

MARINE SERIE



### **LEADER IN INNOVATION**



### **GENERAL INFORMATION**



#### **GENERAL INFORMATION**

#### **LIGHT DUTY CRANES**

page 10 - 15



LIFTING CAPACITY from 11 kNm to 120 kNm

MAX LOAD: from 995 kg to 5400 kg

MAX HYDRAULIC OUTREACH: from 2,00 m to 12,05 m (with hydraulic extension\*)

WEIGHT: from 145 kg to 1390 kg

WORKING PRESSURE: from 180 bar to 310 bar

WINCH: V5 (500 daN) - V15 (1500 daN)

#### **MEDIUM DUTY CRANES**

page 16 - 21



LIFTING CAPACITY from 128 kNm to 335 kNm

MAX LOAD: from 5730 kg to 9500 kg

MAX HYDRAULIC OUTREACH: from 14,70 m to 20,90 m (with hydraulic extension\*)

WEIGHT: from 1640 kg to 4660 kg

WORKING PRESSURE: from 280 bar to 330 bar

WINCH: V9 (900 daN) - V30 (3000 daN)

#### **HEAVY DUTY CRANES**

page 22 - 30



LIFTING CAPACITY from 365 kNm to 1350 kNm

MAX LOAD: from 9500 kg to 30000 kg

MAX HYDRAULIC OUTREACH: from 20,90 m to 31,00 m (with hydraulic extension\*)

WEIGHT: from 4080 kg to 15865 kg

WORKING PRESSURE: from 310 bar to 340 bar

WINCH: V20 (2000 daN) - V50 (5000 daN)



\*optional

### **RACK AND PINON CRANES IN DETAILS**

#### MARINE TREATMENT

Corrosion resistance standard ASTM B117

SPECIAL PROTECTION 240 µm

#### **RELIABLE IN EVERY ASPECT**

High resistance to extreme stresses. One of Fassi cranes' strengths can be found in the monolithic base structure and the column, made of molten cast iron and steel. The accuracy in the welding processes is another example of world-class value which forms part of the reliability of Fassi's products.

DOUBLE RACK AND PINION



#### Rack and pinion cranes in details



#### DOUBLE RACK AND PINION SYSTEM

The base with a double rack makes it possible to double the slewing torque, without increasing slewing pressure.



#### FLEXIBLE PIPES FROM CONNECTING PLATE

A more versatile installation: the length of the pipes can be adapted to the customer's needs.



#### **EASY TO INSTALL**

Distributor with levers and controls fixed on a detachable console for easy installation.



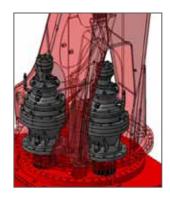
#### ROTATION CYLINDER PIPING

Pipes positioned underneath the rotation cylinders to avoid interference with load handling.

### **TURNTABLE CRANES IN DETAILS**



**Turntable cranes in details** 



#### SLEWING SYSTEM

Continuous rotation with double roller and ball guide turntable and motoreducer, designed for intensive use.



#### STAND-UP CONTROL STATION

The position of safety allows the operator complete control when executing specific manoeuvres and lifting operations, the ergonomic positioning of levers delivers ease of use and comfortable operation.



#### RADIO REMOTE CONTROLS

Radio remote controls of digital generation, to have an absolute operational control of the crane and able to communicate with the operator.



#### WINCHES

Cable-operated lifting device equipped with an exclusive, patented mechanical, torque and end stop limiter system which avoids the risks resulting from direct and indirect overload applied to the winch itself. Anti-revolving cable and cable guide pulley to make easy the aligned winding of the cable on the winch drum.

