

Compact Constant Speed Reducer MC Series

SEW
EURODRIVE

2003
Product
Catalog

Up to 97% Efficient • Superior Uptime • Long Life • Low Maintenance • Compact Design • Modular Components • Custom Assembled

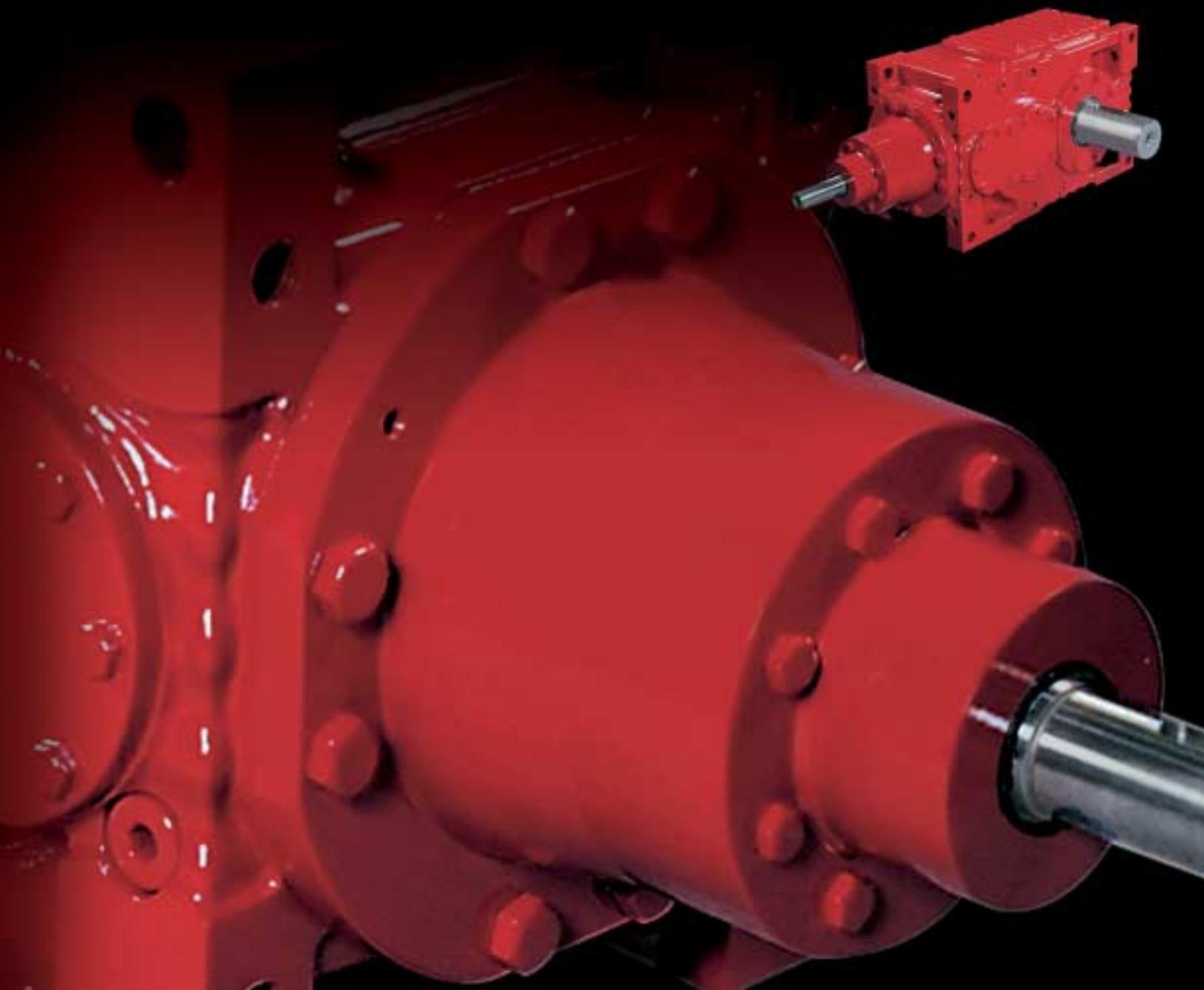


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1. General Information

1.1. International SI-Units

Type of Measure	SI Sign	SI Unit	SI-Units Denomination
Length	l	m	meter
Width	b	m	meter
Height	h	m	meter
Radius	r	m	meter
Rotary Speed	n	rpm	
Diameter	d	m	meter
Distance	s	m	meter
Angle	$\alpha, \beta, \gamma, \dots$	rad	radian
Area	A,S	m^2	
Volume	V	m^3	
Time	t	s	Second
Cycle Length	T	s	Second
Frequency	f	Hz	Hertz
Velocity	v	m/s	
Acceleration	a	m/s^2	
Gravity	g	m/s^2	= 9.81 m/s^2
Angular Acceleration	α	rad/s^2	
Mass	m	kg	kilogram
Density	g	kg/m^3	

Type of Measure	SI Sign	SI Unit	SI-Units Denomination
Force	F	N	Newton
Gravity Force	G	N	Newton
Pressure	p	N/m^2	Pascal
Torque	M	Nm	Newton meter
Inertia	J	kgm^2	m^2
Temperature	T	K	Kelvin
Temperature	t	$^{\circ}C$	Celsius
Work, energy	W	J	Joule
Real Power	P	W	Watt
Apparent Power	S	VA	Volt Ampere
Reactive Power	Q	VAR	Volt Ampere
Voltage	U	V	Volt
Elec. Current	I	A	Ampere
Elec. Resistance	R	Ω	Ohm
Elec. Capacity	C	F	Farad
Elec. Inductance	L	H	Henry
Friction Factor	μ	1	
Efficiency	η	1	EFF.
Dynamic Viscosity	η	Ns/m^2	Pascal sec.

1.2. Conversion Table for Commonly Used English - Metric Units

Distance	Area	Volume
Inches = 39.37 x m	sq. in. = 1550 x m^2	Gallon (UK) = 0.22 x liter
Feet = 3.281 x m	sq. ft. = 10.76 x m^2	Gallon (US) = 0.264 x liter
Yards = 1.094 x m	sq. yd. = 1.196 x m^2	cu. inch = 61.024 x liter
Miles = 0.621 x km	sq. ml. = 0.3861 x km^2	cu. ft. = 35.315 x m^3
Feet = 5280 x miles	m^2 = 106 x km^2	cu. yd. = 1.308 x m^3
Mass & Force	Pressure, Stress	Temperature
Ounces = 35.3 x kg	lb./sq. in. = 14.69 x atm.	$^{\circ}F$ = $(1.8 \times ^{\circ}C) + 32$
Pounds = 2.205 x kg	ft. water = 33.9 x atm.	$^{\circ}C$ = $0.555(^{\circ}F - 32)$
Pounds = 0.225 x N	Pascal = 9.81 x 104 x atm.	
Torque	Inertia	Performance
lb. in. = 8.85 x Nm	WK^2 (lb-ft. 2) = 5.93 x GD^2	lb. in. = 86.79 x kpm
lb. ft. = 0.738 x Nm	WK^2 (lb-ft. 2) = 23.75 x J	lb. ft. = 0.7376 x J
lb. in. = 86.79 x kpm	lb. in. 2 = 144 x lb. ft. 2	lb. ft./min. = 44253 x kW
lb. ft. = 7.233 x kpm	J (mr^2) = 0.25 x GD^2 (kgm^2)	lb. ft./s. = 737.55 x kW
lb. in. = 12 x lb. ft.		hp = 1.33 x kW

1.3. Gear Unit - Required Data

SI Unit	Description
n_1	High speed shaft RPM
n_2	Low speed shaft RPM
i	Ratio
P_{K1}	Power at high speed shaft
P_{K2}	Power at low speed shaft
M_{K1}	Torque at high speed shaft
M_{K2}	Torque at low speed shaft
F_s	Service factor

SI Unit	Description
T_{amb}	Ambient temperature
η	Efficiency
J	Moment of inertia
M_{N2}	Nominal torque at low speed shaft
W	Weight
P_T	Thermal rating - without any cooling device, or - with cooling fan
P_{TW}	Thermal rating with water cooling coil AISI 316
P_{TL}	Thermal rating with external cooler and pressure lubrication unit.

2. The SEW-EURODRIVE Group of Companies

2.1. What is SEW?

SEW-EURODRIVE is a leading company in the global market for electro-mechanical drive engineering. SEW's global presence, extensive product range and broad spectrum of services mean it is the ideal partner for all industries requiring geared reducers and high dynamic drive systems for demanding applications.

SEW possesses many years of experience in drive engineering which it puts to good use when developing, producing and selling all its drives with components drawn from mechanical and electrical engineering and electronics.

The headquarters of the US operations is located in Lyman, SC. Components for SEW's modular drive system are manufactured to the highest quality standards in production plants located in the USA, Germany, France, Brazil, China and Finland. These stocked components are utilized in assembly plants in over 30 industrialized countries all over the world. The assembly plants offer close proximity to customers and particularly short delivery times for individual drive systems – with a constantly high standard of quality. SEW's sales, application engineering, customer and spare parts services are to be found in more than 50 countries all over the world.

2.2. The Product Range

- Geared motors, gear units and motors
 - Helical gear units/geared motors
 - Parallel shaft helical gear units/geared motors
 - Helical-bevel gear units/geared motors
 - Helical-worm gear units/geared motors
 - Spiroplan® right-angle geared motors
 - Planetary geared motors Industrial gear units
 - Low backlash gear units/geared motors
 - Brake motors
 - Geared torque motors
 - Two speed geared motors
 - Compact® helical and right angle helical-bevel gear reducer
 - M-Series split housing helical and bevel-helical gear reducer for high torque requirements
 - Combination Planetary high torque, low output speed planetary reducer in combination with an input of either a helical or helical-bevel gearmotor
 - Quattro® high torque capacity planetary gear reducer
- Electronically controlled drives with
 - MOVITRAC® frequency inverters
 - MOVIDRIVE® drive inverters
 - MOVIDYN® servo controllers
 - Technology and communications options for the inverters
 - Asynchronous AC motors and AC geared motors
 - Asynchronous and synchronous servomotors and geared servomotors
- Components for decentralized installation
 - MOVIMOT® geared motors with integrated frequency inverter
 - MOVI-SWITCH® geared motors with integrated circuit breaker and protective function
 - Field distributors, fieldbus interfaces

- Mechanical variable speed drives
 - VARIGEAR® wide V-belt variable speed geared motors
 - VARIMOT® friction disk variable speed geared motors
- Services
 - Application engineering
 - Application software
 - Seminars and training courses
 - Extensive technical documentation
 - Worldwide customer service

2.3. Content of the Catalog

This catalog describes SEW gear units and their components on the input side. It contains project planning notes, mounting positions, technical data, selection tables and dimension sheets. Please refer to separate catalogs for more information about gear units, geared motors, two speed geared motors, variable speed geared motors and geared servomotors.

2.4. Other Catalogs

- Gear Reducers (for high torque requirements)
 - Combination-Planetary Reducers
 - Compact® Reducers
 - M-Series Gear Reducers
- Low Backlash Planetary Gear Units
- Constant Speed Gearmotors
- Constant Speed Gear Units
- VARIMOT® Variable Speed Gearmotors
- VARIGEAR® Variable Speed Gearmotors
- F27 Parallel Shaft Helical Gear Units
- **TorqLOC** Mounting System

3. Product Description and Overview of Types

3.1. General Information

3.1.1. Power Output and Torque

The details on power and torque are given in the catalog. The gear units are assumed to be standard versions with standard lubrication and normal ambient conditions.

3.1.2. Noise Levels

Information on noise levels for specific reducers and ratios can be found on the "Gear 4.2" Selection CD-ROM.

3.1.3. Coating

SEW gear units are painted with SEW stainless steel blue paint.

3.1.4. Surface and Corrosion Protection

If required, SEW gear units can also be supplied with special corrosion protection for applications in wet and chemically aggressive environments.

3.1.5. Weights

Please note that all weights shown in the catalog exclude the oil fill for the gear units. The weights vary depending on the gear unit type and gear unit size. The lubricant fill is dependent on the mounting position.

3.1.6. Hollow Shaft Mounting Paste for Protection Against Contact Corrosion

As standard, all keyed shaft-mounted gear units are supplied with mounting paste which prevents contact corrosion. Use this compound in accordance with the instructions in the gear unit operating instructions. It facilitates servicing and removal of the gear reducer.

3.1.7. US Standards

SEW-EURODRIVE, INC. is a member of the AGMA (American Gear Manufacturers' Association), and as such, all its gear units conform to AGMA specifications.

3.2. Optional Components

Output Mounting Flange – Hollow or solid output shaft mounting flange.

Input Side Cooling Fan – Cooling fan used when the thermal rating of the reducer is insufficient. Fan is bi-directional and can be installed in the field.

Shrink Disc – A shrink disc is available for all sizes of the Compact[®] hollow shaft reducers.

Motor Mounting Flange – Mounting surface to attach NEMA C-face or IEC flanged motors to the reducer.

Motor Mounting Flange with Fan – NEMA C-face or IEC flanged motor mounting surface with a cooling fan.

Backstop – Reducer mounted backstop to prevent undesirable reverse rotation.

Motor Bracket – Motor mounting platform for belt driven input.

V-Belt Drive – Belt driven input. Includes motor platform, pulleys, v-belt and belt guard.

High Speed Shaft (HSS) Elastic Coupling – Pre-selected HSS couplings are available for mounting to the input motor. Coupling selection is based upon the horsepower of the motor and the size of the reducer.

Low Speed Shaft (LSS) Gear Coupling – Pre-selected LSS gear coupling based upon the nominal reducer torque and output shaft diameter. Couplings available for vertical and horizontal applications.

HSS and LSS Coupling Guard – Coupling guard for HSS and LSS. Attaches directly to the gear reducer.

Torque Arm – Torque arm for shaft mounted reducer. The torque arm can be mounted to function in either tension or compression.

Shaft End Oil Lubrication Pump – (Available on reducer sizes 04 – 09 only.) The shaft end pump is used when bath lubrication is insufficient for the rotating speed of the HSS. All plumbing is external to the reducer.

Shaft End Oil Lubrication with Cooler – The shaft end pump with cooler is used when the thermal rating of the basic gear unit is not sufficient. Cooler is used when no fan can be used due to the conditions of the operating environment.

Oil Drain Valve – A ball valve is mounted to the drain plug location to enable a drain pipe to be easily attached to the valve when changing the oil in the reducer.

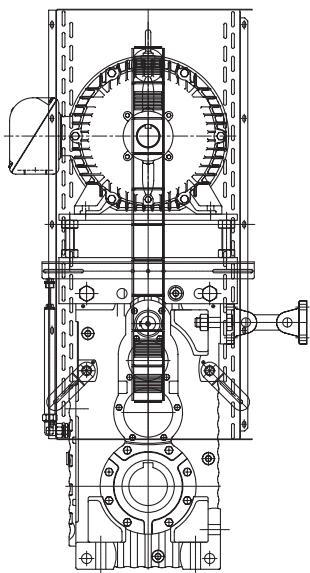
Oil Heater – (Available on reducer sizes 04 – 09 only.) Oil heating system to ensure the oil is fluid when starting up the reducer in cold environments.

Central Lubrication System Connections – Hardware to connect the reducer to a central oil filtering and cooling system.

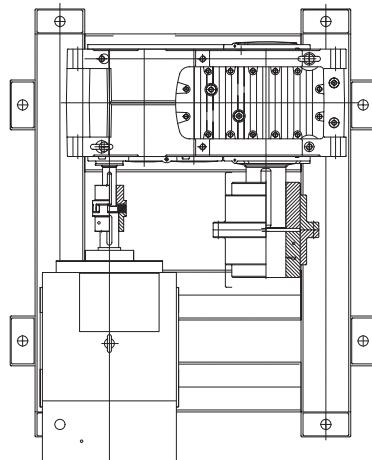
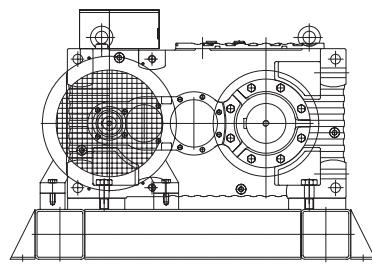
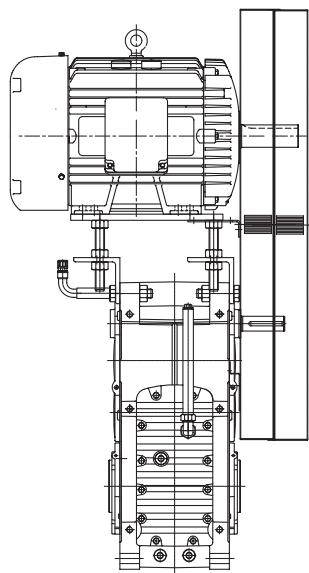
Custom Oil Seal System – Optional oil sealing methods are available to protect the reducer from harsh contaminants in the operating environment.

Temperature Sensor PT100 (MBT 5250) – The temperature sensor PT100 can be used for measuring the oil sump temperature in the reducer.

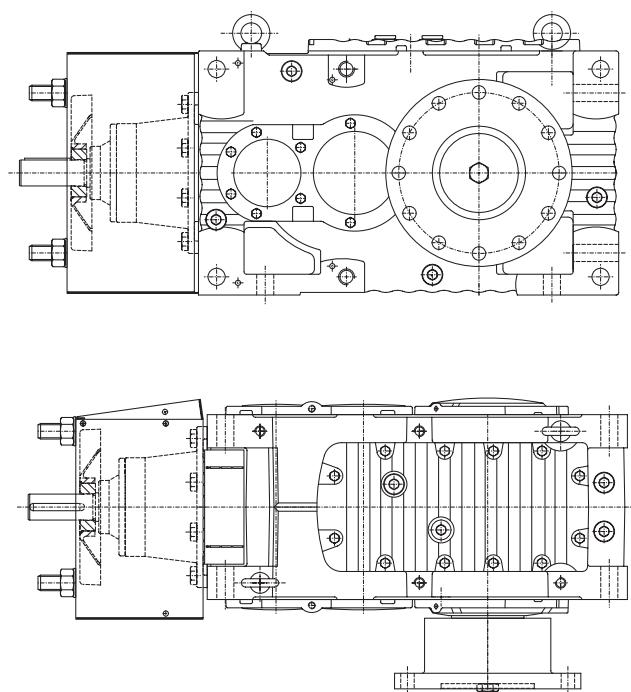
Shock Pulse Adapter – Adapters are installed on the reducer housing for monitoring vibration at various points on the reducer. Additional delivery time required. Contact SEW-Eurodrive for additional information.



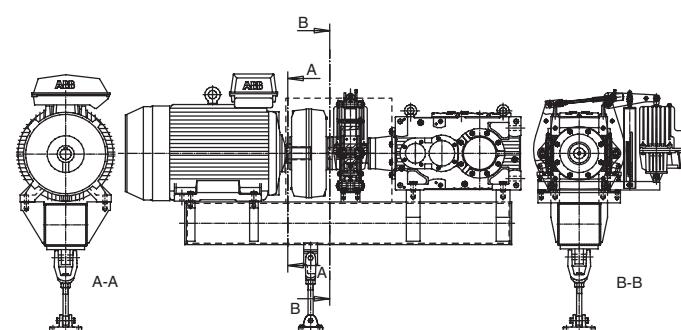
Complete V-belt drive packages, including motor platform, AC motor, belts, sheaves, and guard.



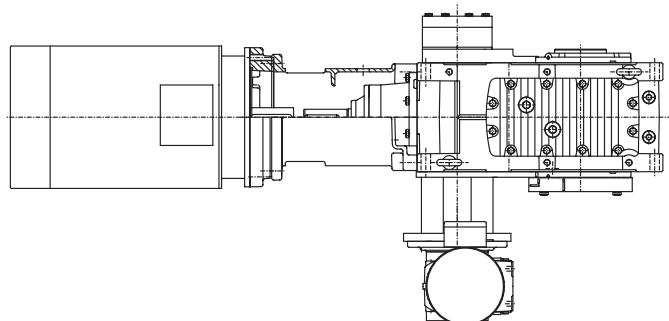
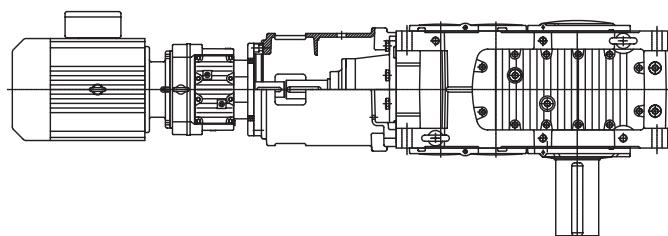
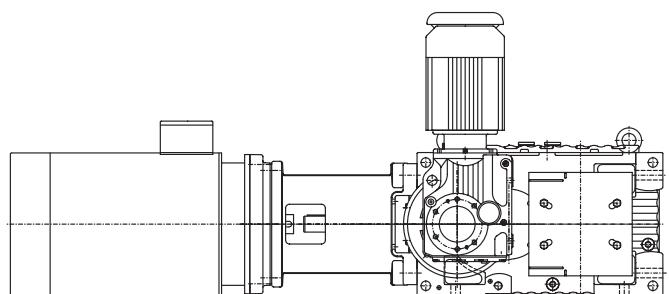
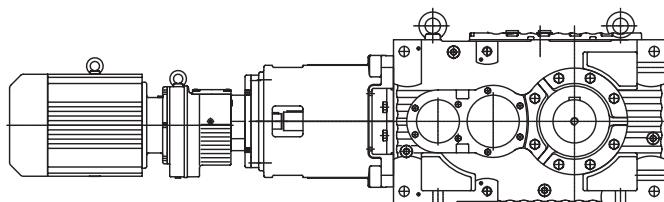
Common baseplates and couplings for large HP applications.



Rigid flanged hubs as an alternative to shaft mounted reducers.

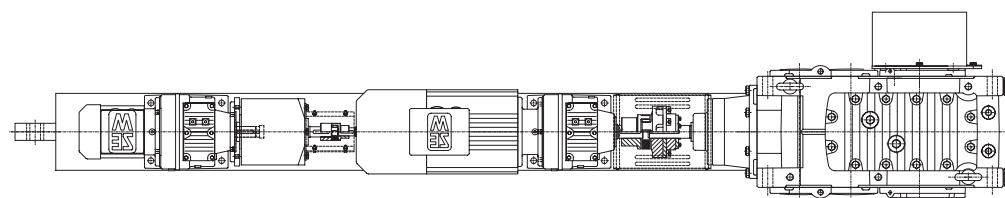
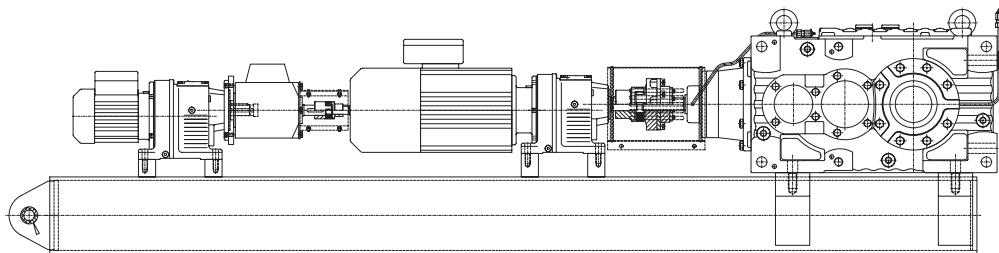


Complete drive packages including swing base, fluid coupling, brake, and torque arm.



A wide range of ratios and shaft configurations are possible with an SEW Gearmotor mounted onto the input of the Compact.

Complete multi-speed bucket elevator drive packages including creep drive, backstop, and overrunning clutch.



SEW Engineering can provide drive solutions from the most basic to the most complex, including multi-speed travel drives with clutches and brakes.

3.3. Nomenclature and General Reducer Information

When selecting a reducer, the customer will be required to furnish information on **duty cycle** and **operation conditions**. To ensure that the gear unit functions according to the specification, please take SEW-Eurodrive's instructions into consideration; e.g. selection, storage, mounting, lubrication, operation and maintenance of the gear unit. The system of connected rotating parts must be dynamically balanced and aligned to prevent excess vibration.

Included in normal delivery:

One lip seal on HSS	Oil dipstick
End key on HSS	Breather (if needed)
One lip seal on LSS	Lifting eyebolts and / or lifting holes
End key on LSS (solid shaft)	Oil fill plug and drain plug
End plate, circlip and shrink disk cover (hollow shaft with shrink disk)	
End plate, circlips and shaft end cover (hollow shaft with keyway)	

Excluded in normal delivery:

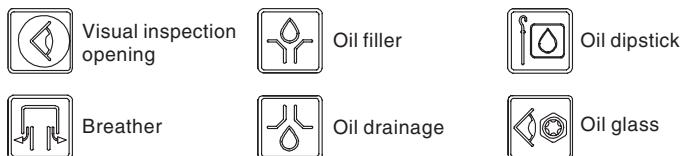
End plate bolts and shrink disk (hollow shaft with shrink disk)
End plate bolts and parallel key (hollow shaft with keyway)
Gear unit foundation bolts

Gear units will be delivered without oil

Abbreviations used:

LSS = Low Speed Shaft
HSS = High Speed Shaft

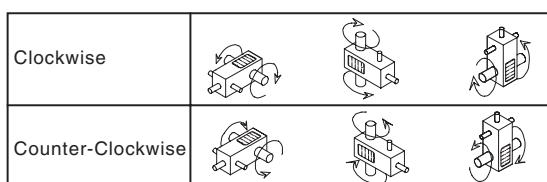
Definition of Icons used in dimensional drawings:



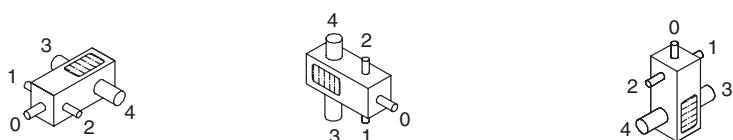
Standards used in dimensional drawings:

Keys and keyways: ISO/R773-1969
Nominal ratios: ISO/3-73
Screw strength grade of Foot Mounting Face fixing: 6.8

Direction of rotation for output shaft:

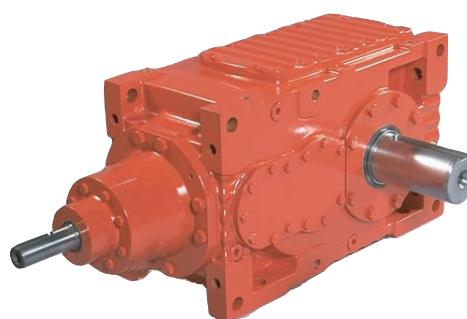


Shaft positions:

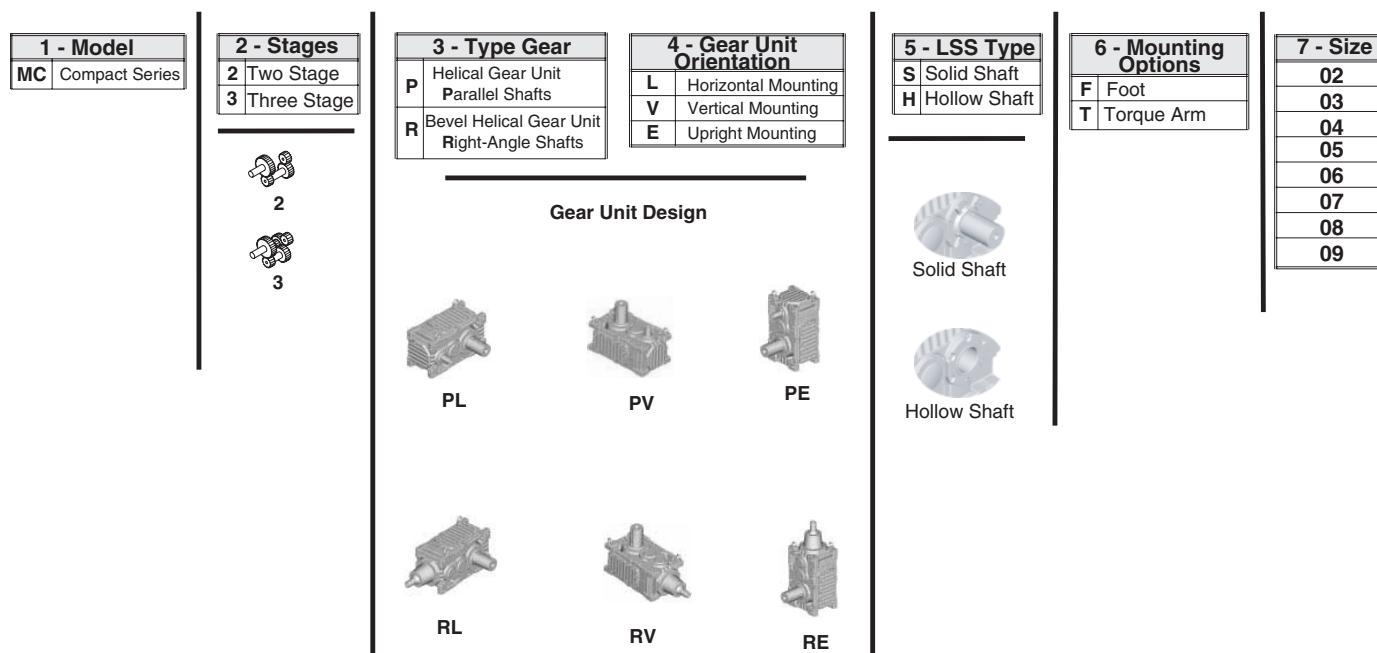


Manufacturer reserves the right to alteration

Nomenclature



Example: MC3PLSF05

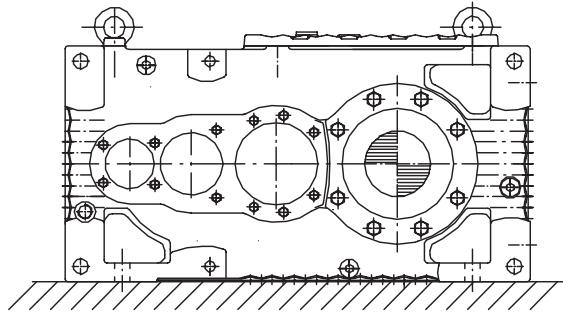


Helical Gear Units	Number of stages		2
	Horizontal LSS	Solid LSS	 MC2PLS
		Hollow LSS	 MC2PLH
	Vertical LSS	Solid LSS	 MC2PVS
		Hollow LSS	 MC2PVH
	Ratio range i_N		7.1 ... 20

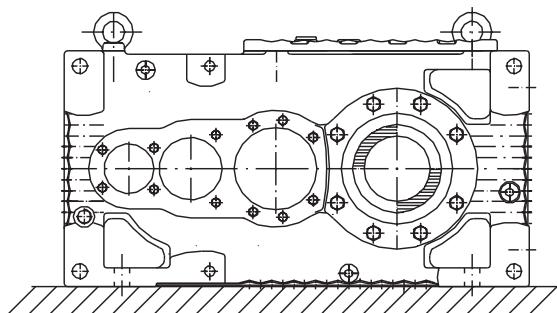
Bevel Helical Gear Units	Horizontal LSS		Solid LSS	 MC2RLS
			Hollow LSS	 MC2RLH
	Vertical LSS			
		Solid LSS	 MC2RVS	
	Vertical LSS			
		Hollow LSS	 MC2RVH	
	Ratio range i_N		7.1 ... 12.5	

2	3	
 MC2PES	 MC3PLS	 MC3PES
 MC2PEH	 MC3PLH	
 MC3PVS	 MC3PVH	
7.1 ... 20	22.5 ... 112	
 MC2RES	 MC3RLS	 MC3RES
 MC2REH	 MC3RLH	
 MC3RVS	 MC3RVH	
7.1 ... 12.5	14 ... 112	

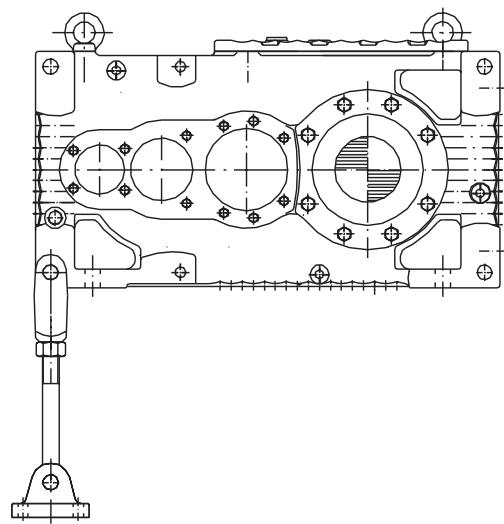
Horizontal LSS



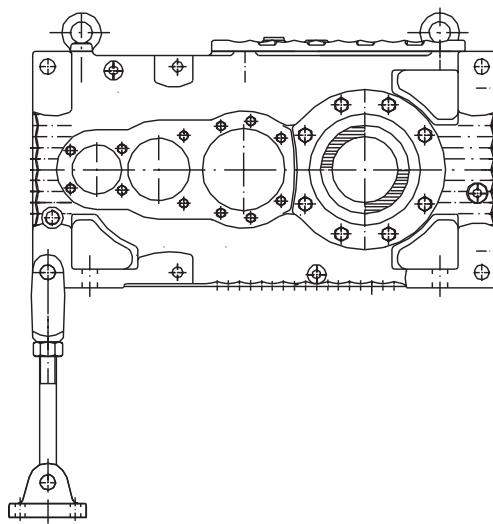
MC..LSF
Solid LSS (S)
Foot Mounting (F)



MC..LHF
Hollow LSS (H)
Foot Mounting (F)

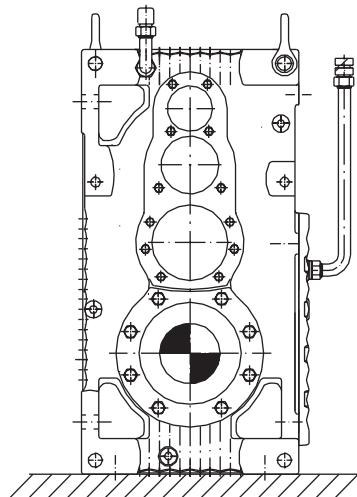


MC..LST
Solid LSS (S)
Torque Arm (T)

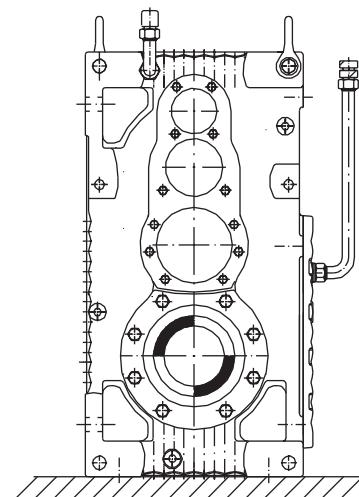


MC..LHT
Hollow LSS (H)
Torque Arm (T)

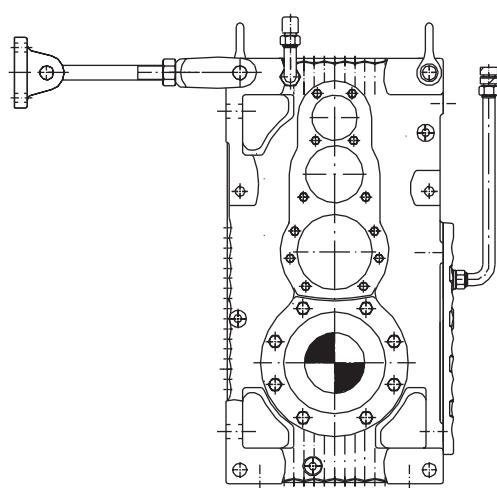
Upright Mounting



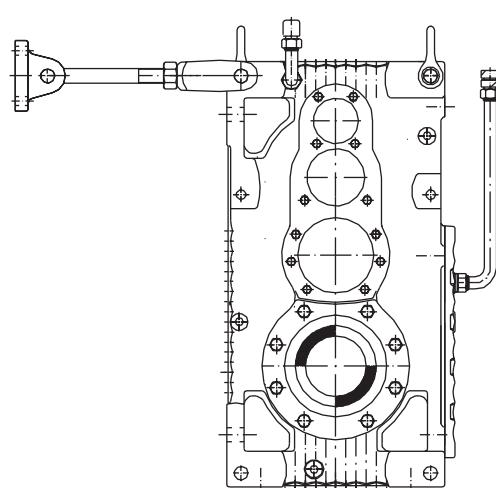
MC..ESF
Solid LSS (S)
Foot Mounting (F)



MC..EHF
Hollow LSS (H)
Foot Mounting (F)



MC..EST
Solid LSS (S)
Torque Arm (T)



MC..EHT
Hollow LSS (H)
Torque Arm (T)

4. Additional Documentation

In addition to the information in this catalog, SEW offers you extensive documentation covering the entire topic of electrical drive engineering. This includes the publications in the “Drive Engineering - Practical Implementation” series as well as the handbooks and catalogs for electronically controlled drives.

The SEW home page (<http://www.seweurodrive.com>) provides links to the current SEW documentation which you can order or download. The list below includes other documents associated with the application of SEW products. You can order these publications from SEW.

4.1. “Gearmotor” and “Gear Reducer” Catalog

These SEW catalogs provide information in the form of

- Application information
- Technical data
- Selection tables
- Dimension sheets

It gives you detailed information for selecting SEW geared motors, AC (brake) motors and their accessories, as well as about their functional principles.

4.2. Operating Instructions

The SEW “Gear Units” operating instructions and the “AM Adapter” operating instructions contain extensive safety notes and also information about

- Installation
- Mounting
- Disassembly
- Startup
- Inspection
- Maintenance
- Troubleshooting

for SEW gear units as well as components on the input side and accessories.

4.3. Gearmotor Selection and Drive Engineering

The following pages contain important information about sizing gear units. On request, we will provide the SEW calculation and selection software, **Gear 4.2**, which can be used for drive project planning on a PC. In addition, SEW is available to offer assistance in your selection process.

The “Drive Engineering - Practical Implementation, Drive Arrangements with SEW Drives” publication contains extensive information about the properties, differentiating characteristics and fields of application of SEW drives. This publication contains an extensive library of the most important drive calculation formulas as well as detailed examples of the most frequently used applications. This information is an important tool for selecting and applying SEW products.

PT Pilot[®] is a software-based configuration program for selecting SEW traditional gearmotor products. **PT Pilot[®]** can be ordered by going to www.ptpilot.com.

5. Selection of Gear Units

5.1. Efficiency of SEW Gear Units

The efficiency of the gear unit is determined mainly by the gearing and bearing friction. Please note that the starting efficiency of a gear unit is always less than its efficiency at operating speed.

The efficiency of Compact® helical, parallel shaft and helical-bevel gear units will vary according to the number of gear stages, between 95% (3-stage) and 97% (2-stage). There is a 1.5% efficiency loss per gear stage.

5.2. Service Factor

The effect of the driven machine on the gear unit is taken into account with sufficient accuracy using the service factor F_s . The Service Factors are given in the following table:

Driving Machine (Prime Mover)	Load Classification of Driven Machine	Service Hours Per Day		
		< 3	3 ... 10	> 10
Electric Motor, Steam or Gas Turbine	Group U	1.00	1.10	1.25
	Group M	1.15	1.25	1.50
	Group C	1.35	1.50	1.75
	Group H	1.55	1.75	2.00
Water Turbine, Hydraulic Motor	Group U	1.15	1.25	1.50
	Group M	1.35	1.50	1.75
	Group C	1.55	1.75	2.00
	Group H	1.80	2.00	2.25
Multi-cylinder Combustion Engine	Group U	1.15	1.25	1.50
	Group M	1.35	1.50	1.75
	Group C	1.55	1.75	2.00
	Group H	1.80	2.00	2.25

5.3. Overhung and Axial Loads

5.3.1. Determining Overhung Load

When determining the resulting overhung load, the type of transmission element mounted on the shaft end must be considered. Contact SEW-Eurodrive for further assistance.

Radial External Forces for Solid Shafts - External radial forces can be to any direction. F_{RN} in the table shows the allowed nominal radial forces when axial force is $F_A = 0$ kN.

Gear Unit Size	F_{RN} in the middle of the LSS end (kN)			
	LSS Speed			
	≤ 17	≤ 30	≤ 60	≤ 90
02	34	29	27	24
03	46	39	33	32
04	53	45	39	38
05	62	54	47	45
06	68	59	51	43
07	79	68	60	56
08	100	85	75	72
09	120	115	91	86

High Speed Shaft (HSS) End - Gear units are dimensioned to take radial forces in the middle of the HSS end. No axial forces, F_A , are permitted. V-belt pulley pitch diameter must be greater than 6 times the shaft end diameter.

5.4. Ratio

Calculate the ratio, $i = \frac{n_1}{n_2}$ and choose the nearest nominal ratio shown in the ratings table.

The exact ratio for a given unit can be found in the selection tables.

$$(1) i = \frac{n_1}{n_2}$$

5.5. Power and Torque

$$(2) P_{K1} = \frac{P_{K2}}{\eta}$$

$$(3) P_{K1} = \frac{M_{K2} \times n_2}{63025 \times \eta} \quad P_{K1} (\text{HP})$$

M_{K2} (lb-in)
n₂ (RPM)

$$(4) P_{K1} = \frac{M_{K2} \times n_2}{9550 \times \eta} \quad P_{K1} (\text{kW})$$

M_{K2} (Nm)
n₂ (RPM)

5.6. Maximum Power and Torque

$$(5) P_{K1(\max)} = \frac{2 \times P_{N1}}{F_F} \quad P_{N1} (\text{kW})$$

$$\qquad\qquad\qquad M_{n2} (\text{Nm}) \quad (6) M_{K2(\max)} = \frac{2 \times M_{N2}}{F_F}$$

$$(7) P_{K1(\max)} = \frac{2 \times P_{N1}}{F_F} \quad P_{N1} (\text{HP}_{\max})$$

$$\qquad\qquad\qquad M_{n2} (\text{lb-in}) \quad (8) M_{K2(\max)} = \frac{2 \times M_{N2}}{F_F}$$

See the table on page 21 for F_F (maximum load factor).

5.7. Overhung Loads

Contact SEW-Eurodrive concerning loads on the input (high speed) and output (low speed) shaft.

5.8. Reversing

The selection power ratings, P_{N1}, and torque rating, M_{N2}, are stated for constant load directions. When rotation direction changes with full load once per minute, 70% of P_{N1} and M_{N2} are to be used. Consult with SEW for proper sizing.

5.9. Thermal Rating

The thermal rating, P_T, is the actual power rating the gear unit can transmit continuously without exceeding the oil sump temperature of 200°F (95° C).

$$(9) P_T = P_{TH} \times f_1 \times f_2 \times f_3 \times f_4$$

P_{TH} = thermal value listed in tables

f₁ = factor for altitude, see table below.

f₂ = 1.07 for torque arm mounted gear units and f₂ = 1.0 for others.

f₃ = factor for mounting position, see table below.

f₄ = 1.10 with pressure lubrication and f₄ = 1.0 with bath and splash lubrications.

Determine the thermal rating, P_T, of the gear unit in the actual ambient temperature. If P_{K1} > P_T, check if external pressure lubrication and cooling unit can be used.

$$(10) P_{K1} \leq P_T$$

Factor for Altitude f ₁ (above sea level)					
	0	3280 ft. (1000 M)	6560 ft. (2000 M)	9840 ft. (3000 M)	13120 ft. (4000 M)
f ₁	1.0	0.95	0.91	0.87	0.83

f₁ Intermediate values have to be interpolated.

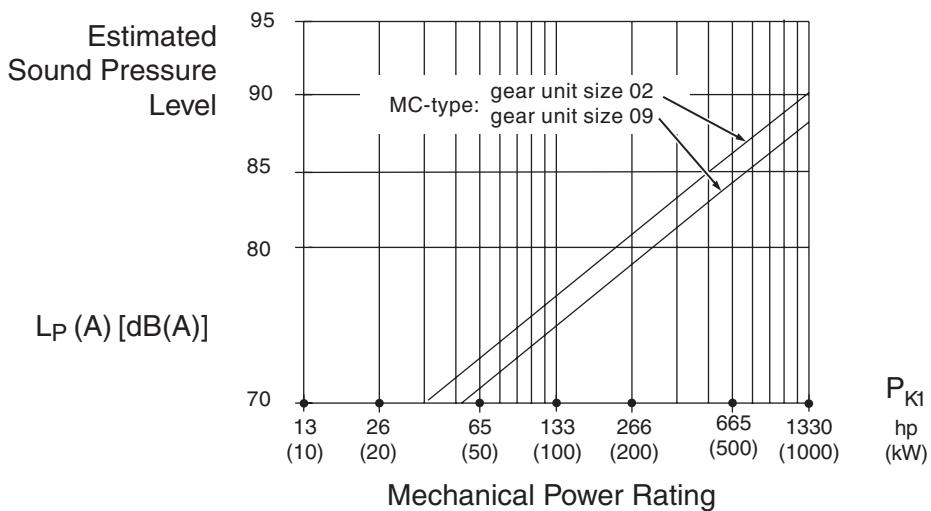
Factor for Mounting f ₃		Mounting Position		
		L	V	E
f ₃	With fan	1.0	.095	.095
	Without fan	1.0	0.9	0.9

5.10. Lubrication Method

- **Splash lubrication** — Oil level is low, gear teeth and bearings are lubricated by oil splash.
 - Used in horizontal solutions.
- **Bath lubrication** — Oil level is so high that gear teeth and bearings are submerged in oil.
 - Used in vertical and upright solutions.

5.11. Noise Level

Estimated sound pressure level, $L_P(A)$, applies only in free-field conditions at one (1) meter distance from the gear unit surface. The $L_P(A)$ values are provided by SEW-Eurodrive when requested.



5.12. Final Selection

Complete instructions for selecting the gear unit are in Instruction A.

Driving Machine (Prime Mover)	Load Classification Of Driven Machine	Service Factor F_S		
		< 3	3 ... 10	> 10
Electric Motor, Steam or Gas Turbine Water Turbine, Hydraulic Motor	Uniform Load	1.00	1.10	1.25
	Moderate Load	1.15	1.25	1.50
	Considerable Shock	1.35	1.50	1.75
	Heavy Shock Load	1.55	1.75	2.00
Multi-cylinder Combustion Engine	Uniform Load	1.15	1.25	1.50
	Moderate Load	1.35	1.50	1.75
	Considerable Shock	1.55	1.75	2.00
	Heavy Shock Load	1.80	2.00	2.25

These service factors are given as a general guide only. For exceptional working conditions, such as extreme shock loads, frequent starts on full load, reversing drive, rapid acceleration or deceleration, function near to critical speed, braking, high external loads on shaft ends and exceptional ambient conditions, reference to SEW-Eurodrive is recommended.

Maximum Load Occurrence Factor F_F					
Maximum Load Occurrence / Hour	1 ... 5	6 ... 20	21 ... 40	41 ... 80	81 ... 160 >160
F_F	1.00	1.20	1.30	1.50	1.75

5.13. Tolerances

The following tables contain tolerances for all applicable dimensions included in this catalog.

ISO Tolerances in mm										
From	To and Including	h6	h9	h11	js6	js7	k6	m6	H7	H8
6	10	-	0.000	-	-	-	-	-	-	-
		-	-0.036	-	-	-	-	-	-	-
10	18	-	0.000	-	-	-	-	-	-	-
		-	-0.043	-	-	-	-	-	-	-
18	30	-	0.000	-	-	-	0.015	-	-	-
		-	-0.052	-	-	-	0.002	-	-	-
30	50	-	0.000	-	-	-	0.018	-	-	-
		-	-0.062	-	-	-	0.002	-	-	-
50	80	-	-	-	-	0.015	-	0.030	-	0.046
		-	-	-	-	-0.015	-	0.011	-	0.000
80	120	0.000	-	-	0.011	0.0175	-	0.035	0.035	0.054
		-0.022	-	-	-0.011	-0.0175	-	0.013	0.000	0.000
120	180	0.000	-	0.000	0.0125	0.020	-	0.040	0.040	0.063
		-0.025	-	-0.250	-0.0125	-0.020	-	0.015	0.000	0.000
180	250	-	-	0.000	-	-	-	-	-	-
		-	-	-0.290	-	-	-	-	-	-
250	315	-	-	0.000	-	-	-	-	-	-
		-	-	-0.320	-	-	-	-	-	-
315	400	-	-	0.000	-	-	-	-	-	-
		-	-	-0.360	-	-	-	-	-	-
400	500	-	-	0.000	-	-	-	-	-	-
		-	-	-0.400	-	-	-	-	-	-

Tolerances in inch										
From	To and Including	h6	h9	h11	js6	js7	k6	m6	H7	H8
0.2362	0.3937	-	0.0000	-	-	-	-	-	-	-
		-	-0.0014	-	-	-	-	-	-	-
0.3937	0.7087	-	0.0000	-	-	-	-	-	-	-
		-	-0.0017	-	-	-	-	-	-	-
0.7087	1.1811	-	0.0000	-	-	-	0.0006	-	-	-
		-	-0.002	-	-	-	0.0001	-	-	-
1.1811	1.9685	-	0.0000	-	-	-	0.0007	-	-	-
		-	-0.0024	-	-	-	0.0001	-	-	-
1.9685	3.1496	-	-	-	-	0.0006	-	0.0012	-	0.0018
		-	-	-	-	-0.0006	-	0.0004	-	0.0000
3.1496	4.7244	0.0000	-	-	0.0004	0.0007	-	0.0014	0.0014	0.0021
		-0.0009	-	-	-0.0004	-0.0007	-	0.0005	0.0000	0.0000
4.7244	7.0866	0.0000	-	0.0000	0.0005	0.0008	-	0.0016	0.0016	0.0025
		-0.0010	-	-0.0098	-0.0005	-0.0008	-	0.0006	0.0000	0.0000
7.0866	9.8425	-	-	0.0000	-	-	-	-	-	-
		-	-	-0.0114	-	-	-	-	-	-
9.8425	12.4016	-	-	0.0000	-	-	-	-	-	-
		-	-	-0.0126	-	-	-	-	-	-
12.4016	15.748	-	-	0.0000	-	-	-	-	-	-
		-	-	-0.0142	-	-	-	-	-	-
15.748	19.685	-	-	0.0000	-	-	-	-	-	-
		-	-	-0.0157	-	-	-	-	-	-

Notes

6. MC Series Selection Guide

6.1. MC2P...1750 RPM

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC2P-02	7.10	246	246	60923	1585 2018 2408 2637	3000
	8	219	221	61780		
	9	194	203	63812		
	10	175	193	67290		
	11.20	156	177	69295		
	12.50	140	162	70565		
	14	125	142	69548		
	16	109	119	66405		
	18	97	107	66983		
	20	88	87	60787		
MC2P-03	7.10	246	305	75672	1463 1836 2221 2414	2778
	8	219	284	79484		
	9	194	257	80883		
	10	175	248	86709		
	11.20	156	228	89022		
	12.50	140	200	87500		
	14	125	193	94206		
	16	109	168	93935		
	18	97	153	95922		
	20	88	123	85987		
MC2P-04	7.10	246	397	98438	1315 1674 2027 2140	2546
	8	219	367	102606		
	9	194	341	107302		
	10	175	317	110645		
	11.20	156	293	114818		
	12.50	140	268	116854		
	14	125	248	121393		
	16	109	226	126451		
	18	97	216	135754		
	20	88	185	129160		
MC2P-05	7.10	246	553	137236	1216 1534 1860 2012	2350
	8	219	512	143070		
	9	194	476	149574		
	10	175	446	155806		
	11.20	156	412	161352		
	12.50	140	374	163144		
	14	125	349	170709		
	16	109	321	179199		
	18	97	292	183715		
	20	88	242	168902		
MC2P-06	7.10	246	664	164811	1098 1433 1679 1847	2037
	8	219	655	183174		
	9	194	606	190625		
	10	175	511	178386		
	11.20	156	511	199793		
	12.50	140	437	190806		
	14	125	437	213703		
	16	109	407	227611		
	18	97	376	236554		
	20	88	306	214063		
MC2P-07	7.10	246	849	210663	1025 1313 1575 1758	1910
	8	219	813	227251		
	9	194	750	235741		
	10	175	662	231225		
	11.20	156	646	252902		
	12.50	140	552	241047		
	14	125	552	269973		
	16	109	503	281083		
	18	97	458	287766		
	20	88	414	289031		
MC2P-08	7.10	246	1070	265493	936 1195 1445 1575	1797
	8	219	1070	299147		
	9	194	989	310934		
	10	175	840	293547		
	11.20	156	840	328773		
	12.50	140	699	305402		
	14	125	699	342050		
	16	109	658	367792		
	18	97	611	384501		
	20	88	551	384773		

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM	
MC2P-09	7.10	246	1378	341807	851	1697	
	8	219	1378	385134			
	9	194	1347	423520			
	10	175	1094	382063			
	11.20	156	1094	427911			
	12.50	140	929	405885	1075		
	14	125	929	454591			
	16	109	929	519533			
	18	97	852	535701	1266		
	20	88	777	542836			

Note: Thermal ratings listed are nominal. For specific ratings based upon conditions, contact SEW.

Thermal Ratings (P_{TH}) MC2P.. 1750 RPM						
Model	Nominal Ratio	Number of Fans	68°F 20°C	86°F 30°C	104°F 40°C	
MC2P-02	7.1 - 14	0	64	48	32	
		1	149	121	93	
		2	188	155	122	
	16 - 20	0	56	40	24	
		1	131	102	75	
		2	165	132	98	
MC2P-03	7.1 - 14	0	80	59	40	
		1	185	151	116	
		2	234	192	152	
	16 - 20	0	70	50	31	
		1	162	128	92	
		2	204	164	122	
MC2P-04	7.1 - 14	0	100	75	50	
		1	234	190	147	
		2	296	244	191	
	16 - 20	0	89	63	38	
		1	205	161	116	
		2	259	207	154	
MC2P-05	7.1 - 14	0	115	85	56	
		1	267	217	167	
		2	338	277	218	
	16 - 20	0	100	72	43	
		1	233	184	134	
		2	294	234	175	
MC2P-06	7.1 - 14	0	138	103	68	
		1	325	263	203	
		2	409	338	266	
	16 - 20	0	123	88	52	
		1	284	223	162	
		2	358	286	214	
MC2P-07	7.1 - 14	0	171	126	84	
		1	398	323	248	
		2	504	415	326	
	16 - 20	0	151	107	64	
		1	349	274	198	
		2	440	350	261	
MC2P-08	7.1 - 14	0	211	157	105	
		1	496	402	309	
		2	626	516	405	
	16 - 20	0	188	133	80	
		1	434	340	247	
		2	546	437	326	
MC2P-09	7.1 - 14	0	245	183	121	
		1	575	467	358	
		2	725	598	470	
	16 - 20	0	218	155	93	
		1	503	395	287	
		2	633	506	378	

Model	Exact Ratios									
	7.1	8	9	10	11.2	12.5	14	16	18	20
MC2P-02	7.070	8.176	9.175	9.829	11.366	12.314	14.240	15.981	17.880	20.238
MC2P-03	7.291	8.226	9.280	9.952	11.227	12.697	14.324	16.160	17.913	20.401
MC2P-04	7.124	8.014	8.958	9.945	11.186	12.723	14.312	15.998	17.115	19.250
MC2P-05	7.104	7.996	8.871	9.783	11.012	12.522	14.095	15.636	17.236	19.400
MC2P-06	6.817	7.889	8.853	9.822	11.366	12.036	13.927	15.630	17.588	19.908
MC2P-07	6.860	7.725	8.677	9.647	10.863	12.194	13.731	15.424	17.664	20.249
MC2P-08	7.005	7.888	8.958	9.798	11.033	12.488	14.063	15.969	17.763	19.895
MC2P-09	6.911	7.992	8.969	9.534	11.025	11.767	13.607	15.271	17.012	19.256

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

6.2. MC2P...1450 RPM

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC2P-02	7.10	204	215	64228	1585 2018 2408 2637	3000
	8	181	194	65435		
	9	161	170	64352		
	10	145	168	70960		
	11.20	129	148	69769		
	12.50	116	141	74481		
	14	104	118	69541		
	16	91	99	66822		
	18	81	89	67374		
	20	72	72	61102		
MC2P-03	7.10	204	267	79996	1463 1836 2221 2414	2778
	8	181	248	83636		
	9	161	226	85802		
	10	145	217	91545		
	11.20	129	199	94037		
	12.50	116	167	88024		
	14	104	168	99344		
	16	91	140	94469		
	18	81	127	96236		
	20	72	103	86561		
MC2P-04	7.10	204	347	103840	1315 1674 2027 2140	2546
	8	181	321	108336		
	9	161	298	113103		
	10	145	278	117003		
	11.20	129	257	121337		
	12.50	116	234	123233		
	14	104	217	128162		
	16	91	194	130870		
	18	81	181	137479		
	20	72	154	130004		
MC2P-05	7.10	204	484	144993	1216 1534 1860 2012	2350
	8	181	448	151238		
	9	161	416	157955		
	10	145	391	164672		
	11.20	129	361	170478		
	12.50	116	312	164536		
	14	104	304	179730		
	16	91	266	179405		
	18	81	243	184281		
	20	72	202	170089		
MC2P-06	7.10	204	581	173837	1098 1433 1679 1847	2037
	8	181	573	193272		
	9	161	531	201344		
	10	145	447	188506		
	11.20	129	447	211126		
	12.50	116	383	201777		
	14	104	383	225991		
	16	91	351	236607		
	18	81	312	236932		
	20	72	254	214507		
MC2P-07	7.10	204	743	222296	1025 1313 1575 1758	1910
	8	181	712	240074		
	9	161	655	248632		
	10	145	579	244299		
	11.20	129	567	267548		
	12.50	116	483	254591		
	14	104	483	285142		
	16	91	441	297276		
	18	81	401	304209		
	20	72	347	292509		
MC2P-08	7.10	204	937	280370	936 1195 1445 1575	1797
	8	181	937	315910		
	9	161	865	328098		
	10	145	735	309843		
	11.20	129	735	347024		
	12.50	116	612	322302		
	14	104	612	360978		
	16	91	576	388278		
	18	81	536	406587		
	20	72	459	386762		

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM	
MC2P-09	7.10	204	1205	360750	851	1697	
	8	181	1205	406479			
	9	161	1178	447051			
	10	145	957	403554			
	11.20	129	957	451980			
	12.50	116	813	428607	1075		
	14	104	813	480039			
	16	91	813	548616			
	18	81	745	565517	1266		
	20	72	648	546017			

Note: Thermal ratings listed are nominal. For specific ratings based upon conditions, contact SEW.

Thermal Ratings (P_{TH}) MC2P.. 1750 RPM						
Model	Nominal Ratio	Number of Fans	68°F 20°C	86°F 30°C	104°F 40°C	
MC2P-02	7.1 - 14	0	64	48	32	
		1	149	121	93	
		2	188	155	122	
	16 - 20	0	56	40	24	
		1	131	102	75	
		2	165	132	98	
MC2P-03	7.1 - 14	0	80	59	40	
		1	185	151	116	
		2	234	192	152	
	16 - 20	0	70	50	31	
		1	162	128	92	
		2	204	164	122	
MC2P-04	7.1 - 14	0	100	75	50	
		1	234	190	147	
		2	296	244	191	
	16 - 20	0	89	63	38	
		1	205	161	116	
		2	259	207	154	
MC2P-05	7.1 - 14	0	115	85	56	
		1	267	217	167	
		2	338	277	218	
	16 - 20	0	100	72	43	
		1	233	184	134	
		2	294	234	175	
MC2P-06	7.1 - 14	0	138	103	68	
		1	325	263	203	
		2	409	338	266	
	16 - 20	0	123	88	52	
		1	284	223	162	
		2	358	286	214	
MC2P-07	7.1 - 14	0	171	126	84	
		1	398	323	248	
		2	504	415	326	
	16 - 20	0	151	107	64	
		1	349	274	198	
		2	440	350	261	
MC2P-08	7.1 - 14	0	211	157	105	
		1	496	402	309	
		2	626	516	405	
	16 - 20	0	188	133	80	
		1	434	340	247	
		2	546	437	326	
MC2P-09	7.1 - 14	0	245	183	121	
		1	575	467	358	
		2	725	598	470	
	16 - 20	0	218	155	93	
		1	503	395	287	
		2	633	506	378	

Exact Ratios										
Model	7.1	8	9	10	11.2	12.5	14	16	18	20
MC2P-02	7.070	8.176	9.175	9.829	11.366	12.314	14.240	15.981	17.880	20.238
MC2P-03	7.291	8.226	9.280	9.952	11.227	12.697	14.324	16.160	17.913	20.401
MC2P-04	7.124	8.014	8.958	9.945	11.186	12.723	14.312	15.998	17.115	19.250
MC2P-05	7.104	7.996	8.871	9.783	11.012	12.522	14.095	15.636	17.236	19.400
MC2P-06	6.817	7.889	8.853	9.822	11.366	12.036	13.927	15.630	17.588	19.908
MC2P-07	6.860	7.725	8.677	9.647	10.863	12.194	13.731	15.424	17.664	20.249
MC2P-08	7.005	7.888	8.958	9.798	11.033	12.488	14.063	15.969	17.763	19.895
MC2P-09	6.911	7.992	8.969	9.534	11.025	11.767	13.607	15.271	17.012	19.256

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

6.3. MC2P...1170 RPM

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC2P-02	7.10	165	185	68793	1585 2018 2408 2637	3000
	8	146	165	68841		
	9	130	137	64640		
	10	117	144	75211		
	11.20	104	119	69665		
	12.50	94	116	75464		
	14	84	95	69722		
	16	73	81	67324		
	18	65	72	67933		
	20	58	59	61523		
MC2P-03	7.10	165	231	85632	1463 1836 2221 2414	2778
	8	146	214	89440		
	9	130	195	91472		
	10	117	187	97570		
	11.20	104	172	100931		
	12.50	94	136	88932		
	14	84	137	100551		
	16	73	114	95185		
	18	65	103	96960		
	20	58	84	87271		
MC2P-04	7.10	165	300	111128	1315 1674 2027 2140	2546
	8	146	278	116000		
	9	130	257	120744		
	10	117	240	125351		
	11.20	104	222	129769		
	12.50	94	201	131280		
	14	84	187	136598		
	16	73	157	131178		
	18	65	147	137818		
	20	58	125	130365		
MC2P-05	7.10	165	418	154906	1216 1534 1860 2012	2350
	8	146	386	161533		
	9	130	359	168919		
	10	117	337	176168		
	11.20	104	311	182131		
	12.50	94	254	166005		
	14	84	253	184977		
	16	73	217	181047		
	18	65	197	185383		
	20	58	163	170748		
MC2P-06	7.10	165	502	186176	1098 1433 1679 1847	2037
	8	146	495	207066		
	9	130	458	215264		
	10	117	386	201916		
	11.20	104	386	226146		
	12.50	94	331	215976		
	14	84	329	240944		
	16	73	284	237421		
	18	65	254	239047		
	20	58	207	216823		
MC2P-07	7.10	165	642	238132	1025 1313 1575 1758	1910
	8	146	615	256935		
	9	130	565	265879		
	10	117	501	261542		
	11.20	104	489	286098		
	12.50	94	416	271875		
	14	84	416	304500		
	16	73	380	317646		
	18	65	346	325641		
	20	58	281	294066		
MC2P-08	7.10	165	808	299710	936 1195 1445 1575	1797
	8	146	808	337702		
	9	130	747	351253		
	10	117	634	331333		
	11.20	104	634	371092		
	12.50	94	528	344715		
	14	84	528	386080		
	16	73	497	415215		
	18	65	449	421992		
	20	58	373	390281		

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM	
MC2P-09	7.10	165	1040	385822	851	1697	
	8	146	1040	434730			
	9	130	1017	478095			
	10	117	826	431613			
	11.20	104	826	483406			
	12.50	94	702	458208	1075		
	14	84	702	513192			
	16	73	702	586506			
	18	65	634	596399	1266		
	20	58	525	548833			

Note: Thermal ratings listed are nominal. For specific ratings based upon conditions, contact SEW.

Thermal Ratings (P_{TH}) MC2P.. 1750 RPM						
Model	Nominal Ratio	Number of Fans	68°F 20°C	86°F 30°C	104°F 40°C	
MC2P-02	7.1 - 14	0	64	48	32	
		1	149	121	93	
		2	188	155	122	
	16 - 20	0	56	40	24	
		1	131	102	75	
		2	165	132	98	
MC2P-03	7.1 - 14	0	80	59	40	
		1	185	151	116	
		2	234	192	152	
	16 - 20	0	70	50	31	
		1	162	128	92	
		2	204	164	122	
MC2P-04	7.1 - 14	0	100	75	50	
		1	234	190	147	
		2	296	244	191	
	16 - 20	0	89	63	38	
		1	205	161	116	
		2	259	207	154	
MC2P-05	7.1 - 14	0	115	85	56	
		1	267	217	167	
		2	338	277	218	
	16 - 20	0	100	72	43	
		1	233	184	134	
		2	294	234	175	
MC2P-06	7.1 - 14	0	138	103	68	
		1	325	263	203	
		2	409	338	266	
	16 - 20	0	123	88	52	
		1	284	223	162	
		2	358	286	214	
MC2P-07	7.1 - 14	0	171	126	84	
		1	398	323	248	
		2	504	415	326	
	16 - 20	0	151	107	64	
		1	349	274	198	
		2	440	350	261	
MC2P-08	7.1 - 14	0	211	157	105	
		1	496	402	309	
		2	626	516	405	
	16 - 20	0	188	133	80	
		1	434	340	247	
		2	546	437	326	
MC2P-09	7.1 - 14	0	245	183	121	
		1	575	467	358	
		2	725	598	470	
	16 - 20	0	218	155	93	
		1	503	395	287	
		2	633	506	378	

Exact Ratios										
Model	7.1	8	9	10	11.2	12.5	14	16	18	20
MC2P-02	7.070	8.176	9.175	9.829	11.366	12.314	14.240	15.981	17.880	20.238
MC2P-03	7.291	8.226	9.280	9.952	11.227	12.697	14.324	16.160	17.913	20.401
MC2P-04	7.124	8.014	8.958	9.945	11.186	12.723	14.312	15.998	17.115	19.250
MC2P-05	7.104	7.996	8.871	9.783	11.012	12.522	14.095	15.636	17.236	19.400
MC2P-06	6.817	7.889	8.853	9.822	11.366	12.036	13.927	15.630	17.588	19.908
MC2P-07	6.860	7.725	8.677	9.647	10.863	12.194	13.731	15.424	17.664	20.249
MC2P-08	7.005	7.888	8.958	9.798	11.033	12.488	14.063	15.969	17.763	19.895
MC2P-09	6.911	7.992	8.969	9.534	11.025	11.767	13.607	15.271	17.012	19.256

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

6.4. MC2P...870 RPM

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC2P-02	7.10	123	146	72738	1585 2018 2408 2637	3000
	8	109	123	68950		
	9	97	103	64982		
	10	87	108	75861		
	11.20	78	89	69757		
	12.50	70	86	75617		
	14	62	71	69779		
	16	54	60	67649		
	18	48	54	68348		
	20	44	44	61795		
MC2P-03	7.10	123	182	90635	1463 1836 2221 2414	2778
	8	109	169	94969		
	9	97	145	91472		
	10	87	147	103262		
	11.20	78	130	101994		
	12.50	70	101	89032		
	14	62	102	100628		
	16	54	85	95619		
	18	48	77	97472		
	20	44	62	87813		
MC2P-04	7.10	123	235	117190	1315 1674 2027 2140	2546
	8	109	218	122288		
	9	97	202	128061		
	10	87	187	131720		
	11.20	78	174	136598		
	12.50	70	149	131110		
	14	62	141	138875		
	16	54	117	131394		
	18	48	109	138306		
	20	44	93	131069		
MC2P-05	7.10	123	329	163950	1216 1534 1860 2012	2350
	8	109	303	170423		
	9	97	280	177090		
	10	87	265	186196		
	11.20	78	240	188506		
	12.50	70	190	166683		
	14	62	189	185546		
	16	54	162	182131		
	18	48	147	185871		
	20	44	123	172374		
MC2P-06	7.10	123	395	196856	1098 1433 1679 1847	2037
	8	109	389	218557		
	9	97	360	227582		
	10	87	303	213028		
	11.20	78	300	235859		
	12.50	70	259	227664		
	14	62	245	241323		
	16	54	213	239373		
	18	48	190	240023		
	20	44	155	217907		
MC2P-07	7.10	123	504	251699	1025 1313 1575 1758	1910
	8	109	483	271245		
	9	97	444	281002		
	10	87	392	275636		
	11.20	78	384	302337		
	12.50	70	327	287629		
	14	62	325	319868		
	16	54	296	333040		
	18	48	260	329299		
	20	44	211	295963		
MC2P-08	7.10	123	635	316933	936 1195 1445 1575	1797
	8	109	635	357107		
	9	97	587	371011		
	10	87	499	350440		
	11.20	78	499	392493		
	12.50	70	414	363856		
	14	62	414	407518		
	16	54	371	417601		
	18	48	334	422968		
	20	44	280	393534		

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM	
MC2P-09	7.10	123	817	407567	851	1697	
	8	109	817	459231			
	9	97	798	504926			
	10	87	649	456141			
	11.20	78	649	510878			
	12.50	70	552	484802	1075		
	14	62	552	542979			
	16	54	526	591926			
	18	48	474	600058			
	20	44	392	551272	1266		
					1381		

Note: Thermal ratings listed are nominal. For specific ratings based upon conditions, contact SEW.

