

# Electric Brakes and Clutches

## ATT Series – Advanced Technology Brakes and Clutches

### Advanced Technology – A new design concept!

Warner Electric's ATT Series clutches and brakes are rugged and durable.

Besides providing the ultimate in long life and durability, the ATT units are easily repairable... and, for the first time, mounting a standard sheave, pulley or sprocket to the clutch is a snap.

AT Clutches and Brakes are completely assembled at the factory and have been specifically designed to match the torque ratings of standard motors, reducers, and other power transmission components. Easy to select and easy to install.

### Features:

#### ATT Tension Clutches and Brakes

- Ideal for intermediate range applications
- Both brake and clutch models for winders and unwinders
- .284 to .9 thermal horsepower capacity
- Brake wear faces replaceable on the shaft for limited downtime
- Full range of control options. See pages 38-39.



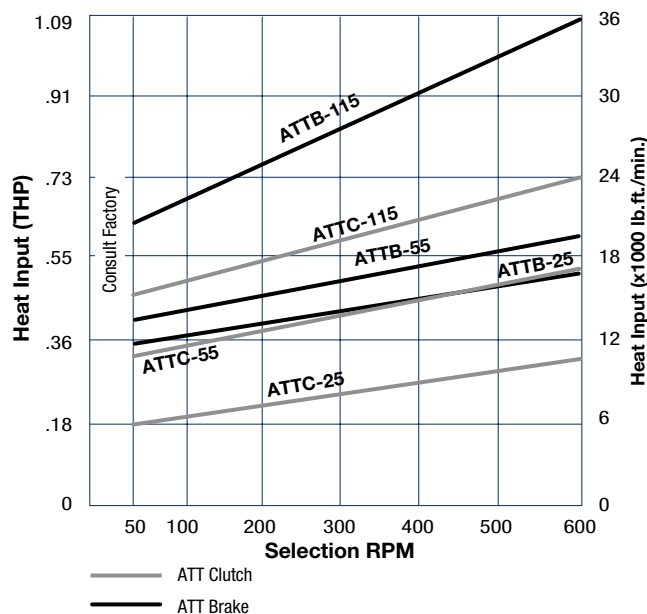
Unit Size	Maximum RPM	Continuous <sup>1</sup> Dynamic Torque	Overcurrent E-Stop Torque
<b>ATT Brakes</b>			
ATTB-25	3600	8 lb.ft.	15 lb.ft
ATTB-55	3600	15 lb.ft.	21 lb.ft.
ATTB-115	3600	62 lb.ft.	83 lb.ft.
<b>ATT Clutches</b>			
ATTC-25	3600	7 lb.ft.	*2
ATTC-55	3600	12 lb.ft.	*
ATTC-115	3600	41 lb.ft.	*

#### Notes

1. Dynamic torque is constant over a speed range of 0–600 RPM
2. Overcurrent is not used on clutch applications for tensioning

### Continuous Operation

Thermal HP vs. Selection RPM

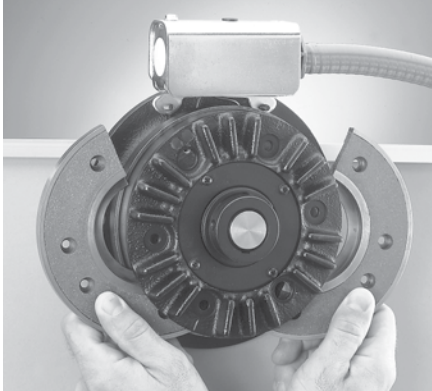


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### Special Coil Designs

High temperature coil wire improves durability in the face of high temperature environments and high cycle rates or high inertia cycling that generate large amounts of heat. High temperature Teflon leads are very resistant to accidental abrasion and cutting.



### Replaceable Friction Discs

Friction disc is designed as separate assembly from clutch rotor or brake magnet, allowing for replacement of the wear surface without the expense of replacing other valuable unit components. Provides superior wear life with reduced engagement noise level.

### Advanced Technology Tension Clutches and Brakes

- Ideal for intermediate range applications
- Both brake and clutch models for winders and unwinders
- .284 to .9 thermal horsepower capacity
- Wear faces replaceable on the shaft for limited downtime
- Full range of control options

### Complete Control Capability



### Optional Accessories

Warner Electric offers a number of optional accessories as well as rebuild kits, which may make an ATT clutch

or brake easier to apply to your machine. See pages 38-39 for controls.

Unit	Model No.	Clutch Restraining Strap	Repair Kits	
			Friction Face Replacement	Rebuild
Clutch	ATTC-25	5162-101-004	5161-101-008	5161-101-009
	ATTC-55	5162-101-004	5162-101-008	5162-101-009
	ATTC-115	5163-101-004	5163-101-008	5163-101-009
Brake	ATTB-25	—	5161-101-008	—
	ATTB-55	—	5162-101-008	—
	ATTB-115	—	5163-101-008	—

