

800 Series Conveyor Sprockets

Martin Series 800 Conveyor Sprockets Manufactured From High Quality Semi-Steel



815 Solid Face With Guide Ring Holes For Straight Running Chains



820 Grooved Face For Straight Running Chain

QRS® SPLIT



PAT. # 4,964,842

Split 81.62520 Solid And Grooved Face With Guide Ring Holes Steel And Thermoplastic



821 Heavy Duty For Wide Hinged Chain Straight Running



880 And 882 Single Duty For Side Flex Chains



881 For Side Flex Chain

815, 820, and 881 sprockets are all double duty. Sprockets with an odd number of teeth are recommended to reduce wear since a given tooth engages the chain every other revolution. Sprockets with 19, 21, 23, and 25 teeth are preferred. Sprockets with even number of teeth should be advanced one tooth periodically to attain even wear.

Martin QRS® Split Sprocket

Series 81.62520 Split Sprockets For Flat Top Conveyor Chains

Split sprockets manufactured from steel and thermoplastic material stocked in 21, 23, 25, and 27 tooth sizes

Martin's **Quick Replacement Split** sprocket eliminates the time-consuming and costly dismounting of shafts and pillow blocks to remove worn sprockets — all that's required is a wrench

“QRS” split thermoplastic sprocket advantages:

Lightweight

Service temperature to 300°F

Toughness - Excellent resistance to oils, grease, soaps, and detergents, outstanding abrasion and impact resistance

Available with solid and grooved face and furnished with rust resistant plated steel bolts and nuts

Split (plated carbon steel and stainless) guide rings available, if necessary, for easy assembly



Split Steel and Thermoplastic Stock Bore



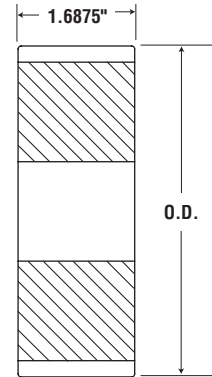
Series 815 Sprockets — Split Steel

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
QRS815A21	21	10.5	5.089 (129.26)	5.12 (130.0)	.75 (19.1)	1.5 (38.1)	5.0 (2.27)
QRS815A23	23	11.5	5.560 (141.22)	5.59 (142.0)	.75 (19.1)	1.5 (38.1)	5.6 (2.54)
QRS815A25	25	12.5	6.032 (153.21)	6.07 (154.2)	.75 (19.1)	1.5 (38.1)	6.6 (3.0)
QRS815A27	27	13.5	6.504 (165.20)	6.56 (166.6)	.75 (19.1)	1.5 (38.1)	7.8 (3.54)

Supplied with 5/16 -18 standard setscrew @ 90° to split.

† Inches (mm)

†† Lbs (kg)



Solid Face

Series 815 Sprockets — Split Thermoplastic

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
QRS815A21P	21	10.5	5.089 (129.26)	5.12 (130.0)	.75 (19.1)	1.5 (38.1)	.94 (.43)
QRS815A23P	23	11.5	5.560 (141.22)	5.59 (142.0)	.75 (19.1)	1.5 (38.1)	1.00 (.45)
QRS815A25P	25	12.5	6.032 (153.21)	6.07 (154.2)	.75 (19.1)	1.5 (38.1)	1.10 (.50)
QRS815A27P	27	13.5	6.504 (165.20)	6.56 (166.6)	.75 (19.1)	1.5 (38.1)	1.25 (.57)

Thermoplastic temperature operating range -20°F to +300°F

Supplied with 5/16 -18 standard setscrew @ 90° to split.

† Inches (mm)

†† Lbs (kg)



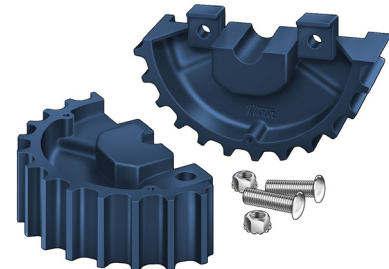
Series 820 Sprockets — Split Steel

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
QRS820A21	21	10.5	5.089 (129.26)	5.12 (130.0)	.75 (19.1)	1.5 (38.1)	5.0 (2.27)
QRS820A23	23	11.5	5.560 (141.22)	5.59 (142.0)	.75 (19.1)	1.5 (38.1)	5.6 (2.54)
QRS820A25	25	12.5	6.032 (153.21)	6.07 (154.2)	.75 (19.1)	1.5 (38.1)	6.6 (3.0)
QRS820A27	27	13.5	6.504 (165.20)	6.56 (166.6)	.75 (19.1)	1.5 (38.1)	7.8 (3.54)

Supplied with 5/16-18 standard setscrew @ 90° to split.

