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NBPG Ningbo Planetary gearbox

Model 6 Series, Wheel drives----technical specification (Long flange distance version)

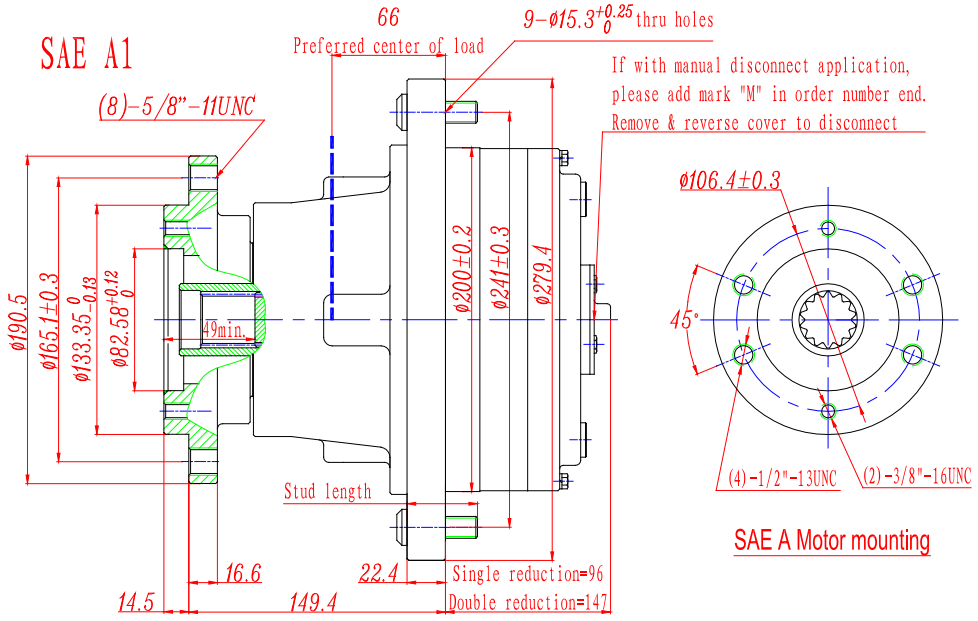
output torque (N.m)		Ratio (i)		Recommend Hydraulic Motor pilot/hubs and input spline	Max. input speed (rpm)	Brake torque (N.m)	Brake work pressure (bar)
normal	Max. Intermittent						
3400	7000	2.62, 3.24, 4.23	Single reduction	SAE A，B motor pilot/hubs 13T - 16/32 Spline 15T - 16/32 Spline 1" - 6B Spline 14T - 12/24 Spline	3500	440	22-50
		12.96, 15.78	Double reduction			330	27-50
		20.71, 24.41				260	22-50
		26.26, 30.38				160	17-50

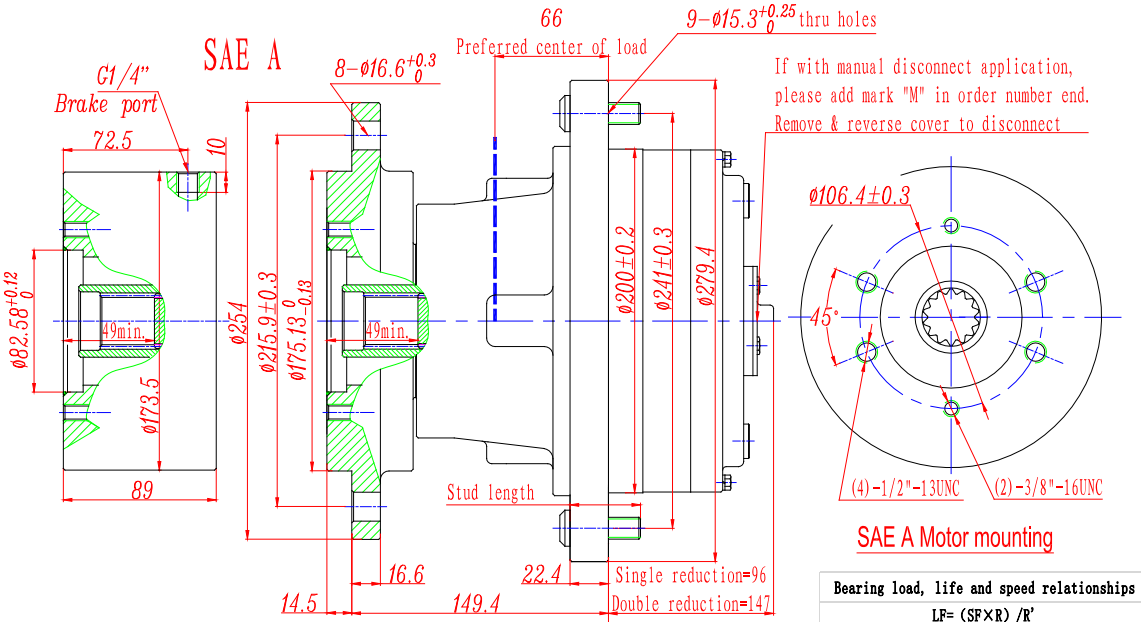
- Input rotation opposite output rotaion.
- Other ratio and other input type can special design.
- If with manual disconnect application, please add mark "M" in order number end.

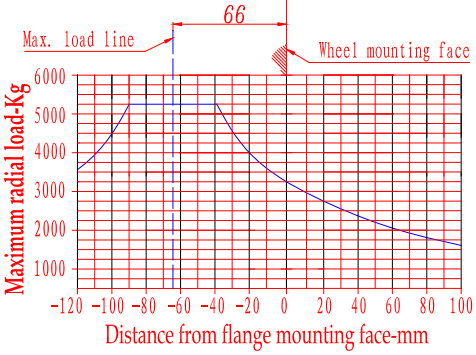
FEATURE CHART: MODEL 6 SERIES, WHEEL DRIVES REDUCTION – STYLE W (Long flange distance version)

OPTIONS	DESCRIPTION	ORDER NUMBER	USE OPTION ORDER CODES TO BUILD ORDER NUMBER						
MODEL SERIES	MODEL 6	6W	6W						
MOTOR PILOT/HUBS	SAE A	A		A					
	SAE A1	A1							
	SAE B	B							
	SAE B1	B1							
MOTOR INPUT SPLINE OR SHAFT INPUT OPTIONS	13T - 16/32	13			13				
	15T - 16/32	15							
	1" - 6B	6B							
	14T - 12/24	14							
	2K Bearing less	2K							
	OMSS Bearing less	OMSS							
RATIO OPTIONS	2.62, 3.24, 4.23 12.96, 15.78, 20.71, 24.41, 26.26, 30.38	02, 03, 04 13, 15 20, 24 26, 30				15			
OUTPUT OPTIONS	1/2×1.89 1/2×2.50 9/16×2.06 9/16×2.75 5/8×2.36 NONE	15 16 17 18 8 0					15		
BRAKE	160Nm	B4D							
	260Nm	B4F							
	330Nm	B4H						B4H	
	440Nm	B4L							
	Without Brake	WO							
DISCONNECT	With disconnect	M							M
	Without disconnect	NONE							
Example of complete order code:			6W	A	13	15	15	B4H	M