### **MARINE SERIES**

### **MARINE TREATMENT - 4 PHASES OF PAINTING**

- 1 PHASE
  - Sandblasting degree A Sa 2 ½ and application of 70 μm organic zinc
- 2 PHASE Double coat of bi-component epoxy primer 100 µm
- 3 PHASE
   Dual coat of polyurethane glaze finish 70 µm
- 4 PHASE Final baking

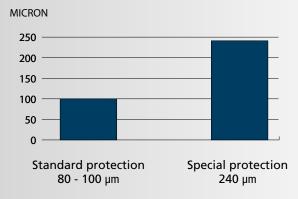
Each Fassi crane is provided with the best possible protection in order to face the most extreme working conditions of the marine environment, while maintaining its high standards of performance. 1 PHASE

2 PHASE

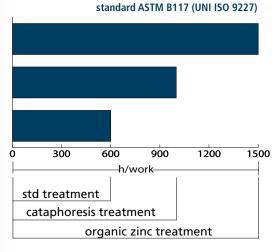
4 PHASE

**Total paint thickness** 

#### **Total paint thickness + 140%**



#### **Corrosion resistance +150%**



### **TOTAL PAINT THICKNESS - COMPONENTS**



#### RODS

The rods of the inner and outer rams are nickel treated ( ${\geq}20~\mu m)$  + chromium ( ${\geq}40~\mu m).$ 

The rods of the boom extension rams have a dual chromium thickness ( >40  $\mu m). \label{eq:mu}$ 



#### **ROTATION CYLINDERS**

The rotation cylinders are treated with dual chromium plating of the inner part with a coating thickness > 40  $\mu m$ .



#### **ALLUMINIUM VALVES**

The aluminium valves undergo an anodising treatment while those in steel are fully painted.

**Total paint thickness - components** 



PINS

Pins are completely protected thanks to hardened chemical nickel plating (thickness  $\geq 40~\mu m).$ 



FITTINGS AND HOSES

Standard zinc coating processes. Can be supplied on request in stainless steel



**PIPES** 

Special Zistaplex treatment, made to obtain protection excellent anti-corrosion in the hydraulic connection technique. Can be supplied on request in stainless steel.

### **DOUBLE RACK AND PINION SYSTEM**

### **HIGH EFFICIENCY**

The latest innovation of the development of a base with a double rack makes it possible to double the slewing torque, without increasing slewing pressure. This results in an improvement of performance when the crane is at an angle, as is often the case out on the water. Cranes fitted with this system are in fact capable of exceeding the 5-degree inclination limit and of handling loads in rotation up to approximately 10°. Beyond 10°, the load that can be handled reduces progressively, reaching a reduction of approximately 50% at a 15° inclination.





**Double the slewing torque** 

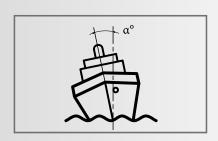


Improvement of performance when the crane is at an angle

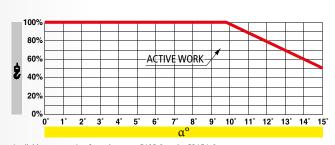


**Modular configuration** 

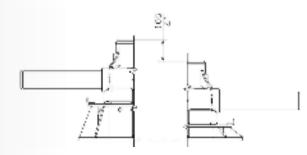
#### **Specification**



The height of the base with double rack have been set out in such a way as to produce a crane with a similar height to that of the crane with a standard rotation system. However, the design of this modular conguration of the bases makes it possible for Fassi to offer the option, on request, of lowered or raised bases that allow for reduced or increased overall height of the crane.



Available as an option from the crane F40B.0 to the F215A.0 For further information please consult the data sheets available on www.fassitech.com



## **QUALITY - CERTIFIED STANDARDS**



Every phase of the entire production cycle from design to after-sales service is regulated through written procedure in accordance with the Fassi Group Quality System, which is executed in accordance with the UNI EN ISO 9001 standard certified by the international organization Det Norske Veritas (DNV).







