65 SERIES—HEAVY-DUTY SWING DRIVE

nput	Input
Nount	Spline
SAE "A" (2 & modified 4 bolt)	13T16/32DPSpline
SAE "B" (2 bolt)	SAE1"-6BSpline
SAE "C" (2 & 4 bolt)	14T12/24DPSpline
	15T16/32DPSpline
	•

Output Shafts	
23T12/24DPSpline	
2.00 Dia. X 3/8 key	
2.00 Dia. X 1/2 key	
2.25 Dia. X 1/2 key	
3.00 X 3/4 key	
Customoption	

65,000 in-lb. maximum intermittent 32,000 in-lb. maximum continuous contact factory peak load rating maximum radial load (note 2)

maximum intermittent

maximum continuous

maximum radial load (note 2)

t	Spline	23T12/24DPSpline
A" (2 & modified 4 bolt)	13T16/32DPSpline	2.00 Dia. X 3/8 key
B" (2 bolt)	SAE1"-6BSpline	2.00 Dia. X 1/2 key
C" (2 & 4 bolt)	14T12/24 DP Spline	2.25 Dia. X 1/2 key
	15T16/32DPSpline	3.00 X 3/4 key
	·	Custom option
1000		

	D	imensional Ref	eren	ce Table			
Model	Mounting Bolt Pattern	Flange	Α	В	С	D*	Е
65E	4Holes, 5.00 X 10.00	Rectangular	11	10	6	6.78-7.16	1
	*Single sta	age. Add 1.36 for	each	nadditional st	age.		

Gear Ratios 4, 6, 19, 26, 33, 36, 45, 86, 117, 146, 159, 199, 216, 270

50 SERIES — INDUSTRIAL DRIVE

Input	Input
Mount	Spline
SAE "A" (2 & modified 4 bolt)	13T16/32DPSpline
SAE "B" (2 bolt)	SAE1"-6BSpline
SAE "C" (4bolt)	14T12/24DPSpline(3)
SAE"C" (2bolt)	15T16/32DPSpline
, ,	1.00 Dia x 1/4 Key (3)

Spline
13T16/32DPSpline
SAE1"-6BSpline
14T12/24DPSpline(3)
15T16/32DPSpline
1.00 Dia x 1/4 Key (3)



Output Shafts
2.00 Dia. X 3/8 key
23T12/24DPSpline
2.125 Dia X 1/2 key
2.00 Dia. X 1/2 key
2.00 Hex Drive
2.00 Dia. X 1/2 key (internal)
2.25 Dia. X 1/2 key (LG50 only)
16T8/16DPSpline (50LGonly)
17T12/24 DP Spline (50) Gonly)

Output Shafts
2.00 Dia. X 3/8 key
23T12/24DPSpline
2.125 Dia X 1/2 key
2.00 Dia. X 1/2 key
2.00 Hex Drive
2.00 Dia. X 1/2 key (internal)
2.25 Dia. X 1/2 key (LG50 only)
16T8/16DPSpline (50LGonly)
17T12/24 DP Soline (501 Gonly)

	Dir	nensional Ref	erence 1	able			
Model	Mounting Bolt Pattern	Flange	Α	В	С	D	E
50KA	4Holes, 9.50 Dia. BC	Round	11.00	825	7.88	5.4*	1.87
50KE	4Holes, 5.00 X 10.00	Rectangular	11.00	825	6.00	6.28*	1.00
50KF	6X3/4-10 on 6.00 BC	Flangeless	N/A	8.25	5.00	6.96*	1.19
50LG	4Holes, 6.375BC	SAEC4bolt	8.25	8.25	5.00	8.20*	0.50
50KQ	4Holes, 9.50 Dia. BC	Round	11.00	825	7.88	5.4*	1.87
	* Single star	ne Add 1 20 for	each ad	ditional sta	ide		

25.000 in-lb.

