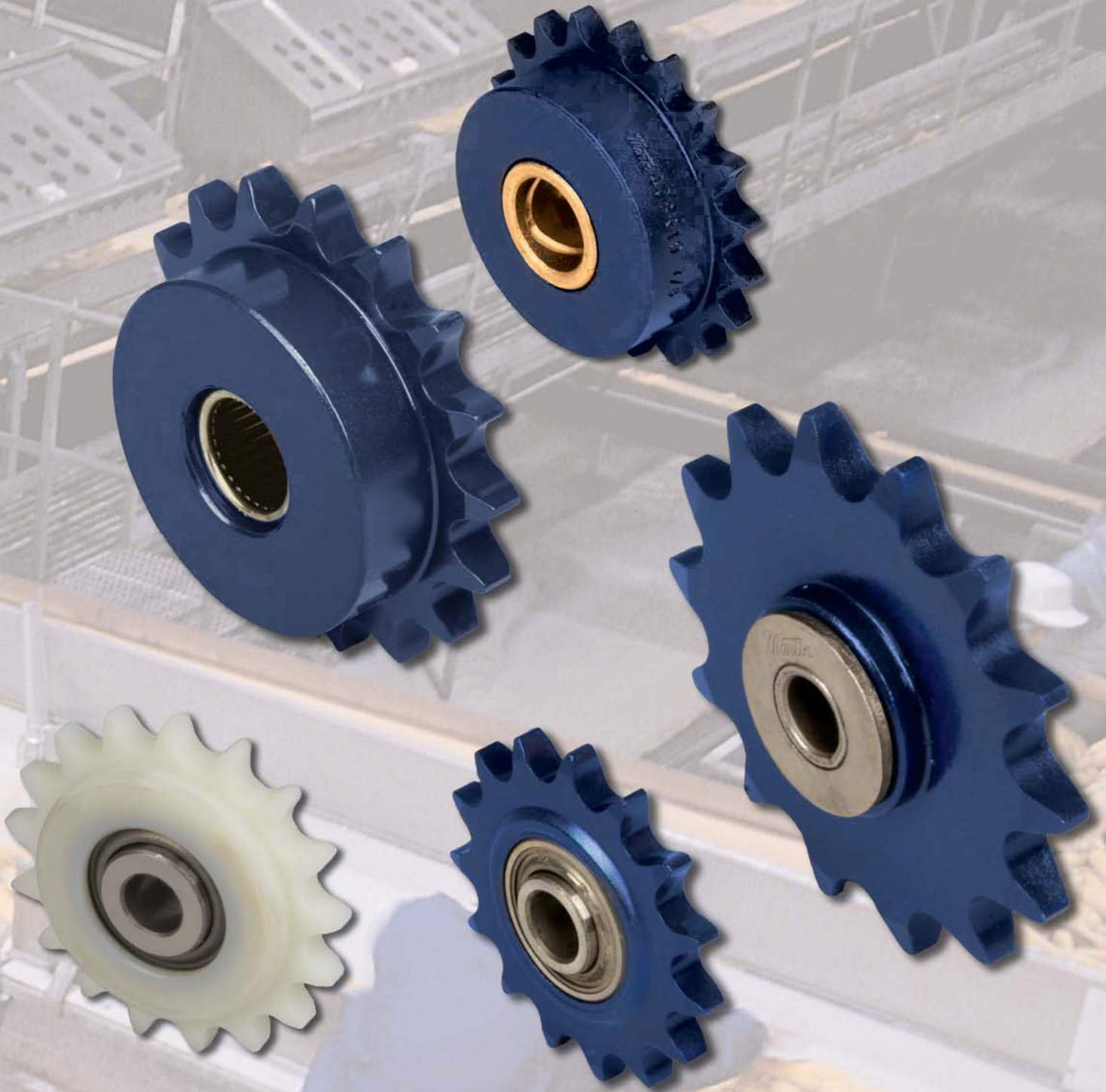


*Martin*



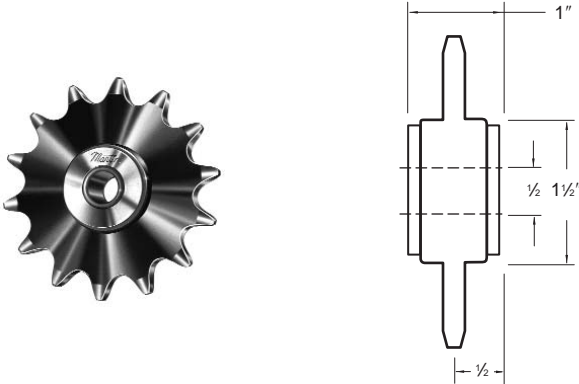
# **IDLER SPROCKETS**

**BALL BEARING • NEEDLE BEARING • BRONZE BUSHED • BRONZE BEARING • NON-METALLIC**



# Idler Sprockets

## Bronze Bushed Type

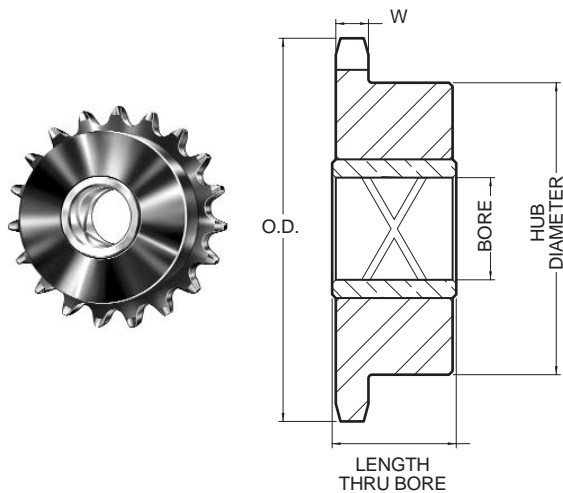


## Bronze Bushed Idler Sprockets

No. Teeth	Catalog Number	Chain Size	O.D.	Stock Bore	Wt. Lbs.
20	31E20	35	2.60	1/2"	.46
15	41E15	41-40	2.65	1/2"	.50
15	51E15	50	3.32	1/2"	.70
14	61E14	60-60H	3.74	1/2"	.92

Above idlers have oil impregnated sintered bronze bearings and are mounted on steel journals. Idler RPM to 2500. Radial load rating to 50 pounds.

## Bronze Bearing Type



## Bronze Bearing Idler Sprocket

No. Teeth	Catalog Number	Bearing Type	Chain Size	O.D.	Stock Bore	Length Thru Bore	W	Hub Diameter	Wt. Lbs.
