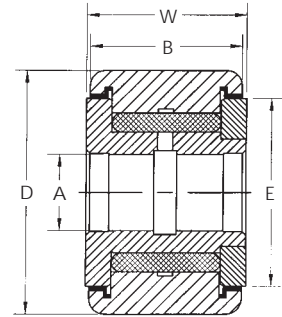


BYR & BYR-X**Non-Metallic Bushing****Yoke Type**

Yoke Type with
Non-Metallic Bushing
for Shaft Mounting
Sealed or Unsealed
X = Sealed



**NON-METALLIC
BUSHING**

**General Information**

The **SMITH BCR** and **BYR** Series replace the standard steel needle rollers with a **non-metallic**, self-lubricating, engineered plastic bushing which eliminates or reduces the need for bearing lubrication. This product is available in **Sealed, Crowned & Eccentric Stud** type. The Load Capacity is based on speed used. Consult our Engineering Department for load calculations. Max allowable temperature 250°F typical. Higher temperature versions available.

Dimensional Data (inches)

SMITH Bearing® Number		D Roller +.000 -.001	A Bore Nominal +.0002 -.0004	B Roller Width +.000 -.005	W Overall Width +.005 -.010	E Min Clamping Dia.	Recommended Shaft Diameter			
UNSEALED	SEALED						Slip Fit		Press Fit	
							Max	Min	Max	Max
BYR-3/4	BYR-3/4-X	.750	.250	.500	.5625	1/2	.2497	.2493	.2505	.2501
BYR-7/8	BYR-7/8-X	.875	.250	.500	.5625	1/2	.2497	.2493	.2505	.2501
BYR-1	BYR-1-X	1.000	.310	.625	.6875	5/8	.3122	.3118	.3130	.3126
BYR-1 ¹ / ₈	BYR-1 ¹ / ₈ -X	1.125	.3125	.625	.6875	5/8	.3122	.3118	.3130	.3126
BYR-1 ¹ / ₄	BYR-1 ¹ / ₄ -X	1.250	.375	.750	.8125	3/4	.3747	.3743	.3755	.3751
BYR-1 ³ / ₈	BYR-1 ³ / ₈ -X	1.375	.375	.750	.8125	3/4	.3747	.3743	.3755	.3751
BYR-1 ¹ / ₂	BYR-1 ¹ / ₂ -X	1.500	.4375	.875	.9375	57/64	.4372	.4368	.4380	.4376
BYR-1 ⁵ / ₈	BYR-1 ⁵ / ₈ -X	1.625	.4375	.875	.9400	57/64	.4372	.4368	.4380	.4376
BYR-1 ³ / ₄	BYR-1 ³ / ₄ -X	1.750	.500	1.000	1.0625	1 ³ / ₆₄	.4997	.4993	.5007	.5003
BYR-1 ⁷ / ₈	BYR-1 ⁷ / ₈ -X	1.875	.500	1.000	1.0625	1 ³ / ₆₄	.4997	.4993	.5007	.5003
BYR-2	BYR-2-X	2.000	.625	1.250	1.3125	1 ¹³ / ₆₄	.6247	.6243	.6257	.6253
BYR-2 ¹ / ₄	BYR-2 ¹ / ₄ -X	2.250	.625	1.250	1.3125	1 ¹³ / ₆₄	.6247	.6243	.6257	.6253
BYR-2 ¹ / ₂	BYR-2 ¹ / ₂ -X	2.500	.750	1.500	1.5625	1 ⁵ / ₁₆	.7497	.7493	.7507	.7503
BYR-2 ³ / ₄	BYR-2 ³ / ₄ -X	2.750	.750	1.500	1.5625	1 ⁵ / ₁₆	.7497	.7493	.7507	.7503
BYR-3	BYR-3-X	3.000	1.000	1.750	1.8125	1 ³ / ₄	.9996	.9992	1.0008	1.0003

1) Add suffix "C" for Crowned. Example for Unsealed and Crowned: **BYR-1/2-C**. Example for Sealed and Crowned: **BYR-1/2-XC**.

NOTE: Bushing type bearings are designed for operation without lubrication at service temperature from -40° F to 200° F (250° F for short duration)