



FASSI



without
compromise



IDENTIFICATION NAMES OF CRANE MODELS

F 365 R A . 2 . 26 e-dynamic

<p>Crane type</p> <p>F: Fassi – articulated crane</p>	<p>Th crane model refers to the lifting moment (in kNm)</p> <p>Theoretical design capacity one meter from center of column Example: "365" kNm (36,5 tm)</p>	<p>R = continue rotation</p> <p><i>(only for continue rotation cranes)</i></p>	<p>Fassi series Single, double or triple letter designation: A, B, D, E, G-Z Example: Series "A" (1st generation of the same lifting class) Second and/or third letter identify a special range (ex.: C, F, FM, AS, SE, XS)</p>	<p>Number of Linkage</p> <p>0: Without Linkage 1: One linkage 2: Double linkage (on both articulations)</p>	<p>Articulations and hydraulic extension booms of the outer boom</p> <p>Example: "2" articulations "6" extension booms</p>	<p>Identification of the crane set-up</p> <p>List:</p> <ul style="list-style-type: none"> <input type="checkbox"/> active <input type="checkbox"/> e-active <input type="checkbox"/> dynamic <input type="checkbox"/> e-dynamic <input type="checkbox"/> he-dynamic
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without compromise



IDENTIFICATION NAMES OF CRANE MODELS

The identification names of the crane model are applied to both CE cranes and NON-CE cranes.

The crane equipment (active, e-active, etc.) is standard for CE markets and optional for the NON-CE cranes.

Excluded:

- XP cranes
- cranes with continue rotation, from F295RA to F1950RA
- e-dynamic or he-dynamic: packages available both for CE and NON-CE markets





GENERAL CATALOGUE: MEANING OF THE SYMBOLS



Lifting capacity (tm)



Standard extension (m)



Hydraulic extension(m)



Rotation (°)



Rotation torque (kNm)



Working pressure (MPa)



Pump capacity (l/min)



Oil tank (l)



Crane weight (kg)



Crane length (mm)



Crane width (mm)



Crane height (mm)



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FASSI RANGE: NON-CE CRANES

FASSI

PRODUCES MORE THAN

60

**CRANE
MODELS FOR
3 DIFFERENT
RANGE**



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CRANES WITH RACK AND PINION



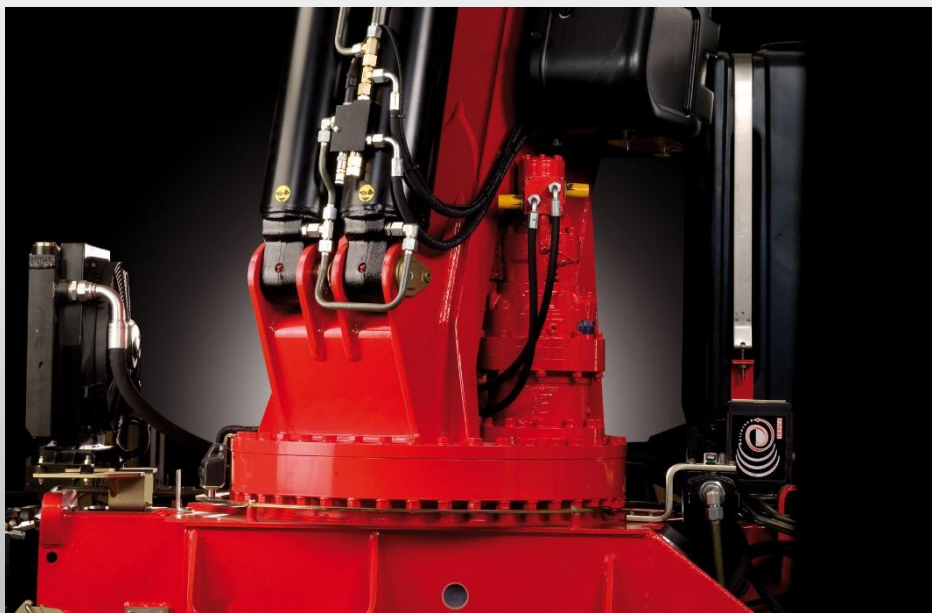
MICRO RANGE	F95A.0
M10	F110B.0 - F110B.1 - F110B.2
M15	
M20	MIDDLE RANGE
M30	F135A.0 - F135A.2
M40	F155A.0 - F155A.2
	F175A.0 - F175A.2
SMALL RANGE	F195A.0 - F195A.2
F22A.0	F215A.0 - F215A.2
F26A.0	F245A.0 - F245A.2
F30CY.0	F295A.2
F32A.0	F335A.2
F40A.0	
F50A.0	HEAVY RANGE
F65B.0	F385A.2
F85B.0 - F85B.1 - F85B.2	F415A.2



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CRANES WITH CONTINUOUS ROTATION



MIDDLE RANGE	
F295RA.2 e-dynamic	F600RA.2 he-dynamic
F315RA.2 e-dynamic	F660RA.2 he-dynamic
F335RA.2 e-dynamic	F720RA.2 he-dynamic
F365RA.2 e-dynamic	F800RA.2 he-dynamic
	F820RA.2 xhe-dynamic
	F950RA.2 he-dynamic
HEAVY RANGE	
F385RA.2 e-dynamic	F990RA.2 xhe-dynamic
F415RA.2 e-dynamic	F1100RA.2 he-dynamic
F425RA.2 e-dynamic	F1300RA.2 he dynamic
F455RA.2 e-dynamic	F1350RA.2 xhe-dynamic
F485RA.2 xe-dynamic	F1500RA.2 he-dynamic
F515RA.2 e-dynamic	F1550RA.2 xhe-dynamic
F545RA.2 xe-dynamic	F1950RA.2 he-dynamic
	F1950RAL.2 he-dynamic
	F2150RA.2 he-dynamic



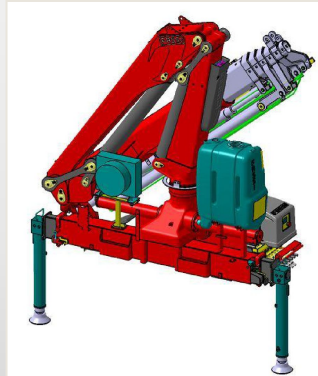
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CRANES WITH AND WITHOUT LINKAGE : AVAILABLE VERSIONS

