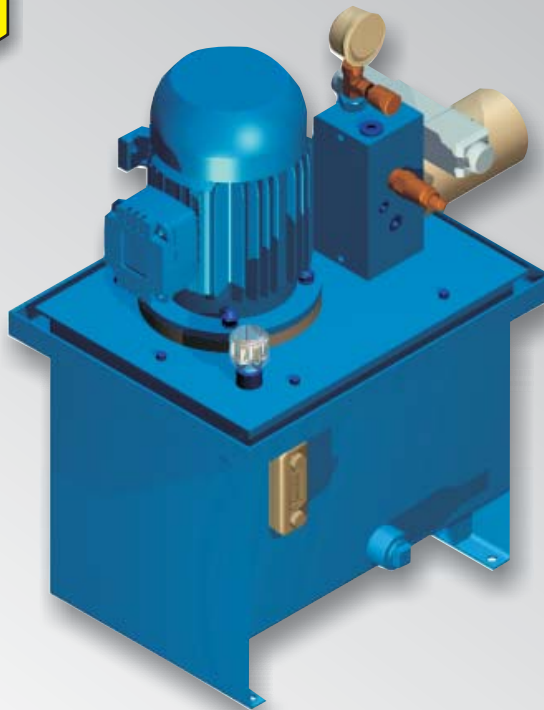




GLOBAL
HYDRAULICS AND PNEUMATICS

CAT. U201.09.05EN

UHG



**HYDRAULIC POWER
UNITS
30/60/120 L**



THE COMPANY

GLOBAL hydraulics and pneumatics are a company who was build with the more and news commercial concepts, and born with focus on the client, were his satisfaction is the bases of our values.

Our team is formed by recognized professionals and suppliers, selected with the objective of joint experience and modern solutions, resulting in an excellent synergy, more than a simples “buy and sales” relationship.

The quality requirement's science makes GLOBAL to be, a structured and guided ISO 9000 company.

Our policy is the value adds of Suppliers, GLOBAL and their clients.



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PRESENTATION

GLOBAL hydraulics have a pleasure to introduce you our standard hydraulic power units, in capacities of 30, 60, 120 L.

The objective of this catalogue is bring to you of the simples way, hydraulic power units ready to use, in the most and diversses hydraulics industry aplications.

Our hydraulic units are designed and building with the most high quality standards like ANSI B93.18 and NBR 10141.

In this catalogue, the proffessional wil be foud with facility a unit for cover their requeriment, the selection tables, was made for offer ready informations for fast select.



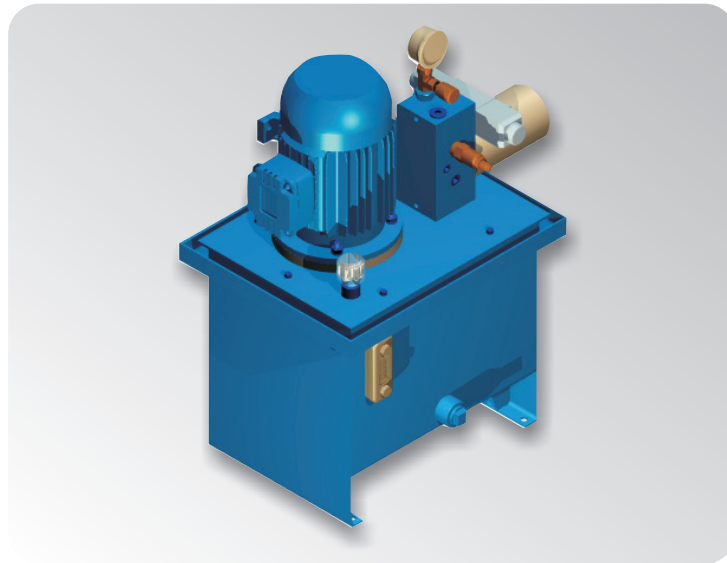
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UHG SERIES

Capacities 30-60-120 and specials

Work pressure up to 250 bar



Characteristics:

Hydraulic units in sizes: 30, 60, 120 L or specials up to 1000 L conform user requirements and under consult.

Flow rate up to 39 L/min

Work pressure up to 250 bar

Hydraulic Power up to 18 hp

Complete units with:

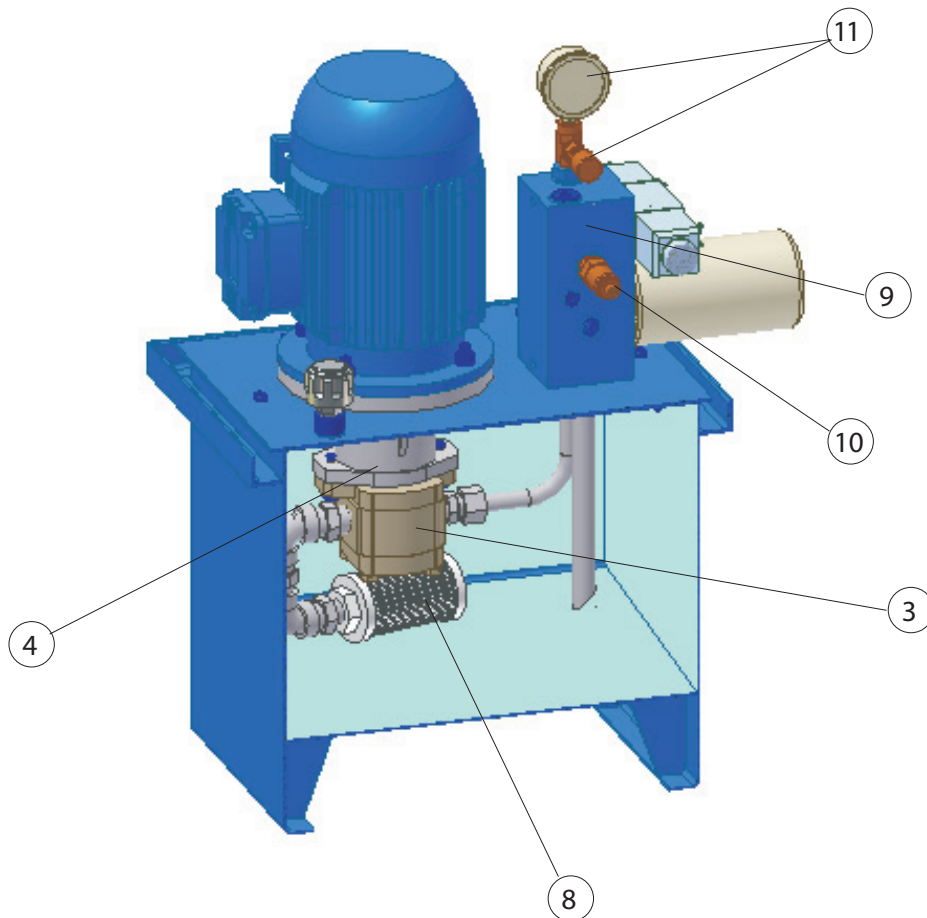
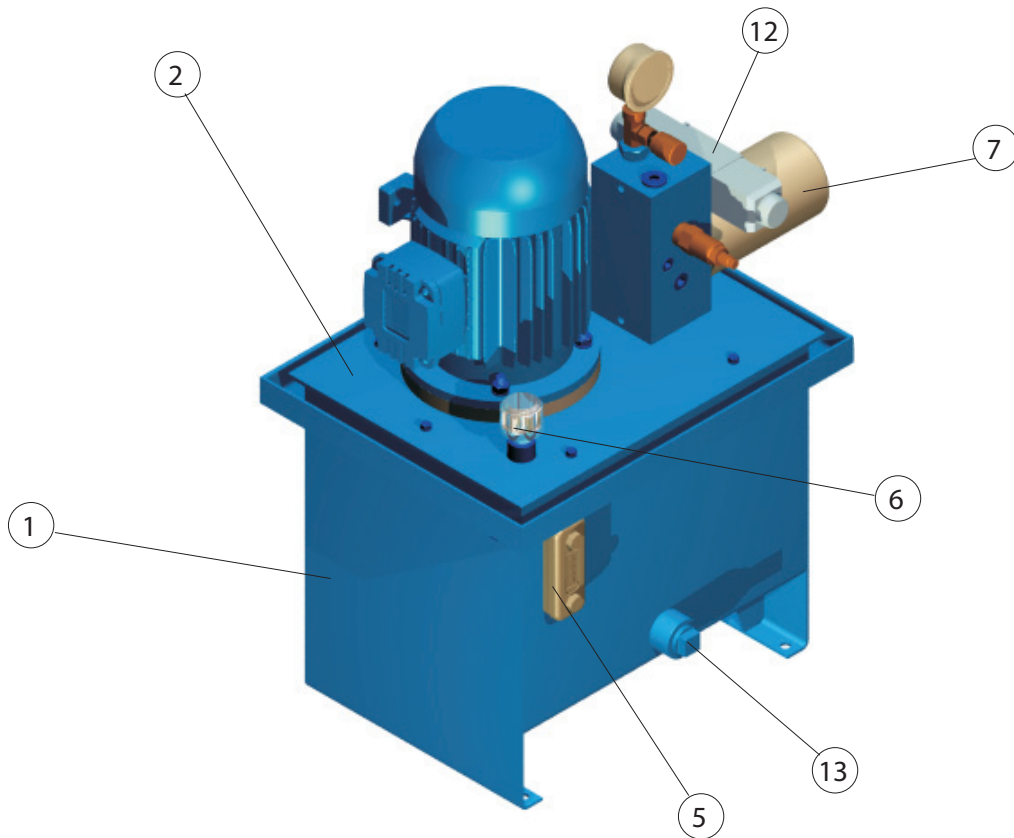
- Suction Filter
- Return Filter
- Air Filter
- Cleaning covers, drain, level indicator
- Manifold block with up to 6 connections
- Pressure relief valve
- Manometer with isolation valve
- Anti-leakage wing

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Units with another capacities, or special characteristics out of this catalogue, please consult to engineering dept. of GLOBAL



- All de Global units are building with these characteristics:

1.- Hydraulic tank:

Made of AISI 1010 steel, bended and welded, with epoxy paint finished, internal and external, with a protective wing to prevent oil leakages

2.- Inspection and cleaning cover

Inspection and cleaning cover, for maintenance of the unit.

3.- Hydraulic pump

Gears hydraulics pumps as standard, immerse in hydraulic oil, for better acoustic and vibrations shock absorption

4.- Flange coupling motor-pump

Internal coupling flange, this means, a better space distribution on the top of the tank with a sealing for achieve the isolation level of the unit.

5.- Level indicator

The tank has a standard visual level indicator for indicated the maximum and minimal level of the hydraulic oil.

6.- Air filters

The tank has an air filter on the top for filling and venting, and don't permit the entrance of contaminants.

7.- Return filters

10 microns return filter for reduce the inlet of contaminants to the tank and mantain the contamination level in the acceptable parameters.

8.- Suction filters

50 microns suction filter, for reduce the inlet of big contaminants to the pump

9.- Manifold block

The basic manifold has the required basic connections, like as connection for the manometer, work connections A,B,P,T etc.

10. Hydraulic pressure relief valve

Big reliability, protect and limit the system pressure in the required level

11.- Manometer

High precisions, glycerin immersed type, for absorbs the vibrations (Standard, with isolation valve)

12.- Command valves (NOT INCLUDED)

The command valves should be specified for separate and conform to the requirements and application type..

