

EASY-LASER[®]

**MEASUREMENT AND ALIGNMENT SYSTEMS
PRODUCT CATALOGUE**

**STRAIGHTFORWARD
BY ALL MEASURES[™]**

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WHAT THE PICTURES SHOW

System picture. Does only show the main parts of the system, not all items that are included. Always read the Part list for complete system specification.



Easy-Laser® E915 Flange Spin
Part No: 12-0526

Measure with spinning laser. Evaluate directly the result as a true 3D image in the display. Then evaluate the result easily by changing settings, for example three point reference can also be done directly on site without having to use separate analysis programs, which makes production much more efficient.

The system includes laser transmitter D23 head. This is how it works in brief: The laser rotates constantly and creates a reference measurement object. Measurements are performed by placing the detector at the desired measurement point.



[D] [E] [Ex] [XT]: Indicates which product range the part is compatible with. If no letter is present, the part fits all ranges.

[XT*]: If there is an asterisk *, the bracket will need an adapter to fit.

Note: If there are other compatibility limitations these are mentioned for each product. For more information see next page.



Main product picture ¹



Additional pictures ¹

Can show the system/product in an application, a product function or another view.

Detector E5
Part No: 12-0509
Description: Detector for the E915 [0.79"x0.79"]. Built-in 360° element making it possible to connect the detector easily mounted on rods, but has mounting thanks to threads on two sides.
Note: With Dual Detection Technology fixed point laser and spinning laser.

STRAIGHTFORWARD BY ALL MEASURES

Easy-Laser® is one of the world's leading manufacturers and suppliers of laser measurement systems for all types of industry. We provide extreme accuracy and precision. But that's not what sets us apart. Today, when virtually anyone with a decent laser can do "straight", to get ahead, you need to be a bit more forward-thinking.

Because, in the long run, what really counts is neither the absolute straightness of an individual component nor the precise alignment of shafts. It's what these measures add up to: Increased productivity and the saving of resources. Those are the things we ultimately deliver. And from that perspective our most important task is to help you make the road leading there as free from bumps and bends as possible.

That means developing user-friendly measurement and alignment systems that are as easy to get your head around, as they are versatile and scalable. It also means shortening delivery times, extending warranties and optimizing training and support.

Moreover, you can always expect us, or any of our partners, to give you an honest opinion on which of our products are crucial to your operations and which you can do without. What really needs to be aligned and what not. So that what we offer you is a solution perfectly aligned with your needs – and your budget.

Regardless of whether you're a service technician, a purchaser or the CFO of a multinational industrial group, you'll find Easy-Laser® truly easy to deal with. Or as we like to put it – straightforward by all measures.



LONG WARRANTY

The systems come with a 3 year limited warranty (Easy-Laser® D550: 4 years extended warranty period.). The manufacturing and quality systems are ISO9001 approved.



OUR SERVICE CONCEPT

Our service department usually takes care of servicing or calibration within five working days. All this makes Easy-Laser® a safer working partner for your operation. As an extra service, we provide a 48 hour express service for when accidents occur and time is of the essence. Contact us for further information about terms and conditions.



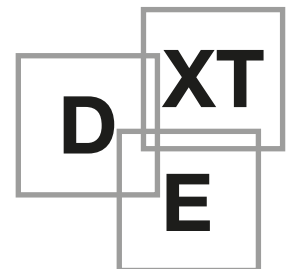
COMPATIBILITY BETWEEN D, E AND XT

Easy-Laser® measurement systems are extremely versatile in their standard form. By using clever accessories, you can adapt the systems for your own needs, now and in the future as your measurement requirements change. You can also combine parts from one system with another. This is cost-effective! However, there are some differences you need to know:

Note1: The D-series, E-series and XT-series detectors and display units can only be used within its own product series. This is due to software communication. Laser transmitters are no problem, because they do not communicate with measurement software.

Note2: Brackets for D- and E-series has a rod C-C of 40 mm, XT-series rod C-C is 56 mm. The new XT offset bracket (12-1008) function as an adaptor for these two measures, but doesn't fit all older brackets.

Note3: Brackets for D550Ex has a rod C-C of 70 mm. These brackets are marked |Ex|.



LEARN MORE ABOUT A SPECIFIC MEASUREMENT SYSTEM OR APPLICATION

In our measurement system brochures you can find technical specifications and more information on the systems and products in this Product overview. Available for download in different languages from:



Easy-Laser® E980



Easy-Laser® E970/E975



Easy-Laser® E960



Easy-Laser® E950



Easy-Laser® E940



Easy-Laser® E930



Easy-Laser® E920



Easy-Laser® E910/E915



Easy-Laser® Wind Power Shaft Alignment



Easy-Laser® D550 Ex



Easy-Laser® XT440



Easy-Laser® E710/E720



Easy-Laser® E540



Easy-Laser® E420



Easy-Laser® E290



Easy-Laser® E180



Easy-Laser® E170



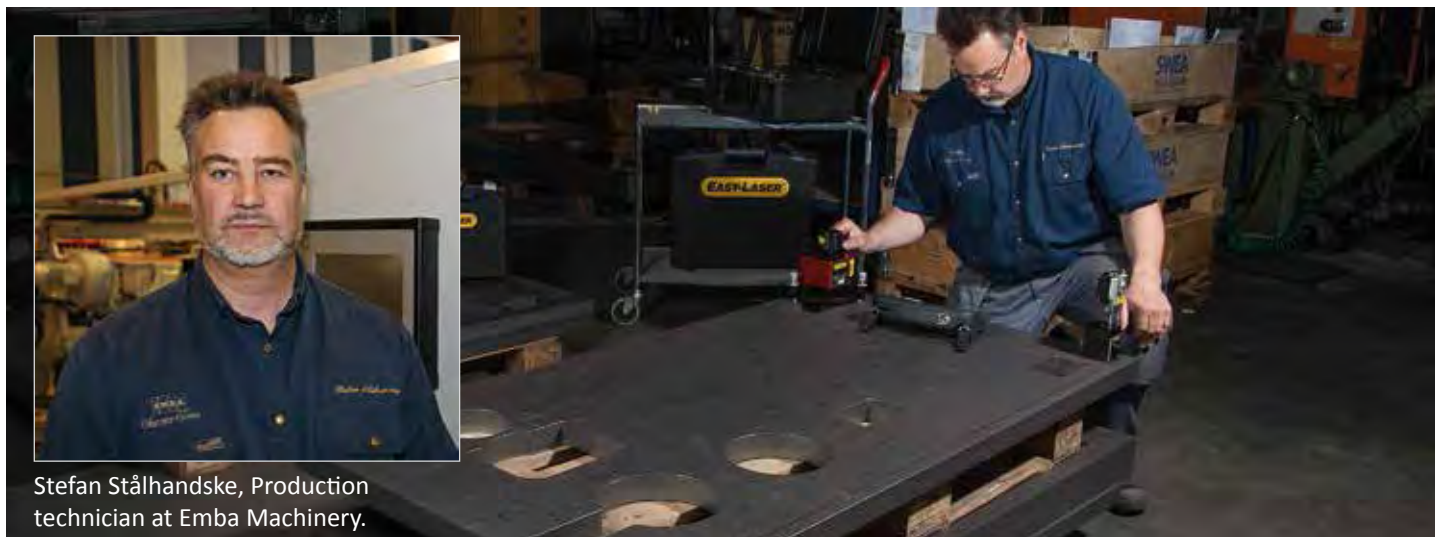
Easy-Laser® D160



Easy-Laser® D130



Easy-Laser® D90



Stefan Stålhandske, Production technician at Emba Machinery.

Emba Machinery AB uses Easy-Laser® throughout its production

Emba Machinery is a Swedish manufacturer of converting machines for the corrugated board industry. They acquired a measurement system from Easy-Laser in 2015. Their machines can be found within the packaging industry all over the world. Thanks to their reliable function, short set-up time and high manufacturing speed, Emba's machines are renowned for high productivity and product quality.

What do Emba's machines do?

Stefan Stålhandske, Production technician at Emba Machinery, answers: To put it simply, they supply a sheet of corrugated board with flexographic printing, before creating slots, punching, gluing and folding the sheet to produce a flat box. The final packaging has to be of the very best quality, as it is often the first thing you see when you purchase goods. The quality demands mean that the packaging also has to be strong, i.e. the corrugated board has to retain its strength through the conversion process. It must protect the packaged product during transport and handling, and it has to be stackable. It must be able to be produced quickly, and changing over the machines to a different format must also take place rapidly. Some of Emba's machine models produce up to 440 sheets per minute. Try to picture that!



There are stringent demands regarding product quality, machine availability and manufacturing speed. How does this influence the importance of the machines' quality?

The machines are made up of many mechanical parts, both fixed and moving parts in the form of linear guides and rotating components. Many parts are dependent on one another. Emba places stringent demands on itself and its suppliers. A separate measurement department checks machined components. Installation procedures are based on combined experience as well as generally applied requirements and tolerances. Many machine parts were previously manufactured in our own production premises in Örebro, which entailed a very high level of control of manufactured components and traceability to the machines in which they were produced. We now have a number of suppliers who have to manufacture to the same high level of accuracy, which has meant that we have been forced to develop new procedures and find new control tools.

Why was the decision taken to acquire laser instruments?

The equipment was principally procured in order to quality-assure and guarantee that all machine units are installed correctly with regard to the alignment of the stands hole centre to hole centre, as well as with regard to their squareness and parallelism. Previous measurement methods such as cross-measurement and measurement using specially manufactured tools must be replaced to achieve a better method of handling and documenting measurement results. We also considered that the equipment can provide us with the possibility in future of measuring the entire machine line. Many of the machine components are large and heavy, and require a mobile measurement system.

Why did you choose Easy-Laser?

Emba's development department got to know the product at an earlier meeting at an industrial fair. The way we were received by Easy-Laser, along with the versatility the instruments have to offer, made it an easy decision, I would say.



Flatness measurement of machine end after machining.

You mentioned versatility – what measurements do you carry out?

Flatness measurements on large, heavy components, as well as straightness measurements on long beams with linear guides. During installation, we align machine ends with the aid of hole centering/shaft alignment. We also measure straightness and squareness at this time, as well as parallelism between various linear movements. These measurements are performed with an E720 supplemented with brackets. To measure parallelism between rolls, we have opted to supplement the system with the Roll alignment kit E975. The instruments have also been used to perform measurements in machine tools and in order to check that diabase surface plates are level. So yes, versatility really is the right word.



Checking roll parallelism using the Easy-Laser Roll alignment kit.

How has knowledge of how to use the instruments been secured?

The software is user-friendly, but many of the users have never operated this type of equipment before. As a result, two training sessions have been conducted with Easy-Laser, lasting a total of 4 days. The training has been conducted at Emba's premises, in machines under construction. The training, which intersperses theory with practical exercises, was divided up such that the participants began with basic geometrical measurements and hole centering in the first session. During the second session, the focus was on E975 and measurement of

How were the measurements performed before and what added value does Easy-Laser provide?

In some of the measurements, we have replaced devices and dial indicators. The measurements are performed more rapidly using the laser instrument, and if you are unsure of measurement data, it is easy to repeat the measurement. Above all, however, the measurements are more reliable. For example, we have linear guides installed on beams that have to move in parallel with other linear guides installed on other beams. When we measured these before using dial indicators, we were unable to capture local deviations in the same way as now.



The linear guides can be parallel, but both beams may be crooked at the same place.

Our laser instrument now gives us the opportunity to pinpoint these deviations as well. In some cases, earlier measurement procedures have been replaced so that we now measure the machine from different positions instead, which are more relevant for the machine's conditions. Some measurements have not been conducted previously. The fact that we can now perform these measurements provides us with a basis for discussions with our suppliers and contributes to our work of consistently improving our quality.



Straightness measurement of linear guide with laser transmitter D22 from system E720.

Emba now uses the Roll alignment kit E975 to measure that the rolls are parallel with each other. What happens if they are not parallel?

Some of the most critical rolls are located in the printers. If the rolls are not correctly aligned, this can result in the print being positioned incorrectly on the package, which is unacceptable.

punching and a folding result that is outside of the stipulated tolerances, all of which are also entirely unacceptable. As Emba's machines are renowned for their good range of formats as well as their high machine speed, the machine alignment from unit level to the overall machine line is an important aspect in achieving a good end result, i.e. a perfect box.

How was roll parallelism checked previously and what is the advantage of E975?

When building units, we relied on the cross-measurement method as well as levelling with the aid of a precision level. The cross-measurement method is difficult, as access to reference points can be difficult or non-existent. When installing machines, we rely on specially manufactured spacers between the units in order to achieve parallelism as well as precision levels for levelling. Where possible, we can use tape measures to take measurements covering two separate rolls. With the laser instrument, we have the potential to measure all or parts of the machine, in order subsequently to monitor any adjustment of rolls in "live" mode.



The feeder table is another part of the machine that is measured with Easy-Laser®. Here the aim is to check e.g. that the rolls are parallel and at right angles to the table.

During shipping, your machines are split into smaller units in containers, and are reassembled on site on the customer's premises. This must place great demands on your technicians?

Absolutely! Prior to handing over to the customer, we perform tests in accordance with a special test protocol. The tests are performed under production-like conditions, for example with measurements being taken regarding register variations in the positioning of printing, slots and punches. The position of printing, slots and punches must be able to be repeated within the tolerances, regardless of machine speed.

In future, new measurement methods with the aid of the newly acquired laser instrument will ensure better control of the machine set-up, which ought to generate a faster and safer start-up of production in the EMBA machine.

Thank you Stefan for giving us the opportunity to hear how you use Easy-Laser!

Here you can learn more about EMBA:

LEARN SOME MORE

This catalogue includes a wide range of products, both lasers, detectors and brackets. The user story above reflects the versatility of our measurement and alignment systems. How the systems can be combined and used to align almost everything.

Read more interesting cases on:
blog.easy-laser.com.

Here are some direct links to click if you read this as a PDF:

[Adapting to the job](#)

[Making the impossible possible](#)



GENERATION XT – A DECLARATION OF INDEPENDENCE

At Easy-Laser® we have always aimed at making measurement and alignment products that are smarter, more versatile and easier to work with than any others on the market. So far, we have done so within the technical boundaries generally accepted in our industry. Now, as the first in our field, we have come up with a pioneer solution for breaking free of these boundaries.

With XT, our next generation of Easy-Laser® products, we launch a new era in laser alignment. One that better aligns with today's industry needs. We call it the age of independence.

By managing to add intelligence to where the actual work is done, we have paved way for a new generation of bright measuring units capable of communicating with virtually any relevant display unit on the planet.

To begin with, we launch functionality for the two major tablet operating systems, opening up a number of new possibilities for you as a user. Simply download our straightforward XT application and you're free to work with whatever iOS or Android gadgets suit you and your company the best. Talk about a revolution!

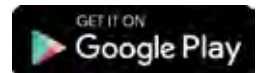
The first XT products to see the light of day are a set of measuring units for shaft alignment, and our new XT display unit. Both equipped with a special rugged design that makes them even more durable than their tough predecessors.



Run the app on your iOS or Android device.

Learn more about the system on page 24.

Test the Easy-Laser XT Alignment app:



XT440

information@itm.com

1.800.561.8187

www.itm.com

EASY-LASER®

COMPLETE SYSTEMS



Note: The look of the E51 Display unit will be updated for the E9xx and E710 systems during second half of 2016. This change might not be reflected on all pictures on the following pages.



Note: The colour of the laser adjustment knob will be changed from red to yellow during second half of 2016. This change might not be reflected on all pictures on the following pages.



Easy-Laser® E980 Sawmill

Part No: 12-0727

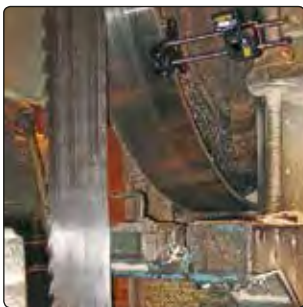
Measurement and alignment of sawmill machinery

Easy-Laser® E980 is a laser based measurement and alignment system that helps sawmills to make optimal use of their machines. By setting the machines up correctly it is possible to maintain a high rate of production with the highest quality end products hour after hour.

With Easy-Laser® E980 measuring and adjustment of reducers, counterholds, saw blades and discs become a simple and quick task. The laser line works as an absolutely straight ruler for 40 metres, and is very practical for the demanding and dusty environment of a sawmill. It replaces the long wire used traditionally, and gives many more possibilities for aligning the saw equipment. Thanks to the user friendliness of a laser measurement system the alignment work is properly done when necessary. The investment is quickly returned through fewer production stoppages and more even quality in the sawn timber. It can be used equally well for circular saws and band saws.

Benefits of using Easy-Laser® E980 are:

- Higher production speed
- Less unplanned downtime
- Better product quality
- Longer lifetime for blades
- Longer lifetime for bearings
- Less vibration
- Less waste material



A complete system contains:

- 12-0418 1 Display unit E51
- 12-0168 1 Laser transmitter D23
- 12-0509 1 Detector E5
- 12-0436 1 Bluetooth® unit
- 03-0833 2 Electronic target
- 12-0074 1 Cable 2 m
- 12-0108 1 Cable 5 m, extension
- 12-0045 1 Magnet base with turnable head
- 12-0016 1 Shaft bracket
- 12-0624 2 Bracket for electronic target
- 12-0169 1 Rod bracket with turnable head
- 12-0485 1 Magnet bracket short, with turnable head
- 12-0484 1 Magnet bracket long, with turnable head
- 12-0483 1 Bracket for tilt table
- 12-0482 1 Index table 90°
- 12-0059 1 Set of Rods 4x60 mm
- 12-0324 1 Rods (8x120 mm)
- 01-0565 2 Large targets
- 05-0685 1 Manual (Note: Refers to English manual)
- 03-0842 1 Measuring tape 5 m
- 03-0914 1 USB memory stick with documentation
- 03-0822 1 USB cable
- 03-0821 1 Battery charger (100–240 V AC)
- 03-0967 1 Hexagon wrench set (incl. with 12-0168)
- 01-0048 1 Rod tightening tool 4 mm (incl. with 12-0168)
- 12-0495 1 Shoulder strap for Display unit
- 03-0878 1 Cleaning cloth for optics

Most common accessories:

- 12-0294 1 AC adaptor for laser transmitter
- 12-0227 1 Profile measurement unit for blade wheels

Easy-Laser® E975 Roll Alignment

Part No: 12-0854

For fast exchange of rolls

System E975 is designed mainly for roll alignment. It is well suited when just one or two rolls are to be replaced or adjusted at the same time. For rolls with diameters 80–400 mm [3.1–15.8"], and a minimum length of 300 mm [11.8"]. The large roll kit (Accessory, Part No. 12-0885) makes it possible to measure diameters 400–1300 mm [15.7–51.2"]. Accessory brackets for other dimensions available on request.

Measurement distance between transmitter and detector up to 20 m (in each direction) [66 feet].

Thanks to the fact that the system is quick to set up on the machine it can be used during short stoppages to check and if necessary adjust or replace a roll. Where more advanced methods might require that the measuring service is scheduled some time in advance and use contracted personnel, with Easy-Laser® E975 you can do the job yourself.

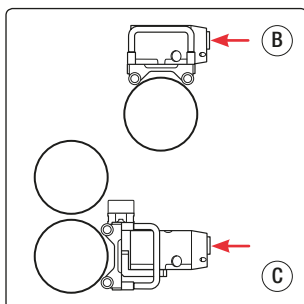
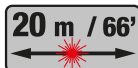
The system can be expanded with other detectors and brackets for more geometric measurement possibilities.

Note: The E2 detector that is included reads angles, not positions. This means that if you want to take full advantage of the measurement program package of system E975, you will also need a positional detector like e.g. the E7.

A. With legs from Large Roll Kit mounted (accessory).

Alternative mounting of units:

- B: Top attachment
- C: Front attachment. If space on top is limited.



A complete system contains:

- 12-0418 1 Display unit E-series E51
- 12-0022 1 Laser transmitter D22 incl. tilt table
- 12-0845 1 Detector E2
- 12-0849 1 Roll bracket
- 12-0846 1 Digital Precision Level E290
- 12-0013 1 Magnet base
- 12-0874 1 Adapter plate for tilt table to magnet base
- 01-0044 2 Rods 240 mm
- 01-0873 2 Rods 120 mm
- 01-0043 2 Rods 60 mm
- 12-0915 1 Safety strap for laser transmitter
- 05-0685 1 Manual (Note: Refers to English manual)
- 03-0842 1 Measuring tape 5 m
- 03-0914 1 USB memory stick with documentation
- 03-0822 1 USB cable
- 03-0821 1 Battery charger (100–240 V AC)
- 12-0750 1 DC charging cable
- 12-0751 1 DC to USB adapter
- 03-0967 1 Hexagon wrench set
- 12-0495 1 Shoulder strap for Display unit
- 03-0878 1 Cleaning cloth for optics
- 12-0870 1 Carrying case

Most common accessories:

- 12-0885 1 Large Roll kit
- 12-0752 1 Detector E7
- 12-0796 1 E180 BTA
- 12-0619 1 Barcode reader
- 12-0585 1 Charger 12–36V
- 12-0434 1 Measuring unit EM
- 12-0433 1 Measuring unit ES
- 12-0016 1 V-bracket with chain
- 01-1165 1 Offset bracket
- 12-0597 1 Splitter box
- 03-1004 1 Thermal printer
- 12-0455 1 Slide bracket Min. Ø120 mm
- 12-0543 1 Slide bracket Min. Ø200 mm
- 12-0510 1 Slide bracket Min. Ø300 mm
- 12-0269 1 Tripod
- 12-0046 1 Angular prism

Note: always check number of items included for each Part No. before ordering.

Complete system:

Weight: 15.0 kg [33.1 lbs]
 WxHxD: 550x450x210 mm [21.6x17.7x8.3"]



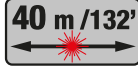
Easy-Laser® E970 Parallelism

Part No: 12-0853

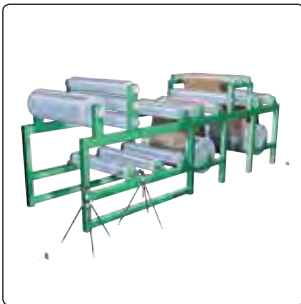
For parallelism measurement

For parallelism measurement of rolls and other objects in numerous applications. The E970 is especially suitable when many objects are to be measured and aligned, and when the distances are long. This system use the traditional method where the laser beam (reference) is pointed alongside the machine, and then deflected 90° towards the detector on the measurement object by a penta prism. Measurement values for the horizontal position are registered in both ends of the object. The included precision level is used for the vertical position.

Any chosen object or the baseline can be used as a reference. For rolls with diameter 40 mm [1.6"] and larger. Maximum measurement distance with a standard system is 80 metres [260 feet] (40 metres in each direction from the transmitter).



Easy-Laser® E970 is a very versatile system. You can also use it to measure level, straightness and flatness on wire sections (suction boxes), flatness on bases and straightness on rolls. With a few accessories you can also perform shaft alignment. This makes Easy-Laser® a very cost effective solution for your maintenance department.



A complete system contains:

- 12-0418 1 Display unit E-series E51
- 12-0022 1 Laser transmitter D22 incl. tilt table
- 12-0752 1 Detector E7
- 12-0436 1 Bluetooth® unit for E7
- 12-0846 1 E290 Digital Precision Level
- 12-0901 1 Extension Kit for E290
- 12-0074 1 Cable 2 m
- 12-0108 1 Cable 5 m, extension
- 12-0046 1 Angular prism
- 12-0203 1 Paralleliity kit
- 12-0269 2 Tripod
- 12-0060 1 Set of Rods 4x240 mm
- 12-0059 1 Set of Rods 4x60 mm
- 12-0915 1 Safety strap for laser transmitter D22
- 12-0915 1 Safety strap for E290
- 05-0685 1 Manual (Note: Refers to English manual)
- 03-0842 1 Measuring tape 5 m
- 03-0914 1 USB memory stick with documentation
- 03-0822 1 USB cable
- 03-0821 1 Battery charger (100–240 V AC)
- 12-0750 1 DC charging cable
- 12-0751 1 DC to USB adapter
- 03-0967 1 Hexagon wrench set
- 12-0495 1 Shoulder strap for Display unit
- 03-0878 1 Cleaning cloth for optics
- 12-0869 1 Carrying case

Most common accessories:

- 12-0796 1 E180 BTA
- 12-0618 1 Battery pack with Bluetooth® technology
- 12-0619 1 Barcode reader
- 12-0585 1 Charger 12–36V
- 12-0434 1 Measuring unit EM
- 12-0433 1 Measuring unit ES
- 12-0016 1 V-bracket with chain
- 01-1165 1 Offset bracket
- 12-0597 1 Splitter box
- 03-1004 1 Thermal printer
- 12-0455 1 Slide bracket Min. Ø120 mm
- 12-0543 1 Slide bracket Min. Ø200 mm
- 12-0510 1 Slide bracket Min. Ø300 mm
- 12-0269 1 Tripod
- 12-0046 1 Angular prism

Note: always check number of items included for each Part No. before ordering.

Complete system:

Weight: 18.9 kg [41.7 lbs]
WxHxD: 620x490x220 mm [24.4x19.3x8.7"]

Tripod:

Weight: 7.9 kg [17.4 lbs]
Transport length: 1110 mm [44"]

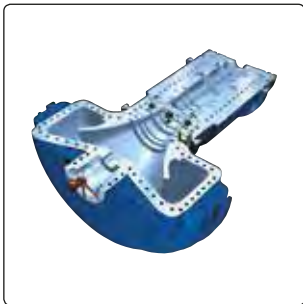
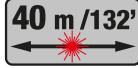


Easy-Laser® E960-A Turbine alignment

Part No: 12-0710

Reliability and precision

Easy-Laser® E960-A has a measuring probe with a stroke of 10 mm (Short stroke). The slidable tube makes it possible to measure several positions in a row without moving the bracket. Suitable for gas turbines and smaller steam turbines. makes the measurement and adjustment work of diaphragms and bearings easier thanks to the wireless detector unit and measurement programs that guides you through the measurement process. All of the parts included in the systems are designed and built for even the most demanding workplace and for easy setup on any machinery. The versatile design solves the straightness measurement problems quickly and with precision for any kind of application. Objects up to 40 m [132 feet] can be measured. The detector reads measurement values with a resolution of 0.001 mm [0.05 mils]. Measures diameters 150–1700 mm [5.9”–67”].



Versatile programs

The straightness programs of system E960 are very versatile, and let you work in the way that suits every job best. You can add, remove and re-measure measurement points at any time during the measurement. Up to 999 points can be handled by the program. You can include both full bores and half bores in any possible combination in one measurement, the program will calculate the correct centre line in all cases. The measurement program includes many different methods for straightness measurement: 1-point measurement, 4-point measurement, Multipoint measurement (also ovality measurement), 3-point measurement, 3-point measurement with arbitrary angles. Optionally a reference detector can be used to monitor the laser transmitter position at long distances.

The measurement result

Thanks to the large colour display with clear graphs and measurement data you can evaluate the result directly on site. Any point can be set as reference and you can set an offset to which the centre line will be recalculated. You can also calculate waviness (short and long) and best-fit for the points. If you want, the result can also be checked against a tolerance value. The measurement system takes care of all these complicated calculations for you.

A complete system contains:

- 12-0418 1 Display unit E-series E51
- 12-0075 1 Laser transmitter D75
- 12-0752 1 Detector E7
- 12-0436 1 Bluetooth® unit
- 12-0074 1 Cable 2 m
- 12-0108 1 Cable 5 m, extension
- 12-0385 1 Laser transmitter bracket
- 12-0661 1 Offset hub for Laser transmitter
- 12-0438 1 Detector bracket Short stroke
- 12-0443 2 Centering target
- 12-0495 1 Shoulder strap for Display unit
- 05-0685 1 Manual (Note: Refers to English manual)
- 03-0842 1 Measuring tape 5 m
- 03-0914 1 USB Memory stick with documentation
- 03-0822 1 USB Cable
- 03-0821 1 Battery charger (100–240 V AC)
- 03-0878 1 Cleaning cloth for optics
- 12-0724 1 Carrying case with wheels

Most common accessories:

- 12-0805 1 Measuring probe ruby, diameter 5 mm
- 12-0801 1 Measuring probe ruby, diameter 2.5 mm
- 12-0618 1 Battery pack with Bluetooth® technology
- 12-0707 1 Offset hub arm kit for diameters 100–500 mm
- 12-0752 1 E7 (as reference detector)
- 12-0585 1 Charger 12–36V
- 12-0434 1 Measuring unit M
- 12-0433 1 Measuring unit S
- 12-0016 1 V-bracket with chain
- 01-1165 1 Offset bracket
- 12-0187 1 Magnetic bracket for D75
- 12-0282 1 Set of extension arms
- 12-0597 1 Splitter box
- 03-1004 1 Thermal printer
- 12-0022 1 Laser transmitter D22
- 12-0706 1 Laser transmitter D25

Note: always check number of items included for each Part No. before ordering.

Complete system:

Weight: 30.3 kg [66.8 lbs]
 WxHxD: 1220x460x170 mm [48.0x18.1x6.7”]



Easy-Laser® E960-B Turbine alignment

Part No: 12-0711

Reliability and precision

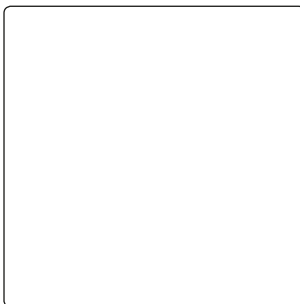
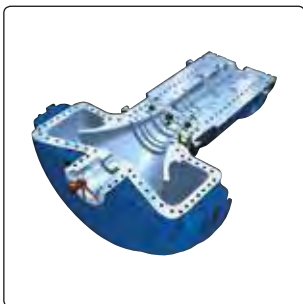
Easy-Laser® E960-B has a measuring probe with a stroke of 60 mm (Long stroke). Suitable for larger turbines. The system makes the measurement and adjustment work of diaphragms and bearings easier thanks to the wireless detector unit and measurement programs that guides you through the measurement process. All of the parts included in the systems are designed and built for even the most demanding workplace and for easy setup on any machinery. The versatile design solves the straightness measurement problems quickly and with precision for any kind of application. Objects up to 40 m [132 feet] can be measured. The detector reads measurement values with a resolution of 0.001 mm [0.05 mils]. Measures diameters 200–1700 mm [7.8”–67”] as standard, and up to 4500 mm [177”] with accessory brackets.

Versatile programs

The straightness programs of system E960 are very versatile, and let you work in the way that suits every job best. You can add, remove and re-measure measurement points at any time during the measurement. Up to 999 points can be handled by the program. You can include both full bores and half bores in any possible combination in one measurement, the program will calculate the correct centre line in all cases. The measurement program includes many different methods for straightness measurement: 1-point measurement, 4-point measurement, Multipoint measurement (also ovality measurement), 3-point measurement, 3-point measurement with arbitrary angles. Optionally a reference detector can be used to monitor the laser transmitter position at long distances.

The measurement result

Thanks to the large colour display with clear graphs and measurement data you can evaluate the result directly on site. Any point can be set as reference and you can set an offset to which the centre line will be recalculated. You can also calculate waviness (short and long) and best-fit for the points. If you want, the result can also be checked against a tolerance value. The measurement system takes care of all these complicated calculations for you.



A complete system contains:

- 12-0418 1 Display unit E-series E51
- 12-0075 1 Laser transmitter D75
- 12-0752 1 Detector E7
- 12-0436 1 Bluetooth® unit
- 12-0074 1 Cable 2 m
- 12-0108 1 Cable 5 m, extension
- 12-0385 1 Laser transmitter bracket
- 12-0661 1 Offset hub for Laser transmitter
- 12-0715 1 Detector bracket Long stroke
- 12-0443 2 Centering target
- 12-0495 1 Shoulder strap for Display unit
- 05-0685 1 Manual (Note: Refers to English manual)
- 03-0842 1 Measuring tape 5 m
- 03-0914 1 USB Memory stick with documentation
- 03-0822 1 USB Cable
- 03-0821 1 Battery charger (100–240 V AC)
- 03-0878 1 Cleaning cloth for optics
- 12-0724 1 Carrying case with wheels

Most common accessories:

- 12-0805 1 Measuring probe ruby, diameter 5 mm
- 12-0801 1 Measuring probe ruby, diameter 2.5 mm
- 12-0618 1 Battery pack with Bluetooth® technology
- 12-0707 1 Offset hub arm kit for diameters 100–500 mm
- 12-0752 1 E7 (as reference detector)
- 12-0585 1 Charger 12–36V
- 12-0434 1 Measuring unit M
- 12-0433 1 Measuring unit S
- 12-0016 1 V-bracket with chain
- 01-1165 1 Offset bracket
- 12-0187 1 Magnetic bracket for D75
- 12-0282 1 Set of extension arms
- 12-0597 1 Splitter box
- 03-1004 1 Thermal printer
- 12-0022 1 Laser transmitter D22
- 12-0706 1 Laser transmitter D25

Note: always check number of items included for each Part No. before ordering.

Complete system:

Weight: 31.5 kg [69.4 lbs]
 WxHxD: 1220x460x170 mm [48.0x18.1x6.7”]



Easy-Laser® E950-A Bore alignment

Part No: 12-0676

Bore alignment with the highest reliability and precision

Easy-Laser® E950-A is primarily designed for diesel engines (for example crank and camshaft bearings), gearboxes, compressors and similar applications. Positioning workpieces in machine tools is also an appropriate application.

Easy-Laser® E950 makes checking and aligning bearings and bearing journals easier thanks to wireless detectors and versatile brackets. A large colour display with clear graphics and software that guides the user through the entire measurement process contributes to simple operation. The system automatically calculates the bearing journals positions in relation to each other, both horizontally and vertically. You can then evaluate the results directly on-site with different calculation methods such as Best fit around zero and Waviness. It is also possible to analyse the different choices of reference points and set the offset and tolerance values.

A great feature is the check of ovality, for example, to analyse the wear rate. The measurement system takes care of all these complicated calculations for you. You measure and align both full and half bearing journals with equal simplicity. The wireless detector eliminates uncertain factors such as cable pull. All parts are designed for maximum accuracy and stability, and measure with a resolution of 0.001 mm [0.05 mils]. Measurement distance up to 40 m [130 feet]. Easy-Laser® E950 is suitable for use both in production and out in the field.

Also straightness of shafts and coupling alignment

With the systems, you can also measure the straightness of shafts, foundations, etc. without any additional accessories. With the measuring devices for shaft alignment (accessories), you have the most complete measurement system to align the entire drive train on the market. Programs for all types of measurements are included as standard, you then adapt the measurement system with brackets and detectors for your needs now and in the future.



