TRANSTECNO®

the modular gearmotor

AC Iron

60Hz

Nema

Índice — Index

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Información general / *General information*

Para una mejor comprensión de los temas y de los datos presentes en el catálogo, proponemos una simbología acompañada por la información necesaria para una selección correcta de los motorreductores y variadores.

Information in this manual is provided with symbols in order to understand the subject matter and data. These symbols are intended to aid the user in selecting the right gearmotors.

Velocidad de entrada / *Input speed*

n_1 [rpm]

Es la velocidad en la entrada del reductor y está relacionada con el tipo de motor seleccionado.

Cuando se requieran otras velocidades, contactar con nuestro servicio técnico.

This is the input speed at the gearbox related to the type of drive unit selected.

When different speeds are required, contact our Technical Service.

Relación de reducción / *Gear ratio*

i

Es una magnitud adimensional y está relacionada con el número de dientes de los engranajes internos del reductor. En los reductores sinfín corona se obtiene dividiendo el número de dientes de la corona entre el número de roscas del tornillo sinfín. Con los datos del catálogo se puede obtener con la siguiente fórmula:

This value is strictly related to the size and number of teeth gears inside the gearbox.
This value is obtained in wormgearboxes by dividing the number of wheel teeth by the number of starts (Z) of the worm.
From the data given in the catalogue, the value can be calculated using the following formula:

$$i = \frac{n_1}{n_2}$$

Velocidad de salida / *Output speed*

n_2 [rpm]

Es la velocidad resultante en el eje de salida del reductor y se obtiene de la fórmula anterior:

This is the gearbox output speed calculated using the formula given above:

$$n_2 = \frac{n_1}{i}$$

En los motovariadores esto es el resultado de cálculos más complejos, para esto en el catálogo encontrara todos los valores de n2 en función de la velocidad en entrada y del campo de variación mínimo y máximo.

In mechanical variators this value is more complicated to calculate. In fact the application data need to be known in order to calculate this value. All the n2 values are given in this catalogue according to the input speed and allowable range.

Par requerido / *Requested torque*

Mr_2 [lb-inch]

Es el par requerido para la aplicación y es necesario para selecionar la motorización. Puede ser comunicado por el usuario o calculado a través de los datos de la aplicación (si se conocen).

This is the torque needed for the application and must be known when selecting a drive system. It can either be provided by the user or calculated according to the application data (if provided).

Par nominal — Mn_2 [lb-inch] — *Nominal torque*

Es el par transmisible a la salida del reductor, en base a la velocidad en entrada n1 y a la relación de reducción i.
Se calcula considerando un servicio con una carga continua constante, que corresponde a un factor de servicio igual a 1. Este valor no aparece en el catálogo, pero se puede calcular aproximadamente mediante la relación siguiente entre M2 (par de salida) y SF (factor de servicio):

This is the output torque that can be transmitted by the gearbox according to input speed n_1 and gear ratio i. It is calculated based on service with a continuous steady load corresponding to a service factor equal to 1. This value is not given in the catalogue but can be calculated approximately with the following formula between M_2 (output torque) and sf (service factor):

$$Mn_2 = M_2 \cdot sf$$

Par transmitido — M_2 [lb-inch] — *Output torque*

Es el par transmitido en la salida del reductor.
Depende de la potencia P1 del motor instalado, de las revoluciones de salida n2 y del rendimiento dinámico Rd.
Se puede calcular mediante la relación:

This is the gearbox's output torque. It is strictly related to power P_1 of the motor installed, output rpm n_2 and dynamic efficiency Rd. It can be calculated with the following formula:

$$M_2 = \frac{63025 \cdot P_1 \cdot Rd}{n_2}$$

o: *or:*

$$M_2 = \frac{63025 \cdot P_2}{n_2}$$

dónde: *where:*

$$P_2 = P_2 \cdot R$$

Rendimiento — Rd — *Efficiency*

Los cálculos de rendimiento se basan en el rendimiento dinámico Rd de los reductores.

Efficiency is calculated based on dynamic efficiency Rd of the gearboxes.

En los reductores de engranajes el rendimiento medio es 94%.

On helical gearboxes the average efficency is 94%.

Potencia de entrada — P1 [hp] — *Input power*

Es la potencia del motor aplicada en la entrada al reductor y se refiere a la velocidad n1.
Se puede calcular de la siguiente manera:

This is the power applied by the motor at the gearbox input in reference to speed n1.
It can be calculated with the following formula:

$$P_1 = \frac{M_2 \cdot n_2}{63025 \cdot Rd}$$

Factor de servicio — sf — *Service factor*

Es un magnitud adimensional que indica el sobredimensionamiento aplicable a una motorización para garantizar la resistencia a los choques y la durabilidad necesaria.
Las tablas del catálogo ofrecen una amplia selección de motorizaciones con factores de servicio diferentes que pueden satisfacer a la mayoría de las aplicaciones.
Para una correcta interpretación de los valores del factor de servicio sf en las selecciones propuestas, encontraran en las tablas siguientes los valores aproximados de las clases de carga A, B, C, de las horas de funcionamiento cotidiano y del número de arranques por hora.
Una vez definida la clase de carga de la aplicación, se busca en la tabla el correspondiente valor de sf para elegir la unidad más adecuada.

This value indicates how a certain drive system is to be over-sized in order to assure the requested service and stand up to shocks.
The tables given in the catalogue offer a wide range of drive systems with different service factors able to satisfy most types of applications. To correctly understand service factor values sf given for each item, approximate values for load classes A, B and C along with the number of hours of daily operation h/d and number of start-ups/hours need to be known.
Once the load class required for the application has been determined, locate corresponding value sf to be used when selecting the most suitable drive system.

Tipo de carga	**A** - Carga uniforme	fa ≤ 0.3
	B - Carga con choques moderados	fa ≤ 3
	C - Carga con choques fuertes	fa ≤ 10

Type of load	***A** - Uniform*	*fa ≤ 0.3*
	***B** - Moderate shocks*	*fa ≤ 3*
	***C** - Heavy shocks*	*fa ≤ 10*

$$fa = \frac{Je}{Jm}$$

- Je (kgm^2) momento de inercia de las masas externas, referido al eje del motor.
- Jm (kgm^2) momento de inercia del motor.
  Para valores > 10 se recomienda contactar con el Servicio Técnico.

$$fa = \frac{Je}{Jm}$$

- *Je (kgm^2) moment of reduced external inertia at the drive-shaft*
- *Jm (kgm^2) moment of inertia of motor.*
  If fa > 10 call our Technical Service.

A Clase de carga / *Load class*
Carga uniforme / *Uniform load*

h/d	sf — n. arranques/hora / n. start-up/hour								
	2	**4**	**8**	**16**	**32**	**63**	**125**	**250**	**500**
4	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.2
8	1.0	1.0	1.1	1.1	1.3	1.3	1.3	1.3	1.3
16	1.3	1.3	1.3	1.3	1.5	1.5	1.5	1.5	1.5
24	1.5	1.5	1.5	1.5	1.8	1.8	1.8	1.8	1.8

B Clase de carga / *Load class*
Carga con choques moderados / *Moderate shock load*

h/d	sf — n. arranques/hora / n. start-up/hour								
	2	**4**	**8**	**16**	**32**	**63**	**125**	**250**	**500**
4	1.0	1.0	1.0	1.0	1.3	1.3	1.3	1.3	1.3
8	1.3	1.3	1.3	1.3	1.5	1.5	1.5	1.5	1.5
16	1.5	1.5	1.5	1.5	1.8	1.8	1.8	1.8	1.8
24	1.8	1.8	1.8	1.8	2.2	2.2	2.2	2.2	2.2

C Clase de carga / *Load class*
Carga con choques fuertes / Heavy *shock load*

h/d	sf — n. arranques/hora / n. start-up/hour								
	2	**4**	**8**	**16**	**32**	**63**	**125**	**250**	**500**
4	1.3	1.3	1.3	1.3	1.5	1.5	1.5	1.5	1.5
8	1.5	1.5	1.5	1.5	1.8	1.8	1.8	1.8	1.8
16	1.8	1.8	1.8	1.8	2.2	2.2	2.2	2.2	2.2
24	2.2	2.2	2.2	2.2	2.5	2.5	2.5	2.5	2.5

A - Tornillos de Arquímedes para materiales ligeros, ventiladores, líneas de montaje, cintas transportadoras para materiales ligeros, pequeños agitadores, elevadores, máquinas limpiadoras, máquinas llenadoras, máquinas comprobadoras, cintas trasportadoras.

A - *Screw feeders for light materials, fans, assembly lines, conveyor belts for light materials, small mixers, lifts, cleaning machines, fillers, control machines.*

B - Dispositivos de enrollado, alimentadores de las máquinas para la madera, montacargas, equilibradores, roscadoras, agitadores medios y mezcladores, cintas transportadoras para materiales pesados, cabrestantes, puertas corredizas, raspadores de abono, máquinas empaquetadoras, hormigoneras, mecanismos para el movimiento de las grúas, fresadoras, plegadoras, bombas de engranajes.

B - *Winding devices, woodworking machine feeders, goods lifts, balancers, threading machines, medium mixers, conveyor belts for heavy materials, winches, sliding doors, fertilizer scrapers, packing machines, concrete mixers, crane mechanisms, milling cutters, folding machines, gear pumps.*

C - Agitadores para materiales pesados, cizallas, prensas, centrifugadoras, soportes rotativos, cabrestantes y elevadores para materiales pesados, tornos para la rectificación, molinos de piedras, elevadores de cangilones, perforadoras, moledores a percusión, prensas de excéntrica, plegadoras, mesas giratorias, pulidoras, vibradores, cortadoras.

C - *Mixers for heavy materials, shears, presses, centrifuges, rotating supports, winches and lifts for heavy materials, grinding lathes, stone mills, bucket elevators, drilling machines, hammer mills, cam presses, folding machines, turntables, tumbling barrels, vibrators, shredders.*

Ejemplo de aplicación:
Cinta transportadora atribuible a la clase de carga B **(carga con choques moderados)**, previsto para una hora de funcionamiento diaria (h/d) **16** horas y con 8 arranques/hora De la tabla obtenemos: **sf = 1.5**

Application example:
*Conveyor belt assigned to load class B **(moderate shock load)**, to be run **16** hours a day (h/d) with **8** start-ups/hour.*
*The following value is obtained from the table **sf = 1.5***

Factor de servicio clase AGMA — AGMA — *Service class AGMA*

Los números de clases AGMA tienen la misma función del factor de servicio.
Las clases de aplicación son I, II y III siendo la clase III la mas obligada para servicios críticos.
La relación entre el factor de servicio y las clases de aplicacion pueden ser resumidas como sigue:

AGMA class numbers have the same function as the service factor.
The application classes are I, II, III with class III being the most severe service duty.
The relationship between the service factor and classes of application can be summarized as below:

Aplicación clases AGMA *Application class AGMA*	Factor de servicio *Service factor*
I	0.8 - 1.39
II	1.4 - 1.99
III	≥ 2.00

APLICACIÓN	*APPLICATION*	OPERACIÓN TOTAL/*LOAD DURATION*		
		0/3 h	3/10 h	10/24 h
AGITADORES O MEZCLADORAS	***AGITATORS (mixers)***			
Líquidos Puros	*Pure Liquids*	I	I	II
Líquidos y Sólidos	*Liquids and Solids*	I	II	II
Líquidos de densidad variable	*Liquids - Variable Density*	I	II	II
SOPLADORES	***BLOWERS***			
Centrífugos	*Centrifugal*	I	I	II
Lóbulo	*Lobe*	I	II	II
De Aspas	*Vane*	I	II	II
FABRICACIÓN DE CERVEZA Y DESTILACIÓN	***BREWING AND DISTILLING***			
Maquinaria para Embotellado	*Bottling Machinery*	I	I	II
Ollas de Hervor - Servicio Continuo	*Brew Kettles - Continuous Duty*	II	II	II
Cocinas - Servicio Continuo	*Cookers - Continuous Duty*	II	II	II
Cubos de Maceración - Servicio Continuo	*Mash Tubs - Continuous Duty*	II	II	II
Tolva Dosificadora - Arranques Frecuentes	*Scale Hopper - Frequent Starts*	II	II	II
ENLATADORAS	***CAN FILLING MACHINES***	I	I	II
VUELCA VAGONES	***CAR DUMPERS***	II	III	III
REMOLCADOR DE VAGONES	***CAR PULLERS***	I	II	II
CLARIFICADORES	***CLARIFIERS***	I	I	II
CLASIFICADORES	***CLASSIFIERS***	I	II	II
MAQUINARIA PARA TRABAJAR ARCILLA	***CLAY WORKING MACHINERY***			
Prensa para ladrillo	*Brick Press*	II	III	III
Máquina de briquetas	*Briquette Machine*	II	III	III
Amasadora	*Pug Mill*	I	II	II
COMPACTADORES	***COMPACTORS***	III	III	III
COMPRESORES	***COMPRESORS***			
Centrífugos	*Centrifugal*	I	I	II
De Lóbulos	*Lobe*	I	II	II
Alternativos Multicilíndricos	*Reciprocating, Multi-Cylinder*	II	III	III
Alternativos de Cilindro Único	*Reciprocating, Single-Cylinder*	III	III	III

Factor de servicio clase AGMA — AGMA — *Service class AGMA*

APLICACIÓN	*APPLICATION*	OPERACIÓN TOTAL/*LOAD DURATION*		
		0/3 h	3/10 h	10/24 h
TRANSPORTADORAS - PROPÒSITO GENERAL	***CONVEYORS - GENERAL PURPOSE***			
Uniformemente cargado o alimentado	*Uniformly loaded*	I	I	II
Servicio pesado	*Heavy Duty*	I	II	II
Servicio severo	*Severe Duty*	II	III	III
GRÚAS	***CRANES***			
Montacargas principal - Servicio medio	*Main Hoist - Medium Duty*	II	II	II
Montacargas principal - Servicio pesado	*Main Hoist - Heavy Duty*	III	III	III
Reversa	*Reversing*	II	II	II
Polipasto	*Skip Hoist*	II	II	II
Recorrido del Carro	*Trolley Drive*	II	II	II
Recorrido del Puente	*Bridge Drive*	II	II	II
TRITURADORAS	***CRUSHER***			
Piedra o mineral	*Stone or Ore*	III	III	III
DRAGAS	***DREDGES***			
Bobinas de cable	*Cable Reels*	II	II	II
Transportadoras	*Conveyors*	II	II	II
Unidades de Accionamiento de Cabezal Cortante	*Cutter Head Drives*	III	III	III
Bombas	*Pumps*	III	III	III
Cedazos	*Screen Drives*	III	III	III
Apiladores	*Stackers*	II	II	II
Cabrestantes Utilitarios (Malacates)	*Winches*	II	II	II
ELEVADORES	***ELEVATORS***			
De Cangilones	*Bucket*	I	II	II
Descarga Centrífuga	*Centrifugal Discharge*	I	I	II
Escaleras mecánicas	*Escalators*	I	I	II
Flete	*Freight*	I	II	II
Descarga por gravedad	*Gravity Discharge*	I	I	II
EXTRUSORAS	***EXTRUDERS***			
Generales	*General*	II	II	II
Plásticos - Variador de velocidad	*Plastics - Variable Speed Drive*	III	III	III
Plásticos - Accionador de velocidad fija	*Plastics - Fixed Speed Drive*	III	III	III
Caucho/Hule - Operación de tornillo continuo	*Rubber - Continuous Screw Operation*	III	III	III
Rubber - Operación de tornillo intermitente	*Rubber - Intermittent Screw Operation*	III	III	III

Factor de servicio clase AGMA

AGMA

Service class AGMAA

APLICACIÓN	*APPLICATION*	OPERACIÓN TOTAL/*LOAD DURATION*		
		0/3 h	3/10 h	10/24 h
VENTILADORES	***FANS***			
Centrífugos	*Centrifugal*	I	I	II
Torres de enfriamiento	*Cooling Towers*	III	III	III
Tiro forzado	*Forced Draft*	II	II	II
Tiro inducido	*Induced Draft*	II	II	II
Industrial y minería	*Industrial and Mine*	II	II	II
ALIMENTADORES	***FEEDERS***			
Salpicaderos (tipo Mandil)	*Apron*	I	II	II
Correas	*Belt*	I	II	II
Disco	*Disc*	I	I	II
Reciprocante	*Reciprocating*	II	III	III
Tornillo	*Screw*	I	II	II
INDUSTRIA ALIMENTICIA	***FOOD INDUSTRY***			
Cocina de Cereales	*Cereal Cooker*	I	I	II
Mezclador de pasta	*Dough Mixer*	II	II	II
Picadoras de carne	*Meat Grinders*	II	II	II
Rebanadoras	*Slicers*	I	II	II
GENERADORES Y EXCITADORES	***GENERATORS AND EXCITERS***	II	II	II
MOLINOS DE MARTILLO	***HAMMER MILLS***	III	III	III
MONTACARGAS	***HOISTS***			
Alta Resistencia	*Heavy Duty*	III	III	III
Resistencia Media	*Medium Duty*	II	II	II
Contenedor	*Skip Hoist*	II	II	II
LAVADORAS	***LAUNDRY***			
Tinas	*Tumblers*	II	II	II
Máquinas de lavado	*Washers*	II	II	III
INDUSTRIA DE LA MADERA	***LUMBER INDUSTRY***			
Descortezador - Automático	*Barkers - Spindle Feed*	II	II	II
Descortezador - Principal	*Barkers - Main Drive*	III	III	III
Transportador - Quemador	*Conveyors - Burner*	II	II	II
Transportadoras - Principal o Servicio pesado	*Conveyors - Main or Heavy Duty*	II	II	II
Transportadora Principal de Troncos	*Conveyors - Main log*	III	III	III
Conveyors - Sierra de cadena, sierra de troceado	*Conveyors - Re-saw, Merry-Go-Round*	II	II	II
Transportador - Losas	*Conveyors - Siab*	III	III	III
Transportador - Carrusel	*Conveyors - Transfer*	II	II	II
Transferencia por cadena	*Chains - Fioor*	II	II	II
Transferencia de Vía de Grúa	*Chains - Green*	II	II	III

Factor de servicio clase AGMA — AGMA — *Service class AGMA*

APLICACIÓN	*APPLICATION*	OPERACIÓN TOTAL/*LOAD DURATION*		
		0/3 h	3/10 h	10/24 h
Sierras cortadoras - Cadena	*Cut-Off Saws - Chain*	II	II	III
Sierras cortadoras - Arrastre	*Cut-Off Saws - Drag*	II	II	III
Tambores de descortezado	*Debarking Drums*	III	III	III
Alimentadores - De Canteadora	*Feeds - Edger*	II	II	II
Alimentadores - Multiple	*Feeds - Gang*	II	III	III
Alimentadores - de Desbastadora	*Feeds - Trimmer*	II	II	II
Plataforma de registro	*Log Deck*	III	III	III
Disparos de registro - tipo inclinado- tipo circular	*Log Hauls - Incline - Well Type*	III	III	III
Conexión de dispositivos giratorios	*Log Turning Devices*	III	III	III
Alimentación de la aplanadora	*Planer Feed*	II	II	II
Aplanadora en inclinación de elevadores	*Planer Tilting Hoists*	II	II	II
Rodillo - de extracción -activos - de Cajas	*Rolls - live-off brg. - Roll Cases*	III	III	III
Mesa de Clasificación	*Sorting Table*	II	II	II
Elevador con caja de volteo	*Tipple Hoist*	II	II	II
Transportador - De Cadenas	*Transfers - Chain*	II	II	III
Transportador -Tipo Grùa	*Transfers - Craneway*	II	II	III
Unidades de batea	*Tray Drives*	II	II	II
Sepilladora para chapas	*Veneer Lathe Drives*	II	II	II
LAMINADORAS DE METAL	***METAL MILLS***			
Accionamiento Principal y Carro de Banco de Estirado	*Draw Bench Carriage and Main Drive*	II	II	II
Mesa de salida - Controlador Grupal no reversible	*Runout Table - Non reversing Group Drives*	II	II	II
Mesa de salida - Controlador individual no reversible	*Runout Table - Non reversing Individual Drives*	III	III	III
Mesas Transportadoras Reversibles	*Runout Table - Reversing*	III	III	III
Impulsadores de Placa	*Slab Pushers*	II	II	II
Cizallas	*Shears*	III	III	III
Trefilado	*Wire drawing*	II	II	II
Máquina de bobinado de alambre	*Wire Winding Machine*	II	II	II
BANDAS DE METAL -MAQUINARIA DE PROCESAMIENTO-	***METAL STRIP PROCESSING MACHINERY***			
Bridas	*Bridles*	II	II	II
Bobinadoras y Desbobinadoras	*Coilers and Uncoilers*	I	I	II
Arista - Condensador de ajuste	*Edge Trimmers*	I	II	II
Laminadora de Rodillos	*Flatteners*	II	II	II
Acumuladores	*Loopers (Accumulators)*	I	I	I
Rodillos de arrastre	*Pinch Rolls*	II	II	I
Cuchillas de corte	*Scrap Choppers*	II	II	II
Cizalla	*Shears*	III	III	III
Cortadoras	*Slitters*	I	II	II

Factor de servicio clase AGMA — AGMA — *Service class AGMA*

APLICACIÓN	*APPLICATION*	OPERACIÓN TOTAL/*LOAD DURATION*		
		0/3 h	3/10 h	10/24 h
MOLINOS TIPO ROTATORIO	***MILLS, ROTARY TYPE***			
Bola y varilla - Engranaje tipo espolón	*Ball and Rod - Spur Ring Gear*	III	III	III
Bola y varilla - Engranaje anular helicoidal	*Ball and Rod - Helical Ring Gear*	II	II	II
Bola y varilla - Conexión directa	*Ball and Rod - Direct Connected*	III	III	III
Bola y varilla - Hornos de cemento	*Ball and Rod - Cement Kilns*	II	II	II
Bola y varilla - Secadores y enfriadores	*Ball and Rod - Dryers and Coolers*	II	II	II
FABRICACIÓN DE PAPEL 1)	***PAPER MILLS 1)***			
Agitador / Mezclador	*Agitator (Mixer)*	II	II	II
Agitador para líquidos puros	*Agitator for Pure liquors*	II	II	II
Descortezadora Hiráulica	*Barking Drums*	III	III	III
Descortezadora - Mecánica	*Barkers - Mechanical*	III	III	III
Blanqueador	*Beater*	II	II	II
Batidora Desfibradora	*Breaker Stack*	II	II	II
Calandradora 2)	*Calender 2)*	II	II	II
Máquina Convertidora	*Chipper*	III	III	III
Alimentador de viruta	*Chip Feeder*	II	II	II
Rodillos de recubrimiento	*Coating Rolls*	II	II	II
Transportadoras - Viruta, corteza, químicos	*Conveyors - Chip, Bark, Chemical*	II	II	II
Transportadora - Troncos -incluye placa-	*Conveyors - Log (including Slab)*	III	III	III
Enrrolladores	*Couch Rolls*	II	II	II
Cortadora	*Cutter*	III	III	III
Moldes cilíndricos	*Cylinder Molds*	III	III	III
Secadoras 2)	*Dryers 2)*			
Máquina de papel	*Paper Machine*	II	II	II
Transportadoras	*Conveyor Type*	II	II	II
Prensa de Impresión	*Embosser*	II	II	II
Extrusora	*Extruder*	II	II	II
Rodillos Fourdrinier	*Fourdrinier Rolls*	II	II	II
Refinadores cónicos Jordán	*Jordan Pulverizer*	II	II	II
Lavadoras y Espesadoras	*Kiln Drive*	II	II	II
Enrolladora de Papel	*Paper Rolls*	II	II	II
Tina de Mezcla	*Platter*	II	II	II
Prensadora -Fieltro y succión-	*Presses - Felt & Suction*	II	II	II
Despulpadora	*Pulper*	III	III	III
Bombas de vacío	*Pumps - Vacuum*	II	II	II
Carretes (tipo superficial)	*Reel (Surface Type)*	II	II	II
Mallas - Viruta	*Screens - Chip*	II	II	II

Factor de servicio clase AGMA — AGMA — *Service class AGMA*

APLICACIÓN	*APPLICATION*	OPERACIÓN TOTAL/*LOAD DURATION*		
		0/3 h	3/10 h	10/24 h
Mallas - Rotatoria	*Screens - Rotary*	II	II	II
Mallas - Vibratoria	*Screens - Vibrating*	III	III	III
Prensa Encoladora	*Size Press*	II	II	II
Súper calandradora 3)	*Supercalendar3)*	II	II	II
Espesador (Motor AC)	*Thickener (AC Motor)*	II	II	II
Espesador (Motor DC)	*Thickener (DC Motor)*	II	II	II
Lavadora (Motor AC)	*Washer (AC Motor)*	II	II	II
Lavadora (Motor DC)	*Washer (DC Motor)*	II	II	II
Soporte de rollos	*Wind and Unwind Stand*	I	I	I
Enrolladoras (tipo superficial)	*Winders (Surface Type)*	II	II	II
Secadoras Yankee 2)	*Yankee Dryers 2)*	II	II	II
INDUSTRIAS DE PLÁSTICOS - PROCESOS PRIMARIOS	***PLASTICS INDUSTRY - PRIMARY PROCESSING***			
Mezcladores internos intensivos - por lotes	*Intensive Internal Mixers - Batch Mixers*	III	III	III
Mezcladores internos intensivos - continuos	*Intensive Internal Mixers - Continuous Mixers*	II	II	II
Molino de caída por lotes -2 rollos lisos-	*Batch Drop Mill - 2 smooth rolls*	II	II	II
Alimentación continua, mantenimiento y molino de mezcla	*Continuous Feed, Holding & Blend Mill Calendars*	II	II	II
INDUSTRIAS DE PLÁSTICOS - PROCESOS SECUNDARIOS	***PLASTICS INDUSTRY - SECONDARY PROCESSING***			
Moldeadores de Soplado	*Blow Molders*	II	II	II
De revestimiento	*Coating*	II	II	II
De Película	*Film*	II	II	II
De Tubo	*Pipe*	II	II	II
Pre plastificantes	*Pre-Piasticizers*	II	II	II
De Barras	*Rods*	II	II	II
De Lámina	*Sheet*	II	II	II
De Tubería	*Tubing*	II	II	II
EXTRACTORES -REMOLQUE DE BARCAZAS	***PULLERS - BARGE HAUL***	II	II	II
BOMBAS	***PUMPS***			
Centrifugas	*Centrifugal*	I	I	II
Dosificadoras	*Proportioning*	II	II	II
Reciprocante - Actuación simple, 3 o mas cilindros	*Reciprocating - Single Acting, 3 or more cylinders*	II	II	II
Reciprocante - Actuación doble, 2 o mas cilindros	*Reciprocating - Double Acting, 2 or more cylinders*	II	II	II
De engrane giratorio	*Rotary - Gear Type*	I	I	II
Rotatoria -Lóbulo	*Rotary - Lobe*	I	I	II
Rotatoria -Paletas	*Rotary - Vane*	I	I	II

Factor de servicio clase AGMA — AGMA — *Service class AGMA*

APLICACIÓN	*APPLICATION*	OPERACIÓN TOTAL/*LOAD DURATION*		
		0/3 h	3/10 h	10/24 h
INDUSTRIA DEL CAUCHO	***RUBBER INDUSTRY***			
Mezcladores internos intensivos - Mezcladoras por lotes	*Intensive Internal - Batch Mixers*	III	III	III
Mezcladores internos intensivos -Mezcladores continuos	*Intensive Internal - Continuous Mixers*	II	II	II
Molinos Mezcladores -2 rodillos lisos	*Mixing Mill - 2 smooth rolls*	II	II	II
Molinos Mezcladores -2 rollo, 1 rodillo corrugado-	*Mixing Mill - 1 or 2 corrugated rolls*	III	III	III
Molino de Lote Descendente – 2 rodillos lisos	*Batch Drop Mill - 2 smooth rolls*	II	II	II
Quebradora en Caliente – 2 rodilloso, 1 rodillo corrugado	*Cracker Warmer - 2 roll, 1 corrugated roll*	III	III	III
Quebradora -2 rodillos corrugados	*Cracker - 2 corrugated rolls*	III	III	III
Ligas, Alimentación & molinos mezcladores - 2 rodillos	*Holding, Feed & Blend Mill - 2 rolls*	II	II	II
Refinadores -2 rodillos	*Refiner - 2 rolls*	II	II	II
Calandrias para Caucho	*Calenders*	II	II	II
MEZCLADOR DE ARENA	***SAND MULLER***	II	II	II
EQUIPOS DE TRATAMIENTO DE AGUAS RESIDUALES	***SEWAGE DISPOSAL EQUIPMENT***			
Cribas de barra	*Bar Screens*	II	II	II
Alimentadores químicos	*Chemical Feeders*	II	II	II
Cribas de desagüe	*Dewatering Screens*	II	II	II
Rompedores de espuma	*Scum Breakers*	II	II	II
Mezcladores lentos o rápidos	*Slow or Rapid Mixers*	II	II	II
Colector de Sedimentos	*Sludge Collectors*	II	II	II
Espesadores	*Thickener*	II	II	II
Filtros de vacío	*Vacuum Filters*	II	II	II
CRIBAS	***SCREENS***			
Para limpieza de Aire	*Air Washing*	I	I	II
Giratorias de Piedra o Grava	*Rotary - Stone or Gravel*	II	II	II
Toma de Agua Movil	*Traveling Water Intake*	I	I	I
TRANSPORTADORES HELICOIDALES	***SCREW CONVEYORS***			
Uniformemente cargado o alimentado	*Uniformly loaded or Fed*	I	I	II
Servicio pesado	*Heavy Duty*	I	II	II
INDUSTRIA AZUCARERA	***SUGAR INDUSTRY***			
Cortadora de remolacha	*Beet Slicer*	III	III	III
Cortadoras de Caña	*Cane Knives*	II	II	II
Trituradoras	*Crushers*	II	II	II
Molinos (terminal de baja velocidad)	*Mills (low speed end)*	III	III	III

Factor de servicio clase AGMA — AGMA — *Service class AGMA*

APLICACIÓN	*APPLICATION*	OPERACIÓN TOTAL/*LOAD DURATION*		
		0/3 h	3/10 h	10/24 h
INDUSTRIA TEXTIL	***TEXTILE INDUSTRY***			
Enrrolladoras	*Batchers*	II	II	II
Calandrias	*Calendars*	II	II	II
Cardas	*Cards*	II	II	II
Tambores de Secado	*Dry Cans*	II	II	II
Secadores	*Dyeing Machinery*	II	II	II
Telares	*Looms*	II	II	II
Planchadoras	*Mangles*	II	II	II
Perchadoras	*Nappers*	II	II	II
Rellenadoras	*Pads*	II	II	II
Encoladoras	*Slashers*	II	II	II
Enjabonadoras	*Soapers*	II	II	II
Hilanderas	*Spinners*	II	II	II
Bastidores Tensores	*Tenter Frames*	II	II	II
Lavadoras	*Washers*	II	II	II
Enrrolladoras	*Winders*	II	II	II

Notas sobre la tabla de FACTOR DE SERVICIO PARA REDUCTORES:
1) La clasificación de los números listados para la aplicación de la industria del papel son consistentes con los mostrados en la información tecnica de la TAPPI (Asociación Técnica de la industria del papel y la pulpa), hoja 0406- 18 1967: factores de servicio para engranajes en servicios pesados en la industria del papel y la pulpa.
2) Solo para transporte anti fricciòn.
3) Un factor de servicio de 1.00 puede ser aplicado a la velocidad base de una súper calandradora que opera sobre caballos de fuerza con un rango de velocidad constante y en el rango de la constante del torque donde la velocidad de la potencia sea mayor que 1.5 a 1. Un número de clase II es aplicable a súper calandradoras que operan en todo el rango de velocidad con par constante o cuando la gama de velocidades de los caballos de fuerza constante es menor de 1.5 a 1.

Notes to GEARMOTOR SERVICE FACTOR table:

1) The class numbers listed for paper mill applications are consistent with those shown in TAPPI (Technical Association of Pulp and Paper Industry) Technical Information Sheet 0406-18 1967, Service Factors for Gears on major Equipment in the Paper and Pulp Industry.
2) Anti-friction bearings only.
3) A Class Number of I may be applied at base speed of a supercalendar operating over a speed range of part-range constant horsepower and part-range constant torque where the constant horsepower speed range is greater than 1.5 to 1. A Class Number of II is applicable to supercalendars operating over the entire speed range at constant torque or where the constant horsepower speed range is less than 1.5 to1.

Carga radial — $R; R_2$ [lb] — *Radial load*

La aplicación en el eje de salida del reductor de piñones, poleas, etc. determina fuerzas radiales que es necesario considerar para evitar excesivo estrés y el riesgo de daños del reductor.
El cálculo de la carga radial externa R que actúa sobre el eje del reductor se puede calcular de la siguiente manera:

Pinions, pulleys, etc applied on the output shaft of the gearboxes create radial forces that must be taken into consideration to avoid excessive stress risking damage to the gearbox itself.

External radial load R that acts on the gearbox shaft can be calculated as follows:

$$R = \frac{2 \cdot M_2 \cdot kr}{d} \leq R_2$$

donde:
d [inch] diámetro primitivo del piñón o polea
kr coeficiente con relación al tipo de transmisión:
kr = 1.4 transmisión por cadena
kr = 1.1 transmisión por cadena
kr = 1.5 - 2.5 polea para correa trapecial

where:
***d** [inch] diameter of the pinion or pulley*
***kr** coefficient in relation to type of transmission:*
***kr = 1.4** sprocket wheel*
***kr = 1.1** gear*
***kr = 1.5 - 2.5** pulley for V belts*

Señalamos que los valores R2 son válidos para cargas aplicadas a la mitad del eje de salida, entonces la comparación debe hacerse en las mismas condiciones.

Keep in mind that values R_2 refer to loads that act on the center-line of the output shaft (considering the shaft protrudes). As a result, the value should be compared under the same conditions.

Carga axial — $A; A_2$ [lb] — *Axial load*

A veces, junto con la carga radial también puede estar presente una fuerza A que actúa axialmente en el eje de salida; en este caso tener en cuenta que la carga axial admisible A2 en el eje es:

At times, along with the radial load, force A may be present that acts axially on the output shaft. In this case, keep in mind allowable axial load A_2 that can be applied on the shaft is:

$$A_2 = R_2 \cdot 0.2$$

Si el valor de la carga axial A en el eje resulta superior a A_2, consultar con nuestro servicio técnico.

If axial load A that acts on the shaft is greater than A_2, contact our Technical Service.

Seleccionando el motorreductor — *Selecting the gearmotors*

Para seleccionar el motorreductor requerido realizar el siguiente procedimiento:

1. Determinar el factor de servicio fs para la aplicación deseada haciendo referencia a los gráficos dados en la página A6. Esto está hecho considerando la clase de carga, la operación horas/días y el número de puesta en marcha/hora.

2. Si la potencia de salida del motor requerido P (Hp) es conocida, ir al punto 3); si el torque de salida requerido M es conocido, determine la salida de del motor P usando las siguientes fórmulas:

To select the required gearmotor, perform the procedure below:

1. *Determine the service factor sf for the desired application by referring to the charts given on page A6. This is to be done by considering the class of load, the operational hours/day and the number of start-ups/ hour.*

2. *If the required motor power output P (Hp) is known, go to item 3); if the required output torque M is known, determine motor output P by using the following formulas:*

$$P = \frac{M \cdot n_2}{63025 \cdot Rd}$$

Motor reductor
Gearmotor

donde Rd es para la eficiencia dinámica (indicada en la página D6) y n2 indica la salida requerida rpm del motorreductor.

where Rd stands for the dynamic efficiency (indicated on page D6) and n_2 indicates the required output rpm of the gearmotor.

Seleccionando el motorreductor

Selecting the gearmotors

3. Use la gráfica de especificación para buscar la unidad de potencia donde P1 es mayor que o igual a P con una velocidad n2/n2max que se aproxima al valor deseado. Elija una unidad de potencia donde el factor de servicio indicado fs es igual o mayor que la unidad calculada en el punto 1).

3. *Use the specification chart to search for the power unit where P_1 is greater than or equal to P with a speed n_2/n_{2max} that approximates the desired one. Choose a power unit where the indicated service factor sf is equal to or greater than that calculated at point 1).*

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i			R_2 [lb]
7.5 hp								
5.5 kW	**28**	15418	2,0	**III**	61,74	**ITH143**	**210TC**	5058
(1750 rpm)	**26**	16666	1,9	**III**	66,73		**210TC**	5058
	22	19835	1,6	**III**	79,43		**210TC**	5058
	20	21437	1,4	**III**	85,85		**210TC**	5058

Esempio / *Example:*

Applicazione / *Application:*
Nastro trasportatore / *Conveyor belt*

P : 7.5 hp
sf : 1.6
n_2 : 22 rpm

Motorizzazione scelta / *Power unit selected:*

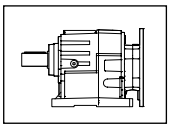
ITH143 i = 61.74, P_1 = 7.5 hp, sf = 1.6

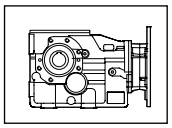
Lubricación

Lubrication

Los reductores de las serie ITH, ITB, y ITS se suministran con lubricante sintético viscosidad 320 de larga duración.

All unit sizes of ITH, ITB, and ITS series are complete with a long life synthetic lubricant, viscosity 320.


ITH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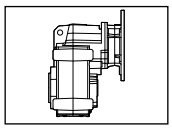

ITS

SHELL	AGIP	KLUBER	CASTROL	ESSO	MOBIL
Shell Omala S4 WE320	Tellium VSF320	Klubersynth GH 6 320	Alphasyn PG320	S320	Mobil Glygoyle HE 320

Las tablas indican la cantidad aproximada de lubricante contenido y/o que se debe verter.

The tables indicates the approximate amount of lubricant held and/or to be put in.

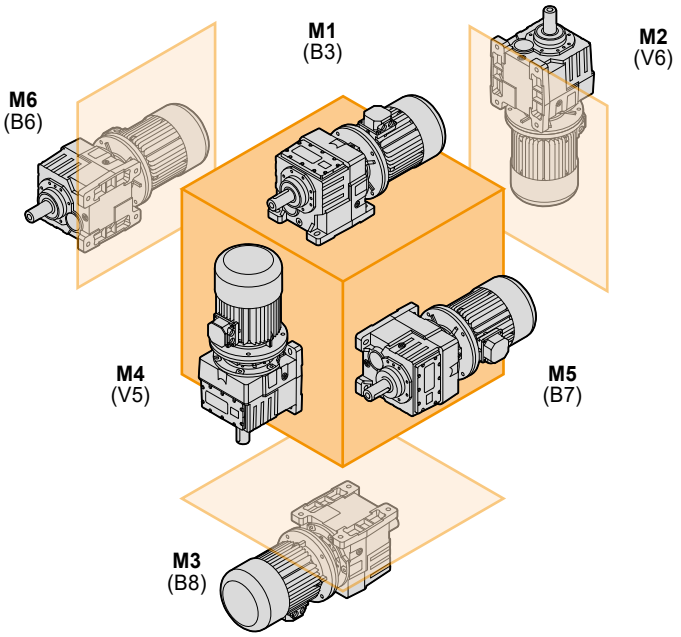
Especifique siempre la posición de montaje deseada al momento de hacer el pedido.

Always specify the desired installation position at the time of order.

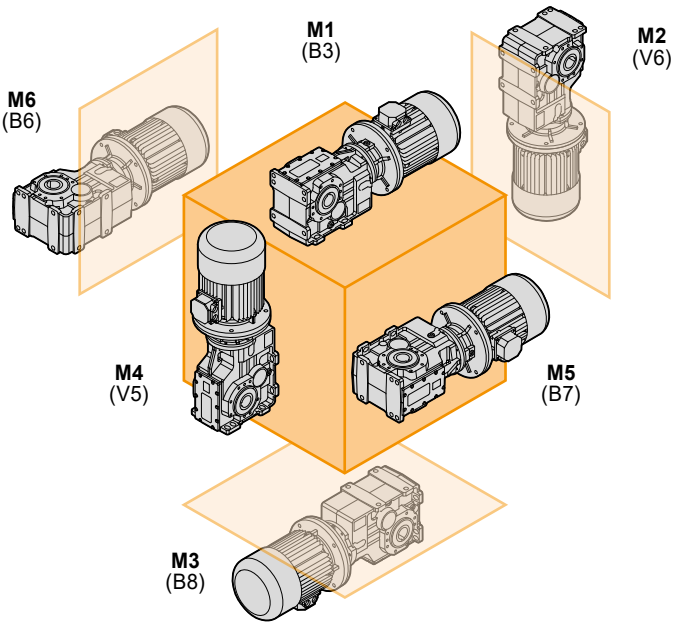
Posición de Montaje

Mounting positions

ITH



ITB



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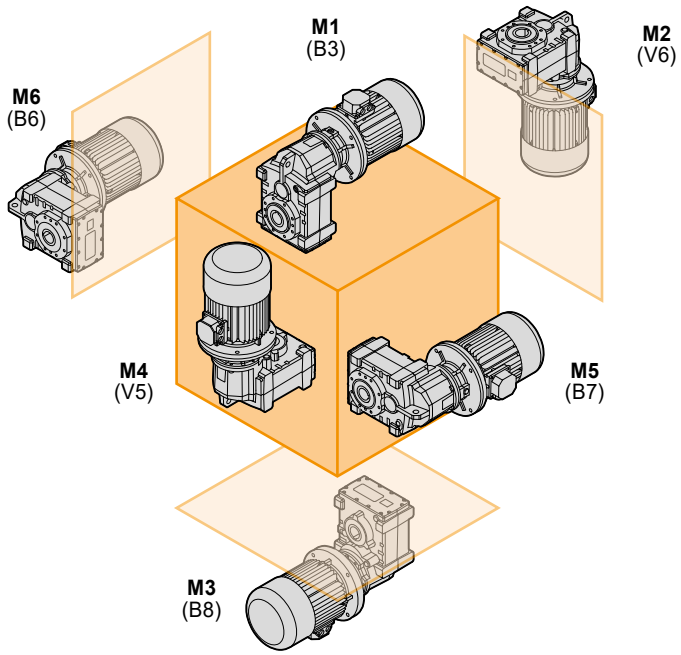
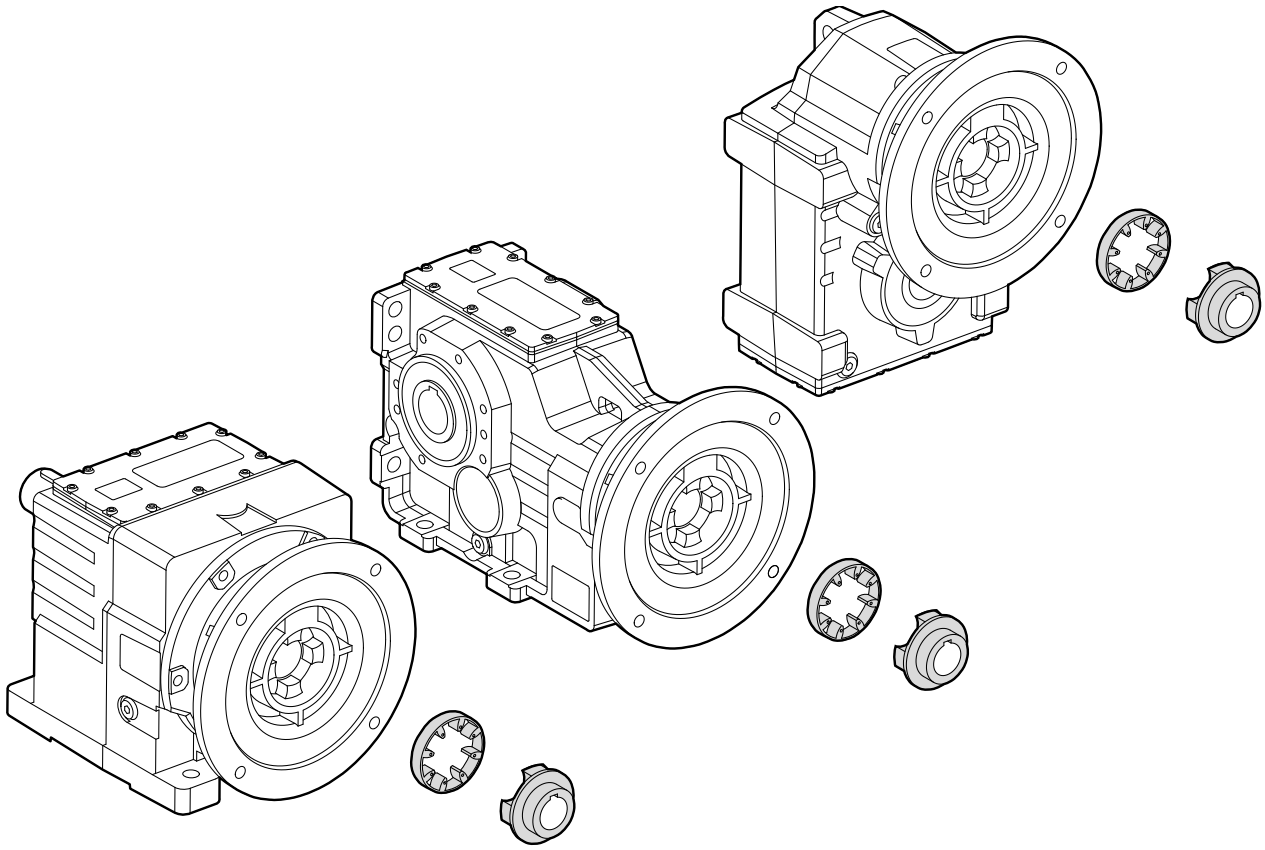


Acoplamiento flexible

Flexible coupling



La conexión al motor por medio de cople flexible permite los siguientes beneficios:
- Incremento en la rigidez torsional;
- Reducción de vibraciones;
- Amortigua el pico de inercia al arranque del motor;
- Elimina el fenómeno de oxidación entre flecha del motor y cople metálico;
- Reduce la temperatura de operación;
- Fácil desensamble del motor después de largos períodos de operación.

Motor connection by flexible coupling allows the following benefits:

- *Increasing torsional rigidity;*
- *Reducing vibrations;*
- *Cushioning motor start up jerks;*
- *Eliminates fretting corrosion phenomenon between motor sleeve and electric motor shaft;*
- *Lowering operating temperature;*
- *Easy disassembly of the motor after long periods of use;*

Temperatura de servicio / *Operating temperature*

La temperatura ambiente afecta las especificaciones de los reductores.

The environmental temperature affects specifications of gearboxes.

Gama de temperatura estándar / *Standard temperature range*

ITH	-25°C / +50°C	-13°F / +122°F
ITB	-25°C / +50°C	-13°F / +122°F
ITS	-25°C / +50°C	-13°F / +122°F

Gamas de temperaturas especiales / *Special temperature range*

	<-15°C / <-5°F	**>+50°C / >+112°F**
ITH	reducir la carga radial en la salida al 50% *halve the output radial loads*	Usar sello de Viton (FPM) *use Viton (FPM) oil seals* *Usar lubricante para alta temperatura* *use high temperature lubricant*
ITB	reducir la carga radial en la salida al 50% *halve the output radial loads*	
ITS	reducir la carga radial en la salida al 50% *halve the output radial loads*	

Si la temperatura es <0°C/F:
- verificar que el motor sea idóneo para trabajar a bajas temperaturas;
- verificar que el motor pueda proveer mayor par de arranque a causa del aumento de la viscosidad del lubricante;
- para una lubricación óptima accionar sin carga algunos minutos;

For temperature <0°C/F refer to the following notes:
- *check if the motor is suitable for low temperature;*
- *due to the high viscosity of the lubricant, check if the motor can supply high starting torque;*
- *let the group run for a few minutes without load to guarantee good lubrication;*

Instalación y controles

Installation and inspection

Al momento de la instalación del equipo reductor es recomendable verificar que:

- Los datos en la placa correspondan al producto pedido;
- Las superificies de acoplamiento y los ejes sean limpios y sin abolladuras;
- Las supeficies donde se instala el reductor (o motovariador) sean planas y bastante rígidas;
- El eje de la máquina operadora y del reductor sean correctamente alineados;
- Se hayan instalados los limitadores de par si hay probabilidad de golpes o bloqueo durante el funcionamiento;
- Las partes rotativas de las maquinas lleven las protecciones de seguridad necesarias;
- Para instalaciones al exterior, sean presentes adecuadas protecciones contra la exposición a los agentes atmosféricos;
- El ambiente de trabajo no sea expuesto a agentes corrosivos (a menos que no haya sido comunicado en el pedido, a fin de preparar el reductor o el motovariador para este uso);
- Los piñones y poleas sean correctamente ensamblados en el eje de salida o de entrada del reductor, para evitar cargas radiales y/o axiales superiores a las admitidas;
- Todos los acoplamientos sean tratados con adecuado producto anticorrosivo para evitar oxidaciones;
- Todos los tornillo de sujeción estén bien apretados;
- Verificar la cantidad de lubricante acorde la posición de montaje en todos los reductores.

While installing the gearbox, always make sure that:

- *the specifications stamped on the rating plate match those indicated for the unit actually ordered;*
- *the mating surfaces and the shafts are thoroughly clean and free of dents;*
- *the surfaces where the gearbox are to be mounted on are flat and strong enough;*
- *the machine drive shaft and the gearbox shaft are perfectly aligned;*
- *the required torque limiters have been installed if the machine is likely to produce shocks or blockages during operation;*
- *the rotary parts have been provided with the required safety guards;*
- *adequate weatherproof covering has been provided if the machine is to be installed outdoor;*
- *the working environment is not exposed to corrosive agents (unless this has been indicated while placing the order so that the gearbox can be adequately set up);*
- *the pinions or pulleys on the gearbox input/output shafts are properly fitted in order not to produce radial and/or axial loads that exceed the maximum allowable limits;*
- *all the couplings have been treated with adequate rust preventative in order to avoid oxidation provoked by contact;*
- *all the mounting screws have been securely tightened;*
- *check the lubricant quantity depending on the mounting position on all gearboxes.*

Aplicaciones críticas

Critical applications

En estos casos consultar con nuestro Servicio Técnico

- uso como multiplicador;
- uso como montacargas;
- uso en posiciones no contempladas en el catálogo;
- uso en ambientes con presión diferente de la atmosférica;
- uso en ambiente con temperaturas <-25°C/-13°F or >+50°C/+122°F

In these cases please contact the Technical Service

- *used to increase speed;*
- *used as a hoist;*
- *used in mounting positions not shown in the catalogue;*
- *use in environment pressure other than atmospheric pressure;*
- *use in places with temperature <-25°C/-13°F or > +50°C / +122°F*

TRANSTECNO®
the modular gearmotor

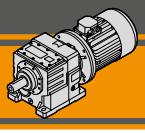
ITH

ITH Iron

60Hz

Motorreductores a engranajes cilíndricos
Helical in-line gearmotors

Nema



ENERGY SAVING

Características técnicas

El motorreductor ITH está diseñado para aplicaciones de uso rudo. Su carcaza fundida en una sola pieza y su diseño modular con distintos accesorios en la entrada y en la salida, incrementan su flexibilidad de uso en múltiples aplicaciones.