13.- Tank drain The tank has a drain for discharge de hydraulic fluid.

GENERAL

Standards	Hydraulic units as guides of NBR 10141 and ANSI B93.18
Nominal Sizes of units	30, 60, 120 L Specials 250, 300, 400 up to 1000 L
Maximum operating work pressure	160, 210 and 250 bar as the unit and source power
Maximum flow	Up to 39 L/min in accordance to the pump type
Hydraulic pumps	As standard, gear type GLOBAL series 11, for other pumps, please contact us
General protection grade of the unit	As standard, tank IP67, Motor IP55 Specials, over consult (Classify areas)
Hydraulic fluid	Mineral oils conform to DIN 51524 part 2, usually ISO VG 32, 46, 68 SPECIAL FLUIDS: OVER CONSULT
Filters	As standard: Suction filter of 50 microns Return filter of 10 microns Reservoir air vent filter of 10 microns Maximum contamination level: Class 20/18/15 conform to DIN 4406
Indicators	level indicator, manometer with isolating valve
Electric Motors	As standard, type V1 three phases - asynchrony, 4 Poles 220/380/440/660 IP55 with "C" type flange (Others, please contact GLOBAL)
Command manifold blocks	Command manifolds blocks with pressure relief valve, manometer, 2 to 6 free stations for TN6 or TN10 valves. (The command valves must be order in separate, in accordance to the function an application)
Mounting types	As standard, electric motor in vertical position with the pump submerse. An others mountings or special specifications please contact GLOBAL.

REQUERIED DRIVE POWER IN ACCORDANCE TO THE PRESSURE AND FLOW NEEDED AND THE CAPAVEL UNITS TO COVER THIS

For use this table, enter with PRESSURE required in bar, then, select the hydraulic pump in accordance to the FLOW, and find the POWER required. The power is in hp and kW. also, is indicated the power of the electric motor used for the selected unit. Finally, in the lower part of the table, in different color, is the size of the tank necessary for the unit

Req. power and supply motor hp (kW)	Hydraulic Pump Displacements in cm ³ /rev Flow Q in L/min (1750 rpm)																		
	Ser.11-2		Ser.11-4		Ser.11-6		Ser.11-8		Ser.11-11		Ser.11-14		Ser.11-16		Ser.11-19		Ser.11-22		
	Req.	Motor	Req.	Motor	Req.	Motor	Req.	Motor	Req.	Motor	Req.	Motor	Req.	Motor	Req.	Motor	Req.	Motor	
35	0,4 (0,3)	2,0	0,6 (0,5)	4	0,9 (0,7)	5,6	1,3 (1,0)	8,1	1,8 (1,3)	11,2	2,2 (1,7)	14,2	2,6 (1,9)	16,3	3,1 (2,3)	19,4	3,6 (2,7)	22,7	
70	0,8 (0,6)	2,0	1,3 (0,9)	7	1,8 (1,3)	10	2,5 (1,9)	14	3,5 (2,7)	19	4,5 (3,4)	24	5,2 (3,9)	28	6,2 (4,6)	34	7,3 (5,5)	39	
115	1,3 (1,0)	2,0	2,1 (1,6)		2,9 (2,2)	3,0	4,2 (3,2)	5,0	5,9 (4,4)	7,5	7,5 (5,6)	10,0	8,6 (6,5)	10,0	10,2 (7,7)		12,0 (9,0)	15,0 (11,0)	
140	1,6 (1,2)	2,0	2,5 (1,9)		3,5 (2,7)	5,0	5,2 (3,9)	7,5	7,1 (5,3)	10,0	9,1 (6,9)	10,0	10,5 (7,9)	15,0	12,5 (9,3)	15,0	14,6 (10,9)	20,0	
160	1,8 (1,4)	2,0	2,7 (2,0)		4,1 (3,0)	5,0	6,9 (5,2)	7,5	8,3 (6,2)	10,0	10,4 (7,8)	15,0	12,0 (9,0)	15,0	14,2 (10,7)		16,7 (12,5)	20,0	
210	2,4 (1,8)	3,0	3,8 (2,8)		5,3 (4,0)	7,5	7,8 (5,9)	10,0	10,8 (8,1)	15,0	13,7 (10,3)	15,0	15,8 (11,8)	20,0	18,7 (14,1)	20,0	20,0 (15,0)		
250	2,8 (2,1)	3,0	4,5 (3,4)		6,4 (4,8)	5,0	9,3 (7,0)	7,5	12,8 (9,6)	15,0	16,3 (12,3)	20,0	18,8 (14,1)						
Tank	GR-30						GR-60						GR-120						

Attention: Special units of others capacities, or different specifications, please contact to engineering Dept. of GLOBAL





Hydraulic Pump	Displacement cm ³ /rev	Flow	Pressure	Requ. Power	Motor Power	Tank size
		L/min	bar	hp (kW)	hp (kW)	
GL-11 Size 2	2,5	4	35	0,4 (0,3)	2,0 (1,5)	GR-30
			70	0,8 (0,6)		
			115	1,3 (1,0)		
			140	1,6 (1,2)		
			160	1,8 (1,4)		
			210	2,4 (1,8)		
250	2,8 (2,1)	3,0 (2,2)				
GL-11 Size 4	4	7	35	0,6 (0,5)	2,0 (1,5)	
			70	1,3 (0,9)	3,0 (2,2)	
			115	2,1 (1,6)		
			140	2,5 (1,9)		
			160	2,7 (2,0)	5,0 (3,7)	
			210	3,8 (2,8)		
250	4,5 (3,4)					
GL-11 Size 6	5,6	10	35	0,9 (0,7)	2,0 (1,5)	
			70	1,8 (1,3)	3,0 (2,2)	
			115	2,9 (2,2)		
			140	3,5 (2,7)	5,0 (3,7)	
			160	4,1 (3,0)		
			210	5,3 (4,0)	7,5 (5,5)	
250	6,4 (4,8)					



