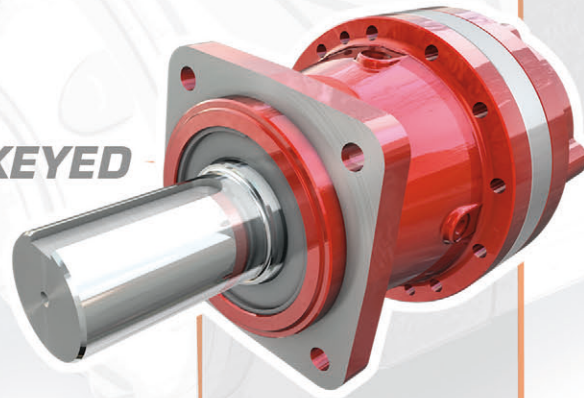
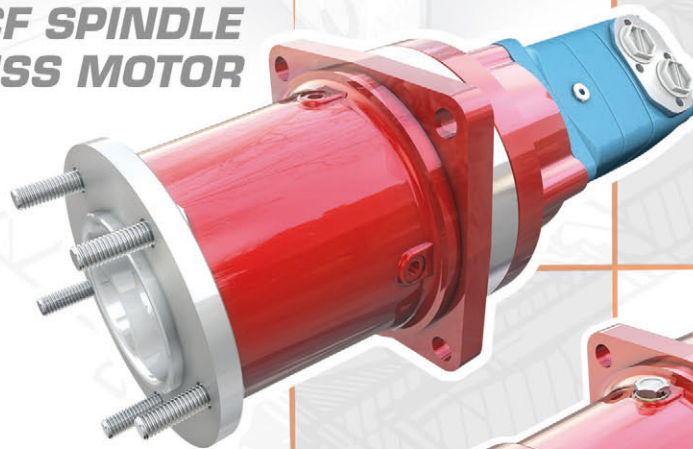


**FF SPLINED**

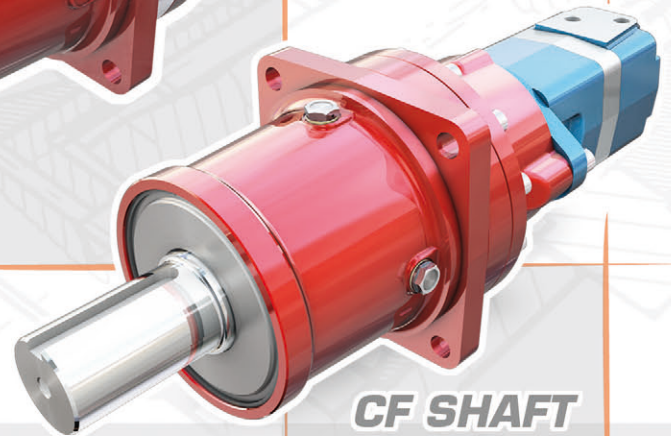


**FF KEYED**

**CF SPINDLE  
W/YMSS MOTOR**



**PLANETARY  
GEAR  
REDUCERS**



**CF SHAFT  
W/YMSY  
MOTOR**

**MPG 900 SERIES  
MPG 700 DRIVES**



## Who We Are

**Young Powertech Inc.** is a Manufacturer and Distributor of Mechanical, Hydraulics, Electric and Electronic assemblies for Construction, Farming, Marine, Mining and Industrial equipment. **Young Powertech Inc.** was started by people with decades of experience in the field and have owned and run similar companies and dedicated to bringing products and services to the customer at higher level. With Headquarter in the USA and branches around the world, we will be able to service any requirements you may have.

**STM/GSM** is a Leading Italian manufacturer of one of the most complete line of Power Transmission products like Planetary, Worm, Parallel shaft, in-line helical, shaft mounted and specialty products, started in 1976 and now serving the world with offices, inventories and service centers in over 50 countries. **STM/GSM** have proven to be able to solve most problems where quality and service are most important.

## Our Vision

**YOUNG / STM / GSM TEAM** are fast becoming a leading complete system Manufacturer/Distributor for our customers to reduce cost while improving system performance and customer satisfaction.

## Our mission

Our mission is to deliver the best products, service and prices to our customers while creating long term partnerships and relationships with companies and individual for a better and more harmonious world.

## INTRODUCTION

The Young Powertech Planetary speed reducers have been designed with the most advanced technology and are manufactured in one of the most modern facility today dedicated to maintain the highest possible quality and with over 40 years experience in this field we are confident to deliver a superior and trouble free product for many applications.

This series has been designed to be superior in every aspect to the competitors with similar products. Our advanced design technical improvements, can assure you a longer life and better performance.

Available in a variety of motor connections and output option, this series will prove very flexible. When coupled with orbital motors, radial piston, and axial piston motors we can deliver a superior package at a lower cost.

### **We are better:**

- 4 planet design for increase torque and life
- Hardened ring gear
- Larger bearings on output shaft
- Full complement bearing on planets

## TECHNICAL DATA

For the correct selection of a Young Powertech Planetary reducer is necessary to take into consideration a number of factors. The correct use of the information in this catalogue will help the customer to choose the best possible unit.

### **MOTOR-INPUT POWER**

The motor or device that will transmit the rotating motion to the speed reducer and the torque is a determinant factor in the life of the reducer especially if this cannot be closely controlled. Please consult our technical department

### **REDUCTION**

To achieve the correct output speed or torque, a proper reduction related to the motor speed and torque and the application speed is necessary.

### **MAXIMUM INPUT SPEED                  RPM**

This is the maximum INTERMITTENT speed the unit can be run at without damaging gears and other components. For continuous duty or speed higher than those permitted, please contact Young Powertech engineering depth

## **THERMAL RATING HP/KW**

This is the maximum power the reducer can transmit continuously without damages to the components in normal operating condition and ambient temperature without external cooling system. In this condition oil temperature should not exceed 90°C (195°F) degrees without external cooling. These conditions are: Input speed 1500 RPM; Ambient temperature 20C; Oil ISO VG 150; mounting position Horizontal; free air flow around unit. If the application required power is higher than the reducer Thermal Rating an external cooling system must be installed.

If ambient temperature, input speed and torque output varies from the standard, a “CORRECTION” factor must be used to calculate the proper cooling requirements.

## **OPERATING TEMPERATURE**

Normal operating temperature should be between -20 to +90. Other working temperature is possible with special lubricants and seals. Please refer to Young Powertech Inc Engineering deptm. for approval.

PLEASE NOTE: The Thermal capacity of the reducer must be related to the actual requirement of the application and not the power of the motor installed which could be greater than the power required by the application.

## **EFFICIENCY**

The efficiency of a planetary reducer is very high. The average efficiency is 98% per stage. Only when in very high speed or with the use of bevel gear the efficiency drops a little.

## **CONTINUOUS TORQUE                      MC**

This is the highest torque according to ISO standard 6336. This value corresponds to an “Unlimited” gear life taking into consideration the bending and surface stresses of the teeth. When selecting the reducer, this value is found in each reducer page and rated depending on the input speed. For different life at different conditions.

## **MAXIMUM TORQUE                      MMAX**

This is the maximum torque the reducer can transmit for a limited period of time without causing damages to internal components. This value MUST be considered as the MAXIMUM output torque during starting, reversing or working time. It cannot be considered as CONTINUOUS working torque. This value must also be carefully evaluated in application with starts, stops and reversing actions.

## MPG 900 RATINGS

SIZE	RATIO	TORQUE CONT. NM	TORQUE CONT. LB-IN	TORQUE INTERM. NM	TORQUE INTERM. LB-IN	TORQUE PEAK NM	TORQUE PEAK LB-FT	HP RATING
901-4	4.4	3400	30000	4500	39780	5600	49000	45
901-5	5.25	3060	27000	4000	35360	5000	44000	37
902-15	15.31	3400	30000	4500	39780	5600	49000	15
902-18	18.74	3400	30000	4500	39780	5600	49000	14.5
902-22	22.36	3060	27000	4000	35360	5000	44000	14
902-25	25.38	3400	30000	4500	39780	5600	49000	10
902-31	31.68	3400	30000	4500	39780	5600	49000	9
902-37	37.8	2850	25190	4000	35360	5000	44000	7

Max Input Speed 2500 RPM

## LUBRICANT

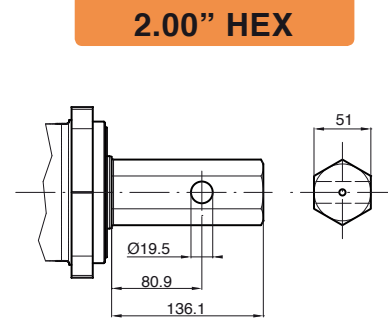
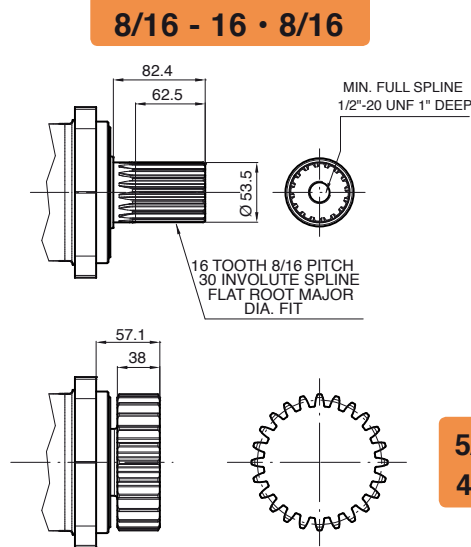
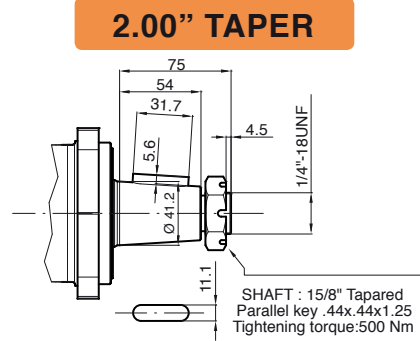
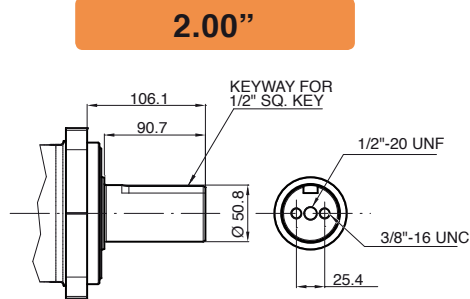
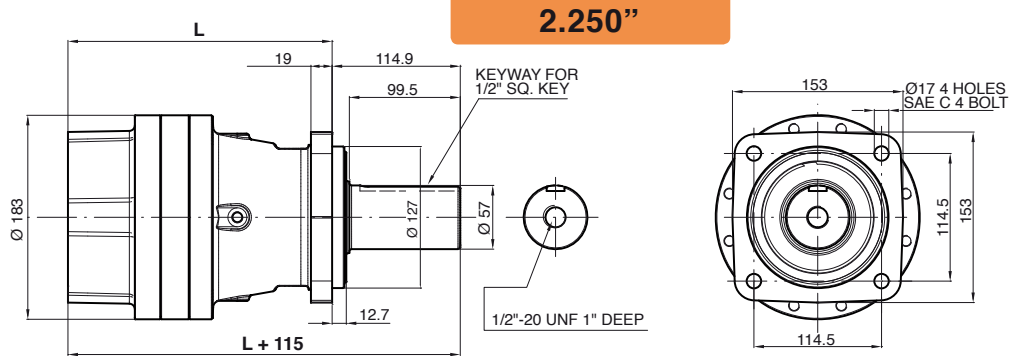
	SINGLE STAGE			TWO STAGES		
Oil / Horizontal	FF 1 STAGE	OZ 24	LIT. 71	FF 2 STAGES	OZ 36	LIT. 1.06
Oil / Vertical	FF 1 STAGE	OZ 54	LIT. 1.59	FF 2 STAGES	OZ 70	LIT. 2.0
Weight	FF 1 STAGE	LBS 51	KG. 23	FF 2 STAGES	LBS 62	KG. 29

	SINGLE STAGE			TWO STAGES		
Oil / Horizontal	CF 1 STAGE	OZ 32	LIT. 1.06	CF 2 STAGES	OZ 44	LIT. 1.3
Oil / Vertical	CF 1 STAGE	OZ 66	LIT. 1.96	CF 2 STAGES	OZ 78	LIT. 2.3
Weight	CF 1 STAGE	LBS 51	KG. 23	CF 2 STAGES	LBS 62	KG. 29

### BASED ON ISO 3448 AND SAE J-306-81

MAKE	VG 100	VG 150	VG 220	VG 320 / VG150-200	SINTETIC
Temper.					
AGIP	BLASIA 100	BLASIA 150	BLASIA 220	BLASIA 320	BLASIA S 220
ARAL	DEGOL BG 100	DEGOL BG 150		DEGOL BG 320	DEGOL GS 220
BP MACH	GR XP 100	GR XP 150		GR XP 320	ENERSYN HTX 220
CASTROL	ALPHA SP 100	ALPHA SP 150		ALPHA 320	ALPHA SIN 220
CHEVRON	NL GEAR 100	NL GEAR 150	ULTRA GEAR 220	TEGRA SYN 320	HIPERSYN 220
EXXON	SPARTAN EP 100	SPARTAN EP 150		SPARTAN EP 320	GLYCOLUBE 220
DEA	FALCON CLP				
ELF	REDUCT. SP 100	REDUCT. SP 150		REDUCT. SP 320	ELF SYNTH P
FINA	GIRAN 100	GIRAN 150		GIRAN 320	GIRAN 220
IP	MELLANA 100	MELLANA 150		MELLANA 320	TELESIA OIL 150
KLUEBER	GEM 1-100	GEM 1-150		GEM 1-320	SYNTESSO D 220 EP
MOBIL		MOB. XMP 150	MOB. XMP 220	MOB. XMP 320	GLYGOYLE 22
SHELL		OMALA 150	OMALA 220	OMALA 320	TIVELA S 220
TEXACO		MEROPA 150	MEROPA 220	MEROPA 320	SYNLUBE CLP 220
TOTAL		CARTER EP 150	CARTER EP 220	CARTER EP 320	CARTER SY 220