contact factory peak load rating

Gear Ratios 4,5,16,20,25,68,84,104,129

20/28 SERIES — HEAVY-DUTY SWING DRIVE

Input	Input
Mount	Spline
SAE "A" (2 & modified 4 bolt)	13T16/32DPSpline
SAE "B" (2 bolt)	SAE 1"-6B Spline
,	14T12/24DPSpline(3)
	15T16/32DPSpline
	1.00 Diax 1/4 Key (3)

nput	Input
/lount	Spline
SAE "A" (2 & modified 4 bolt)	13T16/32DPSpline
SAE "B" (2 bolt)	SAE 1"-6B Spline
,	14T12/24 DP Spline (3)
	15T16/32DPSpline
	1.00 Dia x 1/4 Key (3)

Output Shafts	Output Shafts
20B/28B (Male)	20P/28P (Female
2.00 Dia. X 3/8 key	1.50 Dia. X 3/8 ke
2.00 Dia. X 1/2 key	2.00 Dia. X 1/2 key
2.25 Dia X 1/2 key	Custom option
23T12/24DPSpline	
Custom option '	

	20001103	
	25,000 in-lb.	m
	12,000 in-lb.	m
Shafts	contact factory	ре
P(Female) LX3/8 key	23,000 lb.	m
. X 1/2 key	28 Series	
option	50,000 in-lb.	m
	25,000 in-lb.	m
	contact factory	pe

	25,000 li HD.	maximummuermilleni
	12,000 in-lb.	maximum continuous
	contact factory	peakload
	23.000 lb.	maximum radial load (note:
,	28 Series	()
	50,000 in-lb.	maximum intermittent
	25,000 in-lb.	maximum continuous
	contact factory	peakload
	23.000lb.	maximum radial load (note:

Dimensional Reference Table							
Model	Mounting Bolt Pattern	Shaft	Α	В	С	D	Е
20B	9 Holes, 9.00 Dia. BC	Male	7.88Sq	7.88	4.63	4.23*	1.5
28B	4Holes, 9.00 Dia. BC	Male	7.88Sq	7.88	4.63	5.18*	1.5
20P	4 Holes, 9.00 Dia. BC	Female	7.88Sq	7.88	6.00	4.23*	1.5
28P	9 Holes, 9.00 Dia. BC	Female	7.88Sq	7.88	6.00	5.18*	1.5
	* Single sta	ge. Add 1.29	for each add	itional sta	age.		

Gear Ratios 4,5,16,20,25,68,84,104,129

Other Eskridge Products...

Multiple Disc Brakes

	•		, ,	
		Torque Rating		Torque R
		(In-Lbs.)		(Fi
90B	SAE "B" Output	1,000-4,800	D50 Series	
90BA	SAE "B" Output (Adjustable)	700-4,800	76 Series 2-Speed gear drive, mechanical shift	1
92B	SAE "B" (Low Profile)	800-2,100	77 Series Single Speed	1
3 3	for Thru-Shaft Motors	1,650-6,200	78 Series Hydrasync®Two-Speed	1
95C	SAE"C"Output	3,500-16,000	75 Series Hydrasync®Two-Speed	2
95W	(Wheel Brake)	8,000-16,000	79 Series 2-Speed gear drive, PowerShift™	1
98D	SAE "D" Output	8,500-25,000	D600 High Performance	5
			D1000 High Performance	8

Planetary Life Analysis

Eskridge has developed a proprietary computer model that can be used to analyze a variety of conditions and estimate the composite geardrive life based on your input parameters. See www.eskridgeinc.com or your Eskridge distributor for more details on analyzing your conditions.



Learn more about all the fine products Eskridge has to offer. To get all the technical details on our planetary geardrive & multiple disc brakes, tour our website, www.eskridgeinc.com or

request our electronic catalog (CD format). Remember, Eskridge is committed to meeting the needs of your company's specific applications!

Here are a few examples of applications where we have helped ourcustomers:

Severe Service Conditions

A leading rock crusher manufacturer began developing improvements to cone crushers. They wanted to allow adjustments to the size of the aggregate material produced without interrupting production. They relied upon Eskridge to solve problems experienced on early prototypes. In this application, our planetary geardrives were used to adjust the distance between the rock crushing cones, thus creating an "adjust on the fly" capability. Special considerations included heavy vibrations & impact loads as well as a highly abrasive operating environment. Eskridge can solve you severe service problems, too.