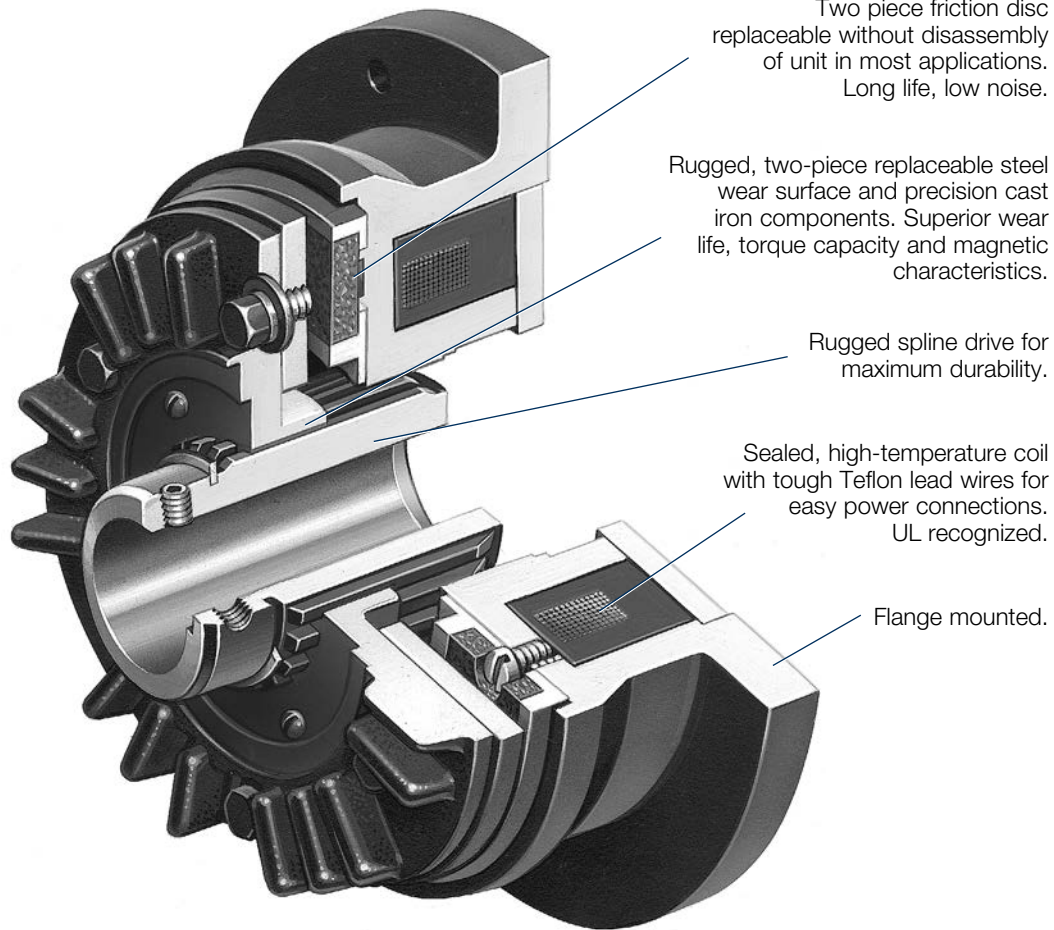
### Bore Sizes/Part Numbers

Size	Bore Size (Inch)	24 VDC		90 VDC	
		Clutch (ATTC)	Brake (ATTB)	Clutch (ATTC)	Brake (ATTB)
ATT-25	1/2"	5161-271-021	5191-6	5161-271-025	5191-10
	5/8"	5161-271-022	5191-7	5161-271-026	5191-11
	3/4"	5161-271-023	5191-8	5161-271-027	5191-12
	7/8"	5161-271-024	5191-9	5161-271-028	5191-13
ATT-55	3/4"	5162-271-021	5192-6	5162-271-025	5192-10
	7/8"	5162-271-022	5192-7	5162-271-026	5192-11
	1"	5162-271-023	5192-8	5162-271-027	5192-12
	1-1/8"	5162-271-024	5192-9	5162-271-028	5192-13
ATT-115	1-1/8"	5163-271-021	5193-6	5163-271-025	5193-10
	1-1/4"	5163-271-022	5193-7	5163-271-026	5193-11
	1-3/8"	5163-271-023	5193-8	5163-271-027	5193-12
	1-1/2"	5163-271-024	5193-9	5163-271-028	5193-13