Thermal Ratings (P_{TH}) MC2P.. 1750 RPM						
Model	Nominal Ratio	Number of Fans	68°F 20°C	86°F 30°C	104°F 40°C	
MC2P-02	7.1 - 14	0	64	48	32	
		1	149	121	93	
		2	188	155	122	
	16 - 20	0	56	40	24	
		1	131	102	75	
		2	165	132	98	
MC2P-03	7.1 - 14	0	80	59	40	
		1	185	151	116	
		2	234	192	152	
	16 - 20	0	70	50	31	
		1	162	128	92	
		2	204	164	122	
MC2P-04	7.1 - 14	0	100	75	50	
		1	234	190	147	
		2	296	244	191	
	16 - 20	0	89	63	38	
		1	205	161	116	
		2	259	207	154	
MC2P-05	7.1 - 14	0	115	85	56	
		1	267	217	167	
		2	338	277	218	
	16 - 20	0	100	72	43	
		1	233	184	134	
		2	294	234	175	
MC2P-06	7.1 - 14	0	138	103	68	
		1	325	263	203	
		2	409	338	266	
	16 - 20	0	123	88	52	
		1	284	223	162	
		2	358	286	214	
MC2P-07	7.1 - 14	0	171	126	84	
		1	398	323	248	
		2	504	415	326	
	16 - 20	0	151	107	64	
		1	349	274	198	
		2	440	350	261	
MC2P-08	7.1 - 14	0	211	157	105	
		1	496	402	309	
		2	626	516	405	
	16 - 20	0	188	133	80	
		1	434	340	247	
		2	546	437	326	
MC2P-09	7.1 - 14	0	245	183	121	
		1	575	467	358	
		2	725	598	470	
	16 - 20	0	218	155	93	
		1	503	395	287	
		2	633	506	378	

Exact Ratios										
Model	7.1	8	9	10	11.2	12.5	14	16	18	20
MC2P-02	7.070	8.176	9.175	9.829	11.366	12.314	14.240	15.981	17.880	20.238
MC2P-03	7.291	8.226	9.280	9.952	11.227	12.697	14.324	16.160	17.913	20.401
MC2P-04	7.124	8.014	8.958	9.945	11.186	12.723	14.312	15.998	17.115	19.250
MC2P-05	7.104	7.996	8.871	9.783	11.012	12.522	14.095	15.636	17.236	19.400
MC2P-06	6.817	7.889	8.853	9.822	11.366	12.036	13.927	15.630	17.588	19.908
MC2P-07	6.860	7.725	8.677	9.647	10.863	12.194	13.731	15.424	17.664	20.249
MC2P-08	7.005	7.888	8.958	9.798	11.033	12.488	14.063	15.969	17.763	19.895
MC2P-09	6.911	7.992	8.969	9.534	11.025	11.767	13.607	15.271	17.012	19.256

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

6.5. MC3P...1750 RPM

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3P-02	22.50	78	96	74131	2838	3000
	25	70	79	67806		
	28	62	66	63368		
	31.50	56	63	68769		
	35.50	49	53	64716		
	40	44	56	77009		
	45	39	46	71230		
	50	35	38	66027		
	56	31	37	70962		
	63	28	31	67227		
	71	25	29	71029		
	80	22	25	67939		
	90	19	20	62025		
	100	18	21	71585		
	112	16	16.90	65236		
MC3P-03	22.50	78	128	99041	2553	3000
	25	70	114	98040		
	28	62	94	90882		
	31.50	56	90	97900		
	35.50	49	75	91233		
	40	44	76	104221		
	45	39	66	102242		
	50	35	55	94039		
	56	31	52	100841		
	63	28	43	93838		
	71	25	42	102914		
	80	22	35	96040		
	90	19	28	87235		
	100	18	28	96484		
	112	16	23	87147		
MC3P-04	22.50	78	153	118049	2448	3000
	25	70	153	131165		
	28	62	131	125741		
	31.50	56	122	131934		
	35.50	49	102	125011		
	40	44	91	125030		
	45	39	90	140057		
	50	35	75	129831		
	56	31	71	137692		
	63	28	59	128293		
	71	25	57	139848		
	80	22	47	129831		
	90	19	40	124051		
	100	18	39	133833		
	112	16	34	129475		
MC3P-05	22.50	78	175	135055	2256	3000
	25	70	175	150062		
	28	62	175	168069		
	31.50	56	156	169470		
	35.50	49	141	172049		
	40	44	116	159710		
	45	39	106	164268		
	50	35	106	182075		
	56	31	94	181266		
	63	28	84	180954		
	71	25	75	182466		
	80	22	66	181763		
	90	19	55	168870		
	100	18	50	172515		
	112	16	45	173298		

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3P-06	22.50	78	208	161066	2114	3000
	25	70	208	178962		
	28	62	208	200438		
	31.50	56	189	204484		
	35.50	49	184	224137		
	40	44	149	204529		
	45	39	124	192279		
	50	35	124	213643		
	56	31	113	217120		
	63	28	107	232496		
	71	25	90	220348		
	80	22	86	235474		
	90	19	70	218090		
	100	18	69	236542		
	112	16	59	225586		
MC3P-07	22.50	78	283	219090	1950	2778
	25	70	283	243433		
	28	62	283	272646		
	31.50	56	255	275914		
	35.50	49	255	310950		
	40	44	207	284561		
	45	39	169	262107		
	50	35	169	291231		
	56	31	151	291320		
	63	28	150	324934		
	71	25	123	301479		
	80	22	122	336138		
	90	19	99	305326		
	100	18	82	282338		
	112	16	77	297295		
MC3P-08	22.50	78	418	323133	1753	2546
	25	70	418	359036		
	28	62	418	402121		
	31.50	56	362	392161		
	35.50	49	336	410391		
	40	44	279	384158		
	45	39	255	394162		
	50	35	242	415727		
	56	31	220	423286		
	63	28	191	414570		
	71	25	178	435646		
	80	22	155	426842		
	90	19	129	400164		
	100	18	120	412614		
	112	16	106	406852		
MC3P-09	22.50	78	530	410169	1621	2350
	25	70	530	455743		
	28	62	530	510432		
	31.50	56	465	504208		
	35.50	49	465	568234		
	40	44	383	526439		
	45	39	357	552227		
	50	35	328	564676		
	56	31	301	580150		
	63	28	268	579839		
	71	25	242	590331		
	80	22	216	594022		
	90	19	178	552227		
	100	18	175	600247		
	112	16	145	557740		

Note: Thermal ratings listed are nominal. For specific ratings based upon conditions, contact SEW.

Thermal Ratings (P_{TH}) MC3P.. 1750 RPM						
Model	Nominal Ratio	Number of Fans	68°F 20°C	86°F 30°C	104°F 40°C	
MC3P-02	22.5 - 63	0	63	50	38	
		1	129	108	88	
		2	-	-	-	
	71 - 112	0	57	44	32	
		1	115	93	72	
MC3P-03	22.5 - 63	0	78	62	47	
		1	161	134	108	
		2	-	-	-	
	71 - 112	0	70	55	40	
		1	142	116	89	
		2	-	-	-	

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Thermal Ratings (P_{TH}) MC3P.. 1750 RPM			
		Number of Fans	68°F 20°C	86°F 30°C	104°F 40°C
MC3P-04	22.5 - 63	0	96	77	57
		1	200	167	134
		2	-	-	-
	71 - 112	0	87	68	49
		1	177	144	111
		2	-	-	-
MC3P-05	22.5 - 63	0	112	89	66
		1	230	192	154
		2	-	-	-
	71 - 112	0	102	79	56
		1	204	167	128
		2	-	-	-
MC3P-06	22.5 - 63	0	133	106	80
		1	274	228	184
		2	-	-	-
	71 - 112	0	121	94	68
		1	244	198	152
		2	-	-	-
MC3P-07	22.5 - 63	0	163	130	98
		1	336	282	226
		2	-	-	-
	71 - 112	0	149	115	83
		1	299	243	188
		2	-	-	-
MC3P-08	22.5 - 63	0	202	161	121
		1	417	348	279
		2	-	-	-
	71 - 112	0	184	143	103
		1	371	302	233
		2	-	-	-
MC3P-09	22.5 - 63	0	240	191	144
		1	494	412	330
		2	-	-	-
	71 - 112	0	218	169	121
		1	438	356	274
		2	-	-	-

Model	Exact Ratios														
	22.5	25	28	31.5	35.5	40	45	50	56	63	71	80	90	100	112
MC3P-02	22.303	25.791	28.945	32.314	36.265	38.887	44.968	50.467	56.341	63.231	71.2	79.907	90.446	95.359	107.937
MC3P-03	22.65	25.552	28.828	32.599	36.778	39.81	44.909	50.667	57.295	64.64	71.618	80.8	92.022	101.822	115.963
MC3P-04	23.204	26.101	29.176	33.394	37.329	40.276	45.304	50.642	57.962	64.792	72.86	81.444	91.602	97.558	109.725
MC3P-05	22.575	25.412	28.191	32.528	36.084	40.615	43.547	48.308	55.74	61.835	71.064	78.833	88.733	96.362	108.464
MC3P-06	22.801	26.385	29.611	32.33	36.284	41.069	45.957	51.576	56.313	63.199	71.1	79.795	90.319	96.735	109.493
MC3P-07	22.38	25.202	28.31	31.856	35.783	41.02	43.887	49.298	55.473	62.312	68.655	77.119	88.405	99.479	114.036
MC3P-08	21.695	24.431	27.742	31.139	35.36	39.603	43.631	49.545	55.612	63.15	69.091	78.456	87.871	97.274	108.947
MC3P-09	21.634	25.017	28.076	30.877	34.652	39.223	44.098	49.491	54.427	61.082	68.034	76.353	86.423	93.938	106.328

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Notes

6.6. MC3P...1450 RPM

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3P-02	22.50	64	80	74517	2838	3000
	25	58	66	68130		
	28	52	55	63613		
	31.50	46	53	69213		
	35.50	41	44	65127		
	40	36	47	77436		
	45	32	38	71276		
	50	29	32	66396		
	56	26	30	70781		
	63	23	26	67533		
	71	20	24	71186		
	80	18	21	68263		
	90	16	16.70	62397		
	100	14	17.30	71996		
	112	13	14.10	65703		
MC3P-03	22.50	64	106	98995	2553	3000
	25	58	95	98528		
	28	52	79	91388		
	31.50	46	75	98443		
	35.50	41	62	91822		
	40	36	63	104102		
	45	32	55	102955		
	50	29	46	94662		
	56	26	43	100944		
	63	23	36	94411		
	71	20	35	102614		
	80	18	29	96848		
	90	16	24	87835		
	100	14	23	97061		
	112	13	19	87804		
MC3P-04	22.50	64	126	117594	2448	3000
	25	58	126	130660		
	28	52	108	125581		
	31.50	46	101	132713		
	35.50	41	85	125143		
	40	36	75	125007		
	45	32	75	140633		
	50	29	63	129860		
	56	26	59	138275		
	63	23	49	128345		
	71	20	48	140857		
	80	18	39	129700		
	90	16	33	124794		
	100	14	32	133860		
	112	13	28	130212		
MC3P-05	22.50	64	145	135593	2256	3000
	25	58	145	150659		
	28	52	145	168738		
	31.50	46	130	169672		
	35.50	41	117	172663		
	40	36	97	160632		
	45	32	88	164152		
	50	29	88	182291		
	56	26	78	181282		
	63	23	70	182103		
	71	20	62	182130		
	80	18	55	183031		
	90	16	45	169912		
	100	14	42	172791		
	112	13	38	174413		

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3P-06	22.50	64	172	160792	2114	3000
	25	58	172	178658		
	28	52	172	200096		
	31.50	46	157	204950		
	35.50	41	153	225295		
	40	36	125	206923		
	45	32	103	192230		
	50	29	103	213590		
	56	26	93	217120		
	63	23	89	233844		
	71	20	75	219995		
	80	18	71	236788		
	90	16	59	219349		
	100	14	57	236255		
	112	13	49	226975		
MC3P-07	22.50	64	235	219589	1950	2778
	25	58	235	243988		
	28	52	235	273267		
	31.50	46	211	275506		
	35.50	41	211	310492		
	40	36	172	285853		
	45	32	140	261587		
	50	29	140	290652		
	56	26	125	291484		
	63	23	125	326912		
	71	20	102	301404		
	80	18	102	337903		
	90	16	82	307184		
	100	14	68	282652		
	112	13	64	299249		
MC3P-08	22.50	64	365	340783	1753	2546
	25	58	365	378648		
	28	52	353	410646		
	31.50	46	316	413259		
	35.50	41	280	412726		
	40	36	233	386114		
	45	32	212	395980		
	50	29	202	418645		
	56	26	182	424086		
	63	23	159	416619		
	71	20	148	435445		
	80	18	130	430912		
	90	16	108	404140		
	100	14	99	412780		
	112	13	88	409153		
MC3P-09	22.50	64	464	433178	1621	2350
	25	58	464	481309		
	28	52	464	539066		
	31.50	46	407	532534		
	35.50	41	387	569865		
	40	36	319	529040		
	45	32	295	551973		
	50	29	274	567972		
	56	26	251	582370		
	63	23	224	584611		
	71	20	200	590690		
	80	18	180	597304		
	90	16	148	551973		
	100	14	144	597304		
	112	13	120	559076		

Note: Thermal ratings listed are nominal. For specific ratings based upon conditions, contact SEW.

Thermal Ratings (P_{TH}) MC3P.. 1750 RPM						
Model	Nominal Ratio	Number of Fans	68°F 20°C	86°F 30°C	104°F 40°C	
MC3P-02	22.5 - 63	0	63	50	38	
		1	129	108	88	
		2	-	-	-	
	71 - 112	0	57	44	32	
		1	115	93	72	
MC3P-03	22.5 - 63	0	78	62	47	
		1	161	134	108	
		2	-	-	-	
	71 - 112	0	70	55	40	
		1	142	116	89	
		2	-	-	-	

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Thermal Ratings (P_{TH}) MC3P.. 1750 RPM			
		Number of Fans	68°F 20°C	86°F 30°C	104°F 40°C
MC3P-04	22.5 - 63	0	96	77	57
		1	200	167	134
		2	-	-	-
	71 - 112	0	87	68	49
		1	177	144	111
		2	-	-	-
MC3P-05	22.5 - 63	0	112	89	66
		1	230	192	154
		2	-	-	-
	71 - 112	0	102	79	56
		1	204	167	128
		2	-	-	-
MC3P-06	22.5 - 63	0	133	106	80
		1	274	228	184
		2	-	-	-
	71 - 112	0	121	94	68
		1	244	198	152
		2	-	-	-
MC3P-07	22.5 - 63	0	163	130	98
		1	336	282	226
		2	-	-	-
	71 - 112	0	149	115	83
		1	299	243	188
		2	-	-	-
MC3P-08	22.5 - 63	0	202	161	121
		1	417	348	279
		2	-	-	-
	71 - 112	0	184	143	103
		1	371	302	233
		2	-	-	-
MC3P-09	22.5 - 63	0	240	191	144
		1	494	412	330
		2	-	-	-
	71 - 112	0	218	169	121
		1	438	356	274
		2	-	-	-

Model	Exact Ratios														
	22.5	25	28	31.5	35.5	40	45	50	56	63	71	80	90	100	112
MC3P-02	22.303	25.791	28.945	32.314	36.265	38.887	44.968	50.467	56.341	63.231	71.2	79.907	90.446	95.359	107.937
MC3P-03	22.65	25.552	28.828	32.599	36.778	39.81	44.909	50.667	57.295	64.64	71.618	80.8	92.022	101.822	115.963
MC3P-04	23.204	26.101	29.176	33.394	37.329	40.276	45.304	50.642	57.962	64.792	72.86	81.444	91.602	97.558	109.725
MC3P-05	22.575	25.412	28.191	32.528	36.084	40.615	43.547	48.308	55.74	61.835	71.064	78.833	88.733	96.362	108.464
MC3P-06	22.801	26.385	29.611	32.33	36.284	41.069	45.957	51.576	56.313	63.199	71.1	79.795	90.319	96.735	109.493
MC3P-07	22.38	25.202	28.31	31.856	35.783	41.02	43.887	49.298	55.473	62.312	68.655	77.119	88.405	99.479	114.036
MC3P-08	21.695	24.431	27.742	31.139	35.36	39.603	43.631	49.545	55.612	63.15	69.091	78.456	87.871	97.274	108.947
MC3P-09	21.634	25.017	28.076	30.877	34.652	39.223	44.098	49.491	54.427	61.082	68.034	76.353	86.423	93.938	106.328

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Notes

6.7. MC3P...1170 RPM

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3P-02	22.50	52	65	75048	2838	3000
	25	47	53	68710		
	28	42	45	64254		
	31.50	37	43	69344		
	35.50	33	36	65599		
	40	29	38	78183		
	45	26	31	71445		
	50	23	26	67043		
	56	21	25	70978		
	63	19	21	68084		
	71	16	20	71519		
	80	15	16.70	68844		
	90	13	13.60	63041		
	100	12	14.10	72713		
	112	10	11.50	66048		
MC3P-03	22.50	52	86	99063	2553	3000
	25	47	77	99397		
	28	42	64	92086		
	31.50	37	61	98763		
	35.50	33	51	92596		
	40	29	51	104334		
	45	26	45	103867		
	50	23	37	95394		
	56	21	35	100864		
	63	19	29	95401		
	71	16	28	102779		
	80	15	24	97662		
	90	13	19	88857		
	100	12	19	98062		
	112	10	15.30	88163		
MC3P-04	22.50	52	102	117675	2448	3000
	25	47	102	130750		
	28	42	88	126267		
	31.50	37	82	133646		
	35.50	33	69	125277		
	40	29	61	125147		
	45	26	61	140790		
	50	23	51	130083		
	56	21	48	139716		
	63	19	40	128602		
	71	16	39	142091		
	80	15	32	130216		
	90	13	27	126081		
	100	12	26	133418		
	112	10	23	131498		
MC3P-05	22.50	52	117	135536	2256	3000
	25	47	117	150596		
	28	42	117	168668		
	31.50	37	104	169158		
	35.50	33	95	174061		
	40	29	79	161970		
	45	26	71	164205		
	50	23	71	182450		
	56	21	63	181556		
	63	19	57	183657		
	71	16	50	182350		
	80	15	45	184651		
	90	13	37	171109		
	100	12	34	172778		
	112	10	30	175579		

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3P-06	22.50	52	139	160602	2114	3000
	25	47	139	178447		
	28	42	139	199861		
	31.50	37	127	205091		
	35.50	33	124	227109		
	40	29	102	209200		
	45	26	83	192423		
	50	23	83	213803		
	56	21	75	217046		
	63	19	73	235770		
	71	16	60	220241		
	80	15	58	239086		
	90	13	48	220941		
	100	12	46	236151		
	112	10	40	228626		
MC3P-07	22.50	52	189	219140	1950	2778
	25	47	189	243489		
	28	42	189	272708		
	31.50	37	170	275276		
	35.50	33	170	310232		
	40	29	140	288185		
	45	26	113	261767		
	50	23	113	290853		
	56	21	101	291760		
	63	19	101	328230		
	71	16	83	301706		
	80	15	83	339950		
	90	13	67	309798		
	100	12	55	282847		
	112	10	52	301847		
MC3P-08	22.50	52	294	340718	1753	2546
	25	47	294	378575		
	28	42	287	412798		
	31.50	37	258	418168		
	35.50	33	227	414432		
	40	29	189	389583		
	45	26	172	399255		
	50	23	163	420269		
	56	21	148	425873		
	63	19	130	420269		
	71	16	120	437640		
	80	15	105	432810		
	90	13	88	407060		
	100	12	80	412931		
	112	10	72	412423		
MC3P-09	22.50	52	401	463797	1621	2350
	25	47	401	515329		
	28	42	385	554755		
	31.50	37	351	569465		
	35.50	33	315	575468		
	40	29	259	533675		
	45	26	239	552353		
	50	23	222	570365		
	56	21	202	582773		
	63	19	182	588376		
	71	16	162	592046		
	80	15	147	603052		
	90	13	119	551152		
	100	12	116	598383		
	112	10	97	559611		

Note: Thermal ratings listed are nominal. For specific ratings based upon conditions, contact SEW.

Thermal Ratings (P_{TH}) MC3P.. 1750 RPM						
Model	Nominal Ratio	Number of Fans	68°F 20°C	86°F 30°C	104°F 40°C	
MC3P-02	22.5 - 63	0	63	50	38	
		1	129	108	88	
		2	-	-	-	
	71 - 112	0	57	44	32	
		1	115	93	72	
MC3P-03	22.5 - 63	0	78	62	47	
		1	161	134	108	
		2	-	-	-	
	71 - 112	0	70	55	40	
		1	142	116	89	
		2	-	-	-	

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Thermal Ratings (P_{TH}) MC3P.. 1750 RPM			
		Number of Fans	68°F 20°C	86°F 30°C	104°F 40°C
MC3P-04	22.5 - 63	0	96	77	57
		1	200	167	134
		2	-	-	-
	71 - 112	0	87	68	49
		1	177	144	111
		2	-	-	-
MC3P-05	22.5 - 63	0	112	89	66
		1	230	192	154
		2	-	-	-
	71 - 112	0	102	79	56
		1	204	167	128
		2	-	-	-
MC3P-06	22.5 - 63	0	133	106	80
		1	274	228	184
		2	-	-	-
	71 - 112	0	121	94	68
		1	244	198	152
		2	-	-	-
MC3P-07	22.5 - 63	0	163	130	98
		1	336	282	226
		2	-	-	-
	71 - 112	0	149	115	83
		1	299	243	188
		2	-	-	-
MC3P-08	22.5 - 63	0	202	161	121
		1	417	348	279
		2	-	-	-
	71 - 112	0	184	143	103
		1	371	302	233
		2	-	-	-
MC3P-09	22.5 - 63	0	240	191	144
		1	494	412	330
		2	-	-	-
	71 - 112	0	218	169	121
		1	438	356	274
		2	-	-	-

Model	Exact Ratios														
	22.5	25	28	31.5	35.5	40	45	50	56	63	71	80	90	100	112
MC3P-02	22.303	25.791	28.945	32.314	36.265	38.887	44.968	50.467	56.341	63.231	71.2	79.907	90.446	95.359	107.937
MC3P-03	22.65	25.552	28.828	32.599	36.778	39.81	44.909	50.667	57.295	64.64	71.618	80.8	92.022	101.822	115.963
MC3P-04	23.204	26.101	29.176	33.394	37.329	40.276	45.304	50.642	57.962	64.792	72.86	81.444	91.602	97.558	109.725
MC3P-05	22.575	25.412	28.191	32.528	36.084	40.615	43.547	48.308	55.74	61.835	71.064	78.833	88.733	96.362	108.464
MC3P-06	22.801	26.385	29.611	32.33	36.284	41.069	45.957	51.576	56.313	63.199	71.1	79.795	90.319	96.735	109.493
MC3P-07	22.38	25.202	28.31	31.856	35.783	41.02	43.887	49.298	55.473	62.312	68.655	77.119	88.405	99.479	114.036
MC3P-08	21.695	24.431	27.742	31.139	35.36	39.603	43.631	49.545	55.612	63.15	69.091	78.456	87.871	97.274	108.947
MC3P-09	21.634	25.017	28.076	30.877	34.652	39.223	44.098	49.491	54.427	61.082	68.034	76.353	86.423	93.938	106.328

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Notes

6.8. MC3P...870 RPM

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3P-02	22.50	39	49	75648	2838	3000
	25	35	40	69045		
	28	31	33	64553		
	31.50	28	32	69597		
	35.50	25	27	65930		
	40	22	28	78450		
	45	19	23	71326		
	50	17	20	67644		
	56	16	18.40	71277		
	63	14	15.70	68588		
	71	12	14.60	71614		
	80	11	12.50	69164		
	90	9.70	10.20	63256		
	100	8.70	10.60	73407		
	112	7.80	8.60	66525		
MC3P-03	22.50	39	64	99063	2553	3000
	25	35	58	100064		
	28	31	48	92795		
	31.50	28	45	98595		
	35.50	25	38	93212		
	40	22	38	104387		
	45	19	34	104466		
	50	17	28	96062		
	56	16	26	100864		
	63	14	22	95821		
	71	12	21	102874		
	80	11	17.70	97983		
	90	9.70	14.30	89337		
	100	8.70	14.30	99264		
	112	7.80	11.60	89568		
MC3P-04	22.50	39	76	117615	2448	3000
	25	35	76	130683		
	28	31	65	126417		
	31.50	28	62	134654		
	35.50	25	51	125608		
	40	22	45	125200		
	45	19	45	140850		
	50	17	38	130484		
	56	16	36	140313		
	63	14	30	128602		
	71	12	29	142659		
	80	11	23	130003		
	90	9.70	20	126801		
	100	8.70	19	133686		
	112	7.80	17.10	132692		
MC3P-05	22.50	39	87	135447	2256	3000
	25	35	87	150497		
	28	31	87	168556		
	31.50	28	78	169200		
	35.50	25	71	175056		
	40	22	59	162984		
	45	19	53	164265		
	50	17	53	182517		
	56	16	47	181556		
	63	14	42	184582		
	71	12	37	182445		
	80	11	34	185719		
	90	9.70	28	172190		
	100	8.70	25	172910		
	112	7.80	23	177521		

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3P-06	22.50	39	103	160843	2114	3000
	25	35	103	178714		
	28	31	103	200160		
	31.50	28	94	205007		
	35.50	25	93	228482		
	40	22	76	211015		
	45	19	62	192363		
	50	17	62	213737		
	56	16	56	216971		
	63	14	54	237032		
	71	12	45	220525		
	80	11	44	240794		
	90	9.70	36	222622		
	100	8.70	34	236151		
	112	7.80	30	230420		
MC3P-07	22.50	39	141	219741	1950	2778
	25	35	141	244156		
	28	31	141	273455		
	31.50	28	127	277378		
	35.50	25	127	312600		
	40	22	105	290746		
	45	19	84	261888		
	50	17	84	290987		
	56	16	75	291835		
	63	14	75	328314		
	71	12	61	301801		
	80	11	61	340057		
	90	9.70	50	311239		
	100	8.70	41	282581		
	112	7.80	39	304835		
MC3P-08	22.50	39	219	340417	1753	2546
	25	35	219	378242		
	28	31	214	414665		
	31.50	28	192	418588		
	35.50	25	170	417748		
	40	22	142	393852		
	45	19	127	396253		
	50	17	123	424271		
	56	16	110	427217		
	63	14	97	423127		
	71	12	89	439345		
	80	11	79	435478		
	90	9.70	66	409942		
	100	8.70	60	413064		
	112	7.80	54	416010		
MC3P-09	22.50	39	300	466498	1621	2350
	25	35	300	518332		
	28	31	288	558117		
	31.50	28	265	577449		
	35.50	25	235	576889		
	40	22	193	534742		
	45	19	177	551152		
	50	17	167	576368		
	56	16	150	582773		
	63	14	137	595101		
	71	12	120	591098		
	80	11	110	606468		
	90	9.70	89	551152		
	100	8.70	87	598783		
	112	7.80	72	559462		

Note: Thermal ratings listed are nominal. For specific ratings based upon conditions, contact SEW.

Thermal Ratings (P_{TH}) MC3P.. 1750 RPM						
Model	Nominal Ratio	Number of Fans	68°F 20°C	86°F 30°C	104°F 40°C	
MC3P-02	22.5 - 63	0	63	50	38	
		1	129	108	88	
		2	-	-	-	
	71 - 112	0	57	44	32	
		1	115	93	72	
MC3P-03	22.5 - 63	0	78	62	47	
		1	161	134	108	
		2	-	-	-	
	71 - 112	0	70	55	40	
		1	142	116	89	
		2	-	-	-	

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model		Nominal Ratio	Thermal Ratings (P_{TH}) MC3P.. 1750 RPM			
			Number of Fans	68°F 20°C	86°F 30°C	104°F 40°C
MC3P-04	22.5 - 63	0	96	77	57	
		1	200	167	134	
		2	-	-	-	
	71 - 112	0	87	68	49	
		1	177	144	111	
		2	-	-	-	
MC3P-05	22.5 - 63	0	112	89	66	
		1	230	192	154	
		2	-	-	-	
	71 - 112	0	102	79	56	
		1	204	167	128	
		2	-	-	-	
MC3P-06	22.5 - 63	0	133	106	80	
		1	274	228	184	
		2	-	-	-	
	71 - 112	0	121	94	68	
		1	244	198	152	
		2	-	-	-	
MC3P-07	22.5 - 63	0	163	130	98	
		1	336	282	226	
		2	-	-	-	
	71 - 112	0	149	115	83	
		1	299	243	188	
		2	-	-	-	
MC3P-08	22.5 - 63	0	202	161	121	
		1	417	348	279	
		2	-	-	-	
	71 - 112	0	184	143	103	
		1	371	302	233	
		2	-	-	-	
MC3P-09	22.5 - 63	0	240	191	144	
		1	494	412	330	
		2	-	-	-	
	71 - 112	0	218	169	121	
		1	438	356	274	
		2	-	-	-	

Exact Ratios															
Model	22.5	25	28	31.5	35.5	40	45	50	56	63	71	80	90	100	112
MC3P-02	22.303	25.791	28.945	32.314	36.265	38.887	44.968	50.467	56.341	63.231	71.2	79.907	90.446	95.359	107.937
MC3P-03	22.65	25.552	28.828	32.599	36.778	39.81	44.909	50.667	57.295	64.64	71.618	80.8	92.022	101.822	115.963
MC3P-04	23.204	26.101	29.176	33.394	37.329	40.276	45.304	50.642	57.962	64.792	72.86	81.444	91.602	97.558	109.725
MC3P-05	22.575	25.412	28.191	32.528	36.084	40.615	43.547	48.308	55.74	61.835	71.064	78.833	88.733	96.362	108.464
MC3P-06	22.801	26.385	29.611	32.33	36.284	41.069	45.957	51.576	56.313	63.199	71.1	79.795	90.319	96.735	109.493
MC3P-07	22.38	25.202	28.31	31.856	35.783	41.02	43.887	49.298	55.473	62.312	68.655	77.119	88.405	99.479	114.036
MC3P-08	21.695	24.431	27.742	31.139	35.36	39.603	43.631	49.545	55.612	63.15	69.091	78.456	87.871	97.274	108.947
MC3P-09	21.634	25.017	28.076	30.877	34.652	39.223	44.098	49.491	54.427	61.082	68.034	76.353	86.423	93.938	106.328

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Notes

6.9. MC2R...1750 RPM

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM	
MC2R-02	7.10	246	186	46173	1568	2680	
	8	219	172	48052			
	9	194	160	50400	2131		
	10	175	138	48322			
	11.20	156	128	50176			
	12.50	140	120	52499			
MC2R-03	7.10	246	229	56754	1451	2474	
	8	219	215	59974			
	9	194	200	63000			
	10	175	165	57806	2033		
	11.20	156	159	62214			
	12.50	140	149	64919			
MC2R-04	7.10	246	293	72786	1319	2297	
	8	219	274	76593			
	9	194	257	80883			
	10	175	217	75870	1814		
	11.20	156	204	79917			
	12.50	140	193	84113			
MC2R-05	7.10	246	415	102927	1189	2144	
	8	219	389	108748			
	9	194	366	115026			
	10	175	306	107032	1631		
	11.20	156	288	112795			
	12.50	140	273	119112			
MC2R-06	7.10	246	549	136273	1047	2010	
	8	219	508	141987			
	9	194	474	149168			
	10	175	396	138193	1480		
	11.20	156	367	143648			
	12.50	140	345	150725			
MC2R-07	7.10	246	666	165132	929	1859	
	8	219	624	174502			
	9	194	583	183309			
	10	175	485	169354	1298		
	11.20	156	456	178549			
	12.50	140	428	186854			
MC2R-08	7.10	246	884	219320	872	1693	
	8	219	827	231225			
	9	194	769	241837			
	10	175	654	228516	1221		
	11.20	156	615	240763			
	12.50	140	574	250644			
MC2R-09	7.10	246	1232	305573	773	1547	
	8	219	1136	317573			
	9	194	1063	334102			
	10	175	913	318837	1084		
	11.20	156	845	330796			
	12.50	140	792	346047			

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Note: Thermal ratings listed are nominal. For specific ratings based upon conditions, contact SEW.

Model	Nominal Ratio	Thermal Ratings (P_{TH}) MC2R.. 1750 RPM			
		Number of Fans	68°F 20°C	86°F 30°C	104°F 40°C
MC2R-02	7.1 - 12.5	0	29	10	*
		1	109	79	47
		0	35	13	*
		1	132	95	57
		0	44	17	*
		1	164	118	70
		0	50	18	*
		1	185	132	80
		0	59	22	*
		1	221	159	96
MC2R-07	7.1 - 12.5	0	72	27	*
		1	269	192	116
MC2R-08	7.1 - 12.5	0	89	34	*
		1	332	237	144
MC2R-09	7.1 - 12.5	0	102	39	*
		1	382	273	165

*Cooling needed

Model	Exact Ratios					
	7.1	8	9	10	11.2	12.5
MC2R-02	6.961	8.050	9.034	9.605	11.107	12.465
MC2R-03	7.124	8.036	9.067	10.000	11.281	12.727
MC2R-04	7.293	8.203	9.170	10.147	11.414	12.759
MC2R-05	7.096	7.987	8.861	9.873	11.114	12.329
MC2R-06	6.739	7.798	8.752	9.638	11.152	12.516
MC2R-07	6.835	7.697	8.646	9.736	10.963	12.315
MC2R-08	6.946	7.821	8.882	9.736	10.963	12.449
MC2R-09	6.852	7.924	8.893	9.605	11.107	12.465

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

6.10. MC2R...1450 RPM

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM	
MC2R-02	7.10	204	163	48843	1568	2680	
	8	181	150	50702			
	9	161	140	53140	2131		
	10	145	121	50973			
	11.20	129	112	52964			
	12.50	116	105	55455			
MC2R-03	7.10	204	200	59996	1451	2474	
	8	181	188	63268			
	9	161	175	66302			
	10	145	137	57960	2033		
	11.20	129	139	65522			
	12.50	116	130	68388			
MC2R-04	7.10	204	256	76534	1319	2297	
	8	181	240	81036			
	9	161	225	85315			
	10	145	190	80170	1814		
	11.20	129	179	84329			
	12.50	116	168	88701			
MC2R-05	7.10	204	362	108456	1189	2144	
	8	181	340	114836			
	9	161	320	121392			
	10	145	269	113212	1631		
	11.20	129	253	119517			
	12.50	116	239	125941			
MC2R-06	7.10	204	481	143838	1047	2010	
	8	181	445	149938			
	9	161	415	157467			
	10	145	346	145712	1480		
	11.20	129	321	151671			
	12.50	116	302	159120			
MC2R-07	7.10	204	583	174606	929	1859	
	8	181	546	184172			
	9	161	510	193543			
	10	145	425	179297	1298		
	11.20	129	400	188680			
	12.50	116	375	197714			
MC2R-08	7.10	204	773	231526	872	1693	
	8	181	725	244407			
	9	161	672	254970			
	10	145	573	241591	1221		
	11.20	129	538	254201			
	12.50	116	502	264748			
MC2R-09	7.10	204	1078	322675	773	1547	
	8	181	994	335410			
	9	161	929	352473			
	10	145	798	336385	1084		
	11.20	129	740	349450			
	12.50	116	694	365636			

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Note: Thermal ratings listed are nominal. For specific ratings based upon conditions, contact SEW.

Model	Nominal Ratio	Thermal Ratings (P_{TH}) MC2R.. 1750 RPM			104°F 40°C
		Number of Fans	68°F 20°C	86°F 30°C	
MC2R-02	7.1 - 12.5	0	29	10	*
		1	109	79	47
		0	35	13	*
		1	132	95	57
		0	44	17	*
		1	164	118	70
		0	50	18	*
		1	185	132	80
		0	59	22	*
		1	221	159	96
MC2R-07	7.1 - 12.5	0	72	27	*
		1	269	192	116
MC2R-08	7.1 - 12.5	0	89	34	*
		1	332	237	144
MC2R-09	7.1 - 12.5	0	102	39	*
		1	382	273	165

*Cooling needed

Model	Exact Ratios					
	7.1	8	9	10	11.2	12.5
MC2R-02	6.961	8.050	9.034	9.605	11.107	12.465
MC2R-03	7.124	8.036	9.067	10.000	11.281	12.727
MC2R-04	7.293	8.203	9.170	10.147	11.414	12.759
MC2R-05	7.096	7.987	8.861	9.873	11.114	12.329
MC2R-06	6.739	7.798	8.752	9.638	11.152	12.516
MC2R-07	6.835	7.697	8.646	9.736	10.963	12.315
MC2R-08	6.946	7.821	8.882	9.736	10.963	12.449
MC2R-09	6.852	7.924	8.893	9.605	11.107	12.465

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

6.11. MC2R...1170 RPM

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM	
MC2R-02	7.10	165	140	51956	1568	2680	
	8	146	130	54206			
	9	130	121	57079	2131		
	10	117	101	52986			
	11.20	104	97	56689			
	12.50	94	91	59372			
MC2R-03	7.10	165	174	64464	1451	2474	
	8	146	162	67757			
	9	130	152	71348			
	10	117	112	58271	2033		
	11.20	104	113	66022			
	12.50	94	112	73348			
MC2R-04	7.10	165	222	82264	1319	2297	
	8	146	207	86729			
	9	130	195	91472			
	10	117	162	84697	1814		
	11.20	104	154	90307			
	12.50	94	145	94860			
MC2R-05	7.10	165	313	115939	1189	2144	
	8	146	293	122505			
	9	130	276	129891			
	10	117	219	114509	1631		
	11.20	104	218	127492			
	12.50	94	206	134667			
MC2R-06	7.10	165	415	153944	1047	2010	
	8	146	384	160449			
	9	130	358	168309			
	10	117	297	155164	1480		
	11.20	104	278	162400			
	12.50	94	261	170240			
MC2R-07	7.10	165	503	186657	929	1859	
	8	146	472	197309			
	9	130	441	207337			
	10	117	363	189720	1298		
	11.20	104	345	201862			
	12.50	94	323	210894			
MC2R-08	7.10	165	668	247754	872	1693	
	8	146	625	261271			
	9	130	581	273197			
	10	117	494	258155	1221		
	11.20	104	466	272438			
	12.50	94	433	282886			
MC2R-09	7.10	165	931	345412	773	1547	
	8	146	858	358842			
	9	130	803	377475			
	10	117	689	359790	1084		
	11.20	104	638	373369			
	12.50	94	599	391297			

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Note: Thermal ratings listed are nominal. For specific ratings based upon conditions, contact SEW.

Model	Nominal Ratio	Thermal Ratings (P_{TH}) MC2R.. 1750 RPM			
		Number of Fans	68°F 20°C	86°F 30°C	104°F 40°C
MC2R-02	7.1 - 12.5	0	29	10	*
		1	109	79	47
		0	35	13	*
		1	132	95	57
		0	44	17	*
		1	164	118	70
		0	50	18	*
		1	185	132	80
		0	59	22	*
		1	221	159	96
MC2R-07	7.1 - 12.5	0	72	27	*
		1	269	192	116
MC2R-08	7.1 - 12.5	0	89	34	*
		1	332	237	144
MC2R-09	7.1 - 12.5	0	102	39	*
		1	382	273	165

*Cooling needed

Model	Exact Ratios					
	7.1	8	9	10	11.2	12.5
MC2R-02	6.961	8.050	9.034	9.605	11.107	12.465
MC2R-03	7.124	8.036	9.067	10.000	11.281	12.727
MC2R-04	7.293	8.203	9.170	10.147	11.414	12.759
MC2R-05	7.096	7.987	8.861	9.873	11.114	12.329
MC2R-06	6.739	7.798	8.752	9.638	11.152	12.516
MC2R-07	6.835	7.697	8.646	9.736	10.963	12.315
MC2R-08	6.946	7.821	8.882	9.736	10.963	12.449
MC2R-09	6.852	7.924	8.893	9.605	11.107	12.465

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

6.12. MC2R...870 RPM

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM	
MC2R-02	7.10	123	111	55131	1568	2680	
	8	109	102	57307			
	9	97	95	60298			
	10	87	76	53257			
	11.20	78	75	59375	2131		
	12.50	70	71	62710			
MC2R-03	7.10	123	137	68120	1451	2474	
	8	109	127	71551			
	9	97	119	75373			
	10	87	83	58461			
	11.20	78	84	66296	2033		
	12.50	70	85	75007			
MC2R-04	7.10	123	174	86594	1319	2297	
	8	109	163	91716			
	9	97	153	96595			
	10	87	124	87000			
	11.20	78	119	93797	1814		
	12.50	70	114	99908			
MC2R-05	7.10	123	245	122386	1189	2144	
	8	109	230	129444			
	9	97	218	137574			
	10	87	164	115458			
	11.20	78	165	130223	1631		
	12.50	70	162	142290			
MC2R-06	7.10	123	326	162796	1047	2010	
	8	109	301	169121			
	9	97	281	177821			
	10	87	229	160991			
	11.20	78	216	170292	1480		
	12.50	70	205	179895			
MC2R-07	7.10	123	396	197434	929	1859	
	8	109	370	208150			
	9	97	346	218801			
	10	87	280	196766			
	11.20	78	267	210362	1298		
	12.50	70	255	223599			
MC2R-08	7.10	123	524	261513	872	1693	
	8	109	491	275798			
	9	97	456	288320			
	10	87	382	268318			
	11.20	78	363	285946	1221		
	12.50	70	340	298808			
MC2R-09	7.10	123	731	364848	773	1547	
	8	109	675	379223			
	9	97	629	398087			
	10	87	536	376459			
	11.20	78	501	394314	1084		
	12.50	70	471	413657			

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Note: Thermal ratings listed are nominal. For specific ratings based upon conditions, contact SEW.

Model	Nominal Ratio	Thermal Ratings (P_{TH}) MC2R.. 1750 RPM			
		Number of Fans	68°F 20°C	86°F 30°C	104°F 40°C
MC2R-02	7.1 - 12.5	0	29	10	*
		1	109	79	47
		0	35	13	*
		1	132	95	57
		0	44	17	*
		1	164	118	70
		0	50	18	*
		1	185	132	80
		0	59	22	*
		1	221	159	96
MC2R-07	7.1 - 12.5	0	72	27	*
		1	269	192	116
MC2R-08	7.1 - 12.5	0	89	34	*
		1	332	237	144
MC2R-09	7.1 - 12.5	0	102	39	*
		1	382	273	165

*Cooling needed

Model	Exact Ratios					
	7.1	8	9	10	11.2	12.5
MC2R-02	6.961	8.050	9.034	9.605	11.107	12.465
MC2R-03	7.124	8.036	9.067	10.000	11.281	12.727
MC2R-04	7.293	8.203	9.170	10.147	11.414	12.759
MC2R-05	7.096	7.987	8.861	9.873	11.114	12.329
MC2R-06	6.739	7.798	8.752	9.638	11.152	12.516
MC2R-07	6.835	7.697	8.646	9.736	10.963	12.315
MC2R-08	6.946	7.821	8.882	9.736	10.963	12.449
MC2R-09	6.852	7.924	8.893	9.605	11.107	12.465

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

6.13. MC3R...1750 RPM

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3R-02	14	125	100	48180	2652	3000
	16	109	100	55062		
	18	97	99	61066		
	20	88	88	60647		
	22.50	78	86	66827		
	25	70	72	61915		
	28	62	70	66979		
	31.50	56	58	62745		
	35.50	49	47	57455		
	40	44	42	58335		
	45	39	43	66027		
	50	35	41	70473		
	56	31	34	66232		
	63	28	28	60505		
	71	25	29	71345		
	80	22	25	68295		
	90	19	20	62425		
	100	18	15.90	54689		
	112	16	15.90	61252		
MC3R-03	14	125	132	63493	2463	3000
	16	109	132	72563		
	18	97	132	81633		
	20	88	125	85991		
	22.50	78	125	96740		
	25	70	104	89147		
	28	62	99	95115		
	31.50	56	82	88936		
	35.50	49	78	95337		
	40	44	73	100841		
	45	39	62	95639		
	50	35	50	85813		
	56	31	49	93870		
	63	28	39	85155		
	71	25	39	95337		
	80	22	36	98529		
	90	19	29	89637		
	100	18	24	80922		
	112	16	24	90632		
MC3R-04	14	125	151	72830	2366	3000
	16	109	151	83234		
	18	97	151	93639		
	20	88	151	104042		
	22.50	78	151	117048		
	25	70	147	126719		
	28	62	137	131966		
	31.50	56	115	124931		
	35.50	49	97	118698		
	40	44	99	135878		
	45	39	86	133655		
	50	35	72	124051		
	56	31	64	123500		
	63	28	58	124651		
	71	25	50	120908		
	80	22	48	131254		
	90	19	42	130854		
	100	18	24	82256		
	112	16	24	93123		

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3R-05	14	125	209	100841	2100	2924
	16	109	209	115247		
	18	97	209	129654		
	20	88	194	133388		
	22.50	78	194	150062		
	25	70	194	166735		
	28	62	176	169314		
	31.50	56	156	169470		
	35.50	49	138	168892		
	40	44	128	175539		
	45	39	118	182475		
	50	35	97	167402		
	56	31	91	175041		
	63	28	77	166108		
	71	25	57	140164		
	80	22	57	157931		
	90	19	55	171671		
	100	18	36	124051		
	112	16	37	140929		
MC3R-06	14	125	261	125741	1873	2680
	16	109	261	143704		
	18	97	261	161666		
	20	88	238	163623		
	22.50	78	238	184075		
	25	70	238	204529		
	28	62	224	215377		
	31.50	56	206	222692		
	35.50	49	171	208352		
	40	44	159	218757		
	45	39	154	238098		
	50	35	125	215644		
	56	31	111	214631		
	63	28	100	216249		
	71	25	81	198566		
	80	22	81	223736		
	90	19	72	224092		
	100	18	60	206307		
	112	16	59	227578		
MC3R-07	14	125	348	167447	1785	2474
	16	109	348	191368		
	18	97	348	215289		
	20	88	300	206307		
	22.50	78	300	232096		
	25	70	300	257883		
	28	62	261	251481		
	31.50	56	261	282916		
	35.50	49	222	271489		
	40	44	203	279226		
	45	39	203	314129		
	50	35	175	300123		
	56	31	147	283850		
	63	28	140	302524		
	71	25	92	224768		
	80	22	92	253259		
	90	19	92	284918		
	100	18	78	267665		
	112	16	78	299785		
MC3R-08	14	125	440	211642	1599	2297
	16	109	440	241878		
	18	97	440	272112		
	20	88	380	261441		
	22.50	78	380	294121		
	25	70	380	326801		
	28	62	330	317464		
	31.50	56	330	357147		
	35.50	49	288	351989		
	40	44	252	346809		
	45	39	252	390160		
	50	35	224	384602		
	56	31	207	398386		
	63	28	177	383758		
	71	25	134	328313		
	80	22	134	369930		
	90	19	127	394562		
	100	18	88	301012		
	112	16	89	341616		

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3R-09	14	125	533	256461	1447	2144
	16	109	533	293098		
	18	97	533	329736		
	20	88	490	337027		
	22.50	78	490	379156		
	25	70	490	421284		
	28	62	434	418305		
	31.50	56	434	470593		
	35.50	49	372	454587		
	40	44	331	455298		
	45	39	331	512210	1924	2467
	50	35	314	540222		
	56	31	268	515412		
	63	28	246	532219		
	71	25	193	470371		
	80	22	193	529995	2907	2907
	90	19	177	548225		
	100	18	95	325023		
	112	16	96	369005	3000	3000

Note: Thermal ratings listed are nominal. For specific ratings based upon conditions, contact SEW.

Model		Nominal Ratio		Number of Fans		Thermal Ratings (P_{TH}) MC3R.. 1750 RPM		68°F 20°C		86°F 30°C		104°F 40°C	
MC3R-02	14 - 63		0		48			35		23			
		1	108					88		66			
MC3R-03	71 - 112		0		47			34		22			
		1	99					79		57			
MC3R-04	14 - 63		0		57			43		28			
		1	131					105		80			
MC3R-05	71 - 112		0		56			41		27			
		1	121					95		69			
MC3R-06	14 - 63		0		72			53		34			
		1	161					131		99			
MC3R-07	71 - 112		0		69			50		32			
		1	148					118		86			
MC3R-08	14 - 63		0		81			59		38			
		1	182					147		112			
MC3R-09	71 - 112		0		78			57		37			
		1	167					132		96			
MC3R-02	14 - 63		0		96			71		46			
		1	218					177		134			
MC3R-03	71 - 112		0		94			68		43			
		1	200					158		116			
MC3R-04	14 - 63		0		117			86		56			
		1	264					214		162			
MC3R-05	71 - 112		0		113			83		54			
		1	243					192		141			
MC3R-06	14 - 63		0		143			106		69			
		1	326					263		200			
MC3R-07	71 - 112		0		139			102		65			
		1	299					237		174			
MC3R-08	14 - 63		0		166			123		79			
		1	375					303		231			
MC3R-09	71 - 112		0		162			117		75			
		1	345					273		200			

Model	Exact Ratios																		
	14	16	18	20	23	25	28	31.5	36	40	45	50	56	63	71	80	90	100	112
MC3R-02	16.896	16.896	18.962	20.312	23.489	26.361	29.430	33.028	37.384	40.296	45.224	50.488	56.661	64.135	70.968	79.647	90.152	97.346	110.185
MC3R-03	15.069	16.999	19.179	20.568	23.203	26.178	29.602	33.397	35.077	39.666	44.751	50.966	57.295	65.252	69.861	78.817	89.764	97.527	111.072
MC3R-04	14.757	16.600	18.555	20.600	23.171	25.901	29.646	33.139	34.627	39.632	44.302	49.827	55.993	62.976	68.901	77.019	86.625	93.184	104.806
MC3R-05	14.681	16.526	18.333	20.217	22.758	25.246	29.130	32.315	33.829	39.033	43.301	48.739	55.438	62.400	69.916	77.560	87.300	93.838	105.622
MC3R-06	14.089	16.303	18.297	20.299	23.489	26.361	28.782	32.302	35.533	38.796	43.540	49.283	55.306	62.600	68.956	77.388	87.595	95.757	108.387
MC3R-07	14.177	15.965	17.933	19.937	22.450	25.218	28.377	31.876	33.791	38.024	42.712	48.963	53.983	61.883	70.765	79.490	91.123	96.173	110.247
MC3R-08	14.477	16.302	18.512	20.249	22.802	25.892	29.063	33.002	34.901	39.175	44.485	49.823	56.617	63.411	70.393	79.934	89.526	96.711	108.316
MC3R-09	14.282	16.516	18.536	19.703	22.784	25.570	28.121	31.559	34.467	37.904	42.539	48.150	54.720	61.937	68.215	76.556	86.653	94.514	106.979

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Notes

6.14. MC3R...1450 RPM

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM	
MC3R-02	14	104	87	50845	2652	3000	
	16	91	87	58109			
	18	81	82	61437			
	20	72	77	63996			
	22.50	64	72	67197			
	25	58	60	62263			
	28	52	58	67346			
	31.50	46	48	63165			
	35.50	41	39	57744			
	40	36	35	58664			
	45	32	36	66477			
	50	29	34	70663	3000		
	56	26	29	66600			
	63	23	23	60812			
	71	20	24	71565			
	80	18	21	68690			
	90	16	16.80	62877			
	100	14	13.20	54931			
	112	13	13.20	61522			
MC3R-03	14	104	110	63837	2463	3000	
	16	91	110	72956			
	18	81	110	82076			
	20	72	109	90769			
	22.50	64	104	97435			
	25	58	86	89595			
	28	52	82	95121			
	31.50	46	68	89372			
	35.50	41	65	95798			
	40	36	61	100901			
	45	32	52	96235			
	50	29	42	86396	3000		
	56	26	41	94374			
	63	23	33	85676			
	71	20	32	95419			
	80	18	30	99409			
	90	16	24	90235			
	100	14	20	81596			
	112	13	20	91388			
MC3R-04	14	104	132	76903	2366	3000	
	16	91	132	87889			
	18	81	132	98875			
	20	72	132	109861			
	22.50	64	132	123594			
	25	58	122	126527			
	28	52	114	132303			
	31.50	46	96	124986			
	35.50	41	81	119085			
	40	36	82	136527			
	45	32	72	133913	3000		
	50	29	60	124794			
	56	26	53	123941			
	63	23	48	125322			
	71	20	41	120788			
	80	18	40	131407			
	90	16	35	131513			
	100	14	20	82663			
	112	13	20	93776			

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3R-05	14	104	175	101541	2100	2924
	16	91	175	116048		
	18	81	175	130553		
	20	72	161	133327		
	22.50	64	161	149992		
	25	58	161	166658		
	28	52	149	173218		
	31.50	46	130	169672		
	35.50	41	114	168309		
	40	36	106	175564		
	45	32	98	183350		
	50	29	81	168259		
	56	26	76	175607		
	63	23	64	166984		
	71	20	48	140099		
	80	18	48	157859		
	90	16	46	172791		
	100	14	30	125328		
	112	13	31	142158		
MC3R-06	14	104	216	125434	1873	2680
	16	91	216	143353		
	18	81	216	161272		
	20	72	197	163191		
	22.50	64	197	183591		
	25	58	197	203990		
	28	52	185	215030		
	31.50	46	171	223429		
	35.50	41	141	208256		
	40	36	132	219723		
	45	32	128	239268		
	50	29	105	217323		
	56	26	93	215328		
	63	23	83	218053		
	71	20	67	198412		
	80	18	67	223562		
	90	16	61	226069		
	100	14	50	207989		
	112	13	49	229364		
MC3R-07	14	104	288	167245	1785	2474
	16	91	288	191138		
	18	81	288	215029		
	20	72	262	217589		
	22.50	64	262	244788		
	25	58	262	271987		
	28	52	229	265800		
	31.50	46	229	299025		
	35.50	41	184	270733		
	40	36	171	283719		
	45	32	171	319184		
	50	29	145	301319		
	56	26	122	284018		
	63	23	116	303393		
	71	20	76	224917		
	80	18	76	253427		
	90	16	76	285106		
	100	14	64	267720		
	112	13	64	299846		
MC3R-08	14	104	385	223989	1599	2297
	16	91	385	255987		
	18	81	385	287986		
	20	72	333	276253		
	22.50	64	333	310785		
	25	58	333	345316		
	28	52	289	335983		
	31.50	46	289	377981		
	35.50	41	252	371075		
	40	36	221	366915		
	45	32	221	412780		
	50	29	186	386647		
	56	26	177	412140		
	63	23	148	386381		
	71	20	111	328288		
	80	18	111	369901		
	90	16	106	397420		
	100	14	73	303451		
	112	13	74	344046		

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3R-09	14	104	466	271026	1447	2144
	16	91	466	309745		
	18	81	466	348462		
	20	72	429	356248		
	22.50	64	429	400780		
	25	58	429	445311		
	28	52	380	442005		
	31.50	46	380	497255		
	35.50	41	325	478990		
	40	36	290	482109		
	45	32	290	542373	1924	2467
	50	29	261	541306		
	56	26	227	528614		
	63	23	204	534214		
	71	20	159	469523		
	80	18	159	529040	2907	2907
	90	16	148	551973		
	100	14	79	327450		
	112	13	80	371523	3000	3000

Note: Thermal ratings listed are nominal. For specific ratings based upon conditions, contact SEW.

		Thermal Ratings (P_{TH}) MC3R.. 1750 RPM					
Model		Nominal Ratio	Number of Fans	68°F 20°C	86°F 30°C	104°F 40°C	
MC3R-02	14 - 63	0	48	35	23		
		1	108	88	66		
MC3R-03	71 - 112	0	47	34	22		
		1	99	79	57		
MC3R-04	14 - 63	0	57	43	28		
		1	131	105	80		
MC3R-05	71 - 112	0	56	41	27		
		1	121	95	69		
MC3R-06	14 - 63	0	72	53	34		
		1	161	131	99		
MC3R-07	71 - 112	0	69	50	32		
		1	148	118	86		
MC3R-08	14 - 63	0	81	59	38		
		1	182	147	112		
MC3R-09	71 - 112	0	78	57	37		
		1	167	132	96		
MC3R-02	14 - 63	0	96	71	46		
		1	218	177	134		
MC3R-03	71 - 112	0	94	68	43		
		1	200	158	116		
MC3R-04	14 - 63	0	117	86	56		
		1	264	214	162		
MC3R-05	71 - 112	0	113	83	54		
		1	243	192	141		
MC3R-06	14 - 63	0	143	106	69		
		1	326	263	200		
MC3R-07	71 - 112	0	139	102	65		
		1	299	237	174		
MC3R-08	14 - 63	0	166	123	79		
		1	375	303	231		
MC3R-09	71 - 112	0	162	117	75		
		1	345	273	200		

Exact Ratios																			
Model	14	16	18	20	23	25	28	31.5	36	40	45	50	56	63	71	80	90	100	112
MC3R-02	16.896	16.896	18.962	20.312	23.489	26.361	29.430	33.028	37.384	40.296	45.224	50.488	56.661	64.135	70.968	79.647	90.152	97.346	110.185
MC3R-03	15.069	16.999	19.179	20.568	23.203	26.178	29.602	33.397	35.077	39.666	44.751	50.966	57.295	65.252	69.861	78.817	89.764	97.527	111.072
MC3R-04	14.757	16.600	18.555	20.600	23.171	25.901	29.646	33.139	34.627	39.632	44.302	49.827	55.993	62.976	68.901	77.019	86.625	93.184	104.806
MC3R-05	14.681	16.526	18.333	20.217	22.758	25.246	29.130	32.315	33.829	39.033	43.301	48.739	55.438	62.400	69.916	77.560	87.300	93.838	105.622
MC3R-06	14.089	16.303	18.297	20.299	23.489	26.361	28.782	32.302	35.533	38.796	43.540	49.283	55.306	62.600	68.956	77.388	87.595	95.757	108.387
MC3R-07	14.177	15.965	17.933	19.937	22.450	25.218	28.377	31.876	33.791	38.024	42.712	48.963	53.983	61.883	70.765	79.490	91.123	96.173	110.247
MC3R-08	14.477	16.302	18.512	20.249	22.802	25.892	29.063	33.002	34.901	39.175	44.485	49.823	56.617	63.411	70.393	79.934	89.526	96.711	108.316
MC3R-09	14.282	16.516	18.536	19.703	22.784	25.570	28.121	31.559	34.467	37.904	42.539	48.150	54.720	61.937	68.215	76.556	86.653	94.514	106.979

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Notes

6.15. MC3R...1170 RPM

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3R-02	14	84	74	52954	2652	3000
	16	73	74	60518		
	18	65	67	61839		
	20	58	67	68578		
	22.50	52	58	67693		
	25	47	49	62707		
	28	42	47	67803		
	31.50	37	39	63671		
	35.50	33	32	58257		
	40	29	29	58971		
	45	26	29	66943		
	50	23	27	70712		
	56	21	23	67243		
	63	19	19	61360		
	71	16	20	71519		
	80	15	16.90	69378		
	90	13	13.60	63041		
	100	12	10.90	55903		
	112	10	10.90	62536		
MC3R-03	14	84	89	64161	2463	3000
	16	73	89	73327		
	18	65	89	82493		
	20	58	89	91659		
	22.50	52	85	98163		
	25	47	70	90225		
	28	42	66	95261		
	31.50	37	56	90147		
	35.50	33	53	96622		
	40	29	49	101132		
	45	26	42	96962		
	50	23	34	87056		
	56	21	33	95261		
	63	19	27	86576		
	71	16	26	95675		
	80	15	24	100330		
	90	13	20	90658		
	100	12	16	82053		
	112	10	16	91899		
MC3R-04	14	84	114	82373	2366	3000
	16	73	114	94140		
	18	65	114	105908		
	20	58	109	111671		
	22.50	52	109	125630		
	25	47	99	126748		
	28	42	93	133366		
	31.50	37	77	125240		
	35.50	33	66	119830		
	40	29	67	137422		
	45	26	58	134186		
	50	23	49	125747		
	56	21	43	124774		
	63	19	39	126501		
	71	16	33	121251		
	80	15	32	131818		
	90	13	29	132685		
	100	12	16.30	84053		
	112	10	16.50	94887		

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3R-05	14	84	141	101798	2100	2924
	16	73	141	116341		
	18	65	141	130884		
	20	58	129	133152		
	22.50	52	129	149796		
	25	47	129	166440		
	28	42	120	172964		
	31.50	37	106	171889		
	35.50	33	92	168378		
	40	29	85	175579		
	45	26	80	184919		
	50	23	66	169775		
	56	21	61	176700		
	63	19	52	168528		
	71	16	38	140196		
	80	15	38	157968		
	90	13	38	174112		
	100	12	25	126748		
	112	10	25	144199		
MC3R-06	14	84	175	126081	1873	2680
	16	73	175	144092		
	18	65	175	162104		
	20	58	160	164105		
	22.50	52	160	184618		
	25	47	160	205131		
	28	42	149	214804		
	31.50	37	139	224844		
	35.50	33	114	207926		
	40	29	106	219073		
	45	26	104	241354		
	50	23	85	219808		
	56	21	75	216672		
	63	19	68	220641		
	71	16	54	198454		
	80	15	54	223609		
	90	13	49	228146		
	100	12	41	210134		
	112	10	40	230867		
MC3R-07	14	84	232	167174	1785	2474
	16	73	232	191055		
	18	65	232	214937		
	20	58	214	220141		
	22.50	52	214	247658		
	25	47	214	275176		
	28	42	197	283915		
	31.50	37	195	315202		
	35.50	33	149	272341		
	40	29	139	285516		
	45	26	139	321206		
	50	23	118	304528		
	56	21	99	285409		
	63	19	94	305955		
	71	16	62	224977		
	80	15	62	253495		
	90	13	62	285182		
	100	12	52	268172		
	112	10	52	300352		
MC3R-08	14	84	332	239086	1599	2297
	16	73	332	273242		
	18	65	332	307396		
	20	58	287	294855		
	22.50	52	287	331713		
	25	47	287	368569		
	28	42	249	358629		
	31.50	37	242	392951		
	35.50	33	206	376541		
	40	29	191	392251		
	45	26	182	420269		
	50	23	152	390249		
	56	21	144	414665		
	63	19	121	390850		
	71	16	90	328230		
	80	15	90	369836		
	90	13	86	400456		
	100	12	60	306863		
	112	10	60	347422		

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3R-09	14	84	402	289519	1447	2144
	16	73	402	330878		
	18	65	402	372238		
	20	58	371	381578		
	22.50	52	371	429274		
	25	47	371	476972		
	28	42	328	472569		
	31.50	37	328	531640		
	35.50	33	275	502055		
	40	29	250	514996		
	45	26	250	579371	1924	2467
	50	23	213	547016		
	56	21	184	530473		
	63	19	166	537944		
	71	16	129	470321		
	80	15	129	529939	2467	2467
	90	13	119	551753	2907	2907
	100	12	64	330878	2907	2907
	112	10	65	375814	3000	3000

Note: Thermal ratings listed are nominal. For specific ratings based upon conditions, contact SEW.

Thermal Ratings (P_{TH}) MC3R.. 1750 RPM		
Model	Nominal Ratio	Number of Fans
MC3R-02	14 - 63	0
		1
MC3R-03	71 - 112	0
		1
MC3R-04	14 - 63	0
		1
MC3R-05	71 - 112	0
		1
MC3R-06	14 - 63	0
		1
MC3R-07	71 - 112	0
		1
MC3R-08	14 - 63	0
		1
MC3R-09	71 - 112	0
		1

Model	Exact Ratios																		
	14	16	18	20	23	25	28	31.5	36	40	45	50	56	63	71	80	90	100	112
MC3R-02	16.896	16.896	18.962	20.312	23.489	26.361	29.430	33.028	37.384	40.296	45.224	50.488	56.661	64.135	70.968	79.647	90.152	97.346	110.185
MC3R-03	15.069	16.999	19.179	20.568	23.203	26.178	29.602	33.397	35.077	39.666	44.751	50.966	57.295	65.252	69.861	78.817	89.764	97.527	111.072
MC3R-04	14.757	16.600	18.555	20.600	23.171	25.901	29.646	33.139	34.627	39.632	44.302	49.827	55.993	62.976	68.901	77.019	86.625	93.184	104.806
MC3R-05	14.681	16.526	18.333	20.217	22.758	25.246	29.130	32.315	33.829	39.033	43.301	48.739	55.438	62.400	69.916	77.560	87.300	93.838	105.622
MC3R-06	14.089	16.303	18.297	20.299	23.489	26.361	28.782	32.302	35.533	38.796	43.540	49.283	55.306	62.600	68.956	77.388	87.595	95.757	108.387
MC3R-07	14.177	15.965	17.933	19.937	22.450	25.218	28.377	31.876	33.791	38.024	42.712	48.963	53.983	61.883	70.765	79.490	91.123	96.173	110.247
MC3R-08	14.477	16.302	18.512	20.249	22.802	25.892	29.063	33.002	34.901	39.175	44.485	49.823	56.617	63.411	70.393	79.934	89.526	96.711	108.316
MC3R-09	14.282	16.516	18.536	19.703	22.784	25.570	28.121	31.559	34.467	37.904	42.539	48.150	54.720	61.937	68.215	76.556	86.653	94.514	106.979

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Notes

6.16. MC3R...870 RPM

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM	
MC3R-02	14	62	55	53122	2652	3000	
	16	54	55	60711			
	18	48	50	62248			
	20	44	52	72366			
	22.50	39	44	68084			
	25	35	36	63041			
	28	31	35	67916			
	31.50	28	29	64049			
	35.50	25	24	58542			
	40	22	21	59238			
	45	19	22	67363			
	50	17	20	70846	3000		
	56	16	17.50	67691			
	63	14	14.10	61528			
	71	12	14.60	71614			
	80	11	12.60	69805			
	90	9.70	10.20	63545			
	100	8.70	8.20	56596			
	112	7.80	8.20	63209			
MC3R-03	14	62	66	64329	2463	3000	
	16	54	66	73519			
	18	48	66	82709			
	20	44	66	91899			
	22.50	39	63	98703			
	25	35	53	90858			
	28	31	49	95485			
	31.50	28	42	90778			
	35.50	25	40	97190			
	40	22	37	101185			
	45	19	31	97622			
	50	17	25	87656	3000		
	56	16	25	95934			
	63	14	20	86744			
	71	12	20	96054			
	80	11	18.20	100544			
	90	9.70	14.70	91499			
	100	8.70	11.90	82453			
	112	7.80	12	93243			
MC3R-04	14	62	87	84614	2366	3000	
	16	54	87	96701			
	18	48	87	108790			
	20	44	81	111592			
	22.50	39	81	125540			
	25	35	73	126681			
	28	31	69	134262			
	31.50	28	58	125324			
	35.50	25	49	120493			
	40	22	50	138008			
	45	19	43	134366	3000		
	50	17	37	126481			
	56	16	32	125520			
	63	14	29	127089			
	71	12	25	121062			
	80	11	24	131284			
	90	9.70	22	134006			
	100	8.70	12.30	84855			
	112	7.80	12.40	95934			

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3R-05	14	62	105	101761	2100	2924
	16	54	105	116298		
	18	48	105	130836		
	20	44	96	133205		
	22.50	39	96	149856		
	25	35	96	166506		
	28	31	89	173038		
	31.50	28	79	172731		
	35.50	25	69	168520		
	40	22	63	175473		3000
	45	19	60	186239		
	50	17	49	170510		
	56	16	46	177521		
	63	14	39	169452		
	71	12	28	139818		
	80	11	28	157541		
	90	9.70	28	175072		
	100	8.70	19	128082		
	112	7.80	19	145245		
MC3R-06	14	62	130	125520	1873	2680
	16	54	130	143452		
	18	48	130	161384		
	20	44	118	163304		
	22.50	39	118	183717		
	25	35	118	204130		
	28	31	111	214953		
	31.50	28	104	226693		
	35.50	25	85	208021		
	40	22	79	219341		3000
	45	19	78	242795		
	50	17	64	221741		
	56	16	56	217867		
	63	14	51	221902		
	71	12	40	198927		
	80	11	40	224143		
	90	9.70	37	229827		
	100	8.70	31	211335		
	112	7.80	30	233109		
MC3R-07	14	62	172	166987	1785	2474
	16	54	172	190842		
	18	48	172	214697		
	20	44	159	219341		
	22.50	39	159	246758		
	25	35	159	274176		
	28	31	148	286904		
	31.50	28	146	317723		
	35.50	25	111	271394		
	40	22	103	284342		3000
	45	19	103	319885		
	50	17	89	306196		
	56	16	74	286455		
	63	14	71	307637		
	71	12	46	225072		
	80	11	46	253602		
	90	9.70	46	285302		
	100	8.70	39	268172		
	112	7.80	39	300352		
MC3R-08	14	62	258	249920	1599	2297
	16	54	258	285622		
	18	48	258	321326		
	20	44	226	312200		
	22.50	39	226	351225		
	25	35	226	390249		
	28	31	196	378803		
	31.50	28	182	395893		
	35.50	25	154	377961		
	40	22	149	413064		2715
	45	19	137	425071		
	50	17	114	393852		
	56	16	108	417803		
	63	14	90	392867		
	71	12	67	328514		
	80	11	67	370157		
	90	9.70	65	402738		
	100	8.70	45	308998		
	112	7.80	45	350560		

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Model	Nominal Ratio	Approximate Output Speed RPM	Mechanical Power Ratings HP	Output Torque lb.-in.	Maximum Input Speed Bath Lubrication RPM	Maximum Input Speed Splash Lubrication RPM
MC3R-09	14	62	316	305955	1447	2144
	16	54	316	349664		
	18	48	316	393371		
	20	44	290	401857		
	22.50	39	290	452089		
	25	35	290	502321		
	28	31	258	499839		
	31.50	28	258	562319		
	35.50	25	205	503001		
	40	22	197	544348		
	45	19	193	601585	1924	2467
	50	17	159	548350		
	56	16	138	533461		
	63	14	124	539626		
	71	12	96	470605		
	80	11	96	530259	2907	2907
	90	9.70	89	551873		
	100	8.70	48	333814		
	112	7.80	49	378354	3000	3000

Note: Thermal ratings listed are nominal. For specific ratings based upon conditions, contact SEW.

