

# WASHERS, SHOULDER WASHERS & SCREW INSULATORS

## SHOULDER WASHERS

Molded in **Natural Nylon 6/6**

SECTION  
**IV**

Nylon Shoulder Washers are suitable for a large variety of insulation and mechanical applications.

► THEY INSULATE ► REDUCE VIBRATION ► ACT AS SPACERS AND GUIDES ► STRONG AND CORROSION RESISTANT ► CAN BE USED AS SEAL IN SOME APPLICATIONS

**New  
SIZES**

| ITEM NUMBER | DESCRIPTION | SHANK LENGTH |         | OD              | THICKNESS |        | SHANK OD      |         | ID            |
|-------------|-------------|--------------|---------|-----------------|-----------|--------|---------------|---------|---------------|
| 12SWS3650   | SWS 3650    | 7/64         | (2,77)  | 1.000 (25,40)   | 5/64      | (1,98) | .770          | (19,56) | .508 (12,90)  |
| 12SWS3680   | SWS 3680    | 1/16         | (1,59)  | 1.000 (25,40)   | 1/16      | (1,59) | .298          | (7,57)  | .203 (5,16)   |
| 12SWS3681   | SWS 3681    | .100         | (2,54)  | 1.230 (31,24)   | .060      | (1,52) | .725          | (18,41) | .585 (14,85)  |
| 12SWS3682   | SWS 3682    | 1.190        | (30,22) | 1.060 (26,92)   | .060      | (1,52) | .880          | (22,35) | .750 (19,05)  |
| 12SWS3683   | SWS 3683    | .500         | (12,70) | .622 (15,79)    | .062      | (1,57) | .443          | (11,25) | .328 (8,33)   |
| 12SWS3684   | SWS 3684    | .100         | (2,54)  | 1.250 (31,75)   | .212      | (5,38) | .940          | (23,88) | .340 (8,64)   |
| 12SWS3685   | SWS 3685    | 1/16         | (1,59)  | 1.064 (27,02)   | 1/16      | (1,59) | .787          | (19,99) | .612 (15,54)  |
| 12SWS3686   | SWS 3686    | 9/32         | (7,14)  | 1.105 (28,07)   | .095      | (2,41) | .718          | (18,24) | .515 (13,08)  |
| 12SWS3687   | SWS 3687    | .118         | (3,00)  | 1.102 (27,99)   | .039      | (0,99) | .906          | (23,01) | .827 (21,01)  |
| 12SWS3688   | SWS 3688    | .313         | (7,95)  | 1.130 (28,70)   | .062      | (1,57) | .880          | (22,35) | .750 (19,05)  |
| 12SWS3689   | SWS 3689    | .313         | (7,95)  | 1.130 (28,70)   | .062      | (1,57) | .880          | (22,35) | .758 (19,25)  |
| 12SWS3690   | SWS 3690    | 7/16         | (11,11) | 1.125 (28,58)   | 3/32      | (2,38) | .700          | (17,78) | .510 (12,95)  |
| 12SWS3691   | SWS 3691    | .060         | (1,52)  | 1.160 (29,46)   | .128      | (3,25) | .495          | (12,57) | .377 (9,58)   |
| 12SWS3693   | SWS 3693    | .422         | (10,72) | 1.250 (31,75)   | .156      | (3,96) | 1.002         | (25,45) | .818 (20,78)  |
| 12SWS3694   | SWS 3694    | .250         | (6,35)  | 1.125 (28,58)   | .187      | (4,75) | .718          | (18,24) | .515 (13,08)  |
| 12SWS3695   | SWS 3695    | .125         | (3,18)  | 1.250 (31,75)   | .045      | (1,14) | .480          | (12,19) | .380 (9,65)   |
| 12SWS3696   | SWS 3696    | .100         | (2,54)  | 1.250 (31,75)   | .150      | (3,81) | 1.000         | (25,40) | .340 (8,64)   |
| 12SWS3697   | SWS 3697    | .100         | (2,54)  | 1.250 (31,75)   | .212      | (5,38) | 1.000         | (25,40) | .340 (8,64)   |
| 12SWS3698   | SWS 3698    | .220         | (5,59)  | 1.500 (38,10)   | .120      | (3,05) | 1.000         | (25,40) | .810 (20,57)  |
| 12SWS3699   | SWS 3699    | .118         | (3,00)  | 1.181 (30,00)   | .079      | (2,01) | .374          | (9,50)  | .197 (5,00)   |
| 12SWS3998   | SWS 3998    | .250         | (6,35)  | 1.248 (31,70)   | .130      | (3,30) | .875          | (22,23) | .627 (15,93)  |
| 12SWS3999   | SWS 3999    | .485         | (12,32) | 1.250 (31,75)   | .130      | (3,30) | .875          | (22,23) | .480 (12,19)  |
| 12SWS4000   | SWS 4000    | 7/16         | (11,10) | 1 3/16 (30,15)  | 1/16      | (1,59) | 1             | (25,40) | .766 (19,46)  |
