



## SUCO 0533 ELECTRONIC PRESSURE SWITCH

053325209B011

NPN output (Low Side), NC, 0-250 Bar, NPT 1/4, Cable connection

- One Switching Output
- Stainless Steel & Titanium Wetted Parts
- Silicon-On-Sapphire Technology
- Factory Set



### PRODUCT DESCRIPTION

### TECHNICAL DATA

#### GENERAL DATA

|                       |                        |
|-----------------------|------------------------|
| Adjustment range max  | 250 bar                |
| Adjustment range min  | 0 bar                  |
| Electrical connection | Embedded 2m cable      |
| Process connection    | 1/4 NPT                |
| Function              | Normally Closed (SPST) |
| Output                | NPN                    |
| Burst pressure        | 2000 bar               |
| Pressure max          | 1000 bar               |

#### TEMPERATURE & MATERIALS DATA

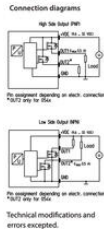
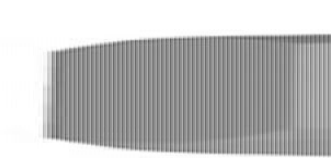
|                           |                                  |
|---------------------------|----------------------------------|
| Temperature of media from | -40 °C                           |
| Temperature of media to   | 125 °C                           |
| Temperature ambient from  | -40 °C                           |
| Temperature ambient to    | 100 °C                           |
| Material of body          | Stainless steel 1.4305           |
| Material of wetted parts  | Stainless steel 1.4305, Titanium |

ADDITIONAL DATA

|                                  |                                                                                    |
|----------------------------------|------------------------------------------------------------------------------------|
| Supply voltage dc max            | 32 V DC                                                                            |
| Supply voltage dc min            | 9.6 V DC                                                                           |
| Pressure rise                    | ≤ 5,000 bar/s                                                                      |
| Switching time                   | < 2 ms                                                                             |
| Switching point adjustment range | 2 ... 100 % of the nominal pressure range Full Scale (FS), programmable at factory |
| Weight                           | 135 g                                                                              |

SAFETY & APPROVALS

|                            |                                                                           |
|----------------------------|---------------------------------------------------------------------------|
| IP class                   | IP67                                                                      |
| Hysteresis                 | 2..99.8% of nominal pressure range (full scale), programmable at factory  |
| Shock resistance           | 500m / s <sup>2</sup> ; 11 ms half sine wave; DIN EN 60068-2-27           |
| Vibration resistance       | 20g; 4..2000 Hz sine wave, DIN EN 60068-2-6                               |
| EMC                        | EMC 2014/30/EU, EN 61000-6-2:2005, EN 61000-6-3:2007                      |
| Accuracy                   | ±0.5 % of adjustment range (Full scale) at room temperature               |
| Long term stability        | ±0.1 % of adjustment range (full scale) per year                          |
| Mechanical life expectancy | 10,000,000 switching cycles at rise rates to 5,000 bar/s nominal pressure |
| Repeatability              | ±0.1 % full scale                                                         |



DIN EN 175305-803-A

| Pin | Assignment |
|-----|------------|
| 1   | Ctrl       |
| 2   | Out        |
| 3   | Ctrl       |
| 4   | Out        |

PS

IP67

• = 10.0 mm

• = 10.0 mm

Order number: 001

M 12 - DIN EN 43756-2-101-A

| Pin | Assignment |
|-----|------------|
| 1   | Ctrl       |
| 2   | Out        |
| 3   | Ctrl       |
| 4   | Out        |

PS

IP67

• = 10.0 mm

• = 10.0 mm

Order number: 002

ISO 15170-A1-A1

| Pin | Assignment |
|-----|------------|
| 1   | Ctrl       |
| 2   | Out        |
| 3   | Ctrl       |
| 4   | Out        |

PS

IP67

• = 10.0 mm

• = 10.0 mm

Order number: 003

AMP Superseal

| Pin | Assignment |
|-----|------------|
| 1   | Ctrl       |
| 2   | Out        |
| 3   | Ctrl       |
| 4   | Out        |

PS

IP67

• = 10.0 mm

• = 10.0 mm

Order number: 004

DEUTSCH DT04-4P

| Pin | Assignment |
|-----|------------|
| 1   | Ctrl       |
| 2   | Out        |
| 3   | Ctrl       |
| 4   | Out        |

PS

IP67

• = 10.0 mm

• = 10.0 mm

Order number: 005

DEUTSCH DT04-3P

| Pin | Assignment |
|-----|------------|
| 1   | Ctrl       |
| 2   | Out        |
| 3   | Ctrl       |

PS

IP67

• = 10.0 mm

• = 10.0 mm

Order number: 006

Cable connection

| Cable | Assignment |
|-------|------------|
| 1     | Ctrl       |
| 2     | Out        |
| 3     | Ctrl       |
| 4     | Out        |