Planetary Auger/Anchor Drives

	1 1011 10 1011 1 1 1 1 1 1 1 1 1 1 1 1	
J		Torque Rating
)		(Ft-Lbs.)
)	D50 Series	5,000
)	76 Series 2-Speed gear drive, mechanical shift	12,000
)	77 Series Single Speed	12,000
)	78 Series Hydrasync®Two-Speed	12,000
)	75 Series Hydrasync®Two-Speed	20,000
)	79 Series 2-Speed gear drive, PowerShift™	12,000
)	D600 High Performance	50,000
	D1000 High Performance	83,000

Unique output shaft requirements

Offloading live bed trucks is not only a demanding application, but also one where innovation in design was used to reduce cost and improve quality. We worked closely with one of our customers to extend the output shaft, allowing it to span the width of the belt. This eliminated several components and alignment problems.

Backdriving – (demolition shears)

On demolition shears mounted to excavators, steel and concrete is gripped, then sheared when hydraulic pressure is applied. In this application, as the shearing action takes place, forces reposition the motor and geardrive that is used to rotate the shear. This back driving action can destroy components if not properly addressed. Eskridge has the experience to assist in resolving these types of backdriving problems.

Backdriving – (swing drives)

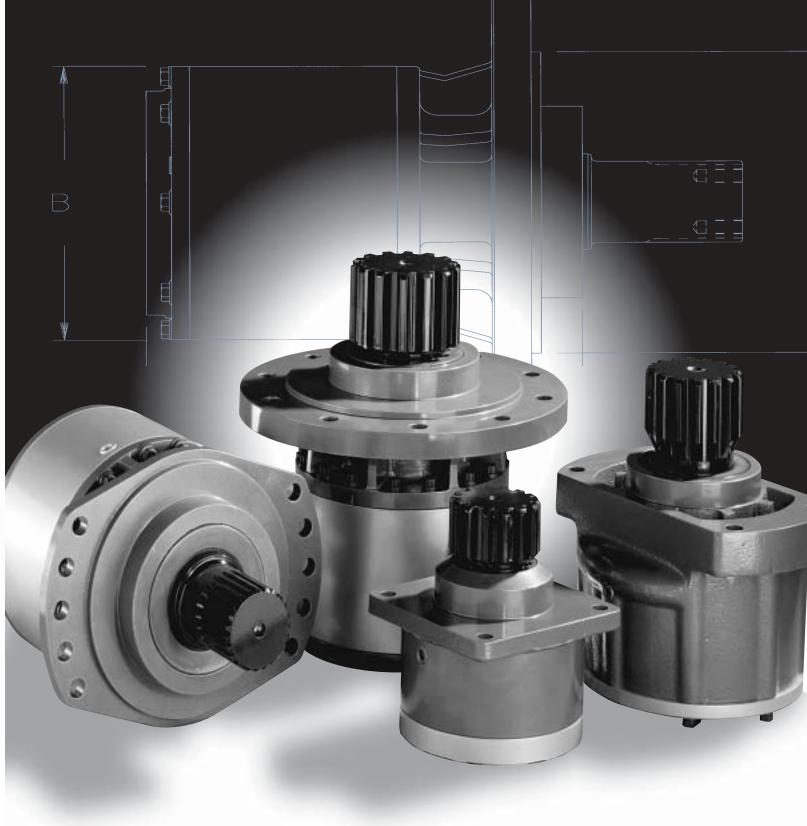
Planetary geardrives are commonly used to provide efficient power transmission for boom rotations. When decelerating the load, unexpected loads can be experienced due to backdriving. Eskridge has the experience to assist in review of hydraulic system design to avoid problems commonly encountered in this application.



For more information regarding planetary drives and other innovative products feel free to contact us at:

1900 KANSAS CITY ROAD • OLATHE, KANSAS 66061 • USA PHONE: (913) 782-1238 • FAX: (913) 782-4206 WEBSITE: www.eskridgeinc.com E-MAIL: sales@eskridgeinc.com









Over 30 Years of Knowledge, Experience and Service

Eskridge provides more than a wide range of quality planetary geardrives, we provide solutions. We know that every application is different, but chances are, in our 30 years in the industry, we have worked on systems similar to yours. With this experience, we will help you find reliable and economic solutions to suit your needs.