† Inches (mm)

†† Lbs (kg)



PAT. # 4,964,842

Series 820 Sprockets — Split Thermoplastic

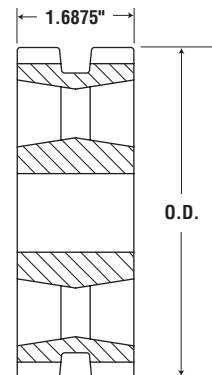
Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
QRS820A21P	21	10.5	5.089 (129.26)	5.12 (130.0)	.75 (19.1)	1.5 (38.1)	.94 (.43)
QRS820A23P	23	11.5	5.560 (141.22)	5.59 (142.0)	.75 (19.1)	1.5 (38.1)	1.00 (.45)
QRS820A25P	25	12.5	6.032 (153.21)	6.07 (154.2)	.75 (19.1)	1.5 (38.1)	1.10 (.50)
QRS820A27P	27	13.5	6.504 (165.20)	6.56 (166.6)	.75 (19.1)	1.5 (38.1)	1.25 (.57)

Thermoplastic temperature operating range -20°F to +300°F

Supplied with 5/16 -18 standard setscrew @ 90° to split.

† Inches (mm)

†† Lbs (kg)

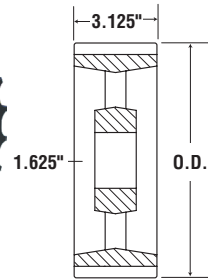
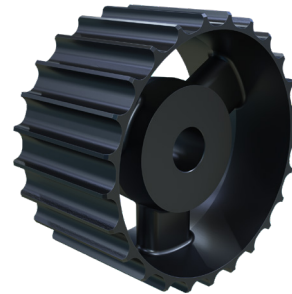


Grooved Face

For Guide Ring Specifications See page A-12.

Series 821 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
821A21	21	10.5	5.089 (129.26)	5.12 (130.0)	1 (25.4)	1.75 (44.5)	6.7 (3.0)
821A23	23	11.5	5.560 (141.22)	5.59 (142.0)	1 (25.4)	1.75 (44.5)	7 (3.2)
821A25	25	12.5	6.032 (153.21)	6.07 (154.2)	1 (25.4)	1.75 (44.5)	7.3 (3.3)
821A27	27	13.5	6.504 (165.20)	6.56 (166.6)	1 (25.4)	1.75 (44.5)	7.6 (3.4)
821A29	29	14.5	6.978 (177.24)	7.05 (179.1)	1 (25.4)	1.75 (44.5)	8.0 (3.6)



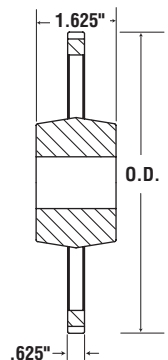
† Inches (mm)

†† Lbs (kg)

821 Series also runs with 815 H chain.

Series 880 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
880C9 •	9	9	4.386 (111.40)	4.33 (110.0)	.75 (19.1)	1.75 (44.5)	2.8 (1.3)
880C10	10	10	4.854 (123.29)	4.82 (122.4)	.75 (19.1)	1.75 (44.5)	3.2 (1.4)
880C11	11	11	5.324 (135.22)	5.31 (134.9)	.75 (19.1)	1.75 (44.5)	3.4 (1.5)
880C12	12	12	5.796 (147.22)	5.80 (147.3)	.75 (19.1)	1.75 (44.5)	3.6 (1.6)
880C15	15	15	7.215 (182.26)	7.26 (184.4)	.75 (19.1)	1.75 (44.5)	4.2 (1.9)



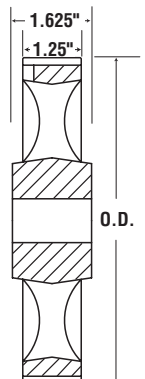
• Block Body – Other sizes are arm body.

† Inches (mm)

†† Lbs (kg)

Series 881 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
881C21	21	10.5	5.089 (129.26)	5.120 (130.05)	.75 (19.1)	1.75 (44.5)	4.2 (1.9)
881C23	23	11.5	5.560 (141.22)	5.590 (141.99)	.75 (19.1)	1.75 (44.5)	4.6 (2.1)
881C25	25	12.5	6.032 (153.21)	6.070 (154.18)	.75 (19.1)	1.75 (44.5)	5.0 (2.3)



† Inches (mm)

†† Lbs (kg)