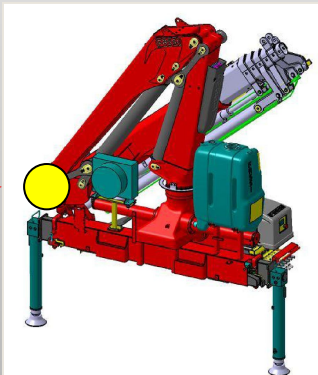
“.0” = WITHOUT LINKAGE

.0



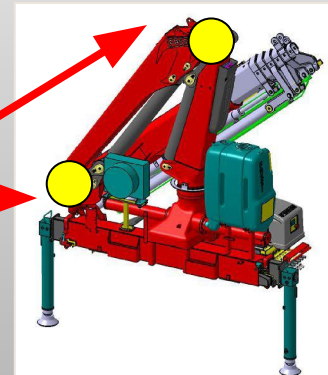
“.1” = ONE LINKAGE

.1



“.2” = DOUBLE LINKAGE

.2



without compromise



CRANES WITHOUT LINKAGE



Available until 27 tm

MICRO RANGE	F65B.0
M10	F85B.0
M15	F95A.0
M20	F110B.0
M30	MIDDLE RANGE
SMALL RANGE	F135A.0
F26A.0	F155A.0
F30CY.0	F175A.0
F32A.0	F195A.0
F40B.0	F215A.0
F50A.0	F245A.0



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CRANES WITH ONE LINKAGE

SMALL RANGE

- F65B.1 dynamic
- F70B.1 e-dynamic
- F85B.1 dynamic
- F90B.1 e-dynamic
- F100B.1 xe-dynamic
- F110B.1 dynamic
- F120B.1 e-dynamic
- F125A.1 xe-dynamic



Specially suitable to work with an accessory (f.i. the bucket)



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CRANES WITH DOUBLE LINKAGE

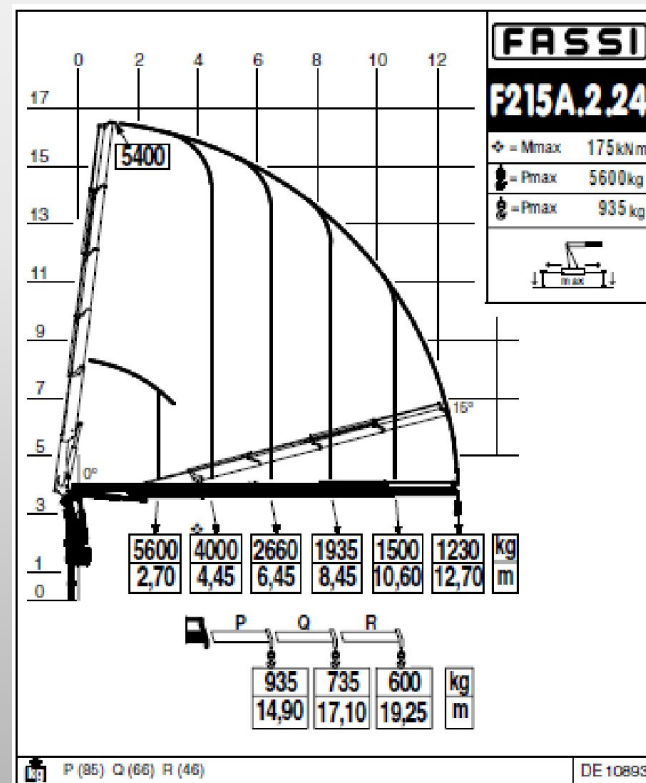
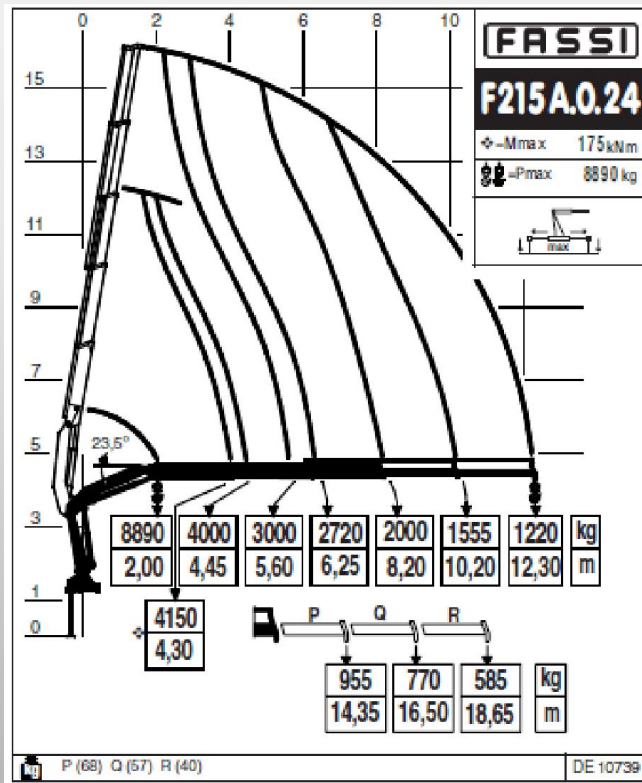
SMALL RANGE	MIDDLE RANGE
F85B.2	F135A.2
F90B.2	F155A.2
F100B.2	F165A.2
F110B.2	F175A.2
F120B.2	F185A.2
F125A.2	F195A.2
	F215A.2
	F235A.2
	F245A.2
	F275A.2
MIDDLE/HEAVY RANGE All the crane from F295A/RA	



