



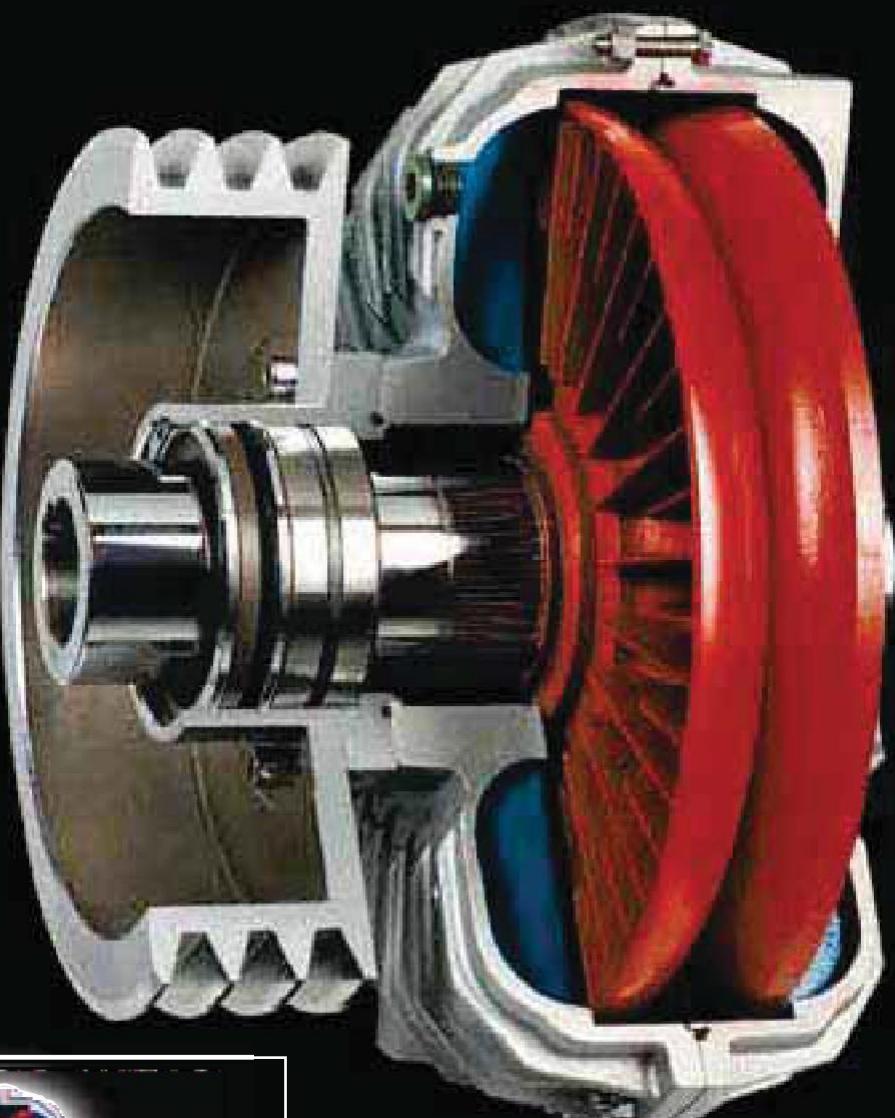
# WESTCAR

s.r.l.

## ROTOFLUID

ENGLISH

# FLUID COUPLINGS





# WESTCAR PRODUCTS

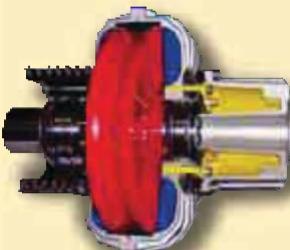
ROTOFLUID hydraulic couplings for rated power up to 4000 kW



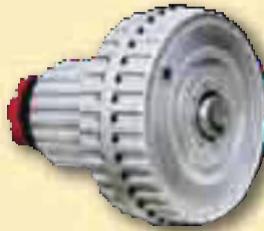
ROTOFLUID GGG hydraulic couplings (with cast-iron casing) for rated power from 100 to 6000 kW



ROTOFLUID-SCF/DCF hydraulic couplings with simple/double delay chamber



ROTOFLUID-CA hydraulic couplings with annular chamber and starting torque lower than nominal motor torque



Drum and disc brakes with brake servo



**SOFTSTART**  
Static starter with digital control for rated power up to 750 kW.  
Energy saving function.  
Water hammering control.  
Programming also via RS 485



ROTOGEAR tooth gear couplings for torques up to 383.000 Nm

ROTOFLEXI® flexible couplings with quick replacement of the rubber element without axial hubs movement. For torques up to 4.000 Nm.

HBX – GCX – HPX disc couplings. With spacer HBSX – GCSX – HPSX - BE. Torques up to 1.043.300 Nm

ROTOPIN flexible couplings with pins and buffers axially sliding. For torques up to 300.000 Nm

ROTOGRID flexible taper grid couplings. For torques up to 169.500 Nm

ROTOMEC hydromechanical couplings with hydraulic start-up and centrifugal mechanical lock-up with zero slip at running. For rated power up to 1500 kW



A RICHIESTA SI POSSONO FORNIRE I PRODOTTI CERTIFICATI ATEX.

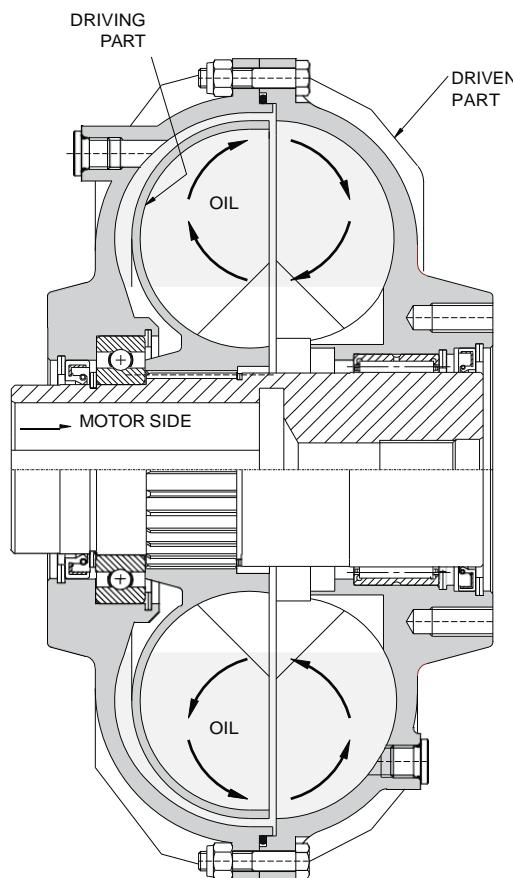


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The ROTOFLUID fluid coupling is designed to provide your plant with optimum reliability and durability. It is fitted between the motor (drive) and machine (driven component).

The ROTOFLUID fluid coupling comprises basically two impellers, with radial blades, opposed to each other, one connected to the motor shaft and the other to the input shaft of the Driven Equipment or Machine.

The ROTOFLUID fluid coupling acts like a centrifugal clutch, by driving an impeller, the oil passing from the blades to the driven part, which acts as a driven impeller, transmits the power to the Equipment or Machine. The oil, which fills the fluid coupling, transfers the torque and also lubricates moving parts.

Fluid couplings are the easiest and cheapest way of creating a perfectly Flexible Drive Train, because no mechanical parts are necessary between the motor and the Equipment or Machine being driven.

Without mechanical parts, there is practically no wear.

Losses in the fluid coupling become power drops according to the following formula:

$$S\% = \frac{n_m - n_u}{n_m} \times 100$$

where:

$n_m$  = motor speed in rpm

$n_u$  = output speed from the fluid coupling in rpm

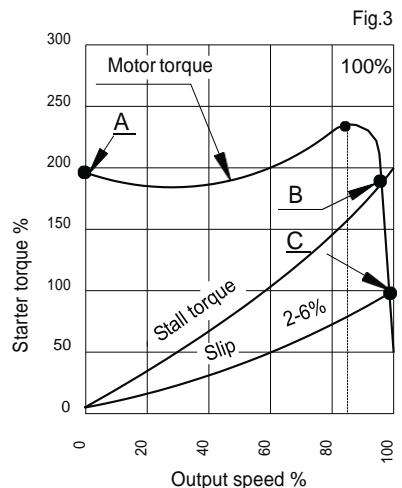
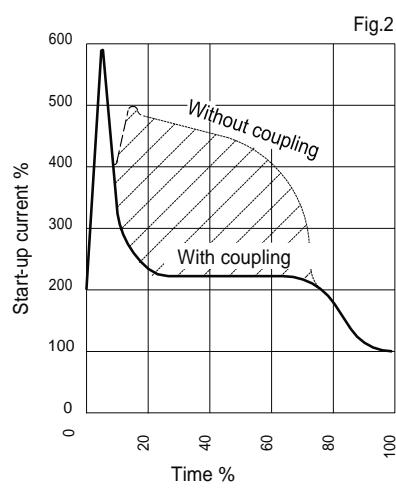
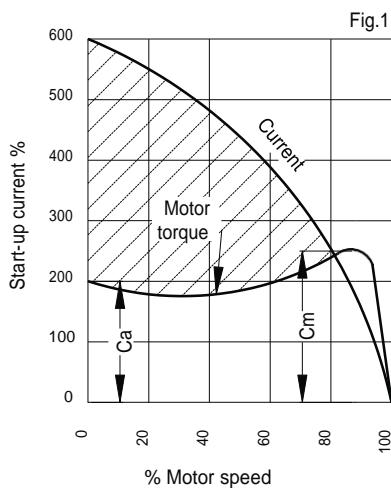
The elasticity of the fluid coupling solves problems of power peaks in conventional electric motors and the machines they drive.

## THE ADVANTAGES OF USING FLUID COUPLINGS

- easy start-up with gradual acceleration of the driven component
- automatic load speed adjustment on the basis of the synchronous speed of two or more motors
- the drive train is protected against overloads
- rotational vibrations are damped
- the torque transmitted complies with pre-set values
- direct on-line start electric motors can be used, without star-delta starters or slip-ring motors with rheostat

## FITTING A ROTOFLUID FLUID COUPLING GIVES YOU THE FOLLOWING BENEFITS:

- a large range of accessories
- interchangeable accessories on the basic cell
- the dimensions of the shaft-pulley system are perfectly suited to the needs of the drive train
- all fluid couplings that utilise a belt drive, from Size 40P up, are fitted with ball bearings under the pulley to guarantee above-standard radial loads
- all the fluid couplings used for Horizontal applications are fitted with ROTOFLEXI Elastic Flexible coupling, which gives the advantage of, the user, of being able to replace the flexible element, by removing it radially from the coupling, without either disturbing the Motor or the Driven Equipment or Machine



## START-UP WITHOUT FLUID COUPLING

Figure 1 represents the typical start-up of an electric motor directly coupled to the load. The dotted line represents the energy lost bringing the motor and load up to operating speed.

As can be seen, direct start-up has the following disadvantages:

- the difference between start-up torque ( $C_a$ ) and the load requirement ( $C_m$ ) is very low; the maximum torque is between 80%-85% of the operating speed.
- the current absorbed during start-up may be up to 6 times the rated current, causing electrical overloads and higher costs, an increase in motor temperature and fewer possible start-ups.

To limit peak currents, a characteristic of direct start-ups, a system with reduced voltage for start-ups must be used, most commonly the Y /  $\Delta$  system. In this way the current and peak torque are reduced by about 1/3 compared to direct starting.

The disadvantages of this type of start-up include:

- greater costs for wiring (2 3-pole cables per motor)
- high currents when switching from Y to  $\Delta$
- you cannot choose start-up features because current/torque parameters are pre-set and cannot be adjusted.
- It cannot be used for applications where the start-up requires a high load or resistant torque.

## START-UP WITH ROTOFUID FLUID COUPLING

With a ROTOFUID fluid coupling between the Motor and Driven Equipment or Machine the motor can start up directly and the starting torque ( $C_a$ ) is used solely to accelerate the rotor and primary part of the connected coupling.

Figure 2. shows the peak current of an electric motor directly connected to the load, with direct start-up, and start-up with a fluid coupling. The dotted line shows the energy lost as heat during start-up without a fluid coupling.

In the first case, the peak current is 6 times the rated current, and continues to be high until the operating speed is reached.

With a ROTOFUID fluid coupling, the peak current is high for only a few seconds (the energy required to accelerate the rotor) and drops to acceptable values throughout the process of reaching operating speed.

## CHARACTERISTIC CURVES FOR START-UP WITH FLUID COUPLING

Figure 3. shows a characteristic torque curve for an electric motor, the stall curve of the fluid coupling and the slip curve at operating speed. The fluid coupling allows the motor to reach 80-85% speed in a few seconds (shift from point A to point B) where it meets the stall curve of the fluid coupling (slip=100%), the point of maximum motor torque.

Point C is the point of functioning of the fluid coupling after the motor has reached operating speed.



The use of a fluid coupling with a delay fill chamber limits maximum torque during start-up, without prejudicing slipping in normal functioning. This allows the motor to quickly increase speed [revs] without hitting the resistant torque (as if it started unloaded).

A Fluid coupling with a delay fill feature is fitted with additional chamber in order to reduce the quantity of oil in the working circuit (see Fig. 1). The chamber is in contact with the circuit via calibrated nozzles, which can be set as required (see Fig. 2).

The variation in the calibrated nozzle holes changes the time it takes for the oil in the chamber to reach the working circuit, thereby, increasing or decreasing start-up time for the driven machine.

When all the oil has flowed from the chamber into the circuit, the fluid coupling reaches the rated speed, transmitting the required torque with minimum slippage (see Fig. 3).

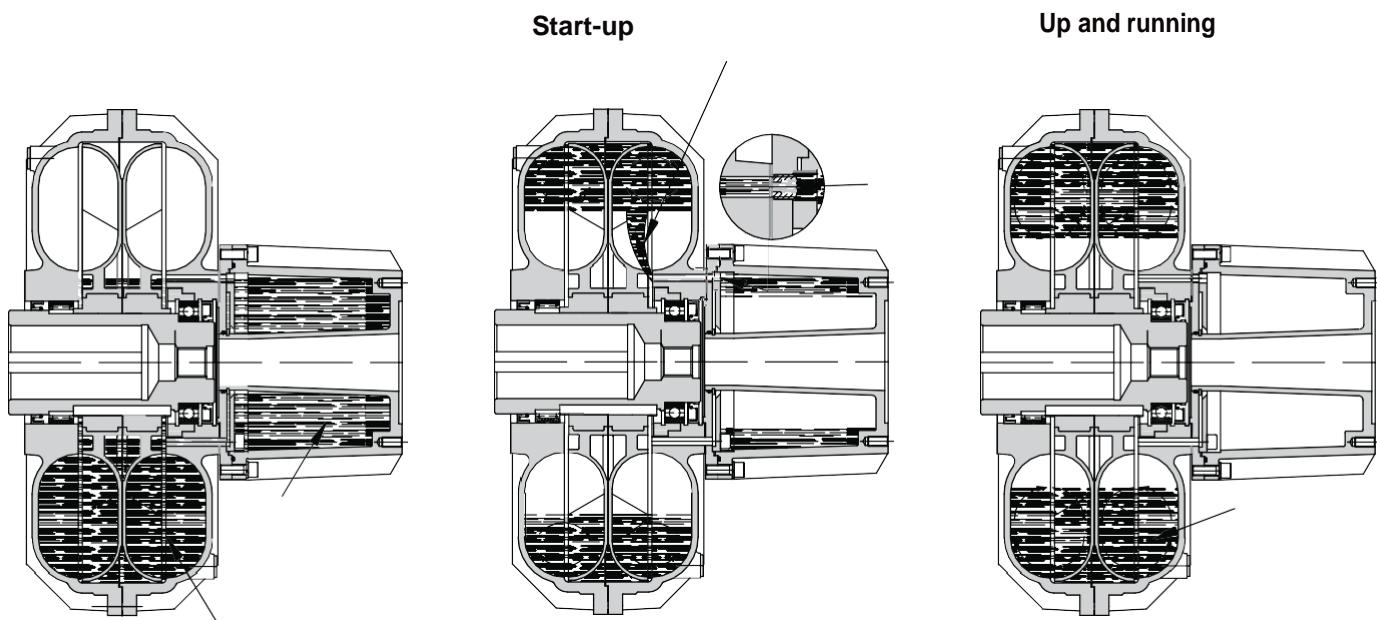
Fluid couplings may be fitted with either a single or dual delay fill chamber.

With a single delay fill chamber, Ca/Cn torque limitation varies from 180% to 150%, adjusting the quantity of oil.

With a dual delay fill chamber Ca/Cn torque limitation varies from 150% to 120%, adjusting the quantity of oil.

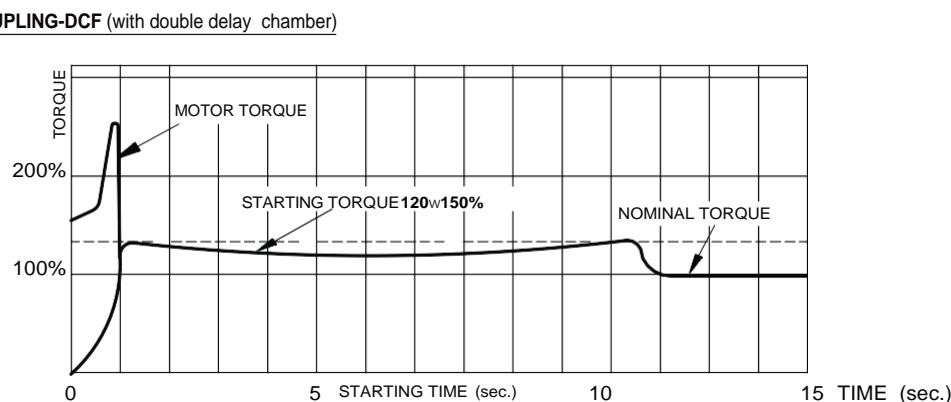
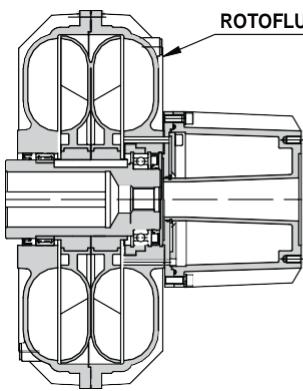
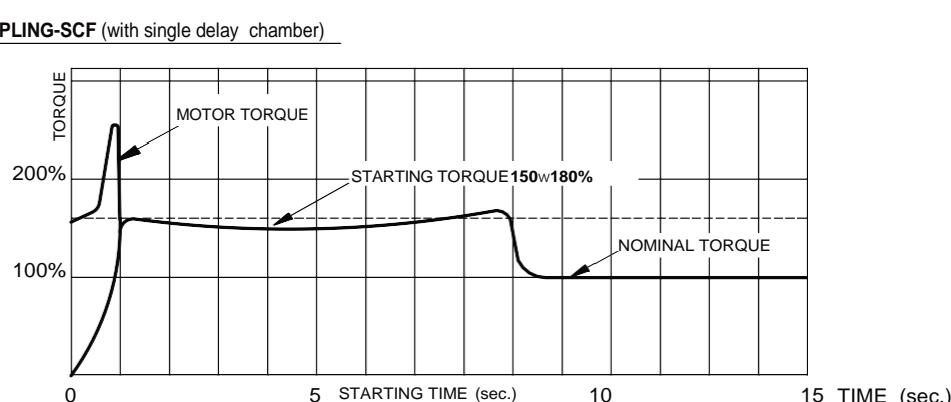
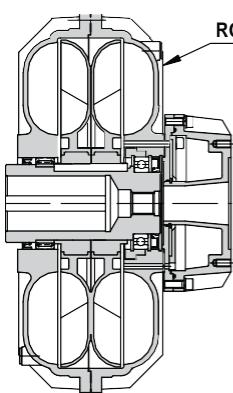
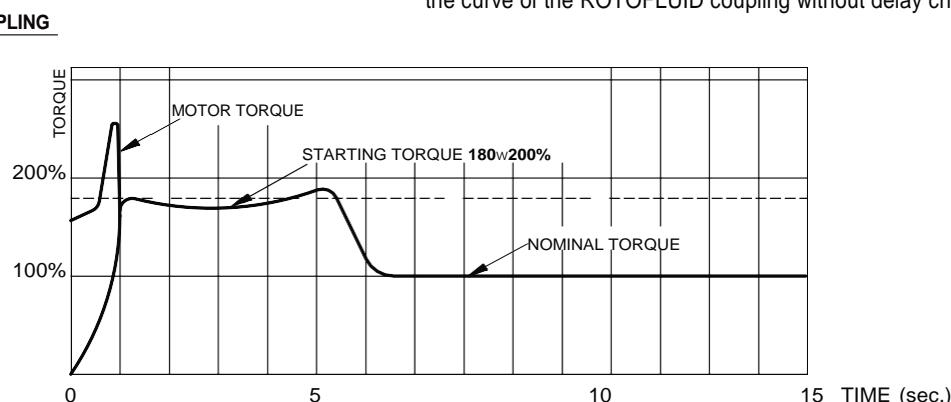
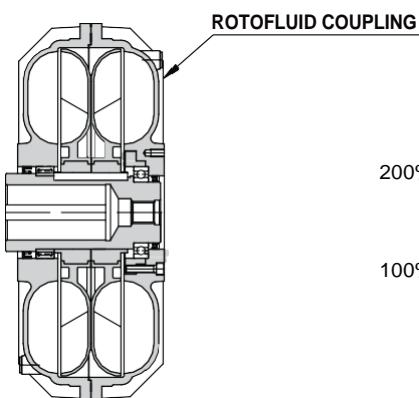
The advantages of delay fill chambers are enhanced as the power requirement rises.

SCF and DCF delay fill chambers are available from size 30 to size 95P.



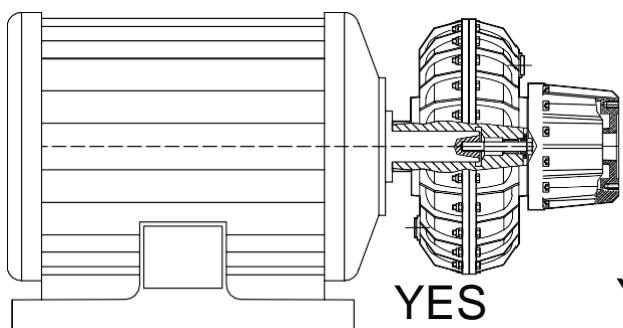
## ADVANTAGES

- Low energy loss even where inertia is high
- Start-up time can be adjusted
- Start-up torque is limited to pre-set values without affecting slip
- Limitation of start-up current prolongs the life of the motor
- For controls with several drives the coupling automatically adjusts the load speed on the basis of synchronous speed
- More start-ups per hour
- The direction of rotation can be reversed
- Asynchronous squirrel cage motors can be used instead of electric motors or special starting devices (Inductors, autotransformers, star-delta, etc.)
- If the load is blocked, both the motor and load are protected.

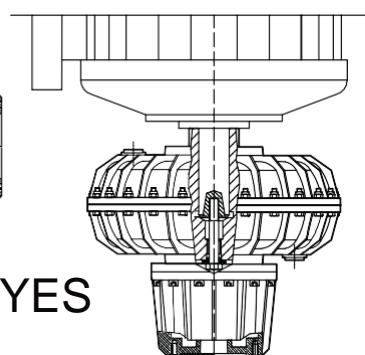


### CORRECT MOUNTING OF THE COUPLING WITH DELAY CHAMBER

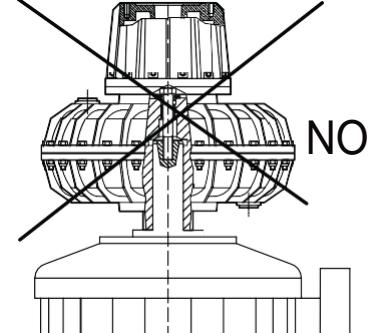
HORIZONTAL SHAFT



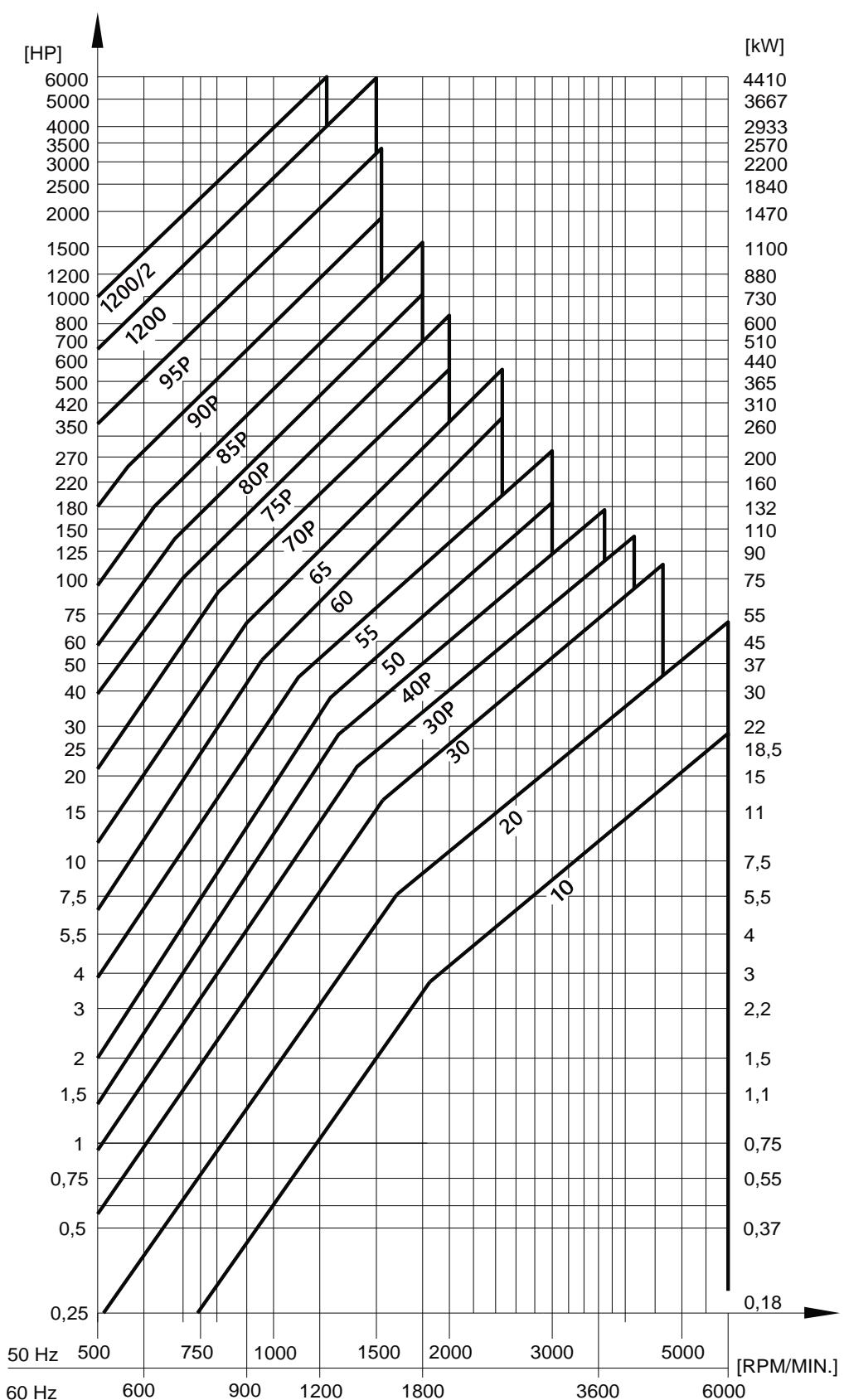
YES

VERTICAL SHAFT WITH  
DOWNWARD DELAY CHAMBER

YES

VERTICAL SHAFT WITH UPWARD  
DELAY CHAMBER

NO



- Select coupling size on input power and speed.
- The curves show limit capacity of couplings.
- If the selection point falls on or close to the max capacity limit line of a given coupling size then it is advisable to check with the starting time and the maximum allowable temperature calculations.



**WESTCAR**  
MILANO - ITALY

## ROTOFLUID COUPLING SELECTION TABLE FOR 50 Hz AND 60 Hz UNEL MEC ELECTRIC MOTORS

Sheet 10-2 BEN  
Date 05-2006

MOTORS		Motor speed 50 Hz												Motor speed 60 Hz											
		8 poles			6 poles			4 poles			2 poles			6 poles			4 poles			1200 R.P.M.			1800 R.P.M.		
		750 R.P.M.			1000 R.P.M.			1500 R.P.M.			3000 R.P.M.			1200 R.P.M.			1800 R.P.M.								
TYPE	Ø SHAFT	kW	HP	Coupling	kW	HP	Coupling	kW	HP	Coupling	kW	HP	Coupling	kW	HP	Coupling	kW	HP	Coupling	kW	HP	Coupling	kW	HP	Coupling
<b>71</b>	14				0,25	0,33	<b>10</b>	0,25	0,33		0,37	0,5		0,25	0,33	<b>10</b>	0,25	0,33	<b>10</b>	0,25	0,35		0,25	0,33	<b>10</b>
					0,37	0,5		0,37	0,5		0,37	0,5		0,37	0,5		0,37	0,5		0,37	0,5		0,37	0,5	
<b>80</b>	19				0,37	0,5	<b>20</b>	0,55	0,75		0,75	1		0,75	1	<b>20</b>	0,75	1		0,75	1	<b>20</b>	0,75	1	<b>20</b>
					0,55	0,75		0,75	1		1,1	1,5		1,1	1,5		1,1	1,5		1,1	1,5		1,1	1,5	
<b>90S</b>	24				0,75	1	<b>20</b>	1,1	1,5		1,5	2		2,2	3	<b>10</b>	2,2	3		2,2	3	<b>20</b>	2,2	3	<b>20</b>
					2,2	3		2,2	3		3	4		3	4		3	4		3	4		3	4	
<b>90L</b>	24	0,55	0,75	<b>20</b>	1,1	1,5	<b>30</b>	1,5	2		4	5,5	<b>20</b>	4	5,5	<b>20</b>	4	5,5		4	5,5	<b>20</b>	4	5,5	<b>20</b>
<b>100L</b>	28	1,1	1,5	<b>30</b>	1,5	2	<b>30</b>	2,2	3		3	4	<b>20</b>	3	4	<b>20</b>	3	4		3	4	<b>30</b>	3	4	<b>30</b>
<b>112M</b>	28	1,5	2	<b>30P</b>	2,2	3	<b>30P</b>	3	4		5,5	7,5	<b>30</b>	5,5	7,5	<b>20</b>	5,5	7,5		5,5	7,5	<b>20</b>	5,5	7,5	<b>20</b>
<b>132</b>	38	-	-	<b>40P</b>	4	5,5	<b>40P</b>	5,5	7,5		7,5	10	<b>30</b>	7,5	10	<b>20</b>	7,5	10		7,5	10	<b>30</b>	7,5	10	<b>30</b>
<b>132M</b>	38	3	4	<b>40P</b>	4	5,5	<b>40P</b>	5,5	7,5		7,5	10	<b>30P</b>	7,5	10	<b>30</b>	7,5	10		7,5	10	<b>30P</b>	7,5	10	<b>30P</b>
<b>160M</b>	42	4	5,5	<b>50</b>	7,5	10	<b>50</b>	11	15		11	15	<b>30P</b>	11	15	<b>30</b>	11	15		11	15	<b>30</b>	11	15	<b>30</b>
<b>160L</b>	42	7,5	10	<b>55</b>	11	15	<b>50</b>	15	20		18,5	25	<b>40P</b>	22	30	<b>30</b>	22	30		22	30	<b>40P</b>	22	30	<b>40P</b>
<b>180M</b>	48	-	-	<b>60</b>	-	-	<b>55</b>	15	20		22	30	<b>55</b>	30	40	<b>50</b>	30	40		30	40	<b>50</b>	30	40	<b>50</b>
<b>180L</b>	48	11	15	<b>70P</b>	15	20	<b>70P</b>	18,5	25		22	30	<b>60</b>	30	40	<b>60</b>	30	40		30	40	<b>60</b>	30	40	<b>60</b>
<b>200L</b>	55	15	20	<b>70P</b>	22	30	<b>70P</b>	30	40		37	50	<b>65</b>	45	60	<b>65</b>	45	60		45	60	<b>65</b>	45	60	<b>65</b>
<b>225S</b>	60	18,5	25	<b>75P</b>	-	-	<b>75P</b>	37	50		45	60	<b>65</b>	55	75	<b>60</b>	55	75		55	75	<b>60</b>	55	75	<b>60</b>
<b>225M</b>	60	-	-	<b>75P</b>	-	-	<b>75P</b>	45	60		75	100	<b>70P</b>	75	100	<b>70P</b>	75	100		75	100	<b>70P</b>	75	100	<b>70P</b>
<b>250M</b>	60	-	-	<b>80P</b>	-	-	<b>80P</b>	90	125		132	180	<b>75P</b>	132	180	<b>75P</b>	132	180		132	180	<b>75P</b>	132	180	<b>75P</b>
<b>280S</b>	65	-	-	<b>85P</b>	-	-	<b>85P</b>	110	150		160	220	<b>70P</b>	160	220	<b>70P</b>	160	220		160	220	<b>70P</b>	160	220	<b>70P</b>
<b>280M</b>	75	37	50	<b>85P</b>	45	60	<b>85P</b>	55	75		90	125	<b>75P</b>	90	125	<b>75P</b>	90	125		90	125	<b>75P</b>	90	125	<b>75P</b>
<b>315S</b>	80	-	-	<b>90P</b>	-	-	<b>90P</b>	110	150		160	220	<b>70P</b>	160	220	<b>70P</b>	160	220		160	220	<b>70P</b>	160	220	<b>70P</b>
<b>355S</b>	100	132	180	<b>90P</b>	160	220	<b>90P</b>	200	270		250	340	<b>75P</b>	250	340	<b>75P</b>	250	340		250	340	<b>75P</b>	250	340	<b>75P</b>
<b>355M</b>	100	160	220	<b>90P</b>	200																				



The preliminary selection of ROTOFUID coupling, will be made on the selection diagram sheet 10-100A depending upon input power and speed. For frequent starts or high inertia acceleration, it is necessary first to carry out the following calculations:

- 1 Acceleration time (ta)
- 2 Max allowable temperature (Ta)
- 3 Max working cycles for hours (H)

For this purpose it is necessary to know:

## DATA

Pm = INPUT POWER KW

Nm = INPUT SPEED RPM

(\*) Nu = COUPLING OUTPUT SPEED RPM

PI = POWER ABSORBED BY THE LOAD AT RATED SPEED KW

NI = SPEED OF DRIVEN MACHINE RPM

T = AMBIENT TEMPERATURE °C

$$J = \text{INERTIA OF DRIVEN MACHINE} \quad \left( \frac{-PD^2}{4} \right) \text{ kgm}^2$$

Jr = INERTIA OF DRIVEN MACHINE REFERED TO COUPLING SHAFT (kgm<sup>2</sup>)

$$Jr = J \left( \frac{NI}{Nu} \right)^2$$

$$(*) \quad Nu = Nm \left( - \frac{100 - S}{100} \right) \quad \text{WHERE: } S = \text{Percent slip of the ROTOFUID coupling}$$

The following assumptions may be made for initial calculations: S=4

## 1

### ACCELERATION TIME

For the calculation of the acceleration time apply the following formula:

The outcome time is worded in seconds

$$ta = \frac{Nu \times Jr}{9,55 \times Ma} = \dots \text{ (sec)}$$

WHERE:

Ma = ACCELERATING TORQUE (Nm)

$$Ma = 1,65 \times Mm - MI = \dots \text{ (Nm)}$$

Mm = NOMINAL TORQUE (Nm)

$$Mm = \frac{9550 \times Pm}{Nm} = \dots \text{ (Nm)}$$

MI = ABSORBED TORQUE (Nm)

$$MI = \frac{9550 \times PI}{Nu} = \dots \text{ (Nm)}$$

## 2

### MAX ALLOWABLE TEMPERATURE

For simplicity of calculation, ignore the heat dissipated during acceleration. Coupling temperature rise:

$$Ta = \frac{Q}{C} = \dots \text{ (°C)}$$

WHERE:

Q = HEAT GENERATED DURING ACCELERATION (Kcal)

C = TOTAL THERMAL CAPACITY OF COUPLING SELECTED FROM

$$Q = \left( \frac{Ta}{Nu} + \frac{TL \times ta}{Jr \times Nu} \right) = \dots \text{ (Kcal)}$$

$$\frac{10^4}{Nu} \quad \frac{76,5}{Jr \times Nu} \quad \frac{8}{MI \times ta}$$

$$10^4 \quad 76,5 \quad 8$$

The final coupling temperature reached at the end of the acceleration cycle will be:

$$Tf = T + Ta + TL \text{ (°C)}$$

where: Tf = Final temperature (°C)

T = Ambient temperature (°C)

Ta = Temperature rise during acceleration (°C)

TL = Temperature increase during steady running (°C)

$$TL = 2,4 \frac{PI \times S}{K}$$

where: K = factor from TAB. D

Size	THERMAL CAPACITY OF ROTOFUID COUPLINGS		TABLE C With DCF Kcal / °C
	Without SCF/DCF Kcal / °C	With SCF Kcal / °C	
10	0,73	-	-
20	1,2	-	-
30	2,8	3,1	3,3
30P	3,5	3,8	4
40P	4	4,7	5
50	6,1	6,9	7,4
55	8,8	9,6	10,1
60	13	14,8	16
65	15,2	17	18,2
70P	22	25,6	27,8
75P	28,6	32,2	34,4
80P	44	50	55
85P	55	61	66
90P	98	100	104
95P	133	138	142
1200	180	-	-
1200/2	250	-	-



**WESTCAR**

MILANO - ITALY

## PERFORMANCE CALCULATION

Sheet  
10-030A EN

Date  
04-2013



## 3

## MAX WORKING CYCLES FOR HOUR H

In addition to the heat generated in the coupling by slip during steady running, heat is also generated (as calculated above) during the acceleration period. To allow time for this heat to be dissipated, one must not exceed the max allowable number of acceleration cycles for hour. This is calculated as follows:

$$H_{max} = \frac{3600}{ta + tL}$$

where  $tL$  = minimum working time

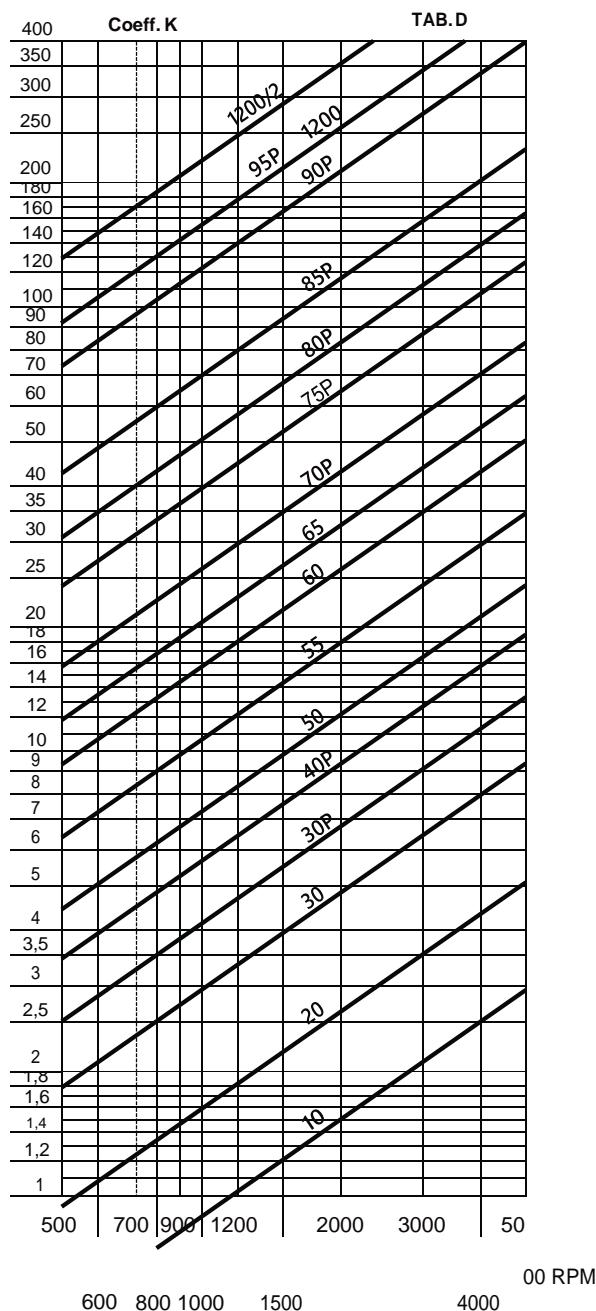
$$tL = 10^3 \cdot \frac{Q}{\left( \frac{T_a}{2} + T_L \right) \cdot K} \quad (\text{sec})$$

## WARNING:

ROTOFLUID couplings equipped with standard (NBR) oil seals must not exceed the maximum value  $T_{120}^{\circ}\text{C}$ .

