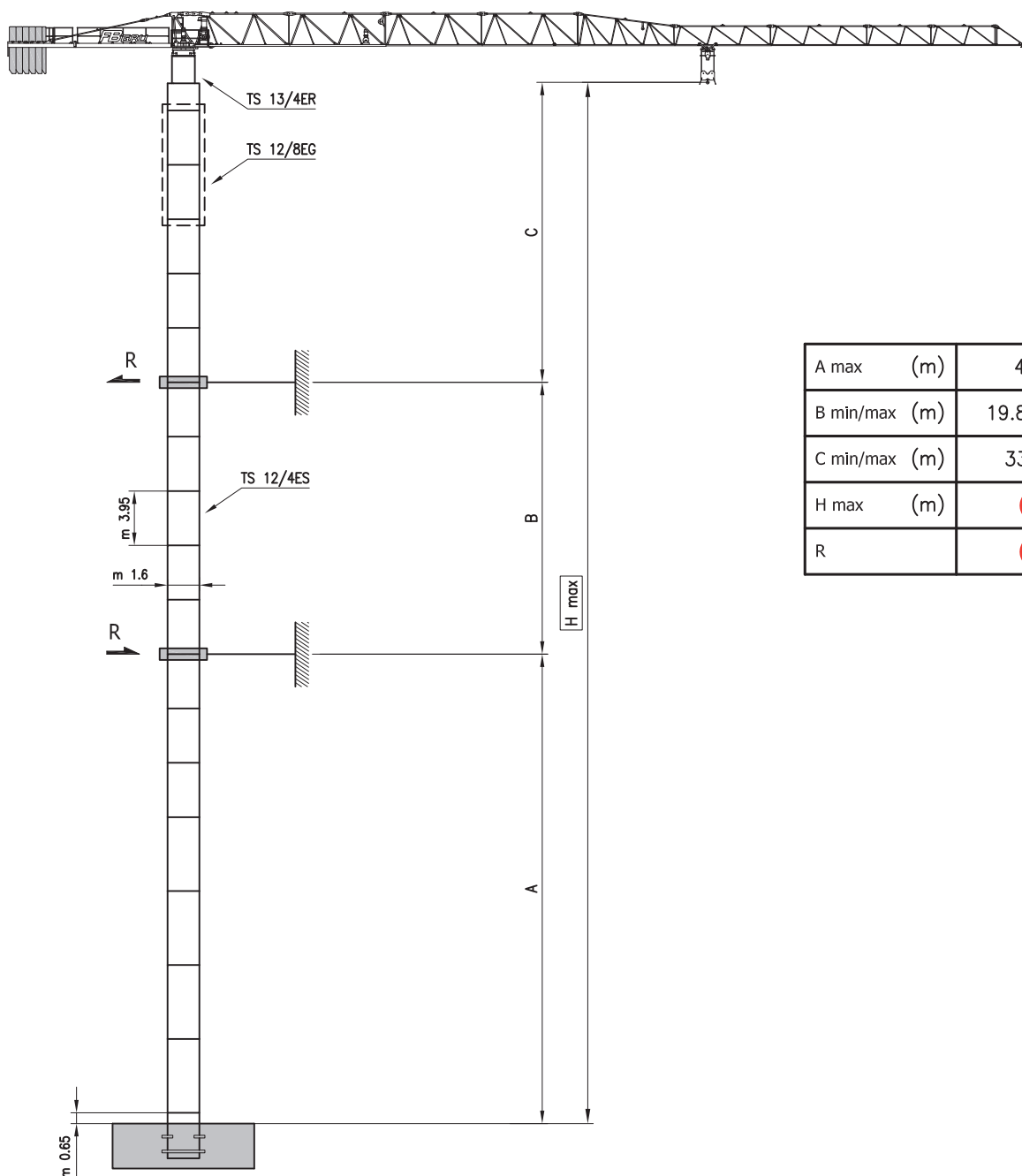
FUERA DE SERVICIO — OUT OF SERVICE
AUSSER BETRIEB — HORS SERVICE

ZAVORRA di BASE

LASTRE DE BASE — CENTRAL BALLAST
ZENTRAL BALLASTSTEIN — LEST DE BASE



*Solo per Hmax — Sólo para Hmax — Only for Hmax — Nur für Hmax — Seulement pour Hmax

TS 12/4ES


A max	(m)	40.5
B min/max	(m)	19.8/23.8
C min/max	(m)	33/37
H max	(m)	i
R		i

i Consultateci — Consultarnos — Consult us — Auf anfrage — Nous consulter

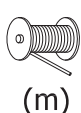
ZAVORRA DI CONTROBRACCIO

LASTRE DE CONTRA FLECHA — COUNTER JIB BALLAST

GEGEN AUSLEGERBALLAST — LEST DE CONTRE-FLÈCHE

	BRACCIO (m) FLECHA — JIB AUSLEGER — FLECHE	50	46.1	42.2	36.4	30.6	24.8
	ZAVORRA (kg) LASTRE — BALLAST BALLAST — LEST	12160 (5A + 1B)	10900 (5A)	9980 (4A + 1B)	9980 (4A + 1B)	8720 (4A)	7800 (3A + 1B)

	TIPO TIPO — TYPE ART — TYPE	A	B
	PESO (kg) PESO — WEIGHT GEWICHT — POIDS	2180	1260

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS		 (m)
---	---	---	---	--

		1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg	5 ^a m/1' - kg		
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE  INVERTER	400 V 50 Hz	 4	8	30	50		kW 11	AS 11 160 Hmax 36 m
		2500	2500	2500	1300			
		 2	4	15	25		kW 18	AS 18 160 Hmax 36 m AS 18 HC 280 H max 70 m
		5000	5000	5000	2500			
		 6	11	32	60	72	kW 25	AS 25 280 Hmax 70 m AS 25 HC 520 H max 130 m
		3000	3000	3000	1300	800		
		 3	6	16	30	36	kW 25	
		6000	6000	6000	2600	1600		
		 7	11	35	72	88	kW 25	
		3000	3000	3000	1300	800		
		 4	6	17	36	44	kW 25	
		6000	6000	6000	2600	1600		

		1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	4 ^a m/1'		
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION  INVERTER	400 V 50 Hz	10	30	48	62	kW 3	

		1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	4 ^a m/1'		
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION  INVERTER	400 V 50 Hz	0 → 0.08	0.08 → 0.2	0.2 → 0.4	0.4 → 0.96	kW 5.5	

		1 ^a m/1'			
TRASLAZIONE TRASLACIÓN – TRAVELLING SCHIENENFAHREN – TRANSLATION INVERTER	  400 V 50 Hz	0 → 20		kW N° 2 x 4 TR 02/02 N° 4 x 4 TR 02/04	



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise level

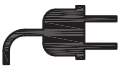
Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

Conforme aux directives CEE
sur le niveau acoustique

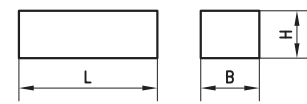
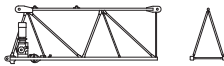
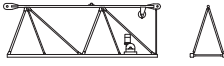
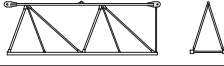
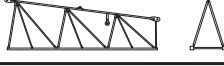
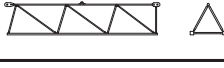
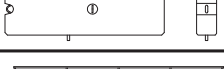
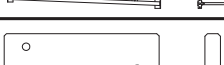
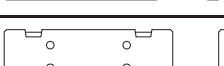
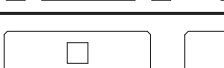
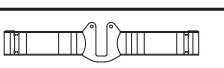
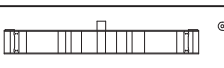
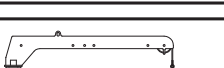
POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER

KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

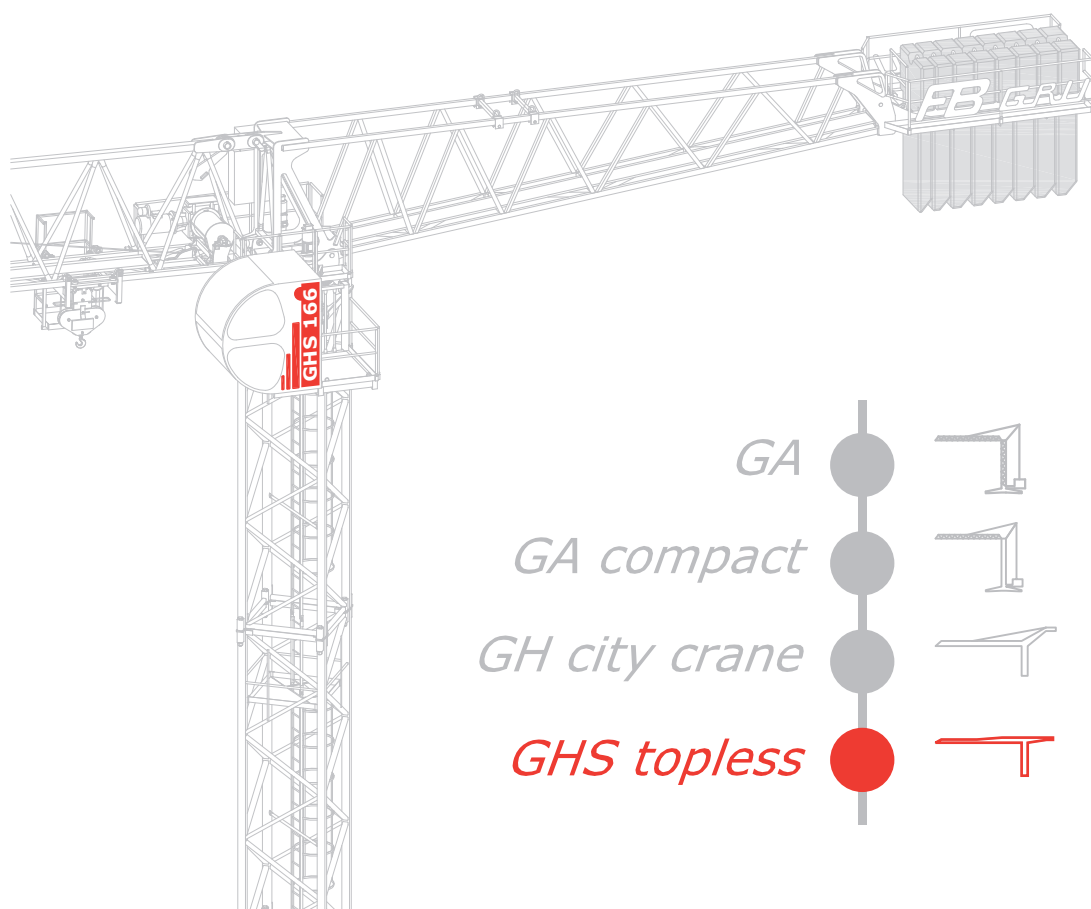
 400 V - 50 Hz	 AS 11 11 kW	 AS 18 AS 18 HC 18 kW	 AS 25 AS 25 HC 25 kW
	28 kVA* (22 kW)	36 kVA* (29 kW)	45 kVA* (36 kW)

* Gru senza traslazione — Grúa sin traslación — Crane without travelling equipment — Krane ohne schienenfahren — Grue sans translation

Pos. Pos. Item Pos. Rep.	DENOMINAZIONE Denominacion Denomination Benennung Dènomination		Q.tà Cont. Qty. Anz. Qte.	L	B	H	 (kg)	
				(m)				
1	Elemento di braccio 1 Tramo de flecha 1 – Jib element 1 Auslegerschuss 1 – Element de flèche 1		1	6.02	1.16	2.21	1670	
2	Elemento di braccio 2 Tramo de flecha 2 – Jib element 2 Auslegerschuss 2 – Element de flèche 2		1	6.05	1.16	2.05	870	
3	Elementi di braccio 3 - 4 Tramos de flecha 3-4 – Jib elements 3-4 Auslegerschuss 3-4 – Elements de flèche 3-4		1 1	6.02	1.16	2.02 2.01	535 435	
4	Elemento di braccio 5 Tramo de flecha 5 – Jib element 5 Auslegerschuss 5 – Element de flèche 5		1	6.02	1.16	2.01	410	
5	Elementi di braccio 6 - 7 Tramos de flecha 6-7 – Jib elements 6-7 Auslegerschuss 6-7 – Elements de flèche 6-7		1 1	6.02 6.01	1.16	1.26 1.25	350 290	
6	Elemento di braccio 8 - 9 Tramo de flecha 8-9 – Jib element 8-9 Auslegerschuss 8-9 – Element de flèche 8-9		2	4.08	1.16	1.25	195	
7	Elemento di braccio 10 Tramo de flecha 10 – Jib element 10 Auslegerschuss 10 – Element de flèche 10		1	2.1	1.16	1.38	100	
8	Blocco di contrappeso Lastre de contraflecha – Counter jib block Gegengewichtsballast – Contrepoids		1 5	2.83	0.87	0.23 0.395	1260 2180	
9	Controbraccio Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	6.1	1.23	1.21	860	
10	Controbraccio Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	4.15	1.22	1.21	800	
11	Gruppo rotazione Plataforma de giro – Slewing platform Drehbühne – Porte-flèche tournant		1	2.65	1.72	1.71	2430	
12	Elemento di torre TS 11/6 Mastil – Tower element Turmschuss – Mats			5.92	1.2	1.38	1435	
13	Elemento di torre TS 12/6 Mastil – Tower element Turmschuss – Mats			5.97	1.6	1.8	2088	
14	Elemento di torre TS 14/6 Mastil – Tower element Turmschuss – Mats			5.97	2.3	2.3	3050	
15	Elemento di torre TS 15/6 Mastil – Tower element Turmschuss – Mats			5.97	2.3	2.3	3500	
16	Adattatore TS AD/02 Adaptador – Adapter Adapter – Adaptateur			5.92	1.6	1.8	2005	
17	Adattatore TS AD/03 Adaptador – Adapter Adapter – Adaptateur			5.97	2.1	2.3	2750	
18	Blocco zavorra di base per TS B/03 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour			3.8	0.38	1.18	4000	
19	Blocco zavorra di base per TS B/04 e TS B/05 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour		TSB/04 TSB/05	5.0 5.7	0.34	1.6	6000 7000	
20	Blocco di appoggio Gatos – Concrete pad Fundament block – Blocs d'appui			3.0 3.2	0.8 1.0	0.74 0.95	4000 7000	
21	Crociera di base (Trave A) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/03 TSB/04 TSB/05 TSB/06	1 1 1 1	5.75 6.75 8.86 11.7	0.35 0.35 0.4 0.45	1.08 1.26 1.6 1.85	1660 2315 4050 6760
	Crociera di base (Trave B) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/03 TSB/04 TSB/05 TSB/06	1 1 1 1	5.75 6.75 8.86 11.7	0.92 0.93 0.99 1.15	0.9 1.1 1.35 1.6	1515 2050 3630 6200
	Opzionale Optional Optional Optionale Option			1	2.2	0.22	0.72	110
	Argano ausiliario Mecanismo auxiliar – Auxiliary winch Hilfswinde – Treuil auxiliaire			1	0.85	0.9	0.43	170

GRU A TORRE

GHS 166 | 8000



FB F.lli Butti s.r.l.

Via XXV Aprile, 58

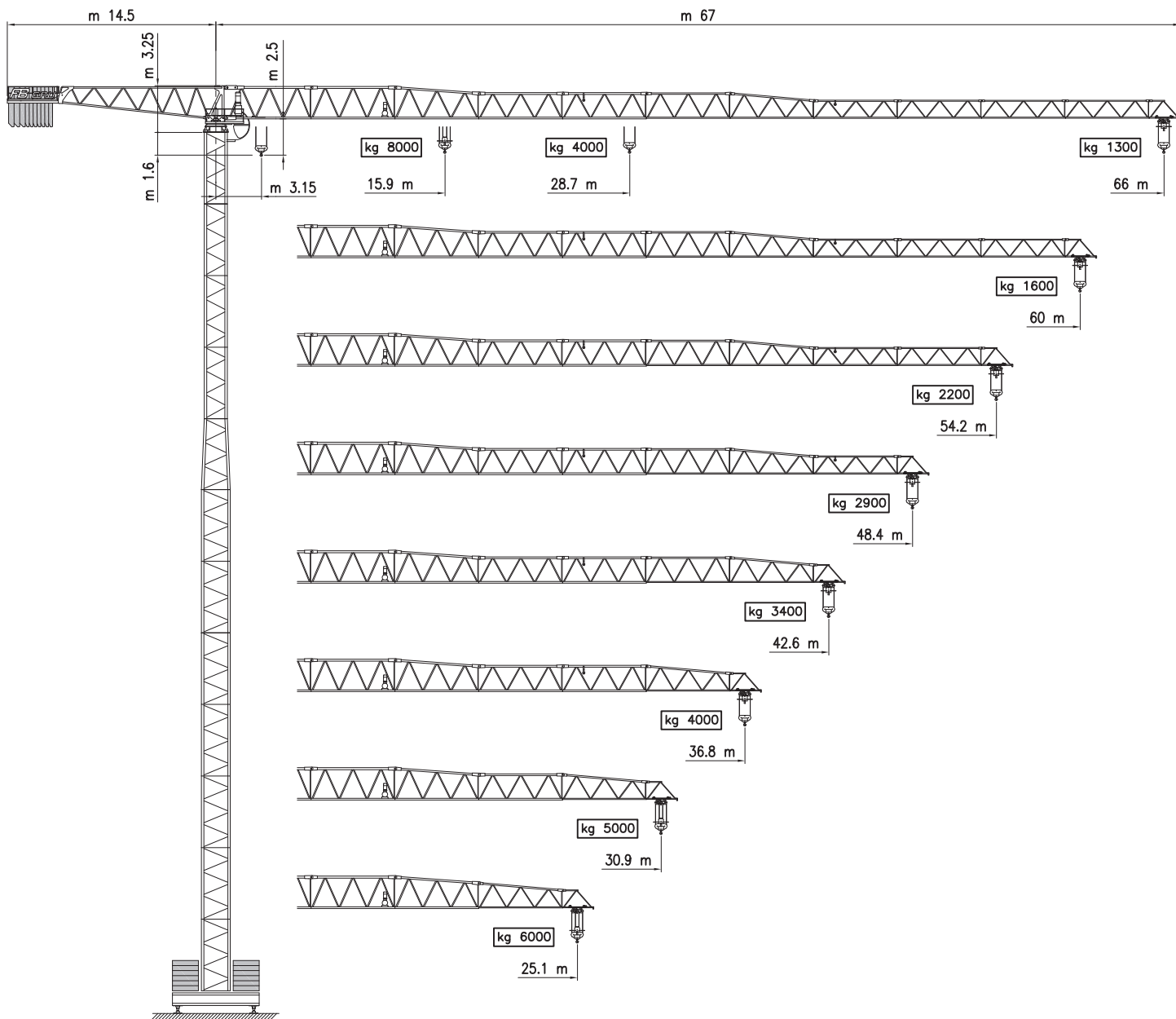
23868 Valmadrera (LC) - ITALIA

Tel. 0341.581108 - Fax 0341.200253

E-mail : fbgru@fbgru.it - <http://www.fbgru.it>



FEM 1.001 - A4
EN 14439 - C25



CURVE DI CARICO

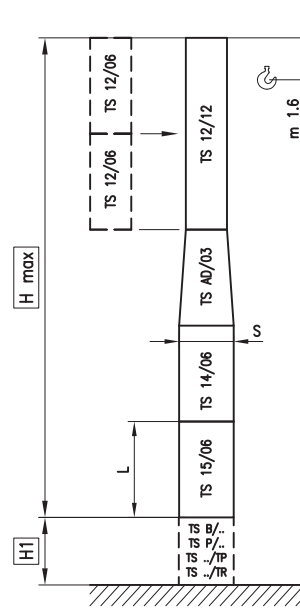
CURVAS DE CARGAS — LOAD DIAGRAMS
LASTKURVEN — COURBES DE CHARGES

m	15.8	15.9	18.3	19.6	20.3	20.6	23	25.1	28.5	28.7	30.9	33.2	36.8	36.9	37.4	40	42.6	45	48.4	50	52	54.2	56	58	60	62	64	66
kg		8000	6833	6327	6083	5983	5213	4721	4083	4000	3680	3389	3008	2998	2857	2656	2465	2308	2114	2031	1936	1839	1765	1689	1467	1406	1349	1300
	8000	7922	6770	6268	5945	5847	5163	4676	4000	3965	3645	3356	2900	2891	2846	2629	2440	2285	2092	2010	1915	1819	1746	1671	1600			
			8000	7414	7131	7016	6205	5551	4811	4773	4389	4000	3556	3545	3490	3231	2952	2744	2518	2422	2311	2200						
						8000	7069	6417	5495	5452	5018	4628	4117	4105	4000	3703	3446	3236	2900									
							8000	7871	6968	6324	5415	5372	4945	4560	4056	4000	3937	3648	3400									
								8000	7834	6935	6294	5389	5347	4921	4538	4000												
									8000	7044	6394	5475	5432	5000														
										8000	1300	7567	6697	6000														

(0 - 4000 kg)

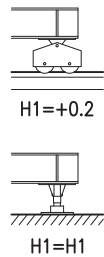
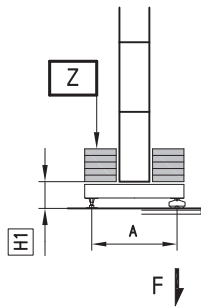
(4001 - 8000 kg)

	TS 12/06	TS AD/03	TS 14	TS 15	H max (m)
S	m 1.6	m 1.6 → 2.1	m 2.1	m 2.1	
L	m 5.97	m 5.97	m 5.97	m 5.97	
TS B/03	6				35.82 ☐ ☒
TS B/04	7				41.79 ☐ ☒
TS B/05	6	1	3	1	65.67 ☒ ☒
TS B/06	6	1	3	1	65.67 ☒ ☒
	4	1	5	2	71.64** ☒
TS P/03	4				23.88
TS P/04	6				35.82
TS P/05	6	1	1		47.76
TS 12/TP	7				41.79
TS 14/TP	6	1	3		59.7
TS 15/TP	4	1	5	2	71.64**



** Senza cabina — Sin cabina — Without cabin — Ohne kabine — Sans cabine

TS B



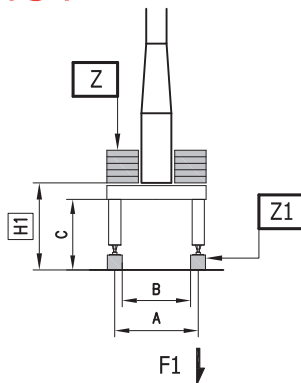
☐ TR 02/02
☒ TR 02/04

☒ AP/02

		F (kN)	Z (kg)
TS B/03	☒	714	80000
	☐	600	
TS B/04	☒	659	72000
	☐	619	
TS B/05	☒	882	140000
	☐	1112	
TS B/06	☒	785	126000
	☐	1027	

A (m)	H1(m)
3.8x3.8	1
4.5x4.5	1.2
6x6	1.4
8x8	1.6

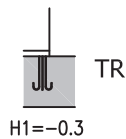
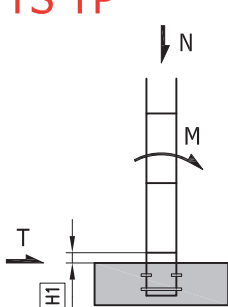
TS P



		F1 (kN)	Z (kg)	Z1 (kg)
TS P/03	☒	635	56000	4x4000
	☐	493		
TS P/04	☒	652	60000	4x4000
	☐	624		
TS P/05	☒	694	84000	4x4000
	☐	768		

A (m)	B (m)	C (m)	H1(m)
3.8x3.8	3	4.55	5.34
4.5x4.5	3.76	4.47	5.5
6x6	5.2	4.53	5.8

TS TP



		N (kN)	T (kN)	M (kNm)
TS 12/TP	☒	588	24	1924
	☐	502	59	2133
TS 14/TP	☒	685	31	2429
	☐	600	112	4120
TS 15/TP	☒	771	37	2879
	☐	686	142	6162

H1 (m)
0.65
0.65
0.65

IN SERVIZIO

EN SERVIZIO — IN SERVICE
IN BETRIEB — EN SERVICE

FUORI SERVIZIO

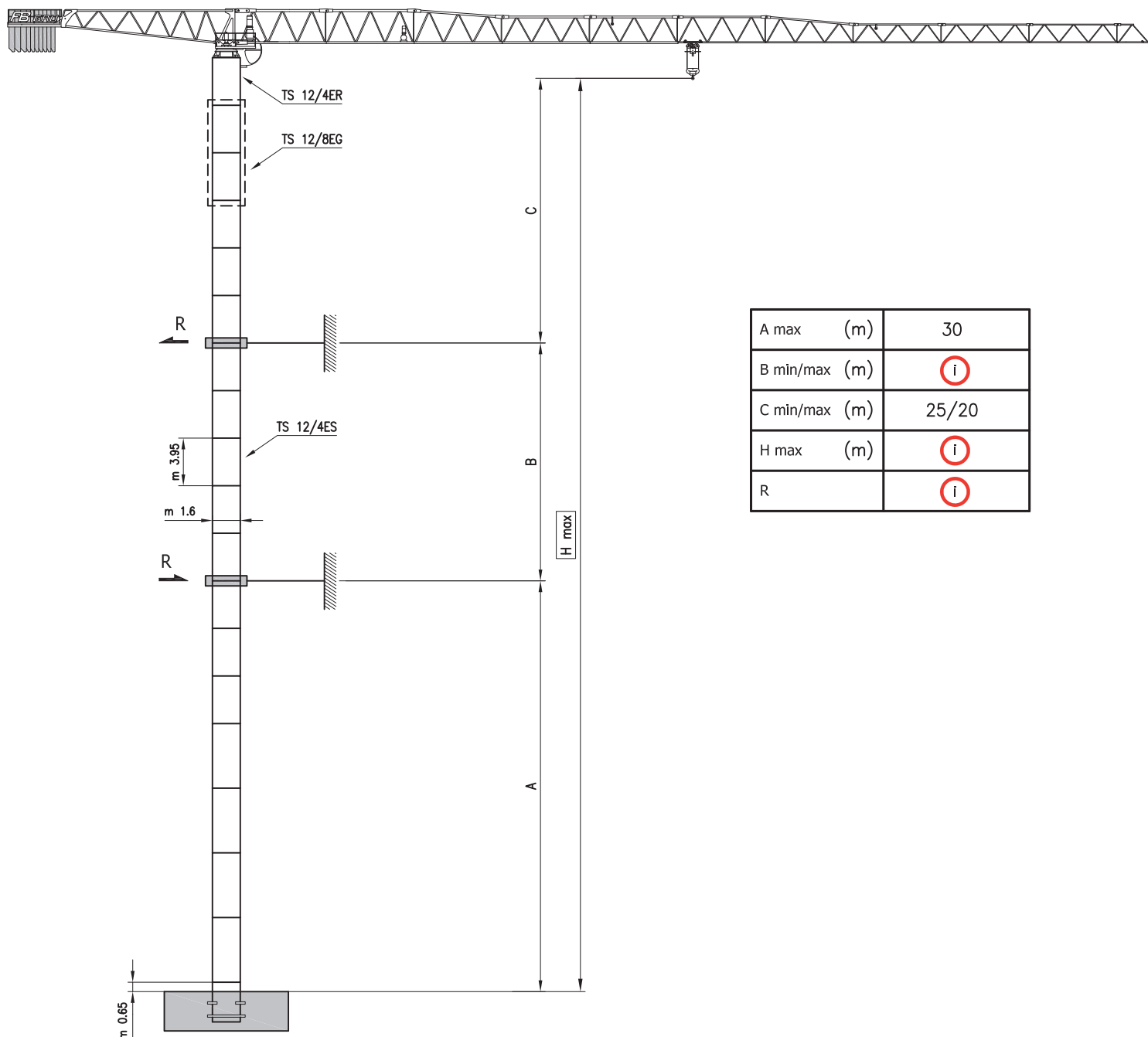
FUERA DE SERVICIO — OUT OF SERVICE
AUSSER BETRIEB — HORS SERVICE

ZAVORRA di BASE

LASTRE DE BASE — CENTRAL BALLAST
ZENTRAL BALLASTSTEIN — LEST DE BASE



TS 12/4ES



A max	(m)	30
B min/max	(m)	i
C min/max	(m)	25/20
H max	(m)	i
R		i

i Consultateci — Consultarnos — Consult us — Auf anfrage — Nous consulter

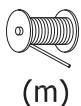
ZAVORRA DI CONTROBRACCIO

LASTRE DE CONTRA FLECHA — COUNTER JIB BALLAST

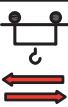
GEGENAUSLEGERBALLAST — LEST DE CONTRE-FLÈCHE

	BRACCIO (m) FLECHA — JIB AUSLEGER — FLECHE	66	60	54.2	48.4	42.6	36.8	30.9	25.1
	ZAVORRA (kg) LASTRE — BALLAST BALLAST — LEST	17360 (6A+1B+1C)	17360 (6A+1B+1C)	15860 (6A+1B)	15860 (6A+1B)	15050 (5A+1B+1C)	13050 (5A+1C)	11240 (4A+1B)	9240 (4A)

	TIPO TIPO — TYPE ART — TYPE	A	B	C
	PESO (kg) PESO — WEIGHT GEWICHT — POIDS	2310	2000	1500

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS		 (m)
---	---	---	---	--

			1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg	5 ^a m/1' - kg		
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE  INVERTER	400 V 50 Hz	 	7 4000 4	12 4000 6	38 4000 19	72 1500 36	88 1000 44	30 kW	<i>AS 30</i> 280 Hmax 70 m <i>AS 30 HC</i> 520 H max 130 m
			8000	8000	8000	3000	2000		

			1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	4 ^a m/1'	
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION  INVERTER	400 V 50 Hz		12	29	49	77	4 kW

			1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	4 ^a g/1'	
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION  INVERTER	400 V 50 Hz		0 → 0.07	0.07 → 0.19	0.19 → 0.37	0.37 → 0.8	4 kW N° 2 x 4

			1 ^a m/1'	
TRASLAZIONE TRASLACIÓN — TRAVELLING SCHIENENFAHREN — TRANSLATION  INVERTER	400 V 50 Hz		0 → 20	<i>TR 02/02</i> kW N° 2 x 4

			1 ^a m/1'	
TRASLAZIONE TRASLACIÓN — TRAVELLING SCHIENENFAHREN — TRANSLATION  INVERTER	400 V 50 Hz		0 → 20	<i>TR 02/04</i> kW N° 4 x 4



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise levell

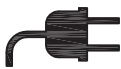
Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

Conforme aux directives CEE
sur le niveau acoustique

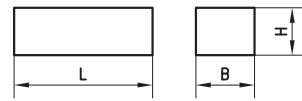
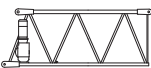
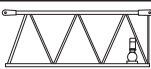
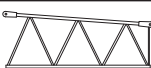
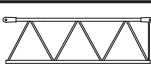
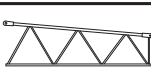
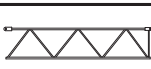
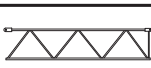
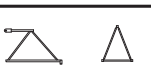
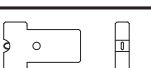
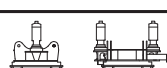
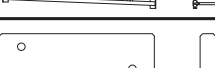
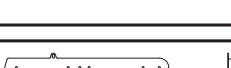
POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER

KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

 400 V - 50 Hz	  <i>AS 30</i> <i>AS 30 HC</i> 30 kW
	50 kVA* (42 kW)

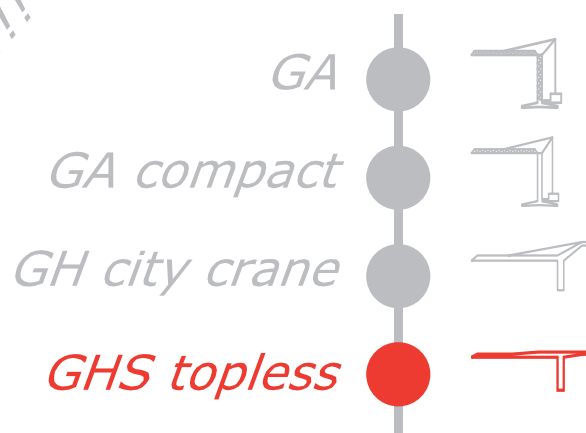
* Gru senza traslazione — Grúa sin traslación — Crane without travelling equipment — Krane ohne schienenfahren — Grue sans translation

Pos.	DENOMINAZIONE		Q.tà Cont. Qty. Anz. Qte.	L	B	H	 (kg)
Pos. Item Pos. Rep.	Denominacion Denomination Benennung Dénomination			(m)			
1	Elemento di braccio 1 Tramo de flecha 1 — Jib element 1 Auslegerschuss 1 — Element de flèche 1		1	6.06	1.21	2.35	2755
2	Elemento di braccio 2 Tramo de flecha 2 — Jib element 2 Auslegerschuss 2 — Element de flèche 2		1	6.05	1.17	2.3	1440
3	Elemento di braccio 3 Tramo de flecha 3 — Jib element 3 Auslegerschuss 3 — Element de flèche 3		1	6.10	1.17	2.3	1035
4	Elementi di braccio 4 - 5 - 6 Tramos de flecha 4-5-6 — Jib elements 4-5-6 Auslegerschuss 4-5-6 — Elements de flèche 4-5-6		1 1 1	6.05	1.17	1.86	925 790 730
5	Elemento di braccio 7 Tramo de flecha 7 — Jib element 7 Auslegerschuss 7 — Element de flèche 7		1	6.04	1.17	1.86	550
6	Elementi di braccio 8 - 9 Tramos de flecha 8-9 — Jib elements 8-9 Auslegerschuss 8-9 — Elements de flèche 8-9		1 1	6.01 6	1.17	1.3 1.29	510 415
7	Elementi di braccio 10 - 11 Tramos de flecha 10-11 — Jib elements 10-11 Auslegerschuss 10-11 — Elements de flèche 10-11		2	6	1.17	1.29	340
8	Elemento di braccio 12 Tramo de flecha 12 — Jib element 12 Auslegerschuss 12 — Element de flèche 12		1	2.25	1.17	1.29	170
9	Blocco di contrappeso Lastre de contraflecha — Counter jib block Gegengewichtsballast — Contrepoids		6 1 1	2.8	1.2	0.38 0.33 0.25	2310 2000 1500
10	Controbraccio Contraflecha — Counter jib Gegenausleger — Contre-flèche		1 1	5.6 6.4	1.15 1.41	1.75 2.35	1055 2300
11	Telaio zavorra controbraccio Soporte lastre contraflecha — Pod mounting for counter jib block Podest gegengewichtsballast — Châssis de contrepoids		1	3.9	2.3	1.15	1160
12	Gruppo rotazione Plataforma de giro — Slewing platform Drehbühne — Porte-flèche tournant		1	1.9	2.25	1.6	2895
13	Elemento di torre TS 12/6 Mastil — Tower element Turmschuss — Mats			5.97	1.6	1.8	2088
14	Elemento di torre TS 12/12 Mastil — Tower element Turmschuss — Mats			11.91	1.6	1.8	3950
15	Elemento di torre TS 14/6 Mastil — Tower element Turmschuss — Mats			5.97	2.3	2.3	3050
16	Elemento di torre TS 15/6 Mastil — Tower element Turmschuss — Mats			5.97	2.3	2.3	3500
17	Adattatore TS AD/03 Adaptador — Adapter Adapter — Adaptateur			5.97	2.1	2.3	2750
18	Blocco zavorra di base per TS B/03 Lastre de base para — Base ballast block for Zentral ballaststein für — Lest de base pour			3.8	0.38	1.18	4000
19	Blocco zavorra di base per TS B/04 e TS B/05 Lastre de base para — Base ballast block for Zentral ballaststein für — Lest de base pour		TSB/04 TSB/05	5.0 5.7	0.34	1.6	6000 7000
20	Blocco di appoggio Gatos — Concrete pad Fundament block — Blocs d'appui			3.0 3.2	0.8 1.0	0.74 0.95	4000 7000
21	Crociera di base (Trave A) Cruz de base — Cruciform base Fundament kreuz — Châssis de base		TSB/03 TSB/04 TSB/05 TSB/06	5.75 6.75 8.86 11.7	0.35 0.35 0.4 0.45	1.08 1.26 1.6 1.85	1660 2315 4050 6760
	Crociera di base (Trave B) Cruz de base — Cruciform base Fundament kreuz — Châssis de base		TSB/03 TSB/04 TSB/05 TSB/06	5.75 6.75 8.86 11.7	0.92 0.93 0.99 1.15	0.9 1.1 1.35 1.6	1515 2050 3630 6200
	Opzionale Optional Optional Option		1	2.2	0.22	0.72	110
	Argano ausiliario Mecanismo auxiliar — Auxiliary winch Hilfswinde — Treuil auxiliaire		1	0.85	0.9	0.43	170

GRU A TORRE

GHS 351

NUOVA SERIE
TOPLESS!!!



