

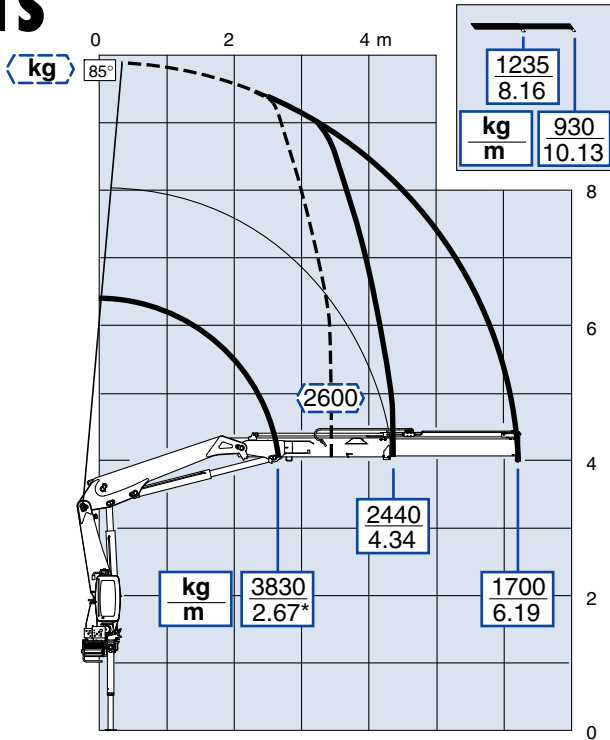
EFFER®

110

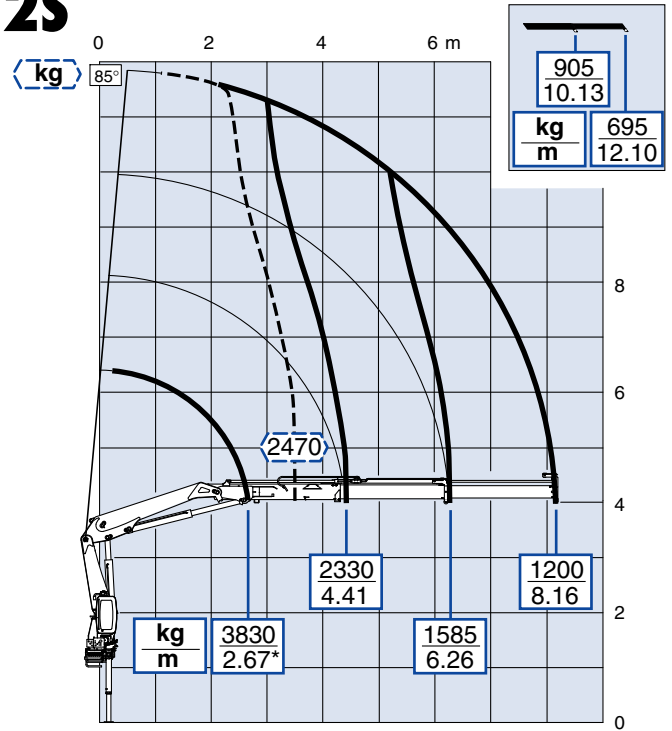


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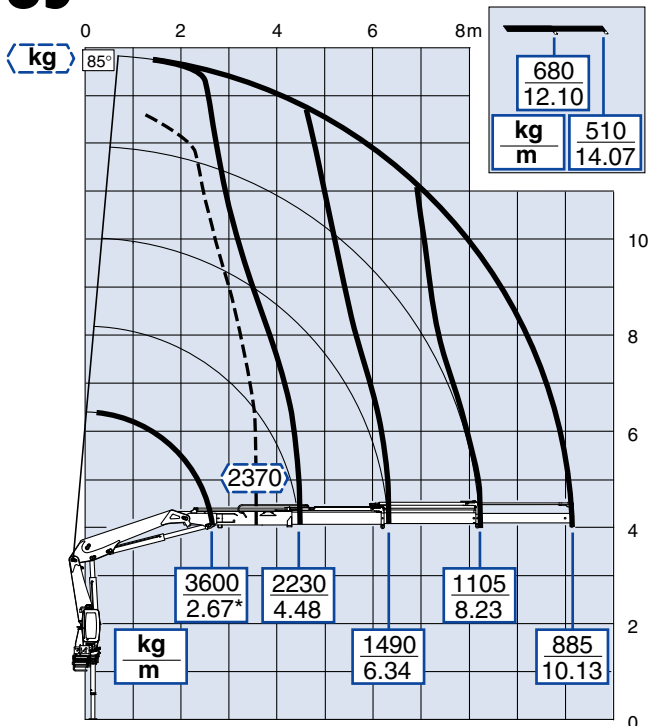
1S



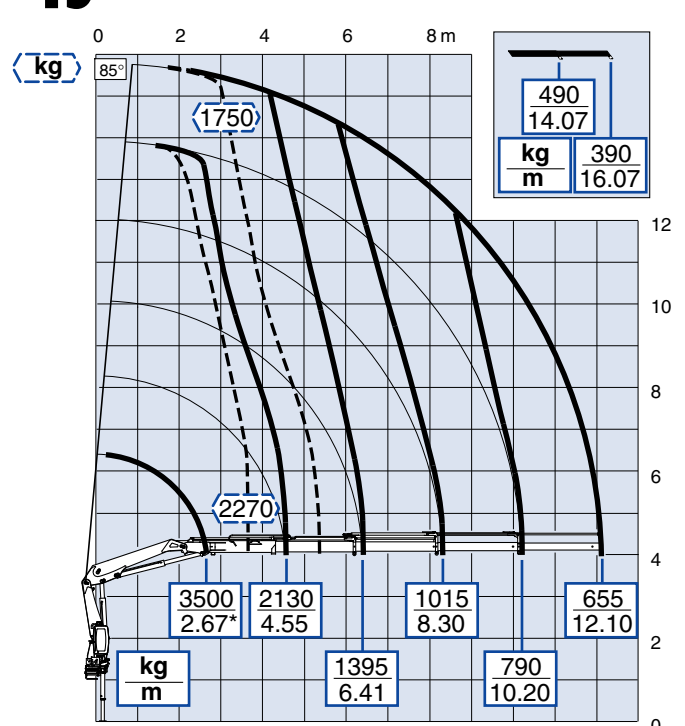
2S



3S



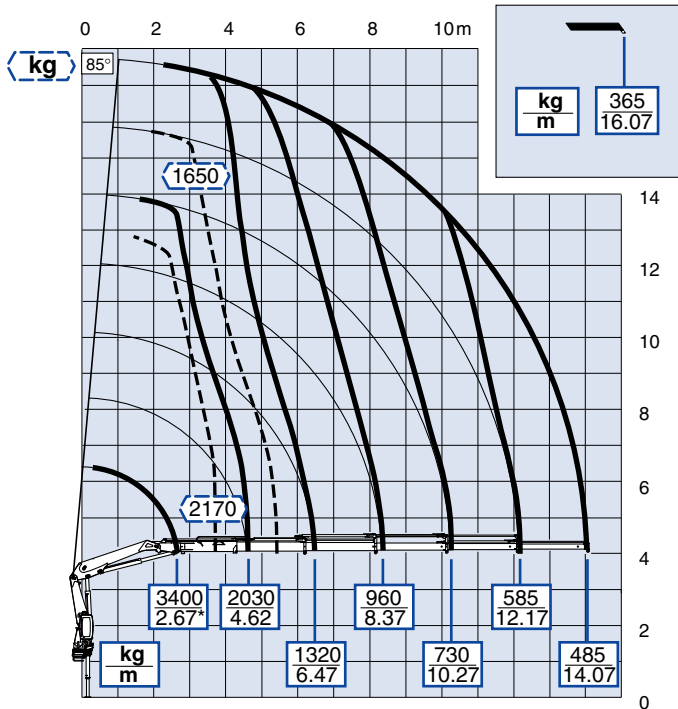
4S





110

5S



Carico Massimo sollevabile nella posizione raffigurata.
 Max. load which can be lifted in the shown position.
 Charge maxi. soulevable dans la position illustrée.
 Max. Hublast in der angezeigten Position.
 Carga máxima levantable en la posición indicada.

Carico Massimo sollevabile con snodo nella posizione illustrata.
 Max. load which can be lifted by the fly-jib in the shown boom position.
 Charge maxi. pouvant être soulevée par le jib dans la position illustrée.
 Max. mögliche Hublast des Zusatzgelenkes in der angegebenen Position.
 Carga máxima a elevar con el brazo auxiliar en la posición indicada.

Curva di Carico Massimo sollevabile.
 Lifting curve of the max. load capacity.
 Courbe de levage de la charge maxi. soulevable.
 Traglastkurve der max. möglichen Hublast.
 Curva de carga máxima a elevar.

Curva di carico descritta partendo con secondo braccio (e/o jib) orizzontale.
 Lifting curve described starting with the outer boom (and/or fly-jib) in horizontal position.
 Charge maxi. soulevable en partant avec le deuxième bras (et/ou le jib) en position horizontale.
 Traglastkurve mit 2. Arm (und/oder Zusatzgelenk) in horizontaler Position.
 Curva de carga máxima partiendo con el segundo brazo (y/o brazo auxiliar) en posición horizontal.

- * Sollevamento con gancho fisso.
- * Lifting by fixed hook.
- * Levage au crochet fixe.
- * Hublast am festen Haken.
- * Levantamiento con gancho fijo.

Sollevamento massimo con gancho e braccio principale a + 20°.
 Max. lifting by hook and with main boom up to 20°.
 Capacité maxi. au crochet, le bras principal relevé de 20°.
 Max. Hubkapazität bei Hakenbetrieb und unter Hauptarmstellung von 20°.
 Carga máxima a elevar en el gancho y con el brazo principal a 20°.

Le curve indicate sono realizzabili con limitatore di carico.
 Load charts achievable by L.M.B.
 Courbes de levage réalisables par limiteur de moment.
 Mit Überlastabschalteinrichtung realisierbare Lastkurven.
 Curvas de carga máxima con limitador de carga.

Capacità secondo potenza massima della gru. La stabilità dell'autocarro può richiedere il declassamento.
 Loadcharts resulting from the crane max. capacity. Truck stability may command derating.

Capacité selon puissance maxi. de la grue. La stabilité du porteur peut imposer un déclassement.
 Maximale Hubkapazität des Kranes.
 Die LKW-Standsicherheit kann eine Verminderung der Hubklasse erfordern.
 Carga máxima de la grúa. La estabilidad del vehículo puede requerir disminuir la carga.

In seguito ad aggiornamenti tecnici i dati indicati possono subire modifiche.

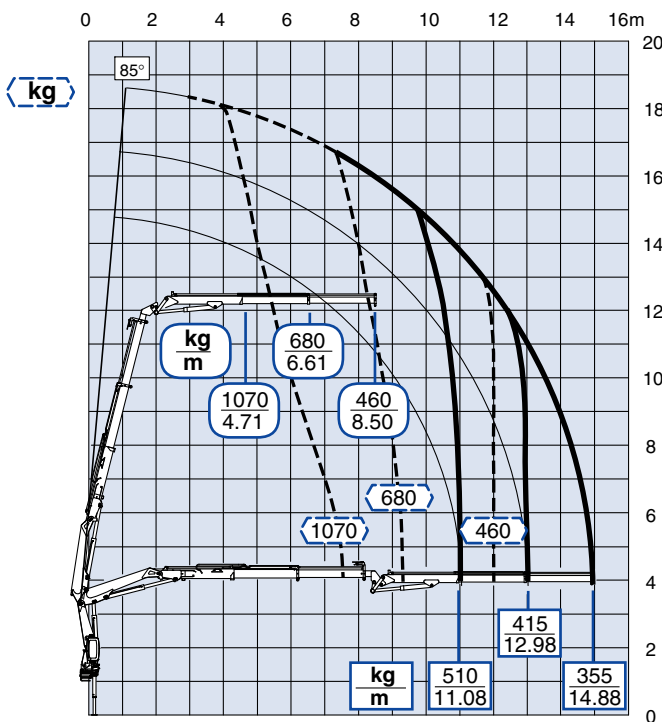
Technical modifications may change the stated data.
 Des modifications techniques peuvent modifier les données mentionnées.
 Die technischen Angaben können aufgrund technischer Erneuerungen verändert werden.
 Como consecuencia de la constante investigación tecnológica, los datos pueden ser modificados.



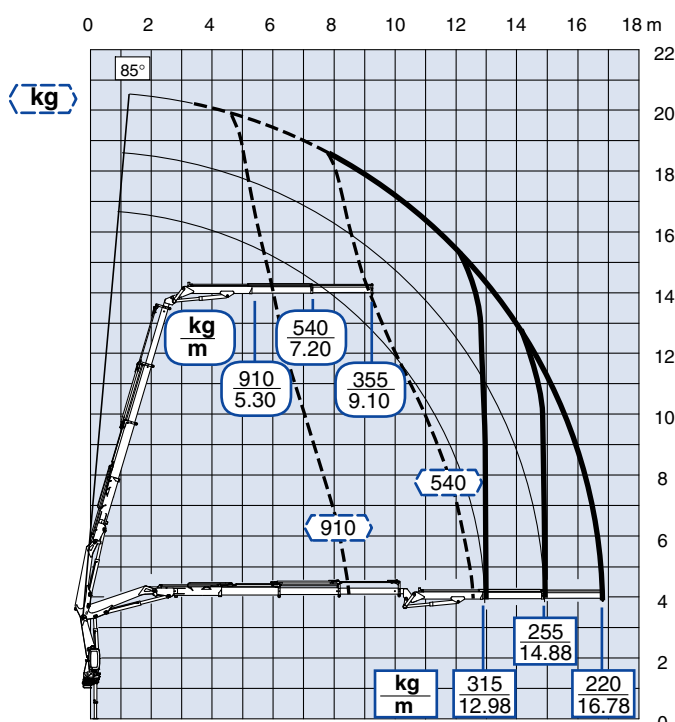
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02.1K.060301.02.2

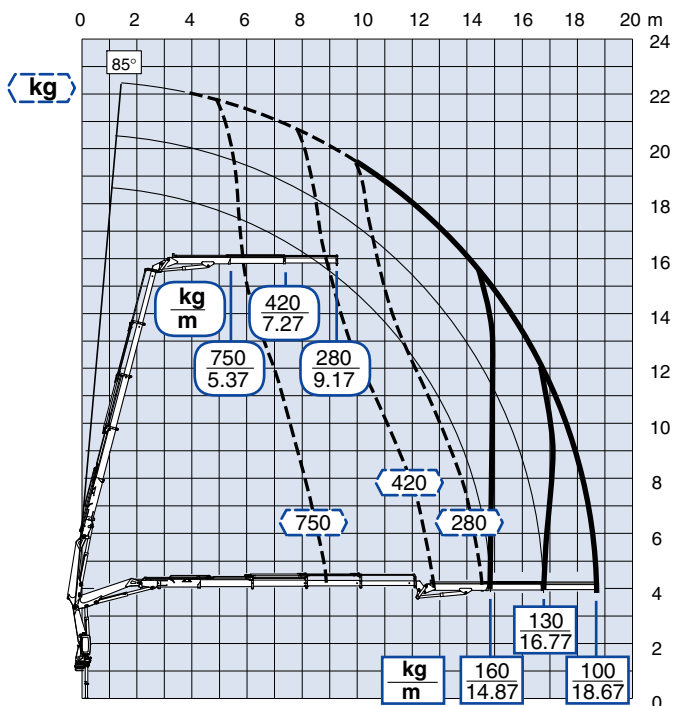
2S+JIB 2S



3S+JIB 2S

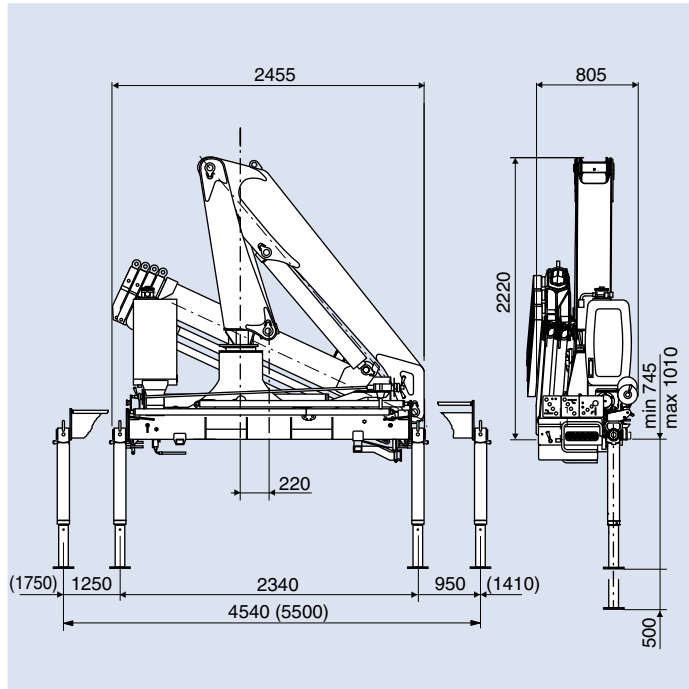


4S+JIB 2S

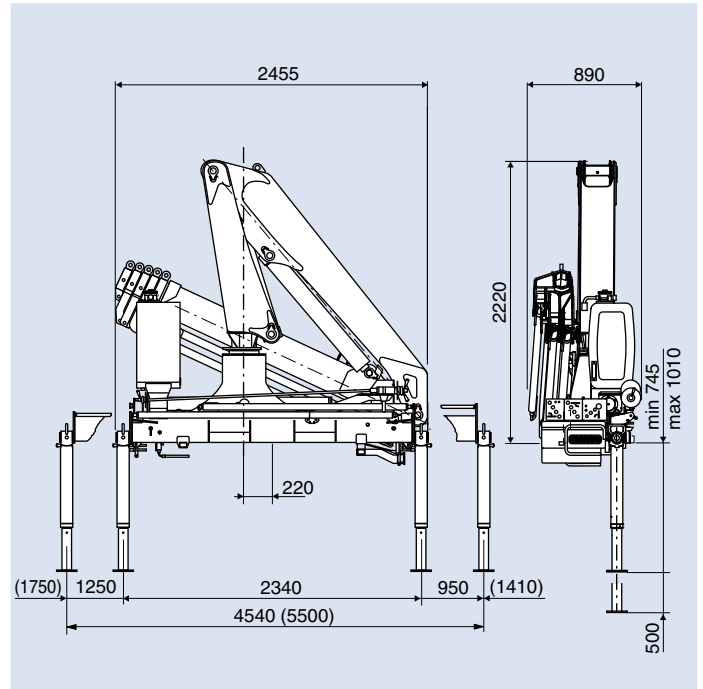


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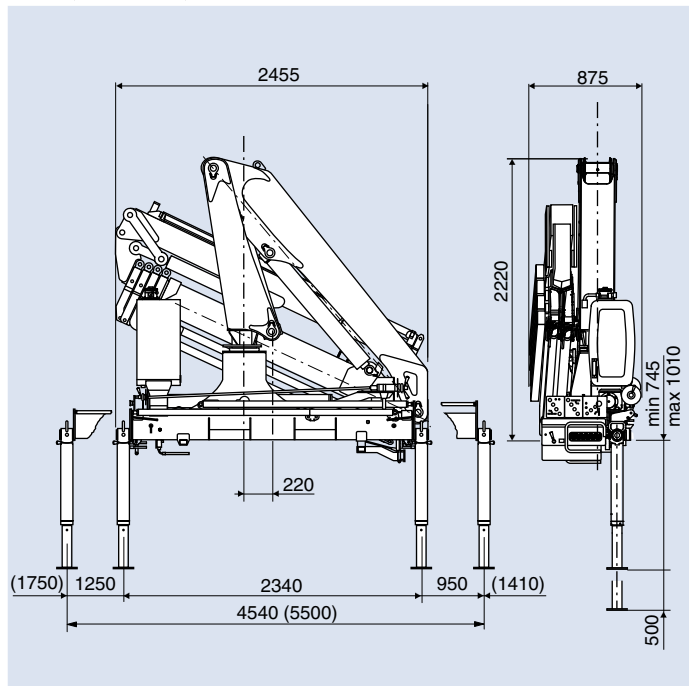
1S/2S/3S/4S



5S



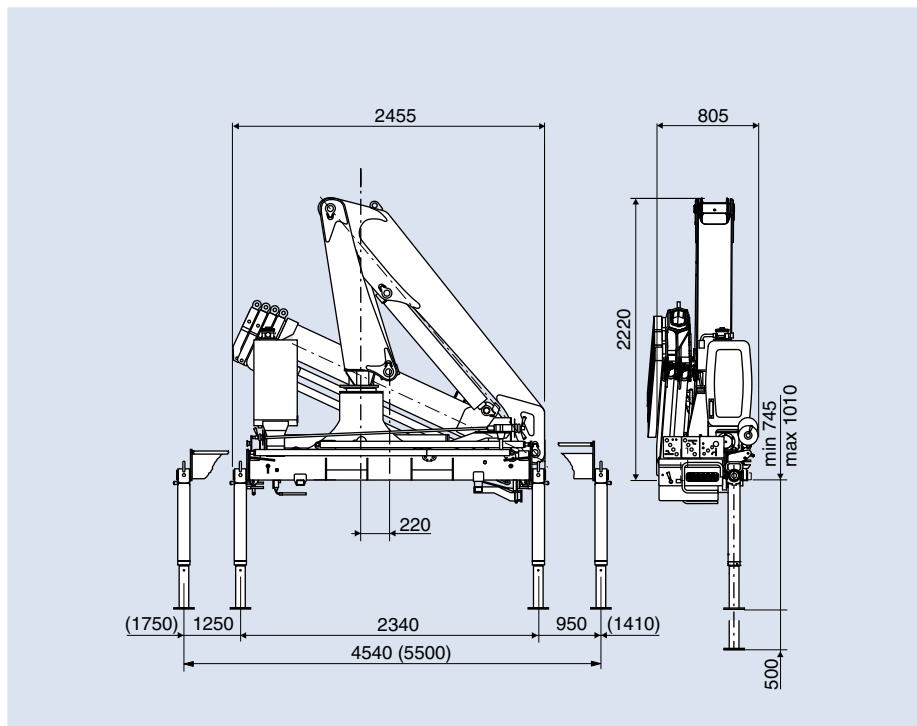
2S/3S/4S+JIB





110 CL

2S/3S/4S



Carico Massimo sollevabile nella posizione raffigurata.
 Max. load which can be lifted in the shown position.
 Charge maxi. soulevable dans la position illustrée.
 Max. Hublast in der angezeigten Position.
 Carga máxima levantable en la posición indicada.

