The Drive & Control Company

Rexroth
Bosch Group

Hägglunds Drive Systems

Reliable high quality products for improved performance.

The drive to deliver

The Hägglunds direct drive systems from Bosch Rexroth stand for quality and reliability beyond the ordinary. But more than that, our solutions are a response to our customers' challenges, and their purpose is to deliver performance. Our people will always work hard to ensure our drive systems are worthy of your trust. We put a great deal of effort into building relationships and sharing knowledge in order to deliver a service beyond the ordinary. Your needs are always the starting point for designing a Hägglunds drive systems. We listen carefully in order to gain a deep understanding. Then we work quickly and responsively to achieve the right solution. It's all about performance, flexibility and reliability – delivered with simplicity.

Drive systems

From the bitter cold of Siberia to the blistering heat of Africa, Hägglunds direct drive systems withstand the challenges of any environment and any type of industry. The drive units can be supplied in a wide range of power levels and configurations, and are function-tested before delivery.

A Hägglunds direct drive system consists of a motor, a drive unit, and a control and monitoring system. The motor provides dependable power for any application and under the most demanding conditions. The driving force behind it is the drive unit, featuring fast-acting hydraulic pumps that bring total reliability to your drive system. The brains behind the brawn is the control and monitoring system. Flexible and easy to install, it puts essential functionality and information at your fingertips. We also offer a broad range of valves that increase flexibility and add functionality to your drive system, as well as the accessories you need to complete the package. We give you high power under full control.

From challenge to performance






We realize that customers don't actually want to buy a product: they simply want the best solution to a challenge. So we start by listening carefully, then draw on our long experience to understand the nature of that challenge. More often than not some inventive thinking is required.

A different kind of strength

Demanding industries require tough and reliable products. But is that enough? We don't think so. Of course products are important, but they are not the whole story. We offer a different kind of strength, which comes from our focus on people. That's what makes us drives different.

The experience

Your business is our business, and we live in your reality every day. Our focus is on trust, peace of mind and simplicity. You'll feel it in the way we listen, understand and support you every step of the way. In the quality of our systems. In our expertise and commitment to delivering a superior solution. And in our promise to secure your performance.

Every product is part of something bigger - a solution created by people, for people. And the purpose of that solution is to deliver performance. That's what we stand for. Achieving performance requires the right product in the right context, with the right support. It takes understanding, commitment and expertise.

The journey:

Challenge → Understanding → Expertise → Systems

The power of certainty
We can provide you with everything that is necessary to optimize system performance and give you full peace of mind through a wide range of service options such as original Hägglunds spare parts, field service with our highly skilled service engineers, as well as repair and overhaul to the highest factory standard.

We provide the support you require for your specific needs and offer a range of customized maintenance agreements, called performance agreements. They are all designed for you to get the most out of your system solution by choosing from different levels of support and services that ensure maximum performance from your equipment.

A wide range of service options is available. Together with our representative you can tailor a performance agreement that suits your drive and is optimized to meet your challenges.

Support Performance

Power in a compact solution

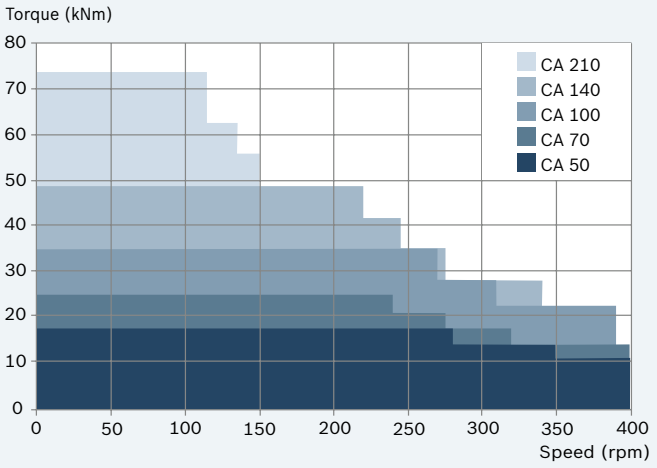
The Hägglunds CA is a compact hydraulic motor for applications where size and weight are significant issues.

The Hägglunds CA motor was developed for a very specific purpose: to provide a tough and powerful solution for heavy-duty applications where size and weight are significant issues. The result is a really compact hydraulic drive with the same durability, excellent performance and reliability as other Hägglunds motors from Rexroth. With its small envelope size and lightweight, the Hägglunds CA has an excellent power to weight ratio.

Popular features of the Hägglunds CA motor are for example the numerous mounting options, the very useful through hole and the insensitivity to shock loads. When matched to your needs Hägglunds CA provides real competitive advantages in your plant operations. The benefits of using a Hägglunds CA motor are many.

Wide operating range

Max intermittent torque and speed.



Motor data, Hägglunds CA

Motor Type*	Full Displacement					Displacement Shift				
	Displacement (cm^3/rev)	Specific Torque (Nm/bar)	Rated Speed **(rev/min)	Max Speed (rev/min)	Max Pressure ***(bar)	Displacement (cm^3/rev)	Specific Torque (Nm/bar)	Rated Speed **(rev/min)	Max Speed (rev/min)	Ratio
CA 50 20	1 256	20	400	400	350					
CA 50 25	1 570	25	350	400	350					
CA 50 32	2 010	32	280	400	350					
CA 50 40	2 512	40	230	350	350					
CA 50	3 140	50	200	280	350	1 570	25	200	280	1:2
CA 70 40	2 512	40	270	400	350					
CA 70 50	3 140	50	225	320	350	1 570	25	225	320	1:2
CA 70 60	3 771	60	195	275	350	1 886	30	195	275	1:2
CA 70	4 400	70	180	240	350	2 200	35	180	240	1:2
CA 100 40	2 512	40	390	400	350					
CA 100 50	3 140	50	320	400	350					
CA 100 64	4 020	64	260	390	350					
CA 100 80	5 024	80	220	310	350	2 512	40	220	310	1:2
CA 100	6 280	100	190	270	350	3 140	50	190	270	1:2
CA 140 80	5 024	80	245	340	350					
CA 140 100	6 280	100	205	275	350	3 140	50	205	275	1:2
CA 140 120	7 543	120	180	245	350	3 771	60	180	245	1:2
CA 140	8 800	140	170	220	350	4 400	70	170	220	1:2
CA 210 160	10 051	160	105	150	350	5 026	80	105	150	1:2
CA 210 180	11 314	180	100	135	350	5 675	90	100	135	1:2
CA 210	13 200	210	85	115	350	6 600	105	85	115	1:2

*) All motor types can be tandem mounted.
**) Special considerations regarding charge pressure, cooling and choice of hydraulic system for speeds above rated.
***) The motors are designed according to DNV-rules. Test pressure 420 bar/6000 psi. Peak/transient pressure 420 bar/6000 psi maximum, allowed to occur 10 000 times.
More options with different torques and speeds are available. This data covers the main sizes of our Hägglunds CA motors.