M10A.11

C M 995 585 410 300 kg 1,10 1,90 2,70 3,55 m

M10A.12

M 995 585 410 300 kg 1,10 1,90 2,70 3,55 m

MICRO M10A - TECHNICAL DATA	
Lifting capacity	1,12 tm
Rotation arc	325°
Rotation torque	1,9 kNm
Working pressure	18,0 MPa
Pump capacity	6 l/m
Weight	145 kg
Winch*	V5

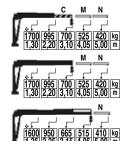
M15A.11

C M 1300 740 515 385 kg 1,20 2,10 3,00 3,95 m

M15A.12

MICRO MITJA - TECHNICAL DATA	
Lifting capacity	1,53 tm
Rotation arc	325°
Rotation torque	1,9 kNm
Working pressure	18,0 MPa
Pump capacity	6 l/m
Weight	190 kg
Winch*	V5

M20A.11



M20A.13

M20A.12

MICRO M20A - TECHNICAL DATA	
Lifting capacity	2,24 tm
Rotation arc	325°
Rotation torque	3,4 kNm
Working pressure	18,0 MPa
Pump capacity	8 l/m
Weight	195 kg
Winch*	V5





MICRO M25A - TECHNICAL DATA

Lifting capacity 2,65 tm

Rotation arc 325°

Rotation torque 3,4 kNm

Working pressure 15,5 MPa

Pump capacity 8 l/m

Weight 215 kg

Winch\* V5

M30A.11

M30A.12

M30A.13

MICRO M30A - TECHNICAL DATA

Lifting capacity 3,06 tm

Rotation arc 325°

Rotation torque 3,4 kNm

Working pressure 18,0 MPa

Pump capacity 8 l/m

Weight 215 kg

Winch\* V5

MICRO M40A - TECHNICAL DATA	
Lifting capacity	4,08 tm
Rotation arc	337°
Rotation torque	4,2 kNm
Working pressure	23,0 MPa
Pump capacity	10-15 l/m
Weight	330 kg
Winch*	V5

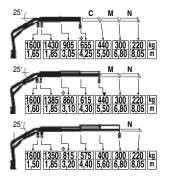




F32A.0.21

F32A.0.22

F32A.0.23



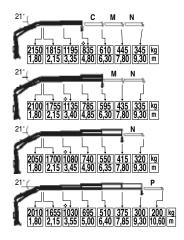
F32A.0 - TECHNICAL DATA	
Lifting capacity	2,75 tm
Rotation arc	370°
Rotation torque	4,0 kNm
Working pressure	26,5 MPa
Pump capacity	10 l/m
Weight	390 kg
Winch*	V5

F40B.0.21

F40B.0.22

F40B.0.23

F40B.0.24



F40B.0 - TECHNICAL DATA	
Lifting capacity	3,98 tm
Rotation arc	370°
Rotation torque	5,3 kNm
Working pressure	26,5 MPa
Pump capacity	15 l/m
Weight	505 kg
Winch*	V5





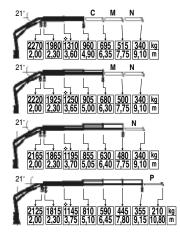


F50A.0.21

F50A.0.22

F50A.0.23

F50A.0.24



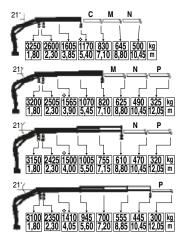
F50A.0 - TECHNICAL DATA	
Lifting capacity	4,69 tm
Rotation arc	370°
Rotation torque	7,6 kNm
Working pressure	25,5 MPa
Pump capacity	16 l/m
Weight	540 kg
Winch*	V5 - V6 - V9 - V15

F65B.0.21

F65B.0.22

F65B.0.23

F65B.0.24



F65B.0 - TECHNICAL DATA	
Lifting capacity	6,32 tm
Rotation arc	400°
Rotation torque	7,8 kNm
Working pressure	32 MPa
Pump capacity	20 l/m
Weight	610 kg
Winch*	V6





The weight of the crane refers to standard model



F85B.0.21

F85B.0.22

F85B.0.22

F85B.0.23

F85B.0.23

F85B.0.24

F85B.0.24

F85B.0.24

F85B.0 - TECHNICAL DATA	
Lifting capacity	8,56 tm
Rotation arc	400°
Rotation torque	11,7 kNm
Working pressure	31 MPa
Pump capacity	30-40 l/m
Weight	790 kg
Winch*	V9

