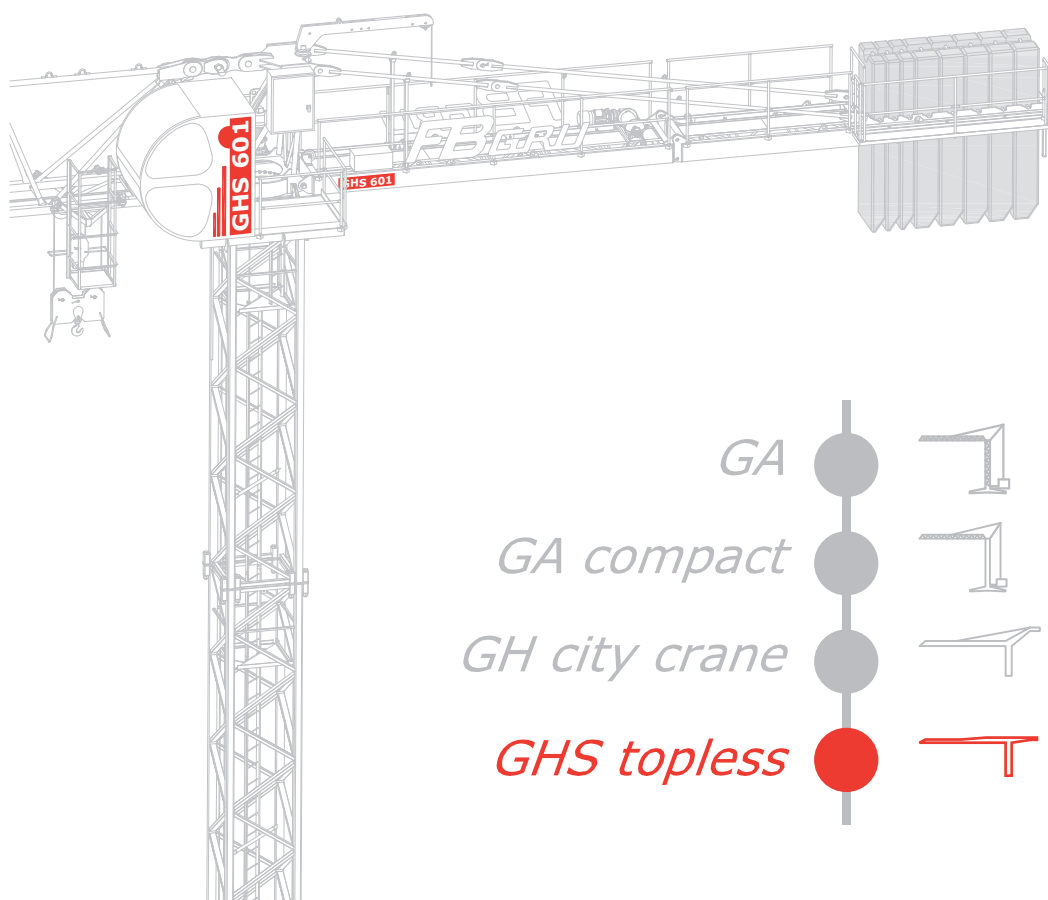


GRU A TORRE

GHS 601 | 6000



FB F.lli Butti s.r.l.

Via XXV Aprile, 58

23868 Valmadrera (LC) - ITALIA

Tel. 0341.581108 - Fax 0341.200253

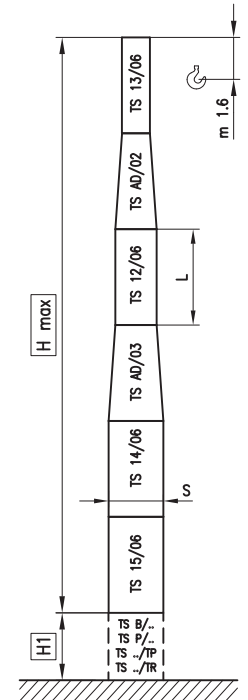
E-mail : fbgru@fbgru.it - <http://www.fbgru.it>



