# INDICE
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# INTRODUCCIÓN
*INTRODUCTION*

El progreso industrial demanda mejores, eficaces y duraderos productos. **REDUMSA** consiente de ésta imperiosa necesidad, lanza al mercado industrial una amplia gama de Reductores de Velocidad para el accionamiento de diferentes mecanismos, Atendiendo las exigentes necesidades de la industria, **REDUMSA** colabora con ello a cumplir con los requisitos de las especificaciones y normas de cada empresa, ofreciendo calidad total y garantía en nuestros equipos. Actualmente **REDUMSA** trabaja bajo un sistema de calidad basado en la norma ISO 9001:2015. Conozca a través de éste catálogo que producto cubre sus necesidades y en caso de surgir alguna duda, requiere de más información ó asesoría técnica contáctenos o comuníquese con alguno de nuestros distribuidores autorizados.

*The industry progress demand better, effective and lasting products.* ***REDUMSA*** *conscious of this one urgent necessity launch to the industrial market an ample range of Speed Reducers for the drive of different mechanisms. Taking care of the demanding necessities of the industry,* ***REDUMSA*** *collaborates with it to fulfill the requirements of the specifications and norms of each company, offering total quality and guarantee in our equipment. At the moment* ***REDUMSA*** *works under a system of quality based on ISO 9001:2015. Know throught this catalogue what product covers your necessities and in case of arising some doubt, requiring more information or technical support, contact us or some of our authorized distributors.*

## REDUMSA LE OFRECE
## *REDUMSA OFFERS YOU*

(+)  X (-) $ =

Mas HP por menos costo, con la misma eficiencia.

Transmisiones con amplia gama de potencias.
Materiales de construccion de alta capacidad, máxima resistencia, tratamientos térmicos para ofrecer plena seguridad de garantía.

*More HP for less money, with the same efficiency.*

*Transmissions with a wide variety of horsepower.*
*Materials of construction with a great capacity, maximum resistance and thermo treatments, to offer plain security in the guarantee.*

# FACTOR DE SERVICIO
*DUTY FACTOR*

Las cifras indicadas en las tablas de capacidades de los reductores, son para un factor de servicio 1.0 (FS:1) esto es de 8 a 10 horas diarias de trabajo continuo, movimientos uniformes, sin choques ni arranques frecuentes. Si el reductor va a trabajar en condiciones diferentes, se deberá seleccionar el Factor de Servicio adecuado según la siguiente tabla.

*The numbers indicated in the capacity tables of the reducers, are for duty factors 1.0 (DF:1) this is for 8 to 10 daily hours of continuous work, uniform movement, without shocks or frequent stating. If the reducer is going to work in different conditions, a different factor should be selected, that is an adequate factor based on the following table.*

| **FACTORES DE SERVICIO** *(DUTY FACTOR)* | | | | |
|---|---|---|---|---|
| **ACCIONAMIENTO PRIMARIO** *(PRIMARY ACTIVATION)* | **DURACIÓN DEL SERVICIO (WORKING DURATION)** **TIEMPO TOTAL TRABAJADO POR DÍA** *(TOTAL TIME WORKED PER DAY)* | **CLASIFICACIÓN DE LA CARGA DEL EQUIPO ACCIONADO** *(LOAD CLASSIFICATION OF OPERATE EQUIPMENT)* | | |
| | | **DE EQUIPO UNIFORME** *(UNIFORMED EQUIPMENT)* | **CHOQUE MODERADO** *(MODERATE SHOCKS)* | **CHOQUE PESADO** *(HEAVY SHOCKS)* |
| MOTOR ELÉCTRICO *(ELECTRIC MOTOR)* | Ocasional _ hora *(Ocassional_ hour)* | 0.80 | 0.90 | 1.00 |
| | Intermitente 2 horas (Intermittent 2 Hours) | 0.90 | 1.00 | 1.25 |
| | 10 Horas (10 hours) | 1.00 | 1.25 | 1.5 |
| | 24 horas (24 hours) | 1.25 | 1.50 | 1.75 |
| MAQUINAS DE COMBUSTIÓN INTERNA *(INTERNAL COMBUSTION MACHINERY)* CLINDROS MÚLTIPLES (MULTIPLE CYLINDERS) | Ocasional _ hora (Ocassional_ hour) | 0.90 | 1.00 | 1.25 |
| | Intermitente 2 horas (Intermittent 2 Hours) | 1.25 | 1.25 | 1.50 |
| | 10 Horas (10 hours) | 1.50 | 1.50 | 1.75 |
| | 24 horas (24 hours) | 1.75 | 1.75 | 2.00 |
| MAQUINAS DE COMBUSTIÓN INTERNA *(INTERNAL COMBUSTION MACHINERY)* UN CLINDRO *(ONE CYLINDER)* | Ocasional _ hora *(Ocassional_ hour)* | 1.00 | 0.90 | 1.50 |
| | Intermitente 2 horas (Intermittent 2 Hours) | 1.25 | 1.00 | 1.75 |
| | 10 Horas (10 hours) | 1.50 | 1.25 | 2.00 |
| | 24 horas (24 hours) | 1.75 | 1.50 | 2.25 |
| MOTOR ELÉCTRICO ARRANQUES Y PAROS MUY FRECUENTES *(ELECTRICAL MOTOR FREQUENT STARTING AND STOPS)* 10 Ó MAS PAROS POR HORA *(10 OR MORE STOPS PER HOUR)* | Ocasional _ hora (Ocassional_ hour) | 0.90 | 1.00 | 1.25 |
| | Intermitente 2 horas (Intermittent 2 Hours) | 1.25 | 1.25 | 1.50 |
| | 10 Horas (10 hours) | 1.50 | 1.50 | 1.75 |
| | 24 horas (24 hours) | 1.75 | 1.75 | 2.00 |

# PROCEDIMIENTO DE SELECCIÓN

*PROCESS OF SELECTION*

1. Seleccione el factor de servicio adecuado.
2. Multiplique el par o potencia aplicada (H.P)por el factor de servicio.
3. Determine la relación de velocidad basándose en las R.P.M de entrada y salida del reductor.
4. Seleccione el reductor adecuado, tomando en cuenta la potencia (H.P) ó el par de torsión y la relación de velocidad obtenida. (Ver tablas de potencia Pág. 23, 24, 25)
5. Solicite su reductor de velocidad tomando en cuenta las siguientes indicaciones.

*1. Select the adecuate duty factor.*
*2. Multiply the torque or power (HP) by the duty factor.*
*3. Determine the velocity ratio, based on the RPM of the input and output of the reducer.*
*4. Select the adequate reducer, taking in considereation the power (HP) or the torque and the velocity ratio obtained. (see power tables pg. )*
*5. Order your reducer following the next procedure*

## INFORMACIÓN PARA ORDENAR SU REDUCTOR *(INFORMATION TO MAKE YOUR ORDER)*

SENCILLO EN LAS SERIES: ESTANDAR, REFORZADA Y SIN BASE *(SINGLE : STANDARD, REINFORCED AND WITHOUT BASE)*
AL ORDENAR, FAVOR DE ESPECIFICAR LOS SIGUIENTES DATOS *(WHILE PLACING YOUR ORDER PLEASE SPECIFY THE NEXT INFORMATION)*

| 3 | RUH | F050 | UHDA | 10:1 |
|---|---|---|---|---|
| **CANTIDAD DE UNIDADES A ORDENAR *(QUANTITY TO ORDER)*** | **MODELO *(MODEL)*** | **TAMAÑO *(SIZE)*** | **TIPO DE MONTAJE *(TYPE OF MOUNTING)*** | **RELACION DE VELOCIDAD *(RATIO VELOCITY)*** |

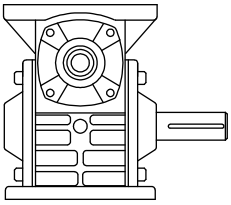
DOBLE REDUCCION EN LAS SERIES: ESTANDAR, REFORZADA Y SIN BASE *(SINGLE : STANDARD, REINFORCED AND WITHOUT BASE)*
AL ORDENAR, FAVOR DE ESPECIFICAR LOS SIGUIENTES DATOS *(WHILE PLACING YOUR ORDER PLEASE SPECIFY THE NEXT INFORMATION)*

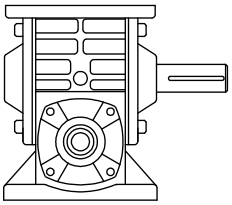
| 3 | RDH | F069 | M-DHA | 1200 |
|---|---|---|---|---|
| **CANTIDAD DE UNIDADES A ORDENAR *(QUANTITY TO ORDER)*** | **MODELO *(MODEL)*** | **TAMAÑO *(SIZE)*** | **TIPO DE MONTAJE *(TYPE OF MOUNTING)*** | **RELACION DE VELOCIDAD *(RATIO VELOCITY)*** |

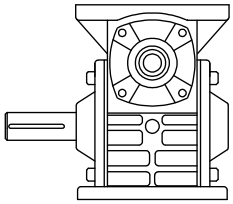
# TIPOS DE MONTAJE
*REDUCCION SENCILLA*

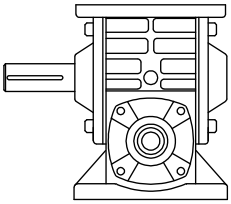
# TYPES OF MOUNTING
*SINGLE REDUCTION*

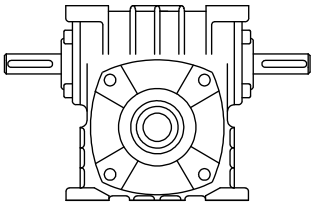
TAMAÑOS DESDE 50-300
*SIZES FROM 50-300*

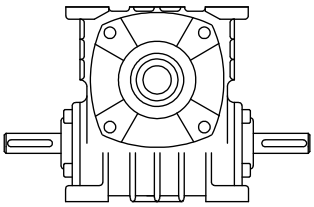

1.- UHDA

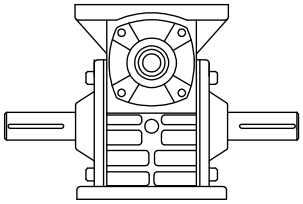

2.- UHDB

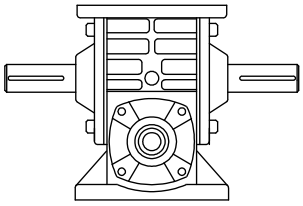

3.- UHIA

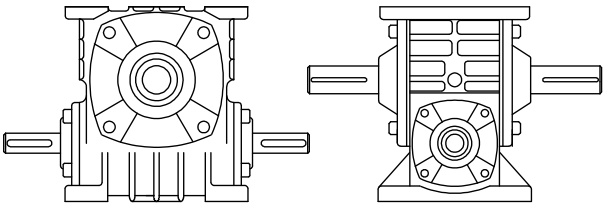

4.- UHDB

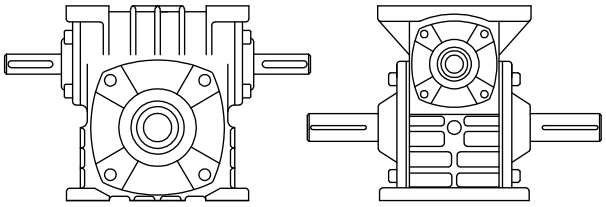

5.- UHDEA

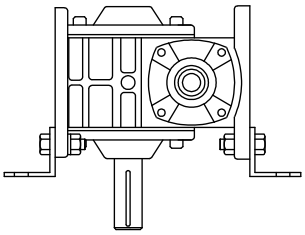

6.- UHDEB

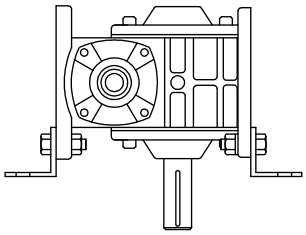

7.- UHDSA

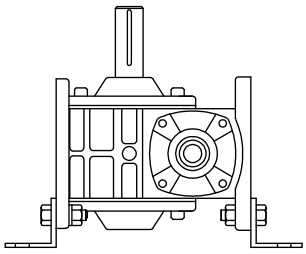

8.- UHDSB

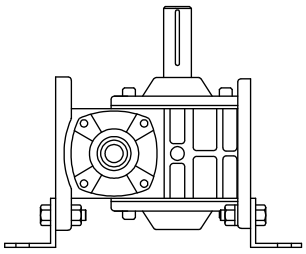

9.- UDSEB

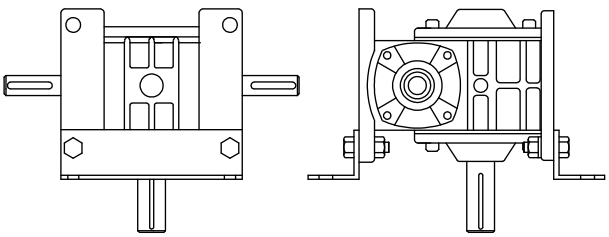

10.- UHIA

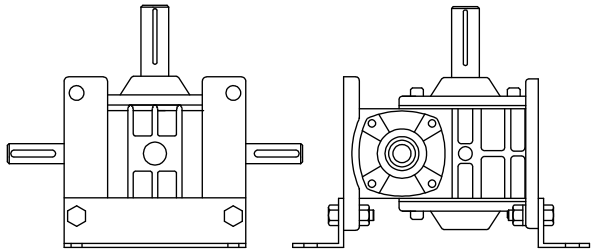

11.- UVDA

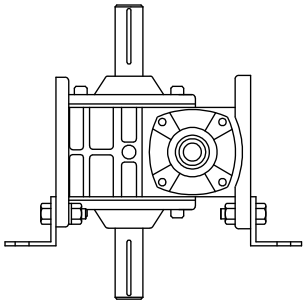

12.- UVDB

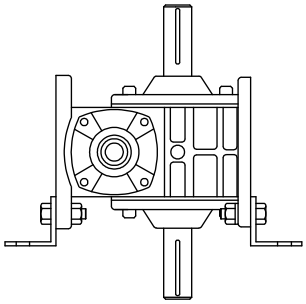

13.- UVIA


14.- UVIB


15.-UVDEA


16.-UVDE


17.- UVDEA

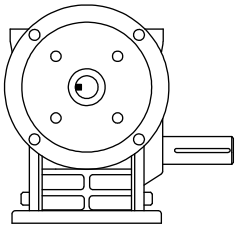

18.- UVDSA

# TIPOS DE MONTAJE | TYPES OF MOUNTING

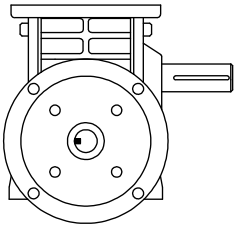
*REDUCCION SENCILLA CON BRIDA PARA MOTOR*

*SINGLE REDUCTION WITH FACE MOTOR*

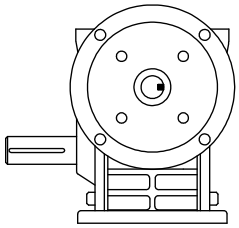
TAMAÑOS DESDE 50-200
*SIZES FROM 50-200*



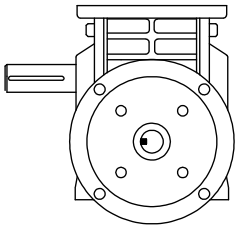
19.- UHDA-B



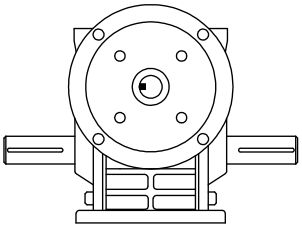
20.- UHDB-B



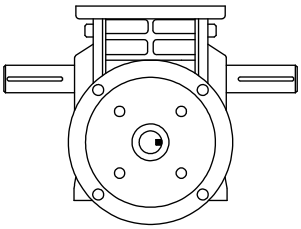
21.- UHIA-B



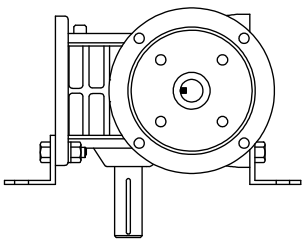
22.- UHIB-B



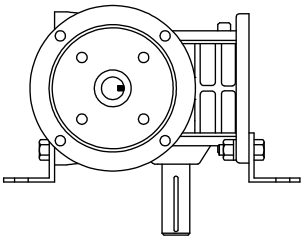
23.- UDSA-B



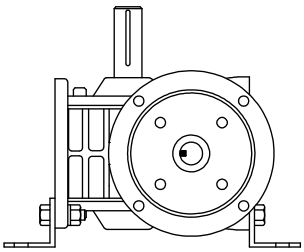
24.- UHDSB-B



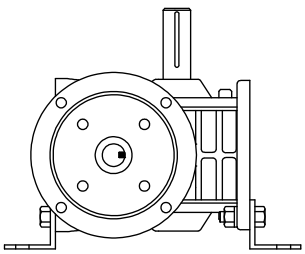
25.- UVDA-B



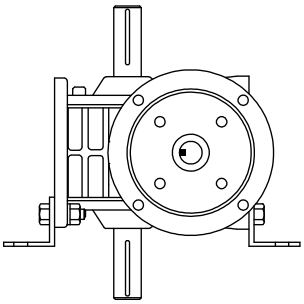
26.- UVDB-B



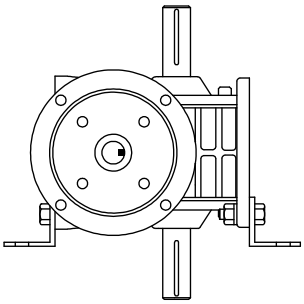
27.- UVIA-B



28.- UVIB-B



29.- UVDSA-B

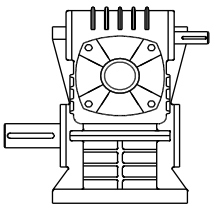


30.- UVDSB-B

# TIPOS DE MONTAJE
*REDUCCION SENCILLA*
*CON BRIDA PARA MOTOR*

# TYPES OF MOUNTING
*SINGLE REDUCTION*
*WITH FACE MOTOR*

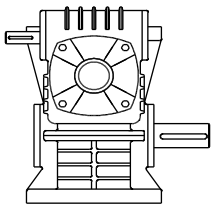
TAMAÑOS DESDE 55-1325
*SIZES FROM 55-1325*



## 31.- M-DHA

ENTRADA HORIZONTAL DERECHA
SALIDA HORIZONTAL IZQUIERDA ABAJO

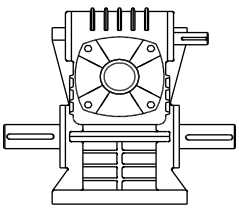
*INPUT HORIZONTAL RIGHT*
*OUTPUT HORIZONTAL LEFT DOWN*



## 32.- M-DHB

ENTRADA HORIZONTAL IZQUIERDA
SALIDA HORIZONTAL DERECHA ABAJO

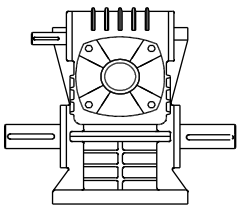
*INPUT HORIZONTAL LEFT*
*OUTPUT HORIZONTAL RIGHT DOWN*



## 33.- M-DHC

ENTRADA HORIZONTAL DERECHA, DOBLE
SALIDA, HORIZONTAL ABAJO

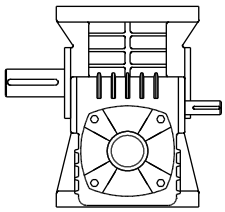
*INPUT HORIZONTAL RIGHT, DOUBLE*
*OUTPUT HORIZONTAL RIGHT DOWN*



## 34.- M-DHD

ENTRADA HORIZONTAL IZQUIERDA,
DOBLE SALIDA, HORIZONTAL ABAJO

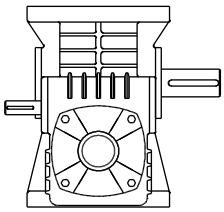
*INPUT HORIZONTAL RIGHT, DOUBLE*
*OUTPUT HORIZONTAL RIGHT DOWN*



## 35.- M-DHE

ENTRADA HORIZONTAL DERECHA
SALIDA HORIZONTAL IZQUIERDA ARRIBA

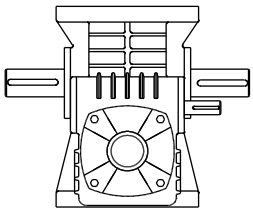
*INPUT HORIZONTAL RIGHT*
*OUTPUT HORIZONTAL LEFT UP*



## 36.- M-DHF

ENTRADA HORIZONTAL IZQUIERDA
SALIDA HORIZONTAL DERECHA ARRIBA

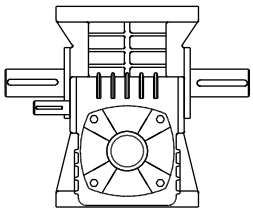
*INPUT HORIZONTAL LEFT*
*OUTPUT HORIZONTAL RIGHT UP*



## 37.- M-DHG

ENTRADA HORIZONTAL DERECHA, DOBLE
SALIDA, HORIZONTAL ARRIBA

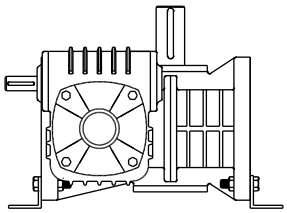
*INPUT HORIZONTAL RIGHT, DOUBLE*
*OUTPUT HORIZONTAL RIGHT UP*



## 38.- M-DHH

ENTRADA HORIZONTAL IZQUIERDA,
DOBLE SALIDA, HORIZONTAL ARRIBA

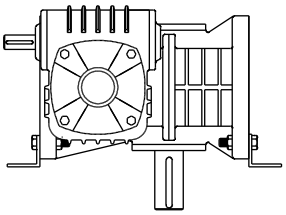
*INPUT HORIZONTAL LEFT, DOUBLE*
*OUTPUT HORIZONTAL RIGHT UP*



## 39.- M-DVA

ENTRADA HORIZONTAL DERECHA
SALIDA VERTICAL HACIA ARRIBA

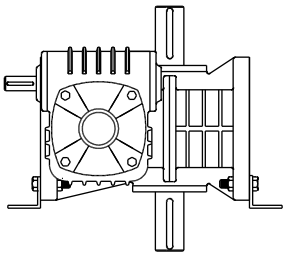
*INPUT HORIZONTAL, VERTICAL OUTPUT UPWARD*



## 40.- M-DHB

ENTRADA HORIZONTAL, SALIDA VERITCAL
HACIA ABAJO

*INPUT HORIZONTAL, VERTICAL OUTPUT DOWNWARD*



## 41.- M-DHC

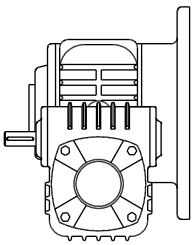
ENTRADA HORIZONTAL, DOBLE SALIDA
VERTICAL.

