

## **GRIPS TO PERFORM TENSILE TESTS OF TAPES - BELTS - STRAPS...**



<u>Model MPCF-5 (5kN)</u> - <u>model MCC -50 (7 kN)</u> - <u>models MPCF-10/20 (10-20 kN)</u> - <u>MCF1 series (20-50 kN)</u> - <u>MCF series (20-100 kN)</u> - <u>model MCF2-50-110 (50 kN)</u> Pneumatic models: <u>MCF1-P/7 (7 kN)</u> and <u>MCF1-P/12 (12 kN)</u>

Grips that are easy to use and applicable to perform **tensile tests** on samples of materials that are difficult to clamp, such as (**ribbons, fabrics, strips, straps... flexible materials**)

**TECHLAB**SYSTEMS



# **CONTENIDO** Tensile Test Grips model MCC/50 (7 kN)...... 4 Tensile Test Grips model MPCF/10/20 (10-20 kN)......5 Tensile Test Grips model MCF1 (20-50 kN)...... 6 Tensile Test Grips MCF series (20-100 kN) ......9 Tensile Test Grips model MCF2/50-110 (50 kN).....14 Pneumatic Tensile Test Grips MCF1-P/7 (7 kN) ...... 15 Pneumatic Tensile Test Grips MCF1-P/12 (12 kN) .............. 17

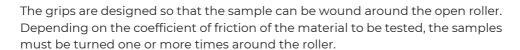


#### **Tensile Test Grips model MPCF-5 of 5kN capacity**

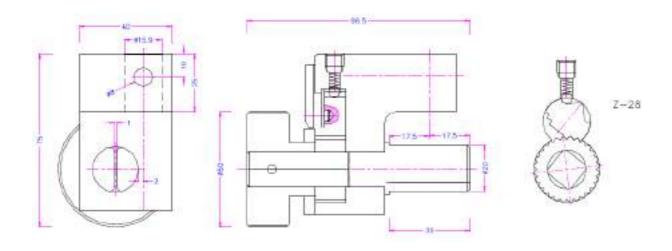
Open roller GRIPS, easy to use and applicable to perform **tensile tests** on samples of materials that are difficult to clamp, such as (**small tapes, fabrics, straps, belts** ... flexible materials)

#### **GENERAL INFORMATION**

The open roller grips are suitable to perform tensile strength tests on a wide range of samples of flexible materials that are difficult to tie well, such as tapes, fabrics, belts, straps....



MODEL	MPCF-5	
Maximum load:	5 kN	
Maximum thickness of samples :	1 mm	
Maximum width of samples :	35 mm	
Minimum length of samples :	300 mm	
Roller:	20 mm	
Number of ratchet teeth:	28	
Coupling:	15,9 or 20mm Ø	
Body grips:	Anodized aluminium	
Ratchet, roller and handle :	Steel, nickel plated	
Temperature range:	0+70°C Other temperature ranges on request	
Weight of each jaw:	0,8 Kg	
Scope of supply:	1 Pair of grips	







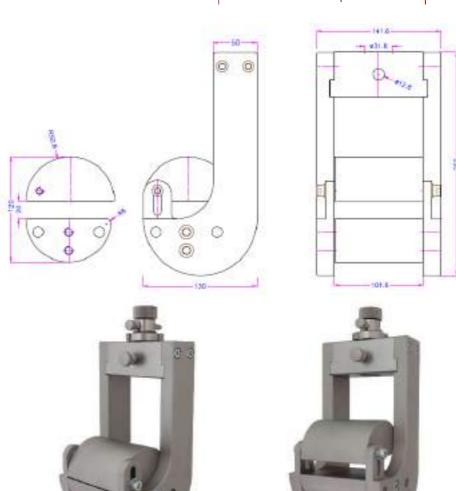
#### **Tensile Test Grips model MCC-50 of 7 kN capacity**

Easy-to-use and applicable capstan type hand grips for **tensile testing** to measure the tensile strength and elongation of difficult to clamp, specimens such as (**textile straps, ribbons, tapes**, and braided material) in accordance with **ASTM-D6775.** 

#### **GENERAL INFORMATION**

The capstan type grips are suitable to perform tensile strength tests on a wide range of samples of flexible materials that are difficult to tie well, such as flexible textile sheets, ribbons, tapes, webbing, straps... (generally flexible materials), in accordance with the specifications of the ASTM D6775 standard