# Electric Brakes and Clutches

## ATT Series – Advanced Technology Brakes and Clutches

### ATTB Brake

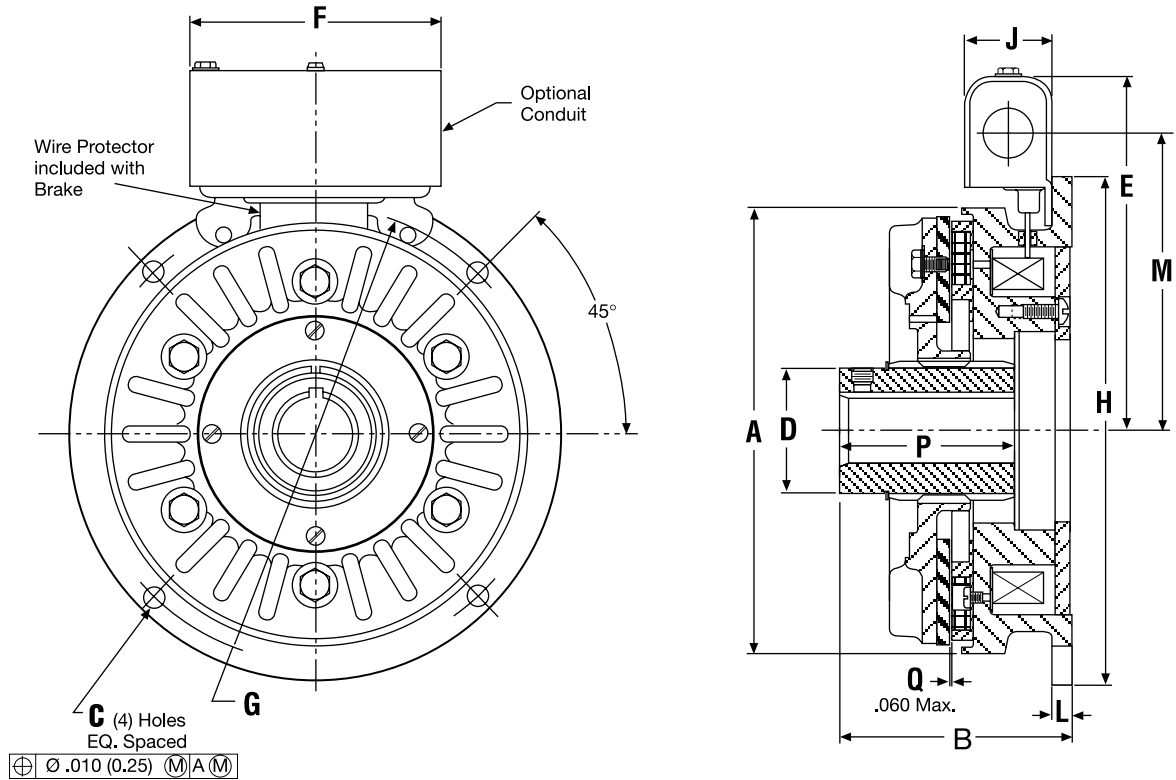


### Specifications

Unit	Model No.	Mechanical Data			Electrical Data		
		Total Weight (lbs.)	Max Speed (RPM)	Inertia $WR^2$ (lb.ft. <sup>2</sup> )	24 VDC		
					Resistance (ohms)	Current (amperes)	Power (watts)
	ATTB-25	7	3600	0.038	20.6	1.16	28.0
Brake	ATTB-55	15	3600	0.126	19.6	1.22	29.4
	ATTB-115	24	3600	0.383	16.5	1.46	34.9

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Customer shall maintain:

1. Squareness of brake mounting face with armature hub shaft within .006 T.I.R.
2. Concentricity of brake mounting pilot diameter with armature hub shaft within .010 T.I.R.

### Shaft Bore and Keyway Dimensions

Model	Unit Bore	Key
ATTB-25	.5025	1/8 Sq.
	.5005	
ATTB-25	.6275	3/16 Sq.
	.6255	
ATTB-25	.7525	3/16 Sq.
	.7505	
ATTB-25	.8775	3/16 Sq.
	.8755	
ATTB-55	1.0025	1/4 Sq.
	1.0005	
ATTB-55	1.1275	1/4 Sq.
	1.1255	
ATTB-115	1.2525	1/4 Sq.
	1.2505	
ATTB-115	1.7775	5/16 Sq.
	1.3755	
ATTB-115	1.5025	3/8 Sq.
	1.5005	

inches (mm)

Model	A		B		C	
	Max. Dia.	Max.	Max.	Min. Dia.		
ATTB-25	4.822 (122.48)	2.730 (69.34)		.264 (6.70)		
ATTB-55	6.271 (159.28)	3.010 (77.97)		.330 (8.38)		
ATTB-115	7.906 (200.81)	3.625 (92.18)		.330 (8.38)		

inches (mm)

Model	D		E		F		G		H		J		L		M		P	
	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.
ATTB-25	1.347 (34.21)	4.748 (120.60)	3.767 (95.68)	5.250 (133.35)	5.625/5.623 (142.87/142.82)	1.544 (39.22)	.225 (5.71)	3.586 (91.08)	2.080 (52.83)									
ATTB-55	1.770 (44.96)	5.37 (136.40)	3.767 (95.68)	6.875 (174.62)	7.375/7.373 (187.33/187.27)	1.544 (39.22)	.491 (12.47)	4.208 (106.88)	3.105 (78.87)									
ATTB-115	2.152 (54.66)	6.278 (159.46)	3.767 (95.68)	8.500 (215.90)	9.000/8.998 (228.60/228.55)	1.544 (39.22)	.463 (11.76)	5.116 (129.95)	3.105 (78.87)									

For replacement parts list and exploded view drawing, see page 72.

**Note:** All dimensions are nominal unless otherwise noted.

# Electric Brakes and Clutches

## ATT Series – Advanced Technology Brakes and Clutches

### ATTC Clutch

Rugged spline drive for maximum durability.

Sealed, high-temperature coil with tough Teflon lead wires for easy power connection.  
UL recognized.