FEM 1.001 - A4
EN 14439 - C25

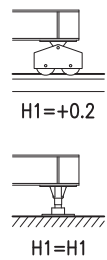
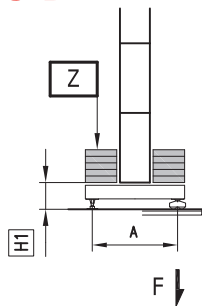
TORRE/REAZIONI* MASTIL/REACCIONES* – MAST/REACTIONS*
 MASTE/ECKDRUCKE* – MAT/RÉACTIONS*

	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 <input type="checkbox"/> <input type="checkbox"/>
TS B/04	2	1	5				47.61 <input type="checkbox"/> <input type="checkbox"/>
TS B/05	2	1	2	1	5		65.52 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
TS B/06	2	1	2	1	5		65.52 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
	2	1		1	7	2	77.46** <input checked="" type="checkbox"/>
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 – Without cabin – Ohne kabine – Sans cabine

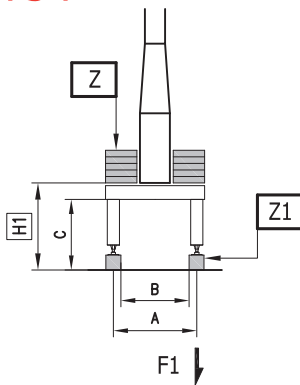
TS B



- TR 02/02
- TR 02/04
- AP/02

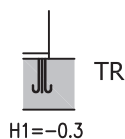
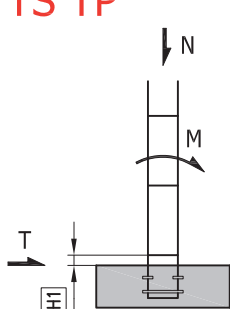
		F (kN)	Z (kg)	A (m)	H1(m)
TS B/03	●	559	64000	3.8x3.8	1
	○	483			
TS B/04	●	618	84000	4.5x4.5	1.2
	○	692			
TS B/05	●	793	140000	6x6	1.4
	○	1037			
TS B/06	●	776	140000	8x8	1.6
	○	1151			