## MPG 900 FF DIMENSIONAL DATA



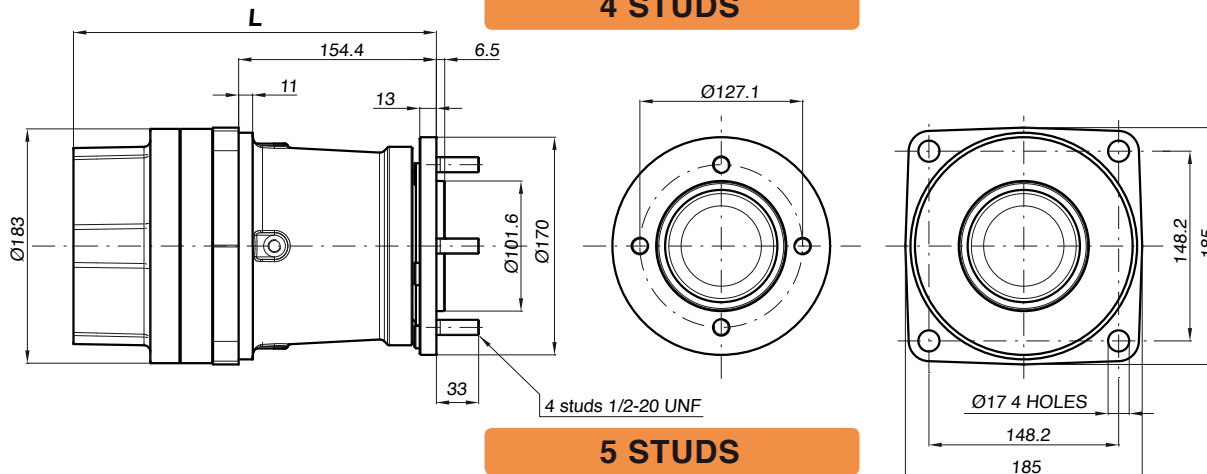
**5/7 DP FELLOW STVB - 24T**  
**4/5 DP FELLOW STVB - 16T**

	L			
	1 STAGE		2 STAGES	
	[inches]	mm	[inches]	mm
<b>SAE A</b>	[9.37]	238	[8.35]	212
<b>SAE B</b>	[9.37]	238	[8.54]	217
<b>SAE C</b>	[9.37]	238	[9.09]	231
<b>FOR BRAKE ADD</b>	[3.94]	100	[3.94]	100

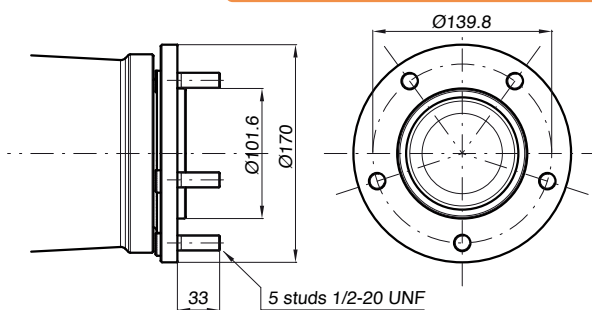
OTHER OPTIONS AVAILABLE

## MPG 900 CF DIMENSIONAL DATA

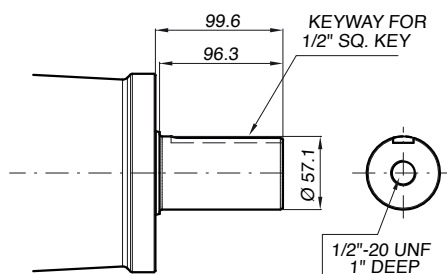
### 4 STUDS



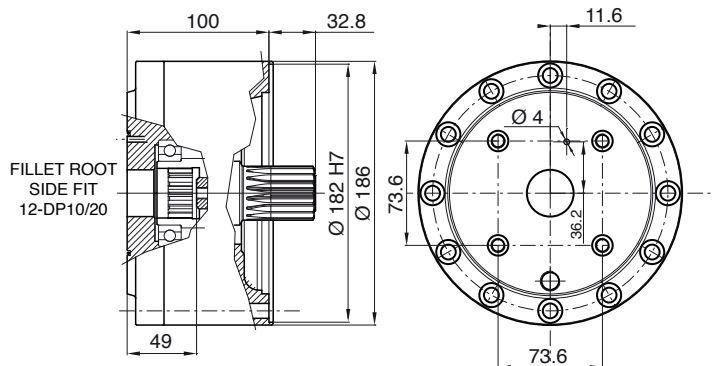
### 5 STUDS



### 2.250" KEY



	L			
	1 STAGE		2 STAGES	
	[inches]	mm	[inches]	mm
SAE A	[11.26]	286	[13.23]	336
SAE B	[11.26]	286	[13.43]	341
SAE C	[11.26]	286	[13.98]	355
FOR BRAKE ADD	[3.94]	100	[3.94]	100



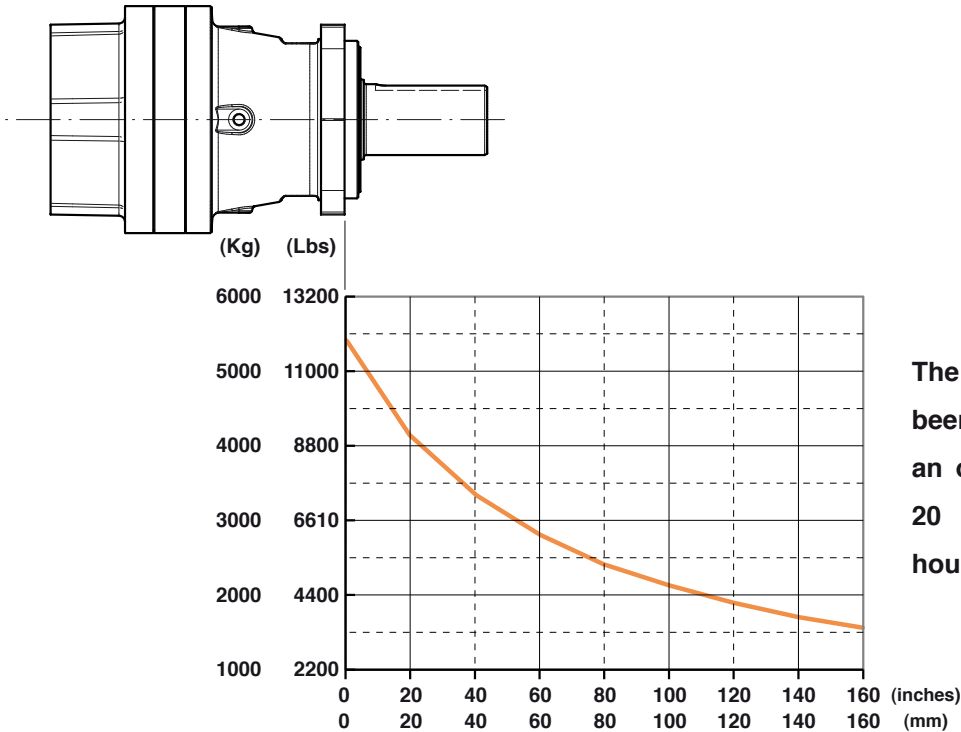
### MDB 70 BRAKE RATINGS

Brake Type	Output Torque Lb / in - Nm	Minimum Opening PSI - bar	Max Pressure PSI - bar
70 - 10	88 - 100	120 - 8	3625 - 250
70 - 18	160 - 180	160 - 11	3625 - 250
70 - 28	250 - 280	200 - 14	3625 - 250
70 - 37	325 - 370	230 - 16	3625 - 250
70 - 58	510 - 580	280 - 19	3625 - 250
70 - 70	615 - 700	320 - 22	3625 - 250

OTHER OPTIONS AVAILABLE

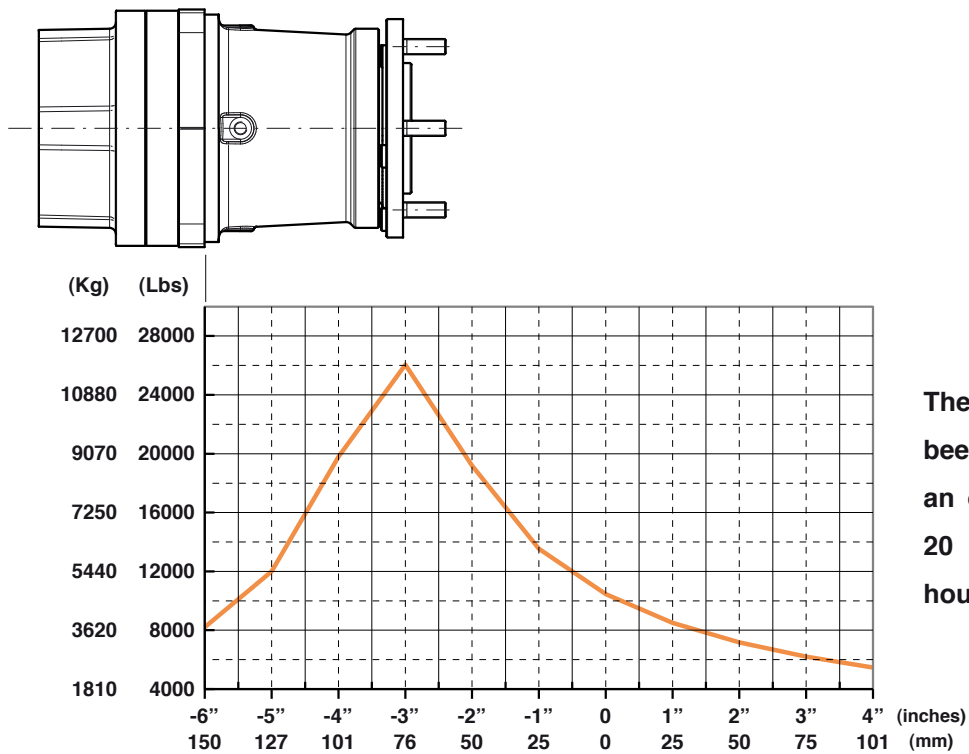
## OUTPUT SHAFT LOAD DIAGRAM

### FF-TYPE MOUNTING FLANGE FACE



The radial load has been calculate with an output speed of 20 RPM and 5000 hours.

### CF-TYPE MOUNTING FLANGE FACE

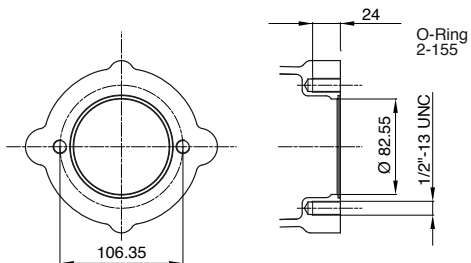


The radial load has been calculate with an output speed of 20 RPM and 5000 hours.

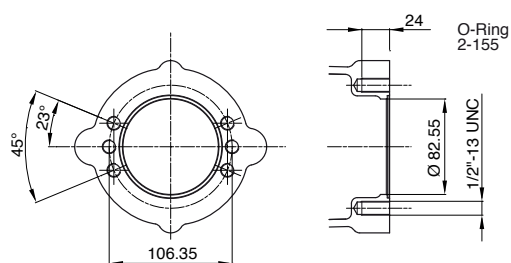


## MOTOR CONNECTIONS

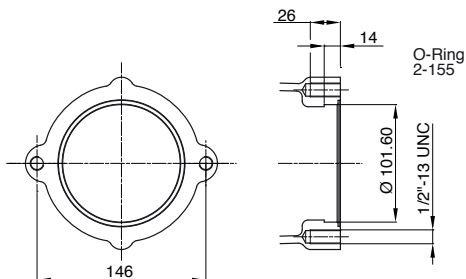
SAE "A" 2 BOLTS



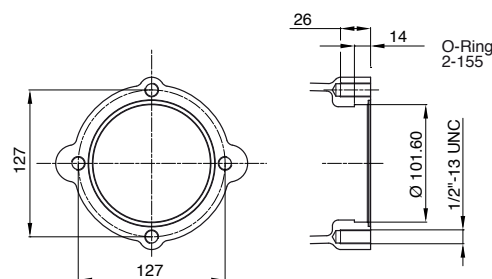
SAE "A" MAGNETO



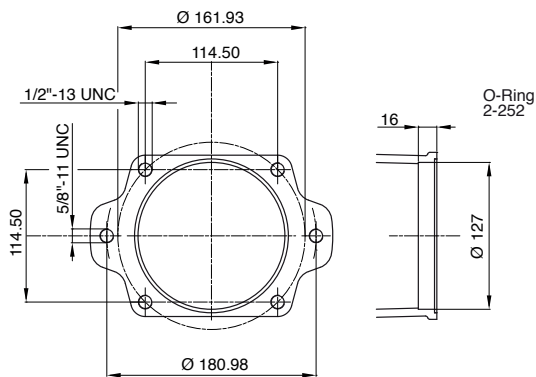
SAE "B" 2B



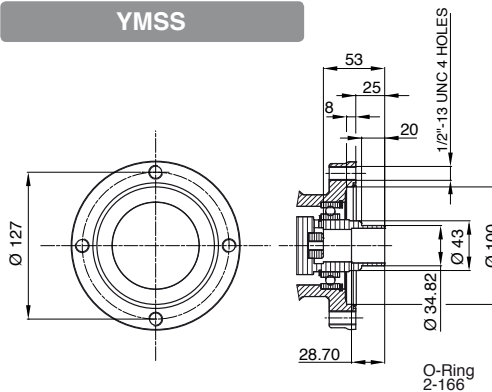
SAE "B" 4B



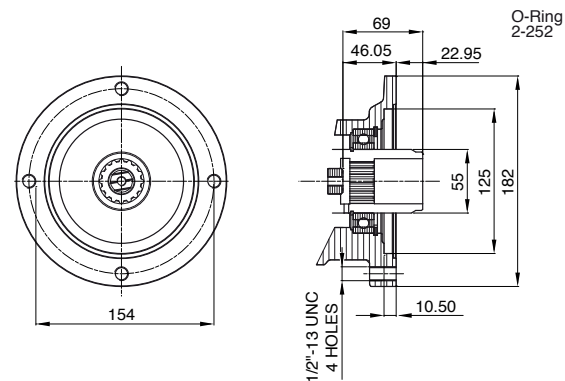
SAE "C" 2/4B



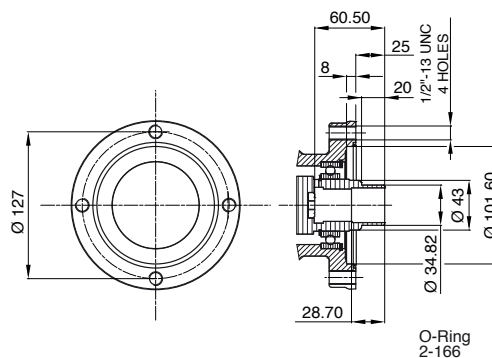
YMSS



YMTS - OMTS



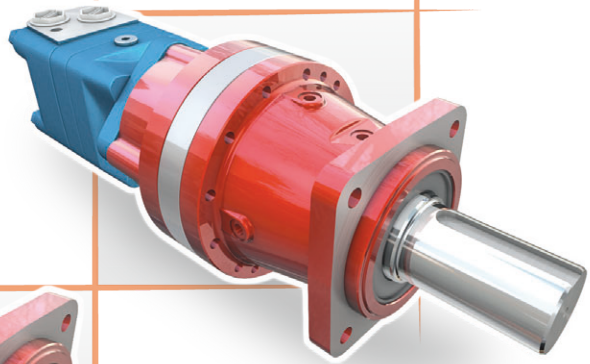
EATON 2000 BEARINGLESS  
YMSJ



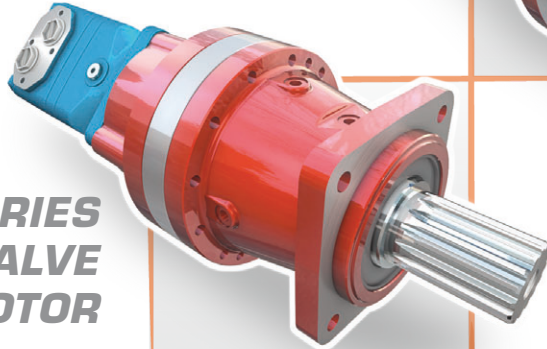
OTHER CONNECTIONS AVAILABLE

# 700

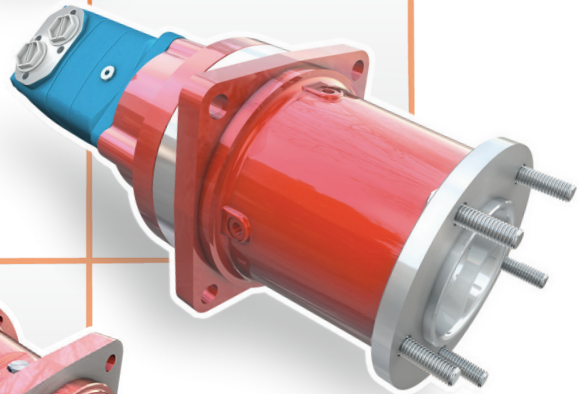
**“Y” SERIES  
DISC VALVE  
ORBITAL MOTOR**