Flexible, High Power Density Design

Eskridge planetary geardrives offer a high power density package providing compact, economical, easy to apply configurations.

Custom Options

A wide variety of integral pinions are available to meet your needs. We can accommodate most user defined output shaft or custom mounting requirements.

High Efficiency

Actual driving efficiencies are as high as 94% for double stage planetaries. Back-driving efficiency is 90%. These characteristics allow the use of smaller motors resulting in less energy lost to heat and a more efficient package.

Precision Boom Positioning/Improved Safety

Eskridge geardrives are manufactured with low backlash (10-30 arc minutes for a two stage planetary). This provides precision positioning capability for demanding applications. In addition, Eskridge provides many configurations of integral pinions and eccentric mounting pilots on the gearbox mounting

face. This allows easy setting of a minimum amount of backlash between the pinion and the rotation bearing, further improving the ability to position booms with precision control. These features combine to reduce overall system backlash and

Superior Shaft Retention

improved safe operation.

The patented Load-N-Lock® shaft retention device provides reliable shaft retention well beyond the load capabilities of more conventional methods such as snap rings or clamp nuts. This shaft retention method is exclusively available on many Eskridge products.

High Ratio Capabilities

Modular design allows "piggybacking" planetary stages to achieve ratios as high as 69,000:1.

600 Series

600/1000 SERIES — INDUSTRIAL DRIVE

Input	Input
Mount	Spline
SAE "C" (2 & 4 bolt)*	14T12/24DPSpline
SAE "D" (4 bolt)	17T 12/24 DP Spline (limited ratios)
SAE "E" (not available on wheel drive)	16T8/16 DP Spline (limited ratios)
	13T8/16 DP Spline **
	15T 8/16 DP Spline (limited ratios)**
* 4 bolt N/A on wheeldrive	** Not available on wheel drives

Output
Spindle
12.75 Pilot, 15.00 BC
Customoption

600.000 in-lb. 58,000 lb.

maximum intermittent 300,000 in-lb. maximum continuous contact factory peak load rating maximum radiăl load) (note 2) 1000 Series 1,000,000 in-lb. maximum intermittent 500,000 in-lb. maximum continuous contact factory peak load rating 58,000 lb. maximum radial load (note 2)

Dimen	sional Ref	erence Table	
Pattern	Flange	Α	В

Model	Output	iviounting Boit Pattern	riange	Α	В	C	ט	
600A	Shaft	20 Holes, 25.50 BC	Round	27.50	23.25	19.00	15.79	7.57
600F	Shaft	20 Holes, 21.90"BC	Flangeless	23.65	23.25	19.00	15.79	7.57
1000A	Shaft	20 Holes, 25.50 BC	Round	27.50	23.25	19.00	15.79	7.57
1000F	Shaft	20 Holes, 21.90"BC	Flangeless	23.65	23.25	19.00	15.79	7.57
600LAW1C	Wheel	20 Holes, 25.50 BC	Round	27.50	23.25	19.00	15.35	n/a
600LAW1D	Wheel	20 Holes, 25.50 BC	Round	27.50	23.25	19.00	15.35	n/a
600LFW1C	Wheel	20 Holes, 21.90" BC	Flangeless	23.65	23.25	19.00	15.35	n/a
600LFW1D	Wheel	20 Holes, 21.90" BC	Flangeless	23.65	23.25	19.00	15.35	n/a
1000LAW1C	Wheel	20 Holes, 25.50 BC	Round	27.50	23.25	19.00	15.35	n/a
1000LAW1D	Wheel	20 Holes, 25.50 BC	Round	27.50	23.25	19.00	15.35	n/a
1000LFW1C	Wheel	20 Holes, 21.90" BC	Flangeless	23.65	23.25	19.00	15.35	n/a
1000LFW1D	Wheel	20 Holes, 21.90" BC	Flangeless	23.65	23.25	19.00	15.35	n/a
600LAS1	Spindle	20 Holes, 25.50 BC	Round	27.50	23.25	19.00	15.79	n/a
600LFS1	Spindle	20 Holes, 21.90 BC	Flangeless	23.65	23.25	19.00	15.79	n/a
1000LAS1	Spindle	20 Holes, 25.50 BC	Round	27.50	23.25	19.00	15.79	n/a
1000LFS1	Spindle	20 Holes, 21.90 BC	Flangeless	23.65	23.25	19.00	15.79	n/a

