BALL GAP GAUGE

Small hole gauge to check right position or gap when assembling parts

Rust prevention▶
Zerust Film for Steel
P380

BTS-030

BTS-025

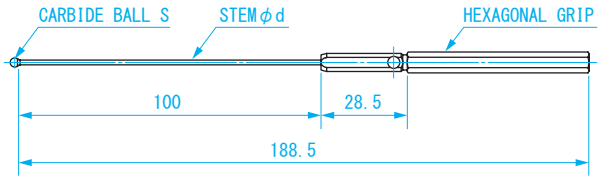
USE
- Suitable for measuring shallow groove and curbed inner pipes
- Clearance measurement of mold

MATERIAL
- Gauge Head: Carbide
- Shaft/Grip: Stainless steel

FEATURES
- Stainless steel spring. Flexible shaft and able to bend
- Easy to check right position or gap when assembling parts

SPECIFICATIONS
- Gauge Accuracy: Sphericity 0.005mm
  Tolerance ±0.005mm

●DIMENSIONS Units: mm



Order No.	Model No.	Ball size S (mm)	Stem diameter d (mm)
112000	BTS-020	ϕ2.0	1.0
112001	BTS-021	ϕ2.1	1.6
112002	BTS-022	ϕ2.2	
112003	BTS-023	ϕ2.3	
112004	BTS-024	ϕ2.4	
112005	BTS-025	ϕ2.5	
112006	BTS-026	ϕ2.6	
112007	BTS-027	ϕ2.7	
112008	BTS-028	ϕ2.8	
112009	BTS-029	ϕ2.9	
112010	BTS-030	ϕ3.0	
112011	BTS-031	ϕ3.1	
112012	BTS-032	ϕ3.2	
112013	BTS-033	ϕ3.3	
112014	BTS-034	ϕ3.4	
112015	BTS-035	ϕ3.5	
112016	BTS-036	ϕ3.6	
112017	BTS-037	ϕ3.7	
112018	BTS-038	ϕ3.8	
112019	BTS-039	ϕ3.9	
112020	BTS-040	ϕ4.0	
112021	BTS-041	ϕ4.1	2.3
112022	BTS-042	ϕ4.2	
112023	BTS-043	ϕ4.3	
112024	BTS-044	ϕ4.4	
112025	BTS-045	ϕ4.5	

Order No.	Model No.	Ball size S (mm)	Stem diameter d (mm)
112026	BTS-046	ϕ4.6	2.3
112027	BTS-047	ϕ4.7	
112028	BTS-048	ϕ4.8	
112029	BTS-049	ϕ4.9	
112030	BTS-050	ϕ5.0	
112031	BTS-051	ϕ5.1	
112032	BTS-052	ϕ5.2	
112033	BTS-053	ϕ5.3	
112034	BTS-054	ϕ5.4	
112035	BTS-055	ϕ5.5	
112036	BTS-056	ϕ5.6	
112037	BTS-057	ϕ5.7	
112038	BTS-058	ϕ5.8	
112039	BTS-059	ϕ5.9	
112040	BTS-060	ϕ6.0	
112041	BTS-061	ϕ6.1	
112042	BTS-062	ϕ6.2	
112043	BTS-063	ϕ6.3	
112044	BTS-064	ϕ6.4	
112045	BTS-065	ϕ6.5	
112046	BTS-066	ϕ6.6	
112047	BTS-067	ϕ6.7	
112048	BTS-068	ϕ6.8	
112049	BTS-069	ϕ6.9	
112050	BTS-070	ϕ7.0	

BALL GAP GAUGE

Small hole gauge to check right position or gap when assembling parts

Rust prevention▶
Zerust Film for Steel
P380

BTP-030

BTP-025

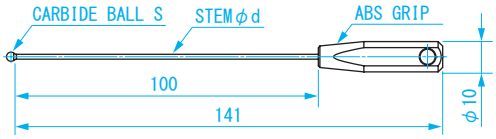
USE
- ●For gap measurement

MATERIAL
- ●Gauge head: Carbide
- ●Stem: Stainless steel
- ●Grip: ABS

FEATURES
- ●Easy to check right position or gap when assembling parts

SPECIFICATIONS
- ●Gauge Accuracy: Sphericity 0.005mm
  Tolerance ±0.005mm

●DIMEMSIONS Units: mm



Order No.	Model No.	Ball size S (mm)	Stem diameter d (mm)
112051	BTP-020	ϕ2.0	1.0
112052	BTP-021	ϕ2.1	1.6
112053	BTP-022	ϕ2.2	
112054	BTP-023	ϕ2.3	
112055	BTP-024	ϕ2.4	
112056	BTP-025	ϕ2.5	
112057	BTP-026	ϕ2.6	
112058	BTP-027	ϕ2.7	
112059	BTP-028	ϕ2.8	
112060	BTP-029	ϕ2.9	
112061	BTP-030	ϕ3.0	
112062	BTP-031	ϕ3.1	
112063	BTP-032	ϕ3.2	
112064	BTP-033	ϕ3.3	
112065	BTP-034	ϕ3.4	
112066	BTP-035	ϕ3.5	
112067	BTP-036	ϕ3.6	
112068	BTP-037	ϕ3.7	
112069	BTP-038	ϕ3.8	
112070	BTP-039	ϕ3.9	
112071	BTP-040	ϕ4.0	
112072	BTP-041	ϕ4.1	2.3
112073	BTP-042	ϕ4.2	
112074	BTP-043	ϕ4.3	
112075	BTP-044	ϕ4.4	
112076	BTP-045	ϕ4.5	

Order No.	Model No.	Ball size S (mm)	Stem diameter d (mm)
112077	BTP-046	ϕ4.6	2.3
112078	BTP-047	ϕ4.7	
112079	BTP-048	ϕ4.8	
112080	BTP-049	ϕ4.9	
112081	BTP-050	ϕ5.0	
112082	BTP-051	ϕ5.1	
112083	BTP-052	ϕ5.2	
112084	BTP-053	ϕ5.3	
112085	BTP-054	ϕ5.4	
112086	BTP-055	ϕ5.5	
112087	BTP-056	ϕ5.6	
112088	BTP-057	ϕ5.7	
112089	BTP-058	ϕ5.8	
112090	BTP-059	ϕ5.9	
112091	BTP-060	ϕ6.0	
112092	BTP-061	ϕ6.1	
112093	BTP-062	ϕ6.2	
112094	BTP-063	ϕ6.3	
112095	BTP-064	ϕ6.4	
112096	BTP-065	ϕ6.5	
112097	BTP-066	ϕ6.6	
112098	BTP-067	ϕ6.7	
112099	BTP-068	ϕ6.8	
112100	BTP-069	ϕ6.9	
112101	BTP-070	ϕ7.0	

FEELER GAUGE (WIDE TYPE)

Essential for assembly and adjustment

50mm width　　30mm width

12.7mm wide (normal) type▶
Feeler Gauge
P86 ~87

Multiple sizes in one product▶
Thickness Gauge
P88 ~90

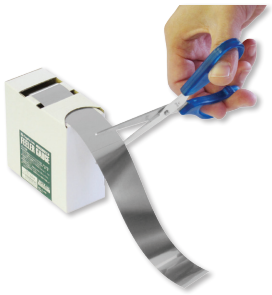
Rust prevention▶
Zerust Film for Steel
P380

USE
- ●For measurement of gap width
- ●For assemble or adjustment of automotive engine components or other machinery

MATERIAL
- ●Stainless steel (SUS304)【RoHS Compliant】

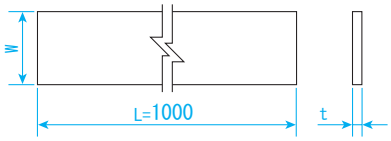
FEATURES
- ●Can be cut to necessary size
- ●Convenient cardboard storage box
- ●Made of stainless steel, rust resistant

SPECIFICATIONS
- ●Leaf Length: 1m
- ●Case Size: 80×88×40mm(30mm width)
  90×90×60mm(50mm width)



Can be cut to necessary size

● DIMENSIONS　　Units: mm



Order No.	Model No.	Leaf Width(W) (mm)	Thickness(t) (mm)	Thickness Accuracy(t) (mm)
007391	SFG30-005-1	30	0.005	±0.0005
007392	SFG30-01-1		0.01	±0.001
007393	SFG30-02-1		0.02	±0.002
007394	SFG30-03-1		0.03	±0.003
007395	SFG30-04-1		0.04	±0.004
007396	SFG30-05-1		0.05	±0.005
007397	SFG30-06-1		0.06	±0.006
007398	SFG30-08-1		0.08	±0.008
007399	SFG30-10-1		0.1	±0.01
007400	SFG50-005-1	50	0.005	±0.0005
007401	SFG50-01-1		0.01	±0.001
007402	SFG50-02-1		0.02	±0.002
007403	SFG50-03-1		0.03	±0.003
007404	SFG50-04-1		0.04	±0.004
007405	SFG50-05-1		0.05	±0.005
007406	SFG50-06-1		0.06	±0.006
007407	SFG50-08-1		0.08	±0.008
007408	SFG50-10-1		0.1	±0.01

FEELER GAUGE (SFG SERIES)

Essential for assembly and fitting work

Wide width type▶
Feeler Gauge (Wide type)
P86

Multiple sizes in one product▶
Thickness Gauge
P88 ~90

Rust prevention▶
Zerust Film for Steel
P380

USE
- ●For measurement of gap width
- ●For assemble or adjustment of automotive engine components or other machinery

MATERIAL
- ●Leaf thickness: 0.01mm　Stainless steel SUS301H
  0.005·0.02~0.10mm　Stainless steel SUS304H

FEATURES
- ●Can be cut to necessary size

SPECIFICATIONS
- ●Leaf width: 12.7mm　●Leaf hardness: HV300 and above　●Case Size: 77×77×22mm
- ※White powder remains on the surface of the product is antirust agent

Order No.	Model No.	Size (mm)	Leaf Width (mm)	Leaf Length (m)	Accuracy (mm)	Weight (Including case)
007245	SFG-005-1	0.005×1m	0.005	1	±0.004	34g
007251	SFG-01-1	0.01 ×1m	0.01			34g
007252	SFG-02-1	0.02 ×1m	0.02			35g
007381	SFG-03-1	0.03 ×1m	0.03		±0.005	36g
007382	SFG-04-1	0.04 ×1m	0.04			37g
007383	SFG-05-1	0.05 ×1m	0.05			38g
007384	SFG-06-1	0.06 ×1m	0.06			39g
007385	SFG-07-1	0.07 ×1m	0.07			40g
007386	SFG-08-1	0.08 ×1m	0.08			41g
007387	SFG-09-1	0.09 ×1m	0.09			42g
007388	SFG-10-1	0.10 ×1m	0.10		±0.006	43g
007421	SFG-01-3	0.01 ×3m	0.01	3	±0.004	36g
007422	SFG-02-3	0.02 ×3m	0.02			39g
007423	SFG-03-3	0.03 ×3m	0.03		±0.005	42g
007424	SFG-04-3	0.04 ×3m	0.04			45g
007425	SFG-05-3	0.05 ×3m	0.05			48g

Order No.	Model No.	Size (mm)	Leaf Width (mm)	Leaf Length (m)	Accuracy (mm)	Weight (Including case)
007426	SFG-06-3	0.06×3m	0.06	3	±0.005	51g
007427	SFG-07-3	0.07×3m	0.07			54g
007428	SFG-08-3	0.08×3m	0.08			57g
007429	SFG-09-3	0.09×3m	0.09			60g
007430	SFG-10-3	0.10×3m	0.10		±0.006	63g
007411	SFG-01-5	0.01×5m	0.01	5	±0.004	38g
007412	SFG-02-5	0.02×5m	0.02			43g
007413	SFG-03-5	0.03×5m	0.03		±0.005	48g
007414	SFG-04-5	0.04×5m	0.04			53g
007415	SFG-05-5	0.05×5m	0.05			58g
007416	SFG-06-5	0.06×5m	0.06			63g
007417	SFG-07-5	0.07×5m	0.07			68g
007418	SFG-08-5	0.08×5m	0.08			73g
007419	SFG-09-5	0.09×5m	0.09			78g
007420	SFG-10-5	0.10×5m	0.10		±0.006	83g

FEELER GAUGE (FG SERIES)

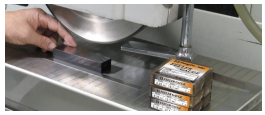
T

Essential for assembly and fitting work

Wide width type▶
Feeler Gauge (Wide type) P86

Multiple sizes in one product▶
Thickness Gauge P88 ~90

Rust prevention▶
Zerust Film for Steel P380



USE
- For measurement of gap width
- For assemble or adjustment of automotive engine components or other machinery

MATERIAL
- Carbon tool steel (Hardened) (equivalent to SK7)

FEATURES
- Can be cut to necessary size

SPECIFICATIONS
- Leaf width: 12.7mm
- Leaf hardness: HV320 and above

※White powder remains on the surface of the product is antirust agent

Order No.	Model No.	Size (mm)	Leaf Width (mm)	Leaf Length (m)	Accuracy (mm)	Case size (mm)	Weight (Including case)
007253	FG-03-1	0.03x1m	0.03	1	±0.005	77×77×22	36g
007254	FG-04-1	0.04x1m	0.04				37g
007255	FG-05-1	0.05x1m	0.05				38g
007256	FG-06-1	0.06x1m	0.06				39g
007257	FG-07-1	0.07x1m	0.07				40g
007258	FG-08-1	0.08x1m	0.08				41g
007259	FG-09-1	0.09x1m	0.09				42g
007260	FG-10-1	0.10x1m	0.10				43g
007261	FG-11-1	0.11x1m	0.11		±0.01		44g
007262	FG-12-1	0.12x1m	0.12				45g
007263	FG-13-1	0.13x1m	0.13				46g
007264	FG-14-1	0.14x1m	0.14				47g
007265	FG-15-1	0.15x1m	0.15				48g
007266	FG-16-1	0.16x1m	0.16				49g
007267	FG-17-1	0.17x1m	0.17				50g
007268	FG-18-1	0.18x1m	0.18				51g
007269	FG-19-1	0.19x1m	0.19				52g
007270	FG-20-1	0.20x1m	0.20				53g
007275	FG-25-1	0.25x1m	0.25				58g
007280	FG-30-1	0.30x1m	0.30				63g
007282	FG-35-1	0.35x1m	0.35		±0.012	115×115×22	121g
007284	FG-40-1	0.40x1m	0.40				126g
007286	FG-45-1	0.45x1m	0.45				133g
007287	FG-50-1	0.50x1m	0.50				138g
007289	FG-60-1	0.60x1m	0.60		±0.02	Plastic bag package	64g
007291	FG-70-1	0.70x1m	0.70				72g
007292	FG-80-1	0.80x1m	0.80				84g
007293	FG-90-1	0.90x1m	0.90				92g
007294	FG-00-1	1.00x1m	1.00				101g
007303	FG-03-3	0.03x3m	0.03	3	±0.005	77×77×22	42g
007304	FG-04-3	0.04x3m	0.04				45g
007305	FG-05-3	0.05x3m	0.05				48g
007306	FG-06-3	0.06x3m	0.06				51g
007307	FG-07-3	0.07x3m	0.07				54g
007308	FG-08-3	0.08x3m	0.08				57g
007309	FG-09-3	0.09x3m	0.09				60g
007310	FG-10-3	0.10x3m	0.10				63g
007311	FG-11-3	0.11x3m	0.11		±0.01		66g
007312	FG-12-3	0.12x3m	0.12				69g
007313	FG-13-3	0.13x3m	0.13				72g
007314	FG-14-3	0.14x3m	0.14				75g
007315	FG-15-3	0.15x3m	0.15			115×115×22	130g
007317	FG-20-3	0.20x3m	0.20				145g
007318	FG-25-3	0.25x3m	0.25				160g
007319	FG-30-3	0.30x3m	0.30				176g
007321	FG-35-3	0.35x3m	0.35		±0.012	Plastic bag package	107g
007323	FG-40-3	0.40x3m	0.40				140g
007325	FG-45-3	0.45x3m	0.45				156g
007326	FG-50-3	0.50x3m	0.50				170g
007328	FG-60-3	0.60x3m	0.60		±0.02		208g
007330	FG-70-3	0.70x3m	0.70				234g
007331	FG-80-3	0.80x3m	0.80				270g
007332	FG-90-3	0.90x3m	0.90				293g
007333	FG-00-3	1.00x3m	1.00				320g
007343	FG-03-5	0.03x5m	0.03	5	±0.005	77×77×22	48g
007344	FG-04-5	0.04x5m	0.04				53g
007345	FG-05-5	0.05x5m	0.05				58g
007346	FG-06-5	0.06x5m	0.06				63g
007347	FG-07-5	0.07x5m	0.07				68g
007348	FG-08-5	0.08x5m	0.08				73g
007349	FG-09-5	0.09x5m	0.09				78g
007350	FG-10-5	0.10x5m	0.10				83g
007351	FG-11-5	0.11x5m	0.11		±0.01		88g
007352	FG-12-5	0.12x5m	0.12				93g
007353	FG-13-5	0.13x5m	0.13				98g
007354	FG-14-5	0.14x5m	0.14				103g
007355	FG-15-5	0.15x5m	0.15			115×115×22	161g
007357	FG-20-5	0.20x5m	0.20				185g
007358	FG-25-5	0.25x5m	0.25			Plastic bag package	157g
007359	FG-30-5	0.30x5m	0.30				184g
007361	FG-35-5	0.35x5m	0.35		±0.012		211g
007363	FG-40-5	0.40x5m	0.40				232g
007365	FG-45-5	0.45x5m	0.45				259g
007366	FG-50-5	0.50x5m	0.50				282g
007368	FG-60-5	0.60x5m	0.60		±0.02		345g
007370	FG-70-5	0.70x5m	0.70				389g
007371	FG-80-5	0.80x5m	0.80				449g
007372	FG-90-5	0.90x5m	0.90				487g
007373	FG-00-5	1.00x5m	1.00				532g