800 Series Conveyor Sprockets



Series 820 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
820A13B •	13	6.5	3.228 (81.99)	3.11 (79.0)	.75 (19.1)	1.25 (31.8)	2.4 (1.1)
820A15B •	15	7.5	3.688 (93.68)	3.63 (92.2)	.75 (19.1)	1.25 (31.8)	3.6 (1.6)
820A17B •	17	8.5	4.153 (105.49)	4.12 (104.7)	.75 (19.1)	1.6875 (42.9)	4.7 (2.1)
820A19	19	9.5	4.620 (117.35)	4.61 (117.1)	.75 (19.1)	1.25 (31.8)	3.1 (1.5)
820A20	20	10	4.854 (123.29)	4.86 (123.4)	.75 (19.1)	1.25 (31.8)	3.8 (1.7)
820A21	21	10.5	5.089 (129.26)	5.12 (130.0)	.75 (19.1)	1.75 (44.5)	4.6 (2.1)
820A21B •	21	10.5	5.089 (129.26)	5.12 (130.0)	.75 (19.1)	2.5 (63.5)	7.1 (3.3)
820A22	22	11	5.324 (135.23)	5.35 (135.9)	.75 (19.1)	1.75 (44.5)	4.2 (1.9)
820A23	23	11.5	5.560 (141.22)	5.59 (142.0)	.75 (19.1)	1.75 (44.5)	5.3 (2.4)
820A24	24	12	5.796 (147.22)	5.83 (148.1)	.75 (19.1)	1.75 (44.5)	4.4 (2.0)
820A25	25	12.5	6.032 (153.21)	6.07 (154.2)	.75 (19.1)	2 (50.8)	5.6 (2.4)
820A25B •	25	12.5	6.032 (153.21)	6.07 (154.2)	.75 (19.1)	3-3/16 (81.0)	9.6 (4.4)
820A27	27	13.5	6.504 (165.20)	6.56 (166.6)	.75 (19.1)	2 (50.8)	6.5 (2.8)
820A29	29	14.5	6.978 (177.24)	7.05 (179.1)	.75 (19.1)	2 (50.8)	6.8 (3.1)
820A31	31	15.5	7.452 (189.28)	7.53 (191.3)	.75 (19.1)	2 (50.8)	6.9 (3.1)
820A41	41	20.5	9.826 (249.58)	9.93 (252.2)	.75 (19.1)	2.5 (64)	16.00 (7.1)

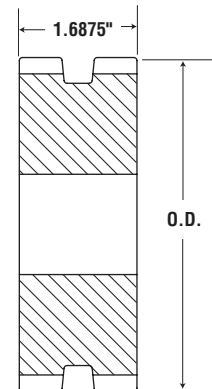
• Block Body — Other sizes are arm body.

† Inches (mm)

†† Lbs (kg)

Max. bore shown is with Standard Keyway and Setscrew.

820 Series stocked grooved. (Guide ring holes in 21, 23, 25, and 27 tooth sizes can be provided upon request).

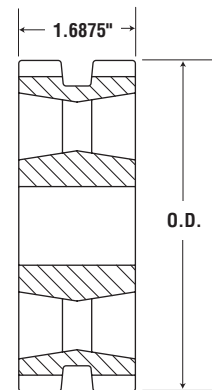


Steel

Series 820 Sprockets — Semi-Steel — Bored-to-Size

Catalog Number	Inch/Metric				
	Stock Finished Bores With Standard Keyway and Setscrew				
820BS19	1" (25.4)				
820BS21	1" (25.4)				
820BS23	.875" (22.2)	1" (25.4)	1.125" (28.6)	1.187" (30.2)	1.25" (31.8)
820BS25	1" (25.4)				
820BS27	1" (25.4)				

Stock grooved without guide ring holes. All arm body.