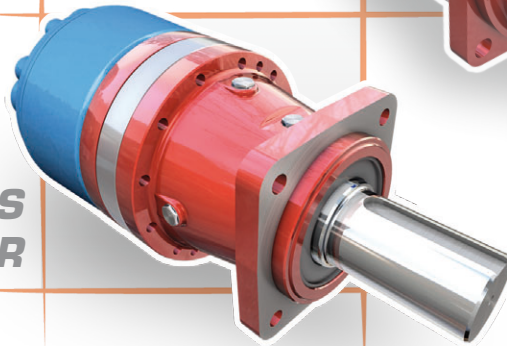
**“T” SERIES  
DISC VALVE  
ORBITAL MOTOR**



**“V” SERIES  
DISC VALVE  
ORBITAL MOTOR**



**“R” SERIES  
RADIAL PISTON MOTOR**



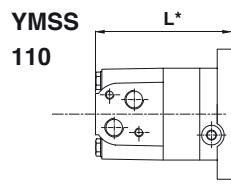
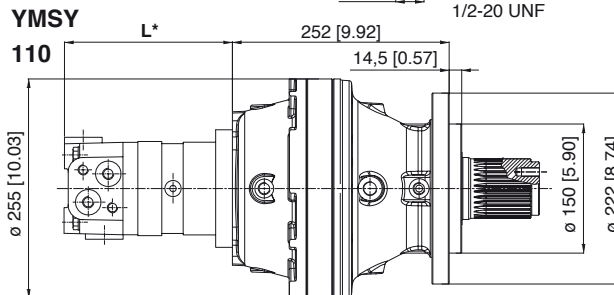
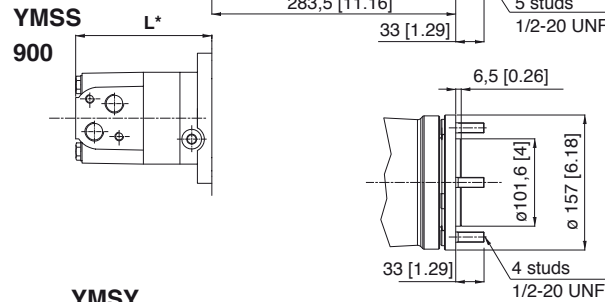
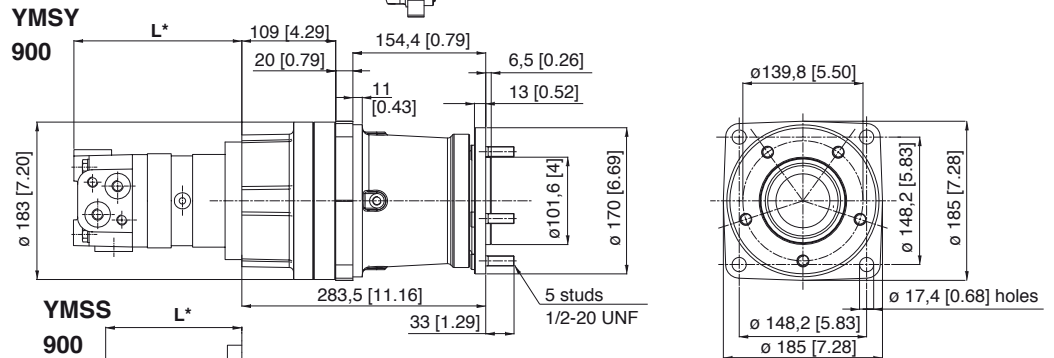
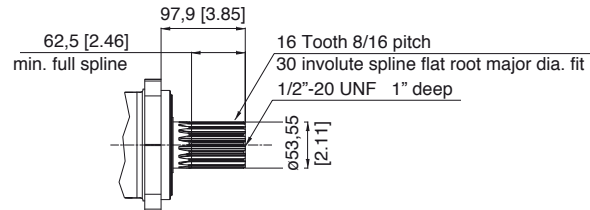
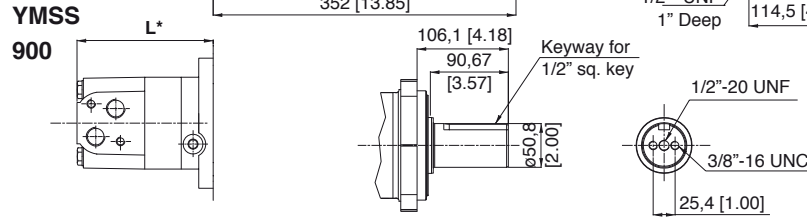
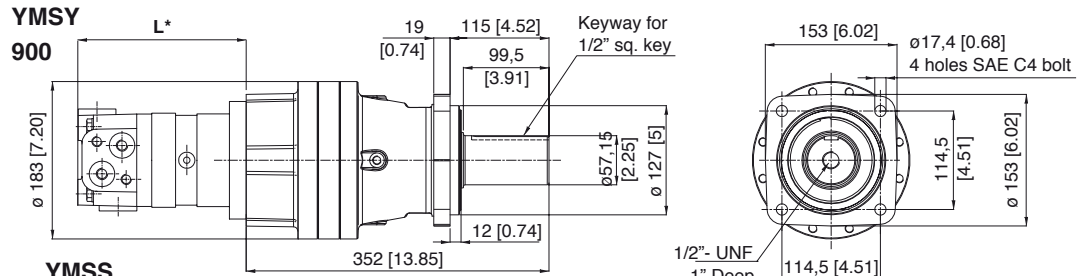
## TECHNICAL SPECIFICATIONS

Code No.	Motor Displacement		Reducer ratio	Total Displacement		Rated torque		Cont. Pressure		Max Pressure		Cont Speed RPM	Max Speed RPM
	Cu.In	CC		Cu.In	CC	Lb-In	Nm	PSI	Mpa	PSI	Mpa		
			100 PSI			1 MPA							
700-Y-160-900-4.4	9.40	154.0	4.40	41.36	677.60	601	98.64	3000	20.7	3300	22.7	100	128
700-Y-160-900-5.25	9.40	154.0	5.25	49.35	808.50	718	117.70	3000	20.7	3300	22.7	90	108
700-Y-200-900-4.4	11.80	194.0	4.40	51.92	853.60	755	123.00	3000	20.7	3300	22.7	85	100
700-Y-200-900-5.25	11.80	194.0	5.25	61.95	1018.50	902	147.00	3000	20.7	3300	22.7	70	84
700-Y-250-900-4.4	14.80	243.0	4.40	65.12	1069.00	920	150.00	2900	20.0	3300	22.4	68	82
700-Y-250-900-5.25	14.80	243.0	5.25	77.70	1275.75	1097	180.00	2900	20.0	3300	22.4	57	69
700-Y-315-900-4.4	18.90	311.0	4.40	83.16	1368.40	1246	204.00	2900	20.0	3300	22.4	54	65
700-Y-315-110-4.76	18.90	311.0	4.76	89.96	1480.36	1348	221.00	2900	20.0	3300	22.4	50	60
700-Y-315-110-5.65	18.90	311.0	5.65	106.78	1757.15	1600	262.00	2900	20.0	3300	22.4	42	50
700-Y-400-110-4.76	24.00	394.0	4.76	114.24	1875.44	1652	270.00	2300	15.8	2500	17.2	38	47
700-Y-400-110-5.65	24.00	394.0	5.65	135.60	2226.10	1961	321.00	2300	15.8	2500	17.2	32	40
700-Y-475-110-4.76	28.90	475.0	4.76	137.56	2261.00	1922	315.00	2000	13.8	2500	17.2	32	39
700-Y-475-110-5.65	28.90	475.0	5.65	163.28	2683.15	2281	370.00	2000	13.8	2500	17.2	27	32

## TECHNICAL SPECIFICATIONS

Code No.	Motor Displacement		Reducer ratio : 1	Total Displacement		Rated torque		Cont. Pressure		Max Pressure		Cont Speed RPM	Max Speed RPM
	Cu.In	CC		Cu.In	CC	Lb-In	Nm	PSI	Mpa	PSI	Mpa		
						100 PSI	1 MPA						
700-Y-160-900-4.4	9.40	154.0	4.40	41.36	677.60	601	98.64	3000	20.7	3300	22.7	100	128
700-Y-160-900-5.25	9.40	154.0	5.25	49.35	808.50	718	117.70	3000	20.7	3300	22.7	90	108
700-Y-200-900-4.4	11.80	194.0	4.40	51.92	853.60	755	123.00	3000	20.7	3300	22.7	85	100
700-Y-200-900-5.25	11.80	194.0	5.25	61.95	1018.50	902	147.00	3000	20.7	3300	22.7	70	84
700-Y-250-900-4.4	14.80	243.0	4.40	65.12	1069.00	920	150.00	2900	20.0	3300	22.4	68	82
700-Y-250-900-5.25	14.80	243.0	5.25	77.70	1275.75	1097	180.00	2900	20.0	3300	22.4	57	69
700-Y-315-900-4.4	18.90	311.0	4.40	83.16	1368.40	1246	204.00	2900	20.0	3300	22.4	54	65
700-Y-315-110-4.76	18.90	311.0	4.76	89.96	1480.36	1348	221.00	2900	20.0	3300	22.4	50	60
700-Y-315-110-5.65	18.90	311.0	5.65	106.78	1757.15	1600	262.00	2900	20.0	3300	22.4	42	50
700-Y-400-110-4.76	24.00	394.0	4.76	114.24	1875.44	1652	270.00	2300	15.8	2500	17.2	38	47
700-Y-400-110-5.65	24.00	394.0	5.65	135.60	2226.10	1961	321.00	2300	15.8	2500	17.2	32	40
700-Y-475-110-4.76	28.90	475.0	4.76	137.56	2261.00	1922	315.00	2000	13.8	2500	17.2	32	39
700-Y-475-110-5.65	28.90	475.0	5.65	163.28	2683.15	2281	370.00	2000	13.8	2500	17.2	27	32
700-T-160-900-4.4	9.83	161.1	4.40	43.25	708.84	639	119.00	2900	20.0	3500	24.1	140	175
700-T-160-900-5.25	9.83	161.1	5.25	51.60	845.78	762	142.00	2900	20.0	3500	24.1	115	146
700-T-200-900-4.4	12.29	201.4	4.40	54.07	886.16	801	150.00	2900	20.0	3500	24.1	140	169
700-T-200-900-5.25	12.29	201.4	5.25	64.52	1057.35	956	179.00	2900	20.0	3500	24.1	115	141
700-T-250-900-4.4	15.37	251.8	4.40	67.62	1107.92	994	186.00	2900	20.0	3500	24.1	110	134
700-T-250-110-5.65	15.37	251.8	5.65	86.84	1422.67	1275	238.00	2900	20.0	3500	24.1	90	104
700-T-315-110-4.76	19.92	326.3	4.76	94.81	1553.19	1426	267.00	2900	20.0	3500	24.1	80	96
700-T-315-110-5.65	19.92	326.3	5.65	112.54	1843.60	1692	317.00	2900	20.0	3500	24.1	64	80
700-T-400-110-4.76	25.08	410.9	4.76	119.38	1955.88	1781	312.00	2600	17.9	3000	21.0	63	76
700-T-400-112-5.65	25.08	410.9	5.65	141.70	2321.59	2113	371.00	2600	17.9	3000	21.0	53	64
700-T-500-112-4.76	31.96	523.6	4.76	152.12	2492.34	2268	371.00	2300	15.8	2600	17.9	50	59
700-T-500-112-5.65	31.96	523.6	5.65	180.57	2958.34	2717	441.00	2300	15.8	2600	17.9	42	50
700-T-630-112-4.76	38.39	629.1	4.76	182.73	2994.52	2733	448.00	2000	13.8	2300	15.8	41	48
700-T-630-112-5.65	38.39	629.1	5.65	216.90	3554.42	3244	531.00	2000	13.8	2300	15.8	35	41
700-T-800-112-4.76	48.93	801.8	4.76	232.90	3816.57	3421	420.00	1800	8.6	1900	8.9	32	38
700-T-800-112-5.65	48.93	801.8	5.65	276.45	4530.17	4061	499.00	1800	8.6	1900	8.9	27	32
700-V-315-110-4.76	20.32	333.0	4.76	96.72	1585.08	1335	218.00	2900	20.0	3500	24.1	93	125
700-V-315-112-5.65	20.32	333.0	5.65	114.80	1881.45	1585	259.00	2900	20.0	3500	24.1	79	105
700-V-400-112-4.76	25.56	419.0	4.76	121.66	1994.44	1850	303.00	2900	20.0	3500	24.1	75	101
700-V-400-112-5.65	25.56	419.0	5.65	144.41	2367.35	2196	360.00	2900	20.0	3500	24.1	62	85
700-V-500-112-4.76	31.60	518.0	4.76	150.41	2465.68	2195	359.00	2900	20.0	3500	24.1	81	78
700-V-500-112-5.65	31.60	518.0	5.65	178.54	2926.70	2606	427.00	2900	20.0	3500	24.1	68	66
700-V-630-112-4.76	40.63	666.0	4.76	193.39	3170.16	2580	423.00	2900	20.0	3500	24.1	46	62
700-V-630-114-5.65	40.63	666.0	5.65	229.55	3762.90	3062	509.00	2900	20.0	3500	24.1	40	52
700-V-800-112-4.76	48.87	801.0	4.76	232.62	3812.76	3297	540.00	2300	13.8	2500	16.0	39	48
700-V-800-114-5.65	48.87	801.0	5.65	276.11	4525.65	3913	641.00	2300	13.8	2500	16.0	32	41
700-V-1000-114-4.76	60.40	990.0	4.76	287.50	4712.40	4178	140.00	2000	14.0	2300	15.8	30	35
700-V-1000-114-5.65	60.40	990.0	5.65	341.26	5593.50	4960	813.00	2000	14.0	2300	15.8	25	30
700-R-05-130-900-5	7.87	129.00	5.25	41.34	677.25	593	97	2900	20.0	5300	37	120	170
700-R-05-150-900-5	9.21	151.00	5.25	48.39	792.75	694	113	2900	20.0	4600	32	120	170
700-R-05-200-900-5	11.66	191.00	5.25	61.21	1002.75	877	143	2900	20.0	4000	28	110	150
700-R-1-250-110-4	14.83	243.00	4.76	88.40	1448.00	1268	207	2900	20.0	5000	35	90	140
700-R-1-250-110-5	14.83	243.00	5.65	83.81	1373.00	1202	196	2900	20.0	4300	30	75	120
700-R-1-300-110-4	17.70	290.00	4.76	84.27	1380.00	1207	197	2900	20.0	4300	30	70	130
700-R-1-350-110-4	20.75	340.00	4.76	98.80	1618.00	1417	232	2900	20.0	4000	28	60	120
700-R-1-350-112-5	20.75	340.00	5.65	117.27	1921.00	1682	275	2900	20.0	4000	28	50	100
700-R-2-420-112-4	25.94	425.00	4.76	123.50	2023.00	1771	290	2900	20.0	5000	35	90	150
700-R-2-420-112-5	25.94	425.00	5.65	146.59	2401.00	2102	344	2900	20.0	5000	35	80	130
700-R-2-500-112-4	30.09	493.00	4.76	143.26	2346.00	2054	336	2900	20.0	5000	35	90	140
700-R-2-500-112-5	30.09	493.00	5.65	170.05	2785.00	2439	399	2900	20.0	5000	35	75	120
700-R-2-630-114-4	38.03	623.00	4.76	181.04	2965.00	2596	424	2900	20.0	4000	28	80	130
700-R-2-630-114-5	38.03	623.00	5.65	214.89	3519.00	3082	504	2900	20.0	4000	28	70	110
700-R-3-700-114-4	42.12	690.00	4.76	200.51	3284.00	2876	470	2900	20.0	5000	35	80	100
700-R-3-700-114-5	42.12	690.00	5.65	238.00	3898.00	3413	558	2900	20.0	5000	35	70	85
700-R-3-800-114-4	48.35	792.00	4.76	230.15	3769.00	3301	540	2900	20.0	5000	35	80	100
700-R-3-800-116-5	48.35	792.00	5.65	273.18	4474.00	3918	641	2900	20.0	5000	35	70	85
700-R-3-800-114-4	53.29	873.00	4.76	253.69	4155.00	3638	595	2900	20.0	5000	35	70	80
700-R-3-800-116-5	53.29	873.00	5.65	301.12	4932.00	4319	706	2900	20.0	5000	35	60	70
700-R-3-1000-116-4	60.25	987.00	4.76	268.82	4698.00	3855	630	2900	20.0	4000	28	60	70
700-R-3-1000-116-5	60.25	987.00	5.65	340.44	5576.00	4883	799	2900	20.0	4000	28	60	60