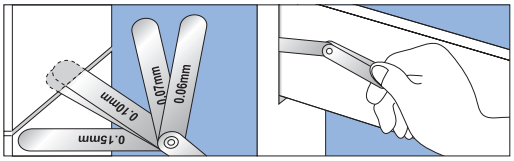
THICKNESS GAUGE

Suitable for measuring slight gaps where it is difficult to do with other measuring instruments

HOW TO MOVIE

For cutting necessary size▶ Feeler Gauge P86 ~87
Replaceable leaf▶ Thickness Gauge Leaf P89
Rust-resistant type▶ Stainless Thickness Gauge P90
Rust prevention▶ Zerust Film for Steel P380

65M



※Leaves can be combined for a wide range of measurements

USE
- For measurement of gap width

MATERIAL
- Carbon tool steel

FEATURES
- Enables precise inspection by inserting the gauge into the gap between two flat surfaces
- Suitable for measuring gap between piston and cylinder of automotive engine
- Each of the gauges can be detached by unscrewing the clip of the cover (except 172 series)
- Leaf width: 12.7mm

※White powder remains on the surface of the product is antirust agent

ACCURACY

Leaf thickness (mm)	Tolerance (mm)
0.01~0.06	±0.005
0.07~0.10	±0.01
0.11~0.35	±0.015
0.40~0.60	±0.02
0.70~3.00	±0.035

Order No.	Model No.	Leaf Length (mm)	Pieces/ Set	Nominal Size (mm)	Weight
111032	172MA	75	9	0.04 0.05 0.06 0.07 0.08 0.10 0.15 0.20 0.30	30g
111033	172MB	100			30g
111034	172MC	150			50g
110970	172MD	230			70g
110971	172ME	300			90g
110972	100MR	100	10	0.03 0.04 0.05 0.08 0.10 0.15 0.20 0.25 0.30 0.40	40g
110973	150MR	150			60g
110974	100MK	100	10	0.01 0.02 0.03 0.04 0.05 0.06 0.07 0.08 0.09 0.10	30g
110975	150MK	150			40g
111038	60M	75	19	0.03 0.04 0.05 0.06 0.07 0.08 0.09 0.10 0.15 0.20 0.25 0.30 0.35 0.40 0.45 0.50 0.70 0.80 1.00	60g
111039	100MY	100			80g
111040	150MY	150			120g
111035	65M	75	25	0.03 0.04 0.05 0.06 0.07 0.08 0.09 0.10 0.11 0.12 0.13 0.14 0.15 0.20 0.25 0.30 0.35 0.40 0.45 0.50 0.60 0.70 0.80 0.90 1.00	80g
111036	100MZ	100			100g
111037	150MZ	150			150g
111031	72M	75	12	0.04 0.05 0.06 0.07 0.08 0.10 0.15 0.20 0.30 1.00 2.00 3.00	70g
111044	100MT	100			100g
111045	150MT	150			140g
110976	100ML	100	19	0.01 0.02 0.03 0.04 0.05 0.06 0.07 0.08 0.09 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00	80g
110977	150ML	150			120g
110978	80M	75	13	0.03 0.04 0.05 0.06 0.07 0.08 0.10 0.15 0.20 0.30 1.00 2.00 3.00	60g
111046	100MX	100			90g
111047	150MX	150			140g
111048	100MH	100	10	0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00	80g
111049	150MH	150			110g

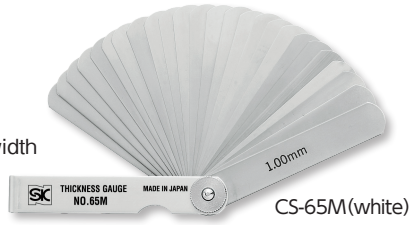
BLOCK GAUGE
PIN GAUGE
PIN VISE
PIN GAUGE ACCESSORIES
RING GAUGE
PLUG GAUGE
LIMIT GAUGE
THICKNESS GAUGE
TAPER GAUGE
WELDING GAUGE
OTHER GAUGES

THICKNESS GAUGE WITH COLOR SLEEVE

HOW TO MOVIE

Same accuracy as regular THICKNESS GAUGE with three different color options - white, black and green

For cutting necessary size▶ Feeler Gauge P86 ~87
Replaceable leaf▶ Thickness Gauge Leaf P89
Rust-resistant type▶ Stainless Thickness Gauge P90
Rust prevention▶ Zerust Film for Steel P380



CS-65M(white)

CS-65M(black)

CS-65M(green)

USE
- For measurement of gap width

MATERIAL
- Carbon tool steel

FEATURES
- Enables precise inspection by inserting the gauge into the gap between two flat surfaces
- Suitable for measuring gap between piston and cylinder of automotive engine
- Each of the gauges can be detached by unscrewing the clip of the cover (except 172 series)
- Leaf Width: 12.7mm

※Please specify color (White, Black, Green) at the time of order placement
※White powder remains on the surface of the product is antirust agent

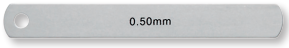
ACCURACY

Leaf thickness (mm)	Tolerance (mm)
0.01~0.06	±0.005
0.07~0.10	±0.01
0.11~0.35	±0.015
0.40~0.60	±0.02
0.70~3.00	±0.035

Model No.	Leaf Length (mm)	Pieces/ Set	Size (mm)	Weight
CS-172MA	75	9	0.04 0.05 0.06 0.07 0.08 0.10 0.15 0.20 0.30	30g
CS-172MB	100			30g
CS-172MC	150			50g
CS-100MR	100	10	0.03 0.04 0.05 0.08 0.10 0.15 0.20 0.25 0.30 0.40	40g
CS-150MR	150			60g
CS-100MK	100	10	0.01 0.02 0.03 0.04 0.05 0.06 0.07 0.08 0.09 0.10	30g
CS-150MK	150			40g
CS-60M	75	19	0.03 0.04 0.05 0.06 0.07 0.08 0.09 0.10 0.15 0.20	60g
CS-100MY	100		0.25 0.30 0.35 0.40 0.45 0.50 0.70 0.80 1.00	80g
CS-150MY	150			120g
CS-65M	75	25	0.03 0.04 0.05 0.06 0.07 0.08 0.09 0.10 0.11 0.12	80g
CS-100MZ	100		0.13 0.14 0.15 0.20 0.25 0.30 0.35 0.40 0.45 0.50	100g
CS-150MZ	150		0.60 0.70 0.80 0.90 1.00	150g
CS-72M	75	12	0.04 0.05 0.06 0.07 0.08 0.10 0.15 0.20 0.30 1.00	70g
CS-100MT	100		2.00 3.00	100g
CS-150MT	150			140g
CS-100ML	100	19	0.01 0.02 0.03 0.04 0.05 0.06 0.07 0.08 0.09 0.10	80g
CS-150ML	150		0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00	120g
CS-80M	75	13	0.03 0.04 0.05 0.06 0.07 0.08 0.10 0.15 0.20 0.30	60g
CS-100MX	100		1.00 2.00 3.00	90g
CS-150MX	150			140g
CS-100MH	100	10	0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00	80g
CS-150MH	150			110g

THICKNESS GAUGE LEAF

HOW TO MOVIE



S100-05

S150-10

For cutting necessary size▶ Feeler Gauge P86 ~87
Rust prevention▶ Zerust Film for Steel P380

MATERIAL
- Carbon tool steel
- Leaf Width: 12.7mm

※White powder remains on the surface of the product is antirust agent

■ Leaf Length: 100mm

Order No.	Model No.	Thickness (mm)
110801	S100-001	0.01
110802	S100-002	0.02
110803	S100-003	0.03
110804	S100-004	0.04
110805	S100-005	0.05
110806	S100-006	0.06
110807	S100-007	0.07
110808	S100-008	0.08
110809	S100-009	0.09
110810	S100-01	0.10
110811	S100-02	0.20
110812	S100-03	0.30
110813	S100-04	0.40
110814	S100-05	0.50
110815	S100-06	0.60
110816	S100-07	0.70
110817	S100-08	0.80
110818	S100-09	0.90
110819	S100-10	1.00

■ Leaf Length: 150mm

Order No.	Model No.	Thickness (mm)
110820	S150-001	0.01
110821	S150-002	0.02
110822	S150-003	0.03
110823	S150-004	0.04
110824	S150-005	0.05
110825	S150-006	0.06
110826	S150-007	0.07
110827	S150-008	0.08
110828	S150-009	0.09
110829	S150-01	0.10
110830	S150-02	0.20
110831	S150-03	0.30
110832	S150-04	0.40
110833	S150-05	0.50
110834	S150-06	0.60
110835	S150-07	0.70
110836	S150-08	0.80
110837	S150-09	0.90
110838	S150-10	1.00

STAINLESS THICKNESS GAUGE NEW!

Rust-resistant stainless steel type now available

For cutting necessary size▶
Feeler Gauge
P86 ~87

USE
- For measurement of gap width

MATERIAL
- Stainless steel (SUS304H)

FEATURES
- Rust-resistant stainless steel leaf
- Accurate inspection can be done by inserting into a fine gap between two planes where difficult to measure
- It is an indispensable measuring tools for automotive distance measurement of piston and cylinder of engine
- Leaf width: 12.7mm

※The gauge leafs are fixed by eyelet and cannot be replaced.

ACCURACY

Leaf thickness (mm)	Tolerance (mm)
0.04~0.10	±0.005
0.15~0.30	±0.015

Order No.	Model No.	Leaf Length (mm)	Pieces /set	Size (mm)	Weight
NEW! 110681	S172MA	75	9	0.04 0.05 0.06 0.07 0.08 0.10 0.15 0.20 0.30	20g
NEW! 110682	S172MB	100			26g
NEW! 110683	S172MC	150			38g

THICKNESS GAUGE LEAF NEW!

For cutting necessary size▶
Feeler Gauge
P86 ~87

SS-100-030

SS-150-030

MATERIAL
- Stainless steel (SUS304H)
- Leaf width: 12.7mm

ACCURACY

Leaf size (mm)	Tolerance (mm)
0.04~0.10	±0.005
0.15~0.30	±0.015

■ Leaf Length: 100mm

Order No.	Model No.	Thickness (mm)
NEW! 110764	SS-100-004	0.04
NEW! 110765	SS-100-005	0.05
NEW! 110766	SS-100-006	0.06
NEW! 110767	SS-100-007	0.07
NEW! 110768	SS-100-008	0.08
NEW! 110770	SS-100-010	0.10
NEW! 110771	SS-100-015	0.15
NEW! 110772	SS-100-020	0.20
NEW! 110773	SS-100-030	0.30

■ Leaf Length: 150mm

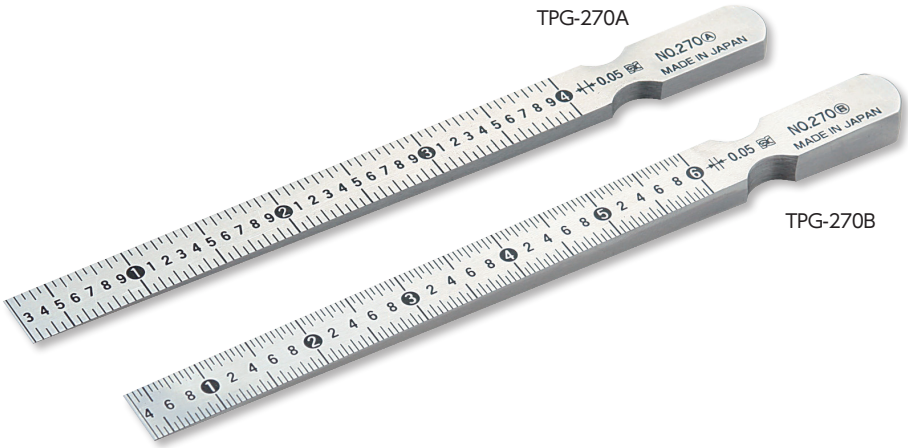
Order No.	Model No.	Thickness (mm)
NEW! 110777	SS-150-004	0.04
NEW! 110778	SS-150-005	0.05
NEW! 110779	SS-150-006	0.06
NEW! 110780	SS-150-007	0.07
NEW! 110781	SS-150-008	0.08
NEW! 110783	SS-150-010	0.10
NEW! 110784	SS-150-015	0.15
NEW! 110785	SS-150-020	0.20
NEW! 110786	SS-150-030	0.30

TAPER GAUGE

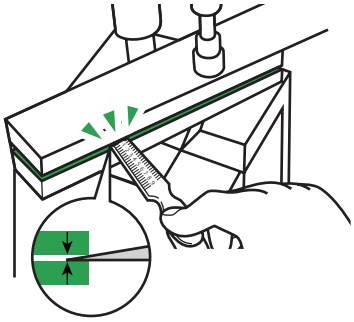
HOW TO MOVIE

For measuring narrower gap▶
Thickness Gauge
P88 ~90

Rust prevention▶
Zerust Film for Steel
P380



Graduation shows the gap width



USE
- For measurement of groove and gap etc.

MATERIAL
- Carbon steel for machine structual use, non-hardened

FEATURES
- Each number marked on the gauge shows gauge thickness of its point which enables to measure width of inner gap
- Satin finish
- Packed in plastic carrying case

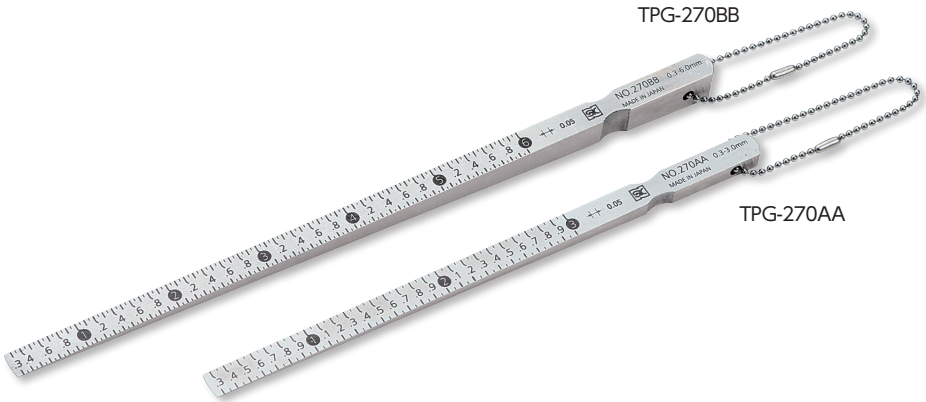
Order No.	Model No.	Standard	Measuring Range (mm)	Accuracy (mm)	Graduation (mm)	Taper Angle	Full Length H×W (mm)	Weight
007000	TPG-270A	270A	0.3~4	±0.04	0.05	1°54′33″	158×12	95g
007001	TPG-270B	270B	0.4~6	±0.04	0.05	2°51′45″	158×12	95g

TAPER GAUGE NARROW WIDTH TYPE

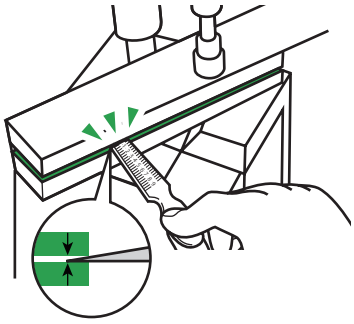
HOW TO MOVIE

For measuring narrower gap▶
Thickness Gauge
P88 ~90

Rust prevention▶
Zerust Film for Steel
P380



Graduation shows the gap width



USE
- For measurement of groove and gap etc.
- For use as a height adjustment jig

MATERIAL
- Carbon steel for machine structual use, non-hardened

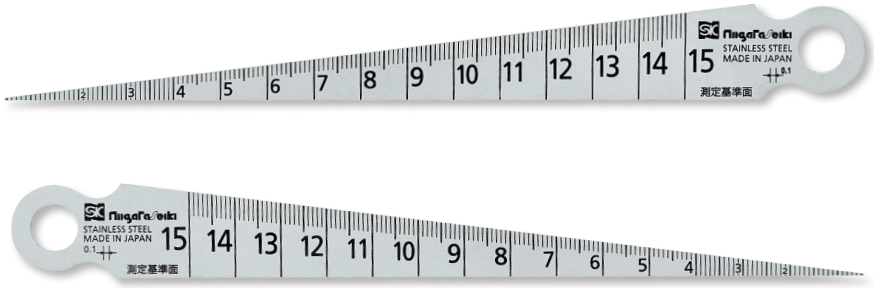
FEATURES
- Each number marked on the gauge shows gauge thickness of its point which enables to measure width of inner gap
- Narrow width type
- Satin finish
- Packed in plastic carrying case
- Ball chain attached

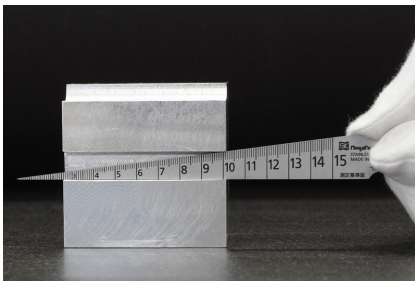
Order No.	Model No.	Standard	Measuring Range (mm)	Accuracy (mm)	Graduation (mm)	Taper Angle	Full Length H×W (mm)	Weight
007002	TPG-270AA	270AA	0.3~3	±0.04	0.05	1°54′33″	127.5×6	18g
007003	TPG-270BB	270BB	0.3~6	±0.04	0.05	2°51′45″	160 ×6	38g

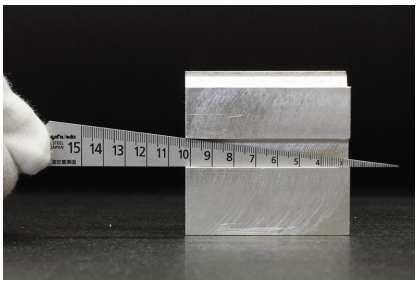
BLOCK GAUGE
PIN GAUGE
PIN VISE
PIN GAUGE ACCESSORIES
RING GAUGE
PLUG GAUGE
LIMIT GAUGE
THICKNESS GAUGE
TAPER GAUGE
WELDING GAUGE
OTHER GAUGES

RIGHT ANGLE TAPER GAUGE

HOW TO MOVIE







USE
- For measurement of groove and gap etc.

