

# 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**

THE NEW  
"QRS"  
SPLIT



**820 Grooved Face for  
Straight Running Chain**

PAT. # 4,964,842

**Split  
815/820 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**

Sprockets for 815, 820, and 881 are all double duty. Sprockets with odd numbers of teeth are recommended for longer 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 815/820 Split Sprockets for Flat Top Conveyor Chains

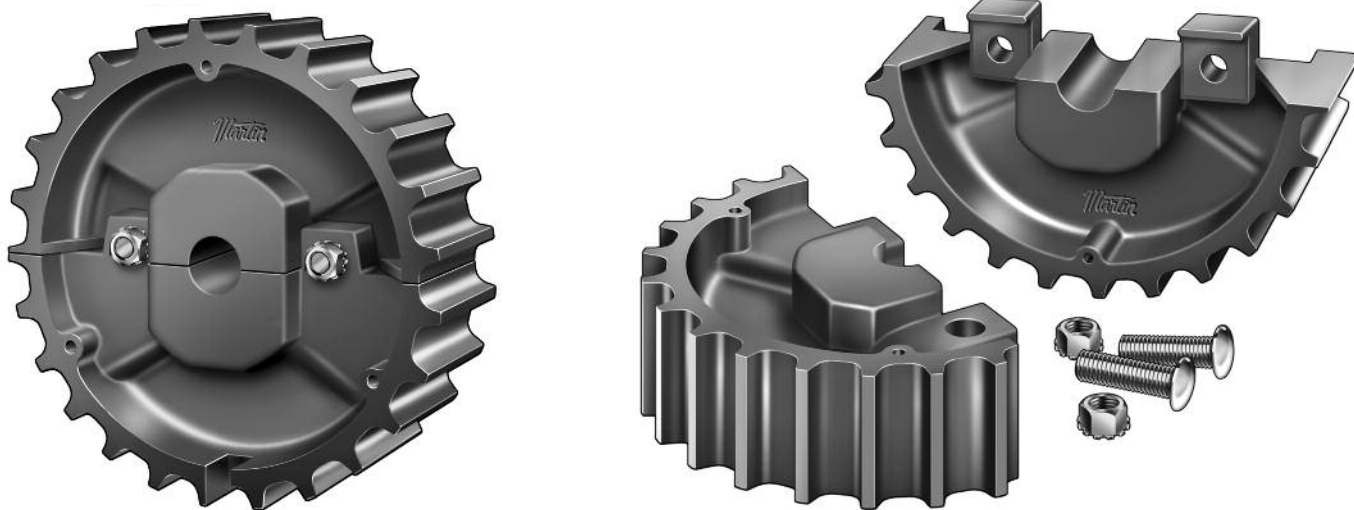
Split Sprockets Manufactured  
from Steel and Thermoplastic Material  
Stocked in 21, 23, 25, and 27 Tooth Sizes

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 Temp. to 300°F — Low Temp. 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



Proudly made in the U.S.A.

PAT. # 4,964,842

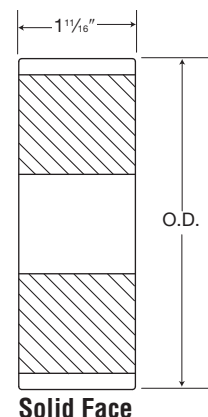
Call your *Martin* Distributor

# 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	10½	5.089 (129.26)	5.12 (130.0)	¾ (19.1)	1½ (38.1)	5.0 (2.27)
QRS815A23	23	11½	5.560 (141.22)	5.59 (142.0)	¾ (19.1)	1½ (38.1)	5.6 (2.54)
QRS815A25	25	12½	6.032 (153.21)	6.07 (154.2)	¾ (19.1)	1½ (38.1)	6.6 (3.0)
QRS815A27	27	13½	6.504 (165.20)	6.56 (166.6)	¾ (19.1)	1½ (38.1)	7.8 (3.54)

★ NOTE: Supplied with ⅜ - 18 standard setscrew @ 90° to split.



## Series 815 Sprockets — Split Thermoplastic

Catalog Number	No. Teeth		Pitch Diameter†	Outside Diameter†	Bore†		Weight
	Actual	Effective			Stock	Maximum	
QRS815A21P	21	10½	5.089 (129.26)	5.12 (130.0)	¾ (19.1)	1½ (38.1)	.94 (.43)
QRS815A23P	23	11½	5.560 (141.22)	5.59 (142.0)	¾ (19.1)	1½ (38.1)	1.00 (.45)
QRS815A25P	25	12½	6.032 (153.21)	6.07 (154.2)	¾ (19.1)	1½ (38.1)	1.10 (.50)
QRS815A27P	27	13½	6.504 (165.20)	6.56 (166.6)	¾ (19.1)	1½ (38.1)	1.25 (.57)

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

★ NOTE: Supplied with ⅜ - 18 plated setscrew @ 90° to split.