F110B.0.21

F110B.0.22

F110B.0.23

F110B.0.23

F110B.0.23

F110B.0.24

F110B.0.25

F110B.0.25

F110B.0 - TECHNICAL DATA	
Lifting capacity	9,89 tm
Rotation arc	410°
Rotation torque	17,7 kNm
Working pressure	30,5 MPa
Pump capacity	30-40 l/m
Weight	970 kg
Winch*	V9 - V15





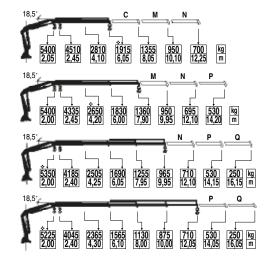


F115A.0.21

F115A.0.22

F115A.0.23

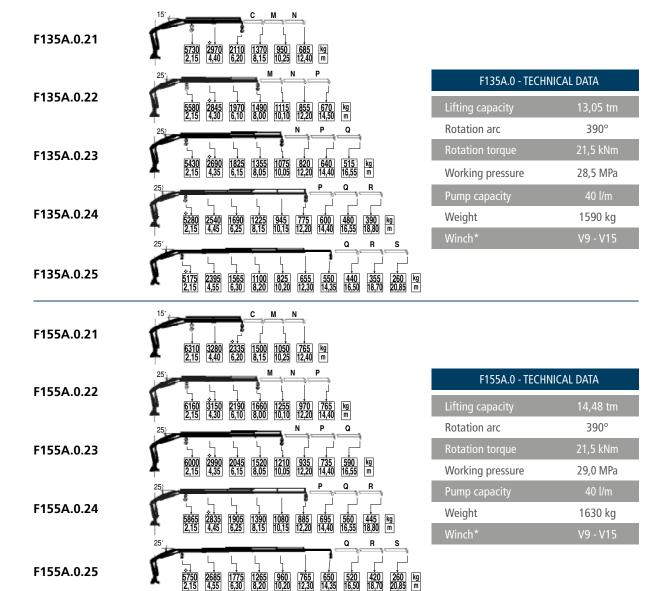
F115A.0.24



F115A.0 - TECHNICAL DATA	
Lifting capacity	11,62 tm
Rotation arc	390°
Rotation torque	17,6 kNm
Working pressure	30,5 MPa
Pump capacity	30 l/m
Weight	1415 kg
Winch*	V9 - V15



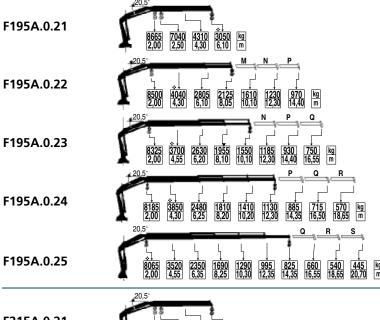












F195A.0 - TECHNICAL DATA	
Lifting capacity	18,65 tm
Rotation arc	400°
Rotation torque	30,8 kNm
Working pressure	28,0 MPa
Pump capacity	45 l/m
Weight	1650 kg
Winch*	V15 - V20

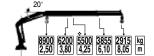
F215A.0.21	9370 7600 4660 3300 kg 2,00 2,50 4,30 6,10 m
F215A.0.22	20.5 M N P 9200 4380 3055 2315 1750 1315 1035 kg 2,00 4,30 6,10 8,05 10,10 12,30 14,40 m
F215A.0.23	20.5 N P Q 9030 3985 2875 2145 1695 1270 1000 810 kg 20.5 R P Q R
F215A.0.24	8890 4000 2720 2000 1555 1220 955 770 585 kg 2,00 4,45 6,25 8,20 10,20 12,30 14,35 16,50 18,65 m
F215A.0.25	8770 3850 2950 1380 1435 1105 915 735 575 445 kg 2,00 4,55 6,55 8,25 10,30 12,35 14,35 16,55 18,65 20,70 m