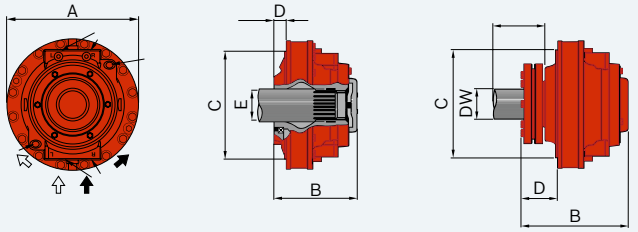
Dimensions, motors with splines

Motor Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Weight (kg)	Main Conn.	Drain Conn.
CA 50	464	312.5	390	46.5	N120x5x30x22x9H	175	SAE 1 1/4 ”	BSP 3/4 “
CA 70	495	312.5	435	46.5	N120x5x30x22x9H	205	SAE 1 1/4 ”	BSP 3/4 “
CA 100	560	399.5	470	135.5	N140x5x30x26x9H	265	SAE 1 1/4 ”	BSP 3/4 “
CA 140	600	399.5	510	135	N140x5x30x26x9H	305	SAE 1 1/4 ”	BSP 3/4 “
CA 210	600	501	510	156.5	N150x5x30x28x9H	395	SAE 1 1/4 ”	BSP 3/4 “

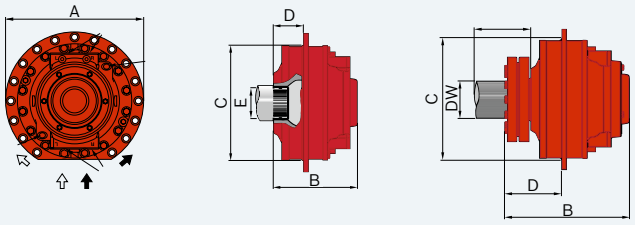
Dimensions, motors with shrink disc coupling

Motor Type	A (mm)	B (mm)	C (mm)	D (mm)	DW (mm)	Weight (kg)	Main Conn.	Drain Conn.
CA 50	464	404.5	390	138	120	203	SAE 1 1/4 ”	BSP 3/4 “
CA 70	495	404.5	435	138	120	232	SAE 1 1/4 ”	BSP 3/4 “
CA 100	560	505	470	241	140	310	SAE 1 1/4 ”	BSP 3/4 “
CA 140	600	505	510	241	140	347	SAE 1 1/4 ”	BSP 3/4 “
CA 210	600	644.5	510	300	160	456	SAE 1 1/4 ”	BSP 3/4 “

Hägglunds CA 50, CA 70

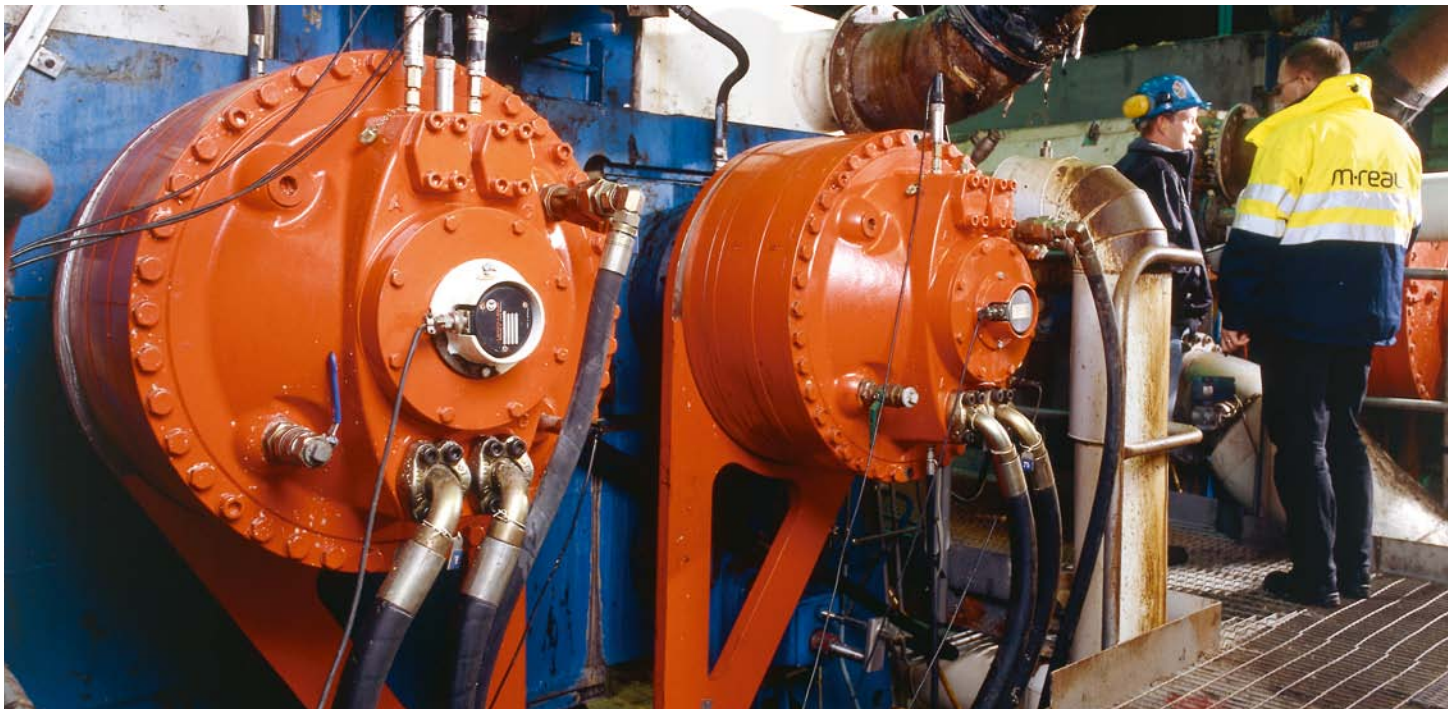


Hägglunds CA 100, CA 140, CA 210



More power – smaller package

More power built into a smaller package has resulted in a truly compact drive solution for a wide range of heavy-duty applications.

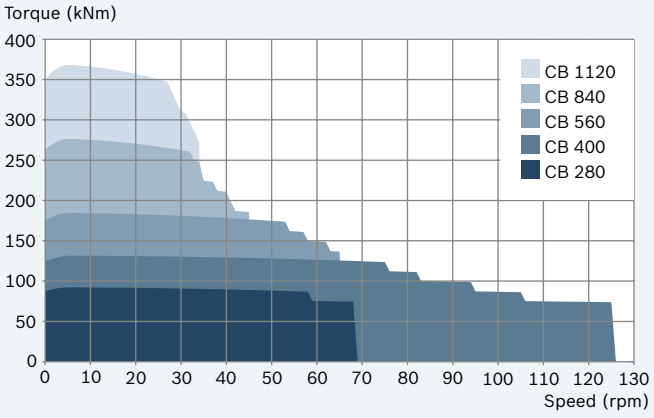


The Hägglunds CB range is suitable for many heavy-duty applications such as shredders, feeders and roll mills. Some of its many benefits are the space saving design and the versatile mounting possibilities.

The wide range of sizes and displacements enables optimisation of the drive system when selecting the motor and the hydraulic pump combinations. The hole through the motor is another advantage, which can be very useful in some applications, for instance in drilling and boring.

The motor reacts quickly and the heavy duty design can take shock loads and stop instantly when required. Hägglunds CB is truly a tough, economical and reliable drive.

Wide operating range
Max intermittent torque and speed.



Valid at high pressure 350 bar and charge pressure 15 bar.

Motor data, Hägglunds CB

Motor Type	Displacement (cm^3/rev)	Specific Torque (Nm/bar)	Rated Speed *(rev/min)	Max Speed (rev/min)	Max Pressure **(bar)	Max Torque ***(kNm)
CB 280-240	15 100	240	53	68	350	79
CB 280	17 600	280	44	58	350	92
CB 400-240	15 100	240	94	125	350	79
CB 400-280	17 600	280	73	105	350	92
CB 400-320	20 100	320	71	94	350	110
CB 400-360	22 600	360	59	82	350	120
CB 400	25 100	400	58	75	350	130
CB 560-440	27 600	440	49	65	350	140
CB 560-480	30 200	480	48	62	350	160
CB 560-520	32 700	520	41	57	350	170
CB 560	35 200	560	40	53	350	180
CB 840-600	37 700	600	30	45	350	200
CB 840-640	40 200	640	28	41	350	210
CB 840-680	42 700	680	27	40	350	220
CB 840-720	45 200	720	25	37	350	240
CB 840-760	47 800	760	23	34	350	250
CB 840-800	50 300	800	23	34	350	260
CB 840	52 800	840	21	32	350	280
CB 1120-880	55 300	880	25	34	350	290
CB 1120-920	57 800	920	24	33	350	300
CB 1120-960	60 300	960	24	32	350	315
CB 1120-1000	62 800	1 000	22	31	350	330
CB 1120-1040	65 300	1 040	21	29	350	340
CB 1120-1080	67 900	1 080	20	28	350	355
CB 1120	70 400	1 120	20	27	350	370

*) Special considerations regarding charge pressure, cooling and choice of hydraulic system for speed above rated.
**) The motors are designed according to DNV-rules. Test pressure 420 bar/6000 psi. Peak/transient pressure 420 bar/6000 psi maximum, allowed to occur 10 000 times.
***) Calculated as
T = Ts x (350-15) x 0.98.
More options with different torques and speeds are available. This data covers the main sizes of our Hägglunds CB motors.

