

TWP Range of Acetal Copolymer Thrust Washers



- Good sliding properties
- Good temperature range
- Lightweight
- No maintenance
- Very good dimensional stability
- High impact strength
- Physiologically inert
- Good chemical resistance ($4 < \text{pH} < 13$)
- Excellent resilience
- Ideal for food industry

Other Plastic Materials Available to Special Order

Bowman International Limited reserve the right to change specifications without prior notice E & OE

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Material Properties

Acetal Copolymer (POM C)

Acetal Copolymer has a good combination of properties, including low moisture absorption, good dimensional stability, and low friction, making it suitable for Bearing applications.

Technical Specification

Property	ASTM Methods	Units	ACETAL Copolymer
Colour	-	-	White
Specific Gravity	D792	-	1.41
Water Absorption			
Saturation in water	-	%	0.85
Tensile Strength	D638	N/mm ²	70
Tensile Modulus	D638	N/mm ²	3000
Elongation	D638	%	30
Flexural Strength	D790	N/mm ²	-
Flexural Modulus	D790	N/mm ²	-
Impact - Izod Notched	D256	J/m	80
Hardness	Rockwell Shore D	-	M86 -
Melt Point	D2117	°C	165
Max allowable service temp in air			
for short periods	-	°C	140
continuously for 20,000hrs	-	°C	100
Linear thermal expansion coefficient	D696	K ⁻¹ x10 ⁻⁵	12.5
Thermal Conductivity	C117	W/K.m	0.31
Flammability	UL	-	HB
Volume Resistivity	D257	Ohm.cm	10 ¹⁴
Dielectric Strength	D149	kV/mm	20
Coefficient of friction (dryVs steel) dynamic		μ	0.25-0.30
Limiting PV (V= 0.1 m/s) unlubricated		N/mm ²	m/s 0.16
(V= 1.0 m/s) unlubricated		N/mm ²	m/s 0.10
continuously lubricated		N/mm ²	m/s 0.50
Maximum long term static load		N/mm ²	22
Maximum velocity (sliding dry)		m/s	2
Outside applications - UV resistance	-	-	C/B
Acids - Strong (pH <3)	-	-	C
Alkalis - Strong (pH >11)	-	-	A
Chlorinated Hydrocarbons	-	-	A/B
Hot Water	-	-	A
'A' - No attack; 'B' - Mild attack by absorption; 'C' - Dimensional change due to absorption, 'D' - Decomposition in short time.			

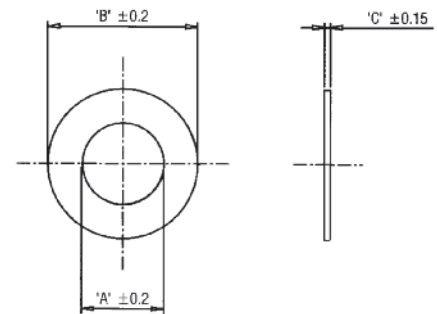
This data gives typical values and are not intended to represent specification. Their aim is to guide the user towards a material choice.

The warranties given by Bowman International Ltd ("Bowman") are as set out in their Conditions of Business, subject to which the products referred to in this brochure are offered. Copies of our conditions are available on request.

The suitability of the proposed use of any of the products for any particular purpose is the responsibility of the customer.

Metric Stock Sizes

DIM 'A'	DIM 'B'	DIM 'C'	PART No.
10.7	24	1.5	TWP 24
12.7	26	1.5	TWP 26
16.7	30	1.5	TWP 30
16.7	32	1.5	TWP 32
18.7	36	1.5	TWP 36
20.7	38	1.5	TWP 38
24.7	42	1.5	TWP 42
24.7	44	1.5	TWP 44
25.7	48	1.5	TWP 48
28.7	48	1.5	TWP 48-A
30.7	54	1.5	TWP 54
36.2	62	1.5	TWP 62
41.2	66	1.5	TWP 66
46.2	74	2	TWP 74
51.2	78	2	TWP 78



Metric Stock Sizes

DIM 'A'	DIM 'B'	DIM 'C'	PART No.
12	20	1.5	TWP 20-1
12	24	1.5	TWP 24-1
14	26	1.5	TWP 26-1
16	30	1.5	TWP 30-1
18	32	1.5	TWP 32-1
20	36	1.5	TWP 36-1
22	38	1.5	TWP 38-1
24	42	1.5	TWP 42-1
26	44	1.5	TWP 44-1
28	48	1.5	TWP 48-1
32	54	1.5	TWP 54-1
38	62	1.5	TWP 62-1
42	66	1.5	TWP 66-1
48	74	2	TWP 74-1
52	78	2	TWP 78-1

Inch and special sizes can be produced promptly to order.

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