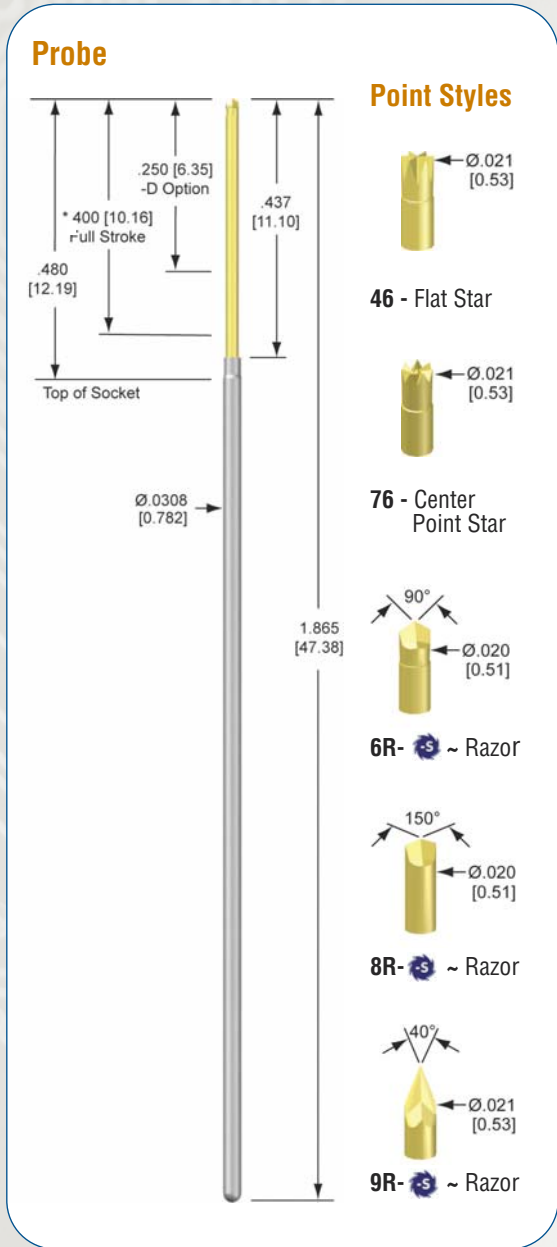




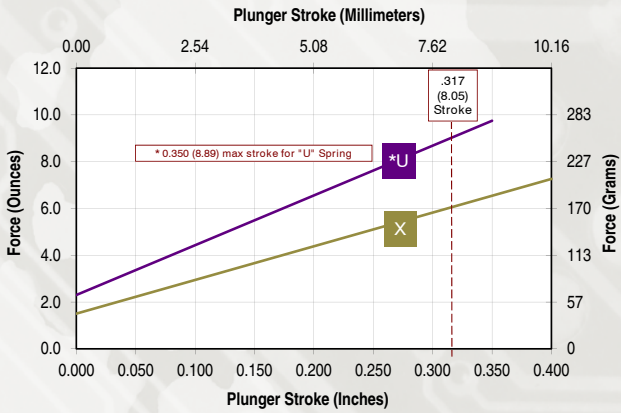
QA is pleased to announce the addition of the **Ultra Force Spring** to 050-R40 Series, .400 [10.16] stroke .050 [1.27] center long stroke probe, ideal when board contamination / process requires additional force to ensure reliable contact. Long-stroke probes are easily mixed with their standard-stroke counterparts from the 050-R25 series. Long-stroke and standard-stroke probes with the same center spacing are used in identical sockets.



Probe Specifications

- Full Stroke:** .400 [10.16]
- Working Stroke:** up to .317 [8.05]
- Operating Temp:** -50° to 250°F [-45° to 120°C]
- Average Resistance:** < 40 mOhms
- Current Rating:** 9.5 Amps