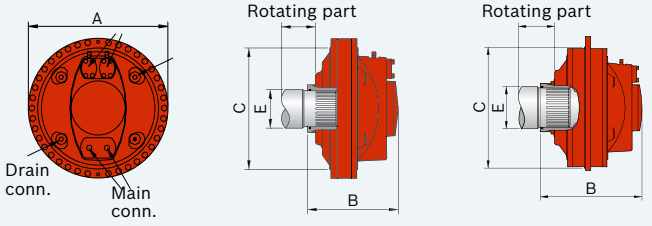
Dimensions, motors with splines

Motor Type	A (mm)	B (mm)	C (mm)	E (mm)	Weight (kg)	Main Conn.	Drain Conn.
CB 280	782	501	680	N200x5x30x38x9H	705	SAE 1 1/4" and 1 1/2"	BSP 1 1/4"
CB 400	782	619	680	N200x5x30x38x9H	1 060	SAE 1 1/4" and 1 1/2"	BSP 1 1/4"
CB 560	940	669	800	N260x5x30x50x9H	1 115	SAE 1 1/4" and 1 1/2"	BSP 1 1/4"
CB 840	940	787	800	N260x5x30x50x9H	1 445	SAE 1 1/4" and 1 1/2"	BSP 1 1/4"
CB 1120	940	904	800	N260x5x30x50x9H	1 770	SAE 1 1/4" and 1 1/2"	BSP 1 1/4"

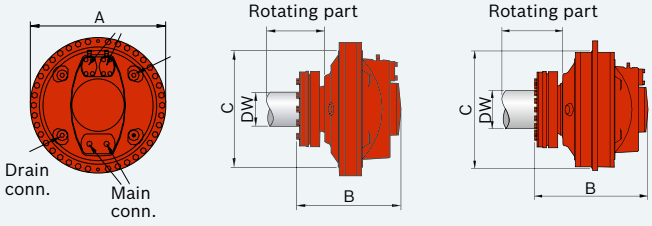
Dimensions, motors with hollow shaft, shrink disc coupling

Motor Type	A (mm)	B (mm)	C (mm)	DW (mm)	Weight (kg)	Main Conn.	Drain Conn.
CB 280	782	612	680	180	800	SAE 1 1/4" and 1 1/2"	BSP 1 1/4"
CB 400	782	740	680	200	1 160	SAE 1 1/4" and 1 1/2"	BSP 1 1/4"
CB 560	940	767	800	260	1 290	SAE 1 1/4" and 1 1/2"	BSP 1 1/4"
CB 840	940	885	800	260	1 620	SAE 1 1/4" and 1 1/2"	BSP 1 1/4"

Hägglunds CB, splines



Hägglunds CB, shrink disc coupling



Empowering possibilities

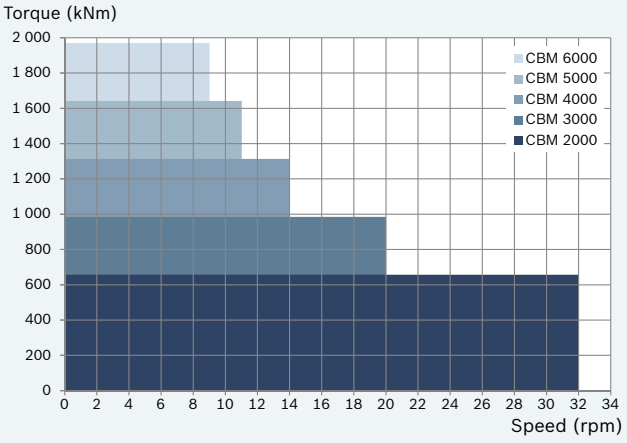
When it comes to production, everyone wants more. But these days there's less of everything else: from available time to the energy and resources for the job. With the Hägglunds CBM direct drive from Bosch Rexroth, the equation is easier to solve.

The Hägglunds CBM packs 50 % more torque into a motor that's smaller and 50 % lighter than its predecessor. That gives it the world's highest torque-to-weight ratio. Even so, it has all the advantages you'd expect from a direct drive. Full torque from zero, protection from shock loads and four-quadrant operation are part of the same small package.

Put simply, the Hägglunds CBM does more with less – and lets you do the same. From industry to offshore, you can handle more work with less space, less energy and less weight on the driven shaft.

That means greater productivity with a smaller footprint. And that's an ingenious solution.

Wide operating range



Motor data, Hägglunds CBM

Motor type	Displacement (cm^3/rev)	Specific torque (Nm/bar)	Max. speed (rpm)	Max. pressure *(bar)	Max. torque **(kNm)
CBM 2000-1200	75 832	1 200	58	350	394
CBM 2000-1400	88 301	1 400	48	350	460
CBM 2000-1600	100 770	1 600	41	350	525
CBM 2000-1800	113 748	1 800	36	350	591
CBM 2000	126 726	2 000	32	350	657
CBM 3000-2200	138 686	2 200	29	350	722
CBM 3000-2400	151 155	2 400	26	350	788
CBM 3000-2600	164 133	2 600	24	350	854
CBM 3000-2800	177 111	2 800	22	350	919
CBM 3000	190 089	3 000	20	350	985
CBM 4000-3200	201 540	3 200	18	350	1 051
CBM 4000-3400	214 518	3 400	17	350	1 116
CBM 4000-3600	227 496	3 600	16	350	1 182
CBM 4000-3800	240 474	3 800	15	350	1 248
CBM 4000	253 452	4 000	14	350	1 313
CBM 5000-4600	290 859	4 600	12	350	1 510
CBM 5000	316 815	5 000	11	350	1 642
CBM 6000-5600	354 222	5 600	9	350	1 838
CBM 6000	380 178	6 000	9	350	1 970

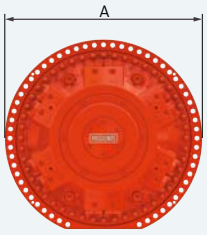
*) The motors are designed according to DNV-rules. Test pressure 420 bar/6 000 psi.
Peak/transient pressure 420 bar/6 000 psi maximum, allowed to occur 10 000 times.

**) Calculated as T = Ts x (350-15) x 0.98.

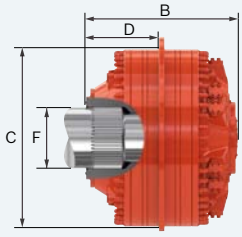
Dimensions, motors with splines

Motor type	**A** (mm)	**B** (mm)	**C** (mm)	**D** (mm)	**E** (mm)	**F** (mm)	**Weight** (kg)	**Main conn.**	**Drain conn.**
CBM 2000	1 460	872	1 300	419	-	N360x8x30x44x9H	4 100	SAE 2”	BSP 1 1/4” and 2”
CBM 3000	1 460	990	1 300	419	-	N440x8x30x54x9H	5 000	SAE 2”	BSP 1 1/4” and 2”
CBM 4000	1 460	1 108	1 300	537	-	N440x8x30x54x9H	5 800	SAE 2”	BSP 1 1/4” and 2”
CBM 5000	1 460	1 224	1 300	535	270	N460x8x30x56x9H	6 700	SAE 2”	BSP 1 1/4” and 2”
CBM 6000	1 460	1 342	1 300	535	270	N460x8x30x56x9H	7 500	SAE 2”	BSP 1 1/4” and 2”

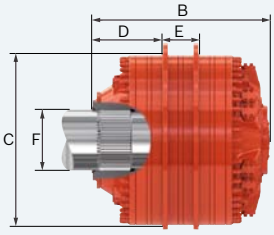
Hägglunds CBM 2000-6000



Hägglunds CBM 2000, 3000, 4000



Hägglunds CBM 5000, 6000



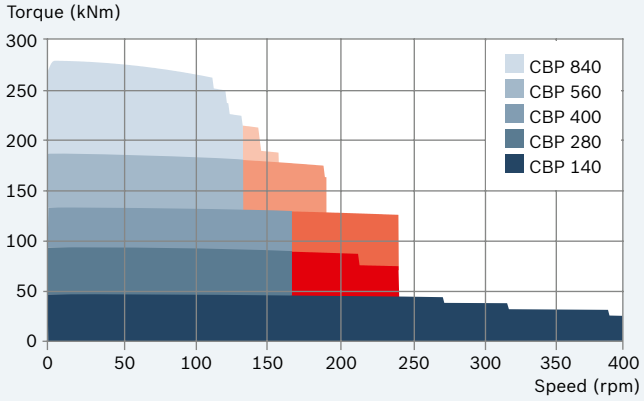
Powerful opportunities

The Hägglunds CBP motor range is part of the Hägglunds Gemini drive system concept, bringing new possibilities and higher power.