Model 6 Series, Wheel drives---dimensions (Long flange distance version)





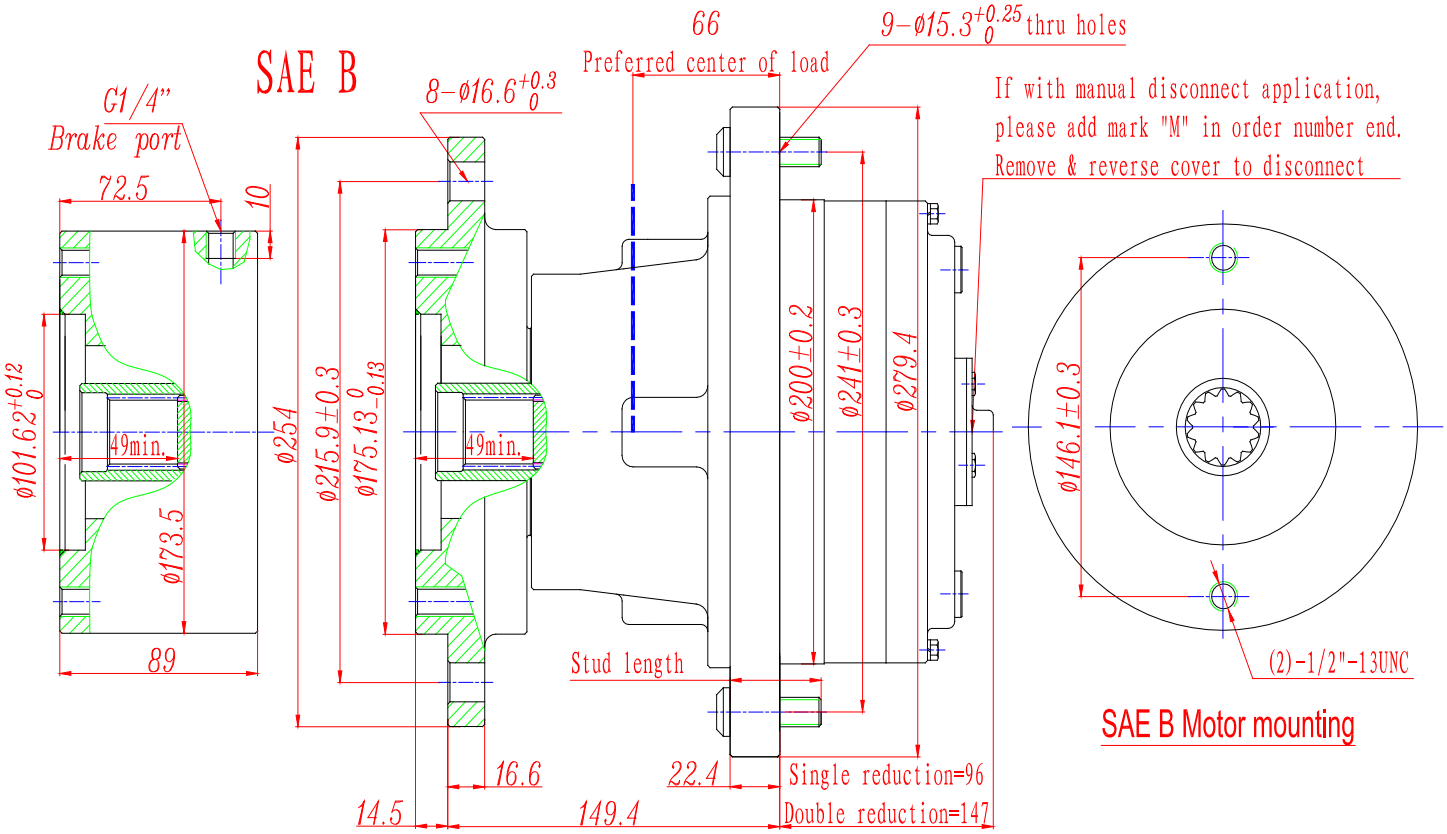


Maximum radial load on input shaft

(Based on: output speed n2=100 rpm,Life=3000 h)

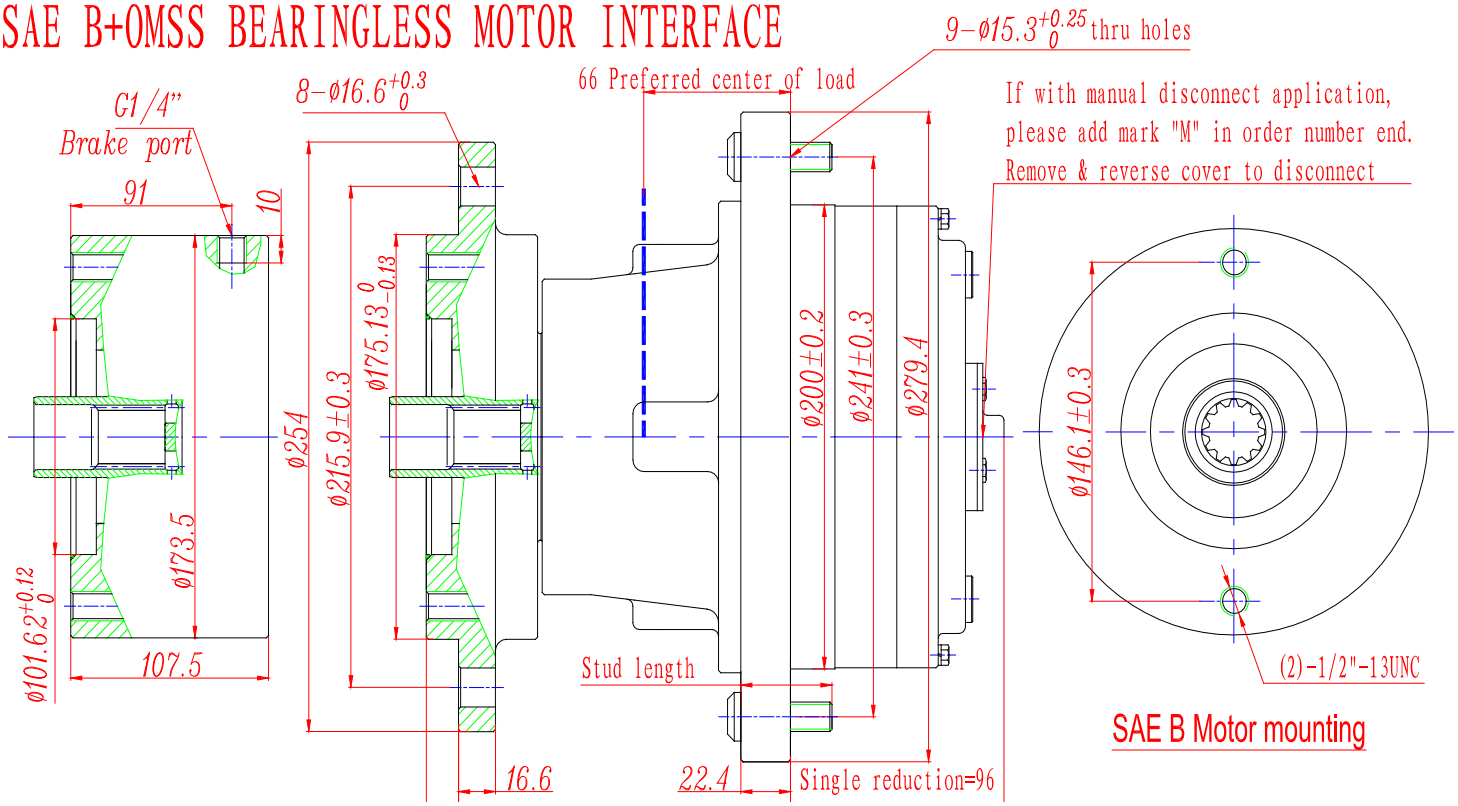
Bearing load, life and speed relationships			
LF= (SF×R) /R'			
R=Allowable resultant load for given location from mounting flange			
R'=Anticipated load at location from mounting flange			
LF=Life factor from table(See below)			
SF=Speed factor from table(See below)			
Output speed (rpm)	SF	LF	Bearing life B-10 Life(Hours)
5	2.456	0.584	500
10	1.994	0.719	1000
20	1.620	0.812	1500
30	1.435	0.886	2000
40	1.316	0.947	2500
50	1.231	1.000	3000
60	1.165	1.047	3500
70	1.113	1.090	4000
80	1.069	1.130	4500
90	1.032	1.166	5000
100	1.000	1.231	6000
200	0.812	1.289	7000
300	0.719	1.342	8000
400	0.659	1.390	9000
500	0.617	1.435	10000