MATERIAL
- Hardened stainless steel

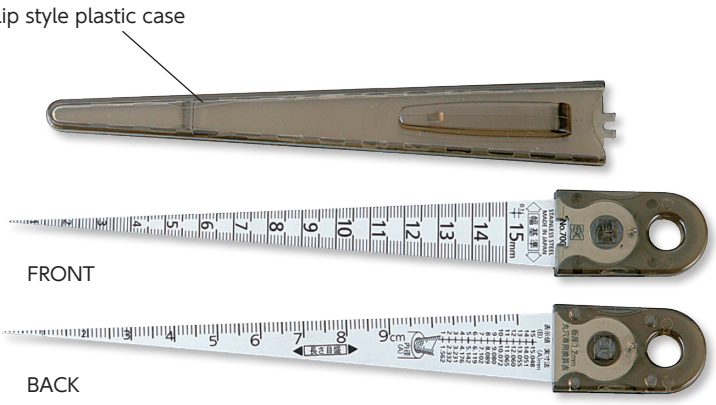
FEATURES
- Taper gauge specialized in inner width measurements
  One side of gauge rests secure along with the workpiece for a stable measurement
- The scale is designed to be read easily from the side when the gap to be measured is not visible from above

Order No.	Model No.	Measuring Range (mm)	Accuracy (mm)	Graduation (mm)	Taper Angle	Full Length (mm)	Weight
007004	TPG-700T	1～15	±0.05	0.1	7° 9′ 10″	148.5	10g

TAPER GAUGE

HOW TO MOVIE

Clip style plastic case



Wide Measuring Range 1-29mm▶
Taper Gauge TPG-267M
P94

Slide case for convenient carrying▶
Slide Taper Gauge
P95

Made of polycarbonate▶
Plastic Taper Gauge KAIDAN
P95

130mm scale set▶
Taper Gauge with Scale
P96

Perfect for carrying in shirt pocket

USE
- For measurement of groove, gap, hole diameter etc.

MATERIAL
- Hardened stainless steel
- Hardness: HV480

FEATURES
- Satin finish
- Back side- scale graduated and hole diameter conversion table
- Pocket clip style carrying case
- Front - Width scale, Back - Length scale

Order No.	Model No.	Standard	Measuring Range (mm)	Accuracy (mm)	Graduation (mm)	Taper Angle	Full Length (mm)	Thickness (mm)	Weight
007008	TPG-700AC	#700 1-15 with Plastic case	1～15	± 0.05	0.1	7° 9′ 10″	148.5	1.2	10g

TAPER GAUGE

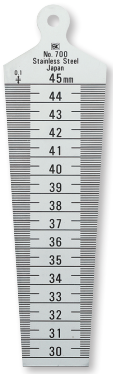
HOW TO MOVIE

For measuring narrower gap▶
Pin Gauge
P50

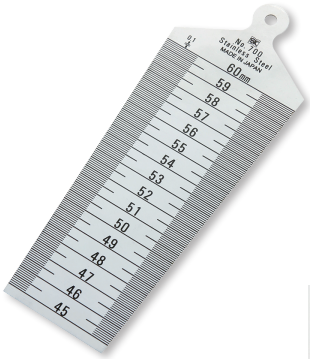
Quick size measurement of groove and gap

TPG-700A

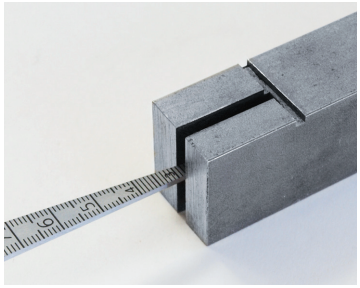
TPG-700B



TPG-700C



TPG-700D



Measurement of gap width

USE
- For measurement of groove, gap, hole diameter etc.

MATERIAL
- Hardened stainless steel
- Hardness: HV480

FEATURES
- Satin finish

Order No.	Model No.	Standard	Measuring Range (mm)	Accuracy (mm)	Graduation (mm)	Taper Angle	Overall Length (mm)	Thickness (mm)	Weight
007010	TPG-700A	#700 1-15	1～15	± 0.05	0.1	7° 9′ 10″	148.5	1.2	10g
007011	TPG-700B	#700 15-30	15～30	± 0.05	0.1	7° 9′ 10″	153	1.2	40g
007012	TPG-700C	#700 30-45	30～45	± 0.05	0.1	7° 9′ 10″	159	1.2	60g
007013	TPG-700D	#700 45-60	45～60	± 0.05	0.1	7° 9′ 10″	161.5	1.2	80g

SHORT TAPER GAUGE SET/ SINGLE PART

HOW TO MOVIE

No need to cut-off the existing taper gauge.
Suitable for measuring shallow gap

TPG-511

TPG-0515S

USE
- For measurement of groove, gap, hole diameter etc.

MATERIAL
- Stainless steel
- Hardness: HV300

FEATURES
- Suitable for measuring shallow gap
- With ball chain
- TPG-0515S is set of 0.5～7.0mm, 5.0～11.0mm and 9.0～15.0mm

Order No.	Model No.	Measuring Range (mm)	Accuracy (mm)	Graduation (mm)	Taper Angle	Overall Length (mm)	Thickness (mm)	Weight
111422	TPG-057	0.5～ 7.0	± 0.1	0.1	7° 9′ 10″	72.8	1.2	6g
111423	TPG-511	5.0～11.0				68.8		9g
111424	TPG-915	9.0～15.0						11g
111425	TPG-0515S	0.5～15.0				72.8		20g

TAPER GAUGE KAIDAN

HOW TO MOVIE

Made of polycarbonate ▶
Plastic Taper Gauge KAIDAN
P95

New stepped millimeter graduation prevents misreading

FRONT

BACK

USE
- For measurement of groove, gap, hole diameter etc.

MATERIAL
- Hardened stainless steel
- Hardness: HV480

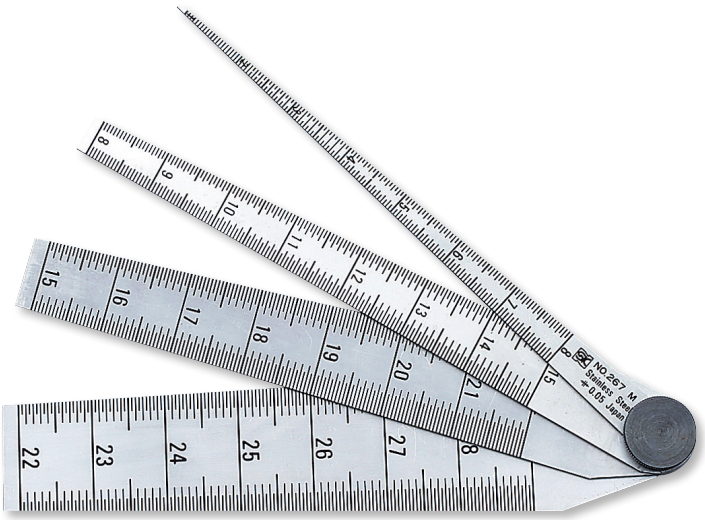
FEATURES
- Increasing height of each mark makes it easier for eye to distinguish 0.1mm steps
- Sequential number style can be read directly without checking the surrounding numbers, 0.2mm point markings
- Satin finish
- Front: width scale
- Back: length scale with a conversion table

Order No.	Model No.	Measuring Range (mm)	Accuracy (mm)	Graduation (mm)	Taper Angle	Full Length (mm)	Thickness (mm)	Weight
007211	TPG-700AKD	1～15	± 0.05	0.1	7° 9′ 10″	148.5	1.0	10g

TAPER GAUGE

HOW TO MOVIE

Four different sizes of gauges in one set, enables to measure 1 ～ 29mm gap



USE
- For measurement of groove, gap, hole diameter etc.

MATERIAL
- Hardened stainless steel
- Hardness: HV480

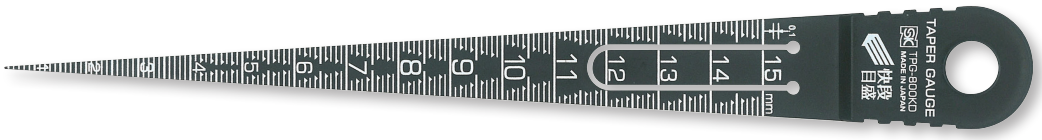
FEATURES
- Satin finish
- Number of leafs: 4 pieces（1～8mm, 8～15mm, 15～22mm, 22～29mm）

Order No.	Model No.	Standard	Measuring Range (mm)	Accuracy (mm)	Graduation (mm)	Full Length (mm)	Thickness (mm)	Weight
007030	TPG-267M	267M	1～29	±0.05	0.05	144	1.2	80g

PLASTIC TAPER GAUGE KAIDAN

HOW TO MOVIE

Polycarbonate material allows scratch-free contact to measuring objects



Stepped millimeter graduation prevents misreading

can put in a pocket

USE
- For measurement of groove, gap, hole diameter etc.

MATERIAL
- Polycarbonate

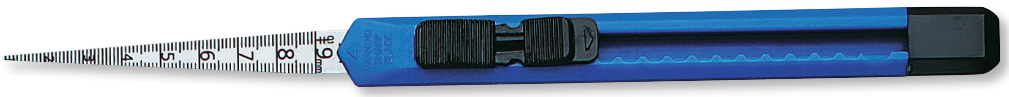
FEATURES
- Scratch resistant
- Clip design

Order No.	Model No.	Standard	Measuring Range (mm)	Accuracy (mm)	Graduation (mm)	Full Length (mm)	Weight
007212	TPG-800KD	800	1～15	±0.2	0.1	158	5g

SLIDE TAPER GAUGE

HOW TO MOVIE

Clip-type slide case for safe and convenient carrying



USE
- For measurement of groove, gap, hole diameter etc.

MATERIAL
- Hardened stainless steel
- Hardness: HV480

FEATURES
- Satin finish
- Clip-type slide case for safe and convenient carrying
- Gauge tip is rounded for safety
- Slide into case for storage

Clip-style slide case

Perfect for carrying in shirt pocket

Order No.	Model No.	Standard	Measuring Range (mm)	Accuracy (mm)	Graduation (mm)	Taper Angle	Weight
007201	TPG-700SL	700SL	1～9	±0.05	0.1	7°9′10″	20g

TAPER GAUGE WITH KAIDAN SCALE

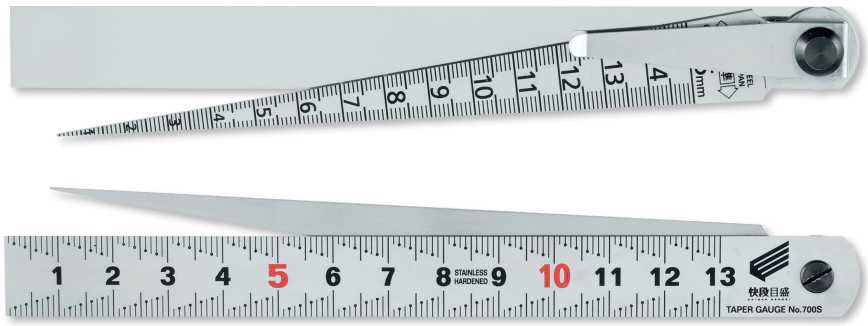
HOW TO MOVIE

Convenient set, taper gauge 700A with 130mm scale

Stepped graduation for easy reading ▶ TAPER GAUGE KAIDAN P94
Stepped graduation for easy reading ▶ Stainless Steel Ruler KAIDAN P304

FRONT

BACK



With pocket clip, easy to carry

USE
- For measurement of groove, gap, hole diameter and length

MATERIAL
- Hardened stainless steel

FEATURES
- Convenient set, taper gauge 700A with 130mm scale. Folds safely with pocket clip, easy to carry.
- 130mm scale with 1mm Kaidan graduation on the back for convenient use
- Satin finish

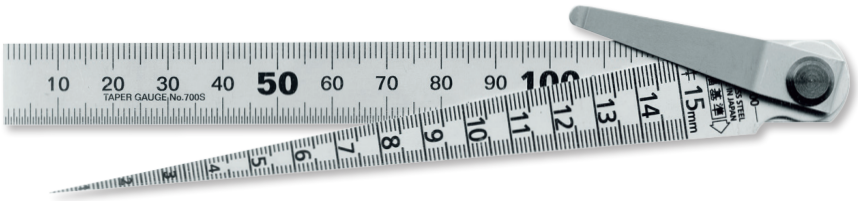
Order No.	Model No.	Weight
007205	TPG-700SKD	40g

	Measuring Range (mm)	Accuracy (mm)	Graduation (mm)	Full Length (mm)	Taper Angle
Taper Gauge	1～ 15	±0.05	0.1	148.5	7°9′10″
Scale	0～130	±0.13	1	155	–

TAPER GAUGE

HOW TO MOVIE

Convenient set, taper gauge 700A with 130mm scale



With pocket clip, easy to carry

USE
- For measurement of groove, gap, hole diameter and length

MATERIAL
- Hardened stainless steel

FEATURES
- Convenient set, taper gauge 700A with 130mm scale. Folds safely with pocket clip, easy to carry.
- Satin finish

Order No.	Model No.	Standard	Weight
007200	TPG-700S	700S	40g

	Measuring Range (mm)	Accuracy (mm)	Graduation (mm)	Full Length (mm)	Taper Angle
Taper Gauge	1～ 15	±0.05	0.1	148.5	7°9′10″
Scale	0～130	±0.13	0.5	155	–

CIRCULAR TAPER GAUGE

HOW TO MOVIE

For measuring narrower gap▶
Pin Gauge
P50

Rust prevention▶
Zerust Film for Steel
P380

TPG-710A

TPG-710B

TPG-710C

USE
- For measurement of groove, gap, hole and tube diameter etc.

MATERIAL
- Gauge: Carbon tool steel (TPG-710A), Carbon steel for machine structual use (TPG-710B & 710C)
- Grip: Free cutting steel

FEATURES
- Cylindrical type
- Silver finish

Order No.	Model No.	Standard	Measuring Range (mm)	Accuracy (mm)	Graduation (mm)	Taper Angle	Full Length (mm)	Weight
007100	TPG-710A	710A	1～ 6	± 0.05	0.1	5° 44′	93	20g
007101	TPG-710B	710B	4～15	± 0.05	0.1	5° 44′	175	140g
007102	TPG-710C	710C	4～25	± 0.05	0.1	5° 44′	290	550g

CIRCULAR TAPER GAUGE WITH GREEN COLOR GRIP

HOW TO MOVIE

For measuring narrower gap▶
Pin Gauge
P50

Rust prevention▶
Zerust Film for Steel
P380

CGTPG-710A

CGTPG-710B

CGTPG-710C

USE
- For measurement of groove, gap, hole and tube diameter etc.

