

## Specifications



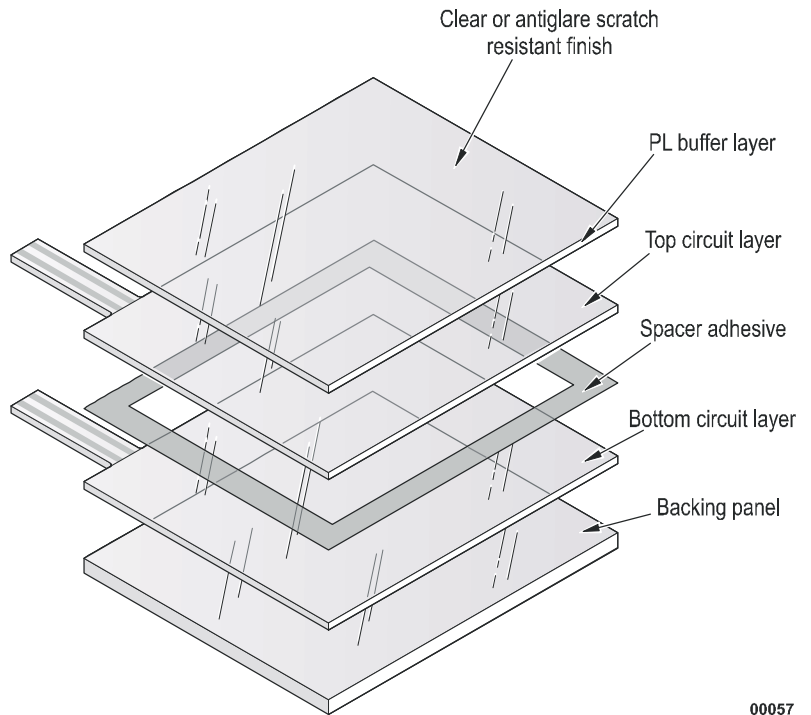
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The *hands on* company

# Dynaclear™ PL Resistive Touch Screen

Dynapro's Dynaclear™ Polyester Laminated (PL) touch screen construction produces the most rugged resistive touch screen in the industry. This is Dynapro's strongest design because it consists of layers of polyester bonded over the entire surface, rather than just at the edge, to a chemically toughened glass panel.

This combination, of full optical lamination and a backing panel that is three to four times stronger than non-strengthened glass, provides break resistance similar to safety glass. This construction gives the touch screen added durability and reliability in rugged environments.

### Dynaclear-PL Construction



00057

### Specifications Electrical

Operating Voltage	3.3 to 5 VDC typical
Sheet Resistance	220 $\pm$ 30% $\Omega$ /square
Linearity	+/- 1.5% full scale linearity error in either direction. Dynapro document PS002
Insulation Resistance	> 20 M $\Omega$ @ 25 VDC. Dynapro test procedure TP0004

### Optical

Total light Transmission	68% typical (> 66% @ 550 nm test) Dynapro test procedure TP0009
Workmanship Standards	Per Dynapro document PS014 Includes optical inspection standards for touch screen

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## Environmental

Operating Temperature Range	-20°C to +50°C, ambient humidity Dynapro test procedures TP0006 and TP0007
Storage Temperature High	+70°C, 500 hours at ambient humidity Dynapro test procedure TP0003
Storage Temperature Low	-40°C, continuous at ambient humidity Dynapro test procedure TP0005
Accelerated Aging	100 hours continuous exposure at 60°C/95% RH Dynapro test procedure TP0001
Thermal Shock	25 cycles (one cycle is 30 min. dwell alternating from -40°C to +85°C with less than 10 min. transfer time). Dynapro test procedure TP0008

## Mechanical

Activation Method	Gloved or ungloved finger Delrin or plastic stylus (no metal) with 1mm radius full hemispherical tip
Activation Force	< 70g average with non-metal stylus < 90g average with 5/8" diameter silicone finger
Data is for .006" diameter, .160" pitch spacer dots	Custom activation force and palm rejection available. Dynapro test procedure TP0002

## Durability

Point Activation Life	1 Million activations on a single point with a 5/8" diameter silicone finger with a 350g load at 2Hz
Character Activation Life	>100,000 characters written within a 20mm x 20mm area on the touch screen
Surface Finish Properties	Minimum 4H hardness. Refer to <i>Touch Screen Surface Finishes Data Sheet 1005</i> for more details

Specifications subject to change without notice. All values are typical. Products are sold with the understanding that buyers will test them in actual use and determine the product's adaptability to their application. Touch screens must be installed per *Dynapro Custom Touch Screen Design Guide D-CDG 100* and *Dynapro Touch Screen Integration Guide D-IG-100*. Failure to adhere to recommended installation may affect ability to meet specifications stated within this document.

## Supporting Documents

Touch Screen Surface Finishes Data Sheet 1005  
Test Procedures: TP0001, TP0002, TP0003, TP0004, TP0005, TP0006, TP0007, TP0008, TP0009  
Product Standards: Workmanship Standard for Dynapro Touch Screens PS014  
Electrical Testing of Analog Resistive Touch Screens PS002



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For more information on our resistive stock products or custom design solutions, visit us at

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*Dynapro simplifies interaction between people and technology by designing and manufacturing world class touch products, from touch screen components to touch computers, terminals, and monitors.*