## HYD-DRIVES DIMENSIONAL DATA



L\*: See dimension page 10

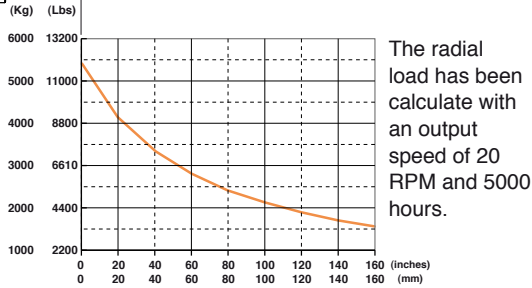
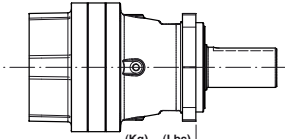
MODEL	L	
	[inches]	mm
YMSY 80	[6.69]	170
YMSY 100	[6.85]	174
YMSY 125	[7.05]	179
YMSY 160	[7.15]	181,5
YMSY 200	[7.44]	189
YMSY 250	[7.92]	201
YMSY 315	[8.39]	213
YMSY 400	[8.78]	223
YMSY 475	[9.33]	237

MODEL	L	
	[inches]	mm
YMSS 80	[5.12]	130
YMSS 100	[5.28]	134
YMSS 125	[5.48]	139
YMSS 160	[5.69]	144,5
YMSS 200	[5.99]	152
YMSS 250	[6.46]	164
YMSS 315	[6.93]	176
YMSS 375	[7.41]	188

## RADIAL LOAD RATINGS

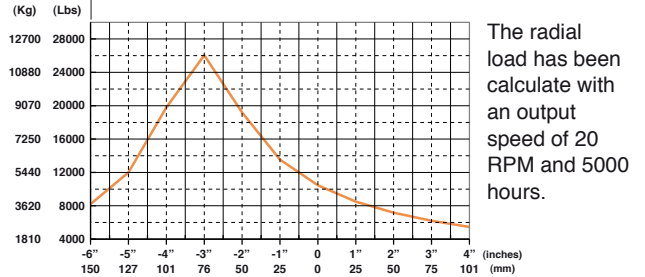
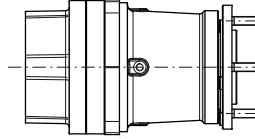
### 900 SERIES

#### FF-TYPE



FLANGE MOUNTING FACE	
0	11000
1	9100
2	7500
3	6100
5	5000

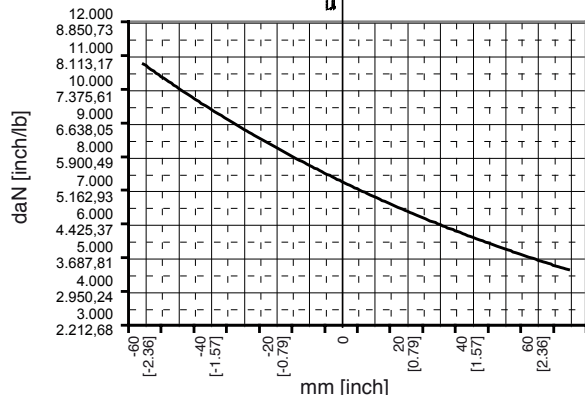
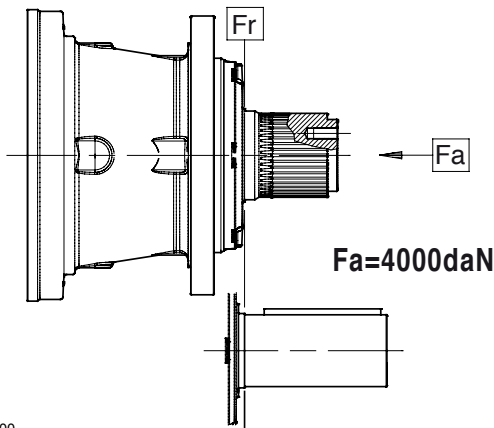
#### CF-TYPE



FLANGE MOUNTING FACE	
0	8200
1	12000
2	19793
3	26050
4	19200
5	13530

FLANGE MOUNTING FACE	
6	10450
7	8500
8	7170
9	6200
10	5460

### 110 SERIES

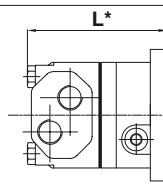
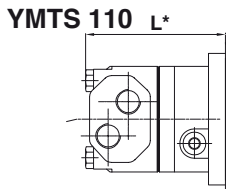
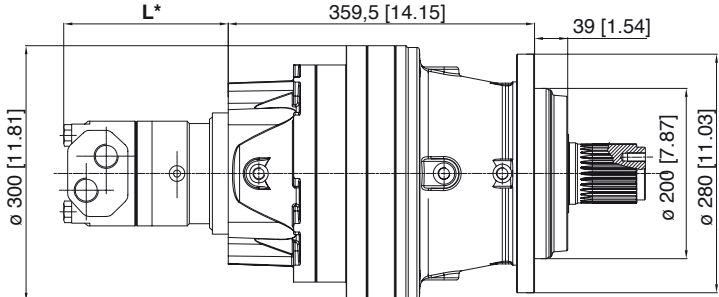
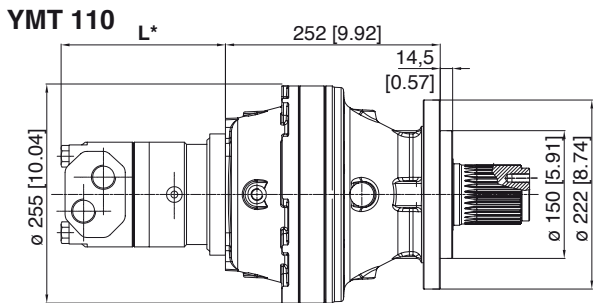
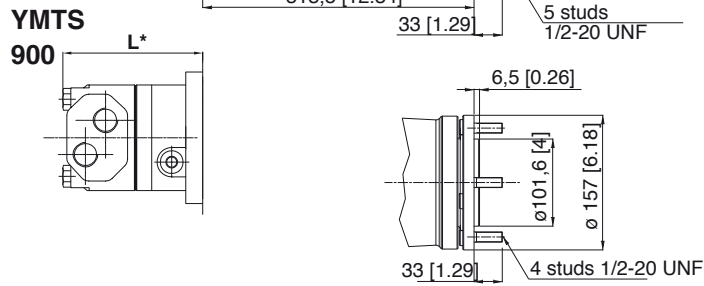
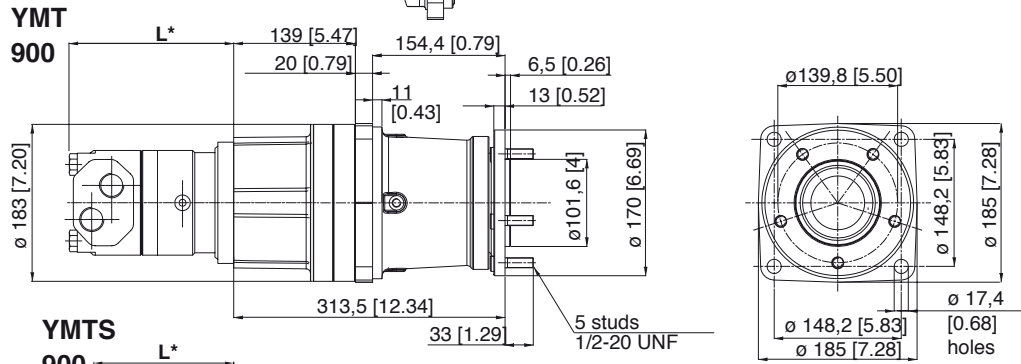
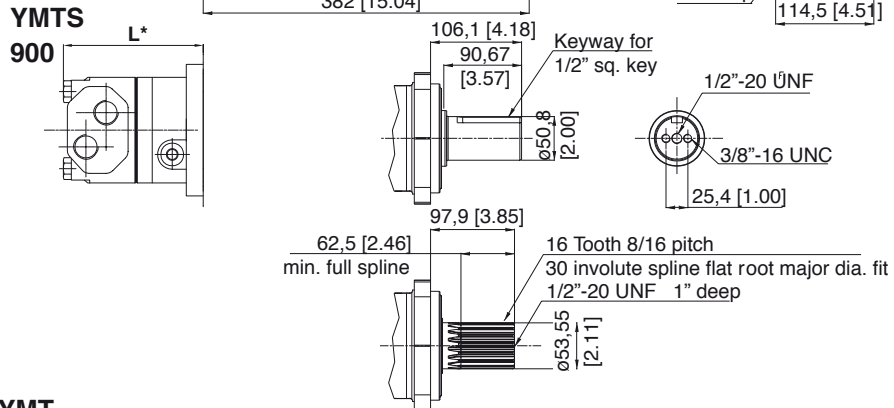
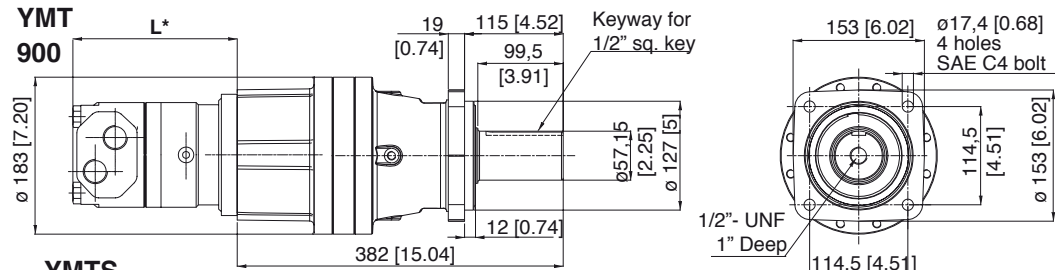


For different load or life calculation, please contact YPT technical department.

## HYD-DRIVES DIMENSIONAL DATA

MODEL	L	
	[inches]	mm
YMTS 160	[5.83]	148
YMTS 200	[5.98]	152
YMTS 250	[6.22]	158
YMTS 315	[6.42]	163
YMTS 400	6.69]	170
YMTS 500	[7.01]	178
YMTS 630	[7.48]	190
YMTS 800	[7.91]	201

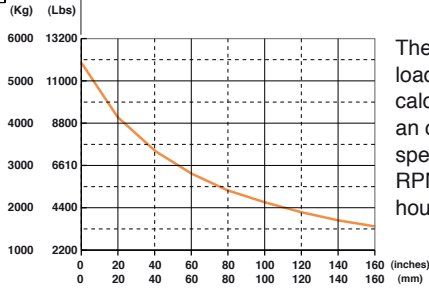
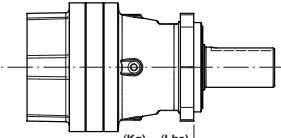
MODEL	L	
	[inches]	mm
YMT160	[7.60]	193
YMT200	[7.76]	197
YMT250	[8.00]	203
YMT315	[8.19]	208
YMT400	[8.47]	215
YMT500	[8.78]	223
YMT630	[9.26]	235
YMT800	[9.69]	246



## RADIAL LOAD RATINGS

### 900 SERIES

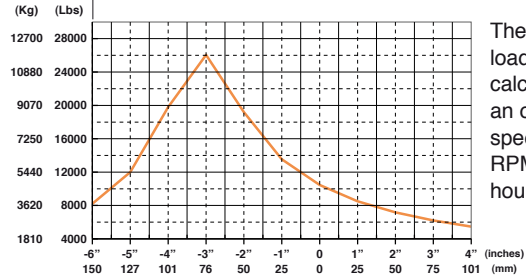
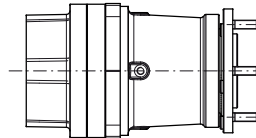
#### FF-TYPE



The radial load has been calculate with an output speed of 20 RPM and 5000 hours.

