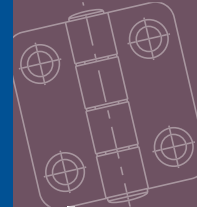


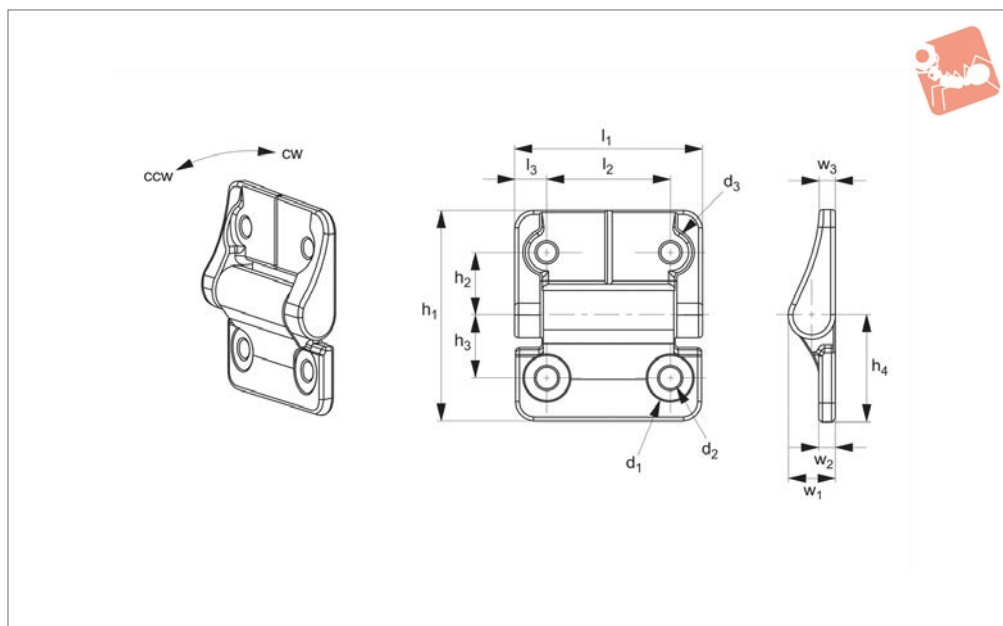


# Friction Hinges - Natural & Black

symmetric - asymmetric torque



## Hinges



**S3854**

HINGES

### Material

Steel and zinc with natural or black oxide finish.

### Technical Notes

Tested to 25,000 cycles with static torque value remaining within +/- 20%. Oil ring

seals against environmental contamination.

### Important Notes

Symmetric hinges, offer same torque value in both clockwise and counterclockwise directions. Asymmetric hinges, offer diffe-

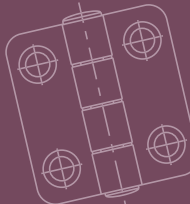
rent torque value in clockwise and counter-clockwise directions - see data table.

CW= clockwise.

CCW= counterclockwise.

| Order No.    | Torque CW<br>Nm | Torque CCW<br>Nm | Shaft rotation | Finish      | Torque type | d <sub>1</sub> | d <sub>2</sub> | d <sub>3</sub> |
|--------------|-----------------|------------------|----------------|-------------|-------------|----------------|----------------|----------------|
| S3854.AC0000 | 0.0             | 0.0              | 270°           | Natural     | Symmetric   | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC0009 | 0.9             | 0.9              | 270°           | Natural     | Symmetric   | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC0018 | 1.8             | 1.8              | 270°           | Natural     | Symmetric   | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC0023 | 2.3             | 2.3              | 270°           | Natural     | Symmetric   | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC0034 | 3.4             | 3.4              | 270°           | Natural     | Symmetric   | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC0223 | 2.3             | 1.4              | 270°           | Natural     | Asymmetric  | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC0234 | 3.4             | 2.0              | 270°           | Natural     | Asymmetric  | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC0327 | 4.5             | 2.7              | 270°           | Natural     | Asymmetric  | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC0323 | 1.4             | 2.3              | 270°           | Natural     | Asymmetric  | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC0334 | 2.0             | 3.4              | 270°           | Natural     | Asymmetric  | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC0345 | 2.7             | 4.5              | 270°           | Natural     | Asymmetric  | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC1000 | 0.0             | 0.0              | 270°           | Black paint | Symmetric   | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC1009 | 0.9             | 0.9              | 270°           | Black paint | Symmetric   | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC1018 | 1.8             | 1.8              | 270°           | Black paint | Symmetric   | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC1023 | 2.3             | 2.3              | 270°           | Black paint | Symmetric   | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC1034 | 3.4             | 3.4              | 270°           | Black paint | Symmetric   | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC1223 | 2.3             | 1.4              | 270°           | Black paint | Asymmetric  | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC1234 | 3.4             | 2.0              | 270°           | Black paint | Asymmetric  | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC1327 | 4.5             | 2.7              | 270°           | Black paint | Asymmetric  | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC1323 | 1.4             | 2.3              | 270°           | Black paint | Asymmetric  | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC1334 | 2.0             | 3.4              | 270°           | Black paint | Asymmetric  | Ø12x0,7 dept.  | 5.2            | 10             |
| S3854.AC1345 | 2.7             | 4.5              | 270°           | Black paint | Asymmetric  | Ø12x0,7 dept.  | 5.2            | 10             |