FB F.lli Butti s.r.l.

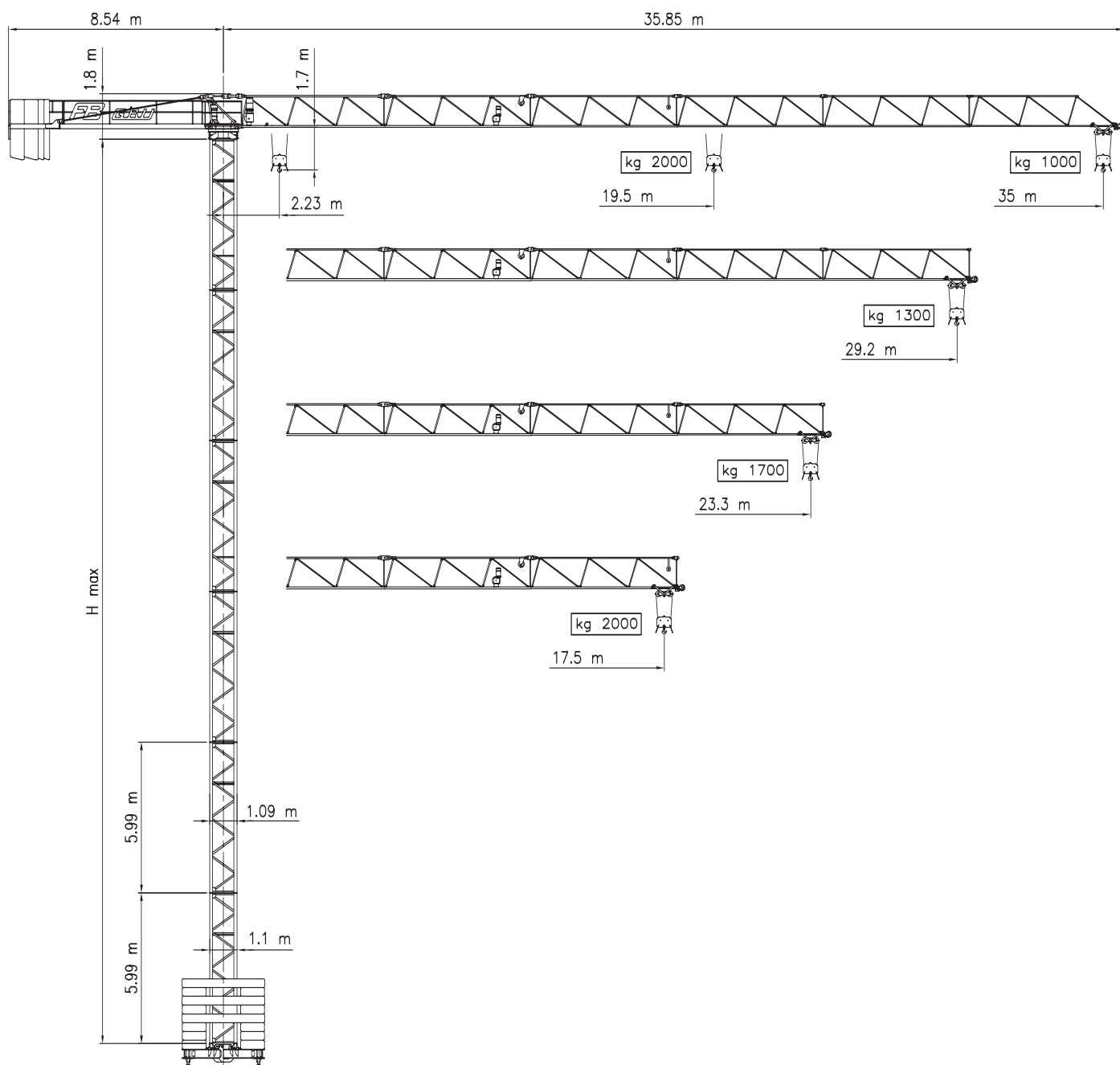
Via XXV Aprile, 58

23868 Valmadrera (LC) - ITALIA

Tel. 0341.581108 - Fax 0341.200253

E-mail : fbgru@fbgru.it - <http://www.fbgru.it>





CURVE DI CARICO

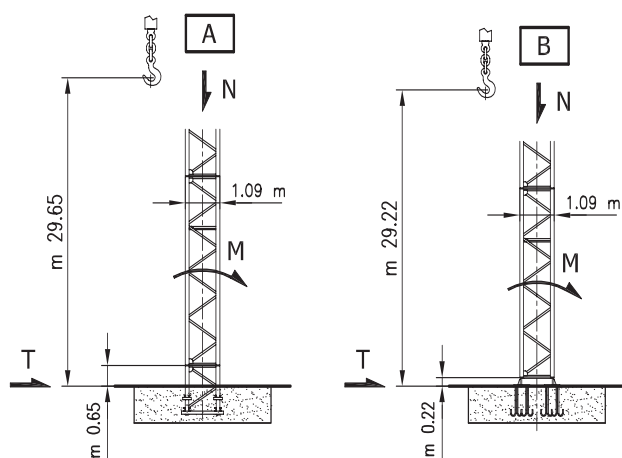
CURVAS DE CARGAS — LOAD DIAGRAMS
LASTKURVEN — COURBES DE CHARGES

m	17.5	18	19.5	19.8	20	21	22	23.3	24	25	26	27	28	29.2	30	31	32	33	34	35
kg			2000	1968	1946	1846	1754	1647	1594	1523	1458	1397	1341	1279	1241	1195	1152	1112	1075	1000
				2000	1977	1874	1781	1673	1619	1547	1481	1420	1363	1300						
					2000	1905	1811	1700												
	2000																			

II (0 - 2000 kg)

Torre da m 1.09 x 1.09

Mastil de m 1.09 x 1.09 — m 1.09 x 1.09 mast
m 1.09 x 1.09 maste — mat de m 1.09 x 1.09



	Altezza MAX. utile al gancio Altura MAX. bajo gancho MAX. height under hook MAX. hakenhöhe Hauteur MAX. grue
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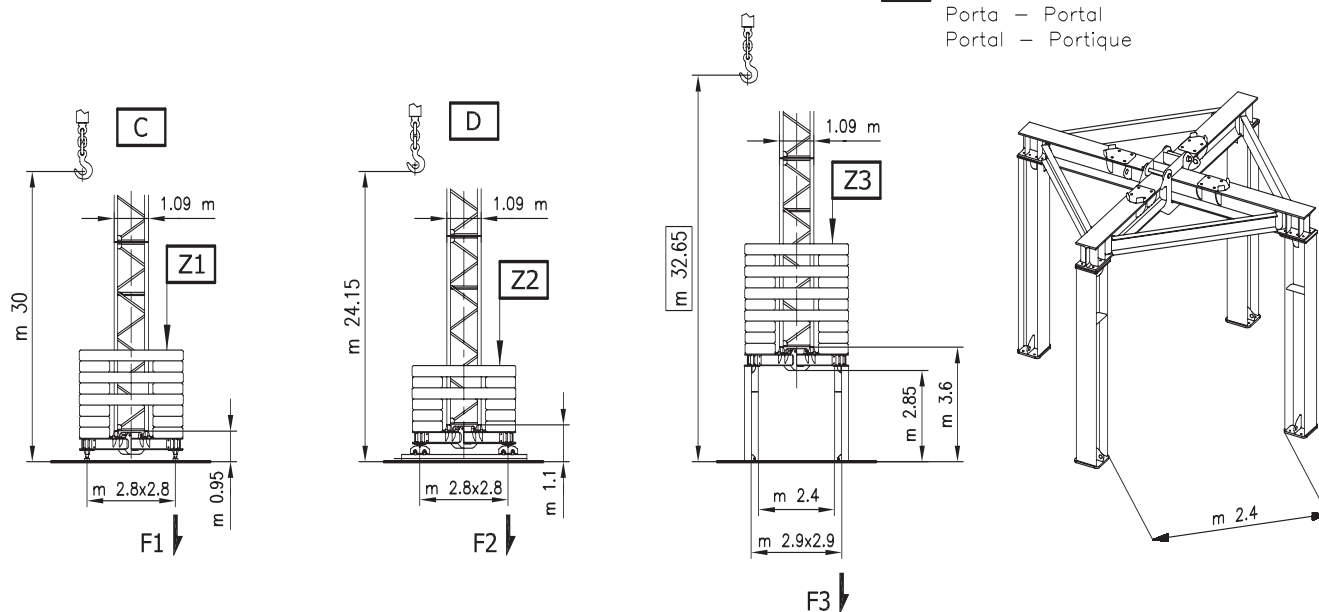
	A - B		
	N (kN)	T (kN)	M (kNm)
IN SERVIZIO EN SERVIZIO — IN SERVICE IN BETRIEB — EN SERVICE	152	10	486
FUORI SERVIZIO FUERA DE SERVICIO — OUT OF SERVICE AUSSER BETRIEB — HORS SERVICE	115	36	548

Crociera di base da m 2.8 x 2.8

Cruz de base m 2.8 x 2.8 — m 2.8 x 2.8 cross base
m 2.8 x 2.8 fundament kreuz — m 2.8 x 2.8 chassis

E Portale

Porta — Portal
Portal — Portique



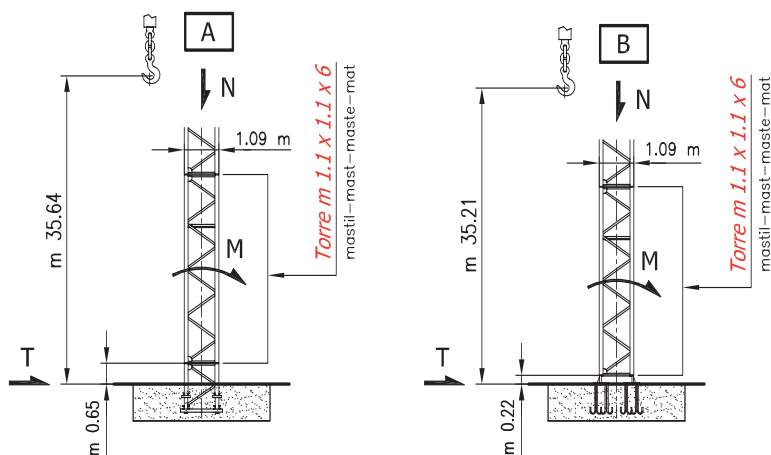
	C	D	E
	F1 (kN)	F2 (kN)	F3 (kN)
IN SERVIZIO EN SERVIZIO — IN SERVICE IN BETRIEB — EN SERVICE	267	231	307
FUORI SERVIZIO FUERA DE SERVICIO — OUT OF SERVICE AUSSER BETRIEB — HORS SERVICE	292	196	389

ZAVORRA DI BASE
LASTRE DE BASE
CENTRAL BALLAST
ZENTRAL BALLASTSTEIN
LEST DE BASE

C	D	E
Z1 (kg)	Z2 (kg)	Z3 (kg)
40000 N°16 2500 kg	30000 N°12 2500 kg	50000 N°20 2500 kg

Torre da m 1.09 x 1.09 e m 1.1 x 1.1

Mastil de m 1.09 x 1.09 y m 1.1 x 1.1 — m 1.09 x 1.09 whit m 1.1 x 1.1 masts
m 1.09 x 1.09 mit m 1.1 x 1.1 maste — mats de m 1.09 x 1.09 e m 1.1 x 1.1



Altezza MAX. utile al gancio
Altura MAX. bajo gancho
MAX. height under hook
MAX. hakenhöhe
Hauteur MAX. grue

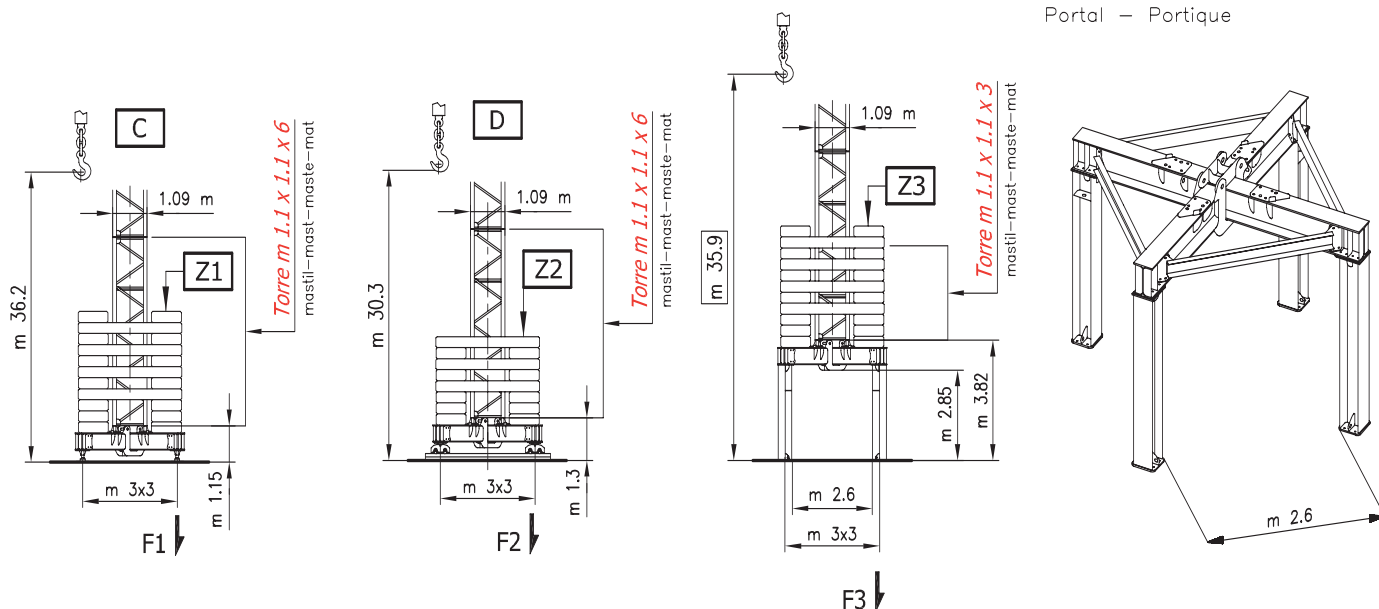
	A - B		
	N (kN)	T (kN)	M (kNm)
IN SERVIZIO EN SERVICIO — IN SERVICE IN BETRIEB — EN SERVICE	161	12	557
FUORI SERVIZIO FUERA DE SERVICIO — OUT OF SERVICE AUSSER BETRIEB — HORS SERVICE	124	43	826

Crociera di base da m 3 x 3

Cruz de base m 3 x 3 — m 3 x 3 cross base
m 3 x 3 fundament kreuz — m 3 x 3 chassis

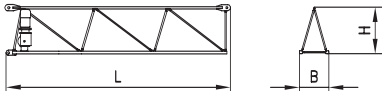
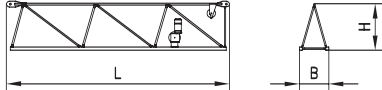
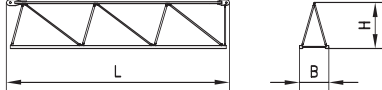
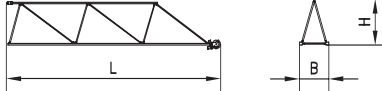
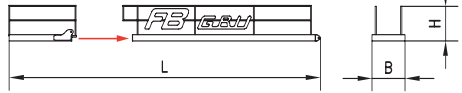
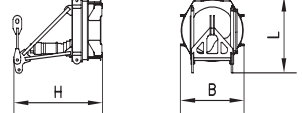
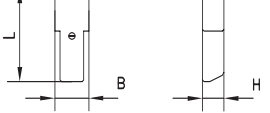
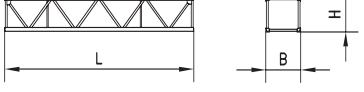
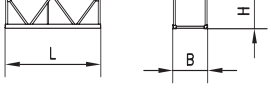
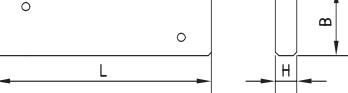
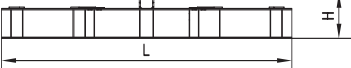
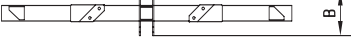
E Portale

Porta — Portal
Portal — Portique



	C	D	E
	F1 (kN)	F2 (kN)	F3 (kN)
IN SERVIZIO EN SERVICIO — IN SERVICE IN BETRIEB — EN SERVICE	316	267	322
FUORI SERVIZIO FUERA DE SERVICIO — OUT OF SERVICE AUSSER BETRIEB — HORS SERVICE	415	283	436

	C	D	E
	Z1 (kg)	Z2 (kg)	Z3 (kg)
ZAVORRA DI BASE LASTRE DE BASE CENTRAL BALLAST ZENTRAL BALLASTSTEIN LEST DE BASE	55000 N°22 2500 kg	35000 N°14 2500 kg	55000 N°22 2500 kg

Pos. Pos. Item Pos. Rep.	Q.tà Cant. Qty. Anz. Qte.	DENOMINAZIONE Denominacion Denomination Benennung Dènomination		L	B	H	 (kg)
				(m)			
1	1	1° Elemento di braccio 1° Tramo de flecha 1st Jib element Auslegerschuss 1 1 er element de flèche		6.02	0.8	1.4	750
2	1	2° Elemento di braccio 1° Tramo de flecha 1st Jib element Auslegerschuss 1 1 er element de flèche		6.01	0.8	1.31	510
3	1	Elemento di braccio Tramo de flecha		5.98	0.8	1.3	310
	1	Jib element Auslegerschuss		5.95	0.8	1.28	255
	1	Element de flèche		5.91	0.8	1.27	230
4	1	Elemento di braccio Tramo de flecha Jib element Auslegerschuss Element de flèche		5.90	0.8	1.25	185
5	1	Controbraccio Contraflecha Counter jib Gegenausleger Contre-flèche		7.95	0.8	1.12	890
6	1	Gruppo rotazione Plataforma de giro Slewing platform Drehbühne Porte-flèche tournant		1.55	1.3	1.81	1215
7	2	Blocco di contrappeso Lastre de contraflecha Counter jib blok Gegengewichtsballast Contrepoids		2.4	0.82	0.23	900
	2			2.4	0.82	0.55	2150
8		Elemento di torre Mastil Tower element Turmschuss Mats		5.99	1.09	1.09	850
9		Elemento di torre Mastil Tower element Turmschuss Mats		3.03	1.1	1.1	700
10		Elemento di torre Mastil Tower element Turmschuss Mats		5.99	1.1	1.1	1180
11		Blocco zavorra di base Lastre de base Base ballast blok Zentral ballaststein Lest de base		3.28	0.95	0.35	2500
12	2	Crociera di base Cruz de base Cruciform base		2.8x2.8	4.34	0.66	2250
	2	Fundament kreuz Châssis de base		3x3	4.62	0.78	2950

MECCANISMI

MECANISMOS — MECHANISMS

ANTRIEBE — MÉCANISMES

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS	POTENZA NECESSARIA POTENCIA NECESARIA POWER REQUIREMENT KRAFT DARF PUISSANCE NÉCESSAIRE
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		▷ m/1' - kg	▷▷ m/1' - kg	▷▷▷ m/1' - kg	
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE 	400 V 50 Hz	5 ↑↓	26 ↑ 27 ↓	40 ↑ 42 ↓	kW 9.2
INVERTER		2000	2000	1000	

		▷ m/1'	▷▷ m/1'	▷▷▷ m/1'	
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION 	400 V 50 Hz	16	28	42	kW 2.2
INVERTER					

		▷ g/1'	▷▷ g/1'	▷▷▷ g/1'	
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION 	400 V 50 Hz	0 → 0.2	0.2 → 0.6	0.6 → 0.98	kW 4
INVERTER					

			▷ m/1'	
TRASLAZIONE TRASLACIÓN — TRAVELLING SCHIENENFAHREN — TRANSLATION 	400 V 50 Hz	D (m 2.8x2.8) (m 3x3)	0 → 20	kW N° 2 x 3
INVERTER				



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise levell

Gemass EWG-Richtlinien für
den Schall-Leistungspegel

Conforme aux directives CEE
sur le niveau acoustique

POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER

KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

ALIMENTAZIONE TRIFASE TRIFASICA — THREE PHASE DREIPHASIGE — TRIPHASE	15 kw 400 V - 50 Hz	SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE	kg 2000
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Gru senza traslazione

Grúa sin traslación

Crane without travelling equipment

Krane ohne schienenfahren

Grue sans translation

ZAVORRA DI CONTROBRACCIO

LASTRE DE CONTRA FLECHA — COUNTER JIB BALLAST

GENEAUSLEGERBALLAST — LEST DE CONTRE-FLÈCHE

	BRACCIO (m) FLECHA — JIB AUSLEGER — FLECHE	35	29.2	23.3	17.5
	ZAVORRA (kg) LASTRE — BALLAST BALLAST — LEST	6100	5200	4300	3050

	TIPO TIPO — TYPE ART — TYPE	A	B	
	PESO (kg) PESO — WEIGHT GEWICHT — POIDS	2150	900	

Con riserva di modifiche

Derecho de modificaciones reservadas

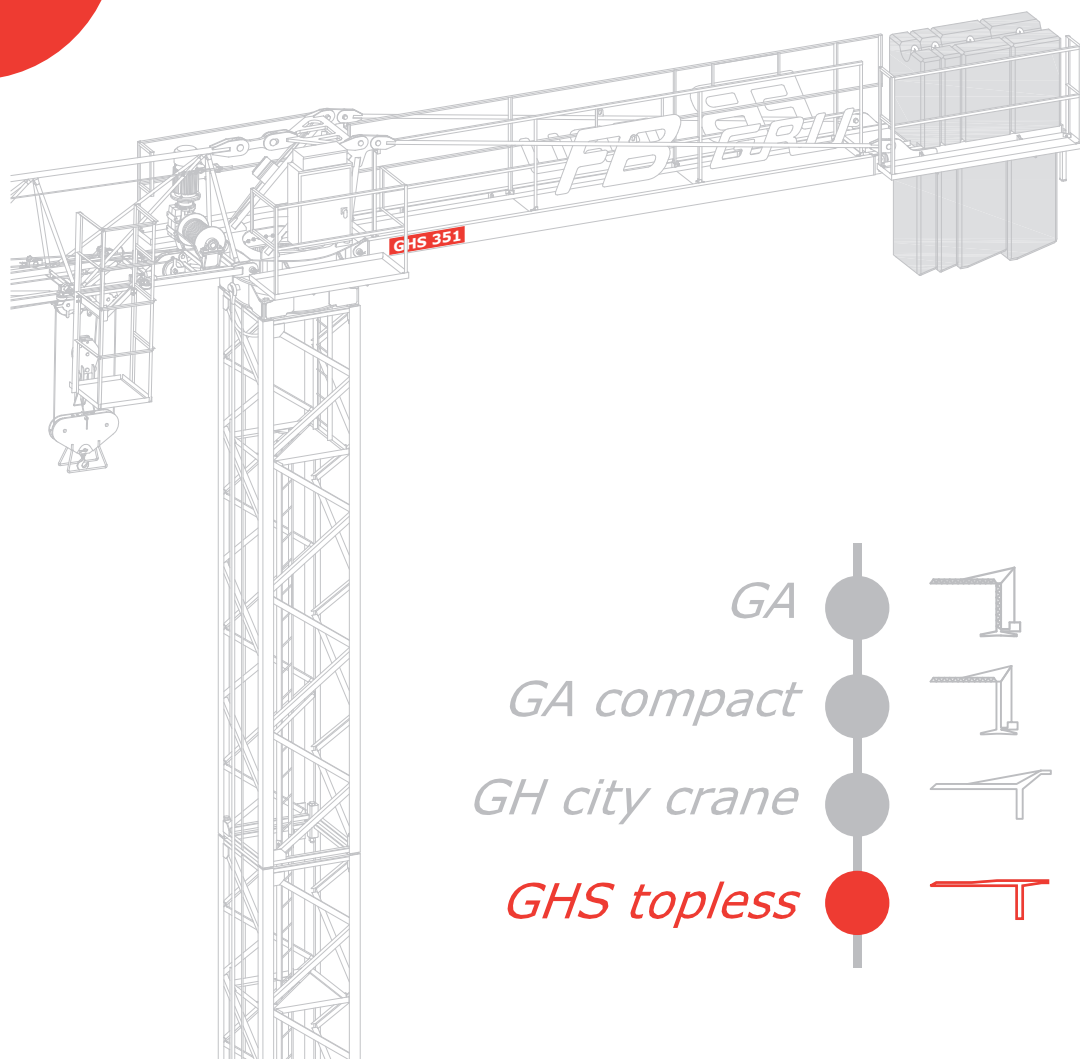
Subject to change without notice

Anderungen vorbehalten

Modifications réservées

GRU A TORRE

GHS 351 | 4000



FB F.lli Butti s.r.l.

