CTS7 Force Sensor Spring
Spring Constant: 4.1 kg/mm
Idle Length: 11.4 mm
End Length: 6.4 mm

Number of Springs: 2
PinA Reduction Ratio: 4.00
PinB Reduction Ratio: 3.00

Distance [mm] (Number of Screw Revolutions)	Spring Length [mm]	Single Spring Weight Force [kg]	Sensor-Triggering Single Spring Weight Force [kg]	Sensor-Triggering Spring Weight Force at PinA [kg]	Sensor-Triggering Spring Weight Force at PinB [kg]	Spring State
5.0	11.4					Idle State
4.5	10.9					
4.0	10.4					
3.5	9.9	6.2	12.3	6.2	8.2	
3.0	9.4	8.2	14.4	7.2	9.6	
2.5	8.9	10.3	16.4	8.2	10.9	
2.0	8.4	12.3	18.5	9.2	12.3	
1.5	7.9	14.4	20.5	10.3	13.7	
1.0	7.4	16.4	22.6	11.3	15.0	
0.5	6.9	18.5	24.6	12.3	16.4	
0.0	6.4					Blockage

Setup of Force Sensor Spring for Pressure Sensors:
(1) Screw until the springs are in blockage
(2) Unscrew as much revolutions until the desired sensor-triggering pin weight force is reached
(3) Loosen the Hall sensor, slowly put it in until the *Force* (or *Start*) LED lights up and then screw tight
(4) Unscrew the springs for further 1 ½ revolutions

Force Sensor Spring Setup for Stretch Sensors (see also CTS7 data sheet):
(1) Screw until the springs are in blockage
(2) Unscrew as much revolutions until the desired sensor-triggering pin weight force is reached
(3) Preload the springs with a washer (of about 1.4 mm thickness) between the plates
(4) Loosen the Hall sensor, insert it completely, and slowly put it out until the *Force* (or *Start*) LED lights up, and then screw tight
(5) Unscrew the springs for further 1 ½ revolutions

(as of Nov 16, 2025)