FLANGE MOUNTING FACE	
0	11000
1	9100
2	7500
3	6100
5	5000

#### CF-TYPE

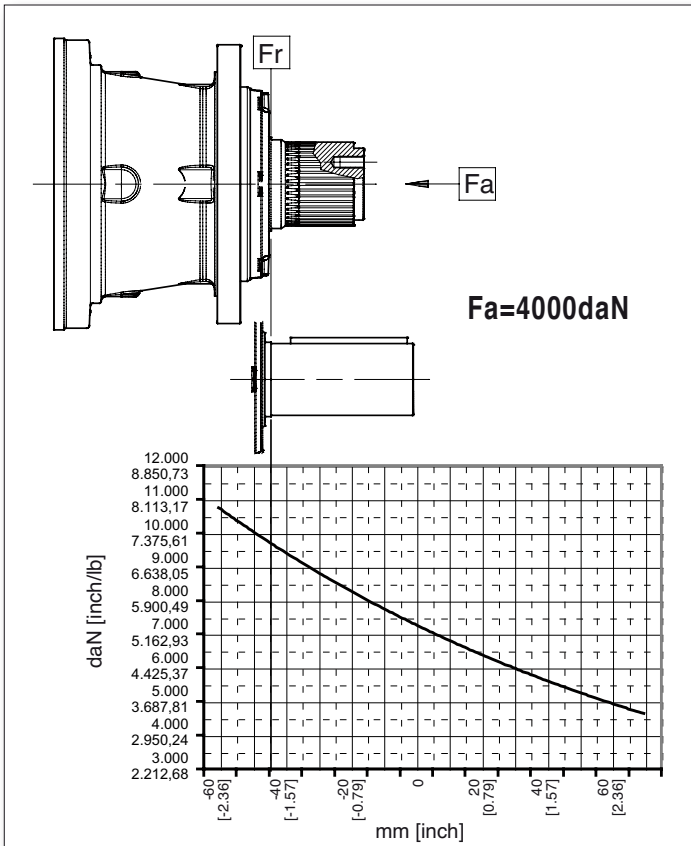


The radial load has been calculate with an output speed of 20 RPM and 5000 hours.

FLANGE MOUNTING FACE	
0	8200
1	12000
2	19793
3	26050
4	19200
5	13530

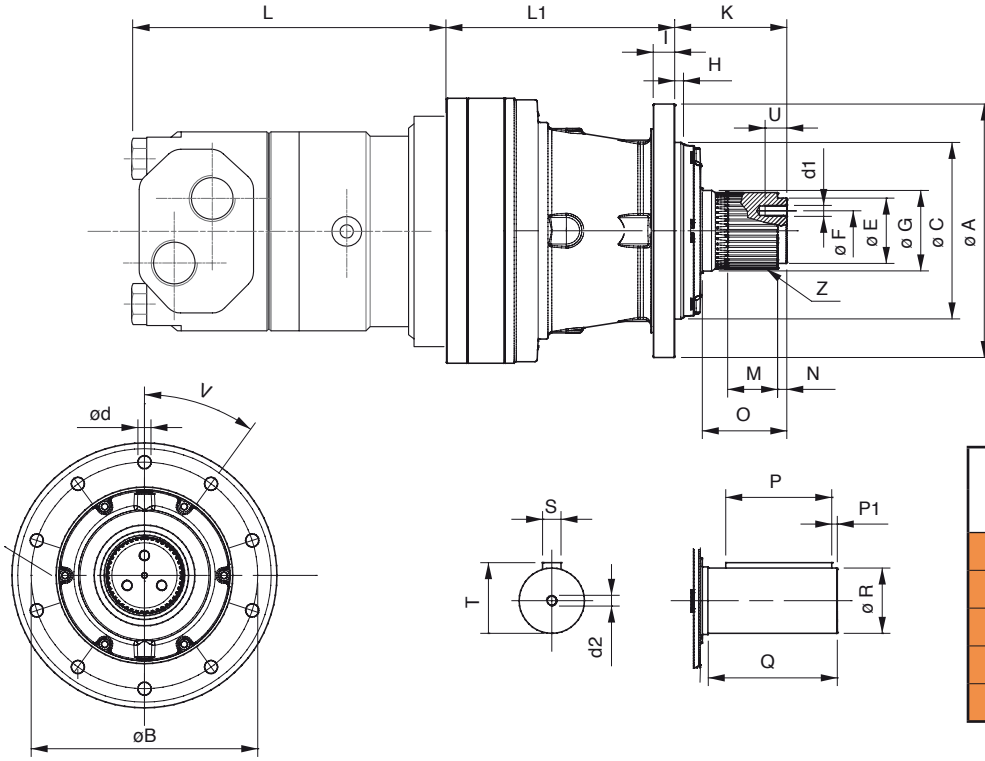
FLANGE MOUNTING FACE	
6	10450
7	8500
8	7170
9	6200
10	5460

### 110 SERIES



For different load or life calculation, please contact YPT technical department.

## HYD-DRIVES DIMENSIONAL DATA



MODEL	L	
	[inches]	mm
YMV315	[8.55]	217
YMV400	[8.82]	224
YMV500	[9.13]	232
YMV630	[9.61]	244
YMV800	[10.04]	255

Type		A	B	C	E	F	G	H	I	K	L1	M	N	O
110	mm	222	195	150 h8	50 f7	32	60 f7	13	20	84	237	35	8	68
	inch	8.74	7.68	5.91 h8	1.97 f7	1.26	2.36 f7	0.51	0.79	3.29	9.33	1.38	0.31	2.68

Type		P	P1	Q	R	S	T	U	V	Z	d	d1	d2
110	mm	90	7,5	105	65 h6	18	69	20	36°	B 58 x 53 DIN 5482	13 n°10	M 10	M 20
	inch	3.54	0.30	4.13	2.56 h6	0.71	2.72	0.79			0.51 n°8		

Type		A	B	C	E	F	G	H	I	K	L1	M	N	O
112	mm	280	250	200 h8	62 f7	40	72 f7	17	21	130	253	52	10	90
	inch	11.02	9.84	7.87 h8	2.44 f7	1.57	2.83 f7	0.67	0.83	5.12	9.96	2.05	0.39	3.54

Type		P	P1	Q	R	S	T	U	V	Z	d	d1	d2
112	mm	160	5	170	90 h6	25	95	20	30°	B 70 x 64 DIN 5482	16 n°12	M 10	M 24
	inch	6.30	0.20	6.69	3.54 h6	0.98	3.74	0.79			0.63 n°12		

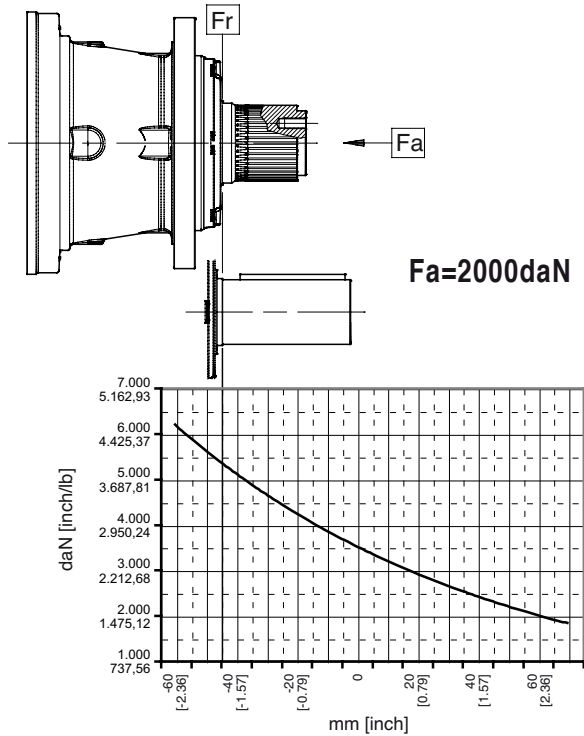
Type		A	B	C	E	F	G	H	I	K	L1	M	N	O
114	mm	325	295	230 h8	70 f7	25	85 f7	13	25	126	277	52	10	90
	inch	12.80	11.61	9.06 h8	2.76 f7	0.98	2.83 f7	0.51	0.98	4.96	10.91	2.05	0.39	3.54

Type		P	P1	Q	R	S	T	U	V	Z	d	d1	d2
114	mm	200	5	210	100 h6	28	106	20	36°	B 80 x 74 DIN 5482	17 n°10	M 10	M 24
	inch	7.87	0.20	8.27	3.94 h6	1.10	4.17	0.79			0.67 n°12		

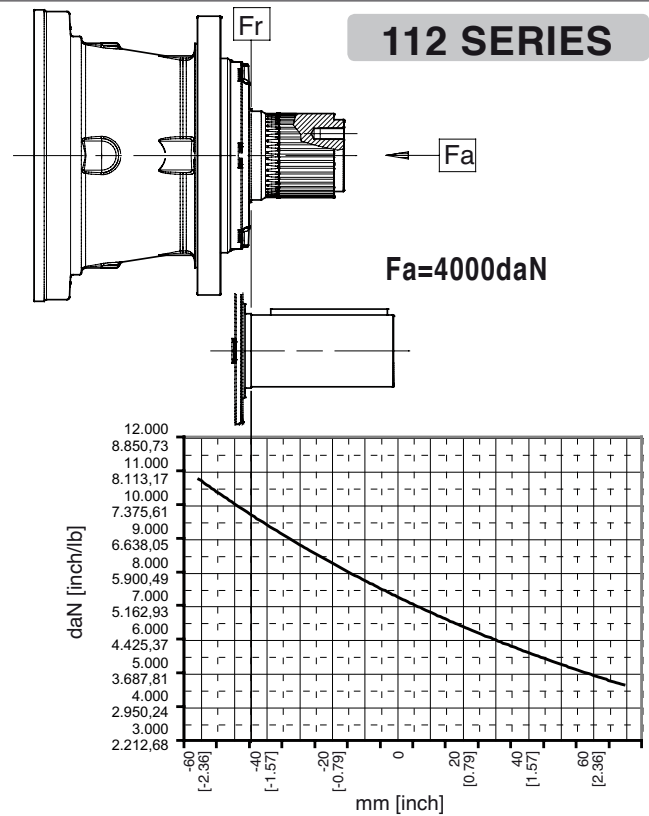


## RADIAL LOAD RATINGS

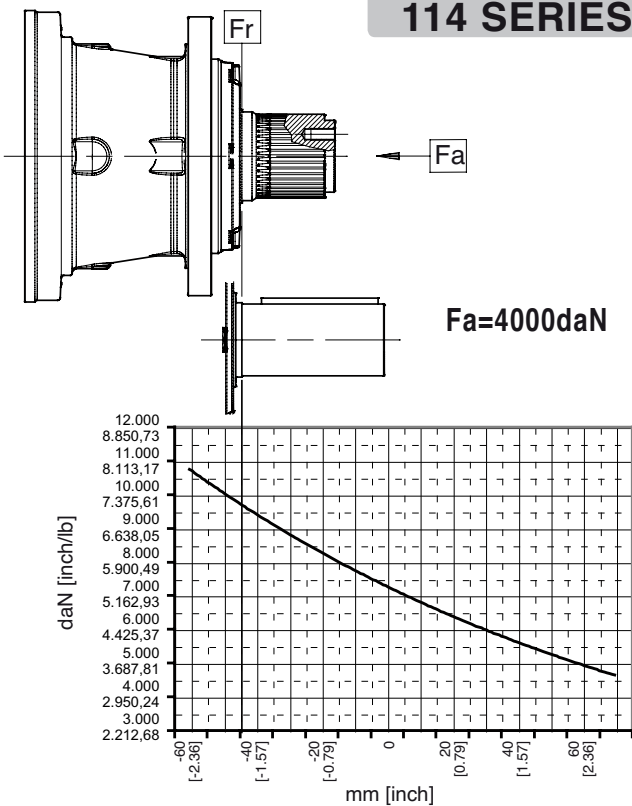
### 110 SERIES



### 112 SERIES

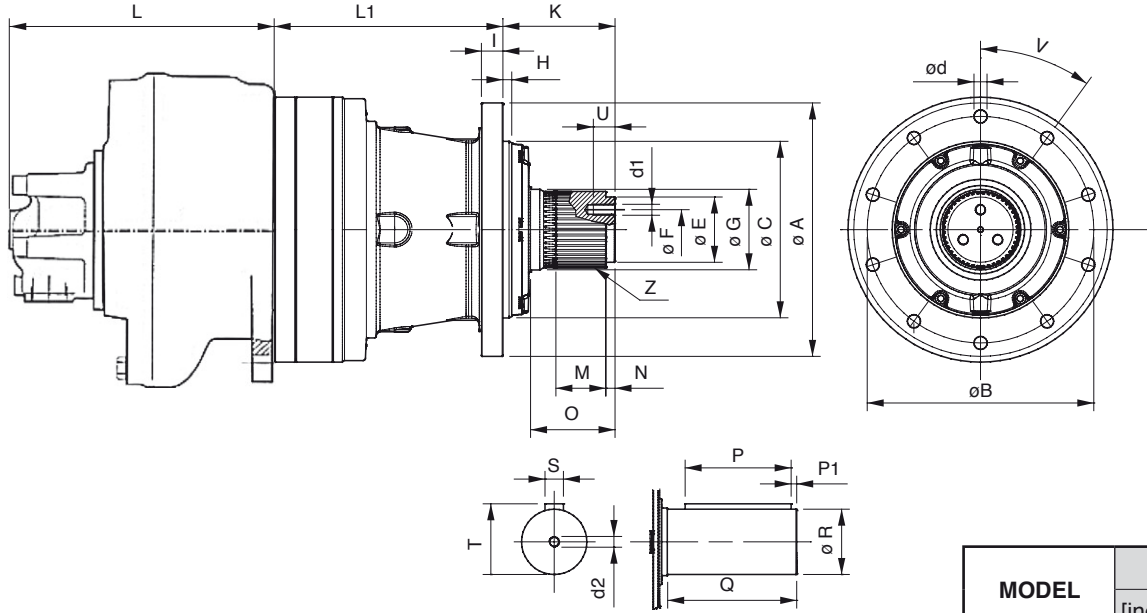


### 114 SERIES



For different load or life calculation, please contact YPT technical department.