Características principales de la serie ITH:

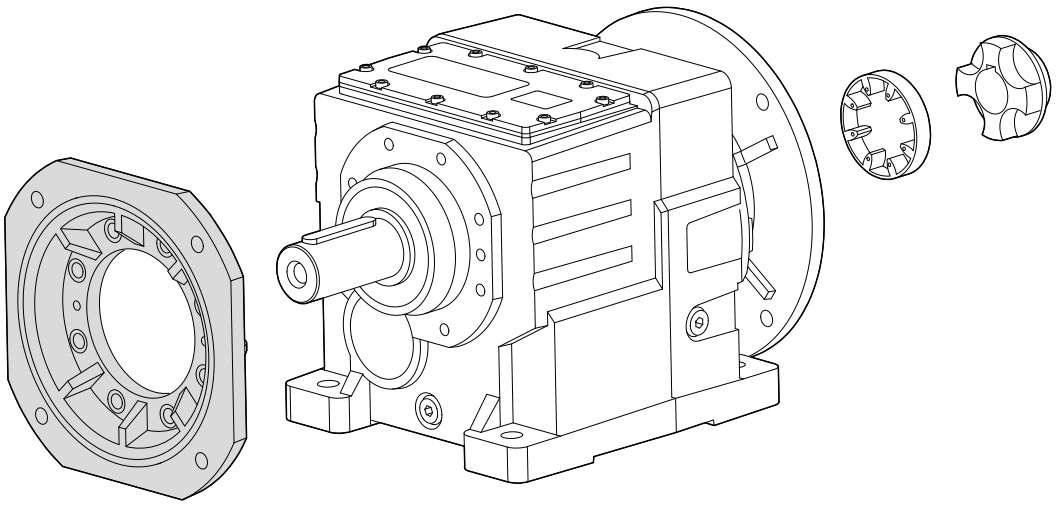
- Carcaza en fierro fundido;
- Elevada modularidad;
- Lubricación con aceite sintético;
- Acoplamiento a motor con cople flexible;
- Acabado en pintura epóxica RAL 7016.

Technical features

The ITH gearmotors are intended for heavy duty applications. The robust one pieces casing of the main housing and the modular design of input and output sets increase application fexibility.

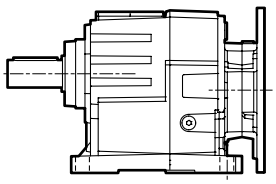
The main features of ITH range are:

- *Robust cast iron housings;*
- *High degree of modularity;*
- *Lubrication with synthetic oil;*
- *Coupled to motor with flexible coupling.*
- *Epoxy powder coating RAL 7016.*



Clasificación

Classification



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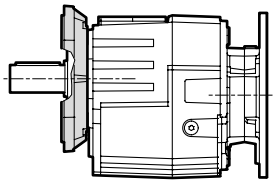

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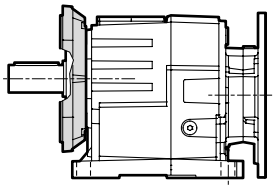
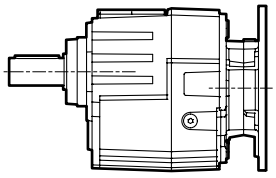
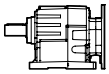


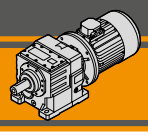
U/F...



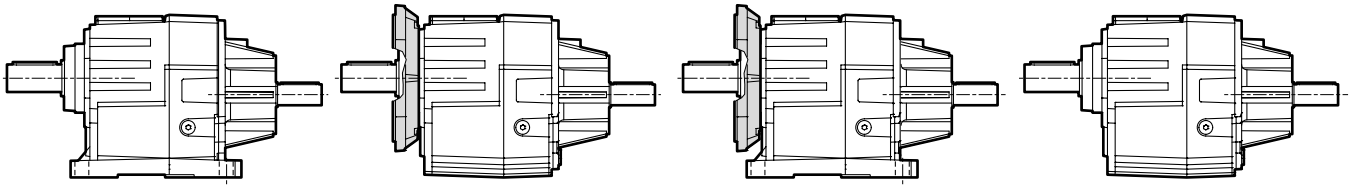
G

REDUCTOR / *GEARBOX*

ITH	12	2	H	26.28	D1.625	56C	M1	CW
Tipo *Type*	Tamaño *Size*	Etapas *Stages*	Versión *Version*	Relación de reducción *Ratio*	Eje de salida *Output shaft*	NEMA	Posición de Montaje *Mounting position*	Dispositivo anti retroceso *Backstop device*
ITH 	**11** **12** **13** **14**	**2** **3**	**U** **F...** **U/F...** **G**	ver tablas *see tables*	ver tablas *see tables*	**56C** **140TC** **180TC** **210TC** **250TC** **280TC**	**M1 (B3)** **M2 (V6)** **M3 (B8)** **M4 (V5)** **M5 (B7)** **M6 (B6)**	**CW** **CCW**

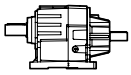


Clasificación — *Classification*



U F... U/F... G

REDUCTOR / *GEARBOX*

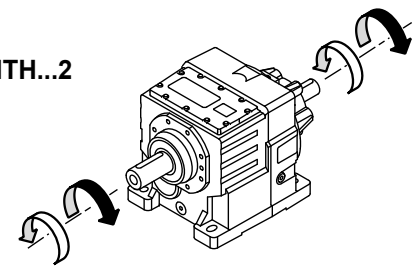
ITHIS	12	2	H	26.28	D1.625	M1
Tipo *Type*	Tamaño *Size*	Etapas *Stages*	Versión *Version*	Relación de reducción *Ratio*	Eje de salida *Output shaft*	Posición de Montaje *Mounting position*
ITHIS 	**11** **12** **13** **14**	**2** **3**	**U** **F...** **U/F...** **G**	ver tablas *see tables*	ver tablas *see tables*	**M1 (B3)** **M2 (V6)** **M3 (B8)** **M4 (V5)** **M5 (B7)** **M6 (B6)**

MOTOR / *MOTOR*

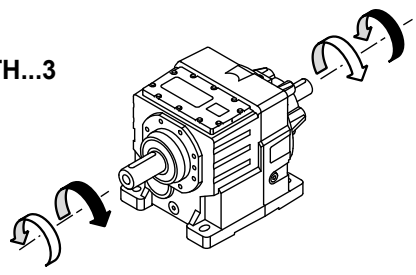
7.5hp / 5.5kW	4p	3ph	230/400V	60Hz	T1
Potencia *Power*	Polos *Poles*	Fases *Phases*	Tensión *Voltage*	Frecuencia *Frequency*	Posición caja de bornes *Terminal box pos.*
ver tablas *see tables*	**2p** **4p** **6p** **8p**	**1ph** **3ph**	**230V** **230/400V**	**50Hz** **60Hz**	**T1** (Std) **T4** **T2** **T3**

Sentidos de rotación — *Direction of rotation*

ITH...2



ITH...3



Nomenclatura — *Symbols*

n_1	[rpm]	Velocidad de entrada / *Input speed*
n_2	[rpm]	Velocidad de salida / *Output speed*
i		Relación de reducción / *Ratio*
P_1	[hp]	Potencia en la entrada / *Input power*
M_2	[lb·in]	Par en la salida en función de P_1 / *Output torque referred to P_1*
Pn_1	[hp]	Potencia nominal en la entrada / *Nominal input power*
Mn_2	[lb·in]	Par nominal en la salida en función de Pn_1 / *Nominal output torque referred to Pn_1*
sf		Rendimiento dinámico / *Service factor*
R_1	[lb]	Carga radial permitida a la entrada / *Permitted input radial load*
A_1	[lb]	Carga axial permitida a la entrada / *Permitted input axial load*
R_2	[lb]	Carga radial admisible en la salida / *Maximum output radial load*
A_2	[lb]	Carga axial admisible en la salida / *Maximum output axial load*

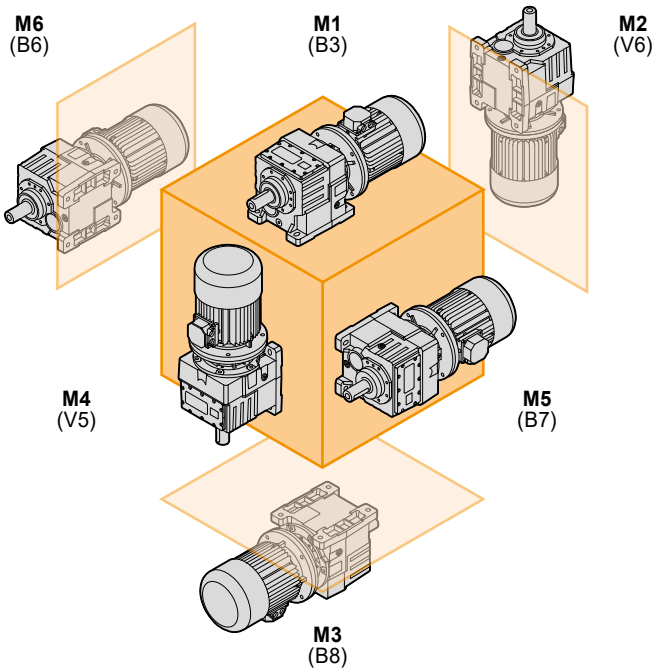
Lubricación

Los moto reductores de la serie ITH - ITHIS se suministran con lubricante sintético viscosidad 320. La cantidad de lubricante dependerá de la posición de montaje requerida.

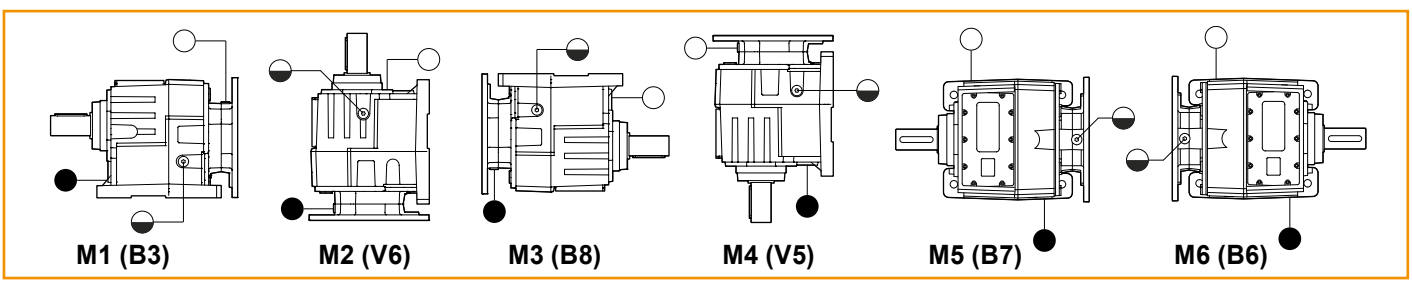
Lubrication

ITH - ITHIS series gearmotors come complete with synthetic lubricant 320 viscosity. The lubricant quantity depends on mounting position.

ITH..

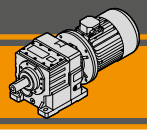


ITH	**Cantidad de aceite** (US gal) / ***Oil quantity*** *(US gal)*					
	M1 (B3)	**M2** (V6)	**M3** (B8)	**M4** (V5)	**M5** (B7)	**M6** (B6)
112 113	0.29	1.03	0.97	0.89	0.63	0.63
122 123	0.45	1.32	1.13	1.13	0.81	0.76
132 133	1.18	2.5	2.19	2.27	1.55	1.50
142 143	2.13	3.83	3.03	3.8	2.48	2.37

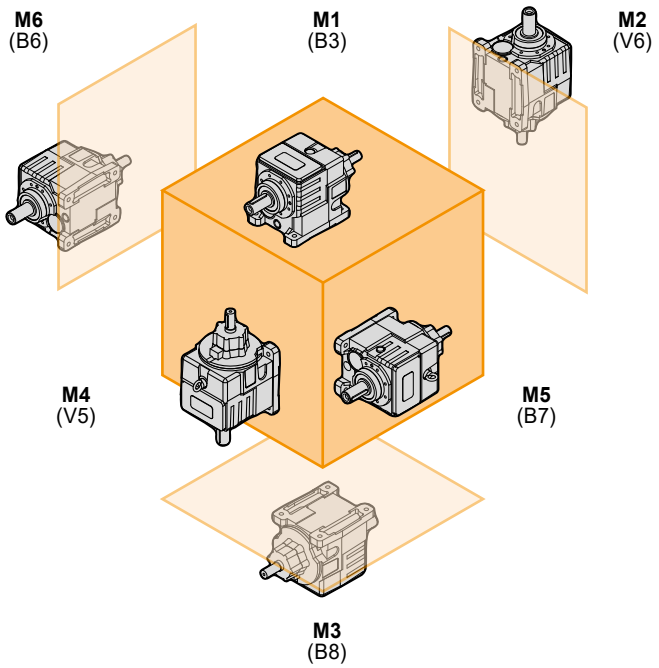


(Estándar)
(standard)

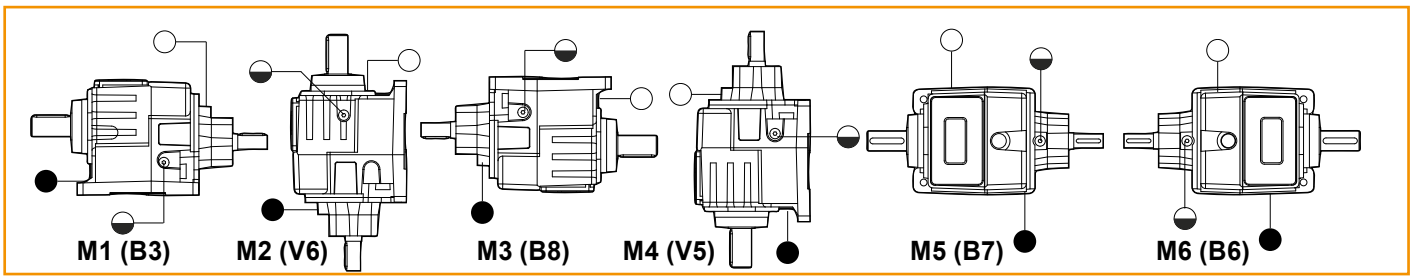
○ Respiradero y tapón de llenado / *Breather and filling plug*
◒ Tapón de nivel de aceite / *Oil level plug*
● Tapón de drenado de aceite / *Oil drain plug*



ITHIS..



ITHIS	Cantidad de aceite (US gal) / *Oil quantity (US gal)*					
	M1 (B3)	**M2** (V6)	**M3** (B8)	**M4** (V5)	**M5** (B7)	**M6** (B6)
112 **113**	0.34	1.13	1.03	0.89	0.68	0.68
122 **123**	0.50	1.42	1.18	1.13	0.87	0.81
132	0.97	2.69	2.29	2.27	1.66	1.61
133	0.92	2.61	2.24		1.61	1.55
142	1.92	4.01	3.14	3.8	2.58	2.48
143	1.87	3.93	3.09		2.53	2.43



(Estándar)
(standard)

○ Respiradero y tapón de llenado / *Breather and filling plug*
◒ Tapón de nivel de aceite / *Oil level plug*
● Tapón de drenado de aceite / *Oil drain plug*

Carga radial en la entrada — *Input Radial loads*

ITH 113	n_1 [rpm]	Potencia motor / *Motor Power [hp]*	
		1.5	2
R_1 [lb]	1750	281	
	1150	337	
	850	393	-

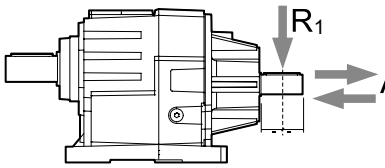
ITH 112 ITH 122 -123 ITH 133 - 143	n_1 [rpm]	Potencia motor / *Motor Power [hp]*		
		3	5	7.5
R_1 [lb]	1750	404		168
	1150	472	269	-
	850	562	-	-

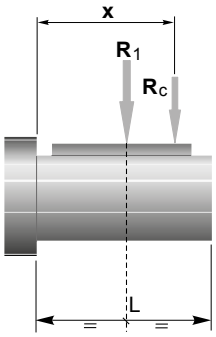
ITH 132 ITH 142	n_1 [rpm]	Potencia motor / *Motor Power [hp]*				
		7.5	10	15	20	25
R_1 [lb]	1750	831			629	269
	1150	1101		741	146	-
	850	1180	876	-	-	-

Carga radial en la entrada — *Input Radial loads*

Las cargas radiales máximas aplicables en la entrada están indicadas en las tablas.
Cuando la carga radial no se aplica en el punto medio del eje, es necesario calcular la carga efectiva a través la siguiente fórmula:

The radial loads maximum input applicable are indicated in the previous tables.
When the resulting radial load is not applied on the centre line of the shaft it is necessary to calculate the effective load with the following formula:





	ITH 112	ITH 113	ITH 122	ITH 123	ITH 132	ITH 133	ITH 142	ITH 143
a	5.472	5.275	5.472		6.181	5.472	6.181	5.472
b	4.33	4.33	4.33		4.645	4.33	4.645	4.33

$$R_c = \frac{R_1 \cdot a}{(b+x)} \leq R_1$$

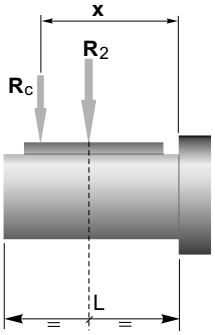
$$R \leq R_c$$

a, b = valores dados en la tabla
a, b = values given in the table

Carga radial en la salida — *Output Radial loads*

Las cargas radiales máximas aplicables en la salida están indicadas en la siguiente tabla.
Cuando la carga radial no se aplica en el punto medio del eje, es necesario calcular la carga efectiva a través la siguiente fórmula:

The radial loads maximum output applicable are indicated in the technical data table.
When the resulting radial load is not applied on the centre line of the shaft it is necessary to calculate the effective load with the following formula:

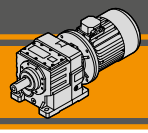


	ITH 112	ITH 113	ITH 122	ITH 123	ITH 132	ITH 133	ITH 142	ITH 143
a	7.244		8.188		9.724		11.259	
b	5.866		6.614		7.755		8.897	
R_{2MAX}	1.843		2.810		4.158		5.058	

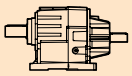
$$R_c = \frac{R_2 \cdot a}{(b+x)} \leq R_{2MAX}$$

$$R \leq R_c$$

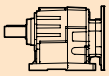
a, b = valori riportati nella tabella
a, b = values given in the table



Datos técnicos — **n_1 1750 rpm** — ***Technical data***



n_2 [rpm]	Mn_2 [lb·in]	Pn_1 [hp]	i	R_2 [lb]
ITHIS 112				
326	3098	16.67	5.38	773
271	3098	13.85	6.47	861
222	3540	13.00	7.88	924
205	3540	11.99	8.54	969
193	3717	11.87	9.06	985
170	3717	10.46	10.28	1060
154	4248	10.78	11.39	1064
140	4248	9.81	12.52	1124
118	4425	8.65	14.80	1216
97	4691	7.50	18.10	1327
86	4691	6.70	20.25	1417
74	5310	6.53	23.52	1436
67	5310	5.87	26.16	1528
61	5753	5.78	28.77	1527
54	6019	5.41	32.18	1574
48	6019	4.78	36.35	1690
42	6019	4.19	41.57	1828
36	5310	3.19	48.27	1843
31	5310	2.69	57.21	1843
ITHIS 113				
32	6196	3.32	55.27	1843
26	6196	2.71	67.61	1843
23	6196	2.44	74.96	1843
19	6196	2.00	91.70	1843
16	6196	1.68	108.91	1843
13	6196	1.34	136.65	1843
11	6196	1.12	163.98	1843
10	6196	1.06	173.44	1843
9.4	6196	0.98	185.20	1843
8.7	6196	0.91	201.58	1843
8.2	6196	0.86	212.17	1843
7.7	6196	0.81	226.55	1843
7.1	6196	0.74	246.59	1843



NEMA Motores aplicables
NEMA Motor adapters

ITH 112			
56C	**140TC**	**180TC**	**210TC**

ITH 113	
56C	**140TC**
	*
	*
	*

NOTA
Las áreas resaltadas indican el tamaño de carcasa del motor correspondiente.

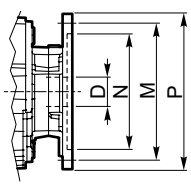
*** =** El Factor de servicio (sf) se deberá seleccionar con respecto a la aplicación: Favor de contactar con nuestro Servicio Técnico

Antes de seleccionar cualquier reductor, favor de revisar los valores de desempeño en las páginas B11 a la B20.

NOTE
Highlighted áreas indicate the motor input flange available on each gearbox size.

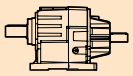
*** =** *The service factor (**sf**) has to be selected depending on application: please contact our Technical Department.*

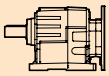
Before selecting any gearbox, please read the performance values shown in the tables on page B11 to B20.



Dimensiones NEMA/ *NEMA Dimensions*				
	56C	**140TC**	**180TC**	**210TC**
N	4.5		8.5	
M	5.88		7.25	
P	6.5		9	
D	0.625	0.875	1.125	1.375

Datos técnicos — **n_1 1750 rpm** — ***Technical data***

	n_2 [rpm]	Mn_2 [lb·in]	Pn_1 [hp]	i	R_2 [lb]
ITHIS 122					
	339	4868	27.24	5,17	1068
	262	4868	21.06	6,69	1241
	225	5310	19.71	7,79	1322
	198	5753	18.86	8,82	1382
	174	6638	19.04	10,08	1411
	154	6638	16.92	11,35	1512
	132	7523	16.36	13,30	1561
	110	7523	13.66	15,92	1734
	102	7523	12.72	17,11	1809
	90	7523	11.15	19,50	1952
	82	7966	10.76	21,43	1998
	73	8674	10.45	24,00	2024
	67	8674	9.55	26,28	2134
	60	8674	8.53	29,40	2279
	54	8674	7.77	32,31	2408
	49	8674	7.07	35,47	2542
	42	8674	6.01	41,78	2797
	38	8674	5.49	45,73	2810
	35	8674	4.97	50,40	2810
ITHIS 123					
	31	8674	4.58	56,00	2810
	29	8674	4.17	61,31	2810
	25	8674	3.63	70,53	2810
	22	8674	3.16	81,00	2810
	20	8674	2.88	88,68	2810
	17	8674	2.43	105,23	2810
	15	8674	2.23	115,21	2810
	14	8674	1.99	128,73	2810
	12	8674	1.79	144,00	2810
	11	8674	1.63	157,66	2810
	9,8	8674	1.43	178,10	2810
	8,6	8674	1.26	203,65	2810
	8,1	8674	1.19	216,00	2810
	7,4	8674	1.08	236,49	2810
	6,8	8674	1.00	256,00	2810
	6,2	8674	0.91	280,29	2810



NEMA Motores aplicables
NEMA Motor adapters

ITH 122			
56C	**140TC**	**180TC**	**210TC**

ITH 123		
56C	**140TC**	**180TC**
		*
		*
		*
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		*
		*

NOTA
Las áreas resaltadas indican el tamaño de carcasa del motor correspondiente.

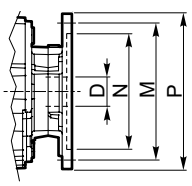
* = El Factor de servicio (sf) se deberá seleccionar con respecto a la aplicación: Favor de contactar con nuestro Servicio Técnico

NOTE
Highlighted áreas indicate the motor input flange available on each gearbox size.

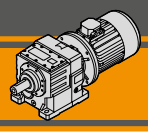
* = *The service factor (**sf**) has to be selected depending on application: please contact our Technical Department.*

Antes de seleccionar cualquier reductor, favor de revisar los valores de desempeño en las páginas B11 a la B20.

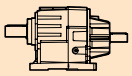
Before selecting any gearbox, please read the performance values shown in the tables on page B11 to B20.



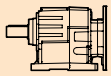
Dimensiones NEMA/ *NEMA Dimensions*				
	56C	**140TC**	**180TC**	**210TC**
N	4.5		8.5	
M	5.88		7.25	
P	6.5		9	
D	0.625	0.875	1.125	1.375



Datos técnicos — **n_1 1750 rpm** — ***Technical data***



n_2 [rpm]	Mn_2 [lb·in]	Pn_1 [hp]	i	R_2 [lb]
ITHIS 132				
348	7523	43.22	5,03	2320
287	7523	35.71	6,09	2593
253	7966	33.35	6,91	2730
233	7966	30.69	7,51	2866
209	7966	27.55	8,36	3051
194	7966	25.51	9,03	3191
170	8408	23.59	10,30	3370
159	8408	22.09	11,01	3503
141	10621	24.78	12,39	3330
118	10621	20.76	14,80	3693
116	11506	22.04	15,11	3547
94	13276	20.54	18,69	3586
86	14161	20.17	20,31	3537
68	14161	15.96	25,65	4054
64	15046	15.84	27,48	3950
57	15046	14.27	30,46	4159
51	16816	14.06	34,61	3902
46	16816	12.90	37,71	4102
42	16816	11.64	41,80	4159
38	16816	10.67	45,60	4159
35	16816	9.75	49,88	4159
ITHIS 133				
29	16816	8.15	60,92	4159
27	16816	7.66	64,74	4159
25	16816	7.01	70,88	4159
22	16816	6.33	78,38	4159
20	16816	5.70	87,14	4159
18	16816	5.19	95,67	4159
16	16816	4.51	109,93	4159
15	16816	4.12	120,36	4159
13	16816	3.69	134,66	4159
12	16816	3.35	147,98	4159
11	16816	3.07	162,45	4159
9,1	16816	2.58	191,39	4159
8,4	16816	2.38	209,48	4159
7,6	16816	2.16	230,85	4159



NEMA Motores aplicables
NEMA Motor adapters

ITH 132

56C	140TC	180TC	210TC	250TC	280TC
					*
					*
					*
					*
					*
					*

ITH 133

56C	140TC	180TC	210TC
			*
			*
			*
			*
			*
			*
			*
			*
		*	
		*	

NOTA
Las áreas resaltadas indican el tamaño de carcasa del motor correspondiente.

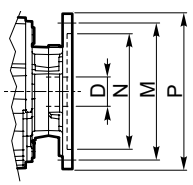
*** =** El Factor de servicio (sf) se deberá seleccionar con respecto a la aplicación: Favor de contactar con nuestro Servicio Técnico

NOTE
Highlighted áreas indicate the motor input flange available on each gearbox size.

**** =** The service factor (**sf**) has to be selected depending on application: please contact our Technical Department.*

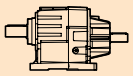
Antes de seleccionar cualquier reductor, favor de revisar los valores de desempeño en las páginas B11 a la B20.

Before selecting any gearbox, please read the performance values shown in the tables on page B11 to B20.

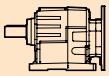


Dimensiones NEMA/ *NEMA Dimensions*						
	56C	140TC	180TC	210TC	250TC	280TC
N	4.5		8.5			10.5
M	5.88		7.25			9
P	6.5		9		10	11.525
D	0.625	0.875	1.125	1.375	1.625	1.875

Datos técnicos — **n_1 1750 rpm** — ***Technical data***



n_2 [rpm]	Mn_2 [lb·in]	Pn_1 [hp]	i	R_2 [lb]
ITHIS 142				
285	15931	74.90	6,15	3362
238	15931	62.69	7,35	3708
197	17702	57.63	8,88	3878
180	17702	52.54	9,75	4080
169	18587	51.94	10,35	4087
150	18587	46.17	11,65	4362
137	19472	44.09	12,78	4444
124	20357	41.82	14,08	4535
107	20357	35.90	16,40	4931
99	24782	40.42	17,73	4277
87	24782	35.43	20,24	4600
67	28322	31.50	25,99	4418
62	28322	29.16	28,10	4612
54	28322	25.32	32,35	4984
47	28322	22.09	37,09	5058
40	28322	18.82	43,57	5058
37	28322	17.32	47,35	5058
34	28322	15.82	51,76	5058
ITHIS 143				
28	30978	14.80	61,74	5058
26	30978	13.70	66,73	5058
22	30978	11.50	79,43	5058
20	30978	10.67	85,85	5058
16	30978	8.21	111,40	5058
15	30978	7.58	120,42	5058
13	30978	6.95	131,84	5058
12	30978	6.22	147,51	5058
11	30978	5.65	162,10	5058
9,8	30978	5.12	177,95	5058
9,0	30978	4.71	193,96	5058
8,3	30978	4.34	209,65	5058
7,6	30978	3.97	229,46	5058
6,9	30978	3.61	252,87	5058



NEMA Motores aplicables
NEMA Motor adapters

ITH 142

140TC	180TC	210TC	250TC	280TC
				*

ITH 143

56C	140TC	180TC	210TC	250TC
				*
				*
				*
				*
			*	
			*	
			*	

NOTA
Las áreas resaltadas indican el tamaño de carcasa del motor correspondiente.

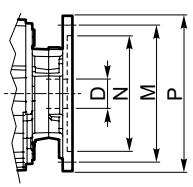
* = El Factor de servicio (sf) se deberá seleccionar con respecto a la aplicación: Favor de contactar con nuestro Servicio Técnico

NOTE
Highlighted áreas indicate the motor input flange available on each gearbox size.

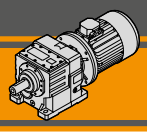
** = The service factor (**sf**) has to be selected depending on application: please contact our Technical Department.*

Antes de seleccionar cualquier reductor, favor de revisar los valores de desempeño en las páginas B11 a la B20.

Before selecting any gearbox, please read the performance values shown in the tables on page B11 to B20.



Dimensiones NEMA/ *NEMA Dimensions*						
	56C	**140TC**	**180TC**	**210TC**	**250TC**	**280TC**
N	4.5		8.5			10.5
M	5.88		7.25			9
P	6.5		9		10	11.525
D	0.625	0.875	1.125	1.375	1.625	1.875



Datos técnicos

Technical data

0.33 hp

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
0.22 kW (1750 rpm)	**67**	301	17.5	III	26.16	ITH112	56C	1843
	48	425	14.3	III	36.35		56C	1843
	42	478	12.5	III	41.57		56C	1843
	36	558	9.5	III	48.27		56C	1843
	31	664	8.0	III	57.21		56C	1843
	32	628	9.9	III	55.27	ITH113	56C	1843
	26	770	8.1	III	67.61		56C	1843
	23	850	7.3	III	74.96		56C	1843
	19	1044	6.0	III	91.70		56C	1843
	16	1239	5.0	III	108.91		56C	1843
	13	1549	4.0	III	136.65		56C	1843
	11	1859	3.3	III	163.98		56C	1843
	10	1965	3.1	III	173.44		56C	1843
	9.4	2106	2.9	III	185.20		56C	1843
	8.7	2292	2.7	III	201.58		56C	1843
	8.2	2407	2.6	III	212.17		56C	1843
	7.7	2576	2.4	III	226.55		56C	1843
	7.1	2797	2.2	III	246.59		56C	1843
	9.8	2018	4.3	III	178.10	ITH123	56C	2810
	8.6	2310	3.8	III	203.65		56C	2810
	8.1	2452	3.5	III	216.00		56C	2810
	7.4	2682	3.2	III	236.49		56C	2810
	6.8	2903	3.0	III	256.00		56C	2810
	6.2	3177	2.7	III	280.29		56C	2810

0.5 hp

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
0.37 kW (1750 rpm)	**67**	451	11.8	III	26.16	ITH112	56C	1843
	48	620	9.6	III	36.35		56C	1843
	42	717	8.4	III	41.57		56C	1843
	36	832	6.4	III	48.27		56C	1843
	31	982	5.4	III	57.21		56C	1843
	32	929	6.6	III	55.27	ITH113	56C	1843
	26	1133	5.5	III	67.61		56C	1843
	23	1257	4.9	III	74.96		56C	1843
	19	1540	4.0	III	91.70		56C	1843
	16	1832	3.4	III	108.91		56C	1843
	13	2292	2.7	III	136.65		56C	1843
	11	2753	2.2	III	163.98		56C	1843
	10	2912	2.1	III	173.44		56C	1843
	9.4	3115	2.0	II	185.20		56C	1843
	8.7	3390	1.8	II	201.58		56C	1843
	8.2	3567	1.7	II	212.17		56C	1843
	7.7	3806	1.6	II	226.55		56C	1843
	7.1	4142	1.5	II	246.59		56C	1843
	9.8	2992	2.9	III	178.10	ITH123	56C	2810
	8.6	3425	2.5	III	203.65		56C	2810
	8.1	3629	2.4	III	216.00		56C	2810
	7.4	3974	2.2	III	236.49		56C	2810
	6.8	4301	2.0	II	256.00		56C	2810
	6.2	4709	1.8	II	280.29		56C	2810

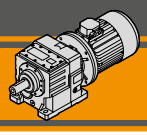
0.75 hp

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
0.55 kW (1750 rpm)	**326**	133	22.6	III	5.38	ITH112	56C	992
	271	168	18.8	III	6.47		56C	1102
	222	204	17.6	III	7.88		56C	1232
	205	221	16.3	III	8.54		56C	1290
	193	230	16.1	III	9.06		56C	1333
	170	266	14.2	III	10.28		56C	1430
	154	292	14.6	III	11.39		56C	1515
	140	319	13.3	III	12.52		56C	1596
	118	381	11.7	III	14.80		56C	1750
	97	460	10.2	III	18.10		56C	1843
	86	513	9.1	III	20.25		56C	1843
	74	602	8.9	III	23.52		56C	1843
	67	664	8.0	III	26.16		56C	1843
	61	735	7.8	III	28.77		56C	1843
	54	823	7.3	III	32.18		56C	1843
	48	929	6.5	III	36.35		56C	1843
	42	1062	5.7	III	41.57		56C	1843
	36	1230	4.3	III	48.27		56C	1843
	31	1460	3.6	III	57.21		56C	1843
	32	1381	4.5	III	55.27	ITH113	56C	1843
	26	1690	3.6	III	67.61		56C	1843
	23	1868	3.3	III	74.96		56C	1843
	19	2292	2.7	III	91.70		56C	1843
	16	2717	2.3	III	108.91		56C	1843
	13	3416	1.8	II	136.65		56C	1843
	11	4098	1.5	II	163.98		56C	1843
	10	4328	1.4	II	173.44		56C	1843
	9.4	4629	1.3	I	185.20		56C	1843
	8.7	5036	1.2	I	201.58		56C	1843
	8.2	5302	1.2	I	212.17		56C	1843
	7.7	5656	1.1	I	226.55		56C	1843
	7.1	6160	1.0	I	246.59		56C	1843
	67	673	12.9	III	26.28	ITH122	56C	2810
	60	752	11.6	III	29.40		56C	2810
	54	823	10.5	III	32.31		56C	2810
	49	903	9.6	III	35.47		56C	2810
	42	1062	8.1	III	41.78		56C	2810
	38	1168	7.4	III	45.73		56C	2810
	35	1283	6.7	III	50.40		56C	2810
	31	1398	6.2	III	56.00	ITH123	56C	2810
	29	1531	5.7	III	61.31		56C	2810
	25	1761	4.9	III	70.53		56C	2810
	22	2027	4.3	III	81.00		56C	2810
	20	2213	3.9	III	88.68		56C	2810
	17	2629	3.3	III	105.23		56C	2810
	15	2876	3.0	III	115.21		56C	2810
	14	3213	2.7	III	128.73		56C	2810
	12	3593	2.4	III	144.00		56C	2810
	11	3939	2.2	III	157.66		56C	2810
	9.8	4443	2.0	II	178.10		56C	2810
	8.6	5089	1.7	II	203.65		56C	2810

Datos técnicos / *Technical data*

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
0.75 hp								
0.55 kW	**8.1**	5390	1.6	II	216.00	**ITH123**	**56C**	2810
(1750 rpm)	**7.4**	5903	1.5	II	236.49		**56C**	2810
	6.8	6390	1.4	II	256.00		**56C**	2810
	6.2	7001	1.2	I	280.29		**56C**	2810
	29	1522	11,1	III	60,92	**ITH133**	**56C**	4159
	27	1620	10,4	III	64,74		**56C**	4159
	25	1770	9,5	III	70,88		**56C**	4159
	22	1956	8,6	III	78,38		**56C**	4159
	20	2177	7,7	III	87,14		**56C**	4159
	18	2390	7,0	III	95,67		**56C**	4159
	16	2744	6,1	III	109,93		**56C**	4159
	15	3009	5,6	III	120,36		**56C**	4159
	13	3363	5,0	III	134,66		**56C**	4159
	12	3700	4,6	III	147,98		**56C**	4159
	11	4054	4,1	III	162,45		**56C**	4159
	9,1	4779	3,5	III	191,39		**56C**	4159
	8,4	5231	3,2	III	209,48		**56C**	4159
	7,6	5762	2,9	III	230,85		**56C**	4159
	16	2779	11,1	III	111,40	**ITH143**	**56C**	5058
	15	3009	10,3	III	120,42		**56C**	5058
	13	3292	9,4	III	131,84		**56C**	5058
	12	3682	8,4	III	147,51		**56C**	5058
	11	4045	7,7	III	162,10		**56C**	5058
	9,8	4443	7,0	III	177,95		**56C**	5058
	9,0	4841	6,4	III	193,96		**56C**	5058
	8,3	5231	5,9	III	209,65		**56C**	5058
	7,6	5726	5,4	III	229,46		**56C**	5058
	6,9	6311	4,9	III	252,87		**56C**	5058
1.0 hp								
0.75 kW	**326**	186	16,6	III	5,38	**ITH112**	**56C-140TC**	987
(1750 rpm)	**271**	221	13,8	III	6,47		**56C-140TC**	1096
	222	274	12,9	III	7,88		**56C-140TC**	1223
	205	301	11,9	III	8,54		**56C-140TC**	1280
	193	319	11,8	III	9,06		**56C-140TC**	1322
	170	354	10,4	III	10,28		**56C-140TC**	1417
	154	398	10,7	III	11,39		**56C-140TC**	1499
	140	434	9,8	III	12,52		**56C-140TC**	1578
	118	513	8,6	III	14,80		**56C-140TC**	1727
	97	628	7,5	III	18,10		**56C-140TC**	1843
	86	708	6,7	III	20,25		**56C-140TC**	1843
	74	814	6,5	III	23,52		**56C-140TC**	1843
	67	912	5,8	III	26,16		**56C-140TC**	1843
	61	1000	5,8	III	28,77		**56C-140TC**	1843
	54	1115	5,4	III	32,18		**56C-140TC**	1843
	48	1266	4,8	III	36,35		**56C-140TC**	1843
	42	1443	4,2	III	41,57		**56C-140TC**	1843
	36	1682	3,2	III	48,27		**56C-140TC**	1843
	31	1991	2,7	III	57,21		**56C-140TC**	1843

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
1.0 hp								
0.75 kW	**32**	1885	3,3	III	55,27	**ITH113**	**56C-140TC**	1843
(1750 rpm)	**26**	2301	2,8	III	67,61		**56C-140TC**	1843
	23	2549	2,4	III	74,96		**56C-140TC**	1843
	19	3124	2,0	II	91,70		**56C-140TC**	1843
	16	3708	1,7	II	108,91		**56C-140TC**	1843
	13	4655	1,3	I	136,65		**56C-140TC**	1843
	11	5585	1,1	I	163,98		**56C-140TC**	1843
	10	5903	1,0	I	173,44		**56C-140TC**	1843
	9,4	6311	1,0	I	185,20		**56C-140TC**	1843
	8,7	6868	0,9	I	201,58		**56C-140TC**	1843
	102	593	12,6	III	17,11	**ITH122**	**56C-140TC**	2674
	90	682	11,1	III	19,50		**56C-140TC**	2810
	82	743	10,7	III	21,43		**56C-140TC**	2810
	73	832	10,4	III	24,00		**56C-140TC**	2810
	67	912	9,5	III	26,28		**56C-140TC**	2810
	60	1027	8,5	III	29,40		**56C-140TC**	2810
	54	1124	7,7	III	32,31		**56C-140TC**	2810
	49	1230	7,0	III	35,47		**56C-140TC**	2810
	42	1452	6,0	III	41,78		**56C-140TC**	2810
	38	1593	5,5	III	45,73		**56C-140TC**	2810
	35	1752	4,9	III	50,40		**56C-140TC**	2810
	31	1903	4,5	III	56,00	**ITH123**	**56C-140TC**	2810
	29	2089	4,2	III	61,31		**56C-140TC**	2810
	25	2399	3,6	III	70,53		**56C-140TC**	2810
	22	2761	3,1	III	81,00		**56C-140TC**	2810
	20	3018	2,9	III	88,68		**56C-140TC**	2810
	17	3585	2,4	III	105,23		**56C-140TC**	2810
	15	3921	2,2	III	115,21		**56C-140TC**	2810
	14	4381	2,0	II	128,73		**56C-140TC**	2810
	12	4903	1,8	II	144,00		**56C-140TC**	2810
	11	5372	1,6	II	157,66		**56C-140TC**	2810
	9,8	6063	1,4	II	178,10		**56C-140TC**	2810
	8,6	6930	1,3	I	203,65		**56C-140TC**	2810
	8,1	7355	1,2	I	216,00		**56C-140TC**	2810
	7,4	8054	1,1	I	236,49		**56C-140TC**	2810
	6,8	8718	1,0	I	256,00		**56C-140TC**	2810
	6,2	9541	0,9	I	280,29		**56C-140TC**	2810
	46	1310	12,8	III	37,71	**ITH132**	**56C-140TC**	4159
	42	1452	11,6	III	41,80		**56C-140TC**	4159
	38	1584	10,6	III	45,60		**56C-140TC**	4159
	35	1735	9,7	III	49,88		**56C-140TC**	4159



Datos técnicos / *Technical data*

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
1.0 hp								
0.75 kW	**29**	2071	8,1	III	60,92	ITH133	56C-140TC	4159
(1750 rpm)	**27**	2204	7,6	III	64,74		56C-140TC	4159
	25	2416	7,0	III	70,88		56C-140TC	4159
	22	2673	6,3	III	78,38		56C-140TC	4159
	20	2965	5,7	III	87,14		56C-140TC	4159
	18	3257	5,2	III	95,67		56C-140TC	4159
	16	3744	4,5	III	109,93		56C-140TC	4159
	15	4098	4,1	III	120,36		56C-140TC	4159
	13	4585	3,7	III	134,66		56C-140TC	4159
	12	5036	3,3	III	147,98		56C-140TC	4159
	11	5532	3,0	III	162,45		56C-140TC	4159
	9,1	6514	2,6	III	191,39		56C-140TC	4159
	8,4	7134	2,4	III	209,48		56C-140TC	4159
	7,6	7859	2,1	III	230,85		56C-140TC	4159
	22	2708	11,5	III	79,43	ITH143	56C-140TC	5058
	20	2921	10,6	III	85,85		56C-140TC	5058
	16	3797	8,2	III	111,40		56C-140TC	5058
	15	4098	7,6	III	120,42		56C-140TC	5058
	13	4487	6,9	III	131,84		56C-140TC	5058
	12	5027	6,2	III	147,51		56C-140TC	5058
	11	5523	5,6	III	162,10		56C-140TC	5058
	9,8	6063	5,1	III	177,95		56C-140TC	5058
	9,0	6603	4,7	III	193,96		56C-140TC	5058
	8,3	7143	4,3	III	209,65		56C-140TC	5058
	7,6	7815	4,0	III	229,46		56C-140TC	5058
	6,9	8612	3,6	III	252,87		56C-140TC	5058
1.5 hp								
1.1 kW	**326**	274	11,3	III	5,38	ITH112	56C-140TC	979
(1750 rpm)	**271**	327	9,4	III	6,47		56C-140TC	1085
	222	398	8,8	III	7,88		56C-140TC	1208
	205	434	8,1	III	8,54		56C-140TC	1263
	193	460	8,0	III	9,06		56C-140TC	1303
	170	522	7,1	III	10,28		56C-140TC	1395
	154	584	7,3	III	11,39		56C-140TC	1473
	140	637	6,7	III	12,52		56C-140TC	1547
	118	752	5,9	III	14,80		56C-140TC	1686
	97	920	5,1	III	18,10		56C-140TC	1843
	86	1036	4,5	III	20,25		56C-140TC	1843
	74	1204	4,4	III	23,52		56C-140TC	1843
	67	1336	4,0	III	26,16		56C-140TC	1843
	61	1469	3,9	III	28,77		56C-140TC	1843
	54	1637	3,7	III	32,18		56C-140TC	1843
	48	1850	3,2	III	36,35		56C-140TC	1843
	42	2124	2,8	III	41,57		56C-140TC	1843
	36	2461	2,2	III	48,27		56C-140TC	1843
	31	2921	1,8	II	57,21		56C-140TC	1843

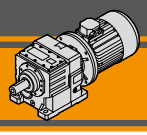
P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
1.5 hp								
1.1 kW	**32**	2761	2,3	III	55,27	ITH113	56C-140TC	1843
(1750 rpm)	**26**	3372	1,9	II	67,61		56C-140TC	1843
	23	3744	1,7	II	74,96		56C-140TC	1843
	19	4576	1,4	II	91,70		56C-140TC	1843
	16	5443	1,1	I	108,91		56C-140TC	1843
	13	6824	0,9	I	136,65		56C-140TC	1843
	198	451	12,8	III	8,82	ITH122	56C-140TC	1833
	174	513	12,9	III	10,08		56C-140TC	1973
	154	575	11,5	III	11,35		56C-140TC	2107
	132	682	11,1	III	13,30		56C-140TC	2297
	110	814	9,3	III	15,92		56C-140TC	2531
	102	876	8,6	III	17,11		56C-140TC	2630
	90	991	7,6	III	19,50		56C-140TC	2810
	82	1089	7,3	III	21,43		56C-140TC	2810
	73	1221	7,1	III	24,00		56C-140TC	2810
	67	1336	6,5	III	26,28		56C-140TC	2810
	60	1496	5,8	III	29,40		56C-140TC	2810
	54	1646	5,3	III	32,31		56C-140TC	2810
	49	1806	4,8	III	35,47		56C-140TC	2810
	42	2133	4,1	III	41,78		56C-140TC	2810
	38	2337	3,7	III	45,73		56C-140TC	2810
	35	2567	3,4	III	50,40		56C-140TC	2810
	31	2797	3,1	III	56,00	ITH123	56C-140TC	2810
	29	3062	2,8	III	61,31		56C-140TC	2810
	25	3523	2,5	III	70,53		56C-140TC	2810
	22	4045	2,1	III	81,00		56C-140TC	2810
	20	4425	2,0	II	88,68		56C-140TC	2810
	17	5257	1,7	II	105,23		56C-140TC	2810
	15	5753	1,5	II	115,21		56C-140TC	2810
	14	6426	1,3	I	128,73		56C-140TC	2810
	12	7196	1,2	I	144,00		56C-140TC	2810
	11	7877	1,1	I	157,66		56C-140TC	2810
	9,8	8895	1,0	I	178,10		56C-140TC	2810
	8,6	10170	0,9	I	203,65		56C-140TC	2810
	68	1310	10,8	III	25,65	ITH132	56C-140TC	4159
	64	1398	10,7	III	27,48		56C-140TC	4159
	57	1558	9,7	III	30,46		56C-140TC	4159
	51	1761	9,5	III	34,61		56C-140TC	4159
	46	1921	8,7	III	37,71		56C-140TC	4159
	42	2133	7,9	III	41,80		56C-140TC	4159
	38	2328	7,2	III	45,60		56C-140TC	4159
	35	2540	6,6	III	49,88		56C-140TC	4159

Datos técnicos

Technical data

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
1.5 hp								
1.1 kW	**29**	3045	5,5	**III**	60,92	**ITH133**	**56C-140TC**	4159
(1750 rpm)	**27**	3231	5,2	**III**	64,74		**56C-140TC**	4159
	25	3540	4,8	**III**	70,88		**56C-140TC**	4159
	22	3912	4,3	**III**	78,38		**56C-140TC**	4159
	20	4355	3,9	**III**	87,14		**56C-140TC**	4159
	18	4779	3,5	**III**	95,67		**56C-140TC**	4159
	16	5487	3,1	**III**	109,93		**56C-140TC**	4159
	15	6010	2,8	**III**	120,36		**56C-140TC**	4159
	13	6727	2,5	**III**	134,66		**56C-140TC**	4159
	12	7390	2,3	**III**	147,98		**56C-140TC**	4159
	11	8116	2,1	**III**	162,45		**56C-140TC**	4159
	9,1	9559	1,8	**II**	191,39		**56C-140TC**	4159
	8,4	10462	1,6	**II**	209,48		**56C-140TC**	4159
	7,6	11533	1,5	**II**	230,85		**56C-140TC**	4159
	28	3080	10,0	**III**	61,74	**ITH143**	**56C-140TC**	5058
	26	3337	9,3	**III**	66,73		**56C-140TC**	5058
	22	3965	7,8	**III**	79,43		**56C-140TC**	5058
	20	4284	7,2	**III**	85,85		**56C-140TC**	5058
	16	5567	5,6	**III**	111,40		**56C-140TC**	5058
	15	6010	5,2	**III**	120,42		**56C-140TC**	5058
	13	6585	4,7	**III**	131,84		**56C-140TC**	5058
	12	7364	4,2	**III**	147,51		**56C-140TC**	5058
	11	8098	3,8	**III**	162,10		**56C-140TC**	5058
	9,8	8886	3,5	**III**	177,95		**56C-140TC**	5058
	9,0	9683	3,2	**III**	193,96		**56C-140TC**	5058
	8,3	10470	3,0	**III**	209,65		**56C-140TC**	5058
	7,6	11462	2,7	**III**	229,46		**56C-140TC**	5058
	6,9	12630	2,5	**III**	252,87		**56C-140TC**	5058
2.0 hp								
1.5 kW	**326**	372	8,3	**III**	5,38	**ITH112**	**56C-140TC**	970
(1750 rpm)	**271**	451	6,9	**III**	6,47		**56C-140TC**	1072
	222	549	6,5	**III**	7,88		**56C-140TC**	1191
	205	593	6,0	**III**	8,54		**56C-140TC**	1243
	193	628	5,9	**III**	9,06		**56C-140TC**	1282
	170	717	5,2	**III**	10,28		**56C-140TC**	1369
	154	797	5,4	**III**	11,39		**56C-140TC**	1442
	140	867	4,9	**III**	12,52		**56C-140TC**	1511
	118	1027	4,3	**III**	14,80		**56C-140TC**	1640
	97	1257	3,7	**III**	18,10		**56C-140TC**	1801
	86	1407	3,3	**III**	20,25		**56C-140TC**	1843
	74	1637	3,2	**III**	23,52		**56C-140TC**	1843
	67	1823	2,9	**III**	26,16		**56C-140TC**	1843
	61	2000	2,9	**III**	28,77		**56C-140TC**	1843
	54	2239	2,7	**III**	32,18		**56C-140TC**	1843
	48	2531	2,4	**III**	36,35		**56C-140TC**	1843
	42	2894	2,1	**III**	41,57		**56C-140TC**	1843
	36	3354	1,6	**II**	48,27		**56C-140TC**	1843
	31	3983	1,3	**I**	57,21		**56C-140TC**	1843