Model		Nominal Ratio		Number of Fans		Thermal Ratings (P_{TH}) MC3R.. 1750 RPM		68°F 20°C		86°F 30°C		104°F 40°C	
MC3R-02	14 - 63		0		48			35		23			
		1	108					88		66			
MC3R-03	71 - 112		0		47			34		22			
		1	99					79		57			
MC3R-04	14 - 63		0		57			43		28			
		1	131					105		80			
MC3R-05	71 - 112		0		56			41		27			
		1	121					95		69			
MC3R-06	14 - 63		0		72			53		34			
		1	161					131		99			
MC3R-07	71 - 112		0		69			50		32			
		1	148					118		86			
MC3R-08	14 - 63		0		81			59		38			
		1	182					147		112			
MC3R-09	71 - 112		0		78			57		37			
		1	167					132		96			
MC3R-02	14 - 63		0		96			71		46			
		1	218					177		134			
MC3R-03	71 - 112		0		94			68		43			
		1	200					158		116			
MC3R-04	14 - 63		0		117			86		56			
		1	264					214		162			
MC3R-05	71 - 112		0		113			83		54			
		1	243					192		141			
MC3R-06	14 - 63		0		143			106		69			
		1	326					263		200			
MC3R-07	71 - 112		0		139			102		65			
		1	299					237		174			
MC3R-08	14 - 63		0		166			123		79			
		1	375					303		231			
MC3R-09	71 - 112		0		162			117		75			
		1	345					273		200			

Model	Exact Ratios																		
	14	16	18	20	23	25	28	31.5	36	40	45	50	56	63	71	80	90	100	112
MC3R-02	16.896	16.896	18.962	20.312	23.489	26.361	29.430	33.028	37.384	40.296	45.224	50.488	56.661	64.135	70.968	79.647	90.152	97.346	110.185
MC3R-03	15.069	16.999	19.179	20.568	23.203	26.178	29.602	33.397	35.077	39.666	44.751	50.966	57.295	65.252	69.861	78.817	89.764	97.527	111.072
MC3R-04	14.757	16.600	18.555	20.600	23.171	25.901	29.646	33.139	34.627	39.632	44.302	49.827	55.993	62.976	68.901	77.019	86.625	93.184	104.806
MC3R-05	14.681	16.526	18.333	20.217	22.758	25.246	29.130	32.315	33.829	39.033	43.301	48.739	55.438	62.400	69.916	77.560	87.300	93.838	105.622
MC3R-06	14.089	16.303	18.297	20.299	23.489	26.361	28.782	32.302	35.533	38.796	43.540	49.283	55.306	62.600	68.956	77.388	87.595	95.757	108.387
MC3R-07	14.177	15.965	17.933	19.937	22.450	25.218	28.377	31.876	33.791	38.024	42.712	48.963	53.983	61.883	70.765	79.490	91.123	96.173	110.247
MC3R-08	14.477	16.302	18.512	20.249	22.802	25.892	29.063	33.002	34.901	39.175	44.485	49.823	56.617	63.411	70.393	79.934	89.526	96.711	108.316
MC3R-09	14.282	16.516	18.536	19.703	22.784	25.570	28.121	31.559	34.467	37.904	42.539	48.150	54.720	61.937	68.215	76.556	86.653	94.514	106.979

Lubrication: Splash lubrication is used in horizontal solutions. Bath lubrication is used in vertical and upright solutions.

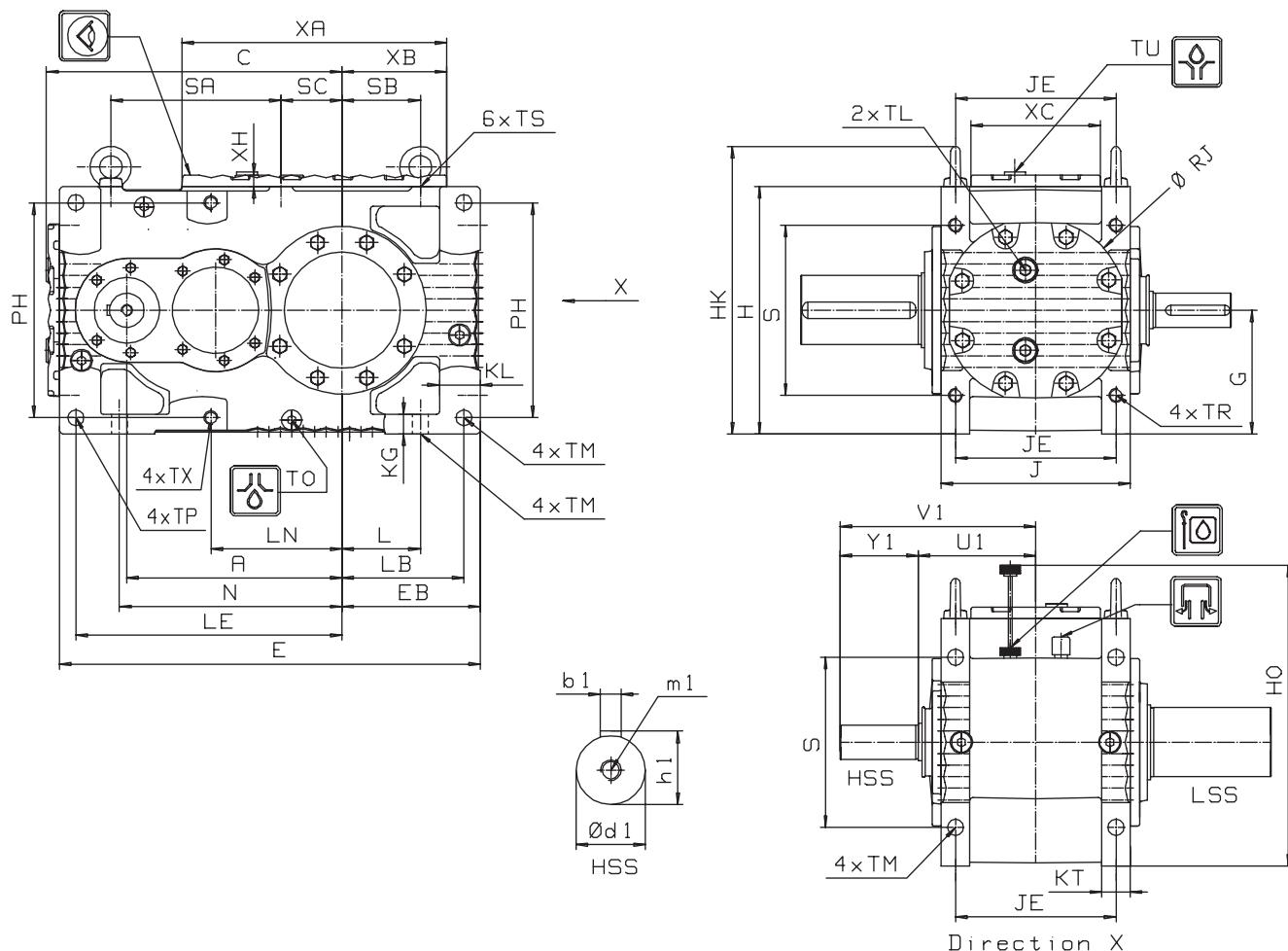
Cooling: Additional cooling is required, when the required load power rating is higher than the thermal rating.

Notes

7. Gear Unit Dimensions

7.1. MC2PL..

7.1.1. 2-Stage Helical Gear Unit - Horizontal Mounting



Inch Dimensions

Size	Housing Dimensions in inch											
	A	C	E	EB h11 ⁽¹⁾	G h11 ⁽¹⁾	H	HK	HO	J h11 ⁽¹⁾	JE	KG	KL
02	11.02	15.74	22.60	7.68	6.30	12.60	15.04	14.96	10.24	8.34	1.10	2.68
03	12.20	17.00	24.34	8.14	7.08	14.18	16.62	17.52	10.78	8.98	1.10	2.68
04	13.38	18.54	26.66	9.02	7.88	15.74	18.18	20.08	12.36	10.24	1.18	2.80
05	14.72	20.24	28.78	9.44	8.46	16.92	19.68	22.24	12.96	10.98	1.34	2.80
06	16.10	22.24	31.96	10.62	9.26	18.50	21.26	23.82	14.02	11.50	1.58	3.46
07	17.52	24.26	34.84	11.62	10.44	20.86	24.40	27.36	14.96	12.44	1.58	3.58
08	19.30	26.96	38.62	12.68	11.82	23.62	27.16	29.92	16.96	13.90	2.04	4.06
09	21.26	29.22	41.30	13.18	13.18	26.38	30.66	34.26	17.76	14.68	2.04	4.06

Size	Housing Dimensions in inch											
	KT	L	LB	LE	LN	N	PH	ØRJ	S	SA	SB	
02	1.78	3.86	6.70	13.94	6.88	11.10	10.62	9.44	8.12	8.12	4.48	
03	1.78	4.34	7.16	15.32	8.14	12.36	12.20	9.40	9.68	9.68	4.80	
04	1.96	4.80	7.92	16.54	9.18	13.42	13.54	10.86	10.24	10.08	5.78	
05	1.96	5.36	8.34	18.22	8.98	15.24	14.72	12.60	11.66	11.66	5.36	
06	2.52	5.56	9.26	19.96	10.08	16.26	15.74	12.68	12.12	12.12	5.56	
07	2.52	5.90	10.24	21.86	11.22	17.52	17.88	13.62	13.78	13.78	5.90	
08	3.08	6.86	11.02	24.30	12.54	20.12	20.32	14.40	15.98	15.98	6.86	
09	3.08	7.36	11.54	26.46	14.70	22.28	23.08	15.44	18.74	18.74	7.36	

(1) Refer to page 22 for tolerance information

(2) British Pipe Threads

Dimensions subject to change without notice

Weights and oil quantities are guide values only

Size	Housing Dimensions in inch										
	SC	TU	TM	TO	TP Hg ⁽¹⁾	TR/TX	TS	XA	XB	XC	XH
02	3.78	-	0.94	-	0.94	-	-	13.98	5.32	7.16	0.70
03	3.30	-	0.94	-	0.94	-	-	15.12	5.78	7.72	0.70
04	4.48	-	1.10	-	1.10	-	-	16.92	6.62	8.30	0.86
05	4.18	-	1.10	-	1.10	-	-	18.12	7.16	8.90	0.86
06	5.20	-	1.30	-	1.30	-	-	20.66	7.68	9.76	0.86
07	4.40	-	1.30	-	1.30	-	-	22.08	8.62	10.32	0.86
08	4.52	-	1.54	-	1.54	-	-	23.50	9.22	11.38	0.86
09	3.94	-	1.54	-	1.54	-	-	25.66	9.72	12.16	0.86

Size	HSS Dimensions in inch								Weight lb	Oil Capacity gallons
	U1	Y1	V1	Ød1	b1	h1	m1			
02	6.70	-	-	-	-	-	-	443.20	2.38	
03	6.96	-	-	-	-	-	-	564.48	3.16	
04	7.76	-	-	-	-	-	-	778.36	4.22	
05	8.08	-	-	-	-	-	-	1003.28	7.40	
06	8.58	-	-	-	-	-	-	1234.80	9.50	
07	9.06	-	-	-	-	-	-	1600.84	12.14	
08	10.08	-	-	-	-	-	-	2136.64	15.32	
09	10.48	-	-	-	-	-	-	2663.64	19.80	

Metric Dimensions

Size	Housing Dimensions in mm											
	A	C	E	EB h11 ⁽¹⁾	G h11 ⁽¹⁾	H	HK	HO	J h11 ⁽¹⁾	JE	KG	KL
02	280	400	574	195	160	320	382	380	260	212	28	68
03	310	432	618	207	180	360	422	445	274	228	28	68
04	340	471	677	229	200	400	462	510	314	260	30	71
05	374	514	731	240	215	430	500	565	329	279	34	71
06	409	565	812	270	235	470	540	605	356	292	40	88
07	445	616	885	295	265	530	620	695	380	316	40	91
08	490	685	981	322	300	600	690	760	431	353	52	103
09	540	742	1049	335	335	670	779	870	451	373	52	103

Size	Housing Dimensions in mm										
	KT	L	LB	LE	LN	N	PH	ØRJ	S	SA	SB
02	45	98	170	354	175	282	270	240	206	206	114
03	45	110	182	389	207	314	310	239	246	246	122
04	50	122	201	420	233	341	344	276	260	256	147
05	50	136	212	463	228	387	374	320	296	296	136
06	64	141	235	507	256	413	400	322	308	308	141
07	64	150	260	555	285	445	454	346	350	350	150
08	78	174	280	617	318.5	511	516	366	406	406	174
09	78	187	293	672	373.5	566	586	392	476	476	187

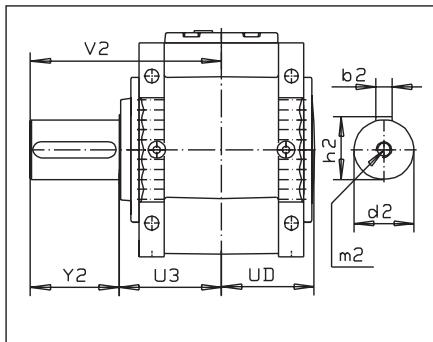
Size	Housing Dimensions in mm										
	SC	TU ⁽²⁾	TM	TO ⁽²⁾	TP Hg ⁽¹⁾	TR/TX	TS	XA	XB	XC	XH
02	96	R1	24	R3/4	24	M20 x 35	M16 x 32	355	135	182	18
03	84	R1	24	R3/4	24	M20 x 35	M16 x 32	384	147	196	18
04	114	R1	28	R3/4	28	M24 x 42	M16 x 32	430	168	211	22
05	106	R1	28	R3/4	28	M24 x 42	M20 x 35	460	182	226	22
06	132	R1	33	R1	33	M30 x 53	M20 x 35	525	195	248	22
07	112	R1	33	R1	33	M30 x 53	M24 x 42	561	219	262	22
08	115	R1	39	R1	39	M30 x 53	M24 x 42	597	234	289	22
09	100	R1	39	R1	39	M30 x 53	M30 x 53	652	247	309	22

Size	HSS Dimensions in mm								Weight kg	Oil Capacity liters
	U1	Y1	V1	Ød1	b1 hg ⁽¹⁾	h1	m1			
02	170	120	290	48 k6	14	51.5	M16	201	9	
03	177	120	297	50 k6	14	53.5	M16	256	12	
04	197	130	327	55 m6	16	59	M20	353	16	
05	205	135	340	60 m6	18	64	M20	455	28	
06	218	140	358	70 m6	20	74.5	M20	560	36	
07	230	140	370	75 m6	20	79.5	M20	726	46	
08	256	160	416	80 m6	22	85	M20	969	58	
09	266	160	426	85 m6	22	90	M20	1208	75	

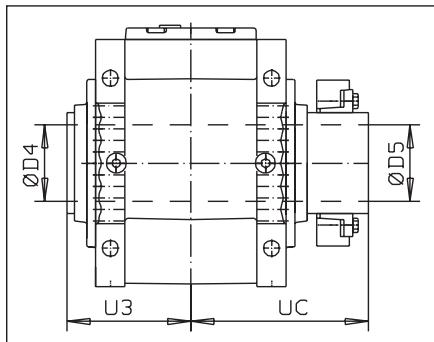
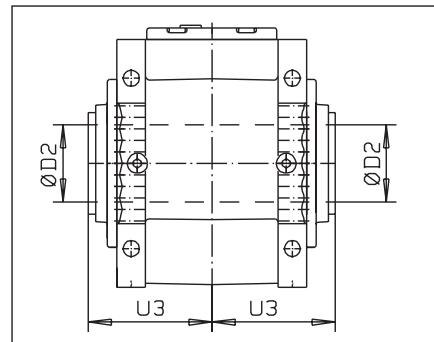
⁽¹⁾Refer to page 22 for tolerance information⁽²⁾British Pipe Threads

Dimensions subject to change without notice

Weights and oil quantities are guide values only



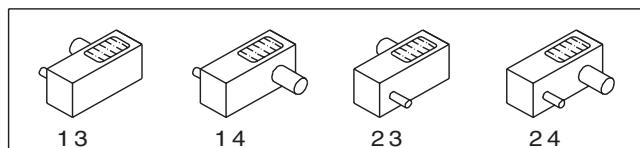
Solid Shaft

Hollow Shaft
Shrink DiskHollow Shaft
Key Connection

Size	LSS Dimensions in inch											
	d2	b2	h2	m2	Y2	V2	U3	UC	UD	ØD2	ØD4	ØD5
02	-	-	-	-	-	11.96	6.46	10.12	6.14	-	-	-
03	-	-	-	-	-	13.42	6.74	10.78	6.42	-	-	-
04	-	-	-	-	-	15.86	7.60	11.88	7.36	-	-	-
05	-	-	-	-	-	16.18	7.92	12.24	7.60	-	-	-
06	-	-	-	-	-	17.08	8.42	13.04	8.26	-	-	-
07	-	-	-	-	-	18.82	8.98	13.94	8.82	-	-	-
08	-	-	-	-	-	19.84	10.00	15.62	9.68	-	-	-
09	-	-	-	-	-	22.60	10.40	16.02	10.32	-	-	-

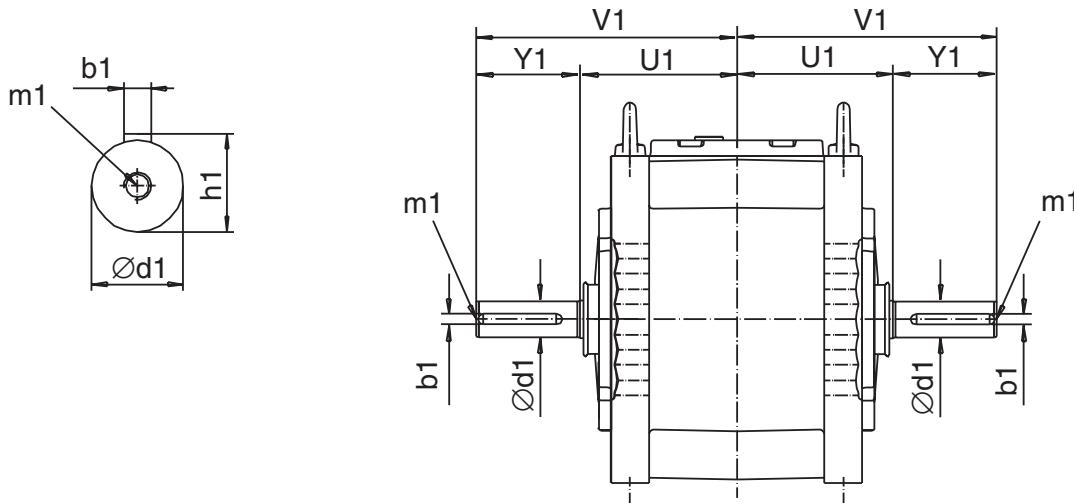
Size	LSS Dimensions in mm											
	d2 m6 ⁽¹⁾	b2 h9 ⁽¹⁾	h2	m2	Y2	V2	U3	UC	UD	ØD2 js7/H8 ⁽¹⁾	ØD4 js6/H7 ⁽¹⁾	ØD5 h6/H7 ⁽¹⁾
02	80	22	85	M20	140	304	164	257	156	80	86	85
03	100	28	106	M24	170	341	171	274	163	95	101	100
04	105	28	111	M24	210	403	193	302	187	105	111	110
05	120	32	127	M24	210	411	201	311	193	115	121	120
06	130	32	137	M24	220	434	214	331	210	125	131	130
07	140	36	148	M24	250	478	228	354	224	135	141	140
08	160	40	169	M24	250	504	254	397	246	150	151	150
09	170	40	179	M24	310	574	264	407	262	165	166	165

Shaft Positions



⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

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Double Input Shafts

Two Stage Helical Gear Units								
Size	Ratio	Ød1 ⁽¹⁾	h1	b1 ⁽¹⁾ h9 ⁽¹⁾	m1	V1	Y1	U1
02	7.1 - 11.2	48 k6	51.5	14	M16	290	170	
	12.5 - 20	40 k6	43	12		120		
03	7.1 - 11.2	50 k6	53.5	14	M16	297	177	
	12.5 - 20	42 k6	45	12				
04	7.1 - 11.2	55 m6	59	16	M20	327	130	197
	12.5 - 20	50 k6	53.5	14	M16			
05	7.1 - 11.2	60 m6	64	18	M20	340	135	205
	12.5 - 20	50 k6	53.5	14	M16			
06	7.1 - 11.2	70 m6	74.5	20	M20	358	218	
	12.5 - 20	55 m6	59	16		140		
07	7.1 - 11.2	75 m6	79.5	20		370	230	
	12.5 - 20	60 m6	64	18				
08	7.1 - 11.2	80 m6	85	22		416	256	
	12.5 - 20	65 m6	69	18		426		
09	7.1 - 11.2	85 m6	90	22		416	256	
	12.5 - 20	75 m6	79.5	20				

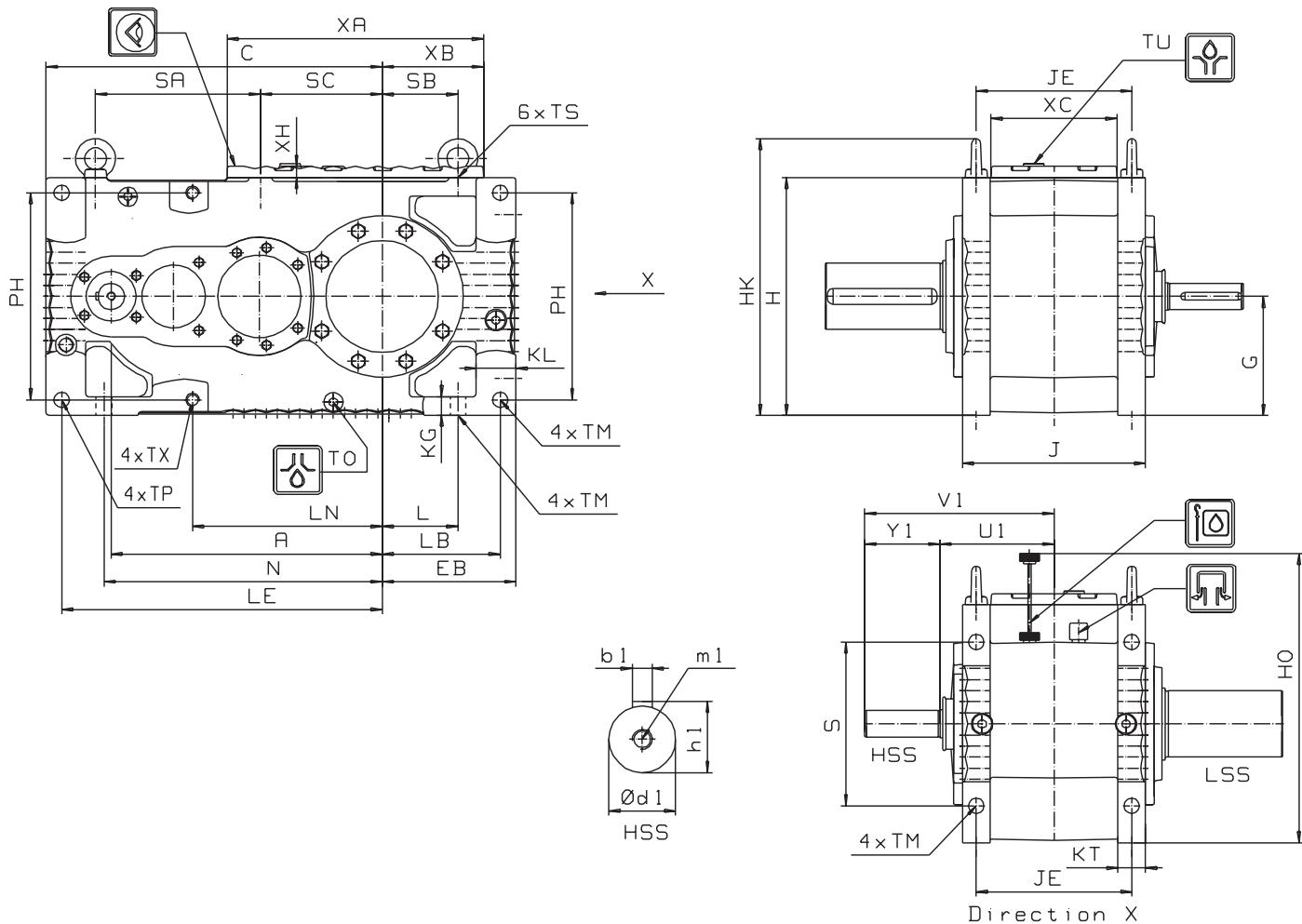
Three Stage Helical Gear Units								
Size	Ratio	Ød1 ⁽¹⁾	h1	b1 ⁽¹⁾ h9 ⁽¹⁾	m1	V1	Y1	U1
02	22.5 - 35.5	32 k6	35	10	M12	290	170	
	40 - 63	30 k6	33	8	M10			
	71 - 112	25 k6	28					
03	22.5 - 35.5	38 k6	41	10	M12	297	177	
	40 - 63	35 k6	38	8	M10			
	71 - 112	28 k6	31					
04	22.5 - 35.5	38 k6	41	10	M12	327	130	197
	40 - 63	35 k6	38					
	71 - 112	30 k6	33	8	M10			
05	22.5 - 35.5	48 k6	51.5	14	M16	340	135	205
	40 - 63	40 k6	43	12	M12			
	71 - 112	32 k6	38	10				
06	22.5 - 35.5	48 k6	51.5	14	M16	358	140	218
	40 - 63	50 k6	43	12				
	71 - 112	35 k6	38	10	M12			
07	22.5 - 35.5	50 k6	53.5	14	M16	370	140	230
	40 - 63	45 k6	48.5					
	71 - 112	38 k6	41	10	M12			
08	22.5 - 35.5	55 m6	59	16	M20	416	160	256
	40 - 63	50 k6	53.5	14	M16			
	71 - 112	42 k6	45	12				
09	22.5 - 35.5	60 m6	64	18	M20	426	160	266
	40 - 63	55 m6	59	16				
	71 - 112	45 k6	48.5	14	M16			

⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

7.2. MC3PL..

7.2.1. 3-Stage Helical Gear Unit - Horizontal Mounting



Inch Dimensions

Size	Housing Dimensions in inch										
	A	C	EB h11 ⁽¹⁾	G h11 ⁽¹⁾	H	HK	HO	J h11 ⁽¹⁾	JE	KG	KL
02	14.48	18.38	7.68	6.30	12.60	15.04	14.96	10.24	8.34	1.10	2.68
03	16.06	20.20	8.14	7.08	14.18	16.62	17.52	10.78	8.98	1.10	2.68
04	17.48	21.88	9.02	7.88	15.74	18.18	20.08	12.36	10.24	1.18	2.80
05	19.14	23.82	9.44	8.46	16.92	19.68	22.24	12.96	10.98	1.34	2.80
06	20.82	26.18	10.62	9.26	18.50	21.26	23.82	14.02	11.50	1.58	3.46
07	22.64	28.34	11.62	10.44	20.86	24.40	27.36	14.96	12.44	1.58	3.58
08	24.80	31.62	12.68	11.82	23.62	27.16	29.92	16.96	13.90	2.04	4.06
09	27.32	34.34	13.18	13.18	26.38	30.66	34.26	17.76	14.68	2.04	4.06

Size	Housing Dimensions in inch										
	KT	L	LB	LE	LN	N	PH	S	SA	SB	SC
02	1.78	3.86	6.70	17.40	10.36	14.52	10.62	8.12	8.12	4.48	6.88
03	1.78	4.34	7.16	19.22	12.04	16.38	12.20	9.68	9.68	4.80	7.12
04	1.96	4.80	7.92	20.62	13.26	17.68	13.54	10.24	10.08	5.78	8.58
05	1.96	5.36	8.34	22.64	13.38	19.64	14.72	11.66	11.66	5.36	8.58
06	2.52	5.56	9.26	24.68	14.80	20.98	15.74	12.12	12.12	5.56	9.92
07	2.52	5.90	10.24	26.96	16.34	22.64	17.88	13.78	13.78	5.90	9.52
08	3.08	6.86	11.02	29.80	18.06	25.62	20.32	15.98	15.98	6.86	10.04
09	3.08	7.36	11.54	32.52	20.76	28.34	23.08	18.74	18.74	7.36	10.00

⁽¹⁾Refer to page 22 for tolerance information

⁽²⁾British Pipe Threads

Dimensions subject to change without notice

Weights and oil quantities are guide values only

Size	Housing Dimensions in inch									
	TU	TM	TO	TP H9 ⁽¹⁾	TX	TS	XA	XB	XC	XH
02	-	0.94	-	0.94	-	-	13.98	5.32	7.16	0.70
03	-	0.94	-	0.94	-	-	15.12	5.78	7.72	0.70
04	-	1.10	-	1.10	-	-	16.92	6.62	8.30	0.86
05	-	1.10	-	1.10	-	-	18.12	7.16	8.90	0.86
06	-	1.30	-	1.30	-	-	20.66	7.68	9.76	0.86
07	-	1.30	-	1.30	-	-	22.08	8.62	10.32	0.86
08	-	1.54	-	1.54	-	-	23.50	9.22	11.38	0.86
09	-	1.54	-	1.54	-	-	25.66	9.72	12.16	0.86

Size	HSS Dimensions in inch							Weight lb	Oil Capacity gallons
	U1	Y1	V1	Ød1	b1	h1	m1		
02	6.70	-	-	-	-	-	-	489.52	3.44
03	6.96	-	-	-	-	-	-	643.86	4.48
04	7.76	-	-	-	-	-	-	873.18	6.34
05	8.08	-	-	-	-	-	-	1139.98	8.98
06	8.58	-	-	-	-	-	-	1353.88	11.88
07	9.06	-	-	-	-	-	-	1757.38	14.00
08	10.08	-	-	-	-	-	-	2392.42	17.96
09	10.48	-	-	-	-	-	-	2859.88	22.44

Metric Dimensions

Size	Housing Dimensions in mm										
	A	C	EB h11 ⁽¹⁾	G h11 ⁽¹⁾	H	HK	HO	J h11 ⁽¹⁾	JE	KG	KL
02	368	467	195	160	320	382	380	260	212	28	68
03	408	513	207	180	360	422	445	274	228	28	68
04	444	556	229	200	400	462	510	314	260	30	71
05	486	605	240	215	430	500	565	329	279	34	71
06	529	665	270	235	470	540	605	356	292	40	88
07	575	720	295	265	530	620	695	380	316	40	91
08	630	803	322	300	600	690	760	431	353	52	103
09	694	872	335	335	670	779	870	451	373	52	103

Size	Housing Dimensions in mm										
	KT	L	LB	LE	LN	N	PH	S	SA	SB	SC
02	45	98	170	442	263	369	270	206	206	114	175
03	45	110	182	488	306	416	310	246	246	122	181
04	50	122	201	524	337	449	344	260	256	147	218
05	50	136	212	575	340	499	374	296	296	136	218
06	64	141	235	627	376	533	400	308	308	141	252
07	64	150	260	685	415	575	454	350	350	150	242
08	78	174	280	757	458.5	651	516	406	406	174	255
09	78	187	293	826	527.5	720	586	476	476	187	254

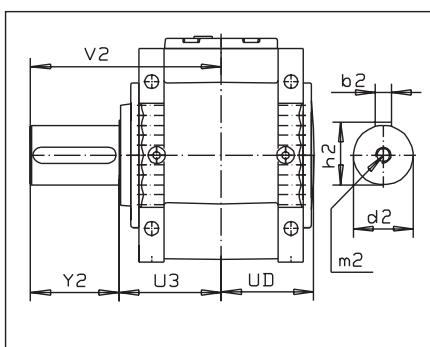
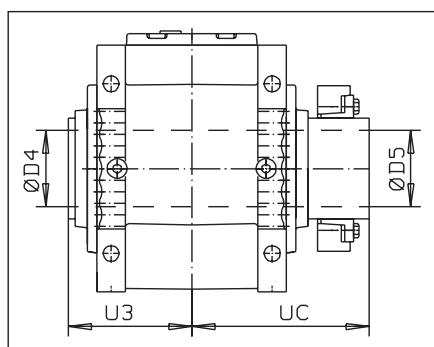
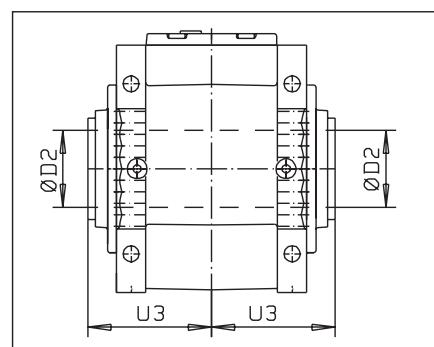
Size	Housing Dimensions in mm									
	TU ⁽²⁾	TM	TO ⁽²⁾	TP H9 ⁽¹⁾	TX	TS	XA	XB	XC	XH
02	R1	24	R3/4	24	M20 x 35	M16 x 32	355	135	182	18
03	R1	24	R3/4	24	M20 x 35	M16 x 32	384	147	196	18
04	R1	28	R3/4	28	M24 x 42	M16 x 32	430	168	211	22
05	R1	28	R3/4	28	M24 x 42	M20 x 35	460	182	226	22
06	R1	33	R1	33	M30 x 53	M20 x 35	525	195	248	22
07	R1	33	R1	33	M30 x 53	M24 x 42	561	219	262	22
08	R1	39	R1	39	M30 x 53	M24 x 42	597	234	289	22
09	R1	39	R1	39	M30 x 53	M30 x 53	652	247	309	22

Size	HSS Dimensions in mm							Weight kg	Oil Capacity liters
	U1	Y1	V1	Ød1	b1 h9 ⁽¹⁾	h1	m1		
02	170	120	290	32 k6	10	35	M12	222	13
03	177	120	297	38 k6	10	41	M12	292	17
04	197	130	327	38 k6	10	41	M12	396	24
05	205	135	340	48 k6	14	51.5	M16	517	34
06	218	140	358	48 k6	14	51.5	M16	614	45
07	230	140	370	50 k6	14	53.5	M16	797	53
08	256	160	416	55 m6	16	59	M20	1085	68
09	266	160	426	60 m6	18	64	M20	1297	85

⁽¹⁾Refer to page 22 for tolerance information⁽²⁾British Pipe Threads

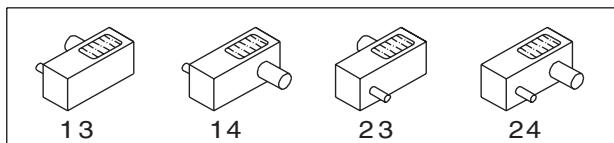
Dimensions subject to change without notice

Weights and oil quantities are guide values only

LSS Types**Solid Shaft****Hollow Shaft
Shrink Disk****Hollow Shaft
Key Connection**

Size	LSS Dimensions in inch											
	d2	b2	h2	m2	Y2	V2	U3	UC	UD	ØD2	ØD4	ØD5
02	-	-	-	-	-	11.96	6.46	10.12	6.14	-	-	-
03	-	-	-	-	-	13.42	6.74	10.78	6.42	-	-	-
04	-	-	-	-	-	15.86	7.60	11.88	7.36	-	-	-
05	-	-	-	-	-	16.18	7.92	12.24	7.60	-	-	-
06	-	-	-	-	-	17.08	8.42	13.04	8.26	-	-	-
07	-	-	-	-	-	18.82	8.98	13.94	8.82	-	-	-
08	-	-	-	-	-	19.84	10.00	15.62	9.68	-	-	-
09	-	-	-	-	-	22.60	10.40	16.02	10.32	-	-	-

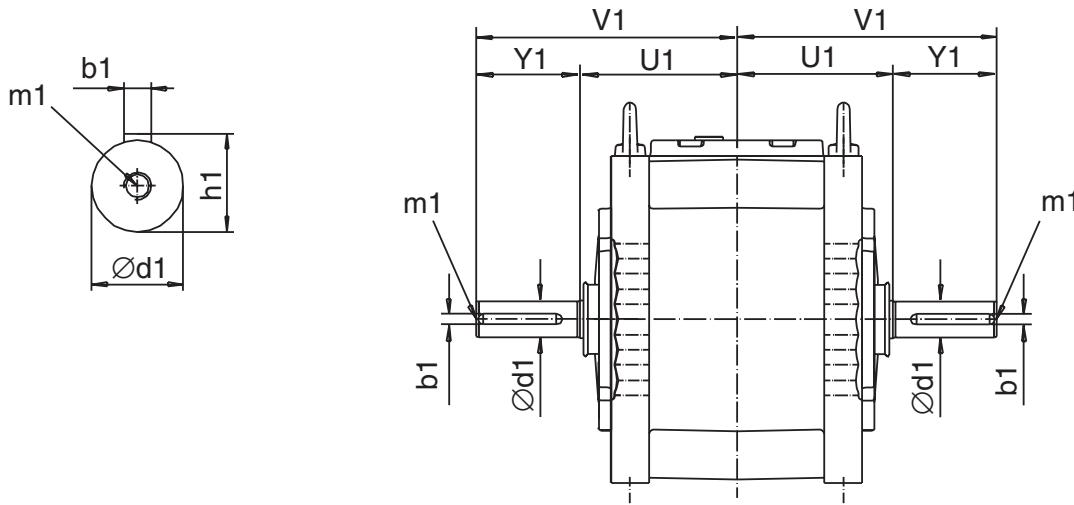
Size	LSS Dimensions in mm											
	d2 m6 ⁽¹⁾	b2 h9 ⁽¹⁾	h2	m2	Y2	V2	U3	UC	UD	ØD2 js7/H8 ⁽¹⁾	ØD4 js6/H7 ⁽¹⁾	ØD5 h6/H7 ⁽¹⁾
02	80	22	85	M20	140	304	164	257	156	80	86	85
03	100	28	106	M24	170	341	171	274	163	95	101	100
04	105	28	111	M24	210	403	193	302	187	105	111	110
05	120	32	127	M24	210	411	201	311	193	115	121	120
06	130	32	137	M24	220	434	214	331	210	125	131	130
07	140	36	148	M24	250	478	228	354	224	135	141	140
08	160	40	169	M24	250	504	254	397	246	150	151	150
09	170	40	179	M24	310	574	264	407	262	165	166	165
	170	40	179	M24	310	574	264	407	262	165	166	165

Shaft Positions

⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

Double Input Shafts



Two Stage Helical Gear Units								
Size	Ratio	Ød1 ⁽¹⁾	h1	b1 ⁽¹⁾ h9 ⁽¹⁾	m1	V1	Y1	U1
02	7.1 - 11.2	48 k6	51.5	14	M16	290	170	
	12.5 - 20	40 k6	43	12		120		
03	7.1 - 11.2	50 k6	53.5	14	M16	297	177	
	12.5 - 20	42 k6	45	12				
04	7.1 - 11.2	55 m6	59	16	M20	327	130	197
	12.5 - 20	50 k6	53.5	14	M16			
05	7.1 - 11.2	60 m6	64	18	M20	340	135	205
	12.5 - 20	50 k6	53.5	14	M16			
06	7.1 - 11.2	70 m6	74.5	20	M20	358	218	
	12.5 - 20	55 m6	59	16				
07	7.1 - 11.2	75 m6	79.5	20		370	230	
	12.5 - 20	60 m6	64	18				
08	7.1 - 11.2	80 m6	85	22		416	256	
	12.5 - 20	65 m6	69	18				
09	7.1 - 11.2	85 m6	90	22		426	266	
	12.5 - 20	75 m6	79.5	20		416		256

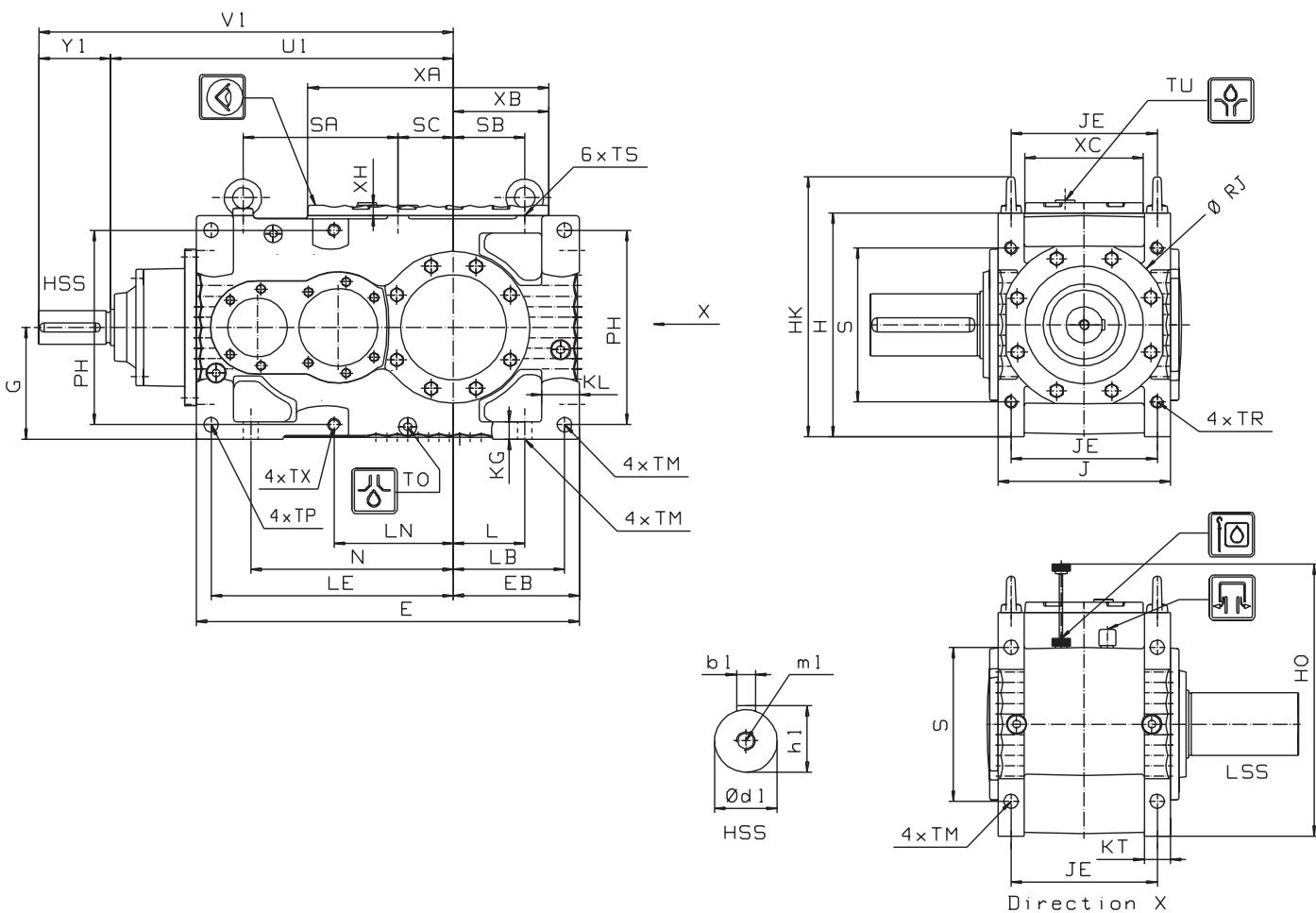
Three Stage Helical Gear Units								
Size	Ratio	Ød1 ⁽¹⁾	h1	b1 ⁽¹⁾ h9 ⁽¹⁾	m1	V1	Y1	U1
02	22.5 - 35.5	32 k6	35	10	M12	290	170	
	40 - 63	30 k6	33	8	M10			
	71 - 112	25 k6	28					
03	22.5 - 35.5	38 k6	41	10	M12	297	177	
	40 - 63	35 k6	38	8	M10			
	71 - 112	28 k6	31					
04	22.5 - 35.5	38 k6	41	10	M12	327	130	197
	40 - 63	35 k6	38					
	71 - 112	30 k6	33	8	M10			
05	22.5 - 35.5	48 k6	51.5	14	M16	340	135	205
	40 - 63	40 k6	43	12	M12			
	71 - 112	32 k6	38	10				
06	22.5 - 35.5	48 k6	51.5	14	M16	358	140	218
	40 - 63	50 k6	43	12	M12			
	71 - 112	35 k6	38	10				
07	22.5 - 35.5	50 k6	53.5	14	M16	370	140	230
	40 - 63	45 k6	48.5					
	71 - 112	38 k6	41	10	M12			
08	22.5 - 35.5	55 m6	59	16	M20	416	160	256
	40 - 63	50 k6	53.5	14	M16			
	71 - 112	42 k6	45	12				
09	22.5 - 35.5	60 m6	64	18	M20	426	160	266
	40 - 63	55 m6	59	16	M16			
	71 - 112	45 k6	48.5	14				256

⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

7.3. MC2RL..

7.3.1. 2-Stage Bevel Helical Gear Unit - Horizontal Mounting



Inch Dimensions

Housing Dimensions in inch												
Size	E	EB h11 ⁽¹⁾	G h11 ⁽¹⁾	H	HK	HO	J h11 ⁽¹⁾	JE	KG	KL	KT	L
02	22.60	7.68	6.30	12.60	15.04	15.56	10.24	8.34	1.10	2.68	1.78	3.86
03	24.34	8.14	7.08	14.18	16.62	18.12	10.78	8.98	1.10	2.68	1.78	4.34
04	26.66	9.02	7.88	15.74	18.18	20.48	12.36	10.24	1.18	2.80	1.96	4.80
05	28.78	9.44	8.46	16.92	19.68	22.64	12.96	10.98	1.34	2.80	1.96	5.36
06	31.96	10.62	9.26	18.50	21.26	24.22	14.02	11.50	1.58	3.46	2.52	5.56
07	34.84	11.62	10.44	20.86	24.40	27.76	14.96	12.44	1.58	3.58	2.52	5.90
08	38.62	12.68	11.82	23.62	27.16	30.52	16.96	13.90	2.04	4.06	3.08	6.86
09	41.30	13.18	13.18	26.38	30.66	34.84	17.76	14.68	2.04	4.06	3.08	7.36

Housing Dimensions in inch											
Size	LB	LE	LN	N	PH	ØRJ	S	SA	SB	SC	
02	6.70	13.94	6.88	11.10	10.62	9.44	8.12	8.12	4.48	3.78	
03	7.16	15.32	8.14	12.36	12.20	9.44	9.68	9.68	4.80	3.30	
04	7.92	16.54	9.18	13.42	13.54	10.86	10.24	10.08	5.78	4.48	
05	8.34	18.22	8.98	15.24	14.72	12.60	11.66	11.66	5.36	4.18	
06	9.26	19.96	10.08	16.26	15.74	12.68	12.12	12.12	5.56	5.20	
07	10.24	21.86	11.22	17.52	17.88	13.62	13.78	13.78	5.90	4.40	
08	11.02	24.30	12.54	20.12	20.32	15.16	15.98	15.98	6.86	4.52	
09	11.54	26.46	14.70	22.28	23.08	15.44	18.74	18.74	7.36	3.94	

⁽¹⁾Refer to page 22 for tolerance information

⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

Size	TU	TM	TO	Housing Dimensions in inch							
				TP H9 ⁽¹⁾	TR/TX	TS	XA	XB	XC	XH	
02	-	0.94	-	0.94	-	-	13.98	5.32	7.16	0.70	
03	-	0.94	-	0.94	-	-	15.12	5.78	7.72	0.70	
04	-	1.10	-	1.10	-	-	16.92	6.62	8.30	0.86	
05	-	1.10	-	1.10	-	-	18.12	7.16	8.90	0.86	
06	-	1.30	-	1.30	-	-	20.66	7.68	9.76	0.86	
07	-	1.30	-	1.30	-	-	22.08	8.62	10.32	0.86	
08	-	1.54	-	1.54	-	-	23.50	9.22	11.38	0.86	
09	-	1.54	-	1.54	-	-	25.66	9.72	12.16	0.86	

Size	HSS Dimensions in inch								Weight lb	Oil Capacity gallons
	U1	Y1	V1	Ød1	b1	h1	m1			
02	20.04	-	-	-	-	-	-	487.30	2.90	
03	21.62	-	-	-	-	-	-	617.40	3.70	
04	23.62	-	-	-	-	-	-	840.10	5.28	
05	25.78	-	-	-	-	-	-	1113.52	7.92	
06	27.48	-	-	-	-	-	-	1356.08	10.56	
07	29.60	-	-	-	-	-	-	1748.56	13.20	
08	32.36	-	-	-	-	-	-	2326.28	17.16	
09	36.26	-	-	-	-	-	-	2932.66	21.12	

Metric Dimensions

Size	Housing Dimensions in mm											
	E	EB h11 ⁽¹⁾	G h11 ⁽¹⁾	H	HK	HO	J h11 ⁽¹⁾	JE	KG	KL	KT	L
02	574	195	160	320	382	395	260	212	28	68	45	98
03	618	207	180	360	422	460	274	228	28	68	45	110
04	677	229	200	400	462	520	314	260	30	71	50	122
05	731	240	215	430	500	575	329	279	34	71	50	136
06	812	270	235	470	540	615	356	292	40	88	64	141
07	885	295	265	530	620	705	380	316	40	91	64	150
08	981	322	300	600	690	775	431	353	52	103	78	174
09	1049	335	335	670	779	885	451	373	52	103	78	187

Size	Housing Dimensions in mm									
	LB	LE	LN	N	PH	ØRJ	S	SA	SB	SC
02	170	354	175	282	270	240	206	206	114	96
03	182	389	207	314	310	240	246	246	122	84
04	201	420	233	341	344	276	260	256	147	114
05	212	463	228	387	374	320	296	296	136	106
06	235	507	256	413	400	322	308	308	141	132
07	260	555	285	445	454	346	350	350	150	112
08	280	617	318.5	511	516	385	406	406	174	115
09	293	672	373.5	566	586	392	476	476	187	100

Size	Housing Dimensions in mm										
	TU ⁽²⁾	TM	TO ⁽²⁾	TP H9 ⁽¹⁾	TR/TX	TS	XA	XB	XC	XH	
02	R1	24	R3/4	24	M20 x 35	M16 x 32	355	135	182	18	
03	R1	24	R3/4	24	M20 x 35	M16 x 32	384	147	196	18	
04	R1	28	R3/4	28	M24 x 42	M16 x 32	430	168	211	22	
05	R1	28	R3/4	28	M24 x 42	M20 x 35	460	182	226	22	
06	R1	33	R1	33	M30 x 53	M20 x 35	525	195	248	22	
07	R1	33	R1	33	M30 x 53	M24 x 42	561	219	262	22	
08	R1	39	R1	39	M30 x 53	M24 x 42	597	234	289	22	
09	R1	39	R1	39	M30 x 53	M30 x 53	652	247	309	22	

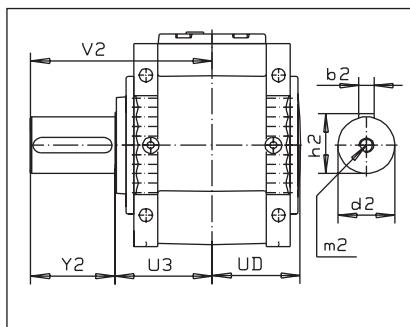
Size	HSS Dimensions in mm								Weight kg	Oil Capacity liters
	U1	Y1	V1	Ød1	b1 h9 ⁽¹⁾	h1	m1			
02	509	130	639	50 k6	14	53.5	M16	221	11	
03	549	135	684	55 m6	16	59	M20	280	14	
04	600	135	735	60 m6	18	64	M20	381	20	
05	655	138	793	65 m6	18	69	M20	505	30	
06	698	140	838	70 m6	20	74.5	M20	615	40	
07	752	160	912	75 m6	20	79.5	M20	793	50	
08	822	160	982	85 m6	22	90	M20	1055	65	
09	921	195	1116	90 m6	25	95	M24	1330	80	

⁽¹⁾Refer to page 22 for tolerance information⁽²⁾British Pipe Threads

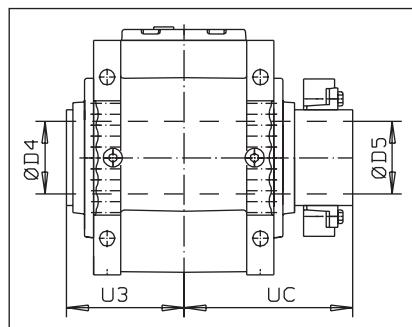
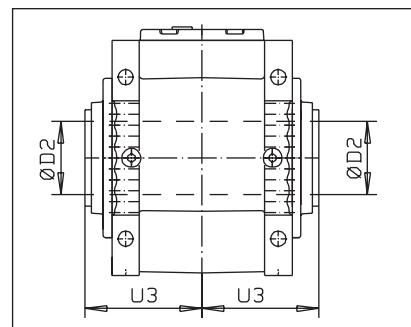
Dimensions subject to change without notice

Weights and oil quantities are guide values only

LSS Types



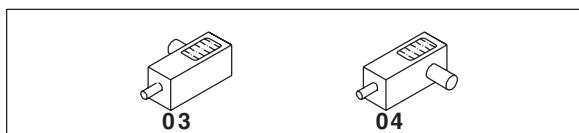
Solid Shaft

Hollow Shaft
Shrink DiskHollow Shaft
Key Connection

Size	LSS Dimensions in inch											
	d2	b2	h2	m2	Y2	V2	U3	UC	UD	ØD2	ØD4	ØD5
02	-	-	-	-	-	11.96	6.46	10.12	6.14	-	-	-
03	-	-	-	-	-	13.42	6.74	10.78	6.42	-	-	-
04	-	-	-	-	-	15.86	7.60	11.88	7.36	-	-	-
05	-	-	-	-	-	16.18	7.92	12.24	7.60	-	-	-
06	-	-	-	-	-	17.08	8.42	13.04	8.26	-	-	-
07	-	-	-	-	-	18.82	8.98	13.94	8.82	-	-	-
08	-	-	-	-	-	19.84	10.00	15.62	9.68	-	-	-
09	-	-	-	-	-	22.60	10.40	16.02	10.32	-	-	-

Size	LSS Dimensions in mm											
	d2 m6 ⁽¹⁾	b2 h9 ⁽¹⁾	h2	m2	Y2	V2	U3	UC	UD	ØD2 js6/H8 ⁽¹⁾	ØD4 js6/H7 ⁽¹⁾	ØD5 h6/H7 ⁽¹⁾
02	80	22	85	M20	140	304	164	257	156	80	86	85
03	100	28	106	M24	170	341	171	274	163	95	101	100
04	105	28	111	M24	210	403	193	302	187	105	111	110
05	120	32	127	M24	210	411	201	311	193	115	121	120
06	130	32	137	M24	220	434	214	331	210	125	131	130
07	140	36	148	M24	250	478	228	354	224	135	141	140
08	160	40	169	M24	250	504	254	397	246	150	151	150
09	170	40	179	M24	310	574	264	407	262	165	166	165

Shaft Positions



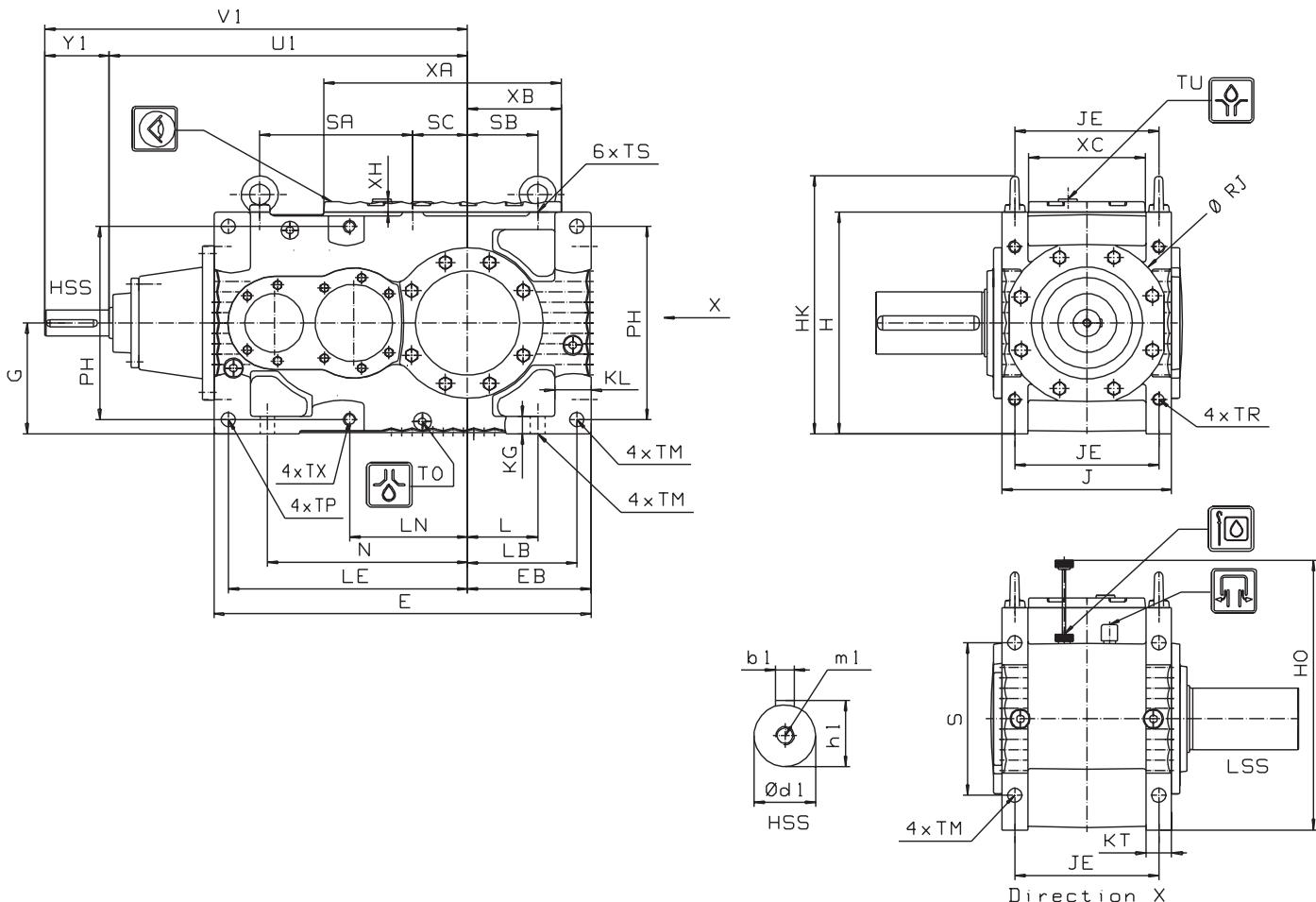
⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

Notes

7.4. MC3RL..

7.4.1. 3-Stage Bevel Helical Gear Unit - Horizontal Mounting



Inch Dimensions

Size	E	Housing Dimensions in inch											
		EB h11 ⁽¹⁾	G h11 ⁽¹⁾	H	HK	HO	J h11 ⁽¹⁾	JE	KG	KL	KT	L	
02	22.60	7.68	6.30	12.60	15.04	14.96	10.24	8.34	1.10	2.68	1.78	3.86	
03	24.34	8.14	7.08	14.18	16.62	17.52	10.78	8.98	1.10	2.68	1.78	4.34	
04	26.66	9.02	7.88	15.74	18.18	20.08	12.36	10.24	1.18	2.80	1.96	4.80	
05	28.78	9.44	8.46	16.92	19.68	22.24	12.96	10.98	1.34	2.80	1.96	5.36	
06	31.96	10.62	9.26	18.50	21.26	23.82	14.02	11.50	1.58	3.46	2.52	5.56	
07	34.84	11.62	10.44	20.86	24.40	27.36	14.96	12.44	1.58	3.58	2.52	5.90	
08	38.62	12.68	11.82	23.62	27.16	29.92	16.96	13.90	2.04	4.06	3.08	6.86	
09	41.30	13.18	13.18	26.38	30.66	34.26	17.76	14.68	2.04	4.06	3.08	7.36	

Size	LB	LE	LN	N	PH	ØRJ	S	Housing Dimensions in inch			
								SA	SB	SC	Direction X
02	6.70	13.94	6.88	11.10	10.62	9.44	8.12	8.12	4.48	3.78	
03	7.16	15.32	8.14	12.36	12.20	9.44	9.68	9.68	4.80	3.30	
04	7.92	16.54	9.18	13.42	13.54	10.86	10.24	10.08	5.78	4.48	
05	8.34	18.22	8.98	15.24	14.72	12.60	11.66	11.66	5.36	4.18	
06	9.26	19.96	10.08	16.26	15.74	12.68	12.12	12.12	5.56	5.20	
07	10.24	21.86	11.22	17.52	17.88	13.62	13.78	13.78	5.90	4.40	
08	11.02	24.30	12.52	20.12	20.32	15.16	15.98	15.98	6.86	4.52	
09	11.54	26.46	14.68	22.28	23.08	15.44	18.74	18.74	7.36	3.94	

⁽¹⁾Refer to page 22 for tolerance information

⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

Size	Housing Dimensions in inch									
	TU	TM	TO	TP H9 ⁽¹⁾	TR/TX	TS	XA	XB	XC	XH
02	-	0.94	-	0.94	-	-	13.98	5.32	7.16	0.70
03	-	0.94	-	0.94	-	-	15.12	5.78	7.72	0.70
04	-	1.10	-	1.10	-	-	16.92	6.62	8.30	0.86
05	-	1.10	-	1.10	-	-	18.12	7.16	8.90	0.86
06	-	1.30	-	1.30	-	-	20.66	7.68	9.76	0.86
07	-	1.30	-	1.30	-	-	22.08	8.62	10.32	0.86
08	-	1.54	-	1.54	-	-	23.50	9.22	11.38	0.86
09	-	1.54	-	1.54	-	-	25.66	9.72	12.16	0.86

Size	HSS Dimensions in inch													Weight lb	Oil Capacity gallons		
	U1	Y1	V1	Ød1	b1	h1	m1	Ød1	b1	h1	m1	Ød1	b1	h1	m1		
02	20.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	482.90	2.90
03	23.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	615.20	3.70
04	25.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	842.32	5.28
05	27.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1087.06	7.92
06	29.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1325.20	10.56
07	32.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1717.70	13.20
08	35.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2286.58	17.16
09	38.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2864.30	21.12

Metric Dimensions

Size	Housing Dimensions in mm											
	E	EB h11 ⁽¹⁾	G h11 ⁽¹⁾	H	HK	HO	J h11 ⁽¹⁾	JE	KG	KL	KT	
02	574	195	160	320	382	380	260	212	28	68	45	98
03	618	207	180	360	422	445	274	228	28	68	45	110
04	677	229	200	400	462	510	314	260	30	71	50	122
05	731	240	215	430	500	565	329	279	34	71	50	136
06	812	270	235	470	540	605	356	292	40	88	64	141
07	885	295	265	530	620	695	380	316	40	91	64	150
08	981	322	300	600	690	760	431	353	52	103	78	174
09	1049	335	335	670	779	870	451	373	52	103	78	187

Size	Housing Dimensions in mm										
	LB	LE	LN	N	PH	ØRJ	S	SA	SB	SC	
02	170	354	175	282	270	240	206	206	114	96	
03	182	389	207	314	310	240	246	246	122	84	
04	201	420	233	341	344	276	260	256	147	114	
05	212	463	228	387	374	320	296	296	136	106	
06	235	507	256	413	400	322	308	308	141	132	
07	260	555	285	445	454	346	350	350	150	112	
08	280	617	318	511	516	385	406	406	174	115	
09	293	672	373	566	586	392	476	476	187	100	

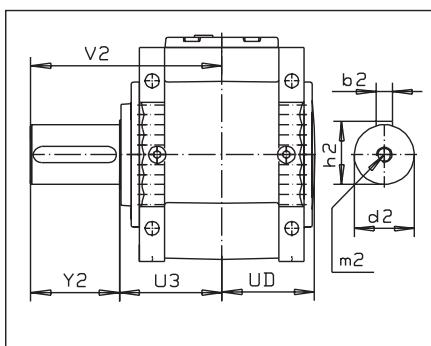
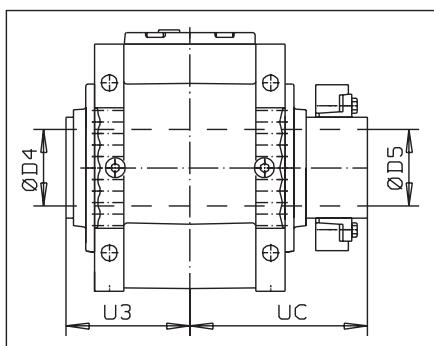
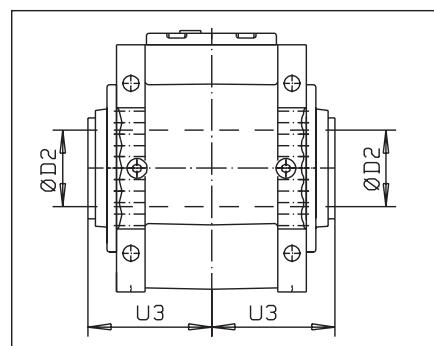
Size	Housing Dimensions in mm										
	TU ⁽²⁾	TM	TO ⁽²⁾	TP H9 ⁽¹⁾	TR/TX	TS	XA	XB	XC	XH	
02	R1	24	R3/4	24	M20 x 35	M16 x 32	355	135	182	18	
03	R1	24	R3/4	24	M20 x 35	M16 x 32	384	147	196	18	
04	R1	28	R3/4	28	M24 x 42	M16 x 32	430	168	211	22	
05	R1	28	R3/4	28	M24 x 42	M20 x 35	460	182	226	22	
06	R1	33	R1	33	M30 x 53	M20 x 35	525	195	248	22	
07	R1	33	R1	33	M30 x 53	M24 x 42	561	219	262	22	
08	R1	39	R1	39	M30 x 53	M24 x 42	597	234	289	22	
09	R1	39	R1	39	M30 x 53	M30 x 53	652	247	309	22	

Size	HSS Dimensions in mm													Weight kg	Oil Capacity liters		
	i = 14-63				i = 71-90				i = 100-112								
U1	Y1	V1	Ød1 ⁽¹⁾	b1 hg ⁽¹⁾	h1	m1	Ød1 ⁽¹⁾	b1 hg ⁽¹⁾	h1	m1	Ød1 k6 ⁽¹⁾	b1 hg ⁽¹⁾	h1	m1			
02	533	100	633	35 k6	10	38	M12	30 k6	8	33	M10	25	8	28	M10	219	11
03	584	112	696	40 k6	12	43	M16	30 k6	8	33	M10	25	8	28	M10	279	14
04	642	120	762	42 k6	12	45	M16	35 k6	10	38	M12	25	8	28	M10	382	20
05	693	125	818	50 k6	14	53.5	M16	40 k6	12	43	M16	30	8	33	M10	493	30
06	758	130	888	50 k6	14	53.5	M16	45 k6	14	48.5	M16	35	10	38	M12	601	40
07	814	135	949	60 m6	18	64	M20	45 k6	14	48.5	M16	40	12	43	M16	779	50
08	890	135	1025	60 m6	18	64	M20	55 m6	16	59	M20	40	12	43	M16	1037	65
09	969	140	1109	70 m6	20	74.5	M20	60 m6	18	64	M20	45	14	48.5	M16	1299	80

⁽¹⁾Refer to page 22 for tolerance information⁽²⁾British Pipe Threads

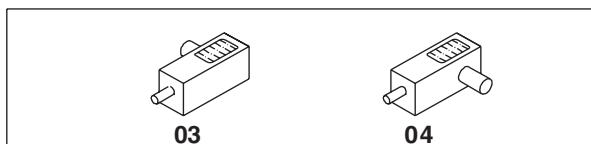
Dimensions subject to change without notice

Weights and oil quantities are guide values only

LSS Types**Solid Shaft****Hollow Shaft
Shrink Disk****Hollow Shaft
Key Connection**

Size	LSS Dimensions in inch											
	d2	b2	h2	m2	Y2	V2	U3	UC	UD	ØD2	ØD4	ØD5
02	-	-	-	-	-	11.96	6.46	10.12	6.14	-	-	-
03	-	-	-	-	-	13.42	6.74	10.78	6.42	-	-	-
04	-	-	-	-	-	15.86	7.60	11.88	7.36	-	-	-
05	-	-	-	-	-	16.18	7.92	12.24	7.60	-	-	-
06	-	-	-	-	-	17.08	8.42	13.04	8.26	-	-	-
07	-	-	-	-	-	18.82	8.98	13.94	8.82	-	-	-
08	-	-	-	-	-	19.84	10.00	15.62	9.68	-	-	-
09	-	-	-	-	-	22.60	10.40	16.02	10.32	-	-	-

Size	LSS Dimensions in mm											
	d2 m6 ⁽¹⁾	b2 h9 ⁽¹⁾	h2	m2	Y2	V2	U3	UC	UD	ØD2 js7/H8 ⁽¹⁾	ØD4 js6/H7 ⁽¹⁾	ØD5 h6/H7 ⁽¹⁾
02	80	22	85	M20	140	304	164	257	156	80	86	85
03	100	28	106	M24	170	341	171	274	163	95	101	100
04	105	28	111	M24	210	403	193	302	187	105	111	110
05	120	32	127	M24	210	411	201	311	193	115	121	120
06	130	32	137	M24	220	434	214	331	210	125	131	130
07	140	36	148	M24	250	478	228	354	224	135	141	140
08	160	40	169	M24	250	504	254	397	246	150	151	150
09	170	40	179	M24	310	574	264	407	262	165	166	165
	170	40	179	M24	310	574	264	407	262	165	166	165