Model 6 Series, Wheel drives---dimensions (Long flange distance version)

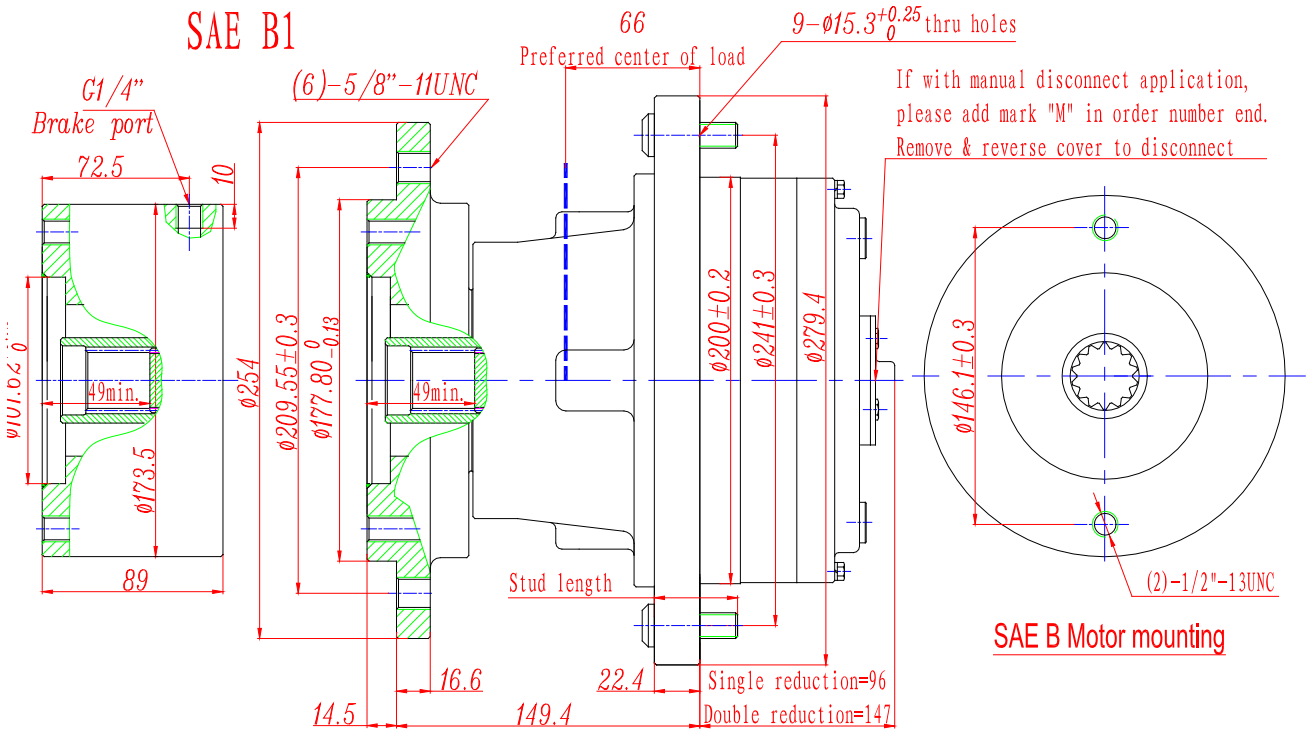


SAE B+2K BEARINGLESS MOTOR INTERFACE

SAE B+OMSS BEARINGLESS MOTOR INTERFACE

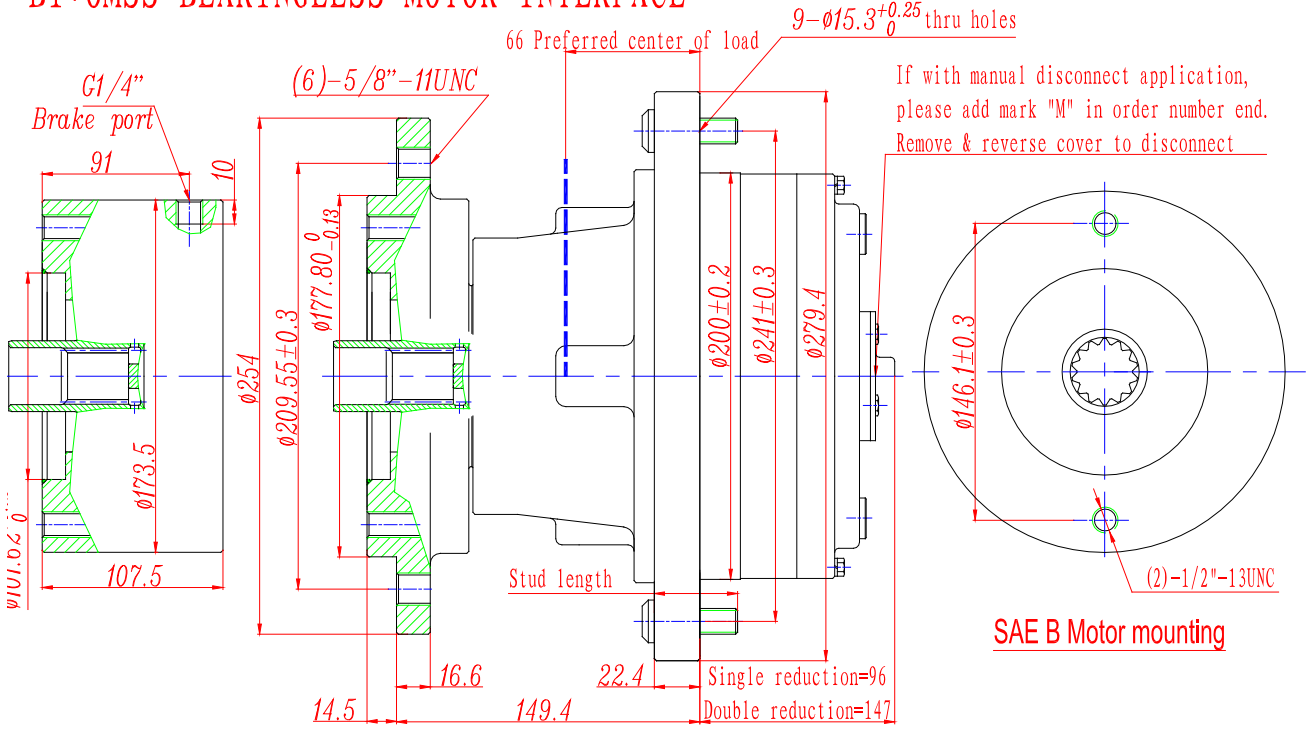


Model 6 Series, Wheel drives---dimensions (Long flange distance version)



B1+2K BEARINGLESS MOTOR INTERFACE

B1+0MSS BEARINGLESS MOTOR INTERFACE



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Model 6 Series, Wheel drives----technical specification (Short flange distance version)

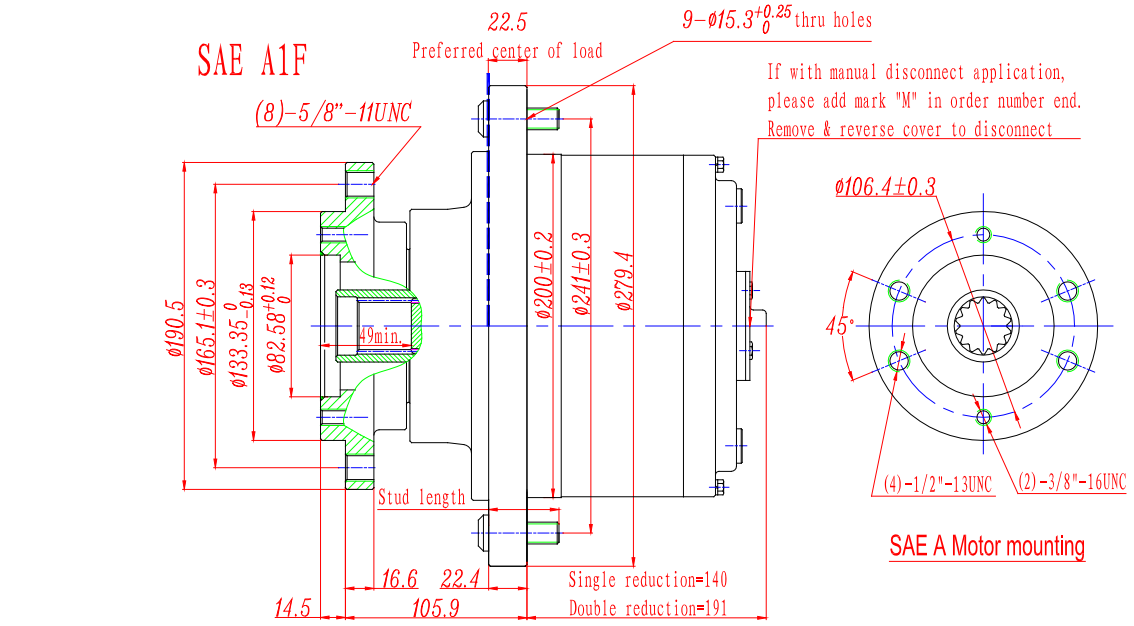