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
2.0 hp								
1.5 kW	**32**	3762	1,6	**II**	55,27	**ITH113**	**56C-140TC**	1843
(1750 rpm)	**26**	4602	1,4	**II**	67,61		**56C-140TC**	1843
	23	5107	1,2	**I**	74,96		**56C-140TC**	1843
	19	6249	1,0	**I**	91,70		**56C-140TC**	1843
	339	363	13,5	**III**	5,17	**ITH122**	**56C-140TC**	1349
	262	469	10,5	**III**	6,69		**56C-140TC**	1558
	225	540	9,8	**III**	7,79		**56C-140TC**	1695
	198	611	9,4	**III**	8,82		**56C-140TC**	1815
	174	699	9,5	**III**	10,08		**56C-140TC**	1952
	154	788	8,4	**III**	11,35		**56C-140TC**	2080
	132	929	8,1	**III**	13,30		**56C-140TC**	2263
	110	1106	6,8	**III**	15,92		**56C-140TC**	2485
	102	1186	6,3	**III**	17,11		**56C-140TC**	2579
	90	1354	5,5	**III**	19,50		**56C-140TC**	2755
	82	1487	5,3	**III**	21,43		**56C-140TC**	2810
	73	1673	5,2	**III**	24,00		**56C-140TC**	2810
	67	1823	4,7	**III**	26,28		**56C-140TC**	2810
	60	2045	4,2	**III**	29,40		**56C-140TC**	2810
	54	2248	3,9	**III**	32,31		**56C-140TC**	2810
	49	2469	3,5	**III**	35,47		**56C-140TC**	2810
	42	2903	3,0	**III**	41,78		**56C-140TC**	2810
	38	3177	2,7	**III**	45,73		**56C-140TC**	2810
	35	3505	2,5	**III**	50,40		**56C-140TC**	2810
	31	3815	2,3	**III**	56,00	**ITH123**	**56C-140TC**	2810
	29	4178	2,1	**III**	61,31		**56C-140TC**	2810
	25	4806	1,8	**II**	70,53		**56C-140TC**	2810
	22	5514	1,6	**II**	81,00		**56C-140TC**	2810
	20	6036	1,4	**II**	88,68		**56C-140TC**	2810
	17	7169	1,2	**I**	105,23		**56C-140TC**	2810
	15	7851	1,1	**I**	115,21		**56C-140TC**	2810
	14	8771	1,0	**I**	128,73		**56C-140TC**	2810
	12	9807	0,9	**I**	144,00		**56C-140TC**	2810
	194	628	12,7	**III**	9,03	**ITH132**	**56C-140TC**	4159
	170	717	11,7	**III**	10,30		**56C-140TC**	4159
	159	770	11,0	**III**	11,01		**56C-140TC**	4159
	141	859	12,3	**III**	12,39		**56C-140TC**	4159
	118	1027	10,3	**III**	14,80		**56C-140TC**	4159
	116	1053	11,0	**III**	15,11		**56C-140TC**	4159
	94	1301	10,2	**III**	18,69		**56C-140TC**	4159
	86	1416	10,0	**III**	20,31		**56C-140TC**	4159
	68	1788	7,9	**III**	25,65		**56C-140TC**	4159
	64	1912	7,9	**III**	27,48		**56C-140TC**	4159
	57	2115	7,1	**III**	30,46		**56C-140TC**	4159
	51	2407	7,0	**III**	34,61		**56C-140TC**	4159
	46	2620	6,4	**III**	37,71		**56C-140TC**	4159
	42	2903	5,8	**III**	41,80		**56C-140TC**	4159
	38	3169	5,3	**III**	45,60		**56C-140TC**	4159
	35	3469	4,8	**III**	49,88		**56C-140TC**	4159



Datos técnicos

Technical data

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
2.0 hp								
1.5 kW	**29**	4151	4,1	III	60,92	ITH133	56C-140TC	4159
(1750 rpm)	**27**	4408	3,8	III	64,74		56C-140TC	4159
	25	4824	3,5	III	70,88		56C-140TC	4159
	22	5337	3,2	III	78,38		56C-140TC	4159
	20	5939	2,8	III	87,14		56C-140TC	4159
	18	6514	2,6	III	95,67		56C-140TC	4159
	16	7488	2,2	III	109,93		56C-140TC	4159
	15	8196	2,1	III	120,36		56C-140TC	4159
	13	9169	1,8	II	134,66		56C-140TC	4159
	12	10081	1,7	II	147,98		56C-140TC	4159
	11	11063	1,5	II	162,45		56C-140TC	4159
	9,1	13037	1,3	I	191,39		56C-140TC	4159
	8,4	14267	1,2	I	209,48		56C-140TC	4159
	7,6	15719	1,1	I	230,85		56C-140TC	4159
	28	4204	7,4	III	61,74	ITH143	56C-140TC	5058
	26	4540	6,8	III	66,73		56C-140TC	5058
	22	5408	5,7	III	79,43		56C-140TC	5058
	20	5850	5,3	III	85,85		56C-140TC	5058
	16	7585	4,1	III	111,40		56C-140TC	5058
	15	8205	3,8	III	120,42		56C-140TC	5058
	13	8975	3,5	III	131,84		56C-140TC	5058
	12	10046	3,1	III	147,51		56C-140TC	5058
	11	11037	2,8	III	162,10		56C-140TC	5058
	9,8	12117	2,6	III	177,95		56C-140TC	5058
	9,0	13205	2,3	III	193,96		56C-140TC	5058
	8,3	14276	2,2	III	209,65		56C-140TC	5058
	7,6	15630	2,0	II	229,46		56C-140TC	5058
	6,9	17224	1,8	II	252,87		56C-140TC	5058
3.0 hp								
2.2 kW	**326**	549	5,6	III	5,38	ITH112	140C-180TC	953
(1750 rpm)	**271**	664	4,7	III	6,47		140C-180TC	1050
	222	805	4,4	III	7,88		140C-180TC	1161
	205	867	4,1	III	8,54		140C-180TC	1209
	193	920	4,0	III	9,06		140C-180TC	1245
	170	1044	3,5	III	10,28		140C-180TC	1323
	154	1159	3,7	III	11,39		140C-180TC	1388
	140	1275	3,3	III	12,52		140C-180TC	1449
	118	1513	2,9	III	14,80		140C-180TC	1559
	97	1850	2,5	III	18,10		140C-180TC	1689
	86	2062	2,3	III	20,25		140C-180TC	1759
	74	2399	2,2	III	23,52		140C-180TC	1843
	67	2664	2,0	II	26,16		140C-180TC	1843
	61	2938	2,0	II	28,77		140C-180TC	1843
	54	3284	1,8	II	32,18		140C-180TC	1843
	48	3708	1,6	II	36,35		140C-180TC	1843
	42	4240	1,4	II	41,57		140C-180TC	1843
	36	4921	1,1	I	48,27		140C-180TC	1843
	31	5833	0,9	I	57,21		140C-180TC	1843
	32	5523	1,1	I	55,27	ITH113	140TC	1843
	26	6753	0,9	I	67,61		140TC	1843

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
3.0 hp								
2.2 kW	**339**	531	9,2	III	5,17	ITH122	140C-180TC	1336
(1750 rpm)	**262**	682	7,1	III	6,69		140C-180TC	1538
	225	797	6,7	III	7,79		140C-180TC	1670
	198	903	6,4	III	8,82		140C-180TC	1784
	174	1027	6,5	III	10,08		140C-180TC	1913
	154	1159	5,7	III	11,35		140C-180TC	2034
	132	1354	5,5	III	13,30		140C-180TC	2204
	110	1620	4,6	III	15,92		140C-180TC	2406
	102	1744	4,3	III	17,11		140C-180TC	2491
	90	1991	3,8	III	19,50		140C-180TC	2646
	82	2186	3,6	III	21,43		140C-180TC	2760
	73	2452	3,5	III	24,00		140C-180TC	2810
	67	2682	3,2	III	26,28		140C-180TC	2810
	60	3000	2,9	III	29,40		140C-180TC	2810
	54	3292	2,6	III	32,31		140C-180TC	2810
	49	3620	2,4	III	35,47		140C-180TC	2810
	42	4266	2,0	II	41,78		140C-180TC	2810
	38	4664	1,9	II	45,73		140C-180TC	2810
	35	5142	1,7	II	50,40		140C-180TC	2810
	31	5594	1,6	II	56,00	ITH123	140C-180TC	2810
	29	6125	1,4	II	61,31		140C-180TC	2810
	25	7045	1,2	I	70,53		140C-180TC	2810
	22	8090	1,1	I	81,00		140C-180TC	2810
	194	920	8,6	III	9,03	ITH132	140C-180TC	4159
	170	1053	8,0	III	10,30		140C-180TC	4159
	159	1124	7,5	III	11,01		140C-180TC	4159
	141	1266	8,4	III	12,39		140C-180TC	4159
	118	1513	7,0	III	14,80		140C-180TC	4159
	116	1540	7,5	III	15,11		140C-180TC	4159
	94	1903	7,0	III	18,69		140C-180TC	4159
	86	2071	6,8	III	20,31		140C-180TC	4159
	68	2620	5,4	III	25,65		140C-180TC	4159
	64	2806	5,4	III	27,48		140C-180TC	4159
	57	3107	4,8	III	30,46		140C-180TC	4159
	51	3531	4,8	III	34,61		140C-180TC	4159
	46	3850	4,4	III	37,71		140C-180TC	4159
	42	4266	3,9	III	41,80		140C-180TC	4159
	38	4655	3,6	III	45,60		140C-180TC	4159
	35	5089	3,3	III	49,88		140C-180TC	4159
	29	6080	2,8	III	60,92	ITH133	140C-180TC	4159
	27	6470	2,6	III	64,74		140C-180TC	4159
	25	7081	2,4	III	70,88		140C-180TC	4159
	22	7824	2,1	III	78,38		140C-180TC	4159
	20	8700	1,9	II	87,14		140C-180TC	4159
	18	9559	1,8	II	95,67		140C-180TC	4159
	16	10984	1,5	II	109,93		140C-180TC	4159
	15	12019	1,4	II	120,36		140C-180TC	4159
	13	13453	1,3	I	134,66		140C-180TC	4159
	12	14781	1,1	I	147,98		140C-180TC	4159
	11	16223	1,0	I	162,45		140C-180TC	4159
	9,1	19118	0,9	I	191,39		140C-180TC	4159

Datos técnicos / *Technical data*

3.0 hp

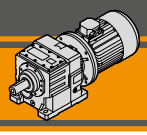
P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
2.2 kW	**107**	1673	12,2	III	16,40	ITH142	140C-180TC	5058
(1750 rpm)	**87**	2062	12,0	III	20,24		140C-180TC	5058
	67	2655	10,7	III	25,99		140C-180TC	5058
	54	3301	8,6	III	32,35		140C-180TC	5058
	40	4443	6,4	III	43,57		140C-180TC	5058
	37	4833	5,9	III	47,35		140C-180TC	5058
	34	5284	5,4	III	51,76		140C-180TC	5058
	28	6169	5,0	III	61,74	ITH143	140C-180TC	5058
	26	6665	4,6	III	66,73		140C-180TC	5058
	22	7930	3,9	III	79,43		140C-180TC	5058
	20	8576	3,6	III	85,85		140C-180TC	5058
	16	11125	2,8	III	111,40		140C-180TC	5058
	15	12028	2,6	III	120,42		140C-180TC	5058
	13	13170	2,4	III	131,84		140C-180TC	5058
	12	14736	2,1	III	147,51		140C-180TC	5058
	11	16188	1,9	II	162,10		140C-180TC	5058
	9,8	17772	1,7	II	177,95		140C-180TC	5058
	9,0	19374	1,6	II	193,96		140C-180TC	5058
	8,3	20941	1,5	II	209,65		140C-180TC	5058
	7,6	22923	1,4	II	229,46		140C-180TC	5058
	6,9	25260	1,2	I	252,87		140C-180TC	5058

5.0 hp

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
3.7 kW	**326**	920	3,4	III	5,38	ITH112	180TC	911
(1750 rpm)	**271**	1106	2,8	III	6,47		180TC	994
	222	1354	2,6	III	7,88		180TC	1084
	205	1469	2,4	III	8,54		180TC	1122
	193	1558	2,4	III	9,06		180TC	1149
	170	1761	2,1	III	10,28		180TC	1206
	154	1956	2,2	III	11,39		180TC	1251
	140	2151	2,0	II	12,52		180TC	1289
	118	2540	1,7	II	14,80		180TC	1350
	97	3107	1,5	II	18,10		180TC	1402
	86	3478	1,4	II	20,25		180TC	1416
	74	4036	1,3	I	23,52		180TC	1411
	67	4487	1,2	I	26,16		180TC	1843
	61	4939	1,2	I	28,77		180TC	1843
	54	5523	1,1	I	32,18		180TC	1843
	48	6240	1,0	I	36,35		180TC	1843
	339	885	5,5	III	5,17	ITH122	180TC	1303
	262	1151	4,2	III	6,69		180TC	1486
	225	1336	4,0	III	7,79		180TC	1604
	198	1513	3,8	III	8,82		180TC	1704
	174	1726	3,8	III	10,08		180TC	1815
	154	1947	3,4	III	11,35		180TC	1915
	132	2283	3,3	III	13,30		180TC	2051
	110	2735	2,8	III	15,92		180TC	2203
	102	2938	2,6	III	17,11		180TC	2263
	90	3346	2,2	III	19,50		180TC	2366
	82	3673	2,2	III	21,43		180TC	2434
	73	4116	2,1	III	24,00		180TC	2508
	67	4505	1,9	II	26,28		180TC	2558

5.0 hp

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
3.7 kW	**60**	5045	1,7	II	29,40	ITH122	180TC	2604
(1750 rpm)	**54**	5541	1,6	II	32,31		180TC	2626
	49	6080	1,4	I	35,47		180TC	2630
	42	7169	1,2	I	41,78		180TC	2579
	38	7842	1,1	I	45,73		180TC	2810
	35	8647	1,0	III	50,40		180TC	2810
	194	1549	5,1	III	9,03	ITH132	180TC	4126
	170	1770	4,8	III	10,30		180TC	4159
	159	1885	4,5	III	11,01		180TC	4159
	141	2124	5,0	III	12,39		180TC	4159
	118	2540	4,2	III	14,80		180TC	4159
	116	2593	4,4	III	15,11		180TC	4159
	94	3204	4,1	III	18,69		180TC	4159
	86	3487	4,1	III	20,31		180TC	4159
	68	4399	3,2	III	25,65		180TC	4159
	64	4717	3,2	III	27,48		180TC	4159
	57	5222	2,9	III	30,46		180TC	4159
	51	5939	2,8	III	34,61		180TC	4159
	46	6470	2,6	III	37,71		180TC	4159
	42	7169	2,3	III	41,80		180TC	4159
	38	7824	2,1	III	45,60		180TC	4159
	35	8559	2,0	II	49,88		180TC	4159
	29	10231	1,6	II	60,92	ITH133	180TC	4159
	27	10878	1,5	II	64,74		180TC	4159
	25	11904	1,4	II	70,88		180TC	4159
	22	13170	1,3	I	78,38		180TC	4159
	20	14639	1,1	I	87,14		180TC	4159
	18	16073	1,0	I	95,67		180TC	4159
	137	2195	8,9	III	12,78	ITH142	180TC	5058
	124	2416	8,4	III	14,08		180TC	5058
	107	2815	7,2	III	16,40		180TC	5058
	87	3469	7,1	III	20,24		180TC	5058
	67	4461	6,4	III	25,99		180TC	5058
	54	5549	5,1	III	32,35		180TC	5058
	40	7479	3,8	III	43,57		180TC	5058
	37	8125	3,5	III	47,35		180TC	5058
	34	8877	3,2	III	51,76		180TC	5058
	28	10373	3,0	III	61,74	ITH143	180TC	5058
	26	11214	2,8	III	66,73		180TC	5058
	22	13347	2,3	III	79,43		180TC	5058
	20	14418	2,1	III	85,85		180TC	5058
	16	18710	1,7	II	111,40		180TC	5058
	15	20224	1,5	II	120,42		180TC	5058
	13	22145	1,4	II	131,84		180TC	5058
	12	24782	1,3	II	147,51		180TC	5058
	11	27234	1,1	I	162,10		180TC	5058
	9,8	29889	1,0	I	177,95		180TC	5058
	9,0	32580	1,0	I	193,96		180TC	5058



Datos técnicos

Technical data

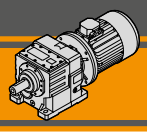
P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
7.5 hp								
5.5 kW	**326**	1372	2,3	**III**	5,38	**ITH112**	**210TC**	876
(1750 rpm)	**271**	1646	1,9	**II**	6,47		**210TC**	947
	222	2009	1,8	**II**	7,88		**210TC**	1020
	205	2177	1,6	**II**	8,54		**210TC**	1049
	193	2310	1,6	**II**	9,06		**210TC**	1069
	170	2620	1,4	**II**	10,28		**210TC**	1108
	154	2903	1,5	**II**	11,39		**210TC**	1136
	140	3195	1,3	**I**	12,52		**210TC**	1156
	97	4620	1,0	**I**	18,10		**210TC**	1402
	339	1319	3,7	**III**	5,17	**ITH122**	**210TC**	1275
	262	1708	2,9	**III**	6,69		**210TC**	1443
	225	1983	2,7	**III**	7,79		**210TC**	1550
	198	2248	2,6	**III**	8,82		**210TC**	1638
	174	2567	2,6	**III**	10,08		**210TC**	1732
	154	2894	2,3	**III**	11,35		**210TC**	1816
	132	3390	2,2	**III**	13,30		**210TC**	1923
	110	4062	1,9	**II**	15,92		**210TC**	2034
	102	4363	1,7	**II**	17,11		**210TC**	2073
	90	4974	1,5	**II**	19,50		**210TC**	2132
	82	5461	1,5	**II**	21,43		**210TC**	2163
	73	6125	1,4	**II**	24,00		**210TC**	2183
	67	6700	1,3	**I**	26,28		**210TC**	2183
	60	7497	1,2	**I**	29,40		**210TC**	2157
	54	8240	1,1	**I**	32,31		**210TC**	2626
	49	9045	1,0	**I**	35,47		**210TC**	2630
	348	1283	5,9	**III**	5,03	**ITH132**	**210TC**	2994
	287	1558	4,8	**III**	6,09		**210TC**	3299
	253	1761	4,5	**III**	6,91		**210TC**	3514
	233	1912	4,2	**III**	7,51		**210TC**	3662
	209	2133	3,7	**III**	8,36		**210TC**	3858
	194	2301	3,5	**III**	9,03		**210TC**	4001
	170	2629	3,2	**III**	10,30		**210TC**	4159
	159	2806	3,0	**III**	11,01		**210TC**	4159
	141	3160	3,4	**III**	12,39		**210TC**	4159
	118	3770	2,8	**III**	14,80		**210TC**	4159
	116	3850	3,0	**III**	15,11		**210TC**	4159
	94	4771	2,8	**III**	18,69		**210TC**	4159
	86	5178	2,7	**III**	20,31		**210TC**	4159
	68	6541	2,2	**III**	25,65		**210TC**	4159
	64	7010	2,1	**III**	27,48		**210TC**	4159
	57	7771	1,9	**II**	30,46		**210TC**	4159
	51	8824	1,9	**II**	34,61		**210TC**	4159
	46	9612	1,7	**II**	37,71		**210TC**	4159
	42	10656	1,6	**II**	41,80		**210TC**	4159
	38	11630	1,4	**II**	45,60		**210TC**	4159
	35	12719	1,3	**I**	49,88		**210TC**	4159
	29	15214	1,1	**I**	60,92	**ITH133**	**210TC**	4159
	27	16161	1,0	**I**	64,74		**210TC**	4159
	25	17702	1,0	**I**	70,88		**210TC**	4159

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
7.5 hp								
5.5 kW	**285**	1567	10,2	**III**	6,15	**ITH142**	**210TC**	4903
(1750 rpm)	**238**	1876	8,5	**III**	7,35		**210TC**	5058
	197	2266	7,8	**III**	8,88		**210TC**	5058
	180	2487	7,1	**III**	9,75		**210TC**	5058
	169	2638	7,0	**III**	10,35		**210TC**	5058
	150	2974	6,3	**III**	11,65		**210TC**	5058
	137	3257	6,0	**III**	12,78		**210TC**	5058
	124	3593	5,7	**III**	14,08		**210TC**	5058
	107	4178	4,9	**III**	16,40		**210TC**	5058
	99	4523	5,5	**III**	17,73		**210TC**	5058
	87	5160	4,8	**III**	20,24		**210TC**	5058
	67	6629	4,3	**III**	25,99		**210TC**	5058
	62	7169	4,0	**III**	28,10		**210TC**	5058
	54	8249	3,4	**III**	32,35		**210TC**	5058
	47	9461	3,0	**III**	37,09		**210TC**	5058
	40	11108	2,5	**III**	43,57		**210TC**	5058
	37	12072	2,3	**III**	47,35		**210TC**	5058
	34	13196	2,1	**III**	51,76		**210TC**	5058
	28	15418	2,0	**II**	61,74	**ITH143**	**210TC**	5058
	26	16666	1,9	**II**	66,73		**210TC**	5058
	22	19835	1,6	**II**	79,43		**210TC**	5058
	20	21437	1,4	**II**	85,85		**210TC**	5058
	16	27818	1,1	**I**	111,40		**210TC**	5058
	15	30066	1,0	**I**	120,42		**210TC**	5058
	13	32925	0,9	**I**	131,84		**210TC**	5058
10.0 hp								
7.5 kW	**326**	1868	1,7	**II**	5,38	**ITH112**	**210TC**	830
(1750 rpm)	**271**	2248	1,4	**II**	6,47		**210TC**	885
	222	2735	1,3	**I**	7,88		**210TC**	935
	205	2974	1,2	**I**	8,54		**210TC**	952
	193	3151	1,1	**I**	9,06		**210TC**	963
	170	3576	1,0	**I**	10,28		**210TC**	1108
	154	3965	1,1	**I**	11,39		**210TC**	1136
	140	4355	1,0	**I**	12,52		**210TC**	1156
	339	1797	2,7	**III**	5,17	**ITH122**	**210TC**	1238
	262	2328	2,1	**III**	6,69		**210TC**	1386
	225	2708	2,0	**II**	7,79		**210TC**	1477
	198	3071	1,9	**II**	8,82		**210TC**	1549
	174	3505	1,9	**II**	10,08		**210TC**	1623
	154	3947	1,7	**II**	11,35		**210TC**	1684
	132	4629	1,6	**II**	13,30		**210TC**	1754
	110	5532	1,4	**II**	15,92		**210TC**	1808
	102	5948	1,3	**I**	17,11		**210TC**	1820
	90	6780	1,1	**I**	19,50		**210TC**	2132
	82	7452	1,1	**I**	21,43		**210TC**	2163
	73	8346	1,0	**I**	24,00		**210TC**	2183
	67	9134	0,9	**I**	26,28		**210TC**	2183

Datos técnicos / *Technical data*

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
10.0 hp								
7.5 kW	**348**	1752	4,3	**III**	5,03	**ITH132**	**210TC**	2929
(1750 rpm)	**287**	2115	3,6	**III**	6,09		**210TC**	3209
	253	2399	3,3	**III**	6,91		**210TC**	3405
	233	2611	3,1	**III**	7,51		**210TC**	3538
	209	2903	2,7	**III**	8,36		**210TC**	3710
	194	3142	2,5	**III**	9,03		**210TC**	3834
	170	3585	2,3	**III**	10,30		**210TC**	4046
	159	3832	2,2	**III**	11,01		**210TC**	4150
	141	4310	2,5	**III**	12,39		**210TC**	4159
	118	5142	2,1	**III**	14,80		**210TC**	4159
	116	5248	2,2	**III**	15,11		**210TC**	4159
	94	6496	2,0	**II**	18,69		**210TC**	4159
	86	7063	2,0	**II**	20,31		**210TC**	4159
	68	8922	1,6	**II**	25,65		**210TC**	4159
	64	9559	1,6	**II**	27,48		**210TC**	4159
	57	10594	1,4	**II**	30,46		**210TC**	4159
	51	12037	1,4	**II**	34,61		**210TC**	4159
	46	13117	1,3	**I**	37,71		**210TC**	4159
	42	14533	1,2	**I**	41,80		**210TC**	4159
	38	15861	1,1	**I**	45,60		**210TC**	4159
	35	17347	1,0	**I**	49,88		**210TC**	4159
	285	2142	7,4	**III**	6,15	**ITH142**	**210TC**	4826
	238	2558	6,2	**III**	7,35		**210TC**	5058
	197	3089	5,7	**III**	8,88		**210TC**	5058
	180	3390	5,2	**III**	9,75		**210TC**	5058
	169	3602	5,2	**III**	10,35		**210TC**	5058
	150	4054	4,6	**III**	11,65		**210TC**	5058
	137	4443	4,4	**III**	12,78		**210TC**	5058
	124	4894	4,2	**III**	14,08		**210TC**	5058
	107	5700	3,6	**III**	16,40		**210TC**	5058
	99	6169	4,0	**III**	17,73		**210TC**	5058
	87	7036	3,5	**III**	20,24		**210TC**	5058
	67	9037	3,1	**III**	25,99		**210TC**	5058
	62	9771	2,9	**III**	28,10		**210TC**	5058
	54	11249	2,5	**III**	32,35		**210TC**	5058
	47	12896	2,2	**III**	37,09		**210TC**	5058
	40	15152	1,9	**II**	43,57		**210TC**	5058
	37	16462	1,7	**II**	47,35		**210TC**	5058
	34	18002	1,6	**II**	51,76		**210TC**	5058
	28	21021	1,5	**II**	61,74	**ITH143**	**210TC**	5058
	26	22720	1,4	**II**	66,73		**210TC**	5058
	22	27048	1,1	**I**	79,43		**210TC**	5058
	20	29234	1,1	**I**	85,85		**210TC**	5058

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
15.0 hp								
11.0 kW	**348**	2567	2,9	**III**	5,03	**ITH132**	**250TC**	2816
(1750 rpm)	**287**	3107	2,4	**III**	6,09		**250TC**	3053
	253	3523	2,3	**III**	6,91		**250TC**	3215
	233	3832	2,1	**III**	7,51		**250TC**	3320
	209	4266	1,9	**II**	8,36		**250TC**	3452
	194	4602	1,7	**II**	9,03		**250TC**	3543
	170	5257	1,6	**II**	10,30		**250TC**	3686
	159	5611	1,5	**II**	11,01		**250TC**	3751
	141	6319	1,7	**II**	12,39		**250TC**	3851
	118	7550	1,4	**II**	14,80		**250TC**	3945
	116	7700	1,5	**II**	15,11		**250TC**	3950
	94	9532	1,4	**II**	18,69		**250TC**	3916
	86	10355	1,4	**II**	20,31		**250TC**	3847
	68	13081	1,1	**I**	25,65		**250TC**	4159
	51	17648	1,0	**I**	34,61		**250TC**	4159
	285	3133	5,1	**III**	6,15	**ITH142**	**250TC**	4692
	238	3753	4,2	**III**	7,35		**250TC**	5058
	197	4532	3,9	**III**	8,88		**250TC**	5058
	180	4974	3,6	**III**	9,75		**250TC**	5058
	169	5275	3,5	**III**	10,35		**250TC**	5058
	150	5939	3,1	**III**	11,65		**250TC**	5058
	137	6514	3,0	**III**	12,78		**250TC**	5058
	124	7178	2,8	**III**	14,08		**250TC**	5058
	107	8364	2,4	**III**	16,40		**250TC**	5058
	99	9045	2,7	**III**	17,73		**250TC**	5058
	87	10320	2,4	**III**	20,24		**250TC**	5058
	67	13258	2,1	**III**	25,99		**250TC**	5058
	62	14329	2,0	**II**	28,10		**250TC**	5058
	54	16498	1,7	**II**	32,35		**250TC**	5058
	47	18914	1,5	**II**	37,09		**250TC**	5058
	40	22224	1,3	**I**	43,57		**250TC**	5058
	28	30836	1,0	**I**	61,74	**ITH143**	**250TC**	5058
	26	33323	0,9	**I**	66,73	**ITH143**	**250TC**	5058



Datos técnicos / *Technical data*

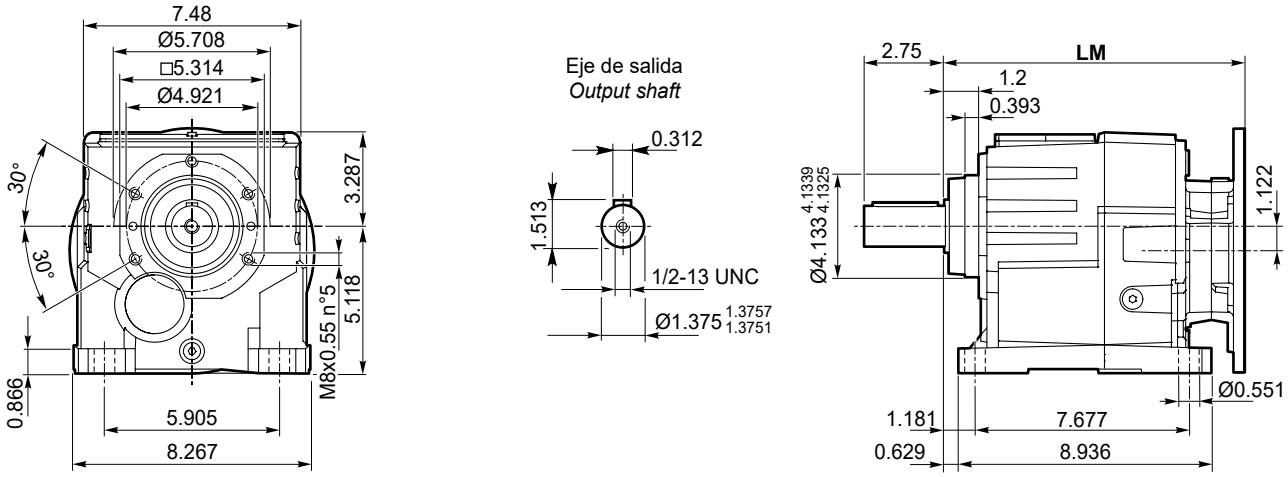
P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
20.0 hp								
15.0 kW	**348**	3505	2,1	**III**	5,03	**ITH132**	**250TC**	2686
(1750 rpm)	**287**	4240	1,8	**II**	6,09		**250TC**	2874
	253	4806	1,7	**II**	6,91		**250TC**	2996
	233	5222	1,5	**II**	7,51		**250TC**	3071
	209	5815	1,4	**II**	8,36		**250TC**	3157
	194	6284	1,3	**I**	9,03		**250TC**	3209
	170	7169	1,2	**I**	10,30		**250TC**	3686
	159	7656	1,1	**I**	11,01		**250TC**	3751
	141	8621	1,2	**I**	12,39		**250TC**	3851
	118	10293	1,0	**I**	14,80		**250TC**	3945
	116	10506	1,1	**I**	15,11		**250TC**	3950
	94	13002	1,0	**I**	18,69		**250TC**	3916
	86	14126	1,0	**I**	20,31		**250TC**	3847
	285	4275	3,7	**III**	6,15	**ITH142**	**250TC**	4538
	238	5116	3,1	**III**	7,35		**250TC**	4866
	197	6178	2,9	**III**	8,88		**250TC**	5058
	180	6780	2,6	**III**	9,75		**250TC**	5058
	169	7196	2,6	**III**	10,35		**250TC**	5058
	150	8098	2,3	**III**	11,65		**250TC**	5058
	137	8886	2,2	**III**	12,78		**250TC**	5058
	124	9789	2,1	**III**	14,08		**250TC**	5058
	107	11400	1,8	**II**	16,40		**250TC**	5058
	99	12338	2,0	**II**	17,73		**250TC**	5058
	87	14082	1,8	**II**	20,24		**250TC**	5058
	67	18082	1,6	**II**	25,99		**250TC**	5058
	62	19542	1,4	**II**	28,10		**250TC**	5058
	54	22499	1,3	**I**	32,35		**250TC**	5038
	47	25791	1,1	**I**	37,09		**250TC**	5058
	40	30305	0,9	**I**	43,57		**250TC**	5058

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
25.0 hp								
18.5 kW	**348**	4319	1,7	**II**	5,03	**ITH132**	**280TC**	2573
(1750 rpm)	**287**	5222	1,4	**II**	6,09		**280TC**	2718
	253	5930	1,3	**I**	6,91		**280TC**	2806
	233	6443	1,2	**I**	7,51		**280TC**	2853
	209	7169	1,1	**I**	8,36		**280TC**	3157
	194	7744	1,0	**I**	9,03		**280TC**	3209
	170	8842	1,0	**I**	10,30		**280TC**	3686
	159	9444	0,9	**I**	11,01		**280TC**	3751
	141	10630	1,0	**I**	12,39		**280TC**	3851
	285	5275	3,0	**III**	6,15	**ITH142**	**280TC**	4404
	238	6302	2,5	**III**	7,35		**280TC**	4685
	197	7620	2,3	**III**	8,88		**280TC**	4978
	180	8364	2,1	**III**	9,75		**280TC**	5058
	169	8877	2,1	**III**	10,35		**280TC**	5058
	150	9992	1,9	**II**	11,65		**280TC**	5058
	137	10957	1,8	**II**	12,78		**280TC**	5058
	124	12072	1,7	**II**	14,08		**280TC**	5058
	107	14064	1,4	**II**	16,40		**280TC**	5058
	99	15214	1,6	**II**	17,73		**280TC**	5058
	87	17365	1,4	**II**	20,24		**280TC**	5058
	67	22295	1,3	**I**	25,99		**280TC**	4528
	62	24101	1,2	**I**	28,10		**280TC**	5058
	54	27747	1,0	**I**	32,35		**280TC**	5038
	47	31810	0,9	**I**	37,09		**280TC**	5058
30.0 hp								
22.3 kW	**348**	5204	1,4	**II**	5,03	**ITH132**	**280TC**	2460
(1750 rpm)	**287**	6302	1,2	**I**	6,09		**280TC**	2561
	253	7143	1,1	**I**	6,91		**280TC**	2806
	233	7762	1,0	**I**	7,51		**280TC**	2853
	209	8647	0,9	**I**	8,36		**280TC**	3157
	285	6364	2,5	**III**	6,15	**ITH142**	**280TC**	4270
	238	7603	2,1	**III**	7,35		**280TC**	4504
	197	9187	1,9	**II**	8,88		**280TC**	4736
	180	10081	1,8	**II**	9,75		**280TC**	4828
	169	10701	1,7	**II**	10,35		**280TC**	4877
	150	12037	1,5	**II**	11,65		**280TC**	4946
	137	13205	1,5	**II**	12,78		**280TC**	4968
	124	14559	1,4	**II**	14,08		**280TC**	4952
	107	16949	1,2	**I**	16,40		**280TC**	4828
	99	18339	1,4	**II**	17,73		**280TC**	4705
	87	20932	1,2	**I**	20,24		**280TC**	4382
	67	26880	1,1	**I**	25,99		**280TC**	4528
	62	29048	1,0	**I**	28,10		**280TC**	5058

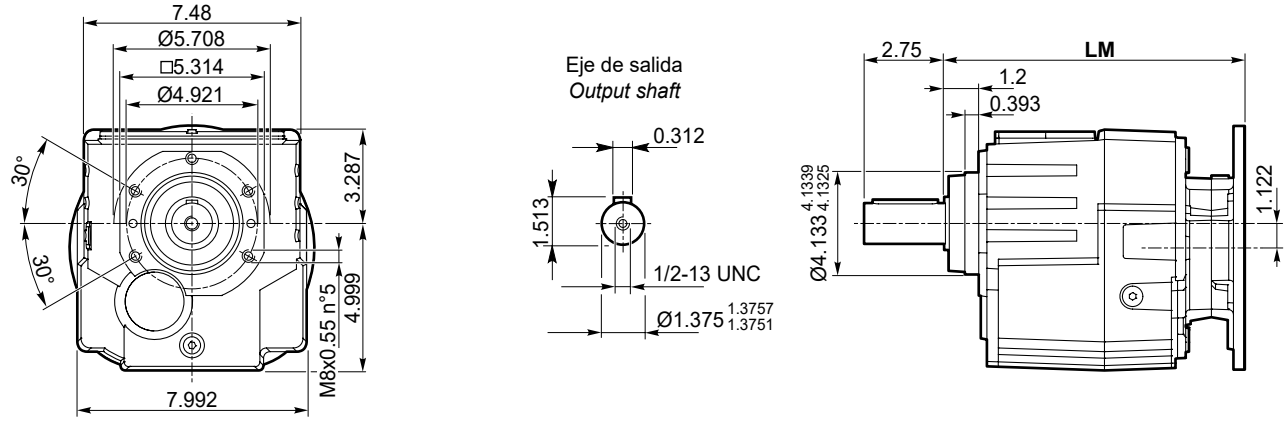
Dimensiones ***Dimensions***

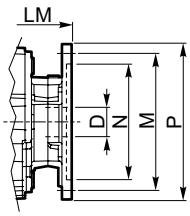
ITH 112 - ITH 113

ITH 112 U
ITH 113 U



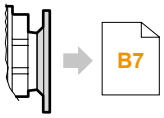
ITH 112 G
ITH 113 G



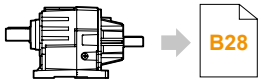


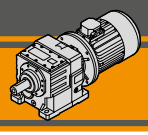
Dimensiones NEMA/ *NEMA Dimensions*				
	56C	**140TC**	**180TC**	**210TC**
LM	**12.125**		**13.149**	
N	4.5		8.5	
M	5.875		7.25	
P	6.5		9	
D	0.625	0.875	1.125	1.375

Bridas Motor
NEMA C-FACE



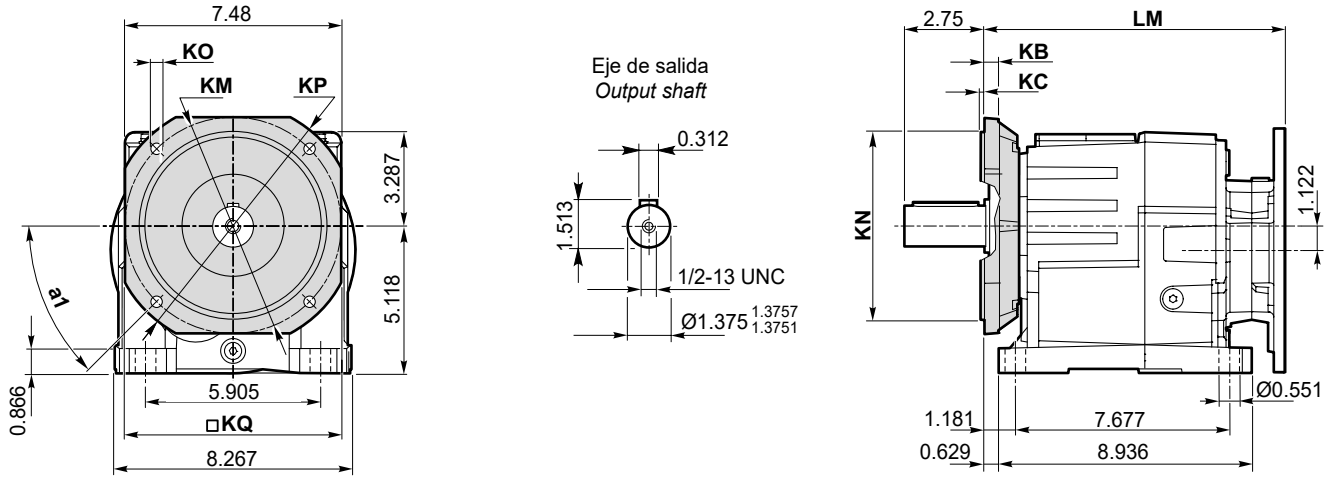
ITHIS 112...
ITHIS 113...



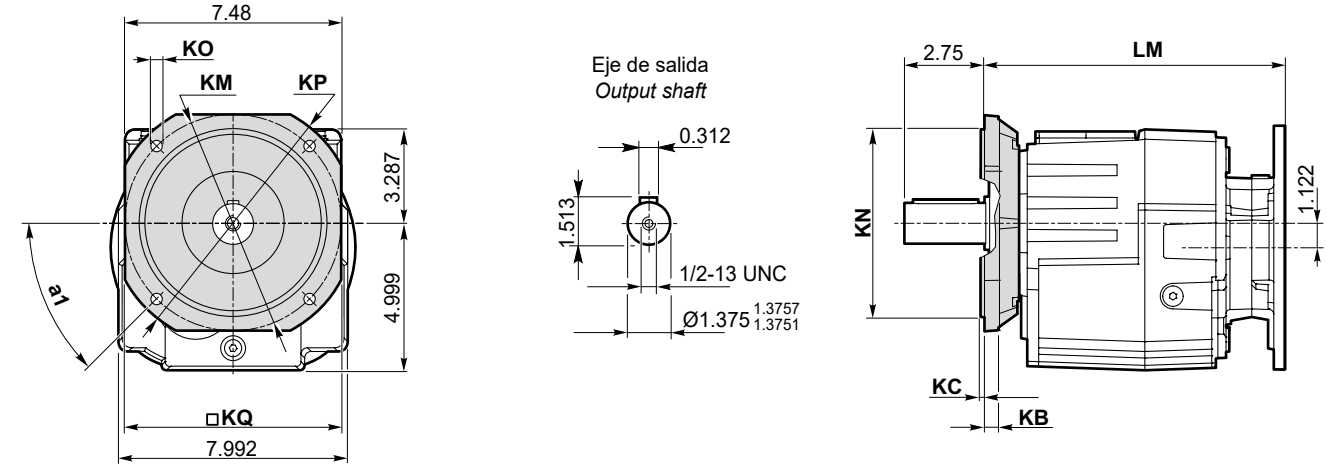


ITH 112 - ITH 113

ITH 112 U/F...
ITH 113 U/F...



ITH 112 F...
ITH 113 F...



Versión **F** / ***F** Version*										
ITH	**a_1**	**KB**	**KC**	**KM**	**KN**	**KO**	**KP**	**KQ**	**Brida / *Flange***	
									Tipo / *Type*	Peso / *Weight* [lb]
112 113	45°	0.472	0.157	6.496	5.118 5.1164 5.1148	0.433	7.874	6.496	**F200**	**4.6**
	45°	0.472	0.157	8.465	7.086 7.0849 7.0833	0.551	9.843	8.465	**F250**	**7.0**

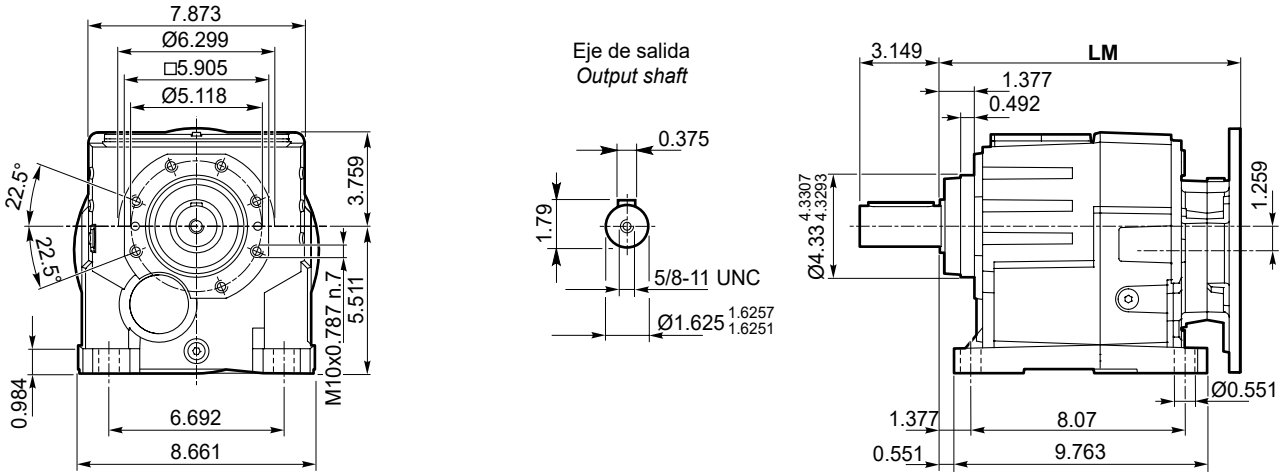
Peso / *Weight [lb]*				
ITH	**56C**	**140TC**	**180TC**	**210TC**
112 U	59.02		66.60	
112 G	55.71		63.29	
113 U	60.12		-	-
113 G	56.81		-	-

Nota: Peso del reductor llenado con aceite para la posición de montaje M1 (B3)
Note: weight of the gearbox filled with oil for M1 (B3) assembly position

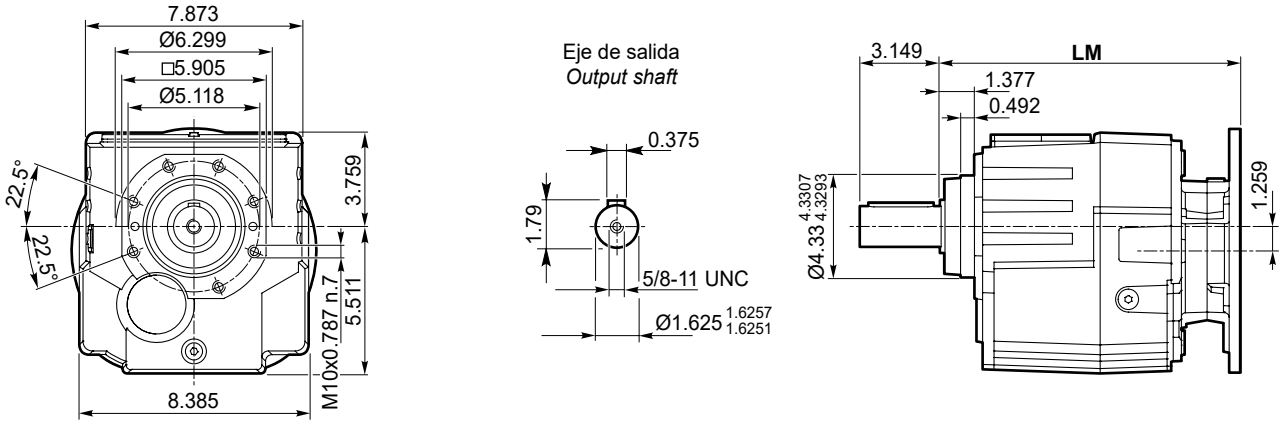
Dimensiones *Dimensions*

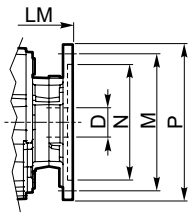
ITH 122 - ITH 123

ITH 122 U
ITH 123 U



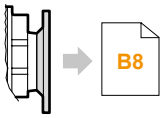
ITH 122 G
ITH 123 G



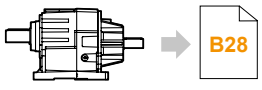


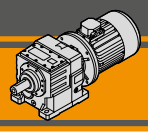
Dimensiones NEMA/ *NEMA Dimensions*				
	56C	**140TC**	**180TC**	**210TC**
LM	**12.933**		**13.956**	
N	4.5		8.5	
M	5.875		7.25	
P	6.5		9	
D	0.625	0.875	1.125	1.375

Bridas Motor
NEMA C-FACE



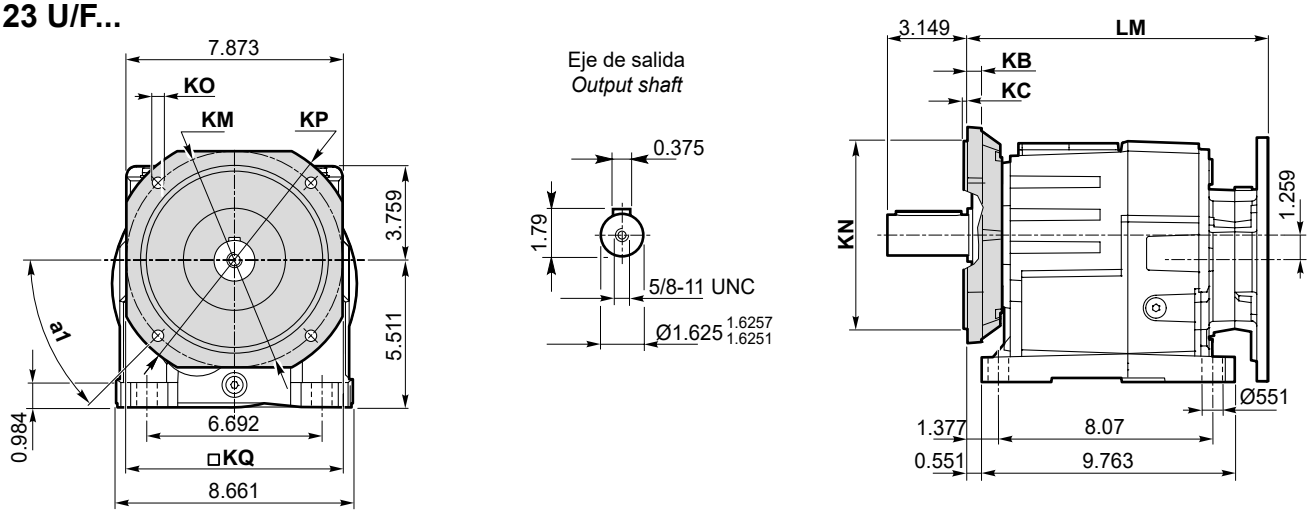
ITHIS 122...
ITHIS 123...



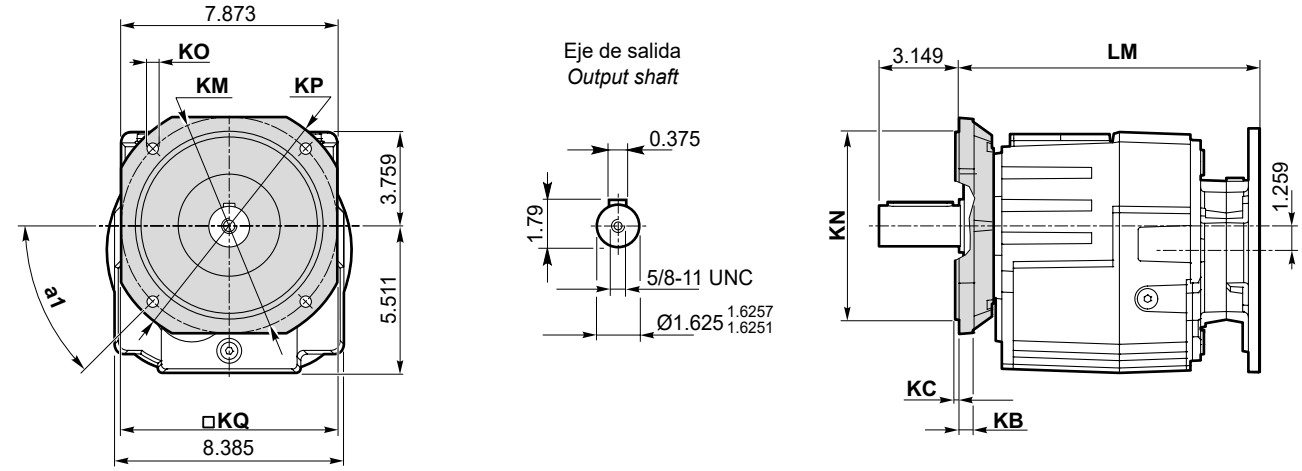


ITH 122- ITH 123

ITH 122 U/F...
ITH 123 U/F...



ITH 122 F...
ITH 123 F...



