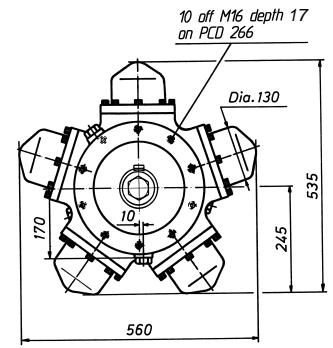
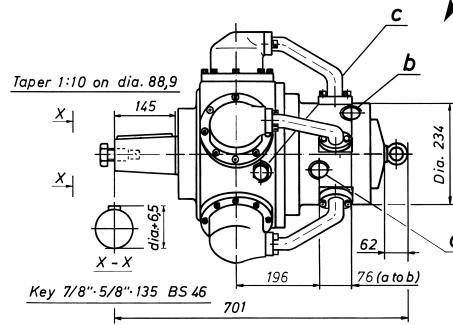
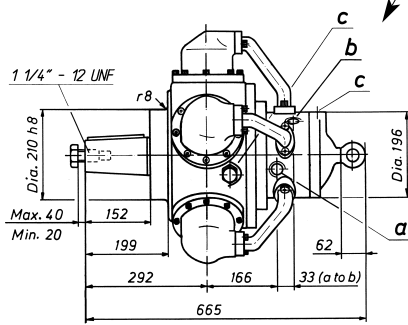


# MOTOR TYPE HMB – DIMENSIONS AND TECHNICAL DATA

## MOTOR TYPE HMB5 – 1.8/2.3/2.8

HMB5 – 1.8/2.3/2.8-1 -T with 300 l/min slide valve.

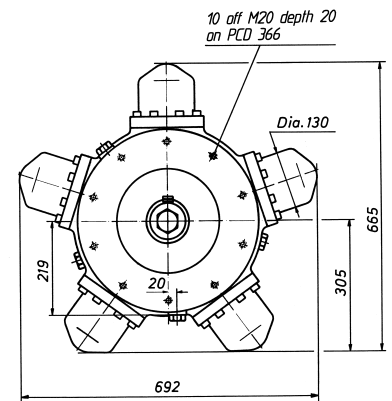
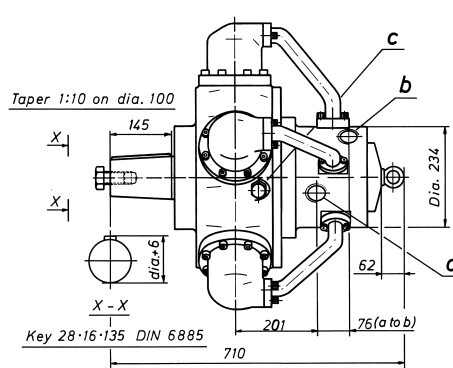
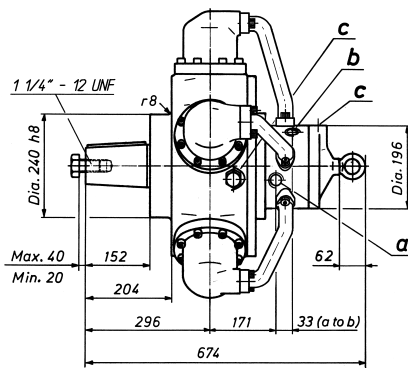
HMB5 – 1.8/2.3/2.8-1 -T with 500 l/min slide valve.



## MOTOR TYPE HMB5 – 2.6/3.3/4.0

HMB5 – 2.6/3.3/4.0-1 -T with 300 l/min slide valve.