Shaft Positions

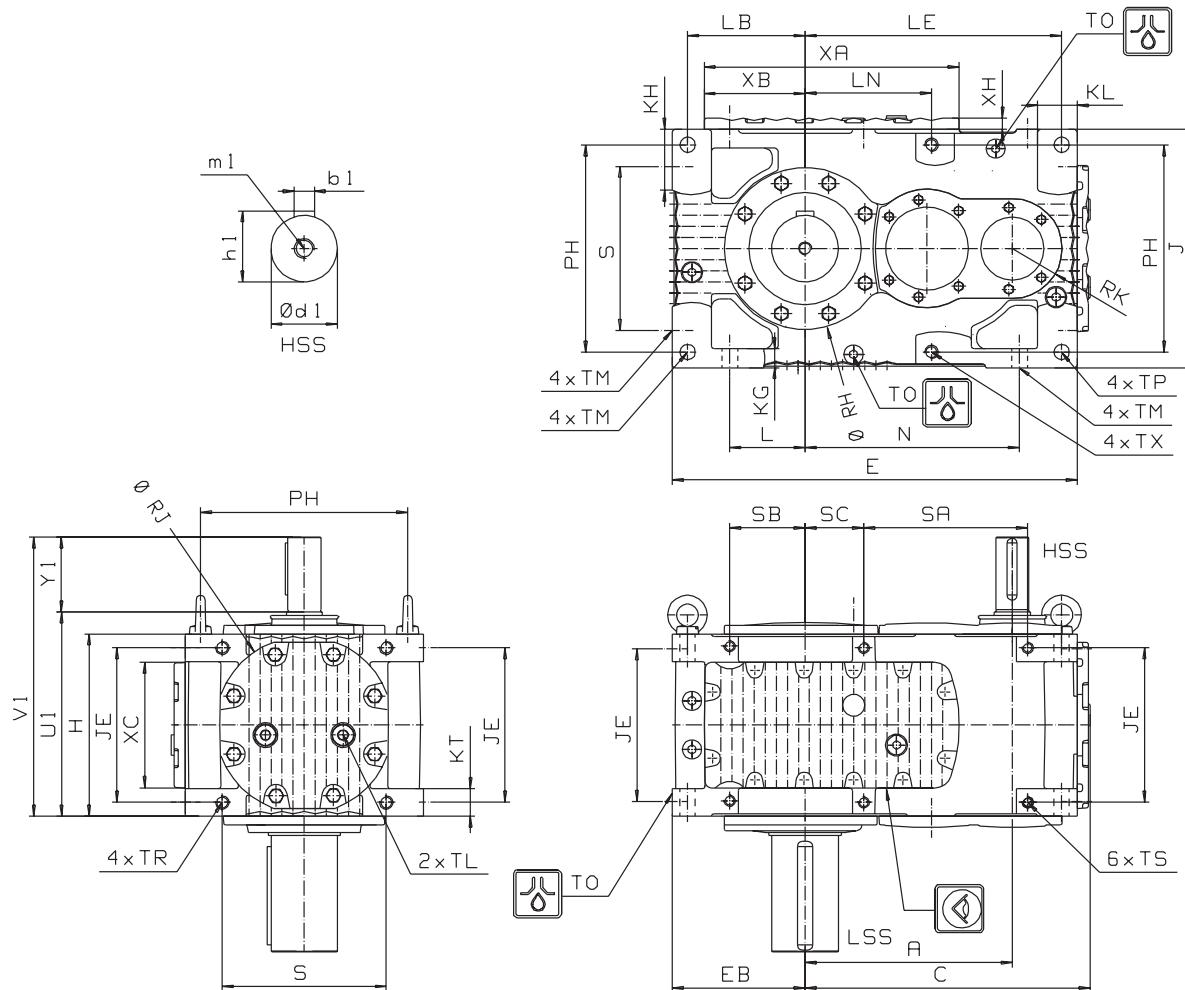
⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

Notes

7.5. MC2PV..

7.5.1. 2-Stage Helical Gear Unit - Vertical Mounting



Inch Dimensions

Size	A	Housing Dimensions in inch											
		EB h11 ⁽¹⁾	C	E	H h11 ⁽¹⁾	J	JE	KG	KH	KL	KT	L	
02	11.02	7.68	13.38	22.60	10.24	12.60	8.34	1.10	3.54	2.68	1.78	3.86	
03	12.20	8.14	17.00	24.34	10.78	14.18	8.98	1.10	3.94	2.68	1.78	4.34	
04	13.38	9.02	18.54	26.66	12.36	15.74	10.24	1.18	4.64	2.80	1.96	4.80	
05	14.72	9.44	20.24	28.78	12.96	16.92	10.98	1.34	4.64	2.80	1.96	5.36	
06	16.10	10.62	22.24	31.96	14.02	18.50	11.50	1.58	5.16	3.46	2.52	5.56	
07	17.52	11.62	24.26	34.84	14.96	20.86	12.44	1.58	5.98	3.58	2.52	5.90	
08	19.30	12.68	26.96	38.62	16.96	23.62	13.90	2.04	6.02	4.06	3.08	6.86	
09	21.26	13.18	29.22	41.30	17.76	26.38	14.68	2.04	6.02	4.06	3.08	7.36	

Size	Housing Dimensions in inch												
	LB	LE	LN	N	PH	RH	ØRJ	RK	S	SA	SB	SC	
02	6.70	13.94	6.88	11.10	10.62	4.22	9.44	2.88	8.12	8.12	4.48	3.78	
03	7.16	15.32	8.14	12.36	12.20	5.00	9.40	3.08	9.68	9.68	4.80	3.30	
04	7.92	16.54	9.18	13.42	13.54	5.36	10.86	3.26	10.24	10.08	5.78	4.48	
05	8.34	18.22	8.98	15.24	14.72	5.74	12.60	3.54	11.66	11.66	5.36	4.18	
06	9.26	19.96	10.08	16.26	15.74	6.14	12.68	3.82	12.12	12.12	5.56	5.20	
07	10.24	21.86	11.22	17.52	17.88	6.82	13.62	4.02	13.78	13.78	5.90	4.40	
08	11.02	24.30	12.54	20.12	20.32	7.00	14.40	4.22	15.98	15.98	6.86	4.52	
09	11.54	26.46	14.70	22.28	23.08	7.72	15.44	4.40	18.74	18.74	7.36	3.94	

⁽¹⁾Refer to page 22 for tolerance information

⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

Size	Housing Dimensions in inch									
	TL	TM	TO	TP H9 ⁽¹⁾	TR/TX	TS	XA	XB	XC	XH
02	-	0.94	-	0.94	-	-	13.98	5.32	7.16	0.70
03	-	0.94	-	0.94	-	-	15.12	5.78	7.72	0.70
04	-	1.10	-	1.10	-	-	16.92	6.62	8.30	0.86
05	-	1.10	-	1.10	-	-	18.12	7.16	8.90	0.86
06	-	1.30	-	1.30	-	-	20.66	7.68	9.76	0.86
07	-	1.30	-	1.30	-	-	22.08	8.62	10.32	0.86
08	-	1.54	-	1.54	-	-	23.50	9.22	11.38	0.86
09	-	1.54	-	1.54	-	-	25.66	9.72	12.16	0.86

Size	HSS Dimensions in inch								Weight lb	Oil Capacity gallons
	U1	Y1	V1	Ød1	b1	h1	m1			
02	11.82	-	-	-	-	-	-	443.20	6.60	
03	12.36	-	-	-	-	-	-	564.48	7.92	
04	13.94	-	-	-	-	-	-	778.36	10.56	
05	14.56	-	-	-	-	-	-	1003.28	15.32	
06	15.60	-	-	-	-	-	-	1234.80	18.48	
07	16.54	-	-	-	-	-	-	1600.84	25.08	
08	18.58	-	-	-	-	-	-	2136.64	29.04	
09	19.38	-	-	-	-	-	-	2663.64	34.32	

Metric Dimensions

Size	Housing Dimensions in mm											
	A	EB h11 ⁽¹⁾	C	E	H h11 ⁽¹⁾	J	JE	KG	KH	KL	KT	L
02	280	195	340	574	260	320	212	28	90	68	45	98
03	310	207	432	618	274	360	228	28	100	68	45	110
04	340	229	471	677	314	400	260	30	118	71	50	122
05	374	240	514	731	329	430	279	34	118	71	50	136
06	409	270	565	812	356	470	292	40	131	88	64	141
07	445	295	616	885	380	530	316	40	152	91	64	150
08	490	322	685	981	431	600	353	52	153	103	78	174
09	540	335	742	1049	451	670	373	52	153	103	78	187

Size	Housing Dimensions in mm											
	LB	LE	LN	N	PH	RH	ØRJ	RK	S	SA	SB	SC
02	170	354	175	282	270	107	240	73	206	206	114	96
03	182	389	207	314	310	127	239	78	246	246	122	84
04	201	420	233	341	344	136	276	83	260	256	147	114
05	212	463	228	387	374	146	320	90	296	296	136	106
06	235	507	256	413	400	156	322	97	308	308	141	132
07	260	555	285	445	454	173	346	102	350	350	150	112
08	280	617	318.5	511	516	178	366	107	406	406	174	115
09	293	672	373.5	566	586	196	392	112	476	476	187	100

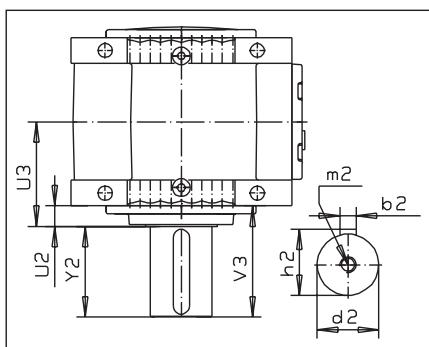
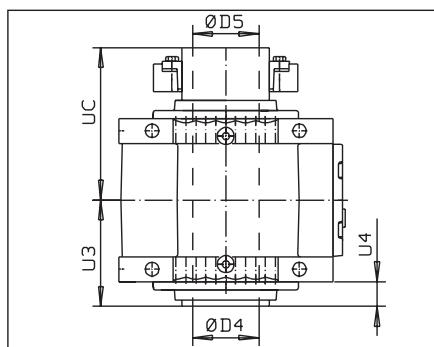
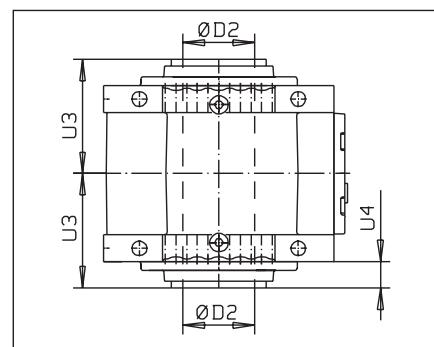
Size	Housing Dimensions in mm											
	TL ⁽²⁾	TM	TO ⁽²⁾	TP H9 ⁽¹⁾	TR/TX	TS	XA	XB	XC	XH		
02	R1	24	R3/4	24	M20 x 35	M16 x 32	355	135	182	18		
03	R1	24	R3/4	24	M20 x 35	M16 x 32	384	147	196	18		
04	R1	28	R3/4	28	M24 x 42	M16 x 32	430	168	211	22		
05	R1	28	R3/4	28	M24 x 42	M20 x 35	460	182	226	22		
06	R1	33	R1	33	M30 x 53	M20 x 35	525	195	248	22		
07	R1	33	R1	33	M30 x 53	M24 x 42	561	219	262	22		
08	R1	39	R1	39	M30 x 53	M24 x 42	597	234	289	22		
09	R1	39	R1	39	M30 x 53	M30 x 53	652	247	309	22		

Size	HSS Dimensions in mm								Weight kg	Oil Capacity liters
	U1	Y1	V1	Ød1	b1 h9 ⁽¹⁾	h1	m1			
02	300	120	420	48 k6	14	51.5	M16	201	25	
03	314	120	434	50 k6	14	53.5	M16	256	30	
04	354	130	484	55 m6	16	59	M20	353	40	
05	370	135	505	60 m6	18	64	M20	455	58	
06	396	140	536	70 m6	20	74.5	M20	560	70	
07	420	140	560	75 m6	20	79.5	M20	726	95	
08	472	160	632	80 m6	22	85	M20	969	110	
09	492	160	652	85 m6	22	90	M20	1208	130	

⁽¹⁾Refer to page 22 for tolerance information⁽²⁾British Pipe Threads

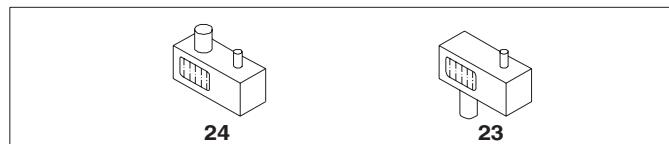
Dimensions subject to change without notice

Weights and oil quantities are guide values only

LSS Types**Solid Shaft****Hollow Shaft
Shrink Disk****Hollow Shaft
Key Connection**

Size	LSS Dimensions in inch													
	d2	b2	h2	m2	Y2	V3	U2	U3	U4	UC	UD	ØD2	ØD4	ØD5
02	-	-	-	-	-	6.86	1.34	6.46	1.34	10.12	6.14	-	-	-
03	-	-	-	-	-	8.04	1.34	6.74	1.34	10.78	6.42	-	-	-
04	-	-	-	-	-	9.68	1.42	7.60	1.42	11.88	7.36	-	-	-
05	-	-	-	-	-	9.68	1.42	7.92	1.42	12.24	7.60	-	-	-
06	-	-	-	-	-	10.08	1.42	8.42	1.42	13.04	8.26	-	-	-
07	-	-	-	-	-	11.34	1.50	8.98	1.50	13.94	8.82	-	-	-
08	-	-	-	-	-	11.34	1.50	10.00	1.50	15.62	9.68	-	-	-
09	-	-	-	-	-	13.70	1.50	10.40	1.50	16.02	10.32	-	-	-

Size	LSS Dimensions in mm													
	d2 m6 ⁽¹⁾	b2 h9 ⁽¹⁾	h2	m2	Y2	V3	U2	U3	U4	UC	UD	ØD2 js7/H8 ⁽¹⁾	ØD4 js6/H7 ⁽¹⁾	ØD5 h6/H7 ⁽¹⁾
02	80	22	85	M20	140	34	164	34	257	156	80	86	85	
03	100	28	106	M24	170	204	34	171	34	274	163	95	101	100
04	105	28	111	M24	210	246	36	193	36	302	187	105	111	110
05	120	32	127	M24	210	246	36	201	36	311	193	115	121	120
06	130	32	137	M24	220	256	36	214	36	331	210	125	131	130
07	140	36	148	M24	250	288	38	228	38	354	224	135	141	140
08	160	40	169	M24	250	288	38	254	38	397	246	150	151	150
09	170	40	179	M24	310	348	38	264	38	407	262	165	166	165

Shaft Positions

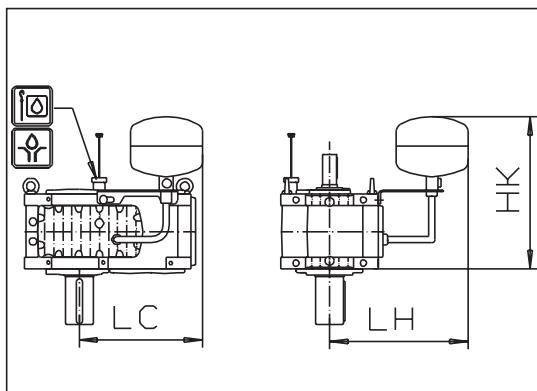
⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

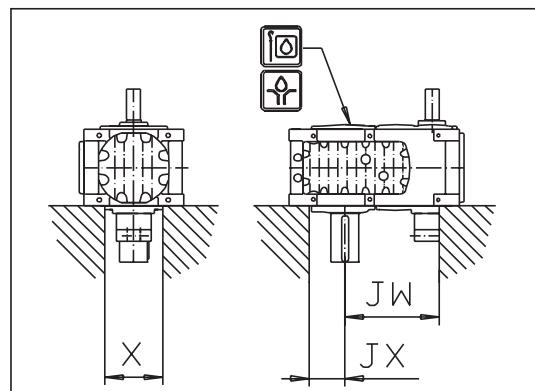
Accessory Dimensions

Size	Accessory Dimensions in inch					
	HK	LC	LH	X	JX	JW
02	24.40	18.12	23.62	-	-	-
03	25.20	19.30	24.40	-	-	-
04	26.78	20.86	24.40	9.84	6.38	14.96
05	27.16	22.04	24.80	9.84	6.66	16.54
06	28.34	23.62	25.60	9.84	7.16	17.88
07	29.14	24.40	26.78	9.84	8.04	19.64
08	31.10	27.16	25.20	12.44	8.62	21.88
09	31.88	29.14	26.38	15.20	9.14	24.06

Size	Accessory Dimensions in mm					
	HK	LC	LH	X	JX	JW
02	620	460	600	-	-	-
03	640	490	620	-	-	-
04	680	530	620	250	162	380
05	690	560	630	250	169	420
06	720	600	650	250	182	454
07	740	620	680	250	204	499
08	790	690	640	316	219	556
09	810	740	670	386	232	611



Expansions Tank

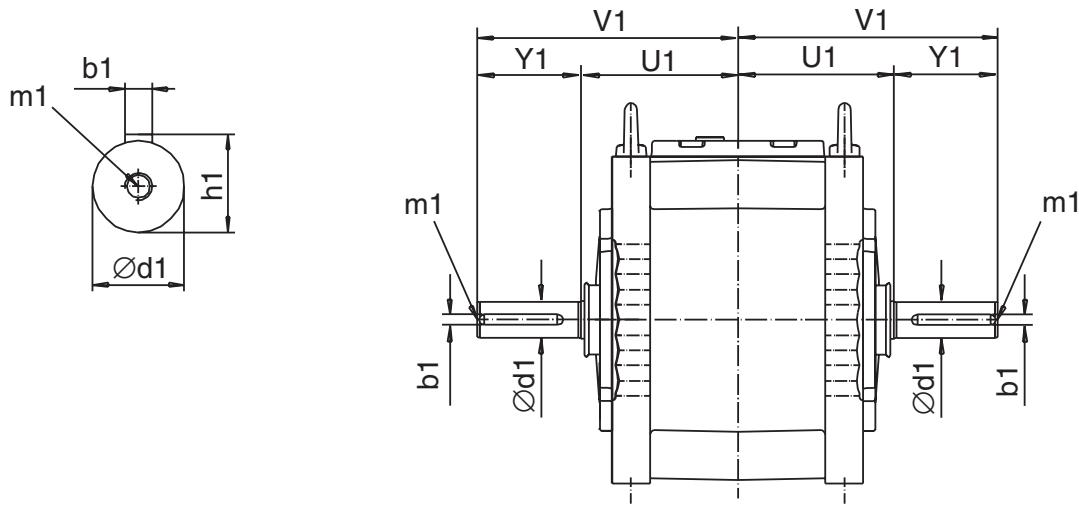


Shaft End Pump

⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

Double Input Shafts



Two Stage Helical Gear Units								
Size	Ratio	Ød1 ⁽¹⁾	h1	b ₁ h ₉ ⁽¹⁾	m1	V1	Y1	U1
02	7.1 - 11.2	48 k6	51.5	14	M16	290	120	170
	12.5 - 20	40 k6	43	12		297		177
03	7.1 - 11.2	50 k6	53.5	14	M20	327	130	197
	12.5 - 20	42 k6	45	12		16		
04	7.1 - 11.2	55 m6	59	16	M16	340	135	205
	12.5 - 20	50 k6	53.5	14		358		
05	7.1 - 11.2	60 m6	64	18	M20	370	140	218
	12.5 - 20	50 k6	53.5	14		416		230
06	7.1 - 11.2	70 m6	74.5	20	M20	426	160	256
	12.5 - 20	55 m6	59	16		416		266
07	7.1 - 11.2	75 m6	79.5	20	M20	426	160	256
	12.5 - 20	60 m6	64	18		416		256
08	7.1 - 11.2	80 m6	85	22	M20	426	160	256
	12.5 - 20	65 m6	69	18		416		256
09	7.1 - 11.2	85 m6	90	22	M20	426	160	256
	12.5 - 20	75 m6	79.5	20		416		256

Three Stage Helical Gear Units								
Size	Ratio	Ød1 ⁽¹⁾	h1	b ₁ h ₉ ⁽¹⁾	m1	V1	Y1	U1
02	22.5 - 35.5	32 k6	35	10	M12	290	120	170
	40 - 63	30 k6	33	8	M10			
	71 - 112	25 k6	28	8	M10			
03	22.5 - 35.5	38 k6	41	10	M12	297	120	177
	40 - 63	35 k6	38	10	M12			
	71 - 112	28 k6	31	8	M10			
04	22.5 - 35.5	38 k6	41	10	M12	327	130	197
	40 - 63	35 k6	38	10	M12			
	71 - 112	30 k6	33	8	M10			
05	22.5 - 35.5	48 k6	51.5	14	M16	340	135	205
	40 - 63	40 k6	43	12	M16			
	71 - 112	32 k6	38	10	M12			
06	22.5 - 35.5	48 k6	51.5	14	M16	358	140	218
	40 - 63	50 k6	43	12	M16			
	71 - 112	35 k6	38	10	M12			
07	22.5 - 35.5	50 k6	53.5	14	M16	370	140	230
	40 - 63	45 k6	48.5	10	M12			
	71 - 112	38 k6	41	10	M12			
08	22.5 - 35.5	55 m6	59	16	M20	416	160	256
	40 - 63	50 k6	53.5	14	M16			
	71 - 112	42 k6	45	12	M16			
09	22.5 - 35.5	60 m6	64	18	M20	426	160	266
	40 - 63	55 m6	59	16	M20			
	71 - 112	45 k6	48.5	14	M16			

⁽¹⁾Refer to page 22 for tolerance information

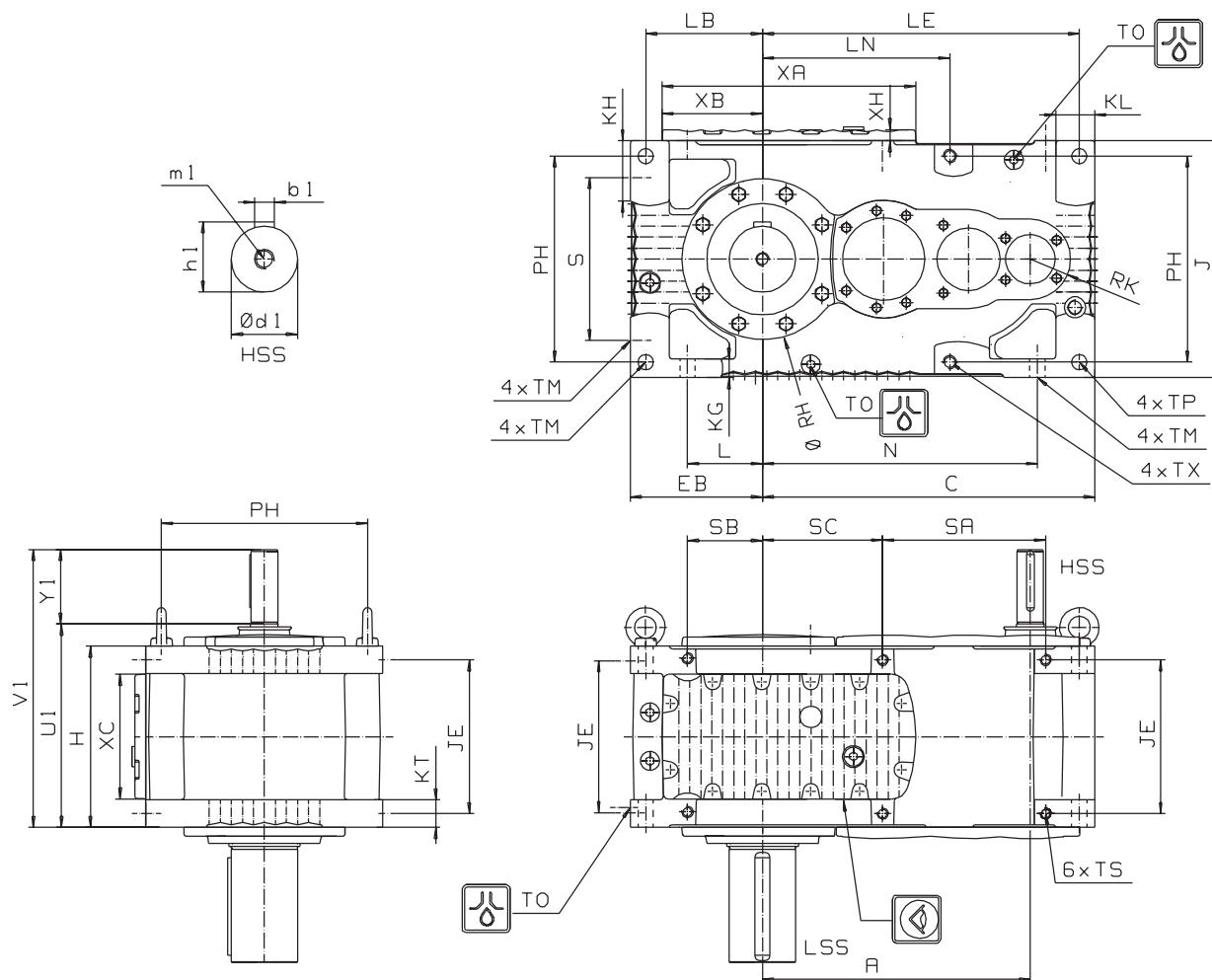
(2)British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

Notes

7.6. MC3PV..

7.6.1. 3-Stage Helical Gear Unit - Vertical Mounting



Inch Dimensions

Size	A	Housing Dimensions in inch									
		EB h11 ⁽¹⁾	C	H h11 ⁽¹⁾	J	JE	KG	KH	KL	KT	L
02	14.48	7.68	18.38	10.24	12.60	8.34	1.10	3.54	2.68	1.78	3.86
03	16.06	8.14	20.20	10.78	14.18	8.98	1.10	3.94	2.68	1.78	4.34
04	17.48	9.02	21.88	12.36	15.74	10.24	1.18	4.64	2.80	1.96	4.80
05	19.14	9.44	23.82	12.96	16.92	10.98	1.34	4.64	2.80	1.96	5.36
06	20.82	10.62	26.18	14.02	18.50	11.50	1.58	5.16	3.46	2.52	5.56
07	22.64	11.62	28.34	14.96	20.86	12.44	1.58	5.98	3.58	2.52	5.90
08	24.80	12.68	31.62	16.96	23.62	13.90	2.04	6.02	4.06	3.08	6.86
09	27.32	13.18	34.34	17.76	26.38	14.68	2.04	6.02	4.06	3.08	7.36

Size	Housing Dimensions in inch										
	LB	LE	LN	N	PH	RH	RK	S	SA	SB	SC
02	6.70	17.40	10.36	14.52	10.62	4.22	2.88	8.12	8.12	4.48	6.88
03	7.16	19.22	12.04	16.38	12.20	5.00	3.08	9.68	9.68	4.80	7.12
04	7.92	20.62	13.26	17.68	13.54	5.36	3.26	10.24	10.08	5.78	8.58
05	8.34	22.64	13.38	19.64	14.72	5.74	3.54	11.66	11.66	5.36	8.58
06	9.26	24.68	14.80	20.98	15.74	6.14	3.82	12.12	12.12	5.56	9.92
07	10.24	26.96	16.34	22.64	17.88	6.82	4.02	13.78	13.78	5.90	9.52
08	11.02	29.80	18.06	25.62	20.32	7.00	4.22	15.98	15.98	6.86	10.04
09	11.54	32.52	20.76	28.34	23.08	7.72	4.40	18.74	18.74	7.36	10.00

⁽¹⁾Refer to page 22 for tolerance information

⁽²⁾British Pipe Threads

Dimensions subject to change without notice

Weights and oil quantities are guide values only

Size	TM	TO	TP H9 ⁽¹⁾	Housing Dimensions in inch					
				TX	TS	XA	XB	XC	XH
02	0.94	-	0.94	-	-	13.98	5.32	7.16	0.70
03	0.94	-	0.94	-	-	15.12	5.78	7.72	0.70
04	1.10	-	1.10	-	-	16.92	6.62	8.30	0.86
05	1.10	-	1.10	-	-	18.12	7.16	8.90	0.86
06	1.30	-	1.30	-	-	20.66	7.68	9.76	0.86
07	1.30	-	1.30	-	-	22.08	8.62	10.32	0.86
08	1.54	-	1.54	-	-	23.50	9.22	11.38	0.86
09	1.54	-	1.54	-	-	25.66	9.72	12.16	0.86

Size	HSS Dimensions in inch								Weight lb	Oil Capacity gallons
	U1	Y1	V1	Ød1	b1	h1	m1			
02	11.82	-	-	-	-	-	-	489.52	9.50	
03	12.36	-	-	-	-	-	-	643.86	11.08	
04	13.94	-	-	-	-	-	-	873.18	14.52	
05	14.56	-	-	-	-	-	-	1139.98	18.48	
06	15.60	-	-	-	-	-	-	1353.88	23.76	
07	16.54	-	-	-	-	-	-	1757.38	34.32	
08	18.58	-	-	-	-	-	-	2392.42	35.64	
09	19.38	-	-	-	-	-	-	2859.88	42.24	

Metric Dimensions

Size	Housing Dimensions in mm										
	A	EB h11 ⁽¹⁾	C	H h11 ⁽¹⁾	J	JE	KG	KH	KL	KT	L
02	368	195	467	260	320	212	28	90	68	45	98
03	408	207	513	274	360	228	28	100	68	45	110
04	444	229	556	314	400	260	30	118	71	50	122
05	486	240	605	329	430	279	34	118	71	50	136
06	529	270	665	356	470	292	40	131	88	64	141
07	575	295	720	380	530	316	40	152	91	64	150
08	630	322	803	431	600	353	52	153	103	78	174
09	694	335	872	451	670	373	52	153	103	78	187

Size	Housing Dimensions in mm										
	LB	LE	LN	N	PH	RH	RK	S	SA	SB	SC
02	170	442	263	369	270	107	73	206	206	114	175
03	182	488	306	416	310	127	78	246	246	122	181
04	201	524	337	449	344	136	83	260	256	147	218
05	212	575	340	499	374	146	90	296	296	136	218
06	235	627	376	533	400	156	97	308	308	141	252
07	260	685	415	575	454	173	102	350	350	150	242
08	280	757	458.5	651	516	178	107	406	406	174	255
09	293	826	527.5	720	586	196	112	476	476	187	254

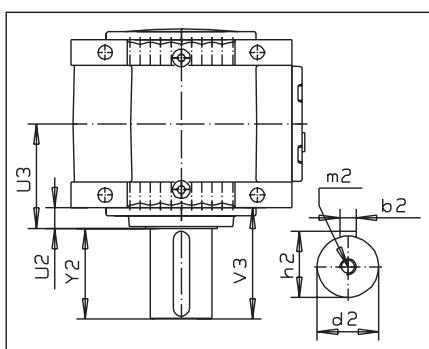
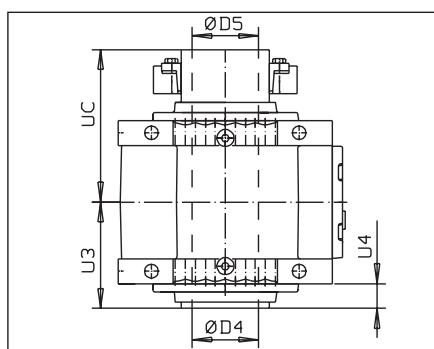
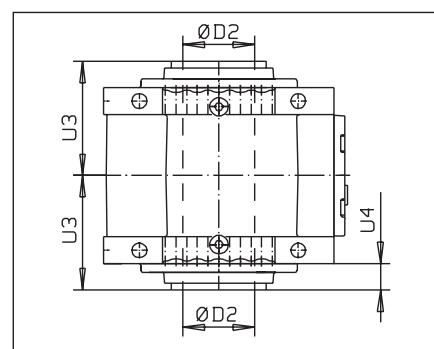
Size	Housing Dimensions in mm									
	TM	TO ⁽²⁾	TP H9 ⁽¹⁾	TX	TS	XA	XB	XC	XH	
02	24	R3/4	24	M20 x 35	M16 x 32	355	135	182	18	
03	24	R3/4	24	M20 x 35	M16 x 32	384	147	196	18	
04	28	R3/4	28	M24 x 42	M16 x 32	430	168	211	22	
05	28	R3/4	28	M24 x 42	M20 x 35	460	182	226	22	
06	33	R1	33	M30 x 53	M20 x 35	525	195	248	22	
07	33	R1	33	M30 x 53	M24 x 42	561	219	262	22	
08	39	R1	39	M30 x 53	M24 x 42	597	234	289	22	
09	39	R1	39	M30 x 53	M30 x 53	652	247	309	22	

Size	HSS Dimensions in mm								Weight kg	Oil Capacity liters
	U1	Y1	V1	Ød1	b1 h9 ⁽¹⁾	h1	m1			
02	300	120	420	32 k6	10	35	M12	222	36	
03	314	120	434	38 k6	10	41	M12	292	42	
04	354	130	484	38 k6	10	41	M12	396	55	
05	370	135	505	48 k6	14	51.5	M16	517	70	
06	396	140	536	48 k6	14	51.5	M16	614	90	
07	420	140	560	50 k6	14	53.5	M16	797	130	
08	472	160	632	55 m6	16	59	M20	1085	135	
09	492	160	652	60 m6	18	64	M20	1297	160	

⁽¹⁾Refer to page 22 for tolerance information⁽²⁾British Pipe Threads

Dimensions subject to change without notice

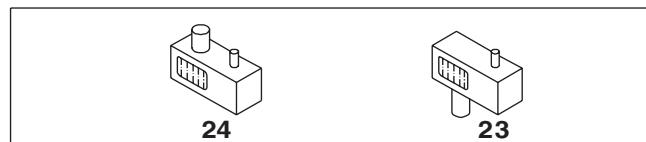
Weights and oil quantities are guide values only

LSS Types**Solid Shaft****Hollow Shaft
Shrink Disk****Hollow Shaft
Key Connection****LSS Dimensions in inch**

Size	d2	b2	h2	m2	Y2	V3	U2	U3	U4	UC	UD	ØD2	ØD4	ØD5
02	-	-	-	-	-	6.86	1.34	6.46	1.34	10.12	6.14	-	-	-
03	-	-	-	-	-	8.04	1.34	6.74	1.34	10.78	6.42	-	-	-
04	-	-	-	-	-	9.68	1.42	7.60	1.42	11.88	7.36	-	-	-
05	-	-	-	-	-	9.68	1.42	7.92	1.42	12.24	7.60	-	-	-
06	-	-	-	-	-	10.08	1.42	8.42	1.42	13.04	8.26	-	-	-
07	-	-	-	-	-	11.34	1.50	8.98	1.50	13.94	8.82	-	-	-
08	-	-	-	-	-	11.34	1.50	10.00	1.50	15.62	9.68	-	-	-
09	-	-	-	-	-	13.70	1.50	10.40	1.50	16.02	10.32	-	-	-

LSS Dimensions in mm

Size	d2 m6 ⁽¹⁾	b2 h9 ⁽¹⁾	h2	m2	Y2	V3	U2	U3	U4	UC	UD	ØD2 js7/H8 ⁽¹⁾	ØD4 js6/H7 ⁽¹⁾	ØD5 h6/H7 ⁽¹⁾
02	80	22	85	M20	140	34	164	34	257	156	80	86	85	
03	100	28	106	M24	170	204	34	171	34	274	163	95	101	100
04	105	28	111	M24	210	246	36	193	36	302	187	105	111	110
05	120	32	127	M24	210	246	36	201	36	311	193	115	121	120
06	130	32	137	M24	220	256	36	214	36	331	210	125	131	130
07	140	36	148	M24	250	288	38	228	38	354	224	135	141	140
08	160	40	169	M24	250	288	38	254	38	397	246	150	151	150
09	170	40	179	M24	310	348	38	264	38	407	262	165	166	165

Shaft Positions

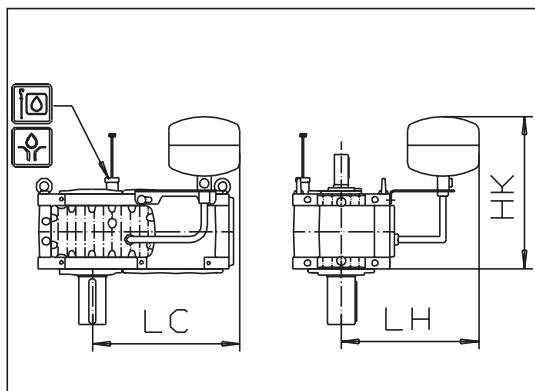
⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

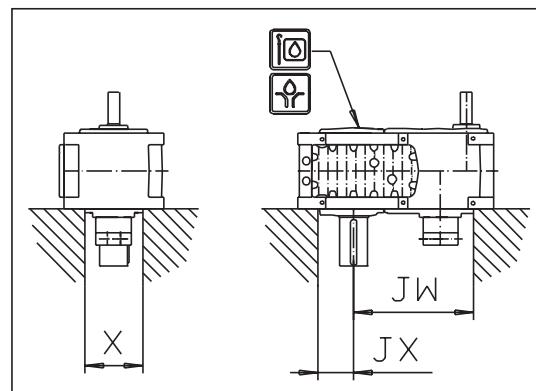
Accessory Dimensions

Size	Accessory Dimensions in inch					
	HK	LC	LH	X	JX	JW
02	24.40	21.26	23.62	-	-	-
03	25.20	22.84	24.40	-	-	-
04	26.78	25.20	24.40	9.84	6.38	19.22
05	27.16	26.78	24.80	9.84	6.66	20.94
06	28.34	28.34	25.60	9.84	7.16	22.60
07	29.14	29.52	26.78	9.84	8.04	24.76
08	31.10	32.68	25.20	12.44	8.62	27.40
09	31.88	35.44	26.38	15.20	9.14	30.12

Size	Accessory Dimensions in mm					
	HK	LC	LH	X	JX	JW
02	620	540	600	-	-	-
03	640	580	620	-	-	-
04	680	640	620	250	162	488
05	690	680	630	250	169	532
06	720	720	650	250	182	574
07	740	750	680	250	204	629
08	790	830	640	316	219	696
09	810	900	670	386	232	765



Expansions Tank

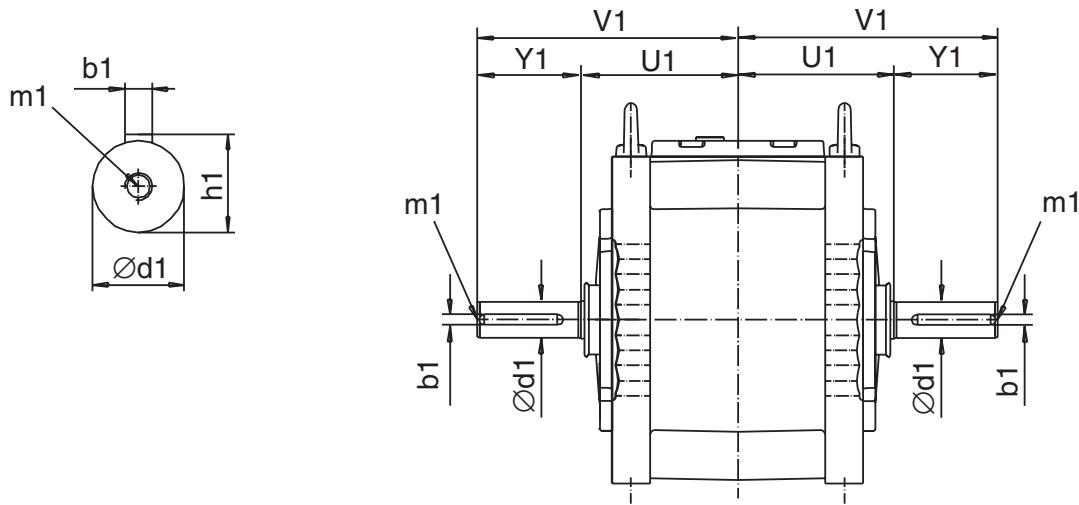


Shaft End Pump

⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

Double Input Shafts



Two Stage Helical Gear Units								
Size	Ratio	$\varnothing d1^{(1)}$	h1	$b_1^{(1)}$ $h_9^{(1)}$	m1	V1	Y1	U1
02	7.1 - 11.2	48 k6	51.5	14	M16	290	120	170
	12.5 - 20	40 k6	43	12		297		177
03	7.1 - 11.2	50 k6	53.5	14	M20	327	130	197
	12.5 - 20	42 k6	45	12		16		
04	7.1 - 11.2	55 m6	59	16	M16	340	135	205
	12.5 - 20	50 k6	53.5	14		358		
05	7.1 - 11.2	60 m6	64	18	M20	370	140	218
	12.5 - 20	50 k6	53.5	14		416		230
06	7.1 - 11.2	70 m6	74.5	20	M20	426	160	256
	12.5 - 20	55 m6	59	16		416		266
07	7.1 - 11.2	75 m6	79.5	20	M20	426	160	256
	12.5 - 20	60 m6	64	18		416		
08	7.1 - 11.2	80 m6	85	22	M20	426	160	256
	12.5 - 20	65 m6	69	18		416		
09	7.1 - 11.2	85 m6	90	22	M20	426	160	256
	12.5 - 20	75 m6	79.5	20		416		

Three Stage Helical Gear Units								
Size	Ratio	$\varnothing d1^{(1)}$	h1	$b_1^{(1)}$ $h_9^{(1)}$	m1	V1	Y1	U1
02	22.5 - 35.5	32 k6	35	10	M12	290	120	170
	40 - 63	30 k6	33	8	M10			
	71 - 112	25 k6	28	8	M10			
03	22.5 - 35.5	38 k6	41	10	M12	297	120	177
	40 - 63	35 k6	38	10	M12			
	71 - 112	28 k6	31	8	M10			
04	22.5 - 35.5	38 k6	41	10	M12	327	130	197
	40 - 63	35 k6	38	10	M12			
	71 - 112	30 k6	33	8	M10			
05	22.5 - 35.5	48 k6	51.5	14	M16	340	135	205
	40 - 63	40 k6	43	12	M16			
	71 - 112	32 k6	38	10	M12			
06	22.5 - 35.5	48 k6	51.5	14	M16	358	140	218
	40 - 63	50 k6	43	12	M16			
	71 - 112	35 k6	38	10	M12			
07	22.5 - 35.5	50 k6	53.5	14	M16	370	140	230
	40 - 63	45 k6	48.5	10	M12			
	71 - 112	38 k6	41	10	M12			
08	22.5 - 35.5	55 m6	59	16	M20	416	160	256
	40 - 63	50 k6	53.5	14	M16			
	71 - 112	42 k6	45	12	M16			
09	22.5 - 35.5	60 m6	64	18	M20	426	160	266
	40 - 63	55 m6	59	16	M20			
	71 - 112	45 k6	48.5	14	M16			

(1)Refer to page 22 for tolerance information

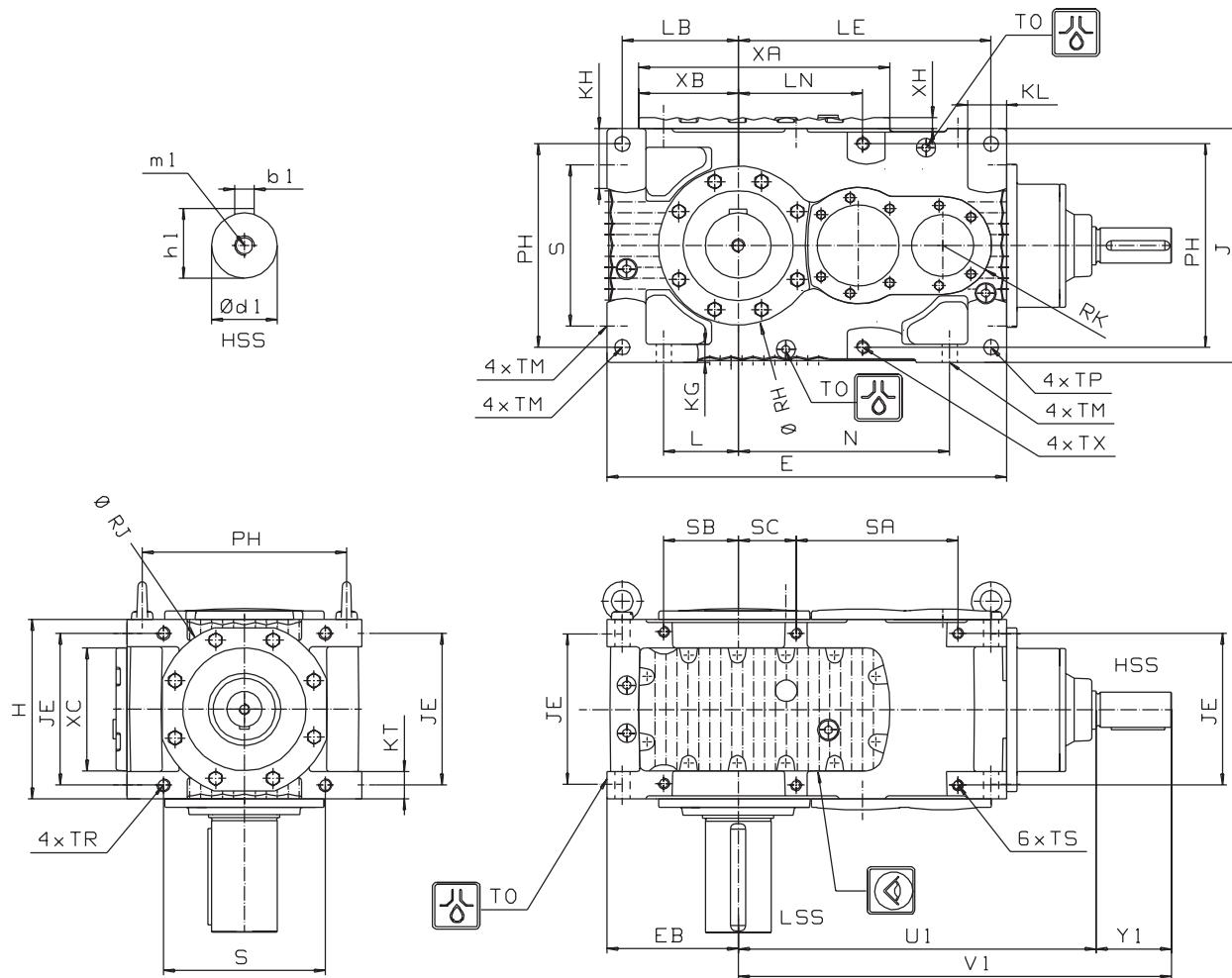
(2)British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

Notes

7.7. MC2RV..

7.7.1. 2-Stage Bevel Helical Gear Unit - Vertical Mounting



Inch Dimensions

Size	Housing Dimensions in inch										
	EB h11 ⁽¹⁾	E	H h11 ⁽¹⁾	J	JE	KG	KH	KL	KT	L	
02	7.68	22.60	10.24	12.60	8.34	1.10	3.54	2.68	1.78	3.86	
03	8.14	24.34	10.78	14.18	8.98	1.10	3.94	2.68	1.78	4.34	
04	9.02	26.66	12.36	15.74	10.24	1.18	4.64	2.80	1.96	4.80	
05	9.44	28.78	12.96	16.92	10.98	1.34	4.64	2.80	1.96	5.36	
06	10.62	31.96	14.02	18.50	11.50	1.58	5.16	3.46	2.52	5.56	
07	11.62	34.84	14.96	20.86	12.44	1.58	5.98	3.58	2.52	5.90	
08	12.68	38.62	16.96	23.62	13.90	2.04	6.02	4.06	3.08	6.86	
09	13.18	41.30	17.76	26.38	14.68	2.04	6.02	4.06	3.08	7.36	

Size	Housing Dimensions in inch												
	LB	LE	LN	N	PH	RH	ØRJ	RK	S	SA	SB	SC	
02	6.70	13.94	6.88	11.10	10.62	4.22	9.44	2.88	8.12	8.12	4.48	3.78	
03	7.16	15.32	8.14	12.36	12.20	5.00	9.44	3.08	9.68	9.68	4.80	3.30	
04	7.92	16.54	9.18	13.42	13.54	5.36	10.86	3.26	10.24	10.08	5.78	4.48	
05	8.34	18.22	8.98	15.24	14.72	5.74	12.60	3.54	11.66	11.66	5.36	4.18	
06	9.26	19.96	10.08	16.26	15.74	6.14	12.68	3.82	12.12	12.12	5.56	5.20	
07	10.24	21.86	11.22	17.52	17.88	6.82	13.62	4.02	13.78	13.78	5.90	4.40	
08	11.02	24.30	12.54	20.12	20.32	7.00	15.16	4.22	15.98	15.98	6.86	4.52	
09	11.54	26.46	14.70	22.28	23.08	7.72	15.44	4.40	18.74	18.74	7.36	3.94	

⁽¹⁾Refer to page 22 for tolerance information

(2)British Pipe Threads

Dimensions subject to change without notice

Weights and oil quantities are guide values only

Size	TM	TO	Housing Dimensions in inch						
			TP H9 ⁽¹⁾	TR/TX	TS	XA	XB	XC	XH
02	0.94	-	0.94	-	-	13.98	5.32	7.16	0.70
03	0.94	-	0.94	-	-	15.12	5.78	7.72	0.70
04	1.10	-	1.10	-	-	16.92	6.62	8.30	0.86
05	1.10	-	1.10	-	-	18.12	7.16	8.90	0.86
06	1.30	-	1.30	-	-	20.66	7.68	9.76	0.86
07	1.30	-	1.30	-	-	22.08	8.62	10.32	0.86
08	1.54	-	1.54	-	-	23.50	9.22	11.38	0.86
09	1.54	-	1.54	-	-	25.66	9.72	12.16	0.86

Size	HSS Dimensions in inch							Weight lb	Oil Capacity gallons
	U1	Y1	V1	Ød1	b1	h1	m1		
02	20.04	-	-	-	-	-	-	487.30	7.92
03	21.62	-	-	-	-	-	-	617.40	10.04
04	23.62	-	-	-	-	-	-	840.10	13.20
05	25.78	-	-	-	-	-	-	1113.52	17.16
06	27.48	-	-	-	-	-	-	1356.08	22.18
07	29.60	-	-	-	-	-	-	1748.56	31.68
08	32.36	-	-	-	-	-	-	2326.28	31.68
09	36.26	-	-	-	-	-	-	2932.66	38.28

Metric Dimensions

Size	Housing Dimensions in mm									
	EB h11 ⁽¹⁾	E	H h11 ⁽¹⁾	J	JE	KG	KH	KL	KT	L
02	195	574	260	320	212	28	90	68	45	98
03	207	618	274	360	228	28	100	68	45	110
04	229	677	314	400	260	30	118	71	50	122
05	240	731	329	430	279	34	118	71	50	136
06	270	812	356	470	292	40	131	88	64	141
07	295	885	380	530	316	40	152	91	64	150
08	322	981	431	600	353	52	153	103	78	174
09	335	1049	451	670	373	52	153	103	78	187

Size	Housing Dimensions in mm											
	LB	LE	LN	N	PH	RH	ØRJ	RK	S	SA	SB	SC
02	170	354	175	282	270	107	240	73	206	206	114	96
03	182	389	207	314	310	127	240	78	246	246	122	84
04	201	420	233	341	344	136	276	83	260	256	147	114
05	212	463	228	387	374	146	320	90	296	296	136	106
06	235	507	256	413	400	156	322	97	308	308	141	132
07	260	555	285	445	454	173	346	102	350	350	150	112
08	280	617	318.5	511	516	178	385	107	406	406	174	115
09	293	672	373.5	566	586	196	392	112	476	476	187	100

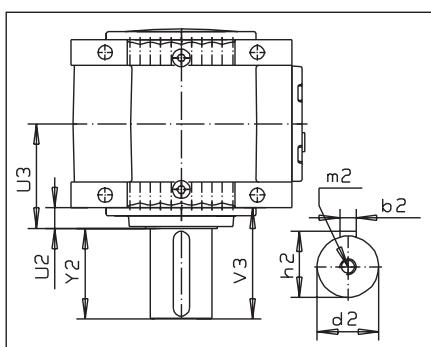
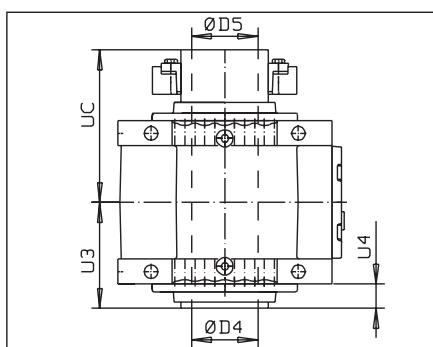
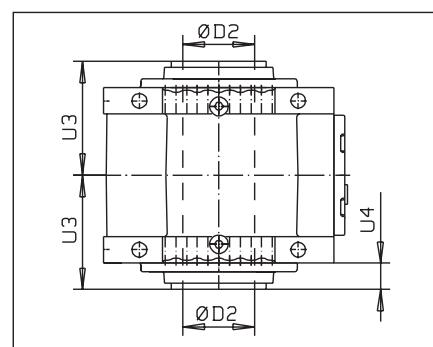
Size	Housing Dimensions in mm									
	TM	TO ⁽²⁾	TP H9 ⁽¹⁾	TR/TX	TS	XA	XB	XC	XH	
02	24	R3/4	24	M20 x 35	M16 x 32	355	135	182	18	
03	24	R3/4	24	M20 x 35	M16 x 32	384	147	196	18	
04	28	R3/4	28	M24 x 42	M16 x 32	430	168	211	22	
05	28	R3/4	28	M24 x 42	M20 x 35	460	182	226	22	
06	33	R1	33	M30 x 53	M20 x 35	525	195	248	22	
07	33	R1	33	M30 x 53	M24 x 42	561	219	262	22	
08	39	R1	39	M30 x 53	M24 x 42	597	234	289	22	
09	39	R1	39	M30 x 53	M30 x 53	652	247	309	22	

Size	HSS Dimensions in mm								Weight kg	Oil Capacity liters
	U1	Y1	V1	Ød1 ⁽¹⁾	b1 h9 ⁽¹⁾	h1	m1			
02	509	130	639	50 k6	14	53.5	M16	221	30	
03	549	135	684	55 m6	16	59	M20	280	38	
04	600	135	735	60 m6	18	64	M20	381	50	
05	655	138	793	65 m6	18	69	M20	505	65	
06	698	140	838	70 m6	20	74.5	M20	615	84	
07	752	160	912	75 m6	20	79.5	M20	793	120	
08	822	160	982	85 m6	22	90	M20	1055	120	
09	921	195	1116	90 m6	25	95	M24	1330	145	

⁽¹⁾Refer to page 22 for tolerance information⁽²⁾British Pipe Threads

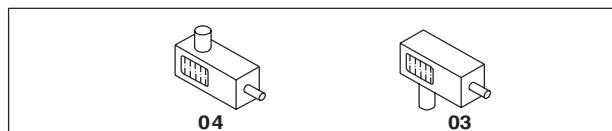
Dimensions subject to change without notice

Weights and oil quantities are guide values only

LSS Types**Solid Shaft****Hollow Shaft
Shrink Disk****Hollow Shaft
Key Connection**

Size	LSS Dimensions in inch													
	d2	b2	h2	m2	Y2	V3	U2	U3	U4	UC	UD	ØD2	ØD4	ØD5
02	-	-	-	-	-	6.86	1.34	6.46	1.34	10.12	6.14	-	-	-
03	-	-	-	-	-	8.04	1.34	6.74	1.34	10.78	6.42	-	-	-
04	-	-	-	-	-	9.68	1.42	7.60	1.42	11.88	7.36	-	-	-
05	-	-	-	-	-	9.68	1.42	7.92	1.42	12.24	7.60	-	-	-
06	-	-	-	-	-	10.08	1.42	8.42	1.42	13.04	8.26	-	-	-
07	-	-	-	-	-	11.34	1.50	8.98	1.50	13.94	8.82	-	-	-
08	-	-	-	-	-	11.34	1.50	10.00	1.50	15.62	9.68	-	-	-
09	-	-	-	-	-	13.70	1.50	10.40	1.50	16.02	10.32	-	-	-

Size	LSS Dimensions in mm													
	d2 m6 ⁽¹⁾	b2 h9 ⁽¹⁾	h2	m2	Y2	V3	U2	U3	U4	UC	UD	ØD2 js7/H8 ⁽¹⁾	ØD4 js6/H7 ⁽¹⁾	ØD5 h6/H7 ⁽¹⁾
02	80	22	85	M20	140	34	164	34	257	156	80	86	85	
03	100	28	106	M24	170	204	34	171	34	274	163	95	101	100
04	105	28	111	M24	210	246	36	193	36	302	187	105	111	110
05	120	32	127	M24	210	246	36	201	36	311	193	115	121	120
06	130	32	137	M24	220	256	36	214	36	331	210	125	131	130
07	140	36	148	M24	250	288	38	228	38	354	224	135	141	140
08	160	40	169	M24	250	288	38	254	38	397	246	150	151	150
09	170	40	179	M24	310	348	38	264	38	407	262	165	166	165

Shaft Positions

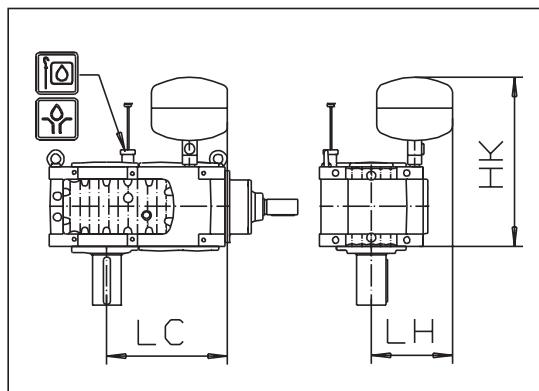
⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

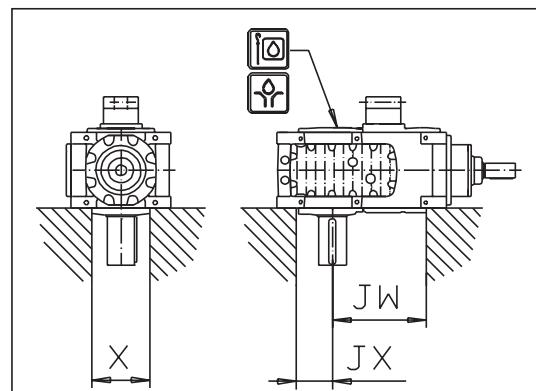
Accessory Dimensions

Size	Accessory Dimensions in inch					
	HK	LC	LH	X	JX	JW
02	27.96	16.92	12.20	-	-	-
03	28.74	17.32	13.00	-	-	-
04	30.32	18.90	13.78	9.84	6.38	14.96
05	30.70	20.08	14.56	9.84	6.66	16.54
06	31.88	21.26	14.96	9.84	7.16	17.88
07	32.68	22.84	16.14	9.84	8.04	19.64
08	34.64	24.40	17.72	12.44	8.62	21.88
09	35.44	26.38	18.90	15.20	9.14	24.06

Size	Accessory Dimensions in mm					
	HK	LC	LH	X	JX	JW
02	710	430	310	-	-	-
03	730	440	330	-	-	-
04	770	480	350	250	162	380
05	780	510	370	250	169	420
06	810	540	380	250	182	454
07	830	580	410	250	204	499
08	880	620	450	316	219	556
09	900	670	480	386	232	611



Expansions Tank



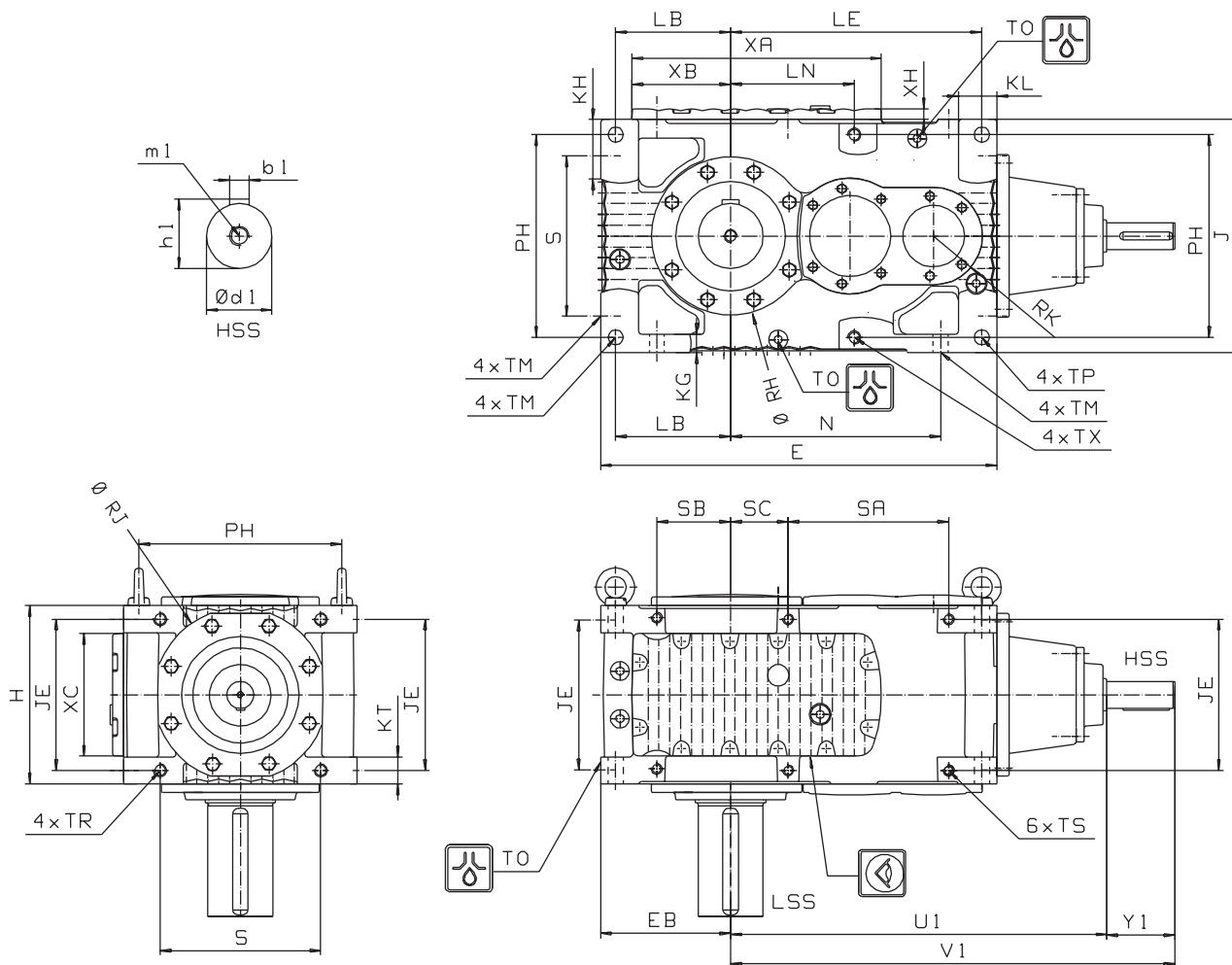
Shaft End Pump

(1) Refer to page 22 for tolerance information
 (2) British Pipe Threads

Dimensions subject to change without notice
 Weights and oil quantities are guide values only

7.8. MC3RV..

7.8.1. 3-Stage Bevel Helical Gear Unit - Vertical Mounting



Inch Dimensions

Housing Dimensions in inch										
Size	EB h11 ⁽¹⁾	E	H h11 ⁽¹⁾	J	JE	KG	KH	KL	KT	L
02	7.68	22.60	10.24	12.60	8.34	1.10	3.54	2.68	1.78	3.86
03	8.14	24.34	10.78	14.18	8.98	1.10	3.94	2.68	1.78	4.34
04	9.02	26.66	12.36	15.74	10.24	1.18	4.64	2.80	1.96	4.80
05	9.44	28.78	12.96	16.92	10.98	1.34	4.64	2.80	1.96	5.36
06	10.62	31.96	14.02	18.50	11.50	1.58	5.16	3.46	2.52	5.56
07	11.62	34.84	14.96	20.86	12.44	1.58	5.98	3.58	2.52	5.90
08	12.68	38.62	16.96	23.62	13.90	2.04	6.02	4.06	3.08	6.86
09	13.18	41.30	17.76	26.38	14.68	2.04	6.02	4.06	3.08	7.36

Housing Dimensions in inch													
Size	LB	LE	LN	N	PH	RH	ØRJ	RK	S	SA	SB	SC	
02	6.70	13.94	6.88	11.10	10.62	4.22	9.44	2.88	8.12	8.12	4.48	3.78	
03	7.16	15.32	8.14	12.36	12.20	5.00	9.44	3.08	9.68	9.68	4.80	3.30	
04	7.92	16.54	9.18	13.42	13.54	5.36	10.86	3.26	10.24	10.08	5.78	4.48	
05	8.34	18.22	8.98	15.24	14.72	5.74	12.60	3.54	11.66	11.66	5.36	4.18	
06	9.26	19.96	10.08	16.26	15.74	6.14	12.68	3.82	12.12	12.12	5.56	5.20	
07	10.24	21.86	11.22	17.52	17.88	6.82	13.62	4.02	13.78	13.78	5.90	4.40	
08	11.02	24.30	12.54	20.12	20.32	7.00	15.16	4.22	15.98	15.98	6.86	4.52	
09	11.54	26.46	14.70	22.28	23.08	7.72	15.44	4.40	18.74	18.74	7.36	3.94	

⁽¹⁾Refer to page 22 for tolerance information

(2)British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

Size	TM	TO	TP H9 ⁽¹⁾	Housing Dimensions in inch								XC	XH
				TR/TX	TS	XA	XB						
02	0.94	-	0.94	-	-	13.98	5.32	7.16	0.70				
03	0.94	-	0.94	-	-	15.12	5.78	7.72	0.70				
04	1.10	-	1.10	-	-	16.92	6.62	8.30	0.86				
05	1.10	-	1.10	-	-	18.12	7.16	8.90	0.86				
06	1.30	-	1.30	-	-	20.66	7.68	9.76	0.86				
07	1.30	-	1.30	-	-	22.08	8.62	10.32	0.86				
08	1.54	-	1.54	-	-	23.50	9.22	11.38	0.86				
09	1.54	-	1.54	-	-	25.66	9.72	12.16	0.86				

Size	HSS Dimensions in inch												Weight lb	Oil Capacity gallons	
	U1	Y1	V1	i = 14-63			i = 71-90			i = 100-112			m1		
02	20.98	-	24.92	-	-	-	-	-	-	-	-	-	-	482.90	7.92
03	23.00	-	27.40	-	-	-	-	-	-	-	-	-	-	615.20	10.04
04	25.28	-	30.00	-	-	-	-	-	-	-	-	-	-	842.32	13.20
05	27.28	-	32.20	-	-	-	-	-	-	-	-	-	-	1087.06	17.16
06	29.84	-	34.96	-	-	-	-	-	-	-	-	-	-	1325.20	22.18
07	32.04	-	37.36	-	-	-	-	-	-	-	-	-	-	1717.70	31.68
08	35.04	-	40.36	-	-	-	-	-	-	-	-	-	-	2286.58	31.68
09	38.14	-	43.66	-	-	-	-	-	-	-	-	-	-	2864.30	38.28

Metric Dimensions

Size	Housing Dimensions in mm											L
	EB h11 ⁽¹⁾	E	H h11 ⁽¹⁾	J	JE	KG	KH	KL	KT			
02	195	574	260	320	212	28	90	68	45	98	98	
03	207	618	274	360	228	28	100	68	45	110	110	
04	229	677	314	400	260	30	118	71	50	122	122	
05	240	731	329	430	279	34	118	71	50	136	136	
06	270	812	356	470	292	40	131	88	64	141	141	
07	295	885	380	530	316	40	152	91	64	150	150	
08	322	981	431	600	353	52	153	103	78	174	174	
09	335	1049	451	670	373	52	153	103	78	187	187	

Size	Housing Dimensions in mm												SC
	LB	LE	LN	N	PH	RH	ØRJ	RK	S	SA	SB		
02	170	354	175	282	270	107	240	73	206	206	114	96	
03	182	389	207	314	310	127	240	78	246	246	122	84	
04	201	420	233	341	344	136	276	83	260	256	147	114	
05	212	463	228	387	374	146	320	90	296	296	136	106	
06	235	507	256	413	400	156	322	97	308	308	141	132	
07	260	555	285	445	454	173	346	102	350	350	150	112	
08	280	617	318.5	511	516	178	385	107	406	406	174	115	
09	293	672	373.5	566	586	196	392	112	476	476	187	100	

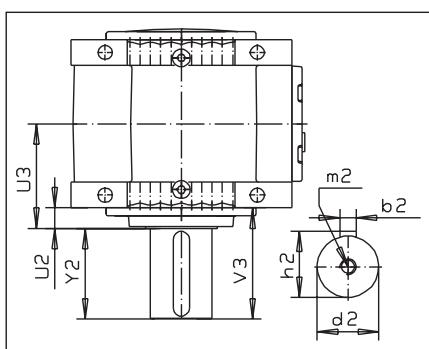
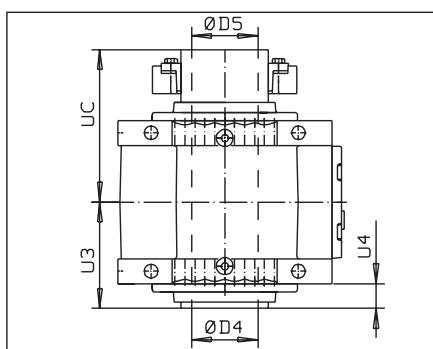
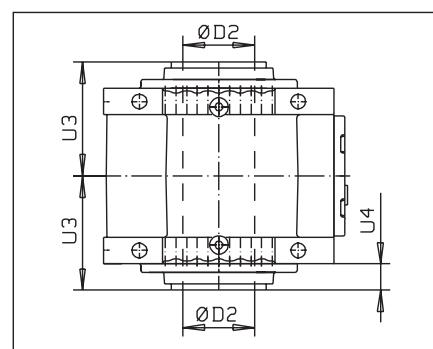
Size	TM	TO ⁽²⁾	TP H9 ⁽¹⁾	Housing Dimensions in mm								XH
				TR/TX	TS	XA	XB	XC				
02	24	R3/4	24	M20 x 35	M16 x 32	355	135	182	18	18	18	
03	24	R3/4	24	M20 x 35	M16 x 32	384	147	196	18	18	18	
04	28	R3/4	28	M24 x 42	M16 x 32	430	168	211	22	22	22	
05	28	R3/4	28	M24 x 42	M20 x 35	460	182	226	22	22	22	
06	33	R1	33	M30 x 53	M20 x 35	525	195	248	22	22	22	
07	33	R1	33	M30 x 53	M24 x 42	561	219	262	22	22	22	
08	39	R1	39	M30 x 53	M24 x 42	597	234	289	22	22	22	
09	39	R1	39	M30 x 53	M30 x 53	652	247	309	22	22	22	

