Dial Tension Gages

SERIES 546

FEATURES

- Can measure dynamic tension in Newton (N) units.
- Dial Tension Gages are widely used to determine the contact force of other measuring instruments, as well as that of electrical relays, micro-switches, valves and precision springs.

• Convenient peak-hold type gages are also available.



SPECIFICATIONS

Standard

Range	Order No.	Minimum reading
6mN - 50mN	546-112	2mN
10mN - 100mN	546-113	5mN
30mN - 300mN	546-114	10mN
0.06N - 0.5N	546-115	0.02N
0.1N - 1N	546-116	0.05N
0.15N - 1.5N	546-117	0.05N
0.3N - 3N	546-118	0.1N
0.6N - 5N	546-119	0.2N

Peak hold

Range	Order No.	Graduation
10mN - 100mN	546-133	5mN
30mN - 300mN	546-134	10mN
0.06N - 0.5N	546-135	0.02N
0.1N - 1N	546-136	0.05N
0.15N - 1.5N	546-137	0.05N
0.3N - 3N	546-138	0.1N
0.6N - 5N	546-139	0.2N

V-Block Sets

SERIES 181

FEATURES

- Two V-blocks per set.
- Magnetic type is available. (The magnetic V-block is not provided with a workpiece clamp.)



SPECIFICATIONS

Inch

Max. workpiece dia.	Order No.	Thread Size	Remarks	Mass(g)
1"	181-901-10	UNC 1/4"-20	With clamp	750
2"	181-904-10	5/16"-18NC	With clamp	3600

Magnetic V-Block

SERIES 181

SPECIFICATIONS

Metric

Max. workpiece dia.	Order No.	Magnetic Pull	Remarks
50mm	181-146	60 kg	1 Piece

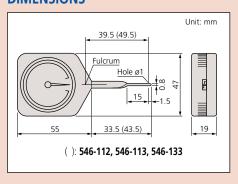


Application

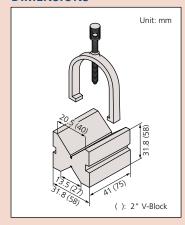
Measuring contact force of relay



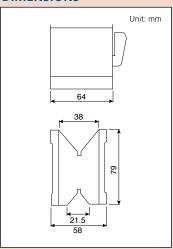
DIMENSIONS



DIMENSIONS



DIMENSIONS



Accuracy		
	Mitutoyo	Reference JIS B 7540 Grade 1,100 mm or shorter
Bottom-surface flatness	2 µm or better	10 µm or better
V-surface flatness	2 µm or better	10 µm or better
Parallelism between the bottom-surface and a cylinder on the V-surface	7.5 µm or better	10 µm or better
Inclination of the V-anvil against the bottom-surface	10 µm or better	10 µm or better
Parallelism between the side surface and a cylinder on the V-surface	7.5 µm or better	20 μm or better
Difference in the height of a pair of V-Blocks	9 µm or better	10 µm or better

Optional Accessory 101462 Serrated anvil (standard accessory)

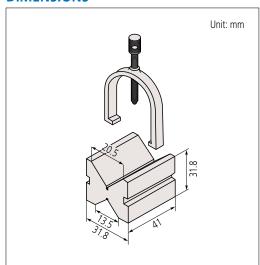
V-Block Set SERIES 181



SPECIFICATIONS

Order No.	Max. workpiece dia. (mm)	Remarks
181-902-10	25	A set of two blocks and clamps

DIMENSIONS

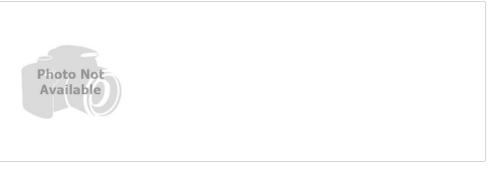






Magnetic V-Block, 2 pcs. 95 x 70 x 98mm, D=50,8mm

Item number: 181-947



Description

These Magnetic V-Blocks are a regular-length type and offer you the following benefits:

- Contact faces are ground and lapped.
- They are of regular length with two differently sized, 90° V-grooves.
- You can use them for holding ferromagnetic cylindrical parts for scribing, adjusting, testing, etc.

Features

98
70 mm
95 mm
50.8
25.4
980 N
In pairs (181-946 and 181-947) Individually (181-246)
10 μm
181-246 21 µm 181-947 21 µm 181-946 11 µm
10 μm
10 μm
Metric
8 kg