Versione **F** / ***F** Version*										
ITH	**a_1**	**KB**	**KC**	**KM**	**KN** f7	**KO**	**KP**	**KQ**	**Brida / *Flange***	
									Tipo / *Type*	Peso / *Weight* [lb]
122 123	45°	0.512	0.157	6.496	5.118 5.1164 5.1148	0.433	7.874	6.772	**F200**	**5.7**
	45°	0.512	0.157	8.465	7.086 7.0849 7.0833	0.551	9.843	8.465	**F250**	**8.3**
	45°	0.512	0.157	10.433	9.055 9.0534 9.0519	0.551	11.811	10.433	**F300**	**12.3**

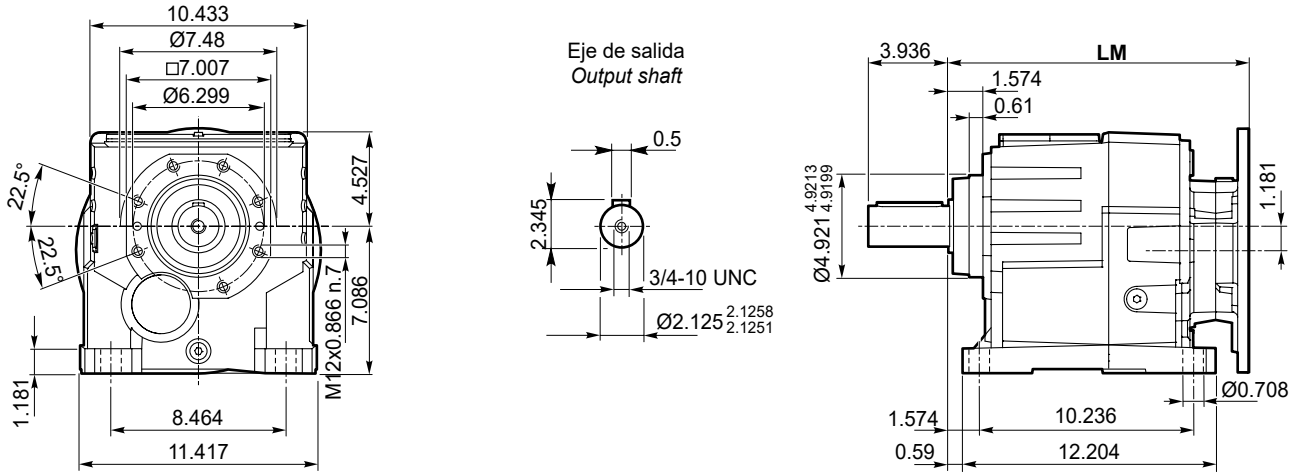
Peso / *Weight [lb]*				
ITH	**56C**	**140TC**	**180TC**	**210TC**
122 U	74.45		82.03	
122 G	70.04		77.62	
123 U	76.65		94.23	-
123 G	72.25		79.82	-

Nota: Peso del reductor llenado con aceite para la posición de montaje M1 (B3)
Note: weight of the gearbox filled with oil for M1 (B3) assembly position

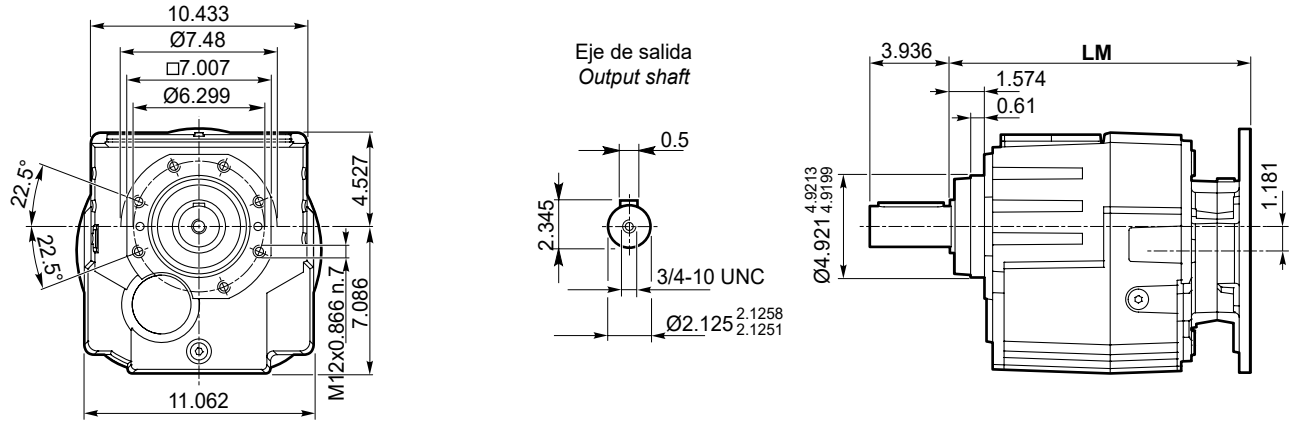
Dimensiones *Dimensions*

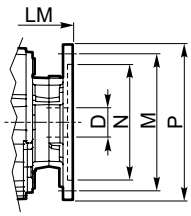
ITH 132 - ITH 133

ITH 132 U
ITH 133 U



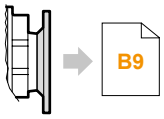
ITH 132 G
ITH 133 G



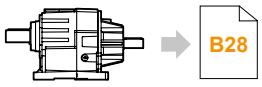


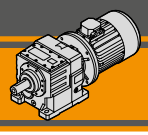
Dimensiones NEMA/ *NEMA Dimensions*						
	56C	**140TC**	**180TC**	**210TC**	**250TC**	**280TC**
LM	**14.153**		**15.177**		**17.125**	**17.519**
N	4.5		8.5			10.5
M	5.875		7.25			9
P	6.5		9		10	11.525
D	0.625	0.875	1.125	1.375	1.625	1.875

Bridas Motor
NEMA C-FACE



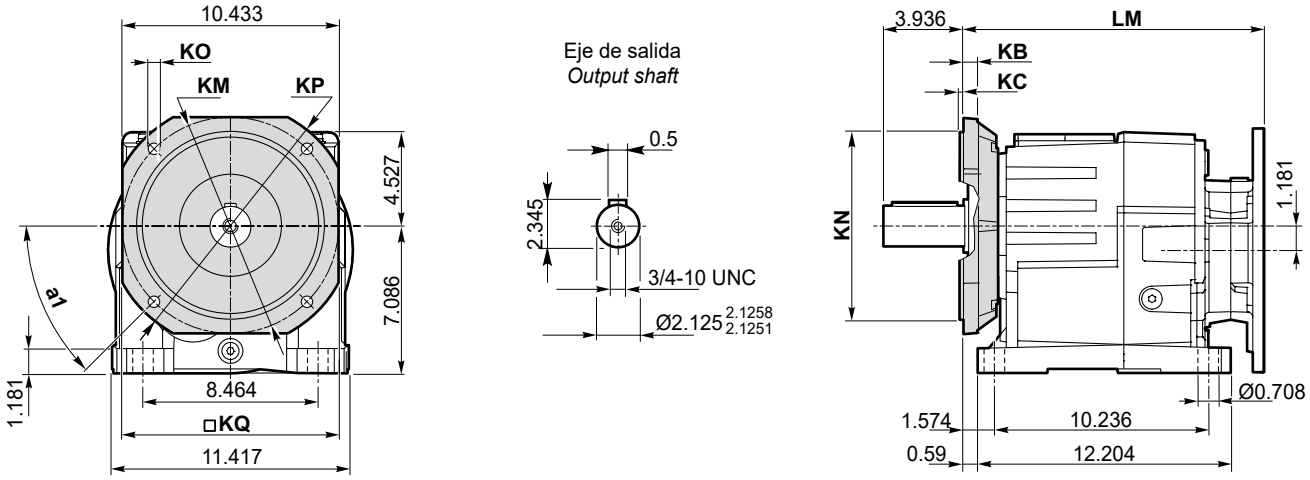
ITHIS 132...
ITHIS 133...



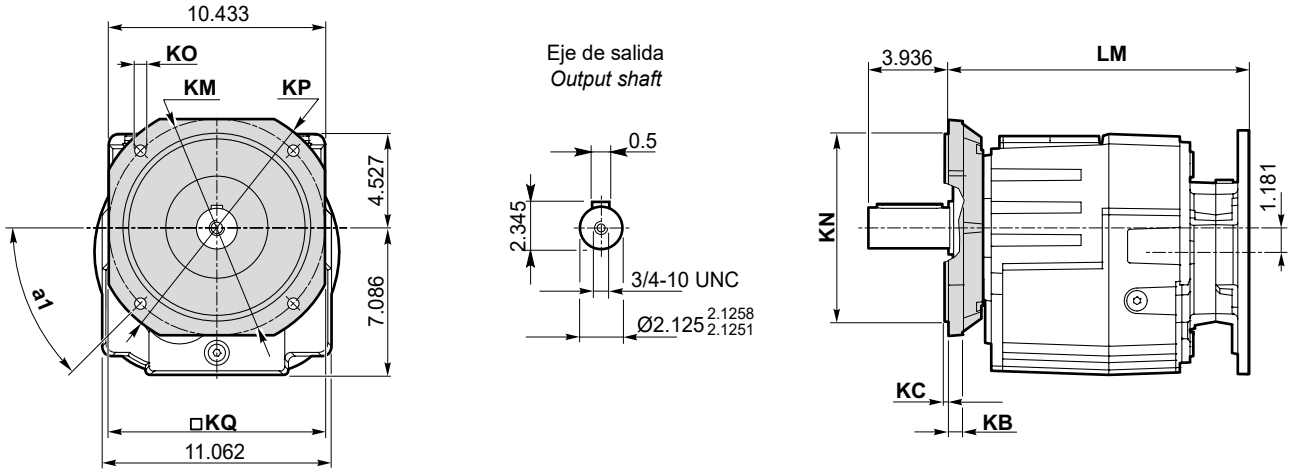


ITH 132- ITH 133

ITH 132 U/F...
ITH 133 U/F...



ITH 132 F...
ITH 133 F...



Versione **F** / ***F** Version*										
ITH	**a_1**	**KB**	**KC**	**KM**	**KN** f7	**KO**	**KP**	**KQ**	**Brida / *Flange***	
									Tipo / *Type*	Peso / *Weight* [lb]
132 133	45°	0.630	0.157	8.465	7.086 7.0849 7.0833	0.551	9.843	8.465	**F250**	**8.3**
	45°	0.630	0.157	10.433	9.055 9.0534 9.0519	0.551	11.811	10.236	**F300**	**12.3**
	45°	0.630	0.157	11.811	9.842 9.8408 9.8393	0.709	13.780	11.811	**F350**	**20.0**

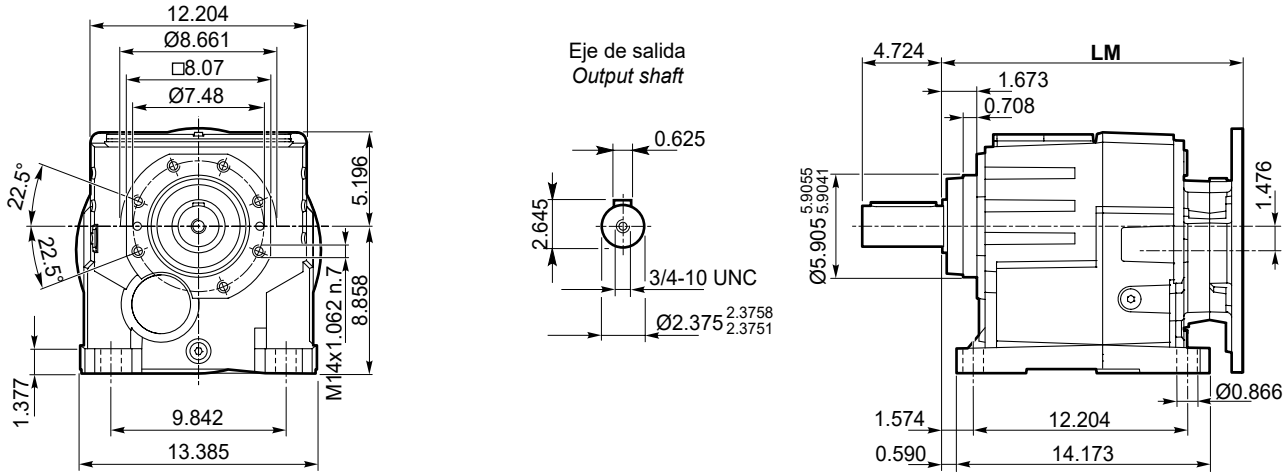
Peso / *Weight [lb]*						
ITH	**56C**	**140TC**	**180TC**	**210TC**	**250TC**	**280TC**
132 U	135.08		142.66		155.80	158.58
132 G	126.26		133.84		146.98	149.76
133 U	139.49		147.07		-	-
133 G	130.67		138.25		-	-

Nota: Peso del reductor llenado con aceite para la posición de montaje M1 (B3)
Note: weight of the gearbox filled with oil for M1 (B3) assembly position

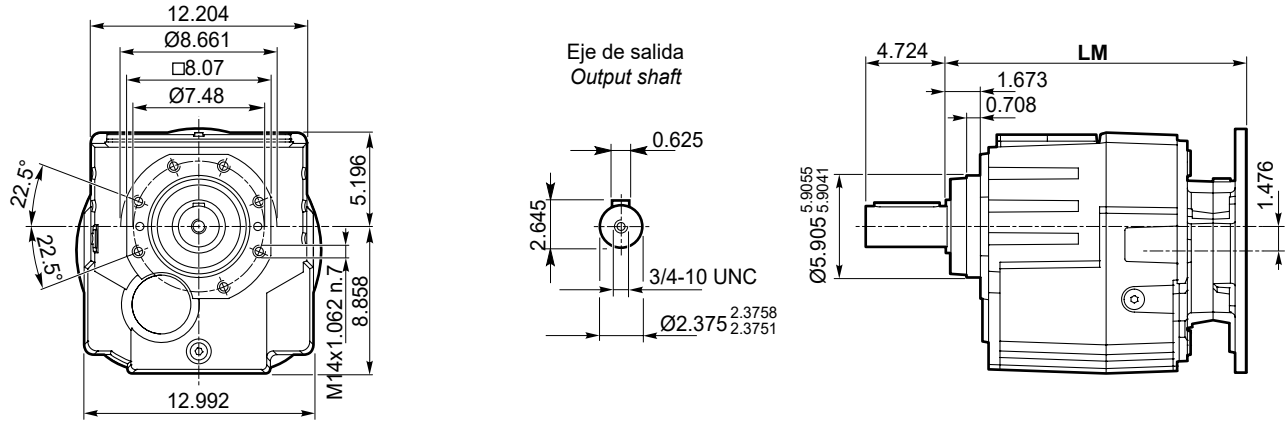
Dimensiones *Dimensions*

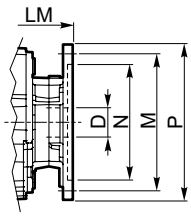
ITH 142 - ITH 143

ITH 142 U
ITH 143 U



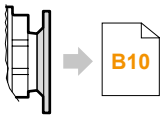
ITH 142 G
ITH 143 G



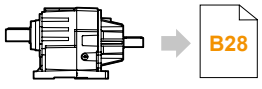


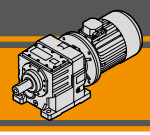
Dimensiones NEMA/ *NEMA Dimensions*						
	56C	**140TC**	**180TC**	**210TC**	**250TC**	**280TC**
LM	**15.452**		**16.476**		**18.425**	**18.818**
N	4.5		8.5			10.5
M	5.875		7.25			9
P	6.5		9		10	11.252
D	0.625	0.875	1.125	1.375	1.625	1.875

Bridas Motor
NEMA C-FACE



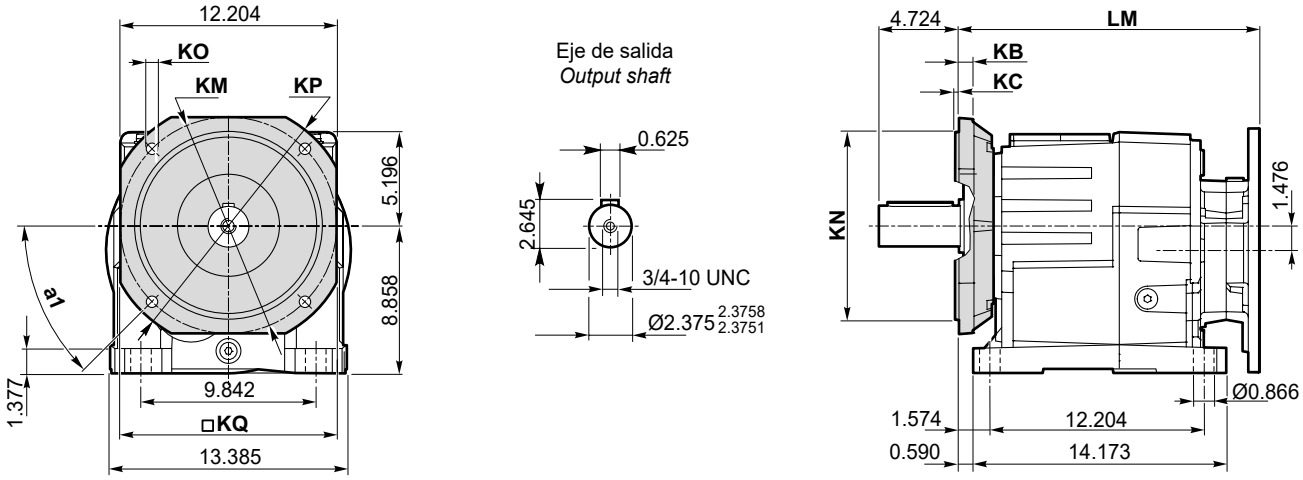
ITHIS 142...
ITHIS 143...



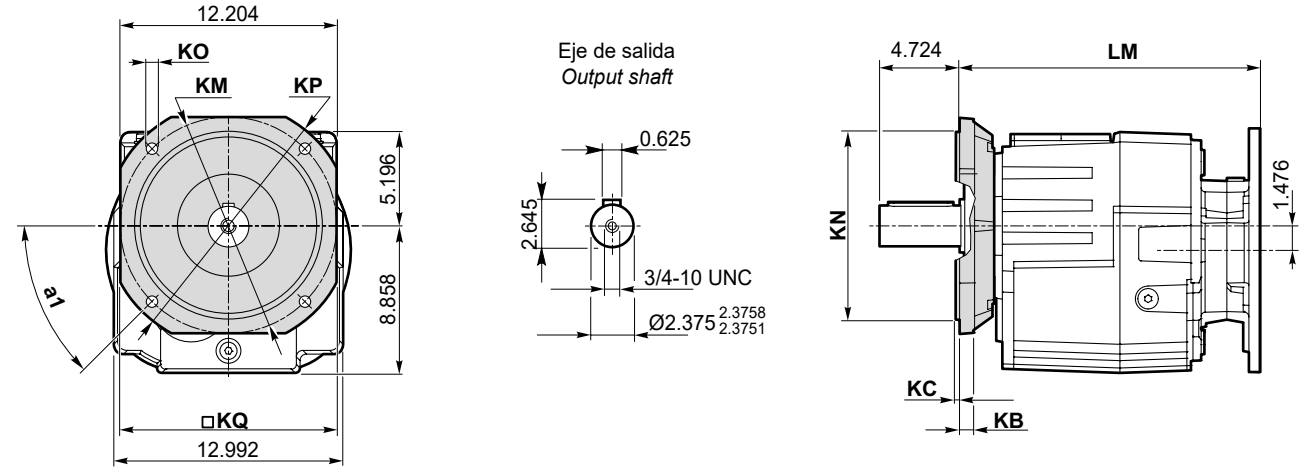


ITH 142- ITH 143

ITH 142 U/F...
ITH 143 U/F...



ITH 142 F...
ITH 143 F...



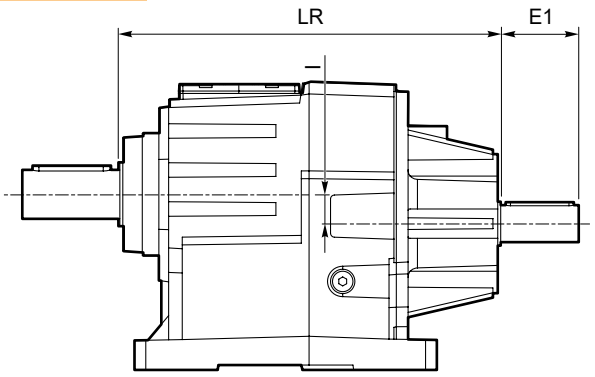
Versione **F** / ***F** Version*										
ITH	**a_1**	**KB**	**KC**	**KM**	**KN** f7	**KO**	**KP**	**KQ**	**Brida / *Flange***	
									Tipo / *Type*	Peso / *Weight* [lb]
142 143	45°	0.709	0.157	10.433	9.055 $^{9.0534}_{9.0519}$	0.551	11.811	10.433	**F300**	**16.3**
	45°	0.709	0.197	11.811	9.842 $^{9.8408}_{9.8393}$	0.709	13.780	11.811	**F350**	**22.4**
	45°	0.709	0.197	15.748	13.748 $^{13.7778}_{13.7763}$	0.709	17.717	15.748	**F450**	**37.2**

Peso / *Weight [lb]*						
ITH	**56C**	**140TC**	**180TC**	**210TC**	**250TC**	**280TC**
142 U	207.83		215.41		228.55	231.33
142 G	194.60		202.19		215.33	218.10
143 U	214.44		222.03		235.17	-
143 G	201.22		208.80		221.94	-

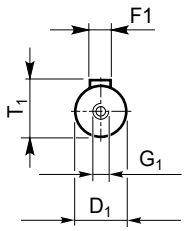
Nota: Peso del reductor llenado con aceite para la posición de montaje M1 (B3)
Note: weight of the gearbox filled with oil for M1 (B3) assembly position

Dimensiones — *Dimensions*

ITHIS...



Eje de entrada
Input shaft



ITHIS	Versión *Version*	LR	D1	E1	I	T1	F1	G1
112	U G U/F... F...	12.657	0.875 $^{0.8742}_{0.8734}$	1.969	1.134	0.958	0.188	1/4-20
113								
122		13.465			1.26			
123								
132		15.374	1.625 $^{1.6254}_{1.6248}$	3.15	1.181	1.791	0.375	5/8-11
133								
142		16.673			1.476			
143								

ITHIS	Peso / *Weight [lb]*
112 U	8.18
112 G	7.79
113 U	8.29
113 G	7.89
122 U	10.19
122 G	9.66
123 U	10.46
123 G	9.93
132 U	19.78
132 G	18.72
133 U	18.83
133 G	17.77
142 U	29.587
142 G	28.00
143 U	28.79
143 G	27.20

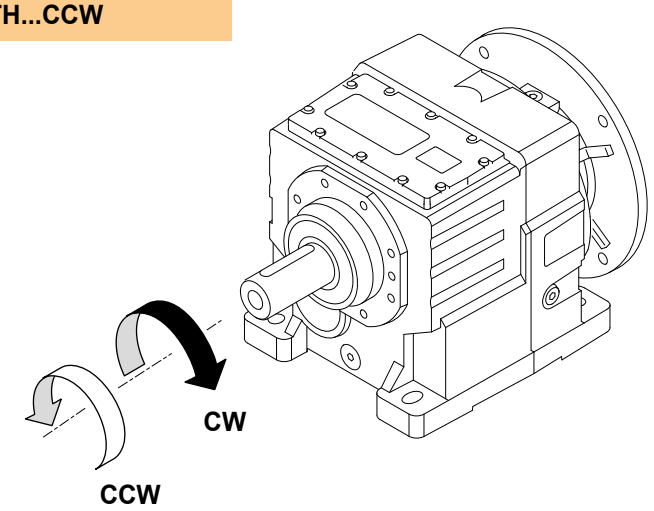
Nota: ITHIS133 relación 191,39 – 209,48 – 230,85 / ITHIS143 relación 193,96 – 209,65 – 229,46 – 252,87 pedido bajo demanda.
Favor de contactar al servicio técnico TRANSTECNO.

Note: ITHIS133 ratios 191,39 – 209,48 – 230,85 and ITHIS143 ratios 193,96 – 209,65 – 229,46 – 252,87 available upon request.
Please contact TRANSTECNO technical service.

Accesorios — *Accessories*

Dispositivo anti-retorno / *Backstop device*

ITH...CW
ITH...CCW



El dispositivo anti-retorno permite que la flecha de salida gire en un solo sentido.
Antes de utilizarlo, especifique la rotación deseada como se muestra en la figura.

The backstop device allows the output shaft to rotate in just one direction. Before using it, please specify output shaft rotation direction as shown in the figure.

TRANSTECNO®
the modular gearmotor

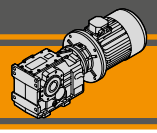
ITB

ITB Iron

60Hz

Motoreductores de ejes ortogonales
Helical bevel gearmotors

Nema



ENERGY SAVING

Características técnicas

El motorreductor ITB está diseñado para aplicaciones de uso rudo. Su carcaza fundida en una sola pieza y su diseño modular con distintos accesorios en la entrada y en la salida, incrementan su flexibilidad de uso en múltiples aplicaciones.

Características principales de la serie ITB:

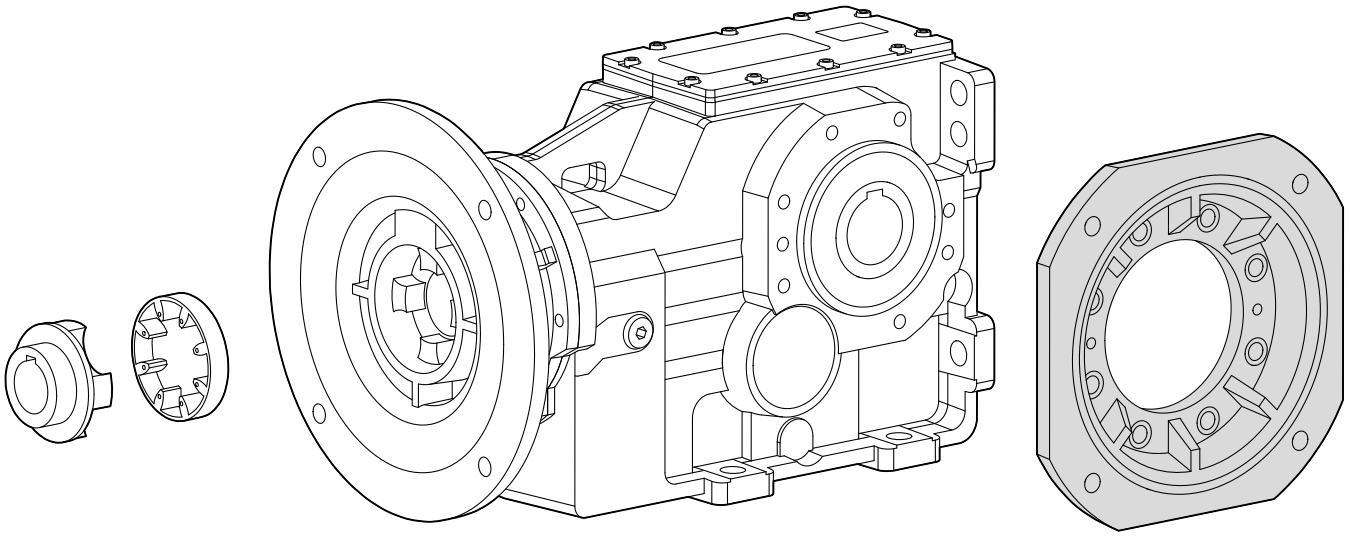
- Carcaza en fierro fundido;
- Elevada modularidad;
- Lubricación con aceite sintético;
- Acoplamiento a motor con cople flexible;
- Acabado en pintura epóxica RAL 7016.

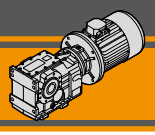
Technical features

The ITB gearmotors are intended for heavy duty applications. The robust one pieces casing of the main housing and the modular design of input and output sets increase application fexibility.

The main features of ITB range are:

- *Robust cast iron housings;*
- *High degree of modularity;*
- *Lubrication with synthetic oil;*
- *Coupled to motor with flexible coupling;*
- *Epoxy powder coating RAL 7016.*



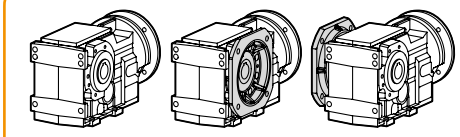


Clasificación — *Classification*

REDUCTOR / *GEARBOX*

ITB	42	3	U	20.12	D1.5	56C	SZDX	BRSX	M1	CW
Tipo *Type*	Tamaño *Size*	Etapas *Stages*	Versión *Version*	Relación de reducción *Ratio*	Eje de salida *Output shaft*	NEMA	Eje de salida *Output shaft*	Brazo de reacción *Torque arm*	Posición de Montaje *Mounting position*	Dispositivo anti retroceso *Backstop device*
ITB	42 43 44	3	U F…D F…S	véase tablas *see tables*	véase tablas *see tables*	56C 140TC 180TC 250TC 280TC	SZDX SZSX DZ	TADX TASX BRDX 90°...270° BRSX 0°...270°	M1 (B3) M2 (V6) M3 (B8) M4 (V5) M5 (B7) M6 (B6)	CW CCW

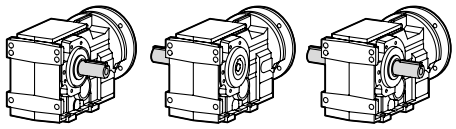
Relación de reducción
Gearbox Version



U FD FS

F.....D = Lado derecho / *Right side*
F.....S = Lado izquierdo / *Left side*

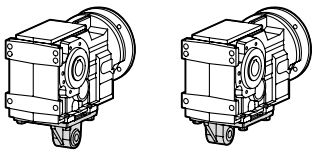
Eje de salida
Output shaft



SZDX SZSX DZ

SZDX = Flecha sencilla lado derecho
Single shaft right side
DZ = Flecha doble / *Double shaft*
SZSX =Flecha sencilla lado izquierdo / *Single shaft left side*

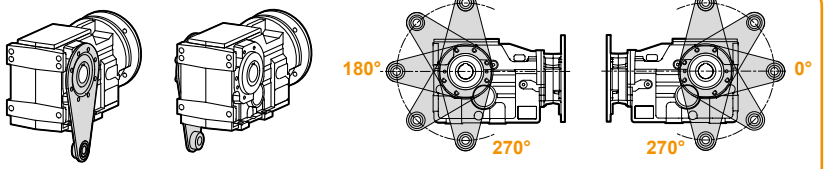
Brazo de reacción
Torque arm



TADX TASX

TADX = Lado derecho / *Right side*
TASX = Lado izquierdo / *Left side*

Brazo de reacción (*)
Torque arm



BRDX BRSX BRDX BRSX

BRDX = Lado derecho / *Right side*
BRSX = Lado izquierdo / *Left side*

(*) NOTA: El brazo de reacción se suministra desmontado.
NOTE: the torque arm will be supplied not assembled.

REDUCTOR / *GEARBOX*

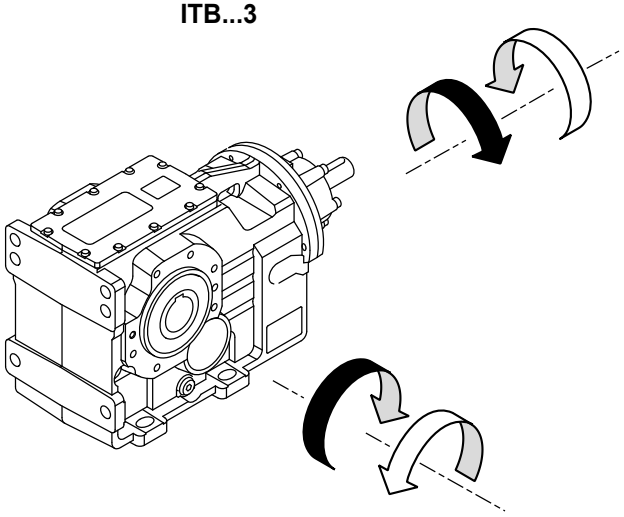
ITBIS	42	3	U	20.12	D1.5	SZDX	BRSX	M1
Tipo *Type*	Tamaño *Size*	Etapas *Stages*	Versión *Version*	Relación de reducción *Ratio*	Eje de salida *Output shaft*	Eje de salida *Output shaft*	Brazo de reacción *Torque arm*	Posición de Montaje *Mounting position*
ITBIS	42 43 44	3	U F…D F…S	véase tablas *see tables*	véase tablas *see tables*	SZDX SZSX DZ	BRDX BRSX	M1 (B3) M2 (V6) M3 (B8) M4 (V5) M5 (B7) M6 (B6)

MOTOR / *MOTOR*

7.5hp / 5.5kW	4p	3ph	230/400V	60Hz	T1
Potencia *Power*	Polos *Poles*	Fases *Phases*	Tensión *Voltage*	Frecuencia *Frequency*	Posición caja de bornes *Terminal box pos.*
véase tablas *see tables*	2p 4p 6p 8p	1ph 3ph	230V 230/400V	50Hz 60Hz	T1 (Std) T4 T2 T3

Sentidos de rotación — *Direction of rotation*

ITB...3



Rotación Inversa bajo solicitud.
Inverse rotation on request

Nomenclatura — *Symbols*

n_1	[rpm]	Velocidad de entrada / *Input speed*
n_2	[rpm]	Velocidad de salida / *Output speed*
i		Relación de reducción / *Ratio*
P_1	[hp]	Potencia en la entrada / *Input power*
M_2	[lb·in]	Par en la salida en función de P_1 / *Output torque referred to P_1*
Pn_1	[hp]	Potencia nominal en la entrada / *Nominal input power*
Mn_2	[lb·in]	Par nominal en la salida en función de Pn_1 / *Nominal output torque referred to Pn_1*
sf		Rendimiento dinámico / *Service factor*
R_1	[lb]	Carga radial permitida a la entrada / *Permitted input radial load*
A_1	[lb]	Carga axial permitida a la entrada / *Permitted input axial load*
R_2	[lb]	Carga radial admisible en la salida / *Maximum output radial load*
A_2	[lb]	Carga axial admisible en la salida / *Maximum output axial load*

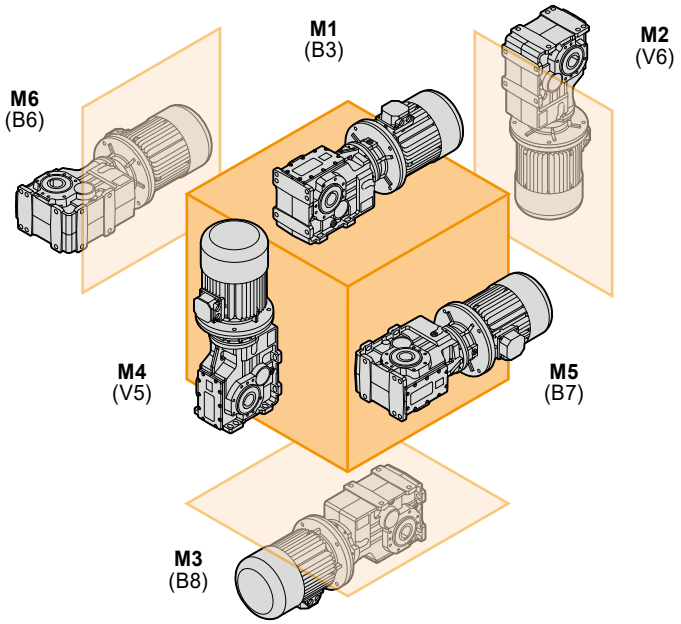
Lubricación

Los moto reductores de la serie ITB se suministran con lubricante sintético viscosidad 320. La cantidad de lubricante dependerá de la posición de montaje requerida.

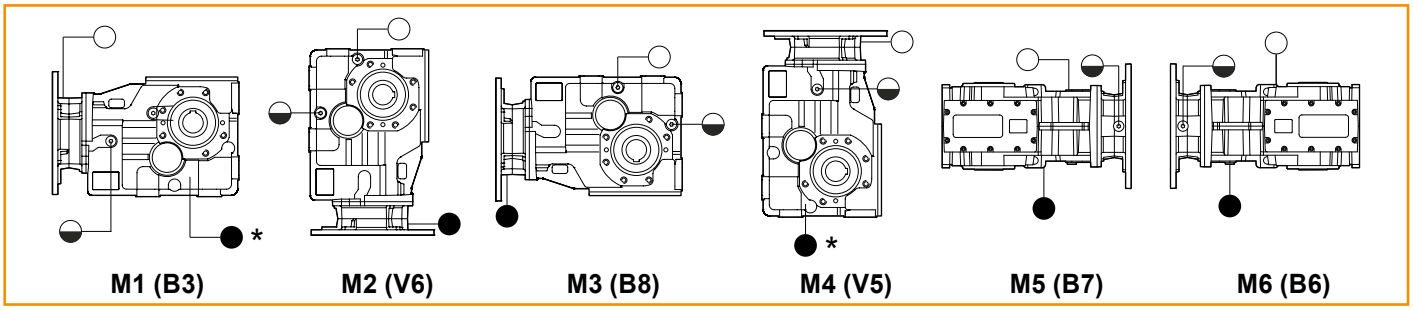
Lubrication

ITB series gearmotors come complete with synthetic lubricant 320 viscosity. The lubricant quantity depends on assembly position.

ITB..



ITB	**Cantidad de aceite** (US gal) / ***Oil quantity*** *(US gal)*					
	M1 (B3)	**M2** (V6)	**M3** (B8)	**M4** (V5)	**M5** (B7)	**M6** (B6)
423	0.55	0.81	0.79	1.03	0.84	0.6
433	1.13	1.34	1.29	1.9	1.4	1.05
443	1.71	2.35	2.37	3.22	2.32	1.76



* Tapón de drenado en posición posterior

* *Oil draing plug in backside position.*

○ Respiradero y tapón de llenado / *Breather and filling plug*
◒ Tapón de nivel de aceite / *Oil level plug*
● Tapón de dren de aceite / *Oil drain plug*

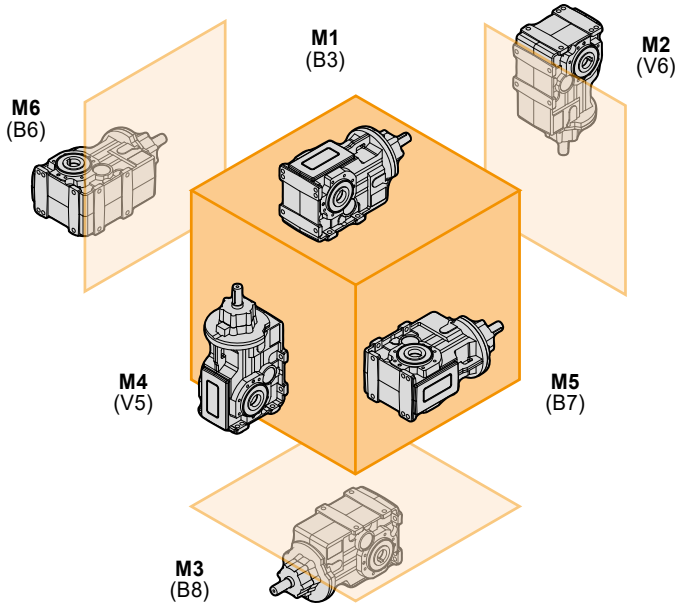
Lubricación

Los reductores de la serie ITBIS se suministran con lubricante sintético viscosidad 320. La cantidad de lubricante dependerá de la posición de montaje requerida.

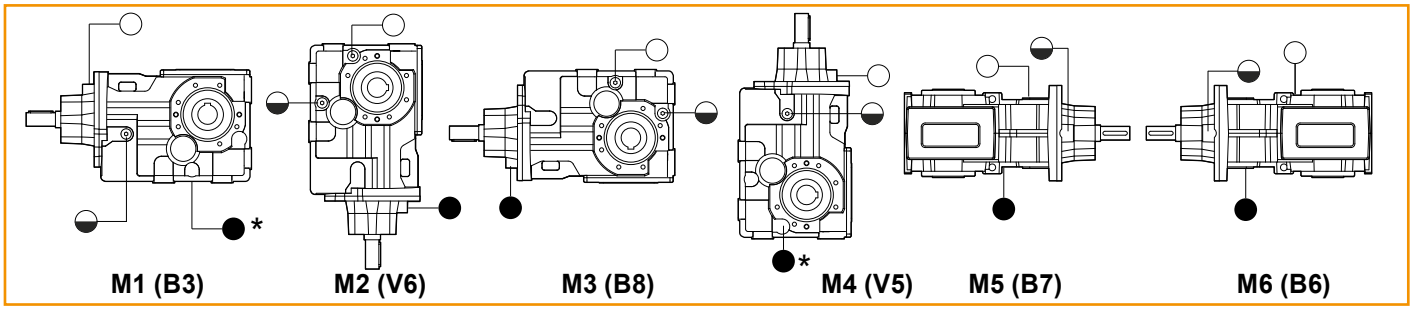
Lubrication

ITBIS series gearboxes come complete with synthetic lubricant 320 viscosity. The lubricant quantity depends on assembly position.

ITBIS..



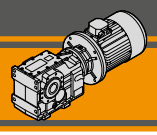
ITBIS	**Cantidad de aceite** (US gal) / ***Oil quantity*** *(US gal)*					
	M1 (B3)	**M2** (V6)	**M3** (B8)	**M4** (V5)	**M5** (B7)	**M6** (B6)
423	0.6	0.92	0.84	1.03	0.86	0.66
433	1.18	1.45	1.34	1.9	1.45	1.1
443	1.82	2.53	2.48	3.22	2.43	1.87



* Tapón de drenado en posición posterior

* *Oil draing plug in backside position.*

○ Respiradero y tapón de llenado / *Breather and filling plug*
◒ Tapón de nivel de aceite / *Oil level plug*
● Tapón de dren de aceite / *Oil drain plug*



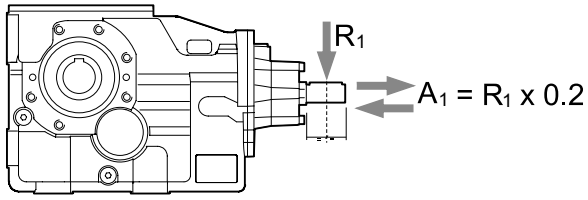
Carga radial a la entrada — *Input radial loads*

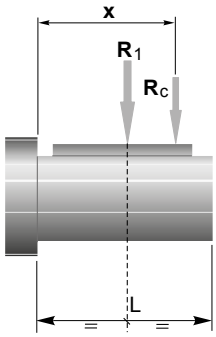
ITB423 ITB433	n_1 [rpm]	Potencia motor / *Motor Power* [hp]		
		3	5	7.5
R_1 [lb]	1750	404		168
	1150	472	269	-
	850	562	-	-

ITB443	n_1 [rpm]	Potencia motor / *Motor Power* [hp]				
		7.5	10	15	20	25
R_1 [lb]	1750	831			629	269
	1150	1101		741	146	-
	850	1180	876	-	-	-

Las cargas radiales máximas aplicables están indicadas en las tablas previas.
Cuando la carga radial no se aplica en el punto medio del eje, es necesario calcular la carga efectiva a través la siguiente fórmula:

The radial loads maximum input applicable are indicated in the previous tables.
When the resulting radial load is not applied on the centre line of the shaft it is necessary to calculate the effective load with the following formula:





	ITB 423	ITB 433	ITB 443
a	5.472		6.181
b	4.330		4.645

$$R_c = \frac{R_1 \cdot a}{(b+x)} \leq R_1$$

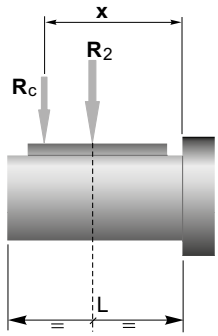
$$R \leq R_c$$

a, b = valores dados en la tabla
a, b = values given in the table

Carga radial en la salida — *Output radial loads*

Las cargas radiales máximas aplicables en la salida están indicadas en la siguiente tabla
Cuando la carga radial no se aplica en el punto medio del eje, es necesario calcular la carga efectiva a través la siguiente fórmula:

The radial loads maximum output applicable are indicated in the technical data table.
When the resulting radial load is not applied on the centre line of the shaft it is necessary to calculate the effective load with the following formula:



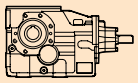
	ITB 423	ITB 433	ITB 443
a	7.165	8.582	9.921
b	5.590	6.614	7.559
R_{2MAX}	4.158	5.170	6.969

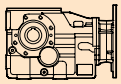
$$R_c = \frac{R_2 \cdot a}{(b+x)} \leq R_{2MAX}$$

$$R \leq R_c$$

a, b = valores dados en la tabla
a, b = values given in the table

Datos técnicos — n_1 1750 rpm — *Technical data*

	n_2 [rpm]	Mn_2 [lb·in]	Pn_1 [hp]	i	R_2 [lb]
ITBIS 423					
	238	4425	17.80	7.34	2160
	191	4425	14.26	9.16	2439
	148	5310	13.24	11.85	2725
	112	5310	10.03	15.64	3174
	96	6196	9.99	18.32	3354
	87	6196	9.10	20.12	3531
	77	7081	9.15	22.85	3665
	62	7081	7.41	28.22	4115
	59	7523	7.52	29.57	4159
	57	7523	7.19	30.90	4159
	51	7523	6.42	34.57	4159
	46	7523	5.85	37.99	4159
	45	7966	6.04	39.01	4159
	42	7966	5.65	41.70	4159
	36	7966	4.79	49.13	4159
	35	7966	4.69	50.19	4159
	33	7966	4.37	53.77	4159
	30	7966	3.97	59.26	4159
	25	7966	3.35	70.40	4159
	23	8408	3.22	77.08	4159
	20	8408	2.88	86.24	4159
	19	8408	2.63	94.77	4159
	17	8408	2.38	104.04	4159
	14	8408	2.03	122.57	4159
	13	8408	1.84	134.15	4159
	12	8408	1.67	147.84	4159



NEMA Motores aplicables
NEMA Motor adapters

ITB 423			
56C	**140TC**	**180TC**	**210TC**
			*
			*
			*
		*	*
		*	*
		*	*
		*	*
		*	*
		*	*
		*	*
		*	*

NOTA
Las áreas resaltadas indican el tamaño de carcasa del motor correspondiente.

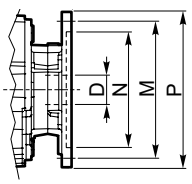
⚠ * = El Factor de servicio (sf) se deberá seleccionar con respecto a la aplicación: Favor de contactar con nuestro Servicio Técnico

NOTE
Highlighted áreas indicate the motor input flange available on each gearbox size.

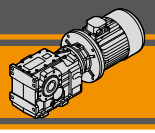
⚠ * = *The service factor (**sf**) has to be selected depending on application: please contact our Technical Department.*

Antes de seleccionar cualquier reductor, favor de revisar los valores de desempeño en las páginas C11 a la C15.

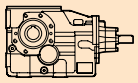
Before selecting any gearbox, please read the performance values shown in the tables on page C11 to C15.



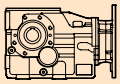
Dimensiones NEMA/ *NEMA Dimensions*				
	56C	**140TC**	**180TC**	**210TC**
N	4.5		8.5	
M	5.875		7.25	
P	6.5		9	
D	0.625	0.875	1.125	1.375



Datos técnicos — n_1 1750 rpm — *Technical data*



n_2 [rpm]	Mn_2 [lb·in]	Pn_1 [hp]	i	R_2 [lb]
ITBIS 433				
213	8851	31.83	8.21	2774
171	8851	25.52	10.25	3133
132	11506	25.63	13.25	3405
100	12391	20.93	17.49	3886
86	14161	20.46	20.44	4060
78	15046	19.76	22.50	4189
69	15046	17.45	25.49	4487
56	15046	14.09	31.56	5047
53	15046	13.48	32.98	5171
51	15046	12.85	34.55	5171
45	15046	11.50	38.66	5171
41	15046	10.46	42.48	5171
40	15931	10.81	43.51	5171
38	15931	10.08	46.64	5171
31	15931	8.42	55.98	5171
29	14161	6.96	60.14	5171
26	14161	6.31	66.27	5171
22	15931	6.00	78.52	5171
20	15931	5.49	85.97	5171
18	15931	4.89	96.19	5171
17	15931	4.46	105.70	5171
15	15931	4.06	116.04	5171
13	15931	3.44	136.71	5171
12	15931	3.15	149.63	5171
11	15931	2.85	164.89	5171



NEMA Motores aplicables
NEMA Motor adapters

ITB 433				
56C	**140TC**	**180TC**	**210TC**	**250TC**
				*
				*
			*	*
			*	
			*	
			*	
			*	
		*		
		*		
		*		

ITB

NOTA
Las áreas resaltadas indican el tamaño de carcasa del motor correspondiente.

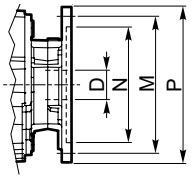
⚠ * = El Factor de servicio (sf) se deberá seleccionar con respecto a la aplicación: Favor de contactar con nuestro Servicio Técnico

Antes de seleccionar cualquier reductor, favor de revisar los valores de desempeño en las páginas C11 a la C15.

N.B.
Highlighted areas indicate motor inputs available on each size of unit.

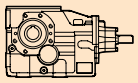
⚠ * = *The service factor (**sf**) has to be selected depending on application: please contact our Technical Department.*

Before selecting any gearbox, please read the performance values shown in the tables on page C11 to C15.

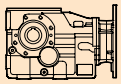


Dimensiones NEMA/ *NEMA Dimensions*					
	56C	**140TC**	**180TC**	**210TC**	**250TC**
N	4.5		8.5		
M	5.875		7.25		
P	6.5		9		10
D	0.625	0.875	1.125	1.375	1.625

Datos técnicos — n_1 1750 rpm — *Technical data*



n_2 [rpm]	Mn_2 [lb·in]	Pn_1 [hp]	i	R_2 [lb]
ITBIS 443				
222	15046	56.40	7.88	3891
184	15046	46.62	9.53	4321
149	15931	40.04	11.75	4794
124	17702	36.99	14.13	5188
102	20357	34.91	17.23	5586
76	24782	31.62	23.16	6185
71	26552	31.59	24.82	6263
58	26552	26.13	30.03	6969
47	26552	21.20	37.01	6969
44	24782	18.53	39.46	6969
39	28322	18.79	44.51	6969
37	24782	15.35	47.67	6969
32	28322	15.44	54.26	6969
24	30978	12.55	72.94	6969
19	30978	9.93	92.14	6969
14	30978	7.37	124.32	6969
13	30978	6.74	135.45	6969
12	30978	6.12	150.15	6969
11	30978	5.59	163.80	6969
9.8	30978	5.12	179.16	6969



NEMA Motores aplicables
NEMA Motor adapters

ITB 443					
56C	**140TC**	**180TC**	**210TC**	**250TC**	**280TC**
					*
					*
					*
				*	*
				*	*
				*	*
			*		
			*		
			*		

NOTA
Las áreas resaltadas indican el tamaño de carcasa del motor correspondiente.

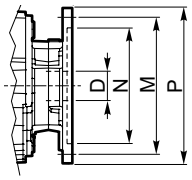
⚠ * = El Factor de servicio (sf) se deberá seleccionar con respecto a la aplicación: Favor de contactar con nuestro Servicio Técnico

Antes de seleccionar cualquier reductor, favor de revisar los valores de desempeño en las páginas C11 a la C15.

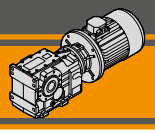
N.B.
Highlighted areas indicate motor inputs available on each size of unit.

⚠ * = *The service factor (**sf**) has to be selected depending on application: please contact our Technical Department.*

Before selecting any gearbox, please read the performance values shown in the tables on page C11 to C15.