## RADIAL LOAD RATINGS



MODEL	L	
	[inches]	mm
L-700-R05	[7.16]	182
L-700-R1	[8.70]	221

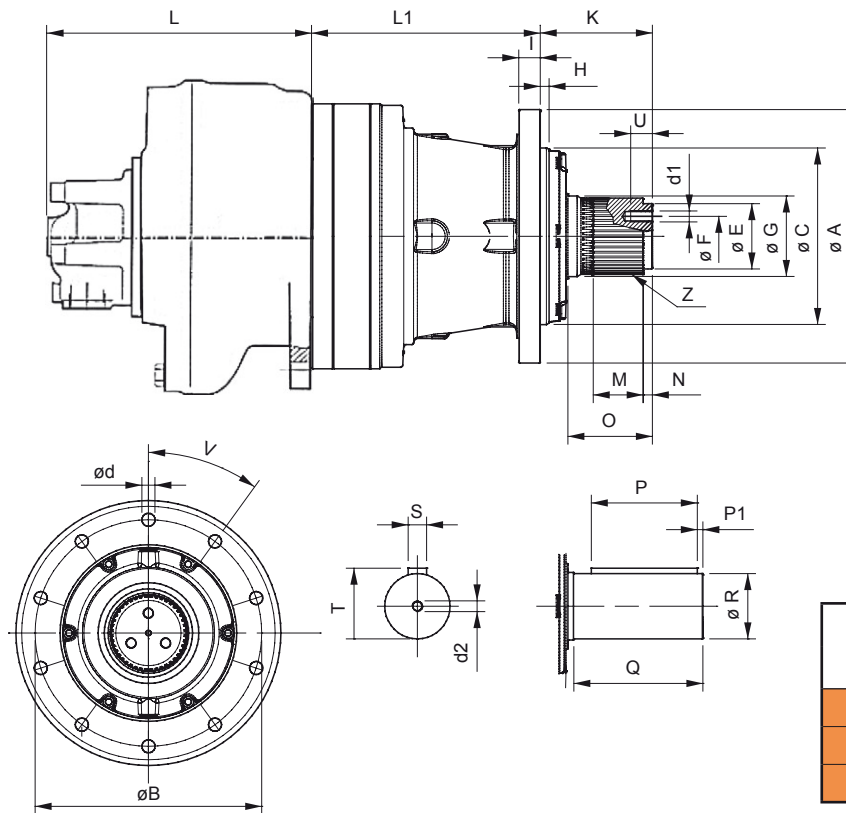
Type		A	B	C	E	F	G	H	I	K	L1	M	N	O
110	mm	222	195	150 h8	50 f7	32	60 f7	13	20	84	237	35	8	68
	inch	8.74	7.68	5.91 h8	1.97 f7	1.26	2.36 f7	0.51	0.79	3.29	9.33	1.38	0.31	2.68

Type		P	P1	Q	R	S	T	U	V	Z	d	d1	d2
110	mm	90	7,5	105	65 h6	18	69	20	36°	B 58 x 53 DIN 5482	13 n°10	M 10	M 20
	inch	3.54	0.30	4.13	2.56 h6	0.71	2.72	0.79			0.51 n°8		

Type		A	B	C	E	F	G	H	I	K	L1	M	N	O
900	mm	153	114.5	127	*	*	*	12.7	19	*	177	*	*	*
	inch	6.02	4.51	5				0.5	0.75		6.7			

Type		P	P1	Q	R	S	T	U	V	Z	d	d1	d2
900	mm	*	*	*	*	*	*	*	90°	*	17,4 n°4	*	*
	inch										0.68 n°4		

## DIMENSIONAL DATA



MODEL	L	
	[inches]	mm
L-700-R1	[7.16]	221
L-700-R2	[9.72]	247
L-700-R3	[10.59]	269

Type		A	B	C	E	F	G	H	I	K	L1	M	N	O
110	mm	222	195	150 h8	50 f7	32	60 f7	13	20	84	237	35	8	68
	inch	8.74	7.68	5.91 h8	1.97 f7	1.26	2.36 f7	0.51	0.79	3.29	9.33	1.38	0.31	2.68

Type		P	P1	Q	R	S	T	U	V	Z	d	d1	d2
110	mm	90	7.5	105	65 h6	18	69	20	36°	B 58 x 53 DIN 5482	13 n°10	M 10	M 20
	inch	3.54	0.30	4.13	2.56 h6	0.71	2.72	0.79			0.51 n°8		

Type		A	B	C	E	F	G	H	I	K	L1	M	N	O
112	mm	280	250	200 h8	62 f7	40	72 f7	17	21	130	253	52	10	90
	inch	11.02	9.84	7.87 h8	2.44 f7	1.57	2.83 f7	0.67	0.83	5.12	9.96	2.05	0.39	3.54

Type		P	P1	Q	R	S	T	U	V	Z	d	d1	d2
112	mm	160	5	170	90 h6	25	95	20	30°	B 70 x 64 DIN 5482	16 n°12	M 10	M 24
	inch	6.30	0.20	6.69	3.54 h6	0.98	3.74	0.79			0.63 n°12		

Type		A	B	C	E	F	G	H	I	K	L1	M	N	O
114	mm	325	295	230 h8	70 f7	25	85 f7	13	25	126	277	52	10	90
	inch	12.80	11.61	9.06 h8	2.76 f7	0.98	2.83 f7	0.51	0.98	4.96	10.91	2.05	0.39	3.54

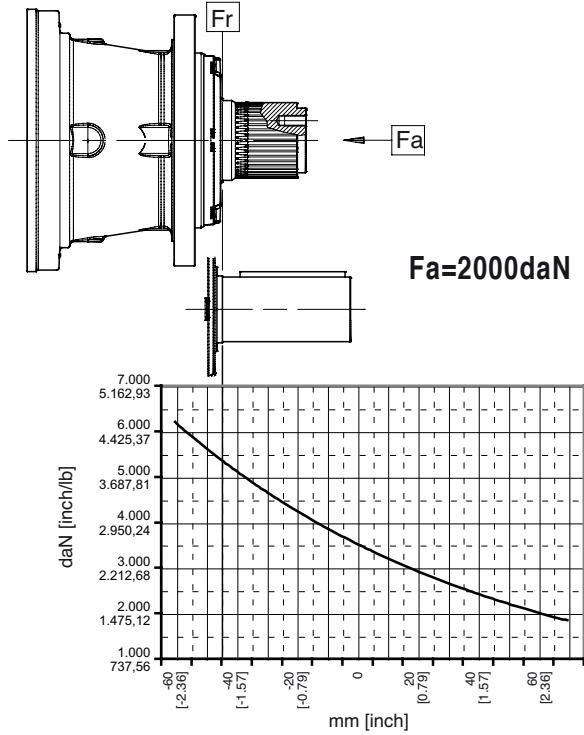
Type		P	P1	Q	R	S	T	U	V	Z	d	d1	d2
114	mm	200	5	210	100 h6	28	106	20	36°	B 80 x 74 DIN 5482	17 n°10	M 10	M 24
	inch	7.87	0.20	8.27	3.94 h6	1.10	4.17	0.79			0.67 n°12		

Type		A	B	C	E	F	G	H	I	K	L1	M	N	O
116	mm	330	295	230 h8	70 f7	85 f7	52	105 f7	11,5	27	146	65	12	110
	inch	12.99	11.61	9.06 h8	2.76 f7	3.35 f7	2.05	4.13 f7	0.45	1.06	5.75	2.56	0.47	4.33

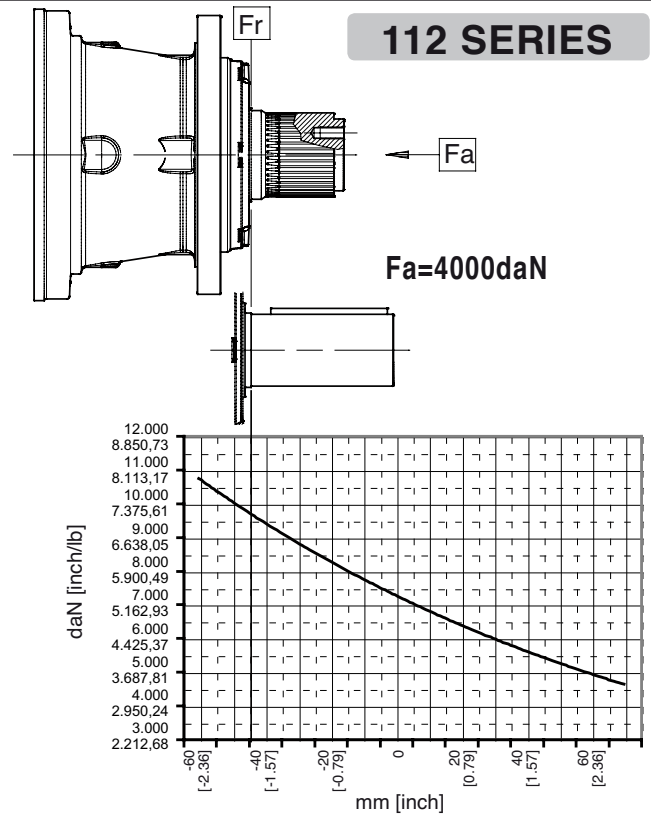
Type		P	P1	Q	R	S	T	U	V	Z	d	d1	d2
116	mm	200	5	210	100 h6	28	106	30	36°	B 100 x 94 DIN 5482	17 n°12	M 14	M 24
	inch	7.87	0.20	8.27	3.94 h6	1.10	4.17	1.18			0.67 n°12		

