SETTIMA®
research & innovation, always

INDUSTRIAL

MOBILE

LUBRICATION

CONTINUUM® Series

Helical rotor pumps for high pressure and high speed applications

NO PULSATION & NO NOISE

Continuum® pump / pompa Continuum®

Achieves better efficiency, lower production cost, better life quality for the industrial world.
Ottiene alti livelli di efficienza, ridotti costi di produzione ed una migliore qualità del lavoro.

Reducing noise in the workplace has become a necessity for many companies. By now most companies have recognized noise as a cost weighting on the economics of their businesses. Noise pollution remains a serious problem to be solved for both stationary and mobile machinery. Hydraulic pumps, above all those for high pressure, entail unacceptable noise and/or vibration levels in many different applications. Up to now the noise problem has always been approached in the only possible way: with secondary and expensive activities such as using pulsation dampers, hoses, damping rails and rings, encapsulating the hydraulic components or the entire system and so on. **SETTIMA** decided to start to design a new gear pumps generation capable to reduce as much as possible the acoustic emissions and the consequent vibration level. Some years ago the result was the **Continuum® pump series,** able to reduce down to 52 dB(A) the normal operation noise. Today **SETTIMA** presents the new generation of **Continuum® pumps**, silent as always, but much more efficient and with longer lifetime even at heavy duty, at all pressure and speed ranges.

The most important economic benefits of using **Continuum® pumps** are:
- very low pump pulsations reduce dramatically also vibrations with no dispersion of energy,
- saving money respect to the more expensive traditional pumps such as piston pumps and internal gear pumps,
- high volumetric efficiency, also at very low speed, contributes to cost reduction and also enables the pump to be driven by motor at a variable velocity with consequent energy saving,
- cost saving by eliminating second noise reduction measures,
- keeping the same external dimensions of gear pump, with no necessity to redesign the system in case of replacement.

COMPETITIVE ANALYSIS / *ANALISI COMPETITIVA*

Continuum® pump is a valid alternative to silently replace different traditional solutions of noisy high pressure pump.
Continuum® pump can replace the following types of high pressure pumps:
- External gear pumps
- Internal gear pumps
- Fixed displacement vane pumps
- Fixed displacement piston pumps

Please contact Settima for all information about any possible replacement.

NOISE AND VIBRATIONS KNOCKED DOWN BY CONTINUUM® PUMP / *LA POMPA CONTINUUM® HA ELIMINATO IL RUMORE E LE VIBRAZIONI*

The typical sound emissions of gear pumps have two distinct origins: mechanical noise and hydraulic noise. The mechanical noise is what can be expected from any pair of gears. The hydraulic noise, however, is generated by the perturbations of fluid pressure through the pump. This noise and/or vibration comes from three basic components:
- cavitation, that can cause serious noise in addition to structural damage to mechanical components
- the peak pressure that arises from trapping of fluid between the top and the bottom of the tooth,
- the "ripple" or the flow pulsation during meshing that causes pressure pulsation.

The continuous contact helical rotor **Continuum® pump** has solved these problems with sophisticated and efficient systems.

THINK DIFFERENT: THE SILENT AND UNIQUE REVOLUTION OF CONTINUUM® PUMP / *UNA RIVOLUZIONE SILENZIOSA: LA POMPA CONTINUUM®*

As for classic gear pumps, the transport flow is perpendicular to the axes, but the rotors profile, specially developed and internationally patented, does not trap any volume since the helical design of the profile plays the role of completing an overlap, making a gentle transmission of fluid resulting in a dramatic reduction of pulsation. There is just a single point of contact between the profiles during rotation, which eliminates the pockets acting on the axial thrust washer and the noise associated with this problem.
The Continuum® core and its technological innovation is based on three patented breakthroughs:
- The rotor profile
- The screw step
- The inner force balancing.

MANUFACTURING ACCURACY IN ANY DETAILS / *MASSIMA ACCURATEZZA NEI DETTAGLI*

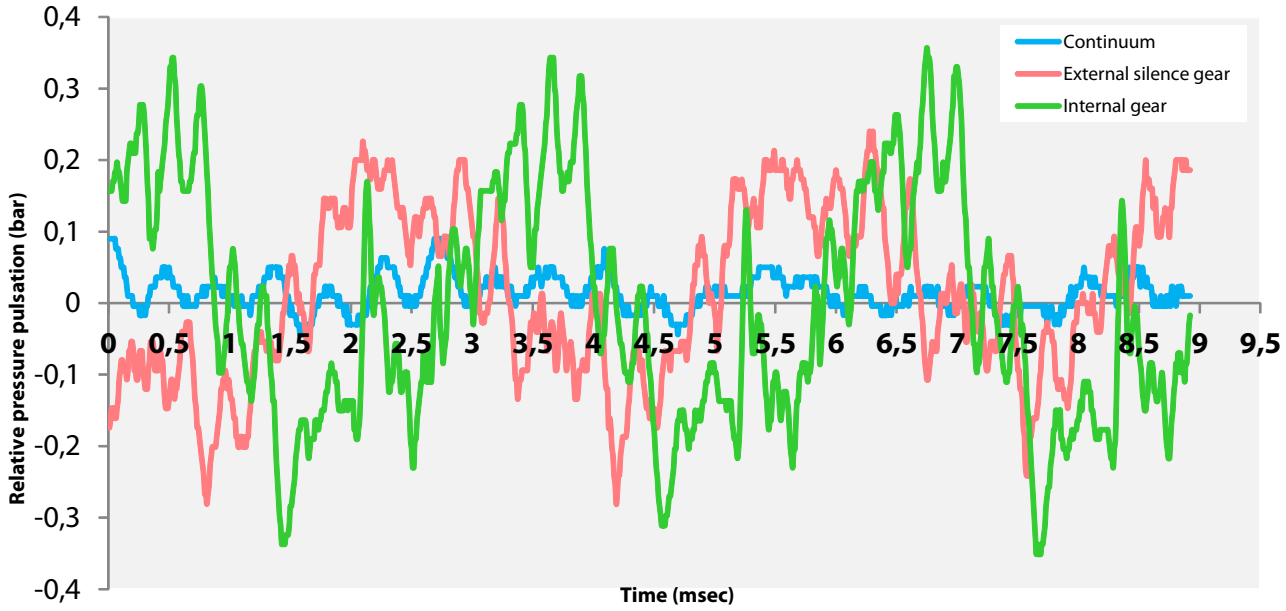
SETTIMA produces hydraulic no noise pumps since over thirty years, achieving a high level of competence and accuracy in the manufacture of high-precision hydraulic pump drives.

Together with top production machineries, efficient test environments, 3D drawing capability and special materials for rotors and bushings, **SETTIMA** constantly achieves products of high quality that is the industry standard.

CONTINUUM® PUMP ADVANTAGES / *VANTAGGI DELLA POMPA CONTINUUM®*

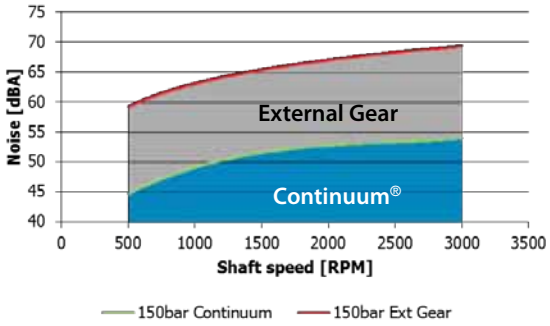
- Low noise also at high speed (up to 6.500 RPM).
- Average of 15dB(A) less noisy than standard external gear pumps.
- Reduced noise level for the machine operator and surroundings.
- Cost saving by eliminating second noise reduction measures.
- Easy to replace - compatibile with all external gear pumps.
- Helps meet legal noise requirements.
- Continuous variable flow rate (0% to 100%).
- Intermittent operation at high pressure & low speed.
- High volumetrical efficiency.

PULSATIONS LEVEL GRAPH / *GRAFICO PULSAZIONI* (100 bar - 40 cSt - 1.500 rpm)

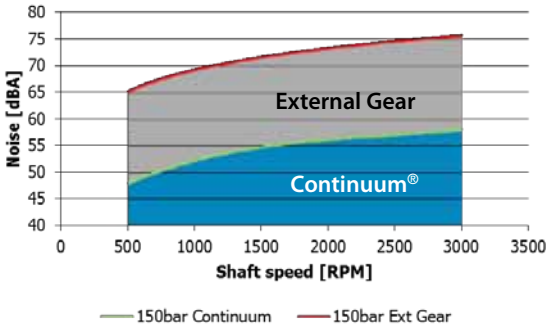


NOISE LEVEL GRAPH / *GRAFICO EMISSIONI ACUSTICHE* (150 bar)

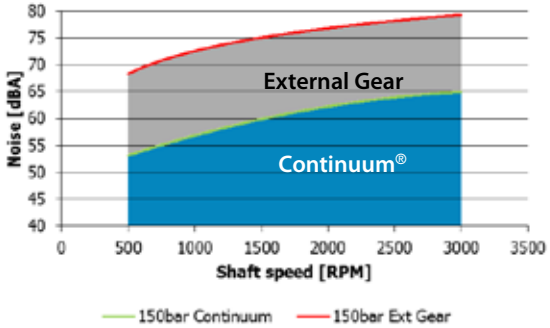
GR 28



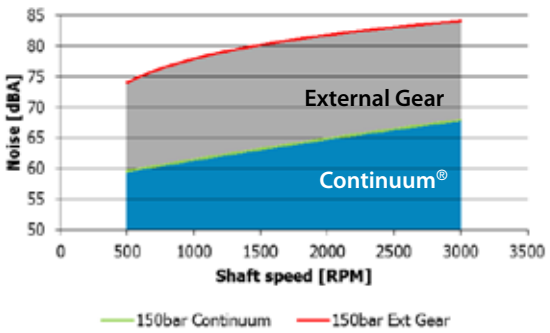
GR 33 - 38



GR 47 - 55



GR 72



Applications / Applicazioni

INDUSTRIAL

Machine tools lubrication systems.

Lifting equipment, hydraulic systems for dock-levelers.

Hydraulic transmission systems.

Machines lubrication.

Chemical metering.

Hydraulic systems for injection moulding machines, presses, compactors and balers.

Systems for lubrication and cooling of gearboxes and bearings.

Hydraulic powerpack.

Hydro power.

Feeder system for filter circuits, cooling circuits, lubrication applications, pump transfer unit.

MOBILE

Ground-handling equipment.

Agricultural machinery.

Hydraulic systems for parking systems.

Steering units.

Torque converters & powershift transmissions.

Street-sweeping vehicles.

Shredder systems.

Waste container level lifter.

Electric fork lift trucks & AGV's

Electric terminal trucks oppure heavy duty material handling trucks

Electric/hybrid buses

Electric/hybrid tractors

Electrid/hybrid excavators

Electrid/hybrid agricultural machines

ENVIRONMENTAL INDUSTRY

Baler and compacting of waste.

Containers.

Hooklift containers.

Back loading containers.

Front loading containers.

Liftdumper containers.

Hooklift systems.

Garbage trucks.

Mobile compactors.

Stationary compactors.

MARINE

Marine power hydraulics.

Rudder actuators (tandem system).

Propeller pitch control.

Propeller drive (power transmission from engine).

Rotary vane steering gears.

Minipowerpacks (dock operation, door control).

Yacht building industry (lifting systems: fly bridge cranes, tenderlift, elevator, walkways, automatic swimming ladders, side boarding ladders, pitch controls and operations, hydraulic davits).

Technical characteristics / Caratteristiche tecniche

SPECIAL HELICAL ROTORS – CONTINUUM® represents an innovative and revolutionary gear pump. The patented profile of the **Continuum®** rotors permits just a single point of contact between gears: this results, together with a particular screw step and inner force balancing, in the total absence of trapped and compressed oil, and leads to no noise and no pulsation.

HIGH PRESSURE – CONTINUUM® has been designed for high pressure, high speed and heavy duty.

TANDEM GROUP – CONTINUUM® can be also assembled as a double pump, connecting two pumps from different groups: from group 1 to group 4.

Technical characteristics

Models / *Modelli*	28-33-38-47-55-63-72	
Flanges ***Flange***	Group 1 – Group 2 (European, German, BKT, SAE-A) – Group 3 (European, SAE-B) – Group 4 (SAE-D) *Gruppo 1 – Gruppo 2 (Europeo, Tedesco, BKT, SAE-A) – Gruppo 3 (Europeo, SAE-B) – Gruppo 4 (SAE-D)*	
Connections ***Connessioni***	BSPP (GAS) – SAE 3000/6000 PSI – FL 4 HOLES M6 SU Ø40 DN20 (mentioned connections depend on model) *BSPP (GAS) – SAE 3000/6000 PSI – FL 4 HOLES M6 SU Ø40 DN20 (in base al modello)*	
Installation position ***Posizione di installazione***	External and/or under oil *Esterna e/o immersa*	
Shaft rotation ***Rotazione***	Clockwise (please contact Settima for counter clockwise) *Destra (contattare Settima per sinistra)*	
Shaft speed ***Velocità di rotazione***	From 150 to 6.500 rpm (for usage below 1.000 rpm or over 1.800 rpm please contact Settima) *Da 150 a 6.500 rpm (per utilizzi a giri inferiori a 1.000 rpm o superiori a 1.800 rpm contattare Settima)*	
Flows ***Portate***	From 6 L/min up to 300 L/min (at 1.500 rpm) *Da 6 L/min fino a 300 L/min (a 1.500 rpm)*	From 1.585 GPM up to 79.251 GPM (at 1,500 rpm)
Operating pressure ***Pressione operativa*******	Max. Continuous: 275 bar/3,988.5 PSI Max. Cycle ON/OFF: 280 bar/4,061 PSI Max. Peak: 300 bar/4,351.1 PSI	*Max. Continuo: 275 bar* *Max. Ciclo ON/OFF: 280 bar* *Max. Picco: 300 bar*
Inlet pressure ***Pressione di aspirazione*******	0,6– 3 bar	8.702 - 43,511 PSI
Fluids ***Fluidi***	- Mineral oil - Synthetic oil	*- Olio minerale* *- Olio sintetico*
Viscosity ***Viscosità***	Possible: from 5 up to 800 cSt** Recommended: from 32 up to 150 cSt Starting condition: up to 3.000 cSt**	*Consentita: da 5 fino a 800 cSt*** *Raccomandata: da 32 fino a 150 cSt* *Condizioni di avviamento: fino a 3.000 cSt***
Environmental temperature ***Temperatura ambiente***	From -15°C up to +60°C *Da -15°C a +60°C*	
Oil temperature ***Temperature olio***	From -20°C up to +80°C*** *Da -20°C a +80°C****	
Contamination level ***Livello di contaminazione***	Up to 8 NAS (18/17/14 ISO4406) (for heavy duty operations over 150 bar, over 4 working hours/day, 100 cycle/day oil ISO 46) *Fino a 8 NAS (18/17/14 ISO4406) (per lavoro ad alto sforzo oltre 150 bar, oltre 4 ore lavorative/giorno, 100 cicli/giorno olio ISO 46)*	
Filtration ***Filtrazione***	From 25 to 10 µm (for heavy duty operations over 150 bar, over 4 working hours/day, 100 cycle/day oil ISO 46) *Da 25 a 10 µm (per lavoro ad alto sforzo oltre 150 bar, oltre 4 ore lavorative/giorno, 100 cicli/giorno olio ISO 46)*	
Seals ***Guarnizioni***	NBR, FKM (others on request) *NBR, FKM (altri a richiesta)*	
Acoustic emissions ***Emissioni acustiche***	From 52 up to 63 db(A) at 2.950 rpm *Da 52 fino a 63 db(A) at 2.950 rpm*	
Flanges material ***Materiale delle flange***	Cast iron *Ghisa*	
Pump body / *Corpo*	Extruded aluminium alloy / *Alluminio estruso*	
Rotors / *Rotori*	Hardened steel / *Acciaio temprato*	

** Please for more information about possible and starting conditions of viscosity contact Settima. *Contattare Settima per maggiori informazioni sui livelli di viscosità possibili e quelli delle condizioni di inizio lavoro.*
*** For higher temperature than 80°C, please, contact Settima. *Per temperature superiori a 80° C, contattare Settima.*
**** Depending on models. */ In base al modello*

System requirements / Requisiti del sistema

Inlet pressure

The inlet vacuum must be controlled within the prescribed range in order to achieve the expected pump life and performance. The system design must meet inlet pressure requirements during all modes of operation.

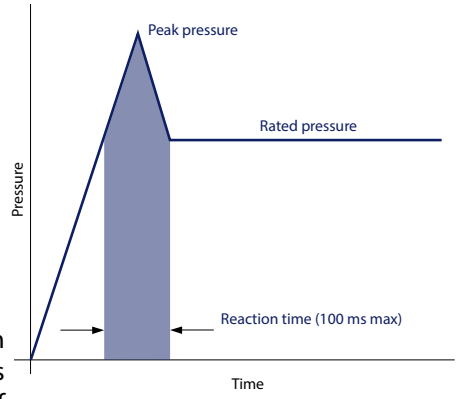
Peak pressure is the highest intermittent pressure allowed. The reaction time of the pressure relief valve determines the duration of operation at pressure above the rated value. The maximum time interval is 100 ms. The illustration to the right shows peak pressure in relation to rated pressure and reaction time (100 ms maximum).

Rated pressure is the average, regularly occurring, operating pressure that does not compromise the product's life and performance.

System pressure is the pressure differential between the outlet and inlet ports. System pressure must remain at, or below, the rated pressure during normal operation to achieve expected life.

Max. continuous vacuum	bar abs. [in. Hg]	0.8 [23.6]
Max. intermittent vacuum		0.6 [17.7]
Max. pressure		3.0 [88.5]

Time versus pressure



Hydraulic fluids

Ratings and data for Continuum® pumps are valid for operation with premium hydraulic fluids containing oxidation, rust, and foam inhibitors. These fluids must possess good thermal and hydrolytic stability to prevent wear, erosion, and corrosion of internal components. They include:

- Hydraulic fluids following DIN 51524, part 2 (HLP) and part 3 (HVLP) specifications
- API CD engine oils conforming to SAE J183
- M2C33F or G automatic transmission fluids
- Certain agricultural tractor fluids

Use only clean fluid in the pump and hydraulic circuit. Never mix hydraulic fluids.

Temperature and viscosity

Temperature and viscosity requirements must be concurrently satisfied. Use petroleum / mineral-based fluids.

High temperature limits apply at the inlet port to the pump. The pump should run at or below the maximum continuous temperature. The peak temperature is based on material properties. Don't exceed it. Cold oil, generally, doesn't affect the durability of pump components. It may affect the ability of oil to flow and transmit power. For this reason, keep the temperature at 16 °C [60 °F] above the pour point of the hydraulic fluid.

Minimum (cold start) **temperature** relates to the physical properties of component materials.

Minimum viscosity occurs only during brief occasions of maximum ambient temperature and severe duty cycle operation. You will encounter maximum viscosity only at cold start. During this condition, limit speeds until the system warms up. Size heat exchangers to keep the fluid within these limits. Test regularly to verify that these temperatures and viscosity limits aren't exceeded. For maximum unit efficiency and bearing life, keep the fluid viscosity in the recommended viscosity range.

Fluid viscosity

Maximum (cold start)	mm^2/s [SUS]	3000 [13904]
Recommended range		32-150** [148-695]
Minimum		5 [23]

Temperature

Minimum (cold start)	°C [°F]	-20 [-4]
Maximum continuous		50* [122]
Peak (intermittent)		90* [176]

*For higher temperature than 50°C, please contact Settima.
**For viscosity value out of this range, please contact Settima.

Filtration

A Class 18/17/14 of ISO 4406 (or better) filter must be used.

Selecting a filter

When selecting a filter, please consider:

- Contaminant ingression rate
  (determined by factors such as the number of actuators used in the system)
- Generation of contaminants in the system
- Required fluid cleanliness

- Desired maintenance interval
- Filtration requirements of other system components

Measure filter efficiency with a Beta ratio (β_X). For:

- Suction filtration, with controlled reservoir ingression, use a $\beta_{35\text{-}45} = 75$ filter
- Return or pressure filtration, use a pressure filtration with an efficiency of $\beta_{10} = 75$.

βx ratio is a measure of filter efficiency defined by ISO 4572. It is the ratio of the number of particles greater than a given diameter ("$_x$" in microns) upstream of the filter to the number of these particles downstream of the filter.

Fluid cleanliness level and βx ratio

Fluid cleanliness level (per ISO 4406)	Class 18/17/14 or better
β_x ratio (suction filtration)	$\beta_{35\text{-}45} = 75$ and $\beta_{10} = 2$
β_x ratio (pressure or return filtration)	$\beta_{10} = 75$
Recommended inlet screen size	100-125 µm [0.004-0.005 in]

The filtration requirements for each system are unique. Evaluate filtration system capacity by monitoring and testing prototypes.

Reservoir

The **reservoir** provides clean fluid, dissipates heat, removes entrained air and makes up for changes in fluid volume due to fluid expansion-contraction and flow imbalances associated with differential cylinders. A correctly sized reservoir accommodates maximum volume changes during all system operating modes. It promotes de-aeration of the fluid as it passes through, and accommodates a fluid dwell-time between 60 and 180 seconds, allowing entrained air to escape.

Hydraulic oil contains 10% of dissolved air by volume in normal conditions and the system should be design in order to avoid any over-areation of the hydraulic fluid, to limit any air release at the inlet port.

Minimum reservoir capacity depends on the volume required to cool and hold the oil from all retracted cylinders, allowing for expansion due to temperature changes. A fluid volume of 1 to 3 times the pump output flow (per minute) is satisfactory. The minimum reservoir capacity is 125% of the fluid volume.

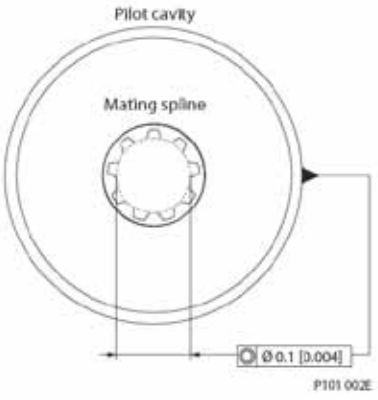
The suction line shall be installed above the bottom of the reservoir to take advantage of gravity separation and prevent large foreign particles from entering the line. Cover the line with a 100-125 micron screen. The pump should be below the lowest expected fluid level. Put the return-line below the lowest expected fluid level to allow discharge into the reservoir for maximum dwell and efficient deaeration. A baffle (or baffles) between the return and suction lines promotes deaeration and reduces fluid surges.

Pump drive

Shaft options for Continuum® pumps include tapered, tang, splined, or parallel shafts. They are suitable for a wide range of direct and indirect drive applications for radial and thrust loads.

Plug-in drives, acceptable only with a splined shaft, can impose severe radial loads when the mating spline is rigidly supported. Increasing spline clearance does not alleviate this condition. Use plug-in drives if the concentricity between the mating spline and pilot diameter is within 0.1 mm [0.004 in]. Lubricate the drive by flooding it with oil. A 3-piece coupling minimizes radial or thrust shaft loads. In order to avoid spline shaft damages it is recommended to use carburized and hardened steel couplings with 60-62 HRC surface hardness.

Allowable **radial shaft loads** are a function of the load position, load orientation, and operating pressure of the hydraulic pump. All external shaft loads have an effect on bearing life, and may affect pump performance.



Pump life

Pump life is a function of speed, system pressure, and other system parameters (such as fluid quality and cleanliness). All Continuum® pumps use hydrodynamic journal bearings that have an oil film maintained between the gear/shaft and bearing surfaces at all times. If the oil film is sufficiently sustained through proper system maintenance and operating within recommended limits, long life can be expected. B10 life expectancy number is generally associated with rolling element bearings. It does not exist for hydrodynamic bearings. High pressure, resulting from high loads, impacts pump life. When submitting an application for review, provide machine duty cycle data that includes percentages of time at various loads and speeds. We strongly recommend a prototype testing program to verify operating parameters and their impact on life expectancy before finalizing any system design.

Continuum® Servo drive pumps

Servo drive systems: easy, no noise, fast and energy saving.

Hydraulic press servo drives have been on the market since many years already. In Asia most of the market of plastic injection molding machines is using variable servo drive motors and fixed displacement pumps, like external gear, vane or internal gear pumps. The usage of this type of systems enables **energy savings up to 65%** when compared to conventional drive systems (fixed speed motor and variable displacement hydraulic pumps). Today, more than 100.000 servo drive systems are used in the manufacturing process of hydraulic presses.
This kind of systems, while reaching real energy savings, also enables **huge simplifications of the hydraulic circuits**: no more proportional valves or complicated hydraulic pressure feedback are needed to control the press actions and cycles. Servo pump systems use motor speed between nearly 0 and 3.000 RPM, to enable very fast movement of the molds and a high cycle dynamics.

The noise of hydraulic pumps is the issue, Continuum® is the solution.

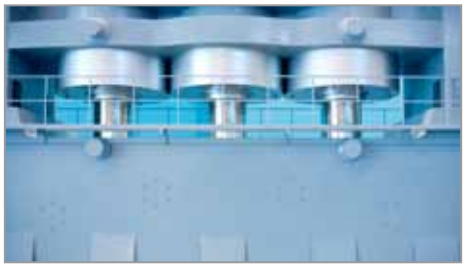
The real innovation in the pump market is the **Continuum® pump.**
Continuum® is on the market since early 2004 and brought Settima to the very top amongst manufacturers of silent components establishing a new high standard that all competitors struggle to reach but without success.
This technology cuts the noise at the root: the profile of the rotors has been engineered to reach **no-noise** and **no-pulsations**. The **Continuum® servo pump** is used in the market of presses since 2008, enabling the press designers to reach wide speed dynamics in heavy duty pressing cycles without noise.
Settima package is suitable for **press modernization and revamping**. It's possible to remove all of the old and noisy hydraulic components and to replace them with our system, making the old machines more flexible and quieter than ever.

Continuum® Servo Drive pump

The Continuum® servo drive pump possible applications:

PLASTICS

Plastic injection molding machines,
Plastic injection machines retrofitting,
Blow molding machines,
Rubber presses.



PRESSES

Hydraulic presses,
Press modernization and revamping.

ENVIRONMENTAL INDUSTRY

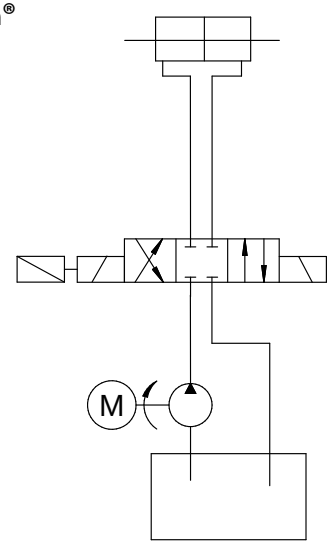
Balers,
Waste compactors.

The Continuum® servo drive pump advantages & economical benefit	
Variable servo drive motors + Gear pump	• Enables **energy savings** up to **65%** • **Simplification** of the hydraulic circuits • More **compact** hydraulic units, up to 80% less space needed
High pressure and flow control through gear pumps	• No more need for **proportional valves** • Significant **reduction** of all **operating cost**
Special profile of the rotors	• **No-noise** and • **No-pulsations** • **No noise reduction measures needed** to fulfill the Occupational Guidelines

Continuum® Servo drive pumps

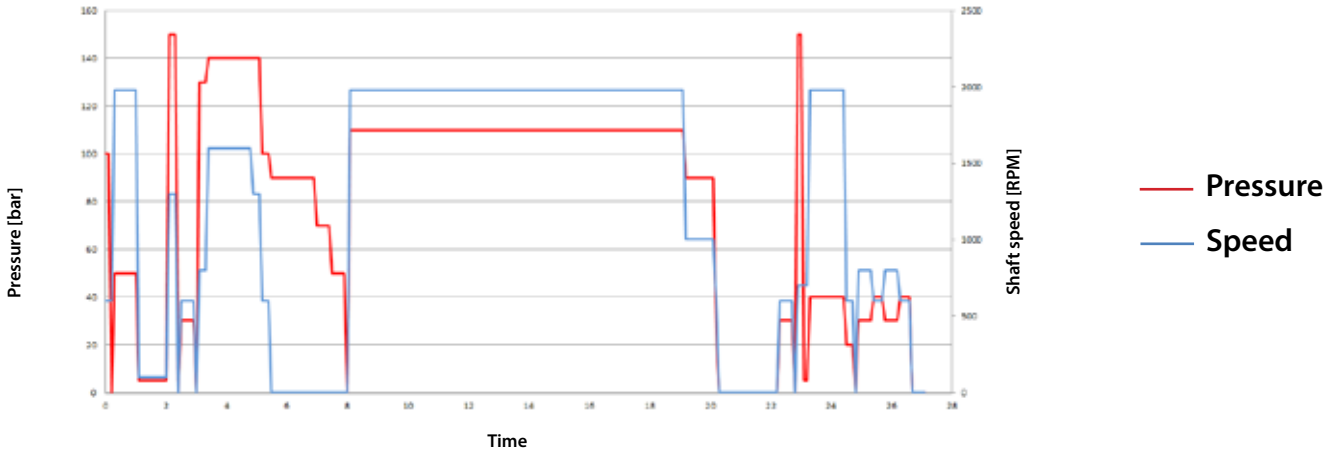
The Continuum® servo drive pump can be equipped with (optional):

- Accumulator: the bypass valve never reacts with the same dynamic and speed of the **Continuum® servo drive pump**. The accumulator catches the risky pressure peaks.
- Pressure line filter.
- Non return valve: to make the management of pressure "holding" phases stronger.
- Inline pressure and temperature sensor: to enable quick and easy installation.
- Servo drive and motor: can be supplied by **Settima** (many brands are available). This enables a better management of the electronic components maintenance and service programs of the machines of our customer.

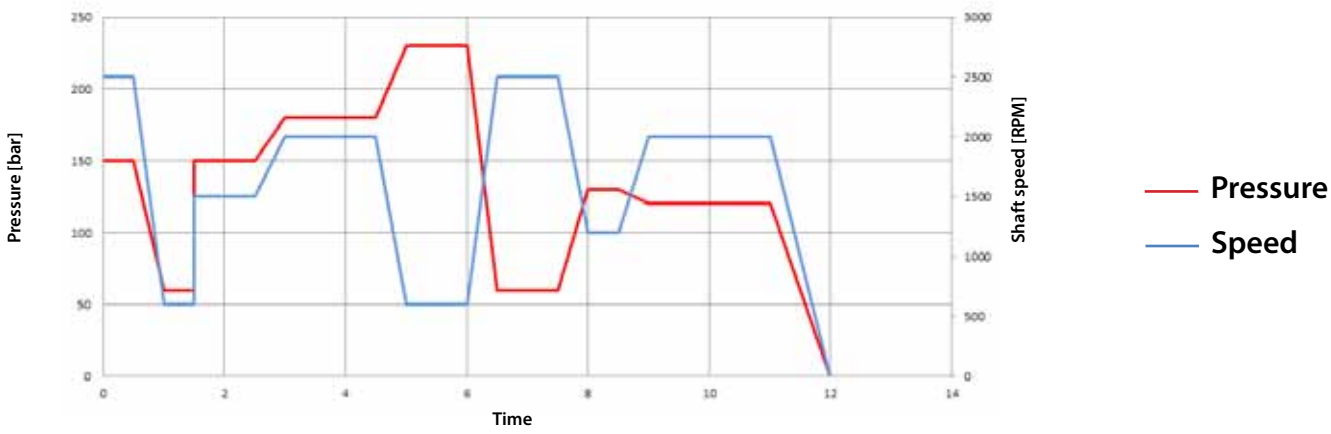


The below graphs show two real examples of PIMM working cycles with Continuum® servo drive pump.

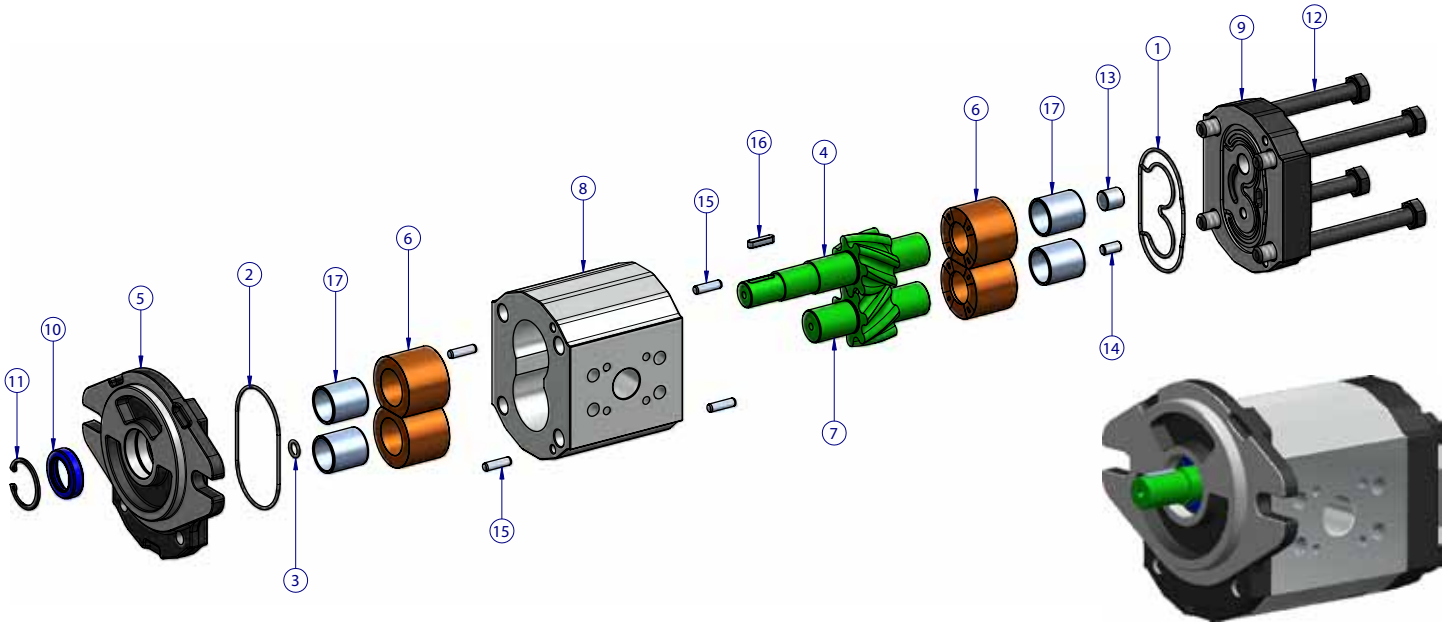
Ex. 1



Ex. 2



Product description / Descrizione prodotto



N°	DESCRIPTION/DESCRIZIONE	MATERIAL / MATERIALE
1	O-ring seal / O-ring	NBR
2	O-ring seal / O-ring	NBR
3	O-ring seal / O-ring	NBR
4	Driving Continuum® rotor / *Rotore guida Continuum®*	Hardened steel / *Acciaio temprato*
5	Motor flange / *Flangia motore*	Cast iron / *Ghisa*
6	Ring for bush / *Anello porta boccola*	Aluminium / *Alluminio*
7	Driven Continuum® rotor / *Rotore guidato Continuum®*	Hardened steel / *Acciaio temprato*
8	Body / *Corpo*	Extruded aluminum alloy / *Alluminio estruso*
9	Cover flange / *Flangia*	Cast iron / *Ghisa*
10	Seal / *Anello di tenuta*	NBR
11	Seeger / *Seeger*	Steel / *Acciaio*
12	Screws / *Viti di fissaggio*	Steel / *Acciaio*
13	Piston / *Pistone*	Steel / *Acciaio*
14	Piston / *Pistone*	Steel / *Acciaio*
15	Centring Keys / *Spine di centraggio*	Steel / *Acciaio*
17	Bushings / *Boccole*	Steel / *Acciaio*

Standard type and options

	STANDARD MATERIAL	OPTIONAL MATERIAL
Body / *Corpo*	Alluminium / *Alluminio*	Cast iron / *Ghisa*
Seal kit	NBR	FKM
Bushings / *Boccole*	Alluminium / *Alluminio*	Bronze / *Bronzo*

Ordering code / Codice ordine

Single pump / *Pompa singola*

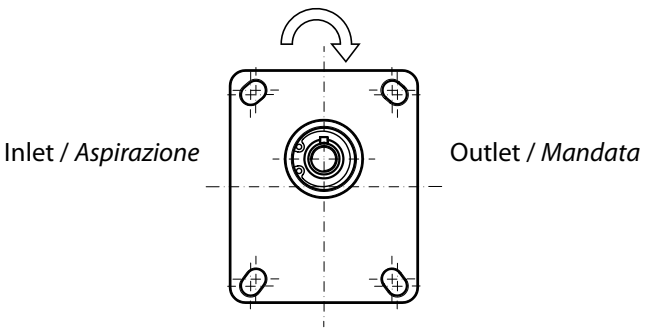
Type *Tipo*	Class *Classe*	Displacement *Cilindrata*	Flange *Flangia*	Albero *Shaft*	Ports *Porte*	Shaft seal *Guarnizione albero*	Rotation *Rotazione*
GR28	2V	3cc - 3,5cc - 4cc - 6cc - 8cc - 10cc - 13cc	F1 - F1P - FSAEAA- F1K-F1L	AC3 - AC2 - AG54 - AGL54 - AT6 - AT9 - AC	GAS-UNF metric - axial	Standard NBR **(none)** Optional FKM **V**	Standard DX **(none)** Optional **SX***
GR33	2C	6,5cc - 8cc - 10cc - 11cc - 13cc - 15cc - 18cc	F2 - FSAEA - F2BK7 - F2BK1	AC4 - AC6 - AC - AT9 - AG	GAS - SAE - UNF - metric		
GR38	2C	16cc - 18cc - 20cc - 22cc - 25cc - 28cc	F2 - FSAEA - FSAEB - F2BK7 - F2BK1	AC4 - AC6 - AC - AT9 - AT10 - AT11 - AT13 - AG	GAS - SAE - UNF - metric		
GR47	2C	20cc - 25cc - 28cc - 32cc - 36cc - 40cc - 45cc - 50cc	F3 - FSAEA - FSAEB	AC9 - AC25 - AC - AT13	GAS - SAE - UNF		
GR55	2C	32cc - 40cc - 50cc - 63cc - 75cc - 80cc - 90cc	F3 - FSAEB - FSAEC	AC9 - AC25 - AC - AT13 - AT15	SAE - UNF		
GR63	2V	100cc - 125cc	FSAED	AC	SAE		
GR72	2V	94cc - 101cc - 125cc - 150cc - 175cc - 200cc	FSAEDAC	AC - AT17 - AT23	SAE		

* Please Contact Settima for SX counter clockwise optional rotation.
Contattare Settima per rotazione SX opzionale.

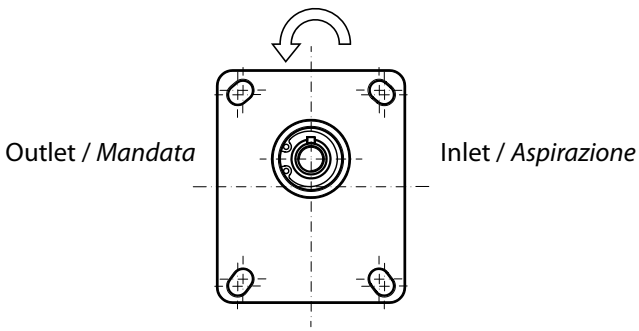
DIRECTION OF ROTATION / *SENSO DI ROTAZIONE*

Continuum® pumps are available with right rotation as standard configuration and left rotation as optional configuration. Right hand rotation means that, when standing in front of the pump, with driving shaft towards to the observer, the pump is rotating clockwise (DX). The other way around with left hand rotation, counter clockwise (SX).
Le pompe **Continuum®** *sono fornite con la configurazione standard di rotazione destra. Opzionale la rotazione sinistra. Con rotazione destra (DX) si intende che, guardando la pompa frontalmente, con l'albero conduttore sporgente verso il punto di osservazione, la rotazione sarà in senso orario, con il lato mandata sulla destra e il lato aspirazione sulla sinistra della pompa. Viceversa per quanto riguarda la rotazione sinistra (SX).*

DX: Clockwise rotation / *Rotazione destra*



SX: Counter clockwise rotation / *Rotazione sinistra*



Variant codes for ordering integral relief valves*

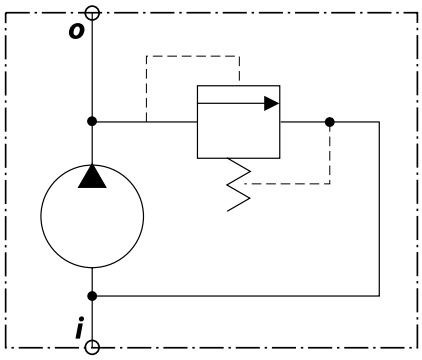
The tables below detail the various codes for ordering integral relief valves.

R:

Code	Pump speed for RV setting
C	500 min^{-1} (rpm)
E	1000 min^{-1} (rpm)
F	1250 min^{-1} (rpm)
G	1500 min^{-1} (rpm)
K	2000 min^{-1} (rpm)
I	2250 min^{-1} (rpm)
L	2500 min^{-1} (rpm)
M	2800 min^{-1} (rpm)
N	3000 min^{-1} (rpm)
O	3250 min^{-1} (rpm)

Code	Pressure setting
18	18 bar [261 psi]
30	30 bar [435 psi]
40	40 bar [580 psi]
50	50 bar [725 psi]
60	60 bar [870 psi]
70	70 bar [1015 psi]
80	80 bar [1160 psi]
90	90 bar [1305 psi]
100	100 bar [1450 psi]
120	120 bar [1740 psi]
140	140 bar [2030 psi]
160	160 bar [2320 psi]
180	180 bar [2611 psi]
210	210 bar [3046 psi]
250	250 bar [3626 psi]

Integral relief valve schematic



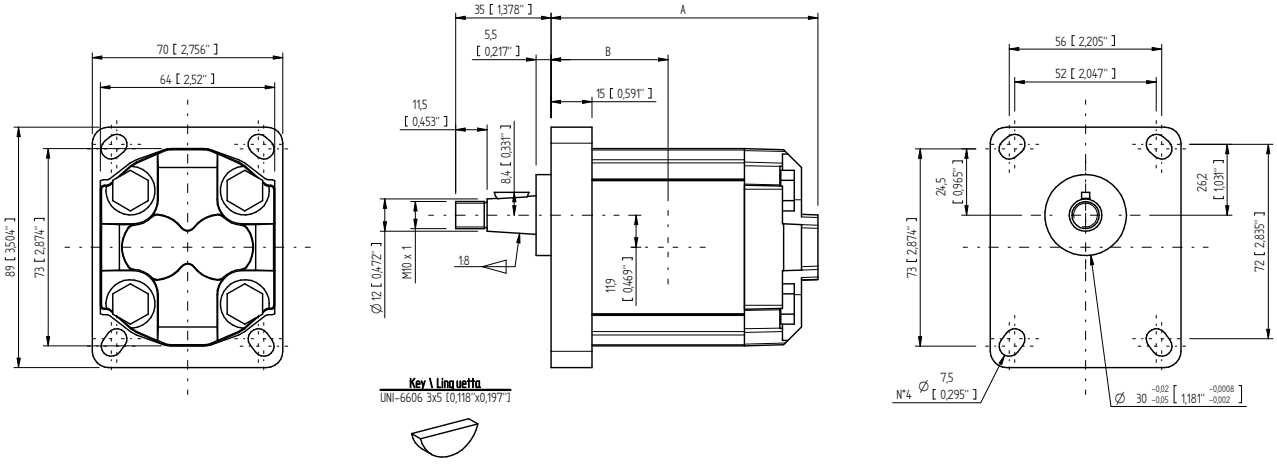
* Please, contact Settima for this option.

GR28 - Dimensional drawings / Disegni dimensionali

GR28 SHAFT AND FLANGE TYPES AND DIMENSIONS / *TIPI DI ALBERO E FLANGIA E DIMENSIONI*
Group 1 pumps / *Pompe gruppo 1*

Type	Model	Weight (Kg)
GR28 2V	3	2
	3,5	2
	4	2
	6	2
	8	2
	10	2
	13	3

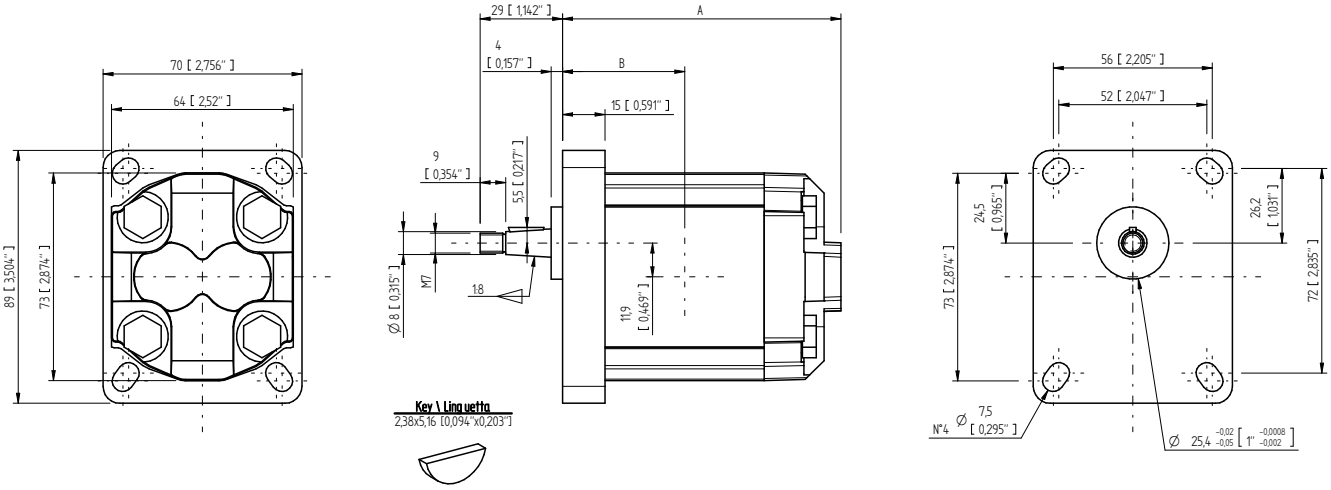
The values of noise level, reported into this catalogue, are purely indicative. Please contact Settima for more precise information / *I valori di rumorosità riportati in questo catalogo sono puramente indicativi. Si prega di contattare Settima per informazioni più precise.*



GR28 - TYPE / *TIPO* F1 AC3														
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
3	3,1	4,6	1,23	98	3,86	43	1,69	275	3989	280	4061	300	4351	
3,5	3,5	5,2	1,39	99	3,90	43,5	1,71	275	3989	280	4061	300	4351	
4	4,2	6	1,58	101	3,97	44,5	1,75	275	3989	280	4061	300	4351	
6	6,4	9,2	2,43	106,5	4,19	47,25	1,86	275	3989	280	4061	300	4351	55
8	8,3	12	3,17	111,5	4,39	49,75	1,95	246	3568	260	3771	280	4061	
10	10,2	14,7	3,88	116,5	4,58	52,25	2,05	222	3220	250	3626	270	3916	
13	12,9	18,6	4,91	123,4	4,85	55,7	2,19	176	2553	230	3336	250	3626	

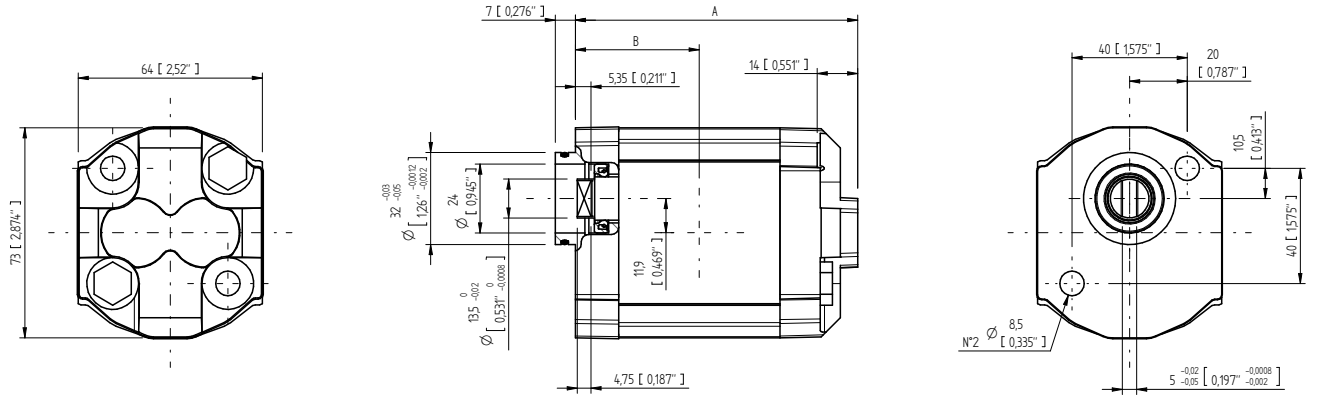
Max torque / *Coppia max:* 100 Nm

* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



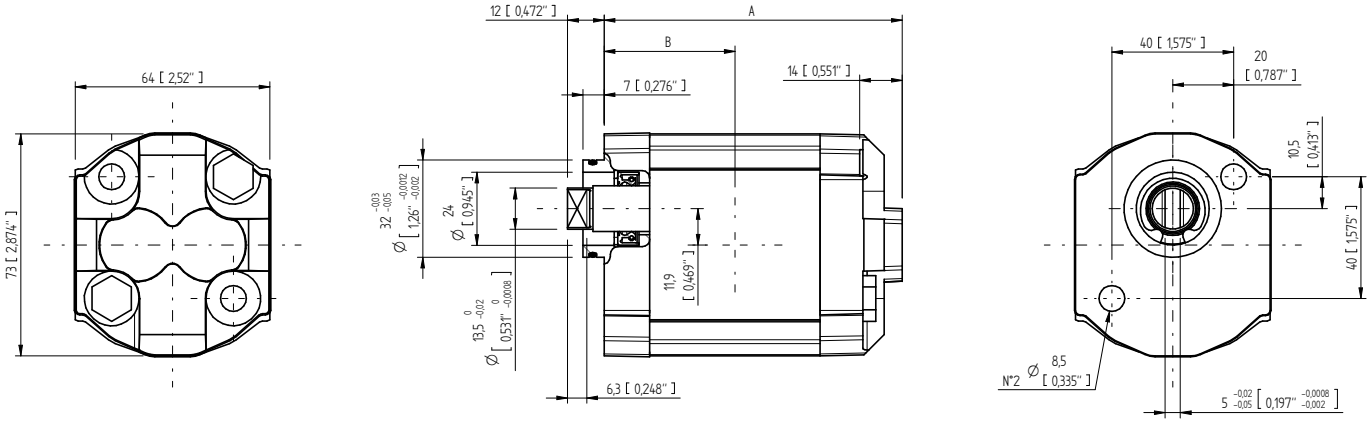
GR28 - TYPE / *TIPO* F1P AC2														
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
3	3,1	4,6	1,23	98	3,86	43	1,69	275	3989	280	4061	300	4351	
3,5	3,5	5,2	1,39	99	3,90	43,5	1,71	275	3989	280	4061	300	4351	
4	4,2	6	1,58	101	3,97	44,5	1,75	240	3481	260	3771	280	4061	
6	6,4	9,2	2,43	106,5	4,19	47,25	1,86	230	3336	240	3481	270	3916	55
8	8,3	12	3,17	111,5	4,39	49,75	1,95	200	2901	210	3046	220	3191	
10	10,2	14,7	3,88	116,5	4,58	52,25	2,05	160	2321	170	2466	180	2611	
13	12,9	18,6	4,91	123,4	4,85	55,7	2,19	140	2031	150	2176	160	2321	

Max torque / *Coppia max:* 50 Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



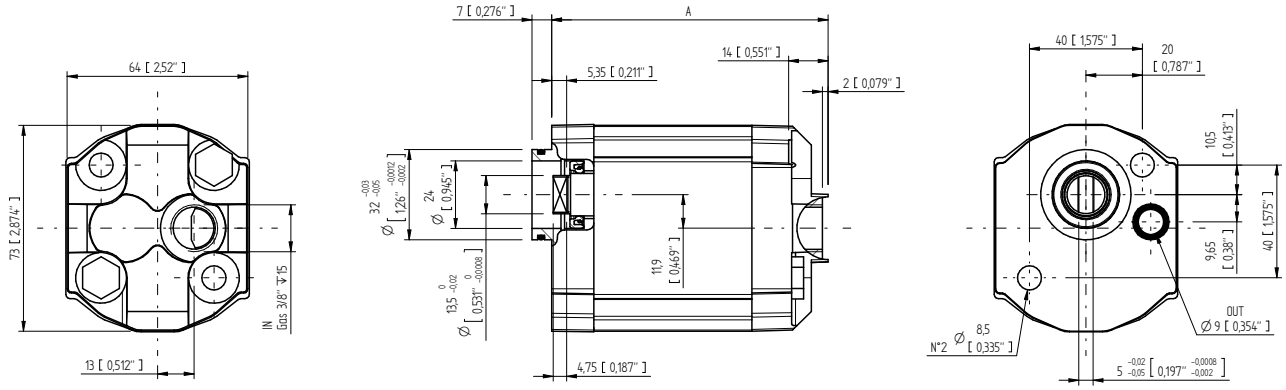
GR28 - TYPE / *TIPO* F1K AG54														
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
3	3,1	4,6	1,23	98	3,86	43	1,69	275	3989	280	4061	300	4351	
3,5	3,5	5,2	1,39	99	3,90	43,5	1,71	275	3989	280	4061	300	4351	
4	4,2	6	1,58	101	3,97	44,5	1,75	275	3989	280	4061	300	4351	
6	6,4	9,2	2,43	106,5	4,19	47,25	1,86	230	3336	240	3481	270	3916	55
8	8,3	12	3,17	111,5	4,39	49,75	1,95	180	2611	200	2901	210	3046	
10	10,2	14,7	3,88	116,5	4,58	52,25	2,05	150	2176	160	2321	170	2466	
13	12,9	18,6	4,91	123,4	4,85	55,7	2,19	120	1740	130	1885	140	2031	

Max torque / *Coppia max:* 30 Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



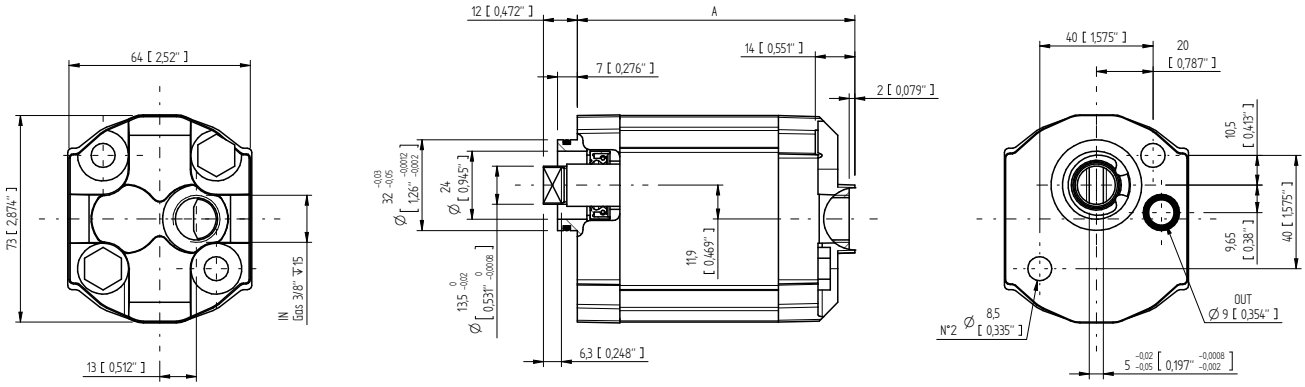
GR28 - TYPE / *TIPO* F1K AGL54														
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
3	3,1	4,6	1,23	98	3,86	43	1,69	275	3989	280	4061	300	4351	
3,5	3,5	5,2	1,39	99	3,90	43,5	1,71	275	3989	280	4061	300	4351	
4	4,2	6	1,58	101	3,97	44,5	1,75	275	3989	280	4061	300	4351	
6	6,4	9,2	2,43	106,5	4,19	47,25	1,86	260	3771	275	3989	290	4206	55
8	8,3	12	3,17	111,5	4,39	49,75	1,95	230	3336	210	3046	250	3626	
10	10,2	14,7	3,88	116,5	4,58	52,25	2,05	180	2611	190	2756	200	2901	
13	12,9	18,6	4,91	123,4	4,85	55,7	2,19	150	2176	160	2321	170	2466	

Max torque / *Coppia max:* 45 Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