*INPUT HORIZONTAL, VERTICAL DOUBLE OUTPUT*

# TIPOS DE MONTAJE
DOBLE REDUCCION
CON TAPA FLANGE

# TYPES OF MOUNTING
DOUBLE REDUCTION
WITH MOTOR FLANGE

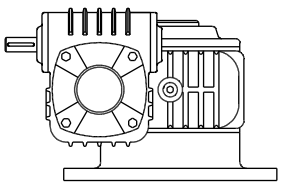
TAMAÑOS DESDE 55-813
SIZES FROM 55-813



## 42.- M-DHFA

ENTRADA HORIZONTAL IZQUIERDA,
SALIDA HORIZONTAL DERECHA

*INPUT HORIZONTAL LEFT, OUTPUT HORIZONTAL RIGHT*



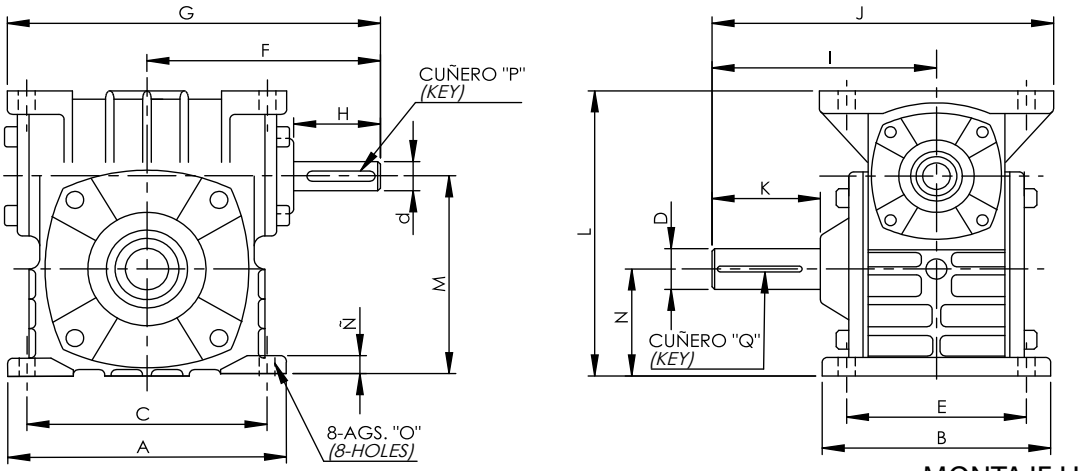
## 43.- M-DVFA

ENTRADA HORIZONTAL IZQUIERDA,
SALIDA VERTICAL ABAJO

*INPUT HORIZONTAL LEFT, OUTPUT VERTICAL RIGHT*

# REDUCTOR SERIE ESTANDAR
*REDUCER STANDAR LINE*

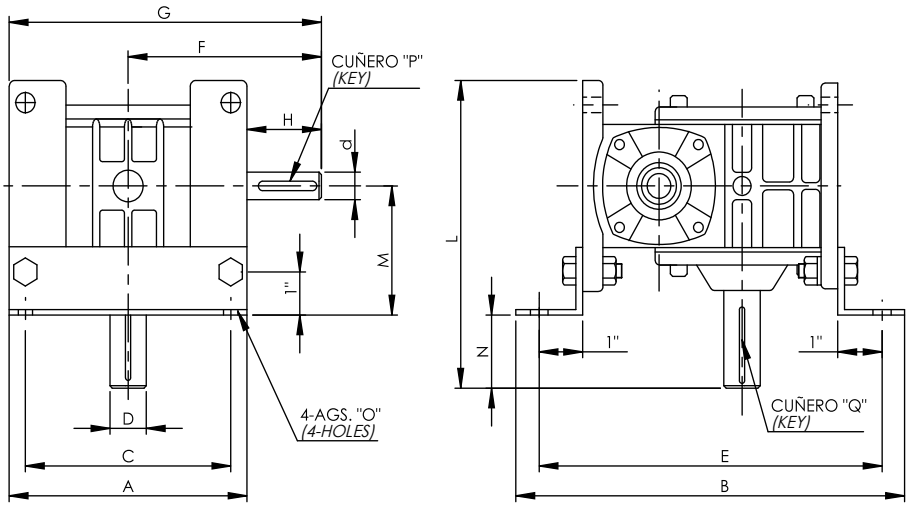
TAMAÑOS DESDE 55-813
*SIZES FROM 55-813*




MONTAJE HORIZONTAL

DIMENSIONES | *DIMENSIONS*

| SERIE | A | B | C | D | d | E | F | G | H | I | J | K | L | M | N | Ñ | O | P | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F050 | 5- 5/8 | 4- 1/2 | 4- 5/8 | 7/8 | 5/8 | 3- 1/2 | 4- 1/2 | 7- 5/16 | 1- 15/16 | 4- 3/8 | 6- 5/8 | 2- 1/8 | 6 | 4- 1/4 | 2- 9/32 | 1/2 | 13/32 | 3/16 X 1- 1/2 | 3/16 X 1- 7/8 |
| F060 | 6- 3/4 | 5- 3/8 | 5- 5/8 | 1 | 3/4 | 4- 1/4 | 5 | 8- 3/8 | 2 | 4- 3/4 | 7- 7/16 | 2- 1/8 | 7- 3/8 | 5- 1/4 | 2- 7/8 | 1/2 | 13/32 | 3/16 X 1- 1/2 | 1/4 X 1-3/4 |
| F070 | 8 | 6- 1/4 | 6- 5/8 | 1- 1/8 | 7/8 | 4- 7/8 | 5- 3/4 | 9- 3/4 | 2- 1/16 | 5- 1/8 | 8- 1/4 | 2- 3/8 | 8- 7/16 | 6- 7/32 | 3- 5/16 | 5/8 | 17/32 | 3/16 X 1- 1/2 | 1/4 X 2-1/8 |
| F080 | 9 | 7- 1/8 | 7- 1/2 | 1- 3/8 | 1 | 5- 5/8 | 6- 1/2 | 11 | 2- 9/16 | 5- 1/2 | 9- 1/16 | 2- 5/8 | 9- 3/4 | 6- 13/16 | 3- 11/16 | 3/4 | 17/32 | 1/4 X 2 | 5/16 X 2- 1/4 |
| F090 | 10- 1/8 | 8- 1/2 | 8- 1/2 | 1- 1/2 | 1- 1/8 | 6- 3/8 | 7- 3/8 | 12- 7/16 | 3 | 6 | 10 | 2- 7/8 | 10- 3/4 | 7- 21/32 | 4- 1/8 | 7/8 | 17/32 | 1/4 X 2- 1/4 | 3/8 X 2-3/16 |



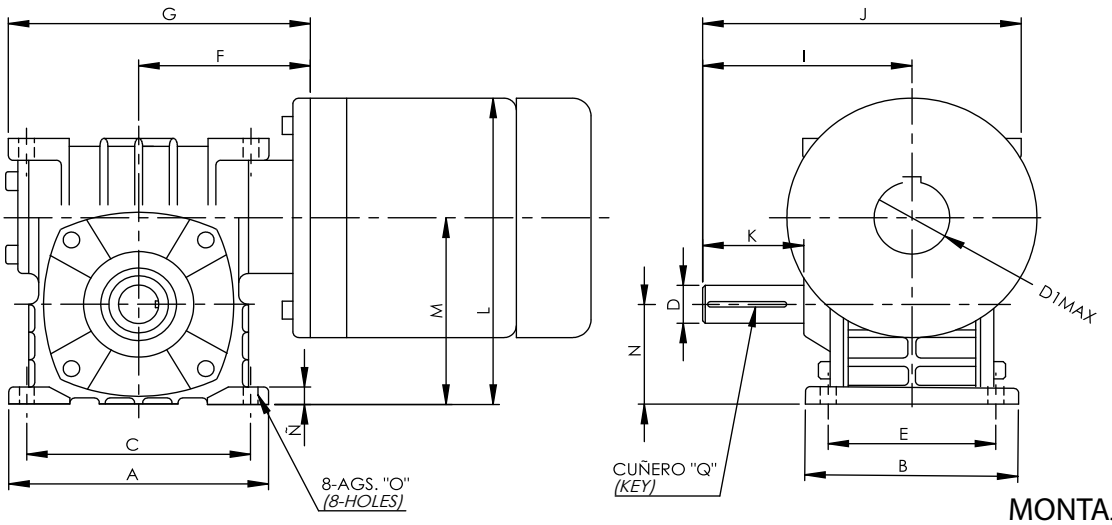

MONTAJE VERTICAL

DIMENSIONES | *DIMENSIONS*

| SERIE | A | B | C | D | d | E | F | G | H | L | M | N | O | P | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F050 | 5- 5/8 | 10 | 4- 5/8 | 7/8 | 5/8 | 8 | 4- 1/2 | 7- 5/16 | 1- 15/16 | 6- 5/8 | 2- 15/16 | 2 | 13/32 | 3/16 X 1- 1/2 | 3/16 X 1- 7/8 |
| F060 | 6- 3/4 | 11- 1/2 | 5- 5/8 | 1 | 3/4 | 9- 3/8 | 5 | 8- 3/8 | 2 | 7- 7/16 | 3- 5/16 | 2 | 13/32 | 3/16 X 1- 1/2 | 1/4 X 1-3/4 |
| F070 | 8 | 12- 1/2 | 6- 5/8 | 1- 1/8 | 7/8 | 10- 7/16 | 5- 3/4 | 9- 3/4 | 2- 1/16 | 8- 1/4 | 3- 5/8 | 1- 11/16 | 17/32 | 3/16 X 1- 1/2 | 1/4 X 2-1/8 |
| F080 | 9 | 13- 7/8 | 7- 1/2 | 1- 3/8 | 1 | 11- 3/4 | 6- 1/2 | 11 | 2- 9/16 | 9- 1/16 | 4 | 1- 11/16 | 17/32 | 1/4 X 2 | 5/16 X 2- 1/4 |
| F090 | 10- 1/8 | 14- 7/8 | 8- 1/2 | 1- 1/2 | 1- 1/8 | 13- 1/16 | 7- 3/8 | 12- 7/16 | 3 | 10 | 4- 3/8 | 1- 13/16 | 17/32 | 1/4 X 2- 1/4 | 3/8 X 2-3/16 |

TODAS LAS DIMENSIONES EN PULGADAS | *ALL DIMENSIONS IN INCHES*

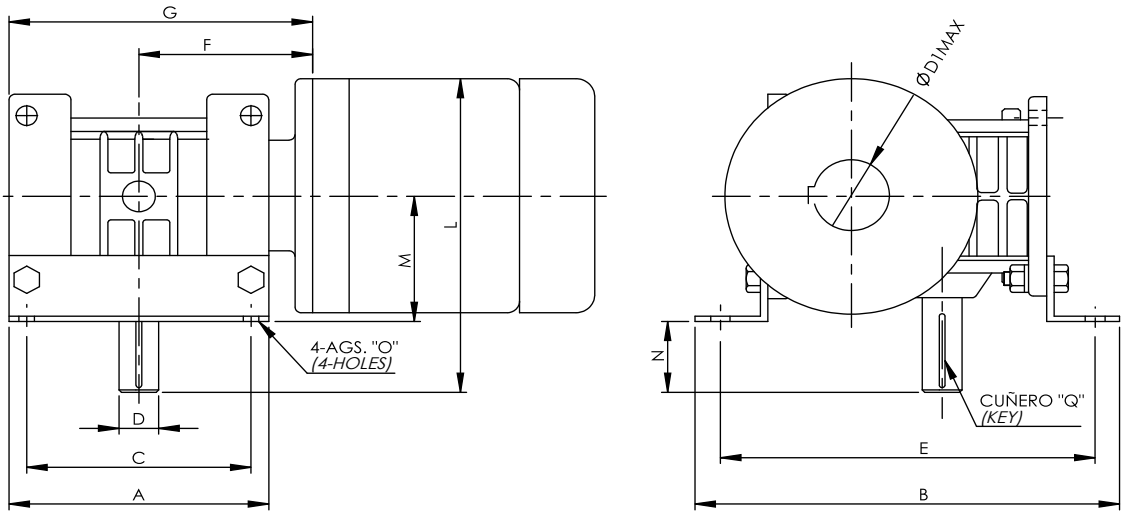
# MOTOREDUCTOR SERIE ESTANDAR
*MOTO- REDUCER STANDARD LINE*




MONTAJE HORIZONTAL

DIMENSIONES | *DIMENSIONS*

| SERIE | A | B | C | D | E | F | G | I | J | K | L | M | N | Ñ | O | Q | D1MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F050 | 5- 5/8 | 4- 1/2 | 4- 5/8 | 7/8 | 3- 1/2 | 3- 7/8 | 6- 11/16 | 4- 3/8 | 6- 5/8 | 2- 1/8 | 7- 5/8 | 4- 1/4 | 2- 9/32 | 1/2 | 13/32 | 3/16 X 1- 7/8 | 7/8 |
| F060 | 6- 3/4 | 5- 3/8 | 5- 5/8 | 1 | 4- 1/4 | 4- 7/16 | 7- 13/16 | 4- 3/4 | 7- 7/16 | 2- 1/8 | 8- 5/8 | 5- 1/4 | 2- 7/8 | 1/2 | 13/32 | 1/4 X 1-3/4 | 7/8 |
| F070 | 8 | 6- 1/4 | 6- 5/8 | 1- 1/8 | 4- 7/8 | 5- 7/16 | 9- 7/16 | 5- 1/8 | 8- 1/4 | 2- 3/8 | 9- 9/16 | 6- 7/32 | 3- 5/16 | 5/8 | 17/32 | 1/4 X 2-1/8 | 1- 1/8 |
| F080 | 9 | 7- 1/8 | 7- 1/2 | 1- 3/8 | 5- 5/8 | 5- 7/8 | 10- 3/8 | 5- 1/2 | 9- 1/16 | 2- 5/8 | 11-5/16 | 6- 13/16 | 3- 11/16 | 3/4 | 17/32 | 5/16 X 2- 1/4 | 1- 1/8 |
| F090 | 10- 1/8 | 8- 1/2 | 8- 1/2 | 1- 1/2 | 6- 3/8 | 6- 5/16 | 11- 3/8 | 6 | 10 | 2- 7/8 | 12- 1/8 | 7- 21/32 | 4- 1/8 | 7/8 | 17/32 | 3/8 X 2-3/16 | 1- 1/8 |




MONTAJE VERTICAL

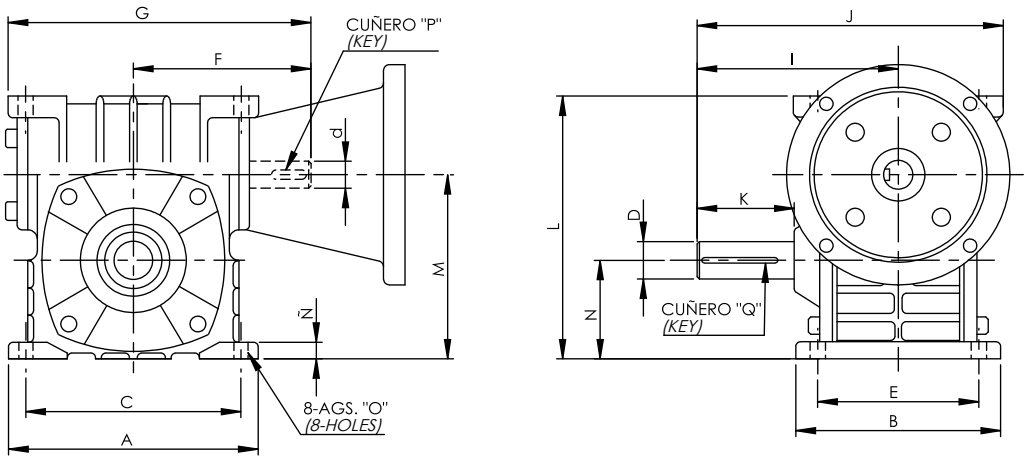
DIMENSIONES | *DIMENSIONS*

| SERIE | A | B | C | D | E | F | G | L | M | N | O | Q | D1MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F050 | 5- 5/8 | 10 | 4- 5/8 | 7/8 | 8- 5/16 | 3- 7/8 | 6- 11/16 | 7- 5/8 | 4- 1/4 | 2- 9/32 | 13/32 | 3/16 X 1- 7/8 | 7/8 |
| F060 | 6- 3/4 | 11- 1/2 | 5- 5/8 | 1 | 9- 11/16 | 4- 7/16 | 7- 13/16 | 8- 5/8 | 5- 1/4 | 2- 7/8 | 13/32 | 1/4 X 1-3/4 | 7/8 |
| F070 | 8 | 12- 1/2 | 6- 5/8 | 1- 1/8 | 10- 3/8 | 5- 7/16 | 9- 7/16 | 9- 9/16 | 6- 7/32 | 3- 5/16 | 17/32 | 1/4 X 2-1/8 | 1- 1/8 |
| F080 | 9 | 13- 7/8 | 7- 1/2 | 1- 3/8 | 11- 5/8 | 5- 7/8 | 10- 3/8 | 11-5/16 | 6- 13/16 | 3- 11/16 | 17/32 | 5/16 X 2- 1/4 | 1- 1/8 |
| F090 | 10- 1/8 | 14- 7/8 | 8- 1/2 | 1- 1/2 | 13- 1/16 | 6- 5/16 | 11- 3/8 | 12- 1/8 | 7- 21/32 | 4- 1/8 | 17/32 | 3/8 X 2-3/16 | 1- 1/8 |

TODAS LAS DIMENSIONES EN PULGADAS | *ALL DIMENSIONS IN INCHES*

# MOTOREDUCTOR BRIDA DE CAMPANA SERIE ESTANDAR

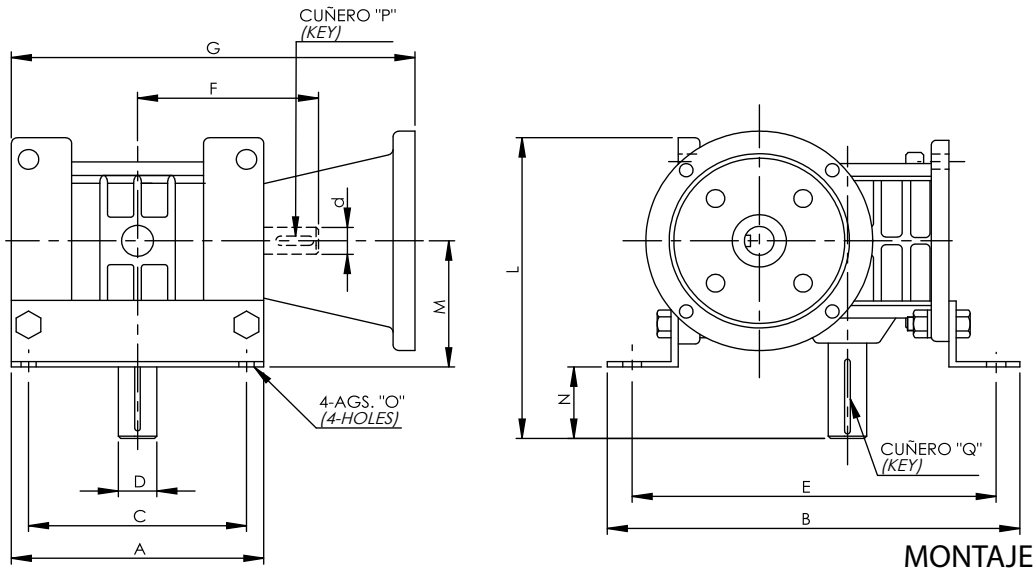
*MOTO-REDUCER WITH FLANGE STANDARD LINE*




## MONTAJE HORIZONTAL

DIMENSIONES | *DIMENSIONS*

| SERIE | A | B | C | D | d | E | F | G | I | J | K | L | M | N | Ñ | O | P | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **F050** | 5- 5/8 | 4- 1/2 | 4- 5/8 | 7/8 | 5/8 | 3- 1/2 | 4- 1/16 | 9- 5/8 | 4- 3/8 | 6- 5/8 | 2- 1/8 | 6 | 4- 1/4 | 2- 9/32 | 1/2 | 13/32 | 3/16 X 1- 1/2 | 3/16 X 1- 7/8 |
| **F060** | 6- 3/4 | 5- 3/8 | 5- 5/8 | 1 | 3/4 | 4- 1/4 | 4- 3/4 | 10- 3/4 | 4- 3/4 | 7- 7/16 | 2- 1/8 | 7- 3/8 | 5- 1/4 | 2- 7/8 | 1/2 | 13/32 | 3/16 X 1- 1/2 | 1/4 X 1-3/4 |
| **F070** | 8 | 6- 1/4 | 6- 5/8 | 1- 1/8 | 7/8 | 4- 7/8 | 5- 3/16 | 11- 13/16 | 5- 1/8 | 8- 1/4 | 2- 3/8 | 8- 7/16 | 6- 7/32 | 3- 5/16 | 5/8 | 17/32 | 3/16 X 1- 1/2 | 1/4 X 2-1/8 |
| **F080** | 9 | 7- 1/8 | 7- 1/2 | 1- 3/8 | 1 | 5- 5/8 | 5- 1/2 | 12- 3/4 | 5- 1/2 | 9- 1/16 | 2- 5/8 | 9- 3/4 | 6- 13/16 | 3- 11/16 | 3/4 | 17/32 | 1/4 X 2 | 5/16 X 2- 1/4 |
| **F090** | 10- 1/8 | 8- 1/2 | 8- 1/2 | 1- 1/2 | 1- 1/8 | 6- 3/8 | 6- 1/4 | 15- 1/16 | 6 | 10 | 2- 7/8 | 10- 3/4 | 7- 21/32 | 4- 1/8 | 7/8 | 17/32 | 1/4 X 2- 1/4 | 3/8 X 2-3/16 |




## MONTAJE VERTICAL

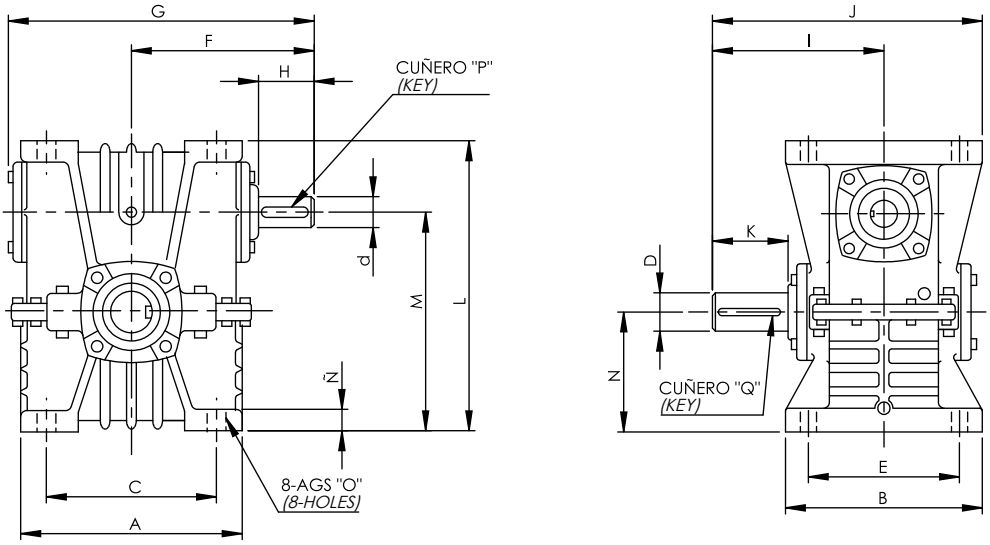
DIMENSIONES | *DIMENSIONS*

| SERIE | A | B | C | D | d | E | F | G | L | M | N | O | P | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **F050** | 5- 5/8 | 10 | 4- 5/8 | 7/8 | 5/8 | 8- 5/16 | 4- 1/16 | 9- 5/8 | 6- 5/8 | 2- 15/16 | 2 | 13/32 | 3/16 X 1- 1/2 | 3/16 X 1- 7/8 |
| **F060** | 6- 3/4 | 11- 1/2 | 5- 5/8 | 1 | 3/4 | 9- 11/16 | 4- 3/4 | 10- 3/4 | 7- 7/16 | 3- 5/16 | 2 | 13/32 | 3/16 X 1- 1/2 | 1/4 X 1-3/4 |
| **F070** | 8 | 12- 1/2 | 6- 5/8 | 1- 1/8 | 7/8 | 10- 3/4 | 5- 3/16 | 11- 13/16 | 8- 1/4 | 3- 5/8 | 1- 11/16 | 17/32 | 3/16 X 1- 1/2 | 1/4 X 2-1/8 |
| **F080** | 9 | 13- 7/8 | 7- 1/2 | 1- 3/8 | 1 | 5- 5/8 | 5- 1/2 | 12- 3/4 | 9- 1/16 | 4 | 1- 11/16 | 17/32 | 1/4 X 2 | 5/16 X 2- 1/4 |
| **F090** | 10- 1/8 | 14- 7/8 | 8- 1/2 | 1- 1/2 | 1- 1/8 | 6- 3/8 | 6- 1/4 | 15- 1/16 | 10 | 4- 3/8 | 1-13/16 | 17/32 | 1/4 X 2- 1/4 | 3/8 X 2-3/16 |