MATERIAL
- Gauge: Carbon tool steel (CCTPG-710A), Carbon steel for machine structual use (CCTPG-710B & 710C)
- Grip: Anodized aluminum

FEATURES
- Silver finish

Order No.	Model No.	Standard	Measuring Range (mm)	Accuracy (mm)	Graduation (mm)	Taper Angle	Full Length (mm)	Weight
007103	CGTPG-710A	710A	1～ 6	± 0.05	0.1	5° 44′	93	20g
007104	CGTPG-710B	710B	4～15	± 0.05	0.1	5° 44′	175	140g
007105	CGTPG-710C	710C	4～25	± 0.05	0.1	5° 44′	290	550g

CIRCULAR TAPER GAUGE

HOW TO MOVIE

Rust prevention▶
Zerust Film for Steel
P380

TPG-715A

USE
- For measurement of groove, gap, hole and tube diameter etc.

MATERIAL
- Gauge: Carbon tool steel
- Case: Brass

FEATURES
- Comes with a cap for gauge tip protection

Order No.	Model No.	Standard	Measuring Range (mm)	Accuracy (mm)	Graduation (mm)	Taper Angle	Full Length (mm)	Weight
007150	TPG-715A	715A	0.1 ~ 3	± 0.05	0.1	5° 43′ 29″	118.5	33g
007151	TPG-715B	715B	1 ~ 6	± 0.05	0.1	5° 43′ 29″	168	80g

CIRCULAR TAPER GAUGE WITH GREEN COLOR CASE

HOW TO MOVIE

Rust prevention▶
Zerust Film for Steel
P380

CCTPG-715A

USE
- For measurement of groove, gap, hole and tube diameter etc.

MATERIAL
- Gauge: Carbon tool steel
- Case: Anodized aluminum

FEATURES
- Comes with a cap for gauge tip protection

Order No.	Model No.	Standard	Measuring Range (mm)	Accuracy (mm)	Graduation (mm)	Taper Angle	Full Length (mm)	Weight
007152	CCTPG-715A	715A	0.1 ~ 3	± 0.05	0.1	5° 43′ 29″	118.5	33g
007153	CCTPG-715B	715B	1 ~ 6	± 0.05	0.1	5° 43′ 29″	168	80g

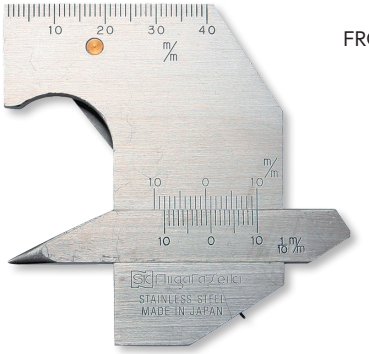
WELDING GAUGE

T

A wide variety of welding measurements in one gauge

Function comparison▶
Welding Gauge Chart
P110 ~111

FRONT



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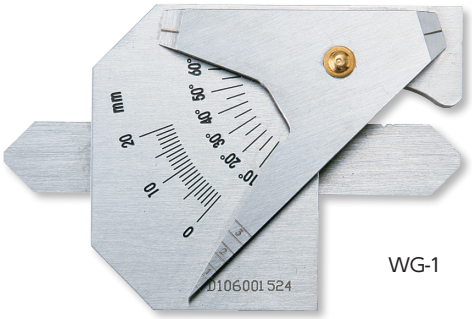
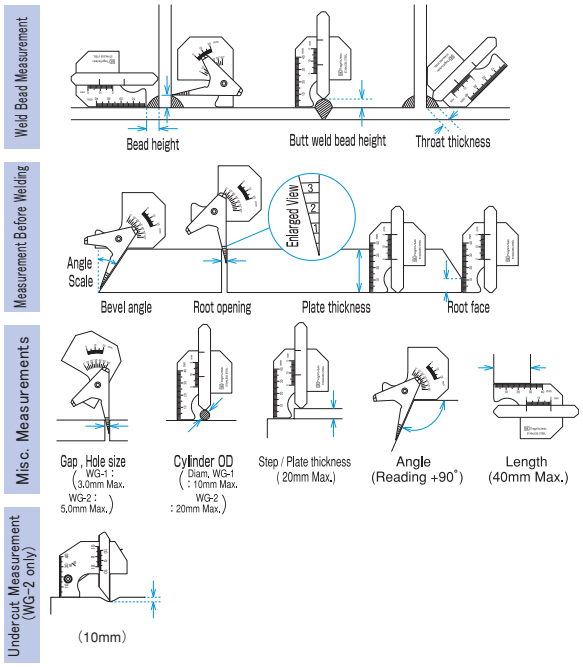


BACK

WG-1

BACK

WG-2



USE
- For measuring fillet weld, bead weld, etc.

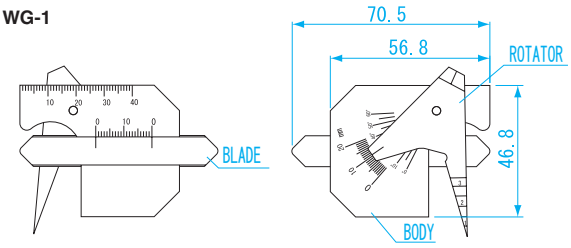
MATERIAL
- Stainless steel

FEATURES
- Efficient for welding and quality control
- Tough and portable (with vinyl case)

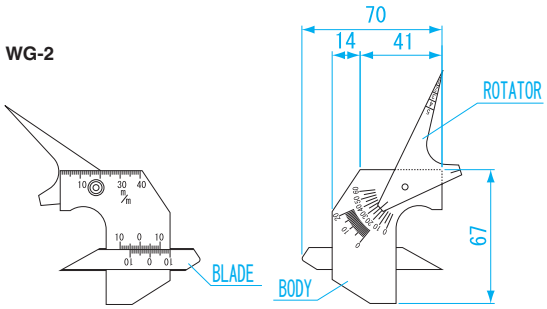
● DIMENSIONS

Units: mm

WG-1



WG-2



Order No.	Model No.	Measurement Accuracy for Throat Thickness of Fillet Weld	Bevel Angle Accuracy	Accuracy	Weight
007502	WG-1 (M)	± 0.4mm	± 0.7°	± 0.4mm	79g
007503	WG-2 (L)	± 0.2mm	± 0.7°	± 0.4mm	91g

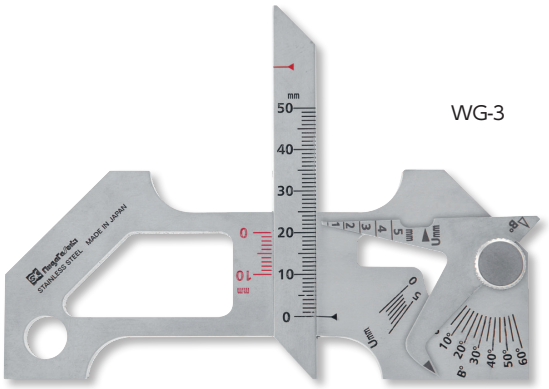
BLOCK GAUGE
PIN GAUGE
PIN VISE
PIN GAUGE ACCESSORIES
RING GAUGE
PLUG GAUGE
LIMIT GAUGE
THICKNESS GAUGE
TAPER GAUGE
WELDING GAUGE
OTHER GAUGES

WELDING GAUGE

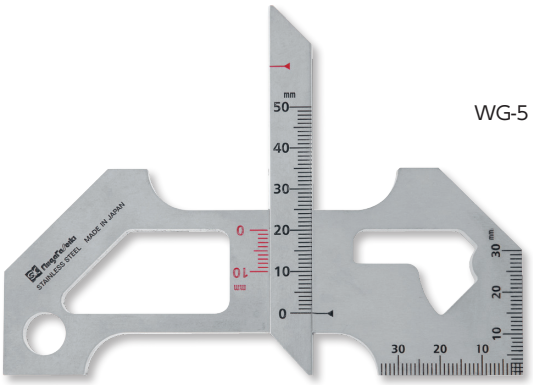
T

Gauges with new features added to existing welding gauge line-up.
Measure weld reinforcement height up to 50mm.

Function comparison▶
Welding Gauge Chart
P110 ~111

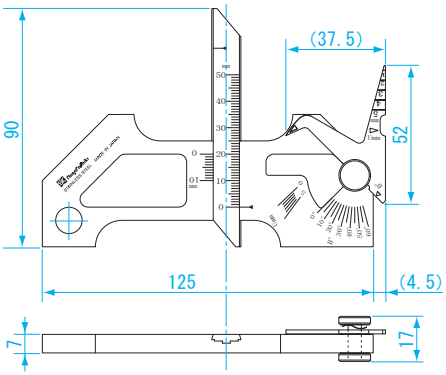


WG-3



WG-5

● DIMENSIONS Units: mm

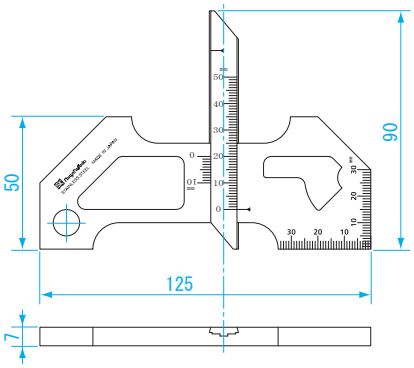


USE
- Measurement of size and alignment of bead, gap size, undercut, etc.

MATERIAL
- Stainless Steel (silver finish)

FEATURES
- Speed up and streamline the quality control of welding
- Measures weld reinforcement height up to 50mm
- Wide base for stability during measurements
- Pivoting gauge provides a variety of measurement functions
- Silver finish is ideal for reduced reflection when photographing measurements
- Translucent case for easy confirmation of contents

● DIMENSIONS Units: mm



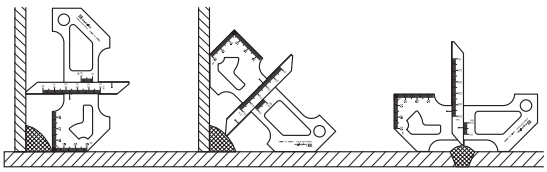
USE
- Measurement of size and alignment of bead, gap size, undercut, etc.

MATERIAL
- Stainless steel (silver finish)

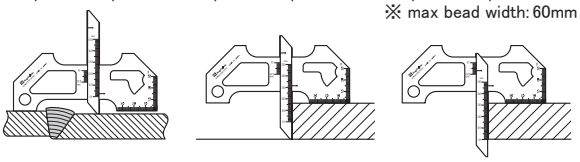
FEATURES
- Speed up and streamline the quality control of welding
- Measures weld reinforcement height up to 50mm
- Wide base for stability during measurements
- Silver finish is ideal for reduced reflection when photographing measurements
- Translucent case for easy confirmation of contents

■ Measurement Functions

WG-3, WG-5 capabilities

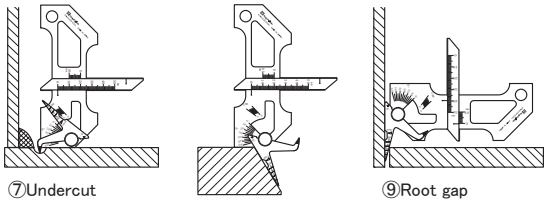


①Fillet leg length measurement (0~50mm)
②Fillet throat height measurement (0~50mm)
③Weld reinforcement height measurement (0~10mm)
※ max bead width: 60mm



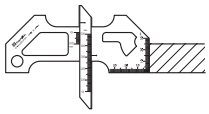
④Step height measurement (0~50mm)
※max bead width: 53mm
⑤Depth and step measurement (0~50mm)
⑥Thickness measurement (0~35mm)

WG-3 only



⑦Undercut measurement (0~5mm)
⑧Bevel angle measurement (0~60°)
⑨Root gap measurement (0.5~5mm)

WG-5 only



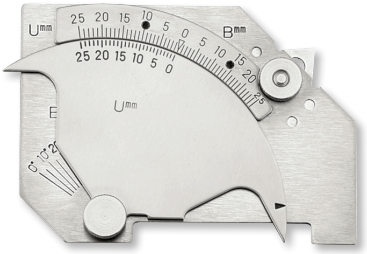
⑩Thickness measurement (0~30mm)

Order No.	Model No.	Weight
007506	WG-3	198g
007507	WG-5	187g

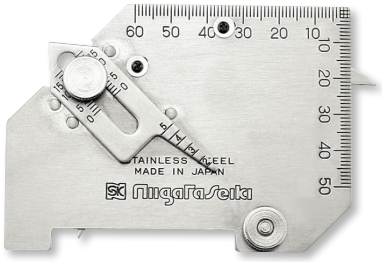
WELDING GAUGE

Essential for welding process. A wide variety of welding measurements in one gauge.

Function comparison▶
Welding Gauge Chart
P110 ~111

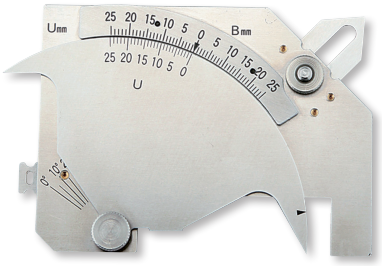


FRONT

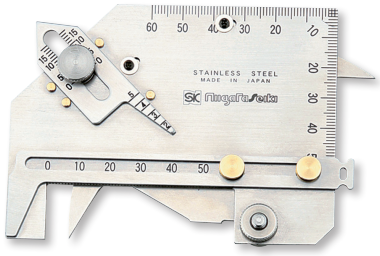


BACK

WGU-7M



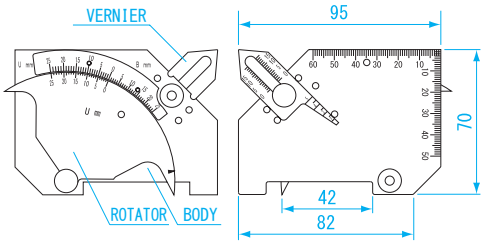
FRONT



BACK

WGU-8M

● DIMENSIONS Units: mm



USE

●For wide of variety welding measurements

Undercut depth / Groove angle / Inconsistent level
Height of fillet weld & bead weld / Throat thickness of fillet
Root opening / Plate thickness

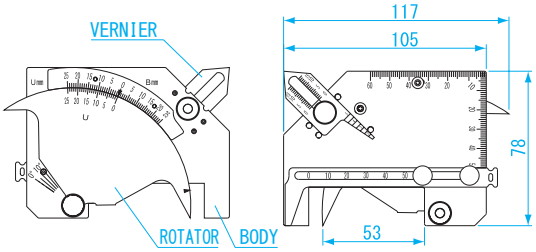
MATERIAL

●Stainless steel

FEATURES

●Long usage life, rust and corrosion resistant and extremely durable as well as being light weight
●Very convenient to the welding process involving steel frame assembly such as general welding, ship building, bridge construction, etc.
●Easy reading scale

● DIMENSIONS Units: mm



USE

●For wide of variety welding measurements

Undercut depth / Groove angle / Inconsistent level
Height of fillet weld & bead weld / Throat thickness of fillet
Root opening / Plate thickness / External diameter of circular workpiece / Width of bead weld

MATERIAL

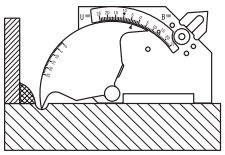
●Stainless steel

FEATURES

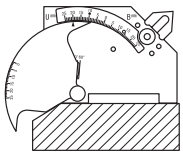
●Additional function for measurement of external diameter of circular workpiece, swelling of pressure welding of reinforcing iron and width of bead weld
●Bead stride width: 53mm
●Bevel angle range: 0-70°

■ MEASUREMENT FUNCTION

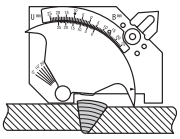
WGU-7M,WGU-8M, WGU-9M common functions



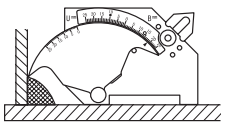
① Undercut depth (0~25mm)



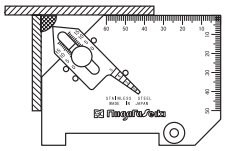
② Bevel angle
(WGU-7M: 0~60°)
(WGU-8M・WGU-9M: 0~70°)



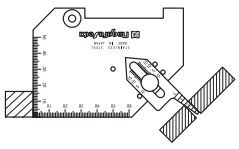
③ Bead striding width (WGU-7M: 42mm)
(WGU-8M・WGU-9M: 53mm)
Step difference (0~25mm)



④ Height of fillet & bead weld (0~25mm)

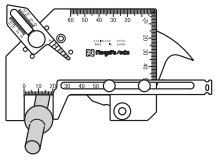


⑤ Throat thickness of fillet weld (0~15mm)

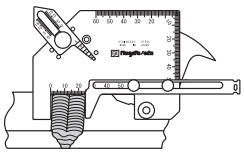


⑥ Root opening (2~5mm)
⑦ Plate thickness (scale)

WGU-8M, WGU-9M common functions



⑧ External diameter of circular workpiece
WGU-8M: up to 30mm
WGU-9M: up to 50mm



⑨ Width of bead weld (0~53mm)

Order No.	Model No.	Weight
007513	WGU-7M	150g
007514	WGU-8M	190g

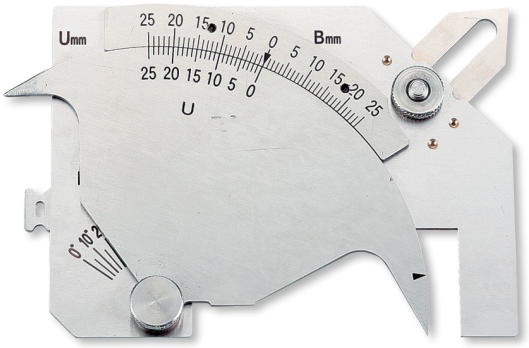
BLOCK GAUGE
PIN GAUGE
PIN VISE
PIN GAUGE ACCESSORIES
RING GAUGE
PLUG GAUGE
LIMIT GAUGE
THICKNESS GAUGE
TAPER GAUGE
WELDING GAUGE
OTHER GAUGES

WELDING GAUGE

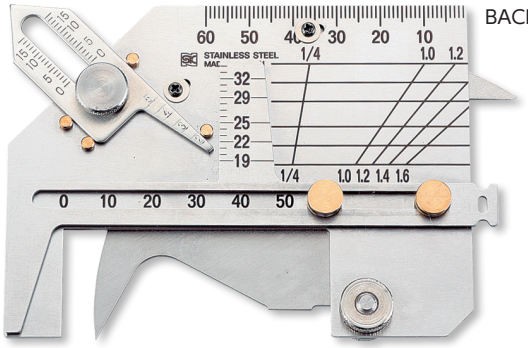
T

Essential for welding process. A wide variety of welding measurements in one gauge.