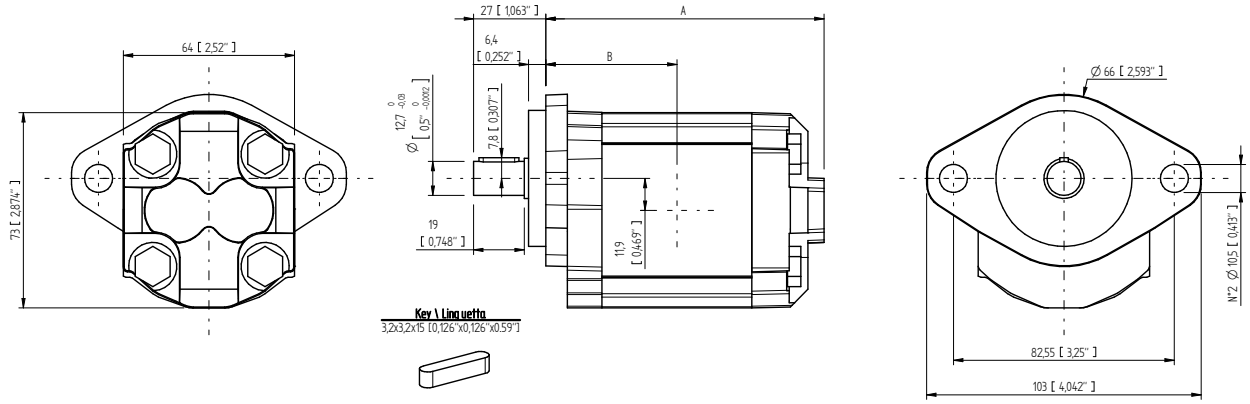
GR28 - TYPE / *TIPO* F1L AG54														
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
3	3,1	4,6	1,23	98	3,86	43	1,69	275	3989	280	4061	300	4351	
3,5	3,5	5,2	1,39	99	3,90	43,5	1,71	275	3989	280	4061	300	4351	
4	4,2	6	1,58	101	3,97	44,5	1,75	275	3989	280	4061	300	4351	
6	6,4	9,2	2,43	106,5	4,19	47,25	1,86	260	3771	275	3989	290	4206	55
8	8,3	12	3,17	111,5	4,39	49,75	1,95	230	3336	210	3046	250	3626	
10	10,2	14,7	3,88	116,5	4,58	52,25	2,05	180	2611	190	2756	200	2901	
13	12,9	18,6	4,91	123,4	4,85	55,7	2,19	150	2176	160	2321	170	2466	

Max torque / *Coppia max: 30* Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



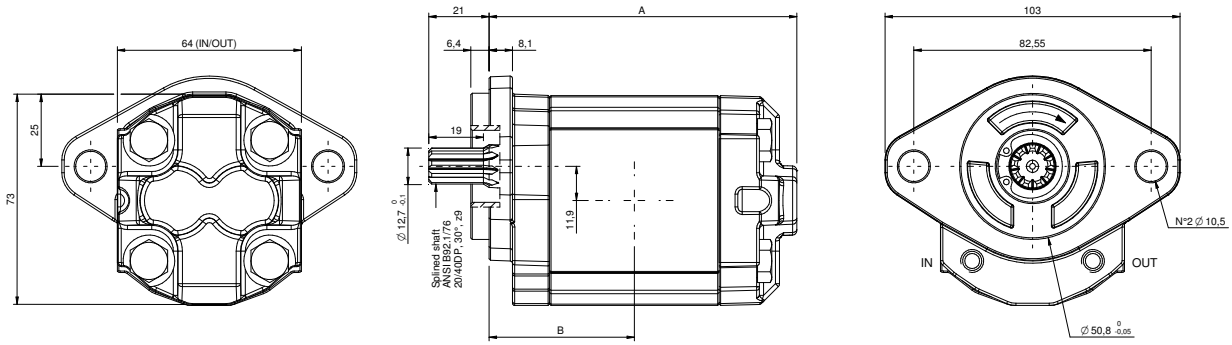
GR28 - TYPE / *TIPO* F1L AGL54														
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
3	3,1	4,6	1,23	98	3,86	43	1,69	275	3989	280	4061	300	4351	
3,5	3,5	5,2	1,39	99	3,90	43,5	1,71	275	3989	280	4061	300	4351	
4	4,2	6	1,58	101	3,97	44,5	1,75	275	3989	280	4061	300	4351	
6	6,4	9,2	2,43	106,5	4,19	47,25	1,86	260	3771	275	3989	290	4206	55
8	8,3	12	3,17	111,5	4,39	49,75	1,95	230	3336	210	3046	250	3626	
10	10,2	14,7	3,88	116,5	4,58	52,25	2,05	180	2611	190	2756	200	2901	
13	12,9	18,6	4,91	123,4	4,85	55,7	2,19	150	2176	160	2321	170	2466	

Max torque / *Coppia max: 45* Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



GR28 - TYPE / *TIPO* FSAEAA AC														
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
3	3,1	4,65	1,23	104	4,09	49	1,93	234	3394	238	3452	255	3698	
3,5	3,5	5,25	1,39	105	4,13	49,5	1,95	234	3394	238	3452	255	3698	
4	4,2	6	1,585	107	4,21	50,50	1,98	234	3394	238	3452	255	3698	
6	6,4	9,2	2,430	112,5	4,42	53,25	2,09	234	3394	238	3452	255	3698	55
8	8,3	12	3,170	117,5	4,62	55,75	2,19	209	3031	221	3205	238	3452	
10	10,2	14,7	3,883	122,5	4,82	58,25	2,29	189	2741	213	3089	230	3336	
13	12,9	18,6	4,914	129,4	5,09	61,7	2,42	170	2466	196	2843	213	3089	

Max torque / *Coppia max: 60* Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF

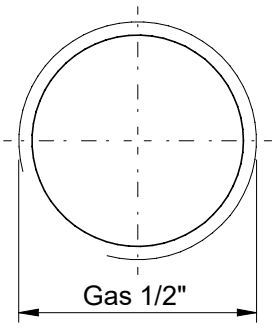


GR28 - TYPE / *TIPO* FSAEAA AT9														
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
3	3,1	4,65	1,23	104	4,09	49	1,93	234	3394	238	3452	255	3698	
3,5	3,5	5,25	1,39	105	4,13	49,5	1,95	234	3394	238	3452	255	3698	
4	4,2	6,3	1,67	107	4,21	50,50	1,99	234	3394	238	3452	255	3698	
6	6,4	9,6	2,54	112,5	4,42	53,3	2,10	234	3394	238	3452	255	3698	55
8	8,3	12,45	3,29	117,5	4,62	55,8	2,19	209	3031	221	3205	238	3452	
10	10,2	15,3	4,05	122,5	4,82	58,3	2,29	189	2741	213	3089	230	3336	
13	12,9	19,35	5,12	129,4	5,09	61,7	2,43	170	2466	196	2843	213	3089	

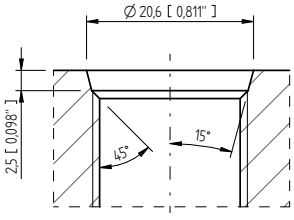
Max torque / *Coppia max:* 60 Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF

INLET AND OUTLET PORTS
PORTE DI ASPIRAZIONE E MANDATA
(Suction / Pressure)

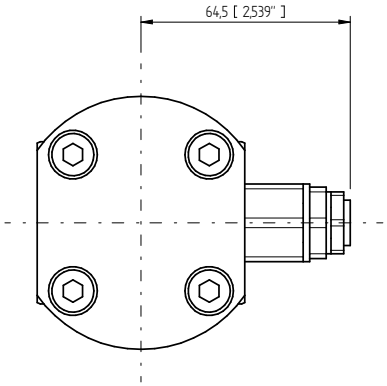
Type G / *Tipo G*

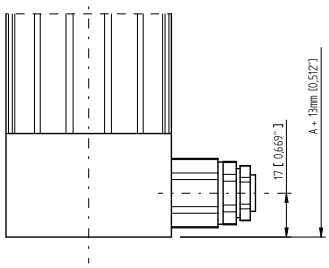


Type U / *Tipo U*
SAE O-Ring port 10
Thread ANSI B1.1 3/4-16 UNF-2B



SAFETY VALVE / *VALVOLA DI MASSIMA*
Not available on models
N*on disponibile per i modelli*
F1L AG54 and F1L AGL54



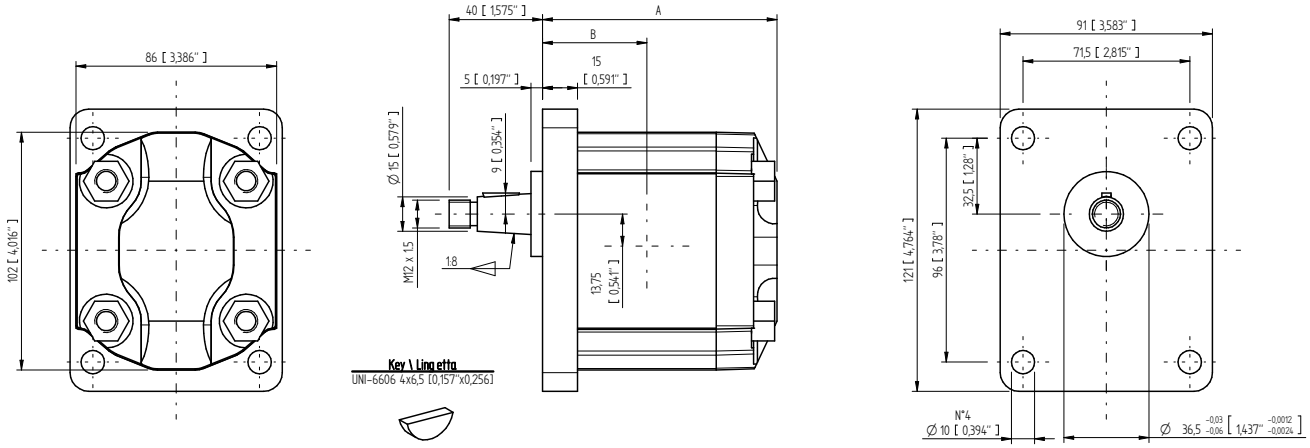


GR33 - Dimensional drawings / Disegni dimensionali

GR33 SHAFT AND FLANGE TYPES AND DIMENSIONS / *TIPI DI ALBERO E FLANGIA E DIMENSIONI*
Group 2 pumps / *Pompe gruppo 2*

Type	Model	Weight (Kg)
GR33 2C	6,5	4
	8	4
	10	4
	11	4
	13	4
	15	4
	18	4

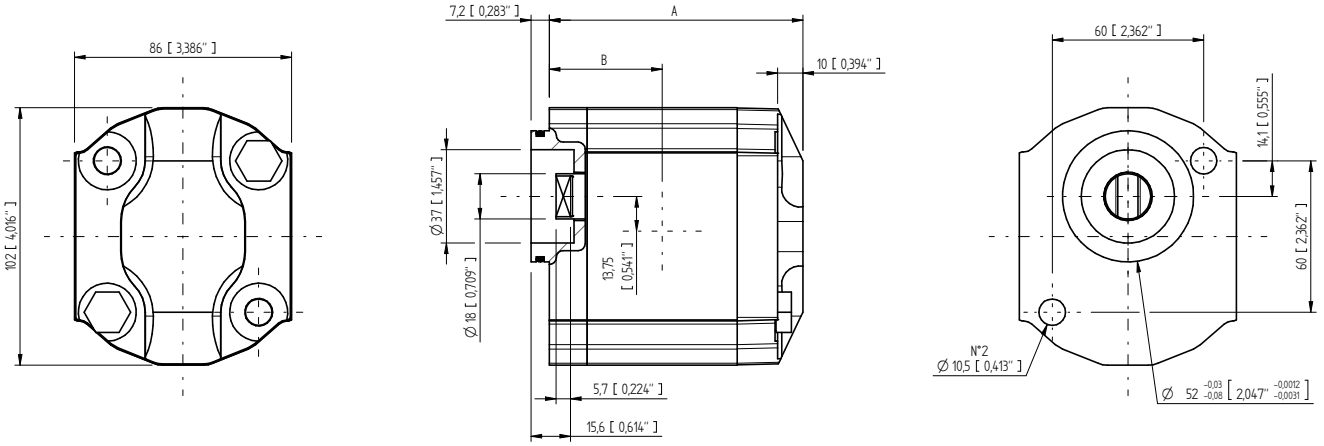
The values of noise level, reported into this catalogue, are purely indicative. Please contact Settima for more precise information / *I valori di rumorosità riportati in questo catalogo sono puramente indicativi. Si prega di contattare Settima per informazioni più precise.*



GR33 - TYPE / *TIPO* F2 AC4														
Type *Tipo*	CC	Flow Portata (1500 rpm)		Dimensions A *Dimensioni A*		Dimensions B *Dimensioni B*		Continuous Pressure *Pressione continua*		Intermittent Pressure *Pressione intermittente* (*)		Peak pressure *Picco pressione (*)*		Noise level *Livello rumore*
		L/min	GPM	mm	inc	mm	inc	bar	PSI	bar	PSI	bar	PSI	dB
6	6,5	9,8	2,58	97,5	3,842	43,25	1,704	275	3989	280	4061	300	4351	55
8	8	12,0	3,17	100,5	3,960	44,75	1,763	275	3989	280	4061	300	4351	
10	10,1	14,5	3,830	104,5	4,114	46,75	1,841	275	3989	280	4061	300	4351	
11	11,1	16,7	4,40	102,5	4,039	45,75	1,803	275	3989	280	4061	300	4351	
13	12,6	18,1	4,782	109,4	4,307	49,2	1,937	265	3844	270	3916	290	4206	
15	15,2	21,8	5,759	114,4	4,504	51,7	2,035	241	3495	250	3626	270	3916	
18	18,2	26,1	6,895	120,2	4,732	54,6	2,150	206	2988	250	3626	270	3916	

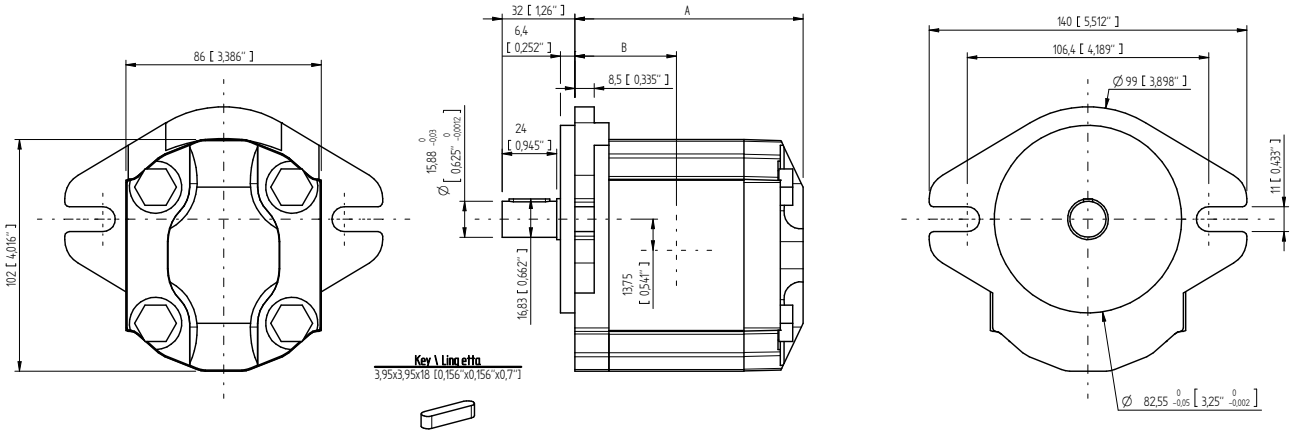
Max torque / *Coppia max:* 170 Nm

* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



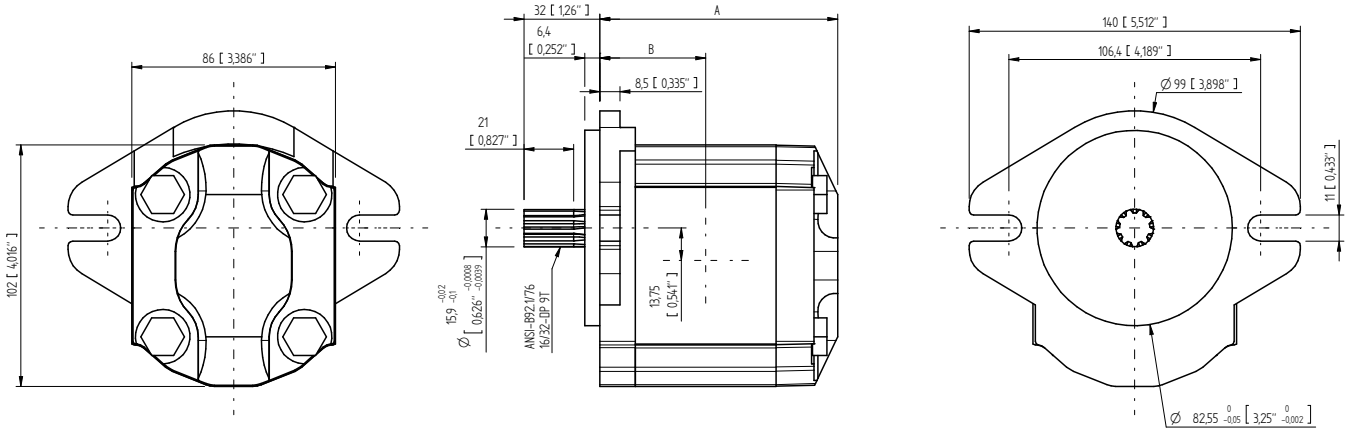
GR33 - TYPE / *TIPO* F2BK7 AG														
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
6	6,5	9,8	2,58	97,5	3,842	43,25	1,704	275	3989	280	4061	300	4351	
8	8	12,0	3,17	100,5	3,960	44,75	1,763	275	3989	280	4061	300	4351	
10	10,1	14,5	3,830	104,5	4,114	46,75	1,841	275	3989	280	4061	300	4351	
11	11,1	16,7	4,40	102,5	4,039	45,75	1,803	275	3989	280	4061	300	4351	55
13	12,6	18,1	4,782	109,4	4,307	49,2	1,937	265	3844	270	3916	290	4206	
15	15,2	21,8	5,759	114,4	4,504	51,7	2,035	241	3495	250	3626	270	3916	
18	18,2	26,1	6,895	120,2	4,732	54,6	2,150	206	2988	250	3626	270	3916	

Max torque / *Coppia max:* 100 Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



GR33 - TYPE / *TIPO* FSAEA AC														
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
6	6,5	9,8	2,58	97,5	3,842	43,25	1,704	275	3989	280	4061	300	4351	
8	8	12,0	3,17	100,5	3,960	44,75	1,763	275	3989	280	4061	300	4351	
10	10,1	14,5	3,830	104,5	4,114	46,75	1,841	275	3989	280	4061	300	4351	
11	11,1	16,7	4,40	102,5	4,039	45,75	1,803	275	3989	280	4061	300	4351	55
13	12,6	18,1	4,782	109,4	4,307	49,2	1,937	265	3844	270	3916	290	4206	
15	15,2	21,8	5,759	114,4	4,504	51,7	2,035	241	3495	250	3626	270	3916	
18	18,2	26,1	6,895	120,2	4,732	54,6	2,150	206	2988	250	3626	270	3916	

Max torque / *Coppia max:* 120 Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



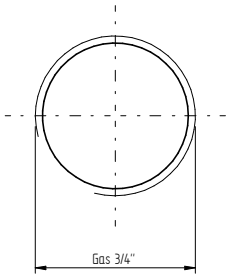
GR33 - TYPE / *TIPO* FSAEA AT9													
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
6	6,5	9,8	2,58	97,5	3,842	43,25	1,704	275	3989	280	4061	300	4351	55
8	8	12,0	3,17	100,5	3,960	44,75	1,763	275	3989	280	4061	300	4351	
10	10,1	14,5	3,830	104,5	4,114	46,75	1,841	275	3989	280	4061	300	4351	
11	11,1	16,7	4,40	102,5	4,039	45,75	1,803	275	3989	280	4061	300	4351	
13	12,6	18,1	4,782	109,4	4,307	49,2	1,937	265	3844	270	3916	290	4206	
15	15,2	21,8	5,759	114,4	4,504	51,7	2,035	241	3495	250	3626	270	3916	
18	18,2	26,1	6,895	120,2	4,732	54,6	2,150	206	2988	250	3626	270	3916	

Max torque / *Coppia max:* 130 Nm

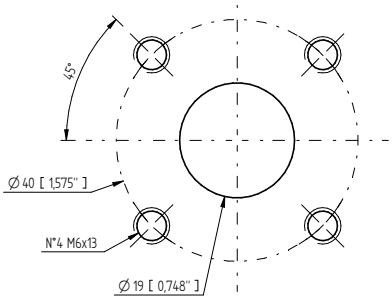
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF

INLET OUTLET PORTS / *PORTE DI ASPIRAZIONE E MANDATA* (Suction / Pressure)

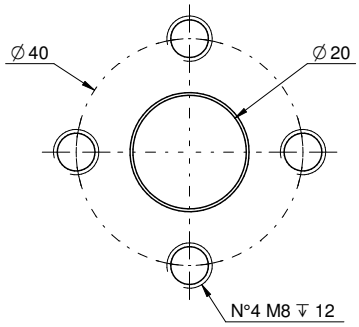
Type G / *Tipo G*

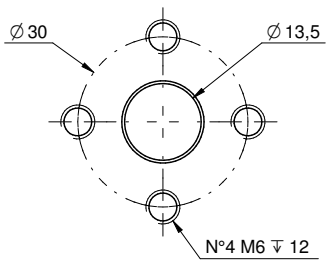


Type Q / *Tipo Q*



Type F / *Tipo F**

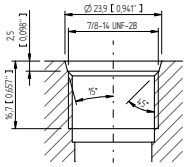




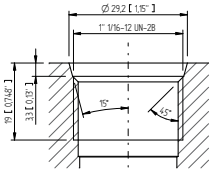
*Only for GR33: the F-type suction and delivery ports are positioned at 15.9mm with respect to the axis of the pump shaft, instead of 13.75mm like the other types of connections / *Solo per GR33: le porte di aspirazione e di mandata di tipo F sono posizionate a 15,9mm rispetto all'asse dell'albero della pompa, anziché 13,75mm come le altre tipologie di connessione*

UNF INLET OUTLET PORTS / *PORTE DI ASPIRAZIONE E MANDATA UNF* - **Type U / *Tipo U***

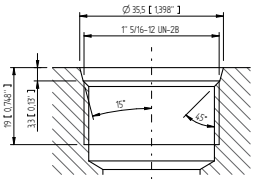
SAE O-Ring ANSI B1.1
port 10



SAE O-Ring ANSI B1.1
port 12



SAE O-Ring ANSI B1.1
port 16



Suction/Pressure U ports possible configuration
Possibili combinazioni porte di aspirazione/ mandata di tipo U

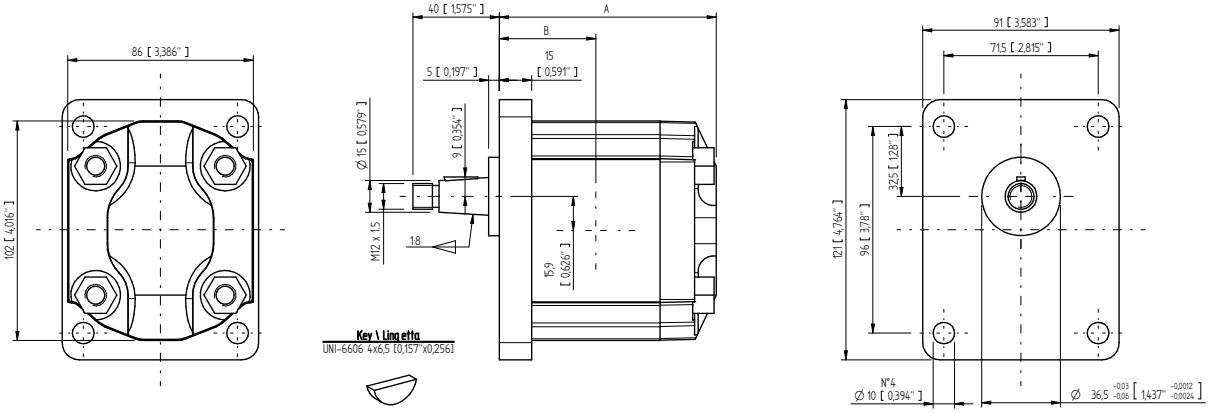
Pump	Suction port	Pressure port
10 cc	SAE O-Ring port 12	SAE O-Ring port 10
13 cc	SAE O-Ring port 12	SAE O-Ring port 10
15 cc	SAE O-Ring port 12	SAE O-Ring port 10
18 cc	SAE O-Ring port 16	SAE O-Ring port 12

GR38 - Dimensional drawings / Disegni dimensionali

GR38 SHAFT AND FLANGE TYPES AND DIMENSIONS / *TIPI DI ALBERO E FLANGIA E DIMENSIONI*
Group 2 pumps / *Pompe gruppo 2*

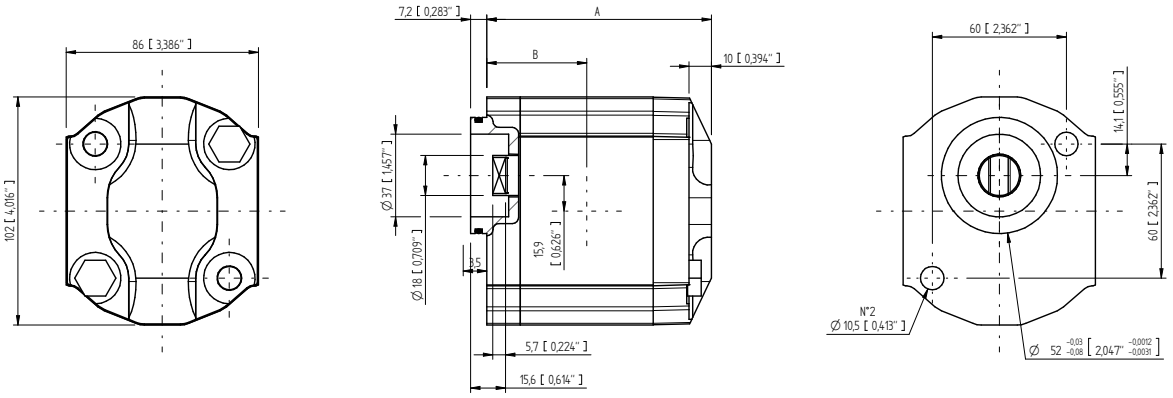
Type	Model	Weight (Kg)
GR38 2C	16	4
	18	4
	20	4
	22	4
	25	4
	28	5

The values of noise level, reported into this catalogue, are purely indicative. Please contact Settima for more precise information / *I valori di rumorosità riportati in questo catalogo sono puramente indicativi. Si prega di contattare Settima per informazioni più precise.*



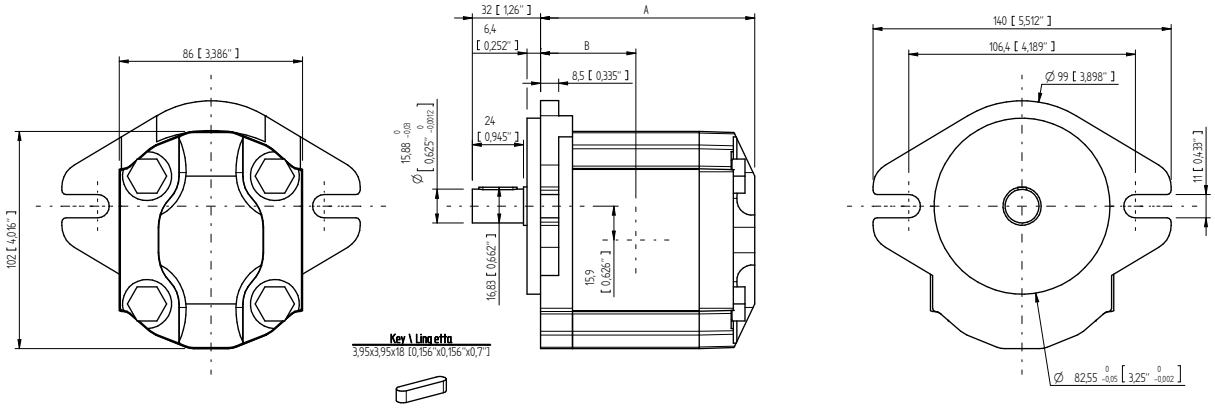
GR38 - TYPE / *TIPO* F2 AC4														
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	*dB*
16	15,9	22,8	6,023	108	4,252	48,5	1,909	265	3844	280	4061	300	4351	55
18	17,9	25,8	6,816	111	4,370	50	1,969	247	3582	260	3771	280	4061	
20	20	28,8	7,608	114	4,488	51,5	2,028	230	3336	250	3626	270	3916	
22	22,1	31,8	8,401	117	4,606	53	2,087	222	3220	240	3481	260	3771	
25	25,2	36,2	9,563	121,5	4,783	55,25	2,175	200	2901	210	3046	220	3191	
28	28,3	40,7	10,752	126	4,961	57,5	2,264	180	2611	190	2756	200	2901	

Max torque / *Coppia max:* 170 Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



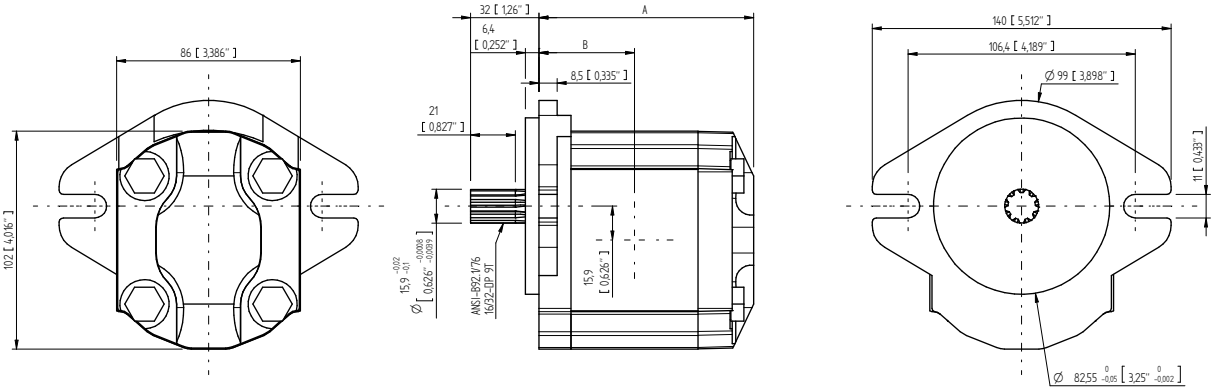
GR38 - TYPE / *TIPO* F2BK7 AG													
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
16	15,9	22,8	6,023	108	4,252	48,5	1,909	265	3844	280	4061	300	4351	55
18	17,9	25,8	6,816	111	4,370	50	1,969	247	3582	260	3771	280	4061	
20	20	28,8	7,608	114	4,488	51,5	2,028	230	3336	250	3626	260	3771	
22	22,1	31,8	8,401	117	4,606	53	2,087	210	3046	230	3336	240	3481	
25	25,2	36,2	9,563	121,5	4,783	55,25	2,175	200	2901	210	3046	220	3191	
28	28,3	40,7	10,752	126	4,961	57,5	2,264	180	2611	190	2756	200	2901	

Max torque / *Coppia max:* 100 Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



GR38 - TYPE / *TIPO* FSAEA AC													
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
16	15,9	22,8	6,023	108	4,252	48,5	1,909	265	3844	280	4061	300	4351	55
18	17,9	25,8	6,816	111	4,370	50	1,969	247	3582	260	3771	280	4061	
20	20	28,8	7,608	114	4,488	51,5	2,028	230	3336	250	3626	270	3916	
22	22,1	31,8	8,401	117	4,606	53	2,087	222	3220	240	3481	260	3771	
25	25,2	36,2	9,563	121,5	4,783	55,25	2,175	200	2901	210	3046	220	3191	
28	28,3	40,7	10,752	126	4,961	57,5	2,264	180	2611	190	2756	200	2901	

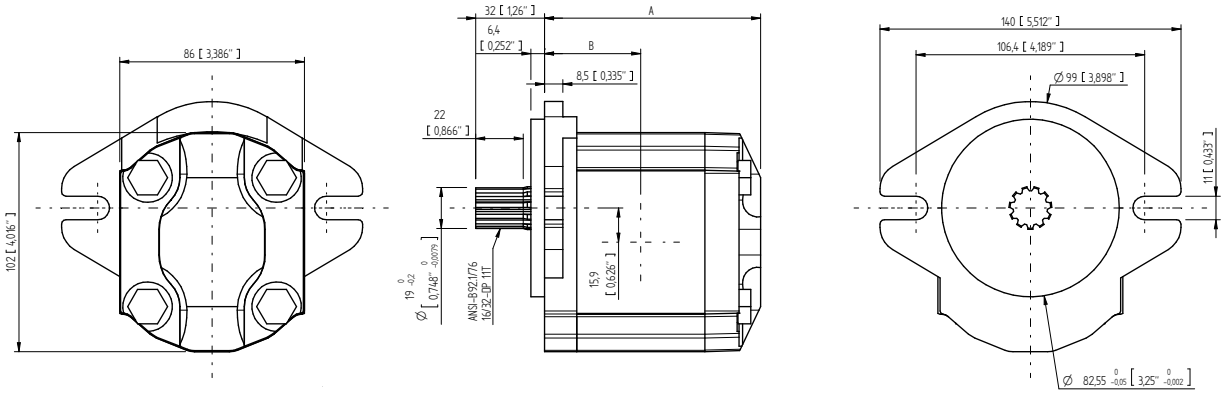
Max torque / *Coppia max:* 120 Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



GR38 - TYPE / *TIPO* FSAEA AT9														
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
16	15,9	22,8	6,023	108	4,252	48,5	1,909	265	3844	280	4061	300	4351	55
18	17,9	25,8	6,816	111	4,370	50	1,969	247	3582	260	3771	280	4061	
20	20	28,8	7,608	114	4,488	51,5	2,028	230	3336	250	3626	270	3916	
22	22,1	31,8	8,401	117	4,606	53	2,087	222	3220	240	3481	260	3771	
25	25,2	36,2	9,563	121,5	4,783	55,25	2,175	200	2901	210	3046	220	3191	
28	28,3	40,7	10,752	126	4,961	57,5	2,264	180	2611	190	2756	200	2901	

Max torque / *Coppia max:* 150 Nm

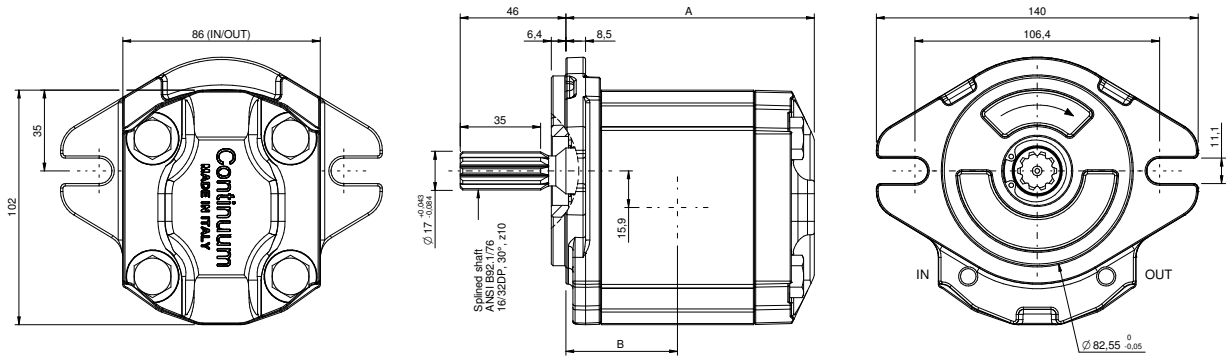
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



GR38 - TYPE / *TIPO* FSAEA AT11														
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
16	15,9	22,8	6,023	108	4,252	48,5	1,909	265	3844	280	4061	300	4351	55
18	17,9	25,8	6,816	111	4,370	50	1,969	247	3582	260	3771	280	4061	
20	20	28,8	7,608	114	4,488	51,5	2,028	230	3336	250	3626	270	3916	
22	22,1	31,8	8,401	117	4,606	53	2,087	222	3220	250	3626	270	3916	
25	25,2	36,2	9,563	121,5	4,783	55,25	2,175	200	2901	250	3626	270	3916	
28	28,3	40,7	10,752	126	4,961	57,5	2,264	197	2857	250	3626	270	3916	

Max torque / *Coppia max:* 230 Nm

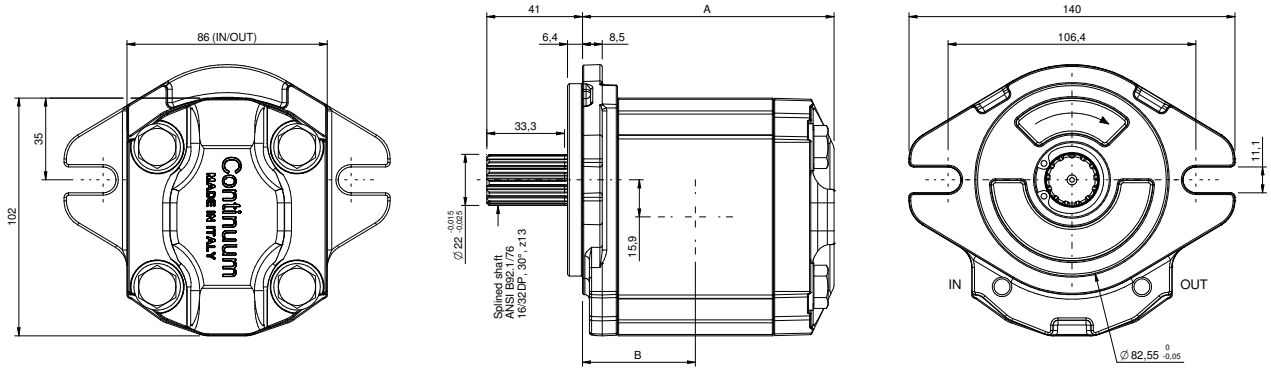
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



GR38 - TYPE / *TIPO* FSAEA AT10														
Type ***Tipo***	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** ***Dimensioni A***		**Dimensions B** ***Dimensioni B***		**Continuous Pressure** ***Pressione continua***		**Intermittent Pressure** ***Pressione intermittente*** **(*)**		**Peak pressure** ***Picco pressione (*)***		**Noise level** ***Livello rumore***
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
16	15,9	23,85	6,31	108	4,255	48,5	1,911	265	3844	280	4061	300	4351	55
18	17,9	26,85	7,10	111	4,373	50	1,970	247	3582	260	3771	280	4061	
20	20	30	7,94	114	4,492	51,5	2,029	230	3336	250	3626	270	3916	
22	22,1	33,15	8,77	117	4,610	53	2,088	222	3220	250	3626	270	3916	
25	25,2	37,8	10,00	121,5	4,787	55,3	2,179	200	2901	250	3626	270	3916	
28	28,3	42,45	11,23	126	4,964	57,5	2,266	197	2857	250	3626	270	3916	

Max torque / *Coppia max:* 230 Nm

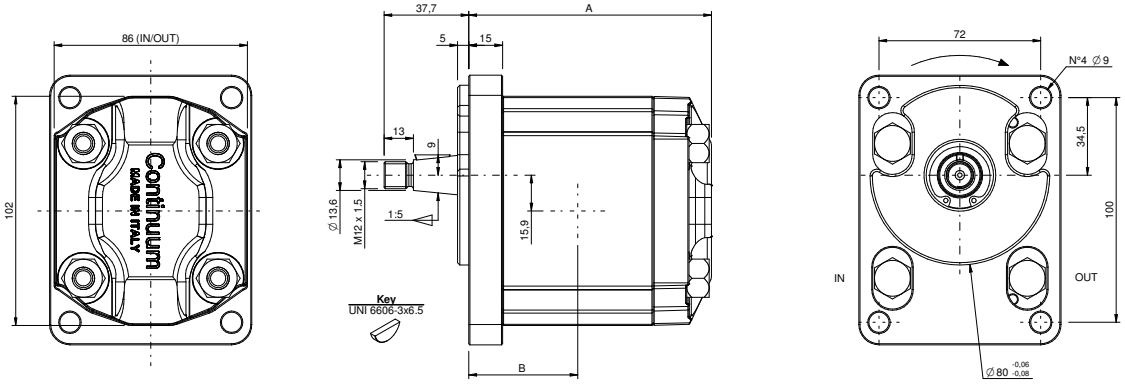
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



GR38 - TYPE / *TIPO* FSAEA AT13														
Type ***Tipo***	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** ***Dimensioni A***		**Dimensions B** ***Dimensioni B***		**Continuous Pressure** ***Pressione continua***		**Intermittent Pressure** ***Pressione intermittente*** **(*)**		**Peak pressure** ***Picco pressione (*)***		**Noise level** ***Livello rumore***
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
16	15,9	23,85	6,31	108	4,255	48,5	1,911	265	3844	280	4061	300	4351	55
18	17,9	26,85	7,10	111	4,373	50	1,970	247	3582	260	3771	280	4061	
20	20	30	7,94	114	4,492	51,5	2,029	230	3336	250	3626	270	3916	
22	22,1	33,15	8,77	117	4,610	53	2,088	222	3220	250	3626	270	3916	
25	25,2	37,8	10,00	121,5	4,787	55,3	2,179	200	2901	250	3626	270	3916	
28	28,3	42,45	11,23	126	4,964	57,5	2,266	197	2857	250	3626	270	3916	

Max torque / *Coppia max:* 450 Nm

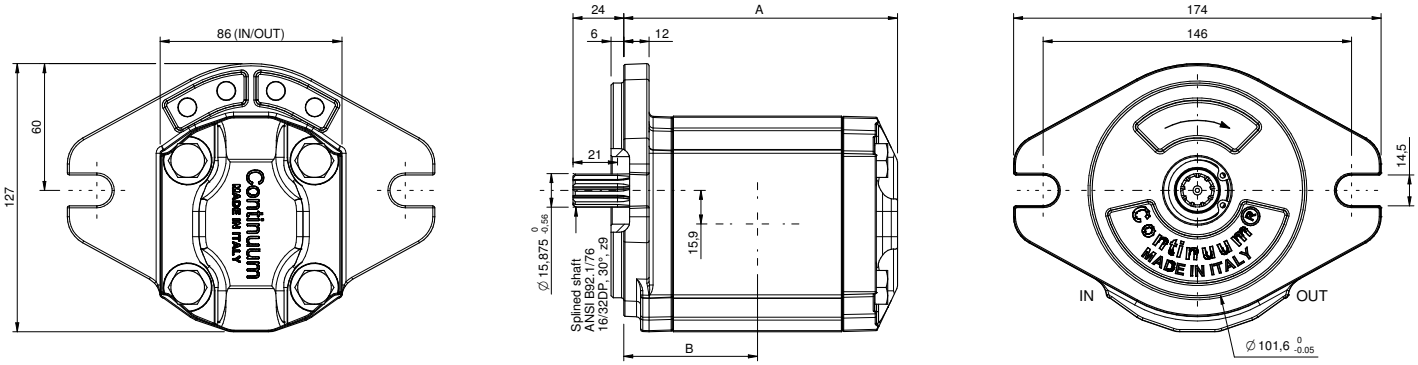
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



GR38 - TYPE / *TIPO* F2BK1 AC6														
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
16	15,9	23,85	6,31	108	4,255	48,5	1,911	265	3844	280	4061	300	4351	55
18	17,9	26,85	7,10	111	4,373	50	1,970	247	3582	260	3771	280	4061	
20	20	30	7,94	114	4,492	51,5	2,029	230	3336	250	3626	270	3916	
22	22,1	33,15	8,77	117	4,610	53	2,088	222	3220	250	3626	270	3916	
25	25,2	37,8	10,00	121,5	4,787	55,3	2,179	200	2901	250	3626	270	3916	
28	28,3	42,45	11,23	126	4,964	57,5	2,266	197	2857	250	3626	270	3916	

Max torque / *Coppia max:* 450 Nm

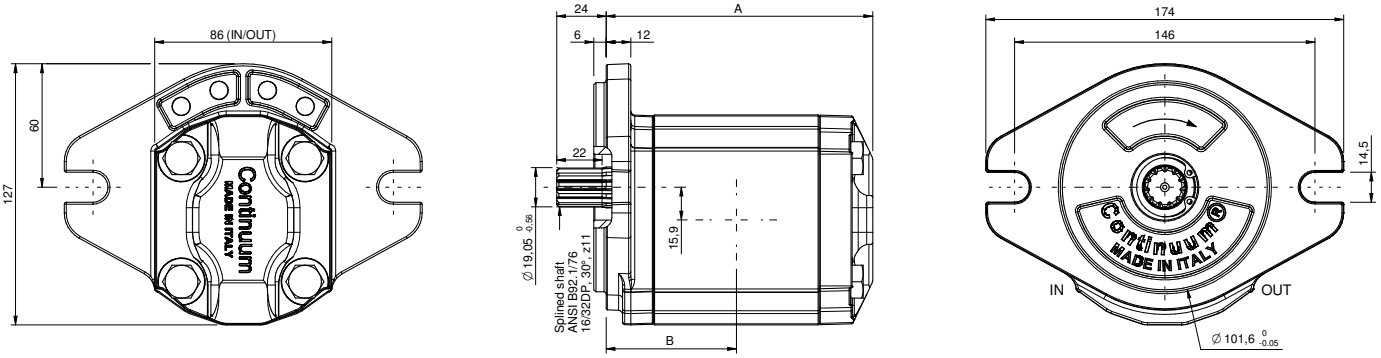
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



GR38 - TYPE / *TIPO* FSAEB AT9														
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
16	15,9	23,85	6,31	116	4,570	56,5	2,226	265	3844	280	4061	300	4351	55
18	17,9	26,85	7,10	119	4,689	58	2,285	247	3582	260	3771	280	4061	
20	20	30	7,94	122	4,807	59,5	2,344	230	3336	250	3626	270	3916	
22	22,1	33,15	8,77	125	4,925	61	2,403	222	3220	250	3626	270	3916	
25	25,2	37,8	10,00	129,5	5,102	63,3	2,494	200	2901	250	3626	270	3916	
28	28,3	42,45	11,23	134	5,280	65,5	2,581	197	2857	250	3626	270	3916	

Max torque / *Coppia max:* 120 Nm

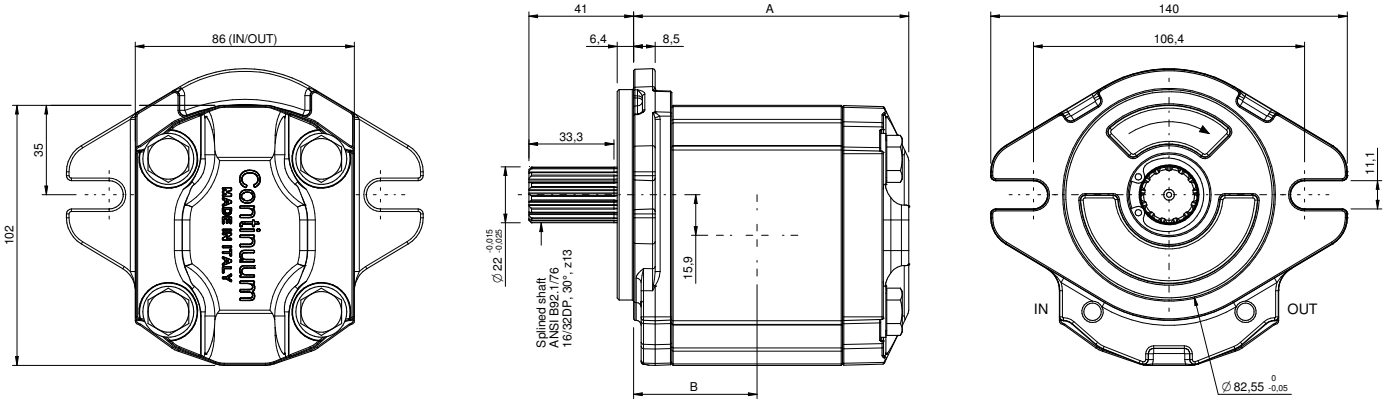
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



GR38 - TYPE / *TIPO* FSAEB AT11													
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
16	15,9	23,85	6,31	116	4,570	56,5	2,226	265	3844	280	4061	300	4351	55
18	17,9	26,85	7,10	119	4,689	58	2,285	247	3582	260	3771	280	4061	
20	20	30	7,94	122	4,807	59,5	2,344	230	3336	250	3626	270	3916	
22	22,1	33,15	8,77	125	4,925	61	2,403	222	3220	250	3626	270	3916	
25	25,2	37,8	10,00	129,5	5,102	63,3	2,494	200	2901	250	3626	270	3916	
28	28,3	42,45	11,23	134	5,280	65,5	2,581	197	2857	250	3626	270	3916	

Max torque / *Coppia max:* 230 Nm

* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



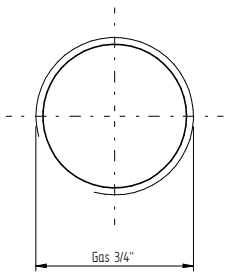
GR38 - TYPE / *TIPO* FSAEB AT13													
Type *Tipo*	**CC**	**Flow Portata (1500 rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
16	15,9	23,85	6,31	116	4,570	56,5	2,226	265	3844	280	4061	300	4351	55
18	17,9	26,85	7,10	119	4,689	58	2,285	247	3582	260	3771	280	4061	
20	20	30	7,94	122	4,807	59,5	2,344	230	3336	250	3626	270	3916	
22	22,1	33,15	8,77	125	4,925	61	2,403	222	3220	250	3626	270	3916	
25	25,2	37,8	10,00	129,5	5,102	63,3	2,494	200	2901	250	3626	270	3916	
28	28,3	42,45	11,23	134	5,280	65,5	2,581	197	2857	250	3626	270	3916	

Max torque / *Coppia max:* 450 Nm

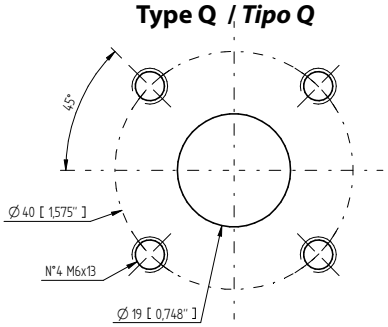
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF

INLET OUTLET PORTS / *PORTE DI ASPIRAZIONE E MANDATA* (Suction / Pressure)

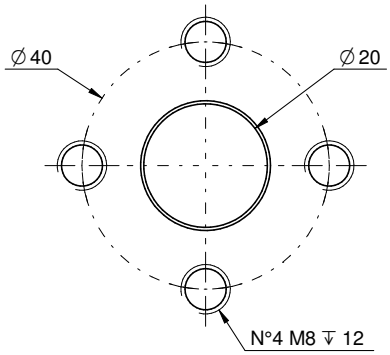
Type G / *Tipo G*

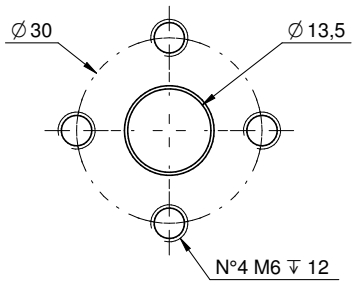


Type Q / *Tipo Q*

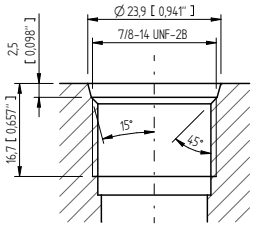


Type F / *Tipo F*

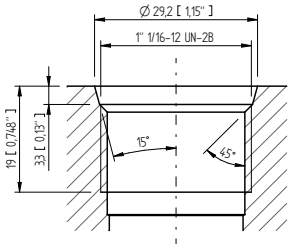




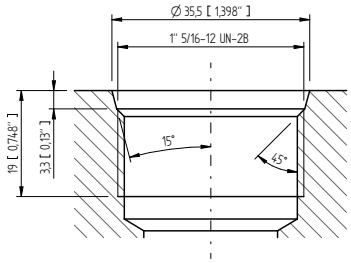
UNF INLET OUTLET PORTS / *PORTE DI ASPIRAZIONE E MANDATA UNF* - **Type U / *Tipo U***



SAE O-Ring ANSI B1.1
port 10



SAE O-Ring ANSI B1.1
port 12



SAE O-Ring ANSI B1.1
port 16

Suction/Pressure UNF ports possible configuration
Possibili combinazioni porte di aspirazione/mandata di tipo UNF

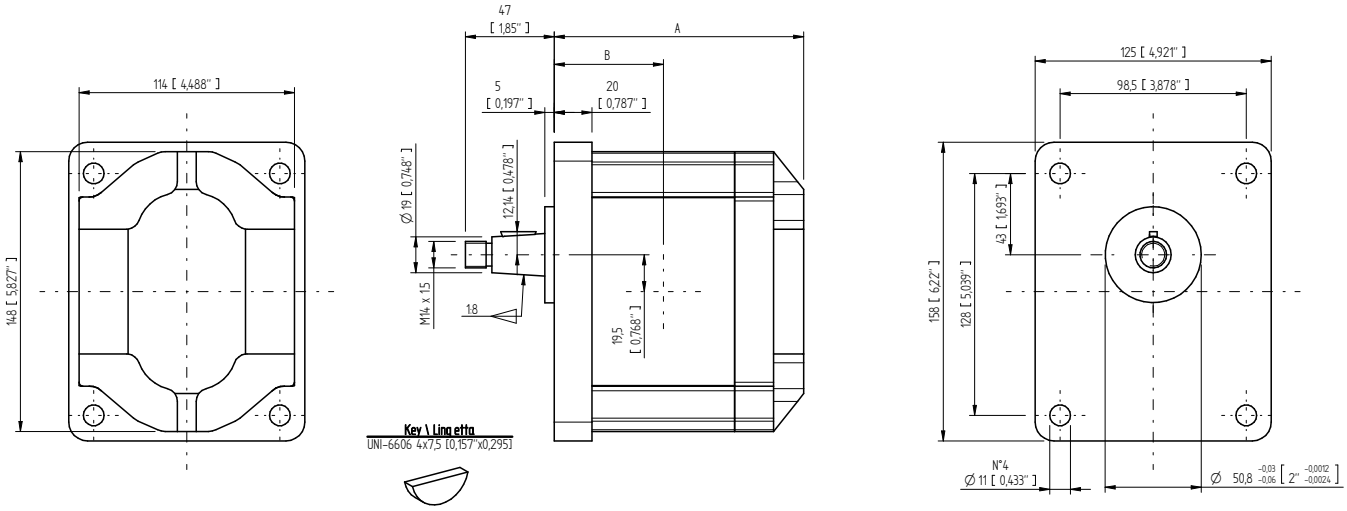
Pump	Suction port	Pressure port
16 cc	SAE O-Ring port 12	SAE O-Ring port 10
18 cc	SAE O-Ring port 16	SAE O-Ring port 12
20 cc	SAE O-Ring port 16	SAE O-Ring port 12
22 cc	SAE O-Ring port 16	SAE O-Ring port 12
25 cc	SAE O-Ring port 16	SAE O-Ring port 12
28 cc	SAE O-Ring port 16	SAE O-Ring port 12

GR47 - Dimensional drawings / Disegni dimensionali

GR47 SHAFT AND FLANGE TYPES AND DIMENSIONS / *TIPI DI ALBERO E FLANGIA E DIMENSIONI*
Group 3 pumps / *Pompe gruppo 3*

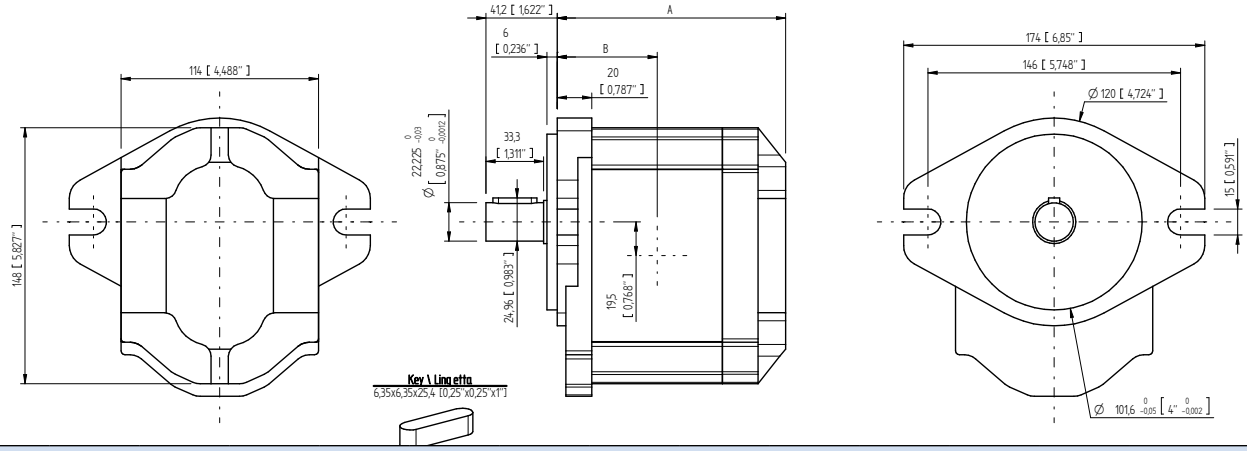
Type	Model	Weight (Kg)
GR47 2C	20	9
	25	9
	28	10
	32	10
	36	10
	40	10
	45	10
	50	11

The values of noise level, reported into this catalogue, are purely indicative. Please contact Settima for more precise information / *I valori di rumorosità riportati in questo catalogo sono puramente indicativi. Si prega di contattare Settima per informazioni più precise.*