TODAS LAS DIMENSIONES EN PULGADAS | *ALL DIMENSIONS IN INCHES*

# REDUCTOR SERIE REFORZADA

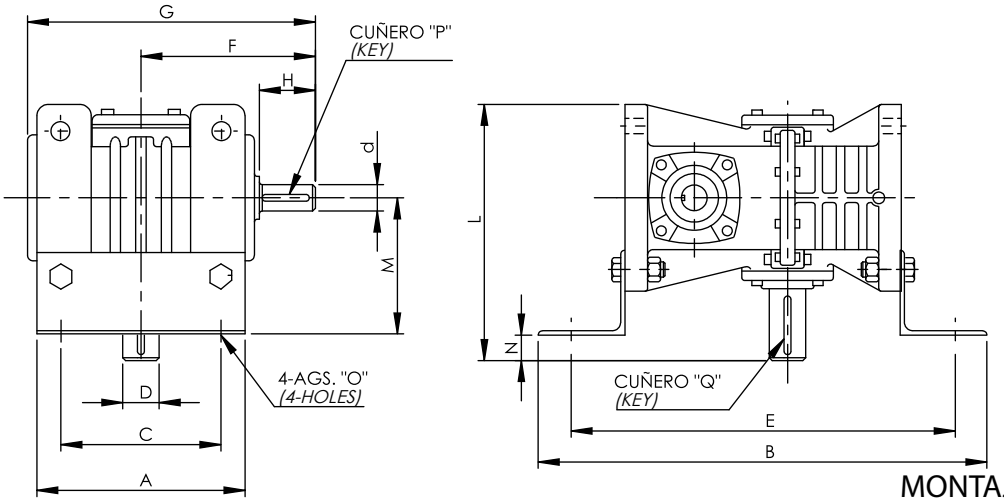
*REDUCER REINFORCED LINE*




## MONTAJE HORIZONTAL

DIMENSIONES | *DIMENSIONS*

| SERIE | A | B | C | D | d | E | F | G | H | I | J | K | L | M | N | Ñ | O | P | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F110 | 9- 5/8 | 8- 3/4 | 7- 1/2 | 1- 3/4 | 1- 1/4 | 6- 3/4 | 8 | 13- 1/8 | 2- 3/4 | 7- 1/2 | 11- 7/8 | 3- 3/8 | 12- 3/4 | 9- 3/16 | 4- 7/8 | 4- 7/8 | 9/16 | 1/4 X 2- 1/4 | 3/8 X 2- 7/8 |
| F130 | 10- 7/8 | 9- 1/2 | 8- 1/2 | 2 | 1- 3/8 | 7- 1/2 | 9- 1/2 | 15- 1/4 | 3 | 8- 1/4 | 13 | 3- 5/8 | 14- 5/8 | 10- 3/4 | 5- 5/8 | 5- 5/8 | 11/16 | 5/16 X 2- 1/2 | 1/2 X 2- 7/8 |
| F150 | 13 | 10- 3/4 | 10 | 2- 1/4 | 1- 1/2 | 8- 1/2 | 10- 5/8 | 17- 7/16 | 3- 7/16 | 9- 1/4 | 14- 5/8 | 3- 15/16 | 16- 1/2 | 12- 13/32 | 6- 1/2 | 6- 1/2 | 13/16 | 3/8 X 2- 15/16 | 1/2 X 3- 3/8 |
| F160 | 13- 3/4 | 12- 1/4 | 11- 1/2 | 2- 1/2 | 1- 1/2 | 10 | 11- 1/2 | 18- 3/4 | 4 | 10 | 16- 1/8 | 4- 3/8 | 17- 1/2 | 13- 3/16 | 6- 7/8 | 6- 7/8 | 13/16 | 3/8 X 3- 1/2 | 5/8 X 4 |
| F200 | 16- 1/2 | 13 | 13- 1/2 | 3 | 1- 7/8 | 10 | 14- 1/2 | 23- 1/2 | 4- 3/4 | 10- 1/2 | 17- 1/8 | 4- 5/8 | 20 | 16- 1/2 | 8- 1/2 | 8- 1/2 | 15/16 | 1/2 X 4- 1/2 | 3/4 X 4- 1/2 |
| F250 | 20- 1/2 | 19 | 16 | 3- 3/4 | 2- 1/4 | 15 | 16- 3/4 | 28 | 5- 1/4 | 15- 1/2 | 25 | 6- 1/2 | 25 | 20- 1/2 | 10- 1/2 | 10- 1/2 | 1- 1/4 | 1/2 X 4- 3/4 | 7/8 X 6- 1/2 |
| F300 | 24- 1/4 | 22 | 19- 1/2 | 4- 1/4 | 2- 1/2 | 17- 1/2 | 20 | 34 | 6 | 18 | 29 | 7 | 30- 1/2 | 24- 1/2 | 12- 1/2 | 12- 1/2 | 1- 9/16 | 5/8 X 5- 5/8 | 1 X 6- 1/2 |




## MONTAJE VERTICAL

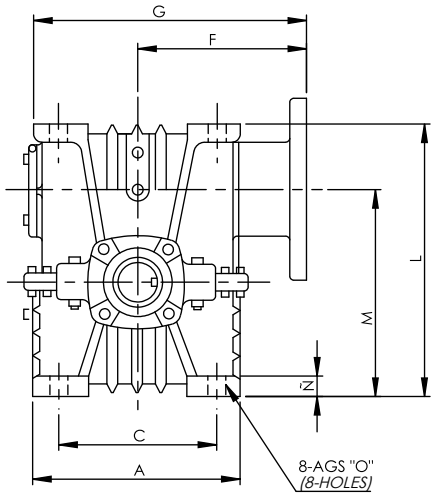
DIMENSIONES | *DIMENSIONS*

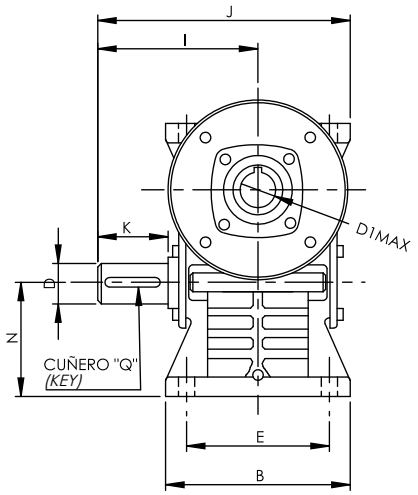
| SERIE | A | B | C | D | d | E | F | G | H | L | M | N | O | P | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F110 | 9- 5/8 | 15- 3/4 | 7- 1/2 | 1- 3/4 | 1- 1/4 | 15 | 8 | 13- 1/8 | 2- 3/4 | 11- 7/8 | 4- 5/8 | 2- 7/8 | 9/16 | 1/4 X 2- 1/4 | 3/8 X 3- 1/8 |
| F130 | 10- 7/8 | 16- 5/8 | 8- 1/2 | 2 | 1- 3/8 | 16- 7/8 | 9- 1/2 | 15- 1/4 | 3 | 13 | 6 | 2 - 1/4 | 11/16 | 5/16 X 2- 1/2 | 1/2 X 3- 1/8 |
| F150 | 13 | 19- 1/2 | 10 | 2- 1/4 | 1- 1/2 | 19- 3/4 | 10- 5/8 | 17- 7/16 | 3- 7/16 | 14- 5/8 | 6- 1/2 | 2- 3/4 | 13/16 | 3/8 X 2- 15/16 | 1/2 X 3- 1/2 |
| F160 | 13- 3/4 | 20- 1/2 | 11- 1/2 | 2- 1/2 | 1- 1/2 | 20- 3/4 | 11- 1/2 | 18- 3/4 | 4 | 16- 1/8 | 7- 1/4 | 2- 3/4 | 13/16 | 3/8 X 3- 1/2 | 5/8 X 4 |
| F200 | 16- 1/2 | 28 | 13- 1/2 | 3 | 1- 7/8 | 24- 1/2 | 14- 1/2 | 23- 1/2 | 4- 3/4 | 17- 1/8 | 8 | 2- 1/2 | 15/16 | 1/2 X 4- 1/2 | 3/4 X 4- 3/8 |
| F250 | 20- 1/2 | 33 | 16 | 3- 3/4 | 2- 1/4 | 29- 1/2 | 16- 3/4 | 28 | 5- 1/4 | 25 | 10- 1/2 | 5 | 1- 1/4 | 1/2 X 4- 3/4 | 7/8 X 6- 3/8 |
| F300 | 24- 1/4 | 38- 1/2 | 19- 1/2 | 4- 1/4 | 2- 1/2 | 35 | 20 | 34 | 6 | 29 | 11- 1/2 | 6- 1/2 | 1- 9/16 | 5/8 X 5- 5/8 | 1 X 6- 3/8 |

TODAS LAS DIMENSIONES EN PULGADAS | *ALL DIMENSIONS IN INCHES*

# MOTOREDUCTOR SERIE REFORZADA

*MOTO-REDUCER REINFORCED LINE*

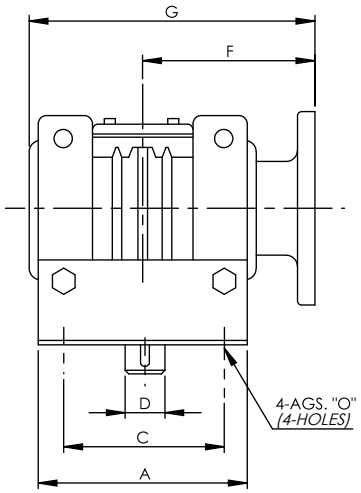


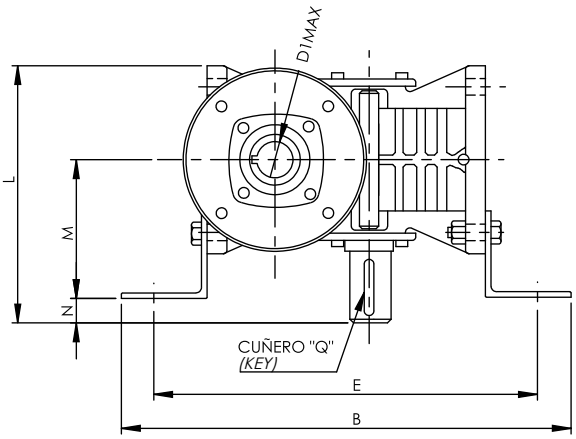




## MONTAJE HORIZONTAL

DIMENSIONES | *DIMENSIONS*

| SERIE | A | B | C | D | E | F | G | I | J | K | L | M | N | Ñ | O | Q | D1MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F110 | 9- 5/8 | 8- 3/4 | 7- 1/2 | 1- 3/4 | 6- 3/4 | 6- 3/4 | 11- 7/8 | 7- 1/2 | 11- 7/8 | 3- 3/8 | 12- 3/4 | 9- 3/16 | 4- 7/8 | 1 | 9/16 | 3/8 X 2- 7/8 | 1- 3/8 |
| F130 | 10- 7/8 | 9- 1/2 | 8- 1/2 | 2 | 7- 1/2 | 7- 1/2 | 13- 1/4 | 8- 1/4 | 13 | 3- 5/8 | 14- 5/8 | 10- 3/4 | 5- 5/8 | 1- 1/8 | 11/16 | 1/2 X 2- 7/8 | 1- 5/8 |
| F150 | 13 | 10- 3/4 | 10 | 2- 1/4 | 8- 1/2 | 8- 5/16 | 15- 1/8 | 9- 1/4 | 14- 5/8 | 3- 15/16 | 16- 1/2 | 12- 13/32 | 6- 1/2 | 1- 1/4 | 13/16 | 1/2 X 3- 3/8 | 1- 7/8 |
| F160 | 13- 3/4 | 12- 1/4 | 11- 1/2 | 2- 1/2 | 10 | 8- 3/4 | 16 | 10 | 16- 1/8 | 4- 3/8 | 17- 1/2 | 13- 3/16 | 6- 7/8 | 1- 3/8 | 13/16 | 5/8 X 4 | 1- 7/8 |
| F200 | 16- 1/2 | 13 | 13- 1/2 | 3 | 10 | 11- 3/4 | 20 | 10- 1/2 | 17- 1/8 | 4- 5/8 | 20 | 16- 1/2 | 8- 1/2 | 1/2 | 15/16 | 3/4 X 4- 1/2 | 1- 7/8 |




## MONTAJE VERTICAL

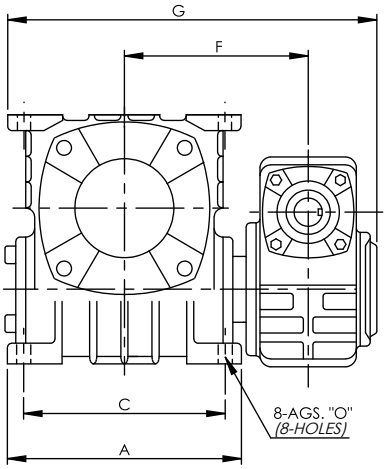
DIMENSIONES | *DIMENSIONS*

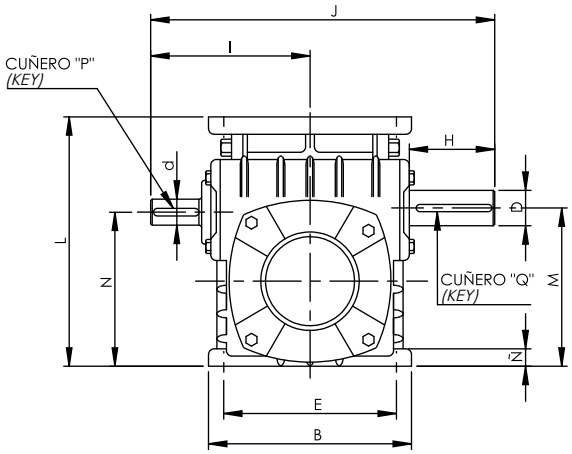
| SERIE | A | B | C | D | E | F | G | L | M | N | O | Q | D1MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F110 | 9- 5/8 | 15- 3/4 | 7- 1/2 | 1- 3/4 | 15 | 6- 3/4 | 11- 7/8 | 11- 7/8 | 4- 5/8 | 2- 7/8 | 9/16 | 3/8 X 2- 7/8 | 1- 3/8 |
| F130 | 10- 7/8 | 16- 7/8 | 8- 1/2 | 2 | 16- 5/8 | 7- 1/2 | 13- 1/4 | 13 | 6 | 2- 1/4 | 11/16 | 1/2 X 2- 7/8 | 1- 5/8 |
| F150 | 13 | 19- 3/4 | 10 | 2- 1/4 | 19- 1/2 | 8- 5/16 | 15- 1/8 | 14- 5/8 | 6- 1/2 | 2- 3/4 | 13/16 | 1/2 X 3- 3/8 | 1- 7/8 |
| F160 | 13- 3/4 | 20- 3/4 | 11- 1/2 | 2- 1/2 | 20- 1/2 | 8- 3/4 | 16 | 16- 1/8 | 7- 1/4 | 2- 3/4 | 13/16 | 5/8 X 4 | 1- 7/8 |
| F200 | 16- 1/2 | 28 | 13- 1/2 | 3 | 24- 1/2 | 11- 3/4 | 20 | 17- 1/8 | 8 | 2- 1/2 | 15/16 | 3/4 X 4- 1/2 | 1- 7/8 |

TODAS LAS DIMENSIONES EN PULGADAS | *ALL DIMENSIONS IN INCHES*

# REDUCTOR DOBLE REDUCCION SERIE ESTANDAR

*REDUCER DOUBLE REDUCTION STANDARD LINE*

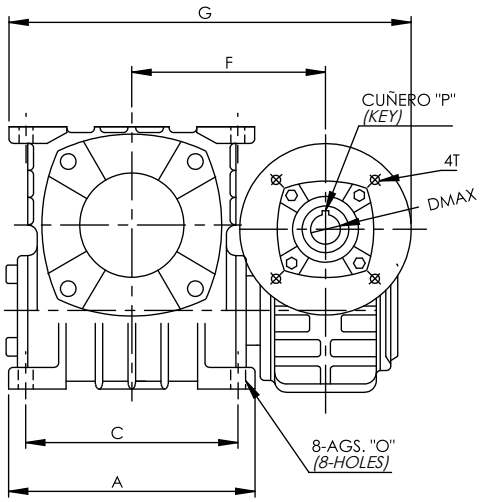


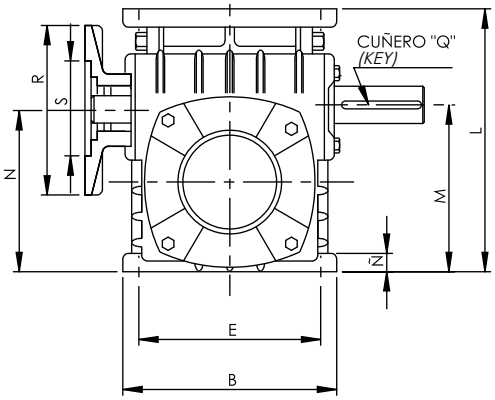




DIMENSIONES | *DIMENSIONS*

## MONTAJE HORIZONTAL

| SERIE | A | B | C | D | d | E | F | G | H | I | J | L | M | N | Ñ | O | P | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F055 | 5- 5/8 | 4- 1/2 | 4- 5/8 | 7/8 | 5/8 | 3- 1/2 | 4- 5/16 | 8- 7/8 | 2- 1/8 | 4- 1/2 | 8- 7/8 | 6 | 3- 23/32 | 3- 3/4 | 1/2 | 13/32 | 3/16 X 1- 1/2 | 3/16 X 1- 7/8 |
| F056 | 6- 3/4 | 5- 3/8 | 5- 5/8 | 1 | 5/8 | 4- 1/4 | 5- 1/2 | 10- 11/16 | 2- 1/8 | 4- 1/2 | 9- 1/4 | 7- 3/8 | 4- 1/2 | 4- 1/8 | 1/2 | 13/32 | 3/16 X 1- 1/2 | 1/4 X 1- 3/4 |
| F058 | 9 | 7- 1/8 | 7- 1/2 | 1- 3/8 | 5/8 | 5- 5/8 | 7 | 12- 15/16 | 2- 5/8 | 4- 1/2 | 10 | 9- 3/4 | 6- 1/16 | 4- 7/8 | 3/4 | 17/32 | 3/16 X 1- 1/2 | 5/16 X 2- 3/8 |
| F069 | 10- 1/8 | 8 | 8- 1/2 | 1- 1/2 | 3/4 | 6- 3/8 | 7- 3/16 | 14- 1/4 | 2- 7/8 | 5 | 11 | 10- 3/4 | 6- 5/8 | 5- 7/16 | 7/8 | 17/32 | 3/16 X 1- 1/2 | 3/8 X 2- 3/16 |




DIMENSIONES | *DIMENSIONS*

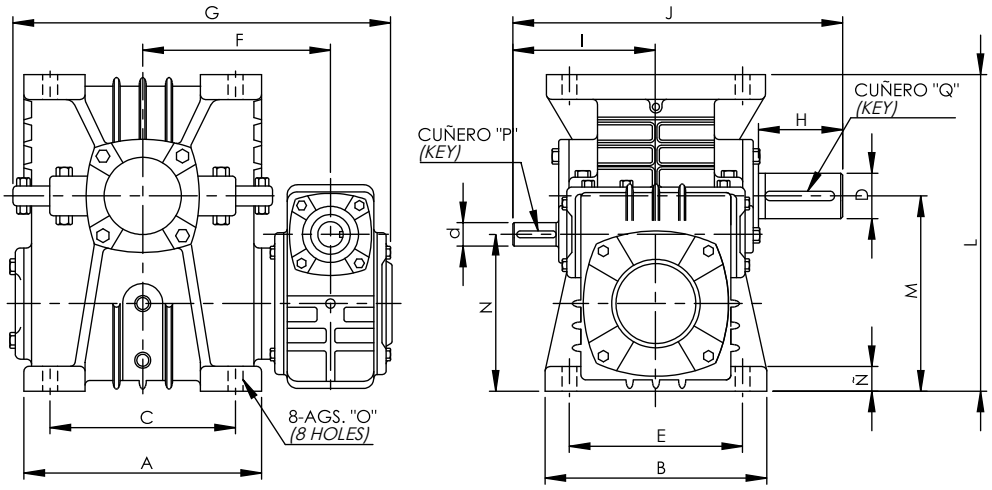
## MONTAJE HORIZONTAL

| SERIE | A | B | C | D | DMAX | E | F | G | H | I | J | L | M | N | Ñ | O | P | Q | R | S | T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F055 | 5- 5/8 | 4- 1/2 | 4- 5/8 | 7/8 | 5/8 , 7/8 | 3- 1/2 | 4- 5/16 | 10- 1/2 | 2- 1/8 | 3- 7/16 | 8- 1/4 | 6 | 3- 23/32 | 3- 3/4 | 1/2 | 13/32 | 3/16 | 3/16 X 1- 7/8 | 6- 3/4 | 4- 1/2 | 13/32 |
| F056 | 6- 3/4 | 5- 3/8 | 5- 5/8 | 1 | 5/8 , 7/8 | 4- 1/4 | 5- 1/2 | 12- 1/4 | 2- 1/8 | 3- 7/16 | 8- 5/8 | 7- 3/8 | 4- 1/2 | 4- 1/8 | 1/2 | 13/32 | 3/16 | 1/4 X 2 | 6- 3/4 | 4- 1/2 | 13/32 |
| F058 | 9 | 7- 1/8 | 7- 1/2 | 1- 3/8 | 5/8 , 7/8 | 5- 5/8 | 7 | 14- 7/8 | 2- 5/8 | 3- 7/16 | 9- 3/8 | 9- 3/4 | 6- 1/16 | 4- 7/8 | 3/4 | 17/32 | 3/16 | 5/16 X 2- 3/8 | 6- 3/4 | 4- 1/2 | 13/32 |
| F069 | 10- 1/8 | 8 | 8- 1/2 | 1- 1/2 | 5/8 , 7/8 | 6- 3/8 | 7- 3/16 | 15- 5/8 | 2- 7/8 | 4 | 10- 7/8 | 10- 3/4 | 6- 5/8 | 5- 7/16 | 7/8 | 17/32 | 3/16 | 3/8 X 2- 7/16 | 6- 3/4 | 4- 1/2 | 13/32 |