Hydraulic Pump	Displacement cm ³ /rev	Flow	Pressure	Requ. Power	Motor Power	Tank size
		L/min	bar	hp (kW)	hp (kW)	
GL-11 Size 8	8,1	14	35	1,3 (1,0)	2,0 (1,5)	GR-60
			70	2,5 (1,9)	3,0 (2,2)	
			115	4,2 (3,2)	5,0 (3,7)	
			140	5,2 (3,9)	7,5 (5,5)	
			160	6,9 (5,2)		
			210	7,8 (5,9)	10,0 (7,5)	
250	9,3 (7,0)					
GL-11 Size 11	11,2	19	35	1,8 (1,3)	2,0 (1,5)	
			70	3,5 (2,7)	5,0 (3,7)	
			115	5,9 (4,4)	7,5 (5,5)	
			140	7,1 (5,3)		
			160	8,3 (6,2)	10,0 (7,5)	
			210	10,8 (8,1)		15,0 (11,0)
250	12,8 (9,6)					



Attention: The flows are obtained with an electrical three phase motor to 1750 rpm
Special units or others capacities or different specifications, please consult to engineering
Dept. of GLOBAL.



Hydraulic Pump	Displacement cm ³ /rev	Flow	Pressure	Requ. Power	Motor Power	Tank size
		L/min	bar	hp (kW)	hp (kW)	
GL-11 Size 14	14,2	24	35	2,2 (1,7)	3,0 (2,2)	GR-120
			70	4,5 (3,4)	5,0 (3,7)	
			115	7,5 (5,6)	10,0 (7,5)	
			140	9,1 (6,9)		
			160	10,4 (7,8)	15,0 (11,0)	
			210	13,7 (10,3)		
GL-11 Size 16	16,3	28	35	2,6 (1,9)	3,0 (2,2)	
			70	5,2 (3,9)	7,5 (5,5)	
			115	8,6 (6,5)	10,0 (7,5)	
			140	10,5 (7,9)	15,0 (11,0)	
			160	12,0 (9,0)		
			210	15,8 (11,8)	20,0 (15,0)	
250	18,8 (14,1)					
GL-11 Size 19	19,4	34	35	3,1 (2,3)	5,0 (3,7)	
			70	6,2 (4,6)	7,5 (5,5)	
			115	10,2 (7,7)	15,0 (11,0)	
			140	12,5 (9,3)		
			160	14,2 (10,7)	20,0 (15,0)	
210	18,7 (14,1)					
GL-11 Size 22	22,7	39	35	3,6 (2,7)	5,0 (3,7)	
			70	7,3 (5,5)	7,5 (5,5)	
			115	12,0 (9,0)	15,0 (11,0)	
			140	14,6 (10,9)		
			160	16,7 (12,5)	20,0 (15,0)	



Attention: The flows are obtained with an electrical three phase motor to 1750 rpm
Special units or others capacities or different specifications, please consult to engineering
Dept. of GLOBAL.

UHG

NOMINAL SIZE OF TANK
GR-30 = 30 L
GR-60 = 60 L
GR-120 = 120 L
EX = Specials
X = 250, 300, 400, up to 1000 L

SPECIAL UNIT
Omit = Standard
S = With specials characteristics in the unit like materials, seals, móbil unit, diferent capacities, differents pumps, differents mountings, heat exchangers, or others.

HYDRAULIC PUMP OF THE UNIT
GL-11/2 = Global Series 11 Size 2
GL-11/4 = Global Series 11 Size 4
GL-11/6 = Global Series 11 Size 6
GL-11/8 = Global Series 11 Size 8
GL-11/11 = Global Series 11 Size 11
GL-11/14 = Global Series 11 Size 14
GL-11/16 = Global Series 11 Size 16
GL-11/19 = Global Series 11 Size 19
GL-11/22 = Global Series 11 Size 22

ESP = Special pump (Vane, Pistons) must be especificated in additional text in the order

COMMAND MANIFOLD BLOCK
 Basic manifold block, included pressure relief valve, return filter, gauge, 2 to 6 free stations for TN6 or TN10 valves.

BC2 = Basic manifold block + 2 free stations
BC4 = Basic manifold block + 4 free stations
BC6 = Basic manifold block + 6 free stations

