



MOBILE EVALUATION UNIT MSM 12

for mobile sensors LSM 1, LSM 2, LSM XL and LSM Belt
(rope diameter 6 - 16 mm / $\frac{1}{4}$ - $\frac{5}{8}$ inch, 4 - 10 mm / $\frac{5}{32}$ - $\frac{3}{8}$ inch, 9,5 - 24 mm / $\frac{3}{8}$ - $1\frac{5}{16}$ inch, belt 30 mm and 60 mm / $1\frac{3}{16}$ - $2\frac{23}{64}$ inch)

MSM 12 mobile evaluation unit for mobile rope load sensors and belts

KIT COMPRISES:

- 1 MSM 12
- USB connection cable
- charging unit 230 V Features:
- Measurement of single loads and total weight
- rope tension assistant / wizard for quick cable adjustment
- Convenient menu with settings of the suspension variant, unit weight, tolerance
- Storage of complete documentation
- Color touch screen for easy operation
- Available in many languages (list available on request and is constantly expanding)
- Advanced lithium-ion batteries
- Bluetooth variants Extended / Premium can be connected via android app with smartphones / tablets

TECHNICAL DATA:

Measuring channels:	12
bandwidth:	30 Hz
sampling frequency:	100 Hz
interfaces:	USB, Bluetooth optional
L x W x H (mm):	190 x 138 x 46

MSM 12	Basic	Extended	Premium
Article-No.	455105	455106	455107
memory	2 GB	4 GB	8 GB
battery capacity	4,5 Ah	6,75 Ah	9 Ah
Bluetooth Class 2	●	●	●
Qi-charge	●	●	●

● = Standard

● = Not available

More rope load sensors LSM 1, LSM 2, LSM XL or LSM Belt can be ordered separately.

Optionale Software-packet	Article-No.
Curve storage	Measures and stores the rope tensions / individual weights during the ride to allow rope sets to be optimized later 455155
Counterweight compensation measurement	Assistant allowing counterweight compensations to be simplified without the use of weights or additional tools, storage and preparation of reports for future documentations 455160

accessories	Article-No.
USB-Stick	455096
Qi-charge station	455097
MSM12 protective bag	455099

ROPE LOAD MEASURING SYSTEM

LSM 1 KIT:

4 MOBILE ROPE SENSORS LSM 1
FOR 6 - 16 mm / $\frac{1}{4}$ - $\frac{5}{8}$ inch ropes

KIT COMPRISES:

- 4 mobile rope sensors LSM 1 (Art.-No 455600)
- transport case for max 10 mobile sensors required:

Mobile evaluation unit MSM 12, Art.-No. 455105, 455106 or 455107
More rope load sensors (LSM1, LSM2, LSM XL or LSM Belt) can be ordered separately

Type	Article-No.
LSM 1 Kit: 4 mobile rope load sensors LSM 1 ropes 6 - 16 mm / $\frac{1}{4}$ - $\frac{5}{8}$ inch incl. transport case	455101
additional sensors LSM 1	455600



LSM 1 SET
inclusive transport case

LSM1SET

LSM 2 KIT:

4 MOBILE ROPE SENSORS LSM 2
FOR 4 - 10 mm / $\frac{3}{16}$ - $\frac{5}{32}$ inch ropes

KIT COMPRISES:

- 4 mobile rope sensors LSM 2 (Art.-No. 455700)
- transport case for max 10 mobile sensors

required: Mobile evaluation unit MSM 12, Art.-No. 455105, 455106 or 455107

More rope load sensors (LSM1, LSM2, LSM-XL or LSM Belt) can be ordered separately

Type	Article-No.
LSM 2 Kit: 4 mobile rope load sensors LSM 1 ropes 6 - 16 mm / $\frac{3}{16}$ - $\frac{5}{32}$ inch incl. transport case	455201
additional sensors LSM 2	455700



LSM 2 SET
inclusive transport case

LSM2SET

1.3

weight watcher^{mobil}

ROPELOAD MEASUREMENT SYSTEM



LSM XL SET

LSM BELT SET

OTIS



LSM BELT SET

SCHINDLER

LSM XL SET:

4 MOBILE ROPE LOAD SENSORS LSM XL
FOR 9,5 - 24 mm / $\frac{3}{8}$ - $\frac{15}{16}$ inch Ropes

KIT COMPRISES:

- 4 Sensors LSM XL (Item No. 455351)
- transport case for max 8 mobile rope load sensors LSM XL

required: Mobile evaluation unit MSM 12, Article-No. 455105,455106 or 455107.
More rope load sensors (LSM1, LSM2, LSM-XL or LSM Belt) can be ordered separately



LSM XL SET
inclusive transport case

Typ	Article-No.
LSM XL Kit: 4 mobile rope load sensors LSM XL for ropes 9,5 - 24 mm / $\frac{3}{8}$ - $\frac{15}{16}$ inch / including transport case	455301
additional sensors LSM-XL	455351

LSM BELT SET:

3 MOBILE MOBILE BELT SENSOR LSM BELT
FOR 30 mm / 60 mm / $1 \frac{3}{16}$ + $2 \frac{23}{64}$ inch belts

KIT COMPRISES:

- 3 sensors LSM Belt (Item No. 455800)
- Rugged carrying case for max 5 mobile belt LSM Belt

required: Mobile Basic evaluation MSM 12, Article-No. 455105,455106 or 455107.
More rope load sensors (LSM1, LSM2, LSM or LSM-XL Belt) can be ordered separately



LSM BELT SET
inclusive transport case

Typ	Article-No.
LSM Belt Set: 3 mobile belt sensors LSM Belt for OTIS load carrier 30 mm / 60 mm / $1 \frac{3}{16}$ + $2 \frac{23}{64}$ inch (recognizable by the blue lever) incl. transport case	455815
LSM Belt Set: 3 mobile belt sensors LSM Belt for Schindler load carrier 30 mm / 60 mm / $1 \frac{3}{16}$ + $2 \frac{23}{64}$ inch (ecognizable by the blue lever) incl. transport case	455816
LSM Belt mobile belt sensors for OTIS load carrier 30 mm / 60 mm / $1 \frac{3}{16}$ + $2 \frac{23}{64}$ inch (recognizable by the blue lever)	455805
LSM Belt mobile belt sensors for Schindler load carrier 30 mm / 60 mm / $1 \frac{3}{16}$ + $2 \frac{23}{64}$ inch (ecognizable by the blue lever)	455806
LSM connection cable extension up to 1,5 m (further extentions on request)	455353

ROPE LOAD MEASURING SYSTEM



MOBILE ROPE LOAD SENSOR LSM 1 (6 - 16 mm / $\frac{1}{4}$ - $\frac{5}{8}$ inch)

LSM1 is designed according to a patented measuring principle that does no longer require any expensive elevator calibration by testing weights.
This rope load sensor suits rope diameters from 6 mm ($\frac{1}{4}$ inch) to 16 mm ($\frac{5}{8}$ inch) and can be applied straightaway.
Its excentric lever allows the sensor to be fitted to the rope within a few seconds.
LSM 1 is equipped with a mains cable of 0,8 m length.

TECHNICAL DATA:

Rope diameter	6 mm - 16 mm / $\frac{1}{4}$ inch - $\frac{5}{8}$ inch
Application range	0 - 500 kg / 0 - 1100 lbs ($\pm 2,5\%$ FSR)
Maximum load	1000 kg / 2200 lbs
Breaking load	2000 kg / 4400 lbs
L x W x H (mm)	250 x 75 x 19
Cable length	1,0 m / 39.37 inch
Temperature range	0 °C - 70 °C

Type	Article-No.
Mobile Rope Load Sensor LSM 1 (6 - 16 mm / $\frac{1}{4}$ - $\frac{5}{8}$ inch)	455600
LSM connection cable extension up to 20 m	455620

LSM 1



MOBILE ROPE LOAD SENSOR LSM 2 (4 - 10 mm / $\frac{5}{32}$ - $\frac{3}{8}$ inch)

LSM2 is designed according to a patented measuring principle that does no longer require any expensive elevator calibration by testing weights.

This rope load sensor suits rope diameters from 4 mm ($\frac{5}{32}$ inch) to 10 mm ($\frac{3}{8}$ inch) and can be applied straightaway. Its excentric lever allows the sensor to be fitted to the rope within a few seconds.

LSM2 is equipped with a mains cable of 1,0 m length.

