



MF-System is a universal construction system based on components to quickly and easy build custom measuring fixtures.

The system has been developed by Schut Geometrical Metrology. The parts of the MF-System are made from high quality steel and colored, anodized aluminum.

The system consists of, among other things, base plates, parallel spring elements, mounting bars, probe holders and probes. A stable product positioning is required for accurate measurements and because of the MF-System's sophisticated composition, it is possible to generate a complete measuring system with only a few parts. Ideal for repeating measurements.

The components of MF-System are based on both horizontal support or vertical clamping. The wide range and shapes of probes make the

system suitable for e.g. lathed parts but also for (more complicated) milling parts. All individual components are available separately, increasing flexibility of use.

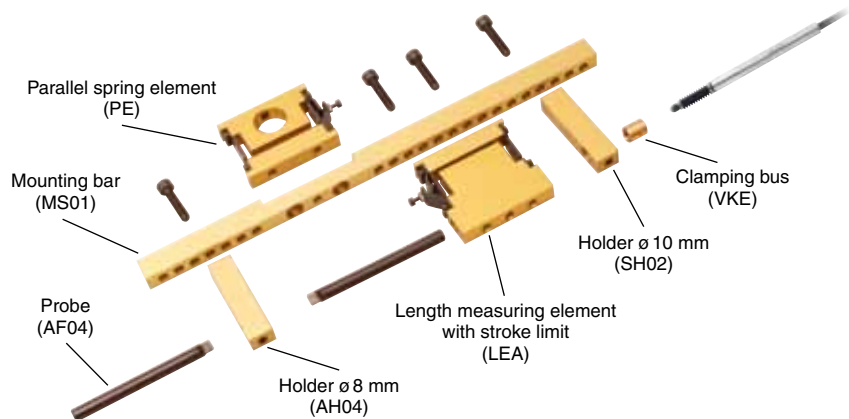
The universal properties of MF-System result in a highly flexible construction system. The use of internationally applied units of fit for e.g. dial indicators and electronic probes make the MF-System's components widely applicable. With just some base elements it is very easy to create some individual measuring points on e.g. production machines.

MF-System's high quality and low price make an ideal addition to existing measuring systems and can be applied in production plants. The easy assembly and modular setup make MF-System especially suitable for application in tailor-made and designed measuring systems.

Components

• measuring systems

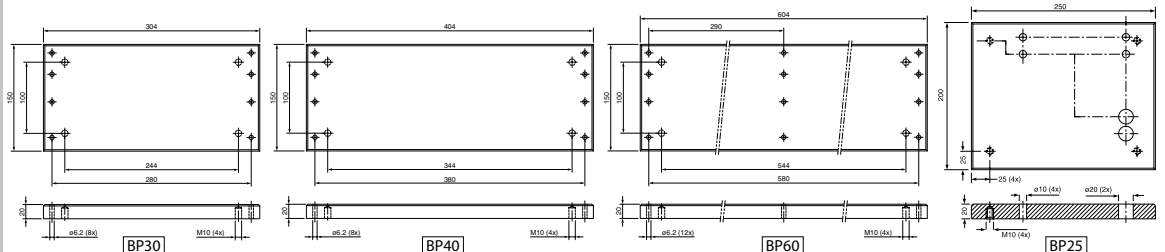
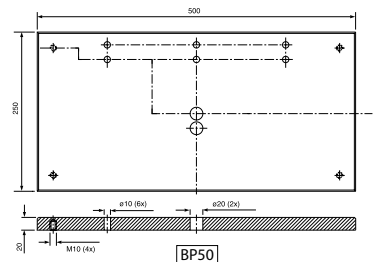
• in-line measurements