Le curve indicate sono realizzabili con limitatore di carico.
 Load curves achievable by L.M.B.
 Courbes de levage réalisables par limiteur de moment.
 Mit Überlastabschalteneinrichtung realisierbare Lastkurven.
 Curvas de carga máxima con limitador de carga.



Curva di Carico Massimo sollevabile.
 Lifting curve of the max. load capacity.
 Courbe de levage de la charge maxi. soulevable.
 Traglastkurve der max. möglichen Hublast.
 Curva de carga máxima a elevar.

Capacità secondo potenza massima della gru. La stabilità dell'autocarro può richiedere il declassamento.
 Loadcharts resulting from the crane max. capacity. Truck stability may command derating.
 Capacité selon puissance maxi. de la grue. La stabilité du porteur peut imposer un déclassement.
 Maximale Hubkapazität des Kranes.
 Die LKW-Standsicherheit kann eine Verminderung der Hubkraft erfordern.
 Carga máxima de la grúa. La estabilidad del vehículo puede requerir disminuir la carga.

Curva di carico descritta partendo con secondo braccio (e/o jib) orizzontale.
 Lifting curve described starting with the outer boom (and/or fly-jib) in horizontal position.
 Charge maxi. soulevable en partant avec le deuxième bras (et/ou le jib) en position horizontale.
 Traglastkurve mit 2.Arm (und/oder Zusatzgelenk) in horizontaler Position.
 Curva de carga máxima partiendo con el segundo brazo (y/o brazo auxiliar) en posición horizontal.

In seguito ad aggiornamenti tecnici i dati indicati possono subire modifiche.
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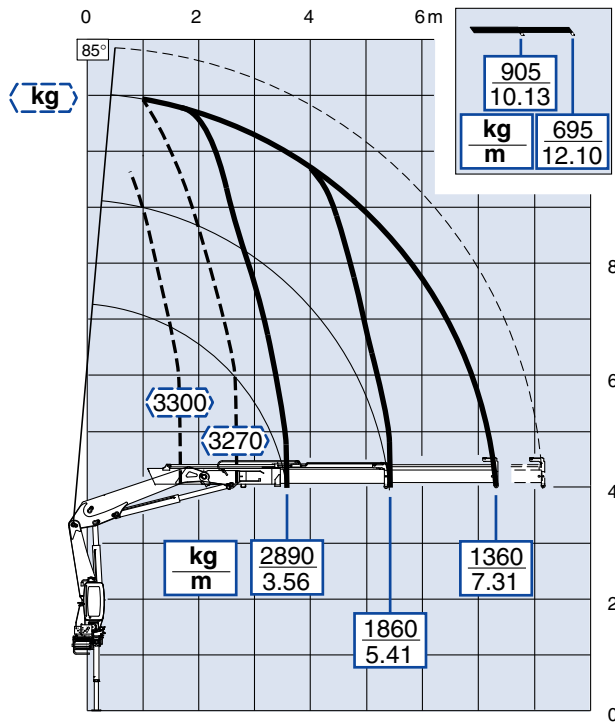
Sollevamento massimo con gancio e braccio principale a + 20°.
 Max. lifting by hook and with main boom up to 20°.
 Capacité maxi. au crochet, le bras principal relevé de 20°.
 Max. Hubkapazität bei Hakenbetrieb und Hauptarmstellung von 20°.
 Carga máxima a elevar en el gancho y con el brazo principal a 20°.



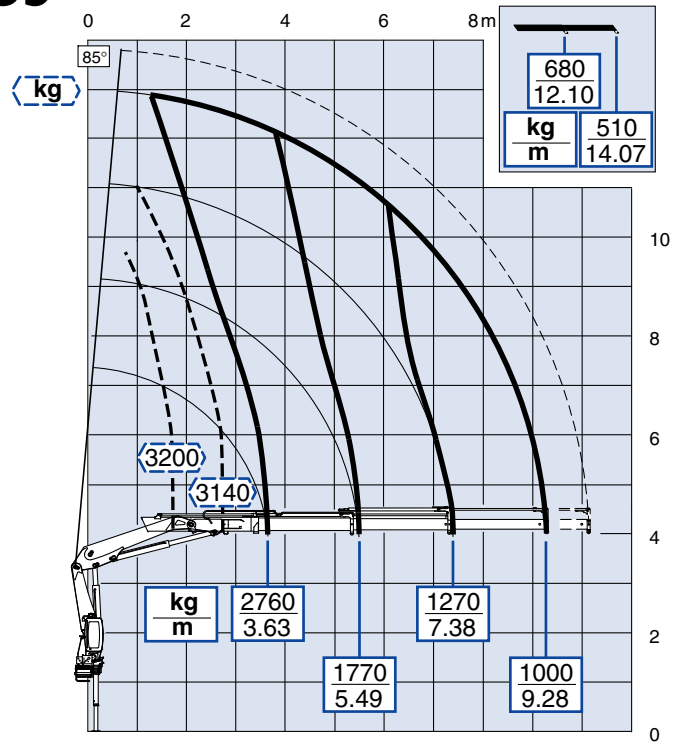
110 CL

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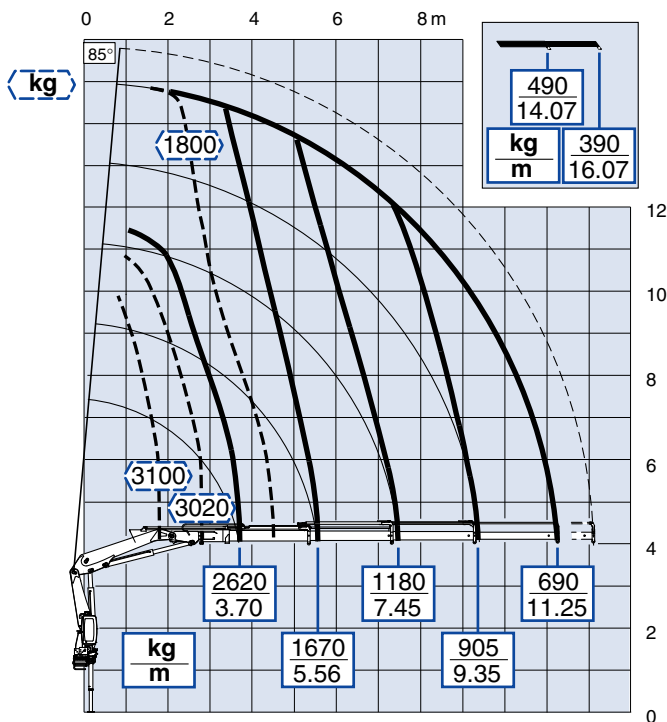
2S



3S



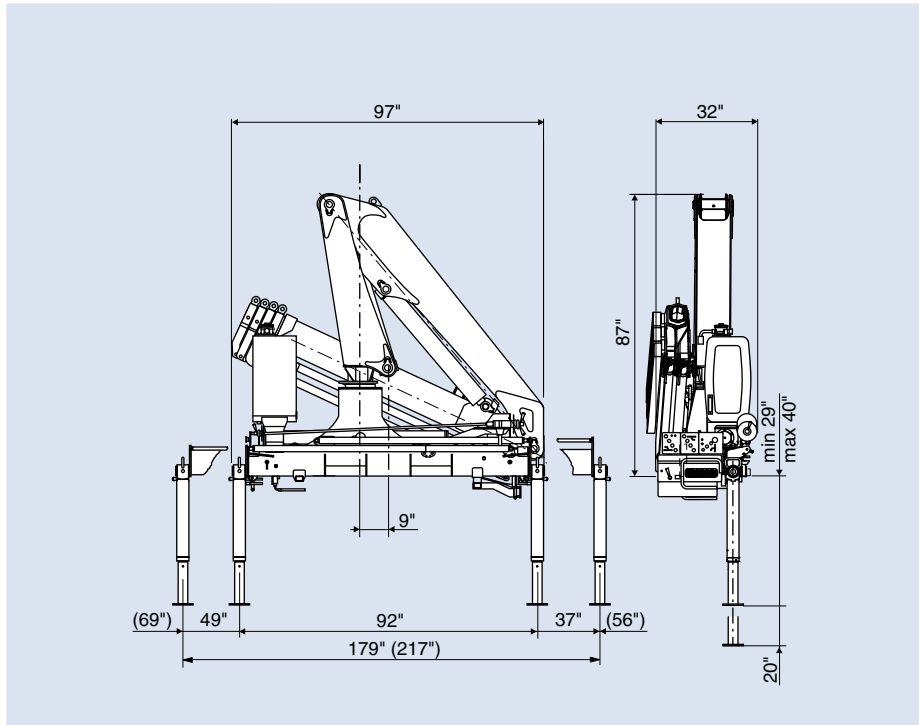
4S





110 CL

2S/3S/4S



Carico Massimo sollevabile nella posizione raffigurata.
 Max. load which can be lifted in the shown position.
 Charge maxi. soulevable dans la position illustrée.
 Max. Hublast in der angezeigten Position.
 Carga máxima levantable en la posición indicada.



Curva di Carico Massimo sollevabile.
 Lifting curve of the max. load capacity.
 Courbe de Levage de la charge maxi. soulevable.
 Traglastkurve der max. möglichen Hublast.
 Curva de carga máxima a elevar.


Curva di carico descritta partendo con secondo braccio (e/o jib) orizzontale.
 Lifting curve described starting with the outer boom (and/or fly-jib) in horizontal position.
 Charge maxi. soulevable en partant avec le deuxième bras (et/ou le jib) en position horizontale.
 Traglastkurve mit 2. Arm (und/oder Zusatzgelenk) in horizontaler Position.
 Curva de carga máxima partiendo con el segundo brazo (y/o brazo auxiliar) en posición horizontal.


Sollevamento massimo con gancio e braccio principale a + 20°.
 Max. lifting by hook and with main boom up to 20°.
 Capacité maxi. au crochet, le bras principal relevé de 20°.
 Max. Hubkapazität bei Hakenbetrieb und Hauptarmstellung von 20°.
 Carga máxima a elevar en el gancho y con el brazo principal a 20°.


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 Courbes de levage réalisables par limiteur de moment.
 Mit Überlastabschalteneinrichtung realisierbare Lastkurven.
 Curvas de carga máxima con limitador de carga.


Capacità secondo potenza massima della gru. La stabilità dell'autocarro può richiedere il declassamento.
 Loadcharts resulting from the crane max. capacity. Truck stability may command derating.
 Capacité selon puissance maxi. de la grue. La stabilité du porteur peut imposer un déclassement.
 Maximale Hubkapazität des Kranes.
 Die LKW-Standsicherheit kann eine Verminderung der Hubkraft erfordern.
 Carga máxima de la grúa. La estabilidad del vehículo puede requerir disminuir la carga.

In seguito ad aggiornamenti tecnici i dati indicati possono subire modifiche.
 Technical modifications may change the stated data.
 Des modifications techniques peuvent modifier les données mentionnées.
 Die technischen Angaben können aufgrund technischer Erneuerungen verändert werden.
 Como consecuencia de la constante investigación tecnológica, los datos pueden ser modificados.

1.6.1 	COD. 01.02.271099.409.0 DATA: PAG. 1/4	110	1S	2S	3S	4S	5S			
DATI TECNICI GRU BASE										
Momento massimo di sollevamento (primo braccio a + 20°)	kN m	104	101	98	95	92				
	t m	10.60	10.30	10.00	9.70	9.40				
Momento dinamico massimo	kN m	145.74	147.67	147.26	146.28	144.44				
Momento rotazione	kN m	15.30	15.30	15.30	15.30	15.30				
Angolo di rotazione (rotazione con cremagliera)		400°	400°	400°	400°	400°				
Inclinazione max. piano apparecchio a gru orizz. (capacità di rotaz.)		4.5°	4.5°	4.5°	4.5°	4.5°				
Portata d'olio (max.)	l/min	30	30	30	30	30				
Pressione d'esercizio (max.)	bar	300	300	300	300	300				
Potenza idraulica richiesta (teorica)	kW	15	15	15	15	15				
Potenza elettrica richiesta	W									
Tensione 24 V	V	24	24	24	24	24				
Capacità serbatoio olio	l	70	70	70	70	70				
Reazione massima sullo stabilizzatore (stabilizzatori standard)	daN	6615	6700	6685	6640	6555				
Apertura stabilizzatori standard		4540	4540	4540	4540	4540				
Apertura stabilizzatori maggiorati		5500	5500	5500	5500	5500				
Gancio: portata max.	t	5.4	5.4	5.4	5.4	5.4				
Gancio: grillo di fissaggio	t	4.75	4.75	4.75	4.75	4.75				
Classificazione gru DIN 15018 – sollevamento con gancio		H1-B3	H1-B3	H1-B3	H1-B3	H1-B3				
Pressione acustica nel posto di comando *1	dB (A)	< 70	< 70	< 70	< 70	< 70				
Vibrazioni nel posto di comando *2										
N. 8 tiranti M 24x2 (39NiCrMo3 bonificato UNI 7845-78)										
Pesi *3										
Gru standard senza carica olio nel serbatoio	kg	1335	1456	1553	1653	1737				
Gru con stabilizzatori maggiorati senza carica olio nel serbatoio	kg	1361	1482	1579	1679	1763				
Carica olio	kg	65	65	65	65	65				
Gancio: peso	kg	4	4	4	4	4				
Dispositivi di sicurezza std / optional										
Valvole di blocco (rotazione -1° e 2° braccio – sfili)										
Limitatore di momento										
Indicatore di momento (manometro)										
Dispositivo di emergenza										
	bar									
Dispositivi previsti										
Radiocomando										
Refrigeratore										
Note										
I dati relativi ai carichi sollevabili e sbracci, sono rilevabili dai diagrammi di carico. Gli sbracci indicati sui diagrammi sono teorici e non considerano le flessioni (± 2% in orizzontale).										
Dati tecnici generali e dati tecnici particolari in relazione alle condizioni ambientali, sono trattati in una altra sezione del manuale.										
*1 E' possibile che sia > 70 dB (A) a gru installata; cio' dipende dal rumore della pompa e dal motore del veicolo.										
*2 Dipende dal tipo di veicolo.										
*3 Pesi ± 5%										

1.6.1 	COD. 01.02.2710.99.409.0 DATE: PAG. 2/4	110	1S	2S	3S	4S	5S			
BASIC CRANE TECHNICAL SPECIFICATION										
Maximum lifting moment (firstboom + 20°)	kN m	104	101	98	95	92				
	t m	10.60	10.30	10.00	9.70	9.40				
Maximum dynamic moment	kN m	145.74	147.67	147.26	146.28	144.44				
Slewing moment	kN m	15.30	15.30	15.30	15.30	15.30				
Slewing angle (rack rotation)		400°	400°	400°	400°	400°				
Max. slope of whole unit with horizontal crane (slewing capacity)		4.5°	4.5°	4.5°	4.5°	4.5°				
Oil delivery (max.)	l/min	30	30	30	30	30				
Working pressure (max.)	bar	300	300	300	300	300				
Required Hydr. power (theoretical)	kW	15	15	15	15	15				
Required power:	W									
Voltage 24 V	V	24	24	24	24	24				
Oil tank capacity	l	70	70	70	70	70				
Maximum reaction on stabilizer (standard stabilizers)	daN	6615	6700	6685	6640	6555				
Standard stabilizers sread		4540	4540	4540	4540	4540				
Wider stabilizers spread		5500	5500	5500	5500	5500				
Hook: max. capacity	t	5.4	5.4	5.4	5.4	5.4				
Hook: holding cricket	t	4.75	4.75	4.75	4.75	4.75				
DIN 15018 crane classification – lifting by hook		H1–B3	H1–B3	H1–B3	H1–B3	H1–B3				
Aerial noise at the control post *1	dB (A)	< 70	< 70	< 70	< 70	< 70				
Vibrations at the control post *2										
N. 8 tie rods M 24x2 (39NiCrMo3 Hardened and tempered UNI 7845–78)										
Weights *3										
Standard crane without oil in the tank	kg	1335	1456	1553	1653	1737				
Crane with wider stabilizers without oil in the tank	kg	1361	1482	1579	1679	1763				
Oil fill	kg	65	65	65	65	65				
Hook: weight	kg	4	4	4	4	4				
Standard / optional safety devices										
Holding valves (Slewing–1st and 2nd boom – extensions)										
Moment limiter										
Moment indicator (pressure gauge)										
Emergency device										
	bar									
Devices included										
Radio remote control										
Oil cooler										
Notes										
<p>The figures for liftable loads and outreaches may be found in the loading diagrams. The outreaches indicated in the diagrams are theoretical and do not consider boom flexing ($\pm 2\%$ horizontally). General technical specifications and special specifications in relation to environmental conditions are dealt with in another section of the manual.</p> <p>*1 It may be >70 dB (A) when the crane is installed; this depends on the noise from the pump and the vehicle engine.</p> <p>*2 Depends on the type of vehicle.</p> <p>*3 Weights $\pm 5\%$.</p>										

2.2.3.1 	COD. 01.02.271099.410.0 DATE: PAG. 2/4	110	1S	2S	3S	4S	5S			
EFFER LIFTING EQUIPMENT TECHNICAL SPECIFICATIONS										
Manual basic crane extensions										
First manual extension after basic crane – max. capacity	kg	1235	905	680	490	365				
Weight *1	kg	69	62	55	47	35				
Second manual extension after basic crane – max. capacity	kg	930	695	510	390					
Weight*1	kg	62	55	47	35					
Third manual extension after basic crane – max. capacity	kg									
Weight*1	kg									
Fourth manual extension after basic crane – max. capacity	kg									
Weight*1	kg									
Fifth manual extension after basic crane – max. capacity	kg									
Weight*1	kg									
Diameter of the extension holding pin	mm	20	20	20	20	20				
Hook: max. capacity	t	5.4	5.4	5.4	5.4	5.4				
Hook: weight*1	kg	4	4	4	4	4				
Hook: holding cricket	mm	4.75	4.75	4.75	4.75	4.75				
DIN 15018 crane and extension classification – lifting by hook		H1-B3	H1-B3	H1-B3	H1-B3	H1-B3				
Fly – jib										
2 Supplementary controls with piping for fly-jib	kg		50	60	70					
Fly –jib after basic crane			2	2	2					
weight*1	kg		450	410	400					
Diameter of the knuckle – boom holding pin	mm		20	20	20					
Hook: max. capacity	t		5.4	5.4	5.4					
Hook: weight*1	kg		4	4	4					
Hook: holding pin diameter	mm		25	25	25					
First manual extension after fly-jib – max. capacity	kg									
Weight*1	kg									
Extension holding pin diameter	mm									
Hook: max. capacity	t									
Hook: weight*1	kg									
Hook: holding pin diameter	mm									
DIN 15018 crane and fly – jib classification – lifting by hook		H1-B3	H1-B3	H1-B3	H1-B3	H1-B3				
Notes										
The figures for liftable loads and outreaches may be found in the loading diagrams. The outreaches indicated in the diagrams are theoretical and do not consider boom flexing ($\pm 2\%$ horizontally).										
General technical specifications and special specifications in relation to environmental conditions are dealt with in another section of the manual.										
*1 Weights $\pm 5\%$										