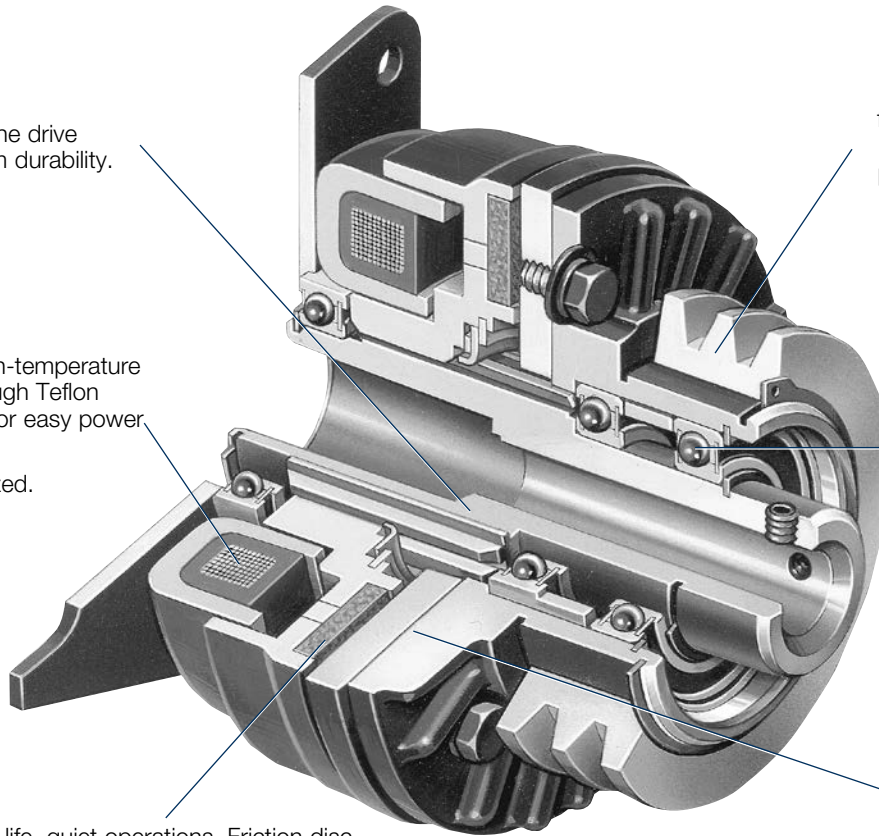
Long life, quiet operations. Friction disc replaceable without disassembly of unit in most applications.

Easily visible friction disc indicates when replacement is necessary.

Easy sheave mounting. Optional sheaves and pulleys available from Warner Electric. Many other industry-standard sheaves and pulleys adaptable through simple boring and key seating.

Sealed heavy-duty bearings with high-temperature lubricant maintain tight concentricities and running efficiency.

Rugged steel wear surface and precision cast iron components. Superior wear life, torque capacity and magnetic characteristics.



### Specifications

Model No.	Mechanical Data			Electrical Data		
	Total Weight (lbs.)	Max Speed (RPM)	Inertia $WR^2$ (lb.ft. <sup>2</sup> )	24 VDC		
				Resistance (ohms)	Current (amperes)	Power (watts)
ATTC-25	8	3600	0.048	20.6	1.16	28.0
ATTC-55	18	3600	0.173	19.6	1.22	29.4
ATTC-115	28	3600	0.483	16.5	1.46	34.9

### Dimensions

inches (mm)

Model	A Max. Dia.	B Max.	C Nom.	D Nom. Dia.	E Max.	F Max.	G Max.	H Max.	J Max Dia.	K Max.	L Max.	M Max.	T Nom.
ATTC-25	3.60 (91.44)	4.39 (111.51)	2.375 (60.33)	1.080 (27.43)	4.748 (120.60)	3.767 (95.68)	3.282 (83.36)	5.11 (129.79)	4.822 (122.49)	1.68 (42.67)	1.003/991 (25.48/25.17)	.715/.703 (18.16/17.86)	.375 (9.53)
ATTC-55	3.95 (100.33)	4.935 (125.35)	2.925 (74.30)	1.40 (35.56)	5.182 (131.62)	3.767 (95.68)	4.032 (102.41)	5.11 (129.79)	6.275 (159.39)	1.817 (46.15)	1.113/1.101 (28.27/27.97)	—	.375 (9.53)
ATTC-115	5.254 (133.45)	5.977 (151.82)	3.102 (78.79)	1.86 (47.24)	6.089 (154.66)	3.767 (95.68)	4.246 (107.85)	10.11 (256.79)	7.906 (200.81)	2.467 (62.66)	1.539/1.523 (39.09/38.68)	—	.375 (9.53)