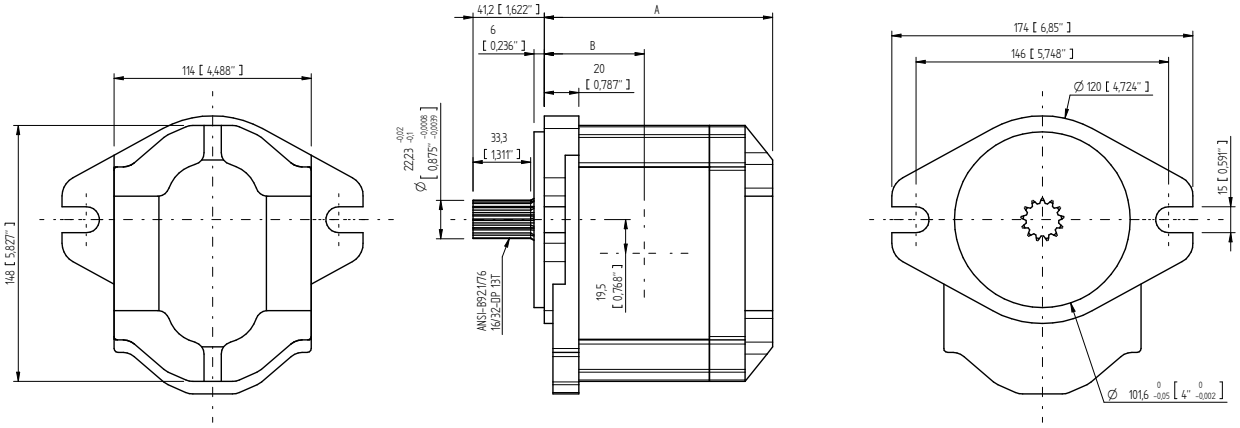
GR47 - TYPE / *TIPO* F3 AC9														
Type *Tipo*	**CC**	**Flow Portata (1500rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
20	20,2	30,3	8,02	132	5,201	57,75	2,275	270	3916	280	4061	300	4351	57
25	24,9	37,4	9,88	136,5	5,378	60	2,364	270	3916	280	4061	300	4351	
28	28	40,3	10,646	139,5	5,492	61,5	2,421	270	3916	280	4061	300	4351	
32	32,2	46,3	12,231	143,5	5,65	63,5	2,5	252	3655	270	3916	280	4061	
36	36,3	52,3	13,816	147,5	5,807	65,5	2,579	239	3466	250	3626	270	3916	
40	40,5	58,3	15,401	151,5	5,965	67,5	2,657	225	3263	250	3626	270	3916	
45	45,5	65	17,171	156	6,142	69,75	2,746	213	3089	250	3626	270	3916	
50	50,3	72,4	19,126	161	6,339	72,25	2,844	202	2930	250	3626	270	3916	

Max torque / *Coppia max:* 250 Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



GR47 - TYPE / *TIPO* FSAEB AC														
Type *Tipo*	**CC**	**Flow Portata (1500rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
20	20,2	30,3	8,02	132	5,201	57,75	2,275	270	3916	280	4061	300	4351	57
25	24,9	37,4	9,88	136,5	5,378	60	2,364	270	3916	280	4061	300	4351	
28	28	40,3	10,646	139,5	5,492	61,5	2,421	270	3916	280	4061	300	4351	
32	32,2	46,3	12,231	143,5	5,65	63,5	2,5	252	3655	270	3916	280	4061	
36	36,3	52,3	13,816	147,5	5,807	65,5	2,579	239	3466	250	3626	270	3916	
40	40,5	58,3	15,401	151,5	5,965	67,5	2,657	225	3263	250	3626	270	3916	
45	45,5	65	17,171	156	6,142	69,75	2,746	213	3089	250	3626	270	3916	
50	50,3	72,4	19,126	161	6,339	72,25	2,844	202	2930	250	3626	270	3916	

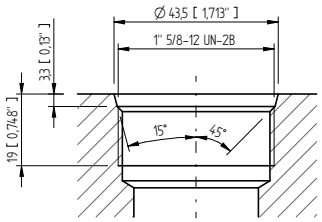
Max torque / *Coppia max:* 450 Nm - Max torque / *Coppia max:* 350 Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



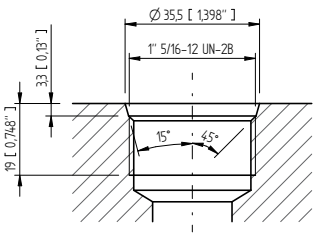
GR47 - TYPE / *TIPO* FSAEB T13														
Type *Tipo*	**CC**	**Flow Portata (1500rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
20	20,2	30,3	8,02	132	5,201	57,75	2,275	270	3916	280	4061	300	4351	57
25	24,9	37,4	9,88	136,5	5,378	60	2,364	270	3916	280	4061	300	4351	
28	28	40,3	10,646	139,5	5,492	61,5	2,421	270	3916	280	4061	300	4351	
32	32,2	46,3	12,231	143,5	5,65	63,5	2,5	252	3655	270	3916	280	4061	
36	36,3	52,3	13,816	147,5	5,807	65,5	2,579	239	3466	250	3626	270	3916	
40	40,5	58,3	15,401	151,5	5,965	67,5	2,657	225	3263	250	3626	270	3916	
45	45,5	65	17,171	156	6,142	69,75	2,746	213	3089	250	3626	270	3916	
50	50,3	72,4	19,126	161	6,339	72,25	2,844	202	2930	250	3626	270	3916	

Max torque / *Coppia max:* 450 Nm - Max torque / *Coppia max:* 600 Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF

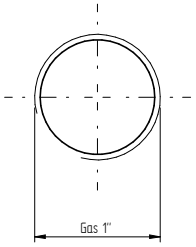
Suction port
Type "U"



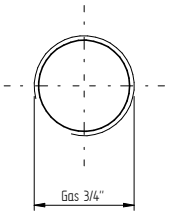
Pressure port
Type "U"



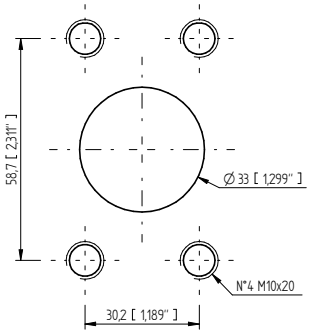
Suction port
Type "G"



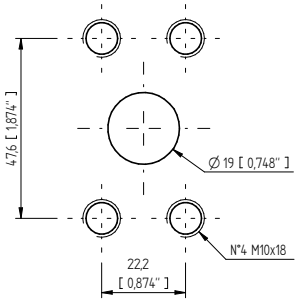
Pressure port
Type "G"



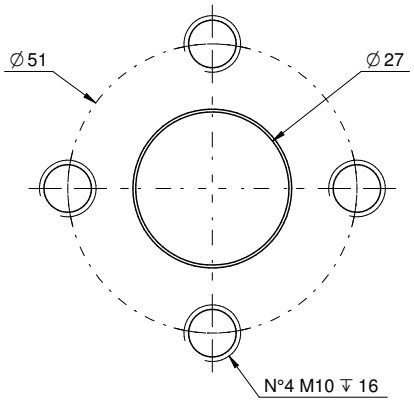
Suction port
Type "O"



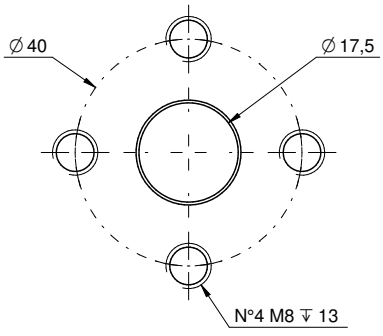
Pressure port
Type "O"



Suction port
Type "F"



Pressure port
Type "F"

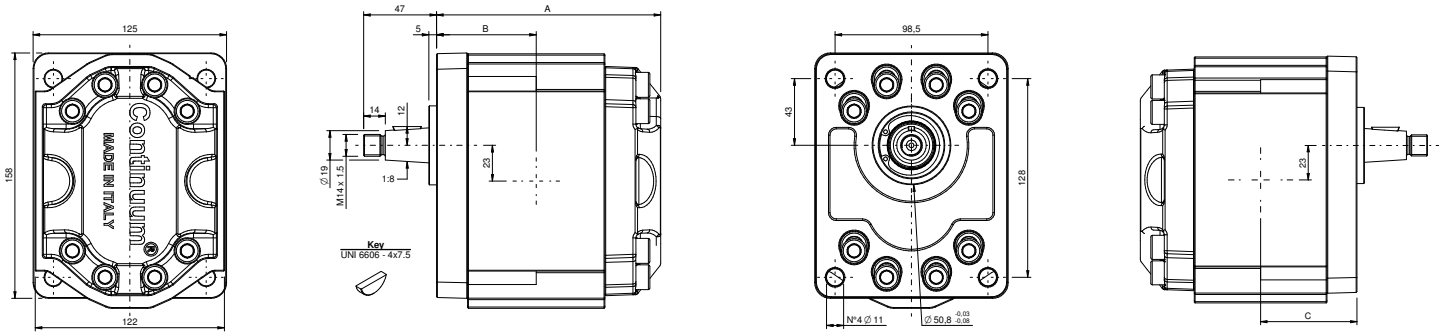


GR55 - Dimensional drawings / Disegni dimensionali

GR55 SHAFT AND FLANGE TYPES AND DIMENSIONS / *TIPI DI ALBERO E FLANGIA E DIMENSIONI*
Group 3 pumps / *Pompe gruppo 3*

Type	Model	Weight (Kg)
GR55 2C	32	12
	40	12
	50	13
	63	13
	75	14
	80	14
	90	15

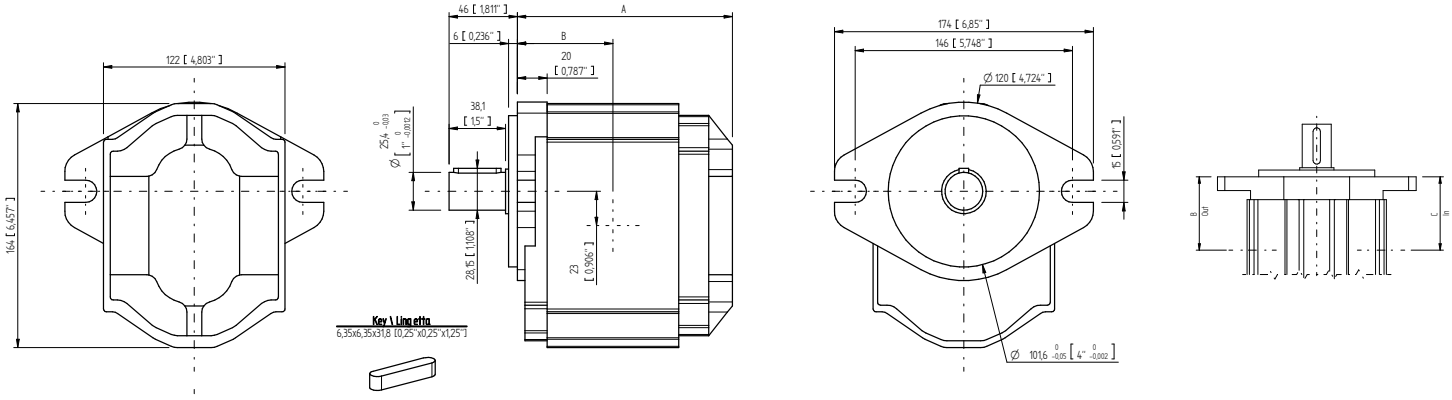
The values of noise level, reported into this catalogue, are purely indicative. Please contact Settima for more precise information / *I valori di rumorosità riportati in questo catalogo sono puramente indicativi. Si prega di contattare Settima per informazioni più precise.*



GR55 - TYPE / *TIPO* F3 AC9																		
Type *Tipo*	**CC**	**Flow Portata (1500rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Dimensions C** *Dimensioni C*				**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
								O		**OE**								
		L/ min	**GPM**	**mm**	**inc**	**mm**	**inc**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	**dB**
32	32,5	48,8	12,90	132	5,201	57,8	2,277	57,8	2,277	57,8	2,277	270	3916	280	4061	300	4351	
40	40,4	60,6	16,03	136,5	5,378	60	2,364	60	2,364	60,0	2,364	270	3916	280	4061	300	4351	
50	50,5	75,8	20,04	157	6,186	70,5	2,778	70,5	2,778	70,5	2,778	275	3989	280	4061	300	4351	
63	63,5	95,3	25,20	166	6,540	75	2,955	75	2,955	78,5	3,093	249	3611	260	3771	280	4061	57
75	75,0	112,5	29,76	174	6,856	79	3,113	79	3,113	82,5	3,251	229	3321	250	3626	270	3916	
80	80,0	120,0	31,75	177,5	6,994	80,8	3,184	80,8	3,184	84,3	3,321	185	2683	240	3481	260	3771	
90	90,9	136,4	36,07	185	7,289	84,5	3,329	84,5	3,329	88,0	3,467	178	2582	240	3481	260	3771	

Max torque / *Coppia max:* 250 Nm

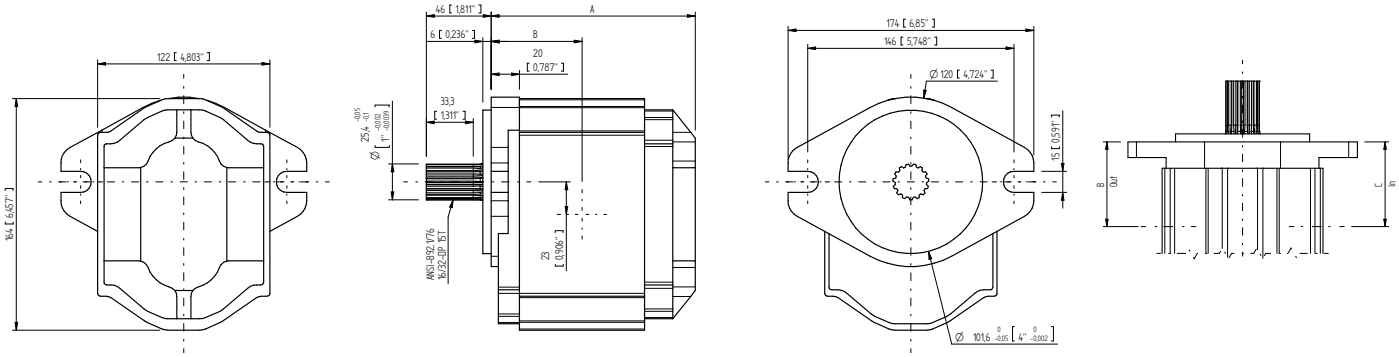
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



GR55 - TYPE / *TIPO* FSAEB AC																		
Type *Tipo*	**CC**	**Flow Portata (1500rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Dimensions C** *Dimensioni C*				**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
								O		**OE**								
		L/ min	**GPM**	**mm**	**inc**	**mm**	**inc**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
32	32,5	48,8	12,90	132	5,201	57,8	2,277	57,8	2,277	57,8	2,277	270	3916	280	4061	300	4351	
40	40,4	60,6	16,03	136,5	5,378	60	2,364	60	2,364	60,0	2,364	270	3916	280	4061	300	4351	
50	50,5	75,8	20,04	157	6,186	70,5	2,778	70,5	2,778	70,5	2,778	275	3989	280	4061	300	4351	
63	63,5	95,3	25,20	166	6,540	75	2,955	75	2,955	78,5	3,093	249	3611	260	3771	280	4061	57
75	75,0	112,5	29,76	174	6,856	79	3,113	79	3,113	82,5	3,251	229	3321	250	3626	270	3916	
80	80,0	120,0	31,75	177,5	6,994	80,8	3,184	80,8	3,184	84,3	3,321	185	2683	240	3481	260	3771	
90	90,9	136,4	36,07	185	7,289	84,5	3,329	84,5	3,329	88,0	3,467	178	2582	240	3481	260	3771	

Max torque / *Coppia max:* 500 Nm

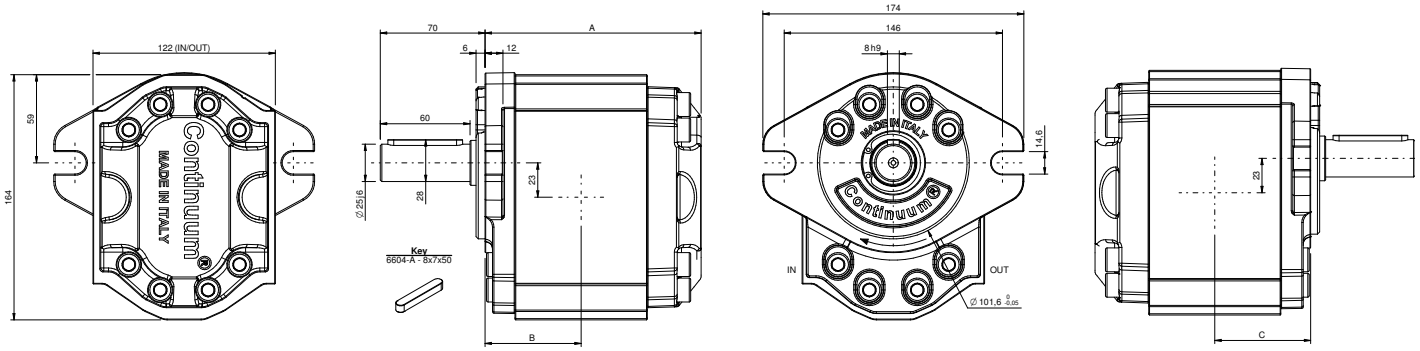
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



GR55 - TYPE / *TIPO* FSAEB T15																		
Type *Tipo*	**CC**	**Flow Portata (1500rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Dimensions C** *Dimensioni C*				**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
								O		**OE**								
		L/ min	**GPM**	**mm**	**inc**	**mm**	**inc**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
32	32,5	48,8	12,90	132	5,201	57,8	2,277	57,8	2,277	57,8	2,277	270	3916	280	4061	300	4351	
40	40,4	60,6	16,03	136,5	5,378	60	2,364	60	2,364	60,0	2,364	270	3916	280	4061	300	4351	
50	50,5	75,8	20,04	157	6,186	70,5	2,778	70,5	2,778	70,5	2,778	275	3989	280	4061	300	4351	
63	63,5	95,3	25,20	166	6,540	75	2,955	75	2,955	78,5	3,093	249	3611	260	3771	280	4061	57
75	75,0	112,5	29,76	174	6,856	79	3,113	79	3,113	82,5	3,251	229	3321	250	3626	270	3916	
80	80,0	120,0	31,75	177,5	6,994	80,8	3,184	80,8	3,184	84,3	3,321	185	2683	240	3481	260	3771	
90	90,9	136,4	36,07	185	7,289	84,5	3,329	84,5	3,329	88,0	3,467	178	2582	240	3481	260	3771	

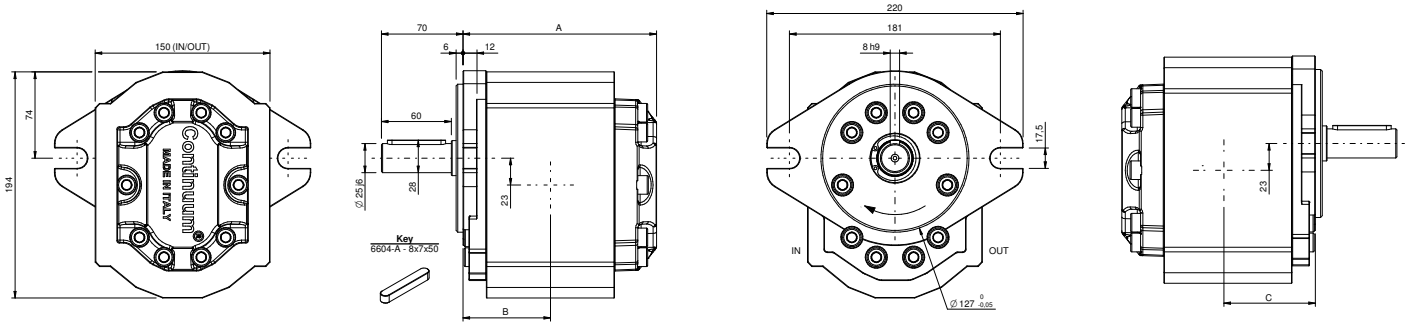
Max torque / *Coppia max:* 600 Nm

* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



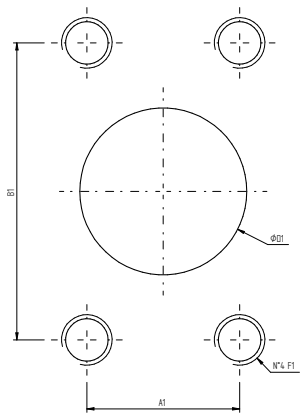
GR55 - TYPE / *TIPO* FSAEB AC25																		
Type *Tipo*	**CC**	**Flow Portata (1500rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Dimensions C** *Dimensioni C*				**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
								O		**OE**								
		L/ min	**GPM**	**mm**	**inc**	**mm**	**inc**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
32	32,5	48,8	12,90	132	5,201	57,8	2,277	57,8	2,277	57,8	2,277	270	3916	280	4061	300	4351	
40	40,4	60,6	16,03	136,5	5,378	60	2,364	60	2,364	60,0	2,364	270	3916	280	4061	300	4351	
50	50,5	75,8	20,04	157	6,186	70,5	2,778	70,5	2,778	70,5	2,778	275	3989	280	4061	300	4351	
63	63,5	95,3	25,20	166	6,540	75	2,955	75	2,955	78,5	3,093	249	3611	260	3771	280	4061	57
75	75,0	112,5	29,76	174	6,856	79	3,113	79	3,113	82,5	3,251	229	3321	250	3626	270	3916	
80	80,0	120,0	31,75	177,5	6,994	80,8	3,184	80,8	3,184	84,3	3,321	185	2683	240	3481	260	3771	
90	90,9	136,4	36,07	185	7,289	84,5	3,329	84,5	3,329	88,0	3,467	178	2582	240	3481	260	3771	

Max torque / *Coppia max:* 600 Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



GR55 - TYPE / *TIPO* FSAEC AC25																		
Type *Tipo*	**CC**	**Flow Portata (1500rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Dimensions C** *Dimensioni C*				**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione (*)*		**Noise level** *Livello rumore*
								O		**OE**								
		L/ min	**GPM**	**mm**	**inc**	**mm**	**inc**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
32	32,5	48,8	12,90	132	5,201	57,8	2,277	57,8	2,277	57,8	2,277	270	3916	280	4061	300	4351	
40	40,4	60,6	16,03	136,5	5,378	60	2,364	60	2,364	60,0	2,364	270	3916	280	4061	300	4351	
50	50,5	75,8	20,04	157	6,186	70,5	2,778	70,5	2,778	70,5	2,778	275	3989	280	4061	300	4351	
63	63,5	95,3	25,20	166	6,540	75	2,955	75	2,955	78,5	3,093	249	3611	260	3771	280	4061	57
75	75,0	112,5	29,76	174	6,856	79	3,113	79	3,113	82,5	3,251	229	3321	250	3626	270	3916	
80	80,0	120,0	31,75	177,5	6,994	80,8	3,184	80,8	3,184	84,3	3,321	185	2683	240	3481	260	3771	
90	90,9	136,4	36,07	185	7,289	84,5	3,329	84,5	3,329	88,0	3,467	178	2582	240	3481	260	3771	

Max torque / *Coppia max:* 600 Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF



INLET			
Type port	**"O"**	**"OE"**	
Size port	**SAE-3000 1" ¼**	**SAE-3000 1" ¼** only for 50cc	**SAE-3000 1" ½**
A1	30,20	30,20	35,70
B1	58,70	58,70	69,85
ØD1	33,00	33,00	38,00
F1	M10x20	M10x18	M12x18

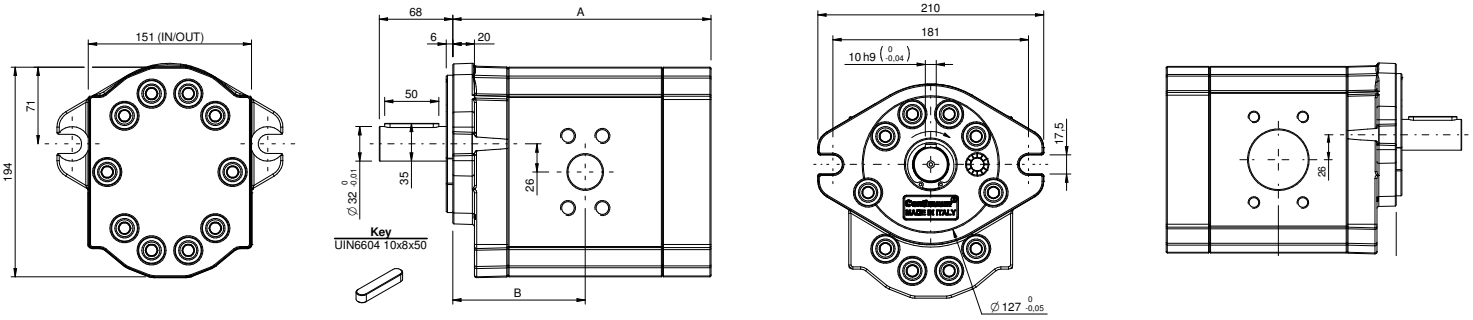
OUTLET		
Type port	**"O"**	**"OE"**
Size port	**SAE-3000 ¾"**	**SAE-3000 1"**
A2	22,20	26,20
B2	47,60	52,40
ØD2	19,00	25,00
F2	M10X18	M10X18

GR63 - Dimensional drawings / Disegni dimensionali

GR63 SHAFT AND FLANGE TYPES AND DIMENSIONS / *TIPI DI ALBERO E FLANGIA E DIMENSIONI*
Group 4 pumps / *Pompe gruppo 4*

Type	Model	Weight (Kg)
GR63 2C	100	21
	125	22

The values of noise level, reported into this catalogue, are purely indicative. Please contact Settima for more precise information / *I valori di rumorosità riportati in questo catalogo sono puramente indicativi. Si prega di contattare Settima per informazioni più precise.*



GR63 - TYPE / *TIPO* FSAEC AC																
Type *Tipo*	**CC**	**Flow Portata (1500rpm)**		**Dimensions A** *Dimensioni A*		**Dimensions B** *Dimensioni B*		**Dimensions C** *Dimensioni C*		**Continuous Pressure** *Pressione continua*		**Intermittent Pressure** *Pressione intermittente* (*)		**Peak pressure** *Picco pressione* (*)		**Noise level** *Livello rumore*
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
100	101,1	151,7	40,12	241	9,495	122,5	4,827	200	2901	210	3046	230	3336	260	3771	57
125	126,8	190,2	50,32	255	10,047	129,5	5,102	180	2611	200	2901	210	3046	250	3626	

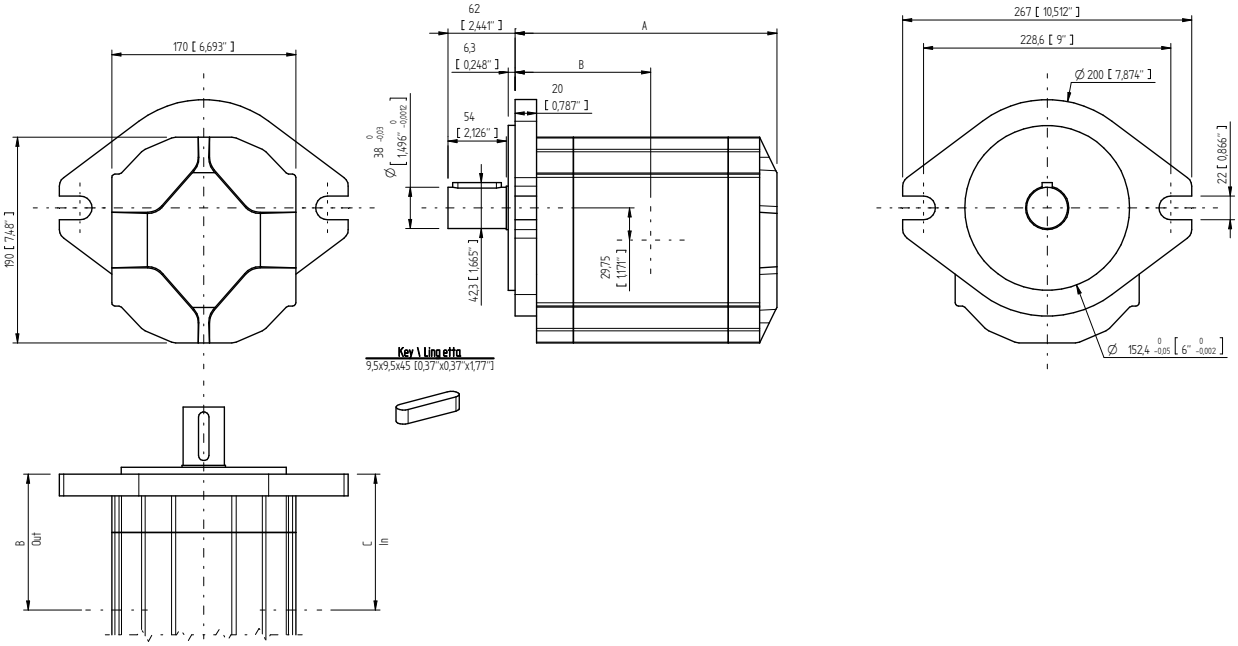
Max torque / *Coppia max:* 600 Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF

GR72 - Dimensional drawings / Disegni dimensionali

GR72 SHAFT AND FLANGE TYPES AND DIMENSIONS / *TIPI DI ALBERO E FLANGIA E DIMENSIONI*
Group 4 pumps / *Pompe gruppo 4*

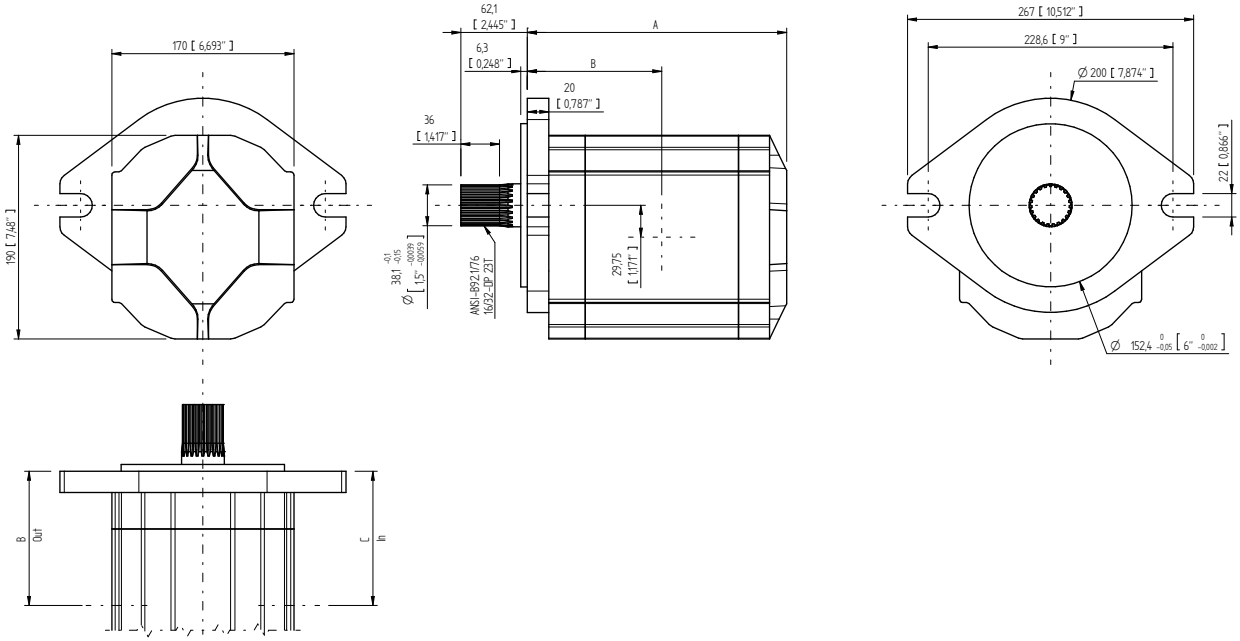
Type	Model	Weight (Kg)
GR72 2C	94	25
	101	26
	125	27
	150	28
	175	29
	200	30

The values of noise level, reported into this catalogue, are purely indicative. Please contact Settima for more precise information / *I valori di rumorosità riportati in questo catalogo sono puramente indicativi. Si prega di contattare Settima per informazioni più precise.*



GR72 - TYPE / *TIPO* FSAED AC																
Type *Tipo*	CC	Flow Portata (1500rpm)		Dimensions A *Dimensioni A*		Dimensions B *Dimensioni B*		Dimensions C *Dimensioni C*		Continuous Pressure *Pressione continua*		Intermittent Pressure *Pressione intermittente* (*)		Peak pressure *Picco pressione* (*)		Noise level *Livello rumore*
		L/min	GPM	mm	inc	mm	inc	mm	inc	bar	PSI	bar	PSI	bar	PSI	dB
94	94,1	136	35,927	245	9,646	125,5	4,941	128,5	4,941	240	3481	250	3626	260	3771	57
101	101,4	147	38,833	248	9,764	127	5	134	5,276	230	3336	240	3481	250	3626	
125	125,5	181	47,815	258	10,157	132	5,197	145	5,709	220	3191	220	3191	230	3336	
150	150,9	218	57,589	268,5	10,571	137,25	5,404	150,25	5,915	200	2901	210	3046	220	3191	
175	175	253	66,836	278,5	10,965	142,25	5,6	155,25	6,112	180	2611	190	2756	200	2901	
200	200,4	290	76,610	289	11,378	147,5	5,807	160,5	6,319	160	2321	170	2466	180	2611	

Max torque / *Coppia max:* 800 Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF

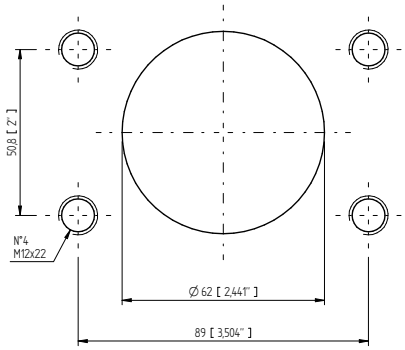


GR72 - TYPE / *TIPO* FSAEB AT23																
Type ***Tipo***	**CC**	**Flow Portata (1500rpm)**		**Dimensions A** ***Dimensioni A***		**Dimensions B** ***Dimensioni B***		**Dimensions C** ***Dimensioni C***		**Continuous Pressure** ***Pressione continua***		**Intermittent Pressure** ***Pressione intermittente*** **(*)**		**Peak pressure** ***Picco pressione (*)***		**Noise level** ***Livello rumore***
		L/min	**GPM**	**mm**	**inc**	**mm**	**inc**	**mm**	**inc**	**bar**	**PSI**	**bar**	**PSI**	**bar**	**PSI**	***dB***
94	94,1	136	35,927	245	9,646	125,5	4,941	128,5	4,941	240	3481	250	3626	260	3771	57
101	101,4	147	38,833	248	9,764	127	5	134	5,276	230	3336	240	3481	250	3626	
125	125,5	181	47,815	258	10,157	132	5,197	145	5,709	220	3191	220	3191	230	3336	
150	150,9	218	57,589	268,5	10,571	137,25	5,404	150,25	5,915	200	2901	210	3046	220	3191	
175	175	253	66,836	278,5	10,965	142,25	5,6	155,25	6,112	180	2611	190	2756	200	2901	
200	200,4	290	76,610	289	11,378	147,5	5,807	160,5	6,319	160	2321	170	2466	180	2611	

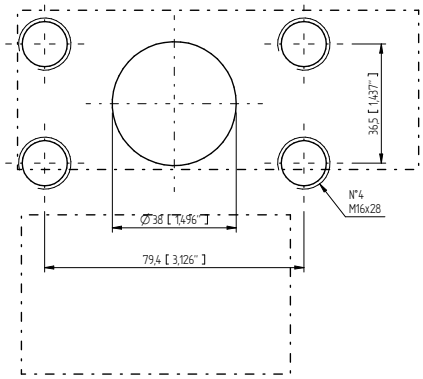
Max torque / *Coppia max:* 1000 Nm
* Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec OFF. Intermittente: ciclo 20 sec. ON & 3 sec. OFF - Picco: ciclo 1 sec. ON & 3 sec OFF