1.6.1 	COD. 01.02.101000.425.0 DATA: PAG. 1/4	110 CL	2S	3S	4S				
DATI TECNICI GRU BASE									
Momento massimo di sollevamento (primo braccio a + 20°)	kN m		101	98	95				
	t m		10.30	10.00	9.70				
Momento dinamico massimo	kN m		147.67	147.26	146.28				
Momento rotazione	kN m		15.30	15.30	15.30				
Angolo di rotazione (rotazione con cremagliera)			400°	400°	400°				
Inclinazione max. piano apparecchio a gru orizz. (capacità di rotaz.)			4.5°	4.5°	4.5°				
Portata d'olio (max.)	l/min		30	30	30				
Pressione d'esercizio (max.)	bar		300	300	300				
Potenza idraulica richiesta (teorica)	kW		15	15	15				
Potenza elettrica richiesta	W								
Tensione 24 V	V		24	24	24				
Capacità serbatoio olio	l		70	70	70				
Reazione massima sullo stabilizzatore (stabilizzatori standard)	daN		6700	6685	6640				
Apertura stabilizzatori standard			4540	4540	4540				
Apertura stabilizzatori maggiorati			5500	5500	5500				
Gancio: portata max.	t		6.6	6.6	6.6				
Gancio: grillo di fissaggio	t		4.75	4.75	4.75				
Classificazione gru DIN 15018 – sollevamento con gancio			H1–B3	H1–B3	H1–B3				
Pressione acustica nel posto di comando *1	dB (A)		< 70	< 70	< 70				
Vibrazioni nel posto di comando *2									
N. 8 tiranti M 24x2 (39NiCrMo3 bonificato UNI 7845–78)									
Pesi *3									
Gru standard senza carica olio nel serbatoio	kg		1526	1623	1723				
Gru con stabilizzatori maggiorati senza carica olio nel serbatoio	kg		1552	1649	1749				
Carica olio	kg		65	65	65				
Gancio: peso	kg		4	4	4				
Dispositivi di sicurezza std / optional									
Valvole di blocco (rotazione –1° e 2° braccio – sfili)									
Limitatore di momento									
Indicatore di momento (manometro)									
Dispositivo di emergenza									
	bar								
Dispositivi previsti									
Radiocomando									
Refrigeratore									
Note									
I dati relativi ai carichi sollevabili e sbracci, sono rilevabili dai diagrammi di carico. Gli sbracci indicati sui diagrammi sono teorici e non considerano le flessioni (± 2% in orizzontale).									
Dati tecnici generali e dati tecnici particolari in relazione alle condizioni ambientali, sono trattati in una altra sezione del manuale.									
*1 E' possibile che sia > 70 dB (A) a gru installata; cio' dipende dal rumore della pompa e dal motore del veicolo.									
*2 Dipende dal tipo di veicolo.									
*3 Pesi ± 5%									

2.2.3.1 I	COD. 01.02.101000.426.0 DATA: PAG. 1/4	110 CL		2S	3S	4S					
DATI TECNICI ATTREZZATURE DI SOLLEVAMENTO EFFER											
Prolunghe manuali gru base											
Prima prolunga manuale dopo gru base – portata max.	kg	905	680	490							
Peso*1	kg	62	55	47							
Seconda prolunga manuale dopo gru base – portata max.	kg	695	510	390							
Peso*1	kg	55	47	35							
Terza prolunga manuale dopo gru base – portata max.	kg										
Peso*1	kg										
Quarta prolunga manuale dopo gru base – portata max.	kg										
Peso*1	kg										
Quinta prolunga manuale dopo gru base – portata max.	kg										
Peso*1	kg										
Diametro del perno di fissaggio prolunghe	mm	20	20	20							
Gancio: portata max.	t	5.4	5.4	5.4							
Gancio. peso*1	kg	4	4	4							
Gancio: grillo di fissaggio	t	4.75	4.75	4.75							
Classificazione gru e prol. DIN 15018 – sollevamento con gancio		H1-B3	H1-B3	H1-B3							
Snodo supplementare											
2 comandi + tubazioni per alimentazione snodo	kg	50	60	70							
Snodo supplementare dopo gru base – n° sfili snodo		2	2	2							
Peso*1	kg	450	410	400							
Diametro del perno di fissaggio snodo	mm	20	20	20							
Gancio: portata max.	t	5.4	5.4	5.4							
Gancio: peso*1	kg	4	4	4							
Gancio: diametro del perno di fissaggio	mm	25	25	25							
Prima prolunga manuale dopo snodo supplementare – portata max.	kg										
Peso*1	kg										
Diametro del perno di fissaggio prolunghe	mm										
Gancio: portata max.	t										
Gancio: peso*1	kg										
Gancio: diametro del perno di fissaggio	mm										
Classificazione gru e snodo DIN 15018 – sollevamento con gancio		H1-B3	H1-B3	H1-B3	H1-B3						
Note											
<p>I dati relativi ai carichi sollevabili e sbracci, sono rilevabili dai diagrammi di carico. Gli sbracci indicati sui diagrammi sono teorici e non considerano le flessioni ($\pm 2\%$ in orizzontale).</p> <p>Dati tecnici generali e dati tecnici particolari in relazione alle condizioni ambientali, sono trattati in una altra sezione del manuale.</p>											
*1 peso $\pm 5\%$											

**EFFER LIFTING EQUIPMENT
TECHNICAL SPECIFICATIONS****Manual basic crane extensions**

First manual extension after basic crane – max. capacity

kg

905

680

490

Weight *1

kg

62

55

47

Second manual extension after basic crane – max. capacity

kg

695

510

390

Weight*1

kg

55

47

35

Third manual extension after basic crane – max. capacity

kg

Weight*1

kg

Fourth manual extension after basic crane – max. capacity

kg

Weight*1

kg

Fifth manual extension after basic crane – max. capacity

kg

Weight*1

kg

Diameter of the extension holding pin

mm

20

20

20

Hook: max. capacity

t

5.4

5.4

5.4

Hook: weight*1

kg

4

4

4

Hook: holding cricket

mm

4.75

4.75

4.75

DIN 15018 crane and extension classification – lifting by hook

H1–B3

H1–B3

H1–B3

Fly – jib

2 Supplementary controls with piping for fly–jib

kg

50

60

70

Fly –jib after basic crane

2**2****2**

weight*1

kg

450

410

400

Diameter of the knuckle – boom holding pin

mm

20

20

20

Hook: max. capacity

t

5.4

5.4

5.4

Hook: weight*1

kg

4

4

4

Hook: holding pin diameter

mm

25

25

25

First manual extension after fly–jib – max. capacity

kg

Weight*1

kg

Extension holding pin diameter

mm

Hook: max. capacity

t

Hook: weight*1

kg

Hook: holding pin diameter

mm

DIN 15018 crane and fly – jib classification – lifting by hook

H1–B3

H1–B3

H1–B3

H1–B3

Notes

The figures for liftable loads and outreaches may be found in the loading diagrams. The outreaches indicated in the diagrams are theoretical and do not consider boom flexing ($\pm 2\%$ horizontally).

General technical specifications and special specifications in relation to environmental conditions are dealt with in another section of the manual.

*1 Weights $\pm 5\%$



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DATI TECNICI
TECHNICAL DATA
TECHNISCHE DATEN
DONNEES TECHNIQUES

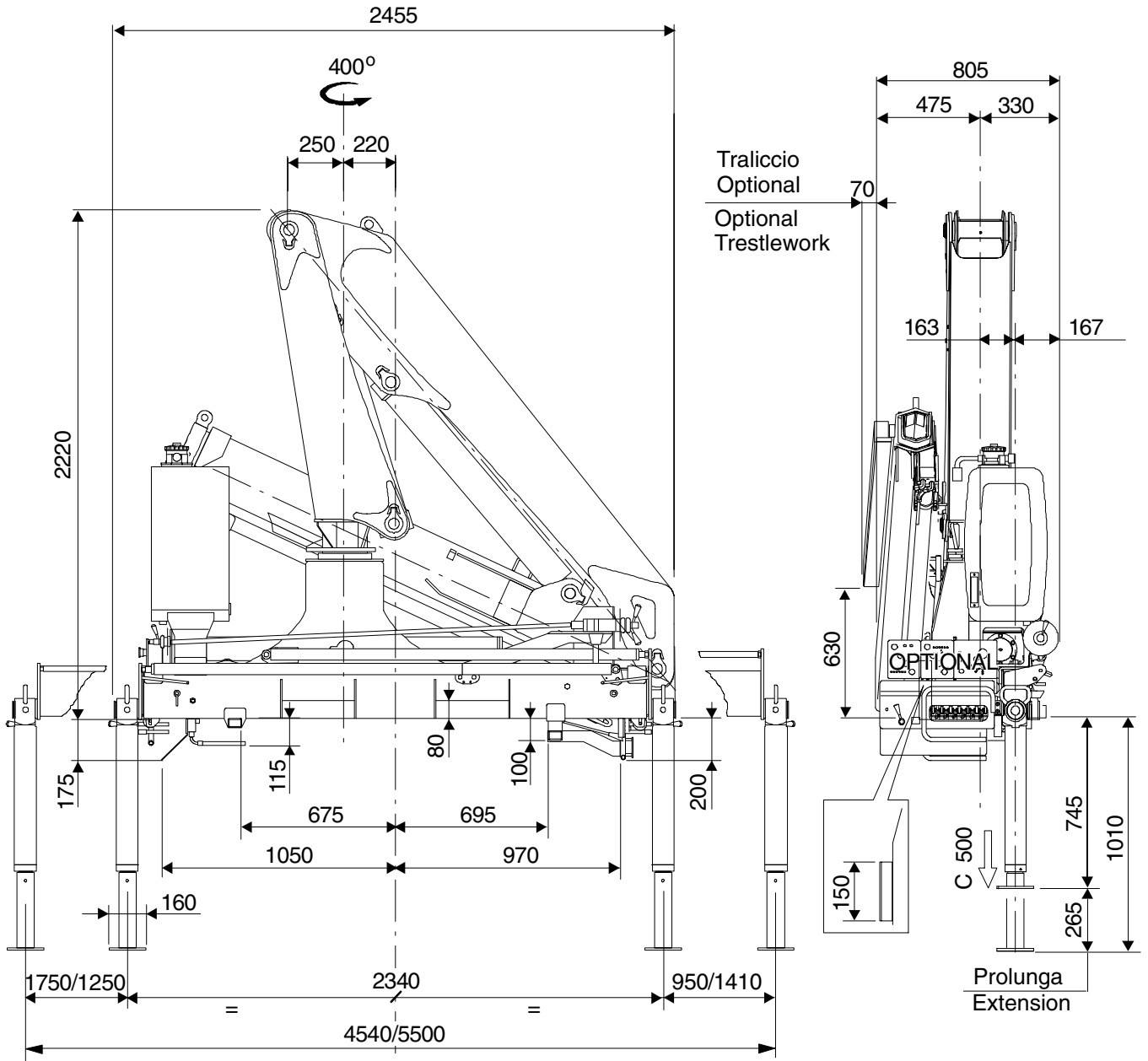
110 / 1S

DIMENSIONI D'INGOMBRO OVERALL DIMENSIONS

COD.1K.1.MB.01

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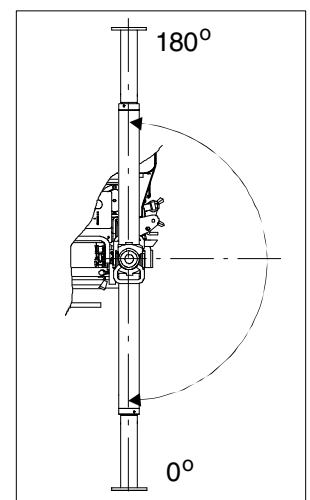
STANDARD



Traliccio
Optional
Optional
Trestlework

OPTIONAL

Prolunga
Extension



interasse staffe
Bracket interaxle

Esterno staffe
Ext. Brackets

8 tiranti M 24x2 (39 NiCrMo 3)
8 tie-rods M 24x2 (39 NiCrMo 3)



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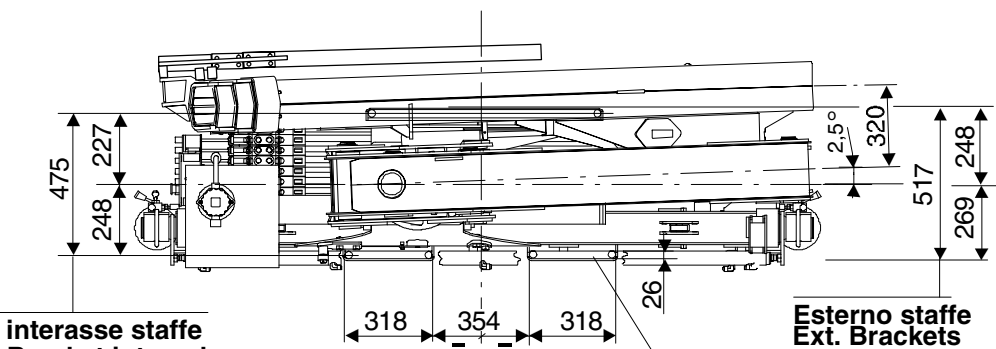
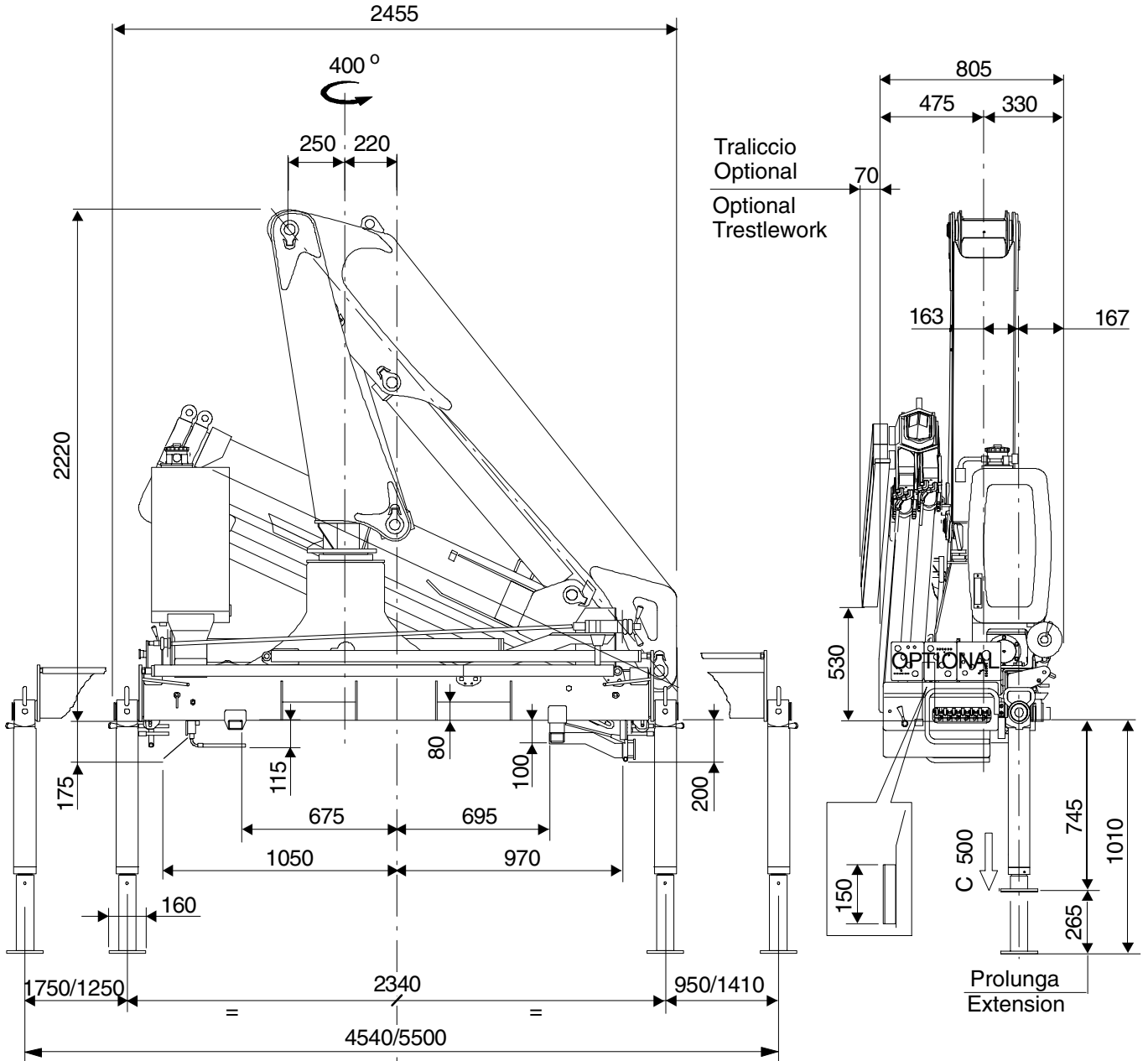
110 / 2S

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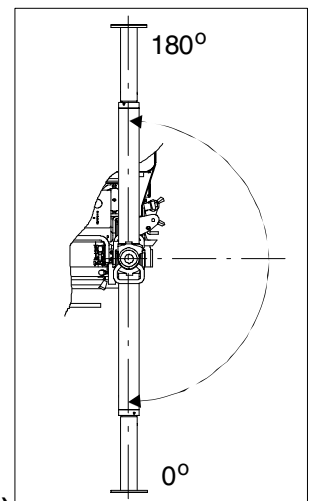
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DATA: 16.02.00

STANDARD



8 tiranti M 24x2 (39 NiCrMo 3)
8 tie-rods M 24x2 (39 NiCrMo 3)





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TECHNISCHE DATEN
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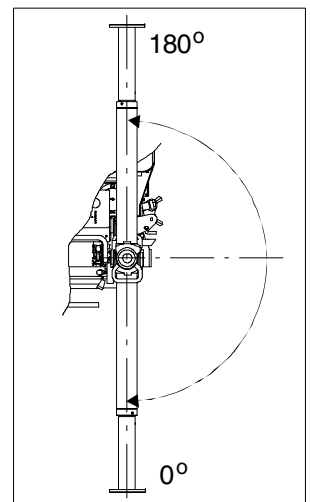
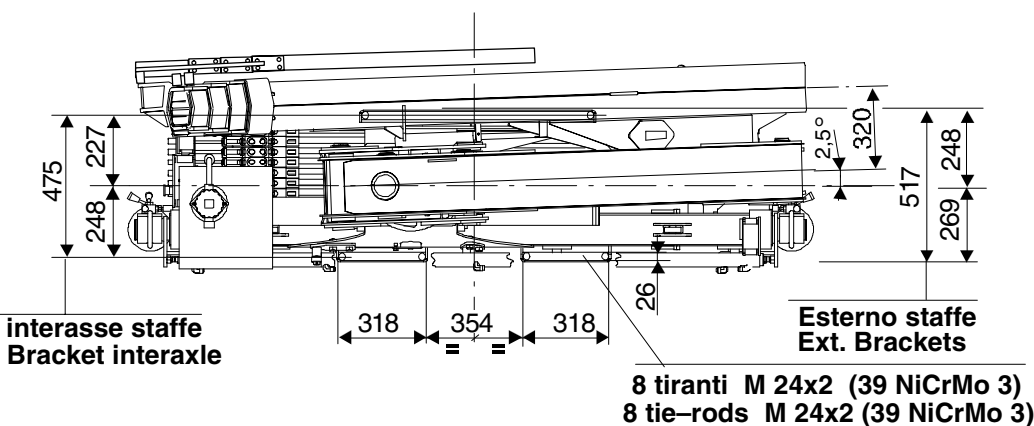
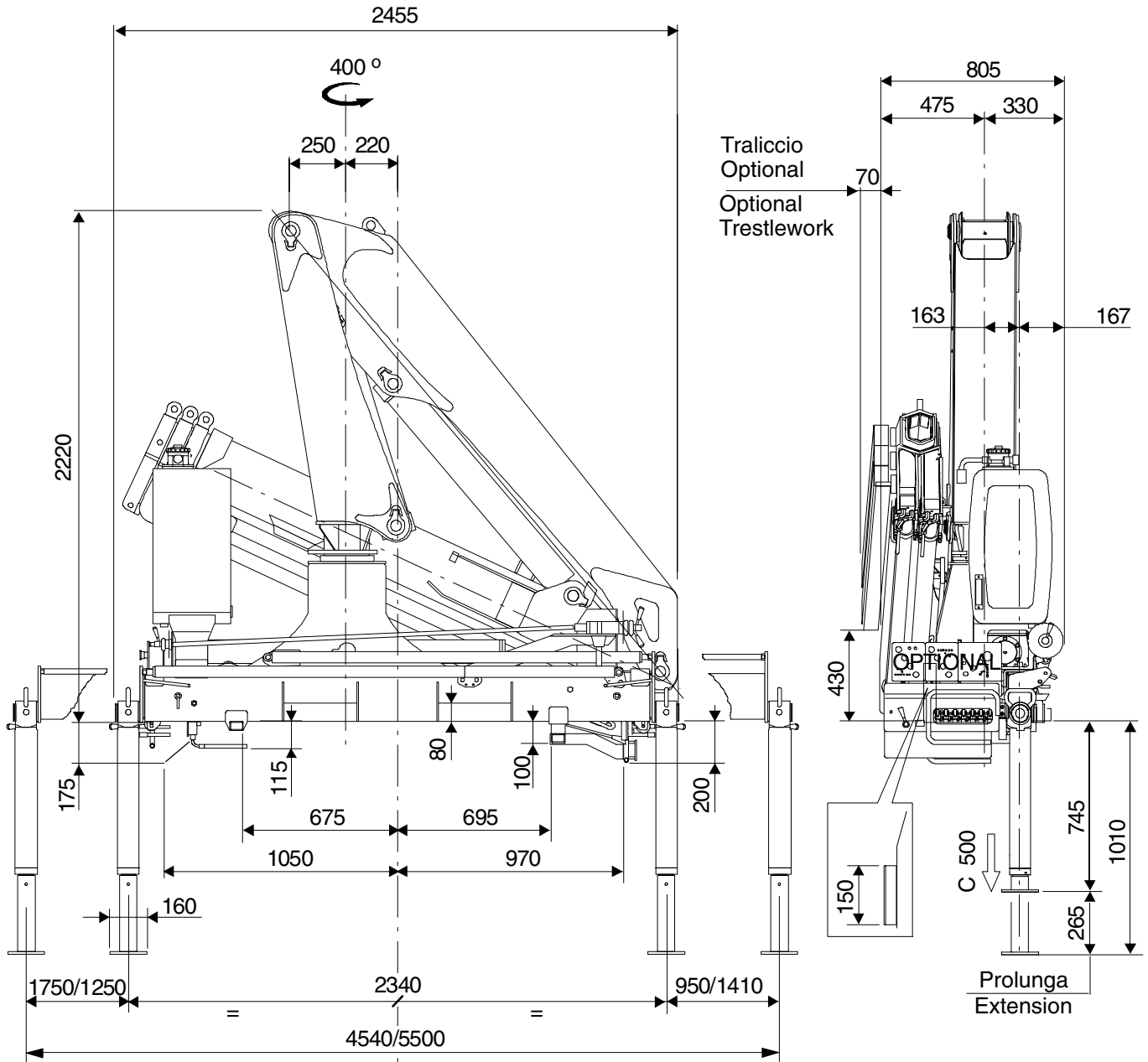
110 / 3S