Via XXV Aprile, 58

23868 Valmadrera (LC) - ITALIA

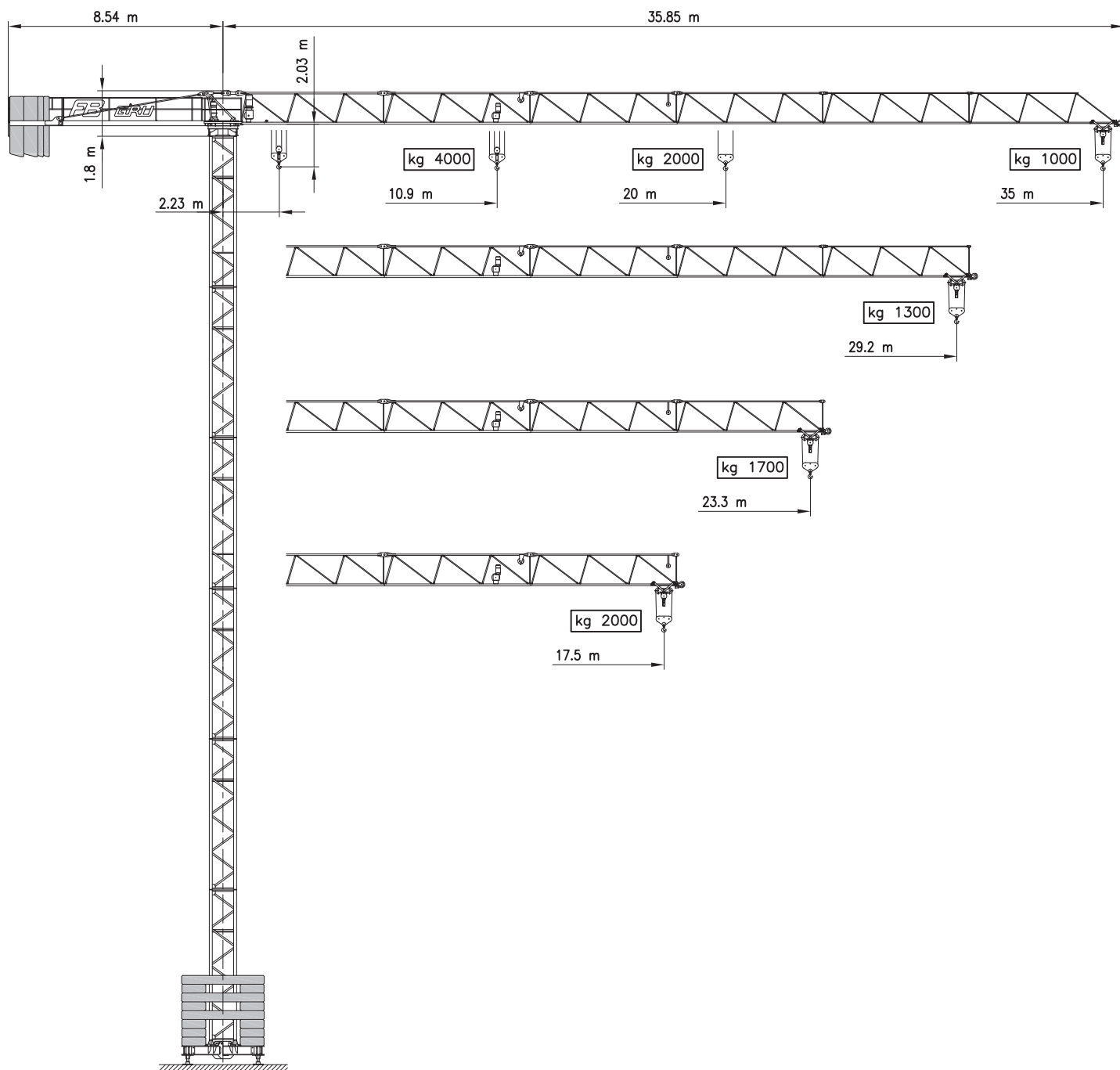
Tel. 0341.581108 - Fax 0341.200253

E-mail : fbgru@fbgru.it - <http://www.fbgru.it>



FEM 1.001 - A3
EN 14439 - C25

GHS 351 - 4000

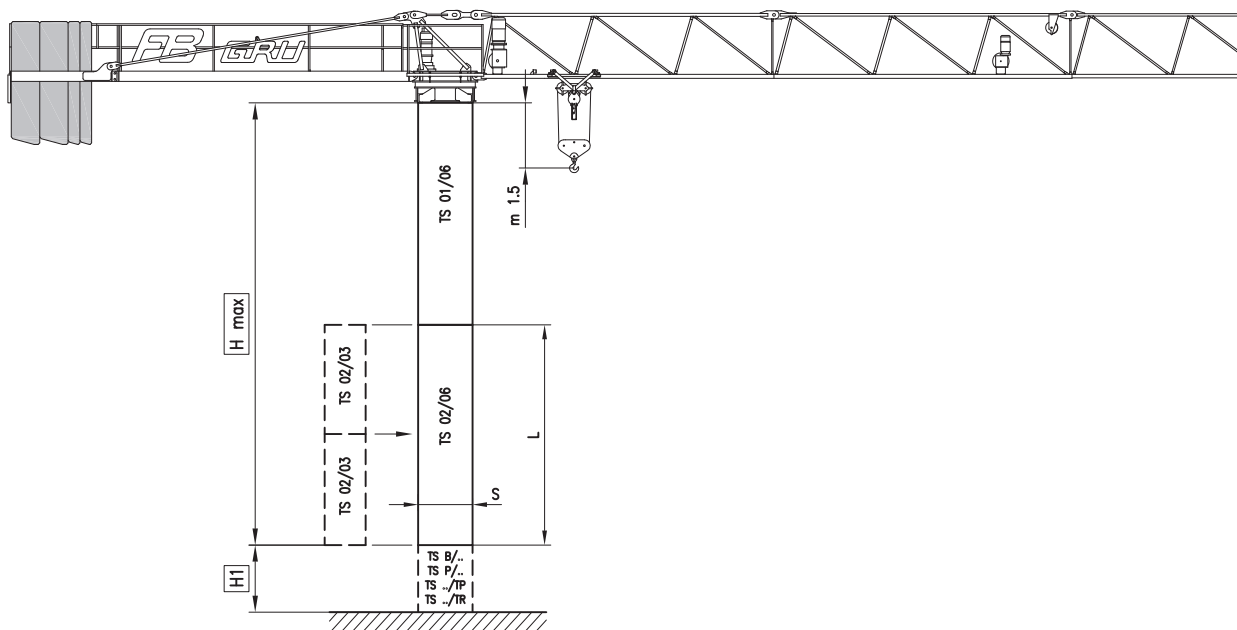


CURVE DI CARICO

CURVAS DE CARGAS — LOAD DIAGRAMS
LASTKURVEN — COURBES DE CHARGES

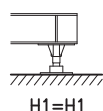
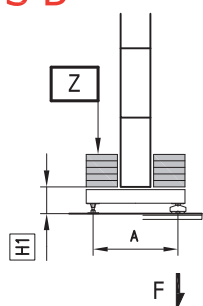
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kg		4000	3906	3259	2762	2386	2306	2092	2000	1963	1940	1784	1665	1606	1457	1330	1262	1170	1080	1000
			4000	3347	2838	2453	2371	2151	2024	2015	2000	1835	1713	1653	1500	1370	1300			
				4000	3323	2817	2434	2353	2135	2009	2000	1980	1821	1700						
	4000	3437	3366	2801	2368	2040	2000													
(0 - 2000 kg) (2001 - 4000 kg)																				

TORRE/REAZIONI* MASTIL/REACCIONES* — MAST/REACTIONS*
 MASTE/ECKDRUCKE* — MAT/RÉACTIONS*

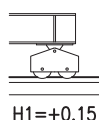


	TS 01/06	TS 02/06	TS 02/03	H max (m)
S	m 1.09	m 1.1	m 1.1	
L	m 5.99	m 5.99	m 3.03	
TS B/01	4			23.96 □
	5			29.95 ■
TS B/02	4	1		29.95 □
	5	1		35.94 ■
TS P/01	5			29.95
TS P/02	5		1	32.98
TS 01/TP	5			29.95
TS 02/TP	5	1		35.94

TS B



■ AP/01

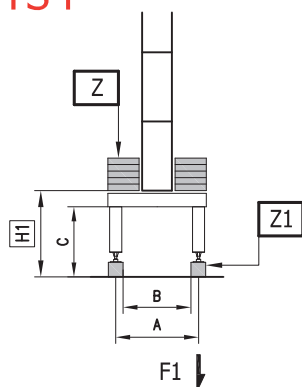


□ TR 01/02

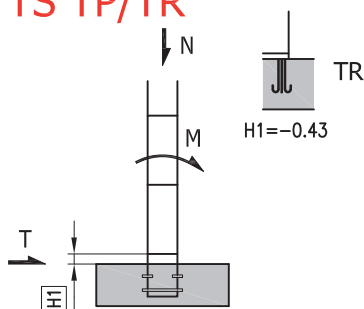
	F (kN)	Z (kg)	A (m)	H1(m)
TS B/01	293	40000	2.8x2.8	0.95
	266			
TS B/02	343	55000	3x3	1.15
	372			

IN SERVIZIO EN SERVIZIO — IN SERVICE IN BETRIEB — EN SERVICE	●
FUORI SERVIZIO FUERA DE SERVICIO — OUT OF SERVICE AUSSER BETRIEB — HORS SERVICE	○
ZAVORRA di BASE LASTRE DE BASE — CENTRAL BALLAST ZENTRAL BALLASTSTEIN — LEST DE BASE	Z

*Solo per Hmax — Sólo para Hmax — Only for Hmax — Nur für Hmax — Seulement pour Hmax

TS P


		F1 (kN)	Z (kg)	Z1 (kg)	A (m)	B (m)	C (m)	H1 (m)
TS P/01	●	336	40000	4x2500	2.9x2.9	2.16	3.45	4.2
	○	357						
TS P/02	●	354	45000	4x2500	3x3	2.26	3.45	4.42
	○	416						

TS TP/TR


		N (kN)	T (kN)	M (kNm)	H1 (m)
TS 01/TP TS 01/TR	●	195	11	545	0.65
	○	152	27	675	
TS 02/TP TS 02/TR	●	206	13	617	0.65
	○	163	29	837	

IN SERVIZIO EN SERVIZIO — IN SERVICE IN BETRIEB — EN SERVICE	●
FUORI SERVIZIO FUERA DE SERVICIO — OUT OF SERVICE AUSSER BETRIEB — HORS SERVICE	○
ZAVORRA di BASE LASTRE DE BASE — CENTRAL BALLAST ZENTRAL BALLASTSTEIN — LEST DE BASE	Z

*Solo per Hmax — Sólo para Hmax — Only for Hmax — Nur für Hmax — Seulement pour Hmax

ZAVORRA DI CONTROBRACCIO

LASTRE DE CONTRA FLECHA — COUNTER JIB BALLAST

GEGENAUSSLEGERBALLAST — LEST DE CONTRE-FLÈCHE

	BRACCIO (m) FLECHA — JIB AUSLEGER — FLECHE	35	29.2	23.3	17.5
	ZAVORRA (kg) LASTRE — BALLAST BALLAST — LEST	6100 (2A+2B)	5200 (2A+1B)	4300 (2A)	3050 (1A+1B)

	TIPO TIPO — TYPE ART — TYPE	A	B
	PESO (kg) PESO — WEIGHT GEWICHT — POIDS	2150	900

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS		 (m)
---	---	---	---	--

			1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg		
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE  INVERTER	400 V 50 Hz		5	26	40	kW 9.2	 AS 9 80 Hmax 40 m
			2000	2000	1000		
			3	13	20		 AS 9 HC 180 H max 40 m
			4000	4000	2000		

			1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION  INVERTER	400 V 50 Hz		18	30	50	kW 2.2

			1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION  INVERTER	400 V 50 Hz		0 → 0.2	0.2 → 0.6	0.6 → 0.98	kW 4

			1 ^a m/1'	
TRASLAZIONE TRASLACIÓN — TRAVELLING SCHIENENFAHREN — TRANSLATION  INVERTER	400 V 50 Hz		0 → 20	kW N° 2 x 3



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise level

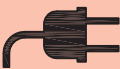
Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

Conforme aux directives CEE
sur le niveau acoustique

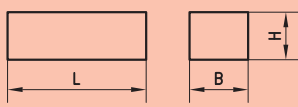
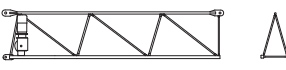
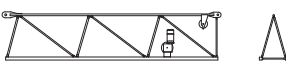
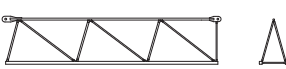
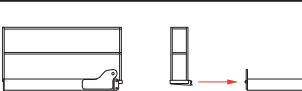
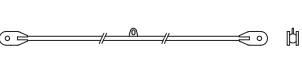
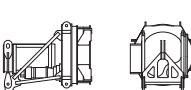
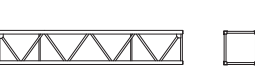
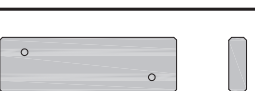
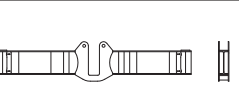
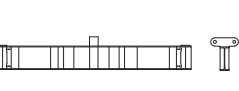
POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER

KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

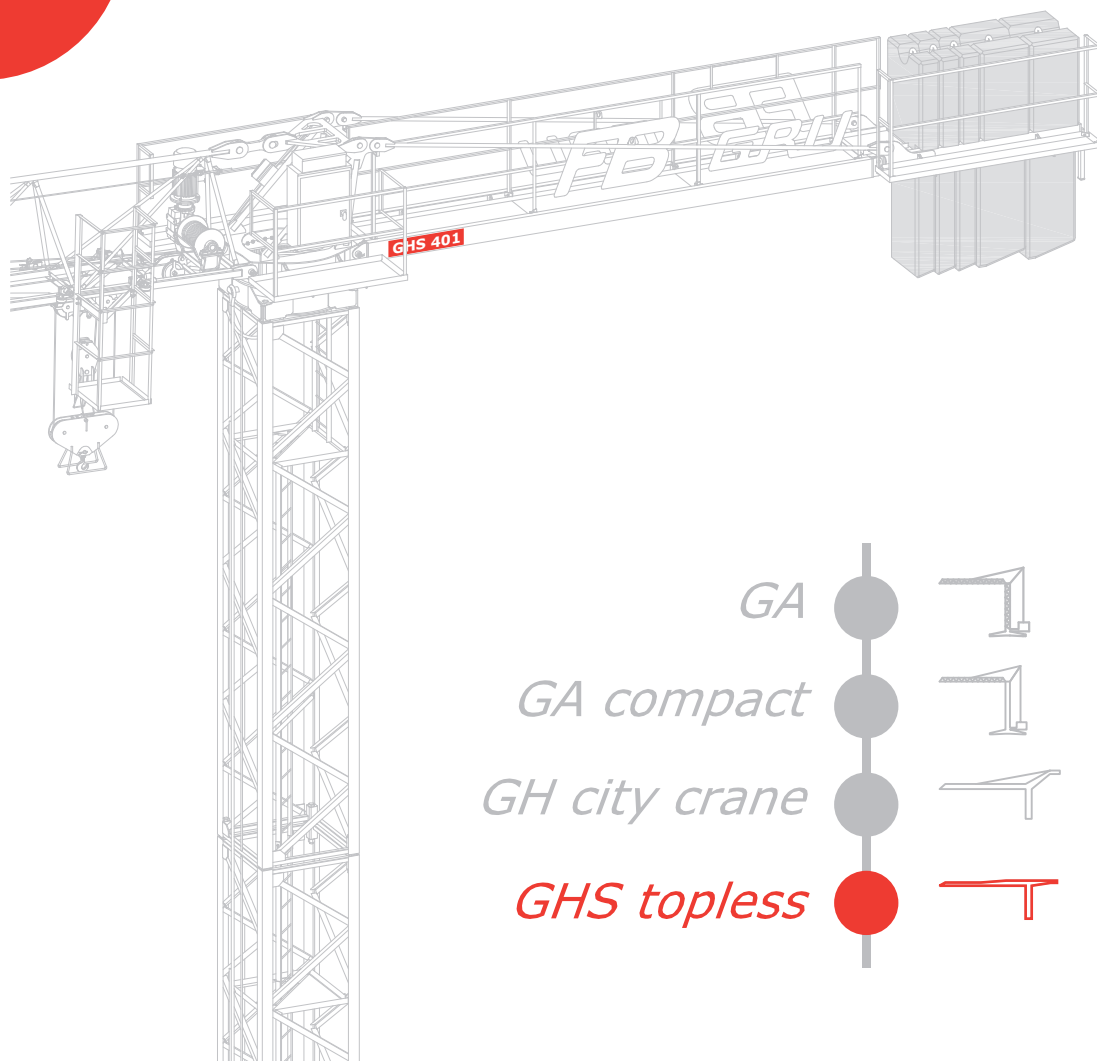
 400 V - 50 Hz	  AS 9 AS 9 HC 9.2 kW
	15 kVA* (12 kW)

* Gru senza traslazione — Grúa sin traslación — Crane without travelling equipment — Krane ohne schienenfahren — Grue sans translation

Pos. Pos. Item Pos. Rep.	DENOMINAZIONE Denominacion Denomination Benennung Dénomination		Q.tà Cont. Qty. Anz. Qte.	L	B	H	 (kg)
				(m)			
1	Elemento di braccio 1 Tramo de flecha 1 – Jib element 1 Auslegerschuss 1 – Element de flèche 1		1	6.02	0.8	1.4	775
2	Elemento di braccio 2 Tramo de flecha 2 – Jib element 2 Auslegerschuss 2 – Element de flèche 2		1	6.01	0.8	1.31	530
3	Elementi di braccio 3 - 4 - 5 Tramos de flecha 3-4-5 – Jib elements 3-4-5 Auslegerschuss 3-4-5 – Elements de flèche 3-4-5		1	5.98	0.8	1.3	345
			1	5.95		1.28	280
			1	5.91		1.27	230
4	Elementi di braccio 6 Tramos de flecha 6 – Jib elements 6 Auslegerschuss 6 – Elements de flèche 6		1	5.90	0.8	1.25	195
5	Controbraccio parte A Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	2.25	1.25	1.22	253
6	Controbraccio parte B Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	5.95	0.8	1.22	560
7	Tiranti Tirantes – Tie-rods Abspannung – Hauban		2	5.95	0.45	0.17	65
8	Gruppo rotazione Plataforma de giro – Slewing platform Drehbühne – Porte-flèche tournant		1	1.55	1.3	1.81	1230
9	Blocco di contrappeso Lastre de contraflecha – Counter jib block Gegengewichtsbalken – Contrepoids		2	2.4	0.82	0.23	900
			2	2.4	0.82	0.55	2150
10	Elemento di torre TS 01/06 Mastil – Tower element Turmschuss – Mats			5.99	1.09	1.09	850
11	Elemento di torre TS 02/03 Mastil – Tower element Turmschuss – Mats			3.03	1.1	1.1	700
12	Elemento di torre TS 02/06 Mastil – Tower element Turmschuss – Mats			5.99	1.1	1.1	1180
13	Blocco zavorra di base per TS B/01 e TS B/02 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour			3.28	0.95	0.35	2500
14	Blocco di appoggio Gatos – Concrete pad Fundament block – Blocs d'appui			2.36	0.6	0.65	2500
15	Crociera di base (Trave A) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/01	1	4.34	0.34	810
			TSB/02	1	4.62	0.35	1120
	Crociera di base (Trave B) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/01	1	4.34	0.66	750
			TSB/02	1	4.62	0.78	970

GRU A TORRE

GHS 401 | 4000

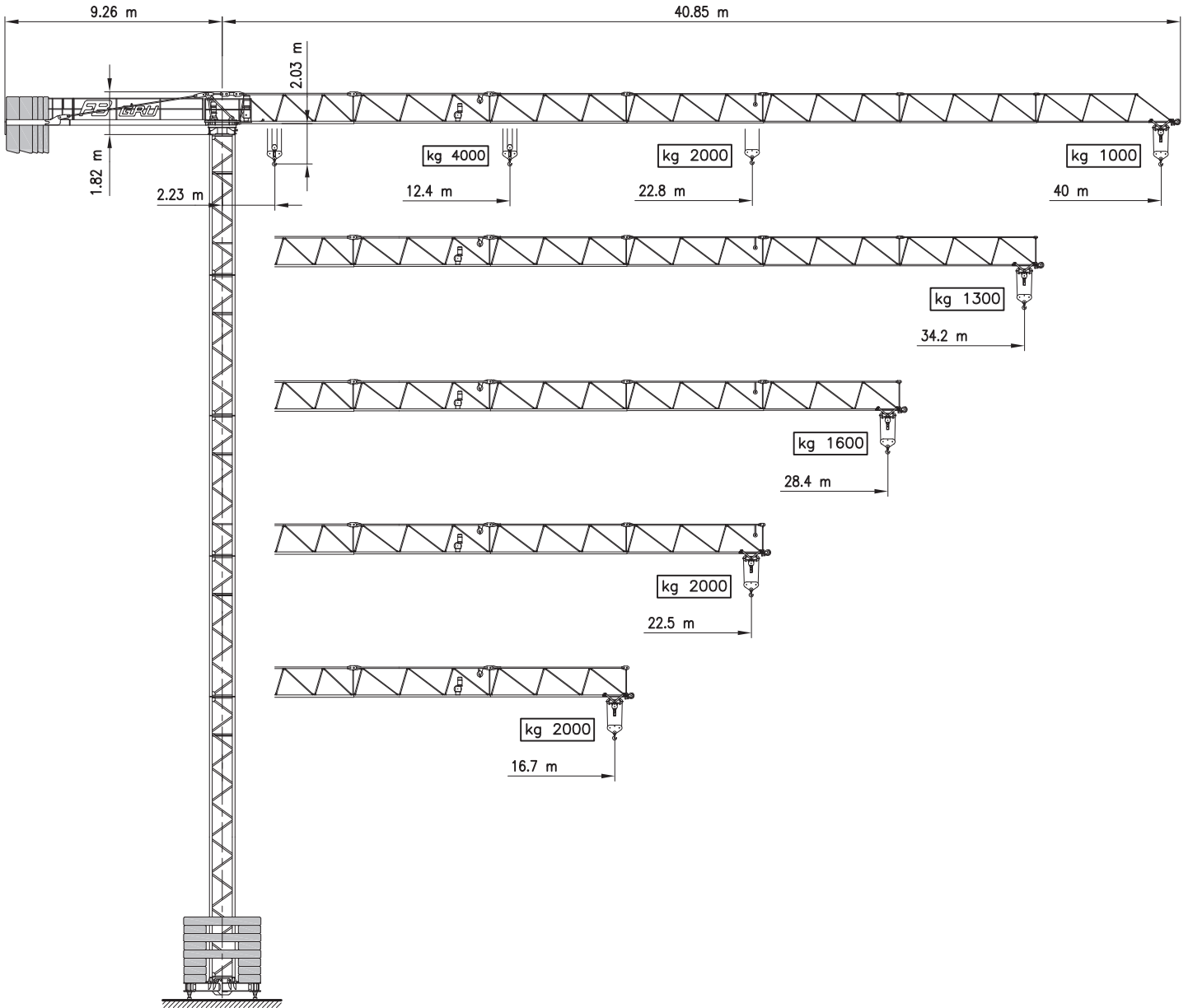


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FEM 1.001 - A3
EN 14439 - C25



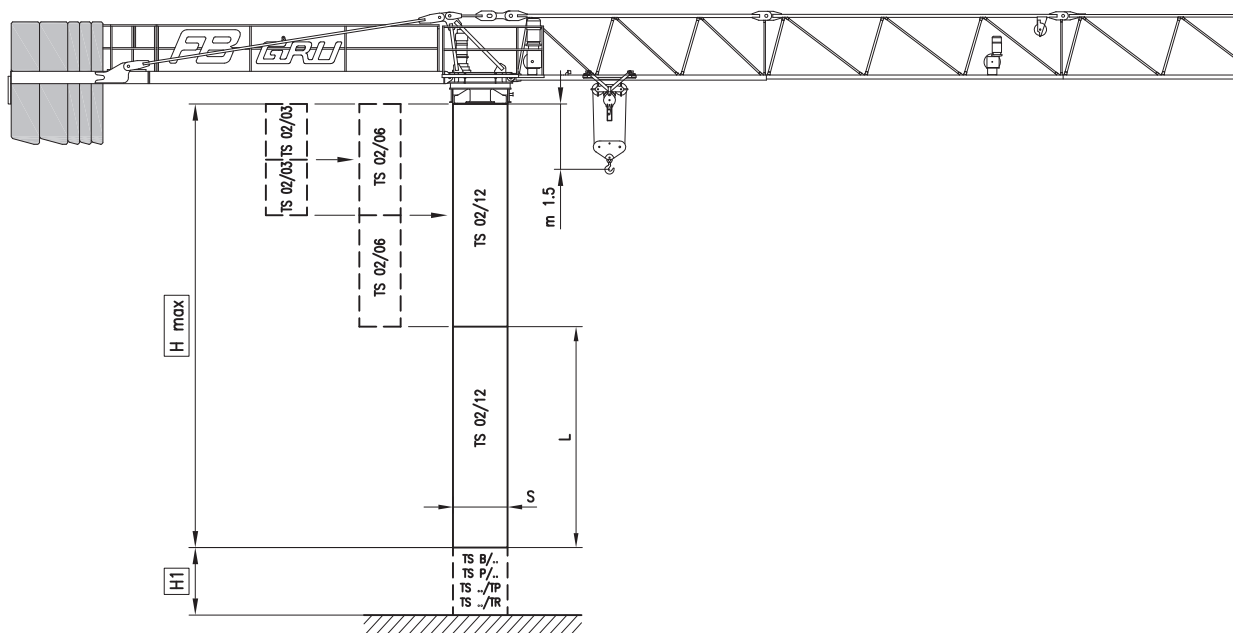
CURVE DI CARICO

CURVAS DE CARGAS — LOAD DIAGRAMS
LASTKURVEN — COURBES DE CHARGES

m	9.1	10	12.2	12.4	12.8	13	15	16.7	17	19	21	22.5	22.8	23.5	24	26	28.4	30	32	34.2	36	38	40
kg				4000	3846	3779	3210	2837	2779	2442	2171	2010	2000	1929	1882	1711	1538	1439	1329	1223	1146	1069	1000
						4000	3390	2998	2938	2583	2299	2119	2086	2013	2000	1813	1632	1527	1411	1300			
					4000	3917	3329	2943	2884	2536	2256	2079	2047	2000	1955	1779	1600						
			4000	3930	3791	3724	3163	2795	2738	2406	2138	2000											
	4000	3602	2858	2804	2702	2653	2240	2000															

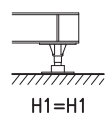
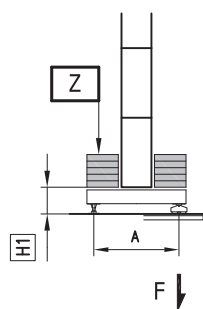
(0 - 2000 kg)

(2001 - 4000 kg)

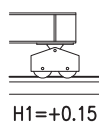


	TS 02/12	TS 02/06	TS 02/03	H max (m)
S	m 1.1	m 1.1	m 1.1	
L	m 11.9	m 5.99	m 3.03	
TS B/01	2			23.8 □
	2	1		29.79 ■
TS B/02	2	1		29.79 □
	3			35.7 ■
TS P/01	2	1		29.79
TS P/02	2	1	1	32.82
TS 02/TP	3			35.7

TS B



■ AP/01

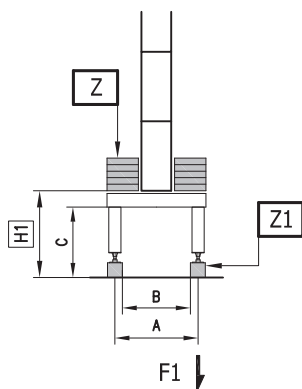


□ TR 01/02

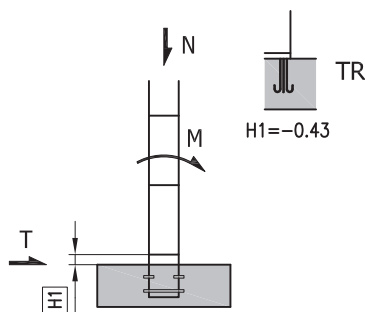
	F (kN)	Z (kg)	A (m)	H1(m)
TS B/01	● 319	40000	2.8x2.8	0.95
	○ 272			
TS B/02	● 365	55000	3x3	1.15
	○ 374			

IN SERVIZIO EN SERVICIO — IN SERVICE IN BETRIEB — EN SERVICE	●
FUORI SERVIZIO FUERA DE SERVICIO — OUT OF SERVICE AUSSER BETRIEB — HORS SERVICE	○
ZAVORRA di BASE LASTRE DE BASE — CENTRAL BALLAST ZENTRAL BALLASTSTEIN — LEST DE BASE	Z

*Solo per Hmax — Sólo para Hmax — Only for Hmax — Nur für Hmax — Seulement pour Hmax

TS P


		F1 (kN)	Z (kg)	Z1 (kg)	A (m)	B (m)	C (m)	H1 (m)
TS P/01	●	359	40000	4x2500	2.9x2.9	2.16	3.45	4.2
	○	360						
TS P/02	●	376	45000	4x2500	3x3	2.26	3.45	4.42
	○	418						

TS TP/TR


		N (kN)	T (kN)	M (kNm)	H1 (m)
TS 02/TP TS 02/TR	●	236	13	666	0.65
	○	193	31	915	

IN SERVIZIO EN SERVIZIO — IN SERVICE IN BETRIEB — EN SERVICE	●
FUORI SERVIZIO FUERA DE SERVIZIO — OUT OF SERVICE AUSSER BETRIEB — HORS SERVICE	○
ZAVORRA di BASE LASTRE DE BASE — CENTRAL BALLAST ZENTRAL BALLASTSTEIN — LEST DE BASE	Z

*Solo per Hmax — Sólo para Hmax — Only for Hmax — Nur für Hmax — Seulement pour Hmax

ZAVORRA DI CONTROBRACCIO

LASTRE DE CONTRA FLECHA — COUNTER JIB BALLAST
 GEGENAUSLEGERBALLAST — LEST DE CONTRE-FLECHE

	BRACCIO (m) FLECHA — JIB AUSLEGER — FLECHE	40	34.2	28.4	22.5	16.7
	ZAVORRA (kg) LASTRE — BALLAST BALLAST — LEST	7000 (2A+3B)	6100 (2A+2B)	5200 (2A+1B)	4300 (2A)	2700 (3B)

	TIPO TIPO — TYPE ART — TYPE	A	B
	PESO (kg) PESO — WEIGHT GEWICHT — POIDS	2150	900

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS		 (m)
---	---	---	---	--

			1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg		
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE  INVERTER	400 V 50 Hz		5	26	40	kW 9.2	 AS 9 80 Hmax 40 m
			2000	2000	1000		
			3	13	20		 AS 9 HC 180 H max 40 m
			4000	4000	2000		

			1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION  INVERTER	400 V 50 Hz		18	30	50	kW 2.2

			1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION  INVERTER	400 V 50 Hz		0 → 0.2	0.2 → 0.6	0.6 → 0.98	kW 4

			1 ^a m/1'	
TRASLAZIONE TRASLACIÓN — TRAVELLING SCHIENENFAHREN — TRANSLATION  INVERTER	400 V 50 Hz		0 → 20	kW N° 2 x 3



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise levell

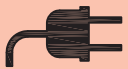
Gemass EWG-Richtlinien für
den Schall-Leistungspegel

Conforme aux directives CEE
sur le niveau acoustique

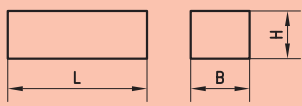
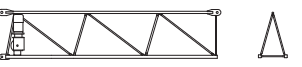
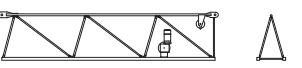
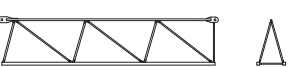
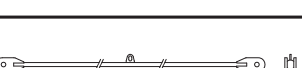
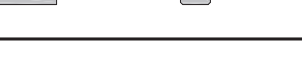
POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER

KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

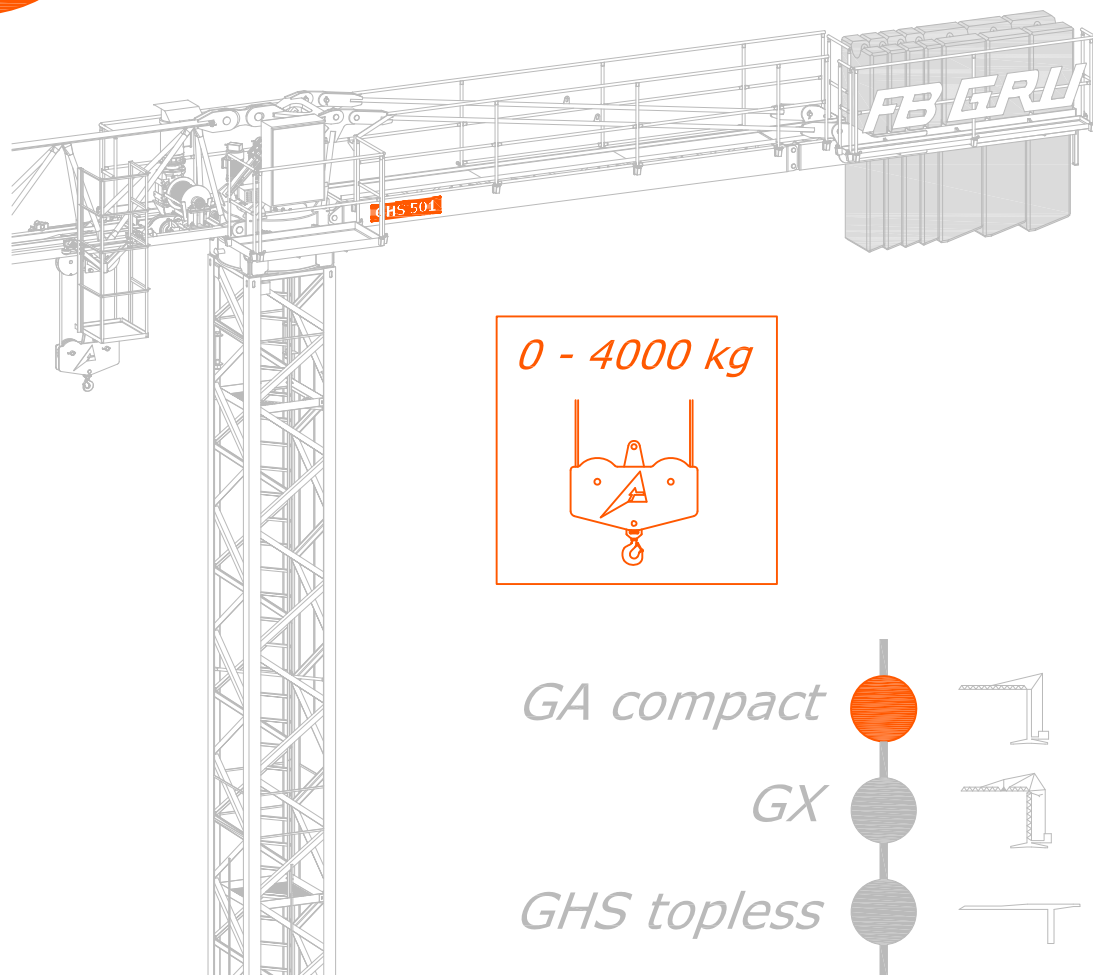
 400 V - 50 Hz	  AS 9 AS 9 HC 9.2 kW
	15 kVA* (12 kW)

* Gru senza traslazione — Grúa sin traslación — Crane without travelling equipment — Krane ohne schienenfahren — Grue sans translation

Pos. Pos. Item Pos. Rep.	DENOMINAZIONE Denominacion Denomination Benennung Dénomination		Q.tà Cont. Qty. Anz. Qte.	L	B	H	 (kg)	
				(m)				
1	Elemento di braccio 1 Tramo de flecha 1 – Jib element 1 Auslegerschuss 1 – Element de flèche 1		1	5.23	0.8	1.4	800	
2	Elemento di braccio 2 Tramo de flecha 2 – Jib element 2 Auslegerschuss 2 – Element de flèche 2		1	6.03	0.8	1.33	625	
3	Elementi di braccio 3 - 4 - 5 - 6 Tramos de flecha 3-4-5-6 – Jib elements 3-4-5-6 Auslegerschuss 3-4-5-6 – Elements de flèche 3-4-5-6		1 1 1 1	6.01 5.98 5.95 5.91	0.8	1.32 1.31 1.29 1.27	365 345 280 230	
4	Elementi di braccio 7 Tramos de flecha 7 – Jib elements 7 Auslegerschuss 7 – Elements de flèche 7		1	5.90	0.8	1.25	195	
5	Controbraccio parte A Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	2.90	1.30	1.25	435	
6	Controbraccio parte B Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	5.95	0.82	1.25	690	
7	Tiranti Tirantes – Tie-rods Abspannung – Hauban		2	6.4	0.52	0.19	95	
8	Gruppo rotazione Plataforma de giro – Slewing platform Drehbühne – Porte-flèche tournant		1	1.55	1.3	1.82	1420	
9	Blocco di contrappeso Lastre de contraflecha – Counter jib block Gegengewichtsballast – Contrepoids		3 2	2.4 2.4	0.82 0.82	0.23 0.55	900 2150	
10	Elemento di torre TS 02/03 Mastil – Tower element Turmschuss – Mats			3.03	1.1	1.1	700	
11	Elemento di torre TS 02/06 Mastil – Tower element Turmschuss – Mats			5.99	1.1	1.1	1180	
12	Elemento di torre TS 02/12 Mastil – Tower element Turmschuss – Mats			11.9	1.1	1.1	2100	
13	Blocco zavorra di base per TS B/01 e TS B/02 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour			3.28	0.95	0.35	2500	
14	Blocco di appoggio Gatos – Concrete pad Fundament block – Blocs d'appui			2.36	0.6	0.65	2500	
15	Crociera di base (Trave A) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/01 TSB/02	1 1	4.34 4.62	0.34 0.35	0.69 0.96	810 1120
	Crociera di base (Trave B) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/01 TSB/02	1 1	4.34 4.62	0.66 0.78	0.54 0.78	750 970

GRU A TORRE

GHS 501 | **4000**



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FB F.lli Butti s.r.l.