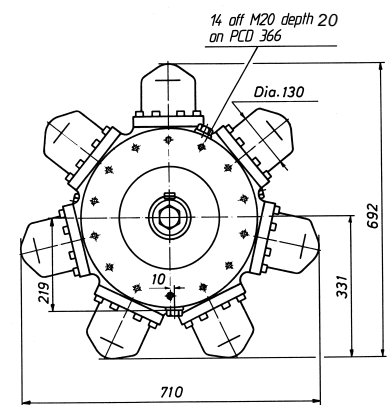
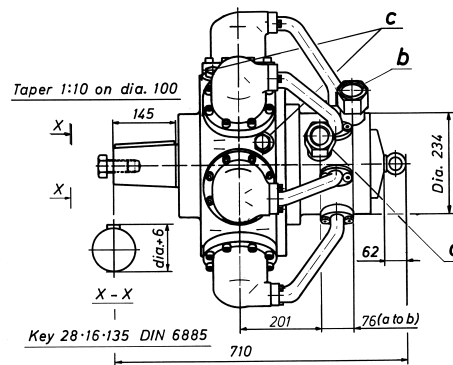
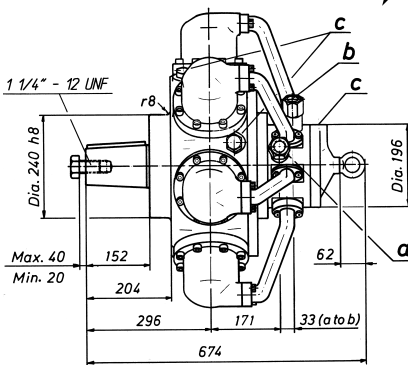
HMB5 – 2.6/3.3/4.0-1 -T with 500 l/min slide valve.



## MOTOR TYPE HMB7 – 3.7/4.6/5.6

HMB7 – 3.7/4.6/5.6 -T with 300 l/min slide valve.

HMB7 – 3.7/4.6/5.6 -T with 500 l/min slide valve.



### OIL CONNECTION

Connections **a** and **b** on 300 l/min slide valve – 1" BSP.  
Connections **a** and **b** on 500 l/min slide valve – 1 1/2" BSP.  
On 7 cylinder motors connection through adapters with length 95 mm.

### DRAIN

Connection **c**: 3/4" BSP.  
Drain always to be connected to the highest connection point.

### ROTATION

Clockwise rotation view from shaft end: **b**-oil inlet and **a**-oil outlet.

### TIGHTENING OF MOUNTING SCREWS

Tightening torque on screw M16 (quality 8.8): 180 Nm  
Tightening torque on screw M20 (quality 8.8): 360 Nm

## ALTERNATIVE SHAFT TYPES:

HMB5-1.8/2.3/2.8	Parallel shaft: Key: 7/8"x7/8"x135 BS46	Splines BS 3550: 1963. 6/12 pitch, flat root side fit	Splines DIN 5480 WA90x3x30x28xh6x9e
HMB5-2.6/3.3/4.0 HMB7-3.7/4.6/5.6	Parallel shaft Key: 1"x1"x135 (BS46)	Splines BS 3550:1963 6/12 pitch, flat root side fit	Splines DIN 5480 WA100x3x30x32xh6x9e

## DIFFERENT MOTOR VERSIONS AND APPLICATIONS

The motor type HMB is produced in 3 different versions:

1. A heavy duty industrial motor with large cylindrical bearings and a 500 l/min slide valve. The cylindrical roller bearings give longest service life of the different type of bearings that can be mounted in a standard motor. For carrying external radial loads they have the highest fatigue capacity.
2. Also a heavy duty motor with large cylindrical bearings, but with a 300 l/min slide valve for lower speed.
3. For motors on applications where the shaft has to carry large axial loads, taper roller bearings are recommended.

