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# **ITALGROUP SRL**

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## **IAMD SERIES - IAMD H4**

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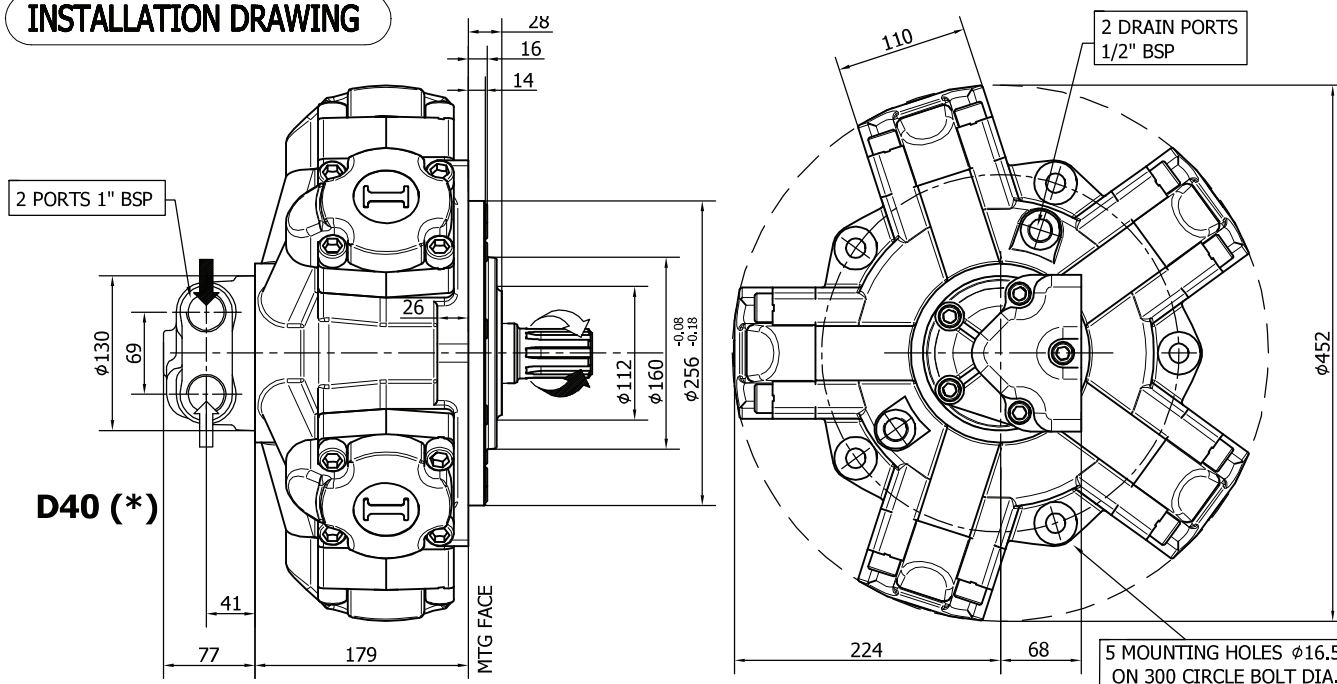
### **GENERAL CATALOGUE**

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**INSTALLATION DRAWING**



**TECHNICAL DATA**

		500	600	700	800	850	900	1000	1250
DISPLACEMENT	[cc]	493	584	714	792	847	904	992	1247
SPECIFIC TORQUE	[Nm/bar]	7.8	9.3	11.4	12.6	13.5	14.4	15.8	19.8
MAX. CONT. PRESSURE	[bar]	270	270	270	270	270	270	270	200
HYDROSTATIC TEST PRESSURE	[bar]	420	420	420	420	420	420	420	420
MAX. CONT. SPEED	[rpm]	700	700	500	450	420	400	355	280
PEAK SPEED (***)	[rpm]	800	800	580	520	490	460	405	320
MAX. CONT. POWER (****)	[kW]	120	120	120	120	120	120	120	120
MAX. CONT. POWER WITH FLUSHING	[kW]	150	150	150	150	150	150	150	150
MAX. CASE PRESSURE	[bar]	6	6	6	6	6	6	6	6
DRY WEIGHT	[kg]	92	92	92	92	92	92	92	92
TEMPERATURE RANGE (**)	[°C]	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70

- (\*) The standard distributor (D40) is shown. Please refer to distributors section (pag. 148-149) for different distributor interfaces.
- (\*\*) Please refer to the hydraulic fluid recommendations (pag. 10-11).
- (\*\*\*) Do not exceed maximum continuous power with flushing (see pag. 13).
- (\*\*\*\*) For motor operation with a continuous duty cycle at maximum continuous power the flushing is usually required. For more information please contact our technical department.

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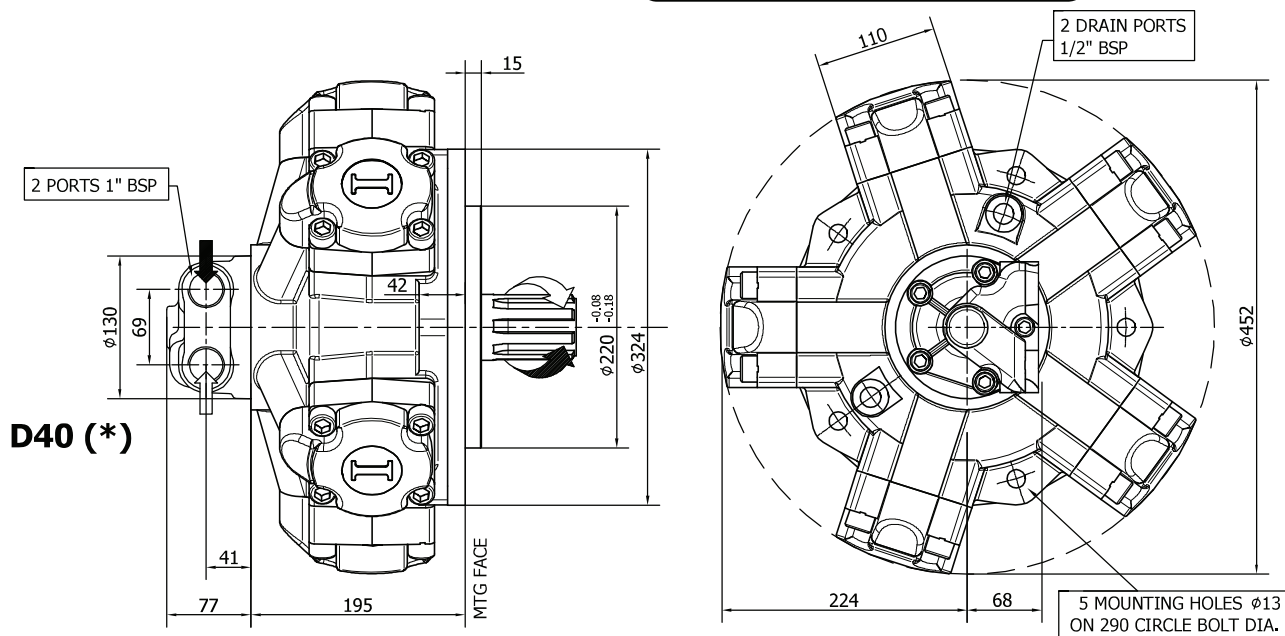
**A0**



Pag. 49

**INSTALLATION DRAWING**

Available distributor flange: **FL2**  
refer to page 156 (distributor fitting D47)



