

**SHOULDER/INSULATING (TOP HAT) WASHERS**

**METRIC (Millimetres)**

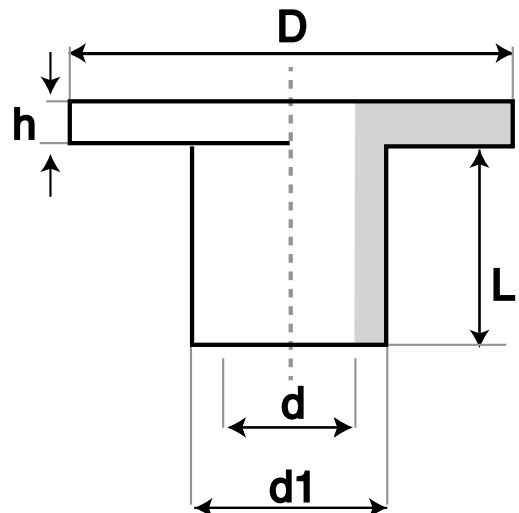
**NATURAL NYLON**

Size	ID	OD	Length	Head Dia.	Thick	Pack	
<b>M4</b>	4.1	6.0	3.0	8.4	1.5	<b>1,000</b>	
	4.1	6.0	4.0	8.4	1.5		
	4.1	6.0	5.0	8.4	1.5		
	4.1	6.0	7.0	8.4	1.5		
	4.1	6.0	9.0	8.4	1.5		
<b>M5</b>	5.1	7.0	3.0	10.2	2.0	<b>1,000</b>	
	5.1	7.0	4.0	10.2	2.0		
	5.1	7.0	5.0	10.2	2.0		
	5.1	7.0	7.0	10.2	2.0		
	5.1	7.0	9.0	10.2	2.0		
<b>M5</b>	5.1	8.0	3.5	14.0	1.5	<b>500</b>	
	5.1	8.0	8.5	14.0	1.5		
	5.1	8.0	13.5	14.0	1.5		
	5.1	8.0	18.5	14.0	1.5		
	5.1	8.0	23.5	14.0	1.5		
	5.1	8.0	28.5	14.0	1.5		
	5.1	8.0	33.5	14.0	1.5		
<b>M6</b>	6.1	8.0	4.0	12.2	2.0	<b>1,000</b>	
	6.1	8.0	6.0	12.2	2.0		
	6.1	8.0	8.0	12.2	2.0		
	6.1	8.0	10.0	12.2	2.0		
	6.1	8.0	12.0	12.2	2.0		
	6.1	9.0	3.5	16.0	1.5		<b>500</b>
6.1	9.0	8.5	16.0	1.5			
6.1	9.0	13.5	16.0	1.5			
6.1	9.0	18.5	16.0	1.5			
6.1	9.0	23.5	16.0	1.5			
6.1	9.0	28.5	16.0	1.5			
<b>M6</b>	6.1	9.0	33.5	16.0	1.5	<b>500</b>	
	6.5	12.0	8.0	24.0	3.0		
	8.1	10.0	4.0	14.2	2.5		<b>500</b>
	8.1	10.0	6.0	14.2	2.5		
	8.1	10.0	8.0	14.2	2.5		
8.1	10.0	10.0	14.2	2.5			
8.1	10.0	12.0	14.2	2.5			
<b>M8</b>	8.1	11.0	3.0	20.0	2.0	<b>500</b>	
	8.1	11.0	8.0	20.0	2.0		
	8.1	11.0	13.0	20.0	2.0		
	8.1	11.0	18.0	20.0	2.0		
	8.1	11.0	23.0	20.0	2.0		
	8.1	11.0	28.0	20.0	2.0		
	8.1	11.0	33.0	20.0	2.0		
	8.1	11.0	38.0	20.0	2.0		
	8.1	11.0	43.0	20.0	2.0		
	8.3	9.7	4.0	12.0	2.0		

Size	ID	OD	Length	Head Dia.	Thick	Pack
<b>M10</b>	10.1	13.0	3.0	23.7	2.0	<b>250</b>
	10.1	13.0	8.0	23.7	2.0	
	10.1	13.0	13.0	23.7	2.0	
	10.1	13.0	18.0	23.7	2.0	
	10.1	13.0	23.0	23.7	2.0	
	10.1	13.0	28.0	23.7	2.0	
	10.1	13.0	33.0	23.7	2.0	
	10.1	13.0	38.0	23.7	2.0	
	10.1	13.0	43.0	23.7	2.0	
	10.4	11.7	4.0	20.0	2.0	
<b>M12</b>	12.1	14.8	3.0	25.6	2.0	<b>250</b>
	12.1	14.8	8.0	25.6	2.0	
	12.1	14.8	13.0	25.6	2.0	
	12.1	14.8	18.0	25.6	2.0	
	12.1	14.8	23.0	25.6	2.0	
	12.1	14.8	28.0	25.6	2.0	
	12.1	14.8	33.0	25.6	2.0	
	12.1	14.8	38.0	25.6	2.0	
	12.1	14.8	43.0	25.6	2.0	
	12.5	13.7	4.0	25.0	2.0	

**SCREWS INSULATORS / SHOULDER (TOP HAT) WASHERS HAVE FIVE (5) MEASUREMENTS THAT NEED TO BE INCLUDED WHEN YOU ARE ORDERING:**