Steel base plates

Item No. Type Steel base plates

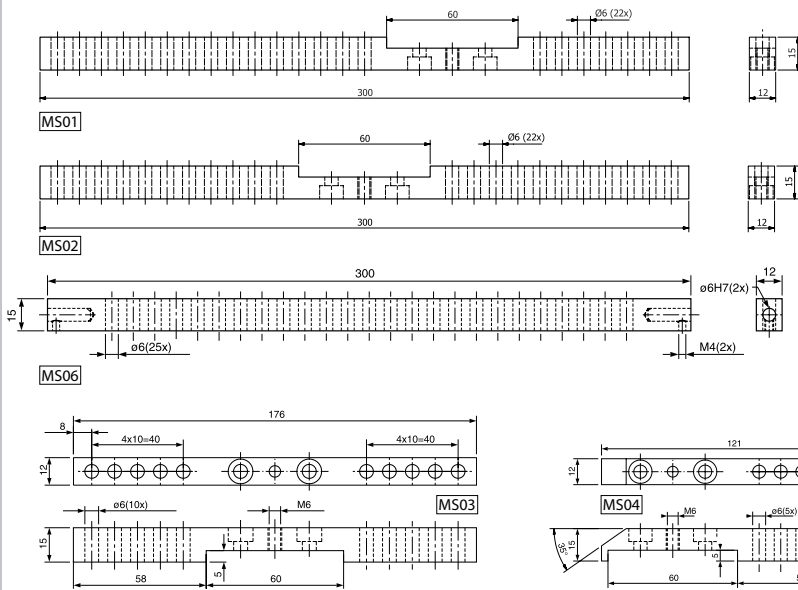
- 870.014 BP25 Base plate for vertical measuring systems 250 x 200 mm. Fitted with bores for quick and easy setup of measuring fixtures.
- 870.015 BP50 Base plate 500 x 250 mm for double vertical measuring systems. Larger base than type BP25 with two measuring positions. Fitted with bores for quick and easy setup of measuring fixtures.
- 870.087 BP30 Base plate for horizontal measuring systems, 304 x 150 mm. Fitted with bores for quick and easy setup of measuring fixtures.
- 870.088 BP40 Base plate for horizontal measuring systems, 404 x 150 mm.
- 870.202 BP60 Base plate, 604 x 150 mm. With bores for 3 mounting blocks MB01/02.
- 636.027 Adjustable foot for base plate.



Mounting bars / mounting blocks

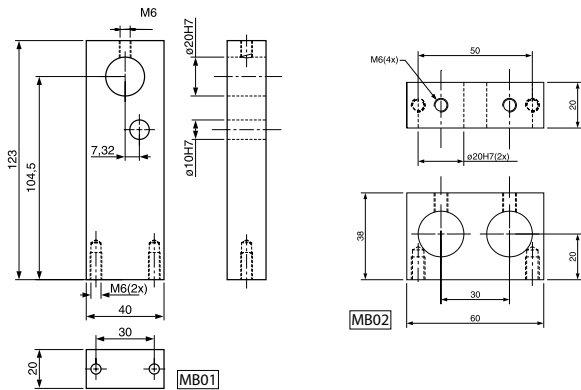
Item No. Type Mounting bars (gold anodized aluminum)

- 870.057 MS01 Universal bar for the assembly of measuring components. Recess eccentric from the middle of the bar for assembly to a mounting plate or construction component.
- 870.058 MS02 Universal bar for the assembly of measuring components. Recess in the middle of the bar for assembly to a mounting plate or construction component.
- 870.091 MS03 Universal bar for assembly of measuring bracket without parallel measuring components. Recess in the middle for assembly to the mounting plate or constructing component.
- 870.096 MS04 Space-saving and one-sided mounting bar, short model. Suitable for travel measurements.
- 870.314 MS05 Space-saving and one-sided mounting bar, long model. Suitable for travel measurements.
- 870.315 MS06 MS06 Mounting bar for vertical measuring systems (like set 2). Fitted with threads and bores for assembly to mounting bracket.



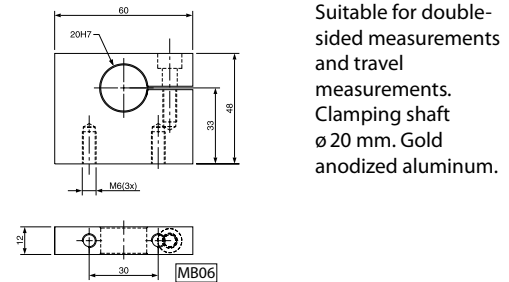
Item No. Type Mounting blocks (black anodized aluminum)

- 870.089 MB01 Mounting block for V-block connecting shafts.
- 870.090 MB02 Mounting block for V-block connecting shafts.