In the version with Viton seals the maximum value  $T_f = 180^{\circ}\text{C}$ .

In case the above performance calculations result shows unsuitable values, check again with a larger ROTOFLUID size or consult with Westcar technical office.





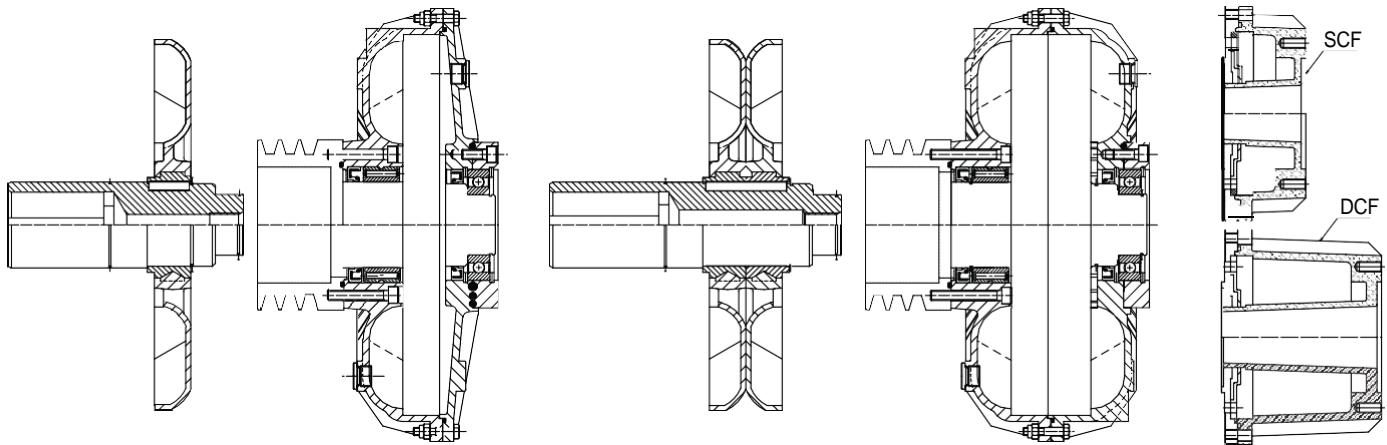
The mass moment of inertia values listed in the table below are referred to inner part, outer part and oil where:

INNER PART = hollow shaft, impeller pump, half oil

OUTER PART = turbine and cover housing, half oil

values valid for ROTOFLUID couplings with oil level at 45° off center pulleys, flexible couplings and other accessories are not included.

INNER PART	OUTER PART	INNER PART	OUTER PART	DELAY CHAMBER
SIZE: 10, 20, 30, 30P, 40P, 50, 60, 70P, 80P, 90P.		SIZE: 55, 65, 75P, 85P, 95P.		



$$\text{MOMENT OF INERTIA } I = m \times R^2 \text{ (Kgm}^2\text{)}$$

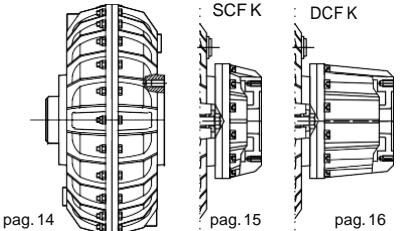
2

ROTOFLUID COUPLING SIZE	VERSION ALFA		VERSION BETA						DELAY CHAMBER	
	Type K		Type Z, X, I		Type J		Type H		SCF	DCF
	I INNER Kgm <sup>2</sup>	I OUTER Kgm <sup>2</sup>	I INNER Kgm <sup>2</sup>	I OUTER Kgm <sup>2</sup>	I INNER Kgm <sup>2</sup>	I OUTER Kgm <sup>2</sup>	I INNER Kgm <sup>2</sup>	I OUTER Kgm <sup>2</sup>	I Kgm <sup>2</sup>	I Kgm <sup>2</sup>
<b>10</b>	0,003	0,011	0,003	0,011	--	--	0,003	0,012	--	--
<b>20</b>	0,006	0,024	0,006	0,024	0,006	0,026	0,006	0,027	--	--
<b>30</b>	0,021	0,081	0,022	0,081	0,022	0,084	0,022	0,086	0,006	0,007
<b>30P</b>	0,040	0,140	0,045	0,140	0,045	0,144	0,045	0,147	0,006	0,007
<b>40P</b>	0,060	0,179	0,065	0,179	0,065	0,190	0,065	0,197	0,013	0,016
<b>50</b>	0,105	0,363	0,109	0,363	0,109	0,376	0,109	0,385	0,026	0,032
<b>55</b>	0,208	0,474	0,214	0,474	0,214	0,487	0,214	0,496	0,026	0,032
<b>60</b>	0,311	0,795	0,326	0,795	0,326	0,823	0,326	0,842	0,053	0,062
<b>65</b>	0,564	1,040	0,583	1,040	0,583	1,068	0,583	1,087	0,053	0,062
<b>70P</b>	0,710	2,230	0,780	2,230	0,780	2,307	0,780	2,357	0,11	0,140
<b>75P</b>	1,426	2,834	1,462	2,834	1,462	2,911	1,462	2,961	0,11	0,140
<b>80P</b>	2,389	7,276	2,499	7,276	2,499	7,393	--	--	0,215	0,254
<b>85P</b>	4,668	8,977	4,792	8,977	4,792	9,094	--	--	0,215	0,254
<b>90P</b>	8,372	23,200	--	--	--	--	--	--	0,490	0,550
<b>95P</b>	15,613	28,855	--	--	--	--	--	--	0,490	0,550
<b>1200</b>	54,000	260,000	--	--	--	--	--	--	--	--
<b>1200/2</b>	104,000	320,000	--	--	--	--	--	--	--	--

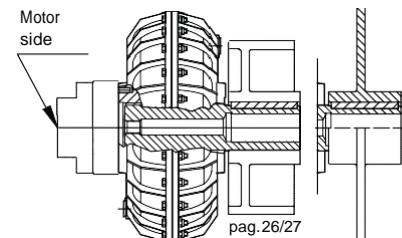


**ALL THE ACCESSORIES CAN BE FITTED TO THE COUPLINGS ALFA WITH DELAY  
FILL CHAMBERS "SCF AND DCF"**

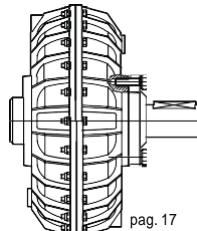
**ROTOFLUID ALFA without accessories  
K**



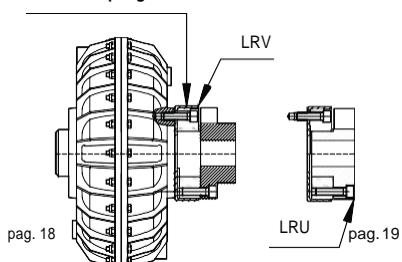
**ROTOFLUID ALFA KK reverse assembly  
with disc or brake drum**



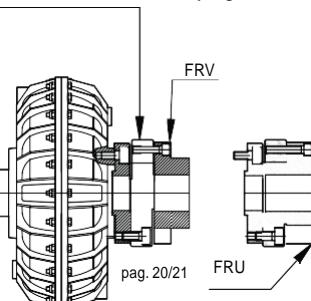
**ROTOFLUID ALFA KS with rigid stub shaft**



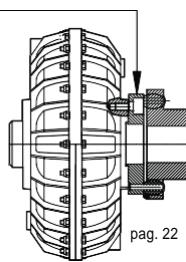
**ROTOFLUID ALFA K-LRV/LRU  
with standard ROTOFLEXI  
flexible coupling**



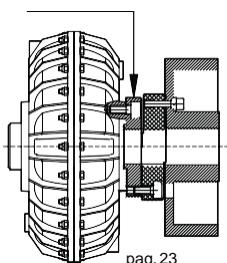
**ROTOFLUID ALFA K-FRV/FRU with  
ROTOFLEXI oversized flexible coupling**



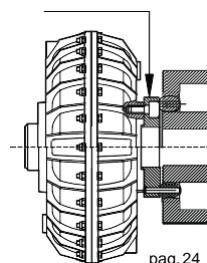
**ROTOFLUID ALFA K-AB with  
ROTOPIN flexible coupling**



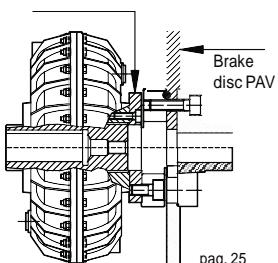
**ROTOFLUID ALFA K-FRD with ROTOFLEXI  
oversized flexible coupling and brake drum**



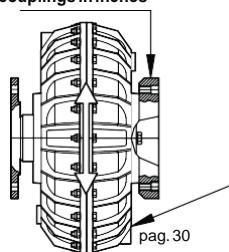
**ROTOFLUID ALFA K-AFF with ROTOPIN  
flexible coupling and brake drum**



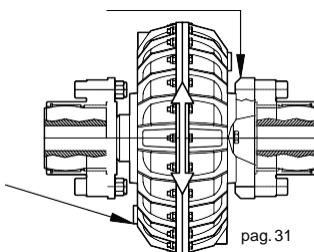
**ROTOFLUID ALFA K-FR-PAV/PBV  
with flexible coupling and brake disc**



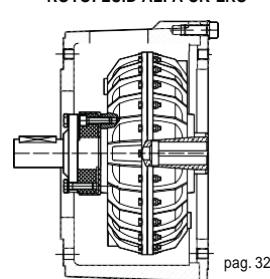
**ROTOFLUID ALFA WAG  
with flanges for the mounting of half  
gear couplings in inches**



**ROTOFLUID ALFA WAG-G with  
ROTOGEAR coupling**

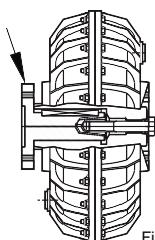


**ROTOFLUID ALFA CK-LRS**

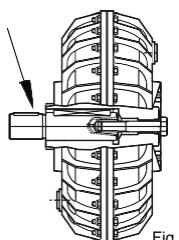


**SPECIAL CONFIGURATIONS EXAMPLES FOR COUPLING ROTOFLUID ALFA**

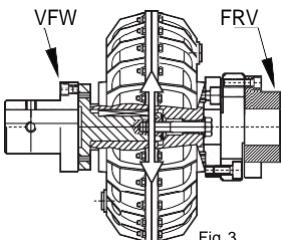
**ROTOFLUID ALFA K-W  
with flange shaft**



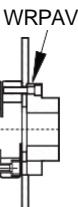
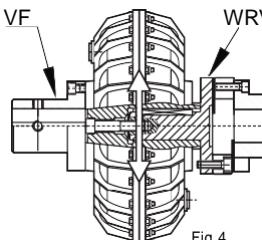
**ROTOFLUID ALFA K-Y  
with pin shaft**

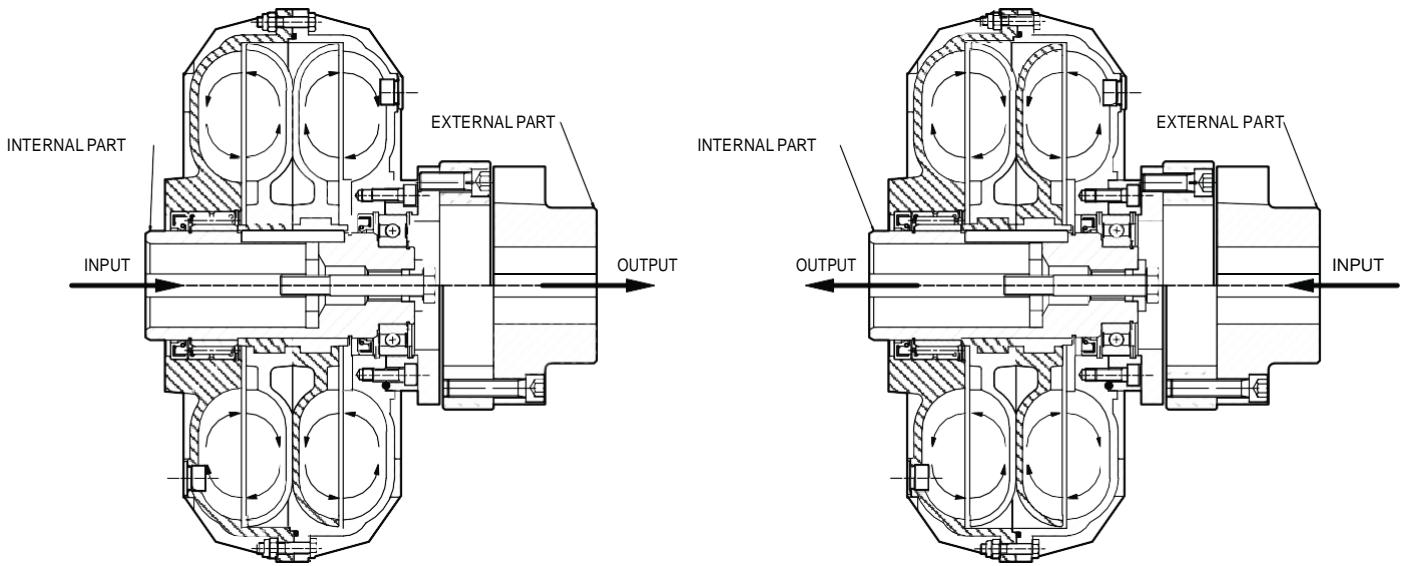


**ROTOFLUID ALFA K-VFW  
with rigid hub**



**ROTOFLUID ALFA K-VF  
for "reverse mounting"**





### ADVANTAGES OF STANDARD ASSEMBLY

In STANDARD assemblies, the fluid coupling is fitted with the internal part keyed to the motor.

This is common for couplings with pulleys and linear couplings, and provides the following benefits:

- A) – Standardisation of bores in compliance with unified electric motor shafts;
- B) – During start-up the inertia of the coupling affects the motor less, so the motor can reach operating speed with less peak current;
- C) – In linear applications, where a brake disc/drum are required, they are keyed directly onto the reduction gear shaft without increasing the axial length of the coupling.
- D) – In couplings with delay fill chambers, start-up is more gradual because the oil passing from the delay fill chamber is subjected to centrifugal forces in the work chamber as revs rise;
- E) – The flexible coupling fitted to the fluid coupling is subject to less stress, because it receives motion from the fluid coupling not directly from the motor.

### ADVANTAGES OF REVERSE ASSEMBLY

In a REVERSE assembly, the fluid coupling is fitted with the external part keyed to the motor.

This type of assembly is possible whenever the fluid coupling is fitted between the motor and the reduction gear.

For couplings with a Vee Pulley, the coupling must be fitted to the driving shaft and attention needs to be paid to the ratio between the Drivingpulley and Driven pulley. (**In this case consult WESTCAR S.R.L.**)

This type of assembly has the following important benefits:

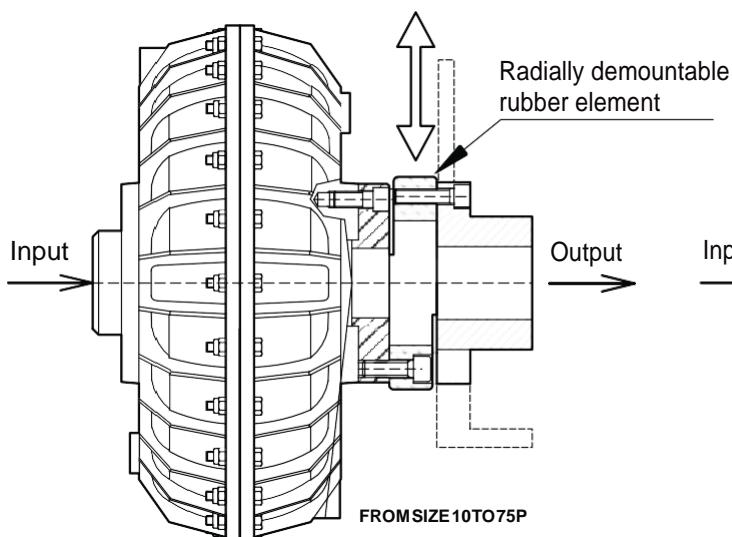
- F) - Greater dissipation of heat, above all during start-up, recommended where start-ups are frequent or lengthy;
- G) - Control is easier and the regulation of the oil level in the coupling is simplified, since the external part can be rotated without moving the Driven Equipment or Machine;
- H) - **IMPORTANT!** Where the coupling is fitted with THERMAL TRIPPIN, it continues to function even when the Driven Equipment or Machine comes to rest and the motor is rotating.

In the absence of special needs or requests, the coupling is supplied for the Standard configuration.

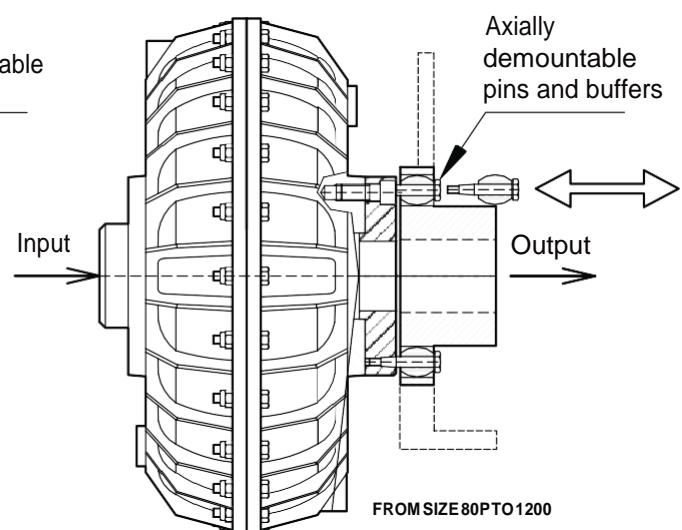
Please advise **WESTCAR S.R.L.** if you require, the selected Fluid Coupling to be quoted for Reverse Assembly.



**ROTOFLEXIflexible coupling**



**ROTOPIN flexible coupling**



Rubber elements type « R » available also with reinforced fabric for higher torque applications' " BR ".

COUPLING	750 R.P.M.		COUPLING	1000 R.P.M.		COUPLING	1500 R.P.M.		COUPLING	3000 R.P.M.		
	HP	KW		HP	KW		HP	KW		CV/HP	KW	
20 K-LR..-2	0,75	0,55	10 K-LR..-1	0,33	0,25	10 K-LR..-1	0,33	0,25	10 K-LR..-1	1	0,75	
30 K-LR..-3	1,5	1,1		0,5	0,37		0,5	0,37		1,5	1,1	
30P K-LR..-3	2	1,5	20 K-LR..-2	0,75	0,55		0,75	0,55	20 K-LR..-2	2	1,5	
40P K-LR..-4	4	3		1	0,75		1	0,75		3	2,2	
50 K-LR..-5	5,5	4	20 K-LR..-2	1,5	1,1		1,5	1,1	30 K-LR..-3	4	3	
55 K-LR..-5	10	7,5		2	1,5		2	1,5		5,5	4	
60 K-LR..-6	15	11	30 K-LR..-3	3	2,2		3	2,2	20 K-LR..-2	7,5	5,5	
	20	15		4	3		4	3		10	7,5	
65 K-LR..-6	25	18,5	30P K-LR..-3	5,5	4		5,5	4	30 K-LR..-3	15	11	
	30	22	40P K-LR..-4	7,5	5,5		7,5	5,5		20	15	
65 K-FR..-7	40	30		10	7,5	30 P K-FR..-4	10	7,5		25	18,5	
70P K-LR..-7	50	37	50 K-LR..-5	15	11		15	11	30 K-FR..-4	30	22	
	60	45		20	15	30P K-FR..-4	20	15		40	30	
75P K-FR..-8	75	55	55 K-LR..-5	25	18,5		25	18,5	30P K-FR..-4	50	37	
	100	75		30	22	40P K-FR..-5	30	22		60	45	
80P K-AB..-8	125	90	60 K-LR..-6	40	30	50 K-FR..-6	40	30	40P K-FR..-5	75	55	
80P K-AB..-8	150	110		50	37		50	37		50 K-FR..-6	100	75
85P AB..-8M	180	132	65 K-FR..-7	60	45	55 K-FR..-6	60	45		125	90	
85P K-AB..-8M	220	160	70P K-LR..-7	75	55		75	55	50 K-FR..-6x2	150	110	
90P K-AB..-9	270	200	70P K-FR..-8	100	75	60 K-FR..-7	100	75		180	132	
90P K-AB..-9	450	330 ★		125	90	65 K-FR..-7	125	90	50 K-FR..-6x2	220	160	
95P K-AB..-9	800	600 ★	75P K-FR..-8x2	150	110		150	110		270	200	
1200 K-AB..-9	1600	1200 ★		180	132	75P K-FR..-8x2	220	160	75P K-FR..-8	220	160	
For higher power contact WESTCAR Technical Dept.			80P K-AB..-8	220	160		270	200	75P K-FR..-8	270	200	
			85P K-AB..-8M	270	200		340	255		340	255	
			85P K-AB..-8M	340	250		430	315	75P K-FR..-8x2	340	255	
			85P K-AB..-8M	500	370		500	365 ★		500	365 ★	
			90P K-AB..-9	800	600 ★		600	450 ★	80P K-AB..-8	600	450 ★	
			90P K-AB..-9	1360	1000 ★		700	525 ★		700	525 ★	
			1200 K-AB..-9 (1)	2720	2000 ★		1100	810 ★	80P K-AB..-8	1100	810 ★	
							1740	1300 ★	90P K-AB..-9	1740	1300 ★	
							3100	2300 ★	95P K-AB..-9	3100	2300 ★	

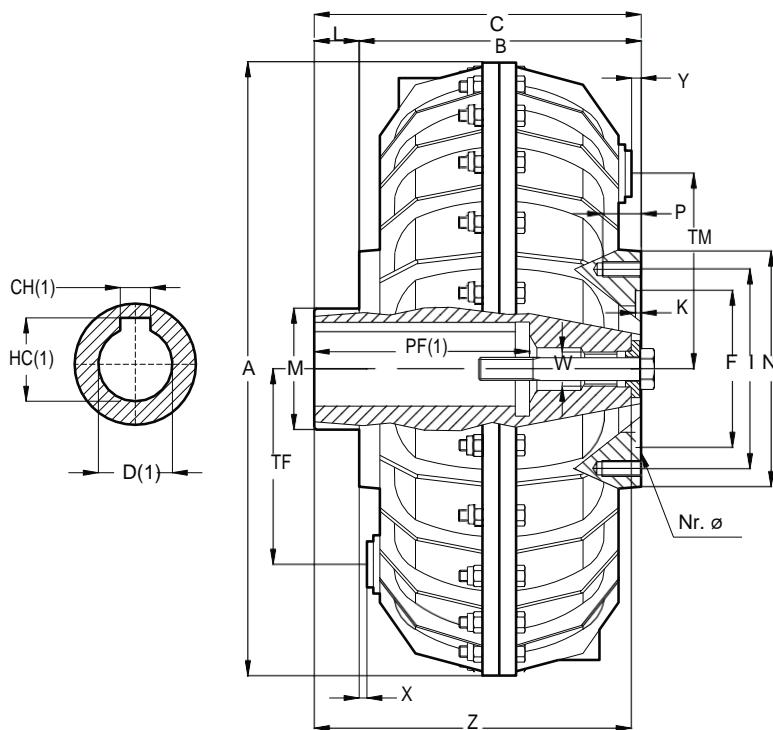
For higher power contact  
WESTCAR Technical Dept.

\* Maximum power transmitted by the fluid coupling for no standard motors.

(1) Check flexible coupling duty factor with the rated motor power

NOTE - For REVERSE MOUNTING advise WESTCAR

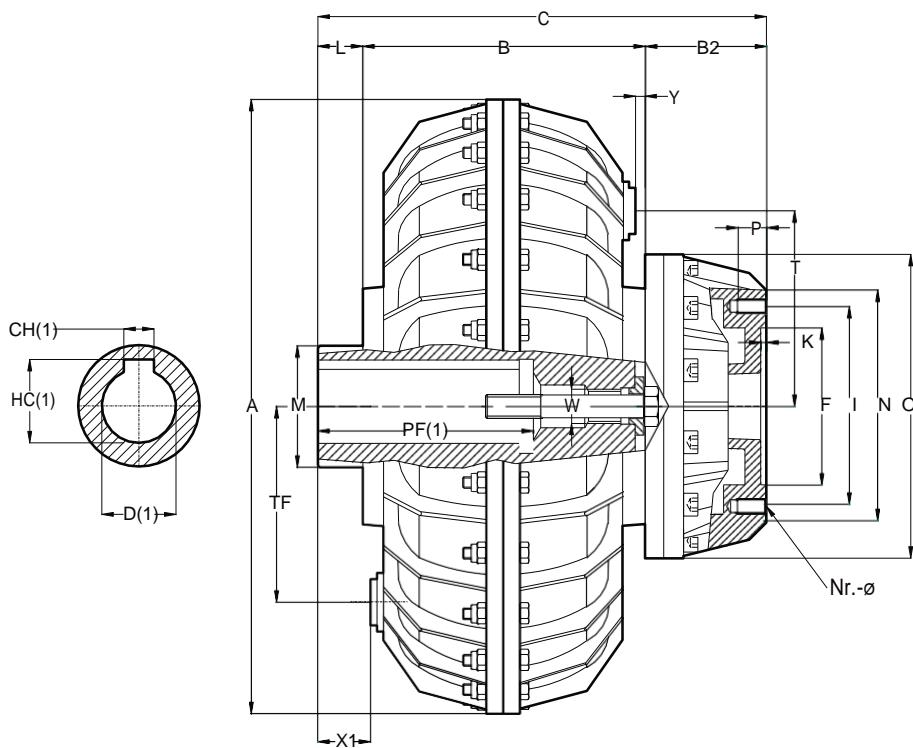
NOTE - For couplings running at 3000 R.P.M. contact WESTCAR Technical Dept.



NOTE: (1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET 10-019D

Size	Type	D	Dimensions in mm																Weight Kg.*	
			A	B	C	F <sup>H7</sup>	K	I	L	M	N	Nr.Ø	P	TF	TM	W	X	Y	Z	
10	K-1 K-3	14-19-24 28	193	88	98 114	47	4 2	60	10 26	35 40	75	6-M6	12 9	66	66	ø8,5	0,5 0	0 0,5	94 112	4
20	K-1 K-3	19-24-28 38	230	115	125 135	62 52	4	78	10 20	40 53	94	6-M8	16 14	80	80	M14 M16	2 7	7 2	120 130	6
30	K-1 K-3 K-4	28-38-42 48 ** 55	290	150	162 190 219	75 72 72	4	100	12 40 69	55 60 70	114	8-M8	16	110	110	M24	9	9	157,5 185,5 214,5	13,2 13,2 14
30P	K-1 K-3 K-4	28-38-42 48 ** 55	327	150	162 190 219	75 72 72	4	100	12 40 69	55 60 70	114	8-M8	16	130	130	M24	4	4	157,5 185,5 214,5	21 21 22
40P	K-1 K-2	38-42-48-55 60	338	183	198	100 90	4	125	15	70 80	145	8-M10	22 20	130	130	M24	11 24	24 11	194 193	22
50	K-2	42-48-55-60-65	430	154	179	110	4,5	140	25	85	165	8-M10	22	150	150	M24	6	20	176,5	30
55	K-2 K-3	42-48-55-60-65 75	430	196	211 210	110	4,5	140	15 14	85 100	165	8-M10	22	150	150	M24 M30	6	6	208,5 207,5	40
60	K-2 K-3	48-55-60-65-75 80	520	172	192 222	125	8	160	20 50	110	185	8-M10	22	205	192	M30	6	20	192 222	46
65	K-2	55-60-65-75-80	520	220	240	125	8	160	20	110	185	8-M10	22	205	205	M30	6	6	240	66
70P	K-2N K-3N	75-80-90 100	640	190	240 280	150	4	195	50 90	128	225	8-M16	30	265	265	M36	0	15	234 274	86
75P	K-2N K-3N	80-90 100	640	245	265 280	150	4	195	20 35	128	225	8-M16	30	265	265	M36	0	0	254 269	127
80P	K-2N K-3N	max. 110 max. 125***	810	226	270 286	160	5	230	44 60	160	270	8-M18	28	325	325	M36	0	15	264 280	180
85P	K-2N K-3N	max. 125 max. 135	810	300	340	160	5	230	40	160 170	270	8-M18	28	325	325	M36	0	0	334	252
90P	K-2 K-3	max. 130 max. 140***	1000	344	364 464	445	5	506	20 120	170	550	16-M20	32	416	416	M36	0	35	343	350 390
95P	K-2 K-3	max. 130 max. 140***	1000	466	479 586	445	5	506	13 120	170	550	16-M20	32	416	416	M36	0	35	420	505 555
1200	K-2	max. 190	1300	425	462	220	7	310	7	240	570	16-M20	36	430	430	M36	0	30	419	1800

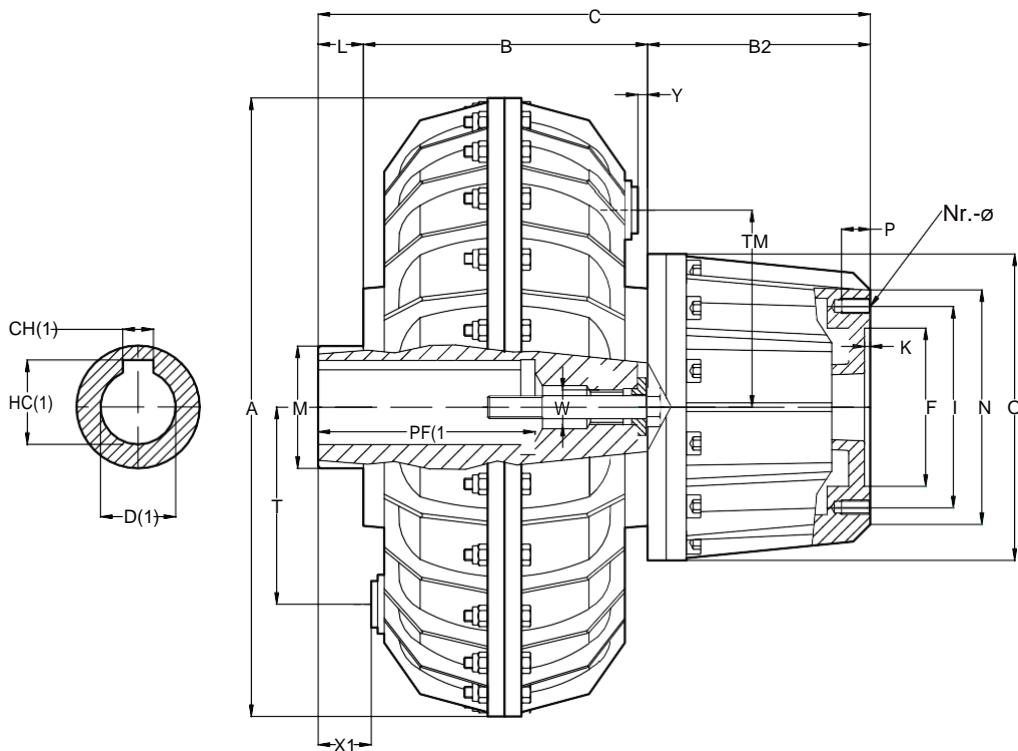
\* Weight with oil - \*\* Reduced keyway - \*\*\* Depth of bore PF = 210 (for larger bores consult WESTCAR) - Standard bores in **heavy** type



NOTE: (1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET 10-019D

Size	Type	D	Dimensions mm																Weight			
			A	B	C	B2	F <sup>H7</sup>	K	I	L	M	N	Nr.Ø	O	P	TF	TM	W	X1	Y	Kg.*	
30 SCF	K-2	28-38-42			217		72			12	60								21		15,6	
	K-3	48 **	290	150	245	55	72	4	100	40	60	114	8-M8	156	16	110	110	M24	49	9	15,6	
	K-4	55			274		72			69	70								78		16,4	
30P SCF	K-2	28-38-42			217		72			12	60								16		23,4	
	K-3	48 **	327	150	245	55	72	4	100	40	60	114	8-M8	156	16	110	110	M24	44	4	23,4	
	K-4	55			274		72			69	70								73		24,4	
40P SCF	K-2	38-42-48-55-60	338	183	256	58	90	4	125	15	80	145	8-M10	185	20	130	130	M24	39	11	25,7	
50 SCF	K-2	42-48-55-60-65	430	154	259	80	110	4,5	140	25	85	165	8-M10	213	22	150	150	M24	31	20	35,8	
55 SCF	K-2	42-48-55-60-65			291		80	110	4,5	140	15	85						M24	21			
	K-3	75	430	196	290		110	14	100	100	165	213	8-M10	213	22	150	150	M30	20	6	45,8	
60 SCF	K-2	48-55-60-65-75			282		90	125	8	160	20	110	185	8-M10	245	22	205	192	M30	26		
	K-3	80	520	172	312		110	125	5	160	50	110	185	8-M10	245	22	205	205	M30	56	20	54,4
65 SCF	K-2	55-60-65-75-80	520	220	330	90	125	8	160	20	110	185	8-M10	245	22	205	205	M30	26	6	74,4	
70P SCF	K-2N	75-80-90			350		110	150	4	195	50	128	225	8-M16	288	30	265	265	M36	50		
	K-3N	100	640	190	390		110	150	4	195	90	128	225	8-M16	288	30	265	265	M36	90	15	99
75P SCF	K-2N	80-90			375		110	150	4	195	20	128	225	8-M16	288	30	265	265	M36	35		
	K-3N	100	640	245	390		110	150	5	195	35	128	225	8-M16	288	30	265	265	M36	35	0	140
80P SCF	K-2N	max. 110			388		118	160	5	230	44	160	270	8-M18	375	28	325	325	M36	44		
	K-3N	max. 125***	810	226	404		118	160	5	230	60	160	270	8-M18	375	28	325	325	M36	60	15	196
85P SCF	K-2N	max. 125			458		118	160	5	230	40	160	270	8-M18	375	28	325	325	M36	40	0	
	K-3N	max. 135	810	300			118	160	5	230	170	170	270	8-M18	375	28	325	325	M36	40	0	268
90P SCF	K-2	max. 130			424		120	445	5	506	20	170	550	16-M20	630	32	416	416	M36	20	35	390
	K-3	max. 140***	1000	344	524		120	445	5	506	120	170	550	16-M20	630	32	416	416	M36	20	35	430
95P SCF	K-2	max. 130			599		120	445	5	506	13	170	550	16-M20	630	32	416	416	M36	13	35	545
	K-3	max. 140***	1000	466	706		120	445	5	506	120	170	550	16-M20	630	32	416	416	M36	13	35	595

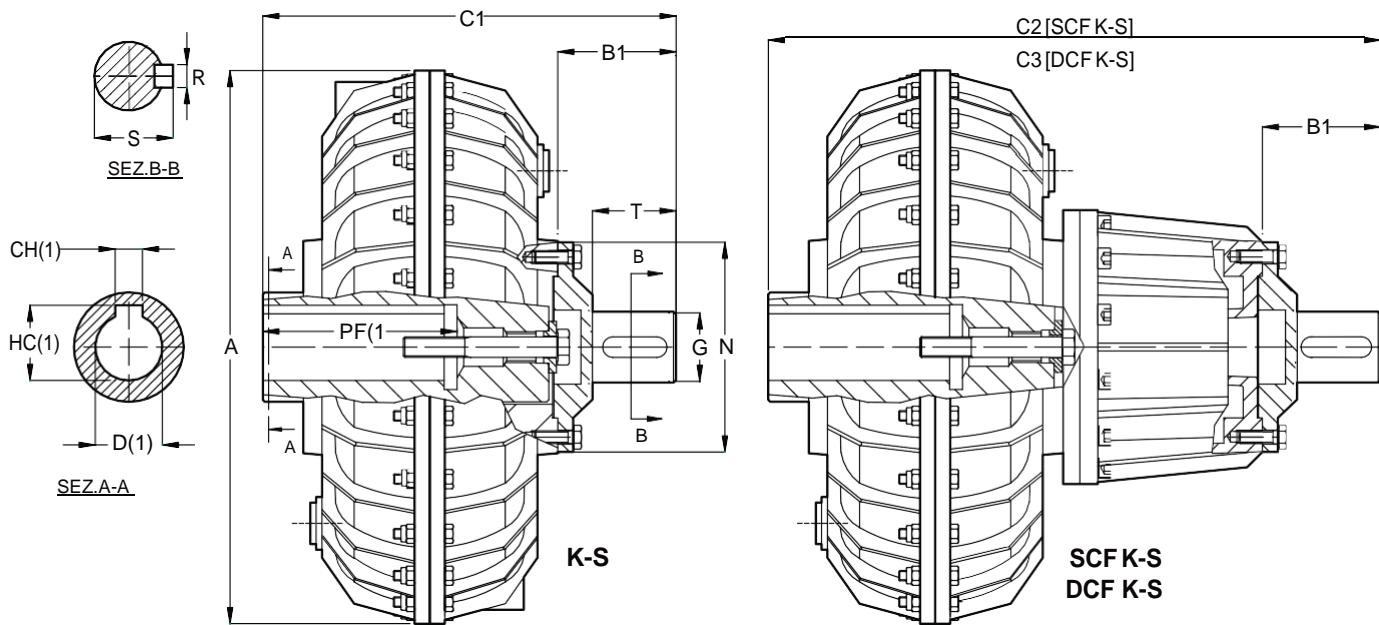
\* Weight with oil - \*\* Reduced keyway - \*\*\* Depth of bore PF = 210 (for larger bores consult WESTCAR) - Standard bores in **heavy** type