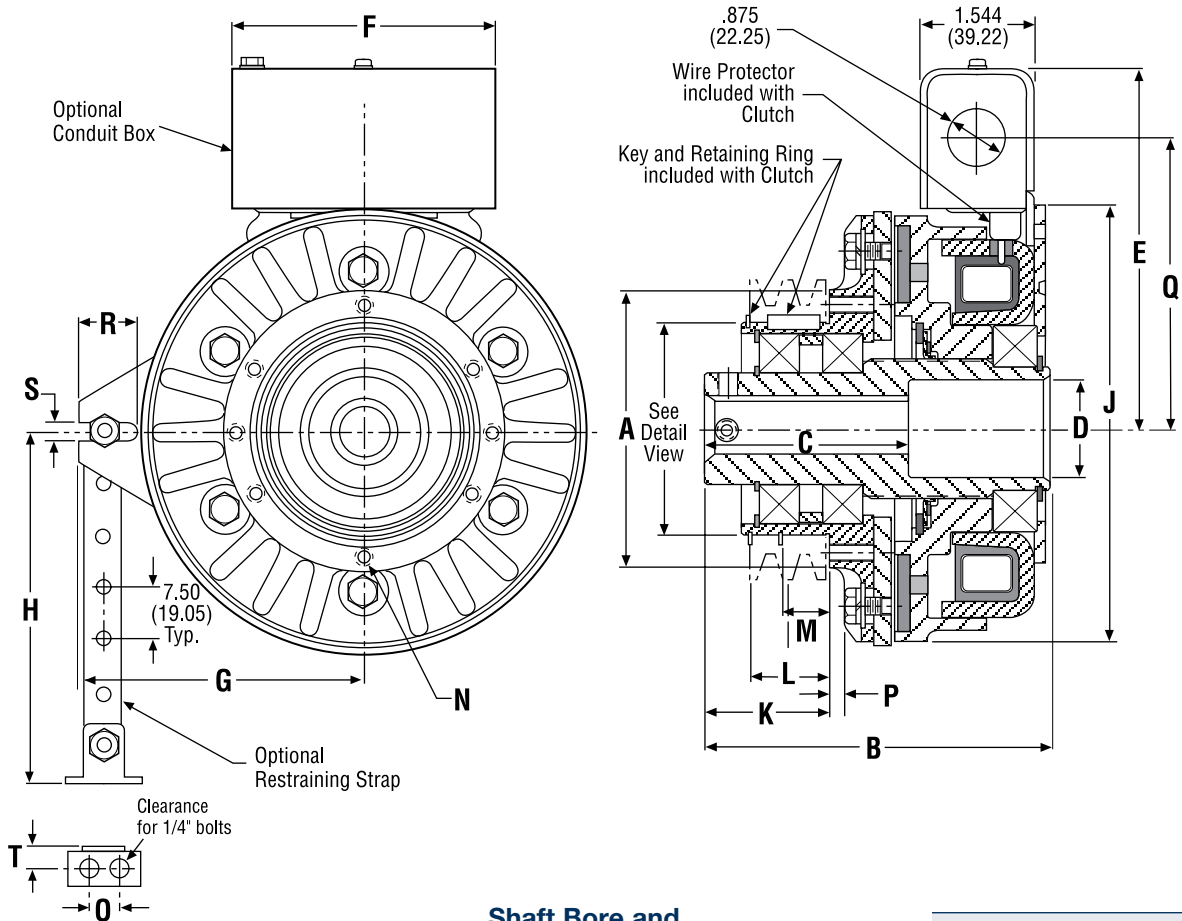
For replacement parts list and exploded view drawing, see page 73.

**Note:** All dimensions are nominal unless otherwise noted.

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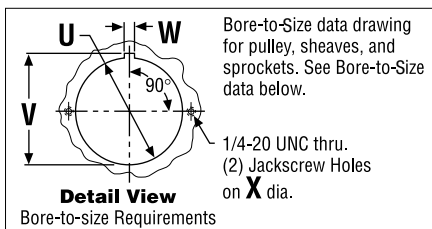
### Dimensions



### Shaft Bore and Keyway Dimensions

Model	Unit Bore	Key
ATTC-25	.5025 (12.76) .5005 (12.71)	1/8 Sq.
ATTC-25	.6275 (15.94) .6255 (15.89)	3/16 Sq.
ATTC-25	.7525 (19.11) .7505 (19.06)	3/16 Sq.
ATTC-25	.8775 (22.29) .8755 (22.24)	3/16 Sq.

Model	Unit Bore	Key
ATTC-55	1.0025 (25.46) 1.0005 (25.41)	1/4 Sq.
ATTC-55	1.1275 (28.64) 1.1255 (28.59)	1/4 Sq.
ATTC-115	1.2525 (31.71) 1.2505 (31.76)	1/4 Sq.
ACCT-115	1.3775 (34.99) 1.3755 (34.94)	5/16 Sq.
ATTC-115	1.5025 (38.16) 1.5005 (38.11)	3/8 Sq.



inches (mm)

Model	No. of Holes	N Thread Size	Max. Depth	Bolt Circle	O Nom.	Q Nom.	R Min.	S Min.
ATTC-25	3	1/4-20	.500	3.00	.500 (12.7)	3.586 (91.08)	.752 (19.08)	.279 (7.09)
ATTC-55	4	1/4-20	.635	3.50	.500 (12.7)	4.156 (105.56)	.722 (18.34)	.265 (6.73)
ATTC-115	4	5/16-18	.830	4.75	.500 (12.7)	4.927 (125.15)	.504 (12.80)	.265 (6.73)

### Bore-to-Size Data

U Bore Dia.	V Keyway Height	W Keyway Width	X Bolt Circle
2.502/2.500 (63.55/63.50)	2.601/2.591 (66.06/65.81)	.1905/.1885 (4.84/4.79)	3.00 (76.20)
3.002/3.000 (76.25/76.20)	3.099/3.089 (78.71/78.46)	.1905/.1885 (4.84/4.79)	3.50 (88.90)
4.002/4.000 (101.65/101.60)	4.127/4.117 (104.83/104.57)	.378/.376 (9.60/9.55)	4.50 (114.30)

