



# ELASTOMER MOULDED PARTS

SILICONE RUBBER / SPECIAL ELECTRONICS

## CHARACTERISTICS

These parts are usually supplied in VHDS (very high density silicone) rubber and the full reference should include:

- the letter S,
- the appropriate grade which corresponds :
  - to the young's modulus of the rubber under static compression in accordance with ASTM D945 (ref. 33 to 77),
  - or to the stiffness measured on a part (ref. 16 to 25).

These standard VIBRACHOC grades are shown in the following table: EPDM, butyle, nitrile.

| Hardness                                     | Color   | Characteristics                                       |  |   |
|--|---|---|--|---|
|  |   | G : Shear modul.<br>(MPa)                             | E : Elast. modul.<br>(MPa)                           | Stiffness (1)(2) (N/mm)<br>Tolerance : ± 10%  |
|  |   | Tolérance : ± 15 %                                    |  |   |
| 16<br>20<br>25                               | yellow<br>dark blue<br>black  |   |  | 19<br>20<br>25                                |
| 33<br>38<br>42<br>48<br>55<br>63<br>72<br>77 | light blue<br>grey<br>brown<br>dark green<br>brick red<br>orange<br>light green<br>ultramarine blue | 0,4<br>0,47<br>0,53<br>0,6<br>0,67<br>0,8<br>1<br>1,1 | 1,2<br>1,4<br>1,6<br>1,8<br>2,0<br>2,4<br>3,0<br>3,3 | 36<br>40<br>45<br>50<br>55<br>65<br>75<br>100 |

(1) measured on standardised Ø 19 - h 12.7 mm high part.

(2) linear region between 1 to 3 mm compression.

Example : E3RP0754S55 flat washer internal diameter 7, external diameter 30, height 6, in VHDS silicone, young modulus 2 MPa; washer colour: brick red.

Other elastomers may be used: natural rubber, neoprene, EPDM, butyl rubber, nitrile rubber.

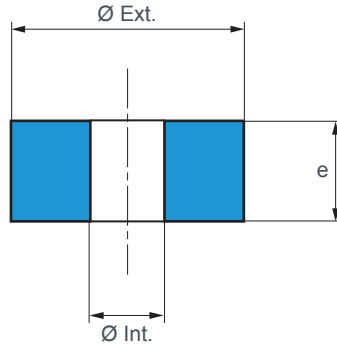


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# DIMENSIONS

## FLAT WASHERS



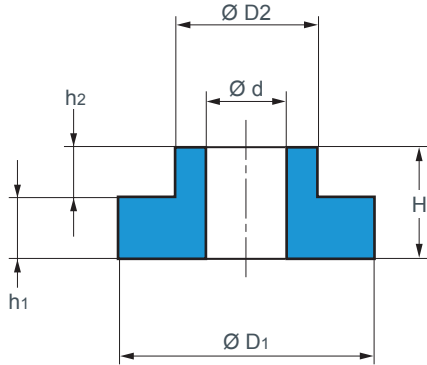
| Reference | Ø Int. (mm) | Ø Ext. (mm) | e (mm) |
|-----------|-------------|-------------|--------|
| E3RP2439  | 2           | 6           | 10     |
| E3RP3419  | 2           | 7           | 1      |
| E3RP2062  | 4           | 8           | 5      |
| E3RP3291  | 4           | 9           | 3,4    |
| E3RP2061  | 4           | 12          | 4      |
| E3RP2667  | 5           | 12          | 5      |
| E3RP2025  | 5           | 15          | 4      |
| E3RP2024  | 5           | 22          | 4      |
| E3RP2401  | 6           | 18          | 6      |
| E3RP2282  | 6,1         | 12          | 6      |
| E3RP2281  | 6,1         | 20          | 4      |
| E3RP2959  | 6,4         | 12          | 3      |
| E3RP2453  | 6,5         | 11,8        | 2,5    |
| E3RP2403  | 6,5         | 13,5        | 10     |
| E3RP3534  | 6,5         | 15          | 4,5    |
| E3RP2402  | 6,5         | 18          | 14,5   |
| E3RP3162  | 6,5         | 25          | 2      |
| E3RP2882  | 7           | 12          | 4      |
| E3RP0590  | 7           | 12          | 6      |
| E3RP2883  | 7           | 16          | 6      |
| E3RP0591  | 7           | 16          | 8      |
| E3RP2404  | 7           | 30          | 3      |
| E3RP0754  | 7           | 30          | 6      |
| E3RP2148  | 7,4         | 11,5        | 7,5    |
| E3RP2149  | 7,6         | 17,6        | 6      |
| E3RP2454  | 7,7         | 11,8        | 7,7    |
| E3RP2406  | 8           | 13          | 4      |
| E3RP2405  | 8           | 16          | 4      |
| E3RP0607  | 8           | 18          | 6      |
| E3RP0608  | 8           | 18          | 8      |
| E3RP0588  | 8           | 22          | 4      |
| E3RP0777  | 8           | 24          | 4      |
| E3RP2436  | 8           | 26          | 6      |
| E3RP0609  | 8           | 26          | 10     |
| E3RP2045  | 8,5         | 26          | 4      |