NOTE: (1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET 10-019D

Size	Dimensions mm																	Weight			
	Type	D	A	B	C	B2	F <sup>H7</sup>	K	I	L	M	N	Nr.Ø	O	P	TF	TM	W	X1	Y	Kg.*
<b>30 DCF</b>	K-2	<b>28-38-42</b>		290	150	257		<b>78</b>		4	100	12	69					21	49	16,2	
	K-3	48 **			285	95	72				40	60	114	8-M8	156	16	110	110	M24	78	16,2
	K-4	55			314		72			69	70									17,2	
<b>30P DCF</b>	K-2	<b>28-38-42</b>		327	150	257		<b>78</b>		4	100	12	69					16	44	24	
	K-3	48 **			285	95	72			40	60	114	8-M8	156	16	110	110	M24	73	24	
	K-4	55			314		72			69	70									25	
<b>40P DCF</b>	K-2	<b>38-42-48-55-60</b>	338	183	328	130	90	4	125	15	80	145	8-M10	185	20	130	130	M24	39	11	27,2
<b>50 DCF</b>	K-2	<b>42-48-55-60-65</b>	430	154	334	155	110	4,5	140	25	85	165	8-M10	213	22	150	150	M24	31	20	38
<b>55 DCF</b>	K-2	<b>42-48-55-60-65</b>		430	196	366			110	4,5	140	15	85					M24	21		
	K-3	75			365	155	110			14	100	165	8-M10	213	22	150	150	M30	20	6	48
<b>60 DCF</b>	K-2	<b>48-55-60-65-75</b>		520	172	362			170	125	8	160	20	50	110	185	8-M10	245	22	205	192
	K-3	<b>80</b>			392							110					M30	56	20	58	
<b>65 DCF</b>	K-2	<b>55-60-65-75-80</b>	520	220	410	170	125	8	160	20	110	185	8-M10	245	22	205	205	M30	26	6	78
<b>70P DCF</b>	K-2N	<b>75-80-90</b>		640	190	465			225	150	4	195	50	90	128	225	8-M16	288	30	265	265
	K-3N	100				505											M36	90	15	106	
<b>75P DCF</b>	K-2N	<b>80-90</b>		640	245	490			225	150	4	195	20	35	128	225	8-M16	288	30	265	265
	K-3N	100				505											M36	35	0	147	
<b>80P DCF</b>	K-2N	max. 110		810	226	488			218	160	5	230	44	60	160	270	8-M18	375	28	325	325
	K-3N	max. 125***				504											M36	60	15	208	
<b>85P DCF</b>	K-2N	max. 125		810	300	558			218	160	5	230	40	160	170	270	8-M18	375	28	325	325
<b>90P DCF</b>	K-2N	max. 135															M36	40	0	280	
	K-3	max. 130		1000	344	504			200	445	5	506	20	120	170	550	16-M20	630	32	416	416
<b>95P DCF</b>	K-2	max. 130		1000	466	679			200	445	5	506	13	120	170	550	16-M20	630	32	416	416
	K-3	max. 140***				786											M36	13	35	560	
																				610	

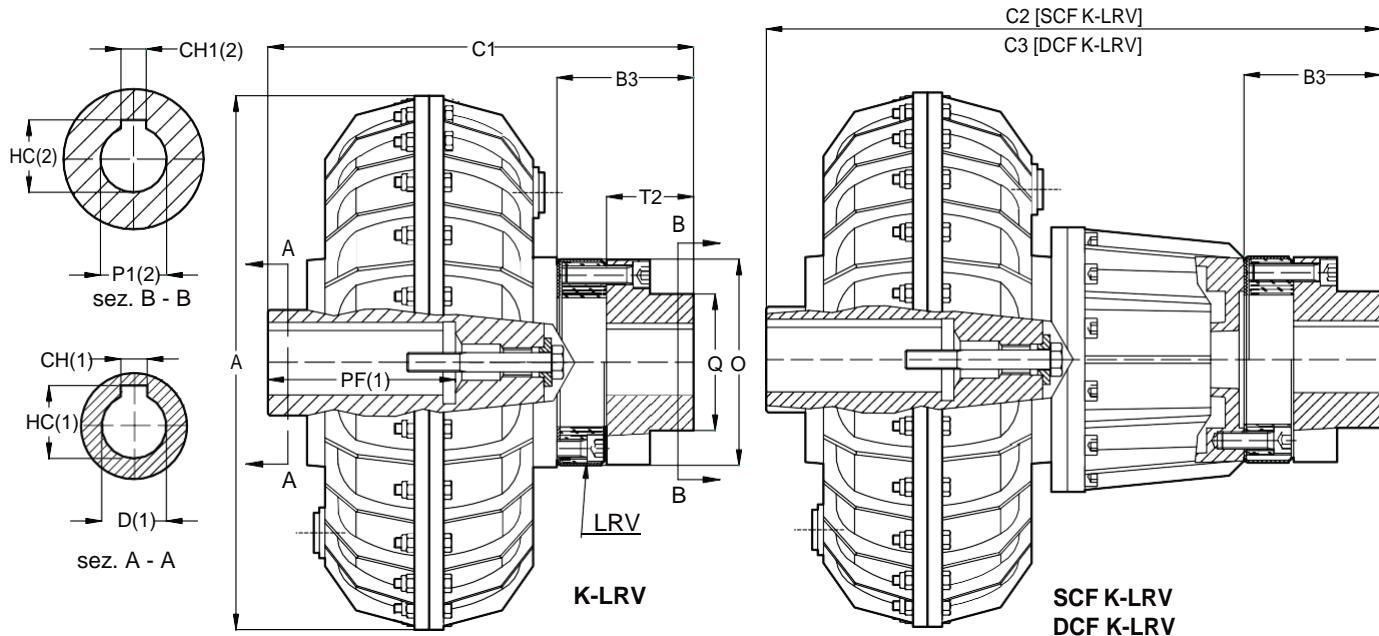
\* Weight with oil - \*\* Reduced keyway - \*\*\* Depth of bore PF = 210 (for larger bores consult WESTCAR) - Standard bores in **heavy type**



NOTE: (1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET 10-019D

Size	K-S										SCF K-S			DCF K-S			
	Dimensions mm.										Weight Kg.*	Type	C2	Kg.*	Type	C3	Kg.*
	Type	D	A	B1	C1	G h6	N	R	S	T							
<b>10</b>	K-1-S K-3-S	<b>14-19-24</b> 28	193	35	133 149	19	75	6	21,5	25	4,4	-	-	-	-	-	-
<b>20</b>	K-1-S K-3-S	<b>19-24-28</b> 38	230	44	169 179	24	94	8	27	32	6,7	-	-	-	-	-	-
<b>30</b>	K-1-S K-3-S K-4-S	<b>28-38-42</b> 48 ** 55	290	63	225 253 282	38	114	10	41	45	14,5	SCF K-2-S SCF K-3-S SCF K-4-S	280 308 337	16,9	DCF K-2-S DCF K-3-S DCF K-4-S	320 348 377	17,5 17,5 18,5
<b>30P</b>	K-1-S K-3-S K-4-S	<b>28-38-42</b> 48 ** 55	327	63	225 253 282	38	114	10	41	45	22,3	SCF K-2-S SCF K-3-S SCF K-4-S	280 308 337	24,7	DCF K-2-S DCF K-3-S DCF K-4-S	320 348 377	25,3 25,3 26,3
<b>40P</b>	K-1-S K-2-S	<b>38-42-48-55</b> 60	338	76	274	48	145	14	51,5	55	24,5	SCF K-2-S SCF K-2-S	332	28,2	DCF K-2-S DCF K-2-S	404	29,7
<b>50</b>	K-2-S	<b>42-48-55-60-65</b>	430	92	271	55	165	16	59	65	34	SCF K-2-S	351	39,8	DCF K-2-S	426	42
<b>55</b>	K-2-S K-3-S	<b>42-48-55-60-65</b> 75	430	92	303 302	55	165	16	59	65	44	SCF K-2-S SCF K-3-S	383 382	49,8	DCF K-2-S DCF K-3-S	458 457	52
<b>60</b>	K-2-S K-3-S	<b>48-55-60-65-75</b> 80	520	110	302 332	60	185	18	64	80	52	SCF K-2-S SCF K-3-S	392 422	60,4	DCF K-2-S DCF K-3-S	472 502	64
<b>65</b>	K-2-S	<b>55-60-65-75-80</b>	520	110	350	60	185	18	64	80	72	SCF K-2-S	440	80,4	DCF K-2-S	520	84
<b>70P</b>	K-2N-S K-3N-S	<b>65-75-80-90</b> 100	640	122	362 402	70	225	20	74,5	90	96	SCF K-2N-S SCF K-3N-S	472 512	109	DCF K-2N-S DCF K-3N-S	587 627	116
<b>75P</b>	K-2N-S K-3N-S	<b>75-80-90</b> 100	640	122	387 402	70	225	20	74,5	90	137	SCF K-2N-S SCF K-3N-S	497 512	150	DCF K-2N-S DCF K-3N-S	612 627	157
<b>80P</b>	K-2N-S K-3N-S	max. 110 max. 125***	810	145	415 431	80	270	22	85	110	197	SCF K-2N-S SCF K-3N-S	533 549	213	DCF K-2N-S DCF K-3N-S	633 649	225
<b>85P</b>	K-2N-S K-3N-S	max. 125 max. 135	810	145	485	80	270	22	85	110	269	SCF K-2N-S SCF K-3N-S	603	285	DCF K-2N-S DCF K-3N-S	703	297
<b>90P</b>	K-2-S K-3-S	max. 130 max. 140***	1000	220	584 684	110	550	28	116	180	418	SCF K-2-S SCF K-3-S	704 804	458	DCF K-2-S DCF K-3-S	784 884	473 513
<b>95P</b>	K-2-S K-3-S	max. 130 max. 140***	1000	220	699 806	160	550	40	169	180	595	SCF K-2-S SCF K-3-S	819 926	635	DCF K-2-S DCF K-3-S	899 1006	650 700
<b>1200</b>	K-2-S	max. 190	1300	290	752	180	550	45	190	250	1900	-	-	-	-	-	-

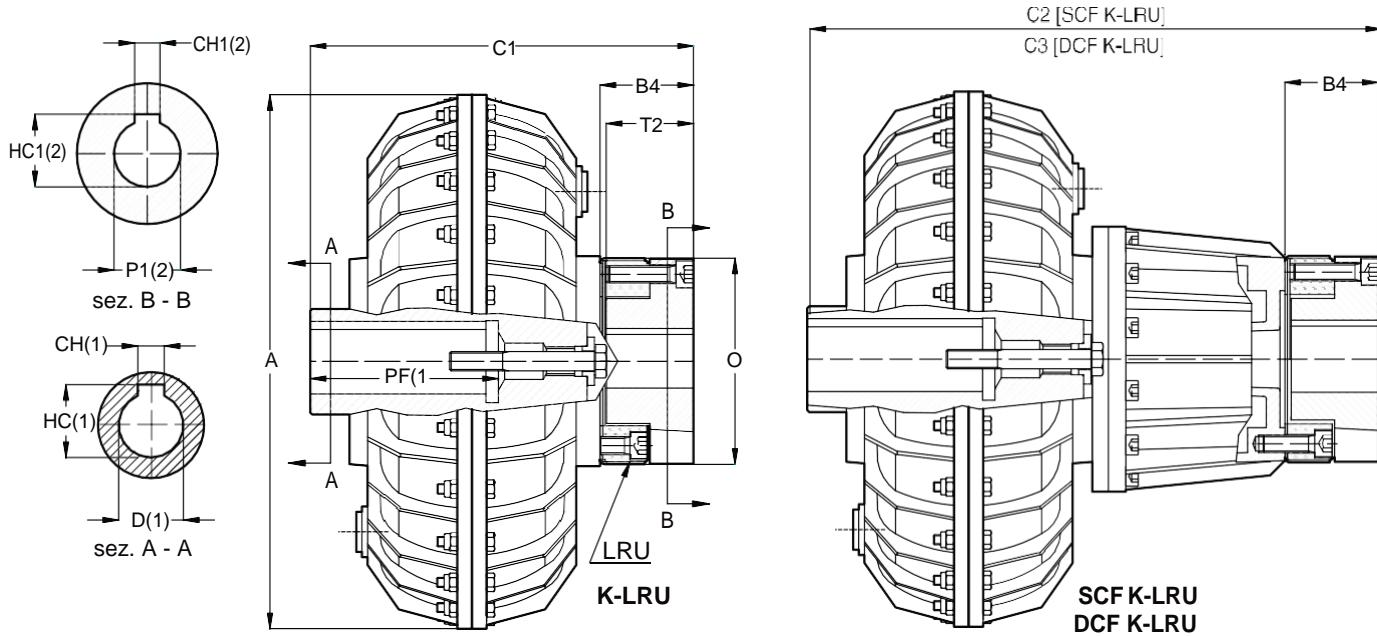
\* Weight with oil - \*\* Reduced keyway - \*\*\* Depth of bore PF = 210 (for larger bores consult WESTCAR) - Standard bores in **heavy type**



**NOTE:** (1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET 10-019D  
 (2) UPON REQUEST: BORE P1 MACHINED SEE SHEET 10-023A

Size.	K-LRV									SCF K-LRV				DCF K-LRV		
	Type	D	A	B3	C1	O	P1 Max.	Q	T2	Kg.*	Type	C2	Kg.*	Type	C3	Kg.*
10	K-1-LRV-1 K-3-LRV-1	14-19-24 28	193	50	148 164	84	28	45	30	4,7	-	-	-	-	-	-
20	K-1-LRV-2 K-3-LRV-2	19-24-28 38	230	69	194 204	104	38	56	45	7,6	-	-	-	-	-	-
30	K-01-LRV-3 K-03-LRV-3 K-04-LRV-3	28-38-42 48 ** 55	290	87	249 277 306	130	48	68	55	16,2 16,2 17,2	SCF K-02-LRV-3 SCF K-03-LRV-3 SCF K-04-LRV-3	304 332 361	18,6 18,6 19,6	DCF K-02-LRV-3 DCF K-03-LRV-3 DCF K-04-LRV-3	344 372 401	19,2 19,2 20,2
30P	K-01-LRV-3 K-03-LRV-3 K-04-LRV-3	28-38-42 48 ** 55	327	87	249 277 306	130	48	68	55	24 24 25	SCF K-02-LRV-3 SCF K-03-LRV-3 SCF K-04-LRV-3	304 332 361	26,4 26,4 27,4	DCF K-02-LRV-3 DCF K-03-LRV-3 DCF K-04-LRV-3	344 372 401	27 27 28
40P	K-01-LRV-4 K-02-LRV-4	38-42-48-55 60	338	96	294	158	60	91	60	27,2	SCF K-02-LRV-4 SCF K-02-LRV-4	352	30,9	DCF K-02-LRV-4 DCF K-02-LRV-4	424	32,4
50	K-02-LRV-5	42-48-55-60-65	430	110	289	176	70	106	70	37,6	SCF K-02-LRV-5	369	43,4	DCF K-02-LRV-5	444	45,6
55	K-02-LRV-5 K-03-LRV-5	42-48-55-60-65 75	430	110	321 320	176	70	106	70	47,6	SCF K-02-LRV-5 SCF K-03-LRV-5	401 400	53,4	DCF K-02-LRV-5 DCF K-03-LRV-5	476 475	55,6
60	K-02-LRV-6 K-03-LRV-6	48-55-60-65-75 80	520	124	316 346	195	80	121	80	59	SCF K-02-LRV-6 SCF K-03-LRV-6	406 436	65,3	DCF K-02-LRV-6 DCF K-03-LRV-6	486 516	69,7
65	K-02-LRV-6	55-60-65-75-80	520	124	364	195	80	121	80	76,9	SCF K-02-LRV-6	454	85,3	DCF K-02-LRV-6	534	89,7
70P	K-2N-LRV-7 K-3N-LRV-7	65-75-80-90 100	640	140	380 420	236	100	146	90	104,3	SCF K-2N-LRV-7 SCF K-3N-LRV-7	490 530	117,3	DCF K-2N-LRV-7 DCF K-3N-LRV-7	605 645	124,3
75P	See type "K-FRV"									See type "SCF K-FRV"				See type "DCF K-FRV"		
80P	Available with flexible coupling ROTOPIN AB - See type "K-AB"									See type "SCF K-AB"				See type "DCF K-AB"		
85P																
90P																
95P																

\*Weight with oil - \*\* Reduced keyway - Standard bores in **heavy** type

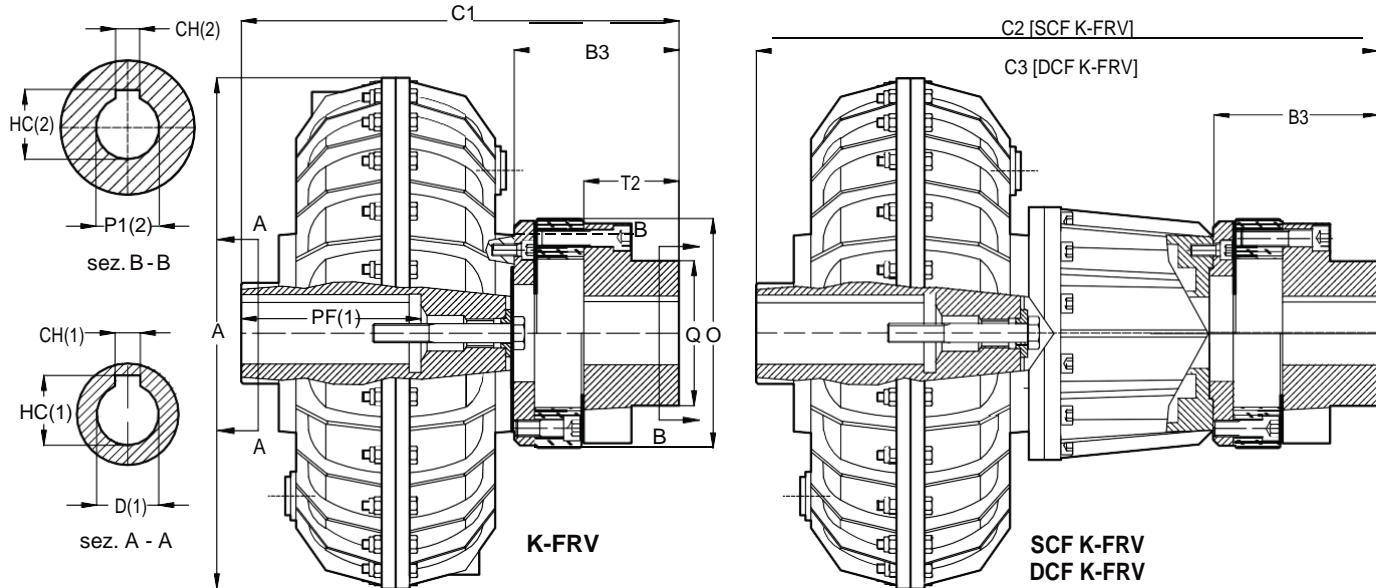


The rubber elements is not radially removable

**NOTE:** (1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET 10-019D  
(2) UPON REQUEST: BORE P1 MACHINED SEE SHEET 10-023A

Size	K-LRU							SCF K-LRU				DCF K-LRU				
	Type	D	A	B4	Dimensions mm		Weight	Type	Dimensions mm		Weight	Type	Dimensions mm		Weight	
					C1	O			P1 Max.	T2			Kg.*	C2	Kg.*	
10	K-1-LRU-1 K-3-LRU-1	14-19-24 28	193	35	133 149	84	28	30	4,7	-	-	-	-	-	-	-
20	K-1-LRU-2 K-3-LRU-2	19-24-28 38	230	49	174 184	104	32	45	7,6	-	-	-	-	-	-	-
30	K-01-LRU-3 K-03-LRU-3 K-04-LRU-3	28-38-42 48 ** 55	290	62	224 252 281	130	48	55	16,2 16,2 17,2	SCF K-02-LRU-3 SCF K-03-LRU-3 SCF K-04-LRU-3	279 307 336	18,6 18,6 19,6	DCF K-02-LRU-3 DCF K-03-LRU-3 DCF K-04-LRU-3	319 347 376	19,2 19,2 20,2	
30P	K-01-LRU-3 K-03-LRU-3 K-04-LRU-3	28-38-42 48 ** 55	327	62	224 252 281	130	48	55	24 24 25	SCF K-02-LRU-3 SCF K-03-LRU-3 SCF K-04-LRU-3	279 307 336	26,4 26,4 27,4	DCF K-02-LRU-3 DCF K-03-LRU-3 DCF K-04-LRU-3	319 347 376	27 27 28	
40P	K-01-LRU-4 K-02-LRU-4	38-42-48-55 60	338	66	264	158	60	60	27,2	SCF K-02-LRU-4 SCF K-02-LRU-4	322	30,9	DCF K-02-LRU-4 DCF K-02-LRU-4	394	32,4	
50	K-02-LRU-5	42-48-55-60-65	430	75	254	176	70	70	37,6	SCF K-02-LRU-5	334	43,4	DCF K-02-LRU-5	409	45,6	
55	K-02-LRU-5 K-03-LRU-5	42-48-55-60-65 75	430	75	286 285	176	70	70	47,6	SCF K-02-LRU-5 SCF K-03-LRU-5	366 365	53,4	DCF K-02-LRU-5 DCF K-03-LRU-5	441 440	55,6	
60	K-02-LRU-6 K-03-LRU-6	48-55-60-65-75 80	520	84	276 306	195	80	80	5,9	SCF K-02-LRU-6 SCF K-03-LRU-6	366 396	65,3	DCF K-02-LRU-6 DCF K-03-LRU-6	446 476	69,7	
65	K-02-LRU-6	55-60-65-75-80	520	84	324	195	80	80	76,9	SCF K-02-LRU-6	414	85,3	DCF K-02-LRU-6	494	89,7	
70P	K-2N-LRU-7 K-3N-LRU-7	65-75-80-90 100	640	95	335 375	236	100	90	104,3	SCF K-2N-LRU-7 SCF K-3N-LRU-7	445 485	117,3	DCF K-2N-LRU-7 DCF K-3N-LRU-7	560 600	124,3	
75P	See type "K-FRV"							See type "SCF K-FRV"				See type "DCF K-FRV"				
80P	Available with flexible coupling ROTOPIN AB - See type "K-AB"							See type "SCF K-AB"				See type "DCF K-AB"				
85P																
90P																
95P																

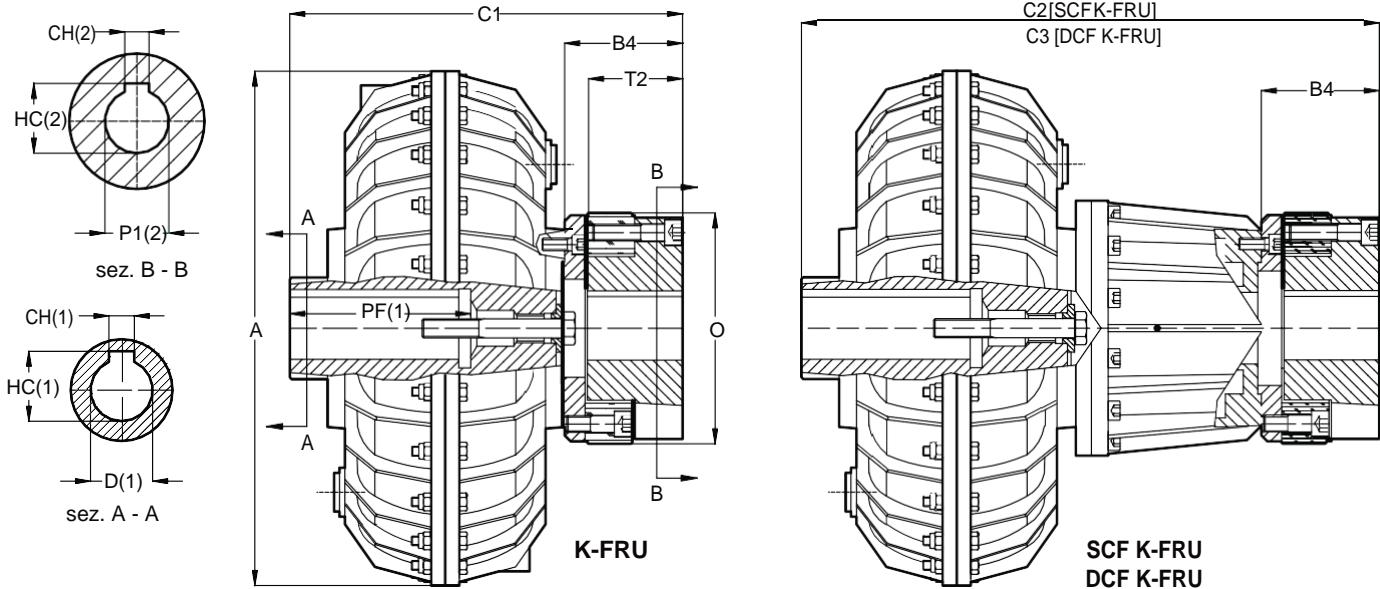
\*Weight with oil - \*\* Reduced keyway - Standard bores in **heavy** type



NOTE: (1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET 10-019D (2) UPON REQUEST: BORE P1 MACHINED SEE SHEET 10-023A

Size	K-FRV									SCF K-FRV				DCF K-FRV			
	Type	D	A	B3	C1	O	P1 Max.	Q	T2	Kg *	Type	C2	Kg *	Type	C3	Kg *	
											Dimensions mm				Dimensions mm		
10	K-1-FRV-2 K-3-FRV-2	14-19-24 28	193	77	175 191	100	38	56	45	5,8	-	-	-	-	-	-	-
20	K-1-FRV-3 K-3-FRV-3	19-24-28 38	230	98	223 233	126	48	68	55	9,6	-	-	-	-	-	-	-
30	K-1-FRV-4 K-3-FRV-4 K-4-FRV-4	28-38-42 48 ** 55	290	111	273 301 330	153	60	91	60	19,5 19,5 20,5	SCF K-2-FRV-4 SCF K-3-FRV-4 SCF K-4-FRV-4	328 356 385	21,9 21,9 22,9	DCF K-2-FRV-4 DCF K-3-FRV-4 DCF K-4-FRV-4	368 396 425	22,5 22,5 23,5	
30P	K-1-FRV-4 K-3-FRV-4 K-4-FRV-4	28-38-42 48 ** 55	327	111	273 301 330	153	60	91	60	27,3 27,3 28,3	SCF K-2-FRV-4 SCF K-3-FRV-4 SCF K-4-FRV-4	328 356 385	29,7 29,7 30,7	DCF K-2-FRV-4 DCF K-3-FRV-4 DCF K-4-FRV-4	368 396 425	30,3 30,3 31,3	
40P	K-1-FRV-5 K-2-FRV-5	38-42-48-55 60	338	125	323	170	70	106	70	31	SCF K-2-FRV-5 SCF K-2-FRV-5	381	34,7	DCF K-2-FRV-5 DCF K-2-FRV-5	453	36,2	
50	K-2-FRV-6	42-48-55-60-65	430	139	318	190	80	121	80	42,5	SCF K-2-FRV-6	398	48,3	DCF K-2-FRV-6	473	50,5	
55	K-2-FRV-6 K-3-FRV-6	42-48-55-60-65 75	430	139	350 349	190	80	121	80	52,5	SCF K-2-FRV-6 SCF K-3-FRV-6	430 429	58,3	DCF K-2-FRV-6 DCF K-3-FRV-6	505 504	60,5	
60	K-2-FRV-7 K-3-FRV-7	48-55-60-65-75 80	520	163	355 385	232	100	146	90	69	SCF K-2-FRV-7 SCF K-3-FRV-7	445 475	77,4	DCF K-2-FRV-7 DCF K-3-FRV-7	525 555	81	
65	K-2-FRV-7	55-60-65-75-80	520	163	403	232	100	146	90	89	SCF K-2-FRV-7	493	97,4	DCF K-2-FRV-7	573	101	
70P	K-2N-FRV-8 K-3N-FRV-8	65-75-80-90 100	640	194	434 474	271	110	156	110	123	SCF K-2N-FRV-8 SCF K-3N-FRV-8	544 584	136	DCF K-2N-FRV-8 DCF K-3N-FRV-8	659 699	143	
75P	K-2N-FRV-8 K-3N-FRV-8	75-80-90 100	640	194	459 474	271	110	156	110	164	SCF K-2N-FRV-8 SCF K-3N-FRV-8	569 584	177	DCF K-2N-FRV-8 DCF K-3N-FRV-8	684 699	184	
75P	K-2N-FRV-8x2 K-3N-FRV-8x2	75-80-90 100	640	246	511 526	271	110	156	110	174	SCF K-2N-FRV-8x2 SCF K-3N-FRV-8x2	621 636	187	DCF K-2N-FRV-8x2 DCF K-3N-FRV-8x2	736 751	194	
80P	Available with flexible coupling ROTOPIN AB - See type "K-AB"									See type "SCF K-AB"				See type "DCF K-AB"			
85P																	
90P																	
95P																	

\*Weight with oil - \*\* Reduced keyway - Standard bores in **heavy** type



The rubber element is not radially removable

NOTE: (1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET 10-019D (2) UPON REQUEST: BORE P1 MACHINED SEE SHEET 10-023A

Size	K-FRU							SCF K-FRU				DCF K-FRU			
	Type	D	A	B4	C1	O	P1 Max.	T2	Kg.*	Type	C2	Kg.*	Type	C3	Kg.*
										Dimensions mm.					
10	K-1-FRU-2 K-3-FRU-2	14-19-24 28	193	60	158 174	100	38	45	5,8	-	-	-	-	-	-
20	K-1-FRU-3 K-3-FRU-3	19-24-28 38	230	73	198 208	126	48	55	9,6	-	-	-	-	-	-
30	K-1-FRU-4 K-3-FRU-4 K-4-FRU-4	28-38-42 48 ** 55	290	81	245 273 302	153	60	60	19,5 19,5 20,5	SCF K-2-FRU-4 SCF K-3-FRU-4 SCF K-4-FRU-4	300	21,9	DCF K-2-FRU-4 DCF K-3-FRU-4 DCF K-4-FRU-4	340 368 397	22,5 22,5 23,5
30P	K-1-FRU-4 K-3-FRU-4 K-4-FRU-4	28-38-42 48 ** 55	327	81	245 273 302	153	60	60	27,3 27,3 28,3	SCF K-2-FRU-4 SCF K-3-FRU-4 SCF K-4-FRU-4	300	29,7	DCF K-2-FRU-4 DCF K-3-FRU-4 DCF K-4-FRU-4	340 368 397	30,3 30,3 31,3
40P	K-1-FRU-5 K-2-FRU-5	38-42-48-55 60	338	90	288	170	70	70	31	SCF K-2-FRU-5 SCF K-2-FRU-5	346	34,7	DCF K-2-FRU-5 DCF K-2-FRU-5	418	36,2
50	K-2-FRU-6	42-48-55-60-65	430	99	278	190	80	80	42,5	SCF K-2-FRU-6	358	48,3	DCF K-2-FRU-6	433	50,5
55	K-2-FRU-6 K-3-FRU-6	42-48-55-60-65 75	430	99	310 309	190	80	80	52,5	SCF K-2-FRU-6 SCF K-3-FRU-6	390 389	58,3	DCF K-2-FRU-6 DCF K-3-FRU-6	465 464	60,5
60	K-2-FRU-7 K-3-FRU-7	48-55-60-65-75 80	520	118	310 340	232	100	90	69	SCF K-2-FRU-7 SCF K-3-FRU-7	400 430	77,4	DCF K-2-FRU-7 DCF K-3-FRU-7	480 510	81
65	K-2-FRU-7	55-60-65-75-80	520	118	358	232	100	90	89	SCF K-2-FRU-7	448	97,4	DCF K-2-FRU-7	528	101
70P	K-2N-FRU-8 K-3N-FRU-8	65-75-80-90 100	640	139	379 419	271	110	110	123	SCF K-2N-FRU-8 SCF K-3N-FRU-8	489 529	136	DCF K-2N-FRU-8 DCF K-3N-FRU-8	604 644	143
75P	K-2N-FRU-8 K-3N-FRU-8	75-80-90 100	640	139	404 419	271	110	110	164	SCF K-2N-FRU-8 SCF K-3N-FRU-8	514 529	177	DCF K-2N-FRU-8 DCF K-3N-FRU-8	629 644	184
75P	K-2N-FRU-8x2 K-3N-FRU-8x2	75-80-90 100	640	191	456 471	271	110	110	174	SCF K-2N-FRU-8x2 SCF K-3N-FRU-8x2	566 581	187	DCF K-2N-FRU-8x2 DCF K-3N-FRU-8x2	681 696	194
80P	Available with flexible coupling ROTOPIN AB - See type "K-AB"									See type "SCF K-AB"				See type "DCF K-AB"	
85P															
90P															
95P															

\*Weight with oil - \*\* Reduced keyway - Standard bores in **heavy** type

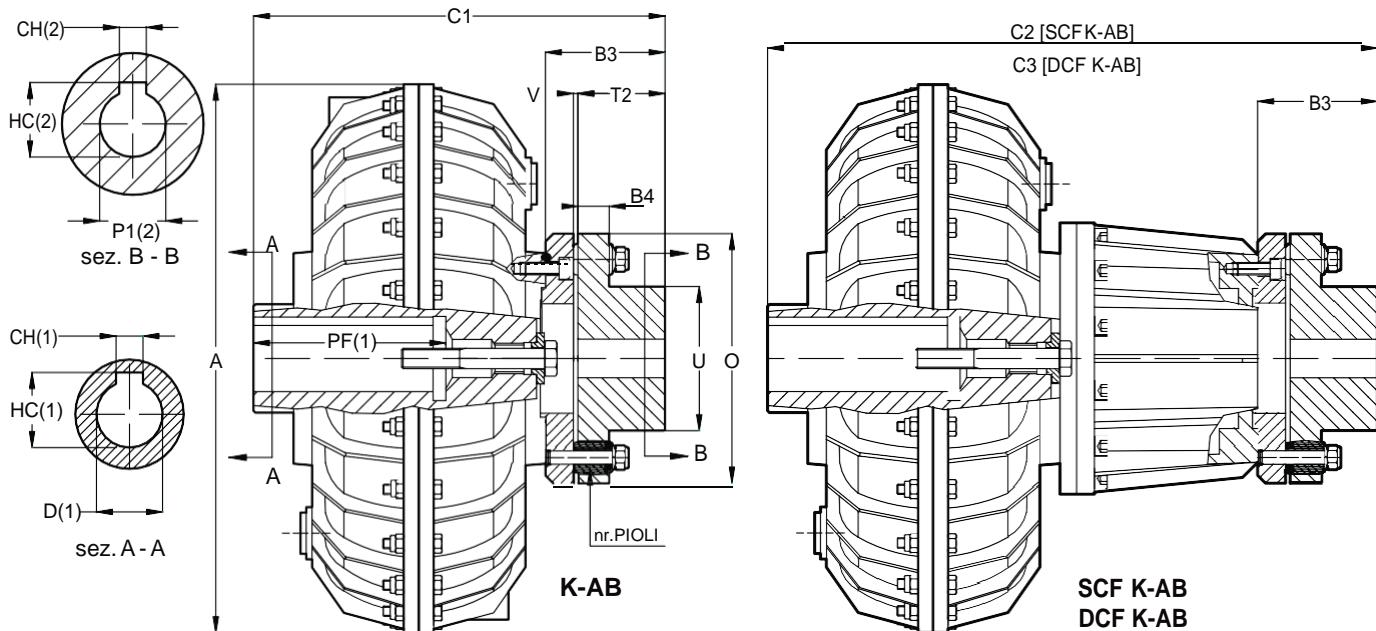


**WESTCAR**  
MILANO - ITALY

**ROTOFLUID COUPLING ALFA**  
**"K-AB" "SCF K-AB" "DCF K-AB"**

Sheet  
45-081B EN

Date  
05-2006



NOTE: (1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET 10-019D      (2) UPON REQUEST: BORE P1 MACHINED SEE SHEET 10-023A

Size	K-AB											SCF K-AB			DCF K-AB				
	Dimensions mm.											Weight	Dimensions mm.		Weight	Dimensions mm.		Weight	
	D	A	B3	B4	C1	nr.	O	P1 Max.	T2	U	V		Type	C2	Kg *	Type	C3	Kg *	
<b>80P</b>	K-2N-AB-8 K-3N-AB-8	max. 110 max. 125***	810	196	65	466 482	8	330	110	140	170	6	240	SCF K-2N-AB-8 SCF K-3N-AB-8	584 600	256	DCF K-2N-AB-8 DCF K-3N-AB-8	684 700	268
<b>85P</b>	K-2N-AB-8M K-3N-AB-8M	max. 125 max. 135	810	226	65	566	12	400	155	170	236	6	367	SCF K-2N-AB-8M SCF K-3N-AB-8M	684	383	DCF K-2N-AB-8M DCF K-3N-AB-8M	784	395
<b>90P</b>	K-2-AB-9 K-3-AB-9	max. 130 max. 140***	1000	318	82	682 782	14	550	180	250	290	6	600 640	SCF K-2-AB-9 SCF K-3-AB-9	742 842	640 680	DCF K-2-AB-9 DCF K-3-AB-9	822 922	655 695
<b>95P</b>	K-2-AB-9 K-3-AB-9	max. 130 max. 140***	1000	318	82	797 904	14	550	180	250	290	6	755 805	SCF K-2-AB-9 SCF K-3-AB-9	917 1024	795 845	DCF K-2-AB-9 DCF K-3-AB-9	997 1104	810 860
<b>1200</b>	K-2-AB-9	max. 190	1300	318	82	780	14	550	180	250	290	6	2050	-	-	-	-	-	

\* Weight with oil - \*\*\* Depth of bore PF = 210 (for larger bores consult WESTCAR)