output torque (N.m)		Ratio (i)		Recommend Hydraulic Motor pilot/hubs and input spline	Max. input speed (rpm)	Brake torque (N.m)	Brake work pressure (bar)
normal	Max. Intermittent						
3400	7000	2.62, 3.24, 4.23	Single reduction	SAE A，B motor pilot/hubs 13T - 16/32 Spline 15T - 16/32 Spline 1" - 6B Spline 14T - 12/24 Spline	3500	440	22-50
		12.96, 15.78	Double reduction			330	27-50
		20.71, 24.41				260	22-50
		26.26, 30.38				160	17-50

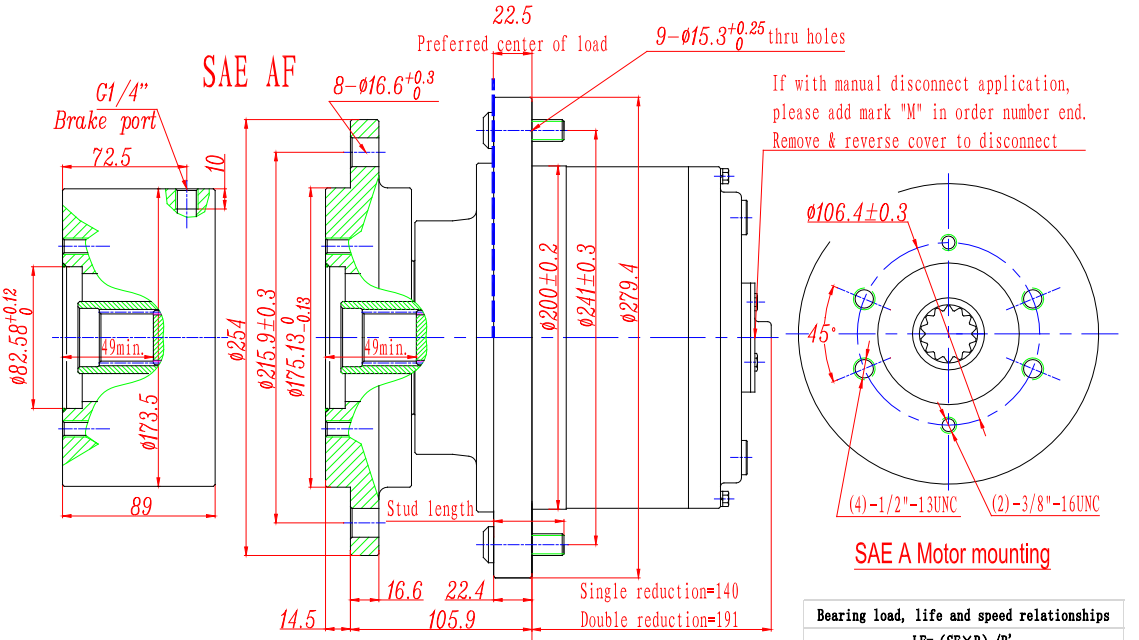
- Input rotation opposite output rotaion.
- Other ratio and other input type can special design.
- If with manual disconnect application, please add mark "M" in order number end.

