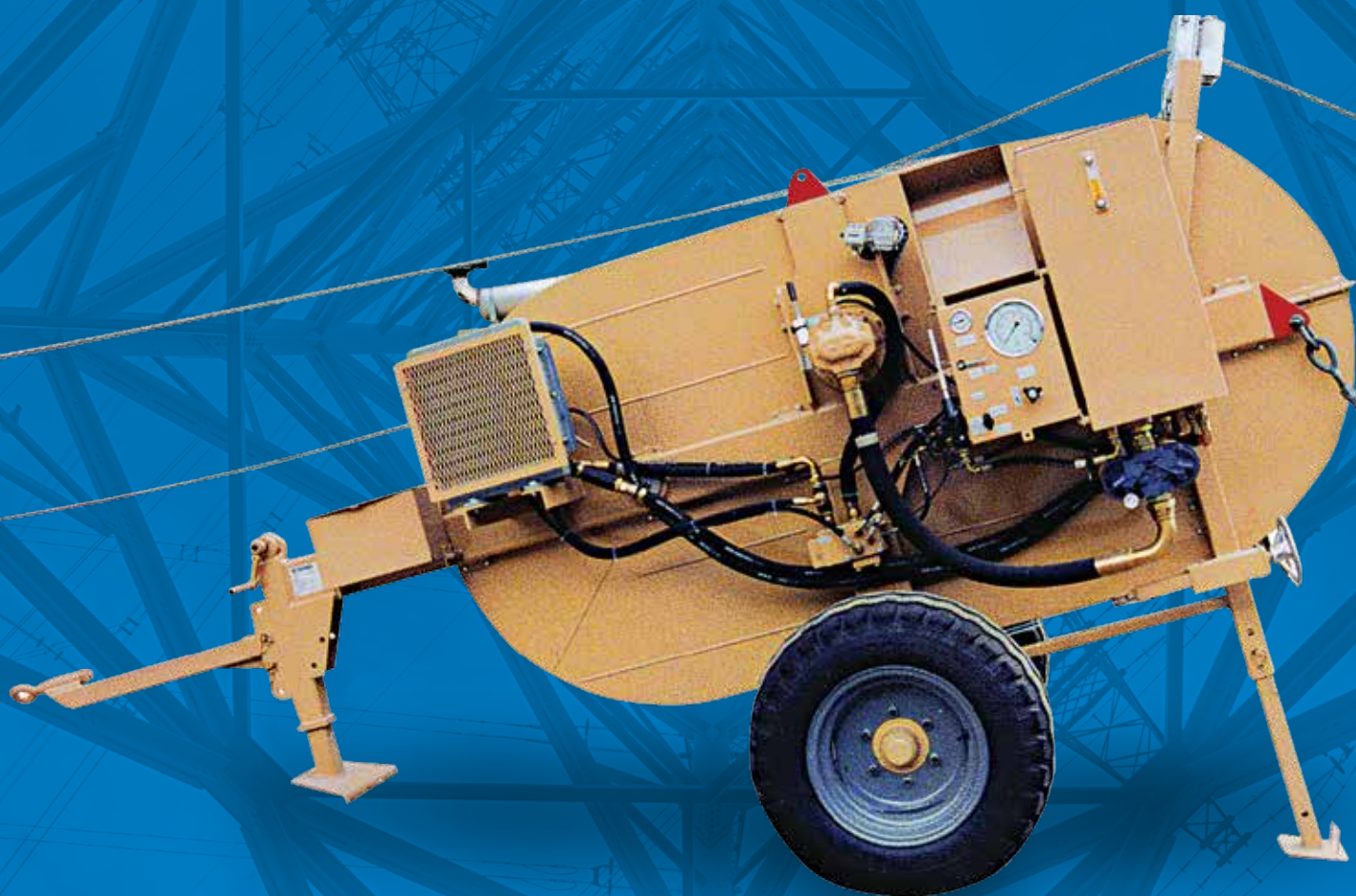


ESSENTIAL MACHINES





INDEX

ESSENTIAL MACHINES

CODE	PULL RANGE (KN)	LAYOUT	BULL WHEEL DIAMETER (mm)	GROOVES NUMBER	ENGINE POWER (kW)	
ARS522	50	Single	400	7	60	5.10
ARS519	70	Single	400	7	60	5.15
ARS500	90	Single	450	10	104	5.20
ARS612	140	Single	600	10	129	5.25
ARS700/701	160/180	Single	600	10	209	5.30
FRS404	40	Single	1500	8	25	5.35
FRS531	75	Single	1500	10	25	5.40
FRS615	140	Single	1500	16	48	5.45
FRB600	2x75	Twin	1500	20	48	5.50

ESSENTIAL MACHINES

The basic solutions

The essential machines are one of the solutions supplied by Tesmec for new line constructions.

This is the most basic and light solution, with few or no electronic components at all.

The quality of these machines is tested by several years of employment on different jobsites, in every weather condition from Russia to Saudi Arabia.

The machines are extra CE/EPA, except for the pullers ARS500 and ARS700 available also in CE/EPA version.





THE STANDARD RANGE

Basic machines for line construction