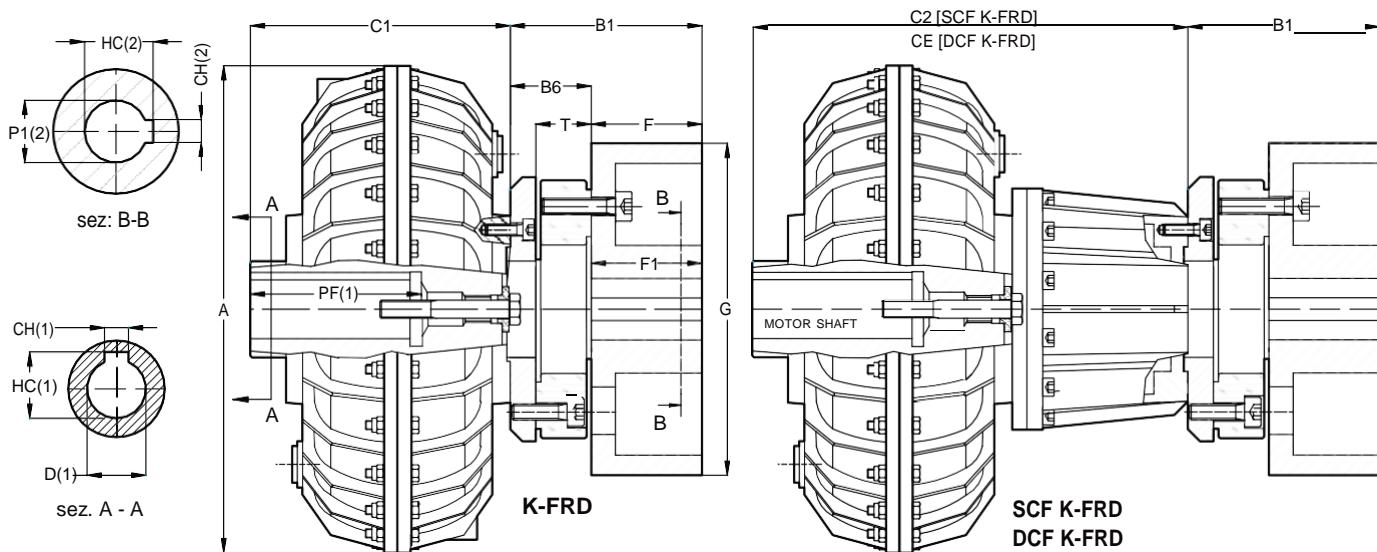


**WESTCAR**  
MILANO - ITALY

**ROTOFLUID COUPLING ALFA**  
**"K-FRD" "SCF K-FRD" "DCF K-FRD"**  
**(STANDARD ASSEMBLY)**

Sheet  
45-070B EN  
Date  
05-2006

For "REVERSE MOUNTING" see type "KK"



NOTE: (1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET 10-019D

(2) UPON REQUEST: BORE P1 MACHINED SEE SHEET 10-023A

Size	K-FRD							SCF K-FRD				DCF K-FRD			
	Type	Dimensions mm					Weight Kg.*	Type	Dimensions mm		Weight Kg.*	Type	Dimensions mm		Weight Kg.*
		D	A	B6	C1	P1 Max.		T	Kg.*	C2			C3	Kg.*	
20	K-1-FRD-3 K-3-FRD-3	19-24-28 38	230	43	125 135	48	28	7,6	-	-	-	-	-	-	
30	K-1-FRD-4 K-3-FRD-4 K-4-FRD-4	28-38-42 48 ** 55	290	51	162 190 219	60	34	15,8	SCF K-2-FRD-4 SCF K-3-FRD-4 SCF K-4-FRD-4	217 245 274	18,2	DCF K-2-FRD-4 DCF K-3-FRD-4 DCF K-4-FRD-4	257 285 314	18,8	
30P	K-1-FRD-4 K-3-FRD-4 K-4-FRD-4	28-38-42 48 ** 55	327	51	162 190 219	60	34	23,6	SCF K-2-FRD-4 SCF K-3-FRD-4 SCF K-4-FRD-4	217 245 274	26	DCF K-2-FRD-4 DCF K-3-FRD-4 DCF K-4-FRD-4	257 285 314	26,6	
40P	K-1-FRD-5 K-2-FRD-5	38-42-48-55 60	338	55	198	70	38	25,3	SCF K-2-FRD-5 SCF K-2-FRD-5	256	29	DCF K-2-FRD-5 DCF K-2-FRD-5	328	30,5	
50	K-2-FRD-6	42-48-55-60-65	430	59	179	80	42	34	SCF K-2-FRD-6	259	39,8	DCF K-2-FRD-6	334	42	
55	K-2-FRD-6 K-3-FRD-6	42-48-55-60-65 75	430	59	211 210	80	42	44	SCF K-2-FRD-5 SCF K-3-FRD-6	291 290	49,8	DCF K-2-FRD-6 DCF K-3-FRD-6	366 365	52	
60	K-2-FRD-7 K-3-FRD-7	48-55-60-65-75 80	520	73	192 222	100	48	54,9	SCF K-2-FRD-7 SCF K-3-FRD-7	282 312	63,3	DCF K-2-FRD-7 DCF K-3-FRD-7	362 392	66,9	
65	K-2-FRD-7	55-60-65-75-80	520	73	240	100	48	74,9	SCF K-2-FRD-7	330	83,3	DCF K-2-FRD-7	410	86,9	
70P	K-2N-FRD-8 K-3N-FRD-8	65-75-80-90 100	640	84	240 280	110	56	91	SCF K-2N-FRD-8 SCF K-3N-FRD-8	350 390	114	DCF K-2N-FRD-8 DCF K-3N-FRD-8	465 505	121	
75P	K-2N-FRD-8 K-3N-FRD-8	75-80-90 100	640	84	265 280	110	56	142	SCF K-2N-FRD-8 SCF K-3N-FRD-8	375 390	155	DCF K-2N-FRD-8 DCF K-3N-FRD-8	490 505	162	
75P	K-2N-FRD-8x2 K-3N-FRD-8x2	75-80-90 100	640	136	317 332	110	56	152	SCF K-2N-FRD-8x2 SCF K-3N-FRD-8x2	427 442	165	DCF K-2N-FRD-8x2 DCF K-3N-FRD-8x2	542 557	172	
80P	Available with flexible coupling ROTOPIN AB - See type "K-AFF"							See type "SCF K-AFF"				See type "DCF K-AFF"			
85P															
90P															
95P															

BRAKE DRUMS "D" DIMENSIONS

Size	D-3		D-4		D-5				D-6		D-7		D-8									
B1	103	118	138	161	126	146	169	130	150	173	205	245	134	154	177	209	249	191	223	263	234	274
Ø G	160	200	250	315	200	250	315	200	250	315	400	500	200	250	315	400	500	315	400	500	400	500
F=F1	60	75	95	118	75	95	118	75	95	118	150	190	75	95	118	150	190	118	150	190	150	190
Kg.	4,7	7,2	13,1	22,8	8,6	14,8	25	9,3	15,8	26,2	45,1	76,2	10,8	17,8	28,7	48,4	80,5	32,6	53,5	87	55,7	90

\* Weight with oil without Brake Drum - \*\* Reduced keyway - Standard bores in **heavy** type

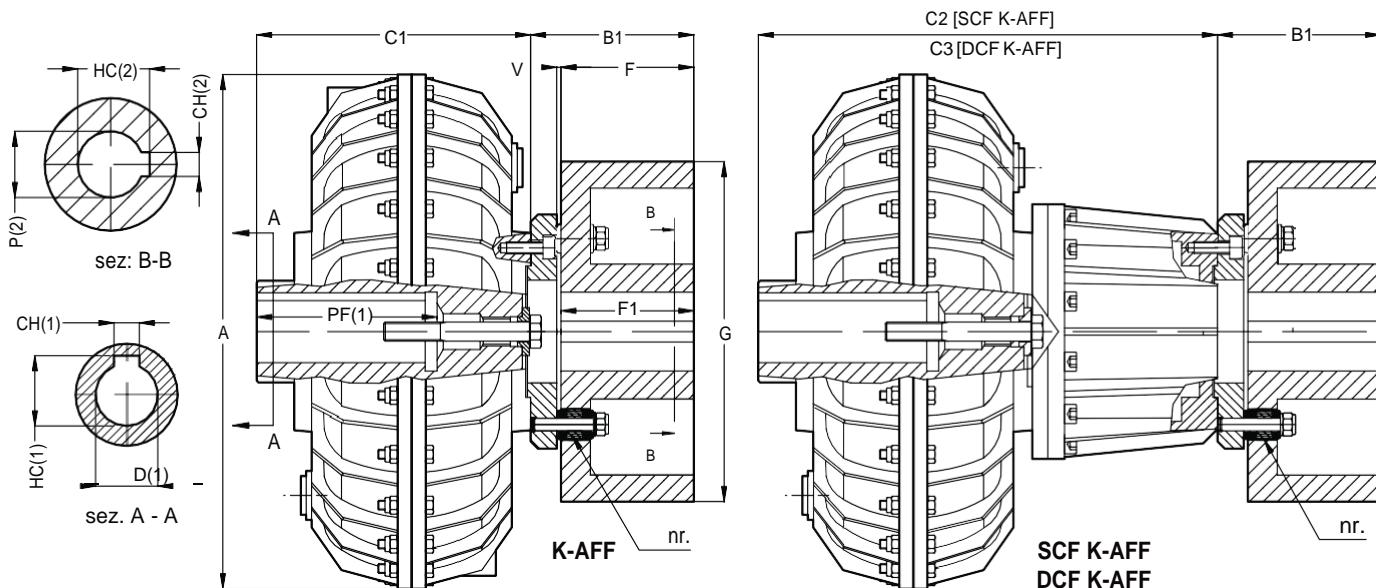


**WESTCAR**  
MILANO - ITALY

**ROTOFLUID COUPLING ALFA**  
**"K-AFF" "SCF K-AFF" "DCF K-AFF"**  
**(STANDARD ASSEMBLY)**

Sheet  
45-092A EN  
Date  
05-2006

For "REVERSE MOUNTING" see type "KK"



NOTE: (1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET 10-019D

(2) UPON REQUEST: BORE P1 MACHINED SEE SHEET 10-023A

Size	K-AFF								SCF K-AFF			DCF K-AFF		
	Dimensions mm							Weight	Dimensions mm		Weight	Dimensions mm		Weight
	Type	D	A	C1	nr.	P1 Max.	V		Type	C2		Type	C3	
50	K-2-AFF-5	42-48- <b>55-60-65</b>	430	179	8	70	4	35	SCF K-2-AFF-5	259	40,8	DCF K-2-AFF-5	334	43
55	K-2-AFF-5	42-48-55- <b>60-65</b>	430	211	8	70	4	45	SCF K-2-AFF-5	291	50,8	DCF K-2-AFF-5	366	53
	K-3-AFF-5	75	430	210					SCF K-3-AFF-5	290		DCF K-3-AFF-5	365	
60	K-2-AFF-6	48-55-60-65- <b>75</b>	520	192	8	85	4	54	SCF K-2-AFF-6	282	62,4	DCF K-2-AFF-6	362	66
	K-3-AFF-6	80	520	222					SCF K-3-AFF-6	312		DCF K-3-AFF-6	392	
65	K-2-AFF-6	55-60-65- <b>75-80</b>	520	240	8	85	4	74	SCF K-2-AFF-6	330	82,4	DCF K-2-AFF-6	410	86
70P	K-2N-AFF-8/7	<b>75-80-90</b>	640	240	8	105	5	101	SCF K-2N-AFF-7	350		DCF K-2N-AFF-7	465	121
	K-3N-AFF-8/7	100	640	280					SCF K-3N-AFF-7	390	114	DCF K-3N-AFF-7	505	
75P	K-2N-AFF-8/7	<b>80-90</b>	640	265	8	105	5	142	SCF K-2N-AFF-7	375		DCF K-2N-AFF-7	490	162
	K-3N-AFF-8/7	100	640	280					SCF K-3N-AFF-7	390	155	DCF K-3N-AFF-7	505	
80P	K-2N-AFF-8	max. 110	810	270	8	110	6	210	SCF K-2N-AFF-8	388		DCF K-2N-AFF-8	488	238
	K-3N-AFF-8	max. 125***	810	286					SCF K-3N-AFF-8	404	226	DCF K-3N-AFF-8	504	
85P	K-2N-AFF-8M	max. 125	810	340	12	160	6	302	SCF K-2N-AFF-8M	458		DCF K-2N-AFF-8M	558	330
	K-3N-AFF-8M	max. 135	810	340					SCF K-3N-AFF-8M	458	318	DCF K-3N-AFF-8M	558	
90P	K-2-AFF-9	max. 130	1000	364	14	180	6	450	SCF K-2-AFF-9	424		DCF K-2-AFF-9	504	505
	K-3-AFF-9	max. 140***	1000	764					SCF K-3-AFF-9	524	490	DCF K-3-AFF-9	604	
95P	K-2-AFF-9	max. 130	1000	479	14	180	6	605	SCF K-2-AFF-9	599		DCF K-2-AFF-9	679	660
	K-3-AFF-9	max. 140***	1000	586					SCF K-3-AFF-9	706	645	DCF K-3-AFF-9	786	

BRAKE DRUMS "D" DIMENSIONS

Size	FF-5			FF-6			FF-8/7 FF-8			FF-8M			FF-9		
B1	124	147	179	156	188	228	206	246	292	206	246	292	255	304	333
Ø G	<b>250</b>	<b>315</b>	<b>400</b>	<b>315</b>	<b>400</b>	<b>500</b>	<b>400</b>	<b>500</b>	<b>630</b>	<b>400</b>	<b>500</b>	<b>630</b>	<b>500</b>	<b>630</b>	<b>710</b>
F=F1	95	118	150	118	150	190	150	190	236	150	190	236	190	236	265
Kg.	20	33	50	38	56	89	75	108	168	85	118	178	236	296	365

\* Weight with oil - \*\* Reduced keyway - \*\*\* Depth of bore PF = 210 (for larger bores consult WESTCAR) - Standard bores in **heavy** type



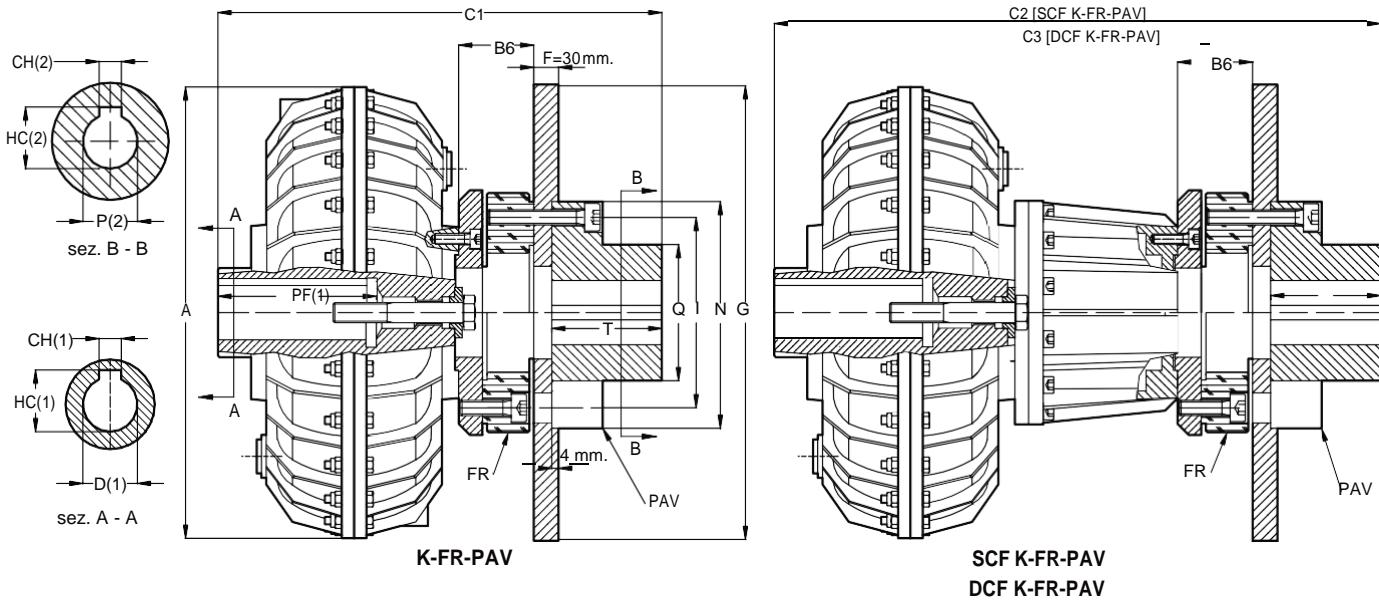
**WESTCAR**  
MILANO - ITALY

**ROTOFLUID COUPLING ALFA**  
**"K-FR-PAV" "SCF K-FR-PAV" "DCF K-FR-PAV"**  
**(STANDARD ASSEMBLY)**

Sheet  
45-066B EN

Date  
05-2006

For "REVERSE MOUNTING" see type "KK"



NOTE: (1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET 10-019D (2) UPON REQUEST: BORE P1 MACHINED SEE SHEET 10-023A

Size	K-FR-PAV										Weight	SCF K-FR-PAV			DCF K-FR-PAV			
	Dimensions mm											Type	Dimensions mm		Weight	Dimensions mm		Weight
	Type	D	A	B6	C1	P1 Max.	T	Q	I	N	Ø G		C2	Kg.*	Type	C3	Kg.*	
10	K-1-FR-PAV-2 K-3-FR-PAV-2	14-19-24 28	193	35	204 220	38	45	55	78	94	200	5,8	-	-	-	-	-	
20	K-1-FR-PAV-3 K-3-FR-PAV-3	19-24-28 38	230	43	249 259	48	55	69	100	118	250-315	9,6	-	-	-	-	-	
30	K-1-FR-PAV-4 K-3-FR-PAV-4 K-4-FR-PAV-4	28-38-42 48 ** 55	290	51	299 327 356	60	60	91	125	145	250-315	19,5	SCF K-1-FR-PAV-4 SCF K-3-FR-PAV-4 SCF K-4-FR-PAV-4	354 382 411	DCF K-1-FR-PAV-4 DCF K-3-FR-PAV-4 DCF K-4-FR-PAV-4	394 422 451		
30P	K-1-FR-PAV-4 K-3-FR-PAV-4 K-4-FR-PAV-4	28-38-42 48 ** 55	327	51	299 327 356	60	60	91	125	145	250-315	27,3	SCF K-1-FR-PAV-4 SCF K-3-FR-PAV-4 SCF K-4-FR-PAV-4	354 382 411	DCF K-1-FR-PAV-4 DCF K-3-FR-PAV-4 DCF K-4-FR-PAV-4	394 422 451		
40P	K-1-FR-PAV-5 K-2-FR-PAV-5	42-48-55 60	338	55	349	70	70	106	140	165	315-355-400	31	SCF K-2-FR-PAV-5	407	34,7	DCF K-2-FR-PAV-5	479	36,2
50	K-2-FR-PAV-6	42-48-55-60-65	430	59	344	80	80	121	160	185	315-355-400	42,5	SCF K-2-FR-PAV-6	424	48,3	DCF K-2-FR-PAV-6	499	50,5
55	K-2-FR-PAV-6 K-3-FR-PAV-6	55-60-65-75	430	59	376 375	80	80	121	160	185	315-355-400	52,5	SCF K-2-FR-PAV-6 SCF K-3-FR-PAV-6	456 455	58,3	DCF K-2-FR-PAV-6 DCF K-3-FR-PAV-6	531 530	60,5
60	K-2-FR-PAV-7 K-3-FR-PAV-7	60-65-75-80	520	73	381 411	100	90	146	195	225	400-450-500	69	SCF K-2-FR-PAV-7 SCF K-3-FR-PAV-7	471 501	77,4	DCF K-2-FR-PAV-7 DCF K-3-FR-PAV-7	551 581	81
65	K-2-FR-PAV-7	55-60-65-75-80	520	73	429	100	90	146	195	225	400-450-500	89	SCF K-2N-FR-PAV-7	519	97,4	DCF K-2N-FR-PAV-7	599	101
70P	K-2N-FR-PAV-8 K-3N-FR-PAV-8	75-80-90 100	640	84	460 500	110	110	156	225	270	500-560-630	123	SCF K-2N-FR-PAV-8 SCF K-3N-FR-PAV-8	570 610	136	DCF K-2N-FR-PAV-8 DCF K-3N-FR-PAV-8	685 725	143
75P	K-2N-FR-PAV-8 K-3N-FR-PAV-8	75-80-90 100	640	84	485 500	110	110	156	225	270	500-560-630 710	164	SCF K-2N-FR-PAV-8 SCF K-3N-FR-PAV-8	595 610	177	DCF K-2N-FR-PAV-8 DCF K-3N-FR-PAV-8	710 725	184
75P	K-2N-FR-PAV-8x2 K-3N-FR-PAV-8x2	75-80-90 100	640	136	537 552	110	110	156	225	270	500-560-630 710	174	SCFK-2N-FR-PAV-8x2 SCFK-3N-FR-PAV-8x2	647 662	187	DCF K-2N-FR-PAV-8x2 DCF K-3N-FR-PAV-8x2	762 777	194

BRAKE DISC "PA"

Ø G	200	250	315	355	400	450	500	560	630	710
F	30	30	30	30	30	30	30	30	30	30
Weight Kg.	3,7	5,7	9,1	12,5	14,7	18	23	28	36	45

Different disc thickness "F" is available on request - \* Weight with oil without brake disc "PA" - \*\* Reduced keyway - Standard bores in **heavy** type

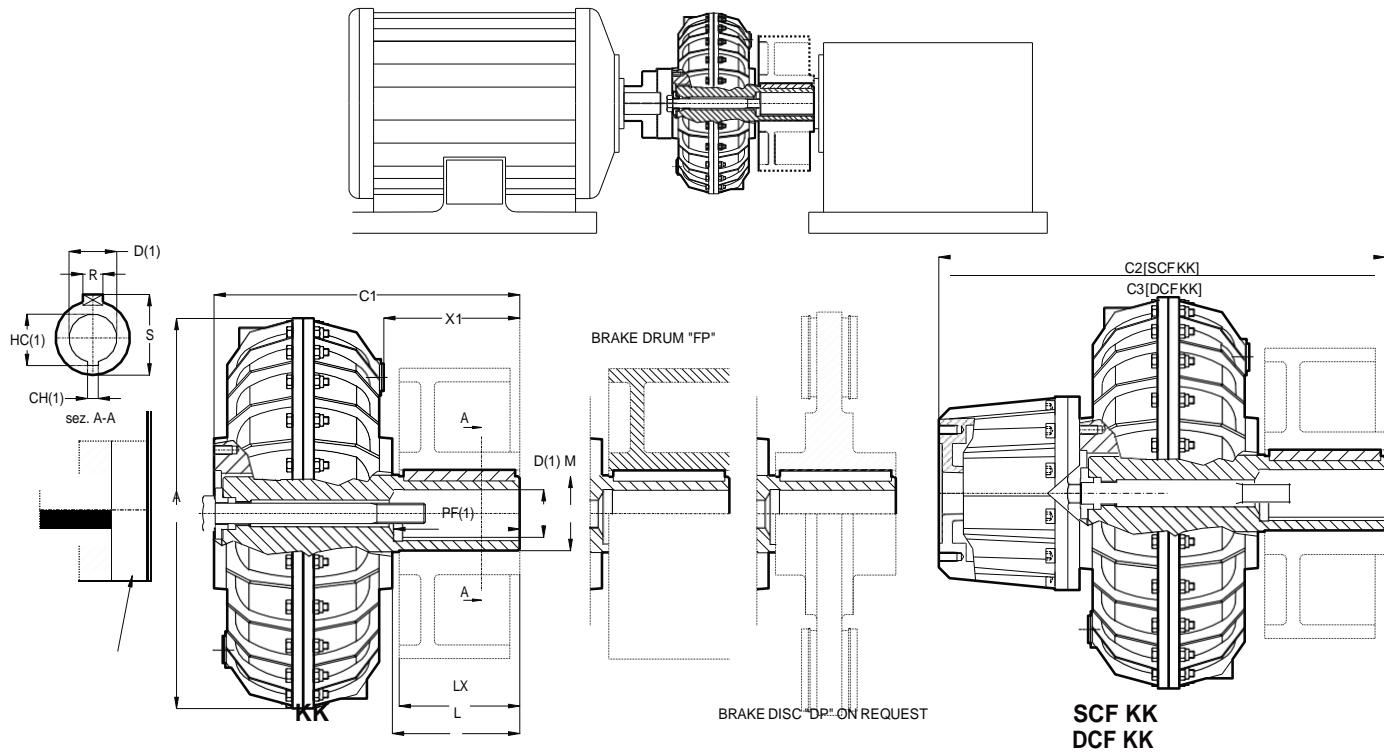


**WESTCAR**  
MILANO - ITALY

**ROTOFLUID COUPLING ALFA**  
**"KK" "SCF KK" "DCF KK"**  
**FOR BRAKE DRUM "FP" AND BRAKE DISC "DP"**

Sheet  
45-082B EN

Date  
05-2006



NOTE: (1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET 10-019D

Size	KK										SCF KK			DCF KK			
	Dimensions mm									Weight	Dimensions mm		Weight	Dimensions mm		Weight	
	Type	D Max.	A	C1	L	LX	M	R	S		Type	C2	Kg.*	Type	C3	Kg.*	
20	K-2 K 70	28	230	185	70	60	44	10	47,3	77	6,2	..	--	--	--	--	
30	K-2 K 68	42	290	218	68	60				77	13,6	SCF K-2 K 68	273	16	DCF K-2 K 68	313	16,6
	K-2 K 88		238	88	75		57	12	60,3	97	13,8	SCF K-2 K 88	293	16,2	DCF K-2 K 88	333	16,8
	K-2 K 112		262	112	95					121	14	SCFK-2 K 112	317	16,4	DCF K-2 K 112	356	17
30P	K-2 K 68	42	327	218	68	60				77	21,4	SCF K-2 K 68	273	23,8	DCF K-2 K 68	313	24,4
	K-2 K 88		238	88	75		57	12	60,3	97	21,6	SCF K-2 K 88	293	24	DCF K-2 K 88	333	24,6
	K-2 K 112		262	112	95					121	21,8	SCFK-2 K 112	317	24,2	DCF K-2 K 112	356	24,8
40P	K-2 K 90	60	338	273	90	75				114	23	SCF K-2 K 90	331	26,7	DCF K-2 K 90	403	28,2
	K-2 K 118		301	118	115		77	16	81,3	142	23,5	SCFK-2 K 118	359	27,2	DCF K-2 K 118	431	28,7
50	K-2 K 90	65	430	234	90	86				97	32,5	SCFK-2 K 90	314	38,3	DCF K-2 K 90	389	40,5
	K-2 K 120		264	120	118		85	18	89,3	127	33,5	SCFK-2 K 120	344	39,3	DCF K-2 K 120	419	41,5
	K-2 K 155		299	155	150					162	34,5	SCFK-2 K 155	379	40,3	DCF K-2 K 155	454	42,5
55	K-2 K 90	65	430	286	90	86				97	42	SCFK-2 K 90	366	47,8	DCF K-2 K 90	441	50
	K-2 K 120		316	120	118		85	18	89,3	127	43	SCFK-2 K 120	396	48,8	DCF K-2 K 120	471	51
	K-2 K 155		351	155	150					162	44	SCFK-2 K 155	431	49,8	DCF K-2 K 155	506	52
60	K-2 K 130	80	520	302	130	118				136	50	SCFK-2 K 130	392	58,4	DCF K-2 K 130	472	62
	K-2 K 170		342	170	150		107	20	111,9	176	53	SCFK-2 K 170	432	61,4	DCF K-2 K 170	512	65
	K-2 K 230		402	230	190					236	56	SCFK-2 K 230	492	64,4	DCF K-2 K 230	572	68
65	K-2 K 130	80	520	350	130	118				136	69	SCFK-2 K 130	440	77,4	DCF K-2 K 130	520	71
	K-2 K 170		390	170	150		107	20	111,9	176	72	SCFK-2 K 170	480	80,4	DCF K-2 K 170	560	74
	K-2 K 220		440	220	190					226	76	SCFK-2 K 220	530	84,4	DCF K-2 K 220	610	78
	K-2 K 255		475	255	236					261	79	SCFK-2 K 255	565	87,4	DCF K-2 K 255	645	81

\* Weight with oil

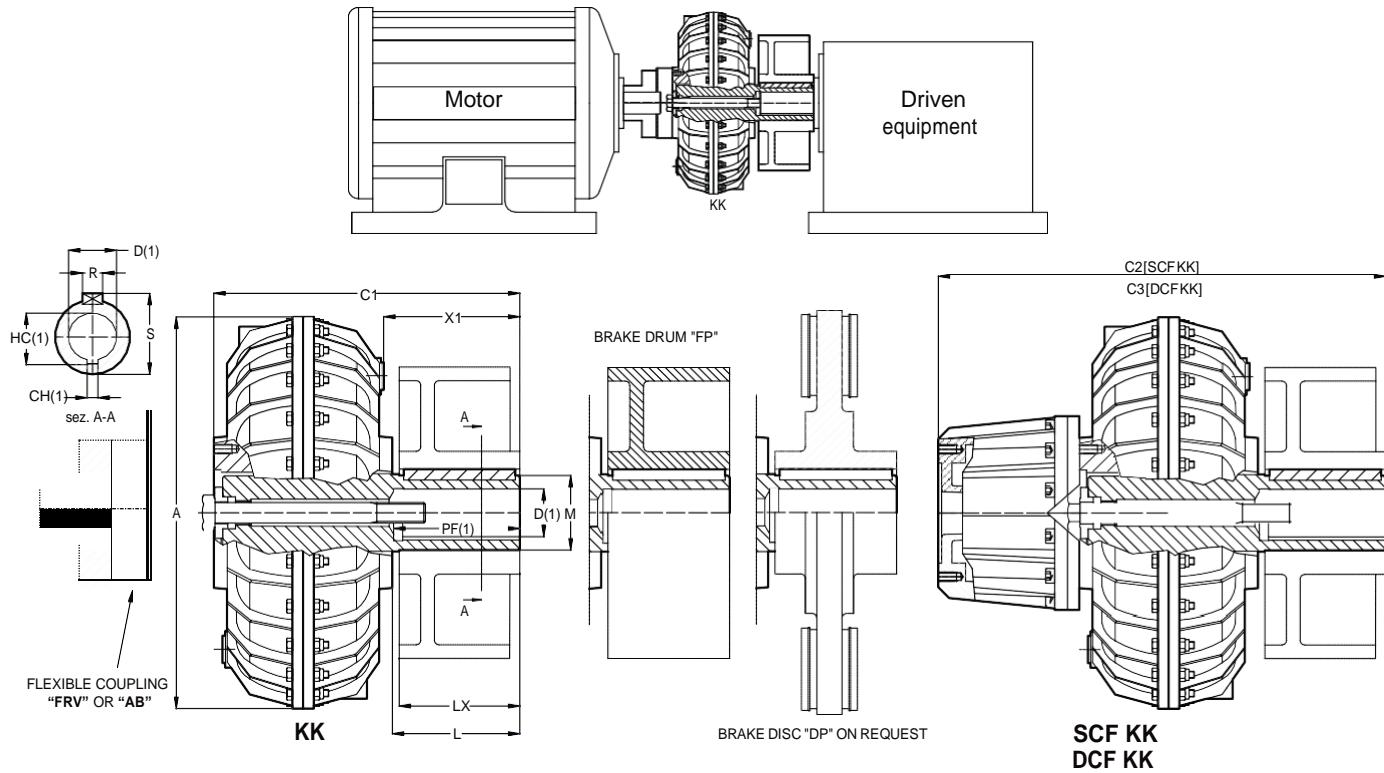


**WESTCAR**  
MILANO - ITALY

**ROTOFLUID COUPLING ALFA**  
**"KK" "SCF KK" "DCF KK"**  
**FOR BRAKE DRUM "FP" AND BRAKE DISC "DP"**

Sheet  
45-083B EN  
Date  
05-2006

REVERSE ASSEMBLY



NOTE: (1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET 10-019D

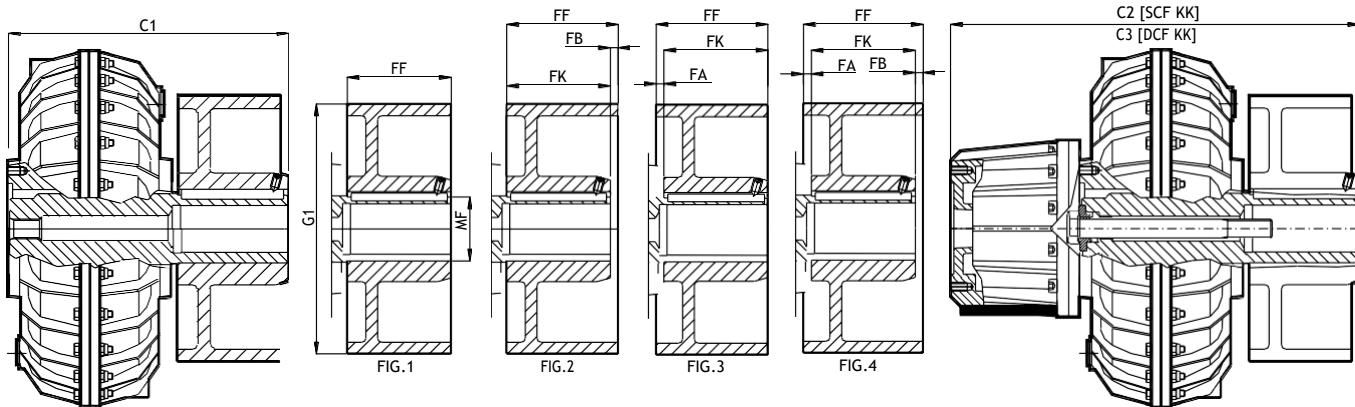
Size	KK										SCF KK			DCF KK			
	Dimensions mm									Weight	Dimensions mm		Weight	Dimensions mm		Weight	
	Type	D Max.	A	C1	L	LX	M	R	S	X1	Kg.*	Type	C2	Kg.*	Type	C3	Kg.*
70P	K-2N K 155	90	640	345	155	150			159	105	SCFK-2NK 155	455	118	DCF K-2NK 155	570	125	
	K-2N K 195			385	195	190			199	108	SCFK-2NK 195	495	121	DCF K-2NK 195	610	128	
	K-2N K 240			430	240	236	128	25	133,4	244	112	SCFK-2NK 240	540	125	DCF K-2NK 240	655	132
	K-2N K 270			460	270	265			274	115	SCFK-2NK 270	570	128	DCF K-2NK 270	685	135	
	K-2N K 305			495	305	300			309	118	SCFK-2NK 305	605	131	DCF K-2NK 305	720	138	
75P	K-2N K 155	90	640	400	155	150			159	130	SCFK-2NK 155	510	143	DCF K-2NK 155	625	150	
	K-2N K 195			440	195	190			199	134	SCFK-2NK 195	550	147	DCF K-2NK 195	665	154	
	K-2N K 240			485	240	236	128	25	133,4	244	139	SCFK-2NK 240	595	152	DCF K-2NK 240	710	159
	K-2N K 270			515	270	265			274	141	SCFK-2NK 270	625	154	DCF K-2NK 270	740	161	
	K-2N K 305			550	305	300			309	145	SCFK-2NK 305	660	158	DCF K-2NK 305	775	165	
80P	K-2N K 195	125	810	421	195	190			193	190	SCFK-2NK 195	539	206	DCF K-2NK 195	639	218	
	K-2N K 240			466	240	236	160	28	166,4	238	200	SCFK-2NK 240	584	216	DCF K-2NK 240	684	228
	K-2N K 270			496	270	265			268	208	SCFK-2NK 270	614	224	DCF K-2NK 270	714	236	
	K-2N K 305			531	305	300			303	215	SCFK-2NK 305	649	231	DCF K-2NK 305	749	243	
85P	K-2N K 195	125	810	495	195	190			193	260	SCFK-2NK 195	613	276	DCF K-2NK 195	713	288	
	K-2N K 240			540	240	236	160	28	166,4	238	270	SCFK-2NK 240	658	286	DCF K-2NK 240	758	298
	K-2N K 270			570	270	265			268	278	SCFK-2NK 270	688	294	DCF K-2NK 270	788	306	
	K-2N K 305			605	305	300			303	285	SCFK-2NK 305	723	301	DCF K-2NK 305	823	313	
90P	K-2 K 240	135	1000	584	240	236			240	370	SCF K-2 K 240	604	410	DCF K-2 K 240	784	525	
	K-2 K 270			614	270	265	170	32	177,4	270	380	SCF K-2 K 270	634	420	DCF K-2 K 270	814	535
	K-2 K 305			649	305	300			305	390	SCF K-2 K 305	669	430	DCF K-2 K 305	849	545	
95P	K-2 K 240	135	1000	706	240	236			240	520	SCF K-2 K 240	826	560	DCF K-2 K 240	906	575	
	K-2 K 270			736	270	265	170	32	177,4	270	530	SCF K-2 K 270	856	570	DCF K-2 K 270	936	585
	K-2 K 305			771	305	300			305	540	SCF K-2 K 305	891	580	DCF K-2 K 305	971	595	

\* Weight with oil



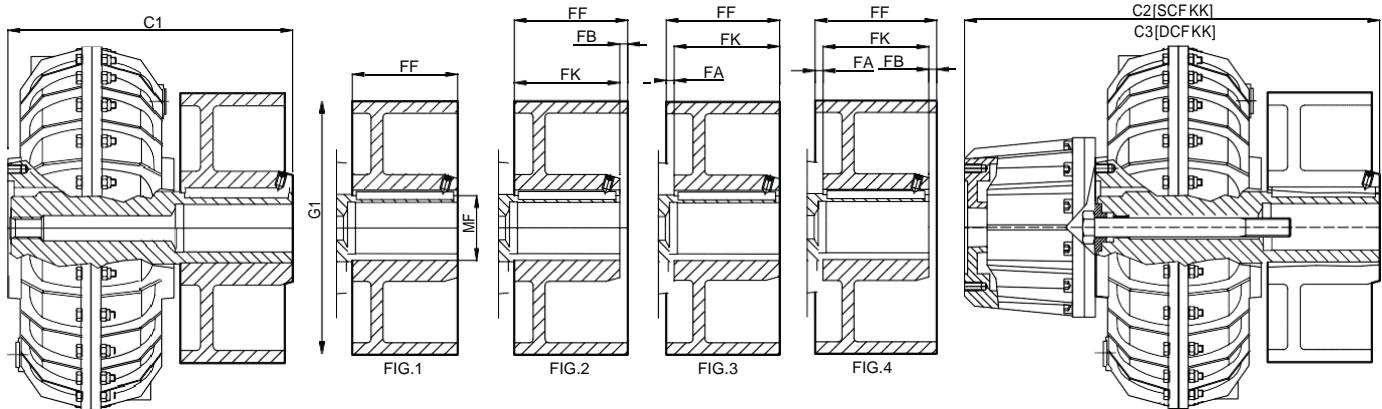
# BRAKE DRUMS "FP" FOR ROTOFUID COUPLING ALFA "KK"

