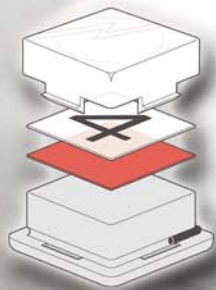




## Graphic Series Keypads



### Tough keypads with 'snap-on' keytops for custom graphics

- Rugged, reliable and responsive data entry
- Available with optional integrated LED illumination of keytops and keypad characters
- Keytop colours and graphics can be configured to suit almost any application
- Sealed against water and dust to IP54 specification
- 4, 12 and 16 key formats
- Can be fixed to a flat surface or under panel mounted for a flush, low profile installation
- Extensive library of keytop graphics and colour tiles available
- Custom keytop graphics can be created and fitted 'on-site'



[www.storm-interface.com](http://www.storm-interface.com)

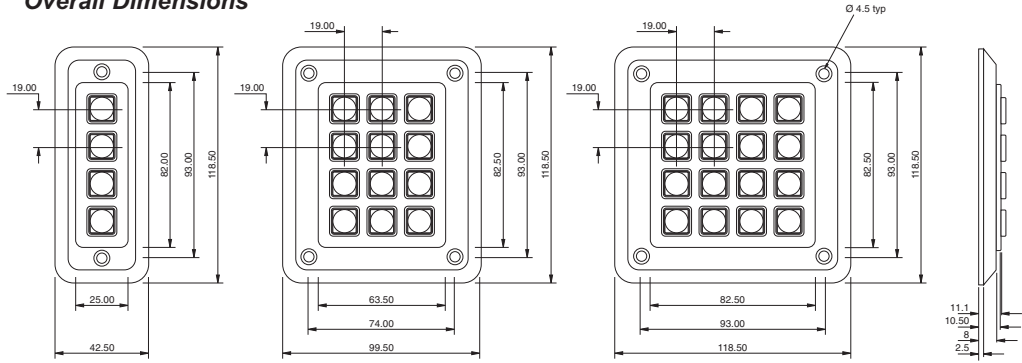
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# storm

## K Range Graphic Series Keypads

**STORM Graphic Series Keypads** feature keytop legends that can be configured or customised without dismantling the keypad. The unique 'snap on' keytop cover encapsulates a polymer legend tile. The legend tiles can be selected from an extensive library of standard characters or symbols to suit many applications. Alternatively custom keytop graphics can be created using laser printed acetate film or screen printed polymer film. Keytop colours can also be customised by backing the transparent legend film with a second, coloured tile. When pressed into place the impact resistant keytop provides a permanent tamper resistant lens. The keytop cover protects the encapsulated legends from wear, physical damage, water ingress and unauthorised removal. These field proven keypads are ideal for use in a wide range of industrial and commercial applications. Also available with optional integrated LED illumination of keytops and keytop graphics, making these keypads suitable for use in dark or subdued lighting conditions.

### Overall Dimensions

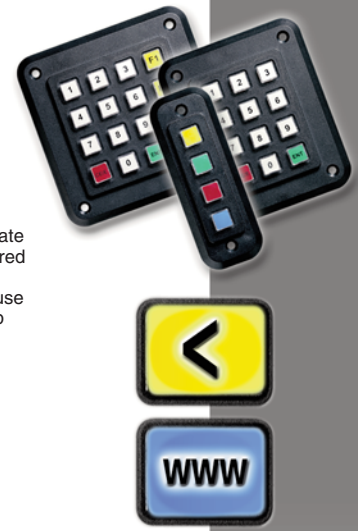


Part No.s  
GS04020[x] (Black)

GS12020[x] (Black)

GS16020[x] (Black)

[x] denotes packaging variant



### Connection Details for 4 Key Keypad

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

**KEY LOCATION**  
(As viewed from front of keypad)

|   |   |
|---|---|
| A | 1 |
| B | 2 |
| C | 3 |
| D | 4 |

| CONTACT MATRIX |            |
|----------------|------------|
| CONN. PIN      | ROW/COLUMN |
| 1              | common     |
| 2              | D          |
| 3              | C          |
| 4              | B          |
| 5              | A          |