GR72 INLET OUTLET PORTS / *PORTE DI ASPIRAZIONE E MANDATA* - **Type ME / *Tipo ME***

SAE 3000 2" ½ Inlet

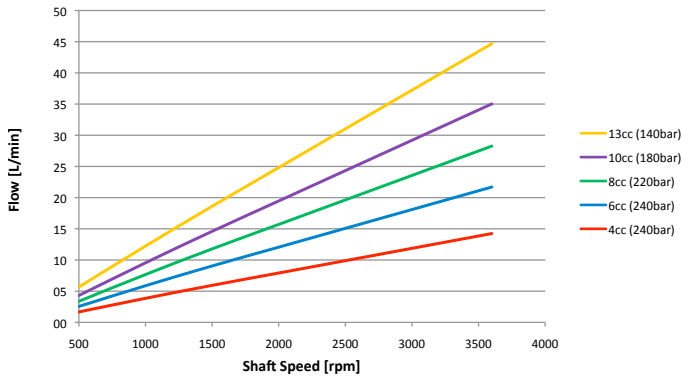


SAE 6000 1" ½ Outlet

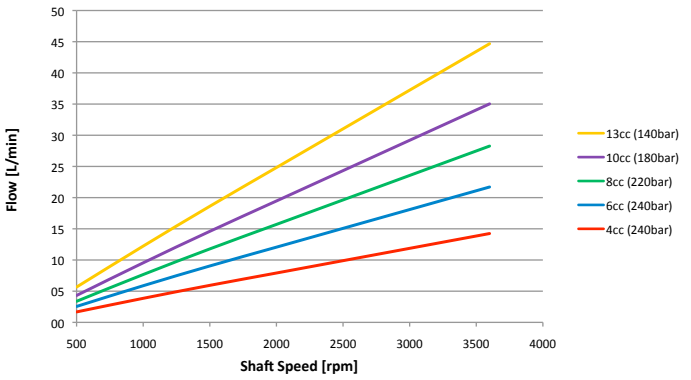


Flow performances @ 46 cSt

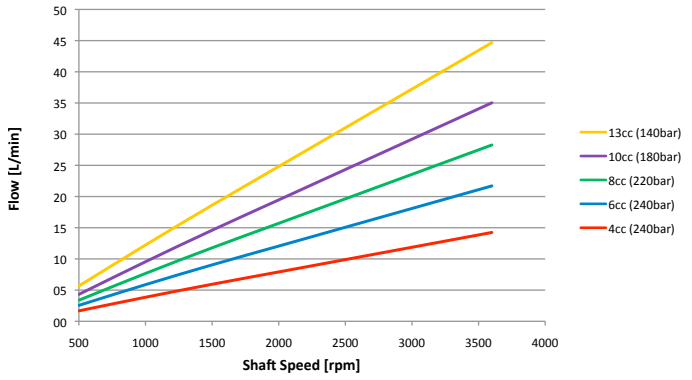
GR28 1-C3 / 1L-GL54 / 1L-G54



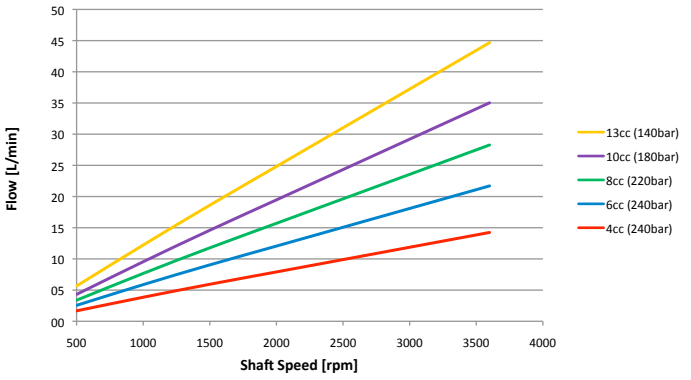
GR28 1P-C2



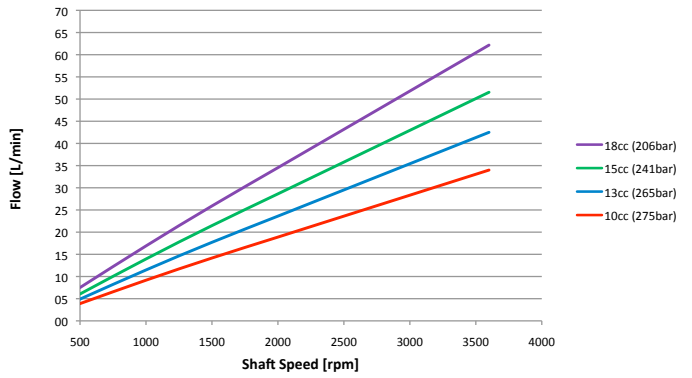
GR28 1K-G54 / 1K-GL54



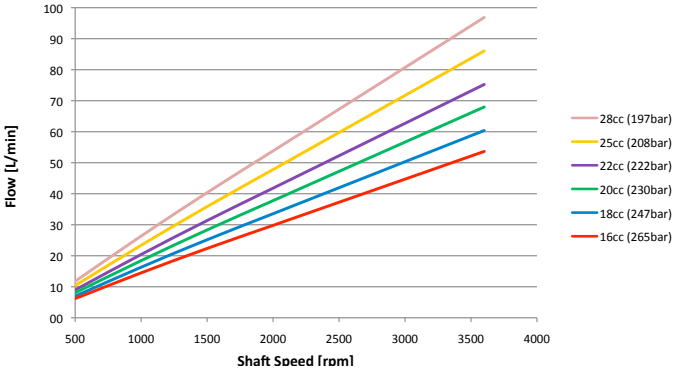
GR28 SAEA-AC



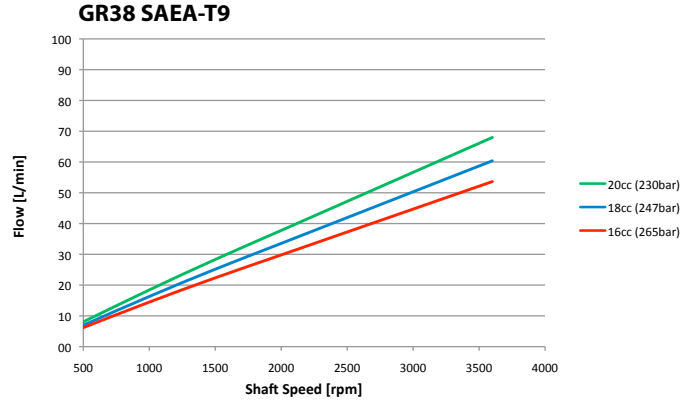
GR33



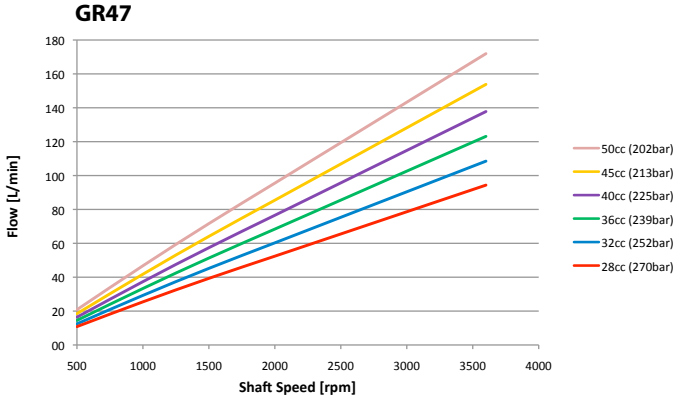
GR38



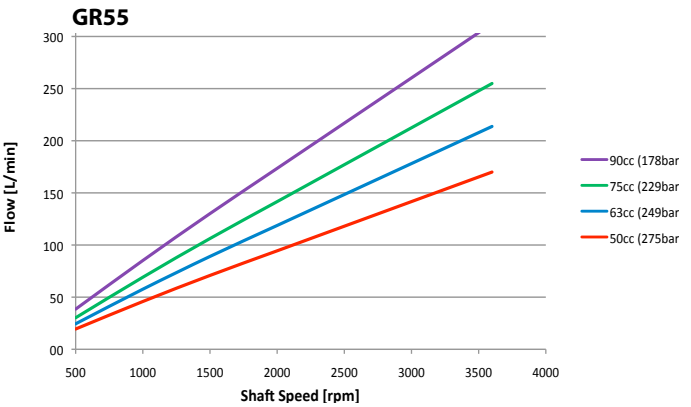
GR38 SAEA-T9

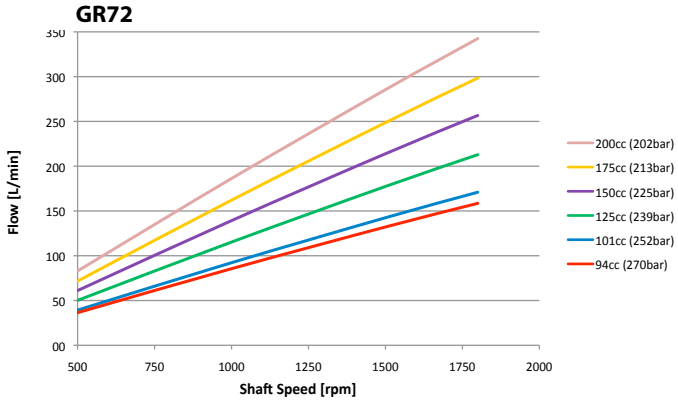


GR47



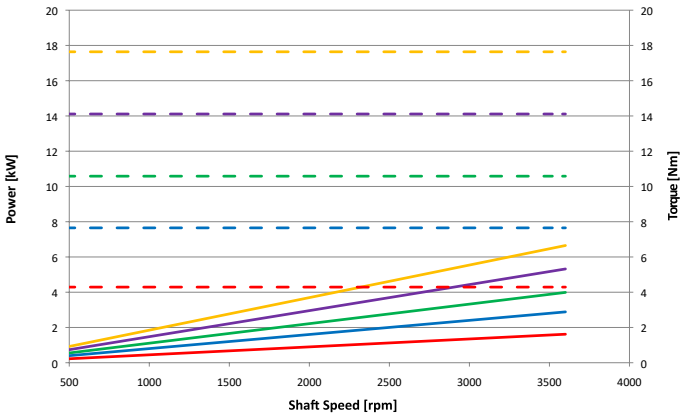
Flow performances @ 46 cSt



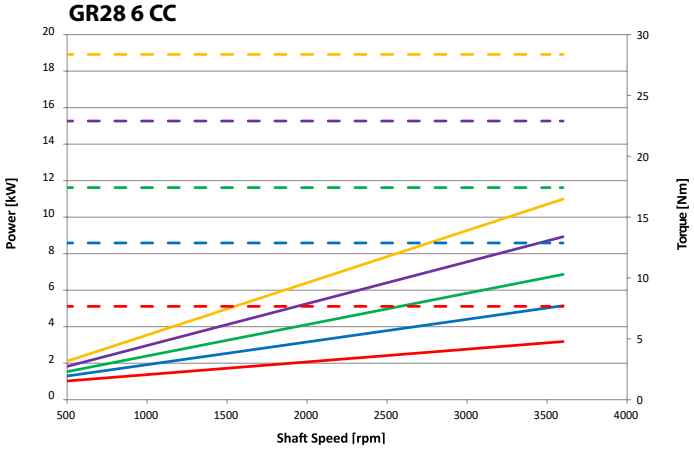


Power-torque performances @ 46 cSt

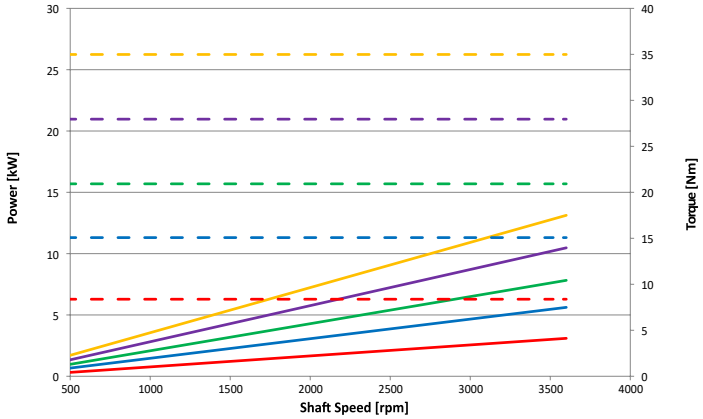
GR28 4 CC



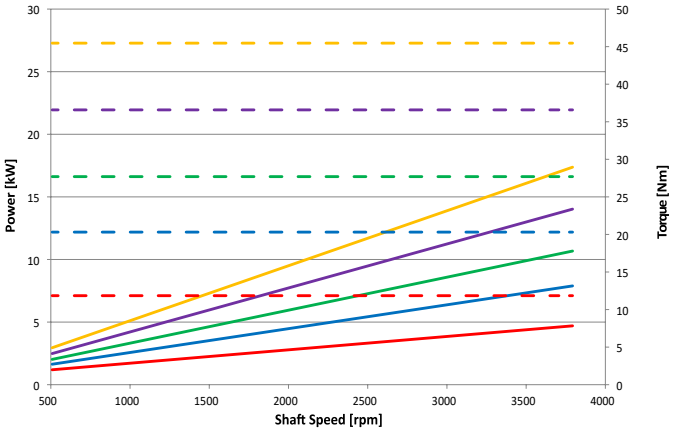
GR28 6 CC



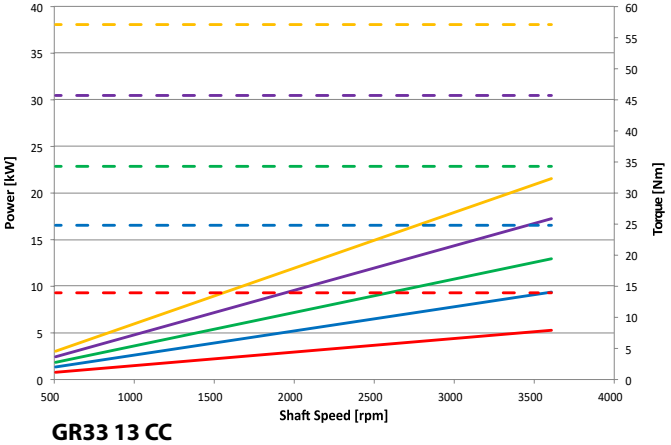
GR28 8 CC



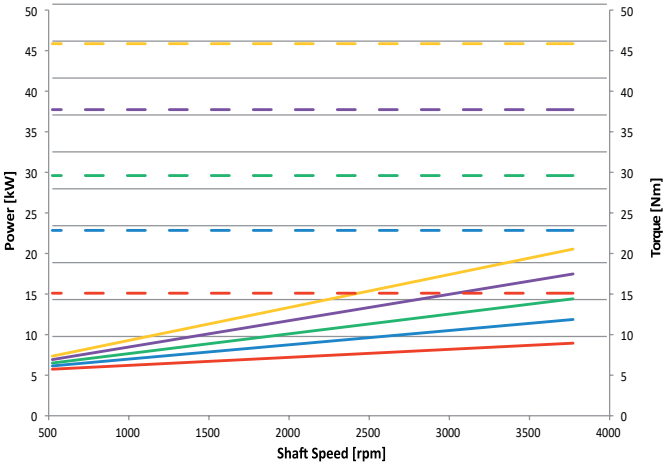
GR28 10 CC



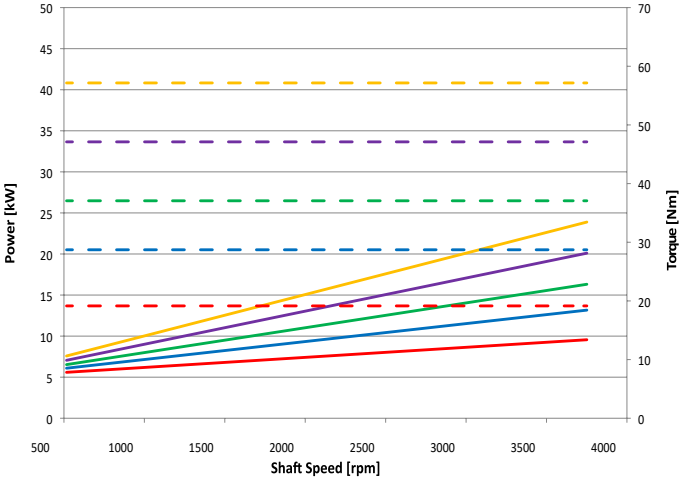
GR28 13 CC



GR33 10 CC

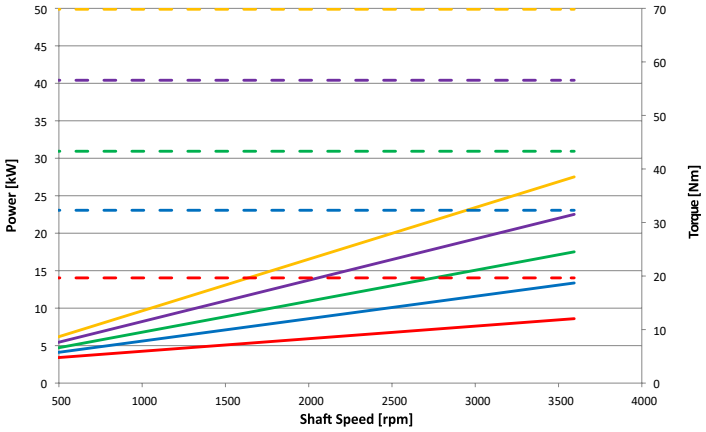


GR33 13 CC

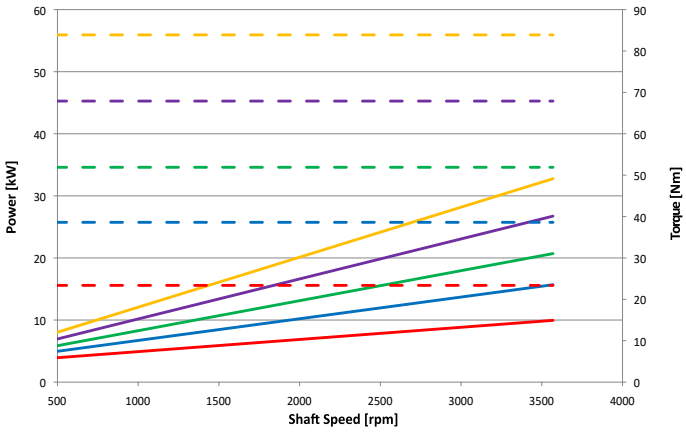


Power-torque performances @ 46 cSt

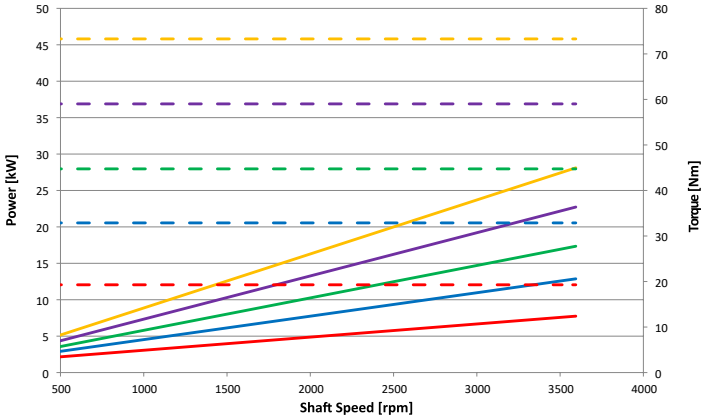
GR33 15 CC



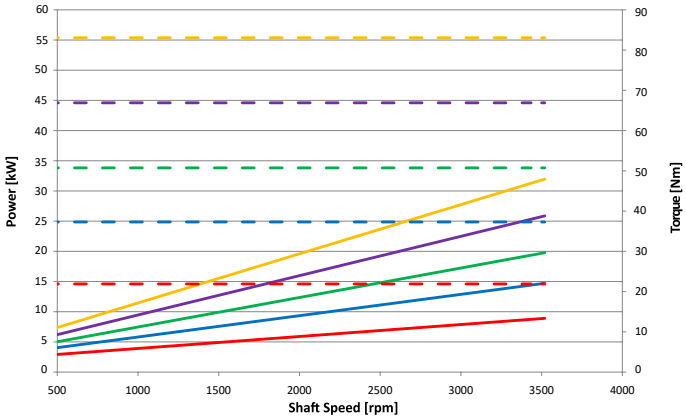
GR33 18 CC



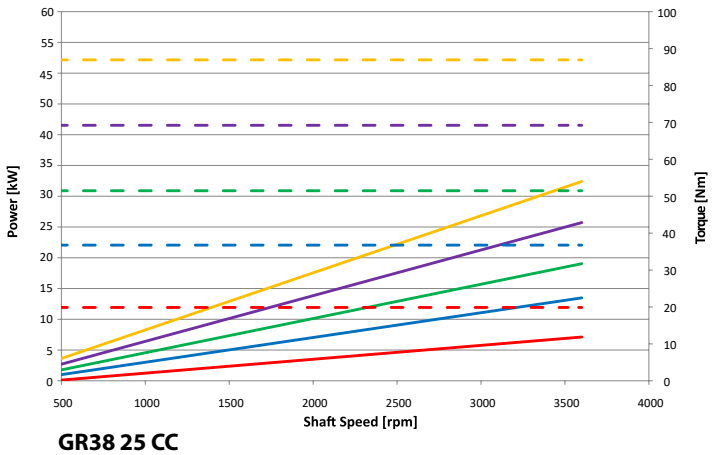
GR38 16 CC



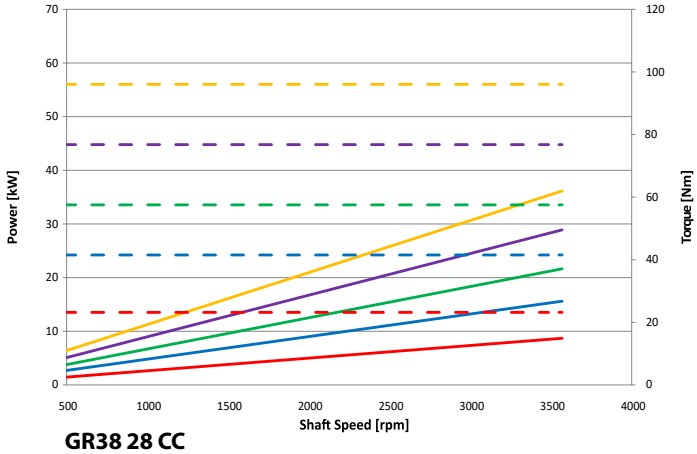
GR38 18 CC



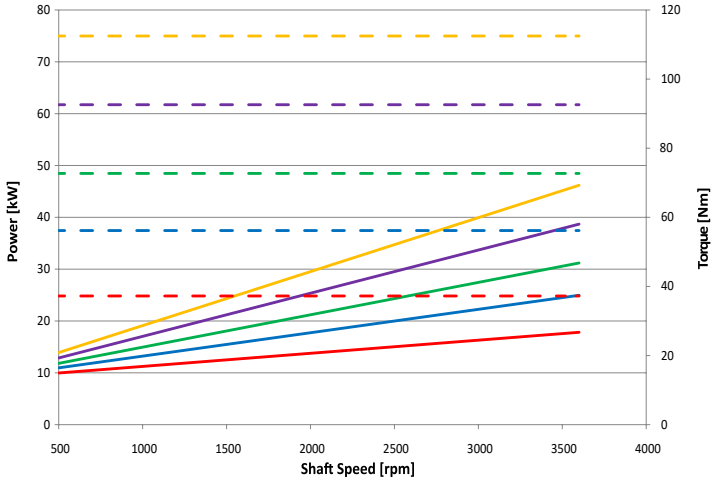
GR38 20 CC



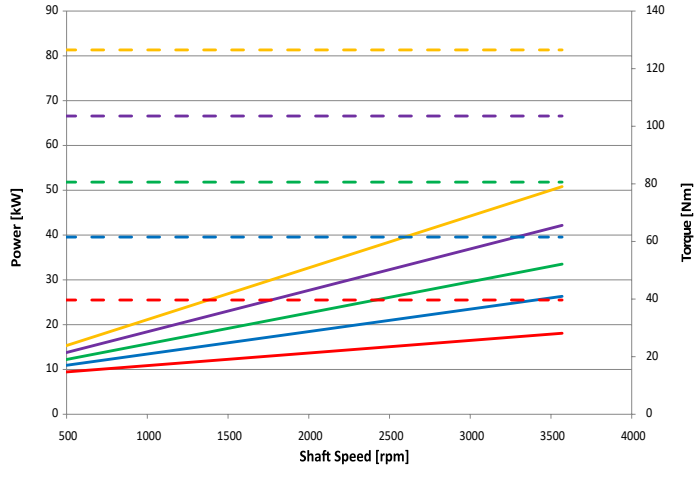
GR38 22 CC



GR38 25 CC

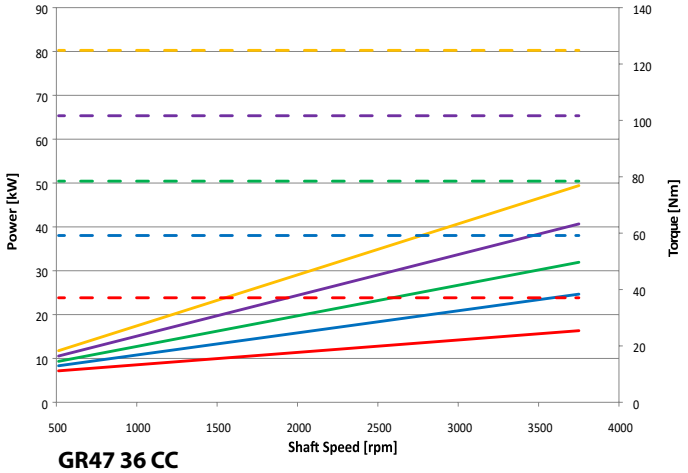


GR38 28 CC

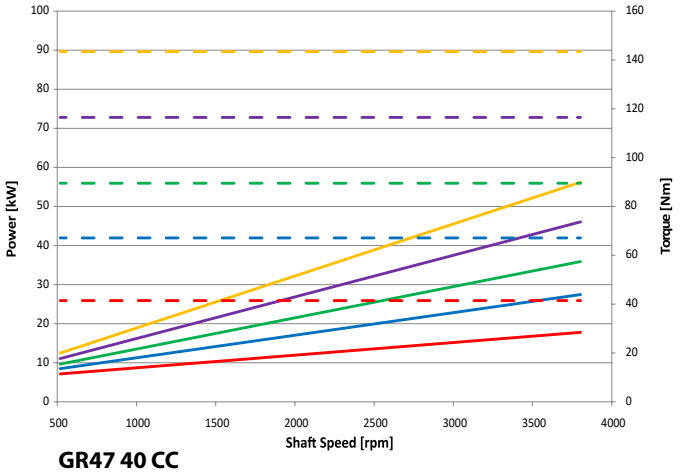


Power-torque performances @ 46 cSt

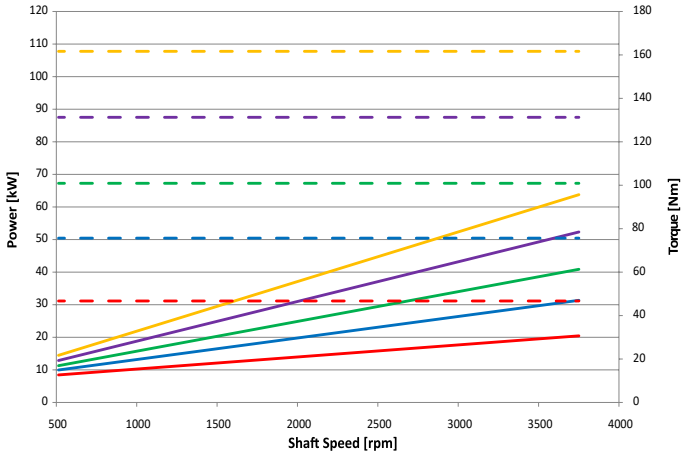
GR47 28 CC



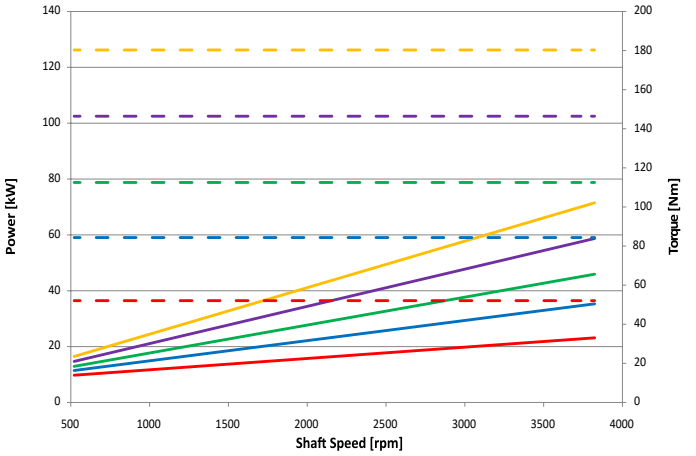
GR47 32 CC



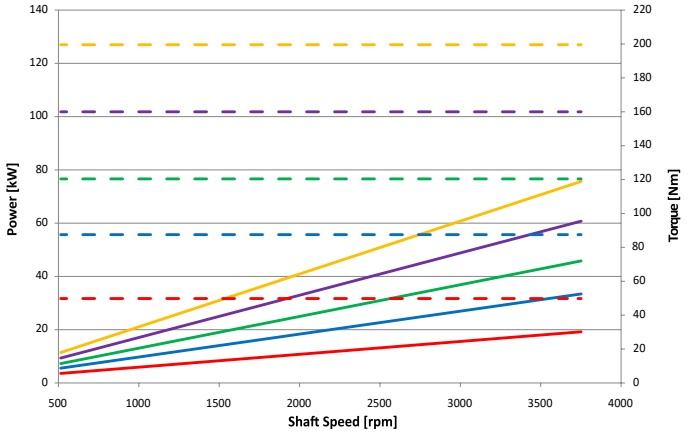
GR47 36 CC



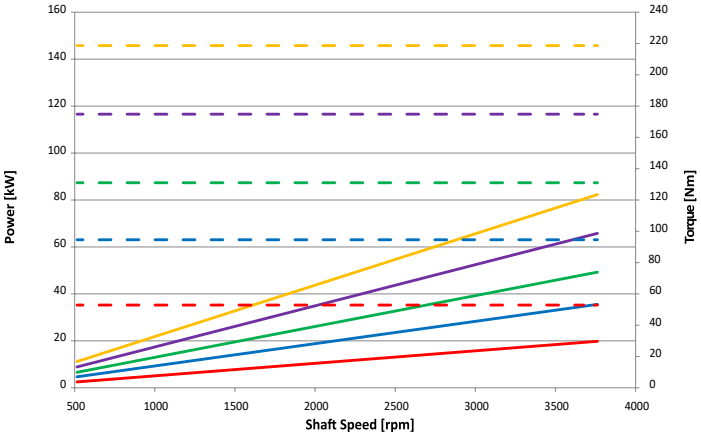
GR47 40 CC



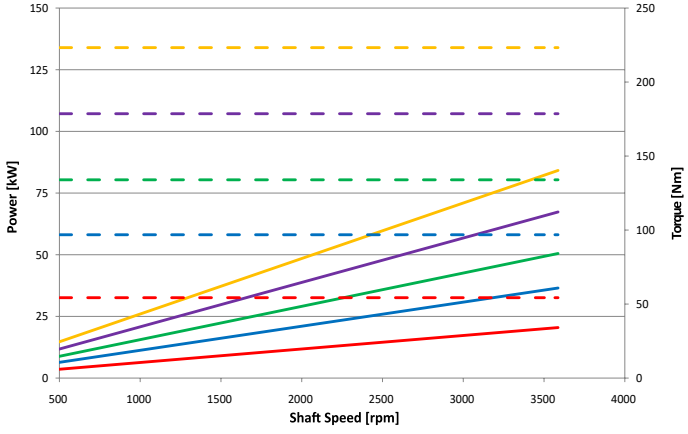
GR47 45 CC



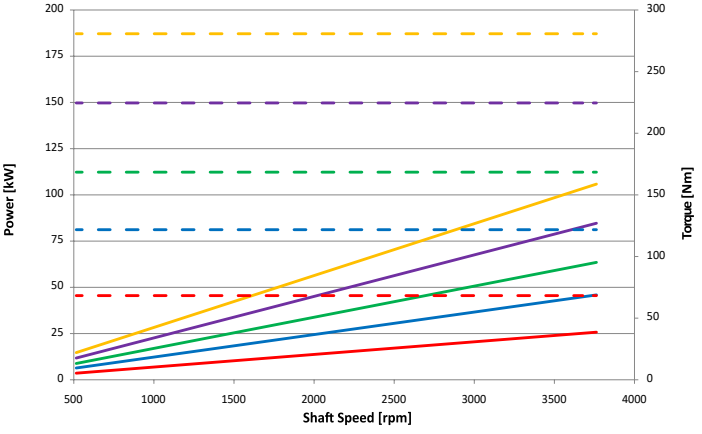
GR47 50 CC



GR55 50 CC

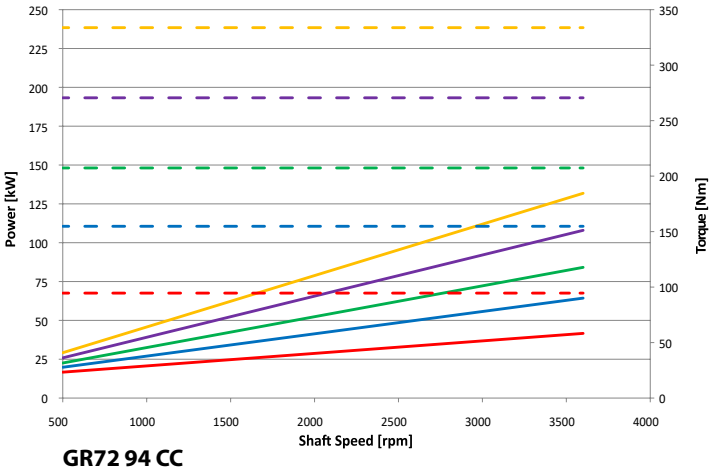


GR55 63 CC

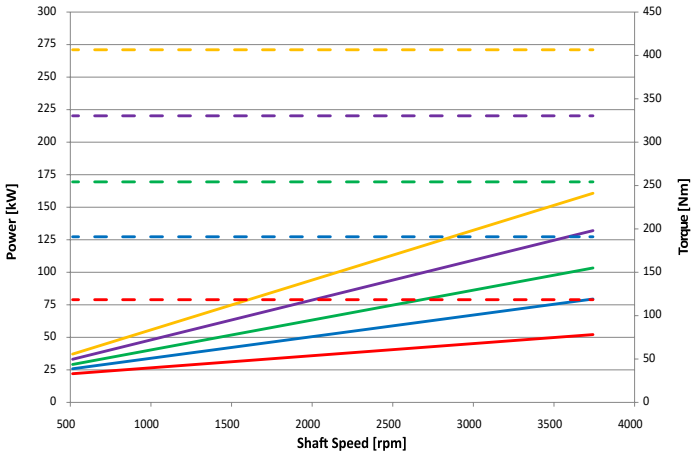


Power-torque performances @ 46 cSt

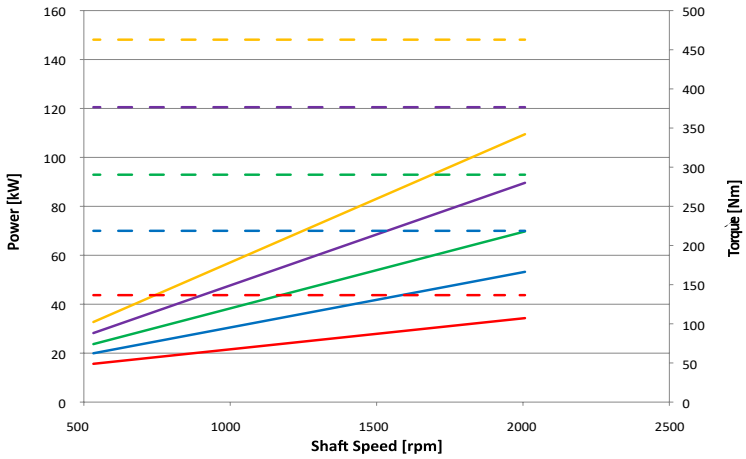
GR55 75



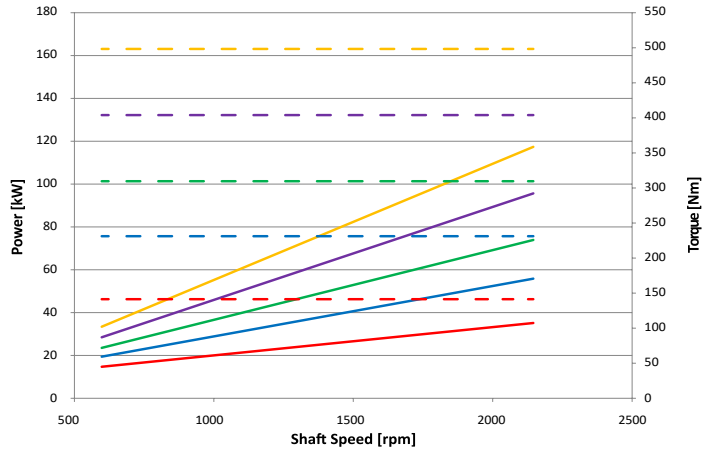
GR55 90 CC



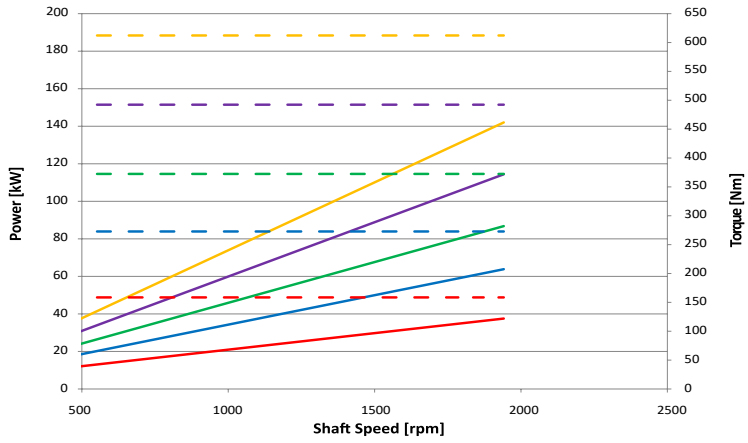
GR72 94 CC



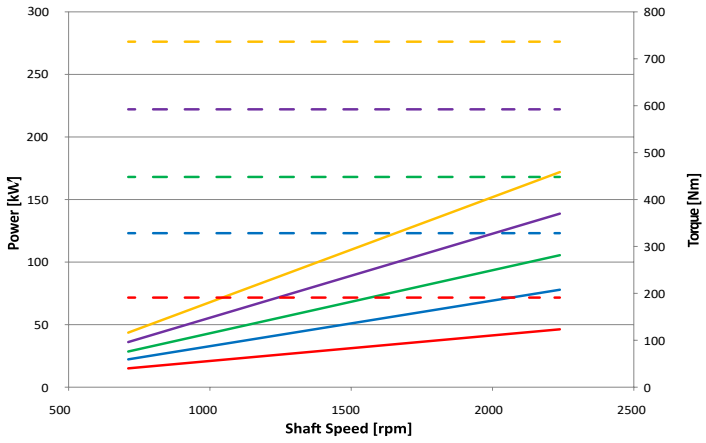
GR72 101 CC



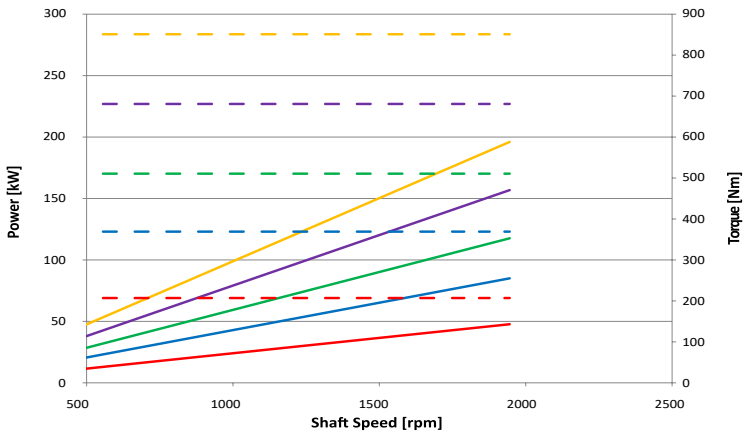
GR72 125 CC



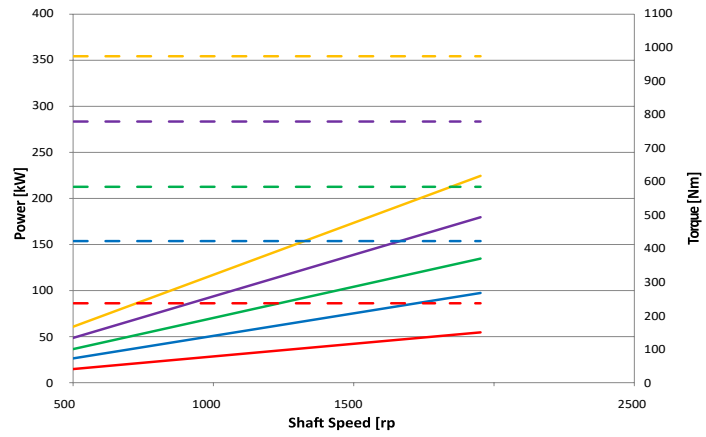
GR72 150 CC



GR72 175 CC



GR72 200 CC



Tandem & multiple pumps / Pompe doppie e multiple

Continuum® pumps are suitable for multiple setups, whereby the drive shaft of the first pump is extended to a second and even a third **Continuum®** pump. Each pump is connected to another by means of coupling. Each pump has its own suction port.
Basically the technical specifications of single pumps apply also to multiple setups**. The maximum speed is determined by the highest pump speed rate in use. In case of multiple setup configurations, it is recommended to use the largest displacement for the first pump. The front pump may be equipped with different types of flange and shaft.
Standard multiple pumps are delivered with a sealing between the different stages. In some of the applications this could generate lubrication issue for the connecting joints. When placing an order, it is necessary to specify if the different stages will handle different kind of fluids (or the same fluid coming from different reservoir) or if they suck the same fluids from the same tank.

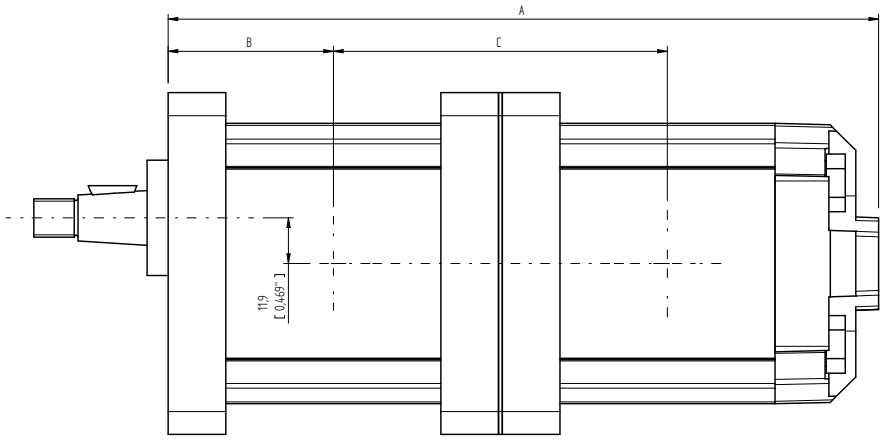
Ordering code / Codice ordine

Multiple setups / *Pompe multiple*

Type *Tipo*	Class *Classe*	Displacement *Cilindrata*	Flange & shaft *Flangia & albero*	Ports *Porte*	Type 2nd stage *Tipo 2° stadio*	*Displacement 2nd stage* *Cilindrata 2° stadio*	Ports *Porte*	Shaft seal *Guarnizione albero*	Rotation *Rotazione*
DG28	2V	004-006-008-010-013	F1AC3	G-U	GR28	004-006-008-010-013	G-U	Standard NBR **(none)** Optional FKM **V**	Standard DX **(none)**  Optional **SX*** 
DG33	2C	010-013-015-018	F2AC4	G-Q-U-M	GR28				
					GR33	010-013-015-018	G-Q-U		
					GR38	016-018-020-022-025-028			
DG38	2C	016-018-020-022-025-028	F2AC4	G-Q-U-M	GR28	004-006-008-010-013	G-U		
					GR33	010-013-015-018	G-Q-U		
					GR38	016-018-020-022-025-028			
DG47	2C	028-032-036-040-045-050	F3AC9 FSAEBAT13	G-O-U	GR28	004-006-008-010-013	G-U		
					GR33	010-013-015-018	G-Q-U		
					GR38	016-018-020-022-025-028			
					GR47	028-032-036-040-045-050	O-U		
DG55	2C	050-063-075-090	FSAEBAT15	O-OE	GR28	004-006-008-010-013	G-U		
					GR33	010-013-015-018	G-Q-U		
					GR38	016-018-020-022-025-028			
					GR47	028-032-036-040-045-050	O-U		
					GR55	050-063-075-090	O-OE		
DG72	2V	094-101-125-150-175-200-225	FSAEDAT23	ME	GR47	028-032-036-040-045-050	O-U		
					GR55	050-063-075-090	O-OE		
					GR72	094-101-125-150-175-200	ME		

* Please contact Settima for SX counter clockwise optional rotation. *Contattare Settima per rotazione SX opzionale.*
** The minimum operating pressure recommended for the second stage is 30 bar. In case of lower pressure, please, contact Settima. *Minima pressione di funzionamento consigliata per il secondo stadio 30 bar, al di sotto, contattare Settima.*

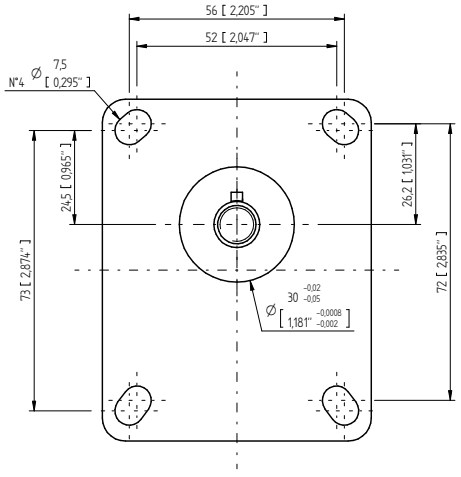
GR28 - Group 1 tandem pumps*



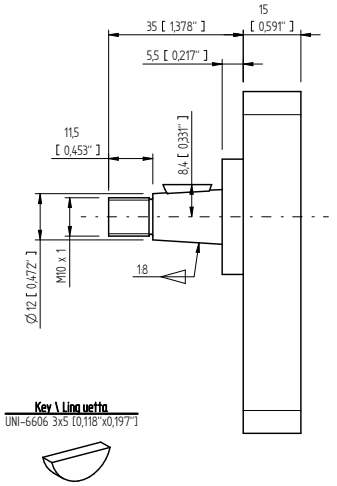
GR28 + GR28			GR28 - 2°									
			4		6		8		10		13	
			mm	inc	mm	inc	mm	inc	mm	inc	mm	inc
GR28 - 1°	4	A	191	7,52	196,5	7,73	201,5	7,93	206,5	8,13	213,4	8,40
		B	44,5	1,75	44,5	1,75	44,5	1,75	44,5	1,75	44,5	1,75
		C	90	3,54	92,75	3,65	95,25	3,75	97,75	3,85	101,2	3,98
	6	A	196,5	7,74	202	7,95	207	8,15	212	8,35	218,9	8,62
		B	47,25	1,86	47,25	1,86	47,25	1,86	47,25	1,86	47,25	1,86
		C	92,75	3,65	95,5	3,76	98	3,86	100,5	3,96	103,95	4,09
	8	A	201,5	7,93	207	8,15	212	8,35	217	8,54	223,9	8,81
		B	49,75	1,96	49,75	1,96	49,75	1,96	49,75	1,96	49,75	1,96
		C	95,25	3,75	98	3,86	100,5	3,96	103	4,06	106,45	4,19
	10	A	206,5	8,13	212	8,35	217	8,54	222	8,74	228,9	9,01
		B	52,25	2,06	52,25	2,06	52,25	2,06	52,25	2,06	52,25	2,06
		C	97,75	3,85	100,5	3,96	103	4,06	105,5	4,15	108,95	4,29
	13	A	213,4	8,40	218,9	8,62	223,9	8,81	228,9	9,01	235,8	9,28
		B	55,7	2,19	55,7	2,19	55,7	2,19	55,7	2,19	55,7	2,19
		C	101,2	3,98	103,95	4,09	106,45	4,19	108,95	4,29	112,4	4,43

Available flanges and shafts for GR28
Flange e alberi disponibili per GR28

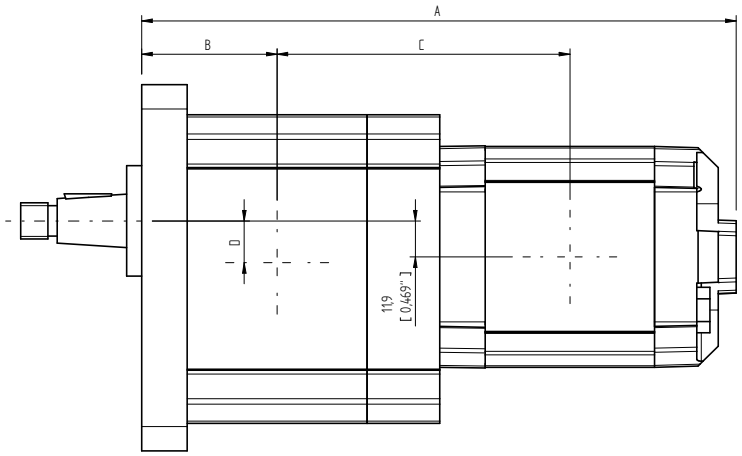
Type flange 1C3 / *Flangia tipo 1 C3*



Type shaft 1C3 / *Albero tipo 1 C3*
Max torque / *Coppia max 100 Nm*

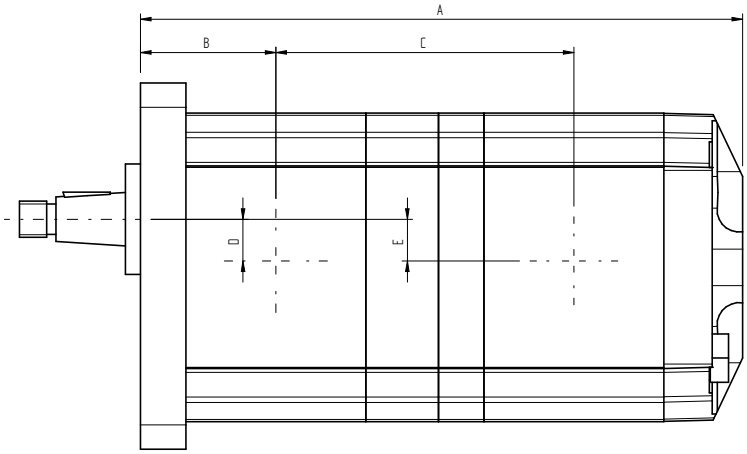


GR33 - Groups 2 tandem pumps*



GR33 + GR28			GR28 - 2°									
			4		6		8		10		13	
			mm	inc	mm	inc	mm	inc	mm	inc	mm	inc
GR33 - 1°	10	A	217,5	8,56	223	8,78	228	8,98	233	9,17	239,9	9,44
		B	53,75	2,12	53,75	2,12	53,75	2,12	53,75	2,12	53,75	2,12
		C	107,25	4,22	110	4,33	112,5	4,43	115	4,53	118,45	4,67
		D	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	13	A	222,4	8,76	227,9	8,97	232,9	9,17	237,9	9,37	244,8	9,64
		B	56,2	2,21	56,2	2,21	56,2	2,21	56,2	2,21	56,2	2,21
		C	109,7	4,32	112,45	4,43	114,95	4,53	117,45	4,62	120,9	4,76
		D	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	15	A	227,4	8,95	232,9	9,17	237,9	9,37	242,9	9,56	249,8	9,83
		B	58,7	2,31	58,7	2,31	58,7	2,31	58,7	2,31	58,7	2,31
		C	112,2	4,42	114,95	4,53	117,45	4,63	119,95	4,72	123,4	4,86
		D	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	18	A	233,2	9,18	238,7	9,40	243,7	9,59	248,7	9,79	255,6	10,06
		B	61,6	2,43	61,6	2,43	61,6	2,43	61,6	2,43	61,6	2,43
		C	115,1	4,53	117,85	4,64	120,35	4,74	122,85	4,84	126,3	4,97
		D	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54

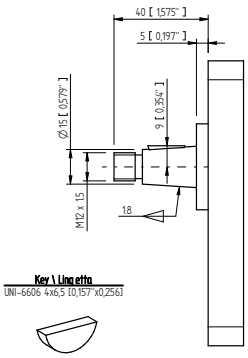
GR33 - Groups 2 tandem pumps*



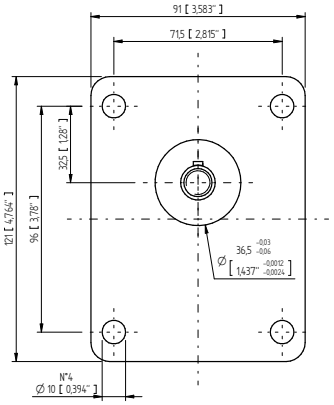
GR33 + GR33			GR33 - 2°							
			10		13		15		18	
			mm	inc	mm	inc	mm	inc	mm	inc
GR33 - 1°	10	A	218	8,58	222,9	8,78	227,9	8,97	233,7	9,20
		B	53,75	2,11	53,75	2,12	53,75	2,12	53,75	2,12
		C	106,5	4,19	108,95	4,29	111,45	4,39	114,35	4,50
		D	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
		E	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	13	A	222,9	8,78	227,8	8,97	232,8	9,17	238,6	9,39
		B	56,2	2,21	56,2	2,21	56,2	2,21	56,2	2,21
		C	108,95	4,29	111,4	4,39	113,9	4,48	116,8	4,60
		D	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
		E	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	15	A	227,9	8,97	232,8	9,17	237,8	9,36	243,6	9,59
		B	58,7	2,31	58,7	2,31	58,7	2,31	58,7	2,31
		C	111,45	4,39	113,9	4,48	116,4	4,58	119,3	4,70
		D	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
		E	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	18	A	233,7	9,20	238,6	9,39	243,6	9,59	249,4	9,82
		B	61,6	2,43	61,6	2,43	61,6	2,43	61,6	2,43
		C	114,35	4,50	116,8	4,60	119,3	4,70	122,2	4,81
		D	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
		E	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54

Available flanges and shafts for GR33
Flange ed alberi disponibili per GR33

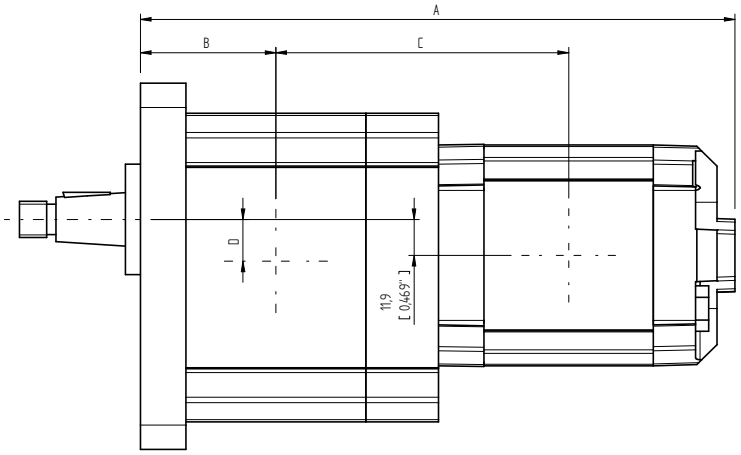
Type flange 2C4 /
Flangia tipo 2C4



Type shaft 2C4 /
Albero tipo 2C4
Max torque /
Coppia max 170 Nm

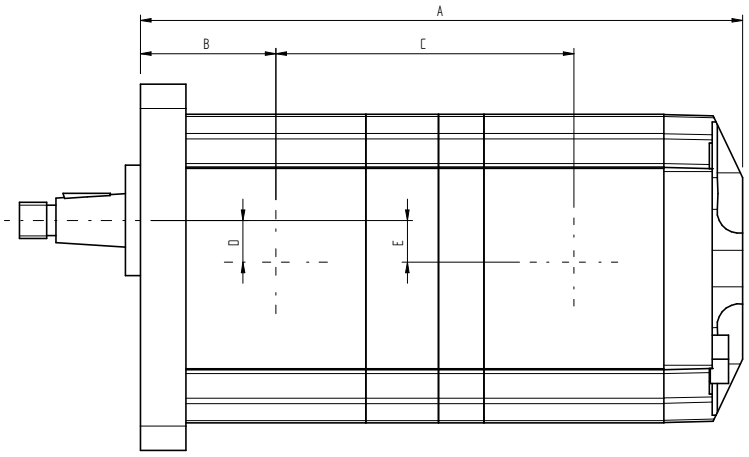


GR38 - Groups 2 tandem pumps*



GR38 + GR28			GR28 - 2°									
			4		6		8		10		13	
			mm	inc	mm	inc	mm	inc	mm	inc	mm	inc
GR38 - 1°	16	A	224	8,81	229,5	9,03	234,5	9,23	239,5	9,429	246,4	9,701
		B	55,5	2,18	55,5	2,18	55,5	2,185	55,5	2,185	55,5	2,185
		C	112	4,40	114,75	4,51	117,25	4,61	119,75	4,71	123,2	4,85
		D	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62
	18	A	227	8,93	232,5	9,15	237,5	9,35	242,5	9,54	249,4	9,81
		B	57	2,24	57	2,24	57	2,24	57	2,24	57	2,24
		C	113,5	4,46	116,25	4,57	118,75	4,67	121,25	4,77	124,7	4,90
		D	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62
	20	A	230	9,05	235,5	9,27	240,5	9,46	245,5	9,66	252,4	9,93
		B	58,5	2,30	58,5	2,30	58,5	2,30	58,5	2,30	58,5	2,30
		C	115	4,52	117,75	4,63	120,25	4,73	122,75	4,83	126,2	4,96
		D	15,9	0,626	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62
	22	A	233	9,173	238,5	9,39	243,5	9,58	248,5	9,78	255,4	10,05
		B	60	2,36	60	2,36	60	2,36	60	2,36	60	2,36
		C	116,5	4,58	119,25	4,69	121,75	4,79	124,25	4,89	127,7	5,02
		D	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62
	25	A	237,5	9,35	243	9,56	248	9,76	253	9,96	259,9	10,23
		B	62,25	2,45	62,25	2,45	62,25	2,45	62,25	2,45	62,25	2,45
		C	118,75	4,67	121,5	4,78	124	4,88	126,5	4,98	129,95	5,11
		D	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62
	28	A	242	9,52	247,5	9,74	252,5	9,94	257,5	10,13	264,4	10,40
		B	64,5	2,53	64,5	2,53	64,5	2,53	64,5	2,53	64,5	2,53
		C	121	4,76	123,75	4,87	126,25	4,97	128,75	5,06	132,2	5,20
		D	15,9	0,626	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62

GR38 - Groups 2 tandem pumps*



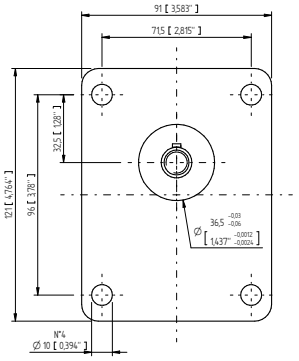
GR38 + GR33			GR33 - 2°							
			10		13		15		18	
			mm	inc	mm	inc	mm	inc	mm	inc
GR38 - 1°	16	A	224,5	8,84	229,4	9,03	234,4	9,23	240,2	9,46
		B	55,5	2,19	55,5	2,19	55,5	2,19	55,5	2,19
		C	111,25	4,38	113,7	4,48	116,2	4,57	119,1	4,69
		D	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
		E	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	18	A	227,5	8,96	232,4	9,15	237,4	9,35	243,2	9,57
		B	57	2,24	57	2,24	57	2,24	57	2,24
		C	112,75	4,44	115,2	4,54	117,7	4,63	120,6	4,75
		D	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
		E	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	20	A	230,5	9,07	235,4	9,27	240,4	9,46	246,2	9,69
		B	58,5	2,30	58,5	2,30	58,5	2,30	58,5	2,30
		C	114,25	4,50	116,7	4,59	119,2	4,69	122,1	4,81
		D	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
		E	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	22	A	233,5	9,19	238,4	9,39	243,4	9,58	249,2	9,81
		B	60	2,36	60	2,36	60	2,36	60	2,36
		C	115,75	4,56	118,2	4,65	120,7	4,75	123,6	4,87
		D	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
		E	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	25	A	238	9,37	242,9	9,56	247,9	9,76	253,7	9,99
		B	62,25	2,45	62,25	2,45	62,25	2,45	62,25	2,45
		C	118	4,65	120,45	4,74	122,95	4,84	125,85	4,96
		D	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
		E	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	28	A	242,5	9,55	247,4	9,74	252,4	9,94	258,2	10,17
		B	64,5	2,54	64,5	2,54	64,5	2,54	64,5	2,54
		C	120,25	4,74	122,7	4,83	125,2	4,93	128,1	5,04
		D	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
		E	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54

GR38 - Groups 2 tandem pumps*

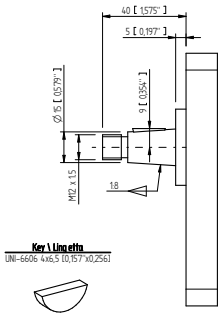
GR38 + GR38			GR38 - 2°											
			16		18		20		22		25		28	
			mm	inc	mm	inc	mm	inc	mm	inc	mm	inc	mm	inc
GR38 - 1°	16	A	228	8,98	231	9,09	234	9,21	237	9,33	241,5	9,51	246	9,69
		B	55,5	2,19	55,5	2,19	55,5	2,19	55,5	2,19	55,5	2,19	55,5	2,19
		C	113	4,45	114,5	4,51	116	4,57	117,5	4,63	119,75	4,71	122	4,80
		D	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
		E	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
	18	A	231	9,09	234	9,21	237	9,33	240	9,45	244,5	9,63	249	9,80
		B	57	2,24	57	2,24	57	2,24	57	2,24	57	2,24	57	2,24
		C	114,5	4,51	116	4,57	117,5	4,63	119	4,69	121,25	4,77	123,5	4,86
		D	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
		E	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
	20	A	234	9,21	237	9,33	240	9,45	243	9,57	247,5	9,74	252	9,92
		B	58,5	2,30	58,5	2,30	58,5	2,30	58,5	2,30	58,5	2,30	58,5	2,30
		C	116	4,57	117,5	4,63	119	4,69	120,5	4,74	122,75	4,83	125	4,92
		D	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
		E	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
	22	A	237	9,33	240	9,45	243	9,57	246	9,69	250,5	9,86	255	10,04
		B	60	2,36	60	2,36	60	2,36	60	2,36	60	2,36	60	2,36
		C	117,5	4,63	119	4,69	120,5	4,74	122	4,80	124,25	4,89	126,5	4,98
		D	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
		E	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
	25	A	241,5	9,51	244,5	9,63	247,5	9,74	250,5	9,86	255	10,04	259,5	10,22
		B	62,25	2,45	62,25	2,45	62,25	2,45	62,25	2,45	62,25	2,45	62,25	2,45
		C	119,75	4,72	121,25	4,77	122,75	4,83	124,25	4,89	126,5	4,98	128,75	5,07
		D	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
		E	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
	28	A	246	9,69	249	9,80	252	9,92	255	10,04	259,5	10,22	264	10,39
		B	64,5	2,54	64,5	2,54	64,5	2,54	64,5	2,54	64,5	2,54	64,5	2,54
		C	122	4,80	123,5	4,86	125	4,92	126,5	4,98	128,75	5,07	131	5,16
		D	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
		E	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63

Available flanges and shafts for GR38
Flange ed alberi disponibili per GR38

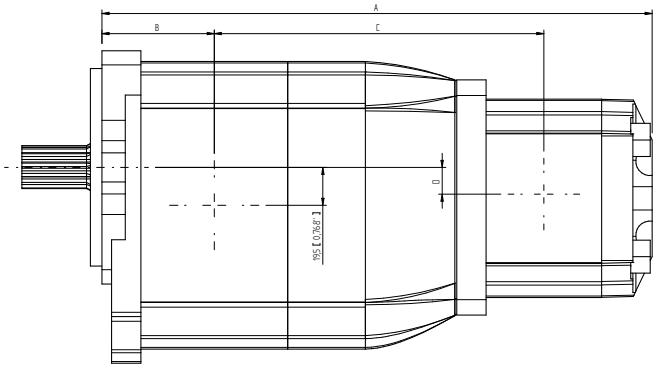
Type flange 2C4 /
Flangia tipo 2C4



Type shaft 2C4 /
Albero tipo 2C4
Max torque /
Coppia max 170 Nm



GR47 - Group 3 tandem pumps



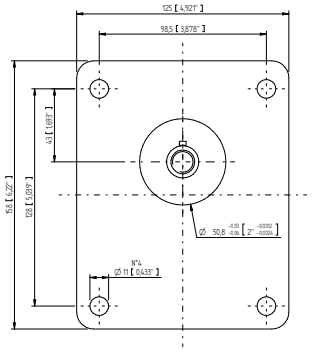
GR47 + GR28			GR28 - 2°									
			4		6		8		10		13	
			mm	inc	mm	inc	mm	inc	mm	inc	mm	inc
GR47 - 1°	28	A	293	11,54	298,50	11,75	303,5	11,95	308,5	12,15	315,4	12,42
		B	67,5	2,66	67,5	2,66	67,5	2,66	67,5	2,66	67,5	2,66
		C	169	6,65	171,75	6,76	174,25	6,86	176,75	6,96	180,20	7,10
		D	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47
	32	A	297	11,69	302,5	11,91	307,5	12,11	312,5	12,30	319,4	12,57
		B	69,5	2,74	69,5	2,74	69,5	2,74	69,5	2,74	69,5	2,74
		C	171	6,73	173,75	6,84	176,25	6,94	178,75	7,04	182,2	7,17
		D	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47
	36	A	301	11,85	306,5	12,07	311,5	12,26	316,5	12,46	323,4	12,73
		B	71,5	2,81	71,5	2,81	71,5	2,81	71,5	2,81	71,5	2,81
		C	173	6,81	175,75	6,91	178,25	7,01	180,75	7,11	184,2	7,25
		D	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47
	40	A	305	12,01	310,5	12,22	315,5	12,42	320,5	12,62	327,4	12,89
		B	73,5	2,89	73,5	2,89	73,5	2,89	73,5	2,89	73,5	2,89
		C	175	6,89	177,75	7,00	180,25	7,96	182,75	7,19	186,2	7,33
		D	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47
	45	A	309,5	12,19	315	12,40	320	12,60	325	12,80	331,9	13,07
		B	75,75	2,98	75,75	2,98	75,75	2,98	75,75	2,98	75,75	2,98
		C	177,25	6,98	180	7,09	182,5	7,19	185	7,28	188,45	7,42
		D	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47
	50	A	314,5	12,38	320	12,60	325	12,80	330	12,99	336,9	13,26
		B	78,25	3,08	78,25	3,08	78,25	3,08	78,25	3,08	78,25	3,08
		C	179,75	7,08	182,50	7,19	185	7,28	187,5	7,38	190,95	7,52
		D	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47

GR47 + GR33			GR33 - 2°							
			10		13		15		18	
			mm	inc	mm	inc	mm	inc	mm	inc
GR47 - 1°	28	A	306,5	12,07	311,4	12,26	316,4	12,46	322,2	12,69
		B	67,5	2,66	67,5	2,66	67,5	2,66	67,5	2,66
		C	181,25	7,14	183,7	7,23	186,2	7,33	189,1	7,44
		D	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	32	A	310,5	12,22	315,4	12,42	320,4	12,61	326,2	12,84
		B	69,5	2,74	69,5	2,74	69,5	2,74	69,5	2,74
		C	183,25	7,21	185,7	7,31	188,2	7,41	191,1	7,52
		D	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	36	A	314,5	12,38	319,4	12,57	324,4	12,77	330,2	13,00
		B	71,5	2,81	71,5	2,81	71,5	2,81	71,5	2,81
		C	185,25	7,29	187,7	7,39	190,2	7,49	193,1	7,60
		D	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	40	A	318,5	12,54	323,4	12,73	328,4	12,93	334,2	13,16
		B	73,5	2,89	73,5	2,89	73,5	2,89	73,5	2,89
		C	187,25	7,37	189,7	7,47	192,2	7,57	195,1	7,68
		D	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	45	A	323	12,72	327,9	12,91	332,9	13,11	338,7	13,33
		B	75,75	2,98	75,75	2,98	75,75	2,98	75,75	2,98
		C	189,5	7,46	191,95	7,56	194,45	7,66	197,35	7,77
		D	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	50	A	328	12,91	332,9	13,11	337,9	13,30	343,7	13,53
		B	78,25	3,08	78,25	3,08	78,25	3,08	78,25	3,08
		C	192	7,56	194,45	7,66	196,95	7,75	199,85	7,87
		D	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54

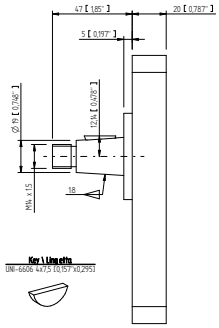
GR47 + GR38			GR38 - 2°											
			16		18		20		22		25		28	
			mm	inc	mm	inc	mm	inc	mm	inc	mm	inc	mm	inc
GR47 - 1°	28	A	310	12,205	313	12,32	316	12,44	319	12,55	323,5	12,73	328	12,91
		B	67,5	2,65	67,5	2,65	67,5	2,65	67,5	2,65	67,5	2,65	67,5	2,65
		C	183	7,20	184,5	7,26	186	7,32	187,5	7,38	189,75	7,47	192	7,55
		D	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62
	32	A	314	12,36	317	12,48	320	12,59	323	12,89	327,5	12,89	332	13,07
		B	69,5	2,73	69,5	2,73	69,5	2,73	69,5	2,73	69,5	2,73	69,5	2,73
		C	185	7,28	186,5	7,34	188	7,40	189,5	7,46	191,75	7,54	194	7,63
		D	15,9	0.62	15,9	0.62	15,9	0.62	15,9	0.62	15,9	0.62	15,9	0.62
	36	A	318	12,52	321	12,38	324	12,75	327	12,87	331,5	13,05	336	13,22
		B	71,50	2,81	71,50	2,81	71,50	2,81	71,50	2,81	71,50	2,81	71,50	2,81
		C	187	7,36	188,5	7,42	190	7,48	191,5	7,53	193,75	7,62	196	7,71
		D	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62
	40	A	322	12,67	325	12,79	328	12,91	331	13,03	335,5	13,2	340	13,38
		B	73,50	2,89	73,50	2,89	73,50	2,89	73,50	2,89	73,50	2,89	73,50	2,89
		C	189	7,44	190,5	7,50	192	7,55	193,5	7,61	195,75	7,70	198	7,79
		D	15,9	0.62	15,9	0.62	15,9	0.62	15,9	0.62	15,9	0.62	15,9	0.62
	45	A	326,5	12,85	329,5	12,97	332,5	13,09	335,5	13,20	340	13,38	344,5	13,56
		B	75,75	2,98	75,75	2,98	75,75	2,98	75,75	2,98	75,75	2,98	75,75	2,98
		C	191,25	7,53	192,75	7,58	194,25	7,64	195,75	7,70	198	7,79	200,25	7,88
		D	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62
	50	A	331,5	13,05	334,5	13,16	337,5	13,28	340,5	13,40	345	13,58	349,5	13,76
		B	78,25	3,08	78,25	3,08	78,25	3,08	78,25	3,08	78,25	3,08	78,25	3,08
		C	193,75	7,62	195,25	7,68	196,75	7,74	198,25	7,80	200,5	7,89	202,75	7,98
		D	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62

GR47 + GR47			GR47 - 2°											
			28		32		36		40		45		50	
			mm	inc	mm	inc	mm	inc	mm	inc	mm	inc	mm	inc
GR47 - 1°	28	A	341,5	13,44	345,5	13,60	349,5	13,76	353,5	13,91	358	14,09	363	14,29
		B	67,5	2,66	67,5	2,66	67,5	2,66	67,5	2,66	67,5	2,66	67,5	2,66
		C	196	7,72	198	7,80	200	7,87	202	7,95	204,25	8,04	206,75	8,14
		D	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,76	19,5	0,77	19,5	0,77
	32	A	345,5	13,60	349,5	13,76	353,5	13,92	357,5	14,07	362	14,25	367	14,45
		B	69,5	2,74	69,5	2,74	69,5	2,74	69,5	2,73	69,5	2,74	69,5	2,74
		C	198	7,80	200	7,87	202	7,95	204	8,03	206,25	8,12	208,75	8,22
		D	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,76	19,5	0,77	19,5	0,77
	36	A	349,5	13,76	353,5	13,92	357,5	14,07	361,5	14,23	366	14,41	371	14,61
		B	71,5	2,81	71,5	2,81	71,5	2,81	71,5	2,81	71,5	2,81	71,5	2,81
		C	200	7,87	202	7,95	204	8,03	206	8,11	208,25	8,20	210,75	8,30
		D	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,76	19,5	0,77	19,5	0,77
	40	A	353,5	13,92	357,5	14,07	361,5	14,23	365,5	14,39	370	14,57	375	14,76
		B	73,5	2,89	73,5	2,89	73,5	2,89	73,5	2,89	73,5	2,89	73,5	2,89
		C	202	7,95	204	8,03	206	8,11	208	8,18	210,25	8,28	212,75	8,38
		D	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,76	19,5	0,77	19,5	0,77
	45	A	358	14,09	362	14,25	366	14,41	370	14,56	374,5	14,74	379,5	14,94
		B	75,75	2,98	75,75	2,98	75,75	2,98	75,75	2,98	75,75	2,98	75,75	2,98
		C	204,25	8,04	206,25	8,12	208,25	8,20	210,25	8,27	212,5	8,37	215	8,46
		D	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,76	19,5	0,77	19,5	0,77
	50	A	363	14,29	367	14,45	371	14,61	375	14,76	379,5	14,94	384,5	15,14
		B	78,25	3,08	78,25	3,08	78,25	3,08	78,25	3,08	78,25	3,08	78,25	3,08
		C	206,75	8,14	208,75	8,22	210,75	8,30	212,75	8,37	215	8,46	217,5	8,56
		D	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,76	19,5	0,77	19,5	0,77

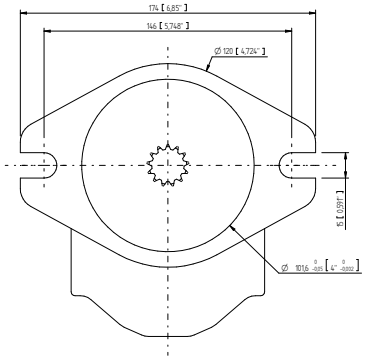
Available flanges and shafts for GR47
Flange ed alberi disponibili per GR47



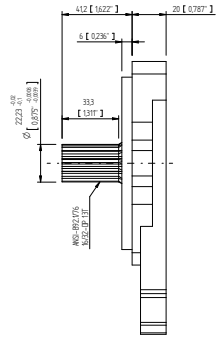
Type flange 3-C9
Flangia tipo 3-C9



Type shaft 3-C9
Albero tipo 3-C9
Max torque */ Coppia max: 250 Nm*

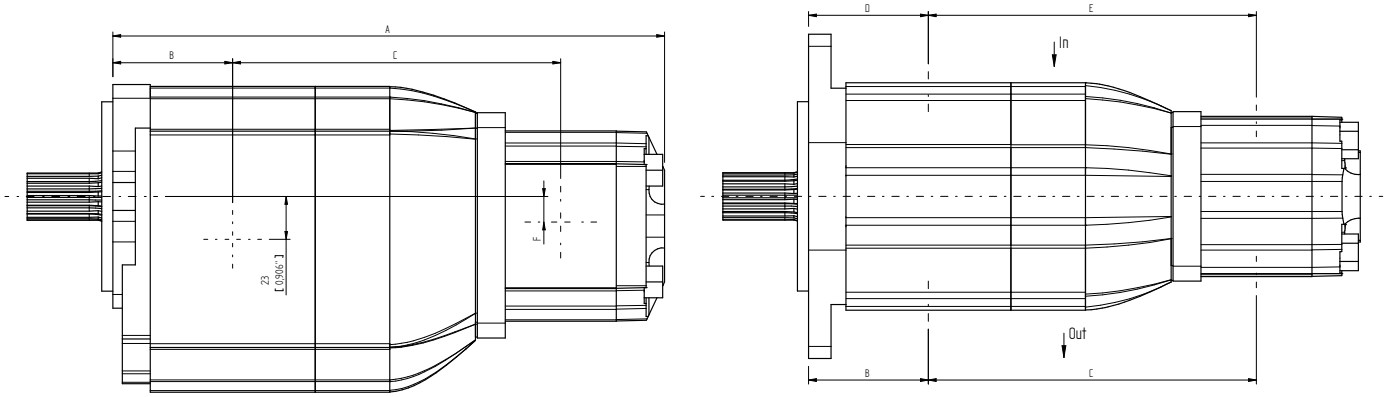


Type flange SAEB-T13
Flangia tipo SAEB-T13



Type shaft SAEB-T13
Albero tipo SAEB-T13
Max torque */ Coppia max: 450 Nm*

GR55 - Group 3 tandem pumps



GR55 + GR28				GR28 - 2°									
				4		6		8		10		13	
				mm	inc	mm	inc	mm	inc	mm	inc	mm	inc
GR55 - 1°	50		A	324	12,76	329,5	12,97	334,5	13,17	339,5	13,37	346,4	13,64
			B	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21
			C	186	7,32	188,75	7,43	191,25	7,53	193,75	7,63	197,2	7,76
			D	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21
			E	186	7,32	188,75	7,43	191,25	7,53	193,75	7,63	197,2	7,76
			F	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47
	63		A	333	13,11	338,5	13,33	343,5	13,52	348,5	13,72	355,4	13,99
			B	86	3,39	86	3,39	86	3,39	86	3,39	86	3,39
			C	190,5	7,50	193,25	7,61	195,75	7,71	198,25	7,81	201,7	7,94
		D	O ports	86	3,39	86	3,39	86	3,39	86	3,39	86	3,39
			OE ports	89,5	3,52	89,5	3,52	89,5	3,52	89,5	3,52	89,5	3,52
		E	O ports	190,5	7,50	193,25	7,61	195,75	7,71	198,25	7,81	201,7	7,94
			OE ports	187	7,36	189,75	7,47	192,25	7,57	194,75	7,67	198,2	7,80
			F	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47
	75		A	341	13,43	346,5	13,64	351,5	13,84	356,5	14,04	363,4	14,31
			B	90	3,54	90	3,54	90	3,54	90	3,54	90	3,54
			C	194,50	7,66	197,25	7,77	199,75	7,86	202,25	7,96	205,7	8,10
		D	O ports	90	3,54	90	3,54	90	3,54	90	3,54	90	3,54
			OE ports	93,5	3,68	93,5	3,68	93,5	3,68	93,5	3,68	93,5	3,68
		E	O ports	194,5	7,66	197,25	7,77	199,75	7,86	202,25	7,96	205,7	8,10
			OE ports	191	7,52	193,75	7,63	196,25	7,73	198,75	7,82	202,2	7,96
			F	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47
	90		A	352	13,86	357,5	14,07	362,5	14,27	367,5	14,47	374,4	14,74
			B	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76
			C	200	7,87	202,75	7,98	205,25	8,08	207,75	8,18	211,2	8,31
		D	O ports	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76
			OE ports	99	3,90	99	3,90	99	3,90	99	3,90	99	3,90
		E	O ports	200	7,87	202,75	7,98	205,25	8,08	207,75	8,18	211,2	8,31
			OE ports	196,5	7,74	199,25	7,84	201,75	7,94	204,25	8,04	207,7	8,18
			F	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47	11,9	0,47