15	35BR15 1/2	Bronze	35	1.99	1/2"	0.94	0.168	1.35	0.30
21	35BR21 7/8	Bronze	35	2.71	7/8"	1.06	0.168	2.00	0.75
13	41BR13 1/2	Bronze	41	2.33	1/2"	0.94	0.227	1.56	0.50
19	41BR19 7/8	Bronze	41	3.29	7/8"	1.06	0.227	2.50	1.00
13	40BR13 1/2	Bronze	40	2.33	1/2"	0.94	0.284	1.56	0.50
19	40BR19 7/8	Bronze	40	3.29	7/8"	1.06	0.284	2.50	1.25
13	50BR13 1/2	Bronze	50	2.91	1/2"	0.94	0.343	1.87	0.90
17	50BR17 7/8	Bronze	50	3.72	7/8"	1.06	0.343	2.62	1.50
15	60BR15 7/8	Bronze	60	3.98	7/8"	1.06	0.459	2.62	1.75
17	60BR17 1 1/8	Bronze	60	4.46	1 1/8"	1.56	0.459	3.25	2.75
15	80BR15 1 1/8	Bronze	80	5.30	1 1/8"	1.56	0.575	3.50	4.25

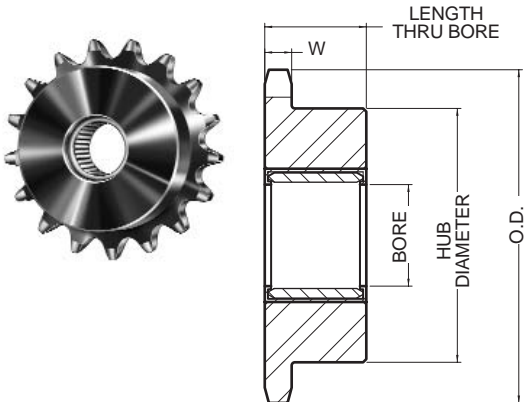
7/8" & 1-1/8" bore have double loop grease groove.