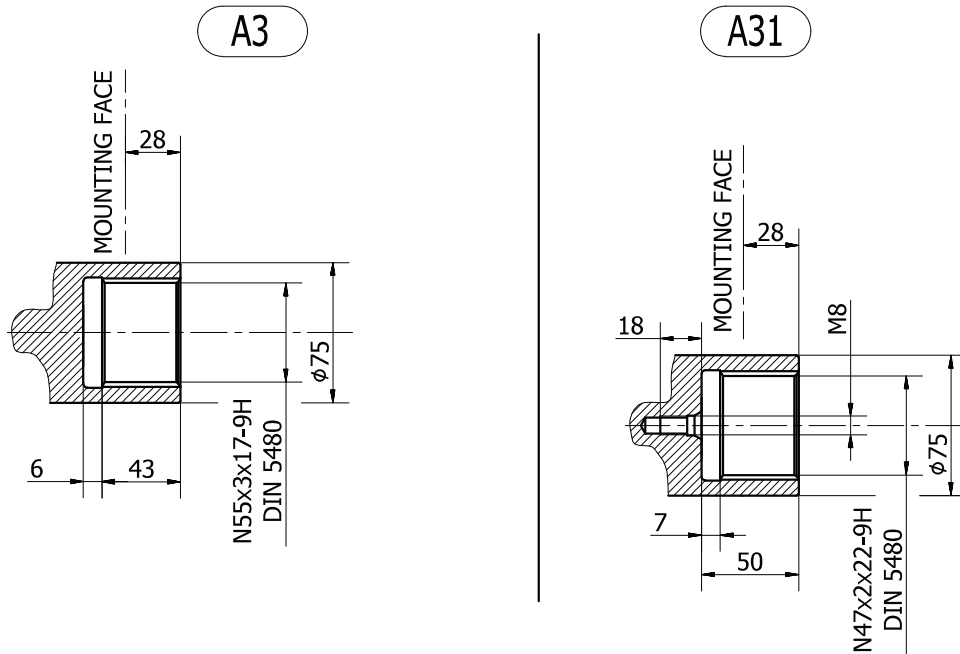
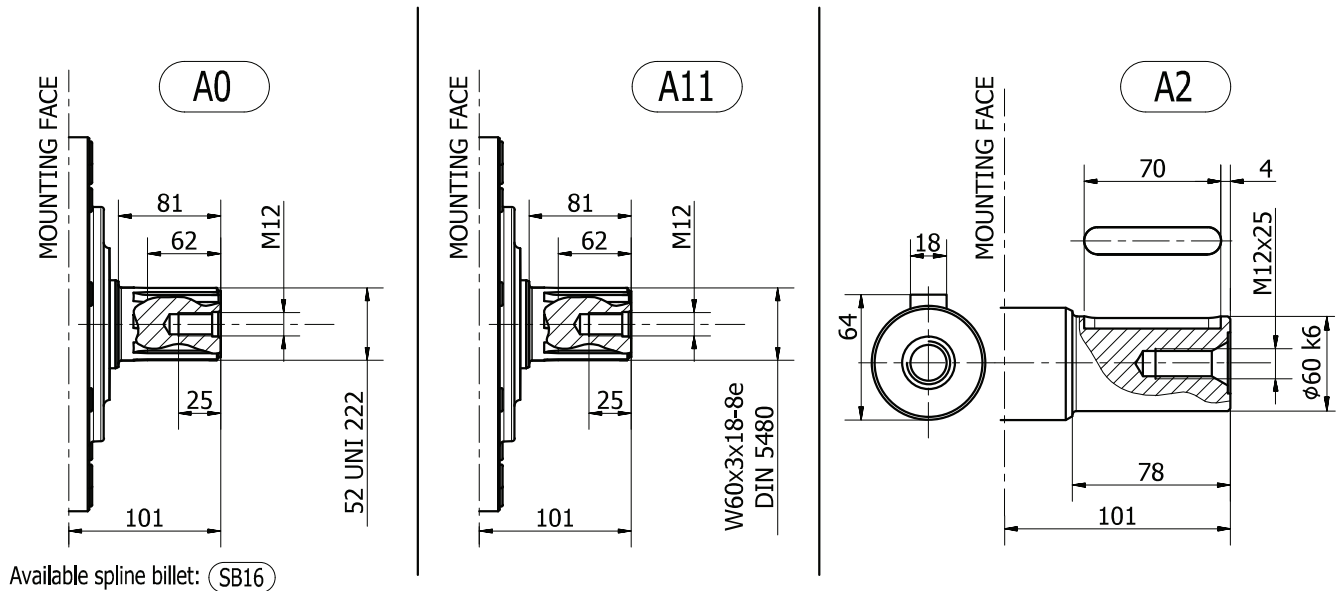
**TECHNICAL DATA**

		500	600	700	800	850	900	1000	1250
DISPLACEMENT	[cc]	493	584	714	792	847	904	992	1247
SPECIFIC TORQUE	[Nm/bar]	7.8	9.3	11.4	12.6	13.5	14.4	15.8	19.8
MAX. CONT. PRESSURE	[bar]	270	270	270	270	270	270	270	200
HYDROSTATIC TEST PRESSURE	[bar]	420	420	420	420	420	420	420	420
MAX. CONT. SPEED	[rpm]	700	700	500	450	420	400	355	280
PEAK SPEED (***)	[rpm]	800	800	580	520	490	460	405	320
MAX. CONT. POWER (****)	[kW]	120	120	120	120	120	120	120	120
MAX. CONT. POWER WITH FLUSHING	[kW]	150	150	150	150	150	150	150	150
MAX. CASE PRESSURE	[bar]	6	6	6	6	6	6	6	6
DRY WEIGHT	[kg]	92	92	92	92	92	92	92	92
TEMPERATURE RANGE (**)	[°C]	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70

- (\*) The standard distributor (D40) is shown. Please refer to distributors section (pag. 148-149) for different distributor interfaces.
- (\*\*) Please refer to the hydraulic fluid recommendations (pag. 10-11).
- (\*\*\*) Do not exceed maximum continuous power with flushing (see pag. 13).
- (\*\*\*\*) For motor operation with a continuous duty cycle at maximum continuous power the flushing is usually required. For more information please contact our technical department.

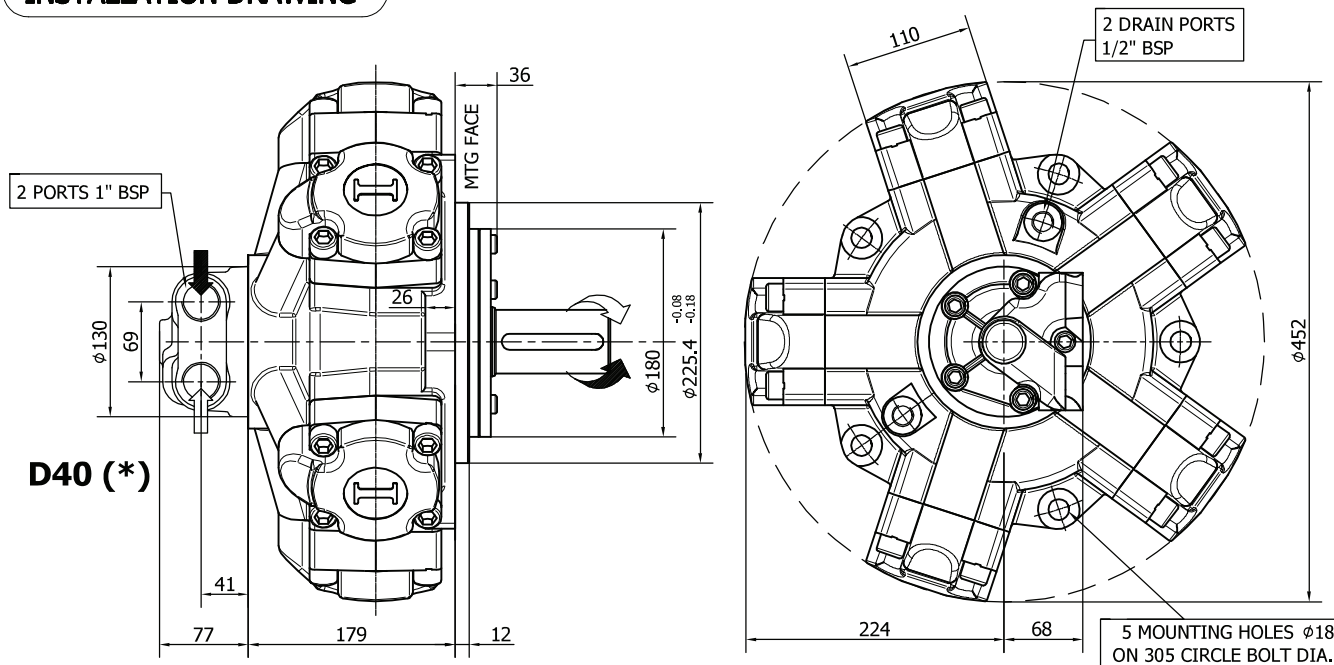
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## SHAFT CONFIGURATIONS