Dimensiones NEMA/ *NEMA Dimensions*						
	56C	**140TC**	**180TC**	**210TC**	**250TC**	**280TC**
N	4.5		8.5			10.5
M	5.875		7.25			9
P	6.5		9		10	11.252
D	0.625	0.875	1.125	1.375	1.625	1.875



Datos técnicos / *Technical data*

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
0.75 hp								
0.55 kW	**238**	186	24.1	III	7.34	ITB423	56C	2473
(1750 rpm)	**191**	230	19.3	III	9.16		56C	2788
	148	292	17.9	III	11.85		56C	3205
	112	389	13.6	III	15.64		56C	3719
	96	460	13.5	III	18.32		56C	4048
	87	504	12.3	III	20.12		56C	4159
	77	566	12.4	III	22.85		56C	4159
	62	708	10.0	III	28.22		56C	4159
	59	735	10.2	III	29.57		56C	4159
	57	770	9.8	III	30.90		56C	4159
	51	867	8.7	III	34.57		56C	4159
	46	947	7.9	III	37.99		56C	4159
	45	974	8.2	III	39.01		56C	4159
	42	1044	7.6	III	41.70		56C	4159
	36	1230	6.5	III	49.13		56C	4159
	35	1257	6.4	III	50.19		56C	4159
	33	1345	5.9	III	53.77		56C	4159
	30	1478	5.4	III	59.26		56C	4159
	25	1761	4.5	III	70.40		56C	4159
	23	1921	4.4	III	77.08		56C	4159
	20	2151	3.9	III	86.24		56C	4159
	19	2363	3.6	III	94.77		56C	4159
	17	2602	3.2	III	104.04		56C	4159
	14	3062	2.7	III	122.57		56C	4159
	13	3346	2.5	III	134.15		56C	4159
	12	3691	2.3	III	147.84		56C	4159
	31	1398	11.4	III	55.98	ITB433	56C	5171
	29	1505	9.4	III	60.14		56C	5171
	26	1655	8.6	III	66.27		56C	5171
	22	1965	8.1	III	78.52		56C	5171
	20	2151	7.4	III	85.97		56C	5171
	18	2399	6.6	III	96.19		56C	5171
	17	2638	6.0	III	105.70		56C	5171
	15	2894	5.5	III	116.04		56C	5171
	13	3416	4.7	III	136.71		56C	5171
	12	3735	4.3	III	149.63		56C	5171
	11	4116	3.9	III	164.89		56C	5171
	14	3107	10.0	III	124.32	ITB443	56C	6969
	13	3381	9.2	III	135.45		56C	6969
	12	3753	8.3	III	150.15		56C	6969
	11	4089	7.6	III	163.80		56C	6969
	9.8	4470	6.9	III	179.16		56C	6969

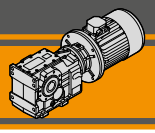
P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
1.00 hp								
0.75 kW	**238**	248	17.7	III	7.34	ITB423	56C-140TC	2467
(1750 rpm)	**191**	310	14.2	III	9.16		56C-140TC	2780
	148	407	13.2	III	11.85		56C-140TC	3192
	112	531	10.0	III	15.64		56C-140TC	3699
	96	620	9.9	III	18.32		56C-140TC	4022
	87	682	9.0	III	20.12		56C-140TC	4159
	77	779	9.1	III	22.85		56C-140TC	4159
	62	965	7.4	III	28.22		56C-140TC	4159
	59	1009	7.5	III	29.57		56C-140TC	4159
	57	1053	7.2	III	30.90		56C-140TC	4159
	51	1177	6.4	III	34.57		56C-140TC	4159
	46	1292	5.8	III	37.99		56C-140TC	4159
	45	1328	6.0	III	39.01		56C-140TC	4159
	42	1416	5.6	III	41.70		56C-140TC	4159
	36	1673	4.8	III	49.13		56C-140TC	4159
	35	1708	4.7	III	50.19		56C-140TC	4159
	33	1832	4.4	III	53.77		56C-140TC	4159
	30	2018	3.9	III	59.26		56C-140TC	4159
	25	2399	3.3	III	70.40		56C-140TC	4159
	23	2629	3.2	III	77.08		56C-140TC	4159
	20	2938	2.9	III	86.24		56C-140TC	4159
	19	3231	2.6	III	94.77		56C-140TC	4159
	17	3540	2.4	III	104.04		56C-140TC	4159
	14	4178	2.0	II	122.57		56C-140TC	4159
	13	4567	1.8	II	134.15		56C-140TC	4159
	12	5036	1.7	II	147.84		56C-140TC	4159
	51	1177	12.8	III	34.55	ITB433	56C-140TC	5171
	45	1319	11.4	III	38.66		56C-140TC	5171
	41	1443	10.4	III	42.48		56C-140TC	5171
	40	1478	10.8	III	43.51		56C-140TC	5171
	38	1584	10.0	III	46.64		56C-140TC	5171
	31	1903	8.4	III	55.98		56C-140TC	5171
	29	2045	6.9	III	60.14		56C-140TC	5171
	26	2257	6.3	III	66.27		56C-140TC	5171
	22	2673	6.0	III	78.52		56C-140TC	5171
	20	2930	5.4	III	85.97		56C-140TC	5171
	18	3275	4.9	III	96.19		56C-140TC	5171
	17	3602	4.4	III	105.70		56C-140TC	5171
	15	3947	4.0	III	116.04		56C-140TC	5171
	13	4655	3.4	III	136.71		56C-140TC	5171
	12	5098	3.1	III	149.63		56C-140TC	5171
	11	5611	2.8	III	164.89		56C-140TC	5171
	24	2487	12.5	III	72.94	ITB443	56C-140TC	6969
	19	3133	9.9	III	92.14		56C-140TC	6969
	14	4231	7.3	III	124.32		56C-140TC	6969
	13	4611	6.7	III	135.45		56C-140TC	6969
	12	5116	6.1	III	150.15		56C-140TC	6969
	11	5576	5.6	III	163.80		56C-140TC	6969
	9.8	6098	5.1	III	179.16		56C-140TC	6969

Datos técnicos

Technical data

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
1.50 hp								
1.1 kW	**238**	363	12.1	**III**	7.34	**ITB423**	**56C-140TC**	2456
(1750 rpm)	**191**	460	9.7	**III**	9.16		**56C-140TC**	2764
	148	593	9.0	**III**	11.85		**56C-140TC**	3169
	112	779	6.8	**III**	15.64		**56C-140TC**	3664
	96	912	6.8	**III**	18.32		**56C-140TC**	3977
	87	1009	6.2	**III**	20.12		**56C-140TC**	4159
	77	1142	6.2	**III**	22.85		**56C-140TC**	4159
	62	1407	5.0	**III**	28.22		**56C-140TC**	4159
	59	1478	5.1	**III**	29.57		**56C-140TC**	4159
	57	1540	4.9	**III**	30.90		**56C-140TC**	4159
	51	1726	4.4	**III**	34.57		**56C-140TC**	4159
	46	1894	4.0	**III**	37.99		**56C-140TC**	4159
	45	1947	4.1	**III**	39.01		**56C-140TC**	4159
	42	2080	3.8	**III**	41.70		**56C-140TC**	4159
	36	2452	3.2	**III**	49.13		**56C-140TC**	4159
	35	2505	3.2	**III**	50.19		**56C-140TC**	4159
	33	2682	3.0	**III**	53.77		**56C-140TC**	4159
	30	2956	2.7	**III**	59.26		**56C-140TC**	4159
	25	3514	2.3	**III**	70.40		**56C-140TC**	4159
	23	3850	2.2	**III**	77.08		**56C-140TC**	4159
	20	4310	2.0	**II**	86.24		**56C-140TC**	4159
	19	4735	1.8	**II**	94.77		**56C-140TC**	4159
	17	5195	1.6	**II**	104.04		**56C-140TC**	4159
	14	6125	1.4	**II**	122.57		**56C-140TC**	4159
	13	6700	1.3	**I**	134.15		**56C-140TC**	4159
	12	7382	1.1	**I**	147.84		**56C-140TC**	4159
	69	1275	11.8	**III**	25.49	**ITB433**	**56C-140TC**	5171
	56	1575	9.5	**III**	31.56		**56C-140TC**	5171
	53	1646	9.1	**III**	32.98		**56C-140TC**	5171
	51	1726	8.7	**III**	34.55		**56C-140TC**	5171
	45	1929	7.8	**III**	38.66		**56C-140TC**	5171
	41	2124	7.1	**III**	42.48		**56C-140TC**	5171
	40	2177	7.3	**III**	43.51		**56C-140TC**	5171
	38	2328	6.8	**III**	46.64		**56C-140TC**	5171
	31	2797	5.7	**III**	55.98		**56C-140TC**	5171
	29	3000	4.7	**III**	60.14		**56C-140TC**	5171
	26	3310	4.3	**III**	66.27		**56C-140TC**	5171
	22	3921	4.1	**III**	78.52		**56C-140TC**	5171
	20	4293	3.7	**III**	85.97		**56C-140TC**	5171
	18	4806	3.3	**III**	96.19		**56C-140TC**	5171
	17	5275	3.0	**III**	105.70		**56C-140TC**	5171
	15	5797	2.7	**III**	116.04		**56C-140TC**	5171
	13	6824	2.3	**III**	136.71		**56C-140TC**	5171
	12	7470	2.1	**III**	149.63		**56C-140TC**	5171
	11	8231	1.9	**II**	164.89		**56C-140TC**	5171

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
1.50 hp								
1.1 kW	**44**	1974	12.6	**III**	39.46	**ITB443**	**56C-140TC**	6969
(1750 rpm)	**39**	2222	12.7	**III**	44.51		**56C-140TC**	6969
	37	2381	10.4	**III**	47.67		**56C-140TC**	6969
	32	2708	10.5	**III**	54.26		**56C-140TC**	6969
	24	3647	8.5	**III**	72.94		**56C-140TC**	6969
	19	4602	6.7	**III**	92.14		**56C-140TC**	6969
	14	6204	5.0	**III**	124.32		**56C-140TC**	6969
	13	6762	4.6	**III**	135.45		**56C-140TC**	6969
	12	7497	4.1	**III**	150.15		**56C-140TC**	6969
	11	8178	3.8	**III**	163.80		**56C-140TC**	6969
	9.8	8948	3.5	**III**	179.16		**56C-140TC**	6969
2.0 hp								
1.5 kW	**238**	504	8.8	**III**	7.34	**ITB423**	**56C-140TC**	2444
(1750 rpm)	**191**	620	7.1	**III**	9.16		**56C-140TC**	2747
	148	805	6.6	**III**	11.85		**56C-140TC**	3143
	112	1062	5.0	**III**	15.64		**56C-140TC**	3624
	96	1248	5.0	**III**	18.32		**56C-140TC**	3926
	87	1372	4.5	**III**	20.12		**56C-140TC**	4114
	77	1558	4.5	**III**	22.85		**56C-140TC**	4159
	62	1921	3.7	**III**	28.22		**56C-140TC**	4159
	59	2018	3.7	**III**	29.57		**56C-140TC**	4159
	57	2106	3.6	**III**	30.90		**56C-140TC**	4159
	51	2354	3.2	**III**	34.57		**56C-140TC**	4159
	46	2584	2.9	**III**	37.99		**56C-140TC**	4159
	45	2655	3.0	**III**	39.01		**56C-140TC**	4159
	42	2841	2.8	**III**	41.70		**56C-140TC**	4159
	36	3346	2.4	**III**	49.13		**56C-140TC**	4159
	35	3416	2.3	**III**	50.19		**56C-140TC**	4159
	33	3664	2.2	**III**	53.77		**56C-140TC**	4159
	30	4036	2.0	**II**	59.26		**56C-140TC**	4159
	25	4797	1.7	**II**	70.40		**56C-140TC**	4159
	23	5248	1.6	**II**	77.08		**56C-140TC**	4159
	20	5877	1.4	**II**	86.24		**56C-140TC**	4159
	19	6452	1.3	**I**	94.77		**56C-140TC**	4159
	17	7089	1.2	**I**	104.04		**56C-140TC**	4159
	14	8346	1.0	**I**	122.57		**56C-140TC**	4159
	13	9134	0.9	**I**	134.15		**56C-140TC**	4159
	132	903	12.7	**III**	13.25	**ITB433**	**56C-140TC**	4206
	100	1195	10.4	**III**	17.49		**56C-140TC**	4867
	86	1390	10.2	**III**	20.44		**56C-140TC**	5171
	78	1531	9.8	**III**	22.50		**56C-140TC**	5171
	69	1735	8.7	**III**	25.49		**56C-140TC**	5171
	56	2151	7.0	**III**	31.56		**56C-140TC**	5171
	53	2248	6.7	**III**	32.98		**56C-140TC**	5171
	51	2354	6.4	**III**	34.55		**56C-140TC**	5171
	45	2629	5.7	**III**	38.66		**56C-140TC**	5171
	41	2894	5.2	**III**	42.48		**56C-140TC**	5171
	40	2965	5.4	**III**	43.51		**56C-140TC**	5171
	38	3177	5.0	**III**	46.64		**56C-140TC**	5171
	31	3815	4.2	**III**	55.98		**56C-140TC**	5171
	29	4098	3.5	**III**	60.14		**56C-140TC**	5171



Datos técnicos / *Technical data*

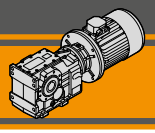
P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
2.0 hp								
1.5 kW	**26**	4514	3.1	III	66.27	ITB433	56C-140TC	5171
(1750 rpm)	**22**	5346	3.0	III	78.52		56C-140TC	5171
	20	5859	2.7	III	85.97		56C-140TC	5171
	18	6550	2.4	III	96.19		56C-140TC	5171
	17	7196	2.2	III	105.70		56C-140TC	5171
	15	7904	2.0	II	116.04		56C-140TC	5171
	13	9311	1.7	II	136.71		56C-140TC	5171
	12	10187	1.6	II	149.63		56C-140TC	5171
	11	11232	1.4	II	164.89		56C-140TC	5171
	47	2522	10.5	III	37.01	ITB443	56C-140TC	6969
	44	2691	9.2	III	39.46		56C-140TC	6969
	39	3036	9.3	III	44.51		56C-140TC	6969
	37	3248	7.6	III	47.67		56C-140TC	6969
	32	3700	7.7	III	54.26		56C-140TC	6969
	24	4965	6.2	III	72.94		56C-140TC	6969
	19	6275	4.9	III	92.14		56C-140TC	6969
	14	8470	3.7	III	124.32		56C-140TC	6969
	13	9222	3.4	III	135.45		56C-140TC	6969
	12	10223	3.0	III	150.15		56C-140TC	6969
	11	11152	2.8	III	163.80		56C-140TC	6969
	9.8	12205	2.5	III	179.16		56C-140TC	6969
3.0 hp								
2.2 kW	**238**	735	6.0	III	7.34	ITB423	140TC-180TC	2422
(1750 rpm)	**191**	912	4.8	III	9.16		140TC-180TC	2716
	148	1186	4.5	III	11.85		140TC-180TC	3097
	112	1558	3.4	III	15.64		140TC-180TC	3554
	96	1832	3.4	III	18.32		140TC-180TC	3836
	87	2009	3.1	III	20.12		140TC-180TC	4010
	77	2283	3.1	III	22.85		140TC-180TC	4159
	62	2815	2.5	III	28.22		140TC-180TC	4159
	59	2956	2.5	III	29.57		140TC-180TC	4159
	57	3089	2.4	III	30.90		140TC-180TC	4159
	51	3452	2.2	III	34.57		140TC-180TC	4159
	46	3797	2.0	II	37.99		140TC-180TC	4159
	45	3894	2.0	II	39.01		140TC-180TC	4159
	42	4169	1.9	II	41.70		140TC-180TC	4159
	36	4903	1.6	II	49.13		140TC-180TC	4159
	35	5010	1.6	II	50.19		140TC-180TC	4159
	33	5372	1.5	II	53.77		140TC-180TC	4159
	30	5921	1.3	I	59.26		140TC-180TC	4159
	213	823	10.8	III	8.21	ITB433	140TC-180TC	3239
	171	1027	8.6	III	10.25		140TC-180TC	3640
	132	1328	8.7	III	13.25		140TC-180TC	4166
	100	1744	7.1	III	17.49		140TC-180TC	4805
	86	2045	6.9	III	20.44		140TC-180TC	5171
	78	2248	6.7	III	22.50		140TC-180TC	5171
	69	2549	5.9	III	25.49		140TC-180TC	5171
	56	3151	4.8	III	31.56		140TC-180TC	5171
	53	3292	4.6	III	32.98		140TC-180TC	5171
	51	3452	4.4	III	34.55		140TC-180TC	5171
	45	3859	3.9	III	38.66		140TC-180TC	5171

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
3.0 hp								
2.2 kW	**41**	4240	3.5	III	42.48	ITB433	140TC-180TC	5171
(1750 rpm)	**40**	4346	3.7	III	43.51		140TC-180TC	5171
	38	4655	3.4	III	46.64		140TC-180TC	5171
	31	5594	2.8	III	55.98		140TC-180TC	5171
	29	6010	2.4	III	60.14		140TC-180TC	5171
	26	6620	2.1	III	66.27		140TC-180TC	5171
	22	7842	2.0	II	78.52		140TC-180TC	5171
	20	8585	1.9	II	85.97		140TC-180TC	5171
	18	9612	1.7	II	96.19		140TC-180TC	5171
	17	10559	1.5	II	105.70		140TC-180TC	5171
	15	11594	1.4	II	116.04		140TC-180TC	5171
	47	3700	7.2	III	37.01	ITB443	140TC-180TC	6969
	44	3939	6.3	III	39.46		140TC-180TC	6969
	39	4443	6.4	III	44.51		140TC-180TC	6969
	37	4762	5.2	III	47.67		140TC-180TC	6969
	32	5417	5.2	III	54.26		140TC-180TC	6969
	24	7284	4.3	III	72.94		140TC-180TC	6969
	19	9205	3.4	III	92.14		140TC-180TC	6969
	14	12418	2.5	III	124.32		140TC-180TC	6969
	13	13533	2.3	III	135.45		140TC-180TC	6969
	12	15002	2.1	III	150.15		140TC-180TC	6969
	11	16365	1.9	II	163.80		140TC-180TC	6969
	9.8	17896	1.7	II	179.16		140TC-180TC	6969
5.0 hp								
3.7 kW	**238**	1234	3.6	III	7.34	ITB423	180TC	2366
(1750 rpm)	**191**	1539	2.9	III	9.16		180TC	2637
	148	1991	2.7	III	11.85		180TC	2979
	112	2627	2.0	II	15.64		180TC	3373
	96	3078	2.0	II	18.32		180TC	3605
	87	3380	1.8	II	20.12		180TC	3743
	77	3839	1.8	II	22.85		180TC	3928
	62	4740	1.5	II	28.22		180TC	4159
	59	4967	1.5	II	29.57		180TC	4159
	57	5190	1.4	I	30.90		180TC	4159
	51	5807	1.3	I	34.57		180TC	4159
	46	6381	1.2	I	37.99		180TC	4159
	45	6554	1.2	I	39.01		180TC	4159
	42	7005	1.1	I	41.70		180TC	4159
	36	8253	1.0	I	49.13		180TC	4159
	35	8432	0.9	I	50.19		180TC	4159
	213	1380	6.4	III	8.21	ITB433	180TC	3189
	171	1721	5.1	III	10.25		180TC	3570
	132	2227	5.2	III	13.25		180TC	4061
	100	2938	4.2	III	17.49		180TC	4644
	86	3433	4.1	III	20.44		180TC	4994
	78	3780	4.0	III	22.50		180TC	5171
	69	4282	3.5	III	25.49		180TC	5171
	56	5301	2.8	III	31.56		180TC	5171
	53	5540	2.7	III	32.98		180TC	5171
	51	5804	2.6	III	34.55		180TC	5171
	45	6494	2.3	III	38.66		180TC	5171

Datos técnicos / *Technical data*

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
5.0 hp								
3.7 kW	**41**	7136	2.1	II	42.48	ITB433	180TC	5171
(1750 rpm)	**40**	7310	2.2	II	43.51		180TC	5171
	38	7834	2.0	II	46.64		180TC	5171
	31	9404	1.7	II	55.98		180TC	5171
	29	10102	1.4	I	60.14		180TC	5171
	26	11133	1.3	I	66.27		180TC	5171
	22	13190	1.2	I	78.52		180TC	5171
	20	14442	1.1	I	85.97		180TC	5171
	18	16158	1.0	I	96.19		180TC	5171
	47	6218	4.3	III	37.01	ITB443	180TC	6969
	44	6629	3.7	III	39.46		180TC	6969
	39	7477	3.8	III	44.51		180TC	6969
	37	8007	3.1	III	47.67		180TC	6969
	32	9115	3.1	III	54.26		180TC	6969
	24	12254	2.5	III	72.94		180TC	6969
	19	15478	2.0	II	92.14		180TC	6969
	14	20883	1.5	II	124.32		180TC	6969
	13	22754	1.4	I	135.45		180TC	6969
	12	25224	1.2	I	150.15		180TC	6969
	11	27517	1.1	I	163.80		180TC	6969
	9.8	30097	1.0	I	179.16		180TC	6969
7.5 hp								
5.5 kW	**238**	1832	2.4	III	7.34	ITB423	210TC	2319
(1750 rpm)	**191**	2283	1.9	II	9.16		210TC	2571
	148	2956	1.8	II	11.85		210TC	2881
	112	3903	1.4	II	15.64		210TC	3223
	96	4576	1.4	II	18.32		210TC	3413
	87	5027	1.2	I	20.12		210TC	3520
	77	5709	1.2	I	22.85		210TC	3657
	62	7045	1.0	I	28.22		210TC	4159
	59	7382	1.0	I	29.57		210TC	4159
	57	7718	1.0	I	30.90		210TC	4159
	51	8629	0.9	I	34.57		210TC	4159
	213	2053	4.3	III	8.21	ITB433	210TC	3147
	171	2558	3.5	III	10.25		210TC	3512
	132	3310	3.5	III	13.25		210TC	3974
	100	4363	2.8	III	17.49		210TC	4510
	86	5107	2.8	III	20.44		210TC	4823
	78	5620	2.7	III	22.50		210TC	5019
	69	6364	2.4	III	25.49		210TC	5171
	56	7877	1.9	II	31.56		210TC	5171
	53	8231	1.8	II	32.98		210TC	5171
	51	8629	1.7	II	34.55		210TC	5171
	45	9656	1.6	II	38.66		210TC	5171
	41	10612	1.4	II	42.48		210TC	5171
	40	10869	1.5	II	43.51		210TC	5171
	38	11648	1.4	II	46.64		210TC	5171
	31	13975	1.1	I	55.98		210TC	5171

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
7.5 hp								
5.5 kW	**222**	1965	7.6	III	7.88	ITB443	210TC	4503
(1750 rpm)	**184**	2381	6.3	III	9.53		210TC	4973
	149	2938	5.4	III	11.75		210TC	5537
	124	3531	5.0	III	14.13		210TC	6079
	102	4301	4.7	III	17.23		210TC	6707
	76	5780	4.3	III	23.16		210TC	6969
	71	6196	4.3	III	24.82		210TC	6969
	58	7497	3.5	III	30.03		210TC	6969
	47	9240	2.9	III	37.01		210TC	6969
	44	9851	2.5	III	39.46		210TC	6969
	39	11117	2.5	III	44.51		210TC	6969
	37	11904	2.1	III	47.67		210TC	6969
	32	13550	2.1	III	54.26		210TC	6969
	24	18215	1.7	II	72.94		210TC	6969
	19	23012	1.3	I	92.14		210TC	6969
	14	31040	1.0	I	124.32		210TC	6969
	13	33828	0.9	I	135.45		210TC	6969
10.0 hp								
7.5 kW	**238**	2505	1.8	II	7.34	ITB423	210TC	2257
(1750 rpm)	**191**	3115	1.4	II	9.16		210TC	2484
	148	4036	1.3	I	11.85		210TC	2751
	112	5328	1.0	I	15.64		210TC	3223
	96	6240	1.0	I	18.32		210TC	3413
	87	6850	0.9	I	20.12		210TC	3520
	77	7780	0.9	I	22.85		210TC	3657
	213	2797	3.2	III	8.21	ITB433	210TC	3092
	171	3487	2.5	III	10.25		210TC	3434
	132	4514	2.5	III	13.25		210TC	3857
	100	5957	2.1	III	17.49		210TC	4331
	86	6957	2.0	II	20.44		210TC	4596
	78	7665	2.0	II	22.50		210TC	4755
	69	8683	1.7	II	25.49		210TC	4952
	56	10745	1.4	II	31.56		210TC	5171
	53	11232	1.3	I	32.98		210TC	5171
	51	11763	1.3	I	34.55		210TC	5171
	45	13161	1.1	I	38.66		210TC	5171
	41	14462	1.0	I	42.48		210TC	5171
	40	14816	1.1	I	43.51		210TC	5171
	38	15878	1.0	I	46.64		210TC	5171
	222	2682	5.6	III	7.88	ITB443	210TC	4459
	184	3248	4.6	III	9.53		210TC	4914
	149	4001	4.0	III	11.75		210TC	5456
	124	4815	3.7	III	14.13		210TC	5971
	102	5868	3.5	III	17.23		210TC	6560
	76	7886	3.1	III	23.16		210TC	6969
	71	8452	3.1	III	24.82		210TC	6969
	58	10223	2.6	III	30.03		210TC	6969
	47	12603	2.1	III	37.01		210TC	6969
	44	13435	1.8	II	39.46		210TC	6969
	39	15161	1.9	II	44.51		210TC	6969



Datos técnicos

Technical data

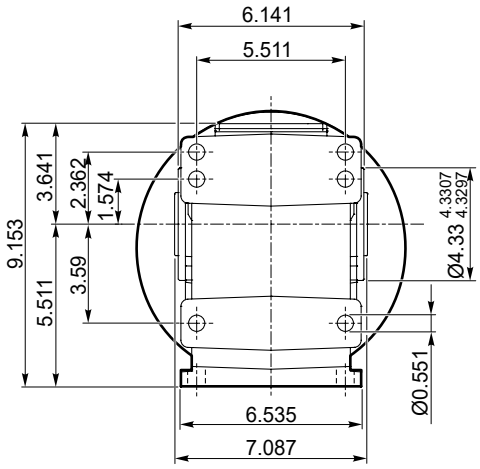
P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
10.0 hp								
7.5 kW	**37**	16232	1.5	**II**	47.67	**ITB443**	**210TC**	6969
(1750 rpm)	**32**	18480	1.5	**II**	54.26		**210TC**	6969
	24	24835	1.2	**I**	72.94		**210TC**	6969
	19	31376	1.0	**I**	92.14		**210TC**	6969
15.0 hp								
11.0 kW	**213**	4098	2.2	**III**	8.21	**ITB433**	**250TC**	2995
(1750 rpm)	**171**	5116	1.7	**II**	10.25		**250TC**	3297
	132	6620	1.7	**II**	13.25		**250TC**	3654
	100	8736	1.4	**II**	17.49		**250TC**	4018
	86	10205	1.4	**II**	20.44		**250TC**	4198
	78	11240	1.3	**I**	22.50		**250TC**	4293
	69	12727	1.2	**I**	25.49		**250TC**	4952
	56	15763	1.0	**I**	31.56		**250TC**	5171
	53	16471	0.9	**I**	32.98		**250TC**	5171
	222	3939	3.8	**III**	7.88	**ITB443**	**250TC**	4383
	184	4762	3.2	**III**	9.53		**250TC**	4812
	149	5868	2.7	**III**	11.75		**250TC**	5315
	124	7054	2.5	**III**	14.13		**250TC**	5783
	102	8603	2.4	**III**	17.23		**250TC**	6305
	76	11568	2.1	**III**	23.16		**250TC**	6969
	71	12391	2.1	**III**	24.82		**250TC**	6969
	58	15002	1.8	**II**	30.03		**250TC**	6969
	47	18489	1.4	**II**	37.01		**250TC**	6969
	44	19711	1.3	**I**	39.46		**250TC**	6969
	39	22233	1.3	**I**	44.51		**250TC**	6969
	32	27101	1.0	**I**	54.26		**250TC**	6969
20.0 hp								
15.0 kW	**213**	5594	1.6	**II**	8.21	**ITB433**	**250TC**	2884
(1750 rpm)	**171**	6974	1.3	**I**	10.25		**250TC**	3141
	132	9028	1.3	**I**	13.25		**250TC**	3422
	100	11913	1.0	**I**	17.49		**250TC**	4018
	86	13913	1.0	**I**	20.44		**250TC**	4198
	78	15321	1.0	**I**	22.50		**250TC**	4293
	69	17356	0.9	**I**	25.49		**250TC**	4952
	222	5364	2.8	**III**	7.88	**ITB443**	**250TC**	4296
	184	6496	2.3	**III**	9.53		**250TC**	4695
	149	8001	2.0	**II**	11.75		**250TC**	5153
	124	9621	1.8	**II**	14.13		**250TC**	5568
	102	11727	1.7	**II**	17.23		**250TC**	6012
	76	15772	1.6	**II**	23.16		**250TC**	6631
	71	16905	1.6	**II**	24.82		**250TC**	6759
	58	20454	1.3	**I**	30.03		**250TC**	6969
	47	25207	1.1	**I**	37.01		**250TC**	6969
	44	26880	0.9	**I**	39.46		**250TC**	6969
	39	30314	0.9	**I**	44.51		**250TC**	6969

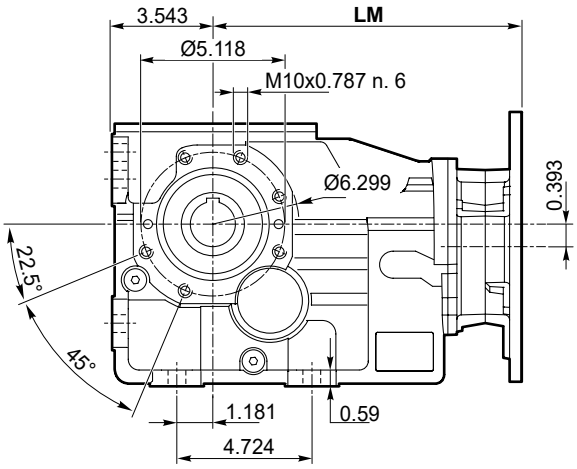
P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 [lb]
25.0 hp								
18.5 kW	**222**	6620	2.3	**III**	7.88	**ITB443**	**280TC**	4220
(1750 rpm)	**184**	8010	1.9	**II**	9.53		**280TC**	4593
	149	9869	1.6	**II**	11.75		**280TC**	5012
	124	11869	1.5	**II**	14.13		**280TC**	5380
	102	14471	1.4	**II**	17.23		**280TC**	5756
	76	19454	1.3	**I**	23.16		**280TC**	6226
	71	20844	1.3	**I**	24.82		**280TC**	6309
	58	25225	1.1	**I**	30.03		**280TC**	6969
	47	31093	0.9	**I**	37.01		**280TC**	6969
30.0 hp								
22.3 kW	**222**	7977	1.9	**II**	7.88	**ITB443**	**280TC**	4144
(1750 rpm)	**184**	9652	1.6	**II**	9.53		**280TC**	4491
	149	11896	1.3	**I**	11.75		**280TC**	4870
	124	14307	1.2	**I**	14.13		**280TC**	5192
	102	17440	1.2	**I**	17.23		**280TC**	5500
	76	23445	1.1	**I**	23.16		**280TC**	6226
	71	25128	1.1	**I**	24.82		**280TC**	6309
	58	30405	0.9	**I**	30.03		**280TC**	6969

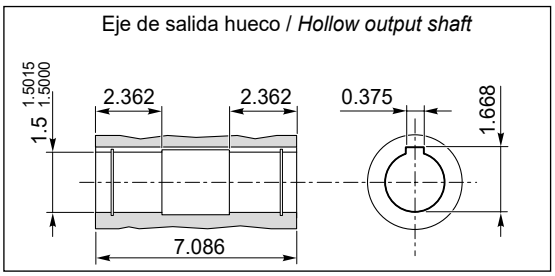
Dimensiones ***Dimensions***

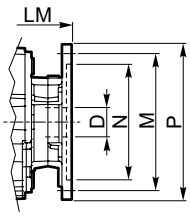
ITB 423 U

ITB 423 U



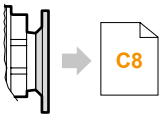




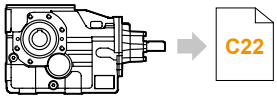


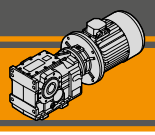
Dimensiones NEMA/ *NEMA Dimensions*				
	56C	**140TC**	**180TC**	**210TC**
LM	**11.75**		**12.77**	
N	4.5		8.5	
M	5.875		7.25	
P	6.5		9	
D	0.625	0.875	1.125	1.375

Bridas Motor
NEMA C-FACE



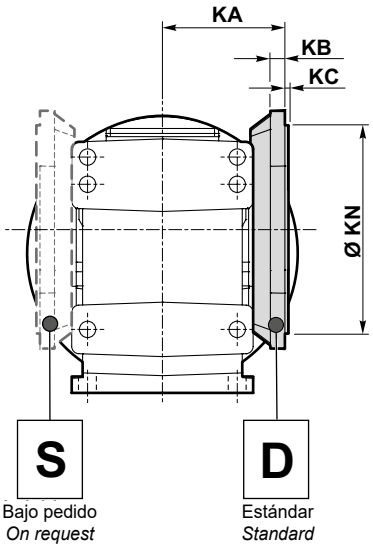
ITBIS 423..

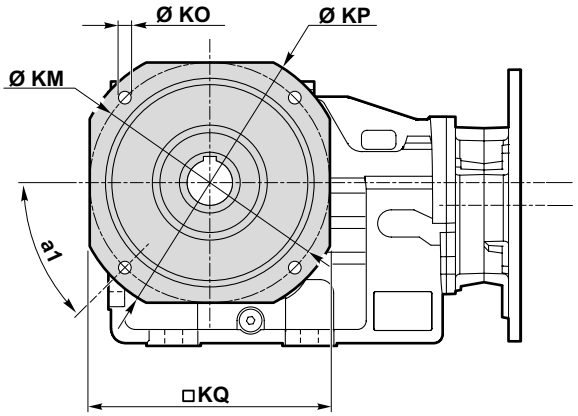


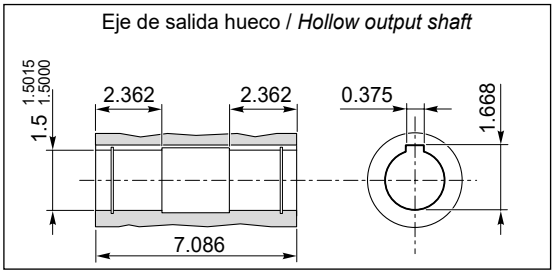


ITB 423 F...

ITB 423 F...







Versión **F** / ***F** Version*											
ITB	**a_1**	**KA**	**KB**	**KC**	**KM**	**KN**	**KO**	**KP**	**KQ**	**Brida / *Flange***	
										Tipo / *Type*	Peso / *Weight* [lb]
423	45°	4.448	0.512	0.157	6.496	5.118 5.1164 5.1148	0.433	7.874	6.772	**F200**	5.7
	45°	4.448	0.512	0.157	8.465	7.086 7.0849 7.0833	0.551	9.843	8.465	**F250**	8.3
	45°	4.448	0.512	0.157	10.433	9.055 9.0534 9.0519	0.551	11.811	10.433	**F300**	12.3

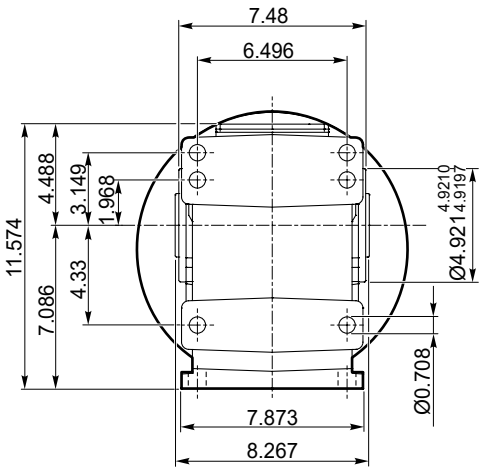
Peso / *Weight* [lb]				
ITB	**56C**	**140TC**	**180TC**	**210TC**
423 U	79.96		87.55	

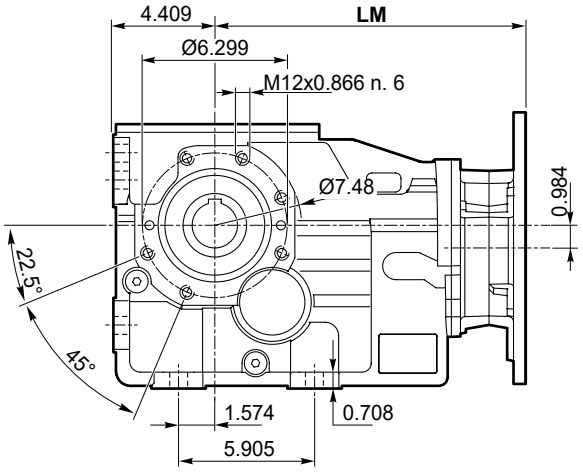
Nota: Peso del reductor llenado con aceite para la posición de montaje M1 (B3)
Note: weight of the gearbox filled with oil for M1 (B3) assembly position

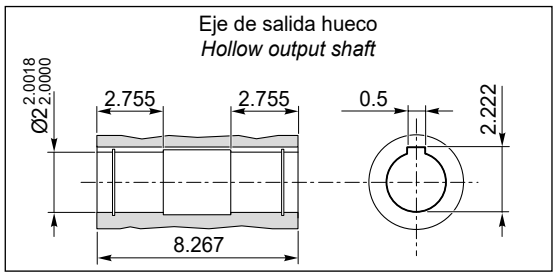
Dimensiones ***Dimensions***

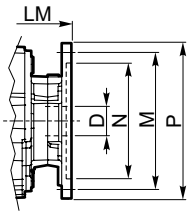
ITB 433 U

ITB 433 U



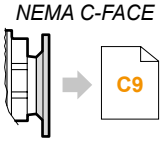




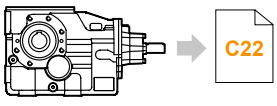


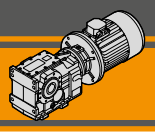
Dimensiones NEMA/ *NEMA Dimensions*					
	56C	**140TC**	**180TC**	**210TC**	**250TC**
LM	13.73		14.75		16.7
N	4.5		8.5		
M	5.875		7.25		
P	6.5		9		10
D	0.625	0.875	1.125	1.375	1.625

Bridas Motor
NEMA C-FACE



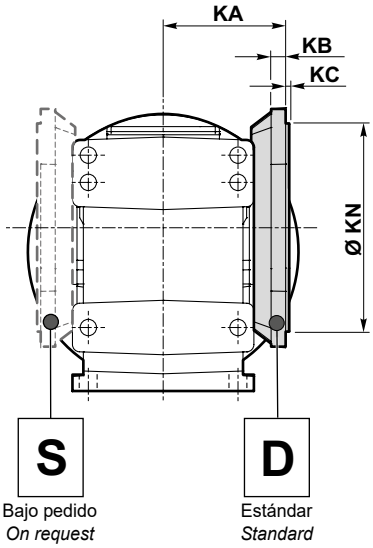
ITBIS 433..

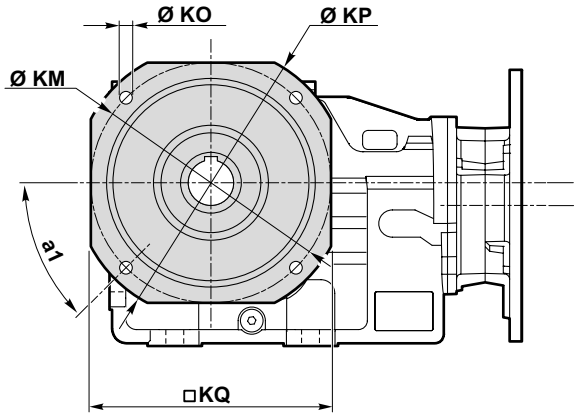


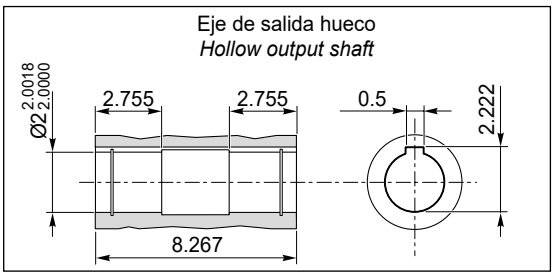


ITB 433 F...

ITB 433 F...







Versión **F** / ***F** Version*											
ITB	**a_1**	**KA**	**KB**	**KC**	**KM**	**KN**	**KO**	**KP**	**KQ**	**Brida / *Flange***	
										Tipo / *Type*	Peso / *Weight* [lb]
433	45°	5.314	0.630	0.157	8.465	7.086 (7.0849 / 7.0833)	0.551	9.843	8.465	**F250**	8.3
	45°	5.314	0.630	0.157	10.433	9.055 (9.0534 / 9.0519)	0.551	11.811	10.236	**F300**	12.3
	45°	5.314	0.630	0.157	11.811	9.842 (9.8408 / 9.8393)	0.709	13.780	11.811	**F350**	20.0

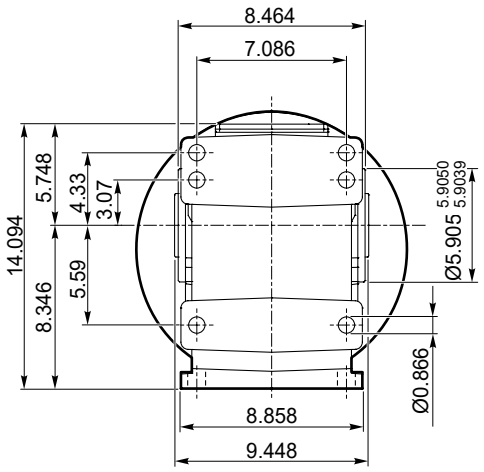
Peso / *Weight* [lb]					
ITB	**56C**	**140TC**	**180TC**	**210TC**	**250TC**
433 U	118.51		126.13		139.27

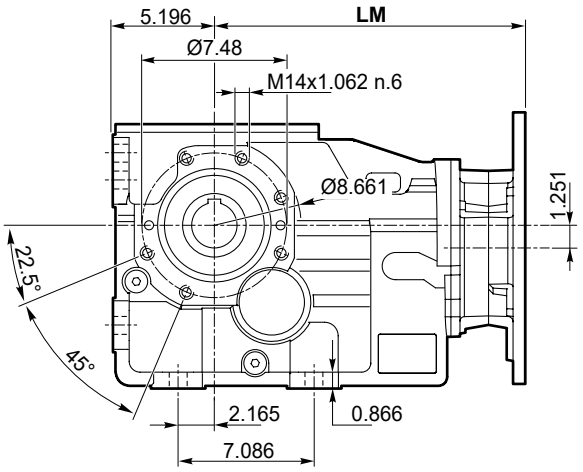
Nota: Peso del reductor llenado con aceite para la posición de montaje M1 (B3)
Note: weight of the gearbox filled with oil for M1 (B3) assembly position

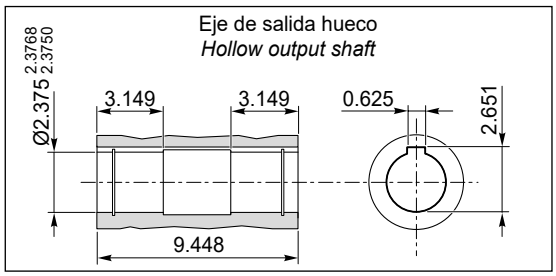
Dimensiones ***Dimensions***

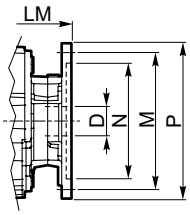
ITB 443 U

ITB 443 U



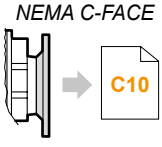




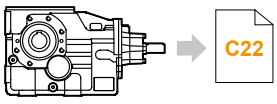


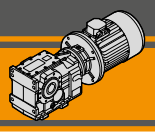
Dimensiones NEMA/ *NEMA Dimensions*						
	56C	**140TC**	**180TC**	**210TC**	**250TC**	**280TC**
LM	15.525		16.549		18.498	18.897
N	4.5		8.5			10.5
M	5.875		7.25			9
P	6.5		9		10	11.252
D	0.625	0.875	1.125	1.375	1.625	1.875

Bridas Motor
NEMA C-FACE



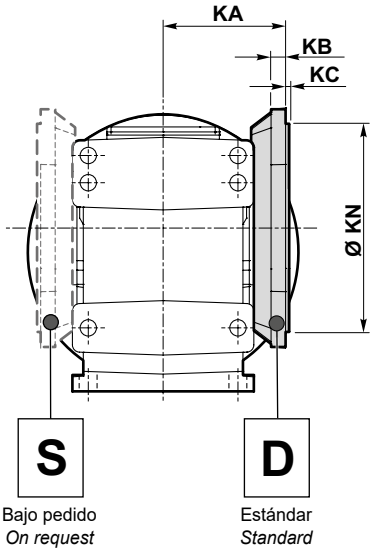
ITBIS 443..

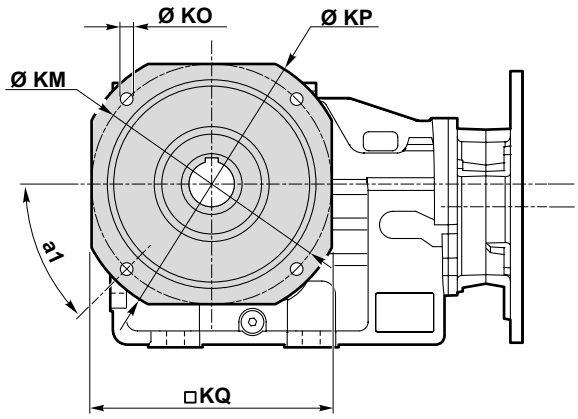


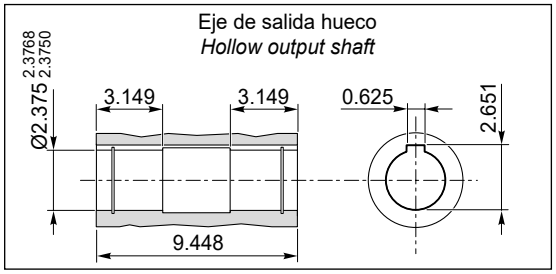


ITB 443 F...

ITB 443 F...







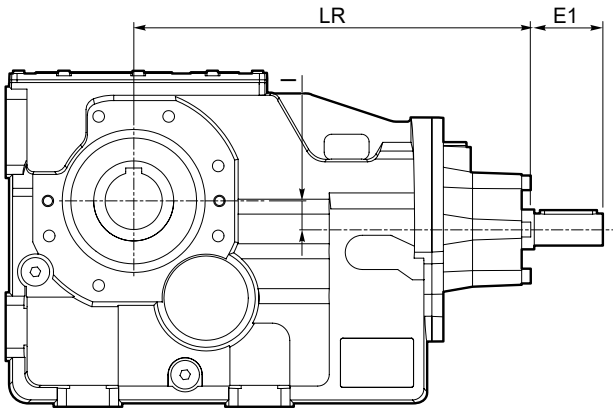
Versión **F** / ***F** Version*											
ITB	**a_1**	**KA**	**KB**	**KC**	**KM**	**KN**	**KO**	**KP**	**KQ**	**Brida / *Flange***	
										Tipo / *Type*	Peso / *Weight* [lb]
443	45°	5.905	0.709	0.157	10.433	9.055 (9.0534 / 9.0519)	0.551	11.811	10.433	**F300**	16.3
	45°	5.905	0.709	0.157	11.811	9.842 (9.8408 / 9.8393)	0.709	13.780	11.811	**F350**	22.4
	45°	5.905	0.709	0.157	15.748	13.779 (13.7778 / 13.7763)	0.709	17.717	15.748	**F400**	37.2

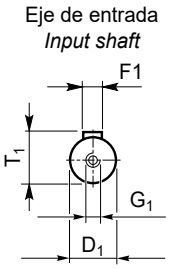
Peso / *Weight* [lb]						
ITB	**56C**	**140TC**	**180TC**	**210TC**	**250TC**	**280TC**
443 U	221.06		228.64		241.78	244.56

Nota: Peso del reductor llenado con aceite para la posición de montaje M1 (B3)
Note: weight of the gearbox filled with oil for M1 (B3) assembly position

Dimensiones *Dimensions*

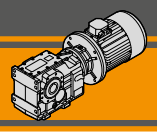
ITBIS..





ITBIS	Versione *Version*	LR	D1	E1	I	T1	F1	G1
423	U F	12.283	0.875 $^{0.8742}_{0.8734}$	1.969	1.26	0.958	0.188	1/4-20 UNC
433		14.263	0.875 $^{0.8742}_{0.8734}$	1.969	1.26	0.958	0.188	1/4-20 UNC
443		16.746	1.625 $^{1.6254}_{1.6248}$	3.15	1.476	1.791	0.375	5/8-11 UNC

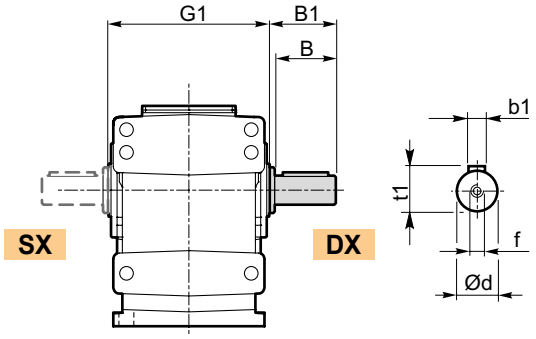
ITBIS	Peso / *Weight* [lb]
423 U	87.96
433 U	131.39
443 U	251.1



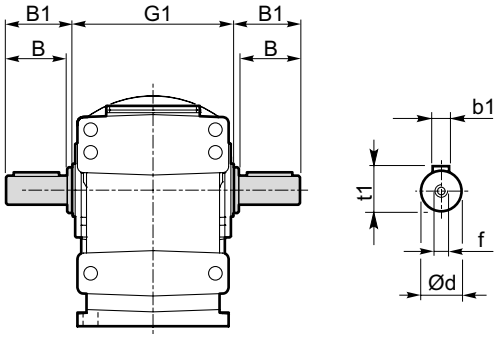
Accessorios — *Accessories*

Eje de salida / ***Output shaft***

ITB.. SZ..
ITBIS..SZ..



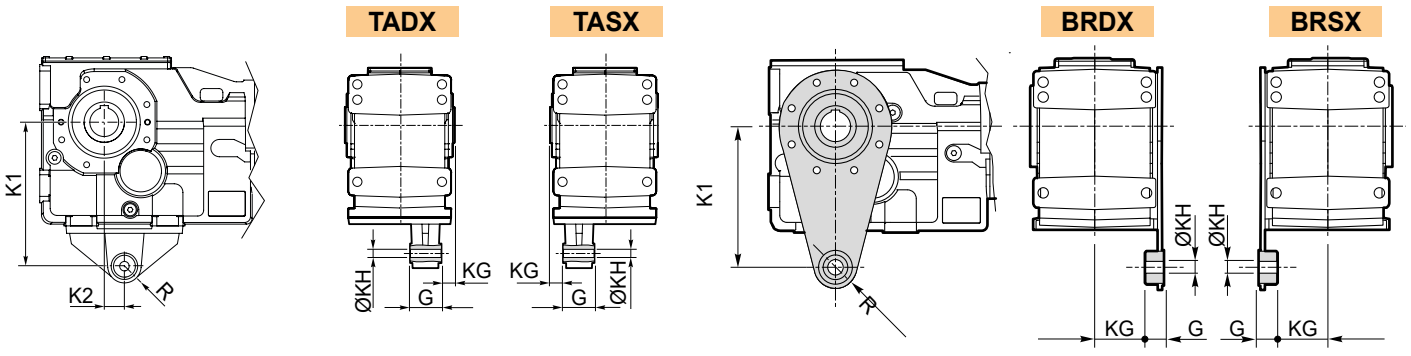
ITB... DZ
ITBIS..DZ



ITB	d	B	B1	G1	f	b1	t1	Peso / *Weight* [lb]	
								SZ	DZ
423	1.5 $^{1.5000}_{1.4988}$	2.992	3.149	7.086	5/8-11 UNC	0.375	1.664	4.85	7.05
433	2 $^{2.0000}_{1.9988}$	3.937	4.133	8.267	5/8-11 UNC	0.5	2.218	9.48	13.66
443	2.375 $^{2.3750}_{2.3738}$	4.724	4.921	9.448	3/4-10 UNC	0.625	2.645	15.65	22.70

Brazo de reacción / *Torque arm kit*

ITB..
ITBIS..