Besides the technological improvements developed to reach the top quality level of Stringing Machines 4.0, Tesmec keeps a light range of machines, mainly for extra CE & EPA Countries. These machines are the example of a reliable evergreen design.

TRADITIONAL USE & MAINTENANCE

Mechanical machines

The main feature of these machines is the absence or a limited use of electronic components. This means a traditional use and maintenance of the machines: a basic and light range, simple and user friendly.

ARS522

HYDRAULIC PULLER



MAX
PULL
50 kN



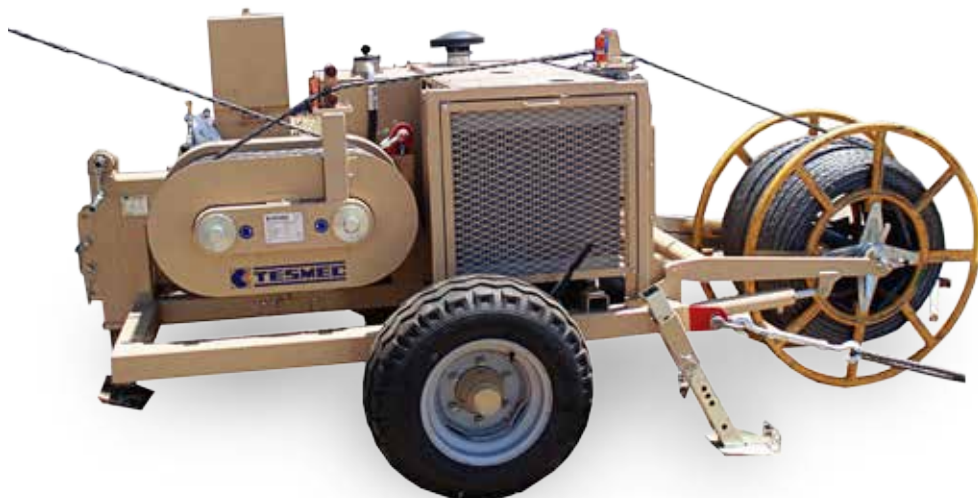
MAX
SPEED
5 km/h



ROPE
DIAMETER
16 mm

EXTRA CE/EPA

LIGHT & SIMPLE



PERFORMANCE*

Max pull	50 kN
Speed at max pull	2.5 km/h
Max speed	5 km/h
Pull at max speed	25 kN

* at 20°C and at sea level

CHARACTERISTICS

Bull-wheel diameter	400 mm
Bull-wheel material	STEEL
Max rope diameter	16 mm
Weight	2050 kg
Number of grooves	7
Suitable for	1 rope
Layout	Single

ENGINE

Diesel	60 kW (81 hp)
Cooling system	water
Electrical system	12 V

HYDRAULIC TRANSMISSION

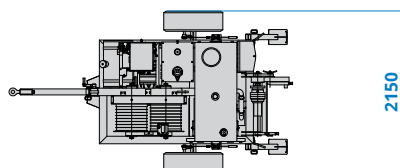
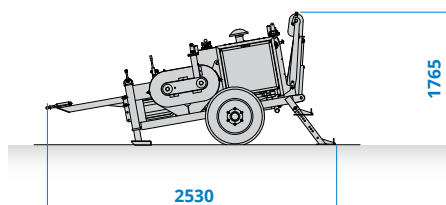
Closed hydraulic circuit for stepless speed variation in both rotating directions.