DIMENSIONI D'INGOMBRO OVERALL DIMENSIONS

COD.1K.3.MB.01

DATA: 16.02.00

STANDARD





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DONNEES TECHNIQUES

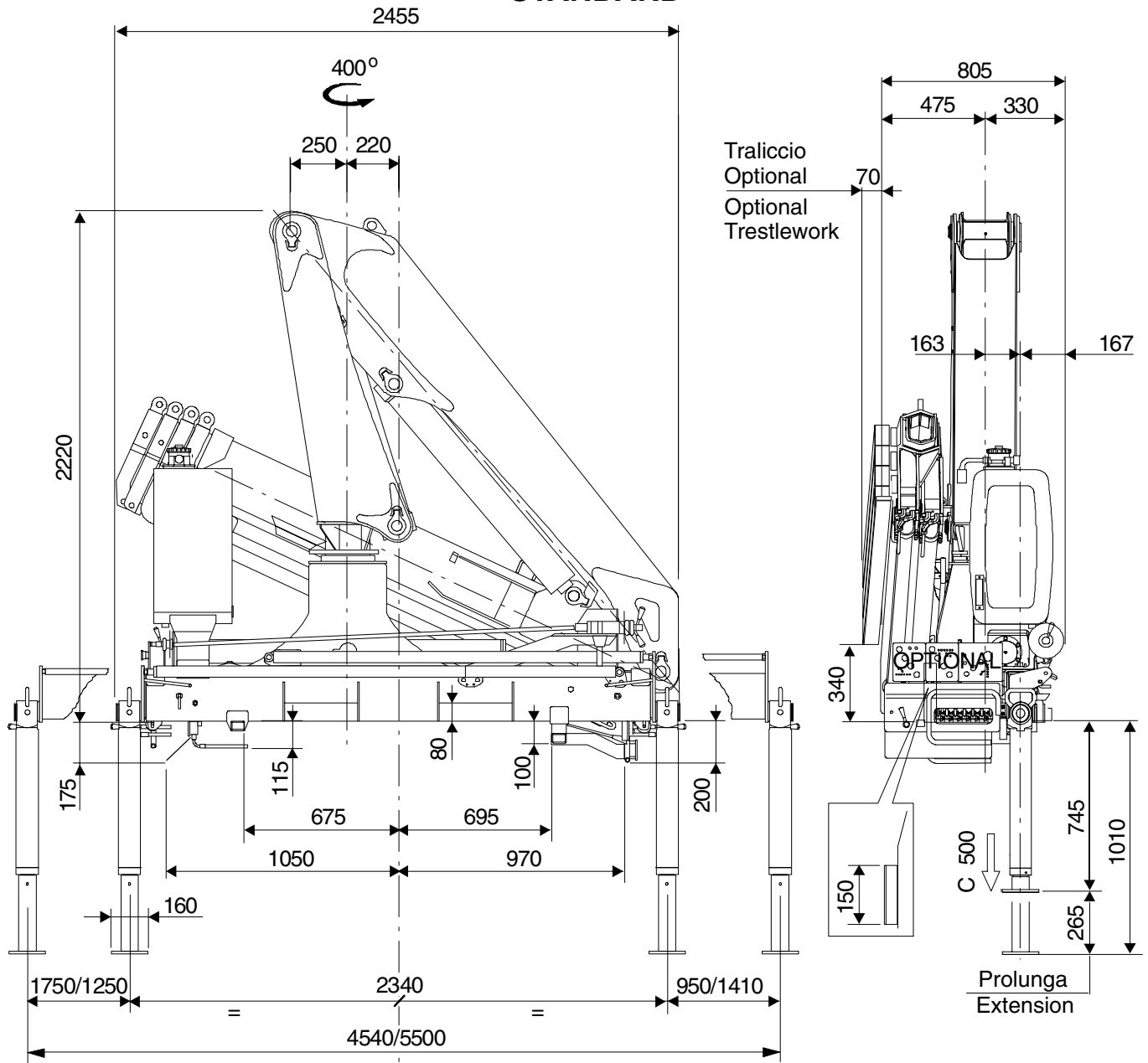
110 / 4S

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COD.1K.4.MB.01

DATA: 16.02.00

STANDARD

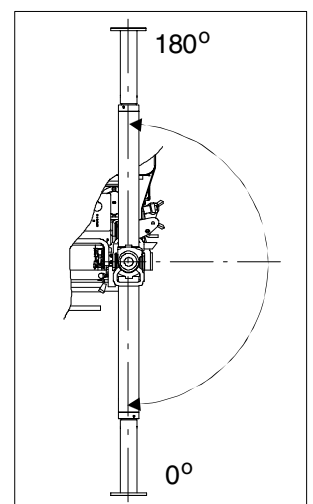


Traliccio
Optional
Optional
Trestlework

interasse staffe
Bracket interaxle

Esterno staffe
Ext. Brackets

8 tiranti M 24x2 (39 NiCrMo 3)
8 tie-rods M 24x2 (39 NiCrMo 3)





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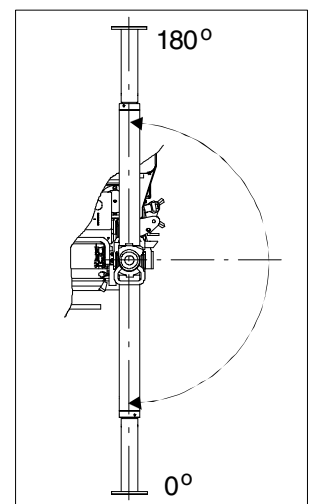
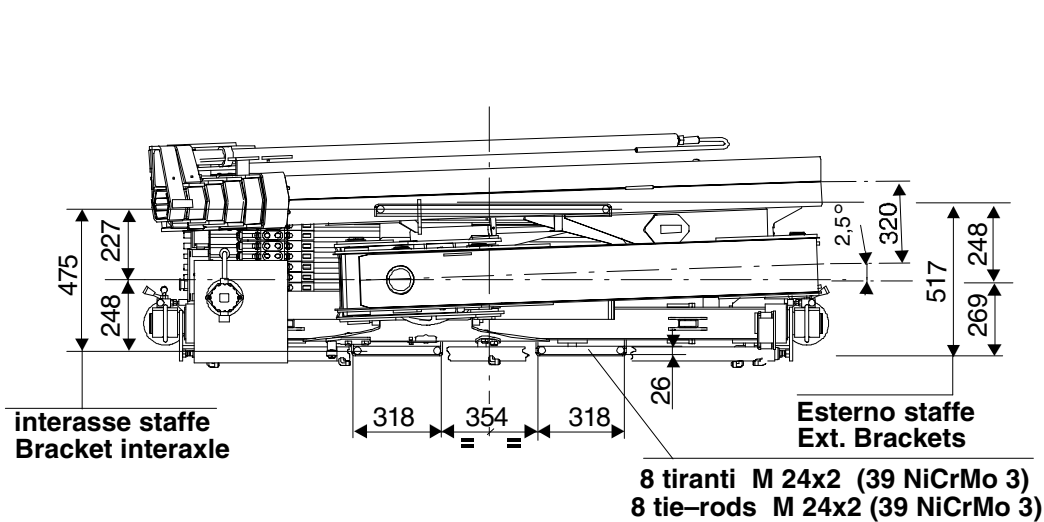
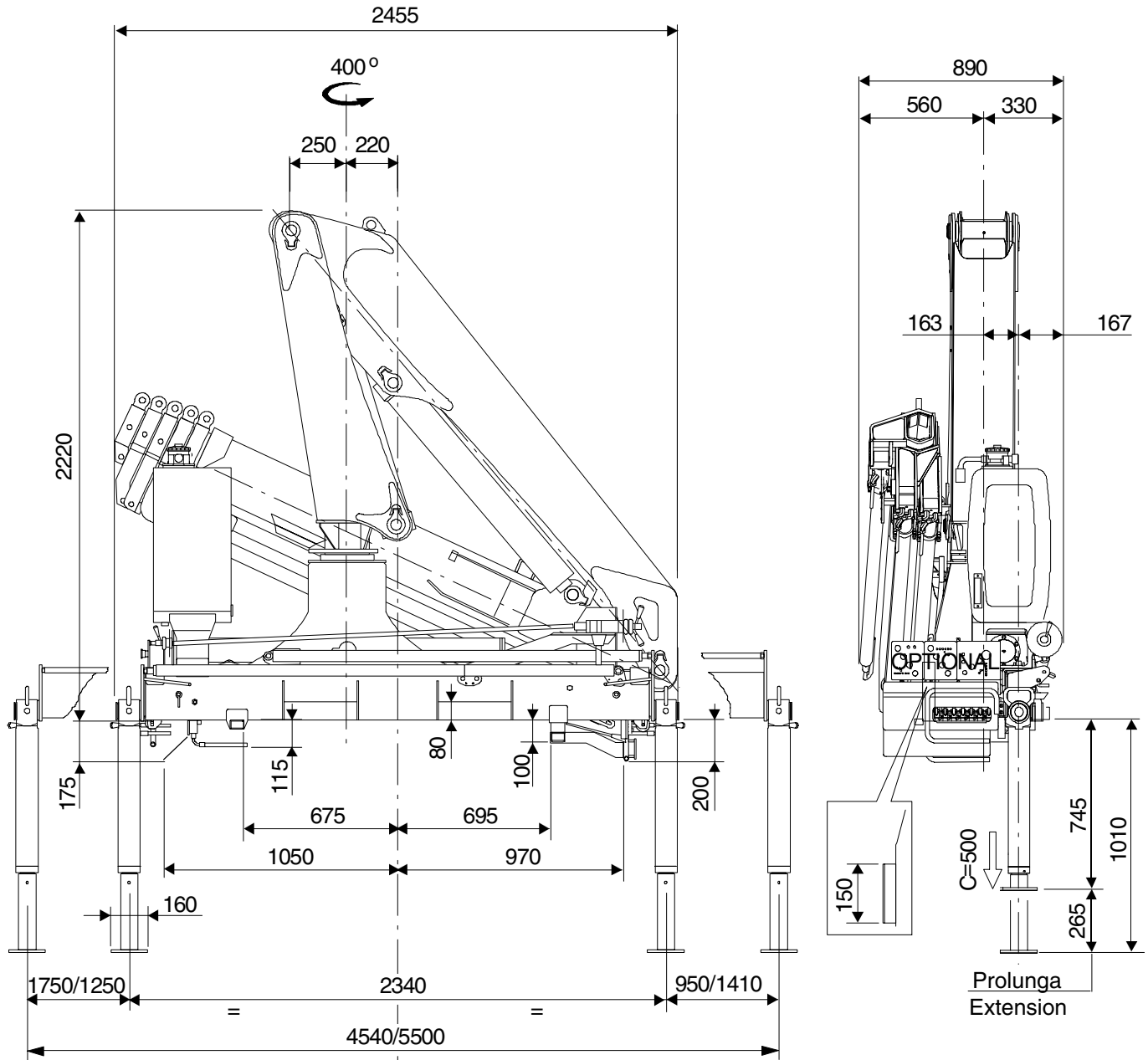
110 / 5S

DIMENSIONI D'INGOMBRO OVERALL DIMENSIONS

COD.1K.5.MB.01

DATA: 16.02.00

STANDARD





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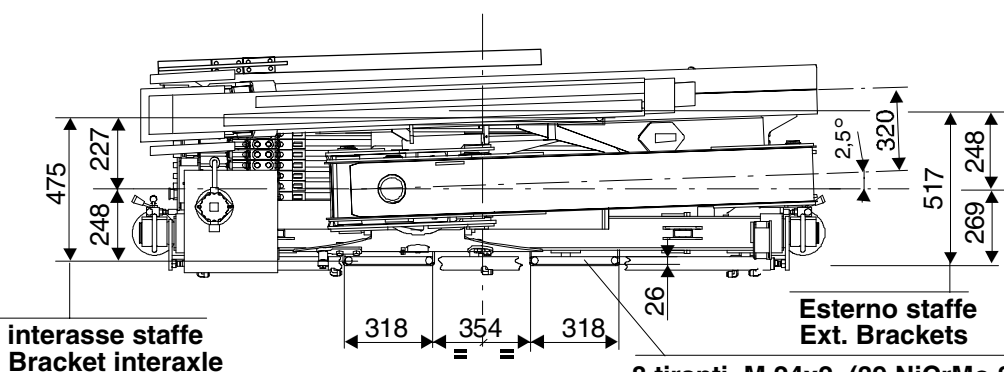
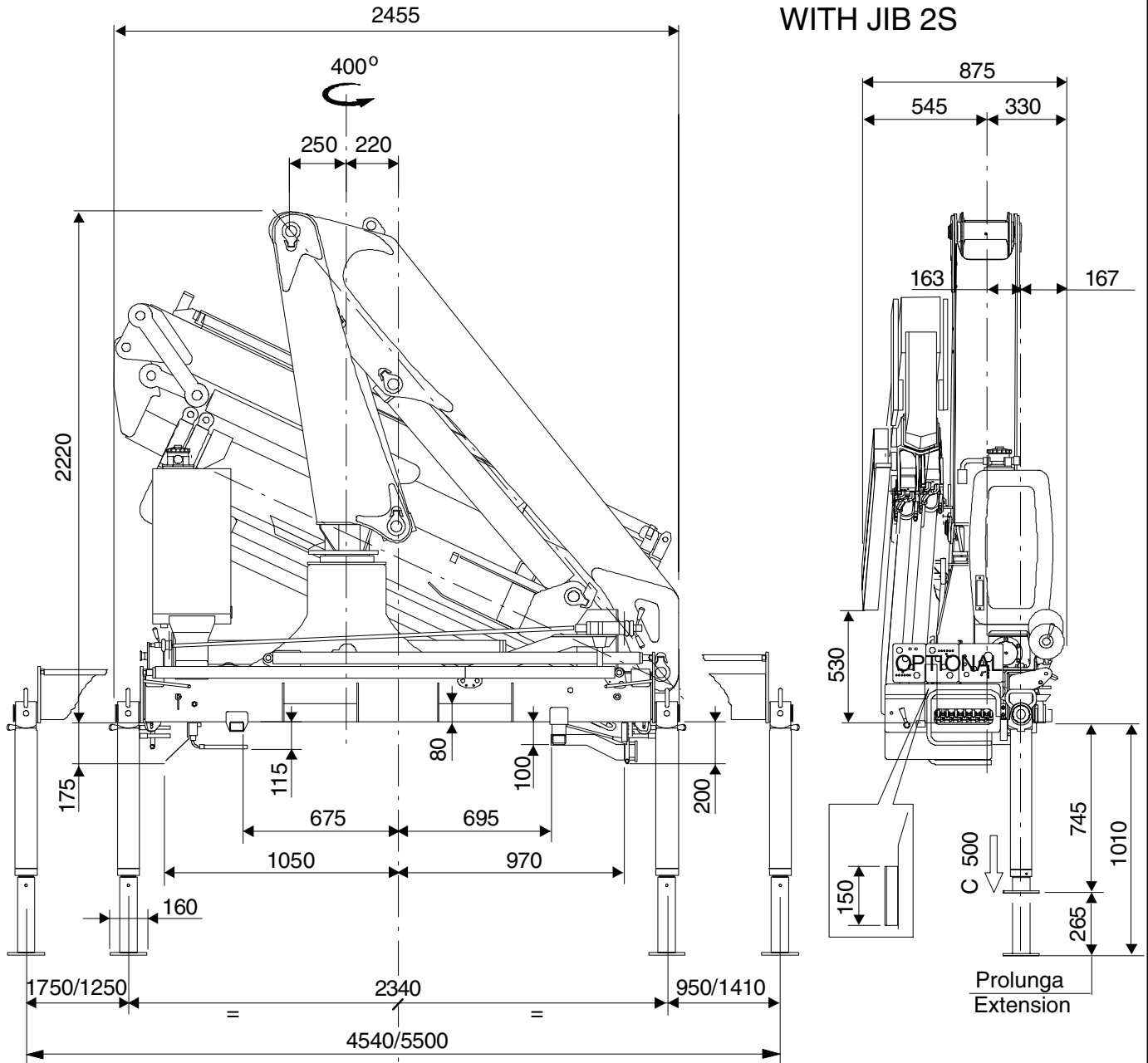
110 / 2S

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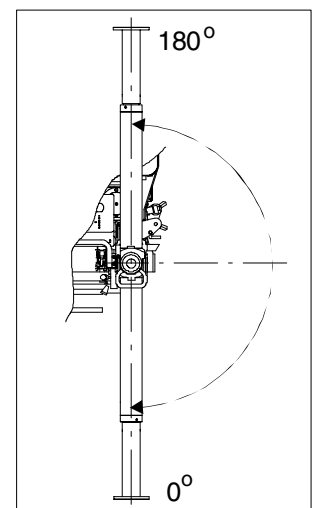
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DATA: 16.02.00

CON SNODO SUPPL. 2S WITH JIB 2S



8 tiranti M 24x2 (39 NiCrMo 3)
8 tie-rods M 24x2 (39 NiCrMo 3)





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s.p.a

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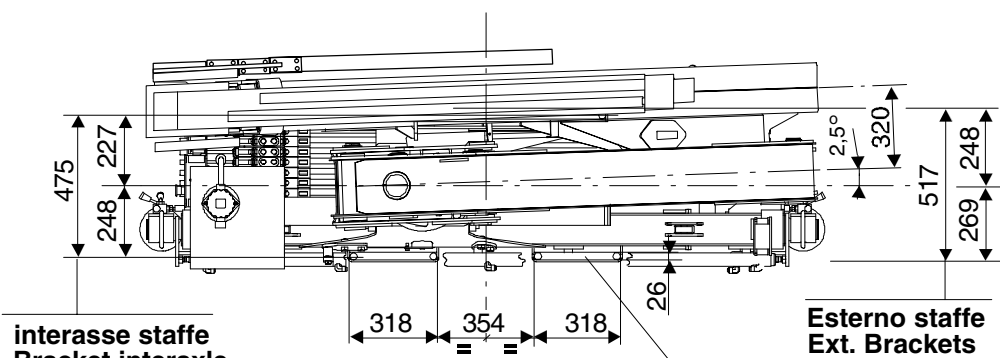
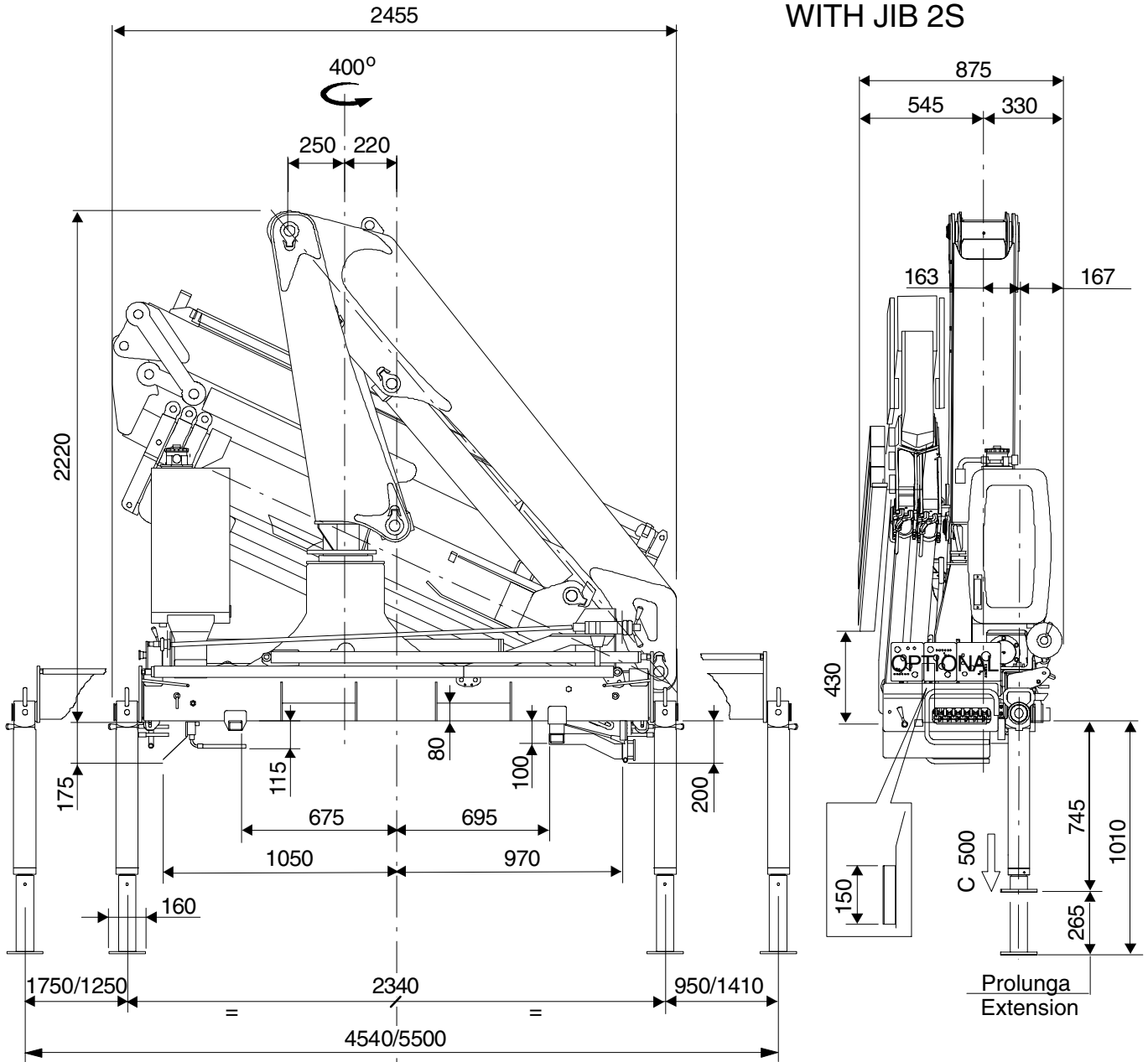
110 / 3S