The Hägglunds CBP motor series is a truly powerful motor range. It has all the attractive characteristics of the Hägglunds direct drive hydraulic motors. It is compact, with low weight and immensely powerful. In fact, the most powerful Hägglunds motor (power per kilo) ever. This motor can operate continuously at high power. It can be flange-mounted or torque arm mounted and all of the motors are fitted with splines and have through-holes. This motor range opens new opportunities for drive solutions in new applications, because this motor can drive at higher speeds with increased efficiency.

Wide operating range

Max intermittent torque and speed.



Shaft seal is limiting max continuous speed. Valid at high pressure 350 bar and charge pressure 15 bar.

Motor data, Hägglunds CBP

Motor Type*	Displacement (cm^3/rev)	Specific Torque (Nm/bar)	Rated Speed (rev/min)	Max Speed (rev/min)	Max Pressure (bar)
CBP 140 80	5 024	80	320	400	350
CBP 140 100	6 280	100	270	390	350
CBP 140 120	7 543	120	230	320	350
CBP 140	8 800	140	210	275	350
CBP 280-160	10 100	160	170	170	350
CBP 280-200	12 600	200	170	170	350
CBP 280-240	15 100	240	170	170	350
CBP 280	17 600	280	150	170	350
CBP 400-240	15 100	240	170	170	350
CBP 400-280	17 600	280	170	170	350
CBP 400-320	20 100	320	170	170	350
CBP 400-360	22 600	360	170	170	350
CBP 400	25 100	400	170	170	350
CBP 560-440	27 600	440	135	135	350
CBP 560-480	30 200	480	135	135	350
CBP 560-520	32 700	520	135	135	350
CBP 560	35 200	560	135	135	350
CBP 840-600	37 700	600	110	135	350
CBP 840-640	40 200	640	100	135	350
CBP 840-680	42 700	680	100	135	350
CBP 840-720	45 200	720	95	135	350
CBP 840-760	47 800	760	90	125	350
CBP 840-800	50 300	800	85	120	350
CBP 840	52 800	840	80	115	350

*) Tandem mounting possible. Contact your local sales representative for more information.

Dimensions, motors with splines for front mounting

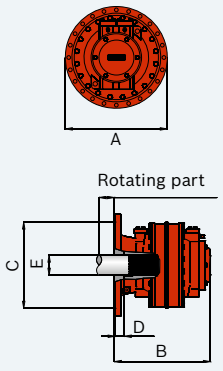
Motor Type	A (mm)	B (mm)	C (mm)	D (mm)	E
CBP 140	600	570	510	54	N120x5x30x22x9H
CBP 280	782	860	680	11.6	N200x5x30x38x9H
CBP 400	782	978	680	11.6	N200x5x30x38x9H
CBP 560	940	1 037	800	65.5	N260x5x30x50x9H

Dimensions, motors with splines for center mounting

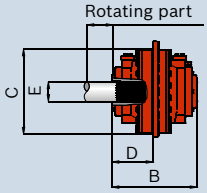
Motor Type	A (mm)	B (mm)	C (mm)	D (mm)	E
CBP 140	600	511	510	246	N120x5x30x22x9H
CBP 400	940	960	800	457	N200x5x30x38x9H
CBP 560	940	1 037	800	534	N260x5x30x50x9H
CBP 840	940	1 155	800	534	N260x5x30x50x9H

Front Mounted

Hägglunds CBP 140

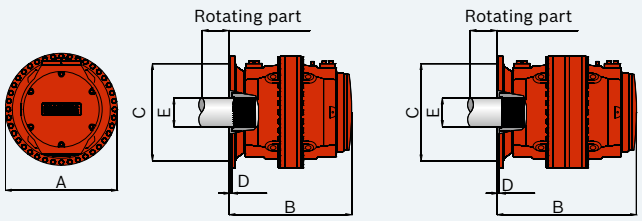


Center Mounted

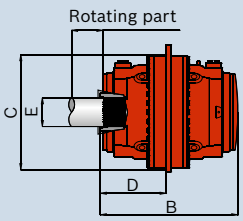


Front Mounted

Hägglunds CBP 280, 400

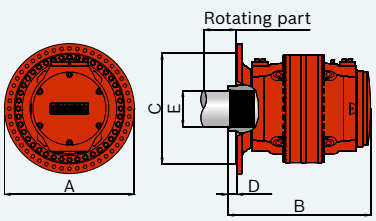


Center Mounted

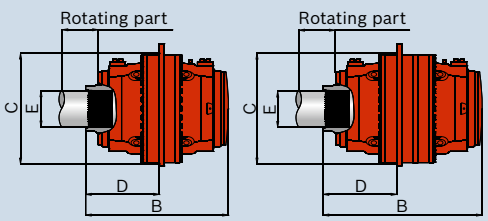


Front Mounted

Hägglunds CBP 560, 840



Center Mounted



Size really matters

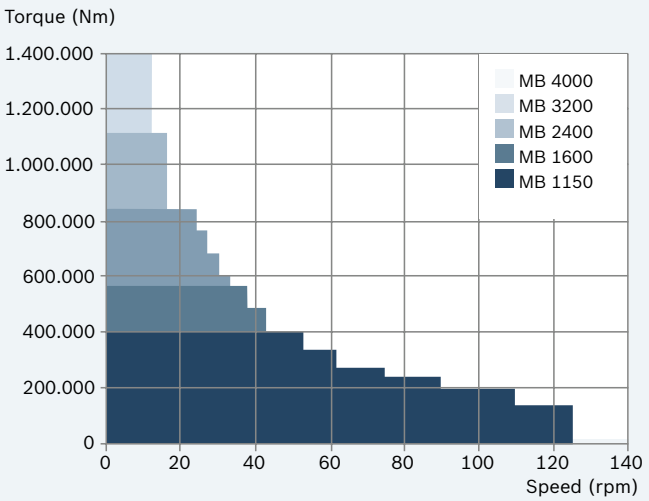
The Hägglunds MB range is engineered for tough high torque applications and includes by far the largest hydraulic motors in the world.

The heavy-duty motor design and the high reliability makes this motor suitable for severe working conditions. Excellent controllability and resistance to shock loads are other factors contributing to its success.

The Hägglunds MB motor has performed very well in all kinds of environments even in dusty, corrosive and explosive risk areas. In extreme heat or freezing cold, the Hägglunds MB is the obvious choice for tough, high-torque applications and provides many years of reliable service.

Wide operating range

Max intermittent torque and speed.



Motor data, Hägglunds MB

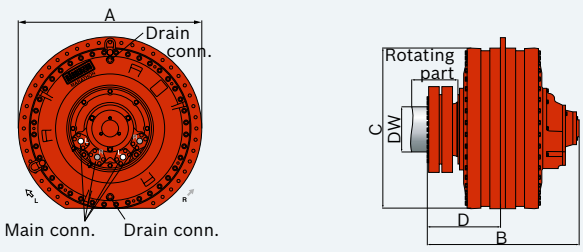
Motor Type	Displacement (cm^3/rev)	Specific Torque (Nm/bar)	Rated Speed *(rev/min)	Max Speed (rev/min)	Max Pressure **(bar)	Max Torque ***(kNm)
MB 1150-400	25 145	400	90	125	350	130
MB 1150-566	35 561	566	70	110	350	184
MB 1150-683	42 899	683	62	90	350	222
MB 1150-800	50 258	800	55	75	350	260
MB 1150-975	61 249	975	40	62	350	317
MB 1150	72 241	1 150	38	53	350	374
MB 1600-1375	86 392	1 375	30	43	350	447
MB 1600	100 529	1 600	28	38	350	520
MB 2400-1725	108 383	1 725	22	33	350	560
MB 2400-1950	122 520	1 950	22	30	350	634
MB 2400-2175	136 657	2 175	18	27	350	707
MB 2400	150 794	2 400	16	24	350	780
MB 3200	201 059	3 200	10	16	350	1 040
MB 4000	251 323	4 000	8	12	350	1 300

*) Special considerations regarding charge pressure, cooling and choice of hydraulic system for speeds above rated.
**) The motors are designed according to DNV-rules. Test pressure 420 bar/6000 psi. Peak/transient pressure 420 bar/6000 psi maximum, allowed to occur 10 000 times.
***) Calculated as T = Ts x (350-15) x 0.97.