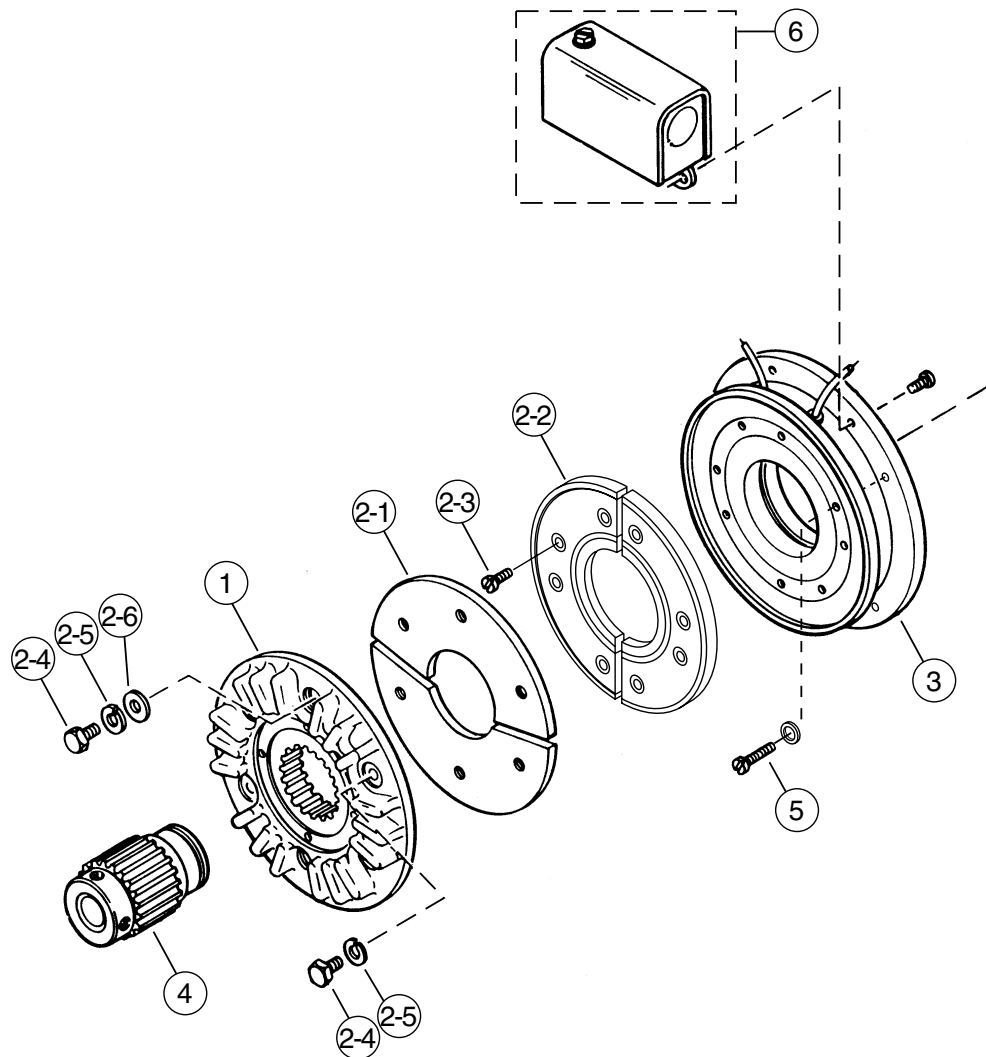
For replacement parts list and exploded view drawing, see page 73.

**Note:** All dimensions are nominal unless otherwise noted.

# Brake Assemblies and Part Numbers

## ATT Series – Advanced Technology Brakes

ATTB-25, ATTB-55, ATTB-115



### Brake Assemblies

Unit Size	Voltage	Part No.
ATTB-25-1/2	24	5191-6
ATTB-25-1/2	90	5191-10
ATTB-25-5/8	24	5191-7
ATTB-25-5/8	90	5191-11
ATTB-25-3/4	24	5191-8
ATTB-25-3/4	90	5191-12
ATTB-25-7/8	24	5191-9
ATTB-25-7/8	90	5191-13
ATTB-55-3/4	24	5192-6
ATTB-55-3/4	90	5192-10
ATTB-55-7/8	24	5192-7
ATTB-55-7/8	90	5192-11
ATTB-55-1	24	5192-8
ATTB-55-1	90	5192-12
ATTB-55-1-1/8	24	5192-9
ATTB-55-1-1/8	90	5192-13
ATTB-115-1-1/8	24	5193-6
ATTB-115-1-1/8	90	5193-10
ATTB-115-1-1/4	24	5193-7
ATTB-115-1-1/4	90	5193-11
ATTB-115-1-3/8	24	5193-8
ATTB-115-1-3/8	90	5193-12
ATTB-115-1-1/2	24	5193-9
ATTB-115-1-1/2	90	5193-13

