
ITALGROUP SRL
IAC SERIES - IAC H3
GENERAL CATALOGUE

INDEX - IAC H3

<u>TECHNICAL DATA</u>	Pag	50
<u>IAC 500 H3 - INSTALLATION DRAWING</u>	“	51
<u>IAC 500/B30 H3 - INSTALLATION DRAWING</u>	“	52
<u>IAC 500/C H3 - INSTALLATION DRAWING</u>	“	53
<u>IAC 500/MRH H3 - INSTALLATION DRAWING</u>	“	54
<u>IAC H3 - NIP OPTION</u>	“	55
<u>IAC H3 - CETOP 3 FITTING</u>	“	56
<u>IAC H3 - ORDERING CODE</u>	“	57
<u>IAC 500 H3 - PERFORMANCE DIAGRAMS</u>	“	58 - 59

IAC 500 H3 - TECHNICAL DATA

IAC 500 H3

Displacement (*)	[cc]	492	442	393	344	292
Th. specific torque	[Nm/bar]	7,8	7	6,3	5,5	4,7
Continuous speed	[rpm]	500	550	600	630	630
Peak speed	[rpm]	600	650	680	700	700
Minimum speed	[rpm]	2	2	2	2	2
Mechanical efficiency	[%]	87,5	86	85	83,6	82,4
Starting efficiency	[%]	82,5	81	80	77,2	74,3
Continuous power (**)	[kW]	65	65	65	60	50
Cont. power with flushing	[kW]	78	78	78	70	60
Continuous pressure	[bar]	270	270	270	270	270
Intermittent pressure	[bar]	310	310	310	310	310
Peak pressure	[bar]	350	350	350	350	350
Flushing flow	[l/min]	8	8	8	8	8
Dry weight	[kg]	68	68	68	68	68

Displacement (*)	[cc]	255	197	147	98
Th. specific torque	[Nm/bar]	4,1	3,1	2,3	1,6
Continuous speed	[rpm]	650	700	700	700
Peak speed	[rpm]	750	800	900	1000
Minimum speed	[rpm]	3	3	3	4
Mechanical efficiency	[%]	82	80	78	73,4
Starting efficiency	[%]	69,6	62,1	52	30
Continuous power (**)	[kW]	48	38	24	15
Cont. power with flushing	[kW]	55	41	28	18
Continuous pressure	[bar]	270	250	250	250
Intermittent pressure	[bar]	310	310	310	310
Peak pressure	[bar]	350	350	350	350
Flushing flow	[l/min]	8	8	8	8
Dry weight	[kg]	68	68	68	68

(*) Different displacements can be available on request. Please contact ItalgrouP S.r.l. for more information.

(**) The continuous power and the continuous power with flushing are the output maximum power. To estimate the input power divide the output power by the mechanical efficiency. For example: if required output power is 60 kW and starting efficiency is 82,5%, estimated required power is $60/0.825 = 72,7$ kW.

Hydrostatic pressure test: 420 bar.

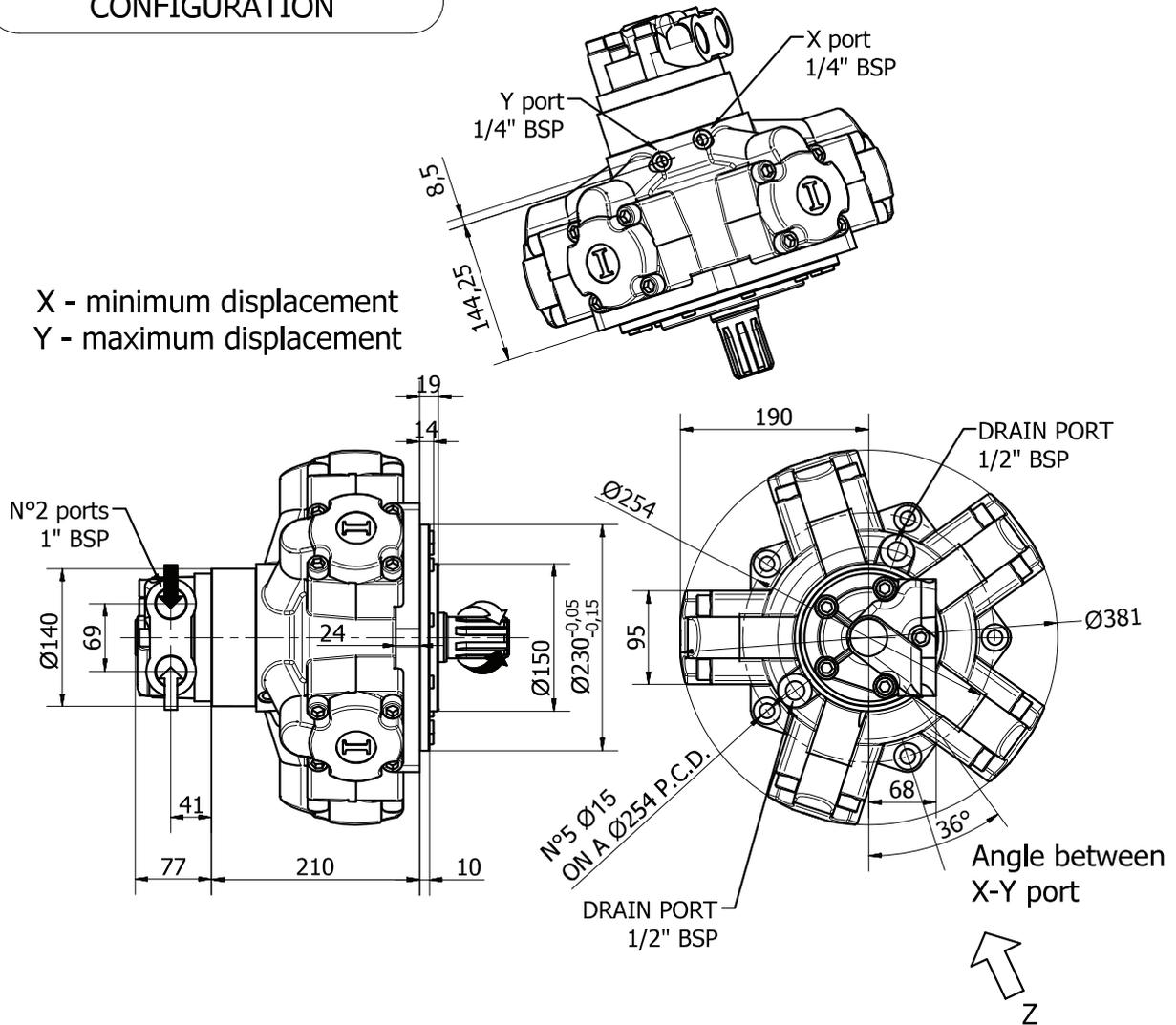
Temperature range: -30 / 70 °C.