F215A.0 - TECHNICAL DATA	
Lifting capacity	20,08 tm
Rotation arc	400°
Rotation torque	33,5 kNm
Working pressure	30,0 MPa
Pump capacity	45 l/m
Weight	1650 kg
Winch*	V9 - 15 - V20

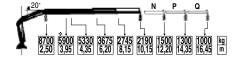




F245A.0.22



F245A.0.23



F245A.0 - TECHNICAL DATA

Lifting capacity 23,55 tm

Rotation arc 420°

Rotation torque 37,1 kNm

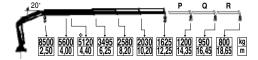
Working pressure 30,5 MPa

Pump capacity 45-65 l/m

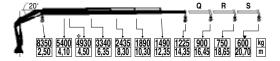
Weight 2400 kg

Winch\* V15 - V20

F245A.0.24



F245A.0.25



F245A.0.26







18

F295A.2 - TECHNICAL DATA

28,34 tm 400°

31,0 MPa 60-80 l/m

3250 kg

Lifting capacity

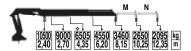
Working pressure

Pump capacity

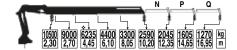
Weight

Rotation arc

F295A.2.22



F295A.2.23



F295A.2.24



F295A.2.25



F295A.2.26



F295A.2.27



F295A.2.28







M max = ❖

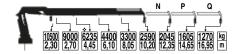
The weight of the crane refers to standard model

Telescopic manual extensions are optionals  $\begin{tabular}{ll} M \begin{tabular}{ll} N \begin{tabular}{ll} P \begin{tabular}{ll} R \begin{tabular}{ll} S \begin{tabular}{ll} T \begin{tabular}{ll} V \begin{tabular}{ll} P \begin{tabular}{ll} Q \begin{tabular}{ll} R \begin{tabular}{ll} S \begin{tabular}{ll} T \begin{tabular}{ll} V \begin{tabular}{ll} P \begin{tabular}{ll} Q \begin{tabular}{ll} R \begin{tabular}{ll} S \begin{tabular}{ll} T \begin{tabular}{ll} V \begin{tabular}{ll} P \begin{tabular}{ll} Q \begin{tabular}{ll} R \begin{tabular}{ll} S \begin{tabular}{ll} T \begin{tabular}{ll} P \begin{tabular}{ll} Q \begin{tabular}{ll} R \begin{tabular}{ll} S \begin{tabular}{ll} P \begin{tabular}{ll} Q \begin{tabular}{ll} R \begin{tabular}{ll} S \begin{tabular}{ll} P \begin{tabular}{ll} Q \begin{tabular}{ll} R \begin{tabular}{ll} S \begin{tabular}{ll} P \begin{tabular}{ll} P$ 

F295RA.2.22



F295RA.2.23



F295RA.2.24



F295RA.2.25



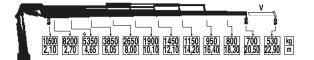
F295RA.2.26



F295RA.2.27



F295RA.2.28







F295RA.2 - TECHNICAL DATA

28,34 tm 360° cont.

25 kNm

31,0 MPa 60-80 l/m

3460 kg

Lifting capacity

Working pressure

Pump capacity

Weight

Rotation arc

F335A.2 - TECHNICAL DATA

31,70 tm 400°

31,0 MPa 60-80 l/m

3350 kg

Lifting capacity

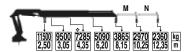
Working pressure

Pump capacity

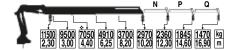
Weight

Rotation arc

F335A.2.22



F335A.2.23



F335A.2.24



F335A.2.25



F335A.2.26



F335A.2.27



F335A.2.28



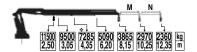




M max = ❖

The weight of the crane refers to standard model

F335RA.2.22



F335RA.2.23



F335RA.2.24



F335RA.2 - TECHNICAL DATA

Lifting capacity 31,70 tm

Rotation arc 360° cont.