PS

IP67

• = 10.0 mm

• = 10.0 mm

Order number: 007

Thread code: 01

Thread code: 02

Thread code: 03

Thread code: 04

Thread code: 05

Thread code: 06

Thread code: 07

Thread code: 08

Thread code: 09

Thread code: 10

Thread code: 11

Thread code: 12

Thread code: 13

Thread code: 14

Thread code: 15

Thread code: 16

Thread code: 17

Thread code: 18

Thread code: 19

Thread code: 20

Thread code: 21

Thread code: 22

Thread code: 23

Thread code: 24

Thread code: 25

Thread code: 26

Thread code: 27

Thread code: 28

Thread code: 29

Thread code: 30

Thread code: 31

Thread code: 32

Thread code: 33

Thread code: 34

Thread code: 35

Thread code: 36

Thread code: 37

Thread code: 38

Thread code: 39

Thread code: 40

Thread code: 41

Thread code: 42

Thread code: 43

Thread code: 44

Thread code: 45

Thread code: 46

Thread code: 47

Thread code: 48

Thread code: 49

Thread code: 50

Thread code: 51

Thread code: 52

Thread code: 53

Thread code: 54

Thread code: 55

Thread code: 56

Thread code: 57

Thread code: 58

Thread code: 59

Thread code: 60

Thread code: 61

Thread code: 62

Thread code: 63

Thread code: 64

Thread code: 65

Thread code: 66

Thread code: 67

Thread code: 68

Thread code: 69

Thread code: 70

Thread code: 71

Thread code: 72

Thread code: 73

Thread code: 74

Thread code: 75

Thread code: 76

Thread code: 77

Thread code: 78

Thread code: 79

Thread code: 80

Thread code: 81

Thread code: 82

Thread code: 83

Thread code: 84

Thread code: 85

Thread code: 86

Thread code: 87

Thread code: 88

Thread code: 89

Thread code: 90

Thread code: 91

Thread code: 92

Thread code: 93

Thread code: 94

Thread code: 95

Thread code: 96

Thread code: 97

Thread code: 98

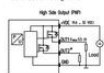
Thread code: 99

Thread code: 100

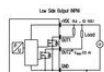


haz 221

Connection diagrams



Do not connect directly to each connector  
Vcc I+ I- RL



Do not connect directly to each connector  
Vcc V+ V- RL

Technical modifications and errors excepted.