## Radial Load Capacity in Pounds at Various Speeds Needle Bearings

Idler Size	RPM					
	100	500	1000	1500	2000	2500
1/2" Bore	1021	630	512	453	416	389
1" Bore	2751	1698	1379	1221	1120	1048
1-1/2" Bore	6306	3891	3160	2798	2567	—

Ratings shown above are based on an average bearing life of 2500 hours.

## Needle Bearing Type



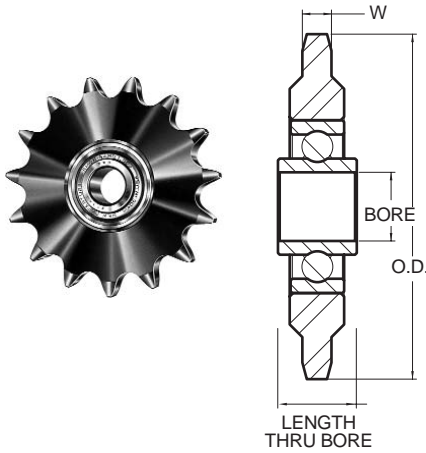
## Needle Bearing Idler Sprocket - Hardened Teeth

No. Teeth	Catalog Number	Bearing Type	Chain Size	O.D.	Stock Bore	Length Thru Bore	W	Hub Diameter	Wt. Lbs.
19	25NB19H 1/2	Needle	25	1.65	0.50	0.75	0.110	1.22	0.10
13	35NB13H 1/2	Needle	35	1.75	0.50	0.75	0.168	1.18	0.20
19	35NB19H 1	Needle	35	2.47	1.00	1.00	0.168	1.84	0.50
19	41NB19H 1	Needle	41	3.29	1.00	1.00	0.227	2.50	1.00
19	40NB19H 1	Needle	40	3.29	1.00	1.00	0.284	2.50	1.10
17	50NB17H 1	Needle	50	3.72	1.00	1.00	0.343	2.25	1.30
17	60NB17H 1	Needle	60	4.46	1.00	1.00	0.459	3.00	2.60
13	80NB13H 1	Needle	80	4.66	1.00	1.25	0.575	2.63	2.90
11	100NB11H 1 1/2	Needle	100	5.01	1.50	1.88	0.692	3.56	3.60
11	120NB11H 1 1/2	Needle	120	6.01	1.50	2.13	0.924	3.56	7.00
11	140NB11H 1 1/2	Needle	140	7.01	1.50	2.25	0.924	4.25	10.90
9	160NB9H 1 1/2	Needle	160	6.70	1.50	2.25	1.156	3.63	9.60

# Idler Sprockets



## Ball Bearing Type



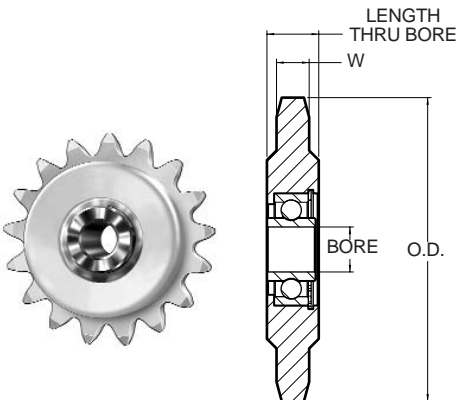
## Ball Bearing Idler Sprocket - Hardened Teeth