CONFIGURATION

Negative self-acting hydraulic brake Hydraulic dynamometer with set-point and automatic control of maximum pull
Control instruments for hydraulic system and Diesel engine
Rigid axle 30 km/h
On board reel winder with automatic level wind, suitable for standard reel mod. BOF010 and BOF020 (AXR001 included)
Electronic pull and speed recorder kit (instrument not included)
Pull pre-setting system
Mechanical front stabiliser
Grounding connection point

AVAILABLE DEVICES

ALL037	Preheating device for use up to -30°C
ALL071	Hydraulic rope clamp for reel change operations
ALL111	Swivel guide rope roller
AXR001	Extra shaft
DLR300	Electronic pull and speed recorder



ALL111



DLR300

Pictures & drawings can be different according to technical specifications - updating programme variations without notice are possible.

Certified Quality System
ISO 9001:2015

Certified Environmental System
ISO 14001:2015

Certified Health & Safety System
ISO 45001:2018

ARS519

HYDRAULIC PULLER



MAX
PULL
70 kN



MAX
SPEED
4 km/h



ROPE
DIAMETER
16 mm

EXTRA CE/EPA

LIGHT & SIMPLE

COMPLETELY ELECTRONICALLY CONTROLLED

PERFORMANCE*

Max pull	70 kN
Speed at max pull	1.8 km/h
Max speed	4 km/h
Pull at max speed	32 kN

* at 20°C and at sea level

CHARACTERISTICS

Bull-wheel diameter	400 mm
Bull-wheel material	STEEL
Max rope diameter	16 mm
Weight	2100 kg
Number of grooves	7
Suitable for	1 rope
Layout	Single

ENGINE

Diesel	60 kW (81 hp)
Cooling system	water
Electrical system	12 V

HYDRAULIC TRANSMISSION

Closed hydraulic circuit for stepless speed variation in both rotating directions. This machine is provided with a pull pre-setting system that maintains the pre-set pulling value (also when the speed is reduced to "0") by automatically adjusting the operation speed according to the friction and unexpected loads which may occur.

CONFIGURATION

Negative self-acting hydraulic brake
Hydraulic dynamometer with set-point and automatic control of maximum pull
Control instruments for hydraulic system and Diesel engine
Rigid axle 30 km/h
On board reel winder with automatic level wind, suitable for standard reel mod. BOF010 and BOF020 (AXR001 included)
Electronic pull and speed recorder kit (instrument not included)
Pull pre-setting system
Mechanical front stabiliser
Grounding connection point

AVAILABLE DEVICES

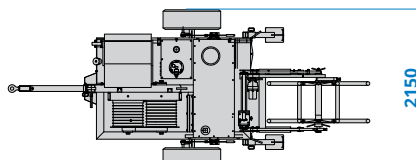
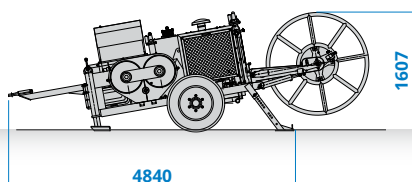
ALL037	Preheating device for use up to -30°C
ALL051	Cable remote control kit (instrument not included)
AXC005	Cable remote control (15 m range)
ALL059	Radio remote control kit (instrument not included)
AXH007	Radio remote control (150 m range)
ALL071	Hydraulic rope clamp for reel change operations
ALL111	Swivel guide rope roller
AXR001	Extra shaft
DLR300	Electronic pull and speed recorder