A complete system contains:

- 12-0418 1 Display unit E-series E51
- 12-0075 1 Laser transmitter D75
- 12-0752 1 Detector E7
- 12-0436 1 Bluetooth® unit
- 12-0074 1 Cable 2 m
- 12-0108 1 Cable 5 m, extension
- 12-0661 1 Offset hub for Laser transmitter
- 12-0384 1 Set of offset hub arms for diameters 100–500 mm
- 12-0154 1 Set of magnets for offset hub arms
- 12-0455 1 Slide bracket Min. Ø120 mm
- 12-0543 1 Slide bracket Min. Ø200 mm
- 12-0510 1 Slide bracket Min. Ø300 mm
- 12-0588 1 Large target E-series
- 12-0013 1 Magnet base
- 12-0059 1 Set of rods (4x60 mm)
- 01-0938 2 Rods 30 mm
- 01-0873 4 Rods 120 mm
- 01-0044 2 Rods 240 mm
- 12-0495 1 Shoulder strap for Display unit
- 05-0685 1 Manual (Note: Refers to English manual)
- 03-0842 1 Measuring tape 5 m
- 03-0914 1 USB Memory stick with documentation
- 03-0822 1 USB Cable
- 03-0821 1 Battery charger (100–240 V AC)
- 03-0967 1 Hexagon wrench set
- 03-0878 1 Cleaning cloth for optics
- 12-0684 1 Carrvina case Linebore A

Most common accessories:

- 12-0618 1 Battery pack with Bluetooth® technology
- 12-0619 1 Barcode reader
- 12-0585 1 Charger 12–36V
- 12-0434 1 Measuring unit M
- 12-0433 1 Measuring unit S
- 12-0016 1 V-bracket with chain
- 01-1165 1 Offset bracket
- 12-0187 1 Magnetic bracket for D75
- 12-0282 1 Set of extension arms
- 12-0580 1 Axial extension arms
- 12-0597 1 Splitter box
- 03-1004 1 Thermal printer
- 12-0022 1 Laser transmitter D22

Note: always check number of items included for each Part No. before ordering.

Complete system:

Weight: 14.0 kg (30.8 lbs). WxHxD: 550x450x210 mm (21.6x17.7x8.3")

Easy-Laser® E950-B Bore alignment

Part No: 12-0677

Bore alignment with the highest reliability and precision

Easy-Laser® E950-B is primarily designed for propeller shaft installations on ships with stern tubes, support bearings, gearboxes and engines.

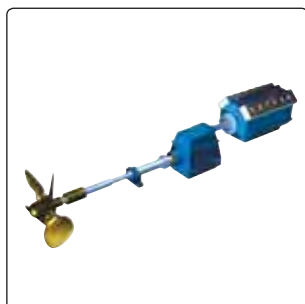
Easy-Laser® E950 makes checking and aligning bearings and bearing journals easier thanks to wireless detectors and versatile brackets. A large colour display with clear graphics and software that guides the user through the entire measurement process contributes to simple operation. The system automatically calculates the bearing journals positions in relation to each other, both horizontally and vertically. You can then evaluate the results directly on-site with different calculation methods such as Best fit around zero and Waviness. It is also possible to analyse the different choices of reference points and set the offset and tolerance values.

A great feature is the check of ovality, for example, to analyse the wear rate. The measurement system takes care of all these complicated calculations for you. You measure and align both full and half bearing journals with equal simplicity. The wireless detector eliminates uncertain factors such as cable pull. All parts are designed for maximum accuracy and stability, and measure with a resolution of 0.001 mm [0.05 mils]. Measurement distance up to 40 m [130 feet]. The included aluminium beams for the laser transmitter bracket are 1100 mm [43.31"] (main beam) and 500 mm [19.86"] (vertical support beam). Easy-Laser® E950 is suitable for use both in production and out in the field.

Also straightness of shafts and coupling alignment

With the systems, you can also measure the straightness of shafts, foundations, etc. without any additional accessories. With the measuring devices for shaft alignment (accessories), you have the most complete measurement system to align the entire drive train on the market. Programs for all types of measurements are included as standard, you then adapt the measurement system with brackets and detectors for your needs now and in the future.

Note! The design of the Self centering bracket is as on the picture to the left, not as on the overview picture.



A complete system contains:

- 12-0418 1 Display unit E-series E51
- 12-0075 1 Laser transmitter D75
- 12-0752 1 Detector E7
- 12-0436 1 Bluetooth® unit
- 12-0074 1 Cable 2 m
- 12-0108 1 Cable 5 m, extension
- 12-0661 1 Offset hub for Laser transmitter
- 12-0385 1 Laser transmitter bracket for sterntube
- 12-0341 1 Self centering detector bracket for Ø250–500 mm
- 12-0588 1 Large target E-series
- 12-0013 1 Magnet base
- 12-0059 1 Set of rods (4x60 mm)
- 01-0938 2 Rods 30 mm
- 01-0873 4 Rods 120 mm
- 01-0044 2 Rods 240 mm
- 12-0495 1 Shoulder strap for Display unit
- 05-0685 1 Manual (Note: Refers to English manual)
- 03-0842 1 Measuring tape 5 m
- 03-0914 1 USB Memory stick with documentation
- 03-0822 1 USB Cable
- 03-0821 1 Battery charger (100–240 V AC)
- 03-0967 1 Hexagon wrench set
- 03-0878 1 Cleaning cloth for optics
- 12-0685 1 Carrying case Linebore B

Most common accessories:

- 12-0618 1 Battery pack with Bluetooth® technology
- 12-0619 1 Barcode reader
- 12-0585 1 Charger 12–36V
- 12-0434 1 Measuring unit M
- 12-0433 1 Measuring unit S
- 12-0016 1 V-bracket with chain
- 01-1165 1 Offset bracket
- 12-0187 1 Magnetic bracket for D75
- 12-0282 1 Set of extension arms
- 12-0597 1 Splitter box
- 03-1004 1 Thermal printer
- 12-0022 1 Laser transmitter D22
- 12-0455 1 Slide bracket Min. Ø120 mm
- 12-0543 1 Slide bracket Min. Ø200 mm
- 12-0510 1 Slide bracket Min. Ø300 mm
- 03-0769 1 Aluminium extension beam L=500 mm
- 03-0770 1 Aluminium extension beam L=600 mm
- 03-0771 1 Aluminium extension beam L=1100 mm

Note: always check number of items included for each Part No. before ordering.

Complete system:
Weight: 27.0 kg (59.5 lbs)

1.800.561.8187

www.itm.com

information@itm.com



Easy-Laser® E950-C Bore alignment

Part No: 12-0772

Bore alignment with the highest reliability and precision

Easy-Laser® E950-C is primarily designed for diesel engines, compressors, gearboxes and similar applications. This system is much like the E950-A, but has for example instead the round detector E9. One of the brackets has a width of 25 mm [0.99"] to fit in narrow bearing journals. Measures bores diameter 80–500 mm [3.15"–19.68"] as standard, and down to 50 mm [2.00"] with customized brackets.

Easy-Laser® E950 makes checking and aligning bearings and bearing journals easier thanks to wireless detectors and versatile brackets. A large colour display with clear graphics and software that guides the user through the entire measurement process contributes to simple operation. The system automatically calculates the bearing journals positions in relation to each other, both horizontally and vertically. You can then evaluate the results directly on-site with different calculation methods such as Best fit around zero and Waviness. It is also possible to analyse the different choices of reference points and set the offset and tolerance values.

A great feature is the check of ovality, for example, to analyse the wear rate. The measurement system takes care of all these complicated calculations for you. You measure and align both full and half bearing journals with equal simplicity. The wireless detector eliminates uncertain factors such as cable pull. All parts are designed for maximum accuracy and stability, and measure with a resolution of 0.001 mm [0.05 mils]. Measurement distance up to 40 m [130 feet]. Easy-Laser® E950 is suitable for use both in production and out in the field.

Also straightness of shafts and coupling alignment

With the systems, you can also measure the straightness of shafts, foundations, etc. without any additional accessories. With the measuring devices for shaft alignment (accessories), you have the most complete measurement system to align the entire drive train on the market. With additional accessories extruder machines can also be measured. Programs for all types of measurements are included as standard, you then adapt the measurement system with brackets and detectors for your needs now and in the future.



A complete system contains:

- 12-0418 1 Display unit E-series E51
- 12-0075 1 Laser transmitter D75
- 12-0759 1 Detector E9, 2-axis
- 12-0074 1 Cable 2 m
- 12-0108 1 Cable 5 m, extension
- 12-0661 1 Offset hub for Laser transmitter
- 12-0384 1 Set of offset hub arms for diameters 100–500 mm
- 12-0154 1 Set of magnets for offset hub arms
- 12-0768 1 Slide bracket, Width 25 mm, Min. Ø80 mm
- 12-0767 1 Rod adapter with built in target
- 12-0455 1 Slide bracket Min. Ø120 mm
- 12-0543 1 Slide bracket Min. Ø200 mm
- 12-0510 1 Slide bracket Min. Ø300 mm
- 12-0013 1 Magnet base
- 12-0059 1 Set of rods (4x60 mm)
- 01-0938 2 Rods 30 mm
- 01-0873 4 Rods 120 mm
- 01-0044 2 Rods 240 mm
- 12-0495 1 Shoulder strap for Display unit
- 05-0685 1 Manual (Note: Refers to English manual)
- 03-0842 1 Measuring tape 5 m
- 03-0914 1 USB Memory stick with documentation
- 03-0822 1 USB Cable
- 03-0821 1 Battery charger (100–240 V AC)
- 03-0967 1 Hexagon wrench set
- 03-0878 1 Cleaning cloth for optics
- 12-0782 1 Carrving case

Most common accessories:

- 12-0553 1 Bore bracket adapter plate
- 12-0314 1 Detector arms Linebore
- 12-0343 1 Slide bracket Min. Ø100 mm
- 12-0752 1 Detector E7 reference detector
- 12-0436 1 Bluetooth® unit
- 01-0777 1 Tube adapters (manufactured on request to specified diameter)
- 12-0214 1 Set of extension rods for Tube measurements
- 12-0434 1 Measuring unit EM
- 12-0433 1 Measuring unit ES
- 12-0016 1 V-bracket with chain
- 01-1165 1 Offset bracket
- 12-0187 1 Magnetic bracket for D75
- 12-0282 1 Set of extension arms
- 12-0580 1 Axial extension arms
- 12-0597 1 Splitter box
- 12-0585 1 Charger 12–36V
- 12-0619 1 Barcode reader
- 03-1004 1 Thermal printer
- 12-0022 1 Laser transmitter D22

Note: always check number of items included for each Part No. before ordering.

Complete system:

Weight: 14.3 kg [31.5 lbs]
 WxDxH: 550x450x210 mm [21.6x17.7x8.3"]



Easy-Laser® E950-D Bore alignment

Part No: 12-0954

Bore alignment with the highest reliability and precision

Easy-Laser® E950-D is primarily designed for propeller shaft installations on ships with stern tubes, support bearings, gearboxes and engines.

Easy-Laser® E950 makes checking and aligning bearings and bearing journals easier thanks to wireless detectors and versatile brackets. A large colour display with clear graphics and software that guides the user through the entire measurement process contributes to simple operation. The system automatically calculates the bearing journals positions in relation to each other, both horizontally and vertically. You can then evaluate the results directly on-site with different calculation methods such as Best fit around zero and Waviness. It is also possible to analyse the different choices of reference points and set the offset and tolerance values.

A great feature is the check of ovality, for example, to analyse the wear rate. The measurement system takes care of all these complicated calculations for you. You measure and align both full and half bearing journals with equal simplicity. The wireless detector eliminates uncertain factors such as cable pull. All parts are designed for maximum accuracy and stability, and measure with a resolution of 0.001 mm [0.05 mils]. Measurement distance up to 40 m [130 feet]. Easy-Laser® E950 is suitable for use both in production and out in the field.

Also straightness of shafts and coupling alignment

With the systems, you can also measure the straightness of shafts, foundations, etc. without any additional accessories. With the measuring devices for shaft alignment (accessories), you have the most complete measurement system to align the entire drive train on the market. Programs for all types of measurements are included as standard, you then adapt the measurement system with brackets and detectors for your needs now and in the future.



A complete system contains:

- 12-0418 1 Display unit E-series E51
- 12-0075 1 Laser transmitter D75
- 12-0752 1 Detector E7
- 12-0436 1 Bluetooth® unit
- 12-0074 1 Cable 2 m
- 12-0108 1 Cable 5 m, extension
- 12-0661 1 Offset hub for Laser transmitter
- 12-0707 1 Arm kit with magnets
- 12-0282 1 Extension arms Linebore
- 12-0341 1 Self centering detector bracket for Ø250–500 mm
- 12-0588 1 Large target E-series
- 12-0495 1 Shoulder strap for Display unit
- 05-0685 1 Manual (Note: Refers to English manual)
- 03-0842 1 Measuring tape 5 m
- 03-0914 1 USB Memory stick with documentation
- 03-0822 1 USB Cable
- 03-0821 1 Battery charger (100–240 V AC)
- 03-0792 1 Toolbox
- 03-0967 1 Hexagon wrench set
- 03-0878 1 Cleaning cloth for optics
- 12-0986 1 Carrying case Linebore D

Most common accessories:

- 12-0618 1 Battery pack with Bluetooth® technology
- 12-0823 1 E30 Long Range laser
- 12-0619 1 Barcode reader
- 12-0585 1 Charger 12–36V
- 12-0434 1 Measuring unit M
- 12-0433 1 Measuring unit S
- 12-0016 1 V-bracket with chain
- 01-1165 1 Offset bracket
- 12-0187 1 Magnetic bracket for D75
- 12-0282 1 Set of extension arms
- 12-0597 1 Splitter box
- 03-1004 1 Thermal printer
- 12-0022 1 Laser transmitter D22
- 12-0455 1 Slide bracket Min. Ø120 mm
- 12-0543 1 Slide bracket Min. Ø200 mm
- 12-0510 1 Slide bracket Min. Ø300 mm

Note: always check number of items included for each Part No. before ordering.

Complete system:

Weight: 18.3 kg [40.3 lbs]
WxHxD: 550x450x210 mm [21.6x17.7x8.3"]



Easy-Laser® E940 Machine tool

Part No: 12-0761

For measuring and aligning machine tools

Easy-Laser® E940 Machine tool system is the market's most complete measurement system for measuring and aligning machine tools.

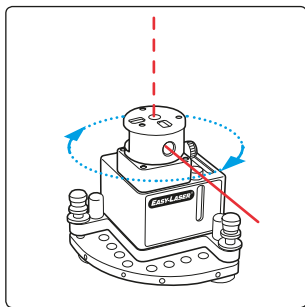
You can measure straightness, flatness, squareness, spindle pointing direction, level and much more. The measurement programs guide the user step-by-step through the measurement process with clear graphics and instructions on the large 5.7" colour display. The system can handle most tasks in this field, despite the fact that there is considerable variation in machine design: different types of lathe, milling machines, automatic drills, presses, water cutting machines etc. Compared to conventional methods, such as dial gauges, mandrels and stones, work can be carried out much more quickly with the use of a laser measurement system. And not to forget, the measurement result can be documented and compared to ISO10791-1 and 10791-2 used for machine tools.

There are many good reasons for investing in a laser system. One is that because it is so quick to set up, the operator can check the machine much more often, for example if there has been an accidental collision in the machine. Then compare with the machine documentation and see if everything is ok before continuing production. This can prevent costly production of parts that are out of tolerance. It can also prolong the life of the tools.

With E940 the user can perform almost any kind of measurement thanks to the very versatile design of the D22 laser transmitter, the EMH- and ESH-units and brackets. For example, the ESH-unit can also act as a compact and light-weight transmitter. Mounted on the cleverly designed spindle bracket it can even point the laser through the clamping pin, through the spindle (see picture to the left).

The measuring units delivered with system Easy-Laser® E940 has got our new HyperPSD™ precision detectors, making it possible to display a resolution of 0.0001 mm [0.000005"/0.005 mils].

Bluetooth® POWERED BY ENDURIO™
 40 m /132' 2 AXIS PSD BARCODE SYSTEM



A complete system contains:

- 12-0418 1 Display unit E51 (with HyperPSD™ support)
- 12-0022 1 Laser transmitter D22 incl. tilt table
- 12-0789 1 Measuring unit ESH (HyperPSD™)
- 12-0790 1 Measuring unit EMH (HyperPSD™)
- 12-0436 2 Bluetooth® unit
- 12-0656 1 E285 Vibrometer probe
- 12-0074 2 Cable 2 m
- 12-0108 2 Cable 5 m, extension
- 01-1333 1 Machine/magnet base pin for D22
- 12-0787 2 Spindle bracket for measuring unit
- 12-0013 1 Magnet base
- 12-0045 1 Magnet base with turnable head
- 01-1165 2 Offset bracket
- 12-0324 1 Rods (8x120 mm)
- 12-0059 1 Set of Rods 4x60 mm
- 12-0915 1 Safety strap for laser transmitter
- 05-0685 1 Manual (Note: Refers to English manual)
- 05-0686 1 Machine Tools Guide (Note: English version)
- 03-0842 1 Measuring tape 5 m
- 03-0914 1 USB memory stick with documentation
- 03-0822 1 USB cable
- 03-0821 1 Battery charger (100–240 V AC)
- 03-0967 1 Hexagon wrench set
- 12-0495 1 Shoulder strap for Display unit
- 03-0878 1 Cleaning cloth for optics
- 12-0760 1 Carrying case

Most common accessories:

- 12-0846 1 E290 Digital Precision Level
- 12-0901 1 Extension Kit for E290
- 12-0146 1 Laser transmitter D146
- 12-0988 1 Bar bracket
- 12-0759 1 Detector E9, 2-axis (*)
- 12-0758 1 Detector E8, 1-axis (*)
- 12-0796 1 E180 BTA
- 12-0619 1 Barcode reader
- 12-0016 1 V-bracket with chain
- 12-0413 1 Magnetic bracket
- 12-0412 1 Thin shaft bracket
- 12-0039 1 Sliding bracket
- 12-0585 1 Charger 12–36V
- 12-0618 1 Battery pack with Bluetooth® technology
- 12-0597 1 Splitter box
- 12-0059 1 Rods (4x60 mm)
- 12-0324 1 Rods (8x120 mm)
- 12-0060 1 Rods (4x240 mm)
- 12-0128 1 Extension chain (2x900 mm)
- 03-1004 1 Thermal printer

Note: always check number of items included for each Part No. before ordering.

Complete system:

Weight: 15 kg [33 lbs]
 WxDxH: 550x450x210 mm [21.6x17.7x8.2"]



Easy-Laser® E930 Extruder alignment

Part No: 12-0788

For aligning extrusion machines

Easy-Laser® E930 is designed to measure straightness and pointing direction, primarily on extruder pipes. Another application can be hydraulic pipes for example. With the system, pipes with diameters down to 50 mm can be measured, at a range of up to 40 m. The transmitter's laser beam can be compared to an absolutely straight and weightless ruler, that is to say a perfect starting point for precision measurement.

During the alignment procedure both detector and spindle are rotated, thus self calibrating the system. This way you can determine how the centre line of the spindle is, relative to the tube's centre at the inlet end.

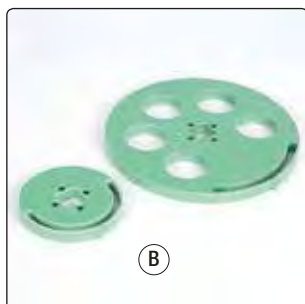
Document your measurement results

The detector's measurement value is transferred to the display unit wirelessly via Bluetooth®, which means that one can measure more freely. The measurement system has programs that guide you step-by-step, using clear graphics on a large 5.7" colour screen. You can also produce full documentation for your measurement job, with direct generation of PDF reports, and database programs for PC for example.

Complete system with all the measuring programs

Easy-Laser® E930 is a complete system in itself, with laser transmitter, detector and display unit. You can also add other parts from our extensive range to build a system that suits your specific needs and requirements, because all the measurement programs are included as standard. For example add shaft alignment equipment for other rotating machines, and lasers for flatness measurement.

- A. Detector with tube brackets mounted
- B. The brackets are manufactured on order to specified diameter
- C. Special brackets with metal points available on request.



A complete system contains:

- 12-0418 1 Display unit E-series E51
- 12-0075 1 Laser transmitter D75
- 12-0759 1 Detector E9
- 12-0074 1 Cable 2 m
- 12-0108 1 Cable 5 m, extension
- 12-0187 1 Bracket for D75 with magnets
- 01-0777 1 Set of brackets for detector
- 12-0792 1 Set of extension rods for detector (6.3 m)
- 12-0810 1 Target for extruder
- 12-0495 1 Shoulder strap for Display unit
- 05-0685 1 Manual (Note: Refers to English manual)
- 03-0842 1 Measuring tape 5 m
- 03-0914 1 USB Memory stick with documentation
- 03-0822 1 USB Cable
- 03-0821 1 Battery charger (100–240 V AC)
- 03-0967 1 Hexagon wrench set
- 03-0878 1 Cleaning cloth for optics
- 12-0811 1 Carrying case

Most common accessories:

- 12-0767 1 Rod adapter with built in target
- 12-0022 1 Laser transmitter D22
- 12-0436 1 Bluetooth® unit
- 12-0434 1 Measuring unit EM
- 12-0433 1 Measuring unit ES
- 12-0016 1 V-bracket with chain
- 12-0013 1 Magnet base
- 12-0413 1 Magnetic bracket
- 12-0412 1 Thin shaft bracket
- 12-0039 1 Sliding bracket
- 01-1165 1 Offset bracket
- 12-0125 1 Cardan bracket
- 12-0553 1 Bore bracket adapter plate
- 12-0314 1 Detector arms Linebore
- 12-0597 1 Splitter box
- 12-0585 1 Charger 12–36V
- 12-0619 1 Barcode reader
- 03-1004 1 Thermal printer

Note: always check number of items included for each Part No. before ordering.



Easy-Laser® E920 Geometric

Part No: 12-0771

Measurement system for all types of geometric measurement

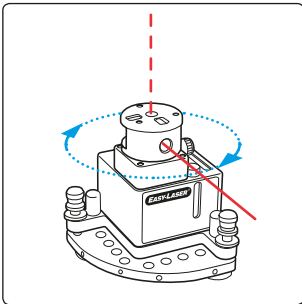
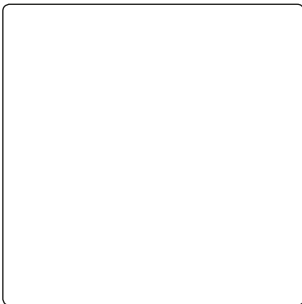
This system can be used to carry out all the most common geometric measurements; straightness, flatness, squareness, plumb and level. Measurement is quick and precise. Displayed resolution is 0.001 mm [0.05 mils]. The laser transmitter is our well known big seller, the D22 with levelling table, strong magnetic feet, and a range of up to 40 m. The transmitter's laser beam can be compared to an absolutely straight and weightless ruler, that is to say a perfect starting point for precision measurement. The swivelling laser head gives a laser plane parallel to the measured object and can also angle the laser beam 90° to the sweep for squareness measurement.

The display unit has a large and clear 5.7" colour screen. The programs guide you step-by-step through the measuring process, which makes it easy even for inexperienced users. The system can provide full documentation, with direct generation of PDF reports, and database programs for PC for example. The detector transfers the measurement data to the display unit wirelessly, or by cable if required. The advantages of wireless are especially clear on mechanical constructions and objects where cables can snag or get in the way.

The most common method is to fix the laser transmitter to the measurement object using the mounting magnets, or mounting it on a tripod (accessory) to one side. A pin is also provided to secure the laser transmitter to a machine spindle or equivalent, to check straightness and spindle alignment for example.

Easy-Laser® E920 is a complete system in itself, with laser transmitter, detector and display unit. But it is also an excellent starting point for creating a measurement system that suits your specific needs and requirements, because all the measurement programs are included as standard! Add extra laser transmitters, measuring units and brackets as well as other accessories from the wide Easy-Laser® range. Now or in the future.

Bluetooth® **POWERED BY ENDURIO** **40 m / 132'** **2 AXIS PSD** **BARCODE SYSTEM**



A complete system contains:

- 12-0418 1 Display unit E51
- 12-0022 1 Laser transmitter D22 incl. tilt table
- 12-0752 1 Detector E7
- 12-0436 1 Bluetooth® unit
- 12-0074 1 Cable 2 m
- 12-0108 1 Cable 5 m, extension
- 01-1333 1 Machine/magnet base pin for D22
- 12-0045 1 Magnet base with turnable head
- 12-0544 2 Targets for rough alignment
- 01-1165 1 Offset bracket
- 01-0043 6 Rods 60 mm
- 01-0873 6 Rods 120 mm
- 12-0915 1 Safety strap for laser transmitter
- 05-0685 1 Manual (Note: Refers to English manual)
- 03-0842 1 Measuring tape 5 m
- 03-0914 1 USB memory stick with documentation
- 03-0822 1 USB cable
- 03-0821 1 Battery charger (100–240 V AC)
- 03-0967 1 Hexagon wrench set
- 12-0495 1 Shoulder strap for Display unit
- 03-0878 1 Cleaning cloth for optics
- 12-0512 1 Carrying case

Most common accessories:

- 12-0759 1 Detector E9, 2-axis
- 12-0758 1 Detector E8, 1-axis
- 12-0796 1 E180 BTA
- 12-0618 1 Battery pack with Bluetooth® technology
- 12-0619 1 Barcode reader
- 12-0585 1 Charger 12–36V
- 12-0434 1 Measuring unit EM
- 12-0433 1 Measuring unit ES
- 12-0016 1 V-bracket with chain
- 01-1165 1 Offset bracket
- 12-0597 1 Splitter box
- 03-1004 1 Thermal printer
- 12-0455 1 Slide bracket Min. Ø120 mm
- 12-0543 1 Slide bracket Min. Ø200 mm
- 12-0510 1 Slide bracket Min. Ø300 mm
- 12-0269 1 Tripod
- 12-0046 1 Angular prism

Note: always check number of items included for each Part No. before ordering.

Complete system:

Weight: 12.3 kg [27.1 lbs]
WxHxD: 550x450x210 mm [21.6x17.7x8.3"]



Easy-Laser® E915 Flange Spin

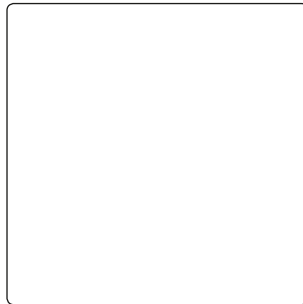
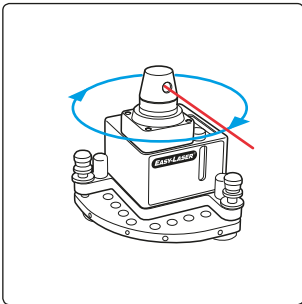
Part No: 12-0526

Measure with spinning laser. Evaluate directly in true 3D.

See the result as a true 3D image in the display unit directly after measuring. Then evaluate the result easily with different calculation settings, for example three point reference, best fit or all positive. This can also be done directly on site without having to stop to go to a PC with separate analysis programs, which was the case previously. This makes production much more efficient.

The system includes laser transmitter D23 Spin with power rotating head. This is how it works in brief: The laser beam from the transmitter rotates constantly and creates a reference plane over the entire measurement object. Measurements are performed quicker as you do not have to align the beam for each new measurement position. You place the detector at the desired measurement points and register the reading by a push of a button. In principle, one person can perform the measurement themselves. It is then possible to generate a PDF report containing graphs and measurement data directly from the measurement system's display unit. All information about the measurement object is documented.

Includes the sectional measurement flatness program. A tower section with diameter over 4 meters represents a significant weight. This weight causes the flanges to deform when the sections are manufactured. With sectional measurement program the flatness is measured in four sections which are mathematically merged into a full circle, which solves this measurement problem. The program also makes it possible to perform the complete measurement on ground. No climbing on ladders or skylift is therefore required. With traditional methods the operator has to work on hazardous high levels, and often more men are needed.



A complete system contains:

- 12-0418 1 Display unit E-series E51
- 12-0168 1 Laser transmitter D23 incl. tilt table
- 12-0509 1 Detector E5
- 12-0436 1 Bluetooth® unit
- 12-0074 1 Cable 2 m
- 12-0108 1 Cable 5 m, extension
- 12-0321 1 Cable support
- 12-0544 3 Targets for rough alignment
- 12-0045 1 Magnet base with turnable head
- 01-0043 6 Rods 60 mm
- 01-0873 6 Rods 120 mm
- 12-0495 1 Shoulder strap for Display unit
- 12-0915 1 Safety strap for laser transmitter
- 05-0400 1 Manual (Note: Refers to English manual)
- 05-0545 1 Quick manual (Note: Refers to English manual)
- 03-0842 1 Measuring tape 5 m
- 03-0914 1 USB Memory stick with documentation
- 03-0822 1 USB Cable
- 03-0821 1 Battery charger (100–240 V AC)
- 03-0967 1 Hexagon wrench set
- 03-0878 1 Cleaning cloth for optics
- 12-0512 1 Carrying case

Most common accessories:

- 12-0618 1 Battery pack with Bluetooth® unit
- 12-0619 1 Barcode reader
- 12-0585 1 Charger 12–36V
- 12-0434 1 Measuring unit EM
- 12-0433 1 Measuring unit ES
- 12-0016 1 V-bracket with chain
- 01-1165 1 Offset bracket
- 12-0597 1 Splitter box
- 03-1004 1 Thermal printer
- 12-0455 1 Slide bracket Min. Ø120 mm
- 12-0543 1 Slide bracket Min. Ø200 mm
- 12-0510 1 Slide bracket Min. Ø300 mm

Note: always check number of items included for each Part No. before ordering.

Complete system:

Weight: 12.1 kg [26.7 lbs]
WxHxD: 550x450x210 mm [21.6x17.7x8.3"]



Easy-Laser® E910

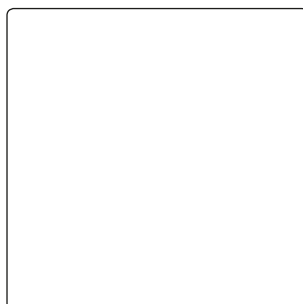
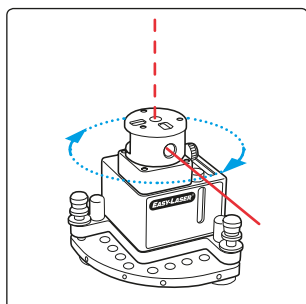
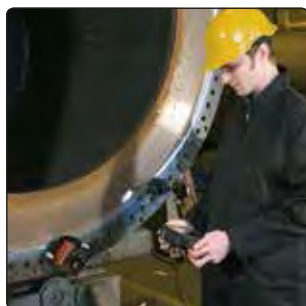
Part No: 12-0525

Evaluate directly in true 3D.

See the result as a true 3D image in the display unit directly after measuring. Then evaluate the result easily with different calculation settings, for example three point reference, best fit or all positive. This can also be done directly on site without having to stop to go to a PC with separate analysis programs, which was the case previously. This makes production much more efficient.

The system includes laser transmitter D22 with manual rotatable head, and with the option of deflecting the laser beam 90°. With a few more accessories the system can also be used to check the parallelism of the two tower flanges. In the measurement system's display unit it is possible to generate a PDF report containing graphs and measurement data. All information about the measurement object is documented.

Includes the sectional measurement flatness program. A tower section with diameter over 4 meters represents a significant weight. This weight causes the flanges to deform when the sections are manufactured. With sectional measurement program the flatness is measured in four sections which are mathematically merged into a full circle, which solves this measurement problem. The program also makes it possible to perform the complete measurement on ground. No climbing on ladders or skylift is therefore required. With traditional methods the operator has to work on hazardous high levels, and often more men are needed.



A complete system contains:

- 12-0418 1 Display unit E-series E51
- 12-0022 1 Laser transmitter D22 incl. tilt table
- 12-0752 1 Detector E7
- 12-0436 1 Bluetooth® unit
- 12-0074 1 Cable 2 m
- 12-0108 1 Cable 5 m, extension
- 12-0321 1 Cable support
- 12-0544 3 Targets for rough alignment
- 12-0045 1 Magnet base with turnable head
- 01-0043 6 Rods 60 mm
- 01-0873 6 Rods 120 mm
- 12-0495 1 Shoulder strap for Display unit
- 12-0915 1 Safety strap for laser transmitter
- 05-0400 1 Manual (Note: Refers to English manual)
- 05-0545 1 Quick manual (Note: Refers to English manual)
- 03-0842 1 Measuring tape 5 m
- 03-0914 1 USB Memory stick with documentation
- 03-0822 1 USB Cable
- 03-0821 1 Battery charger (100–240 V AC)
- 03-0967 1 Hexagon wrench set
- 03-0878 1 Cleaning cloth for optics
- 12-0512 1 Carrying case

Most common accessories:

- 12-0618 1 Battery pack with Bluetooth® unit
- 12-0619 1 Barcode reader
- 12-0585 1 Charger 12–36V
- 12-0434 1 Measuring unit EM
- 12-0433 1 Measuring unit ES
- 12-0016 1 V-bracket with chain
- 01-1165 1 Offset bracket
- 12-0597 1 Splitter box
- 03-1004 1 Thermal printer
- 12-0455 1 Slide bracket Min. Ø120 mm
- 12-0543 1 Slide bracket Min. Ø200 mm
- 12-0510 1 Slide bracket Min. Ø300 mm
- 12-0269 1 Tripod
- 12-0046 1 Angular prism

Note: always check number of items included for each Part No. before ordering.

Complete system:

Weight: 12.1 kg [26.7 lbs]
 WxHxD: 550x450x210 mm [21.6x17.7x8.3"]



12-0967

Easy-Laser® XT440 Shaft

Part No: 12-0967 (with Display unit XT11, in medium sized case)

Part No: 12-0966 (without Display unit, in small case)

Multi-platform alignment system

Easy-Laser® XT440 is a crossover multi-platform system. The system runs on your iOS and Android unit¹. You can also choose a complete system with our ergonomic and rugged, IP66/67 approved shock proof Easy-Laser® XT11 display unit. As standard a 13 MP camera for documentation is built-in, and you can also choose to add an IR camera to the XT11; shoot a thermal image before and after alignment and include with the documentation!

The measuring units are also rugged and IP66/67 approved, featuring Bluetooth® wireless technology, an integrated rechargeable battery and large 30 mm [1.2"] TruePSD detectors. A built-in OLED display shows battery status and the angular value of the unit for easy positioning. Thanks to high capacity rechargeable batteries the operating times are very long: Display unit: 16 h, Measuring units: 24 h.

All functions are available in one app

Programs for alignment of both horizontal and vertical² machines are included. Added to that are functions for soft foot check, thermal growth compensation and tolerance check. As always, Easy-Laser® comes with the very versatile Values program. The app has a built-in Users Manual, which opens the relevant chapter depending on where in the process you are.