TODAS LAS DIMENSIONES EN PULGADAS | *ALL DIMENSIONS IN INCHES*

# REDUCTOR DOBLE REDUCCION SERIE REFORZADA

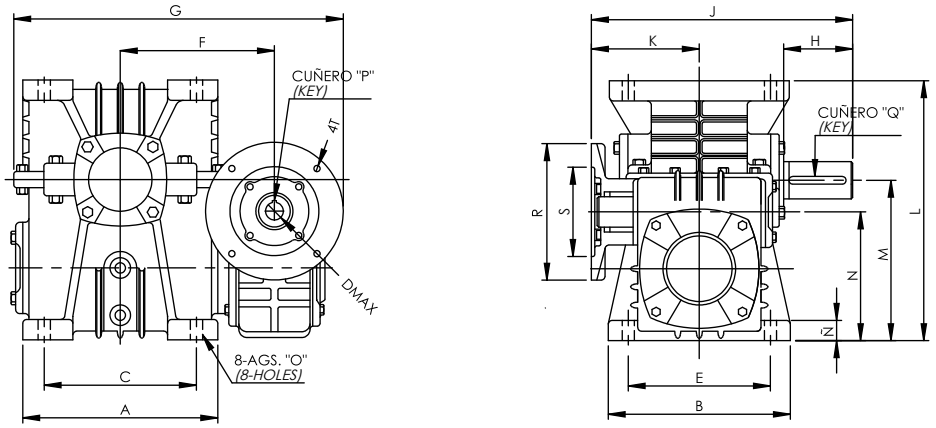
*REDUCER DOUBLE REDUCTION REINFORCED LINE*




DIMENSIONES | *DIMENSIONS*

## MONTAJE HORIZONTAL

| SERIE | A | B | C | D | d | E | F | G | H | I | J | L | M | N | Ñ | O | P | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F711 | 9- 5/8 | 8- 3/4 | 7 - 1/2 | 1- 3/4 | 7/8 | 6- 3/4 | 7- 1/2 | 15- 5/8 | 3- 3/8 | 5- 3/4 | 13- 1/4 | 12- 3/4 | 7- 7/8 | 6- 5/16 | 1 | 9/16 | 3/16 X 1- 1/2 | 3/8 X 2- 7/8 |
| F813 | 10- 7/8 | 9- 1/2 | 8 -1/2 | 2 | 1 | 7- 1/2 | 8- 1/8 | 16- 5/32 | 3- 5/8 | 6- 1/2 | 14- 3/4 | 14- 5/8 | 9 | 7- 1/32 | 1- 1/8 | 11/16 | 1/2 X 2- 7/8 | 1/2 X 2- 7/8 |
| F916 | 13- 3/4 | 12- 1/4 | 11- 1/2 | 2- 1/2 | 1- 1/8 | 10 | 10- 1/8 | 19- 7/8 | 15/16 | 7- 3/8 | 17- 3/8 | 17- 1/2 | 10- 5/8 | 7- 7/8 | 1- 3/8 | 13/16 | 5/8 X 4 | 5/8 X 4 |
| F1116 | 13- 3/4 | 12- 1/4 | 11- 1/2 | 2 - 1/2 | 1- 1/4 | 10 | 11- 1/4 | 22- 5/8 | 4- 3/8 | 8 | 18 | 17- 1/2 | 10- 5/8 | 8- 5/8 | 1- 3/8 | 13/16 | 5/8 X 4 | 5/8 X 4 |
| F1120 | 16- 1/2 | 13 | 13- 1/2 | 3 | 1- 1/4 | 10 | 13 | 25- 1/2 | 4- 5/8 | 8 | 18- 1/2 | 20 | 11- 1/2 | 7- 13/16 | 1- 1/2 | 15/16 | 3/4 X 4- 1/2 | 3/4 X 4- 1/2 |
| F1325 | 20- 1/2 | 19 | 16 | 3- 3/4 | 1- 3/8 | 15 | 17 | 32 | 6- 1/2 | 9- 1/2 | 25 | 25 | 14- 1/2 | 9- 5/8 | 2 | 1- 1/4 | 7/8 X 6- 1/2 | 7/8 X 6- 1/2 |
| F1630 | 24- 1/2 | 22 | 19 - 1/2 | 4- 1/4 | 4- 1/4 | 17- 1/2 | 20- 1/2 | 38 | 7 | 11- 1/2 | 29- 1/2 | 30- 1/2 | 18 | 12- 5/16 | 2- 1/2 | 1- 9/16 | 1 X 6- 1/2 | 1 X 6- 1/2 |



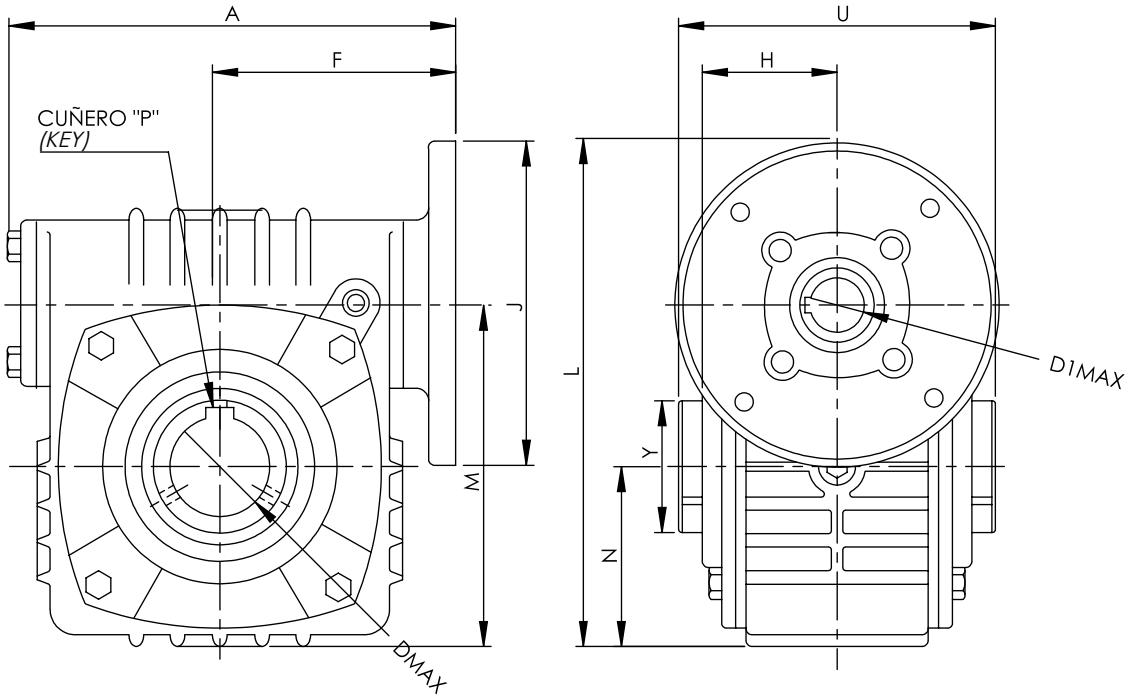

DIMENSIONES | *DIMENSIONS*

## MONTAJE HORIZONTAL

| SERIE | A | B | C | D | DMAX | E | F | G | H | I | J | L | M | N | Ñ | O | P | Q | R | S | T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F711 | 9- 5/8 | 8- 3/4 | 7 - 1/2 | 1- 3/4 | 5/8 , 7/8 | 6- 3/4 | 7- 1/2 | 16 | 3- 3/8 | 4- 7/8 | 12- 3/8 | 12- 3/4 | 7- 7/8 | 6- 5/16 | 1 | 9/16 | 3/16 | 3/8 X 2- 7/8 | 6- 3/4 , 9 | 4- 1/2 , 8- 1/2 | 13/32 |
| F813 | 10- 7/8 | 9- 1/2 | 8 -1/2 | 2 | 5/8 , 1 1/8 | 7- 1/2 | 8- 1/8 | 17- 1/4 | 3- 5/8 | 5- 5/8 | 13- 7/8 | 14- 5/8 | 9 | 7- 1/32 | 1- 1/8 | 11/16 | 3/16 , 1/4 | 1/2 X 2- 7/8 | 6- 3/4 , 9 | 4- 1/2 , 8- 1/2 | 13/32 , 17/32 |
| F916 | 13- 3/4 | 12- 1/4 | 11- 1/2 | 2- 1/2 | 5/8 , 1 1/8 | 10 | 10- 1/8 | 20- 3/4 | 3- 15/16 | 6 | 16 | 17- 1/2 | 10- 5/8 | 7- 7/8 | 1- 3/8 | 13/16 | 3/16 , 1/4 | 5/8 X 4 | 6- 3/4 , 9 | 4- 1/2 , 8- 1/2 | 13/32 , 17/32 |
| F1116 | 13- 3/4 | 12- 1/4 | 11- 1/2 | 2 - 1/2 | 7/8 , 1 3/8 | 10 | 11- 1/4 | 21- 3/4 | 4- 3/8 | 6- 1/4 | 16- 1/4 | 17- 1/2 | 10- 5/8 | 8- 5/8 | 1- 3/8 | 13/16 | 3/16 , 5/16 | 5/8 X 4 | 6- 3/4 , 9 | 4- 1/2 , 8- 1/2 | 13/32 , 17/32 |
| F1120 | 16- 1/2 | 13 | 13- 1/2 | 3 | 7/8 , 1 3/8 | 10 | 13 | 25- 3/4 | 4- 5/8 | 6- 1/4 | 16- 5/8 | 20 | 11- 1/2 | 7- 13/16 | 1- 1/2 | 15/16 | 3/16 , 5/16 | 3/4 X 4- 1/2 | 6- 3/4 , 9 | 4- 1/2 , 8- 1/2 | 13/32 , 17/32 |
| F1325 | 20- 1/2 | 19 | 16 | 3- 3/4 | 7/8 , 1 5/8 | 15 | 17 | 31- 3/4 | 6- 1/2 | 7 | 22- 7/8 | 25 | 14- 1/2 | 9- 5/8 | 2 | 1- 1/4 | 1/4 , 3/8 | 7/8 X 6- 1/2 | 9 | 8- 1/2 | 17/32 |
| F1630 | 24- 1/2 | 22 | 19 - 1/2 | 4- 1/4 | 1 1/8 , 1 7/8 | 17- 1/2 | 20- 1/2 | 37- 1/8 | 7 | 8- 1/4 | 26- 3/4 | 30- 1/2 | 18 | 12- 5/16 | 2- 1/2 | 1- 9/16 | 1/4 , 3/8 | 1 X 6- 1/2 | 9 | 8- 1/2 | 17/32 |

TODAS LAS DIMENSIONES EN PULGADAS | *ALL DIMENSIONS IN INCHES*

# MOTOREDUCTOR CON BUJE SIN BASE
*MOTO-REDUCER WITH BUSHING AND WITHOUT BASE*

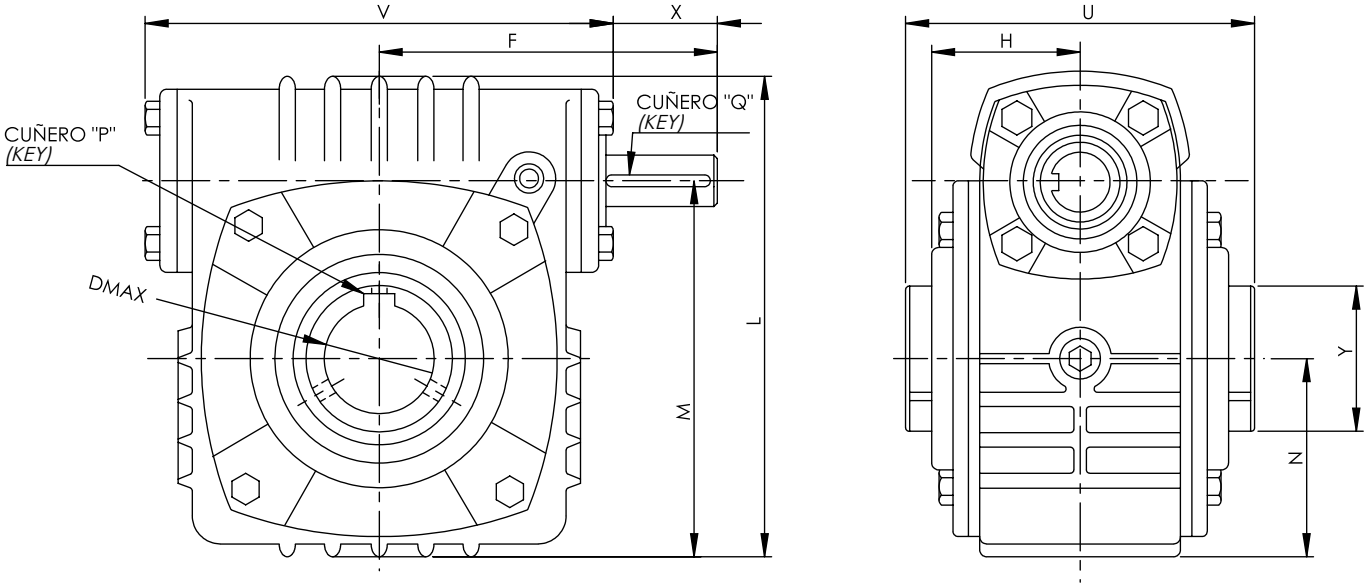



DIMENSIONES | *DIMENSIONS*

| SERIE MRU | F050 | F060 | F070 | F080 | F090 | F110 | F130 |
|---|---|---|---|---|---|---|---|
| A | 6- 5/8 | 7- 5/8 | 9- 1/8 | 9- 13/16 | 10- 11/16 | 11- 7/8 | 13- 1/4 |
| DMAX | 1 | 1- 1/4 | 1- 1/2 | 1- 5/8 | 1- 3/4 | 2 | 2- 1/4 |
| F | 3- 7/8 | 4- 7/16 | 5- 7/16 | 5- 7/8 | 6- 5/16 | 6- 3/4 | 7- 1/2 |
| H | 2 | 2- 5/16 | 2- 5/16 | 3- 1/16 | 3- 6/16 | 3- 5/8 | 4- 1/16 |
| J | 6- 3/4, 9 | 6- 3/4, 9 | 6- 3/4, 9 | 6- 3/4, 9 | 6- 3/4, 9 | 6- 3/4,9 | 9 |
| L | 7- 5/8 | 8- 5/8 | 9- 19/32 | 11- 5/16 | 12- 5/32 | 13- 5/8 | 15- 1/8 |
| M | 4- 1/4 | 5- 1/4 | 6- 7/32 | 6- 13/16 | 7- 21/32 | 9- 3/16 | 10- 5/8 |
| N | 2- 9/32 | 2- 7/8 | 3- 5/16 | 3- 11/16 | 4- 1/8 | 4- 7/8 | 5- 1/2 |
| P | 1/4 | 1/4 | 5/16 | 3/8 | 3/8 | 1/2 | 1/2 |
| U | 5- 1/4 | 6- 1/8 | 7 | 7- 3/4 | 8- 1/2 | 8- 1/4 | 10 |
| V | 1- 15/16 | 2- 1/4 | 2- 1/2 | 2- 15/16 | 3- 1/4 | 3- 1/2 | 3- 7/8 |
| D1MAX | 7/8 | 7/8 | 1- 1/8 | 1- 1/8 | 1- 1/8 | 1- 3/8 | 1- 5/8 |

D1MAX DE BUJE Y DE ENTRADA DE MOTOR SON MEDIDAS ESRANDAR DE ACUERDO A REQUERIMIENTOS QUE SOLICITEN | *D1MAX OF BUSHING AND INSIDE DIAMTER OF MOTOR ARE DIMENSIONS STANDARD ACCORDING TO NECCESITY*

# REDUCTOR CON BUJE SIN BASE
*REDUCER WITH BUSHING AND WITHOUT BASE*

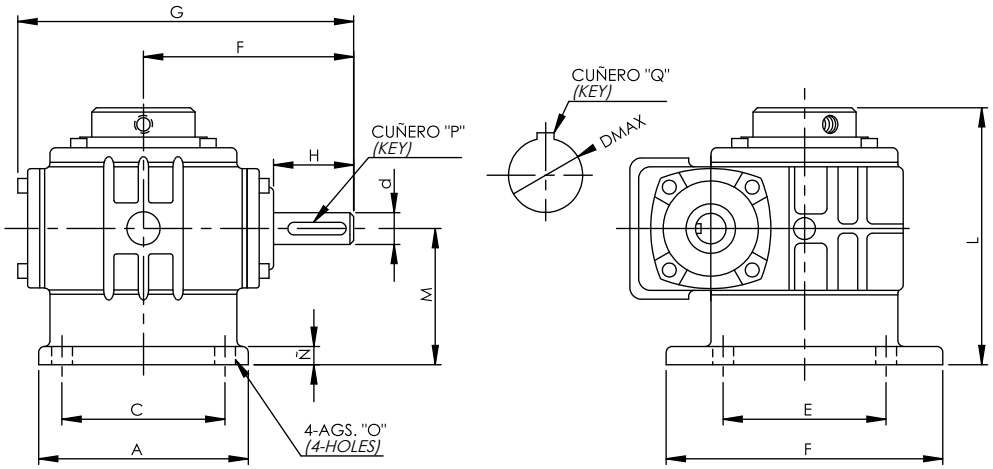



DIMENSIONES | *DIMENSIONS*

| SERIE RU | F050 | F060 | F070 | F080 | F090 | F110 |
|---|---|---|---|---|---|---|
| d | 5/8 | 3/4 | 7/8 | 1 | 1- 1/8 | 1- 1/4 |
| D1MAX | 1 | 1 1/4 | 1- 1/2 | 1- 5/8 | 1- 3/4 | 2 |
| F | 4- 1/2 | 5 | 5- 3/4 | 6- 1/2 | 7- 3/8 | 8 |
| H | 2 | 2- 5/16 | 2- 3/4 | 3- 1/16 | 3- 5/16 | 3- 5/8 |
| L | 6 | 7- 3/8 | 8- 7/16 | 9- 3/4 | 10- 3/4 | 12 |
| M | 4- 1/4 | 5- 1/4 | 6- 7/32 | 6- 13/16 | 7- 21/32 | 9- 3/16 |
| N | 2- 9/16 | 2- 7/8 | 3- 5/16 | 3- 11/16 | 4- 1/8 | 4- 7/8 |
| P | 1/4 | 1/4 | 5/16 | 3/8 | 3/8 | 1/2 |
| Q | 3/16 X 1- 1/2 | 3/16 X 1- 1/2 | 3/16 X 1-1/2 | 1/4 X 2 | 1/4 X 2- 1/4 | 1/4 X 2- 1/4 |
| U | 5- 1/4 | 6- 1/8 | 7 | 7- 3/4 | 8- 1/2 | 8- 1/4 |
| V | 5- 1/2 | 6- 1/2 | 7- 3/8 | 7- 7/8 | 8- 3/4 | 10- 1/4 |
| X | 1- 15/16 | 2 | 2- 1/16 | 2- 9/16 | 3 | 2- 3/4 |
| Y | 1- 15/16 | 2- 1/4 | 2- 1/2 | 2- 15/16 | 3- 1/4 | 3- 1/2 |

D1MAX DE BUJE Y DE ENTRADA DE MOTOR SON MEDIDAS ESRANDAR DE ACUERDO A REQUERIMIENTOS QUE SOLICITEN | *D1MAX OF BUSHING AND INSIDE DIAMTER OF MOTOR ARE DIMENSIONS STANDARD ACCORDING TO NECCESITY*

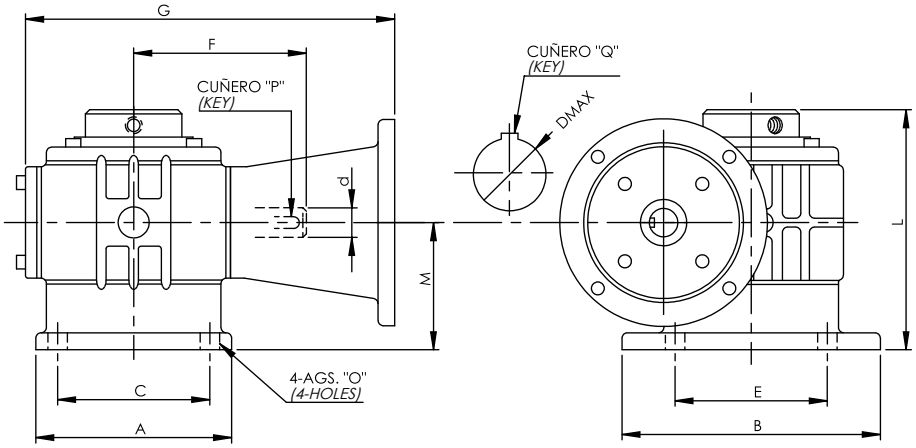
# REDUCTOR CON BUJE Y TAPA FLANGE
*REDUCER WITH BUSHING AND FLANGE*




DIMENSIONES | *DIMENSIONS*

| SERIE | A | B | C | d | DMAX | E | F | G | H | L | M | Ñ | O | P | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F050 | 6 | 7- 3/4 | 4- 9/16 | 5/8 | 1 | 4- 9/16 | 4- 1/2 | 7- 5/16 | 1- 15/16 | 5- 15/16 | 3- 3/16 | 1/2 | 13/32 | 3/16 X 1- 1/2 | 1/4 |
| F060 | 6- 3/4 | 8- 1/2 | 4- 5/16 | 3/4 | 1- 1/4 | 4- 15/16 | 5 | 8- 3/8 | 2 | 6- 5/8 | 3- 5/8 | 1/2 | 13/32 | 3/16 X 1- 1/2 | 3/8 |
| F070 | 7- 3/4 | 9- 1/4 | 5- 3/4 | 7/8 | 1- 1/2 | 5- 3/4 | 5- 3/4 | 9- 3/4 | 2- 1/16 | 7- 3/8 | 3- 7/8 | 1/2 | 17/32 | 3/16 X 1- 1/2 | 3/8 |
| F080 | 8 | 10 | 6- 3/8 | 1 | 1- 5/8 | 6- 3/8 | 6- 1/2 | 11 | 2- 9/16 | 8 | 4- 1/16 | 1/2 | 17/32 | 1/4 X 2 | 1/2 |
| F090 | 9 | 11- 1/4 | 7- 1/16 | 1- 1/8 | 1- 3/4 | 7- 1/16 | 7- 3/8 | 12- 7/16 | 3 | 9 | 4- 3/4 | 5/8 | 17/32 | 1/4 X 2- 1/4 | 1/2 |
| F110 | 10- 1/2 | 13 | 8- 1/8 | 1- 1/4 | 2 | 8- 1/8 | 6- 1/2 | 13 | 2- 3/4 | 9- 5/8 | 5- 9/16 | 3/4 | 9/16 | 1/4 X 2- 1/4 | 1/2 |