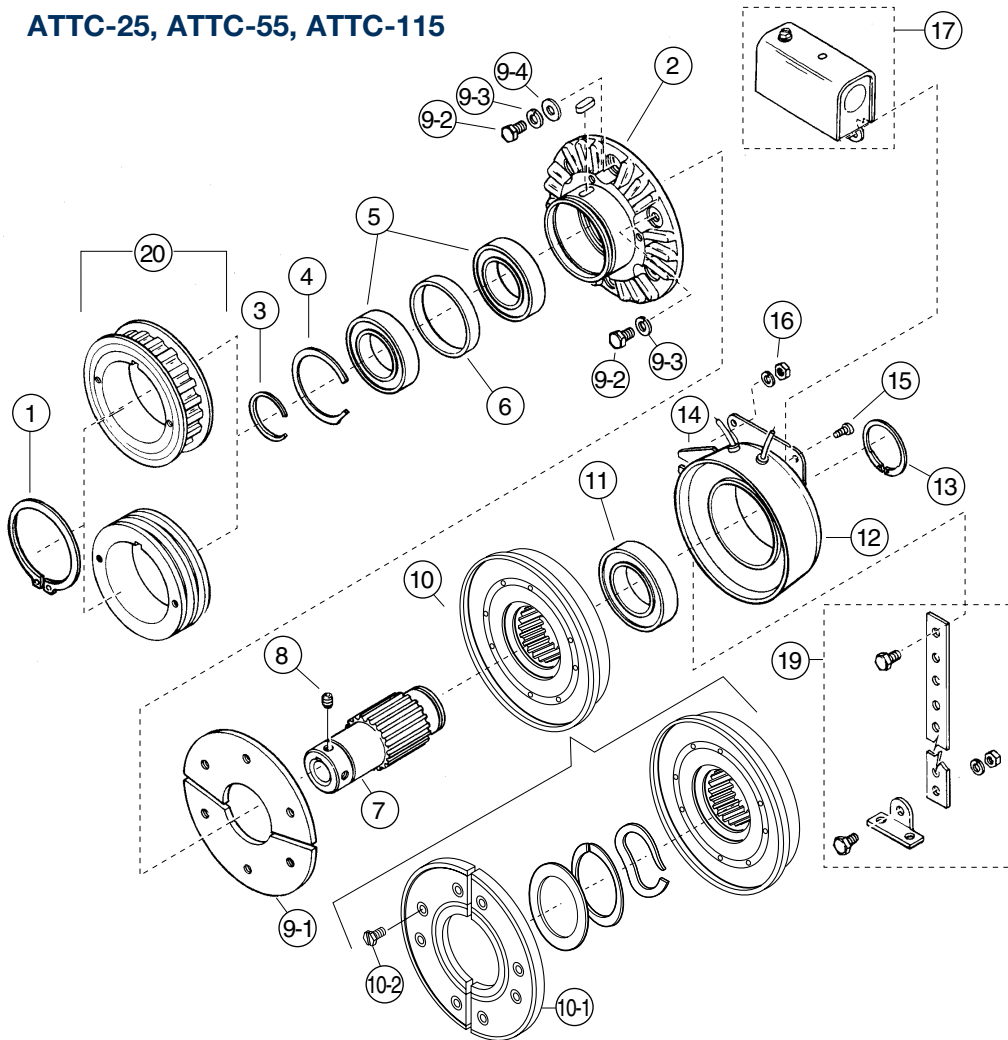
### Part Numbers

Item No.	Description	ATTB-25		ATTB-55		ATTB-115		Item No.	Description	ATTB-25		ATTB-55		ATTB-115		
		Qty.	Part No.	Qty.	Part No.	Qty.	Part No.			Qty.	Part No.	Qty.	Part No.	Qty.	Part No.	
1	Armature Hub	1	540-0908	1	540-0851	1	540-0864		7/8" Bore	-	5191-541-005	-	5192-541-003	-	-	
2-1	Armature	1	110-0220	1	110-0218	1	110-0223		1" Bore	-	-	-	5192-541-004	-	-	
2-2	Facing Assem.	1	5191-445-003	1	5192-445-003	1	5193-445-003		1-1/8" Bore	-	-	-	5192-541-005	-	5193-541-002	
2-3	Screw	6	797-1389	8	797-1389	8	797-1389		1-1/4" Bore	-	-	-	-	-	5193-541-003	
2-4	Screw	4	797-1020	6	797-1387	6	797-1174		1-3/8" Bore	-	-	-	-	-	5193-541-004	
2-5	Lockwasher	-	-	6	950-0355	6	950-0355		1-1/2" Bore	-	-	-	-	-	5193-541-005	
2-6	Flatwasher	-	-	2	950-0023	2	950-0023		5	Mtg. Acc'y.	1	5191-101-007	1	5192-101-007	1	5192-101-007
3	Magnet Assem.	1	-	1	-	1	-		Optional Accessory Items							
	24 Volts D.C.	-	5191-631-007	-	5192-631-007	-	5193-631-014		6	Conduit Box	1	5162-101-002	1	5162-101-002	1	5162-101-002
	90 Volts D.C.	-	5191-631-008	-	5192-631-008	-	5193-631-015		Kit Items							
4	Splined Hub	1	-	1	-	1	-		7	Friction Face						
	1/2" Bore	-	5191-541-002	-	-	-	-		Replacement Kit	1	5161-101-008	1	5162-101-008	1	5163-101-008	
	5/8" Bore	-	5191-541-003	-	-	-	-		(includes items 2-1, 2-2, 2-3, 2-4, 2-5, 2-6)							
	3/4" Bore	-	5191-541-004	-	5192-541-002	-	-									