Function comparison▶
Welding Gauge Chart
P110 ~111



FRONT



BACK

USE

●For a wide variety of welding measurements

Undercut depth / Groove angle / Inconsistent level
Height of fillet weld & bead weld / Throat thickness of fillet
Root opening / Plate thickness / External diameter of circular workpiece / Width of bead weld

MATERIAL

●Stainless steel

FEATURES

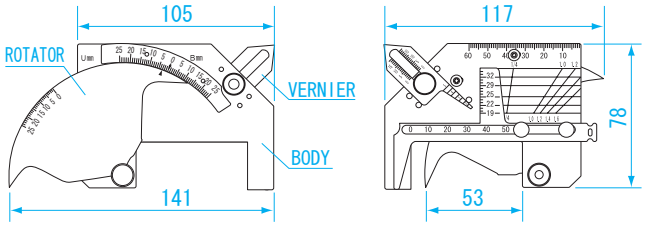
●Additional functions for measurement of
- external diameter of circular workpiece
- swelling of pressure welded reinforcing iron
- width of bead weld

●Bead stride width: 53mm

●Bevel angle range: 0-70°

●Higher accuracy undercut measurement function

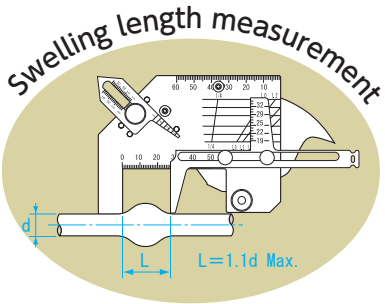
● DIMENSIONS Units: mm

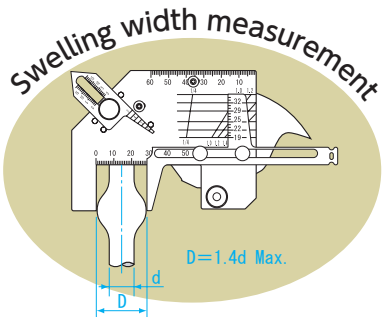


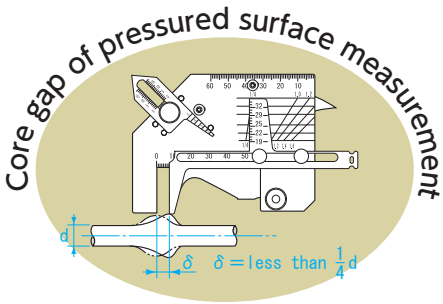
Additional functions

Provides quick way to measure the diameter of welded rebar to insure proper dimensions of weld seam.

Scale marked for material diameter (ϕ19, 20, 25, 29, 32) corresponding to various rebar diameters, and amount of expansion (1/4, 1.0~1.6). You can quickly find the ratio by reading the intersection of the two scale lines.







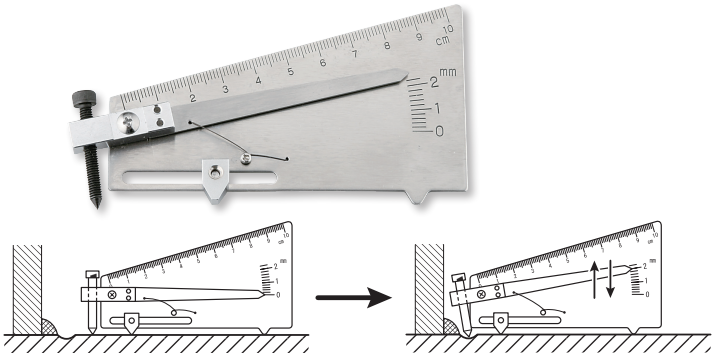
※ Please also refer to "MEASUREMENT FUNCTIONS" on Page 101 to see other functions

Order No.	Model No.	Rebar diameter (mm)	Expansion	Weight
007515	WGU-9M	ϕ 19 ~ 35	1/4, 1.0 ~ 1.6	190g

WELDING GAUGE

Essential for welding process. Specialized for undercut depth measurement.

Function comparison▶
Welding Gauge Chart
P110 ~111



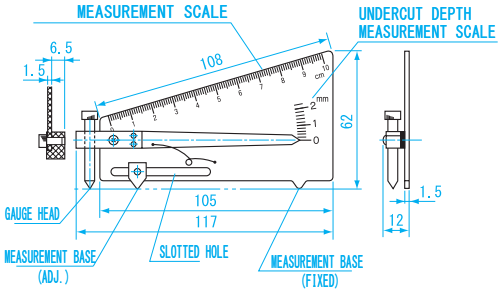
USE
- For undercut depth and length measurement (Scale range: 0-2mm)

MATERIAL
- Stainless steel

FEATURES
- Easy to measure depth and length of undercut
- Capable of 0 adjustment with screw type of gauge head

SPECIFICATIONS
- Measuring Range
  Depth: 0 ~ 2.0mm (Minimum reading: 0.2mm, Accuracy: ± 0.1mm)
  Length: 0 ~ 10cm
- Width of measurement base: ≒ 40mm

● DIMENSIONS Units: mm



Zero Adjustment

1. Press this gauge to the measuring sample
2. Adjust Zero point adjustment screw to indicate 0, insuring that all three points contact surface

Measurement

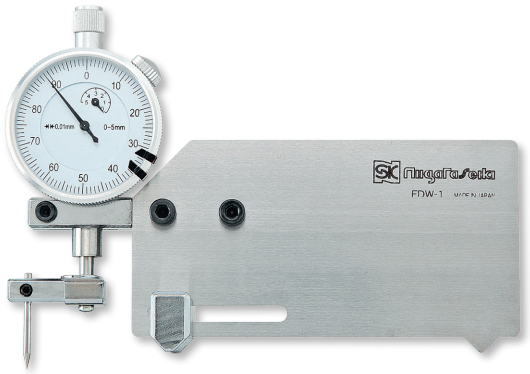
After 0 adjustment, put the tool on undercut and the spring will move indicator arm to show depth of undercut on graduation

Order No.	Model No.	Weight
007521	WGU-2S	100g

WELDING GAUGE

Essential for welding process. Dial gauge type. Specialized for undercut measurement.

Function comparison▶
Welding Gauge Chart
P110 ~111



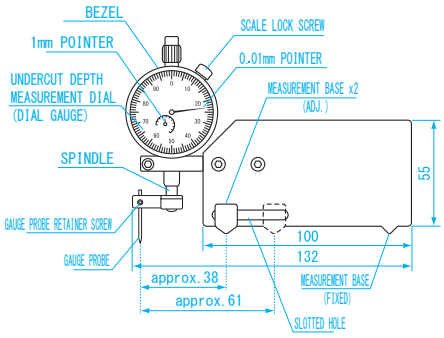
USE
- Exclusive use for undercut measurement

MATERIAL
- Stainless steel

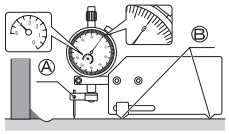
FEATURES
- Easy and accurate to measure depth and length of undercut
- Dial gauge type performs more precise measurement
- Three point support for stable measurement

SPECIFICATIONS
- Measuring Range: 0~4.00mm
- Minimum reading: 0.01mm
- Accuracy: ±0.04mm
- Width of measurement base: ≒ 23mm

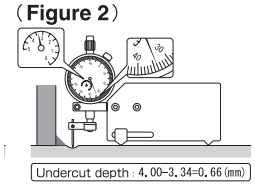
● DIMENSIONS Units: mm



(Figure 1)



(Figure 2)



Zero Adjustment

Recommended to be performed on a flat surface such as a surface plate

① Loosen GAUGE PROBE RETAINER SCREW using hex key
② Place Welding Gauge on surface insuring all three points of MEASUREMENT BASE are making contact (2x ADJ, 1x FIXED) and push on SPINDLE shaft. When 1mm POINTER indicates 4.00mm, tighten GAUGE PROBE RETAINER SCREW. (Insure that probe tip is in contact with the surface plate)

Measurement

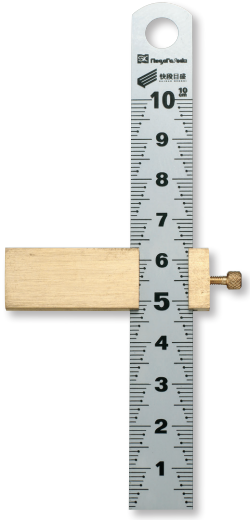
① Place the gauge on a flat surface and rotate BEZEL to indicate 0.01mm. (Figure 1)
② Place PROBE tip on weld undercut point to be measured. (Figure 2)
③ Undercut value is obtained by subtracting Dial Gauge reading from 4.00mm

Order No.	Model No.	Weight
007520	FDW-1	280g

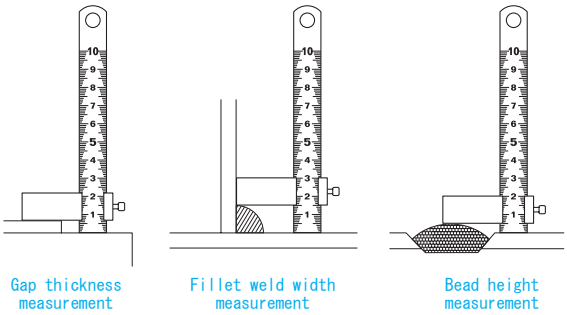
MULTI STEP GAUGE KAIDAN

For measurement of steps of machinery, jigs and structures.
Vertical scale for easy reading.

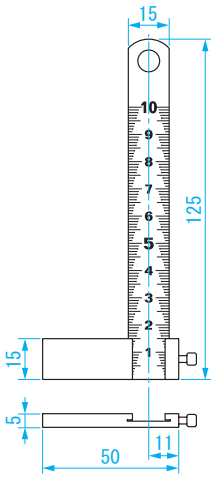
Function comparison▶
Welding Gauge Chart
P110 ~111



● Example of use



● DIMEMSIONS Units: mm



USE
- For measurement of steps of machinery, jigs and structures

MATERIAL
- Stainless steel, Brass

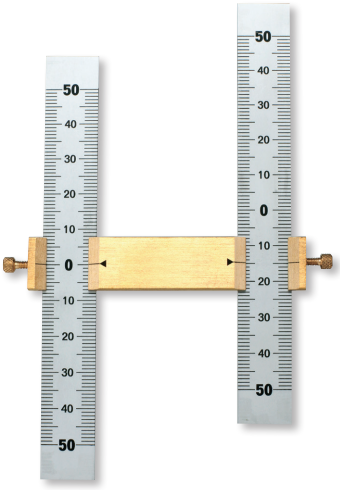
FEATURES
- Vertical scale for easy reading
- Stepped length of linear graduations by 1mm for easy-to-read

Order No.	Model No.	Measurement Range (mm)	Accuracy (mm)	Graduation (mm)	Weight
111401	MSG-100KD	0~100	±0.15	1	32g

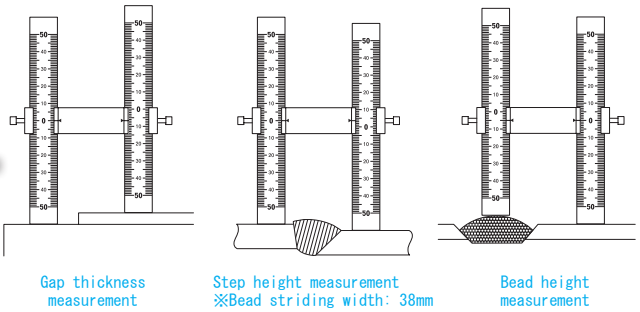
MULTI STEP GAUGE

For measurement of steps of machinery, jigs and structures.
Vertical scale for easy reading.

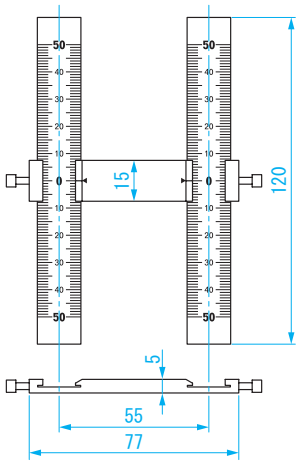
Function comparison▶
Welding Gauge Chart
P110 ~111



● Example of use



● DIMEMSIONS Units: mm



USE
- For measurement of steps of machinery, jigs and structures

MATERIAL
- Stainless steel, Brass

FEATURES
- Vertical scale for easy reading

Order No.	Model No.	Measurement Range (mm)	Accuracy (mm)	Graduation (mm)	Weight
111402	MSG-50	-50~+50	±0.15	1	51g

DIGITAL WELDING GAUGE

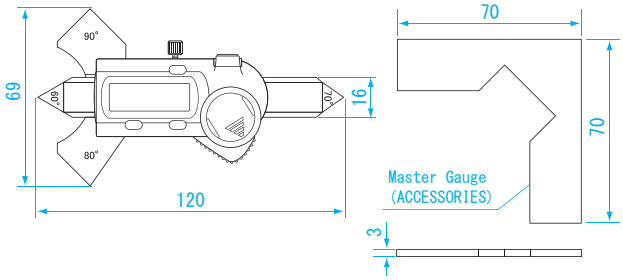
T PDI O

Essential for welding process.
Digital welding gauge specialized for measuring fillet weld and bead weld height.

Function comparison▶ Welding Gauge Chart P110 ~111
Wireless data output▶ Bluetooth BOX for Calipers P165

Provided with zero setting master gauge

● DIMENSIONS Units: mm



USE
- For measuring the size of fillet weld and bead weld

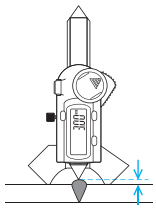
MATERIAL
- Stainless steel

FEATURES
- Easy to read with digital display
- Bevel angle: 60°, 70°, 80°, 90° (Accuracy: ±2°)
- Master gauge included
- Hold function

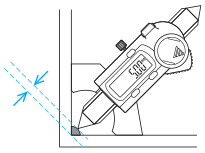
SPECIFICATIONS
- Throat thickness: 20mm
- Bead height: 10mm
- perating temperature: 0~40℃

POWER
- One CR2032 (lithium) battery included for testing

Weld reinforcement height measurement

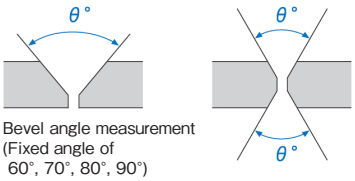


Bead height
Maximum measurement
10mm



Throat thickness
Maximum measurement
20mm

Measurement before welding process



Bevel angle measurement
(Fixed angle of
60°, 70°, 80°, 90°)

※ Quantization Error (± 1 digit) not included

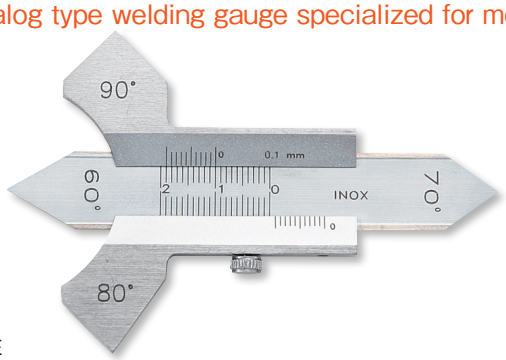
Order No.	Model No.	Resolution (mm)	Accuracy※ (mm)	Weight
007527	GDCS-20WG	0.01	± 0.03	130g

WELDING GAUGE

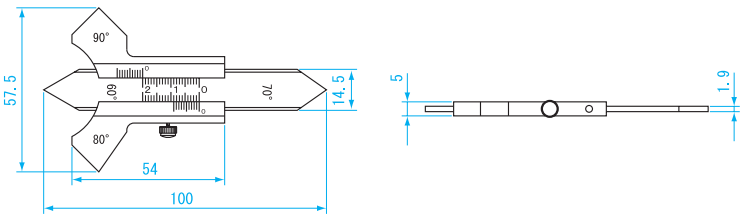
T O

Essential for welding process.
Analog type welding gauge specialized for measuring fillet weld and bead weld height.

