

## A Solution for Short Flanges and Die Marks

Wilson Tool's V-Series Black press brake dies incorporate replaceable rotating inserts to decrease friction and to give better performance on certain tough-to-bend applications.

Manufactured by Wilson Tool, the V-Series Black is available for European and Trumpf/Wila style press brake tooling. The Wilson Tool V-Series Black die offers the following features:

- Higher quality tool steel
- Tighter tolerances
- Increased bend accuracy
- Shorter lead times

### Hard-to-bend Application Capability:

V-Series Black dies make it much easier to produce small flanges, small bend radii, and bend close to holes. The V-Series Black also enables you to bend a wide range of materials using the same die, reducing set-up time and the number of dies you need to hold in stock.

### Reduced Friction:

V-Series Black dies include replaceable built-in inserts that rotate so material glides on a flat surface rather than the traditional grabbing action of a die's shoulder radius. Friction and concentrated load is greatly reduced which reduces material marking. This tool is ideal for working with diamond plate, stainless and aluminum. Add Zip-Mar strips to the top of the inserts and marking on cosmetic materials such as painted or polished materials is practically eliminated.



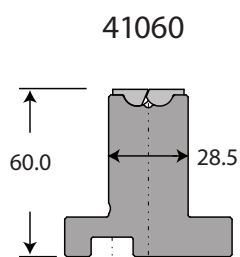
**For more information, visit [wilsontool.com](http://wilsontool.com), call our tooling technicians at +44 (0) 1793 831 818 or contact your sales engineer.**

# V-SERIES BLACK FOR BENDING

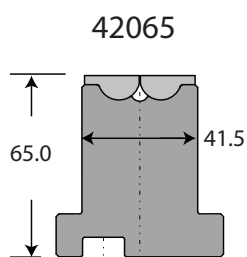
## V-SERIES BLACK DIES

EUROPEAN STYLE

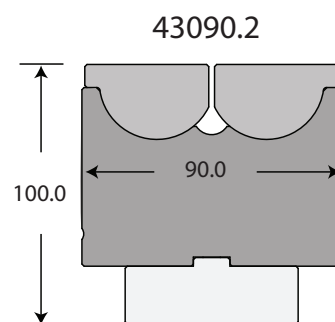
MODEL 1



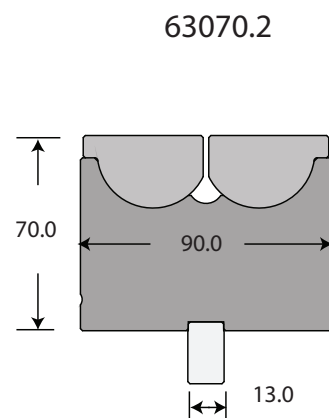
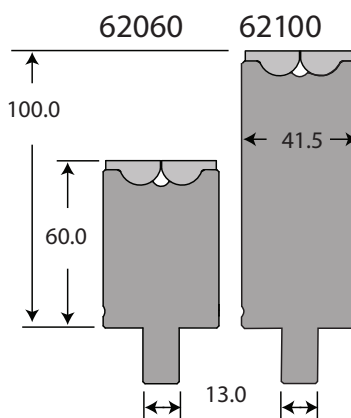
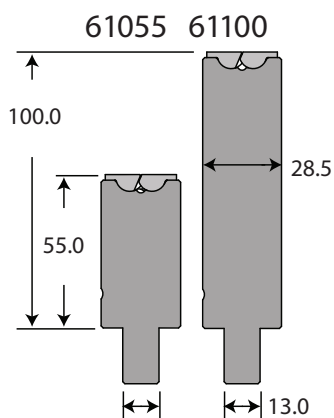
MODEL 2



MODEL 3



WILA®/TRUMPF® STYLE



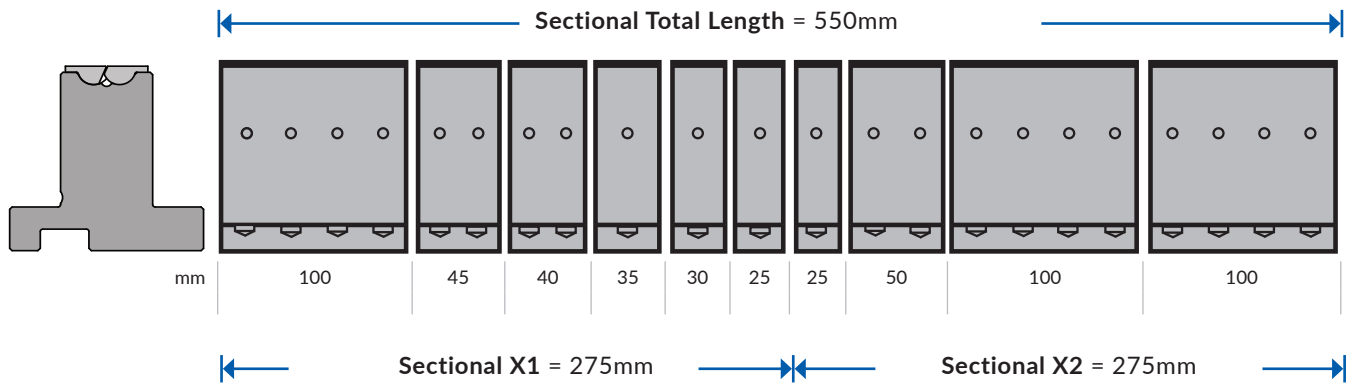
| V OPENING AND SHOULDER RADIUS DIMENSIONS |              |               |                      |
|------------------------------------------|--------------|---------------|----------------------|
| MODEL                                    | SHOULDER RAD | DESIRED ANGLE | THEORETICAL V METRIC |
| 1                                        | 1.0 mm       | 90°           | 7.2                  |
|                                          |              | 34°           | 6.5                  |
| 2                                        | 1.3 mm       | 90°           | 13.9                 |
|                                          |              | 42°           | 13.3                 |
| 3                                        | 6.0 mm       | 90°           | 33.0                 |
|                                          |              | 65°           | 31.4                 |

