

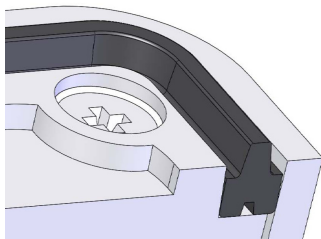


## 720 TFX-i Series Sealed and Rugged Keypads

These tough, water resistant keypads feature moving, tactile keys with a responsive 'over-centre' action and are designed for use in harsh industrial environments. High contrast white keytops are permanently laser engraved with black characters and have integral white LED illumination for use in dark or partially lit locations.



The keypad can be installed on the surface or under the panel.  
( Underpanel Installation Instructions are in the Underpanel Fitting Kit )  
Fit the supplied silicone seal into the seal groove on the keypad  
Use the groove on top for underpanel, and on back for surface fix.  
The wide part of the seal goes into the groove – see picture below of the seal fitted to the back of the keypad.



### Connection Details

#### Connection Details for 4 Key Keypad

CONTACT CONNECTIONS  
● ● ● ● ● ●  
7 6 5 4 3 2 1  
(As viewed from rear of keypad)

1  
A ☐  
B ☐  
C ☐  
D ☐

KEY LOCATION  
(As viewed from front of keypad)

CONTACT MATRIX	
CONN. PIN	ROW/ COLUMN
1	Cathode
2	Common
3	D
4	C
5	B
6	A
7	Anode

#### Connection Details for 12 Key Keypad

CONTACT CONNECTIONS  
● ● ● ● ● ● ● ● ● ● ● ●  
10 9 8 7 6 5 4 3 2 1  
(As viewed from rear of keypad)

1 2 3  
A ☐ ☐ ☐  
B ☐ ☐ ☐  
C ☐ ☐ ☐  
D ☐ ☐ ☐

KEY LOCATION  
(As viewed from front of keypad)

CONTACT MATRIX	
CONN. PIN	ROW/ COLUMN
1	Cathode
2	A
3	B
4	1
5	2
6	3
7	–
8	D
9	C
10	Anode

#### Connection Details for 16 Key Keypad

CONTACT CONNECTIONS  
● ● ● ● ● ● ● ● ● ● ● ● ● ●  
10 9 8 7 6 5 4 3 2 1  
(As viewed from rear of keypad)

1 2 3 4  
A ☐ ☐ ☐ ☐  
B ☐ ☐ ☐ ☐  
C ☐ ☐ ☐ ☐  
D ☐ ☐ ☐ ☐

KEY LOCATION  
(As viewed from front of keypad)

CONTACT MATRIX	
CONN. PIN	ROW/ COLUMN
1	Cathode
2	A
3	B
4	1
5	2
6	3
7	4
8	D
9	C
10	Anode

### Electrical

Contact Bounce 5 ms (max)  
Contact Resistance 100 ohms (max)  
Insulation Resistance 50 Mohms (min)  
Breakdown Voltage 500 V AC (max 60 secs.)  
Switch Rating 24V DC 50mA (max)  
Connection X-Y Matrix  
Illumination ( Pin 1 is 0 V ) 5 V DC  $\pm$  10 %, 13mA per key

### Mechanical

Operational Life 2 million cycles (min) per key  
Keytop Travel 1.4mm nominal  
Actuation Force 150 grams nominal  
Connector 0.1"pitch, gold plated square pin

Mating Connector Molex 2695 Series or equivalent

### Performance

Operational Temp -20°C to 60°C  
Impact Rating 5 J  
Vibration/Shock ETSI 300 019 5M3  
Water / Dust sealed IP65 (when fixed to suitable panel )

### Part Numbers

7203-04CW20  
7203-12TW20  
7203-16TW20  
7200-FK020

720TFXi SERIES 4 KEY  
720TFXi SERIES 12 KEY  
720TFXi SERIES 16 KEY  
UNDERPANEL FITTING KIT

### Accessories

4200-00  
4500-10  
Replacement Seals -- go to [www.storm-interface.com](http://www.storm-interface.com)

RS232 Encoder Interface Module  
450 USB Encoder Interface Module  
with Buzzer and Illumination Control