Size	HSS Dimensions in mm												SC				
	i = 14-63				i = 71-90				i = 100-112				Weight	Oil Capacity liters			
U1	Y1	V1	Ød1 ⁽¹⁾	b1 h9 ⁽¹⁾	h1	m1	Ød1 ⁽¹⁾	b1 h9 ⁽¹⁾	h1	m1	Ød1 k6 ⁽¹⁾	b1 h9 ⁽¹⁾	h1	m1	kg	kg	
02	533	100	633	35 k6	10	38	M12	30 k6	8	33	M10	25	8	28	M10	219	30
03	584	112	696	40 k6	12	43	M16	30 k6	8	33	M10	25	8	28	M10	279	38
04	642	120	762	42 k6	12	45	M16	35 k6	10	38	M12	25	8	28	M10	382	50
05	693	125	818	50 k6	14	53.5	M16	40 k6	12	43	M16	30	8	33	M10	493	65
06	758	130	888	50 k6	14	53.5	M16	45 k6	14	48.5	M16	35	10	38	M12	601	84
07	814	135	949	60 m6	18	64	M20	45 k6	14	48.5	M16	40	12	43	M16	779	120
08	890	135	1025	60 m6	18	64	M20	55 m6	16	59	M20	40	12	43	M16	1037	120
09	969	140	1109	70 m6	20	74.5	M20	60 m6	18	64	M20	45	14	48.5	M16	1299	145

⁽¹⁾Refer to page 22 for tolerance information⁽²⁾British Pipe Threads

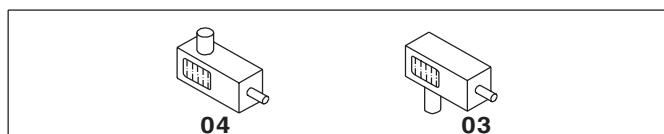
Dimensions subject to change without notice

Weights and oil quantities are guide values only

LSS Types**Solid Shaft****Hollow Shaft
Shrink Disk****Hollow Shaft
Key Connection**

Size	LSS Dimensions in inch													
	d2	b2	h2	m2	Y2	V3	U2	U3	U4	UC	UD	ØD2	ØD4	ØD5
02	-	-	-	-	-	6.86	1.34	6.46	1.34	10.12	6.14	-	-	-
03	-	-	-	-	-	8.04	1.34	6.74	1.34	10.78	6.42	-	-	-
04	-	-	-	-	-	9.68	1.42	7.60	1.42	11.88	7.36	-	-	-
05	-	-	-	-	-	9.68	1.42	7.92	1.42	12.24	7.60	-	-	-
06	-	-	-	-	-	10.08	1.42	8.42	1.42	13.04	8.26	-	-	-
07	-	-	-	-	-	11.34	1.50	8.98	1.50	13.94	8.82	-	-	-
08	-	-	-	-	-	11.34	1.50	10.00	1.50	15.62	9.68	-	-	-
09	-	-	-	-	-	13.70	1.50	10.40	1.50	16.02	10.32	-	-	-

Size	LSS Dimensions in mm													
	d2 m6 ⁽¹⁾	b2 h9 ⁽¹⁾	h2	m2	Y2	V3	U2	U3	U4	UC	UD	ØD2 js7/H8 ⁽¹⁾	ØD4 js6/H7 ⁽¹⁾	ØD5 h6/H7 ⁽¹⁾
02	80	22	85	M20	140	34	164	34	257	156	80	86	85	
03	100	28	106	M24	170	204	34	171	34	274	163	95	101	100
04	105	28	111	M24	210	246	36	193	36	302	187	105	111	110
05	120	32	127	M24	210	246	36	201	36	311	193	115	121	120
06	130	32	137	M24	220	256	36	214	36	331	210	125	131	130
07	140	36	148	M24	250	288	38	228	38	354	224	135	141	140
08	160	40	169	M24	250	288	38	254	38	397	246	150	151	150
09	170	40	179	M24	310	348	38	264	38	407	262	165	166	165
09	170	40	179	M24	310	348	38	264	38	407	262	165	166	165

Shaft Positions

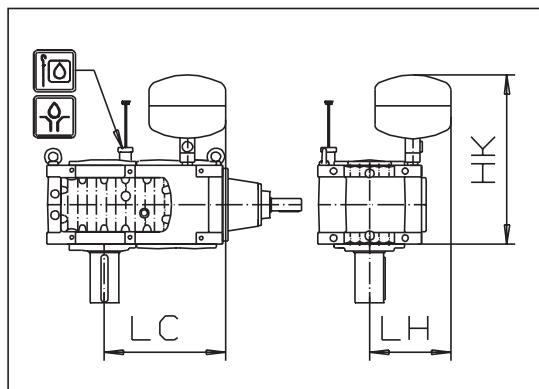
⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

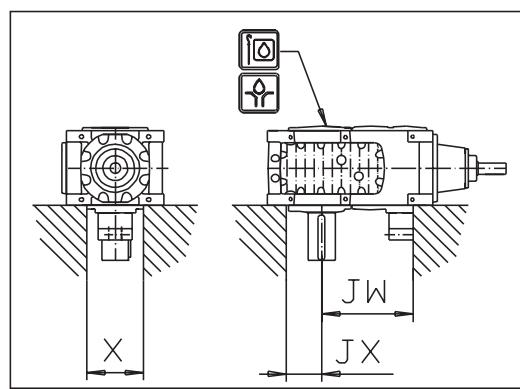
Accessory Dimensions

Size	Accessory Dimensions in inch					
	HK	LC	LH	X	JX	JW
02	27.96	16.92	12.20	-	-	-
03	28.74	17.32	13.00	-	-	-
04	30.32	18.90	13.78	9.84	6.38	14.96
05	30.70	20.08	14.56	9.84	6.66	16.54
06	31.88	21.26	14.96	9.84	7.16	17.88
07	32.68	22.84	16.14	9.84	8.04	19.64
08	34.64	24.40	17.72	12.44	8.62	21.88
09	35.44	26.38	18.90	15.20	9.14	24.06

Size	Accessory Dimensions in mm					
	HK	LC	LH	X	JX	JW
02	710	430	310	-	-	-
03	730	440	330	-	-	-
04	770	480	350	250	162	380
05	780	510	370	250	169	420
06	810	540	380	250	182	454
07	830	580	410	250	204	499
08	880	620	450	316	219	556
09	900	670	480	386	232	611



Expansions Tank



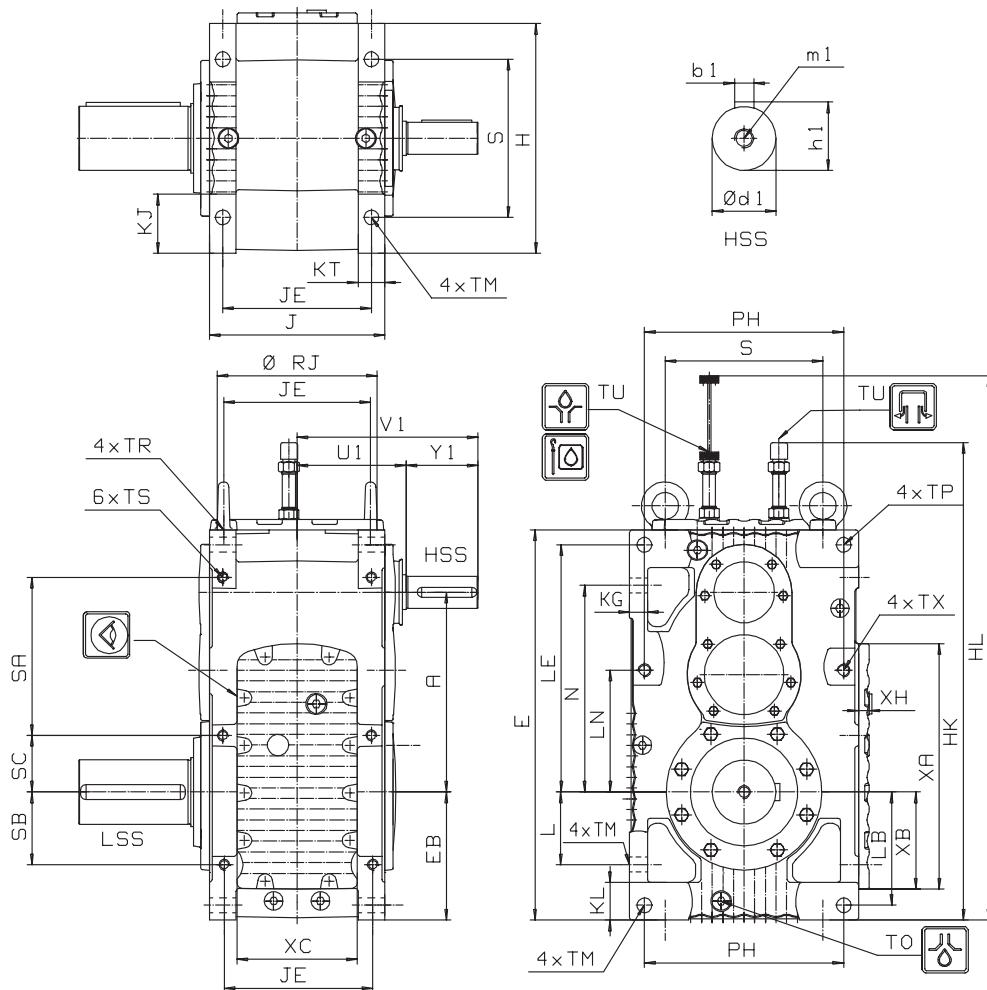
Shaft End Pump

⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

7.9. MC2PE..

7.9.1. 2-Stage Helical Gear Unit - Upright Mounting



Inch Dimensions

Housing Dimensions in inch													
Size	A	EB h11 ⁽¹⁾	E	H	HK	HL	J h11 ⁽¹⁾	JE	KG	KJ	KL	KT	L
02	11.02	7.68	22.60	12.60	29.14	34.64	10.24	8.34	1.10	3.54	2.68	1.78	3.86
03	12.20	8.14	24.34	14.18	31.10	38.00	10.78	8.98	1.10	3.94	2.68	1.78	4.34
04	13.38	9.02	26.66	15.74	33.46	40.74	12.36	10.24	1.18	4.64	2.80	1.96	4.80
05	14.72	9.44	28.78	16.92	35.44	43.30	12.96	10.98	1.34	4.64	2.80	1.96	5.36
06	16.10	10.62	31.96	18.50	38.58	48.04	14.02	11.50	1.58	5.16	3.46	2.52	5.56
07	17.52	11.62	34.84	20.86	41.54	52.56	14.96	12.44	1.58	5.98	3.58	2.52	5.90
08	19.30	12.68	38.62	23.62	45.28	57.48	16.96	13.90	2.04	6.02	4.06	3.08	6.86
09	21.26	13.18	41.30	26.38	48.04	60.62	17.76	14.68	2.04	6.02	4.06	3.08	7.36

Housing Dimensions in inch									
Size	LB	LE	LN	N	PH	S	SA	SB	SC
02	6.70	13.94	6.88	11.10	10.62	8.12	8.12	4.48	3.78
03	7.16	15.32	8.14	12.36	12.20	9.68	9.68	4.80	3.30
04	7.92	16.54	9.18	13.42	13.54	10.24	10.08	5.78	4.48
05	8.34	18.22	8.98	15.24	14.72	11.66	11.66	5.36	4.18
06	9.26	19.96	10.08	16.26	15.74	12.12	12.12	5.56	5.20
07	10.24	21.86	11.22	17.52	17.88	13.78	13.78	5.90	4.40
08	11.02	24.18	12.54	20.12	20.32	15.98	15.98	6.86	4.52
09	11.54	26.46	14.70	22.28	23.08	18.74	18.74	7.36	3.94

⁽¹⁾Refer to page 22 for tolerance information.

⁽²⁾British Pipe Threads

**Dimensions subject to change without notice
Weights and oil quantities are guide values only**

Size	TU	TM	TO	Housing Dimensions in inch							
				TP H9 ⁽¹⁾	TR/TX	TS	XA	XB	XC	XH	
02	-	0.94	-	0.94	-	-	13.98	5.32	7.16	0.70	
03	-	0.94	-	0.94	-	-	15.12	5.78	7.72	0.70	
04	-	1.10	-	1.10	-	-	16.92	6.62	8.30	0.86	
05	-	1.10	-	1.10	-	-	18.12	7.16	8.90	0.86	
06	-	1.30	-	1.30	-	-	20.66	7.68	9.76	0.86	
07	-	1.30	-	1.30	-	-	22.08	8.62	10.32	0.86	
08	-	1.54	-	1.54	-	-	23.50	9.22	11.38	0.86	
09	-	1.54	-	1.54	-	-	25.66	9.72	12.16	0.86	

Size	HSS Dimensions in inch								Weight lb	Oil Capacity gallons
	U1	Y1	V1	Ød1	b1	h1	m1			
02	6.70	-	-	-	-	-	-	443.20	5.28	
03	6.96	-	-	-	-	-	-	564.48	6.60	
04	7.76	-	-	-	-	-	-	778.36	9.24	
05	8.08	-	-	-	-	-	-	1003.28	13.20	
06	8.58	-	-	-	-	-	-	1234.80	17.16	
07	9.06	-	-	-	-	-	-	1600.84	22.44	
08	10.08	-	-	-	-	-	-	2136.64	26.40	
09	10.48	-	-	-	-	-	-	2663.64	34.32	

Metric Dimensions

Size	A	Housing Dimensions in mm											
		EB h11 ⁽¹⁾	E	H	HK	HL	J h11 ⁽¹⁾	JE	KG	KJ	KL	KT	L
02	280	195	574	320	740	880	260	212	28	90	68	45	98
03	310	207	618	360	790	965	274	228	28	100	68	45	110
04	340	229	677	400	850	1035	314	260	30	118	71	50	122
05	374	240	731	430	900	1100	329	279	34	118	71	50	136
06	409	270	812	470	980	1220	356	292	40	131	88	64	141
07	445	295	885	530	1055	1335	380	316	40	152	91	64	150
08	490	322	981	600	1150	1460	431	353	52	153	103	78	174
09	540	335	1049	670	1220	1540	451	373	52	153	103	78	187

Size	Housing Dimensions in mm								
	LB	LE	LN	N	PH	S	SA	SB	SC
02	170	354	175	282	270	206	206	114	96
03	182	389	207	314	310	246	246	122	84
04	201	420	233	341	344	260	256	147	114
05	212	463	228	387	374	296	296	136	106
06	235	507	256	413	400	308	308	141	132
07	260	555	285	445	454	350	350	150	112
08	280	614	318.5	511	516	406	406	174	115
09	293	672	373.5	566	586	476	476	187	100

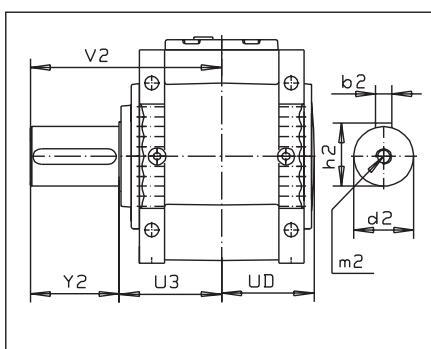
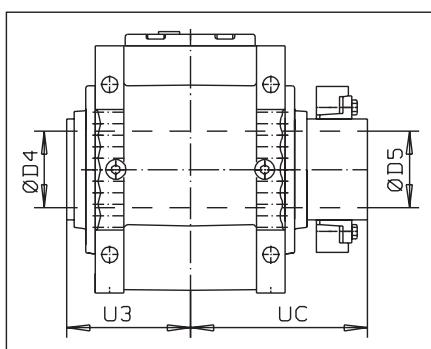
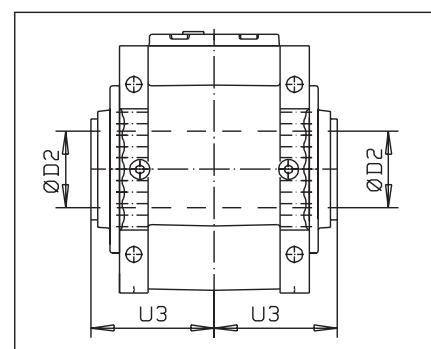
Size	Housing Dimensions in mm									
	TU ⁽²⁾	TM	TO ⁽²⁾	TP H9 ⁽¹⁾	TR/TX	TS	XA	XB	XC	XH
02	R3/4	24	R3/4	24	M20 x 35	M16 x 32	355	135	182	18
03	R3/4	24	R3/4	24	M20 x 35	M16 x 32	384	147	196	18
04	R3/4	28	R3/4	28	M24 x 42	M16 x 32	430	168	211	22
05	R3/4	28	R3/4	28	M24 x 42	M20 x 35	460	182	226	22
06	R3/4	33	R1	33	M30 x 53	M20 x 35	525	195	248	22
07	R3/4	33	R1	33	M30 x 53	M24 x 42	561	219	262	22
08	R3/4	39	R1	39	M30 x 53	M24 x 42	597	234	289	22
09	R3/4	39	R1	39	M30 x 53	M30 x 53	652	247	309	22

Size	HSS Dimensions in mm								Weight kg	Oil Capacity liters
	U1	Y1	V1	Ød1 ⁽¹⁾	b1 h9 ⁽¹⁾	h1	m1			
02	170	120	290	48 k6	14	51.5	M16	201	20	
03	177	120	297	50 k6	14	53.5	M16	256	25	
04	197	130	327	55 m6	16	59	M20	353	35	
05	205	135	340	60 m6	18	64	M20	455	50	
06	218	140	358	70 m6	20	74.5	M20	560	65	
07	230	140	370	75 m6	20	79.5	M20	726	85	
08	256	160	416	80 m6	22	85	M20	969	100	
09	266	160	426	85 m6	22	90	M20	1208	130	

⁽¹⁾Refer to page 22 for tolerance information⁽²⁾British Pipe Threads

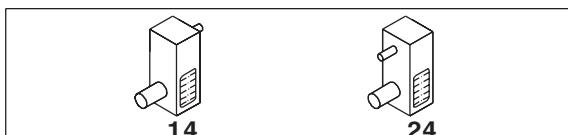
Dimensions subject to change without notice

Weights and oil quantities are guide values only

LSS Types**Solid Shaft****Hollow Shaft
Shrink Disk****Hollow Shaft
Key Connection**

Size	LSS Dimensions in inch											
	d2	b2	h2	m2	Y2	V2	U3	UC	UD	ØD2	ØD4	ØD5
02	-	-	-	-	-	11.96	6.46	10.12	6.14	-	-	-
03	-	-	-	-	-	13.42	6.74	10.78	6.42	-	-	-
04	-	-	-	-	-	15.86	7.60	11.88	7.36	-	-	-
05	-	-	-	-	-	16.18	7.92	12.24	7.60	-	-	-
06	-	-	-	-	-	17.08	8.42	13.04	8.26	-	-	-
07	-	-	-	-	-	18.82	8.98	13.94	8.82	-	-	-
08	-	-	-	-	-	19.84	10.00	15.62	9.68	-	-	-
09	-	-	-	-	-	22.60	10.40	16.02	10.32	-	-	-

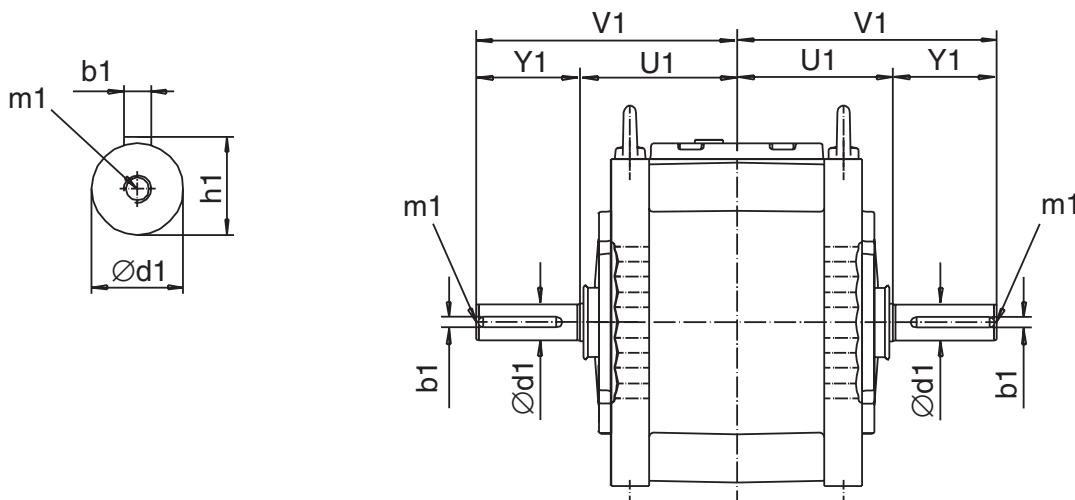
Size	LSS Dimensions in mm											
	d2 m6 ⁽¹⁾	b2 h9 ⁽¹⁾	h2	m2	Y2	V2	U3	UC	UD	ØD2 js7/H8 ⁽¹⁾	ØD4 js6/H7 ⁽¹⁾	ØD5 h6/H7 ⁽¹⁾
02	80	22	85	M20	140	304	164	257	156	80	86	85
03	100	28	106	M24	170	341	171	274	163	95	101	100
04	105	28	111	M24	210	403	193	302	187	105	111	110
05	120	32	127	M24	210	411	201	311	193	115	121	120
06	130	32	137	M24	220	434	214	331	210	125	131	130
07	140	36	148	M24	250	478	228	354	224	135	141	140
08	160	40	169	M24	250	504	254	397	246	150	151	150
09	170	40	179	M24	310	574	264	407	262	165	166	165

Shaft Positions

⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

Double Input Shafts



Two Stage Helical Gear Units								
Size	Ratio	$\varnothing d_1^{(1)}$	h_1	$b_1^{(1)}$ $h_9^{(1)}$	m_1	V_1	Y_1	U_1
02	7.1 - 11.2	48 k6	51.5	14	M16	290	170	
	12.5 - 20	40 k6	43	12		120		
03	7.1 - 11.2	50 k6	53.5	14		297	177	
	12.5 - 20	42 k6	45	12				
04	7.1 - 11.2	55 m6	59	16	M20	327	130	197
	12.5 - 20	50 k6	53.5	14	M16			
05	7.1 - 11.2	60 m6	64	18	M20	340	135	205
	12.5 - 20	50 k6	53.5	14	M16			
06	7.1 - 11.2	70 m6	74.5	20	M20	358	218	
	12.5 - 20	55 m6	59	16		140		
07	7.1 - 11.2	75 m6	79.5	20		370	230	
	12.5 - 20	60 m6	64	18				
08	7.1 - 11.2	80 m6	85	22		416	256	
	12.5 - 20	65 m6	69	18		426		
09	7.1 - 11.2	85 m6	90	22		416	256	
	12.5 - 20	75 m6	79.5	20				

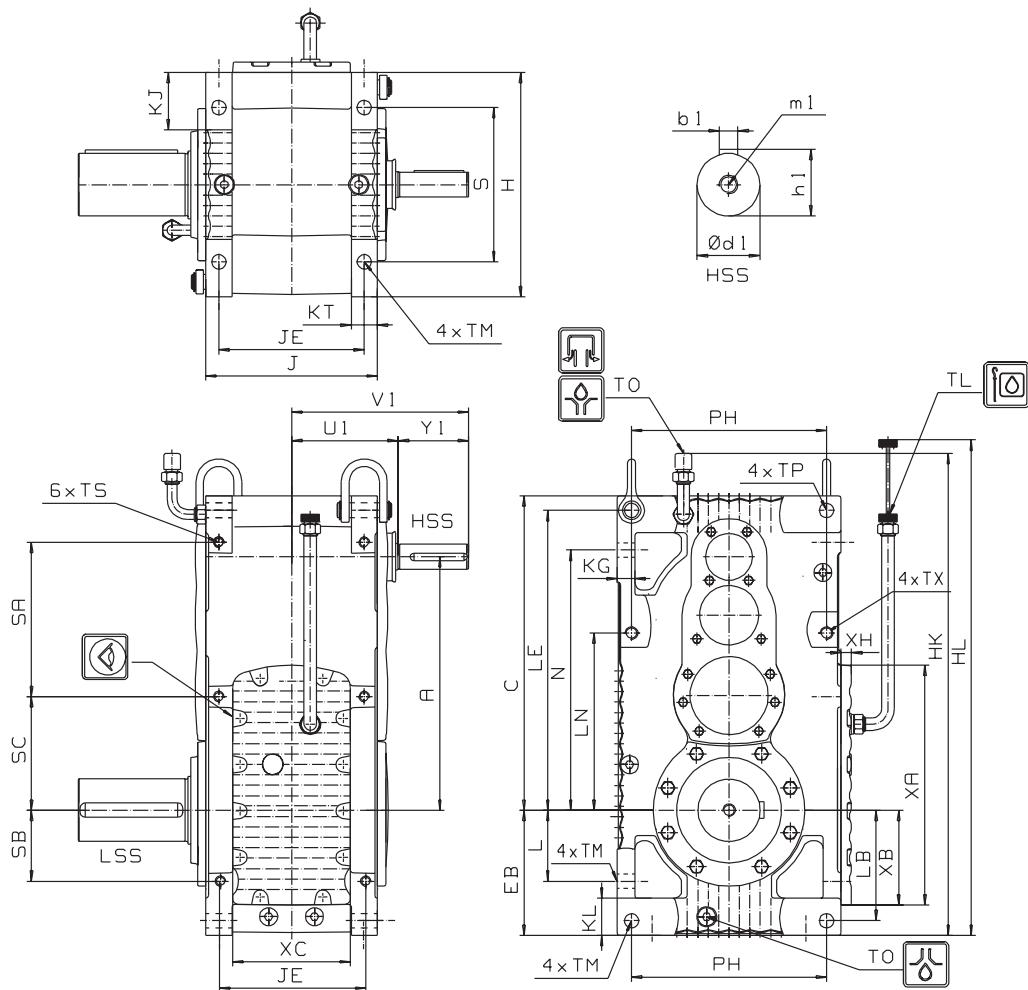
Three Stage Helical Gear Units								
Size	Ratio	$\varnothing d_1^{(1)}$	h_1	$b_1^{(1)}$ $h_9^{(1)}$	m_1	V_1	Y_1	U_1
02	22.5 - 35.5	32 k6	35	10	M12	290	170	
	40 - 63	30 k6	33		8			
	71 - 112	25 k6	28		M10			
03	22.5 - 35.5	38 k6	41	10	M12	297	177	
	40 - 63	35 k6	38		8			
	71 - 112	28 k6	31		M10			
04	22.5 - 35.5	38 k6	41	10	M12	327	130	197
	40 - 63	35 k6	38		10			
	71 - 112	30 k6	33		8			
05	22.5 - 35.5	48 k6	51.5	14	M16	340	135	205
	40 - 63	40 k6	43		12			
	71 - 112	32 k6	38		10			
06	22.5 - 35.5	48 k6	51.5	14	M16	358	218	
	40 - 63	50 k6	43		12			
	71 - 112	35 k6	38		10			
07	22.5 - 35.5	50 k6	53.5	14	M16	370	140	230
	40 - 63	45 k6	48.5		10			
	71 - 112	38 k6	41		M12			
08	22.5 - 35.5	55 m6	59	16	M20	416	256	
	40 - 63	50 k6	53.5		14			
	71 - 112	42 k6	45		12			
09	22.5 - 35.5	60 m6	64	18	M20	426	160	266
	40 - 63	55 m6	59		16			
	71 - 112	45 k6	48.5		14			256

(1) Refer to page 22 for tolerance information
(2) British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

7.10. MC3PE..

7.10.1. 3-Stage Helical Gear Unit - Upright Mounting



Inch Dimensions

Housing Dimensions in inch												
Size	A	EB h11 ⁽¹⁾	C	H	HK	HL	J h11 ⁽¹⁾	JE	KG	KJ	KL	KT
02	14.48	7.68	18.38	12.60	26.54	28.14	10.24	8.34	1.10	3.54	2.68	1.78
03	16.06	8.14	20.20	14.18	28.26	30.12	10.78	8.98	1.10	3.94	2.68	1.78
04	17.48	9.02	21.88	15.74	30.60	31.88	12.36	10.24	1.18	4.64	2.80	1.96
05	19.14	9.44	23.82	16.92	32.72	35.04	12.96	10.98	1.34	4.64	2.80	1.96
06	20.82	10.62	26.18	18.50	35.90	37.20	14.02	11.50	1.58	5.16	3.46	2.52
07	22.64	11.62	28.34	20.86	38.78	39.96	14.96	12.44	1.58	5.98	3.58	2.52
08	24.80	12.68	31.62	23.62	42.56	42.92	16.96	13.90	2.04	6.02	4.06	3.08
09	27.32	13.18	34.34	26.38	45.24	45.86	17.76	14.68	2.04	6.02	4.06	3.08

Housing Dimensions in inch											
Size	L	LB	LE	LN	N	PH	S	SA	SB	SC	
02	3.86	6.70	17.40	10.36	14.52	10.62	8.12	8.12	4.48	6.88	
03	4.34	7.16	19.22	12.04	16.38	12.20	9.68	9.68	4.80	7.12	
04	4.80	7.92	20.62	13.26	17.68	13.54	10.24	10.08	5.78	8.58	
05	5.36	8.34	22.64	13.38	19.64	14.72	11.66	11.66	5.36	8.58	
06	5.56	9.26	24.68	14.80	20.98	15.74	12.12	12.12	5.56	9.92	
07	5.90	10.24	26.96	16.34	22.64	17.88	13.78	13.78	5.90	9.52	
08	6.86	11.02	29.80	18.06	25.62	20.32	15.98	15.98	6.86	10.04	
09	7.36	11.54	32.52	20.76	28.34	23.08	18.74	18.74	7.36	10.00	

⁽¹⁾Refer to page 22 for tolerance information

⁽²⁾British Pipe Threads

Dimensions subject to change without notice

Weights and oil quantities are guide values only

Size	TL	TM	TO	Housing Dimensions in inch							
				TP H9 ⁽¹⁾	TX	TS	XA	XB	XC	XH	
02	-	0.94	-	0.94	-	-	13.98	5.32	7.16	0.70	
03	-	0.94	-	0.94	-	-	15.12	5.78	7.72	0.70	
04	-	1.10	-	1.10	-	-	16.92	6.62	8.30	0.86	
05	-	1.10	-	1.10	-	-	18.12	7.16	8.90	0.86	
06	-	1.30	-	1.30	-	-	20.66	7.68	9.76	0.86	
07	-	1.30	-	1.30	-	-	22.08	8.62	10.32	0.86	
08	-	1.54	-	1.54	-	-	23.50	9.22	11.38	0.86	
09	-	1.54	-	1.54	-	-	25.66	9.72	12.16	0.86	

Size	HSS Dimensions in inch								Weight lb	Oil Capacity gallons
	U1	Y1	V1	Ød1	b1	h1	m1			
02	6.70	-	-	-	-	-	-	489.52	7.12	
03	6.96	-	-	-	-	-	-	643.86	8.44	
04	7.76	-	-	-	-	-	-	873.18	11.36	
05	8.08	-	-	-	-	-	-	1139.98	15.84	
06	8.58	-	-	-	-	-	-	1353.88	20.06	
07	9.06	-	-	-	-	-	-	1757.38	27.72	
08	10.08	-	-	-	-	-	-	2392.43	33.00	
09	10.48	-	-	-	-	-	-	2859.89	39.60	

Metric Dimensions

Size	A	Housing Dimensions in mm										
		EB h11 ⁽¹⁾	C	H	HK	HL	J h11 ⁽¹⁾	JE	KG	KJ	KL	KT
02	368	195	467	320	674	715	260	212	28	90	68	45
03	408	207	513	360	718	765	274	228	28	100	68	45
04	444	229	556	400	777	810	314	260	30	118	71	50
05	486	240	605	430	831	890	329	279	34	118	71	50
06	529	270	665	470	912	945	356	292	40	131	88	64
07	575	295	720	530	985	1015	380	316	40	152	91	64
08	630	322	803	600	1081	1090	431	353	52	153	103	78
09	694	335	872	670	1149	1165	451	373	52	153	103	78

Size	L	LB	LE	Housing Dimensions in mm						
				LN	N	PH	S	SA	SB	SC
02	98	170	442	263	369	270	206	206	114	175
03	110	182	488	306	416	310	246	246	122	181
04	122	201	524	337	449	344	260	256	147	218
05	136	212	575	340	499	374	296	296	136	218
06	141	235	627	376	533	400	308	308	141	252
07	150	260	685	415	575	454	350	350	150	242
08	174	280	757	458.5	651	516	406	406	174	255
09	187	293	826	527.5	720	586	476	476	187	254

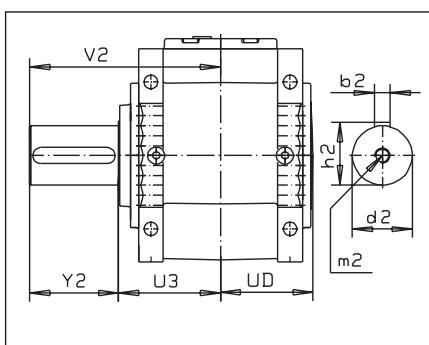
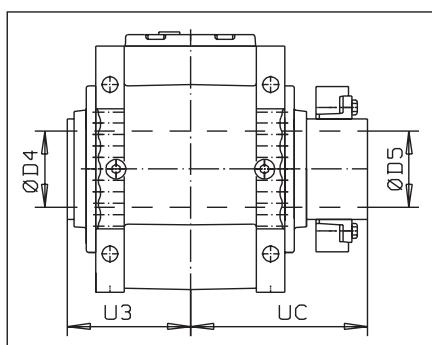
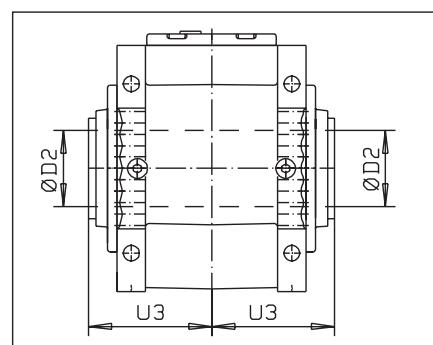
Size	TL ⁽²⁾	TM	TO ⁽²⁾	Housing Dimensions in mm						
				TP H9 ⁽¹⁾	TX	TS	XA	XB	XC	XH
02	R3/4	24	R3/4	24	M20 x 35	M16 x 32	355	135	182	18
03	R3/4	24	R3/4	24	M20 x 35	M16 x 32	384	147	196	18
04	R3/4	28	R3/4	28	M24 x 42	M16 x 32	430	168	211	22
05	R3/4	28	R3/4	28	M24 x 42	M20 x 35	460	182	226	22
06	R3/4	33	R1	33	M30 x 53	M20 x 35	525	195	248	22
07	R3/4	33	R1	33	M30 x 53	M24 x 42	561	219	262	22
08	R3/4	39	R1	39	M30 x 53	M24 x 42	597	234	289	22
09	R3/4	39	R1	39	M30 x 53	M30 x 53	652	247	309	22

Size	HSS Dimensions in mm							Weight kg	Oil Capacity liters
	U1	Y1	V1	Ød1 ⁽¹⁾	b1 h9 ⁽¹⁾	h1	m1		
02	170	120	290	32 k6	10	35	M12	222	27
03	177	120	297	38 k6	10	41	M12	292	32
04	197	130	327	38 k6	10	41	M12	396	43
05	205	135	340	48 k6	14	51.5	M16	517	60
06	218	140	358	48 k6	14	51.5	M16	614	76
07	230	140	370	50 k6	14	53.5	M16	797	105
08	256	160	416	55 m6	16	59	M20	1085	125
09	266	160	426	60 m6	18	64	M20	1297	150

⁽¹⁾Refer to page 22 for tolerance information⁽²⁾British Pipe Threads

Dimensions subject to change without notice

Weights and oil quantities are guide values only

LSS Types**Solid Shaft****Hollow Shaft
Shrink Disk****Hollow Shaft
Key Connection**

Size	LSS Dimensions in inch											
	d2	b2	h2	m2	Y2	V2	U3	UC	UD	ØD2	ØD4	ØD5
02	-	-	-	-	-	11.96	6.46	10.12	6.14	-	-	-
03	-	-	-	-	-	13.42	6.74	10.78	6.42	-	-	-
04	-	-	-	-	-	15.86	7.60	11.88	7.36	-	-	-
05	-	-	-	-	-	16.18	7.92	12.24	7.60	-	-	-
06	-	-	-	-	-	17.08	8.42	13.04	8.26	-	-	-
07	-	-	-	-	-	18.82	8.98	13.94	8.82	-	-	-
08	-	-	-	-	-	19.84	10.00	15.62	9.68	-	-	-
09	-	-	-	-	-	22.60	10.40	16.02	10.32	-	-	-

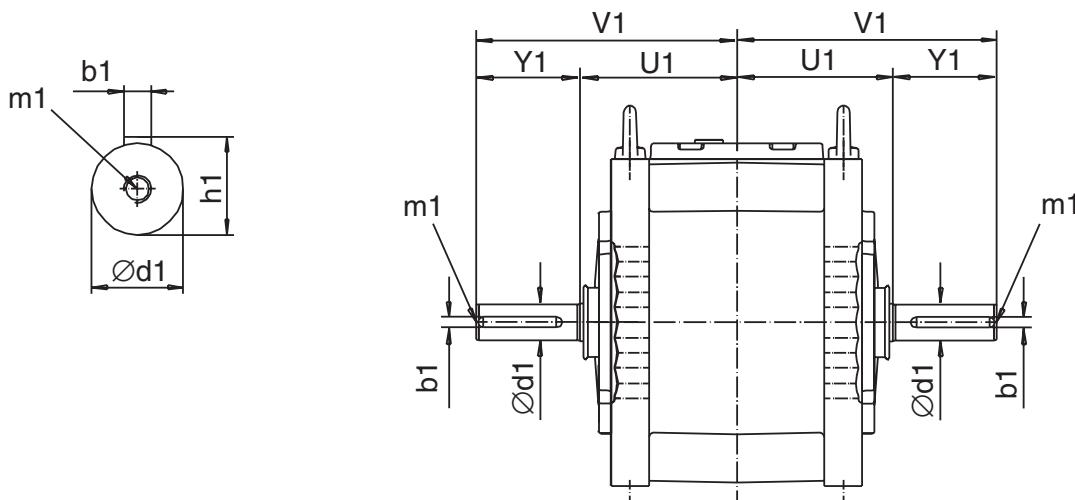
Size	LSS Dimensions in mm											
	d2 m6 ⁽¹⁾	b2 h9 ⁽¹⁾	h2	m2	Y2	V2	U3	UC	UD	ØD2 js7/H8 ⁽¹⁾	ØD4 js6/H7 ⁽¹⁾	ØD5 h6/H7 ⁽¹⁾
02	80	22	85	M20	140	304	164	257	156	80	86	85
03	100	28	106	M24	170	341	171	274	163	95	101	100
04	105	28	111	M24	210	403	193	302	187	105	111	110
05	120	32	127	M24	210	411	201	311	193	115	121	120
06	130	32	137	M24	220	434	214	331	210	125	131	130
07	140	36	148	M24	250	478	228	354	224	135	141	140
08	160	40	169	M24	250	504	254	397	246	150	151	150
09	170	40	179	M24	310	574	264	407	262	165	166	165

Shaft Positions

⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

Double Input Shafts



Two Stage Helical Gear Units								
Size	Ratio	$\emptyset d_1^{(1)}$	h_1	$b_1^{(1)}$ $h_9^{(1)}$	m_1	V_1	Y_1	U_1
02	7.1 - 11.2	48 k6	51.5	14	M16	290	170	
	12.5 - 20	40 k6	43	12		120		
03	7.1 - 11.2	50 k6	53.5	14	M16	297	177	
	12.5 - 20	42 k6	45	12				
04	7.1 - 11.2	55 m6	59	16	M20	327	130	197
	12.5 - 20	50 k6	53.5	14	M16			
05	7.1 - 11.2	60 m6	64	18	M20	340	135	205
	12.5 - 20	50 k6	53.5	14	M16			
06	7.1 - 11.2	70 m6	74.5	20	M20	358	218	
	12.5 - 20	55 m6	59	16		140		
07	7.1 - 11.2	75 m6	79.5	20		370	230	
	12.5 - 20	60 m6	64	18				
08	7.1 - 11.2	80 m6	85	22	M20	416	256	
	12.5 - 20	65 m6	69	18		160		
09	7.1 - 11.2	85 m6	90	22		426	266	
	12.5 - 20	75 m6	79.5	20		416		

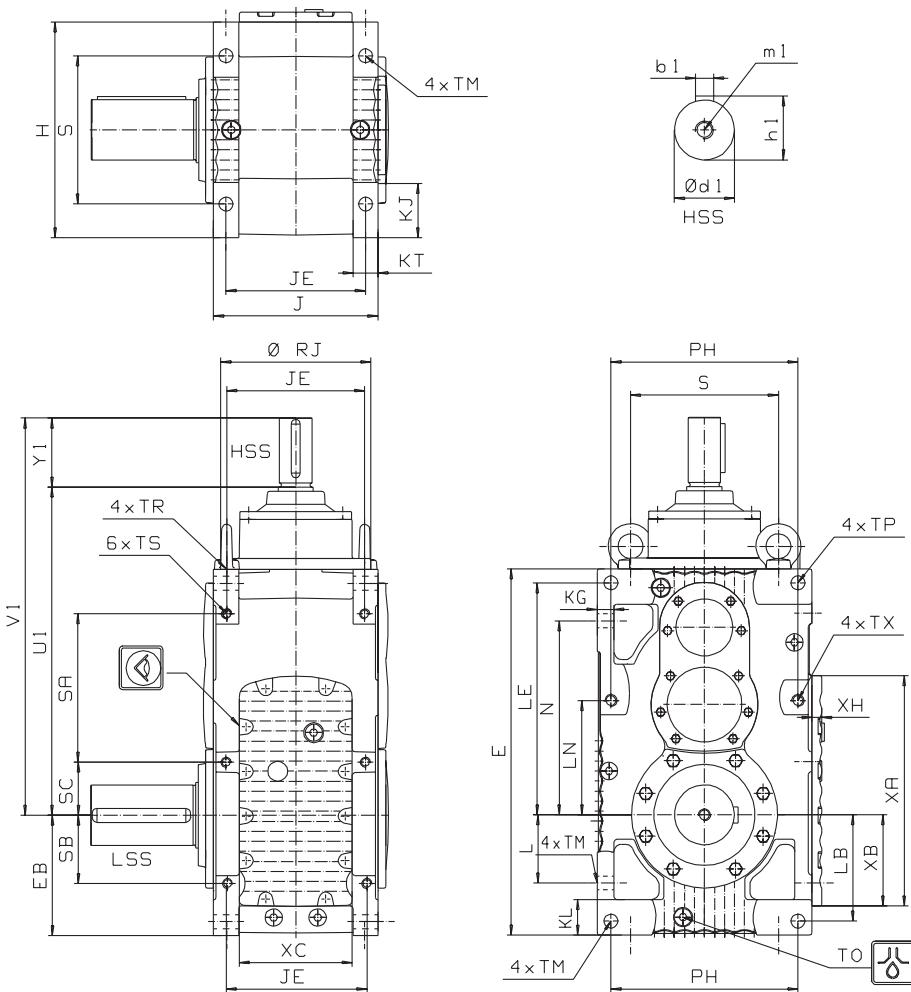
Three Stage Helical Gear Units								
Size	Ratio	$\emptyset d_1^{(1)}$	h_1	$b_1^{(1)}$ $h_9^{(1)}$	m_1	V_1	Y_1	U_1
02	22.5 - 35.5	32 k6	35	10	M12	290	170	
	40 - 63	30 k6	33		M10			
	71 - 112	25 k6	28					
03	22.5 - 35.5	38 k6	41	10	M12	297	177	
	40 - 63	35 k6	38		M10			
	71 - 112	28 k6	31					
04	22.5 - 35.5	38 k6	41	10	M12	327	130	197
	40 - 63	35 k6	38		M12			
	71 - 112	30 k6	33		M10			
05	22.5 - 35.5	48 k6	51.5	14	M16	340	135	205
	40 - 63	40 k6	43		M16			
	71 - 112	32 k6	38		M12			
06	22.5 - 35.5	48 k6	51.5	14	M16	358	140	218
	40 - 63	50 k6	43		M16			
	71 - 112	35 k6	38		M12			
07	22.5 - 35.5	50 k6	53.5	14	M16	370	230	
	40 - 63	45 k6	48.5		M16			
	71 - 112	38 k6	41		M12			
08	22.5 - 35.5	55 m6	59	16	M20	416	160	256
	40 - 63	50 k6	53.5		M16			
	71 - 112	42 k6	45		M12			
09	22.5 - 35.5	60 m6	64	18	M20	426	160	266
	40 - 63	55 m6	59		M20			
	71 - 112	45 k6	48.5		M16			256

(1) Refer to page 22 for tolerance information
 (2) British Pipe Threads

Dimensions subject to change without notice
 Weights and oil quantities are guide values only

7.11. MC2RE..

7.11.1. 2-Stage Bevel Helical Gear Unit - Upright Mounting



Inch Dimensions

Size	Housing Dimensions in inch								
	EB h11 ⁽¹⁾	E	H	J h11 ⁽¹⁾	JE	KG	KJ	KL	KT
02	7.68	22.60	12.60	10.24	8.34	1.10	3.54	2.68	1.78
03	8.14	24.34	14.18	10.78	8.98	1.10	3.94	2.68	1.78
04	9.02	26.66	15.74	12.36	10.24	1.18	4.64	2.80	1.96
05	9.44	28.78	16.92	12.96	10.98	1.34	4.64	2.80	1.96
06	10.62	31.96	18.50	14.02	11.50	1.58	5.16	3.46	2.52
07	11.62	34.84	20.86	14.96	12.44	1.58	5.98	3.58	2.52
08	12.68	38.62	23.62	16.96	13.90	2.04	6.02	4.06	3.08
09	13.18	41.30	26.38	17.76	14.68	2.04	6.02	4.06	3.08

Size	Housing Dimensions in inch									
	L	LB	LE	LN	N	PH	S	SA	SB	SC
02	3.86	6.70	13.94	6.88	11.10	10.62	8.12	8.12	4.48	3.78
03	4.34	7.16	15.32	8.14	12.36	12.20	9.68	9.68	4.80	3.30
04	4.80	7.92	16.54	9.18	13.42	13.54	10.24	10.08	5.78	4.48
05	5.36	8.34	18.22	8.98	15.24	14.72	11.66	11.66	5.36	4.18
06	5.56	9.26	19.96	10.08	16.38	15.74	12.12	12.12	5.56	5.20
07	5.90	10.24	21.86	11.22	17.52	17.88	13.78	13.78	5.90	4.40
08	6.86	11.02	24.30	12.54	20.12	20.32	15.98	15.98	6.86	4.52
09	7.36	11.54	26.46	14.70	22.28	23.08	18.74	18.74	7.36	3.94

⁽¹⁾Refer to page 22 for tolerance information

(2)British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

Size	TM	TO	TP H9 ⁽¹⁾	Housing Dimensions in inch					
				TR/TX	TS	XA	XB	XC	XH
02	0.94	-	0.94	-	-	13.98	5.32	7.16	0.70
03	0.94	-	0.94	-	-	15.12	5.78	7.72	0.70
04	1.10	-	1.10	-	-	16.92	6.62	8.30	0.86
05	1.10	-	1.10	-	-	18.12	7.16	8.90	0.86
06	1.30	-	1.30	-	-	20.66	7.68	9.76	0.86
07	1.30	-	1.30	-	-	22.08	8.62	10.32	0.86
08	1.54	-	1.54	-	-	23.50	9.22	11.38	0.86
09	1.54	-	1.54	-	-	25.66	9.72	12.16	0.86

Size	HSS Dimensions in inch							Weight lb	Oil Capacity gallons
	U1	Y1	V1	Ød1	b1	h1	m1		
02	20.04	-	-	-	-	-	-	487.30	7.92
03	21.62	-	-	-	-	-	-	617.40	9.50
04	23.62	-	-	-	-	-	-	840.10	12.14
05	25.78	-	-	-	-	-	-	1113.52	17.16
06	27.48	-	-	-	-	-	-	1356.08	21.12
07	29.60	-	-	-	-	-	-	1748.56	30.36
08	32.36	-	-	-	-	-	-	2326.28	29.04
09	36.26	-	-	-	-	-	-	2932.66	35.64

Metric Dimensions

Size	Housing Dimensions in mm								
	EB h11 ⁽¹⁾	E	H	J h11 ⁽¹⁾	JE	KG	KJ	KL	KT
02	195	574	320	260	212	28	90	68	45
03	207	618	360	274	228	28	100	68	45
04	229	677	400	314	260	30	118	71	50
05	240	731	430	329	279	34	118	71	50
06	270	812	470	356	292	40	131	88	64
07	295	885	530	380	316	40	152	91	64
08	322	981	600	431	353	52	153	103	78
09	335	1049	670	451	373	52	153	103	78

Size	Housing Dimensions in mm									
	L	LB	LE	LN	N	PH	S	SA	SB	SC
02	98	170	354	175	282	270	206	206	114	96
03	110	182	389	207	314	310	246	246	122	84
04	122	201	420	233	341	344	260	256	147	114
05	136	212	463	228	387	374	296	296	136	106
06	141	235	507	256	416	400	308	308	141	132
07	150	260	555	285	445	454	350	350	150	112
08	174	280	617	318.5	511	516	406	406	174	115
09	187	293	672	373.5	566	586	476	476	187	100

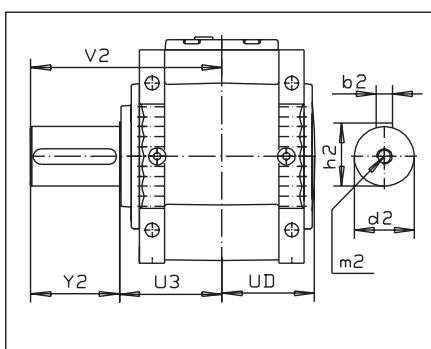
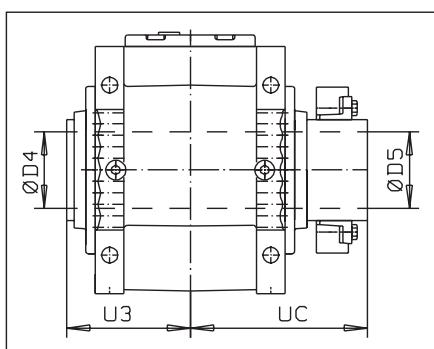
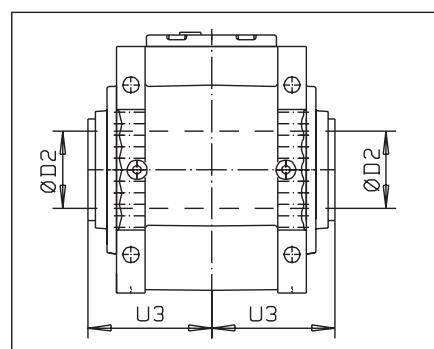
Size	Housing Dimensions in mm								
	TM	TO ⁽²⁾	TP H9 ⁽¹⁾	TR/TX	TS	XA	XB	XC	XH
02	24	R3/4	24	M20 x 35	M16 x 32	355	135	182	18
03	24	R3/4	24	M20 x 35	M16 x 32	384	147	196	18
04	28	R3/4	28	M24 x 42	M16 x 32	430	168	211	22
05	28	R3/4	28	M24 x 42	M20 x 35	460	182	226	22
06	33	R1	33	M30 x 53	M20 x 35	525	195	248	22
07	33	R1	33	M30 x 53	M24 x 42	561	219	262	22
08	39	R1	39	M30 x 53	M24 x 42	597	234	289	22
09	39	R1	39	M30 x 53	M30 x 53	652	247	309	22

Size	HSS Dimensions in mm							Weight kg	Oil Capacity liters
	U1	Y1	V1	Ød1 ⁽¹⁾	b1 h9 ⁽¹⁾	h1	m1		
02	509	130	639	50 k6	14	53.5	M16	221	30
03	549	135	684	55 m6	16	59	M20	280	36
04	600	135	735	60 m6	18	64	M20	381	46
05	655	138	793	65 m6	18	69	M20	505	65
06	698	140	838	70 m6	20	74.5	M20	615	80
07	752	160	912	75 m6	20	79.5	M20	793	115
08	822	160	982	85 m6	22	90	M20	1055	110
09	921	195	1116	90 m6	25	95	M24	1330	135

⁽¹⁾Refer to page 22 for tolerance information⁽²⁾British Pipe Threads

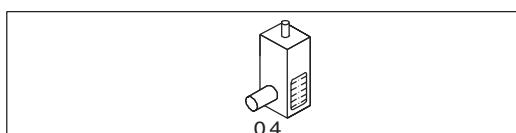
Dimensions subject to change without notice

Weights and oil quantities are guide values only

LSS Types**Solid Shaft****Hollow Shaft
Shrink Disk****Hollow Shaft
Key Connection**

Size	LSS Dimensions in inch											
	d2	b2	h2	m2	Y2	V2	U3	UC	UD	ØD2	ØD4	ØD5
02	-	-	-	-	-	11.96	6.46	10.12	6.14	-	-	-
03	-	-	-	-	-	13.42	6.74	10.78	6.42	-	-	-
04	-	-	-	-	-	15.86	7.60	11.88	7.36	-	-	-
05	-	-	-	-	-	16.18	7.92	12.24	7.60	-	-	-
06	-	-	-	-	-	17.08	8.42	13.04	8.26	-	-	-
07	-	-	-	-	-	18.82	8.98	13.94	8.82	-	-	-
08	-	-	-	-	-	19.84	10.00	15.62	9.68	-	-	-
09	-	-	-	-	-	22.60	10.40	16.02	10.32	-	-	-

Size	LSS Dimensions in mm											
	d2 m6 ⁽¹⁾	b2 h9 ⁽¹⁾	h2	m2	Y2	V2	U3	UC	UD	ØD2 js7/H8 ⁽¹⁾	ØD4 js6/H7 ⁽¹⁾	ØD5 h6/H7 ⁽¹⁾
02	80	22	85	M20	140	304	164	257	156	80	86	85
03	100	28	106	M24	170	341	171	274	163	95	101	100
04	105	28	111	M24	210	403	193	302	187	105	111	110
05	120	32	127	M24	210	411	201	311	193	115	121	120
06	130	32	137	M24	220	434	214	331	210	125	131	130
07	140	36	148	M24	250	478	228	354	224	135	141	140
08	160	40	169	M24	250	504	254	397	246	150	151	150
09	170	40	179	M24	310	574	264	407	262	165	166	165

Shaft Positions

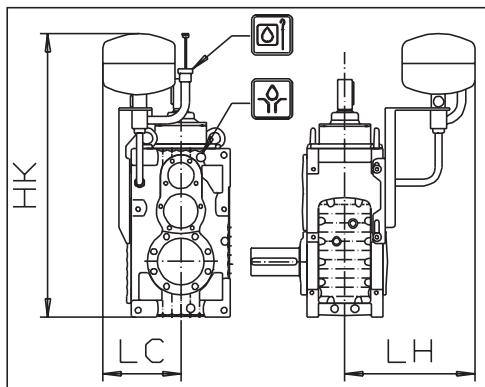
⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

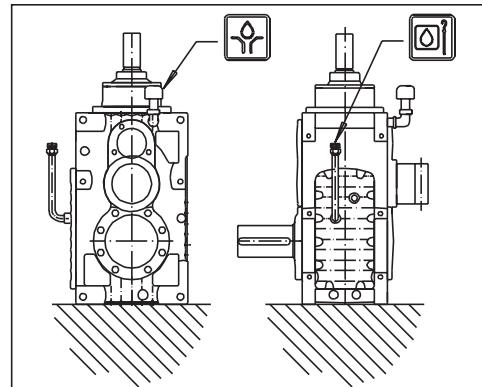
Accessory Dimensions

Accessory Dimensions in inch			
Size	HK	LC	LH
02	41.34	12.20	21.26
03	44.10	13.00	21.66
04	46.86	13.78	22.84
05	49.22	14.18	23.22
06	53.14	14.96	22.84
07	57.08	16.14	23.22
08	61.02	17.72	23.22
09	63.78	18.90	23.62

Accessory Dimensions in mm			
Size	HK	LC	LH
02	1050	310	540
03	1120	330	550
04	1190	350	580
05	1250	360	590
06	1350	380	580
07	1450	410	590
08	1550	450	590
09	1620	480	600



Expansions Tank



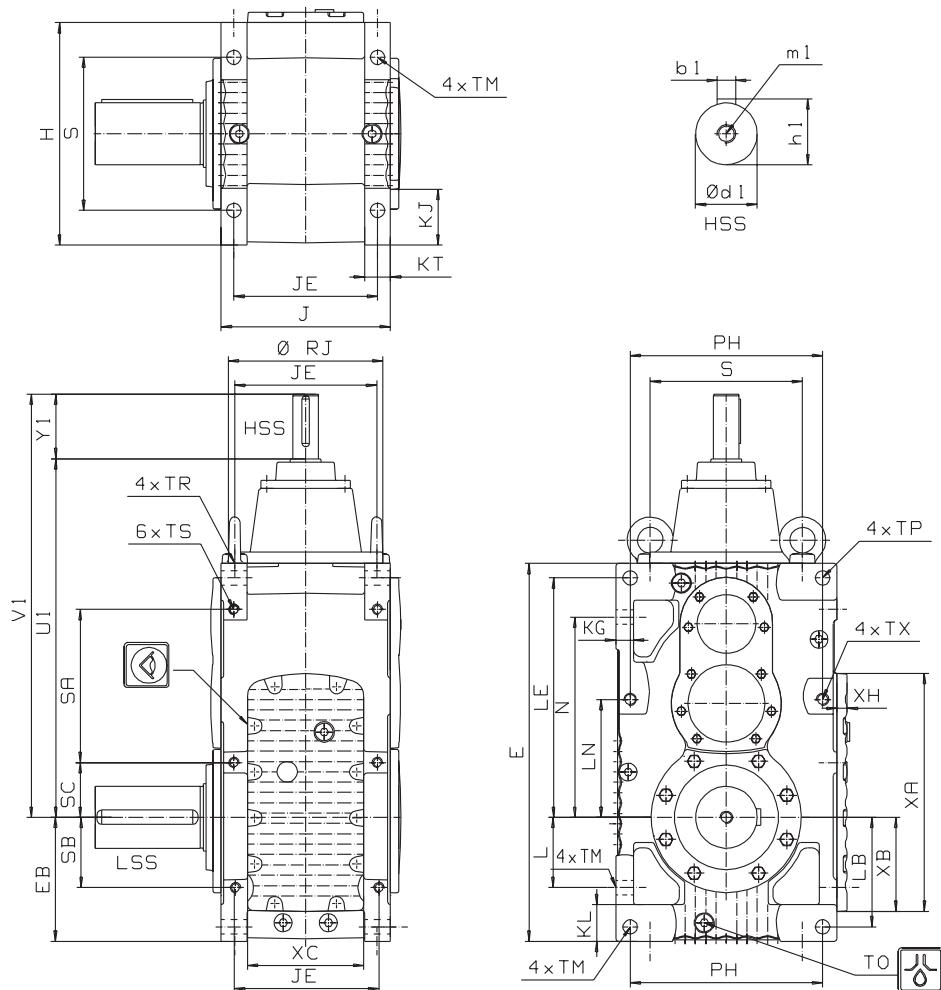
Shaft End Pump

⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

7.12. MC3RE..

7.12.1. 3-Stage Bevel Helical Gear Unit - Upright Mounting



Inch Dimensions

Size	Housing Dimensions in inch								
	EB h11 ⁽¹⁾	E	H	J h11 ⁽¹⁾	JE	KG	KJ	KL	KT
02	7.68	22.60	12.60	10.24	8.34	1.10	3.54	2.68	1.78
03	8.14	24.34	14.18	10.78	8.98	1.10	3.94	2.68	1.78
04	9.02	26.66	15.74	12.36	10.24	1.18	4.64	2.80	1.96
05	9.44	28.78	16.92	12.96	10.98	1.34	4.64	2.80	1.96
06	10.62	31.96	18.50	14.02	11.50	1.58	5.16	3.46	2.52
07	11.62	34.84	20.86	14.96	12.44	1.58	5.98	3.58	2.52
08	12.68	38.62	23.62	16.96	13.90	2.04	6.02	4.06	3.08
09	13.18	41.30	26.38	17.76	14.68	2.04	6.02	4.06	3.08

Size	Housing Dimensions in inch									
	L	LB	LE	LN	N	PH	S	SA	SB	SC
02	3.86	6.70	13.94	6.88	11.10	10.62	8.12	8.12	4.48	3.78
03	4.34	7.16	15.32	8.14	12.36	12.20	9.68	9.68	4.80	3.30
04	4.80	7.92	16.54	9.18	13.42	13.54	10.24	10.08	5.78	4.48
05	5.36	8.34	18.22	8.98	15.24	14.72	11.66	11.66	5.36	4.18
06	5.56	9.26	19.96	10.08	16.26	15.74	12.12	12.12	5.56	5.20
07	5.90	10.24	21.86	11.22	17.52	17.88	13.78	13.78	5.90	4.40
08	6.86	11.02	24.30	12.52	20.12	20.32	15.98	15.98	6.86	4.52
09	7.36	11.54	26.46	14.68	22.28	23.08	18.74	18.74	7.36	3.94

⁽¹⁾Refer to page 22 for tolerance information

(2)British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

Size	TM	TO	TP H9 ⁽¹⁾	Housing Dimensions in inch								XB	XC	XH
				TR/TX	TS	XA								
02	0.94	-	0.94	-	-	13.98	5.32	7.16	0.70					
03	0.94	-	0.94	-	-	15.12	5.78	7.72	0.70					
04	1.10	-	1.10	-	-	16.92	6.62	8.30	0.86					
05	1.10	-	1.10	-	-	18.12	7.16	8.90	0.86					
06	1.30	-	1.30	-	-	20.66	7.68	9.76	0.86					
07	1.30	-	1.30	-	-	22.08	8.62	10.32	0.86					
08	1.54	-	1.54	-	-	23.50	9.22	11.38	0.86					
09	1.54	-	1.54	-	-	25.66	9.72	12.16	0.86					

Size	U1	Y1	V1	HSS Dimensions in inch								Weight lb	Oil Capacity gallons	
				i = 14-63			i = 71-90			i = 100-112				
02	20.98	-	24.92	-	-	-	-	-	-	-	-	-	482.90	7.92
03	23.00	-	27.40	-	-	-	-	-	-	-	-	-	615.20	9.50
04	25.28	-	30.00	-	-	-	-	-	-	-	-	-	842.32	12.14
05	27.28	-	32.20	-	-	-	-	-	-	-	-	-	1087.06	17.16
06	29.84	-	34.96	-	-	-	-	-	-	-	-	-	1325.20	21.12
07	32.04	-	37.36	-	-	-	-	-	-	-	-	-	1717.70	30.36
08	35.04	-	40.36	-	-	-	-	-	-	-	-	-	2286.58	29.04
09	38.14	-	43.66	-	-	-	-	-	-	-	-	-	2864.30	35.64

Metric Dimensions

Size	EB h11 ⁽¹⁾	E	H	Housing Dimensions in mm				KG	KJ	KL	KT
				J h11 ⁽¹⁾	JE						
02	195	574	320	260	212	28	90	68	45		
03	207	618	360	274	228	28	100	68	45		
04	229	677	400	314	260	30	118	71	50		
05	240	731	430	329	279	34	118	71	50		
06	270	812	470	356	292	40	131	88	64		
07	295	885	530	380	316	40	152	91	64		
08	322	981	600	431	353	52	153	103	78		
09	335	1049	670	451	373	52	153	103	78		

Size	L	LB	LE	LN	N	PH	S	SA	SB	SC	Housing Dimensions in mm			
02	98	170	354	175	282	270	206	206	114	96				
03	110	182	389	207	314	310	246	246	122	84				
04	122	201	420	233	341	344	260	260	147	114				
05	136	212	463	228	387	374	296	296	136	106				
06	141	235	507	256	413	400	308	308	141	132				
07	150	260	555	285	445	454	350	350	150	112				
08	174	280	617	318	511	516	406	406	174	115				
09	187	293	672	373	566	586	476	476	187	100				

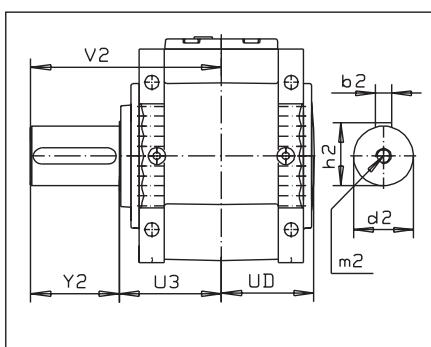
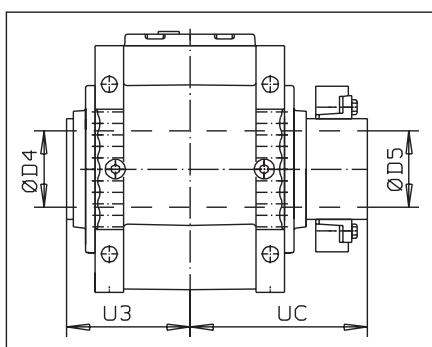
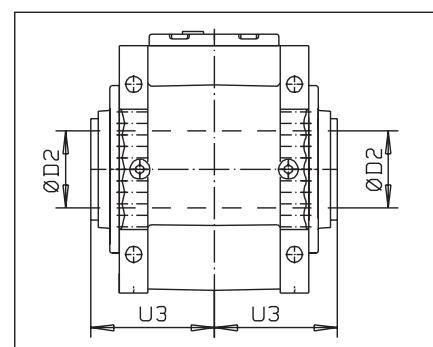
Size	TM	TO ⁽²⁾	TP H9 ⁽¹⁾	Housing Dimensions in mm				XB	XC	XH
				TR/TX	TS	XA				
02	24	R3/4	24	M20 x 35	M16 x 32	355	135	182	18	
03	24	R3/4	24	M20 x 35	M16 x 32	384	147	196	18	
04	28	R3/4	28	M24 x 42	M16 x 32	430	168	211	22	
05	28	R3/4	28	M24 x 42	M20 x 35	460	182	226	22	
06	33	R1	33	M30 x 53	M20 x 35	525	195	248	22	
07	33	R1	33	M30 x 53	M24 x 42	561	219	262	22	
08	39	R1	39	M30 x 53	M24 x 42	597	234	289	22	
09	39	R1	39	M30 x 53	M30 x 53	652	247	309	22	

Size	U1	Y1	V1	HSS Dimensions in mm				Ød1 k6 ⁽¹⁾	b1 h9 ⁽¹⁾	h1	m1	Weight kg	Oil Capacity liters		
				i = 14-63			i = 71-90			i = 100-112					
02	533	100	633	35 k6	10	38	M12	30 k6	8	33	M10	25	8	219	30
03	584	112	696	40 k6	12	43	M16	30 k6	8	33	M10	25	8	279	36
04	642	120	762	42 k6	12	45	M16	35 k6	10	38	M12	25	8	382	46
05	693	125	818	50 k6	14	53.5	M16	40 k6	12	43	M16	30	8	493	65
06	758	130	888	50 k6	14	53.5	M16	45 k6	14	48.5	M16	35	10	601	80
07	814	135	949	60 m6	18	64	M20	45 k6	14	48.5	M16	40	12	779	115
08	890	135	1025	60 m6	18	64	M20	55 m6	16	59	M20	40	12	1037	110
09	969	140	1109	70 m6	20	74.5	M20	60 m6	18	64	M20	45	14	1299	135

⁽¹⁾Refer to page 22 for tolerance information⁽²⁾British Pipe Threads

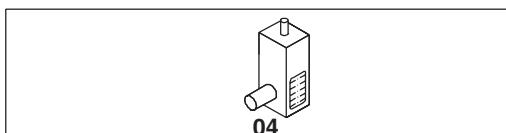
Dimensions subject to change without notice

Weights and oil quantities are guide values only

LSS Types**Solid Shaft****Hollow Shaft
Shrink Disk****Hollow Shaft
Key Connection**

Size	LSS Dimensions in inch											
	d2	b2	h2	m2	Y2	V2	U3	UC	UD	ØD2	ØD4	ØD5
02	-	-	-	-	-	11.96	6.46	10.12	6.14	-	-	-
03	-	-	-	-	-	13.42	6.74	10.78	6.42	-	-	-
04	-	-	-	-	-	15.86	7.60	11.88	7.36	-	-	-
05	-	-	-	-	-	16.18	7.92	12.24	7.60	-	-	-
06	-	-	-	-	-	17.08	8.42	13.04	8.26	-	-	-
07	-	-	-	-	-	18.82	8.98	13.94	8.82	-	-	-
08	-	-	-	-	-	19.84	10.00	15.62	9.68	-	-	-
09	-	-	-	-	-	22.60	10.40	16.02	10.32	-	-	-

Size	LSS Dimensions in mm											
	d2 m6 ⁽¹⁾	b2 h9 ⁽¹⁾	h2	m2	Y2	V2	U3	UC	UD	ØD2 js7/H8 ⁽¹⁾	ØD4 js6/H7 ⁽¹⁾	ØD5 h6/H7 ⁽¹⁾
02	80	22	85	M20	140	304	164	257	156	80	86	85
03	100	28	106	M24	170	341	171	274	163	95	101	100
04	105	28	111	M24	210	403	193	302	187	105	111	110
05	120	32	127	M24	210	411	201	311	193	115	121	120
06	130	32	137	M24	220	434	214	331	210	125	131	130
07	140	36	148	M24	250	478	228	354	224	135	141	140
08	160	40	169	M24	250	504	254	397	246	150	151	150
09	170	40	179	M24	310	574	264	407	262	165	166	165

Shaft Positions

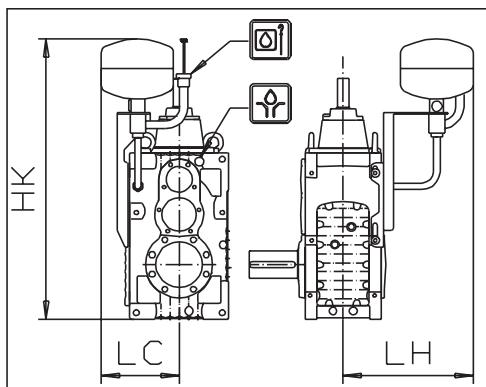
⁽¹⁾Refer to page 22 for tolerance information
⁽²⁾British Pipe Threads

Dimensions subject to change without notice
Weights and oil quantities are guide values only

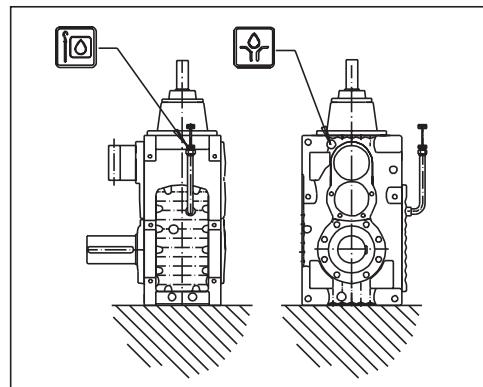
Accessory Dimensions

Accessory Dimensions in inch			
Size	HK	LC	LH
02	41.34	12.20	21.26
03	44.10	13.00	21.66
04	46.86	13.78	22.84
05	49.22	14.18	23.22
06	53.14	14.96	22.84
07	57.08	16.14	23.22
08	61.02	17.72	23.22
09	63.78	18.90	23.62

Accessory Dimensions in mm			
Size	HK	LC	LH
02	1050	310	540
03	1120	330	550
04	1190	350	580
05	1250	360	590
06	1350	380	580
07	1450	410	590
08	1550	450	590
09	1620	480	600



Expansions Tank

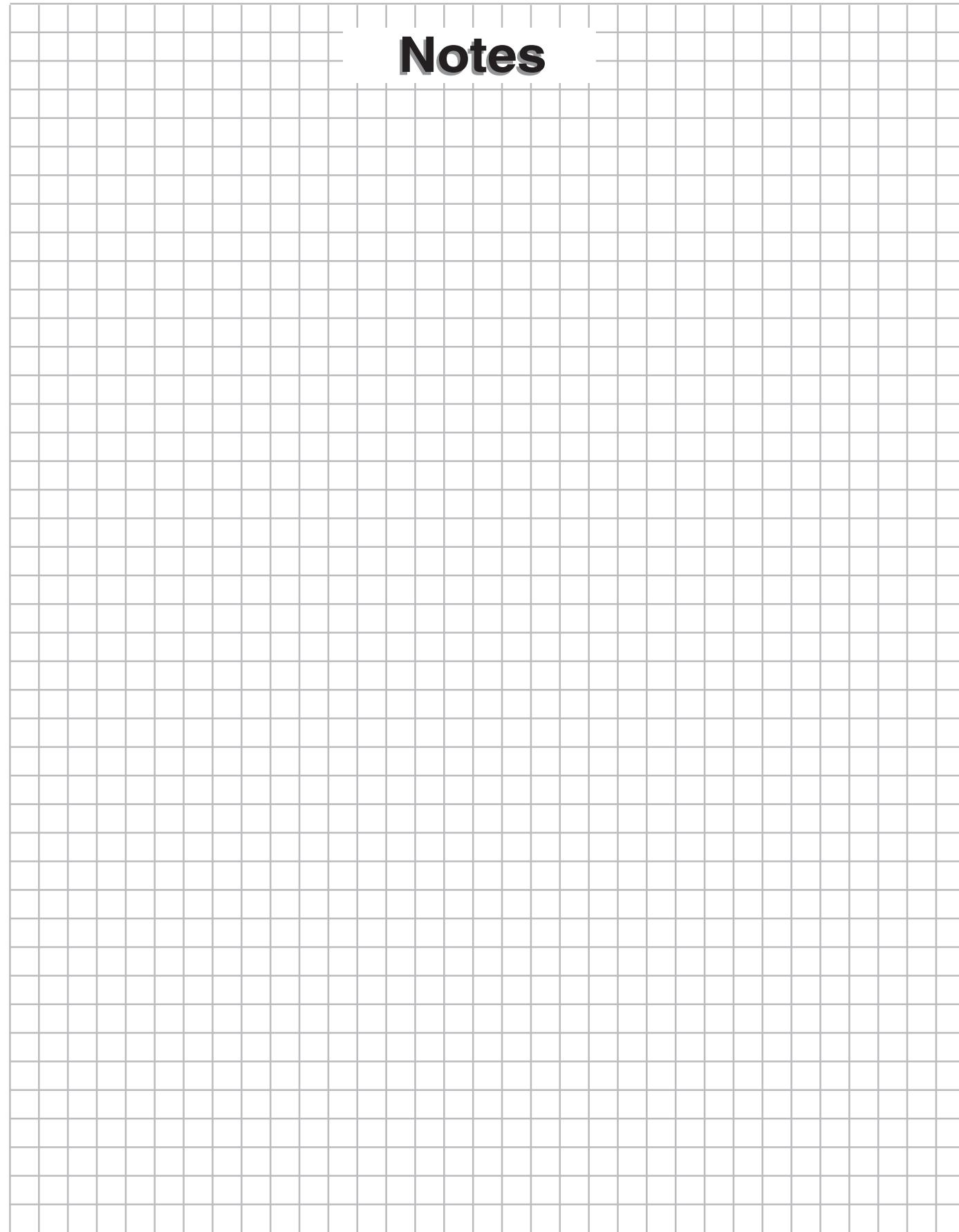


Shaft End Pump

(1) Refer to page 22 for tolerance information
 (2) British Pipe Threads

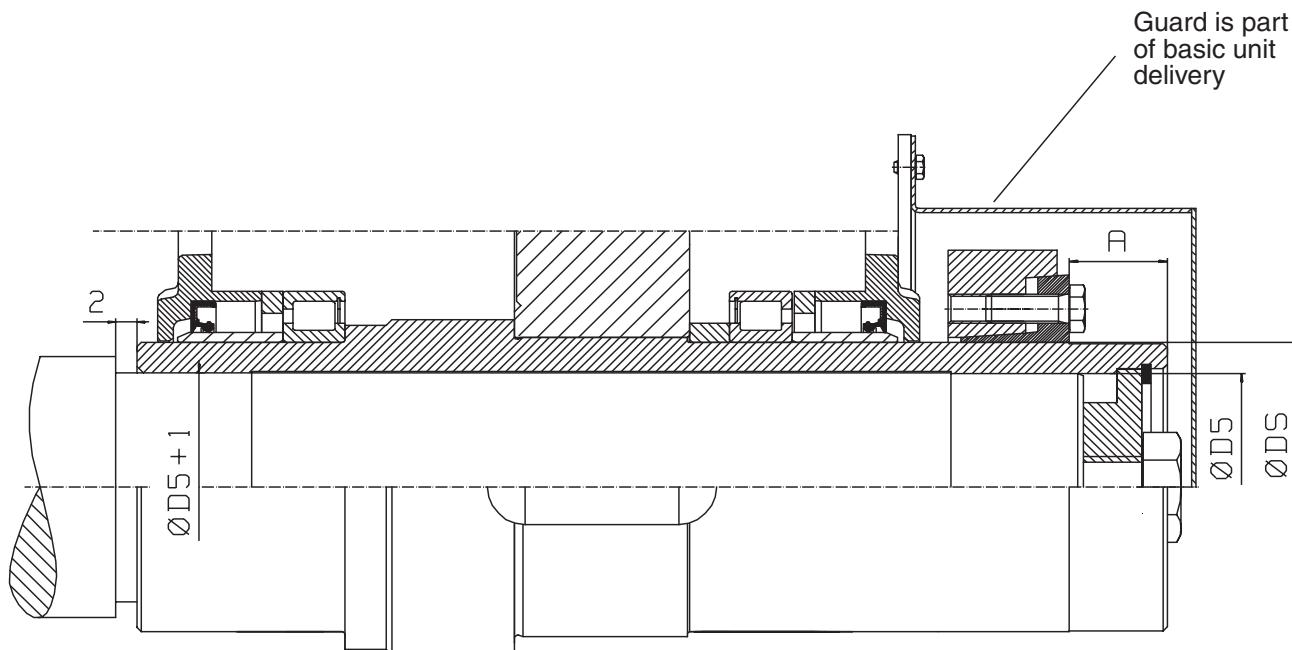
Dimensions subject to change without notice
 Weights and oil quantities are guide values only

Notes



8. Accessories

8.1. Shrink Disk



Shrink disc is located on the opposite side of the gear unit in relation to driven machine.