### Connection Details for 12 Key Keypad

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

**KEY LOCATION**  
(As viewed from front of keypad)

|   |   |   |   |
|---|---|---|---|
| A | 1 | 2 | 3 |
| B | 4 | 5 | 6 |
| C | 7 | 8 | - |
| D | - | - | - |

| CONTACT MATRIX |            |
|----------------|------------|
| CONN. PIN      | ROW/COLUMN |
| 1              | A          |
| 2              | B          |
| 3              | 1          |
| 4              | 2          |
| 5              | 3          |
| 6              | -          |
| 7              | D          |
| 8              | C          |

### Connection Details for 16 Key Keypad

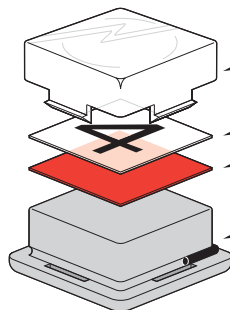
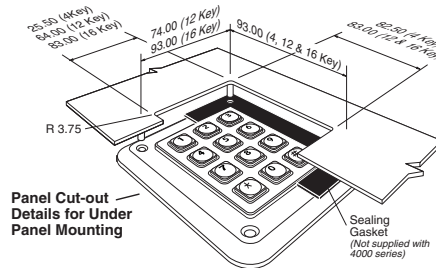
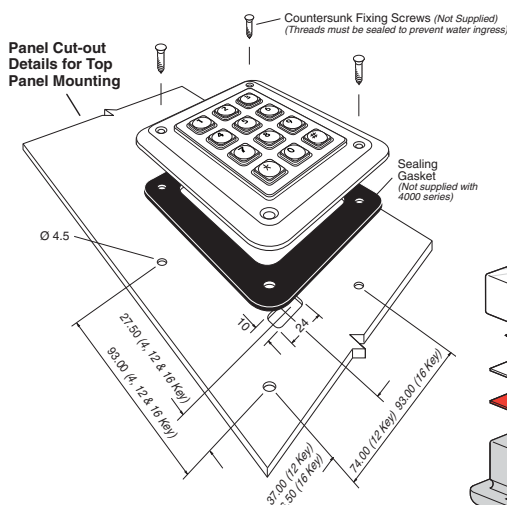
**CONTACT CONNECTIONS**  
● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●  
(As viewed from rear of keypad)  
8 7 6 5 4 3 2 1

**KEY LOCATION**  
(As viewed from front of keypad)

|   |    |    |    |    |
|---|----|----|----|----|
| A | 1  | 2  | 3  | 4  |
| B | 5  | 6  | 7  | 8  |
| C | 9  | 10 | 11 | 12 |
| D | 13 | 14 | 15 | 16 |

| CONTACT MATRIX |            |
|----------------|------------|
| CONN. PIN      | ROW/COLUMN |
| 1              | A          |
| 2              | B          |
| 3              | 1          |
| 4              | 2          |
| 5              | 3          |
| 6              | 4          |
| 7              | D          |
| 8              | C          |

### Mounting & Connection Details



All dimensions are in mm

### Electrical

Contact Bounce 5ms (max)  
Contact Resistance 100 ohms (max)  
Insulation Resistance 50 Mohms (min)  
Breakdown Voltage 500V AC (max 60 secs.)  
Operating Voltage 24V DC (max)  
Operating Current 50mA (max)

### Mechanical

Operational Life 2 million cycles (min) per key  
Keytop Travel 1.4mm nominal  
Actuation Force 180gms nominal  
Connector 0.1" pitch, gold plated square pin, male connector

### Environmental

Water / Dust Sealed  
Operational Temperature

IP54 (when mounted to suitable enclosure)  
-20°C to +60°C (Dry)

### Material

Casing  
Keytops  
Contact Circuit

General Service Polymer (black or mid grey)  
General Service Polymer (transparent)  
Gold on Nickel plated FR4

Whilst every effort is made to ensure details are correct at time of print, specifications are subject to change without notice.



Designed & produced by  
NIK Design  
www.nikdesign.co.uk

GFX-LIT-01 Rev 4  
Nov 2008



FM 39602



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For details of available STORM Graphic Series keytop character sets, please request the legend tile character library, document ref. GFX-LEG1-01