Brazo de reacción / *Torque arm*

ITB ITBIS	K1	K2	KG	KH	G	R	Peso *Weight* [lb]
423	7.874	1.181	0.984	0.650	2.362	1.142	6.39
433	9.843	1.378	0.984	0.650	2.362	1.142	9.7
443	11.811	1.378	1.181	0.984	3.150	1.575	17.85

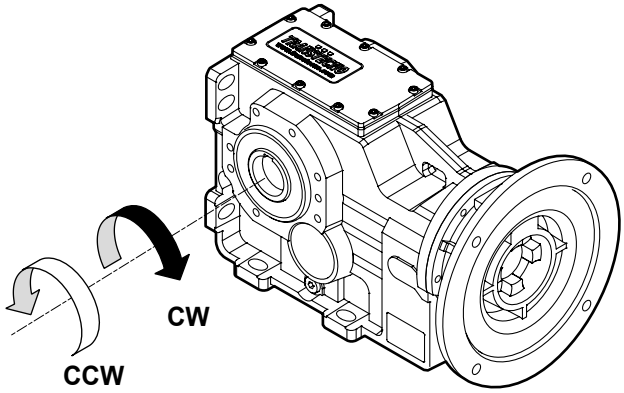
Brazo de reacción / *Torque arm*

ITB ITBIS	K1	KG	KH	G	R	Peso *Weight* [lb]
423	7.874	2.697	0.787	0.984	1.181	3.52
433	9.842	3.268	0.984	1.181	1.378	5.95

Accessorios — *Accessories*

Dispositivo anti-retorno / *Backstop device*

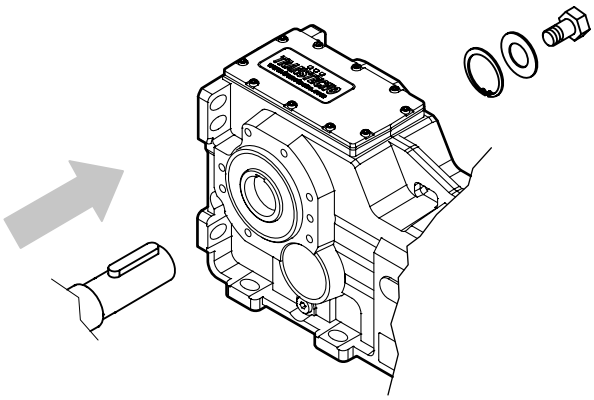
ITB...CW
ITB...CCW



El dispositivo anti-retorno permite que la flecha de salida gire en un solo sentido.
Antes de utilizarlo, especifique la rotación deseada como se muestra en la figura

The backstop device allows the output shaft to rotate in just one direction. Before using it, please specify output shaft rotation direction as shown in the figure.

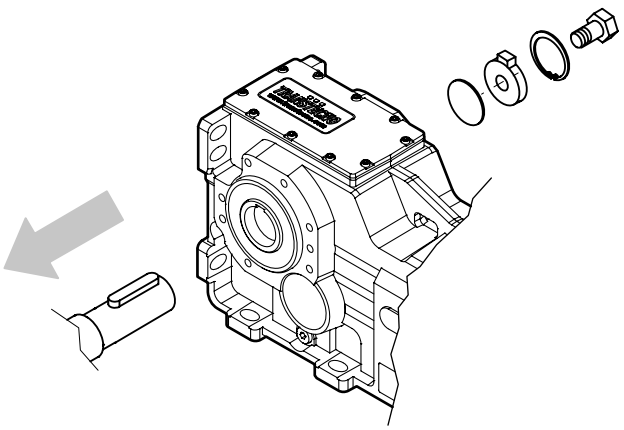
Kit de montaje para eje solido / *Output shaft assembly kit*



Kit de montaje para eje sólido disponible a solicitud.
Referirse con nuestro departamento técnico para conocer las instrucciones de montaje.

Output shaft assembly kit available upon request: for assembly instructions please contact our Technical Assistance

Kit de montaje para eje solido / *Output shaft disassembly kit*



Kit de desmontaje para eje sólido disponible a solicitud.
Referirse con nuestro departamento técnico para conocer las instrucciones de montaje.

Output shaft disassembly kit available upon request: for assembly instructions please contact our Technical Assistance

TRANSTECNO®
the modular gearmotor

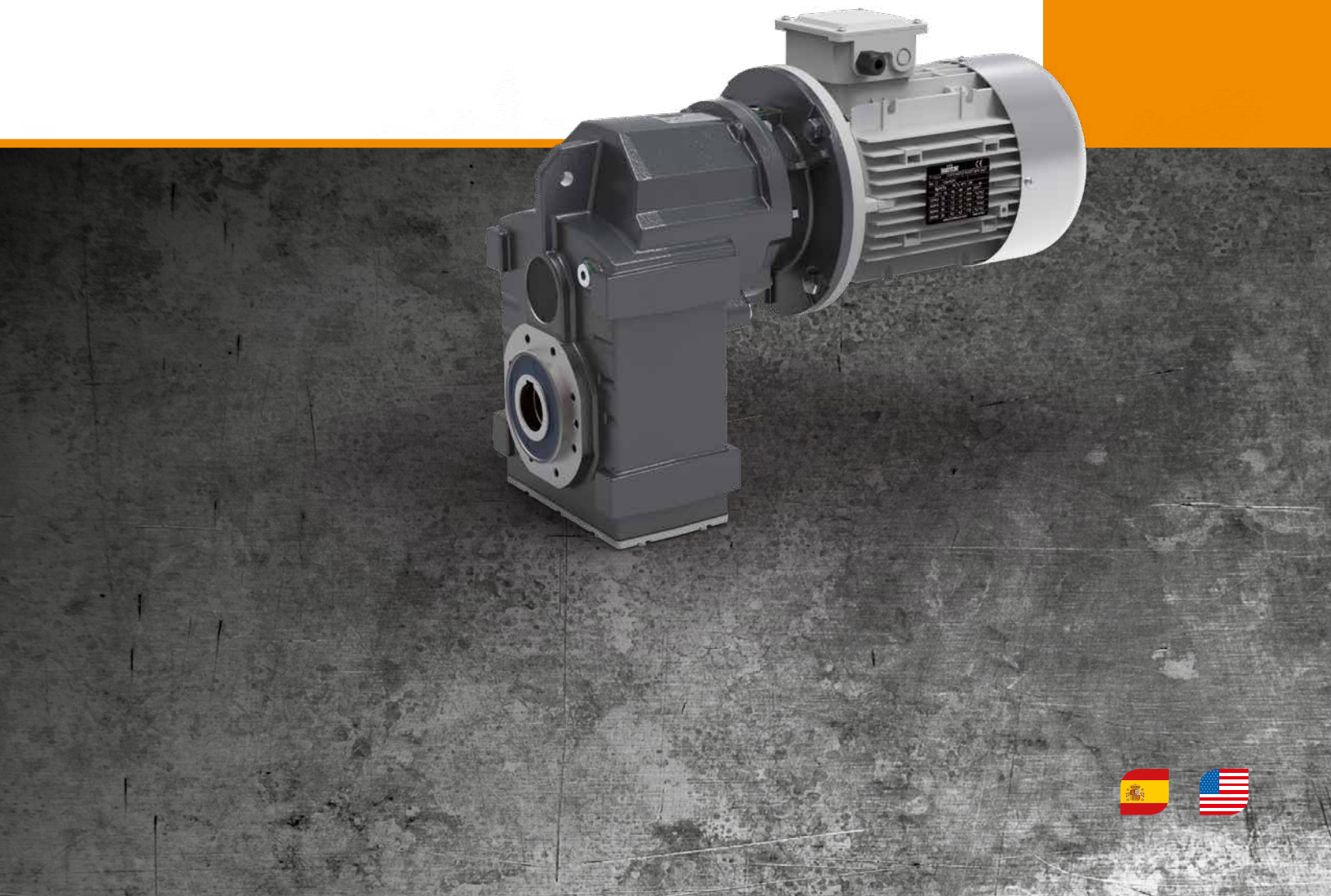
ITS

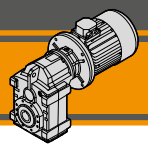
ITS Iron

60Hz

Motorreductores pendulares
Helical parallel gearmotors

Nema





ENERGY SAVING

Pag.
Page

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Características técnicas

El motorreductor ITS está diseñado para aplicaciones de uso rudo. Su carcaza fundida en una sola pieza y su diseño modular con distintos accesorios en la entrada y en la salida, incrementan su flexibilidad de uso en múltiples aplicaciones.

Características principales de la serie ITH:

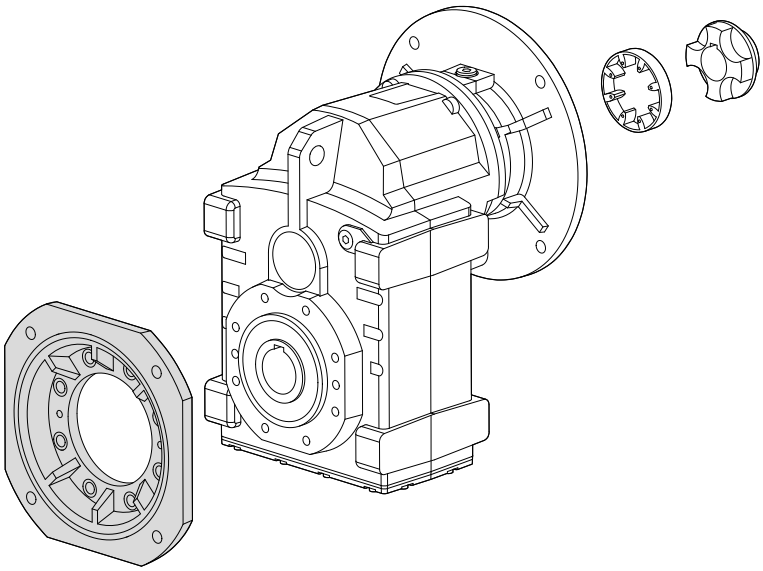
- Carcaza en fierro fundido;
- Elevada modularidad;
- Lubricación con aceite sintético;
- Acoplamiento a motor con cople flexible;
- Acabado en pintura epóxica RAL 7016.

Technical features

The ITS gearmotors are intended for heavy duty applications. The robust one pieces casing of the main housing and the modular design of input and output sets increase application fexibility.

The main features of ITS range are:

- *Robust cast iron housings*
- *High degree of modularity*
- *Lubrication with synthetic oil*
- *Coupled to motor with flexible coupling*
- *Epoxy powder coating RAL 7016.*

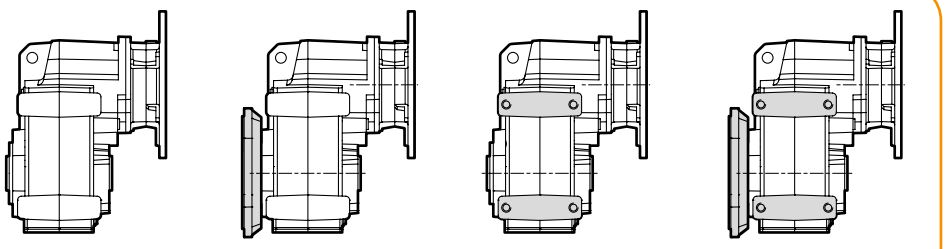


Clasificación

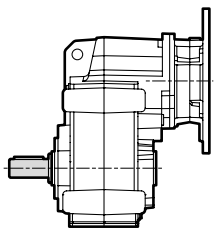
Classification

ITS...

Versione Riduttore
Gearbox Version

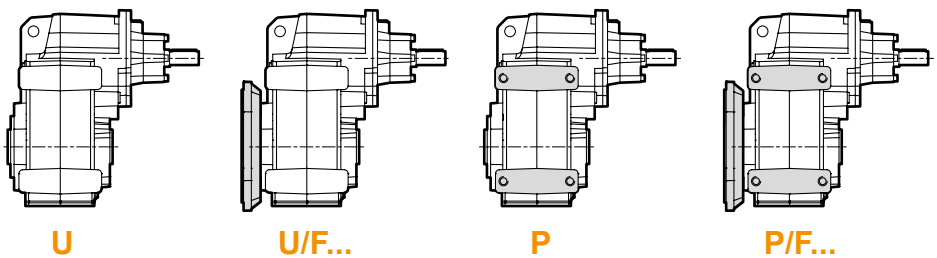


Albero di uscita
Output shaft

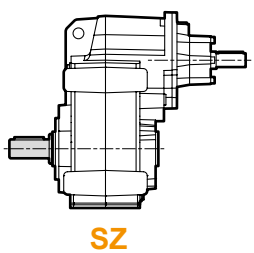


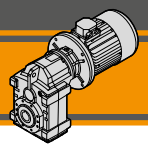
ITSIS...

Versione Riduttore
Gearbox Version



Albero di uscita
Output shaft





Clasificación — *Classification*

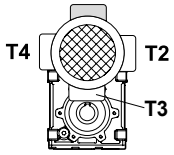
REDUCTOR / *GEARBOX*

ITS	92	2	U	22.92	D1.5	56C	SZ	M1	CW
Tipo *Type*	Tamaño *Size*	Etapas *Stages*	Versión *Version*	Relación de reducción *Ratio*	Eje de salida *Output shaft*	NEMA	Eje de salida *Output shaft*	Posición de Montaje *Mounting position*	Dispositivo anti retroceso *Backstop device*
ITS 	**92** **93** **94**	**2** **3**	**U...** **U/F...** **P...** **P/F...**	véase tablas *see tables*	véase tablas *see tables*	**56C** **140TC** **180TC** **210TC** **250TC** **280TC**	**SZ**	**M1 (B3)** **M2 (V6)** **M3 (B8)** **M4 (V5)** **M5 (B7)** **M6 (B6)**	**CW** **CCW**

REDUCTOR / *GEARBOX*

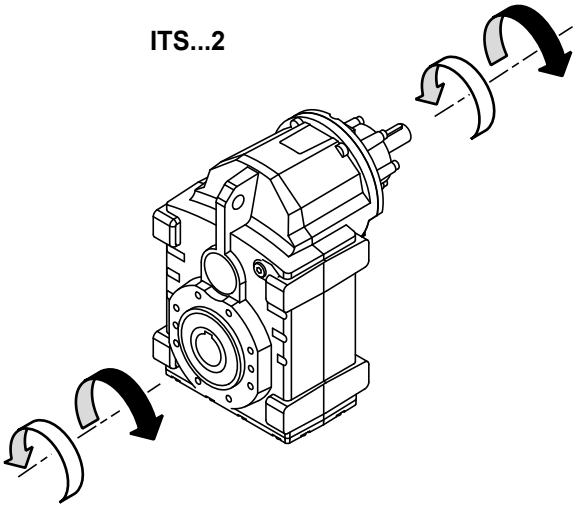
ITSIS	92	2	U	22.92	D1.5	SZ	M1
Tipo *Type*	Tamaño *Size*	Etapas *Stages*	Versión *Version*	Relación de reducción *Ratio*	Eje de salida *Output shaft*	Eje de salida *Output shaft*	Posición de Montaje *Mounting position*
ITSIS 	**92** **93** **94**	**2** **3**	**U...** **U/F...** **P...** **P/F...**	véase tablas *see tables*	véase tablas *see tables*	**SZ**	**M1 (B3)** **M2 (V6)** **M3 (B8)** **M4 (V5)** **M5 (B7)** **M6 (B6)**

MOTOR / *MOTOR*

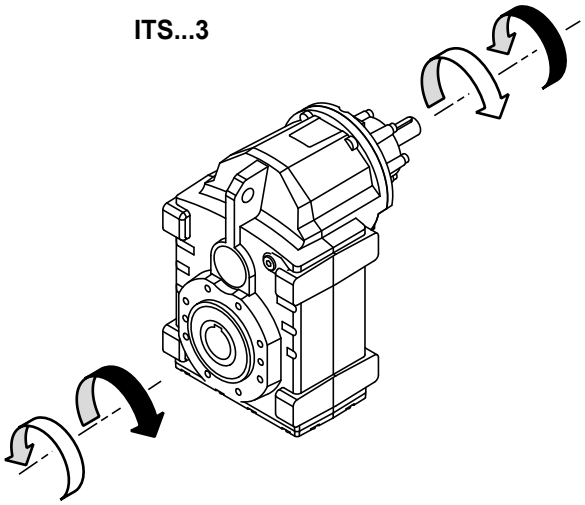
7.5hp / 5.5kW	4p	3ph	230/400V	60Hz	T1
Potencia *Power*	Polos *Poles*	Fases *Phases*	Tensión *Voltage*	Frecuencia *Frequency*	Posición caja de bornes *Terminal box pos.*
véase tablas *see tables*	**2p** **4p** **6p** **8p**	**1ph** **3ph**	**230V** **230/400V**	**50Hz** **60Hz**	**T1** (Std) 

Sentidos de rotación — *Direction of rotation*

ITS...2



ITS...3



Nomenclatura — *Symbols*

n_1	[rpm]	Velocidad de entrada / *Input speed*
n_2	[rpm]	Velocidad de salida / *Output speed*
i		Relación de reducción / *Ratio*
P_1	[hp]	Potencia en la entrada / *Input power*
M_2	[lb·in]	Par en la salida en función de P_1 / *Output torque referred to* P_1
Pn_1	[hp]	Potencia nominal en la entrada / *Nominal input power*
Mn_2	[lb·in]	Par nominal en la salida en función de Pn_1 / *Nominal output torque referred to* Pn_1
sf		Rendimiento dinámico / *Service factor*
R_1	[lb]	Carga radial permitida a la entrada / *Permitted input radial load*
A_1	[lb]	Carga axial permitida a la entrada / *Permitted input axial load*
R_2	[lb]	Carga radial admisible en la salida / *Maximum output radial load*
A_2	[lb]	Carga axial admisible en la salida / *Maximum output axial load*

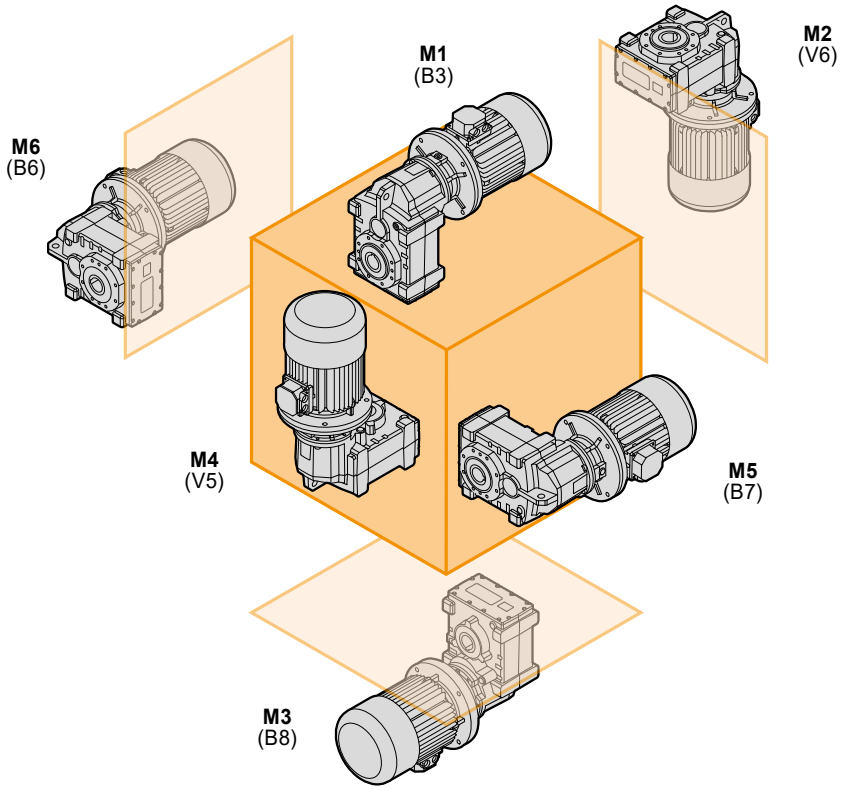
Lubricación

Lubrication

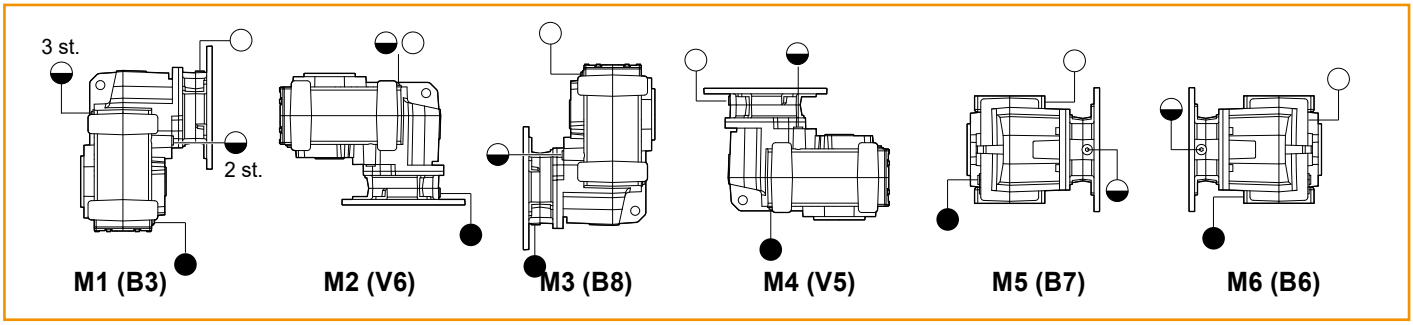
Los moto reductores de la serie ITS se suministran con lubricante sintético viscosidad 320. La cantidad de lubricante dependerá de la posición de montaje requerida.

ITS series gearmotors come complete with synthetic lubricant 320 viscosity. The lubricant quantity depends on assembly position.

ITS..



ITS	**Cantidad de aceite** (US gal) / ***Oil quantity*** *(US gal)*					
	M1 (B3)	**M2** (V6)	**M3** (B8)	**M4** (V5)	**M5** (B7)	**M6** (B6)
922	0.89	1.36	1.10	1.61	0.97	0.95
923	1.29					
932	1.24	1.84	1.13	2.03	1.18	1.16
933	1.76					
942	2.40	3.8	2.40	4.06	2.4	2.35
943	3.17					



○ Respiradero y tapón de llenado / *Breather and filling plug*
◒ Tapón de nivel de aceite / *Oil level plug*
● Tapón de dren de aceite / *Oil drain plug*

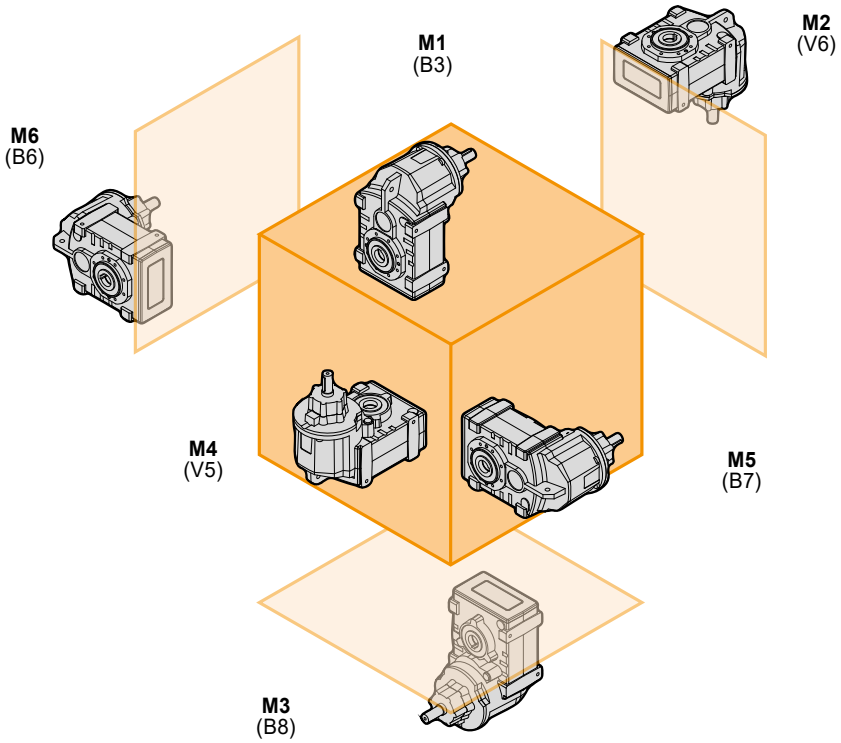
Lubricación

Lubrication

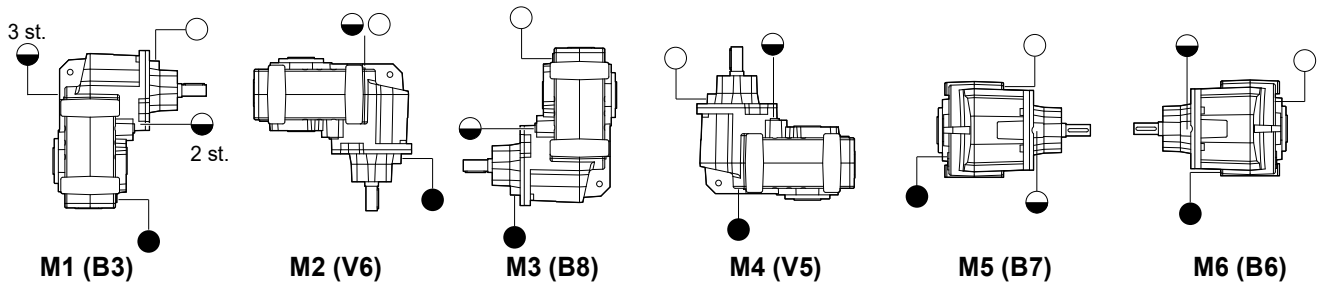
Los reductores de la serie ITSIS se suministran con lubricante sintético viscosidad 320. La cantidad de lubricante dependerá de la posición de montaje requerida.

ITSIS series gearboxes come complete with synthetic lubricant 320 viscosity. The lubricant quantity depends on assembly position.

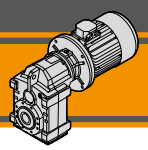
ITSIS..



ITSIS	Cantidad de aceite (US gal) / *Oil quantity (US gal)*					
	M1 (B3)	**M2** (V6)	**M3** (B8)	**M4** (V5)	**M5** (B7)	**M6** (B6)
922	0.95	1.47	1.16	1.61	1.03	1.00
923	1.34					
932	1.29	1.95	1.24	2.03	1.24	1.21
933	1.82					
942	2.45	3.97	2.58	4.06	2.5	2.43
943	3.22	3.90	2.50	4.06	2.45	2.40



○ Respiradero y tapón de llenado / *Breather and filling plug*
◒ Tapón de nivel de aceite / *Oil level plug*
● Tapón de dren de aceite / *Oil drain plug*



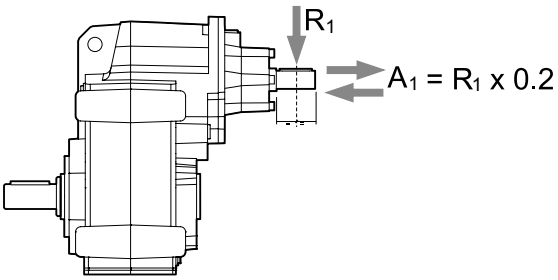
Carga radial a la entrada — *Input Radial loads*

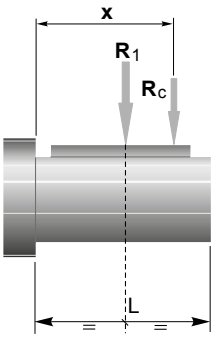
ITS 922 ITS 923 -932 ITS 933 - 943	n_1 [rpm]	Potencia motor / *Motor Power [hp]*		
		3	5	7.5
R_1 [lb]	1750	404		168
	1150	472	269	-
	850	562	-	-

ITS 942	n_1 [rpm]	Potencia motor / *Motor Power [hp]*				
		7.5	10	15	20	25
R_1 [lb]	1750	831			629	269
	1150	1101		741	146	-
	850	1180	876	-	-	-

Las cargas radiales máximas aplicables están indicadas en las tablas.
Cuando la carga radial no se aplica en el punto medio del eje, es necesario calcular la carga efectiva a través la siguiente fórmula:

The radial loads maximum output applicable are indicated in the previous tables.
When the resulting radial load is not applied on the centre line of the shaft it is necessary to calculate the effective load with the following formula:





	ITS922	ITS923	ITS932	ITS933	ITS942	ITS943
a	5.472				6.181	5.472
b	4.330				4.645	4.330

$$R_c = \frac{R_1 \cdot a}{(b+x)} \leq R_1$$

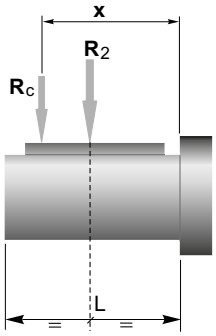
$$R \leq R_c$$

a, b = valores dados en la tabla
a, b = values given in the table

Carga radial en la salida — *Output radial loads*

Las cargas radiales máximas aplicables en la salida están indicadas en la siguiente tabla.
Cuando la carga radial no se aplica en el punto medio del eje, es necesario calcular la carga efectiva a través la siguiente fórmula:

The radial loads maximum output applicable are indicated in the technical data table.
When the resulting radial load is not applied on the centre line of the shaft it is necessary to calculate the effective load with the following formula:



ITS	922 U... 923 U...	922 P... 923 P...	932 U... 933 U...	932 P... 933 P...	942 U... 943 U...	942 P... 943 P...
a	7.480	7.165	8.818	8.503	10.314	9.921
b	5.905	5.590	6.850	6.535	7.952	7.559
R_{2MAX}	2135	4046	2697	5170	3372	6969

$$R_c = \frac{R_2 \cdot a}{(b+x)} \leq R_{2MAX}$$

$$R \leq R_c$$

a, b = valores dados en la tabla
a, b = values given in the table

La versión U se suministra con rodamientos esféricos en la salida.
La versión P se suministra con rodamientos de rodillos en la salida.

U version has ball bearings on the output side.
P version uses taper roller bearings.
It's possible to have taper roller bearings for U version upon request.

Datos técnicos — n_1 1750 rpm — *Technical data*

n_2 [rpm]	Mn_2 [lb·in]	Pn_1 [hp]	i	R_2 U [lb]	R_2 P [lb]
ITSIS 922					
309	4425	22.63	5.66	560	2106
248	4425	18.14	7.06	637	2378
209	4425	15.30	8.37	704	2612
192	5753	18.23	9.13	692	2632
168	5753	15.94	10.43	748	2833
145	5753	13.81	12.04	813	3066
130	6638	14.22	13.50	829	3175
113	6638	12.39	15.50	898	3425
98	7966	12.93	17.81	902	3541
81	7966	10.60	21.73	1013	3951
76	7966	10.06	22.92	1045	4068
74	7966	9.68	23.80	1068	4159
66	7966	8.65	26.63	1140	4159
60	7966	7.87	29.26	1205	4159
54	8851	7.96	32.14	1205	4159
50	8851	7.27	35.19	1271	4159
44	8851	6.49	39.38	1357	4159
40	8851	5.91	43.27	1433	4159
37	8851	5.38	47.50	1514	4159
31	9736	5.04	55.96	1572	4159
29	9736	4.60	61.25	1657	4159
26	9736	4.17	67.50	1754	4159
ITSIS 923					
23	9736	3.83	75.00	1865	4159
20	9736	3.34	86.28	2024	4159
19	9736	3.04	94.46	2136	4159
16	9736	2.65	108.48	2136	4159
15	9736	2.42	118.77	2136	4159
12	9736	2.04	140.93	2136	4159
11	9736	1.86	154.30	2136	4159
10	9736	1.68	172.40	2136	4159
9.3	9736	1.53	188.76	2136	4159
8.3	9736	1.36	211.15	2136	4159
7.3	9736	1.20	238.53	2136	4159
6.4	9736	1.05	272.74	2136	4159
6.0	9736	0.99	289.29	2136	4159
5.5	9736	0.90	316.73	2136	4159
5.1	9736	0.84	342.86	2136	4159
4.7	9736	0.77	375.38	2136	4159

NEMA Motores aplicables — ***NEMA Motor adapters***

ITS 922			
56C	**140TC**	**180TC**	**210TC**
			*
			*

ITS 923		
56C	**140TC**	**180TC**
		*
		*
		*
		*
		*
		*
		*
		*
		*
	*	*
	*	*

NOTA
Las áreas resaltadas indican el tamaño de carcasa del motor correspondiente.

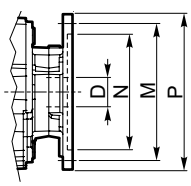
*** =** El Factor de servicio (sf) se deberá seleccionar con respecto a la aplicación: Favor de contactar con nuestro Servicio Técnico

NOTE
Highlighted áreas indicate the motor input flange available on each gearbox size.

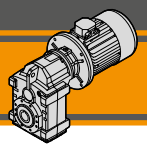
**** =*** *The service factor (**sf**) has to be selected depending on application: please contact our Technical Department.*

Antes de seleccionar cualquier reductor, favor de revisar los valores de desempeño en las páginas D11 a la D17.

Before selecting any gearbox, please read the performance values shown in the tables on page D11 to D17.



Dimensiones NEMA/ *NEMA Dimensions*				
	56C	**140TC**	**180TC**	**210TC**
N	4.5		8.5	
M	5.88		7.25	
P	6.5		9	
D	0.625	0.875	1.125	1.375



Datos técnicos — **n_1 1750 rpm** — ***Technical data***

n_2 [rpm]	Mn_2 [lb·in]	Pn_1 [hp]	i	R_2 U [lb]	R_2 P [lb]
ITSIS 932					
285	7523	35.47	6.13	623	2614
229	7523	28.43	7.65	709	2952
194	7523	24.08	9.03	781	3234
177	7966	23.28	9.90	811	3368
155	7966	20.45	11.27	874	3617
134	7966	17.64	13.06	953	3924
120	7966	15.80	14.58	1016	4168
104	8851	15.23	16.81	1069	4420
91	8851	13.31	19.24	1156	4761
74	10621	13.02	23.57	1217	5114
71	10621	12.41	24.75	1252	5171
68	12391	13.88	25.81	1193	5171
61	12391	12.41	28.88	1274	5171
50	14604	12.16	34.71	1285	5171
46	14604	11.10	38.01	1354	5171
41	14604	9.94	42.53	1446	5171
37	14604	9.03	46.73	1528	5171
34	14604	8.23	51.30	1613	5171
29	14604	7.00	60.44	1775	5171
27	14604	6.40	66.15	1871	5171
24	13276	5.27	72.90	2104	5171
ITSIS 933					
22	15046	5.49	81.00	2062	5171
19	15046	4.77	93.18	2238	5171
17	15046	4.37	102.02	2359	5171
15	15046	3.78	117.16	2557	5171
14	15046	3.45	128.28	2698	5171
12	15046	2.92	152.21	2698	5171
11	15046	2.67	166.65	2698	5171
9.4	15046	2.39	186.19	2698	5171
8.6	15046	2.18	203.86	2698	5171
7.7	15046	1.96	228.05	2698	5171
6.8	15046	1.73	257.61	2698	5171
5.9	15046	1.50	294.56	2698	5171
5.6	15046	1.42	312.43	2698	5171
5.1	15046	1.30	342.07	2698	5171
4.7	15046	1.19	370.29	2698	5171
4.3	15046	1.09	405.42	2698	5171

NEMA Motores aplicables
NEMA Motor adapters

56C	140TC	180TC	210TC	250TC
ITS 932				
				*
				*
ITS 933				
				*
				*
				*
				*
				*
				*
				*
				*
				*

NOTA
Las áreas resaltadas indican el tamaño de carcasa del motor correspondiente.

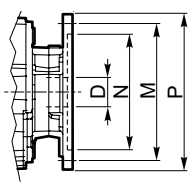
***** = El Factor de servicio (sf) se deberá seleccionar con respecto a la aplicación: Favor de contactar con nuestro Servicio Técnico

NOTE
Highlighted áreas indicate the motor input flange available on each gearbox size.

***** = *The service factor (**sf**) has to be selected depending on application: please contact our Technical Department.*

Antes de seleccionar cualquier reductor, favor de revisar los valores de desempeño en las páginas D11 a la D17.

Before selecting any gearbox, please read the performance values shown in the tables on page D11 to D17.



Dimensiones NEMA/ *NEMA Dimensions*					
	56C	140TC	180TC	210TC	250TC
N	4.5		8.5		
M	5.88		7.25		
P	6.5		9		10
D	0.625	0.875	1.125	1.375	1.625

Datos técnicos — n_1 1750 rpm — *Technical data*

n_2 [rpm]	Mn_2 [lb·in]	Pn_1 [hp]	i	R_2 U [lb]	R_2 P [lb]
ITSIS 942					
221	13276	48.44	7.93	946	3882
183	13276	40.04	9.59	1057	4311
164	15046	40.80	10.67	1083	4477
148	15046	36.83	11.82	1150	4738
136	17702	39.67	12.91	1140	4816
123	17702	36.01	14.21	1206	5078
110	21242	38.62	15.91	1182	5168
101	21242	35.46	17.33	1242	5417
92	22127	33.46	19.13	1287	5656
75	22127	27.43	23.32	1445	6307
60	23897	23.50	29.42	1579	6969
56	26552	24.49	31.35	1520	6969
44	26552	19.40	39.60	1742	6969
41	23897	15.99	43.25	1977	6969
37	23897	14.42	47.95	2099	6969
33	28322	15.35	53.43	1968	6969
30	28322	14.09	58.22	2069	6969
27	28322	12.68	64.53	2197	6969
25	26552	10.93	70.40	2437	6969
23	26552	9.96	77.00	2568	6969
ITSIS 943					
19	28322	8.89	94.05	2737	6969
18	28322	8.37	99.94	2836	6969
16	28322	7.65	109.42	2990	6969
15	28322	6.93	121.00	3170	6969
13	28322	6.21	134.54	3372	6969
12	28322	5.64	147.69	3372	6969
10	28322	4.92	169.71	3372	6969
9.4	28322	4.49	185.82	3372	6969
8.4	28322	4.02	207.90	3372	6969
7.7	28322	3.68	228.46	3372	6969
7.0	28322	3.35	250.80	3372	6969
5.9	28322	2.82	295.48	3372	6969
5.4	28322	2.58	323.40	3372	6969
4.9	28322	2.34	356.40	3372	6969

NEMA Motores aplicables
NEMA Motor adapters

ITS 942					
56C	**140TC**	**180TC**	**210TC**	**250TC**	**280TC**
					*
					*

ITS 943			
56C	**140TC**	**180TC**	**210TC**
			*
			*
			*
			*
			*
			*
			*
		*	

NOTA
Las áreas resaltadas indican el tamaño de carcasa del motor correspondiente.

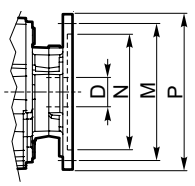
*** =** El Factor de servicio (sf) se deberá seleccionar con respecto a la aplicación: Favor de contactar con nuestro Servicio Técnico

NOTE
Highlighted áreas indicate the motor input flange available on each gearbox size.

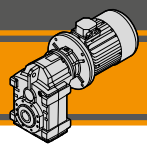
**** =*** *The service factor (**sf**) has to be selected depending on application: please contact our Technical Department.*

Antes de seleccionar cualquier reductor, favor de revisar los valores de desempeño en las páginas D11 a la D17.

Before selecting any gearbox, please read the performance values shown in the tables on page D11 to D17.



Dimensiones NEMA/ *NEMA Dimensions*						
	56C	**140TC**	**180TC**	**210TC**	**250TC**	**280TC**
N	4.5		8.5			10.5
M	5.875		7.25			9
P	6.5		9		10	11.252
D	0.625	0.875	1.125	1.375	1.625	1.875



Datos técnicos

Technical data

0.33 hp

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
0.25 kW	**7.3**	2708	3.6	**III**	238.53	**ITS923**	**56C**	2136	4159
(1750 rpm)	**6.4**	3098	3.1	**III**	272.74		**56C**	2136	4159
	6.0	3284	3.0	**III**	289.29		**56C**	2136	4159
	5.5	3593	2.7	**III**	316.73		**56C**	2136	4159
	5.1	3894	2.5	**III**	342.86		**56C**	2136	4159
	4.7	4257	2.3	**III**	375.38		**56C**	2136	4159
	9.4	2115	7.1	**III**	186.19	**ITS933**	**56C**	2698	5171
	8.6	2310	6.5	**III**	203.86		**56C**	2698	5171
	7.7	2584	5.8	**III**	228.05		**56C**	2698	5171
	6.8	2921	5.1	**III**	257.61		**56C**	2698	5171
	5.9	3346	4.5	**III**	294.56		**56C**	2698	5171
	5.6	3549	4.2	**III**	312.43		**56C**	2698	5171
	5.1	3885	3.9	**III**	342.07		**56C**	2698	5171
	4.7	4204	3.6	**III**	370.29		**56C**	2698	5171
	4.3	4602	3.3	**III**	405.42		**56C**	2698	5171

0.5 hp

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
0.37 kW	**7.3**	4009	2.4	**III**	238.53	**ITS923**	**56C**	2136	4159
(1750 rpm)	**6.4**	4585	2.1	**III**	272.74		**56C**	2136	4159
	6.0	4859	2.0	**II**	289.29		**56C**	2136	4159
	5.5	5319	1.8	**II**	316.73		**56C**	2136	4159
	5.1	5762	1.7	**II**	342.86		**56C**	2136	4159
	4.7	6302	1.5	**II**	375.38		**56C**	2136	4159
	9.4	3124	4.8	**III**	186.19	**ITS933**	**56C**	2698	5171
	8.6	3425	4.4	**III**	203.86		**56C**	2698	5171
	7.7	3832	3.9	**III**	228.05		**56C**	2698	5171
	6.8	4328	3.5	**III**	257.61		**56C**	2698	5171
	5.9	4948	3.0	**III**	294.56		**56C**	2698	5171
	5.6	5248	2.9	**III**	312.43		**56C**	2698	5171
	5.1	5744	2.6	**III**	342.07		**56C**	2698	5171
	4.7	6222	2.4	**III**	370.29		**56C**	2698	5171
	4.3	6806	2.2	**III**	405.42		**56C**	2698	5171
	19	1584	17.9	**III**	94.05	**ITS943**	**56C**	3372	6969
	18	1682	16.9	**III**	99.94		**56C**	3372	6969
	16	1841	15.4	**III**	109.42		**56C**	3372	6969
	15	2036	13.9	**III**	121.00		**56C**	3372	6969
	13	2257	12.5	**III**	134.54		**56C**	3372	6969
	12	2478	11.4	**III**	147.69		**56C**	3372	6969
	10	2850	9.9	**III**	169.71		**56C**	3372	6969
	9.4	3124	9.1	**III**	185.82		**56C**	3372	6969
	8.4	3496	8.1	**III**	207.90		**56C**	3372	6969
	7.7	3841	7.4	**III**	228.46		**56C**	3372	6969
	7.0	4213	6.7	**III**	250.80		**56C**	3372	6969
	5.9	4965	5.7	**III**	295.48		**56C**	3372	6969
	5.4	5434	5.2	**III**	323.40		**56C**	3372	6969
	4.9	5983	4.7	**III**	356.40		**56C**	3372	6969

0.75 hp

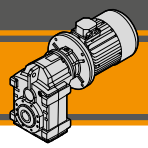
P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
0.55 kW	**309**	142	30.7	**III**	5.66	**ITS922**	**56C**	678	2373
(1750 rpm)	**248**	177	24.6	**III**	7.06		**56C**	770	2676
	209	212	20.7	**III**	8.37		**56C**	849	2936
	192	230	24.7	**III**	9.13		**56C**	892	3078
	168	266	21.6	**III**	10.43		**56C**	963	3310
	145	310	18.7	**III**	12.04		**56C**	1045	3577
	130	345	19.3	**III**	13.50		**56C**	1115	3804
	113	398	16.8	**III**	15.50		**56C**	1205	4097
	98	451	17.5	**III**	17.81		**56C**	1303	4159
	81	558	14.4	**III**	21.73		**56C**	1455	4159
	76	584	13.6	**III**	22.92		**56C**	1499	4159
	74	611	13.1	**III**	23.80		**56C**	1530	4159
	66	682	11.7	**III**	26.63		**56C**	1628	4159
	60	743	10.7	**III**	29.26		**56C**	1714	4159
	54	823	10.8	**III**	32.14		**56C**	1803	4159
	50	894	9.9	**III**	35.19		**56C**	1895	4159
	44	1000	8.8	**III**	39.38		**56C**	2012	4159
	40	1106	8.0	**III**	43.27		**56C**	2115	4159
	37	1213	7.3	**III**	47.50		**56C**	2136	4159
	31	1425	6.8	**III**	55.96		**56C**	2136	4159
	29	1558	6.2	**III**	61.25		**56C**	2136	4159
	26	1717	5.7	**III**	67.50		**56C**	2136	4159
	23	1876	5.2	**III**	75.00	**ITS923**	**56C**	2136	4159
	20	2151	4.5	**III**	86.28		**56C**	2136	4159
	19	2363	4.1	**III**	94.46		**56C**	2136	4159
	16	2708	3.6	**III**	108.48		**56C**	2136	4159
	15	2965	3.3	**III**	118.77		**56C**	2136	4159
	12	3523	2.8	**III**	140.93		**56C**	2136	4159
	11	3850	2.5	**III**	154.30		**56C**	2136	4159
	10	4301	2.3	**III**	172.40		**56C**	2136	4159
	9.3	4717	2.1	**III**	188.76		**56C**	2136	4159
	8.3	5275	1.8	**II**	211.15		**56C**	2136	4159
	7.3	5957	1.6	**II**	238.53		**56C**	2136	4159
	6.4	6806	1.4	**II**	272.74		**56C**	2136	4159
	6.0	7222	1.3	**I**	289.29		**56C**	2136	4159
	5.5	7913	1.2	**I**	316.73		**56C**	2136	4159
	5.1	8559	1.1	**I**	342.86		**56C**	2136	4159
	4.7	9373	1.0	**I**	375.38		**56C**	2136	4159
	37	1195	12.3	**III**	46.73	**ITS932**	**56C**	2471	5171
	34	1310	11.2	**III**	51.30		**56C**	2599	5171
	29	1540	9.5	**III**	60.44		**56C**	2698	5171
	27	1690	8.7	**III**	66.15		**56C**	2698	5171
	24	1859	7.1	**III**	72.90		**56C**	2698	5171

Datos técnicos

Technical data

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
0.75 hp									
0.55 kW	**22**	2027	7.4	**III**	81.00	**ITS933**	**56C**	2698	5171
(1750 rpm)	**19**	2328	6.5	**III**	93.18		**56C**	2698	5171
	17	2549	5.9	**III**	102.02		**56C**	2698	5171
	15	2930	5.1	**III**	117.16		**56C**	2698	5171
	14	3204	4.7	**III**	128.28		**56C**	2698	5171
	12	3797	4.0	**III**	152.21		**56C**	2698	5171
	11	4160	3.6	**III**	166.65		**56C**	2698	5171
	9.4	4647	3.2	**III**	186.19		**56C**	2698	5171
	8.6	5089	3.0	**III**	203.86		**56C**	2698	5171
	7.7	5691	2.6	**III**	228.05		**56C**	2698	5171
	6.8	6434	2.3	**III**	257.61		**56C**	2698	5171
	5.9	7355	2.0	**II**	294.56		**56C**	2698	5171
	5.6	7798	1.9	**II**	312.43		**56C**	2698	5171
	5.1	8541	1.8	**II**	342.07		**56C**	2698	5171
	4.7	9249	1.6	**II**	370.29		**56C**	2698	5171
	4.3	10125	1.5	**II**	405.42		**56C**	2698	5171
	19	2345	12.1	**III**	94.05	**ITS943**	**56C**	3372	6969
	18	2496	11.3	**III**	99.94		**56C**	3372	6969
	16	2735	10.4	**III**	109.42		**56C**	3372	6969
	15	3018	9.4	**III**	121.00		**56C**	3372	6969
	13	3363	8.4	**III**	134.54		**56C**	3372	6969
	12	3691	7.7	**III**	147.69		**56C**	3372	6969
	10	4240	6.7	**III**	169.71		**56C**	3372	6969
	9.4	4638	6.1	**III**	185.82		**56C**	3372	6969
	8.4	5195	5.5	**III**	207.90		**56C**	3372	6969
	7.7	5709	5.0	**III**	228.46		**56C**	3372	6969
	7.0	6266	4.5	**III**	250.80		**56C**	3372	6969
	5.9	7382	3.8	**III**	295.48		**56C**	3372	6969
	5.4	8072	3.5	**III**	323.40		**56C**	3372	6969
	4.9	8904	3.2	**III**	356.40		**56C**	3372	6969

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
1.0 hp									
0.75 kW	**309**	195	22.5	**III**	5.66	**ITS922**	**56C-140TC**	676	2368
(1750 rpm)	**248**	248	18.0	**III**	7.06		**56C-140TC**	767	2671
	209	292	15.2	**III**	8.37		**56C-140TC**	845	2928
	192	319	18.1	**III**	9.13		**56C-140TC**	888	3070
	168	363	15.9	**III**	10.43		**56C-140TC**	958	3299
	145	416	13.7	**III**	12.04		**56C-140TC**	1039	3563
	130	469	14.1	**III**	13.50		**56C-140TC**	1107	3788
	113	540	12.3	**III**	15.50		**56C-140TC**	1196	4077
	98	620	12.9	**III**	17.81		**56C-140TC**	1292	4159
	81	752	10.5	**III**	21.73		**56C-140TC**	1440	4159
	76	797	10.0	**III**	22.92		**56C-140TC**	1482	4159
	74	832	9.6	**III**	23.80		**56C-140TC**	1513	4159
	66	929	8.6	**III**	26.63		**56C-140TC**	1606	4159
	60	1018	7.8	**III**	29.26		**56C-140TC**	1689	4159
	54	1115	7.9	**III**	32.14		**56C-140TC**	1775	4159
	50	1221	7.2	**III**	35.19		**56C-140TC**	1863	4159
	44	1372	6.5	**III**	39.38		**56C-140TC**	1974	4159
	40	1505	5.9	**III**	43.27		**56C-140TC**	2070	4159
	37	1655	5.4	**III**	47.50		**56C-140TC**	2136	4159
	31	1947	5.0	**III**	55.96		**56C-140TC**	2136	4159
	29	2133	4.6	**III**	61.25		**56C-140TC**	2136	4159
	26	2345	4.1	**III**	67.50		**56C-140TC**	2136	4159
	23	2558	3.8	**III**	75.00	**ITS923**	**56C-140TC**	2136	4159
	20	2938	3.3	**III**	86.28		**56C-140TC**	2136	4159
	19	3213	3.0	**III**	94.46		**56C-140TC**	2136	4159
	16	3691	2.6	**III**	108.48		**56C-140TC**	2136	4159
	15	4045	2.4	**III**	118.77		**56C-140TC**	2136	4159
	12	4797	2.0	**II**	140.93		**56C-140TC**	2136	4159
	11	5257	1.9	**II**	154.30		**56C-140TC**	2136	4159
	10	5868	1.7	**II**	172.40		**56C-140TC**	2136	4159
	9.3	6426	1.5	**II**	188.76		**56C-140TC**	2136	4159
	8.3	7187	1.4	**II**	211.15		**56C-140TC**	2136	4159
	7.3	8125	1.2	**I**	238.53		**56C-140TC**	2136	4159
	6.4	9284	1.0	**I**	272.74		**56C-140TC**	2136	4159
	6.0	9851	1.0	**I**	289.29		**56C-140TC**	2136	4159
	5.5	10789	0.9	**I**	316.73		**56C-140TC**	2136	4159
	71	859	12.3	**III**	24.75	**ITS932**	**56C-140TC**	1725	5171
	68	894	13.8	**III**	25.81		**56C-140TC**	1765	5171
	61	1000	12.3	**III**	28.88		**56C-140TC**	1877	5171
	50	1204	12.1	**III**	34.71		**56C-140TC**	2075	5171
	46	1319	11.0	**III**	38.01		**56C-140TC**	2178	5171
	41	1478	9.9	**III**	42.53		**56C-140TC**	2315	5171
	37	1629	9.0	**III**	46.73		**56C-140TC**	2433	5171
	34	1788	8.2	**III**	51.30		**56C-140TC**	2554	5171
	29	2098	6.9	**III**	60.44		**56C-140TC**	2698	5171
	27	2301	6.3	**III**	66.15		**56C-140TC**	2698	5171
	24	2531	5.2	**III**	72.90		**56C-140TC**	2698	5171