ALL111



DLR300



ARS500

HYDRAULIC PULLER



MAX
PULL
90 kN



MAX
SPEED
5 km/h



ROPE
DIAMETER
18 mm

AVAILABLE ALSO FOR CE/EPA

HIGH PERFORMANCE

COMPLETELY ELECTRONICALLY CONTROLLED



PERFORMANCE*

Max pull	90 kN
Speed at max pull	2.4 km/h
Max speed	5 km/h
Pull at max speed	44 kN

* at 20°C and at sea level

CHARACTERISTICS

Bull-wheel diameter	450 mm
Bull-wheel material	STEEL
Max rope diameter	18 mm
Weight	3800 kg
Number of grooves	10
Suitable for	1 rope
Layout	Single

ENGINE

Diesel	104 kW (140 hp)
Cooling system	water
Electrical system	12 V

HYDRAULIC TRANSMISSION

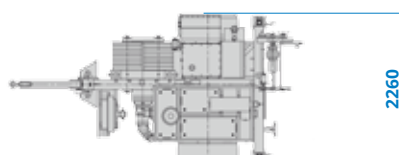
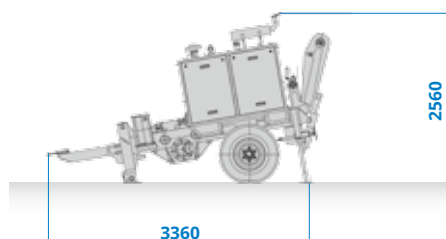
Closed hydraulic circuit for stepless speed variation in both rotating directions. This machine is provided with a pull pre-setting system that maintains the pre-set pulling value (also when the speed is reduced to "0") by automatically adjusting the operation speed according to the friction and unexpected loads which may occur.

CONFIGURATION

Negative self-acting hydraulic brake
Hydraulic dynamometer with set-point and automatic control of maximum pull
Control instruments for hydraulic system and Diesel engine
Rigid axle 30 km/h
On board reel winder with automatic level wind, suitable for standard reel mod. BOF010 and BOF020 (AXR001 included)
Mechanical front stabiliser
Grounding connection point

AVAILABLE DEVICES

ALL037	Preheating device for use up to -30°C
ALL051	Cable remote control kit (instrument not included)
AXC005	Cable remote control (15 m range)
ALL053	Electronic pull and speed recorder kit (instrument not included)
ALL059	Radio remote control kit (instrument not included)
AXH007	Radio remote control (150 m range)
ALL071	Hydraulic rope clamp for reel change operations
ALL089	Electronic arrangement for connection of multiple machines and for stringing synchronization
AXR001	Extra shaft
DLR300	Electronic pull and speed recorder



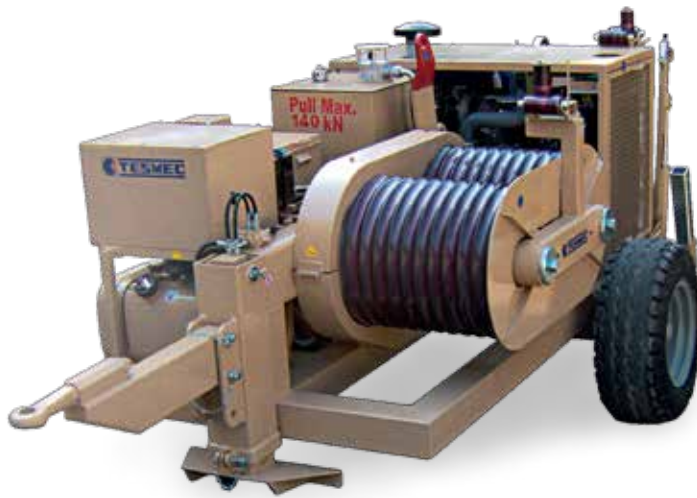
DLR300

Pictures & drawings can be different according to technical specifications - updating programme variations without notice are possible.