## RADIAL LOAD RATINGS

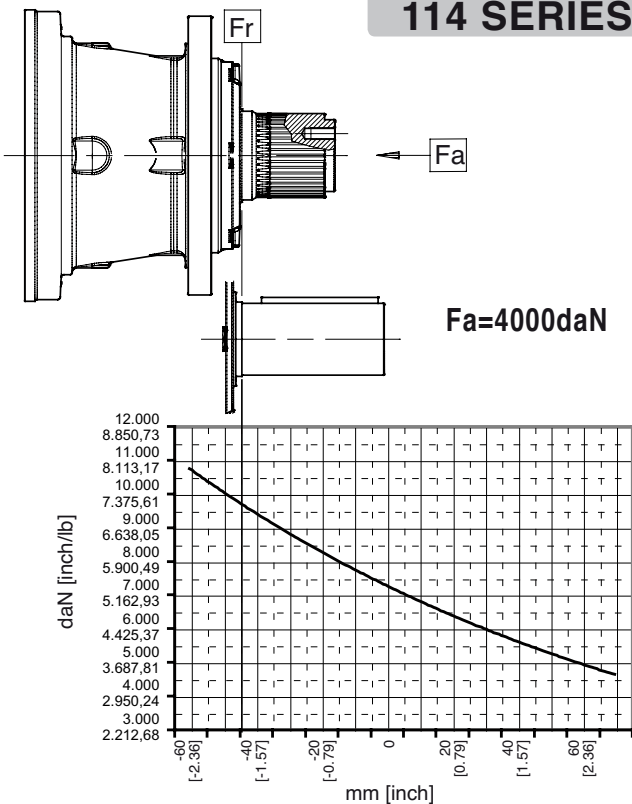
### 110 SERIES



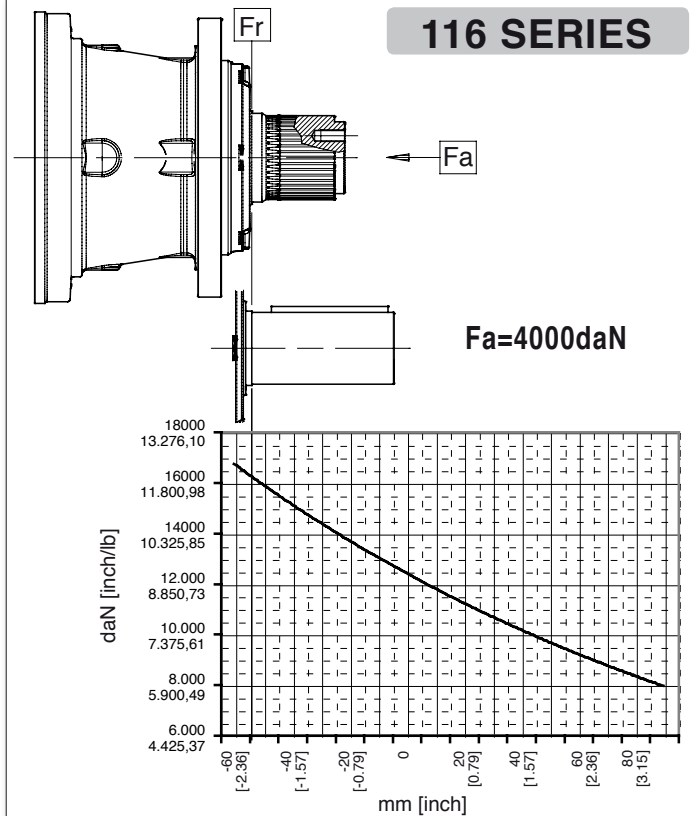
### 112 SERIES



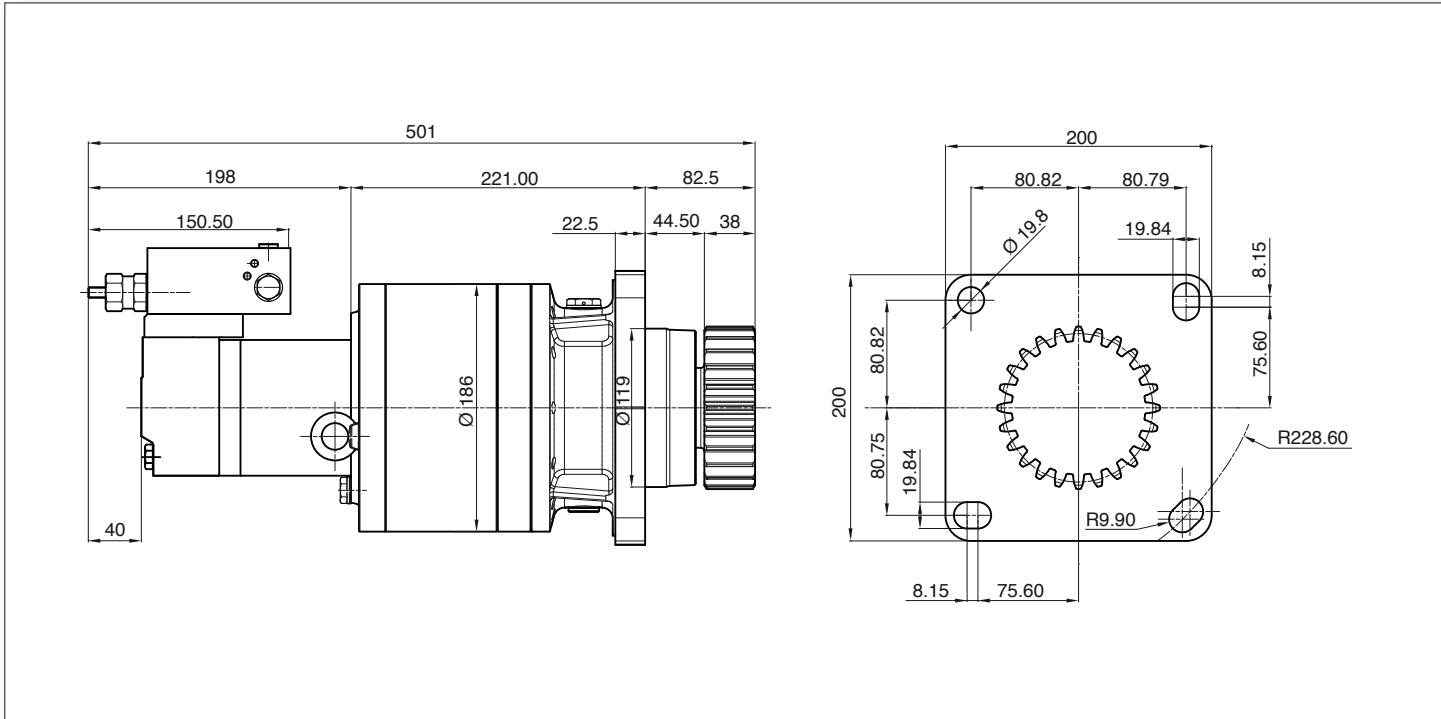
### 114 SERIES



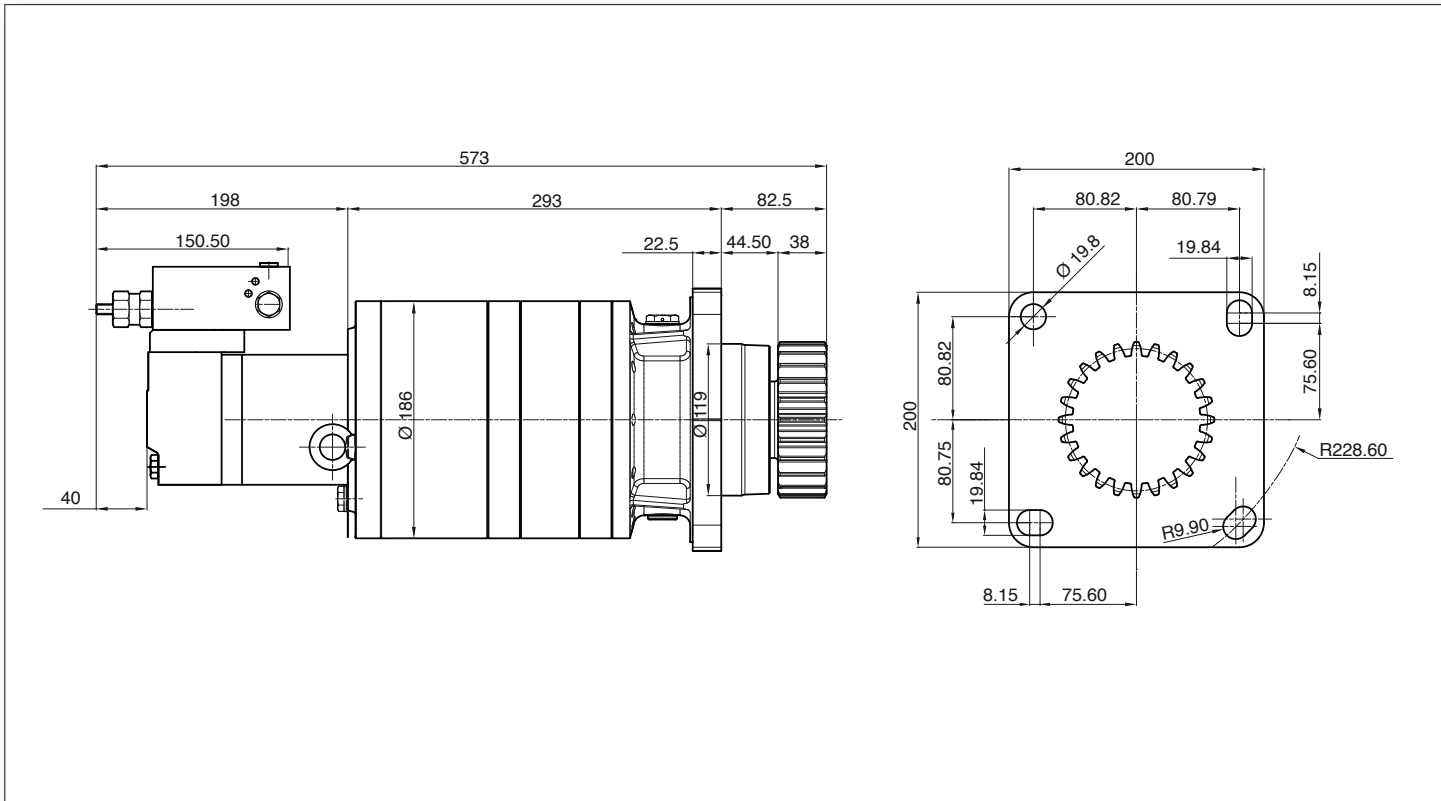
### 116 SERIES



# SINGLE STAGE SWING DRIVE

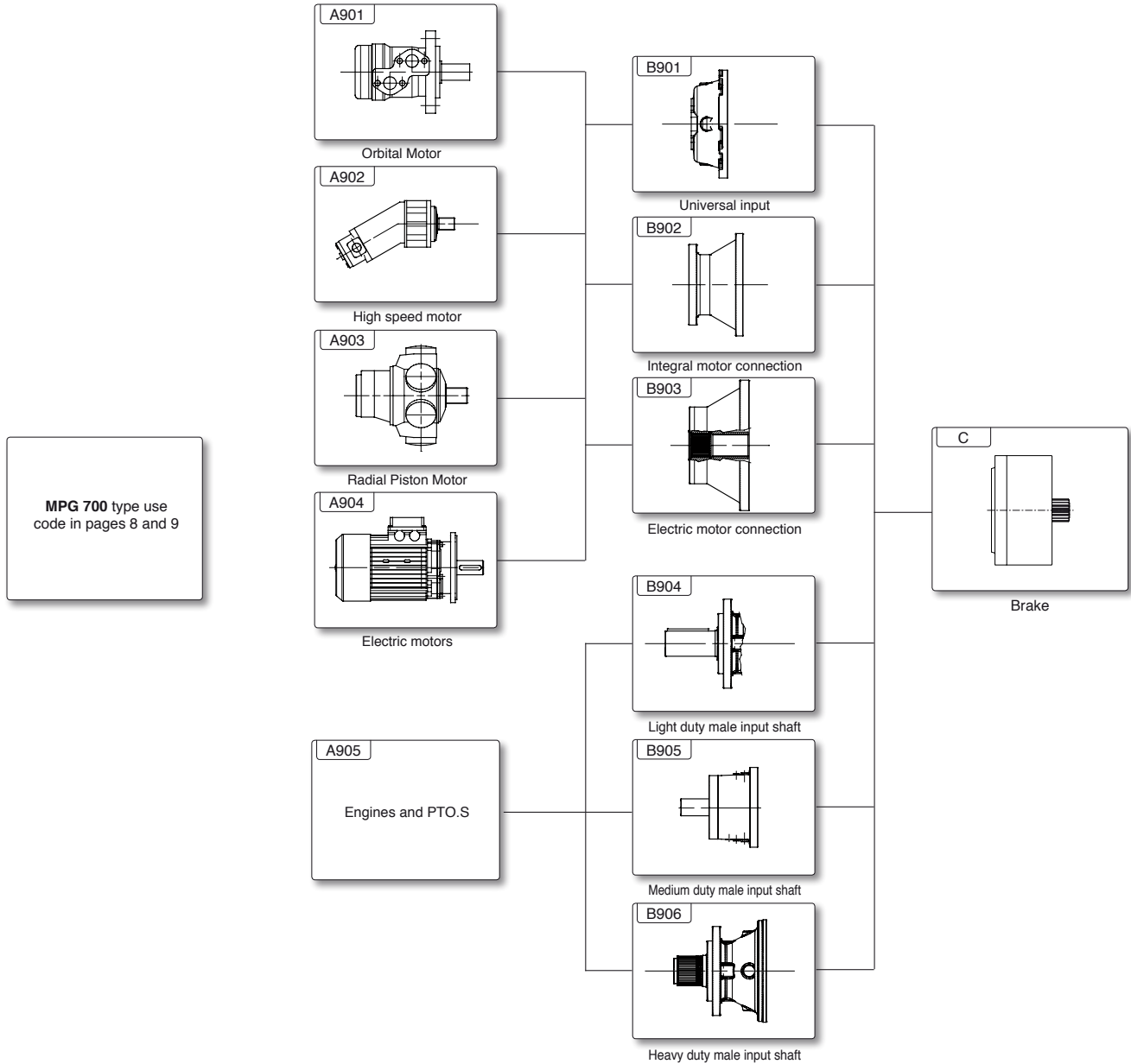


# DOUBLE STAGE SWING DRIVE



OTHER OPTIONS AVAILABLE

# INPUT SIDE ASSEMBLY CONFIGURATION



901-4
901-5
902-15
902-18
902-22
902-25
902-31
902-37

A	
MOTOR CONNECTION FLANGES	
A901	SAE "A" 2 Bolts
A902	SAE "A" Square
A903	SAE "A" Magneto
A904	SAE "B" 2 Bolts
A905	SAE "B" 4 Bolts
A906	SAE "C" 2 Bolts
A907	SAE "C" 2/4 Bolts
A908	YMSJ - 2000
A909	YMTS - 4000

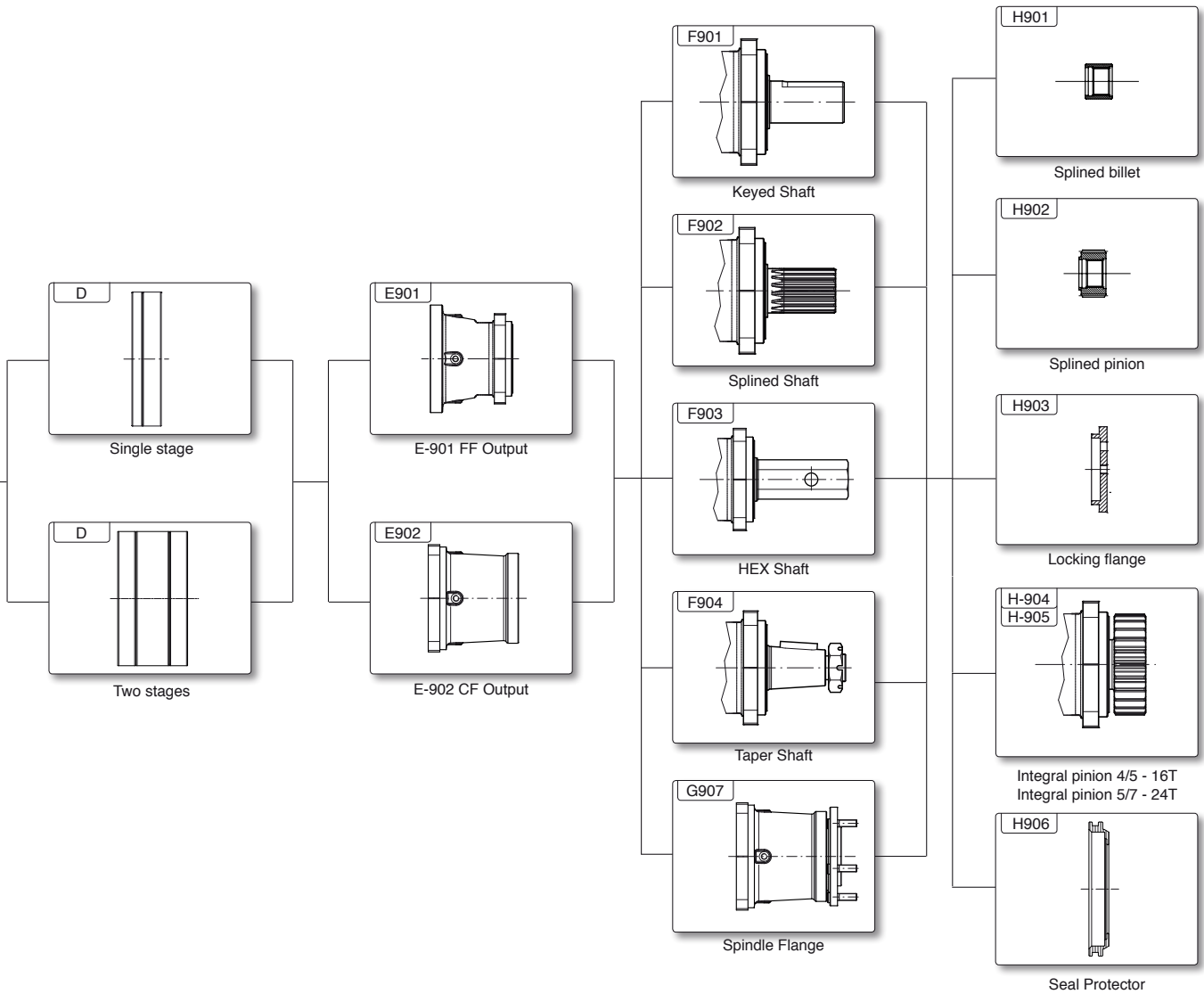
B	
MOTOR SHAFT	
B901	6 B Spline
B902	16/32-13 T spline
B903	16/32-15 T spline
B904	1.00" keyed
B905	1.250" keyed
B906	YMSJ Bearingless
B907	Eaton 2000 Bear.
B908	YMTS Bearingless
B909	Eaton 4000 Bear.
B910	25 mm keyed
B911	32 mm keyed
B912	1-1/4-12/24-14T Spline

C	
BRAKE	
MDB 70-10	
MDB 70-18	
MDB 70-28	
MDB 70-37	
MDB 70-58	
MDB 70-70	

## ORDERING SYSTEM

	A	B	C
	MOTOR CONNECTION FLANGES	MOTOR SHAFT	BRAKE
901-4	A901	B901	MDB 70-10

# OUTPUT SIDE ASSEMBLY CONFIGURATION



D		
RATIO		
1 STAGE	D901-4	4.4
	D901-5	5.25
2 STAGES	D902-15	15.31
	D902-18	18.74
	D902-22	22.36
	D902-25	25.38
	D902-31	31.68
	D902-37	37.8

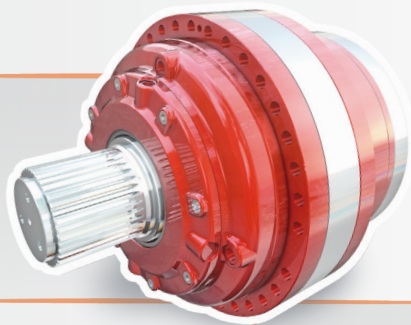
E	
OUTPUT FLANGE	
E901	FF Output
E902	CF Output