Gear Unit Size	Shrink Disc Dimensions				
	Type 3171 Shrink Disc Size	ØDS mm	ØD5 mm	A mm	Ma ⁽¹⁾ Nm
02	110	110	85	42	100
03	125	125	100	48	100
04	140	140	110	48	160
05	155	150	120	45	160
06	165	165	130	45	250
07	175	175	140	54	250
08	185	185	150	54	250
09	200	200	165	54	250

⁽¹⁾Tightening torque of shrink disc screws.

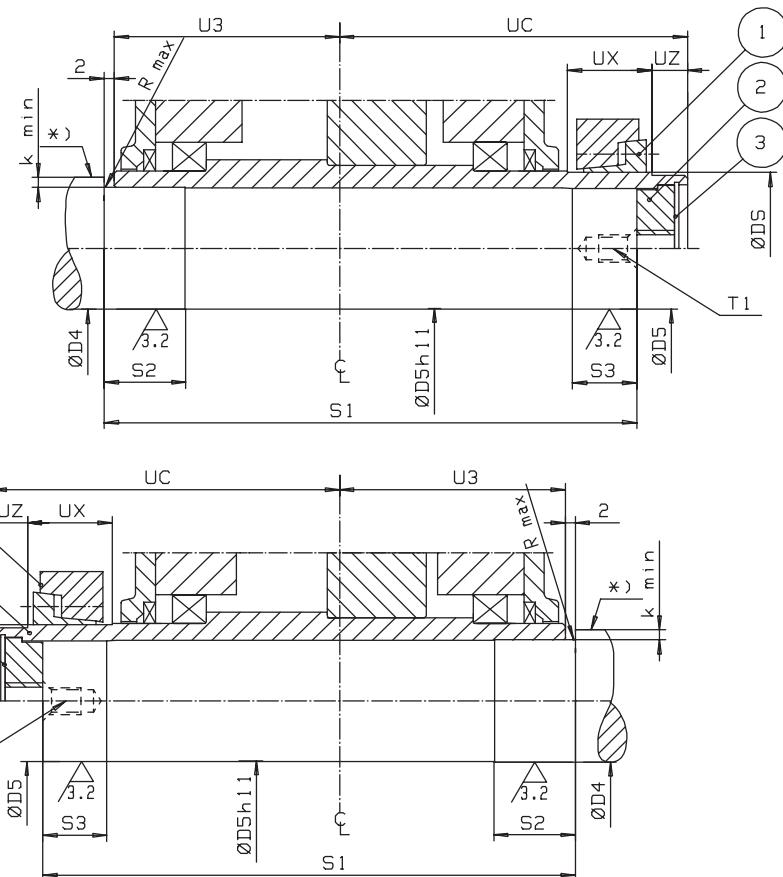
Information to be given in an order:

- shrink disc type
- shrink disc size
- shrink disc bore ØDS

Example: 3171 - 155 - 150

8.1.1. Hollow Shaft Bore and Driven Shaft End for Hollow Shaft Gear Units

For all mounting positions. Left and right handed hollow shafts are symmetrical regarding to center line.



Item 1: Shrink Disk

Item 2: End Plate

Item 3: Circlip

*) Shaft shoulder (not necessary)

8.1.1.1. For minor external axial and/or radial forces only.

If noticeable external axial and/or radial forces exist, please contact nearest SEW-Eurodrive office.

FOR ALL GEAR UNIT TYPES

Gear Unit Size	Dimensions in mm												
	ØDS	ØD4 js6/H7**	ØD5**	S1	S2	S3	k min	r max	U3	UC	UZ	UX	T1
02	110	86	85 h6/H7	386	45	53	6	3	164	257	40	54	M24 x 45
03	125	101	100 h6/H7	407	52	58	6	3	171	274	47	55	M24 x 45
04	140	111	110 h6/H7	457	57	64	6	3	193	302	47	63	M24 x 45
05	150	121	120 h6/H7	473	62	68	6	3	201	311	44	67	M24 x 45
06	165	131	130 h6/H7	507	67	72	6	4	214	331	44	72	M24 x 45
07	175	141	140 h6/H7	534	72	72	7	4	228	354	53	72	M30 x 60
08	185	151	150 h6/H7	602	77	88	7	5	254	397	54	88	M30 x 60
09	200	166	165 g6/H7	622	85	87	7	5	264	407	54	90	M30 x 60

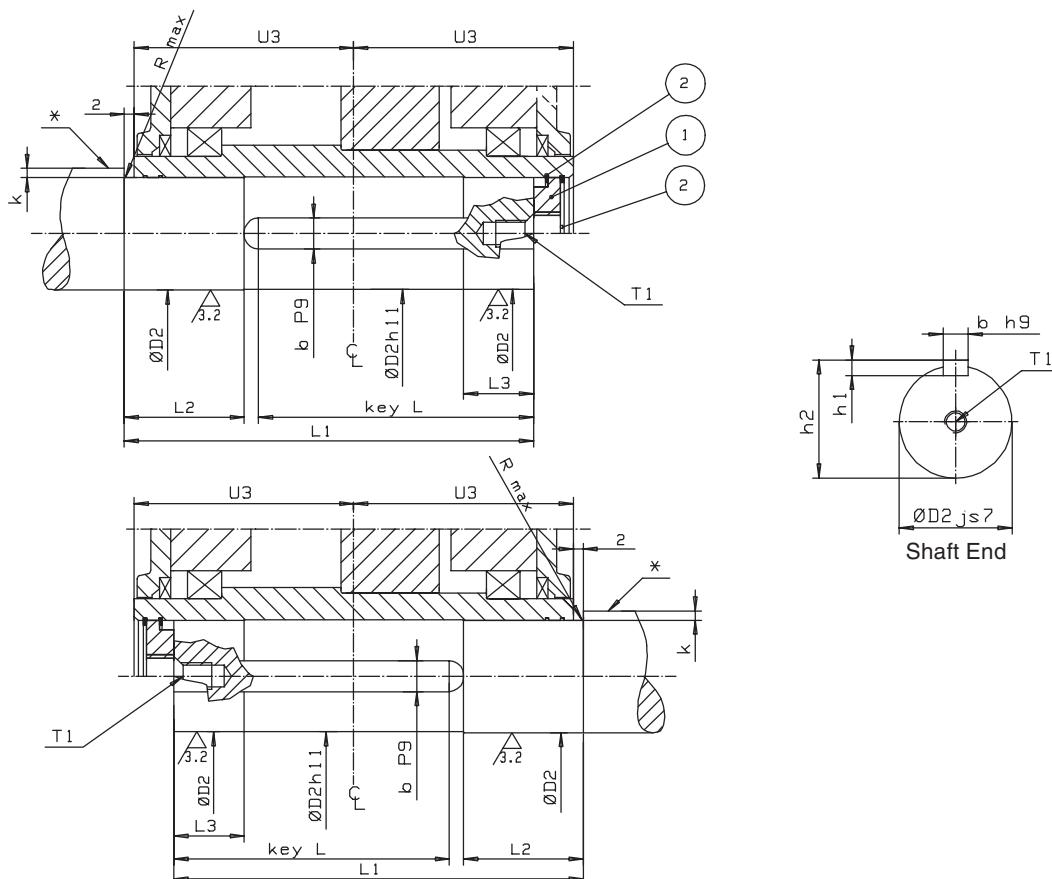
**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

8.2. Key Connection

8.2.1. Hollow Shaft Bore and Driven Shaft End for Hollow Shaft Gear Units

For all mounting positions. Hollow shaft bore is symmetrical regarding to center line.



Item 1: End Plate

Item 2: Circlip

*) Shaft shoulder required for through going shaft and with noticeable external axial forces only.

8.2.1.1. For minor external axial and/or radial forces only.

If noticeable external axial and/or radial forces exist, please contact nearest SEW-Eurodrive office.

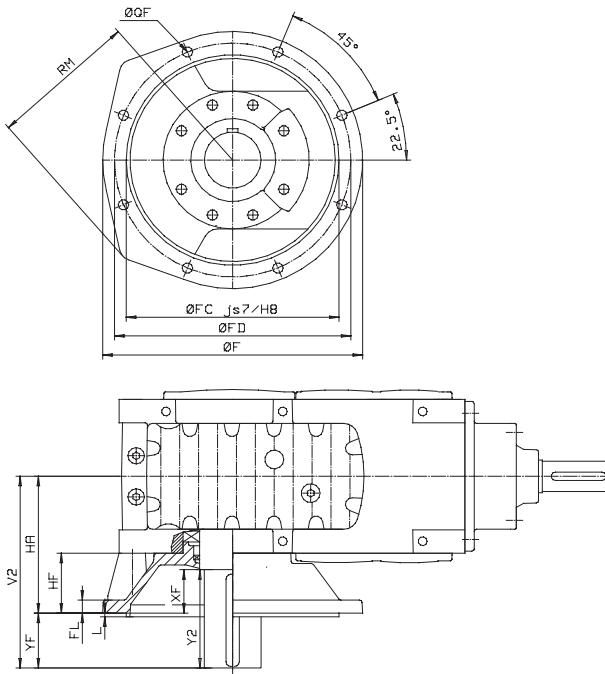
FOR ALL GEAR UNIT TYPES

Gear Unit Size	$\emptyset D2$ js7/H8**	Dimensions in mm											
		L1	L2	L3	Key L	U3	T1	b	h1	h2	k min	r max	
02	80	290	82	40	196	164	M24 x 45	22	14	85	5	3	
03	95	303	91	48	199	171	M24 x 45	25	14	100	5	3	
04	105	346	96	52	236	193	M24 x 45	28	16	111	5	3	
05	115	361	101	57	244	201	M24 x 45	32	18	122	5	3	
06	125	388	107	63	265	214	M24 x 45	32	18	132	6	4	
07	135	409	118	67	273	228	M30 x 60	36	20	143	6	4	
08	150	460	126	75	316	254	M30 x 60	36	20	158	7	5	
09	165	480	133	82	327	264	M30 x 60	40	22	174	7	5	

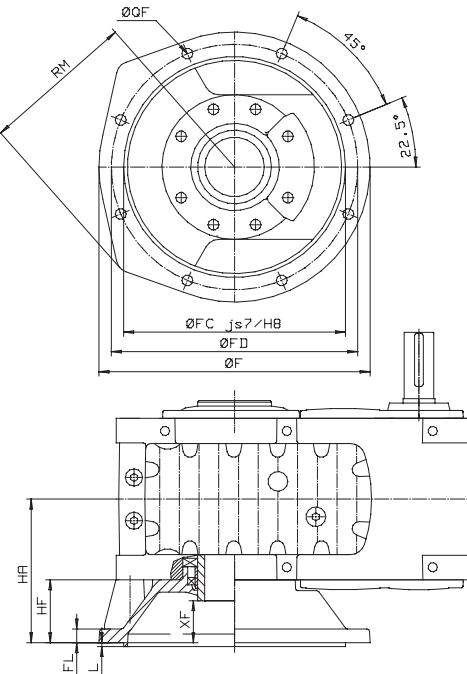
**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

8.2. Mounting Flange



Solid Shaft LSS



Hollow Shaft LSS

Mounting Flange														
Gear Unit Size	ØF	ØFD	ØFC js7/H8 **	ØQF	L	FL	YF	Y2	XF	HF	V2	HA	RM	
02	440	400	350	18	5	22	74	140	66	100	304	230	237	
03	500	450	400	18	5	25	88	170	81	115	340	252	260	
04	500	450	400	18	6	25	126	210	84	120	403	277	293	
05	550	500	450	22	6	30	112	210	99	135	412	300	311	
06	600	550	500	22	7	30	113	220	107	143	434	321	337	
07	660	600	550	22	7	30	148	250	102	140	478	330	378	
08	730	680	620	27	7	35	139	250	112	150	505	366	421	
09	750	680	620	27	7	35	184	310	127	165	575	391	452	

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

8.3. Mounting Flange and Seal Arrangements

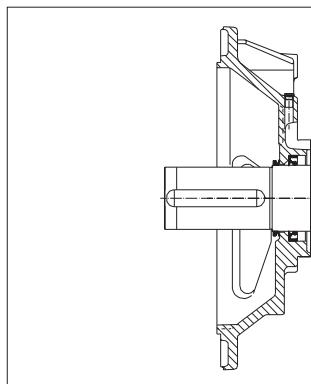


Figure 1

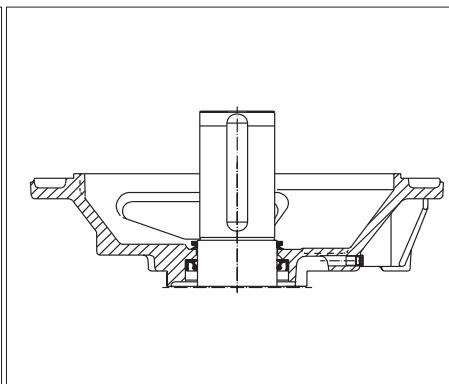


Figure 2

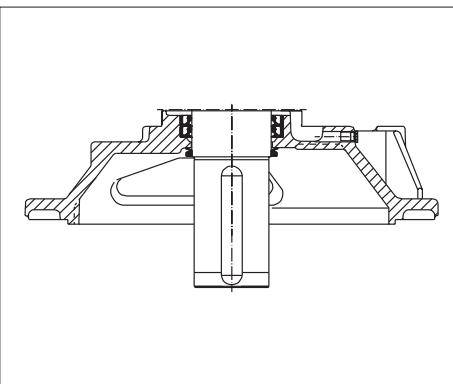


Figure 3

Solid Shaft (LSS)			
Sealing Solution	Mounting Position	Shaft Position	Figure Number
Single lip seal (NBR) with dust protection cover and V-ring	Horizontal	All	1
	Upright	All	1
	Vertical	14, 24, 04	2
Double lip seal (NBR)with dust protection cover and V-ring (NBR)	Vertical	13, 23, 03	3

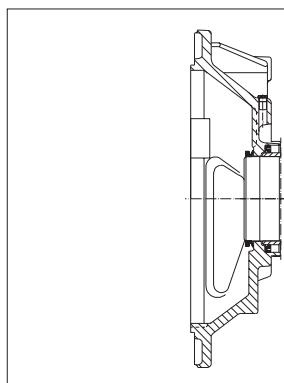


Figure 4

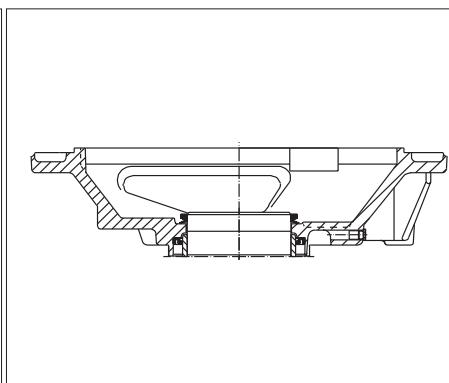


Figure 5

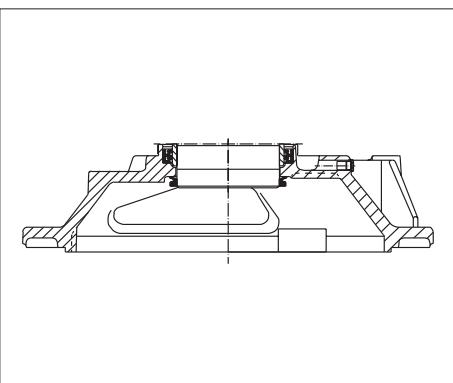


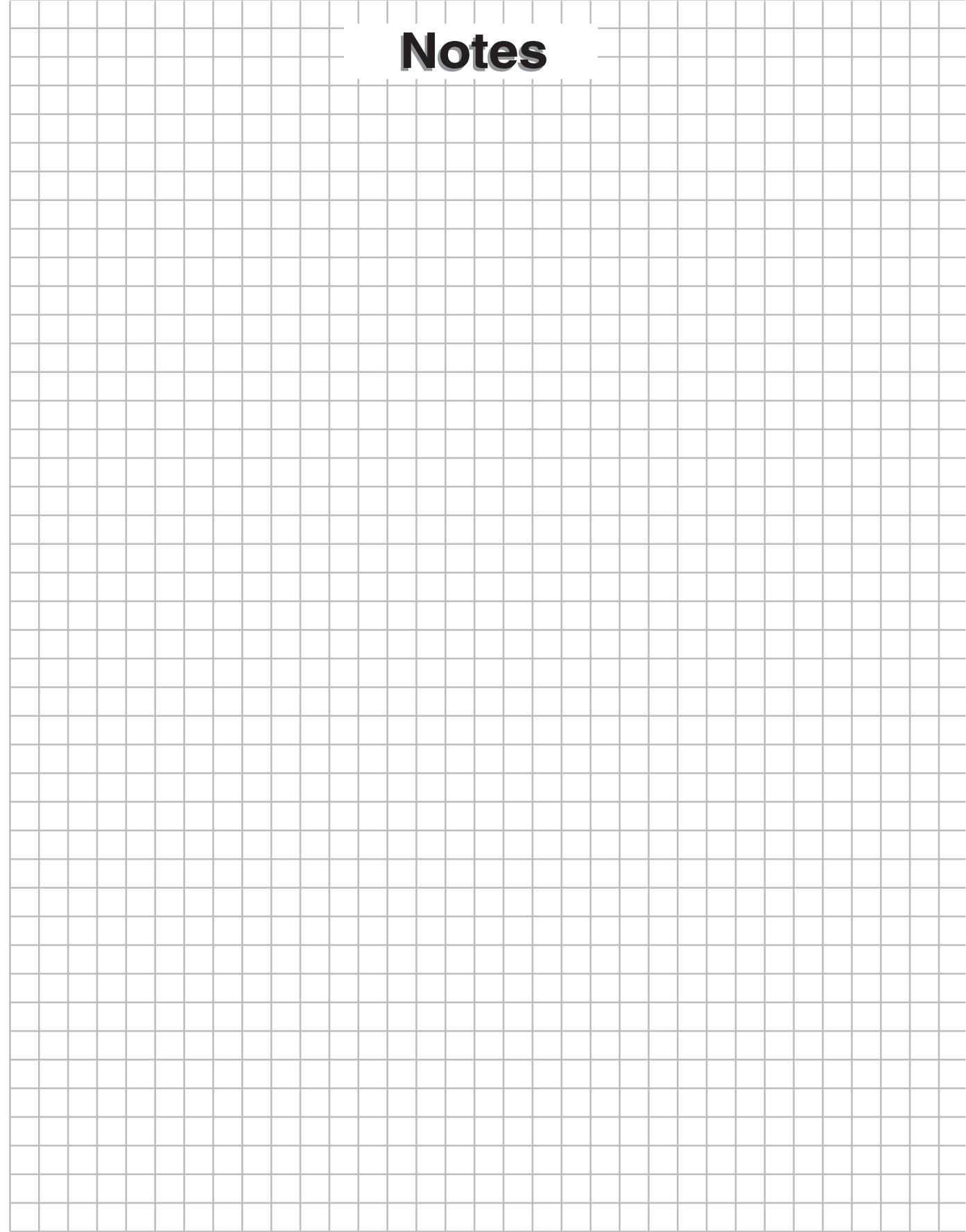
Figure 6

Hollow Shaft (LSS)			
Sealing Solution	Mounting Position	Shaft Position	Figure Number
Single lip seal (NBR) with dust protection cover and V-ring	Horizontal	All	4
	Upright	All	4
	Vertical	14, 24, 04	5
Double lip seal (NBR)with dust protection cover and V-ring (NBR)	Vertical	13, 23, 03	6

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

Notes



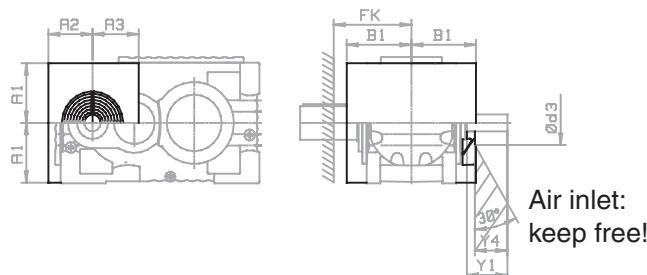
8.4. Fan

The cooling fan is used when the thermal rating of the basic gear unit is not sufficient. Rotation direction does not affect the operation of the fan. It can be mounted after unit is delivered.

8.4.1. Gear Unit Types MC..PL, MC..PE

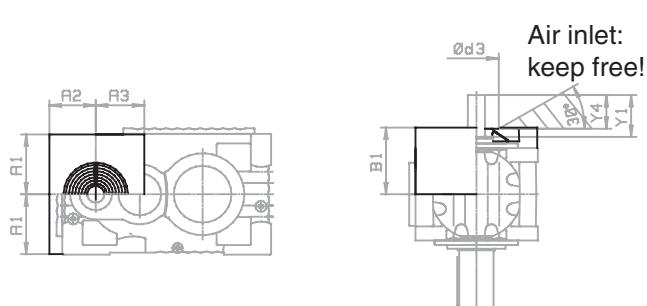
MC2PL/MC2PE, MC3PL/MC3PE							
Size	A1	A2	A3	B1	FK ⁽¹⁾	Y4	Y1
						Air Inlet Ød3	
02	158	160	140	210	233	90	120
03	178	180	140	215	255	90	120
04	198	195	165	235	275	100	130
05	213	205	170	245	295	105	135
06	232	225	205	260	308	110	140
07	263	250	230	270	330	110	140
08	298	275	230	295	355	130	160
09	335	280	230	305	365	130	160

⁽¹⁾ Dimension FK only for 2-stage Helical Gear Units. Two fans solution can be used only in 2-stage helical gear unit and only one fan for MC3PL/MC3PE according MC3PV.



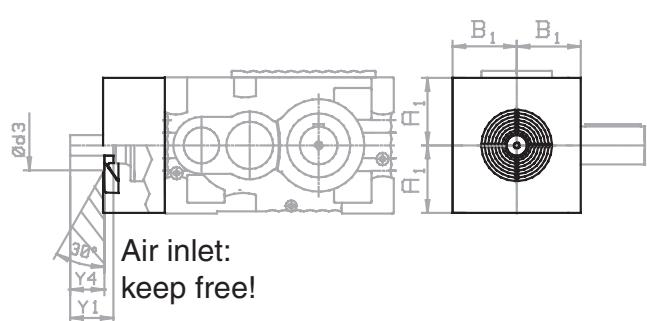
8.4.2. Gear Unit Types MC..PV

MC2PV, MC3PV							
Size	A1	A2	A3	B1	Y4	Y1	Air Inlet Ød3
02	158	160	140	210	90	120	131
03	178	180	140	215	90	120	131
04	198	195	165	235	100	130	156
05	213	205	170	245	105	135	156
06	232	225	205	260	110	140	198
07	263	250	230	270	110	140	226
08	298	275	230	295	130	160	226
09	335	280	230	305	130	160	226



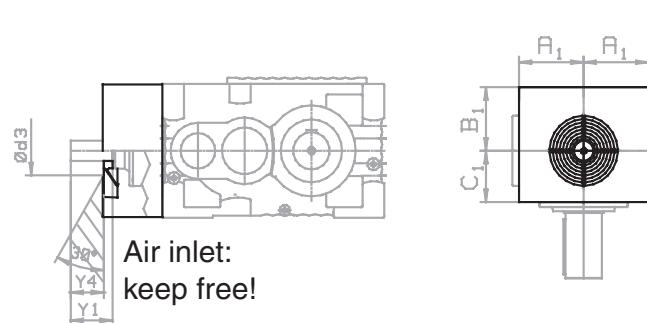
8.4.3. Gear Unit Types MC..RL, MC..RE

MC2RL/MC2RE, MC3RL/MC3RE							
Size	A1	B1	Y4	Y1	Y4	Y1	Air Inlet Ød3
			2-Stage	3-Stage	2-Stage	3-Stage	
02	158	160	100	130	70	100	109
03	178	165	105	135	82	112	131
04	198	185	105	135	90	120	131
05	213	195	108	138	95	125	156
06	232	220	110	140	100	130	156
07	262	230	130	160	105	135	156
08	297	255	130	160	105	135	198
09	332	265	165	195	110	140	226



8.4.4. Gear Unit Types MC..RV

MC2RV, MC3RV							
Size	A1	B1	C1	Y4	Y1	Y4	Y1
				2-Stage	3-Stage	2-Stage	3-Stage
02	180	160	125	100	130	70	100
03	200	165	133	105	135	82	112
04	220	185	152	105	135	90	120
05	235	195	159	108	138	95	125
06	260	220	172	110	140	100	130
07	290	230	184	130	160	105	135
08	325	255	210	130	160	105	135
09	360	265	219	165	195	110	140



^{**}Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

8.5. Shaft End Pump

For gear unit sizes 04 - 09 only.

8.5.1. Construction

Pump operates in both rotating directions, oil flows in one direction.

8.5.2. Selection

- Select required oil flow

Gear Unit Size	2 Stage Gear Unit dm ³ /min	3 Stage Gear Unit dm ³ /min
04	8	10
05	9	11
06	10	12
07	11	13
08	12	14
09	13	16

- Select pump size

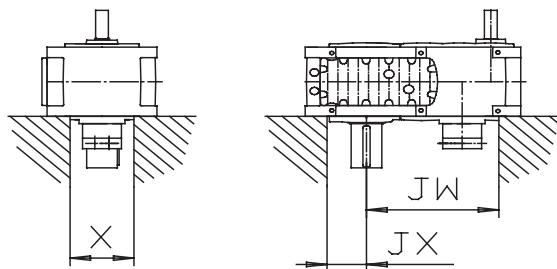
Pump Size	Pump Speed (rpm)				
	300	450	670	1000	1500
Oil Pump Output Q _P (dm ³ /min)					
SHP 7	2.2	3.3	4.9	7.3	11.0
SHP 12	3.6	5.4	8.0	12.0	18.0
SHP 18	5.6	8.4	12.5	18.7	28.0
SHP 29	8.8	13.2	19.7	29.3	44.0
SHP 47	13.0	19.5	29.0	43.3	65.0

Note: When the pump is not located on HSS (MC3P.., MC2R.., and MC3R..), contact SEW-Eurodrive for correct pump speed selection.

Shaft end pump for gear units with vertical LSS - Shaft end pump with external piping is a standard construction when pressure lubrication is needed. Shaft end pump is used when the allowed rotating speed for bath lubrication is exceeded. When designing foundation construction for gear unit, adequate space must be reserved for the shaft end pump.

8.5.3. Foundation for Vertical LSS Gear Units (V)

Gear Unit Size	MC2PV.., MC2RV.., MC3RV..			MC3PV..		
	X	JX	JW	X	JX	JW
04	250	162	380	250	162	488
05	250	169	420	250	169	532
06	250	182	454	250	182	574
07	250	204	499	250	204	629
08	316	219	556	316	219	696
09	386	232	611	386	232	765



Information to be given in an order:

-pump size

Example: **SHP12**

Standard pump and shaft position combinations

		Shaft Positions		
	23	13 ⁽¹⁾	24 ⁽¹⁾	14
MC2P				
Solid shaft				
Hollow shaft with keyway				
Hollow shaft with shrink disk				
MC3P				
Solid shaft				
Hollow shaft with keyway				
Hollow shaft with shrink disk				

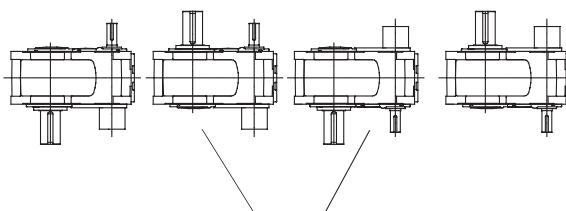
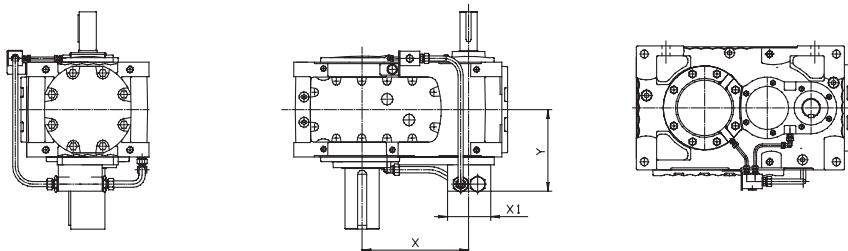
	Shaft Positions		Pump Side - Opposite Driven Machine Side ⁽²⁾		
	Pump Side - Driven Machine Side	3	4	3	4
MC2R					
Solid shaft					
MC2R					
Hollow shaft with keyway					
MC2R					
Hollow shaft with shrink disk					
MC3R					
Solid shaft					
Hollow shaft with keyway					
Hollow shaft with shrink disk					

⁽¹⁾ Maximum allowed external loads on LSS are lower.

⁽²⁾ Optional pump and shaft position combinations.

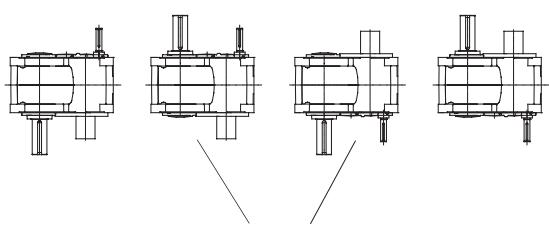
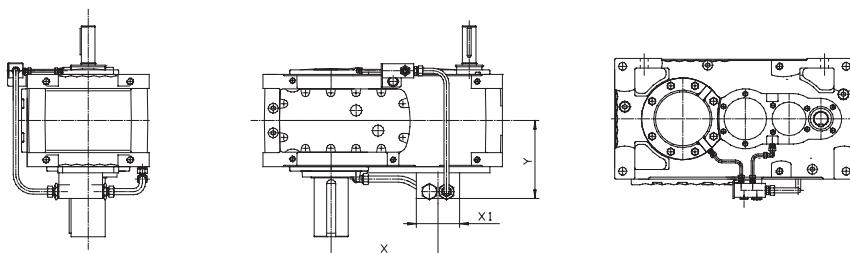
8.5.4. Oil Pump Assembly Dimensions for MC..PV

Oil pump locations and shaft positions, gear units with solid or hollow LSS.



Maximum allowable external loads on LSS are lower than usual.

MC2PV



Maximum allowable external loads on LSS are lower than usual.

MC3PV

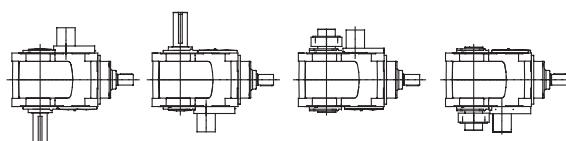
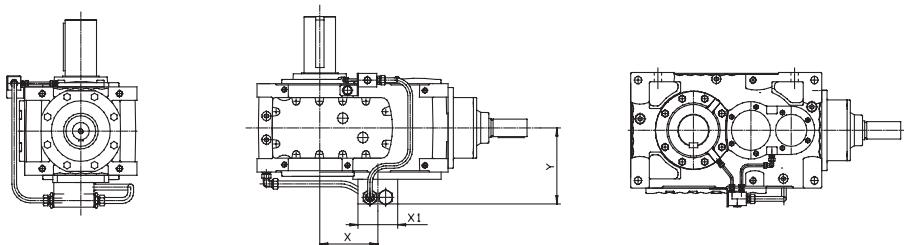
Gear Unit Size	Dimensions		
	X	X1	max Y
04	340	156	312
05	374	156	320
06	409	156	333
07	445	156	345
08	490	156	371
09	540	156	381

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

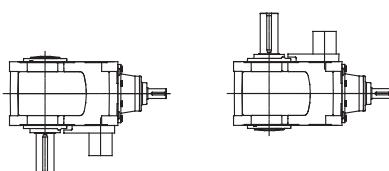
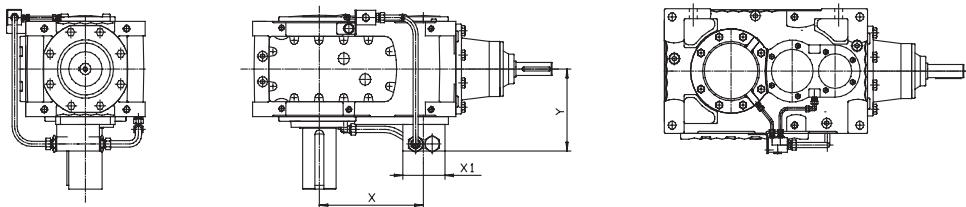
8.5.5. Oil Pump Assembly Dimensions for MC..RV

Oil pump locations and shaft positions, gear units with solid or hollow LSS.



MC2RV

Gear Unit Size	Dimensions		
	X	X1	max Y
04	200	156	312
05	220	156	320
06	240	156	333
07	265	156	345
08	290	156	371
09	320	156	381



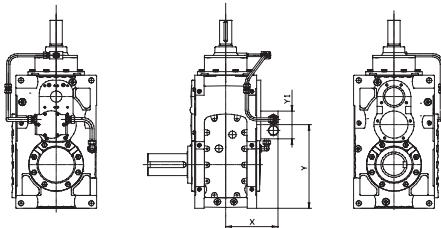
MC3RV

Gear Unit Size	Dimensions		
	X	X1	max Y
04	340	156	312
05	374	156	320
06	409	156	333
07	445	156	345
08	490	156	371
09	540	156	381

Standard oil pump location. Other solutions are also possible for MC3R. Maximum allowed external forces on LSS for other solutions will be lower than usual. Please contact nearest SEW-Eurodrive office.

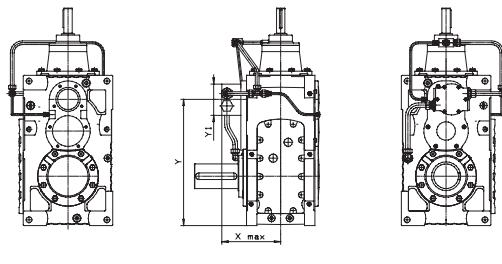
8.5.6. Oil Pump Assembly Dimensions for MC..RE

Oil pump locations and shaft positions, gear units with solid or hollow LSS.



MC2RE

Gear Unit Size	Dimensions		
	max X	Y	Y1
04	312	429	156
05	320	460	156
06	333	510	156
07	345	560	156
08	371	612	156
09	381	655	156



MC3RE

Gear Unit Size	Dimensions		
	max X	Y	Y1
04	312	569	156
05	320	614	156
06	333	679	156
07	345	740	156
08	371	812	156
09	381	875	156

Standard oil pump location. Other solutions are also possible for MC3R. Maximum allowed external forces on LSS for other solutions will be lower than usual. Please contact nearest SEW-Eurodrive office.

Notes

8.6. Shaft End Pump with Cooler

Gear unit sizes 04 - 09 only.

Shaft end pump with cooler is used when the thermal rating of the basic gear unit is not sufficient. Cooler is used when no fan can be used because of dusty or wet environment or noise.

8.6.1. Selection

Use the formulas given in section 8.7., "Lubrication Unit with Cooler", on page 142 to:

- Calculate power loss to be cooled (P_L).
- Select cooler: Required cooling rating (P_C) determines right cooler size and required oil flow Q_R .
- Select pump: With required oil flow (Q_R) and pump speed the right pump size can be selected. ($Q_P \geq Q_R$)

Cooler Size	Cooling Rating (P_C) (kW)	Oil Flow Required (Q_R) (dm ³ /min)
P820	3.6	10.5
P830	4.6	10.5
P1540	10	18
P2540	16	27
P2560	26	43

Pump Size	Pump Speed (rpm)				
	300	450	670	1000	1500
Oil Pump Output Q_P (dm ³ /min)					
SHP 7	2.2	3.3	4.9	7.3	11.0
SHP 12	3.6	5.4	8.0	12.0	18.0
SHP 18	5.6	8.4	12.5	18.7	28.0
SHP 29	8.8	13.2	19.7	29.3	44.0
SHP 47	13.0	19.5	29.0	43.3	65.0

Note: When the pump is not located on HSS (MC3P.., MC2R.., and MC3R..), contact SEW-Eurodrive for correct pump speed selection.

Information to be given in an order:

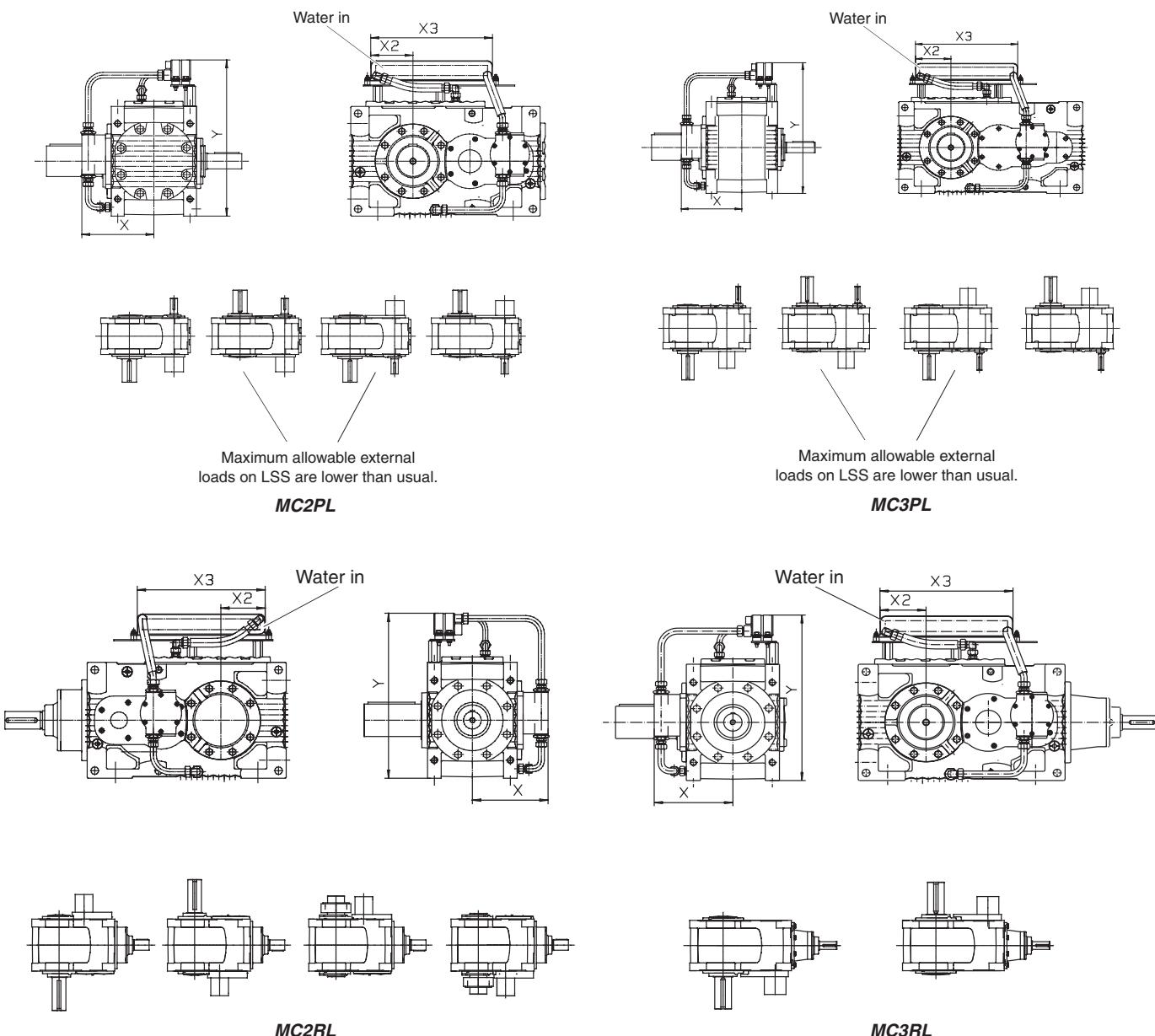
-pump size

-cooler size

Example: **SHP12**

8.6.2. Horizontal LSS Gear Unit Position

Gear units with solid and hollow LSS (MC..PL, MC..RL)



Standard oil pump location. Other solutions are also possible for MC3R.
Maximum allowable external forces on LSS for other solutions will be lower than usual. Please contact the nearest SEW-Eurodrive facility.

Gear Unit Size	Dimensions			
	X	X2	X3	Y
04	312	200	466	562
05	320	210	524	637
06	333	240	524	677
07	345	265	524	737
08	371	292	524	807
09	381	305	524	877

Thread size of the water in- and outlet:

Size	Thread
P8..	R 1/2
P15..	R 1/2
P25..	R1

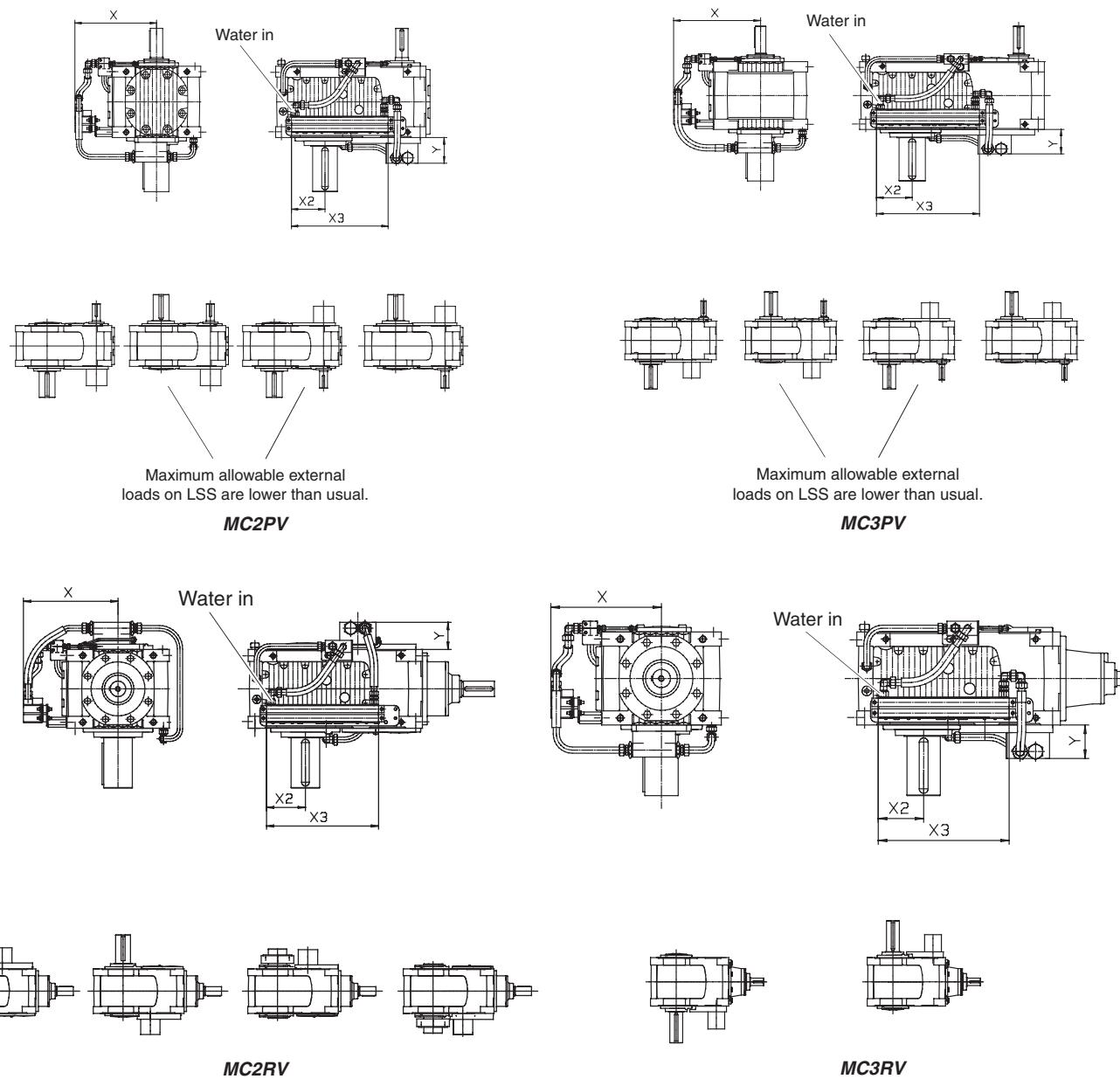
Please refer to shaft end pump and foundation dimensions on page 132

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

8.6.3. Vertical LSS Gear Unit Position

Gear units with solid or hollow LSS (MC..RV, MC..PV)



Standard oil pump location. Other solutions are also possible for MC3R.
Maximum allowable external forces on LSS for other solutions will be lower than usual. Please contact the nearest SEW-Eurodrive facility.

Gear Unit Size	Dimensions			
	X	X2	X3	Y
04	362	200	466	155
05	422	210	524	155
06	422	240	524	155
07	472	265	524	155
08	507	292	524	155
09	542	305	524	155

Thread size of the
water in- and outlet:

Size	Thread
P8..	R 1/2
P15..	R 1/2
P25..	R1

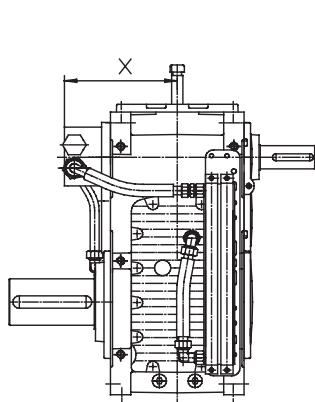
Please refer to shaft end pump and foundation dimensions on page 132

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

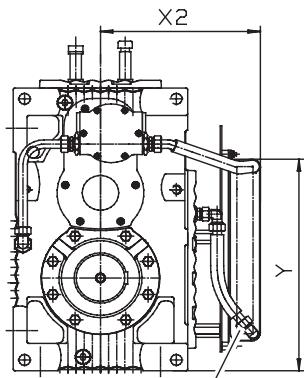
Dimensions subject to change without notice

8.6.4. Upright Gear Unit Position

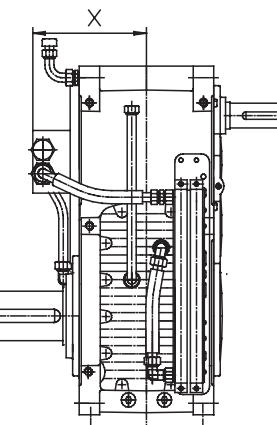
Gear units with solid or hollow LSS (MC..PE, MC..RE)



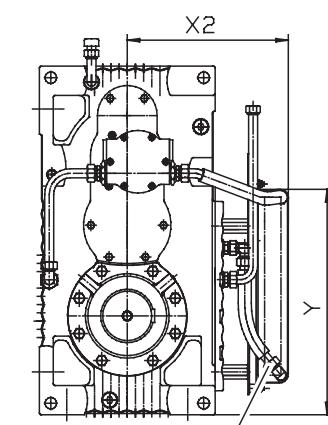
MC2PE



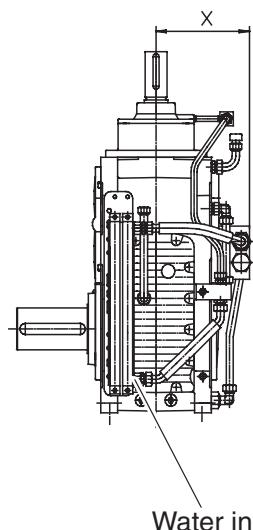
MC3PE



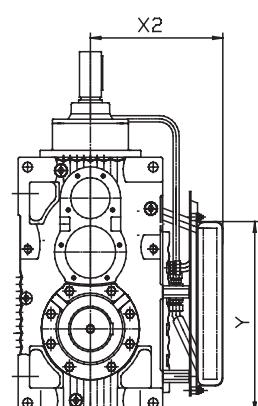
Water in



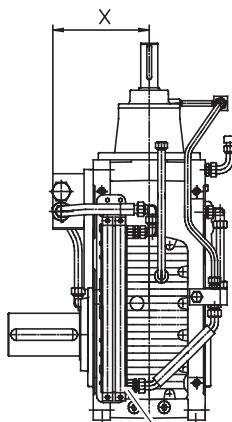
Water in



MC2RE



Water in



MC3RE

Thread size of the
water in- and outlet:

Size	Thread
P8..	R 1/2
P15..	R 1/2
P25..	R1

Gear Unit Size	Dimensions		
	X	X2	Y
04	312	362	496
05	320	422	554
06	333	442	554
07	345	472	554
08	371	507	554
09	381	542	554

Please refer to shaft end pump and foundation dimensions on page 132

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

8.7. Lubrication Unit with Cooler

Selection oil flow and cooling rating

$\bullet P_L = \left(P_{K1} - \frac{P_T}{2} \right) (1 - \eta) \text{ kW}$	Single stage	$\eta = 0.985$
	Double stage	$\eta = 0.97$
	Triple stage	$\eta = 0.955$
	Quadruple stage	$\eta = 0.94$
	Quintuple stage	$\eta = 0.93$

$$\bullet Q_R = 2.3 \times P_L \text{ dm}^3/\text{min}$$

$$\bullet Q_P \geq Q_R$$

P_L = power loss to be cooled (kW)

P_T = gear unit thermal rating (kW)

Q_R = oil flow needed for cooling the gear unit (dm^3/min)

P_K = gear unit running load (kW)

η = efficiency

Q_P = oil pump output (dm^3/min)

8.7.1. Choosing the size of the oil cooler:

$$\bullet P_c \geq F_L \times P_L \quad F_L = 1.1 \dots 1.2$$

clean... dirty cooling media

P_C = cooling rating (kW) (see tables 1, 2 and 3 on pages 144 and 145)

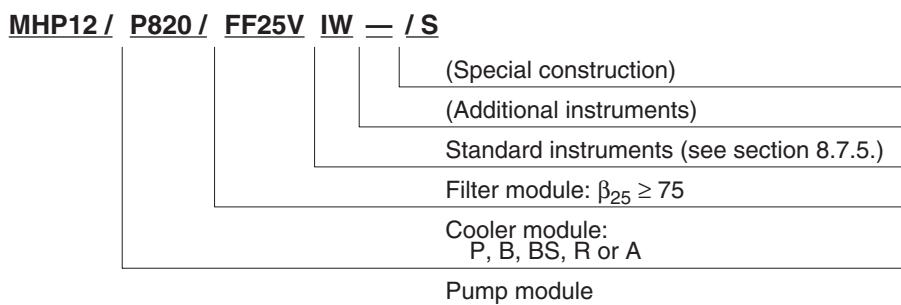
F_L = safety factor for cooling capacity

8.7.2. Water flow needed for water / oil coolers:

- $Q_w \leq 2 \times P_L$, plate cooler, type P
- $Q_w = 1.5 \dots 3 \times P_L$, pipe cooler, types B, BS or R
clean...dirty water

Q_W = water flow (dm^3/min).

8.7.3. Specifying the Lubrication Unit Modules



See selection tables 1, 2 and 3 on pages 144 and 145.

Information to be given in an order:

- type of the unit (code above)
- motor main voltage and frequency
- instrument voltage (and frequency)
- ambient temperature range
- water temperature range (for water coolers)

Example: **MHP12 / P820 / FF25V / IW**, at LSS end of the gear unit.

It is recommended to place the lubrication unit at the low speed shaft end of the gear unit (mounting position W).

The standard length of the suction hose is 1000mm. The standard length of the pressure hose is 1500mm. If hoses of greater length are required, the hose size must be increased and it is recommended to use steel piping between the gear unit and the lubrication unit. Contact SEW-Eurodrive for further information.

8.7.4. Technical Data of Components

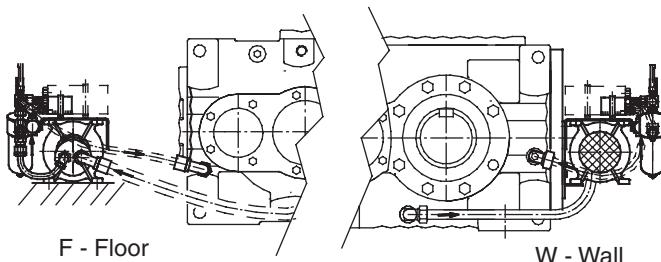


Figure 1
Mounting positions. Position W recommended.

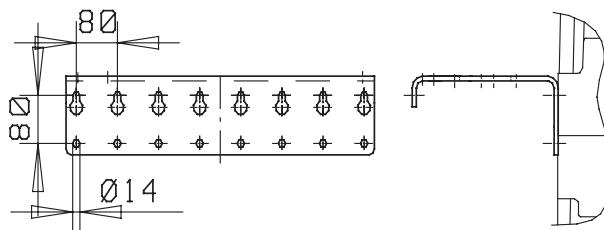


Figure 2
Mounting plate for wall mounting

Protection class for all electrical components is at minimum IP54. All electrical instruments can be connected according to NC (Normally closed) principle.

8.7.5. Component modules

8.7.5.A. Pump, type MHP, gear wheel pump + motor, nominal pressure 1MPa (10bar/145psi).

Optionally:

- type HP, shaft end pump, one rotation direction
- type RHP, shaft end pump, two rotation directions

8.7.5.B. Fiber-glass filter, type FF, standard degree of filtration 25mm abs; $\beta_{25} = 75$ (ISO 4572).

8.7.5.C. Cooler type P, plate cooler, material AISI 316/Cu. Not for sea water (Table 1, page 144).

Optionally:

- type BS, pipe cooler, material Cu/Ni, for sea water (Table 2, page 145)
- type B, pipe cooler, material Cu/Ni, not for sea water (Table 2, page 145)
- type R, pipe cooler, material AISI 316, not for sea water (Table 2, page 145)
- type A, air oil cooler (Table 3, page 145)

8.7.6. Instrument module

8.7.6.A. Standard instruments

Use code IW for lubrication unit with water cooler and code IA for lubrication unit with air cooler.

A1. Standard visual filter contamination indicator code V.

8.7.6.B. Additional Instruments

A2. Electrical contamination indicator (24VDC or 230VAC). Code E. (Replacing visual indicator)

A3. Temperature monitors (2pcs; 70°C and 80°C, 24VDC or 230VAC). Additional code 2T.

A4. Flow indicator; visual (FV), elecrical (FE).

A5. Connection box (CB).

For special instruments please contact SEW-Eurodrive.

8.7.7. Cooling power regulator

- for water coolers, thermostatic water valve, minimum water pressure required 200 kPa (2 bar/29 psi).
- for air coolers, thermostatic switch (controls the cooling fan of the air cooler)

8.7.8. Thermometer, scale 0 ... 100° C (+32 ... +212° F).

8.7.9. Pressure gauge, scale 0 ... 10 bar (0 ...145 psi).

8.7.10. Pressure relief valve. Adjusted before delivery.

8.7.11. Pressure switch (24VDC or 230 VAC).

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

8.7.12. Technical data for pressure lubrication unit with water / oil cooler module

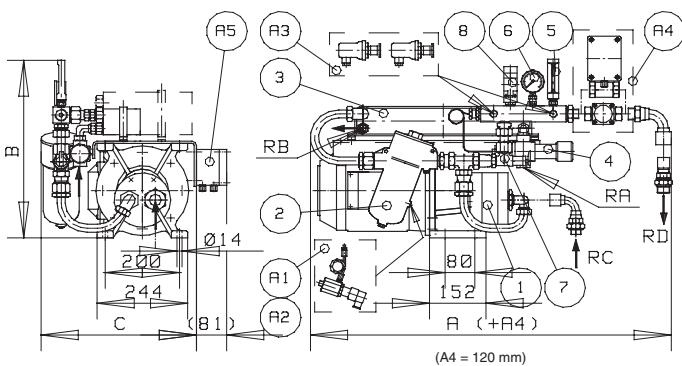


Figure 3
Type MHP with Plate Cooler type P (Table 1)

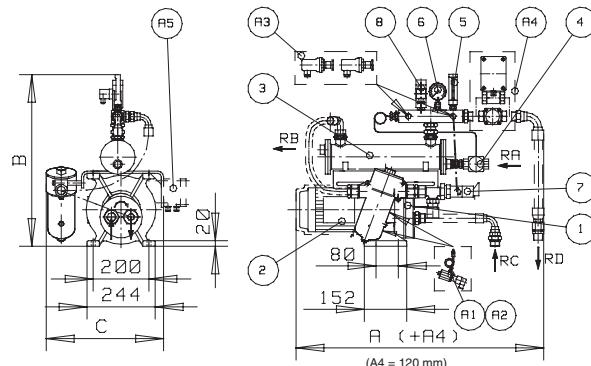


Figure 4
Type MHP with Pipe Cooler type B, BS and R (Table 2)

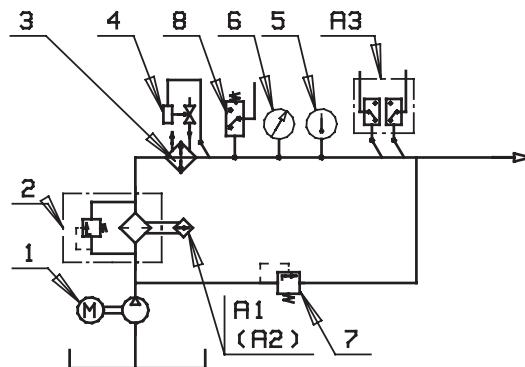


Figure 5
Flow diagram for water / oil cooler

Standard equipment

1. Pump
 2. Filter
 3. Cooler
 4. Cooling power regulator
 5. Thermometer
 6. Pressure gauge
 7. Pressure relief valve
 8. Pressure switch
- A1. Visual filter contamination indicator

Accessories

- A2. Electrical filter contamination indicator
A3. Temperature monitors

Table 1. Lubrication unit with plate cooler, type P. Not for sea water.

Cooling Rating P _c kW	Pump Output Q _p dm ³ /min	Water Temperature Range T _w °C	Water Supply Q _w dm ³ /min	Pump Module	Cooler Module P	Motor Rating 1500 rpm		Weight (kg)	Dimensions (mm)			Connections			
						IEC	kW		A	B	C	RA	RB	RC	RD
0.75	2.5	5...25 25...40	..1 1.2	MH-2	P8-10	19FF165	0.75	29	700	645	390	R3/8	R1/2	R3/4	R3/4
2.5	7.5	5...25 25...40	3.7 2..11	MH-5	P8-20			30							
3.4	11	5...25 25...40	4..10 2..10	MHP7	P8-30			32							
5.3	18	5...25 25...40	8..16 6..9	MHP12	P8-40		1.1	42							
8.5	18	5...25 25...40	4..16		P15-40			43							
10.5	28	5...25 25...40	6..12		P15-50			45							
15	28	5...25 25...40	5..24		P25-40			47							
19	44	5...25 25...40	6..22	MHP29	P25-50		24FF165	48			695	R1	R1	R1	R3/4
24	44	5...25 25...40	9..38		P25-60			49							
25	65	5...25 25...40	10..38		P25-100			55							
29	65	5...25 25...40	8..16 12..57		P25-60			62							
				MHP47	P25-70		28FF215	68			755	R1	R1...	R1...	R1...
					P25-110			75							
								68							
								88							
								71							
								72							
								93							
								1010							

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

Table 2. Lubrication unit with pipe cooler, types B, BS and R (for sea water, choose type BS)

Cooling Rating P _c kW	Pump Output Q _p dm ³ /min	Pump Module	Water Supply Q _w dm ³ /min	Cooler Module Rating B, BS, R	Motor			Dimensions (mm)			Connections				
					1500 rpm	IEC	Power kW	Weight kg	A	B	C	RA	RB	RC	Oil (male) RD
0.75	2.5	MHI2		1.2				50						R3/4	
2.5	7.5	MHI5		4.8				52							
3.4	11	MHP7	2	5..10				56							
5.3	18	MHP12		8..16				61	630	500	423	R1/2	R3/4		
8.5				13.26			1.1	64	790						
10.5	28	MHP18	3	16..32	24FF165		1.5	67	787						R1
15				23.45				84		540					
19	44	MHP29	4	29.57			3	87	889	600	452	R1	R11/4		
24			5	32..63	28FF215			93						R11/4	R11/4
25			4	38..75			4	96							
29	65	MHP47	5	44..87											

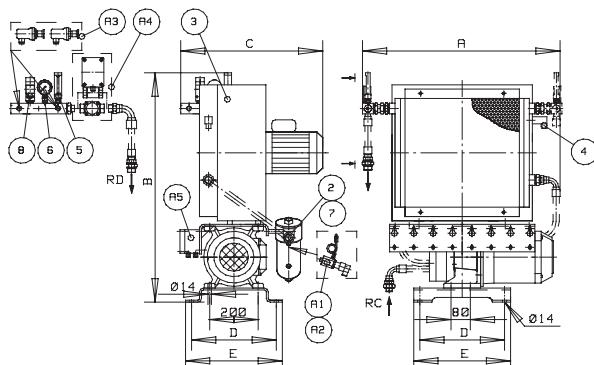
8.7.13. Technical data for lubrication unit with air / oil cooler

Figure 6
Type MHP with air / oil type A (Table 3)

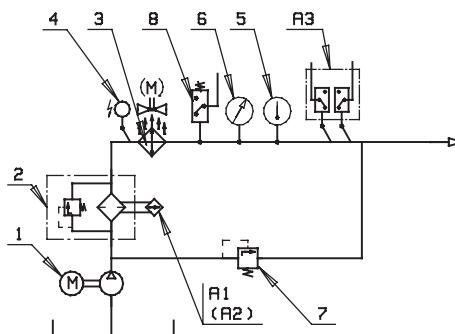


Figure 7
Flow diagram for air / oil cooler

Table 3. Lubrication unit with air / oil cooler, type A. See Figure 6 ($T_{air,max} = 35^\circ\text{C}$)

Cooling Rating P _c kW	Pump Output Q _p dm ³ /min	Pump Module	Cooler Module Rating P	Pump Motor 1500 rpm kW	Fan Motor Speed rpm	Power kW	Noise Level (1m) dB(A)	Weight kg	Dimensions (mm)				Connections Oil (male) RC RD		
									A	B	C	D	E		
0.75	2.5	MHI2					70	40	500	730	530			R3/4	
2.5	7.5	MHI5	A042	0.75	3000		0.25								
3.4	11	MHP7					64	60	600	800	540				
5.3	18	MHP12	A074				71	66	670	870	570				
8.5			A0114				74	70	730	930	590				
10.5	28	MHP18	A0164	1.1	1500	0.37	79	80	850	1020	660			R1	R3/4
15			A0234			0.75	72	100			680				
19	44	MHP29	A0336	3	1000	0.55	72	110	960	1090	750	350	400	R11/4	R11/4
24			A0334			2.2	84	130			770				
25			A0444			4									
29	65	MHP47													

Note: SEW-Eurodrive reserves the right to optimize the cooling unit for each application.