TECHNICAL DATA:

Rope diameter	4 mm - 10 mm / $\frac{5}{32}$ inch - $\frac{3}{8}$ inch
Application range	0 - 300 kg / 0 - 660 lbs ($\pm 2,5\%$ FSR)
Maximum load	600 kg / 1320 lbs
Breaking load	1200 kg / 2640 lbs
L x W x H (mm)	178 x 58 x 16
Cable length	1,0 m / 39.37 inch
Temperature range	0 °C - 70 °C

Type	Article-No.
Mobile Rope Load Sensor LSM 2 (4 - 10 mm / $\frac{5}{32}$ - $\frac{3}{8}$ inch)	455700
LSM connection cable extension up to 20 m	455620

LSM 2

MOBILE ROPE LOAD SENSOR LSM XL (9,5 - 24 mm / $\frac{3}{8}$ inch - $\frac{15}{16}$ inch)

LSM XL is designed according to a patented measuring principle that does no longer require the expensive elevator calibration by testing weights. This rope load sensor suits rope diameters from 9,5 mm ($\frac{3}{8}$ inch) to 24 mm ($\frac{15}{16}$ inch) and can be applied straightaway. Its excentric lever allows the sensor to be fitted to the rope within a few seconds.

It is equipped with a mains cable of 1,5 m length.

TECHNICAL DATA:

Rope diameter	9,5 mm - 24 mm / $\frac{3}{8}$ inch - $\frac{15}{16}$ inch
Application range	200 - 2000 kg / 400 - 4500 lbs (± 2,5% FSR)
Maximum load	4000 kg / 9000 lbs
Breaking load	6000 kg / 18000 lbs
L x B x H (mm)	570 x 210 x 50
Cable length	1,5 m
Temperature range	0 °C - 70 °C

Type	Article-No.
Mobiler Seilsensor LSM XL (9,5 mm - 24 mm / $\frac{3}{8}$ - $\frac{15}{16}$ inch)	455351
LSM Anschlusskabelverlängerung bis 20 m	455620

Mobile Belt Load Sensor LSM Belt

SPECIAL LOAD SENSOR FOR BELTS.

LSM-Belt is designed according to a patented measuring principle that does no longer require any expensive elevator calibration by testing weights. This belt sensor suits belts from 30 mm to 60 mm / $1\frac{3}{16}$ - $2\frac{23}{64}$ inch of width and can be applied straightaway. Its excentric lever allows the belt sensor to be fitted to the belt within a few seconds.

It is equipped with a mains cable of 0,8 m length.

TECHNICAL DATA:

Width of belt	30 mm + 60 mm / $1\frac{3}{16}$ + $2\frac{23}{64}$ inch
Application range	0 - 500 kg / 0 - 1100 lbs (± 2,5% FSR)
Maximum load	1000 kg / 2200 lbs
Breaking load	2000 kg / 4400 lbs
L x W x H (mm)	230 x 120 x 82
Cable length	0,8 m
Temperature range	0 °C - 70 °C

Type	Article-No.
Mobile Belt Load Sensor LSM Belt for OTIS (30 mm + 60 mm / $1\frac{3}{16}$ + $2\frac{23}{64}$ inch) (recognisable on the blue lever)	455805
Mobile Belt Load Sensor LSM Belt for SCHINDLER (30 mm + 60 mm / $1\frac{3}{16}$ + $2\frac{23}{64}$ inch) (recognisable on the red lever)	455806
LSM connection cable extension up to 1,5 m (further extensions on request)	455353



LSM XL

LSM BELT
OTIS



LSM BELT
SCHINDLER

Qi-Charging station for MSM12

TECHNICAL DATA:

standard:	Qi Standard V1.0/V 1.1
max. voltage:	DC 4.6 - 5.5V
max. current:	1500 - 200 mA
max. capacity:	5W
Efficiency:	72%
Frequency range:	110 K - 205 KHZ
range:	2 - 5 m

Type	Article-No.
Qi-Charging station for MSM12	455097

USB-Ladeadapter für MSM12

Type	Article-No.
USB charging adapter for MSM12	455096

Protective Bag For MSM 12

Features of the bag:

- Material: Cordura, padded, colour black, protection against dust, splashing water and slight impacts
- Carrying strap
- Operating elements and connection sockets (incl. bluetooth) accessible without having to open the bag
- Big transparent viewing panel in the bag

Type	Article-No.
Protective Bag For MSM 12	455099