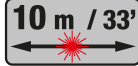
¹Please see our web site for a complete list of which tablets we recommend: easylaser.com > lifecycle support > software download

²Available during 2017

Note: the system is delivered in different carrying cases depending on if the Display unit is included or not. See pictures to the left.



iOS Android



IR Camera is optional



Medium case

Small case

System with display unit (Part No. 12-0967):

- 12-0961 1 Display unit XT11
 - 12-0943 1 Measuring unit XT40-M
 - 12-0944 1 Measuring unit XT40-S
 - 12-0963 2 Shaft bracket with chain and rods
 - 12-0059 1 Set of Rods 4x60 mm
 - 03-0824 1 Measuring tape 3 m
 - 03-0967 1 Hexagon wrench set
 - 03-1256 1 Battery charger (100–240 V AC)
 - 12-0989 1 DC split cable for charging
 - 12-0751 1 DC to USB adapter, for charging
 - 12-0997 1 Shoulder strap for display unit
 - 05-0833 1 Quick manual (Note: Refers to English manual)
 - 03-0878 1 Cleaning cloth for optics
 - 03-0914 1 USB memory stick with documentation
 - 03-0991 1 Documentation folder
 - 12-0973 1 Carrying case Medium
- Weight complete system: 7.2 kg [15.9 lbs]
WxHxD: 460x350x175 mm [18.1"x13.8"x6.9"]

Options for XT11: (Note! Cannot be retrofitted.)

- 12-0968 1 IR Camera added to XT11
- 12-0969 1 AV connector added to XT11
- 12-0985 1 Camera (and LED light) removed from XT11

System without display unit (Part No. 12-0966):

- 12-0943 1 Measuring unit XT40-M
 - 12-0944 1 Measuring unit XT40-S
 - 12-0963 2 Shaft bracket with chain and rods
 - 12-0059 1 Set of Rods 4x60 mm
 - 03-0824 1 Measuring tape 3 m
 - 03-0967 1 Hexagon wrench set
 - 03-1256 1 Battery charger (100–240 V AC)
 - 12-0989 1 DC split cable for charging
 - 12-0751 1 DC to USB adapter, for charging
 - 05-0833 1 Quick manual (Note: Refers to English manual)
 - 03-0878 1 Cleaning cloth for optics
 - 03-0914 1 USB memory stick with documentation
 - 12-0972 1 Carrying case Small
- Weight complete system: 3.8 kg [8.4 lbs]
WxHxD: 335x280x130 mm [13.2"x11.0"x5.1"]

Most common accessories for XT440:

- 12-0013 1 Magnet base (Note: offset bracket also needed.)
- 12-1008 1 Offset bracket for XT-series
- 12-1011 1 Magnetic bracket for XT-series
- 12-1012 1 Thin shaft bracket for XT-series
- 12-1010 1 Sliding bracket for XT-series
- 12-0059 1 Rods (4x60 mm)
- 12-0324 1 Rods (8x120 mm)
- 12-0060 1 Rods (4x240 mm)
- 12-0128 1 Extension chain (2x900 mm)

Easy-Laser® E720 Shaft/Geo

Part No: 12-0955

The complete alignment solution

Easy-Laser® E720 gives you all the functions for shaft alignment plus the opportunity to check the machine base and any bearing play using the standard equipment. The system includes the very versatile laser transmitter D22.

Programs for Horizontal machines, soft foot checks, Machine trains, vertical/flange mounted and cardan/offset mounted* machines are included. Furthermore all geometry programs such as Straightness, Flatness/Twist and Parallelism measurement are included. Using accessories you can also align sheaves/pulleys with digital precision and check vibration levels. No other system on the market can offer this flexibility!

The keys to the system flexibility and wide range of use are the measuring units with 2-axis TruePSD detectors and dual laser beams, and the laser transmitter D22. Together with the included measurement programs they make the Easy-Laser® E720 a Total Alignment Solution!

Large, clear colour screen, wireless measuring units (included as standard), long operating life and robust design give a measurement system that is both reliable and easy to use.

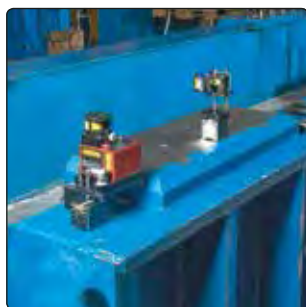
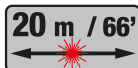
The measurement values can be registered with only 40° rotation of the shafts. You then align the machine "live" using the measuring units in any position around the shaft.

The display unit program is available in several different languages which facilitates use; English, German, French, Spanish, Portuguese, Swedish, Finnish, Russian, Polish, Dutch, Italian, Japanese, Korean and Chinese. Our unique Endurio™ power management system gives up to 30 hours of operating time for the display unit. Expandable for more measurement applications.

The case is pre-cut for accessories:

A. E290 Digital Precision Level, B. E285 Vibrometer case

*Cardan bracket is optional equipment.



A complete system contains:

- 12-0418 1 Display unit E51
- 12-0433 1 Measuring unit ES
- 12-0434 1 Measuring unit EM
- 12-0436 2 Bluetooth® unit
- 12-0022 1 Laser transmitter D22
- 12-0074 2 Cables 2 m
- 12-0016 2 Shaft bracket with chain
- 12-0319 2 Extension chain
- 12-0013 1 Magnet base
- 12-0045 1 Magnet base with turnable head
- 01-1165 2 Offset bracket
- 12-0413 2 Magnetic bracket
- 12-0324 1 Set of Rods 8x120 mm
- 12-0059 1 Set of Rods 4x60 mm
- 05-0685 1 Manual (Note: Refers to English manual)
- 05-0486 1 Quick manual (Note: Refers to English manual)
- 03-0824 1 Measuring tape 3 m
- 03-0914 1 USB memory stick with documentation
- 03-0822 1 USB cable
- 03-0821 1 Battery charger (100–240 V AC)
- 03-0792 1 Toolbox
- 12-0495 1 Shoulder strap for Display unit
- 03-0878 1 Cleaning cloth for optics
- 12-0981 1 Carrying case

Most common accessories:

- 12-0846 1 E290 Digital Precision Level
- 12-0656 1 E285 Vibrometer probe
- 12-0796 1 E180 BTA
- 12-0619 1 Barcode reader
- 12-0412 1 Thin shaft bracket
- 12-0039 1 Sliding bracket
- 12-0615 1 Cardan bracket
- 12-0585 1 Charger 12–36V
- 12-0617 1 Battery pack
- 12-0618 1 Battery pack with Bluetooth® technology
- 12-0597 1 Splitter box
- 12-0059 1 Rods (4x60 mm)
- 12-0324 1 Rods (8x120 mm)
- 12-0060 1 Rods (4x240 mm)
- 12-0128 1 Extension chain (2x900 mm)

Note: always check number of items included for each Part No. before ordering.

Complete system:
Weight: 14.8 kg (32.6 lbs)

1.800.561.8187

www.itm.com

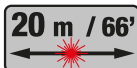
information@itm.com

Easy-Laser® E710 Shaft

Part No: 12-0440

The measurement system for all stages of machine set-up

Easy-Laser® E710 gives you all the functions for shaft alignment plus the opportunity to check the machine base and any bearing play using the standard equipment! Programs for Horizontal machines, soft foot checks, Machine trains, vertical/flange mounted and cardan/offset mounted* machines are included. Furthermore programs for Straightness, Flatness/Twist and Parallelism measurement are included. Using accessories you can also align sheaves/pulleys with digital precision and check vibration levels. No other system on the market can offer this flexibility! The keys to the system flexibility and wide range of use are the measuring units with 2-axis TruePSD detectors, and the dual laser beams. Together with the included measurement programs they make the Easy-Laser® E710 a Total Alignment Solution!



Large, clear colour screen, wireless measuring units (included as standard), long operating life and robust design give a measurement system that is both reliable and easy to use. A clever feature is the barcode reader*, which enters the machine dimensions with literally one swipe!

The measurement values can be registered with only 40° rotation of the shafts. You then align the machine "live" using the measuring units in any position around the shaft. The display unit program is available in several different languages which facilitates use; English, German, French, Spanish, Portuguese, Swedish, Finnish, Russian, Polish, Dutch, Italian, Japanese, Korean and Chinese. Our unique Endurio™ power management system gives up to 30 hours of operating time for the display unit. Expandable for more measurement applications.

**Barcode reader and cardan bracket are optional equipment.*

A complete system contains:

- 12-0418 1 Display unit E51
- 12-0433 1 Measuring unit ES
- 12-0434 1 Measuring unit EM
- 12-0436 2 Bluetooth® unit
- 12-0074 2 Cables 2 m
- 12-0016 2 Shaft bracket with chain
- 12-0319 2 Extension chain
- 12-0013 2 Magnet base
- 01-1165 2 Offset bracket
- 01-0873 4 Rods 120 mm
- 12-0059 1 Set of Rods 4x60 mm
- 05-0461 1 Manual (Note: Refers to English manual)
- 05-0486 1 Quick manual (Note: Refers to English manual)
- 03-0824 1 Measuring tape 3 m
- 03-0914 1 USB memory stick with documentation
- 03-0822 1 USB cable
- 03-0821 1 Battery charger (100–240 V AC)
- 03-0792 2 Toolbox
- 12-0495 1 Shoulder strap for Display unit
- 03-0878 1 Cleaning cloth for optics
- 12-0442 1 Carrying case

Most common accessories:

- 12-0656 1 E285 Vibrometer probe
- 12-0796 1 E180 BTA
- 12-0619 1 Barcode reader
- 12-0413 1 Magnetic bracket
- 12-0412 1 Thin shaft bracket
- 12-0039 1 Sliding bracket
- 12-0615 1 Cardan bracket
- 12-0585 1 Charger 12–36V
- 12-0617 1 Battery pack
- 12-0618 1 Battery pack with Bluetooth® technology
- 12-0597 1 Splitter box
- 12-0059 1 Rods (4x60 mm)
- 12-0324 1 Rods (8x120 mm)
- 12-0060 1 Rods (4x240 mm)
- 12-0128 1 Extension chain (2x900 mm)
- 12-0022 1 Laser transmitter D22

Note: always check number of items included for each Part No. before ordering.

Complete system:

Weight: 10.0 kg [22.0 lbs]
WxHxD: 500x400x200 mm [19.7x15.7x7.9"]

Easy-Laser® E540 Shaft

Part No: 12-0775

Simple and efficient shaft alignment

Easy-Laser® E540 is a very powerful shaft alignment system, with the ideal balance between performance and price. The measuring units are incredibly compact featuring Bluetooth® wireless technology, an integrated rechargeable battery and TruePSD detectors. This means that they are easy to install on most types of machines, even where there is limited space. The wireless technology gives you full freedom of movement around the machine that is to be aligned. Start with the measuring units positioned anywhere through 360° around the shaft, then take any three readings down to 20° in-between. Then adjust the machine with the live-values in both horizontal and vertical directions. Simple and efficient! Programs included: Horizontal, Vertical, 3-Machine train, Values, Belt transmission alignment, Vibrometer.

Technology that gives the best performance

The shaft alignment system has a large 5.7", bright colour display. The measuring units have TruePSD-technology, which gives unlimited resolution. Twin laser beams, twin PSDs (30 mm [1.2"]) and twin inclinometers give you superb control of the measurement in all situations. Display unit, measuring units and fixtures are all very robust for the highest accuracy in demanding industrial environments.

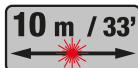
Large expansion possibilities

It is possible to connect two very useful accessories to the system. With Vibrometer E285* it is possible to check the vibration level and bearing condition of the machine. Using E180 BTA* you can check and align sheaves and pulleys with digital precision. With the barcode reader* the user can save many key operations where all machine dimensions, tolerances and compensation values are entered in one single operation, and the measurement can be started directly.

*Accessories.

The case is pre-cut for accessories:

- A. Barcode reader/B. Magnetic brackets/C. E180 BTA/D. E285 Vibrometer/
- E. Magnet bases/F. Offset brackets



Built-in battery and Bluetooth® wireless functionality.



A complete system contains:

- 12-0700 1 Display unit E52
- 12-0777 1 Measuring unit ELS40
- 12-0776 1 Measuring unit ELM40
- 12-0016 2 Shaft bracket with chain
- 12-0319 2 Extension chain
- 01-0873 4 Rods 120 mm [4.72"]
- 12-0059 1 Set of Rods 4x60 mm [2.36"]
- 05-0689 1 Quick manual (Note: Refers to English manual)
- 03-0824 1 Measuring tape 3 m
- 03-0914 1 USB Memory stick with documentation
- 03-0822 1 USB cable
- 03-0821 1 Battery charger (100–240 V AC)
- 12-0750 1 DC charging cable
- 12-0751 1 DC to USB adapter
- 12-0495 1 Shoulder strap for Display unit
- 03-1007 1 Carrying case

Most common accessories:

- 12-0619 1 Barcode reader
- 12-0656 1 E285 Vibrometer probe
- 12-0796 1 E180 BTA
- 12-0074 1 Cable 2 m [78.7"]
- 12-0013 1 Magnet base
- 01-1165 1 Offset bracket
- 12-0413 1 Magnetic bracket
- 12-0412 1 Thin shaft bracket
- 12-0039 1 Sliding bracket
- 12-0585 1 Charger 12–36V
- 12-0597 1 Splitter box
- 12-0059 1 Rods (4x60 mm)
- 12-0324 1 Rods (8x120 mm)
- 12-0060 1 Rods (4x240 mm)
- 12-0128 1 Extension chain (2x900 mm)

Note: always check number of items included for each Part No. before ordering.

Complete system:

Weight: 7.2 kg [15.9 lbs]
WxHxD: 500x415x170 mm [19.7x16.3x6.7"]



Easy-Laser® E420 Shaft

Part No: 12-0745

Entry level redefined!

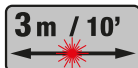
The Easy-Laser® E420 sets a new standard in entry level laser systems for shaft alignment. Wireless measuring units, a large 5.7" colour display and an IP65-rated design that withstands harsh environments. These are the features you would normally only find in more expensive systems!

The measuring units are incredibly compact featuring Bluetooth® wireless technology, an integrated rechargeable battery and large 20 mm [0.78"] TruePSD detectors. This means that they are easy to install on most types of machines, even where there is limited space. The wireless technology gives you full freedom of movement around the machine that is to be aligned.

Programs for alignment of both horizontal and vertical machines are included. Added to that are functions for soft foot control, thermal growth compensation and tolerance control.

Pre-mounted units make it easy to install on the machine and the programs guide you step-by-step through the process. You can use our barcode reader* to enter all machine data in one single operation. Start with the measuring units positioned anywhere on the shaft, recording three readings with as little as 20° of rotation between readings. Then adjust the machine with the live values, and save the measurements in the display unit memory. You can also transfer the results to the database EasyLink™ program (included) for PC.

**Barcode reader is accessory.*



A complete system contains:

- 12-0748 1 Display unit E53
- 12-0747 1 Measuring unit ELS20
- 12-0746 1 Measuring unit ELM20
- 12-0016 2 Shaft bracket with chain
- 12-0319 2 Extension chain
- 01-0873 4 Rods 120 mm
- 12-0059 1 Set of Rods 4x60 mm
- 05-0640 1 Quick manual (Note: Refers to English manual)
- 03-0914 1 USB memory stick with documentation
- 03-0824 1 Measuring tape 3 m
- 12-0750 1 DC charging cable
- 12-0751 1 DC to USB adapter
- 03-0821 1 Battery charger (100–240 V AC) for Display unit
- 03-1059 1 Carrying case

Most common accessories:

- 12-0013 1 Magnet base
- 01-1165 1 Offset bracket
- 12-0413 1 Magnetic bracket
- 12-0412 1 Thin shaft bracket
- 12-0039 1 Sliding bracket
- 12-0619 1 Barcode reader
- 12-0585 1 Charger 12–36V
- 12-0059 1 Rods (4x60 mm)
- 12-0324 1 Rods (8x120 mm)
- 12-0060 1 Rods (4x240 mm)
- 12-0128 1 Extension chain (2x900 mm)

Note: always check number of items included for each Part No. before ordering.

Complete system:

Weight: 6.3 kg [13.9 lbs]
 WxHxD: 500x415x170 mm [19.7x16.3x6.7"]

Easy-Laser® E180 BTA digital Wireless**Part No:** 12-0796**Part No:** 12-0850, Laser transmitter 12-0309 excluded.**“Live” digital read outs on clear OLED display**

The detector reads off the position in relation to the laser plane and digitally displays the parallel and angular misalignment “live” on the clear built-in OLED display. The accuracy of the reading means that you can be within the prescribed alignment tolerances and rely upon the result. With this system there is no need to move the detector to read horizontal respectively vertical values, which saves time and makes things easier. Suitable for most types of drive, such as V-belt, timing belt, flat belt and chain drives.

If you connect (via Bluetooth®) the detector to a separate display unit, e.g. one of our shaft alignment systems, you can read and follow the alignment from where you are standing and making adjustments, instead of only where the detector is mounted. Then you can also set a tolerance and document the result of the alignment.

(Note 1: There is no separate display unit included. The detector connects wireless to the E51 and E52 display units with BTA program, which for example is included in systems E710, E540 and E530 and most E9xx systems.)

(Note 2: The E180 detector unit cannot be connected to the D-series display units or other equipment.)

(Note 3: Available also without the laser transmitter 12-0309 if this is already in your tool box. Part No: 12-0850.)

**A system contains:**

- 12-0309 1 Laser transmitter
- 12-0791 1 Detector unit with built-in display, wireless
- 12-0394 2 Target
- 03-0821 1 Charger (100–240 V AC) and cable
- 03-0247 1 Battery R6 (AA) 1.5 V
- 05-0728 1 Manual
- 12-0804 1 Carrying case

Easy-Laser® E170 BTA digital**Part No:** 12-0659**“Live” digital read outs where making adjustments**

With the Easy-Laser® E170 you can read and follow the alignment from where you are standing and making adjustments, instead of only where the detector is mounted. The detector reads off the position in relation to the laser plane and digitally displays the parallel and angular misalignment “live”. This makes alignment of the adjustable machine very easy. The accuracy of the reading means that you can be within the prescribed alignment tolerances and rely upon the result. With this system there is no need to move the detector to read horizontal respectively vertical values, which saves time and makes things easier. Suitable for most types of drive, such as V-belt, timing belt, flat belt and chain drives.

(Note 1! The E170 detector unit cannot be connected to the D-series display units or other equipment.)

(Note 2! There is no separate display unit included or available. The detector connects to the E51 and E52 display units with BTA program, which for example is included in systems E710, E540 and E530.)

(Note 3! For systems E710 and E530 the red cable of the main system is used for connection. For system E540 a cable has to be added. Wireless connection is not available.)

**A system contains:**

- 12-0309 1 Laser transmitter
- 12-0657 1 Detector unit E-series
- 12-0394 2 Target
- 03-0247 1 Battery R6 (AA) 1.5 V
- 12-0658 1 Carrying case

Easy-Laser® D160 BTA digital

Part No: 12-0411

“Live” digital read outs where making adjustments

Easy-Laser® D160 has a separate detector unit and display unit. This means you can read and follow the alignment from where you are standing and making adjustments. The backlit display also makes it easier to read in poor light conditions.

The detector reads off the position in relation to the laser plane and digitally displays the parallel and angular misalignment “live”. This makes alignment of the adjustable machine extremely easy. The accuracy of the reading means that you can be within the prescribed alignment tolerances and rely upon the result. With this system there is no need to move the detector to read horizontal respectively vertical values, which saves time and makes things easier. Suitable for most types of drive, such as V-belt, timing belt, flat belt and chain drives.

(Note! The D160 detector unit must not be connected to the E-series display unit or other equipment.)

**A complete system contains:**

12-0404	1	Display unit
12-0309	1	Laser transmitter
12-0403	1	Detector unit D-series
12-0394	2	Target
12-0074	1	Cable 2 m
05-0364	1	Manual
03-0247	1	Battery R6 (AA) 1.5 V
03-0642	2	Battery LR61 9V
12-0410	1	Carrying case

Easy-Laser® D90 BTA

Part No: 12-0415

For quick and easy alignment of sheaves/pulleys

Easy-Laser® D90 is installed in a few seconds, and the laser line that is projected on the targets clearly shows how to adjust the machines. The tool has targets that can be read out “visually” and which give excellent degrees of accuracy that are sufficient for most users. If, in the future, you wish to have the option of digital readouts with the corresponding advantages, you can add a digital detector (see system D150 and D160).

D90 BTA is compact and light. Suitable for most types of drive, such as V-belt, timing belt, flat belt and chain drives.

**A complete system contains:**

12-0309	1	Laser transmitter
12-0394	2	Target
05-0352	1	Manual
03-0247	1	Battery R6 (AA) 1.5 V
03-0591	1	Padded cover



Easy-Laser® D550 Extreme™ Ex / ATEX / IECEx

Part No: 12-0340

Extremely durable and ATEX / Ex approved

Easy-Laser® Extreme™ is one of the toughest and most robust measurement and alignment systems on the market for work in potentially explosive environments. Easy-Laser® Extreme™ is intrinsically safe and complies with the latest ATEX standards for work in such environments.

With Easy-Laser® Extreme™ we have gone one step further. The entire construction is extremely durable with regard to external influences, not just shockproof, but also resistant to corrosion and leaks. This is because we know that measurement systems are all too often used in environments that are anything but clean and dry. This could involve anything from water to oil or solvents. The measurement system is therefore naturally IP66 and IP67 approved. In other words, system D550 is not just for those who need an Ex-approved system, but also for those who want a little extra from their tools. Viewed as a whole, with its robust construction, its software and its generous warranty period of 4 years, you get a measurement and alignment system that is extremely hard to beat!

Fulfils the requirements according to:

Ex ib op is IIC T4 Gb, 0°C ≤ Ta ≤ +40°C

ATEX code: II 2 G

EX certificate number: Presafe 14ATEX5726X, IECEx PRE 14.0062X



13 PROGRAMS & FUNCTIONS

20 m / 66'



A complete system contains:

- | | | | | | |
|---------|---|---|---------|---|--|
| 12-0336 | 1 | Display unit D336 | 03-0824 | 1 | Measuring tape 3 m |
| 12-0335 | 1 | Measuring unit S, Extreme | 12-0425 | 1 | PC Cable 1.8 m incl. Adapter USB/RS232 |
| 12-0334 | 1 | Measuring unit M, Extreme | 03-1208 | 8 | Battery 1.5 V, LR14 Alkaline |
| 12-0074 | 3 | Cable 2.0 m | 05-0314 | 1 | CD Easy-Laser incl. Easy-Link software |
| 12-0108 | 1 | Extension cable 5.0 m | 12-0339 | 1 | Case Shaft Extreme |
| 12-0337 | 2 | Shaft bracket with chain, Extreme | | | |
| 12-0363 | 4 | Extension chain, stainless steel | | | |
| 12-0360 | 1 | Tool kit for system D550 | | | |
| 05-0304 | 1 | Manual (Note: Refers to English manual) | | | |



Shaft alignment system for Vestas wind turbines

Part No: 12-0797 (Vestas 4)

Part No: 12-0825 (Vestas 3)

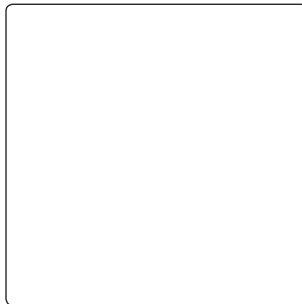
For shaft alignment with the rotor locked.

Large forces are in action in a wind turbine. The safety of the maintenance technicians is therefore of the utmost importance. With the Easy-Laser® shaft alignment system the generator and gearbox can be aligned with the coupling dismantled and the brake locked. The system pictured is designed especially for one turbine manufacturer, and fits all their turbine sizes.

Using the barcode reader, you scan the appropriate tag and the correct measures for that specific machine are entered automatically. Or open the settings with the pre-defined machine templates. Quick and easy! The measurement programs are easy to learn and to use, and there are numerous options for documenting and saving the result of the work (e.g. to printer or PC).



Pre-defined machine templates for different turbines.



- The Vestas 3 system has brackets for turbines V47, V52, V66, V80 2MW Mark1–7, V90 3MW.
- The Vestas 4 has additional brackets also for turbines V80 1.8MW, 2MW Mark8 and V112.

Note! The system pictured is “Vestas 4”.



Built-in battery and Bluetooth® wireless functionality.



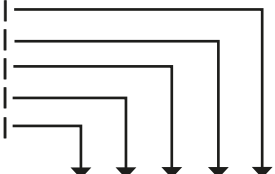
A Vestas 4 system contains:

- 12-0700 1 Display unit E52
- 12-0777 1 Measuring unit ELS40
- 12-0776 1 Measuring unit ELM40
- 12-0619 1 Barcode reader
- 01-0815 3 Plunges
- 01-0816 3 Plunges
- 01-0817 3 Plunges
- 01-0818 3 Plunges
- 01-1520 4 Centering plunges
- 03-0613 1 Distance gauge
- 03-1034 1 Extender
- 12-0703 1 Generator bracket
- 12-0718 1 Gear box bracket
- 12-0713 2 Bracket V112
- 03-0914 1 USB Memory stick
- 03-0822 1 USB cable
- 03-0821 1 Battery charger (100–240 V AC)
- 12-0750 1 DC charging cable
- 12-0751 1 DC to USB adapter
- 03-1004 1 Printer
- 01-1379 1 Protective case for Displayunit
- 12-0495 1 Shoulder strap for Display unit
- 12-0798 1 Carrying case

(Plus miscellaneous fastening items and user manual.)



| E980 | E975 | E970 | E960 | E950 | E940 | E930 | E920 | E720 |
 | E710 |
 | E915 | E910 |
 | E540 |
 | E420 |



	E980	E975	E970	E960	E950	E940	E930	E920	E720	E710	E915	E910	E540	E420
HORIZONTAL 9-12-3	●	●												
SOFT FOOT	●	●												
EASYTURN™	●	●												
MULTIPOINT HORIZONTAL SHAFT													●	●
VERTICAL/FLANGE MOUNTED	●	●											●	●
CARDAN													●	●
MACHINE TRAIN													●	●
MACHINE TRAIN (3 MACHINES)											●			
OFFSET AND ANGLE													●	●
VALUES (Digital Dial Indicator)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
VIBROMETER											●		●	●
BELT TRANSMISSION ALIGNMENT											●		●	●
STRAIGHTNESS 1-point													●	●
STRAIGHTNESS 2-point (Centre of Circle)														●
STRAIGHTNESS 4-point														●
STRAIGHTNESS Multipoint														●
STRAIGHTNESS 3-point (Half circle)														●
ROUNDNESS/OVALITY MEASUREMENT														●
SPINDLE DIRECTION														●
SQUARENESS														●
FLATNESS														●
TWIST														●
FLANGE FLATNESS													●	●
FLANGE PARALLELISM													●	●



| D550 |

	HORIZONTAL 9-12-3	
	SOFT FOOT	
	EASYTURN™	
	VERTICAL	
	CARDAN	
	MACHINE TRAIN	
	OFFSET AND ANGLE	
	VALUES (Digital Dial Indicator)	
	STRAIGHTNESS	

Easy-Laser XT Alignment App for Generation XT



| XT440 | XT40-M/S |

	HORIZONTAL 9-12-3	
	SOFT FOOT	
	EASYTURN™	
	VERTICAL/FLANGE MOUNTED (Available 2017)	
	VALUES (Digital Dial Indicator)	

Easy-Laser® Precision Level App for E290



| E290 |

	PRECISION LEVEL Use your iPhone, iPod or iPad as display! With our free app Precision Level for the E290 you can follow the alignment	
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EASYLINK™ PROGRAM

With EasyLink™ 3.0 you can save and organise all your measurements in one place, produce reports with both data and images and export to your maintenance systems. You can customise what your Excel reports should look like and what data should be visible and where it should be positioned. The program has a clear folder structure, where you drag and drop files from the display unit to the database, or vice versa if you wish to prepare a measurement before going out into the field to take measurements. Create your own structure with folders for manufacturer, department or machine type for example. With everything in one location you have a better overview of what actions have been carried out. The database can also be located on a common server and shared with other users. For extra safety you can use EasyLink™ to make backups of what you have saved in the E-series' display unit. You can also simulate adjustments and test corrective actions in the program without any risk of losing the original data. The program is supplied with all our measurement systems, but can also be downloaded by anyone for free.



System requirements: Windows® XP, Vista, 7, 8. For the export function, Excel 2003 or newer must also be installed on the computer. EasyLink™ 3.0 functions with both the D and E series in Easy-Laser®. Not with the XT series.

Export formats: Excel, XML.

Download the program free of charge from www.easylaser.com.



PARTS

| XT |



XT11 – Display unit for Generation XT

Part No: 12-0961

Description: Wireless display unit for Generation XT. Rugged design, shock proof, IP66 and IP67. Glove enabled touch screen. Water and dust proof connectors: USB A, USB B, Charger.

Options: IR Camera (Part No. 12-0968), AV connector (Part No. 12-0969), Camera removed for security reasons (Part No. 12-0985).

Note: Options cannot be retrofitted.

| E |



Display unit E-series: E51

Part No: 12-0418

Description: Available in different measurement program configurations. Which programs are available depends on in which system the display unit is included. Connectors: USB A, USB B, Easy-Laser® equipment, Charger.

Note: Dust and splash guard for connectors open on picture to the right. The look of the display unit keyboard can vary depending on market.

| E |



Display unit E-series: E52

Part No: 12-0700

Description: Available in different measurement program configurations. Which programs are available depends on in which system the display unit is included. Connectors: USB A, USB B, Easy-Laser® equipment, charger.

Note: Dust and splash guard for connectors removed on upper right picture.

| E |



Display unit E-series: E53

Part No: 12-0748

Description: All wireless display unit for shaft alignment system. The unit can temporarily power measuring units ELS20/ELM20 via the USB connector as backup. Connectors: USB A, charger.

Note: Dust and splash guard for connectors removed on upper right picture. No connector for "red cable" equipment.

| Ex |



Display unit Extreme™ EX: D336

Part No: 12-0336

Description: Intrinsically safe display unit. IP66/IP67/Ex/ATEX/IECEx.

Note: Only for use together with measuring units 12-0334/12-0335.

| D |

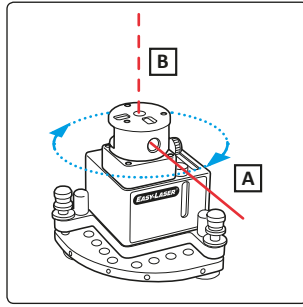


Display unit for sheave/pulley alignment

Part No: 12-0404

Description: Included in system D160.

Note: Only for connection to detector 12-0403 (D-series).

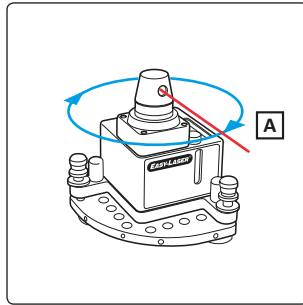


Laser transmitter D22 Swivel

Part No: 12-0022

Description: Laser transmitter D22 can be used to measure flatness, straightness, squareness and parallelism. The laser beam can sweep 360° with a measurement distance of up to 40 metres [130'] in radius. The laser beam can be angled 90° to the sweep, within 0.005 mm/m [0.005 mils/INCH]. Tilt table included.

Note: Option A. The laser beam is used for a 360° sweep. Option B. The laser beam is angled at 90° to the sweep.



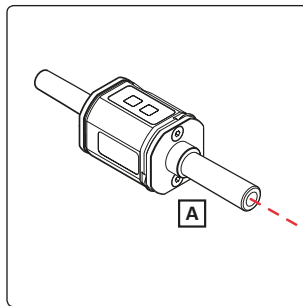
Laser transmitter D23 Spin

Part No: 12-0168

Description: Laser transmitter D23 has a motor driven, rotating head that gives a 360° laser plane. Because the laser beam sweeps across the surface you do not need to align the beam for every detector position. Tilt table included.

Measurement distance up to 20 metres [65'] in radius.

Note: A. The laser beam is used for a 360° sweep.



Laser transmitter D146 Spindle

Part No: 12-0146

Description: For measuring spindle direction and straightness. Can be used in a rotating spindle (max. 2000 rpm). Measurement distance 20 metres [65']. Mounting pin Ø20 mm [0.79"].

Note: A. An extra mounting pin (Part No. 12-0568) can be fitted at the laser aperture side (A), making it possible to align, for example, bar feeders. (Be aware that the standard mounting pin displayed on the left image cannot be detached from the transmitter.)



Laser transmitter D75

Part No: 12-0075

Description: For measuring straightness and spindle direction. M6 threads on ends and sides offer alternative mounting options. Measurement distance 40 m [130'].

Note: With tilting screws for laser beam adjustment.



Laser transmitter D25

Part No: 12-0594

Description: For measuring straightness primarily in turbine applications. Measurement distance 40 m [130']. The laser beam can sweep 360°, and can be angled 90° to the sweep.

Note: Battery adaptor included. Brackets, arms and/or offset hub may also be needed, but are not included. See also 12-0706.

Option A. The laser beam is used for a 360° sweep.

Option B. The laser beam is angled at 90° to the sweep.



Laser transmitter D25 with offset hub

Part No: 12-0706

Description: For measuring straightness primarily in turbine applications. Measurement distance 40 m [130']. The laser beam can be angled 90° to the sweep, within 0.01 mm/m [0.5 mils/INCH].

Note: Battery adaptor (not pictured) and offset hub included. Brackets/arms may also be needed, but are not included. See also 12-0594



Laser transmitter E30 Long Range

Part No: 12-0823

Description: For measuring straightness on long distances. Measurement distance 100 m [328'] with a 20 mm PSD, >200 m [656'] with 30 mm PSD. M6 threads on front and bottom offer alternative mounting options. Built-in rechargeable battery and Oled display.

Note: Coordinate table or tilt table needed for accurate functionality. No charger or bracketing included (compare with Part No. 12-0858).



Laser transmitter E30 Long Range, with tilt table

Part No: 12-0858

Description: For measuring straightness on long distances. Measurement distance 100 m [328'] with a 20 mm PSD, >200 m [656'] with 30 mm PSD. M6 threads on front and bottom offer alternative mounting options. Built-in rechargeable battery and Oled display.

Note: With tilt table (12-0864), which can be used with magnets or mounted on tripod, Battery charger 100–240 V AC (03-0821), USB memory stick with documentation, and Carrying case (12-0872).



Laser transmitter for sheave alignment systems

Part No: 12-0309

Description: Laser transmitter producing a laser line parallel to the object it is mounted to.

Note: Only transmitter as pictured, no targets included. (Complete system, see Part No. 12-0415.)

| E |



Detector E9, 2-axis PSD

Part No: 12-0759

Description: Detector diameter 45 mm [1.77"]. 2 axis PSD, 20x20 mm [0.79"x0.79"]. Built-in 360° electronic inclinometer. Built-in Bluetooth® wireless communication and rechargeable battery. There is also a connector on the back side for standard "red cable" (charging and data transfer). Mounting threads on both ends, for tube adapters (01-0777) or other suitable brackets (e.g. 12-0767 and 12-0553).