Certified Quality System
ISO 9001:2015

Certified Environmental System
ISO 14001:2015

Certified Health & Safety System
ISO 45001:2018



ARS612

HYDRAULIC PULLER



**MAX
PULL**
140 kN



**MAX
SPEED**
4,5 km/h



**ROPE
DIAMETER**
24 mm

EXTRA CE/EPA

LIGHT & SIMPLE

COMPLETELY ELECTRONICALLY CONTROLLED

PERFORMANCE*

Max pull	140 kN
Speed at max pull	2 km/h
Max speed	4.5 km/h
Pull at max speed	60 kN

* at 20°C and at sea level

CHARACTERISTICS

Bull-wheel diameter	600 mm
Bull-wheel material	STEEL
Max rope diameter	24 mm
Weight	4800 kg
Number of grooves	10
Suitable for	1 rope
Layout	Single

ENGINE

Diesel	129 kW (173 hp)
Cooling system	water
Electrical system	12 V

HYDRAULIC TRANSMISSION

Closed hydraulic circuit for stepless speed variation in both rotating directions. This machine is provided with a pull pre-setting system that maintains the pre-set pulling value (also when the speed is reduced to "0") by automatically adjusting the operation speed according to the friction and unexpected loads which may occur.

CONFIGURATION

Negative self-acting hydraulic brake
Hydraulic dynamometer with set-point and automatic control of maximum pull
Control instruments for hydraulic system and Diesel engine
Rigid axle 30 km/h
On board reel winder with automatic level wind, suitable for standard reel mod. BOF010 BOF020 (AXR001 included)
Electronic pull and speed recorder kit (instrument not included)
Pull pre-setting system
Hydraulic front stabiliser
Grounding connection point

AVAILABLE DEVICES

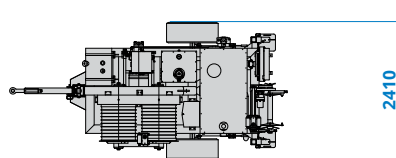
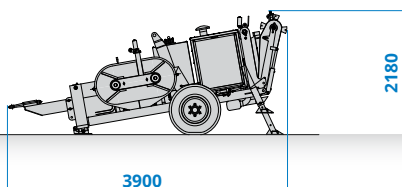
ALL037	Preheating device for use up to -30°C
ALL051	Cable remote control kit (instrument not included)
AXC005	Cable remote control (15 m range)
ALL059	Radio remote control kit (instrument not included)
AXH007	Radio remote control (150 m range)
ALL071	Hydraulic rope clamp for reel change operations
ALL111	Swivel guide rope roller
AXR001	Extra shaft
DLR300	Electronic pull and speed recorder



ALL111



DLR300



ARS700/701

HYDRAULIC PULLER



MAX
PULL

160/180 kN



MAX
SPEED

5 km/h



ROPE
DIAMETER

24 mm

AVAILABLE ALSO FOR CE/EPA

HIGH PERFORMANCE

COMPLETELY ELECTRONICALLY CONTROLLED



PERFORMANCE*

Max pull	160/180 kN
Speed at max pull	2.5/2.2 km/h
Max speed	5 km/h
Pull at max speed	80 kN

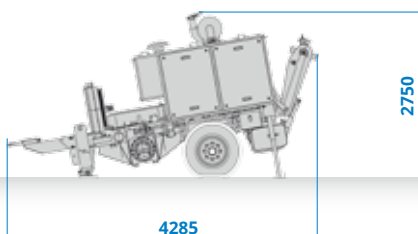
* at 20°C and at sea level

CHARACTERISTICS

Bull-wheel diameter	600 mm
Bull-wheel material	STEEL
Max rope diameter	24 mm
Weight	6000 kg
Number of grooves	10
Suitable for	1 rope
Layout	Single



DLR300



ENGINE

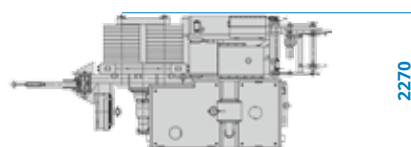
Diesel	209 kW (280 hp)
Cooling system	water
Electrical system	24 V

HYDRAULIC TRANSMISSION

Closed hydraulic circuit for stepless speed variation in both rotating directions. This machine is provided with a pull pre-setting system that maintains the pre-set pulling value (also when the speed is reduced to "0") by automatically adjusting the operation speed according to the friction and unexpected loads which may occur.