# MOTOREDUCTOR CON BUJE Y TAPA FLANGE
*MOTO-REDUCER WITH BUSHING AND FLANGEREDUCER WITH BUSHING AND*

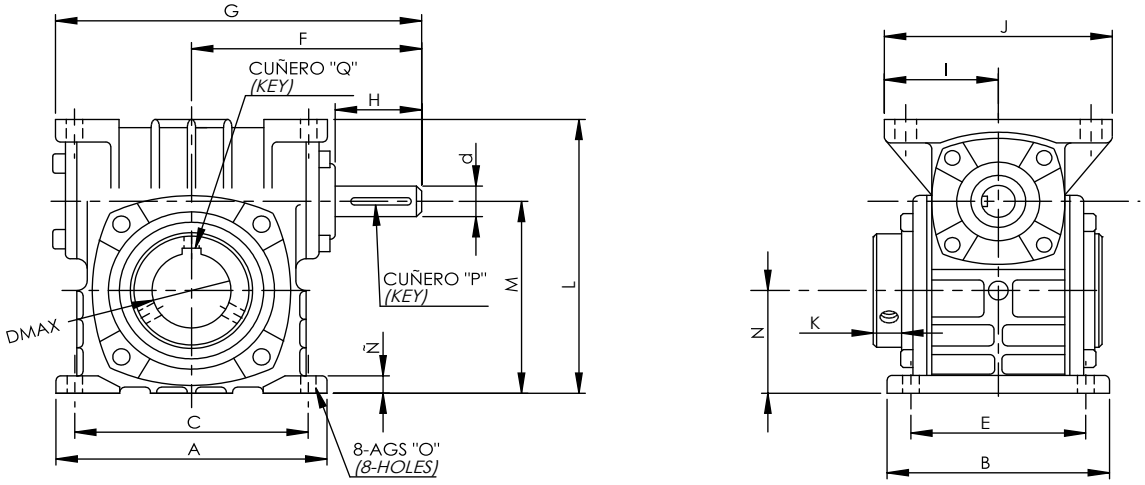



DIMENSIONES | *DIMENSIONS*

| SERIE | A | B | C | d | DMAX | E | F | G | L | M | Ñ | O | P | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F050 | 6 | 7- 3/4 | 4- 9/16 | 5/8 | 1 | 4- 9/16 | 4- 1/16 | 9- 9/16 | 5- 13/16 | 3- 3/16 | 1/2 | 13/32 | 3/16 X 1- 1/2 | 1/4 |
| F060 | 6- 3/4 | 8- 1/2 | 4- 5/16 | 3/4 | 1- 1/4 | 4- 15/16 | 4- 3/4 | 10- 7/8 | 6- 5/8 | 3- 5/8 | 1/2 | 13/32 | 3/16 X 1- 1/2 | 1/4 |
| F070 | 7- 3/4 | 9- 1/4 | 5- 3/4 | 7/8 | 1- 1/2 | 5- 3/4 | 5- 3/16 | 11- 1/2 | 7- 3/8 | 3- 7/8 | 1/2 | 17/32 | 3/16 X 1- 1/2 | 5/16 |
| F080 | 8 | 10 | 6- 3/8 | 1 | 1- 5/8 | 6- 3/8 | 5- 1/2 | 12- 3/16 | 8 | 4- 1/16 | 1/2 | 17/32 | 1/4 X 2 | 3/8 |
| F090 | 9 | 11- 1/4 | 7- 1/16 | 1- 1/8 | 1- 3/4 | 7- 1/16 | 6- 1/4 | 14- 3/16 | 9 | 4- 3/4 | 5/8 | 17/32 | 1/4 X 2- 1/4 | 3/8 |
| F110 | 10- 1/2 | 13 | 8- 1/8 | 1- 1/4 | 2 | 8- 1/8 | 6- 7/8 | 15- 7/8 | 9- 5/8 | 5- 9/16 | 3/4 | 9/16 | 1/4 X 2- 1/4 | 1/2 |

TODAS LAS DIMENSIONES EN PULGADAS | *ALL DIMENSIONS IN INCHES*

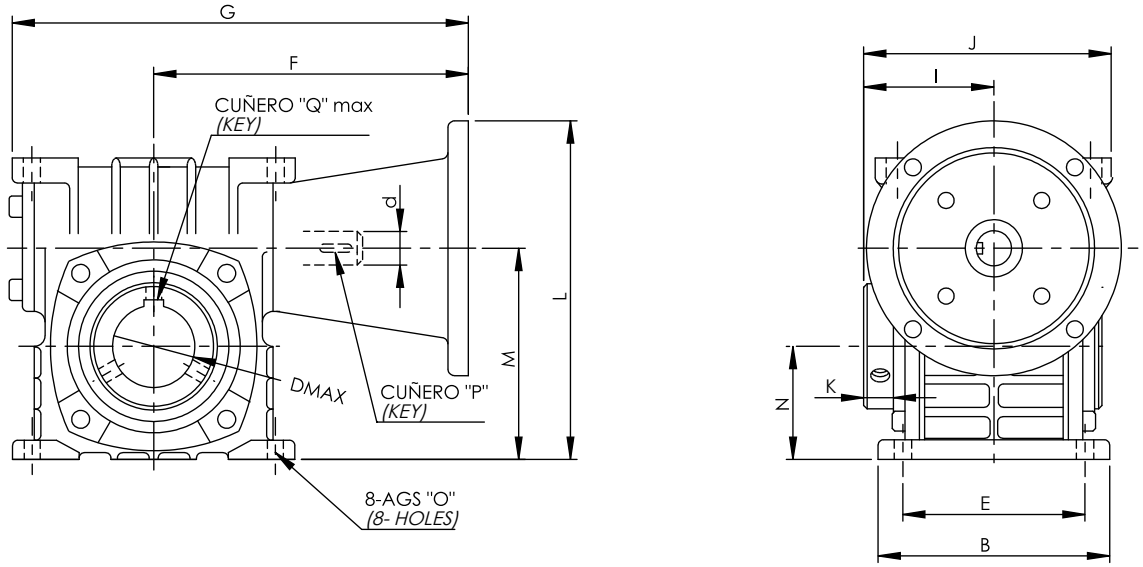
# REDUCTOR CON BUJE Y BASE
*REDUCER WITH BUSHING AND BASE*




DIMENSIONES | *DIMENSIONS*

| SERIE | A | B | C | DMAX | d | E | F | G | H | I | J | K | L | M | N | Ñ | O | P | QMAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F050 | 5- 5/8 | 4- 1/2 | 4- 5/8 | 1- 1/4 | 5/8 | 3- 1/2 | 4- 1/2 | 7- 5/16 | 1- 15/16 | 2- 5/8 | 4- 7/8 | 5/8 | 6 | 4- 1/4 | 2- 9/32 | 1/2 | 13/32 | 3/16 X 1- 1/2 | 1/4 |
| F060 | 6- 3/4 | 5- 3/8 | 5- 5/8 | 1- 1/2 | 3/4 | 4- 1/4 | 5 | 8- 3/8 | 2 | 3- 1/16 | 5- 11/16 | 11/16 | 7- 3/8 | 5- 1/4 | 2- 7/8 | 1/2 | 13/32 | 3/16 X 1- 1/2 | 1/4 |
| F070 | 8 | 6- 1/4 | 6- 5/8 | 1- 3/4 | 7/8 | 4- 7/8 | 5 3/4 | 9- 3/4 | 2 1/16 | 3- 1/2 | 6- 5/8 | 3/4 | 8- 7/16 | 6- 7/32 | 3- 5/16 | 5/8 | 17/32 | 3/16 X 1- 1/2 | 5/16 |
| F080 | 9 | 7- 1/8 | 7- 1/2 | 2 | 1 | 5- 5/8 | 6- 1/2 | 11 | 2- 9/16 | 3- 7/8 | 7- 7/16 | 25/32 | 9- 3/4 | 6- 13/16 | 3- 11/16 | 3/4 | 17/32 | 1/4 X 2 | 3/8 |
| F090 | 10- 1/8 | 8 | 8- 1/2 | 2- 1/4 | 1- 1/8 | 6- 3/8 | 7- 3/8 | 12- 7/16 | 3 | 4- 1/4 | 8- 1/4 | 15/16 | 10- 3/4 | 7- 21/32 | 4- 1/8 | 7/8 | 17/32 | 1/4 X 2- 1/4 | 3/8 |

# MOTOREDUCTOR CON BUJE Y BRIDA DE CAMPANA
*MOTO-REDUCER WITH BUSHING AND FLANGE*

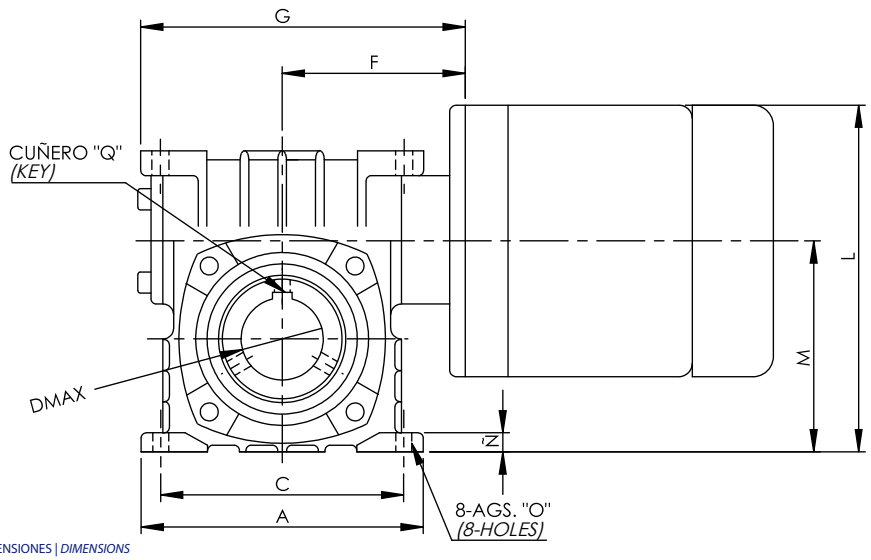


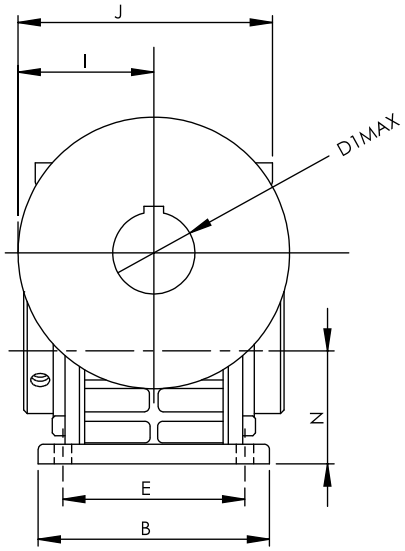

DIMENSIONES | *DIMENSIONS*

| SERIE | A | B | C | DMAX | d | E | F | G | I | J | K | L | M | N | Ñ | O | P | QMAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F050 | 5- 5/8 | 4- 1/2 | 4- 5/8 | 1- 1/4 | 5/8 | 3- 1/2 | 4- 1/16 | 9- 5/8 | 2- 5/8 | 4- 7/8 | 5/8 | 6 | 4- 1/4 | 2- 9/32 | 1/2 | 13/32 | 3/16 X 1- 1/2 | 1/4 |
| F060 | 6- 3/4 | 5- 3/8 | 5- 5/8 | 1- 1/2 | 3/4 | 4- 1/4 | 4- 3/4 | 10- 3/4 | 3- 1/16 | 5- 11/16 | 11/16 | 7- 3/8 | 5- 1/4 | 2- 7/8 | 1/2 | 13/32 | 3/16 X 1- 1/2 | 1/4 |
| F070 | 8 | 6- 1/4 | 6- 5/8 | 1- 3/4 | 7/8 | 4- 7/8 | 5- 3/16 | 11- 13/16 | 3- 1/2 | 6- 5/8 | 3/4 | 8- 7/16 | 6- 7/32 | 3- 5/16 | 5/8 | 17/32 | 3/16 X 1- 1/2 | 5/16 |
| F080 | 9 | 7- 1/8 | 7- 1/2 | 2 | 1 | 5- 5/8 | 5- 1/2 | 12- 3/4 | 3- 7/8 | 7- 7/16 | 25/32 | 9- 3/4 | 6- 13/16 | 3- 11/16 | 3/4 | 17/32 | 1/4 X 2 | 3/8 |
| F090 | 10- 1/8 | 8 | 8- 1/2 | 2- 1/4 | 1- 1/8 | 6- 3/8 | 6- 1/4 | 15- 1/16 | 4- 1/4 | 8- 1/4 | 15/16 | 10- 3/4 | 7- 21/32 | 4- 1/8 | 7/8 | 17/32 | 1/4 X 2- 1/4 | 3/8 |

TODAS LAS DIMENSIONES EN PULGADAS | *ALL DIMENSIONS IN INCHES*

# MOTOREDUCTOR CON BASE
*MOTO- REDUCER WITH BASE*



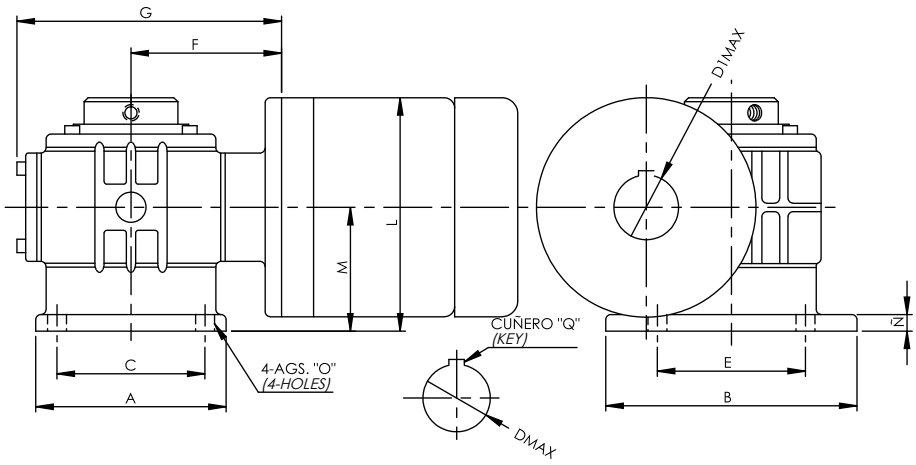




DIMENSIONES | *DIMENSIONS*

| SERIE | A | B | C | DMAX | E | F | G | I | J | K | L | M | N | Ñ | O | Q | D1MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F050 | 5- 5/8 | 4- 1/2 | 4- 5/8 | 1 | 3- 1/2 | 3- 7/8 | 6- 11/16 | 2- 5/8 | 4- 7/8 | 5/8 | 7- 5/8 | 4- 1/2 | 2- 9/32 | 1/2 | 13/32 | 1/4 | 7/8 |
| F060 | 6- 3/4 | 5- 3/8 | 5- 5/8 | 1- 1/4 | 4- 1/2 | 4- 7/16 | 7- 13/16 | 3- 1/16 | 5- 11/16 | 11/16 | 8- 5/8 | 5- 1/4 | 2- 7/8 | 1/2 | 13/32 | 1/4 | 7/8 |
| F070 | 8 | 6- 1/4 | 6- 5/8 | 1- 1/2 | 4- 7/8 | 5- 7/16 | 9- 7/16 | 3- 1/2 | 6- 5/8 | 3/4 | 9- 9/16 | 6- 7/32 | 3- 15/16 | 5/8 | 17/32 | 5/16 | 1 1/8 |
| F080 | 9 | 7- 1/8 | 7- 1/2 | 1- 5/8 | 5- 5/8 | 5- 7/8 | 10- 3/8 | 3- 7/8 | 7- 7/16 | 25/32 | 11- 15/16 | 6- 13/16 | 3- 11/16 | 3/4 | 17/32 | 3/8 | 1 1/8 |
| F090 | 10- 1/8 | 8 | 8- 1/2 | 1- 3/4 | 6- 3/8 | 6- 5/16 | 11- 3/8 | 4- 1/4 | 8- 1/4 | 15/16 | 12- 1/8 | 7- 21/32 | 4- 1/8 | 7/8 | 17/32 | 3/8 | 1 1/8 |

REDUMSA

# MOTOREDUCTOR CON BUJE Y TAPA FLANGE
*MOTO- REDUCER WITH BUSHING AND FLANGE*



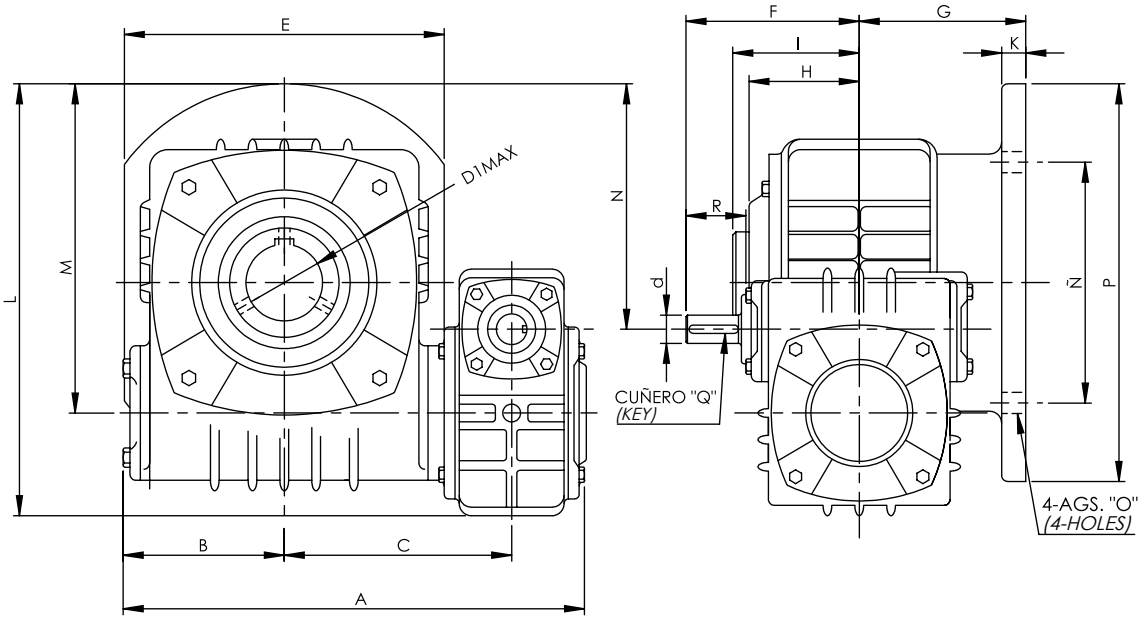

DIMENSIONES | *DIMENSIONS*

| SERIE | A | B | C | DMAX | E | F | G | L | M | Ñ | O | Q | D1MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F050 | 5- 5/8 | 7- 3/4 | 4- 9/16 | 1 | 4- 9/16 | 3- 7/8 | 6- 11/16 | 6- 11/16 | 3- 3/16 | 1/2 | 13/32 | 1/4 | 7/8 |
| F060 | 6- 3/4 | 8- 1/2 | 4- 15/16 | 1- 1/4 | 4- 5/16 | 4- 7/16 | 7- 13/16 | 7 | 3- 5/8 | 1/2 | 13/32 | 1/4 | 7/8 |
| F070 | 8 | 9- 1/4 | 5- 3/4 | 1- 1/2 | 5- 3/4 | 5- 7/16 | 9- 7/16 | 7- 1/4 | 3- 7/8 | 1/2 | 17/32 | 5/16 | 1- 1/8 |
| F080 | 9 | 10 | 6- 3/8 | 1- 5/8 | 6- 3/8 | 5- 7/8 | 10- 3/8 | 8- 3/4 | 4- 1/16 | 1/2 | 17/32 | 3/8 | 1- 1/8 |
| F090 | 10- 1/8 | 11- 1/4 | 7- 1/16 | 1- 3/4 | 7- 1/16 | 6- 5/16 | 11- 3/8 | 9- 1/4 | 4- 3/4 | 5/8 | 17/32 | 3/8 | 1- 1/8 |
| F110 | 10- 1/2 | 13 | 8- 1/8 | 2 | 8 1/8 | 6- 3/4 | 11- 7/8 | 9- 11/16 | 5 9/16 | 3/4 | 9/16 | 1/2 | 1- 3/8 |

TODAS LAS DIMENSIONES EN PULGADAS | *ALL DIMENSIONS IN INCHES*

# REDUCTOR DOBLE REDUCCION CON BUJE Y TAPA FLANGE

*REDUCER DOUBLE REDUCTION WITH BUSHING AND FLANGE*



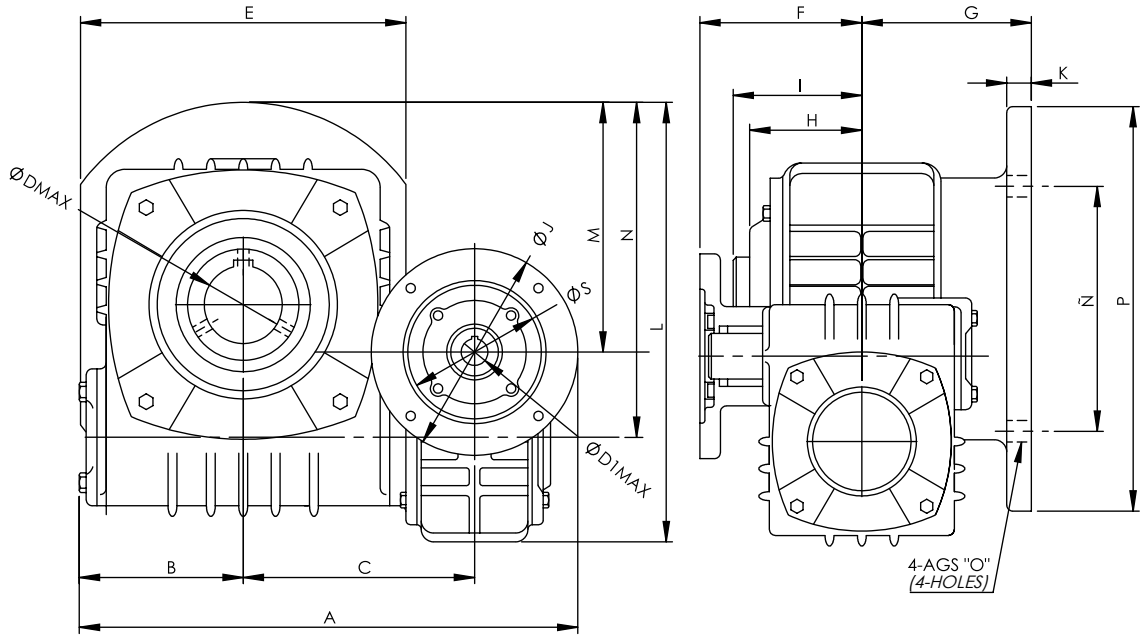

DIMENSIONES | *DIMENSIONS*

| SERIE | F055 | F056 | F058 | F069 | F711 |
|---|---|---|---|---|---|
| A | 8- 15/16 | 10- 11/16 | 12- 15/16 | 13- 3/4 | 15- 1/8 |
| B | 2-13/16 | 3- 3/8 | 3- 15/16 | 4- 3/8 | 5- 1/4 |
| C | 4- 5/16 | 5- 1/2 | 7 | 7- 3/16 | 37- 1/2 |
| D1MAX | 5/8 | 5/8 | 5/8 | 3/4 | 7/8 |
| d | 1 | 1- 1/4 | 1- 5/8 | 1- 3/4 | 2 |
| E | 6 | 6- 3/4 | 8 | 9 | 10- 1/2 |
| F | 4- 1/2 | 4- 1/2 | 4- 1/2 | 5 | 5- 3/4 |
| G | 3 -3/16 | 3- 5/8 | 4- 1/16 | 4- 3/4 | 5- 9/16 |
| H | 2 | 2- 5/16 | 3- 1/16 | 3- 5/16 | 3- 5/8 |
| I | 2- 5/8 | 3- 1/16 | 3- 7/8 | 4- 1/4 | 4- 1/8 |
| K | 1/2 | 7/16 | 1/2 | 5/8 | 3/4 |
| L | 8- 3/16 | 8- 15/16 | 10-7/16 | 11- 15/16 | 14- 3/16 |
| M | 5- 7/8 | 6- 5/8 | 8- 1/8 | 9- 1/16 | 10- 13/16 |
| N | 3- 7/8 | 4- 5/8 | 6- 3/16 | 6- 11/16 | 8- 1/16 |
| Ñ | 4- 9/16 | 4- 15/16 | 6- 3/8 | 7- 1/16 | 8- 1/8 |
| O | 13/32 | 13/32 | 1/2 | 17/32 | 9/16 |
| P | 7- 3/4 | 8- 1/2 | 10 | 11- 1/4 | 13 |
| Q | 3/16 X 1- 1/2 | 3/16 X 1- 1/2 | 3/16 X 1-1/2 | 3/16 X 1-1/2 | 3/16 X 1-1/2 |
| R | 1- 15/16 | 1- 15/16 | 1- 15/16 | 2 | 2- 1/16 |

D1MAX DE BUJE Y DE ENTRADA DE MOTOR SON MEDIDAS ESRANDAR DE ACUERDO A REQUERIMIENTOS QUE SOLICITEN | *D1MAX OF BUSHING AND INSIDE DIAMTER OF MOTOR ARE DIMENSIONS STANDARD ACCORDING TO NECCESITY*