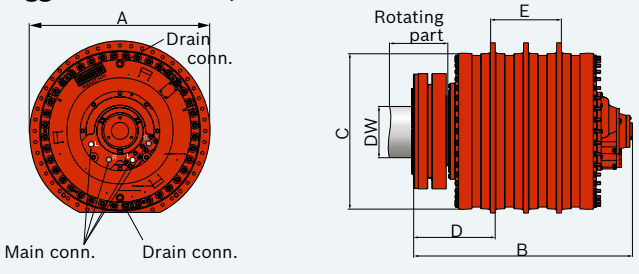
Dimensions, motors with hollow shaft, shrink disc coupling

Motor Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	DW	Weight (kg)	Main Conn.	Drain Conn.
MB 1150	1 460	1 205	1 288	567	–	340	4 600		
MB 1600	1 460	1 205	1 288	567	–	340	4 600		BSP 1 1/4”
MB 2400	1 460	1 531	1 288	620	313	360	6 460	SAE 2”	(D1-4)
MB 3200	1 460	1 822	1 288	651	586	460	8 930		
MB 4000	1 460	2 095	1 288	651	859	460	10 750		

Hägglunds MB 1150, 1600, 2400

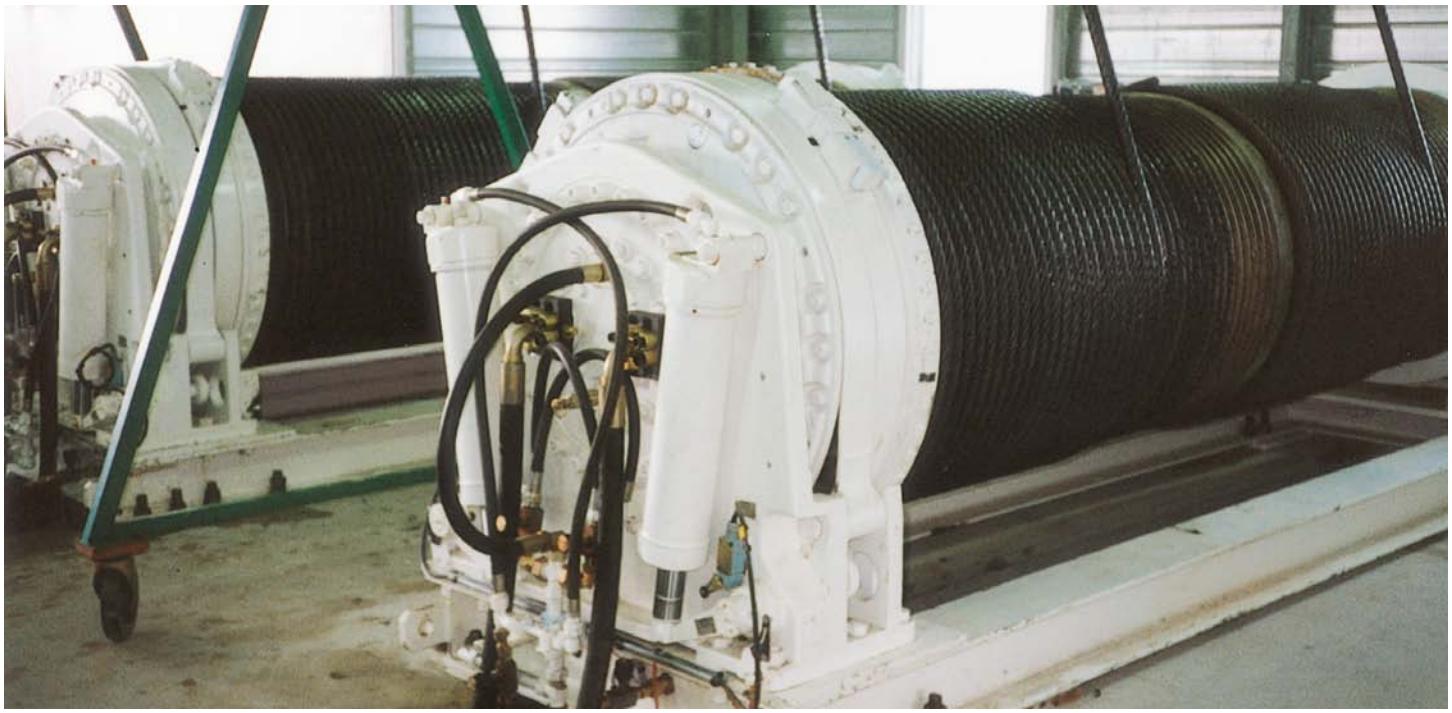


Hägglunds MB 3200, 4000



Intelligent power

The Hägglunds VI was originally engineered to bring unparallelled performance, reliability and control to marine applications.

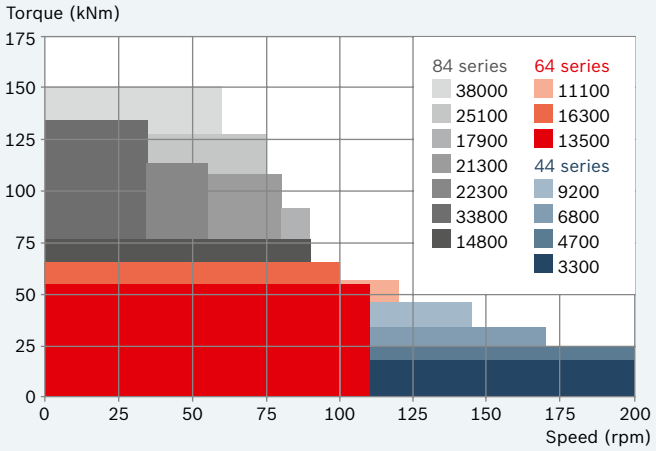


The Hägglunds VI was the first Hägglunds hydraulic motor to leave the assembly line. It was originally designed to bring performance, reliability and control to marine applications. The same features have however also proven valuable in the industrial field; e.g. Pulp & Paper and the Mining Industry.

In marine applications, particularly with tough winches, the Hägglunds VI motor is known to provide the best available control of torque (line pull) regardless of speed. This reduces maintenance costs and increases productivity by reducing the risk of snagging or equipment breakdowns. True free-wheeling and a very low moment of inertia are some other features that has made the Hägglunds VI so popular in even the most demanding environments.

Wide operating range

Max intermittent torque and speed.