 Special functions or requeriments, please consult engineering Dept. of GLOBAL

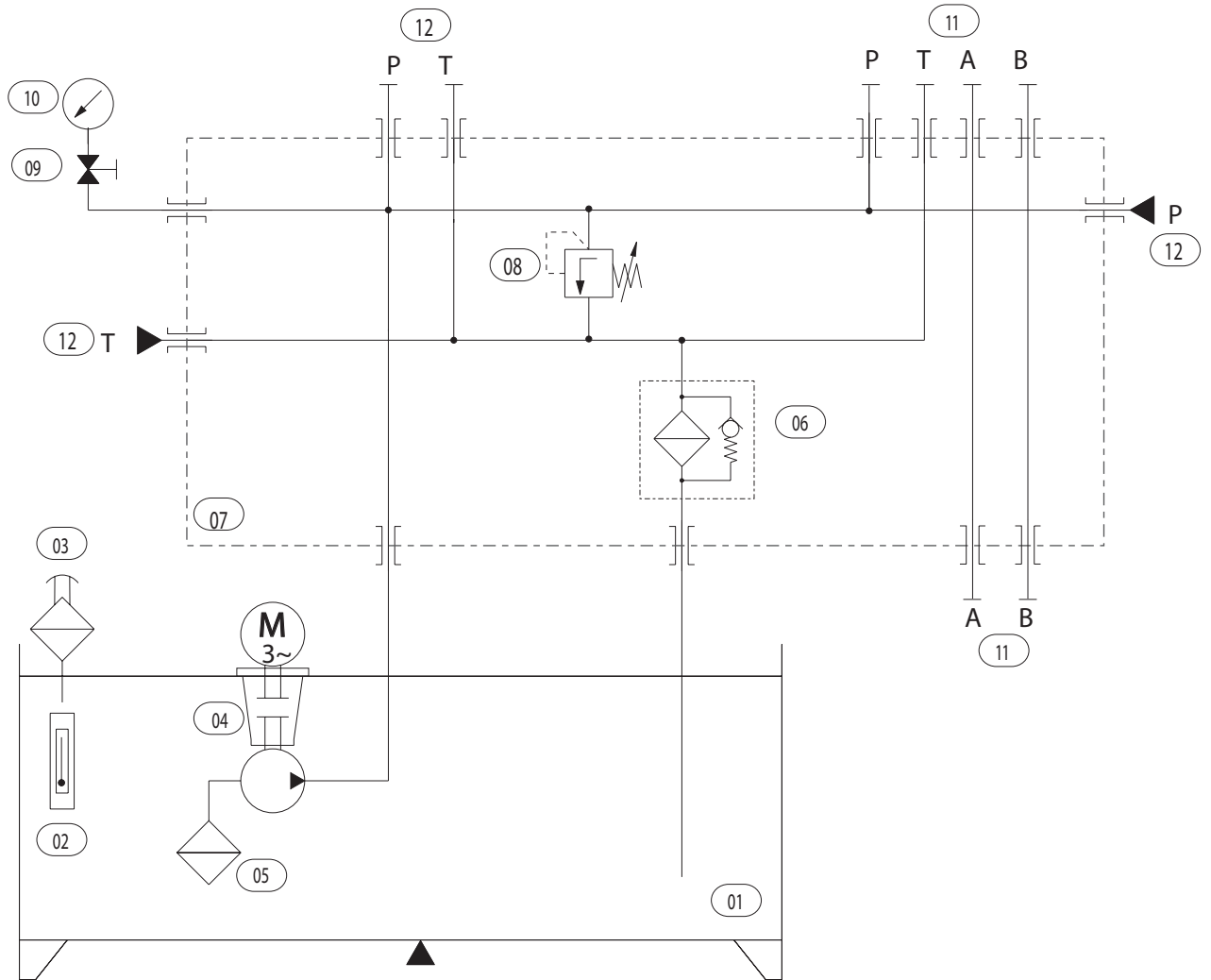
REQUERIED FLOW
4 = 4 L/min (Pump size 2)
7 = 6 L/min (Pump size 4)
10 = 10 L/min (Pump size 6)
14 = 14 L/min (Pump size 8)
19 = 19 L/min (Pump size 11)
24 = 24 L/min (Pump size 14)
28 = 28 L/min (Pump size 16)
34 = 34 L/min (Pump size 19)
39 = 39 L/min (Pump size 22)

REQUIERED PRESSURE
35 = 35 bar
70 = 70 bar
115 = 115 bar
140 = 140 bar
210 = 210 bar
250 = 250 bar

 Attention.- Pump size 19, only to 210 bar
 Pum size 22 only to 160 bar

EXAMPLE: Hydraulic unit with 30 L tank, hydraulic pump size 14, flow up to 24 L/min work pressure of 210 bar and 6 free stations for conect command valves:
CODE. UHG GR-30 GL-11/14 24 210 BC6

