



No striking required

Replaceable tips

All punches have a steel tip for punching starter holes or producing small indentations in workpieces to facilitate drilling. 2ZVF4 is a hinge locating center punch.

L	Dia.	Adjustable	Brand	Mfr. Model	ltem No.
4 in	9⁄16 in	Yes	Starrett	18AA	2ZVE8
	5∕s in	Yes	Starrett	819	2ZVF4
5 in	9⁄16 in	Yes	Starrett	18A	2ZVE9
	1/2 in	Yes	Westward	_	2YNE9
5 1⁄4 in	11/16 in	Yes	Starrett	18C	2ZVF2
0 :	5⁄8 in	Yes	Westward	_	2YNF1 *
6 in	78 IN	Yes	Westward	_	2YNF2
Carbide tip.					

# Starrett +///SIZE+

### **Hardness Testers**

Provide reliable values on hard or soft metal and alloys. 2ZUP4 includes 4 test tables, and 3 certified test blocks. 463K92 includes flat anvil and V-type anvil for cylinders. 463K97 and 463K85 include a hardness test block, USB cable/software, V-type anvil, and flat anvil (463K97 comes with 2 flat anvils).



Scales	Measuring Range	Res.	Indenter	Туре	Mfr. Model	Brand	ltem No.
Rockwell A Scale 80, Rockwell B Scale 90, Rockwell C Scale 63	_	_	Diamond	_	3814	Starrett	2ZUP4
HRA, HRB, HRC, HRD, HRF, HRG	98N/10kgf	0.5 HR	Ball, Diamond	Manual	ISH-R150	Insize	463K92
HRA, HRB, HRC, HRD, HRE, HRF,	98N/10kgf	0.1 HR	Ball, Diamond	ISO 6508, ASTM E18	ISH-RD200	Insize	463K97
HRG, HRH, HRK	98N/10kgf	0.1 HR	Ball	Automatic	ISH-MRD200-U	Insize	463K85





### **Probe Sets**

Description	Point Type	Overall Length (in.)	Brand	Mfr. Model	ltem No.
4-Pc. Mini Hook and Pick Set	Straight, $90^\circ$ , Curved, and Complex Hooks	6 ½ in	Mayhew	60003	2KKV4
4-Pc. Probe Set	180° Hook, 35° Bend, 90° Bend, Straight	6 in	General	60004	1XHP8
3-Pc, Probe Set	45°, Double Bend, Hook Bend	6 ½ in	General	862	3G945





### Starrett Westward Miluloyo

#### **Punch Sets**

No. of Pieces	Sizes Included	L (in.)	Material	Brand	Mfr. Model	ltem No.
Drive P						
4	1/4 in, 3/16 in, 3/8 in, 5/16 in 1/4 in, 3/16 in, 3/8 in, 5/16 in	8	Brass	Starrett	SB248Z	3AER9
	1/4 in, 1/8 in, 3/16 in, 3/8 in, 5/16 in	8	Steel	Westward	_	2YNE7
5	1/4 in, 1/8 in, 3/16 in, 3/8 in, 5/16 in 1/4 in, 1/8 in, 3/16 in, 3/8 in, 5/16 in	8	Steel	Starrett	S248PC	2ZVJ6
5	1/4 in, 1/8 in, 3/16 in, 3/8 in, 5/16 in 1/4 in, 1/8 in, 3/16 in, 3/8 in, 5/16 in	8	Steel	Starrett	S248	2ZVJ7
	1/8-3/8 in 1/8 to 3/8 in	8	Steel	Mitutoyo	985-118	4LB27
	1/16 in, 1/4 in, 1/6 in, 3/16 in, 3/32 in, 5/16 in, 5/32 in, 1/32 in 1/16 in, 1/4 in, 1/8 in, 3/16 in, 3/32 in, 5/16 in, 5/32 in, 1/32 in	4	Steel	Starrett	S565WB	2ZVK5
8	1/16 in, 1/4 in, 1/8 in, 3/16 in, 3/32 in, 5/16 in, 5/32 in, 1/32 in 1/16 in, 1/4 in, 1/8 in, 3/16 in, 3/32 in, 5/16 in, 5/32 in, 1/32 in	4	Brass	Starrett	SB565Z	3AET9
	1/16-5/16 in 1/16 to 5/16 in	4	Steel	Mitutoyo	985-119	4LB28
	sening & Removing Punches					
8	1/16-5/16 in 1/16 to 5/16 in	4	Brass	Mitutoyo	985-120	4LB29
Center						
5	1/16 to 5/32 in, Pouch 1/16 in, 1/8 in, 3/32 in, 5/32 in, 5/64 in	3 and 4 in 3 to 5 in	Steel Steel	Mitutoyo Starrett	985-138 S117PC	1ARY9 2ZVF5
7	1/16 in, 1/4 in, 1/8 in, 3/16 in, 3/32 in, 5/32 in, 5/64 in	3 - 5 in	Steel	Starrett	S264WB	2ZVJ8



## Mitutoyo Starrett

## **Durometer Calibration Sets**

Rubber durometer test blocks help you to test the operational status of your Shore A or Shore D durometer. Choose a Shore A test block kit to yield hardness values of averaged ranges of 30, 60 and 90. Use a Shore D test block kit to find hardness values in the average ranges of 20, 40 and 80. A set of three rubber test blocks for testing type A hardness values of 27 to 94 includes a certificate.

Range	For Use With	Brand	Mfr. Model	ltem No.			
Shore A Calibra							
30, 60, 90	1ARV2, 1ARV3, 1ARV6, 1ZRT4	Mitutoyo	64AAA964	1ARU7			
27 to 94	Mfr. No. 3805B	Starrett	SRB-3	2ZUP5			
Shore D Calibration Block Set							
20, 40, 80	1ARV4, 1ARV5, 1ZRT5, 1ZRT6	Mitutoyo	64AAA590	1ARU6			
		-					

4KY26

#### Westward Scribers

4KY29

Point Type	Tip Material	Replaceable Tip	Threaded Points	Overall Length (in.)	ltem No.
Machinist					
(1) Straight/(1) 90°	Hardened Steel	No	Yes	9 in	4KY26
Pocket					
Straight	Hardened Steel	No	Yes	4 ¾ in	4KY29
Straight	Carbide	No	No	5 in	4KY32



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