PAT. #4,964,842

## Series 820 Sprockets — Split Steel

Catalog Number	No. Teeth		Pitch Diameter†	Outside Diameter†	Bore†		Weight
	Actual	Effective			Stock	Maximum	
QRS820A21	21	10½	5.089 (129.26)	5.12 (130.0)	¾ (19.1)	1½ (38.1)	5.0 (2.27)
QRS820A23	23	11½	5.560 (141.22)	5.59 (142.0)	¾ (19.1)	1½ (38.1)	5.6 (2.54)
QRS820A25	25	12½	6.032 (153.21)	6.07 (154.2)	¾ (19.1)	1½ (38.1)	6.6 (3.0)
QRS820A27	27	13½	6.504 (165.20)	6.56 (166.6)	¾ (19.1)	1½ (38.1)	7.8 (3.54)

★ NOTE: Supplied with ⅜ - 18 standard setscrew @ 90° to split.



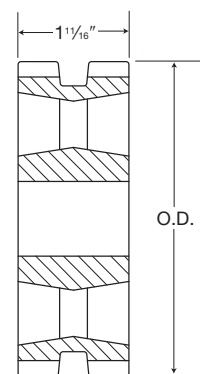
## Series 820 Sprockets — Split Thermoplastic

Catalog Number	No. Teeth		Pitch Diameter†	Outside Diameter†	Bore†		Weight
	Actual	Effective			Stock	Maximum	
QRS820A21P	21	10½	5.089 (129.26)	5.12 (130.0)	¾ (19.1)	1½ (38.1)	.94 (.43)
QRS820A23P	23	11½	5.560 (141.22)	5.59 (142.0)	¾ (19.1)	1½ (38.1)	1.00 (.45)
QRS820A25P	25	12½	6.032 (153.21)	6.07 (154.2)	¾ (19.1)	1½ (38.1)	1.10 (.50)
QRS820A27P	27	13½	6.504 (165.20)	6.56 (166.6)	¾ (19.1)	1½ (38.1)	1.25 (.57)

★ NOTE: Supplied with ⅜ - 18 plated setscrew @ 90° to split.

† Inches/mm

For Guide Ring Specifications See page A-12

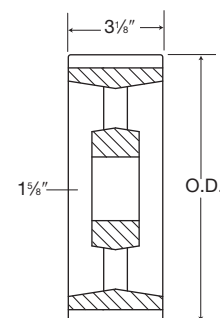


Grooved Face

## Series 821 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter†	Outside Diameter†	Bore†		Weight
	Actual	Effective			Stock	Maximum	
821A21	21	10½	5.089 (129.26)	5.12 (130.1)	1 (25.4)	1¼ (44.5)	6.7 (3.0)
821A23	23	11½	5.560 (141.22)	5.59 (142.0)	1 (25.4)	1¼ (44.5)	7 (3.2)
821A25	25	12½	6.032 (153.21)	5.07 (154.2)	1 (25.4)	1¼ (44.5)	7.3 (3.3)
821A27	27	13½	6.504 (165.20)	6.56 (166.6)	1 (25.4)	1¼ (44.5)	7.6 (3.4)
821A29	29	14½	6.978 (177.24)	7.05 (179.1)	1 (25.4)	1¼ (44.5)	8.0 (3.6)

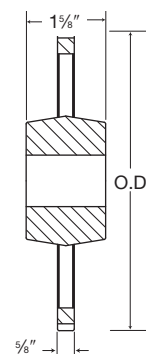
NOTE: † Inches/mm  
821 Series also runs with 815 H chain.