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**INSTALLATION DRAWING**



**TECHNICAL DATA**

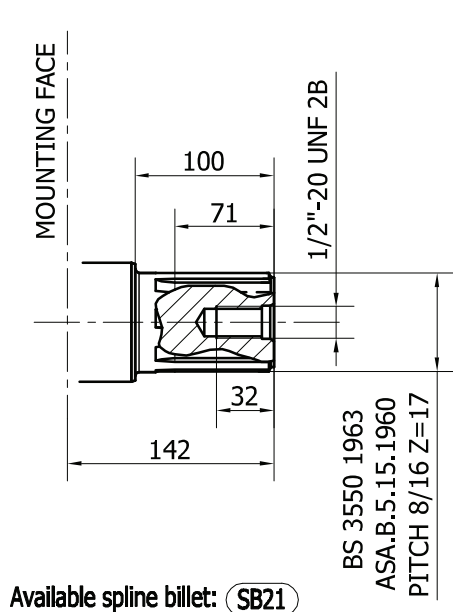
		500	600	700	800	850	900	1000	1250
DISPLACEMENT	[cc]	493	584	714	792	847	904	992	1247
SPECIFIC TORQUE	[Nm/bar]	7.8	9.3	11.4	12.6	13.5	14.4	15.8	19.8
MAX. CONT. PRESSURE	[bar]	270	270	270	270	270	270	270	200
HYDROSTATIC TEST PRESSURE	[bar]	420	420	420	420	420	420	420	420
MAX. CONT. SPEED	[rpm]	700	700	500	450	420	400	355	280
PEAK SPEED (***)	[rpm]	800	800	580	520	490	460	405	320
MAX. CONT. POWER (****)	[kW]	120	120	120	120	120	120	120	120
MAX. CONT. POWER WITH FLUSHING	[kW]	150	150	150	150	150	150	150	150
MAX. CASE PRESSURE	[bar]	6	6	6	6	6	6	6	6
DRY WEIGHT	[kg]	92	92	92	92	92	92	92	92
TEMPERATURE RANGE (**)	[°C]	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70

- (\*) The standard distributor (D40) is shown. Please refer to distributors section (pag. 148-149) for different distributor interfaces.
- (\*\*) Please refer to the hydraulic fluid recommendations (pag. 10-11).
- (\*\*\*) Do not exceed maximum continuous power with flushing (see pag. 13).
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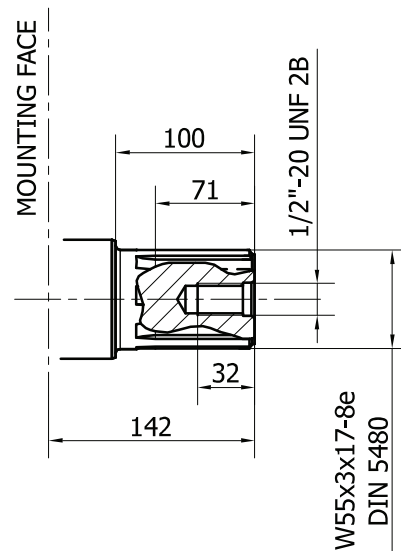
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## SHAFT CONFIGURATIONS

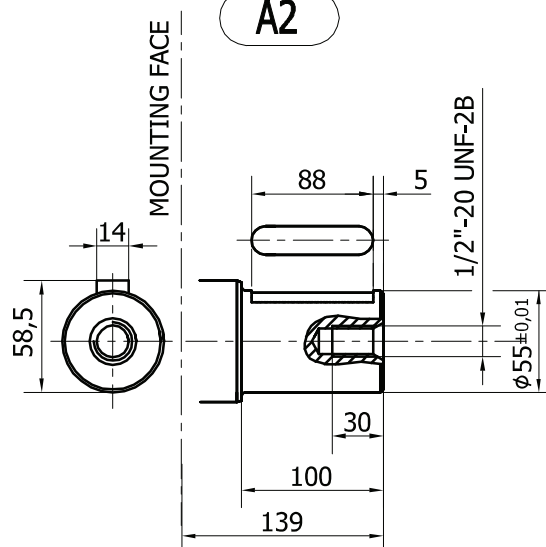
**A1**



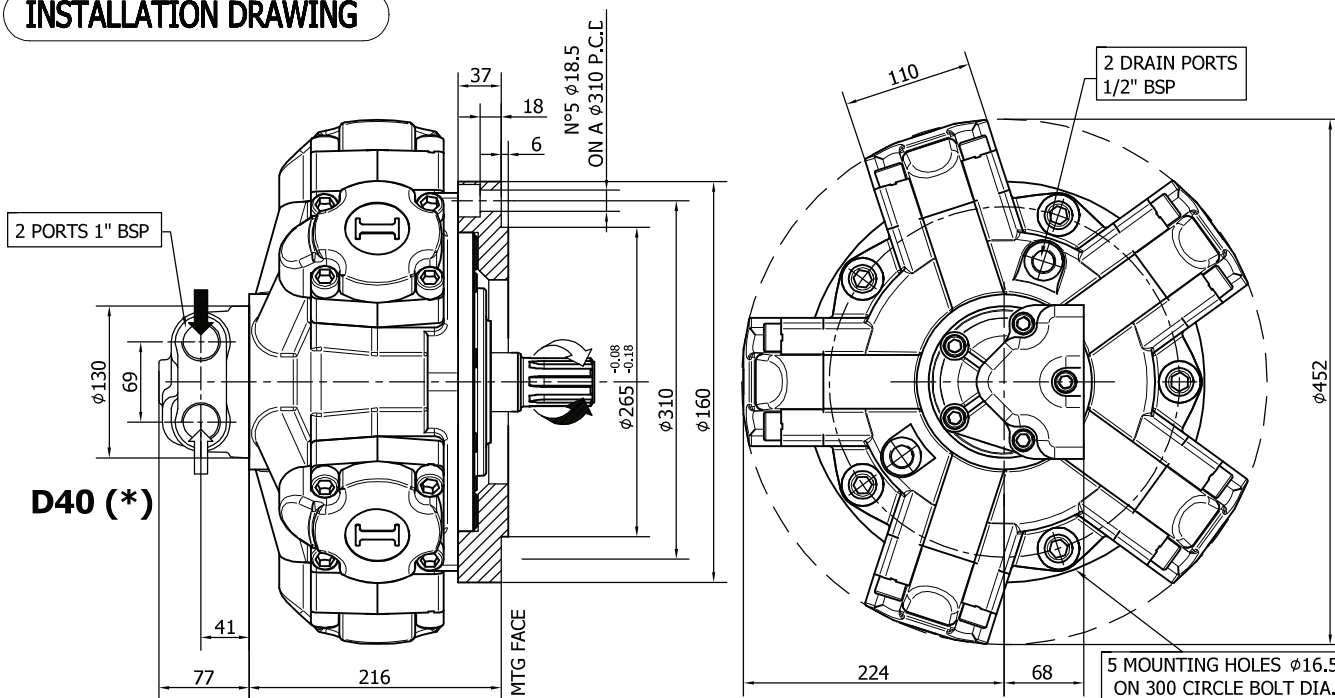
**A11**



**A2**



**INSTALLATION DRAWING**



**TECHNICAL DATA**

		500	600	700	800	850	900	1000	1250
DISPLACEMENT	[cc]	493	584	714	792	847	904	992	1247
SPECIFIC TORQUE	[Nm/bar]	7.8	9.3	11.4	12.6	13.5	14.4	15.8	19.8
MAX. CONT. PRESSURE	[bar]	270	270	270	270	270	270	270	200
HYDROSTATIC TEST PRESSURE	[bar]	420	420	420	420	420	420	420	420
MAX. CONT. SPEED	[rpm]	700	700	500	450	420	400	355	280
PEAK SPEED (***)	[rpm]	800	800	580	520	490	460	405	320
MAX. CONT. POWER (****)	[kW]	120	120	120	120	120	120	120	120
MAX. CONT. POWER WITH FLUSHING	[kW]	150	150	150	150	150	150	150	150
MAX. CASE PRESSURE	[bar]	6	6	6	6	6	6	6	6
DRY WEIGHT	[kg]	92	92	92	92	92	92	92	92
TEMPERATURE RANGE (**)	[°C]	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70