# MOTOREDUCTOR DOBLE REDUCCION CON BUJE Y TAPA FLANGE

*MOTO- REDUCER DOUBLE REDUCTION WITH BUSHING AND FLANGE*

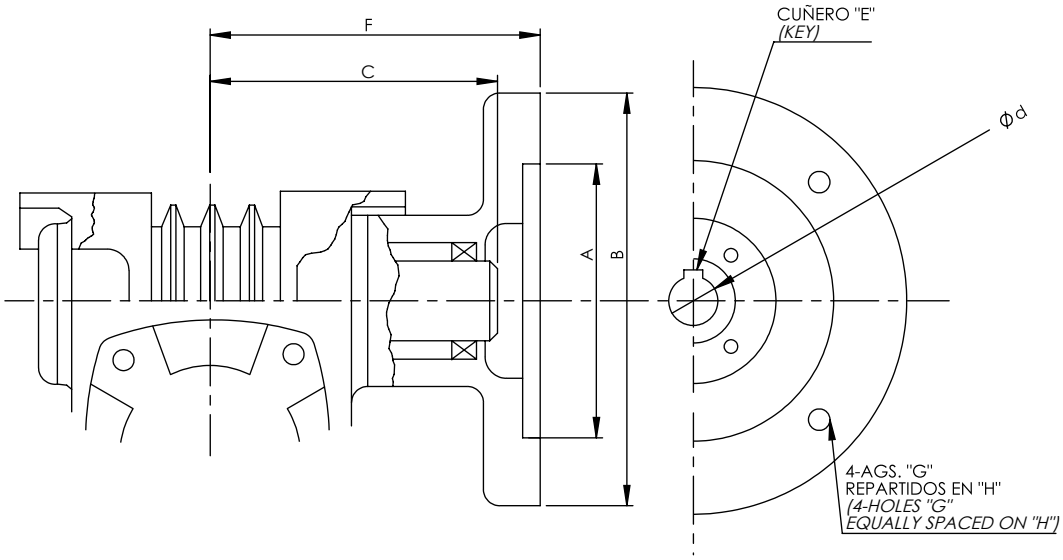



DIMENSIONES | *DIMENSIONS*

| SERIE | F055 | F056 | F058 | F069 | F711 |
|---|---|---|---|---|---|
| A | 10- 1/2 | 12- 1/4 | 14- 5/16 | 15 | 16- 1/8 |
| B | 2- 13/16 | 3- 3/8 | 3- 15/16 | 4- 3/8 | 5- 1/4 |
| C | 4- 5/16 | 5- 1/2 | 7 | 7- 3/16 | 37- 1/2 |
| D1MAX | 1 | 1- 1/4 | 1- 5/8 | 1- 3/4 | 7/8 |
| DMAX | 5/8 , 7/8 | 5/8 , 7/8 | 5/8 , 7/8 | 5/8 , 7/8 | 1/8 |
| E | 6 | 6- 3/4 | 8 | 9 | 10- 1/2 |
| F | 3- 7/8 | 3- 7/8 | 3- 7/8 | 4- 7/16 | 5- 3/4 |
| G | 3- 3/16 | 3- 5/8 | 4- 1/16 | 4- 3/4 | 5- 9/16 |
| H | 2 | 2- 5/16 | 3- 1/16 | 3- 5/16 | 3- 5/8 |
| I | 2- 5/8 | 3- 1/16 | 3- 7/8 | 4- 1/4 | 4- 1/8 |
| J | 6- 3/4 | 6- 3/4 | 6- 3/4, 9 | 6- 3/4, 9 | 6- 3/4, 9 |
| K | 1/2 | 7/16 | 1/2 | 5/8 | 14- 3/16 |
| L | 8- 3/16 | 8- 15/16 | 10- 7/16 | 11- 15/16 | 10- 13/16 |
| M | 5- 7/8 | 6- 5/8 | 8- 1/8 | 9- 1/16 | 8- 1/16 |
| N | 3- 7/8 | 4- 5/8 | 6- 3/16 | 6- 11/16 | 8- 1/8 |
| Ñ | 4- 9/16 | 4- 15/16 | 6- 3/8 | 7- 1/16 | 9/16 |
| O | 13/32 | 13/32 | 1/2 | 17/32 | 13 |
| P | 7- 3/4 | 8- 1/2 | 10 | 11- 1/4 | 3/16 X 1-1/2 |
| S | 4- 1/2 | 4- 1/2 | 4- 1/2 | 4- 1/2 | 4- 1/2 , 8- 1/2 |

TODAS LAS DIMENSIONES EN PULGADAS | *ALL DIMENSIONS IN INCHES*

# ACOPLAMIENTO DE MOTOREDUCTOR
*COUPLING ARRANGEMENT*

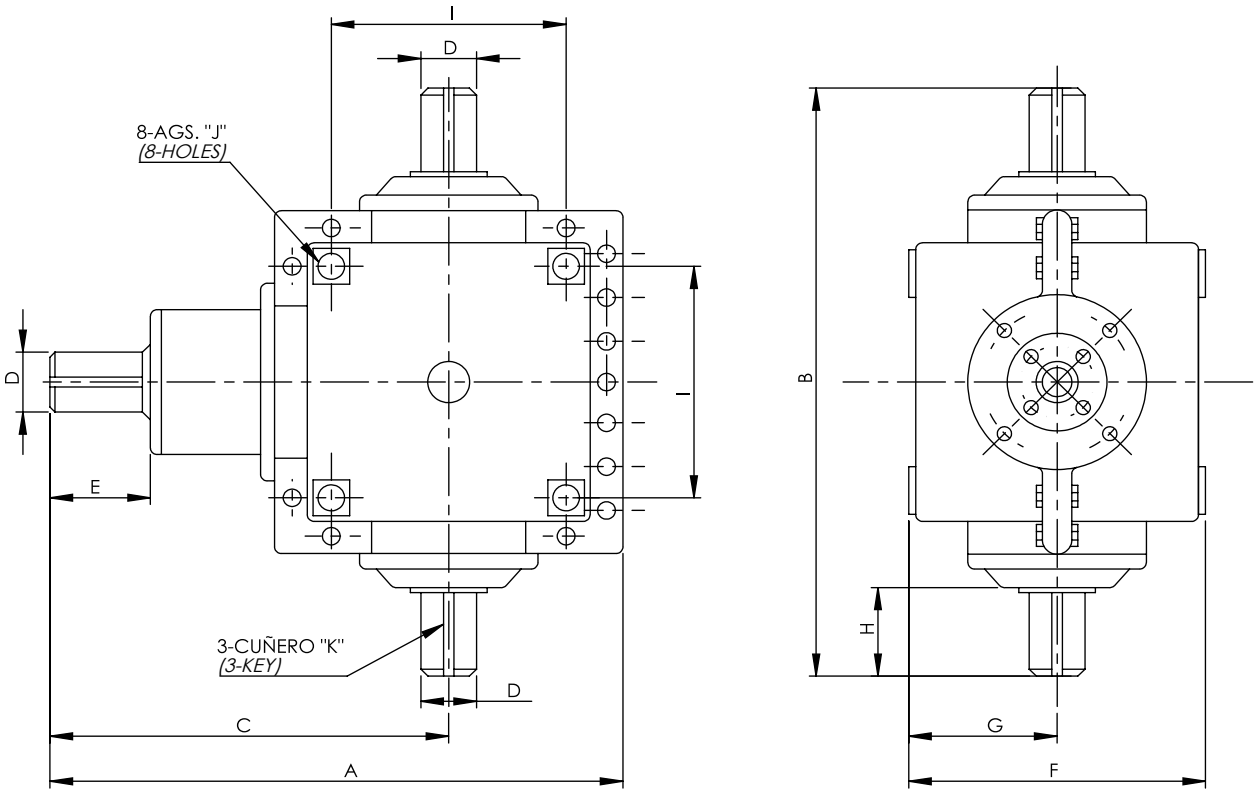



DIMENSIONES | *DIMENSIONS*

| SERIE | MOTOR ARMAZON FRAME | A | B | C | d | E | F | G , H |
|---|---|---|---|---|---|---|---|---|
| **F050** | 56 | 4- 1/2 | 6- 3/4 | 3- 7/16 | 5/8 | 3/16 | 3- 7/8 | 13/32 , 5- 7/8 |
| | 143 | 4- 1/2 | 6- 3/4 | 3- 7/16 | 7/8 | 3/16 | 3- 7/8 | 13/32 , 5- 7/8 |
| **F060** | 56 | 4- 1/2 | 6- 3/4 | 4 | 5/8 | 3/16 | 4- 7/16 | 13/32 , 5- 7/8 |
| | 143 | 4- 1/2 | 6- 3/4 | 4 | 7/8 | 3/16 | 4- 7/16 | 13/32 , 5- 7/8 |
| **F070** | 143 | 4- 1/2 | 6- 3/4 | 4- 7/8 | 5/8 | 3/16 | 5- 7/16 | 13/32 , 5- 7/8 |
| | 182 | 8- 1/2 | 9 | 4- 7/8 | 7/8 | 1/4 | 5- 7/8 | 17/32 , 7- 1/4 |
| **F080** | 143, 213 | 4- 1/2 | 6- 3/4 | 5- 5/8 | 5/8 , 7/8 | 3/16 | 5- 7/8 | 13/32 , 5- 7/8 |
| | 182 | 8- 1/2 | 9 | 5- 5/8 | 1- 1/8 | 1/4 | 5- 7/8 | 17/32 , 7- 1/4 |
| **F090** | 143, 213 | 4- 1/2 | 6- 3/4 | 6 | 5/8 , 7/8 | 3/16 , 5/16 | 6- 5/16 | 13/32 , 5- 7/8 |
| | 182 | 8- 1/2 | 9 | 6 | 1- 1/8 | 1/4 | 6- 5/16 | 17/32 , 7- 1/4 |
| **F110** | 143, 213 | 4- 1/2 | 6- 3/4 | 6- 1/4 | 7/8 , 1 1/8 | 3/16 , 1/4 | 6- 3/4 | 13/32 , 5- 7/8 |
| | 182,213 | 8- 1/2 | 9 | 6- 1/4 | 1- 1/8 , 1-3/8 | 5/16 | 6- 3/4 | 17/32 , 7- 1/4 |
| **F130** | 143, 213 | 4- 1/2 | 6- 3/4 | 7 | 7/8, 1- 3/8 | 3/16 , 5/16 | 7- 1/2 | 13/32 , 5- 7/8 |
| | 182, 254 | 8- 1/2 | 9 | 7 | 1- 1/8 , 1-5/8 | 1/4 , 3/8 | 7- 1/2 | 17/32 , 7- 1/4 |
| **F150** | 182, 254 | 8- 1/2 | 9 | 8 | 1- 1/8 , 1-5/8 | 1/4 , 3/8 | 8- 5/16 | 17/32 , 7- 1/4 |
| | 213, 284 | 10 1/2 | 11 | 8 | 1- 3/8 , 1- 7/8 | 5/16, 1/2 | 8- 5/16 | 17/32 , 9 |
| **F160** | 182, 254 | 8- 1/2 | 9 | 8- 1/4 | 1/ 1/8, 1- 5/8 | 1/4 , 3/8 | 8- 3/4 | 17/32 , 7- 1/4 |
| | 213, 284 | 10 1/2 | 11 | 08/01/04 | 1- 3/8 , 1- 7/8 | 5/16, 1/2 | 8- 3/4 | 17/32 , 9 |

TODAS LAS DIMENSIONES EN PULGADAS | *ALL DIMENSIONS IN INCHES*

# CAMBIADOR DE DIRECCIÓN
*DIRECTION CHANGER*




| DIMENSIONES (DIMENSIONS) | | |
|---|---|---|
| **SERIE** | **CD300** | **CD900** |
| **A** | 10 | 13 |
| **B** | 11 | 15-3/8 |
| **C** | 7 | 9-5/8 |
| **D** | 1 | 1-1/4 |
| **E** | 2- 1/2 | 2-7/8 |
| **F** | 5- 1/4 | 6-5/8 |
| **G** | 2- 5/8 | 3-15/16 |
| **H** | 1- 7/8 | 3-1/16 |
| **I** | 4 | 4-3/4 |
| **J** | 3/8-16NC | 1/2-18NC |
| **K** | 1/4 X 1-5/8 | 1/4 X2-3/4 |

| TABLA PARA SELECCION DE CAPACIDADES (CAPACITY SELECTION TABLE) | | | |
|---|---|---|---|
| **TAMAÑO (SIZE)** | **RELACION (RATIO)** | **DESCRIPCION (DESCRIPTION)** | **MOTOR 1750 RPM 230/460 VAC** |
| **CD500** | 1:1 | HP- ENTRADA (INPUT) | 10.3 |
| | | PAR/TORQUE KG-CM | 370 |
| | | RPM SALIDA (OUTPUT) | 1750 |
| | 1.5:1 | HP- ENTRADA (INPUT) | 7.28 |
| | | PAR/TORQUE KG-CM | 370 |
| | | RPM SALIDA (OUTPUT) | 1160 |
| | 2:1 | HP- ENTRADA (INPUT) | 3.62 |
| | | PAR/TORQUE KG-CM | 280 |
| | | RPM SALIDA (OUTPUT) | 875 |
| **CD900** | 1:1 | HP- ENTRADA (INPUT) | 18.6 |
| | | PAR/TORQUE KG-CM | 675 |
| | | RPM SALIDA (OUTPUT) | 1750 |
| | 1.5:1 | HP- ENTRADA (INPUT) | 12.5 |
| | | PAR/TORQUE KG-CM | 675 |
| | | RPM SALIDA (OUTPUT) | 1750 |
| | 2:1 | HP- ENTRADA (INPUT) | 6 |
| | | PAR/TORQUE KG-CM | 440 |
| | | RPM SALIDA (OUTPUT) | 875 |

*DISPONIBLE : UNA ENTRADA Y UNA SALIDA , UNA ENTRADA Y DOS SALIDAS*

# TABLA POTENCIAS
*SERIE ESTANDAR*

# POWER TABLES
*STANDARD LINE*

| SERIE | | | F050 | | F060 | | F070 | | F080 | | F090 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RELACION (RATIO) | R.P.M | | | | | | | | | | | |
| | ENTRADA (INPUT) | SALIDA (OUTPUT) | ENTRADA (INPUT) | SALIDA (OUTPUT) | ENTRADA (INPUT) | SALIDA (OUTPUT) | ENTRADA (INPUT) | SALIDA (OUTPUT) | ENTRADA (INPUT) | SALIDA (OUTPUT) | ENTRADA (INPUT) | SALIDA (OUTPUT) |
| | KM-CM | KM-CM | H.P | TOR KM-CM | H.P | TOR KM-CM | H.P | TOR KM-CM | H.P | TOR KM-CM | H.P | TOR KM-CM |
| 6 | 1750 | 291.60 | 2.92 | 635 | 4.10 | 852 | 4.86 | 891 | 8.06 | 1469 | 11.54 | 2113 |
| | 1150 | 191.60 | 2.35 | 770 | 3.00 | 983 | 4.37 | 1185 | 8.06 | 1872 | 9.70 | 2675 |
| | 870 | 145.00 | 1.96 | 839 | 3.30 | 1413 | 3.54 | 1271 | 5.90 | 2131 | 5.58 | 3098 |
| | 580 | 96.60 | 1.45 | 921 | 2.50 | 1590 | 3.00 | 1541 | 4.50 | 2441 | 6.82 | 3653 |
| 10 | 1750 | 175.00 | 1.92 | 667 | 2.73 | 958 | 3.59 | 1275 | 5.37 | 1898 | 7.55 | 2679 |
| | 1150 | 115.00 | 1.52 | 788 | 2.34 | 1235 | 3.05 | 1608 | 4.50 | 2380 | 6.43 | 3417 |
| | 870 | 87.00 | 1.26 | 850 | 1.94 | 1338 | 2.72 | 1834 | 3.85 | 2665 | 5.62 | 3900 |
| | 580 | 58.00 | 0.92 | 917 | 1.63 | 1635 | 2.05 | 1985 | 2.94 | 2989 | 4.40 | 4994 |
| 15 | 1750 | 116.60 | 1.44 | 718 | 2.11 | 1074 | 2.58 | 1327 | 4.01 | 2056 | 5.60 | 2884 |
| | 1150 | 76.60 | 1.14 | 843 | 1.78 | 1347 | 2.17 | 1641 | 3.36 | 2562 | 4.80 | 3678 |
| | 870 | 58.00 | 0.94 | 906 | 1.52 | 1487 | 1.95 | 1917 | 2.90 | 2852 | 4.20 | 4185 |
| | 580 | 38.00 | 0.07 | 977 | 1.22 | 1743 | 1.54 | 2100 | 2.20 | 3191 | 3.30 | 4796 |
| 20 | 1750 | 87.50 | 1.13 | 729 | 1.72 | 1127 | 2.15 | 1414 | 3.19 | 2118 | 4.44 | 2699 |
| | 1150 | 57.50 | 0.88 | 843 | 1.45 | 1411 | 1.85 | 1758 | 2.65 | 2612 | 3.80 | 3757 |
| | 870 | 43.50 | 0.73 | 899 | 1.22 | 1531 | 0.62 | 2030 | 2.27 | 2892 | 3.31 | 4246 |
| | 580 | 29.00 | 0.53 | 964 | 0.96 | 1748 | 0.93 | 1656 | 1.73 | 3200 | 2.58 | 4817 |
| 25 | 1750 | 70.00 | 0.94 | 733 | 1.45 | 1159 | 1.90 | 1505 | 0.64 | 2139 | 3.67 | 3003 |
| | 1150 | 46.00 | 0.73 | 841 | 1.03 | 1223 | 1.21 | 1388 | 2.18 | 2603 | 3.11 | 3758 |
| | 870 | 34.80 | 0.61 | 895 | 1.00 | 1529 | 1.32 | 2006 | 1.85 | 2862 | 2.69 | 4206 |
| | 580 | 23.20 | 0.45 | 955 | 0.77 | 1699 | 0.65 | 1360 | 1.41 | 3148 | 2.08 | 4710 |
| 30 | 1750 | 58.30 | 0.84 | 742 | 1.32 | 1205 | 1.54 | 1422 | 2.31 | 2139 | 3.22 | 3003 |
| | 1150 | 38.30 | 0.67 | 869 | 1.11 | 1482 | 1.30 | 1739 | 1.45 | 2654 | 2.79 | 3808 |
| | 870 | 29.00 | 0.57 | 933 | 0.94 | 1615 | 1.12 | 1980 | 1.69 | 2951 | 2.46 | 4326 |
| | 580 | 19.30 | 0.42 | 1005 | 0.73 | 1797 | 0.60 | 1385 | 1.31 | 3285 | 1.97 | 4949 |
| 40 | 1750 | 43.75 | 0.65 | 728 | 0.99 | 1142 | 1.23 | 1403 | 1.81 | 2121 | 2.50 | 2965 |
| | 1150 | 28.75 | 0.52 | 840 | 0.86 | 1449 | 1.08 | 1745 | 1.53 | 2605 | 2.16 | 3756 |
| | 870 | 21.75 | 0.43 | 896 | 0.74 | 1602 | 0.94 | 2026 | 1.33 | 2886 | 1.92 | 4239 |
| | 580 | 14.50 | 0.32 | 956 | 0.58 | 1740 | 0.71 | 1974 | 1.03 | 1390 | 1.53 | 4795 |
| 50 | 1750 | 35.00 | 0.53 | 699 | 0.83 | 1148 | 1.00 | 1345 | 1.46 | 2046 | 2.00 | 2877 |
| | 1150 | 23.00 | 0.42 | 803 | 0.70 | 1391 | 0.88 | 1644 | 1.23 | 2488 | 1.74 | 3595 |
| | 870 | 17.40 | 0.35 | 853 | 0.59 | 1501 | 0.67 | 1572 | 1.06 | 2734 | 1.52 | 4014 |
| | 580 | 11.60 | 0.27 | 908 | 0.45 | 1691 | 0.50 | 1583 | 0.82 | 3000 | 1.21 | 4488 |
| 60 | 1750 | 29.00 | 0.44 | 660 | 0.69 | 1109 | 0.82 | 1263 | 1.21 | 1939 | 1.67 | 3731 |
| | 1150 | 19.16 | 0.35 | 757 | 0.57 | 1295 | 0.74 | 1579 | 1.02 | 2352 | 1.44 | 3398 |
| | 870 | 14.50 | 0.30 | 802 | 0.48 | 1387 | 0.62 | 1805 | 0.88 | 2577 | 1.26 | 3787 |
| | 580 | 9.60 | 0.22 | 854 | 0.36 | 1490 | 0.32 | 1163 | 0.69 | 2829 | 1.00 | 4223 |
| 70 | 1750 | 25.00 | 0.40 | 589 | 0.53 | 839 | 0.70 | 1088 | 1.00 | 1802 | 1.25 | 2286 |
| | 1150 | 16.42 | 0.30 | 660 | 0.37 | 876 | 0.60 | 1372 | 0.80 | 2161 | 1.15 | 3155 |
| | 870 | 12.42 | 0.27 | 697 | 0.26 | 800 | 0.53 | 1572 | 0.72 | 2532 | 1.00 | 3572 |
| | 580 | 8.28 | 0.19 | 798 | 0.20 | 906 | 0.22 | 960 | 0.60 | 3116 | 0.80 | 4220 |

*NOTA: MRU SON LAS SIGLAS QUE SE UTILIZAN EN EL PRESENTE CATALOGO PARA HACERE REFERENCIA AL MOTOREDUCTOR. TODOS NUESTROS DISEÑOS MARCA REDUMSA NO INCLUYEN MOTOR. SOLO BRIDA PARA SU ACOPLAMIENTO*