Via XXV Aprile, 58

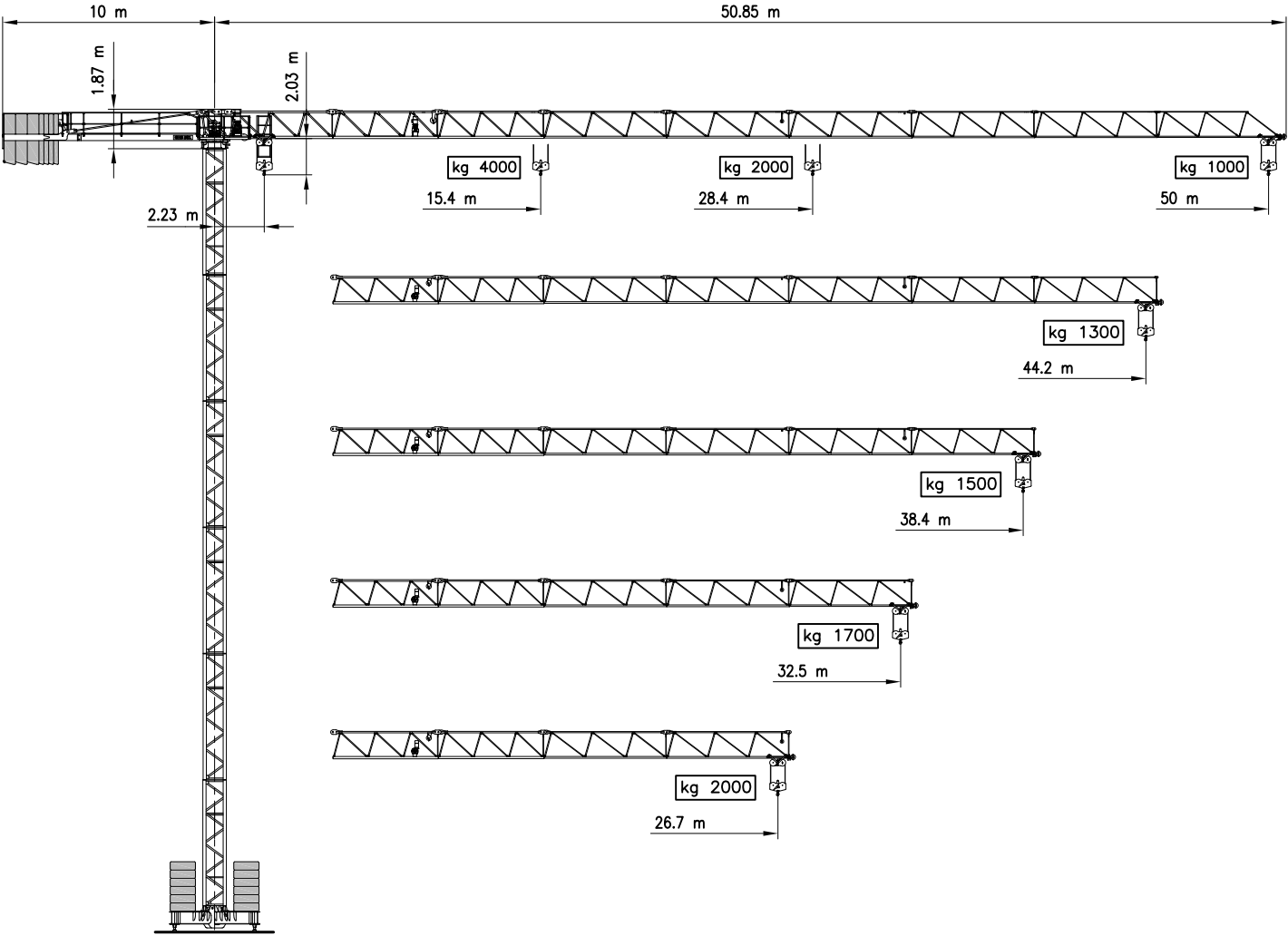
23868 Valmadrera (LC) - Italia

Tel. 0341.581108 - Fax 0341.200253

E-mail : fbgru@fbgru.it - <http://www.fbgru.it>

CE

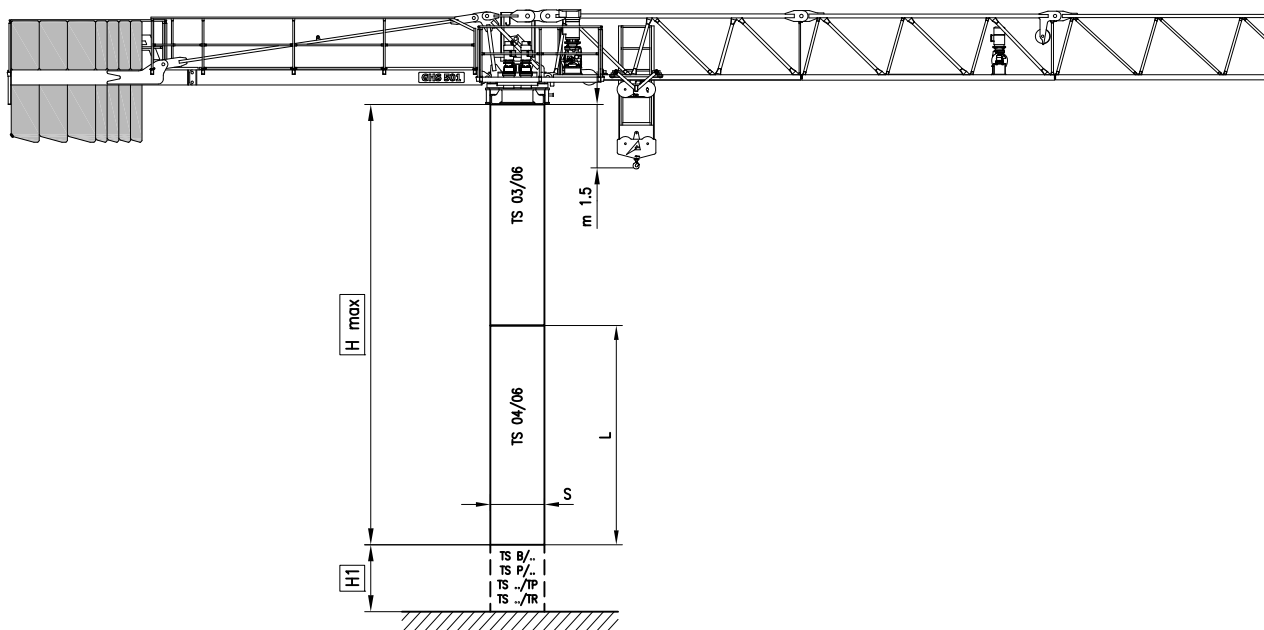
FEM 1.001 - A3
EN 14439 - C25



CURVE DI CARICO CURVAS DE CARGAS — LOAD DIAGRAMS
LASTKURVEN — COURBES DE CHARGES

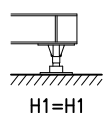
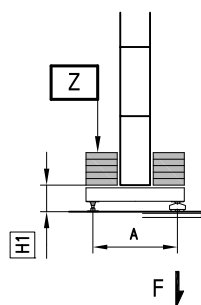
m	14.4	15.3	15.4	16.3	16.7	18	20	22	24	25	26.7	28.3	28.4	30.2	30.9	32.5	34	36	38.4	40	42	44.2	46	48	50
kg			4000	3739	3638	3342	2965	2658	2403	2292	2122	2011	2000	1863	1813	1708	1618	1510	1396	1327	1249	1172	1114	1054	1000
				4000	3664	3253	2919	2643	2521	2336	2183	2174	2022	2000	1883	1786	1668	1544	1469	1384	1300				
				4000	3883	3569	3168	2842	2572	2453	2272	2123	2114	2000	1943	1831	1736	1621	1500						
		4000	3969	3723	3623	3328	2952	2646	2393	2282	2112	2000	1993	1885	1805	1700									
	4000	3746	3718	3487	3392	3115	2761	2473	2234	2130	2000														

(0 - 4000 kg)

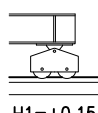


	TS 03/06	TS 04/06	H max (m)
S	m 1.1	m 1.116	
L	m 5.99	m 5.99	
TS B/03	4	1	29.95 □
	4	2	35.94 ■
TS B/04	4	1	29.95 □
	4	2	35.94 ■
TS P/03	4	2	35.94
TS P/04	4	2	35.94
TS 03/TP	4		23.96
TS 04/TP	4	2	35.94

TS B



■ AP/01



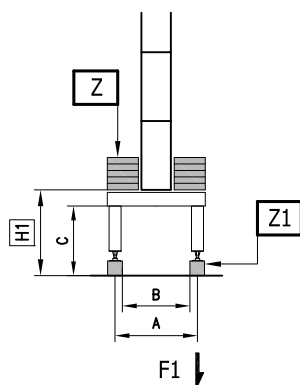
□ TR 01/02

	F (kN)	Z (kg)	A (m)	H1(m)
TS B/03	● 362	48000	3.8x3.8	1
	○ 362			
TS B/04	● 309	36000	4.5x4.5	1.2
	○ 308			

IN SERVIZIO EN SERVICIO — IN SERVICE IN BETRIEB — EN SERVICE	●
FUORI SERVIZIO FUERA DE SERVICIO — OUT OF SERVICE AUSSER BETRIEB — HORS SERVICE	○
ZAVORRA di BASE LASTRE DE BASE — CENTRAL BALLAST ZENTRAL BALLASTSTEIN — LEST DE BASE	Z

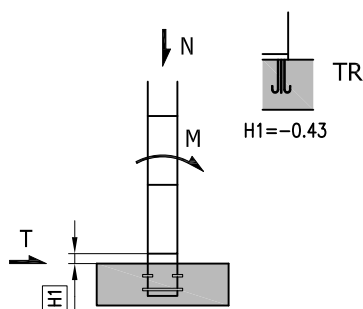
*Solo per Hmax — Sólo para Hmax — Only for Hmax — Nur für Hmax — Seulement pour Hmax

TS P



		F1 (kN)	Z (kg)	Z1 (kg)	A (m)	B (m)	C (m)	H1 (m)
TS P/03	●	448	56000	4x4000	3.8x3.8	3	4.55	5.34
	○	496						
TS P/04	●	402	48000	4x4000	4.5x4.5	3.76	4.47	5.5
	○	440						

TS TP/TR



		N (kN)	T (kN)	M (kNm)	H1 (m)
TS 03/TP TS 03/TR	●	263	11	705	0.65
	○	231	32	728	
TS 04/TP TS 04/TR	●	294	14	859	0.65
	○	261	38	1135	

IN SERVIZIO EN SERVIZIO — IN SERVICE IN BETRIEB — EN SERVICE	●
FUORI SERVIZIO FUERA DE SERVICIO — OUT OF SERVICE AUSSER BETRIEB — HORS SERVICE	○
ZAVORRA di BASE LASTRE DE BASE — CENTRAL BALLAST ZENTRAL BALLASTSTEIN — LEST DE BASE	Z

*Solo per Hmax — Sólo para Hmax — Only for Hmax — Nur für Hmax — Seulement pour Hmax

ZAVORRA DI CONTROBRACCIO

LASTRE DE CONTRA FLECHA — COUNTER JIB BALLAST

GEGEN AUSLEGERBALLAST — LEST DE CONTRE-FLÈCHE

	BRACCIO (m) FLECHA — JIB AUSLEGER — FLECHE	50	44.2	38.4	32.6	26.8
	ZAVORRA (kg) LASTRE — BALLAST BALLAST — LEST	10050 (3A+4B)	9150 (3A+3B)	7900 (2A+4B)	6450 (3A)	5200 (2A+1B)

	TIPO TIPO — TYPE ART — TYPE	A	B
	PESO (kg) PESO — WEIGHT GEWICHT — POIDS	2150	900

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS		 (m)
---	---	---	---	--

			1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg		
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE  INVERTER	400 V 50 Hz		4	16	34	46	kW 15	 AS 15 80 Hmax 40 m
			4000	4000	2000	1000		

			1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION  INVERTER	400 V 50 Hz		19	42	61	kW 3

			1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION  INVERTER	400 V 50 Hz		0 → 0.15	0.15 → 0.49	0.49 → 0.9	kW N° 2 x 3

			1 ^a m/1'	
TRASLAZIONE TRASLACIÓN — TRAVELLING SCHIENENFAHREN — TRANSLATION  INVERTER	400 V 50 Hz		0 → 20	kW N° 2 x 3



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise levell

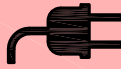
Gemass EWG-Richtlinien für
den Schall-Leistungspegel

Conforme aux directives CEE
sur le niveau acoustique

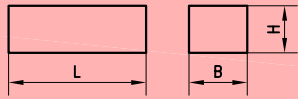
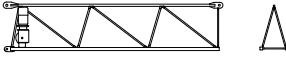
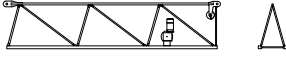
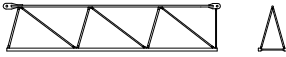
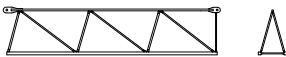
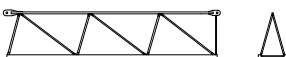
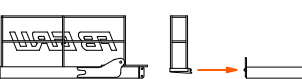
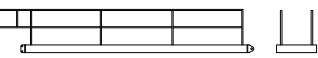
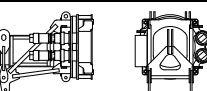
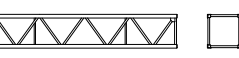
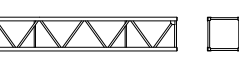
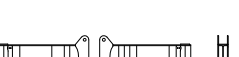
POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER

KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

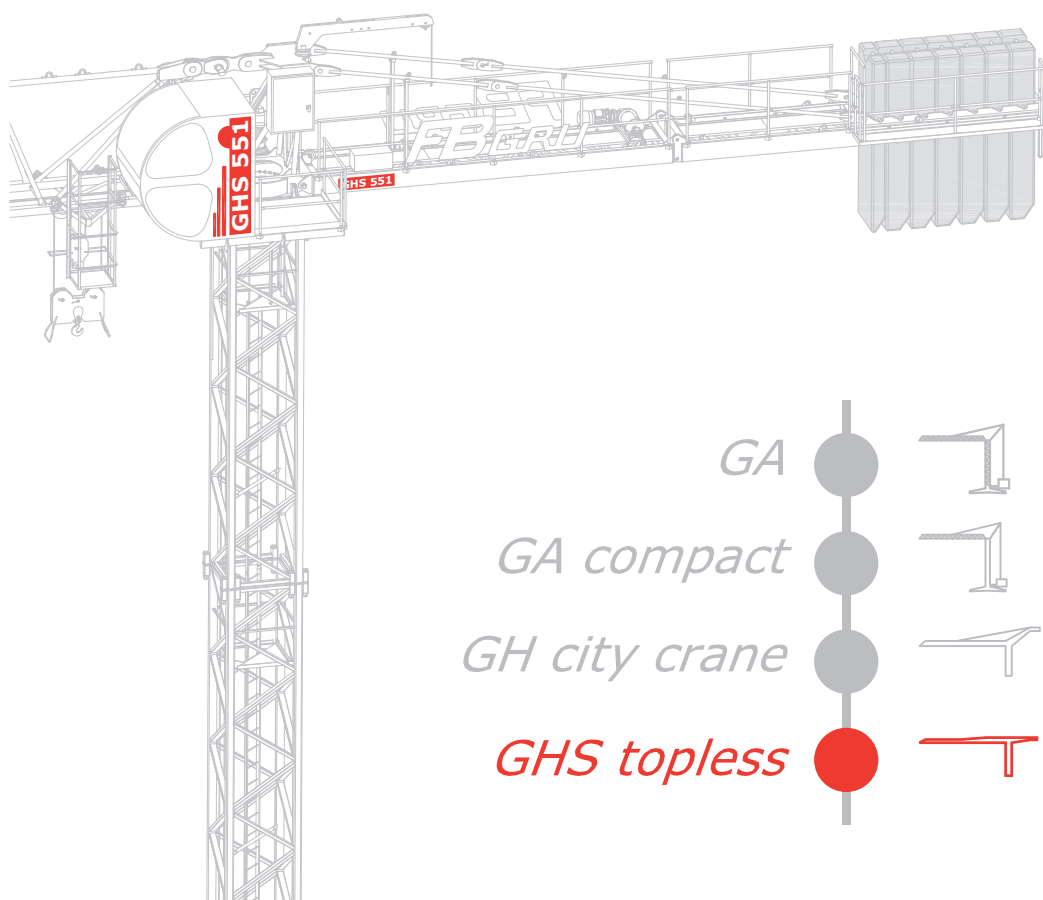
 400 V - 50 Hz	  AS 15 15 kW
	18 kVA* (15 kW)

* Gru senza traslazione — Grúa sin traslación — Crane without travelling equipment — Krane ohne schienenfahren — Grue sans translation

Pos. Pos. Item Pos. Rep.	DENOMINAZIONE Denominacion Denomination Benennung Dénomination		Q.tà Cant. Qty. Anz. Qte.	L	B	H	 (kg)
				(m)			
1	Elemento di braccio 1 Tramo de flecha 1 — Jib element 1 Auslegerschuss 1 — Element de flèche 1		1	5.28	0.91	1.5	1300
2	Elemento di braccio 2 Tramo de flecha 2 — Jib element 2 Auslegerschuss 2 — Element de flèche 2		1	5.25	0.87	1.37	830
3	Elemento di braccio 3 Tramo de flecha 3 — Jib element 3 Auslegerschuss 3 — Element de flèche 3		1	5.23	0.8	1.35	465
4	Elemento di braccio 4 Tramo de flecha 4 — Jib element 4 Auslegerschuss 4 — Element de flèche 4		1	6.03	0.8	1.32	435
5	Elementi di braccio 5 - 6 - 7 - 8 Tramos de flecha 5-6-7-8 — Jib elements 5-6-7-8 Auslegerschuss 5-6-7-8 — Elements de flèche 5-6-7-8		1 1 1 1	6.01 5.98 5.95 5.91	0.8	1.32 1.31 1.29 1.27	345 320 265 212
6	Elementi di braccio 9 Tramos de flecha 9 — Jib elements 9 Auslegerschuss 9 — Elements de flèche 9		1	5.90	0.8	1.25	195
7	Controbraccio parte A Contraflecha — Counter jib Gegenausleger — Contre-flèche		1	3.73	1.32	1.31	740
8	Controbraccio parte B Contraflecha — Counter jib Gegenausleger — Contre-flèche		1	5.95	0.85	1.36	880
9	Tiranti Tirantes — Tie-rods Abspannung — Hauban		2	6.4	0.8	0.2	132
10	Gruppo rotazione Plataforma de giro — Slewing platform Drehbühne — Porte-flèche tournant		1	1.87	1.52	1.6	1920
11	Blocco di contrappeso Lastre de contraflecha — Counter jib block Gegengewichtsballast — Contrepoids		4 3	2.4 2.4	0.82 0.82	0.23 0.55	900 2150
12	Elemento di torre TS 03/06 Mastil — Tower element Turmschuss — Mats			5.99	1.1	1.1	1410
13	Elemento di torre TS 04/06 Mastil — Tower element Turmschuss — Mats			5.99	1.116	1.116	1640
14	Blocco zavorra di base per TS B/03 Lastre de base para — Base ballast block for Zentral ballaststein für — Lest de base pour			3.8	0.38	1.18	4000
15	Blocco zavorra di base per TS B/04 Lastre de base para — Base ballast block for Zentral ballaststein für — Lest de base pour			5	0.34	1.6	6000
16	Blocco di appoggio Gatos — Concrete pad Fundament block — Blocs d'appui			3	0.8	0.74	4000
17	Crociera di base (Trave A) Cruz de base — Cruciform base Fundament kreuz — Châssis de base		TSB/03 1	5.75	0.35	1.08	1660
			TSB/04 1	6.75	0.35	1.26	2315
	Crociera di base (Trave B) Cruz de base — Cruciform base Fundament kreuz — Châssis de base		TSB/03 1	5.75	0.92	0.9	1515
			TSB/04 1	6.75	0.93	1.1	2050

GRU A TORRE

GHS 551 | 6000



FB F.lli Butti s.r.l.

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Tel. 0341.581108 - Fax 0341.200253
E-mail : fbgru@fbgru.it - <http://www.fbgru.it>



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EN 14439 - C25

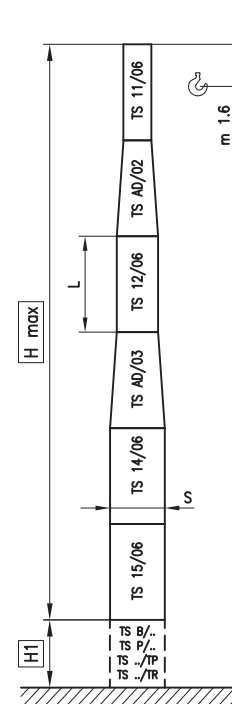


CURVE DI CARICO

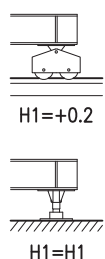
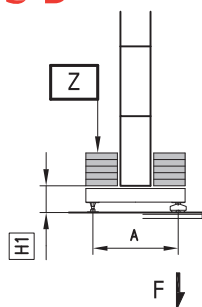
CURVE DI CARICO

	TS 11	TS AD/02	TS 12	TS AD/03	TS 14	TS 15	H max (m)
S	m 1.2	m 1.2 → 1.6	m 1.6	m 1.6 → 2.1	m 2.1	m 2.1	
L	m 5.92	m 5.92	m 5.97	m 5.97	m 5.97	m 5.97	
TS B/03	4	1	2				41.54 ■
TS B/04	4	1	3				47.51 ■
TS B/05	4	1	2	1	3		65.42 ■
TS B/06	4	1	2	1	3		65.42 ■
	2	1	2	1	5	2	77.46** ■
TS P/03	4	1					29.6
TS P/04	4	1	1				35.57
TS P/05	4	1	3				47.51
TS 11/TP	4						23.68
TS 12/TP	4	1	3				47.51
TS 14/TP	4	1	2	1	3		65.42
TS 15/TP	2	1	2	1	5	2	77.46**

** Senza cabina — Sin cabina — Whitout cabin — Ohne kabine — Sans cabine



TS B

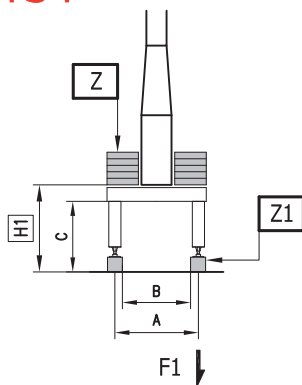


□ TR 02/02
■ TR 02/04

■ AP/02

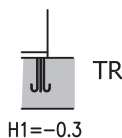
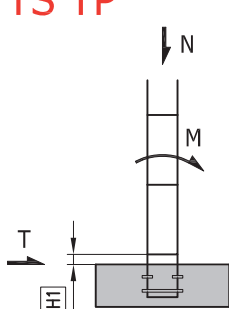
		F (kN)	Z (kg)	A (m)	H1(m)
TS B/03	●	560	72000	3.8x3.8	1
	○	572			
TS B/04	●	578	84000	4.5x4.5	1.2
	○	635			
TS B/05	●	715	126000	6x6	1.4
	○	935			
TS B/06	●	710	126000	8x8	1.6
	○	1066			

TS P



		F1 (kN)	Z (kg)	Z1 (kg)	A (m)	B (m)	C (m)	H1 (m)
TS P/03	●	479	40000	4x4000	3.8x3.8	3	4.52	5.31
	○	434						
TS P/04	●	490	48000	4x4000	4.5x4.5	3.72	4.47	5.5
	○	499						
TS P/05	●	544	70000	4x4000 4x7000	6x6	5.2 5	4.5 4.65	5.8 5.95
	○	639						

TS TP



TR

		N (kN)	T (kN)	M (kNm)	H1 (m)
TS 11/TP	●	370	15	1008	0.65
	○	317	44	436	
TS 12/TP	●	455	21	1450	0.65
	○	403	76	2149	
TS 14/TP	●	552	28	1907	0.65
	○	501	111	4189	
TS 15/TP	●	654	35	2361	0.65
	○	602	145	6414	

IN SERVIZIO

EN SERVICE — IN SERVICE
IN BETRIEB — EN SERVICE

FUORI SERVIZIO

FUERA DE SERVICIO — OUT OF SERVICE
AUSSER BETRIEB — HORS SERVICE

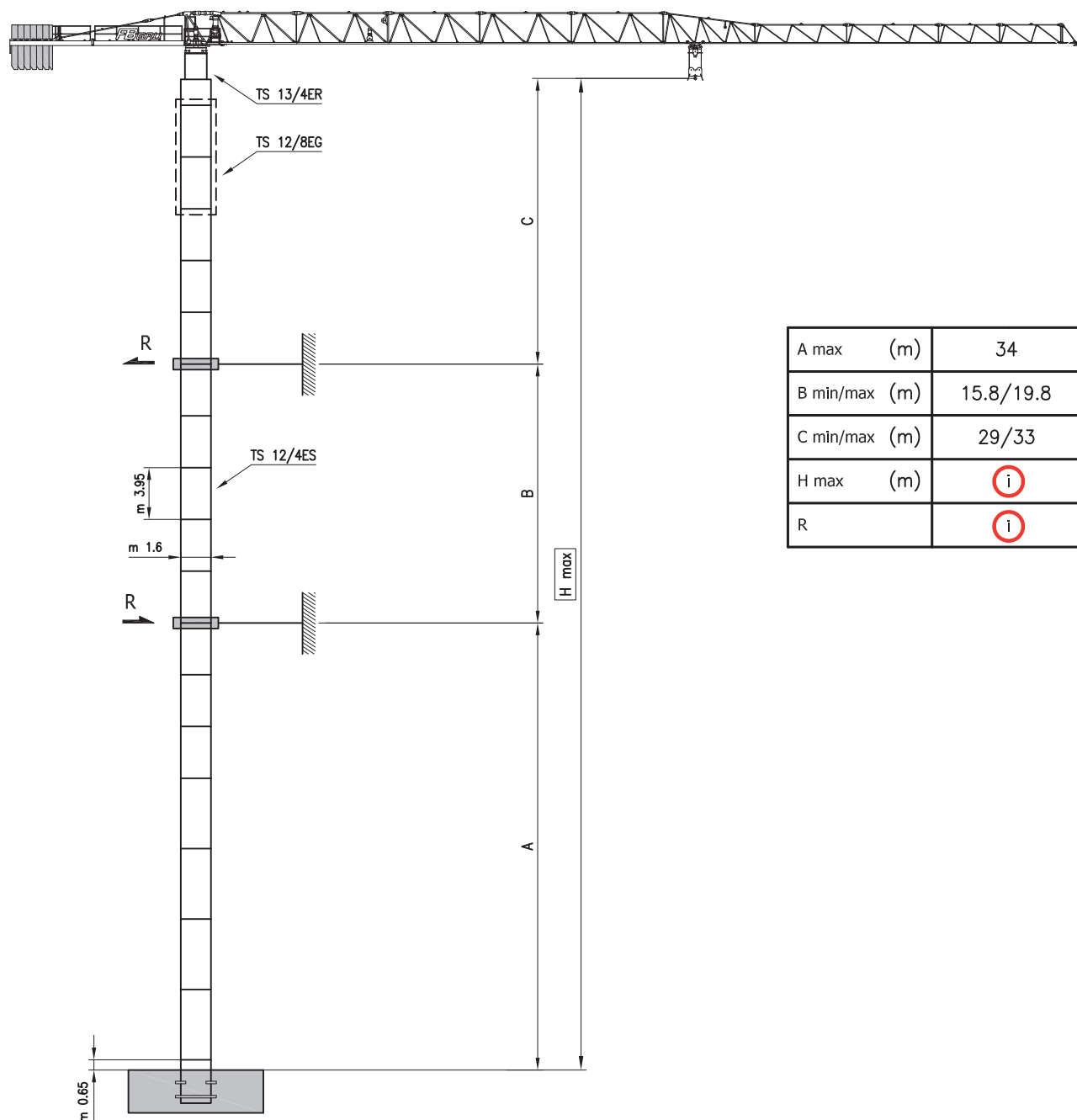
ZAVORRA di BASE

LASTRE DE BASE — CENTRAL BALLAST
ZENTRAL BALLASTSTEIN — LEST DE BASE



*Solo per Hmax — Sólo para Hmax — Only for Hmax — Nur für Hmax — Seulement pour Hmax

TS 12/4ES



A max	(m)	34
B min/max	(m)	15.8/19.8
C min/max	(m)	29/33
H max	(m)	i
R		i

i Consultateci — Consultarnos — Consult us — Auf anfrage — Nous consulter

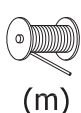
ZAVORRA DI CONTROBRACCIO

LASTRE DE CONTRA FLECHA — COUNTER JIB BALLAST

GENEAUSLEGERBALLAST — LEST DE CONTRE-FLÈCHE

	BRACCIO (m) FLECHA — JIB AUSLEGER — FLECHE	55	51.1	47.2	41.4	35.6	29.8	24
	ZAVORRA (kg) LASTRE — BALLAST BALLAST — LEST	14340 (6A + 1B)	13080 (6A)	12160 (5A + 1B)	12160 (5A + 1B)	10900 (5A)	7800 (3A + 1B)	5620 (2A + 1B)