- ID = INNER DIAMETER, SCREW / BOLT SIZE (d)**
- OD = OUTER DIAMETER, SIZE OF INSERT HOLE (d1)**
- LENGTH = DEPTH REQUIRED/ LENGTH UNDER WASHER (L)**
- HEAD = WIDTH OF OUTER FLANGE (D)**
- THICK = THICKNESS OF FLANGE (h)**



**OTHER SIZES INCLUDING IMPERIAL DIMENSIONS ARE ALSO AVAILABLE.**

SHOULDER/INSULATING (TOP HAT) WASHERS

METRIC (Millimetres)

NATURAL NYLON

Size	ID	OD	Length	Head Dia.	Thick	Pack
<b>M16</b>	16.1	19.0	2.0	34.5	3.0	<b>100</b>
	16.1	19.0	7.0	34.5	3.0	
	16.1	19.0	12.0	34.5	3.0	
	16.1	19.0	17.0	34.5	3.0	
	16.1	19.0	22.0	34.5	3.0	
	16.1	19.0	27.0	34.5	3.0	
	16.1	19.0	32.0	34.5	3.0	
	16.1	19.0	42.0	34.5	3.0	
	16.1	19.0	47.0	34.5	3.0	
	16.1	21.5	17.0	27.0	3.0	
<b>M20</b>	20.2	22.0	12.0	36.0	2.0	<b>100</b>
	20.2	22.0	15.0	36.0	2.0	
	20.2	22.0	17.5	36.0	2.0	
	20.2	22.0	20.0	36.0	2.0	
	20.2	22.2	22.0	35.3	3.0	

Size	ID	OD	Length	Head Dia.	Thick	Pack
<b>M24</b>	24.2	26.0	12.5	44.0	2.0	<b>100</b>
	24.5	26.0	17.0	46.0	3.0	
	24.5	26.5	19.0	44.0	1.6	
	25.0	35.8	25.0	47.5	6.0	
<b>M27</b>	28.0	32.0	20.0	40.0	3.0	<b>100</b>
<b>M30</b>	30.5	32.5	34.0	56.0	1.6	<b>100</b>
	31.0	33.0	20.0	56.0	3.0	
<b>M33</b>	31.0	33.0	40.0	56.0	3.0	<b>100</b>
	34.0	37.0	20.0	60.0	2.0	
<b>M36</b>	37.0	40.0	20.0	66.0	5.0	<b>100</b>

SOME SIZES ALSO AVAILABLE IN ACETAL,  
 POLYPROPYLENE AND GLASS FILLED NYLON  
 - Subject to Minimum Order Levels

METRIC (Millimetres)

BLACK NYLON

Size	ID	OD	Length	Head Dia.	Thick	Pack
<b>M5</b>	5.1	7.0	3.0	10.2	2.0	<b>1,000</b>
	5.1	7.0	4.0	10.2	2.0	
	5.1	7.0	5.0	10.2	2.0	
	5.1	7.0	7.0	10.2	2.0	
	5.1	7.0	9.0	10.2	2.0	
<b>M6</b>	6.1	8.0	4.0	12.2	2.0	<b>1,000</b>
	6.1	8.0	6.0	12.2	2.0	
	6.1	8.0	8.0	12.2	2.0	
	6.1	8.0	10.0	12.2	2.0	
<b>M8</b>	8.1	10.0	3.0	14.2	2.5	<b>500</b>
	8.1	10.0	4.0	14.2	2.5	
	8.1	10.0	6.0	14.2	2.5	
	8.1	10.0	8.0	14.2	2.5	
	8.1	10.0	10.0	14.2	2.5	
<b>M10</b>	10.1	13.0	3.0	23.7	2.0	<b>250</b>
	10.1	13.0	8.0	23.7	2.0	
	10.1	13.0	10.0	23.7	2.0	
	10.1	13.0	13.0	23.7	2.0	
	10.1	13.0	18.0	23.7	2.0	

Size	ID	OD	Length	Head Dia.	Thick	Pack
<b>M12</b>	12.1	14.8	3.0	25.6	2.0	<b>250</b>
	12.1	14.0	8.0	25.6	2.0	
	12.1	14.8	8.0	25.6	2.0	
	12.1	14.8	13.0	25.6	2.0	
	12.1	14.8	18.0	25.6	2.0	
	12.1	14.8	23.0	25.6	2.0	
<b>M16</b>	12.3	13.9	6.0	25.6	2.0	<b>100</b>
	16.1	19.0	2.0	34.5	3.0	
	16.1	19.0	7.0	34.5	3.0	
	16.1	19.0	12.0	34.5	3.0	
<b>M20</b>	16.1	19.0	17.0	34.5	3.0	<b>100</b>
	16.1	19.0	22.0	34.5	3.0	
	20.2	22.0	12.0	36.0	2.0	
	20.2	22.0	15.0	36.0	2.0	
	20.2	22.0	17.5	36.0	2.0	
<b>M24</b>	20.2	22.0	20.0	36.0	3.0	<b>100</b>
	20.2	35.0	25.0	50.0	10.0	
	24.2	26.0	12.5	44.0	2.0	
<b>M27</b>	24.5	26.0	17.0	46.0	3.0	<b>100</b>
	24.5	26.5	19.0	44.0	1.6	
<b>M27</b>	28.0	32.0	20.0	40.0	3.0	<b>100</b>
	28.0	35.8	25.0	47.5	6.0	