Datos técnicos

Technical data

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
1.0 hp									
0.75 kW	**22**	2761	5.5	**III**	81.00	**ITS933**	**56C-140TC**	2698	5171
(1750 rpm)	**19**	3169	4.7	**III**	93.18		**56C-140TC**	2698	5171
	17	3478	4.3	**III**	102.02		**56C-140TC**	2698	5171
	15	3992	3.8	**III**	117.16		**56C-140TC**	2698	5171
	14	4372	3.4	**III**	128.28		**56C-140TC**	2698	5171
	12	5187	2.9	**III**	152.21		**56C-140TC**	2698	5171
	11	5673	2.7	**III**	166.65		**56C-140TC**	2698	5171
	9.4	6337	2.4	**III**	186.19		**56C-140TC**	2698	5171
	8.6	6939	2.2	**III**	203.86		**56C-140TC**	2698	5171
	7.7	7762	1.9	**II**	228.05		**56C-140TC**	2698	5171
	6.8	8771	1.7	**II**	257.61		**56C-140TC**	2698	5171
	5.9	10028	1.5	**II**	294.56		**56C-140TC**	2698	5171
	5.6	10639	1.4	**II**	312.43		**56C-140TC**	2698	5171
	5.1	11648	1.3	**I**	342.07		**56C-140TC**	2698	5171
	4.7	12612	1.2	**I**	370.29		**56C-140TC**	2698	5171
	4.3	13807	1.1	**I**	405.42		**56C-140TC**	2698	5171
	27	2248	12.6	**III**	64.53	**ITS942**	**56C-140TC**	3372	6969
	25	2452	10.8	**III**	70.40		**56C-140TC**	3372	6969
	23	2682	9.9	**III**	77.00		**56C-140TC**	3372	6969
	19	3204	8.8	**III**	94.05	**ITS943**	**56C-140TC**	3372	6969
	18	3408	8.3	**III**	99.94		**56C-140TC**	3372	6969
	16	3726	7.6	**III**	109.42		**56C-140TC**	3372	6969
	15	4124	6.9	**III**	121.00		**56C-140TC**	3372	6969
	13	4585	6.2	**III**	134.54		**56C-140TC**	3372	6969
	12	5027	5.6	**III**	147.69		**56C-140TC**	3372	6969
	10	5780	4.9	**III**	169.71		**56C-140TC**	3372	6969
	9.4	6328	4.5	**III**	185.82		**56C-140TC**	3372	6969
	8.4	7081	4.0	**III**	207.90		**56C-140TC**	3372	6969
	7.7	7780	3.6	**III**	228.46		**56C-140TC**	3372	6969
	7.0	8541	3.3	**III**	250.80		**56C-140TC**	3372	6969
	5.9	10063	2.8	**III**	295.48		**56C-140TC**	3372	6969
	5.4	11010	2.6	**III**	323.40		**56C-140TC**	3372	6969
	4.9	12134	2.3	**III**	356.40		**56C-140TC**	3372	6969

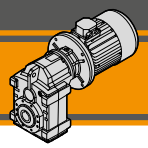
P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
1.5 hp									
1.1 kW	**309**	292	15.3	**III**	5.66	**ITS922**	**56C-140TC**	673	2361
(1750 rpm)	**248**	363	12.3	**III**	7.06		**56C-140TC**	763	2660
	209	425	10.4	**III**	8.37		**56C-140TC**	839	2915
	192	469	12.4	**III**	9.13		**56C-140TC**	881	3054
	168	531	10.8	**III**	10.43		**56C-140TC**	950	3280
	145	611	9.4	**III**	12.04		**56C-140TC**	1028	3540
	130	690	9.6	**III**	13.50		**56C-140TC**	1095	3760
	113	788	8.4	**III**	15.50		**56C-140TC**	1180	4043
	98	912	8.8	**III**	17.81		**56C-140TC**	1272	4159
	81	1106	7.2	**III**	21.73		**56C-140TC**	1413	4159
	76	1168	6.8	**III**	22.92		**56C-140TC**	1453	4159
	74	1213	6.6	**III**	23.80		**56C-140TC**	1482	4159
	66	1354	5.9	**III**	26.63		**56C-140TC**	1570	4159
	60	1496	5.3	**III**	29.26		**56C-140TC**	1646	4159
	54	1637	5.4	**III**	32.14		**56C-140TC**	1725	4159
	50	1797	4.9	**III**	35.19		**56C-140TC**	1807	4159
	44	2009	4.4	**III**	39.38		**56C-140TC**	1907	4159
	40	2204	4.0	**III**	43.27		**56C-140TC**	1992	4159
	37	2425	3.7	**III**	47.50		**56C-140TC**	2078	4159
	31	2850	3.4	**III**	55.96		**56C-140TC**	2136	4159
	29	3124	3.1	**III**	61.25		**56C-140TC**	2136	4159
	26	3443	2.8	**III**	67.50		**56C-140TC**	2136	4159
	23	3744	2.6	**III**	75.00	**ITS923**	**56C-140TC**	2136	4159
	20	4310	2.3	**III**	86.28		**56C-140TC**	2136	4159
	19	4717	2.1	**III**	94.46		**56C-140TC**	2136	4159
	16	5417	1.8	**II**	108.48		**56C-140TC**	2136	4159
	15	5930	1.6	**II**	118.77		**56C-140TC**	2136	4159
	12	7036	1.4	**II**	140.93		**56C-140TC**	2136	4159
	11	7709	1.3	**I**	154.30		**56C-140TC**	2136	4159
	10	8612	1.1	**I**	172.40		**56C-140TC**	2136	4159
	9.3	9426	1.0	**I**	188.76		**56C-140TC**	2136	4159
	8.3	10541	0.9	**I**	211.15		**56C-140TC**	2136	4159
	134	664	12.0	**III**	13.06	**ITS932**	**56C-140TC**	1196	4536
	120	743	10.7	**III**	14.58		**56C-140TC**	1272	4810
	104	859	10.3	**III**	16.81		**56C-140TC**	1376	5171
	91	982	9.0	**III**	19.24		**56C-140TC**	1482	5171
	74	1204	8.8	**III**	23.57		**56C-140TC**	1656	5171
	71	1266	8.4	**III**	24.75		**56C-140TC**	1700	5171
	68	1319	9.4	**III**	25.81		**56C-140TC**	1738	5171
	61	1469	8.4	**III**	28.88		**56C-140TC**	1845	5171
	50	1770	8.2	**III**	34.71		**56C-140TC**	2032	5171
	46	1938	7.5	**III**	38.01		**56C-140TC**	2129	5171
	41	2168	6.7	**III**	42.53		**56C-140TC**	2258	5171
	37	2381	6.1	**III**	46.73		**56C-140TC**	2366	5171
	34	2620	5.6	**III**	51.30		**56C-140TC**	2477	5171
	29	3080	4.7	**III**	60.44		**56C-140TC**	2678	5171
	27	3372	4.3	**III**	66.15		**56C-140TC**	2698	5171
	24	3717	3.6	**III**	72.90		**56C-140TC**	2698	5171

Datos técnicos

Technical data

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
1.5 hp									
1.1 kW	**22**	4045	3.7	**III**	81.00	**ITS933**	**56C-140TC**	2698	5171
(1750 rpm)	**19**	4655	3.2	**III**	93.18		**56C-140TC**	2698	5171
	17	5098	3.0	**III**	102.02		**56C-140TC**	2698	5171
	15	5850	2.6	**III**	117.16		**56C-140TC**	2698	5171
	14	6408	2.3	**III**	128.28		**56C-140TC**	2698	5171
	12	7603	2.0	**II**	152.21		**56C-140TC**	2698	5171
	11	8320	1.8	**II**	166.65		**56C-140TC**	2698	5171
	9.4	9302	1.6	**II**	186.19		**56C-140TC**	2698	5171
	8.6	10178	1.5	**II**	203.86		**56C-140TC**	2698	5171
	7.7	11391	1.3	**I**	228.05		**56C-140TC**	2698	5171
	6.8	12869	1.2	**I**	257.61		**56C-140TC**	2698	5171
	5.9	14710	1.0	**I**	294.56		**56C-140TC**	2698	5171
	5.6	15604	1.0	**I**	312.43		**56C-140TC**	2698	5171
	5.1	17082	0.9	**I**	342.07		**56C-140TC**	2698	5171
	41	2204	10.8	**III**	43.25	**ITS942**	**56C-140TC**	3108	6969
	37	2443	9.8	**III**	47.95		**56C-140TC**	3283	6969
	33	2726	10.4	**III**	53.43		**56C-140TC**	3372	6969
	30	2965	9.5	**III**	58.22		**56C-140TC**	3372	6969
	27	3292	8.6	**III**	64.53		**56C-140TC**	3372	6969
	25	3593	7.4	**III**	70.40		**56C-140TC**	3372	6969
	23	3930	6.8	**III**	77.00		**56C-140TC**	3372	6969
	19	4700	6.0	**III**	94.05	**ITS943**	**56C-140TC**	3372	6969
	18	4992	5.7	**III**	99.94		**56C-140TC**	3372	6969
	16	5461	5.2	**III**	109.42		**56C-140TC**	3372	6969
	15	6045	4.7	**III**	121.00		**56C-140TC**	3372	6969
	13	6718	4.2	**III**	134.54		**56C-140TC**	3372	6969
	12	7373	3.8	**III**	147.69		**56C-140TC**	3372	6969
	10	8479	3.3	**III**	169.71		**56C-140TC**	3372	6969
	9.4	9276	3.1	**III**	185.82		**56C-140TC**	3372	6969
	8.4	10382	2.7	**III**	207.90		**56C-140TC**	3372	6969
	7.7	11409	2.5	**III**	228.46		**56C-140TC**	3372	6969
	7.0	12524	2.3	**III**	250.80		**56C-140TC**	3372	6969
	5.9	14754	1.9	**II**	295.48		**56C-140TC**	3372	6969
	5.4	16153	1.8	**II**	323.40		**56C-140TC**	3372	6969
	4.9	17799	1.6	**II**	356.40		**56C-140TC**	3372	6969

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
2.0 hp									
1.5 kW	**309**	389	11.2	**III**	5.66	**ITS922**	**56C-140TC**	669	2353
(1750 rpm)	**248**	487	9.0	**III**	7.06		**56C-140TC**	758	2649
	209	584	7.6	**III**	8.37		**56C-140TC**	833	2900
	192	637	9.1	**III**	9.13		**56C-140TC**	874	3037
	168	726	7.9	**III**	10.43		**56C-140TC**	940	3259
	145	841	6.9	**III**	12.04		**56C-140TC**	1016	3514
	130	938	7.1	**III**	13.50		**56C-140TC**	1080	3728
	113	1080	6.2	**III**	15.50		**56C-140TC**	1162	4003
	98	1239	6.4	**III**	17.81		**56C-140TC**	1249	4159
	81	1513	5.3	**III**	21.73		**56C-140TC**	1383	4159
	76	1593	5.0	**III**	22.92		**56C-140TC**	1420	4159
	74	1655	4.8	**III**	23.80		**56C-140TC**	1446	4159
	66	1850	4.3	**III**	26.63		**56C-140TC**	1527	4159
	60	2036	3.9	**III**	29.26		**56C-140TC**	1597	4159
	54	2239	4.0	**III**	32.14		**56C-140TC**	1668	4159
	50	2452	3.6	**III**	35.19		**56C-140TC**	1742	4159
	44	2735	3.2	**III**	39.38		**56C-140TC**	1830	4159
	40	3009	2.9	**III**	43.27		**56C-140TC**	1903	4159
	37	3301	2.7	**III**	47.50		**56C-140TC**	1975	4159
	31	3894	2.5	**III**	55.96		**56C-140TC**	2097	4159
	29	4257	2.3	**III**	61.25		**56C-140TC**	2136	4159
	26	4691	2.1	**III**	67.50		**56C-140TC**	2136	4159
	23	5107	1.9	**II**	75.00	**ITS923**	**56C-140TC**	2136	4159
	20	5877	1.7	**II**	86.28		**56C-140TC**	2136	4159
	19	6434	1.5	**II**	94.46		**56C-140TC**	2136	4159
	16	7390	1.3	**I**	108.48		**56C-140TC**	2136	4159
	15	8090	1.2	**I**	118.77		**56C-140TC**	2136	4159
	12	9594	1.0	**I**	140.93		**56C-140TC**	2136	4159
	11	10506	0.9	**I**	154.30		**56C-140TC**	2136	4159
	194	628	12.0	**III**	9.03	**ITS932**	**56C-140TC**	966	3706
	177	690	11.6	**III**	9.90		**56C-140TC**	1017	3892
	155	788	10.2	**III**	11.27		**56C-140TC**	1093	4170
	134	912	8.8	**III**	13.06		**56C-140TC**	1186	4509
	120	1018	7.9	**III**	14.58		**56C-140TC**	1260	4779
	104	1168	7.6	**III**	16.81		**56C-140TC**	1361	5148
	91	1336	6.6	**III**	19.24		**56C-140TC**	1463	5171
	74	1637	6.5	**III**	23.57		**56C-140TC**	1629	5171
	71	1717	6.2	**III**	24.75		**56C-140TC**	1671	5171
	68	1797	6.9	**III**	25.81		**56C-140TC**	1708	5171
	61	2009	6.2	**III**	28.88		**56C-140TC**	1809	5171
	50	2416	6.0	**III**	34.71		**56C-140TC**	1984	5171
	46	2646	5.5	**III**	38.01		**56C-140TC**	2073	5171
	41	2956	4.9	**III**	42.53		**56C-140TC**	2192	5171
	37	3248	4.5	**III**	46.73		**56C-140TC**	2290	5171
	34	3567	4.1	**III**	51.30		**56C-140TC**	2389	5171
	29	4204	3.5	**III**	60.44		**56C-140TC**	2564	5171
	27	4602	3.2	**III**	66.15		**56C-140TC**	2660	5171
	24	5071	2.6	**III**	72.90		**56C-140TC**	2698	5171

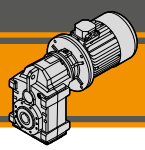


Datos técnicos

Technical data

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
2.0 hp									
1.5 kW	**22**	5514	2.7	**III**	81.00	**ITS933**	**56C-140TC**	2698	5171
(1750 rpm)	**19**	6346	2.4	**III**	93.18		**56C-140TC**	2698	5171
	17	6948	2.2	**III**	102.02		**56C-140TC**	2698	5171
	15	7983	1.9	**II**	117.16		**56C-140TC**	2698	5171
	14	8736	1.7	**II**	128.28		**56C-140TC**	2698	5171
	12	10364	1.5	**II**	152.21		**56C-140TC**	2698	5171
	11	11347	1.3	**I**	166.65		**56C-140TC**	2698	5171
	9.4	12683	1.2	**I**	186.19		**56C-140TC**	2698	5171
	8.6	13887	1.1	**I**	203.86		**56C-140TC**	2698	5171
	7.7	15533	1.0	**I**	228.05		**56C-140TC**	2698	5171
	6.8	17542	0.9	**I**	257.61		**56C-140TC**	2698	5171
	60	2045	11.7	**III**	29.42	**ITS942**	**56C-140TC**	2490	6969
	56	2177	12.2	**III**	31.35		**56C-140TC**	2577	6969
	44	2753	9.6	**III**	39.60		**56C-140TC**	2917	6969
	41	3009	7.9	**III**	43.25		**56C-140TC**	3054	6969
	37	3337	7.2	**III**	47.95		**56C-140TC**	3220	6969
	33	3717	7.6	**III**	53.43		**56C-140TC**	3372	6969
	30	4045	7.0	**III**	58.22		**56C-140TC**	3372	6969
	27	4487	6.3	**III**	64.53		**56C-140TC**	3372	6969
	25	4894	5.4	**III**	70.40		**56C-140TC**	3372	6969
	23	5355	5.0	**III**	77.00		**56C-140TC**	3372	6969
	19	6408	4.4	**III**	94.05	**ITS943**	**56C-140TC**	3372	6969
	18	6806	4.2	**III**	99.94		**56C-140TC**	3372	6969
	16	7452	3.8	**III**	109.42		**56C-140TC**	3372	6969
	15	8240	3.4	**III**	121.00		**56C-140TC**	3372	6969
	13	9161	3.1	**III**	134.54		**56C-140TC**	3372	6969
	12	10054	2.8	**III**	147.69		**56C-140TC**	3372	6969
	10	11559	2.5	**III**	169.71		**56C-140TC**	3372	6969
	9.4	12657	2.2	**III**	185.82		**56C-140TC**	3372	6969
	8.4	14161	2.0	**II**	207.90		**56C-140TC**	3372	6969
	7.7	15560	1.8	**II**	228.46		**56C-140TC**	3372	6969
	7.0	17082	1.7	**II**	250.80		**56C-140TC**	3372	6969
	5.9	20127	1.4	**II**	295.48		**56C-140TC**	3372	6969
	5.4	22021	1.3	**I**	323.40		**56C-140TC**	3372	6969
	4.9	24269	1.2	**I**	356.40		**56C-140TC**	3372	6969

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
3.0 hp									
2.2 kW	**309**	575	7.7	**III**	5.66	**ITS922**	**140TC-180TC**	663	2338
(1750 rpm)	**248**	717	6.1	**III**	7.06		**140TC-180TC**	749	2628
	209	850	5.2	**III**	8.37		**140TC-180TC**	821	2874
	192	929	6.2	**III**	9.13		**140TC-180TC**	860	3007
	168	1062	5.4	**III**	10.43		**140TC-180TC**	923	3222
	145	1230	4.7	**III**	12.04		**140TC-180TC**	995	3467
	130	1381	4.8	**III**	13.50		**140TC-180TC**	1055	3673
	113	1584	4.2	**III**	15.50		**140TC-180TC**	1131	3935
	98	1814	4.4	**III**	17.81		**140TC-180TC**	1210	4159
	81	2222	3.6	**III**	21.73		**140TC-180TC**	1329	4159
	76	2337	3.4	**III**	22.92		**140TC-180TC**	1361	4159
	74	2425	3.3	**III**	23.80		**140TC-180TC**	1384	4159
	66	2717	2.9	**III**	26.63		**140TC-180TC**	1453	4159
	60	2983	2.7	**III**	29.26		**140TC-180TC**	1511	4159
	54	3275	2.7	**III**	32.14		**140TC-180TC**	1568	4159
	50	3593	2.5	**III**	35.19		**140TC-180TC**	1630	4159
	44	4018	2.2	**III**	39.38		**140TC-180TC**	1695	4159
	40	4417	2.0	**II**	43.27		**140TC-180TC**	1747	4159
	37	4841	1.8	**II**	47.50		**140TC-180TC**	1794	4159
	31	5709	1.7	**II**	55.96		**140TC-180TC**	1862	4159
	29	6249	1.6	**II**	61.25		**140TC-180TC**	1890	4159
	26	6886	1.4	**II**	67.50		**140TC-180TC**	1908	4159
	23	7488	1.3	**I**	75.00	**ITS923**	**140TC-180TC**	1911	4159
	20	8621	1.1	**I**	86.28		**140TC-180TC**	2136	4159
	19	9435	1.0	**I**	94.46		**140TC-180TC**	2136	4159
	16	10833	0.9	**I**	108.48		**140TC-180TC**	2136	4159
	285	628	12.0	**III**	6.13	**ITS932**	**140TC-180TC**	771	2995
	229	779	9.6	**III**	7.65		**140TC-180TC**	872	3370
	194	920	8.2	**III**	9.03		**140TC-180TC**	956	3680
	177	1009	7.9	**III**	9.90		**140TC-180TC**	1005	3862
	155	1151	6.9	**III**	11.27		**140TC-180TC**	1079	4134
	134	1336	6.0	**III**	13.06		**140TC-180TC**	1168	4464
	120	1487	5.4	**III**	14.58		**140TC-180TC**	1238	4725
	104	1717	5.2	**III**	16.81		**140TC-180TC**	1334	5081
	91	1965	4.5	**III**	19.24		**140TC-180TC**	1430	5171
	74	2407	4.4	**III**	23.57		**140TC-180TC**	1583	5171
	71	2522	4.2	**III**	24.75		**140TC-180TC**	1622	5171
	68	2629	4.7	**III**	25.81		**140TC-180TC**	1655	5171
	61	2947	4.2	**III**	28.88		**140TC-180TC**	1746	5171
	50	3540	4.1	**III**	34.71		**140TC-180TC**	1899	5171
	46	3877	3.8	**III**	38.01		**140TC-180TC**	1975	5171
	41	4337	3.4	**III**	42.53		**140TC-180TC**	2077	5171
	37	4771	3.1	**III**	46.73		**140TC-180TC**	2157	5171
	34	5231	2.8	**III**	51.30		**140TC-180TC**	2234	5171
	29	6169	2.4	**III**	60.44		**140TC-180TC**	2364	5171
	27	6744	2.2	**III**	66.15		**140TC-180TC**	2429	5171
	24	7435	1.8	**II**	72.90		**140TC-180TC**	2492	5171



Datos técnicos

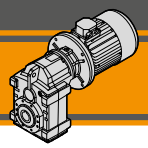
Technical data

3.0 hp

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
2.2 kW	**22**	8090	1.9	**II**	81.00	**ITS933**	**140TC-180TC**	2550	5171
(1750 rpm)	**19**	9311	1.6	**II**	93.18		**140TC-180TC**	2604	5171
	17	10187	1.5	**II**	102.02		**140TC-180TC**	2620	5171
	15	11701	1.3	**I**	117.16		**140TC-180TC**	2609	5171
	14	12816	1.2	**I**	128.28		**140TC-180TC**	2571	5171
	12	15206	1.0	**I**	152.21		**140TC-180TC**	2698	5171
	11	16648	0.9	**I**	166.65		**140TC-180TC**	2698	5171
	123	1452	12.2	**III**	14.21	**ITS942**	**140TC-180TC**	1650	6068
	110	1620	13.1	**III**	15.91		**140TC-180TC**	1756	6441
	101	1770	12.0	**III**	17.33		**140TC-180TC**	1840	6739
	92	1947	11.3	**III**	19.13		**140TC-180TC**	1941	6969
	75	2381	9.3	**III**	23.32		**140TC-180TC**	2159	6969
	60	3000	8.0	**III**	29.42		**140TC-180TC**	2439	6969
	56	3195	8.3	**III**	31.35		**140TC-180TC**	2521	6969
	44	4036	6.6	**III**	39.60		**140TC-180TC**	2835	6969
	41	4417	5.4	**III**	43.25		**140TC-180TC**	2960	6969
	37	4894	4.9	**III**	47.95		**140TC-180TC**	3109	6969
	33	5452	5.2	**III**	53.43		**140TC-180TC**	3278	6969
	30	5939	4.8	**III**	58.22		**140TC-180TC**	3372	6969
	27	6585	4.3	**III**	64.53		**140TC-180TC**	3372	6969
	25	7178	3.7	**III**	70.40		**140TC-180TC**	3372	6969
	23	7851	3.4	**III**	77.00		**140TC-180TC**	3372	6969
	19	9391	3.0	**III**	94.05	**ITS943**	**140TC-180TC**	3372	6969
	18	9984	2.8	**III**	99.94		**140TC-180TC**	3372	6969
	16	10931	2.6	**III**	109.42		**140TC-180TC**	3372	6969
	15	12090	2.3	**III**	121.00		**140TC-180TC**	3372	6969
	13	13435	2.1	**III**	134.54		**140TC-180TC**	3372	6969
	12	14754	1.9	**II**	147.69		**140TC-180TC**	3372	6969
	10	16949	1.7	**II**	169.71		**140TC-180TC**	3372	6969
	9.4	18560	1.5	**II**	185.82		**140TC-180TC**	3372	6969
	8.4	20764	1.4	**II**	207.90		**140TC-180TC**	3372	6969
	7.7	22817	1.2	**I**	228.46		**140TC-180TC**	3372	6969
	7.0	25048	1.1	**I**	250.80		**140TC-180TC**	3372	6969
	5.9	29517	1.0	**I**	295.48		**140TC-180TC**	3372	6969
	5.4	32305	0.9	**I**	323.40		**140TC-180TC**	3372	6969

5.0 hp

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
3.7 kW	**309**	974	4.6	**III**	5.66	**ITS922**	**180TC**	647	2302
(1750 rpm)	**248**	1213	3.7	**III**	7.06		**180TC**	725	2576
	209	1434	3.1	**III**	8.37		**180TC**	790	2806
	192	1567	3.7	**III**	9.13		**180TC**	825	2929
	168	1788	3.2	**III**	10.43		**180TC**	880	3126
	145	2062	2.8	**III**	12.04		**180TC**	941	3348
	130	2319	2.9	**III**	13.50		**180TC**	990	3530
	113	2655	2.5	**III**	15.50		**180TC**	1050	3758
	98	3054	2.6	**III**	17.81		**180TC**	1110	3994
	81	3726	2.1	**III**	21.73		**180TC**	1191	4159
	76	3930	2.0	**II**	22.92		**180TC**	1211	4159
	74	4080	2.0	**II**	23.80		**180TC**	1225	4159
	66	4567	1.7	**II**	26.63		**180TC**	1263	4159
	60	5018	1.6	**II**	29.26		**180TC**	1290	4159
	54	5514	1.6	**II**	32.14		**180TC**	1312	4159
	50	6036	1.5	**II**	35.19		**180TC**	1340	4159
	44	6753	1.3	**I**	39.38		**180TC**	1349	4159
	40	7426	1.2	**I**	43.27		**180TC**	1345	4159
	37	8152	1.1	**I**	47.50		**180TC**	1794	4159
	31	9603	1.0	**I**	55.96		**180TC**	1862	4159
	29	10506	0.9	**I**	61.25		**180TC**	1890	4159
	285	1053	7.1	**III**	6.13	**ITS932**	**180TC**	757	2959
	229	1310	5.7	**III**	7.65		**180TC**	852	3319
	194	1549	4.9	**III**	9.03		**180TC**	930	3614
	177	1699	4.7	**III**	9.90		**180TC**	975	3786
	155	1929	4.1	**III**	11.27		**180TC**	1042	4041
	134	2239	3.6	**III**	13.06		**180TC**	1121	4347
	120	2505	3.2	**III**	14.58		**180TC**	1183	4586
	104	2885	3.1	**III**	16.81		**180TC**	1265	4908
	91	3301	2.7	**III**	19.24		**180TC**	1344	5171
	74	4045	2.6	**III**	23.57		**180TC**	1465	5171
	71	4248	2.5	**III**	24.75		**180TC**	1494	5171
	68	4425	2.8	**III**	25.81		**180TC**	1518	5171
	61	4956	2.5	**III**	28.88		**180TC**	1582	5171
	50	5957	2.5	**III**	34.71		**180TC**	1680	5171
	46	6523	2.2	**III**	38.01		**180TC**	1723	5171
	41	7293	2.0	**II**	42.53		**180TC**	1782	5171
	37	8019	1.8	**II**	46.73		**180TC**	1814	5171
	34	8798	1.7	**II**	51.30		**180TC**	1837	5171
	29	10373	1.4	**II**	60.44		**180TC**	1849	5171
	27	11347	1.3	**I**	66.15		**180TC**	1835	5171
	24	12506	1.1	**I**	72.90		**180TC**	2492	5171
	22	13604	1.1	**I**	81.00	**ITS933**	**180TC**	2550	5171
	19	15657	1.0	**I**	93.18		**180TC**	2604	5171



Datos técnicos

Technical data

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
5.0 hp									
3.7 kW	**123**	2443	7.3	**III**	14.21	**ITS942**	**180TC**	1609	5975
(1750 rpm)	**110**	2726	7.8	**III**	15.91		**180TC**	1706	6331
	101	2974	7.1	**III**	17.33		**180TC**	1783	6613
	92	3284	6.7	**III**	19.13		**180TC**	1875	6953
	75	4001	5.5	**III**	23.32		**180TC**	2068	6969
	60	5045	4.7	**III**	29.42		**180TC**	2308	6969
	56	5381	4.9	**III**	31.35		**180TC**	2376	6969
	44	6797	3.9	**III**	39.60		**180TC**	2625	6969
	41	7417	3.2	**III**	43.25		**180TC**	2719	6969
	37	8222	2.9	**III**	47.95		**180TC**	2825	6969
	33	9169	3.1	**III**	53.43		**180TC**	2948	6969
	30	9984	2.8	**III**	58.22		**180TC**	3030	6969
	27	11072	2.6	**III**	64.53		**180TC**	3121	6969
	25	12081	2.2	**III**	70.40		**180TC**	3189	6969
	23	13214	2.0	**II**	77.00		**180TC**	3248	6969
	19	15799	1.8	**II**	94.05	**ITS943**	**180TC**	3324	6969
	18	16790	1.7	**II**	99.94		**180TC**	3327	6969
	16	18383	1.5	**II**	109.42		**180TC**	3310	6969
	15	20330	1.4	**II**	121.00		**180TC**	3254	6969
	13	22605	1.3	**I**	134.54		**180TC**	3372	6969
	12	24809	1.1	**I**	147.69		**180TC**	3372	6969
	10	28508	1.0	**I**	169.71		**180TC**	3372	6969
7.5 hp									
5.5 kW	**309**	1443	3.1	**III**	5.66	**ITS922**	**210TC**	633	2271
(1750 rpm)	**248**	1797	2.5	**III**	7.06		**210TC**	706	2533
	209	2133	2.1	**III**	8.37		**210TC**	765	2749
	192	2328	2.5	**III**	9.13		**210TC**	796	2864
	168	2664	2.2	**III**	10.43		**210TC**	844	3047
	145	3071	1.9	**II**	12.04		**210TC**	896	3248
	130	3443	1.9	**II**	13.50		**210TC**	936	3411
	113	3947	1.7	**II**	15.50		**210TC**	983	3611
	98	4540	1.8	**II**	17.81		**210TC**	1026	3811
	81	5541	1.4	**II**	21.73		**210TC**	1076	4088
	76	5841	1.4	**II**	22.92		**210TC**	1086	4158
	74	6072	1.3	**I**	23.80		**210TC**	1092	4159
	66	6789	1.2	**I**	26.63		**210TC**	1263	4159
	60	7461	1.1	**I**	29.26		**210TC**	1290	4159
	54	8196	1.1	**I**	32.14		**210TC**	1312	4159
	50	8975	1.0	**I**	35.19		**210TC**	1340	4159
	44	10046	0.9	**I**	39.38		**210TC**	1349	4159
	285	1567	4.8	**III**	6.13	**ITS932**	**210TC**	745	2929
	229	1947	3.9	**III**	7.65		**210TC**	836	3277
	194	2301	3.3	**III**	9.03		**210TC**	908	3559
	177	2522	3.2	**III**	9.90		**210TC**	950	3723
	155	2876	2.8	**III**	11.27		**210TC**	1011	3963
	134	3328	2.4	**III**	13.06		**210TC**	1082	4250
	120	3717	2.1	**III**	14.58		**210TC**	1137	4471
	104	4284	2.1	**III**	16.81		**210TC**	1207	4764
	91	4903	1.8	**II**	19.24		**210TC**	1273	5050
	74	6010	1.8	**II**	23.57		**210TC**	1366	5171
	71	6311	1.7	**II**	24.75		**210TC**	1387	5171

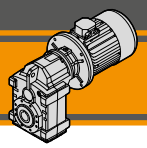
P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
7.5 hp									
5.5 kW	**68**	6585	1.9	**II**	25.81	**ITS932**	**210TC**	1404	5171
(1750 rpm)	**61**	7364	1.7	**II**	28.88		**210TC**	1446	5171
	50	8851	1.6	**II**	34.71		**210TC**	1498	5171
	46	9692	1.5	**II**	38.01		**210TC**	1513	5171
	41	10842	1.3	**I**	42.53		**210TC**	1536	5171
	37	11913	1.2	**I**	46.73		**210TC**	1529	5171
	34	13081	1.1	**I**	51.30		**210TC**	1506	5171
	221	2018	6.6	**III**	7.93	**ITS942**	**210TC**	1159	4367
	183	2443	5.4	**III**	9.59		**210TC**	1284	4824
	164	2717	5.5	**III**	10.67		**210TC**	1358	5097
	148	3018	5.0	**III**	11.82		**210TC**	1432	5372
	136	3292	5.4	**III**	12.91		**210TC**	1499	5618
	123	3629	4.9	**III**	14.21		**210TC**	1574	5899
	110	4054	5.2	**III**	15.91		**210TC**	1665	6240
	101	4417	4.8	**III**	17.33		**210TC**	1736	6509
	92	4877	4.5	**III**	19.13		**210TC**	1820	6831
	75	5948	3.7	**III**	23.32		**210TC**	1993	6969
	60	7505	3.2	**III**	29.42		**210TC**	2199	6969
	56	7992	3.3	**III**	31.35		**210TC**	2255	6969
	44	10099	2.6	**III**	39.60		**210TC**	2450	6969
	41	11028	2.2	**III**	43.25		**210TC**	2517	6969
	37	12232	2.0	**II**	47.95		**210TC**	2588	6969
	33	13621	2.1	**III**	53.43		**210TC**	2673	6969
	30	14843	1.9	**II**	58.22		**210TC**	2715	6969
	27	16454	1.7	**II**	64.53		**210TC**	2750	6969
	25	17949	1.5	**II**	70.40		**210TC**	2763	6969
	23	19640	1.4	**II**	77.00		**210TC**	2757	6969
	19	23481	1.2	**I**	94.05	**ITS943**	**210TC**	2650	6969
	18	24959	1.1	**I**	99.94		**210TC**	3327	6969
	16	27322	1.0	**I**	109.42		**210TC**	3310	6969
	15	30216	0.9	**I**	121.00		**210TC**	3254	6969

Datos técnicos

Technical data

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
10.0 hp									
7.5 kW	**309**	1965	2.2	III	5.66	ITS922	210TC	615	2229
(1750 rpm)	**248**	2452	1.8	II	7.06		210TC	680	2475
	209	2912	1.5	II	8.37		210TC	731	2673
	192	3177	1.8	II	9.13		210TC	757	2778
	168	3629	1.6	II	10.43		210TC	796	2940
	145	4186	1.4	II	12.04		210TC	836	3115
	130	4691	1.4	II	13.50		210TC	864	3253
	113	5390	1.2	I	15.50		210TC	893	3414
	98	6196	1.3	I	17.81		210TC	914	3567
	81	7559	1.1	I	21.73		210TC	1076	4088
	76	7966	1.0	I	22.92		210TC	1086	4158
	74	8275	1.0	I	23.80		210TC	1092	4159
	66	9258	0.9	I	26.63		210TC	1263	4159
	285	2133	3.5	III	6.13	ITS932	210TC	730	2888
	229	2664	2.8	III	7.65		210TC	813	3220
	194	3142	2.4	III	9.03		210TC	879	3486
	177	3443	2.3	III	9.90		210TC	917	3638
	155	3921	2.0	II	11.27		210TC	970	3860
	134	4540	1.8	II	13.06		210TC	1031	4120
	120	5071	1.6	II	14.58		210TC	1075	4317
	104	5841	1.5	II	16.81		210TC	1130	4572
	91	6691	1.3	I	19.24		210TC	1177	4813
	74	8196	1.3	I	23.57		210TC	1235	5159
	71	8603	1.2	I	24.75		210TC	1245	5171
	68	8975	1.4	II	25.81		210TC	1252	5171
	61	10046	1.2	I	28.88		210TC	1265	5171
	50	12072	1.2	I	34.71		210TC	1255	5171
	46	13214	1.1	I	38.01		210TC	1513	5171
	41	14790	1.0	I	42.53		210TC	1536	5171
	37	16250	0.9	I	46.73		210TC	1529	5171
	221	2753	4.8	III	7.93	ITS942	210TC	1141	4326
	183	3337	4.0	III	9.59		210TC	1259	4768
	164	3708	4.1	III	10.67		210TC	1329	5031
	148	4107	3.7	III	11.82		210TC	1398	5295
	136	4487	3.9	III	12.91		210TC	1459	5530
	123	4939	3.6	III	14.21		210TC	1528	5796
	110	5532	3.8	III	15.91		210TC	1610	6118
	101	6027	3.5	III	17.33		210TC	1673	6369
	92	6656	3.3	III	19.13		210TC	1746	6669
	75	8107	2.7	III	23.32		210TC	1892	6969
	60	10231	2.3	III	29.42		210TC	2053	6969
	56	10904	2.4	III	31.35		210TC	2093	6969
	44	13772	1.9	II	39.60		210TC	2217	6969
	41	15046	1.6	II	43.25		210TC	2249	6969
	37	16675	1.4	II	47.95		210TC	2272	6969
	33	18578	1.5	II	53.43		210TC	2306	6969
	30	20242	1.4	II	58.22		210TC	2294	6969
	27	22446	1.3	I	64.53		210TC	2255	6969
	19	32022	0.9	I	94.05	ITS943	210TC	2650	6969

P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
15.0 hp									
11.0 kW	**285**	3133	2.4	III	6.13	ITS932	250TC	702	2818
(1750 rpm)	**229**	3903	1.9	II	7.65		250TC	775	3121
	194	4611	1.6	II	9.03		250TC	829	3358
	177	5054	1.6	II	9.90		250TC	859	3490
	155	5744	1.4	II	11.27		250TC	899	3679
	134	6665	1.2	I	13.06		250TC	940	3893
	120	7435	1.1	I	14.58		250TC	1075	4317
	104	8568	1.0	I	16.81		250TC	1130	4572
	91	9815	0.9	I	19.24		250TC	1177	4813
	74	12019	0.9	I	23.57		250TC	1235	5159
	221	4045	3.3	III	7.93	ITS942	250TC	1109	4253
	183	4894	2.7	III	9.59		250TC	1216	4671
	164	5443	2.8	III	10.67		250TC	1278	4916
	148	6027	2.5	III	11.82		250TC	1338	5160
	136	6585	2.7	III	12.91		250TC	1390	5375
	123	7249	2.4	III	14.21		250TC	1447	5616
	110	8116	2.6	III	15.91		250TC	1513	5904
	101	8842	2.4	III	17.33		250TC	1562	6125
	92	9754	2.3	III	19.13		250TC	1617	6384
	75	11895	1.9	II	23.32		250TC	1715	6901
	60	15011	1.6	II	29.42		250TC	1798	6969
	56	15993	1.7	II	31.35		250TC	1812	6969
	44	20197	1.3	I	39.60		250TC	1809	6969
	33	27251	1.0	I	53.43		250TC	2306	6969
20.0 hp									
15.0 kW	**285**	4266	1.8	II	6.13	ITS932	250TC	671	2737
(1750 rpm)	**229**	5319	1.4	II	7.65		250TC	730	3007
	194	6284	1.2	I	9.03		250TC	772	3211
	177	6886	1.2	I	9.90		250TC	859	3490
	155	7842	1.0	I	11.27		250TC	899	3679
	134	9081	0.9	I	13.06		250TC	940	3893
	221	5514	2.4	III	7.93	ITS942	250TC	1073	4170
	183	6673	2.0	II	9.59		250TC	1167	4559
	164	7417	2.0	II	10.67		250TC	1219	4784
	148	8222	1.8	II	11.82		250TC	1269	5006
	136	8975	2.0	II	12.91		250TC	1311	5198
	123	9886	1.8	II	14.21		250TC	1355	5411
	110	11063	1.9	II	15.91		250TC	1403	5659
	101	12055	1.8	II	17.33		250TC	1436	5846
	92	13303	1.7	II	19.13		250TC	1470	6059
	75	16223	1.4	II	23.32		250TC	1514	6459
	60	20463	1.2	I	29.42		250TC	1798	6969
	56	21808	1.2	I	31.35		250TC	1812	6969
	44	27544	1.0	I	39.60		250TC	1809	6969



Datos técnicos

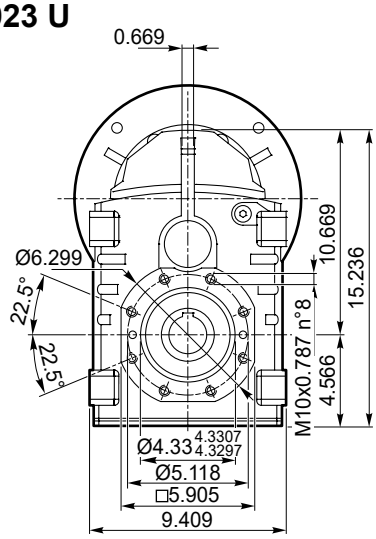
Technical data

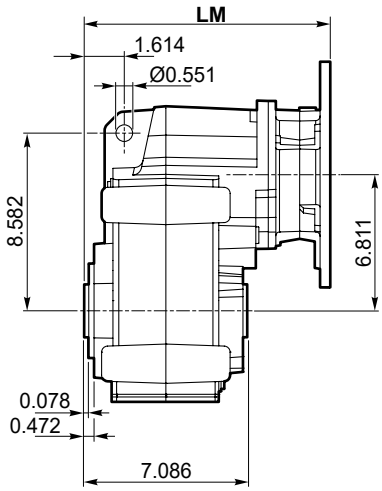
P_1 [hp]	n_2 [rpm]	M_2 [lb·in]	sf	AGMA	i		NEMA	R_2 U [lb]	R_2 P [lb]
25.0 hp									
18.5 kW	**221**	6797	2,0	**II**	7,93	**ITS942**	**280TC**	1041	4098
(1750 rpm)	**183**	8222	1,6	**II**	9,59		**280TC**	1123	4462
	164	9152	1,6	**II**	10,67		**280TC**	1168	4669
	148	10143	1,5	**II**	11,82		**280TC**	1209	4871
	136	11072	1,6	**II**	12,91		**280TC**	1242	5044
	123	12196	1,5	**II**	14,21		**280TC**	1275	5232
	110	13648	1,6	**II**	15,91		**280TC**	1307	5446
	101	14860	1,4	**II**	17,33		**280TC**	1326	5602
	92	16409	1,3	**I**	19,13		**280TC**	1341	5774
	75	20003	1,1	**I**	23,32		**280TC**	1514	6459
	60	25242	0,9	**I**	29,42		**280TC**	1798	6969
	56	26889	1,0	**I**	31,35		**280TC**	1812	6969
30.0 hp									
22.3 kW	**221**	8196	1,6	**II**	7,93	**ITS942**	**280TC**	1009	4025
(1750 rpm)	**183**	9913	1,3	**I**	9,59		**280TC**	1080	4364
	164	11028	1,4	**II**	10,67		**280TC**	1117	4554
	148	12223	1,2	**I**	11,82		**280TC**	1149	4736
	136	13347	1,3	**I**	12,91		**280TC**	1173	4889
	123	14701	1,2	**I**	14,21		**280TC**	1194	5052
	110	16445	1,3	**I**	15,91		**280TC**	1211	5232
	101	17914	1,2	**I**	17,33		**280TC**	1326	5602
	92	19781	1,1	**I**	19,13		**280TC**	1341	5774
	75	24109	0,9	**I**	23,32		**280TC**	1514	6459

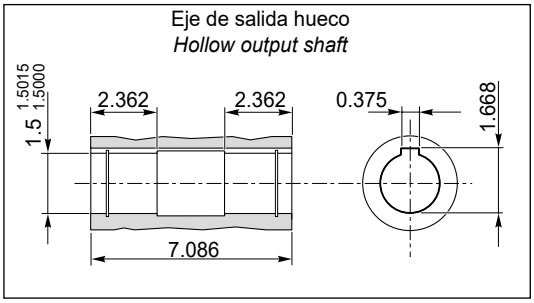
Dimensiones *Dimensions*

ITS 922 - ITS 923

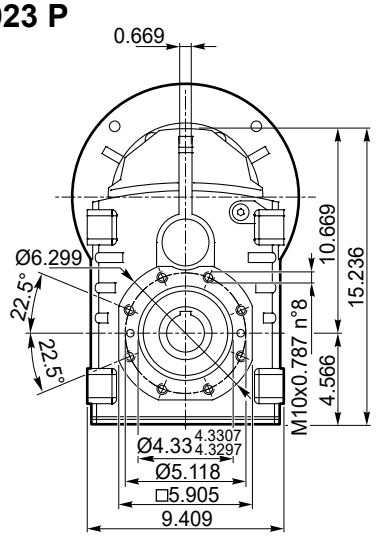
ITS 922 U
ITS 923 U

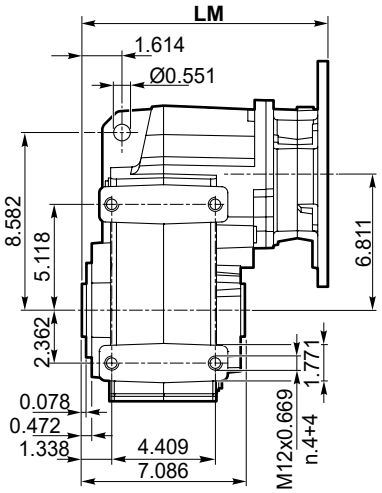


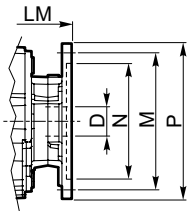




ITS 922 P
ITS 923 P

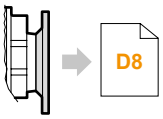




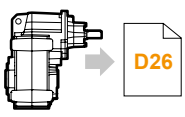


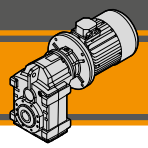
Dimensiones NEMA/ *NEMA Dimensions*				
	56C	**140TC**	**180TC**	**210TC**
LM	**11.87**		**12.893**	
N	4.5		8.5	
M	5.88		7.25	
P	6.5		9	
D	0.625	0.875	1.125	1.375

Bridas Motor
NEMA C-FACE



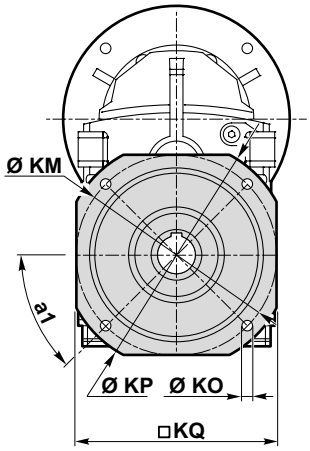
ITSIS..

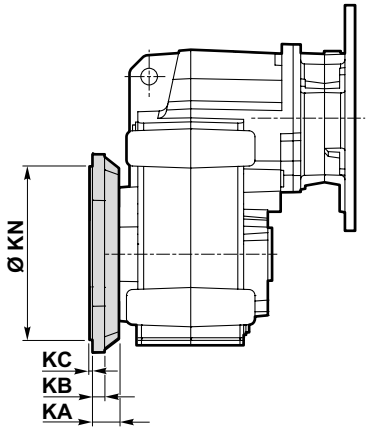


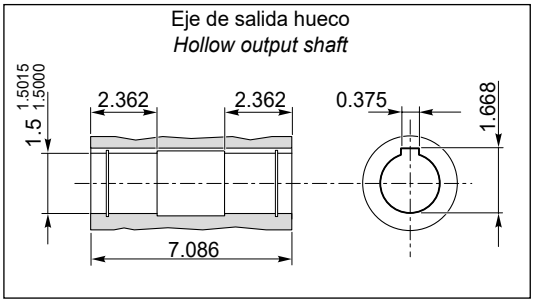


ITS 922 - ITS 923

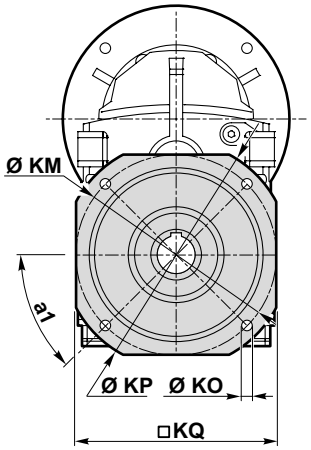
ITS 922 U/F...
ITS 923 U/F...

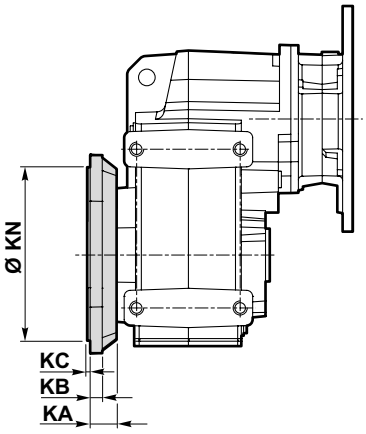






ITS 922 P/F...
ITS 923 P/F...