STANDARD HYDRAULIC CIRCUIT

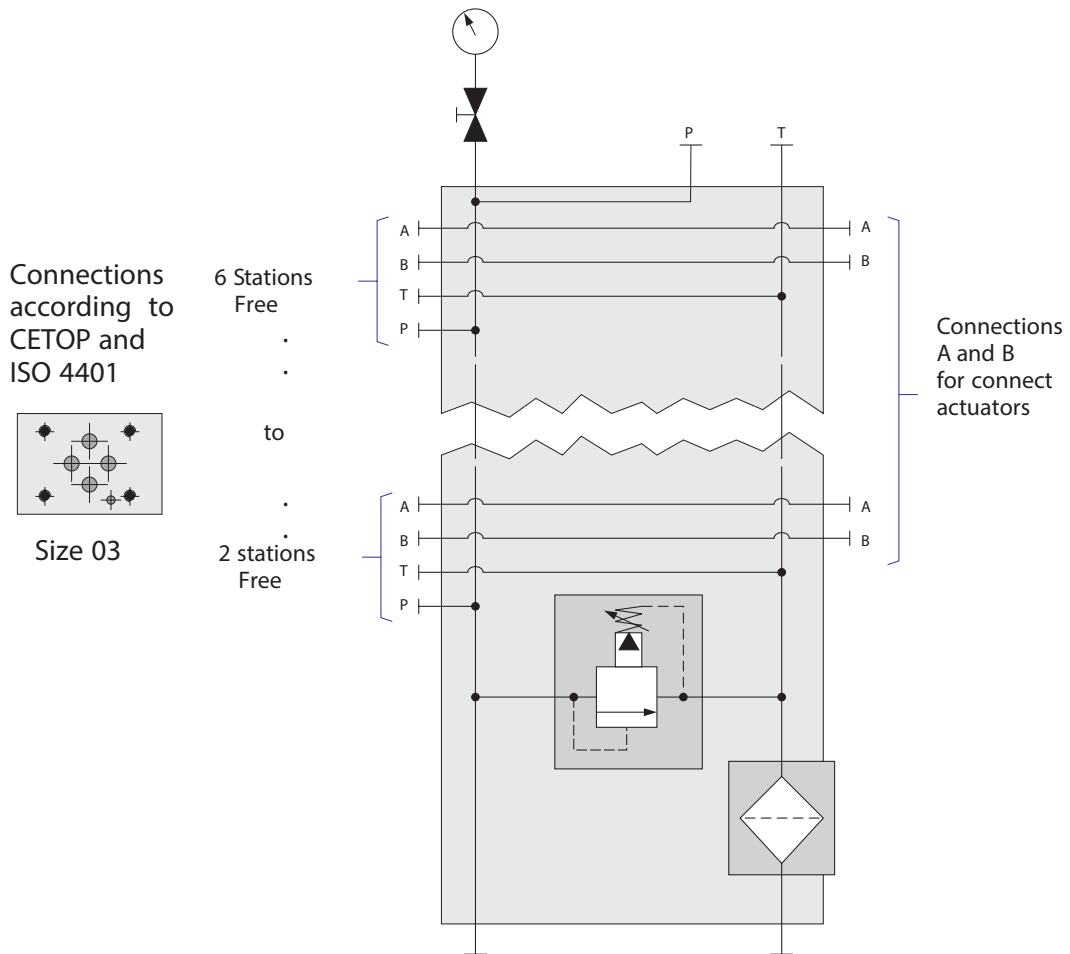


- | | |
|---------------------|---|
| 01 Hydraulic tank | 08 Pressure relief valve |
| 02 lever indicator | 09 Gauge Isolation valve |
| 03 Air filter | 10 Manometer |
| 04 Motor-Pump group | 11 Free conections for up 6 commands
(Shown only one in the diagram) |
| 05 Suction Filter | 12 Free conections for tubing |
| 06 Return Filter | |
| 07 Manifold Block | |

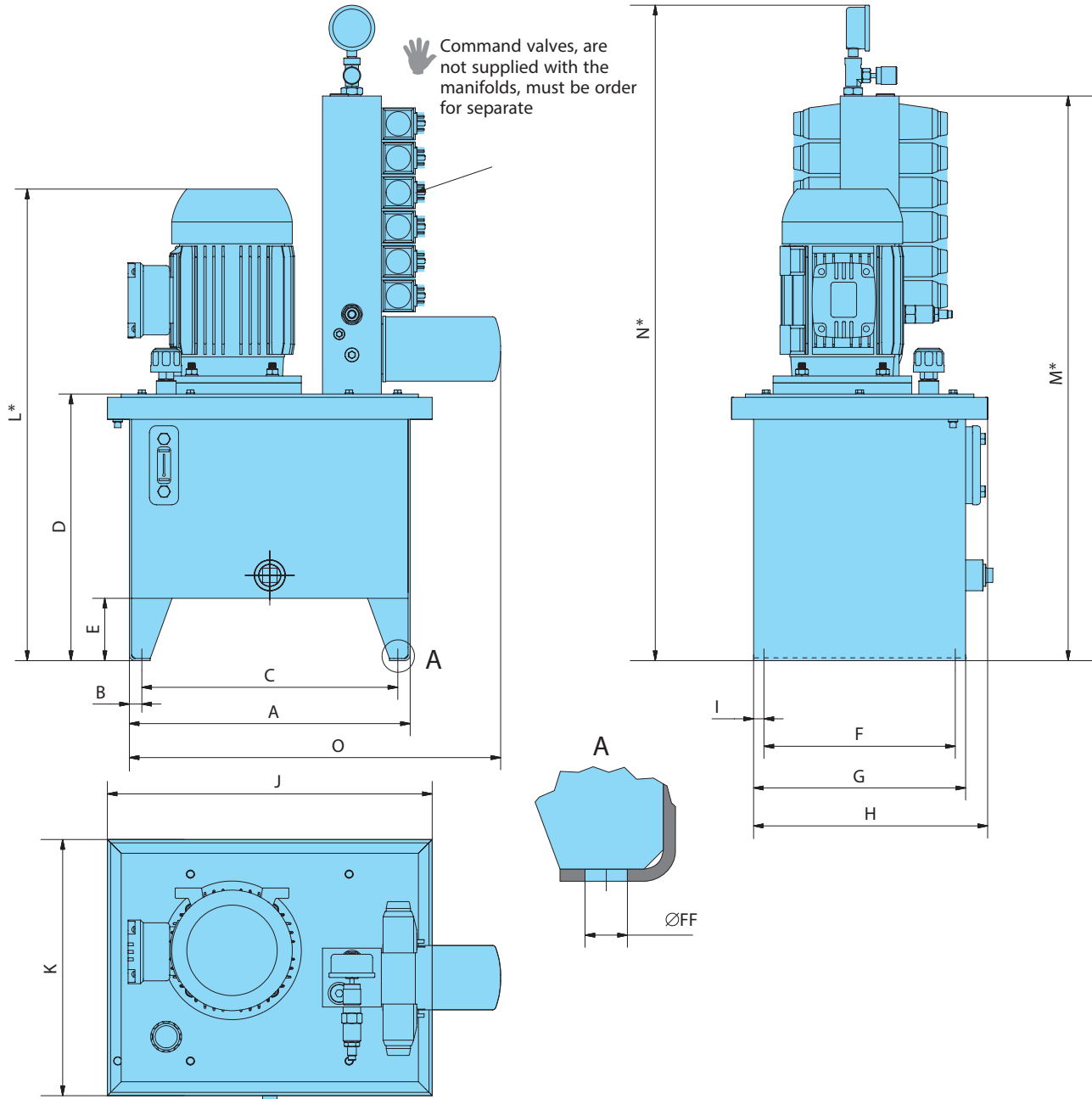
STANDARD MANIFOLDS BLOCKS

All the hydraulic units have standard manifolds blocks with 2, 4 and 6 free stations, for connecting TN6 and TN10 valves

For specify command valves, in function to the requirements, please contact the engineering Dep. of GLOBAL, for personalize your command.