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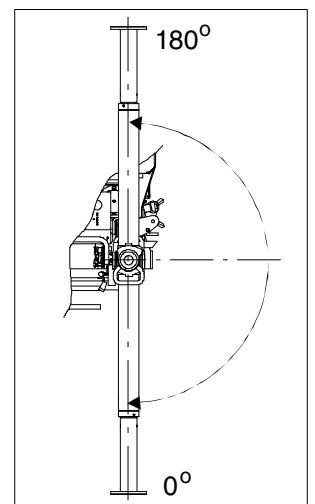
COD.1K.3.SN.01

DATA: 16.02.00

**CON SNODO SUPPL. 2S
WITH JIB 2S**



8 tiranti M 24x2 (39 NiCrMo 3)
8 tie-rods M 24x2 (39 NiCrMo 3)





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DONNEES TECHNIQUES

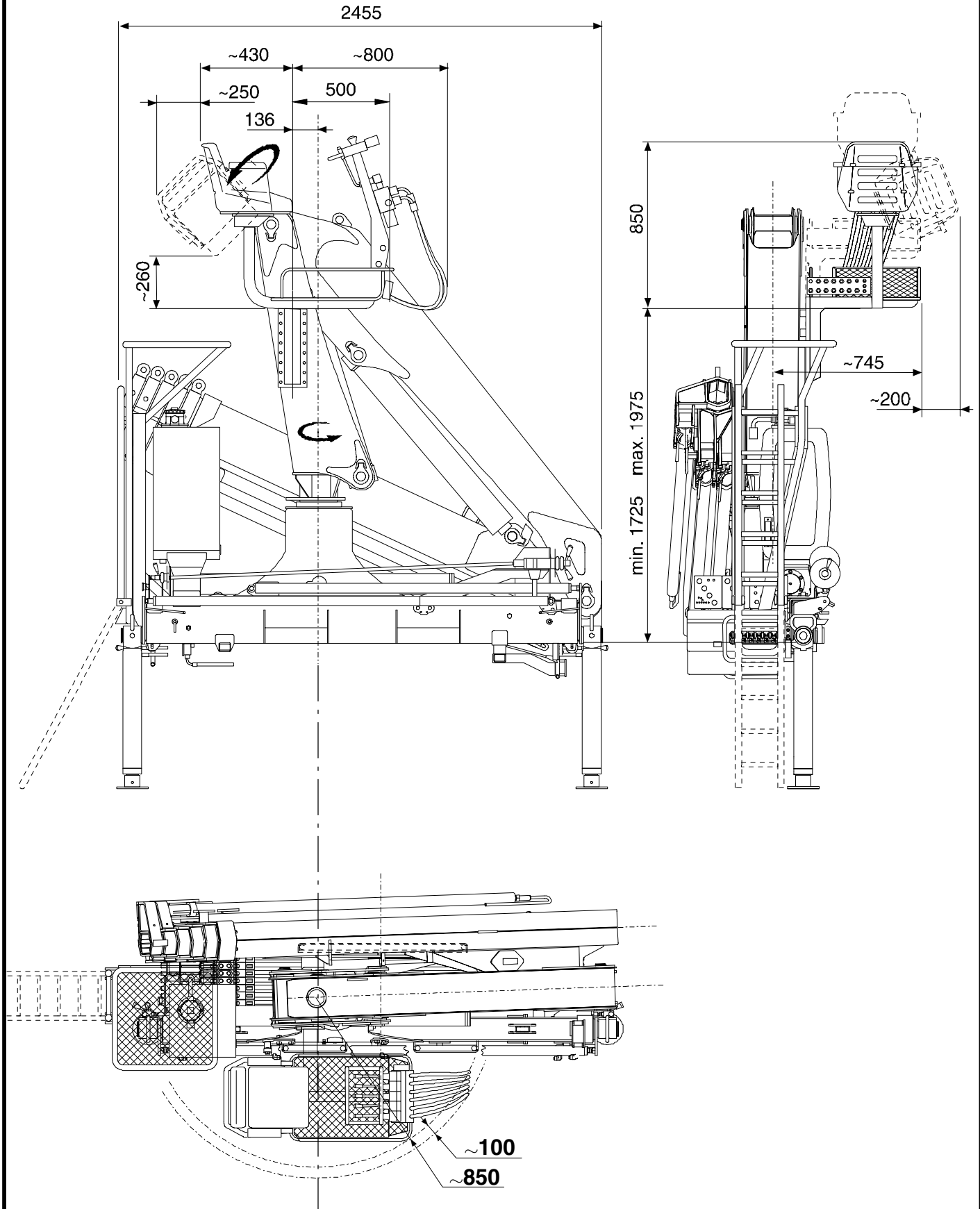
110

DIMENSIONI D'INGOMBRO OVERALL DIMENSIONS

COD.1K.X.CA.01

DATA: 24.03.00

COMANDI IN ALTO / TOP SEAT





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DONNEES TECHNIQUES

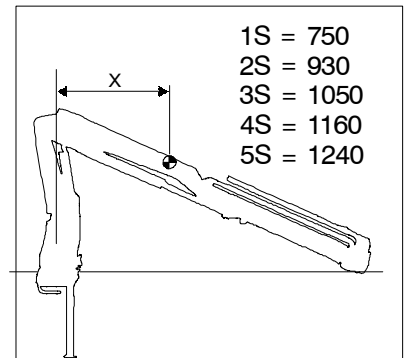
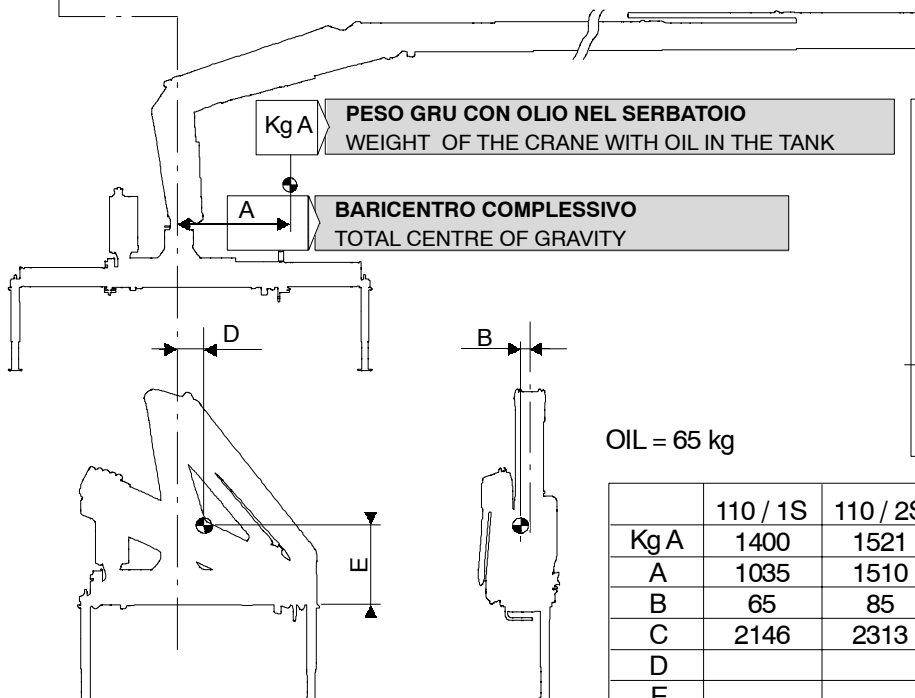
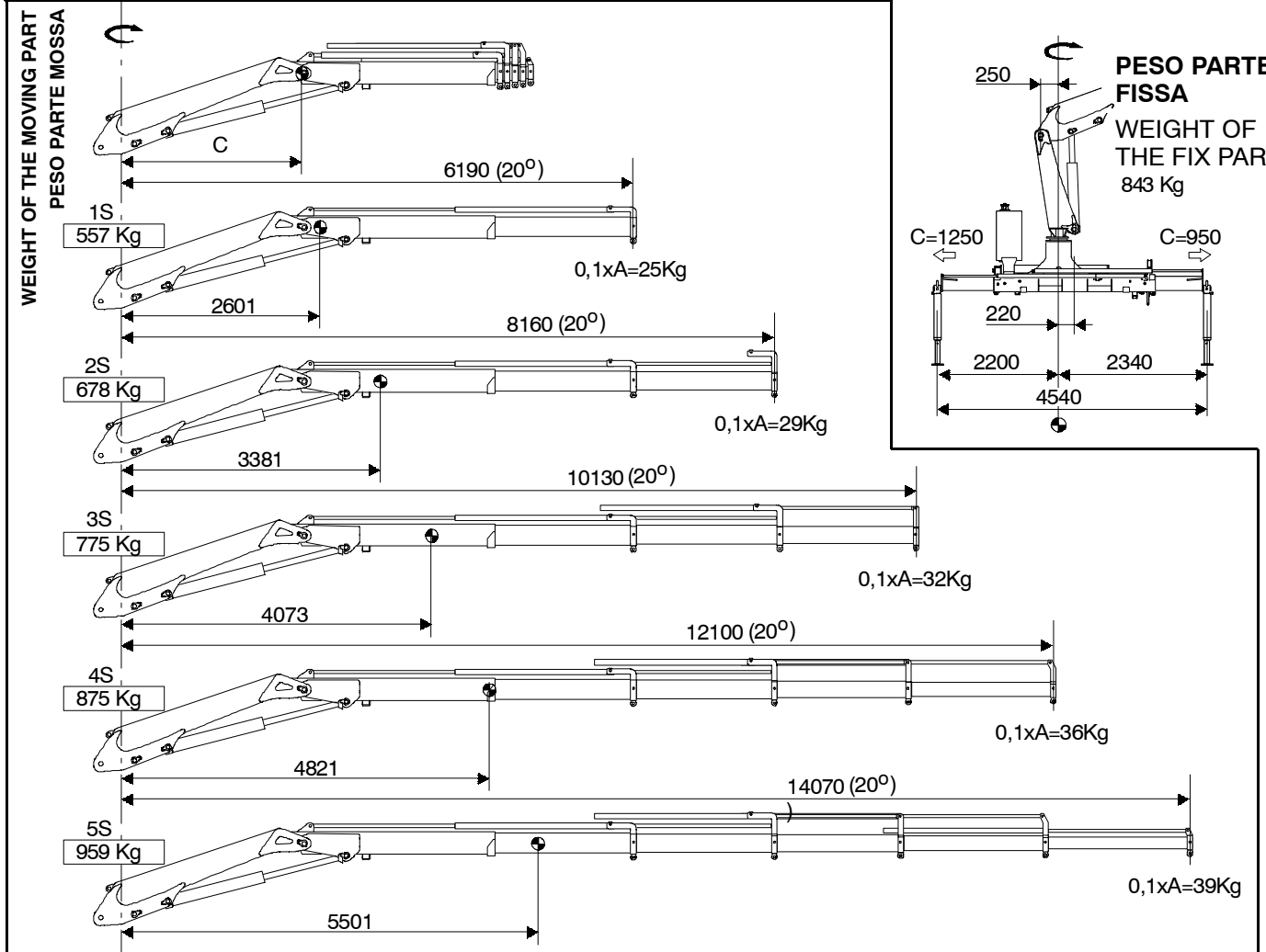
110

PESI E BARICENTRI WEIGHT - CENTER OF GRAVITY

COD.1K.X.BAR.01

DATA: 16.02.00

STABILIZZATORI STANDARD / STANDARD STABILIZER



OIL = 65 kg

	110 / 1S	110 / 2S	110 / 3S	110 / 4S	110 / 5S
Kg A	1400	1521	1618	1718	1802
A	1035	1510	1950	2455	2930
B	65	85	100	115	125
C	2146	2313	2405	2478	2527
D					
E					



DATI TECNICI
TECHNICAL DATA
TECHNISCHE DATEN
DONNEES TECHNIQUES

110 + JIB

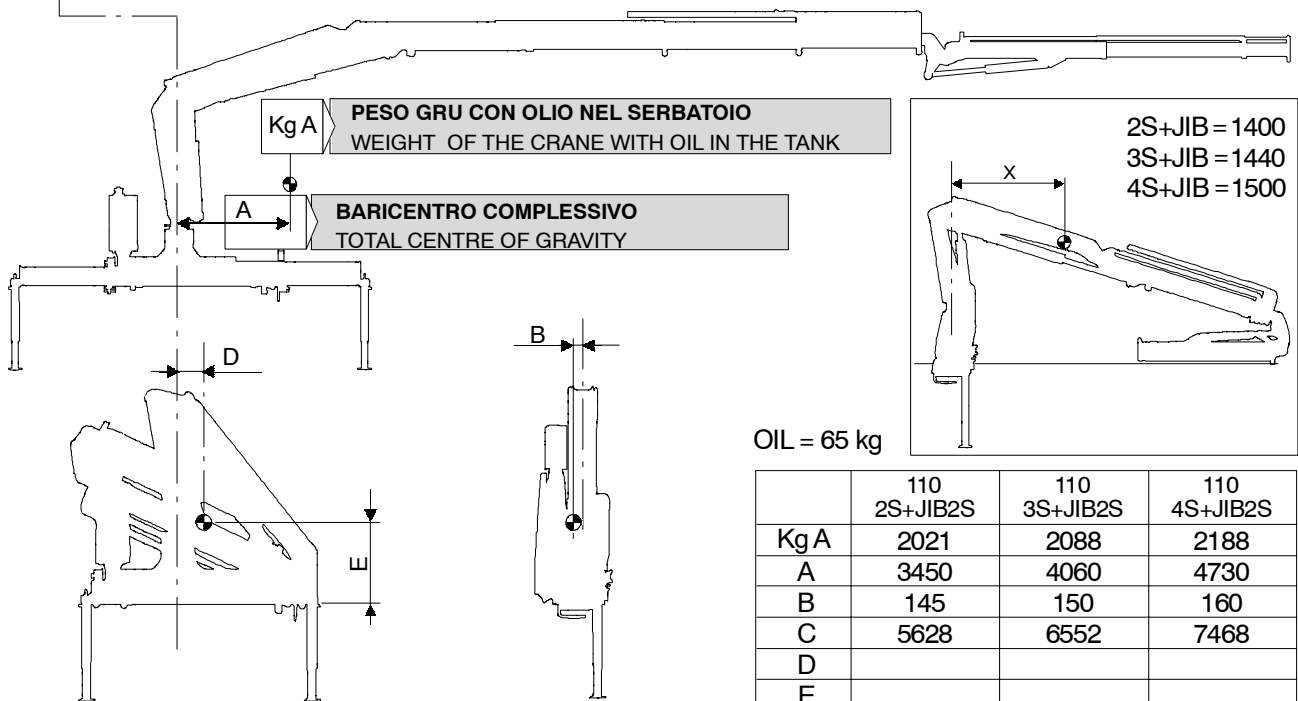
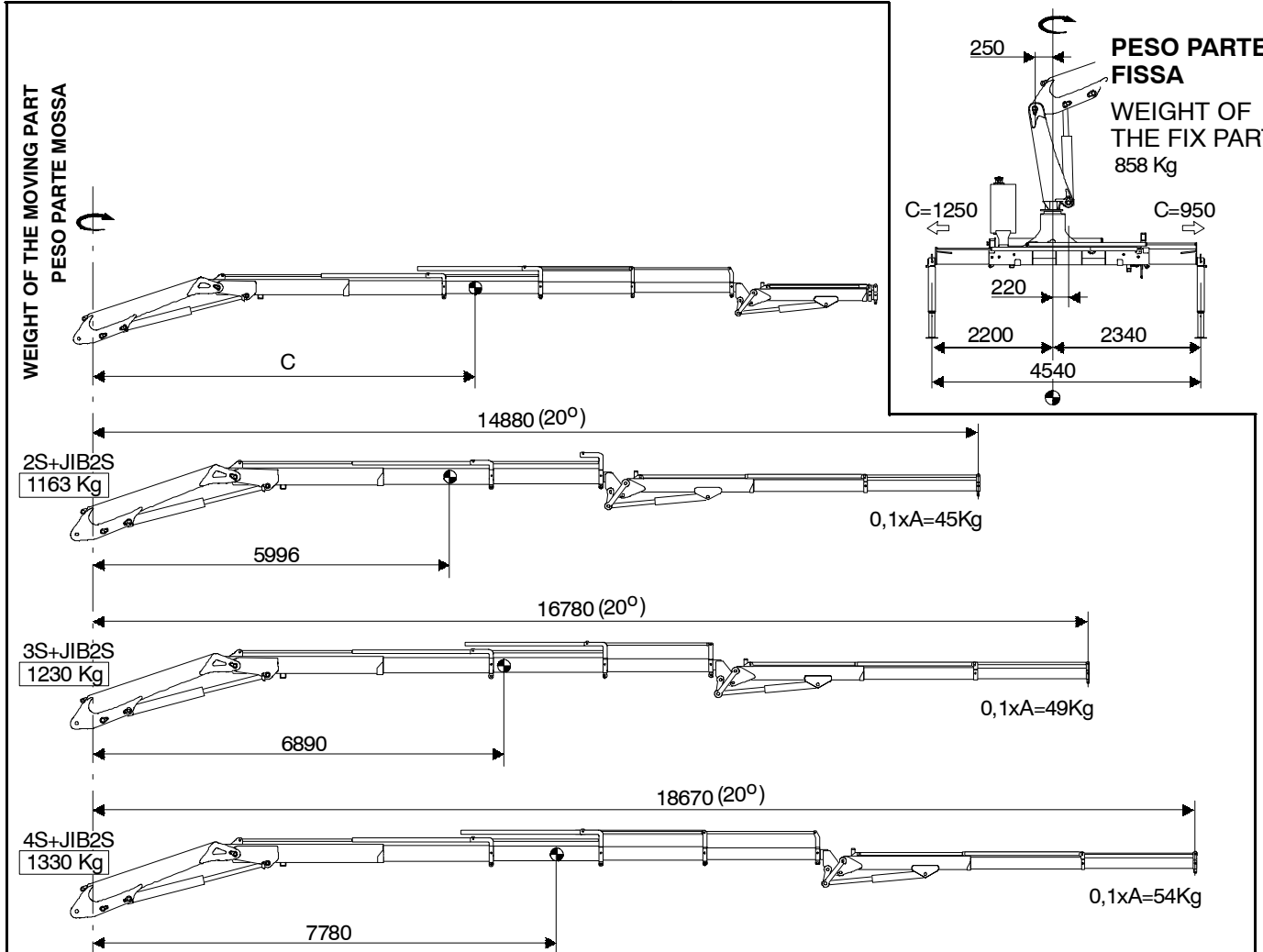
PESI E BARICENTRI

