

## Force Sensors, FSA Series Compensated/Amplified

**Table 2. Environmental Specifications**

Characteristic	Parameter
Humidity	0% to 95% RH, non-condensing
Vibration	MIL-STD-202, Method 214, Condition 1E (16.9 G)
Shock	MIL-STD-202, Method 213, Condition F (1500 G)
Life <sup>1</sup>	1 million full scale force cycles minimum

<sup>1</sup>Life may vary depending on specific application in which the sensor is utilized.

**Table 3. Materials<sup>1</sup>**

Component	Material
Covers	high temperature polyamide
Plunger	stainless steel 316
Substrate	alumina, ceramic
Adhesives	epoxy, silicone
Electronic components	ceramic silicon, glass, solder

<sup>1</sup>Contact Honeywell customer service for detailed material information.

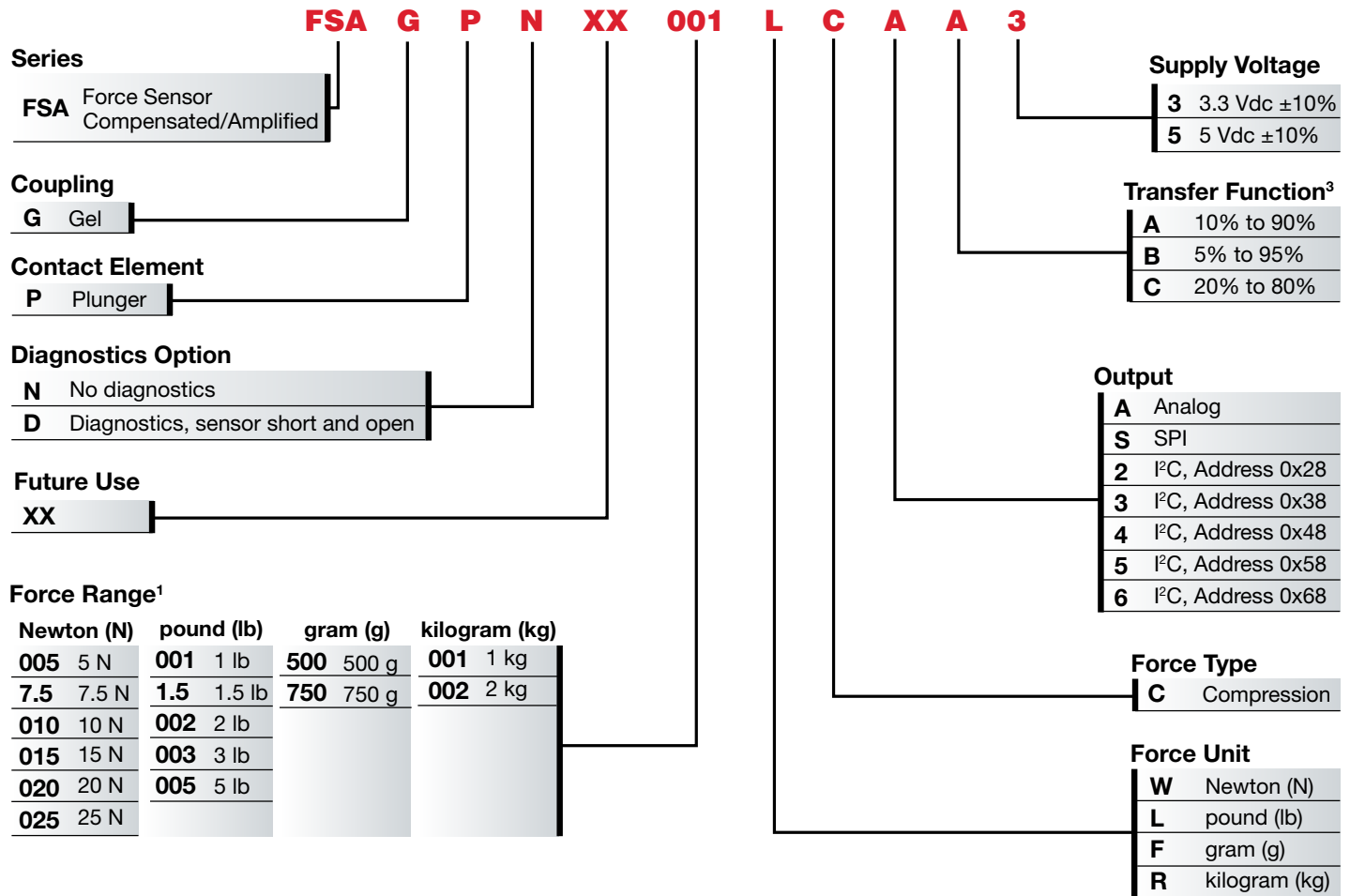
**Table 4. Absolute Maximum Specifications**

Characteristic	Min.	Max.	Unit
Supply voltage	-0.3	6.0	Vdc
Voltage on any pin	-0.3	$V_{\text{supply}} + 0.3$	V
Digital interface clock frequency:			
SPI	50	800	kHz
I <sup>2</sup> C	100	400	
ESD susceptibility (human body model)	2	—	kV
Storage temperature range	-40 [-40]	85 [185]	°C [°F]
Overforce limit	—	6804 [15]	g [lb]
Minimum operating voltage	2.8 Vdc		
Lead soldering time and temperature	4 s max. at 220°C [428°F]		

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Figure 1. Nomenclature and Order Guide

For example, **FSAGPNXX001LCAA3** defines an FSA Series Force Sensor, gel coupling, plunger contact element, no diagnostics, 2 lb force range, force unit in pounds, compression force type, analog output, 10% to 90% transfer function, 3.3 Vdc supply voltage



<sup>1</sup>Custom designations available upon request.

<sup>2</sup>Consult with factory.

<sup>3</sup>For other available transfer functions, contact Honeywell customer service.

## COMMON CATALOG LISTINGS

FSAGPDXX010WCAA5  
 FSAGPDXX001RCAB5  
 FSAGPNXX1.5LCAC5  
 FSAGPNXX003LCAC5  
 FSAGPNXX010WC2C3  
 FSAGPNXX001RC4C5  
 FSAGPDXX005LCSB5  
 FSAGPDXX1.5LC5B5