## 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)	¾ (19.1)	1¼ (44.5)	2.8 (1.3)
880C10	10	10	4.854 (123.29)	4.82 (122.4)	¾ (19.1)	1¼ (44.5)	3.2 (1.4)
880C11	11	11	5.324 (135.22)	5.31 (134.9)	¾ (19.1)	1¼ (44.5)	3.4 (1.5)
880C12	12	12	5.796 (147.22)	5.80 (147.3)	¾ (19.1)	1¼ (44.5)	3.6 (1.6)
880C15	15	15	7.215 (182.26)	7.26 (184.4)	¾ (19.1)	1¼ (44.5)	4.2 (1.9)

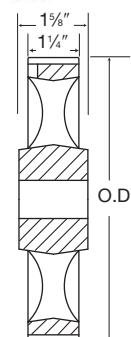
NOTE: • Block Body – Other sizes are arm body  
† Inches/mm



## Series 881 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter†	Outside Diameter†	Bore†		Weight
	Actual	Effective			Stock	Maximum	
881C21	21	10½	5.089 (129.26)	5.120 (130.05)	¾ (19.1)	1¼ (44.5)	4.2 (1.9)
881C23	23	11½	5.560 (141.22)	5.590 (141.99)	¾ (19.1)	1¼ (44.5)	4.6 (2.1)
881C25	25	12½	6.032 (153.21)	6.070 (154.18)	¾ (19.1)	1¼ (44.5)	5.0 (2.3)

NOTE: † Inches/mm



# 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	6½	3.228 (81.99)	3.11 (79.0)	¾ (19.1)	1¼ (31.8)	2.4 (1.1)
820A15B•	15	7½	3.688 (93.68)	3.63 (92.2)	¾ (19.1)	1¼ (31.8)	3.6 (1.6)
820A17B•	17	8½	4.153 (105.49)	4.12 (104.7)	¾ (19.1)	1⅞ (42.9)	4.7 (2.1)
820A19	19	9½	4.620 (117.35)	4.61 (117.1)	¾ (19.1)	1¼ (31.8)	3.1 (1.5)
820A20	20	10	4.854 (123.29)	4.86 (123.4)	¾ (19.1)	1¼ (31.8)	3.8 (1.7)
820A21	21	10½	5.089 (129.26)	5.12 (130.0)	¾ (19.1)	1¾ (44.5)	4.6 (2.1)
820A21B•	21	10½	5.089 (129.26)	5.12 (130.0)	¾ (19.1)	2½ (63.5)	7.1 (3.3)
820A22	22	11	5.324 (135.23)	5.35 (135.9)	¾ (19.1)	1¾ (44.5)	4.2 (1.9)
820A23	23	11½	5.560 (141.22)	5.59 (142.0)	¾ (19.1)	1¾ (44.5)	5.3 (2.4)
820A24	24	12	5.796 (147.22)	5.83 (148.1)	¾ (19.1)	1¾ (44.5)	4.4 (2.0)
820A25	25	12½	6.032 (153.21)	6.07 (154.2)	¾ (19.1)	2 (50.8)	5.6 (2.4)
820A25B•	25	12½	6.032 (153.21)	6.07 (154.2)	¾ (19.1)	3⅞ (81.0)	9.6 (4.4)
820A27	27	13½	6.504 (165.20)	6.56 (166.6)	¾ (19.1)	2 (50.8)	6.5 (2.8)
820A29	29	14½	6.978 (177.24)	7.05 (179.1)	¾ (19.1)	2 (50.8)	6.8 (3.1)
820A31	31	15½	7.452 (189.28)	7.53 (191.3)	¾ (19.1)	2 (50.8)	6.9 (3.1)
820A41	41	20½	9.826 (249.58)	9.93 (252.2)	¾ (19.1)	2½ (64)	16.00 (7.1)

NOTE: • Block Body — Other sizes are arm body

† Inches/mm

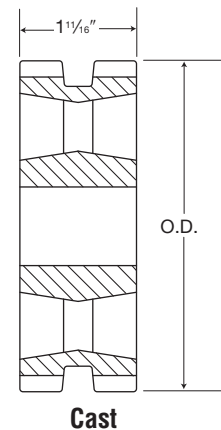
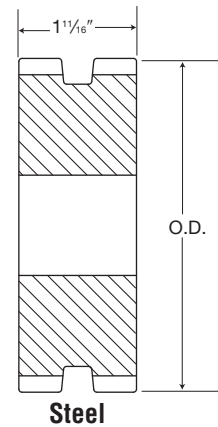
Max. bore shown is with Standard Keyway and Setscrew.

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

## 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	¾" (22.2)	1" (25.4)	1⅞" (28.6)	1¼" (31.8)
820BS25	1" (25.4)		1⅞" (30.2)	1¼" (31.8)
820BS27	1" (25.4)			

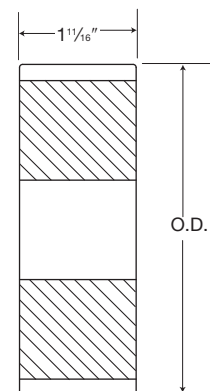
Stock grooved without guide ring holes. All arm body.