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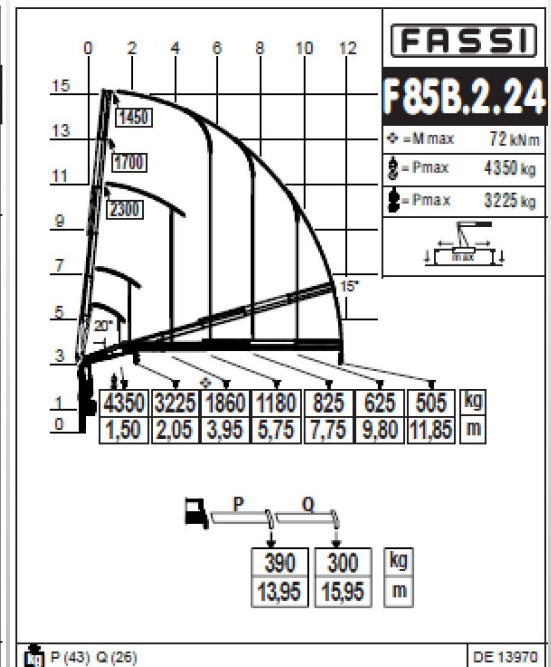
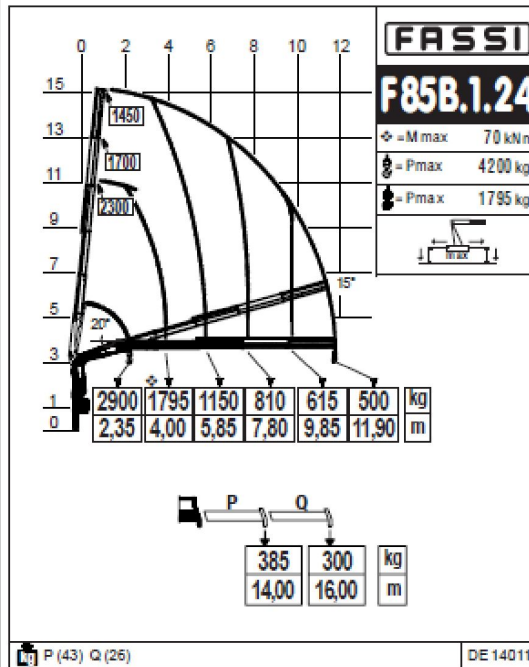
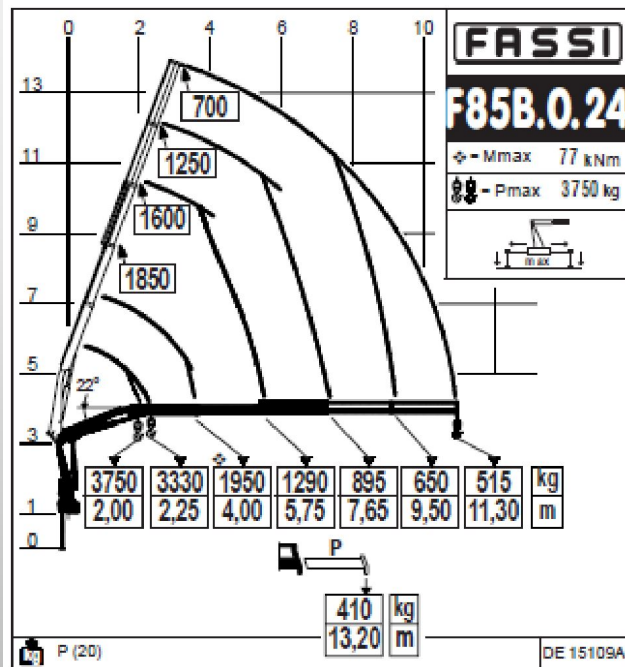


COMPARISON



without compromise

COMPARISON



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 compromise



ADVANTAGES OF THE LINKAGE TECHNOLOGY

- The double link system allows the boom to have constant lifting capacity in every position of the boom
- The cranes without power link have a sensible reduction in the lifting capacity once that the boom is in a position of approx. 45°
- **Perfect kinematics** allowing rated capacities **with horizontal load configuration (0°)** exploiting the full outreach of the boom, rather than requiring the angle of the inner boom.





MAIN FEATURES OF THE PRODUCT

□ MECHANICAL FEATURES

- Cast components
- Welding reduction
- Ultra High Strength Steel
- Rack and pinion system

□ HYDRAULIC FEATURES

- Control banks
- XF system / recycling valve
- MPES system
- Oil tank
- Oil cooler
- Centralized grease system

□ FUNCTIONAL FEATURES

- crane control
- limiting devices



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MECHANICAL FEATURES OF THE PRODUCT



CQ - Cast Quality:

Fassi has been using for more than 35 years cast components with high mechanical characteristics for various important structural components, such as the bottom section (pinion) and the head of the column, the column support, the heads of the ram rods and the cylinder bottoms, the connecting rods and other minor components.

Reduction of welded points, increased resistance



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FASSI
COMPANY
PRODUCTION UNIT

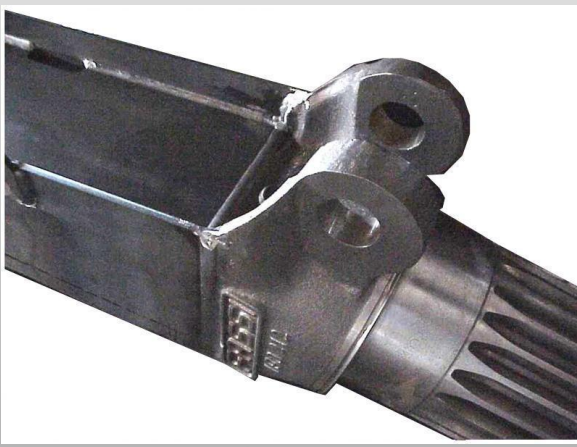
Lower part of the column (pinion)



Steel cast column support



Cast pinion welded in the higher part of the column



Steel cast support elded welded to the crane crossbar



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Column head



Cast column support

Cast components allow a drastic reduction of welded points (90%) and this means an increased resistance to fatigue cycles

Structural resistance of the components beyond the levels guaranteed by welded structures

Increased resistance to fatigue cycles means a longer life of the components and no risk of possible breaks due to fatigue during crane life

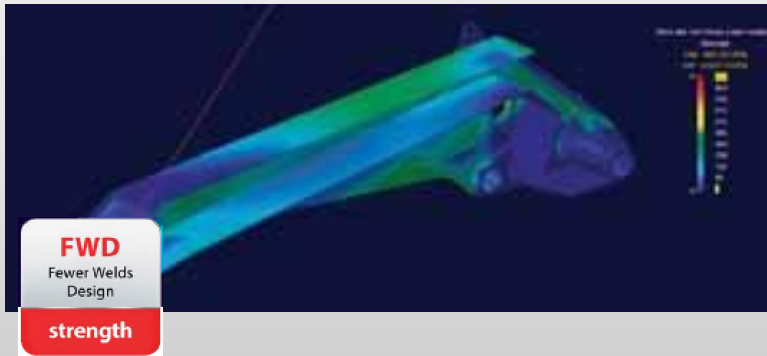


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MECHANICAL FEATURES OF THE PRODUCT

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FWD - Fewer Welds Design

Fewer welded joints, the stronger the structure will be. Structural components made out of bended steel with a welded closing plate in lieu of four corners welded structures or monolithic structure likes those for the outer boom and sliding sections with one single welded side: balanced elasticity under load and ideal resistance to fatigue.



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MECHANICAL FEATURES OF THE PRODUCT



UHSS
Ultra High
Strength Steel
strength

UHSS - Ultra High Strength Steel

Ultra high strength steel used for the construction of the Fassi structural components, with a high elastic limit, increases structural strength and resistance of the components and at the same time reduces the weight of the crane, to the benefit of the loading capacity of the vehicle which increases.