MODEL	MCC-50	
Maximum load:	50 kN	
Coupling:	31,8 mm Ø	
Body grips:	Nickel plated steel	
Capstan and adapter:	Hardened nickel plated steel	
Temperature range:	0+70°C	
Weight:	9,5 Kg each grip	
Scope of supply:	1 Pair Grips	







## Tensile Test Grips model MPCFC-10 of 10 kN capacity Tensile Test Grips model MPCFC-20 of 20 kN capacity

Open roller grips, easy to use and applicable to perform **tensile tests** on samples of difficult-to-grip materials,, such as (**small tapes, fabrics, straps, straps** ... flexible materials)

#### **GENERAL INFORMATION**

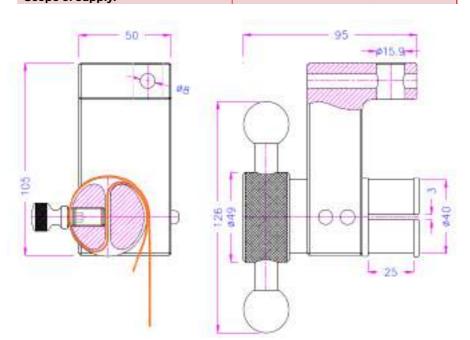
The open roller grips are suitable to perform tensile strength tests on a wide rang of flexible materials that are difficult to clamp, such as tapes, fabrics, belts, straps...

The grips are designed so that the sample can be wound around the open roller. D the coefficient of friction of the material to be tested, the samples must be turned times around the roller.

MODELOS	MPCF-10 / MPCF-20	
Maximum load:	10 kN / 20 kN	
Maximum thickness samples::	2,5 mm	
Maximum width of samples :	25 mm	
Minimum length of samples:	550 mm	
Coupling:	15,9 or 20 mm Ø	
Body grips:	Anodized aluminium (10 kN version) Nickel-plated steel (20 kN version)	
Roller:	40 mm Nickel-plated Steel	
Temperature range:	0+70°C Other temperature ranges on request	
Weight each grip:	1,2 Kg (version of 10 kN) 2,6 Kg (version of 20 kN)	
Scope of supply:	1 Pair of Grips	



Versión of 10 kN





Version of 20 kN



#### **Tensile Test Grips MCF1 series 20-50 kN capacity**

Manual capstan type grips that are easy to use and applicable to perform **tensile tests** on samples of materials that are difficult to clamp, such as (**metal sheets, tapes, straps**... flexible materials)

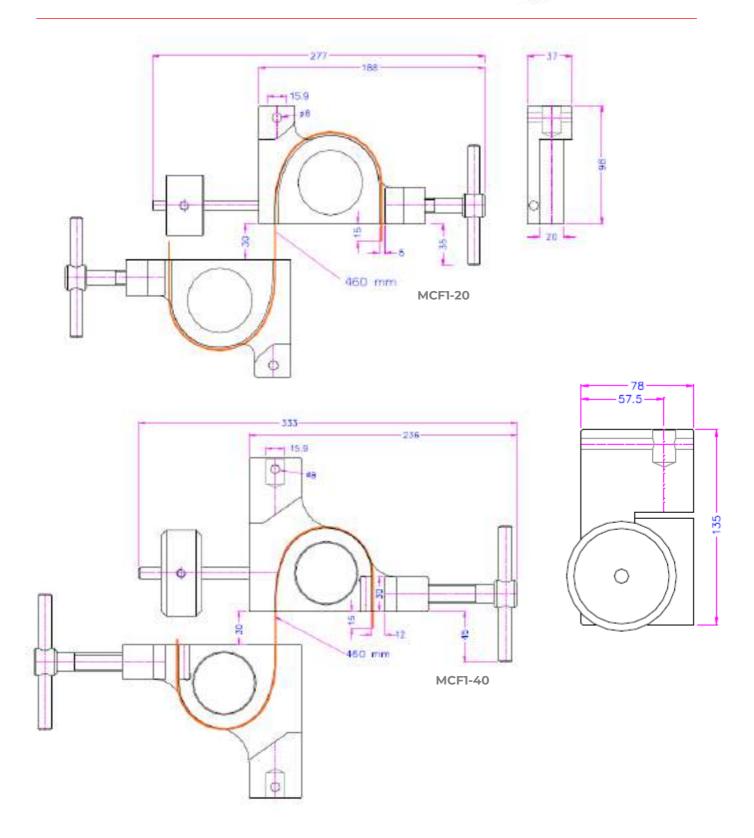
#### **GENERAL INFORMATION**

The capstan type manual grips are suitable to perform tensile strength te of samples of flexible materials that are difficult to tie well, such as metal sh belts, straps.... (flexible materials)