Item No. Type Mounting block

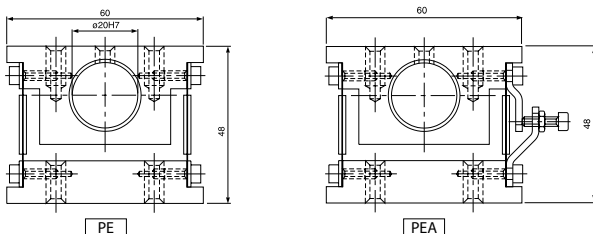
- 870.082 MB06 Measuring bracket connecting block. Suitable for double-sided measurements and travel measurements. Clamping shaft $\varnothing 20$ mm. Gold anodized aluminum.



Measuring elements

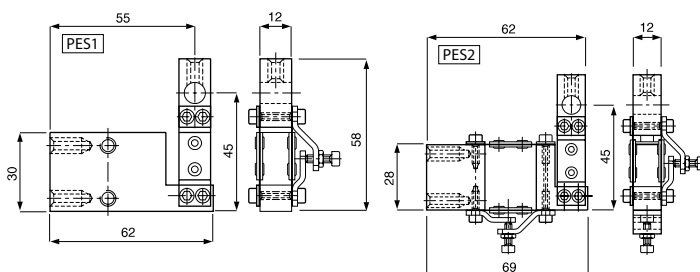
Item No. Type Parallel spring elements (gold anodized aluminum)

- Complete with parallel motion by means of leaf springs.
- 871.005 PE Without stroke limit, clamping shaft: $\varnothing 20$ mm.
- 871.006 PEA With stroke limit, clamping shaft: $\varnothing 20$ mm.



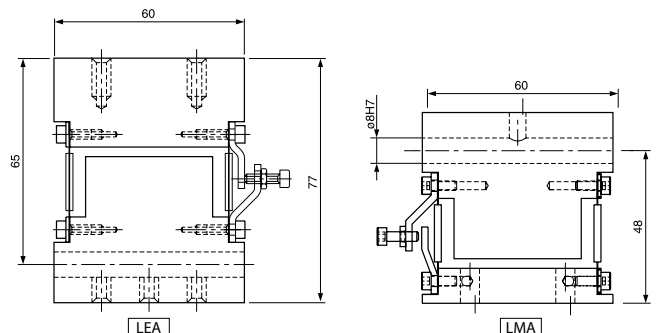
Item No. Type Squared holders for anvil and attachment $\varnothing 8$ mm

- 871.008 PES1 Parallel guidance in measurement direction.
- 871.009 PES2 Parallel guidance in measurement direction as well as perpendicular to measurement direction.



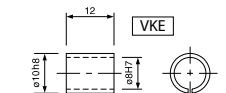
Item No. Type Length measuring elements (gold anodized aluminum)

- Complete with parallel motion by means of leaf springs. Especially for measuring systems like set 2.
- 871.003 LE Without stroke limiter, long clamping shaft: $\varnothing 8$ mm.
- 871.004 LEA With stroke limiter, long clamping shaft: $\varnothing 8$ mm.
- With parallel guidance by means of leaf springs.
- 871.015 LM Without stroke limiter, long clamping shaft: $\varnothing 8$ mm.
- 871.016 LMA With stroke limiter, long clamping shaft: $\varnothing 8$ mm.



Item No. Type Clamping bush

- 780.398 VKE External $\varnothing 10$ h8, internal $\varnothing 8$ H7. Used to clamp electronic probes and dial indicators.

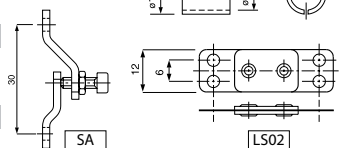


Item No. Type Leaf spring

- 871.012 LS02 Spring thickness: 0.2 mm.