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	6x6	5.2	4.5	5.8
	○	708						

TS TP

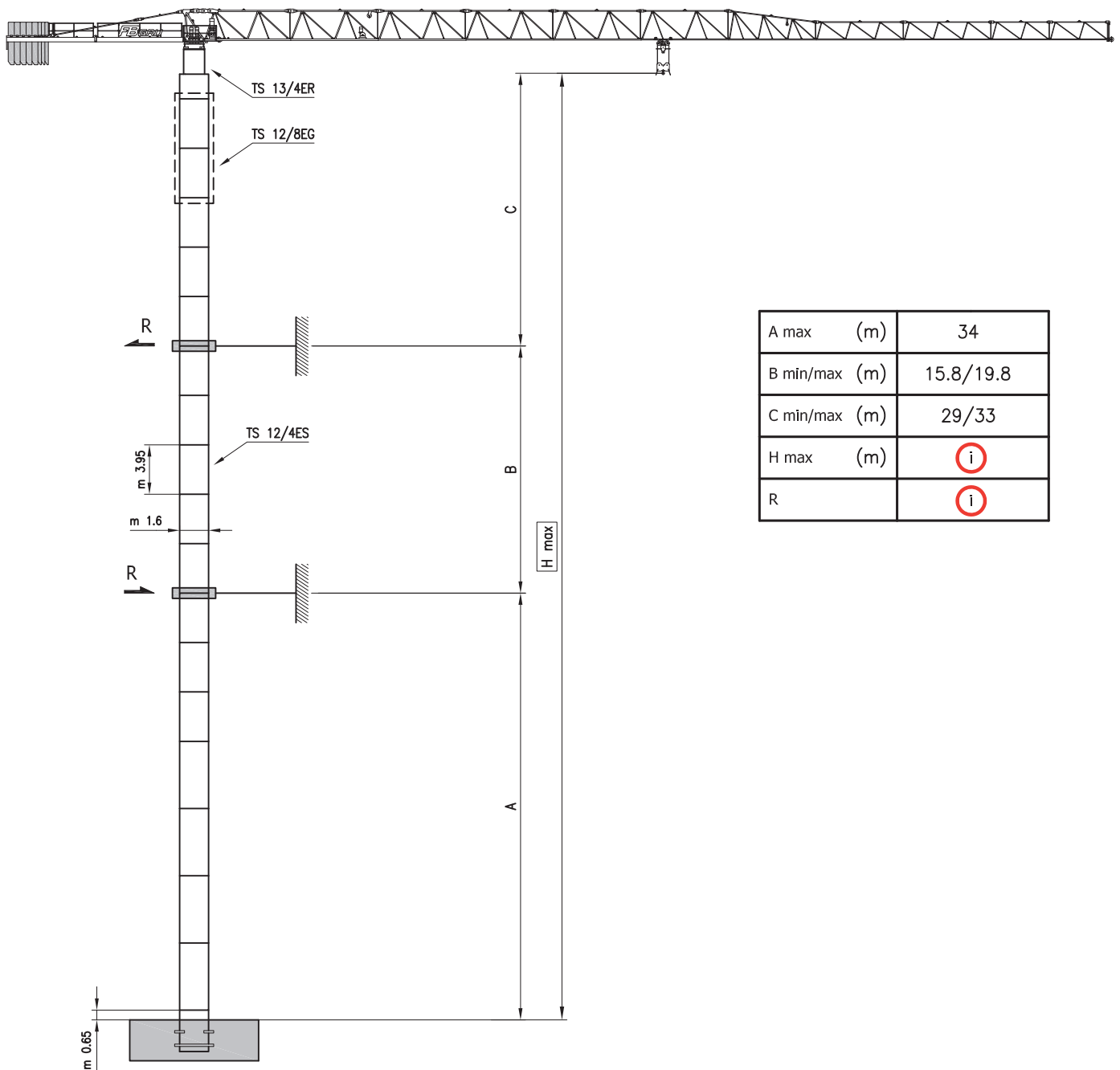


		N (kN)	T (kN)	M (kNm)	H1 (m)
TS 13/TP	●	381	16	1195	0.65
	○	343	45	504	
TS 12/TP	●	478	22	1661	0.65
	○	440	80	2339	
TS 14/TP	●	593	30	2166	0.65
	○	555	121	4637	
TS 15/TP	●	679	36	2623	0.65
	○	641	153	6915	

IN SERVIZIO EN SERVICIO – IN SERVICE IN BETRIEB – EN SERVICE	<input checked="" type="checkbox"/>
FUORI SERVIZIO FUERA DE SERVICIO – OUT OF SERVICE AUSSER BETRIEB – HORS SERVICE	<input type="checkbox"/>
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
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)
---	---	---	---	--

		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		4	8	30	50		kW 11	<i>AS 11</i> 160 Hmax 36 m
		<i>2500</i>	<i>2500</i>	<i>2500</i>	<i>1300</i>			
		2	4	15	25		kW 18	<i>AS 18</i> 160 Hmax 36 m <i>AS 18 HC</i> 280 H max 70 m
		<i>5000</i>	<i>5000</i>	<i>5000</i>	<i>2500</i>			
		6	11	32	60	72	kW 25	<i>AS 25</i> 280 Hmax 70 m <i>AS 25 HC</i> 520 H max 130 m
		<i>3000</i>	<i>3000</i>	<i>3000</i>	<i>1300</i>	<i>800</i>		
		3	6	16	30	36	kW 18	<i>AS 18 HC</i> 280 H max 70 m
		<i>6000</i>	<i>6000</i>	<i>6000</i>	<i>2600</i>	<i>1600</i>		
		7	11	35	72	88	kW 25	<i>AS 25</i> 280 Hmax 70 m <i>AS 25 HC</i> 520 H max 130 m
		<i>3000</i>	<i>3000</i>	<i>3000</i>	<i>1300</i>	<i>800</i>		
		4	6	17	36	44	kW 18	<i>AS 18 HC</i> 280 H max 70 m
		<i>6000</i>	<i>6000</i>	<i>6000</i>	<i>2600</i>	<i>1600</i>		

		1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	4 ^a m/1'		
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION INVERTER		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		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 TRASLACION — 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

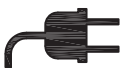



In compliance with the EEC
instructions on noise level

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	 <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)

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

Pos. Pos. Rep.	DENOMINAZIONE Denomination Benennung Dénomination		Q.ta 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	6.05	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	2.83	0.87	0.23	1260	
			5			0.395	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	5.0	0.34	1.6	6000	
			TSB/05	5.7			7000	
20	Blocco di appoggio Gatos – Concrete pad Fundament block – Blocs d'appui			3.0	0.8	0.74	4000	
				3.2			1.0	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 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	