Function comparison▶ Welding Gauge Chart P110 ~111



● DIMENSIONS Units: mm



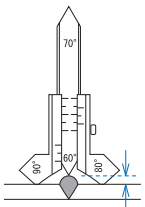
USE
- Use for measuring the size of fillet weld and bead weld

MATERIAL
- Stainless steel

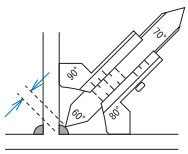
FEATURES
- Made of stainless steel, corrosion resistant
- Bevel angle: 60°, 70°, 80°, 90°

SPECIFICATIONS
- Fillet weld: 11mm
- Bead weld: 8mm
- Accuracy: ±0.2mm
- Minimum reading: 0.1mm

Weld Bead Measurement

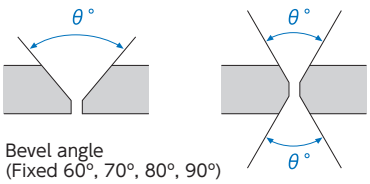


Bead height
Maximum measurement 8mm



Throat thickness
Maximum measurement 11mm

Measurement Before Welding



Bevel angle
(Fixed 60°, 70°, 80°, 90°)

Order No.	Model No.	Weight
007516	AWG-10	80g

BLOCK GAUGE
PIN GAUGE
PIN VISE
PIN GAUGE ACCESSORIES
RING GAUGE
PLUG GAUGE
LIMIT GAUGE
THICKNESS GAUGE
TAPER GAUGE
WELDING GAUGE
OTHER GAUGES

ANGLE LIMIT GAUGE

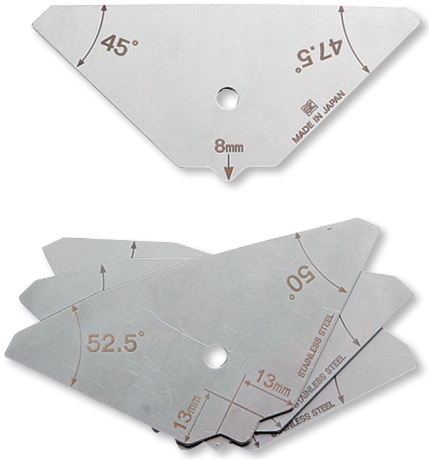
T

Function comparison▶
Welding Gauge Chart
P110 ~111

Groove angle measurement▶
Angle Gauge
P109

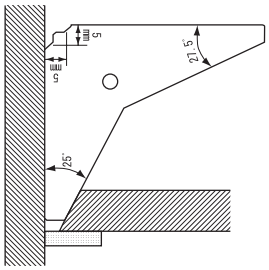
Inner angle measurement▶
Inside Protractor
P158

WAL2542

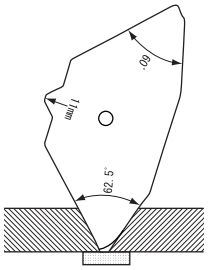


WAL4562

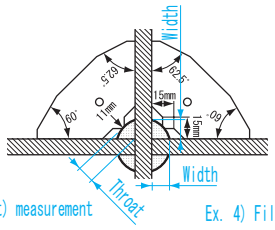
● Example of use



Ex. 1) Joint gap angle (inside) measurement



Ex. 2) Butt joint gap angle measurement



Ex. 3) Fillet weld (throat) measurement

Ex. 4) Fillet weld width measurement

USE
- For measuring bevel angle of T-joint (interior angle), bevel angle of facing joint (interior angle), leg length (height), and throat thickness of fillet weld

MATERIAL
- Stainless steel

FEATURES
- Indication of size limit for easy judgement (angle step by 2.5°, throat thickness step by 1mm)
- Set of 4 pieces
- Provided with plastic case and ball chain

SPECIFICATIONS

Model No.		WAL2542				WAL4562			
Blank No.		1	2	3	4	1	2	3	4
Outline Dimension (mm)	Overall width	92				92			
	Overall height	46	45	44	43	43	44	45	46
	Plate thickness	1.5				1.5			
Material/ Finish		SUS304 /barrel semi-gloss finish				SUS304/ barrel semi-gloss finish			
Measurement Value Indication	Angle degree (Both side)	25°	30°	35°	40°	45°	50°	55°	60°
		27.5°	32.5°	37.5°	42.5°	47.5°	52.5°	57.5°	62.5°
	Throat thickness (Front)	4	5	6	7	8	9	10	11
	Leg Length (Back)	5	7	8	10	11	13	14	15
Accuracy		Fillet weld·Reinforcement±0.1mm/ Angle ±1°				Fillet weld·Reinforcement±0.1mm/ Angle ±1°			

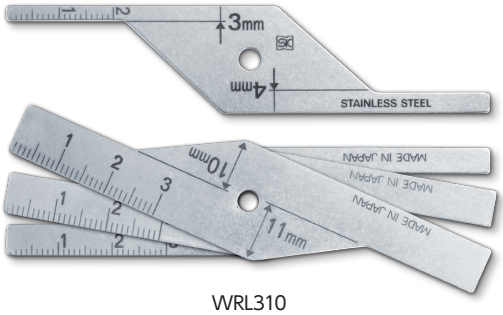
Order No.	Model No.	Weight
007550	WAL2542	100g
007551	WAL4562	120g

ROOT LIMIT GAUGE

T

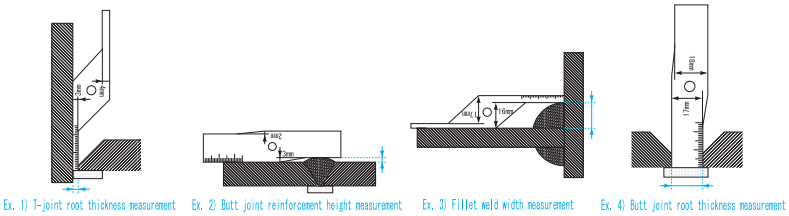
Limit gauge for measuring root gap of T-joint, facing joint and so on

Function comparison▶
Welding Gauge Chart
P110 ~111



WRL310

● Example of use



USE
- ●Use for measuring root gap of T-joint or facing joint, leg length (height) of fillet weld and excess weld and height of facing joint

MATERIAL
- ●Stainless steel

FEATURES
- ●Measure with 1mm interval
- ●The measurement result of root thickness will be indicated on the scale
- ●Measurement range chosen so most frequently used dimensions are combined
- ●Provided with plastic case & ball chain

Order No.	Model No.	Weight
007560	WRL310	60g
007561	WRL1118	90g

SPECIFICATIONS

Model No.		WRL310				WRL1118			
Blank No.		1	2	3	4	1	2	3	4
Outline dimension (mm)	Overall width	90				90			
	Overall height	20				20			
	Plate thickness	2				2			
Material/ Finish		SUS304/ barrel semi-gloss finish				SUS304/ barrel semi-gloss finish			
Measurement Value Indication	Root gap (Front)	3·4	5·6	7·8	9·10	11·12	13·14	15·16	17·18
	Leg length·height (Back)	16·17	14·15	12·13	10·11	8·9	6·7	4·5	2·3
	Root side(Front)	20				20			
	Plate thickness	30				30			
Accuracy		±0.1mm				±0.1mm			

WELDING ELECTRODE GAUGE SET / SINGLE PART

Quick measurement for height of welding electrode

EC-1520S

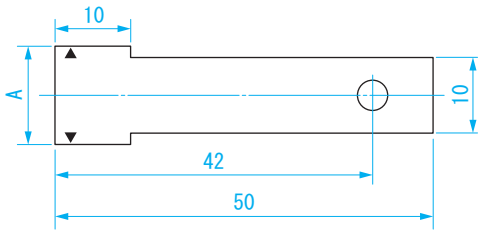
EC-21

USE
- ●Use for measuring height of welding electrode

MATERIAL
- ●Stainless steel

SPECIFICATIONS
- ●Accuracy: ±0.2mm
- ●Thickness: 1mm
- ●With ball chain

● DIMEMSIONS Units: mm



■ Set

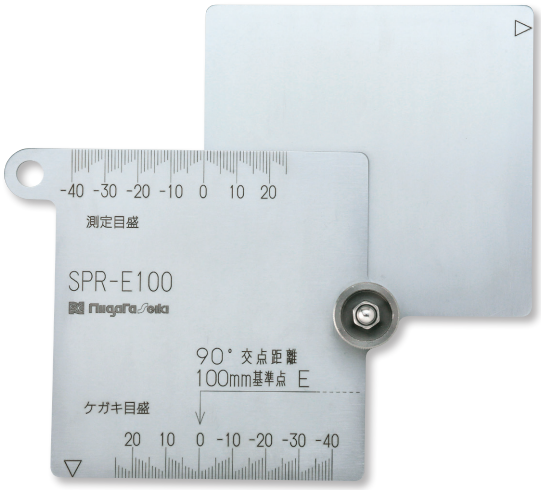
Order No.	Model No.	Size A (mm)	Weight
111419	EC-1015S	10・11・12・13・14・15	26g
111420	EC-1520S	15・16・17・18・19・20	28g
111421	EC-2025S	20・21・22・23・24・25	31g

■ Single Part

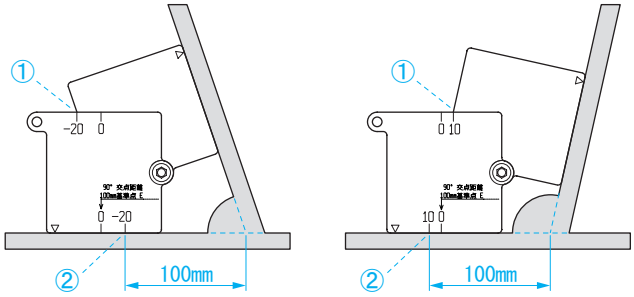
Order No.	Model No.	Size A (mm)	Weight
111403	EC-10	10	6.7g
111404	EC-11	11	6.8g
111405	EC-12	12	6.8g
111406	EC-13	13	6.9g
111407	EC-14	14	7.0g
111408	EC-15	15	7.1g
111409	EC-16	16	7.2g
111410	EC-17	17	7.2g
111411	EC-18	18	7.3g
111412	EC-19	19	7.4g
111413	EC-20	20	7.5g
111414	EC-21	21	7.5g
111415	EC-22	22	7.6g
111416	EC-23	23	7.7g
111417	EC-24	24	7.8g
111418	EC-25	25	7.8g

STEALTH POINT READER

The length measurement from welded corners.
Can determine the position of the reference point（100 mm）from the corner hidden in fillet.



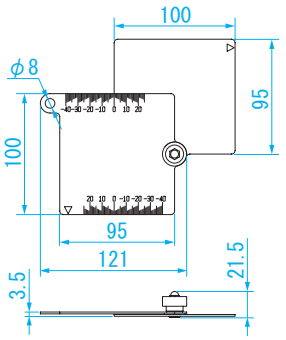
● Example of use



①Read the value from the measuring scale where the two plates intersect

②Confirm the same point as ① and the value read from step ① indicates the point 100mm from the corner

● DIMENSIONS Units: mm



USE
- For measuring the length from the welded corner

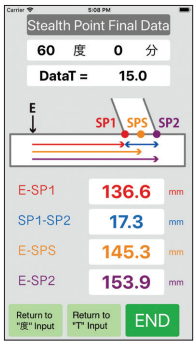
FEATURES
- Can determine the position of the reference point（100 mm）from the corner hidden in fillet

MATERIAL
- Stainless steel

Order No.	Model No.	Usage Range (intersection angle)	Accuracy (mm)	Weight
007571	SPR-E100	60°～120°	± 0.5	240g

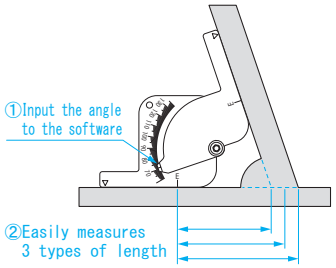
STEALTH POINT READER NEW!

For measuring the length from the welded corner.
Dedicated application software for free and it can be easily measured the distance from the reference point to the welding point.

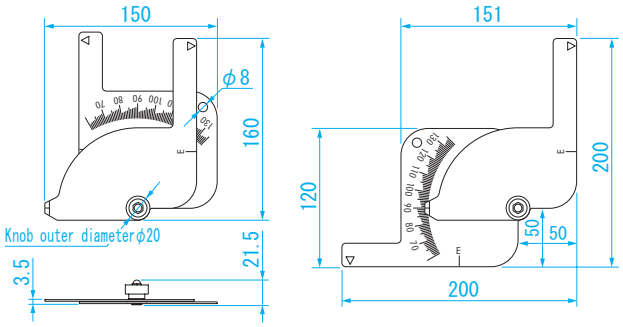


< Image of application >

● Example of use



● DIMENSIONS Units: mm



USE
- For measuring the length from the welded corner

MATERIAL
- Stainless steel

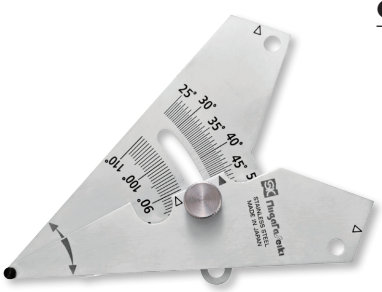
FEATURES
- Dedicated application software for free and it can be easily measured the distance from the reference point to the welding point

Supported OS
- iPhone: iOS 10.0 or later / Android: Android 4.4 or later

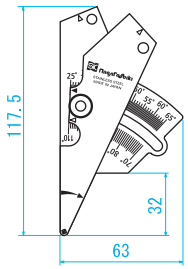
Order No.	Model No.	Usage Range (intersection angle)	Angle Measurement Accuracy	Accuracy（welding point distance from reference point）(mm)	Weight
NEW! 007572	SPR-S	60° ～ 135°	± 0.5°	± 0.7 (85° or more) ± 1.1 (less than 85°)	270g

ANGLE GAUGE

Specialized for angle measurement of grooves with minimum reading 0.5°



● DIMENSIONS Units: mm



USE
- ●Butt angle measurement and gap angle measurement

MATERIAL
- ●Stainless steel

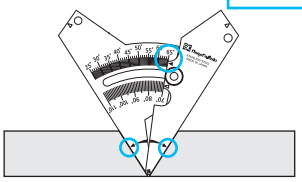
FEATURES
- ●Measurement of butt joint gap angle
- ●Sharpened tip enables measurement for root gap of 0mm, or when sheet thickness is less than 15mm
- ●Minimum reading 0.5°, large graduation for easy reading
- ●T-joint gap angle can be measured avoiding weld buildup
- ●Non-reflective satin finish for better ligibility
- ●Solid and convenient carrying (provided with plastic carrying case)

SPECIFICATIONS
- ●Bevel angle: 25~65° (minimum graduation: 0.5°)
- ●Angle of cross weld part: 70~110°

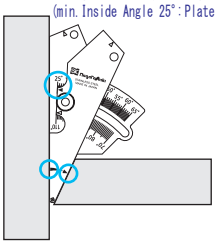
● Example use

Example 1) Butt joint gap angle measurement (max. inside angle 65°: plate thickness :30mm)

・How to read the value Examples 1) & 2) Angle between ◀ ▶ marks indicated at ◀

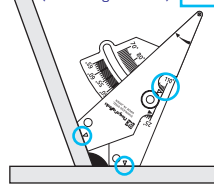


Example 2) T-joint gap angle measurement (min. Inside Angle 25°: Plate Thickness: 30mm)

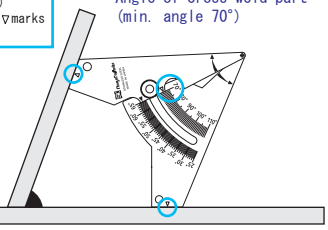


Example 3) Angle of cross weld part (max. angle 110°)

How to read the value Examples 3) & 4) Angle between ◁ ▽ marks indicated at ▷



Example 4) Angle of cross weld part (min. angle 70°)

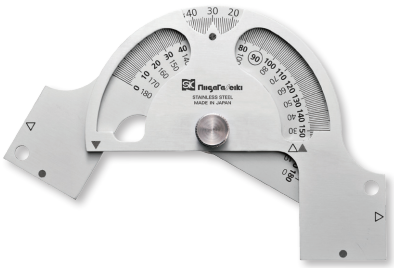


SPECIFICATIONS

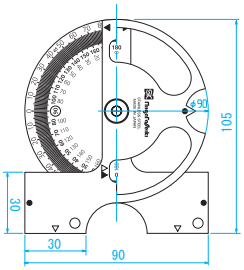
Order No.	Model No.	Accuracy	Weight
007518	WGA-65	± 0.5°	73.5g

ANGLE PROTRACTOR

Specialized for angle measurement.
three measurement points enable multiple angle measurements.