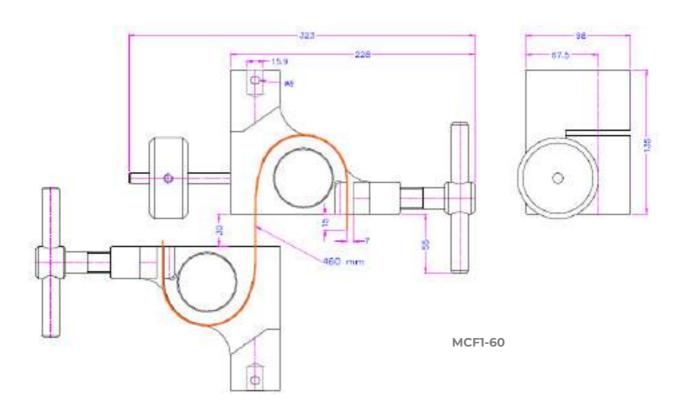


MODEL	MCF1-20	MCF1-40	MCF1-60	
Maximum load:	20 kN	20 kN (with coupling 15,9 mm) 50 kN (with coupling 31,8 mm)	50 kN	
Coupling:	15,9 o 20 mm Ø	15,9 o 31,8 mm Ø	31,8 mm Ø	
Maximum width of samples :	20 mm	40 mm	60 mm	
Minimum length of samples:	460 mm			
Jaws finish :	Blank Jaws Diamond Jaws	Blank Jaws Diamond Jaws	Blank Jaws Pyramids (Serrated) Jaws Wave Jaws Diamond Jaws	
Jaw surface: (height x width)	30x20 mm	30x40 mm	30x60 mm	
Body grips:	Steel, nickel plated			
Temperature range:	-70 a +350 °C			
Weight of grips including jaws :	2.3 Kg each grip (with counterweight) 1.45 Kg each grip (without counterweight)	6.35 Kg each grip (with counterweight) 5.15 Kg each grip (without counterweight)	6.78 Kg each grip (with counterweight) 5.58 Kg each grip (without counterweight)	
Scope of supply:	1 Pair of grips			









#### Jaws for manual grips MCF1:



**Diamond Jaws for MCF1-20** 



**Balnk Jaws for MCF1-40** 



**Diamond Jaws for MCF1-40** 



Serrated Jaws (pyramids) for MCF1-60



Doc.: General Catalog of Grips for Tensile Tests of Ribbons, Tapes, Straps-1-CAT-I-R1 TECHLAB SYSTEMS reserves the right to make any technical modification without prior notice.



### Open Roller Grips Tensile Tests MCF series models from 20-100 kN capacity

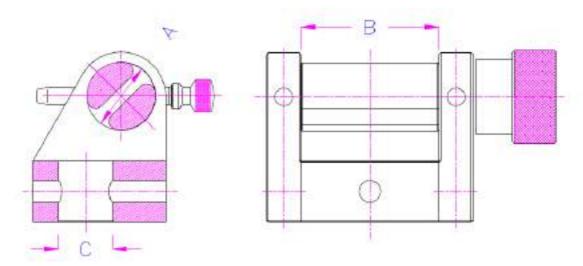
Open roller grips, easy to use and applicable to perform **tensile tests** on samples of materials that are difficult toclamp, such as (**tapes, fabrics, straps, belts** ... flexible materials)



#### **GENERAL INFORMATION**

The open roller grips are suitable for perform tensile strength tests on a wide range of samples of flexible materials that are difficult to tie well, such as tapes, fabrics, belts, straps....

The grips are designed so that the sample can be wound around the open roller. Depending on the coefficient of friction of the material to be tested, the samples must be turned one or more times around the roller.