Note: Make sure you have a suitable bracket!

| E |



Detector E7H, HyperPSD™

Part No: 12-0824

Description: Detector for the E-series. 2 axis PSD, 20x20 mm [0.79"x0.79"]. With HyperPSD™ technology, which allows for a displayed resolution of 0.0001 mm [0.000005"/0.005 mils]. Built-in 360° electronic inclinometer. Two connectors for making it possible to connect two detectors or more in series. Normally mounted on rods, but has many additional mounting possibilities thanks to threads on two sides.

Note: Optimised for fixed laser/does not detect a spinning laser.

| E |



Detector E7

Part No: 12-0752

Description: Detector for the E-series. 2 axis PSD, 20x20 mm [0.79"x0.79"]. Built-in 360° electronic inclinometer. Two connectors for making it possible to connect two detectors or more in series. Normally mounted on rods, but has many additional mounting possibilities thanks to threads on two sides.

Note: Optimised for fixed point laser/does not detect a spinning laser.

| E |



Detector E5

Part No: 12-0509

Description: Detector for the E-series. 2 axis PSD, 20x20 mm [0.79"x0.79"]. Built-in 360° electronic inclinometer. Two connectors for making it possible to connect two detectors or more in series. Normally mounted on rods, but has many additional mounting possibilities thanks to threads on two sides.

Note: With Dual Detection Technology, making it possible to read both fixed point laser and spinning laser, but is optimised for spinning laser.

| E |



Detector E3

Part No: 12-0799

Description: Detector for the E-series. 2 axis PSD, 30x30 mm [1.18"x1.18"]. Built-in Bluetooth® wireless communication. Battery status indicator. Built-in 360° electronic inclinometer. One connector on top side. Normally mounted on rods, but also has additional mounting threads on back side.

Note: Target/Dust cover for PSD included. Does not detect a spinning laser.

| E |



Angle detector E2

Part No: 12-0845

Description: Detector for angle measurements, e.g. roll parallelism measurement. Built-in OLED display and rechargeable battery.

Note: The E2 detector reads angles, not positions. This means that if you want to take full advantage of the measurement program package of some geometric systems, you will also need a positional detector.

| D |



D-series Detector for belt alignment

Part No: 12-0403

Description: Detector that reads off the sheaves position in two directions (horizontal+vertical) at the same time.

Note: For connection to display unit 12-0404, or D279 with BTA digital program. Must not be connected to the E-series equipment!

A. Super magnets x 4, for attachment to sheave side.

| E |



E-series Detector for belt alignment

Part No: 12-0657

Description: Detector that reads off the sheaves position in two directions (horizontal+vertical) at the same time.

Note: For connection to display units with BTA digital program. For connection, a standard “red cable” is used. If your system doesn’t include one, be sure to order this too.

Cannot be connected to the D-series equipment!

A. Super magnets x 4, for attachment to sheave side.

| E |



E-series wireless Detector for belt alignment

Part No: 12-0791

Description: Detector that reads off the sheaves position in two directions (horizontal+vertical) at the same time. With built-in display showing offset and angular values.

Note: Also for Bluetooth® wireless connection to separate display units which have the BTA digital program.

A. Super magnets x 4, for attachment to sheave side.

| E |



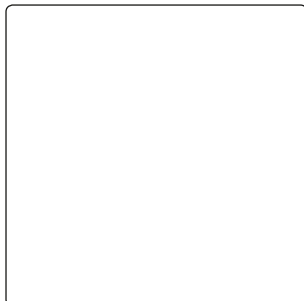
Digital Precision Level E290

Part No: 12-0846

Description: Digital precision level. Built-in OLED display and rechargeable battery.

Note: For complete kit, see Part No. 12-0857 below.

| E |



Digital Precision Level E290, complete kit

Part No: 12-0857

Description: Digital precision level (12-0846), complete kit with Battery charger 100–240 V AC (03-0821), safety strap (12-0915) and USB memory stick with documentation (03-0914).

Note: Delivered in plastic case (12-0873).

| E |



E-series Vibrometer probe E285

Part No: 12-0656

Description: For measuring vibration level (mm/s, inch/s) and bearing condition value (g-value).

Note: Requires measurement program Vibrometer in the display unit. For connection, one of the red cables of the system is used.

Cannot be connected to the D-series equipment!

[D]



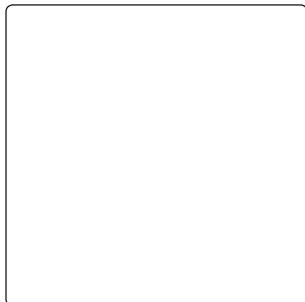
D-series Vibrometer probe D283

Part No: 12-0283

Description: For measuring vibration level (mm/s, inch/s) and bearing condition value (g-value).

Note: Requires measurement program Vibrometer in the display unit. Standard "red cable" also needed to be able to connect to display unit. Must not be connected to the E-series equipment!

[E]



Roll alignment kit

Part No: 12-0856

Description: Includes roll bracket (12-0849), detector E2 (12-0845), digital level E290 (12-0846), adapter plate (12-0874), charger (03-0821), DC charging cable (12-0750), DC to USB adapter (12-0751), USB memory stick with documentation (03-0914).

Note: Delivered in plastic case (12-0871). As standard for roll diameters up to 400 mm. For larger roll diameters, please see Part No. 12-0885, Large Roll Kit.



Measuring unit EMH, PSD 20x20 mm

Part No: 12-0790

Description: Laser diode and PSD detector in one housing. Built-in electronic 360° inclinometer. Mainly for shaft alignment. PSD 20x20 mm [0.79"x0.79"]. With HyperPSD™ technology, which allows for a displayed resolution of 0.0001 mm [0.000005"/0.005 mils].

Note: To be used in pair with S unit 12-0789. E-series measuring unit.



Measuring unit ESH, PSD 20x20 mm

Part No: 12-0789

Description: Laser diode and PSD detector in one housing. Built-in electronic 360° inclinometer. Mainly for shaft alignment. PSD 20x20 mm [0.79"x0.79"]. With HyperPSD™ technology, which allows for a displayed resolution of 0.0001 mm [0.000005"/0.005 mils].

Note: To be used in pair with M unit 12-0790. E-series measuring unit.



Measuring unit EM, PSD 20x20 mm

Part No: 12-0434

Description: Laser diode and PSD detector in one housing. Built-in electronic 360° inclinometer. Mainly for shaft alignment. PSD 20x20 mm [0.79"x0.79"].

Note: To be used in pair with S unit 12-0433. E-series measuring unit.



Measuring unit ES, PSD 20x20 mm

Part No: 12-0433

Description: Laser diode and PSD detector in one housing. Built-in electronic 360° inclinometer. Mainly for shaft alignment. PSD 20x20 mm [0.79"x0.79"].

Note: To be used in pair with M unit 12-0434. E-series measuring unit.



Measuring unit ELM40, PSD 30 mm

Part No: 12-0776

Description: Laser diode and PSD detector in one housing. Built-in Bluetooth® wireless communication. Battery status indicator. Built-in electronic 360° inclinometer. For shaft alignment. PSD 30 mm [1.18"].

Note: To be used in pair with S unit 12-0777. E-series measuring unit.



Measuring unit ELS40, PSD 30 mm

Part No: 12-0777

Description: Laser diode and PSD detector in one housing. Built-in Bluetooth® wireless communication. Battery status indicator. Built-in electronic 360° inclinometer. For shaft alignment. PSD 30 mm [1.18"].

Note: To be used in pair with M unit 12-0776. E-series measuring unit.

| E |



Measuring unit ELM30, PSD 30 mm

Part No: 12-0698

Description: Laser diode and PSD detector in one housing. Built-in electronic 360° inclinometer. For shaft alignment. PSD 30 mm [1.18"].

Note: To be used in pair with S unit 12-0697. E-series measuring unit.

| E |



Measuring unit ELS30, PSD 30 mm

Part No: 12-0697

Description: Laser diode and PSD detector in one housing. Built-in electronic 360° inclinometer. For shaft alignment. PSD 30 mm [1.18"].

Note: To be used in pair with M unit 12-0698. E-series measuring unit.

| E |



Measuring unit ELM20, PSD 20 mm

Part No: 12-0746

Description: Laser diode and PSD detector in one housing. Built-in Bluetooth® wireless communication. Battery status indicator. Built-in electronic 360° inclinometer. For shaft alignment. PSD 20 mm [0.79"].

Note: To be used in pair with S unit 12-0747. E-series measuring unit.

| E |



Measuring unit ELS20, PSD 20 mm

Part No: 12-0747

Description: Laser diode and PSD detector in one housing. Built-in Bluetooth® wireless communication. Battery status indicator. Built-in electronic 360° inclinometer. For shaft alignment. PSD 20 mm [0.79"].

Note: To be used in pair with M unit 12-0746. E-series measuring unit.

| Ex |



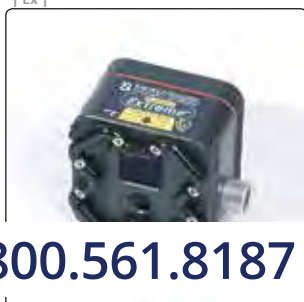
Measuring unit M, Extreme™

Part No: 12-0334

Description: Intrinsically safe and ATEX/Ex/IECEx approved units. Water, dust and shock proof according to both IP66 and IP67. Built-in electronic 360° inclinometer. 2 axis PSD.

Note: For use with display unit D336 and in pair with measuring unit 12-0335.

| Ex |



Measuring unit S, Extreme™

Part No: 12-0335

Description: Intrinsically safe and ATEX/Ex/IECEx approved units. Water, dust and shock proof according to both IP66 and IP67. Built-in electronic 360° inclinometer. 2 axis PSD.

Note: For use with display unit D336 and in pair with measuring unit 12-0334

| XT |

**Measuring unit XT40-M, PSD 30 mm****Part No:** 12-0943

Description: Laser diode and PSD detector in one housing. Built-in Bluetooth® wireless communication. OLED display shows battery status and angle of the unit on shaft. Built-in electronic 360° inclinometer. For shaft alignment. PSD 30 mm [1.18"].

Note: To be used in pair with M unit 12-0944. XT-series measuring unit.

| XT |

**Measuring unit XT40-S, PSD 30 mm****Part No:** 12-0944

Description: Laser diode and PSD detector in one housing. Built-in Bluetooth® wireless communication. OLED display shows battery status and angle of the unit on shaft. Built-in electronic 360° inclinometer. For shaft alignment. PSD 30 mm [1.18"].

Note: To be used in pair with M unit 12-0943. XT-series measuring unit.

| D | E | XT* |

**Magnet base****Part No:** 12-0013**Description:** Versatile magnet base with On/Off function and many optional rod mounting possibilities.**Note:** Three sides are magnetic. *For use with XT-series offset bracket 12-1008 is also needed.

| D | E | XT* |

**Magnet base with turnable head****Part No:** 12-0045**Description:** Versatile magnet base with On/Off function and 360° turnable head with two rod mounting possibilities.**Note:** *For use with XT-series offset bracket 12-1008 is also needed.

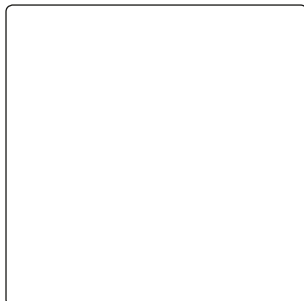
| D | E |

**Tilt table with magnet base****Part No:** 12-0742**Description:** Tilt table for use with an ES-unit as transmitter, e.g. with the Twist measurement program. This tilt table simplifies and makes the rough alignment of the laser beam quicker. Use the EM-unit as detector, mounted on a regular magnet base.**Note:** Magnet base and rods included as pictured.

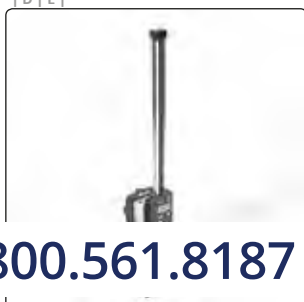
| D | E |

**Rotating detector bracket for rods****Part No:** 12-0169**Description:** Allows for 360° swivel.**Note:** -

| D | E |

**Small magnet base with turnable head****Part No:** 12-0696**Description:** With On/Off function and 360° turnable head.**Note:** Includes 2 rods 60 mm [2.36"].

| D | E |

**Magnet base with linear digital scale****Part No:** 12-0230**Description:** -**Note:** The length of the linear guide can be adapted. Detector not included.

| E |



Height adjustment bracket for detector

Part No: 12-0937

Description: For fine adjustment of detector on rods.

Note: -

| D | E |



Radial support for magnet base

Part No: 12-0508

Description: Can be used for supporting the magnet base in many different ways. Makes it easier to position the detector correctly. Especially useful on flywheels.

Note: -

| Ex |



Magnet base with adapter Ex

Part No: 12-0579

Description: For e.g. straightness measurement with the Ex measuring units.

Note: Magnet base, adapter, screws and two rods 140 mm included.

| D | E |



Pointing bracket on magnet base

Part No: 12-0583

Description: For wind tower flanges. Makes it possible to measure near the edge of a surface.

Note: Probe does not touch surface. Rods and detector not included.

| D | E |



Magnetic bracket

Part No: 12-0413

Description: For axial mounting on flanges or shafts. With M6 screws working as radial supports, and four super magnets.

Note: Does not fit the XT series.

| D | E | XT |



Magnetic bracket

Part No: 12-1011

Description: For axial mounting on flanges or shafts. With M6 screws working as radial supports, and four super magnets.

Note: Leftmost photo shows old threadings, but is otherwise correct.

| D | E |

**Magnetic brackets and rods, kit****Part No:** 12-0992**Description:** 2 magnetic brackets and 4pcs rods 120 mm [4.72"] in small case.**Note:** -

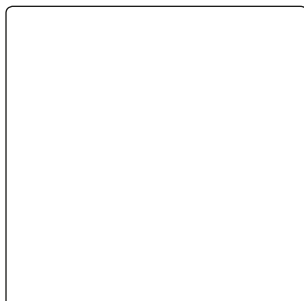
| D | E | XT |

**Magnetic brackets and rods, kit****Part No:** 12-1017**Description:** 2 magnetic brackets and 4pcs rods 120 mm [4.72"] in small case.**Note:** Leftmost photo shows old threadings on bracket, but is otherwise correct.

| D | E |

**V-bracket with chain****Part No:** 12-0016**Description:** For mounting on shaft or coupling. The V-bracket fits shafts with diameters 20–450 mm [0.8–17.7"]. The standard chain included can be used on shaft diameters up to 150 mm [6"]. Bracket width 18 mm [0.7"].**Note:** Extension chains available for shafts larger than diameter 150 mm [6"]. Does not fit the XT series.

| D | E | XT |

**Standard chains****Part No:** 12-0625**Description:** Standard chains for shaft alignment brackets.**Note:** 2 pcs. Includes plastic box.

| D | E | XT |

**Extension chain, set****Part No:** 12-0128**Description:** For standard chains. For shaft diameters 150–450 mm [5.9–17.7"].**Note:** 2 pcs. included, with plastic box

| D | E | XT |

**Extension chain****Part No:** 12-0319**Description:** For standard chains. For shaft diameters 150–450 mm [5.9–17.7"].**Note:** 1 pc. included.

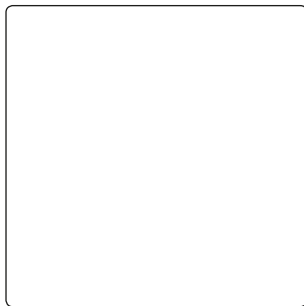
| D | E |

**Thin chain bracket****Part No:** 12-0412**Description:** For use for example when the space between coupling and machine is limited. Width: 12 mm [0.5"]. For shaft diameters 20–450 mm [0.8–17.7"].**Note:** Includes thin chains and tightening tool. Does not fit the XT series.

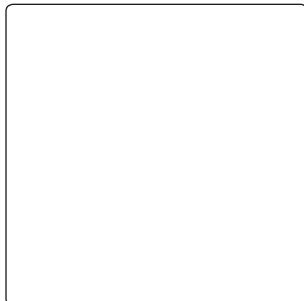
| D | E | XT |

**Thin chain bracket****Part No:** 12-1012**Description:** For use for example when the space between coupling and machine is limited. Width: 12 mm [0.5"]. For shaft diameters 20–450 mm [0.8–17.7"].**Note:** Includes thin chains and tightening tool. Photos show old threadings, but are otherwise correct.

| Ex |

**Shaft bracket with chain, stainless steel****Part No:** 12-0337**Description:** Bracket mainly for use with the D550 system which has a rod C–C of 70 mm. Pre-mounted chain and rods. For shaft diameters 20–150 mm [0.8–5.9"].**Note:** -

| Ex |

**Extension chain, stainless steel****Part No:** 12-0363**Description:** For use together with 12-0337. For shaft diameters 150–320 mm [5.9–12.6"]. Two extension chains: –500 mm [–19.6"]**Note:** Does not fit with standard chains.

| D | E |

**Offset bracket****Part No:** 01-1165**Description:** Allows axial displacement between measuring units to be able to rotate past projecting machine parts. For both E and D series.**Note:** 2 screws M6x16 also needed (Part No. 03-0045). V-bracket and rods not included.

| D | E | XT |

**Offset bracket****Part No:** 12-1008**Description:** Allows axial displacement between measuring units to be able to rotate past projecting machine parts. Also works as a converter between rod C–C 40 mm (D and E series) and C–C 56 mm (XT series) so older brackets can be used.**Note:** 2 screws M6x16 included

| D | E |



Sliding bracket

Part No: 12-0039

Description: For shaft alignment. The spherical feet can be placed in two different positions for adaption to small or large shaft diameters. Min./Max. diameters 90–600 mm [3.5–23.6"]. Used when the shafts cannot be rotated. Mounted with standard chains (not included).

Note: -

| D | E | XT |



Sliding bracket

Part No: 12-1010

Description: For shaft alignment. The spherical feet can be placed in two different positions for adaption to small or large shaft diameters. Min./Max. diameters 90–600 mm [3.5–23.6"]. Used when the shafts cannot be rotated. Mounted with standard chains (not included).

Note: Photos show old threadings, but are otherwise correct.

| D | E |



Sliding bracket with magnets

Part No: 12-0303

Description: The spherical feet can be placed in two different positions for adaption to small or large shaft diameters. With attachment magnets. Can also be mounted with standard chains (not included).

Note: -

| D | E |



Sliding bracket with magnets and probe

Part No: 12-0138

Description: For plumb measurement of e.g. generator shafts. The spherical feet can be placed in two different positions for adaption to small or large shaft diameters. With attachment magnets. Can also be mounted with standard chains (not included).

Note: -

| D | E |



Sliding bracket with turnable head

Part No: 12-0137

Description: For roll parallelism measurement. The spherical feet can be placed in two different positions for adaption to small or large roll diameters. With attachment magnets. Can also be mounted with standard chains (not included).

Note: -

| D |



Cardan bracket set

Part No: 12-0125

Description: For alignment of cardan/offset mounted machines. Offset range 0–900 mm.

Note: Delivered in plastic case. For D-series.

| E |

**Cardan bracket set****Part No:** 12-0615**Description:** For alignment of cardan/offset mounted machines. Offset range 0–900 mm.**Note:** Delivered in plastic case. For E-series.

| D | E | Ex | XT |

**Rod, 30 mm [1.18"]****Part No:** 01-0938**Description:** Stainless steel. Diameter 10 mm. Extendable.**Note:** 1 pcs.

| D | E | Ex | XT |

**Rods, 60 mm [2.36"]****Part No:** 12-0059**Description:** Stainless steel. Diameter 10 mm. Extendable. Plastic holder included.**Note:** 4 pcs.

| D | E | Ex | XT |

**Rods, 120 mm [4.72"]****Part No:** 12-0987**Description:** Stainless steel. Diameter 10 mm. Extendable. Plastic holder included.**Note:** 4 pcs.

| D | E | Ex | XT |

**Rods, 120 mm [4.72"]****Part No:** 12-0324**Description:** Stainless steel. Diameter 10 mm. Extendable. Plastic holder included.**Note:** 8 pcs.

| D | E | Ex | XT |

**Rods, 240 mm [9.44"]****Part No:** 12-0060**Description:** Stainless steel. Diameter 10 mm. Extendable. Plastic holder included.**Note:** 4 pcs.

| D |

**Rod adapter for D157****Part No:** 12-0320**Description:** For mounting of detector D157 on standard rods.**Note:** Includes items as pictured leftmost (adapter, hexagon wrench and screws). Magnet base, rods and detector not included.

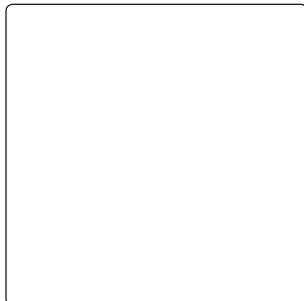
| D | E |

**Tube adapters for detector D157 and E9/E8****Part No:** 01-0777**Description:** Adapters mainly for mounting of detector D157, E8 or E9 and used for extruder measurements.**Note:** Manufactured on request to your specified diameter up to 250 mm. 2 pcs included. Includes items as pictured leftmost.

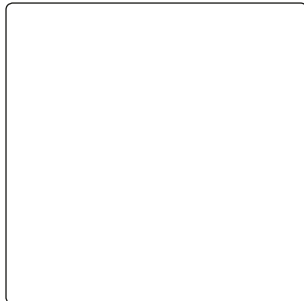
| D | E |

**Tube adapters with metal points****Part No:** -**Description:** Adapters mainly for mounting of detector D157, E8 or E9 and used for extruder measurements. With metal points of your choice and adapted for your application.**Note:** Manufactured on request to your specified diameter. 2 pcs included.

| D | E |

**Large extruder adapter/bracket****Part No:** -**Description:** Adapters mainly for mounting of detector D157, E8 or E9 and used for extruder measurements.**Note:** Manufactured on request to your specified diameter, from 250 mm and upwards.

| E |

**Roll bracket****Part No:** 12-0849**Description:** For use with detector E2 and precision level E290 when aligning rolls.**Note:** -

| E |

**Large roll kit****Part No:** 12-0885**Description:** Accessories for roll diameter 400–1300 mm [15.7–51.2"].**Note:** Only legs as on picture to the left included.

| E |



Extension Kit for E290 for large diameters

Part No: 12-0901

Description: For using the E290 Precision Level on diameters 55–800+ mm [2.16–31.50+ “].

Note: Includes 2 legs, 4 magnets and mounting screws.

| E |



Slide bracket Width 25 mm [0.99”]

Part No: 12-0768

Description: Bracket for straightness measurement of bores with a width of down to 25 mm [0.99”]. For bores \varnothing 80– mm [3.15”–]. Magnetic feet holds the bracket safely also upside down. With positioning guide (extended on picture to the right). Guide can be removed.

Note: Designed to fit with rod adapter 12-0767 and detectors E8/E9. If used with other detectors and adapters, it is those which determines the minimum measurable diameter.

| E |



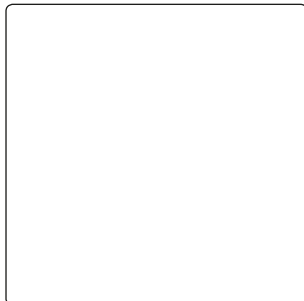
Rod adapter with built in target

Part No: 12-0767

Description: For detector E8/E9. With slidable target. For mounting of the detector on regular rods with 40 mm centre-to-centre distance. Can be used on Slide bracket 12-0768 or any other suitable bracket.

Note: Detector not included.

| D |



Cam shaft bracket

Part No: 12-0476

Description: Bracket for straightness measurement. For detector D157. For bores \varnothing 80– mm [3.15”–].

Note: -

| D | E |



Adapter bracket for 40 mm rod distance

Part No: 12-0815

Description: Bracket for Cam shaft bracket 12-0476. Makes it possible to also mount a D5, E4, E5 or E7.

Note: Only bracket with screws and rods, as pictured leftmost.

| D |



Magnet base with turnable head, for D157

Part No: 12-0608

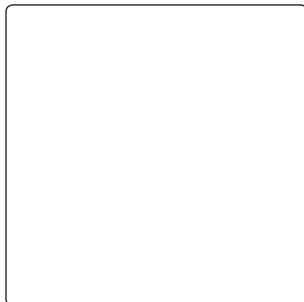
Description: Magnet base with turnable head. The C–C measure of the rods is 54 mm to fit with the upper part of the 12-0476 bracket.

Note: Bracket 12-0476 and rods also needed. Detector not included.

| D | E |

**Slide bracket min. Ø100 mm [3.94"]****Part No:** 12-0343**Description:** For bore straightness measurement. Hard anodised surface. For bores Ø100–200 mm [3.94"–7.88"].**Note:** -

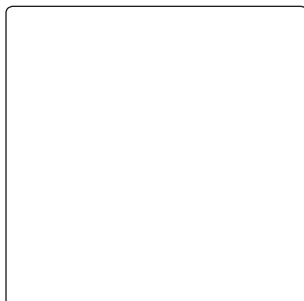
| D | E |

**Slide bracket min. Ø120 mm [4.72"]****Part No:** 12-0455**Description:** For bore straightness measurement. With magnetic feet. For bores Ø120–250 mm [4.72"–9.84"].**Note:** -

| D | E |

**Slide bracket min. Ø200 [7.87"]****Part No:** 12-0543**Description:** For bore straightness measurement. With magnetic feet. For bores Ø200–350 mm [7.87"–13.78"], width Min. 80 mm [3.15"].**Note:** -

| D | E |

**Slide bracket min. Ø300 mm [11.81"]****Part No:** 12-0510**Description:** For bore straightness measurement. With magnetic feet. For bores Ø300–500 mm [11.81"–19.68"], width Min. 100 mm [3.94"].**Note:** -

| D | E |

**Bore bracket adapter plate****Part No:** 12-0553**Description:** Bracket for use with detector D5, D157, E8 or E9.**Note:** Detector and arm set not included. Suitable Arm set is Part No. 12-0314.

| D | E |

**Detector arms Linebore****Part No:** 12-0314**Description:** For bracket 12-0553. For bores Ø100–500 mm [3.94"–19.68"], with the possibility to use the longest three arms as extension arms.**Note:** Also includes Foot set 12-0134 and 12-0143 (the rightmost picture)

| D | E |

**Foot set for linebore arms****Part No:** 12-0134**Description:** For use with linebore detector arms. Included in 12-0314.**Note:** -

| D | E |

**Foot set for Ø100–150 mm****Part No:** 12-0143**Description:** For use with linebore detector 12-0032 and bracket 12-0553. Included in 12-0314.**Note:** -

| D | E |

**Offset hub with counterlock****Part No:** 12-0661**Description:** For laser transmitter 12-0075.**Note:** -

| D | E |

**Offset hub with counterlock and tilt function****Part No:** 12-0537**Description:** For laser transmitter 12-0594.**Note:** -

| E |

**Offset hub with counterlock and tilt function for transmitter E30****Part No:** 12-0828**Description:** For laser transmitter E30, Part No. 12-0823.**Note:** -

| D | E |

**Pin for hub****Part No:** 01-1952**Description:** This pin is mounted on the hubs 12-0661, 12-0537 or 12-0828. The hub can then be mounted in a machine spindle or similar.

The pin is hollow so laser beam can be pointed also through pin.

Note: -

| D | E |



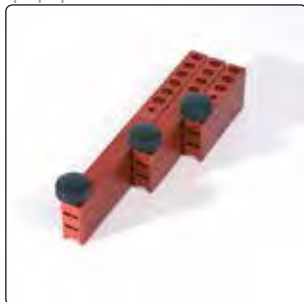
Arm kit with magnets

Part No: 12-0707

Description: For offset hub 12-0661 and 12-0537. Arms for bores \varnothing 100–500 mm [3.94"–19.68"].

Note: -

| D | E |



Offset hub arms

Part No: 12-0384

Description: For offset hub 12-0661 and 12-0537. For bores \varnothing 100–500 mm [3.94"–19.68"]. Also includes centering plug.

Note: -

| D | E |



Extension arms Linebore

Part No: 12-0282

Description: For extension of the Linebore offset hub arms.

Note: -

| D | E |



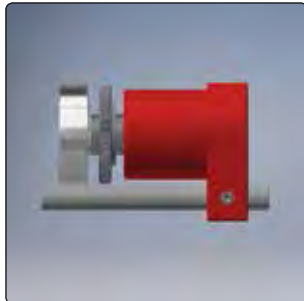
Magnets for offset hub arms

Part No: 12-0154

Description: For arms 12-0384. With plastic holder.

Note: -

| D | E |



Adjustable magnet for offset hub arms

Part No: 12-0990

Description: To use when the mounting surfaces for the hub arms aren't in same level. Adjustable 0–14mm [0–0.55"] compared to standard magnet level.

Note: -

| D | E |



Axial extension arms, Linebore

Part No: 12-0580

Description: Used for making it possible to reach the Linebore detector from the same side of the bore as the transmitter.

Note: 3 arms with magnets etc. as pictured on the left picture.

| D | E |



Laser transmitter bracket Turbine/Bore alignment

Part No: 12-0385

Description: For use with offset hub 12-0661 and laser transmitter D75. Included in system E950-B, E960-A, E960-B, D662 and D664. 2 aluminium beams, length 1100 mm and 500 mm.

Note: Transmitter and hub not included.

| D | E |



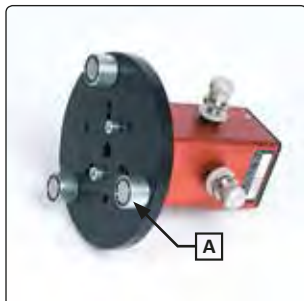
Rod bracket for laser D75

Part No: 12-0149

Description: For mounting of laser transmitter D75 on standard rods. Laser beam can point from the bracket or through the bracket.

Note: -

| D | E |



Bracket for laser D75

Part No: 12-0187

Description: To use on shaft ends, flywheels etc. Laser beam can point from the bracket or through the bracket.

Note: A. 3 super magnets.

| D | E |



Adapter plate for tilt table to magnet base

Part No: 12-0874

Description: For mounting D22 laser transmitter on a magnet base, or a magnet base with turnable head.

Note: 4 screws M6x16 also needed (not included).

| D | E |



Tilt table

Part No: 12-0110

Description: Tilt table mainly for transmitter D22 and D23, but can also be used together with transmitter D75, for example.

Note: Tool kit also included (see below).

| D | E |



Tilt table, turnable

Part No: 12-0864

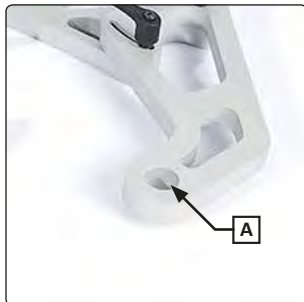
Description: Tilt table mainly for transmitter E30 Long Range. For fine adjustment of horizontal and vertical angle. Can be used with magnets or mounted on tripod.

Note: -

| D | E |

**Tool kit for tilt table****Part No:** 12-0622**Description:** Safety strap (12-0915), Machine/magnet base pin (01-0139), set of Hexagon wrenches, Rod tightening tool (03-0048), Feet with points (3 pcs).**Note:** Tool kit included in Tilt table, Part No. 12-0110.

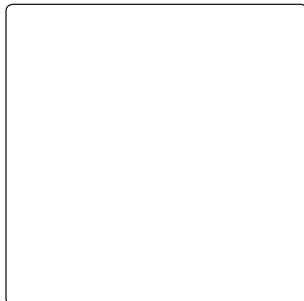
| D | E |

**Bracket for non-magnetic flanges, with handheld detector bracket****Part No:** 12-0628**Description:** For attachment of laser transmitter D22 or D23 outside flange, on non-magnetic flanges.**Note:** A. Customer adaptable diameter (18–38 mm) on request.

| D | E |

**Handheld detector bracket****Part No:** 12-0603**Description:** For use on non-magnetic surfaces.**Note:** Use with rods (not included). Includes 2 screws M6x10 and rod tightening tool.

| E |

**Bar bracket****Part No:** 12-0988**Description:** For alignment of e.g. bar feeders. With super magnet.**Note:** Rotational centre of magnet is centre for PSD.

| E |

**Spindle bracket for measuring unit****Part No:** 12-0787**Description:** Bracket for use with an ES-unit as laser transmitter. Clamping pin \varnothing 20 mm [0.79"], clamping length 40 mm [1.57"]. It is also possible to turn the measuring unit to point the laser beam through the pin. This is for example useful when aligning bar feeders.**Note:** Rods and measuring unit not included.

| D | E | XT |

**Angular adapter for detector, 90°****Part No:** 12-1018**Description:** Adapter positions detector exactly 90° to other direction. Mainly used for machine tool applications.**Note:** -

| D | E |

**Machine/magnet base pin for D22, short****Part No:** 01-0139**Description:** For mounting the transmitter in a spindle or on a magnet base, for example. Clamping pin \varnothing 16 mm [0.63"], clamping length 30 mm [1.18"].**Note:** This pin is included in the tilt table tool kit.

| D | E |

**Machine/magnet base pin for D22, Long****Part No:** 01-1333**Description:** For mounting the transmitter in a spindle (or on a magnet base), for example. Clamping pin \varnothing 20 mm [0.79"], clamping length 60 mm [2.36"].**Note:** -

| D | E |

**Mounting pin for D146****Part No:** 12-0568**Description:** Accessory mounting pin for laser transmitter D146.Makes it possible to point the laser beam into e.g. the chuck. Clamping \varnothing 20 mm [0.79"].**Note:** -

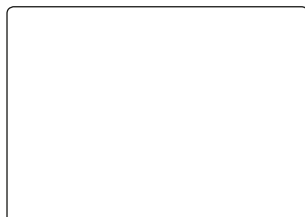
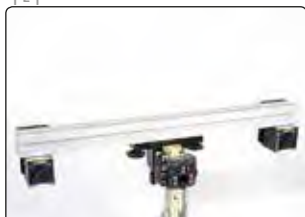
| D | E |

**Self centering bracket, Linebore****Part No:** 12-0341**Description:** For sterntube measurement. Smallest diameter 250 mm [9.84"]. Includes extension beams and rods for diameters up to 1200 mm [47.24"].**Note:** Includes items as pictured leftmost. No detector included.