| ZIP MAR URETHANE SHOULDER STRIPS |                 |
|----------------------------------|-----------------|
| CAT. NO                          | DESCRIPTION     |
| 980953                           | Zip Mar Model 1 |
| 980954                           | Zip Mar Model 2 |
| 980955                           | Zip Mar Model 3 |

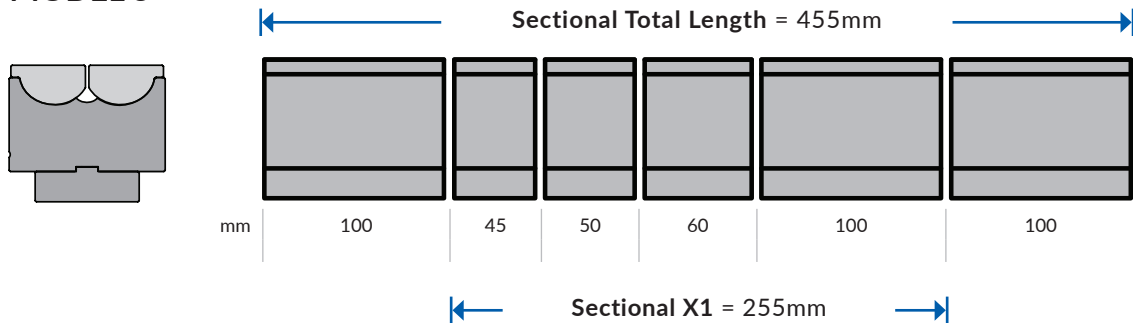
## V-SERIES BLACK SPECIFICATIONS:

|         | MATERIAL THICKNESS | MIN. OUTSIDE FLANGE | KN/M* | MIN. ANGLE | PUNCH TIP REQUIRED TO ACHIEVE ANGLE | MAX OR @ MIN. ANGLE | MAX OR @ 90° | MAX kN/M |
|---------|--------------------|---------------------|-------|------------|-------------------------------------|---------------------|--------------|----------|
| MODEL 1 | 0.45 mm            | 3.0 mm              | 58    | 34°        | 1.4                                 | 3.1 mm              | 4.45 mm      | 1100     |
|         | 0.50 mm            |                     | 58    |            | 1.3                                 |                     |              |          |
|         | 0.60 mm            |                     | 65    |            | 1.2                                 |                     |              |          |
|         | 0.80 mm            |                     | 81    |            | 1.1                                 |                     |              |          |
|         | 0.90 mm            |                     | 106   |            | 1.0                                 |                     |              |          |
|         | 1.0 mm             | 3.9 mm              | 129   |            | 0.8                                 |                     |              |          |
|         | 1.2 mm             |                     | 187   |            |                                     |                     |              |          |
|         | 1.5 mm             | 4.2 mm              | 290   |            |                                     |                     |              |          |
| MODEL 2 | 1.9 mm             | 8.5 mm              | 226   | 42°        | 3.0                                 | 5.5 mm              | 9.0 mm       | 1650     |
|         | 2.9 mm             | 8.8 mm              | 419   |            | 2.8                                 |                     |              |          |
|         | 3.0 mm             | 9.3 mm              | 483   |            | 2.5                                 |                     |              |          |
|         | 3.2 mm             |                     | 644   |            | 2.3                                 |                     |              |          |
|         | 3.4 mm             |                     | 709   | 55°        | 2.1                                 | 7,9 mm              |              |          |
| MODEL 3 | 4.0 mm             | 22.5 mm             | 290   | 65°        | 2.0                                 | 11.5 mm             | 12.7 mm      | 2000     |
|         | 4.75 mm            |                     | 838   |            | 2.4                                 |                     |              |          |
|         | 6.35 mm            |                     | 903   |            | 3.2                                 |                     |              |          |

## MODEL 1 & 2



## MODEL 3



|              | CAT. NO.    | DESCRIPTION                  |
|--------------|-------------|------------------------------|
| MODELS 1 & 2 | 41060-500   | 500 mm Piece                 |
|              | 41060-250   | 250 mm Piece                 |
|              | 41060-550   | 550 Section                  |
|              | 41060X1     | Sectional X1 - Sets as above |
|              | 41060X2     | Sectional X2 - Sets as above |
|              | 42065-500   | 500 mm Piece                 |
|              | 42065-250   | 250 mm Piece                 |
|              | 42065-550   | 550 Section                  |
|              | 42065X1     | Sectional X1 - Sets as above |
|              | 42065X2     | Sectional X2 - Sets as above |
| MODEL 3      | 43090.2-100 | 100 mm Piece                 |
|              | 43090.2-250 | 250 mm Piece                 |
|              | 43090.2X1   | Sectional X1 - Sets as above |
|              | 43090.2-455 | 455 Section Set              |