Sheet  
70-006B EN  
Date  
09-2013



Coupling size 20-30-30P-40P-50-55-60-65

KK			SCF KK		DCF KK		Dimensions mm.							Weight		
Size	Type	C1	Type	C2	Type	C3	Drum "FP"	Fig.	G1	FF	MF H7	FK	FA	FB	Kg.*	
20	K-2 K 70	185	-	-	-	-	FP-44-160	1	160	60	44	60	0	0	5	
	K-2 K 70	185	-	-	-	-	FP-44-200	4	200	75		60	14	1	7,5	
30	K-2 K 68	218	SCF K-2 K 68	273	DCF K-2 K 68	313	FP-57-160	1	160	60	57	60	0	0	6	
	K-2 K 88	238	SCF K-2 K 88	293	DCF K-2 K 88	333	FP-57-200		200	75		75	0	0	8	
	K-2 K 112	262	SCF K-2 K 112	317	DCF K-2 K 112	357	FP-57-250		250	95		95	0	0	14,5	
30P	K-2 K 68	218	SCF K-2 K 68	273	DCF K-2 K 68	313	FP-57-160	1	160	60	57	60	0	0	6	
	K-2 K 88	238	SCF K-2 K 88	293	DCF K-2 K 88	333	FP-57-200		200	75		75	0	0	8	
	K-2 K 112	262	SCF K-2 K 112	317	DCF K-2 K 112	357	FP-57-250		250	95		95	0	0	14,5	
40P	K-2 K 90	273	SCF K-2 K 90	331	DCF K-2 K 90	403	FP-77-200	1	200	75	77	75	0	0	9	
	K-2 K 90	273	SCF K-2 K 90	331	DCF K-2 K 90	403	FP-77-250	3	250	95		75	20	0	16	
	K-2 K 118	301	SCF K-2 K 118	359	DCF K-2 K 118	431	FP-77-315	3	315	118		115	3	0	28	
	K-2 K 118	301	SCF K-2 K 118	359	DCF K-2 K 118	431	FP-77-400	4	400	150		115	25	10	48	
50	K-2 K 90	234	SCF K-2 K 90	324	DCF K-2 K 90	389	FP-85-250	3	250	95	85	86	9	0	17	
	K-2 K 120	264	SCF K-2 K 120	354	DCF K-2 K 120	419	FP-85-315	1	315	118		118	0	0	28	
	K-2 K 155	299	SCF K-2 K 155	389	DCF K-2 K 155	454	FP-85-400	1	400	150		150	0	0	48	
55	K-2 K 90	286	SCFK-2 K 90	366	DCF K-2 K 90	441	FP-85-250	3	250	95	85	86	9	0	17	
	K-2 K 120	316	SCF K-2 K 120	396	DCF K-2 K 120	471	FP-85-315	1	315	118		118	0	0	28	
	K-2 K 155	351	SCF K-2 K 155	431	DCF K-2 K 155	506	FP-85-400	1	400	150		150	0	0	48	
60	K-2 K 130	302	SCF K-2 K 130	392	DCF K-2 K 130	472	FP-107-315	1	315	118	107	118	0	0	28	
	K-2 K 170	342	SCF K-2 K 170	432	DCF K-2 K 170	512	FP-107-400		400	150		150	0	0	50	
	K-2 K 230	402	SCF K-2 K 230	492	DCF K-2 K 230	572	FP-107-500		500	190		190	0	0	90	
65	K-2 K 130	350	SCF K-2 K 130	440	DCF K-2 K 130	520	FP-107-315	1	315	118	107	118	0	0	28	
	K-2 K 170	390	SCF K-2 K 170	480	DCF K-2 K 170	560	FP-107-400	1	400	150		150	0	0	50	
	K-2 K 220	440	SCF K-2 K 220	530	DCF K-2 K 220	610	FP-107-500	1	500	190		190	0	0	90	
	K-2 K 255	475	SCF K-2 K 255	565	DCF K-2 K 255	645	FP-107-630	1	630	236		236	0	0	151	
	K-2 K 255	475	SCF K-2 K 255	565	DCF K-2 K 255	645	FP-107-710	4	710	265		236	22	7	310	



Coupling size 70P-75P-80P-85P-90P-95P

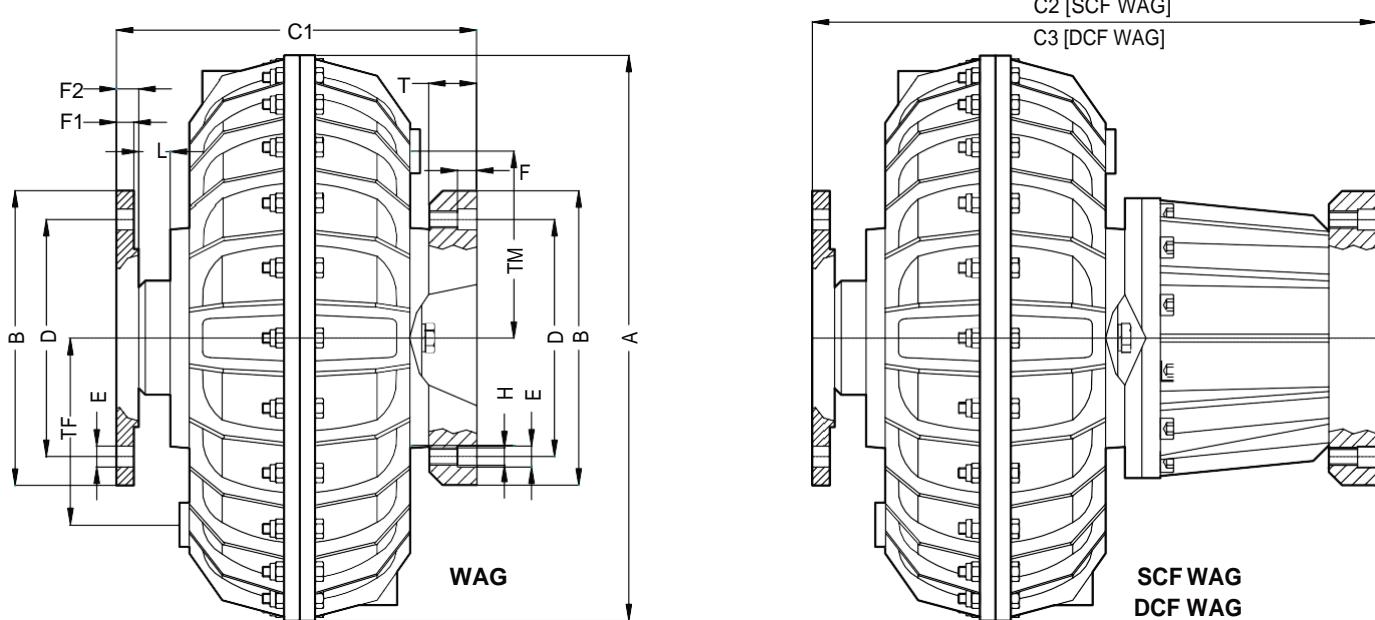
KK			SCF KK		DCF KK		Dimensions mm								Weight	
Size	Type	C1	Type	C2	Type	C3	Drum "FP"	Fig.	G1	FF	MF	H7	FK	FA	FB	Kg.*
70P	K-2N K 155	345	SCFK-2N K 155	455	DCF K-2N K 155	570	FP-128-400	1	400	150	128	150	0	0	0	73
	K-2N K 195	385	SCFK-2N K 195	495	DCF K-2N K 195	610	FP-128-500		500	190		190	0	0	0	110
	K-2N K 240	430	SCFK-2N K 240	540	DCF K-2N K 240	655	FP-128-630		630	236		236	0	0	0	171
	K-2N K 270	460	SCFK-2N K 270	570	DCF K-2N K 270	685	FP-128-710		710	265		265	0	0	0	335
	K-2N K 305	495	SCFK-2N K 305	605	DCF K-2N K 305	720	FP-128-800		800	300		300	0	0	0	478
75P	K-2N K 155	400	SCFK-2N K 155	510	DCF K-2N K 155	625	FP-128-400	1	400	150	128	150	0	0	0	73
	K-2N K 195	440	SCFK-2N K 195	550	DCF K-2N K 195	665	FP-128-500		500	190		190	0	0	0	110
	K-2N K 240	485	SCFK-2N K 240	595	DCF K-2N K 240	710	FP-128-630		630	236		236	0	0	0	171
	K-2N K 270	515	SCFK-2N K 270	625	DCF K-2N K 270	740	FP-128-710		710	265		265	0	0	0	335
	K-2N K 305	550	SCFK-2N K 305	690	DCF K-2N K 305	775	FP-128-800		800	300		300	0	0	0	478
80P	K-2N K 195	421	SCFK-2N K 195	539	DCF K-2N K 195	639	FP-160-500	1	500	190	160	190	0	0	0	118
	K-2N K 240	466	SCFK-2N K 240	584	DCF K-2N K 240	684	FP-160-630		630	236		236	0	0	0	179
	K-2N K 270	496	SCFK-2N K 270	614	DCF K-2N K 270	714	FP-160-710		710	265		265	0	0	0	343
	K-2N K 305	531	SCFK-2N K 305	649	DCF K-2N K 305	749	FP-160-800		800	300		300	0	0	0	490
85P	K-2N K 195	495	SCFK-2N K 195	613	DCF K-2N K 195	713	FP-160-500	1	500	190	160	190	0	0	0	118
	K-2N K 240	540	SCFK-2N K 240	658	DCF K-2N K 240	758	FP-160-630		630	236		236	0	0	0	179
	K-2N K 270	570	SCFK-2N K 270	688	DCF K-2N K 270	788	FP-160-710		710	265		265	0	0	0	343
	K-2N K 305	605	SCFK-2N K 305	723	DCF K-2N K 305	823	FP-160-800		800	300		300	0	0	0	490
90P	K-2 K 240	584	SCF K-2 K 240	604	DCF K-2 K 240	784	FP-170-630	1	630	236	170	236	0	0	0	300
	K-2 K 270	614	SCF K-2 K 270	634	DCF K-2 K 270	814	FP-170-710		710	265		265	0	0	0	365
	K-2 K 305	649	SCF K-2 K 305	669	DCF K-2 K 305	849	FP-170-800		800	300		300	0	0	0	510
95P	K-2 K 240	706	SCF K-2 K 240	826	DCF K-2 K 240	906	FP-170-630	1	630	236	170	236	0	0	0	300
	K-2 K 270	736	SCF K-2 K 270	856	DCF K-2 K 270	936	FP-170-710		710	265		265	0	0	0	365
	K-2 K 305	771	SCF K-2 K 305	891	DCF K-2 K 305	971	FP-170-800		800	300		300	0	0	0	510



**WESTCAR**  
MILANO - ITALY

**ROTOFLUID COUPLING ALFA TYPE "WAG"**  
For Gear Couplings in inches mounting

Sheet  
45-112B EN  
Date  
05-2006



WAG																		
Size	Type	Basic Coupling	Dimensions mm													Weight Kg *		
			A	B	C1	D	E		F	F1	F2	H	L	T	TF	TM	Gear Coupling	
20	WAG	K- □ 28	230	116	150	95,25	6	6,4	7	6,5	8	1/4 28 UNF	10	17	75	80	1" S	8,5
30	WAG	K- □ 38	290		192,5		8										1" 1/2 S	18,3
30P	WAG	K- □ 38	327		192,5													26,3
40P	WAG	K- □ 48	338		231			9,57	7	6,5	12	3/8 24 UNF	15		130	130		28,2
50	WAG	K- □ 55	430		212								25	21	150	150		36,2
55	WAG	K- □ 60	430		253								15	24,5	150	150		54,3
60	WAG	K- □ 75	520		235		10	12,75	9,5	10	17,5	1/2 20 UNF	20	25,5	205	192	2" 1/2 S	61
65	WAG	K- □ 75	520		283								20	25,5	205	205		82,2
70P	WAG	K- □ 80	640		258,5								15	25,5	265	265		102,7
75P	WAG	K- □ 80	640		313,5		8	15,875	9,5	10	23	1/2 20 UNF	20	25,5	408	52,2		137,5
80P	WAG	K- □ 90	810		355								20	25,5	405	73		202
85P	WAG	K- □ 90	810		425		8	19,05	22	28	35	3/4 10 UNF	44	50	453	94,2		286
90P	WAG	K- □ 110	1000	318	456	279,4		19,05	22	28	42	3/4 10 UNF	40	50	573	122,7		
													20	416	416	4" E		157,7
													50	416	416	4" E		232
													50	416	416	4" E		314
													50	416	416	4" E		505

SCF WAG					DCF WAG						
Size	Type	Basic Coupling	Dimensions mm		Weight Kg *	Size	Type	Basic Coupling	Dimensions mm		Weight Kg *
			Gear Coupling	C2					Gear Coupling	C3	
30	SCF WAG	K- □ 38	1" 1/2 S	247,5	20,7	1" 1/2 S	30	DCF WAG	K- □ 38	287,5	21,3
30P	SCF WAG	K- □ 38		247,5	28,5		30P	DCF WAG	K- □ 38	287,5	29,1
40P	SCF WAG	K- □ 48		289	35,9		40P	DCF WAG	K- □ 48	361	33,4
50	SCF WAG	K- □ 55		292	42		50	DCF WAG	K- □ 55	367	44,2
55	SCF WAG	K- □ 60	2" 1/2 S	333	60	2" 1/2 S	55	DCF WAG	K- □ 60	408	52,2
60	SCF WAG	K- □ 75		325	69,4		60	DCF WAG	K- □ 75	405	73
65	SCF WAG	K- □ 75		373	90,6		65	DCF WAG	K- □ 75	453	94,2
70P	SCF WAG	K- □ 80	3" E	368,5	115,7	3" E	70P	DCF WAG	K- □ 80	483,5	122,7
75P	SCF WAG	K- □ 80		423,5	150,5		75P	DCF WAG	K- □ 80	538,5	157,7
80P	SCF WAG	K- □ 90	3" 1/2 E	473	218	3" 1/2 E	80P	DCF WAG	K- □ 90	573	232
85P	SCF WAG	K- □ 90		543	302		85P	DCF WAG	K- □ 90	643	314
90P	SCF WAG	K- □ 110	4" E	576	490	4" E	90P	DCF WAG	K- □ 110	656	505

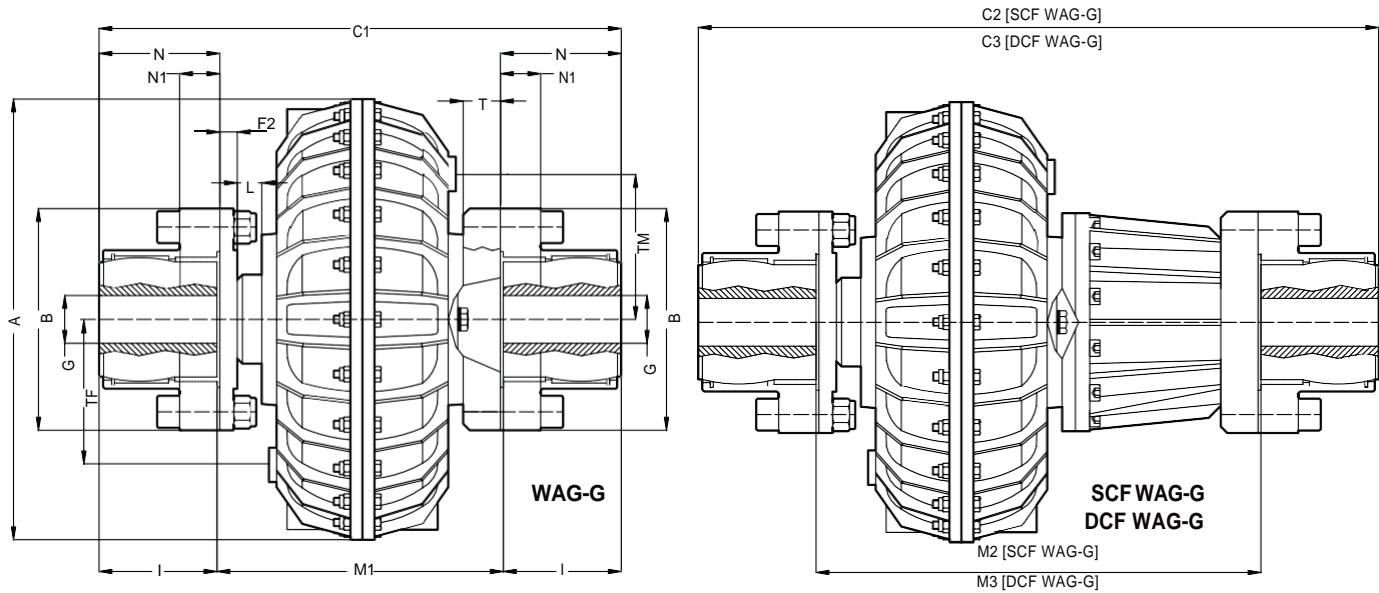
\* Weight with oil



**WESTCAR**  
MILANO - ITALY

**ROTOFLUID COUPLING ALFA TYPE "WAG-G"**  
Mounted with ROTOGEAR "RE" Couplings

Sheet  
45-113D EN  
Date  
05-2006

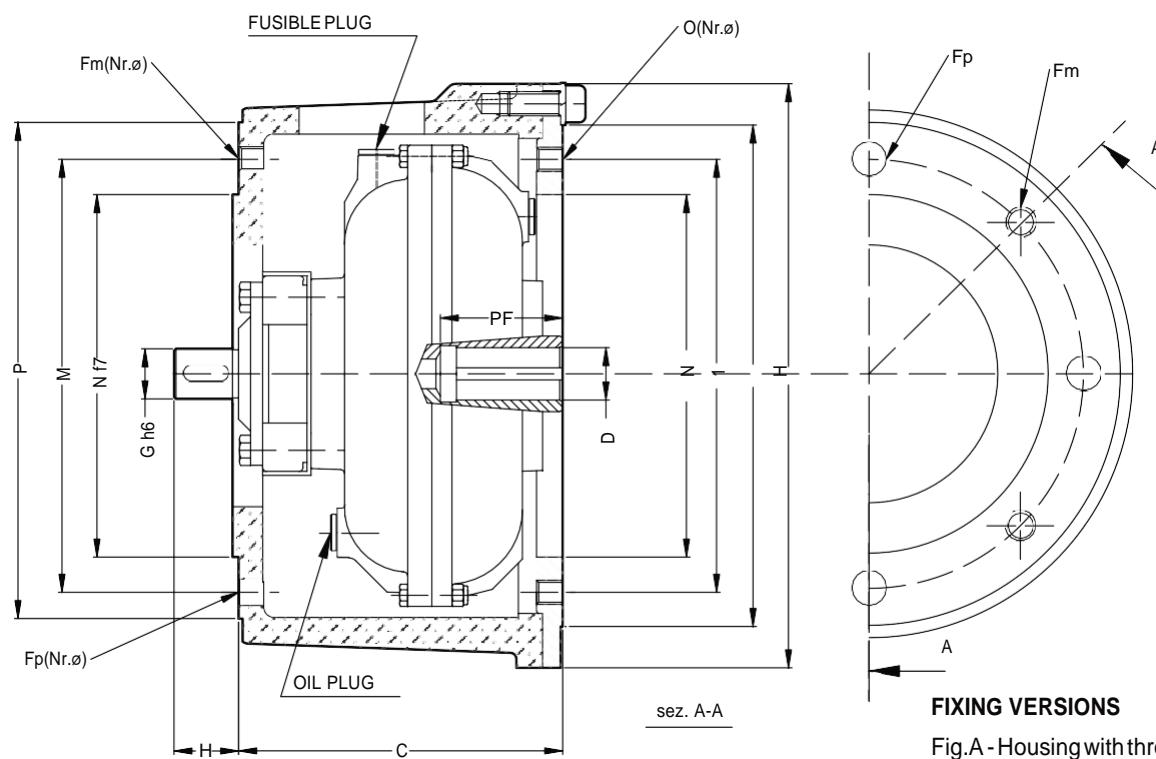


NOTE: For bore and keyway dimensions see sheet 10-023A

Size	Type	Basic Coupling	Dimensions mm													Weight Kg.*
			G		F2	I	L	M1	N	N1	T	TF	TM	Gear Coupling		
A	B	C1	raw	max												
20	WAG-G	K1-□ 28	230	111	240	10	50	8	43	10	154	44,5	12	18	80	80 RE 40 13
30	WAG-G	K1-□ 38	290	142	297	15	60	12	50	12	197	51,5	10	20	110	110
30P	WAG-G	K1-□ 38	327		297					12	197				130	130
40P	WAG-G	K1-□ 48	338		334					15	234				130	130
50	WAG-G	K2-□ 55	430		315					25	215				150	150
55	WAG-G	K2-□ 60	430		410					15	258				24,5	150
60	WAG-G	K2-□ 75	520	200	392	35	95	17,5	76	20	240	78,5	13	25,5	192	RE 85 86
65	WAG-G	K2-□ 75	520		440											205
70P	WAG-G	K2-□ 80	640	225	448,5	45	110	23	90	20	268,5	92,5	13	30,5	265	RE 100 146,7
75P	WAG-G	K2-□ 80	640		503,5											265
80P	WAG-G	K2-□ 90	810	265	548	55	130	28	105	44	338	108	22	34	325	
85P	WAG-G	K2-□ 90	810		618										325 RE 120 262	
90P	WAG-G	K2-□ 110	1000	370	748	90	190	42	150	20	448	154	24	34	416	RE 180 550
95P	WAG-G	K2-□ 110	1000		863											416 RE 180 710
1200	WAG-G	K2-□ 160	1300													ON REQUEST

SCF WAG-G			DCF WAG-G										
Size	Type	Basic Coupling	Dimensions mm			Weight Kg.*	Size	Type	Basic Coupling	Dimensions mm			Weight Kg.*
			Gear Coupling	C2	M2					C3	M3		
30	SCF WAG-G	K1-□ 38	RE 55	352	252	28,7	RE 55	DCF WAG-G	K1-□ 38	392	292	29,3	RE 55 37,1
30P	SCF WAG-G	K1-□ 38		352	252	36,5				392	292	37,1	
40P	SCF WAG-G	K1-□ 48		392	292	39,9				464	364	41,2	
50	SCF WAG-G	K2-□ 55		395	295	50				470	370	52,2	
55	SCF WAG-G	K2-□ 60		490	338	85,1				565	413	87,2	
60	SCF WAG-G	K2-□ 75	RE 85	482	330	94,4	RE 85	DCF WAG-G	K2-□ 75	562	410	98	RE 85 119,2
65	SCF WAG-G	K2-□ 75		530	378	115,6				610	458	119,2	
70P	SCF WAG-G	K2-□ 80	RE 100	558,5	378,5	159,7	RE 100	DCF WAG-G	K2-□ 80	673,5	493,5	166,7	RE 100 207,5
75P	SCF WAG-G	K2-□ 80		613,5	433,5	200,5				728,5	548,5	207,5	
80P	SCF WAG-G	K2-□ 90	RE 120	666	456	278	RE 120	DCF WAG-G	K2-□ 90	766	556	290	RE 120 374
85P	SCF WAG-G	K2-□ 90		736	526	382				836	626	374	
90P	SCF WAG-G	K2-□ 110	RE 180	868	568	590	RE 180	DCF WAG-G	K2-□ 110	949	648	605	RE 180 765
95P	SCF WAG-G	K2-□ 110		983	683	750				1063	763	765	

\* Weight with oil

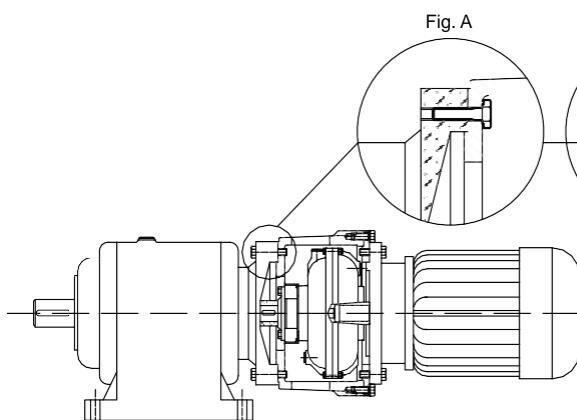


#### FIXING VERSIONS

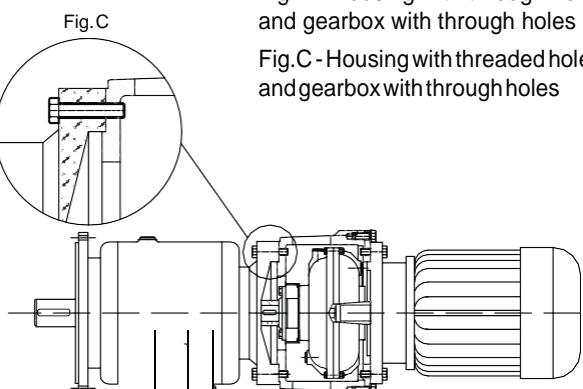
Fig.A - Housing with through holes and gearbox with threaded holes

Fig.B - Housing with through holes and gearbox with through holes

Fig.C - Housing with threaded holes and gearbox with through holes



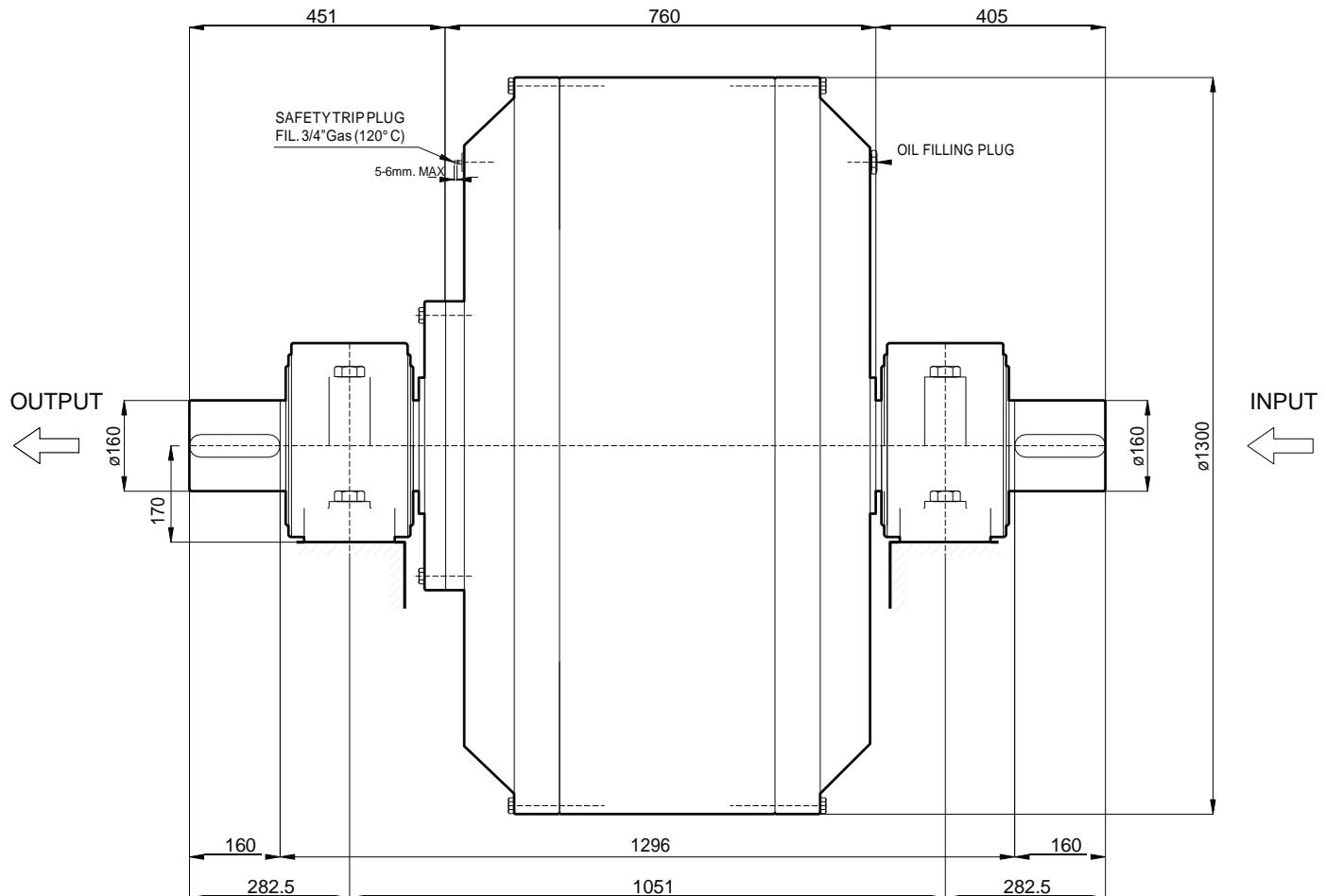
Feet mounted Gearbox



Flange mounted Gearbox

Coupling		Motor		Dimensions mm.															Weight
Size	Type	Type	KW	A	C	D	Fm	Fp	G	H	M	M1	N (f7)	N1 (H7)	O	P	P1	PF	Kg. *
<b>10CK</b>	19LRS19	80	0,55 0,75	240	128	19	Nr.4 M10	Nr.4 ø11	19	25	165	165	130	130	Nr.8 M10	200	200	45	8,5
<b>10CK</b>	24LRS24	90 S 90 L	1,1 1,5	240	128	24	Nr.4 M10	Nr.4 ø11	24	25	165	165	130	130	Nr.8 M10	200	200	55	8,5
<b>20CK</b>	28LRS28	100 100 112 M	2,2 3 4	292	161	28	Nr.4 M12	Nr.4 ø13	28	32	215	215	180	180	Nr.8 M12	250	250	65	24
<b>30CK</b>	38LRS38	132 L	9,2	350	210	38	Nr.4 M12	Nr.4 ø13	38	45	265	265	230	230	Nr.8 M12	300	300	82	36,5
<b>30PCK</b>	42LRS42	160 M 160 L	11 15	400	210	42	Nr.4 M16	Nr.4 ø17	42	45	300	300	250	250	Nr.8 M16	350	350	112	40
<b>40PCK</b>	48LRS48	180 M 180 L	18,5 22	400	255	48	Nr.4 M16	Nr.4 ø17	48	55	300	300	350	250	Nr.8 M16	350	350	112	42

\* Weight with oil



Specify installation required "STANDARD ASSEMBLY" or "REVERSE ASSEMBLY"  
see page 12

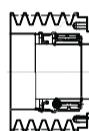
WEIGHT Kg. Without oil	OIL CAPACITY max. lt.	OIL DENSITY	WEIGHT Kg. max. with oil
2400	400	0,88	2752



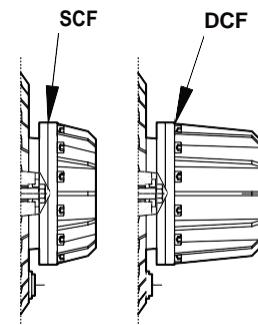
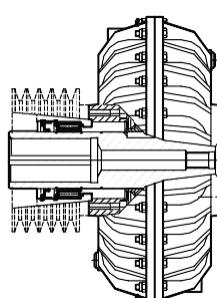
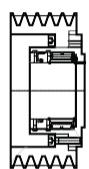
THE DELAY FILL CHAMBERS "SCF AND DCF" CAN BE ALSO FITTED TO THE VERSIONS "J"- "H"- "Z"

ROTOFLUID BETA X for pulley with bearing support under the belts tension.

BUILT-IN PULLEY  
TYPE X-XC-XM-XN

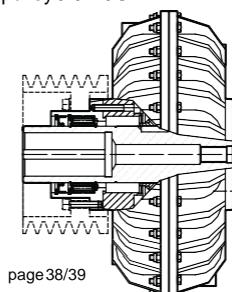


DEMOUNTABLE PULLEY  
TYPE XJ-NJ



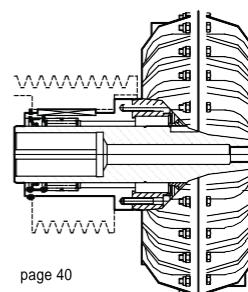
page 36/37

ROTOFLUID BETA J with bearing supported output sleeve for externally bolted v-belt pulley J-JA-JG



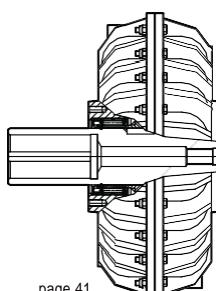
page 38/39

ROTOFLUID BETA H with bearing supported output sleeve keyed v-belt pulley "P"



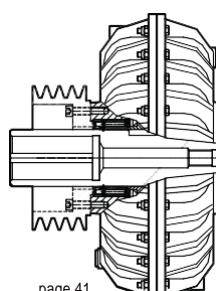
page 40

ROTOFLUID BETA Z



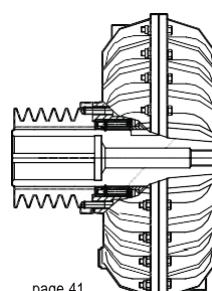
page 41

ROTOFLUID BETA Z for externally bolted demountable pulley F-T-FT-TG-TM-TR



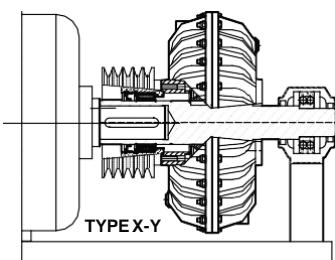
page 41

ROTOFLUID BETA ZI for externally bolted built-in pulley I-IF-IG

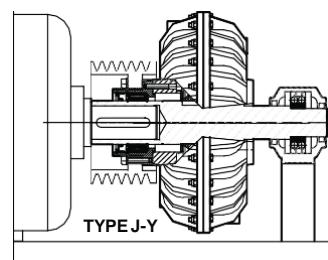
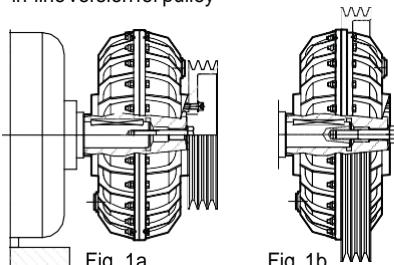


page 41

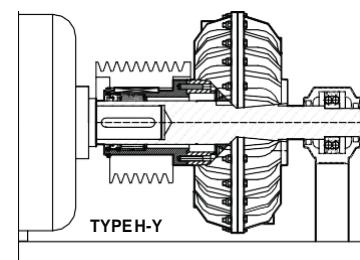
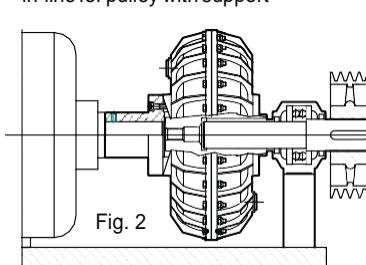
#### SPECIAL VERSIONS



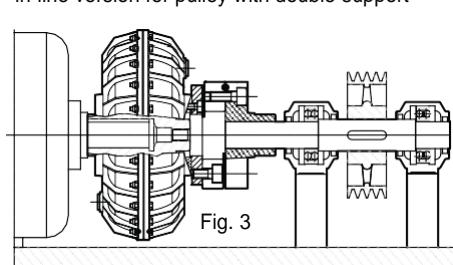
ROTOFLUID ALFA  
in-line version for pulley



ROTOFLUID ALFA  
in-line for pulley with support



ROTOFLUID ALFA  
in-line version for pulley with double support

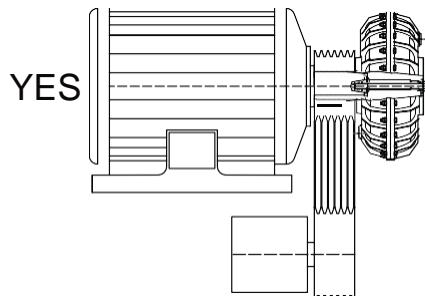




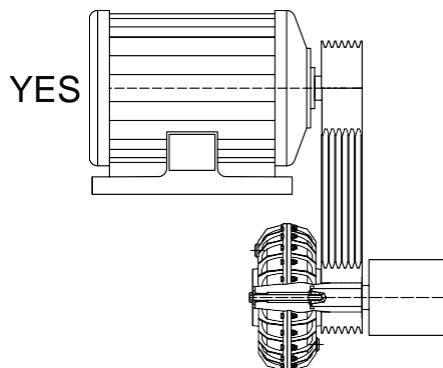
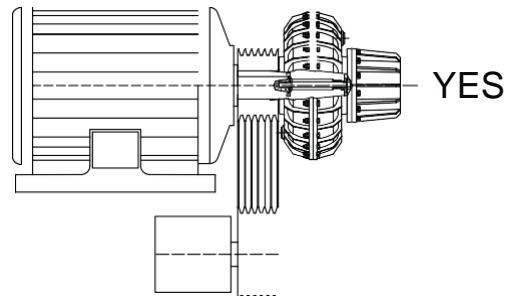
**Fig.1-2 HORIZONTAL SHAFT**

**Fig. 3-4 VERTICAL SHAFT**

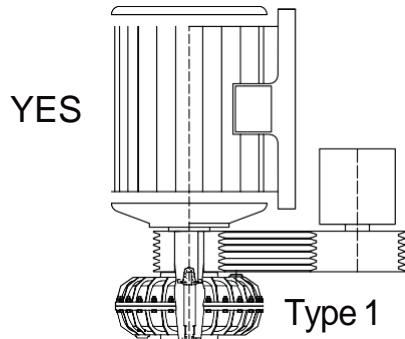
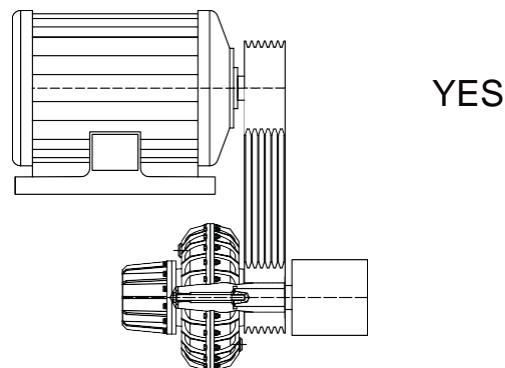
In case of order specify mounting figure (if different from STANDARD)



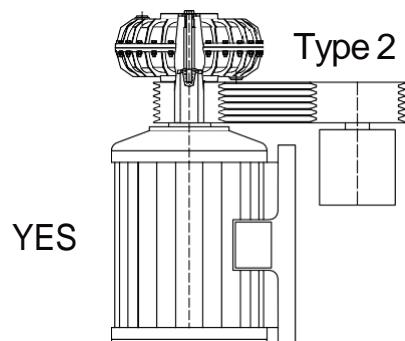
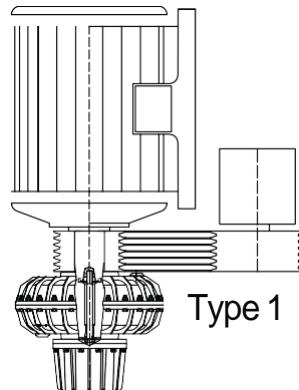
**Fig. 1  
STANDARD**