IAC 500 H3 - INSTALLATION DRAWING

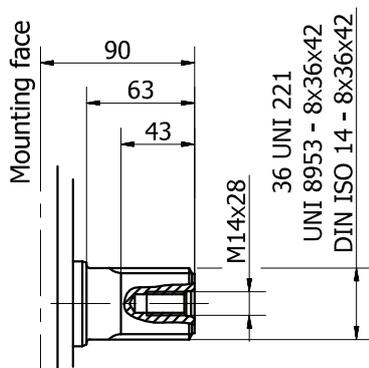
XY DISPLACEMENT CHANGE CONFIGURATION

VIEW FROM Z

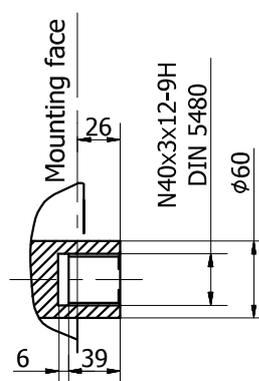
X - minimum displacement
Y - maximum displacement



SHAFT TYPE: A0



SHAFT TYPE: A3

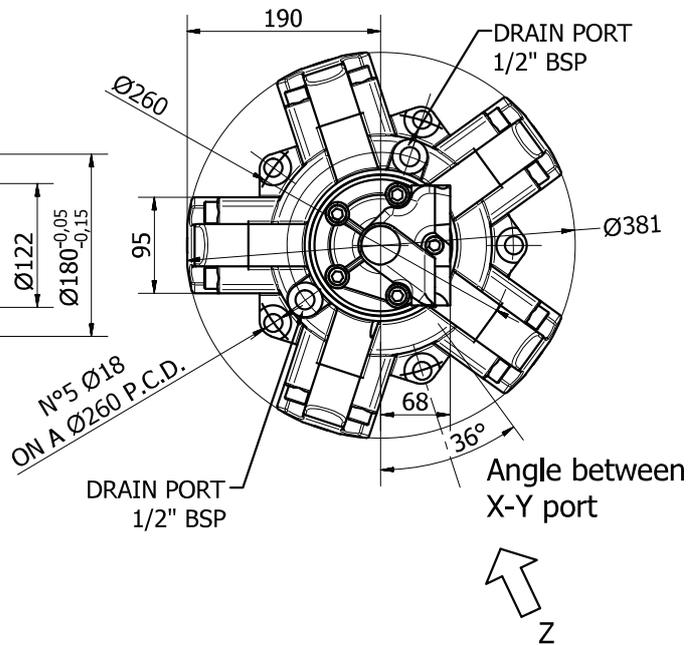
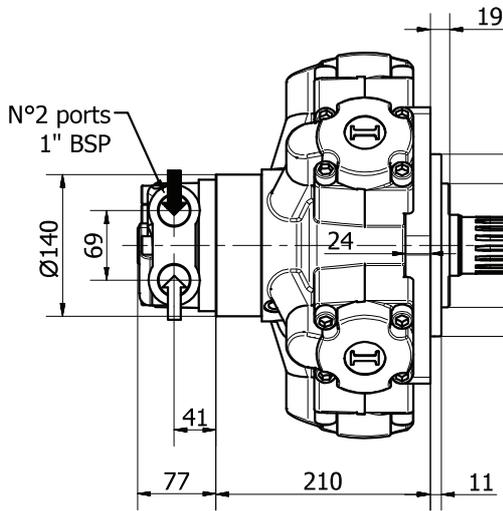
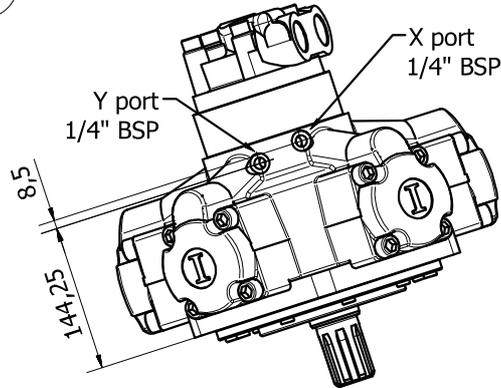


The data specified into the catalogue are for product description purpose only and must not be interpreted as warranted characteristics in legal sense. ItalgrouP S.r.l. reserves the right to implement modifications without notice. All partial or total reproduction and copy without written authorization of ItalgrouP S.r.l. is strictly forbidden.