| Reference | Ø Int. (mm) | Ø Ext. (mm) | e (mm) |
|-----------|-------------|-------------|--------|
| E3RP2604  | 9           | 13          | 4      |
| E3RP2605  | 9           | 19          | 4      |
| E3RP2330  | 9           | 36          | 6      |
| E3RP2181  | 9,5         | 20          | 6      |
| E3RP2570  | 9,5         | 24          | 4      |
| E3RP2446  | 9,5         | 26          | 4      |
| E3RP3500  | 10          | 18          | 4      |
| E3RP0613  | 10          | 20          | 6      |
| E3RP2346  | 10          | 21          | 6      |
| E3RP2437  | 10          | 22          | 4      |
| E3RP0584  | 10          | 22          | 6      |
| E3RP2345  | 10          | 24          | 6      |
| E3RP2645  | 10          | 25          | 4      |
| E3RP0614  | 10          | 26          | 6      |
| E3RP0615  | 10          | 26          | 12     |
| E3RP2435  | 10          | 30          | 6      |
| E3RP0644  | 10          | 30          | 12     |
| E3RP0585  | 10          | 34          | 6      |
| E3RP0643  | 10          | 34          | 8      |
| E3RP0586  | 10          | 34          | 12     |
| E3RP2329  | 11          | 36          | 4      |
| E3RP2328  | 11          | 36          | 6      |
| E3RP0694  | 12          | 17          | 4      |
| E3RP0695  | 12          | 18          | 4      |
| E3RP0738  | 12          | 50          | 12     |
| E3RP2407  | 14          | 22          | 6,5    |
| E3RP3222  | 14          | 30          | 3      |
| E3RP2408  | 16          | 29          | 7      |
| E3RP2409  | 20          | 32          | 10,5   |
| E3RP3532  | 20          | 38          | 3      |
| E3RP0782  | 21          | 29          | 5      |
| E3RP2434  | 22          | 38          | 17     |
| E3RP0744  | 31          | 36          | 3      |
| E3RP0745  | 36          | 44          | 3      |
| E3RP2341  | 44,5        | 83          | 3,2    |