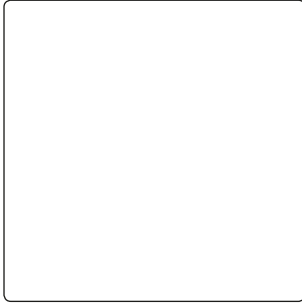
| D | E |

**Detector bracket "short stroke", Turbine****Part No:** 12-0438**Description:** With slidable beam. Makes it possible to reach several measurement positions without moving the entire bracket. One aluminium beam 1100 and one 600 mm included. For \varnothing 150–1700mm [5.9"–66.9"].**Note:** Detector not included.

| E |

**Detector bracket "long stroke", Turbine****Part No:** 12-0715**Description:** Measures diameters 200–1700 mm [7.8"–67"] as standard. Stroke: 60 mm [2.36"].Two aluminium beams 1100 mm [43.3"], one 600 mm [23.6"], rods 5x240 mm [9.44"], 4x120 mm [4.72"], 2x60 mm [2.36"], 1x30 mm [1.18"] included. For \varnothing 200–1700mm [7.8"–66.9"]

| D | E |



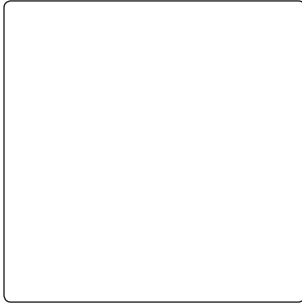
Aluminium beam, 500 mm [19.68"]

Part No: 03-0769

Description: Cross section measures 44x44 mm [1.73x1.73"].

Note: -

| D | E |



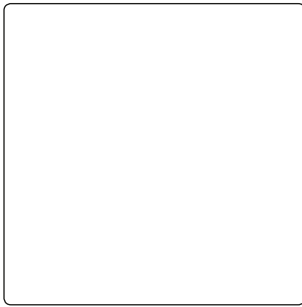
Aluminium beam, 600 mm [23.62"]

Part No: 03-0770

Description: Cross section measures 44x44 mm [1.73x1.73"].

Note: -

| D | E |



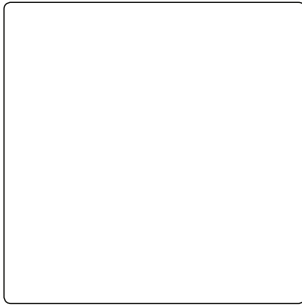
Aluminium beam, 1100 mm [43.31"]

Part No: 03-0771

Description: Cross section measures 44x44 mm [1.73x1.73"].

Note: -

| D | E |



Titanium rods, set of 3

Part No: 12-1019

Description: Very light, titanium rods. Mainly for use with the probe in turbine applications and similar. Diameter 10 mm. Extendable.

Note: 3 lengths included: 1000 mm [39.37"] weight 150 g [5.29 oz], 700 mm [27.56"] weight 110 g [3.88 oz], 400 mm [15.75"] weight 64 g [2.26 oz]

| D | E |



Upgrade kit Long stroke

Part No: 12-0855

Description: This kit is for upgrading of the long stroke brackets used in D650 with self center bracket, D660 Turbine, E950-B and E960-B. Makes it easier to adjust for different diameters, since the probe rod no longer has to be changed, instead the two other rods are extended when necessary.

Note: Only parts pictured on the left image included.

| D | E |



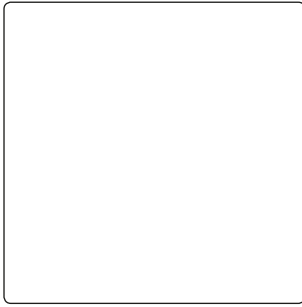
Tube bracket

Part No: 12-0814

Description: Included with Part No. 12-0438 and 12-0715.

Note: -

[D | E]



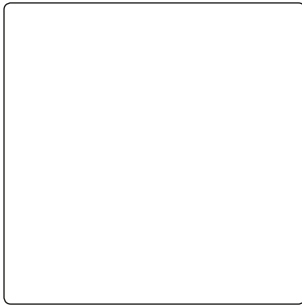
Ball top probe

Part No: 12-0439

Description: Probe for turbine measurement.

Note: -

[D | E]



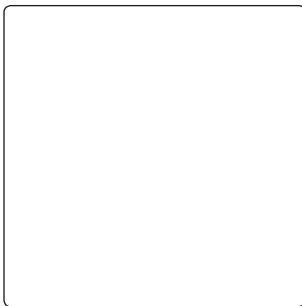
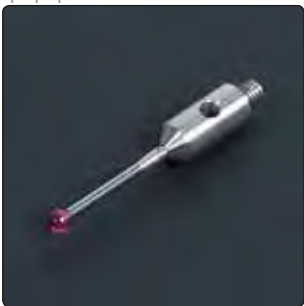
Short ball top probe

Part No: 12-0490

Description: Probe for turbine measurement.

Note: -

[D | E]



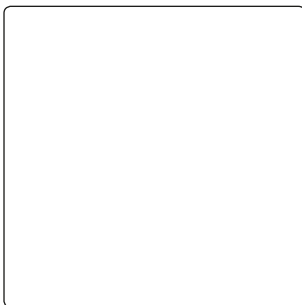
Measuring probe Ruby \varnothing 5 mm

Part No: 12-0805

Description: Probe for turbine measurement. With ruby top.

Note: -

[D | E]



Measuring probe Ruby \varnothing 2.5 mm

Part No: 12-0801

Description: Probe for turbine measurement. With ruby top.

Note: -

[D | E]



Centering target, Turbine

Part No: 12-0443

Description: For rough alignment of laser beam. 1 m + 0.5 m extension.

Note: -

[D | E]



Side support for D5 and other detectors

Part No: 12-0188

Description: For straightness measurement of engine bed plate. For use together with 12-0189.

Note: -

| D | E |



Side support for D75

Part No: 12-0189

Description: For straightness measurement of engine bed plate. For use together with 12-0188.

Note: -

| D | E |



Tripod

Part No: 12-0269

Description: For use with e.g. D22 and D46. Min./Max. height 500–2730 mm [19.7–107.5”]

Note: -

| E |



Parallelity kit

Part No: 12-0203

Description: For parallelism measurement of rolls. Includes Magnet base D45, Sliding bracket 12-0137, Sliding table 12-0202, 2 x Large target base line. Delivered in plastic case.

Note: Detector not included.

| D | E |



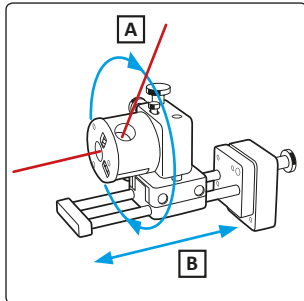
Sliding table for tripod

Part No: 12-0202

Description: Sliding table for D22 and D46 to mount on a tripod. Allows for 150 mm slide of the unit, for example to point the laser beam to a detector on a rod or flange without moving the tripod.

Note: -

| D | E |



Angular prism D46

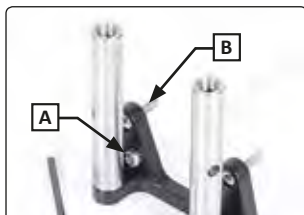
Part No: 12-0046

Description: Angular prism with built-in penta prism which deflects the beam 90°.

Note: A. With the rotatable angular prism you can reach the detector at any height on a flange, or on a roll at any height.

B. The beam is aligned with the detector using the sled.

| D | E |



Measuring unit holder for Angular prism

Part No: 12-0709

Description: Makes it possible to mount a measuring unit in front of the angular prism D46. Used for precision aligning the prism.

Note: A. Support screws, only used with some detectors to put the PSD at the correct height/centre in front of the prism.

B. Screws for mounting on the D46

| E |

**Sun visor E-series****Part No:** 12-0587**Description:** To use in very sunny conditions when light causes unstable values. Fits detector 12-0509 and measuring units 12-0433/12-0434. With magnet attachment.**Note:** -

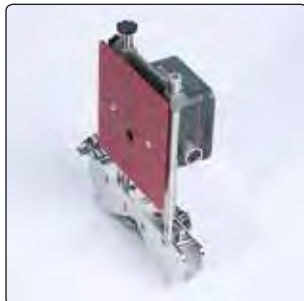
| Ex |

**Sun visor Ex****Part No:** 12-0592**Description:** To use in very sunny conditions when light causes unstable values. Fits measuring units 12-0334 and 12-0335. Clamps onto the front of the unit.**Note:** -

| D | E |

**Target 100x100 mm****Part No:** 12-0544**Description:** Rough alignment target for flatness measurement. Adjustable height (to align with either D22 or D23) and magnet base.

| Ex |

**Target Ex cardan****Part No:** 12-0402**Description:** Large target for use when aligning cardan/offset mounted machines. The target clamps onto the front of the D550 measuring units.**Note:** -

| E |

**Large target E-series****Part No:** 12-0588**Description:** The target is mounted with magnet attachment onto the front of detectors 12-0509, 12-0752 and 12-0702, as well as measuring units 12-0433 and 12-0434.**Note:** -

| E |

**Target E-series 20 x 20****Part No:** 12-0794**Description:** Rough alignment target for measuring units ES/EM, detectors E4, E5 and E7. Can be mounted to cover laser opening, functioning as dust cover and protection. With reflective centre point.**Note:** Only one target included per Part No., i.e. if you order targets for a pair of measuring units, you will need two 12-0794

| D | E |



Large target extruder

Part No: 12-0810

Description: Transparent target with adjustable magnets for mounting on tube end. Splits in two, to fit in the transportation case.

Note: -

| D |



Target cardan

Part No: 12-0139

Description: Large target for use when aligning cardan/offset mounted machines. The target clamps onto the front of the D-series measuring units.

Note: -

| E |



Bluetooth® Wireless unit

Part No: 12-0436

Description: The unit for wireless communication is inserted into the connector on the detector or measuring unit. No internal battery.

Note: Fits both E-series detector and measuring units which have an internal battery; 12-0509, 12-0702, 12-0752, 12-0434 and 12-0433.

| E |



Bluetooth® Wireless unit for E530

Part No: 12-0738

Description: For wireless connection of measuring units 12-0697 and 12-0698. With attachment screw.

Note: With built-in chargeable battery. Does only work with units 12-0697 and 12-0698. Also available as a kit (12-0739) with 2 wireless units and splitter charge cable.

| E |



Bluetooth® Wireless units kit for E530

Part No: 12-0739

Description: Includes 2 wireless units with battery, Part No. 12-0738, and 1 splitter cable Part No. 12-0728 for charging.

Note: Measuring unit not included.

| E |



Battery pack with built-in Bluetooth® unit

Part No: 12-0618

Description: Chargeable battery pack which gives extra operating time. With battery status indicator and On/Off button. Built-in Bluetooth® unit for wireless measurement data transfer to the display unit.

Note: Only for the E-series. Includes "red cable" 0.16 m [6.3"].

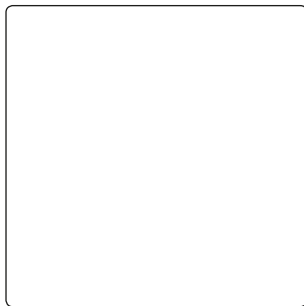
| E |

**Battery pack****Part No:** 12-0617**Description:** Chargeable battery pack which gives extra operating time. With battery status indicator and On/Off button.**Note:** Only for the E-series. Includes "red cable" 0.16 m [6.3"].

| E |

**Batterypack with Bluetooth®, Kit****Part No:** 12-0740**Description:** Kit including two Batterypack units with Bluetooth® (12-0618) and one splitter cable B (12-0725).**Note:** The cable cannot be used for data transfer, only for charging.

| E |

**Splitter box****Part No:** 12-0597**Description:** Used for connection of up to four Easy-Laser® units when charging them.**Note:** Standard "red" cables also needed.

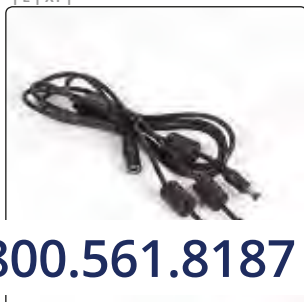
| E |

**Splitter cable B, for charging****Part No:** 12-0725**Description:** To connect two Easy-Laser® units when charging.**Note:** Only for charging, the cable cannot be used to transfer any measurement data. Not for use with 12-0738.

| E |

**Splitter cable A, for charging two 12-0738****Part No:** 12-0728**Description:** For charging two Bluetooth® wireless units with battery, Part No. 12-0738.**Note:** Only for charging 12-0738, the cable cannot be used to transfer any measurement data.

| E | XT |

**DC split cable for charging****Part No:** 12-0989**Description:** Cable for charging the units of system E420, E540 and XT440.**Note:** This cable cannot transfer any measurement data.

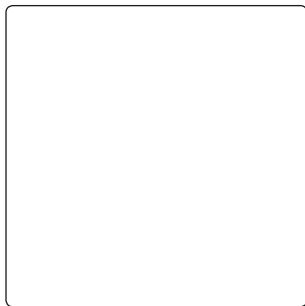
| E |

**DC cable extension 1.5 m****Part No:** 03-1203**Description:** For extension of the DC split cables Part No. 12-0989 and 12-0750.**Note:** -

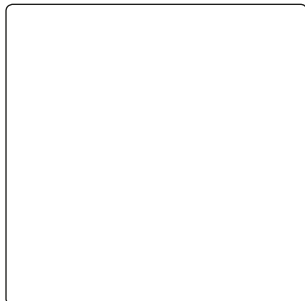
| E | XT |

**DC to USB adapter****Part No:** 12-0751**Description:** Adaptor to be used with cable 12-0989 and 12-0750.**Note:** Cannot transfer any measurement data.

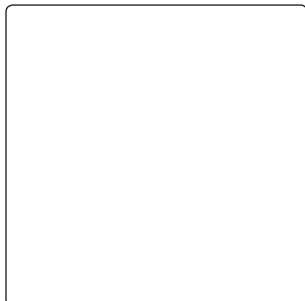
| D | E |

**“Red cable”, 0.16 m [6.3”]****Part No:** 12-0494**Description:** For connecting Easy-Laser® measurement equipment. With Push-Pull connectors.**Note:** -

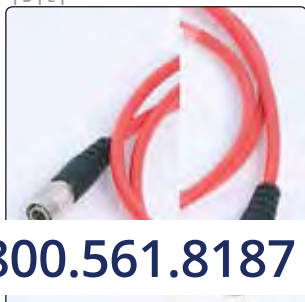
| D | E |

**“Red cable”, 0.4 m [15.7”]****Part No:** 12-0289**Description:** For connecting Easy-Laser® measurement equipment. With Push-Pull connectors.**Note:** -

| D | E |

**“Red cable”, 1.0 m [39.3”]****Part No:** 12-0179**Description:** For connecting Easy-Laser® measurement equipment. With Push-Pull connectors.**Note:** -

| D | E |

**“Red cable”, 2.0 m [78.7”]****Part No:** 12-0074**Description:** For connecting Easy-Laser® measurement equipment. With Push-Pull connectors.**Note:** -

| D | E |

**“Red cable”, extension, 5.0 m [16.4’]****Part No:** 12-0108**Description:** For connecting Easy-Laser® measurement equipment. With Push-Pull connectors.**Note:** Extension cable.

| D | E |

**“Red cable”, extension, 10.0 m [32.8’]****Part No:** 12-0180**Description:** For connecting Easy-Laser® measurement equipment. With Push-Pull connectors.**Note:** Extension cable.

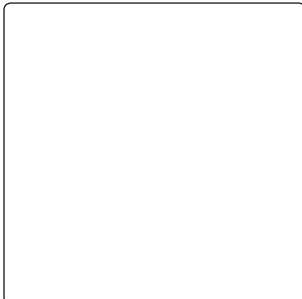
| D | E |

**“Red cable”, 2.0 m [78.7”] with angled connector****Part No:** 12-0735**Description:** For connecting Easy-Laser® measurement equipment. With Push-Pull connector on one end, and angled connector on the other. For use when there is limited space for the cable, e.g. small bore diameters.**Note:** -

| D | E |

**Cable support****Part No:** 12-0321**Description:** If the cable is accidentally pulled with great force, this support will prevent the connector from damage. It will also minimise the risk of moving the detector out of position.**Note:** -

| D | E |

**Cable tester****Part No:** 12-0362**Description:** Easily check the cables for connection problems. The diodes indicates broken threads.**Note:** -

| D |

**Printer cable****Part No:** 03-0241**Description:** For connection of the thermal printers 03-0341 and 03-0032 to display unit D279.**Note:** -

| D |

**PC cable (“null modem”)****Part No:** 03-0333**Description:** Length 1.8 m [71”]**Note:** -

| D |

**USB/RS232 adaptor****Part No:** 03-0722**Description:** Adaptor and cable extension.**Note:** Requires internet connection and Windows update.

| E | XT |

**USB A - USB B cable****Part No:** 03-0822**Description:** Cable with USB A to USB B connectors.**Note:** -

| E | XT |

**USB cable for Streaming values****Part No:** 03-1043**Description:** Null modem cable for use with E-series display units to stream values directly to a PC.**Note:** -

| E |

**Charger for E-series display unit****Part No:** 03-0821**Description:** -**Note:** Wall socket connection cable also needed, choose part depending on country of use.

| XT |

**Charger for XT-series****Part No:** 03-1256**Description:** -**Note:** Wall socket connection cable also needed, choose part depending on country of use.

| E | XT |

**Charger cable, EUR****Part No:** 03-0892**Description:** -**Note:** Charger unit also needed.

| E | XT |

**Charger cable, USA****Part No:** 03-0893**Description:** -**Note:** Charger unit also needed.

| E | XT |

**Charger cable, UK****Part No:** 03-0894**Description:** -**Note:** Charger unit also needed.

| E | XT |

**Charger cable, AUS****Part No:** 03-0895**Description:** -**Note:** Charger unit also needed.

| E |

**Charger 12–36V for car****Part No:** 12-0585**Description:** For charging the display unit via a 12–36V outlet, in for example a car. The red adapter can be detached for use with newer (smaller) types of connectors.**Note:** -

| E |

**VGA kit****Part No:** 12-0573**Description:** Makes it possible to show the display unit screen on a TV or projector. Includes cable 03-0901, cable 03-0902, converter and VGA circuit board.**Note:** Only for Display unit 12-0418 (E51) with serial number 94176 and lower. The VGA kit (the circuit board) must be ordered at system

| E |



VGA kit, for serial number 94177 and newer

Part No: 12-0840

Description: Makes it possible to show the display unit screen on a TV or projector. Includes cable 03-0901, cable 03-0902, converter and VGA circuit board.

Note: Only for Display unit 12-0418 (E51) with serial number 94177 and higher. The VGA kit (the circuit board) must be ordered at system purchase for factory installation, it cannot be mounted afterwards.

| E | XT |



HDMI to HDMI cable

Part No: 03-0901

Description: Length 3 m.

Note: -

| E |



VGA to VGA cable

Part No: 03-0902

Description: Length 3 m.

Note: -

| E |



Barcode reader

Part No: 12-0619

Description: For registration of machine data. Connected to the USB port.

Note: Includes 25 pcs bar code stickers.

| E |



Printer for E-series

Part No: 03-1004

Description: Battery operated thermal printer. With USB cable and 110–220V charger. For connection to all systems with E-series display units.

Note: 1 paper roll included. Spare rolls, Part No. 03-0041.

| D |



Printer 220 V

Part No: 03-0032

Description: Battery operated thermal printer. With cable and 220V charger. For connection to all systems with display unit D279.

Note: 1 paper roll included. Spare rolls, Part No. 03-0041.

| D |

**Printer 110 V****Part No:** 03-0341**Description:** Battery operated thermal printer. With cable and 110V charger. For connection to all systems with display unit D279.**Note:** 1 paper roll included. Spare rolls, Part No. 03-0041.

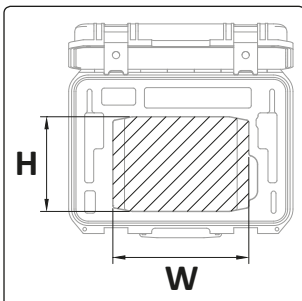
| Ex |

**Tool kit for system D550, complete****Part No:** 12-0360**Description:** With 4 rods 120 mm, 4 extension chains, rod tightening tool and hexagon tool.**Note:** Antistatic fabric.

| XT |

**Carrying case Small for system XT440****Part No:** 12-0972**Description:** Carrying case with pre-shaped interior for system XT440.**Note:** No place for display unit.

| XT |

**Carrying case Medium for system XT440****Part No:** 12-0973**Description:** Carrying case with pre-shaped interior for system XT440.**Note:** The interior has space for display unit XT11. If other display unit is to be placed in the case, please note the shape and dimension of the cutout (picture to the left). W=280 mm [11"], H= 195 mm [7.6"].

| E |

**Carrying case for system E710****Part No:** 12-0442**Description:** Carrying case with pre-shaped interior for system E710.**Note:** -

| E |

**Carrying case for system E540 and E530****Part No:** 03-1007**Description:** Carrying case with interior for system E540 and E530. Pre-cut also for accessories, just remove foam blocks (please see measurement system page for example). Divided in upper and lower compartment as pictured.**Note:** For exterior view, please see E420 carrying case

| E |



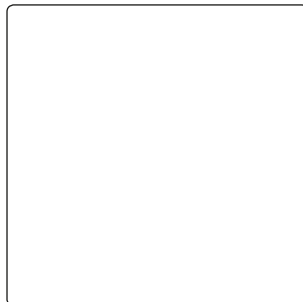
Carrying case for system E420

Part No: 03-1059

Description: Carrying case with interior for system E420. Only lower compartment as pictured.

Note: -

| D | E |

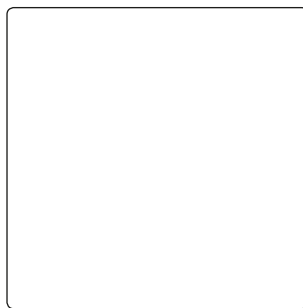


Transportation case, Cardan

Part No: 12-0237

Description: Rigid case for Cardan bracket set, or other accessories. To use e.g. when there isn't place in the system case.

Note: The foam is cut for Cardan brackets.



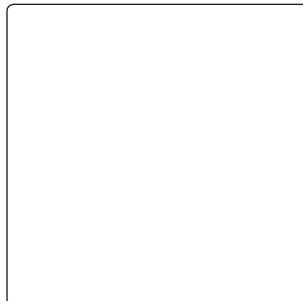
Transportation case

Part No: 03-0909

Description: Rigid case for D22 or D23, or other accessories. To use e.g. when there isn't place in the system case.

Note: The foam is cut to order. Specify what the case will be used for. Otherwise it will be delivered with foam uncut.

| Ex |



Transportation case Ex Large

Part No: 12-0456

Description: Larger case for system D550 Extreme™ with place for accessory brackets: sliding brackets, magnet bases, magnet brackets and thin chain brackets.

Note: Antistatic padding.

| D | E |



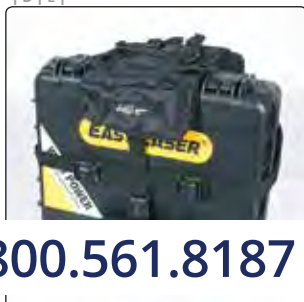
Back Pack System Medium

Part No: 03-1044

Description: For easy carrying of your system case.

Note: Fits the following cases: E540, E530, E420, D525, D505, D480, D450. Does not fit D600, D650, D670, D800. Case not included.

| D | E |



Back Pack System Large

Part No: 03-1045

Description: For easy carrying of your system case.

Note: Fits the following cases: E980, E940, E930, E920, E915, E910, E710, D550. Does not fit D600, D650, D670, D800. Case not included.



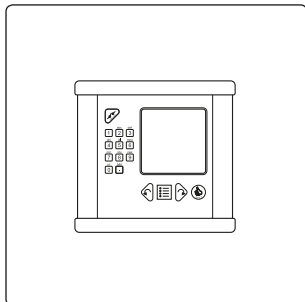
Luggage trolley

Part No: 03-1046

Description: Luggage trolley for easier transportation of system cases.

Note: Max. load 75 kg [165 lbs]. Dimensions WxHxD: 500x1070x455 mm [19.7x42.1x17.9"]. Dimensions folded WxHxD: 485x790x70 [19.1x31.1x2.8]. Weight 4.4 kg [9.7 lbs].

| D |



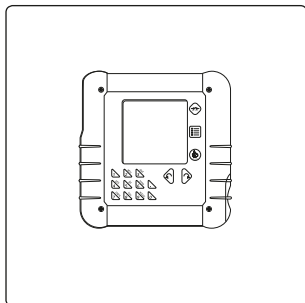
Protective case for older display units

Part No: 03-0042

Description: With strap.

Note: -

| D |



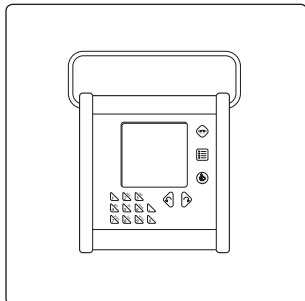
Protective case for display unit D279

Part No: 03-0592

Description: With strap.

Note: -

| Ex |



Protective case for display unit D336

Part No: 03-0799

Description: Made of antistatic materials. With strap.

Note: -

| E |



Protective case for display unit E51, E52 and E53

Part No: 01-1379

Description: With strap.

Note: -

| E |



LCD display protection film

Part No: 03-0972

Description: Thin film for scratch protection of the LCD display.

Note: -

| XT |

**LCD display protection film for XT11****Part No:** 01-1945**Description:** Thin film for scratch protection of the LCD display.**Note:** -

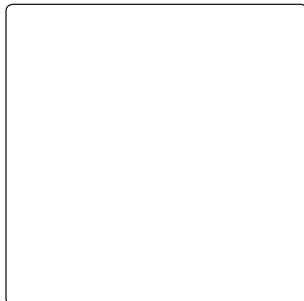
| D |

**Padded case for BTA****Part No:** 03-0591**Description:** Padded case with belt strap.**Note:** -

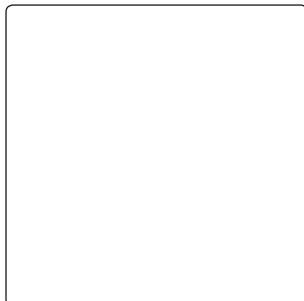
| E |

**Shoulder strap for display unit E-series****Part No:** 12-0495**Description:** -**Note:** -

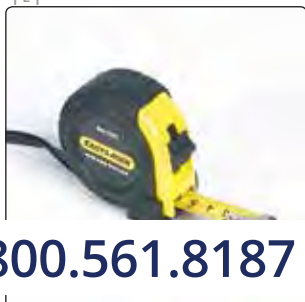
| D | E |

**Safety strap****Part No:** 12-0915**Description:** For use with laser transmitter D22, D23 and Digital Level E290.**Note:** -

| E |

**Measuring tape, 3 m [9.8']****Part No:** 03-0824**Description:** Fits the cases for the E-systems.**Note:** -

| E |

**Measuring tape, 5 m [16.4']****Part No:** 03-0842**Description:** Fits the cases for the E-series geometry systems.**Note:** -

| D | E |

**AC adaptor for D22 and D75****Part No:** 12-0205**Description:** For continuous power supply of laser transmitters D22 and D75.**Note:** Only 230V AC, 50–60 Hz, 30 mA / 1.5–9V DC, Max. 1.8W, 250mA.

| D | E |

**AC adaptor for D23****Part No:** 12-0294**Description:** For continuous power supply of the laser transmitter D23.**Note:** 100–240V AC, 50–60 Hz, 180 mA / 5V DC, 1A.

| D | E | XT |

**Demo unit Shaft****Part No:** 12-0416**Description:** For shaft alignment training. Can simulate both coupled and uncoupled shafts. With two shims 1.00 mm included.

Dimensions: appr. 400x200x200 mm [15.7x7,8x7.8"].

Note: To simulate an actual alignment, shims (Type A) of different thicknesses can be used. Measuring units and brackets not included.**Demo unit Sheave****Part No:** 12-0236**Description:** Can be placed standing or lying down.

WxHxD: 660x200x100 mm. Weight: 8 kg.

Note: BTA and targets not included.**Shim remover****Part No:** 01-0847**Description:** Tool for safer shim removal.**Note:** -**Hexagon wrench set****Part No:** 03-0967**Description:** Hexagon wrench set with dimensions 1.27, 1.5, 2, 2.5, 3, 4, 5 and 6 mm. Ball end.**Note:** -



Battery lid for older display units

Part No: 12-0284

Description: -

Note: -



Battery lid for display unit D279

Part No: 12-0354

Description: -

Note: -



Battery lid for display unit D336

Part No: 12-0546

Description: -

Note: -



Bottom part for old display unit

Part No: 01-0062

Description: -

Note: -



Side part for display unit D279

Part No: 01-0752

Description: -

Note: -

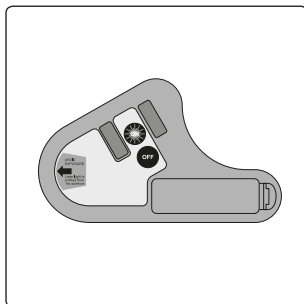
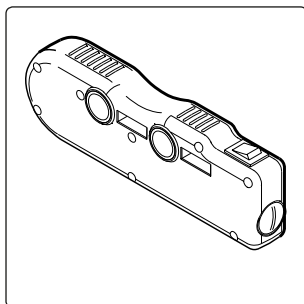
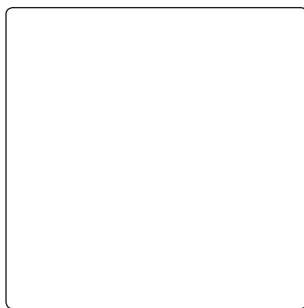
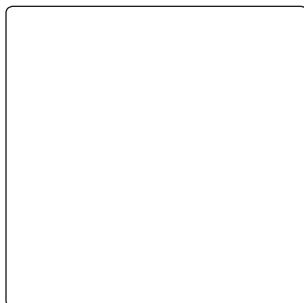
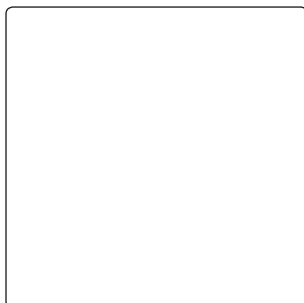


Top for D23

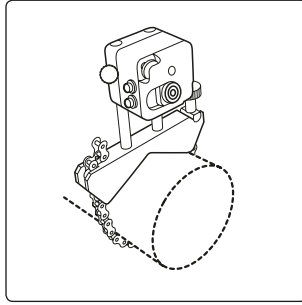
Part No: 01-0618 + 03-0505

Description: For protection of the rotating head.

Note: Top and screw are separate articles.

**Target for BTA, 18 mm****Part No:** 12-0394**Description:** Suitable for laser transmitter 12-0309 and 12-0390.**Note:** 1 pc.**Target for BTA, 15 mm****Part No:** 12-0213**Description:** Suitable for Easy-Laser® D80.**Note:** 1 pc.**Barrel nut****Part No:** 01-0045**Description:** For the standard chain.**Note:** -**Nut****Part No:** 01-0042**Description:** For the standard chain.**Note:** -**Standard chain****Part No:** 12-0033**Description:** -**Note:** -**Chain, stainless steel****Part No:** 12-0386**Description:** For use with 12-0337.**Note:** Does not fit with standard chains.

| D | E |

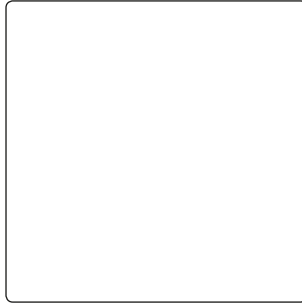


V-bracket

Part No: 12-0130

Description: For mounting on shaft or coupling.

Note: Just bracket, no chain.

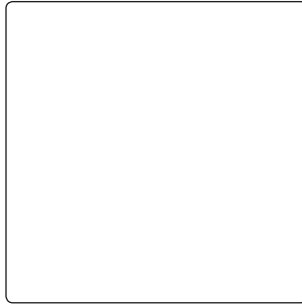


Screw M6x14

Part No: 03-0061

Description: -

Note: -

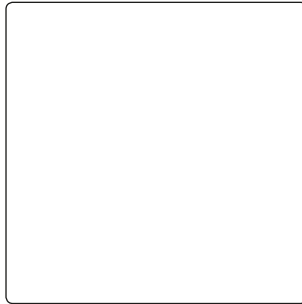
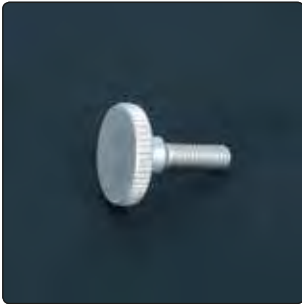


Rod tightening tool, 4 mm

Part No: 01-0048

Description: -

Note: -



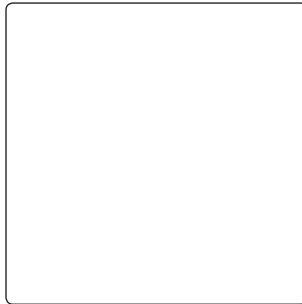
Locking screw

Part No: 01-0039

Description: Fits measuring units; 12-0001, 12-0002, 12-0119, 12-0120, 12-0114, 12-0116, 12-0776, 12-0777, 12-0698, 12-0697, 12-0746, 12-0747. Detectors; 12-0005, 12-0201, 12-0255.

Note: -

| E |

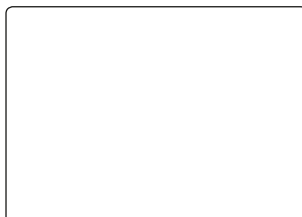


Locking screw

Part No: 03-0810

Description: Fits measuring units; 12-0434, 12-0433. Detectors; 12-0702, 12-0509, 12-0752.

Note: -



Spare locks for carrying cases

Part No: -

Description: Spare locks for different models of Easy-Laser® carrying cases.

Note: Ask us for more details on pricing and availability.

| Ex |

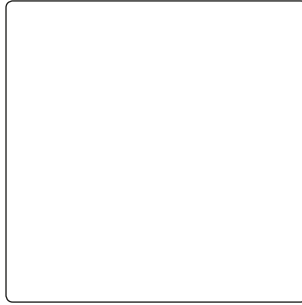


Case for BTA Ex

Part No: 03-0736

Description: Case for Ex environments. Made of antistatic material. With belt strap.

Note: -

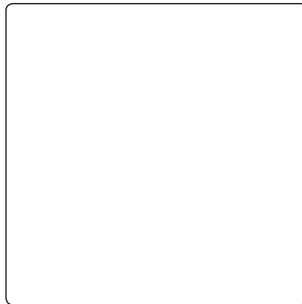


Cleaning cloth

Part No: 03-0878

Description: For cleaning of optical surfaces such as laser aperture and PSD window.

Note: -

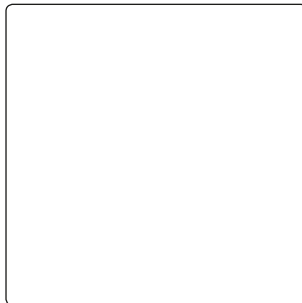


Thermo paper roll

Part No: 03-0041

Description: Paper roll for printer 03-0032 and 03-0341.