	TIPO TIPO — TYPE ART — TYPE	A	B
	PESO (kg) PESO — WEIGHT GEWICHT — POIDS	2180	1260

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS		 (m)
---	---	---	---	--

		1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg	5 ^a m/1' - kg		
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE  INVERTER	400 V 50 Hz		4	8	30	50	kW 11	AS 11 160 Hmax 36 m
			2500	2500	2500	1300		
			2	4	15	25	kW 18	AS 18 160 Hmax 36 m AS 18 HC 280 H max 70 m
			5000	5000	5000	2500		
			6	11	32	60	kW 25	AS 25 280 Hmax 70 m AS 25 HC 520 H max 130 m
			3000	3000	3000	1300		
			3	6	16	30	kW 25	AS 25 280 Hmax 70 m AS 25 HC 520 H max 130 m
			6000	6000	6000	2600		
			7	11	35	72	kW 25	AS 25 280 Hmax 70 m AS 25 HC 520 H max 130 m
			3000	3000	3000	1300		
			4	6	17	36	kW 25	AS 25 280 Hmax 70 m AS 25 HC 520 H max 130 m
			6000	6000	6000	2600		

		1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	4 ^a m/1'		
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION  INVERTER	400 V 50 Hz	10	30	48	62	kW 3	

		1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	4 ^a g/1'		
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION  INVERTER	400 V 50 Hz	0 → 0.08	0.08 → 0.2	0.2 → 0.4	0.4 → 0.96	kW 9	

		1 ^a m/1'		
TRASLAZIONE TRASLACIÓN — TRAVELLING SCHIENENFAHREN — TRANSLATION  INVERTER	400 V 50 Hz	0 → 20		
				kW N° 2 x 4 TR 02/02 N° 4 x 4 TR 02/04



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise level

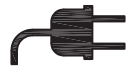
Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

Conforme aux directives CEE
sur le niveau acoustique

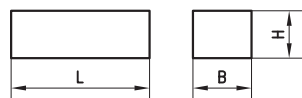
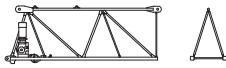
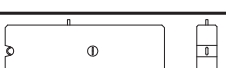
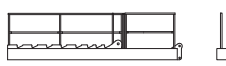
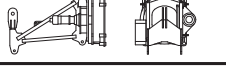
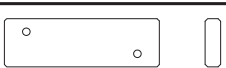
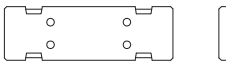
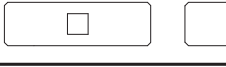
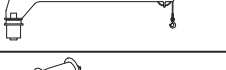
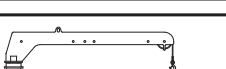
POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER

KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

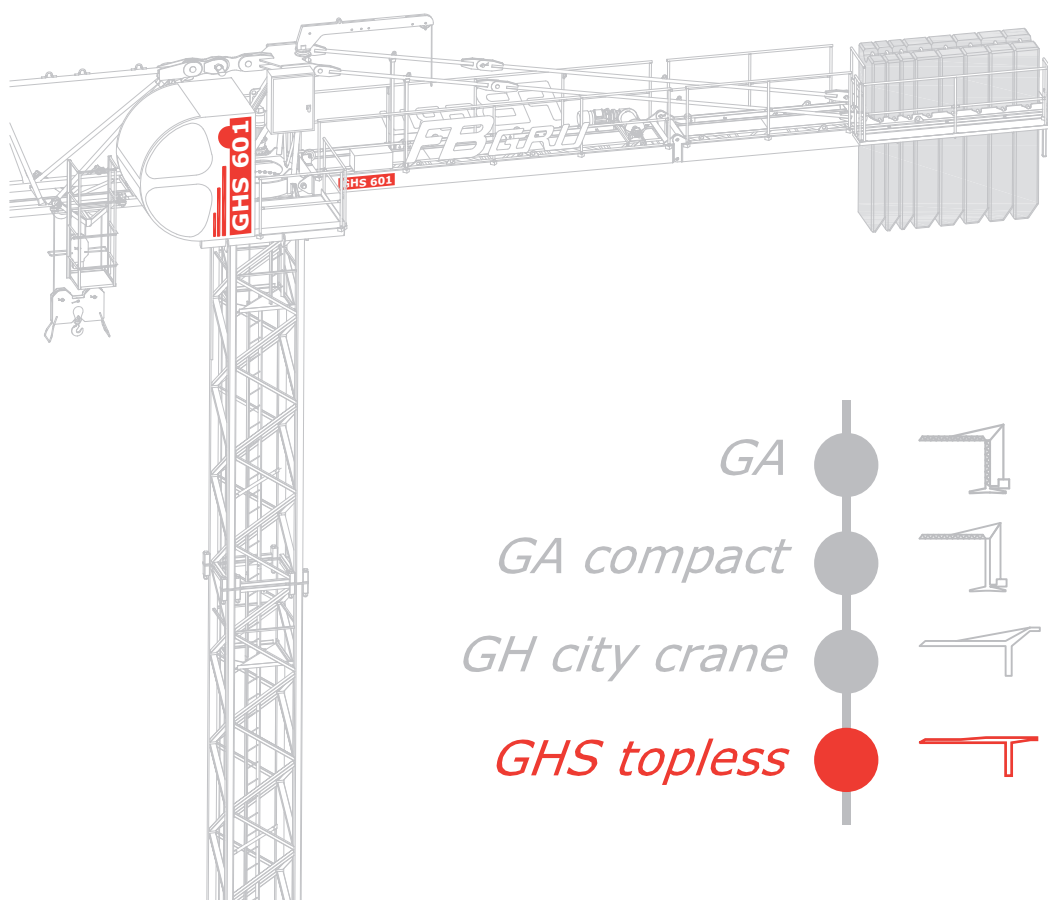
 400 V - 50 Hz	 AS 11 11 kW	 AS 18 AS 18 HC 18 kW	 AS 25 AS 25 HC 25 kW
	28 kVA* (22 kW)	36 kVA* (29 kW)	45 kVA* (36 kW)

* Gru senza traslazione — Grúa sin traslación — Crane without travelling equipment — Krane ohne schienenfahren — Grue sans translation

Pos.	DENOMINAZIONE		Q.tà	L	B	H		
Pos. Item	Denominacion		Cont.					
Pos. Rep.	Benennung		Anz.	(m)			(kg)	
Rep.	Dénomination		Qte.					
1	Elemento di braccio 1 Tramo de flecha 1 – Jib element 1 Auslegerschuss 1 – Element de flèche 1		1	6.04	1.16	2.25	1800	
2	Elemento di braccio 2 Tramo de flecha 2 – Jib element 2 Auslegerschuss 2 – Element de flèche 2		1	6.08	1.16	2.07	945	
3	Elementi di braccio 3 - 4 - 5 Tramos de flecha 3-4-5 – Jib elements 3-4-5 Auslegerschuss 3-4-5 – Elements de flèche 3-4-5		1 1 1	6.03 6.02 6.02	1.16	2.04 2.02 2.01	640 535 435	
4	Elemento di braccio 6 Tramo de flecha 6 – Jib element 6 Auslegerschuss 6 – Element de flèche 6		1	6.02	1.16	2.01	410	
5	Elementi di braccio 7 - 8 Tramos de flecha 7-8 – Jib elements 7-8 Auslegerschuss 7-8 – Elements de flèche 7-8		1 1	6.02 6.01	1.16	1.26 1.25	350 290	
6	Elemento di braccio 9 - 10 Tramo de flecha 9-10 – Jib element 9-10 Auslegerschuss 9-10 – Element de flèche 9-10		2	4.08	1.16	1.25	195	
7	Elemento di braccio 11 Tramo de flecha 11 – Jib element 11 Auslegerschuss 11 – Element de flèche 11		1	1.35	1.16	1.38	75	
8	Blocco di contrappeso Lastre de contraflecha – Counter jib block Gegengewichtsbalken – Contrepoids		1 6	2.83	0.87	0.23 0.395	1260 2180	
9	Controbraccio Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	6.1	1.23	1.26	990	
10	Controbraccio Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	5.3	1.22	1.26	1070	
11	Gruppo rotazione Plataforma de giro – Slewing platform Drehbühne – Porte-flèche tournant		1	2.7	1.72	1.71	2480	
12	Elemento di torre TS 11/6 Mastil – Tower element Turmschuss – Mats			5.92	1.2	1.38	1435	
13	Elemento di torre TS 12/6 Mastil – Tower element Turmschuss – Mats			5.97	1.6	1.8	2088	
14	Elemento di torre TS 14/6 Mastil – Tower element Turmschuss – Mats			5.97	2.3	2.3	3050	
15	Elemento di torre TS 15/6 Mastil – Tower element Turmschuss – Mats			5.97	2.3	2.3	3500	
16	Adattatore TS AD/02 Adaptador – Adapter Adapter – Adaptateur			5.92	1.6	1.8	2005	
17	Adattatore TS AD/03 Adaptador – Adapter Adapter – Adaptateur			5.97	2.1	2.3	2750	
18	Blocco zavorra di base per TS B/03 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour			3.8	0.38	1.18	4000	
19	Blocco zavorra di base per TS B/04 e TS B/05 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour		TSB/04 TSB/05	5.0 5.7	0.34	1.6	6000 7000	
20	Blocco di appoggio Gatos – Concrete pad Fundament block – Blocs d'appui			3.0 3.2	0.8 1.0	0.74 0.95	4000 7000	
21	Crociera di base (Trave A) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/03 TSB/04 TSB/05 TSB/06	1 1 1 1	5.75 6.75 8.86 11.7	0.35 0.35 0.4 1.85	1.08 1.26 1.6 1.85	1660 2315 4050 6760
	Crociera di base (Trave B) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/03 TSB/04 TSB/05 TSB/06	1 1 1 1	5.75 6.75 8.86 11.7	0.92 0.93 0.99 1.15	0.9 1.1 1.35 1.6	1515 2050 3630 6200
	Opzionale Optional	Braccio ausiliario Plumin de intervencion – Auxiliary arm Hilfsgalgen – Potence d'intervention		1	2.2	0.22	0.72	110
	Optional	Argano ausiliario Mecanismo auxiliar – Auxiliary winch Hilfswinde – Treuil auxiliaire		1	0.85	0.9	0.43	170
	Optionale							
	Option							

GRU A TORRE

GHS 601 | 6000

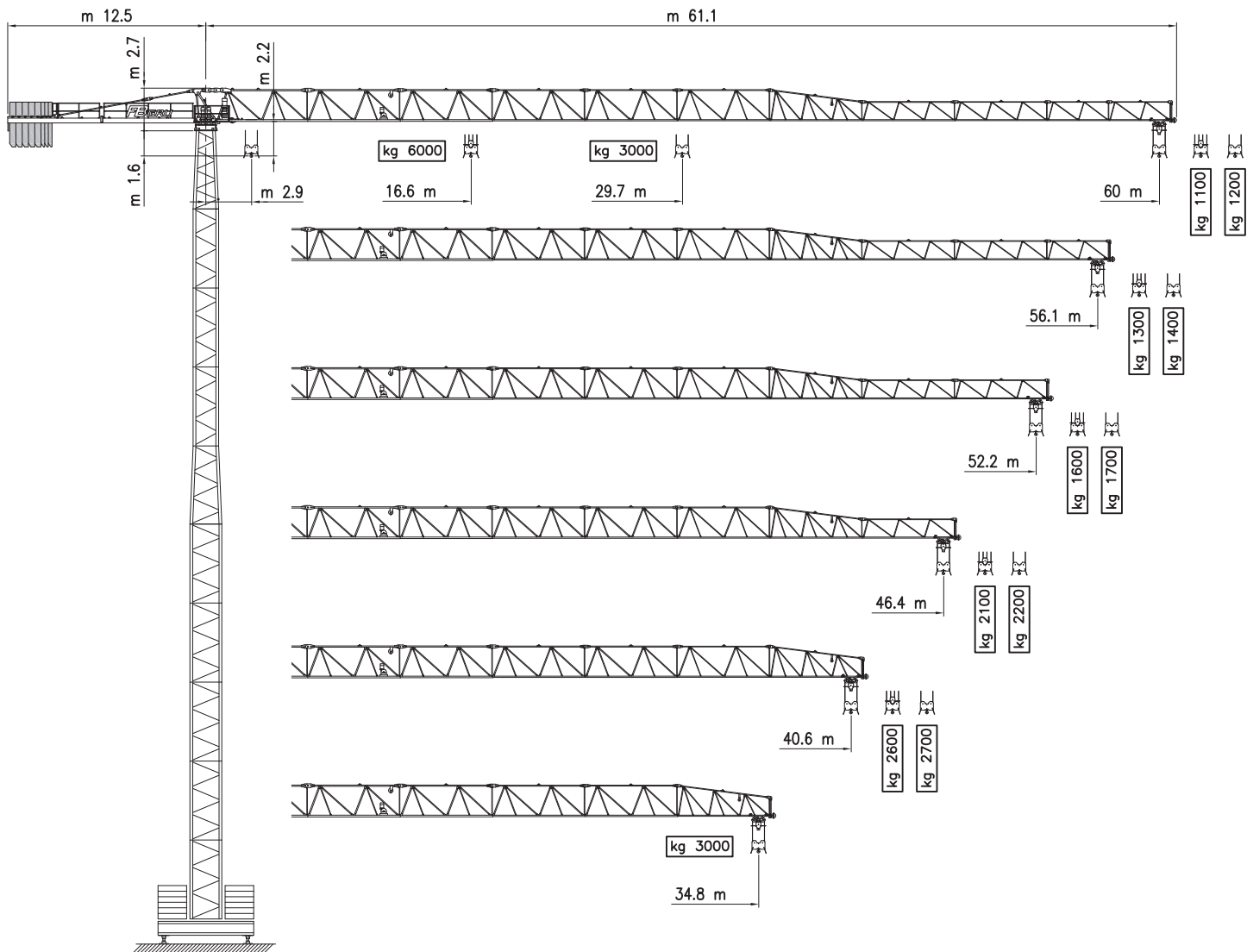


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FEM 1.001 - A4
EN 14439 - C25



CURVE DI CARICO

CURVAS DE CARGAS — LOAD DIAGRAMS
LASTKURVEN — COURBES DE CHARGES

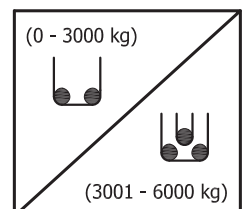
m	16.6	17.4	17.6	19.4	20	23	26	29.7	30	30.9	31.2	31.5	32	32.5	34.8	36	37	38	40.6	43	46.4	48	50	52.2	54	56.1	58	60
kg	6000	5667	5593	4998	4823	4093	3535	3000	2962	2860	2827	2795	2742	2692	2478	2378	2299	2225	2048	1905	1728	1653	1566	1479	1276	1210	1155	1100
									3000	2962	2929	2876	2825	2607	2505	2425	2350	2171	2025	1845	1769	1681	1592	1525	1452	1255	1200	
	6000	5927	5299	5116	4346	3759	3201	3162	3049	3000	2970	2915	2862	2637	2531	2448	2370	2184	2033	1846	1768	1676	1584	1369	1300			
							3000	2900	2868	2836	2785	2735	2524	2424	2347	2273	2099	1957	1782	1708	1623	1536	1471	1400				
	6000	5344	5160	4384	3792	3230	3191	3077	3041	3000	2941	2888	2661	2554	2471	2392	2205	2052	1864	1785	1693	1600						
													3000	2770	2663	2579	2499	2310	2157	1966	1886	1794	1700					
	6000				4888	4236	3618	3574	3449	3409	3370	3307	3245	2984	3000	2768	2681	2475	2307	2100								
													3000	2785	2578	2409	2200											
	6000				5121	4442	3797	3752	3622	3580	3539	3473	3409	3137	3000	2905	2814	2600										
													3000	2916	2700													
	6000				5784	4925	4269	3646	3602	3471	3437	3397	3333	3271	3000													
														3000														

(0 - 3000 kg)

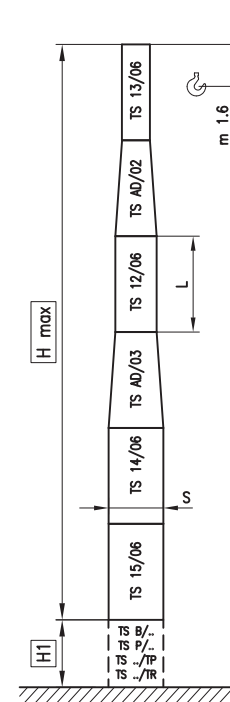




(3001 - 6000 kg)

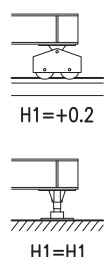
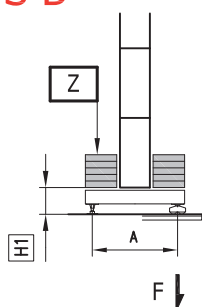


	TS 13	TS AD/02	TS 12	TS AD/03	TS 14	TS 15	H max (m)
S	m 1.2	m 1.2 → 1.6	m 1.6	m 1.6 → 2.1	m 2.1	m 2.1	
L	m 5.92	m 5.92	m 5.97	m 5.97	m 5.97	m 5.97	
TS B/03	4	1	1				35.57 ■
TS B/04	2	1	5				47.61 ■
TS B/05	2	1	2	1	5		65.52 ■
TS B/06	2	1	2	1	5		65.52 ■
	2	1		1	7	2	77.46** ■
TS P/03	4						23.68
TS P/04	4	1	1				35.57
TS P/05	2	1	5				47.61
TS 13/TP	4						23.68
TS 12/TP	2	1	5				47.61
TS 14/TP	2	1	2	1	5		65.52
TS 15/TP	2	1		1	7	2	77.46**



** Senza cabina — Sin cabina — Whitout cabin — Ohne kabine — Sans cabine

TS B

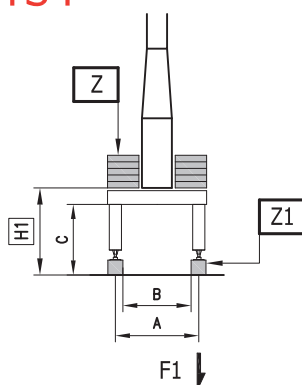


□ TR 02/02
■ TR 02/04

■ AP/02

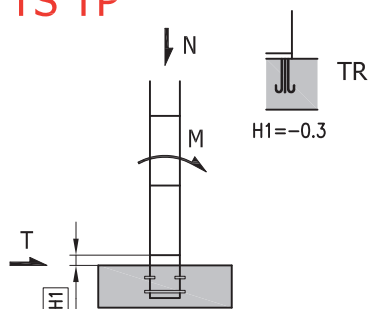
		F (kN)	Z (kg)	A (m)	H1(m)
TS B/03	●	559	64000	3.8x3.8	1
	○	483			
TS B/04	●	618	84000	4.5x4.5	1.2
	○	692			
TS B/05	●	793	140000	6x6	1.4
	○	1037			
TS B/06	●	776	140000	8x8	1.6
	○	1151			

TS P



		F1(kN)	Z (kg)	Z1(kg)	A (m)	B (m)	C (m)	H1(m)
TS P/03	●	493	40000	4x4000	3.8x3.8	3	4.52	5.31
	○	384						
TS P/04	●	554	60000	4x4000	4.5x4.5	3.72	4.47	5.5
	○	552						
TS P/05	●	611	84000	4x4000 4x7000	6x6	5.2 5	4.5 4.65	5.8 5.95
	○	708						

TS TP

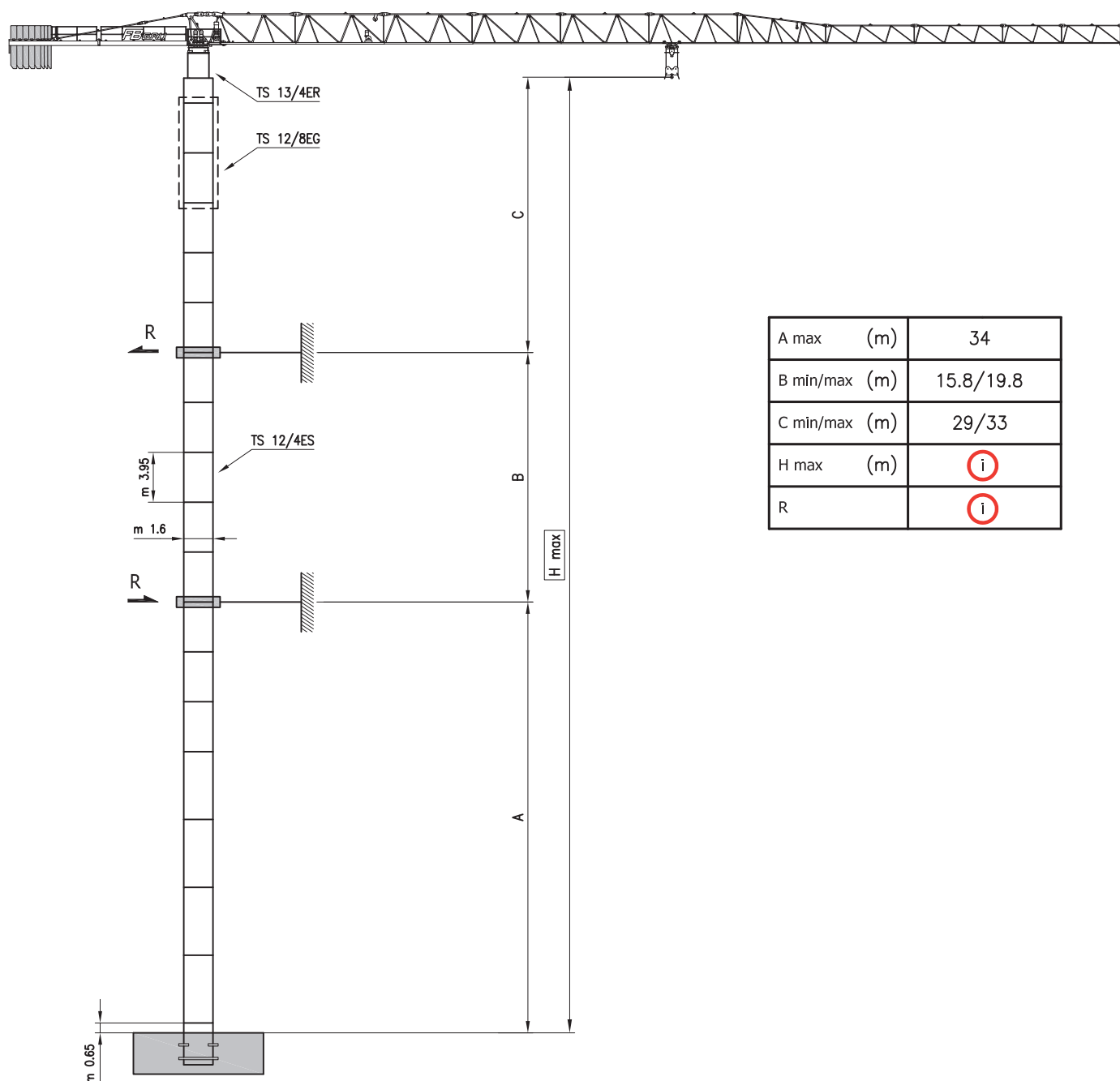


		N (kN)	T (kN)	M (kNm)	H1 (m)
TS 13/TP	●	381	16	1195	0.65
	○	343	45	504	
TS 12/TP	●	478	22	1661	0.65
	○	440	80	2339	
TS 14/TP	●	593	30	2166	0.65
	○	555	121	4637	
TS 15/TP	●	679	36	2623	0.65
	○	641	153	6915	

IN SERVIZIO EN SERVIZIO — IN SERVICE IN BETRIEB — EN SERVICE	●
FUORI SERVIZIO FUERA DE SERVIZIO — OUT OF SERVICE AUSSER BETRIEB — HORS SERVICE	○
ZAVORRA di BASE LASTRE DE BASE — CENTRAL BALLAST ZENTRAL BALLASTSTEIN — LEST DE BASE	Z

*Solo per Hmax — Sólo para Hmax — Only for Hmax — Nur für Hmax — Seulement pour Hmax

TS 12/4ES



A max	(m)	34
B min/max	(m)	15.8/19.8
C min/max	(m)	29/33
H max	(m)	i
R		i

i Consultateci — Consultarnos — Consult us — Auf anfrage — Nous consulter

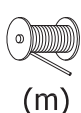
ZAVORRA DI CONTROBRACCIO

LASTRE DE CONTRA FLECHA — COUNTER JIB BALLAST

GENEAUSLEGERBALLAST — LEST DE CONTRE-FLÈCHE

	BRACCIO (m) FLECHA — JIB AUSLEGER — FLECHE	60	56.1	52.2	46.4	40.6	34.8
	ZAVORRA (kg) LASTRE — BALLAST BALLAST — LEST	14680 (5A + 3B)	13420 (5A + 2B)	12160 (5A + 1B)	12160 (5A + 1B)	11240 (4A + 2B)	9980 (4A + 1B)

	TIPO TIPO — TYPE ART — TYPE	A	B
	PESO (kg) PESO — WEIGHT GEWICHT — POIDS	2180	1260

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS		 (m)
---	---	---	---	--

		1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg	5 ^a m/1' - kg		
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE  INVERTER	400 V 50 Hz	 4	8	30	50		kW 11	AS 11 160 Hmax 36 m
		2500	2500	2500	1300			
		 2	4	15	25		kW 18	AS 18 160 Hmax 36 m AS 18 HC 280 H max 70 m
		5000	5000	5000	2500			
		 6	11	32	60	72	kW 25	AS 25 280 Hmax 70 m AS 25 HC 520 H max 130 m
		3000	3000	3000	1300	800		
		 3	6	16	30	36	kW 25	AS 25 280 Hmax 70 m AS 25 HC 520 H max 130 m
		6000	6000	6000	2600	1600		
		 7	11	35	72	88	kW 25	AS 25 280 Hmax 70 m AS 25 HC 520 H max 130 m
		3000	3000	3000	1300	800		
		 4	6	17	36	44	kW 25	AS 25 280 Hmax 70 m AS 25 HC 520 H max 130 m
		6000	6000	6000	2600	1600		

		1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	4 ^a m/1'	
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION INVERTER 	400 V 50 Hz	10	30	48	62	kW 3

		1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	4 ^a g/1'	
ROTAZIONE ROTACION – SLEWING DREHEN – ORIENTATION  INVERTER	400 V 50 Hz	0 → 0.06	0.06 → 0.16	0.16 → 0.31	0.31 → 0.78	kW N° 2 x 4

		1 ^a m/1'		
TRASLAZIONE TRASLACIÓN — TRAVELLING SCHIENENFAHREN — TRANSLATION  INVERTER	400 V 50 Hz	0 → 20	kW N° 2 x 4 TR 02/02 N° 4 x 4 TR 02/04	



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise level

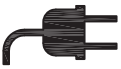
Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

Conforme aux directives CEE
sur le niveau acoustique

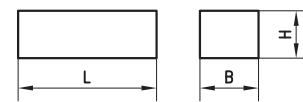
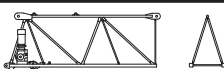
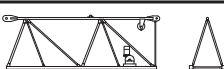
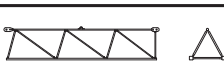
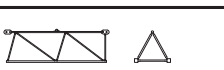
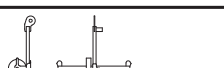
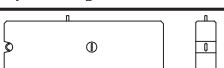
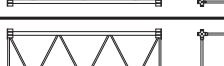
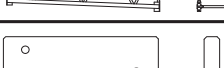
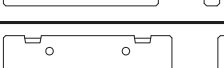
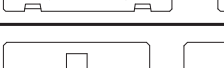
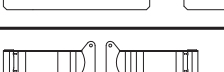
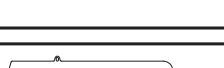
POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER

KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

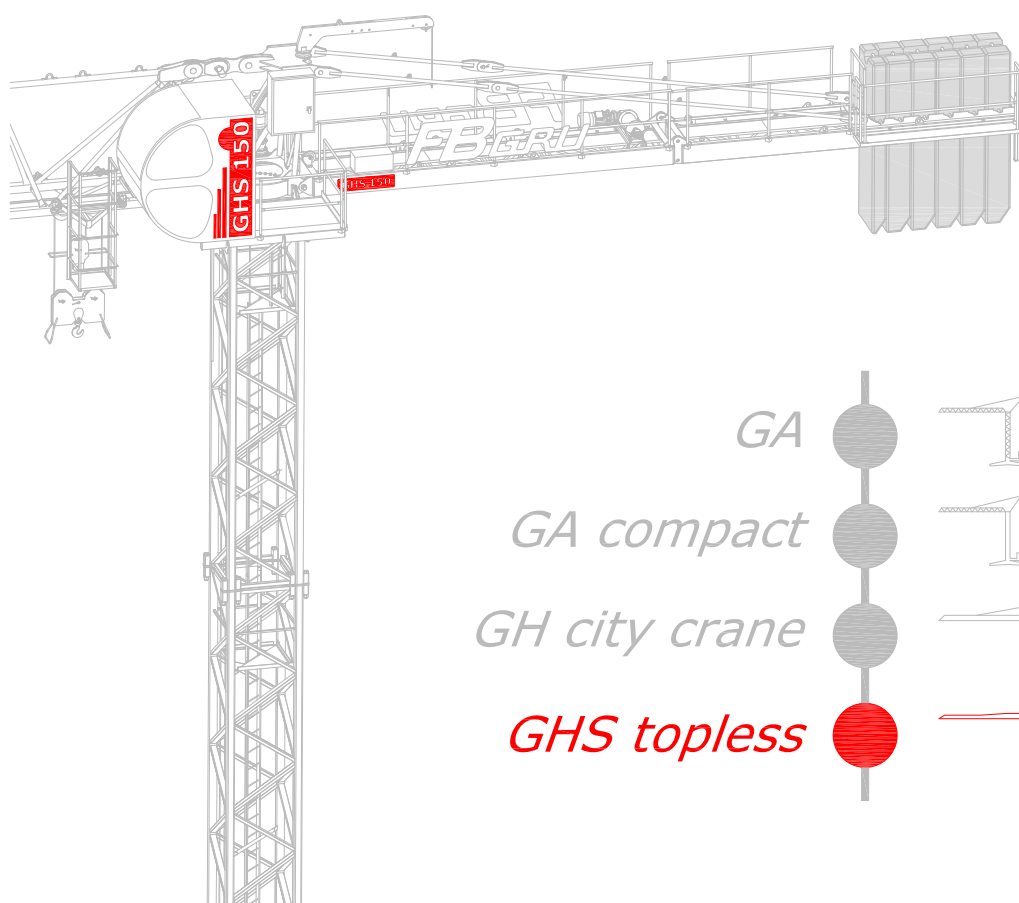
 400 V - 50 Hz	 AS 11 11 kW	 AS 18 AS 18 HC 18 kW	 AS 25 AS 25 HC 25 kW
	28 kVA* (22 kW)	36 kVA* (29 kW)	45 kVA* (36 kW)

* Gru senza traslazione — Grúa sin traslación — Crane without travelling equipment — Krane ohne schienenfahren — Grue sans translation

Pos.	DENOMINAZIONE		Q.tà	L	B	H		
Pos. Item Pos. Rep.	Denominacion Denomination Benennung Dénomination		Cont. Qty. Anz. Qte.	(m)			(kg)	
1	Elemento di braccio 1 Tramo de flecha 1 – Jib element 1 Auslegerschuss 1 – Element de flèche 1		1	6.05	1.16	2.25	1950	
2	Elemento di braccio 2 Tramo de flecha 2 – Jib element 2 Auslegerschuss 2 – Element de flèche 2		1	6.09	1.16	2.08	1100	
3	Elementi di braccio 3 - 4 - 5 - 6 Tramos de flecha 3-4-5-6 – Jib elements 3-4-5-6 Auslegerschuss 3-4-5-6 – Elements de flèche 3-4-5-6		1 1 1 1	6.05 6.03 6.02 6.02	1.16	2.06 2.04 2.02 2.01	670 640 535 435	
4	Elemento di braccio 7 Tramo de flecha 7 – Jib element 7 Auslegerschuss 7 – Element de flèche 7		1	6.02	1.16	2.01	410	
5	Elementi di braccio 8 - 9 Tramos de flecha 8-9 – Jib elements 8-9 Auslegerschuss 8-9 – Elements de flèche 8-9		1 1	6.02 6.01	1.16	1.26 1.25	350 290	
6	Elemento di braccio 10-11 Tramo de flecha 10-11 – Jib element 10-11 Auslegerschuss 10-11 – Element de flèche 10-11		2	4.08	1.16	1.25	195	
7	Elemento di braccio 12 Tramo de flecha 12 – Jib element 12 Auslegerschuss 12 – Element de flèche 12		1	0.43	1.20	1.38	36	
8	Blocco di contrappeso Lastre de contraflecha – Counter jib block Gegengewichtsbalken – Contrepoids		3 5	2.83	0.87	0.23 0.395	1260 2180	
9	Controbraccio Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	6.1	1.23	1.26	935	
10	Controbraccio Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	6.0	1.28	1.26	1150	
11	Gruppo rotazione Plataforma de giro – Slewing platform Drehbühne – Porte-flèche tournant		1	2.7	1.65	1.65	2650	
12	Elemento di torre TS 13/6 Mastil – Tower element Turmschuss – Mats			5.92	1.2	1.38	1710	
13	Elemento di torre TS 12/6 Mastil – Tower element Turmschuss – Mats			5.97	1.6	1.8	2088	
14	Elemento di torre TS 14/6 Mastil – Tower element Turmschuss – Mats			5.97	2.3	2.3	3050	
15	Elemento di torre TS 15/6 Mastil – Tower element Turmschuss – Mats			5.97	2.3	2.3	3500	
16	Adattatore TS AD/02 Adaptador – Adapter Adapter – Adaptateur			5.92	1.6	1.8	2005	
17	Adattatore TS AD/03 Adaptador – Adapter Adapter – Adaptateur			5.97	2.1	2.3	2750	
18	Blocco zavorra di base per TS B/03 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour			3.8	0.38	1.18	4000	
19	Blocco zavorra di base per TS B/04 e TS B/05 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour		TSB/04 TSB/05	5.0 5.7	0.34	1.6	6000 7000	
20	Blocco di appoggio Gatos – Concrete pad Fundament block – Blocs d'appui			3.0 3.2	0.8 1.0	0.74 0.95	4000 7000	
21	Crociera di base (Trave A) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/03 TSB/04 TSB/05 TSB/06	1 1 1 1	5.75 6.75 8.86 11.7	0.35 0.35 0.4 0.45	1.08 1.26 1.6 1.85	1660 2315 4050 6760
	Crociera di base (Trave B) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/03 TSB/04 TSB/05 TSB/06	1 1 1 1	5.75 6.75 8.86 11.7	0.92 0.93 0.99 1.15	0.9 1.1 1.35 1.6	1515 2050 3630 6200
	Opzionale Optional Optional Optionale Option	Braccio ausiliario Plumin de intervencion – Auxiliary arm Hilfsgalgen – Potence d'intervention		1	2.2	0.22	0.72	110
		Argano ausiliario Mecanismo auxiliar – Auxiliary winch Hilfswinde – Treuil auxiliaire		1	0.85	0.9	0.43	170

GRU A TORRE

GHS 150 | 6000



FB F.lli Butti s.r.l.