Spring Force



Part Number: 050-PRP40 -

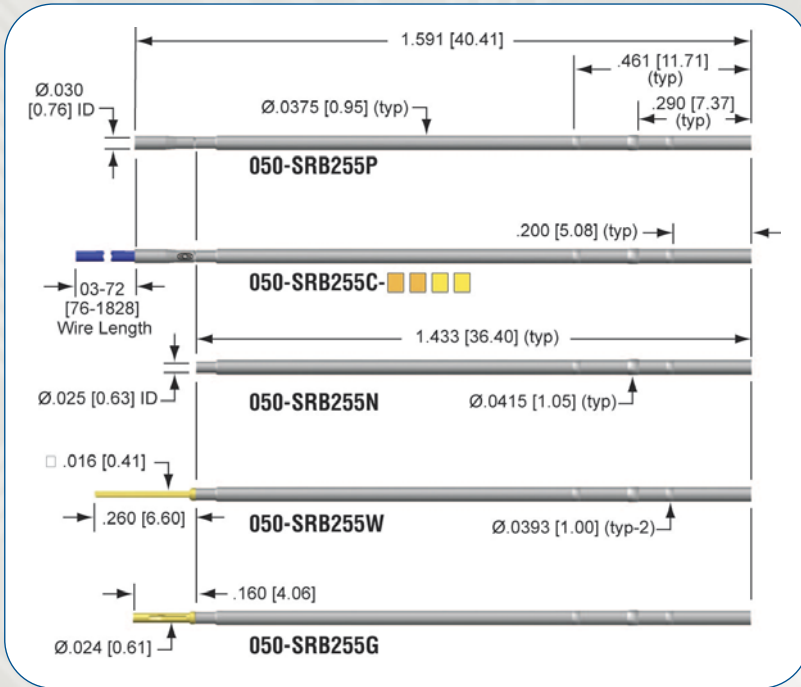
Tube	Letter	Material/Finish			
	P	Nickel silver / ID precious metal clad			
Point	Digit	Material/Finish			
	See Points	Standard material is heat treated BeCu / plated gold over nickel (see S option for steel plungers)			
Spring	Letter	Preload	@ .317 Stroke	Material	Mechanical Life (cycles @ stroke)
	X	1.5 [43]	6.0 [170]	Stainless Steel	250K min @ .317 [8.05] max
	U*	2.3 [65]	9.0 [255]	Stainless Steel	100K min @ .317 [8.05] max
Option	Letter	Description			
	D	Decreased stroke is .250 [6.35]. Must select from 050-R25 series spring forces with this option.			
	N	No probe lubrication. Removing probe lubrication greatly reduces cycle life and should be only used in applications outside of the probe operating temperature specifications.			
	S	Heat treated steel / plated gold over nickel			

*.350 [8.89] maximum stroke for U spring.

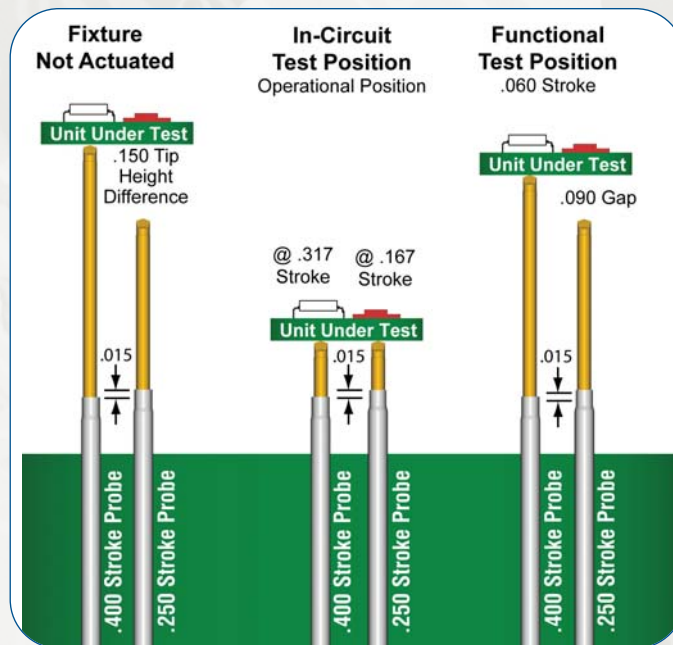
All dimensions are in inches [mm]. All spring forces are in ounces [gms].

← New

Sockets



As shown to the right, the long-stroke probe tips are .150 [3.81] higher than neighboring standard-stroke tips when the fixture is not actuated. In the functional test position, the long-stroke probes are deflected .060 [1.524], leaving .090 [2.29] clearance to the tips of the standard-stroke probes. During in-circuit test, deflection of the long-stroke probes is .317 [8.05], and the standard-stroke probes are deflected .167 [4.24] (the recommended two-thirds travel position).



The illustration above shows the typical positions of both a standard .250 stroke and .400 long-stroke 050-R40 in dual level testing. To achieve the .150 tip height difference, set the socket .015 lower on the .400 stroke.