Note: -



Batteries

Description:

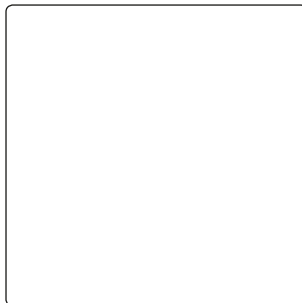
A. 3.6 V, Lithium (for BTA Ex), Part Nr 03-0730

B. 1.5 V, LR6 Alkaline, Part Nr 03-0247

C. 1.5 V, LR14 Alkaline, Part Nr 03-0242

D. 9V, 6LR61 Alkaline, Part Nr 03-0642

Note: -



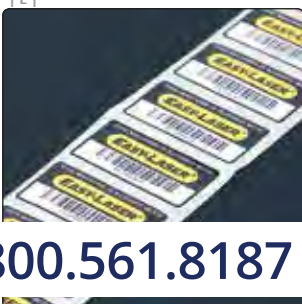
Sticker “This machine is aligned with”

Part No: 04-0053

Description: To stick on aligned machines. With writable surface for date and operator signature.

Note: 25 stickers.

| E |

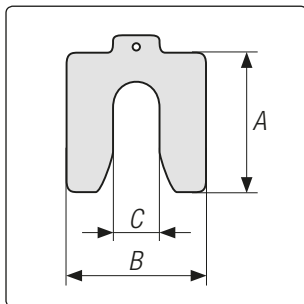


Barcode sticker

Part No: 04-0147

Description: To stick on aligned machines. With barcode.

Note: 25 stickers.

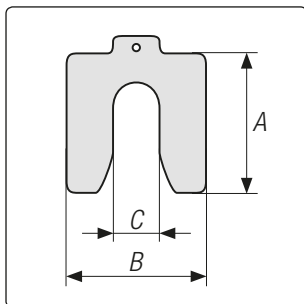


Shims case 1, 180 shims

Part No: 12-0258

Description: 180 shims, 10 pcs of each shim included. Weight 3.9 kg.
 Shims type 1, thickness 0.05, 0.10, 0.20, 0.50, 0.70, 1.00 mm.
 Shims type 2, thickness 0.05, 0.10, 0.20, 0.50, 0.70, 1.00 mm.
 Shims type 3, thickness 0.05, 0.10, 0.20, 0.50, 0.70, 1.00 mm.

Note: Shims type 1, A: 55 mm, B: 50 mm, C: 15 mm
 Shims type 2, A: 75 mm, B: 70 mm, C: 23 mm
 Shims type 3, A: 90 mm, B: 80 mm, C: 32 mm

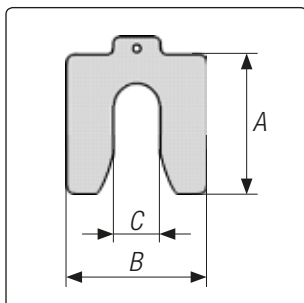


Shims case 2, 360 shims

Part No: 12-0259

Description: 360 shims, 20 pcs of each shim included. Weight 6.1 kg.
 Shims type 1, thickness 0.05, 0.10, 0.20, 0.50, 0.70, 1.00 mm.
 Shims type 2, thickness 0.05, 0.10, 0.20, 0.50, 0.70, 1.00 mm.
 Shims type 3, thickness 0.05, 0.10, 0.20, 0.50, 0.70, 1.00 mm.

Note: Shims type 1, A: 55 mm, B: 50 mm, C: 15 mm
 Shims type 2, A: 75 mm, B: 70 mm, C: 23 mm
 Shims type 3, A: 90 mm, B: 80 mm, C: 32 mm

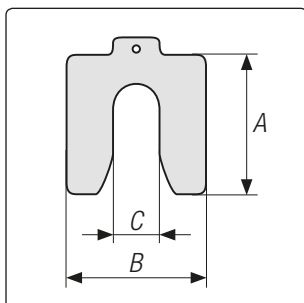


Shims case 3, shims of your choice

Part No: 12-0743

Description: For this case you choose number of shims yourself, from type 1, 2, 3, 4. We recommend minimum 10pcs/model. Please see price list for dimensions. Weight, case without shims 3.2 kg.

Note: Shims type 1, A: 55 mm, B: 50 mm, C: 15 mm
 Shims type 2, A: 75 mm, B: 70 mm, C: 23 mm
 Shims type 3, A: 90 mm, B: 80 mm, C: 32 mm
 Shims type 4, A: 125 mm, B: 105 mm, C: 44 mm

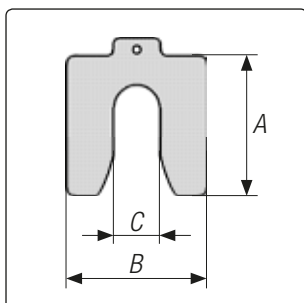


Shims case 4, shims of your choice

Part No: 12-0755

Description: For this case you choose number of shims yourself, from type 2, 3, 4, 5. We recommend minimum 10pcs/model. Please see price list for dimensions. Weight, case without shims 3.2 kg.

Note: Shims type 2, A: 75 mm, B: 70 mm, C: 23 mm
 Shims type 3, A: 90 mm, B: 80 mm, C: 32 mm
 Shims type 4, A: 125 mm, B: 105 mm, C: 44 mm
 Shims type 5, A: 200 mm, B: 200 mm, C: 85 mm

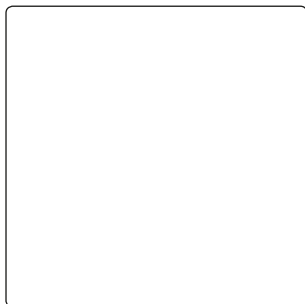


Shims

Part No: See price list.

Description: Blister packs of 10 pcs/size.

Type 1, thickness [mm] 0.05, 0.10, 0.20, 0.40, 0.50, 0.70, 1.00, 2.00, 3.00.
 Type 2, thickness [mm] 0.05, 0.10, 0.20, 0.40, 0.50, 0.70, 1.00, 2.00, 3.00.
 Type 3, thickness [mm] 0.05, 0.10, 0.20, 0.40, 0.50, 0.70, 1.00, 2.00, 3.00.
 Type 4, thickness [mm] 0.05, 0.10, 0.20, 0.40, 0.50, 0.70, 1.00, 2.00, 3.00.
 Type 5, thickness [mm] 0.05, 0.10, 0.20, 0.40, 0.50, 0.70, 0.80, 1.00, 2.00, 3.00.
Dimensions [mm]: Type 1, A: 55, B: 50, C: 15. Type 2, A: 75, B: 70, C: 23. Shims type 3, A: 90, B: 80, C: 32. Type 4, A: 125, B: 105, C: 44. Type 5, A: 200, B: 200, C: 85.

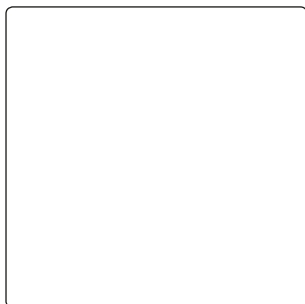


Cap

Part No: 13-0004

Description: Cap made of 100% cotton. Easy-Laser® embroidery on front. With strap for size adjustment.

Note: Not always in stock. Price upon request.

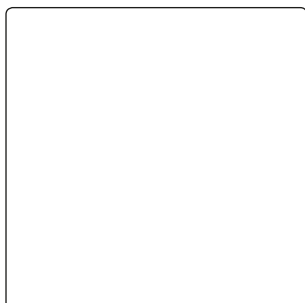


USB memory

Part No: 03-0914

Description: 2 GB memory stick USB. Easy-Laser® logo engraved on one side as on picture.

Note: Price upon request.



Pen

Part No: 13-0006

Description: With blue ink. Easy-Laser® logo and web address “www.easylaser.com” printed.

Note: Not always in stock. Price upon request.



Pen, engraved

Part No: 13-0011

Description: With blue ink. Engraved Easy-Laser® logo. Delivered in paper envelope as pictured.

Note: Not always in stock. Price upon request.

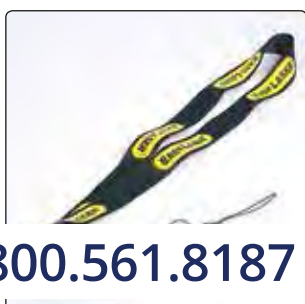


Playing cards

Part No: 13-0007

Description: Deck of cards. International symbols. Easy-Laser® logo and web address “www.easylaser.com” printed as on picture.

Note: Not always in stock. Price upon request.

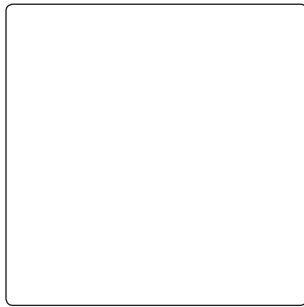


Key holder

Part No: 01-1095

Description: With snap-hook and string for mobile phone.

Note: Not always in stock. Price upon request.



Logo sticker

Part No: 04-0125 (small), 04-0124 (large)

Description: Durable sticker with strong adhesive. This is the same sticker as on the system cases. Available in two sizes: 200x44 mm [7.87x1.73"] and 305x67 mm [12.01x2.64"].

Note: Price upon request.

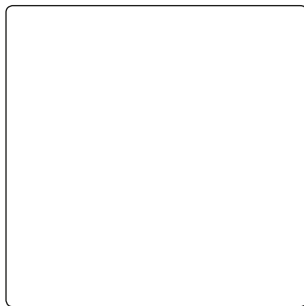


Notebook for the technician

Part No: 05-0792

Description: Notebook measuring 90x140 mm that fits easily into a pocket in your work clothes, with an insert comprising 38 pages of graph paper and conversion tables on the inside of the cover. Laser facts on back cover with QR code link to blog.easy-laser.com.

Note: -



A5 Notes

Part No: 13-0012

Description: 25 note papers, glued with cardboard back.

Note: -

**Laser transmitter D246 (Discontinued)****Part No:** 12-0246

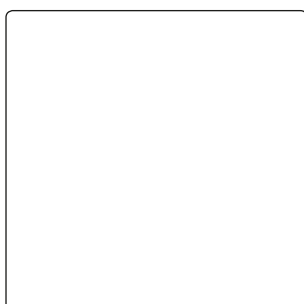
Description: For measuring straightness primarily in turbine applications. The laser beam can sweep 360° (rods will hinder the beam at three positions, see picture), and can be angled 90° to the sweep. Measurement distance 40 m [130'].

Note: This product is discontinued and replaced by 12-0706.

**Offset hub for D75 (Discontinued)****Part No:** 12-0132

Description: For offset adjustment of the laser transmitter in two perpendicular axes. Adjustment ± 5 mm in each direction.

Note: This product is discontinued and replaced by 12-0661.

**Offset hub with arms (Discontinued)****Part No:** 12-0364

Description: For laser transmitter D75. Offset adjustment possible of the laser transmitter in two perpendicular axes (± 5 mm in each direction). Arms for bores $\varnothing 100$ –500 mm [3.94"–19.68"].

Note: This product includes offset hub 12-0132, which is discontinued.

**Detector Extruder, diameter 20 mm [0.79"] (Discontinued)****Part No:** 12-0538

Description: PSD 10x10 mm [0.39"x0.39"]

Note: Tube adaptors also needed.

**Detector D6 (Discontinued)****Part No:** 12-0201

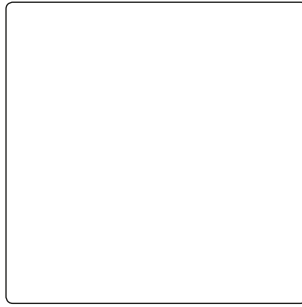
Description: Detector that can read the position of a rotating laser beam from the D23 laser transmitter. 1 axis PSD, 18x18 mm [0.71"x0.71"]. Connectors on top and back side; versatile and also makes it possible to series connect two or more detectors. Normally mounted on rods, but has many additional mounting possibilities thanks to threads on two sides.

Note: -

**Detector Linebore (Discontinued)****Part No:** 12-0032

Description: Detector for linebore applications. PSD 18x18 mm [0.71"x0.71"]. Built-in 360° electronic inclinometer. Connector on back side. Slots for mounting arms.

Note: Arm set 12-0314 also needed.



Detector bracket "long stroke", Turbine (Discontinued)

Part No: 12-0248

Description: Includes Part No. 12-0178 and 12-0302. Two aluminium beams 1100 and one 600 mm included. For \varnothing 200–1700mm [7.8"–66.9"].

Note: Detector not included.

[D]



System D800 Machine Spin (Discontinued)

Part No: 12-0220

Description: This system is no longer in stock as a standard system. Please see system E915 instead.

[D]



System D670 Parallelism (Discontinued)

Part No: 12-0224

Description: This system is no longer in stock as a standard system. Please see system E970 instead.

[D]

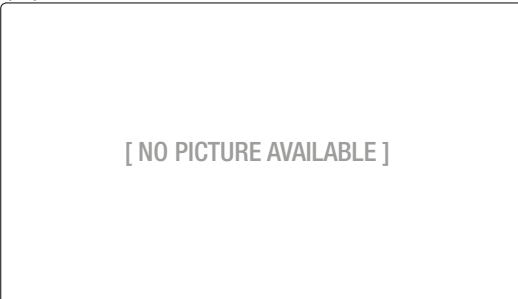


System D664 Turbine (Discontinued)

Part No: 12-0664

Description: This system is no longer in stock as a standard system. Please see system E960 instead.

[D]



System D663 Turbine (Discontinued)

Part No: 12-0663

Description: This system is no longer in stock as a standard system. Please see system E960 instead.

[D]



System D662 Turbine (Discontinued)

Part No: 12-0662

Description: This system is no longer in stock as a standard system. Please see system E960 instead.

| D |

[NO PICTURE AVAILABLE]

System D660 Turbine (Discontinued)**Part No:** 12-0185**Description:** This system is no longer in stock as a standard system. Please see system E960 instead.

| D |

**System D652 Linebore (Discontinued)****Part No:** 12-0652**Description:** This system is no longer in stock as a standard system. Please see system E950 instead.

| D |

**System D650 Linebore (Discontinued)****Part No:** 12-0034**Description:** This system is no longer in stock as a standard system. Please see system E950 instead.

| D |

**System D640 Machine tool (Discontinued)****Part No:** 12-0552**Description:** This system is no longer in stock as a standard system. Please see system E940 instead.

| D |

**System D630 Extruder (Discontinued)****Part No:** 12-0193**Description:** This system is no longer in stock as a standard system. Please see system E930 instead.

| D |

**System D600 Machine (Discontinued)****Part No:** 12-0133**Description:** This system is no longer in stock as a standard system. Please see system E920 instead.

| D |

**System D525 Shaft (Discontinued)****Part No:** 12-0231**Description:** This system is no longer in stock as a standard system. Please see system E710 instead.

| D |

**System D525 B Shaft (Discontinued)****Part No:** 12-0235**Description:** This system is no longer in stock as a standard system. Please see system E710 instead.

| D |

**System D505 Shaft (Discontinued)****Part No:** 12-0207**Description:** This system is no longer in stock as a standard system. Please see system E540 or E710 instead.

| D |

**System D480 Shaft (Discontinued)****Part No:** 12-0422**Description:** This system is no longer in stock as a standard system. Please see system E540 or E710 instead.

| D |

**System D450 Shaft (Discontinued)****Part No:** 12-0300**Description:** This system is no longer in stock as a standard system. Please see system E420 instead.

| D |

**System D150 BTA digital (Discontinued)****Part No:** 12-0310**Description:** This system is no longer in stock as a standard system. Please see system E180 instead.



Measuring unit M, PSD 10x10 mm (Discontinued)

Part No: 12-0001

Description: Laser diode and PSD detector in one housing. Mainly for shaft alignment. PSD 10x10 mm [0.39"x0.39"].

Note: To be used in pair with S unit 12-0002.



Measuring unit S, PSD 10x10 mm (Discontinued)

Part No: 12-0002

Description: Laser diode and PSD detector in one housing. Mainly for shaft alignment. PSD 10x10 mm [0.39"x0.39"].

Note: To be used in pair with M unit 12-0001.



Measuring unit M, PSD 18x18 mm, inclinometer (Discontinued)

Part No: 12-0119

Description: Laser diode and PSD detector in one housing. Built-in electronic 360° inclinometer. Mainly for shaft alignment. PSD 18x18 mm [0.71"x0.71"].

Note: To be used in pair with S unit 12-0120.



Measuring unit S, PSD 18x18 mm, inclinometer (Discontinued)

Part No: 12-0120

Description: Laser diode and PSD detector in one housing. Built-in electronic 360° inclinometer. Mainly for shaft alignment. PSD 18x18 mm [0.71"x0.71"].

Note: To be used in pair with M unit 12-0119.



Measuring unit M, PSD 10x10 mm, inclinometer (Discontinued)

Part No: 12-0423

Description: Laser diode and PSD detector in one housing. Built-in electronic 360° inclinometer. Mainly for shaft alignment. PSD 10x10 mm [0.39"x0.39"].

Note: To be used in pair with S unit 12-0424.



Measuring unit S, PSD 10x10 mm, inclinometer (Discontinued)

Part No: 12-0424

Description: Laser diode and PSD detector in one housing. Built-in electronic 360° inclinometer. Mainly for shaft alignment. PSD 10x10 mm [0.39"x0.39"].



Measuring unit M, PSD 30x30 mm, inclinometer (Discontinued)

Part No: 12-0256

Description: Laser diode and PSD detector in one housing. Built-in electronic 360° inclinometer. Mainly for shaft alignment. PSD 30x30 mm [1.18"x1.18"].

Note: To be used in pair with S unit 12-0260.



Measuring unit S, PSD 30x30 mm, inclinometer (Discontinued)

Part No: 12-0260

Description: Laser diode and PSD detector in one housing. Built-in electronic 360° inclinometer. Mainly for shaft alignment. PSD 30x30 mm [1.18"x1.18"].

Note: To be used in pair with M unit 12-0256.



Measuring unit M, 2 axis, PSD 18x18 mm, inclinometer (Discontinued)

Part No: 12-0116

Description: Laser diode and PSD detector in one housing. For shaft alignment and many geometrical applications, thanks to the 2 axis PSD (18x18 mm [0.71"x0.71"]).

Note: -

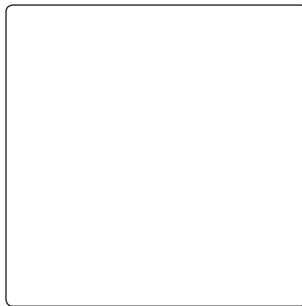


Detector 30 mm, D-series (Discontinued)

Part No: 12-0255

Description: 2 axis PSD, 30 x 30 mm [1.18"x1.18"]. Built-in 360° electronic inclinometer. Connectors on top and back side; versatile and also makes it possible to series connect two or more detectors. Normally mounted on rods, but has many additional mounting possibilities thanks to threads on two sides.

Note: -



Offset bracket (Discontinued)

Part No: 01-0076

Description: Please see 01-1165 instead.

Note: -

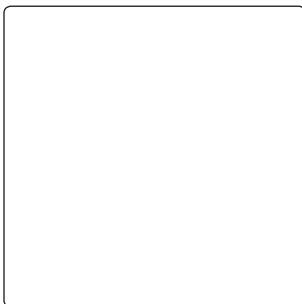


Measuring tape, 2 m [6.5'] (Discontinued)

Part No: 12-0012

Description: -

Note: -



Large target extruder (Discontinued)

Part No: 12-0199

Description: Please see 12-0810 instead.

Note: -



CD (Discontinued)

Part No: 06-0001

Description: -

Note: -



Magnet base bracket for Linebore detector (Discontinued)

Part No: 12-0329

Description: With this bracket the Linebore detector (Part No. 12-0032) can be mounted on a magnet base.

Note: Screws not included.



Height adjustment bracket for D6 (Discontinued)

Part No: 12-0417

Description: For fine adjustment of detector D6 on rods.

Note: -



Detector E8, 1-axis PSD (Discontinued)

Part No: 12-0758

Description: Detector diameter 45 mm [1.77"]. 1 axis PSD, 20x20 mm [0.79"x0.79"]. Built-in 360° electronic inclinometer. Built-in Bluetooth® wireless communication and rechargeable battery. There is also a connector on the back side for standard "red cable" (charging and data transfer). Mounting threads on both ends, for tube adapters (01-0777) or other suitable brackets (e.g. 12-0767 and 12-0553).

Note: Make sure you have a suitable bracket!



Detector E4 (Discontinued)

Part No: 12-0702

Description: Detector for the E-series. 1 axis PSD, 20x20 mm [0.79"x0.79"]. Built-in 360° electronic inclinometer. Two connectors for making it possible to connect two detectors or more in series. Normally mounted on rods, but has many additional mounting possibilities thanks to threads on two sides.

| D |

**Detector D157 (Discontinued)****Part No:** 12-0157

Description: 2 axis PSD, 20x20mm [0.79"x0.79"]. Minimum measuring diameter 42 mm. Built-in 360° electronic inclinometer. Connectors on side and back (useful for different bracket designs and applications). Mounting threads on both ends, for tube adapters (01-0777) or other suitable brackets (e.g. 12-0476, 12-0320, 12-0553).

Note: -

| D |

**Detector D5 (Discontinued)****Part No:** 12-0005

Description: 2 axis PSD, 18x18 mm [0.71"x0.71"]. Built-in 360° electronic inclinometer. Connectors on top and back side; versatile and also makes it possible to series connect two or more detectors. Normally mounted on rods, but has many additional mounting possibilities thanks to threads on three sides.

Note: -

| E |

**System E530 Shaft (Discontinued)****Part No:** 12-0695

Description: This system is no longer in stock as a standard system. Please see system E710 or E540 instead.

| D |

**Display unit D-series: D279 (Discontinued)****Part No:** 12-0279

Description: Available in different measurement program configurations. Which programs are available depends on in which system the display unit is included.

Note: -

| D |

**AC adaptor for Display unit D279 (Discontinued)****Part No:** 12-0590

Description: For unbroken power supply of the Display unit.

Note: Wall socket connection cable also needed, choose part depending on country of use (Part Numbers: 03-0892, 03-0893, 03-0894 or 03-0895). 100–240V AC, 50–60 Hz, 30 mA / 12V DC, 1.5A.

**Detector for sheave/pulley alignment (Discontinued)****Part No:** 12-0308

Description: Detector unit that reads off the sheaves position in one direction (horizontal/vertical) at a time. With built-in display.

Note: For use together with BTA transmitter 12-0309.

| D |

**Sun visor (Discontinued)****Part No:** 01-1352**Description:** To use in very sunny conditions when light causes unstable values. Fits detector D6.**Note:** -

| D |

**Easy-Laser® D130 BTA Ex (Discontinued)****Part No:** 12-0400**Description:** This system is no longer in stock as a standard system.

| D |

**Laser transmitter for sheave/pulley alignment Ex (Discontinued)****Part No:** 12-0390**Description:** Laser transmitter producing a laser line parallel to the object it is mounted to. For use in potentially explosive environments.**Note:** Only transmitter as pictured, no targets included. (Complete system, see Part No. 12-0400.)

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TECHNICAL SPECIFICATIONS

READ THIS INFORMATION CAREFULLY

- On the following pages technical specifications for the most common units can be found. We will not list all products here.
- You should always also read the complete product description to find out about compatibility with other Easy-Laser® products.
- Please note that the measurement range for laser transmitters is the maximum range, and in reality depends on the detector used and the application.
- Operating times also depends on the actual application, therefore it is not specified for all products. See system specifications in each brochure for more detailed information.
- The drawings show the most important measures. Because of limited space we cannot always place the projections according to European drawing projection, but that is otherwise the method used.



COMPATIBILITY BETWEEN D, E AND XT

- The D-series, E-series and XT-series detectors and display units can only be used within its own product series. This is due to software communication.
- Brackets for D- and E-series has a rod C–C of 40 mm, XT-series rod C–C is 56 mm. The new XT offset bracket (12-1008) function as an adaptor for these two measures, but doesn't fit all older brackets. We will of course continue the development and adaptation of brackets.

Software communication



Brackets



SPECIFICATIONS FOR BUILT-IN RECHARGEABLE BATTERIES:

Easy-Laser Part No.	Type	Voltage	Output	Capacity	Included in Part No.
03-0757	Li-Ion	3.7 V	43 Wh	11600 mAh	12-0418, 12-0700
03-0765	Li-Po	3.7 V	2.5 Wh	680 mAh	12-0433, 12-0434, 12-0509, 12-0688, 12-0702, 12-0738, 12-0752, 12-0759, 12-0758, 12-0846
03-0971	Li-Ion	3.7 V	8.5 Wh	2300 mAh	12-0617, 12-0618, 12-0823, 12-0845
03-1052	Li-Po	3.7 V	1.5 Wh	380 mAh	12-0746, 12-0747, 12-0776, 12-0777, 12-0791
03-1055	Li-Ion	3.7 V	34 Wh	9200 mAh	12-0748
12-0953	Li-Po	3.7 V	7.4 Wh	2000 mAh	12-0944, 12-0943
12-0952	Li-Ion	7.4 V	39.22 Wh	5300 mAh	12-0961 (2 pcs)





Display unit D336, Part No. 12-0336

Type of display	Dot matrix LCD
Display size	73x73 mm
Displayed resolution	Changeable: 0.1; 0.01; 0.001 mm. 5; 0.5; 0.05 mils/thou
Battery	4 Duracell Procell Alkaline Mn1400 LR14 1.5 V
Output port	RS232 with USB adapter. For printer+PC communication
Keyboard	Membrane keys with alphanumeric multifunction
Storage memory	Space for 1,000 shaft alignment measurements
Settings	For Measurement value filtering, Unit (mil/thou/mm) etc.
Protection	IP66/IP67: Shockproof, Waterproof, Dustproof
Housing material	Anodised aluminium/Chrome-plated aluminium
Dimensions	WxHxD: 177x180x43 mm
Weight	1000 g



Bluetooth® Wireless unit, Part No. 12-0436

Wireless communication	Class I Bluetooth® wireless technology
Temperature range	-10–50 °C
Environmental protection	IP class 66 and 67
Housing material	ABS
Dimensions	WxHxD: 53x32x24 mm [2.1"x1.2"x0.9"]
Weight	25 g [0.9 oz]



Battery pack with built-in Bluetooth® Wireless unit, Part No. 12-0618

Wireless communication	Class I Bluetooth® wireless technology
Internal battery	Li Ion
Temperature range	-10–50 °C
Connection cable	0.16 m [6.3"], included
Housing material	Anodized aluminium + POM
Dimensions	WxHxD: 60x85x43 mm [2.36"x3.35"x1.69"]
Weight	180 g [6.3 oz]



Bluetooth® Wireless unit with battery, Part No. 12-0738

Wireless communication	Class I Bluetooth® wireless technology
Internal battery	Li Po
Temperature range	-10–50 °C
Housing material	ABS + stainless steel
Dimensions	WxHxD: 55x65x37 mm [2.2"x2.6"x1.4"]
Weight	70 g [2.5 oz]



Vibrometer probe D283, Part No. 12-0283

Probe sensitivity	100 mV/g ±10%
Dimensions	Magnet: L=20 mm [4/5"], Ø=15 mm [19/32"] Gauge tip: L=65 mm [2 1/2"]



Vibrometer probe E285, Part No. 12-0656

Probe sensitivity	100 mV/g ±10%
Dimensions	Magnet: L=20 mm [4/5"], Ø=15 mm [19/32"] Gauge tip: L=65 mm [2 1/2"]




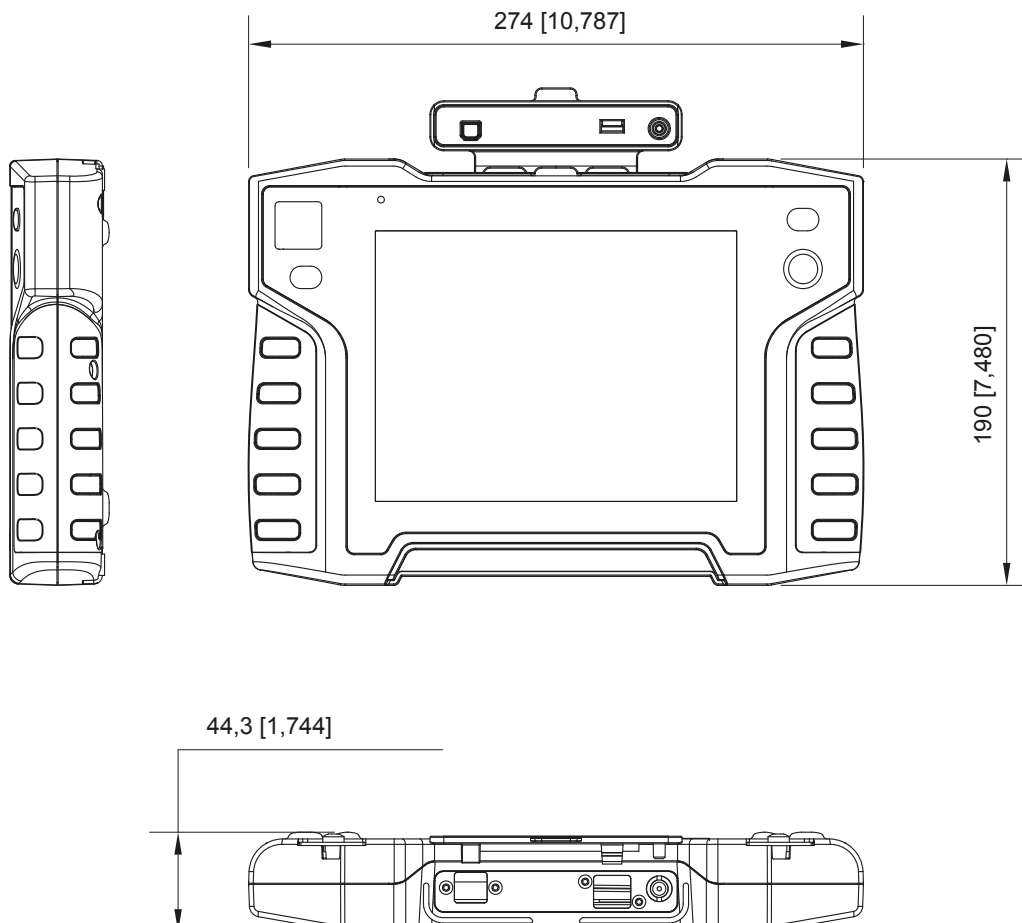
Measuring unit Extreme. M: Part No. 12-0334, S: Part No. 12-0335

Type of laser	Diode laser
Laser wavelength	635–670 nm, visible red light
Laser safety class	Class 2
Laser output power	< 1 mW
Resolution	0.001 mm
Type of detector	2-axis PSD 20x20 mm
Inclinometers	Electronic inclinometers, 0.1° resolution
Thermal sensors	±1°C accuracy
Protection	No influence from ambient light
Protection	IP66/IP67: Shockproof, Waterproof, Dustproof
Housing material	Hard anodised aluminium
Dimensions	WxHxD: 75x65x52 mm
Weight	220 g


Display unit XT11, Part No. 12-0961

mm [inch]

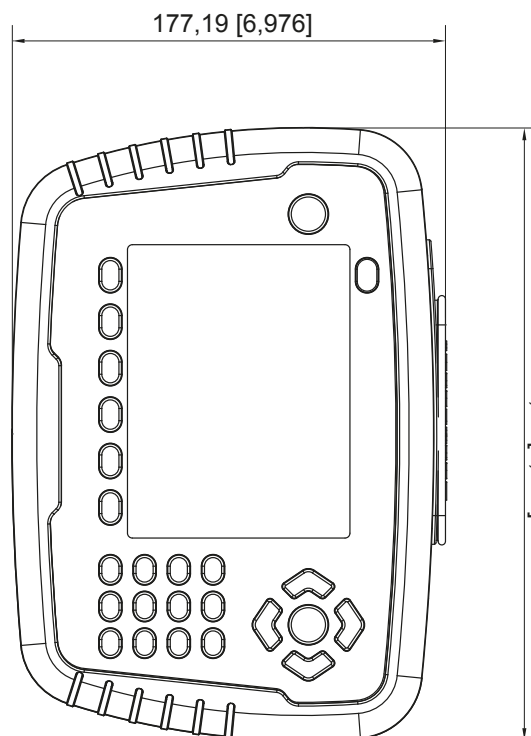
	CE
Type of display/size	SVGA 8" colour screen, backlit LED, multitouch
Battery type	Heavy duty Li Ion chargeable
Operating time	Up to 16 h continuously
Connections	USB A, USB B, Charger, AV (optional)
Communication	Wireless technology, WiFi
Camera, with diode lamp	13 Mp
IR camera (optional)	FLIR LEPTON® Long Wave Infrared
Help functions	Built-in manual
Environmental protection	IP class 66 and 67
Operating temperature	-10–50 °C
Storage temperature	-20–50 °C
Relative humidity	10–95%
OLED display	96x96 pixels
Housing material	PC/ABS + TPE
Dimensions	WxHxD: 274x190x44 mm [10.8x7.5x1.7"]
Weight	1450 g [51.1 oz]



Display unit E51, Part No. 12-0418

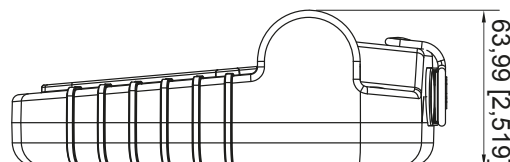
	CE
<i>Note: the look of the display unit keyboard can vary depending on market.</i>	
Type of display/size	VGA 5.7" colour screen, backlit LED
Displayed resolution	0.001 mm / 0.05 thou
Power management	Endurio™ system for unbroken power supply
Internal battery (fixed)	Heavy duty Li Ion chargeable
Battery compartment	For 4 x R14 (C)
Temperature range	-10–50 °C
Connections	USB A, USB B, Easy-Laser® units, Charger
Wireless communication	Class I Bluetooth® wireless technology
Internal memory	>100 000 measurements can be saved
Help functions	Calculator, Unit converter
Environmental protection	IP class 65
Housing material	PC/ABS + TPE
Dimensions	WxHxD: 250x175x63 mm [9.8"x6.9"x2.5"]
Weight (without batteries)	1080 g [2.4 lbs]

mm [inch]




Display unit E52, Part No. 12-0700

	CE
Type of display/size	VGA 5.7" colour screen, backlit LED
Displayed resolution	0.001 mm / 0.05 thou
Internal battery (fixed)	Heavy duty Li Ion chargeable
Temperature range	-10–50 °C
Connections	USB A, USB B, Easy-Laser® units, Charger
Wireless communication	Class I Bluetooth® wireless technology
Internal memory	>100 000 measurements can be saved
Help functions	Calculator, Unit converter
Environmental protection	IP class 65
Housing material	PC/ABS + TPE
Dimensions	WxHxD: 250x175x63 mm [9.8"x6.9"x2.5"]
Weight	1020 g [2.3 lbs]