Via XXV Aprile, 58

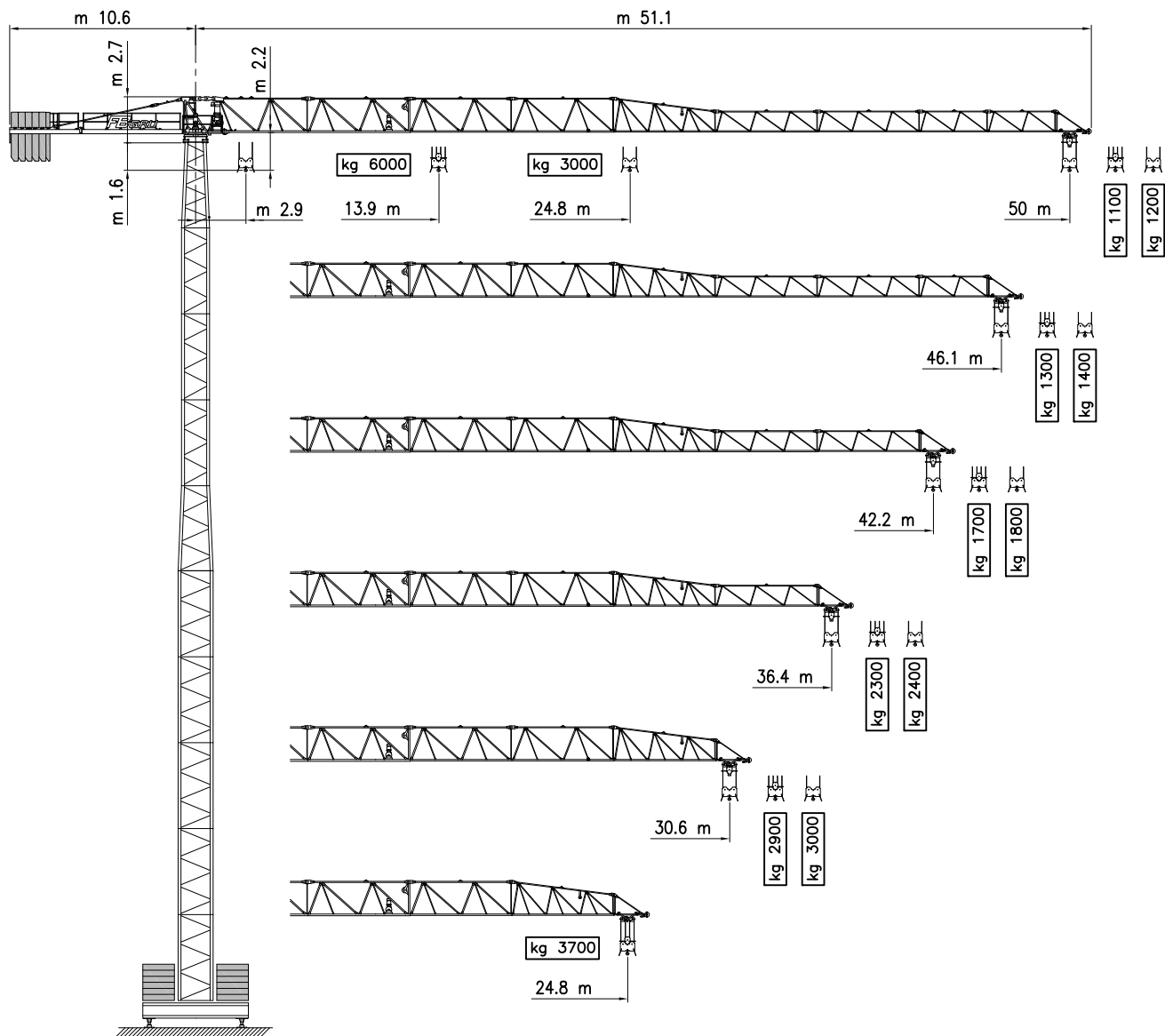
23868 Valmadrera (LC) - Italia

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FEM 1.001 - A4



CURVE DI CARICO

CURVAS DE CARGAS — LOAD DIAGRAMS
LASTKURVEN — COURBES DE CHARGES

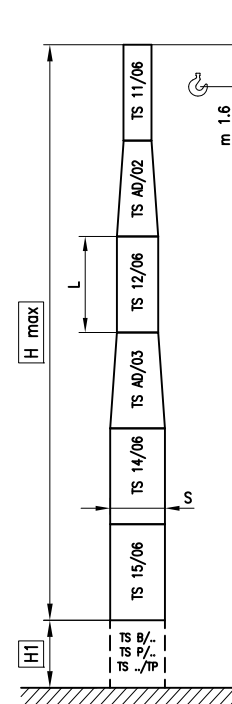
m	13.9	14.4	14.9	16.3	16.4	16.6	18	20	22	24.8	25.8	26.7	27.6	29.2	29.7	30.1	30.6	32	34	36.4	38	40	42.2	44	46.1	47	48	50
kg	6000	5746	5523	4974	4939	4869	4427	3905	3482	3000	2859	2744	2636	2462	2411	2372	2324	2199	2038	1869	1768	1654	1541	1457	1234	1201	1167	1100
											3000	2878	2768	2591	2539	2500	2451	2324	2160	1989	1886	1770	1655	1570	1336	1303	1267	1200
	6000	5763	5193	5156	5084	4624	4083	3642	3148	3000	2870	2758	2577	2524	2484	2434	2304	2137	1961	1857	1738	1620	1533	1300				
										3000	2855	2742	2637	2467	2418	2380	2333	2211	2055	1890	1792	1680	1570	1488	1400			
	6000			5420	5382	5307	4829	4266	3803	3295	3140	3000	2885	2696	2642	2599	2548	2413	2239	2056	1948	1824	1700					
													3000	2805	2750	2707	2665	2519	2344	2160	2050	1925	1800					
	6000				5962	5879	5355	4738	4237	3674	3503	3361	3228	3000	2943	2897	2840	2692	2502	2300								
																3000	2944	2795	2603	2400								
						6000	5463	4835	4324	3751	3577	3432	3297	3077	3000	2957	2900											
																3000												
	6000			5913	5387	4767	4262	3700																				
										3000																		

(0 - 3000 kg)

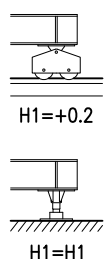
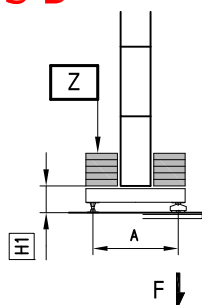

(3001 - 6000 kg)


	TS 11	TS AD/02	TS 12	TS AD/03	TS 14	TS 15	H max (m)
S	m 1.2	m 1.2 → 1.6	m 1.6	m 1.6 → 2.1	m 2.1	m 2.1	
L	m 5.92	m 5.92	m 5.97	m 5.97	m 5.97	m 5.97	
TS B/03	5	1	1				41.49 ■
TS B/04	5	1	2				47.46 ■
TS B/05	4	1	2	1	3		65.42 ■
TS B/06	4	1	2	1	3		65.42 ■
	3	1	2	1	4	2	77.41* ■
TS P/03	5						29.6
TS P/04	5	1					35.52
TS P/05	5	1	2				47.46
TS 11/TP	5						29.6
TS 12/TP	5	1	2				47.46
TS 14/TP	4	1	2	1	3		65.42
TS 15/TP	3	1	2	1	4	2	77.41*

* Senza cabina — Sin cabina — Whitout cabin — Ohne kabine — Sans cabine



TS B

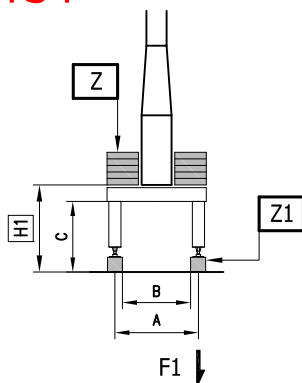


□ TR 02/02
■ TR 02/04

■ AP/02

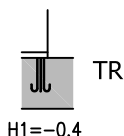
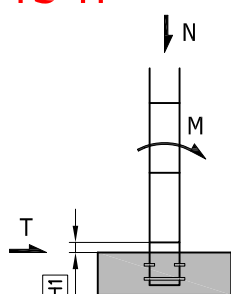
		F (kN)	Z (kg)	A (m)	H1(m)
TS B/03	●	541	72000	3.8x3.8	1
	○	583			
TS B/04	●	559	84000	4.5x4.5	1.2
	○	641			
TS B/05	●	700	126000	6x6	1.4
	○	944			
TS B/06	●	689	126000	8x8	1.6
	○	1033			

TS P



		F1 (kN)	Z (kg)	Z1 (kg)	A (m)	B (m)	C (m)	H1 (m)
TS P/03	●	463	40000	4x4000	3.8x3.8	3	4.55	5.34
	○	433						
TS P/04	●	473	48000	4x4000	4.5x4.5	3.76	4.47	5.5
	○	493						
TS P/05	●	527	70000	4x4000	6x6	5.2	4.53	5.8
	○	630						

TS TP

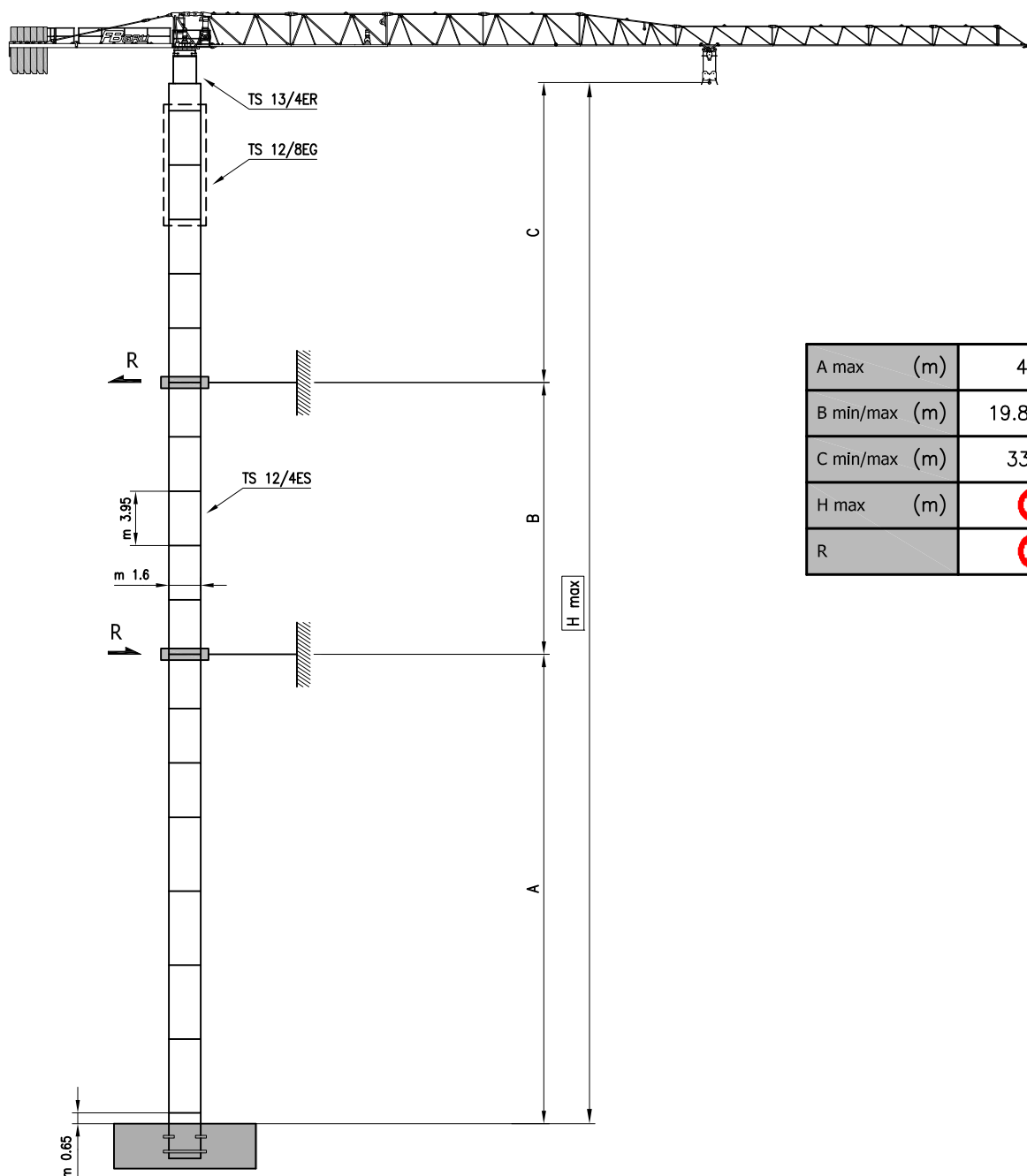


		N (kN)	T (kN)	M (kNm)	H1 (m)
TS 11/TP	●	339	16	1087	0.65
	○	297	50	824	
TS 12/TP	●	402	21	1425	0.65
	○	361	74	2166	
TS 14/TP	●	507	28	1886	0.65
	○	467	111	4227	
TS 15/TP	●	593	34	2292	0.65
	○	552	139	6208	

IN SERVIZIO EN SERVIZIO — IN SERVICE IN BETRIEB — EN SERVICE	●
FUORI SERVIZIO FUERA DE SERVICIO — OUT OF SERVICE AUSSER BETRIEB — HORS SERVICE	○
ZAVORRA di BASE LASTRE DE BASE — CENTRAL BALLAST ZENTRAL BALLASTSTEIN — LEST DE BASE	Z

Solo per Hmax — Sólo para Hmax — Only for Hmax — Nur für Hmax — Seulement pour Hmax

TS 12/4ES



A max (m)	40.5
B min/max (m)	19.8/23.8
C min/max (m)	33/37
H max (m)	i
R	i

i Consultateci — Consultarnos — Consult us — Auf anfrage — Nous consulter

ZAVORRA DI CONTROBRACCIO

LASTRE DE CONTRA FLECHA — COUNTER JIB BALLAST
GEGENAUSLEGERBALLAST — LEST DE CONTRE-FLÈCHE

	BRACCIO (m) FLECHA — JIB AUSLEGER — FLECHE	50	46.1	42.2	36.4	30.6	24.8
	ZAVORRA (kg) LASTRE — BALLAST BALLAST — LEST	12160 (5A + 1B)	10900 (5A)	9980 (4A + 1B)	9980 (4A + 1B)	8720 (4A)	7800 (3A + 1B)

	TIPO TIPO — TYPE ART — TYPE	A	B
	PESO (kg) PESO — WEIGHT GEWICHT — POIDS	2180	1260

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS		 (m)
---	---	---	---	--

		1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg		
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE  INVERTER	400 V 50 Hz	 4	8	30	50	kW 11	AS 11 160 Hmax 36 m
		2500	2500	2500	1300		
		 2	4	15	25		
		5000	5000	5000	2500		
		 5	10	34	60	kW 18	AS 18 160 Hmax 36 m AS 18 HC 280 H max 70 m
		3000	3000	3000	1300		
		 3	5	17	30		
		6000	6000	6000	2600		
		 6	12	38	66	kW 25	AS 25 280 Hmax 70 m AS 25 HC 520 H max 130 m
		3000	3000	3000	1300		
		 3	6	19	33		
		6000	6000	6000	2600		

		1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	4 ^a m/1'		
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION  INVERTER	400 V 50 Hz	10	30	49	62	kW 3	

		1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	4 ^a g/1'		
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION  INVERTER	400 V 50 Hz	0 → 0.08	0.08 → 0.2	0.2 → 0.4	0.4 → 0.96	kW 5.5	

		1 ^a m/1'					
TRASLAZIONE TRASLACIÓN — TRAVELLING SCHIENENFAHREN — TRANSLATION  INVERTER	400 V 50 Hz	0 → 20				kW N° 2 x 4 TR 02/02 N° 4 x 4 TR 02/04	



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise level

Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

Conforme aux directives CEE
sur le niveau acoustique

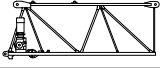
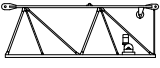
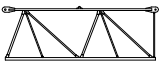
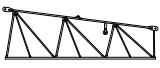
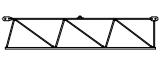
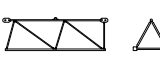
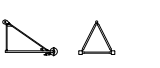
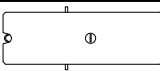
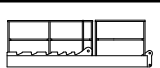
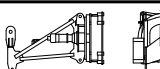
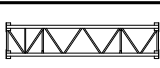
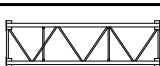
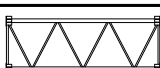
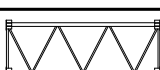
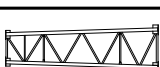
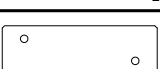
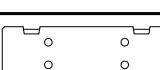
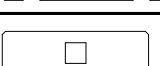
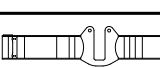
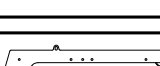
POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER

KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

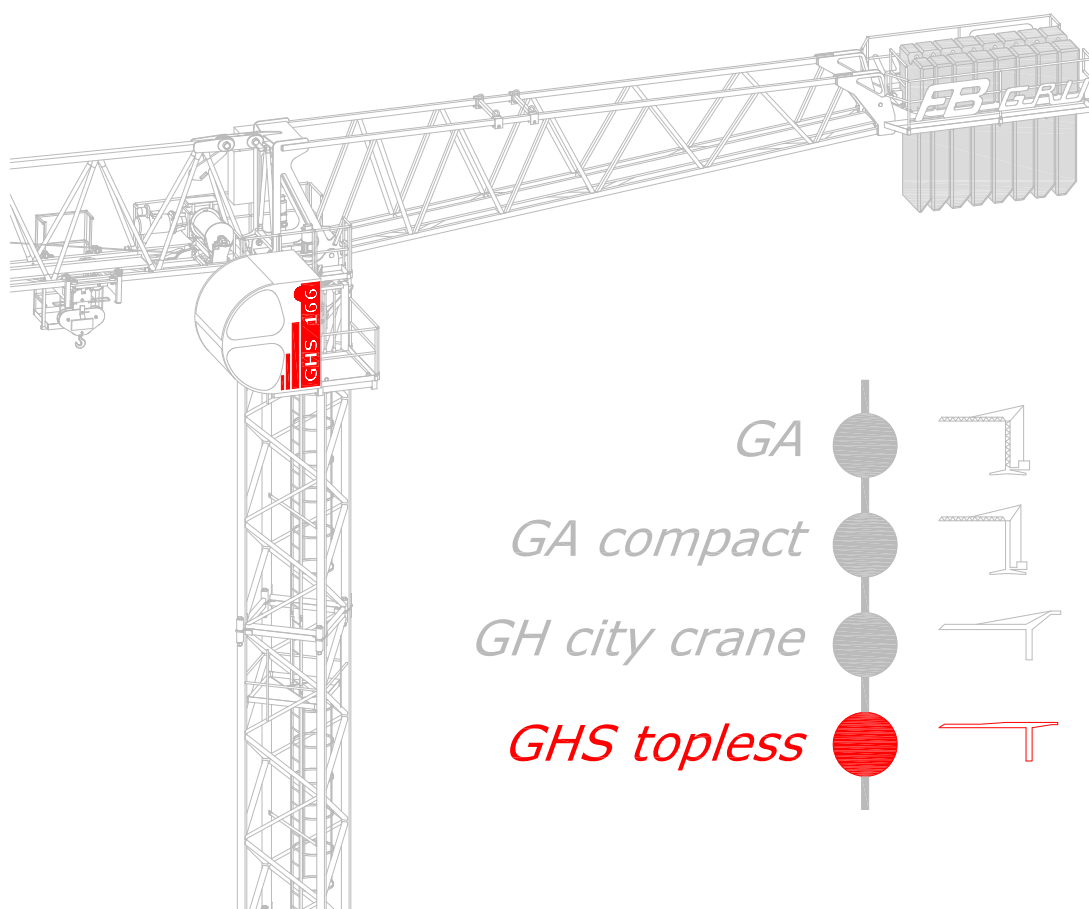
 400 V - 50 Hz	 AS 11 11 kW	 AS 18 AS 18 HC 18 kW	 AS 25 AS 25 HC 25 kW
	28 kVA* (22 kW)	36 kVA* (29 kW)	45 kVA* (36 kW)

* Gru senza traslazione — Grúa sin traslación — Crane without travelling equipment — Krane ohne schienenfahren — Grue sans translation

Pos.	DENOMINAZIONE		Q.tà	L	B	H		
Pos. Item Pos. Rep.	Denominacion Denomination Benennung Dénomination		Cont. Qty. Anz. Qte.	(m)			(kg)	
1	Elemento di braccio 1 Tramo de flecha 1 – Jib element 1 Auslegerschuss 1 – Element de flèche 1		1	6.02	1.16	2.21	1670	
2	Elemento di braccio 2 Tramo de flecha 2 – Jib element 2 Auslegerschuss 2 – Element de flèche 2		1	6.05	1.16	2.05	870	
3	Elementi di braccio 3 - 4 Tramos de flecha 3-4 – Jib elements 3-4 Auslegerschuss 3-4 – Elements de flèche 3-4		1 1	6.02	1.16	2.02 2.01	535 435	
4	Elemento di braccio 5 Tramo de flecha 5 – Jib element 5 Auslegerschuss 5 – Element de flèche 5		1	6.02	1.16	2.01	410	
5	Elementi di braccio 6 - 7 Tramos de flecha 6-7 – Jib elements 6-7 Auslegerschuss 6-7 – Elements de flèche 6-7		1 1	6.02 6.01	1.16	1.26 1.25	350 290	
6	Elemento di braccio 8 - 9 Tramo de flecha 8-9 – Jib element 8-9 Auslegerschuss 8-9 – Element de flèche 8-9		2	4.08	1.16	1.25	195	
7	Elemento di braccio 10 Tramo de flecha 10 – Jib element 10 Auslegerschuss 10 – Element de flèche 10		1	2.1	1.16	1.38	100	
8	Blocco di contrappeso Lastre de contraflecha – Counter jib block Gegengewichtsballast – Contrepoids		1 5	2.83	0.87	0.23 0.395	1260 2180	
9	Controbraccio Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	6.1	1.23	1.21	860	
10	Controbraccio Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	4.15	1.22	1.21	800	
11	Gruppo rotazione Plataforma de giro – Slewing platform Drehbühne – Porte-flèche tournant		1	2.65	1.72	1.71	2430	
12	Elemento di torre TS 11/6 Mastil – Tower element Turmschuss – Mats			5.92	1.2	1.38	1435	
13	Elemento di torre TS 12/6 Mastil – Tower element Turmschuss – Mats			5.97	1.6	1.8	2088	
14	Elemento di torre TS 14/6 Mastil – Tower element Turmschuss – Mats			5.97	2.3	2.3	3050	
15	Elemento di torre TS 15/6 Mastil – Tower element Turmschuss – Mats			5.97	2.3	2.3	3500	
16	Adattatore TS AD/02 Adaptador – Adapter Adapter – Adaptateur			5.92	1.6	1.8	2005	
17	Adattatore TS AD/03 Adaptador – Adapter Adapter – Adaptateur			5.97	2.1	2.3	2750	
18	Blocco zavorra di base per TS B/03 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour			3.8	0.38	1.18	4000	
19	Blocco zavorra di base per TS B/04 e TS B/05 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour		TSB/04 TSB/05	5.0 5.7	0.34	1.6	6000 7000	
20	Blocco di appoggio Gatos – Concrete pad Fundament block – Blocs d'appui			3.0 3.2	0.8 1.0	0.74 0.95	4000 7000	
21	Crociera di base (Trave A) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/03 TSB/04 TSB/05 TSB/06	1 1 1 1	5.75 6.75 8.86 11.7	0.35 0.35 0.4 0.45	1.08 1.26 1.6 1.85	1660 2315 4050 6760
	Crociera di base (Trave B) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/03 TSB/04 TSB/05 TSB/06	1 1 1 1	5.75 6.75 8.86 11.7	0.92 0.93 0.99 1.15	0.9 1.1 1.35 1.6	1515 2050 3630 6200
	Opzionale Optional Optional Option			1	2.2	0.22	0.72	110
	Argano ausiliario Mecanismo auxiliar – Auxiliary winch Hilfswinde – Treuil auxiliaire			1	0.85	0.9	0.43	170

GRU A TORRE

GHS 166 | **8000**



FB F.lli Butti s.r.l.