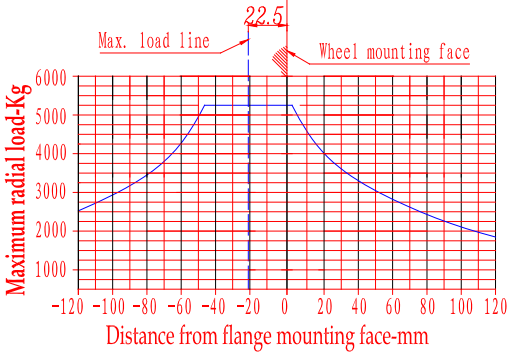
FEATURE CHART: MODEL 6 SERIES, WHEEL DRIVES REDUCTION - STYLE W (Short flange distance version)

OPTIONS	DESCRIPTION	ORDER NUMBER	USE OPTION ORDER CODES TO BUILD ORDER NUMBER						
MODEL SERIES	MODEL 6	6W	6W						
MOTOR PILOT/HUBS	SAE AF	AF		AF					
	SAE A1F	A1F							
	SAE BF	BF							
	SAE B1F	B1F							
MOTOR INPUT SPLINE OR SHAFT INPUT OPTIONS	13T - 16/32	13			13				
	15T - 16/32	15							
	1" - 6B	6B							
	14T - 12/24	14							
	2K Bearing less	2K							
	OMSS Bearing less	OMSS							
RATIO OPTIONS	2.62, 3.24, 4.23 12.96, 15.78, 20.71, 24.41, 26.26, 30.38	02, 03, 04 13, 15 20, 24 26, 30				15			
OUTPUT OPTIONS	1/2×1.89 1/2×2.50 9/16×2.06 9/16×2.75 5/8×2.36 NONE	15 16 17 18 8 0					15		
BRAKE	160Nm	B4D							
	260Nm	B4F							
	330Nm	B4H						B4H	
	440Nm	B4L							
	Without Brake	WO							
DISCONNECT	With disconnect	M							M
	Without disconnect	NONE							
Example of complete order code:			6W	AF	13	15	15	B4H	M

Model 6 Series, Wheel drives---dimensions (Short flange distance version)





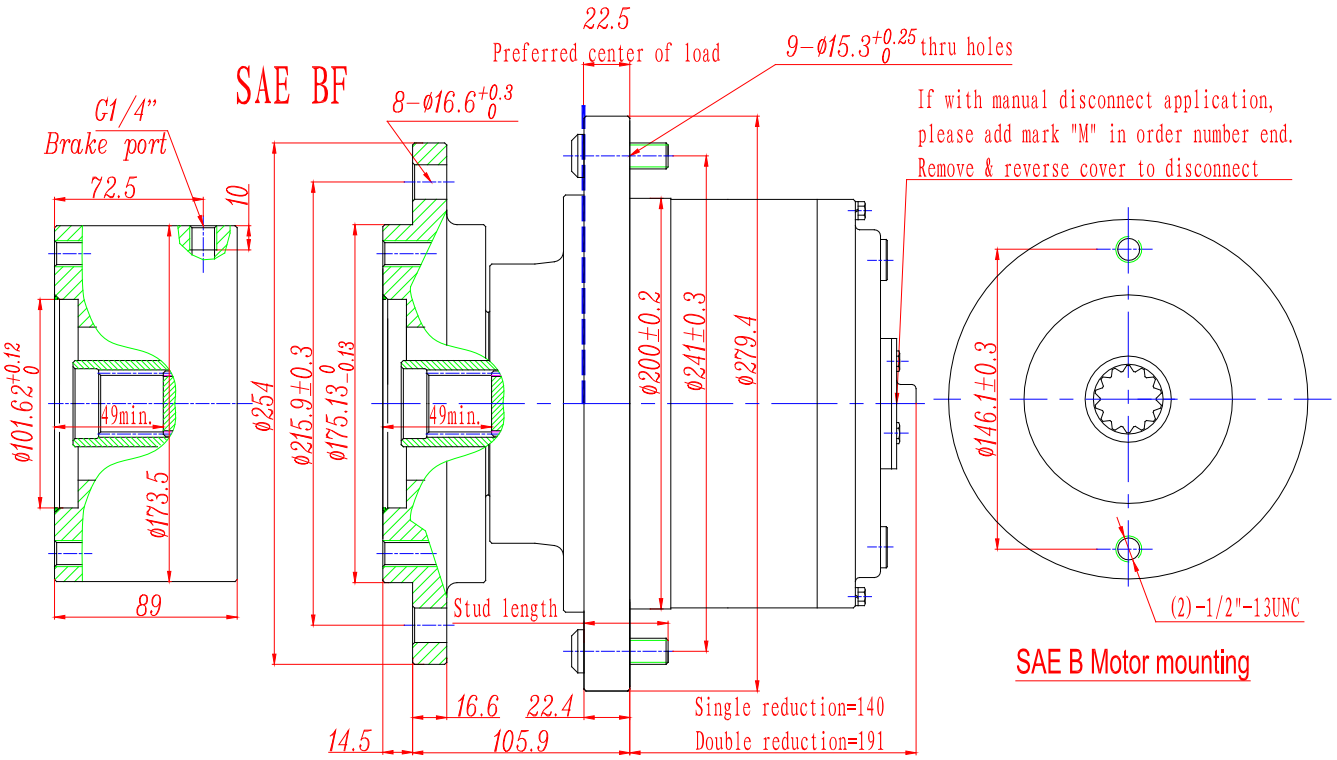


Maximum radial load on input shaft

(Based on: output speed n2=100 rpm,Life=3000 h)