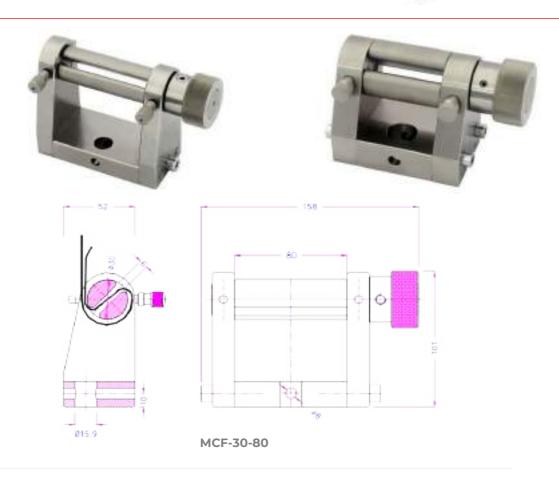
#### Order information:

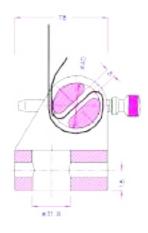
MCF series grips are supplied in pairs. However, it can be supplied in separate units

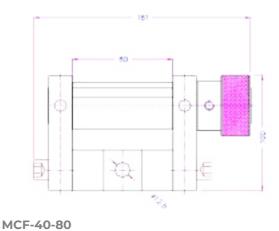
	MCF-30-80	MCF-40-80	MCF-60-80	MCF-60-100	MCF-60-120	MCF-80-120
Maximum load:	20 kN	50 kN	100 kN	100 kN	100 kN	100 kN
A: Roller diameter Ø:	30 mm	40 mm	60 mm	60 mm	60 mm	80 mm
B: Maximum sample width:	80 mm	80 mm	80 mm	100 mm	120 mm	120 mm
Maximum thickness:	5 mm	7 mm	11 mm	11 mm	11 mm	11 mm
Long. minimum sample	460 mm	600 mm	910 mm	910 mm	910 mm	1160 mm
C: Coupling *	15,9*	31,8*	40*	40*	40*	40*
Weight/grip	2.3 kg	4.5 kg	7.3 kg	8.1 kg	8.8 kg	15 kg