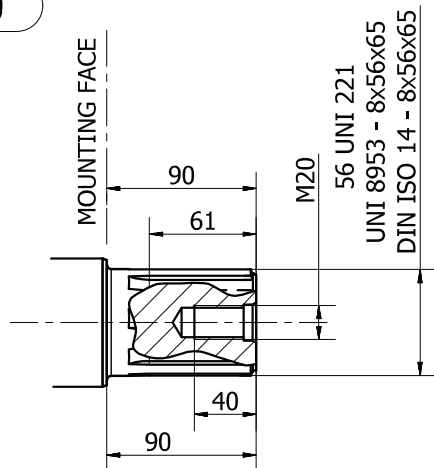
- (\*) The standard distributor (D40) is shown. Please refer to distributors section (pag. 148-149) for different distributor interfaces.
- (\*\*) Please refer to the hydraulic fluid recommendations (pag. 10-11).
- (\*\*\*) Do not exceed maximum continuous power with flushing (see pag. 13).
- (\*\*\*\*) For motor operation with a continuous duty cycle at maximum continuous power the flushing is usually required. For more information please contact our technical department.

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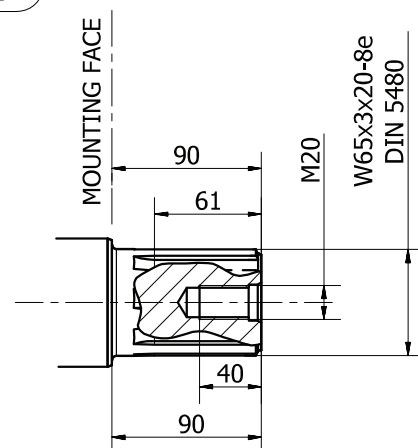
## SHAFT CONFIGURATIONS

A0



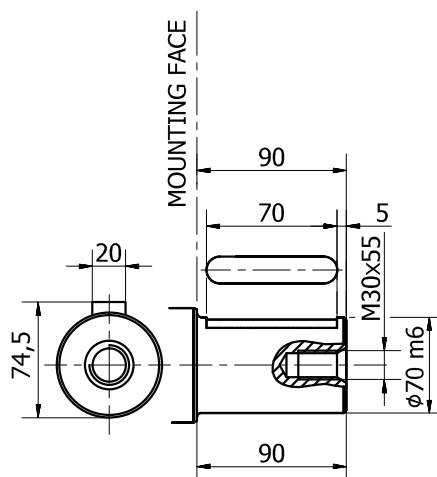
Available spline billet: (SB17)

A1

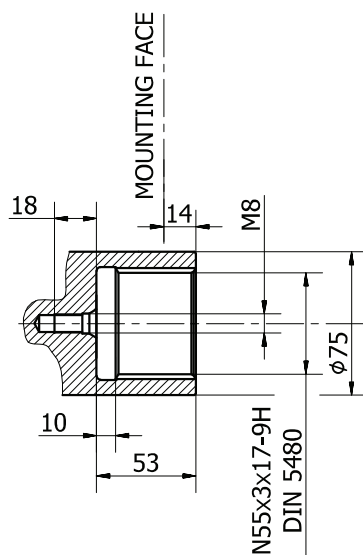


Available spline billet: (SB23)