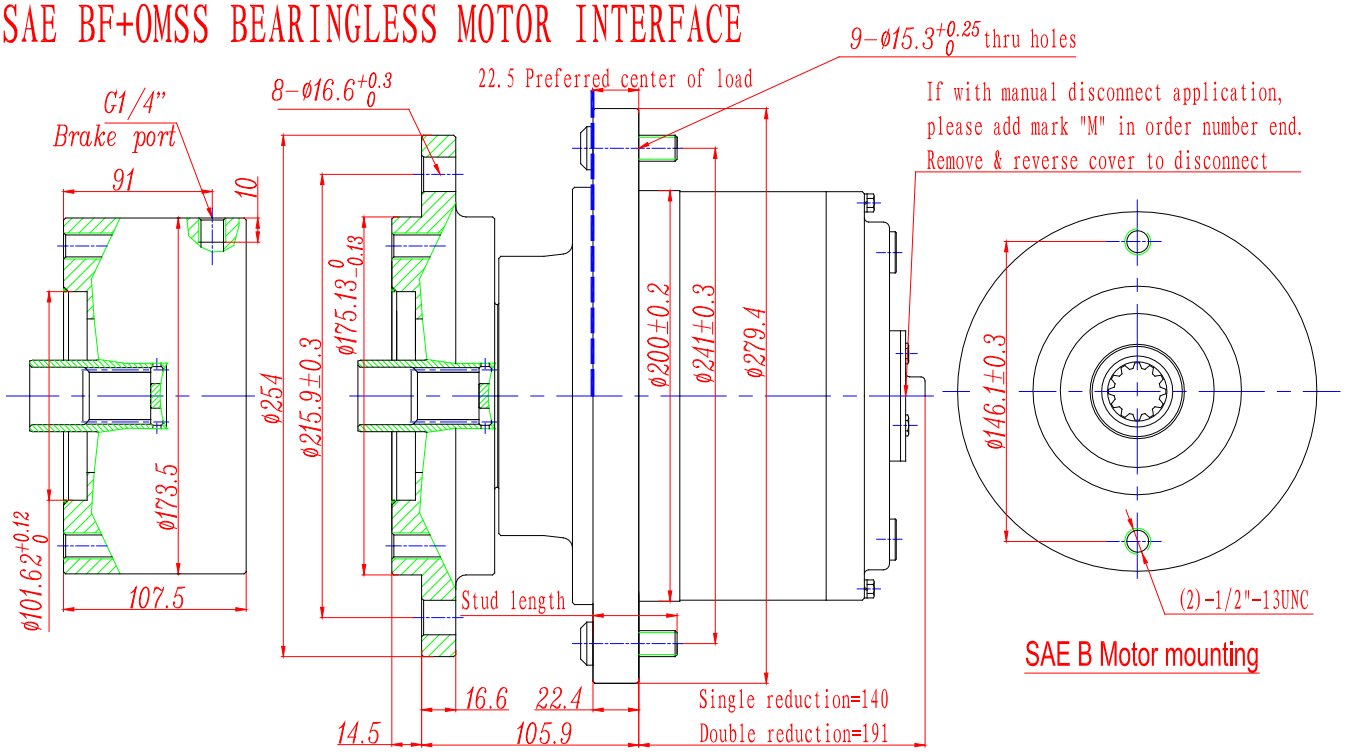
Bearing load, life and speed relationships			
LF= (SF×R) /R'			
R=Allowable resultant load for given location from mounting flange			
R'=Anticipated load at location from mounting flange			
LF=Life factor from table(See below)			
SF=Speed factor from table(See below)			
Output speed (rpm)	SF	LF	Bearing life B-10 Life(Hours)
5	2.456	0.584	500
10	1.994	0.719	1000
20	1.620	0.812	1500
30	1.435	0.886	2000
40	1.316	0.947	2500
50	1.231	1.000	3000
60	1.165	1.047	3500
70	1.113	1.090	4000
80	1.069	1.130	4500
90	1.032	1.166	5000
100	1.000	1.231	6000
200	0.812	1.289	7000
300	0.719	1.342	8000
400	0.659	1.390	9000
500	0.617	1.435	10000

Model 6 Series, Wheel drives---dimensions (Short flange distance version)