Attention: The manifold blocks are supplied as standard with pressure relief valve, gauge, isolate valve, and 2, 4 or 6 free connections for command valves.
(The command valves are not supplied, and must be ordered for separated)



Tank	A	B	C	D	E	F	G	H	I	J	K	O	ØFF
GR-30	405	18	369	385	90	276	306	338	15	469	370	536	11
GR-60	506	23	460	526	170	433	463	495	15	570	527	615	11
GR-120	656	33	590	606	157	480	510	542	15	720	574	765	11

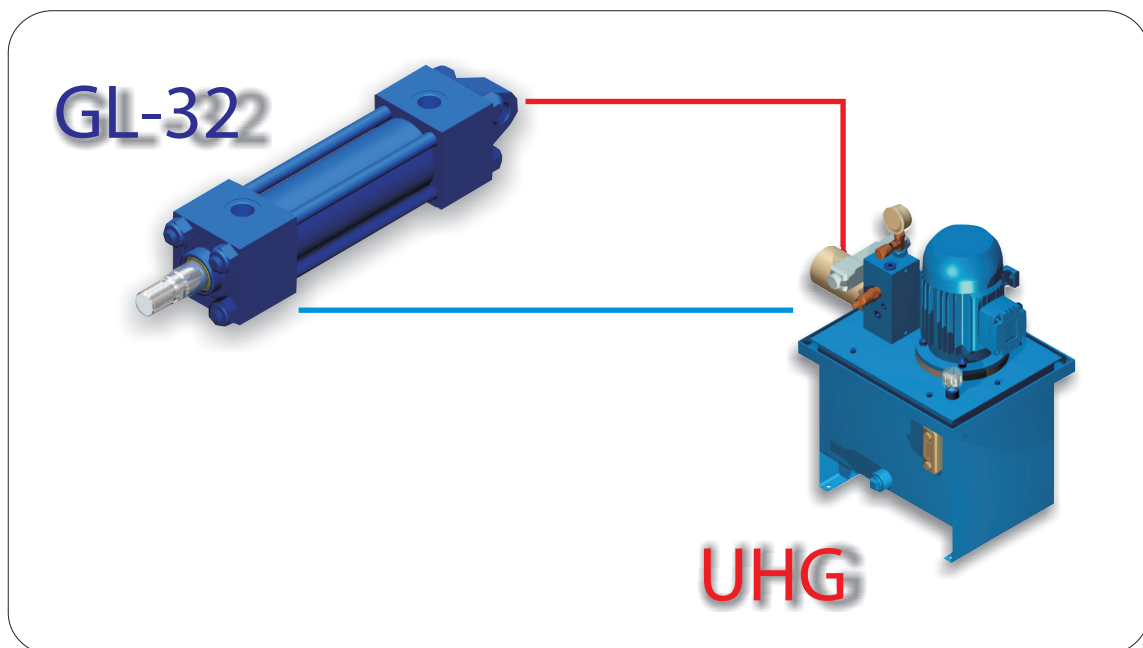
Tank	L*						
Motor	2hp	3hp	5hp	7,5hp	10hp	15hp	20hp
GR-30	656	681					
GR-60			858	875			
GR-120					994	1032	1117

Manif.	Conexions for/válv. TN 6					
	2 sta	4 sta	6 sta	2 sta	4 sta	6 sta
Tank	M*			N*		
GR-30	620	715	815	752	846	946
GR-60	761	856	956	891	986	1086
GR-120	841	936	1036	965	1063	1163

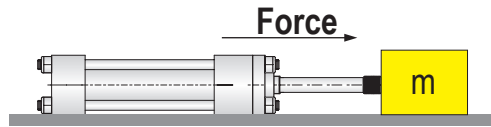


Attention: The dimensions with (*) Indicated a variable dimension for same tank according to motor and manifold used.

QUIQLY REFERENCE OF FORCE AND CAPACITIES OF GL-32 CYLINDERS AND THE VELOCITIES (LOGRADAS) WITH THE STANDARD HYDRAULIC UNITS UHG OF 30,60 AND 120 L, AND THE POWER CONSUMPTION NEEDED FOR THIS

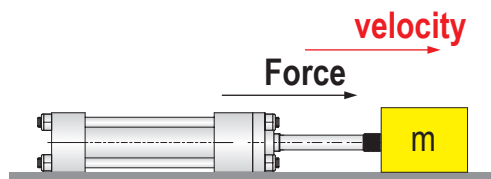


1) Select the nominal diameter in function to the load to wants to move in kgf.



Trust force of Cylinder in kgf ∅ of Cylinder	Work pressure in bar					
	35 bar	70 bar	115 bar	140 bar	160 bar	210 bar
1 1/2"	399	798	1311	1596	1824	2394
2"	710	1421	2335	2842	3248	4263
2 1/2"	1109	2219	3646	4438	5072	6657
3 1/4"	1872	3745	6153	7490	8560	11235
4"	2838	5677	9327	11354	12976	17031
5"	4434	8869	14571	17738	20272	26607
6"	6384	12768	20976	25536	29184	38304
8"	11350	22701	37295	45402	51888	68103

2) With cylinder selected, select one pump in function of the required flow, and then select the needed extension velocity, and the table show you the adequate hydraulic unit