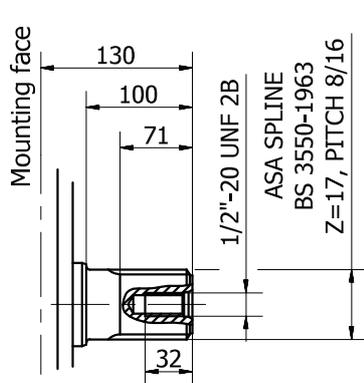
XY DISPLACEMENT CHANGE CONFIGURATION

X - minimum displacement
 Y - maximum displacement

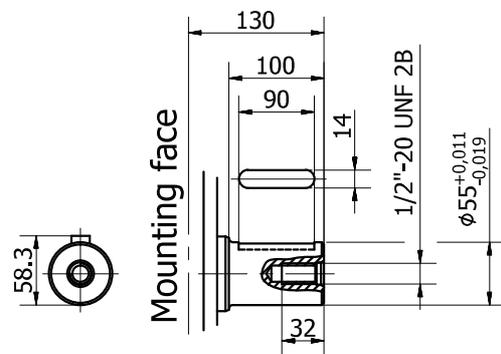
VIEW FROM Z



SHAFT TYPE: A1



SHAFT TYPE: A2



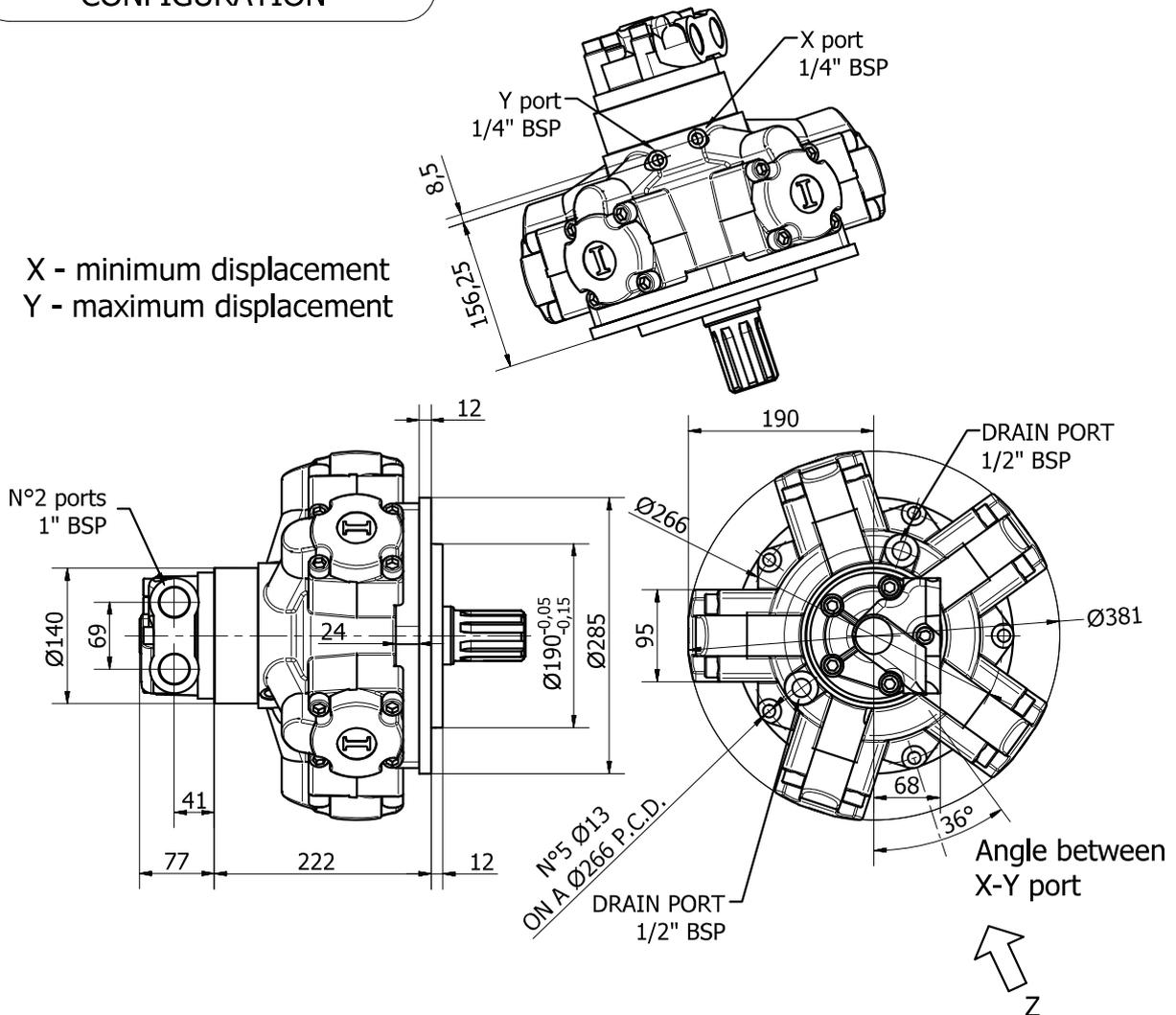
The data specified into the catalogue are for product description purpose only and must not be interpreted as warranted characteristics in legal sense. Italgrou S.r.l. reserves the right to implement modifications without notice. All partial or total reproduction and copy without written authorization of Italgrou S.r.l. is strictly forbidden.

IAC 500/C H3 - INSTALLATION DRAWING

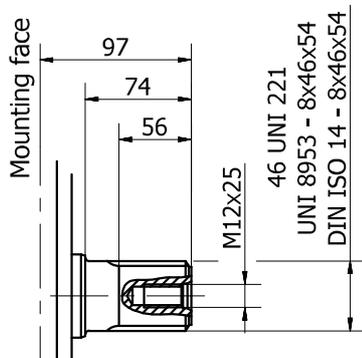
XY DISPLACEMENT CHANGE CONFIGURATION

VIEW FROM Z

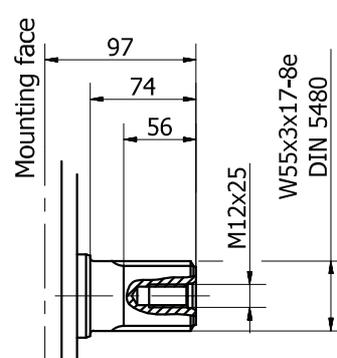
X - minimum displacement
Y - maximum displacement