# TABLA POTENCIAS
*SERIE REFORZADA*

# POWER TABLES
*REINFORCED LINE*

| SERIE | | | F110 | | F130 | | F150 | | F160 | | F200 | | F250 | | F300 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RELACION (RATIO) | R.P.M | | | | | | | | | | | | | | | |
| | ENTRADA (INPUT) | SALIDA (OUTPUT) | ENTRADA (INPUT) | SALIDA (OUTPUT) | ENTRADA (INPUT) | SALIDA (OUTPUT) | ENTRADA (INPUT) | SALIDA (OUTPUT) | ENTRADA (INPUT) | SALIDA (OUTPUT) | ENTRADA (INPUT) | SALIDA (OUTPUT) | ENTRADA (INPUT) | SALIDA (OUTPUT) | ENTRADA (INPUT) | SALIDA (OUTPUT) |
| | KM-CM | KM-CM | H.P | TOR KM-CM | H.P | TOR KM-CM | H.P | TOR KM-CM | H.P | TOR KM-CM | H.P | TOR KM-CM | H.P | TOR KM-CM | H.P | TOR KM-CM |
| 6 | 1750 | 291.60 | 15.76 | 3503 | 24.00 | 5336 | 38.15 | 8482 | 40.00 | 8894 | 72.45 | 13497 | 95.00 | 21347 | 145.00 | 32582 |
| | 1150 | 191.60 | 13.36 | 4425 | 20.00 | 6697 | 31.40 | 10531 | 35.00 | 11720 | 61.05 | 17158 | 84.00 | 28577 | 125.00 | 42526 |
| | 870 | 145.00 | 11.77 | 4293 | 18.00 | 7879 | 27.70 | 12919 | 32.00 | 14084 | 53.64 | 19819 | 70.00 | 31304 | 110.00 | 49191 |
| | 580 | 96.60 | 9.20 | 5979 | 15.00 | 9750 | 23.55 | 15391 | 30.00 | 19607 | 44.81 | 24575 | 55.00 | 36724 | 90.00 | 60094 |
| 10 | 1750 | 175.00 | 13.07 | 4617 | 16.64 | 6002 | 25.10 | 9106 | 33.00 | 11841 | 47.91 | 17471 | 77.66 | 28474 | 115.00 | 42162 |
| | 1150 | 115.00 | 11.03 | 5772 | 13.84 | 7491 | 20.75 | 11303 | 30.00 | 16292 | 39.95 | 21911 | 66.11 | 36494 | 97.00 | 54117 |
| | 870 | 87.00 | 9.75 | 6731 | 12.47 | 8832 | 18.60 | 13261 | 27.00 | 19275 | 35.22 | 25308 | 58.20 | 42148 | 86.00 | 62274 |
| | 580 | 58.00 | 7.50 | 7677 | 10.31 | 10602 | 15.56 | 16384 | 24.00 | 25701 | 30.03 | 31908 | 48.63 | 52082 | 72.00 | 77105 |
| 15 | 1750 | 116.60 | 9.42 | 4853 | 13.31 | 6488 | 18.54 | 9838 | 21.00 | 11124 | 35.55 | 11891 | 57.24 | 30809 | 82.00 | 44161 |
| | 1150 | 76.60 | 8.00 | 6066 | 10.34 | 8135 | 15.39 | 12211 | 18.00 | 14435 | 29.52 | 23652 | 48.72 | 39387 | 71.00 | 57381 |
| | 870 | 58.00 | 7.10 | 7077 | 9.30 | 9544 | 13.90 | 14390 | 16.00 | 16854 | 26.11 | 27312 | 43.03 | 45468 | 62.00 | 65520 |
| | 580 | 38.00 | 6.00 | 9053 | 7.56 | 11383 | 11.61 | 17669 | 14.00 | 22505 | 22.41 | 34467 | 36.18 | 56280 | 52.00 | 80887 |
| 20 | 1750 | 87.50 | 7.70 | 5161 | 9.61 | 6620 | 14.50 | 10053 | 16.00 | 11107 | 27.79 | 19442 | 45.06 | 31773 | 63.00 | 44427 |
| | 1150 | 57.50 | 6.57 | 6462 | 8.18 | 8379 | 12.12 | 12519 | 14.00 | 14707 | 23.21 | 24213 | 38.23 | 40298 | 56.00 | 59030 |
| | 870 | 43.50 | 5.79 | 1468 | 7.29 | 9708 | 10.99 | 14772 | 12.00 | 16569 | 20.58 | 27970 | 33.84 | 46564 | 50.00 | 68804 |
| | 580 | 29.00 | 4.50 | 8578 | 5.87 | 11422 | 9.10 | 17907 | 10.00 | 20712 | 17.78 | 35369 | 28.77 | 58021 | 42.00 | 84716 |
| 25 | 1750 | 70.00 | 6.33 | 5199 | 7.94 | 6673 | 11.72 | 10022 | 14.00 | 11876 | 22.90 | 19646 | 37.11 | 32136 | 55.00 | 92846 |
| | 1150 | 46.00 | 5.42 | 6506 | 6.80 | 8472 | 9.91 | 12589 | 13.00 | 16588 | 19.14 | 24426 | 31.48 | 40636 | 46.00 | 59383 |
| | 870 | 34.80 | 4.76 | 7458 | 6.06 | 9790 | 8.93 | 14753 | 12.00 | 20241 | 17.11 | 28336 | 27.94 | 46970 | 42.00 | 70596 |
| | 580 | 23.20 | 3.10 | 7204 | 4.88 | 11471 | 7.28 | 17549 | 9.00 | 22506 | 14.77 | 35635 | 23.93 | 58726 | 35.00 | 85878 |
| 30 | 1750 | 58.30 | 5.31 | 5037 | 6.92 | 6740 | 10.37 | 10221 | 11.00 | 10817 | 19.66 | 19642 | 31.71 | 32055 | 45.00 | 45519 |
| | 1150 | 38.30 | 4.57 | 6302 | 5.92 | 8486 | 8.73 | 12701 | 10.00 | 14880 | 16.61 | 24547 | 27.23 | 40826 | 37.00 | 64118 |
| | 870 | 29.00 | 4.09 | 7325 | 5.36 | 9914 | 7.97 | 14992 | 9.00 | 17581 | 14.83 | 28312 | 24.25 | 47145 | 32.00 | 62212 |
| | 580 | 19.30 | 3.50 | 9282 | 4.41 | 11780 | 6.74 | 18312 | 7.50 | 2255* | 12.93 | 35837 | 20.73 | 58484 | 28.00 | 79021 |
| 40 | 1750 | 43.75 | 4.35 | 5172 | 5.31 | 6633 | 7.96 | 10070 | 9.00 | 11372 | 15.16 | 19462 | 24.43 | 31824 | 33.00 | 42989 |
| | 1150 | 28.75 | 3.71 | 6477 | 4.60 | 8416 | 6.76 | 12542 | 7.50 | 14333 | 12.84 | 24240 | 20.99 | 40312 | 28.00 | 53843 |
| | 870 | 21.75 | 3.30 | 7468 | 4.14 | 9726 | 6.20 | 14806 | 7.00 | 17574 | 11.53 | 27960 | 18.77 | 46588 | 24.00 | 59500 |
| | 580 | 14.50 | 2.80 | 9357 | 3.38 | 11405 | 5.22 | 17903 | 6.00 | 22454 | 10.13 | 35340 | 16.27 | 58116 | 21.00 | 75127 |
| 50 | 1750 | 35.00 | 3.45 | 5081 | 4.27 | 6388 | 6.23 | 9603 | 7.00 | 10784 | 12.13 | 18787 | 19.52 | 30754 | 27.00 | 42544 |
| | 1150 | 23.00 | 3.00 | 6280 | 3.73 | 8120 | 5.37 | 12100 | 6.00 | 13977 | 10.32 | 23356 | 16.81 | 38859 | 24.00 | 55554 |
| | 870 | 17.40 | 2.67 | 7188 | 3.36 | 9361 | 4.89 | 14120 | 5.50 | 16827 | 9.34 | 27058 | 15.10 | 44913 | 20.00 | 59624 |
| | 580 | 11.60 | 2.00 | 8001 | 2.76 | 10950 | 4.05 | 16785 | 5.00 | 22654 | 8.23 | 34092 | 13.20 | 56168 | 17.00 | 42321 |
| 60 | 1750 | 29.00 | 2.90 | 4761 | 3.48 | 6040 | 5.12 | 9116 | 5.50 | 9838 | 9.87 | 17795 | 15.94 | 29220 | 21.00 | 38552 |
| | 1150 | 19.16 | 2.47 | 5947 | 3.06 | 7683 | 4.45 | 11783 | 5.00 | 12913 | 8.43 | 22090 | 13.77 | 36851 | 18.00 | 48156 |
| | 870 | 14.50 | 2.20 | 6771 | 2.76 | 8815 | 4.06 | 13401 | 4.00 | 13180 | 7.65 | 25561 | 12.42 | 42500 | 16.00 | 54754 |
| | 580 | 9.60 | 1.65 | 7625 | 2.26 | 10256 | 3.39 | 15927 | 3.40 | 15955 | 6.77 | 32222 | 10.95 | 52444 | 14.00 | 68383 |
| 70 | 1750 | 25.00 | 2.50 | 4367 | 3.40 | 5848 | 4.00 | 7044 | 4.68 | 824 | 8.50 | 17172 | 14.00 | 28667 | 17.00 | 34811 |
| | 1150 | 16.42 | 2.00 | 5237 | 3.00 | 7731 | 3.50 | 9165 | 3.90 | 10212 | 7.22 | 21308 | 11.50 | 34442 | 15.00 | 44836 |
| | 870 | 12.42 | 1.80 | 6133 | 2.60 | 8716 | 3.00 | 10139 | 3.48 | 11761 | 9.40 | 35128 | 10.00 | 37920 | 13.00 | 49296 |
| | 580 | 8.28 | 1.50 | 7542 | 2.00 | 9892 | 2.50 | 12364 | 2.89 | 14294 | 5.50 | 29016 | 9.00 | 48965 | 12.00 | 65287 |

*NOTA: MRU SON LAS SIGLAS QUE SE UTILIZAN EN EL PRESENTE CATALOGO PARA HACERE REFERENCIA AL MOTOREDUCTOR. TODOS NUESTROS DISEÑOS MARCA REDUMSA NO INCLUYEN MOTOR. SOLO BRIDA PARA SU ACOPLAMIENTO*

# TABLA POTENCIAS
*DOBLE REDUCCION*

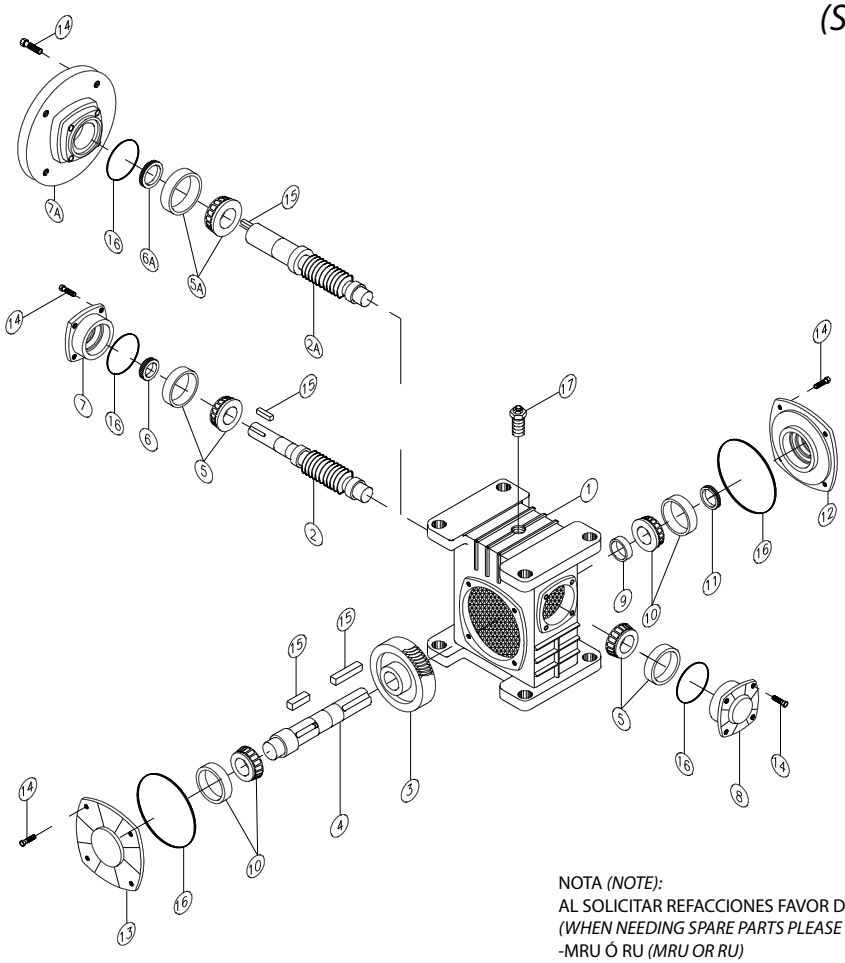
# POWER TABLES
*DOUBLE REDUCTION*

| SERIE | | | | F055 | | | F056 | | | F058 | | | F069 | | | F711 | | | F813 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RELACION (RATIO) | | | | ENTRADA (INPUT) | SALIDA (OUTPUT) | PAR | ENTRADA (INPUT) | SALIDA (OUTPUT) | PAR | ENTRADA (INPUT) | SALIDA (OUTPUT) | PAR | ENTRADA (INPUT) | SALIDA (OUTPUT) | PAR | ENTRADA (INPUT) | SALIDA (OUTPUT) | PAR | ENTRADA (INPUT) | SALIDA (OUTPUT) | PAR |
| TOTAL | 1A | 2A | RPM OUT | H.P | H.P | TOR KM-CM | H.P | H.P | TOR KM-CM | H.P | H.P | TOR KM-CM | H.P | H.P | TOR KM-CM | H.P | H.P | TOR KM-CM | H.P | H.P | TOR KM-CM |
| 100 | 10 | 10 | 18 | 0.20 | 0.16 | 640 | 0.30 | 0.24 | 970 | 0.79 | 0.68 | 2740 | 1.60 | 1.20 | 4830 | 2.20 | 1.60 | 6440 | 3.50 | 2.60 | 10470 |
| 150 | 10 | 15 | 12 | 0.16 | 0.12 | 720 | 0.22 | 0.18 | 1090 | 0.64 | 0.51 | 3080 | 1.20 | 0.82 | 4950 | 1.70 | 1.20 | 7250 | 2.70 | 1.90 | 11470 |
| 200 | 10 | 20 | 9 | 0.13 | 0.10 | 800 | 0.19 | 0.15 | 1200 | 0.54 | 0.43 | 3460 | 0.94 | 0.63 | 5070 | 1.40 | 0.95 | 7850 | 2.20 | 1.50 | 12080 |
| 250 | 10 | 25 | 7.2 | 0.10 | 0.08 | 800 | 0.15 | 0.12 | 1200 | 0.45 | 0.36 | 3620 | 0.83 | 0.54 | 5430 | 1.20 | 0.78 | 8090 | 1.90 | 1.20 | 12080 |
| 300 | 15 | 20 | 6 | 0.08 | 0.07 | 845 | 0.12 | 0.10 | 1200 | 0.37 | 0.29 | 3770 | 0.72 | 0.46 | 5560 | 1.10 | 0.67 | 8750 | 1.70 | 1.10 | 13290 |
| 375 | 15 | 25 | 7.2 | 0.08 | 0.05 | 800 | 0.11 | 0.08 | 1200 | 0.33 | 0.25 | 3860 | 0.64 | 0.38 | 5740 | 1.00 | 0.58 | 8850 | 1.50 | 0.90 | 13420 |
| 400 | 20 | 20 | 4.5 | 0.07 | 0.05 | 800 | 0.10 | 0.07 | 1200 | 0.31 | 0.24 | 3860 | 0.60 | 0.35 | 5630 | 0.92 | 0.55 | 9460 | 1.40 | 0.90 | 14170 |
| 500 | 20 | 25 | 3.6 | 0.06 | 0.04 | 800 | 0.08 | 0.06 | 1200 | 0.25 | 0.19 | 3860 | 0.50 | 0.30 | 6030 | 0.86 | 0.47 | 9990 | 1.20 | 0.70 | 14170 |
| 600 | 20 | 30 | 3 | 0.05 | 0.04 | 960 | 0.07 | 0.05 | 1200 | 0.23 | 0.16 | 3950 | 0.44 | 0.24 | 6030 | 0.77 | 0.41 | 10540 | 1.20 | 0.60 | 15460 |
| 800 | 20 | 40 | 3.2 | 0.04 | 0.03 | 988 | 0.06 | 0.04 | 1310 | 0.18 | 0.12 | 3620 | 0.35 | 0.18 | 6030 | 0.65 | 0.32 | 10540 | 1.00 | 0.50 | 16470 |
| 900 | 30 | 30 | 2 | 0.03 | 0.02 | 988 | 0.05 | 0.03 | 1310 | 0.15 | 0.10 | 3620 | 0.31 | 0.15 | 5430 | 0.60 | 0.28 | 10630 | 0.93 | 0.40 | 15940 |
| 1200 | 30 | 40 | 1.5 | 0.03 | 0.02 | 966 | 0.04 | 0.03 | 1440 | 0.12 | 0.08 | 3620 | 0.27 | 0.11 | 5310 | 0.49 | 0.22 | 10630 | 0.74 | 0.30 | 16420 |
| 1500 | 30 | 50 | 1.2 | 0.03 | 0.02 | 730 | 0.04 | 0.02 | 1320 | 0.10 | 0.06 | 3950 | 0.24 | 0.09 | 5310 | 0.44 | 0.18 | 10630 | 0.67 | 0.30 | 16420 |
| 1600 | 40 | 40 | 1.1 | 0.03 | 0.01 | 730 | 0.04 | 0.03 | 1320 | 0.10 | 0.06 | 3240 | 0.23 | 0.08 | 5690 | 0.44 | 0.17 | 11200 | 0.65 | 0.30 | 17130 |
| 1800 | 30 | 60 | 1 | 0.02 | 0.01 | 730 | 0.03 | 0.01 | 970 | 0.09 | 0.05 | 3240 | 0.21 | 0.07 | 5690 | 0.43 | 0.16 | 11200 | 0.61 | 0.20 | 17130 |
| 2000 | 40 | 50 | 0.9 | 0.02 | 0.01 | 730 | 0.03 | 0.01 | 970 | 0.08 | 0.03 | 3240 | 0.20 | 0.07 | 5690 | 0.33 | 0.12 | 9930 | 0.59 | 0.20 | 17700 |
| 2500 | 50 | 50 | 0.7 | 0.02 | 0.009 | 730 | 0.02 | 0.010 | 970 | 0.07 | 0.04 | 3240 | 0.19 | 0.06 | 5690 | 0.28 | 0.09 | 9930 | 0.51 | 0.20 | 17600 |
| 3000 | 50 | 60 | 0.6 | 0.02 | 0.007 | 730 | 0.02 | 0.006 | 970 | 0.06 | 0.03 | 3240 | 0.16 | 0.05 | 5690 | 0.27 | 0.08 | 9930 | 0.46 | 0.10 | 17500 |
| 3600 | 60 | 60 | 0.5 | 0.01 | 0.005 | 730 | 0.02 | 0.007 | 970 | 0.05 | 0.02 | 3240 | 0.14 | 0.04 | 5690 | 0.27 | 0.07 | 9930 | 0.46 | 0.10 | 17500 |
| 4200 | 70 | 60 | 0.4 | 0.01 | 0.004 | 720 | 0.01 | 0.006 | 970 | 0.03 | 0.02 | 3240 | 0.12 | 0.03 | 5690 | 0.26 | 0.06 | 9930 | 0.42 | 0.10 | 17500 |
| 4700 | 70 | 70 | 0.3 | 0.01 | 0.003 | 720 | 0.01 | 0.005 | 970 | 0.02 | 0.01 | 3240 | 0.10 | 0.02 | 4830 | 0.24 | 0.04 | 9660 | 0.36 | 0.10 | 17500 |

| SERIE | | | | F916 | | | F1116 | | | F1120 | | | F1325 | | | F1630 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RELACION (RATIO) | | | | ENTRADA (INPUT) | SALIDA (OUTPUT) | PAR | ENTRADA (INPUT) | SALIDA (OUTPUT) | PAR | ENTRADA (INPUT) | SALIDA (OUTPUT) | PAR | ENTRADA (INPUT) | SALIDA (OUTPUT) | PAR | ENTRADA (INPUT) | SALIDA (OUTPUT) | PAR |
| TOTAL | 1A | 2A | RPM OUT | H.P | H.P | TOR KM-CM | H.P | H.P | TOR KM-CM | H.P | H.P | TOR KM-CM | H.P | H.P | TOR KM-CM | H.P | H.P | TOR KM-CM |
| 100 | 10 | 10 | 18 | 6.00 | 4.60 | 18520 | 8.90 | 6.80 | 27380 | 13.10 | 0.30 | 41470 | 20.10 | 16.10 | 64830 | 28.90 | 23.60 | 95030 |
| 150 | 10 | 15 | 12 | 4.80 | 3.40 | 20530 | 6.40 | 4.60 | 22780 | 10.40 | 7.60 | 45900 | 19.20 | 12.60 | 76100 | 22.00 | 17.30 | 104490 |
| 200 | 10 | 20 | 9 | 3.80 | 2.60 | 20940 | 5.50 | 3.80 | 30600 | 8.60 | 6.10 | 49720 | 12.30 | 9.60 | 77310 | 17.50 | 13.30 | 107110 |
| 250 | 10 | 25 | 7.2 | 3.20 | 2.20 | 22150 | 4.80 | 3.30 | 33220 | 7.50 | 5.20 | 52340 | 11.10 | 7.90 | 79520 | 15.00 | 10.90 | 109720 |
| 300 | 15 | 20 | 6 | 2.90 | 1.90 | 22950 | 4.60 | 2.90 | 35030 | 4.10 | 4.60 | 55570 | 10.10 | 6.70 | 80930 | 13.40 | 9.30 | 112340 |
| 375 | 15 | 25 | 7.2 | 2.60 | 1.60 | 24150 | 4.10 | 2.50 | 27740 | 6.20 | 3.70 | 55860 | 0.80 | 5.50 | 83040 | 11.70 | 7.60 | 114750 |
| 400 | 20 | 20 | 4.5 | 2.40 | 1.50 | 24150 | 3.80 | 2.40 | 38650 | 5.70 | 3.60 | 57980 | 8.10 | 5.30 | 85360 | 11.30 | 7.30 | 117570 |
| 500 | 20 | 25 | 3.6 | 2.10 | 1.20 | 24150 | 3.30 | 1.90 | 38650 | 5.20 | 3.10 | 62410 | 7.30 | 4.40 | 88580 | 9.80 | 6.20 | 124820 |
| 600 | 20 | 30 | 3 | 1.80 | 1.00 | 24150 | 2.70 | 1.60 | 38650 | 4.60 | 2.70 | 65230 | 6.40 | 3.80 | 91800 | 8.70 | 5.40 | 130460 |
| 800 | 20 | 40 | 3.2 | 1.50 | 0.80 | 26350 | 2.30 | 1.20 | 39530 | 4.00 | 2.10 | 69180 | 5.40 | 3.00 | 98830 | 7.40 | 4.30 | 141660 |
| 900 | 30 | 30 | 2 | 1.40 | 0.71 | 25720 | 2.20 | 1.10 | 39860 | 3.80 | 1.90 | 68850 | 5.00 | 2.60 | 94220 | 6.80 | 3.80 | 137700 |
| 1200 | 30 | 40 | 1.5 | 1.10 | 0.55 | 26570 | 1.80 | 0.85 | 41070 | 2.90 | 1.40 | 67640 | 3.90 | 1.90 | 91800 | 5.70 | 2.90 | 140120 |
| 1500 | 30 | 50 | 1.2 | 1.00 | 0.45 | 27170 | 1.50 | 0.70 | 42270 | 2.50 | 1.10 | 66430 | 3.60 | 1.70 | 102670 | 4.90 | 2.40 | 144900 |
| 1600 | 40 | 40 | 1.1 | 0.90 | 0.42 | 27670 | 1.50 | 0.65 | 42820 | 2.40 | 1.00 | 65890 | 3.70 | 1.60 | 105420 | 4.70 | 2.20 | 144960 |
| 1800 | 30 | 60 | 1 | 0.94 | 0.38 | 28830 | 1.40 | 0.57 | 42820 | 2.30 | 0.98 | 71029 | 3.50 | 1.50 | 106500 | 4.40 | 2.00 | 144960 |
| 2000 | 40 | 50 | 0.9 | 0.91 | 0.35 | 28830 | 1.30 | 0.53 | 42820 | 2.10 | 0.87 | 70060 | 3.20 | 1.30 | 106500 | 4.20 | 1.90 | 153010 |
| 2500 | 50 | 50 | 0.7 | 0.78 | 0.27 | 28830 | 1.80 | 1.68 | 42820 | 1.80 | 0.68 | 70060 | 2.70 | 0.99 | 106500 | 3.80 | 1.50 | 155300 |
| 3000 | 50 | 60 | 0.6 | 0.72 | 0.23 | 28830 | 1.10 | 0.36 | 42500 | 1.70 | 0.57 | 68850 | 2.50 | 0.83 | 106500 | 2.50 | 1.30 | 157030 |
| 3600 | 60 | 60 | 0.5 | 0.66 | 0.19 | 28830 | 0.96 | 0.28 | 42500 | 1.50 | 0.44 | 63780 | 2.20 | 0.68 | 106500 | 3.10 | 1.00 | 157030 |
| 4200 | 70 | 60 | 0.4 | 0.42 | 0.10 | 28830 | 0.85 | 0.24 | 42500 | 1.10 | 0.33 | 63780 | 1.90 | 0.58 | 106500 | 2.70 | 0.88 | 159450 |
| 4700 | 70 | 70 | 0.3 | 0.36 | 0.08 | 28830 | 0.79 | 0.21 | 42500 | 1.00 | 0.28 | 63780 | 1.70 | 0.52 | 106500 | 2.60 | 0.80 | 159450 |