Extension Velocity of cylinder mm/s ∅ of the Cylinder	Hydraulic Pump Displacement in cm ³ /rev Flow Q in L/min (1750 rpm)									
	Ser.11-2 2,5 4	Ser.11-4 4 7	Ser.11-6 5,6 10	Ser.11-8 8,1 14	Ser.11-11 11,2 19	Ser.11-14 14,2 24	Ser.11-16 16,3 28	Ser.11-19 19,4 34	Ser.11-22 22,7 39	
1 1/2"	58	102	146	205						
2"	33	57	82	115	156	197				
2 1/2"	21	37	53	74	100	126	147	179	205	
3 1/4"	12	22	31	44	59	75	87	106	122	
4"	8	14	21	29	39	49	58	70	80	
5"	5	9	13	18	25	32	37	45	51	
6"	4	6	9	13	17	22	26	31	36	
8"	2	4	5	7	10	12	14	17	20	
Tank	GR-30			GR-60		GR-120				

3) Now that you have your cylinder selected, the force, velocity and the tank, this table show you the drive power needed for these requirements

For use this table, enter with **PRESSURE** required in bar, then, select the hydraulic pump in accordance to the **FLOW**, and find the **POWER** required. The power is in hp and kW. also, is indicated the power of the electric motor used for the selected unit. Finally, in the lower part of the table, in different color, is the size of the tank necessary for the unit

Req. power and supply motor power hp (kW)	Hydraulic Pump Displacements in cm ³ /rev Flow Q in L/min (1750 rpm)																	
	Ser.11-2		Ser.11-4		Ser.11-6		Ser.11-8		Ser.11-11		Ser.11-14		Ser.11-16		Ser.11-19		Ser.11-22	
	Req.	Motor	Req.	Motor	Req.	Motor	Req.	Motor	Req.	Motor	Req.	Motor	Req.	Motor	Req.	Motor	Req.	Motor
Pressure P in bar	2,5 4	4 7	5,6 10	8,1 14	11,2 19	14,2 24	16,3 28	19,4 34	22,7 39									
35	0,4 (0,3)	0,6 (0,5)	0,9 (0,7)	1,3 (1,0)	1,8 (1,3)	2,0 (1,5)	2,5 (1,9)	2,9 (2,2)	3,5 (2,7)	4,2 (3,2)	4,5 (3,4)	5,2 (3,9)	5,9 (4,4)	6,2 (4,6)	6,9 (5,2)	7,1 (5,3)	7,5 (5,5)	7,5 (5,5)
70	0,8 (0,6)	1,3 (0,9)	1,8 (1,3)	2,5 (1,9)	3,0 (2,2)	3,0 (2,2)	4,2 (3,2)	5,0 (3,7)	5,0 (3,7)	5,9 (4,4)	7,5 (5,5)	8,6 (6,5)	10,0 (7,5)	10,2 (7,7)	10,5 (7,9)	12,0 (9,0)	12,5 (9,3)	12,0 (9,0)
115	1,3 (1,0)	2,1 (1,6)	2,9 (2,2)	4,2 (3,2)	5,0 (3,7)	5,0 (3,7)	7,5 (5,6)	7,5 (5,5)	7,5 (5,5)	10,0 (7,5)	10,0 (7,5)	10,5 (7,9)	10,5 (7,9)	10,5 (7,9)	12,0 (9,0)	14,6 (10,9)	15,0 (11,0)	15,0 (11,0)
140	1,6 (1,2)	2,5 (1,9)	3,5 (2,7)	5,2 (3,9)	7,5 (5,5)	7,5 (5,5)	9,1 (6,9)	10,0 (7,5)	10,0 (7,5)	10,4 (7,8)	10,4 (7,8)	12,0 (9,0)	12,5 (9,3)	12,5 (9,3)	14,2 (10,7)	14,6 (10,9)	15,0 (11,0)	15,0 (11,0)
160	1,8 (1,4)	2,7 (2,0)	4,1 (3,0)	6,9 (5,2)	8,3 (6,2)	8,3 (6,2)	10,4 (7,8)	10,4 (7,8)	10,4 (7,8)	13,7 (10,3)	13,7 (10,3)	15,0 (11,0)	15,0 (11,0)	15,0 (11,0)	16,7 (12,5)	16,7 (12,5)	20,0 (15,0)	20,0 (15,0)
210	2,4 (1,8)	3,8 (2,8)	5,3 (4,0)	7,8 (5,9)	10,8 (8,1)	10,8 (8,1)	13,7 (10,3)	13,7 (10,3)	13,7 (10,3)	15,0 (11,0)	15,0 (11,0)	15,8 (11,8)	15,8 (11,8)	18,7 (14,1)	18,7 (14,1)	18,7 (14,1)	20,0 (15,0)	20,0 (15,0)
250	2,8 (2,1)	4,5 (3,4)	6,4 (4,8)	9,3 (7,0)	12,8 (9,6)	12,8 (9,6)	16,3 (12,3)	16,3 (12,3)	16,3 (12,3)	20,0 (15,0)	20,0 (15,0)	20,0 (15,0)	20,0 (15,0)	20,0 (15,0)	20,0 (15,0)	20,0 (15,0)	20,0 (15,0)	20,0 (15,0)
Tank																		



GR-120

GR-60

GR-30

Attention: Special units of others capacities, or different specifications, please contact to engineering Dept. of GLOBAL



**WARNINGS**

The data mentioned in this catalog was checked carefully, but it is not exempted of involuntary or fortuitous mistakes that they could happen, anything doubt under the application of the product or with reference in this catalog, please enter in contact with the department of Engineering of Global.

The assembly and maintenance of the units should be made by trained personnel. The units are tested in our laboratory, the start-up for the user must be follow the indications of level of contamination and filtrate grade, especially in the moment of the initial filled of the hydraulic oil.

The proved bad use or damage of the units, exempts to GLOBAL of any responsibility and the equipment are out of guaranty

Any modification, alteration of the units for the same way, exempts to Global of any responsibility

GLOBAL is reserved the right of the modification and/or alteration of the product give our development policies.