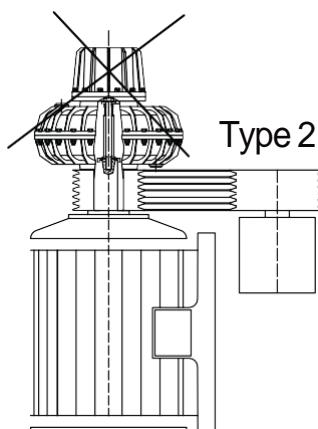
**Fig. 2**



**Fig. 3**



**Fig. 4**



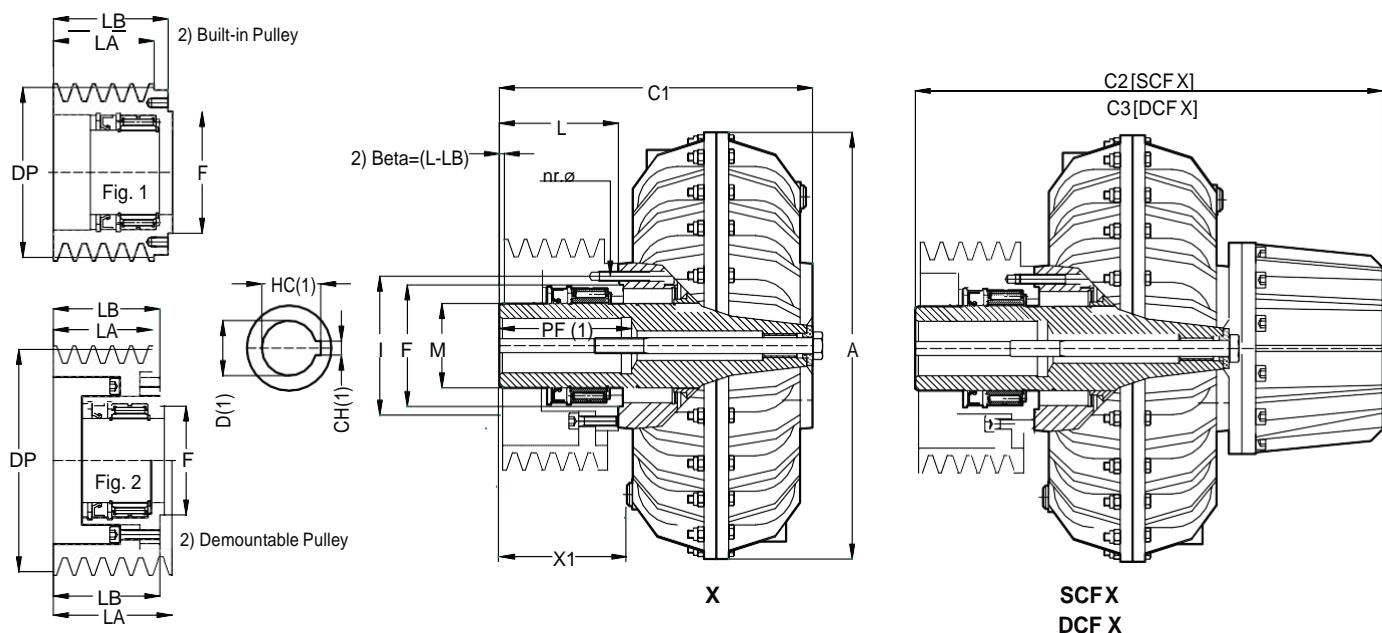
**NO**



**WESTCAR**  
MILANO - ITALY

**ROTOFLUID COUPLING BETA**  
“X”“SCF X”“DCF X”

Sheet  
45-250A EN  
Date  
05-2006



NOTE: 1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET. 10-019D

2) FOR THE CHOICE OF THE ASSEMBLING COUPLING-PULLEY, SEE “WESTCAR PULLEYS” CATALOGUE

Size	X										SCF X			DCF X			
	Dimensions mm.								Weight	Dimensions mm.		Weight	Dimensions mm.		Weight		
	Type	D	A	C1	F	I	L	M		nr. □	X1	Kg. *	Type	C2	Kg. *	Type	C3
<b>20</b>	X 103	38-42	230	218	62	78	103	55	6-M6	120	7	-	-	-	-	-	-
<b>20</b>	X 68	28-38-42	200	218			68	60		77	14	SCF X 68	273	16,4	DCF X 68	313	17
	X 80	48-55		230			80	70		89	14,5	SCF X 80	285	16,9	DCF X 80	325	17,5
	X 88	28-38-42		238	75	100	88	60	Q.MQ	97	14,8	SCF X 88	293	17,2	DCF X 88	333	17,8
	X 112	28-38-42		262			112	60		121	15,5	SCF X 112	317	17,9	DCF X 112	357	18,5
	X 114	48		264			114	65		123	15,5	SCF X 114	319	17,9	DCF X 114	359	18,5
	X 135	42-48-55		285			135	70		144	16	SCF X 135	340	18,4	DCF X 135	380	19
<b>20D</b>	X 68	28-38-42	207	218			68	60		72	22	SCF X 68	273	24,4	DCF X 68	313	25
	X 80	48-55		230			80	70		84	22,5	SCF X 80	285	24,9	DCF X 80	325	25,5
	X 88	28-38-42		238	75	100	88	60	Q.MQ	92	22,8	SCF X 88	293	25,2	DCF X 88	333	25,8
	X 112	28-38-42		262			112	60		116	23,5	SCF X 112	317	25,9	DCF X 112	357	26,5
	X 114	48		264			114	65		118	23,5	SCF X 114	319	25,9	DCF X 114	359	26,5
	X 135	42-48-55		285			135	70		139	24	SCF X 135	340	26,4	DCF X 135	380	27
<b>40D</b>	X 64	<b>42-48</b>	220	247	100		64			88	23	SCF X 64	305	26,7	DCF X 64	377	28,2
	X 90	38-42-48-55-60		273	100		90			114	25	SCF X 90	331	28,7	DCF X 90	403	30,2
	X 118	38-42-48-55-60		301	100		118			142	27	SCF X 118	359	30,7	DCF X 118	431	32,2
	X 142	38-42-48-55-60		325	100	125	142		Q.MQ	166	30	SCF X 142	383	33,7	DCF X 142	455	35,2
	X N64	<b>42-48</b>		247	145		97			88	28	SCF X N64	305	31,7	DCF X N64	377	33,2
	X N90	38-42-48-55-60		273	145		123			114	30	SCF X N90	331	33,7	DCF X N90	403	35,2
	X N118	38-42-48-55-60		301	145		151			142	32	SCF X N118	359	35,7	DCF X N118	431	37,2
	X N142	38-42-48-55-60		325	145		175			166	35	SCF X N142	383	38,7	DCF X N142	455	40,2
<b>50</b>	X 90	42-48-55-60-65	430	244	110	140	90	85	□	96	32,5	SCF X 90	324	38,3	DCF X 90	399	40,5
	X 155			309			155			126	33,5	SCF X 120	354	39,3	DCF X 120	429	41,5
	X 180			334			180			161	34,5	SCF X 155	389	40,3	DCF X 155	464	42,5
<b>55</b>	X 90	42-48-55-60-65	420	286			90	85		96	41	SCF X 90	366	46,8	DCF X 90	441	49
	X 120	42-48-55-60-65		316			120	85		126	42	SCF X 120	396	47,8	DCF X 120	471	50
	X 155	42-48-55-60-65		351	110	110	155	85	8-	161	43	SCF X 155	431	48,8	DCF X 155	506	51
	X 160	75		356			160	105	M10	166	43	SCF X 160	436	48,8	DCF X 160	511	51
	X 200	42-48-55-60-65		396			200	85		206	44	SCF X 200	476	49,8	DCF X 200	551	52
	X 230	75		426			230	105		236	46	SCF X 230	506	51,8	DCF X 230	581	54

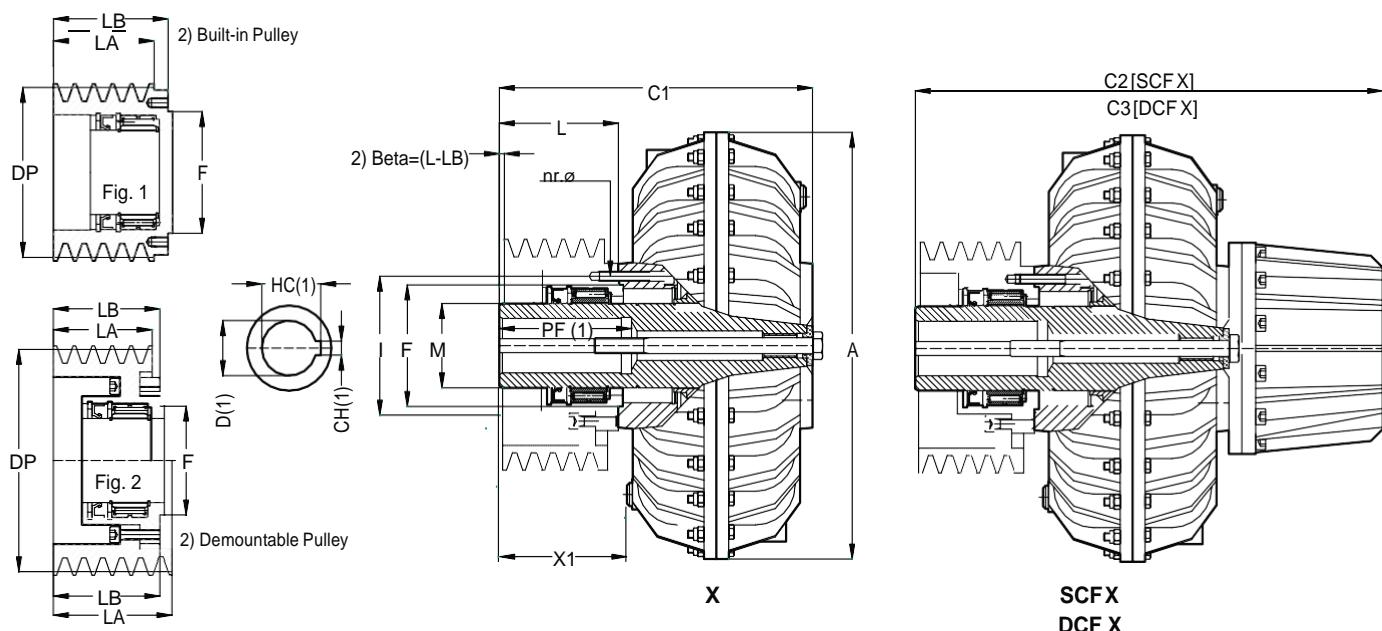
\* Weight with oil - Standard bores in **heavy** type



**WESTCAR**  
MILANO - ITALY

**ROTOFLUID COUPLING BETA**  
“X”“SCF X”“DCF X”

Sheet  
45-251B EN  
Date  
07-2006



NOTE: 1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET. 10-019D

2) FOR THE CHOICE OF THE ASSEMBLING COUPLING-PULLEY, SEE “WESTCAR PULLEYS” CATALOGUE

Size	X										SCF X			DCF X			
	Type	D	A	C1	F	I	L	M	nr.Ø	X1	Kg.*	Type	C2	Kg.*	Type	C3	Kg.*
<b>60</b>	X 130			302		130				136	50	SCF X 130	392	58,4	DCF X 130	472	62
	X 170			342		170				176	53	SCF X 170	432	61,4	DCF X 170	512	65
	X 178	55-60-65-75-80	520	350	125	160	178	110	8-M10	184	53	SCF X 178	440	61,4	DCF X 178	520	65
	X 218			390		218				224	55	SCF X 218	480	63,4	DCF X 218	560	67
	X 230			402		230				236	56	SCF X 230	492	64,4	DCF X 230	572	68
<b>65</b>	X 130			350		130				136	69	SCF X 130	440	77,4	DCF X 130	520	81
	^ 110	60-65-75-80	520	350	125	160	110	8-M10		110	72	SCF X 170	480	80,4	DCF X 170	560	83
	X 220			440		220				226	76	SCF X 220	530	84,4	DCF X 220	610	88
	X 255			475		255				261	79	SCF X 255	565	87,4	DCF X 255	645	91
<b>70P</b>	X 170			380		170				170	111	SCF X 170	490	118	DCF X 170	605	125
	^ 110	75-80-90-100	640	420	150	195	230	120	8-M12	230	114	SCF X 210	530	121	DCF X 210	645	128
	X 230			440		230				230	117	SCF X 230	550	124	DCF X 230	665	131
	X 275			485		275				275	121	SCF X 275	595	128	DCF X 275	710	135
<b>75P</b>	X 160			420		160				160	142	SCF X 160	530	143	DCF X 160	645	150
	^ 110	80-90-100	640	420	150	195	230	120	8-M12	230	147	SCF X 210	580	148	DCF X 210	695	155
	X 230			490		230				230	153	SCF X 230	600	154	DCF X 230	715	161
	X 275			535		275				275	158	SCF X 275	645	159	DCF X 275	760	166
<b>80P</b>	X 160A	Ø max. 100	810	386	190	230	230	140	8-M14	160	192	SCF X 160A	504	201	DCF X 160A	604	213
	X 210A	Ø max. 100	810	436	190	230	230	140	8-M14	210	202	SCF X 210A	554	211	DCF X 210A	654	223
	X 255A	Ø max. 100	810	481	190	230	255	140	8-M14	255	207	SCF X 255A	599	216	DCF X 255A	699	228
	X 255B	Ø max. 125	810	481	190	230	255	160	8-M16	255	215	SCF X 255B	599	224	DCF X 255B	699	236
<b>85P</b>	X 160A	Ø max. 100	810	460	190	230	230	140	8-M14	160	270	SCF X 160A	578	279	DCF X 160A	678	291
	X 230A	Ø max. 100	810	530	190	230	230	140	8-M14	230	280	SCF X 230A	648	289	DCF X 230A	748	301
	X 255A	Ø max. 100	810	555	190	230	255	140	8-M14	255	290	SCF X 255A	673	299	DCF X 255A	773	311
	X 255B	Ø max. 125	810	555	190	230	255	160	8-M16	255	298	SCF X 255B	673	307	DCF X 255B	773	319

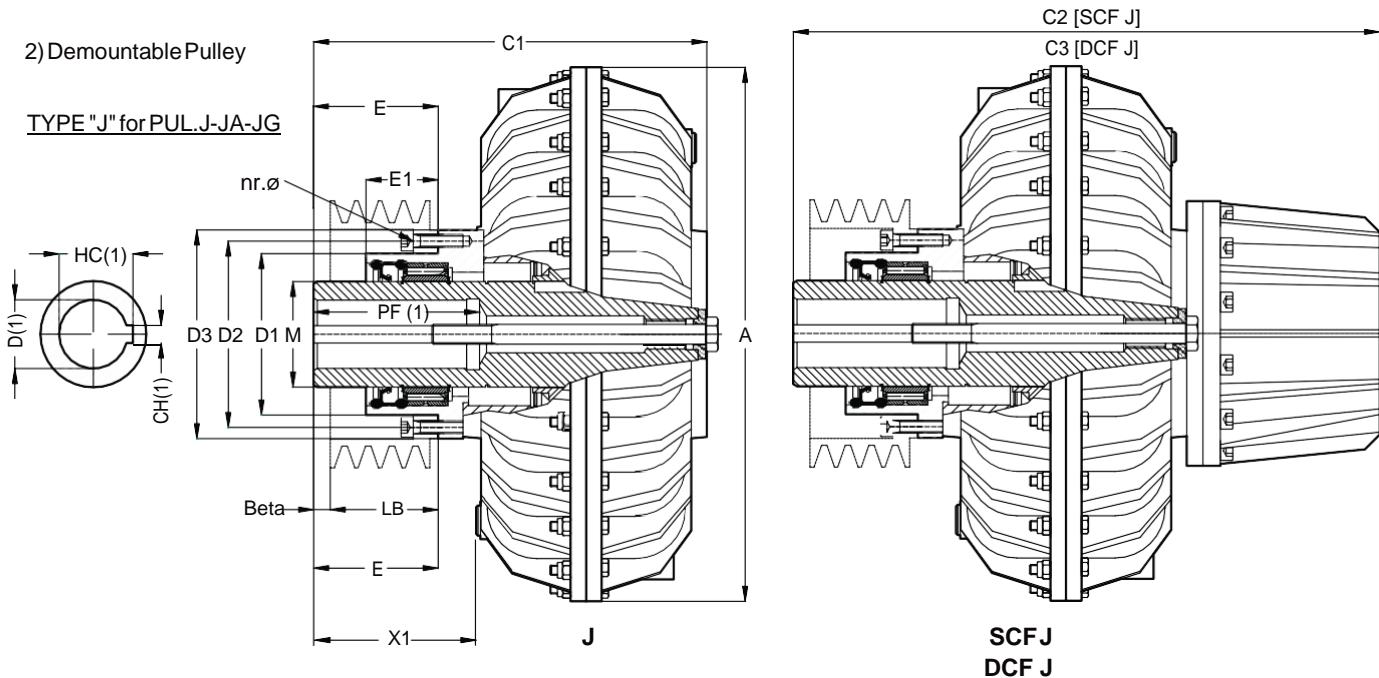
\*Weight with oil - • PER D=100 - M=135 - Standard bores in **heavy** type



**WESTCAR**  
MILANO - ITALY

**ROTOFLUID COUPLING BETA**  
“J”“SCF J”“DCF J”

Sheet  
45-210A EN  
Date  
05-2006



NOTE : 1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET. 10-019D

2) FOR THE CHOICE OF THE ASSEMBLING COUPLING-PULLEY, SEE “WESTCAR PULLEYS” CATALOGUE

Size	J												SCF J			DCF J			
	Dimensions mm.											Weight	Dimensions mm.		Weight	Dimensions mm.		Weight	
	Type	D	A	C1	D1 h7	D2	D3	E	E1	M	nr.- Ø		Type	C2	Kg *	Type	C3	Kg *	
20	J 70 J 103	19-24-28 28-38	229	185 218	60 75	75 90	92 104	70 85	12 32	45 55	6-M8	77 120	6,5 9	-	-	-	-	-	
30	J 68	28-38-42	218	85	100	114	50		60			77	15	SCF J 68	273	17,4	DCF J 68	313	18
	J 80	48-55	230	96	110	124	62		70			89	16	SCF J 80	285	18,4	DCF J 80	325	19
	J 88	28-38-42	238	85	100	114	70	45	60		8-M8	97	16	SCF J 88	293	18,4	DCF J 88	333	19
	J 112	28-38-42	262	85	100	114	94		60			121	19	SCF J 112	317	21,4	DCF J 112	357	22
	J 135	42-48-55	285	96	110	124	117		70			144	20	SCF J 135	340	22,4	DCF J 135	380	23
30P	J 68	28-38-42	218	85	100	114	50		60			72	23	SCF J 68	273	25,4	DCF J 68	313	26
	J 80	48-55	230	96	110	124	62		70			84	24	SCF J 80	285	26,4	DCF J 80	325	27
	J 88	28-38-42	238	85	100	114	70	45	60		8-M8	92	24	SCF J 88	293	26,4	DCF J 88	333	27
	J 112	28-38-42	262	85	100	114	94		60			116	27	SCF J 112	317	29,4	DCF J 112	357	30
	J 135	42-48-55	285	96	110	124	117		70			139	28	SCF J 135	340	30,4	DCF J 135	380	31
40P	J 64	42-48	247				63					88	24	SCF J 64	305	28	DCF J 64	377	29
	J 90	38-42-48-55-60	273	112	130	145	89	60	80	8-M8		114	26	SCF J 90	331	30	DCF J 90	403	31
	J 118	38-42-48-55-60	301				117					142	29	SCF J 118	359	33	DCF J 118	431	34
	J 142	38-42-48-55-60	325				141					166	31	SCF J 142	383	35	DCF J 142	455	36
	J 90		244				70					96	40	SCF J 90	324	46	DCF J 90	399	48
50	J 120	42-48-55-60-65	274	130	150	170	100	58	85	8-M10		126	41	SCF J 120	354	47	DCF J 120	429	49
	J 155		309				135					161	42	SCF J 155	389	48	DCF J 155	464	50
	J 180		334				160					186	45	SCF J 180	414	51	DCF J 180	489	53
	J 90		286				70					96	48	SCF J 90	366	54	DCF J 90	441	56
55	J 120	42-48-55-60-65	316	130	150	170	100	58	85	8-M10		126	50	SCF J 120	396	56	DCF J 120	471	58
	J 155		351				135					161	52	SCF J 155	431	58	DCF J 155	506	60
	J 200		396				180					206	55	SCF J 200	476	61	DCF J 200	551	63

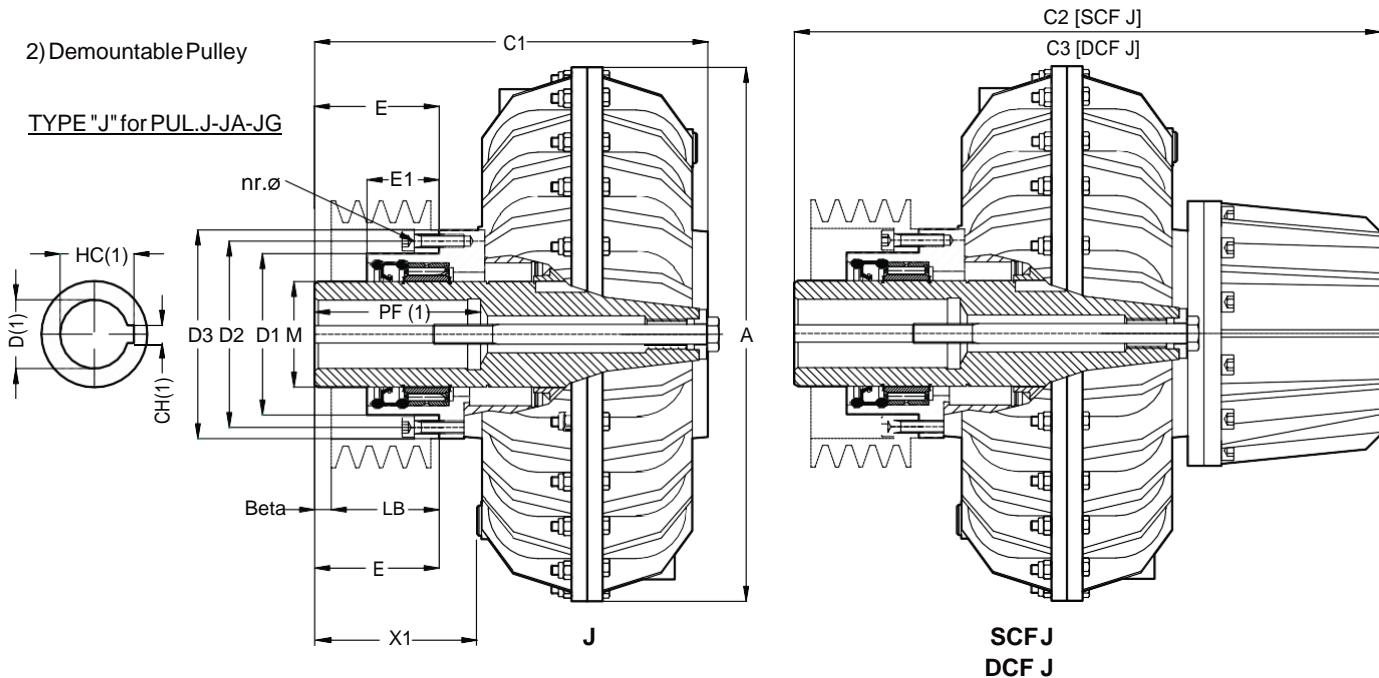
\* Weight with oil - Standard bores in **heavy** type



**WESTCAR**  
MILANO - ITALY

**ROTOFLUID COUPLING BETA**  
“J” “SCF J” “DCF J”

Sheet  
45-211C EN  
Date  
07-2006



NOTE : 1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET. 10-019D

2) FOR THE CHOICE OF THE ASSEMBLING COUPLING-PULLEY, SEE “WESTCAR PULLEYS” CATALOGUE

Size	J												SCF J			DCF J			
	Type	D	A	C1	Dimensions mm.						Weight	Dimensions mm.	Weight	Dimensions mm.	Weight	Dimensions mm.	Weight		
					D1 h7	D2	D3	E	E1	M									
<b>60</b>	J 130	55-60-65-75-80	520	302	150	170	186	110	88	110	8-M10	136	65	SCF J 130	392	74	DCF J 130	472	77
	J 170			342				150				176	70	SCF J 170	432	79	DCF J 170	512	82
	J 178			350				158				184	71	SCF J 178	440	80	DCF J 178	520	83
	J 218			390				198				224	76	SCF J 218	480	85	DCF J 218	560	88
	J 230			402				210				236	80	SCF J 230	492	89	DCF J 230	572	92
<b>65</b>	J 130	55-60-65-75-80	520	350	150	170	186	110	88	110	8-M10	136	83	SCF J 130	440	92	DCF J 130	520	95
	J 170			390				150				176	88	SCF J 170	480	97	DCF J 170	560	100
	J 220			440				200				226	94	SCF J 220	530	103	DCF J 220	610	106
	J 255			475				235				261	100	SCF J 255	565	109	DCF J 255	645	112
<b>70P</b>	J 170	75-80-90-100	640	380	188	210	230	140	100	• 120	8-M12	170	115	SCF J 170	490	128	DCF J 170	605	135
	J 210			420				180				210	118	SCF J 210	530	131	DCF J 210	645	138
	J 230			440				200				230	121	SCF J 230	550	134	DCF J 230	665	141
	J 275			485				245				275	125	SCF J 275	595	138	DCF J 275	710	145
<b>75P</b>	J 160	80-90-100	640	420	188	210	230	130	100	• 120	8-M12	160	150	SCF J 160	530	163	DCF J 160	645	170
	J 210			470				180				210	153	SCF J 210	580	166	DCF J 210	695	173
	J 230			490				200				230	154	SCF J 230	600	167	DCF J 230	715	174
	J 275			535				245				275	160	SCF J 275	645	173	DCF J 275	760	180
<b>80P</b>	J 160A	Ø max. 100	810	386	214	240	270	130	130	140	8-M14	160	185	SCF J 160A	504	201	DCF J 160A	604	213
	J 210A			436				180				210	195	SCF J 210A	554	211	DCF J 210A	654	223
	J 255A			481				225				255	200	SCF J 255A	599	216	DCF J 255A	699	228
	J 255B			481				225				255	208	SCF J 255B	599	224	DCF J 255B	699	236
<b>85P</b>	J 160A	Ø max. 100	810	460	214	240	270	130	130	140	8-M14	160	250	SCF J 160A	578	266	DCF J 160A	678	178
	J 230A			530				200				230	260	SCF J 230A	648	276	DCF J 230A	748	288
	J 255A			555				225				255	270	SCF J 255A	673	286	DCF J 255A	773	298
	J 255B			555				276				255	278	SCF J 255B	673	294	DCF J 255B	773	306

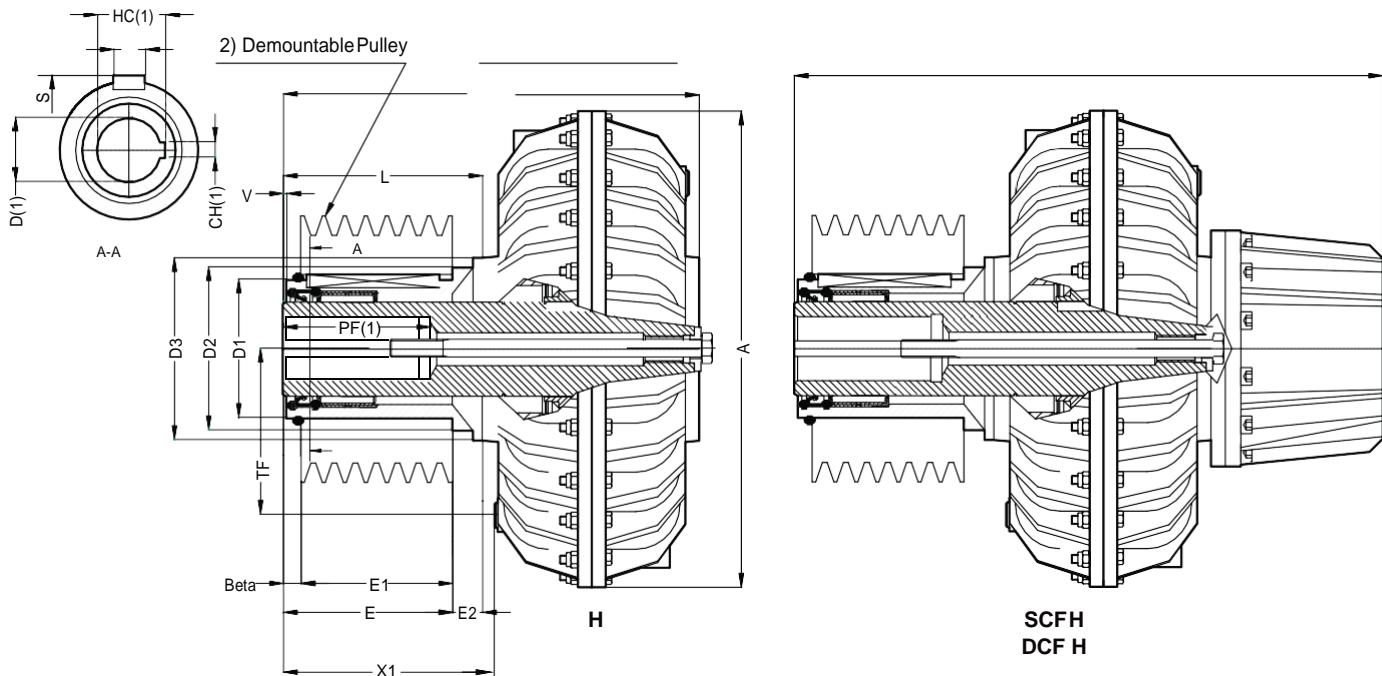
\*Weight with oil - • PER D=100 - M=135 - Standard bores in **heavy** type



**WESTCAR**  
MILANO - ITALY

**ROTOFLUID COUPLING BETA**  
“H”“SCF H”“DCF H”

Sheet  
45-220A EN  
Date  
05-2006



NOTE: ( 1 ) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET. 10-019D

Size	H														SCFH			DCFH					
	Type	D	A	C1	Dimensions mm								R	S	V	X1	Kg	Type	C2	Kg	Type	C3	Kg.
					D1 h7	D2	D3	E	E1	E2	(L)												
<b>20</b>	H 85	<b>28-38-42</b>	229	218	85	90	90	86	70	30	(103)	12	88,3	6	120	9,3	-	-	-	-	-	-	
<b>30</b>	H 85	28-38-42		262	85	90		84	72	40	(112)	12	88,3	4	121	16,7	SCFH 85	317	19	DCFH 85	357	19,7	
	H 95	48	290	264	95	105	117	86	72	38	(114)	12	98,3	8	123	18	SCFH 95	319	20,4	DCFH 95	359	21	
	H 110	42-48-55		285	110	117		116,5	105	30	(135)	16	114,3	4	144	20	SCFH 110	340	22,4	DCFH 110	380	23	
<b>30P</b>	H 85	<b>28-38-42</b>		262	85	90		84	72	40	(112)	12	88,3	4	116	24,7	SCFH 85	317	27	SCFH 85	357	27,7	
	H 95	48	327	264	95	105	117	86	72	38	(114)	12	98,3	8	118	26	SCFH 95	319	28,4	DCFH 95	359	29	
	H 110	42-48-55		285	110	117		116,5	105	30	(135)	16	114,3	4	139	28	SCFH 110	340	30,4	DCFH 110	380	31	
<b>40P</b>	H 110	38-42-48-55-60	301	110	145	145	124	112	21	(118)	16	114,3	4	142	27,6	SCFH 110	359	31,5	DCFH 110	431	32,8		
	H 125	38-42-48-55-60	325	125	138	145	134	120	32	(142)	18	129,4	6	166	31,3	SCFH 125	383	35	DCFH 125	455	36,5		
<b>50</b>	H 125	42-48-55-60-65	430	334	125	165	170	153	140	39	(180)	18	129,4	3	186	41,8	SCFH 125	414	47,5	DCFH 125	489	49,8	
<b>55</b>	H 125	42-48-55-60-65	430	396	125	165	170	173	140	39	(200)	18	129,4	23	206	52	SCFH 125	476	57,8	DCFH 125	551	60	
	H 150	75	430	426	150					87	(230)	16	154,3	23	236	60	SCFH 150	506	65,8	DCFH 150	581	68	
<b>60</b>	H 150	48-55-60-65-75-80	520	402	150	179	188	203	190	33	(230)	16	154,3	3	236	70	SCFH 150	492	78,4	DCFH 150	572	82	
<b>65</b>	H 150	55-60-65-75-80	520	475	150	179	188	228	190	33	(255)	16	154,3	28	261	93	SCFH 150	565	101,4	DCFH 150	645	105	
<b>70P</b>	H 200	75-80-90-100	640	485	200	215	227	245	190	34	(275)	20	204,8	45	275	131	SCFH 200	595	144	DCFH 200	710	151	
<b>75P</b>	H 200	80-90-100	640	535	200	215	227	245	190	34	(275)	20	204,8	45	275	174	SCFH 200	645	187	DCFH 200	760	194	

\* Weight with oil - Standard bores in **heavy** type



## ROTOFLUID COUPLING BETA “Z/ZI”“SCF Z/ZI”“DCF Z/ZI”

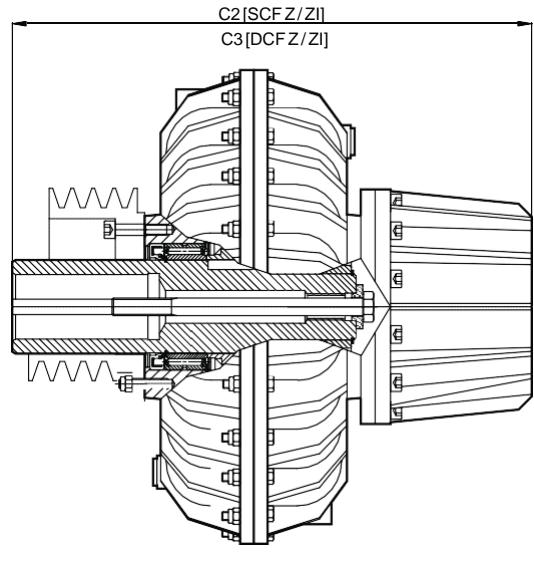
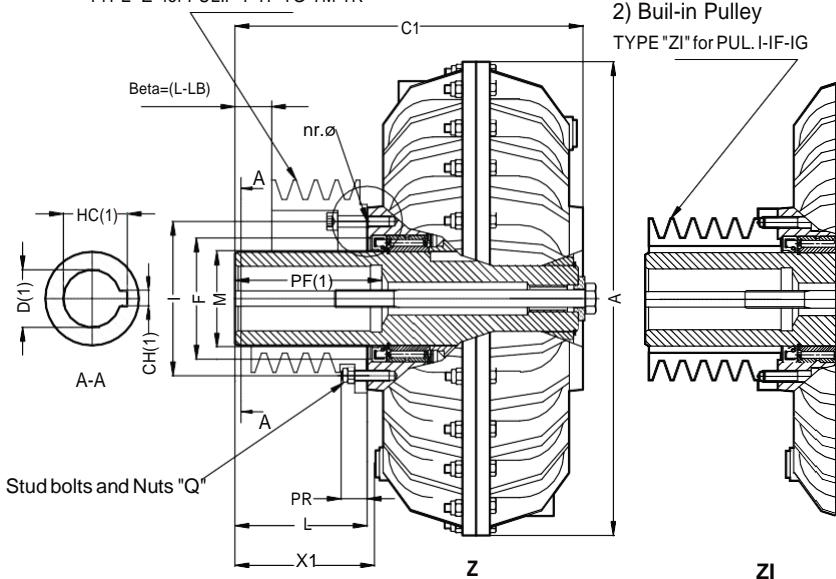
Sheet  
45-204A EN  

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Date  
05-2006

## 2) Demountable Pulley

TYPE "Z" for PUL.F-T-TF-TG-TM-TR



**SCF Z      DCF Z**

NOTE: 1) FOR BORE AND KEYWAY DIMENSIONS SEE SHEET. 10-019D

2) FOR THE CHOICE OF THE ASSEMBLING COUPLING-PULLEY, SEE "WESTCAR PULLEYS" CATALOGUE.