# Brake Assemblies and Part Numbers

## ATT Series – Advanced Technology Clutches

### ATTC-25, ATTC-55, ATTC-115



### Clutch Assemblies

Unit Size	Voltage	Part No.
ATTC-25-1/2	24	5161-271-021
ATTC-25-1/2	90	5161-271-025
ATTC-25-5/8	24	5161-271-022
ATTC-25-5/8	90	5161-271-026
ATTC-25-3/4	24	5161-271-023
ATTC-25-3/4	90	5161-271-027
ATTC-25-7/8	24	5161-271-024
ATTC-25-7/8	90	5161-271-028
ATTC-55-3/4	24	5162-271-021
ATTC-55-3/4	90	5162-271-025
ATTC-55-7/8	24	5162-271-022
ATTC-55-7/8	90	5162-271-026
ATTC-55-1	24	5162-271-023
ATTC-55-1	90	5162-271-027
ATTC-55-1-1/8	24	5162-271-024
ATTC-55-1-1/8	90	5162-271-028
ATTC-115-1-1/8	24	5163-271-021
ATTC-115-1-1/8	90	5163-271-025
ATTC-115-1-1/4	24	5163-271-022
ATTC-115-1-1/4	90	5163-271-026
ATTC-115-1-3/8	24	5163-271-023
ATTC-115-1-3/8	90	5163-271-027
ATTC-115-1-1/2	24	5163-271-024
ATTC-115-1-1/2	90	5163-271-028

### Part Numbers

Item No.	Description	ATTC-25 Qty.	ATTC-25 Part No.	ATTC-55 Qty.	ATTC-55 Part No.	ATTC-115 Qty.	ATTC-115 Part No.	Item No.	Description	ATTC-25 Qty.	ATTC-25 Part No.	ATTC-55 Qty.	ATTC-55 Part No.	ATTC-115 Qty.	ATTC-115 Part No.
1	Retaining Ring	1	748-0734	1	748-0725	1	748-0738	*10-1	Bearing	1	5191-445-003	1	5192-445-003	1	5193-445-003
2	Armature Hub	1	540-0907	1	540-0852	1	540-0863	*10-2	Field Assembly	6	797-1389	8	797-1389	8	797-1389
3	Retaining Ring	1	748-0732	1	748-0726	1	748-0737	*11	90 Volts D.C.	1	5161-451-003	1	5162-451-003	1	5163-451-003
4	Retaining Ring	1	748-0731	1	748-0728	1	748-0736	24 Volts D.C.	1	5161-451-004	1	5162-451-004	1	5163-451-004	
5	Bearing	2	166-0278	2	166-0277	2	166-0279	*13	Retaining Ring	1	748-0018	1	748-0727	1	748-0737
6	Spacer	1	807-0119	1	807-1061	1	807-1063	14	Adapter	-	-	-	-	2	104-0300
7	Splined Hub	1	-	1	-	1	-	15	Screw	-	-	-	-	4	797-1396
	1/2" Bore	-	540-0910	-	-	-	-	16	Lockwasher	-	-	-	-	4	950-0102
	5/8" Bore	-	540-0911	-	-	-	-	<b>Optional Accessory Items</b>							
	3/4" Bore	-	540-0912	-	540-1501	-	-	17	Conduit Box	1	5162-101-002	1	5162-101-002	1	5162-101-002
	7/8" Bore	-	540-0913	-	540-1502	-	-	19	Restraining Arm	-	-	-	-	-	-
	1" Bore	-	-	-	540-1503	-	-	Assembly	1	5162-101-004	1	5162-101-004	1	5162-101-004	
	1-1/8" Bore	-	-	-	540-1504	-	540-0857	20	Timing Belt and V Belt Pulleys: Consult Factory.	-	-	-	-	-	-
	1-1/4" Bore	-	-	-	-	-	540-0858	<b>Kit Items</b>							
	1-3/8" Bore	-	-	-	-	-	540-0859	*	Clutch Rebuild Kit	1	5161-101-012	1	5162-101-012	1	5163-101-012
	1-1/2" Bore	-	-	-	-	-	540-0860		(includes items 9-1, 9-2, 9-3, 9-4, 10, 11, 13)						
8	Setscrew	2	797-1393	2	797-1386	2	797-1395	†	Friction Service Kit	1	5161-101-008	1	5162-101-008	1	5163-101-008
*9-1	Armature	1	110-0220	1	110-0218	1	110-0223	<b>Note:</b>	In some versions of this product, item 10 consists of a rotor and a replaceable face.						
*9-2	Screw	4	797-1519	6	797-1462	6	797-1463								
*9-3	Lockwasher	-	-	6	950-0355	6	950-0355								
*9-4	Flatwasher	-	-	2	950-0023	2	950-0023								
*10	Rotor	1	5161-751-002	1	5162-751-002	1	5163-751-002								