Gear	Ratios (Shaft & Spindle Output)
600	25, 39, 60, 70, 89, 110, 140
1000	26,41,76,96

Gear Ratios (Wheel Drive)

Frame Mount Wheel

250 Series

1) All dimensions in inches. (1) Audit let also is limit let.
 (2) See bearing curve in Electronic Catalog or on website for more infromation.
 (3) Not available for ratios of 5, 25, 129

250/252 SERIES — INDUSTRIAL DRIVE

nput	Input
Vlount	Spline
SAE "A" (2 & modified 4 bolt)	14T12/24DPSpline
SAE "B" (2 & 4bolt)	13T8/16DPSpline
SAE "C" (2 & 4 bolt)	17T 12/24 DP Spline (20 & 26:1 only)
SAE "D" (4 bolt)	13T 16/32 DP Spline (only w/adapter)
· ,	1"-6B

Output Shafts 20T6/12DPSpline 3.75 Dia X 1.00 key Spindle 9.00 Pilot, 10.50 BC

250.000 in-lb. maximum intermittent maximum continuous 125,000 in-lb. contact factory peak load rating 36.000lb. maximum radial load (note 2) 252 Series 250.000 in-lb. maximum intermittent 125,000 in-lb. maximum continuous contact factory peak load rating maximum radial load (note 2)

Dimensional Reference Table							
/lodel	Mounting Bolt Pattern	Flange	Α	В	С	D	Е
250A	20 Holes, 16.00 BC	Round	17.50	13.25	13.00	11.17-11.60	2.94
50F	20 Holes, 13.625 BC	Flangeless	14.75	13.25	12.50	11.17-11.61	2.94
252A	20 Holes, 16.00 BC	Round	17.50	13.25	13.00	13.71 - 14.14	2.94
52F	20 Holes, 13.625 BC	Flangeless	14.75	13.25	12.50	13.71 - 14.14	2.94
250LAS	20 Holes, 16.00 BC	Round	17.50	13.25	13.00	11.17-11.64	2.94
50LFS	20 Holes, 13.625 BC	Round	14.75	13.25	12.50	11.17-11.65	2.94
252LAS	20 Holes, 16.00 BC	Round	17.50	13.25	13.00	13.71 - 14.14	2.94
52LFS	20 Holes, 13.635 BC	Round	14.75	13.25	12.50	13.71 - 14.14	2.94

Gear Ratios 20, 26, 30, 38, 40, 51

150 SERIES — INDUSTRIAL DRIVE

Input	Input
Mount	Spline
SAE "A" (2 & modified 4 bolt)	13T16/32DPSpline
SAE "B" (2 bolt)	SAE 1"-6B Spline
SAE "C" (4 bolt)	14T12/24 DP Spline
4 bolt "A" Danfoss	·

20T6/12 DP spline

150.000 in-lb. maximum intermittent maximum continuous contact factory peak load rating maximum radial load (note 2)

Ounting Bolt Pattern Flange A B C D* E
DHoles, 16.00 BC Round 17.50 13.00 13.00 10.03 -10.98 294
*2-speed height 11.1" available with 2-bolt "C" mount only.

132L SERIES — INDUSTRIAL DRIVE

Input	Input
Mount	Spline
SAE "A" (2 & modified 4 bolt)	13T16/32DPSpline
SAE "B" (2 bolt)	SAE 1"-6B Spline
SAE "C" (2 & 4 bolt)	14T12/24DPSpline
SAE "D" (4bolt) (4 & 6:1 ratios only)	15T16/32DPSpline
	17T 12/24 DP Spline (4 & 6:1 ratios only) (C cover only)
	13T8/16 DP Spline (4 & 6:1 ratios only) (D cover only)

130.000 in-lb. maximum intermittent 65.000 in-lb. maximum continuous contact factory peak load rating Output Spindle 7.00 Pilot Dia., 9.5 BC 46,000 lb. maximum radial load (note 2) Load-N-Lock® shaft retention standard on all models