Main supplier: SSAB

Type : Weldox 700 – 900 – 1100 (70-90-110 kg per mm²)



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MECHANICAL FEATURES OF THE PRODUCT



RPS
Rack and Pinion
System
strength

RPS - Rack and Pinion System:

exclusive Fassi rack and pinion rotation system with gravity self centering rack guide shoe; no need of external adjustment. Low friction anti-seizure techno-polymer rotation top bush for an extra strong rotation power



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HYDRAULIC FEATURES OF THE PRODUCT

- Distributor banks
- XF system / Recycling valve
- MPES
- Oil tank
- Oil cooler
- Centralized grease system





DISTRIBUTOR WALVOIL

WL
Walvoil
Distributor Bank
control



- Applied on the outriggers of all crane models
- Distributor for Micro cranes



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DISTRIBUTOR HYDROCONTROL



HY
Hydrocontrol
Distributor Bank
control

HY - Hydrocontrol Distributor Bank:
Parallel proportional hydraulic distributor characterized by the force and facility of the operation

Standard from F22A.0 to F135A.0 and F155A.0



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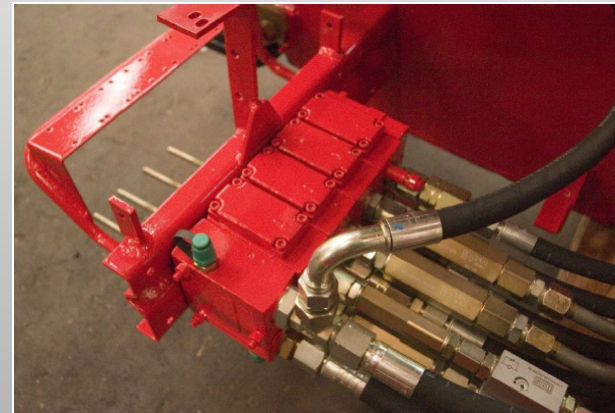
DISTRIBUTOR DANFOSS



S800
Multifunction
Distributor Bank
control

S800 - Multifunction Distributor Bank: D Multifunction distributor bank ideal for the application on small-medium range cranes, with specific spools set up in relation with the characteristics of the crane functions.

Standard from F135A.2 and F155A.2 to F245A.0



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DISTRIBUTOR DANFOSS



Standard from F245A.2 to F415A.2

S900 - Multifunction Distributor Bank

High performances multifunction compensated distributor bank with very high “load-sensing” proportional multifunction ability; all crane functions are perfectly controlled, proportional and smooth. Ideal for the application on heavy range cranes.



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compromise**



DISTRIBUTOR DANFOSS DIGITAL



D850 Digital Multifunction Distributor Bank	D900 Digital Multifunction Distributor Bank
control	control

D850 - Digital Multifunction Distributor Bank: multifunction hydraulic distributor bank with digital anti-saturation system that manages the oil delivered by the pump proportionally among all the functions that require it, thereby ensuring a perfect multifunction and proportional operation.

D900 - Digital Multifunction Distributor Bank: high performances multifunction compensated hydraulic distributor bank with digital anti-saturation system thereby ensuring a superlative multifunction and proportional operation. Coupled with the Fassi XF (Extra Fast) system, it guarantees an extraordinary fluidity and speed of action.



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XF SYSTEM

The system **XF** improves the hydraulic performance of the cranes as for speed, precision and fluidity of the movements on cranes equipped with multifunctional proportional Danfoss.



Block valve on the lifting rams



Advantages for the operator:

- Fluid, progressive and precise movement of the booms
- More sensitive
- Reduced overheating of the oil

The system **XF** is applied:

- Standard starting from F245A.2 e-dynamic;
- Optional on the models F135A.2, F155A.2, F175A.0, F195A.0, F215A.0, F175A.2, F195A.2, F215A.2, F245A.0





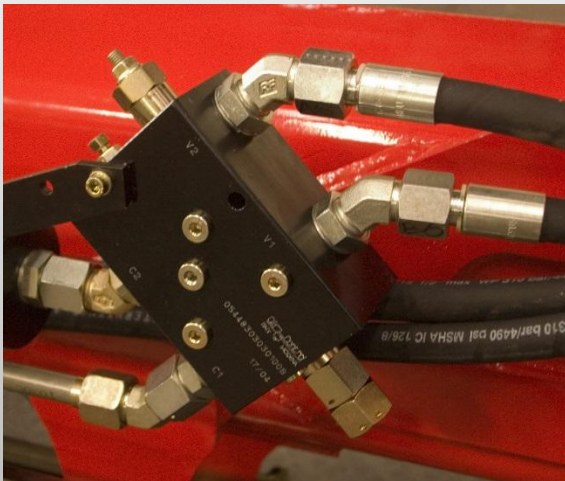
XF SYSTEM

The oil recycling valve recovers the oil coming from the cylinder, which is normally directed to the tank, readdressing it to the cylinder in addition to the oil coming from the pump.

Increase of the oil flow - cylinder side



Increase of the extension speed and the of extension booms.



The recycling valve is **standard** on :

- From F175A.2 to F485A.2 starting from the version with 4 extension booms
- From F385A.2 in all configurations;

Optional on

- ✓ for F135A.2, F155A.2, F175A.0, F195A.0, F215A.0, F245A.0;
- for F175A.2, F195A.2, F215A.2 and from the model F245A.2 to F335A.2 when less than 4 ext. booms

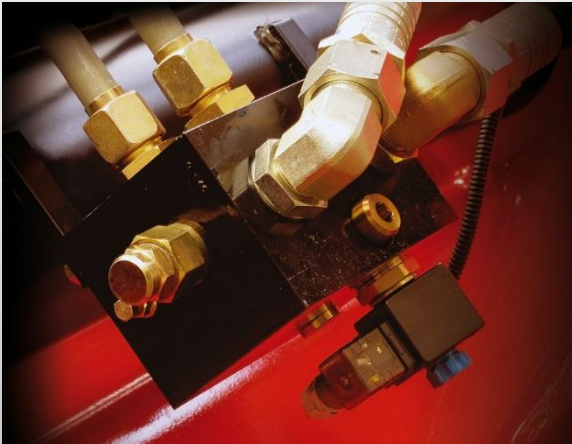


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FULL LIFT SYSTEM

Electric version of the recycling valve



Standard on the heavy range

Optional from F135A.2 to F365RA.2



FL - Full Lift: a system that allows you to select, based on operational needs, “FAST” (recycling valve activated) or “POWER” (recycling valve deactivated) while telescoping the booms. Selection is both via radio control thanks to the icon on the display or on the push button of the main control panel.



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MPES SYSTEM



MPES
Multi Power
Extension System
performance

MPES - Multi Power Extensions System

a Fassi system that guarantees an exceptional extension/retraction speed of the telescopic booms, built up by a set of equally powerful independent rams, linked in series connection and activated by a single control. Special independent fixing system of the extension rams to guarantee high vertical lifting performances.