SHAFT TYPE: A0



SHAFT TYPE: A11

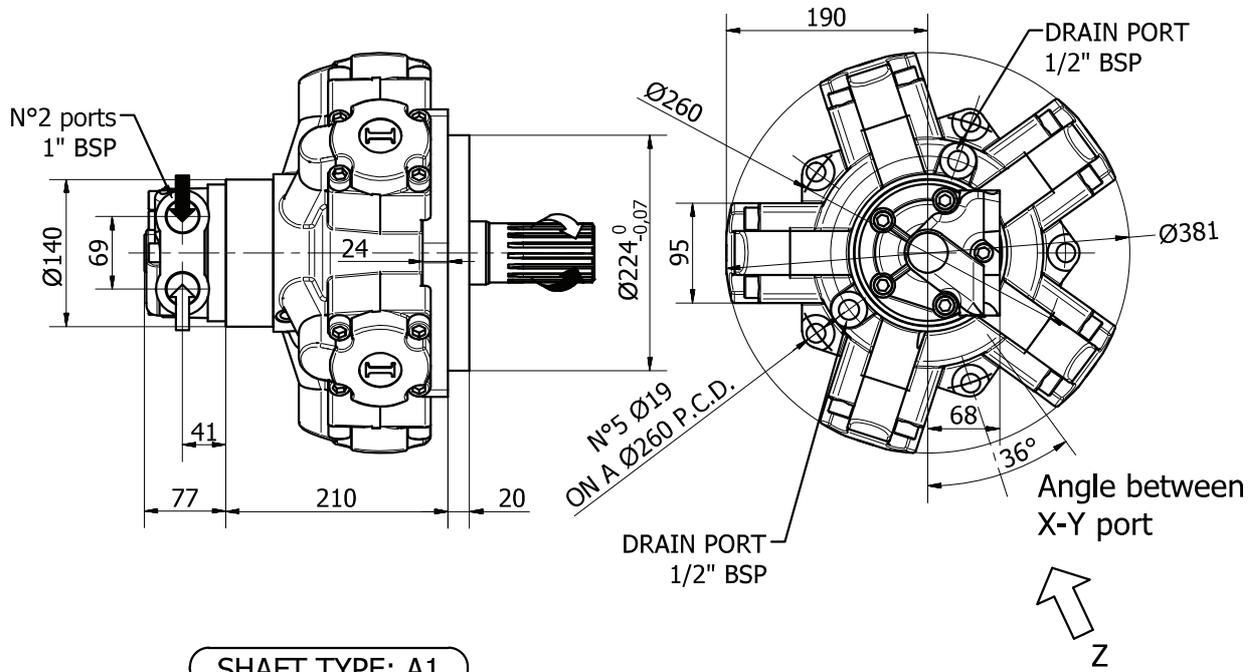
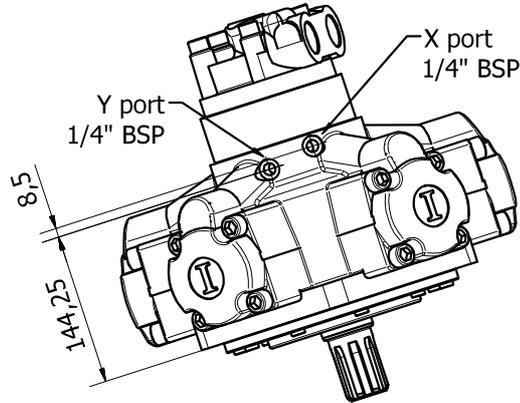


The data specified into the catalogue are for product description purpose only and must not be interpreted as warranted characteristics in legal sense. Italgrou S.r.l. reserves the right to implement modifications without notice. All partial or total reproduction and copy without written authorization of Italgrou S.r.l. is strictly forbidden.

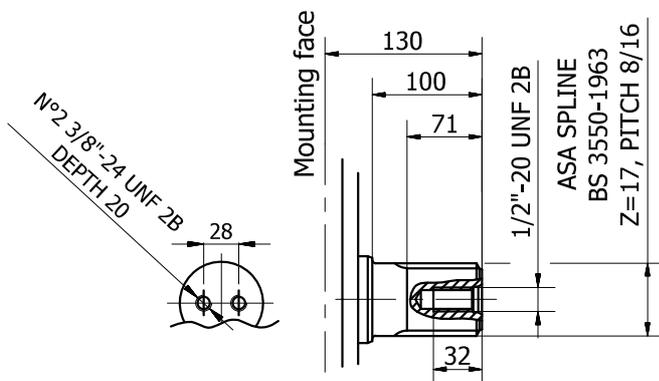
XY DISPLACEMENT CHANGE CONFIGURATION

X - minimum displacement
 Y - maximum displacement

VIEW FROM Z



SHAFT TYPE: A1



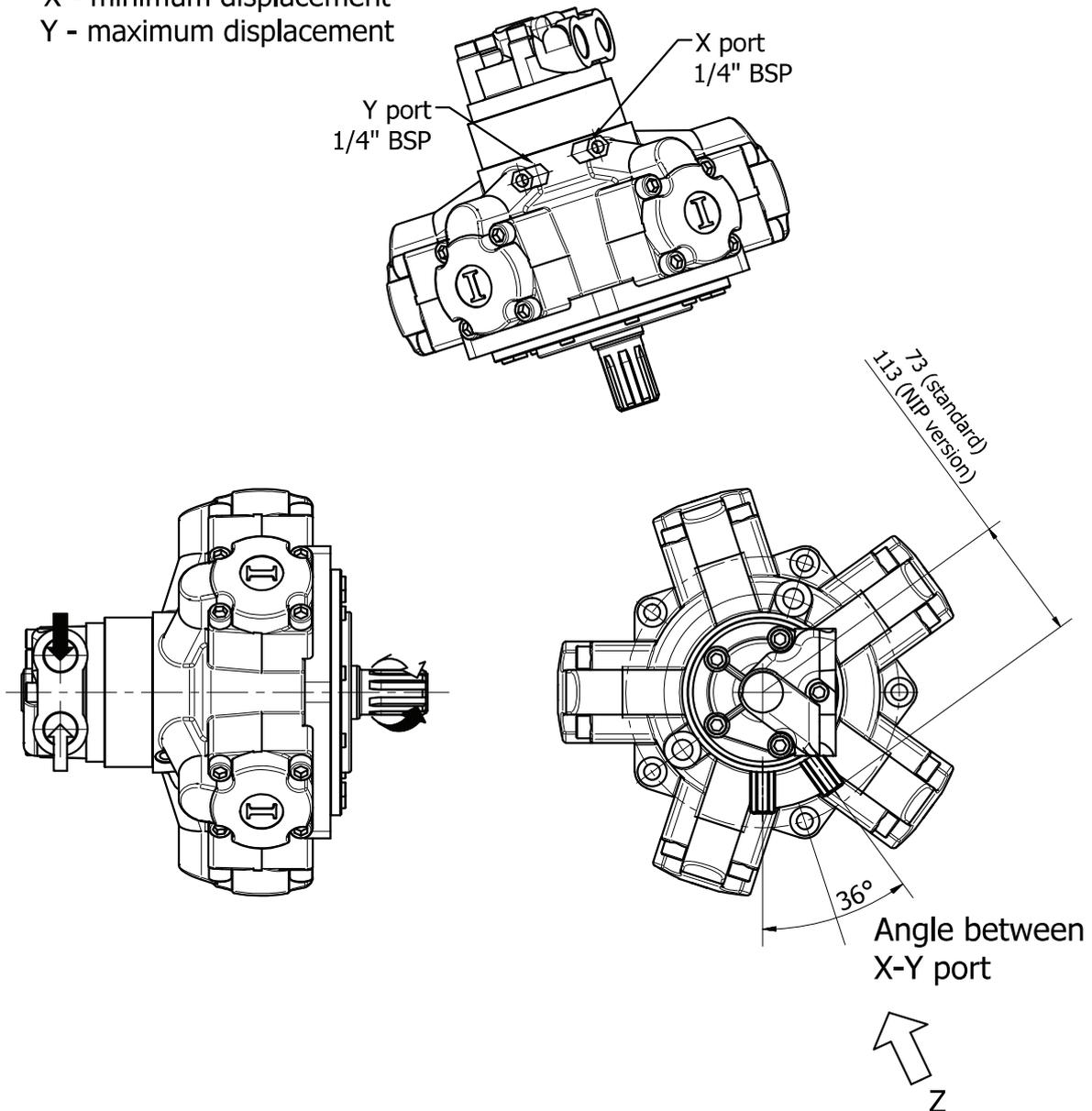
The data specified into the catalogue are for product description purpose only and must not be interpreted as warranted characteristics in legal sense. Italgrou S.r.l. reserves the right to implement modifications without notice. All partial or total reproduction and copy without written authorization of Italgrou S.r.l. is strictly forbidden.

