
5 Grip-Position Pinch Gauge



Instructions for Use

12-0480

12-0480P (paddle only)

12-0490

5 GRIP-POSITION PINCH GAUGE



Pinch width can adjust to fit any hand size. Advanced protocols can now be performed with tip, palmar and key pinch strength tests.



Pinch width without paddle matches today's standard pinch width.



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Intended Purpose

The 5 grip-position pinch gauge is a medical/therapeutic device designed to measure finger pinch strength with adjustable grip widths for different hand sizes and testing protocols.

- The Baseline® hydraulic pinch gauge uses the hydraulic system of the hand dynamometer to assure convenience, product reliability and measurement accuracy and repeatability.
- The therapist can support the pinch gauge during testing. This yields a more accurate result for all pinch tests including tip, key and palmer.
- The results are consistent with published Baseline® and Jamar® studies.
- Maximum reading remains until the unit is reset.
- The strength reading can be viewed as pounds or kilograms.
- Portable measuring unit comes with rugged carrying case.
- Easy adjustable paddle to accommodate to any size hand – other pinch gauges only have one pinch width.
- User can't see results during testing.
- 5 pinch positions permits additional tests for tip, palmar and key tests.
 - 5-position pinch test
 - rapid exchange test
- pinch width without paddle is the same width as standard pinch gauge (mechanical and hydraulic).
- Can now provide same tests as 5-position hand dynamometers.
- 2-year manufacturers warranty.
- CE certified.

WARNING:

- Clean contact surfaces between each patient
- Verify zero position before measurements
- Ensure proper finger placement
- Do not exceed device's force range
- Stop if patient experiences discomfort
- Keep device properly calibrated
- Store in protective case
- Inspect for loose parts before use
- Check gauge accuracy regularly

Tolerances:

The 50 lb. hydraulic pinch gauge is tested for accuracy at 10, 20, 25, 30, 40 and 50 lbs.
TOLERANCES (Based on 3% through 1/3 of range, 2% through 2/3 and 3% through 3/3).

Disposal Method

Dispose of item in accordance with the local/regional/national/international regulations.

5-Position Pinch Gauge can be used to measure pinch strength. It is calibrated in pounds and kilograms of force. Apply pinch force at the pinch groove while holding the pinch gauge between your thumb and finger(s). When force is applied further toward the tip the reading will be slightly higher.

The red maximum pointer must be reset before each pinch test. Rotate the small knurled knob on top of the dial indicator in a counterclockwise direction until it rests against the black pointer at the zero marking. The red maximum pointer will remain at the subject's maximum reading until it is reset.

Use the pinch gauge to perform the three basic pinch tests:

- Tip Pinch (thumb-index pulp pinch) – thumb tip to index fingertip
- Key Pinch (lateral pinch) – thumb pad to lateral aspect of middle phalanx of index finger
- Palmer Pinch (chuck pinch) – thumb pad to pads of the index and middle fingers

Norms based on standard pinch width (pinch width without paddle)

NORMS FOR ADULT PINCH STRENGTH							
Tip Pinch strength performance of all subjects (pounds)							
age	hand	men mean	SD	low-high	women mean	SD	low-high
20-24	dominant	18.0	3.0	11-23	11.1	2.1	8-16
	non-dominant	17.0	2.3	12-33	10.5	1.7	8-14
25-29	dominant	18.3	4.4	10-34	11.9	1.8	8-16
	non-dominant	17.5	5.2	12-36	11.3	1.8	9-18
30-34	dominant	17.4	6.7	12-25	12.6	3.0	8-20
	non-dominant	17.6	4.8	10-27	11.7	2.8	7-17
35-39	dominant	18.0	3.6	12-27	11.6	2.5	8-19
	non-dominant	17.7	3.8	10-24	11.9	2.4	8-16
40-44	dominant	17.8	4.0	11-25	11.5	2.7	5-15
	non-dominant	17.7	3.5	12-25	11.1	3.0	6-17
45-49	dominant	18.7	4.9	12-30	13.2	3.0	9-19
	non-dominant	17.6	4.1	12-28	12.1	2.7	7-18
50-54	dominant	18.3	4.0	11-24	12.5	2.2	9-18
	non-dominant	17.8	3.9	12-26	11.4	2.4	7-16
55-59	dominant	16.6	3.3	11-24	11.7	1.7	9-16
	non-dominant	15.0	3.7	10-26	10.4	1.4	8-13
60-64	dominant	15.8	3.9	9-22	10.1	2.1	7-17
	non-dominant	15.3	3.7	9-23	9.9	2.0	6-15
65-69	dominant	17.0	4.2	11-27	10.6	2.0	7-15
	non-dominant	15.4	2.9	10-21	10.5	2.4	7-17
70-75	dominant	13.8	2.6	11-21	10.1	2.6	7-15
	non-dominant	13.3	2.6	10-21	9.8	2.3	6-17
75+	dominant	14.0	3.4	7-21	9.6	2.8	4-16
	non-dominant	13.9	3.7	8-25	9.3	2.4	4-13
ALL	dominant						
	non-dominant						