Versión F / *F Version*											
ITS	KA	a_1	KB	KC	Ø KM	KN	KO	□KP	KQ	Brida / *Flange*	
										Tipo / *Type*	Peso / *Weight* [lb]
922 923	1.377	45°	0.512	0.157	6.496	5.118 $^{5.1164}_{5.1148}$	0.433	7.874	6.772	**F200**	**5.7**
	1.377	45°	0.512	0.157	8.465	7.086 $^{7.0849}_{7.0833}$	0.551	9.843	8.465	**F250**	**8.3**
	1.377	45°	0.512	0.157	10.433	9.055 $^{9.0534}_{9.0519}$	0.551	11.811	10.433	**F300**	**12.3**

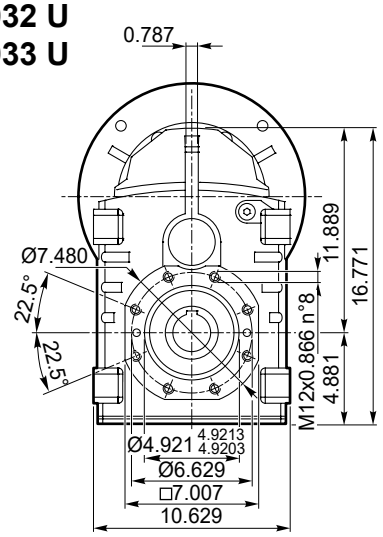
Peso / *Weight* [lb]				
ITS	56C	140TC	180TC	210TC
ITS922 U	84.37	84.37	91.95	91.95
ITS922 G	83.27	83.27	90.85	90.85
ITS923 U	86.58	86.58	94.16	94.16
ITS923 G	85.47	85.47	93.06	93.06

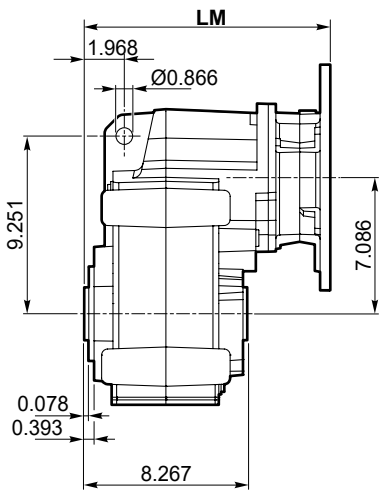
Nota: Peso del reductor llenado con aceite para la posición de montaje M1 (B3)
Note: weight of the gearbox filled with oil for M1 (B3) assembly position

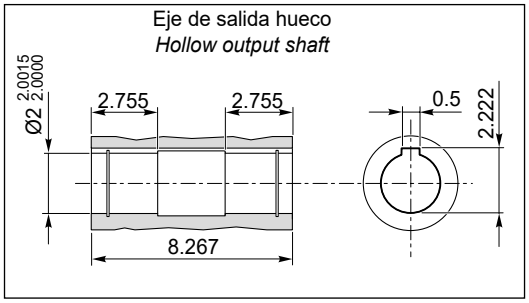
Dimensiones *Dimensions*

ITS 932 - ITS 933

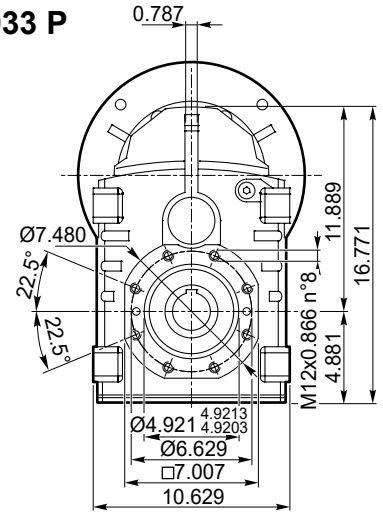
ITS 932 U
ITS 933 U

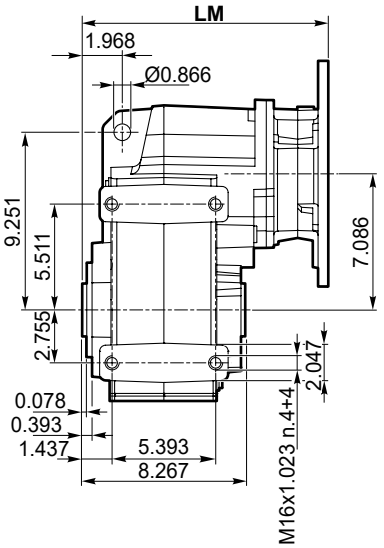


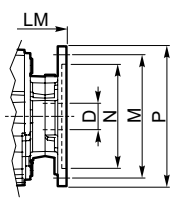




ITS 932 P
ITS 933 P



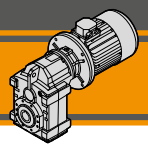




Dimensiones NEMA/ *NEMA Dimensions*					
	56C	**140TC**	**180TC**	**210TC**	**250TC**
LM	12.46		13.484		15.433
N	4.5		8.5		
M	5.875		7.25		
P	6.5		9		10
D	0.625	0.875	1.125	1.375	1.625

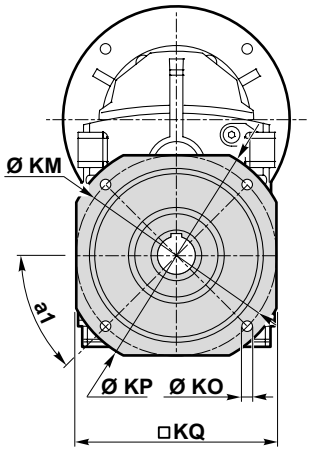
Bridas Motor
NEMA C-FACE
D9

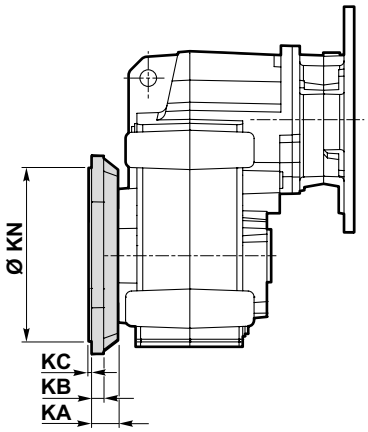
ITSIS..
D26

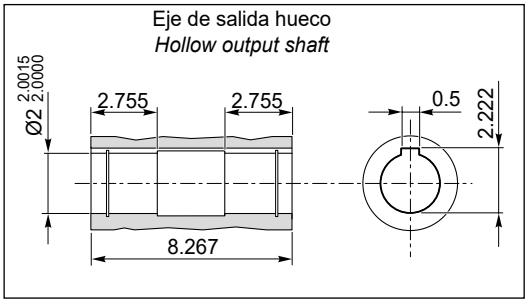


ITS 932 - ITS 933

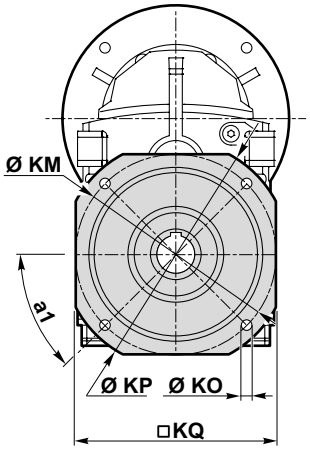
ITS 932 U/F...
ITS 933 U/F...

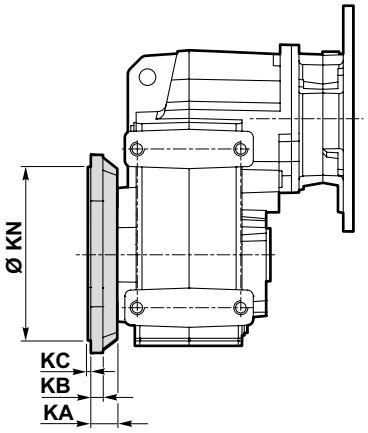






ITS 932 P/F...
ITS 933 P/F...





Versión F / *F Version*											
ITS	KA	a_1	KB	KC	Ø KM	KN	KO	□KP	KQ	Brida / *Flange*	
										Tipo / *Type*	Peso / *Weight* [lb]
932 933	1.574	45°	0.630	0.157	8.465	7.086 $^{7.0849}_{7.0833}$	0.551	9.843	8.465	**F250**	**8.3**
	1.574	45°	0.630	0.157	10.433	9.055 $^{9.0534}_{9.0519}$	0.551	11.811	10.236	**F300**	**12.3**
	1.574	45°	0.630	0.157	11.811	9.842 $^{9.8408}_{9.8393}$	0.709	13.780	11.811	**F350**	**20.0**

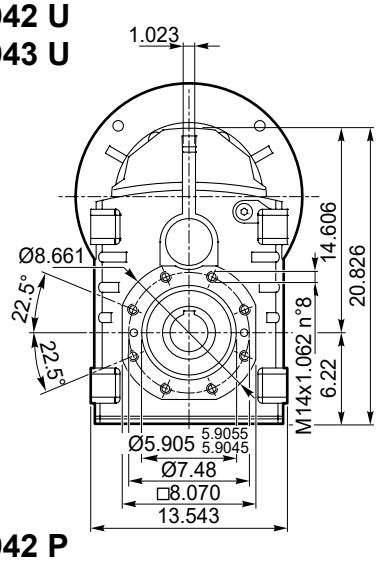
Peso / *Weight* [lb]					
ITS	56C	140TC	180TC	210TC	250TC
ITS932 U	113.03	113.03	120.61	120.61	133.75
ITS932 G	113.03	113.03	120.61	120.61	133.75
ITS933 U	113.03	113.03	120.61	120.61	133.75
ITS933 G	113.03	113.03	120.61	120.61	133.75

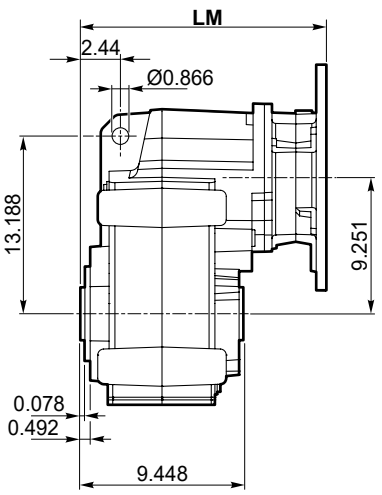
Nota: Peso del reductor llenado con aceite para la posición de montaje M1 (B3)
Note: weight of the gearbox filled with oil for M1 (B3) assembly position

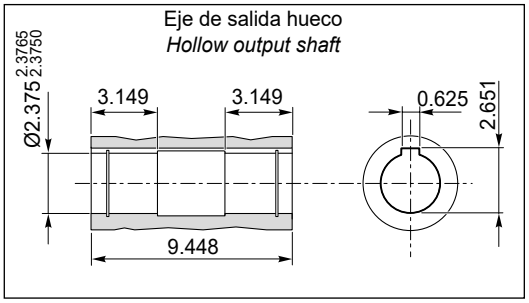
Dimensiones *Dimensions*

ITS 942 - ITS 943

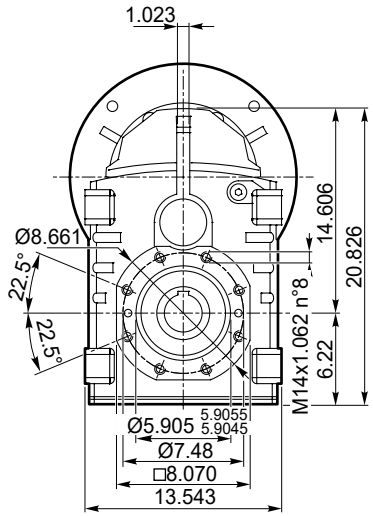
ITS 942 U
ITS 943 U

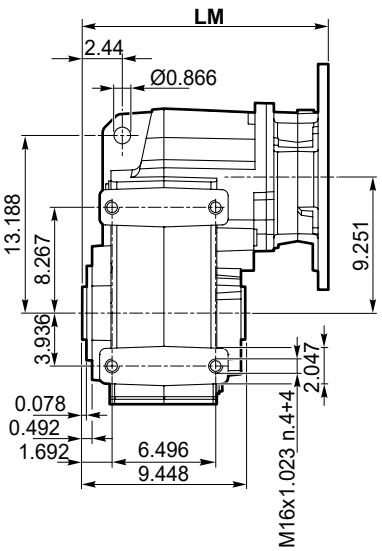


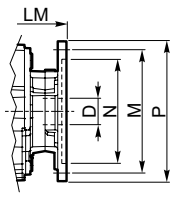




ITS 942 P
ITS 943 P







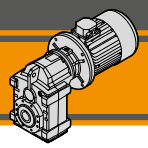
Dimensiones NEMA/ *NEMA Dimensions*						
	56C	**140TC**	**180TC**	**210TC**	**250TC**	**280TC**
LM	13.562		14.586		16.535	16.929
N	4.5		8.5			10.5
M	5.875		7.25			9
P	6.5		9		10	11.252
D	0.625	0.875	1.125	1.375	1.625	1.875

Bridas Motor
NEMA C-FACE

D10

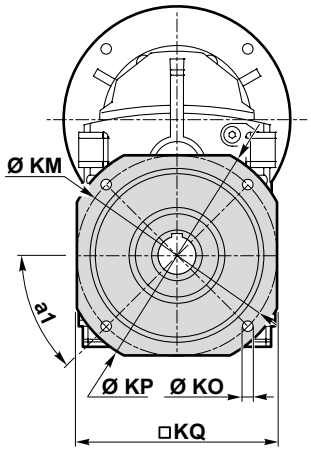
ITSIS..

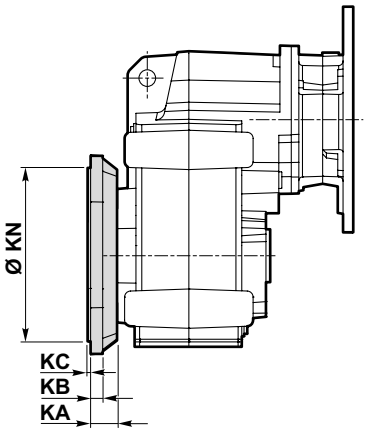
D26

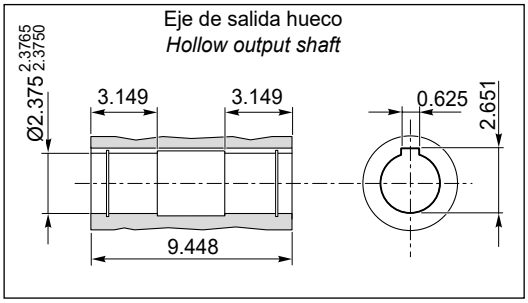


ITS 942 - ITS 943

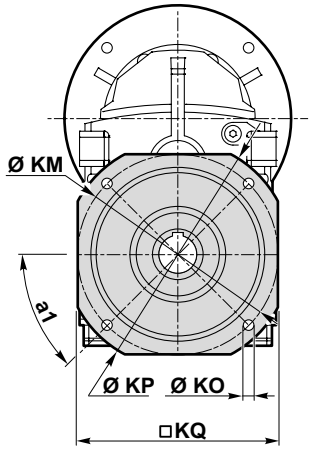
ITS 942 U/F...
ITS 943 U/F...

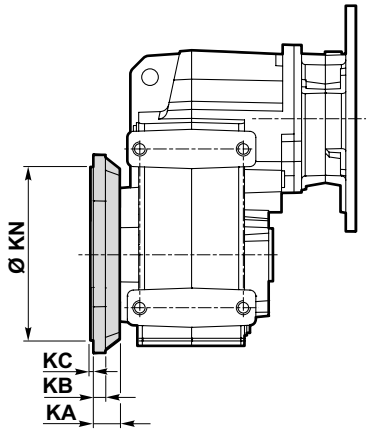






ITS 942 P/F...
ITS 943 P/F...





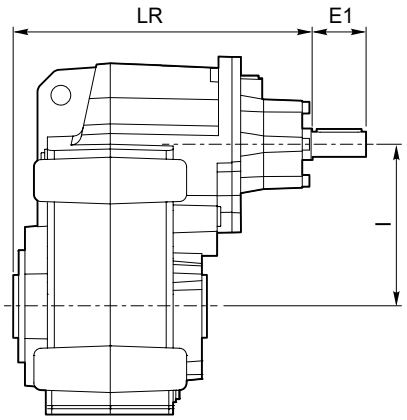
Versión F / *F Version*											
ITS	KA	a_1	KB	KC	Ø KM	KN	KO	□KP	KQ	Brida / *Flange*	
										Tipo / *Type*	Peso / *Weight* [lb]
942 943	1.673	45°	0.709	0.157	10.433	9.055 $^{9.0534}_{9.0519}$	0.551	11.811	10.433	**F300**	**16.3**
	1.673	45°	0.709	0.157	11.811	9.842 $^{9.8408}_{9.8393}$	0.709	13.780	11.811	**F350**	**22.4**
	1.673	45°	0.709	0.157	15.748	13.779 $^{13.7778}_{13.7763}$	0.709	17.717	15.748	**F400**	**37.2**

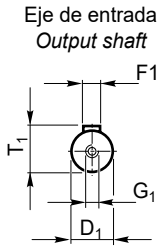
Peso / *Weight* [lb]						
ITS	56C	140TC	180TC	210TC	250TC	280TC
ITS942 U	199.01	199.01	206.59	206.59	219.73	222.51
ITS942 G	196.81	196.81	204.39	204.39	217.53	220.31
ITS943 U	205.62	205.62	213.21	213.21	226.35	229.13
ITS943 G	203.42	203.42	211.00	211.00	221.14	226.92

Nota: Peso del reductor llenado con aceite para la posición de montaje M1 (B3)
Note: weight of the gearbox filled with oil for M1 (B3) assembly position

Dimensiones — *Dimensions*

ITSIS...

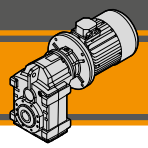




ITHIS	Versione *Version*	LR	D1	E1	I	T1	F1	G1
922	**U** **P** **U/F...** **P/F...**	12.401	0.875 $^{0.8742}_{0.8734}$	1.969	1.26	0.958	0.188	1/4-20 UNC
923		12.401	0.875 $^{0.8742}_{0.8734}$	1.969	1.26	0.958	0.188	1/4-20 UNC
932		12.992	0.875 $^{0.8742}_{0.8734}$	1.969	1.26	0.958	0.188	1/4-20 UNC
933		12.992	0.875 $^{0.8742}_{0.8734}$	1.969	1.26	0.958	0.188	1/4-20 UNC
942		14.783	1.625 $^{1.6254}_{1.6248}$	3.15	1.476	1.791	0.375	5/8-11 UNC
943		14.783	1.625 $^{1.6254}_{1.6248}$	3.15	1.476	1.791	0.375	5/8-11 UNC

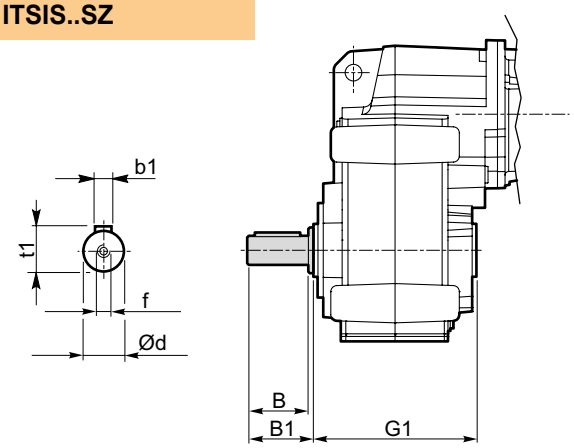
ITHIS	Peso / *Weight* [lb]
922 U	98.54
922 P	97.44
923 U	100.75
923 P	99.64
932 U	127.2
932 P	126.1
933 U	131.61
933 P	130.51
942 U	225.09
942 P	222.88
943 U	219.8
943 P	217.59

Nota: ITSIS943 relación 295,48 – 323,40 – 356,40 pedido bajo demanda.
Favor de contactar al servicio técnico TRANSTECNO.
Note: ITSIS943 ratios 295,48 – 323,40 – 356,40 available upon request.
Please contact TRANSTECNO technical service.



Eje de salida / ***Output shaft***

ITS...SZ
ITSIS..SZ

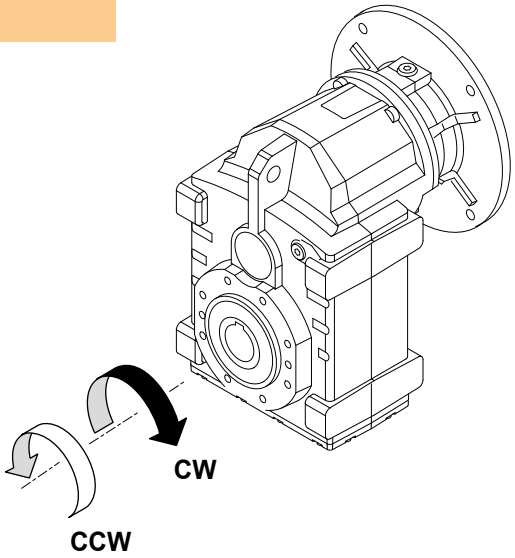


ITS	d	B	B1	G1	f	b1	t1	Peso / *Weight* [lb]
922 **923**	1.5 $^{1.5000}_{1.4988}$	2.992	3.149	7.086	5/8 - 11 UNC	0.375	1.664	4.85
932 **933**	2 $^{2.0000}_{1.9988}$	3.937	4.133	8.267	5/8 - 11 UNC	0.5	2.218	9.47
942 **943**	2.375 $^{2.3750}_{2.3738}$	4.724	4.921	9.448	3/4 - 10 UNC	0.625	2.645	15.65

Accessorios — *Accessories*

Dispositivo anti-retorno / *Backstop device*

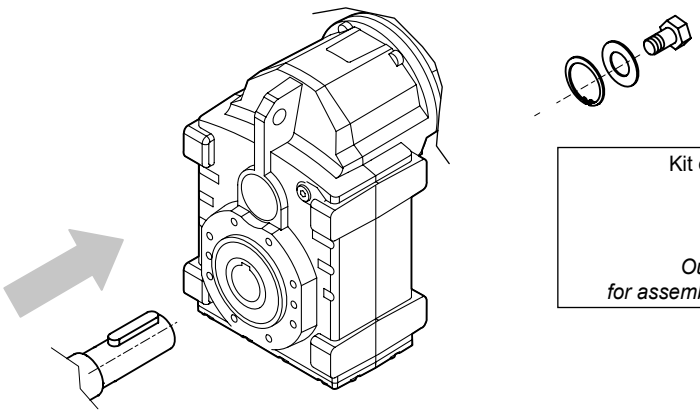
ITS...CW
ITS...CCW



El dispositivo anti-retorno permite que la flecha de salida gire en un solo sentido.
Antes de utilizarlo, especifique la rotación deseada como se muestra en la figura

The backstop device allows the output shaft to rotate in just one direction. Before using it, please specify output shaft rotation direction as shown in the figure.

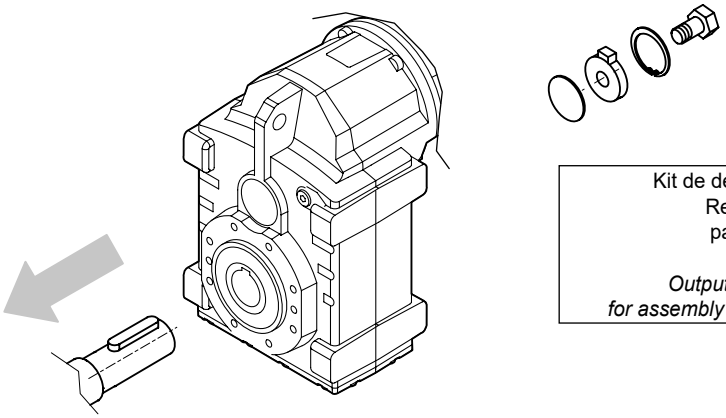
Kit de montaje para eje solido / *Output shaft assembly kit*



Kit de montaje para eje sólido disponible a solicitud.
Referirse con nuestro departamento técnico para conocer las instrucciones de montaje.

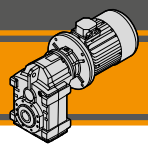
Output shaft assembly kit available upon request: for assembly instructions please contact our Technical Assistance

Kit de montaje para eje solido / *Output shaft disassembly kit*



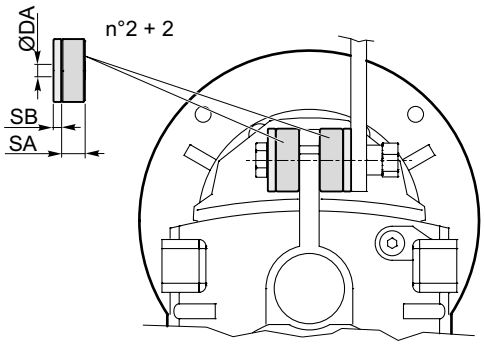
Kit de desmontaje para eje sólido disponible a solicitud.
Referirse con nuestro departamento técnico para conocer las instrucciones de montaje.

Output shaft disassembly kit available upon request: for assembly instructions please contact our Technical Assistance



Accessorios / *Accessories*

Kit Brazo de reacción / *Torque arm kit*



Kit brazo de reacción disponible a solicitud, referirse con nuestro departamento técnico para conocer las instrucciones de montaje.

Torque arm kit available upon request:
for assembly instructions please contact our Technical Assistance

Brazo de reacción / *Torque arm*

ITS	ØDA	SA	SB
922 **923**	0.511	0.59	0.196
932 **933**	0.826	1.181	0.393
942 **943**	0.826	1.181	0.393

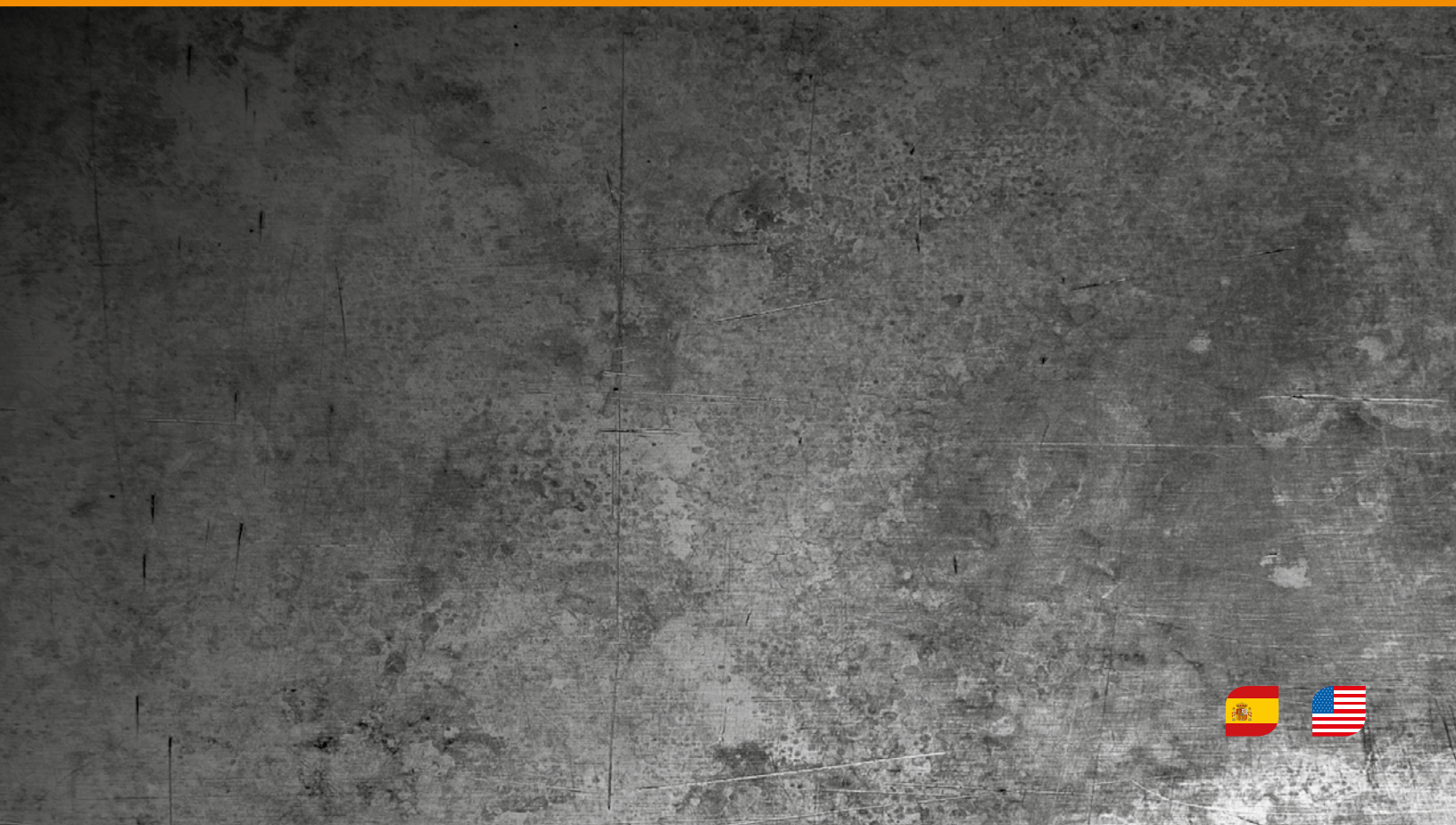
TRANSTECNO®

the modular gearmotor

60Hz

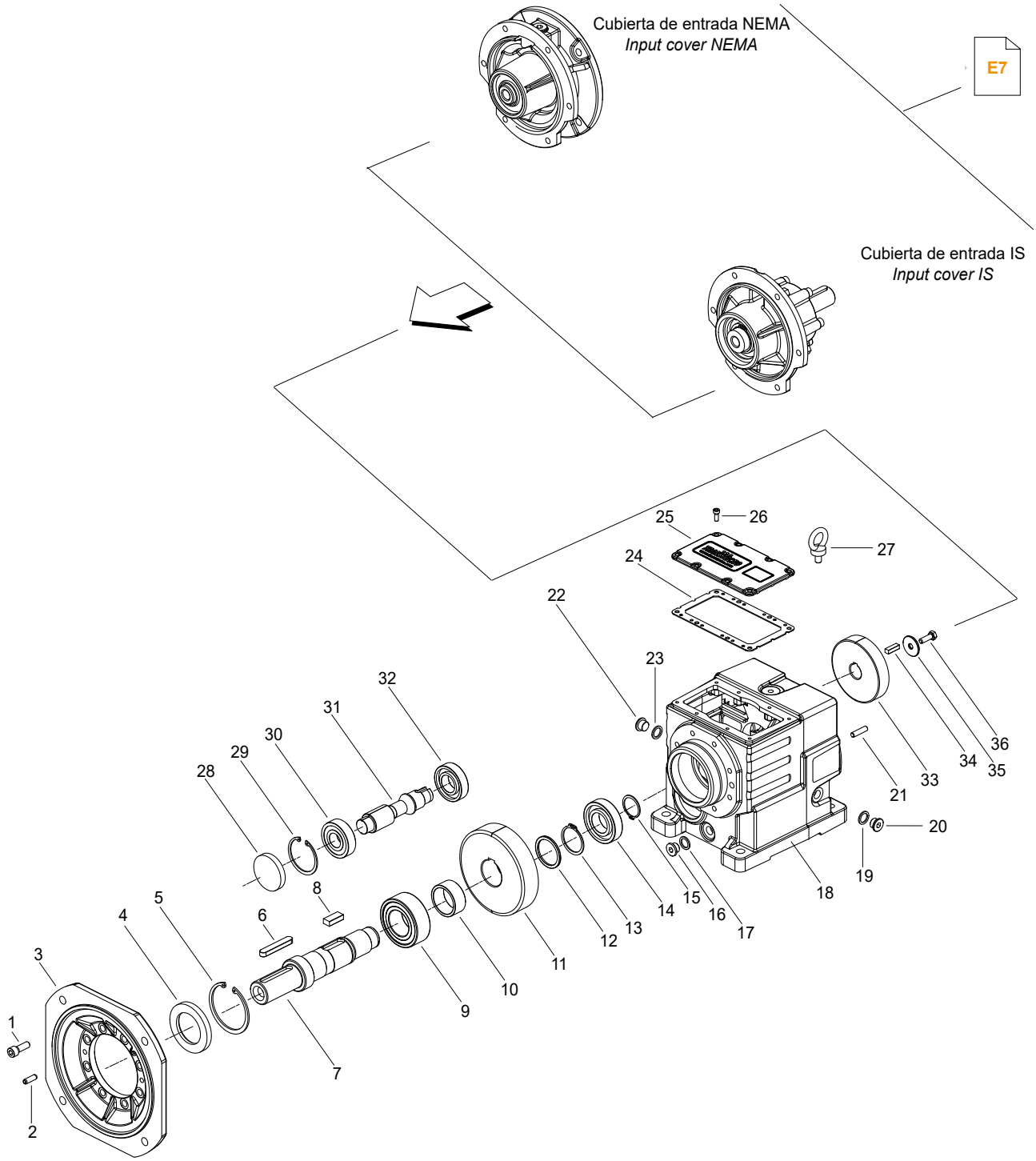
Nema

Apéndice
Appendix



Listado de refacciones ***Spare parts list***

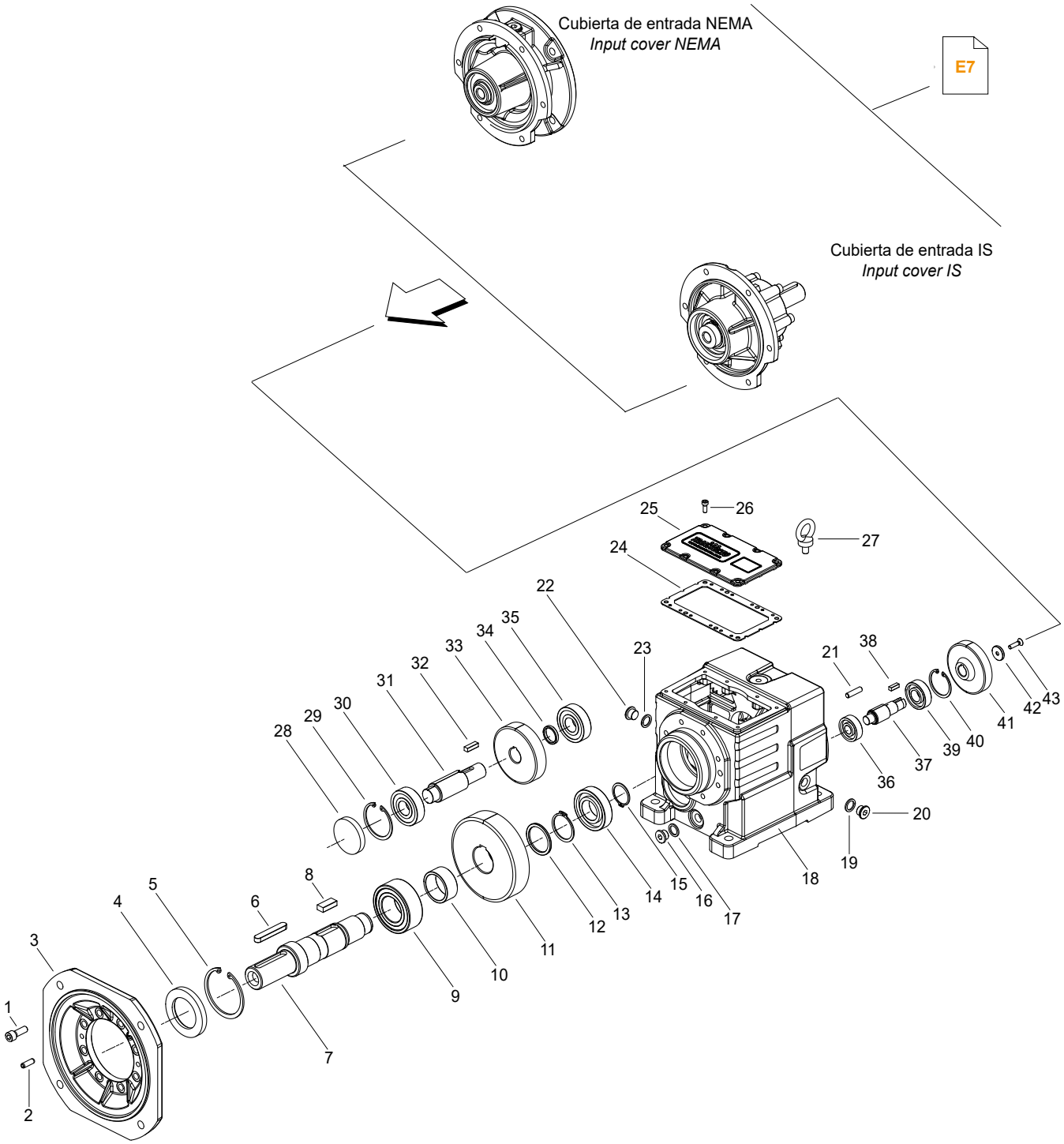
ITH..2



ITH	Sellos de aceite / *Oil seals*	RCA
	4	**28**
112	45/80/10	52x10
122	55/85/10	62x10
132	65/100/10	72x10
142	75/120/10	80x10

Listado de refacciones ***Spare parts list***

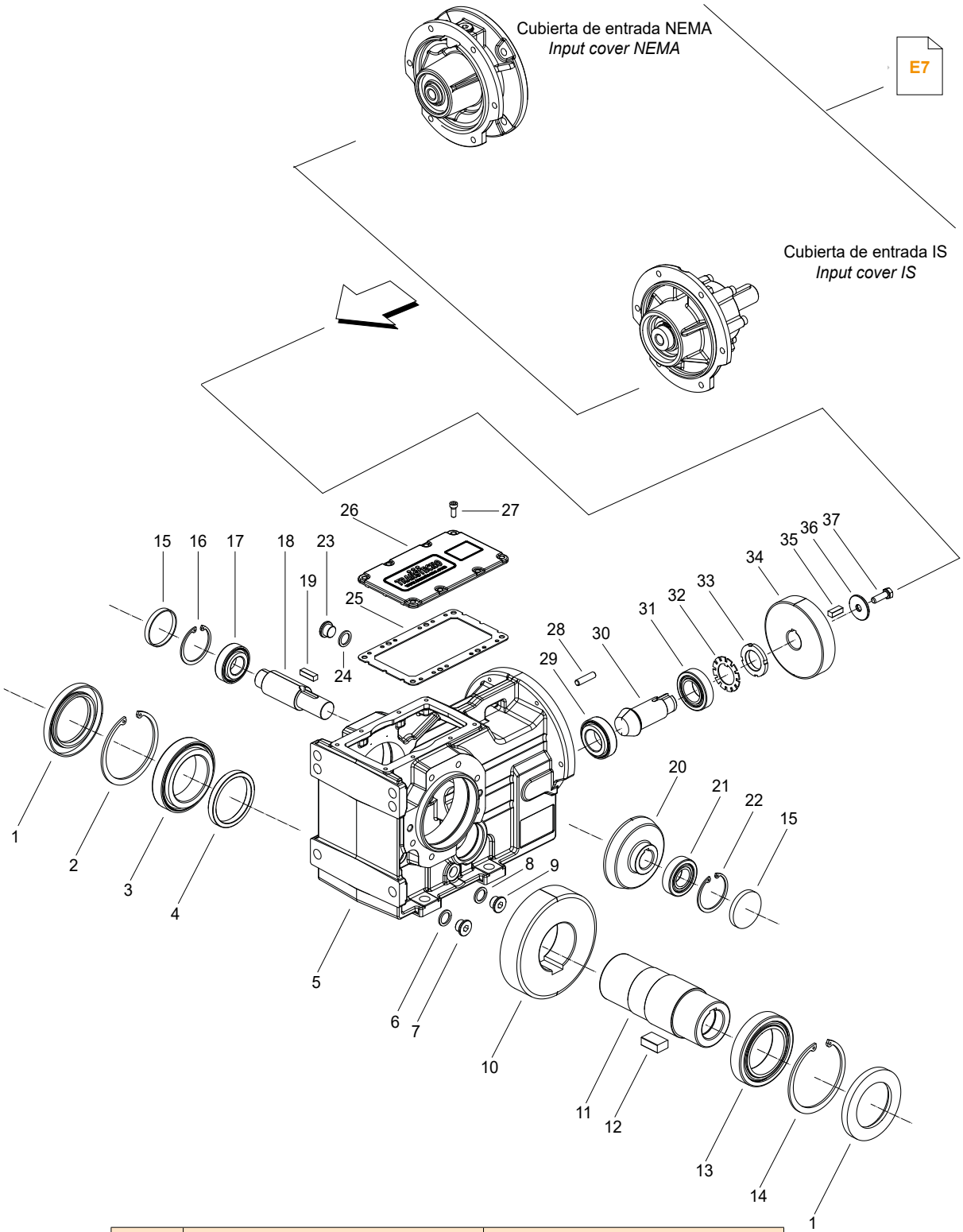
ITH..3



ITH	Sellos de aceite / *Oil seals*	RCA
	4	**28**
113	45/80/10	52x10
123	55/85/10	62x10
133	65/100/10	72x10
143	75/120/10	80x10

Listado de refacciones ***Spare parts list***

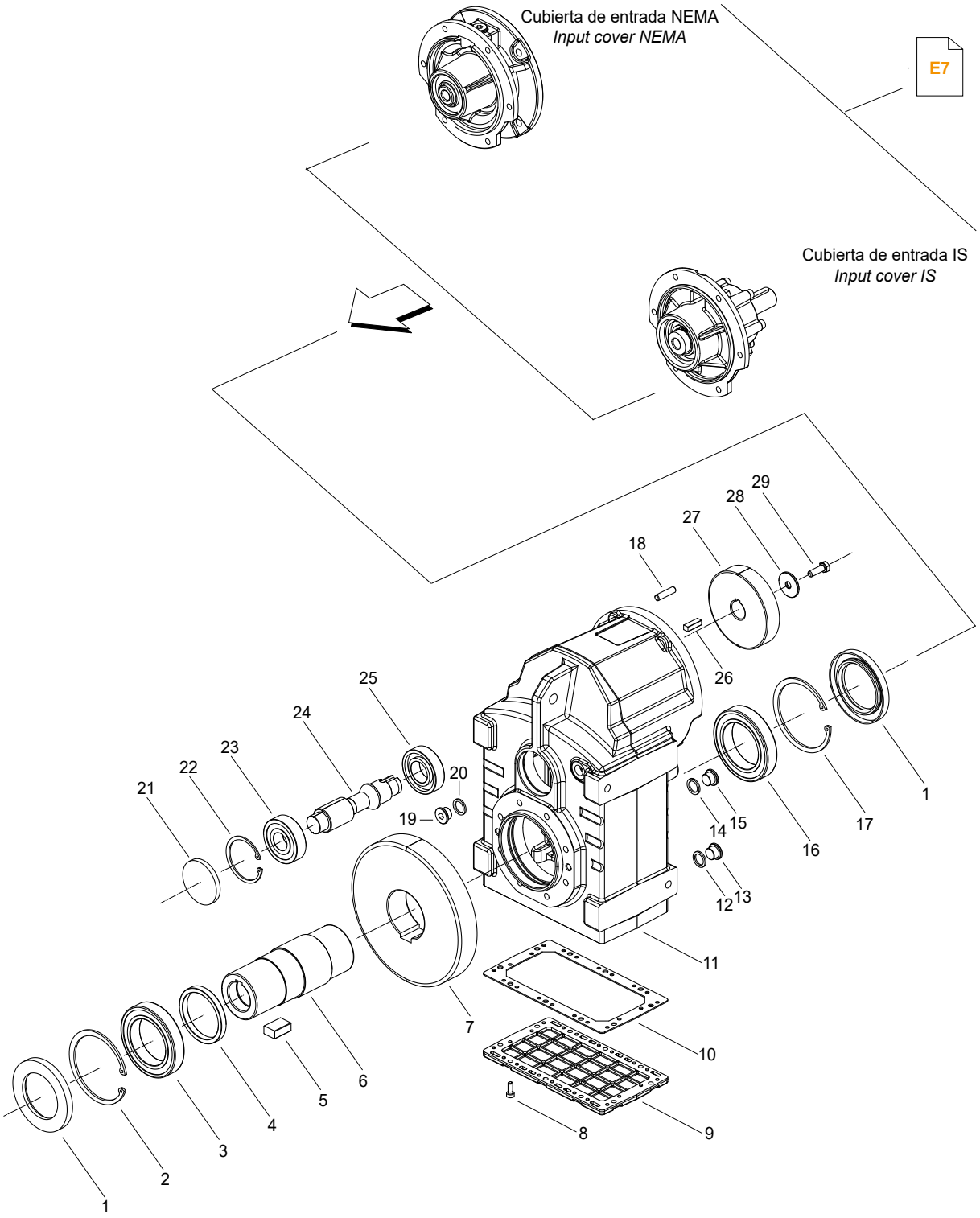
ITB



ITB	Sellos de aceite / *Oil seals*	RCA
	1	**15**
423	65/100/10	52x7
433	70/110/12	72x10
443	85/130/10	80x10

Listado de refacciones ***Spare parts list***

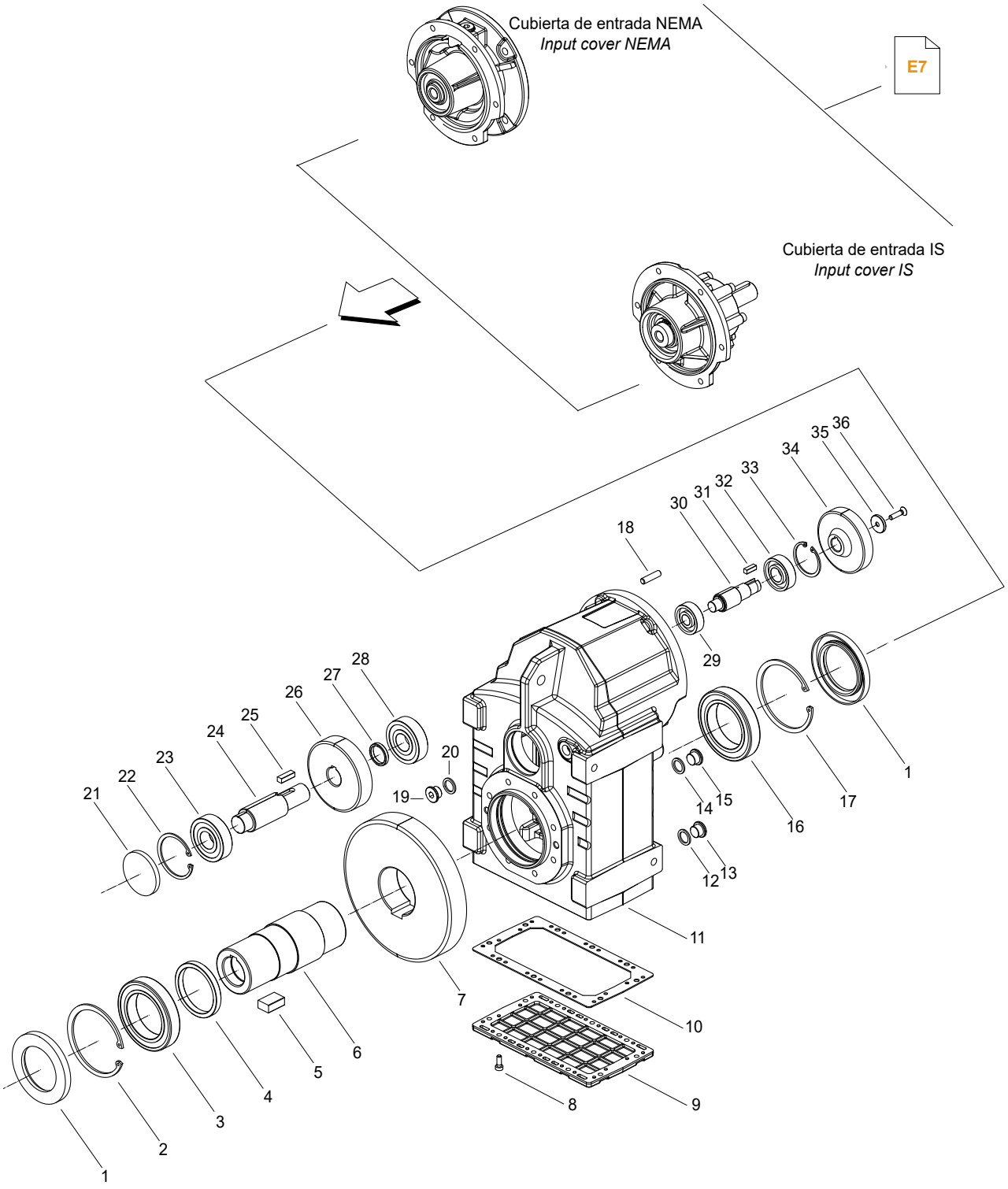
ITS..2



ITS	Sellos de aceite / *Oil seals*	RCA
	1	**21**
922	65/100/10	62x7
932	70/110/12	62x7
942	85/130/10	72x10

Listado de refacciones ***Spare parts list***

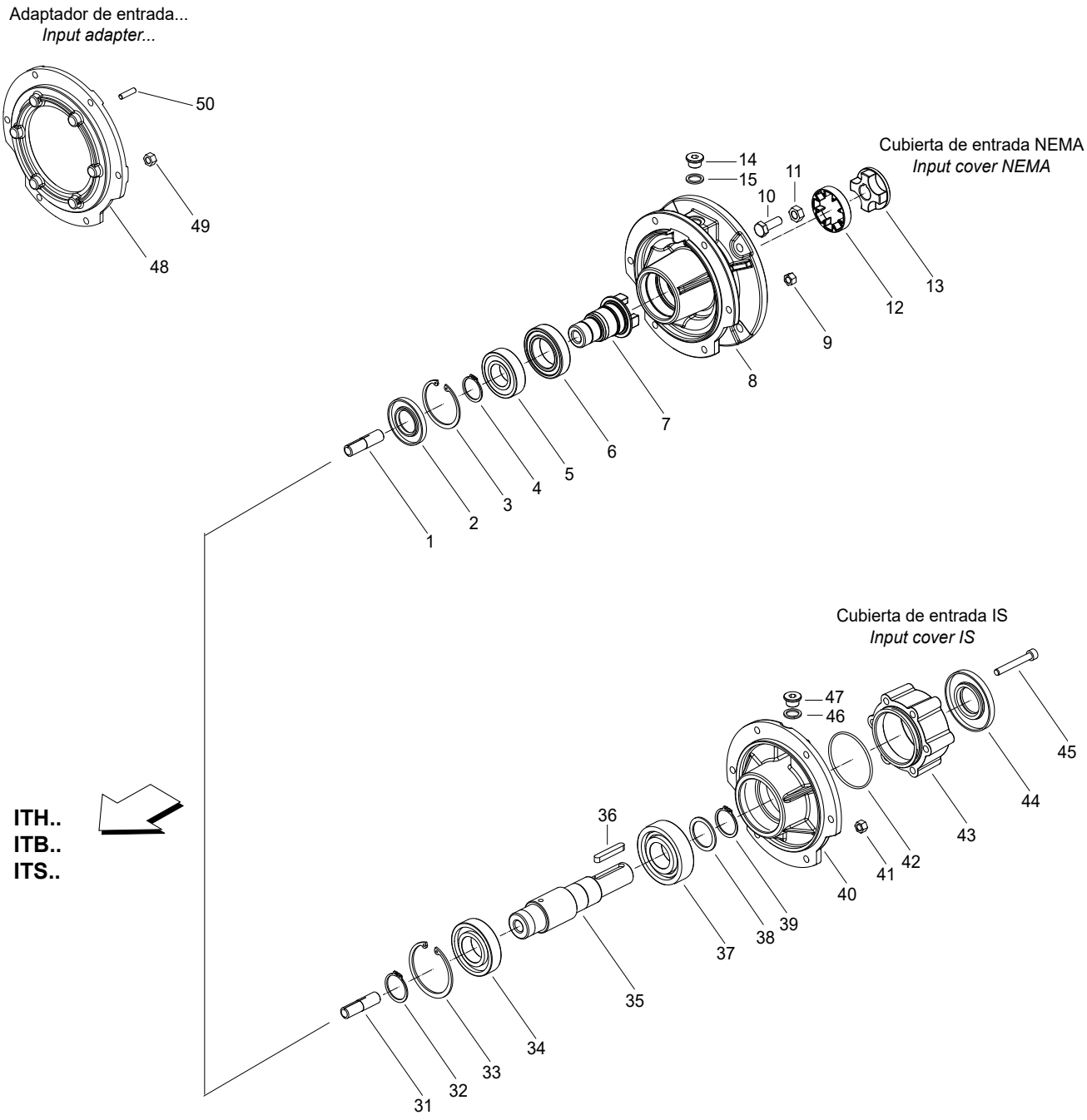
ITS..3



ITS	Sellos de aceite / *Oil seals*	RCA
	1	**21**
923	65/100/10	62x10
933	70/110/12	62x10
943	85/130/10	72x10

Listado de refacciones ***Spare parts list***

CUBIERTA DE ENTRADA - *INPUT COVER*



NEMA	Sellos de aceite / *Oil seals*
	2
56	30/62/7
140TC	30/62/7
180TC	40/80/10
210TC	40/80/10
250TC	50/110/12
280TC	50/110/12

IS	Sellos de aceite / *Oil seals*
	44
0.875	35/80/8
1.625	45/100/10

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