CONFIGURATION

Negative self-acting hydraulic brake
Hydraulic dynamometer with set-point and automatic control of maximum pull
Control instruments for hydraulic system and Diesel engine
Rigid axle 30 km/h
On board reel winder with automatic level wind, suitable for standard reel mod. BOF010 and BOF020 (AXR001 included)
Mechanical front stabiliser
Grounding connection point



AVAILABLE DEVICES

ALL001	Lighting system for the trailer
ALL002	Air brake system for the trailer
ALL010	Hydraulic power pack to control a separate reel winder
ALL022	Hydraulic quick connectors to control a separate reel winder instead of the built-in one
ALL037	Preheating device for use up to -30°C
ALL051	Cable remote control kit (instrument not included)
AXC005	Cable remote control (15 m range)
ALL053	Electronic pull and speed recorder kit (instrument not included)
ALL059	Radio remote control kit (instrument not included)
AXH007	Radio remote control (150 m range)
ALL070	Extra rollers for an additional pilot rope
ALL071	Hydraulic rope clamp for reel change operations
ALL089	Electronic arrangement for connection of multiple machines and for stringing synchronization
ALL111	Swivel guide rope roller
AXR001	Extra shaft
DLR300	Electronic pull and speed recorder

Pictures & drawings can be different according to technical specifications - updating programme variations without notice are possible.

Certified Quality System
ISO 9001:2015

Certified Environmental System
ISO 14001:2015

Certified Health & Safety System
ISO 45001:2018

FRS404

HYDRAULIC TENSIONER



MAX
PULL/TENSION
40 kN



MAX
SPEED
5 km/h

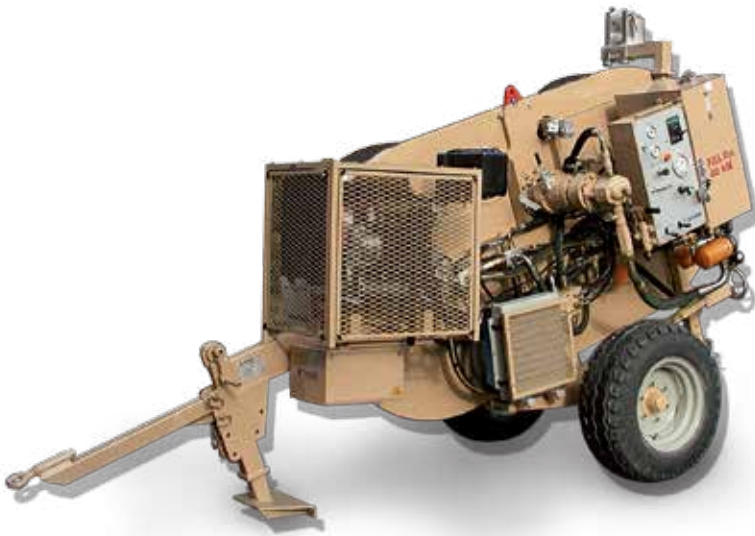


CONDUCTOR
DIAMETER
34 mm

AVAILABLE ALSO FOR CE/EPA

LIGHT & SIMPLE

AVAILABLE PURE HYDRAULIC VERSION FRS403



PERFORMANCE*

Max tension	40 kN
Max speed	5 km/h
Max pull back	40 kN
Speed at max pull back	0.8 km/h

* at 20°C and at sea level

CHARACTERISTICS

Bull-wheel diameter	1500 mm
Bull-wheel material	NYLON
Max conductor diameter	34 mm
Weight	2700 kg
Number of grooves	8
Suitable for	1 or 2 ropes or bundled conductor
Layout	Single

ENGINE

Diesel	25 kW (34 hp)
Cooling system	water
Electrical system	12 V

HYDRAULIC TRANSMISSION

Hydraulic open circuit that provides very sensitive tensioning control and negligible deviations of tension in case of speed change.