GR55 + GR33				GR33 - 2°							
				10		13		15		18	
				mm	inc	mm	inc	mm	inc	mm	inc
GR55 - 1°	50		A	334,5	13,17	339,4	13,36	344,4	13,56	350,2	13,79
			B	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21
			C	195,25	7,70	197,7	7,78	200,2	7,88	203,1	8,00
			D	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21
			E	195,25	7,69	197,7	7,78	200,2	7,88	203,1	8,00
			F	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	63		A	343,5	13,52	348,4	13,72	353,4	13,91	359,2	14,14
			B	86	3,39	86	3,39	86	3,39	86	3,39
			C	199,75	7,86	202,2	7,96	204,7	8,06	207,6	8,17
		D	O ports	86	3,39	86	3,39	86	3,39	86	3,39
			OE ports	89,5	3,52	89,5	3,52	89,5	3,52	89,5	3,52
		E	O ports	199,75	7,86	202,2	7,96	204,7	8,06	207,6	8,17
			OE ports	196,25	7,73	198,7	7,82	201,2	7,92	204,1	8,04
			F	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	75		A	351,5	13,84	356,4	14,03	361,4	14,23	367,2	14,46
			B	90	3,54	90	3,54	90	3,54	90	3,54
			C	203,75	8,02	206,2	8,12	208,7	8,22	211,6	8,33
		F	O ports	90	3,54	90	3,54	90	3,54	90	3,54
			OE ports	93,5	3,68	93,5	3,68	93,5	3,68	93,5	3,68
		G	O ports	203,75	8,02	206,2	8,12	208,7	8,22	211,6	8,33
			OE ports	200,25	7,88	202,7	7,98	205,2	8,08	208,1	8,19
			F	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54
	90		A	362,5	14,27	367,4	14,46	372,4	14,66	378,2	14,89
			B	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76
			C	209,25	8,24	211,7	8,33	214,2	8,43	217,1	8,55
		D	O ports	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76
			OE ports	99	3,90	99	3,90	99	3,90	99	3,90
		E	O ports	209,25	8,24	211,7	8,33	214,2	8,43	217,1	8,55
			OE ports	205,75	8,10	208,2	8,20	210,7	8,30	213,6	8,41
			F	13,75	0,54	13,75	0,54	13,75	0,54	13,75	0,54

GR55 + GR38				GR38 - 2°									
				16		18		20		22		25		28	
				mm	inc	mm	inc	mm	inc	mm	inc	mm	inc	mm	inc
GR55 - 1°	50		A	338	13,31	341	13,43	344	13,54	347	13,66	351,5	13,84	356	14,02
			B	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21
			C	197	7,76	198,5	7,81	200	7,87	201,5	7,93	203,75	8,02	206	8,11
			D	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21
			E	197	7,76	198,5	7,81	200	7,87	201,5	7,93	203,75	8,02	206	8,11
			F	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
	63		A	347	13,66	350	13,78	353	13,90	356	14,02	360,5	14,19	365	14,37
			B	86	3,39	86	3,39	86	3,39	86	3,39	86	3,39	86	3,39
			C	201,5	7,93	203	7,99	204,5	8,05	206	8,11	208,25	8,20	210,5	8,29
		D	O ports	86	3,39	86	3,39	86	3,39	86	3,39	86	3,39	86	3,39
			OE ports	89,5	3,52	89,5	3,52	89,5	3,52	89,5	3,52	89,5	3,52	89,5	3,52
		E	O ports	201,5	7,93	203	7,99	204,5	8,05	206	8,11	208,25	8,20	210,5	8,29
			OE ports	198	7,80	199,5	7,85	201	7,91	202,5	7,97	204,75	8,06	207	8,15
			F	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63

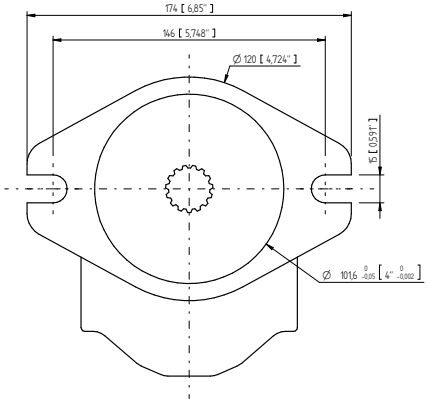
GR55 + GR38				GR38 - 2°											
				16		18		20		22		25		28	
				mm	inc	mm	inc	mm	inc	mm	inc	mm	inc	mm	inc
GR55 - 1°	75		A	355	13,98	358	14,09	361	14,21	364	14,33	368,5	14,51	373	14,69
			B	90	3,54	90	3,54	90	3,54	90	3,54	90	3,54	90	3,54
			C	205,5	8,09	207	8,15	208,5	8,21	210	8,27	212,25	8,36	214,5	8,44
		D	O ports	90	3,54	90	3,54	90	3,54	90	3,54	90	3,54	90	3,54
			OE ports	93,5	3,68	93,5	3,68	93,5	3,68	93,5	3,68	93,5	3,68	93,5	3,68
		E	O ports	205,5	8,09	207	8,15	208,5	8,21	210	8,27	212,25	8,36	214,5	8,44
			OE ports	202	7,95	203,5	8,01	205	8,07	206,5	8,13	208,75	8,22	211	8,31
			F	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63	15,9	0,63
	90		A	366	14,40	369	14,52	372	14,64	375	14,76	379,5	14,94	384	15,11
			B	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76
			C	211	8,3	212,5	8,36	214	8,42	215,5	8,48	217,75	8,57	220	8,66
		D	O ports	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76
			OE ports	99	3,89	99	3,89	99	3,89	99	3,89	99	3,89	99	3,89
		E	O ports	211	8,30	212,5	8,36	214	8,42	215,5	8,48	217,75	8,57	220	8,66
			OE ports	207,5	8,16	209	8,22	210,5	8,28	212	8,34	214,25	8,43	216,5	8,52
			F	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62	15,9	0,62

GR55 + GR47				GR47 - 2°											
				28		32		36		40		45		50	
				mm	inc	mm	inc	mm	inc	mm	inc	mm	inc	mm	inc
GR55 - 1°	50		A	377,5	14,86	381,5	15,02	385,5	15,18	389,5	15,33	394	15,51	399	15,71
			B	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21
			C	218	8,58	220	8,66	222	8,74	224	8,82	226,25	8,91	228,75	9,01
			D	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21	81,5	3,21
			E	218	8,58	220	8,66	222	8,74	224	8,82	226,25	8,91	228,75	9,01
			F	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77
	63		A	386,5	15,22	390,5	15,37	394,5	15,53	398,5	15,69	403	15,87	408	16,06
			B	86	3,39	86	3,39	86	3,39	86	3,39	86	3,39	86	3,39
			C	222,5	8,76	224,5	8,84	226,5	8,92	228,5	9,00	230,75	9,08	233,25	9,18
		D	O ports	86	3,39	86	3,39	86	3,39	86	3,39	86	3,39	86	3,39
			OE ports	89,5	3,52	89,5	3,52	89,5	3,52	89,5	3,52	89,5	3,52	89,5	3,52
		E	O ports	222,5	8,76	224,5	8,84	226,5	8,92	228,5	9,00	230,75	9,08	233,25	9,18
			OE ports	219	8,62	221	8,70	223	8,78	225	8,86	227,25	8,95	229,75	9,05
			F	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77
	75		A	394,5	15,53	398,5	15,69	402,5	15,85	406,5	16,00	411	16,18	416	16,38
			B	90	3,54	90	3,54	90	3,54	90	3,54	90	3,54	90	3,54
			C	226,5	8,92	228,5	9,00	230,5	9,07	232,5	9,15	234,75	9,24	237,25	9,34
		D	O ports	90	3,54	90	3,54	90	3,54	90	3,54	90	3,54	90	3,54
			OE ports	93,5	3,68	93,5	3,68	93,5	3,68	93,5	3,68	93,5	3,68	93,5	3,68
		E	O ports	226,5	8,91	225,5	8,99	230,5	9,07	232,5	9,15	234,75	9,24	237,25	9,34
			OE ports	223	8,78	225	8,85	227	8,93	229	9,01	231,25	9,10	233,75	9,20
			F	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77
	90		A	405,5	15,96	409,5	16,12	413,5	16,28	417,5	16,44	422	16,61	427	16,81
			B	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76
			C	232	9,13	234	9,21	236	9,29	238	9,37	240,25	9,46	242,75	9,56
		D	O ports	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76	95,5	3,76
			OE ports	99	3,90	99	3,90	99	3,90	99	3,90	99	3,90	99	3,90
		E	O ports	232	9,13	234	9,21	236	9,29	238	9,37	240,25	9,46	242,75	9,56
			OE ports	228,5	9,00	230,5	9,07	232,5	9,15	234,5	9,23	236,75	9,32	239,5	9,43
			F	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77

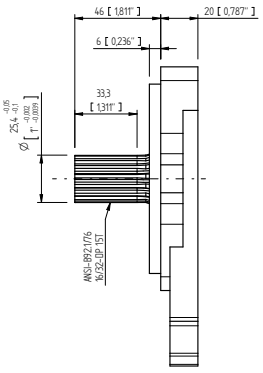
GR55 + GR55				2°													
				50				63				75				90			
				mm		inc		mm		inc		mm		inc		mm		inc	
				O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE
1°	50	A		395		15,55		404		15,91		412		16,22		423		16,65	
		B		81,5		3,21		81,5		3,21		81,5		3,21		81,5		3,2	
		C		227		8,94		231,5		9,11		235,5		9,27		241		9,48	
		D		81,5		3,21		81,5		3,21		81,5		3,21		81,5		3,2	
		E		227		8,94		231,5		9,11		235,5		9,27		241		9,48	
		F		23		0,91		23		0,91		23		0,91		23		0,9	
	63	A		404		15,91		413		16,26		421		16,57		432		17,01	
		B		86		3,39		86		3,39		86		3,39		86		3,39	
		C		231,5		9,11		236		9,29		240		9,45		245,5		9,67	
		D	O ports	86		3,39		86		3,39		86		3,39		86		3,39	
			OE ports	89,5		3,52		89,5		3,52		89,5		3,52		89,5		3,52	
		E	O ports	231,5		9,11		236	239,5	9,29	9,43	240	243,5	9,45	9,59	245,5	249	9,67	9,80
			OE ports	228		8,98		232,5	236	9,15	9,29	236,5	240	9,31	9,45	242	245,5	9,53	9,67
		F		23		0,91		23		0,91		23		0,91		23		0,91	
	75	A		412		16,22		421		16,57		429		16,89		440		17,32	
		B		90		3,54		90		3,54		90		3,54		90		3,54	
		C		235,5		9,27		240		9,45		244		9,61		249,5		9,82	
		F	O ports	90		3,54		90		3,54		90		3,54		90		3,54	
			OE ports	93,5		3,68		93,5		3,68		93,5		3,68		93,5		3,68	
		G	O ports	235,5		9,27		240	243,5	9,45	9,59	244	247,5	9,61	9,74	249,5	253	9,82	9,96
			OE ports	232		9,13		236,5	240	9,31	9,45	240,5	244	9,47	9,61	246	249,5	9,69	9,82
		F		23		0,91		23		0,91		23		0,91		23		0,91	
	90	A		423		16,65		432		17,01		440		17,32		451		17,76	
		B		95,5		3,76		95,5		3,76		95,5		3,76		95,5		3,76	
		C		241		9,49		245,5		9,67		249,5		9,82		255		10,04	
		D	O ports	95,5		3,76		95,5		3,76		95,5		3,76		95,5		3,76	
			OE ports	99		3,90		99		3,90		99		3,90		99		3,90	
		E	O ports	241		9,49		245,5	249	9,67	9,80	249,5	253	9,82	9,96	255	258,5	10,04	10,18
			OE ports	237,5		9,35		242	245,5	9,53	9,67	246	249,5	9,69	9,82	251,5	255	9,90	10,04
		F		23		0,91		23		0,91		23		0,91		23		0,91	

Available flanges and shafts for GR55

Flange ed alberi disponibili per GR55

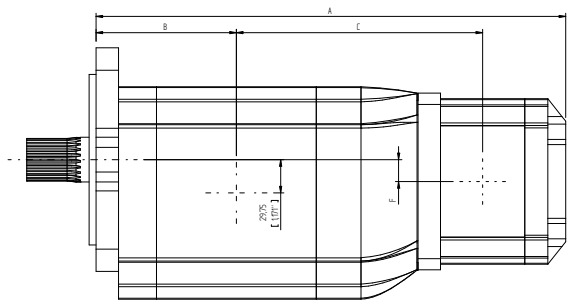


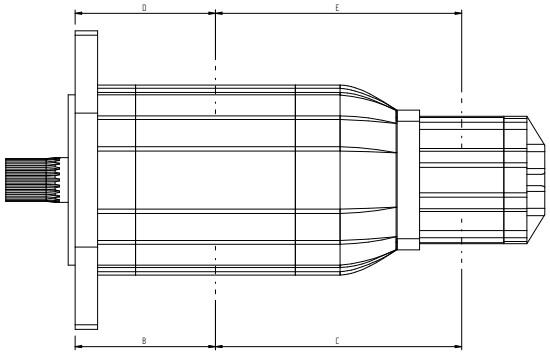
Type flange SAEB-T15
Flangia tipo SAEB-T15



Type shaft SAEB-T15
Albero tipo SAEB-T15
Max torque */ Coppia max: 600 Nm*

GR72 - Group 4 tandem pumps





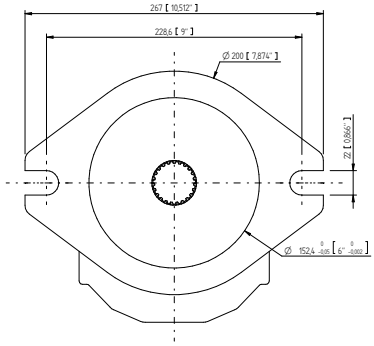
GR72 + GR47			GR47 - 2°											
			28		32		36		40		45		50	
			mm	inc	mm	inc	mm	inc	mm	inc	mm	inc	mm	inc
GR72 - 1°	94	A	430,5	16,95	434,5	17,11	438,5	17,26	442,5	17,42	447	17,60	452	17,80
		B	125,5	4,94	125,5	4,94	125,5	4,94	125,5	4,94	125,5	4,94	125,5	4,94
		C	227	8,94	229	9,02	231	9,09	233	9,17	235,25	9,26	237,75	9,36
		D	128,5	5,06	128,5	5,06	128,5	5,06	128,5	5,06	128,5	5,06	128,5	5,06
		E	224	8,82	226	8,90	228	8,98	230	9,06	232,25	9,14	234,75	9,24
		F	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77
	101	A	433,5	17,07	437,5	17,22	441,5	17,38	445,5	17,54	450	17,72	455	17,91
		B	127	5,00	127	5,00	127	5,00	127	5,00	127	5,00	127	5,00
		C	228,5	9,00	230,5	9,07	232,5	9,15	234,5	9,23	236,75	9,32	239,25	9,42
		D	134	5,28	134	5,28	134	5,28	134	5,28	134	5,28	134	5,28
		E	221,5	8,72	223,5	8,80	225,5	8,88	227,5	8,96	229,75	9,05	232,25	9,14
		F	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77
	125	A	443,5	17,46	447,5	17,62	451,5	17,78	455,5	17,93	460	18,11	465	18,31
		B	132	5,20	132	5,20	132	5,20	132	5,20	132	5,20	132	5,20
		C	233,5	9,19	235,5	9,27	237,5	9,35	239,5	9,43	241,75	9,52	244,25	9,62
		D	145	5,71	145	5,71	145	5,71	145	5,71	145	5,71	145	5,71
		E	220,5	8,68	222,5	8,76	224,5	8,84	226,5	8,92	228,75	9,01	231,25	9,10
		F	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77
	150	A	454	17,87	458	18,03	462	18,19	466	18,35	470,5	18,52	475,5	18,72
		B	137,25	5,40	137,25	5,40	137,25	5,40	137,25	5,40	137,25	5,40	137,25	5,40
		C	238,75	9,40	240,75	9,48	242,75	9,56	244,75	9,64	247	9,72	249,5	9,82
		D	150,25	5,92	150,25	5,92	150,25	5,92	150,25	5,92	150,25	5,92	150,25	5,92
		E	225,75	8,89	227,5	8,96	229,75	9,05	231,75	9,12	234	9,21	236,5	9,31
		F	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77
	175	A	464	18,27	468	18,43	472	18,58	476	18,74	480,5	18,92	485,5	19,11
		B	142,25	5,60	142,25	5,60	142,25	5,60	142,25	5,60	142,25	5,60	142,25	5,60
		C	243,75	9,60	245,75	9,68	247,75	9,75	249,75	9,83	252	9,92	254,5	10,02
		D	155,25	6,11	155,25	6,11	155,25	6,11	155,25	6,11	155,25	6,11	155,25	6,11
		E	230,75	9,08	232,75	9,16	234,75	9,24	236,75	9,32	239	9,41	241,5	9,51
		F	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77
	200	A	474,5	18,68	478,5	18,84	482,5	19,00	486,5	19,15	491	19,33	496	19,53
		B	147,5	5,81	147,5	5,81	147,5	5,81	147,5	5,81	147,5	5,81	147,5	5,81
		C	249	9,80	251	9,88	253	9,96	255	10,04	257,25	10,13	259,75	10,23
		D	160,5	6,32	160,5	6,32	160,5	6,32	160,5	6,32	160,5	6,32	160,5	6,32
		E	236	9,29	238	9,37	240	9,45	242	9,53	244,25	9,62	246,75	9,71
		F	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77	19,5	0,77

GR72 + GR55			GR55 - 2°													
			50				63				75				90			
			mm		inc		mm		inc		mm		inc		mm		inc	
			O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE
GR72 - 1°	94	A	448		17,64		457		17,99		465		18,31		476		18,74	
		B	125,5		4,94		125,5		4,94		125,5		4,94		125,5		4,94	
		C	236		9,29		240,5		9,47		244,5		9,63		250		9,84	
		D	128,5		5,06		128,5		5,06		128,5		5,06		128,5		5,06	
		E	233		9,17		237,5	241	9,35	9,48	241	245	9,50	9,64	247	250,5	9,72	9,86
		F	23		0,91		23		0,9		23		0,9		23		0,9	
	101	A	451		17,76		460		18,11		468		18,42		479		18,85	
		B	127		5,00		127		5,00		127		5,00		127		5,00	
		C	237,5		9,35		242		9,52		246		9,68		251,5		9,9	
		D	134		5,28		134		5,28		134		5,28		134		5,28	
		E	230,5		9,07		235	238,5	9,25	9,39	239	242,5	9,4	9,54	244,5	248	9,62	9,76
		F	23		0,91		23		0,91		23		0,91		23		0,91	
	125	A	461		18,15		470		18,5		478		18,81		489		19,25	
		B	132		5,20		132		5,20		132		5,20		132		5,20	
		C	242,5		9,55		247		9,72		251		9,88		256,5		10,09	
		D	145		5,71		145		5,71		145		5,71		145		5,71	
		E	234,7		9,24		234	237,5	9,21	9,35	238	241,5	9,37	9,5	243,5	247	9,58	9,72
		F	23		0,91		23		0,91		23		0,91		23		0,91	
	150	A	471,5		18,56		480,5		18,91		488,5		19,23		499,5		19,66	
		B	137,25		5,40		137,25		5,40		137,25		5,40		137,25		5,40	
		C	247,7		9,75		252,2		9,93		256,2		10,09		261,7		10,30	
		D	150,25		5,91		150,25		5,91		150,25		5,91		150,25		5,91	
		E	234,75		9,24		239,2	242,7	9,41	9,55	243,2	246,7	9,57	9,71	248,7	252,2	9,7	9,93
		F	23		0,91		23		0,91		23		0,91		23		0,91	
	175	A	481,5		18,96		490,5		19,31		498,5		19,62		509,5		20,05	
		B	142,25		5,60		142,25		5,60		142,25		5,60		142,25		5,60	
		C	252,75		9,95		257,25		10,12		261,25		10,28		266,75		10,50	
		D	155,25		6,11		155,25		6,11		155,25		6,11		155,25		6,11	
		E	239,75		9,44		244,2	247,7	9,61	9,75	248,2	251,7	9,77	9,91	253,7	257,2	9,99	10,12
		F	23		0,91		23		0,91		23		0,91		23		0,91	
	200	A	492		19,37		501		19,72		509		20,04		520		20,47	
		B	147,5		5,81		147,5		5,81		147,5		5,81		147,5		5,81	
		C	258		10,16		262,5		10,33		266,5		10,49		272		10,71	
		D	160,5		6,32		160,5		6,32		160,5		6,32		160,5		6,32	
		E	245		9,64		249,5	253	9,82	9,96	253,5	257	9,98	10,11	259	262,5	10,19	10,33
		F	23		0,91		23		0,91		23		0,91		23		0,91	

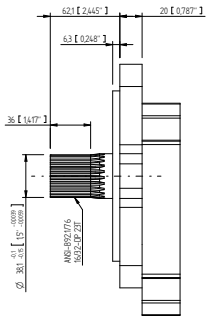
GR72 + GR72			GR72 - 2°											
			94		100		125		150		175		200	
			mm	inc	mm	inc	mm	inc	mm	inc	mm	inc	mm	inc
GR72 - 1°	94	A	559,8	22,03	562,8	22,15	572,8	22,55	583,3	22,96	593,3	23,35	603,8	23,77
		B	125,5	4,94	125,5	4,94	125,5	4,94	125,5	4,94	125,5	4,94	125,5	4,94
		C	314,8	12,39	316,3	12,45	321,3	12,65	326,55	12,86	331,55	13,05	336,8	13,26
		D	128,5	5,06	128,5	5,06	128,5	5,06	128,5	5,06	128,5	5,06	128,5	5,06
		E	314,8	12,39	320,3	12,61	331,3	13,04	336,5	13,25	341,55	13,45	346,8	13,65
		F	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17
	101	A	562,8	22,16	565,8	22,28	575,8	22,67	586,3	23,08	596,3	23,48	606,8	23,89
		B	127	5,00	127	5,00	127	5,00	127	5,00	127	5,00	127	5,00
		C	316,3	12,45	317,8	12,51	322,8	12,71	328	12,91	333	13,11	338,3	13,32
		D	134	5,28	134	5,28	134	5,28	134	5,28	134	5,28	134	5,28
		E	312,3	12,30	317,8	12,51	328,8	12,94	334	13,15	339	13,35	344,3	13,56
		F	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17
	125	A	572,8	22,55	575,8	22,67	585,8	23,06	596,3	23,48	606,3	23,87	616,8	24,28
		B	132	5,20	132	5,20	132	5,20	132	5,20	132	5,20	132	5,20
		C	321,3	12,65	322,8	12,71	327,8	12,91	333	13,11	338	13,31	343	13,50
		D	145	5,71	145	5,71	145	5,71	145	5,71	145	5,71	145	5,71
		E	311,3	12,26	316,8	12,47	327,8	12,91	333	13,11	338	13,31	343,3	13,52
		F	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17
	150	A	583,3	22,96	586,3	23,08	596,3	23,48	606,8	23,89	616,8	24,28	627,3	24,70
		B	137,25	5,40	137,25	5,40	137,25	5,40	137,25	5,40	137,25	5,40	137,25	5,40
		C	326,55	12,85	328	12,91	333	13,11	338,3	13,32	343,3	13,52	348,5	13,72
		D	150,25	5,91	150,25	5,91	150,25	5,91	150,25	5,91	150,25	5,91	150,25	5,91
		E	316,55	12,46	322	12,67	333	13,11	338,3	13,31	343,3	13,51	348,55	13,72
		F	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17
	175	A	593,3	23,36	596,3	23,47	606,3	23,87	616,8	24,28	626,8	24,67	637,3	25,09
		B	142,25	5,60	142,2	5,60	142,2	5,60	142,2	5,60	142,2	5,60	142,2	5,60
		C	331,55	13,05	330	13,11	338	13,30	343,3	13,51	348,3	13,71	353,55	13,91
		D	155,25	6,11	155,25	6,11	155,25	6,11	155,25	6,11	155,25	6,11	155,25	6,11
		E	321,55	12,65	327	12,87	338	13,3	343,3	13,51	348,3	13,71	353,55	13,91
		F	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17
	200	A	603,8	23,77	606,8	23,89	616,8	24,28	627,3	24,69	637,3	25,09	647,8	25,5
		B	147,5	5,8	147,5	5,8	147,5	5,8	147,5	5,8	147,5	5,8	147,5	5,8
		C	336,8	13,26	338,3	13,31	343,3	13,51	348,55	13,72	353,55	13,91	358,8	14,12
		D	160,5	6,31	160,5	6,31	160,5	6,31	160,5	6,31	160,5	6,31	160,5	6,31
		E	326,8	12,86	332,3	13,08	343,3	13,51	348,55	13,72	353,55	13,91	358,8	14,12
		F	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17	29,75	1,17

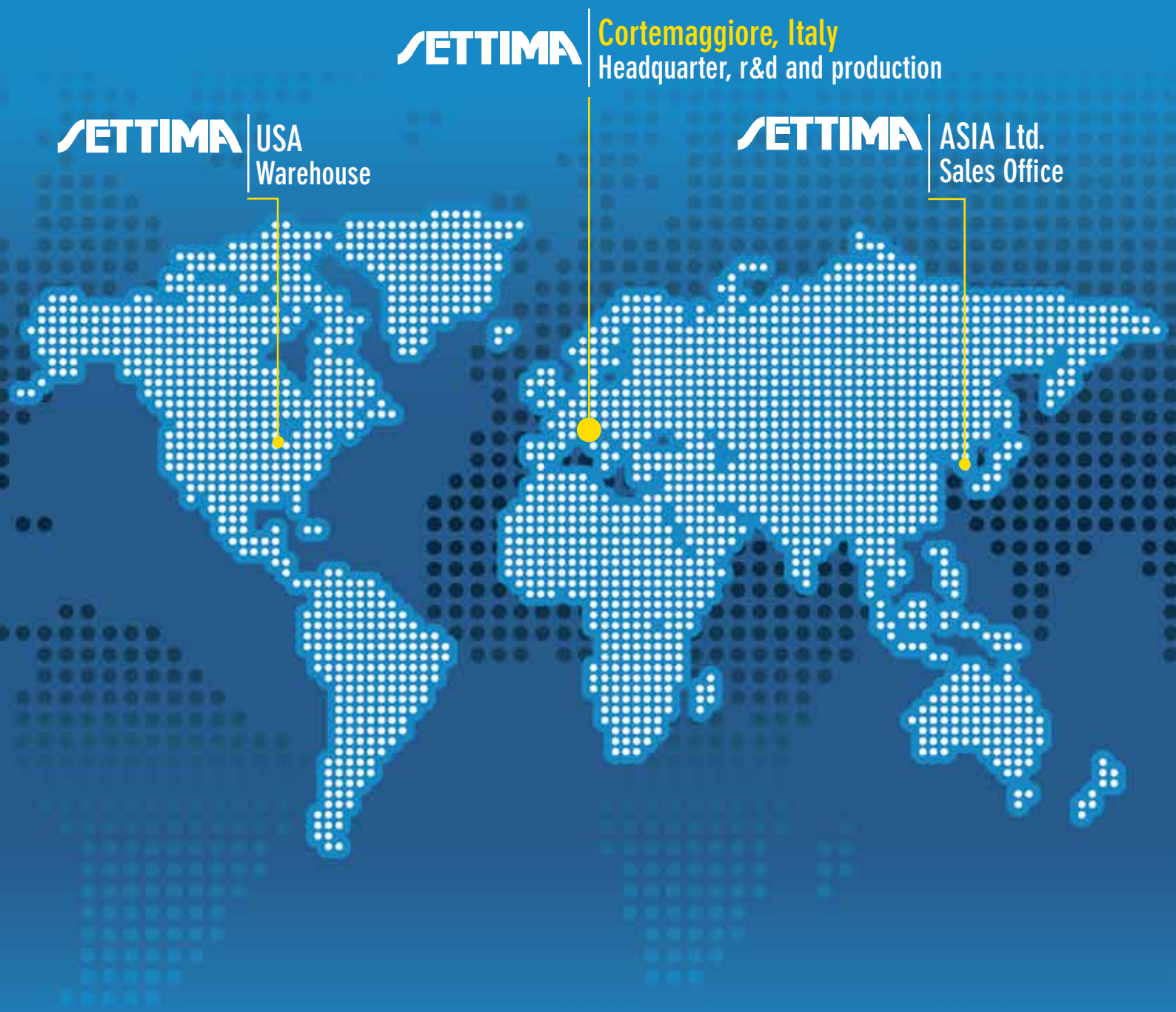
Available flanges and shafts for GR72
Flange ed alberi disponibili per GR72

Type flange SAED-23T
Flangia tipo SAED-23T



Type shaft SAED-23T
Albero tipo SAED-23T
Max torque */ Coppia max: 1000 Nm*





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info@settima.it

SETTIMA®
research & innovation, always

Apr2022

SETTIMA®
research & innovation, always

Since 1978 the benchmark for three-screw pumps

THE INNOVATIVE MODULAR
THREE-SCREW PUMP
QUICKLY ADAPTABLE ON DEMAND

triumflex®

INTERNATIONALLY PATENTED

DESIGNED & MADE IN ITALY

GREEN SILENCE®

Green Silence Group

LEADING THE ENERGY TRANSITION, TOGETHER

Driven by the combined expertise of Settima, Spin, and Motive, GREEN SILENCE GROUP delivers groundbreaking hydraulic, electro-hydraulic, and mechatronic solutions backed by exceptional technical support and real value.

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ULTRA-SILENT HYDRAULICS

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Engineering Solutions

ELECTRIC MOTORS & ACTUATORS, ADVANCED ENGINEERING & CONTROL ELECTRONICS

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THE INNOVATIVE MODULAR THREE-SCREW PUMP QUICKLY ADAPTABLE ON DEMAND

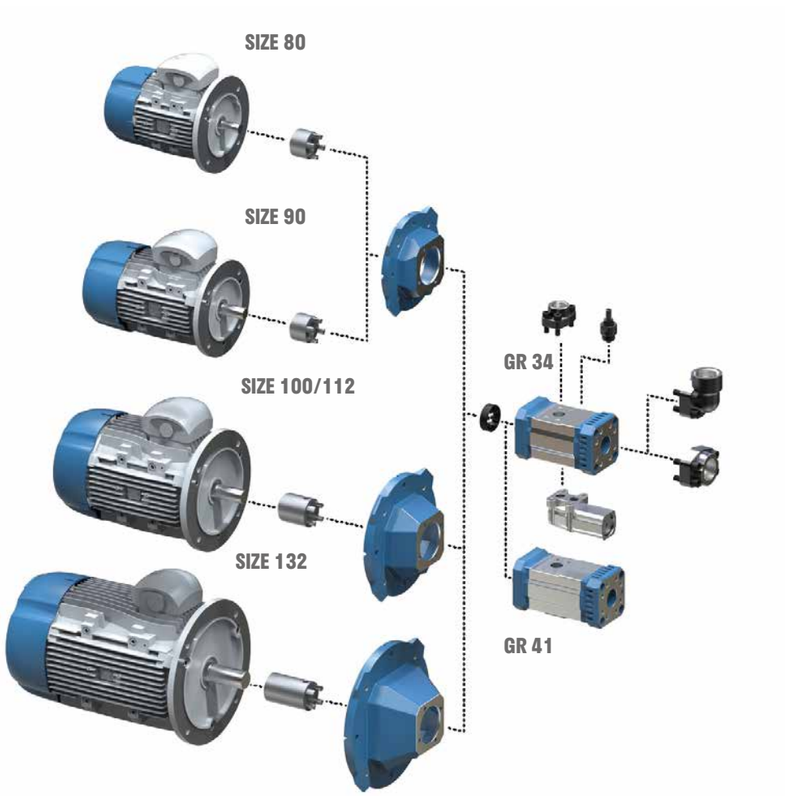
Innovative modular design to cover a wide range of configurations

MODULAR THREE-SCREW

TRIUMFLEX PUMP

ADVANTAGES

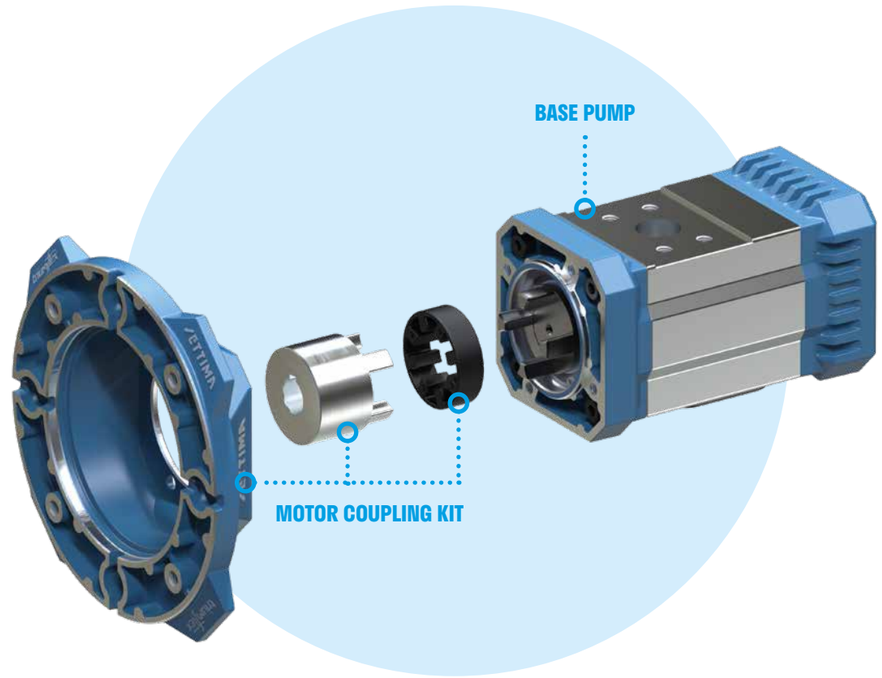
- Universal base pump configured according to application
- Can be easily re-configured by replacing the optional kits only
- Ultra compact footprint to fit all hydraulic systems
- Unparalleled product availability
- Base pump can be coupled to different motor sizes
- Each pump size optimized to operate from 500 to 3600 RPM
- One stop shop for pump, coupling kit and electric motor (optional)
- Relief valve, noise-cancelling valve (optional kits according to the specific application)



Example for GR34 and GR41 only

MODULAR · ADAPTIVE · COMPACT · NO PULSATIONS · QUIET · AFFORDABLE · ENVIRONMENTALLY SUSTAINABLE

2 AND 4 POLES
FOR ALL MODELS



- **FLOW RATE:** (L/min) 9 ÷ 456
- **VISCOSITY:** (cSt) 15 ÷ 3000
- **MAX DIFF. PRESSURE:** (bar) 50
- **SPEED:** (rpm) 500 ÷ 3600
- **NPSHr:** ≥ 1,5 mWc

MAIN COMPONENTS	MATERIAL
Idler screw	Cast iron
Main screw	Carbon steel
Front flange	Aluminium
Rear flange	Aluminium
Pump casing	Aluminium
Seals	NBR

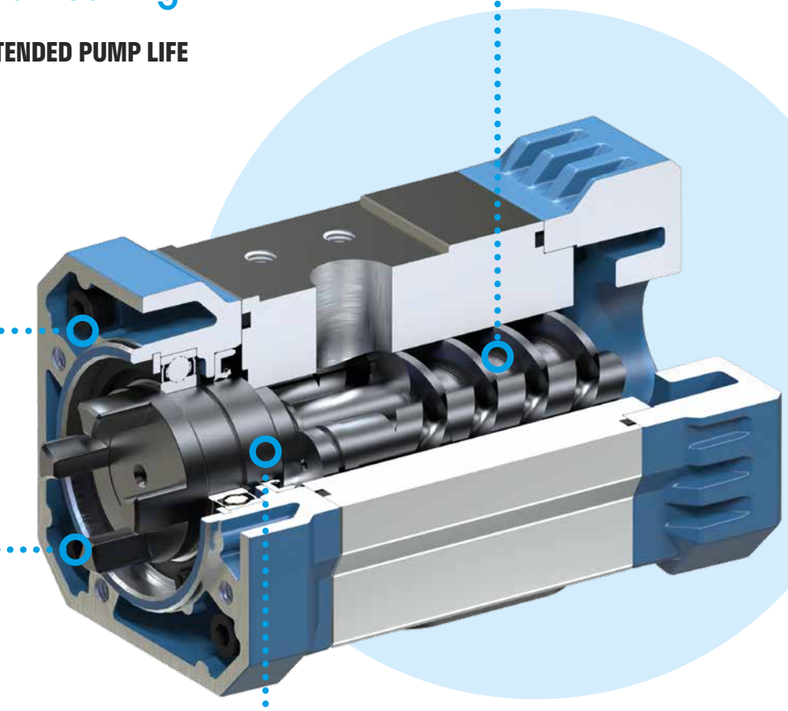
INNOVATION

SETTIMA Patended Design

+ ULTRA COMPACT WITH CUTTING EDGE PERFORMANCES

External Shielded Bearing

+ EXTENDED PUMP LIFE



Patented Built-in Jaw Coupling

+ HEAVY DUTY DESIGN FOR 0÷3600 RPM

Universal Lip Seal

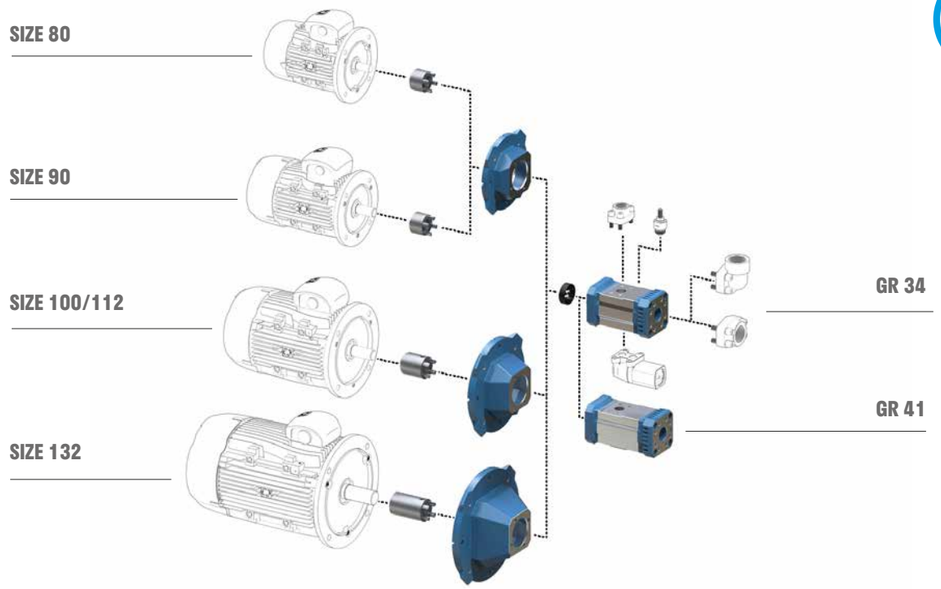
+ SUITABLE FOR ALL APPLICATIONS

MODULAR DESIGN

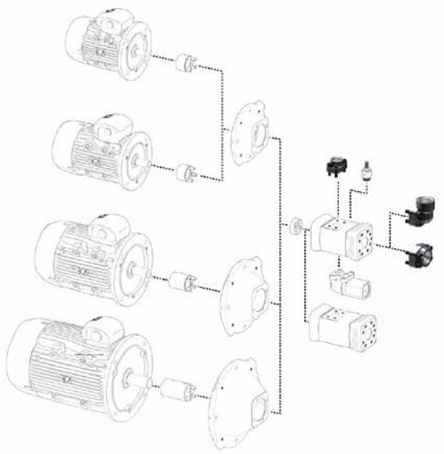
MODULAR

ADAPTIVE

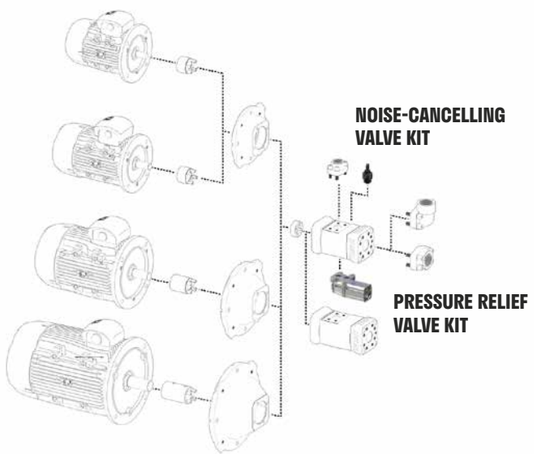
MOTOR COUPLING KITS



PORT KITS (OPTIONAL)



VALVE KITS (OPTIONAL)



Example for GR34 and GR41 only

BASE PUMP
+ MOTOR COUPLING KIT

MODULAR

ADAPTIVE

PORTS ORIENTATION OPTIONS

NO SUCTION FLANGE KIT

SUCTION FLANGE KIT: T1

SUCTION FLANGE KIT: T2

Please contact Settima for T2 + RP valve

SUCTION FLANGE KIT: T3

SUCTION FLANGE KIT: T4

SUCTION FLANGE KIT: AX

Axial suction (SAE - threaded)

VALVE KITS

NOISE-CANCELLING VALVE KIT: NV

The NV KIT is engineered to cancel noise and vibrations due to cavitation generated by very high amount of trapped air in the pumped fluid. Very effective in applications such as gears splash lubrication or low volume lube oil systems.

PRESSURE RELIEF VALVE KIT: RP

Safety valve with adjustable setting pressure:
(01) 2 ÷ 15 bar
(02) 15 ÷ 50 bar

INSTALLATION

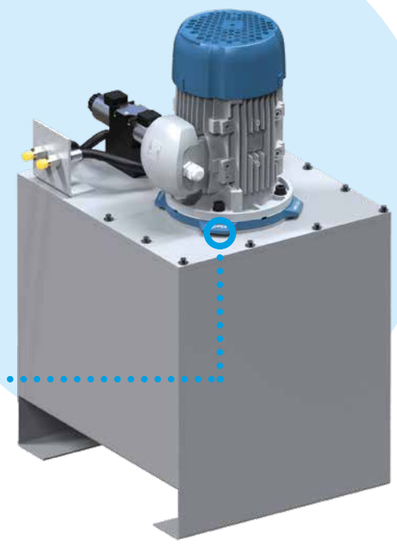
Triumflex® is already equipped with a flange suitable for **Tank Top Installation**.

MODULAR

ADAPTIVE

HORIZONTAL INSTALLATION

VERTICAL INSTALLATION



Built-in
Tank Top Flange

\+ **NO EXTRA COST**

QUICK REFERENCE CHART

Reference Example:

Speed: 1500 rpm

Pressure: 10 bar

Operative viscosity: 46 cSt

(For pump selection please refer to Performance Charts pages 24-63)

SIZE	PITCH	CODE	DISPLACEMENT [CC]	FLOW [L/min]	RATED POWER [kW]
34	34	34	20	26	0,7
	38	38	22	29	0,7
	50	50	29	38	1
41	48	48	40	55	1,3
	58	58	49	66	1,6
	68	68	57	78	1,9
46	62	62	68	95	2,2
	74	74	81	113	2,7
	88	88	96	135	3,2

Reference Example:

Speed: 3000 rpm

Pressure: 10 bar

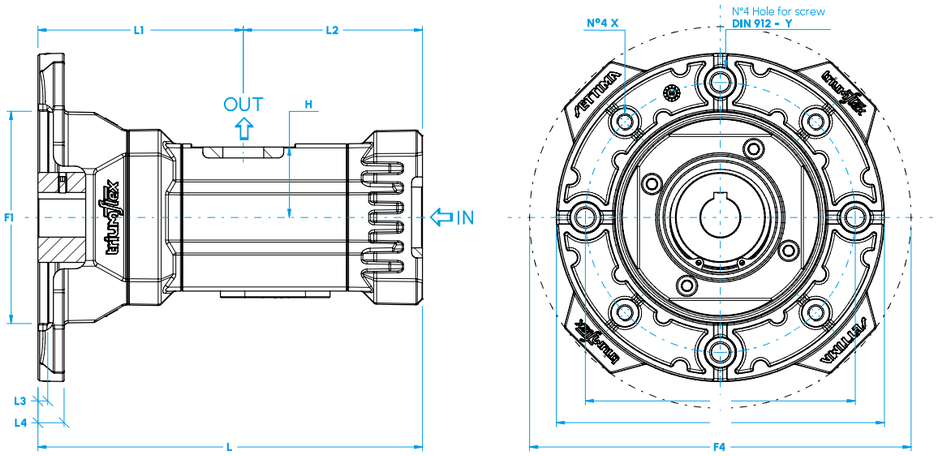
Operative viscosity: 46 cSt

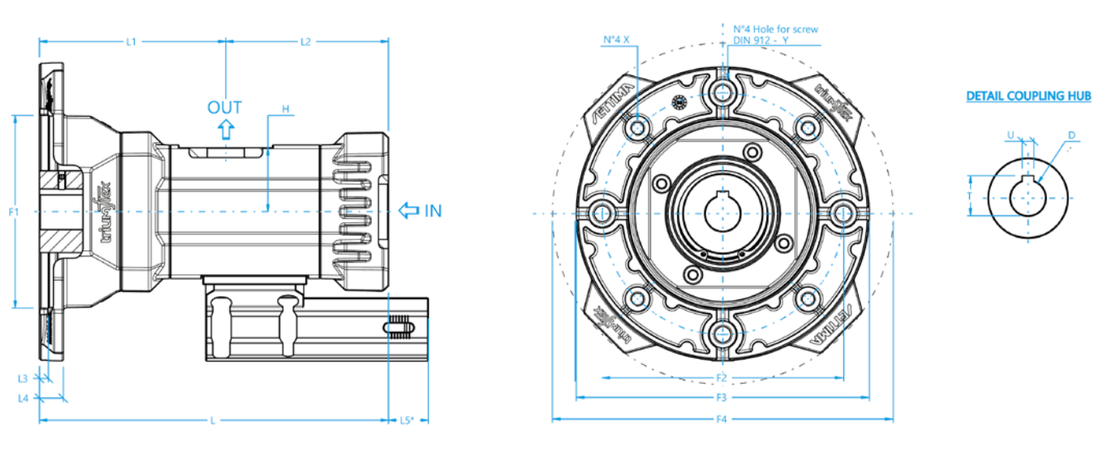
(For pump selection please refer to Performance Charts pages 24-63)

SIZE	PITCH	CODE	DISPLACEMENT [CC]	FLOW [L/min]	RATED POWER [kW]
34	34	34	20	55	1,5
	38	38	22	62	1,7
	50	50	29	81	2,2
41	48	48	40	115	3
	58	58	49	139	3,6
	68	68	57	163	4,2
46	62	62	68	197	4,9
	74	74	81	235	5,9
	88	88	96	280	7

DIMENSIONAL DRAWINGS

COMPACT





	Flange					Shaft				Ports		Pump				
Pump Code	**ØF1**	**ØF2**	**ØF3**	**ØF4**	**X**	**Y**	**D**	**U**	**T**	**IN**	**OUT**	**L**	**L1**	**L2**	**L3**	**L4**
SM-TRFX034---M080	130	165	201	233	M10	M10	19	6	21,8	1"½ SAE-3000	1" SAE-3000	235	125,5	109,5	6	16
SM-TRFX034---M090	130	165	201	233	M10	M10	24	8	27,3	1"½ SAE-3000	1" SAE-3000	235	125,5	109,5	6	16
SM-TRFX034---M112	180	215	251	286	M12	M12	28	8	31,3	1"½ SAE-3000	1" SAE-3000	262	152,5	109,5	7	21
SM-TRFX034---M132	230	265	301	333	M12	M12	38	10	41,3	1"½ SAE-3000	1" SAE-3000	288,5	179	109,5	7	21
SM-TRFX041---M080	130	165	201	233	M10	M10	19	6	21,8	1"½ SAE-3000	1" SAE-3000	255	125,5	129,5	6	16
SM-TRFX041---M090	130	165	201	233	M10	M10	24	8	27,3	1"½ SAE-3000	1" SAE-3000	255	125,5	129,5	6	16
SM-TRFX041---M112	180	215	251	286	M12	M12	28	8	31,3	1"½ SAE-3000	1" SAE-3000	282	152,5	129,5	7	21
SM-TRFX041---M132	230	265	301	333	M12	M12	38	10	41,3	1"½ SAE-3000	1" SAE-3000	308,5	179	129,5	7	21
SM-TRFX046---M112	180	215	251	286	M12	M12	28	8	31,3	2"½ SAE-3000	1"½ SAE-3000	327,5	167,5	160	7	21
SM-TRFX046---M132	230	265	301	333	M12	M12	38	10	41,3	2"½ SAE-3000	1"½ SAE-3000	347,5	187,5	160	7	21
SM-TRFX046---M160	250	300	351	383	M16	M16	42	12	45,3	2"½ SAE-3000	1"½ SAE-3000	390,5	230,5	160	8	25
SM-TRFX046---M180	250	300	351	383	M16	M16	48	14	51,8	2"½ SAE-3000	1"½ SAE-3000	390,5	230,5	160	8	25

	Flange					Shaft				Ports		Pump					
Pump Code	**ØF1**	**ØF2**	**ØF3**	**ØF4**	**X**	**Y**	**D**	**U**	**T**	**IN**	**OUT**	**L**	**L1**	**L2**	**L3**	**L4**	**L5**
SM-TRFX034---M080	130	165	201	233	M10	M10	19	6	21,8	1"½ SAE-3000	1" SAE-3000	235	125,5	109,5	6	16	**27**
SM-TRFX034---M090	130	165	201	233	M10	M10	24	8	27,3	1"½ SAE-3000	1" SAE-3000	235	125,5	109,5	6	16	**27**
SM-TRFX034---M112	180	215	251	286	M12	M12	28	8	31,3	1"½ SAE-3000	1" SAE-3000	262	152,5	109,5	7	21	**27**
SM-TRFX034---M132	230	265	301	333	M12	M12	38	10	41,3	1"½ SAE-3000	1" SAE-3000	288,5	179	109,5	7	21	**27**
SM-TRFX041---M080	130	165	201	233	M10	M10	19	6	21,8	1"½ SAE-3000	1" SAE-3000	255	125,5	129,5	6	16	**7**
SM-TRFX041---M090	130	165	201	233	M10	M10	24	8	27,3	1"½ SAE-3000	1" SAE-3000	255	125,5	129,5	6	16	**7**
SM-TRFX041---M112	180	215	251	286	M12	M12	28	8	31,3	1"½ SAE-3000	1" SAE-3000	282	152,5	129,5	7	21	**7**
SM-TRFX041---M132	230	265	301	333	M12	M12	38	10	41,3	1"½ SAE-3000	1" SAE-3000	308,5	179	129,5	7	21	**7**
SM-TRFX046---M112	180	215	251	286	M12	M12	28	8	31,3	2"½ SAE-3000	1"½ SAE-3000	327,5	167,5	160	7	21	**15**
SM-TRFX046---M132	230	265	301	333	M12	M12	38	10	41,3	2"½ SAE-3000	1"½ SAE-3000	347,5	187,5	160	7	21	**15**
SM-TRFX046---M160	250	300	351	383	M16	M16	42	12	45,3	2"½ SAE-3000	1"½ SAE-3000	390,5	230,5	160	8	25	**15**
SM-TRFX046---M180	250	300	351	383	M16	M16	48	14	51,8	2"½ SAE-3000	1"½ SAE-3000	390,5	230,5	160	8	25	**15**

CODING SYSTEM

TRIUMFLEX PUMP

CONFIGURATION

How to configure your TRIUMFLEX® PUMP

The Triumflex® **Ordering Code** is composed of maximum **9 items**.

ITEM	ITEM DESCRIPTION	ITEM CODE
1	Category pump model Triumflex®	SM-TRFX
2	Type	Assembled (A)
3	Pump size	026 - 034 - 041 - 046 - 053
4	Screw pitch	From 029 to 105
5	Motor coupling KIT	From motor size 80 to 200
6	Inlet - Port type	T1 - T2 - T3 - T4 or AX BSPP threaded
7	Outlet - Port type	M BSPP threaded
8	Noise-cancelling valve	NV
9	Pressure relief valve (RP) setting range	5 ÷ 15 bar (01) / 10 ÷ 50 bar (02)

ORDERING CODE EXAMPLE

YOUR TRIUMFLEX® ASSEMBLED PUMP

ITEM 1	ITEM 2	ITEM 3	ITEM 4	ITEM 5	ITEM 6	ITEM 7	ITEM 8	ITEM 9
SM-TRFX	A	034	038	M08	T4	M	NV	01

P/N: SM-TRFXA000001
ORDERING CODE: **SM-TRFXA034038M08T4MNV01**

STEP 1

Select your Triumflex® Base Pump

Your **Base Pump** model depends on:

- Your **oil viscosity**
- Required **flow** and **pressure**

[Ref. to Performance Charts pages 24-63]

ITEM	CATEGORY	CODE
1	Triumflex® pump	SM-TRFX

ITEM	TYPE	CODE
2	Assembled	A

ITEM	PUMP SIZE	CODE
3	26	026
	34	034
	41	041
	46	046
	53	053

ITEM	SIZE	SCREW PITCH	CODE
4	26	29	029
		33	033
		41	041
		49	049
	34	34	034
		38	038
		50	050
	41	48	048
		58	058
		68	068
	46	62	062
		74	074
		88	88
	53	72	072
		82	082
		92	092
		105	105

ORDERING CODE EXAMPLE

TRIUMFLEX® BASE PUMP

P/N: SM-TRFXA000001
ORDERING CODE: **SM-TRFXA034038...**

A = ASSEMBLED PUMP
034 = PUMP SIZE
038 = SCREW PITCH

STEP 2

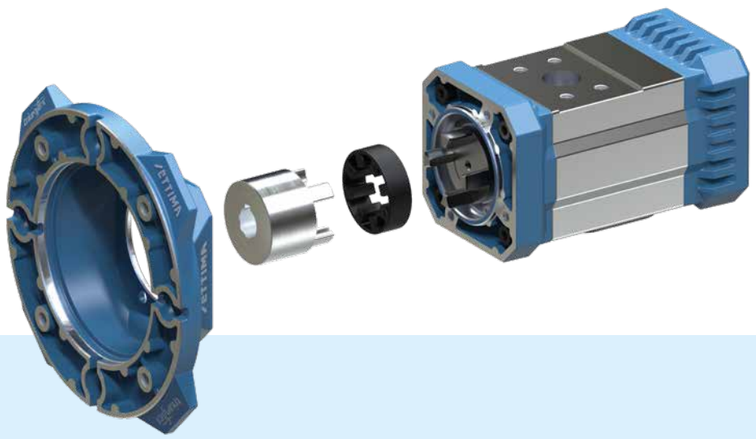
Select your Motor Coupling KIT

Your **Motor Coupling KIT** type depends on:

- Motor **Frequency** (Hz) and **Speed** (rpm)

[Ref. to Performance Charts pages 24-63]

ITEM	COUPLED MOTOR	CODE
5	80	M08
	90	M09
	100-112	M11
	132	M13
	160	M16
	180	M18
	200	M20



ORDERING CODE EXAMPLE

TRIUMFLEX® PUMP + MOTOR COUPLING KIT

P/N: SM-TRFXA000001

ORDERING CODE: **SM-TRFXA034038M08...**

A = ASSEMBLED PUMP
034 = PUMP SIZE
038 = SCREW PITCH
M08 = MOTOR COUPLING KIT 80

STEP 3

Select your Port type - Suction

Your **Port KIT** type depends on:

- Your **System Layout**

ITEM	INLET PORT TYPE	CODE
6	Without inlet port KIT	--
	Radial-90° T1 BSPP threaded	T1
	Radial-90° T2 BSPP threaded	T2
	Radial-90° T3 BSPP threaded	T3
	Radial-90° T4 BSPP threaded	T4
	Axial BSPP threaded	AX

ITEM	OUTLET PORT TYPE	CODE
7	Without outlet port KIT	--
	BSPP threaded	M

[-]

[T1]

[T2]

[T3]

[T4]

[AX]

[M]

ORDERING CODE EXAMPLE

TRIUMFLEX® PUMP + MOTOR COUPLING KIT + PORT KIT

P/N: SM-TRFXA000001

ORDERING CODE: **SM-TRFXA034038M08T4M...**

A = ASSEMBLED PUMP
034 = PUMP SIZE
038 = SCREW PITCH
M08 = MOTOR COUPLING KIT 80

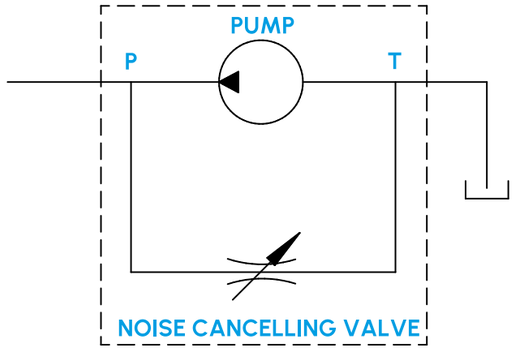
T4 = RADIAL-90° T4 BSPP THREADED
M = WITH OUTLET PORT BSPP THREADED

STEP 4

Noise Cancelling Valve KIT

If your system has a very high amount of trapped air select the NV Valve KIT.

