

# 3D FORCE SENSOR



## 3D FORCE SENSOR UPP-100NX3

Force in 3 dimensions(X, Y, Z) can be measured at the same time !!  
**Safe overload rating of 500%**  
 - the three-axis force sensor with the high sensitivity and rigidity!



Dedicated amplifier  
**FS300**

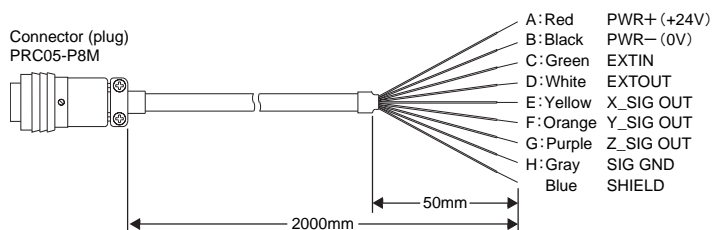
±5V output at the rated capacity for each direction:  
 Fx, Fy, Fz (three axis).  
 As output signals for each direction is adjusted before shipping out, you can get calibrated(scaled) output by just connecting sensor and DC24V power supply to FS300.

### Specifications

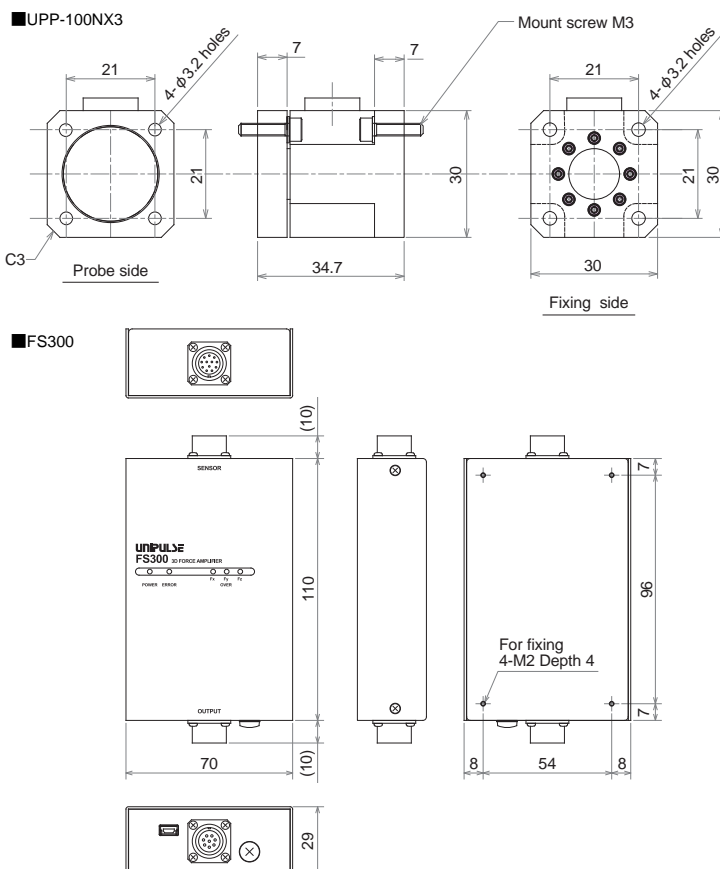
Model	Sensor : UPP-100NX3, Amplifier : FS300
Rated capacity	Fx, Fy, Fz : ±100N
Power supply voltage	DC24V±15%
Consumption current	150mA or less
Load signal output	Fx, Fy, Fz : ±5V DC
Load resistance	2kΩ or more
Response	2kHz
I/O signal	Input: Auto zero command Output: Auto zero response
Safe overload	500%FS
Non-linearity	0.5%FS
Hysteresis	0.5%FS
Repeatability	0.5%FS
Compensated temperature range	0~+40°C
Safe temperature range	-10~+50°C
Temperature effect on zero	0.5%FS/°C
Temperature effect on span	0.05%FS/°C
Sensor material	Aluminum alloy
Weight	Sensor : Approx. 70g. Amplifier : Approx. 180g (Excluding the cable)

\* Above specifications are achieved when the sensor(UPP-100NX3) is connected with the dedicated amplifier(FS300).

### FS300 attached cable



### External dimension



Please note that specifications or designs shown in this catalog may vary due to our continuous product improvement activities.

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