Rotation torque 25 kNm

Working pressure 31,0 MPa

Pump capacity 60-80 l/m

Weight 3510 kg

Winch\* V15 - V20 - V30

F335RA.2.25



F335RA.2.26



F335RA.2.27



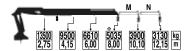
F335RA.2.28







F415A.2.22



F415A.2.23



F415A.2.24



F415A.2 - TECHNICAL DATA Lifting capacity 40,27 tm Rotation arc 430° Working pressure 31,0 MPa Pump capacity Weight 4200 kg

F415A.2.25



F415A.2.26



F415A.2.27



F415A.2.28







M max = ❖

The weight of the crane refers to standard model

\*optional

F415RA.2.22



F415RA.2.23



F415RA.2.24



Lifting capacity 41,39 tm

Rotation arc 360° cont.

Rotation torque 44,1 kNm

Working pressure 31,0 MPa

Pump capacity 60-80 l/m

Weight 4200 kg

Winch\* V20 - V30

F415RA.2 - TECHNICAL DATA

F415RA.2.25



F415RA.2.26



F415RA.2.27



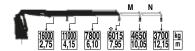
F415RA.2.28







F515RA.2.22



F515RA.2.23



F515RA.2.24

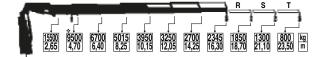


F515RA.2 - TECHNICAL DATA	
Lifting capacity	47,81 tm
Rotation arc	360° cont.
Rotation torque	44,1 kNm
Working pressure	33,5 MPa
Pump capacity	70-80 l/m
Weight	4350 kg
Winch*	V20 - V30

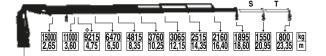
F515RA.2.25



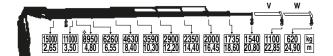
F515RA.2.26



F515RA.2.27



F515RA.2.28







F660RA.2.22



F660RA.2.23



F660RA.2.24



F660RA.2 - TECHNICAL DATA

Lifting capacity 56,78 tm

Rotation arc 360° cont.

Rotation torque 45,0 kNm

Working pressure 32,0 MPa

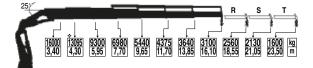
Pump capacity 70-80 l/m

Weight 5135 kg

F660RA.2.25



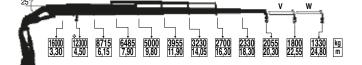
F660RA.2.26



F660RA.2.27



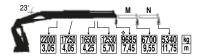
F660RA.2.28



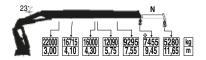




F800RA.2.22



F800RA.2.23



F800RA.2.24



F800RA.2 - TECHNICAL DATA

Lifting capacity 72,17 tm

Rotation arc 360° cont.

Rotation torque 90,0 kNm

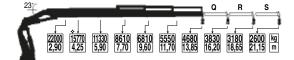
Working pressure 33,0 MPa

Pump capacity 80-100 l/m

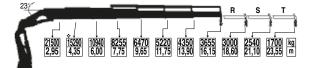
Weight 6100 kg

Winch\* V20 - V30

F800RA.2.25



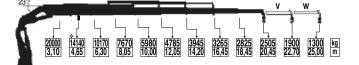
F800RA.2.26



F800RA.2.27



F800RA.2.28



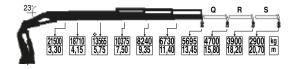




#### F950RA.2.24

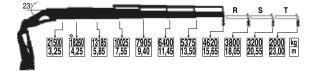


F950RA.2.25



F950RA.2 - TECHNICAL DATA	
Lifting capacity	80,22 tm
Rotation arc	360° cont.
Rotation torque	80,0 kNm
Working pressure	32,5 MPa
Pump capacity	80-100 l/m
Weight	7360 kg
Winch*	V20 - V30 - V40