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OIL TANK



- The outer surface is made of cross linked polyethylene, while the inner surface is in nylon.
- the shape of the tank allows better heat dispersion, and full 180° rotation of the hydraulic rotating outriggers for those crane models having such option.
- **Implementation of a new cap** with filter and anti-reflux system
- **Free oil leakages** inlet and outlet ports.



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OIL TANK

OPTIONAL: OIL TANK TO BE MOUNTED BELOW THE CHASSIS



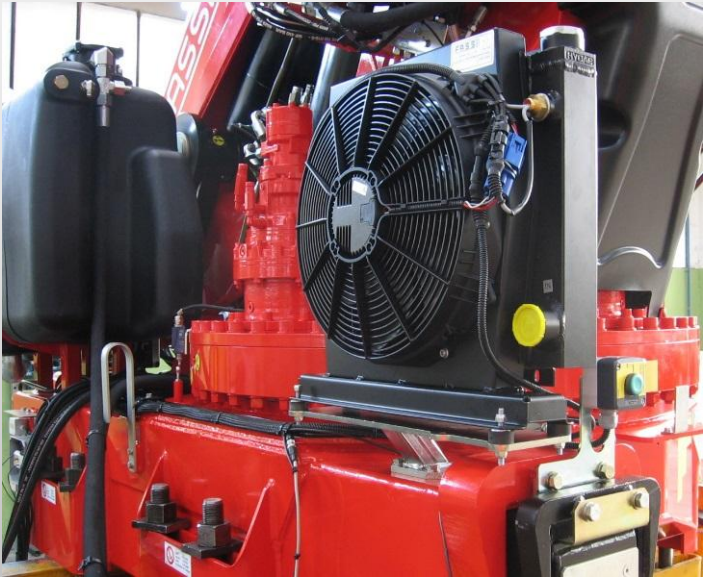
Black iron, capacity:

- 60 l
- 100 l
- 175 l
- 240 l





OIL COOLER



2 models available:

- **for cranes which operate in a non continuous or intermittent way (less than 15 minutes) with pump capacity up to 60 l/min;**
- **for cranes which operate in continuous working conditions (more than 15 minutes) with pump capacity up to 60 l/min and over up to 120 l/min (prescribed from F245A.2):**

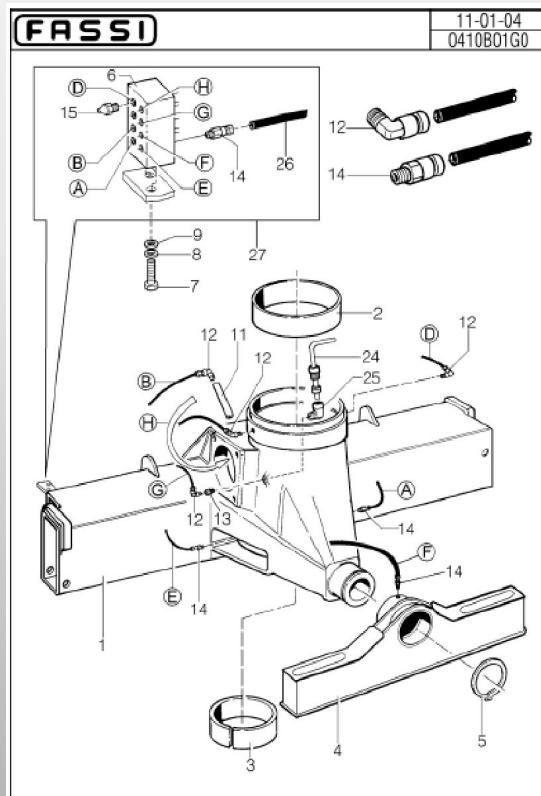
Standard foreseen starting from crane model F545RA.2 (included in the crane package) up to F1950RAL



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CENTRALISED GREASE SYSTEM



**Standard from the model F85B.1
to the model F485A.2**

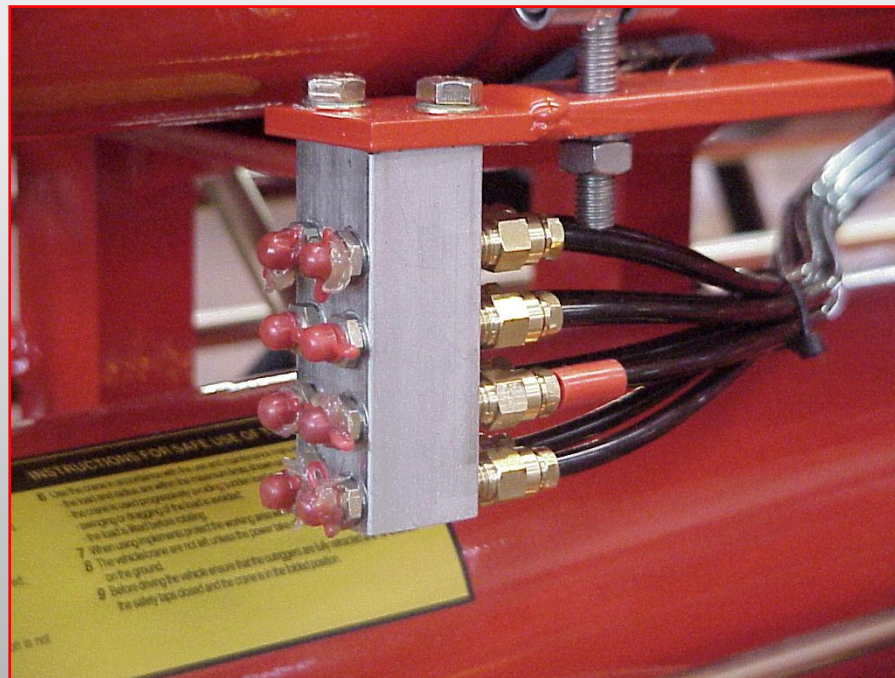


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CENTRALISED GREASE SYSTEM

Centralized greasing of the base: it is placed laterally for an easier maintenance



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FUNCTIONAL FEATURES OF THE PRODUCT

- **Crane control**
 - Double ground controls
 - Non-mounted distributor bank
 - Radio control
 - Top Seat
 - Higher control station
- **Lifting moment limiting device**
- **ADC: Automatic Dynamic Control**
- **System “XP”**
- **System 2XF”**
- **System “Prolink”**
- **System “JDP”**





CRANE CONTROL

- ❑ Cranes with rack & pinion is standard equipped with double ground controls
- ❑ In case of radio remote control, standard one side control and extra price for dual ground controls (except for crane equipped with Hydrocontrol distributor)
- ❑ Cranes with continuous rotation are available only with radio remote control (emergency levers on the column)

Optional:

- ❑ **Top seat control:** available from model F85B.0 to F800RA.2 (cranes “XE” excluded);
- ❑ **Top seat without control:** available from F85B.0 to F1350RA.2;
- ❑ **Stand-up control:** available from F85B.0 to F245A.0. Emergency safety device: rotation arc limiter;





DOUBLE GROUND CONTROLS



Hydraulic



FX200



FX500



without compromise



LOSE DISTRIBUTOR FOR F AND FM RANGE



The distributor bank is not mounted, 1,5 m cable



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RADIO CONTROL



Analogue radio control for NON-Ce cranes



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RADIO CONTROL



Digital radio remote control

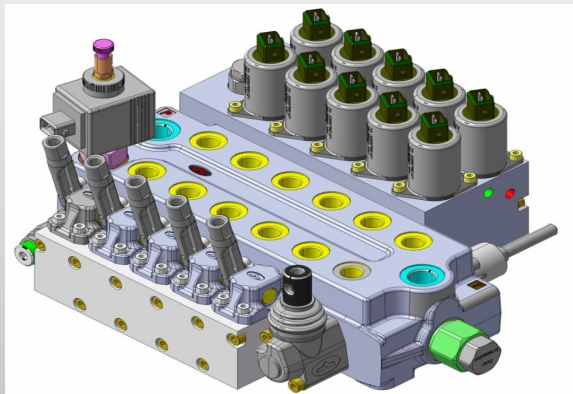


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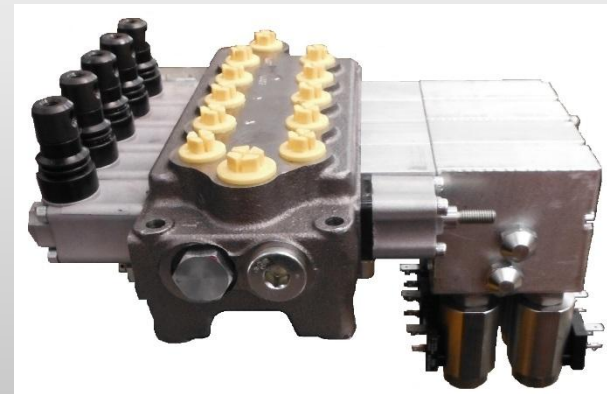


RADIO CONTROL

Radio-controlled distributor bank for the MICRO range and the small cranes until F40B.0, proportional electric control for all crane functions



Control bank **S100** for MICRO cranes: compact monoblock



From F26A.0 to F40B.0: compact and monoblock control bank **S200**



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RADIO CONTROL

The following analogic radio controls can be matched with the distributor banks S100 and S200



Simply control handle with 4 linear levers.



Handy control handle, with 8 push-buttons to proportionally control up to 4 functions



Linus 4 control handle with 4 linear levers



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TOP-SEAT



- Top seat controls:
available from F85B.0 to
F800RA.2 (cranes "XE"
excluded)

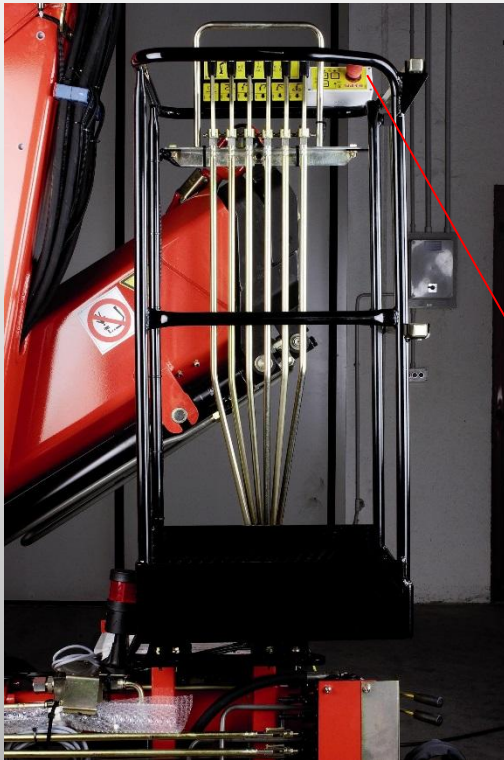
Top seat without controls:
available from F85B.0 to
F1350RA.2



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STAND-UP CONTROL STATION

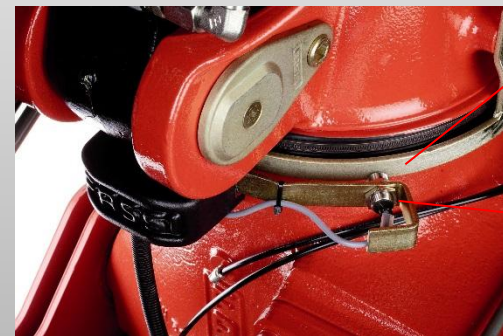


Located in place of oil tank

Lever controls with emergency button



Photocell



Metallic cell

Proximity sensor



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LOAD LIMITING DEVICE

available lifting moment limiting devices:

FX200
Fassi Electronic Control
control

**NON-CE
CRANES**

FX500
Fassi Electronic Control
control

FX900
Fassi Electronic Control
control

**TO COMPLY WITH EU
REGULATIONS**



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LOAD LIMITING DEVICE FX200

FX200 – Fassi Electronic control:



Load limiting device developed for NO-CE cranes, with the aim to offer a safety device which can inform the operator about the working status of the crane and stop it in case of overload condition.

- Emergency STOP button
- Button for the activation of the acoustic buzzer (to be connected to the truck horn)
- Green LED light to inform about the crane activation, orange LED light to inform when the 90% of the load capacity is reached and red LED light to inform when the 100% of the load capacity is reached.

- **Available until F415A.2**
- **Control panel for 1 or 2 control stations**
- **In combination with analogue radio control**



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LOAD LIMITING DEVICE FX500



FX500
Fassi Electronic Control
control

FX500 - Fassi Electronic Control:

a system that electronically controls the load conditions of the crane, of the hydraulic and manual extensions and of the winch, manages the lifting moment with the possibility to activate different work sectors, in relation to the stability condition of the vehicle / crane unit. In addition, it transmits and records the working data.

- Available from F26A.0 to F545RA.2
- Standard for the CE cranes (from F50A.0): active, dynamic, e-active, e-dynamic



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LOAD LIMITING DEVICE FX900



FX900
Fassi Electronic
Control
control

FX900 - Fassi Electronic Control:

System that electronically controls the load conditions of the crane, of the hydraulic and manual extensions and of the winch, with technical and functional characteristics suited to specific crane models, especially those designed to provide high operational performances, even in the most difficult working conditions. Moreover it handles the lifting moment with the possibility to activate different work sectors, in relation to the stability condition of the vehicle/crane unit.