CONFIGURATION

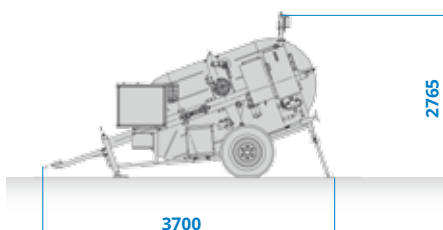
Negative self-acting hydraulic brake
Hydraulic dynamometer
Mechanical meter counter
Rigid axle 30 km/h
Gearbox with 3 operating positions:

- neutral position (with free bull-wheels for conductor loading and unloading)
- low tension position ($2 \div 6$ kN)
- nominal tension position

Hydraulic power pack to control up to 2 separate drum stands with hydraulic motor, not independent control
Mechanical front stabiliser
Grounding connection point

AVAILABLE DEVICES

ALL037	Preheating device for use up to -30°C
ALL071	Hydraulic conductor clamp for drum change operations
ALL080	Special nylon sectors kit



FRS531

HYDRAULIC TENSIONER



MAX
PULL/TENSION
75 kN



MAX
SPEED
5 km/h



CONDUCTOR
DIAMETER
34 mm

EXTRA CE/EPA

COMPLETELY ELECTRONICALLY CONTROLLED



PERFORMANCE*

Max tension	75 kN
Max speed	5 km/h
Max pull back	75 kN
Speed at max pull back	0,7 km/h

* at 20°C and at sea level

CHARACTERISTICS

Bull-wheel diameter	1500 mm
Bull-wheel material	NYLON
Max conductor diameter	34 mm
Weight	3400 kg
Number of grooves	10
Suitable for	1 or 2 ropes or bundled conductors
Layout	Single

ENGINE

Diesel	25 kW (34 hp)
Cooling system	water
Electrical system	12 V

HYDRAULIC TRANSMISSION

Hydraulic open circuit that provides very sensitive tensioning control and negligible deviations of tension in case of speed change.

CONFIGURATION

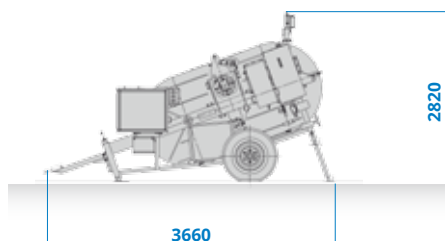
Negative self-acting hydraulic brake
Hydraulic dynamometer with set-point and automatic control of maximum pull
Mechanical meter counter
Control instruments for hydraulic system and Diesel engine
Rigid axle 30 km/h
Gearbox with 3 operating positions:

- neutral position (with free bull-wheels for conductor loading and unloading)
- low tension position (5 ÷ 20 kN)
- nominal tension position

Hydraulic power pack to control up to 2 reel stands with hydraulic head, not independent control
Mechanical front stabiliser
Grounding connection point

AVAILABLE DEVICES

ALL005	Hydraulic power for an external compressor
ALL037	Preheating device for use up to -30°C
ALL051	Cable remote control kit (instrument not included)
AXC005	Cable remote control (15 m range)
ALL059	Radio remote control kit (instrument not included)
AXH007	Radio remote control (150 m range)
ALL071	Hydraulic rope clamp for reel change operations
ALL080	Special nylon sectors kit
ALL089	Electronic arrangement for connection of multiple machines and for stringing synchronization



Pictures & drawings can be different according to technical specifications - updating programme variations without notice are possible.