Motor data, Hägglunds VI

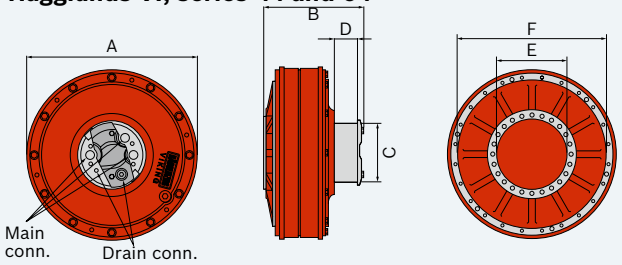
	Full Displacement					Displacement Shift				
Motor Type	**Displace-ment** (cm^3/rev)	**Specific Torque** (Nm/bar)	**Rated Speed** *(rev/min)	**Max Speed** (rev/min)	**Max Pressure** **(bar)	**Displace-ment** (cm^3/rev)	**Specific Torque** (Nm/bar)	**Rated Speed** *(rev/min)	**Max Speed** (rev/min)	**Ratio**
44-03300	3 325	53	100	200	320	1 662	26	100	200	1:2
44-04700	4 710	75	100	200	320	2 356	37	100	200	1:2
44-06800	6 790	108	90	170	320	3 393	54	90	170	1:2
44-09200	9 240	147	80	145	320	4 618	74	80	145	1:2
64-11100	11 080	176	70	120	320	5 542	88	70	120	1:2
64-13500	13 499	215	60	110	250	6 750	107	60	110	1:2
64-16300	16 340	260	50	100	250	8 171	130	50	100	1:2
84-14800	14 840	236	55	90	320	–	–	–	–	–
84-17900	17 961	286	55	85	320	–	–	–	–	–
84-21300	21 375	340	55	80	320	–	–	–	–	–
84-25100	25 090	399	55	75	320	–	–	–	–	–
84-38000	38 000	605	40	60	250	–	–	–	–	–
84-22300	22 300	355	55	55	320	11 150	177	60	85	1:2
84-33800	33 780	538	35	35	250	16 889	269	50	70	1:2
84-25100	25 090	399	40	55	250	8 362	133	45	75	1:3
84-38000	38 000	605	25	35	250	12 667	202	35	60	1:3
84-25100	25 090	399	40	55	250	16 724	266	45	75	2:3
84-38000	38 000	605	25	35	250	25 334	403	35	60	2:3

*) Special considerations regarding charge pressure, cooling and choice of hydraulic systems for speed above rated.
**) The motors are designed according to DNV-rules. Test pressure 70 bar/1000 psi above max. pressure.
Peak/transient pressure 70 bar/1000 psi above max. pressure, allowed to occur 10 000 times.

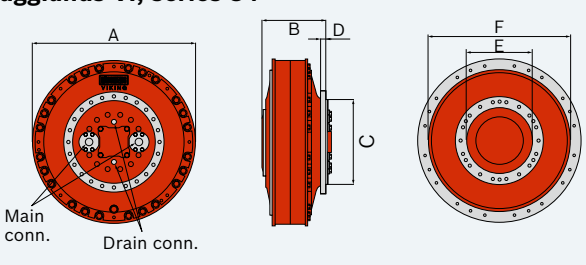
Dimensions

Motor Type	**A** (mm)	**B** (mm)	**C** (mm)	**D** (mm)	**E** (mm)	**F** (mm)	**Weight** (kg)	**Main Conn.**	**Drain Conn.**	**Mounting**
44-series	770	438	260	100	320	676	520	BSP 1 1/4”	BSP 3/4”	Key joint
64-series	858	450	260	100	390	766	750	BSP 1 1/4”	BSP 3/4”	Key joint
84-series	1 100	450	560	71	440	955	1 550	SAE 2”	BSP 1”	Screw/Flange

Hägglunds VI, series 44 and 64



Hägglunds VI, series 84



Few components – many combinations

Wide drive unit range for total reliability.

Our drive units are easy to install and are fully function tested before delivery. With our proven, modularized solutions we give you maximized uptime and quick and easy maintenance. We can also offer you a quick delivery and high delivery precision.

Our monitoring and control system (Spider) brings excellent controllability to the drive system. With a Hägglunds drive unit to match your motors you have the same high quality throughout the entire drive system.

Combination of pump and electric motor - Hägglunds DU

Electric motor		Pump, SP															Pump, HD					
		Single							Tandem								Single					
		71	125	180	250	355	500	750	125 / 125	180 / 180	125 / 250	250 / 250	250 / 355	250 / 500	355 / 355	500 / 500	HD6S-98	HD7S-119	HD11S-180	HD14S-229	HD24S-403	HD30S-501
Small (S)	22	■															■					
	30	■	■														■	■				
	37	■	■														■	■				
	45	■	■	■													■	■	■			
	55	■	■	■													■	■	■			
Medium (M)	75		■	■													■	■	■	■		
	90		■	■	■				■									■	■	■	■	
	110			■	■	■			■	■	■								■	■	■	
	132			■	■	■	■		■	■	■	■	■						■	■	■	■
	160			■	■	■	■		■	■	■	■	■	■	■				■	■	■	■
	200				■	■	■		■	■	■	■	■	■	■	■				■	■	■
Large (L)	250					■	■	■		■	■	■	■	■	■	■					■	■
	315						■	■				■	■	■	■	■					■	■
	355						■	■				■	■	■	■	■						■
	400							■					■	■	■	■						
	500							■						■	■	■						

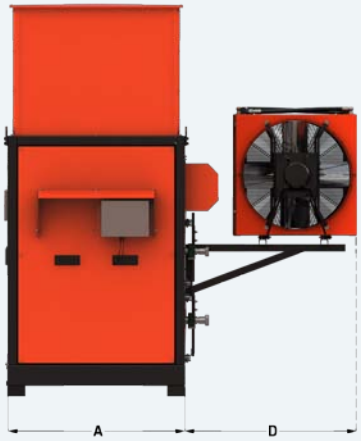
Features

- Modular system – many possible combinations of oil flow and installed power.
- Can be positioned close to the machine or in any convenient location.
- Can easily be equipped with any of Hägglunds advanced control systems.
- Sound insulated cabinet.
- Small space required.
- Very easy to install and maintain.

■ Pre-defined combinations

Hägglunds DU
Cabinet with two doors

Hägglunds DU
Cabinet from the side



Hägglunds DU
Cabinet with three doors

Basic dimensions – Hägglunds DU

Type* / Dim mm	DUeS2	DUeS3	DUeM2	DUeM3	DUeL2	DUeL3
H	2140/2250	2140/2250	2520/3500	2520/3500	2800/3900	2800/3900
B	1820	2720	2000	3000	2190	3500
A	1225	1225	1500	1500	1500	1500
C	400	-	600	-	600	-
D	1330	1330	1870	1870	1870	1870
E**	250	250	250	250	250	250

*) Cabinet designations ending with a 2, represent a two-door cabinet. Cabinet designations ending with a 3, represent a three-door cabinet.
Cabinet designations with an S, represent frame size small, M represent frame size medium and L represent frame size large.
**) The control unit (Spider) can be placed on either side of the cabinet.

Data – Hägglunds PAC

Motor Type	Max Installed Power (kW)	Max Oil Flow *(l/min)	Max Pressure (bar)	Weight (kg)
PAC 202	93	409	350	2 223
PAC 203	2x94	2x409**	350	2 948
PAC 402	298	893	350	3 403
PAC 602	447	2x620	350	5 443
PAC 603	298	2x893	350	5 103
PAC 803/1003	2x447	2x893	350	5 500
PAC 1203	2x596.6	2x890	350	9 072

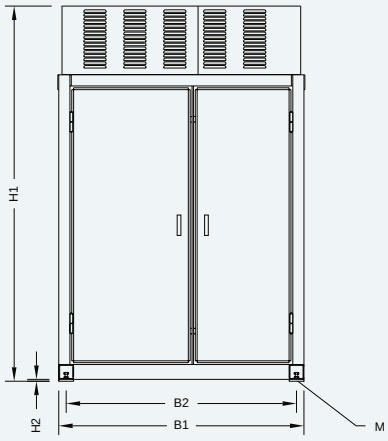
*) 1785 rpm.
**) Only one set of electric motor/pump is permitted to operate. The other set serves as stand by.

Data – Hägglunds PBC

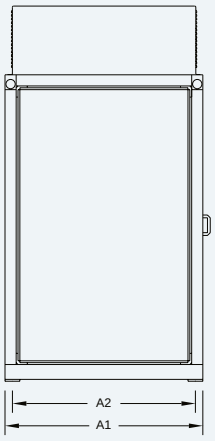
Motor Type	Max Installed Power (kW)	Max Oil Flow *(l/min)	Max Pressure (bar)	Weight (kg)
PBC 202	112	409	350	1 951
PBC 203	2x93	2x409**	350	2 586
PBC 402	373	893	350	3 039
PBC 603	2x373	2x893	350	3 901

*) 1785 rpm.
**) Only one set of electric motor/pump is permitted to operate. The other set serves as stand by.