IAC 500 H3 - NIP OPTION

XY DISPLACEMENT CHANGE CONFIGURATION

X - minimum displacement
Y - maximum displacement

VIEW FROM Z

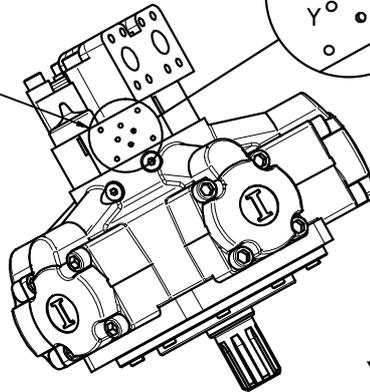
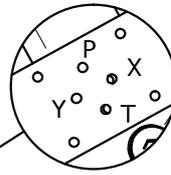


The data specified into the catalogue are for product description purpose only and must not be interpreted as warranted characteristics in legal sense. Italgroup S.r.l. reserves the right to implement modifications without notice. All partial or total reproduction and copy without written authorization of Italgroup S.r.l. is strictly forbidden.

**CETOP 3 DISPLACEMENT
 CHANGE CONFIGURATION**

CETOP 3
 FITTING

VIEW FROM Z



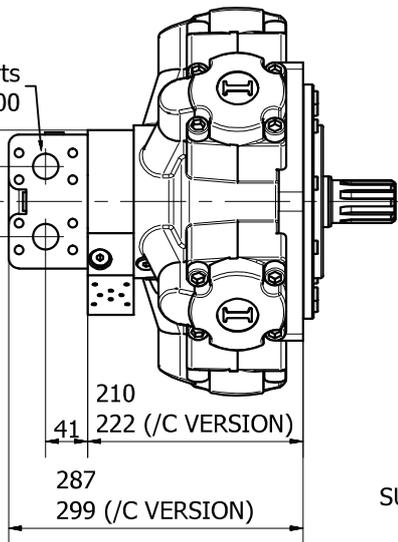
X - minimum displacement
 Y - maximum displacement

N°2 ports
 1" SAE 3000

Ø140
 69

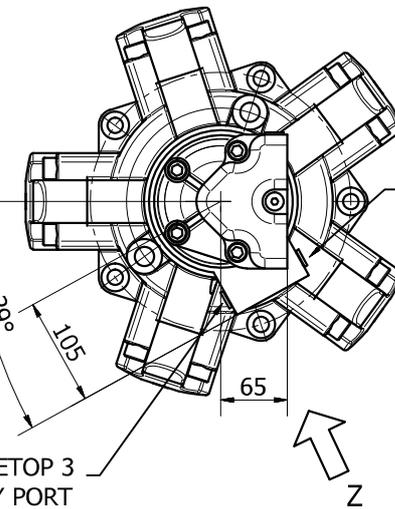
210
 222 (/C VERSION)

41
 287
 299 (/C VERSION)



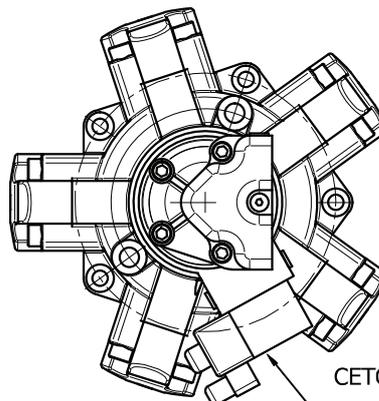
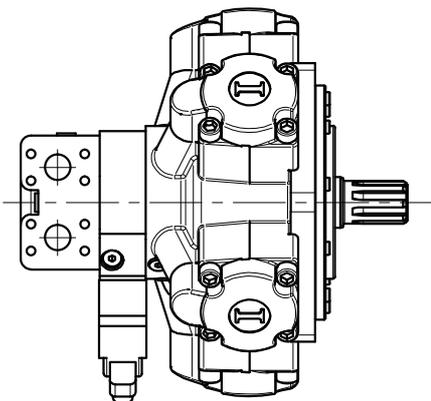
CETOP 3
 SUPPLY PORT
 1/4" BSP