| Order No.    | h <sub>1</sub> | h <sub>2</sub> | h <sub>3</sub> | h <sub>4</sub> | l <sub>1</sub> | l <sub>2</sub> | l <sub>3</sub> | w <sub>1</sub> | w <sub>2</sub> | w <sub>3</sub> |
|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| S3854.AC0000 | 57.15          | 17             | 17             | 28.58          | 50.8           | 34             | 8.4            | 12.8           | 4.5            | 3.81           |
| S3854.AC0009 | 57.15          | 17             | 17             | 28.58          | 50.8           | 34             | 8.4            | 12.8           | 4.5            | 3.81           |
| S3854.AC0018 | 57.15          | 17             | 17             | 28.58          | 50.8           | 34             | 8.4            | 12.8           | 4.5            | 3.81           |
| S3854.AC0023 | 57.15          | 17             | 17             | 28.58          | 50.8           | 34             | 8.4            | 12.8           | 4.5            | 3.81           |
| S3854.AC0034 | 57.15          | 17             | 17             | 28.58          | 50.8           | 34             | 8.4            | 12.8           | 4.5            | 3.81           |
| S3854.AC0223 | 57.15          | 17             | 17             | 28.58          | 50.8           | 34             | 8.4            | 12.8           | 4.5            | 3.81           |
| S3854.AC0234 | 57.15          | 17             | 17             | 28.58          | 50.8           | 34             | 8.4            | 12.8           | 4.5            | 3.81           |



| Order No.           | $h_1$ | $h_2$ | $h_3$ | $h_4$ | $l_1$ | $l_2$ | $l_3$ | $w_1$ | $w_2$ | $w_3$ |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>S3854.AC0327</b> | 57.15 | 17    | 17    | 28.58 | 50.8  | 34    | 8.4   | 12.8  | 4.5   | 3.81  |
| <b>S3854.AC0323</b> | 57.15 | 17    | 17    | 28.58 | 50.8  | 34    | 8.4   | 12.8  | 4.5   | 3.81  |
| <b>S3854.AC0334</b> | 57.15 | 17    | 17    | 28.58 | 50.8  | 34    | 8.4   | 12.8  | 4.5   | 3.81  |
| <b>S3854.AC0345</b> | 57.15 | 17    | 17    | 28.58 | 50.8  | 34    | 8.4   | 12.8  | 4.5   | 3.81  |
| <b>S3854.AC1000</b> | 57.15 | 17    | 17    | 28.58 | 50.8  | 34    | 8.4   | 12.8  | 4.5   | 3.81  |
| <b>S3854.AC1009</b> | 57.15 | 17    | 17    | 28.58 | 50.8  | 34    | 8.4   | 12.8  | 4.5   | 3.81  |
| <b>S3854.AC1018</b> | 57.15 | 17    | 17    | 28.58 | 50.8  | 34    | 8.4   | 12.8  | 4.5   | 3.81  |
| <b>S3854.AC1023</b> | 57.15 | 17    | 17    | 28.58 | 50.8  | 34    | 8.4   | 12.8  | 4.5   | 3.81  |
| <b>S3854.AC1034</b> | 57.15 | 17    | 17    | 28.58 | 50.8  | 34    | 8.4   | 12.8  | 4.5   | 3.81  |
| <b>S3854.AC1223</b> | 57.15 | 17    | 17    | 28.58 | 50.8  | 34    | 8.4   | 12.8  | 4.5   | 3.81  |
| <b>S3854.AC1234</b> | 57.15 | 17    | 17    | 28.58 | 50.8  | 34    | 8.4   | 12.8  | 4.5   | 3.81  |
| <b>S3854.AC1327</b> | 57.15 | 17    | 17    | 28.58 | 50.8  | 34    | 8.4   | 12.8  | 4.5   | 3.81  |
| <b>S3854.AC1323</b> | 57.15 | 17    | 17    | 28.58 | 50.8  | 34    | 8.4   | 12.8  | 4.5   | 3.81  |
| <b>S3854.AC1334</b> | 57.15 | 17    | 17    | 28.58 | 50.8  | 34    | 8.4   | 12.8  | 4.5   | 3.81  |
| <b>S3854.AC1345</b> | 57.15 | 17    | 17    | 28.58 | 50.8  | 34    | 8.4   | 12.8  | 4.5   | 3.81  |