*NOTA: MRU SON LAS SIGLAS QUE SE UTILIZAN EN EL PRESENTE CATALOGO PARA HACERE REFERENCIA AL MOTOREDUCTOR. TODOS NUESTROS DISEÑOS MARCA REDUMSA NO INCLUYEN MOTOR. SOLO BRIDA PARA SU ACOPLAMIENTO*

## Tamaños F050 - F300
## *(Sizes F050- F300)*

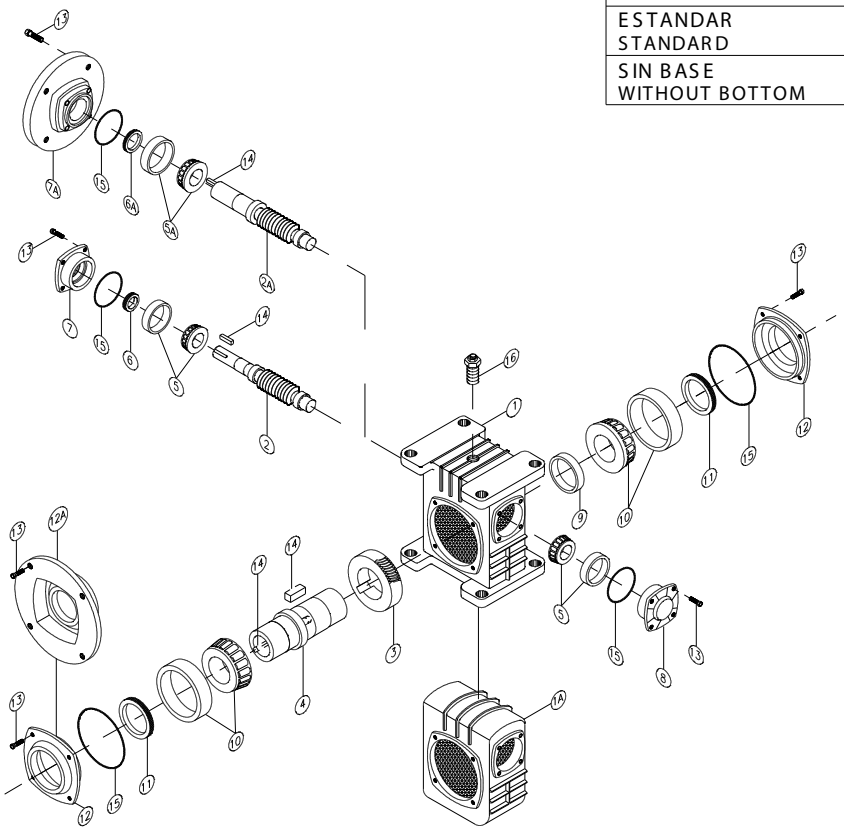


NOTA *(NOTE):*
AL SOLICITAR REFACCIONES FAVOR DE PROPORCIONAR LOS SIGUIENTES DATOS .
*(WHEN NEEDING SPARE PARTS PLEASE MENTION THE NEXT INFORMATION.)*
-MRU Ó RU *(MRU OR RU)*
-TAMAÑO *(SIZE)*
-RELACIÓN *(RATIO)*
-NO. DE PARTE *(NO. OF PART)*

| LISTA DE PARTES / PARTS LIST | | | |
|---|---|---|---|
| No. | Descripción | No. | Descripción |
| 1 | Cuerpo con base/Frame with bottom | 8 | Tapa chica cerrada/Little cover closed |
| 2 | Sinfín "Reductor"/worm "Speed reducer" | 9 | Separador para eje/Bushing spacer |
| 2A | Sinfín "Motoreductor"/worm "Speed Motoreducer" | 10 | Rodamiento para eje/output shaft bearing |
| 3 | Corona/Gear | 11 | Retén para eje/Ouput oil seal |
| 4 | Eje para Corona/Gear shaft | 12 | Tapa grande abierta/Big cover open |
| 5 | Rodamiento para Sinfín Reductor/ Worm bearing speed reducer | 13 | Tapa grande cerrada/Big cover closed |
| 5A | Rodamiento para Sinfín Motorreductor/ Worm bearing speed motoreducer | 14 | Tornillos/Screws |
| 6 | Retén para Sinfín Reductor/ Worm speed reducer oil seal | 15 | Cuñas/Key |
| 6A | Retén para Sinfín Motoreductor/ Worm speed reducer oil seal | 16 | O'rings/O'ring |
| 7 | Tapa chica abierta/Little cover open | 17 | Tapón para llenado y drene/Cover plug |
| 7A | Brida tipo"C"para motor/ Retaining motor flange (type "C") | | |

# SERIE ESTANDAR Y Y SIN BASE
*STANDARD AND WITHOUT BOTTOM*

| SERIE/SERIAL | TAMAÑOS/SIZES |
|---|---|
| ESTANDAR<br>STANDARD | 50 - 90 |
| SIN BASE<br>WITHOUT BOTTOM | 50 - 130 |

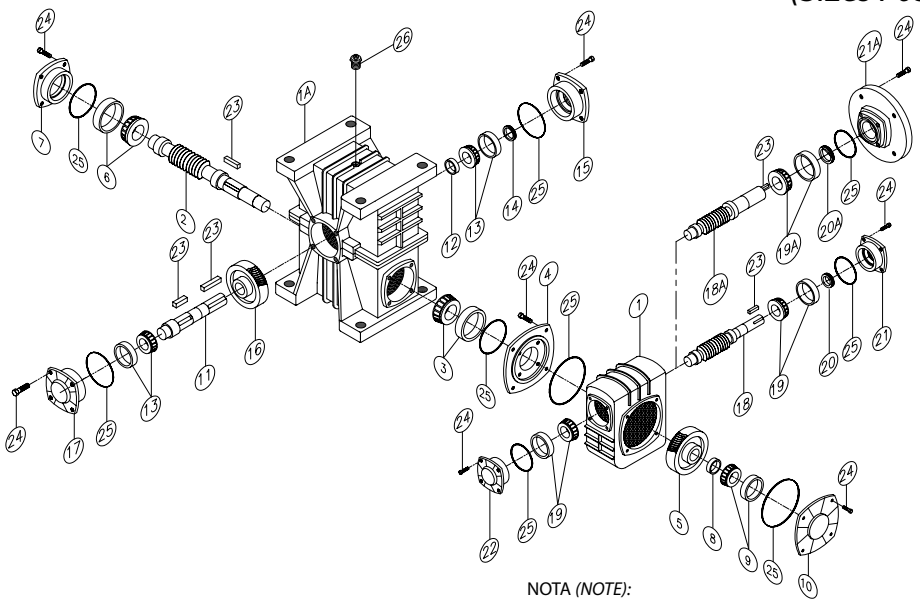


NOTA *(NOTE):*
AL SOLICITAR REFACCIONES FAVOR DE PROPORCIONAR LOS SIGUIENTES DATOS .
*(WHEN NEEDING SPARE PARTS PLEASE MENTION THE NEXT INFORMATION.)*
-MRU Ó RU *(MRU OR RU)*
-TAMAÑO *(SIZE)*
-RELACIÓN *(RATIO)*
-NO. DE PARTE *(NO. OF PART)*

| PARTS LIST | | | |
|---|---|---|---|
| No. | DESCRIPCION/DESCRIPTION | No. | DESCRIPCION/DESCRIPTION |
| 1 | Cuerpo con base/Frame with bottom | 8 | Tapa chica cerrada/Little cover cloced |
| 1A | Cuerpo sin base/Frame without bottom | 9 | Separador para buje/Bushing spacer |
| 2 | Sinfín "Reductor"/Reducer worm shaft | 10 | Rodamiento para Buje/Bearing for bushing |
| 2A | Sinfín "Motorreductor"/Motoreducer worm shaft | 11 | Retén para Buje/Oil seal for bearing |
| 3 | corona/Gear (Worm gear) | 12 | Tapa grande abierta/Open big cover |
| 4 | Buje/Bushing | 12A | Tapa Flange/Retaning motor flange |
| 5 | Rodamiento para Sinfín Reductor/<br>Input bearing reducer | 13 | Tornillos/Screws |
| | | 14 | Cuñas/Key |
| 5A | Rodamiento para Sinfín Motorreductor/<br>Input bearing motoreducer | 15 | "O" Ring / O'Rings |
| 6 | Retén para Sinfín Reductor/Oil seal reducer | 16 | Tapón para llenado y drene/Cap plug |
| 6A | Retén para Sinfín Motoreductor/<br>Oil seal motoreducer | | |
| 7 | Tapa chica abierta | | |
| 7A | Brida "C" para Motor | | |
| | | | |

# DOBLE REDUCCION
*DOUBLE REDUCTION*

## Tamaños F055 - F1325
*(Sizes F055- F1325)*



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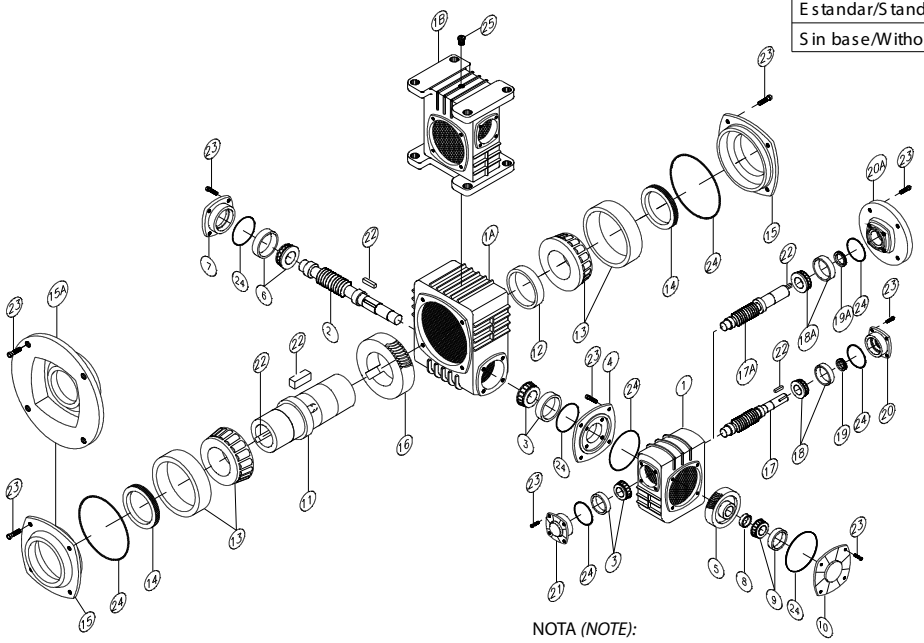
AL SOLICITAR REFACCIONES FAVOR DE PROPORCIONAR LOS SIGUIENTES DATOS .
*(WHEN NEEDING SPARE PARTS PLEASE MENTION THE NEXT INFORMATION.)*
-MRU Ó RU *(MRU OR RU)*
-TAMAÑO *(SIZE)*
-RELACIÓN *(RATIO)*
-NO. DE PARTE *(NO. OF PART)*

| L I S T A D E P A R T E S / P A R T S L I S T | | | |
|---|---|---|---|
| No. | Descripción | No. | Descripción |
| 1 | Cuerpo sin base primera reducción/ Frame without bottom first reduction | 16 | Corona segunda reducción/ Gear-second reduction |
| 1A | Cuerpo con base segunda reducción/ Frame with bottom second reduction | 17 | Sinfín reductor/Worm-reducer |
| 1B | Cuerpo con base segunda reducción/ Frame with bottom second reduction | 17A | Sinfín motorreductor/Worm - Motoreducer |
| 2 | Sinfín de Acoplamiento/Coupling worm | 18 | Rodamiento para sinfin reductor/ Bearing by Worm-Reducer bearing |
| 3 | Rodamiento/Bearing "A" | 18A | Rodamiento para sinfín motorreductor/ Bearing by Worm-motoreducer bearing |
| 4 | Tapa de acoplamiento/Coupling cover | 19 | Retén para sinfín reductor/Worm reducer oil seal |
| 5 | Corona primera reducción/Gear first reduction | 19A | Retén para sinfín motoreductor/ Worm motoreducer oil seal |
| 6 | Rodamiento/Bearing "B" | 20 | Tapa abierta chica primera reducción/ Little cover open first reduction |
| 7 | Tapa chica cerrada segunda reducción/ Little cover cloced-second reduction | 20A | Brida tipo"C"para motor/ Retaining motor flange (type "C") |
| 8 | Separador primera reducción/ Spacer first reduction | 21 | Tapa chica cerrada primera reducción/ Little cover cloced-first reduction |
| 9 | Rodamiento/Bearing "C" | 22 | Cuñas/keys |
| 10 | Tapa grande cerrada primera reducción/ Big cover cloced-first reduction | 23 | Tornillos/Screws |
| 11 | Eje hueco para corona segunda reducción/ Gear Bushing-second reduction | 24 | O-Ring/O-Ring |
| 12 | Separador segunda reducción/ /Second reduction spacer | 25 | Tapones para llenado y drene/Cap plug |
| 13 | Rodamiento para buje/Output bushing bearing | | |
| 14 | Retén para buje/Ouput bushing oil seal | | |
| 15 | Tapa grande abierta segunda reducción/ Big cover open-second reduction | | |
| 15 A | Tapa flange para buje segunda reduccion/ Big flange for bushing-second reduction | | |

# DOBLE REDUCCION CON BUJE
*DOUBLE REDUCTION WITH BUSHING*

| SERIE TAMAÑOS | |
|---|---|
| Estandar/Standar | 55 - 1325 |
| Sin base/Without bottom | 55 - 813 |



NOTA *(NOTE):*
AL SOLICITAR REFACCIONES FAVOR DE PROPORCIONAR LOS SIGUIENTES DATOS .
*(WHEN NEEDING SPARE PARTS PLEASE MENTION THE NEXT INFORMATION.)*
-MRU Ó RU *(MRU OR RU)*
-TAMAÑO *(SIZE)*
-RELACIÓN *(RATIO)*
-NO. DE PARTE *(NO. OF PART)*

LISTA DE PARTES / PARTS LIST

| No. | Descripción | No. | Descripción |
|---|---|---|---|
| 1 | Cuerpo sin base primera reducción/ Frame without bottom first reduction | 16 | Corona segunda reducción/ Gear-second reduction |
| 1A | Cuerpo con base segunda reducción/ Frame with bottom second reduction | 17 | Sinfín reductor/Worm-reducer |
| 1B | Cuerpo con base segunda reducción/ Frame with bottom second reduction | 17A | Sinfín motorreductor/Worm - Motoreducer |
| 2 | Sinfín de Acoplamiento/Coupling worm | 18 | Rodamiento para sinfin reductor/ Bearing by Worm-Reducer bearing |
| 3 | Rodamiento/Bearing "A" | 18A | Rodamiento para sinfín motorreductor/ Bearing by Worm-motoreducer bearing |
| 4 | Tapa de acoplamiento/Coupling cover | 19 | Retén para sinfín reductor/Worm reducer oil seal |
| 5 | Corona primera reducción/Gear first reduction | 19A | Retén para sinfín motoreductor/ Worm motoreducer oil seal |
| 6 | Rodamiento/Bearing "B" | 20 | Tapa abierta chica primera reducción/ Little cover open first reduction |
| 7 | Tapa chica cerrada segunda reducción/ Little cover cloced-second reduction | 20A | Brida tipo"C"para motor/ Retaining motor flange (type "C") |
| 8 | Separador primera reducción/ Spacer first reduction | 21 | Tapa chica cerrada primera reducción/ Little cover cloced-first reduction |
| 9 | Rodamiento/Bearing "C" | 22 | Cuñas/keys |
| 10 | Tapa grande cerrada primera reducción/ Big cover cloced-first reduction | 23 | Tornillos/Screws |
| 11 | Eje hueco para corona segunda reducción/ Gear Bushing-second reduction | 24 | O-Ring/O-Ring |
| 12 | Separador segunda reducción/ /Second reduction spacer | 25 | Tapones para llenado y drene/Cap plug |
| 13 | Rodamiento para buje/Output bushing bearing | | |
| 14 | Retén para buje/Ouput bushing oil seal | | |
| 15 | Tapa grande abierta segunda reducción/ Big cover open-second reduction | | |
| 15 A | Tapa flange para buje segunda reduccion/ Big flange for bushing-second reduction | | |

Generalmente el Reductor se surte lubricado en los tamaños del 050 al 090. El resto de los tamaños se debe especificar al hacer el pedido. En la placa de identificación se especifica el tipo de aceite y la cantidad adeuada. El lubricante debe estar libre de oxidación, partículas o contaminación por agua. Para asegura larga vida de servicio, se debe drenar el Reductor periódicamente preferentemente cuando este tibio y llenarlo al nivel apropiado. Bajo condiciones medio ambientales normales se sugiere cambiar el aceite después de esto a intervalos regulares de 2500 horas o cada 6 meses. Los lubricantes sintéticos pemiten extender los intervalos de lubricación debido a su aumento a la resistencia térmica y degradación de la oxidación normal. Esto se debe al descanso inicial del ajuste del sinfín de doble reducción pueden alcanzar 71°C (160°F) y Reductores de sinfín de Reducción Sencilla aproximadamente 107°C (225°F).

The reducer is provided generally lubricated in the sizes 050 to 090. The rest of the sizes are due to specy when doing the order. In the identification plate one specifies the type og oil and the suitable amount. The lubricant must be dree of oxidation, particules or contamination by water. In order to assure one long life. it is due to drain the Reducer periodically preferably when warm and to fill to the appropriate level. Under normal conditions and average environmental it is suggested to change the oil after 250 running hours after this intervals of the lubrication due to their increases in the thermal resistance and degradation of the oxidation, is suggested to change the oil after 1500 running hours after this at intervals regular of 5000 hours. During the initial period of operations, the temperatures are higher than in the normal operation. This is due to the initial rest of the adjustment of the worm and gear. The tempra-ture od reducers of double reduction can reach 71°C (160°F) and Reducers of simple Reduction approximately 107°C (225°F).

| **LUBRICANTES RECOMENDADOS (LIBRICANTS RECOMMENDED)** | | |
|---|---|---|
| MOBILE 600W | 1920/3200 | -10°C up to 25°C |
| SHELL OMALA | 1920/3200 | -10°C up to 25°C |

| **LITROS DE ACEITE RECOMENDADOS (LITERS OF OIL RECOMMENDED)** | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SERIE** | **F050** | **F060** | **F070** | **F080** | **F090** | **F110** | **F130** | **F150** | **F160** | **F200** | **F250** | **F300** |
| **LITROS (LTS)** | 0.5 | 0.75 | 1.5 | 2 | 2.5 | 4 | 6 | 8.5 | 9 | 13 | 20 | 30 |

# CARACTERISTICAS GENERALES Y NORMAS DE FABRICACIÓN

*GENERAL CHARACTERISTICS AND NORMS OF FABRICATION*

Los Reductores de velocidad **REDUMSA** fueron diseñados para satisfacer las necesidades de la industria. Se han calculado para un promedio de 20,000 horas de vida con un factor de servicio 1.0 (FS: 1).

**CARCASA Y TAPAS:** Son construidas de Fundición Gris según especificaciones de ASTM A48 clase B.

**CORONA:** Ésta construida de un bronce de alta calidad y dureza para evitar desgaste apresurado. Es tallada con fresa madre, obteniendo un perfil que coincide perfectamente con el sinfín, y así obtener una óptima zona de contacto y deslizamiento.

**SINFIN:** Esta fabricado de acero de alta calidad posteriormente cementado y templado para lograr una dureza superficial de 65 Rockwell C.

**EJE:** Esta fabricado de acero de alta calidad posteriomente cementado y templado.

**RODAMIENTOS:** Fueron seleccionaos y calculados para el promedio de vida de 20,000 horas.

*The worm and gear reducers of **REDUMSA** were designed to satisfy the necessities of the industry. There had been calculated for an average os 20,000 life hours with a duty factor (safety factor for pickup) of 1.0 (DF:1).*

***FRAME AND COVERS**: They are manufactured with cast iron with the specifications of ASTM A48 type B.*

***GEAR**: It is manufactured with high quality of bronze in order to avoid rapid ware. It is cutter with a milling machine, to obtain an optimun shape that coincides exactly with the worm, and in hat way an optimun conact zone and slip.*

***WORM**: It is manufactured with high quality steel, next in casehardened and template to obtain supreficial hardness of 65 Rockwell C or 500 Brinell.*

***SPINDLE**: It is manufactured a high quality steel, next is casehardened and template.*

***BEARING**: They were selected and calculated for an average life of 20,000 hours.*

1. Alinee las flechas cuidadosamente, una mala alineación puede resultar en alguna falla. Use coples flexibles, estos se recomiendan para compensar ligeras desalineaciones.

2. En el montaje use pernos a la medida para que el reductor se mantenga rígido. Inspeccione periódicamente todos los pernos.

3. Los componentes impulsados como sprockets, engranes, poleas, etc., deben montarse en las flechas y acercarlos tanto como sea posible a la carcasa del Reductor para minimizar los efectos de sobrecarga.

4. Revise el juego de la rueda helicoidal en la instalación, esto debe hacerse midiendo el movimiento rotatorio en el eje de salida, girándolo alternadamente a favor y en contra de las manecillas del reloj. La rueda debe ser reemplazada cuando el juego exceda 4 veces la medida tomada en la instalación.

5. Las temperaturas iniciales de operación pueden ser mas altas que lo normal durante el período de ajuste entre la rueda helicoidal y el sinfín. PARA UNA VIDA MAXIMA , NO PERMITA QUE EL REDUCTOR DE VELOCIDAD OPERE CONTINUAMENTE ARRIBA DE 107°C EN LA CAJA.

# PRECAUCIONES

Cuando use un reductor de velocidad para subir o bajr una carga, así como en aplicaciones de elevador. Se debe construir un freno externo, Bajo ninguna condición debe considerar el Reductor de Velocidad como un auto candado. Todos los Reductores deben ser verificados para ver si han sido lubricados.

*1. Align the axles carefully; a bad alineation could result in a failure. Use flexible couples, this are recommended for compensating little desalinations.*

*2. In the assembly use pins of the same measure to maintain the reducer rigid. Check the pins periodically.*

*3. The impulse components such as gears, sprockets and pulleys etc., must be shown in the axles and be closer as much as posssible to the frame or cover of the reducer in order to minimize the effects of overload.*

*4. Check the movement of the helicoidally sprocket in the installation, this must be done by measuring the rotator movement in the output spindle, rotating it in an aternated way against and in favor of the gages of the clock. The sprocket must be replaced when movement or work exceed four times the measure that was taken on the installation.*

*5. The initial tempertures of the opreation could be higher that the normal during the adjusting period. Between the helicoidally sprocket and the worm. FOR A LONG LASTING LIFE, DO NOT PERMIT THAT THE SPEED REDUCER OPERATES CONTINIUOSLY ABOVE THE 107°C IN THE CASE.*

# *PRECAUTIONS*

*When you use a speed reducer to take loads up and down, and also in the applications of elevators, it must be installed an external brake. Under none circumstances it must be consider the speed reducer as an auto-brake. All the reducers must be verified to make sure if they have been lubricated.*