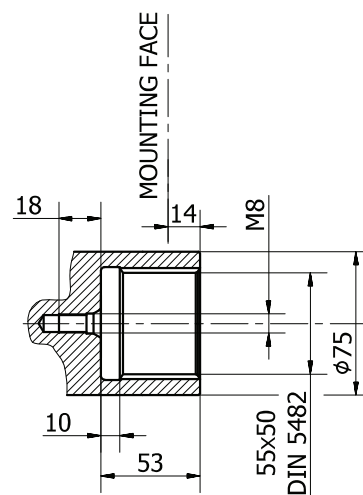
A2



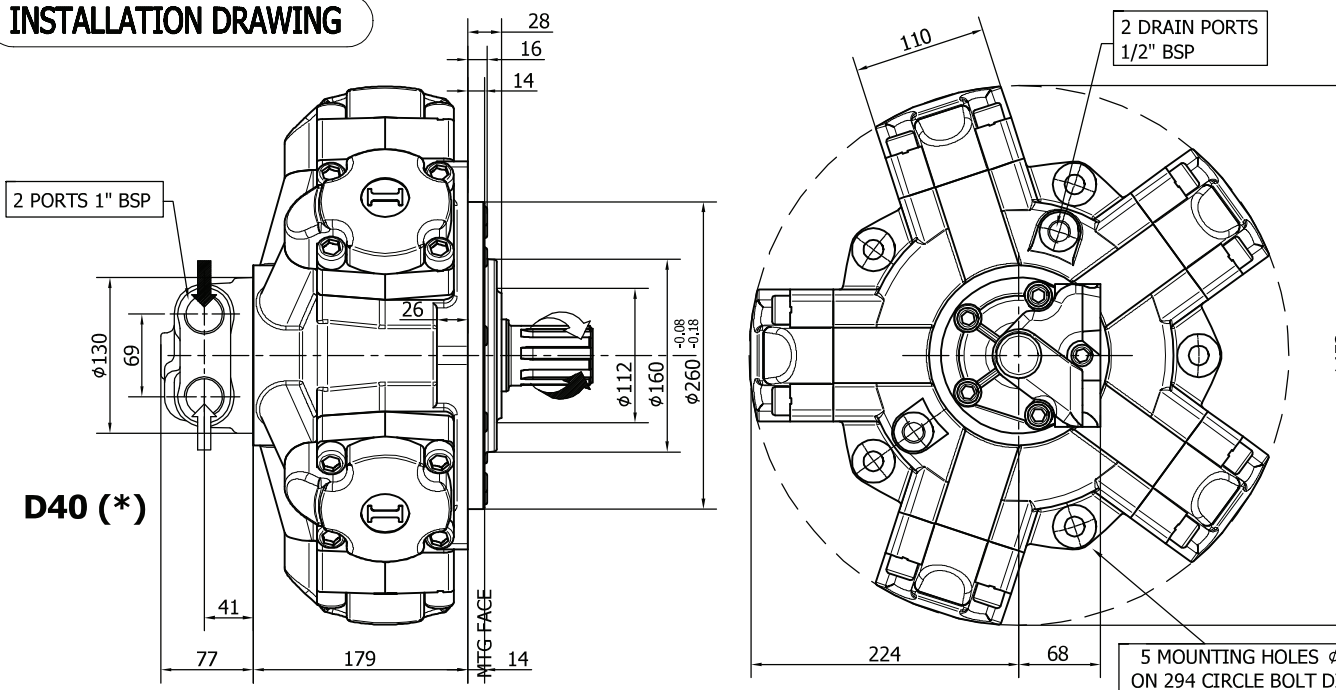
A3



A31



**INSTALLATION DRAWING**



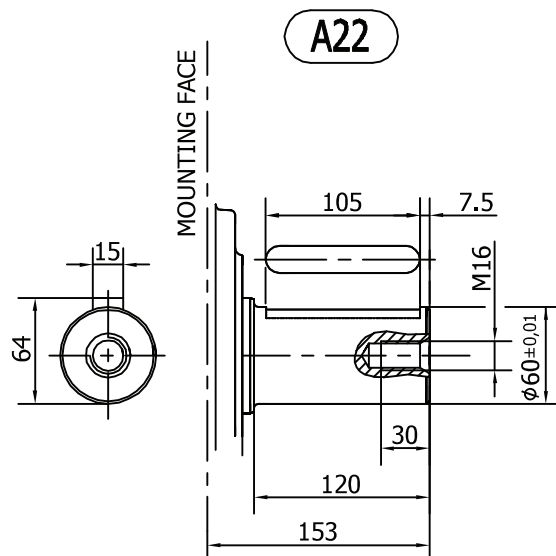
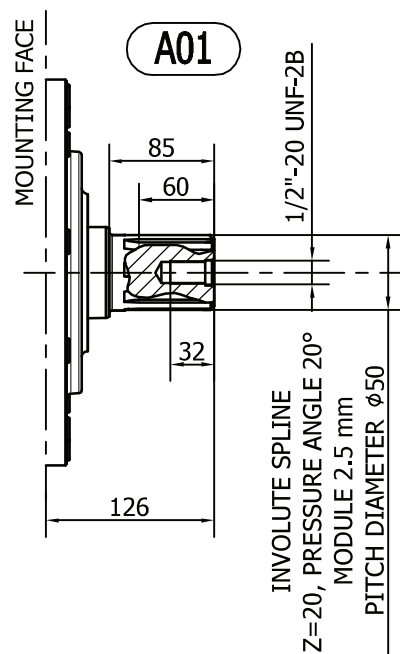
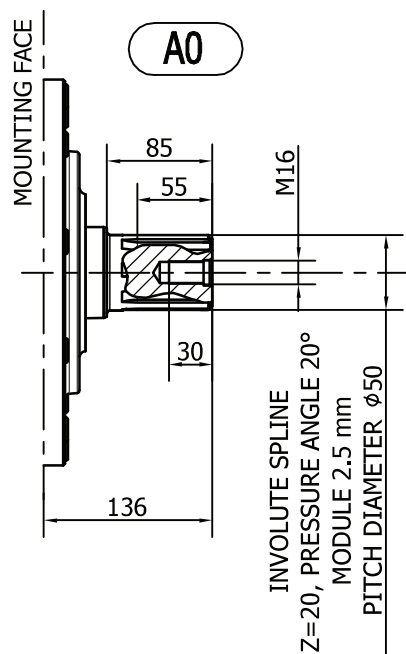
**TECHNICAL DATA**

		500	600	700	800	850	900	1000	1250
DISPLACEMENT	[cc]	493	584	714	792	847	904	992	1247
SPECIFIC TORQUE	[Nm/bar]	7.8	9.3	11.4	12.6	13.5	14.4	15.8	19.8
MAX. CONT. PRESSURE	[bar]	270	270	270	270	270	270	270	200
HYDROSTATIC TEST PRESSURE	[bar]	420	420	420	420	420	420	420	420
MAX. CONT. SPEED	[rpm]	700	700	500	450	420	400	355	280
PEAK SPEED (***)	[rpm]	800	800	580	520	490	460	405	320
MAX. CONT. POWER (****)	[kW]	120	120	120	120	120	120	120	120
MAX. CONT. POWER WITH FLUSHING	[kW]	150	150	150	150	150	150	150	150
MAX. CASE PRESSURE	[bar]	6	6	6	6	6	6	6	6
DRY WEIGHT	[kg]	92	92	92	92	92	92	92	92
TEMPERATURE RANGE (**)	[°C]	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70	-30÷70

- (\*) The standard distributor (D40) is shown. Please refer to distributors section (pag. 148-149) for different distributor interfaces.
- (\*\*) Please refer to the hydraulic fluid recommendations (pag. 10-11).
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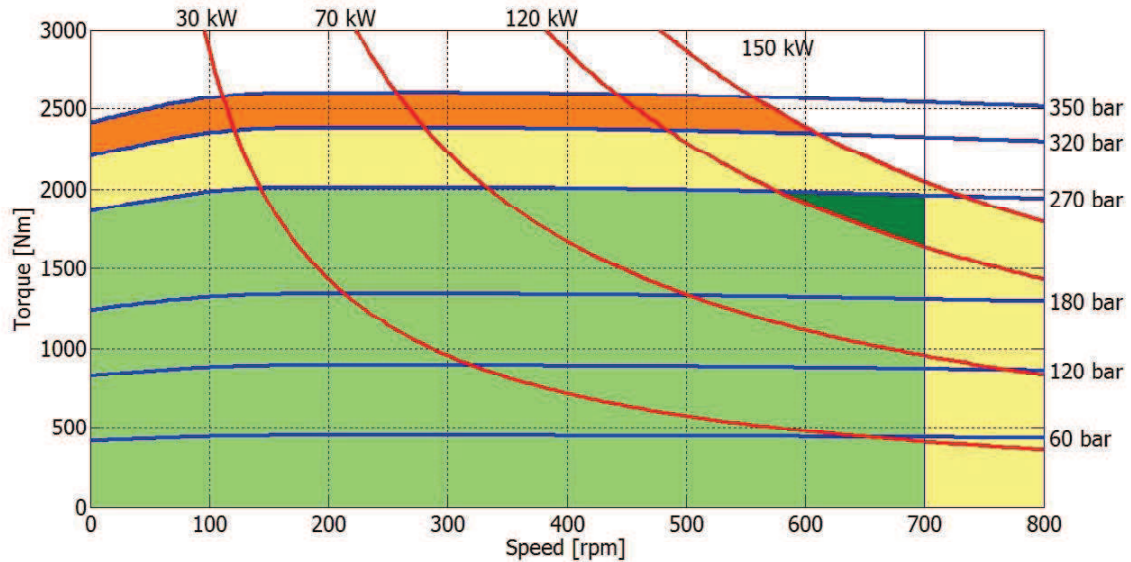
## SHAFT CONFIGURATIONS



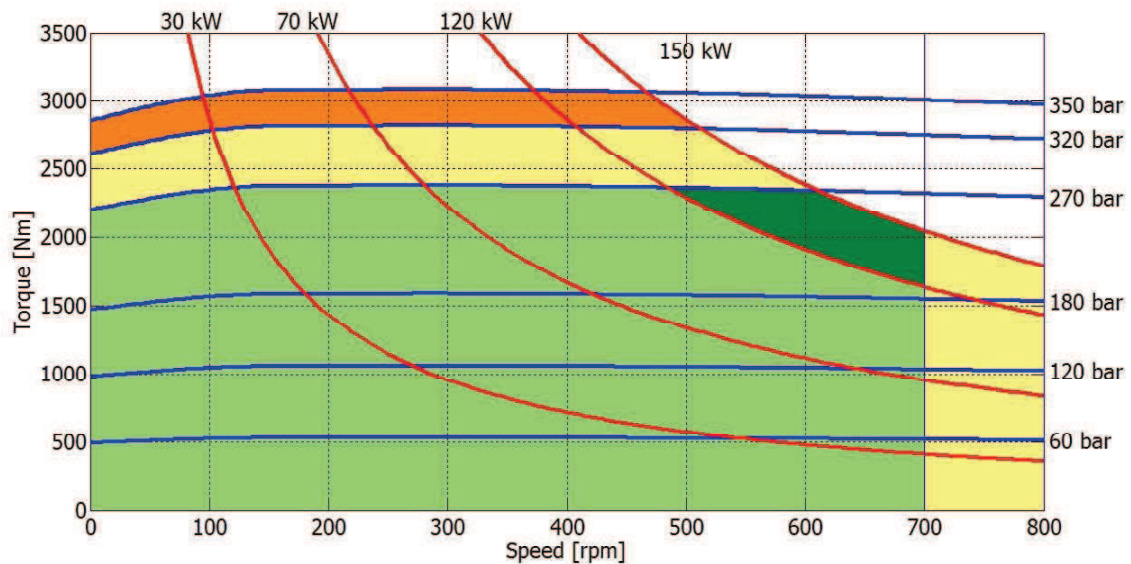
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## IAMD H4 - PERFORMANCE DIAGRAMS