F	
OUTPUT SHAFT	
F901	2.00" Key
F902	2.25" Key
F903	2.00" Hex
F904	2.25" Taper
F905	8/16 DP 16 T
F906	8/16 DP 23 T
G907	4 Studs spindle
G908	5 Studs spindle

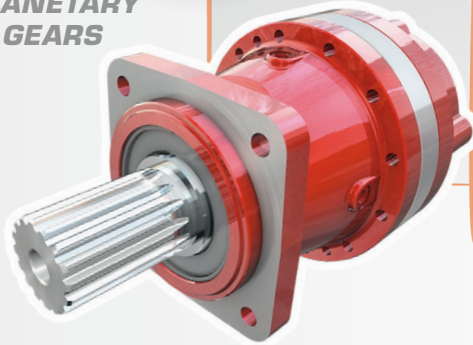
H	
OUTPUT ACCESSORY	
H901	Splined bushing
H902	Splined pinions
H903	Locking flange
H904	Integral pinion 4/5-16
H905	Integral pinion 5/7-24
H906	Seal Protector

ORDERING SYSTEM			
D	E	F	H
RATIO	OUTPUT FLANGE	OUTPUT SHAFT	OUTPUT ACCESSORY
D901-4	E 901	F901	

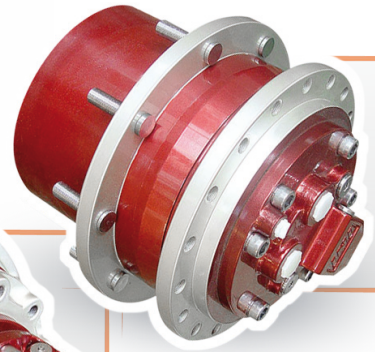
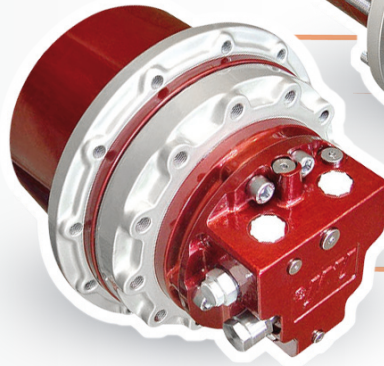
# YOUNG POWERTECH PRODUCTS



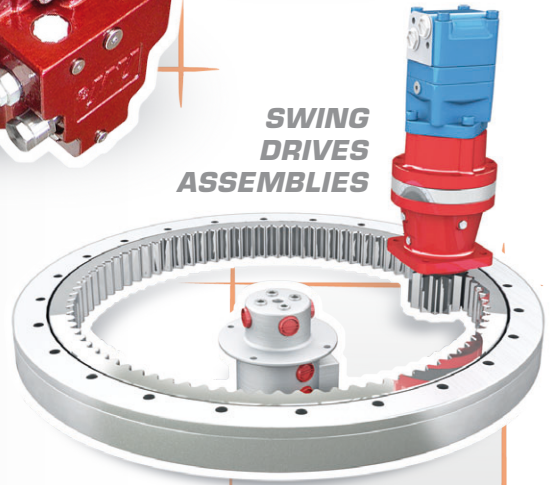
**PLANETARY  
GEARS**



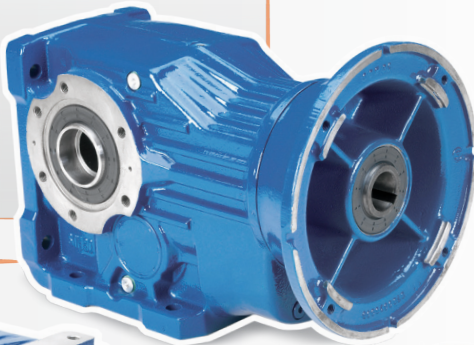
**WHEEL DRIVES  
TRACK DRIVES  
WINCH DRIVES**



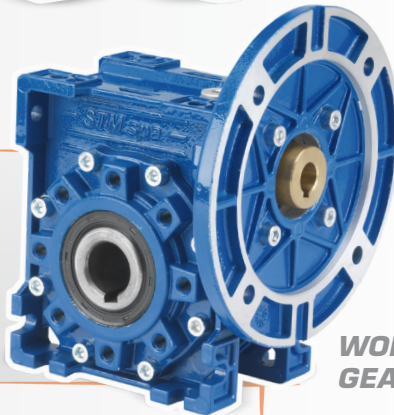
**SWING  
DRIVES  
ASSEMBLIES**



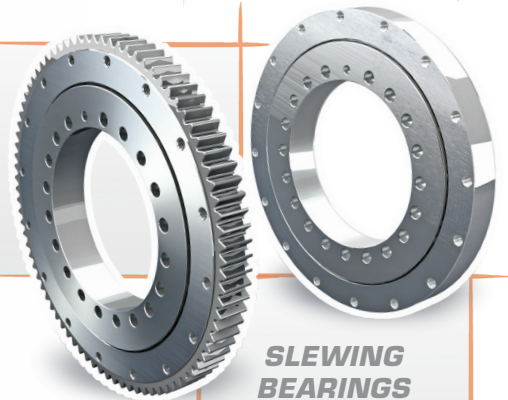
**BEVEL  
GEARS**



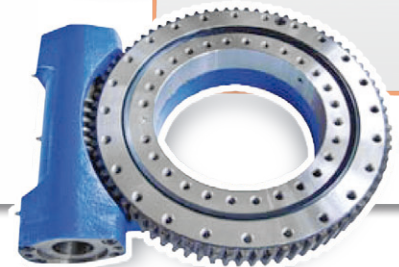
**PARALLEL  
SHAFT**



**WORM  
GEARS**



**SLEWING  
BEARINGS**

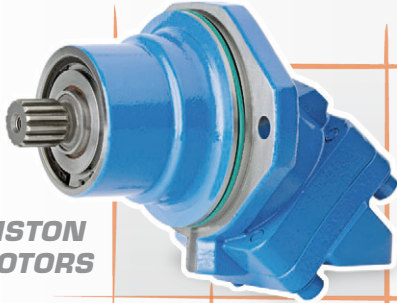




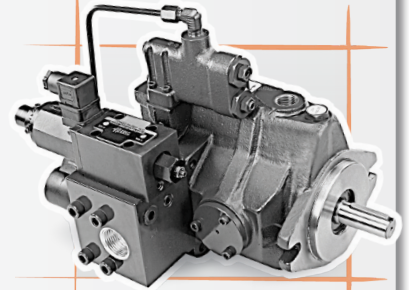
# YOUNG POWERTECH PRODUCTS



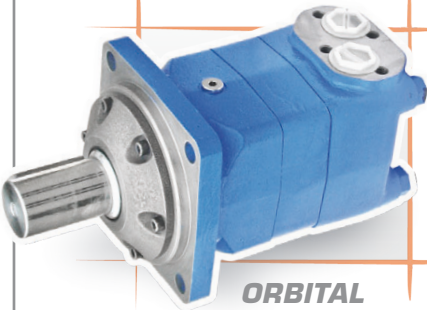
**RADIAL PISTON MOTORS**



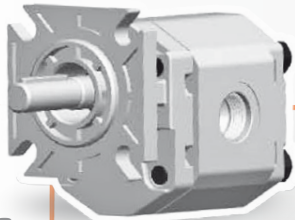
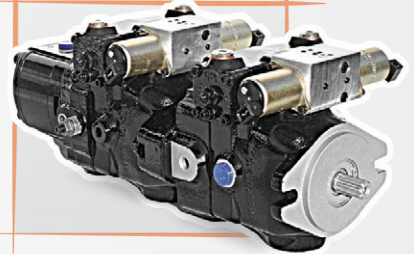
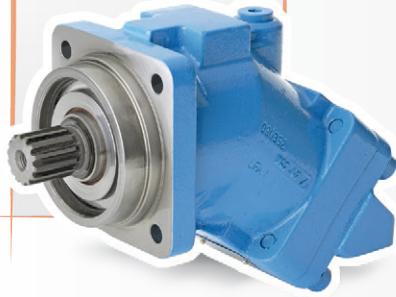
**PISTON MOTORS**



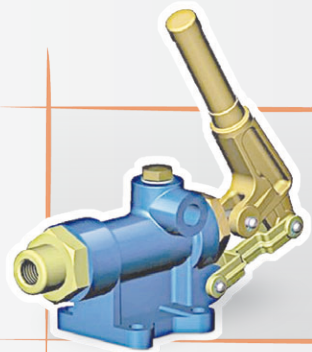
**AXIAL AND PISTON PUMPS**



**ORBITAL MOTORS**



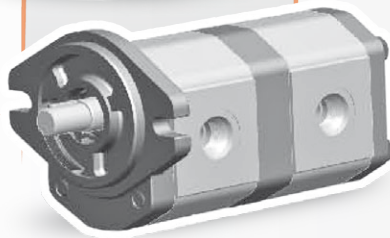
**GEAR PUMPS AND MOTORS**



**HAND PUMPS**



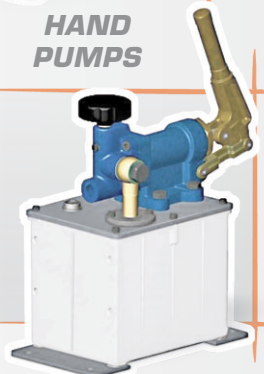
**STEERING VALVES**



**ROTATORS**



**SWIVELS**



# SPEED REDUCERS APPLICATION DATA SHEET

Company \_\_\_\_\_ Street \_\_\_\_\_  
 City \_\_\_\_\_ Zip Code \_\_\_\_\_  
 Phone n° \_\_\_\_\_ Fax n° \_\_\_\_\_  
 E-mail \_\_\_\_\_ Contact \_\_\_\_\_

### REDUCER DATA

Existing \_\_\_\_\_ Mfg \_\_\_\_\_ Code \_\_\_\_\_  
 Model # \_\_\_\_\_ Others \_\_\_\_\_

### APPLICATION DATA

Torque Nm	Speed required RPM	Reducer mounting
1) _____ % of time _____	1) _____ % of time _____	Horizontal
2) _____ % of time _____	2) _____ % of time _____	Shaft Up _____
3) _____ % of time _____	3) _____ % of time _____	Shaft down _____
4) _____ % of time _____	4) _____ % of time _____	Other _____

### WORKING CYCLE

Cycles per Minute \_\_\_\_\_ Hours \_\_\_\_\_ Day \_\_\_\_\_ Expected life \_\_\_\_\_ HRS  
 Stop-Starts-reversal conditions \_\_\_\_\_ S.F. \_\_\_\_\_

### COOLING

Enclosed location \_\_\_\_\_ Open air, outside \_\_\_\_\_ Ambient temperature \_\_\_\_\_

### MOTOR DATA

Hydraulic \_\_\_\_\_ Displacement CC/Rev. \_\_\_\_\_ Max Oil Flow \_\_\_\_\_ L/m  
 Pressure MPa Continuous \_\_\_\_\_ % Intermittent \_\_\_\_\_ %  
 Peak pressure valve setting \_\_\_\_\_ % Others \_\_\_\_\_  
 Electric \_\_\_\_\_ KW /HP Air \_\_\_\_\_ Driveshaft driven \_\_\_\_\_  
 Installed Power \_\_\_\_\_ HP \_\_\_\_\_ KW

### PREFERRED REDUCER TYPE

In-Line \_\_\_\_\_ Right angle \_\_\_\_\_ Ratio \_\_\_\_\_

### INPUT OPTIONS. MOTOR CONNECTION

Metric \_\_\_\_\_ SAE \_\_\_\_\_ Input shaft \_\_\_\_\_ Other \_\_\_\_\_  
 Brakes required \_\_\_\_\_ Yes \_\_\_\_\_ No Dynamic \_\_\_\_\_ Parking \_\_\_\_\_

### OUTPUT OPTIONS

Male spline \_\_\_\_\_ Male keyed shaft \_\_\_\_\_ Female spline \_\_\_\_\_  
 Shrink Disc \_\_\_\_\_

## FOR YOUNG POWERTECH INC ANSWER ONLY. PLEASE DO NOT WRITE BELOW

### SUGGESTED UNIT

Reducer type \_\_\_\_\_ Size \_\_\_\_\_  
 Ratio \_\_\_\_\_ :1 Model \_\_\_\_\_ Life Hrs \_\_\_\_\_  
 Complete part No. \_\_\_\_\_  
 Complete description \_\_\_\_\_  
 Price \_\_\_\_\_ Delivery \_\_\_\_\_

### PLEASE NOTE

The unit Suggested by Young Powertech Engineering department is the result of the application data supplied. Should premature failure or other problem arise, Young Powertech engineering will have the option to inspect the application and verify application data actually required. For all other reason, please refer to "warranty" on page 25 Young Powertech will not be responsible for premature failure or total failure unless actual data is supplied.

## WARRANTY

If the products fails to function within one (1) year after the date of its original shipment, or invoice date whichever come first, due to a defect in the materials or workmanship, Young Powertech will remedy the defect without charge to the consumer purchaser. The foregoing limited warranty does not cover failure to function caused by damage to the product while in your possession, improper installation, unreasonable use or abuse of the product, failure to provide or use of improper maintenance, failure to follow written installation and instructions. THE REMEDIES PROVIDED IN THE ABOVE EXPRESS LIMITED WARRANTY ARE THE SOLE AND EXCLUSIVE REMEDIES AVAILABLE TO YOU. NO OTHER EXPRESS WARRANTIES ARE MADE. ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE LIMITED IN DURATION AS SET FORTH ABOVE. IN NO EVENT SHALL YPT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. The consumer-purchaser must maintain proof of purchase and shipment date of the product to prove the date of purchase and shipment in the unlikely event of a warranty claim.

In order to obtain a return authorization number you must contact Young Powertech at **(610) 558-0760** prior to shipping. The customer will be required to ship only the defective parts, freight pre-paid to :

### **Young Powertech Inc**

**3060 Plaza Drive • Garnet Valley PA 19060 • Tel: (610) 558-0760 • Fax: (610) 558-0762**

**e-mail: [info@youngpowertech.com](mailto:info@youngpowertech.com)**

Young Powertech, will repair or replace any part found defective and return the unit prepaid by ground shipment to the customer.

In the event that the unit is not found to have a defect the customer will be charged an inspection fee and the unit will be returned freight collect to the customer.



Young Powertech  
3060 Plaza Drive  
Garnet Valley PA 19060  
Tel: (610) 558-0760  
Fax: (610) 558-0762  
e-mail: [info@youngpowertech.com](mailto:info@youngpowertech.com)  
[www.youngpowertech.com](http://www.youngpowertech.com)

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