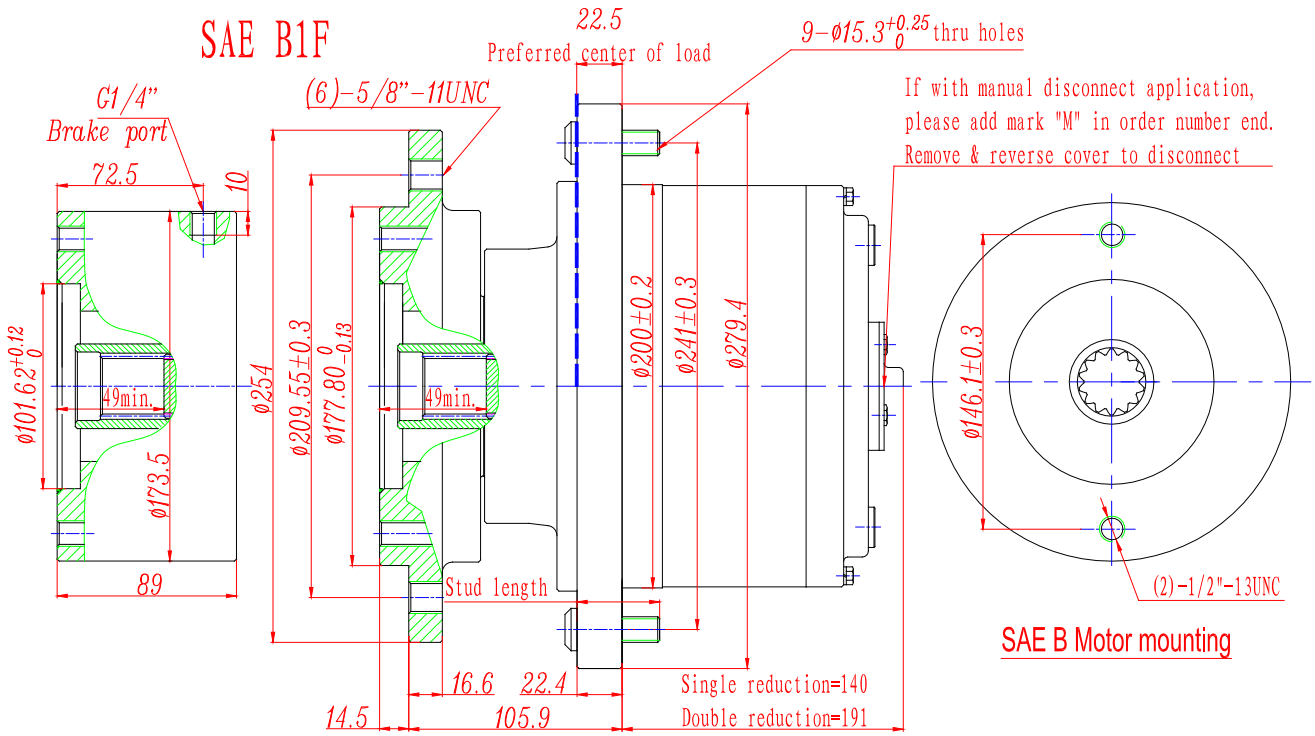


SAE BF+2K BEARINGLESS MOTOR INTERFACE

SAE BF+0MSS BEARINGLESS MOTOR INTERFACE

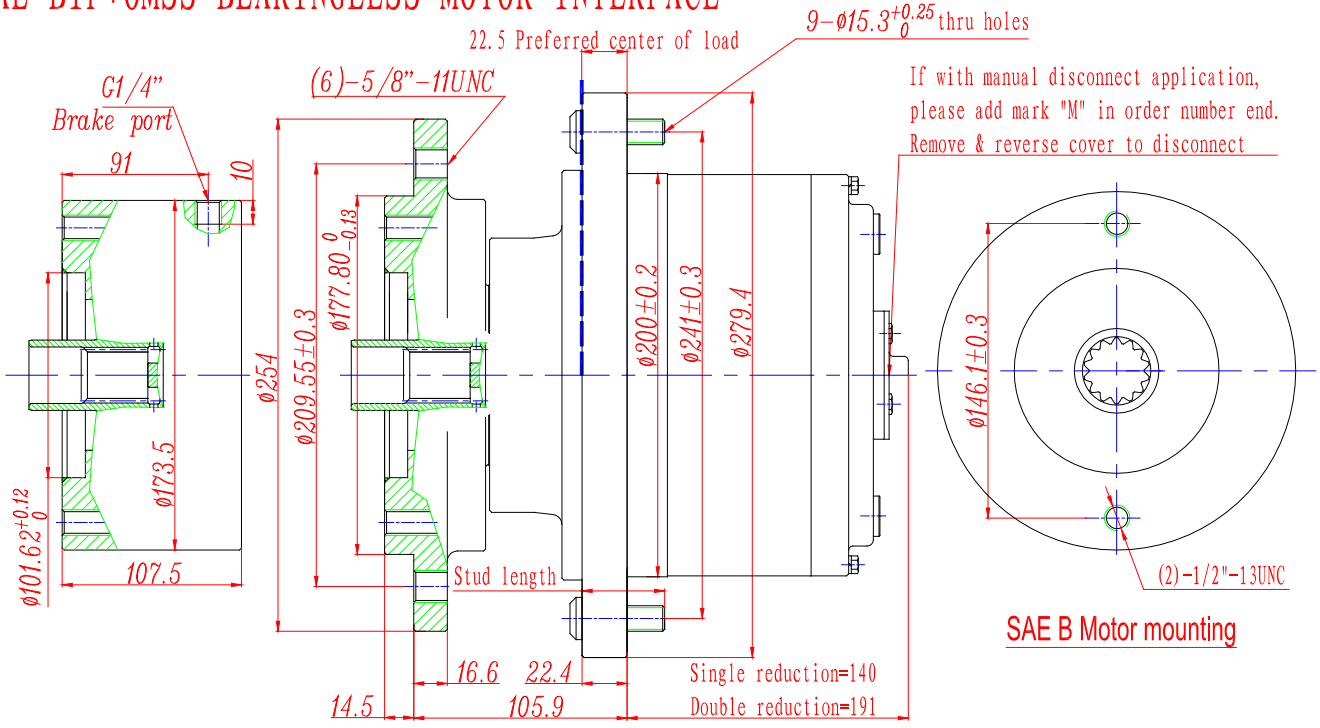


Model 6 Series, Wheel drives---dimensions (Short flange distance version)



SAE B1F+2K BEARINGLESS MOTOR INTERFACE

SAE B1F+OMSS BEARINGLESS MOTOR INTERFACE



Model 6 Series, Wheel drives----technical specification (With integrated brake version)

output torque (N.m)		Ratio (i)		Recommend Hydraulic Motor pilot/hubs and input spline	Max. input speed (rpm)	Brake torque (N.m)	Brake work pressure (bar)
normal	Max. Intermittent						
3400	7000	12.96, 15.78, 20.71 24.41, 26.26, 30.38 36.42, 46.07	Double reduction	KC & LC motor SAE A，B motor pilot/hubs 13T - 16/32 Spline 15T - 16/32 Spline 1" - 6B Spline 14T - 12/24 Spline	3500	300	12-50
		74.96, 86.41 106.63, 124.22 163.34, 185.35 233.90	Triple reduction			150	

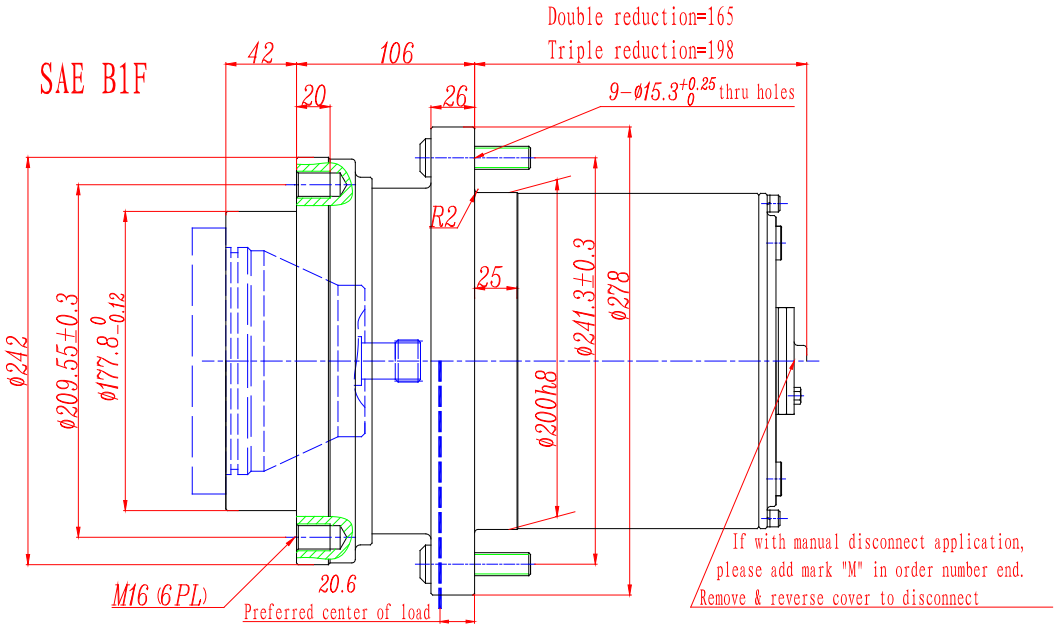
- Input rotation opposite output rotaion.
- Other ratio and other input type can special design.
- If with manual disconnect application, please add mark "M" in order number end.

FEATURE CHART: MODEL 6 SERIES, WHEEL DRIVES REDUCTION - STYLE WL (With integrated brake version)

OPTIONS	DESCRIPTION	ORDER NUMBER	USE OPTION ORDER CODES TO BUILD ORDER NUMBER						
MODEL SERIES	MODEL 6	6WL	6WL						
MOTOR PILOT/HUBS	SAE B1F	B1F		B1F					
MOTOR INPUT SPLINE OR SHAFT INPUT OPTIONS	13T - 16/32	13							
	15T - 16/32	15							
	1" - 6B	6B							
	14T - 12/24	14							
	LC & KC, Z13	LCA							
	LC & KC, Z15	LCE			LCE				
	2K Bearing less	2K							
	OMSS Bearing less	OMSS							
RATIO OPTIONS	12.96, 15.78, 20.71 24.41, 26.26, 30.38 36.42, 46.07, 74.96 86.41, 106.63, 124.22 163.34, 185.35, 233.90	012, 015, 020 024, 026, 030 036, 046, 074 086, 106, 124 163, 185, 233				074			
OUTPUT OPTIONS	1/2×1.89 1/2×2.50 9/16×2.06 9/16×2.75 5/8×2.36 NONE	15 16 17 18 8 0					8		
BRAKE	150Nm	B1						B1	
	300Nm	B2							
	Without Brake	WO							
DISCONNECT	With disconnect	M							M
	Without disconnect	NONE							
Example of complete order code:			6WL	B1F	LCE	074	8	B1	M