## Series 815 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter†	Outside Diameter†	Bore†		Weight
	Actual	Effective			Stock	Maximum	
815A13B•	13	6½	3.228 (81.99)	3.11 (79.0)	¾ (19.1)	1¼ (31.8)	2.4 (1.1)
815A15B•	15	7½	3.688 (93.68)	3.63 (92.2)	¾ (19.1)	1¼ (31.8)	3.6 (1.6)
815A17B•	17	8½	4.153 (105.49)	4.12 (104.7)	¾ (19.1)	1⅞ (42.9)	4.7 (2.1)
815A19	19	9½	4.620 (117.35)	4.61 (117.1)	¾ (19.1)	1¼ (31.8)	3.1 (1.5)
815A20	20	10	4.854 (123.29)	4.86 (123.4)	¾ (19.1)	1¼ (31.8)	3.8 (1.7)
815A21	21	10½	5.089 (129.26)	5.12 (130.0)	¾ (19.1)	1¼ (44.5)	4.6 (2.1)
815A21B•	21	10½	5.089 (129.26)	5.12 (130.0)	¾ (19.1)	2½ (63.5)	7.1 (3.3)
815A22	22	11	5.324 (135.23)	5.35 (135.9)	¾ (19.1)	1¼ (44.5)	4.2 (1.9)
815A23	23	11½	5.560 (141.22)	5.59 (142.0)	¾ (19.1)	1¼ (44.5)	5.3 (2.4)
815A24	24	12	5.796 (147.22)	5.83 (148.1)	¾ (19.1)	1¼ (44.5)	4.4 (2.0)
815A25	25	12½	6.032 (153.21)	6.07 (154.2)	¾ (19.1)	2 (50.8)	5.6 (2.4)
815A25B•	25	12½	6.032 (153.21)	6.07 (154.2)	¾ (19.1)	3⅞ (81.0)	9.6 (4.4)
815A27	27	13½	6.504 (165.20)	6.56 (166.6)	¾ (19.1)	2 (50.8)	6.5 (2.8)
815A29	29	14½	6.978 (177.24)	7.05 (179.1)	¾ (19.1)	2 (50.8)	6.8 (3.1)
815A31	31	15½	7.452 (189.28)	7.53 (191.3)	¾ (19.1)	2 (50.8)	6.9 (3.1)
815A41	41	20½	9.826 (249.58)	9.93 (252.2)	¾ (19.1)	2½ (64)	16.00 (7.1)

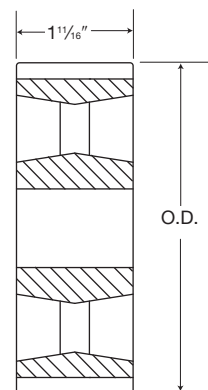
NOTE: • Block Body — Other sizes are arm body  
 † Inches/mm  
 Max. bore shown is with Standard Keyway and Setscrew.  
 815 Series stocked not grooved, with guide ring holes.



## 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	¾" (22.2)	1" (25.4)	1½" (28.6)	1⅞" (30.2)	1¼" (31.8)
815BS25	1" (25.4)		1⅞" (30.2)		1¼" (31.8)
815BS27	1" (25.4)				

Stock not grooved but with guide ring holes. All arm body.

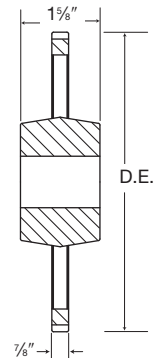


# Series 800 Conveyor Sprockets

## Series 882 Sprockets — Semi-Steel — 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)	$\frac{3}{8}$ (19.1)	$1\frac{1}{4}$ (44.5)	3.8 (1.8)
882C10	10	10	4.854 (123.29)	4.920 (125.0)	$\frac{3}{8}$ (19.1)	$1\frac{1}{4}$ (44.5)	4.2 (1.9)
882C11	11	11	5.325 (135.25)	5.410 (137.40)	$\frac{3}{8}$ (19.1)	$1\frac{1}{4}$ (44.5)	4.4 (2.1)
882C12*	12	12	5.796 (147.21)	5.90 (149.90)	$\frac{3}{8}$ (19.1)	$1\frac{1}{4}$ (44.5)	4.6 (2.2)

NOTE: \* Arm Body — Other sizes are block body  
† Inches/mm



## 815 Guide Rings — Steel and Stainless Steel

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

★ Carbon Steel  
Stainless Steel