### 500 cc



### 600 cc



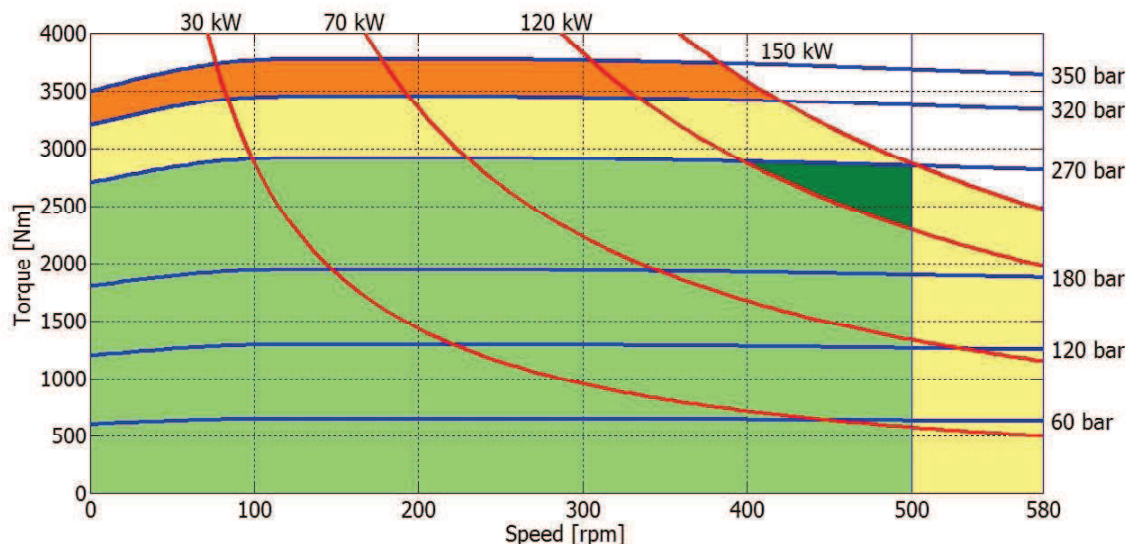
- Continuous operation
- Continuous operation with flushing or intermittent operation (see below for intermittent operation)
- Intermittent operation: permitted for a 15% of duty cycle, for 3 minutes maximum period
- Peak operation: permitted for very short periods (3-5 seconds every 10-15 minutes)

**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.

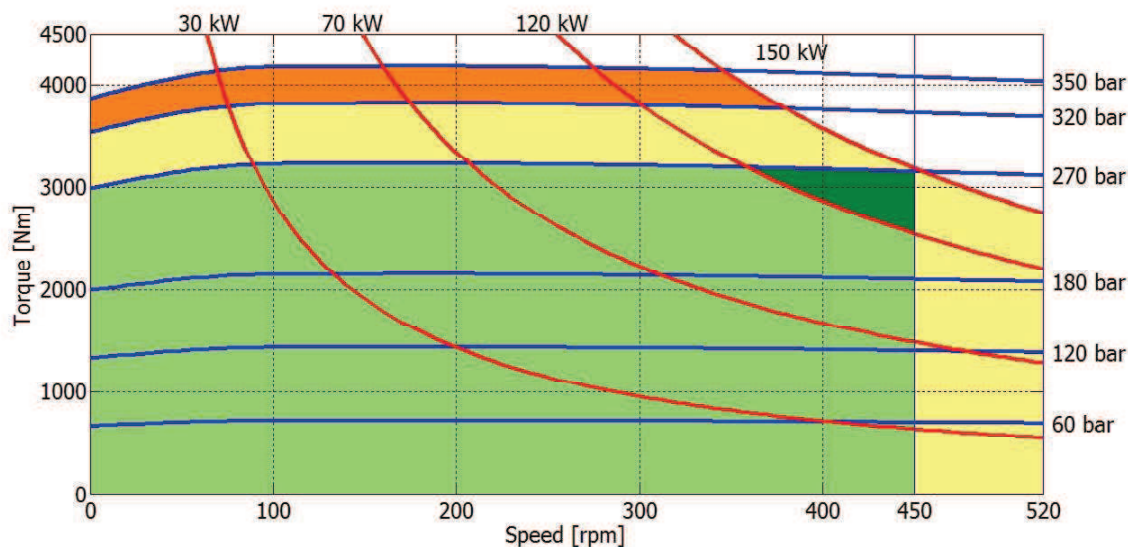
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## IAMD H4 - PERFORMANCE DIAGRAMS

### 700 cc



### 800 cc



- Continuous operation
- Continuous operation with flushing or intermittent operation (see below for intermittent 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)

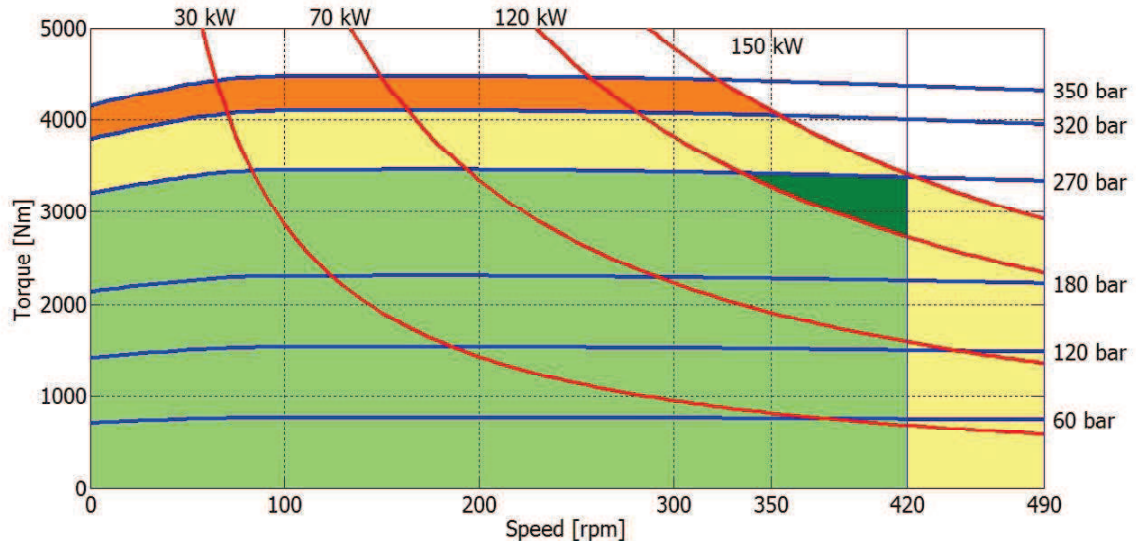
**The above diagrams are referring to the hydraulic motor working with a fluid in ideal conditions (viscosity at 40 cSt).** In case the working temperature increases and viscosity reach values under the recommended values (see hydraulic fluid recommendations) flushing must be performed or ISO oil grade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

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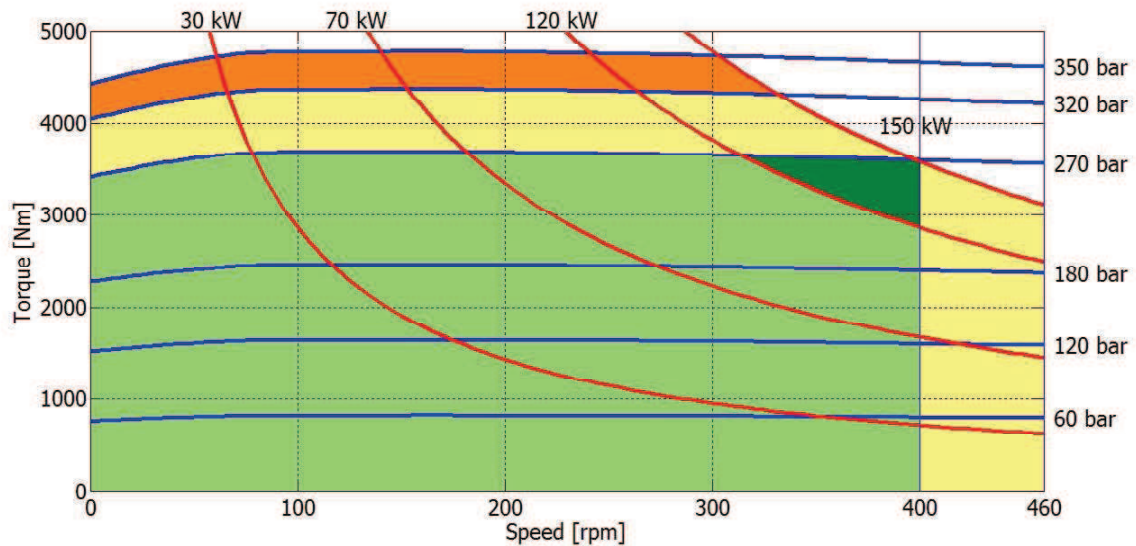