FRS615

HYDRAULIC TENSIONER



MAX
PULL/TENSION
140 kN



MAX
SPEED
5 km/h



CONDUCTOR
DIAMETER
40 mm

EXTRA CE/EPA

COMPLETELY ELECTRONICALLY CONTROLLED



PERFORMANCE*

Max tension	140 kN
Max speed	5 km/h
Max pull back	140 kN
Max speed at pull back	1.8 km/h

* at 20°C and at sea level

CHARACTERISTICS

Bull-wheel diameter	1500 mm
Bull-wheel material	NYLON
Max conductor diameter	40 mm
Weight	6200 kg
Number of grooves	16
Suitable for	1, 2, 3 or 4 conductors
Layout	Single

ENGINE

Diesel	48 kW (64 hp)
Cooling system	water
Electrical system	24 V

HYDRAULIC TRANSMISSION

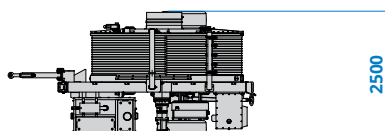
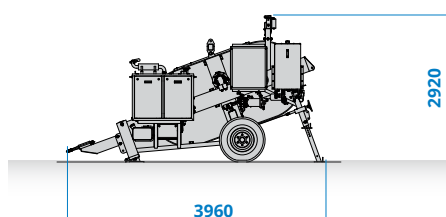
Hydraulic circuit that provides very sensitive tensioning control and negligible deviations of tension in case of speed change.

CONFIGURATION

Negative self-acting hydraulic brake
Hydraulic dynamometer with set-point and automatic control of maximum pull
Digital meter counter
Control instruments for hydraulic system and Diesel engine
Rigid axle 30 km/h
Hydraulic power pack to control up to 4 reel stands with hydraulic head, not independent control
Hydraulic front stabiliser
Grounding connection point

AVAILABLE DEVICES

ALL001	Lighting system for the trailer
ALL002	Air brake system for the trailer
ALL005	Hydraulic power for an external compressor
ALL037	Preheating device for use up to -30°C
AXC005	Cable remote control (15 m range)
ALL059	Radio remote control kit (instrument not included)
AXH007	Radio remote control (150 m range)
ALL071	Hydraulic rope clamp for reel change operations
ALL071	4 hydraulic conductor clamps for drum change operations
ALL080	Special nylon sectors kit
ALL081	same as ALL080 but in addition instead of as an alternative
ALL089	Electronic arrangement for connection of multiple machines and for stringing synchronization



FRB600

HYDRAULIC TENSIONER



MAX
PULL/TENSION
2x75 kN



MAX
SPEED
5 km/h



CONDUCTOR
DIAMETER
38 mm

EXTRA CE/EPA

COMPLETELY ELECTRONICALLY CONTROLLED



PERFORMANCE*

Max tension	2x75 kN
Max speed	5 km/h
Max pull back	2x75 kN
Speed at max pull back	0,6 km/h

* at 20°C and at sea level

CHARACTERISTICS

Bull-wheel diameter	1500 mm
Bull-wheel material	NYLON
Max conductor diameter	38 mm
Weight	7500 kg
Number of grooves	20
Suitable for	1, 2, 3 or 4 conductors
Layout	Twin

ENGINE

Diesel	48 kW (64 hp)
Cooling system	water
Electrical system	24 V

HYDRAULIC TRANSMISSION

2 hydraulic half-closed circuits that allow very sensitive tensioning control and negligible deviations of tension in case of speed change. The machine is provided with tension pre-setting system.

CONFIGURATION

2 negative self-acting hydraulic brakes
2 hydraulic dynamometers
2 digital meter counters
2 digital speed-meters
Control instruments for hydraulic system and Diesel engine
Rigid axle 30 km/h
Hydraulic power pack to control up to 4 separate drum stands with hydraulic motor with 2 independent controls
Hydraulic front stabiliser
Grounding connection point

AVAILABLE DEVICES

ALL001	Lighting system for the trailer
ALL002	Air brake system for the trailer
ALL005	Hydraulic power for an external compressor
ALL037	Preheating device for use up to -30°C
ALL071	4 hydraulic conductor clamps for drum change operations
ALL080	Special nylon sectors kit
ALL089	Electronic arrangement for connection of multiple machines and for stringing synchronization