| 12SWS4001   | SWS 4001    | 3/32         | (2,38)  | 1.125 (28,58)   | 1/16      | (1,59) | .740          | (18,80) | .515 (13,08)  |
| 12SWS4002   | SWS 4002    | 3/32         | (2,38)  | 1.235 (31,36)   | 1/16      | (1,59) | .984          | (24,99) | .510 (12,95)  |
| 12SWS4003   | SWS 4003    | 9/32         | (7,14)  | 1.105 (28,07)   | 1/8       | (3,18) | .752          | (19,10) | .515 (13,08)  |
| 12SWS4004   | SWS 4004    | 1/2          | (12,70) | 1.245 (31,69)   | 1/8       | (3,18) | .875          | (22,23) | .627 (15,92)  |
| 12SWS4005   | SWS 4005    | 13/32        | (10,32) | 1.252 (31,80)   | 1/16      | (1,59) | .600          | (15,24) | .538 (13,66)  |
| 12SWS4006   | SWS 4006    | 13/32        | (10,32) | 1.251 (31,77)   | 1/16      | (1,59) | .528          | (13,41) | .471 (11,96)  |
| 12SWS4007   | SWS 4007    | 13/64        | (5,16)  | 1.739 (44,17)   | 13/64     | (5,16) | 1.095         | (27,81) | .435 (11,04)  |
| 12SWS4008   | SWS 4008    | 11/32        | (8,71)  | 1.250 (31,75)   | 5/32      | (3,97) | .995          | (25,27) | .885 (22,48)  |
| 12SWS4009   | SWS 4009    | 3/4          | (19,05) | 1 1/8 (28,57)   | 1/16      | (1,59) | 7/16          | (11,11) | 5/16 (7,94)   |
| 12SWS4010   | SWS 4010    | 3/32         | (2,38)  | 1.250 (31,75)   | 1/16      | (1,59) | .930          | (23,62) | .562 (14,27)  |
| 12SWS4011   | SWS 4011    | .094         | (2,39)  | 1.250 (31,75)   | .062      | (1,57) | .989          | (25,12) | .562 (14,27)  |
| 12SWS4012   | SWS 4012    | .060         | (1,52)  | 1.650 (41,91)   | .060      | (1,52) | 1.380         | (35,05) | 1.125 (28,58) |
| 12SWS4013   | SWS 4013    | 5/8          | (15,88) | 1-3/4 (44,45)   | 1/8       | (3,18) | 1-3/8 (34,93) |         | 1.015 (25,78) |
| 12SWS4014   | SWS 4014    | .238         | (6,04)  | 1.501 (38,12)   | .133      | (3,38) | 1.248         | (31,70) | .942 (23,92)  |
| 12SWS4016   | SWS 4016    | .100         | (2,54)  | 1.250 (31,75)   | .250      | (6,35) | .419          | (10,64) | .254 (6,45)   |
| 12SWS4017   | SWS 4017    | .170         | (4,32)  | 1.570 (39,88)   | .175      | (4,45) | 1.055         | (26,80) | .887 (22,53)  |
| 12SWS4018   | SWS 4018    | .250         | (6,35)  | 1.500 (38,10)   | .120      | (3,05) | .615          | (15,62) | .265 (6,73)   |
| 12SWS4019   | SWS 4019    | .309         | (7,85)  | 1.365 (34,67)   | .128      | (3,25) | 1.120         | (28,45) | .870 (22,10)  |
| 12SWS4020   | SWS 4020    | 5/16         | (7,92)  | 2 21/64 (59,13) | 1/8       | (3,18) | .968          | (24,59) | .770 (19,56)  |
| 12SWS4021   | SWS 4021    | .138         | (3,51)  | 1.929 (49,00)   | .079      | (2,01) | 1.063         | (27,00) | .906 (23,01)  |
| 12SWS4022   | SWS 4022    | .313         | (7,95)  | 1.500 (38,10)   | .125      | (3,18) | 1.365         | (34,67) | 1.000 (25,40) |
| 12SWS5000   | SWS 5000    | 5/8          | (15,88) | 1.952 (49,58)   | .125      | (3,18) | 31/64 (12,29) |         | .380 (9,65)   |
| 12SWS5001   | SWS 5001    | 1/2          | (12,70) | 2.065 (52,45)   | 1/8       | (3,18) | 1.050         | (26,67) | .806 (20,42)  |
| 12SWS5002   | SWS 5002    | .500         | (12,70) | 2.065 (52,45)   | .125      | (3,18) | 1.050         | (26,67) | .783 (19,89)  |
| 12SWS5003   | SWS 5003    | .305         | (7,75)  | 1.989 (50,52)   | .129      | (3,28) | 1.743         | (44,27) | 1.326 (33,68) |
| 12SWS5009   | SWS 5009    | 45/64        | (17,85) | 2.111 (53,62)   | 1/8       | (3,18) | .603          | (15,31) | .270 (6,85)   |
| 12SWS5050   | SWS 5050    | 1/2          | (12,70) | 1.525 (38,74)   | 1/16      | (1,57) | 3/4 (19,05)   |         | .645 (16,38)  |