Item No. Type Stroke limit

- 871.007 SA Range: approx. 10 mm.

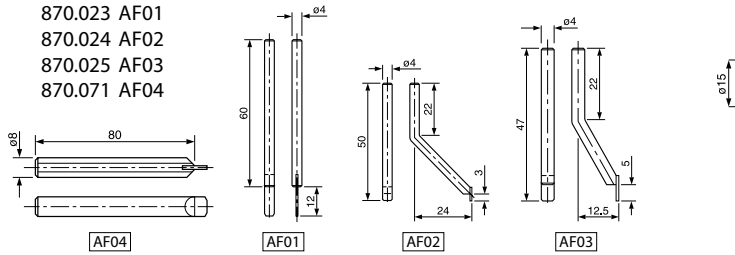


Probes / probe holders

Item No. Type Probes

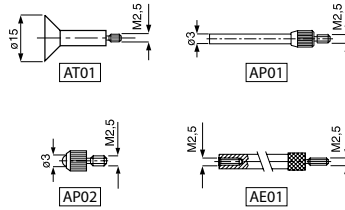
Probes AF01/02/03 ϕ 4 mm, for mounting in probe holders. Complete with tungsten carbide tip. Probe AF04 can be placed directly in ϕ 8 mm holder. Complete with tungsten carbide tip.

870.023 AF01
870.024 AF02
870.025 AF03
870.071 AF04



Item No. Type Probes ϕ 4 mm

(with tungsten carbide spherical tip).
870.027 AR01 Ball ϕ 5 mm.
870.026 AR02 Ball ϕ 4 mm.
870.028 AR03 Ball ϕ 3 mm.
870.029 AR04 Ball ϕ 2 mm.
870.030 AR05 Ball ϕ 1,5 mm.



Item No. Type Probes

(with M2.5 thread).
870.031 AT01 Flat, ϕ 15 mm.
870.032 AP01 Flat, ϕ 3 mm.
870.033 AP02 Ball, ϕ 3 mm.

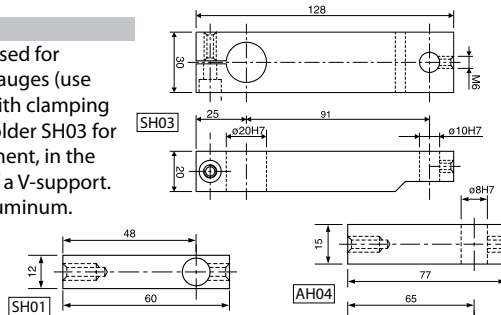
Item No. Type Extensions

(with M2.5 thread).
870.034 AE01 Length 10 mm.
870.035 AE02 Length 20 mm.
870.036 AE03 Length 30 mm.
870.037 AE04 Length 40 mm.
870.038 AE05 Length 50 mm.
870.039 AE06 Length 60 mm.
870.040 AE07 Length 70 mm.
870.041 AE08 Length 80 mm.
870.042 AE09 Length 90 mm.

Item No. Type Holders

Holder SH01/02 used for probes and dial gauges (use in combination with clamping bush 780.398). Holder SH03 for probes or attachment, in the linear direction of a V-support. Gold anodized aluminum.

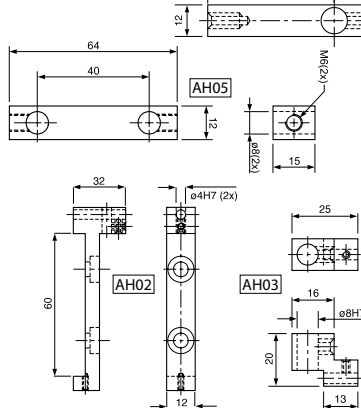
870.050 SH01 Length 60 mm
870.051 SH02 Length 77 mm
870.092 SH03 Length 128 mm



Item No. Type Holders

870.052 AH04 Length 77 mm. Used for anvils, various ϕ 8 mm shafts and probe holder 870.010.

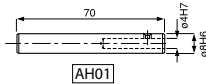
870.297 AH05 Length 64 mm. Probe extension (used in set 1). Gold anodized aluminum.