No. Teeth	Discontinued Part Number	Catalog Number	Bearing Type	Chain Size	O.D.	Stock Bore	Length Thru Bore	W	Wt. Lbs.
20		25BB20 3/8 *	Ball	25	1.73	0.394	0.35	0.110	0.10
19		35BB19H 3/8	Ball	35	2.47	0.394	0.38	0.168	0.35
19		35BB19H 1/2	Ball	35	2.47	0.510	0.72	0.168	0.35
20	35BB20H	35BB20H 5/8	Ball	35	2.59	0.638	0.72	0.168	0.38
18		41BB18H 1/2	Ball	41	3.14	0.510	0.72	0.227	0.51
18		41BB18H 5/8	Ball	41	3.14	0.638	0.72	0.227	0.51
17	40BB17H	40BB17H 5/8	Ball	40	2.97	0.638	0.72	0.284	0.52
18		40BB18H 1/2	Ball	40	3.14	0.510	0.72	0.284	0.53
18	40BB18H	40BB18H 5/8	Ball	40	3.14	0.638	0.72	0.284	0.53
25		40BB25H 5/8	Ball	40	4.26	0.638	0.72	0.284	0.90
35		40BB35H 5/8	Ball	40	5.86	0.638	0.72	0.284	1.77
48		40BB48H 5/8	Ball	40	7.93	0.638	0.72	0.284	3.37
15	50BB15H	50BB15H 5/8	Ball	50	3.32	0.638	0.72	0.343	0.75
17		50BB17H 1/2	Ball	50	3.72	0.510	0.72	0.343	0.78
17	50BB17H	50BB17H 5/8	Ball	50	3.72	0.638	0.72	0.343	0.78
25		50BB25H 3/4	Ball	50	5.32	0.750	0.61	0.343	1.66
39		50BB39H 3/4	Ball	50	8.12	0.750	0.61	0.343	4.09
12		60BB12H 5/8	Ball	60	3.25	0.638	0.72	0.459	0.72
13	60BB13H	60BB13H 5/8	Ball	60	3.49	0.638	0.72	0.459	0.76
15		60BB15H 1/2	Ball	60	3.98	0.510	0.72	0.459	1.06
15	60BB15H	60BB15H 5/8	Ball	60	3.98	0.638	0.72	0.459	1.06
17		60BB17H 5/8	Ball	60	4.46	0.638	0.72	0.459	1.10
12	80BB12H	80BB12H 3/4	Ball	80	4.33	0.750	0.61	0.575	1.50

Note: .394 Stock Bore is +.000 -.0003; .510 Stock Bore is +.005 -.000; .638 Stock Bore is +.005 -.000; .750 Stock Bore is +.005 -.000. Discontinued Part Numbers will be replaced with Catalog Number when existing inventory is exhausted.

\* Unhardened Teeth

## Non-Metallic Teeth - Ball Bearing Type



## Ball Bearing Idler Sprockets - Non Metallic Teeth

No. Teeth	Catalog Number	Bearing Type	Chain Size	O.D.	Stock Bore	Length Thru Bore	W	Wt. Lbs.
17	40BB17NM 1/2	Ball	40	2.97	0.510	0.72	0.284	0.24
18	40BB18NM 5/8	Ball	40	3.14	0.638	0.72	0.284	0.23
17	50BB17NM 1/2	Ball	50	3.72	0.510	0.72	0.343	0.29
18	50BB18NM 5/8	Ball	50	3.92	0.638	0.72	0.343	0.29
15	60BB15NM 1/2	Ball	60	3.98	0.510	0.72	0.459	0.32
16	60BB16NM 5/8	Ball	60	4.22	0.638	0.72	0.459	0.33
12	80BB12NM 3/4	Ball	80	4.33	0.750	0.61	0.575	0.44

Note: .510 Stock Bore is +.005 -.000; .638 Stock Bore is +.005 -.000; .750 Stock Bore is +.005 -.000

## Radial Load Capacity in Pounds at Various Speeds Ball Bearings

Idler Size	RPM					
	100	500	1000	1500	2000	2500
3/8" Bore	620	363	288	252	229	212
1/2" & 5/8" Bore	800	460	360	320	290	270
3/4" Bore	1290	755	600	523	478	440

Ratings shown above are based on an average bearing life of 2500 hours.



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#### *Martin* Sprocket & Gear Canada Inc.

#### (Conveyor Division)

Ayr, Ontario 519-621-0546 (FAX 519-621-4413)

## MEXICO

### Sales and Manufacturing

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#### S.A. de C.V.

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