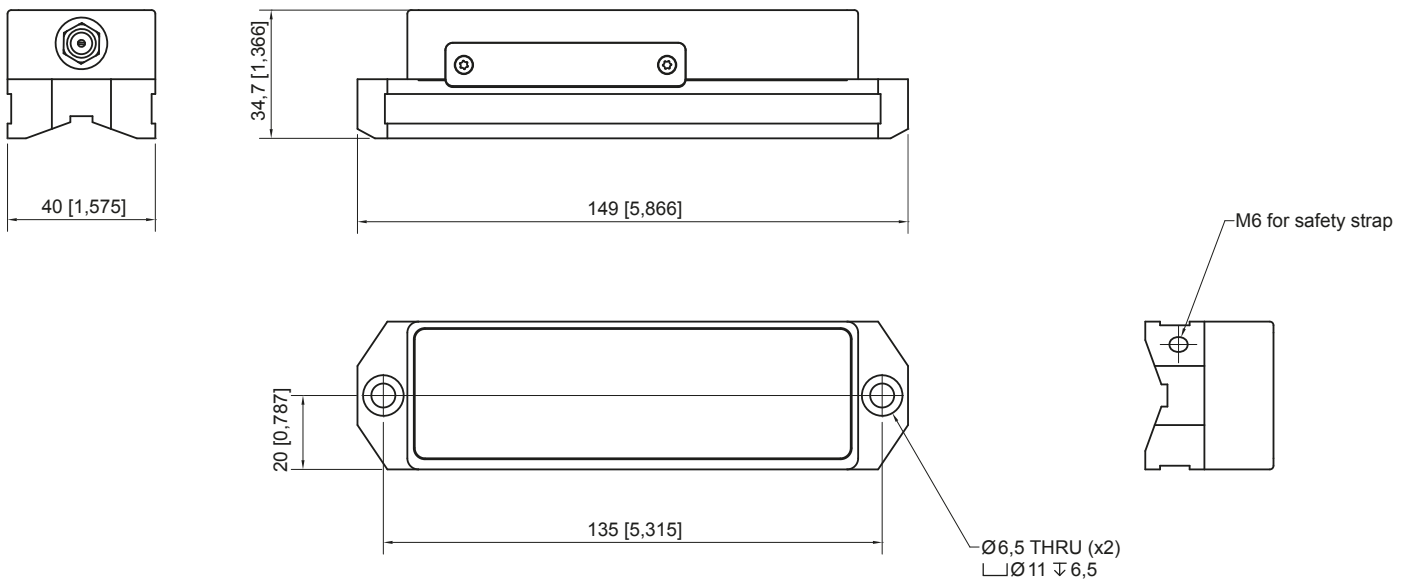
Display unit E53, Part No. 12-0748

	CE
Type of display/size	VGA 5.7" colour screen, backlit LED
Displayed resolution	0.001 mm / 0.05 thou
Internal battery (fixed)	Heavy duty Li Ion chargeable
Temperature range	-10–50 °C
Connections	USB A, Charger
Wireless communication	Class I Bluetooth® wireless technology
Internal memory	>2000 measurements can be saved
Help functions	Calculator, Unit converter
Environmental protection	IP class 65
Housing material	PC/ABS + TPE
Dimensions	WxHxD: 250x175x63 mm [9.8"x6.9"x2.5"]
Weight	910 g [2.0 lbs]


Digital Precision Level, Part No. 12-0846

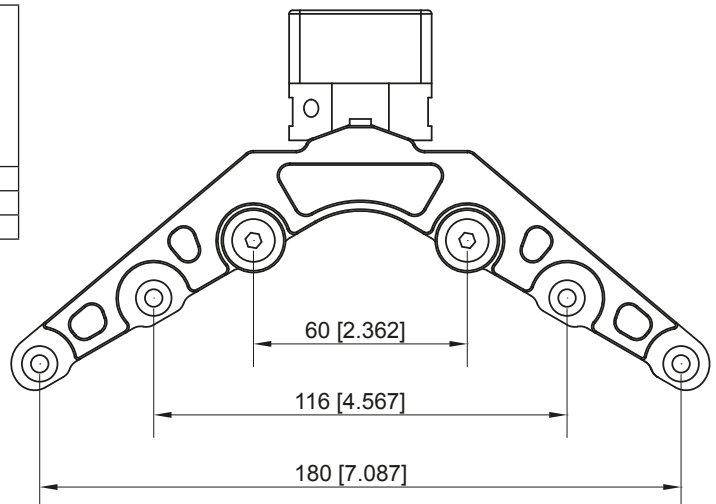
mm [inch]

	CE
Resolution	0.01 mm/m (0.001°)
Range	± 2 mm/m
Measurement error	Better than ± 0.02 mm/m
Type of display	OLED
Wireless communication	Class I Bluetooth® wireless technology
Environmental protection	IP Class 67
Operating temperature	-10–50 °C
Internal battery	Li Po
Material	Anodized aluminium , ABS plastics
Dimensions	WxHxD: 149x40x35 mm [5.9x1.6x1.4"]
Weight	530 g [18.7oz]



Extension kit for Precision Level, Part No. 12-0901

	
For diameters	55–800+ mm [2.16–31.50+"]
Material	Anodized aluminium , Stainless steel feet
Weight	430g [15.2 oz]



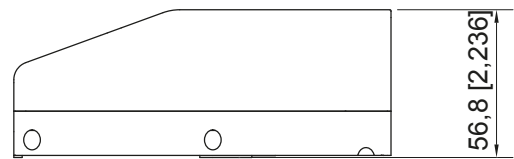
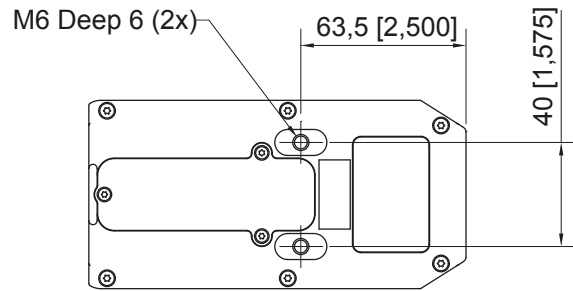
Laser transmitter E30 Long range, Part No. 12-0823



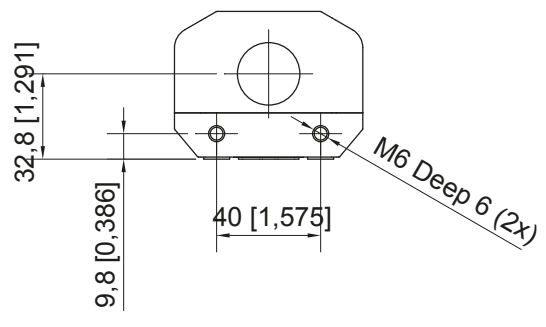
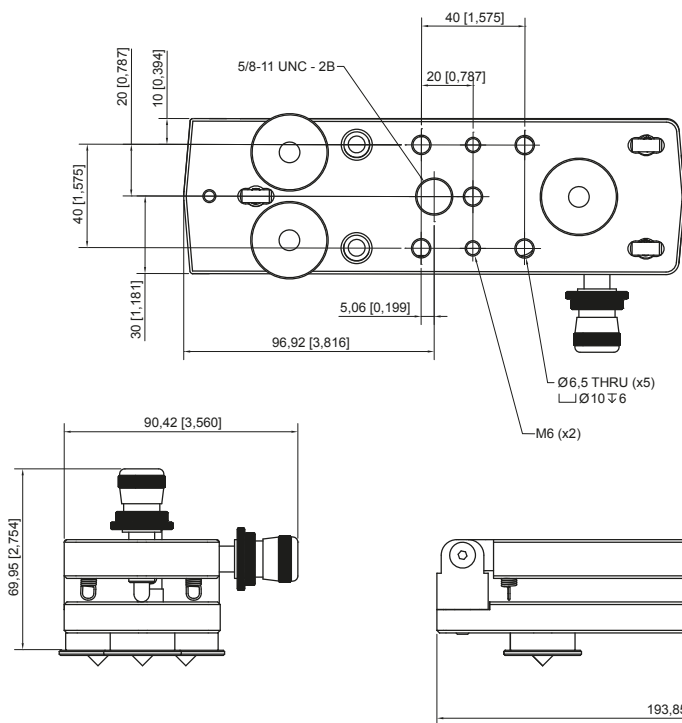
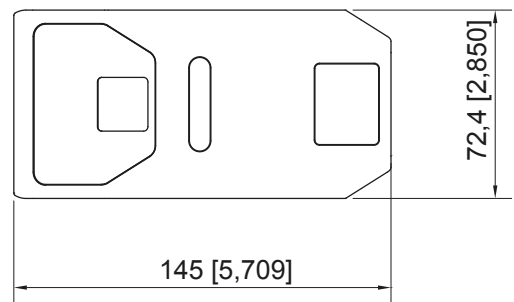
CAUTION
 LASER RADIATION
 DO NOT STARE INTO BEAM
 DIODE LASER
 1 mW MAX OUTPUT AT 600-680 nm
 CLASS 2 LASER PRODUCT

Laser	Diode laser
Laser wave length	600-680 nm
Adjustable modulation	0, 5, 32, 40, 100 KHz
Output power	Max 1mW
Beam diameter	12 mm (1/2") at aperture
Working area with 20mm detector	0-100 meter [328 ft]
Working area with 30mm detector	0- >200 meter [656 ft]
Type of battery	Li Ion
Operating time	>24 h
Operating temperature	-10 to 50 °C
Environmental protection	IP67
Wireless communication	Class I Bluetooth® wireless technology (passive)
Chock sensor	6 axis mems gyro with inclinometer
Type of display	0-led 96x96 pixel
Charging power	5-12 V DC
Housing material	Anodized aluminium T6060
Dimensions	WxHxD: 145.0x72.4x56.8 mm [5.71x2.85x2.24"]
Weight	620g [21.7 oz]

mm [inch]



Laser transmitter E30 Long range, with tilt table, Part No. 12-0858

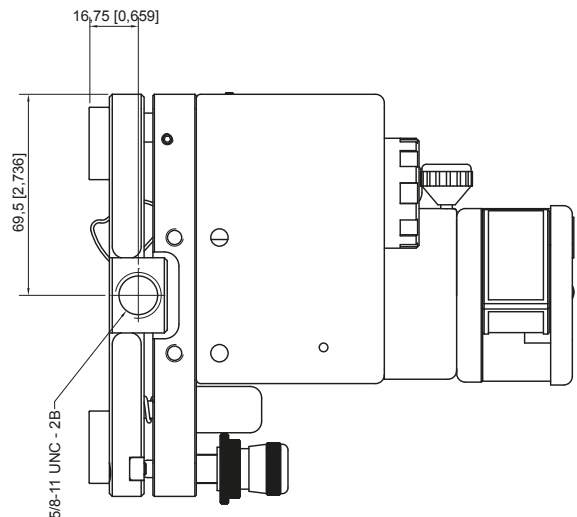
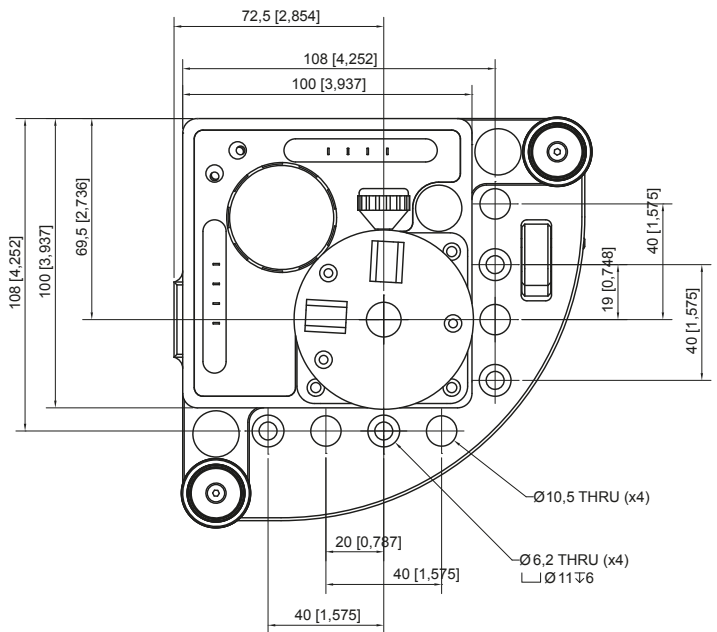
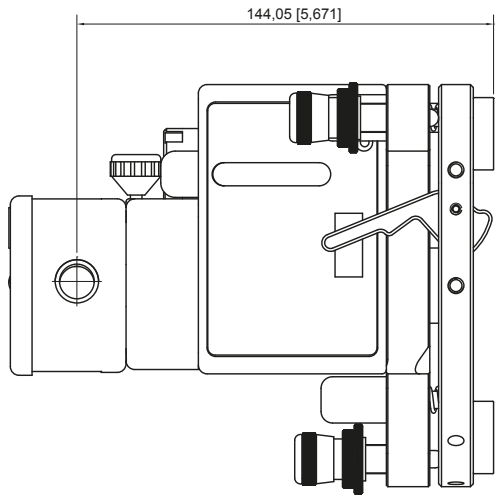
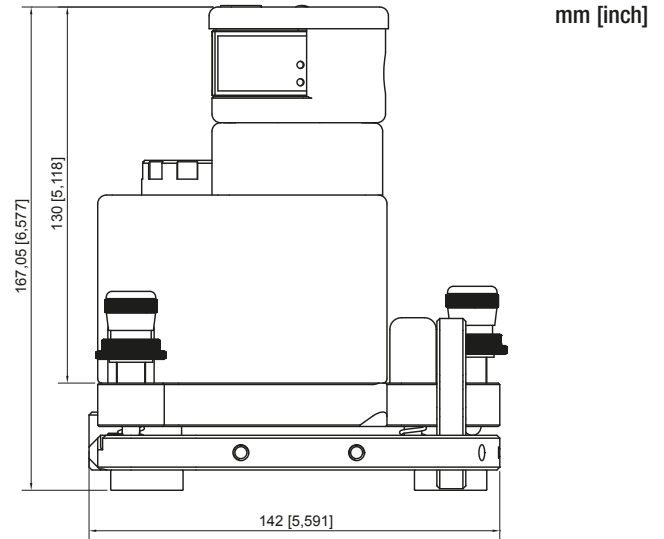


Laser transmitter D22, Part No. 12-0022



CAUTION
 LASER RADIATION
 DO NOT STARE INTO BEAM
 DIODE LASER
 1 mW MAX OUTPUT AT 600-680 nm
 CLASS 2 LASER PRODUCT

Type of laser	Diode laser
Laser wavelength	635-670 nm, visible red light
Laser Safety Class	Class 2
Output	< 1 mW
Beam diameter	6 mm [1/4"] at aperture
Working area, range	40-metre radius [130']
Type of battery	1 x R14 (C)
Operating time/battery	approx. 24 hours
Levelling range	± 30 mm/m [± 1.7°]
3 x spirit vials' scaling	0.02 mm/m
Squareness between laser beams	0.005 mm/m [0.005 mils/inch] [1 arc sec.]
Flatness of sweep	0.02 mm/m
Fine turning	0.1 mm/m [20 arc sec.]
2 x spirit vials for rotation	5 mm/m
Housing material	Aluminium
Dimensions	WxHxD: 139x169x139 mm [5.47"x6.64"x5.47"]
Weight	2650 g [5.8 lbs]



Laser transmitter D22, Part No. 12-0022

Examples of use

The D22 can be mounted in various ways. Below are just some examples. The important thing is to always tighten rods, screws and magnets firmly. Also be sure the surface where the magnets are attached is clean. If possible use the safety strap.



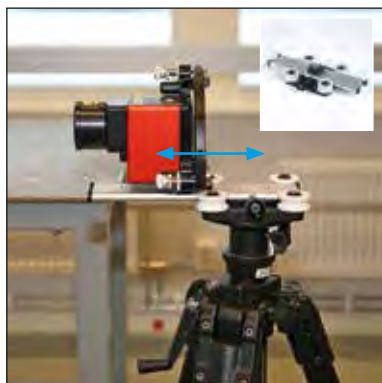
On tripod (Part No. 12-0269).



With super magnets on tilt table (included) directly on surface.



Feet with points (included), on non magnetic surface.



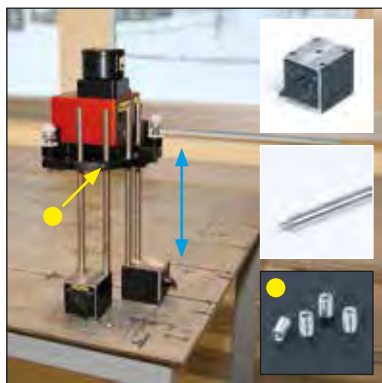
On sliding table for tripod Part No. 12-0202. For easy alignment to detector.



When surface is too small for three super magnets. Pin included with D22.



On round surfaces, horizontal sweep. Pin included with D22.



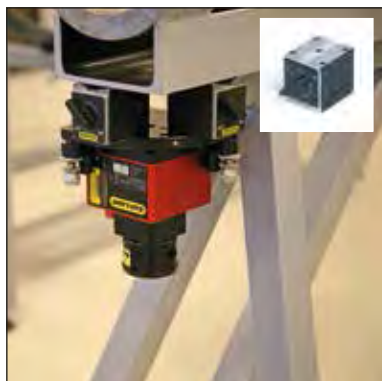
Rigid mounting, still easy to height adjust. Use rods of suitable length.



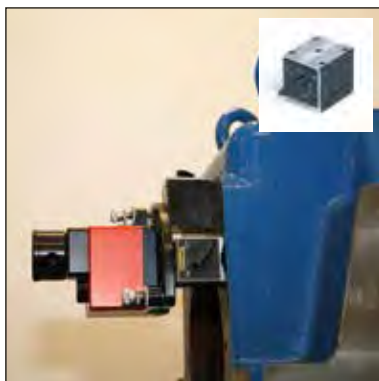
In a machine spindle. Spindle/magnet base pin Part No. 01-1333.



Vertical mounting on roll. Adapter plate Part No. 12-0874.



With magnet bases, very rigid mounting.



With magnet bases, very rigid mounting.



Rigid mounting, horizontal sweep.

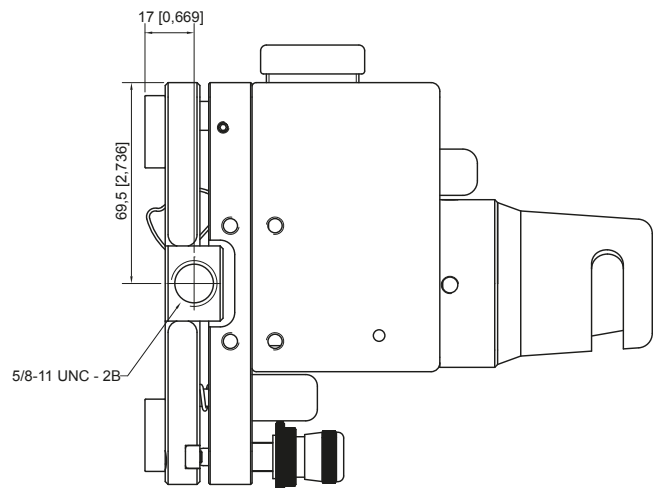
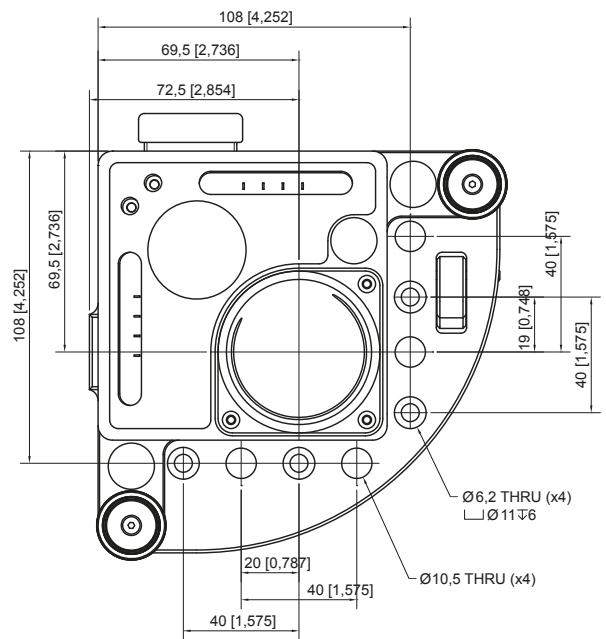
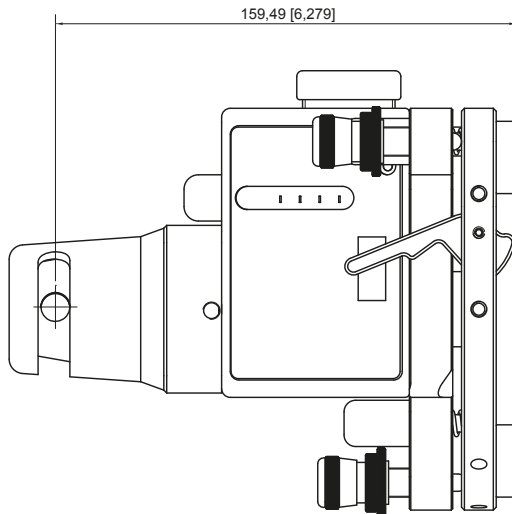
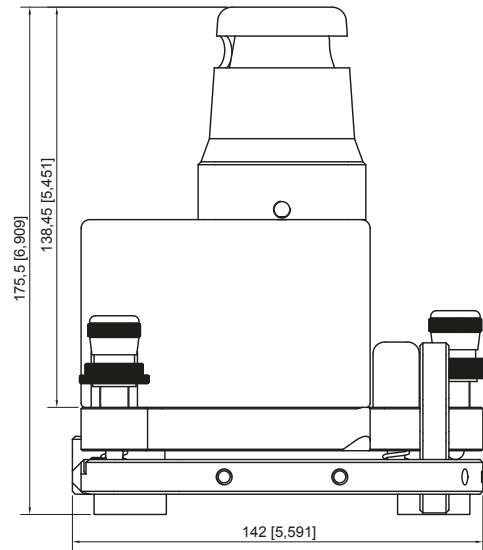
Laser transmitter D23 Spin, Part No. 12-0168



CAUTION
 LASER RADIATION
 DO NOT STARE INTO BEAM
 DIODE LASER
 1 mW MAX OUTPUT AT 600-680 nm
 CLASS 2 LASER PRODUCT


Type of laser	Diode laser
Laser wavelength	635-670 nm, visible red light
Laser Safety Class	Class 2
Output	< 1 mW
Beam diameter	6 mm [1/4"] at aperture
Working area, range	20-metre radius [65']
Type of battery	2 x R14 (C)
Operating time/battery	approx. 15 hours
Operating temperature	0-50 °C
Levelling range	± 30 mm/m [± 1.7°]
3 x spirit vials' scaling	0.02 mm/m
Flatness of sweep	0.02 mm/m
Housing material	Aluminium
Dimensions	WxHxD: 139x169x139 mm [5.47x6.64x5.47"]
Weight	2650 g [5.8 lbs]

mm [inch]



Laser transmitter D146 Spindle, Part No. 12-0146

mm [inch]

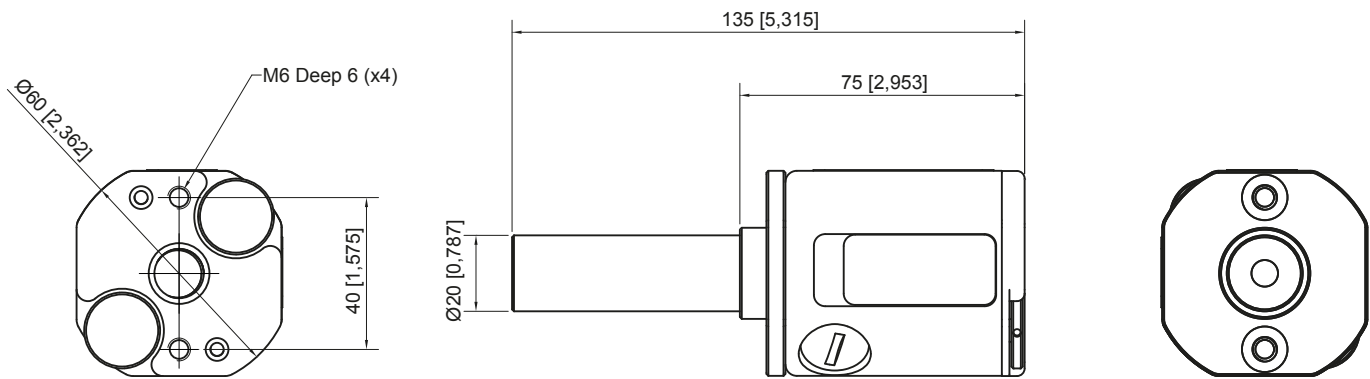


CE

CAUTION
 LASER RADIATION
 DO NOT STARE INTO BEAM

 DIODE LASER
 1 mW MAX OUTPUT AT 600-680 nm
 CLASS 2 LASER PRODUCT

Type of laser	Diode laser
Laser wavelength	635–670 nm, visible red light
Laser Safety Class	Class 2
Output	< 1 mW
Beam diameter	3 mm [1/8"] at aperture
Measurement distance	20 m [65']
Type of battery	1 x R6 (AA)
Operating time/battery	approx. 6 hours
Clamping pin	∅ 20 mm, L= 60 mm [∅ 0.78", L=2.36"]
Housing material	Anodized aluminium
Dimensions (without pin)	∅ 60 mm, L=98 mm [∅ 2.36", L=3.86"]
Weight (with pin)	470 g [16.5 oz]



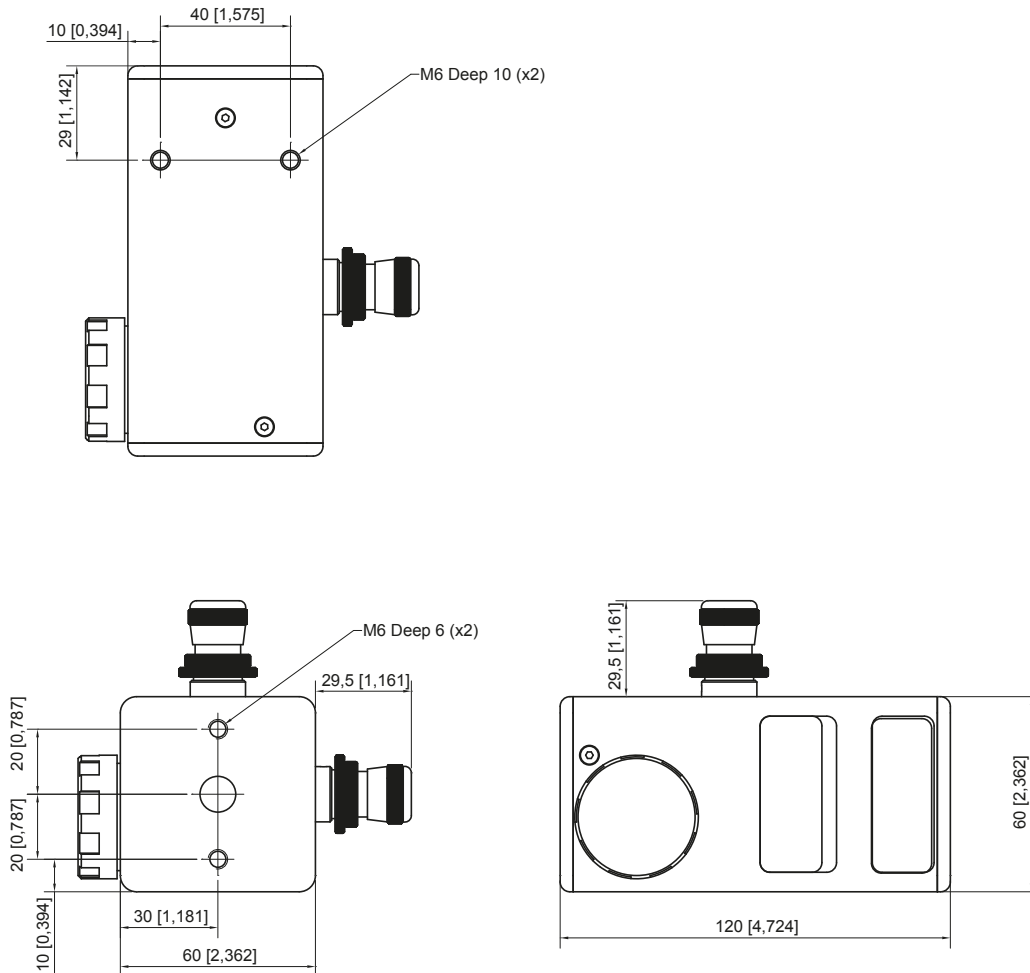
Laser transmitter D75, Part No. 12-0075

mm [inch]



CAUTION
 LASER RADIATION
 DO NOT STARE INTO BEAM
 DIODE LASER
 1 mW MAX OUTPUT AT 600-680 nm
 CLASS 2 LASER PRODUCT

Type of laser	Diode laser
Laser wavelength	635-670 nm, visible red light
Laser Safety Class	Class 2
Output	< 1 mW
Beam diameter	6 mm [1/4"] at aperture
Working distance	40-metre [130']
Type of battery	1 x R14 (C)
Operating time/battery	approx. 15 hours
Operating temperature	0-50 °C
Laser adjustment	D75: 2 ways ±2° (± 35 mm/m)
Housing material	Aluminium
Dimensions D75	WxHxD: 60x60x120 mm [2.36x2.36x4.72"]
Weight	780 g [27.5 oz]



Laser transmitter D25 with offset hub, Part No. 12-0706

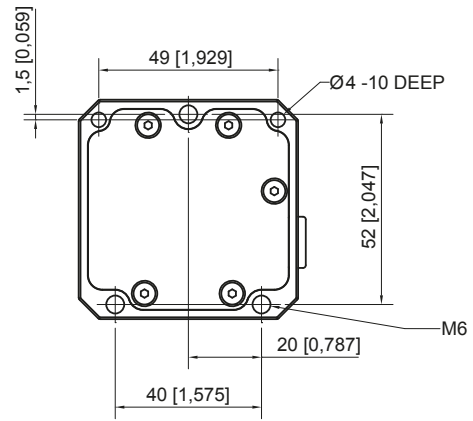


CE

CAUTION
LASER RADIATION
DO NOT STARE INTO BEAM
DIODE LASER
1 mW MAX OUTPUT AT 600-680 nm
CLASS 2 LASER PRODUCT

Laser diode	<1 mW Class 2
Laser wavelength	635-670 nm
Beam diameter	6 mm at aperture [1/4"]
Measurement range	40 m radius [130']
Battery type	1 x 1.5 V R14 (C)
Operating time / battery	>24 hours
Levelling range	±1.7° (±30 mm/m) in two directions [±30 mils/inch]
Perpendicularity between beams	2 arc sec. (0.01 mm/m) [0.5 mils/inch]
Flatness of sweep	0.02 mm/m (20µ)
Housing material	Anodised aluminium
Dimensions (transmitter down)	137x137x142 mm [5.4"x5.4"x5.6"]
Dimensions (transmitter up)	137x137x150 mm [5.4"x5.4"x5.9"]
Weight	2124 g (battery adaptor excluded) [4.7 lbs]

mm [inch]

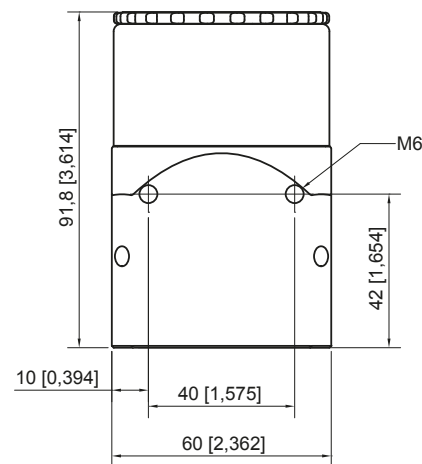
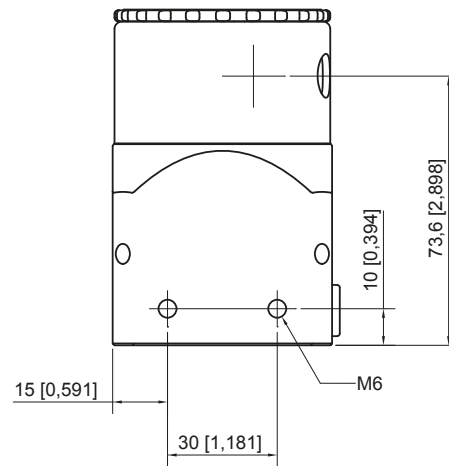


Laser transmitter D25, Part No. 12-0594




CE

CAUTION
LASER RADIATION
DO NOT STARE INTO BEAM
DIODE LASER
1 mW MAX OUTPUT AT 600-680 nm
CLASS 2 LASER PRODUCT



Roll alignment kit, Part No. 12-0856



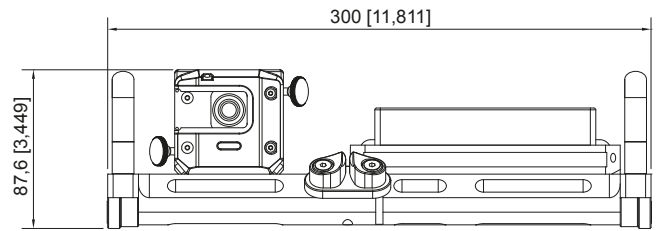
CE

CAUTION
LASER RADIATION
DO NOT STARE INTO BEAM

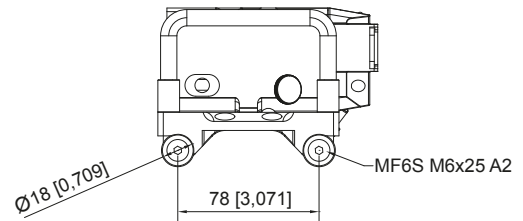
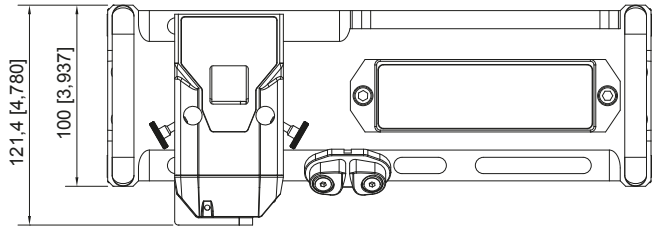
DIODE LASER
1 mW MAX OUTPUT AT 600-680 nm
CLASS 2 LASER PRODUCT

Detector	See 12-0845 for technical specifications
Digital precision level	See 12-0846 for technical specifications
Bracket dimensions	See drawings