NORMS

Norms based on standard pinch width (pinch width without paddle)

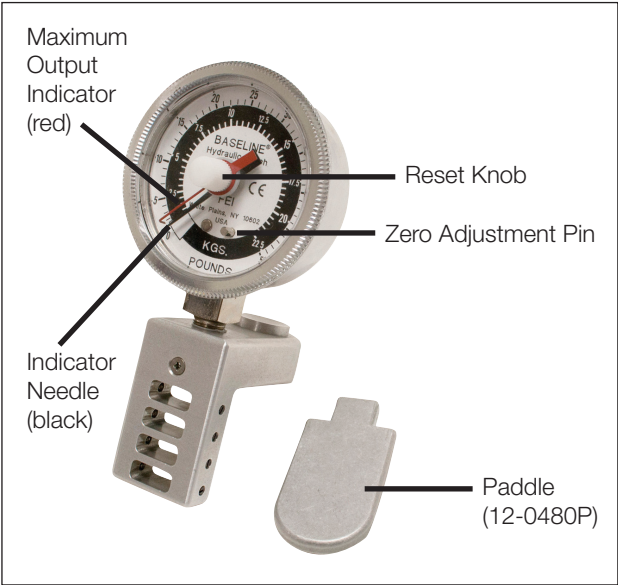
NORMS FOR ADULT PINCH STRENGTH Key Pinch strength performance of all subjects (pounds)							
age	hand	men mean	SD	low-high	women mean	SD	low-high
20-24	dominant	26.0	3.5	21-34	17.6	2.0	14-23
	non-dominant	24.8	3.4	19-31	16.2	2.1	13-23
25-29	dominant	26.7	4.9	19-41	17.7	2.1	14-22
	non-dominant	25.0	4.7	19-39	16.6	2.1	13-22
30-34	dominant	26.4	4.8	20-36	18.7	3.0	13-25
	non-dominant	26.2	5.1	17-36	17.8	3.6	12-26
35-39	dominant	26.1	3.2	21-32	16.6	2.0	12-21
	non-dominant	25.6	3.9	18-32	16.0	2.7	12-22
40-44	dominant	25.6	2.6	21-31	16.7	3.1	10-24
	non-dominant	25.1	4.0	19-31	15.8	3.1	8-22
45-49	dominant	25.8	3.9	19-35	17.6	3.2	13-24
	non-dominant	24.8	4.4	18-42	16.6	2.9	12-24
50-54	dominant	26.7	4.4	20-34	16.7	2.5	12-22
	non-dominant	26.1	4.2	20-37	16.1	2.7	12-22
55-59	dominant	24.2	4.2	18-34	15.7	2.5	11-21
	non-dominant	23.0	4.7	13-31	14.7	2.2	12-19
60-64	dominant	23.2	5.4	14-37	15.5	2.7	10-20
	non-dominant	22.2	4.1	16-33	14.1	2.5	10-19
65-69	dominant	23.4	3.9	17-32	15.0	2.6	10-21
	non-dominant	22.0	3.6	17-28	14.3	2.8	10-20
70-75	dominant	19.3	2.4	16-25	14.5	2.9	8-22
	non-dominant	19.2	3.0	13-28	13.8	3.0	9-22
75+	dominant	20.5	4.6	9-31	12.6	2.3	8-17
	non-dominant	19.1	3.0	13-24	11.4	2.6	7-16
ALL	dominant	24.5	4.6	9-41	16.2	3.0	8-25
	non-dominant	23.6	4.6	11-42	15.3	3.1	7-26