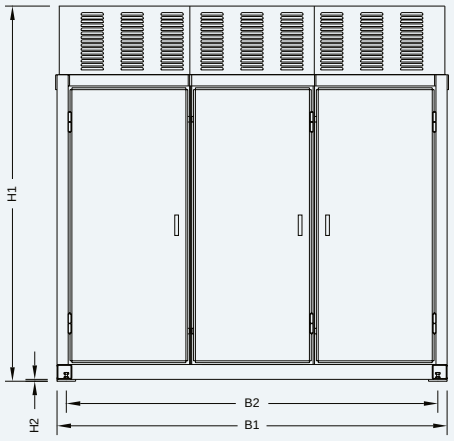
Hägglunds PAC
Cabinet with two doors



Hägglunds PAC
Cabinet from the side



Hägglunds PAC
Cabinet with three doors



Basic dimensions – Hägglunds PAC

Cabinet size	1	2	3	4	5	6	7
Type	PAC 202	PAC 203	PAC 402	PAC 603	PAC 803	PAC 1203	PAC 602
Dim. mm					PAC 1003		
H1	2 261/2 362	2 261	2 565.4/3 022.6	2 565.4/3 022.6	3 073.4/3 505.2	3 073.5/3 987.8	2 997.2/3 502.2
H2	13	13	19.05	19.05	19.05	19.05	19.05
B1	1 400	2 099	1 676	2 667	2 667	3 657.6	2 095.5
B2	1 299	1 949	1 575	2 540	2 540	3 556	1 994
A1	1 000	1 000	1 353	1 353	1 353	1 829	1 829
A2	899	899	1 251	1 251	1 251	1 727.2	1 727.2
M	M12x1.75	M12x1.75	M16x2	M16x2	M16x2	M16x2	M16x2

Powerful system concept

Freedom of application and versatility through a modular design

◄ **Hägglunds Gemini is a modular system, allowing not only the flexible placement of modules but also flexible expansion. It consists of one or more drive units, and oil tank module, a service module and specially designed hydraulic piping.**

Gemini System modules in brief:

Hägglunds CBP
The CBP motor has all the positive characteristics of the direct drive Hägglunds motors. It is compact, with low weight and inertia and very powerful.

Gemini pump unit
This module is the lower power series of units in which one pump is used. They cater for installed power between 160-500 kW.

Gemini filter unit
This module includes filters. They filter the fluid for one or more pump units.

Gemini cooler unit
The unit includes a water/oil cooler of bolted plate type

Gemini tank unit
The tank unit is equipped with a reservoir and instruments and can be placed in the most suitable position for operation and access. Flushing and charge pumps are connected in the end of the reservoir and supply the hydraulic fluid at low pressure.

Gemini piping
Prefabricated hose and flanged, non welded piping systems of the highest grade are used in making Gemini.

Complex controls made simple

The versatile and highly cost-effective Hägglunds Spider control system gives you excellent control of your drive system.

The Spider is our most advanced Hägglunds control system; easy to understand, install and use. The Hägglunds Spider is highly customised and gives you extremely good control of your drive system. It presents the information you need on its convenient front mounted displays. You can easily set the configuration needed for each application, either by using the keypads or a standard PC. Thanks to its modularity, the Hägglunds Spider can quickly and easily be configured to control different types of drive systems.

Features

Compact size
- W 400 x H 300 x D 145

Robust design
- Stainless steel enclosure
- Protection class IP65

Optional mounting
- Flange for door or control desk
- Brackets for wall or inside drive unit

Supply voltage
- 90-132, 180-264 VAC, 50-60 Hz or 24 VDC

Configuration
- Configured via front panel or via PC interface
- Password protected configuration

Control of one or two driven shafts
- Control of one to four pumps (PWM outputs max 2 A each – total max 5A)

Fieldbus interface
- Profibus, Modbus RTU and TCP, Controlnet, Ethernet IP, Devicenet and CC-link

Drive Unit health monitoring
- Monitoring of drive unit standard switches and analog signals
- Configurable monitoring inputs
- Text indication in selectable language on unit displays
- Output grouped to interlocking (alarm) and indication (warning) levels

Closed loop speed feedback
- PID regulator
- Digital or analog speed encoder inputs

Electric motor power limitation
- Current transformer input
- Limitation by pump swash-angle control

Pressure control
- Load sharing
- Forward/reverse action

Shredder control
- Machine overload detection by pressure switches, analog pressure or speed
- Directional interval timer
- Reversal counter

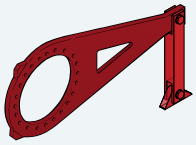
Friction control
- Adjustable friction 0-300 % for one or two slaves

Synchro control
- Position between two driven shafts
- Pulse counter inputs

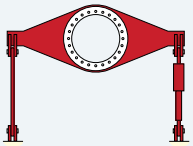
Drive monitoring log
- Alarm and warning log
- Time counters
- 8 scaleable log channels
- Output for PC in Excel format

Hägglunds accessories

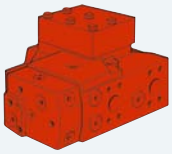
A compact and efficient design can be achieved by means of our standard Hägglunds accessories program.



Hägglunds Torque arms and brackets

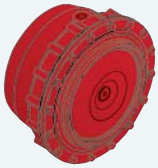


Double ended torque arms

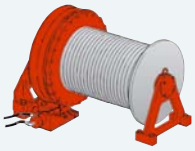


Valves and manifolds for each series of Hägglunds motor

Speed encoders and attachments



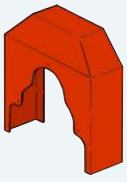
Brakes for Hägglunds CA and Hägglunds CB motors



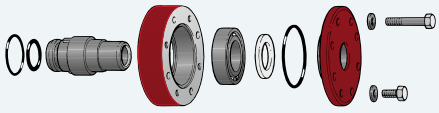
Parking lock unit for Hägglunds VI motors

Brake assemblies for Hägglunds VI motors

Bearing brackets for Hägglunds VI motors



Protective cover for Hägglunds VI motors



Through hole kits

These illustrations show some of our Hägglunds accessories. Kits for harsh environment are also available.

Extended possibilities and high flexibility

Our wide range of Hägglunds valves increases your options or functionality, flexibility and reliability.

We have developed a wide range of valves to ease application and further improve the functionality of Hägglunds drive systems. They can be used for a wide range of drive applications and needs reducing your design time and with added security.

The valves are all of a robust, reliable design and can withstand the toughest environ-ments and many of the valves can also be used in combination. The Hägglunds valves are obviously well matched with our Hägglunds drive systems and provide a neat and efficient way to achieve the control and flexibility you need.

Hägglunds pressure limiting valves

Valve	Size	Short description	Designed for	Max pressure (bar)	Flow capacity (lpm)	Weight (kgs)
COCA 300	20	Protects system main lines from damaging pressures	CA/CB	350	300	8
COCB 1000-1	40	Protects system main lines from damaging pressures	CA/CB	350	1 000	30
COCB 1000-3	40	Protects system main lines from damaging pressures includes an integrated purge circuit	CA/CB	350	1 000	33

Hägglunds load control valves

Valve	Size	Short description	Designed for	Max pressure (bar)	Flow capacity (lpm)	Weight (kgs)
VCBCA 480	32	Controls over running loads provided by a counterbalance function	CA/CB	350	480	20
VCBCA 1000	50/40	Controls over running loads provided by a counterbalance function	CA/CB	350	1 000	40
CTCA 1000	40/30	Controls winch rope load with a constant tension function	CA/CB	350	2 000	34

Hägglunds motion control valves

Valve	Size	Short description	Designed for	Max pressure (bar)	Flow capacity (lpm)	Weight (kgs)
VTCA 600	30	Designed to shift displacement of a dual speed motor	CA/CB	350	600	30
VFCCA 1000	40	Designed to put the motor in free circulation mode with the pistons running against the cam ring.	CA/CB	350	1 000	85
VFWCB 600	50	Designed to put the motor in free wheeling mode with the pistons retracted from the cam ring.	CA/CB	350	600	40
VFW	25	Designed to put a Hägglunds VI motor in free wheeling mode with the pistons retracted from the cam ring.	VI	350	800	56
V4WCA 1000	40	A proportional directional control valve with in built counter balance function	CA/CB	350	1 000	78