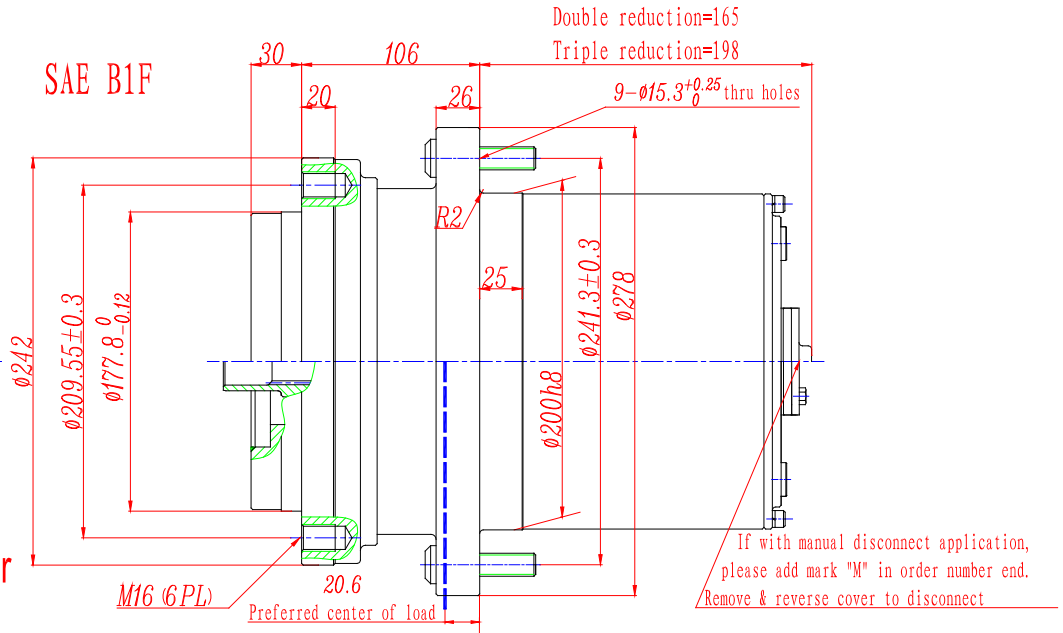
Model 6 Series, Wheel drives---dimensions (With integrated brake version)

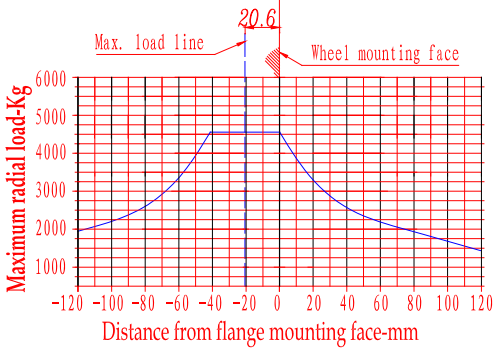
LC & KC Motor Interface



SAE A
SAE B
Motor Interface

2K OMSS Bearing Less Motor Interface





Maximum radial load on input shaft

(Based on: output speed n2=100 rpm,Life=3000 h)

Bearing load, life and speed relationships
$h=3000\times(100/n_2)\times(R/R')^{(10/3)}$
R=Allowable resultant load for given location from mounting flange (see curve image)
R'=Anticipated load at location from mounting flange
h=Bearing Life (hour)
n_2=Anticipated output speed(rpm)

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Model 6 Series, Wheel drives----technical specification (Differential version)

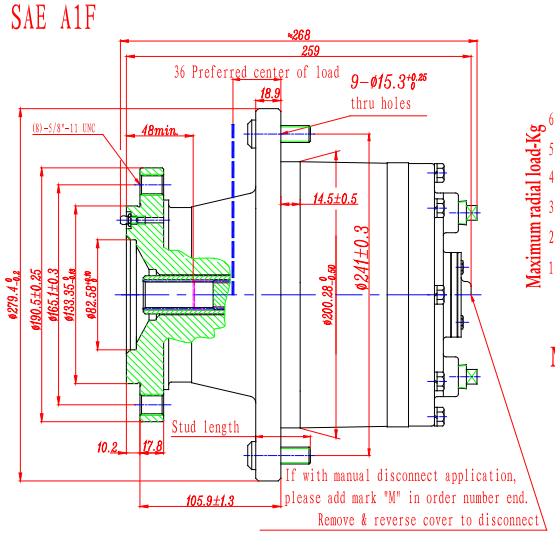
output torque (N.m)		Ratio (i)		Recommend Hydraulic Motor pilot/hubs and input spline	Max. input speed (rpm)	Brake torque (N.m)	Brake work pressure (bar)
normal	Max. Intermittent						
1690	3400	18.25, 24.85, 30.05, 35.13, 40.25, 49.29 59.50, 68.00	Double reduction	SAE A motor pilot/hubs 13T - 16/32 Spline 15T - 16/32 Spline 1" - 6B Spline	3500	Without brake	

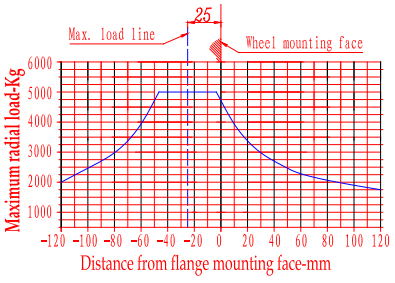
- Input rotation opposite output rotaion.
- Other ratio and other input type can special design.
- If with manual disconnect application, please add mark "M" in order number end.

FEATURE CHART: MODEL 6 SERIES, WHEEL DRIVES REDUCTION - STYLE WD (Differential version)

OPTIONS	DESCRIPTION	ORDER NUMBER	USE OPTION ORDER CODES TO BUILD ORDER NUMBER						
MODEL SERIES	MODEL 6	6WD	6WD						
MOTOR PILOT/HUBS	SAE A1F	A1F		A1F					
MOTOR INPUT SPLINE	13T - 16/32	13			13				
RATIO OPTIONS	18.25, 24.85, 30.05 35.13, 40.25, 49.29 59.50, 68.00	18, 24, 30 35, 40, 49 59, 68				35			
OUTPUT OPTIONS	1/2×1.89 1/2×2.50 9/16×2.06 9/16×2.75 5/8×2.36 NONE	15 16 17 18 8 0					8		
BRAKE	Without Brake	WO						WO	
DISCONNECT	With disconnect	M							M
	Without disconnect	NONE							
Example of complete order code:			6WD	A1F	13	35	8	WO	M

SAE A1F





Maximum radial load on input shaft

(Based on: output speed n2=100 rpm,Life=3000 h)

Bearing load, life and speed relationships
$h=3000\times(100/n_2)\times(R/R')^{(10/3)}$
R=Allowable resultant load for given location from mounting flange (see curve image)
R'=Anticipated load at location from mounting flange
h=Bearing Life (hour)
n_2=Anticipated output speed(rpm)