29°
 105
 65
 CETOP 3
 SUPPLY PORT
 1/4" BSP



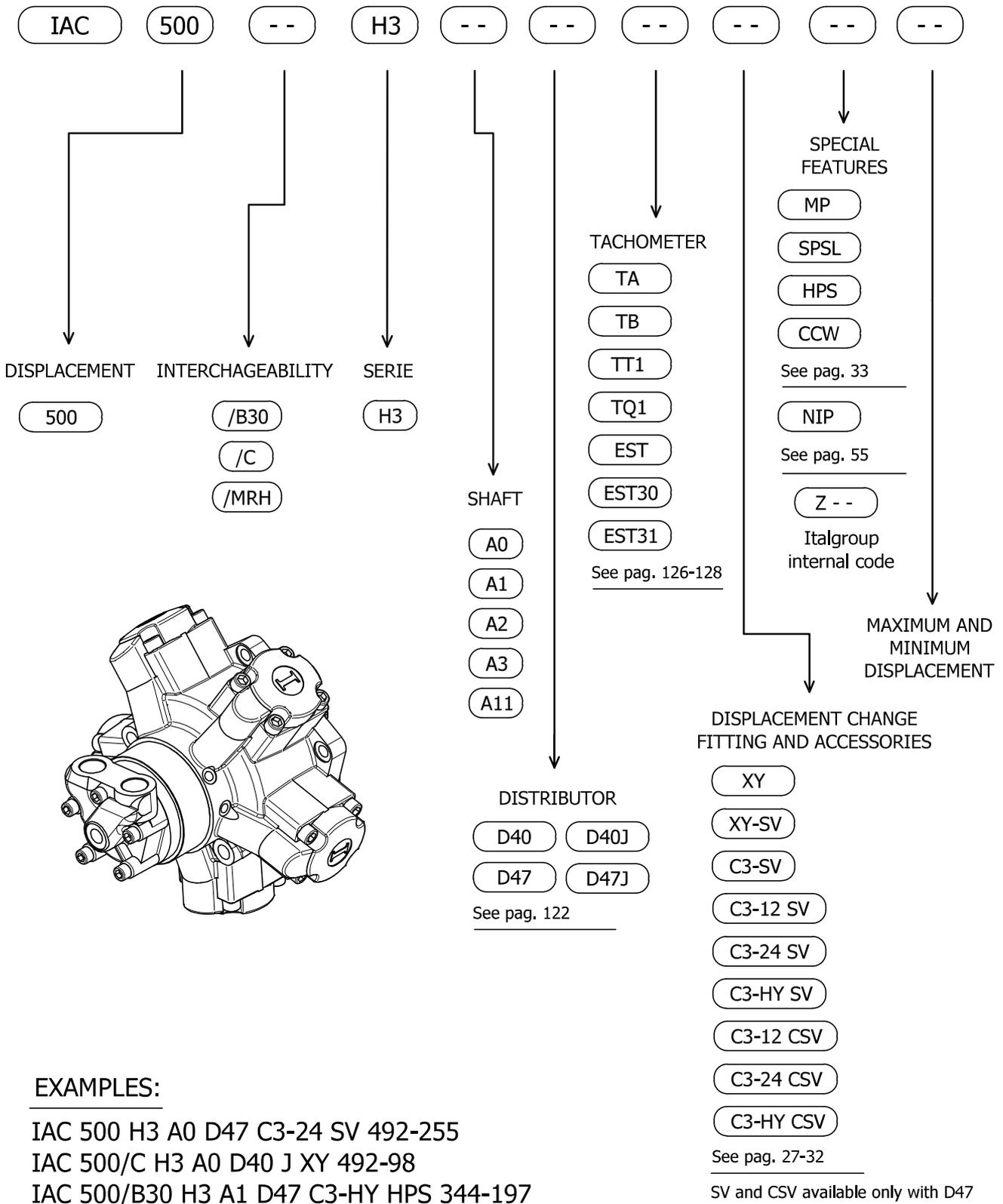
CETOP 3 DISPLACEMENT CHANGE
 VALVE

- C3 - 12 SV (12V DC)
- C3 - 24 SV (24V DC)
- C3 - HY SV (HYDRAULIC OPERATED)



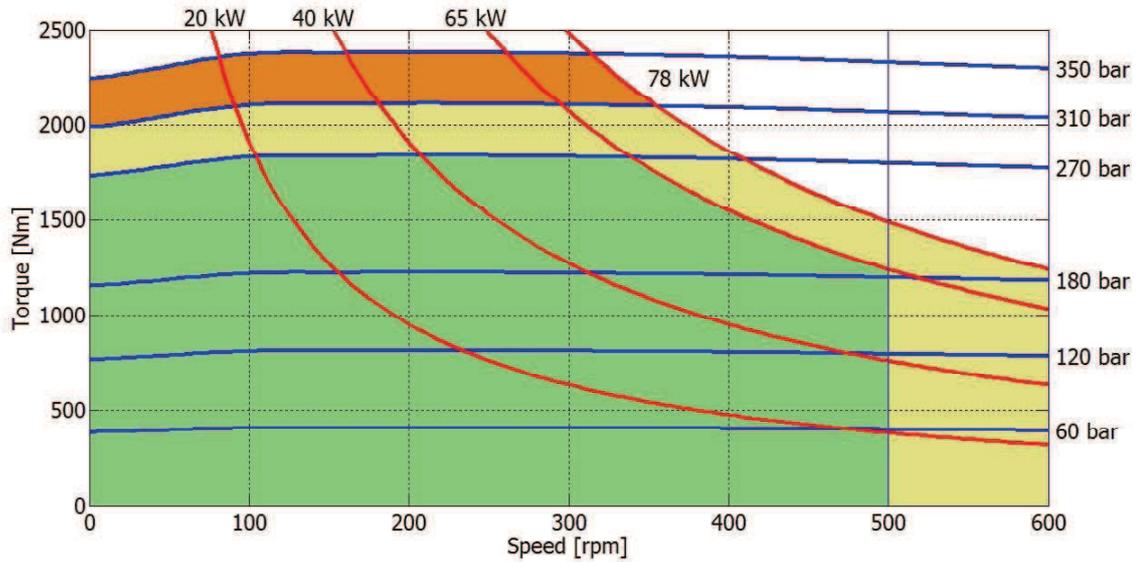
The data specified into the catalogue are for product description purpose only and must not be interpreted as warranted characteristics in legal sense. Italgrou S.r.l. reserves the right to implement modifications without notice. All partial or total reproduction and copy without written authorization of Italgrou S.r.l. is strictly forbidden.

IAC 500 H3 - ORDERING CODE

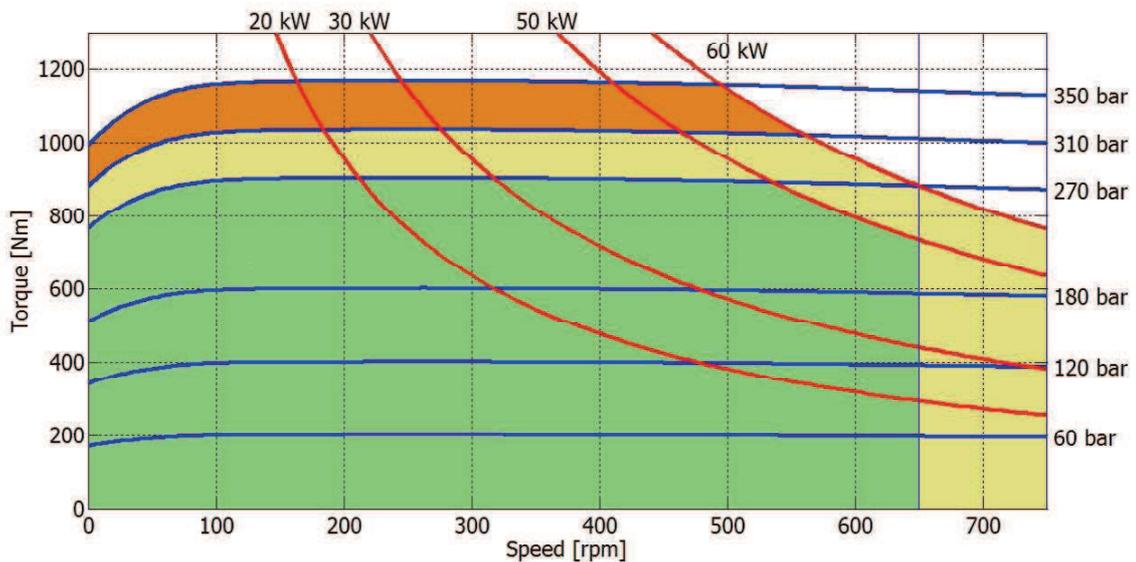


The data specified into the catalogue are for product description purpose only and must not be interpreted as warranted characteristics in legal sense. Italgroup S.r.l. reserves the right to implement modifications without notice. All partial or total reproduction and copy without written authorization of Italgroup S.r.l. is strictly forbidden.