Via XXV Aprile, 58

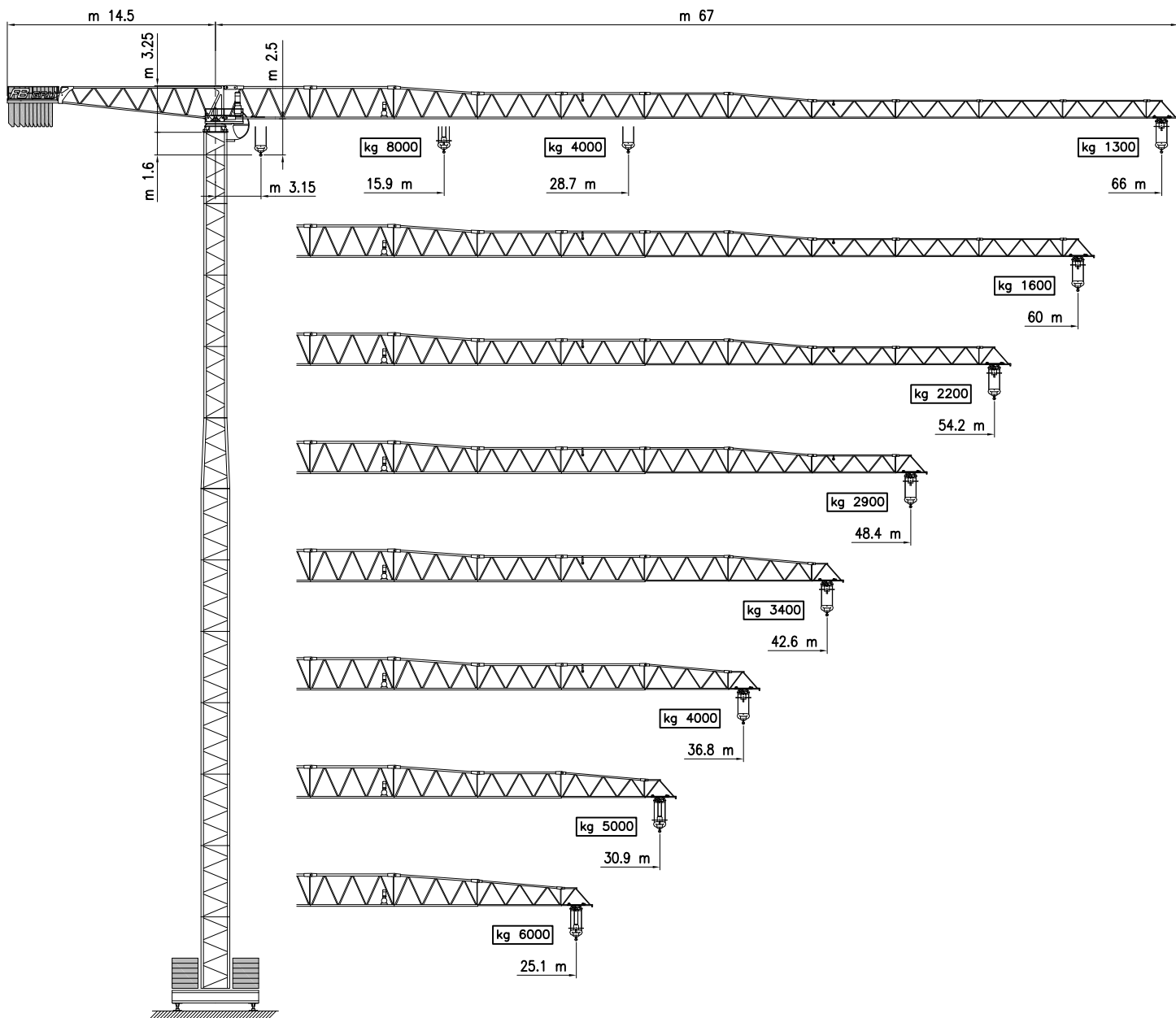
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E-mail : fbgru@fbgru.it - <http://www.fbgru.it>



FEM 1.001 - A4



CURVE DI CARICO

CURVAS DE CARGAS — LOAD DIAGRAMS
LASTKURVEN — COURBES DE CHARGES

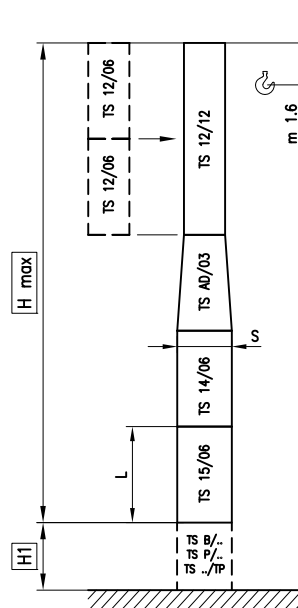
m	15.8	15.9	18.3	19.6	20.3	20.6	23	25.1	28.5	28.7	30.9	33.2	36.8	36.9	37.4	40	42.6	45	48.4	50	52	54.2	56	58	60	62	64	66
kg		8000	6833	6327	6083	5983	5213	4721	4083	4000	3680	3389	3008	2998	2857	2656	2465	2308	2114	2031	1936	1839	1765	1689	1467	1406	1349	1300
	8000	7922	6770	6268	5945	5847	5163	4676	4000	3965	3645	3356	2900	2891	2846	2629	2440	2285	2092	2010	1915	1819	1746	1671	1600			
			8000	7414	7131	7016	6205	5551	4811	4773	4389	4000	3556	3545	3490	3231	2952	2744	2518	2422	2311	2200						
						8000	7069	6417	5495	5452	5018	4628	4117	4105	4000	3703	3446	3236	2900									
							8000	7871	6968	6324	5415	5372	4945	4560	4056	4000	3937	3648	3400									
								8000	7834	6935	6294	5389	5347	4921	4538	4000												
									8000	7044	6394	5475	5432	5000														
											8000	1300	7567	6697	6000													

(0 - 4000 kg)

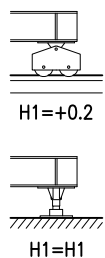
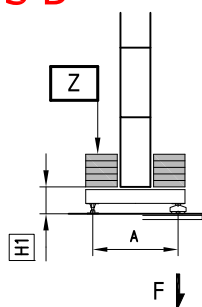
(4001 - 8000 kg)

	TS 12/06	TS AD/03	TS 14	TS 15	H max (m)
S	m 1.6	m 1.6 → 2.1	m 2.1	m 2.1	
L	m 5.97	m 5.97	m 5.97	m 5.97	
TS B/03	6				35.82 ☐ ☒
TS B/04	8				47.76 ☐ ☒
TS B/05	6	1	3	1	65.67 ☒ ☒
TS B/06	6	1	3	1	65.67 ☒ ☒
	4	1	5	2	71.64* ☒
TS P/03	4				23.88
TS P/04	6				35.82
TS P/05	8				47.76
TS 12/TP	8				47.76
TS 14/TP	6	1	3		59.7
TS 15/TP	4	1	5	2	71.64*

* **Senza cabina** — Sin cabina — Without cabin — Ohne kabine — Sans cabine



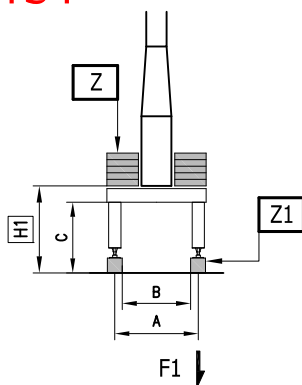
TS B



- ☐ TR 02/02
- ☒ TR 02/04
- ☒ AP/02

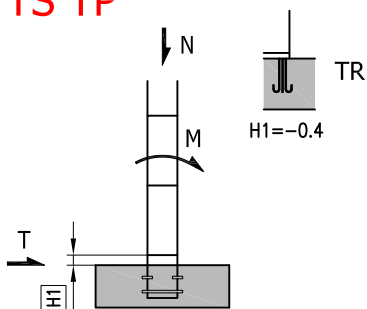
		F (kN)	Z (kg)	A (m)	H1(m)
TS B/03	•	714	80000	3.8x3.8	1
	○	600			
TS B/04	•	721	84000	4.5x4.5	1.2
	○	786			
TS B/05	•	882	140000	6x6	1.4
	○	1112			
TS B/06	•	785	126000	8x8	1.6
	○	1027			

TS P



		F1 (kN)	Z (kg)	Z1 (kg)	A (m)	B (m)	C (m)	H1 (m)
TS P/03	•	635	56000	4x4000	3.8x3.8	3	4.55	5.34
	○	493						
TS P/04	•	652	60000	4x4000	4.5x4.5	3.76	4.47	5.5
	○	624						
TS P/05	•	694	84000	4x4000	6x6	5.2	4.53	5.8
	○	768						

TS TP

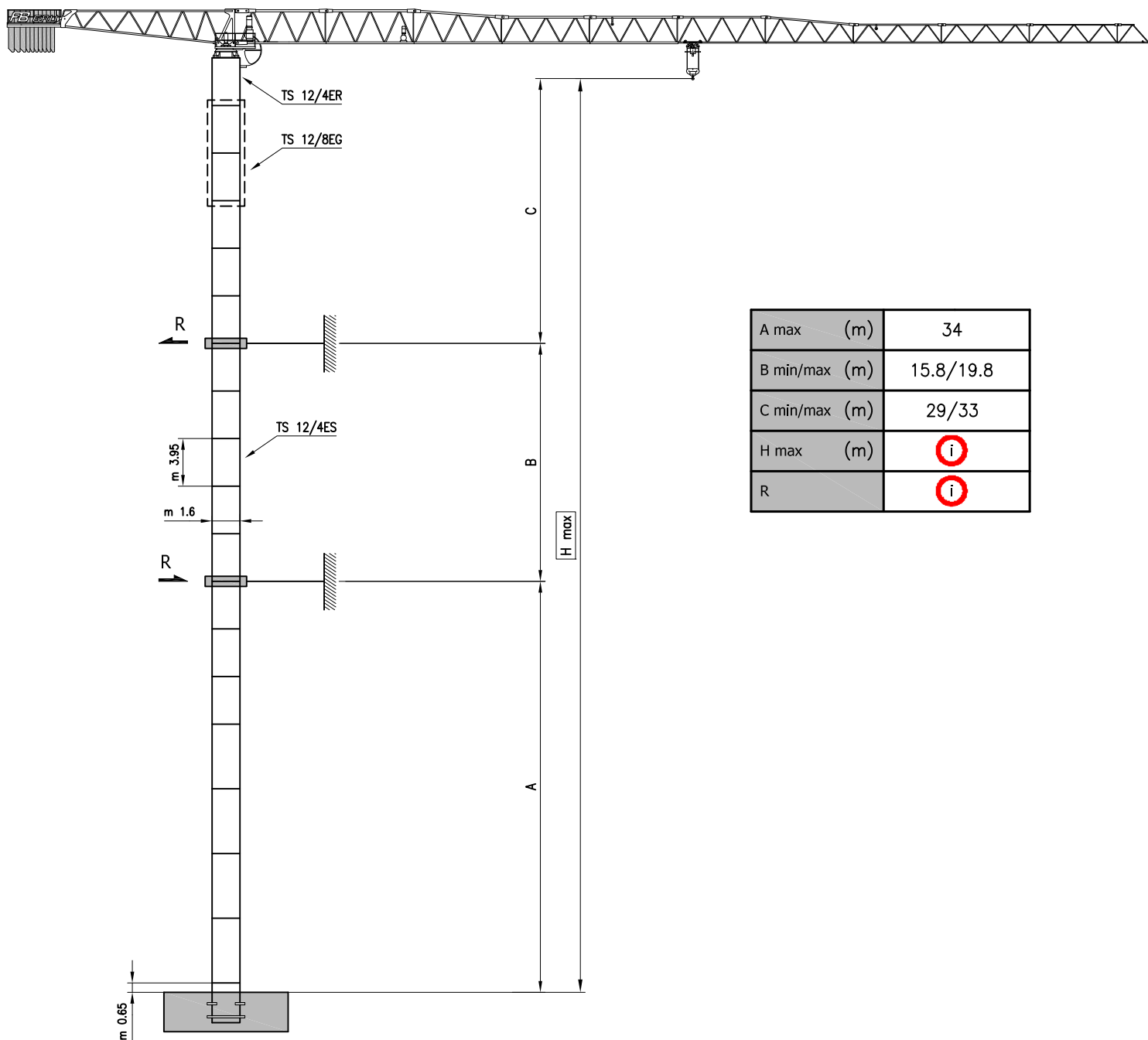


		N (kN)	T (kN)	M (kNm)	H1 (m)
TS 12/TP	•	609	26	2074	0.65
	○	524	85	2651	
TS 14/TP	•	685	31	2429	0.65
	○	600	112	4120	
TS 15/TP	•	771	37	2879	0.65
	○	686	142	6162	

IN SERVIZIO EN SERVIZIO — IN SERVICE IN BETRIEB — EN SERVICE	☒
FUORI SERVIZIO FUERA DE SERVIZIO — OUT OF SERVICE AUSSER BETRIEB — HORS SERVICE	☐
ZAVORRA di BASE LASTRE DE BASE — CENTRAL BALLAST ZENTRAL BALLASTSTEIN — LEST DE BASE	Z

Solo per Hmax — Sólo para Hmax — Only for Hmax — Nur für Hmax — Seulement pour Hmax

TS 12/4ES



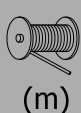
i Consultateci — Consultarnos — Consult us — Auf anfrage — Nous consulter

ZAVORRA DI CONTROBRACCIO

LASTRE DE CONTRA FLECHA — COUNTER JIB BALLAST
GEGENAUSLERBALLAST — LEST DE CONTRE-FLÈCHE

	BRACCIO (m) FLECHA — JIB AUSLEGER — FLECHE	66	60	54.2	48.4	42.6	36.8	30.9	25.1
	ZAVORRA (kg) LASTRE — BALLAST BALLAST — LEST	17360 (6A+1B+1C)	17360 (6A+1B+1C)	15860 (6A+1B)	15860 (6A+1B)	15050 (5A+1B+1C)	13050 (5A+1C)	11240 (4A+1B)	9240 (4A)

	TIPO TIPO — TYPE ART — TYPE	A	B	C
	PESO (kg) PESO — WEIGHT GEWICHT — POIDS	2310	2000	1500

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS		 (m)
---	---	---	---	--

			1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg		
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE  INVERTER	400 V 50 Hz		5	12	32	72	kW 25	AS 25 280 Hmax 70 m AS 25 HC 520 H max 130 m
			4000	4000	3000	1500		
			3	6	16	36		
			8000	8000	6000	3000		

			1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	4 ^a m/1'	
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION  INVERTER	400 V 50 Hz		12	29	49	77	kW 4

			1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	4 ^a g/1'	
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION  INVERTER	400 V 50 Hz		0 → 0.07	0.07 → 0.19	0.19 → 0.37	0.37 → 0.8	kW N° 2 x 4

			1 ^a m/1'	
TRASLAZIONE TRASLACIÓN — TRAVELLING SCHIENENFAHREN — TRANSLATION  INVERTER	400 V 50 Hz		0 → 20	kW N° 2 x 4 TR 02/02

			1 ^a m/1'	
TRASLAZIONE TRASLACIÓN — TRAVELLING SCHIENENFAHREN — TRANSLATION  INVERTER	400 V 50 Hz		0 → 20	kW N° 4 x 4 TR 02/04



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

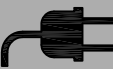
In compliance with the EEC
instructions on noise level

Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

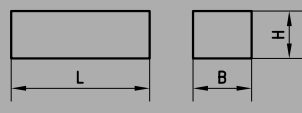
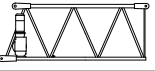
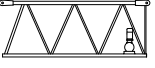
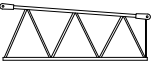
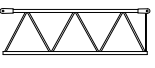
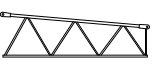
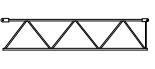
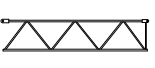
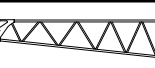
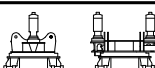
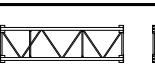
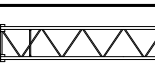
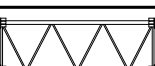
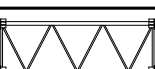
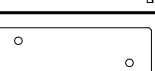
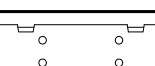
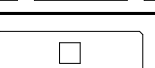
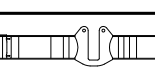
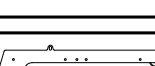
Conforme aux directives CEE
sur le niveau acoustique

POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER
KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

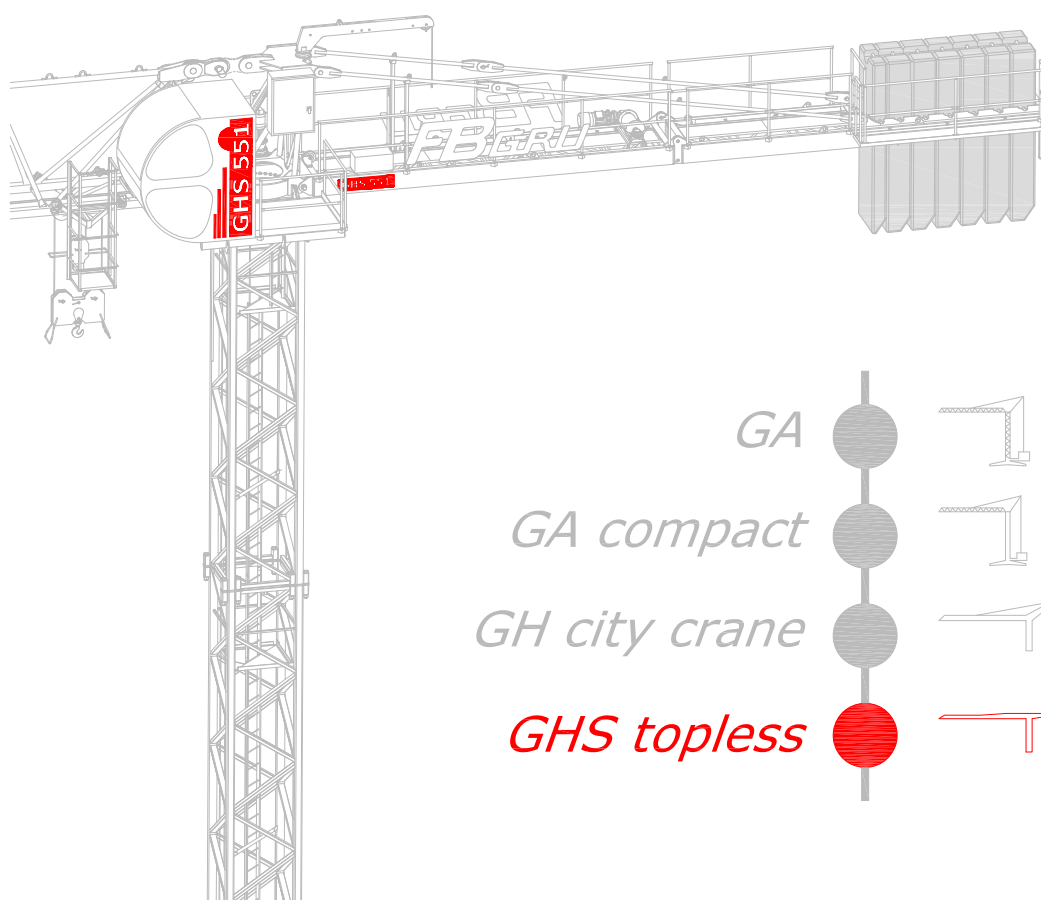
 400 V - 50 Hz	  AS 25 AS 25 HC 25 kW
	45 kVA* (37 kW)

* Gru senza traslazione — Grúa sin traslación — Crane without travelling equipment — Krane ohne schienenfahren — Grue sans translation

Pos.	DENOMINAZIONE		Q.ta	L	B	H		
Pos. Item	Denominacion		Cont.					
Pos. Rep.	Benennung		Anz.	(m)			(kg)	
Rep.	Dénomination		Qte.					
1	Elemento di braccio 1 Tramo de flecha 1 – Jib element 1 Auslegerschuss 1 – Element de flèche 1		1	6.06	1.21	2.35	2755	
2	Elemento di braccio 2 Tramo de flecha 2 – Jib element 2 Auslegerschuss 2 – Element de flèche 2		1	6.05	1.17	2.3	1440	
3	Elemento di braccio 3 Tramo de flecha 3 – Jib element 3 Auslegerschuss 3 – Element de flèche 3		1	6.10	1.17	2.3	1035	
4	Elementi di braccio 4 - 5 - 6 Tramos de flecha 4-5-6 – Jib elements 4-5-6 Auslegerschuss 4-5-6 – Elements de flèche 4-5-6		1 1 1	6.05	1.17	1.86	925 790 730	
5	Elemento di braccio 7 Tramo de flecha 7 – Jib element 7 Auslegerschuss 7 – Element de flèche 7		1	6.04	1.17	1.86	550	
6	Elementi di braccio 8 - 9 Tramos de flecha 8-9 – Jib elements 8-9 Auslegerschuss 8-9 – Elements de flèche 8-9		1 1	6.01 6	1.17	1.3 1.29	510 415	
7	Elementi di braccio 10 - 11 Tramos de flecha 10-11 – Jib elements 10-11 Auslegerschuss 10-11 – Elements de flèche 10-11		2	6	1.17	1.29	340	
8	Elemento di braccio 12 Tramo de flecha 12 – Jib element 12 Auslegerschuss 12 – Element de flèche 12		1	2.25	1.17	1.29	170	
9	Blocco di contrappeso Lastre de contraflecha – Counter jib block Gegengewichtsballast – Contrepoids		6 1 1	2.8	1.2	0.38 0.33 0.25	2310 2000 1500	
10	Controbraccio Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	11.9	1.44	2.35	3355	
11	Telaio zavorra controbraccio Soporte lastre contraflecha – Pod mounting for counter jib block Podest gegengewichtsballast – Châssis de contrepoids		1	3.9	2.3	1.15	1160	
12	Gruppo rotazione Plataforma de giro – Slewing platform Drehbühne – Porte-flèche tournant		1	1.9	2.25	1.6	2895	
13	Elemento di torre TS 12/6 Mastil – Tower element Turmschuss – Mats			5.97	1.6	1.8	2088	
14	Elemento di torre TS 12/12 Mastil – Tower element Turmschuss – Mats			11.91	1.6	1.8	3950	
15	Elemento di torre TS 14/6 Mastil – Tower element Turmschuss – Mats			5.97	2.3	2.3	3050	
16	Elemento di torre TS 15/6 Mastil – Tower element Turmschuss – Mats			5.97	2.3	2.3	3500	
17	Adattatore TS AD/03 Adaptador – Adapter Adapter – Adaptateur			5.97	2.1	2.3	2750	
18	Blocco zavorra di base per TS B/03 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour			3.8	0.38	1.18	4000	
19	Blocco zavorra di base per TS B/04 e TS B/05 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour		TSB/04 TSB/05	5.0 5.7	0.34	1.6	6000 7000	
20	Blocco di appoggio Gatos – Concrete pad Fundament block – Blocs d'appui		4	3.0	0.8	0.74	4000	
21	Crociera di base (Trave A) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/03 TSB/04 TSB/05 TSB/06	5.75 6.75 8.86 11.7	0.35 0.35 0.4 0.45	1.08 1.26 1.6 1.85	1660 2315 4050 6760	
	Crociera di base (Trave B) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/03 TSB/04 TSB/05 TSB/06	5.75 6.75 8.86 11.7	0.92 0.93 0.99 1.15	0.9 1.1 1.35 1.6	1515 2050 3630 6200	
	Opzionale Opcional Optional Optionale Option	Braccio ausiliario Plumin de intervencion – Auxiliary arm Hilfsgalgen – Potence d'intervention		1	2.2	0.22	0.72	110
		Argano ausiliario Mecanismo auxiliar – Auxiliary winch Hilfswinde – Treuil auxiliaire		1	0.85	0.9	0.43	170

GRU A TORRE

GHS 551 | 6000



FB F.lli Butti s.r.l.

Via XXV Aprile, 58

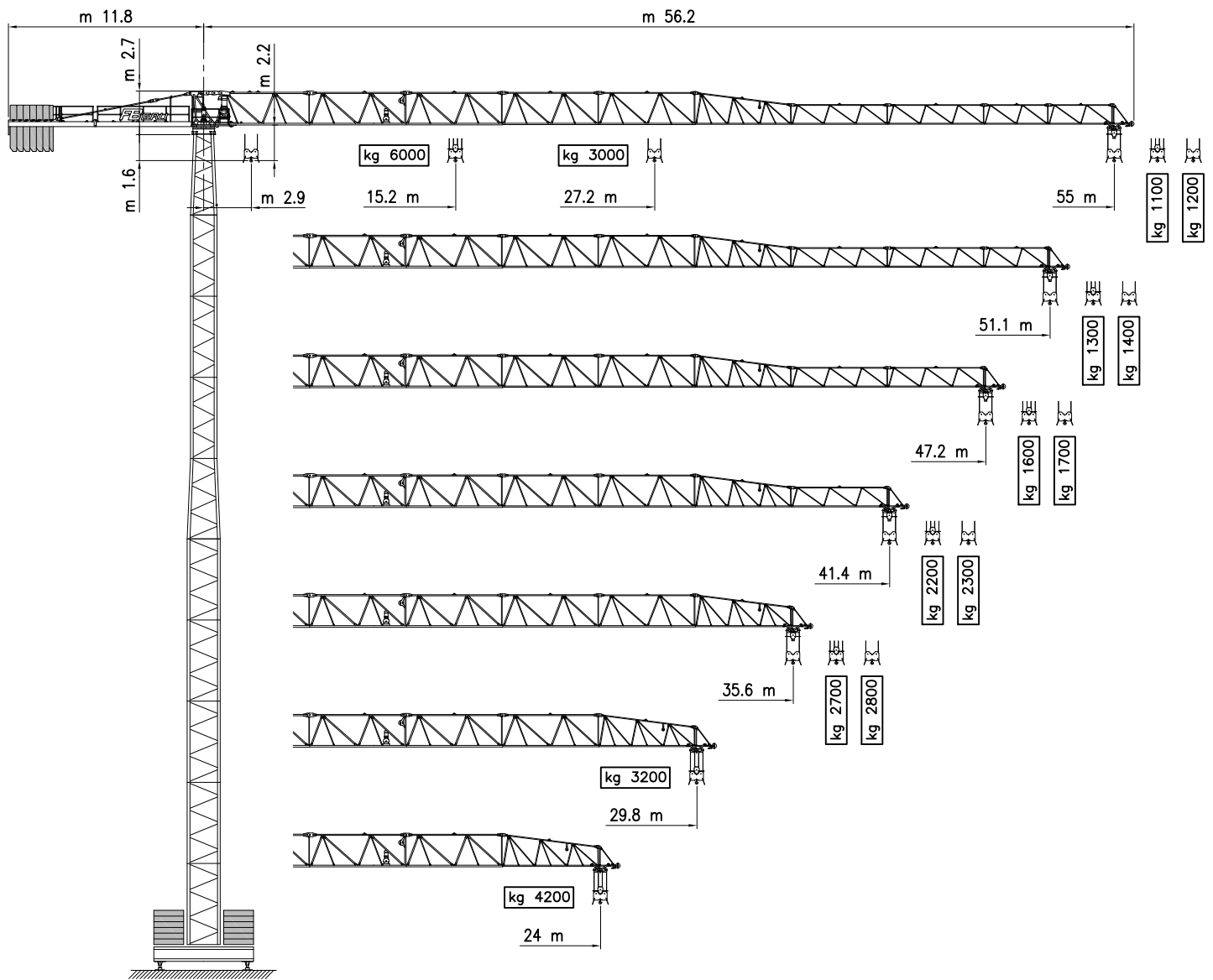
23868 Valmadrera (LC) - Italia

Tel. 0341.581108 - Fax 0341.200253

E-mail : fbgru@fbgru.it - <http://www.fbgru.it>

CE

FEM 1.001 - A4



CURVE DI CARICO

CURVAS DE CARGAS — LOAD DIAGRAMS
LASTKURVEN — COURBES DE CHARGES

m	15.2	15.9	17.5	17.9	18.1	20	22	24	27.2	27.4	28.3	28.5	29.4	29.8	32	32.6	33	33.5	34	35.6	37	39	41.4	44	47.2	51.1	53	55	
kg	6000	5703	5103	4971	4907	4364	3898	3511	3000	2978	2865	2841	2738	2693	2471	2415	2379	2336	2294	2167	2065	1932	1790	1653	1507	1221	1160	1100	
											3000	2977	2871	2826	2600	2544	2507	2463	2420	2291	2187	2052	1453	1769	1620	1464	1261	1200	
	6000	5374	5235	5168	4600	4112	3706	3185	3156	3033	3000	2890	2843	2610	2552	2515	2469	2425	2292	2185	2046	1897	1754	1601	1300				
											3000	2886	2863	2760	2717	2498	2444	2409	2366	2325	2200	2100	1969	1830	1696	1552	1400		
	6000	5377	5238	5171	4603	4114	3709	3187	3158	3035	3000	2892	2845	2612	2554	2516	2471	2427	2293	2187	2047	1898	1756	1600					
													3000	2957	2721	2663	2625	2579	2534	2400	2292	2151	2001	1857	1700				
				6000	5908	5268	4717	4260	3672	3640	3501	3471	3343	3289	3000	2946	2898	2846	2797	2646	2526	2369	2200						
																			3000	2951	2901	2750	2628	2470	2300				
						6000	5369	4806	4344	3745	3713	3572	3541	3411	3356	3077	3000	2956	2903	2853	2700								
																					3000	2953	2800						
			6000	5830	5756	5130	4592	4146	3571	3540	3264	3376	3251	3200															
															3000														
			6000	5892	5817	5186	4642	4200																					
								3000																					

(0 - 3000 kg)

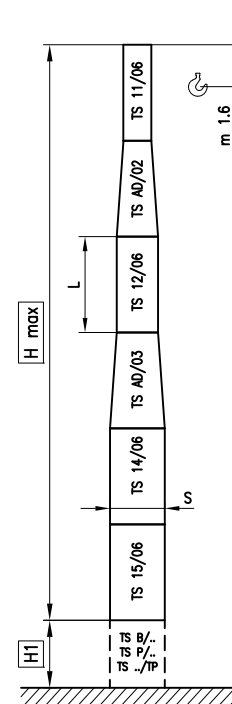


(3001 - 6000 kg)

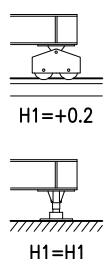
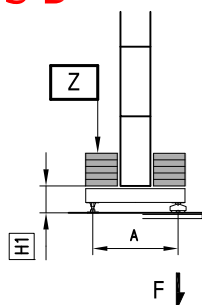


	TS 11	TS AD/02	TS 12	TS AD/03	TS 14	TS 15	H max (m)
S	m 1.2	m 1.2 → 1.6	m 1.6	m 1.6 → 2.1	m 2.1	m 2.1	
L	m 5.92	m 5.92	m 5.97	m 5.97	m 5.97	m 5.97	
TS B/03	4	1	2				41.54 ■
TS B/04	4	1	3				47.51 ■
TS B/05	4	1	2	1	3		65.42 ■
TS B/06	4	1	2	1	3		65.42 ■
	2	1	2	1	5	2	77.46* ■
TS P/03	4	1					29.6
TS P/04	4	1	1				35.57
TS P/05	4	1	3				47.51
TS 11/TP	4						23.68
TS 12/TP	4	1	3				47.51
TS 14/TP	4	1	2	1	3		65.42
TS 15/TP	2	1	2	1	5	2	77.46*

* *Senza cabina* — Sin cabina — Whitout cabin — Ohne kabine — Sans cabine



TS B

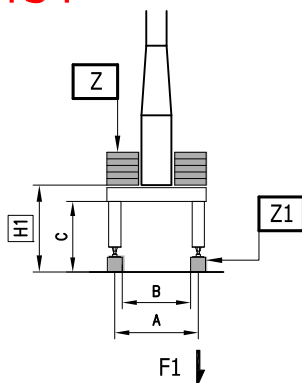


□ TR 02/02
■ TR 02/04

■ AP/02

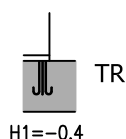
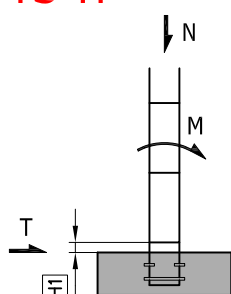
		F (kN)	Z (kg)	A (m)	H1(m)
TS B/03	●	560	72000	3.8x3.8	1
	○	572			
TS B/04	●	578	84000	4.5x4.5	1.2
	○	635			
TS B/05	●	715	126000	6x6	1.4
	○	935			
TS B/06	●	710	126000	8x8	1.6
	○	1066			

TS P



		F1 (kN)	Z (kg)	Z1 (kg)	A (m)	B (m)	C (m)	H1 (m)
TS P/03	●	479	40000	4x4000	3.8x3.8	3	4.55	5.34
	○	434						
TS P/04	●	490	48000	4x4000	4.5x4.5	3.76	4.47	5.5
	○	499						
TS P/05	●	544	70000	4x4000	6x6	5.2	4.53	5.8
	○	639						

TS TP



		N (kN)	T (kN)	M (kNm)	H1 (m)
TS 11/TP	●	317	44	436	0.65
	○	370	15	1008	
TS 12/TP	●	455	21	1450	0.65
	○	403	76	2149	
TS 14/TP	●	552	28	1907	0.65
	○	501	111	4189	
TS 15/TP	●	654	35	2361	0.65
	○	602	145	6414	

IN SERVIZIO

EN SERVICIO — IN SERVICE
IN BETRIEB — EN SERVICE

FUORI SERVIZIO

FUERA DE SERVICIO — OUT OF SERVICE
AUSSER BETRIEB — HORS SERVICE

ZAVORRA di BASE

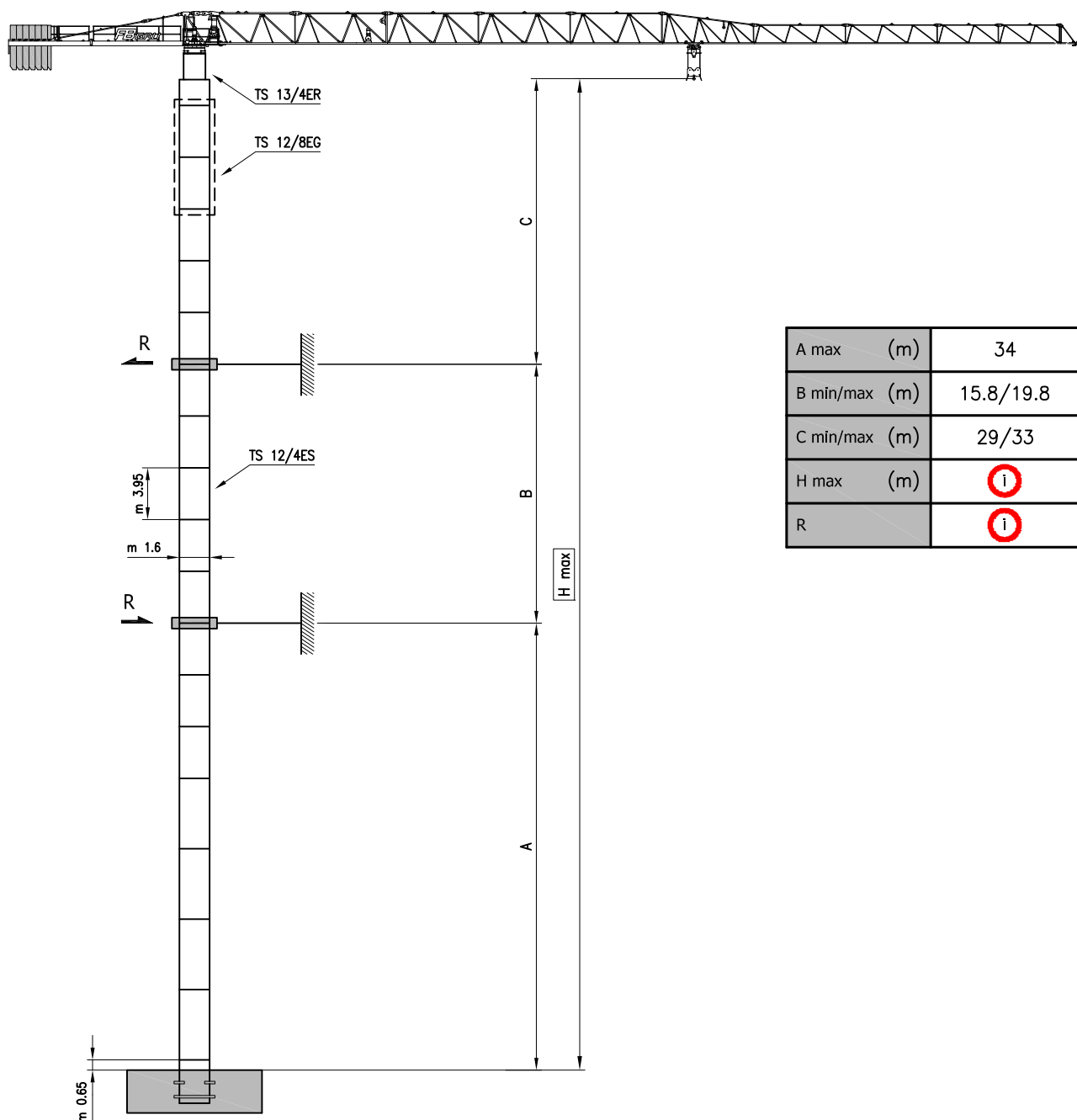
LASTRE DE BASE — CENTRAL BALLAST
ZENTRAL BALLASTSTEIN — LEST DE BASE



Z

Solo per Hmax — Sólo para Hmax — Only for Hmax — Nur für Hmax — Seulement pour Hmax