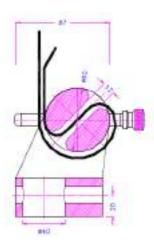
<sup>\*</sup> Other adapters on request

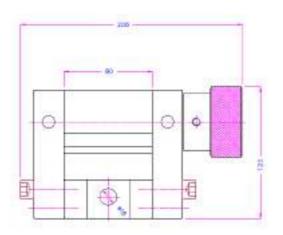






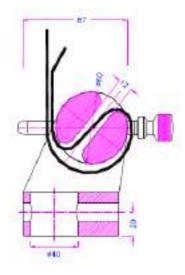


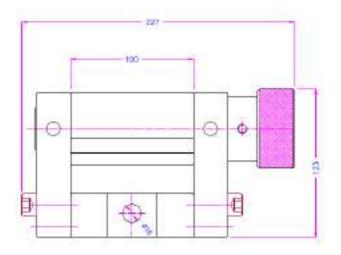




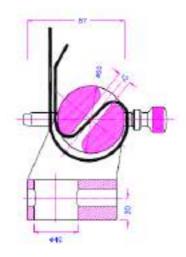
MCF-60-80

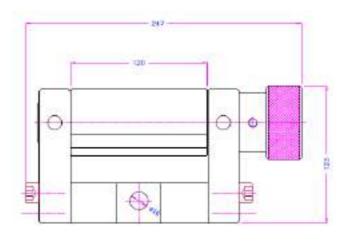




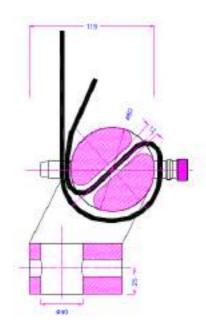


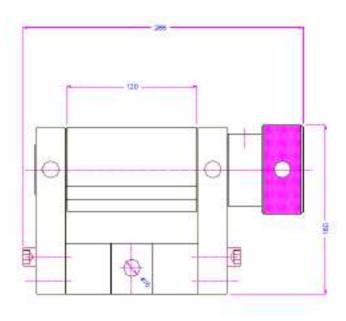
MCF-60-100





MCF-60-120





MCF-80-120







#### **Examples of custom versions:**





Roller diameter 150 mm Width 160 mm 300 kN

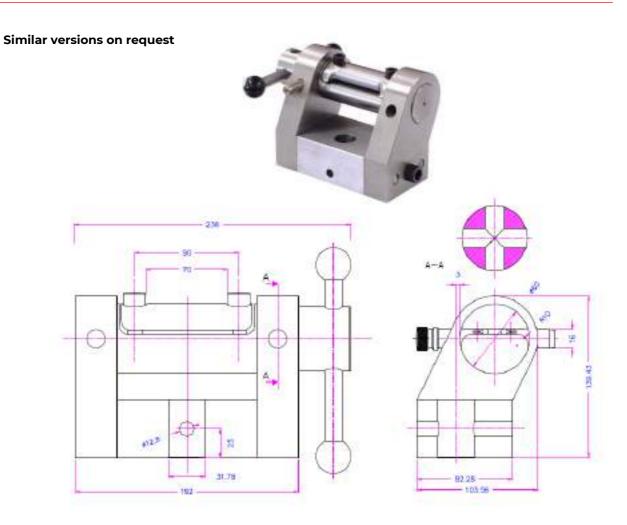


Roller diameter 100 mm Width 80 mm Aluminium version



Roller diameter 60 mm Width 310 mm Nickel Plated Steel







#### **Tensile Test Grips model MCF2-50-110 of 50kN capacity**

Roller grips, easy to use and applicable to perform **tensile tests** on samples of materials that are difficult to clamp, such as (**tapes, belts** and **strips**)



#### **GENERAL INFORMATION**

Grips with a design based on a C-shaped groove, which allows the user to wrap the sample around a self-tightening roller. The action of placing the sample on itself by rolling it over the jaw also aids the gripping force of the sample. Samples can be manually pre-stressed before starting a tensile test.

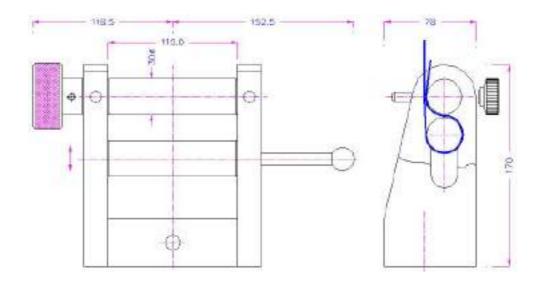
- Capacity: 50 kN

- 2 Rollerss: 30 mm Ø

- Rollers width: 110 mm

- Hardened steel, phosphate coating

- Temperature range: 0 to +130° C





#### Pneumatic Tensile Test Grips model MCF1-P/7 (7 kN)

Easy-to-use pneumatic capstan-type grips applicable to perform **tensile tests** on samples of difficult-to-tie materials, such as (**metal sheets, tapes, ribbons, straps** ... flexible materials)

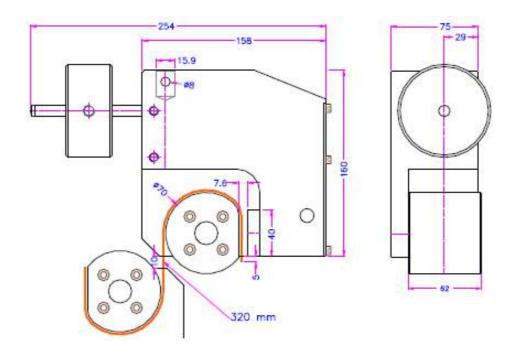


#### **GENERAL INFORMATION**

Capstan-type pneumatic grips are suitableto perform tensile strength tests on a wide range of samples of flexible materials that are difficult to tie well, such as metal sheets, tapes, ribbons, belts, straps.... (flexible materials)

MODEL	MCF1-P-7	
Maximum load:	7 kN a 7 Bar	
Counting		
Coupling:	15,9 mm Ø	
Pneumatic connection:	1/8"	
Maximum thickness of simples:	4 mm	
Minimum length of samples:	320 mm	
Jaw clamp surface:	40x60 mm	
	Blank Jaws	
Jaw finish:	Diamond Covered Jaws	
Jaw Tinish:	Rubber Covered Jaws Serrated Jaws (pyramids)	
Body grips:	Anodized aluminium	
Temperature range:	0+70°C or -30 to +180°C	
	8.4 Kg each grip	
Weight of grips including jaws:	(with counterweight) 5.7 Kg each grip	
	(without counterweight)	
Scope of supply:	1 Pair of Grips (without jaws)	