Flance A B 13ZLA 10Holes.81 Dia.on13.91"BC Round 15.50 10.13 11.00 10.68-12.18 1.40 13ZLAS 11Holes.81 Dia.on13.91"BC Round 15.50 10.13 11.00 10.28-12.83 1.40 13ZLB 4 Holes.81 Dia.on13.00"BC Square 10.75 10.13 7.00 10.33-11.83 1.75 13ZLF 10 Holes 69 Dia. (see drawing) Rectangular 13.19 10.13 8.82 10.68-12.18 1.41 13ZLF 8 Holes 5/8-11 on 9.50 BC Flangeless 10.25 10.13 8.00 10.28-12.83 200 13ZLQ 10 Holes 81 Dia. on 13.91 BC Round 15.50 10.13 11.00 10.68-12.18 1.40 Custom 10 * Add 1.64 for triple stage.

130,000 in-lb.

65.000 in-lb.

30.000 in-lb.

maximum intermittent

maximum continuous

maximum continuous

maximum radial load (note 2)

maximum radiăl load (note 2)

Gear Ratios 4, 6, 19, 26, 33, 36, 45, 86, 117, 146, 159, 199, 216, 270

130L SERIES — INDUSTRIAL DRIVE

			contact factory	peak load rating
	Input	OutputShafts	46.000 lb.	maximum radial load (no
nt	Spline	23T8/16 Spline (medium)	-,	`
"A" (2 & modified 4 bolt)	13T16/32DPSpline	3.00 Dia. X 5/8 key	Load-N-Lock®s	shaft retention standard
"B" (2 bolt)	SAE 1"-6B Spline	23T8/16 Spline (short)	on all models	
"C" (2 & 4 bolt)	14T12/24 DP Spline	23T8/16 Spline (long)	or rain nodolo	
"D" (4 bolt) (4 & 6:1 ratios only)	15T16/32DPSpline	3.50 Dia X 7/8 key		
• • • • • • • • • • • • • • • • • • • •	17T 12/24 DP Spline (4 & 6:1 ratios only) (C cover only)	Custom option		
	13T8/16 DP Spline (4 & 6:1 ratios only) (Dicover only)			

Dimensional Reference Table

 4 Holes .81 Dia on 13.00 BC
 Square
 10.75
 10.13
 7.00

 10 Holes .69 Dia. (see drawing)
 Redrangular
 13.19
 10.13
 8.82

 8 Holes 5/8-11 on 9.50 BC
 Flangeless
 10.25
 10.13
 8.00

 10 Holes .81 Dia. on 13.91 BC
 Round
 15.50
 10.13
 11.00

 130LB 4 Holes .81 Dia on 13.00 BC Square
130LE 10 Holes .69 Dia . (see drawing) Rectangul 10.13 **Gear Ratios** 4, 6, 19, 26, 33, 36, 45, 86, 117, 146, 159, 199, 216, 270, 338

100 SERI	ES—HEAVY-DUT	TY SWING DRIVE
Input	Input	Output Shafts
Mount	Spline	23T 12/24 DPS
SAE "A" (2 & modified 4 bolt)	13T16/32DPSpline	3.00 Dia X 5/8 k
SAE "B" (2 bolt)	SAE 1"-6B Spline	Custom option
SAE "C" (2 & 4 bolt)	14T12/24 DP Spline	•

	Output Shafts 23T 12/24 DP Spline	contact factory 28,000 lb.	peak load rating maximum radial lo		
е	3.00 Dia X 5/8 key				
	Custom option 5				
е					
۵					

131 10/32 DI OPILIC								
The sale								
		Dimensional Reference Table						
The state of the s	Model	Mounting Bolt Pattern	Flange	Α	В	С	D	E
	4000	4111 5001/4000	D 1	40.70	40.00	0.00	0.70 7.40*	4.00

4Holes, 5.00 X 10.00 Redangular 12.70 10.00 6.00 6.78 - 7.16* 1.00 * Single stage. Add 1.36 for each additional stage.

Gear Ratios 19, 26, 33, 36, 45, 86, 117, 159, 216