Standard from F600RA.2 to F2150RAL



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PRODUCT CONFIGURATION AND AVAILABLE OPTIONS

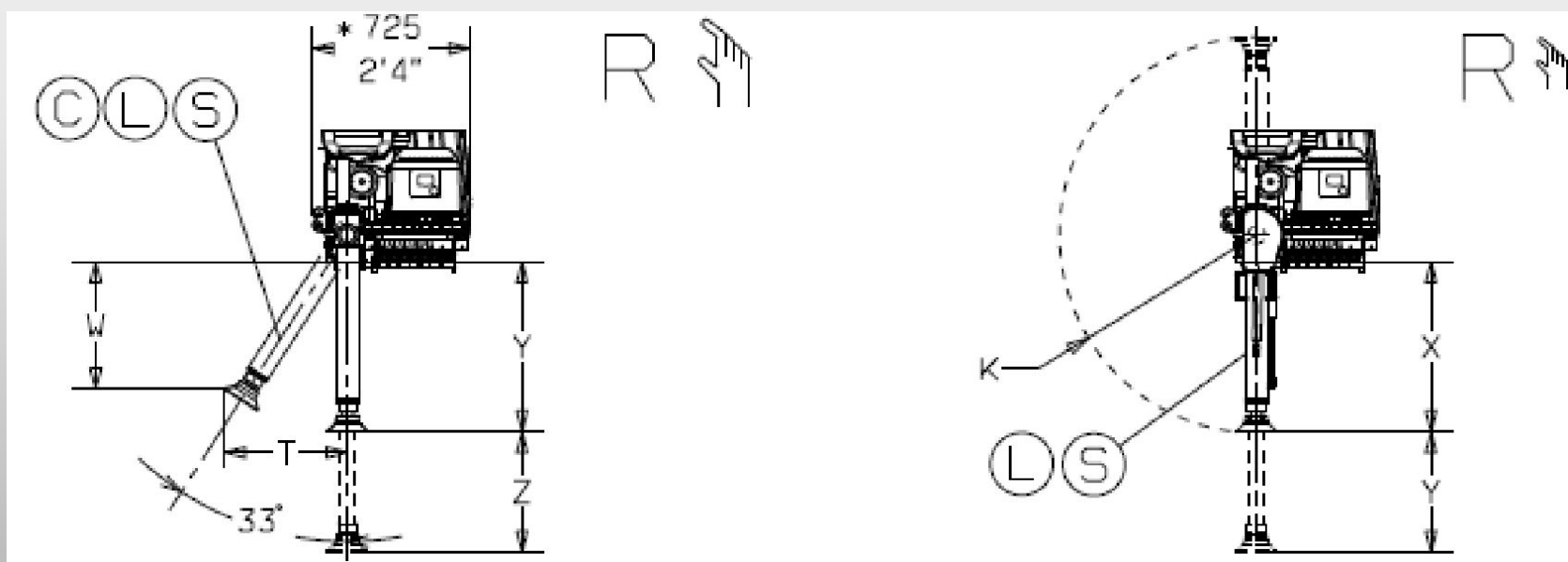
- Crane outriggers
- Winch
- jib
- Hook to increase the height
- LED work and warning lights
- Additional functions
- Power units for cranes FM and F
- Multi-faster





CRANE OUTRIGGERS

- From F22A.0 to F125A: manual standard tiltable (turning) outriggers (33°/45° or 180°)



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CRANE OUTRIGGERS

Optional:

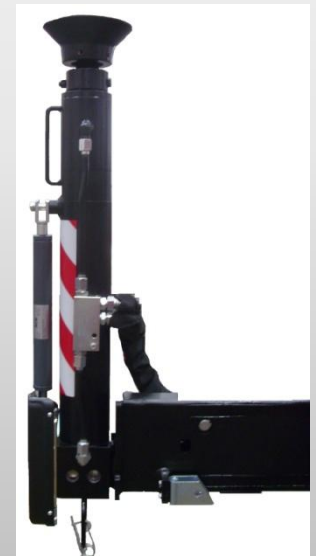
- Extra, super-extra, iper-extra: applicability according to the crane model
- Hydraulic extension of the models from F65B.0 to F125A.2
- Hydraulic tiltable outriggers: F110B.0 (no “A”) – F135A.0
- OET: Outrigger Easy Tilt from the model F65B.0 to F125A.2





OET: OUTRIGGER EASY TILT

The system allows an easy rotation of the manual tiltable outrigger ram (1) thanks to the forces generated by a spring (2) acting thanks to a cinematics mechanism (3).



The system **OET** can also be supplied as a kit on whatever type of outrigger ram (standard, short or long) on existing cranes



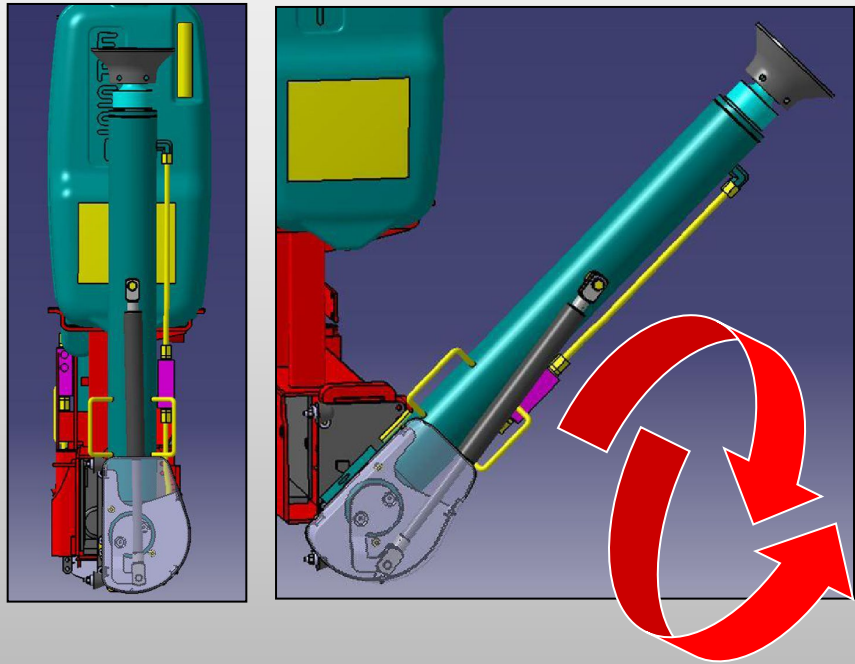
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OET: OUTRIGGER EASY TILT

Advantages for the operator:

- No physical force when you move the outrigger ram to put it in the transport position
- Easy movement for the operator who has to start it and follow it with his hands on the handle



without compromise

ACCESSORIES: WINCHES



Important:

The name of the winch is identified by the capacity of the last layer of the cable

Type "V5" – Capacity daN 500*, safety valve, not rotating cable, diameter mm 6, m 36 long.