Size	Z / ZI											SCF Z / ZI				DCF Z / ZI					
	Dimensions mm.											Weight	Dimensions mm.			Weight	Dimensions mm.			Weight	
	Type		D	A	C1	F H7	I	L	M	PR	nr. □	X1	Kg. *	Type	C2	Kg. *	Type	C3	Kg. *		
10	Z 45	-	14-19-24	192	133	47	60	45	35	14	6-M6	47	4,2	-	-	-	-	-			
	Z 55	ZI 55	14-19-24		143	47	60	55	35			57		-	-	-	-	-			
	Z 56	ZI 56	28		144	52	68	56	40			58									
20	Z 55	-	19-24-28	230	170	55	45	18	6-M8	62	6,2	-	-	-	-	-	-	-			
	Z 70	ZI 70	19-24-28		185	62	78	70	45	77											
	Z 69	ZI 69	38		184	69	53	76													
30	Z 68	-	28-38-42	290	218	68	18	8-M8	77	13,5	SCF Z 68	SCF ZI 68	273	15,9	DCF Z 68	DCF ZI 68	313	16,5			
	Z 88	-			238	75	100	88	60	97	13,8	SCF Z 88	SCF ZI 88	293	16,2	DCF Z 88	DCF ZI 88	325	16,8		
	Z 112	ZI 112			262	112	121	14	SCF Z 112	SCF ZI 112	317	16,4	DCF Z 112	DCF ZI 112	357	17					
30P	Z 68	ZI 68	28-38-42	327	218	68	18	8-M8	72	21,5	SCF Z 68	SCF ZI 68	273	23,9	DCF Z 68	DCF ZI 68	313	24,5			
	Z 88	ZI 88			238	75	100	88	60	92	21,8	SCF Z 88	SCF ZI 88	293	24,2	DCF Z 88	DCF ZI 88	325	24,8		
	Z 112	ZI 112			262	112	116	22	SCF Z 112	SCF ZI 112	317	24,4	DCF Z 112	DCF ZI 112	357	25					
40P	Z 64	-	38-42-48-55-60	338	247	64	25	8-M10	88	22,5	SCF Z 64	SCF ZI 64	305	26,2	DCF Z 64	DCF ZI 64	377	27,7			
	Z 90	-			273	100	125	90	80	114	23	SCF Z 90	SCF ZI 90	331	25,7	DCF Z 90	DCF ZI 90	403	28,2		
	Z 118	ZI 118			301	118	142	23,5	SCF Z 118	SCF ZI 118	359	27,2	DCF Z 118	DCF ZI 118	431	28,7					
50	Z N90	-	42-48-55-60-65	430	244	90	25	8-M10	96	32,5	SCFZN90	SCF ZI N90	324	38,3	DCF Z N90	DCF ZIN90	399	40,5			
	Z N120	ZI N120			274	110	140	120	85	126	33,5	SCFZN120	SCF ZI N120	354	39,3	DCF Z N120	DCF ZIN120	429	41,5		
	Z N90	-			286	90	126	41	SCFZN90	SCF ZI N90	366	46,8	DCF Z N90	DCF ZIN90	441	49					
55	Z N120	-	42-48-55-60-65	430	316	110	140	120	85	25	8-M10	161	42	SCFZN120	SCF ZI N120	396	47,8	DCF Z N120	DCF ZIN120	471	50
	Z N155	ZI N155			351	155	43	43	SCFZN155			SCF ZI N155	431	48,8	DCF Z N155	DCF ZIN155	506	51			
60	Z N130	-	48-55-60-65-75-80	520	302	125	160	130	110	25	8-M10	136	50	SCF Z N130	-	392	58,4	DCF Z N130	-	472	62
65	Z N170	-	55-60-65-75-80	520	390	125	160	170	110	25	8-M10	176	72	SCF Z N170	-	480	80,4	DCF Z N170	-	560	84

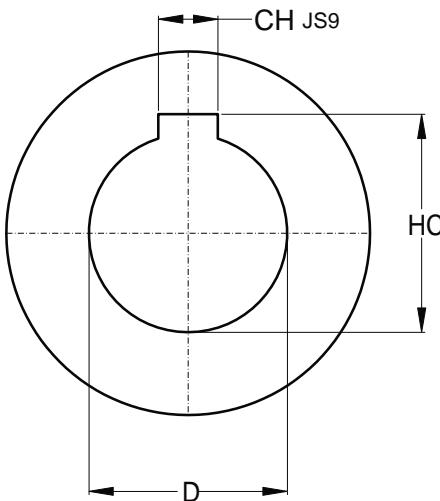
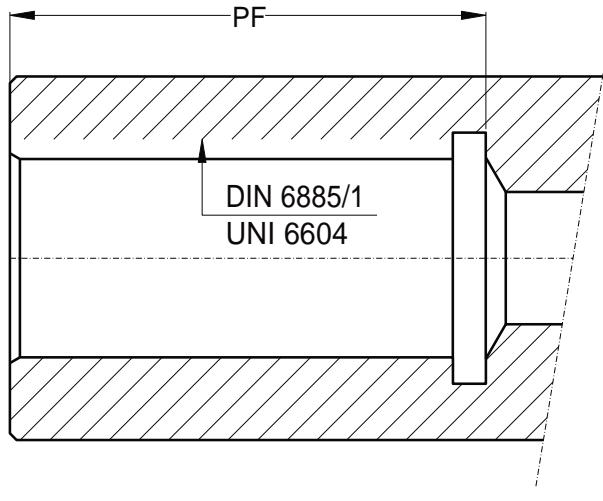
\* Weight with oil - Standard bores in **heavy** type



**WESTCAR**  
MILANO - ITALY

## BORE DIMENSIONS TABLE FOR FLUID COUPLING

Sheet  
10-019D EN  
Date  
05-2006



D	Toll.	PF	CH	HC	Toll.
10	H7	25	3	11,4	+ 0,1 0
11 *		<b>25</b>	<b>4</b>	<b>12,8</b>	
12		25	4	13,8	
13		32	5	15,3	
<b>14 *</b>		<b>32</b>	<b>5</b>	<b>16,3</b>	
15		32	5	17,3	
16		32	5	18,3	
17		42	5	19,3	
18		42	6	20,8	
<b>19 *</b>		<b>45</b>	<b>6</b>	<b>21,8</b>	
20		45	6	22,8	
21		45	6	23,8	
22		55	6	24,8	
23		55	8	26,3	
<b>24 *</b>		<b>55</b>	<b>8</b>	<b>27,3</b>	
25		55	8	28,3	
26		65	8	29,3	
27		65	8	30,3	+0,2 0
<b>28 *</b>		<b>65</b>	<b>8</b>	<b>31,3</b>	
30		65	8	33,3	
32		65	10	35,3	
33	G7	82	10	36,3	
34		82	10	37,3	
35		82	10	38,3	
<b>38 *</b>		<b>82</b>	<b>10</b>	<b>41,3</b>	

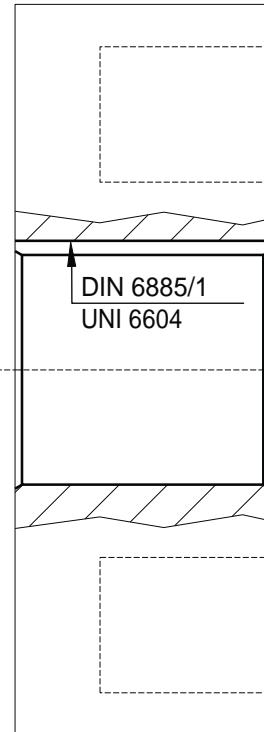
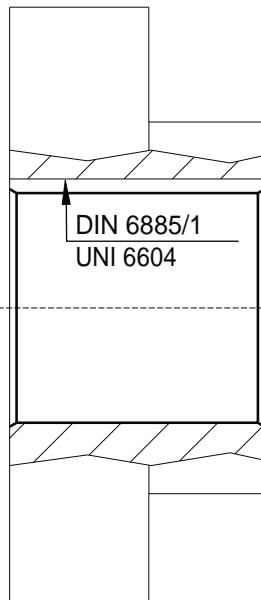
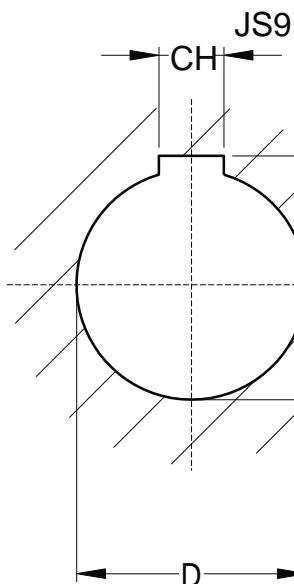
D	Toll.	PF	CH	HC	Toll.
40	G7	112	12	43,3	+0,2 0
<b>42 *</b>		<b>112</b>	<b>12</b>	<b>45,3</b>	
45		112	14	48,8	
<b>48 *</b>		<b>112</b>	<b>14</b>	<b>51,8</b>	
50		112	14	53,8	
<b>55 *</b>		<b>112</b>	<b>16</b>	<b>59,3</b>	
<b>60 *</b>		<b>142</b>	<b>18</b>	<b>64,4</b>	
<b>65 *</b>		<b>142</b>	<b>18</b>	<b>69,4</b>	
<b>70 *</b>		<b>142</b>	<b>20</b>	<b>74,9</b>	
<b>75 *</b>		<b>142</b>	<b>20</b>	<b>79,9</b>	
<b>80 *</b>		<b>172</b>	<b>22</b>	<b>85,4</b>	
<b>85 *</b>		<b>172</b>	<b>22</b>	<b>90,4</b>	
<b>90 *</b>		<b>172</b>	<b>25</b>	<b>95,4</b>	
95		172	25	100,4	
<b>100 *</b>		<b>212</b>	<b>28</b>	<b>106,4</b>	
105		212	28	111,4	
<b>110 *</b>		<b>212</b>	<b>28</b>	<b>116,4</b>	
115		212	32	122,4	
120		252	32	127,4	
<b>125 *</b>		<b>252</b>	<b>32</b>	<b>132,4</b>	
130		252	32	137,4	
<b>135 *</b>		<b>252</b>	<b>36</b>	<b>143,4</b>	
140		252	36	148,4	
160		252	40	169,4	
180		252	45	190,4	

\* STANDARDBORES FOR UNELMEC ELECTRIC MOTORS



**BRAKE DRUM**

**HUB**



D	Toll.	CH	Toll.	HC	Toll.
10		3		11,4	
11 *		4		12,8	
12		4		13,8	
13		5		15,3	
14 *		5		16,3	+ 0,1
15		5		17,3	0
16		5		18,3	
17		5		19,3	
18		6		20,8	
19 *		6		21,8	
20		6		22,8	
21		6		23,8	
22		6		24,8	
23		8		26,3	
24 *		8		27,3	
25		8		28,3	
26		8		29,3	
27		8		30,3	
28 *		8		31,3	+0,2
30		8		33,3	0
32		10		35,3	
33		10		36,3	
34		10		37,3	
35		10		38,3	
38 *		10		41,3	

D	Toll.	CH	Toll.	HC	Toll.
40		12		43,3	
42 *		12		45,3	
45		14		48,8	
48 *		14		51,8	
50		14		53,8	
55 *		16		59,3	
60 *		18		64,4	
65 *		18		69,4	
70 *		20		74,9	
75 *		20		79,9	
80 *		22		85,4	
85 *		22		90,4	
90 *		25		95,4	
95		25		100,4	
100 *		28		106,4	+0,2
105		28		111,4	0
110 *		28		116,4	
115		32		122,4	
120		32		127,4	
125 *		32		132,4	
130		32		137,4	
135 *		36		143,4	
140		36		148,4	
160		40		169,4	
180		45		190,4	

\* TYPICAL BORE SIZES

**OIL CHANGE:**

The oil in the coupling must be changed for the first time after 2000 working hours and subsequently after each 4000 working hours.

Proceed as follows to change the oil:

- 1) Rotate the coupling to bring the filling plug to its highest position.
- 2) Unscrew and remove the filling plug.
- 3) Determine the correct filling level by rotating the coupling until the filling hole corresponds to the current oil level.
- 4) Completely drain the oil in the coupling by bringing the filling hole to its lowest point.
- 5) Rotate the coupling again to bring the filling hole to correspond to the filling level determined at point 3.
- 6) Pour in the new oil until the oil filling level is reached

The quantity and type of oil recommended is listed in Table 1.

**VARIATION OF THE OIL LEVEL (Figures 1 and 2)**

According to the type of use and the service required by the coupling, sometimes the oil filling level must be modified by increasing or decreasing the oil quantity.

The following results are achieved by decreasing the oil quantity:

- Slower and more gradual startings (Fig. 3).
- Less absorption of starting current.
- Better protection to the transmission elements in the event of overload.
- Higher slip value at running.

**IMPORTANT:**

An excessive decrease in the oil quantity can cause the following problems:

- The impossibility of rapidly accelerating the machine due to insufficient torque.
- The overheating of the coupling, with consequent damage to the oil seals.

The following results are achieved by increasing the oil quantity:

- Faster startings (Fig. 3).
- Lower slip value at running.
- Higher absorption of starting current during acceleration phases.
- Greater strain on transmission elements.

**IMPORTANT:**

An excessive oil quantity can cause the following problems:

- The overloading of the electric motor.
- The overturning of the oil seal lip due to internal overpressure.
- The cracking of the coupling housing due to internal overpressure caused by the lack of internal space for sufficient oil expansion.

NOTE: the filling level at 45° must never be exceeded, and a level at 30° can be reached only in special cases and after previous WESTCAR consult.

Types of oil recommended for standard working temperature from -20°C. to +180°C.

- BP	ENERGOL HPL 22÷32
- CASTROL	HYSPIN AWS 22÷32
- ESSO	SPINESSO 22÷32
- MOBIL	VELOCITE OIL D
- OLEOTECNICA MOVO H	22÷32
- SHELL	TELLUS OIL 22÷32

Types of oil can work continually (longer 5 days) working temperature from -15°C. to +180°C.

- BP	ENERGOL HLP Z46
- CASTROL	HYSPIN AWS 46
- ESSO	NUTOH 46
- MOBIL	DTE 25
- OLEOTECNICA MOVO H	46
- SHELL	TELLUS 46

The coupling can be also supplied with fire-proof oil or for low temperature one (-40°C.). For more information, consult WESTCAR.

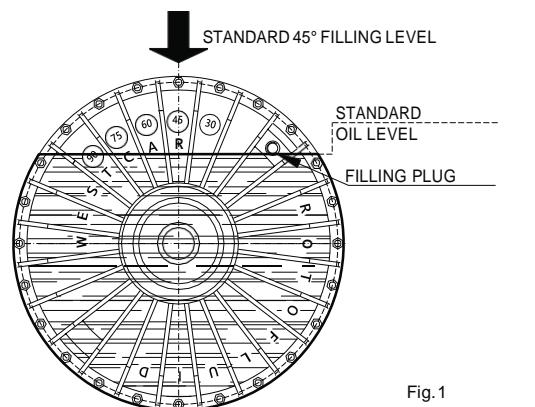


Fig. 1

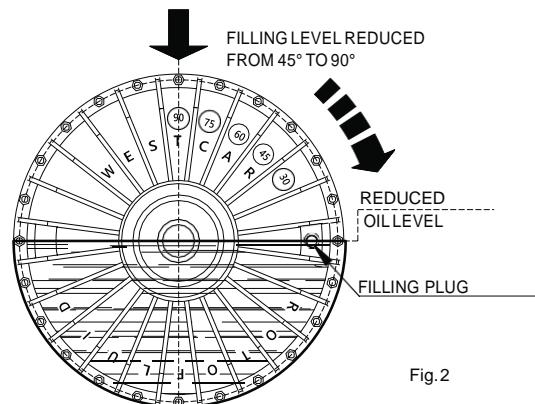


Fig. 2

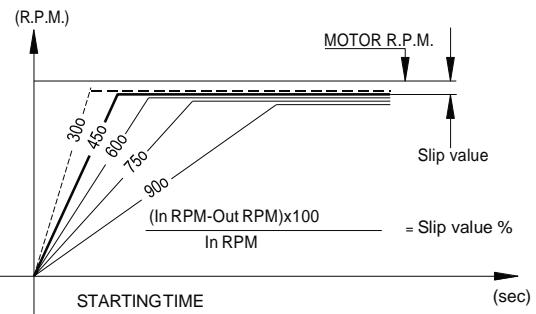


Fig. 3

Tab. 1

SIZE	OIL QUANTITIES CORRESPONDING TO DIFFERENT FILLING LEVELS									
	30°		45°		60°		75°		90°	
	Kg	Lt.	Kg	Lt.	Kg	Lt.	Kg	Lt.	Kg	Lt.
<b>10</b>	0,53	0,61	0,48	0,55	0,41	0,47	0,35	0,40	0,28	0,32
<b>20</b>	1,15	1,32	1,05	1,20	0,90	1,03	0,76	0,86	0,62	0,71
<b>30</b>	2,28	2,61	2,09	2,39	1,78	2,04	1,46	1,67	1,18	1,34
<b>30P</b>	3,88	4,43	3,55	4,05	3,02	3,46	2,48	2,83	1,98	2,27
<b>40P</b>	3,89	4,45	3,56	4,07	3,05	3,48	2,51	2,87	2,03	2,32
<b>50</b>	4,24	4,85	3,84	4,39	3,31	3,78	2,81	3,21	2,33	2,67
<b>55</b>	6,98	7,98	6,29	7,19	5,43	6,21	4,65	5,31	3,88	4,44
<b>60</b>	8,29	9,47	7,53	8,61	6,41	7,32	5,32	6,08	4,33	4,95
<b>65</b>	13,04	14,91	11,80	13,48	10,01	11,44	8,38	9,58	6,86	7,84
<b>70P</b>	16,83	19,23	15,42	17,62	13,18	15,07	10,8	12,34	8,68	9,92
<b>75P</b>	28,18	32,21	25,70	29,37	21,86	24,98	18,06	20,64	14,63	16,72
<b>80P</b>	34,03	38,89	31,09	35,53	26,63	30,43	22,03	25,18	17,92	20,48
<b>85P</b>	58,26	66,59	53,06	60,64	45,30	51,77	37,66	43,04	30,73	35,12
<b>90P</b>	86,83	99,23	80,43	91,92	69,76	79,73	56,31	64,35	44,68	51,06
<b>95P</b>	146,23	167,12	134,16	153,33	115,05	131,48	94,22	107,68	75,88	86,72
<b>1200</b>	199	226	176	200	156	177	132	150	110	125
<b>1200/2</b>	398	452	352	400	312	354	264	300	220	250



### OIL CHANGE:

The oil in the coupling must be changed for the first time after 2000 working hours and subsequently after each 4000 working hours.

To change the oil, proceed as follows:

- 1) Rotate the coupling to bring the filling plug to its highest position.
- 2) Unscrew and remove the filling plug.
- 3) Determine the correct filling level by rotating the coupling until the filling hole corresponds to the current oil level.
- 4) Completely drain the oil in the coupling by bringing the filling hole to its lowest point.
- 5) Rotate the coupling again to bring the filling hole to correspond to the filling level determined at point 3.
- 6) Pour in the new oil until the oil filling level is reached.

The quantity and type of oil recommended is listed in Table 1.

### VARIATION OF THE OIL LEVEL (Figures 1 and 2)

According to the type of use and the service required by the coupling, sometimes the oil filling level must be modified by increasing or decreasing the oil quantity.

The following results are achieved by decreasing the oil quantity:

- Slower and more gradual startings (Fig. 3).
- Less absorption of starting current.
- Better protection to the transmission elements in the event of overload.
- Higher slip value at running.

### IMPORTANT:

An excessive decrease in the oil quantity can cause the following problems:

- The impossibility of rapidly accelerating the machine due to insufficient torque.
- The overheating of the coupling, with consequent damage to the oil seals.

The following results are achieved by increasing the oil quantity:

- Faster startings (Fig. 3).
- Lower slip value at running.
- Higher absorption of starting current during acceleration phases.
- Greater strain on transmission elements.

### IMPORTANT:

An excessive oil quantity can cause the following problems:

- The overloading of the electric motor.
- The overturning of the oil seal lip due to internal overpressure.
- The cracking of the coupling housing due to internal overpressure caused by the lack of internal space for sufficient oil expansion.

NOTE: the filling level at 45° must never be exceeded, and a level at 30° can be reached only in special cases and after previous WESTCAR Consult.

Types of oil recommended for standard

working temperature from -20°C. to +180°C.

- BP	ENERGOL HPL 22-32
- CASTROL	HYSPIN AWS 22-32
- ESSO	SPINESSO 22-32
- MOBIL	VELOCITE OIL D
- OLEOTECNICA MOVO H	22-32
- SHELL	TELLUS OIL 22-32

Types of oil recommended for continuous work  
(over 5 days) temperature -15°C. to +180°C.

- BP	ENERGOL HLP Z46
- CASTROL	HYSPIN AWS 46
- ESSO	NUTOH 46
- MOBIL	DTE 25
- OLEOTECNICA MOVO H	46
- SHELL	TELLUS 46

The coupling can be also supplied with fire-proof oil or for low-temperature one (-40°C.). For more information, consult WESTCAR.

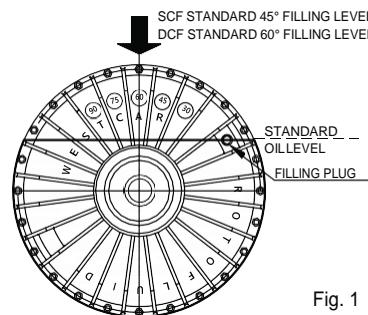


Fig. 1

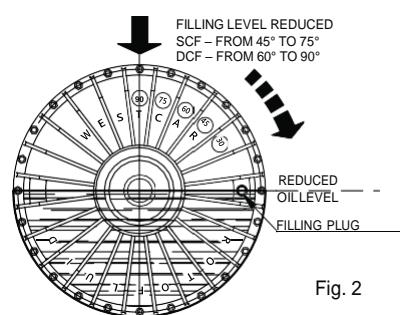
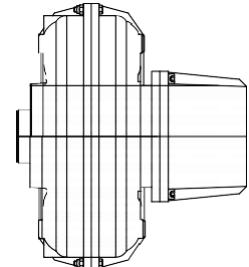


Fig. 2

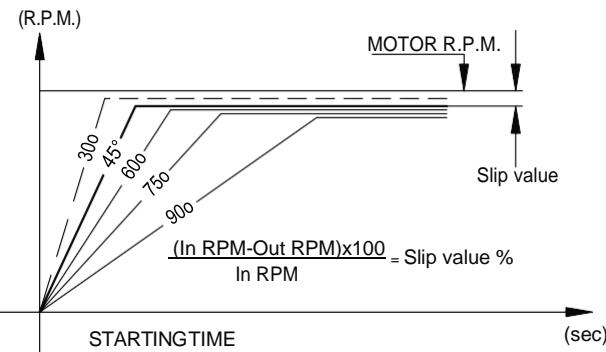
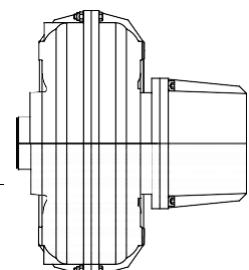


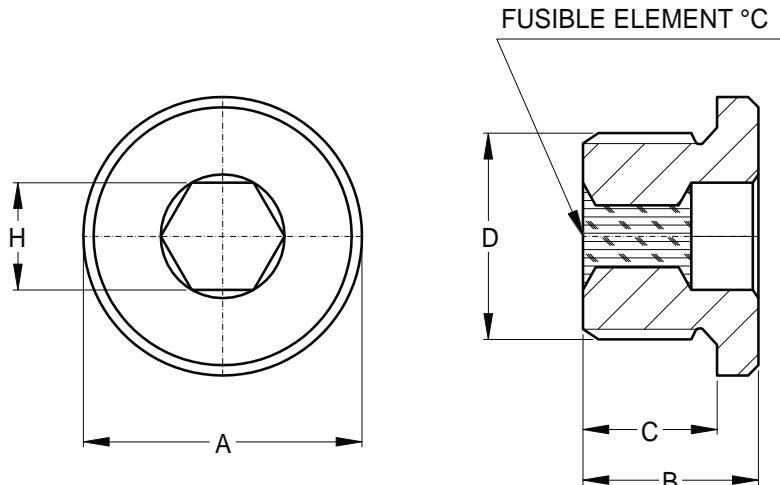
Fig. 3

Tab. 1

SIZE	OIL QUANTITIES CORRESPONDING TO DIFFERENT FILLING LEVELS (Kg. = Litri x 0,875)							
	45° (lt.)		60° (lt.)		75° (lt.)		90° (lt.)	
	SCF	DCF	SCF	DCF	SCF	DCF	SCF	DCF
20	-	-	-	-	-	-	-	-
30	2,65	2,94	2,30	2,58	1,86	2,07	1,47	1,61
30P	4,32	4,62	3,72	4,02	3,04	3,26	2,39	2,53
40P	4,44	5,34	3,84	4,70	3,14	3,78	2,45	2,93
50	5,27	6,36	4,62	5,67	3,83	4,59	3,07	3,56
55	8,06	9,12	7,04	8,05	5,93	6,67	4,84	5,33
60	10,01	11,63	8,71	10,35	7,16	8,41	5,58	6,29
65	14,86	16,42	12,80	14,34	10,65	11,85	8,47	9,20
70P	20,09	23,83	17,51	21,20	14,34	17,32	11,07	12,82
75P	32,96	36,68	27,39	31,02	22,61	25,55	17,87	19,63
80P	42,50	48,45	37,38	43,29	30,58	35,27	23,76	26,57
85P	67,55	73,49	59,54	64,49	48,40	53,08	38,41	41,22
90P	104,80	118,72	91,70	104,61	73,72	83,45	57,25	63,94
95P	178,18	192,94	154,89	168,50	125,43	135,76	98,63	105,81



In case of overheating, the fusible plug allows the oil out and thereby disconnects the power transmitted to the output shaft.  
 Fusible plugs are available for four different melting temperatures: 90°C, 120°C, 145°C and 180°C.  
 The standard Couplings are supplied with fusible plug at 145° C.

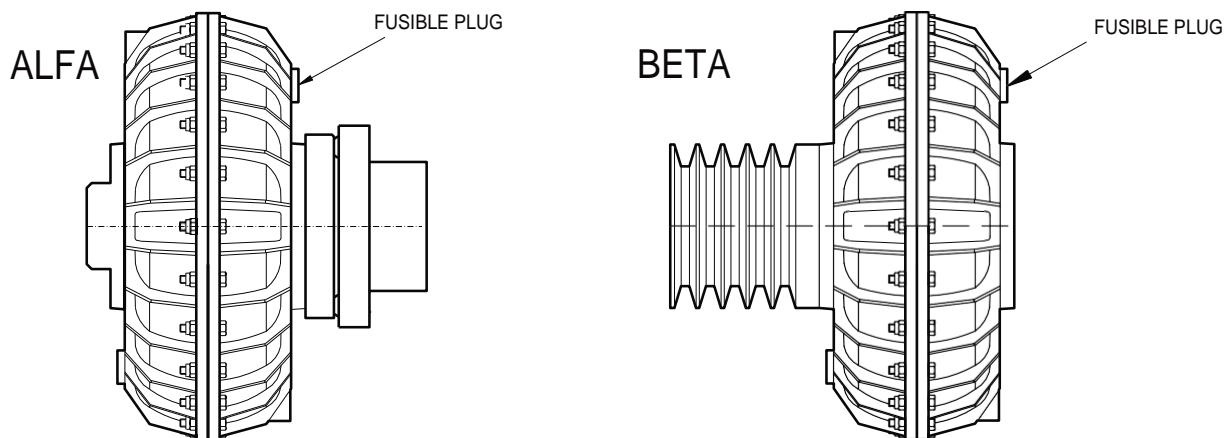


ROTOFLUID SIZE	PLUG DIMENSIONS					FUSIBLE ELEMENT TEMPERATURE AND COLOUR				WEIGHT Kg
	A	B	C	D	H	BLEU	WHITE	RED	GREEN	
10										
20										
30										
30P										
40P	18	15	11	1/4 GAS	6	90°C	120°C	145°C	180°C	0,016
50										
55										
60										
65										
70P	26	19	15	1/2 GAS	10	90°C	120°C	145°C	180°C	0,048
75P										
80P										
85P										
90P	32	20	16	3/4 GAS	12	90°C	120°C	145°C	180°C	0,075
95P										

When ordering specify: dimension "D", fusible plug melting temperature and colour.

EX: Fusible plug \_ GAS 145° red.

### FUSIBLE PLUG STANDARD POSITION





**WESTCAR**  
MILANO - ITALY

## THERMAL TRIP PLUG

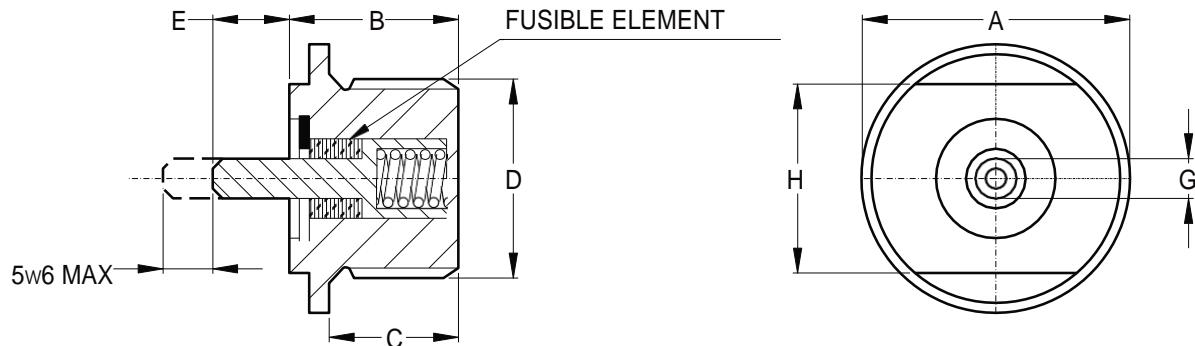
Sheet  
80-003A EN

Date  
05-2006

In case of coupling overheating with a thermal trip plug, a pin is released and trips a limit switch which activates an alarm or shuts off the electric motor. This method avoids the oil leakage from the coupling.

Fusible trip plugs are available for four different temperatures: 90°C, 120°C, 145°C and 180°C.

In case of stall conditions, motor running and machine locked, the coupling housing must be driving to guarantee the signal survey.

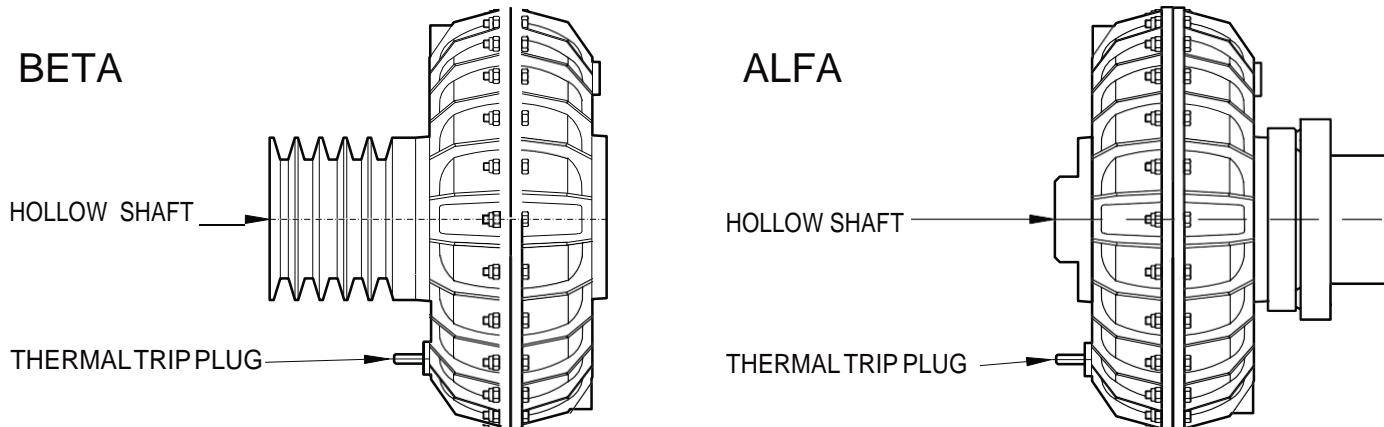


ROTOFLUID SIZE	PLUG DIMENSIONS							FUSIBLE ELEMENT TEMPERATURE AND COLOUR				Weight Kg
	A	B	C	D	E	G	H	BLEU	WHITE	RED	GREEN	
10												
20												
30												
30P												
40P												
50	18	19	16	1/4 GAS	8	4	14	90°C	120°C	145°C	180°C	0,016
55												
60												
65												
70P	26	19	15	1/2 GAS	8	4	19	90°C	120°C	145°C	180°C	0,048
75P												
80P												
85P												
90P	32	20	16	3/4 GAS	8	4	22	90°C	120°C	145°C	180°C	0,075
95P												

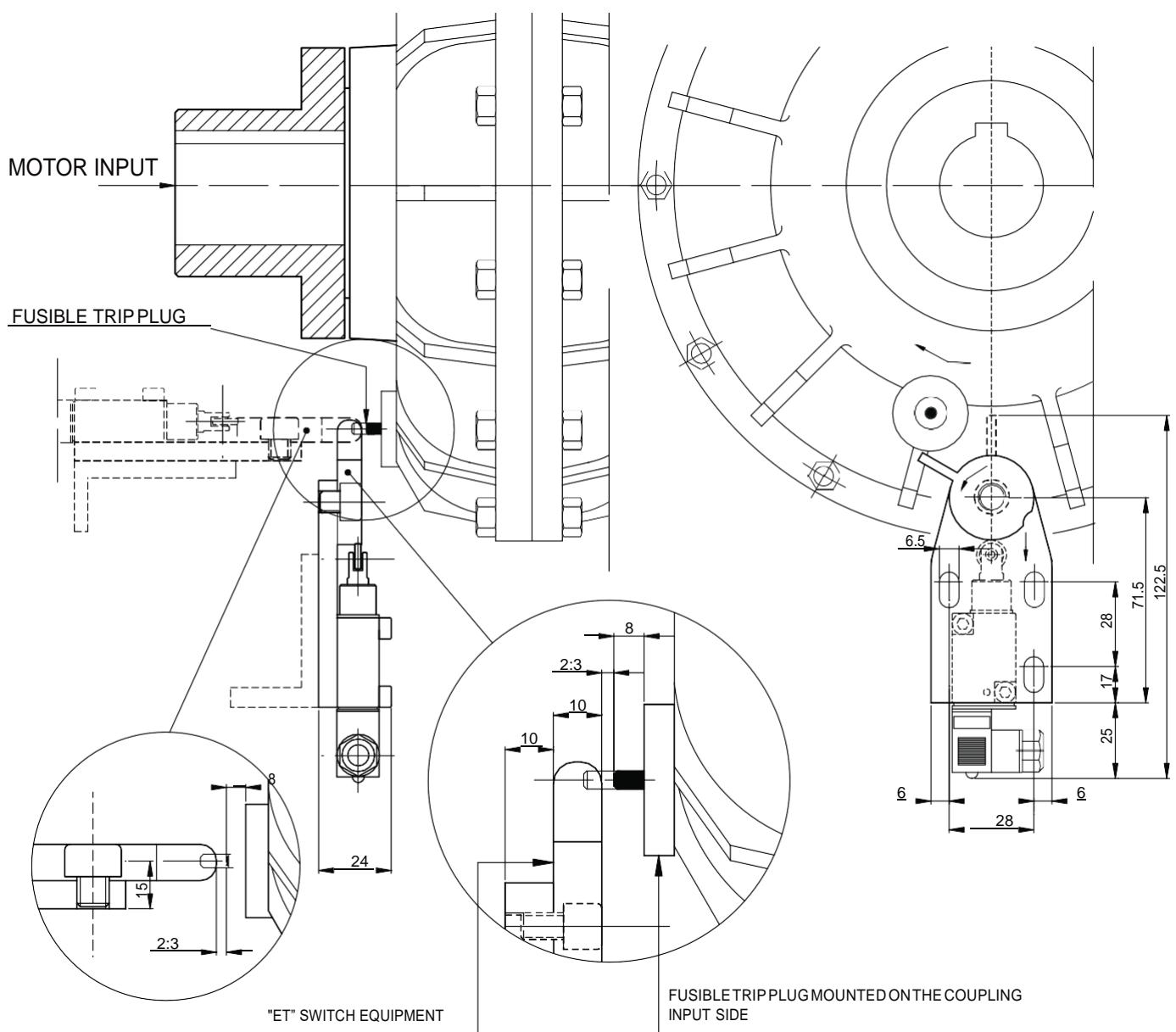
When ordering specify: dimension "D", safety plug melting temperature and colour.

EX: Fusible trip plug 1/4 GAS 145° red.

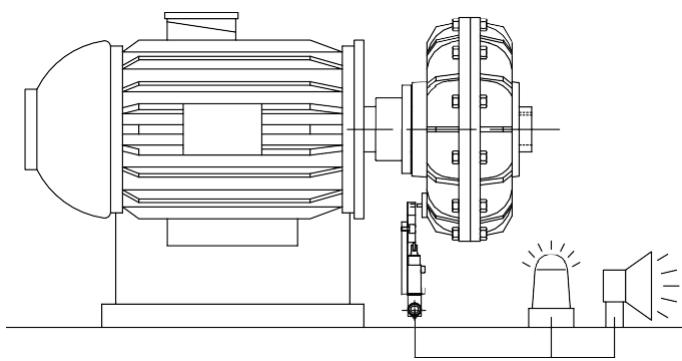
### THERMAL TRIP PLUG STANDARD POSITION



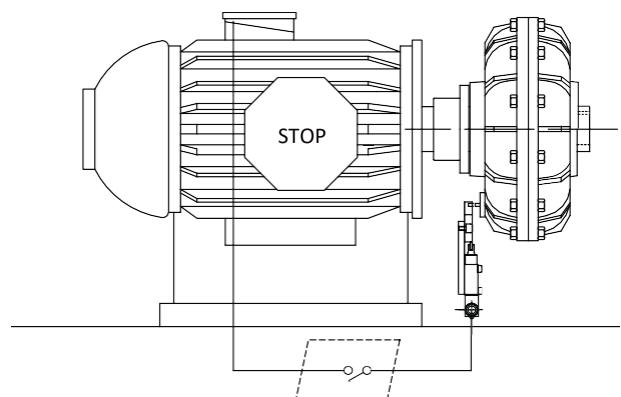
The thermal trip plug is normally mounted by the hollow shaft side but in case of need can be located in the opposite side too.



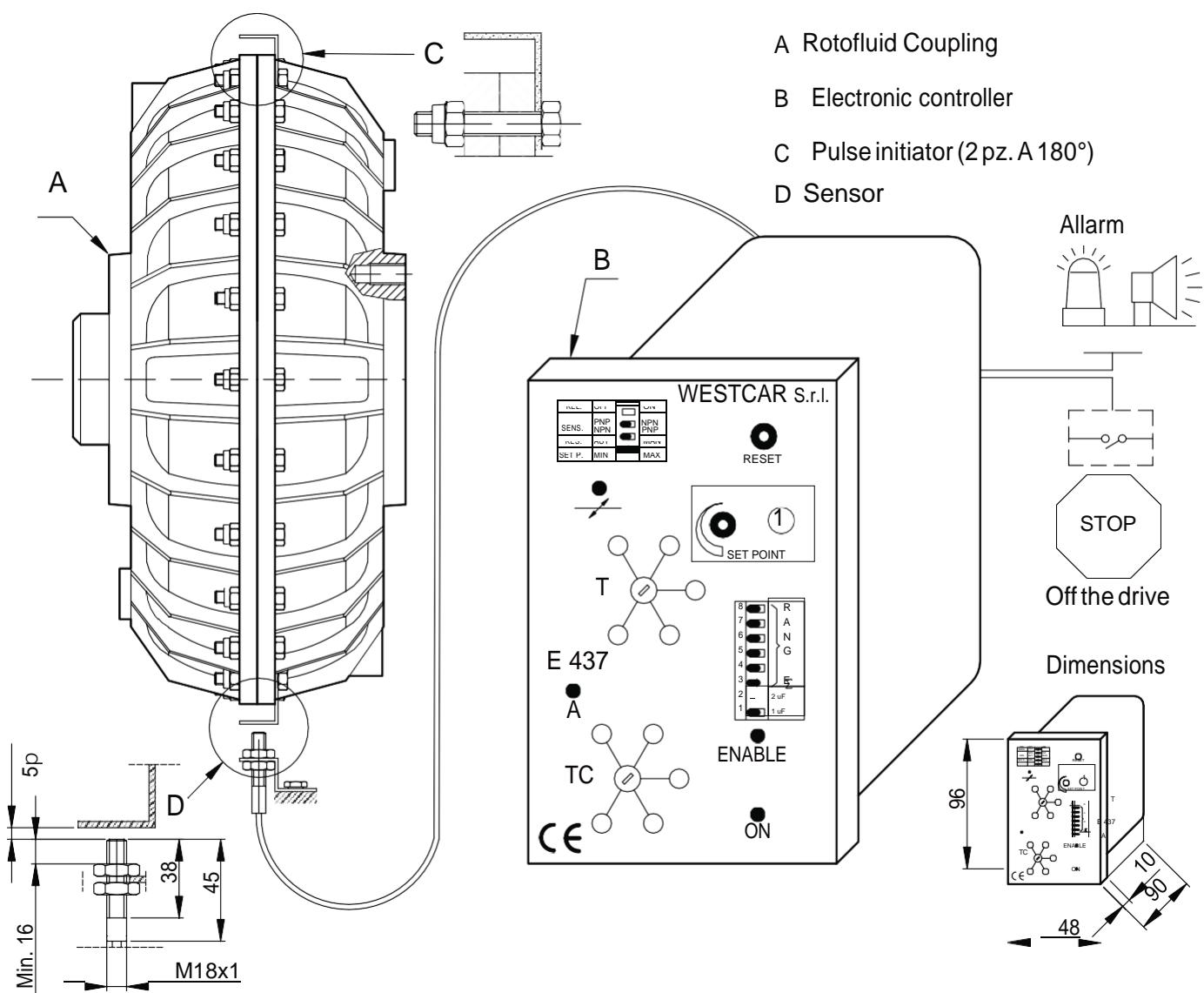
"ET" CONNECTED TO A LIGHT OR SOUND SIGNAL



"ET" CONNECTED TO SWITCH OFF THE DRIVE



The "ET" safety device consists of a microswitch and a cam mounted on a base and operates in combination with a thermal trip plug fitted on the fluid coupling housing. In case of coupling overheating due to overloads and machine jams or reduced oil filling, the oil temperature can exceed the melting temperature set for the thermal trip plug. The pin then extends and makes contact with the cam of the microswitch sounding an alarm or shutting down the drive.