492 cc - WITHOUT FLUSHING



255 cc - WITHOUT FLUSHING

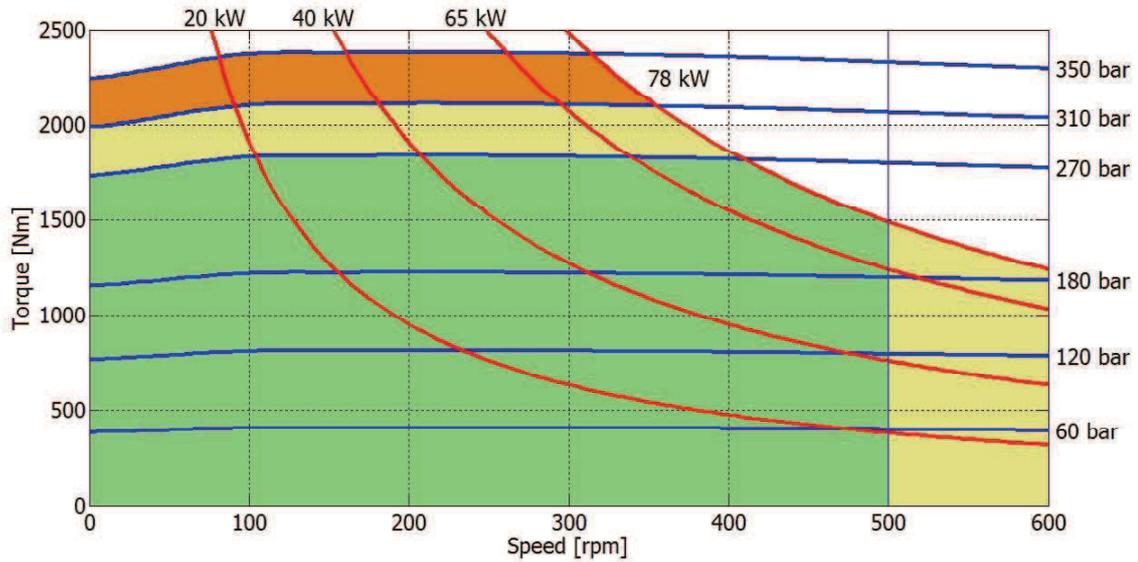


- Continuous operation
- Intermittent operation: permitted for a 15% of duty cycle, for 3 minutes maximum period.
- Peak operation: permitted for very short periods (3-5 seconds every 10-15 minutes).

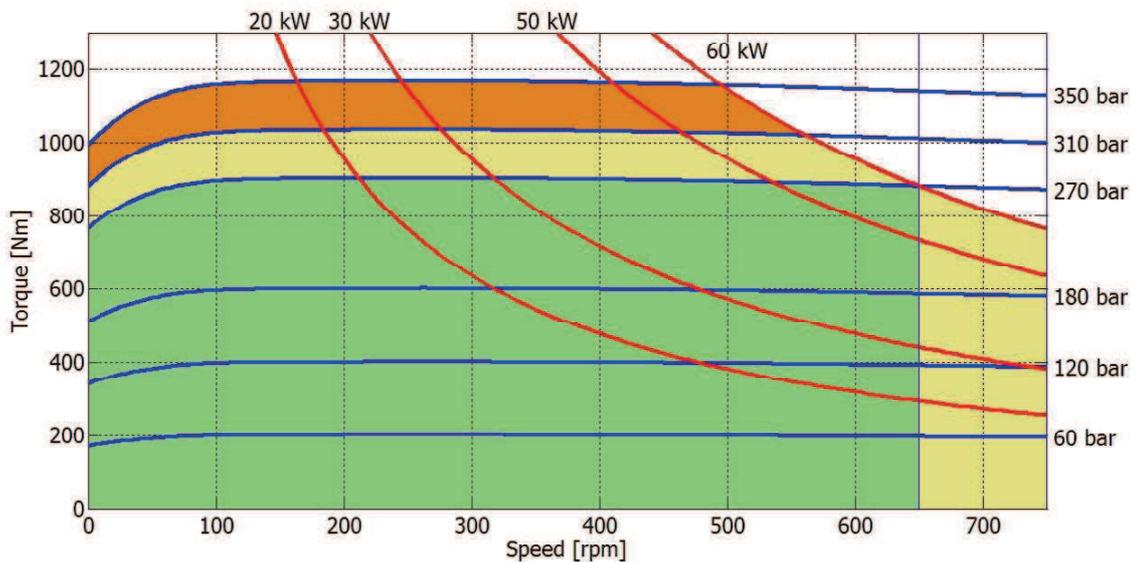
The above diagrams are referring to the hydraulic motor working with a fluid in ideal conditions (viscosity at 40 cSt). In case the working temperature increases and viscosity reach values under the recommended values (see hydraulic fluid recommendations) flushing must be performed or ISO oil grade must be changed. The working temperature must not overcome 70 °C.

The data specified into the catalogue are for product description purpose only and must not be interpreted as warranted characteristics in legal sense. Italgrou S.r.l. reserves the right to implement modifications without notice. All partial or total reproduction and copy without written authorization of Italgrou S.r.l. is strictly forbidden.

