

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 ¹ | 1 million full scale force cycles minimum |

¹Life may vary depending on specific application in which the sensor is utilized.

Table 3. Materials¹

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

¹Contact Honeywell customer service for detailed material information.

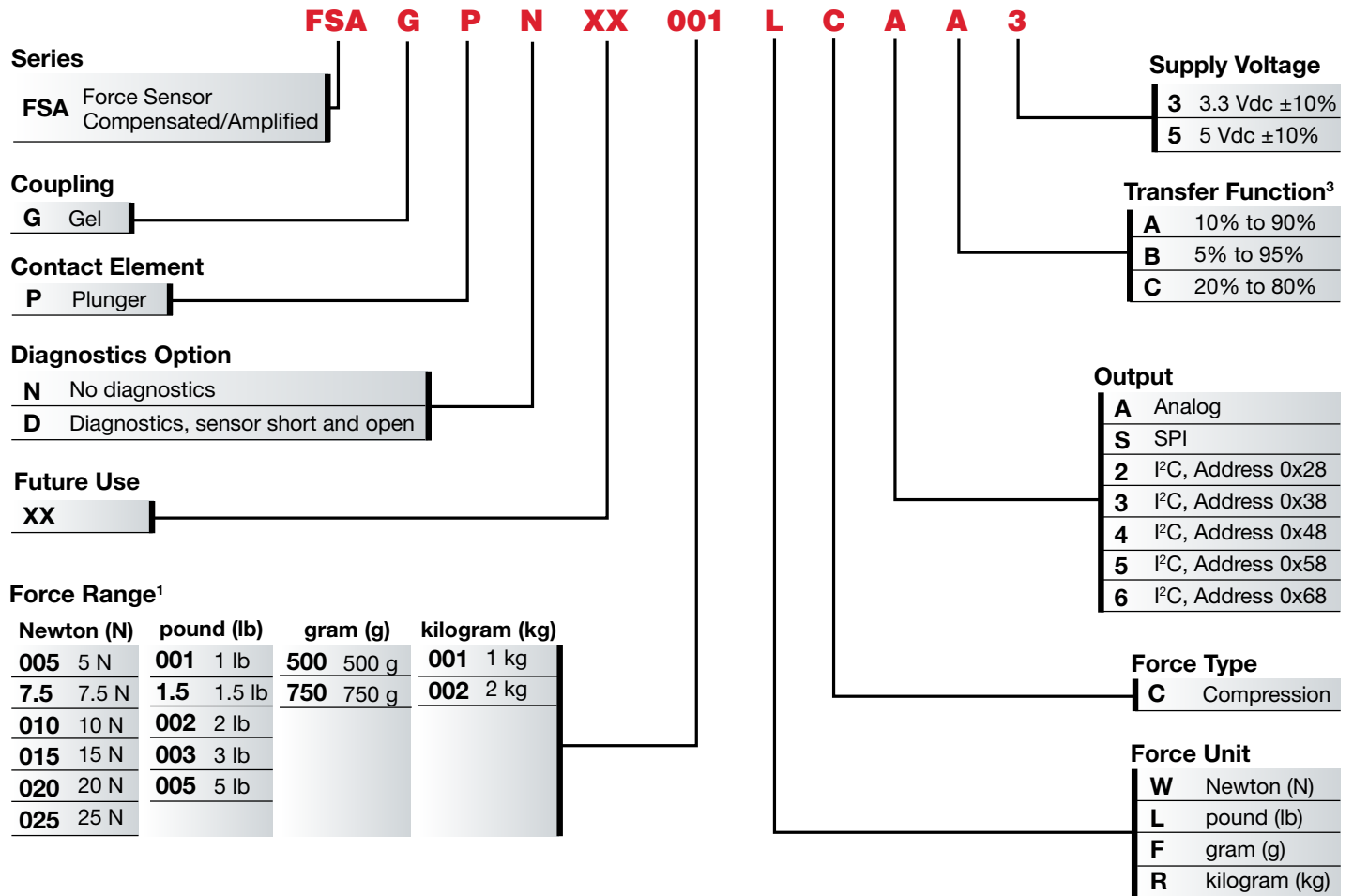
Table 4. Absolute Maximum Specifications

| 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 ² 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



¹Custom designations available upon request.

²Consult with factory.

³For other available transfer functions, contact Honeywell customer service.

COMMON CATALOG LISTINGS

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