### Dimensions

Overall sizes  
Panel Cutout DXF  
Surface Model STEP

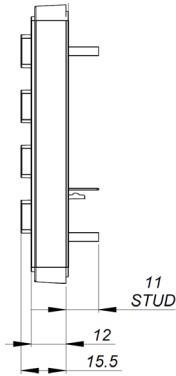
See following page.  
Download .dxf and .stp files from  
[www.storm-interface.com](http://www.storm-interface.com)



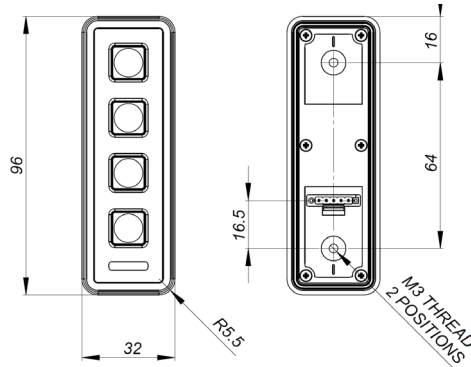
Install the keypad onto the surface of a panel as follows :-

- Fit the seal to the rear of the keypad
- Place the keypad onto the panel and fit the self locking nuts to the studs on the back
- Recommended tightening torque 50Ncm

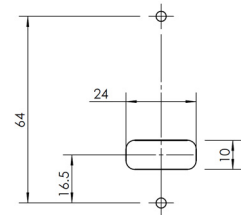
Side View : 4, 12, 16



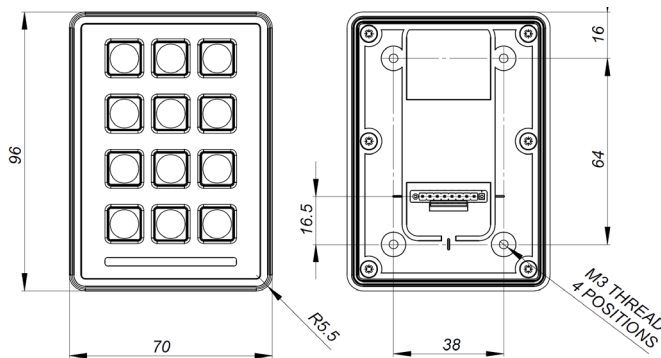
Front and Back View : 4 way



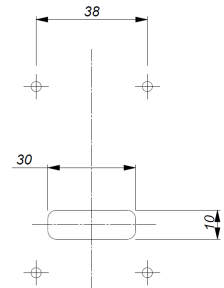
Panel Cutout : 4 way



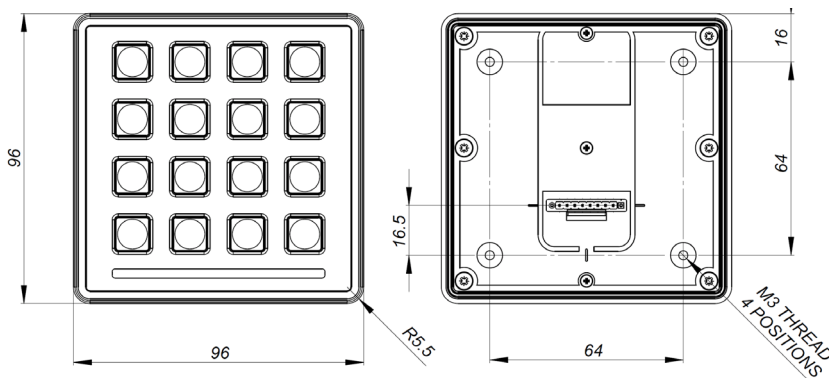
Front and Back View, 12 way



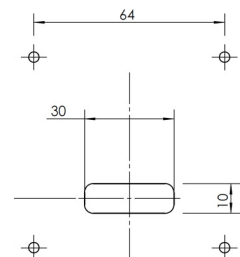
Panel Cutout : 12 way



Front and Back View, 16 way



Panel Cutout : 16 way



All panel dims in mm.  
Corner Rads all M3