● DIMENSIONS Units: mm



USE
- ●Measuring angles for sheet metal bending, welding flanges and butt joints, openings and bevels, scissors plates, etc.

MATERIAL
- ●Stainless steel

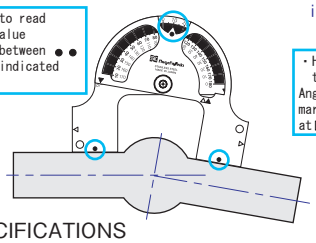
FEATURES
- ●Enables a wide range of angle measurements before and after welding process
- ●Direct measurement can be done without interference from swelling or weld bead
- ●Can measure sheet metal bends and outside angle measurements
- ●Non-reflective satin finish for better ligibility
- ●Solid and convenient carrying (provided with plastic case)

SPECIFICATIONS
- ●Bevel angle: Scissors angle 30~130° (minimum graduation: 1°)
- ●Bending angle and angle of butt weld joint: 0~90°
- ●Stud and beam angle after welding: 0~180°

● Example use

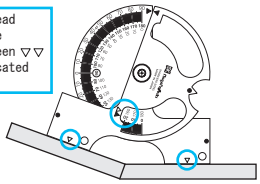
Example 1) Angle measurement of bent butt weld (0~90°: example indicates 10°)

・How to read the value Angle between ● ● marks indicated at ●



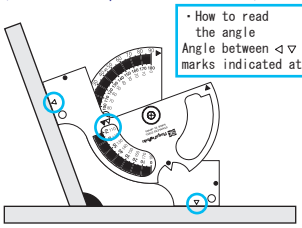
Example 2) Angle measurement of bent Flange and metal plate (0~180°: example indicates 20°)

・How to read the value Angle between ▽ ▽ marks indicated at ▷

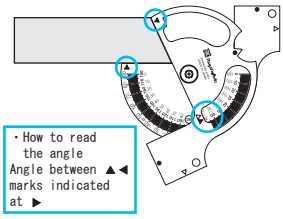


Example 3) Angle of cross weld part (0~180°: example indicates 110°)

・How to read the angle Angle between ◁ ▽ marks indicated at ▷



Example 4) Plate bevel angle (30~130°: example indicates 65°)



・How to read the angle Angle between ▲ ◀ marks indicated at ▶

SPECIFICATIONS

Order No.	Model No.	Accuracy of angle	Weight
007519	AP-130	± 0.5°	100g

● Measurement function and List

※ Measures dimension of weld, relative amount must be calculated

Process	No.	Categories	Figures	TAPER GAUGE	WG-1	WG-2	WG-3	WG-5	WGU-7M	WGU-8M	WGU-9M	WGU-2S
Machining and Assembly (Before welding)	1	T joint Gap		○	○	○	○	–	○	○	○	–
	2	Lap joint Gap		○	○	○	○	–	○	○	○	–
	3	Misalignment of Butt weld		○	○	○	○	–	○	○	○	–
	4	Root Openings		○	○	○	○	–	○	○	○	–
	5	Root gap of T-joint		–	–	–	–	–	–	–	–	–
	6	Root Face		–	○	○	○	○	○	○	○	○
	7	Bevel Angle		–	○	○	○	–	○	○	○	–
	8	Groove angle		–	–	–	–	–	–	–	–	–
	9	T-joint gap angle		–	–	–	–	–	–	–	–	–
	10	Edg Misalignment		–	○	○	○	○	○	○	○	–
After Welding	11	Leg length (height) of Fillet Weld		–	○	○	○	○	○	○	○	–
	12	Throat Thickness of Fillet Weld		–	○	○	○	○	○	○	○	–
	13	Height of Butt weld Overlay		–	○	○	○	○	○	○	○	–
	14	Height of T- joint weld Overlay		–	○	○	○	○	○	○	○	–
	15	Undercut		–	–	○	○	–	○	○	○	○
	16	Misalignment of Butt Weld		–	–	○	○	○	○	○	○	–
	17	Bending angle and angle of butt weld joint		–	–	–	–	–	–	–	–	–
	18	Angle of Cross weld part		–	–	–	–	–	–	–	–	–
	19	Stud angle after welding		–	–	–	–	–	–	–	–	–
	20	Irregularity of Bead Surface		–	–	–	–	–	–	○	○	–
Pressure welding	21	Swelling diameter		–	–	–	–	–	–	△※	○	–
	22	Swelling length		–	–	–	–	–	–	△※	○	–
	23	Misalignment of Pressured Surface		–	–	–	–	–	–	△※	○	–
	24	Bending angle		–	–	–	–	–	–	–	–	–

SPECIFICATIONS	TAPER GAUGE	WG-1	WG-2	WG-3	WG-5	WGU-7M	WGU-8M	WGU-9M	WGU-2S
Material	–	Stainless steel Plate thickness: 4.3mm		Stainless steel Plate thickness 7mm Satin finish		Stainless steel Plate thickness: 1.5mm			
Scale	–	40mm		–	30・35mm	50・60mm		60mm	100mm
Height of Bead Weld	–	10mm		10mm		25mm			–
Height of Fillet Weld	–	20mm	10mm Minimum reading0.1	50mm		25mm			–
Throat thickness of fillet weld	–	10mm		50mm		15mm			–
Undercut depth	–	–	10mm	10mm	–	25mm			2mm (Accuracy ±0.1mm)
Root Opening	–	0.5 ~ 3mm	0.5 ~ 5mm	0.5 ~ 5mm	–	2 ~ 5mm			–
Welding Bar Diameter	–	10mm	20mm	10mm		–	30mm	50mm	–
Width of Bead Weld	–	–		–		–	0 ~ 53mm		–
Length Accuracy	–	± 0.4mm	± 0.2mm (Gap measurement ± 0.4mm)	± 0.4mm		± 0.4mm (Throat thickness measurement ± 0.7mm- manufacturing accuracy)			± 0.6mm
Beveling(groove) angle	–	0 ~ 60° Minimum reading value : 5°		0 ~ 60° Minimum reading value : 5°	–	0 ~ 60° Minimum reading value : 5°	0 ~ 70° Minimum reading value : 5°		–
Bending angle and angle of butt weld joint	–	–		–		–			
Stud and beam angle after welding	–	–		–		–			
Angle Accuracy	–	± 0.7°		± 0.7°	–	± 2°			–

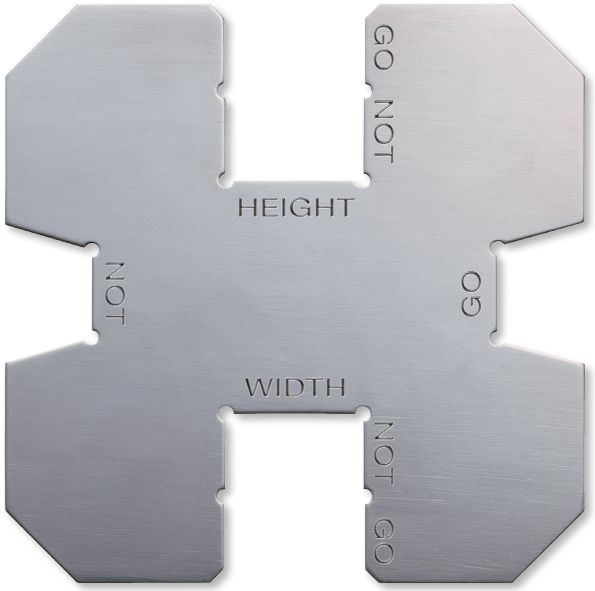
Process	No.	Categories	Figures	FDW-1	WRL310 WRL1118	WAL2542 WAL4562	AWG-10	GDCS-20WG	WGA-65	AP-130	MSG-100KD	MSG-50
Machining and Assembly (Before welding)	1	T joint Gap		–	○	–	–	–	–	–	–	–
	2	Lap joint Gap		–	○	–	–	–	–	–	–	–
	3	Misalignment of Butt weld		–	○	–	–	–	–	–	–	–
	4	Root Openings		–	○	–	–	–	–	–	–	–
	5	Root gap of T-joint		–	○	–	–	–	–	–	–	–
	6	Root Face		–	○	–	–	–	–	–	–	–
	7	Bevel Angle		–	–	–	–	–	–	○	–	–
	8	Groove angle		–	–	○	○	○	○	–	–	–
	9	T-joint gap angle		–	–	○	–	–	○	–	–	–
	10	Edg Misalignment		–	–	–	–	–	–	–	–	–
After Welding	11	Leg length (height) of Fillet Weld		–	○	○	–	–	–	–	○	–
	12	Throat Thickness of Fillet Weld		–	–	○	○	○	–	–	–	–
	13	Height of Butt weld Overlay		–	○	–	○	○	–	–	○	○
	14	Height of T- joint weld Overlay		–	○	–	○	○	–	–	○	–
	15	Undercut		○	–	–	–	–	–	–	–	–
	16	Misalignment of Butt Weld		–	–	–	–	–	–	–	–	○
	17	Bending angle and angle of butt weld joint		–	–	–	–	–	–	○	–	–
	18	Angle of Cross weld part		–	–	–	–	–	○	○	–	–
	19	Stud angle after welding		–	–	–	–	–	○	○	–	–
	20	Irregularity of Bead Surface		–	–	–	–	–	–	–	–	–
Pressure welding	21	Swelling diameter		–	–	–	–	–	–	–	–	–
	22	Swelling length		–	–	–	–	–	–	–	–	–
	23	Misalignment of Pressured Surface		–	–	–	–	–	–	–	–	–
	24	Bending angle		–	–	–	–	–	–	○	–	–

SPECIFICATIONS	FDW-1	WRL310 WRL1118	WAL2542 WAL4562	AWG-10	GDCS-20WG	WGA-65	AP-130	MSG-100KD	MSG-50
Material	Stainless steel Plate thickness:1.5mm	Stainless steel Plate thickness : 2mm	Stainless steel Plate thickness:1.5mm	Stainless steel Thickness : Body : 5mm, Blade:1.9mm	Stainless steel Thickness : Body : 5.7mm Blade : 3.2mm	Stainless steel Plate thickness : 1.5mm Satin finish		Stainless steel Brass	Stainless steel Brass
Scale	–	20mm	–	–		–		10cm	50-0-50mm
Height of Bead Weld	–	10～17mm fixed (1mm step) 2～9mm fixed (1mm step)	–	8mm	10mm	–		10cm (Width: Approx. 3cm)	100mm (Width: Approx. 38mm)
Height of Fillet Weld	–	10～17mm fixed (1mm step) 2～9mm fixed (1mm step)	5・7・8・10mm fixed 11・13・14・15mm fixed	–		–		10cm (Width: Approx. 3cm)	–
Throat thickness of fillet weld	–	–	4～7mm fixed (1mm step) 8～11mm fixed (1mm step)	11mm	20mm	–		–	–
Undercut depth	4mm (Accuracy ± 0.04mm)	–	–	–		–		–	–
Root Opening	–	3～10mm fixed (1mm step) 11～18mm fixed (1mm step)	–	–		–		–	–
Welding Bar Diameter	–	–	–	–		–		–	–
Width of Bead Weld	–	–	–	–		–		–	–
Length Accuracy	–	± 0.1mm	± 0.1mm	± 0.2mm	± 0.03mm	–		–	–
Beveling (groove) angle	–	–	25・27.5・30・32.5 35・37.5・40・42.5° fixed 45・47.5・50・52.5 55・57.5・60・62.5° fixed	60・70・80・90° fixed		25～65° Minimum reading value : 0.5°	30～130° Minimum reading value : 1°	–	–
Bending angle and angle of butt weld joint	–	–	–	–		–	0～90°	–	–
Stud and beam angle after welding	–	–	–	–		70～110°	0～180°	–	–
Angle Accuracy	–	–	± 1°	–		± 0.5°		–	–

GASKET LIMIT GAUGE

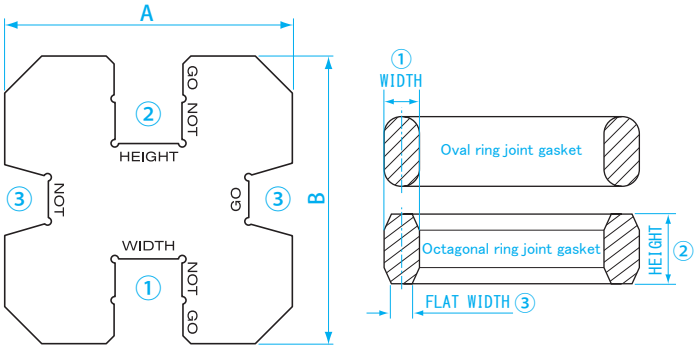
T MTO product

Limit gauge for GO/NOGO testing of ring joint gaskets



GST-1

● DIMENSIONS



Units: mm

Model No.	Outer size		① Width		② Height		③ Flat width	
	A	B	GO	NOT	GO	NOT	GO	NOT
GST-1	80	80	11.33	10.93	16.20	15.20	7.95	7.55
GST-2	80	80	12.90	12.50	18.00	17.00	8.86	8.46
GST-3	80	80	16.08	15.68	21.10	20.10	10.69	10.29
GST-4	120	120	19.25	18.85	24.40	23.40	12.52	12.12
GST-5	120	120	22.42	22.02	27.40	26.40	15.01	14.61
GST-6	140	140	25.60	25.20	32.30	31.30	17.50	17.10
GST-7	140	140	28.78	28.38	35.60	34.60	20.01	19.61

USE
- ●Limit gauge for GO/NOGO testing of ring joint gaskets (Oval ring joint gasket can be tested its width only. Octagonal ring joint gasket can be tested its width, height and flat width.)

MATERIAL
- ●Stainless steel

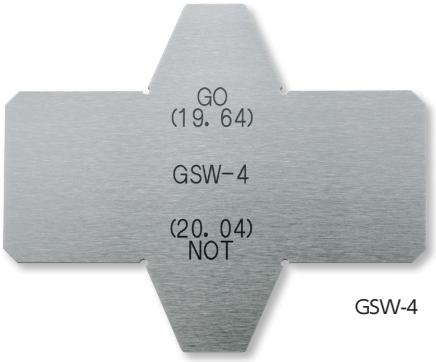
SPECIFICATIONS
- ●GO/NOGO standard conforms to JPI-7S-23
- ●Thickness: 1.5mm
- ●Gasket width accuracy: ±0.20mm
- ●Gasket height accuracy: ±0.5mm
- ●Octagonal corner radius accuracy: ±0.5mm

Order No.	Model No.	Compatible Gasket No.	Common size	Octagonal gasket			Weight
			Gasket Width (mm)	Gasket Height (mm)	Flat width (mm)	Octagonal Corner Radius (mm)	
007478	GST-1	21,23,24,26,27,30,31,34,35,37, 39,41,44,45,49,53,57,61,65,69, 82,84,92,99	11.13	15.7	7.75	1.5	53g
007479	GST-2	28,32,46,73	12.70	17.5	8.66	1.5	53g
007480	GST-3	38,50,54,62,66,77,86,87	15.88	20.6	10.49	1.5	110g
007481	GST-4	42,47,70,74,88,89,93,94,95	19.05	23.9	12.32	1.5	110g
007482	GST-5	51,58,96,97,98	22.22	26.9	14.81	1.5	110g
007483	GST-6	63,78	25.40	31.8	17.30	2.3	139g
007484	GST-7	55,67,71,100	28.58	35.1	19.81	2.3	139g

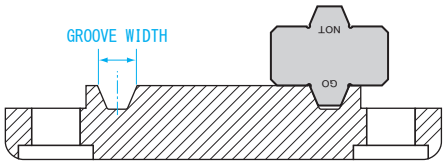
GASKET LIMIT GAUGE

T MTO product

Limit gauge for GO/NOGO testing of O-ring groove width



GSW-4



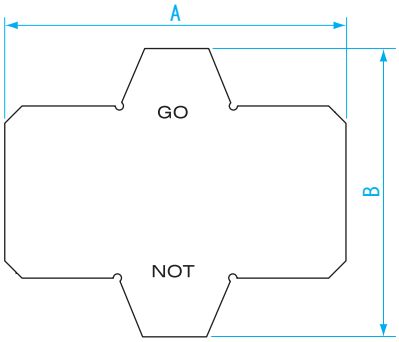
O-ring groove limit inspection

USE
- Limit gauge for measuring width of O-ring groove

MATERIAL
- Stainless steel

SPECIFICATIONS
- GO/NOGO standard conforms to JPI-7S-23
- Thickness: 1.5mm
- Groove width accuracy: ±0.20mm
- Groove depth accuracy: +0.41/0mm
- Groove bottom corner radius tolerance: Less than 1.5mm ···+0.8/0mm
  More than 1.5mm ···±0.8mm
- Angle accuracy: ±0.5°