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

8.7.14. Summary

1. Pump Module		
	Pump Code	Pump Size
SEW-Eurodrive Motor pump ⁽¹⁾	MHP	
2 x Motor pump ⁽¹⁾		
• 380-420V, 660-690V 50 Hz		
• 440-480V 60Hz		
• 550V 50Hz		
SEW-Eurodrive	SHP	7
Shaft end pump (2-directional)		
		12
		18
		29
		47
	Type	Q _P (dm ³ /min)
General:	_HP7	11
Pump output Q _P dm ³ /min	_HP12	18
1500rpm	_HP18	28
	_HP29	44
	_HP47	65

2. Cooler Module			
	Cooler Code	Cooler Size	
No cooler			
Plate cooler	-Oiltech (AISI 316)	P8 P8 P8 P8 P15 P15 P25 P25	10 20 30 40 40 50 40 70
Pipe cooler	-Bowmann -Bowmann (for sea water) Reycel (AISI 316)	B BS R	1 2 3 4 5 6 7
Air cooler	-Oiltech Standard voltages: -220-240 / 380- 420V 50Hz -255-290 / 440- 500V 60Hz	A	042 074 114 164 234 334 336 444

Type P recommended if cooler required (not for sea water)

Refer to page 22 for tolerance information

Unit of measure is metric unless otherwise noted.

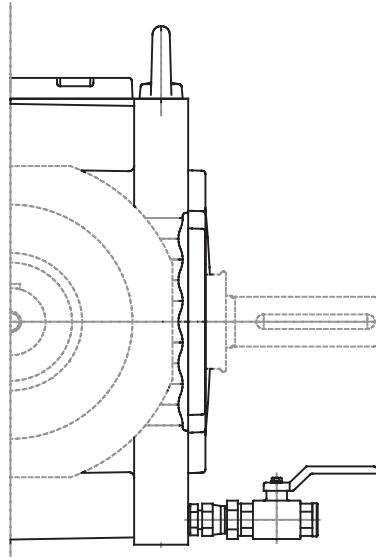
3. Filter Module		
	Filter Code	Filtering Ratio
No Filter	Finn-filter	FF
		25
Filtering ratio: 25 abs => b25=75 Filter includes a by-pass valve		
4. Instrument Module		
Standard Instruments		Additional or Replacement Instruments
Instruments for lubrication unit without cooler		
IP	-Pressure gauge	-Electrical filter contamination indicator
	-Pressure switch 12-250V (Danfoss 9/97->)	-Connection box (for instruments)
	-Visual filter contamination indicator	-Electrical flow indicator (Eletta)
		-Visual flow indicator (Aseko)
		-Pressure switch barksdale E1H 6-250V
Instruments for lubrication unit with water cooler		
IW	-Pressure gauge	-Temperature switches 70°C and 80°C
	-Pressure switch 12-250V (Danfoss 9/97->)	-Temperature sensor PT 100 (Danfoss)
	-Temperature gauge	-Visual flow indicator (Aseko)
	-Thermostatic water valve	-Electrical flow indicator (Eletta)
	-Cold start by-pass valve	-Connection box (for instruments)
Instruments for lubrication unit with air cooler		
IA	-Pressure gauge	-Temperature switches 70°C and 80°C (for gear temperature alarm)
	-Pressure switch 12-250V (Danfoss 9/97->)	-Temperature sensor PT 100 (Danfoss)
	-Temperature switch (for fan motor control)	-Visual flow indicator (Aseko)
	-Cold start by-pass valve	-Electrical flow indicator (Eletta)
	-Visual filter contamination indicator	-Connection box (for instruments)

⁽¹⁾ If special voltage is required, delivery time is 6-8 weeks.
Dimensions subject to change without notice

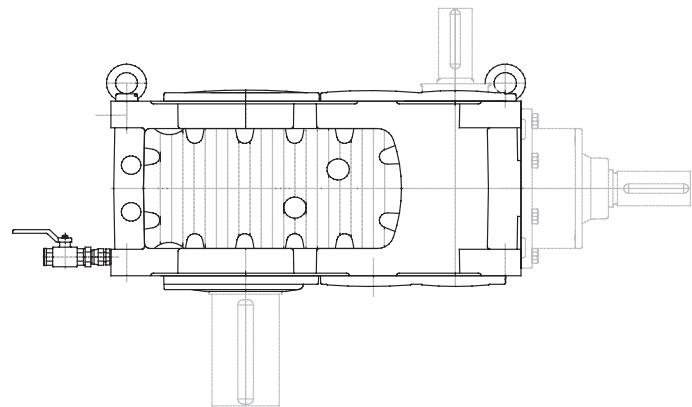
Notes

8.8. Oil Drain Valve

The size of the oil drain valve depends on the size of the gear unit.

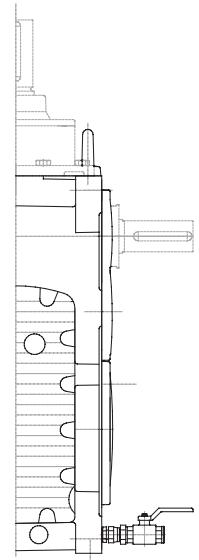


Horizontal LSS Mounting



Vertical LSS Mounting

Oil Drain Valve Thread Sizes	
Gear Unit Size	Thread Size
02	R3/4
03	R3/4
04	R3/4
05	R3/4
06	R1
07	R1
08	R1
09	R1



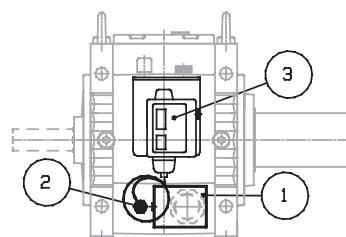
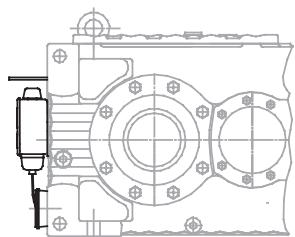
Upright Mounting

8.9. Oil Heater, Sensor, Thermostat

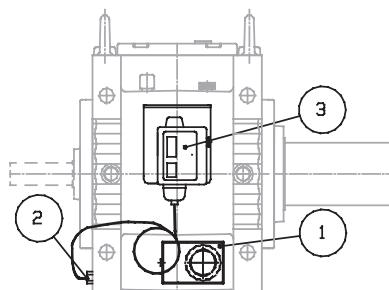
Oil heater can be selected for gear unite sizes 04 — 09 only.

The oil heating system is used to ensure the function of the lubrication in cold condition start ups.

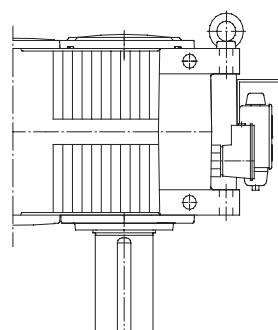
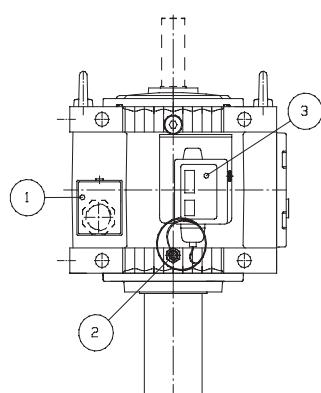
Sizes 04 - 06



Sizes 07 - 09



Horizontal LSS



Components:

1. Oil heater
2. Sensor
3. Thermostat

Vertical LSS

Gear Unit Size	Maximum Heating Power W	Maximum 3-Phase / Single Phase Voltage
04	600	400 / 230
05	600	400 / 230
06	600	400 / 230

Surface power of the oil heater is 1 W/cm²

Oil heating systems for upright mounting position on request.
Please contact your nearest SEW-Eurodrive facility.

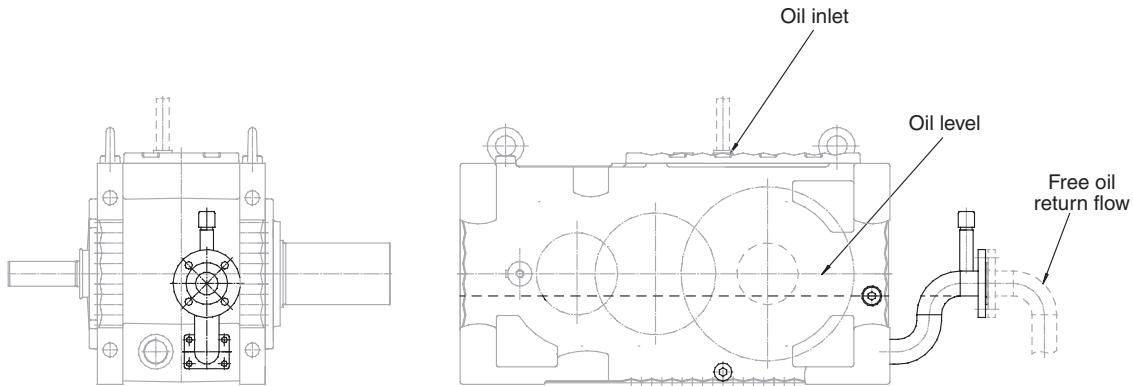
Information to be given in an order:
 -power of the heater
 -main- and phase voltage
 -frequency

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

8.10. Central Lubrication System Connections

Equipment to connect the gear unit to the centralized oil filtering and cooling system.



Splash Lubrication

The diameter and height of the oil outlet pipe varies according to the gear unit size, lubrication method, oil viscosity and oil quantities. A visual or electrical flow meter to ensure the right oil flow into the gear unit can also be delivered.

Dimensions of the attachment flange depend on the pipe diameter and are according to the standard DIN 2642.

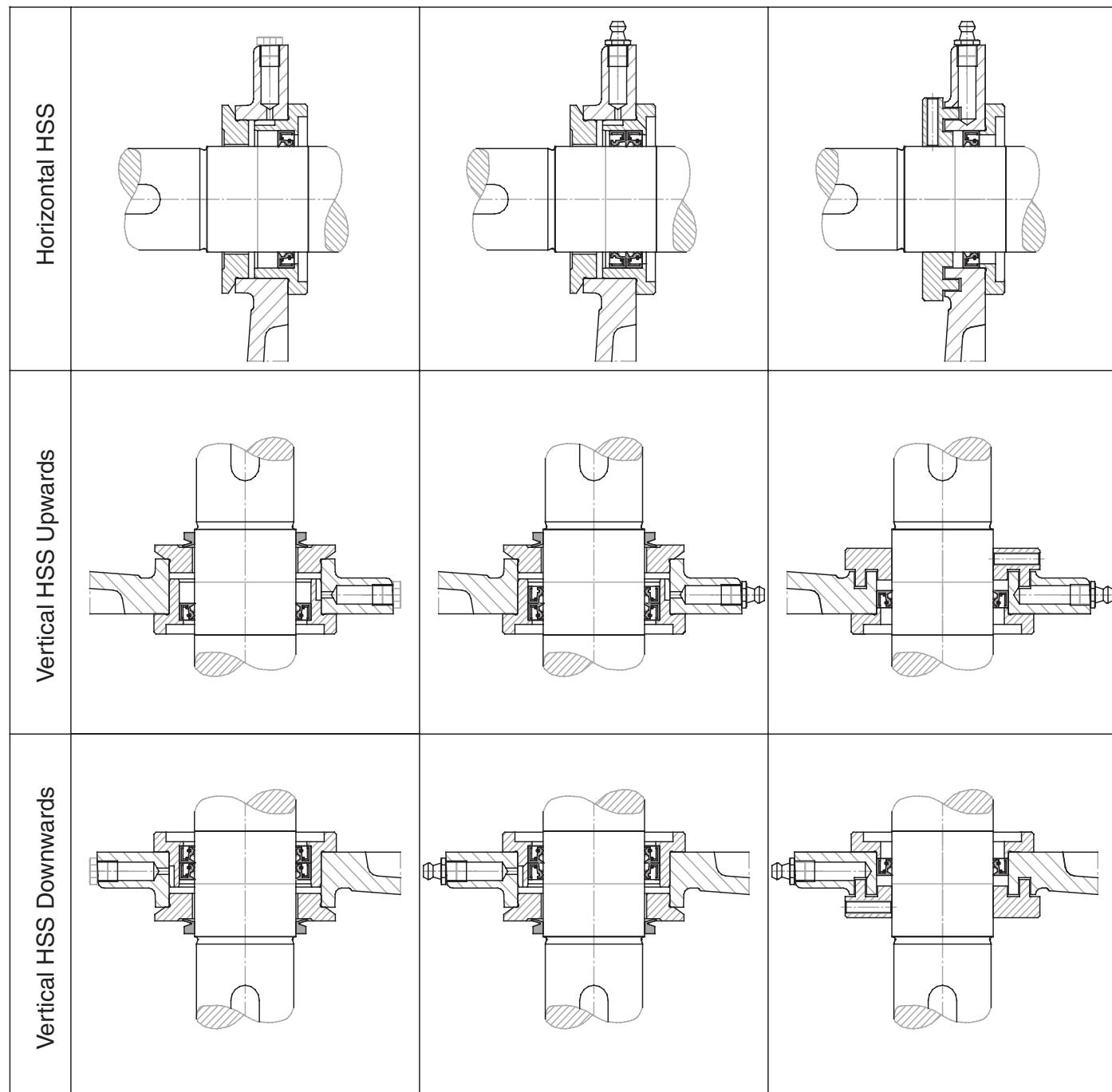
**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

8.11. Optional Seal Arrangements

8.11.1. MC..P.. Helical Gear Units HSS Seal Arrangements

Lip Seal (Basic Solution)	Double Lip Seal with Grease Nipple	Radial Labyrinth Seal with Grease Nipple
single lip seal with dust protection cover -clean environment	double lip seal with regreaseable dust protection cover -dusty environment with abrasive particles	single lip seal with radial grease labyrinth -dusty environment with abrasive particles



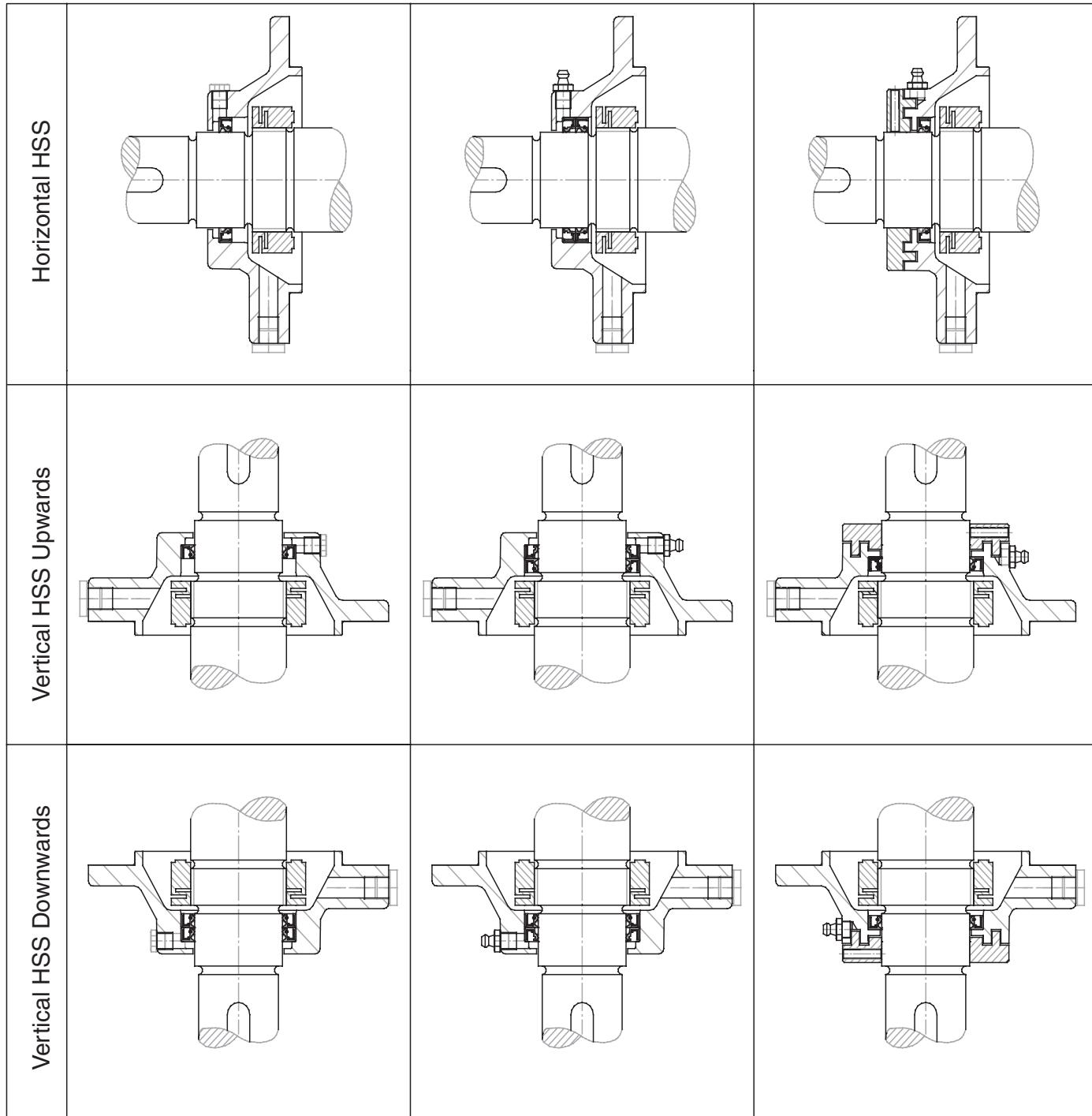
Seal arrangement selection does not affect shaft end dimensions.

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

8.11.2. MC..R.. Bevel-Helical Gear Units HSS Seal Arrangements

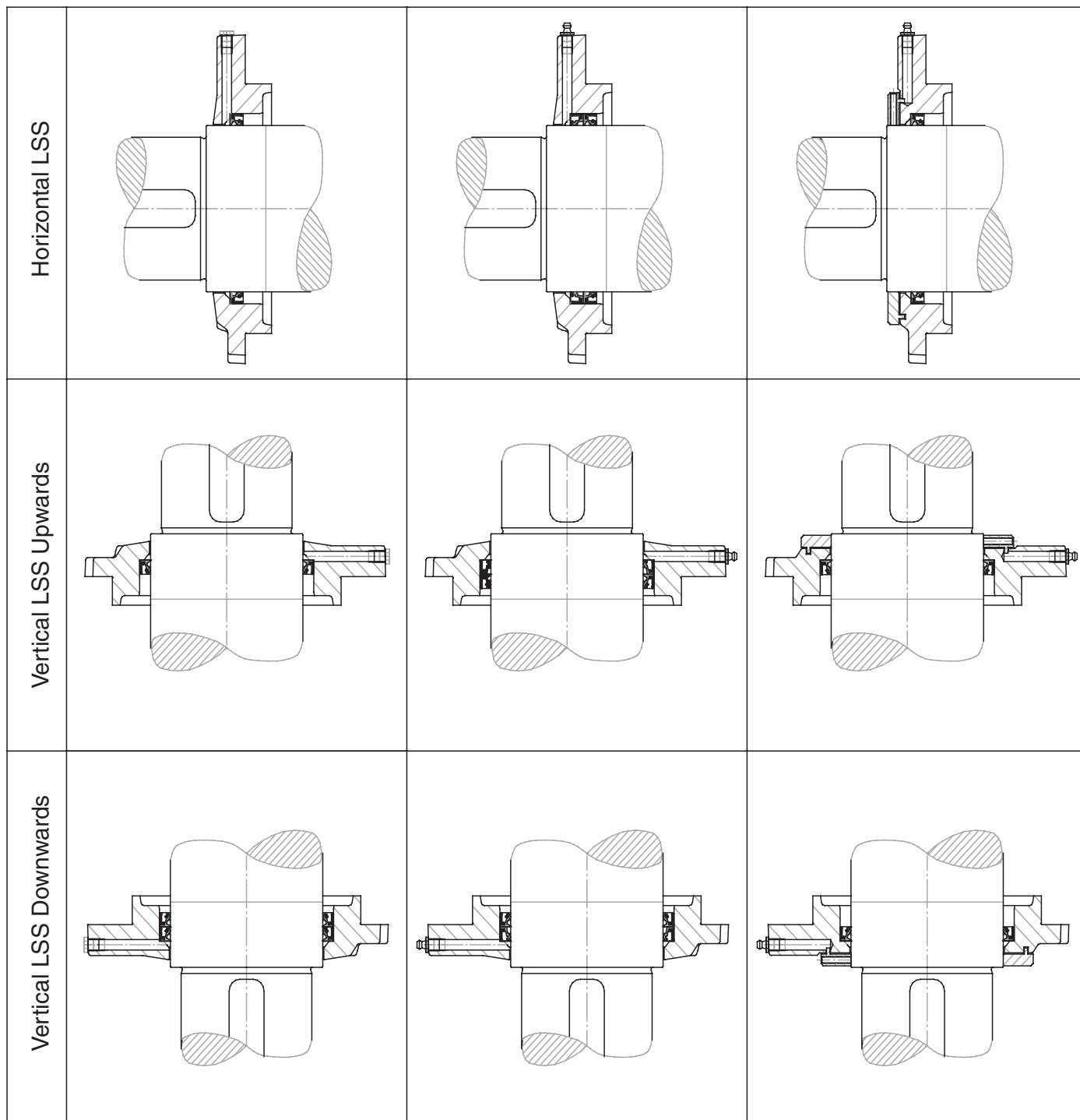
Lip Seal (Basic Solution)	Double Lip Seal with Grease Nipple	Radial Labyrinth Seal with Grease Nipple
single lip seal with dust protection cover -clean environment	double lip seal with resealable dust protection cover -dusty environment with abrasive particles	single lip seal with radial labyrinth -dusty environment with abrasive particles



Seal arrangement selection does not affect shaft end dimensions.

8.11.3. MC..P., MC..R.. Solid LSS Seal Arrangements

Lip Seal (Basic Solution)	Double Lip Seal with Grease Nipple	Radial Labyrinth Seal with Grease Nipple
single lip seal with dust protection cover -clean environment	double lip seal with regreaseable dust protection cover -dusty environment with abrasive particles	single lip seal with radial grease labyrinth -dusty environment with abrasive particles



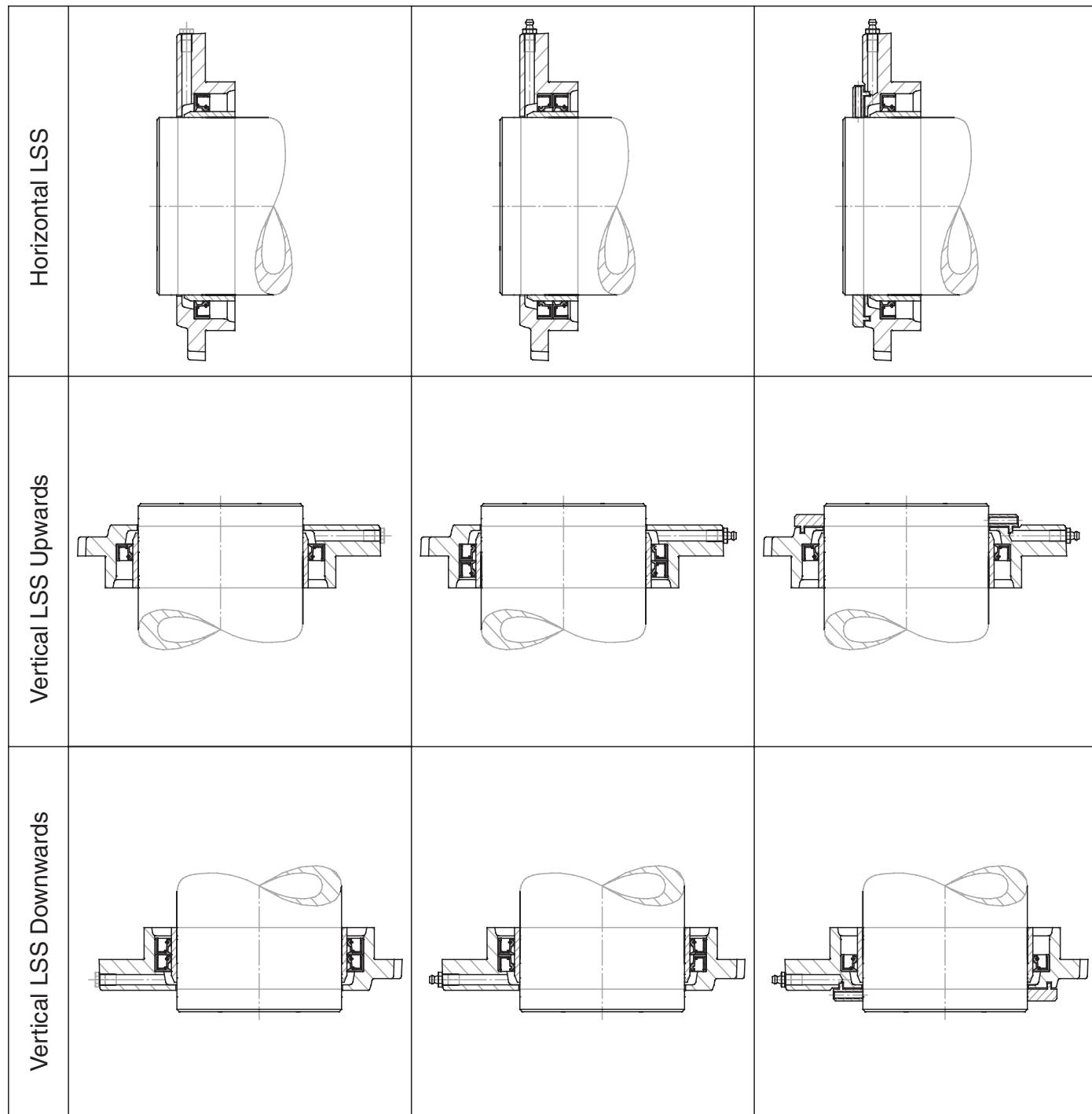
Seal arrangement selection does not affect shaft end dimensions.

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

8.11.4. MC..P.., MC..R.. Hollow LSS Seal Arrangements

Lip Seal (Basic Solution)	Double Lip Seal with Grease Nipple	Radial Labyrinth Seal with Grease Nipple
single lip seal with dust protection cover -clean environment	double lip seal with regreaseable dust protection cover -dusty environment with abrasive particles	single lip seal with radial grease labyrinth -dusty environment with abrasive particles



Seal arrangement selection does not affect shaft end dimensions.

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

Notes

8.12. HSS Elastic Coupling

HSS elastic couplings are preselected according to sizes of electric motor and gear unit. The coupling types are elastic ROTEX and Nor-Mex G. These couplings are compatible with preselected motor flanges. Rotex is recommended to be used in **motor flange arrangements**. Nor-Mex is recommended to be used in **foot mounted motor arrangements**.

The coupling nominal torque is selected to be at least 1.8 times motor nominal torque. Coupling bore tolerance is H7, keyways acc. to DIN 6885.1-JS9

Information to be given in an order:	
-type of coupling	
-motor IEC code	
-motor / gear shaft diameter	
Order example: Ready bored coupling ROTEX R42/55 IEC 180L Ø48 / Ø50	

8.12.1. Rotex Couplings

8.12.1.1. Select coupling size:

$$T_{NC} \geq 9550 \times P_{K1} \times 1.8 / n_{motor}$$

P_{K1} = Running power of the gear unit (kW)

1.8 = F_{SC} =service factor for coupling

T_{NC} = Coupling nominal torque, table 1 (Nm)

n_{motor} = Motor speed (r/min)

8.12.1.2. Check coupling bore limitation, motor side

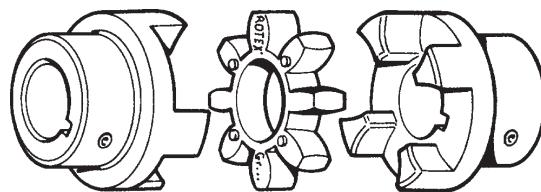


Table 1. Coupling Selection and Standard Bores

Coupling	Size	n_{max} rpm	T_{NC} Nm	Standard Coupling Bores (min...max) Ø mm												Elastic Element	
				28 / 38	38 / 45	42 / 55	48 / 60	55 / 70	65	75	90	100	112	125	140	160	
ROTEX	28 / 38	8500	160	25	32	38											98 Sh A
	38 / 45	7100	325	25	32	35	38	42									98 Sh A
	42 / 55	6000	450	25	32	35	38	40	42	45	48	50	55				98 Sh A
	48 / 60	5600	525	25	32	35	38	40	45	48	50	55	60				98 Sh A
	55 / 70	4750	685	25	32	35	38	40	42	45	48	50	55	60	70	75	98 Sh A
	65	4250	940	32	35	38	40	42	45	48	50	55	60	65			95 Sh A
	75	3550	1465	40	42	45	48	50	55	60	65	70	75	80	85	95	95 Sh A
	90	2800	3600	45	48	50	55	60	65	70	75	80	85	90			95 Sh A
	100	2500	4950	60	65	70	75	80	85	90	95						95 Sh A

8.12.1.3. Check Coupling Bore Limitation, Gear Side

See the gear unit HSS diameter from the catalog

8.12.1.4. Check coupling size limitation if motor flange is used

Table 2. Limitations for Motor Flange With or Without Fan
Maximum ROTEX Coupling Size for Motor Flange

Gear Unit Type	Ratio	Gear Unit Size							
		02	03	04	05	06	07	08	09
MC2P...	7.1 - 20	R48 / 60	R55 / 70	R65	R75	R90	R90	R90	R90
MC3P...	22.5 - 112	R55 / 70	R65	R65	R65	R90	R90	R90	R90
MC2R...	7.1 - 12.5	R55 / 70	R65	R75	R75	R90	R90	R90	R90
MC3R...	14 - 63	R55 / 70	R55 / 70	R65	R65	R75	R90	R90	R90
	71 - 90	42 / 55	R48 / 60	R55 / 70	R65	R65	R75	R90	R90
	100 - 112	42 / 55	R48 / 60	R48 / 60	R55 / 70	R65	R65	R60	R75

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

8.12.2. Nor-Mex Couplings

8.12.2.1. Select coupling size:

$$T_{NC} \geq 9550 \times P_{K1} \times 1.8 / n_{motor}$$

P_{K1} = Running power of the gear unit (kW)

$1.8 = F_{SC}$ = service factor for coupling

T_{NC} = Coupling nominal torque, table 1 (Nm)

n_{motor} = Motor speed (r/min)

8.12.2.2. Check coupling bore limitation, motor side

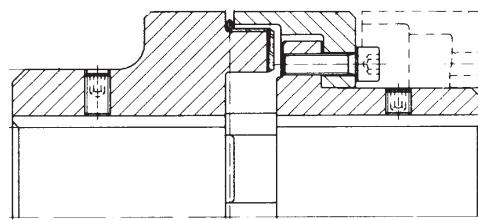


Table 1. Coupling Selection and Standard Bores

Coupling	Size	n_{max} rpm	T_{NC} Nm	Coupling Bores				Coupling Outer Ø mm	Elastic Element		
				Motor Side Ø mm		Gear Side Ø mm					
				min	max	min	max				
Nor-Mex	G82	8000	75	0	32	0	28	82	82 Sh A		
	G97	7000	150	0	42	0	35	97	82 Sh A		
	G112	6000	230	0	48	0	42	112	82 Sh A		
	G128	5000	380	0	55	0	48	128	82 Sh A		
	G148	4500	600	0	65	0	60	148	82 Sh A		
	G168	4000	980	0	75	0	65	168	82 Sh A		
	G194	3500	1650	0	85	0	75	194	82 Sh A		
	G214	3000	2400	0	95	0	85	214	82 Sh A		
	G240	2750	3700	48	110	48	95	240	82 Sh A		
	G265	2500	5800	58	120	58	105	265	82 Sh A		

8.12.2.3. Check Coupling Bore Limitation, Gear Side

See the gear unit HSS diameter from the catalog

8.12.2.4. Check coupling size limitation if motor flange is use

Table 2. Limitations for Motor Flange With or Without Fan
Maximum Nor-Mex Coupling Size for Motor Flange

Gear Unit Type	Ratio	Gear Unit Size							
		02	03	04	05	06	07	08	09
MC2P...	7.1 - 20	148	168	194	194	214	214	214	214
MC3P...	22.5 - 112	148	168	168	168	194	214	214	214
MC2R...	7.1 - 12.5	148	168	194	194	214	214	214	214
MC3R...	14 - 63	148	148	168	194	194	194	214	214
	71 - 90	128	148	148	148	194	194	194	194
	100 - 112	112	112	128	148	168	194	194	194

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

8.13. LSS Gear Coupling

LSS gear couplings are preselected according to gear unit nominal torque.

The coupling nominal torque is selected to be at least 1.44 times gear unit nominal torque.

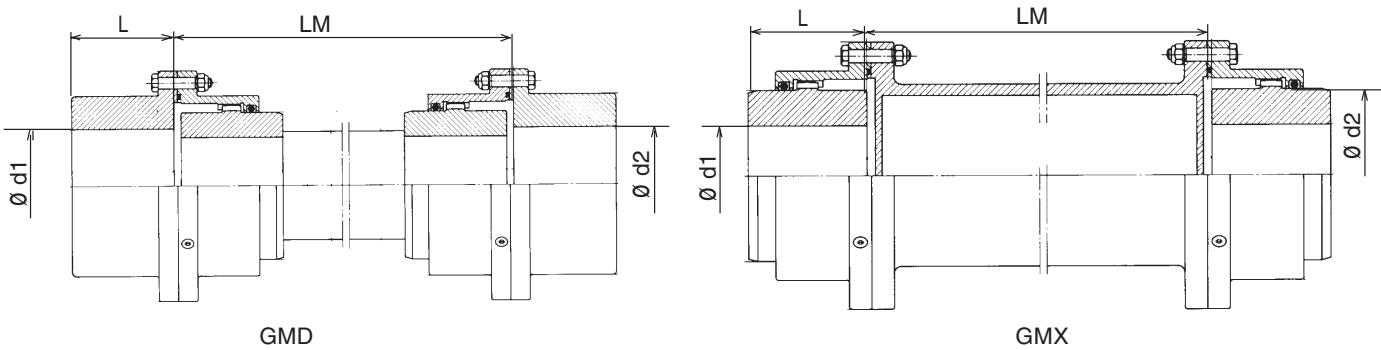
LSS gear couplings are preselected according to sizes of gear unit (LSS diameter). The gear coupling types are **GM (horizontal)** for horizontal installation and **GMV (vertical)** couplings for vertical installation.

Coupling bore tolerances are JS7, keyways acc. to DIN 6885.1-P9.

Information to be given in an order:
 -coupling size
 Coupling bore information:
 -gear unit LSS Ø d1, Ø d2
 -shaft Ø d2 of driving / driven machine
 -distance LM between shaft ends



Gear Unit Size	GM Size	Gear Unit LSS Ø d1 mm	Shaft Ø d2 of Driving / Driven Machine		Hub Length L mm
			min	max	
02	GM-100	80	100	30	105
03	GM-125	100	125	35	120
04	GM-145	105	145	45	135
05	GM-145	120	145	45	135
06	GM-165	130	165	55	150
07	GM-185	140	185	60	170
08	GM-205	160	205	70	185
09	GM-230	170	230	100	200

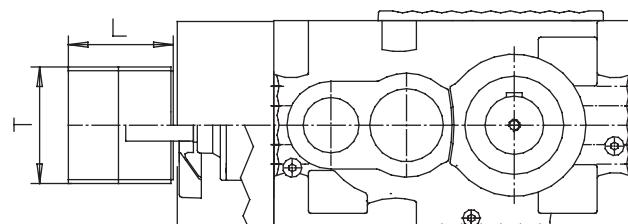
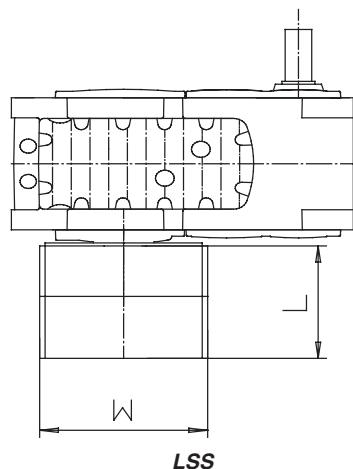
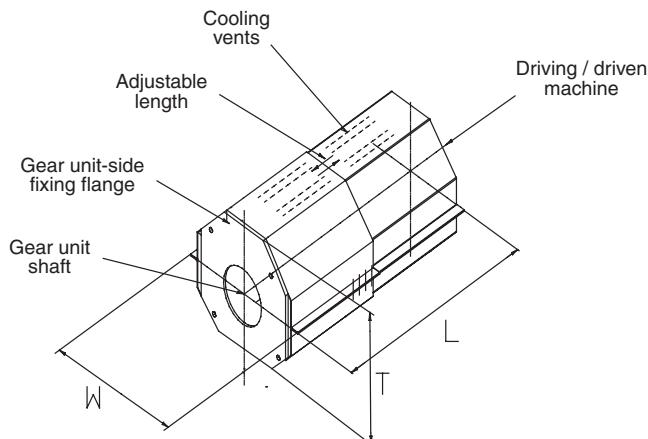


8.14. HSS and LSS Coupling Guard

Coupling guard for input shaft coupling can be used with or without cooling fan.

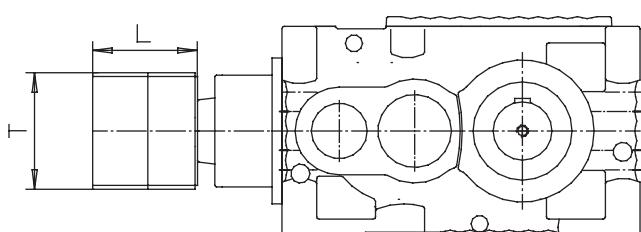
Coupling guard is attached directly to the gear unit bearing cover. No extra support is needed for guard.

Guard Size	Maximum Coupling Diameter mm	Length L mm	Maximum Shaft Ø of Driving mm	Height T mm	Width W mm
1	140	138 - 189		65	216
2	140	190 - 293			
3	230			250	306
4	230		105		
5	290	297 - 482		310	408
6	360		145	380	436
7	470	483 - 829		490	546
8	570		205	590	646

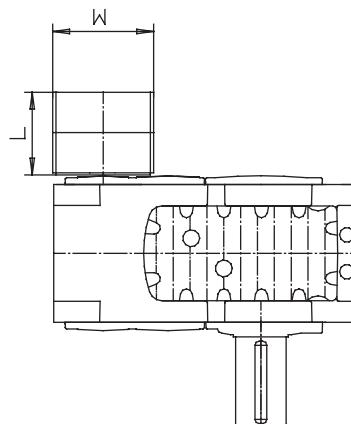


LSS

HSS



HSS



HSS

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

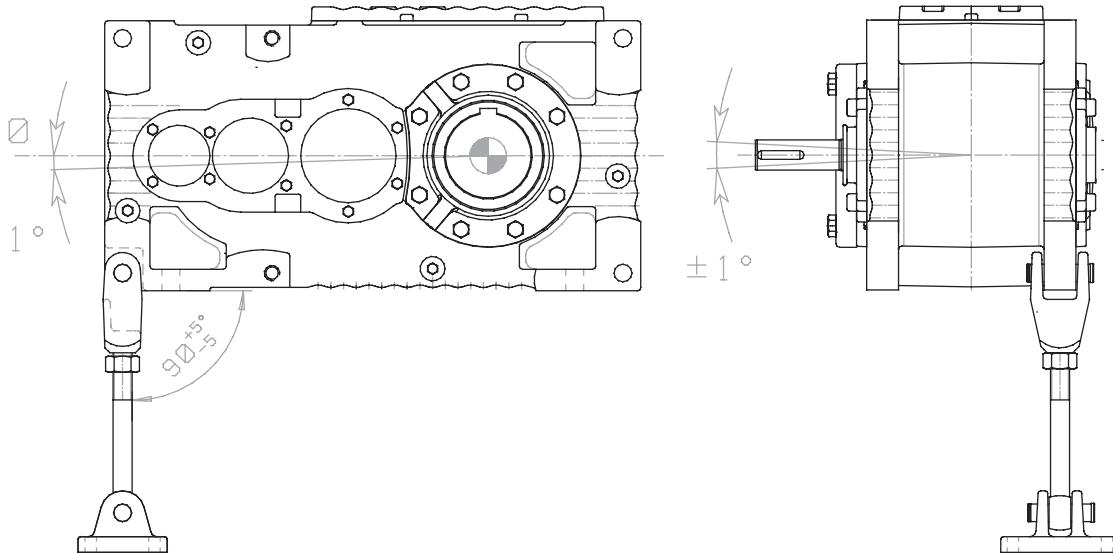
Dimensions subject to change without notice

8.15. Torque Arm

Torque arm can be placed in either tension or compression.

To avoid extra load or stress on the hollow shaft gear unit caused by runout or thermal expansion of the driven machine, the anchoring rod has been designed with double links which allow sufficient lateral and axial play.

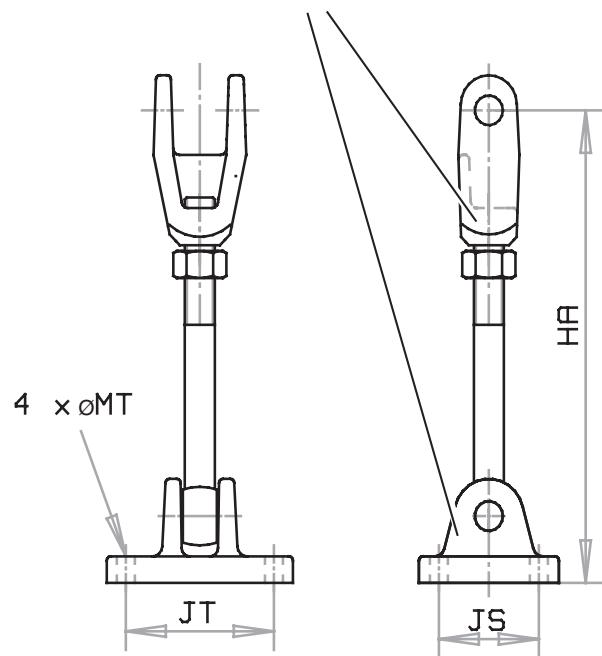
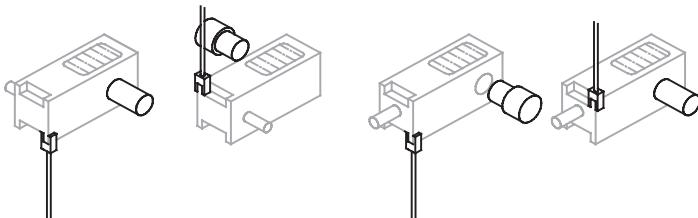
It is important to ensure that there is clearance between the torque arm and anchoring plate as well as between the torque arm and gear unit. This will help reduce any bending to the torque arm and help ensure there is no extra bearing load on the hollow shaft of the shaft mounted gear unit.



Welding is not recommended.
Material: Cast Iron

Gear Unit Size	HA min...max	JT	JS	Ø MT
02 - 03	360...410			
04 - 05	405...455	148	100	18
06 - 07	417...467			
08 - 09	432...482	188	130	22

The torque arm must be on the driven machine side.

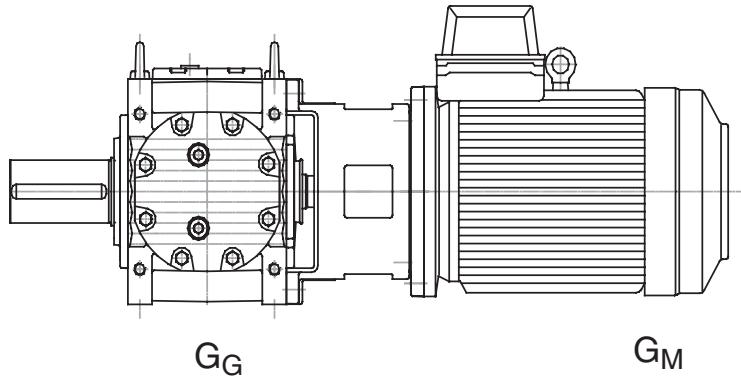


Notes

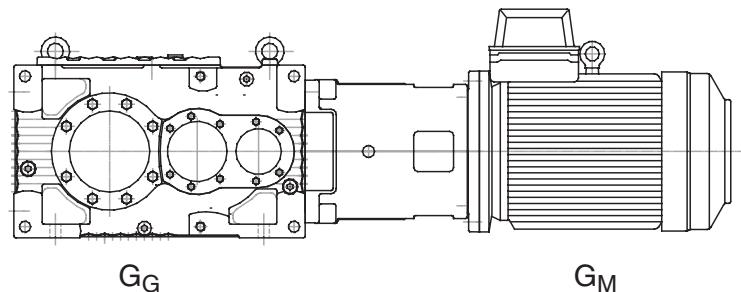
8.16. Motor Flange

- Maximum Allowed Motor Weights
 $G_M = \text{motor weight}$
 $G_G = \text{gear unit weight}$

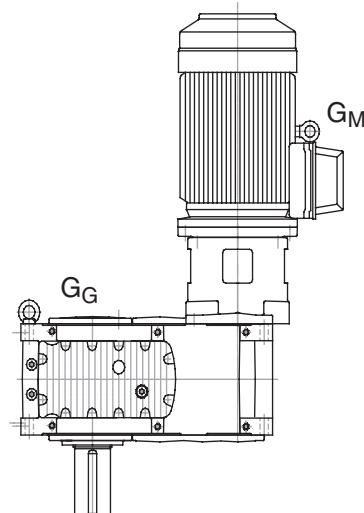
Horizontal Mounted Helical Gear Units	
Foot Mounted	$G_M \leq G_G$
Shaft Mounted	$G_M \leq 0.5 * G_G$
Flange Mounted	$G_M \leq 0.5 * G_G$



Horizontal Mounted Bevel-Helical Gear Units	
Foot Mounted	$G_M \leq G_G$
Shaft Mounted	$G_M \leq G_G$
Flange Mounted	$G_M \leq G_G$



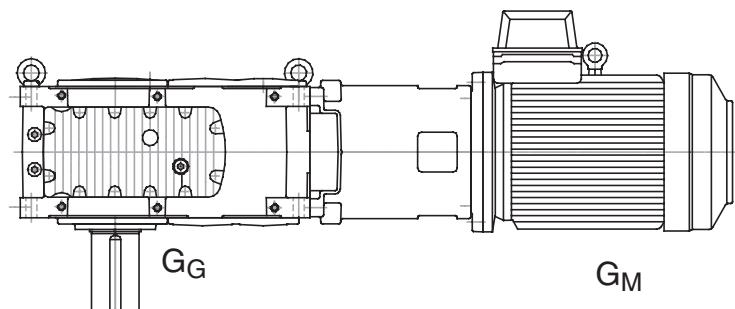
Vertical Mounted Helical Gear Units	
Foot Mounted	$G_M \leq 1.5 * G_G$
Shaft Mounted	$G_M \leq 1.0 * G_G$
Flange Mounted	$G_M \leq 1.0 * G_G$



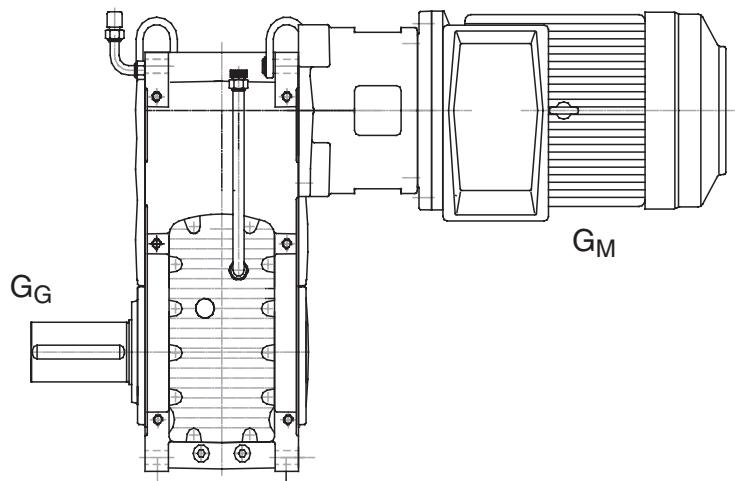
**Refer to page 22 for tolerance information
 Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

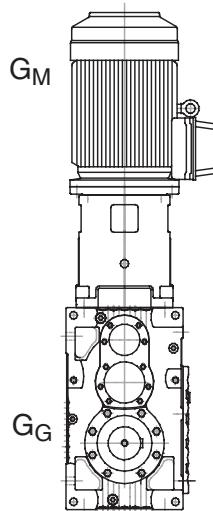
Vertical Mounted Bevel-Helical Gear Units	
Foot Mounted	$G_M \leq G_G$
Shaft Mounted	$G_M \leq 1.0 * G_G$
Flange Mounted	$G_M \leq 0.75 * G_G$



Upright Mounted Helical Gear Units	
Foot Mounted	$G_M \leq G_G$
Shaft Mounted	$G_M \leq 1.0 * G_G$
Flange Mounted	$G_M \leq 1.0 * G_G$



Upright Mounted Bevel-Helical Gear Units	
Foot Mounted	$G_M \leq 1.5 * G_G$
Shaft Mounted	$G_M \leq G_G$
Flange Mounted	$G_M \leq G_G$



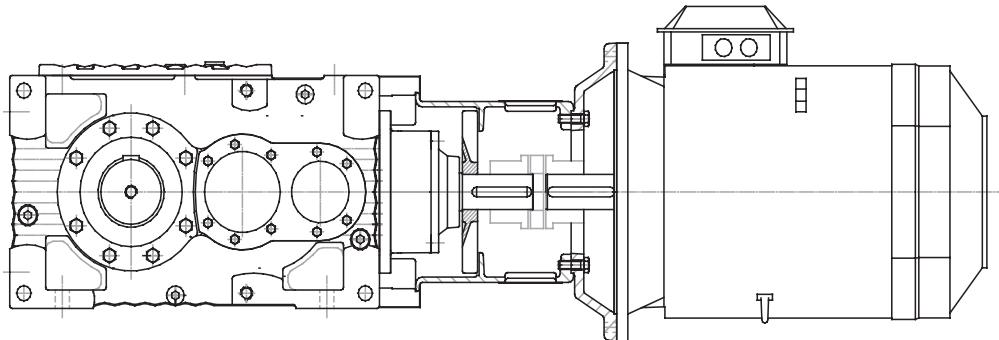
**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

8.16.1. Motor Flange with Cooling Fan

Motor flange can be provided with cooling fan. If needed, cooling fan can also be mounted after delivery. The motor, coupling and motor flange can be removed and the fan can be installed.

Coupling to be ordered separately.

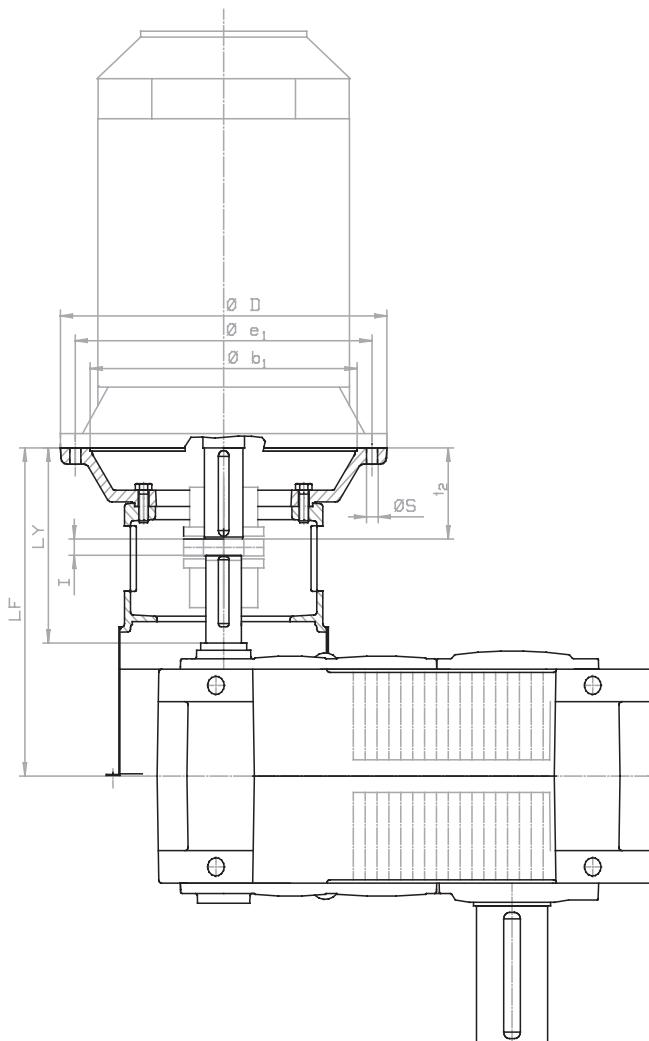


8.16.2. Motor Flange Dimensions

When selecting a motor flange the weight limitations and gear unit mounting position must be observed. Tables give dimensions for preselected motor size areas, but other combinations are also possible. Flange dimensions for NEMA and IEC motors follow on pages 166 — 173. Check the weight of electric motors.

Notes

8.16.3. IEC Motor Adapters



MC3P												
Gear Unit	ØD	Øe ₁	Øb ₁	ØS	S pc.	i ₂	LF	LY	I	Motor Size	Motor Weight	
02	300	265	230	M12		80	373	203	3	132 S;M	65;79	
	350	300	250	M16	4	110	425	255		160 M;L	115;127	
	400	350	300		18					180 M;L	175;185	
	450	400	350			8	140	455	285	220 M;L	255;275	
03	300	265	230	M12		80	373	196	3	132 M	79	
	350	300	250	M16	4	110	432	255		160 M;L	115;127	
	400	350	300							180 M;L	175;185	
	450	400	350		18	8	140			200 M;L	255;275	
	550	500	450					285		225 S;M	330;355	
04	350	300	250	M16		4	110	462	265		250 M	465
	400	350	300							160 M;L	115;127	
	450	400	350		18	8	140			180 M;L	175;185	
	550	500	450					295		200 M;L	255;275	
	350	300	250	M16		4	110	474.5	269.5		225 S;M	330;355
05	400	350	300							160 L	127	
	450	400	350		18	8	140	504.5	299.5	180 M;L	175;185	
	550	500	450							200 M;L	255;275	
	350	300	250	M16		4	110	493	275		225 S;M	330;355
06	400	350	300							180 L	185	
	450	400	350		18	8	140	523	305	200 M;L	255;275	
	550	500	450							225 S;M	330;355	
	350	300	250	M16		4	110	493	275		250 M	465
07	400	350	300							180 L	185;1080	
	450	400	350		18	8	140	505	275	200 M;L	255;275	
	550	500	450							225 S;M	330;355	
	660	600	550		23					250 M	465	
	350	300	250	M16		4	110	505	275	280 S;M	630;690	
08	400	350	300							315 S;M;L	925;1080	
	450	400	350		18					180 L	185;1080	
	550	500	450							200 M;L	255;275	
	660	600	550		23					225 S;M	330;355	
09	450	400	350			8				250 M	465	
	550	500	450		18					280 S;M	630;690	
	660	600	550		23					315 S;M;L	925;1080	
	400	350	300	M16		4	110	550.5	294.5			

Motor weight is a guide value typical IEC motors.

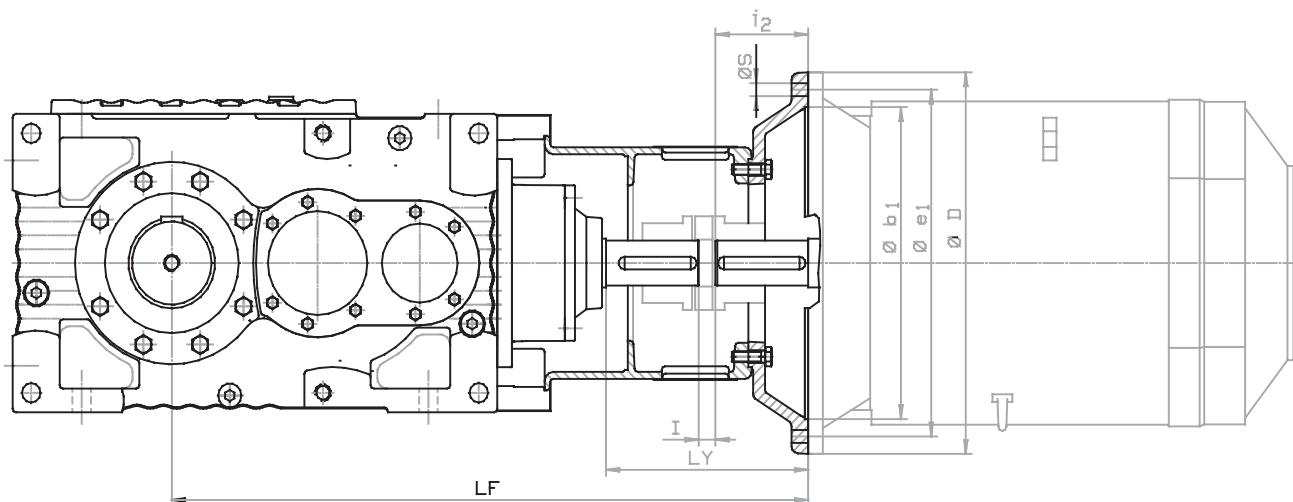
Gear unit size / motor flange combinations are for reference information only. Please see pages 162 and 163 for maximum motor sizes and page 168 for possible motor flange combinations.

MC2P											
Gear Unit	ØD	Øe ₁	Øb ₁	ØS	S pc.	i ₂	LF	LY	I	Motor Size	Motor Weight
02	350	300	250	M16		4	110	425	255	180 L	185
	400	350	300			8	140	455	285	200 M;L	255;275
	450	400	350							225 S	330
	400	350	300			4	110	432	255	200 M;L	255;275
03	450	400	350							225 S;M	330;355
	550	500	450			18				250 M	465
	450	400	350							225 M	355
	550	500	450							250 M	465
04	450	400	350							280 M	690
	550	500	450			140				315 S;M	925;970
	450	400	350							315 M;L	925;1080
	550	500	450							315 L	1080
05	550	500	450								
	660	600	550								
	660	600	550								
	660	600	550								
06	550	500	450								
	660	600	550								
	660	600	550								
	660	600	550								
07	660	600	550								
	660	600	550								
	660	600	550								
	660	600	550								
08	660	600	550								
	660	600	550								
	660	600	550								
	660	600	550								
09	660	600	550								
	660	600	550								
	660	600	550								
	660	600	550								

Motor weight is a guide value typical IEC motors.

Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted.

Dimensions subject to change without notice



MC2R														
Gear Unit	ØD	Øe ₁	Øb ₁	ØS	S pc.	i ₂	LF	LY	I	Motor Size	Motor Weight			
02	400	350	300	18	4	110	774.5	265.5	25	200 L	275			
03	450	400	350		8	849.5	300.5	25	225 S;M	330;355	115;127			
04						900	300		225 M	355				
05	550	500	450		8	960	305	25	250 M	465	175;185			
06						1003	355		280 S;M	630;690				
07						1107			315 M;L	925;1080				
08						1177				250 M	465			
09						1311.5	390.5		315 L			1080		

Motor weight is a guide value typical IEC motors.

Gear unit size / motor flange combinations are for reference information only. Please see pages 162 and 163 for maximum motor sizes and page 168 for possible motor flange combinations.

MC3R												
Gear Unit	ØD	Øe ₁	Øb ₁	ØS	S pc.	i ₂	LF	LY	I	Motor Size	Motor Weight	
02	300	265	230	M12	4	80	716	183	3	132 S;M	65;79	
	350	300	250	M16		110	768	235	25	160 M;L	115;127	
	400	350	300	18		140	798	265		180 M;L	175;185	
	450	400	350			80	779.5	195.5	25	220 M;L	255;275	
03	300	265	230	M12	4	80	779.5	195.5		225 S	330	
	350	300	250	M16		110	831.5	247.5		160 M;L	115;127	
	400	350	300	18		140	861.5	277.5		180 M;L	175;185	
	450	400	350			80	861.5	277.5		200 M;L	255;275	
	550	500	450			110	1220	330		225 S;M	330;355	
08	400	350	300	18	8	110	1160	270	25	250 M	465	
	450	400	350			140	1190	300		280 S;M	630;690	
	550	500	450			170	1220	330		315 S;M;L	925;1080	
09	450	350	300	18	8	110	1276	300	25	200 M;L	255;275	
	400	350	300			140	1306	337		225 S;M	330;355	
	550	500	450			170	1306	337		250 M	465	
	660	600	550			170	1306	337		280 S;M	630;690	
	660	600	550			23	170	1144.5	30	315 S;M;L	925;1080	
	400	350	300			110	1160	270		200 M;L	255;275	
	450	400	350			140	1190	300		225 S;M	330;355	
	550	500	450			170	1220	330		250 M	465	
	660	600	550			170	1220	330		280 S;M	630;690	
	660	600	550			23	170	1144.5	30	315 S;M;L	925;1080	

Motor weight is a guide value typical IEC motors.

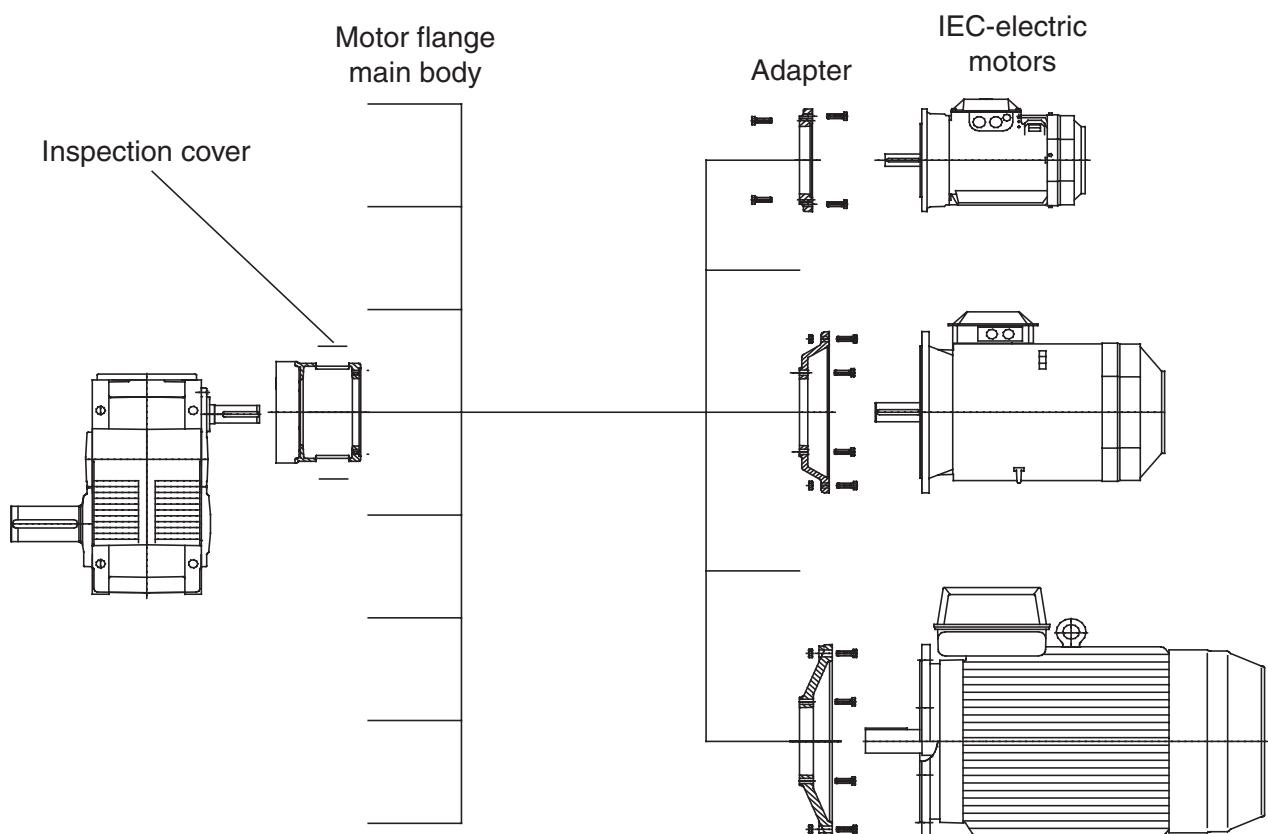
Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted.

Dimensions subject to change without notice

8.16.4. Motor Flange Combinations

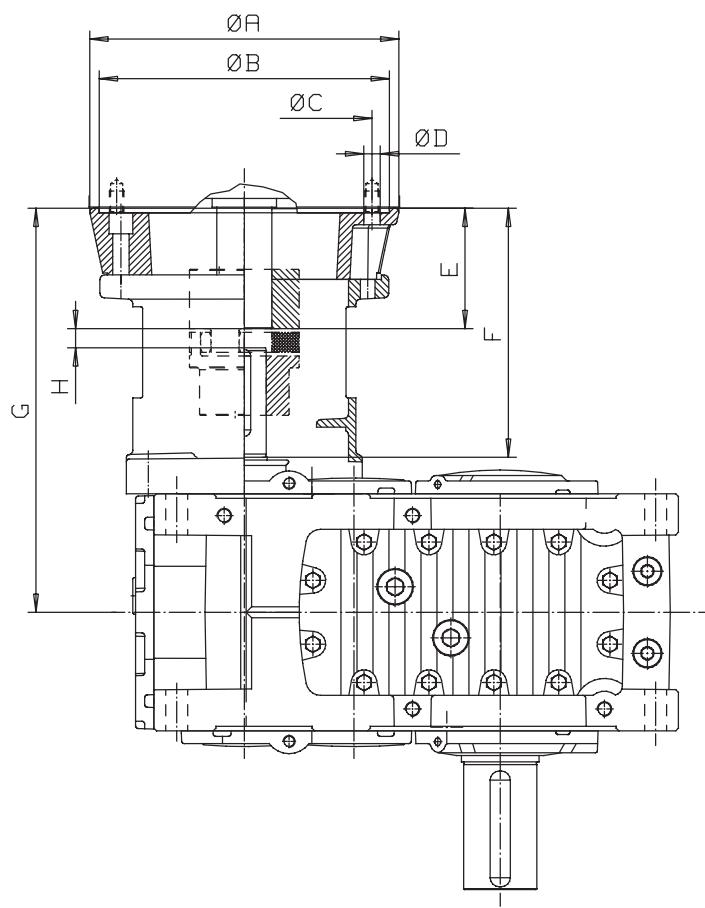
Motor flanges are designed so that any IEC-motor between 160 and 315 can be combined with any gear unit. There are flange adapters for motor sizes 160M, 160L, 180M, 180L, 200L, 225S, 225M, 250M, 280S, 280M, 315S, 315M and 315L, and separate main motor flange bodies that can be fitted to gear unit housing. These modular motor flanges can also be equipped with a cooling fan.

There are also motor flanges for motors 132S and 132M. These motor flanges can not be provided with a cooling fan.