WEIGHT - CENTER OF GRAVITY

COD.1K.X.BAR.02

DATA: 16.02.00

STABILIZZATORI STANDARD / STANDARD STABILIZER





DATI TECNICI
TECHNICAL DATA
TECHNISCHE DATEN
DONNEES TECHNIQUES

110

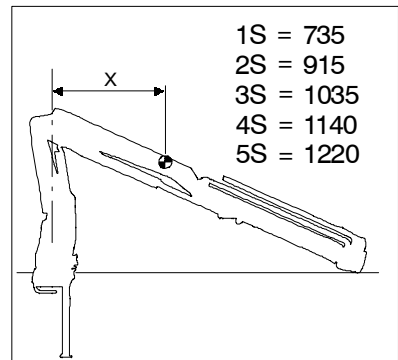
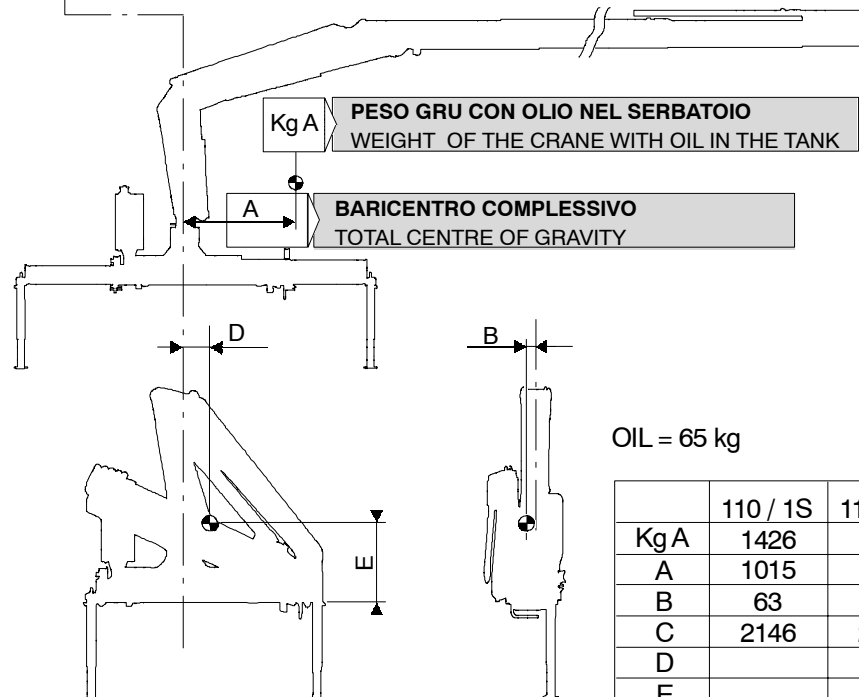
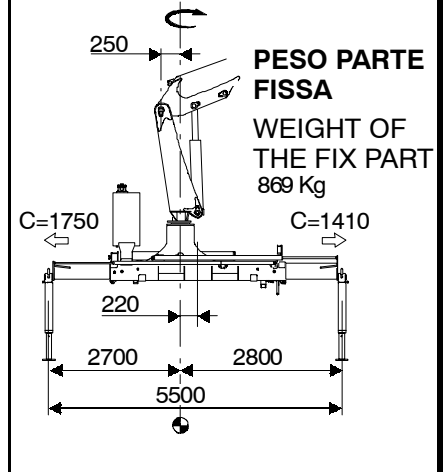
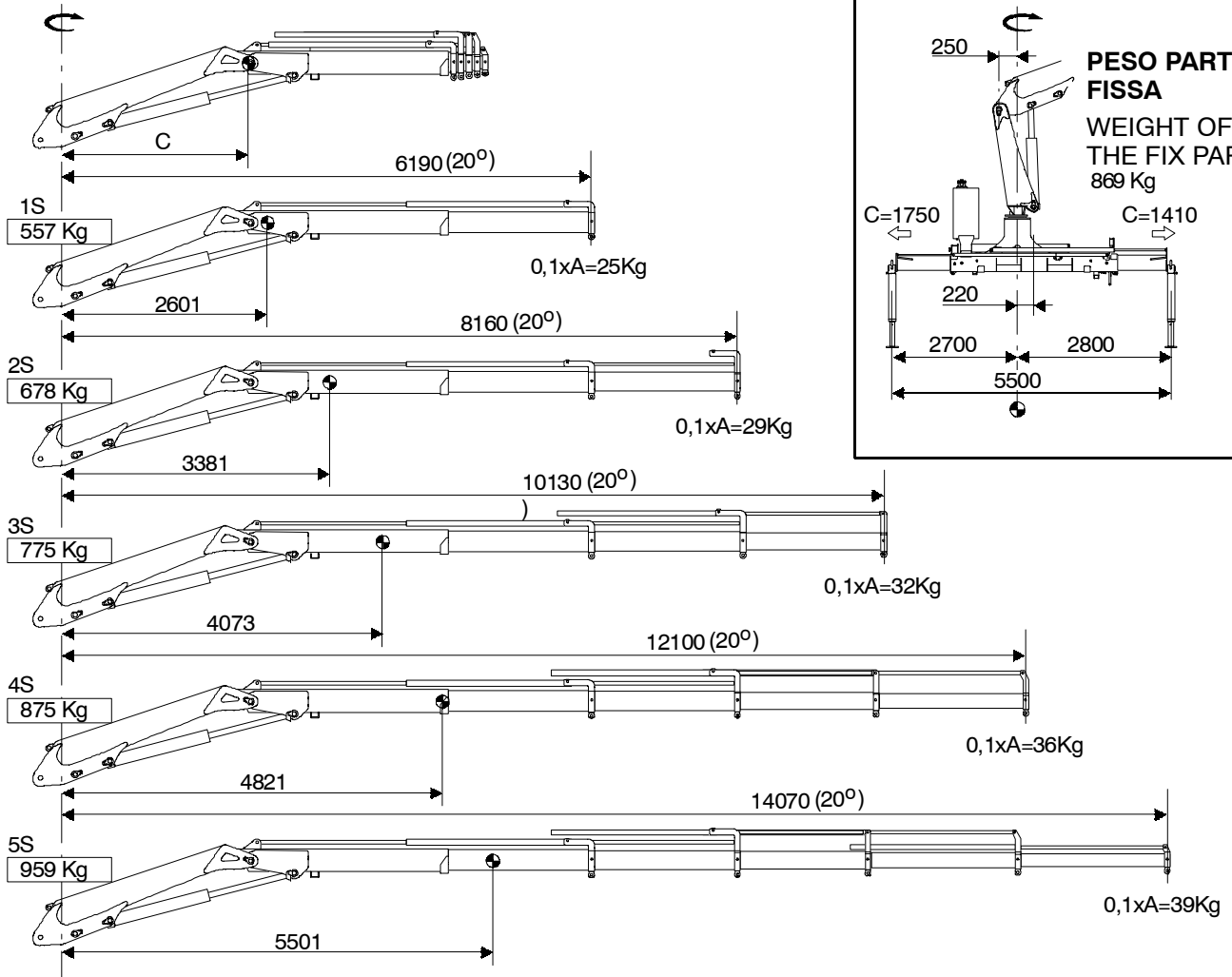
PESI E BARICENTRI WEIGHT - CENTER OF GRAVITY

COD.1K.X.BAR.03

DATA: 16.02.00

STABILIZZATORI MAGGIORATI / OVERSIZED STABILIZER

WEIGHT OF THE MOVING PART
PESO PARTE MOSSA



OIL = 65 kg

	110 / 1S	110 / 2S	110 / 3S	110 / 4S	110 / 5S
Kg A	1426	1547	1644	1744	1828
A	1015	1480	1920	2420	2885
B	63	83	98	113	123
C	2146	2313	2405	2478	2527
D					
E					



DATI TECNICI
TECHNICAL DATA
TECHNISCHE DATEN
DONNEES TECHNIQUES

110 + JIB

PESI E BARICENTRI

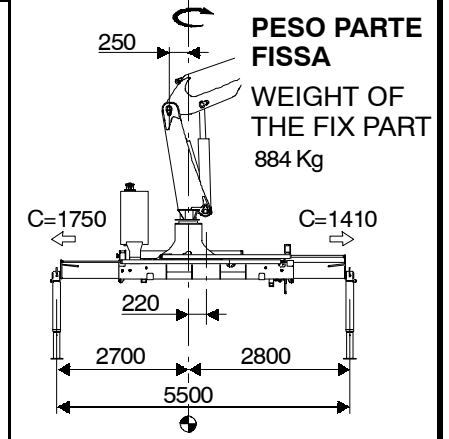
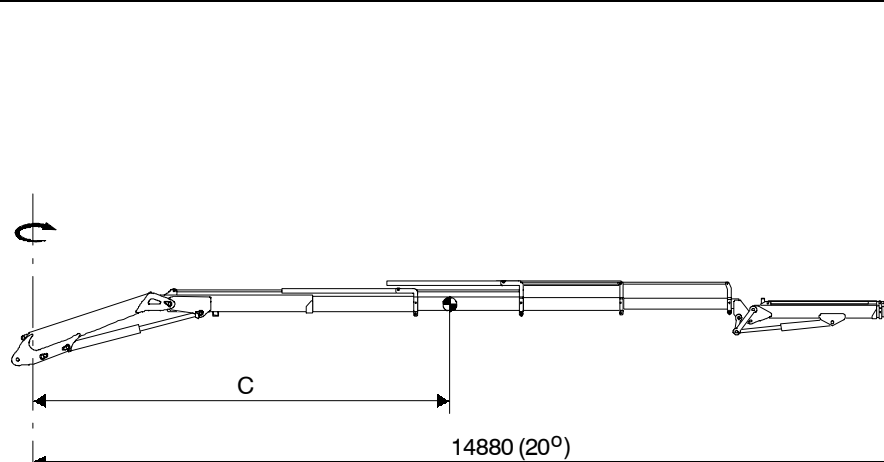
WEIGHT - CENTER OF GRAVITY

COD.1K.X.BAR.04

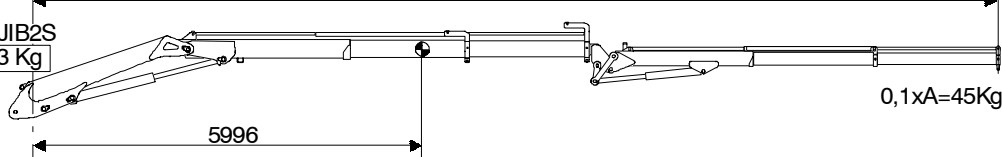
DATA: 16.02.00

STABILIZZATORI MAGGIORATI / OVERSIZED STABILIZER

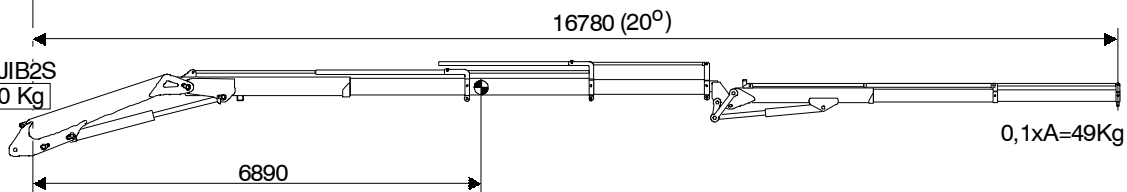
WEIGHT OF THE MOVING PART
PESO PARTE MOSSA



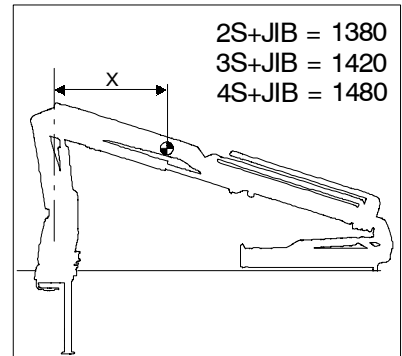
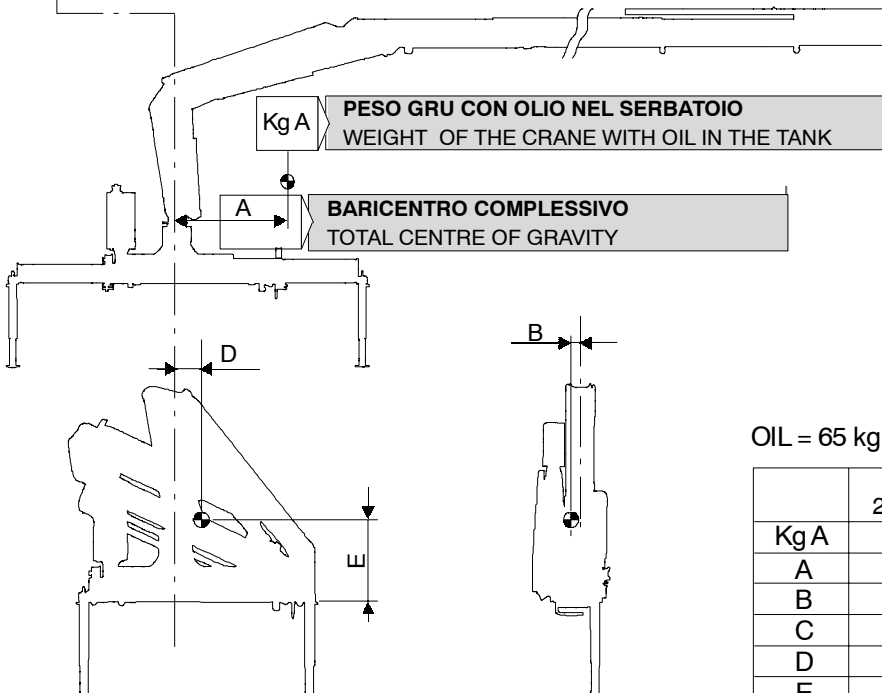
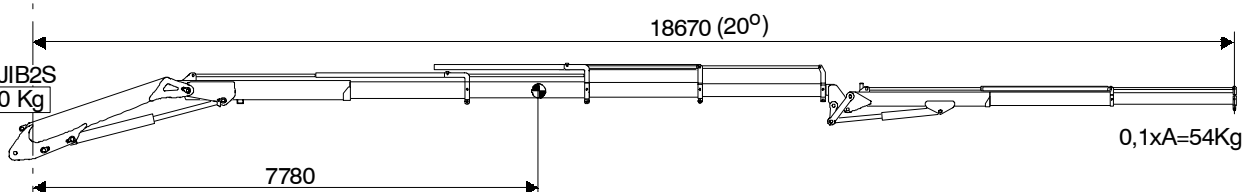
2S+JIB2S
1163 Kg



3S+JIB2S
1230 Kg



4S+JIB2S
1330 Kg



	110 2S+JIB2S	110 3S+JIB2S	110 4S+JIB2S
Kg A	2047	2114	2214
A	3405	4010	4675
B	143	148	158
C	5628	6552	7468
D			
E			

	USCITA STABILIZZATORI STABILIZERS OUTLET SORTIE STABILISATEURS ABSTUETZAUSFAHRT		VALVOLA DI SEQUENZA SEQUENCE VALVE CLAPET DE SEQUENCE SEQUENZVENTIL		RUBINETTO 2 VIE 2-WAY DIVERTER VALVE DEVIATEUR 2 VOIES 2-WEGEHAHN		PULSANTE DI EMERGENZA EMERGENCY PUSH BUTTON BOUTON DE SECOURS NOTAUSSCHALTER		VALVOLA BLOCCO MOMENTO OVERLOAD DEVICE VALVE CLAPET LIMITEUR DE MOMENT UEBERLASTVENTIL
	ROTAZIONE COLONNA COLUMN ROTATION ROTATION COLONNE SCHWENKUNG DER KRANSAEULE		VALV. DI BLOCCO SEMPLICE PER VERRICELLO BLOCKING VALVE FOR WINCH CLAPET HYDROPILOTE' POUR TREUIL EINFACHES ABSPERRVENTIL FUER SEILWINDE		RUBINETTO 3 VIE 3-WAY DIVERTER VALVE DEVIATEUR 3 VOIES 3-WEGEHAHN		PULSANTE DI EMERGENZA EMERGENCY PUSH BUTTON BOUTON DE SECOURS NOTAUSSCHALTER		
	1° BRACCIO 1st BOOM 1er BRAS 1° AUSLEGER		VALVOLA DI BLOCCO BILANCIATA SEMPLICE SIMPLE BALANCED BLOKING VALVE CLAPET HYDROPILOTE' COMPENSE' SIMPLE EINFACHES AUSGEGLEICHENES ABSPERRVENTIL		ELETTROVALVOLA DI SCAMBIO SWITCHING ELECTROVALVE ELECTROVANNE ECHANGEANTE UMSCHALTELEKTROVENTIL		DISTRIBUTORE ROTANTE IDRAULICO HYDRAULIC SWIVEL DISTRIBUTEUR TOURNANT HYDRAULIQUE HYDRAULISCHE DREHDURCHFUEHRUNG		VALV. BLOCCO MOMENTO ELETTRICA ELECTRIC OVERLOAD VALVE CLAP. LIMITEUR DE MOMENT ELECTRIQUE ELEKTRISCHE UEBERLASTVENTIL
	2° BRACCIO 2nd BOOM 2eme BRAS 2° AUSLEGER		VALVOLA REGOLATRICE DI FLUSSO FLOW CONTROL VALVE CLAPET DE REGLAGE FLUSSREGLERVENTIL		RUBINETTO MULTIFUNZIONE MULTIFUNCTIONAL DIVERTER VALVE VANNE MULTIFONCTIONNE DREHVERTEILER		VALVOLA BLOCCO DOPPIA DOUBLE BALANCED VALVE CLAPET COMPENSE' DOUBLE DOPPELTES ABSPERRVENTIL		
	SFILI GRU BASE BASIC CRANE EXTENSIONS EXTENSIONS GRUE BASE AUSSSCHUEBE VOM GRUNDGERAET		SCAMBIATORE DI CALORE HEAT EXCHANGER ECHANGEUR DE CHALEUR OELKUEHLER		RUBINETTO 5 VIE 8 POSIZIONI 5-WAY DIVERTER VALVE 8 POSITIONS DEVIATEUR 5 VOIES 8 POSITIONS 5-WEGEHAHN 8 STELLUNGEN		VALV. DI MASSIMA A SCARICO INCROCIATO CROSSED MAIN RELIEF VALVE CLAP. GENERAL COMPLET A' DECHARGE CROISEE GEKREUZTES RUECKSCHLAGVENTIL		VALVOLA F.P.I. F.P.I. VALVE CLAPET F.P.I. F.P.I. VENTIL
	SNODO SUPPLEMENTARE SUPPLEMENTARY FLY-JIB JIB SUPPLEMENTAIRE ZUSATZGELENK		FILTRO IN SCARICO RETURN LINE FILTER FILTRE DE RETOUR RUECKSCHLAGFILTER		MANOMETRO MANOMETER MANOMETRE MANOMETER		VALVOLA BLOCCO MOMENTO OVERLOAD DEVICE VALVE CLAPET LIMITEUR DE MOMENT UEBERLASTVENTIL		
	SFILI SNODO SUPPLEMENTARE SUPPLEMENTARY FLY-JIB EXTENSIONS EXTENSIONS JIB SUPPLEMENTAIRE GELENKAUSSCHUEBE		FILTRO IN MANDATA INLET FILTER FILTRE POUSSE DRUCKFILTER		PRESSOSTATO PRESSURE SWITCH PRESSOSTAT DRUCKWAECHTER		FINECORSO IDRAULICO HYDRAULIC END STROKE DEVICE DISPOSITIF HYDRAULIQUE FIN COURSE HYDRAULISCHE ENDABSCHALTVORRICHTUNG		VALVOLA RIGENERATRICE REGENERATING VALVE CLAPET REGENERATEUR REGENERATIONSVENTIL
	VERRICELLO WINCH TREUIL SEILWINDE		POMPA PORTATA FISSA FIXED OIL FLOW PUMP POMPE DEBIT FIXE PUMPE MIT FIXER FOERDERLEISTUNG		CILINDRETTO BLOCCO MOMENTO OVERLOAD DEVICE CYLINDER CYLINDRE LIMITEUR DE MOMENT UEBERLASTMINIZYLINDER				
	SFILO CL CL. EXTENSION EXTENSION CL CL-AUSSCHUB		POMPA PORTATA VARIABILE VARIABLE OIL FLOW PUMP POMPE DEBIT VARIABLE VERSTELLPUMPE		CILINDRETTO BLOCCO MOMENTO OVERLOAD DEVICE CYLINDER CYLINDRE LIMITEUR DE MOMENT UEBERLASTMINIZYLINDER				
	COMANDO SUPPLEMENTARE SUPPLEMENTARY CONTROL COMMANDE SUPPLEMENTAIRE ZUSATZSTEUERUNG		FILTRO ARIA AIR FILTER FILTRE A' AIR LUFFTFILTER		ELETTROVALVOLA A 2 VIE 2-WAY SOLENOID VALVE ELECTROVANNE 2 VOIES 2-FACHES ELEKTROVENTIL		LINEA DI CONTORNO DEGLI OPTIONAL OPTIONAL CONTOUR LINE LIGNE DE CONTOUR D'OPTIONS ZUBEHOERRANDLINIE		LINEA DI CONTORNO DEI COMPONENTI COMPONENT CONTOUR LINE LIGNE DE CONTOUR DES COMPOSANTS RANDLINIE DER BESTANDTEILE
	VALVOLA BLOCCO SEMPLICE BLOCKING VALVE CLAPET HYDROPILOTE' EINFACHES ABSPERRVENTIL		STROZZATURA THROTTLE ETRANGEMENT DROSSELSTELLE						
	VALV. DI BLOC. SEMPLICE CON RUBINETTO BLOCKING VALVE WITH DIVERTER VALVE CLAP. HYDROPILOTE' AVEC VANNE-DEVIATEUR EINFACHES ABSPERRVENTIL MIT HAHN		INNESTO RAPIDO QUICK COUPLING RACCORD RAPIDE SCHNELLKUPPLUNG						
	VALVOLA DI STROZZATURA THROTTLE VALVE CLAPET FREINEUR DROSSELVENTIL		V. DI BLOCCO BILANC. DOPPIA CON REGOLAZIONE DI FLUSSO DOUBLE BALANCED BLOCKING VALVE WITH FLOW ADJUSTMENT CLAP. HYDROPILOTE' COMPENSE' DOUBLE AVEC REGL. DE FLUX AUSGEGLEICHENES DOPPELSPERRVENTIL MIT FLUSSVERTEILER						
	VALVOLA PARACADUTE PARACHUTE VALVE CLAPET PARACHUTE FALLSCHMIERVENTIL		VALVOLA DI BLOCCO BILANCIATA DOPPIA DOUBLE BALANCED BLOCKING VALVE CLAPET HYDROPILOTE' COMPENSE' DOUBLE AUSGEGLEICHENES DOPPELSPERRVENTIL						
	VALVOLA FLIP-FLOP FLIP-FLOP VALVE CLAPET FLIP-FLOP FLIP-FLOP VENTIL		V. DI BLOCCO BILANC. DOPPIA CON PRELIEVO DI PRESSIONE DOUBLE BALANCED BLOCKING VALVE WITH PRESSURE C. HYDR. COMPENSE' DOUBLE AVEC PRELEV. DE PRESSION AUSGEGLEICHENES DOPPELSPERRVENTIL MIT DRUCKENTNAHME						

EFFER[®]
Castel Maggiore (Bo) ITALY

Rev. Descrizione modifiche e/o N° modifica.