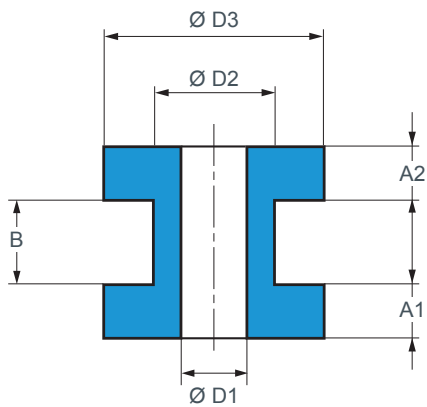
# DIMENSIONS

## FLANGED WASHERS



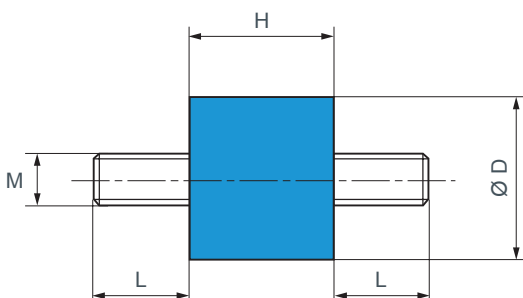
| Reference | Ø d (mm) | Ø D1 (mm) | Ø D2 (mm) | H (mm) | h1 (mm) | h2 (mm) |
|-----------|----------|-----------|-----------|--------|---------|---------|
| E3RP0712  | 3,5      | 10        | 7,5       | 4,7    | 3,2     | 1,5     |
| E3RP2292  | 3,5      | 13        | 6         | 7      | 3,3     | 3,7     |
| E3RP3290  | 4        | 9         | 6         | 5,4    | 3,4     | 2       |
| E3RP0647  | 4,2      | 8         | 5,8       | 3,3    | 1,7     | 1,6     |
| E3RP0997  | 5        | 18        | 10        | 24     | 14      | 10      |
| E3RP2192  | 6        | 12        | 8,5       | 7      | 4       | 3       |
| E3RP2410  | 6        | 18        | 10        | 10     | 6       | 4       |
| E3RP3533  | 6,5      | 15        | 11        | 8      | 4,5     | 3,5     |
| E3RP0755  | 7        | 30        | 17        | 14     | 6       | 8       |
| E3RP2374  | 8        | 18        | 12        | 6      | 3       | 3       |
| E3RP2379  | 8        | 18        | 13        | 3,5    | 2       | 1,5     |
| E3RP0563  | 8        | 19,8      | 13,8      | 7      | 2       | 5       |
| E3RP2173  | 8        | 21        | 13        | 6      | 4       | 2       |
| E3RP0778  | 8        | 24        | 14        | 8      | 4       | 4       |
| E3RP2042  | 8,5      | 26        | 17        | 8      | 4       | 4       |
| E3RP3491  | 9,5      | 24        | 18        | 8      | 4       | 4       |
| E3RP3490  | 10       | 18        | 14        | 8      | 4       | 4       |
| E3RP0553  | 11       | 24        | 17        | 9      | 4       | 5       |
| E3RP0575  | 12       | 50        | 28        | 22     | 12      | 10      |
| E3RP2315  | 16       | 50        | 28        | 22     | 12      | 10      |

## GROMMETS



| Reference | Ø D1 (mm) | Ø D2 (mm) | Ø D3 (mm) | A1 (mm) | A2 (mm) | B (mm) |
|-----------|-----------|-----------|-----------|---------|---------|--------|
| E3RP2364  | 4         | 6         | 8         | 2,2     | 2,2     | 1,6    |
| E3RP0648  | 4,2       | 5,8       | 8         | 1,7     | 1,7     | 1,6    |
| E3RP0576  | 5         | 8         | 12        | 2       | 2       | 4      |
| E3RP3295  | 8         | 12        | 18        | 5,5     | 5,5     | 3      |
| E3RP3258  | 8         | 12        | 18        | 5,5     | 5,5     | 6      |

## THREADED STUDS



| Reference | Ø D (mm) | H (mm) | L (mm)  | M (mm) |
|-----------|----------|--------|---------|--------|
| E4432F01  | 10       | 8      | 6       | M3     |
| E3RP0956  | 12       | 8      | 6       | M3     |
| E3RP2118  | 16       | 16     | 8 / 9,5 | M5     |
| E3RP0757  | 20       | 23     | 12      | M5     |
| E3RP0954  | 33       | 26     | 13,2    | M6     |
| E3RP0708  | 33       | 39     | 13,2    | M6     |
| E3RP0686  | 33,2     | 53,5   | 12      | M6     |