# Torque and Positioning Hinges

**S3810 - S3870**  
Hinges

Table of constant torque ranges

| Table of constant torque ranges                                                     |          |                          |                |              | Torque Nm |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------------------------------------------------------------------------------------|----------|--------------------------|----------------|--------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                                                                                     | Part no. | Torque type              | Shaft Rotation | Torque Nm    | 0,5       | 1,0 | 1,5 | 2,0 | 2,5 | 3,0 | 3,5 | 4,0 | 4,5 | 5,0 | 5,5 | 6,0 | 6,5 | 7,0 |
|    | S3810    | Symmetric                | 360°           | 0,05 to 3,80 |           |     |     |     |     |     |     |     |     |     |     |     |     |     |
|    | S3820    | Symmetric/<br>Asymmetric | 360°           | 0,2 to 1,1   |           |     |     |     |     |     |     |     |     |     |     |     |     |     |
|    | S3824    | Symmetric/<br>Asymmetric | 360°           | 0,2 to 1,1   |           |     |     |     |     |     |     |     |     |     |     |     |     |     |
|    | S3830    | Symmetric/<br>Asymmetric | 270°           | 0,9 to 3,4   |           |     |     |     |     |     |     |     |     |     |     |     |     |     |
|    | S3834    | Symmetric/<br>Asymmetric | 270°           | 0,9 to 3,4   |           |     |     |     |     |     |     |     |     |     |     |     |     |     |
|    | S3840    | Symmetric/<br>Asymmetric | 270°           | 0,9 to 3,4   |           |     |     |     |     |     |     |     |     |     |     |     |     |     |
|    | S3844    | Symmetric/<br>Asymmetric | 270°           | 0,9 to 4,5   |           |     |     |     |     |     |     |     |     |     |     |     |     |     |
|    | S3850    | Symmetric/<br>Asymmetric | 270°           | 0,9 to 3,4   |           |     |     |     |     |     |     |     |     |     |     |     |     |     |
|   | S3852    | Symmetric/<br>Asymmetric | 270°           | 0,9 to 3,4   |           |     |     |     |     |     |     |     |     |     |     |     |     |     |
|  | S3854    | Symmetric/<br>Asymmetric | 270°           | 0,9 to 4,5   |           |     |     |     |     |     |     |     |     |     |     |     |     |     |
|  | S3860    | Symmetric                | 270°           | 3,5 to 7,0   |           |     |     |     |     |     |     |     |     |     |     |     |     |     |
|  | S3870    | Symmetric                | 90° and 360°   | 2,5 to 5,0   |           |     |     |     |     |     |     |     |     |     |     |     |     |     |

Table of constant torque ranges

| Table of constant torque ranges                                                     |          |                                   | Torque Kgf.cm |    |    |    |    |    |    |    |    |     |     |     |     |     |     |  |  |
|-------------------------------------------------------------------------------------|----------|-----------------------------------|---------------|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|--|--|
|                                                                                     | Part no. | Torque Kgf.cm                     | 10            | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 |  |  |
|  | S4000    | 5 - 57.5                          |               |    |    |    |    |    |    |    |    |     |     |     |     |     |     |  |  |
|  | S4002    | 8                                 |               |    |    |    |    |    |    |    |    |     |     |     |     |     |     |  |  |
|  | S4006    | 3.5 - 15.3                        |               |    |    |    |    |    |    |    |    |     |     |     |     |     |     |  |  |
|  | S4010    | 15 - 30                           |               |    |    |    |    |    |    |    |    |     |     |     |     |     |     |  |  |
|  | S4016    | 25 - 70                           |               |    |    |    |    |    |    |    |    |     |     |     |     |     |     |  |  |
|  | S4020    | 20 - 45.8                         |               |    |    |    |    |    |    |    |    |     |     |     |     |     |     |  |  |
|  | S4022    | 20 - 45.8                         |               |    |    |    |    |    |    |    |    |     |     |     |     |     |     |  |  |
|  | S4030    | Tilting: 30.5<br>Swivelling: 15   |               |    |    |    |    |    |    |    |    |     |     |     |     |     |     |  |  |
|  | S4032    | Tilting: 71.5<br>Swivelling: 30.5 |               |    |    |    |    |    |    |    |    |     |     |     |     |     |     |  |  |

## Constant Torque Hinges S4000-S4032

### Operating Principle

Wixroyd Constant Torque Hinges rely only on mechanical friction to achieve a stable torque. A range of different friction hinges are available to best suit your application.