Notes

8.17. NEMA C-Face Adapters



MC2P									
Size	A	B	C	D	E	F	G	H	Motor TC
02	310	266.7	228.6	14	116.3	242	412	5.7	286
	338				132	273	443	21	324 - 326
	340				148			5	364 - 365
					182.8	310	480	7.2	404 - 405
03	338		317.5	279.4		132		21	326
	340					148	273	5	364 - 365
	426	406.4			182.8	310	487	7.2	404 - 405
					214.6	349	526	14.5	444
04	338		279.4	18	148	283	480	5	365
	340	317.5			182.8	320	517	7.2	404 - 405
					360	557		15.5	444
05					364.5	569.5	15		
06						588			444 - 449
07						370		15.5	
08						600			
09						389.5	645.5	15	449
							655.5		

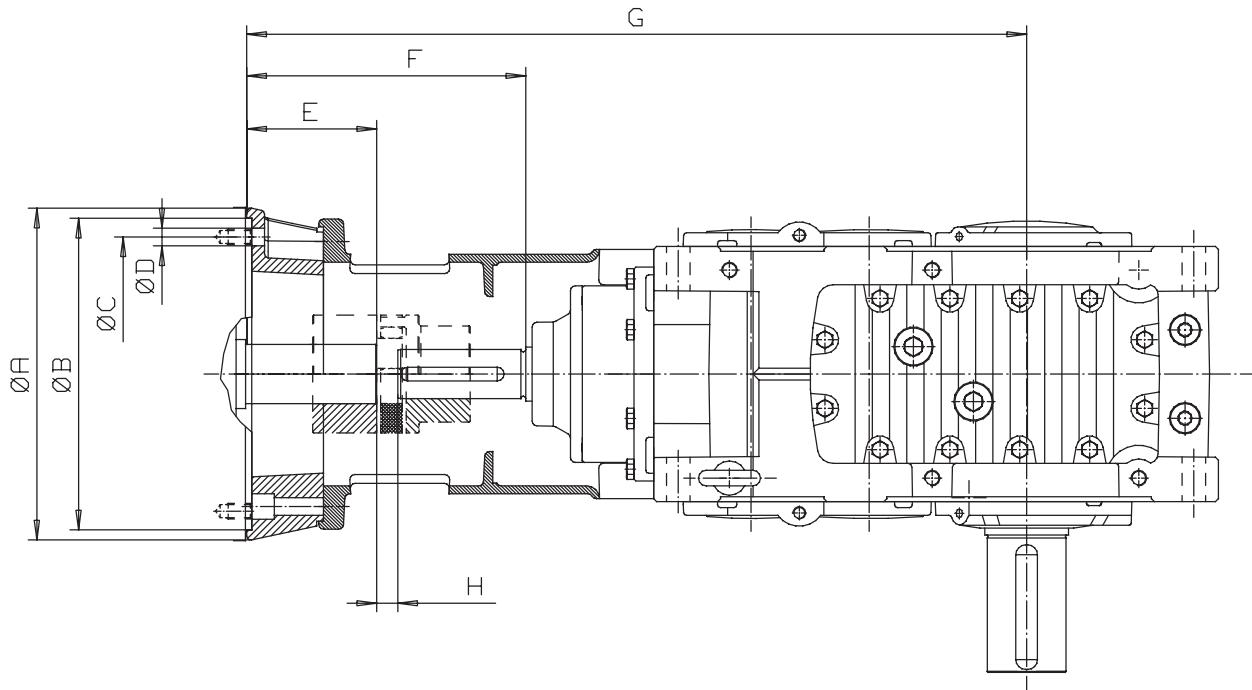
**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

MC3P									
Size	A	B	C	D	E	F	G	H	Motor TC
02	310	215.9	184.2	15	84.5	225	395	20.5	213 - 215
		266.7	228.6	14	100.3			4.8	254 - 256
	338	317.5	279.4	18	116.3	242	412	5.7	284 - 286
					132			21	324 - 326
					148	273	443	5	364 - 365
03	310	215.9	184.2	15	84.5	225	402	20.5	215
		266.7	228.6	14	100.3			4.8	254 - 256
	338	317.5	279.4	18	116.3	242	419	5.7	284 - 286
					132			21	324 - 326
					148	273	450	5	364 - 365
04	310	215.9	184.2	15	100.3	235	432	4.8	254 - 256
		266.7	228.6	14	116.3	252	449	5.7	284 - 286
	338	317.5	279.4	18	132			21	324 - 326
					148	283	480	5	364 - 365
					182.8	320	517	7.2	404 - 405
05	310	215.9	184.2	15	214.6	360	557	15.5	444
		266.7	228.6	14	116.3	256.5	461.5	5.2	284 - 286
	338	317.5	279.4	18	132			20.5	324 - 326
					148	287.5	492.5	4.5	364 - 365
					182.8	324.5	529.5	6.7	404 - 405
06	310	215.9	184.2	15	214.6	364.5	569.5	15	444 - 449
		266.7	228.6	14	116.3	262	480	5.7	286
	338	317.5	279.4	18	132			21	324 - 326
					148	293	511	5.1	364 - 365
					182.8	330	548	7.2	404 - 405
07	310	215.9	184.2	15	214.6	370	588	15.5	444 - 449
		266.7	228.6	14	116.3	262	492	5.7	286
	338	317.5	279.4	18	132	290.5	520.5	18.6	324 - 326
					148	293	523	5	364 - 365
					182.8	330	560	7.2	404 - 405
08	310	215.9	184.2	15	214.6	370	600	15.5	444 - 449
		266.7	228.6	14	116.3	262	492	5.7	286
	338	317.5	279.4	18	132			20.5	326
					148	312.5	568.5	4.5	364 - 365
					182.8	349.5	605.5	6.7	404 - 405
09	310	215.9	184.2	15	214.6	389.5	645.5	15	444 - 449
		266.7	228.6	14	116.3	312.5	578.5	4.5	365
	338	317.5	279.4	18	132			6.7	404 - 405
					148	349.5	615.5		
					182.8			15	444 - 449
	340	317.5	279.4	18	214.6	389.5	655.5		
					214.6			15	444 - 449

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice



MC2R									
Size	A	B	C	D	E	F	G	H	Motor TC
02	338	317.5	279.4	18	132	283.5	767.5	21.5	326
					148			5.5	364
03	340			18	148	288.5	815.5	5.5	365
					182.8	324.5	849.5	6.9	404 - 405
04	338			18	148	288	860	5	365
					182.8	325	897	7.2	404 - 405
05				18	365	937	15.5	444	
						997	17.5	444 - 449	
06				214.6	370	1033	15.5	444 - 449	
07						390	1107	15.5	449
08					390.5	1170.5	16	449	
09					425.5	1304.5	16	449	

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

Size	Ratio	MC3R								Motor TC
		A	B	C	D	E	F	G	H	
02	14 - 63	310	215.9	184.2	15	84.5	205	713	20.5	215
			266.7	228.6	14	100.3	222	730	4.8	254 - 256
		338	317.5	279.4	18	116.3	253	761	5.7	284 - 286
	71 - 90	310	215.9	184.2	15	132	205	713	21	324 - 326
			266.7	228.6	14	148	253	761	5	364 - 365
	100 - 112	310	215.9	184.2	15	84.5	205	713	20.5	213 - 215
03	14 - 63	310	215.9	184.2	15	100.3	217.5	606.5	21	215
			266.7	228.6	14	116.3	234.5	796.5	5.3	254 - 256
		338	317.5	279.4	18	132	265.5	827.5	6.2	284 - 286
	71 - 90	310	215.9	184.2	15	148	302.5	864.5	21.5	324 - 326
			266.7	228.6	14	182.8	302.5	864.5	5.5	364 - 365
	100 - 112	310	215.9	184.2	15	84.5	217.5	606.5	7.7	404 - 405
04	14 - 63	310	215.9	184.2	15	100.3	217.5	606.5	21	215
			266.7	228.6	14	116.3	225	839	4.8	254 - 256
		338	317.5	279.4	18	132	242	856	5.7	284 - 286
	71 - 90	310	215.9	184.2	15	116.3	273	887	21	324
			266.7	228.6	14	120	310	924	7.2	404 - 405
	100 - 112	310	215.9	184.2	15	100.3	225	839	15.5	444
05	14 - 63	310	215.9	184.2	15	116.3	225	839	4.8	254 - 256
			266.7	228.6	14	132	242	856	5.7	284 - 286
		338	317.5	279.4	18	148	273	887	21.5	324 - 326
	71 - 90	310	215.9	184.2	15	120	273	887	5.5	364 - 365
			266.7	228.6	14	132	310	924	16	444
	100 - 112	310	215.9	184.2	15	100.3	225	839	21.5	324 - 326
06	14 - 63	310	215.9	184.2	15	116.3	225	912.5	6.2	284 - 286
			266.7	228.6	14	132	242	912.5	21.5	324 - 326
		338	317.5	279.4	18	148	273	943.5	5.5	364 - 365
	71 - 90	310	215.9	184.2	15	120	273	943.5	16	404 - 405
			266.7	228.6	14	132	310	943.5	21.5	324 - 326
	100 - 112	310	215.9	184.2	15	100.3	225	912.5	6.2	284 - 286
07	14 - 63	310	215.9	184.2	15	116.3	225	975.5	21.5	324 - 326
			266.7	228.6	14	132	242	975.5	5.5	364 - 365
		338	317.5	279.4	18	148	273	1006.5	7.7	404 - 405
	71 - 90	310	215.9	184.2	15	120	273	1043.5	16	444
			266.7	228.6	14	132	310	1083.5	21.5	324 - 326
	100 - 112	310	215.9	184.2	15	100.3	225	975.5	6.2	286
08	14 - 63	310	215.9	184.2	15	116.3	225	1036.5	6.2	286
			266.7	228.6	14	132	242	1036.5	21.5	324 - 326
		338	317.5	279.4	18	148	273	1067.5	5.5	364 - 365
	71 - 90	310	215.9	184.2	15	120	273	1104.5	16	444 - 449
			266.7	228.6	14	132	310	1144.5	21.5	324 - 326
	100 - 112	310	215.9	184.2	15	100.3	225	1067.5	5.5	364 - 365
09	14 - 63	310	215.9	184.2	15	116.3	225	1036.5	6.2	286
			266.7	228.6	14	132	242	1036.5	21.5	324 - 326
		338	317.5	279.4	18	148	273	1067.5	5.5	364 - 365
	71 - 90	310	215.9	184.2	15	120	273	1104.5	16	444 - 449
			266.7	228.6	14	132	310	1144.5	21.5	324 - 326
	100 - 112	310	215.9	184.2	15	100.3	225	1067.5	5.5	364 - 365
10	14 - 63	310	215.9	184.2	15	116.3	225	1136	5	364 - 365
			266.7	228.6	14	132	242	1136	7	404 - 405
		338	317.5	279.4	18	148	273	1173	7.2	404 - 405
	71 - 90	310	215.9	184.2	15	120	273	1213	15.5	444 - 449
			266.7	228.6	14	132	310	1213	15.5	444 - 449
	100 - 112	310	215.9	184.2	15	100.3	225	1136	21	326
11	14 - 63	310	215.9	184.2	15	116.3	225	1222	7	364 - 365
			266.7	228.6	14	132	242	1222	9.2	404 - 405
		338	317.5	279.4	18	148	273	1259	17.5	444 - 449
	71 - 90	310	215.9	184.2	15	120	273	1299	7	364 - 365
			266.7	228.6	14	132	310	1299	9.2	404 - 405
	100 - 112	310	215.9	184.2	15	100.3	225	1222	17.5	444 - 449
12	14 - 63	310	215.9	184.2	15	116.3	225	1299	23	326
			266.7	228.6	14	132	242	1299	7	364 - 365
		338	317.5	279.4	18	148	273	1336	21	326
	71 - 90	310	215.9	184.2	15	120	273	1336	5	364 - 365
			266.7	228.6	14	132	310	1336	7	404 - 405
	100 - 112	310	215.9	184.2	15	100.3	225	1222	7	364 - 365
13	14 - 63	310	215.9	184.2	15	116.3	225	1336	23	326
			266.7	228.6	14	132	242	1336	7	364 - 365
		338	317.5	279.4	18	148	273	1373	21	326
	71 - 90	310	215.9	184.2	15	120	273	1373	5	364 - 365
			266.7	228.6	14	132	310	1373	7	404 - 405
	100 - 112	310	215.9	184.2	15	100.3	225	1222	7	364 - 365
14	14 - 63	310	215.9	184.2	15	116.3	225	1373	23	326
			266.7	228.6	14	132	242	1373	7	364 - 365
		338	317.5	279.4	18	148	273	1410	21	326
	71 - 90	310	215.9	184.2	15	120	273	1410	5	364 - 365
			266.7	228.6	14	132	310	1410	7	404 - 405
	100 - 112	310	215.9	184.2	15	100.3	225	1222	7	364 - 365
15	14 - 63	310	215.9	184.2	15	116.3	225	1410	23	326
			266.7	228.6	14	132	242	1410	7	364 - 365
		338	317.5	279.4	18	148	273	1447	21	326
	71 - 90	310	215.9	184.2	15	120	273	1447	5	364 - 365
			266.7	228.6	14	132	310	1447	7	404 - 405
	100 - 112	310	215.9	184.2	15	100.3	225	1222	7	364 - 365
16	14 - 63	310	215.9	184.2	15	116.3	225	1447	23	326
			266.7	228.6	14	132	242	1447	7	364 - 365
		338	317.5	279.4	18	148	273	1484	21	326
	71 - 90	310	215.9	184.2	15	120	273	1484	5	364 - 365
			266.7	228.6	14	132	310	1484	7	404 - 405
	100 - 112	310	215.9	184.2	15	100.3	225	1222	7	364 - 365
17	14 - 63	310	215.9	184.2	15	116.3	225	1484	23	326
			266.7	228.6	14	132	242	1484	7	364 - 365
		338	317.5	279.4	18	148	273	1521	21	326
	71 - 90	310	215.9	184.2	15	120	273	1521	5	364 - 365
			266.7	228.6	14	132	310	1521	7	404 - 405
	100 - 112	310	215.9	184.2	15	100.3	225	1222	7	364 - 365
18	14 - 63	310	215.9	184.2	15	116.3	225	1521	23	3

8.18. Backstop

8.18.1. General

Backstops are optional accessories for the SEW-Eurodrive Compact® gear unit. The purpose of the backstop is to prevent undesirable reverse rotation.

8.18.2. Structure

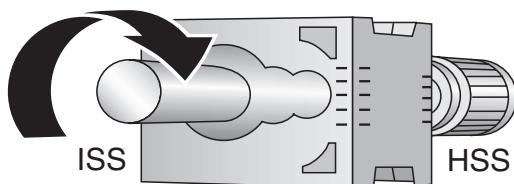
SEW-Eurodrive Compact® gear units can be equipped with a centrifugal lift-off sprag type backstop. Backstops are maintenance free and they are lubricated with the same oil as the gear unit.

8.18.3. Dimensioning

The size of backstop is defined so that the standard solution can be used without problems in all kind of applications.

8.18.3.1. Basic rules for mechanical dimensioning:

- rotating speed for gear unit HSS is 0...3000 rpm
- backstop can handle peak load from a motor that attempts to start in the wrong direction when the service factor of the gear unit (F_S), according to motorpower and gear unit nominal power, is more than $F_S \geq 1.3$
- maximum allowed torque for backstop converted to output shaft is at least 1.8 times gear unit nominal torque.



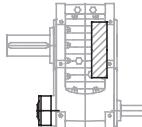
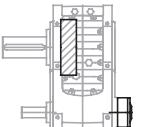
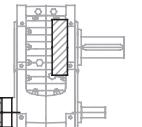
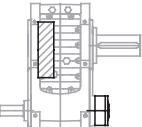
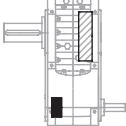
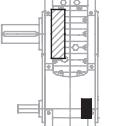
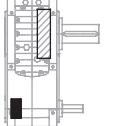
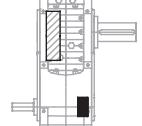
Look at the low speed shaft end for the direction of the rotation.

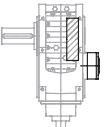
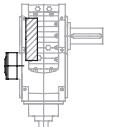
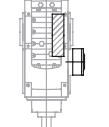
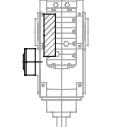
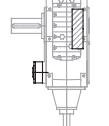
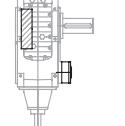
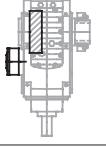
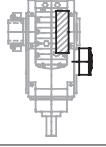
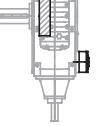
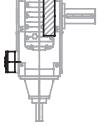
Clockwise is CW

Counterclockwise is CCW

Information to be given in an order:

- backstop type
- direction of rotation of LSS (see graphic above)
- a notice if an optional backstop and shaft position combination is required

	Shaft Positions			
	23	13 ⁽¹⁾	24 ⁽¹⁾	14
MC2P Solid shaft Hollow shaft with keyway Hollow shaft with shrink disk				
MC3P Solid shaft Hollow shaft with keyway Hollow shaft with shrink disk				

	Shaft Positions		Optional Backstop and Shaft Position Combinations	
	3	4	3 ⁽¹⁾	4 ⁽¹⁾
MC2R Solid shaft				
MC2R Hollow shaft with keyway				
MC3R⁽²⁾ Solid shaft Hollow shaft with keyway Hollow shaft with shrink disk				
MC2R Hollow shaft with shrink disk				
MC3R⁽³⁾ Solid shaft Hollow shaft with keyway Hollow shaft with shrink disk				

8.18.4. Construction

MC2P: 2-stage helical gear units. Backstop is on the side of the gear unit housing

MC3P: 3-stage helical gear units. Backstop is inside gear unit housing.

MC2R: 2-stage bevel-helical units. Backstop is on the side of the gear unit housing.

MC3R: 3-stage bevel-helical gear units. Backstop is outside gear unit housing.

⁽¹⁾ Maximum allowed external loads on LSS are lower

⁽²⁾ Backstop side: Driven machine side

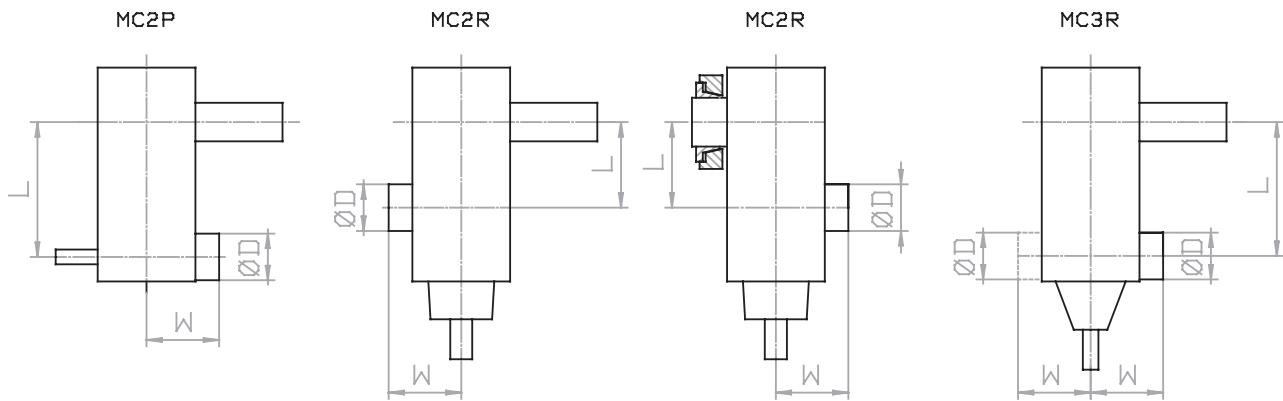
⁽³⁾ Backstop side: Opposite driven machine side

8.18.5. Backstop Dimensions

MC2P	W	L	ØD
02	233	280	150
03	255	310	175
04	275	340	175
05	295	374	190
06	308	409	190
07	330	445	210
08	355	490	210
09	365	540	210

MC2R	W	L	ØD
02	243	160	175
03	257	180	190
04	277	200	190
05	304	220	210
06	318	240	210
07	340	265	245
08	365	290	245
09	388	320	290

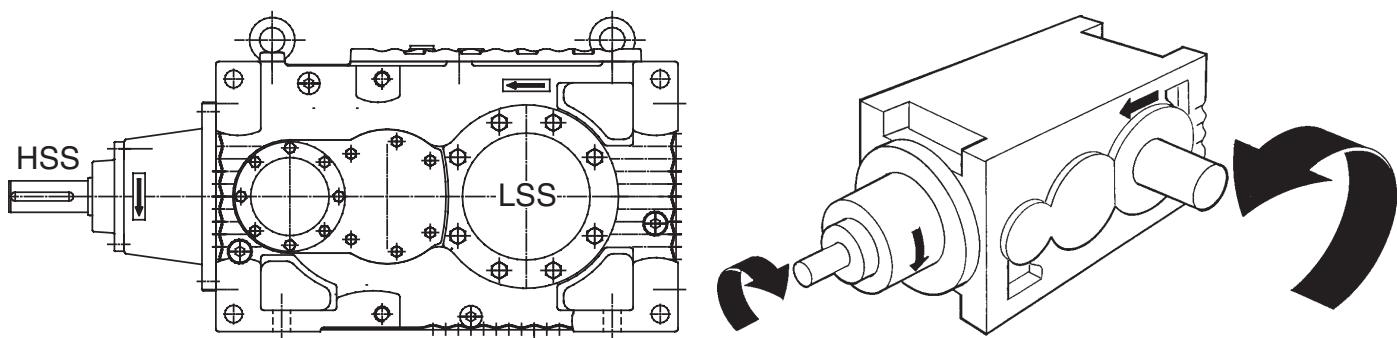
MC3R	W	L	ØD
02	233	280	150
03	255	310	175
04	275	340	175
05	282	374	175
06	308	409	190
07	320	445	190
08	355	490	210
09	365	540	210



8.18.6. Direction of Rotation

Backstops are mounted in the factory according to specification. Therefore, **direction of rotation for output shaft is important to specify**. It is also important for the customer to check that the electric motor is connected to rotate in the correct direction. Otherwise the peak torque of the electric motor may load the backstop in an unfavourable way.

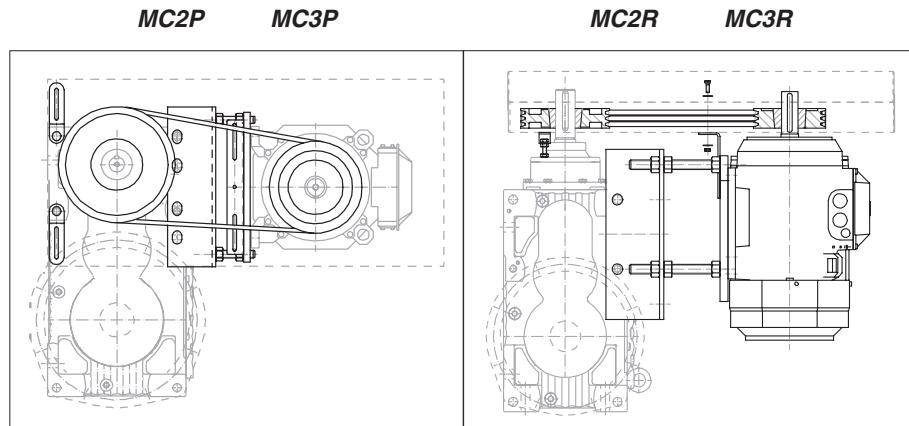
The permitted direction of rotation will be marked on housing.



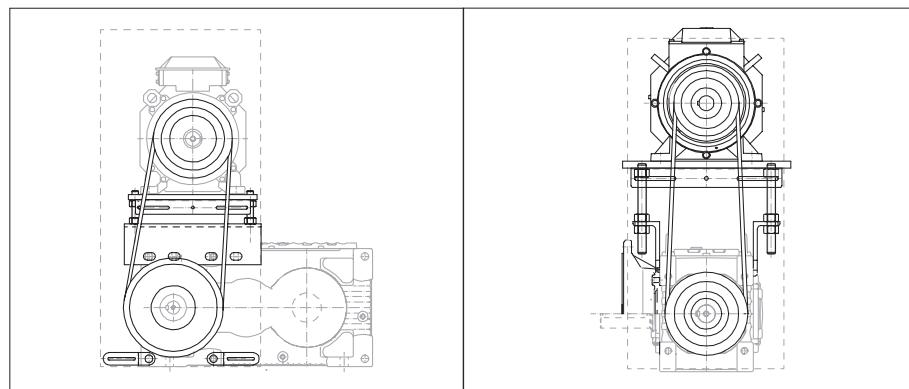
8.19. V-Belt Drive

- Maximum Motor Weights for V-Belt Drive
 $G_M = \text{motor weight}$
 $G_G = \text{gear unit weight}$

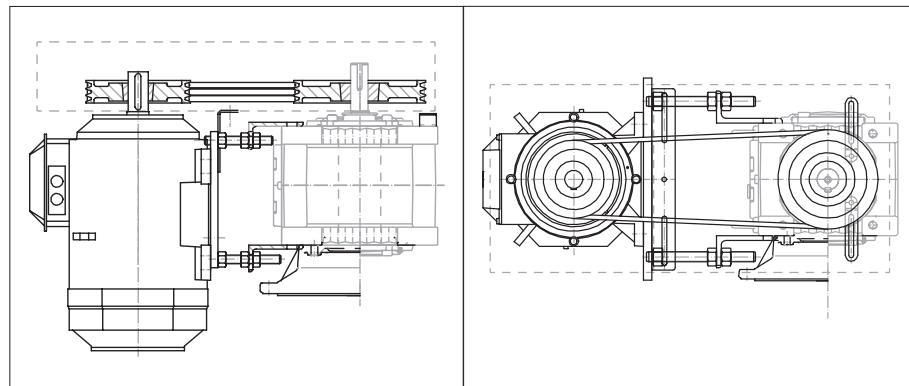
Upright Mounting	
Foot Mounted	$G_M \leq 0.4 * G_G$
Shaft Mounted	$G_M \leq 0.4 * G_G$
Flange Mounted	$G_M \leq 0.4 * G_G$



Horizontal LSS Mounting	
Foot Mounted	$G_M \leq 1.5 * G_G$
Shaft Mounted	$G_M \leq 1.5 * G_G$
Flange Mounted	$G_M \leq G_G$



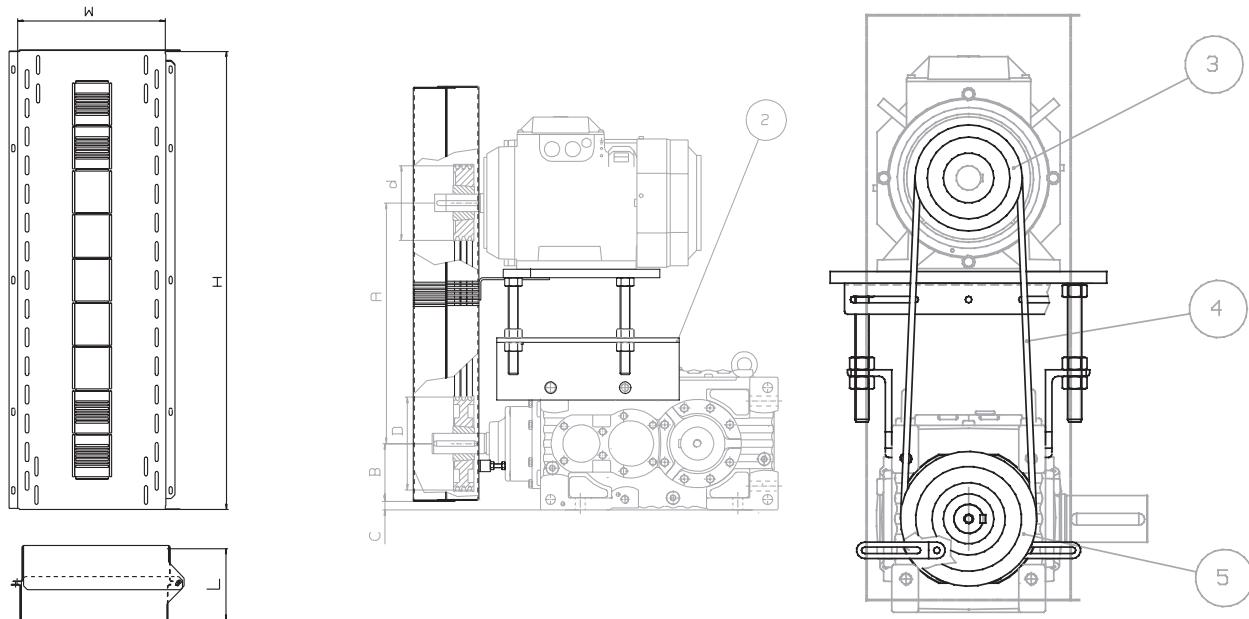
Vertical LSS Mounting	
Foot Mounted	$G_M \leq 0.4 * G_G$
Shaft Mounted	$G_M \leq 0.4 * G_G$
Flange Mounted	$G_M \leq 0.4 * G_G$



**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

V-belt guard is provided with hinges and slots for stroboscope.

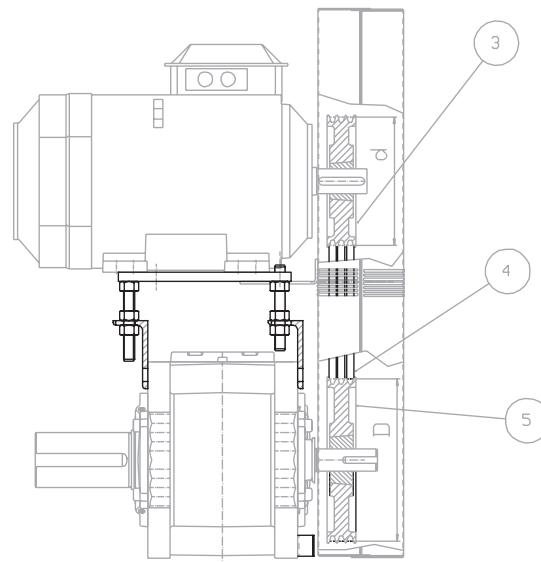
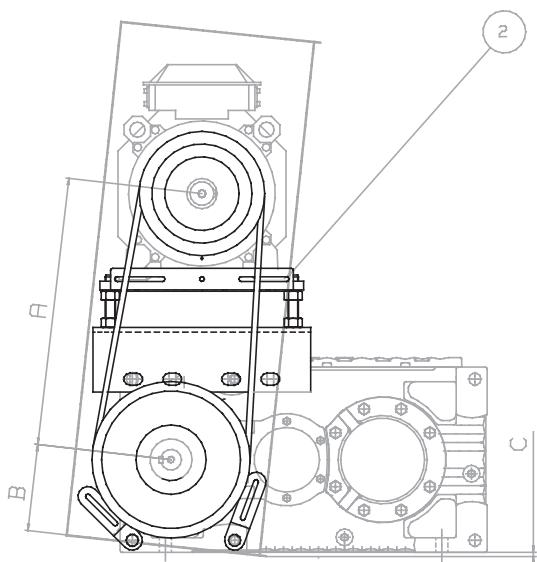


	W	H	L
VBC1	300	1000	160
VBC2	400	1200	190
VBC3	500	1200	220
VBC4	500	1400	220
VBC5	600	1400	220
VBC6	650	1650	220

Complete belt drive delivery includes:

Components

1. Belt guard
2. Motor bracket
3. Pulley (d) with taper bushing
4. V-belts
5. Pulley (D) with taper bushing



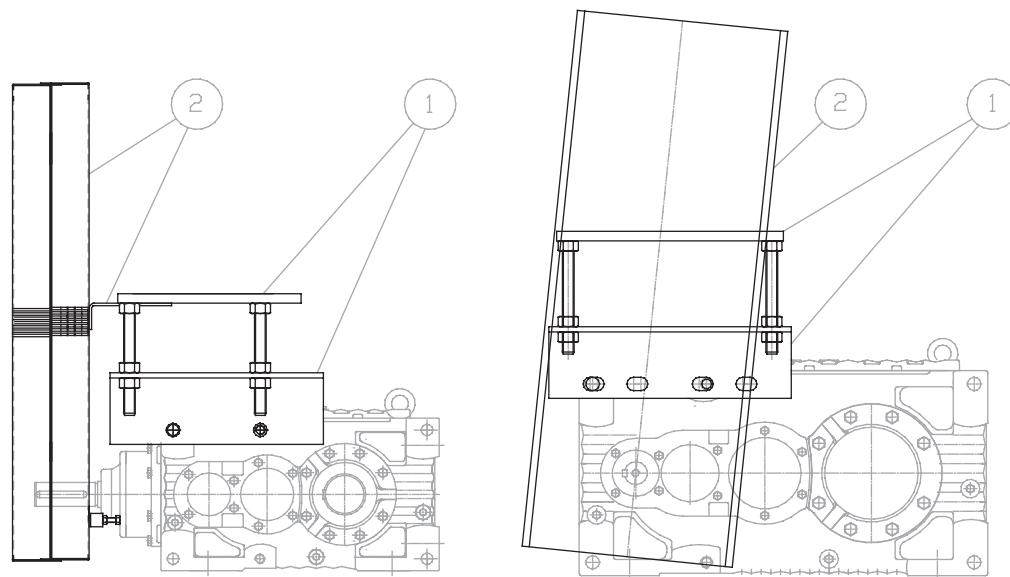
Note: if V-belt guard corner is placed below gear unit foot line, dimension C is negative.

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

8.20. Motor Bracket

V-belt drive can also be delivered without V-belts, pulleys and motor. Motor bracket delivery includes only the bracket (1). Belt guard (2) can be included as an optional feature.



(1) Motor bracket
(2) Belt guard and fastening plates

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

8.21. SPM-Nipple

8.21.1. Shock Pulse Adapter

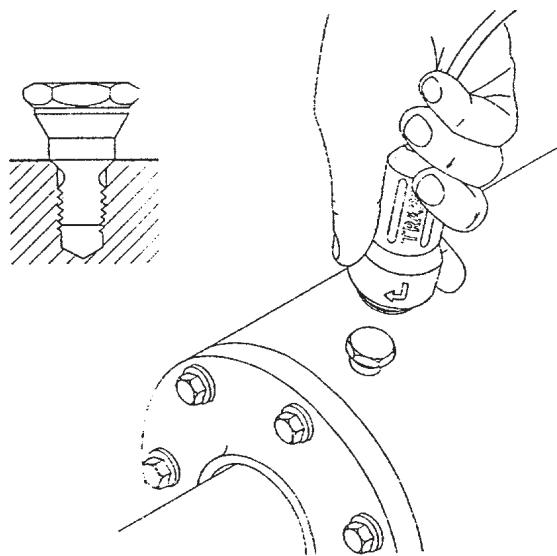
Adapters are installed on the housing in threaded, countersunk, mounting holes. They form the measuring point for bearing monitoring with the shock pulse transducer with quick connector.

SPM-nipples can be machined to different places depending on shaft positions, type of mounting and accessory combinations.

Gear units with SPM-nipples require longer delivery time than standard gear units.

Please contact nearest SEW-Eurodrive office.

Measurement

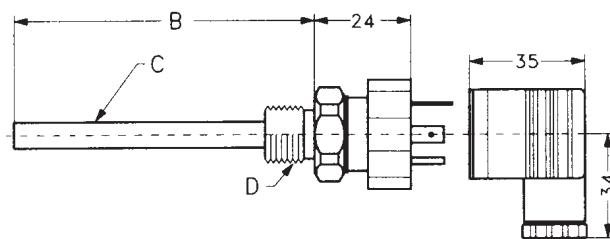


8.22. Temperature Sensor PT100 (MBT5250)

The temperature sensor, PT100, can be used for measurement of gear unit oil sump temperature.

Sensor tolerance is DIN IEC 751 Class B, $\pm(0.3 + 0.005 \times t)$

Dimensions



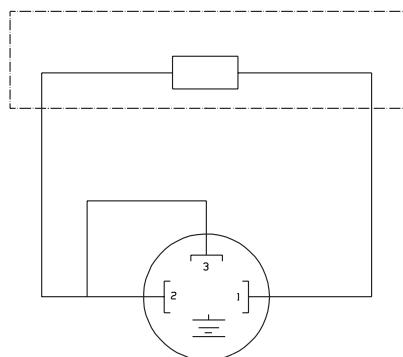
B = 150 (standard)

C = Ø8

D = R1/2

Plug DIN43650 PG9 (IP65)

Connection



Electrical Connections



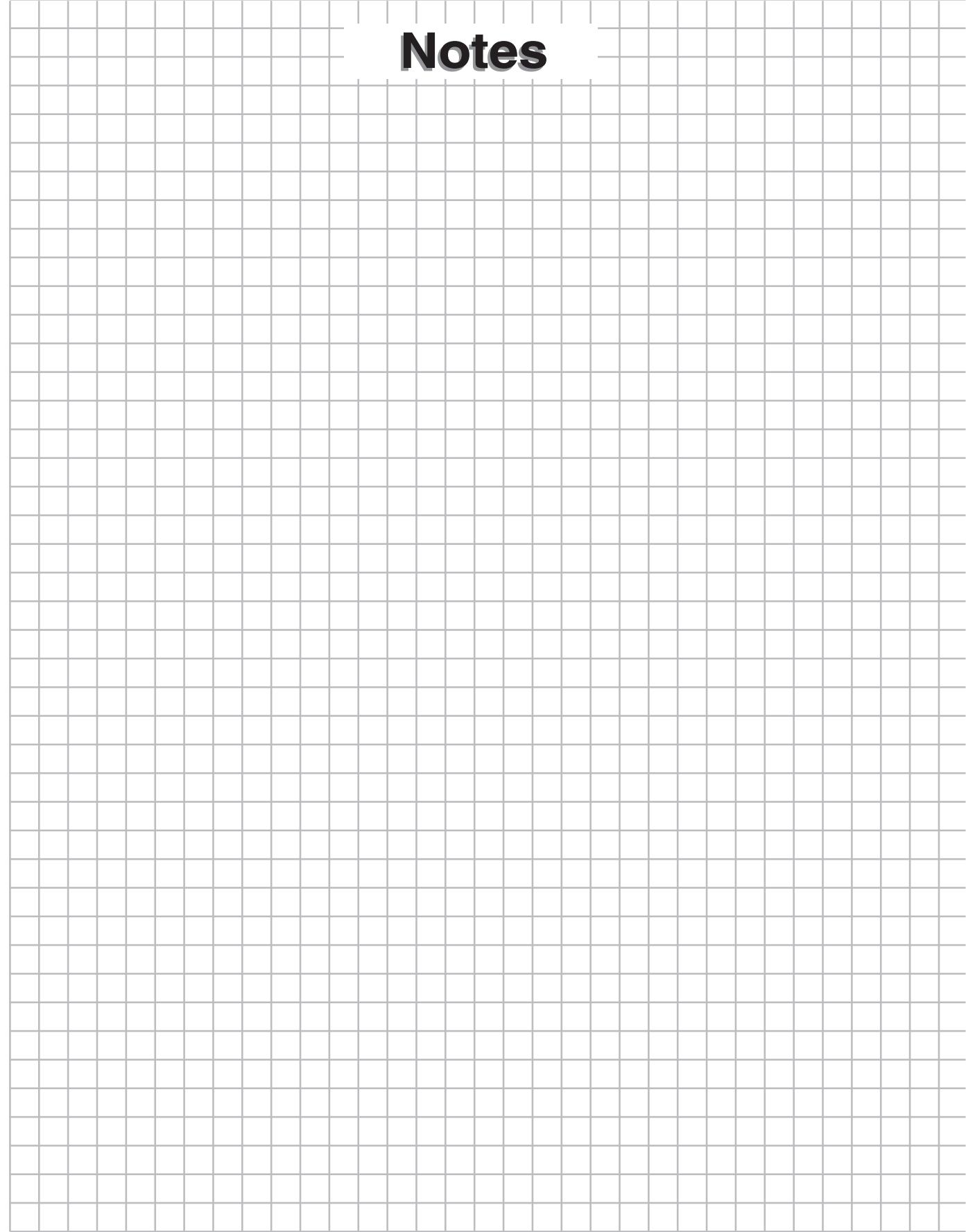
Not Connected

2-wire, 3 terminals

**Refer to page 22 for tolerance information
Unit of measure is metric unless otherwise noted

Dimensions subject to change without notice

Notes



Address List

USA			
Assembly Sales Service	South Carolina	SEW-EURODRIVE INC. 1295 Old Spartanburg Highway P.O. Box 518 Lyman, S.C. 29365	Tel. (864) 439-7537 Fax Sales (864) 439-7830 Fax Assembly (864) 439-0566 Telex 805 550 E-mail: cslyman@seweurodrive.com
Assembly Sales Service	California	SEW-EURODRIVE INC. 30599 San Antonio St. Hayward, California 94544-7101	Tel. (510) 487-3560 Fax (510) 487-6381 E-mail: cshayward@seweurodrive.com
	New Jersey	SEW-EURODRIVE INC. Pureland Ind. Complex 200 High Hill Road, P.O. Box 481 Bridgeport, New Jersey 08014	Tel. (856) 467-2277 Fax (856) 845-3179 E-mail: csbridgeport@seweurodrive.com
	Ohio	SEW-EURODRIVE INC. 2001 West Main Street Troy, Ohio 45373	Tel. (937) 335-0036 Fax (937) 440-3799 E-mail: cstroy@seweurodrive.com
	Texas	SEW-EURODRIVE INC. 3950 Platinum Way Dallas, Texas 75237	Tel. (214) 330-4824 Fax (214) 330-4724 E-mail: csdallas@seweurodrive.com
Canada			
Assembly Sales Service	Toronto	SEW-EURODRIVE CO. OF CANADA LTD. 210 Walker Drive Bramalea, Ontario L6T3W1	Tel. (905) 791-1553 Fax (905) 791-2999
	Vancouver	SEW-EURODRIVE CO. OF CANADA LTD. 7188 Honeyman Street Delta, B.C. V4G 1 E2	Tel. (604) 946-5535 Fax (604) 946-2513
	Montreal	SEW-EURODRIVE CO. OF CANADA LTD. 2555 Rue Leger Street LaSalle, Quebec H8N 2V9	Tel. (514) 367-1124 Fax (514) 367-3677
Large Gear Product Managers			
	Pennsylvania	MARK LUDINSKY 1204 Mahanoy Avenue Mahanoy City PA 17948	Tel. (570) 773-0799 Fax (570) 773-0719
	Indiana	JIM MAGILL 11684 Eden Estates Drive Carmel IN 46033	Tel. (317) 571-0253 Fax (317) 571-0264
	Texas	STEVE HUNTER 1012 Poe Lane Mansfield TX 76063	Tel. (817) 453-8877 Fax (817) 453-5737
USA District Sales Offices			
	Alabama	BOB WHITTLESEY 309 Cedar Hill Drive Birmingham AL 35242	Tel. (205) 979-3484 Fax (205) 822-1838
	Arkansas	ED LOCKETT 1402 Trails Edge Drive Conway AR 72032	Tel. (501) 336-8620 Fax (501) 327-8579
	California	RICK BURDICK 3942 Canyon Terrace Yorba Linda CA 92686	Tel./Fax (714) 970-6197
		MICHAEL HASKINS 7750 Chisamore Ranch Lane Vacaville CA 95688	Tel./Fax (707) 453-1550
		ROBERT HOEHN 11101 Gardenaire Lane Garden Grove CA 92841-1325	Tel./Fax (714) 537-3290
		JOHN MCNAMEE 1736 McClellan Drive Stockton CA 95207	Tel./Fax (209) 473-4887

USA District Sales Offices

Colorado	BRUCE COOPER 686 Lookout Mountain Road Golden CO 80401	Tel./Fax (303) 526-0228
Connecticut	DAVID DANFORTH 9 Windmill Road Ellington CT 06029	Tel. (860) 875-7938 Fax (860) 870-1025
Florida	TONY O. TOLEDO 902 25th Avenue W. Palmetto FL 34221	Tel. (941) 729-0717 Fax (941) 729-7507
Georgia	JIM GARRETT 3843 Boulder Creek Rd. Martinez GA 30907	Tel. (706) 210-0116 Fax (706) 228-4990
	JAMES WALSH 2417 Courtney Renae Drive Dacula GA 30019	Tel. (770) 237-8734 Fax (770) 237-5735
Idaho	DUWAYNE HOGAN 3622 Hillcrest Drive Coeur d'Alene ID 83815	Tel./Fax (208) 667-0414
Illinois	TOM ELLIS 205 W. Prairie Lane Princeton IL 61356	Tel. (815) 872-5200 Fax (815) 872-5202
	SCOTT R. JOHNSON 52 Boxwood Lane Cary IL 60013	Tel. (847) 639-9774 Fax (847) 639-9775
	JEFFREY L. WESTROM 2 S. 111 Stratford Road Glen Ellyn IL 60137	Tel. (630) 790-2868 Fax (630) 790-2878
Indiana	TED KNUE 2070 Lake Run Drive Greenwood IN 46143	Tel. (317) 888-9355 Fax (317) 882-0746
Iowa	JOHN HOHNSTEIN 10505 Hawks Haven Road Cedar Rapids IA 52411	Tel. (319) 378-1642 Fax (319) 378-5585
	MIKE MARKSBURY 3510 Lindenwood Street Sioux City IA 51104	Tel. (712) 255-3662 Fax (712) 258-9299
Kansas	GREG WHITE 15325 W. 84th Terrace Lenexa, Kansas 66219	Tel. (913) 310-0399 Fax (913) 310-0323
Kansas (South)	LOUIS BRANKEL 3301 S. 139th E. Avenue Tulsa OK 74134	Tel. (918) 437-4370 Fax (918) 437-4390
Louisiana	SHELDON ANDERSON 311 Anderson Road Quitman LA 71268	Tel. (318) 395-1001 Fax (318) 395-1002
Maryland	THOMAS MARTIN 102 Tidewater Drive Havre de Grace MD 21078	Tel. (410) 939-8503 Fax (410) 939-8457
Massachusetts	JOHN M. HEBERT 2 King Arthur Court Boxford MA 01921	Tel./Fax (978) 887-7070
Michigan	CHARLES F. MCCLAUGHLIN 2991 Baldwin Road Lake Orion MI 48360	Tel. (248) 391-0543 Fax (248) 391-0563
	JEFFREY ROBINSON 56869 Copperfield Drive Shelby Twp. MI 48316-4862	Tel. (586) 786-1930 Fax (586) 786-1931

USA District Sales Offices		
Michigan (Cont.)	District Sales Representative L.H. FLAHERTY COMPANY LARRY FLAHERTY DENNY DUIMSTRA 1577 E. Jefferson, S.E. Grand Rapids MI 49507	Tel. (616) 245-9266 (800) 878-0081 Fax (616) 241-0954
Minnesota	ANDY SEMELIS 8605 Yalta Street, N.E. Circle Pines MN 55014	Tel. (763) 780-1810 Fax (763) 780-3777
Missouri	GREGORY R. TUCKER 3618 Coffee Tree Court St. Louis MO 63129	Tel. (314) 845-6128 Fax (314) 845-6129
New Jersey	EDWARD McLAUGHLIN 7 Ridgeview Lane Port Jervis NY 12771	Tel. (845) 856-8811 Fax (845) 856-8844
	EDWARD TUCKER 806 Front Street Glendora NJ 08029	Tel. (856) 939-2535 Fax (856) 939-2114
New York	ART CONNER 112 Calvert Blvd. Tonawanda NY 14150	Tel. (716) 695-7728 Fax (716) 695-9109
	PETER T. SCHMITT 4627 Slippery Rock Manlius NY 13104	Tel. (315) 682-5369 Fax (315) 682-3556
	RICHARD MAGGIO 38 Roe Street Melville NY 11747	Tel. (631) 549-8750 Fax (631) 351-0872
North Carolina	EDWARD McLAUGHLIN 7 Ridgeview Lane Port Jervis NY 12771	Tel. (845) 856-8811 Fax (845) 856-8844
	BRENT CRAFT 4004 Smithfield Road Greensboro NC 27406	Tel. (336) 674-5361 Fax (336) 674-1290
	JACK F. JUNG 117 N. Brackenbury Lane Charlotte NC 28270	Tel. (704) 362-2674 Fax (704) 362-2961
Ohio	LOWELL BISHOP 4080 Bayberry Court Columbus OH 43220	Tel. (614) 538-0880 Fax (614) 538-0889
	GUY BORCHERS 82 Countryside Drive N. Troy OH 45373	Tel. (937) 339-1333 Fax (937) 339-1140
	JOHN HERSTINE 248 Plain Street PO Box 82 Magnolia OH 44643	Tel. (330) 866-2544 Fax (330) 866-2553
Oklahoma	ROBERT SCHMIDT 1214 Shady Lakes Dr Kent OH 44240	Tel. (330) 678-2550 Fax (330) 678-2446
	LOUIS BRANKEL 3301 S. 139th E. Avenue Tulsa OK 74134	Tel. (918) 437-4370 Fax (918) 437-4390
	MICHAEL S. JOHNSON 15804 N.E. 160 Ct Brush Prairie WA 98606	Tel./Fax (360) 256-1785
Oregon	SCOTT BANSKY 1213 Milton Street Pittsburgh PA 15218	Tel. (412) 243-9040 Fax (412) 243-9041
	MARK BETZER RR2, Box 1390 Milton PA 17847	Tel. (570) 742-1360 Fax (570) 742-1361

USA District Sales Offices			
Pennsylvania (Cont.)	PAUL E. DECKER 245 Washington Street Red Hill PA 18076	Tel./Fax (215) 679-5638 Fax (215) 679-6281	
	JOHN SHOOP PO Box 188 Picture Rocks PA 17737	Tel./Fax (570) 584-4368 Fax (570) 584-5097	
South Carolina	BILL KINARD 20 Wrenwood Court Greer SC 29651	Tel. (864) 288-2725 Fax (864) 288-3573	
Tennessee	RUSSELL MOOK 2501 Golden Pond Lane, Spring Hill TN 37174	Tel. (931) 486-3242 Fax (931) 486-1281	
Texas	JOHN HILL 170 Benchmark Trail Belton TX 76513	Tel. (254) 780-1251 Fax (254) 780-1074	
	KYLE M. SANDY 2828 Rosedale Dallas TX 75205	Tel. (214) 696-5595 Fax (214) 696-0242	
	STEWART SAPPINGTON 13519 Fawcett Houston TX 77069	Tel. (281) 893-2377 Fax (281) 893-1554	
	MIKE STEWART 2903 Shadwell Lane Mesquite TX 75149	Tel. (972) 289-7996 Fax (972) 288-3549	
Utah	STEVEN JACOBSON 5520 S 225 E Ogden UT 84405	Tel. (801) 612-9558 Fax (801) 612-9561	
Virginia	HANK HANNAM Rt. 2, Box 636 Forest VA 24551	Tel. (804) 525-5394 Fax (804) 525-5694	
	CHRIS WOOD 12211 Poplar Forest Drive Richmond VA 23233	Tel. (804) 740-2269 Fax (804) 741-5141	
Washington	WILLIAM A. ASCHENBRENNER 3687 Duwamish Ave. South Seattle WA 98134	Tel. (206) 264-0545 Fax (206) 264-1545	
Wisconsin	FRANK CARR PO Box 306 Menasha WI 54952	Tel. (920) 751-3871 Fax (920) 751-0107	
	WALTER STURGEON 4045 Fountain Plaza Drive Brookfield WI 53005	Tel. (262) 790-9715 Fax (262) 790-9716	
Algeria			
Technical Office	Alger	Réducom 16, rue des Frères Zaghoun Bellevue El-Harrach 16200 Alger	Tel. 2 82 22 84 Fax 2 82 22 84
Argentina			
Assembly Sales Service	Buenos Aires	SEW EURODRIVE ARGENTINA S.A. Centro Industrial Garin, Lote 35 Ruta Panamericana Km 37,5 1619 Garin	Tel. (3327) 45 72 84 Fax (3327) 45 72 21 sewar@sew-eurodrive.com.ar
Australia			
Assembly Sales Service	Melbourne	SEW-EURODRIVE PTY. LTD. 27 Beverage Drive Tullamarine, Victoria 3043	Tel. (03) 99 33 10 00 Fax (03) 99 33 10 03
	Sydney	SEW-EURODRIVE PTY. LTD. 9, Sleigh Place, Wetherill Park New South Wales, 2164	Tel. (02) 97 25 99 00 Fax (02) 97 25 99 05

Austria			
Assembly	Wien	SEW-EURODRIVE Ges.m.b.H. Richard-Strauss-Strasse 24 A-1230 Wien	Tel. (01) 6 17 55 00-0 Fax (01) 6 17 55 00-30 sew@sew-eurodrive.at
Bangladesh			
	Dhaka	Triangle Trade International Bldg-5, Road-2, Sec-3, Fax 02 89 33 44 Uttara Model Town Dhaka-1230 Bangladesh	Tel. 02 89 22 48
Belgium			
Assembly	Brüssel	CARON-VECTOR S.A. Avenue Eiffel 5 B-1300 Wavre	Tel. (010) 23 13 11 Fax (010) 2313 36 http://www.caron-vector.be info@caron-vector.be
Technical Office	Vlaanderen	CARON-VECTOR S.A. Industrieweg 112-114 B-9032 Gent (Wondelgem)	Tel. (32) 09/2 27 34 52 Fax (32) 09/2 27 41 55
Bolivia			
	La Paz	LARCOS S. R. L. Calle Batallón Colorados No.162 Piso 4 La Paz	Tel. 02 34 06 14 Fax 02 35 79 17
Brazil			
Production	Sao Paulo	SEW DO BRASIL Motores-Redutores Ltda. Rodovia Presidente Dutra, km 208 CEP 07210-000 - Guarulhos - SP	Tel. (011) 64 89-64 33 Fax (011) 64 80-46 12 sew@sew.com.br
<i>Additional addresses for service in Brazil provided on request!</i>			
Bulgaria			
Sales	Sofia	BEVER-DRIVE GMBH Bogdanovetz Str.1 BG-1606 Sofia	Tel. (92) 9 53 25 65 Fax (92) 9 54 93 45 bever@mbox.infotel.bg
Cameroon			
Technical Office	Douala	Electro-Services Rue Drouot Akwa B.P. 2024 Douala	Tel. 43 22 99 Fax 42 77 03
Chile			
Assembly	Santiago de Chile	SEW-EURODRIVE CHILE Motores-Reductores LTDA. Panamericana Norte No 9261 Casilla 23 - Correo Quilicura RCH-Santiago de Chile	Tel. (02) 6 23 82 03+6 23 81 63 Fax (02) 6 23 81 79
China			
Production	Tianjin	SEW-EURODRIVE (Tianjin) Co., Ltd. No. 46, 7th Avenue, TEDA Tianjin 300457	Tel. (022) 25 32 26 12 Fax (022) 25 32 26 11
Colombia			
Assembly	Bogotá	SEW-EURODRIVE COLOMBIA LTDA. Calle 22 No. 132-60 Bodega 6, Manzana B Santafé de Bogotá	Tel. (0571) 5 47 50 50 Fax (0571) 5 47 50 44 sewcol@andinet.com
Croatia			
Sales	Zagreb	KOMPEKS d. o. o. PIT Erdödy 4 II HR 10 000 Zagreb	Tel. +385 14 61 31 58 Fax +385 14 61 31 58

Czech Republic			
Sales	Praha	SEW-EURODRIVE S.R.O. Business Centrum Praha Luná 591 16000 Praha 6	Tel. 02/20 12 12 34 + 20 12 12 36 Fax 02/20 12 12 37 sew@sew-eurodrive.cz
Denmark			
Assembly Sales Service	Kopenhagen	SEW-EURODRIVE A/S Geminivej 28-30, P.O. Box 100 DK-2670 Greve	Tel. 4395 8500 Fax 4395 8509 http://www.sew-eurodrive.dk sew@sew-eurodrive.dk
Egypt			
	Cairo	Copam Egypt for Engineering & Agencies 33 El Hegaz ST, Heliopolis, Cairo	Tel. (02) 2 56 62 99-2 41 06 39 Fax (02) 2 59 47 57-2 40 47 87
Estonia			
Sales	Tallin	ALAS-KUUL AS Paldiski mnt.125 EE 0006 Tallin	Tel. 6 59 32 30 Fax 6 59 32 31
Finland			
Assembly Sales Service	Lahti	SEW-EURODRIVE OY Vesimäentie 4 FIN-15860 Hollola 2	Tel. (3) 589 300 Fax (3) 780 6211
France			
Production Sales Service	Haguenau	SEW-USOCOME SAS 48-54, route de Soufflenheim B. P. 185 F-67506 Haguenau Cedex	Tel. 03 88 73 67 00 Fax 03 88 73 66 00 http://www.usocome.com sew@usocome.com
Assembly Sales Service	Bordeaux	SEW-USOCOME SAS Parc d'activités de Magellan 62, avenue de Magellan - B. P. 182 F-33607 Pessac Cedex	Tel. 05 57 26 39 00 Fax 05 57 26 39 09
	Lyon	SEW-USOCOME SAS Parc d'Affaires Roosevelt Rue Jacques Tati F-69120 Vaulx en Velin	Tel. 04 72 15 37 00 Fax 04 72 15 37 15
	Paris	SEW-USOCOME SAS Zone industrielle 2, rue Denis Papin F-77390 Verneuil l'Etang	Tel. 01 64 42 40 80 Fax 01 64 42 40 88
Gabon			
Technical Office	Libreville	Electro-Services B.P. 1889 Libreville	Tel. 73 40 11 Fax 73 40 12
Germany			
Headquarters Production Sales Service	Bruchsal	SEW-EURODRIVE GmbH & Co Ernst-Bickle-Straße 42 D-76646 Bruchsal P.O. Box Postfach 3023 · D-76642 Bruchsal	Tel. (0 72 51) 75-0 Fax (0 72 51) 75-19 70 Telex 7 822 391 http://www.SEW-EURODRIVE.de sew@sew-eurodrive.de
Production	Graben	SEW-EURODRIVE GmbH & Co Ernst-Bickle-Straße 1 D-76676 Graben-Neudorf P.O. Box Postfach 1220 · D-76671 Graben-Neudorf	Tel. (0 72 51) 75-0 Fax (0 72 51) 75-29 70 Telex 7 822 276
Assembly Service	Garbsen (near Hannover)	SEW-EURODRIVE GmbH & Co Alte Ricklinger Straße 40-42 D-30823 Garbsen Postfach 110453 · D-30804 Garbsen	Tel. (0 51 37) 87 98-30 Fax (0 51 37) 87 98-55

Germany			
Kirchheim (near München)	SEW-EURODRIVE GmbH & Co Domagkstraße 5 D-85551 Kirchheim	Tel. (0 89) 90 95 52-10 Fax (0 89) 90 95 52-50	
Langenfeld (near Düsseldorf)	SEW-EURODRIVE GmbH & Co Siemensstraße 1 D-40764 Langenfeld	Tel. (0 21 73) 85 07-30 Fax (0 21 73) 85 07-55	
Meerane (near Zwickau)	SEW-EURODRIVE GmbH & Co Dänkritzer Weg 1 D-08393 Meerane	Tel. (0 37 64) 76 06-0 Fax (0 37 64) 76 06-30	
Great Britain			
Assembly	Normanton	SEW-EURODRIVE Ltd. Beckbridge Industrial Estate P.O. Box No.1 GB-Normanton, West-Yorkshire WF6 1QR	Tel. 19 24 89 38 55 Fax 19 24 89 37 02
Greece			
Sales Service	Athen	Christ. Bozinos & Son S.A. 12, Mavromichali Street P.O. Box 80136, GR-18545 Piraeus	Tel. 14 22 51 34 Fax 14 22 51 59 Bozinos@otenet.gr
Hong Kong			
Assembly	Hong Kong	SEW-EURODRIVE LTD. Unit No. 801-806, 8th Floor Hong Leong Industrial Complex No. 4, Wang Kwong Road Kowloon, Hong Kong	Tel. 2-7 96 04 77 + 79 60 46 54 Fax 2-7 95-91 29sew@sewhk.com
Hungary			
Sales Service	Budapest	SEW-EURODRIVE Kft. H-1037 Budapest Kunigunda u. 18	Tel. +36 1 437 06 58 Fax +36 1 437 06 50
Iceland			
	Hafnarfjördi	VARMAVERK ehf Dalshrauni 5 IS - 220 Hafnarfjördi	Tel. (354) 5 65 17 50 Fax (354) 5 65 19 51 varmaverk@varmaverk.is
India			
Assembly	Baroda	SEW-EURODRIVE India Pvt. Ltd. Plot No. 4, Gidc Por Ramangamdi · Baroda - 391 243 Gujarat	Tel. 0 265-83 10 86 Fax 0 265-83 10 87 sew.baroda@gecsl.com
Indonesia			
Technical Office	Jakarta	SEW-EURODRIVE Pte Ltd. Jakarta Liaison Office, Fax (021) 536-36 86 Menara Graha Kencana Jl. Perjuangan No. 88, LT 3 B, Kebun Jeruk, Jakarta 11530	Tel. (021) 535-90 66/7
Ireland			
Sales Service	Dublin	Alperton Engineering Ltd. 48 Moyle Road Dublin Industrial Estate Glasnevin, Dublin 11	Tel. (01) 8 30 62 77 Fax (01) 8 30 64 58
Israel			
	Tel-Aviv	Liraz Handasa Ltd. 126 Petach-Tikva Rd. Tel-Aviv 67012	Tel. 03-6 24 04 06 Fax 03-6 24 04 02
Italy			
Assembly	Milano	SEW-EURODRIVE di R. Bickle & Co.s.a.s. Via Bernini, 14 I-20020 Solaro (Milano)	Tel. (02) 96 98 01 Fax (02) 96 79 97 81

Ivory Coast			
Technical Office	Abidjan	SICA Ste industrielle et commerciale pour l'Afrique 165, Bld de Marseille B.P. 2323, Abidjan 08	Tel. 25 79 44 Fax 25 84 36
Japan			
Assembly Sales Service	Toyoda-cho	SEW-EURODRIVE JAPAN CO., LTD 250-1, Shimoman-no, Fax (0 53 83) 7 3814 Toyoda-cho, Iwata gun Shizuoka prefecture, P.O. Box 438-0818	Tel. (0 53 83) 7 3811-13
Korea			
Assembly Sales Service	Ansan-City	SEW-EURODRIVE KOREA CO., LTD. B 601-4, Banweol Industrial Estate Unit 1048-4, Shingil-Dong Ansan 425-120	Tel. (031) 4 92-80 51 Fax (031) 4 92-80 56
Lebanon			
Technical Office	Beirut	Gabriel Acar & Fils sarl B. P. 80484 Bourj Hammoud, Beirut	Tel. (01) 49 47 86 (01) 49 82 72 (03) 27 45 39 Fax (01) 49 49 71x Gacar@beirut.com
Luxembourg			
Assembly Sales Service	Brüssel	CARON-VECTOR S.A. Avenue Eiffel 5 B-1300 Wavre	Tel. (010) 23 13 11 Fax (010) 2313 36 http://www.caron-vector.be info@caron-vector.be
Macedonia			
Sales	Skopje	SGS-Skopje / Macedonia “Teodosij Sinactaski” 6691000 Skopje / Macedonia	Tel. (0991) 38 43 90 Fax (0991) 38 43 90
Malaysia			
Assembly Sales Service	Johore	SEW-EURODRIVE SDN BHD No. 95, Jalan Seraja 39, Taman Johor Jaya 81000 Johor Bahru, Johor West Malaysia	Tel. (07) 3 54 57 07 + 3 54 94 09 Fax (07) 3 5414 04
Mexico			
	Tultitlan	SEW-EURODRIVE, Sales and Distribution, S.A.de C.V. Boulevard Tultitlan Oriente #2 “G” Colonia Ex-Rancho de Santiaguito Tultitlan, Estado de México, México 54900	Tel. 52 55 5888 2976 Fax 52 55 5888 2977 scmexico@seweurodrive.com.mx
Morocco			
	Casablanca	S. R. M. Société de Réalisations Mécaniques 5, rue Emir Abdelkader 05 Casablanca	Tel. (02) 61 86 69/61 86 70/61 86 71 Fax (02) 62 15 88 SRM@marocnet.net.ma
Netherlands			
Assembly Sales Service	Rotterdam	VECTOR Aandrijftechniek B.V. Industrieweg 175 NL-3044 AS Rotterdam Postbus 10085 NL-3004AB Rotterdam	Tel. (010) 4 46 37 00 Fax (010) 4 15 55 52
New Zealand			
Assembly Sales Service	Auckland	SEW-EURODRIVE NEW ZEALAND LTD. P.O. Box 58-428 82 Greenmount drive East Tamaki Auckland	Tel. 0064-9-2 74 56 27 Fax 0064-9-2 74 01 65 sales@sew-eurodrive.co.nz
	Christchurch	SEW-EURODRIVE NEW ZEALAND LTD. 10 Settlers Crescent, Ferrymead Christchurch	Tel. (09) 3 84 62 51 Fax (09) 3 84 64 55 sales@sew-eurodrive.co.nz

Norway			
Assembly	Moss	SEW-EURODRIVE A/S Solgaard skog 71 N-1599 Moss	Tel. (69) 2410 20 Fax (69) 2410 40 sew@sew-eurodrive.no
Pakistan			
Technical Office	Karachi	SEW-EURODRIVE Pte. Ltd. Karachi Liaison Office A/3, 1 st Floor, Central Commercial Area Sultan Ahmed Shah Road Block7/8, K.C.H.S. Union Ltd., Karachi	Tel. 92-21-43 93 69 Telex 92-21-43 73 65
Paraguay			
	Asunción	EQUIS S. R. L. Avda. Madame Lynch y Sucre Asunción	Tel. (021) 67 21 48 Fax (021) 67 21 50
Peru			
Assembly	Lima	SEW DEL PERU MOTORES REDUCTORES S.A.C. Los Calderos # 120-124 Urbanizacion Industrial Vulcano, ATE, Lima	Tel. (511) 349-52 80 Fax (511) 349-30 02 sewperu@terra.com.pe
Philippines			
Technical Office	Manila	SEW-EURODRIVE Pte Ltd Manila Liaison Office Suite 110, Ground Floor Comfoods Building Senator Gil Puyat Avenue 1200 Makati City	Tel. 0 06 32-8 94 27 52 54 Fax 0 06 32-8 94 27 44 sewmla@i-next.net
Poland			
Sales	Lodz	SEW-EURODRIVE Polska Sp.z.o.o. ul. Pojezierska 63 91-338 Lodz	Tel. (042) 6 16 22 00 Fax (042) 6 16 22 10 sew@sew-eurodrive.pl
Portugal			
Assembly	Coimbra	SEW-EURODRIVE, LDA. Apartado 15 P-3050-901 Mealhada	Tel. (0231) 20 96 70 Fax (0231) 20 36 85 infosew@sew-eurodrive.pt
Romania			
Sales	Bucuresti	Sialco Trading SRL str. Madrid nr.4 71222 Bucuresti	Tel. (01) 2 30 13 28 Fax (01) 2 30 71 70 sialco@mediasat.ro
Russia			
Sales	St. Petersburg	ZAO SEW-EURODRIVE P.O. Box 193 193015 St. Petersburg	Tel. (812) 3 26 09 41 + 5 35 04 30 Fax (812) 5 35 22 87 sewrus@post.spbnit.ru
Senegal			
	Dakar	SENEMECA Mécanique Générale Km 8, Route de Rufisque B.P. 3251, Dakar	Tel. 22 24 55 Fax 22 79 06 Telex 21521
Singapore			
Assembly		SEW-EURODRIVE PTE. LTD.	Tel. 8 62 17 01-705
Sales		No 9, Tuas Drive 2	Fax 8 61 28 27
Service		Jurong Industrial Estate	Telex 38 659
		Singapore 638644	
Slovenia			
Sales	Celje	Pakman - Pogonska Tehnika d.o.o. UI. XIV. divizije 14 SLO - 3000 Celje	Tel. 00386 3 490 83 20 Fax 00386 3 490 83 21 pakman@siol.net

South Africa

Assembly Sales Service	Johannesburg	SEW-EURODRIVE (PROPRIETARY) LIMITED Eurodrive House Cnr. Adcock Ingram and Aerodrome Roads Aeroton Ext. 2 Johannesburg 2013 P.O.Box 90004 Bertsham 2013	Tel. + 27 11 248 70 00 Fax +27 11 494 23 11
	Capetown	SEW-EURODRIVE (PROPRIETARY) LIMITED Rainbow Park Cnr. Racecourse & Omuramba Road Montague Gardens, 7441 Cape Town P.O.Box 53 573 Racecourse Park, 7441 Cape Town	Tel. +27 21 552 98 20 Fax +27 21 552 98 30 Telex 576 062
	Durban	SEW-EURODRIVE (PROPRIETARY) LIMITED 2 Monaceo Place Pinetown Durban P.O. Box 10433, Ashwood 3605	Tel. +27 31 700 34 51 Fax +27 31 700 38 47

Spain

Assembly Sales Service	Bilbao	SEW-EURODRIVE ESPAÑA, S.L. Parque Tecnológico, Edificio, 302 E-48170 Zamudio (Vizcaya)	Tel. 9 44 31 84 70 Fax 9 44 31 84 71 sew.spain@sew-eurodrive.es
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Sri Lanka

Colombo 4	SM International (Pte) Ltd 254, Galle Raod Colombo 4, Sri Lanka	Tel. 941-59 79 49 Fax 941-58 29 81
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Sweden

Assembly Sales Service	Jönköping	SEW-EURODRIVE AB Gnejsvägen 6-8 S-55303 Jönköping Box 3100 S-55003 Jönköping	Tel. (036) 34 42 00 Fax (036) 34 42 80 www.sew-eurodrive.se
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Switzerland

Assembly Sales Service	Basel	Alfred Imhof A.G. Jurastrasse 10 CH-4142 Münchenstein bei Basel	Tel. (061) 4 17 17 17 Fax (061) 4 17 17 00 http://www.imhof-sew.ch
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Taiwan (R.O.C.)

Nan Tou	Ting Shou Trading Co., Ltd. No. 55 Kung Yeh N. Road Industrial District Nan Tou 540	Tel. 00886-49-255-353 Fax 00886-49-257-878
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Thailand

Assembly Sales Service	Chon Buri	SEW-EURODRIVE (Thailand) Ltd. Bangpakong Industrial Park 2 700/456, Moo.7, Tambol Donhuaroh Muang District Chon Buri 20000	Tel. 0066-38 21 40 22 Fax 0066-38 21 45 31
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Tunisia

Tunis	T. M.S. Technic Marketing Service 7, rue Ibn El Heithem Z.I. SMMT 2014 Mégrine Erriadh	Tel. (1) 43 40 64 + 43 20 29 Fax (1) 43 29 76
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Turkey			
Assembly	<i>Istanbul</i>	SEW-EURODRIVE Hareket Sistemleri San. ve Tic. Ltd. Sti Bagdat Cad. Koruma Cikmazi No. 3 TR-81540 Maltepe ISTANBUL	Tel. (0216) 4 41 91 63 + 4 41 91 64 + 3 83 80 14 + 3 83 80 15 Fax (0216) 3 05 58 67 seweurodrive@superonline.com.tr
Sales			
Service			
Uruguay			
	<i>Montevideo</i>	SEW-EURODRIVE S. A. Sucursal Uruguay German Barbato 1526 CP 11200 Montevideo	Tel. 0059 82 9018 189 Fax 0059 82 9018 188 sewuy@sew-eurodrive.com.uy
Venezuela			
Assembly	<i>Valencia</i>	SEW-EURODRIVE Venezuela S.A. Av. Norte Sur No. 3, Galpon 84-319 Zona Industrial Municipal Norte Valencia	Tel. +58 (241) 8 32 98 04 Fax +58 (241) 8 38 62 75 sewventas@cantr.net sewfinanzas@cantr.net
Sales			
Service			

Notes