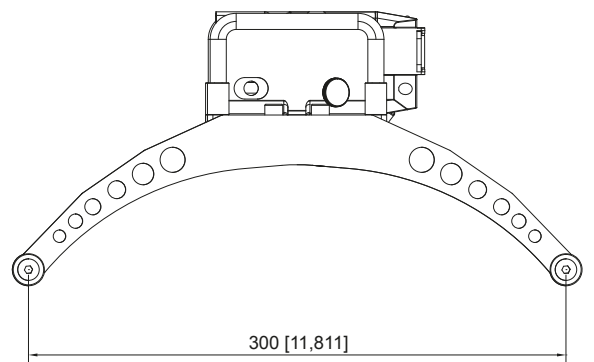
mm [inch]



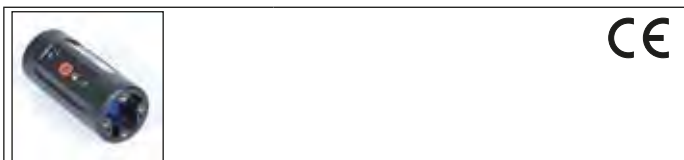
Roll bracket, Part No. 12-0849



Large roll kit, Part No. 12-0885

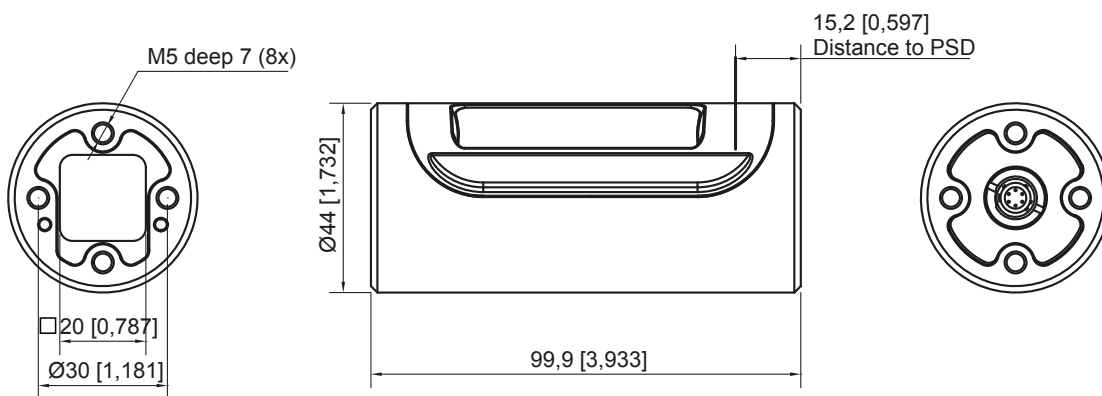


Detector E9, Part No. 12-0759



mm [inch]

Wireless communication	Built-in Class I Bluetooth® wireless technology
Type of detector	2 axis PSD 20x20 mm [0.78" sq]
Resolution	0.001 mm [0.05 mils]
Measurement error	<1% +1 digit
Thermal sensor	± 1° C accuracy
Environmental protection	IP class 67
Internal battery	Li Po
Protection	No influence from ambient light
Housing material	Anodized aluminium
Dimensions	∅ 45 mm [1.77"], length 100 mm [3.94"]
Weight	180 g [6.3 oz]

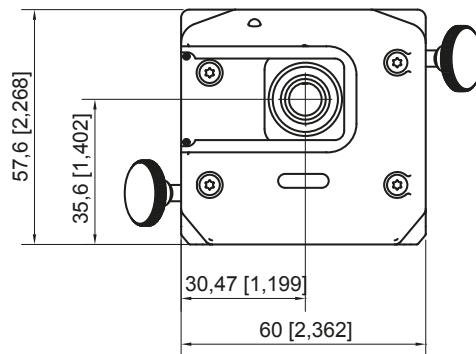
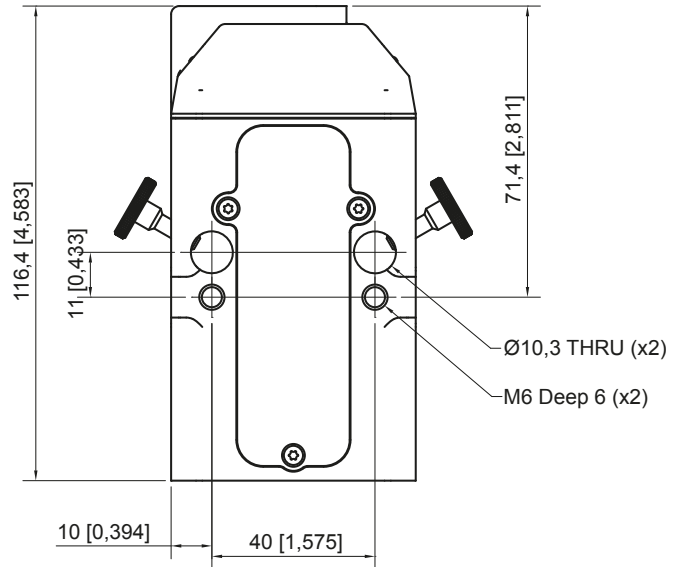


Angle detector E2, Part No. 12-0845



Type of detector	2 axis PSD 20x20 mm [0.78" sq]
Type of display	OLED
Wireless communication	Class I Bluetooth® wireless technology
Internal battery	Li Ion
Resolution	0.01 mm/m (0.001°)
Measurement error	Better than ± 0.02 mm/m
Inclinometers	0.1° resolution
Environmental protection	IP Class 67
Operating temperature	-10–50 °C
Housing material	Anodized aluminium
Dimensions	WxHxD: 116x60x57 mm [4.6x2.4x2.2"]
Weight	530 g [18.7oz]

mm [inch]

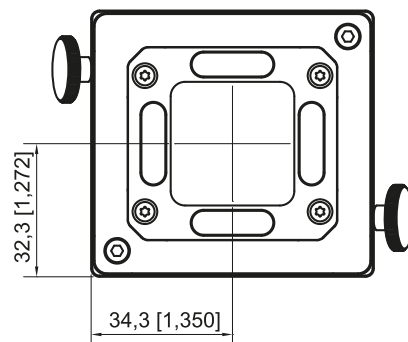
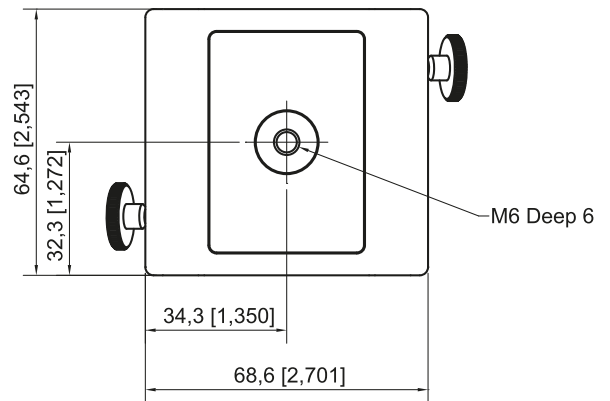
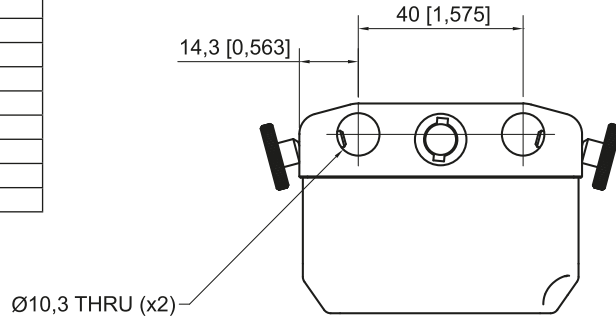


Detector E3, Part No. 12-0799




mm [inch]

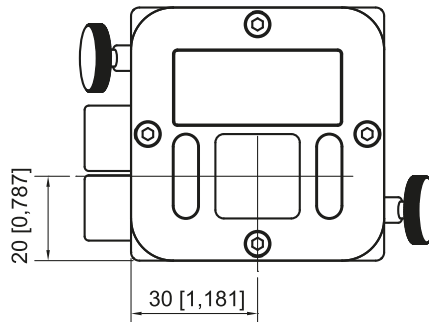
Wireless communication	Built-in Class I Bluetooth® wireless technology
Type of detector	2 axis PSD 30x30 mm [1.18" sq]
Resolution	0.001 mm [0.05 mils]
Measurement error	<1% +1 digit
Thermal sensor	± 1° C accuracy
Environmental protection	IP class 65
Internal battery	Li Po
Protection	No influence from ambient light
Housing material	Anodized aluminium
Dimensions	WxHxD: 69x65x49 mm [2.7"x2.6"x1.9"]
Weight	262 g [9.2 oz]




Detector E7H, HyperPSD™, Part No. 12-0824

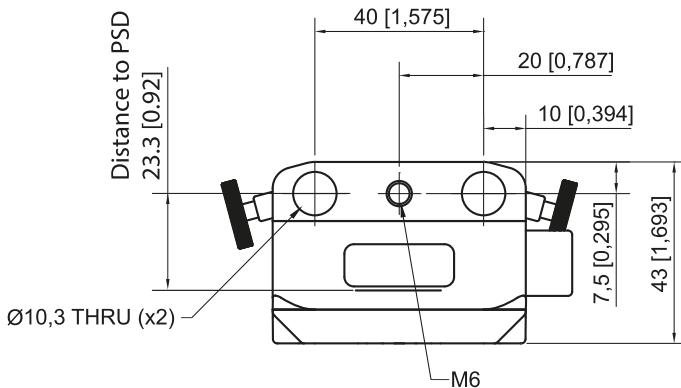
mm [inch]

	CE
Detector E7, Part No. 12-0824	
Type of detector	2 axis PSD 20x20 mm [0.78" sq]
Resolution	0.0001 mm [0.005 mils]
Measurement error	± 1% +1 digit
Inclinometers	0.1° resolution
Thermal sensors	± 1° C accuracy
Environmental protection	IP Class 66 and 67
Operating temperature	-10–50 °C
Internal battery	Li Po
Housing material	Anodized aluminium
Dimensions	WxHxD: 60x60x42 mm [2.36x2.36x1.65"]
Weight	186 g [6.6 oz]




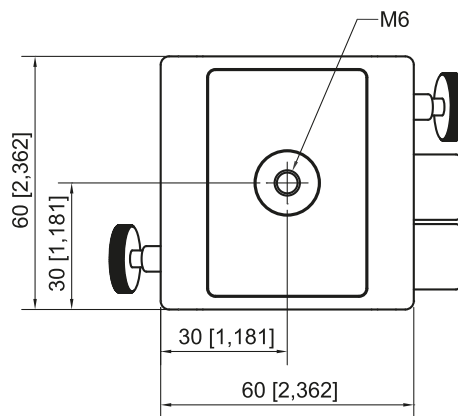
Detector E7, Part No. 12-0752

	CE
Detector E7, Part No. 12-0752	
Type of detector	2 axis PSD 20x20 mm [0.78" sq]
Resolution	0.001 mm [0.05 mils]
Measurement error	± 1% +1 digit
Inclinometers	0.1° resolution
Thermal sensors	± 1° C accuracy
Environmental protection	IP Class 66 and 67
Operating temperature	-10–50 °C
Internal battery	Li Po
Housing material	Anodized aluminium
Dimensions	WxHxD: 60x60x42 mm [2.36x2.36x1.65"]
Weight	186 g [6.6 oz]



Detector E5, Part No. 12-0509

	CE
Detector E5, Part No. 12-0509	
Type of detector	2 axis PSD 20x20 mm [0.78" sq]
Dual Detection Technology™	Can detect both spinning and stationary laser beam, but is optimised for spinning laser.
Resolution	0.001 mm [0.05 mils]
Measurement error	± 1% +1 digit
Inclinometers	0.1° resolution
Thermal sensors	± 1° C accuracy
Environmental protection	IP Class 66 and 67
Operating temperature	-10–50 °C
Internal battery	Li Po
Housing material	Anodized aluminium
Dimensions	WxHxD: 60x60x42 mm [2.36x2.36x1.65"]
Weight	186 g [6.6 oz]



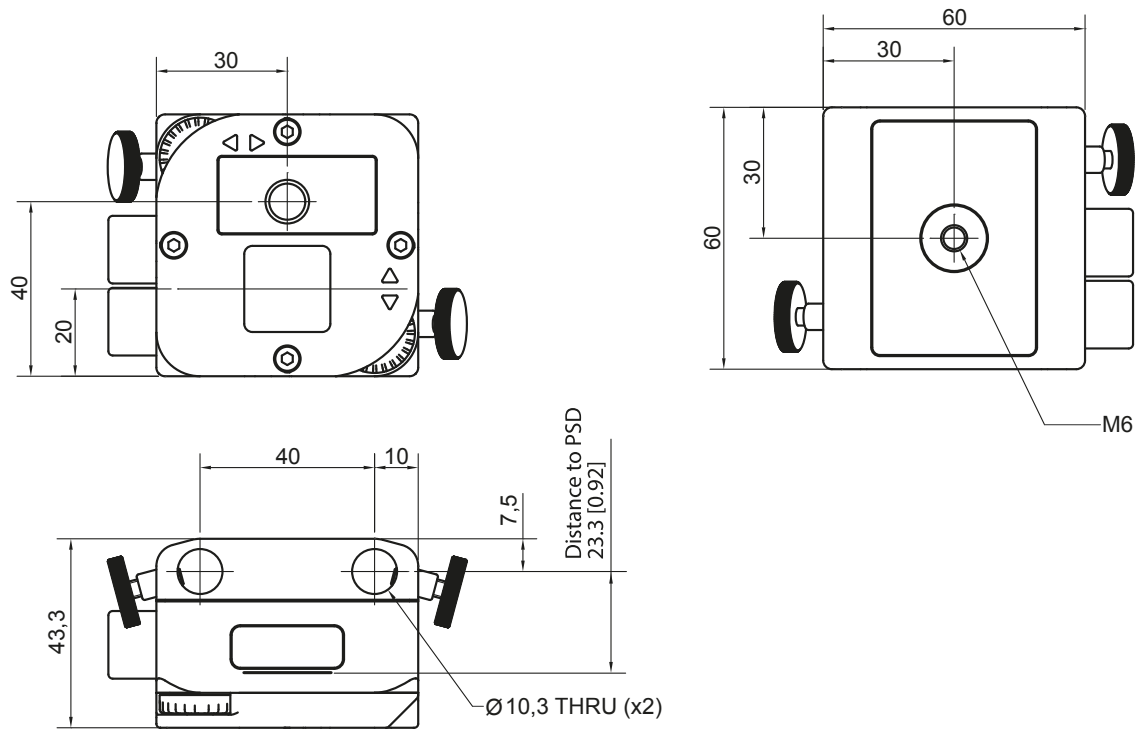
Measuring unit M/S, Part No. 12-0434 / 12-0433

mm [inch]



Measuring unit PSD 20x20 mm. EM: Part No. 12-0434, ES: Part No. 12-0433

Type of detector	2-axis PSD 20x20 mm [0.78" sq]
Resolution	0.001 mm [0.05 mils]
Measuring errors	±1% +1 digit
Measurement range	Up to 20 m [66 feet]
Type of laser	Diode laser
Laser wavelength	635-670 nm
Laser class	Safety class II
Laser output	<1 mW
Electronic inclinometer	0,1° resolution
Thermal sensors	± 1° C accuracy
Environmental protection	IP class 66 and 67
Temperature range	-10-50 °C
Internal battery	Li Po
Housing material	Anodized aluminium
Dimensions	WxHxD: 60x60x42 mm [2.36"x2.36"x1.65"]
Weight	202 g [7.1 oz]

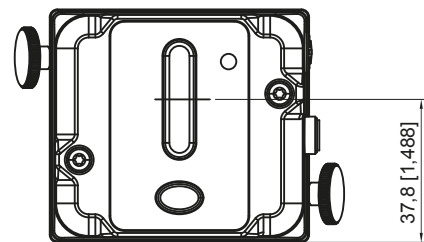


Measuring unit ELM40 / ELS40, Part No. 12-0776 / 12-0777

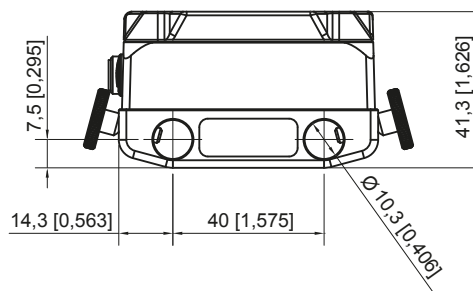
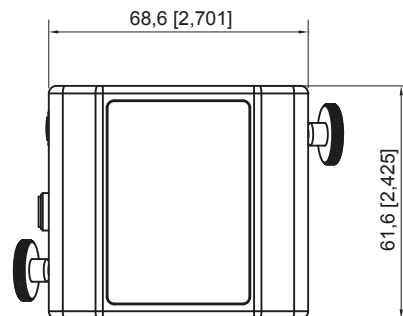


CAUTION
 LASER RADIATION
 DO NOT STARE INTO BEAM
 DIODE LASER
 1 mW MAX OUTPUT AT 600-680 nm
 CLASS 2 LASER PRODUCT

Wireless communication	Built-in Class I Bluetooth® wireless technology
Internal battery	Li Po
Type of detector	True PSD 30 mm [1.2"]
Resolution	0.001 mm [0.05 mils]
Measuring errors	±1% +1 digit
Measurement range	Up to 10 m [33 feet]
Type of laser	Diode laser
Laser wavelength	635-670 nm
Laser class	Safety class II
Laser output	<1 mW
Electronic inclinometer	0.1° resolution
Thermal sensors	-20-60 °C
Environmental protection	IP class 65
Temperature range	-10-50 °C
Housing material	Anodized aluminium / ABS plastics
Dimensions	WxHxD: 69.0x61.5x41.5 mm [2.72"x2.42"x1.63"]
Weight	164 g [5.8 oz]



mm [inch]

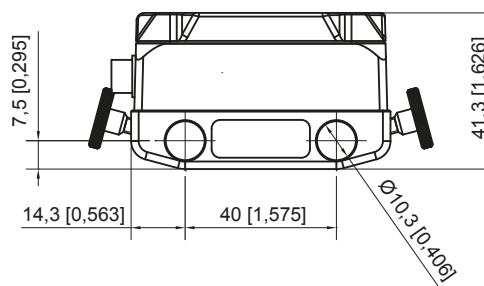
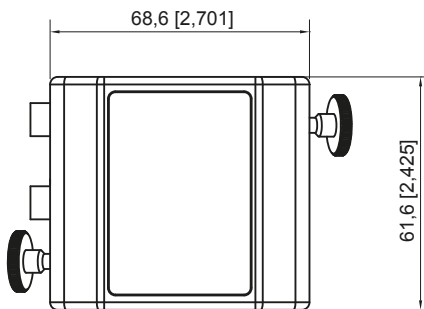


Measuring unit ELM30 / ELS30, Part No. 12-0698 / 12-0697



CAUTION
 LASER RADIATION
 DO NOT STARE INTO BEAM
 DIODE LASER
 1 mW MAX OUTPUT AT 600-680 nm
 CLASS 2 LASER PRODUCT

Type of detector	True PSD 30 mm [1.2"]
Resolution	0.001 mm [0.05 mils]
Measuring errors	±1% +1 digit
Measurement range	Up to 10 m [33 feet]
Type of laser	Diode laser
Laser wavelength	635-670 nm
Laser class	Safety class II
Laser output	<1 mW
Electronic inclinometer	0.1° resolution
Thermal sensors	-20-60 °C
Environmental protection	IP class 65
Temperature range	-10-50 °C
Housing material	Anodized aluminium / ABS plastics
Dimensions	WxHxD: 69.0x61.5x41.5 mm [2.72"x2.42"x1.63"]
Weight	164 g [5.8 oz]



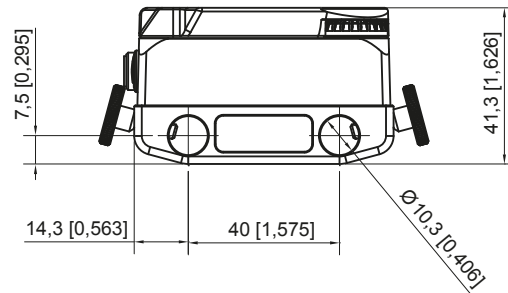
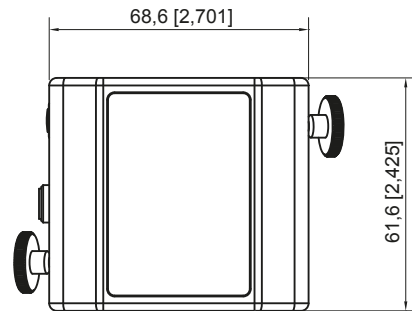
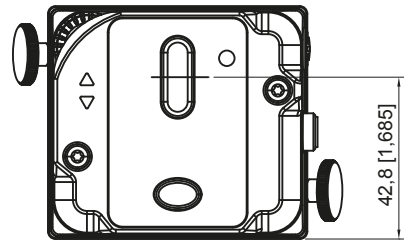
Measuring unit ELM20 / ELS20, Part No. 12-0746 / 12-0747

mm [inch]



Measuring unit PSD 20 mm. ELM20: Part No. 12-0746, ELS20: Part No. 12-0747

Wireless communication	Built-in Class I Bluetooth® wireless technology
Internal battery	Li Po
Type of detector	True PSD 20 mm [0.79"]
Resolution	0.01 mm [0.5 mils]
Measuring errors	±1% +1 digit
Measurement range	Up to 3 m [10 feet]
Type of laser	Diode laser
Laser wavelength	635-670 nm
Laser class	Safety class II
Laser output	<1 mW
Electronic inclinometer	0.1° resolution
Thermal sensors	-20-60 °C
Environmental protection	IP class 65
Temperature range	-10-50 °C
Housing material	Anodized aluminium / ABS plastics
Dimensions	WxHxD: 69.0x61.5x41.5 mm [2.72"x2.42"x1.63"]
Weight	176 g [6.2 oz]



Measuring unit XT40-M, XT40-S, Part No. 12-0943 / 12-0944

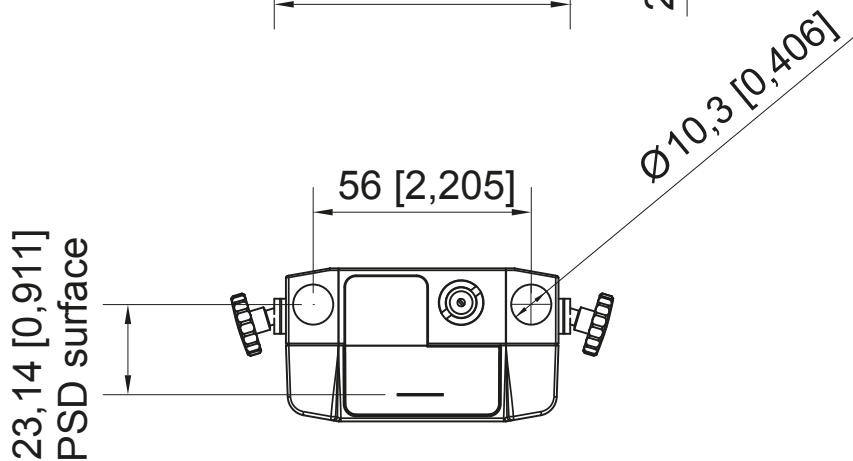
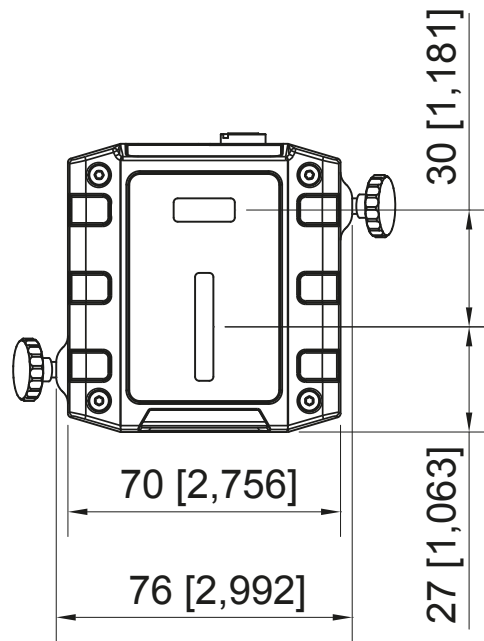
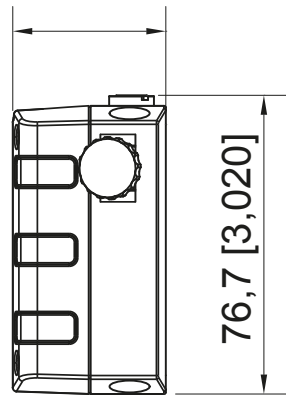
mm [inch]



Measuring unit PSD 30 mm. XT40-M: Part No. 12-0943, XT40-S: Part No. 12-0944

Type of detector	TruePSD 30 mm [1.2"]
Communication	Bluetooth® wireless technology
Battery type	Heavy duty Li Ion chargeable
Operating time	Up to 24 h continuously
Resolution	0.01 mm [0.5 mils]
Measuring errors	<1%
Measurement range	Up to 10 m [33 feet]
Type of laser	Diode laser
Laser wavelength	635-670 nm
Laser class	Safety class 2
Laser output	<1 mW
Electronic inclinometer	0.1° resolution
Environmental protection	IP class 66 and 67
Operating temperature	-10-50 °C
Storage temperature	-20-50 °C
Relative humidity	10-95%
OLED display	128x64 pixels
Housing material	Anodized aluminium + PC/ABS + TPE
Dimensions	WxHxD: 76x76.7x39.3 mm [3.0x3.0x1.5"]
Weight	245 g [8.6 oz]

39,3 [1,547]

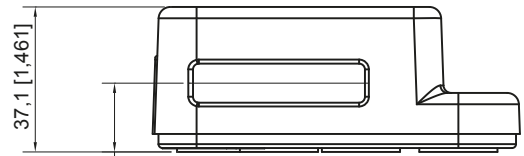
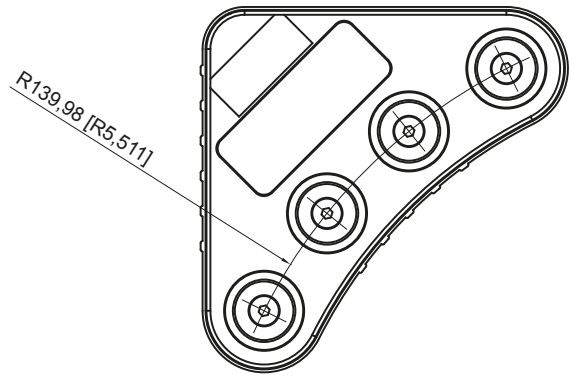


E-series wireless detector for BTA, Part No. 12-0791

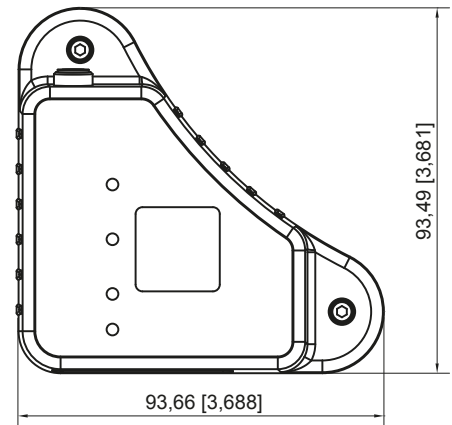
mm [inch]



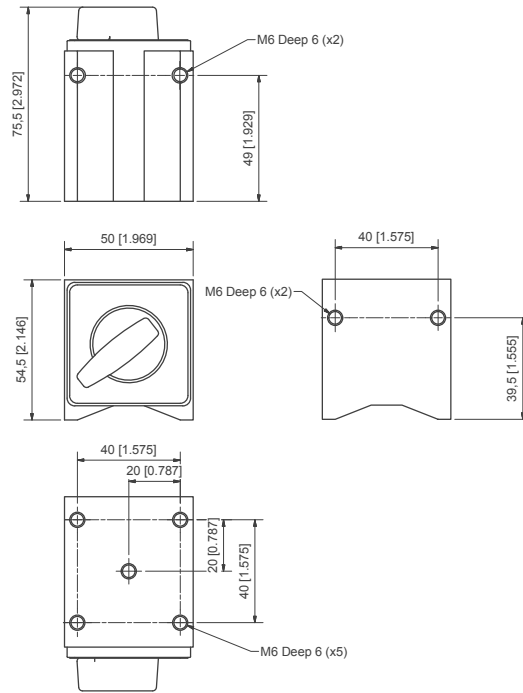
Sheave diameters	>60 mm [2.5"]
Measurement distance	Up to 3 m [9.8'] between Transmitter and Detector
Measurement range	Axial offset: ± 3 mm [0.12"]. Angular value: $\pm 8^\circ$
Displayed resolution	Offset: 0.1°, Angle: 0.01°
Display type	Yellow OLED 96x96 pixels
Connection	Bluetooth® wireless technology
Battery type	Li-Po
Battery operation	5 hours continuously
Material	ABS plastics / Anodized aluminium
Dimensions	WxHxD: 95x95x36 mm [3.7x3.7x1.4"]
Weight	190 g [6.7 oz]



17.6 [0.693]

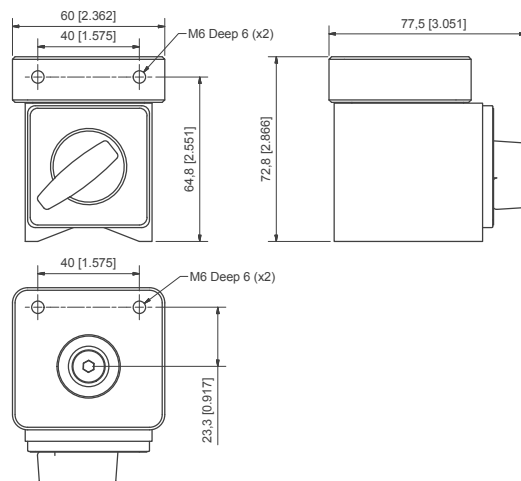


Magnet base, Part No. 12-0013



mm [inch]

Magnet base with turnable head, Part No. 12-0045

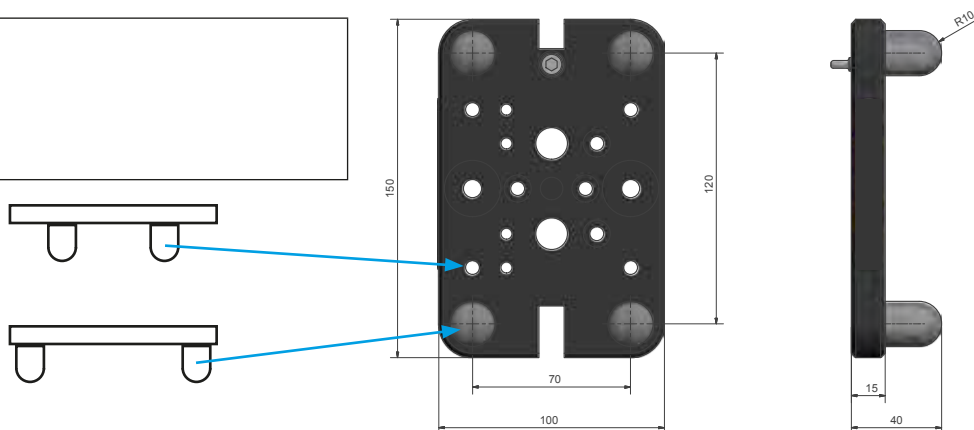


Sliding bracket, Part No. 12-0039



Min. Ø60 mm
Max. Ø155 mm

Min. Ø155 mm
Max. Ø350 mm

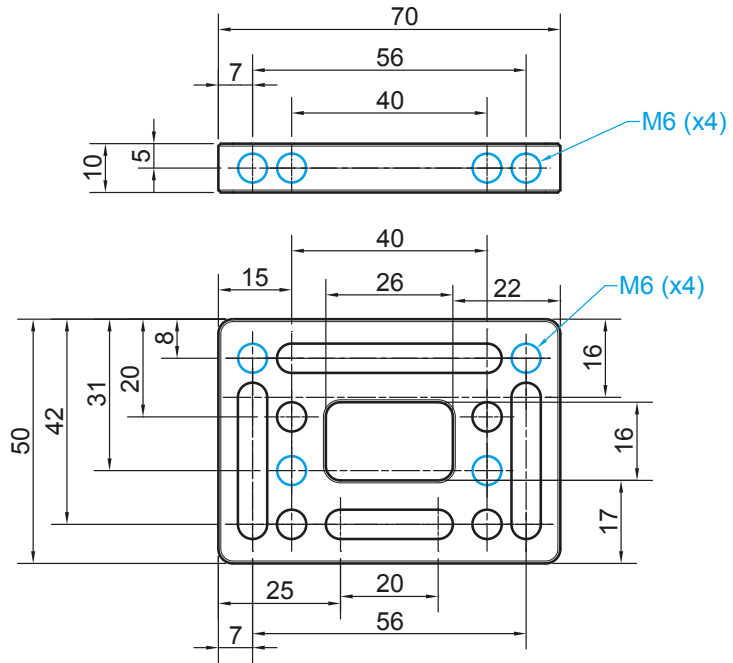


Offset bracket, Part No. 12-1008

mm



Blue circles are threaded holes.



Note: New products in rev14 marked with **Bold** letters.

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12-0283	Vibrometer probe D283	44	12-0543	Slide bracket 200mm	56
12-0284	Battery lid for older display units	78	12-0544	Target 100x100m	65
12-0289	Red cable 0.4m [15.7"]	68	12-0546	Battery lid for display unit D336	78
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12-0300	System D450 Shaft	88	12-0553	Bore bracket adapter plate	56
12-0303	Sliding bracket with magnets	52	12-0568	Mounting pin for D146	61
12-0308	Detector/display unit for belt alignment	92	12-0573	VGA kit	71
12-0309	Laser transmitter for sheave alignment systems	41	12-0579	Magnet base with adapter Ex	49
12-0310	System D150 BTA	88	12-0580	Axial extension arms, linebore	58
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12-0320	Rod adapter for D157	54	12-0587	Sun visor for E-series	65
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12-0324	Rods, 120 mm [4.72"] 8 pcs	53	12-0590	AC adaptor for display unit D279	92
12-0329	Magnet base bracket for linebore detector	91	12-0592	Sun visor for Ex units	65
12-0334	Measuring unit M, Ex	46	12-0594	Laser transmitter D25	40
12-0335	Measuring unit S, Ex	46	12-0597	Splitter box	67
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12-0337	Shaft bracket with chain, stainless steel	51	12-0608	Magnet base with turnable head, for D157	55
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12-0354	Battery lid for display unit D279	78	12-0619	Barcode reader	72
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12-0424	Measuring unit S, D-series, PSD 10x10mm, Incl.	89	12-0710	System E960-A	13
12-0433	Measuring unit S, E-series, PSD 20x20mm	45	12-0711	System E960-B	14
12-0434	Measuring unit M, E-series, PSD 20x20mm	45	12-0715	Detector bracket "Long stroke" Turbine	61
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Note: New products in rev14 marked with **Bold** letters.