ITEM	NOISE-CANCELLING VALVE	CODE
8	Without noise-cancelling valve	--
	With noise-cancelling valve	NV



[NV]

ORDERING CODE EXAMPLE

TRIUMFLEX® PUMP + MOTOR COUPLING KIT + PORT KIT + NV VALVE KIT

P/N: SM-TRFXA000001

ORDERING CODE: **SM-TRFXA034038M08T4MNV...**

A = ASSEMBLED PUMP
034 = PUMP SIZE
038 = SCREW PITCH
M08 = MOTOR COUPLING KIT 80

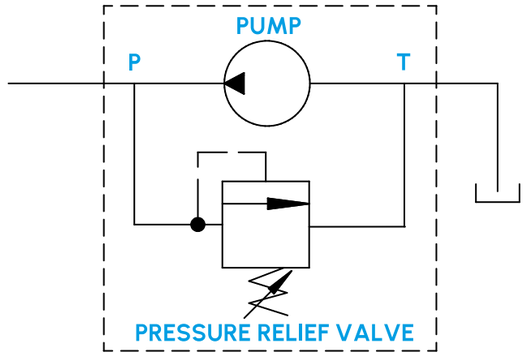
T4 = RADIAL-90° T4 BSPP THREADED
M = WITH OUTLET PORT BSPP THREADED
NV = NOISE-CANCELLING VALVE

STEP 5

Pressure Relief Valve KIT

If your pump requires protection against overpressure select RP Valve KIT.

ITEM	PRESSURE RELIEF VALVE SETTING RANGE	CODE
9	Without pressure relief valve	--
	2 ÷ 15 bar	01
	10 ÷ 50 bar	02



[01] [02]

ORDERING CODE EXAMPLE

TRIUMFLEX® PUMP + MOTOR COUPLING KIT + PORT KIT + NV VALVE KIT + RP VALVE KIT

P/N: SM-TRFXA000001

ORDERING CODE: **SM-TRFXA034038M08T4MNV01**

A = ASSEMBLED PUMP
034 = PUMP SIZE
038 = SCREW PITCH
M08 = MOTOR COUPLING KIT 80

T4 = RADIAL-90° T4 BSPP THREADED
M = WITH OUTLET PORT BSPP THREADED
NV = NOISE-CANCELLING VALVE
01 = PRESSURE RELIEF VALVE (setting range 5÷15 bar)

PERFORMANCE CHART

50HZ SERIES

50HZ SERIES

SM-TRFXA034034

PERFORMANCE CHART

Fluid Viscosity	cSt	15									46									100								
Motor Speed	rpm	950			1450			2900			950			1450			2900			950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Base Pump Model SM-TRFXA034034 Displacement [CC]: 20	0	19	0,1	80 (0,37)	28	0,1	80 (0,55)	57	0,3	80 (0,75)	19	0,1	80 (0,37)	28	0,2	80 (0,55)	57	0,5	80 (0,75)	19	0,1	80 (0,37)	28	0,2	80 (0,55)	57	0,6	80 (0,75)
	5	15	0,2	80 (0,37)	24	0,3	80 (0,55)	53	0,8	80 (1,1)	16	0,2	80 (0,37)	26	0,4	80 (0,55)	54	0,9	80 (1,1)	17	0,3	80 (0,55)	27	0,5	80 (0,75)	55	1,1	90 (1,5)
	10	13	0,4	80 (0,55)	23	0,6	80 (0,75)	51	1,3	90 (1,5)	15	0,4	80 (0,55)	25	0,6	80 (0,75)	53	1,4	90 (1,5)	16	0,4	80 (0,55)	26	0,7	80 (0,75)	54	1,6	90 (2,2)
	15	12	0,5	80 (0,55)	21	0,8	90 (1,1)	50	1,7	90 (2,2)	14	0,6	90 (0,75)	24	0,9	90 (1,1)	53	1,9	90 (2,2)	16	0,6	90 (0,75)	26	1	90 (1,1)	54	2,1	90 (2,2)
	20	11	0,7	90 (0,75)	20	1,1	90 (1,1)	49	2,2	90 (2,2)	14	0,7	90 (0,75)	23	1,1	90 (1,5)	52	2,4	100 (3)	15	0,8	90 (1,1)	25	1,2	90 (1,5)	53	2,6	100 (3)
	25	10	0,8	90 (1,1)	19	1,3	90 (1,5)	48	2,7	100 (3)	13	0,8	90 (1,1)	23	1,4	90 (1,5)	51	2,9	100 (3)	15	0,9	90 (1,1)	25	1,4	90 (1,5)	53	3,1	112 (4)
	30	9	1	90 (1,1)	19	1,5	90 (1,5)	47	3,2	112 (4)	13	1	90 (1,1)	22	1,6	100 (2,2)	51	3,4	112 (4)	15	1,1	90 (1,1)	24	1,7	100 (2,2)	53	3,6	112 (4)
	35	8	1,2	100 (1,5)	18	1,8	100 (2,2)	46	3,7	112 (4)	12	1,2	100 (1,5)	22	1,9	100 (2,2)	50	3,9	112 (4)	14	1,2	100 (1,5)	24	1,9	100 (2,2)	52	4,1	132 (5,5)
	40	7	1,3	100 (1,5)	17	2	100 (2,2)	45	4,2	132 (5,5)	12	1,3	100 (1,5)	21	2,1	100 (2,2)	50	4,4	132 (5,5)	14	1,4	100 (1,5)	24	2,2	100 (2,2)	52	4,6	132 (5,5)
	45	7	1,5	100 (1,5)	16	2,3	100 (3)	45	4,6	132 (5,5)	11	1,5	100 (1,5)	21	2,3	100 (3)	49	4,9	132 (5,5)	14	1,5	100 (1,5)	23	2,4	100 (3)	52	5,1	132 (5,5)
	50	6	1,6	112 (2,2)	16	2,5	100 (3)	44	5,1	132 (5,5)	11	1,7	112 (2,2)	21	2,6	100 (3)	49	5,3	132 (5,5)	13	1,7	112 (2,2)	23	2,7	100 (3)	52	5,6	132 (7,5)

Fluid Viscosity	cSt	220									320									460								
Motor Speed	rpm	950			1450			2900			950			1450			2900			950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Base Pump Model SM-TRFXA034034 Displacement [CC]: 20	0	19	0,2	80 (0,37)	28	0,3	80 (0,55)	57	0,9	80 (1,1)	19	0,2	80 (0,37)	28	0,4	80 (0,55)	57	1	80 (1,1)	19	0,2	80 (0,37)	28	0,4	80 (0,55)	57	1,1	90 (1,5)
	5	17	0,3	80 (0,55)	27	0,5	90 (0,75)	56	1,4	90 (2,2)	18	0,3	80 (0,55)	27	0,6	80 (0,75)	56	1,5	90 (2,2)	18	0,4	80 (0,55)	28	0,7	90 (1,1)	56	1,7	90 (2,2)
	10	17	0,5	90 (0,75)	27	0,8	90 (1,1)	55	1,9	90 (2,2)	17	0,5	80 (0,55)	27	0,8	90 (1,1)	55	2	90 (2,2)	17	0,5	80 (0,55)	27	0,9	90 (1,1)	56	2,2	100 (3)
	15	17	0,6	90 (0,75)	26	1	90 (1,1)	55	2,4	100 (3)	17	0,7	90 (1,1)	27	1,1	90 (1,5)	55	2,5	100 (3)	17	0,7	90 (1,1)	27	1,1	90 (1,5)	55	2,7	100 (3)
	20	16	0,8	90 (1,1)	26	1,3	90 (1,5)	55	2,9	100 (3)	17	0,8	90 (1,1)	27	1,3	90 (1,5)	55	3	112 (4)	17	0,9	90 (1,1)	27	1,4	90 (1,5)	55	3,2	112 (4)
	25	16	1	90 (1,1)	26	1,5	100 (2,2)	54	3,4	112 (4)	17	1	90 (1,1)	26	1,6	100 (2,2)	55	3,5	112 (4)	17	1	90 (1,1)	27	1,7	100 (2,2)	55	3,7	112 (4)
	30	16	1,1	100 (1,5)	26	1,8	100 (2,2)	54	3,9	112 (4)	16	1,2	100 (1,5)	26	1,8	100 (2,2)	54	4	132 (5,5)	17	1,2	100 (1,5)	26	1,9	100 (2,2)	55	4,2	132 (5,5)
	35	16	1,3	100 (1,5)	25	2	100 (2,2)	54	4,4	132 (5,5)	16	1,3	100 (1,5)	26	2,1	100 (2,2)	54	4,5	132 (5,5)	17	1,3	100 (1,5)	26	2,2	100 (3)	55	4,7	132 (5,5)
	40	15	1,4	100 (1,5)	25	2,3	100 (3)	54	4,9	132 (5,5)	16	1,4	100 (1,5)	26	2,3	100 (3)	54	5	132 (5,5)	16	1,5	100 (1,5)	26	2,4	100 (3)	55	5,2	132 (5,5)
	45	15	1,6	112 (2,2)	25	2,5	100 (3)	53	5,4	132 (5,5)	16	1,6	112 (2,2)	26	2,6	100 (3)	54	5,5	132 (7,5)	16	1,7	112 (2,2)	26	2,7	100 (3)	54	5,7	132 (7,5)
	50	15	1,8	112 (2,2)	25	2,8	100 (3)	53	5,9	132 (7,5)	16	1,8	112 (2,2)	25	2,8	100 (3)	54	6,1	132 (7,5)	16	1,8	112 (2,2)	26	2,9	100 (3)	54	6,3	132 (7,5)

The performances refer to the Triumflex® pump coupled to a Motive® motor.
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

50HZ SERIES

SM-TRFXA034038

PERFORMANCE CHART

Fluid Viscosity	cSt	15								
Motor Speed	rpm	950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA034038 Displacement [CC]: 22	0	21	0,1	80 (0,37)	32	0,1	80 (0,55)	63	0,3	80 (0,75)
	5	16	0,2	80 (0,37)	27	0,4	80 (0,55)	59	0,9	80 (1,1)
	10	14	0,4	80 (0,55)	25	0,7	80 (0,75)	57	1,4	90 (1,5)
	15	13	0,6	90 (0,75)	24	0,9	90 (1,1)	56	1,9	90 (2,2)
	20	12	0,8	90 (1,1)	23	1,2	90 (1,5)	55	2,5	100 (3)
	25	11	0,9	90 (1,1)	22	1,5	90 (1,5)	53	3	100 (3)
	30	10	1,1	90 (1,1)	21	1,7	100 (2,2)	53	3,6	112 (4)
	35	9	1,3	100 (1,5)	20	2	100 (2,2)	52	4,1	132 (5,5)
	40	8	1,5	100 (1,5)	19	2,3	100 (3)	51	4,6	132 (5,5)
	45	7	1,6	112 (2,2)	18	2,5	100 (3)	50	5,2	132 (5,5)
	50	7	1,8	112 (2,2)	18	2,8	100 (3)	49	5,7	132 (7,5)

Fluid Viscosity	cSt	46								
Motor Speed	rpm	950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA034038 Displacement [CC]: 22	0	21	0,1	80 (0,37)	32	0,2	80 (0,55)	63	0,5	80 (0,75)
	5	18	0,3	80 (0,37)	29	0,5	80 (0,55)	61	1,1	90 (1,5)
	10	17	0,4	80 (0,55)	28	0,7	80 (0,75)	60	1,6	90 (2,2)
	15	16	0,6	90 (0,75)	27	1	90 (1,1)	59	2,1	90 (2,2)
	20	15	0,8	90 (1,1)	26	1,3	90 (1,5)	58	2,7	100 (3)
	25	15	1	90 (1,1)	26	1,5	90 (1,5)	57	3,2	112 (4)
	30	14	1,2	100 (1,5)	25	1,8	100 (2,2)	57	3,8	112 (4)
	35	14	1,3	100 (1,5)	24	2,1	100 (2,2)	56	4,3	132 (5,5)
	40	13	1,5	112 (2,2)	24	2,3	100 (3)	56	4,9	132 (5,5)
	45	13	1,7	112 (2,2)	24	2,6	100 (3)	55	5,4	132 (5,5)
	50	12	1,9	112 (2,2)	23	2,9	100 (3)	55	6	132 (7,5)

Fluid Viscosity	cSt	100								
Motor Speed	rpm	950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA034038 Displacement [CC]: 22	0	21	0,1	80 (0,37)	32	0,2	80 (0,55)	63	0,7	90 (1,1)
	5	19	0,3	80 (0,55)	30	0,5	90 (0,75)	62	1,2	90 (1,5)
	10	18	0,5	80 (0,55)	29	0,8	90 (1,1)	61	1,8	90 (2,2)
	15	18	0,7	90 (0,75)	29	1,1	90 (1,1)	60	2,4	100 (3)
	20	17	0,8	90 (1,1)	28	1,3	90 (1,5)	60	2,9	100 (3)
	25	17	1	90 (1,1)	28	1,6	100 (2,2)	59	3,5	112 (4)
	30	16	1,2	100 (1,5)	27	1,9	100 (2,2)	59	4	132 (5,5)
	35	16	1,4	100 (1,5)	27	2,2	100 (2,2)	59	4,6	132 (5,5)
	40	16	1,6	112 (2,2)	26	2,4	100 (3)	58	5,1	132 (5,5)
	45	15	1,7	112 (2,2)	26	2,7	100 (3)	58	5,7	132 (7,5)
	50	15	1,9	112 (2,2)	26	3	100 (3)	58	6,2	132 (7,5)

Fluid Viscosity	cSt	220								
Motor Speed	rpm	950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA034038 Displacement [CC]: 22	0	21	0,2	80 (0,37)	32	0,3	80 (0,55)	63	1	80 (1,1)
	5	20	0,4	80 (0,55)	30	0,6	80 (0,75)	62	1,5	90 (2,2)
	10	19	0,5	90 (0,75)	30	0,9	90 (1,1)	62	2,1	90 (2,2)
	15	19	0,7	90 (1,1)	30	1,2	90 (1,5)	61	2,6	100 (3)
	20	18	0,9	90 (1,1)	29	1,4	90 (1,5)	61	3,2	112 (4)
	25	18	1,1	100 (1,5)	29	1,7	100 (2,2)	61	3,8	112 (4)
	30	18	1,3	100 (1,5)	29	2	100 (2,2)	60	4,3	132 (5,5)
	35	17	1,4	112 (2,2)	28	2,3	100 (3)	60	4,9	132 (5,5)
	40	17	1,6	112 (2,2)	28	2,5	100 (3)	60	5,4	132 (5,5)
	45	17	1,8	112 (2,2)	28	2,8	100 (3)	60	6	132 (7,5)
	50	17	2	112 (2,2)	28	3,1	112 (4)	59	6,6	132 (7,5)

Fluid Viscosity	cSt	320								
Motor Speed	rpm	950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA034038 Displacement [CC]: 22	0	21	0,2	80 (0,37)	32	0,4	80 (0,55)	63	1,1	90 (1,5)
	5	20	0,4	80 (0,55)	31	0,7	90 (1,1)	62	1,7	90 (2,2)
	10	19	0,6	90 (0,75)	30	0,9	90 (1,1)	62	2,2	100 (3)
	15	19	0,7	90 (1,1)	30	1,2	90 (1,5)	62	2,8	100 (3)
	20	19	0,9	90 (1,1)	30	1,5	100 (2,2)	61	3,4	112 (4)
	25	18	1,1	100 (1,5)	29	1,8	100 (2,2)	61	3,9	112 (4)
	30	18	1,3	100 (1,5)	29	2,1	100 (2,2)	61	4,5	132 (5,5)
	35	18	1,5	112 (2,2)	29	2,3	100 (3)	61	5,1	132 (5,5)
	40	18	1,6	112 (2,2)	28	2,6	100 (3)	61	5,6	132 (7,5)
	45	18	1,8	112 (2,2)	29	2,9	100 (3)	60	6,2	132 (7,5)
	50	17	2	112 (2,2)	28	3,2	112 (4)	60	6,8	132 (7,5)

Fluid Viscosity	cSt	460								
Motor Speed	rpm	950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA034038 Displacement [CC]: 22	0	21	0,2	80 (0,37)	32	0,5	80 (0,55)	63	1,3	90 (1,5)
	5	20	0,4	80 (0,55)	31	0,7	90 (1,1)	63	1,9	90 (2,2)
	10	20	0,6	90 (0,75)	30	1	90 (1,1)	62	2,4	100 (3)
	15	19	0,8	90 (1,1)	30	1,3	90 (1,5)	62	3	112 (4)
	20	19	1	90 (1,1)	30	1,6	100 (2,2)	62	3,6	112 (4)
	25	19	1,1	100 (1,5)	30	1,9	100 (2,2)	62	4,1	132 (5,5)
	30	19	1,3	100 (1,5)	30	2,1	100 (2,2)	61	4,7	132 (5,5)
	35	18	1,5	112 (2,2)	29	2,4	100 (3)	61	5,3	132 (5,5)
	40	18	1,7	112 (2,2)	29	2,7	100 (3)	61	5,9	132 (7,5)
	45	18	1,9	112 (2,2)	29	3	112 (4)	61	6,4	132 (7,5)
	50	18	2,1	112 (2,2)	29	3,2	112 (4)	61	7	132 (7,5)

The performances refer to the Triumflex® pump coupled to a Motive® motor.
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

50HZ SERIES

SM-TRFXA034050

PERFORMANCE CHART

Fluid Viscosity	cSt	15									46									100								
Motor Speed	rpm	950			1450			2900			950			1450			2900			950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA034050 Displacement [CC]: 29	0	27	0,1	80 (0,37)	42	0,2	80 (0,55)	83	0,4	80 (0,75)	27	0,1	80 (0,37)	42	0,2	80 (0,55)	83	0,7	90 (1,5)	27	0,1	80 (0,37)	42	0,3	80 (0,55)	83	0,9	80 (1,1)
	5	21	0,3	80 (0,37)	36	0,5	80 (0,55)	78	1,1	90 (1,1)	24	0,4	80 (0,55)	38	0,6	80 (0,75)	80	1,4	90 (1,5)	25	0,4	80 (0,55)	39	0,7	90 (1,1)	81	1,6	90 (2,2)
	10	19	0,5	80 (0,55)	33	0,9	90 (1,1)	75	1,8	90 (2,2)	22	0,6	90 (0,75)	37	0,9	90 (1,1)	78	2,1	90 (2,2)	24	0,6	90 (0,75)	38	1	90 (1,1)	80	2,4	100 (3)
	15	17	0,8	90 (1,1)	32	1,2	90 (1,5)	73	2,6	100 (3)	21	0,8	90 (1,1)	35	1,3	90 (1,5)	77	2,8	100 (3)	23	0,9	90 (1,1)	38	1,4	90 (1,5)	79	3,1	112 (4)
	20	16	1	90 (1,1)	30	1,6	100 (2,2)	72	3,3	112 (4)	20	1,1	90 (1,1)	35	1,7	100 (2,2)	76	3,5	112 (4)	22	1,1	90 (1,1)	37	1,8	100 (2,2)	79	3,8	112 (4)
	25	14	1,2	100 (1,5)	29	1,9	100 (2,2)	70	4	112 (4)	19	1,3	100 (1,5)	34	2	100 (2,2)	75	4,3	132 (5,5)	22	1,3	100 (1,5)	36	2,1	100 (2,2)	78	4,5	132 (5,5)
	30	13	1,5	100 (1,5)	27	2,3	100 (3)	69	4,7	132 (5,5)	19	1,5	100 (1,5)	33	2,4	100 (3)	75	5	132 (5,5)	21	1,6	112 (2,2)	36	2,5	100 (3)	77	5,3	132 (5,5)
	35	12	1,7	112 (2,2)	26	2,6	100 (3)	68	5,4	132 (5,5)	18	1,8	112 (2,2)	32	2,7	100 (3)	74	5,7	132 (7,5)	21	1,8	112 (2,2)	35	2,8	100 (3)	77	6	132 (7,5)
	40	11	1,9	112 (2,2)	25	3	100 (3)	67	6,1	132 (7,5)	17	2	112 (2,2)	32	3,1	112 (4)	73	6,4	132 (7,5)	20	2	112 (2,2)	35	3,2	112 (4)	77	6,7	132 (7,5)
	45	10	2,2	112 (2,2)	24	3,3	112 (4)	66	6,8	132 (7,5)	17	2,2	112 (2,2)	31	3,4	112 (4)	73	7,1	132 (7,5)	20	2,3	132 (3)	34	3,6	112 (4)	76	7,5	132 (9,2)
	50	9	2,4	132 (3)	23	3,7	112 (4)	65	7,5	132 (7,5)	16	2,4	132 (3)	30	3,8	112 (4)	72	7,9	132 (9,2)	20	2,5	132 (3)	34	3,9	112 (4)	76	8,2	132 (9,2)

Fluid Viscosity	cSt	220									320									460								
Motor Speed	rpm	950			1450			2900			950			1450			2900			950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA034050 Displacement [CC]: 29	0	27	0,2	80 (0,37)	42	0,4	80 (0,55)	83	1,3	90 (1,5)	27	0,2	80 (0,37)	42	0,5	80 (0,75)	83	1,5	90 (2,2)	27	0,3	80 (0,55)	42	0,6	80 (0,75)	83	1,7	90 (2,2)
	5	26	0,5	90 (0,75)	40	0,8	90 (1,1)	82	2	90 (2,2)	26	0,5	90 (0,75)	40	0,9	90 (1,1)	82	2,2	100 (3)	26	0,6	90 (0,75)	41	1	90 (1,1)	82	2,4	100 (3)
	10	25	0,7	90 (0,75)	39	1,2	90 (1,5)	81	2,7	100 (3)	25	0,7	90 (0,75)	40	1,2	90 (1,5)	82	2,9	100 (3)	26	0,8	90 (1,1)	40	1,3	90 (1,5)	82	3,2	112 (4)
	15	24	0,9	90 (1,1)	39	1,5	100 (2,2)	81	3,5	112 (4)	25	1	90 (1,1)	39	1,6	100 (2,2)	81	3,7	112 (4)	25	1	90 (1,1)	40	1,7	100 (2,2)	82	3,9	112 (4)
	20	24	1,2	100 (1,5)	38	1,9	100 (2,2)	80	4,2	132 (5,5)	25	1,2	100 (1,5)	39	2	100 (2,2)	81	4,4	132 (5,5)	25	1,3	100 (1,5)	39	2,1	100 (2,2)	81	4,7	132 (5,5)
	25	24	1,4	100 (1,5)	38	2,3	100 (3)	80	4,9	132 (5,5)	24	1,5	112 (2,2)	39	2,3	100 (3)	80	5,2	132 (5,5)	25	1,5	112 (2,2)	39	2,4	100 (3)	81	5,4	132 (5,5)
	30	23	1,6	112 (2,2)	38	2,6	100 (3)	79	5,7	132 (7,5)	24	1,7	112 (2,2)	38	2,7	100 (3)	80	5,9	132 (7,5)	25	1,7	112 (2,2)	39	2,8	100 (3)	81	6,2	132 (7,5)
	35	23	1,9	112 (2,2)	37	3	112 (4)	79	6,4	132 (7,5)	24	1,9	112 (2,2)	38	3,1	112 (4)	80	6,7	132 (7,5)	24	2	112 (2,2)	39	3,2	112 (4)	80	6,9	132 (7,5)
	40	23	2,1	112 (2,2)	37	3,3	112 (4)	79	7,2	132 (7,5)	23	2,2	132 (3)	38	3,4	112 (4)	80	7,4	132 (7,5)	24	2,2	132 (3)	39	3,5	112 (4)	80	7,7	132 (9,2)
	45	22	2,4	132 (3)	37	3,7	112 (4)	79	7,9	132 (9,2)	23	2,4	132 (3)	38	3,8	112 (4)	79	8,2	132 (9,2)	24	2,5	132 (3)	38	3,9	112 (4)	80	8,5	132 (9,2)
	50	22	2,6	132 (3)	37	4,1	132 (5,5)	78	8,6	132 (9,2)	23	2,6	132 (3)	37	4,2	132 (5,5)	79	8,9	132 (9,2)	24	2,7	132 (3)	38	4,3	132 (5,5)	80	9,2	160 (11)

The performances refer to the Triumflex® pump coupled to a Motive® motor.
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

50HZ SERIES

SM-TRFXA041048

PERFORMANCE CHART

Pump Model SM-TRFXA041048 — Displacement [CC]: 40

Fluid Viscosity cSt	15								
Motor Speed rpm	950			1450			2900		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	38	0,1	80 (0,37)	58	0,2	80 (0,55)	117	0,5	80 (0,75)
5	32	0,4	80 (0,55)	52	0,7	80 (0,75)	110	1,5	90 (1,5)
10	29	0,7	90 (0,75)	50	1,2	90 (1,5)	108	2,5	100 (3)
15	27	1,1	90 (1,1)	48	1,7	100 (2,2)	106	3,5	112 (4)
20	26	1,4	100 (1,5)	46	2,2	100 (2,2)	104	4,5	132 (5,5)
25	24	1,7	112 (2,2)	44	2,7	100 (3)	103	5,5	132 (5,5)
30	23	2	112 (2,2)	43	3,1	112 (4)	101	6,5	132 (7,5)
35	22	2,4	132 (3)	42	3,6	112 (4)	100	7,5	132 (7,5)
40	21	2,7	132 (3)	41	4,1	132 (5,5)	99	8,5	132 (9,2)
45	20	3	132 (3)	40	4,6	132 (5,5)	98	9,5	160 (11)
50	19	3,3	132 (4)	39	5,1	132 (5,5)	97	10,4	160 (11)

Fluid Viscosity cSt	46								
Motor Speed rpm	950			1450			2900		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	38	0,2	80 (0,37)	58	0,3	80 (0,55)	117	0,8	80 (1,1)
5	34	0,5	80 (0,55)	54	0,8	90 (1,1)	113	1,8	90 (2,2)
10	33	0,8	90 (1,1)	53	1,3	90 (1,5)	111	2,8	100 (3)
15	32	1,1	90 (1,1)	52	1,8	100 (2,2)	110	3,9	112 (4)
20	31	1,5	100 (1,5)	51	2,3	100 (3)	109	4,9	132 (5,5)
25	30	1,8	112 (2,2)	50	2,8	100 (3)	108	5,9	132 (7,5)
30	29	2,1	112 (2,2)	49	3,3	112 (4)	107	6,9	132 (7,5)
35	28	2,4	132 (3)	48	3,8	112 (4)	106	7,9	132 (9,2)
40	27	2,7	132 (3)	48	4,3	132 (5,5)	106	8,9	132 (9,2)
45	27	3,1	132 (4)	47	4,8	132 (5,5)	105	9,9	160 (11)
50	26	3,4	132 (4)	46	5,3	132 (5,5)	105	10,9	160 (11)

Fluid Viscosity cSt	100								
Motor Speed rpm	950			1450			2900		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Abs. Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	38	0,2	80 (0,37)	58	0,4	80 (0,55)	117	1,2	90 (1,5)
5	36	0,5	80 (0,75)	56	0,9	90 (1,1)	114	2,2	100 (3)
10	35	0,9	90 (1,1)	55	1,4	90 (1,5)	113	3,2	112 (4)
15	34	1,2	100 (1,5)	54	1,9	100 (2,2)	112	4,2	132 (5,5)
20	33	1,5	100 (1,5)	53	2,4	100 (3)	111	5,2	132 (5,5)
25	32	1,8	112 (2,2)	53	2,9	100 (3)	111	6,2	132 (7,5)
30	32	2,2	112 (2,2)	52	3,4	112 (4)	110	7,2	132 (7,5)
35	31	2,5	132 (3)	51	3,9	112 (4)	110	8,2	132 (9,2)
40	31	2,8	132 (3)	51	4,4	132 (5,5)	109	9,3	160 (11)
45	30	3,2	132 (4)	51	4,9	132 (5,5)	109	10,3	160 (11)
50	30	3,5	132 (4)	50	5,4	132 (5,5)	108	11,3	160 (15)

Pump Model SM-TRFXA041048 — Displacement [CC]: 40

Fluid Viscosity cSt	220								
Motor Speed rpm	950			1450			2900		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	38	0,3	80 (0,55)	58	0,6	80 (0,75)	117	1,6	90 (2,2)
5	36	0,6	90 (0,75)	57	1,1	90 (1,5)	115	2,6	100 (3)
10	36	1	90 (1,1)	56	1,6	100 (2,2)	114	3,6	112 (4)
15	35	1,3	100 (1,5)	55	2,1	100 (2,2)	114	4,7	132 (5,5)
20	35	1,6	112 (2,2)	55	2,6	100 (3)	113	5,7	132 (7,5)
25	34	1,9	112 (2,2)	54	3,1	112 (4)	113	6,7	132 (7,5)
30	34	2,3	132 (3)	54	3,6	112 (4)	112	7,8	132 (9,2)
35	34	2,6	132 (3)	54	4,1	132 (5,5)	112	8,8	132 (9,2)
40	33	2,9	132 (3)	53	4,6	132 (5,5)	112	9,8	160 (11)
45	33	3,3	132 (4)	53	5,1	132 (5,5)	111	10,8	160 (11)
50	33	3,6	132 (4)	53	5,6	132 (7,5)	111	11,9	160 (15)

Fluid Viscosity cSt	320								
Motor Speed rpm	950			1450			2900		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	38	0,3	80 (0,37)	58	0,6	80 (0,75)	117	1,8	90 (2,2)
5	37	0,7	90 (0,75)	57	1,2	90 (1,5)	115	2,9	112 (4)
10	36	1	90 (1,1)	56	1,7	100 (2,2)	114	3,9	112 (4)
15	35	1,3	100 (1,5)	56	2,2	100 (3)	114	4,9	132 (5,5)
20	35	1,6	112 (2,2)	55	2,7	100 (3)	114	6	132 (7,5)
25	35	2	112 (2,2)	55	3,2	112 (4)	113	7	132 (9,2)
30	35	2,3	132 (3)	55	3,7	112 (4)	113	8,1	132 (9,2)
35	34	2,7	132 (3)	54	4,2	132 (5,5)	113	9,1	160 (11)
40	34	3	132 (4)	54	4,7	132 (5,5)	112	10,1	160 (11)
45	34	3,3	132 (4)	54	5,2	132 (5,5)	112	11,2	160 (15)
50	34	3,7	132 (4)	54	5,7	132 (7,5)	112	12,2	160 (15)

Fluid Viscosity cSt	460								
Motor Speed rpm	950			1450			2900		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	38	0,4	80 (0,55)	58	0,7	90 (1,1)	117	2,1	100 (3)
5	37	0,7	90 (1,1)	57	1,3	90 (1,5)	115	3,2	112 (4)
10	36	1,1	100 (1,5)	57	1,8	100 (2,2)	115	4,2	132 (5,5)
15	36	1,4	100 (1,5)	56	2,3	100 (3)	114	5,3	132 (7,5)
20	36	1,7	112 (2,2)	56	2,8	100 (3)	114	6,3	132 (7,5)
25	35	2,1	112 (2,2)	56	3,3	112 (4)	114	7,4	132 (9,2)
30	35	2,4	132 (3)	55	3,8	112 (4)	114	8,4	132 (9,2)
35	35	2,7	132 (3)	55	4,3	132 (5,5)	113	9,5	160 (11)
40	35	3,1	132 (4)	55	4,9	132 (5,5)	113	10,5	160 (15)
45	35	3,4	132 (4)	55	5,4	132 (7,5)	113	11,6	160 (15)
50	34	3,7	132 (4)	54	5,9	132 (7,5)	113	12,6	160 (15)

The performances refer to the Triumflex® pump coupled to a Motive® motor.
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

50HZ SERIES

SM-TRFXA041058

PERFORMANCE CHART

Fluid Viscosity	cSt	15								
Motor Speed	rpm	950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA041058 Displacement [CC]: 49	0	46	0,1	80 (0,37)	70	0,2	80 (0,55)	141	0,7	80 (0,75)
	5	39	0,5	80 (0,55)	63	0,8	80 (0,75)	133	1,8	90 (2,2)
	10	36	0,9	90 (1,1)	60	1,4	90 (1,5)	130	3	112 (4)
	15	33	1,3	100 (1,5)	57	2	100 (2,2)	128	4,2	132 (5,5)
	20	31	1,7	112 (2,2)	55	2,6	100 (3)	126	5,4	132 (5,5)
	25	29	2,1	112 (2,2)	54	3,2	112 (4)	124	6,6	132 (7,5)
	30	28	2,5	132 (3)	52	3,8	112 (4)	122	7,8	132 (9,2)
	35	26	2,8	132 (3)	51	4,4	132 (5,5)	121	9	132 (9,2)
	40	25	3,2	132 (4)	49	5	132 (5,5)	120	10,2	160 (11)
	45	24	3,6	132 (4)	48	5,6	132 (7,5)	118	11,4	160 (15)
	50	22	4	132 (4)	47	6,2	132 (7,5)	117	12,6	160 (15)

Fluid Viscosity	cSt	46								
Motor Speed	rpm	950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA041058 Displacement [CC]: 49	0	46	0,2	80 (0,37)	70	0,4	80 (0,75)	141	1	80 (1,1)
	5	42	0,6	90 (0,75)	66	1	90 (1,1)	136	2,2	100 (3)
	10	40	1	90 (1,1)	64	1,6	90 (1,5)	134	3,4	112 (4)
	15	38	1,4	100 (1,5)	62	2,2	100 (3)	133	4,7	132 (5,5)
	20	37	1,8	112 (2,2)	61	2,8	100 (3)	132	5,9	132 (7,5)
	25	36	2,1	112 (2,2)	60	3,4	112 (4)	131	7,1	132 (7,5)
	30	35	2,5	132 (3)	59	4	112 (4)	130	8,3	132 (9,2)
	35	34	2,9	132 (3)	58	4,6	132 (5,5)	129	9,5	160 (11)
	40	33	3,3	132 (4)	57	5,2	132 (5,5)	128	10,7	160 (11)
	45	32	3,7	132 (4)	57	5,8	132 (7,5)	127	11,9	160 (15)
	50	32	4,1	132 (5,5)	56	6,4	132 (7,5)	126	13,1	160 (15)

Fluid Viscosity	cSt	100								
Motor Speed	rpm	950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA041058 Displacement [CC]: 49	0	46	0,3	80 (0,55)	70	0,5	80 (0,75)	141	1,4	90 (2,2)
	5	43	0,7	90 (1,1)	67	1,1	90 (1,5)	138	2,6	100 (3)
	10	42	1	100 (1,5)	66	1,7	100 (2,2)	136	3,8	112 (4)
	15	41	1,4	100 (1,5)	65	2,3	100 (3)	135	5,1	132 (5,5)
	20	40	1,8	112 (2,2)	64	2,9	100 (3)	135	6,3	132 (7,5)
	25	39	2,2	132 (3)	63	3,5	112 (4)	134	7,5	132 (7,5)
	30	38	2,6	132 (3)	63	4,1	132 (5,5)	133	8,7	132 (9,2)
	35	38	3	132 (3)	62	4,7	132 (5,5)	133	10	160 (11)
	40	37	3,4	132 (4)	62	5,3	132 (5,5)	132	11,2	160 (15)
	45	37	3,8	132 (4)	61	5,9	132 (7,5)	131	12,4	160 (15)
	50	36	4,2	132 (5,5)	61	6,5	132 (7,5)	131	13,6	160 (15)

Fluid Viscosity	cSt	220								
Motor Speed	rpm	950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA041058 Displacement [CC]: 49	0	46	0,4	80 (0,55)	70	0,7	90 (1,1)	141	1,9	90 (2,2)
	5	44	0,8	90 (1,1)	68	1,3	100 (2,2)	139	3,2	112 (4)
	10	43	1,2	100 (1,5)	67	1,9	100 (2,2)	138	4,4	132 (5,5)
	15	42	1,6	112 (2,2)	67	2,5	100 (3)	137	5,6	132 (7,5)
	20	42	1,9	112 (2,2)	66	3,1	112 (4)	137	6,9	132 (7,5)
	25	41	2,3	132 (3)	66	3,7	112 (4)	136	8,1	132 (9,2)
	30	41	2,7	132 (3)	65	4,3	132 (5,5)	136	9,4	160 (11)
	35	41	3,1	132 (4)	65	5	132 (5,5)	135	10,6	160 (11)
	40	40	3,5	132 (4)	64	5,6	132 (7,5)	135	11,9	160 (15)
	45	40	3,9	132 (5,5)	64	6,2	132 (7,5)	135	13,1	160 (15)
	50	39	4,3	132 (5,5)	64	6,8	132 (7,5)	134	14,3	160 (15)

Fluid Viscosity	cSt	320								
Motor Speed	rpm	950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA041058 Displacement [CC]: 49	0	46	0,4	80 (0,55)	70	0,8	90 (1,1)	141	2,2	100 (3)
	5	44	0,8	90 (0,75)	69	1,4	90 (1,5)	139	3,5	112 (4)
	10	44	1,2	90 (1,1)	68	2	100 (3)	138	4,7	132 (5,5)
	15	43	1,6	112 (2,2)	67	2,6	100 (3)	138	6	132 (7,5)
	20	43	2	112 (2,2)	67	3,2	112 (4)	137	7,2	132 (9,2)
	25	42	2,4	132 (3)	67	3,9	132 (5,5)	137	8,5	132 (9,2)
	30	42	2,8	132 (3)	66	4,5	132 (5,5)	137	9,7	160 (11)
	35	42	3,2	132 (4)	66	5,1	132 (5,5)	136	11	160 (15)
	40	41	3,6	132 (4)	65	5,7	132 (7,5)	136	12,3	160 (15)
	45	41	4	132 (5,5)	65	6,3	132 (7,5)	136	13,5	160 (15)
	50	41	4,4	132 (5,5)	65	6,9	132 (7,5)	135	14,8	160 (18,5)

Fluid Viscosity	cSt	460								
Motor Speed	rpm	950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA041058 Displacement [CC]: 49	0	46	0,5	90 (0,75)	70	0,9	90 (1,1)	141	2,6	112 (4)
	5	45	0,9	90 (1,1)	69	1,5	100 (2,2)	139	3,8	132 (5,5)
	10	44	1,3	112 (2,2)	68	2,1	100 (3)	139	5,1	132 (7,5)
	15	44	1,7	112 (2,2)	68	2,8	100 (3)	138	6,4	132 (7,5)
	20	43	2,1	112 (2,2)	67	3,4	132 (5,5)	138	7,6	132 (9,2)
	25	43	2,5	132 (3)	67	4	132 (5,5)	138	8,9	160 (11)
	30	43	2,9	132 (4)	67	4,6	132 (5,5)	137	10,2	160 (11)
	35	42	3,3	132 (4)	67	5,2	132 (7,5)	137	11,4	160 (15)
	40	42	3,7	132 (5,5)	66	5,9	132 (7,5)	137	12,7	160 (15)
	45	42	4,1	132 (5,5)	66	6,5	132 (7,5)	136	14	160 (15)
	50	42	4,5	132 (5,5)	66	7,1	160 (11)	136	15,2	160 (18,5)

The performances refer to the Triumflex® pump coupled to a Motive® motor.
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

50HZ SERIES

SM-TRFXA041068

PERFORMANCE CHART

Fluid Viscosity	cSt	15									46									100								
Motor Speed	rpm	950			1450			2900			950			1450			2900			950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA041068 Displacement [CC]: 57	0	54	0,1	80 (0,37)	83	0,3	80 (0,55)	165	0,8	80 (1,1)	54	0,2	80 (0,37)	83	0,4	80 (0,55)	165	1,2	90 (1,5)	54	0,3	80 (0,55)	83	0,6	80 (0,75)	165	1,6	90 (2,2)
	5	45	0,6	90 (0,75)	74	1	90 (1,1)	156	2,2	90 (2,2)	49	0,7	90 (0,75)	77	1,1	90 (1,5)	160	2,6	100 (3)	50	0,8	90 (1,1)	79	1,3	90 (1,5)	161	3,1	112 (4)
	10	42	1,1	100 (1,5)	70	1,7	100 (2,2)	153	3,6	112 (4)	46	1,1	100 (1,5)	75	1,8	100 (2,2)	157	4	132 (4)	49	1,2	100 (1,5)	77	2	100 (2,2)	160	4,5	132 (5,5)
	15	39	1,5	100 (1,5)	67	2,4	100 (3)	150	5	132 (5,5)	45	1,6	112 (2,2)	73	2,5	100 (3)	156	5,5	132 (7,5)	48	1,7	112 (2,2)	76	2,7	100 (3)	159	5,9	132 (7,5)
	20	37	2	112 (2,2)	65	3,1	112 (4)	148	6,4	132 (7,5)	43	2,1	112 (2,2)	72	3,2	112 (4)	154	6,9	132 (7,5)	47	2,2	112 (2,2)	75	3,4	112 (4)	158	7,4	132 (7,5)
	25	34	2,4	132 (3)	63	3,8	112 (4)	145	7,8	132 (9,2)	42	2,5	132 (3)	71	3,9	112 (4)	153	8,3	132 (9,2)	46	2,6	132 (3)	74	4,1	132 (5,5)	157	8,8	132 (9,2)
	30	33	2,9	132 (3)	61	4,5	132 (5,5)	144	9,2	132 (9,2)	41	3	132 (3)	69	4,6	132 (5,5)	152	9,7	160 (11)	45	3,1	132 (4)	74	4,8	132 (5,5)	156	10,2	160 (11)
	35	31	3,3	132 (4)	59	5,2	132 (5,5)	142	10,6	160 (11)	40	3,4	132 (4)	68	5,3	132 (5,5)	151	11,1	160 (15)	44	3,5	132 (4)	73	5,5	132 (7,5)	155	11,7	160 (15)
	40	29	3,8	132 (4)	58	5,9	132 (7,5)	140	12	160 (15)	39	3,9	132 (4)	67	6,1	132 (7,5)	150	12,6	160 (15)	44	4	132 (4)	72	6,2	132 (7,5)	155	13,1	160 (15)
	45	28	4,2	132 (5,5)	56	6,6	132 (7,5)	139	13,4	160 (15)	38	4,4	132 (5,5)	66	6,8	132 (7,5)	149	14	160 (15)	43	4,5	132 (5,5)	72	7	132 (7,5)	154	14,6	160 (15)
	50	26	4,7	132 (5,5)	55	7,2	132 (7,5)	137	14,8	160 (15)	37	4,8	132 (5,5)	66	7,5	132 (9,2)	148	15,4	160 (18,5)	43	4,9	132 (5,5)	71	7,7	132 (9,2)	154	16	160 (18,5)

Fluid Viscosity	cSt	220									320									460								
Motor Speed	rpm	950			1450			2900			950			1450			2900			950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA041068 Displacement [CC]: 57	0	54	0,4	80 (0,55)	83	0,8	90 (1,1)	165	2,2	100 (3)	54	0,5	90 (0,75)	83	0,9	90 (1,1)	165	2,6	112 (4)	54	0,6	90 (0,75)	83	1,1	90 (1,5)	165	3	112 (4)
	5	52	0,9	90 (1,1)	80	1,5	100 (2,2)	163	3,7	132 (5,5)	52	1	90 (1,1)	81	1,6	100 (2,2)	163	4,1	132 (5,5)	52	1	90 (1,1)	81	1,8	100 (2,2)	163	4,5	132 (5,5)
	10	51	1,4	100 (1,5)	79	2,2	100 (3)	162	5,2	132 (7,5)	51	1,4	100 (1,5)	80	2,4	100 (3)	162	5,5	132 (7,5)	52	1,5	112 (2,2)	80	2,5	100 (3)	163	6	132 (7,5)
	15	50	1,8	112 (2,2)	78	2,9	112 (4)	161	6,6	132 (7,5)	51	1,9	112 (2,2)	79	3,1	112 (4)	162	7	132 (9,2)	51	2	112 (2,2)	80	3,2	112 (4)	162	7,5	132 (9,2)
	20	49	2,3	132 (3)	78	3,7	112 (4)	160	8,1	132 (9,2)	50	2,4	132 (3)	78	3,8	132 (5,5)	161	8,5	132 (9,2)	51	2,4	132 (3)	79	4	132 (5,5)	162	8,9	160 (11)
	25	49	2,7	132 (3)	77	4,4	132 (5,5)	160	9,5	160 (11)	50	2,8	132 (4)	78	4,5	132 (5,5)	161	10	160 (11)	50	2,9	132 (4)	79	4,7	132 (5,5)	161	10,4	160 (11)
	30	48	3,2	132 (4)	77	5,1	132 (7,5)	159	11	160 (15)	49	3,3	132 (4)	78	5,2	132 (7,5)	160	11,4	160 (15)	50	3,4	132 (4)	78	5,4	132 (7,5)	161	11,9	160 (15)
	35	48	3,7	132 (4)	76	5,8	132 (7,5)	159	12,4	160 (15)	49	3,8	132 (5,5)	77	6	132 (7,5)	160	12,9	160 (15)	50	3,9	132 (5,5)	78	6,2	132 (7,5)	161	13,4	160 (15)
	40	47	4,1	132 (5,5)	76	6,5	132 (7,5)	158	13,9	160 (15)	48	4,2	132 (5,5)	77	6,7	160 (11)	159	14,4	160 (18,5)	49	4,3	132 (5,5)	78	6,9	132 (7,5)	160	14,9	160 (18,5)
	45	47	4,6	132 (5,5)	75	7,2	160 (11)	158	15,4	160 (18,5)	48	4,7	132 (5,5)	76	7,4	132 (7,5)	159	15,8	160 (18,5)	49	4,8	132 (5,5)	77	7,6	132 (9,2)	160	16,4	160 (18,5)
	50	46	5,1	132 (5,5)	75	8	132 (9,2)	157	16,8	160 (18,5)	48	5,2	160 (7,5)	76	8,1	132 (9,2)	159	17,3	160 (18,5)	49	5,3	160 (7,5)	77	8,3	132 (9,2)	160	17,9	160 (18,5)

The performances refer to the Triumflex® pump coupled to a Motive® motor.
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

50HZ SERIES

SM-TRFXA046062

PERFORMANCE CHART

Pump Model SM-TRFXA046062 Displacement [CC]: 68

Fluid Viscosity	15									46									100								
cSt																											
Motor Speed rpm	950			1450			2900			950			1450			2900			950			1450			2900		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	65	0,2	80 (0,37)	99	0,3	80 (0,55)	198	0,9	80 (1,1)	65	0,2	80 (0,37)	99	0,5	80 (0,75)	198	1,3	90 (1,5)	65	0,3	80 (0,55)	99	0,6	80 (0,75)	198	1,8	90 (2,2)
5	56	0,7	90 (0,75)	90	1,1	90 (1,1)	189	2,5	100 (3)	60	0,8	90 (1,1)	94	1,3	90 (1,5)	193	3	100 (3)	61	0,9	90 (1,1)	95	1,5	90 (1,5)	194	3,5	112 (4)
10	53	1,3	100 (1,5)	87	2	100 (2,2)	186	4,2	132 (5,5)	57	1,3	100 (1,5)	91	2,2	100 (2,2)	190	4,7	132 (5,5)	60	1,4	100 (1,5)	94	2,3	100 (3)	193	5,3	132 (5,5)
15	50	1,8	112 (2,2)	84	2,8	100 (3)	183	5,9	132 (7,5)	56	1,9	112 (2,2)	90	3	100 (3)	189	6,4	132 (7,5)	59	2	112(2,2)	93	3,2	112 (4)	192	7	132 (7,5)
20	48	2,3	132(3)	82	3,6	112 (4)	181	7,6	132 (9,2)	54	2,4	132 (3)	88	3,8	112(4)	187	8,1	132 (9,2)	58	2,6	132(3)	92	4	112 (4)	191	8,7	132 (9,2)
25	46	2,9	132(3)	80	4,5	132 (5,5)	179	9,3	160 (11)	53	3	132 (3)	87	4,7	132 (5,5)	186	9,8	160 (11)	57	3,1	132(4)	91	4,9	132 (5,5)	190	10,4	160 (11)
30	44	3,4	132 (4)	78	5,3	132 (5,5)	177	10,9	160 (11)	52	3,5	132 (4)	86	5,5	132 (5,5)	185	11,5	160 (15)	56	3,7	132(4)	90	5,7	132 (7,5)	189	12,1	160 (15)
35	42	4	132 (5,5)	76	6,2	132(7,5)	175	12,6	160 (15)	51	4,1	132 (5,5)	85	6,4	132 (7,5)	184	13,2	160 (15)	55	4,2	132 (5,5)	89	6,6	132 (7,5)	188	13,9	160 (15)
40	41	4,5	132 (5,5)	75	7	132 (7,5)	174	14,3	160 (15)	50	4,6	132 (5,5)	84	7,2	132 (7,5)	183	14,9	160 (15)	55	4,8	132 (5,5)	89	7,4	132 (7,5)	188	15,6	160 (18,5)
45	39	5,1	132 (5,5)	73	7,8	160 (11)	172	16	160 (18,5)	49	5,2	132 (5,5)	83	8,1	160 (11)	182	16,6	160 (18,5)	54	5,3	132 (5,5)	88	8,3	160 (11)	187	17,3	160 (18,5)
50	38	5,6	160 (7,5)	72	8,7	160(11)	171	17,7	160 (18,5)	48	5,7	160 (7,5)	82	8,9	160 (11)	181	18,3	160 (18,5)	54	5,9	160 (7,5)	88	9,1	160 (11)	187	19	180 (22)

Pump Model SM-TRFXA046062 Displacement [CC]: 68

Fluid Viscosity	220									320									460								
cSt																											
Motor Speed rpm	950			1450			2900			950			1450			2900			950			1450			2900		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	65	0,5	90 (0,75)	99	0,9	90 (1,5)	198	2,5	100 (3)	65	0,5	90 (0,75)	99	1	90 (1,1)	198	2,9	112(4)	65	0,6	90 (1,1)	99	1,2	90 (1,5)	198	3,3	112 (4)
5	62	1	90 (1,1)	96	1,7	100 (2,2)	195	4,2	132 (5,5)	63	1,1	100 (1,5)	97	1,9	100 (2,2)	196	4,7	132 (5,5)	63	1,2	100 (1,5)	97	2,1	100 (3)	196	5,1	132 (5,5)
10	61	1,6	112 (2,2)	95	2,6	100 (3)	194	6	132 (5,5)	62	1,7	112 (2,2)	96	2,8	100 (3)	195	6,4	132 (7,5)	62	1,8	112 (2,2)	97	2,9	100 (3)	195	6,9	132 (7,5)
15	61	2,1	112 (2,2)	95	3,5	112 (4)	194	7,7	132 (9,2)	61	2,2	132 (3)	95	3,6	112 (4)	194	8,2	132 (9,2)	62	2,3	132 (3)	96	3,8	112 (4)	195	8,7	160 (11)
20	60	2,7	132 (3)	94	4,3	132 (5,5)	193	9,5	160 (11)	61	2,8	132 (3)	95	4,5	132 (5,5)	194	9,9	160 (11)	61	2,9	132 (3)	96	4,7	132 (5,5)	194	10,5	160 (11)
25	59	3,3	132 (4)	94	5,2	132 (5,5)	192	11,2	160 (15)	60	3,4	132 (4)	94	5,3	132 (5,5)	193	11,7	160 (15)	61	3,5	132 (4)	95	5,5	132 (7,5)	194	12,3	160 (15)
30	59	3,8	132 (4)	93	6	132 (7,5)	192	13	160 (15)	60	3,9	132 (4)	94	6,2	132 (7,5)	193	13,5	160 (15)	61	4	132 (5,5)	95	6,4	132 (7,5)	194	14	160 (15)
35	58	4,4	132 (5,5)	93	6,9	132 (7,5)	191	14,7	160 (15)	60	4,5	132 (5,5)	94	7,1	132 (7,5)	193	15,2	160 (18,5)	60	4,6	132 (5,5)	95	7,3	160 (11)	193	15,8	160 (18,5)
40	58	4,9	132 (5,5)	92	7,8	160 (11)	191	16,5	160 (18,5)	59	5	132 (5,5)	93	7,9	160 (11)	192	17	160 (18,5)	60	5,1	132 (5,5)	94	8,2	160 (11)	193	17,6	160 (18,5)
45	58	5,5	160 (7,5)	92	8,6	160 (11)	191	18,2	160 (18,5)	59	5,6	160 (7,5)	93	8,8	160 (11)	192	18,8	180 (22)	60	5,7	160 (7,5)	94	9	160 (11)	193	19,4	180 (22)
50	57	6,1	160 (7,5)	91	9,5	160 (11)	190	20	180 (22)	58	6,2	160 (7,5)	93	9,7	160 (11)	191	20,5	180 (22)	60	6,3	160 (7,5)	94	9,9	160 (11)	193	21,2	180 (22)

The performances refer to the Triumflex® pump coupled to a Motive® motor.
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

50HZ SERIES

SM-TRFXA046074

PERFORMANCE CHART

Pump Model SM-TRFXA046074 Displacement [CC]: 81

Fluid Viscosity cSt	15								
Motor Speed rpm	950			1450			2900		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	77	0,2	80 (0,55)	118	0,4	80 (0,55)	236	1	80 (1,1)
5	67	0,8	90 (1,1)	108	1,4	90 (1,5)	226	3	112(4)
10	63	1,5	112 (2,2)	104	2,4	100 (3)	222	5	132 (5,5)
15	60	2,1	112 (2,2)	100	3,4	112 (4)	218	7	132 (7,5)
20	57	2,8	132(3)	98	4,4	132 (5,5)	216	9	132 (9,2)
25	54	3,5	131 (4)	95	5,3	132 (5,5)	213	11,1	160 (15)
30	52	4,1	132 (5,5)	93	6,3	132 (7,5)	211	13,1	160 (15)
35	50	4,8	132 (5,5)	91	7,3	132 (7,5)	209	15,1	160 (18,5)
40	48	5,4	132 (5,5)	89	8,3	160 (11)	207	17,1	160 (18,5)
45	47	6,1	160 (7,5)	87	9,3	160 (11)	205	19,1	180 (22)
50	45	6,7	160 (7,5)	86	10,3	160 (11)	204	21,1	180 (22)

Fluid Viscosity cSt	46								
Motor Speed rpm	950			1450			2900		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	77	0,3	80 (0,55)	118	0,6	80 (0,75)	236	1,6	90 (2,2)
5	71	1	90 (1,1)	112	1,6	100 (2,2)	230	3,6	112 (4)
10	68	1,6	112(2,2)	109	2,6	100 (3)	227	5,7	132 (7,5)
15	66	2,3	132 (3)	107	3,6	112 (4)	225	7,7	132 (9,2)
20	65	2,9	132(3)	105	4,6	132 (5,5)	224	9,7	160 (11)
25	63	3,6	132 (4)	104	5,6	132 (7,5)	222	11,7	160 (15)
30	62	4,2	132 (5,5)	103	6,6	132 (7,5)	221	13,8	160 (15)
35	61	4,9	132 (5,5)	101	7,6	160 (11)	219	15,8	160 (18,5)
40	60	5,5	160 (7,5)	100	8,6	160 (11)	218	17,8	160 (18,5)
45	59	6,2	160 (7,5)	99	9,6	160 (11)	217	19,9	180 (22)
50	58	6,9	160 (7,5)	98	10,6	160 (11)	216	21,9	180 (22)

Fluid Viscosity cSt	100								
Motor Speed rpm	950			1450			2900		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	77	0,4	80 (0,55)	118	0,8	90 (1,1)	236	2,2	100 (3)
5	73	1,1	100 (1,5)	114	1,8	100 (2,2)	232	4,2	132 (5,5)
10	71	1,7	112 (2,2)	112	2,8	100 (3)	230	6,3	132 (7,5)
15	70	2,4	132 (3)	111	3,8	112 (4)	229	8,3	132 (9,2)
20	69	3	132 (4)	110	4,8	132 (5,5)	228	10,4	160 (11)
25	68	3,7	132 (4)	109	5,8	132 (7,5)	227	12,4	160 (15)
30	67	4,4	132 (5,5)	108	6,9	132 (7,5)	226	14,5	160 (15)
35	66	5	132 (5,5)	107	7,9	160 (11)	225	16,5	160 (18,5)
40	65	5,7	160 (7,5)	106	8,9	160 (11)	224	18,6	180 (22)
45	65	6,4	160 (7,5)	105	9,9	160 (11)	223	20,7	180 (22)
50	64	7	160 (7,5)	105	10,9	160 (15)	223	22,7	200 (30)