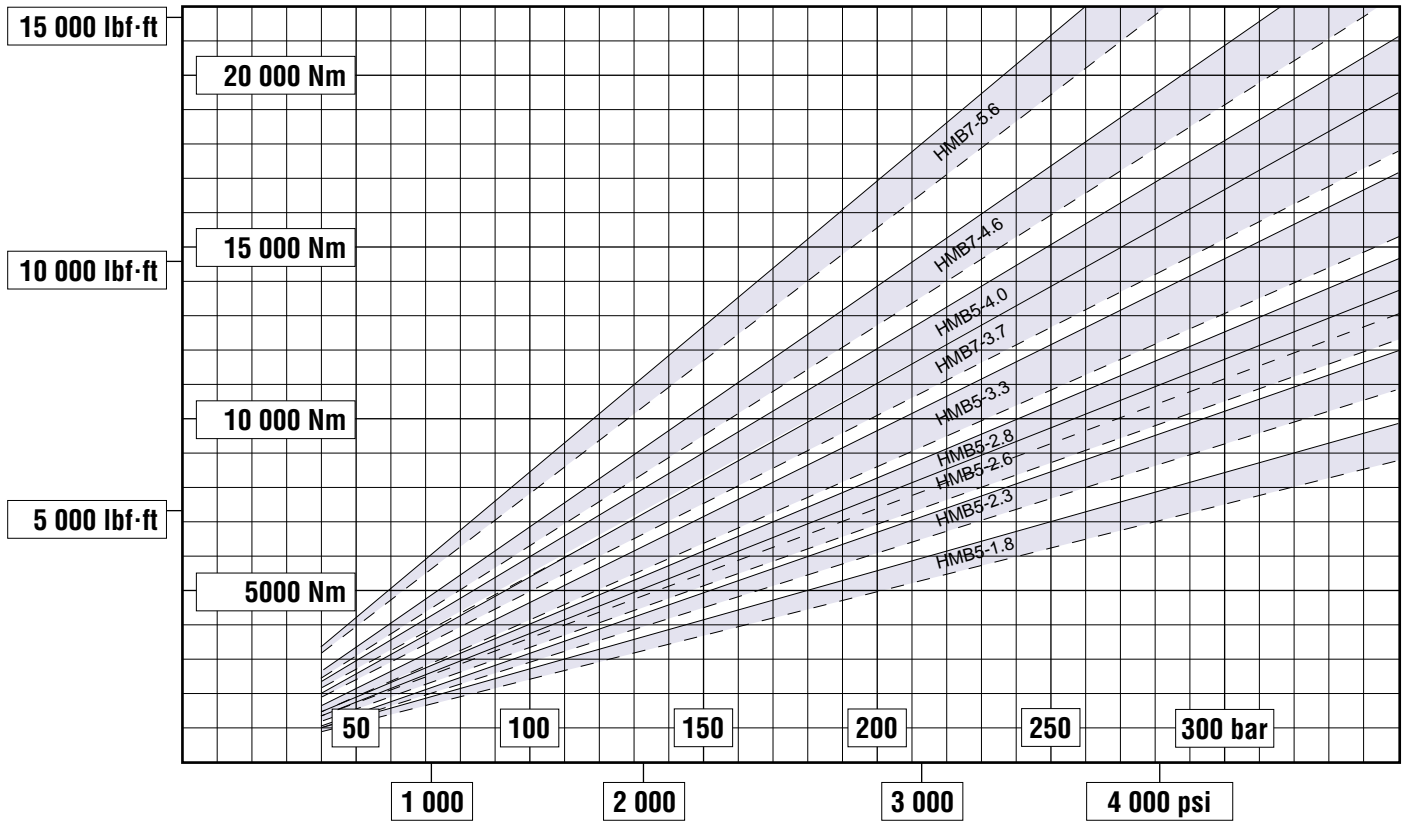
Cylindrical roller bearings are standard. The HMB motors can also be equipped with two shaft connections (shaft on both sides).