Disegn. Data Contr.

TITOLO : LEGENDA
TITLE : KEY
TITRE : LEGENDE
TITEL : LEGENDE

Dis./Drawn
RB/gc
Contr./Check

Foglio/
Sheet

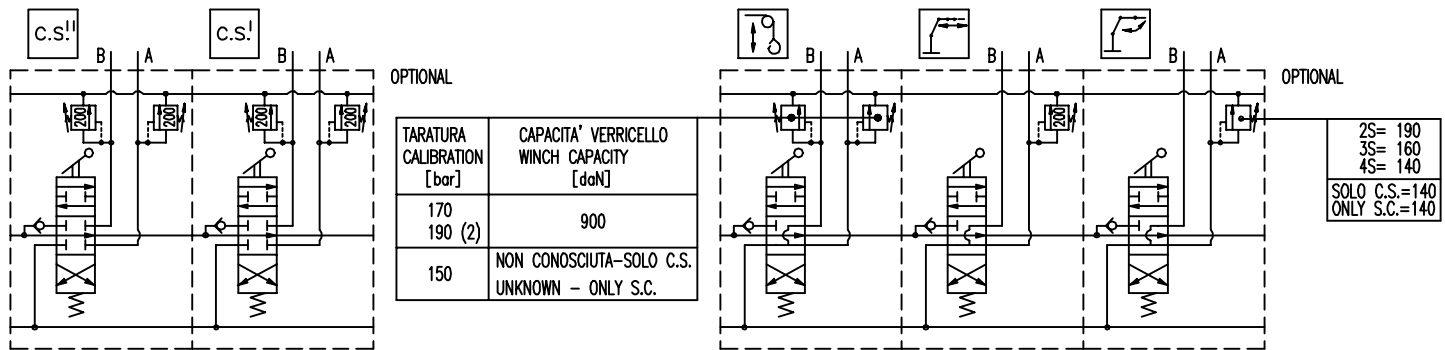
Data/Date
19/10/01

Rev. 0

1/1

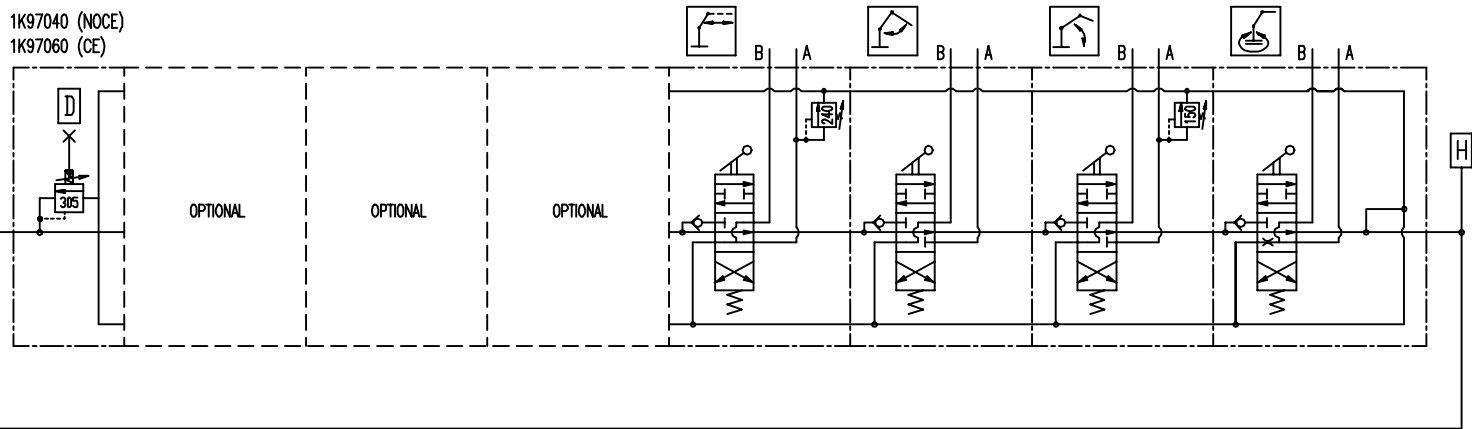
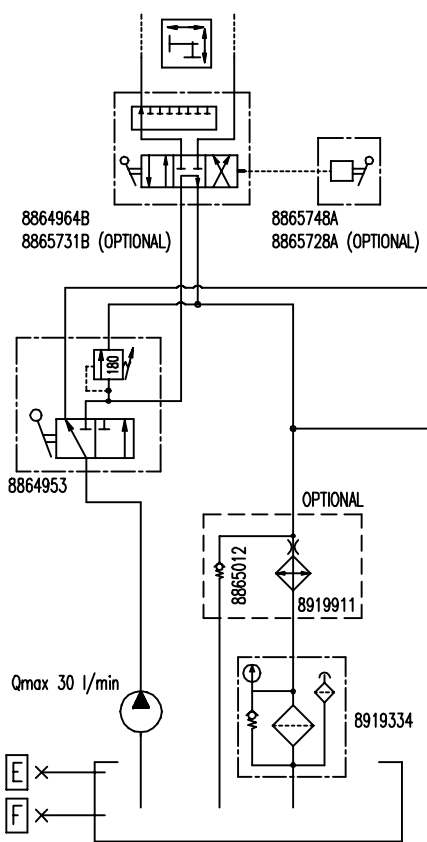
Dis. N°/Drg. N°
S100002

PER CONFIGURAZIONE GRU VEDERE SCHEDA ORDINE
 FOR CRANE CONFIGURATION SEE ORDER SCHEDE
 POUR CONFIGURATION GRUE, VOIR LA FICHE COMMANDE
 FÜR KRANCONFIGURATION BITTE AUF AUFTRAGSBLATT ACHTEN




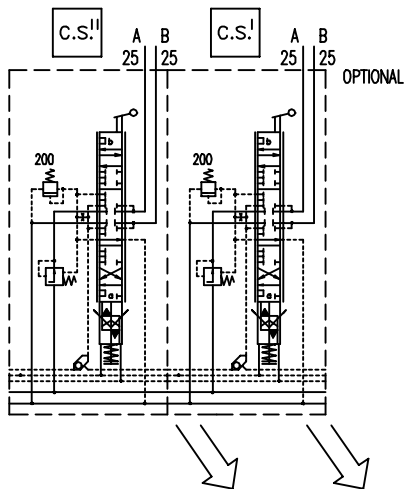
TARATURA CALIBRATION [bar]	CAPACITA' VERRICELLO WINCH CAPACITY [daN]
170	900
190 (2)	
150	NON CONOSCIUTA-SOLO C.S. UNKNOWN - ONLY S.C.

2S= 190
3S= 160
4S= 140
SOLO C.S.=140 ONLY S.C.=140

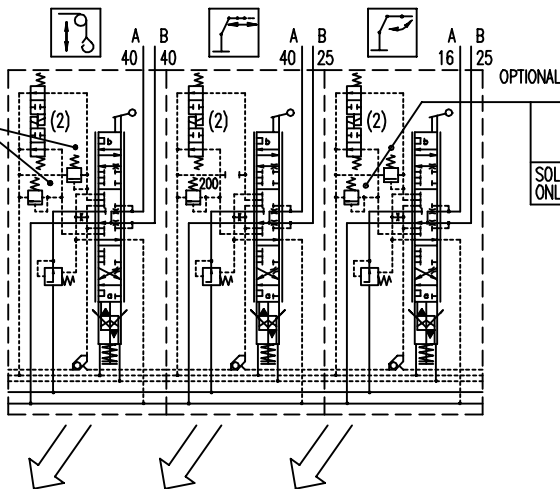


TEMPI DEI MOVIMENTI GRU [s] TIME FOR CRANE MOVEMENTS [s]		TEMPS DES MOUVEMENTS GRUE [s] ZEITEN DER KRANBEWEGUNGEN [s]	
SALITA 1° BRACCIO 1° BOOM CLIMB	MONTEE 1er BRAS AUFSTIEG 1° AUSLEGER	17	
ROTAZIONE COLONNA (360°) COLUMN ROTATION (360°)	ROTATION COLONNE (360°) ZÄULENSCHWENKUNG (360°)	30	
USCITA SFILI EXTENSION EXIT SORTIE EXTENSIONS AUSSHUBAUSFAHRT		1S	2S 3S 4S 5S 6S 7S 8S 9S
TOLLERANZA TEMPI: TIME TOLERANCES:	TOLERANCE TEMPS ZEITTOLLERANZ	± 3 s	
TOLLERANZA TARATURE: CALIBRATION TOLERANCES:	TOLERANCE TARAGES EINSTELLUNGSTOLLERANZ	± 5 bar	
1 bar = 0.1 MPa			

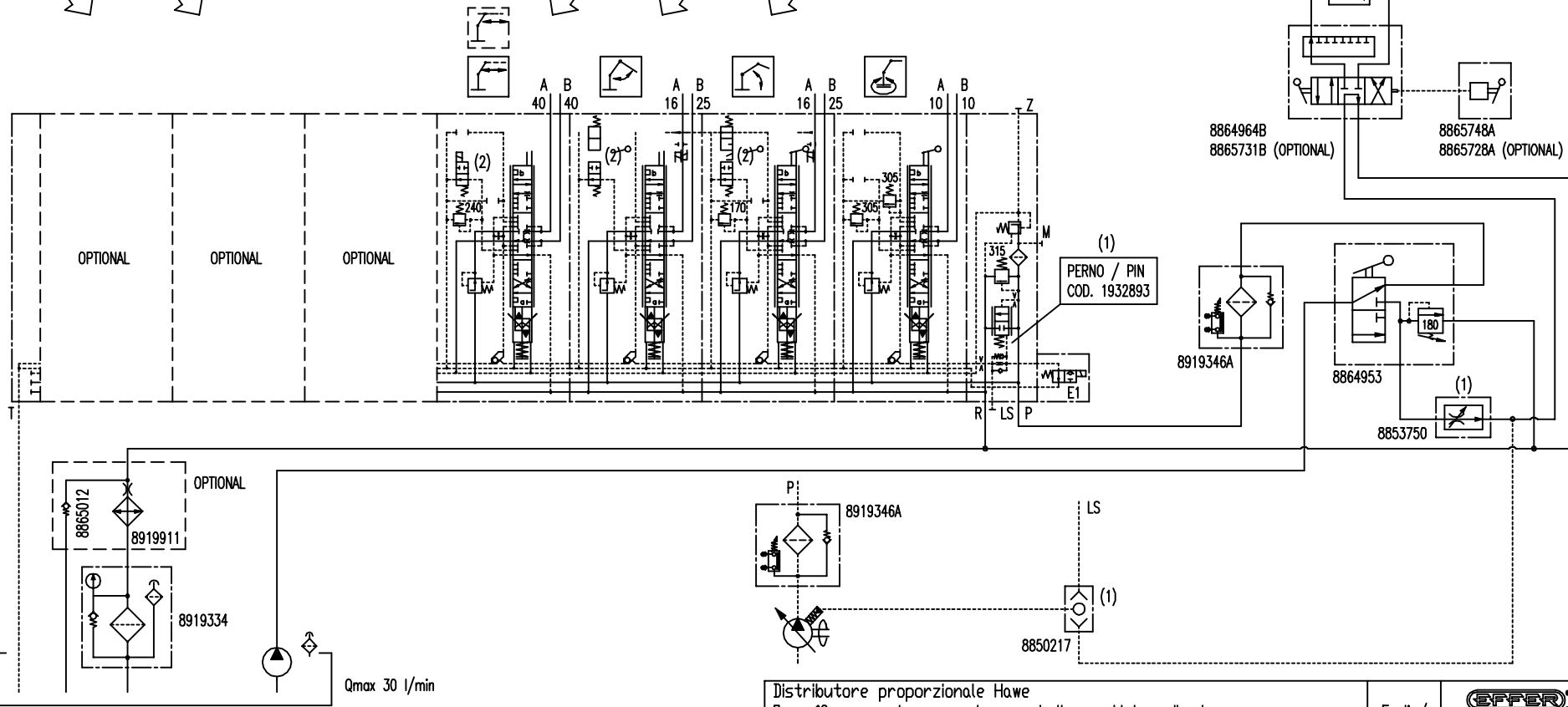
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Rev.	Data	Descrizione modifiche e/o N° modifica.	Preparato	Controllato	Approvato
TITOLO : SCHEMA IDRAULICO GRU 110 TITLE : CRANE 110 HYDRAULIC LAYOUT TITRE : CIRCUIT HYDRAULIQUE GRUE 110 TITEL : HYDRAULIKSCHALTPLAN KRAN 110					
Distributore manuale Hcd Opz. n°2 comandi supplementari, com. snodo e verricello, scambiatore di calore Hcd manual distributor Opt: n°2 addit. ctrl., jib ctrl., winch ctrl., oil cooler Distributeur manuel Hcd Opz: nr:2 comm. suppl., comm. jib et treuil, echangeur de chaleur Manueller Steuerblock typ Hcd Opt: 2 Zusatzsteuer., Steueranlage Gelenk/Seilwinde, Delkuehler			Foglio/Sheet	 Rev. 1	
			1/6	Dis. N°/Drg. N° SI1K001	



TARATURA CALIBRATION [bar]	CAPACITA' VERRICELLO WINCH CAPACITY [daN]
170 190 (2)	900
150	NON CONOSCIUTA-SOLO C.S. UNKNOWN - ONLY S.C.



2S= 190
3S= 160
4S= 140
SOLO C.S.=140 ONLY S.C.=140



(2) SOLO PER VERSIONE CE
ONLY CE VERSION

(1) PRESENTE CON POMPA A PORTATA VARIABILE
INSTALLED WITH VARIABLE OIL FLOW PUMP

PRESSIONE MAX DI STAND-BY DELLA POMPA= 35 bar
STAND-BY MAX PRESSURE PUMP= 35 bar

Distributore proporzionale Hawe
Opz.: n°2 con suppl., con snodo e verricello, scambiatore di calore
Hawe proportional distributor
Opt.: n°2 addit. ctrl., jib ctrl., winch ctrl., oil cooler
Distributeur proportionnel Hawe
Opz.: n°2 comm. suppl., comm. jib et treuil, échangeur de chaleur
Hawe-Proportionalsteuerblock
Opt.: 2 Zusatzsteuer, Steueranlage Gelenk/Seilwinde, Delkuehler

Foglio/
Sheet

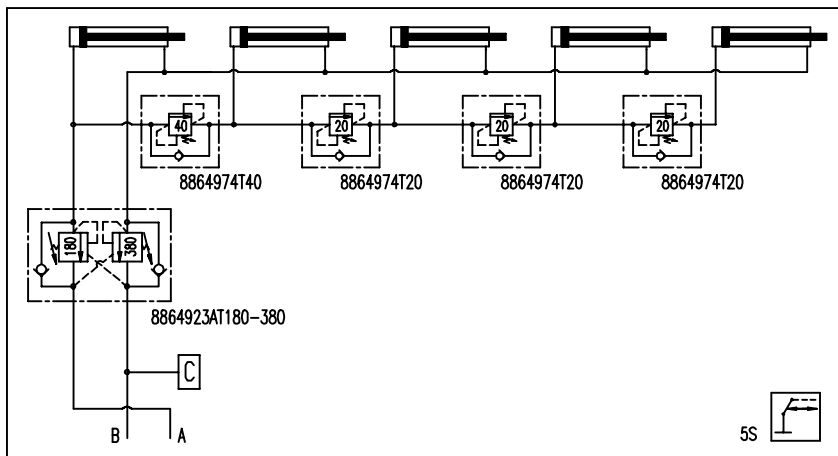
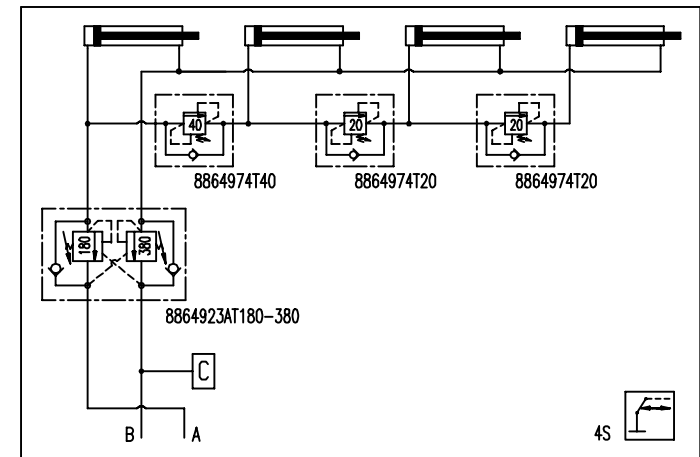
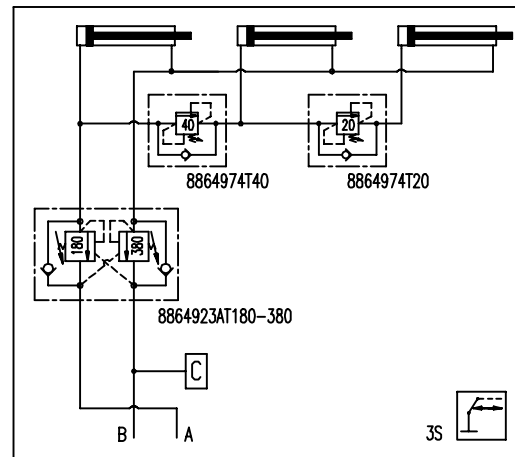
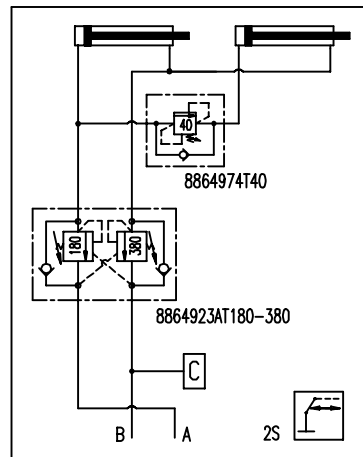
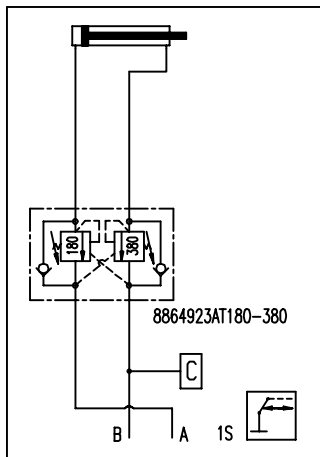
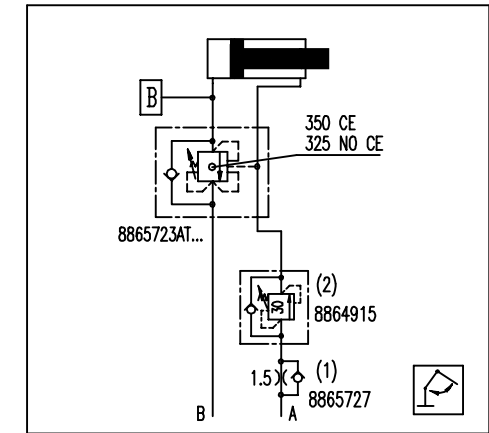
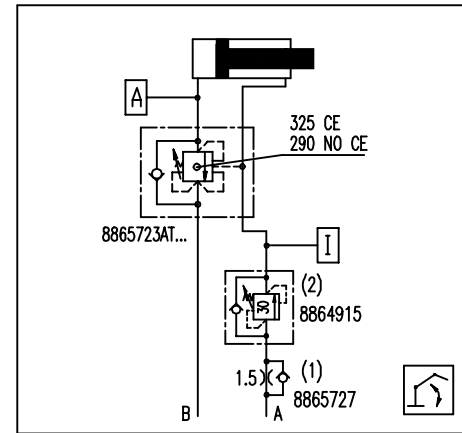
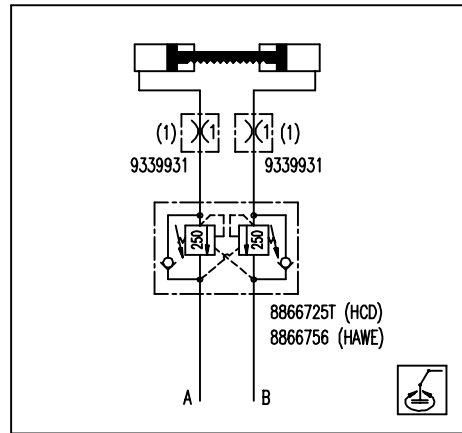
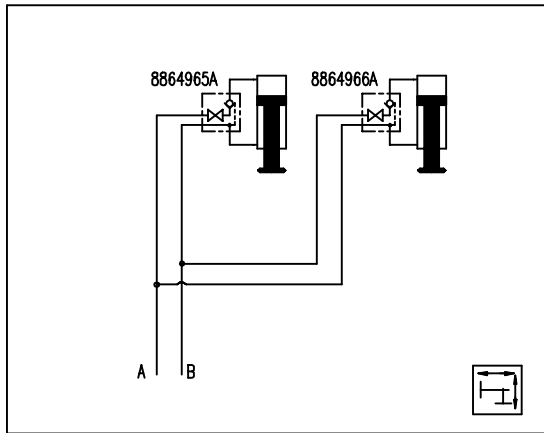
2 / 6