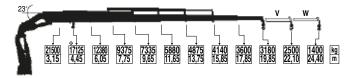
#### F950RA.2.26



#### F950RA.2.27



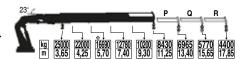
#### F950RA.2.28



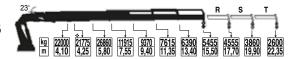




F1300RA.2.24



F1300RA.2.26

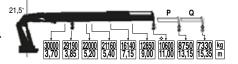


F1300RA.2.28

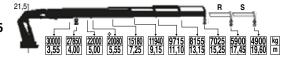


F1300RA.2 - TECHNICAL DATA	
Lifting capacity	95,11 tm
Rotation arc	360° cont.
Rotation torque	100,0 kNm
Working pressure	33,5 MPa
Pump capacity	90-110 l/m
Weight	9700 kg
Winch*	V20 - V30 - V40

F1600RA.2.24



F1600RA.2.26



F1600RA.2.28



1600RA.2 - TECHNICAL DATA	١

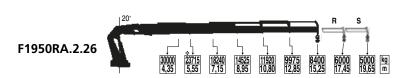
Lifting capacity	116,62 tm
Rotation arc	360° cont.
Rotation torque	130,0 kNm
Working pressure	33,5 MPa
Pump capacity	100+100 l/m
Weight	11770 kg
Winch*	V20 - V30 - V40

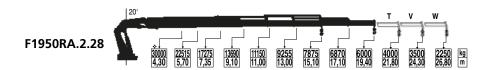






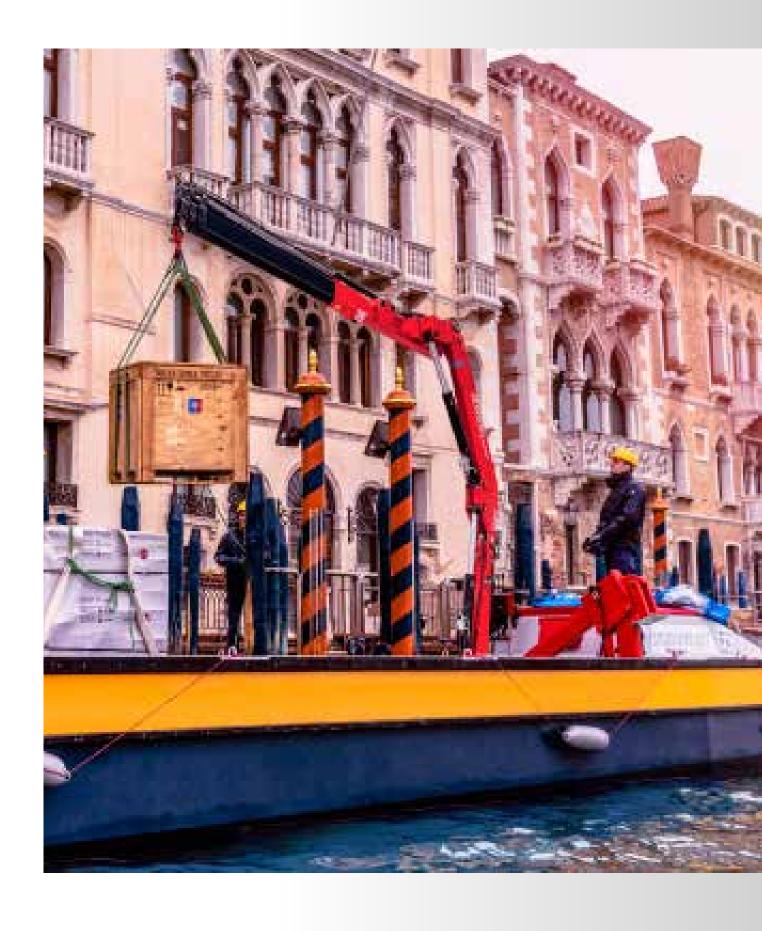
F1950RA.2 - TECHNICAL DATA	
Lifting capacity	137,61 tm
Rotation arc	360° cont.
Rotation torque	130,0 kNm
Working pressure	34,0 MPa
Pump capacity	100+100 l/m
Weight	12700 kg
Winch*	V30 - V40 - V50











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