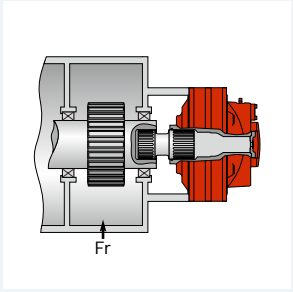
Hägglunds integrated valve solutions

Valve	Size	Short description	Designed for	Max pressure (bar)	Flow capacity (lpm)	Weight (kgs)
V 46-O	25	A integrated winch valve for open hydraulic systems	VI	350	800	100
V 46-C	25	A integrated winch valve for closed hydraulic systems	VI	350	800	88

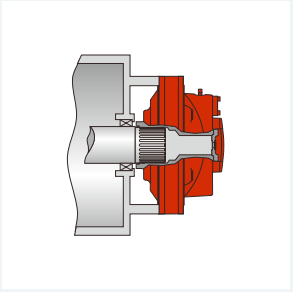
Installation examples

Examples for Hägglunds CB motors

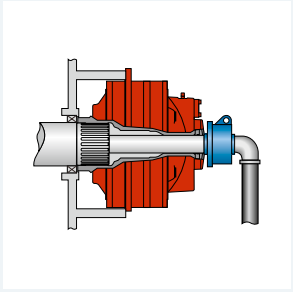
The tough hydraulic motors are weight and space saving and offers versatile mounting possibilities.



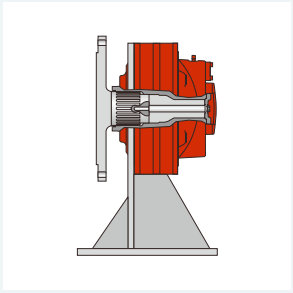
▲ **Flange mounted motor with splines and high radial load from driven shaft.**



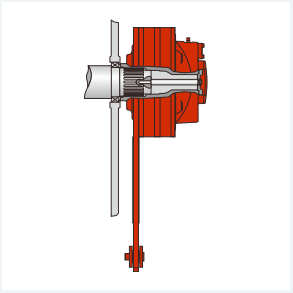
▲ **Flange mounted motor with splines and low radial load from driven shaft.**



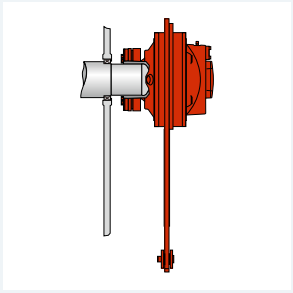
▲ **Flange mounted motor with splines and through hole for cooling of driven machine.**



▲ **Bracket mounted motor with flange adapter.**

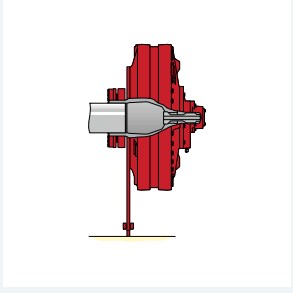


▲ **Torque arm mounted motor with splines.**

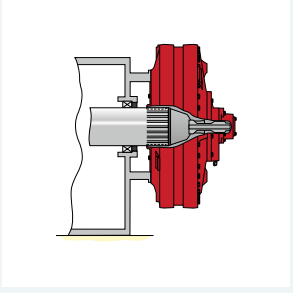


▲ **Torque arm mounted motor with shrink disc coupling.**

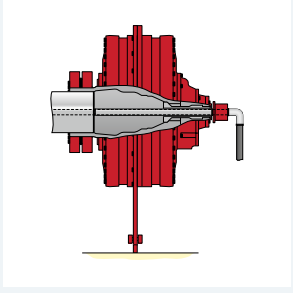
Examples for Hägglunds MB motors



▲ **Shrink disc coupling and torque arm.**

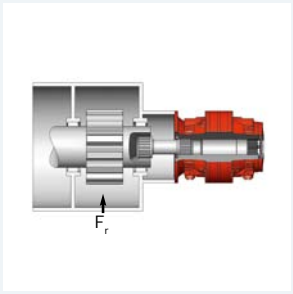


▲ **Flange mounted with splines.**

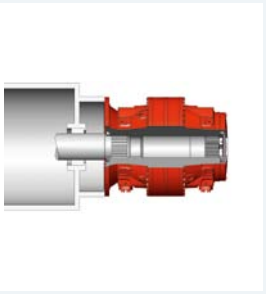


▲ **Torque arm mounted motor with through hole for cooling of driven machine.**

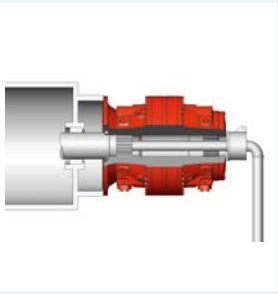
Examples for Hägglunds CBP motors



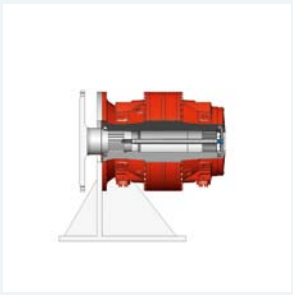
▲ **Flange mounted motor with splines and high radial load from driven shaft.**



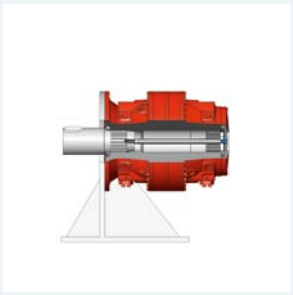
▲ **Flange mounted motor with splines and low radial load from driven shaft.**



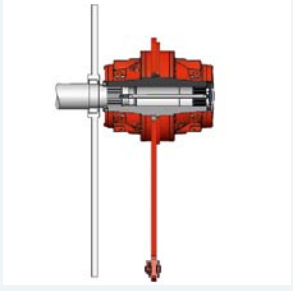
▲ **Flange mounted motor with spline and through hole for cooling of driven machine.**



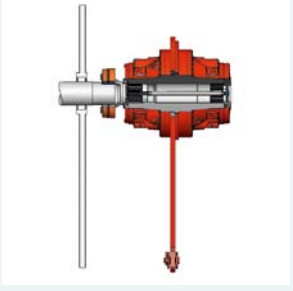
▲ **Bracket mounted motor with flange adapter.**



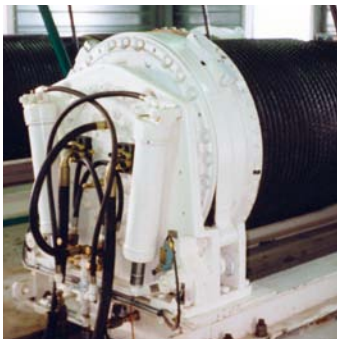
▲ **Bracket mounted motor with stub shaft.**



▲ **Torque arm mounted motor with splines.**



▲ **Torque arm mounted motor with shaft coupling.**

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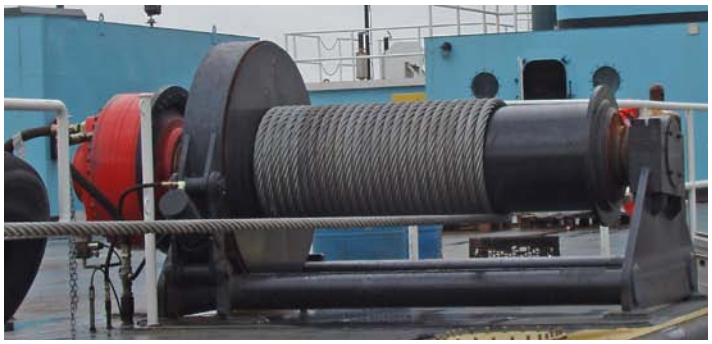


HÄGGLUNDS

The Drive & Control Company

Rexroth
Bosch Group

Bosch Rexroth Mellansel AB
SE-895 80 Mellansel, Sweden
Phone: +46 (0)660-870 00
documentation.mll@boschrexroth.se
www.boschrexroth.com/hagglunds

Find your local contact person here:
www.boschrexroth.com/contact

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