## IAMD H4 - PERFORMANCE DIAGRAMS

### 850 cc



### 900 cc



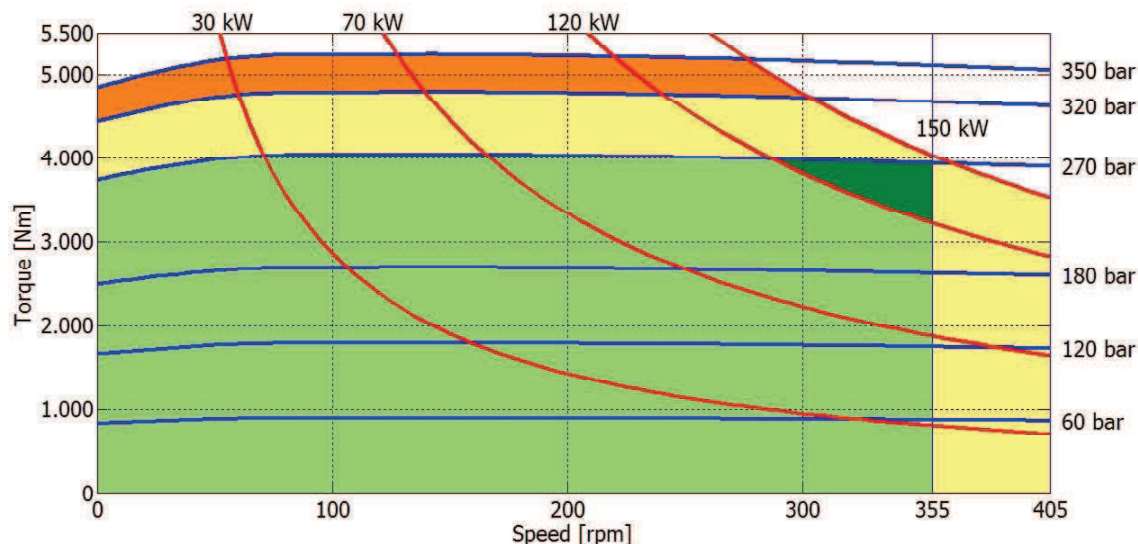
- Continuous operation
- Continuous operation with flushing or intermittent operation (see below for intermittent operation)
- Intermittent operation: permitted for a 15% of duty cycle, for 3 minutes maximum period
- Peak operation: permitted for very short periods (3-5 seconds every 10-15 minutes)

**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.

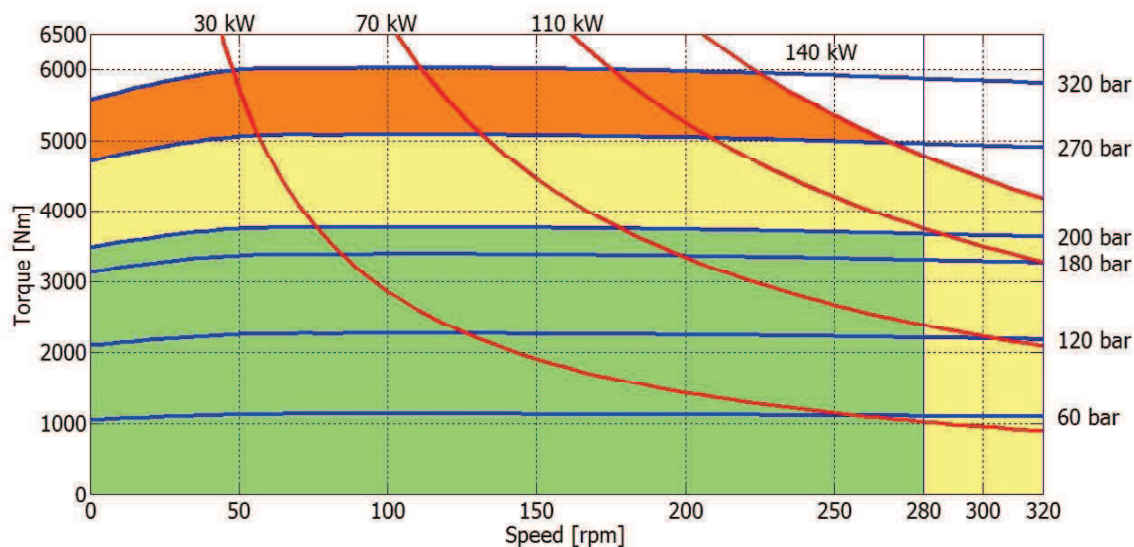
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## IAMD H4 - PERFORMANCE DIAGRAMS

### 1000 cc



### 1250 cc

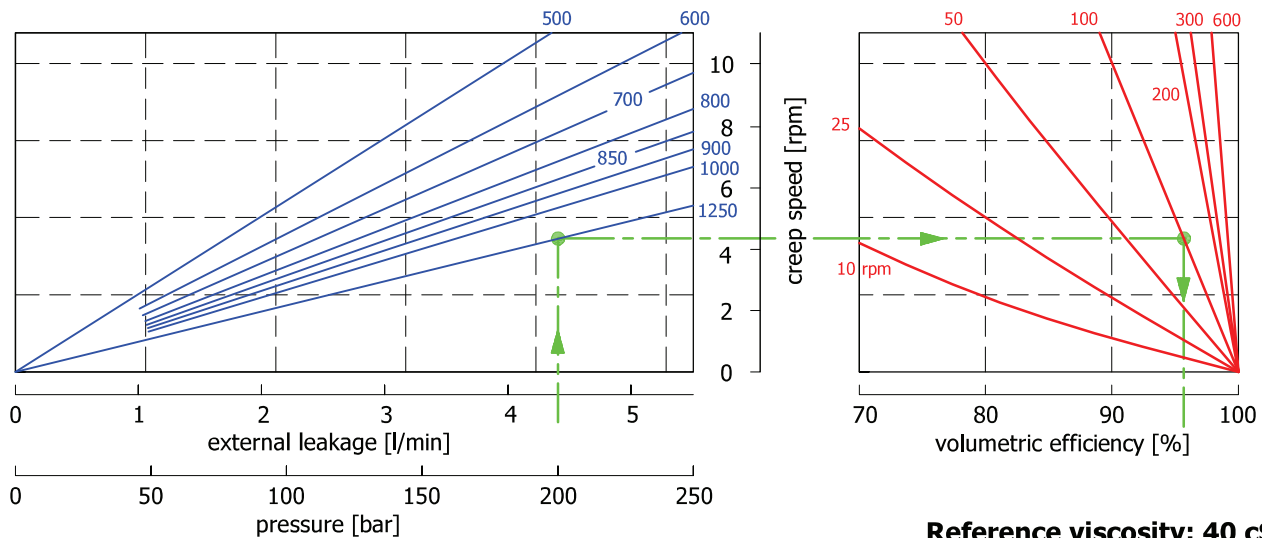


- Continuous operation
- Continuous operation with flushing or intermittent operation (see below for intermittent operation)
- Intermittent operation: permitted for a 15% of duty cycle, for 3 minutes maximum period
- Peak operation: permitted for very short periods (3-5 seconds every 10-15 minutes)

**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.

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**CREEP SPEED - VOLUMETRIC EFFICIENCY**