#### "SCD" DEVICE

The "SCD" Device can be fitted to guarantee the safety of coupling and machine and the product quality.

The "SCD" device is an electronic controller which receives a train of pulses by a sensor. The pulses are converted into a voltage proportional to the pulses frequency. This voltage is compared with a variable reference voltage (SET POINT). The internal relay changes over when the input speed is faster or lower than the fixed (SET POINT). It is employed to control the shaft revolution speed. In case of speed decrease, the device gives a signal to the operator.

#### OPERATION

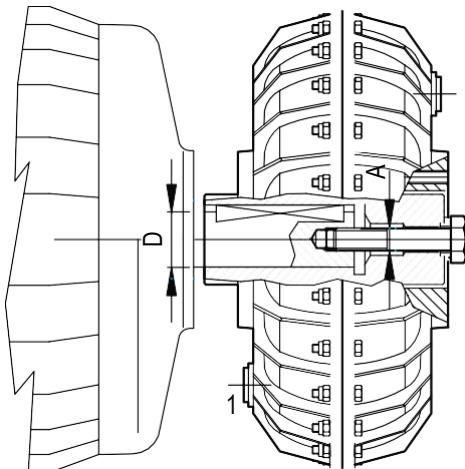
As the transmitted torque is increased, this gives rise to an increased slip of the fluid coupling. Possible overload can be detected by measuring the resulting speed reduction in the driven half coupling by means of overload "SCD". This with change-over contact at the output may either emit an alarm signal or switch off the main motor. A delaying action (max 120 sec.) prevent the unnecessary triggering of the relay, when the motor is started. It only occurs once when the operating voltage is applied. False alarms are prevented arising from very short torque fluctuations, by the introduction of a preset time lag (max. 30 sec.).

#### SUPPLY

50÷60 Hz - Tolerance: -10%÷+6% - 24Vac STANDARD (115Vac or 230 Vac on request)- How to order: SCD 24 Vac



**TAPPED HOLE DIMENSIONS FOR STANDARD ELECTRIC MOTOR SHAFTS**



Dimensions "A"	MOTOR SHAFT DIAMETERS "D"																	
	$\varnothing 14$	$\varnothing 19$	$\varnothing 24$	$\varnothing 28$	$\varnothing 38$	$\varnothing 42$	$\varnothing 48$	$\varnothing 55$	$\varnothing 60$	$\varnothing 65$	$\varnothing 70$	$\varnothing 75$	$\varnothing 80$	$\varnothing 90$	$\varnothing 100$	$\varnothing 110$	$\varnothing 125$	$\varnothing 140$
M 5	●																	
M 6		●																
M 8			●															
M 10				●														
M 12					●													
M 16						●												
M 20							●											
M 24								●										
M 36									●									

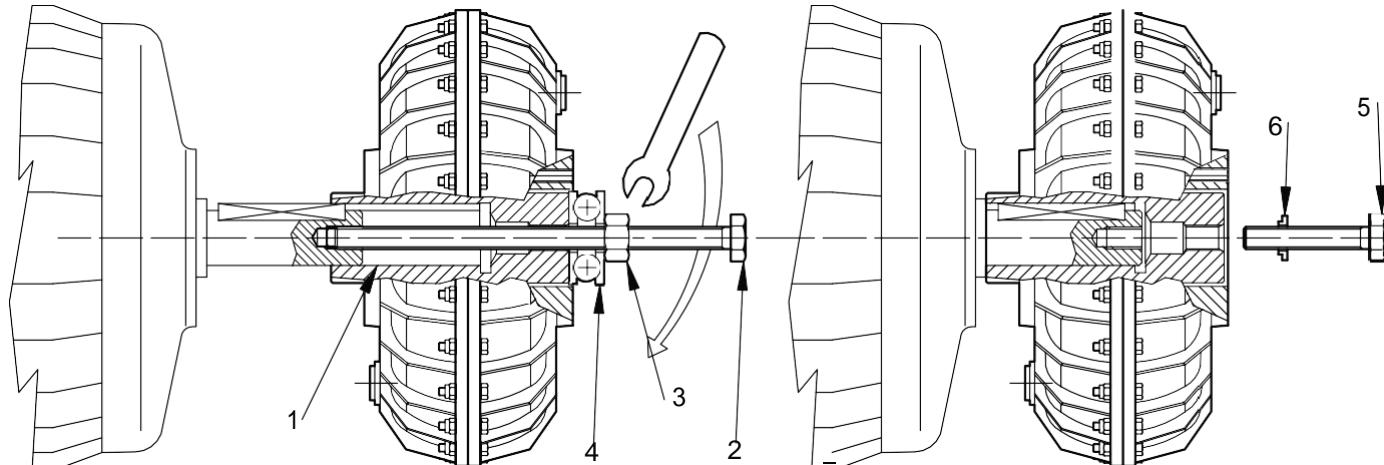


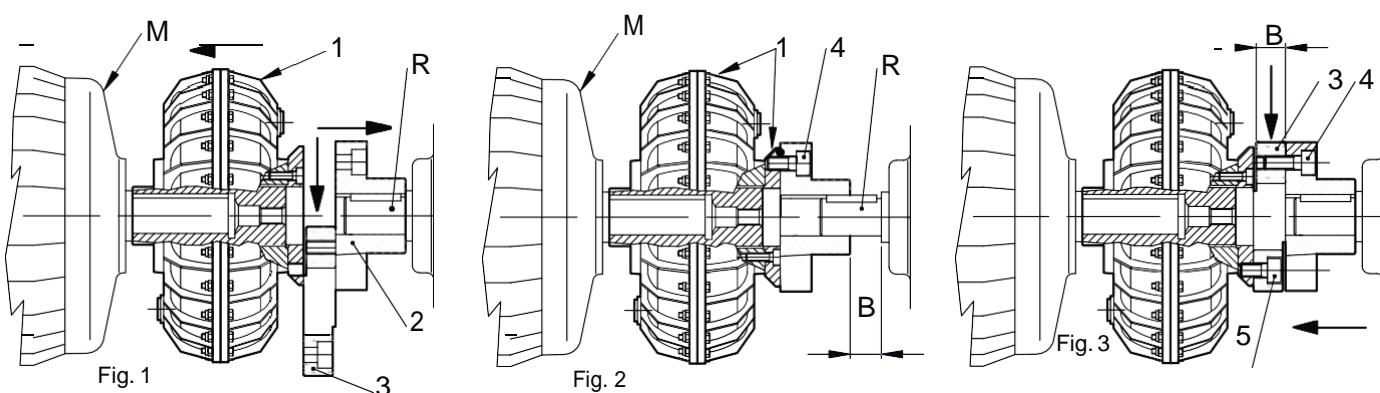
Fig. 1

Fig. 2

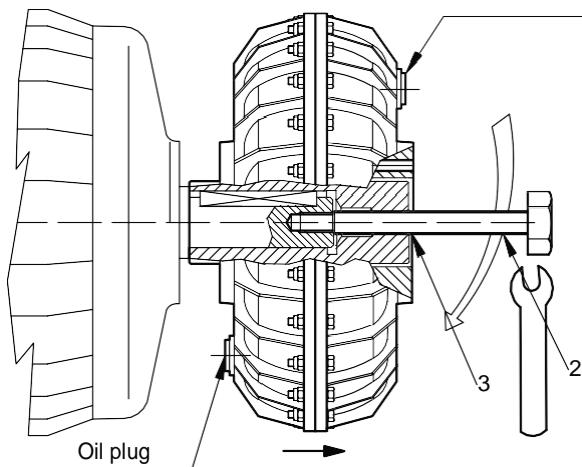
For the mounting of the ROTOFUID coupling to the motor it is required to operate on the shaft (1) of the coupling to avoid axial stress on the bearings. It is recommended to fix on the motor shaft a screw stay (2) on which a nut (3) is tightened possibly resting to a thrust bearing (4) (see Fig.1).

It is indispensable to lubricate the motor shaft before mounting the coupling.

Check that the coupling shaft rest on the motor shaft shoulder and lock by means of screw (5), spacer (6) (see Fig.2)



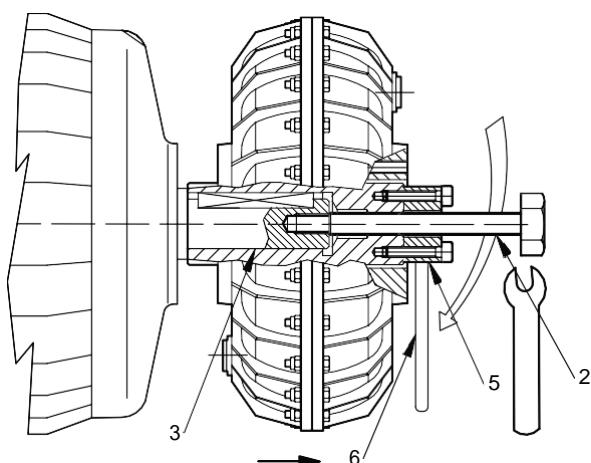
- 1) Demount the ROTOFLEXI rubber element (3) as shown at Fig.1
- 2) Fit the ROTOFUID hydraulic coupling (1) on the motor shaft (M), fit the ROTOFLEXI hub (2) on the driven shaft (R). Assure that the driven shaft is coaxial with the hydraulic coupling (1). The concentricity is assured when it is possible to fix the hub (2) to the hydraulic coupling flange (1) by means of the screw (4), as shown at Fig.2. It is now possible to fix definitely the motor and the driven machine checking that between the hub (2) and the driven shaft shoulder there must be a gap (B) equal to the thickness of the rubber element (3).
- 3) Remove the screws (4), move the hub (2), place the rubber element (3), lock the screws (4) and (5) as shown at Fig.3.



- To pull off the ROTOFLUID coupling proceed as follows:
- Remove the screw plug or the tightening screw from the shaft end.
- Tight the screw puller (2) in the shaft threaded hole checking that the motor shaft is locked.

ROTOFLUID COUPLING		
SYSTEM	SIZE	TYPE
"VE"		K
VE M14	20	K1
VE M16	20	K3
VE M20	20	-
	30	
	30P	
VE M24	40P	All versions
	50	
	55	Up to Ø 65
VE M30	55	For Ø75 Ø 80
	60	
	65	
VE M36	70P	All versions
	75P	
	80P	
	85P	
	90P	
	95P	

#### PULLING OFF SYSTEM "SE" TYPE



ROTOFLUID COUPLING					
SYSTEM "SE"	SIZR	TYPE			
		K	Z	J	H
SE M20	20	-	-	J 103	H 85 X 103
SE M24/35	30				
	30P				
SE M24/40	40P				
	50				
	55				Up to Ø 65
SE M30	55				For Ø75 Ø 80
	60				
	65				
SE M36	70P				All versions
	75P				
	80P				
	85P				
	90P				
	95P				

- To pull off the ROTOFLUID coupling proceed as follows:
- Remove the screw plug or the tightening screw from the shaft end.
- Lock the bush (5) to the shaft end (3) with 2 securing screws.
- Tight the screw puller (2) in the shaft threaded hole keeping locked the rod (6) to avoid the motor shaft rotation.

#### PULLING OFF SYSTEM "SE" TYPE

The figure 1 shows ROTOFLUID® coupled in line with ROTOFLEXI®. This kind of assembly permits the great advantage to replace the rubber elements without moving the transmission components from their position (Fig.2)

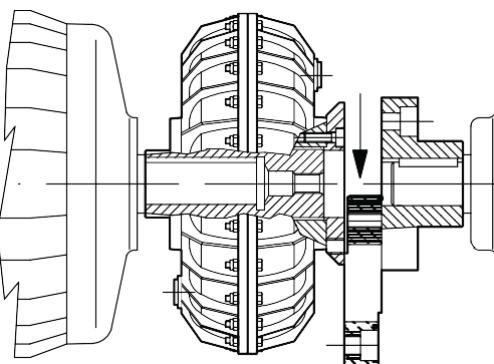
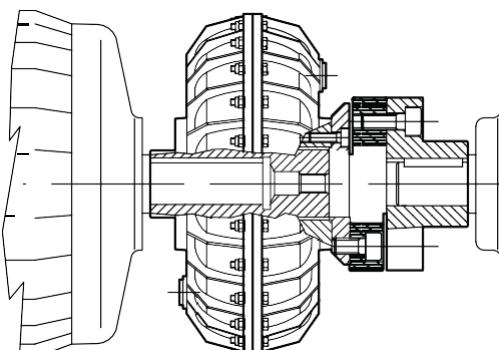


Fig. 1

Fig. 2

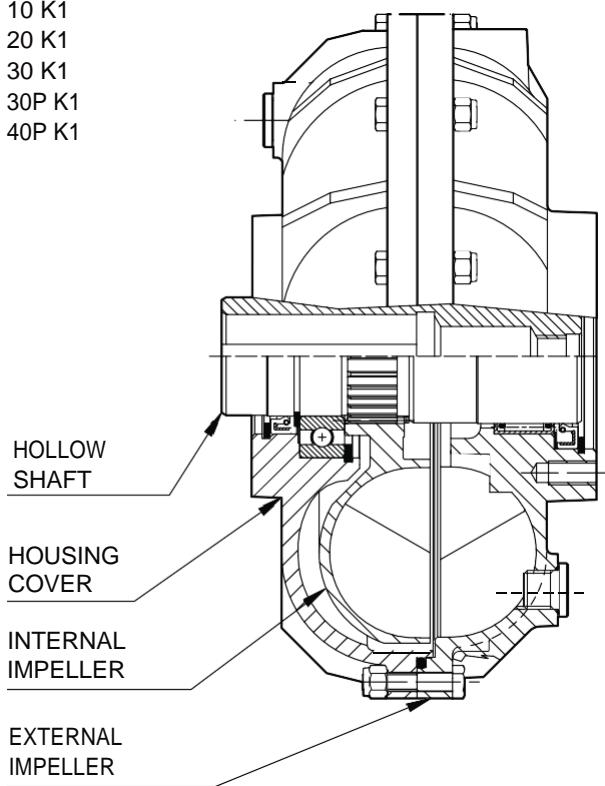


**ROUND SINGLE IMPELLER COUPLINGS**

**COUPLING ALFA**

10 K1  
20 K1  
30 K1  
30P K1  
40P K1

Fig. 1



**COUPLING ALFA**

10 K3  
20 K3  
30 K3  
30P K3  
40P K2

Fig. 2

**COUPLING BETA**

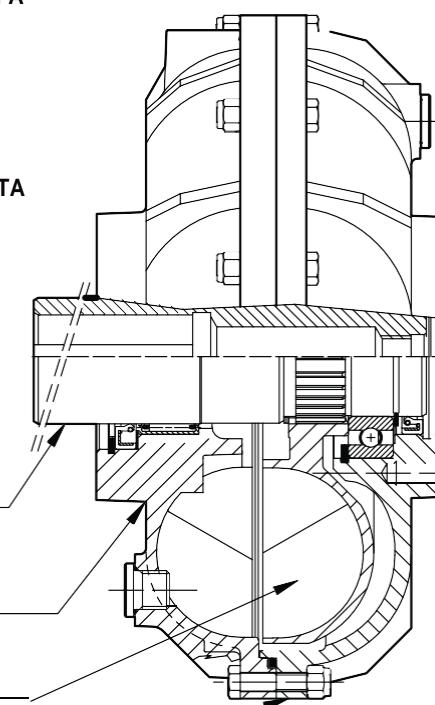
10 Z  
20 Z  
30 Z-X-J-H  
30P Z-X-J-H  
40P Z-X-J-H

HOLLOW SHAFT

EXTERNAL IMPELLER

INTERNAL IMPELLER

HOUSING COVER



**SINGLE IMPELLER COUPLINGS**

**COUPLING ALFA**

50 K2  
60 K2  
70P K2  
80P K2  
90P K2

**COUPLING BETA**

50 Z-X-J-H  
60 Z-X-J-H  
70P Z-X-J-H  
80P Z-X-J-H

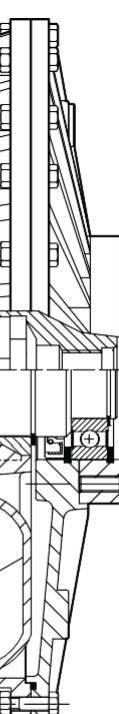
HOLLOW SHAFT

HOUSING EXTERNAL  
IMPELLER - F

INTERNAL  
IMPELLER

HOUSING  
COVER

Fig. 3



**TWIN IMPELLER COUPLINGS**

**COUPLING ALFA**

55 K2  
65 K2  
75P K2  
85P K2  
95P K2

**COUPLING BETA**

55 Z-X-J-H  
65 Z-X-J-H  
75P Z-X-J-H  
85P Z-X-J-H

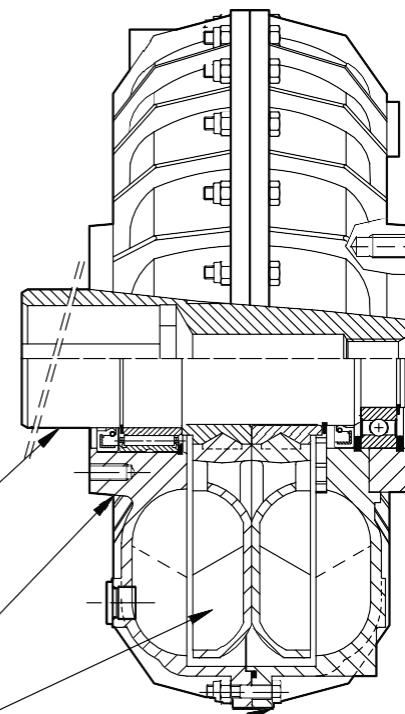
HOLLOW SHAFT

HOUSING EXTERNAL  
IMPELLER - F

INTERNAL  
IMPELLER

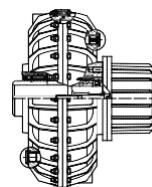
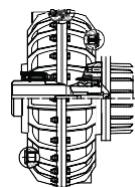
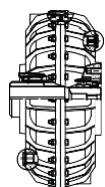
HOUSING  
EXTERNAL  
IMPELLER - M

Fig. 4



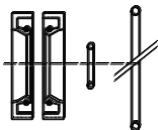


ROTOFLUID COUPLING

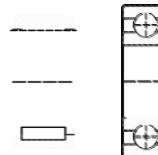


**SPARE PARTS FOR ALFA AND BETA COUPLINGS**

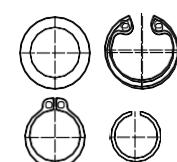
1 OILSEALS KIT



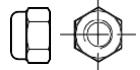
2 BEARINGS KIT



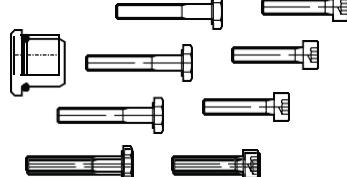
3 SEEGER RINGS KIT



4 NUTS KIT



5 OIL PLUG AND SCREWS KIT



6 FUSIBLE PLUG (1)



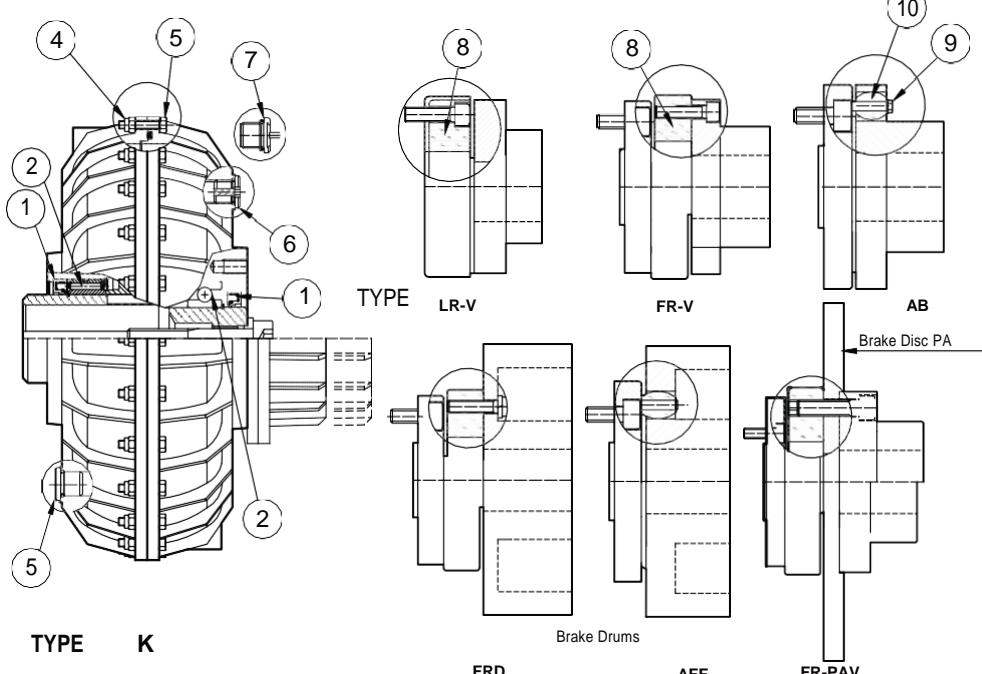
(1) QUOTE TEMPERATURE  
90 °C - 120 °C - 145 °C - 180 °C

7 THERMAL TRIP PLUG (1)

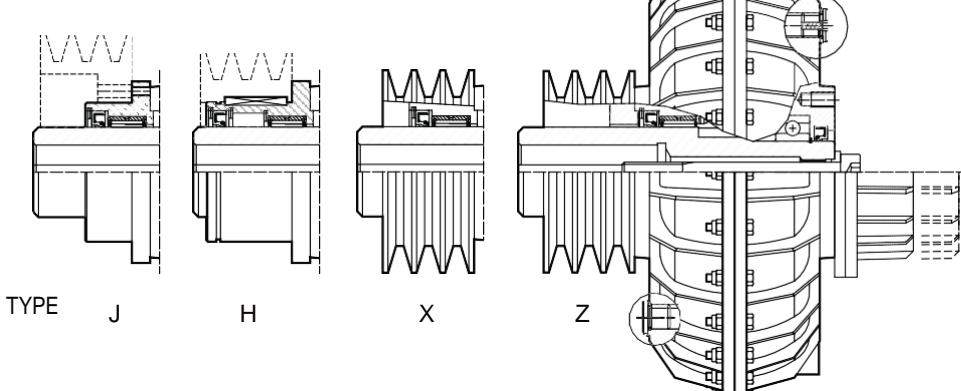


(1) QUOTE TEMPERATURE  
90 °C - 120 °C - 145 °C - 180 °C

**ALFA COUPLING AND FLEXIBLE COUPLING**

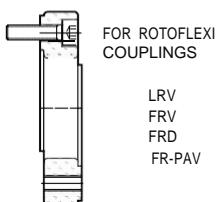


**BETA COUPLING**



**SPARE PARTS FOR FLEXIBLE COUPLING**

8 FLEXIBLE COUPLING WITH SCREW



9 PINS WITH RUBBER

FOR ROTOPIN COUPLINGS  
AB  
AFF



10 RUBBER BUFFER

FOR ROTOPIN COUPLINGS  
AB  
AFF



For transmission oil characteristic see installation and maintenance manual.  
To order spare parts indicate coupling type and identification code or see pag.3 of instruction manual.



THE OPTIONAL FUNCTIONS  
WILL MODIFY THE BASIC  
CODE OF THE  
STANDARD COUPLING

HORIZONTAL SHAFT  
MOUNTING

VERTICAL SHAFT MOUNTING  
MOTOR SHAFT UPWARDS

VERTICAL SHAFT MOUNTING  
MOTOR SHAFT DOWNWARDS

OIL FILLING PLUG PARALLEL  
TO THE COUPLING SHAFT

OIL FILLING PLUG RADIAL  
TO THE COUPLING SHAFT

**NBR** OIL SEALS FOR MAX. 120°C  
(WITHOUT STRENGTHENING RINGS)

**VITON** OIL SEALS FOR  
MAX 200°C

STRENGTHENING AND PROTECTING  
RINGS FOR OIL SEALS

OIL FOR TEMPERATURES FROM  
-20°C TO +180°C.  
**NONFLAMMABLE OIL (I)**  
OIL FOR TEMPERATURES FROM  
-40°C TO +160°C (B)

BEARINGS LUBRICATION WITH  
TRANSMISSION OIL

FORCED BEARINGS LUBRICATION  
WITH GREASE/OIL

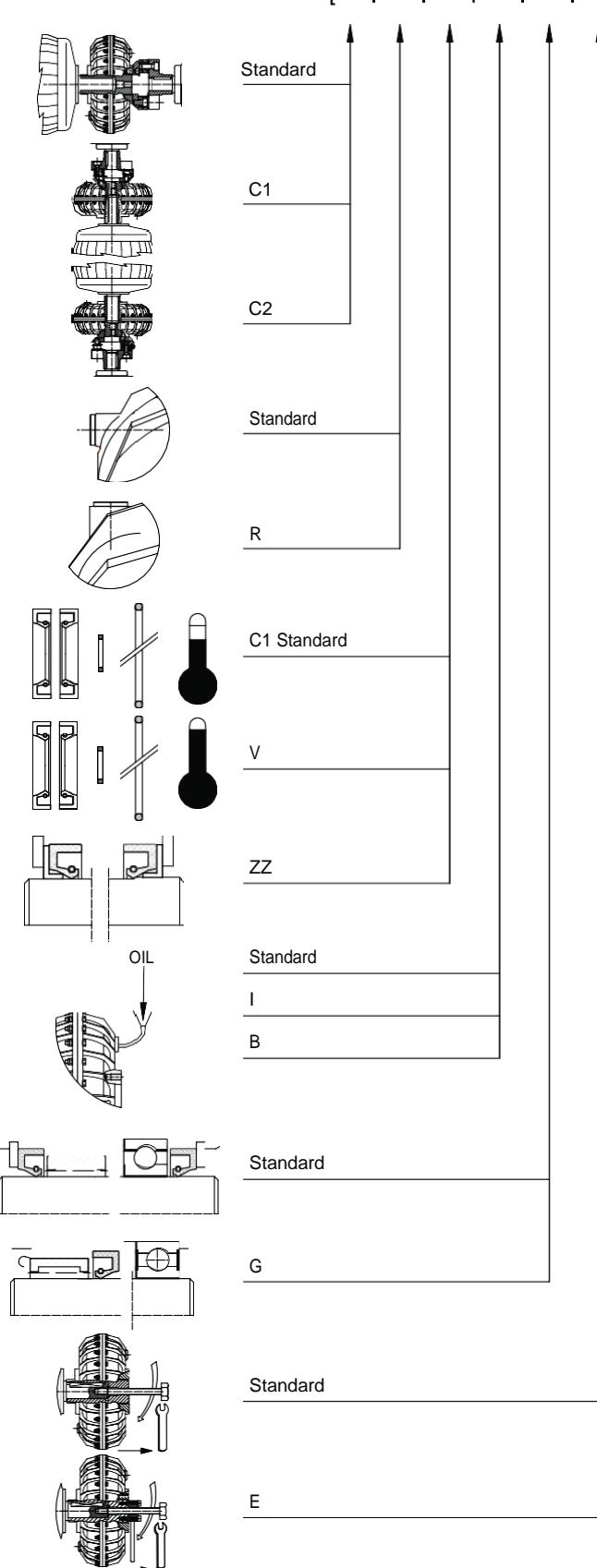
COUPLING ARRANGED FOR  
DISASSEMBLING WITH EXTRACTION  
SCREW

COUPLING ARRANGED FOR  
DISASSEMBLING WITH  
"S.E." SYSTEM (E)

## ROTOFLUID COUPLING

SIZE	VERSION	HOLE
		BORE D

## OPTIONAL FUNCTIONS





## APPLICATION REQUIREMENTS

Sheet  
10-059A EN  

---

Date  
05-2006

CUSTOMER NAME .....  
APPLICANT .....  
ADDRESS .....  
PHONE No. ..... FAX ..... E-MAIL .....

## MOTOR DATA

Electric motor size ..... kW ..... RPM .....  
Shaft diameter mm ..... Length mm ..... Key .....

Diesel engine type ..... kW ..... RPM .....  
Flywheel dimensions (SAE) .....  
Housing dimensions (SAE) .....

## MACHINE DATA

Machinetype .....  
Applicationtype                    in line (pag.11)  
                                      with pulley (pag.29)

Driven shaft diameter mm ..... Length mm.....  
 Pulley: Pitch diameter mm ..... Grooves section and number .....  
 Mounting:  horizontal  vertical  motor shaft up wards  
 motor shaft down wards

#### **FURTHER DETAILS**

Required power when running kW .....

Starts at full load:  yes  no

## Start-Stop Cycle

## Reversal Cycle

## Overload Cycle .....

Load inertia ( $\text{kgm}^2$ ) .....

Load speed RPM .....

Required acceleration time: Full load .....

Empty .....

Room temperature °C .....

## **Environmental conditions .....**

## Specify eventual required options

Please enclose application description and sketch



## FIELDS OF APPLICATION

**Building-Construction-Surface Mining-Bricks**

- Tower cranes
- Bridge cranes
- Belt conveyors
- Armored chain conveyors
- Screw conveyors
- Slat conveyors
- Bucket wheel excavators
- Bucket elevators
- Concrete mixers
- Rotating screens
- Rolling mills
- Brick moulders
- Power trowels
- Stone crushers
- Centrifuge for concrete piles
- Hammer and barrel mills

**Textile**

- Drum tumblers
- Centrifuges
- Industrial washing machines
- Driers
- Carding machines
- Spinning machines
- Combing machines
- Raising machines

**Chemical – Foodstuff**

- Centrifuges
- Centrifugal separators
- Decanters
- Rotating filters
- Mixers
- Stirrers
- Soap cutters
- Bottling plants
- Disc driers
- Waste slaughterhouses braker

**Mechanical Engineering**

- Twistingmachines for rope and wire
- Rod iron straighteners
- Presses
- Profiling machines
- Drawbenches
- Cutters

**Automotive Industry**

- Balancing machines
- Tow conveyors
- Overhead chain conveyors
- Gates open/closing drive
- Chain conveyors
- Car parking elevators

**Paper Processing**

- Winders
- Pulpers
- Cardboard making machinery
- Mixers

**Timber Processing**

- Drum barkers
- Hardboard presses
- Shredders
- Playwood presses

**Plastic and Rubber**

- Crushers
- Screw extruders
- Calenders
- Rolling presses
- Mixers
- Muddlers

**Cement Mill**

- Rotating kilns
- Belt conveyors
- Bucket elevators
- Fan blowers

**Marble**

- Gantry cranes
- Multi-blade frames
- Diamond wire saw

**Ceramics**

- Continuos and intermittent ball mills
- Mixers
- Presses

**The Ecology**

- Blenders
- Sludge purification plant

**Others**

- Winches
- Windlasses
- Centrifugal and alternative compressors
- Suction and centrifugal fans
- Centrifugal pumps
- Fire pumps
- Elevators
- Cable cars
- Amusements park rides
- Haulage wagons in steelworks and mines
- Stack-up coating plants
- Sprayers
- Refineries
- Ski lift
- Sand mixers

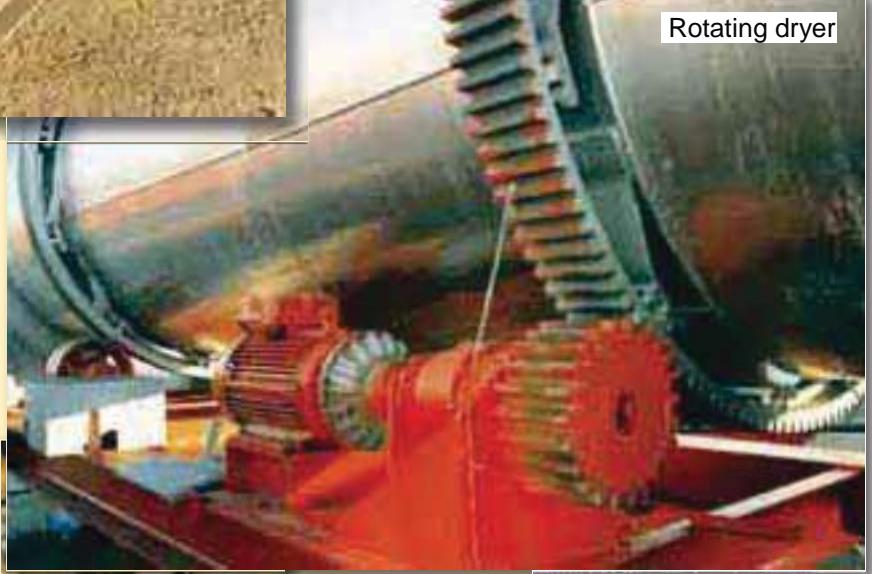
# APPLICATIONS



Elevator winch



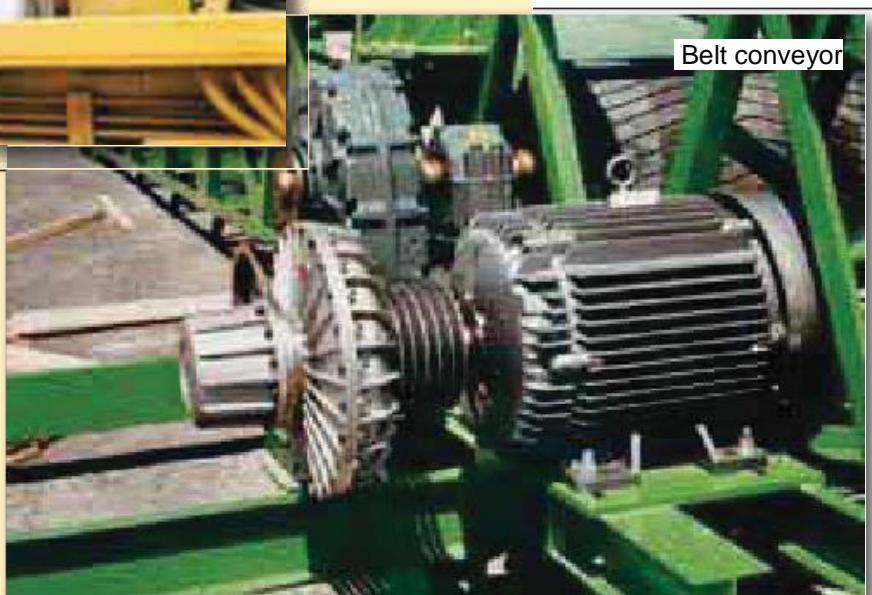
Rotating dryer

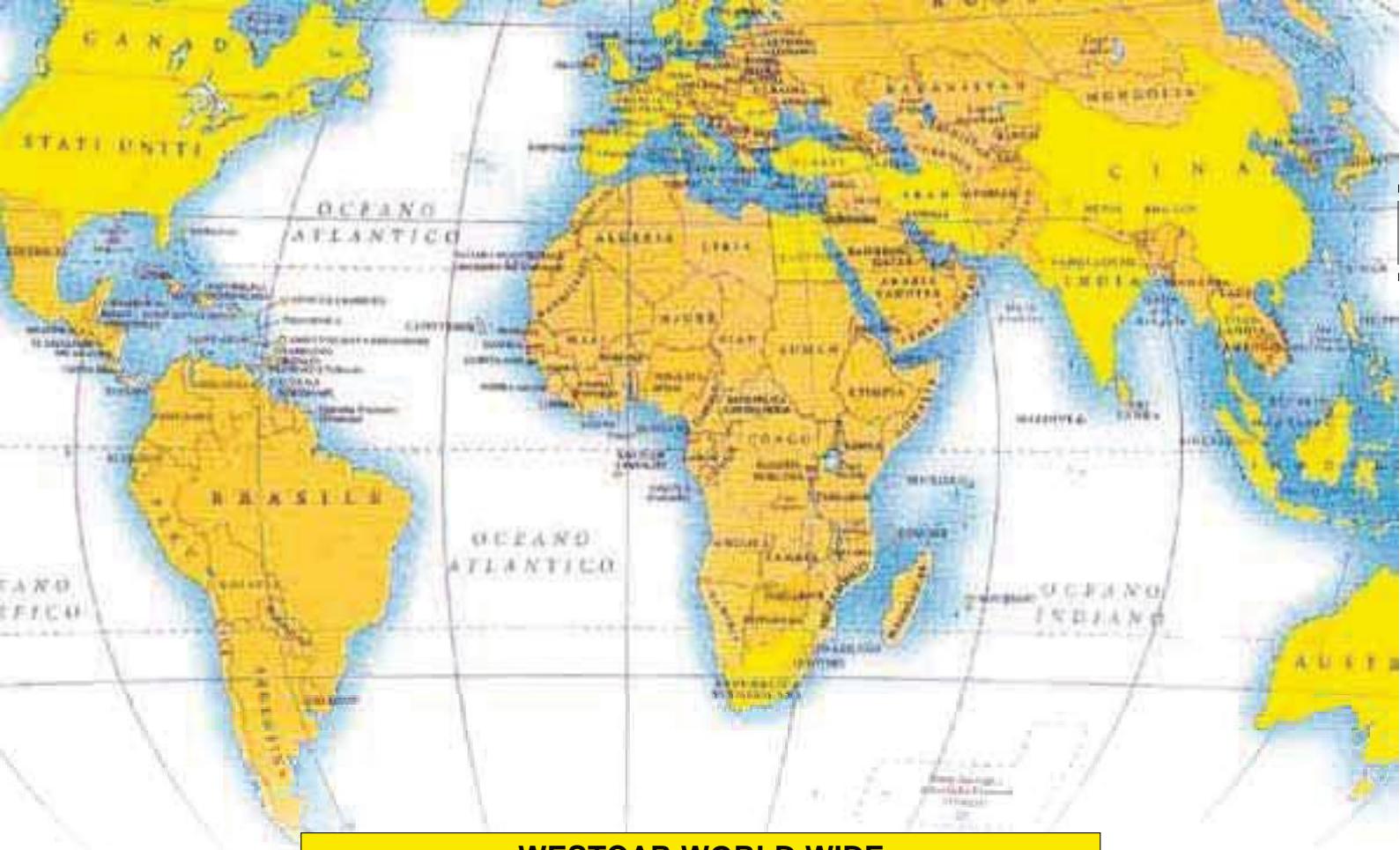


Shredder



Belt conveyor





### WESTCAR WORLD WIDE

Australia	Great Britain	Romania
Austria	Holland	Singapore
Belgium	Hungary	Slovenija
Canada	India	South Africa
Ceka Republik	Indonesia	Spain
China - Shanghai	Iran	Sweden
Cyprus	Israel	Switzerland
Denmark	Korea	Taiwan
Egypt	Malaysia	Thailand
Finland	New Zealand	Turkey
France	Norway	U.S.A.
Germany	Portugal	



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