● DIMENSIONS



Units: mm

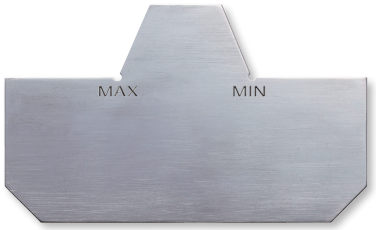
Model No.	A	B
GSW-1	40	35
GSW-2	40	35
GSW-3	60	50
GSW-4	60	50
GSW-5	80	60
GSW-6	80	60
GSW-7	80	70

Order No.	Model No.	Compatible O-Ring No.	Groove Width (mm)	GO (mm)	NOT (mm)	Groove Depth (mm)	Groove Bottom Corner Radius	Weight
007471	GSW-1	21,23,24,26,27,30,31,34,35, 37,39,41,44,45,49,53,57,61, 65,69,82,84,92,99	11.91	11.71	12.11	7.92	0.8	11g
007472	GSW-2	28,32,46,73	13.49	13.29	13.69	9.52	1.5	11g
007473	GSW-3	38,50,54,62,66,77,86,87	16.66	16.46	16.86	11.13	1.5	22g
007474	GSW-4	42,47,70,74,88,89,93,94,95	19.84	19.64	20.04	12.7	1.5	22g
007475	GSW-5	51,58,96,97,98	23.01	22.81	23.21	14.27	1.5	35g
007476	GSW-6	63,78	26.97	26.77	27.17	15.88	2.3	35g
007477	GSW-7	55,67,71,100	30.18	29.98	30.38	17.48	2.3	40g

GASKET LIMIT GAUGE

T MTO product

Limit gauge for GO/NOGO testing of angle for octagonal ring joint gaskets

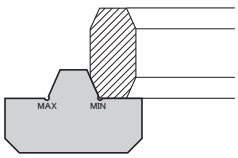


OG-2

USE
- Limit gauge for GO/NOGO testing of angle for octagonal ring joint gaskets

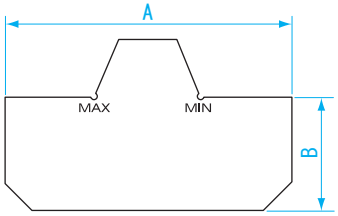
MATERIAL
- Stainless steel

SPECIFICATIONS
- Angle standard conforms to JPI-7S-23
- Thickness: 1.5mm
- Dimensional tolerance of angle: ±0.5°



Limit gauge for testing angle of octagonal shaped gaskets

● DIMENSIONS



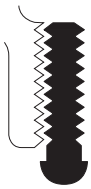
Order No.	Model No.	Width A (mm)	Height B (mm)	MAX	MIN	Weight
007485	OG-1	50	20	23° 30'	22° 30'	10g
007486	OG-2	60	27	23° 30'	22° 30'	18g

PITCH GAUGE

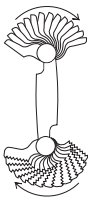
For screw inspection▶
Thread Limit Gauge
P80 ~82

Rust prevention▶
Zerust Film for Steel
P380

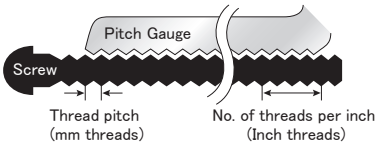
W26



Screw thread measurement



Sliding type



USE
- Use for measuring screw pitch

MATERIAL
- Carbon steel for machine structural use

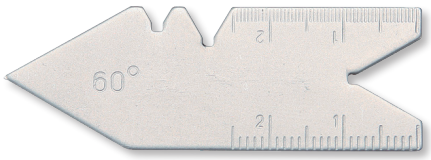
FEATURES
- Pitch is marked on leaf

Order No.	Model No.	Indication Unit	Number of Leaves	Pitch Size	Weight
110961	M28	mm	28	0.25 0.3 0.35 0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.75 0.8 0.85 0.9 1 1.1 1.2 1.25 1.3 1.4 1.5 1.6 1.7 1.75 1.8 1.9 2 2.5	40g
110962	W26	inch	26	4 41/2 5 6 7 8 9 10 11 12 13 14 16 18 19 20 22 24 25 26 28 30 32 40 48 60	40g

CENTER GAUGE

Maintenance for drill tip angle▶
Drill Tip Gauge
P116

Rust prevention▶
Zerust Film for Steel
P380



SG-60M

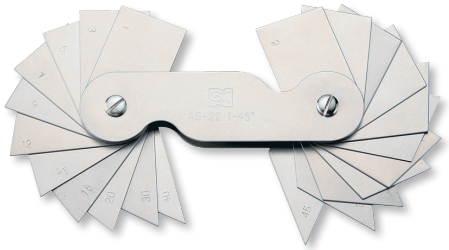
USE
- Fish tail thread gauge for inspection of the angle of lathe center, angle of the tool for screw cutting, etc.

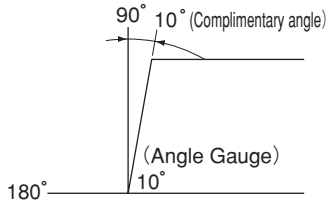
MATERIAL
- Carbon steel for machine structural use

FEATURES
- Can check the angle of tool bits and tool edges

Order No.	Model No.	Angle	Graduation	Accuracy	Weight
007541	SG-60M	60°	0~25mm 0.5mm step, 1mm step	±1°	10g
007542	SG-55I	55°	0~1inch 1/14 inch step, 1/20 inch step	±1°	10g

ANGLE GAUGE





USE
- Use for inspection of internal angle

MATERIAL
- Stainless steel

FEATURES
- 11 leaves on each side, range of 1°~45°
- The angle marked on each leaf is complementary angle

Order No.	Model No.	Graduation	Accuracy	Weight
110931	AG-22	1 2 3 4 5 6 7 8 9 10 12 14 14.5 15 16 18 20 25 30 35 40 45°	±20'	200g

BLOCK GAUGE
PIN GAUGE
PIN VISE
PIN GAUGE ACCESSORIES
RING GAUGE
PLUG GAUGE
LIMIT GAUGE
THICKNESS GAUGE
TAPER GAUGE
WELDING GAUGE
OTHER GAUGES

RADIUS GAUGE

RG-32

USE
- For checking the radius curve of dies, jigs, and wooden molds, etc.

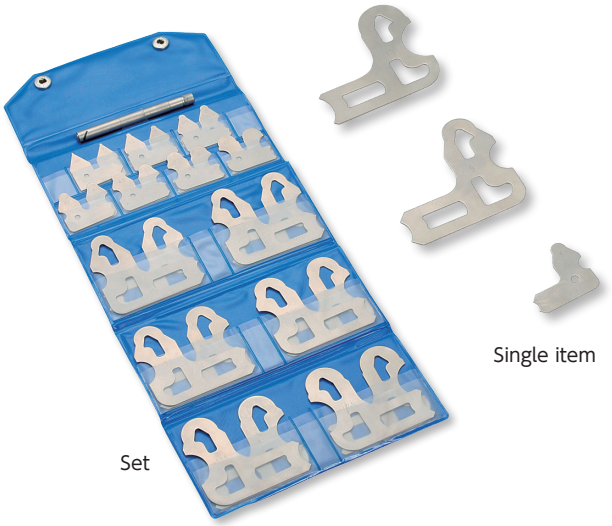
MATERIAL
- Carbon steel for machine structural use

FEATURES
- Concave and convex leaves are separated

Order No.	Model No.	Number of Leaves per Set	Details of Radius Dimension (mm)	Accuracy (mm)	Weight
110923	RG-34	34	1.0 ～ 3.0 (0.25 step) 3.5 ～ 7.0 (0.5 step)	±0.1	65g
110922	RG-32	32	7.5 ～15.0 (0.5 step)	±0.1	115g
110921	RG-30	30	15.5 ～20.0 (0.5 step) 21.0 ～25.0 (1.0 step)	±0.1	110g

RADIUS GAUGE (Set / Single part)

(RG-26S)



USE
- For checking radius curve of dies, jigs and wooden mold etc.

MATERIAL
- Stainless steel

FEATURES
- Each size is separated, suitable for measuring difficult to access parts

SPECIFICATIONS (Radius gauge set)

Order No.	Model No.	Pieces per Set	Detail of Radius Dimension (mm)	Accuracy (mm)	Weight
110875	RG-26S	26	0.5～13.0(0.5step)	±0.1	290g

SPECIFICATIONS (Single part)

Order No.	Model No.	Detail of Radius Dimension (mm)
110881	RGL-05	0.5
110882	RGL-10	1.0
110883	RGL-15	1.5
110884	RGL-20	2.0
110885	RGL-25	2.5
110886	RGL-30	3.0
110887	RGL-35	3.5
110888	RGL-40	4.0
110889	RGL-45	4.5
110890	RGL-50	5.0
110891	RGL-55	5.5
110892	RGL-60	6.0
110893	RGL-65	6.5
110894	RGL-70	7.0
110895	RGL-75	7.5
110896	RGL-80	8.0
110897	RGL-85	8.5
110898	RGL-90	9.0
110899	RGL-95	9.5
110900	RGL-100	10.0
110901	RGL-105	10.5
110902	RGL-110	11.0
110903	RGL-115	11.5
110904	RGL-120	12.0
110905	RGL-125	12.5
110906	RGL-130	13.0

DRILL TIP GAUGE

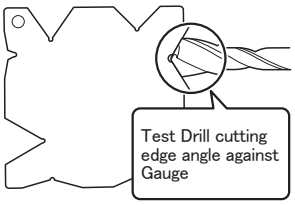
T

Suitable for checking angle of drill-tip after grinding

USE
- Use for checking angle of drill-tip after grinding (60° 70° 90° 118° 125° 135° 150° 160°)

MATERIAL
- Stainless steel

FEATURES
- 8 types of edge angle gauges are useful when grinding
- 2mm scale to measure length of drill tip
- Provided with ball chain



Order No.	Model No.	Product Dimension W×H×D(mm)	Accuracy	Weight
007531	DPG-A	77×77×1	±1.5°	11g

DRILL TIP GAUGE

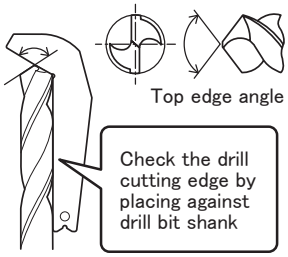
T

Suitable for measuring drill-tip after grinding

USE
- Use for measuring drill-tip after grinding (118°)

MATERIAL
- Stainless steel

FEATURES
- Confirms drill tip edge angle after grinding
- Provided with ball chain



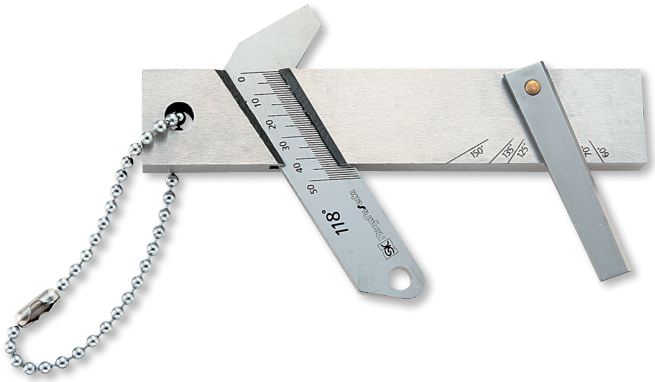
Order No.	Model No.	Product Dimension L×D(mm)	Accuracy	Weight
007532	DPG-118	90×0.5	±1.5°	10g

DRILL POINT GAUGE

T

Suitable for checking angle of drill-tip after grinding

Rust prevention▶
Zerust Film for Steel
P380



USE
- Maintenance management of drilling work
- For measuring drill-tip angle, eccentricity of chisel edge and lip height

MATERIAL
- Main scale･rotor: Stainless steel
- Base: Carbon tool steel

FEATURES
- Clearly marked scale for quick reading
- Rotating tip angle gauge (Marking at 60° 70° 90° 125° 135° 150°)
- Provided with ball chain

SPECIFICATIONS
- Tip angle: 118°
- Drill edge length: 3～45mm

Order No.	Model No.	Product Dimension (mm)	Accuracy	Weight
007535	DP-118	Base:22×110×8 Rotor:7.5×50×2 Main Scale:68×9	±1.5°	160g

SLIDING DRILL POINT GAUGE

T

Suitable for maintenance of drill-tip angle

USE
- Maintenance management of drill point angle

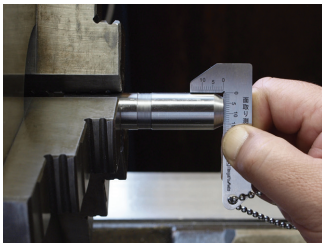
MATERIAL
- Stainless steel

FEATURES
- Use for measuring the drill tip edge length range of 3～40mm
- Satin finish

SPECIFICATIONS
- Tip angle: 118°
- Drill edge length: 3～40mm

Order No.	Model No.	Accuracy	Weight
007536	S-118	±1.5°	150g

CHAMFER MEASURING GAUGE



USE
- Use for measuring the size of all kinds of chamfer

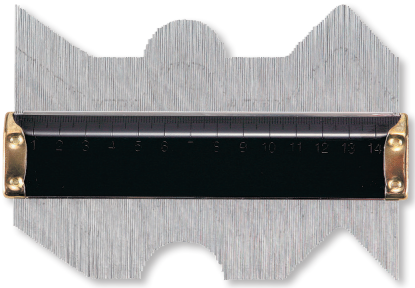
MATERIAL
- Stainless steel

FEATURES
- Measure chamfer circumference of workpiece on lathe
- For milling, measure hole chamfer on workpiece
- Provided with ball chain

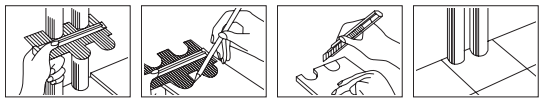
SPECIFICATIONS
- Measuring range: 0~15C
- Minimum reading: 0.5mm

Order No.	Model No.	Product Dimension (mm)	Accuracy (mm)	Weight
006990	CMG-10	Overall Length 71.6×2 Side Length 16	±0.25	20g

PROFILE GAUGE



Example of Use



1. Push profile gauge against desired sample
2. Transfer profile to workpiece
3. Cut workpiece to shape
4. A perfect fit made easy

USE
- Contour gauge for recording the cross-sectional shape of a surface

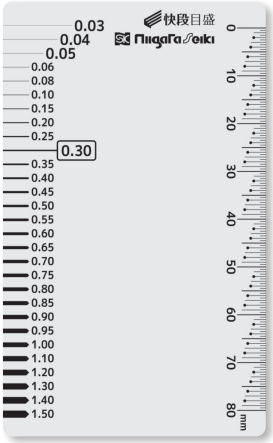
MATERIAL
- Pin material: Stainless steel

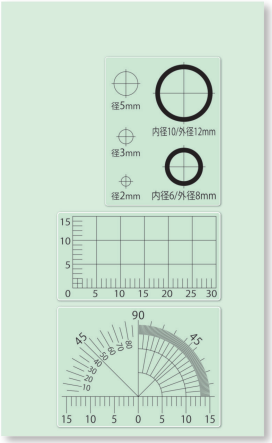
FEATURES
- Pins are thin and can easily record a smooth curve

SPECIFICATIONS
- Active Length: 150mm

Order No.	Model No.	Product Dimension (mm)	Weight
011440	CG-100S	155×84	210g

CRACK GAUGE KAIDAN CLEAR CARD





Sticker included

USE
- Crack measurement of wall, foundation etc.

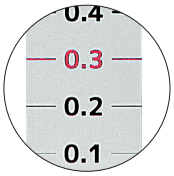
MATERIAL
- Polyester

FEATURES
- Measuring width and length of crack
- Supplied with sticker for angle and diameter measurement
- Flexible, transparent polyester material makes it easy to use
- Portable (business card size)

Order No.	Model No.	Product Dimension (mm)	Weight
111263	CM-CKD	91×55	1g

CRACK GAUGE WITH KAIDAN SCALE TYPE

0.3mm marked in red.
For measuring cracks.



FRONT

BACK

USE
- Crack measurement of wall, foundation etc.

MATERIAL
- Stainless steel

FEATURES
- 0.3mm marked in red, easy to distinguish defect or cracks
- Stepped length of linear graduations by 1mm for easy-to-read on back
- Satin finished

Order No.	Model No.	Measurement Range of Crack Gauge (mm)	Measurement Range of Metal Scale (mm)	Weight
111262	CM-SKD	0.1~2.0	0~150	10g