NORMS

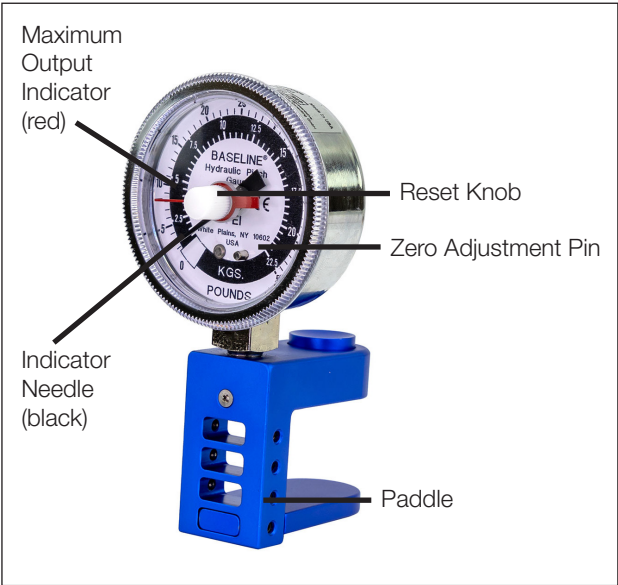
Norms based on standard pinch width (pinch width without paddle)

NORMS FOR ADULT PINCH STRENGTH Palmer Pinch strength performance of all subjects (pounds)							
age	hand	men mean	SD	low-high	women mean	SD	low-high
20-24	dominant	26.6	5.3	18-45	17.2	2.3	14-23
	non-dominant	25.7	5.8	15-42	16.3	2.8	11-24
25-29	dominant	26.0	4.3	19-35	17.7	3.2	13-29
	non-dominant	25.1	4.2	19-36	17.0	3.0	13-26
30-34	dominant	24.7	4.7	16-34	19.3	5.0	12-34
	non-dominant	25.4	5.7	15-37	18.1	4.8	12-32
35-39	dominant	26.2	4.1	19-36	17.5	4.2	13-29
	non-dominant	25.9	5.4	14-40	17.1	3.4	12-24
40-44	dominant	24.5	4.3	17-37	17.0	3.1	10-23
	non-dominant	24.8	4.9	15-37	16.6	3.5	14-25
45-49	dominant	24.0	3.3	19-33	17.9	3.0	12-27
	non-dominant	23.7	3.8	8-33	17.5	2.8	12-24
50-54	dominant	23.8	5.4	15-36	17.3	3.1	12-23
	non-dominant	24.0	5.8	16-36	16.4	2.9	12-22
55-59	dominant	23.7	4.8	16-34	16.0	3.1	11-26
	non-dominant	21.3	4.5	12-25	15.4	3.0	11-21
60-64	dominant	21.8	3.3	16-28	14.8	3.1	10-20
	non-dominant	21.2	3.2	15-27	14.3	2.7	10-20
65-69	dominant	21.4	3.0	15-25	14.2	3.1	8-20
	non-dominant	21.2	4.1	14-30	13.7	3.4	8-22
70-75	dominant	18.1	3.4	14-27	14.4	2.6	9-19
	non-dominant	18.8	3.3	13-27	14.0	1.9	10-17
75+	dominant	18.7	4.2	9-26	12.0	2.6	8-17
	non-dominant	18.3	3.8	10-26	11.5	2.6	6-16
ALL	dominant	23.4	5.0	9-45	16.3	3.8	8-34
	non-dominant	23.0	5.3	10-42	15.7	3.6	6-32

PARTS/SPECIFICATIONS: 5 GRIP-POSITION PINCH GAUGE



12-0480



12-0490

TESTING PROTOCOL: 5 GRIP-POSITION PINCH GAUGE



Palmer (chuck pinch)



Tip (pulp pinch)



Key (lateral pinch)



Pinch strength dynamometers have 5 grip-positions to fit any hand size and to enable advanced test protocols: Rapid Exchange, MVE (Maximum Voluntary effort) and MMVE (Modified Maximum Voluntary Effort).

	PATIENT START POSITION	PLACEMENT OF PINCH GAUGE	POSITION OF THERAPIST	TEST
CHUCK PINCH (PALMER) (RIGHT/LEFT)	- seated or upright - test arm at side with elbow flexed 90° - palm facing down	Pinch gauge between thumb and the index and middle fingers.	In front of patient, to the side, stabilizing pinch gauge.	Have patient squeeze, hold and release.
PULP PINCH (TIP) (RIGHT/LEFT ON EACH FINGER)	- seated or upright - test arm at side with elbow flexed 90° - palm facing down - test finger on button	Pinch gauge between thumb and test finger (make sure other fingers do not interfere).	In front of patient, to the side, stabilizing pinch gauge.	Have patient squeeze, hold and release.
LATERAL (KEY) PINCH (RIGHT/LEFT)	- seated or upright - test arm at side with elbow flexed 90° - palm facing inward	Pinch gauge between flexed PIP joint of index finger and thumb.	In front of patient, to the side, stabilizing pinch gauge.	Have patient squeeze, hold and release.