TS 12/4ES



i Consultateci — Consultarnos — Consult us — Auf anfrage — Nous consulter

ZAVORRA DI CONTROBRACCIO

LASTRE DE CONTRA FLECHA — COUNTER JIB BALLAST
GEGENAUSLERBALLAST — LEST DE CONTRE-FLÈCHE

	BRACCIO (m) FLECHA — JIB AUSLEGER — FLECHE	55	51.1	47.2	41.4	35.6	29.8	24
	ZAVORRA (kg) LASTRE — BALLAST BALLAST — LEST	14340 (6A + 1B)	13080 (6A)	12160 (5A + 1B)	12160 (5A + 1B)	10900 (5A)	7800 (3A + 1B)	5620 (2A + 1B)

	TIPO TIPO — TYPE ART — TYPE	A	B
	PESO (kg) PESO — WEIGHT GEWICHT — POIDS	2180	1260

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS		 (m)
---	---	---	---	--

		1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg		
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE  INVERTER	400 V 50 Hz	 4	8	30	50	kW 11	AS 11 160 Hmax 36 m
		2500	2500	2500	1300		
		 2	4	15	25		
		5000	5000	5000	2500		
		 5	10	34	60	kW 18	AS 18 160 Hmax 36 m AS 18 HC 280 H max 70 m
		3000	3000	3000	1300		
		 3	5	17	30		
		6000	6000	6000	2600		
		 6	12	38	66	kW 25	AS 25 280 Hmax 70 m AS 25 HC 520 H max 130 m
		3000	3000	3000	1300		
		 3	6	19	33		
		6000	6000	6000	2600		

		1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	4 ^a m/1'		
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION  INVERTER	400 V 50 Hz	10	30	49	62	kW 3	

		1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	4 ^a g/1'		
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION  INVERTER	400 V 50 Hz	0 → 0.08	0.08 → 0.2	0.2 → 0.4	0.4 → 0.96	kW 9	

		1 ^a m/1'					
TRASLAZIONE TRASLACIÓN — TRAVELLING SCHIENENFAHREN — TRANSLATION  INVERTER	400 V 50 Hz	0 → 20				kW N° 2 x 4 TR 02/02 N° 4 x 4 TR 02/04	



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise level

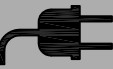
Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

Conforme aux directives CEE
sur le niveau acoustique

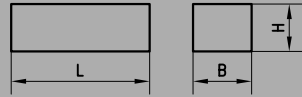
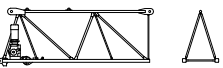
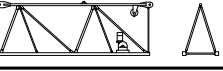
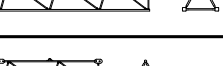
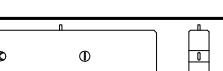
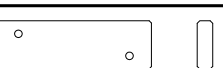
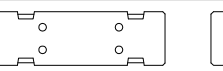
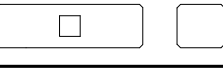
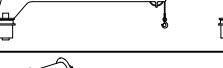
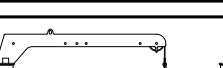
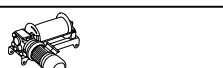
POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER

KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

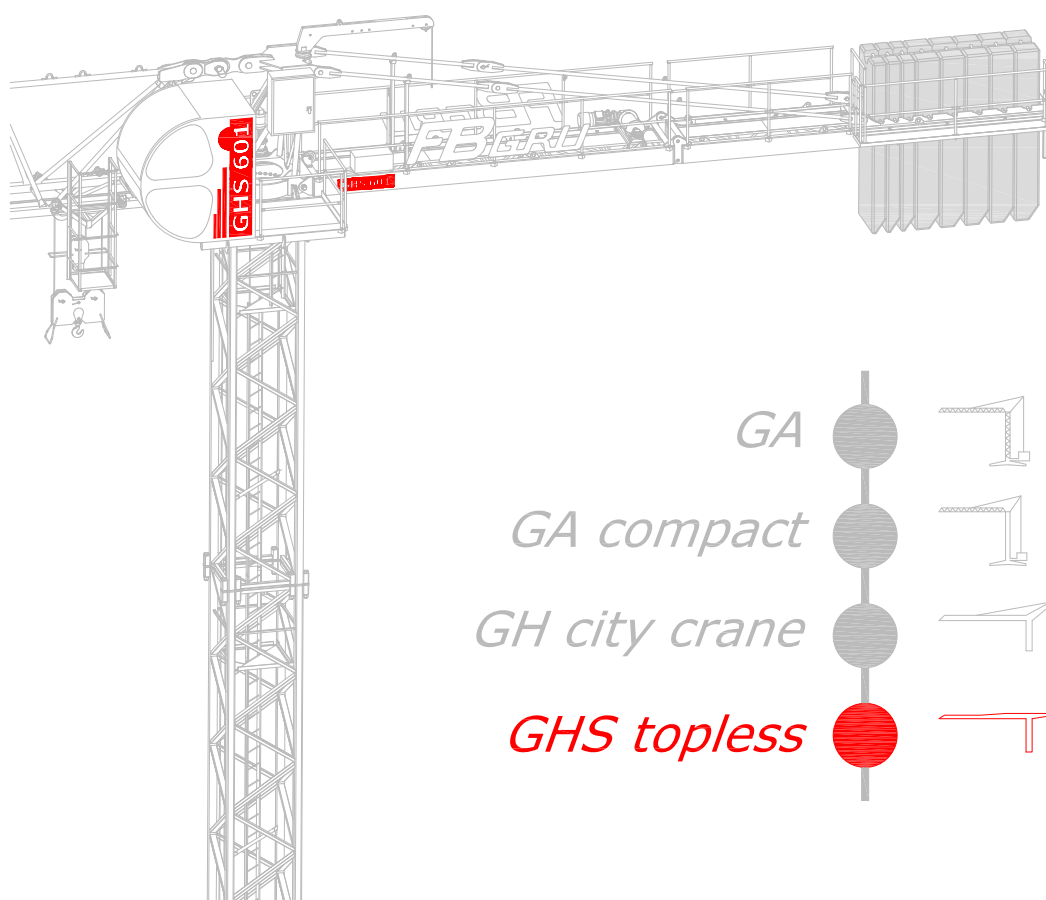
 400 V - 50 Hz	  AS 11 11 kW	  AS 18 AS 18 HC 18 kW	  AS 25 AS 25 HC 25 kW
	28 kVA* (22 kW)	36 kVA* (29 kW)	45 kVA* (36 kW)

* Gru senza traslazione — Grúa sin traslación — Crane without travelling equipment — Krane ohne schienenfahren — Grue sans translation

Pos.	DENOMINAZIONE		Q.tà	L	B	H		
Pos. Item Pos. Rep.	Denominacion Denomination Benennung Dénomination		Cont. Qty. Anz. Qte.	(m)			(kg)	
1	Elemento di braccio 1 Tramo de flecha 1 – Jib element 1 Auslegerschuss 1 – Element de flèche 1		1	6.04	1.16	2.25	1800	
2	Elemento di braccio 2 Tramo de flecha 2 – Jib element 2 Auslegerschuss 2 – Element de flèche 2		1	6.08	1.16	2.07	945	
3	Elementi di braccio 3 - 4 - 5 Tramos de flecha 3-4-5 – Jib elements 3-4-5 Auslegerschuss 3-4-5 – Elements de flèche 3-4-5		1 1 1	6.03 6.02 6.02	1.16	2.04 2.02 2.01	640 535 435	
4	Elemento di braccio 6 Tramo de flecha 6 – Jib element 6 Auslegerschuss 6 – Element de flèche 6		1	6.02	1.16	2.01	410	
5	Elementi di braccio 7 - 8 Tramos de flecha 7-8 – Jib elements 7-8 Auslegerschuss 7-8 – Elements de flèche 7-8		1 1	6.02 6.01	1.16	1.26 1.25	350 290	
6	Elemento di braccio 9 - 10 Tramo de flecha 9-10 – Jib element 9-10 Auslegerschuss 9-10 – Element de flèche 9-10		2	4.08	1.16	1.25	195	
7	Elemento di braccio 11 Tramo de flecha 11 – Jib element 11 Auslegerschuss 11 – Element de flèche 11		1	1.35	1.16	1.38	75	
8	Blocco di contrappeso Lastre de contraflecha – Counter jib block Gegengewichtsbalkast – Contrepoids		1 6	2.83	0.87	0.23 0.395	1260 2180	
9	Controbraccio Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	6.1	1.23	1.26	990	
10	Controbraccio Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	5.3	1.22	1.26	1070	
11	Gruppo rotazione Plataforma de giro – Slewing platform Drehbühne – Porte-flèche tournant		1	2.7	1.72	1.71	2480	
12	Elemento di torre TS 11/6 Mastil – Tower element Turmschuss – Mats			5.92	1.2	1.38	1435	
13	Elemento di torre TS 12/6 Mastil – Tower element Turmschuss – Mats			5.97	1.6	1.8	2088	
14	Elemento di torre TS 14/6 Mastil – Tower element Turmschuss – Mats			5.97	2.3	2.3	3050	
15	Elemento di torre TS 15/6 Mastil – Tower element Turmschuss – Mats			5.97	2.3	2.3	3500	
16	Adattatore TS AD/02 Adaptador – Adapter Adapter – Adaptateur			5.92	1.6	1.8	2005	
17	Adattatore TS AD/03 Adaptador – Adapter Adapter – Adaptateur			5.97	2.1	2.3	2750	
18	Blocco zavorra di base per TS B/03 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour			3.8	0.38	1.18	4000	
19	Blocco zavorra di base per TS B/04 e TS B/05 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour		TSB/04 TSB/05	5.0 5.7	0.34	1.6	6000 7000	
20	Blocco di appoggio Gatos – Concrete pad Fundament block – Blocs d'appui			3.0 3.2	0.8 1.0	0.74 0.95	4000 7000	
21	Crociera di base (Trave A) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/03 TSB/04 TSB/05 TSB/06	1 1 1 1	5.75 6.75 8.86 11.7	0.35 0.35 0.4 0.45	1.08 1.26 1.6 1.85	1660 2315 4050 6760
	Crociera di base (Trave B) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/03 TSB/04 TSB/05 TSB/06	1 1 1 1	5.75 6.75 8.86 11.7	0.92 0.93 0.99 1.15	0.9 1.1 1.35 1.6	1515 2050 3630 6200
	Opzionale Optional Optional Optionale Option	Braccio ausiliario Plumin de intervencion – Auxiliary arm Hilfsgalgen – Potence d'intervention		1	2.2	0.22	0.72	110
		Argano ausiliario Mecanismo auxiliar – Auxiliary winch Hilfswinde – Treuil auxiliaire		1	0.85	0.9	0.43	170

GRU A TORRE

GHS 601 | **6000**



FB F.lli Butti s.r.l.

Via XXV Aprile, 58

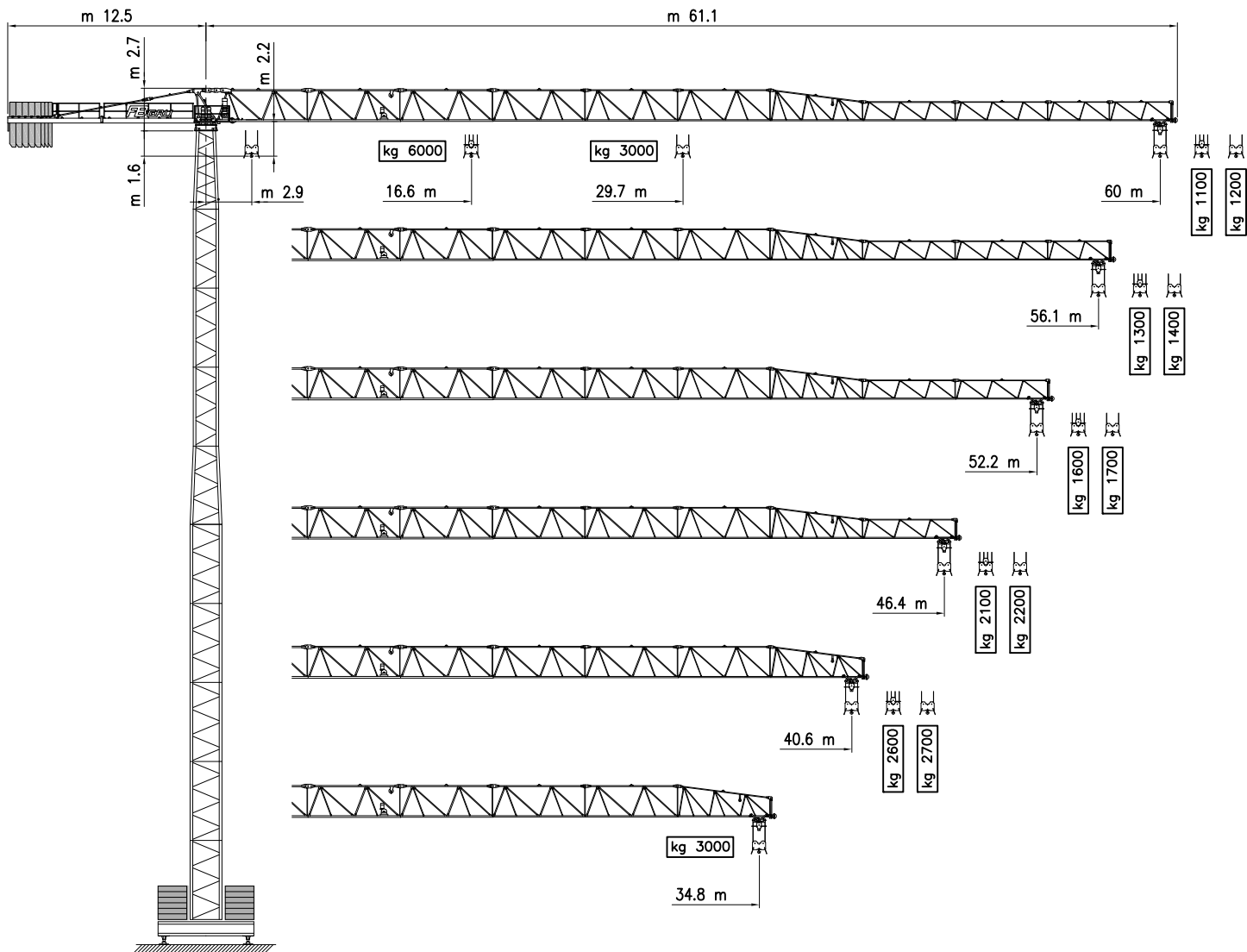
23868 Valmadrera (LC) - Italia

Tel. 0341.581108 - Fax 0341.200253

E-mail : fbgru@fbgru.it - <http://www.fbgru.it>

CE

FEM 1.001 - A4



CURVE DI CARICO

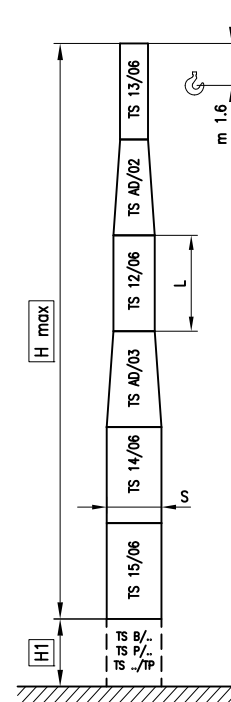
CURVAS DE CARGAS — LOAD DIAGRAMS
LASTKURVEN — COURBES DE CHARGES

m	16.6	17.4	17.6	19.4	20	23	26	29.7	30	30.9	31.2	31.5	32	32.5	34.8	36	37	38	40.6	43	46.4	48	50	52.2	54	56.1	58	60
kg	6000	5667	5593	4998	4823	4093	3535	3000	2962	2860	2827	2795	2742	2692	2478	2378	2299	2225	2048	1905	1728	1653	1566	1479	1276	1210	1155	1100
										3000	2962	2929	2876	2825	2607	2505	2425	2350	2171	2025	1845	1769	1681	1592	1525	1452	1255	1200
	6000	5927	5299	5116	4346	3759	3201	3162	3049	3000	2970	2915	2862	2637	2531	2448	2370	2184	2033	1846	1768	1676	1584	1369	1300			
								3000	2900	2868	2836	2785	2735	2524	2424	2347	2273	2099	1957	1782	1708	1623	1536	1471	1400			
	6000	5344	5160	4384	3792	3230	3191	3077	3041	3000	2941	2888	2661	2554	2471	2392	2205	2052	1864	1785	1693	1600						
														3000	2770	2663	2579	2499	2310	2157	1966	1886	1794	1700				
					6000	4888	4236	3618	3574	3449	3409	3370	3307	3245	2984	3000	2768	2681	2475	2307	2100							
																	3000	2785	2578	2409	2200							
					6000	5121	4442	3797	3752	3622	3580	3539	3473	3409	3137	3000	2905	2814	2600									
																	3000	2916	2700									
					6000	5784	4925	4269	3646	3602	3471	3437	3397	3333	3271	3000												
															3000													

(0 - 3000 kg)

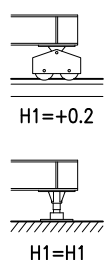
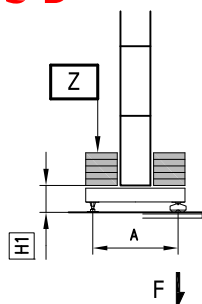
(3001 - 6000 kg)

	TS 13	TS AD/02	TS 12	TS AD/03	TS 14	TS 15	H max (m)
S	m 1.2	m 1.2 → 1.6	m 1.6	m 1.6 → 2.1	m 2.1	m 2.1	
L	m 5.92	m 5.92	m 5.97	m 5.97	m 5.97	m 5.97	
TS B/03	4	1	1				35.57 ■
TS B/04	2	1	5				47.61 ■
TS B/05	2	1	2	1	5		65.52 ■
TS B/06	2	1	2	1	5		65.52 ■
	2	1		1	7	2	77.46* ■
TS P/03	4						23.68
TS P/04	4	1	1				35.57
TS P/05	2	1	5				47.61
TS 13/TP	4						23.68
TS 12/TP	2	1	5				47.61
TS 14/TP	2	1	2	1	5		65.52
TS 15/TP	2	1		1	7	2	77.46*



* *Senza cabina* — Sin cabina — Whitout cabin — Ohne kabine — Sans cabine

TS B

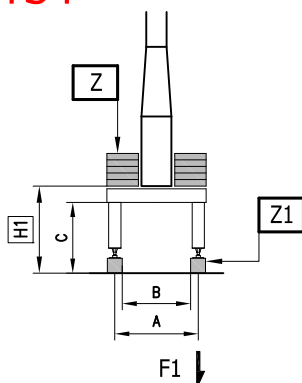


□ TR 02/02
■ TR 02/04

■ AP/02

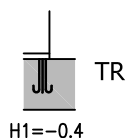
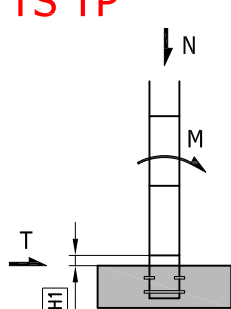
		F (kN)	Z (kg)	A (m)	H1(m)
TS B/03	●	559	64000	3.8x3.8	1
	○	483			
TS B/04	●	618	84000	4.5x4.5	1.2
	○	692			
TS B/05	●	793	140000	6x6	1.4
	○	1037			
TS B/06	●	776	140000	8x8	1.6
	○	1151			

TS P



		F1(kN)	Z (kg)	Z1(kg)	A (m)	B (m)	C (m)	H1(m)
TS P/03	●	493	40000	4x4000	3.8x3.8	3	4.55	5.34
	○	384						
TS P/04	●	554	60000	4x4000	4.5x4.5	3.76	4.47	5.5
	○	552						
TS P/05	●	611	84000	4x4000	6x6	5.2	4.53	5.8
	○	708						

TS TP

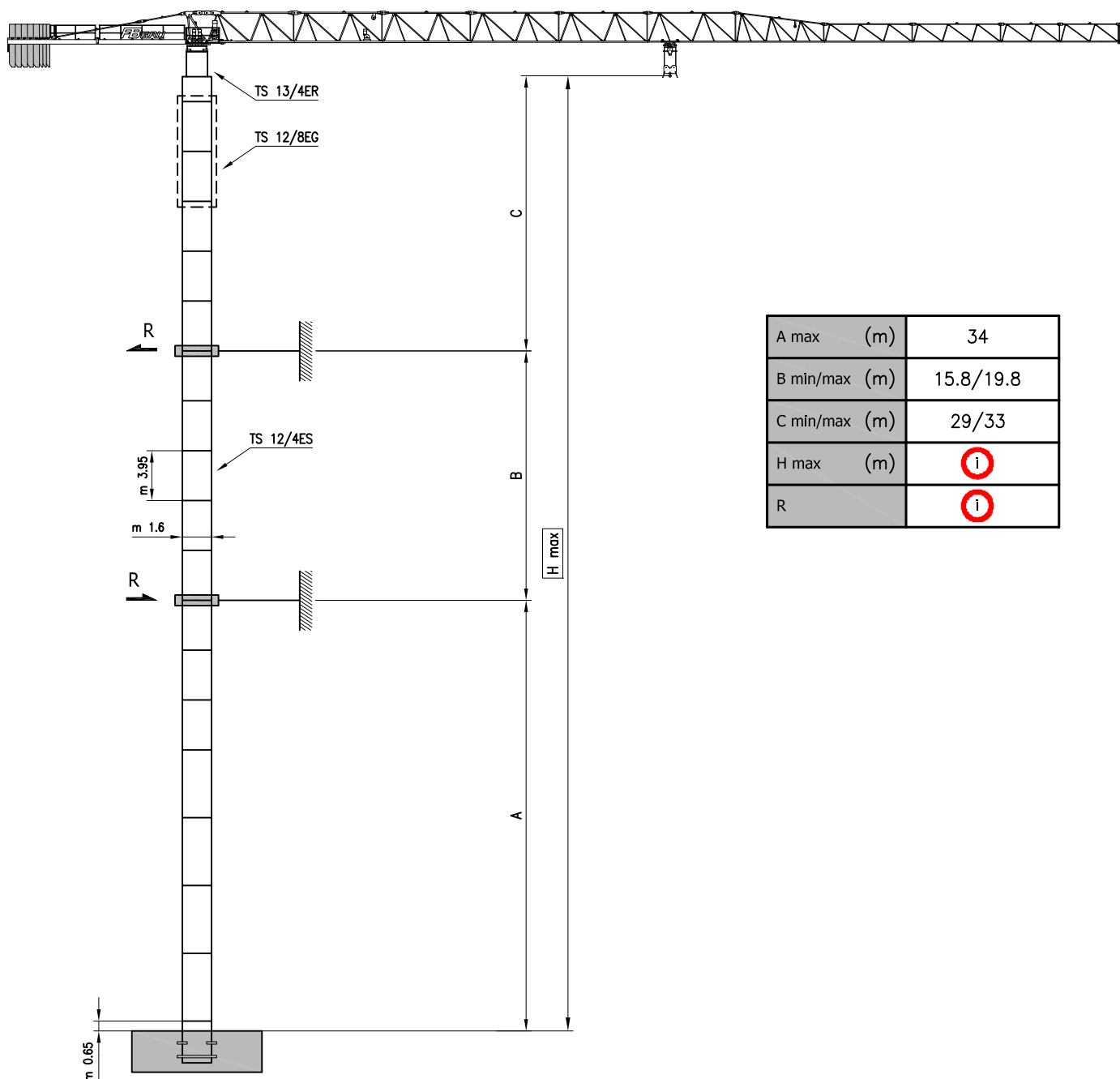


		N (kN)	T (kN)	M (kNm)	H1 (m)
TS 13/TP	●	343	45	504	0.65
	○	381	16	1195	
TS 12/TP	●	440	80	2339	0.65
	○	478	22	1661	
TS 14/TP	●	555	121	4637	0.65
	○	593	30	2166	
TS 15/TP	●	641	153	6915	0.65
	○	679	36	2623	

IN SERVIZIO EN SERVIZIO — IN SERVICE IN BETRIEB — EN SERVICE	●
FUORI SERVIZIO FUERA DE SERVICIO — OUT OF SERVICE AUSSER BETRIEB — HORS SERVICE	○
ZAVORRA di BASE LASTRE DE BASE — CENTRAL BALLAST ZENTRAL BALLASTSTEIN — LEST DE BASE	Z

Solo per Hmax — Sólo para Hmax — Only for Hmax — Nur für Hmax — Seulement pour Hmax

TS 12/4ES



i Consultateci — Consultarnos — Consult us — Auf anfrage — Nous consulter

ZAVORRA DI CONTROBRACCIO

LASTRE DE CONTRA FLECHA — COUNTER JIB BALLAST

GEGENAUSLEGERBALLAST — LEST DE CONTRE-FLÈCHE

	BRACCIO (m) FLECHA — JIB AUSLEGER — FLECHE	60	56.1	52.2	46.4	40.6	34.8
	ZAVORRA (kg) LASTRE — BALLAST BALLAST — LEST	14680 (5A + 3B)	13420 (5A + 2B)	12160 (5A + 1B)	12160 (5A + 1B)	11240 (4A + 2B)	9980 (4A + 1B)

	TIPO TIPO — TYPE ART — TYPE	A	B
	PESO (kg) PESO — WEIGHT GEWICHT — POIDS	2180	1260

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS		 (m)
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		1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg			
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE INVERTER	400 V 50 Hz	↑	4	8	30	50	kW	AS 11 160 Hmax 36 m
			2500	2500	2500	1300		
		↓	2	4	15	25		
			5000	5000	5000	2500		
		↑	5	10	34	60	kW	AS 18 160 Hmax 36 m
			3000	3000	3000	1300		
		↓	3	5	17	30		AS 18 HC 280 H max 70 m
			6000	6000	6000	2600		
		↑	6	12	38	66	kW	AS 25 280 Hmax 70 m
			3000	3000	3000	1300		
		↓	3	6	19	33		AS 25 HC 520 H max 130 m
			6000	6000	6000	2600		

		1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	4 ^a m/1'		
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION INVERTER		400 V 50 Hz	10	30	49	62	kW 3

		1 ^a g/1'	2 ^a g/1'	3 ^a g/1'	4 ^a g/1'		
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION INVERTER		400 V 50 Hz	0 → 0.06	0.06 → 0.16	0.16 → 0.31	0.31 → 0.78	kW N° 2 x 4

		1 ^a m/1'			
TRASLAZIONE TRASLACIÒN – TRAVELLING SCHIENENFAHREN – TRANSLATION INVERTER	 	400 V 50 Hz	0 → 20		kW N° 2 x 4 <i>TR 02/02</i> N° 4 x 4 <i>TR 02/04</i>



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

In compliance with the EEC
instructions on noise level

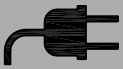
Gemäss EWG-Richtlinien für
den Schall-Leistungspegel

Conforme aux directives CEE
sur le niveau acoustique

POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER

KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

 400 V - 50 Hz	 <i>AS 11</i> 11 kW	 <i>AS 18</i> <i>AS 18 HC</i> 18 kW	 <i>AS 25</i> <i>AS 25 HC</i> 25 kW
	28 kVA* (22 kW)	36 kVA* (29 kW)	45 kVA* (36 kW)

* *Gru senza traslazione* — Grúa sin traslación — Crane without travelling equipment — Krane ohne schienenfahren — Grue sans translation

Pos.	DENOMINAZIONE		Q.ta	L	B	H		
Pos. Item	Denominacion		Cont.					
Pos. Rep.	Benennung		Anz.	(m)			(kg)	
Rep.	Dénomination		Qte.					
1	Elemento di braccio 1 Tramo de flecha 1 – Jib element 1 Auslegerschuss 1 – Element de flèche 1		1	6.05	1.16	2.25	1950	
2	Elemento di braccio 2 Tramo de flecha 2 – Jib element 2 Auslegerschuss 2 – Element de flèche 2		1	6.09	1.16	2.08	1100	
3	Elementi di braccio 3 - 4 - 5 - 6 Tramos de flecha 3-4-5-6 – Jib elements 3-4-5-6 Auslegerschuss 3-4-5-6 – Elements de flèche 3-4-5-6		1	6.05	1.16	2.06	670	
			1	6.03		2.04	640	
			1	6.02		2.02	535	
			1	6.02		2.01	435	
4	Elemento di braccio 7 Tramo de flecha 7 – Jib element 7 Auslegerschuss 7 – Element de flèche 7		1	6.02	1.16	2.01	410	
5	Elementi di braccio 8 - 9 Tramos de flecha 8-9 – Jib elements 8-9 Auslegerschuss 8-9 – Elements de flèche 8-9		1	6.02	1.16	1.26	350	
			1	6.01		1.25	290	
6	Elemento di braccio 10-11 Tramo de flecha 10-11 – Jib element 10-11 Auslegerschuss 10-11 – Element de flèche 10-11		2	4.08	1.16	1.25	195	
7	Elemento di braccio 12 Tramo de flecha 12 – Jib element 12 Auslegerschuss 12 – Element de flèche 12		1	0.43	1.20	1.38	36	
8	Blocco di contrappeso Lastre de contraflecha – Counter jib block Gegengewichtsballast – Contrepoids		3 5	2.83	0.87	0.23 0.395	1260 2180	
9	Controbraccio Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	6.1	1.23	1.26	935	
10	Controbraccio Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	6.0	1.28	1.26	1150	
11	Gruppo rotazione Plataforma de giro – Slewing platform Drehbühne – Porte-flèche tournant		1	2.7	1.65	1.65	2650	
12	Elemento di torre TS 13/6 Mastil – Tower element Turmschuss – Mats			5.92	1.2	1.38	1710	
13	Elemento di torre TS 12/6 Mastil – Tower element Turmschuss – Mats			5.97	1.6	1.8	2088	
14	Elemento di torre TS 14/6 Mastil – Tower element Turmschuss – Mats			5.97	2.3	2.3	3050	
15	Elemento di torre TS 15/6 Mastil – Tower element Turmschuss – Mats			5.97	2.3	2.3	3500	
16	Adattatore TS AD/02 Adaptador – Adapter Adapter – Adaptateur			5.92	1.6	1.8	2005	
17	Adattatore TS AD/03 Adaptador – Adapter Adapter – Adaptateur			5.97	2.1	2.3	2750	
18	Blocco zavorra di base per TS B/03 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour			3.8	0.38	1.18	4000	
19	Blocco zavorra di base per TS B/04 e TS B/05 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour		TSB/04 TSB/05	5.0 5.7	0.34	1.6	6000 7000	
20	Blocco di appoggio Gatos – Concrete pad Fundament block – Blocs d'appui			3.0 3.2	0.8 1.0	0.74 0.95	4000 7000	
21	Crociera di base (Trave A) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/03	1	5.75	0.35	1.08	1660
			TSB/04	1	6.75	0.35	1.26	2315
			TSB/05	1	8.86	0.4	1.6	4050
			TSB/06	1	11.7	0.45	1.85	6760
	Crociera di base (Trave B) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/03	1	5.75	0.92	0.9	1515
			TSB/04	1	6.75	0.93	1.1	2050
			TSB/05	1	8.86	0.99	1.35	3630
			TSB/06	1	11.7	1.15	1.6	6200
Opzionale Optional Optional Optionale Option	Braccio ausiliario Plumin de intervencion – Auxiliary arm Hilfsgalgen – Potence d'intervention		1	2.2	0.22	0.72	110	
	Argano ausiliario Mecanismo auxiliar – Auxiliary winch Hilfswinde – Treuil auxiliaire		1	0.85	0.9	0.43	170	