Pump Model SM-TRFXA046074 Displacement [CC]: 81

Fluid Viscosity cSt	220								
Motor Speed rpm	950			1450			2900		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	77	0,6	90 (0,75)	118	1,1	90 (1,5)	236	3	112 (4)
5	74	1,2	100 (1,5)	115	2,1	100 (3)	233	5,1	132 (5,5)
10	73	1,9	112 (2,2)	114	3,1	112 (4)	232	7,1	132 (9,2)
15	72	2,6	132 (3)	113	4,1	132 (5,5)	231	9,2	132 (9,2)
20	72	3,2	132 (4)	112	5,2	132 (5,5)	230	11,3	160 (15)
25	71	3,9	132 (5,5)	112	6,2	132 (7,5)	230	13,4	160 (15)
30	70	4,6	132 (5,5)	111	7,2	160 (11)	229	15,5	160 (18,5)
35	70	5,2	160 (7,5)	110	8,2	160 (11)	228	17,6	160 (18,5)
40	69	5,9	160 (7,5)	110	9,3	160 (11)	228	19,7	180 (22)
45	69	6,6	160 (7,5)	109	10,3	160 (11)	227	21,7	200 (30)
50	68	7,2	160 (11)	109	11,3	160 (15)	227	23,8	200 (30)

Fluid Viscosity cSt	320								
Motor Speed rpm	950			1450			2900		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	77	0,6	90 (0,75)	118	1,2	90 (1,5)	236	3,5	112 (4)
5	75	1,3	100 (1,5)	116	2,3	100 (3)	234	5,6	132 (7,5)
10	74	2	112 (2,2)	115	3,3	112 (4)	233	7,7	132 (9,2)
15	73	2,7	132 (4)	114	4,3	132 (5,5)	232	9,8	160 (11)
20	73	3,3	132 (4)	113	5,4	132 (7,5)	231	11,9	160 (15)
25	72	4	132 (5,5)	113	6,4	132 (7,5)	231	14	160 (15)
30	72	4,7	132 (5,5)	112	7,4	160 (11)	230	16,1	160 (18,5)
35	71	5,3	160 (7,5)	112	8,4	160 (11)	230	18,2	180 (22)
40	71	6	160 (7,5)	111	9,5	160(11)	229	20,3	180 (22)
45	70	6,7	160 (7,5)	111	10,5	160 (15)	229	22,4	200 (30)
50	70	7,4	160 (11)	111	11,5	160 (15)	229	24,5	200 (30)

Fluid Viscosity cSt	460								
Motor Speed rpm	950			1450			2900		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	77	0,7	90 (1,1)	118	1,4	100 (2,2)	236	4	132 (5,5)
5	75	1,4	100 (1,5)	116	2,5	100 (3)	234	6,1	132 (7,5)
10	75	2,1	112 (2,2)	115	3,5	112(4)	233	8,2	132 (9,2)
15	74	2,8	132 (3)	115	4,5	132 (5,5)	233	10,4	160 (11)
20	73	3,4	132 (4)	114	5,6	132 (7,5)	232	12,5	160 (15)
25	73	4,1	132 (5,5)	114	6,6	132 (7,5)	232	14,6	160 (18,5)
30	72	4,8	132 (5,5)	113	7,7	160 (11)	231	16,8	160 (18,5)
35	72	5,5	160 (7,5)	113	8,7	160 (11)	231	18,9	180 (22)
40	72	6,1	160 (7,5)	112	9,7	160 (11)	230	21	180 (22)
45	71	6,8	160 (7,5)	112	10,8	160 (15)	230	23,1	200 (30)
50	71	7,5	160 (11)	112	11,8	160 (15)	230	25,3	200 (30)

The performances refer to the Triumflex® pump coupled to a Motive® motor.
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

50HZ SERIES

SM-TRFXA046088

PERFORMANCE CHART

Fluid Viscosity	cSt	15									46									100								
Motor Speed	rpm	950			1450			2900			950			1450			2900			950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA046088 Displacement [CC]: 96	0	92	0,2	80 (0,55)	140	0,5	80 (0,75)	281	1,2	90 (1,5)	92	0,4	80 (0,55)	142	0,7	80 (0,75)	283	1,9	90 (2,2)	92	0,5	80 (0,75)	142	1,0	90 (1,1)	283	2,6	100 (3)
	5	80	1,0	90 (1,1)	129	1,7	100 (2,2)	269	3,6	112 (4)	85	1,2	112 (2,2)	134	1,9	100 (2,2)	276	4,3	132 (5,5)	88	1,3	112 (2,2)	137	2,2	100 (2,2)	278	5,0	132 (5,5)
	10	75	1,8	112 (2,2)	124	2,9	100 (3)	264	6,0	132 (7,5)	82	1,9	112 (2,2)	131	3,1	112 (4)	272	6,8	132 (7,5)	85	2,0	112 (2,2)	134	3,4	112 (4)	276	7,6	132 (9,2)
	15	71	2,5	132 (3)	119	4,0	112 (4)	259	8,3	132 (9,2)	79	2,8	132 (3)	128	4,3	132 (5,5)	270	9,2	160 (11)	84	2,9	132 (3)	133	4,6	132 (5,5)	275	10,0	160 (11)
	20	68	3,3	132 (4)	117	5,2	132 (5,5)	257	10,7	160 (11)	78	3,5	132 (4)	126	5,5	132 (5,5)	269	11,6	160 (15)	83	3,6	132 (4)	132	5,8	132 (7,5)	274	12,5	160 (15)
	25	64	4,2	132 (5,5)	113	6,3	132 (7,5)	253	13,2	160 (15)	76	4,3	132 (5,5)	125	6,7	132 (7,5)	266	14,0	160 (15)	82	4,4	132 (5,5)	131	7,0	132(7,5)	272	14,9	160 (15)
	30	62	4,9	132 (5,5)	111	7,5	132 (7,5)	251	15,6	160 (18,5)	74	5,0	132 (5,5)	124	7,9	160 (11)	265	16,6	160 (18,5)	80	5,3	132 (5,5)	130	8,3	160 (11)	271	17,4	160 (18,5)
	35	60	5,7	160 (7,5)	108	8,7	160 (11)	249	18,0	160 (18,5)	73	5,9	160 (7,5)	121	9,1	160 (11)	263	19,0	180 (22)	79	6,0	160 (7,5)	128	9,5	160 (11)	270	19,8	180 (22)
	40	57	6,4	160 (7,5)	106	9,9	160 (11)	246	20,3	180 (22)	72	6,6	160 (7,5)	120	10,3	160 (11)	262	21,4	180 (22)	78	6,8	160 (7,5)	127	10,7	160 (11)	269	22,3	200 (30)
	45	56	7,3	160 (7,5)	104	11,1	160 (11)	244	22,7	200 (30)	71	7,4	160 (7,5)	119	11,5	160 (15)	260	23,9	200 (30)	78	7,7	160 (11)	126	11,9	160 (15)	268	24,8	200 (30)
	50	54	8,0	160 (11)	102	12,3	160 (15)	243	25,1	200 (30)	70	8,3	160 (11)	118	12,7	160 (15)	259	26,3	200 (30)	77	8,4	160 (11)	126	13,1	160 (15)	268	27,2	200 (30)

Fluid Viscosity	cSt	220									320									460								
Motor Speed	rpm	950			1450			2900			950			1450			2900			950			1450			2900		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA046088 Displacement [CC]: 96	0	92	0,7	90 (1,1)	142	1,3	100 (2,2)	283	3,6	112 (4)	92	0,7	90 (1,1)	142	1,4	100 (2,2)	283	4,2	132 (5,5)	92	0,8	90 (1,1)	142	1,7	100 (2,2)	283	4,8	132 (5,5)
	5	89	1,4	112 (2,2)	138	2,5	100 (3)	280	6,1	132 (7,5)	90	1,6	112 (2,2)	139	2,8	100 (3)	281	6,7	132 (7,5)	90	1,7	112 (2,2)	139	3,0	112 (4)	281	7,3	132 (7,5)
	10	88	2,3	132(3)	137	3,7	112 (4)	278	8,5	132 (9,2)	89	2,4	132 (3)	138	4,0	132 (5,5)	280	9,2	160 (11)	90	2,5	132 (3)	138	4,2	132 (5,5)	280	9,8	160 (11)
	15	86	3,1	132 (4)	136	4,9	132 (5,5)	277	11,0	160 (15)	88	3,2	132 (4)	137	5,2	132 (7,5)	278	11,8	160 (15)	89	3,4	132 (4)	138	5,4	132 (7,5)	280	12,5	160 (15)
	20	86	3,8	132 (4)	134	6,2	132 (7,5)	276	13,6	160 (15)	88	4,0	132 (4)	136	6,5	132 (7,5)	277	14,3	160 (15)	88	4,1	132 (5,5)	137	6,7	132 (7,5)	278	15,0	160 (15)
	25	85	4,7	132 (5,5)	134	7,4	132 (7,5)	276	16,1	160 (18,5)	86	4,8	132 (5,5)	136	7,7	160 (11)	277	16,8	160 (18,5)	88	4,9	132 (5,5)	137	7,9	160 (11)	278	17,5	160 (18,5)
	30	84	5,5	160 (7,5)	133	8,6	160 (11)	275	18,6	180 (22)	86	5,6	160 (7,5)	134	8,9	160 (11)	276	19,3	180 (22)	86	5,8	160 (7,5)	136	9,2	160 (11)	277	20,2	180 (22)
	35	84	6,2	160 (7,5)	132	9,8	160(11)	274	21,1	180 (22)	85	6,4	160 (7,5)	134	10,1	160 (11)	276	21,8	180 (22)	86	6,6	160 (7,5)	136	10,4	160 (11)	277	22,7	180 (22)
	40	83	7,1	160 (7,5)	132	11,2	160 (15)	274	23,6	200 (30)	85	7,2	160 (7,5)	133	11,4	160 (15)	275	24,4	200 (30)	86	7,3	160 (11)	134	11,6	160 (15)	276	25,2	200 (30)
	45	83	7,9	160 (11)	131	12,4	160 (15)	272	26,0	200 (30)	84	8,0	160 (11)	133	12,6	160 (15)	275	26,9	200 (30)	85	8,2	160 (11)	134	13,0	160 (15)	276	27,7	200 (30)
	50	82	8,6	160 (11)	131	13,6	160 (15)	272	28,6	200 (30)	84	8,9	160 (11)	133	13,8	160 (15)	275	29,4	200 (30)	85	9,0	160 (11)	134	14,2	160 (15)	276	30,4	200 (30)

The performances refer to the Triumflex® pump coupled to a Motive® motor.
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

PERFORMANCE CHART

60HZ SERIES

60HZ SERIES

SM-TRFXA034034

PERFORMANCE CHART

Base Pump Model SM-TRFXA034034 Displacement [CC]: 20

Fluid Viscosity (cSt)	15								
Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	23	0,1	80 (0,37)	34	0,1	80 (0,55)	69	0,4	80 (0,75)
5	19	0,3	80 (0,37)	30	0,4	80 (0,55)	65	1	80 (1,1)
10	17	0,5	80 (0,55)	29	0,7	80 (0,75)	63	1,6	90 (2,2)
15	16	0,6	90 (0,75)	27	1	90 (1,1)	62	2,1	90 (2,2)
20	15	0,8	90 (1,1)	26	1,3	90 (1,5)	61	2,7	100 (3)
25	14	1	90 (1,1)	25	1,6	100 (2,2)	60	3,3	112 (4)
30	13	1,2	100 (1,5)	24	1,9	100 (2,2)	59	3,9	112 (4)
35	12	1,4	100 (1,5)	24	2,2	100 (2,2)	58	4,5	132 (5,5)
40	11	1,6	112 (2,2)	23	2,5	100 (3)	57	5,1	132 (5,5)
45	11	1,8	112 (2,2)	22	2,7	100 (3)	57	5,6	132 (7,5)
50	10	2	112 (2,2)	22	3	100 (3)	56	6,2	132 (7,5)

Fluid Viscosity (cSt)	46								
Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	23	0,1	80 (0,37)	34	0,2	80 (0,55)	69	0,6	80 (0,75)
5	20	0,3	80 (0,55)	32	0,5	80 (0,55)	66	1,2	90 (1,5)
10	19	0,5	80 (0,55)	31	0,8	90 (1,1)	65	1,8	90 (2,2)
15	18	0,7	90 (0,75)	30	1,1	90 (1,5)	64	2,4	100 (3)
20	18	0,9	90 (1,1)	29	1,4	90 (1,5)	64	3	100 (3)
25	17	1,1	90 (1,1)	29	1,7	100 (2,2)	63	3,6	112 (4)
30	17	1,3	100 (1,5)	28	2	100 (2,2)	63	4,2	132 (5,5)
35	16	1,5	100 (1,5)	28	2,3	100 (3)	62	4,7	132 (5,5)
40	16	1,6	112 (2,2)	27	2,6	100 (3)	62	5,3	132 (5,5)
45	15	1,8	112 (2,2)	27	2,8	100 (3)	61	5,9	132 (7,5)
50	15	2	112 (2,2)	27	3,1	112 (4)	61	6,5	132 (7,5)

Fluid Viscosity (cSt)	100								
Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	23	0,2	80 (0,37)	34	0,3	80 (0,55)	69	0,8	80 (1,1)
5	21	0,3	80 (0,55)	33	0,6	80 (0,75)	67	1,4	90 (1,5)
10	20	0,5	80 (0,55)	32	0,9	90 (1,1)	66	2	90 (2,2)
15	20	0,7	90 (0,75)	31	1,2	90 (1,5)	66	2,6	100 (3)
20	19	0,9	90 (1,1)	31	1,5	90 (1,5)	65	3,2	112 (4)
25	19	1,1	100 (1,5)	31	1,8	100 (2,2)	65	3,8	112 (4)
30	18	1,3	100 (1,5)	30	2,1	100 (2,2)	64	4,4	132 (5,5)
35	18	1,5	100 (1,5)	30	2,4	100 (3)	64	5	132 (5,5)
40	18	1,7	112 (2,2)	30	2,7	100 (3)	64	5,6	132 (7,5)
45	18	1,9	112 (2,2)	29	2,9	100 (3)	64	6,2	132 (7,5)
50	17	2,1	112 (2,2)	29	3,2	112 (4)	63	6,8	132 (7,5)

Base Pump Model SM-TRFXA034034 Displacement [CC]: 20

Fluid Viscosity (cSt)	220								
Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	23	0,2	80 (0,37)	34	0,4	80 (0,55)	69	1,1	90 (1,5)
5	21	0,4	80 (0,55)	33	0,7	90 (1,1)	67	1,7	90 (2,2)
10	21	0,6	90 (0,75)	33	1	90 (1,1)	67	2,3	100 (3)
15	21	0,8	90 (1,1)	32	1,3	100 (2,2)	67	3	112 (4)
20	20	1	90 (1,1)	32	1,6	100 (2,2)	66	3,6	112 (4)
25	20	1,2	100 (1,5)	32	1,9	100 (2,2)	66	4,2	132 (5,5)
30	20	1,4	100 (1,5)	32	2,2	100 (3)	66	4,8	132 (5,5)
35	20	1,6	112 (2,2)	31	2,5	100 (3)	66	5,4	132 (7,5)
40	19	1,8	112 (2,2)	31	2,8	112 (4)	65	6	132 (7,5)
45	19	2	112 (2,2)	31	3,1	112 (4)	65	6,6	132 (7,5)
50	19	2,2	132 (3)	31	3,4	112 (4)	65	7,2	132 (9,2)

Fluid Viscosity (cSt)	320								
Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	23	0,2	80 (0,37)	34	0,4	80 (0,55)	69	1,3	90 (2,2)
5	22	0,4	80 (0,55)	33	0,8	90 (1,1)	68	1,9	90 (2,2)
10	21	0,6	90 (0,75)	33	1,1	90 (1,5)	67	2,5	100 (3)
15	21	0,8	90 (1,1)	33	1,4	100 (2,2)	67	3,2	112 (4)
20	21	1	100 (1,5)	32	1,7	100 (2,2)	67	3,8	132 (5,5)
25	20	1,2	100 (1,5)	32	2	100 (3)	66	4,4	132 (5,5)
30	20	1,4	112 (2,2)	32	2,3	100 (3)	66	5	132 (5,5)
35	20	1,6	112 (2,2)	32	2,6	100 (3)	66	5,6	132 (7,5)
40	20	1,8	112 (2,2)	32	2,9	112 (4)	66	6,2	132 (7,5)
45	20	2	132 (3)	31	3,2	112 (4)	66	6,8	132 (7,5)
50	20	2,2	132 (3)	31	3,5	112 (4)	66	7,5	132 (9,2)

Fluid Viscosity (cSt)	460								
Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	23	0,3	80 (0,55)	34	0,5	90 (0,75)	69	1,5	90 (2,2)
5	22	0,5	90 (0,75)	33	0,8	90 (1,1)	68	2,1	100 (3)
10	21	0,7	90 (1,1)	33	1,1	90 (1,5)	67	2,8	112 (4)
15	21	0,9	90 (1,1)	33	1,4	90 (2,2)	67	3,4	112 (4)
20	21	1,1	100 (1,5)	33	1,8	100 (2,2)	67	4	132 (5,5)
25	21	1,3	100 (1,5)	33	2,1	100 (3)	67	4,6	132 (5,5)
30	21	1,5	112 (2,2)	32	2,4	100 (3)	67	5,3	132 (7,5)
35	20	1,7	112 (2,2)	32	2,7	100 (3)	66	5,9	132 (7,5)
40	20	1,9	112 (2,2)	32	3	112 (4)	66	6,5	132 (7,5)
45	20	2,1	132 (3)	32	3,3	112 (4)	66	7,1	132 (9,2)
50	20	2,3	132 (3)	32	3,6	132 (5,5)	66	7,7	132 (9,2)

The performances refer to the Triumflex® pump coupled to a Motive® motor. Motor Power Increase: 440V (+10%); 460V (+15%); 480V (+20%).
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

60HZ SERIES

SM-TRFXA034038

PERFORMANCE CHART

Fluid Viscosity	cSt	15									46									100								
Motor Speed	rpm	1150			1750			3500			1150			1750			3500			1150			1750			3500		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA034038 Displacement [CC]: 22	0	25	0,1	80 (0,37)	38	0,2	80 (0,55)	77	0,4	80 (0,75)	25	0,1	80 (0,37)	38	0,2	80 (0,55)	77	0,7	80 (0,75)	25	0,2	80 (0,37)	38	38	80 (0,55)	77	0,9	80 (1,1)
	5	21	0,3	80 (0,37)	34	0,5	80 (0,55)	72	1,1	80 (1,1)	22	0,3	80 (0,37)	36	0,6	80 (0,75)	74	1,3	90 (1,5)	23	0,4	80 (0,55)	36	36	90 (1,1)	75	1,6	90 (2,2)
	10	19	0,5	80 (0,55)	32	0,8	90 (1,1)	70	1,7	90 (2,2)	21	0,6	90 (0,75)	34	0,9	90 (1,1)	73	2	90 (2,2)	23	0,6	90 (0,75)	36	36	90 (1,1)	74	2,3	100 (3)
	15	17	0,7	90 (0,75)	31	1,1	90 (1,1)	69	2,4	100 (3)	20	0,8	90 (1,1)	34	1,2	90 (1,5)	72	2,7	100 (3)	22	0,8	90 (1,1)	35	35	90 (1,5)	73	2,9	112 (4)
	20	16	0,9	90 (1,1)	29	1,4	90 (1,5)	68	3	100 (3)	20	1	90 (1,1)	33	1,5	90 (1,5)	71	3,3	112 (4)	21	1	90 (1,1)	35	35	100 (2,2)	73	3,6	112 (4)
	25	15	1,1	90 (1,1)	28	1,8	100 (2,2)	67	3,7	112 (4)	19	1,2	100 (1,5)	32	1,9	100 (2,2)	70	4	132 (5,5)	21	1,3	100 (1,5)	34	34	100 (2,2)	72	4,3	132 (5,5)
	30	14	1,4	100 (1,5)	27	2,1	100 (2,2)	66	4,3	132 (5,5)	18	1,4	100 (1,5)	32	2,2	100 (2,2)	70	4,6	132 (5,5)	21	1,5	100 (1,5)	34	34	100 (3)	72	4,9	132 (5,5)
	35	13	1,6	112 (2,2)	26	2,4	100 (3)	65	5	132 (5,5)	18	1,6	112 (2,2)	31	2,5	100 (3)	69	5,3	132 (5,5)	20	1,7	112 (2,2)	33	33	100 (3)	72	5,6	132 (7,5)
	40	13	1,8	112 (2,2)	26	2,7	100 (3)	64	5,7	132 (7,5)	17	1,8	112 (2,2)	31	2,9	100 (3)	69	6	132 (7,5)	20	1,9	112 (2,2)	33	33	112 (4)	71	6,3	132 (7,5)
	45	12	2	112 (2,2)	25	3,1	112 (4)	63	6,3	132 (7,5)	17	2,1	112 (2,2)	30	3,2	112 (4)	68	6,6	132 (7,5)	20	2,1	112 (2,2)	33	33	112 (4)	71	6,9	132 (7,5)
	50	11	2,2	132 (3)	24	3,4	112 (4)	62	7	132 (7,5)	16	2,3	132 (3)	30	3,5	112 (4)	68	7,3	132 (7,5)	19	2,3	132 (3)	32	32	112 (4)	71	7,6	132 (9,2)

Fluid Viscosity	cSt	220									320									460								
Motor Speed	rpm	1150			1750			3500			1150			1750			3500			1150			1750			3500		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA034038 Displacement [CC]: 22	0	25	0,2	80 (0,37)	38	0,4	80 (0,55)	77	1,3	90 (2,2)	25	0,3	80 (0,37)	38	38	80 (0,75)	77	1,5	90 (2,2)	25	0,3	80 (0,55)	38	0,6	80 (0,75)	77	1,7	100 (3)
	5	24	0,5	90 (0,75)	37	0,8	90 (1,1)	75	1,9	100 (3)	24	0,5	90 (0,75)	37	37	90 (1,1)	76	2,2	100 (3)	24	0,5	80 (0,55)	37	0,9	90 (1,1)	76	2,4	100 (3)
	10	23	0,7	90 (1,1)	37	1,1	90 (1,5)	75	2,6	112 (4)	24	0,7	90 (1,1)	37	37	90 (1,5)	75	2,8	112 (4)	24	0,8	90 (1,1)	37	1,3	90 (2,2)	75	3,1	112 (4)
	15	23	0,9	90 (1,1)	36	1,4	90 (2,2)	74	3,3	112 (4)	23	0,9	90 (1,1)	36	36	100 (2,2)	76	3,5	112 (4)	24	1	90 (1,5)	37	1,6	100 (2,2)	76	3,8	132 (5,5)
	20	23	1,1	100 (1,5)	36	1,8	100 (2,2)	74	4	132 (5,5)	23	1,2	100 (1,5)	36	36	100 (2,2)	74	4,2	132 (5,5)	23	1,2	100 (1,5)	37	2	100 (3)	75	4,5	132 (5,5)
	25	22	1,3	100 (1,5)	35	2,1	100 (3)	74	4,7	132 (5,5)	23	1,4	112 (2,2)	36	36	100 (3)	74	4,9	132 (5,5)	23	1,4	112 (2,2)	36	2,3	100 (3)	75	5,2	132 (7,5)
	30	22	1,5	112 (2,2)	35	2,5	100 (3)	73	5,3	132 (7,5)	23	1,6	112 (2,2)	36	36	100 (3)	74	5,6	132 (7,5)	23	1,6	112 (2,2)	36	2,6	100 (3)	74	5,9	132 (7,5)
	35	22	1,8	112 (2,2)	35	2,8	100 (3)	73	6	132 (7,5)	22	1,8	112 (2,2)	36	36	100 (3)	74	6,3	132 (7,5)	23	1,9	112 (2,2)	36	3	112 (4)	74	6,6	132 (7,5)
	40	22	2	112 (2,2)	35	3,1	112 (4)	73	6,7	132 (7,5)	22	2	112 (2,2)	35	35	112 (4)	74	7	132 (7,5)	23	2,1	132 (3)	36	3,3	112 (4)	74	7,3	132 (9,2)
	45	21	2,2	132 (3)	35	3,5	112 (4)	73	7,4	132 (9,2)	22	2,2	132 (3)	35	35	112 (4)	73	7,7	132 (9,2)	23	2,3	132 (3)	36	3,7	132 (5,5)	74	8	132 (9,2)
	50	21	2,4	132 (3)	34	3,8	132 (5,5)	73	8,1	132 (9,2)	22	2,5	132 (3)	35	35	112 (4)	73	8,3	132 (9,2)	22	2,5	132 (3)	36	4	132 (5,5)	74	8,6	132 (9,2)

The performances refer to the Triumflex® pump coupled to a Motive® motor. Motor Power Increase: 440V (+10%); 460V (+15%); 480V (+20%).
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

60HZ SERIES

SM-TRFXA034050

PERFORMANCE CHART

Pump Model SM-TRFXA034050 Displacement [CC]: 29

Fluid Viscosity 15 cSt

Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	33	0,1	80 (0,37)	50	0,2	80 (0,55)	101	0,6	80 (0,75)
5	27	0,4	80 (0,55)	44	0,6	80 (0,75)	95	1,4	90 (1,5)
10	25	0,7	90 (0,75)	42	1,1	90 (1,1)	92	2,3	100 (3)
15	23	0,9	90 (1,1)	40	1,5	100 (1,5)	91	3,1	112 (4)
20	21	1,2	100 (1,5)	39	1,9	100 (2,2)	89	4	112 (4)
25	20	1,5	100 (1,5)	37	2,3	100 (3)	88	4,9	132 (5,5)
30	19	1,8	112 (2,2)	36	2,8	100 (3)	86	5,7	132 (7,5)
35	18	2,1	112 (2,2)	35	3,2	112 (4)	85	6,6	132 (7,5)
40	16	2,3	132 (3)	34	3,6	112 (4)	84	7,4	132 (7,5)
45	15	2,6	132 (3)	33	4	112 (4)	83	8,3	132 (9,2)
50	15	2,9	132 (3)	32	4,5	132 (5,5)	82	9,2	132 (9,2)

Fluid Viscosity 46 cSt

Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	33	0,2	80 (0,37)	50	0,3	80 (0,55)	101	0,9	90 (1,1)
5	29	0,4	80 (0,55)	47	0,7	80 (0,75)	97	1,8	90 (2,2)
10	28	0,7	90 (0,75)	45	1,2	90 (1,5)	96	2,6	100 (3)
15	27	1	90 (1,1)	44	1,6	100 (2,2)	95	3,5	112 (4)
20	26	1,3	100 (1,5)	43	2	100 (2,2)	94	4,4	132 (5,5)
25	25	1,6	112 (2,2)	42	2,5	100 (3)	93	5,2	132 (5,5)
30	24	1,9	112 (2,2)	42	2,9	100 (3)	92	6,1	132 (7,5)
35	24	2,1	112 (2,2)	41	3,3	112 (4)	91	7	132 (7,5)
40	23	2,4	132 (3)	40	3,8	112 (4)	91	7,8	132 (9,2)
45	22	2,7	132 (3)	40	4,2	132 (5,5)	90	8,7	132 (9,2)
50	22	3	132 (3)	39	4,6	132 (5,5)	89	9,6	160 (11)

Fluid Viscosity 100 cSt

Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	33	0,2	80 (0,37)	50	0,4	80 (0,55)	101	1,2	90 (1,5)
5	31	0,5	80 (0,75)	48	0,9	90 (1,1)	98	2,1	100 (3)
10	30	0,8	90 (1,1)	47	1,3	90 (1,5)	97	3	100 (3)
15	29	1,1	90 (1,1)	46	1,7	100 (2,2)	97	3,9	112 (4)
20	28	1,4	100 (1,5)	45	2,2	100 (2,2)	96	4,7	132 (5,5)
25	28	1,6	112 (2,2)	45	2,6	100 (3)	95	5,6	132 (7,5)
30	27	1,9	112 (2,2)	44	3	100 (3)	95	6,5	132 (7,5)
35	27	2,2	112 (2,2)	44	3,5	112 (4)	94	7,4	132 (7,5)
40	26	2,5	132 (3)	43	3,9	112 (4)	94	8,3	132 (9,2)
45	26	2,8	132 (3)	43	4,3	132 (5,5)	93	9,1	132 (9,2)
50	25	3,1	132 (4)	43	4,8	132 (5,5)	93	10	160 (11)

Pump Model SM-TRFXA034050 Displacement [CC]: 29

Fluid Viscosity 220 cSt

Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	33	0,3	80 (0,55)	50	0,6	80 (0,75)	101	1,7	100 (3)
5	31	0,6	90 (0,75)	49	1	90 (1,5)	99	2,6	112 (4)
10	31	0,9	90 (1,1)	48	1,5	100 (2,2)	98	3,5	112 (4)
15	30	1,2	100 (1,5)	48	1,9	100 (2,2)	98	4,4	132 (5,5)
20	30	1,5	112 (2,2)	47	2,3	100 (3)	97	5,2	132 (7,5)
25	29	1,7	112 (2,2)	47	2,8	112 (4)	97	6,1	132 (7,5)
30	29	2	112 (2,2)	46	3,2	112 (4)	97	7	132 (9,2)
35	29	2,3	132 (3)	46	3,7	132 (5,5)	96	7,9	132 (9,2)
40	28	2,6	132 (3)	46	4,1	132 (5,5)	96	8,8	132 (9,2)
45	28	2,9	132 (4)	45	4,5	132 (5,5)	96	9,7	160 (11)
50	28	3,2	132 (4)	45	5	132 (5,5)	96	10,6	160 (15)

Fluid Viscosity 320 cSt

Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	33	0,4	80 (0,55)	50	0,7	80 (0,75)	101	1,9	90 (2,2)
5	32	0,7	90 (1,1)	49	1,1	90 (1,1)	99	2,8	112 (4)
10	31	0,9	90 (1,1)	48	1,6	100 (2,2)	99	3,7	112 (4)
15	31	1,2	100 (1,5)	48	2	100 (3)	98	4,6	132 (5,5)
20	30	1,5	112 (2,2)	48	2,5	100 (3)	98	5,6	132 (7,5)
25	30	1,8	112 (2,2)	47	2,9	112 (4)	98	6,5	132 (7,5)
30	30	2,1	132 (3)	47	3,3	112 (4)	97	7,4	132 (9,2)
35	29	2,4	132 (3)	47	3,8	132 (5,5)	97	8,3	132 (9,2)
40	29	2,7	132 (3)	47	4,2	132 (5,5)	97	9,2	160 (11)
45	29	3	132 (4)	46	4,7	132 (5,5)	97	10,1	160 (11)
50	29	3,2	132 (4)	46	5,1	132 (5,5)	96	11	160 (15)

Fluid Viscosity 460 cSt

Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	33	0,4	80 (0,55)	50	0,8	90 (1,1)	101	2,2	100 (3)
5	32	0,7	90 (1,1)	49	1,2	90 (1,5)	100	3,2	112 (4)
10	31	1	100 (1,5)	49	1,7	100 (2,2)	99	4,1	132 (5,5)
15	31	1,3	100 (1,5)	48	2,1	100 (2,2)	99	5	132 (5,5)
20	31	1,6	112 (2,2)	48	2,6	100 (3)	98	5,9	132 (7,5)
25	31	1,9	112 (2,2)	48	3	112 (4)	98	6,8	132 (7,5)
30	30	2,2	132 (3)	48	3,5	112 (4)	98	7,7	132 (9,2)
35	30	2,5	132 (3)	47	3,9	112 (4)	98	8,6	132 (9,2)
40	30	2,7	132 (3)	47	4,4	132 (5,5)	98	9,5	160 (11)
45	30	3	132 (4)	47	4,8	132 (5,5)	97	10,5	160 (11)
50	29	3,3	132 (4)	47	5,3	132 (5,5)	97	11,4	160 (15)

The performances refer to the Triumflex® pump coupled to a Motive® motor. Motor Power Increase: 440V (+10%); 460V (+15%); 480V (+20%).
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

60HZ SERIES

SM-TRFXA041048

PERFORMANCE CHART

Pump Model SM-TRFXA041048 Displacement [CC]: 40

Fluid Viscosity cSt	15									46									100								
Motor Speed rpm	1150			1750			3500			1150			1750			3500			1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	46	0,1	80 (0,37)	70	0,3	80 (0,55)	141	0,7	80 (0,75)	46	0,2	80 (0,37)	70	0,4	80 (0,55)	141	1,1	90 (1,5)	46	0,3	80 (0,55)	70	0,5	80 (0,55)	141	1,5	90 (2,2)
5	40	0,5	80 (0,55)	64	0,8	90 (1,1)	134	1,9	90 (2,2)	42	0,6	90 (0,75)	67	1	90 (1,1)	137	2,3	100 (3)	44	0,7	90 (0,75)	68	1,1	90 (1,5)	138	2,8	100 (3)
10	37	0,9	90 (1,1)	62	1,4	90 (1,5)	132	3,1	112 (4)	41	1	90 (1,1)	65	1,6	100 (2,2)	135	3,5	112 (4)	43	1,1	100 (1,5)	67	1,8	100 (2,2)	137	4	132 (5,5)
15	35	1,3	100 (1,5)	60	2	100 (2,2)	130	4,3	132 (5,5)	40	1,4	100 (1,5)	64	2,2	100 (3)	134	4,8	132 (5,5)	42	1,5	112 (2,2)	66	2,4	100 (3)	136	5,2	132 (5,5)
20	34	1,7	112 (2,2)	58	2,6	100 (3)	128	5,5	132 (7,5)	39	1,8	112 (2,2)	63	2,8	100 (3)	133	6	132 (7,5)	41	1,9	112 (2,2)	65	3	112 (4)	135	6,4	132 (7,5)
25	32	2,1	112 (2,2)	56	3,2	112 (4)	127	6,7	132 (7,5)	38	2,2	132 (3)	62	3,4	112 (4)	132	7,2	132 (7,5)	40	2,3	132 (3)	65	3,6	112 (4)	135	7,7	132 (9,2)
30	31	2,5	132 (3)	55	3,8	112 (4)	125	7,9	132 (9,2)	37	2,6	132 (3)	61	4	132 (5,5)	131	8,4	132 (9,2)	40	2,7	132 (3)	64	4,2	132 (5,5)	134	8,9	132 (9,2)
35	30	2,9	132 (3)	54	4,4	132 (5,5)	124	9,1	132 (9,2)	36	3	132 (4)	60	4,6	132 (5,5)	131	9,6	160 (11)	39	3,1	132 (4)	64	4,8	132 (5,5)	134	10,1	160 (11)
40	29	3,3	132 (4)	53	5	132 (5,5)	123	10,3	160 (11)	35	3,4	132 (4)	60	5,2	132 (5,5)	130	10,8	160 (11)	39	3,5	132 (4)	63	5,4	132 (5,5)	133	11,4	160 (15)
45	28	3,6	132 (4)	52	5,6	132 (7,5)	122	11,5	160 (15)	35	3,7	132 (4)	59	5,8	132 (7,5)	129	12	160 (15)	38	3,8	132 (4)	63	6	132 (7,5)	133	12,6	160 (15)
50	27	4	132 (4)	51	6,2	132 (7,5)	121	12,7	160 (15)	34	4,1	132 (5,5)	58	6,4	132 (7,5)	129	13,3	160 (15)	38	4,2	132 (5,5)	62	6,6	132 (7,5)	132	13,8	160 (15)

Pump Model SM-TRFXA041048 Displacement [CC]: 40

Fluid Viscosity cSt	220									320									460								
Motor Speed rpm	1150			1750			3500			1150			1750			3500			1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	46	0,4	80 (0,55)	70	0,7	90 (1,1)	141	2,1	100 (3)	46	0,5	90 (0,75)	70	0,9	90 (1,1)	141	2,4	100 (3)	46	0,5	90 (0,75)	70	1	90 (1,1)	141	2,8	100 (3)
5	44	0,8	90 (1,1)	69	1,4	100 (2,2)	139	3,3	112 (4)	45	0,9	90 (1,1)	69	1,5	100 (2,2)	139	3,7	132 (5,5)	45	0,9	90 (1,1)	69	1,6	100 (2,2)	139	4,1	132 (5,5)
10	44	1,2	100 (1,5)	68	2	100 (2,2)	138	4,6	132 (5,5)	44	1,3	100 (1,5)	68	2,1	100 (3)	139	5	132 (5,5)	45	1,3	112 (2,2)	69	2,2	100 (3)	139	5,4	132 (7,5)
15	43	1,6	112 (2,2)	67	2,6	100 (3)	138	5,8	132 (7,5)	44	1,7	112 (2,2)	68	2,7	112 (4)	138	6,2	132 (7,5)	44	1,7	112 (2,2)	68	2,9	112 (4)	139	6,6	132 (7,5)
20	43	2	112 (2,2)	67	3,2	112 (4)	137	7,1	132 (9,2)	43	2,1	132 (3)	67	3,3	112 (4)	138	7,5	132 (9,2)	44	2,1	132 (3)	68	3,5	112 (4)	138	7,9	132 (9,2)
25	42	2,4	132 (3)	66	3,8	132 (5,5)	137	8,3	132 (9,2)	43	2,5	132 (3)	67	3,9	132 (5,5)	137	8,7	160 (11)	44	2,6	132 (3)	68	4,1	132 (5,5)	138	9,2	160 (11)
30	42	2,8	132 (3)	66	4,4	132 (5,5)	136	9,6	160 (11)	43	2,9	132 (4)	67	4,6	132 (5,5)	137	10	160 (11)	43	3	132 (4)	67	4,7	132 (5,5)	138	10,5	160 (11)
35	42	3,2	132 (4)	66	5	132 (5,5)	136	10,8	160 (15)	42	3,3	132 (4)	67	5,2	132 (7,5)	137	11,3	160 (15)	43	3,4	132 (4)	67	5,4	132 (7,5)	137	11,7	160 (15)
40	41	3,6	132 (4)	65	5,6	132 (7,5)	136	12,1	160 (15)	42	3,7	132 (5,5)	66	5,8	132 (7,5)	137	12,5	160 (15)	43	3,8	132 (5,5)	67	6	132 (7,5)	137	13	160 (15)
45	41	4	132 (4)	65	6,3	132 (7,5)	135	13,3	160 (15)	42	4,1	132 (5,5)	66	6,4	132 (7,5)	136	13,8	160 (15)	43	4,2	132 (5,5)	67	6,6	132 (7,5)	137	14,3	160 (15)
50	41	4,4	132 (5,5)	65	6,9	132 (7,5)	135	14,6	160 (18,5)	42	4,5	132 (5,5)	66	7	132 (7,5)	136	15	160 (18,5)	42	4,6	132 (5,5)	67	7,2	132 (9,2)	137	15,6	160 (18,5)

The performances refer to the Triumflex® pump coupled to a Motive® motor. Motor Power Increase: 440V (+10%); 460V (+15%); 480V (+20%).
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

60HZ SERIES

SM-TRFXA041058

PERFORMANCE CHART

Fluid Viscosity	cSt	15									46									100								
Motor Speed	rpm	1150			1750			3500			1150			1750			3500			1150			1750			3500		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA041058 Displacement [CC]: 49	0	56	0,2	80 (0,37)	85	0,3	80 (0,55)	170	0,9	80 (1,1)	56	0,3	80 (0,55)	85	0,5	80 (0,55)	170	1,4	90 (1,5)	56	0,3	80 (0,55)	85	0,7	90 (1,1)	170	1,8	90 (2,2)
	5	48	0,6	90 (0,75)	77	1	90 (1,1)	162	2,3	100 (3)	51	0,7	90 (0,75)	80	1,2	90 (1,5)	165	2,8	100 (3)	53	0,8	90 (1,1)	82	1,4	90 (1,5)	167	3,3	112 (4)
	10	45	1,1	100 (1,5)	74	1,7	100 (2,2)	159	3,8	112 (4)	49	1,2	100 (1,5)	78	1,9	100 (2,2)	163	4,3	132 (5,5)	51	1,3	100 (1,5)	81	2,1	100 (2,2)	166	4,8	132 (5,5)
	15	43	1,6	112 (2,2)	72	2,5	100 (3)	157	5,2	132 (5,5)	48	1,7	112 (2,2)	77	2,7	100 (3)	162	5,8	132 (7,5)	50	1,8	112 (2,2)	80	2,8	100 (3)	165	6,3	132 (7,5)
	20	41	2	112 (2,2)	70	3,2	112 (4)	155	6,7	132 (7,5)	47	2,2	112 (2,2)	76	3,4	112 (4)	161	7,2	132 (7,5)	50	2,3	132 (3)	79	3,6	112 (4)	164	7,8	132 (9,2)
	25	39	2,5	132(3)	68	3,9	112 (4)	153	8,1	132 (9,2)	46	2,6	132 (3)	75	4,1	132 (5,5)	160	8,7	132 (9,2)	49	2,7	132 (3)	78	4,3	132 (5,5)	163	9,3	132 (9,2)
	30	38	3	132(3)	67	4,6	132 (5,5)	152	9,6	160 (11)	45	3,1	132 (4)	74	4,8	132 (5,5)	159	10,1	160 (11)	48	3,2	132 (4)	77	5	132 (5,5)	162	10,8	160 (11)
	35	36	3,5	132 (4)	65	5,3	132 (5,5)	150	11	160 (11)	44	3,6	132 (4)	73	5,6	132 (7,5)	158	11,6	160 (15)	48	3,7	132 (4)	77	5,8	132 (7,5)	162	12,2	160 (15)
	40	35	3,9	132 (4)	64	6,1	132 (7,5)	149	12,4	160 (15)	43	4,1	132 (5,5)	72	6,3	132 (7,5)	157	13,1	160 (15)	47	4,2	132 (5,5)	76	6,5	132 (7,5)	161	13,7	160 (15)
	45	33	4,4	132 (5,5)	63	6,8	132 (7,5)	147	13,9	160 (15)	42	4,5	132 (5,5)	71	7	132 (7,5)	156	14,5	160 (15)	46	4,7	132 (5,5)	76	7,2	132 (7,5)	161	15,2	160 (15)
	50	32	4,9	132 (5,5)	61	7,5	132 (7,5)	146	15,3	160 (18,5)	41	5	132 (5,5)	70	7,7	132 (9,2)	155	16	160 (18,5)	46	5,1	132 (5,5)	75	8	132 (9,2)	160	16,7	160 (18,5)

Fluid Viscosity	cSt	220									320									460								
Motor Speed	rpm	1150			1750			3500			1150			1750			3500			1150			1750			3500		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA041058 Displacement [CC]: 49	0	56	0,5	90 (0,75)	85	0,9	90 (1,1)	170	2,5	100 (3)	56	0,6	90 (0,75)	85	1	90 (1,1)	170	2,9	112 (4)	56	0,6	90 (0,75)	85	1,2	90 (1,5)	170	3,4	112 (4)
	5	54	1	100 (1,5)	83	1,6	100 (2,2)	168	4	132 (5,5)	54	1	90 (1,1)	83	1,8	100 (2,2)	168	4,5	132 (5,5)	54	1,1	112 (2,2)	84	2	100 (2,2)	168	4,9	132 (5,5)
	10	53	1,4	112 (2,2)	82	2,4	100 (3)	167	5,5	132 (7,5)	53	1,5	112 (2,2)	83	2,5	100 (3)	167	6	132 (7,5)	54	1,6	112 (2,2)	83	2,7	100 (3)	168	6,5	132 (7,5)
	15	52	1,9	112 (2,2)	81	3,1	112 (4)	166	7,1	132 (9,2)	53	2	112 (2,2)	82	3,3	112 (4)	167	7,5	132 (9,2)	53	2,1	132 (3)	82	3,5	112 (4)	167	8	132 (9,2)
	20	52	2,4	132(3)	81	3,9	132 (5,5)	166	8,6	160 (11)	52	2,5	132 (3)	81	4	132 (5,5)	166	9	160 (11)	53	2,6	132 (3)	82	4,2	132 (5,5)	167	9,6	160 (11)
	25	51	2,9	132 (4)	80	4,6	132 (5,5)	165	10,1	160 (11)	52	3	132 (4)	81	4,8	132 (5,5)	166	10,6	160 (11)	53	3,1	132 (4)	82	5	132 (5,5)	167	11,1	160 (15)
	30	51	3,4	132 (4)	80	5,3	132 (7,5)	165	11,6	160 (15)	52	3,5	132 (4)	81	5,5	132 (7,5)	166	12,1	160 (15)	52	3,6	132 (5,5)	81	5,7	132 (7,5)	166	12,6	160 (15)
	35	50	3,9	132 (5,5)	79	6,1	132 (7,5)	164	13,1	160 (15)	51	4	132 (5,5)	80	6,3	132 (7,5)	165	13,6	160 (15)	52	4,1	132 (5,5)	81	6,5	132 (7,5)	166	14,2	160 (15)
	40	50	4,3	132 (5,5)	79	6,8	132 (7,5)	164	14,6	160 (18,5)	51	4,4	132 (5,5)	80	7	132 (7,5)	165	15,1	160 (18,5)	52	4,6	132 (5,5)	81	7,2	132 (9,2)	166	15,7	160 (18,5)
	45	50	4,8	132 (5,5)	79	7,6	132 (9,2)	164	16,1	160 (18,5)	51	4,9	132 (5,5)	80	7,8	132 (9,2)	165	16,7	160 (18,5)	51	5	132 (5,5)	81	8	132 (9,2)	166	17,3	160 (18,5)
	50	49	5,3	160 (7,5)	78	8,3	132 (9,2)	163	17,6	160 (18,5)	50	5,4	160 (7,5)	79	8,5	132 (9,2)	164	18,2	180 (22)	51	5,5	160 (7,5)	80	8,7	132 (9,2)	165	18,8	180 (22)

The performances refer to the Triumflex® pump coupled to a Motive® motor. Motor Power Increase: 440V (+10%); 460V (+15%); 480V (+20%).
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

60HZ SERIES

SM-TRFXA041068

PERFORMANCE CHART

Pump Model SM-TRFXA041068 Displacement [CC]: 57

Fluid Viscosity 15 cSt

Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	65	0,2	80 (0,37)	100	0,4	80 (0,55)	199	1	80 (1,1)
5	57	0,7	90 (0,75)	91	1,2	90 (1,5)	190	2,7	100 (3)
10	53	1,3	100 (1,5)	87	2	100 (2,2)	187	4,4	132 (5,5)
15	50	1,8	112 (2,2)	84	2,9	100 (3)	184	6,1	132 (7,5)
20	48	2,4	132(3)	82	3,7	112 (4)	182	7,8	132 (9,2)
25	46	3	132(3)	80	4,6	132 (5,5)	180	9,5	160 (11)
30	44	3,5	132 (4)	78	5,4	132 (5,5)	178	11,2	160 (15)
35	42	4,1	132 (5,5)	76	6,3	132 (7,5)	176	12,9	160 (15)
40	41	4,6	132 (5,5)	75	7,1	132 (7,5)	174	14,6	160 (15)
45	39	5,2	132 (5,5)	73	7,9	132 (9,2)	173	16,3	160 (18,5)
50	38	5,9	160 (7,5)	72	8,8	132 (9,2)	171	18	160 (18,5)

Fluid Viscosity 46 cSt

Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	65	0,3	80 (0,37)	100	0,6	80 (0,75)	199	1,6	90 (2,2)
5	60	0,9	90 (1,1)	94	1,4	90 (1,5)	194	3,3	112 (4)
10	58	1,4	100 (1,5)	92	2,3	100 (3)	192	5	132 (5,5)
15	56	2	112 (2,2)	90	3,1	112 (4)	190	6,7	132 (7,5)
20	55	2,5	132 (3)	89	4	132 (5,5)	188	8,5	132 (9,2)
25	53	3,1	132 (4)	88	4,8	132 (5,5)	187	10,2	160 (11)
30	52	3,6	132 (4)	86	5,7	132 (7,5)	186	11,9	160 (15)
35	51	4,2	132 (5,5)	85	6,5	132 (7,5)	185	13,6	160 (15)
40	50	4,8	132 (5,5)	84	7,4	132 (7,5)	184	15,3	160 (18,5)
45	49	5,3	132 (5,5)	83	8,2	132 (9,2)	183	17,1	160 (18,5)
50	48	5,9	160 (7,5)	83	9,1	132 (9,2)	182	18,8	180 (22)

Fluid Viscosity 100 cSt

Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	65	0,4	80 (0,55)	100	0,8	90 (1,1)	199	2,2	100 (3)
5	62	1	100 (1,5)	96	1,6	100 (2,2)	196	3,9	132 (5,5)
10	60	1,5	112 (2,2)	94	2,5	100 (3)	194	5,6	132 (7,5)
15	59	2,1	112 (2,2)	93	3,3	112 (4)	193	7,4	132 (7,5)
20	58	2,6	132 (3)	92	4,2	132 (5,5)	192	9,1	132 (9,2)
25	57	3,2	132 (4)	91	5,1	132 (5,5)	191	10,9	160 (11)
30	57	3,8	132 (4)	91	5,9	132 (7,5)	190	12,6	160 (15)
35	56	4,3	132 (5,5)	90	6,8	132 (7,5)	190	14,3	160 (15)
40	55	4,9	132 (5,5)	89	7,6	132 (9,2)	189	16,1	160 (18,5)
45	55	5,5	160 (7,5)	89	8,5	132 (9,2)	188	17,8	160 (18,5)
50	54	6	160 (7,5)	88	9,3	160 (11)	188	19,6	180 (22)

Pump Model SM-TRFXA041068 Displacement [CC]: 57

Fluid Viscosity 220 cSt

Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	65	0,6	90 (0,75)	100	1	90 (1,5)	199	3	112 (4)
5	63	1,1	100 (1,5)	97	1,9	100 (2,2)	197	4,7	132 (5,5)
10	62	1,7	112 (2,2)	96	2,8	112 (4)	196	6,5	132 (7,5)
15	61	2,3	132 (3)	95	3,7	112 (4)	195	8,3	132 (9,2)
20	61	2,8	132 (4)	95	4,5	132 (5,5)	194	10	160 (11)
25	60	3,4	132 (4)	94	5,4	132 (7,5)	194	11,8	160 (15)
30	59	4	132 (5,5)	94	6,3	132 (7,5)	193	13,6	160 (15)
35	59	4,5	132 (5,5)	93	7,1	132 (7,5)	193	15,4	160 (18,5)
40	59	5,1	160 (7,5)	93	8	132 (9,2)	192	17,1	160 (18,5)
45	58	5,7	160 (7,5)	92	8,9	160 (11)	192	18,9	180 (22)
50	58	6,2	160 (7,5)	92	9,7	160 (11)	191	20,7	180 (22)

Fluid Viscosity 320 cSt

Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	65	0,6	90 (0,75)	100	1,2	90 (1,5)	199	3,4	112 (4)
5	63	1,2	100 (1,5)	98	2,1	100 (3)	197	5,2	132 (7,5)
10	63	1,8	112 (2,2)	97	3	112 (4)	196	7	132 (7,5)
15	62	2,4	132 (3)	96	3,8	132 (5,5)	196	8,8	160 (11)
20	61	2,9	132 (4)	96	4,7	132 (5,5)	195	10,6	160 (15)
25	61	3,5	132 (4)	95	5,6	132 (7,5)	195	12,4	160 (15)
30	60	4,1	132 (5,5)	95	6,5	132 (7,5)	194	14,2	160 (18,5)
35	60	4,6	132 (5,5)	94	7,3	132 (9,2)	194	16	160 (18,5)
40	60	5,2	160 (7,5)	94	8,2	132 (9,2)	193	17,7	160 (18,5)
45	59	5,8	160 (7,5)	93	9,1	160 (11)	193	19,5	180 (22)
50	59	6,3	160 (7,5)	93	10	160 (11)	193	21,3	180 (22)

Fluid Viscosity 460 cSt

Motor Speed (rpm)	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	65	0,7	90 (1,1)	100	1,4	100 (2,2)	199	4	132 (5,5)
5	64	1,3	100 (1,5)	98	2,3	100 (3)	198	5,8	132 (7,5)
10	63	1,9	112 (2,2)	97	3,2	112 (4)	197	7,6	132 (9,2)
15	63	2,5	132 (3)	97	4,1	132 (5,5)	196	9,4	160 (11)
20	62	3	132 (4)	96	4,9	132 (5,5)	196	11,2	160 (15)
25	62	3,6	132 (4)	96	5,8	132 (7,5)	195	13	160 (15)
30	61	4,2	132 (5,5)	95	6,7	132 (7,5)	195	14,8	160 (18,5)
35	61	4,8	132 (5,5)	95	7,6	132 (9,2)	195	16,6	160 (18,5)
40	61	5,3	160 (7,5)	95	8,5	132 (9,2)	194	18,4	180 (22)
45	60	5,9	160 (7,5)	95	9,3	160 (11)	194	20,2	180 (22)
50	60	6,5	160 (7,5)	94	10,2	160 (11)	194	22,1	180 (22)

The performances refer to the Triumflex® pump coupled to a Motive® motor. Motor Power Increase: 440V (+10%); 460V (+15%); 480V (+20%).
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

60HZ SERIES

SM-TRFXA046062

PERFORMANCE CHART

Pump Model SM-TRFXA046062 Displacement [CC]: 68

Fluid Viscosity cSt	15								
Motor Speed rpm	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	78	0,2	80 (0,37)	119	0,4	80 (0,55)	239	1,1	90 (1,5)
5	70	0,9	90 (1,1)	111	1,4	90 (1,5)	230	3,2	112 (4)
10	66	1,5	112 (2,2)	107	2,4	100 (3)	227	5,2	132 (5,5)
15	64	2,2	132 (3)	105	3,4	112 (4)	224	7,2	132 (7,5)
20	61	2,9	132 (4)	102	4,4	132(5,5)	222	9,3	160 (11)
25	59	3,5	132 (4)	100	5,5	132 (7,5)	220	11,3	160 (15)
30	57	4,2	132 (5,5)	98	6,5	132 (7,5)	218	13,3	160 (15)
35	56	4,8	132 (5,5)	97	7,5	132 (9,2)	216	15,4	160 (18,5)
40	54	5,5	160 (7,5)	95	8,5	132 (9,2)	214	17,4	160 (18,5)
45	53	6,2	160 (7,5)	94	9,5	160 (11)	213	19,4	180 (22)
50	51	6,8	160 (7,5)	92	10,5	160 (11)	212	21,5	180 (22)

Fluid Viscosity cSt	46								
Motor Speed rpm	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	78	0,3	80 (0,55)	119	0,6	80 (0,75)	239	1,8	90 (2,2)
5	73	1	90 (1,1)	114	1,6	100 (2,2)	233	3,8	112 (4)
10	71	1,7	112 (2,2)	112	2,7	100 (3)	231	5,9	132 (7,5)
15	69	2,3	132 (3)	110	3,7	112 (4)	230	7,9	132 (9,2)
20	68	3	132 (4)	109	4,7	132 (5,5)	228	10	160 (11)
25	67	3,7	132 (4)	108	5,7	132 (7,5)	227	12,1	160 (15)
30	66	4,3	132 (5,5)	106	6,7	132 (7,5)	226	14,1	160 (15)
35	65	5	132 (5,5)	105	7,8	132 (9,2)	225	16,2	160 (18,5)
40	64	5,7	160 (7,5)	104	8,8	132 (9,2)	224	18,2	180 (22)
45	63	6,3	160 (7,5)	104	9,8	160 (11)	223	20,3	180 (22)
50	62	7	160 (7,5)	103	10,8	160 (11)	222	22,4	200 (30)

Fluid Viscosity cSt	100								
Motor Speed rpm	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	78	0,5	90 (0,75)	119	0,9	90 (1,1)	239	2,4	100 (3)
5	75	1,1	100 (1,5)	116	1,9	100 (2,2)	235	4,5	132 (5,5)
10	73	1,8	112 (2,2)	114	2,9	100 (3)	234	6,6	132 (7,5)
15	72	2,5	132 (3)	113	3,9	112 (4)	233	8,7	132 (9,2)
20	71	3,1	132 (4)	112	5	132 (5,5)	232	10,8	160 (15)
25	70	3,8	132 (4)	111	6	132 (7,5)	231	12,8	160 (15)
30	70	4,5	132 (5,5)	111	7	132 (7,5)	230	14,9	160 (18,5)
35	69	5,2	132 (5,5)	110	8,1	132 (9,2)	229	17	160 (18,5)
40	68	5,8	160 (7,5)	109	9,1	160 (11)	229	19,1	180 (22)
45	68	6,5	160 (7,5)	109	10,1	160 (11)	228	21,2	180 (22)
50	67	7,2	160 (7,5)	108	11,1	160 (15)	227	23,3	200 (30)

Pump Model SM-TRFXA046062 Displacement [CC]: 68

Fluid Viscosity cSt	220								
Motor Speed rpm	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	78	0,6	90 (0,75)	119	1,2	100 (2,2)	239	3,3	112 (4)
5	76	1,3	100 (1,5)	117	2,2	100 (3)	236	5,4	132 (7,5)
10	75	2	112 (2,2)	116	3,3	112 (4)	235	7,5	132 (7,5)
15	74	2,7	132 (3)	115	4,3	112 (4)	235	9,7	160 (11)
20	74	3,3	132 (4)	115	5,3	132 (7,5)	234	11,8	160 (15)
25	73	4	132 (5,5)	114	6,4	132 (7,5)	233	13,9	160 (15)
30	73	4,7	132 (5,5)	113	7,4	132 (7,5)	233	16	160 (18,5)
35	72	5,4	160 (7,5)	113	8,5	132 (9,2)	232	18,1	180 (22)
40	72	6	160 (7,5)	113	9,5	160 (11)	232	20,3	180 (22)
45	71	6,7	160 (7,5)	112	10,5	160 (11)	232	22,4	200 (30)
50	71	7,4	160 (11)	112	11,6	160 (15)	231	24,5	200 (30)