Cast

Series 815 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
815A13B •	13	6.5	3.228 (81.99)	3.11 (79.0)	.75 (19.1)	1.25 (31.8)	2.4 (1.1)
815A15B •	15	7.5	3.688 (93.68)	3.63 (92.2)	.75 (19.1)	1.25 (31.8)	3.6 (1.6)
815A17B •	17	8.5	4.153 (105.49)	4.12 (104.7)	.75 (19.1)	111/16 (42.9)	4.7 (2.1)
815A19	19	9.5	4.620 (117.35)	4.61 (117.1)	.75 (19.1)	1.25 (31.8)	3.1 (1.5)
815A20	20	10	4.854 (123.29)	4.86 (123.4)	.75 (19.1)	1.25 (31.8)	3.8 (1.7)
815A21	21	10.5	5.089 (129.26)	5.12 (130.0)	.75 (19.1)	1.75 (44.5)	4.6 (2.1)
815A21B •	21	10.5	5.089 (129.26)	5.12 (130.0)	.75 (19.1)	2.5 (63.5)	7.1 (3.3)
815A22	22	11	5.324 (135.23)	5.35 (135.9)	.75 (19.1)	1.75 (44.5)	4.2 (1.9)
815A23	23	11.5	5.560 (141.22)	5.59 (142.0)	.75 (19.1)	1.75 (44.5)	5.3 (2.4)
815A24	24	12	5.796 (147.22)	5.83 (148.1)	.75 (19.1)	1.75 (44.5)	4.4 (2.0)
815A25	25	12.5	6.032 (153.21)	6.07 (154.2)	.75 (19.1)	2 (50.8)	5.6 (2.4)
815A25B •	25	12.5	6.032 (153.21)	6.07 (154.2)	.75 (19.1)	3-3/16 (81.0)	9.6 (4.4)
815A27	27	13.5	6.504 (165.20)	6.56 (166.6)	.75 (19.1)	2 (50.8)	6.5 (2.8)
815A29	29	14.5	6.978 (177.24)	7.05 (179.1)	.75 (19.1)	2 (50.8)	6.8 (3.1)
815A31	31	15.5	7.452 (189.28)	7.53 (191.3)	.75 (19.1)	2 (50.8)	6.9 (3.1)
815A41	41	20.5	9.826 (249.58)	9.93 (252.2)	.75 (19.1)	2.5 (64)	16.00 (7.1)

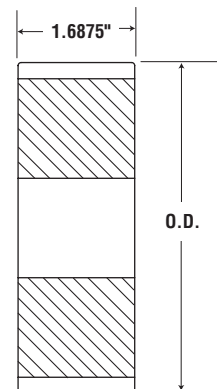
• Block Body — Other sizes are arm body.

† Inches (mm)

†† Lbs (kg)

Max. bore shown is with Standard Keyway and Setscrew.

815 Series stocked not grooved, with guide ring holes.

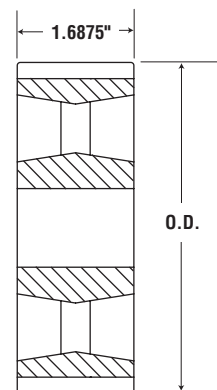


Steel

Series 815 Sprockets — Semi-Steel — Bored-to-Size

Catalog Number	Inch/Metric				
	Stock Finished Bores With Standard Keyway and Setscrew				
815BS19	1" (25.4)				
815BS21	1" (25.4)				
815BS23	.875" (22.2)	1" (25.4)	1.125" (28.6)	1.187" (30.2)	1.25" (31.8)
815BS25	1" (25.4)				
815BS27	1" (25.4)				

Stock grooved without guide ring holes. All arm body.



Cast

Series 800 Conveyor Sprockets



Series 822 Sprockets — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
882C9	9	9	4.386 (111.40)	4.430 (112.5)	.75 (19.1)	1.75 (44.5)	3.8 (1.8)
882C10	10	10	4.854 (123.29)	4.920 (125.0)	.75 (19.1)	1.75 (44.5)	4.2 (1.9)
882C11	11	11	5.325 (135.25)	5.410 (137.40)	.75 (19.1)	1.75 (44.5)	4.4 (2.1)
882C12 •	12	12	5.796 (147.21)	5.90 (149.90)	.75 (19.1)	1.75 (44.5)	4.6 (2.2)

• Arm Body — Other sizes are block body.

† Inches (mm)

†† Lbs (kg)



815 Guide Rings — Steel and Stainless Steel

Catalog Number ★	O.D. †	Thick †	Weight †† Per Set
GR15-16	3.62	1/16	.23
GR15-16SS	(91.9)	(1.6)	(.10)
GR17-18	4.11	1/16	.26
GR17-18SS	(104.4)	(1.6)	(.120)
GR19-20	4.58	1/8	.37
GR19-20SS	(116.3)	(3.2)	(.17)
GR21-22	5.09	1/8	.44
GR21-22SS	(129.3)	(3.2)	(.20)
GR23-24	5.56	1/8	.46
GR23-24SS	(141.2)	(3.2)	(.21)
GR25-26	6.04	1/8	.47
GR25-26SS	(153.4)	(3.2)	(.21)
GR27-28	6.53	1/8	.53
GR27-28SS	(165.9)	(3.2)	(.24)
GR29-30	7.02	1/8	.56
GR29-30SS	(178.3)	(3.2)	(.25)
GR31-32	7.50	1/8	.67
GR31-32SS	(190.5)	(3.2)	(.30)
GR41-42	9.89	1/8	.92
GR41-42SS	(251.2)	(3.2)	(.42)

★ Carbon Steel
Stainless Steel

† Inches (mm)

†† Lbs (kg)