## TECHNICAL DATA - HMB

	Displacement	Speed with oil delivery 600 l/min	1) Max working pressure, short duration	2) Working pressure, intermittent duty	3) Working pressure, continuous duty	4) Minimum specific starting torque	5) Specific running torque	Weight (dry) w/300 l/min. slide valve	Weight (dry) w/500 l/min. slide valve
<b>METRIC</b>	litre/rev	rpm	bar	bar	bar	Nm/bar	Nm/bar	kg	kg
<b>US</b>	in <sup>3</sup> /rev	rpm	psi	psi	psi	lbf-ft/psi	lbf-ft/psi	lb	lb
<b>HMB5-1.8</b>	1,82	330	315	280	200	24,6	27,5	204	231
	111	330	4570	4060	2900	1,25	1,40	450	509
<b>HMB5-2.3</b>	2,27	265	315	250	180	30,7	34,3	210	237
	139	265	4570	3630	2610	1,56	1,74	463	522
<b>HMB5-2.6</b>	2,61	230	315	280	200	35,3	39,5	265	292
	159	230	4570	4060	2900	1,80	2,00	584	644
<b>HMB5-2.8</b>	2,77	217	315	220	140	37,4	41,8	218	245
	169	217	4570	3190	2030	1,90	2,12	481	540
<b>HMB5-3.3</b>	3,26	184	315	250	180	44,2	49,4	270	297
	200	184	4570	3630	2610	2,25	2,51	595	655
<b>HMB5-4.0</b>	3,98	150	315	250	180	54,0	60,3	280	307
	243	150	4570	3630	2610	2,75	3,07	617	677
<b>HMB7-3.7</b>	3,65	164	315	280	180	50,7	55,3	285	312
	223	164	4570	4060	2610	2,58	2,81	628	688
<b>HMB7-4.6</b>	4,56	131	315	250	160	63,3	69,1	290	317
	279	131	4570	3630	2320	3,22	3,51	639	699
<b>HMB7-5.6</b>	5,58	108	315	220	140	77,5	84,6	300	327
	341	108	4570	3190	2030	3,94	4,30	661	721

- 1) For working periods of short duration and intermittent duty e.g. maneuvering of ship's hatches and capstans. Test pressure is 375 bar. Peak (shock) pressure up to 375 bar is allowed.
- 2) Recommended oil pressure for excavators, winches and normal transport equipment, and various applications for intermittent duty.
- 3) Service life for the motors can be calculated with the lifetime formula page 20.
- 4) See diagrams and information page 19.
- 5) 95% efficient.

## TORQUE – PRESSURE DIAGRAM



## ORDERING CODE FOR MOTOR TYPE HMB

Example:

No. of cylinders:  
5-7

Displacement (l/rev):  
1.8-5.6

No off shaft ends:  
1 shaft end  
2 shaft ends

Shaft type:  
Taper  
Parallel  
Spline

Mounting type:  
Standard (no code)  
Front mounting flange

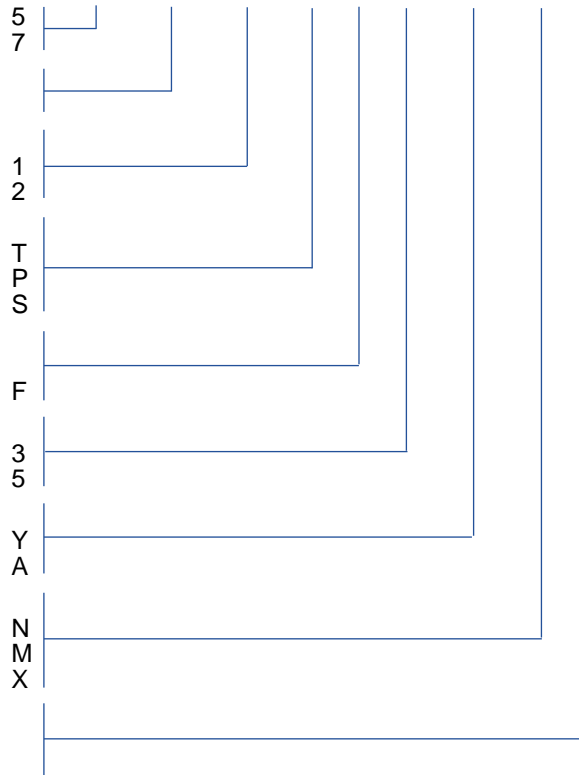
Slide valve (one speed):  
300 l/min  
500 l/min

Shaft bearings:  
Cylindrical roller  
Taper roller

Shaft seals:  
Single acting, nutring  
High speed seal  
Special arrangements

Other details:  
(special hydr. fluids  
valves, etc.)

**HMB 5 - 2.6 - 1 - T - - 3 - Y - N -**



### Reference to old and new designation.

Old designation	New designation
HMB5-8564	HMB5-1.8
HMB5-9564	HMB5-2.3
HMB5-8592	HMB5-2.6
HMB5-9592	HMB5-3.3
HMB7-8592	HMB7-3.7
HMB7-9592	HMB7-4.6