Fluid Viscosity cSt	320								
Motor Speed rpm	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	78	0,7	90 (1,1)	119	1,4	100 (2,2)	239	3,8	112 (4)
5	76	1,4	112 (2,2)	117	2,4	100 (3)	236	6	132 (7,5)
10	76	2,1	132 (3)	117	3,5	112 (4)	236	8,1	132 (9,2)
15	75	2,8	132 (3)	116	4,5	132 (5,5)	235	10,3	160 (11)
20	74	3,5	132 (4)	115	5,6	132 (7,5)	235	12,4	160 (15)
25	74	4,1	132 (5,5)	115	6,6	132 (7,5)	234	14,5	160 (15)
30	74	4,8	132 (5,5)	114	7,6	132 (9,2)	234	16,7	160 (18,5)
35	73	5,5	160 (7,5)	114	8,7	132 (9,2)	233	18,8	180 (22)
40	73	6,2	160 (7,5)	114	9,7	160 (11)	233	21	180 (22)
45	72	6,9	160 (7,5)	113	10,8	160 (15)	233	23,1	200 (30)
50	72	7,5	160 (11)	113	11,8	160 (15)	232	25,3	200 (30)

Fluid Viscosity cSt	460								
Motor Speed rpm	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	78	0,8	90 (1,1)	119	1,6	100 (2,2)	239	4,4	132 (5,5)
5	77	1,5	112 (2,2)	118	2,6	100 (3)	237	6,6	132 (7,5)
10	76	2,2	132 (3)	117	3,7	112 (4)	236	8,8	132 (9,2)
15	76	2,9	132 (4)	116	4,7	132 (5,5)	236	10,9	160 (15)
20	75	3,6	132 (4)	116	5,8	132 (7,5)	235	13,1	160 (15)
25	75	4,3	132 (5,5)	116	6,9	132 (7,5)	235	15,3	160 (18,5)
30	74	5	132 (5,5)	115	7,9	132 (9,2)	235	17,4	160 (18,5)
35	74	5,6	160 (7,5)	115	9	160 (11)	234	19,6	180 (22)
40	74	6,3	160 (7,5)	115	10	160 (11)	234	21,8	200 (30)
45	73	7	160 (7,5)	114	11,1	160 (15)	234	23,9	200 (30)
50	73	7,7	160 (11)	114	12,1	160 (15)	233	26,1	200 (30)

The performances refer to the Triumflex® pump coupled to a Motive® motor. Motor Power Increase: 440V (+10%); 460V (+15%); 480V (+20%).
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

60HZ SERIES

SM-TRFXA046074

PERFORMANCE CHART

Fluid Viscosity	cSt	15									46									100								
Motor Speed	rpm	1150			1750			3500			1150			1750			3500			1150			1750			3500		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA046074 Displacement [CC]: 81	0	94	0,3	80 (0,55)	142	0,5	90 (0,75)	285	1,3	90 (1,5)	94	0,4	90 (0,75)	142	0,7	90 (1,1)	285	2,1	90 (2,2)	94	0,5	90 (0,75)	142	1	90 (1,1)	285	2,9	100 (3)
	5	84	1,1	90 (1,1)	132	1,7	100 (2,2)	275	3,8	112 (4)	87	1,2	100 (1,5)	136	2	100 (2,2)	279	4,6	132 (5,5)	89	1,3	100 (1,5)	138	2,2	100 (3)	281	5,4	132 (5,5)
	10	79	1,8	112 (2,2)	128	2,9	100 (3)	270	6,2	132 (7,5)	85	2	112 (2,2)	134	3,2	112 (4)	276	7	132 (7,5)	88	2,1	112 (2,2)	136	3,5	112 (4)	279	7,9	132 (9,2)
	15	76	2,6	132 (3)	125	4,1	132 (5,5)	267	8,6	132 (9,2)	83	2,8	132 (3)	132	4,4	132 (5,5)	274	9,5	160 (11)	86	2,9	132 (3)	135	4,7	132 (5,5)	278	10,3	160 (11)
	20	73	3,4	132 (4)	122	5,3	132 (5,5)	264	11,1	160 (15)	81	3,6	132 (4)	130	5,6	132 (7,5)	272	11,9	160 (15)	85	3,7	132 (4)	134	5,9	132 (7,5)	276	12,8	160 (15)
	25	71	4,2	132 (5,5)	120	6,5	132 (7,5)	262	13,5	160 (15)	80	4,4	132 (5,5)	128	6,8	132 (7,5)	271	14,4	160 (15)	84	4,6	132 (5,5)	133	7,2	132 (7,5)	275	15,3	160 (18,5)
	30	69	5	132 (5,5)	117	7,7	132 (9,2)	260	15,9	160 (18,5)	78	5,2	132 (5,5)	127	8	132 (9,2)	270	16,9	160 (18,5)	83	5,4	132 (5,5)	132	8,4	132 (9,2)	275	17,8	160 (18,5)
	35	67	5,8	160 (7,5)	115	8,9	132 (9,2)	258	18,3	180 (22)	77	6	160 (7,5)	126	9,3	160 (11)	268	19,3	180 (22)	82	6,2	160 (7,5)	131	9,6	160 (11)	274	20,3	180 (22)
	40	65	6,6	160 (7,5)	114	10,1	132 (9,2)	256	20,8	180 (22)	76	6,8	160 (7,5)	125	10,5	160 (11)	267	21,8	180 (22)	82	7	160 (7,5)	130	10,8	160 (11)	273	22,8	200 (30)
	45	63	7,4	160 (11)	112	11,3	160 (11)	254	23,2	200 (30)	75	7,6	160 (11)	124	11,7	160 (15)	266	24,2	200 (30)	81	7,8	160 (11)	130	12,1	160 (15)	272	25,3	200 (30)
	50	61	8,2	160 (11)	110	12,5	160 (15)	253	25,6	200 (30)	74	8,4	160 (11)	123	12,9	160 (15)	265	26,7	200 (30)	80	8,6	160 (11)	129	13,3	160 (15)	271	27,8	200 (30)

Fluid Viscosity	cSt	220									320									460								
Motor Speed	rpm	1150			1750			3500			1150			1750			3500			1150			1750			3500		
	bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
Pump Model SM-TRFXA046074 Displacement [CC]: 81	0	94	0,7	90 (1,1)	142	1,4	90 (1,5)	285	3,9	112 (4)	94	0,9	90 (1,1)	142	1,6	100 (2,2)	285	4,6	132 (5,5)	94	1	90 (1,1)	142	1,9	100 (2,2)	285	5,3	132 (9,2)
	5	91	1,6	112 (2,2)	140	2,6	100 (3)	282	6,5	132 (7,5)	91	1,7	112 (2,2)	140	2,9	112 (4)	282	7,1	132 (7,5)	92	1,8	112 (2,2)	140	3,1	112 (4)	282	7,9	132 (9,2)
	10	90	2,4	132 (3)	138	3,9	112 (4)	280	9	160 (11)	90	2,5	132 (3)	139	4,1	132 (5,5)	281	9,7	160 (11)	91	2,6	132 (3)	140	4,4	132 (5,5)	282	10,5	160 (11)
	15	89	3,2	132 (4)	137	5,1	132 (5,5)	280	11,5	160 (15)	89	3,3	132 (4)	138	5,4	132 (7,5)	280	12,3	160 (15)	90	3,5	132 (4)	139	5,7	132 (7,5)	281	13,1	160 (15)
	20	88	4	132 (5,5)	137	6,4	132 (7,5)	279	14,1	160 (15)	89	4,1	132 (5,5)	138	6,6	132 (7,5)	280	14,8	160 (18,5)	90	4,3	132 (5,5)	138	6,9	132 (7,5)	281	15,6	160 (18,5)
	25	87	4,8	132 (5,5)	136	7,6	132 (9,2)	278	16,6	160 (18,5)	88	4,9	132 (5,5)	137	7,9	132 (9,2)	279	17,4	160 (18,5)	89	5,1	132 (5,5)	138	8,2	132 (9,2)	280	18,2	180 (22)
	30	87	5,6	160 (7,5)	135	8,9	132 (9,2)	278	19,1	180 (22)	88	5,7	160 (7,5)	137	9,1	160 (11)	279	19,9	180 (22)	89	5,9	160 (7,5)	138	9,4	160 (11)	280	20,8	180 (22)
	35	86	6,4	160 (7,5)	135	10,1	160 (11)	277	21,7	200 (30)	87	6,6	160 (7,5)	136	10,4	160 (11)	278	22,5	200 (30)	88	6,7	160 (7,5)	137	10,7	160 (15)	279	23,4	200 (30)
	40	86	7,2	160 (7,5)	134	11,3	160 (15)	276	24,2	200 (30)	87	7,4	160 (11)	136	11,6	160 (15)	278	25	200 (30)	88	7,6	160 (11)	137	12	160 (15)	279	26	200 (30)
	45	85	8	160 (11)	134	12,6	160 (15)	276	26,7	200 (30)	86	8,2	160 (11)	135	12,9	160 (15)	277	27,6	200 (30)	88	8,4	160 (11)	137	13,2	160 (15)	279	28,6	200 (30)
	50	85	8,8	160 (11)	133	13,8	160 (15)	276	29,3	200 (30)	86	9	160 (11)	135	14,1	160 (15)	277	30,1	200 (37)	87	9,2	160 (11)	136	14,5	180 (18,5)	278	31,1	200 (37)

The performances refer to the Triumflex® pump coupled to a Motive® motor. Motor Power Increase: 440V (+10%); 460V (+15%); 480V (+20%).
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

60HZ SERIES

SM-TRFXA046088

PERFORMANCE CHART

Pump Model SM-TRFXA046088 Displacement [CC]: 96

Fluid Viscosity cSt	15								
Motor Speed rpm	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	113	0,4	80 (0,55)	170	0,6	80 (0,75)	342	1,6	90 (2,2)
5	101	1,3	100 (1,5)	158	2,0	100 (2,2)	330	4,6	132 (5,5)
10	95	2,2	132 (3)	154	3,5	112 (4)	324	7,4	132 (7,5)
15	91	3,1	132 (4)	150	4,9	132 (5,5)	320	10,3	160 (11)
20	88	4,1	132 (5,5)	146	6,4	132 (5,5)	317	13,3	160 (15)
25	85	5,0	132 (5,5)	144	7,8	132 (7,5)	314	16,2	160 (18,5)
30	83	6,0	160 (7,5)	140	9,2	132 (9,2)	312	19,1	180 (22)
35	80	7,0	160 (7,5)	138	10,7	160 (11)	310	22,0	180 (22)
40	78	7,9	160 (11)	137	12,1	160 (15)	307	25,0	200 (30)
45	76	8,9	160 (11)	134	13,6	160 (15)	305	27,8	200 (30)
50	73	9,8	160 (11)	132	15,0	160 (15)	304	30,7	200 (30)

Fluid Viscosity cSt	46								
Motor Speed rpm	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	113	0,5	80 (0,55)	170	0,8	90 (1,1)	342	2,5	100 (3)
5	104	1,4	100 (1,5)	163	2,4	100 (3)	335	5,5	132 (5,5)
10	102	2,4	132 (3)	161	3,8	112 (4)	331	8,4	132 (9,2)
15	100	3,4	132 (4)	158	5,3	132 (5,5)	329	11,4	160 (15)
20	97	4,3	132 (5,5)	156	6,7	132 (7,5)	326	14,3	160 (15)
25	96	5,3	132 (5,5)	154	8,2	132 (9,2)	325	17,3	160 (18,5)
30	94	6,2	160 (7,5)	152	9,6	160 (11)	324	20,3	180 (22)
35	92	7,2	160 (7,5)	151	11,2	160 (15)	322	23,2	200 (30)
40	91	8,2	160 (11)	150	12,6	160 (15)	320	26,2	200 (30)
45	90	9,1	160 (11)	149	14,0	160 (15)	319	29,0	200 (30)
50	89	10,1	160 (11)	148	15,5	180 (18,5)	318	32,0	200 (37)

Fluid Viscosity cSt	100								
Motor Speed rpm	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	113	0,6	90 (0,75)	170	1,2	90 (1,5)	342	3,5	112 (4)
5	107	1,6	112 (2,2)	166	2,6	100 (3)	337	6,5	132 (7,5)
10	106	2,5	132 (3)	163	4,2	112 (4)	335	9,5	160 (11)
15	103	3,5	132 (4)	162	5,6	132 (7,5)	334	12,4	160 (15)
20	102	4,4	132 (5,5)	161	7,1	132 (7,5)	331	15,4	160 (18,5)
25	101	5,5	160 (7,5)	160	8,6	132 (9,2)	330	18,4	160 (18,5)
30	100	6,5	160 (7,5)	158	10,1	160 (11)	330	21,4	180 (22)
35	98	7,4	160 (11)	157	11,5	160 (11)	329	24,4	200 (30)
40	98	8,4	160 (11)	156	13,0	160 (15)	328	27,4	200 (30)
45	97	9,4	160 (11)	156	14,5	160 (15)	326	30,4	200 (30)
50	96	10,3	160 (11)	155	16,0	180 (18,5)	325	33,4	200 (37)

Pump Model SM-TRFXA046088 Displacement [CC]: 96

Fluid Viscosity cSt	220								
Motor Speed rpm	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	113	0,8	90 (1,1)	170	1,7	100 (2,2)	342	4,7	132 (5,5)
5	109	1,9	112 (2,2)	168	3,1	112 (4)	338	7,8	132 (9,2)
10	108	2,9	132(3)	166	4,7	132 (5,5)	336	10,8	160 (15)
15	107	3,8	132 (4)	164	6,1	132 (7,5)	336	13,8	160 (18,5)
20	106	4,8	132 (5,5)	164	7,7	132 (7,5)	335	16,9	160 (18,5)
25	104	5,8	160 (7,5)	163	9,1	132 (9,2)	334	19,9	180 (22)
30	104	6,7	160 (11)	162	10,7	160 (11)	334	22,9	200 (30)
35	103	7,7	160 (11)	162	12,1	160 (11)	332	26,0	200 (30)
40	103	8,6	160 (11)	161	13,6	160 (15)	331	29,0	200 (30)
45	102	9,6	160 (11)	161	15,1	180 (18,5)	331	32,0	200 (37)
50	102	10,6	160 (11)	160	16,6	180 (18,5)	331	35,2	200 (37)

Fluid Viscosity cSt	320								
Motor Speed rpm	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	113	1,1	90 (1,1)	170	1,9	100 (2,2)	342	5,5	132 (7,5)
5	109	2,0	112 (2,2)	168	3,5	112 (4)	338	8,5	132 (9,2)
10	108	3,0	132 (4)	167	4,9	132 (5,5)	337	11,6	160 (15)
15	107	4,0	132 (5,5)	166	6,5	132 (7,5)	336	14,8	160 (18,5)
20	107	4,9	160 (7,5)	166	7,9	132 (9,2)	336	17,8	160 (18,5)
25	106	5,9	160 (7,5)	164	9,5	160 (11)	335	20,9	180 (22)
30	106	6,8	160 (7,5)	164	10,9	160 (11)	335	23,9	200 (30)
35	104	7,9	160 (11)	163	12,5	160 (15)	334	27,0	200 (30)
40	104	8,9	160 (11)	163	13,9	160 (15)	334	30,0	200 (30)
45	103	9,8	160 (11)	162	15,5	180 (18,5)	332	33,1	200 (37)
50	103	10,8	180 (15)	162	16,9	180 (18,5)	332	36,1	200 (37)

Fluid Viscosity cSt	460								
Motor Speed rpm	1150			1750			3500		
bar	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]	Flow [L/min]	Rated Power [kW]	Motor Size [Frame (kW)]
0	113	1,2	100 (1,5)	170	2,3	100 (3)	342	6,4	132 (7,5)
5	110	2,2	112 (2,2)	168	3,7	112 (4)	338	9,5	160 (11)
10	109	3,1	132 (4)	168	5,3	132 (5,5)	338	12,6	160 (15)
15	108	4,2	132 (5,5)	167	6,8	132 (7,5)	337	15,7	160 (18,5)
20	108	5,2	160 (7,5)	166	8,3	132 (9,2)	337	18,7	180 (22)
25	107	6,1	160 (7,5)	166	9,8	160 (11)	336	21,8	200 (30)
30	107	7,1	160 (11)	166	11,3	160 (15)	336	25,0	200 (30)
35	106	8,0	160 (11)	164	12,8	160 (15)	335	28,1	200 (30)
40	106	9,1	160 (11)	164	14,4	160 (15)	335	31,2	200 (37)
45	106	10,1	160 (11)	164	15,8	180 (18,5)	335	34,3	200 (37)
50	104	11,0	180 (15)	163	17,4	180 (18,5)	334	37,3	200 (37)

The performances refer to the Triumflex® pump coupled to a Motive® motor. Motor Power Increase: 440V (+10%); 460V (+15%); 480V (+20%).
Absorbed power values are based on the absolute viscosity of the oil (e.g. 46 cSt) and not on the viscosity grade designation alone (e.g. ISO VG 46).

ALL-IN-ONE SOLUTION

ELECTRO HYDRAULIC GROUPS

ELECTRO-HYDRAULIC GROUPS

THE PERFECT MATCH
BETWEEN PERFORMANCE AND RELIABILITY

SETTIMA® research & innovation, always

motive®

TRIUMFLEX®
DELPHI
SIZES 56-132

Motive® motors are built according to international standard regulations; each size throughout the construction forms is calculated with reference to the tables of standard IEC 72-1 therefore 100% compatible with Triumflex® kits.

All DELPHI motors of Motive® are three-phase, multiple voltage multi-frequency 50/60Hz, to have only one motor covering all Settima's clients worldwide, F class insulation, (H on request) S1 continuous duty service, like all our pumps IP55 protection, therefore suitable for the pumps outdoors use (IP56, 66 and 67 on request), IE2, IE3 or IE4 efficiency classes to not to waste Triumflex® patented screws profiles efficiency, tropicalized winding (encapsulated on demand) for ambients where Triumflex® has to face high humidity, suitable for Motive® NEO-OLEO or NANO-OLEO control units for single phase and three phase hydraulic power packs to save energy at variable power demand.

IE2, high efficiency class IEC 60034-30-1
IE3, premium efficiency class IEC 60034-30-1
IE4, super premium efficiency class IEC 60034-30-1

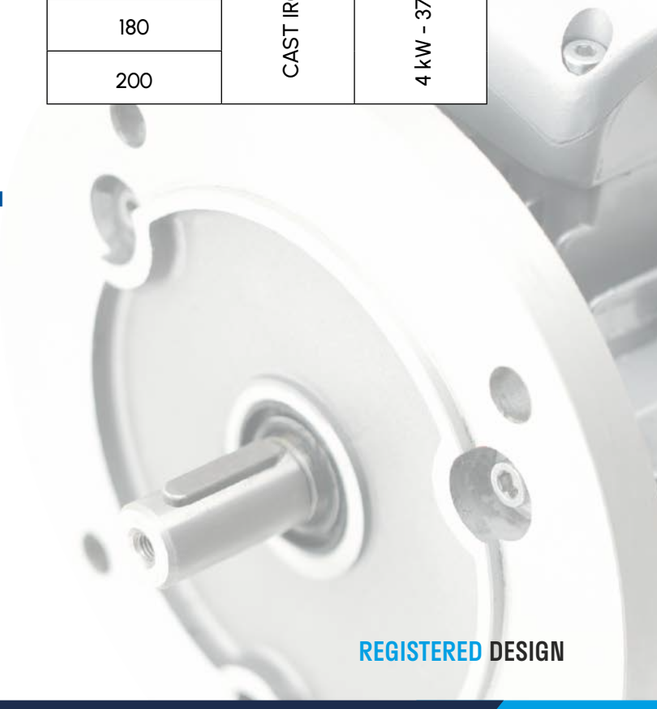
Available also in "Ex" version, **ATEX certified** for all Ex groups of inflamable/explosive oils and dusts.

II 2G Ex eb IIC T4-T6 Gb
II 2D Ex tb IIIC T120°C IP65...67 Db
Tamb = -20°C + 40..60°C

TYPE OF POWER		
56	ALUMINUM	0.09 kW - 11 kW
63		
71		
80		
90		
100		
112		
132		
160	CAST IRON	4 kW - 37 kW
180		
200		

Know DELPHI 56-132

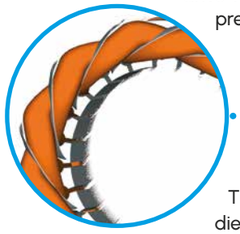
SCAN THE QR CODE



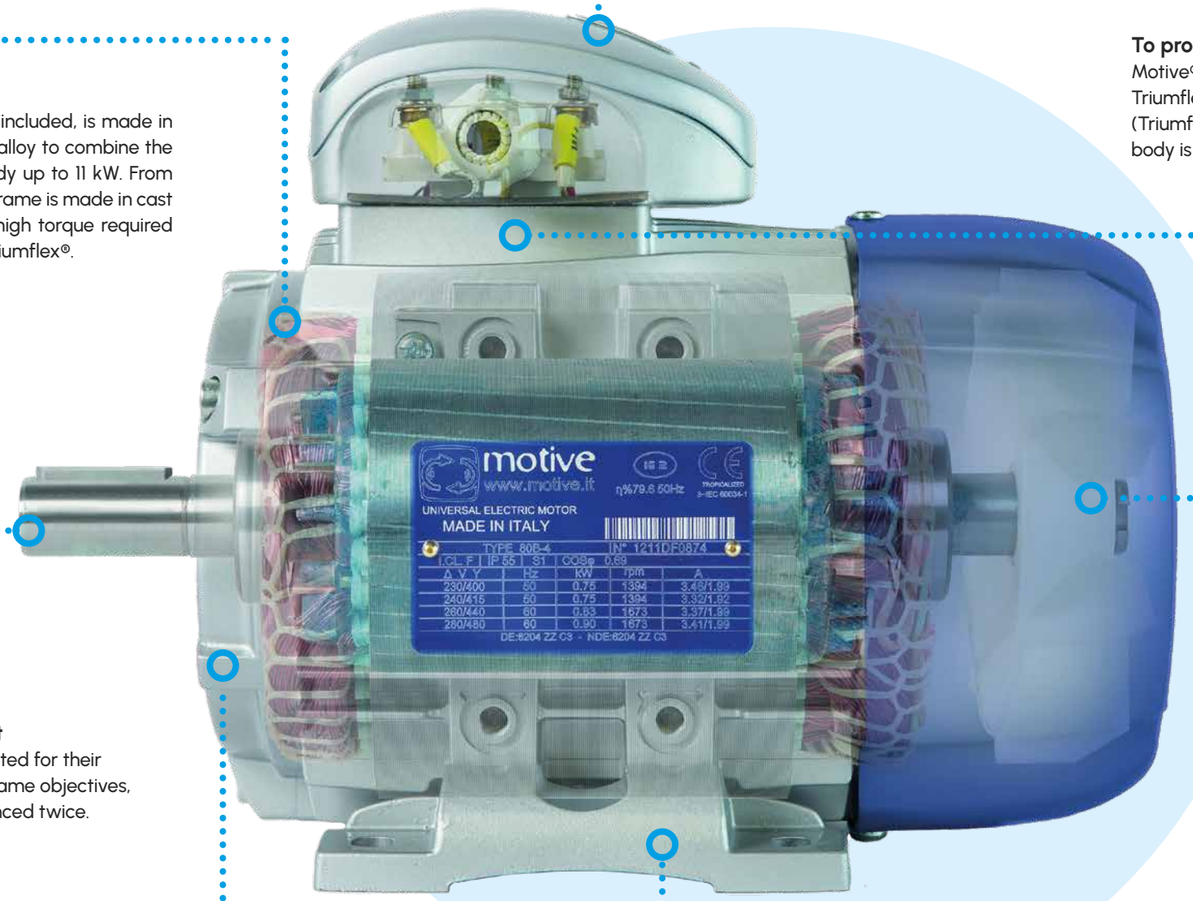
REGISTERED DESIGN

The copper is impregnated with a double layer of insulating enamel to ensure high resistance to electrical, thermal and mechanical stress.

The phases are further isolated by an additional layer of Nomex film to protect the motors from the voltage peaks that usually occur when the motor pump is controlled by a NANO/NEO-OLEO, a variable speed drive which permits the automatic control of the flow and the pressure of the pump.



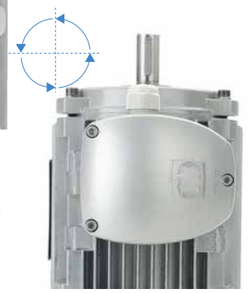
The frame, up to 132 included, is made in die casting aluminium alloy to combine the lightness of Triumflex® body up to 11 kW. From size 160 up to 200 the frame is made in cast iron to support the high torque required by the 50 bar of Triumflex®.



Aiming the maximum protection and ready-to use like Triumflex®, the motors are already equipped with important details like the pull-resistant cable gland.

To protect them by the rust, Motive® motors are painted like Triumflex® flanges and covers (Triumflex® main body is anodized).

As a Triumflex® can be mounted in any position, the cable gland can be easily moved on both the sides of the connection box, thanks to the screw cap.

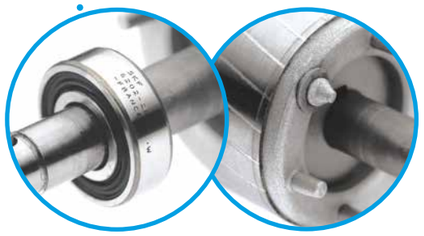


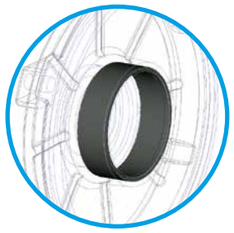
The connection box can be rotated of 360° with steps of 90°

Very thick and made of a special plastic material, the fan cover is:

- impact resistant
- soundproofing
- scratchproof
- rustproof

An aspect of Settima's concept ***"sound of silence"*:** bearings selected for their silence and reliability and, for the same objectives, the cage rotor is dynamically balanced twice.

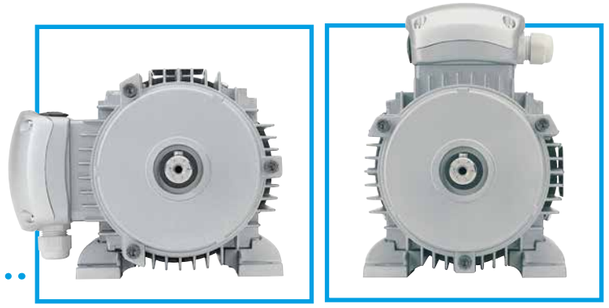




From type 90, a steel insert is provided in the bearing slot of the aluminum flanges, to resist to radial mechanical forces with a fair degree of security.

Performance excellence is granted by the low loss CRNO "FeV" magnetic laminations adoption, instead of the usual Semi Processed/ Decarb "FeP01". FeV laminations provide higher efficiency, lower heating, energy saving and longer life to insulation materials.

From size 56 to size 132, feet are detachable, and can be fixed on 3 sides of the housing, thus permittig the terminal box to be positioned up, right or left for a neater wiring on the hydraulic power pack



TRIUMFLEX®
DELPHI
SIZES 160-200

Motive® three phase motors from size 160 up to size 200 are made in cast-iron and have all those main features of the Delphi series, among which:

- standardized dimensions according to International standards (IEC 72-1)
- multiple voltage and multi-frequency 50/60Hz,
- F class insulation, [upon request H+ (delfire)]
- S1 continuous duty service,
- IP55 protection (IP56, 66 and 67 on request)
- tropicalized winding and reinforced insulation
- suitable for inverter power supply

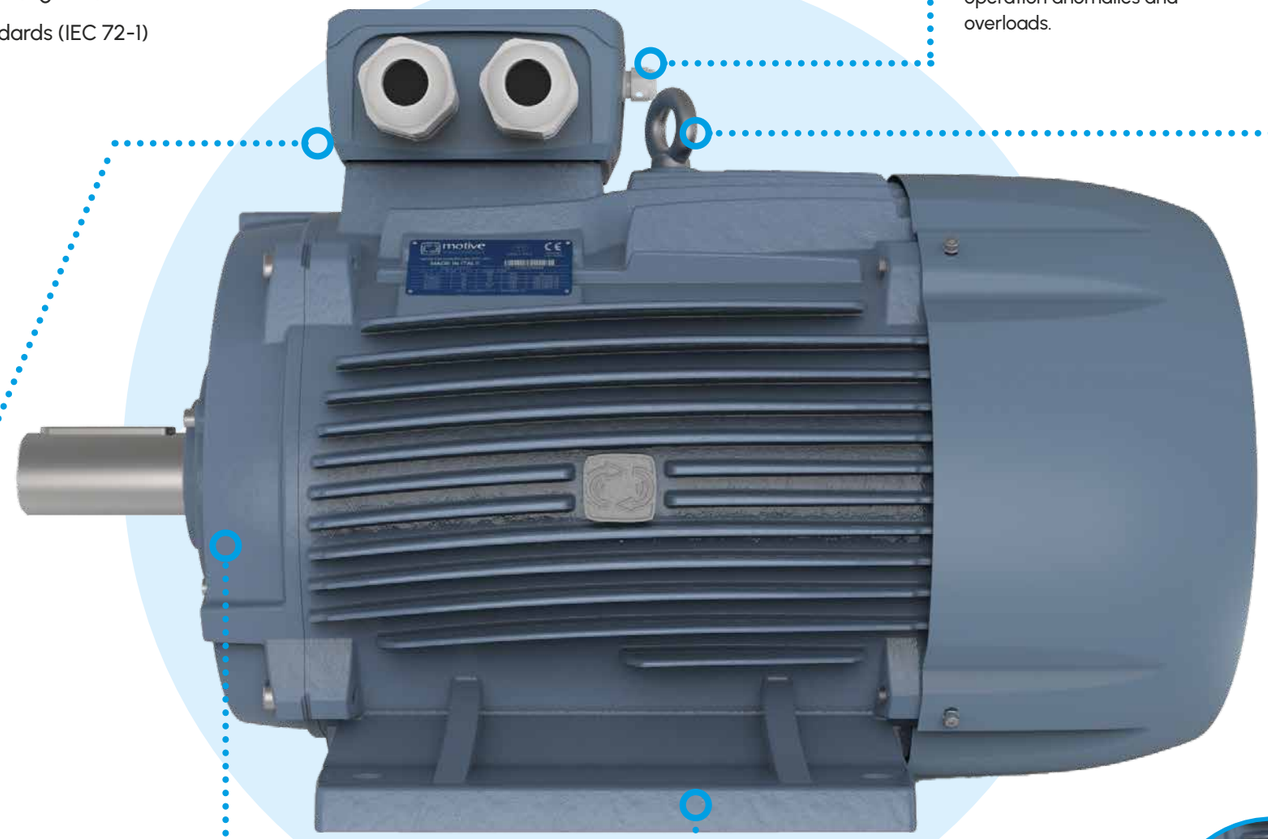
IE2, high efficiency class IEC 60034-30-1
IE3, premium efficiency class IEC 60034-30-1
IE4, super premium efficiency class IEC 60034-30-1

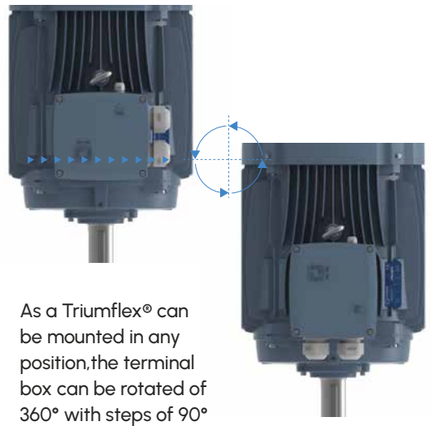
Provided with 3 PTC thermistors that protect the motor and the pump by operation anomalies and overloads.

Available also in "Ex" version, **ATEX certified**

II 2G Ex eb IIC T4-T6 Gb
II 2D Ex tb IIIC T120°C IP65...67 Db
Tamb = -20°C + 40..60°C

Equipped by lifting eyebolts [one for B3 version (feet fixing), two for B5 version (flange fixing)] able to withstand the weight of the motor with the pump.





As a Triumflex® can be mounted in any position,the terminal box can be rotated of 360° with steps of 90°

Keeping the same sealing system of the whole Delphi series, the terminal box up to size 200 is made in aluminum, thus guaranteeing its IP65 protection index without being affected by the usual finishing imperfections of the cast iron.

Also the cast-iron motors 160-200 are maintenance free, like the pump, because they have shielded auto-lubricated bearings, thus avoiding the need of a periodical re-greasing maintenance.

Given the high torque required by the 50 bar of Triumflex®, the fixing from size 160 up is ensured by feet integrally casted with the housing.

Know DELPHI 160-355

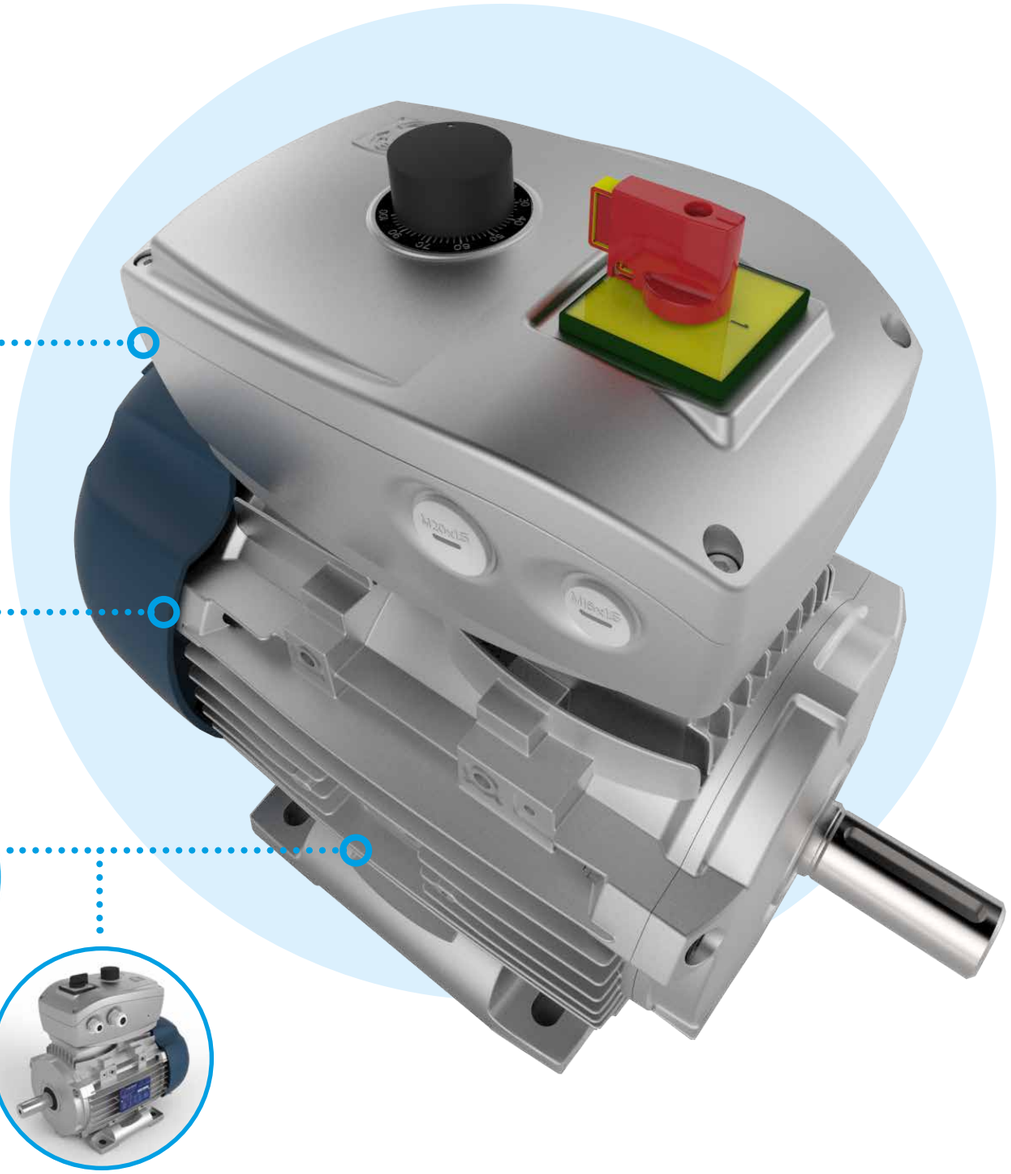
SCAN THE QR CODE

TRIUMFLEX®
NANO

Available also in "Ex" version, **ATEX certified**

II 2D Ex tb IIIC T135°C Db
Tamb: -20 +40 °C

NANO is for single phase power supply, three phase motorpumps. This permits NANO to add to the well known power saving of variable speed drives, the possibility to replace the single phase motors (technically losing lot of power) with the higher efficency IE2, IE3 and IE4 three phase motors.



Setting and command can also be made by a PC, thanks to the free PC interface program "Motive® Motor Manager".

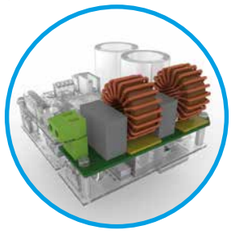
Any NANO can be fixed to a wide range of motors up to 2.2 KW.

A voltage booster guarantees a stable torque Nm at very slow speed too.

Thanks to BLUE, Motive® bluetooth trasnsmitter for NANO and NEO, and to the free App NANO, you can make the setting or command NANO via tablets or smartphones.

NANO can be commanded by analog controls or MODBUS.

NANO is also offered in the version "NANO-OLEO", with a SW specifically modified for the automatic speed+power adaptation to the required pressure and variable flow rate of hydraulic power packs.



The EMC filter makes NANO compatible not just with industrial environment, but also with light industrial, commercial and residential environments.

FEATURES	SYMBOL	U.O.M	NANO-0.75	NANO-2.2
Inverter protection degree*	IP		IP65*	
Inverter input voltage	V_{in}	V	1x110(-10%)÷240(+10%)	
Inverter input frequency	f_{in}	Hz	50/60 (±5%)	
Inverter output frequency	f_2	Hz	200% fIn (f2 0÷100Hz with fIn50Hz)	
Rated output inverter current (to the motor)	I_{2n}	A	4	9

TABLE RP: POWER RANGE OF MOTORS THAT CAN BE CONNECTED (AT 230VAC)

KW motor	0.13	0.18	0.25	0.37	0.55	0.75	1.1	1.5	1.9	2.2
NANO-1.1										
NANO-2.2										

TABLE RD: SIZE RANGE OF IEC MOTORS THAT CAN BE CONNECTED

IEC Motor	63	71	80	90S	90L	100L	112M	132S
NANO-1.1								
NANO-2.2								

Know NANO-OLEO

SCAN THE QR CODE

TRIUMFLEX®
NEO

Available also in "Ex" version, **ATEX certified**

II 2D Ex tb IIIC T135°C Db
Tamb: -20 +40 °C

NEO-WiFi, also supplied in the version NEO-OLEO for the automatic control of the flow rate and the pressure of hydraulic power packs, is a three-phase variable speed drive designed as a competitive and user-friendly turnkey integrated system, with all parts, motor, inverter and control designed for outdoor use, and with standard remote control.

The hydraulic power packs can thus be offered as "plug-in". It is only needed to insert the plug, wherever it is installed, and decide if you want to bring the keypad with you.

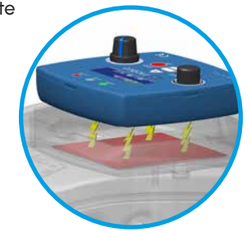
The keypad is available in two versions with or without analog potentiometer and switch, thus being perfect for those who want to control the speed manually and for those who just want to set the pressure and let the speed go automatically.

You can make the settings and control NEO via tablet, smartphone or PC.

IP65 high degree of protection against dust and water for outdoor use.

The keypad can be fixed to a metal wall with its magnets or to a concrete wall.

To maintain the degree of protection and eliminate fragile and complicated connectors, the keypad is automatically powered by induction when the panel is housed in the lid of the NEO, or, when remote controlled, it is automatically powered by rechargeable batteries that are provided standard, or by BLOCK.



Motor KW	0,13	0,18	0,25	0,37	0,55	0,75	1,1	1,5	1,9	2,2	3	4	5,5	7,5	9,2	11	15	18,5	22
NEO-OLEO-3	■	■	■	■	■	■	■	■	■	■	■								
NEO-OLEO-5.5										■	■	■	■						
NEO-OLEO-11											■	■	■	■	■	■			
NEO-OLEO-22																■	■	■	■

The keypad can be positioned or removed from its seat without any tools, because it adheres to it with 4 magnets.

Any NEO can be connected to a wide range of motorpumps of different power and size up to 22 KW.

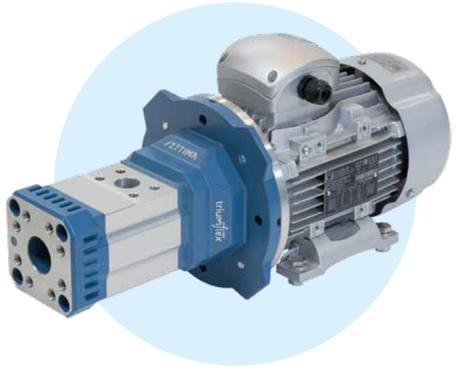
One keypad can control up to 8 units.

Know NEO-OLEO

SCAN THE QR CODE

TRIUMFLEX®
ATEX

Compliant with directive 2014/34/EU covering ATEX zones 1, 2, 21 and 22.

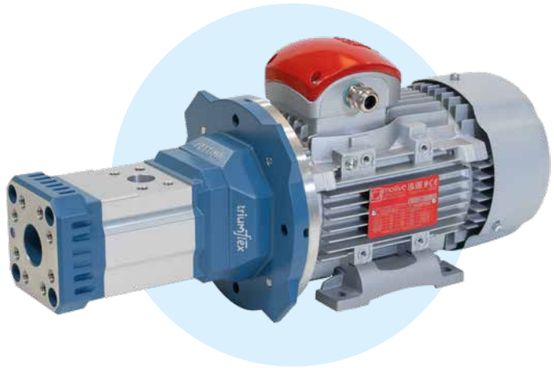


EXPLOSIVE ATMOSPHERES

TRIUMFLEX®
DELFIRE

Delfire is an innovative range of motors specifically designed to work in an ambient temperature up to 100°C in S1 continuous duty.

Max oil temp: 80°C



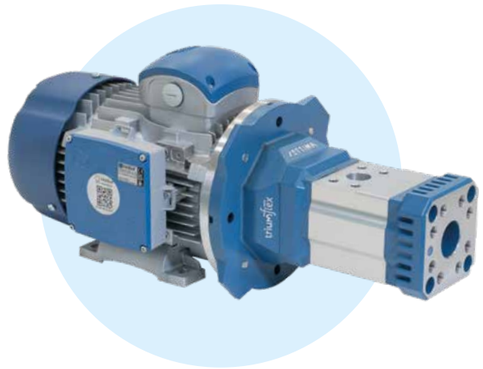
HIGH TEMP. RESISTANT

TRIUMFLEX®
DOCTOR 4.0

The predictive maintenance solution to ensure production continuity and productivity of hydraulic power packs and the whole machines that they are connected with.

Unique features: one package of data exchange per second and unlimited power supply (no battery) by means of Ethernet connection.

DOCTOR 4.0 learns normal and abnormal operation by itself. It measures temperature, vibration, noise, magnetic flux, partial and total working time, external pressure, flow rate, power, speed, etc.



AI PLATFORM

PREDICTIVE MAINTENANCE

7 MOTIVES

TRIUMFLEX® + MOTIVE® ELECTRO-HYDRAULIC GROUPS

- Motor and pump specifically designed for each other
- Energy efficiency optimization
- Performance data reliability
- Improved mechanical coupling reliability
- Single responsibility for the entire system
- Lower logistics costs
- Greater competitiveness and offer customization

ELECTRO HYDRAULIC GROUPS

CONFIGURATION

HOW TO CONFIGURE YOUR TRIUMFLEX® ELECTRO-HYDRAULIC GROUPS

If you have configured your Triumflex® pump (Ex. SM-TRFXA034038M08T4MNV01) and you would like to configure your Triumflex® electro-hydraulic group, change **SM-TRFX**A034038M08T4MNV01 with **APG-TRFX**A034038M08T4MNV01 and then start your configuration from **Item 10.**

ITEM	ITEM DESCRIPTION	ITEM CODE
1	Category pump model Triumflex®	APG-TRFX
2	Type	Assembled (A) [see page 19]
3	Pump size	026 - 034 - 041 - 046 - 053 [see page 19]
4	Screw pitch	From 029 to 105 [see page 19]
5	Motor coupling KIT	From motor size 80 to 200 [see page 20]
6	Inlet - Port type	T1 - T2 - T3 - T4 or AX BSPP threaded [see page 21]
7	Outlet - Port type	M BSPP threaded [see page 21]
8	Noise-cancelling valve	NV [see page 22]
9	Pressure relief valve (RP) setting range	5 ÷ 15 bar (01) / 10 ÷ 50 bar (02) [see page 23]
10	Variable frequency drive type	Without VFD, NANO or NEO
11	Motor number of poles	2 - 4 - 6 poles
12	Motor power (kW)	From 0,75 kW to 30 kW
13	Motor voltage (V)	230-400 V / 400-690 V
14	Motor frequency	50 Hz - 60 Hz
15	ATEX motor	Yes or No
16	Group Assembly Orientation	N1,2,3,4. M1,2,3,4. R1,2,3,4. L1,2,3,4.
17	Custom Option	M000

ORDERING CODE EXAMPLE

YOUR TRIUMFLEX® ELECTRO-HYDRAULIC GROUP

ITEM 1	...	ITEM 10	ITEM 11	ITEM 12	ITEM 13	ITEM 14	ITEM 15	ITEM 16	/	ITEM 17
SM-TFG	...	NA	2	007	02	05	A	N1	/	M000

P/N: APG-TRFX000001
ORDERING CODE: **APG-TRFX034038M08T4MNV01/NA20070205AN1**

STEP 6

Select variable frequency drive type

- Triumflex® NANO/NANO OLEO (NA)
- Triumflex® NEO/NEO OLEO (NE)

ITEM	VARIABLE FREQUENCY DRIVE TYPE	CODE
10	Without VFD	--
	Nano VFD	NA
	NEO VFD	NE

[NA]

[NE]

STEP 7

Select motor number of poles

ITEM	MOTOR NUMBER OF POLES	CODE
11	2 poles	2
	4 poles	4
	6 poles	6

ORDERING CODE EXAMPLE

TRIUMFLEX® ELECTRO-HYDRAULIC GROUP

P/N: APG-TRFX000001
ORDERING CODE: **APG-TRFX034038M08T4MNV01/NA2...**

NA = NANO VARIABLE FREQUENCY DRIVE
2 = 2 POLES MOTOR

STEP 8

Select power (kW)

ITEM	MOTOR SIZE	POWER (kW)	CODE
12	80 - 2 poles	0,75	007
		1,1	011
	80 - 4 poles	0,55	005
		0,75	007
	80 - 6 poles	0,37	003
		0,55	005
	90 - 2 poles	1,5	015
		2,2	022
	90 - 4 poles	1,1	011
		1,5	015
	90 - 6 poles	0,75	007
		1,1	011
	100 - 2 poles	3	030
	100 - 4 poles	2,2	022
		3	030
	100 - 6 poles	1,5	015
	112 - 2 poles	4	040
	112 - 4 poles	4	040
	112 - 6 poles	2,2	022
	132 - 2 poles	5,5	055
		7,5	075
		9,2	092

ITEM	MOTOR SIZE	POWER (kW)	CODE
12	132 - 4 poles	5,5	055
		7,5	075
		9,2	092
	132 - 6 poles	3	030
		4	040
		5,5	055
	160 - 2 poles	11	110
		15	150
		18,5	185
	160 - 4 poles	11	110
		15	150
	160 - 6 poles	7,5	075
		11	110
	180 - 2 poles	22	220
	180 - 4 poles	18,5	185
		22	220
	180 - 6 poles	15	150
	200 - 2 poles	30	300
		37	370
	200 - 4 poles	30	300
	200 - 6 poles	18,5	185
		22	220

STEP 9

Select motor voltage (V)

ITEM	MOTOR VOLTAGE	CODE
13	230 - 400 V	02
	400 - 690 V	04

STEP 10

Select motor frequency (Hz)

ITEM	MOTOR FREQUENCY	CODE
14	50 Hz	05
	60 Hz	06
	50 - 60 Hz	56

STEP 11

Select ATEX motor

ITEM	ATEX MOTOR	CODE
15	No	-
	Yes	A

ORDERING CODE EXAMPLE

TRIUMFLEX® ELECTRO-HYDRAULIC GROUP

P/N: APG-TRFX000001

ORDERING CODE: **APG-TRFX034038M08T4MNV01/NA2007...**

NA = NANO VARIABLE FREQUENCY DRIVE
2 = 2 POLES MOTOR
007 = 0,75 KW (80 - 2 POLES)

ORDERING CODE EXAMPLE

TRIUMFLEX® ELECTRO-HYDRAULIC GROUP

P/N: APG-TRFX000001

ORDERING CODE: **APG-TRFX034038M08T4MNV01/NA20070205A...**

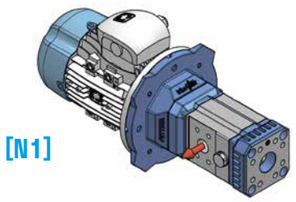
NA = NANO VARIABLE FREQUENCY DRIVE
2 = 2 POLES MOTOR
007 = 0,75 kW (80 - 2 POLES)
02 = 230-400 V (Voltage)
05 = 50 Hz (Motor Frequency)
A = ATEX

STEP 12

Select group assembly orientation

Motor feet and wiring box configuration.

ITEM	GROUP ASSEMBLY ORIENTATION	CODE
16	B5 - M270	N1
	B5 - M000	N2
	B5 - M090	N3
	B5 - M180	N4
	B35 - UP - M270	M1
	B35 - UP - M000	M2
	B35 - UP - M090	M3
	B35 - UP - M180	M4
	B35 - RIGHT - M270	R1
	B35 - RIGHT - M000	R2
	B35 - RIGHT - M090	R3
	B35 - RIGHT - M180	R4
	B35 - LEFT - M270	L1
	B35 - LEFT - M000	L2
	B35 - LEFT - M090	L3
	B35 - LEFT - M180	L4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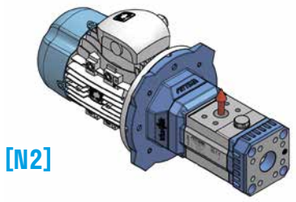
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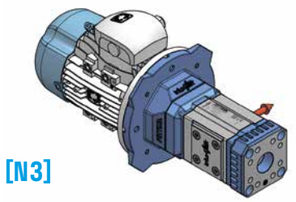
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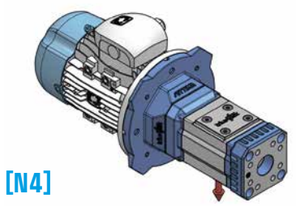
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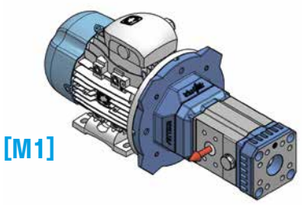
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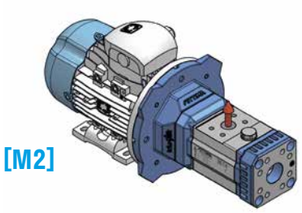
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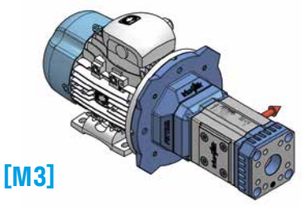
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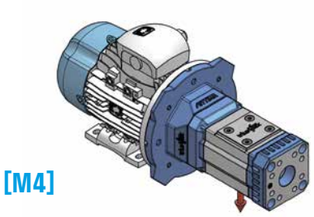
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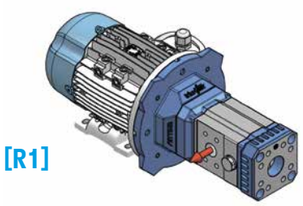
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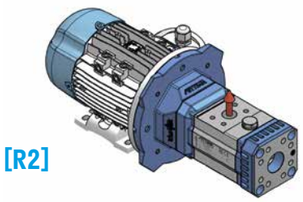
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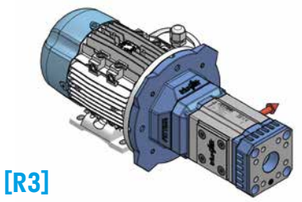
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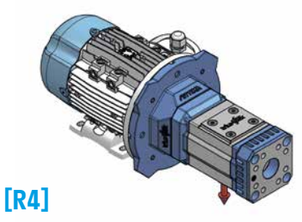
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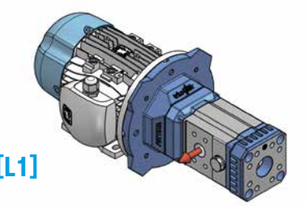
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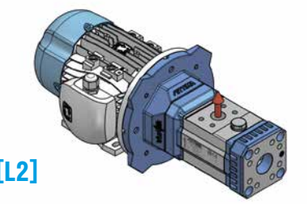
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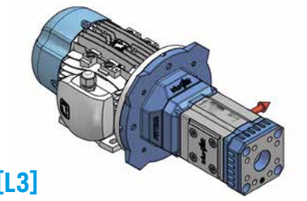
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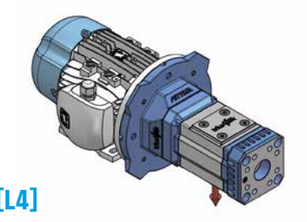
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ORDERING CODE EXAMPLE

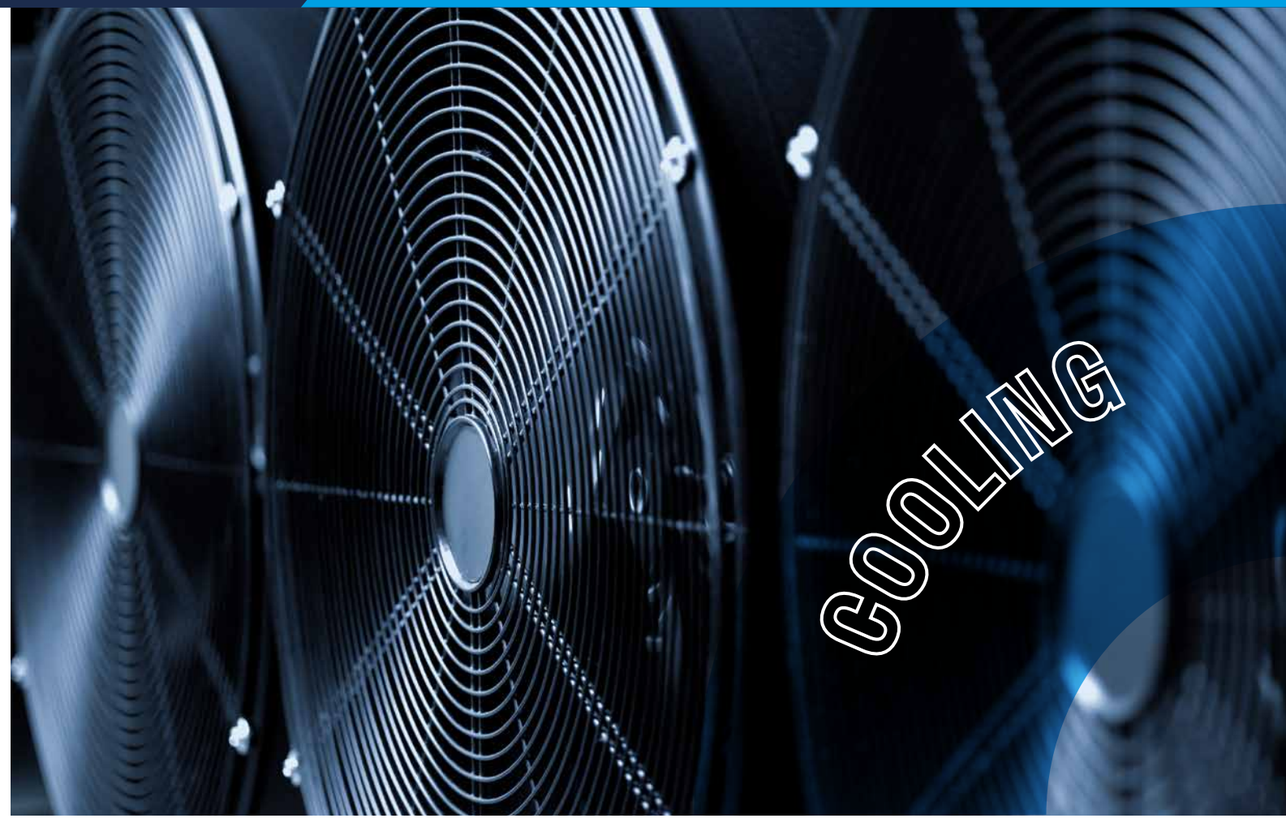
TRIUMFLEX® ELECTRO-HYDRAULIC GROUP

P/N: APG-TRFX000001

ORDERING CODE: **APG-TRFX034038M08T4MNV01/NA20070205AN1**

NA = NANO VARIABLE FREQUENCY DRIVE
2 = 2 POLES MOTOR
007 = 0,75 kW (80 - 2 POLES)
02 = 230-400 V (Voltage)
05 = 50 Hz (Motor Frequency)
A = ATEX
N1 = Group Assembly Orientation

FILTRATION



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