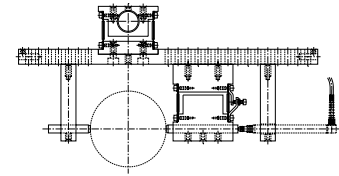
Item No. Type Probe holders

Suitable for ϕ 4 mm probes.

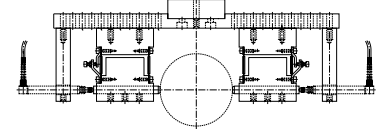
870.010 AH01
870.018 AH02
870.022 AH03



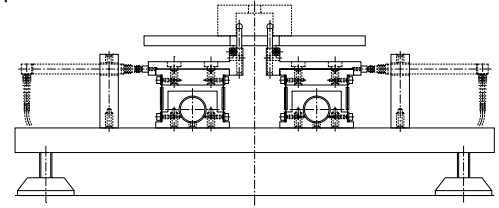
View from above: system for external measurements with 1 probe.



View from above: system for external measurements with 2 probes. Roundness can also be measured with this system.



Front view of a two-point bore measurement with 2 probes.



Example vertical measuring system / horizontal measuring system with V-support

Item No. Qty. Vertical measuring system

871.002	1	Center unit with holder CU
870.001	3	Fixed center point CP7
870.003	1	Shaft C20
870.005	1	Shaft CJ30
780.398	6	Clamping bush
870.014	1	Base plate BP25
870.040	1	Connecting bracket CB05
870.045	1	Mounting plate MP30
870.050	6	Holder SH01
870.058	3	Mounting bar MS02
870.059	1	Workpiece center holder CUH
870.084	2	Connecting bracket CB04
871.016	6	Length measuring element LMA
871.014	2	Handle H01
870.297	6	Holder AH05
636.027	4	Adjustable foot
870.007	6	Shaft (anvil) S8

Item No. Description

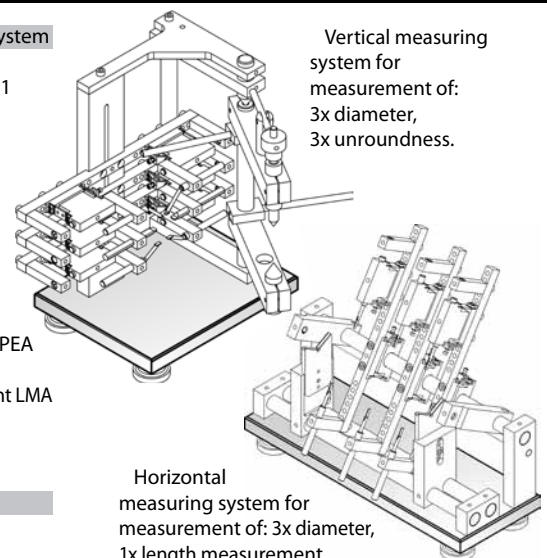
872.000 Set (price incl. 3 measuring brackets, ex. probes and measuring probes).

Item No. Qty. Horizontal measuring system

870.085	2	V-block VB01
870.086	2	Support for V-block VS01
870.088	1	Base plate BP40
870.089	2	Shaft holder MB01
870.090	2	Shaft holder MB02
870.093	3	Shaft C40
870.057	3	Mounting bar MS01
870.092	2	Holder SH03
870.050	6	Holder SH01
780.398	8	Clamping bush
636.027	4	Adjustable foot
871.006	3	Parallel spring element PEA
870.095	1	Setting shaft AS40
871.016	3	Length measuring element LMA
870.010	1	Probe holder AH01
870.028	1	Probe AR03

Item No. Description

872.003 Set (excl. probes and measuring probes).



Vertical measuring system for measurement of:
3x diameter,
3x unroundness.

Horizontal measuring system for measurement of:
3x diameter,
1x length measurement.



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