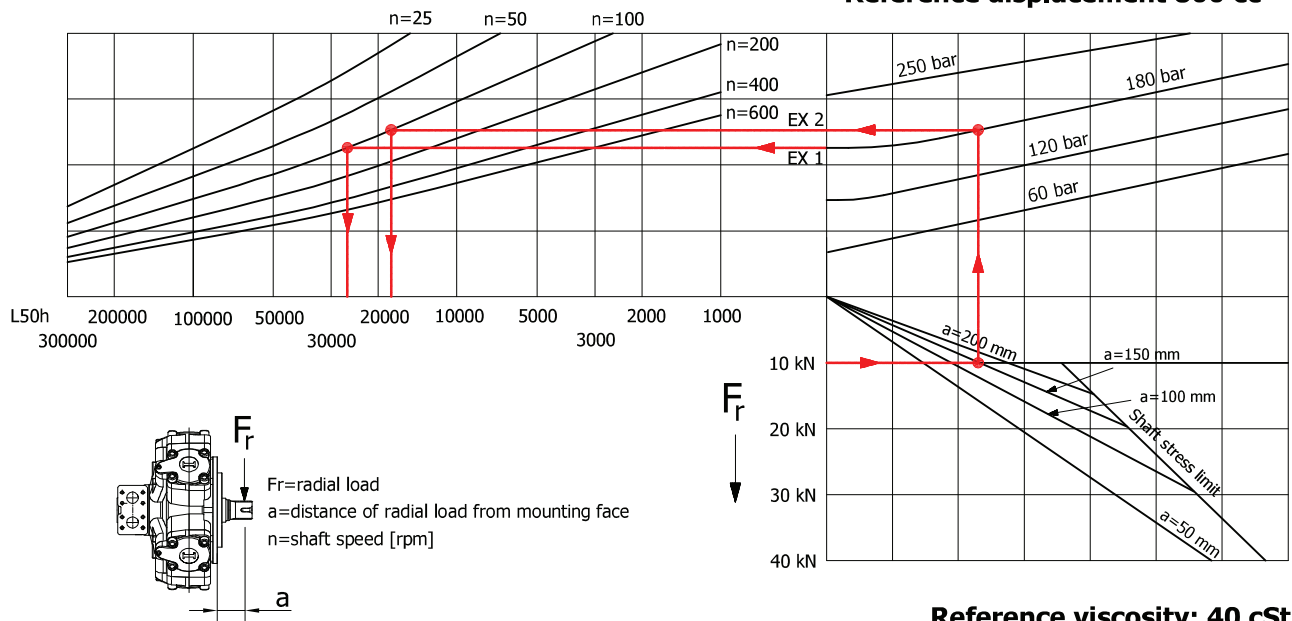


Example:

We suppose (1250 cc):  $p=200$  [bar], we obtain: external leakage 4,3 [l/min], shaft creep speed 4,2 [rpm].  
If we suppose (1250 cc):  $p=200$  [bar] and  $n=100$  [rpm] we obtain a volumetric efficiency of 96%;

**BEARING LIFE**

**Reference displacement 800 cc**



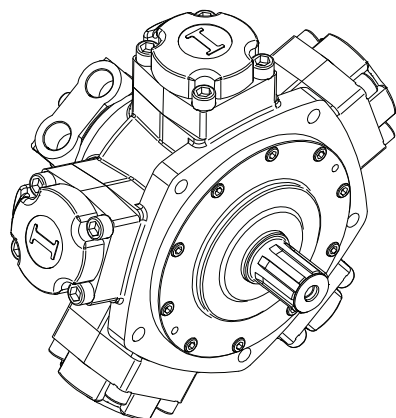
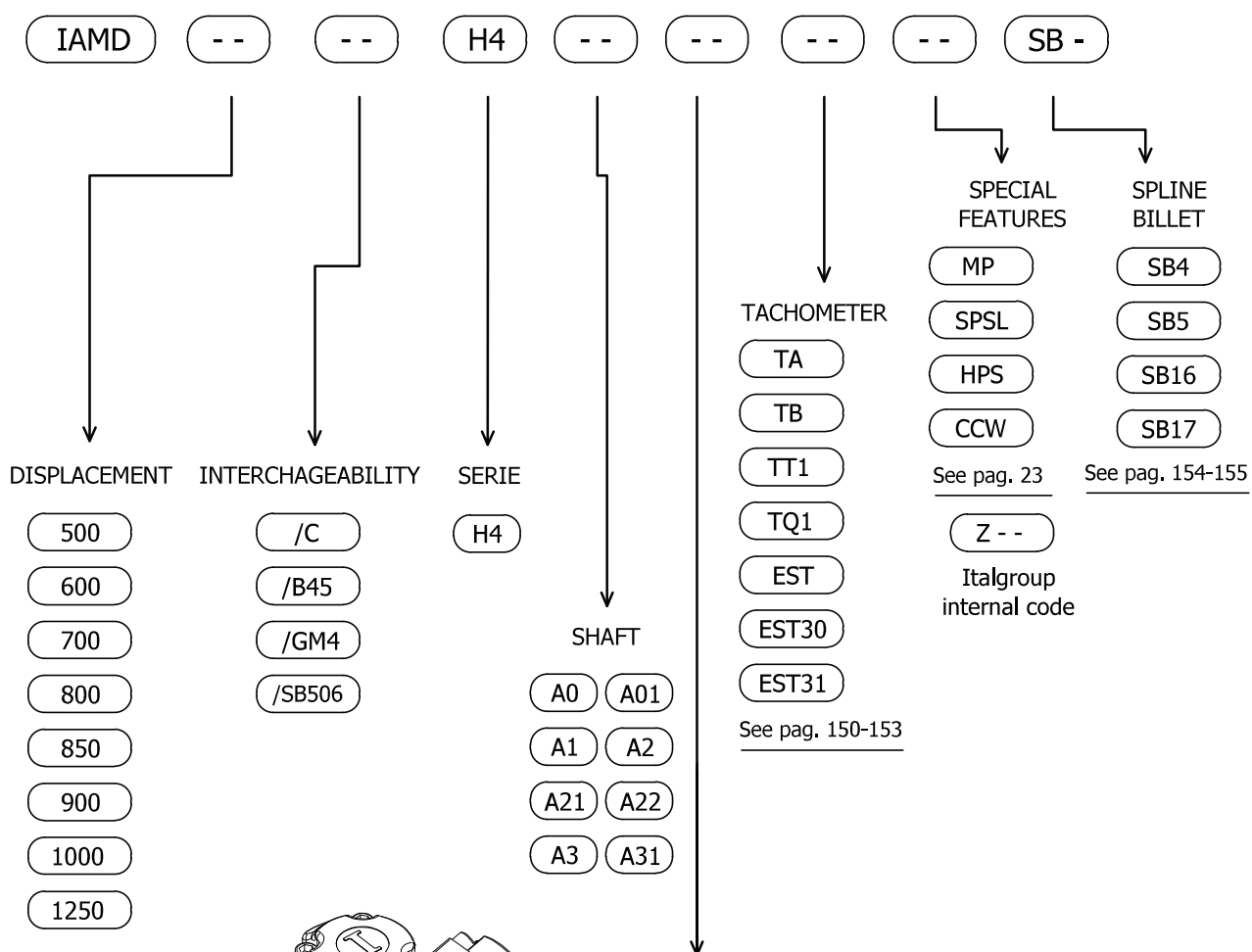
Example:

We suppose (EX1):  $p=180$  [bar],  $n=100$  [rpm]; we obtain an average lifetime of 25000 [h].

If we suppose (EX2):  $F_r=10$  [kN],  $a=150$  [mm],  $n=100$  [rpm] and  $p=180$  [bar] we obtain an average lifetime of 18000 [h].



## IAMD H4 - ORDERING CODE



### EXAMPLES:

IAMD 700 H4 A1 D47J EST31 CCW SB5

IAMD 800/C H4 A0 D40 SB16

IAMD 900/GM4 H4 A0 D47 MP SPSL