| <b>DN EN 175301-803-A</b>                                                                                                                                                                                                                                                 | <b>M 12 - DN EN 61076-3-001 A</b>                                                 | <b>ISO 15175-A1-4-1</b>                                                           | <b>AMP Superseal</b>                                                              |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----|---|-----|---|-----|---|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------|---|-----|---|-----|---|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----|-------|-----|-------|-----|-----|---|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------|---|-----|---|-----|---|-----|---|-----|
|                                                                                                                                                                                          |  |  |  |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Vcc</td></tr><tr><td>2</td><td>Out</td></tr><tr><td>3</td><td>Gnd</td></tr><tr><td>4</td><td>Out</td></tr></table> <p>IP67</p> <p>• 60 / 70 mm<sup>2</sup></p> <p>• Ø 10 mm</p> <p>Order number: 000</p> | Pin                                                                               | Assignment                                                                        | 1                                                                                 | Vcc | 2 | Out | 3 | Gnd | 4 | Out | <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Vcc</td></tr><tr><td>2</td><td>In</td></tr><tr><td>3</td><td>Gnd</td></tr><tr><td>4</td><td>Out</td></tr></table> <p>IP67</p> <p>• 54 mm</p> <p>• Ø 11 mm</p> <p>Order number: 002</p> | Pin | Assignment | 1 | Vcc | 2 | In  | 3 | Gnd | 4                                                                                                                                                                                                                                                                                          | Out | <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Vcc</td></tr><tr><td>2</td><td>In</td></tr><tr><td>3</td><td>Gnd</td></tr><tr><td>4</td><td>Out</td></tr></table> <p>IP67, IP69K</p> <p>• 65 mm</p> <p>• Ø 11 mm</p> <p>Order number: 004</p> | Pin        | Assignment | 1   | Vcc   | 2   | In    | 3   | Gnd | 4 | Out | <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Out</td></tr><tr><td>2</td><td>Gnd</td></tr><tr><td>3</td><td>Vcc</td></tr><tr><td>4</td><td>Out</td></tr></table> <p>IP67</p> <p>• 71 mm</p> <p>• Ø 16 mm</p> <p>Order number: 007</p> | Pin | Assignment | 1 | Out | 2 | Gnd | 3 | Vcc | 4 | Out |
| Pin                                                                                                                                                                                                                                                                       | Assignment                                                                        |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 1                                                                                                                                                                                                                                                                         | Vcc                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 2                                                                                                                                                                                                                                                                         | Out                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 3                                                                                                                                                                                                                                                                         | Gnd                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 4                                                                                                                                                                                                                                                                         | Out                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| Pin                                                                                                                                                                                                                                                                       | Assignment                                                                        |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 1                                                                                                                                                                                                                                                                         | Vcc                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 2                                                                                                                                                                                                                                                                         | In                                                                                |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 3                                                                                                                                                                                                                                                                         | Gnd                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 4                                                                                                                                                                                                                                                                         | Out                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| Pin                                                                                                                                                                                                                                                                       | Assignment                                                                        |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 1                                                                                                                                                                                                                                                                         | Vcc                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 2                                                                                                                                                                                                                                                                         | In                                                                                |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 3                                                                                                                                                                                                                                                                         | Gnd                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 4                                                                                                                                                                                                                                                                         | Out                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| Pin                                                                                                                                                                                                                                                                       | Assignment                                                                        |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 1                                                                                                                                                                                                                                                                         | Out                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 2                                                                                                                                                                                                                                                                         | Gnd                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 3                                                                                                                                                                                                                                                                         | Vcc                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 4                                                                                                                                                                                                                                                                         | Out                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| <p>*without cable (order) = 000m, with cable (order) = 2m</p>                                                                                                                                                                                                             |                                                                                   |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| <b>DEUTSCH DT04-4P</b>                                                                                                                                                                                                                                                    | <b>DEUTSCH DT04-3P</b>                                                            | <b>Cable connection</b>                                                           |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
|                                                                                                                                                                                          |  |  |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>1</td><td>Gnd</td></tr><tr><td>2</td><td>Vcc</td></tr><tr><td>3</td><td>V+</td></tr><tr><td>4</td><td>Out</td></tr></table> <p>IP67</p> <p>• 38 mm</p> <p>• Ø 11 mm</p> <p>Order number: 008</p>                   | Pin                                                                               | Assignment                                                                        | 1                                                                                 | Gnd | 2 | Vcc | 3 | V+  | 4 | Out | <table><tr><th>Pin</th><th>Assignment</th></tr><tr><td>A</td><td>Vcc</td></tr><tr><td>B</td><td>Gnd</td></tr><tr><td>C</td><td>Out</td></tr></table> <p>IP67</p> <p>• 38 mm</p> <p>• Ø 11 mm</p> <p>Order number: 009</p>                               | Pin | Assignment | A | Vcc | B | Gnd | C | Out | <table><tr><th>Cable</th><th>Assignment</th></tr><tr><td>red</td><td>Vcc</td></tr><tr><td>white</td><td>Out</td></tr><tr><td>black</td><td>Gnd</td></tr></table> <p>IP67</p> <p>• 64 mm</p> <p>16-20 mm band width</p> <p>Cable length = 2 m</p> <p>• Ø 11 mm</p> <p>Order number: 011</p> |     | Cable                                                                                                                                                                                                                                                          | Assignment | red        | Vcc | white | Out | black | Gnd |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| Pin                                                                                                                                                                                                                                                                       | Assignment                                                                        |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 1                                                                                                                                                                                                                                                                         | Gnd                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 2                                                                                                                                                                                                                                                                         | Vcc                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 3                                                                                                                                                                                                                                                                         | V+                                                                                |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| 4                                                                                                                                                                                                                                                                         | Out                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| Pin                                                                                                                                                                                                                                                                       | Assignment                                                                        |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| A                                                                                                                                                                                                                                                                         | Vcc                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| B                                                                                                                                                                                                                                                                         | Gnd                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| C                                                                                                                                                                                                                                                                         | Out                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| Cable                                                                                                                                                                                                                                                                     | Assignment                                                                        |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| red                                                                                                                                                                                                                                                                       | Vcc                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| white                                                                                                                                                                                                                                                                     | Out                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| black                                                                                                                                                                                                                                                                     | Gnd                                                                               |                                                                                   |                                                                                   |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
|                                                                                                                                                                                          |  |  |  |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| <p>Thread code: 01</p>                                                                                                                                                                                                                                                    | <p>Thread code: 02</p>                                                            | <p>Thread code: 03</p>                                                            | <p>Thread code: 04</p>                                                            |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
|                                                                                                                                                                                          |  |  |  |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |
| <p>Thread code: 05</p>                                                                                                                                                                                                                                                    | <p>Thread code: 06</p>                                                            | <p>Thread code: 07</p>                                                            | <p>Thread code: 08</p>                                                            |     |   |     |   |     |   |     |                                                                                                                                                                                                                                                         |     |            |   |     |   |     |   |     |                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                |            |            |     |       |     |       |     |     |   |     |                                                                                                                                                                                                                                                          |     |            |   |     |   |     |   |     |   |     |