492 cc - WITH FLUSHING



255 cc - WITH FLUSHING

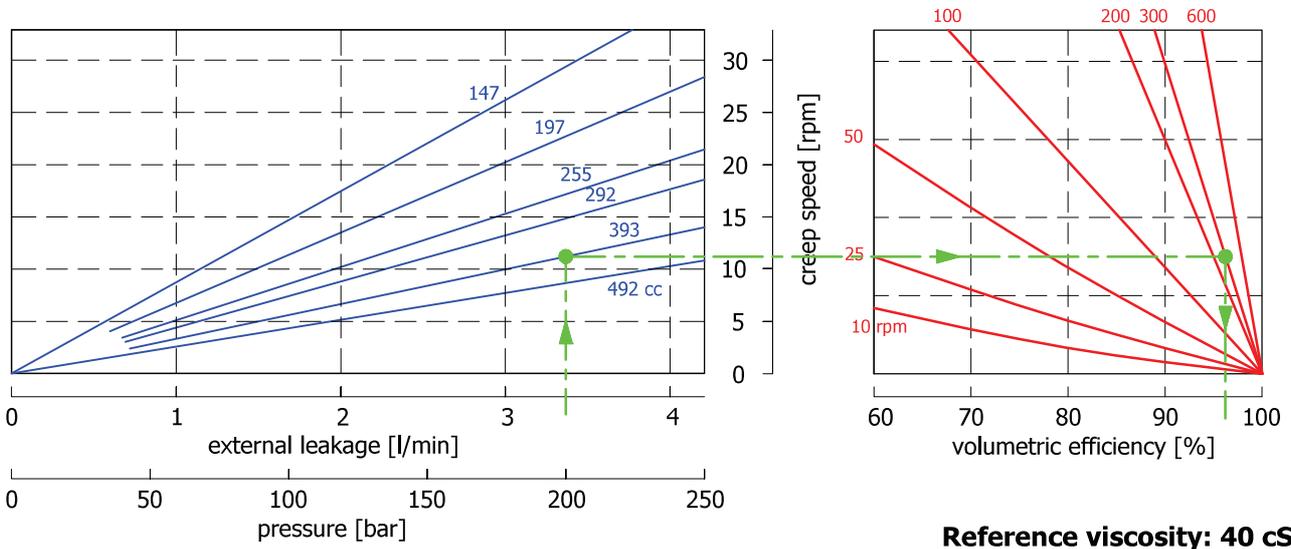


- Continuous operation
- Intermittent operation: permitted for a 15% of duty cycle, for 3 minutes maximum period.
- Peak operation: permitted for very short periods (3-5 seconds every 10-15 minutes).

The above diagrams are referring to the hydraulic motor working with a fluid in ideal conditions (viscosity at 40 cSt). In case the working temperature increases and viscosity reach values under the recommended values (see hydraulic fluid recommendations) flushing must be optimized or ISO oil grade must be changed. The working temperature must not overcome 70 °C.

The data specified into the catalogue are for product description purpose only and must not be interpreted as warranted characteristics in legal sense. ItalgrouP S.r.l. reserves the right to implement modifications without notice. All partial or total reproduction and copy without written authorization of ItalgrouP S.r.l. is strictly forbidden.

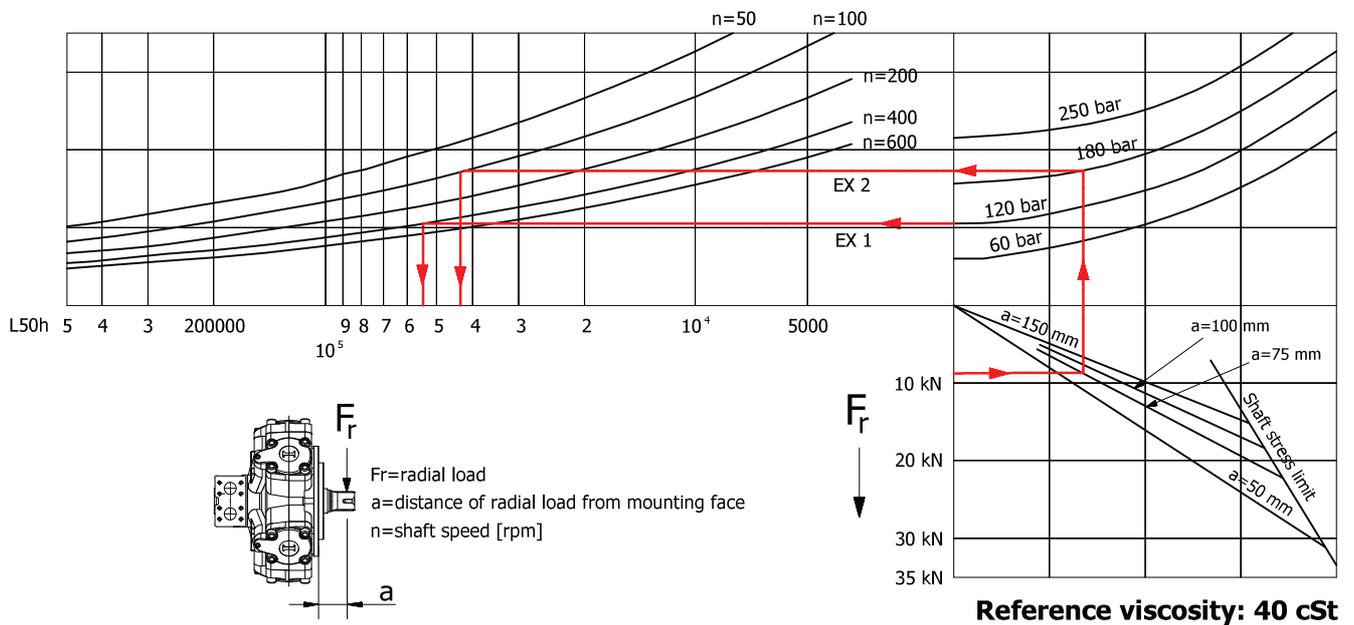
CREEP SPEED - VOLUMETRIC EFFICIENCY



Example:

We suppose (393 cc): $p=200$ [bar], we obtain: external leakage 3,3 [l/min], shaft creep speed 11.5 [rpm].
If we suppose (393 cc): $p=200$ [bar] and $n=300$ [rpm] we obtain a volumetric efficiency of 97%;

BEARING LIFE



Example:

We suppose (EX1): $p=120$ [bar], $n=400$ [rpm]; we obtain an average lifetime of 53000 [h].
If we suppose (EX2): $F_r=9$ [kN], $a=75$ [mm], $p=180$ [bar] and $n=100$ [rpm], we obtain an average lifetime of 42000 [h].

The data specified into the catalogue are for product description purpose only and must not be interpreted as warranted characteristics in legal sense. Italgroup S.r.l. reserves the right to implement modifications without notice. All partial or total reproduction and copy without written authorization of Italgroup S.r.l. is strictly forbidden.