#### Jaws for MCF1-P-7 pneumatic grips:





#### Pneumatic Tensile Test Grips model MCF1-P/12 (12 kN)

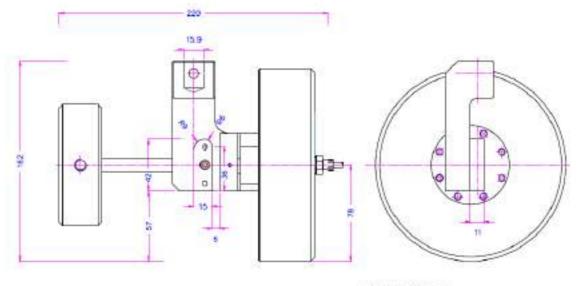
Easy-to-use pneumatic capstan-type grips applicable to perform **tensile tests** on samples of difficult-to-tie materials, such as (**metal sheets, tapes, ribbons, straps** ... flexible materials)



#### **GENERAL INFORMATION**

Pneumatic grips are suitable for performing tensile strength testing of wide range of flexible and difficult to clamp well material samples such as plastic strips, 10mm wide thin steel strips. Support and counterweight are provided to compensate for the portion of weight required to bring the grip in balance.

MODEL	MCF1-P-12
Maximum load:	12 kN at 7 Bar
Temperature range:	0+70°C (other ranges consult)
Minimum length of samples:	300 mm
Maximum width of samples:	10 mm
Maximum thickness samples:	4 mm
Body grips:	Aluminium
Pneumatic connection:	M5
Pneumatic piston diameter :	156 mm Ø
Jaws weight :	3,0 Kg each grip (with counterweight)
Scope of supply:	1 Pair of Grips (without jaws)



-> 12 kN (7bar)



#### Jaws available for MCF1-P-12 grips

Model	Jaw surface	Clamping surface Height x Width	Opening
MCF1-P-12-B	Blank Jaws	10 x 40 mm	0-4 mm
MCF1-P-12-BP	Serrated Jaws (pyramids)	10 x 40 mm	0-4 mm
MCF1-P-12-BD	Diamond Covered Jaws	10 x 40 mm	0-4 mm



**Blank Jaws** Smooth steel without cover



**Serrated Jaws**Pyramids Clamp Area



**Diamond Covered Jaws** Coated Clamp area with synthetic diamond

#### **PNEUMATIC ACCESSORIES:**



#### **UN205-1 Foot pedals**

**None-locking**: The grip jaws open by pressing the foot pedal and close after removing the foot from the pedal.

**Scope of delivery**: I pair of foot switches including tubes and fittings



#### UN205-2 Foot pedal

**With locking function**: The grip jaws open by pressing the foot pedal and remain opened after removing the foot from the pedal. The jaws close by pressing the pedal one more time.

**Scope of delivery**: 1 pair of foot switches including tubes and fittings



UN205-.+PR16bar Pressure regulator

Optional for UN205-1 o UN-205-2 To adjust air pressure: 1-16 bar





#### **UN205-3 Hand switches**

**With locking function:** The jaws of the grip close by pulling the handle and remain closed. The jaws open by pushing the handle back.

Scope of delivery: I unit of hand switches including tubes and fittings



#### UN205-4-M5 Handheld Micro-Switches

Pneumatic manual microswitches, tubes and fittings, M5 pneumatic connection **With lockout feature**: Manual switches mount directly to handles (1/8 "couplings only), 3/2 directional valve. Only for single action rods with spring inside. **Scope of supply**: 2 manual switches including tubes and accessories



#### UN216 Silent compressor for laboratories, oil-lubricated, with pressure reducer

Max pressure 16 bar; 230 V/50 HZ; noise level: 38 dB(A)

Motor: 0.13 kW; displacement: 17 l/min; tank size 3.5 l Dimensions: 340x290x340 mm (L x W x H); weight 18 kg Different voltages on demand



#### **Recommended Testing Machines:**



MTE-5 (to 5 kN)



MTE-10 (to 10 kN)



MTE-25 (to 25 kN)



MTE-50 (to 50 kN)



MTE-100 (to 100 kN)



MTE-200 (to 200 kN)