Type "V6" - Capacity daN 600*, safety valve, not rotating cable, diameter mm 8, m 40 long,

Type "V9" - Capacity daN 900*, safety valve, not rotating cable, diameter mm 8, m 40 long.

Type "V15" - Capacity daN 1500*, safety valve, not rotating cable, diameter mm 10, m 40 long.

Type "V20" - Capacity daN 2000*, safety valve, not rotating cable, diameter mm 12, m 40 long (or 60 – 80 m, starting from F245A.0 – F545RA).

Type "V30" - Capacity daN 3000*, safety valve not rotating cable, diameter mm 14, m 60 long (or 80 starting from F545RA).

Type "V40" - Capacity daN 4000*, safety valve, safety valve, not rotating diameter mm 16, m 80 long

Type "V40/L" - Capacity daN 4000*, safety valve, safety valve, not rotating diameter mm 16, m 80 long.

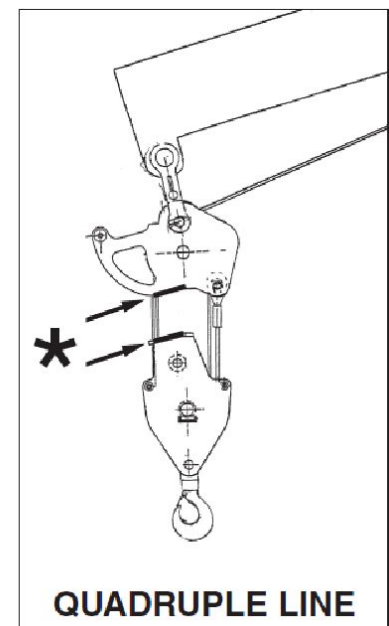
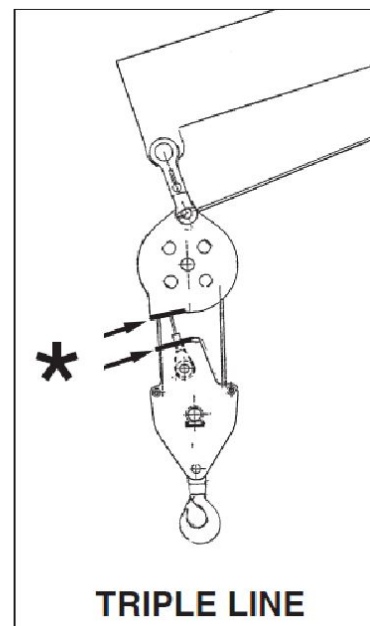
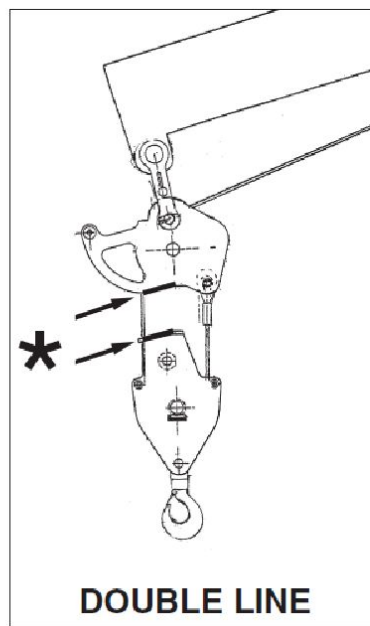
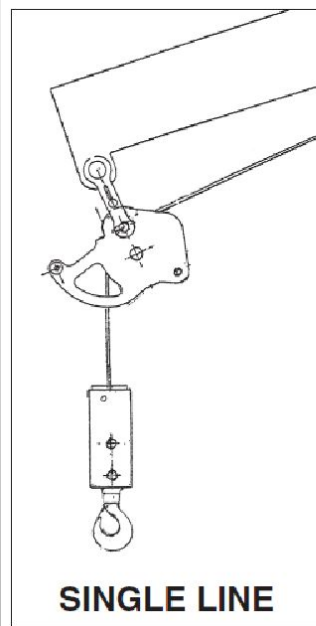
Tipo "V50" – Capacity daN 5000*, safety valve, safety valve, not rotating, diameter mm 16, m 80 long.





ACCESSORIES: WINCHES

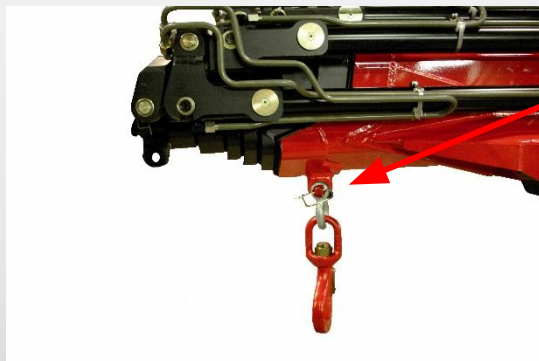
- Different lines are available
- Important: how to read the load diagram with winch



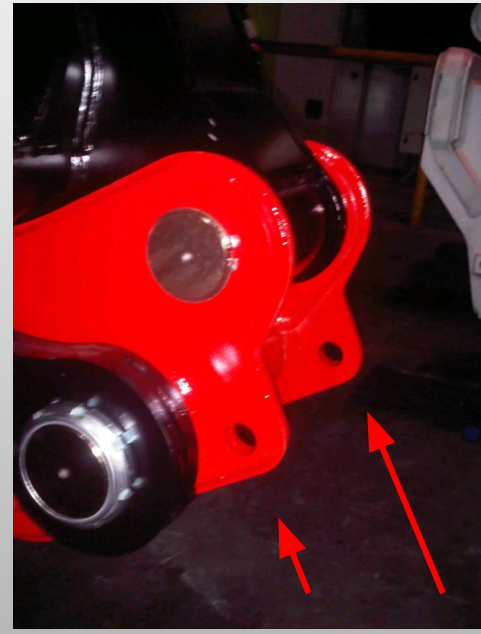
**without
compromise**



ACCESSORIES: JIB



Fixed hook attachment to lift maximum jib loads



Double fixed hook attachment. This is used to move loads exceeding those that are strictly within the capacity of the jib, without having to dismantle it from the crane, but simply by folding it completely under the outer boom

Jib	Max. Capacity of fixed hooks
L10	1350 kg
L15	1800 kg
L21	2.600 kg
L32	3.000 Kg
L41	4.000 kg
L42	4.000 kg
L51	5.000 kg
L61	6.000 kg
L81	8.000 kg
L91	10.000 kg



without compromise