EPFER
Distributore Proporzionale

Rev. 1

Dis. N°/Drg. N°

SI1K001



- (2) SOLO CON DISTRIBUTORE HAWE E CE CONTEMPORANEAMENTE
ONLY WITH HAWE AND CE SIMULTANEOUSLY
- (1) SOLO CON DISTRIBUTORE HCD
ONLY HCD DISTRIBUTOR

Uscita stab. manuale, uscita stab. idraulica, rotazione, 1° braccio,
2° braccio, sfilì
Manual exit stabilizers, hydraulic exit stabilizers, slewing, 1st boom,
2nd boom, extensions
Sortie stab. manuelle, sortie stab. hydraulique, rotation, 1er bras,
2eme bras, extensions
Manueller Hub der Abstuetzungen, Hydraulische Ausfahrt der
Abstuetzungen, Schwenkung, 1° Ausleger, 2° Ausleger, Ausschuebe

Foglio/
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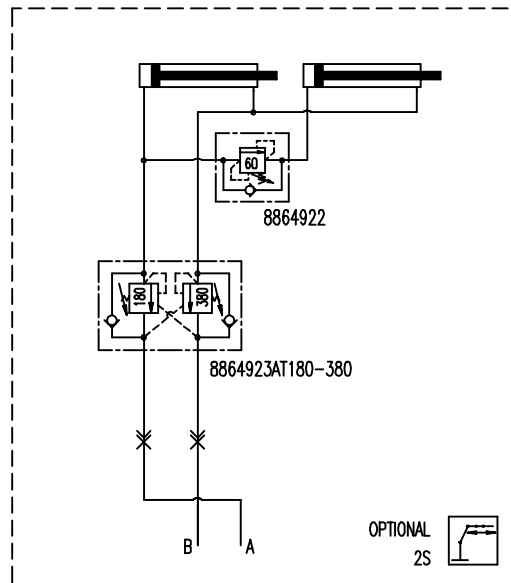
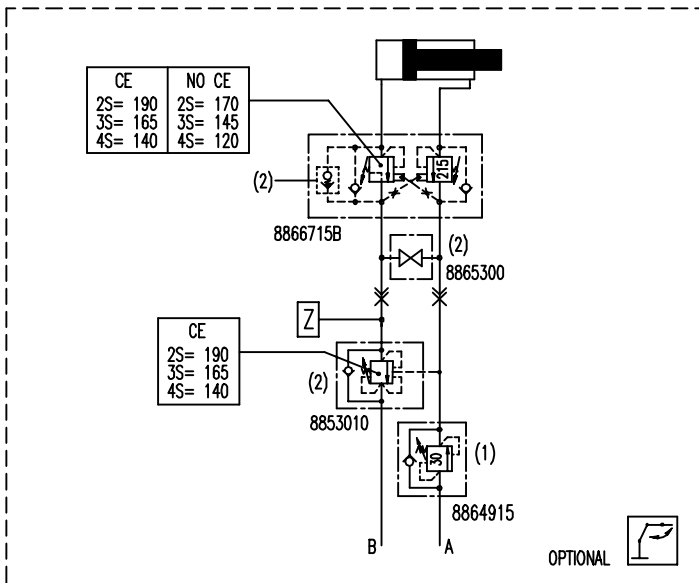
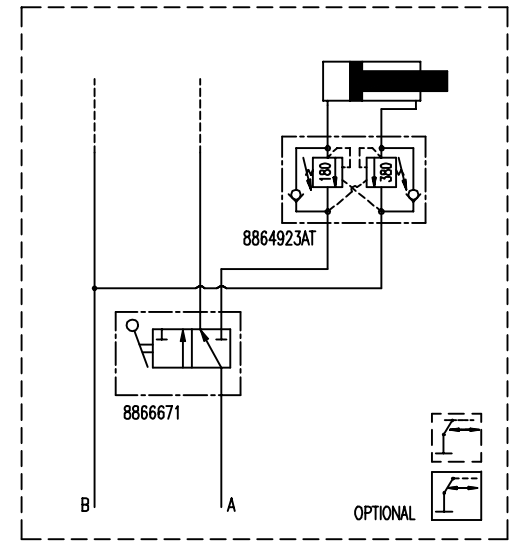
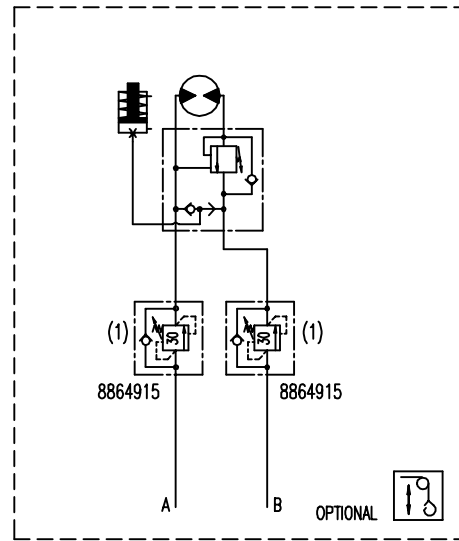
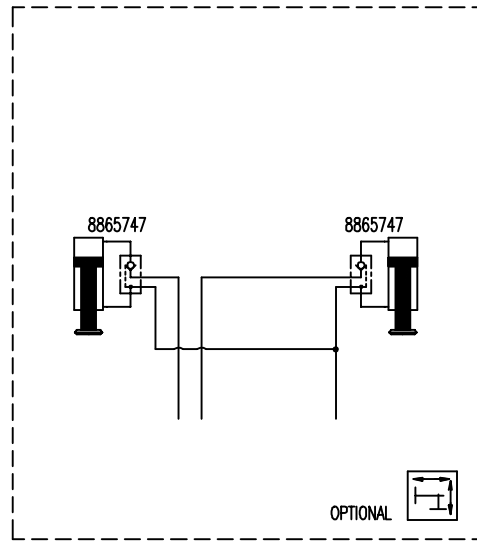
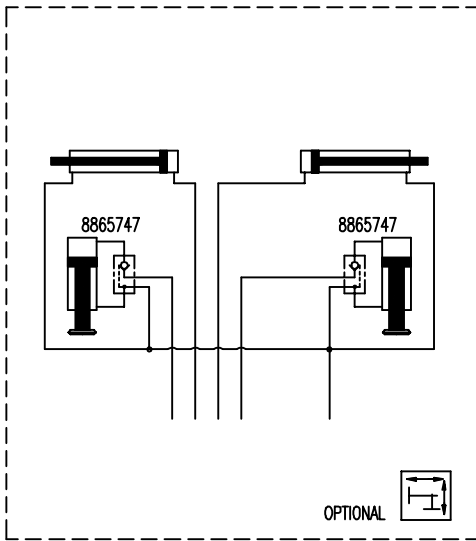
3/6



Rev. 1

Dis. N°/Drg. N°

SI1K001



(2) SOLO PER VERSIONE CE
ONLY CE VERSION

(1) SOLO CON DISTRIBUTORE HAWE E CE CONTEMPORANEAMENTE
ONLY WITH HAWE AND CE SIMULTANEOUSLY

Uscita stab. idraulica supplementare, verricello, sfilo CL,
snodo, sfili snodo
Hydraulic outlet of suppl. stabilizers, winch, CL extension,
Jib, jib extension
Sortie stab. hydraulique suppl., treuil, extension CL,
Jib, extension Jib
Hydraulische Ausfahrt der Zusatzabstuetzungen, Seilwinde, CL-Ausschub,
Gelenk, Gelenkausschuebe

Foglio/
Sheet

4 / 6

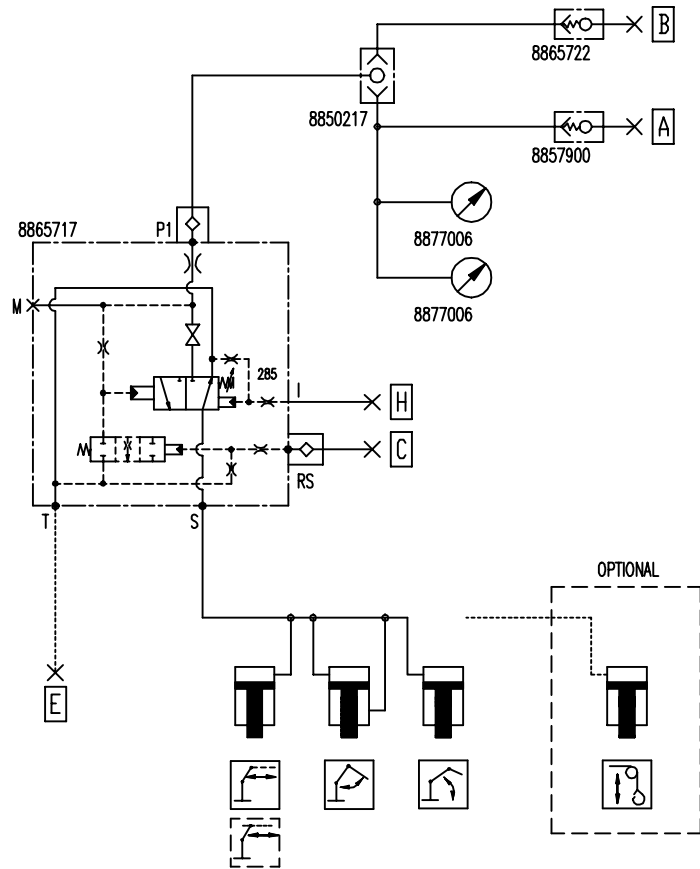


Rev. 1

Dis. N°/Drg. N°

SI1K001

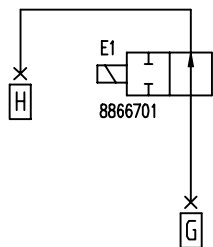
GRU BASE + COMANDI SUPPLEMENTARI
BASIC CRANE + SUPPLEMENTARY CONTROL



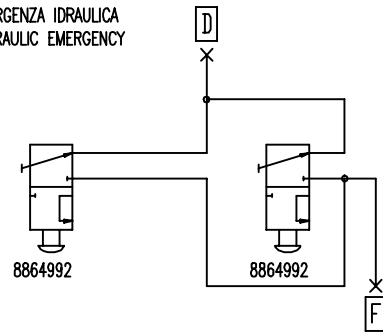
EMERGENZA ELETTRICA
ELECTRIC EMERGENCY

FINE CORSA VERRICELLO
WINCH END-STROKE DEVICE

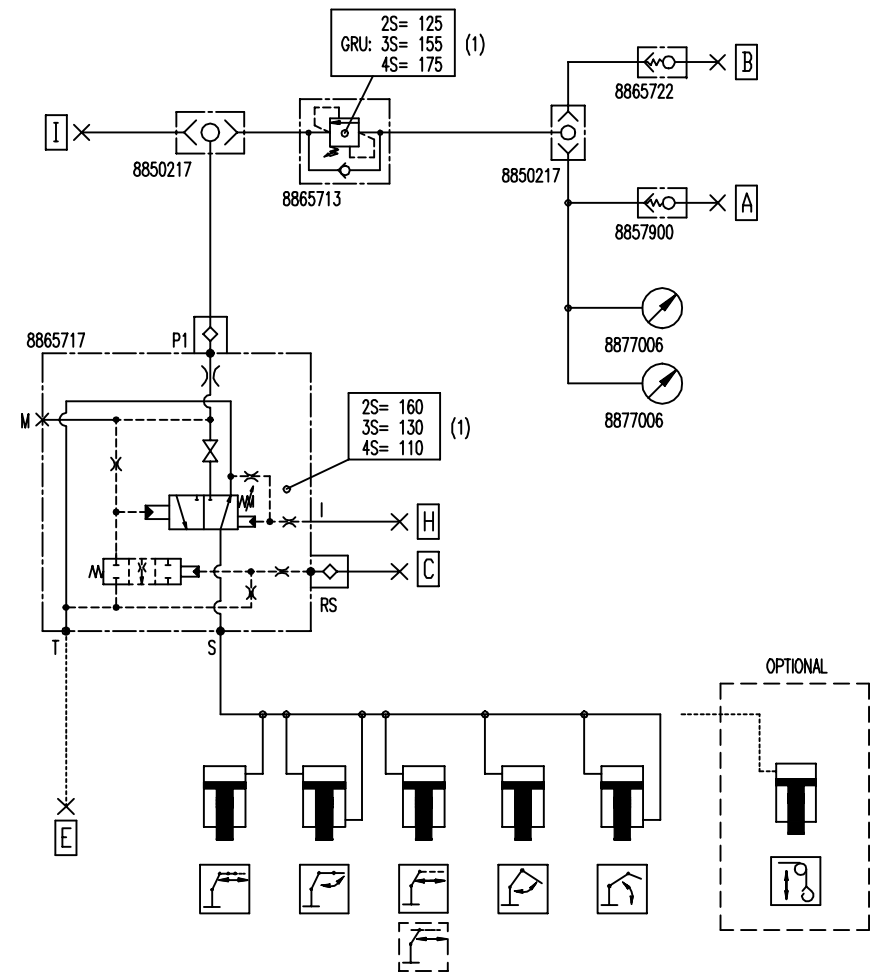
DISPOSITIVO CE PIATTAFORMA
PLATFORM EEC-DEVICE



EMERGENZA IDRAULICA
HYDRAULIC EMERGENCY



GRU BASE + SNODO + COMANDI SUPPLEMENTARI
BASIC CRANE + JIB + SUPPLEMENTARY CONTROL



(1) CON C.S. SNODO, TARARE IN BASE AL NUMERO DI SFILI DELLA GRU
WITH JIB CTRLS, SET ACCORDING TO CRANE HYDR. EXTENSIONS

Limitatore di carico (dispositivo CE) per distributore manuale Hcd
Moment limiter (CE device) for Hcd manual distributor
Limiteur de moment (dispositif CE) pour distributeur manuel Hcd
Ueberlastabschaltvorrichtung (CE-Kit) fuer Manueller Steuerblock typ Hcd

Foglio/
Sheet

5/6

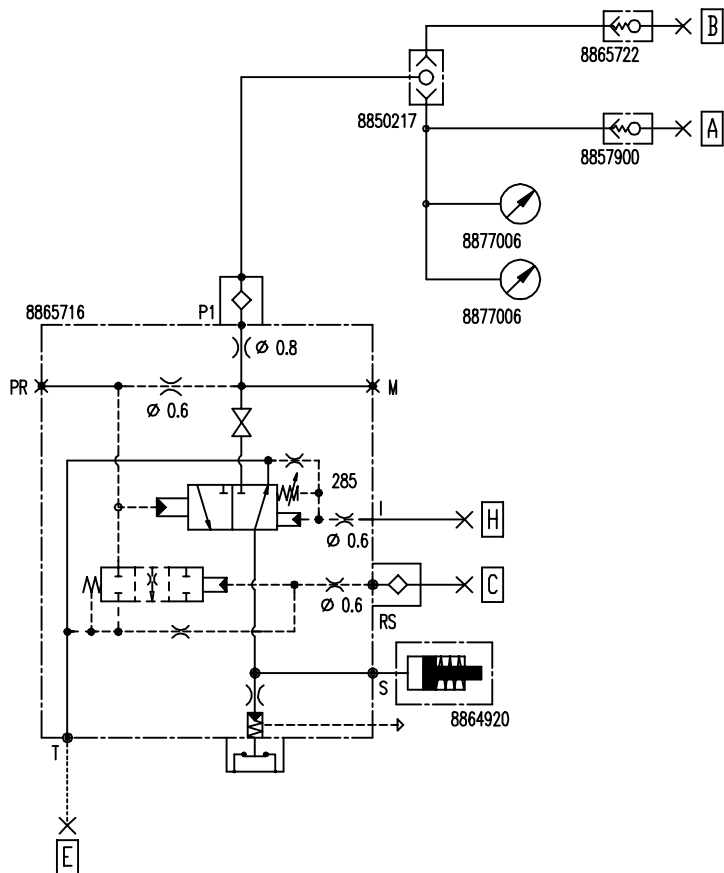
EPFER
DIN 4762 40 1147

Rev. 1

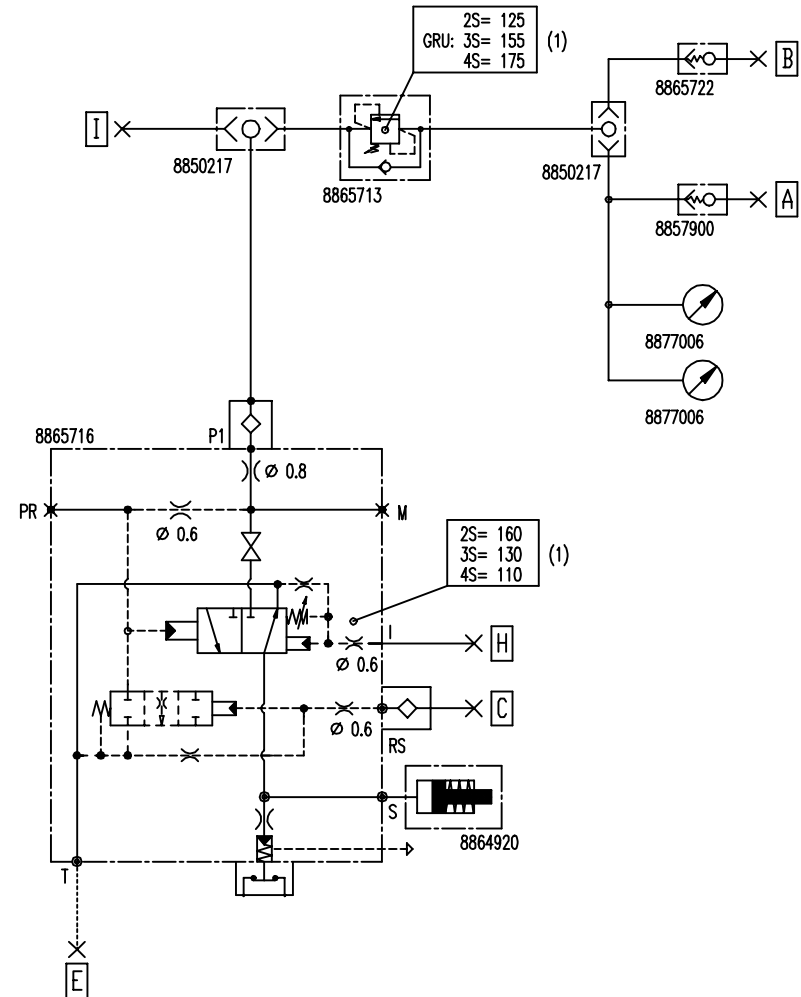
Dis. N°/Drg. N°

SI1K001

GRU BASE + COMANDI SUPPLEMENTARI
BASIC CRANE + SUPPLEMENTARY CONTROL



GRU BASE + SNODO + COMANDI SUPPLEMENTARI
BASIC CRANE + JIB + SUPPLEMENTARY CONTROL



(1) CON C.S. SNODO, TARARE IN BASE AL NUMERO DI SFILI DELLA GRU
WITH JIB CTRLS, SET ACCORDING TO CRANE HYDR. EXTENSIONS

Limitatore di carico (dispositivo CE) per distributore proporzionale Hawe
Moment limiter (CE device) for Hawe proportional distributor
Limiteur de charge (dispositif CE) pour distributeur proportionnel Hawe
Ueberlastabschaltvorrichtung (CE-Kit) fuer Hawe-Proportionalsteuerblok

Foglio/
Sheet

6/6



Rev. 1

Dis. N°/Drg. N°

SI1K001