

BMH Series hydraulic orbit motor

BMH-Replace with DANFOSS OMH SERIES, M+S MH/MLHH SERIES

Parameters

Type		BMH-200	BMH-250	BMH-315	BMH-400	BMH-500
Displacement		203.2	255.9	316.1	406.4	489.2
Max. speed (rpm)	cont.	366	290	236	183	155
	int.	439	348	282	220	166
Max. torque (N·m)	cont.	510	621	740	850	830
	int.	579	702	827	990	1040
	peak	651	790	980	1092	1170
Max. output (KW)	cont.	11.2	9.2	9.8	7.4	6.5
	int.	17	15	13	13	11
Max.pressure drop (Mpa)	cont.	17.5	17.5	17.5	15.5	12.5
	int.	20	20	20	19	16
	peak	22.5	22.5	22.5	21	18
Max. flow (L/min)	cont.	75	75	75	75	75
	int.	90	90	90	90	90
Weight(kg)		10.5	11	11.5	12.3	13

Selection

1	2	3	4
Series	Displacement	Flange	Output shaft
BMH	200	Code 2: 2-Ø13.5 Rhomb-flange , pilot Ø82.5×6 Code 4: 4-Ø13.5 Rhomb-flange , pilot Ø82.5×6	Code B: Ø32 , Parallel key 10×8×45 Code M: Ø35 ,Parallel key 10×8×45 Code F: Ø31.75 , Splined key 14-DP12/24 Code FD: Ø31.75 , Splined key 14-DP12/24 Long shaft Code G: Ø32, Parallel key7.96×7.96×31.75 Code T1: Ø35 Cone shaft,Parallel key 6×6×20 Code S: Ø25.4,Splined key SAE 6B
	250		
	315		
	400		
	500		
5	6	7	8
Port and drain port	Rotation direction	Paint	Unusually function
Code D: G1/2 Manifold mount 4" M8,G1/4 Code M: M22×1.5 Manifold mount 4" M8,M14×1.5 Code S: 7/8-14 O-ring Manifold mount 4" M8,7/16-20UNF Code P: 1/2-14NPTF Manifold mount 4" M8,7/16-20UNF Code R: PT(Rc) 1/2 Manifold mount 4" M8,PT(Rc)1/4	Omit: Standard Code R: Opposite	Omit: Blue Code 00: No paint Code B: Black Code S: Silver Grey	Omit: Standard Code 0: No case drain Code N: Big radial force Code F: Free running Code LS: Low speed

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Performance Data

BMH 200 [203.2cm³/rev.]

		Pressure (MPa)					Max.cont.	Max.int.
		3.5	7	10.5	14	17.5	20	
Flow (L/min)	5	98	194	284				
		25	25	22				
	10	101	204	301	391	482		
		43	41	36	29	14		
	20	99	201	304	402	509	576	
Flow (L/min)	20	100	97	93	85	69	56	
		97	197	300	402	510	579	
	30	145	143	139	130	114	101	
		90	190	292	399	507	578	
	40	200	200	200	188	168	153	
Flow (L/min)	40	82	183	284	392	500	571	
		248	246	244	235	213	199	
	50	73	174	274	384	493	563	
		292	290	287	279	260	244	
	60	63	163	264	374	481	554	
Flow (L/min)	60	352	350	349	338	318	301	
		59	157	259	366	475	547	
	70	366	365	363	355	335	319	
		53	150	253	358	466	538	
	80	381	381	380	371	352	338	
Max.int.	90	39	140	241	348	456	526	
		443	437	434	426	407	392	

BMH 250 [255.9cm³/rev.]

		Pressure (MPa)					Max.cont.	Max.int.
		3.5	7	9	12	14.5	17.5	20
Flow (L/min)	5	121	246	318	398			
		19	19	18	14			
	10	130	258	331	425	515	595	
		34	33	31	29	23	12	
	20	130	258	332	432	520	621	702
Flow (L/min)	20	78	77	76	73	65	53	42
		122	251	327	429	520	621	700
	30	115	113	111	105	96	84	75
		115	240	323	422	513	616	698
	40	157	157	156	150	139	127	114
Flow (L/min)	40	105	232	314	411	505	606	687
		196	195	192	185	173	159	147
	50	94	220	302	401	496	596	676
		232	230	226	218	206	192	180
	60	81.4	209	288	389	484	582	666
Flow (L/min)	60	274	274	274	266	252	238	222
		72	203	280	381	475	574	659
	70	290	289	287	279	266	251	236
		66	194	273	371	467	566	651
	80	303	302	298	290	279	264	249
Max.int.	90	49	178	256	355	453	552	634
		348	347	345	337	325	309	292

BMH 315 [316.1cm³/rev.]

		Pressure (MPa)					Max.cont.	Max.int.
		3.5	7.5	10	13.5	15.5	17.5	20
Flow (L/min)	5	155	325					
		16	13					
	10	163	342	454	556			
		27	24	18	14			
	20	169	349	469	582	664	733	809
Flow (L/min)	20	63	61	55	48	40	32	19
		165	344	470	580	669	740	824
	30	93	89	82	77	67	59	46
		154	337	465	577	663	737	827
	40	126	126	119	111	99	88	73
Flow (L/min)	40	141	325	455	568	656	728	824
		159	155	148	139	126	115	98
	50	121	312	440	555	643	715	812
		187	186	179	169	154	143	124
	60	103	298	425	541	631	703	800
Flow (L/min)	60	222	222	215	205	187	176	157
		94	287	417	529	623	696	792
	70	236	233	224	215	196	184	166
		82	277	406	518	611	688	784
	80	246	244	236	228	210	197	174
Max.int.	90	62	256	386	496	593	669	767
		282	280	275	266	248	234	209

BMH 400 [406.4cm³/rev.]

		Pressure (MPa)					Max.cont.	Max.int.
		3.5	6	10.5	12.5	15.5	19	
Flow (L/min)	5	196	348	516				
		13	13	10				
	10	205	363	546	702	859		
		22	21	21	17	11		
	20	209	366	543	708	874	988	
Flow (L/min)	20	50	49	46	41	36	31	
		201	357	542	706	864	984	
	30	73	72	70	63	56	51	
		195	346	532	701	858	973	
	40	99	98	96	86	77	71	
Flow (L/min)	40	173	332	518	687	848	958	
		123	122	118	107	97	90	
	50	154	319	501	668	833	944	
		146	144	141	128	115	106	
	60	138	305	480	649	814	925	
Flow (L/min)	60	174	173	169	156	141	130	
		128	294	466	637	802	911	
	70	183	181	177	163	149	138	
		113	277	451	621	786	899	
	80	192	191	188	174	158	144	
Max.int.	90	90	256	433	595	767	881	
		220	220	215	202	183	165	

BMH 500 [489.2cm³/rev.]

		Pressure (MPa)					Max.cont.	Max.int.
		2.5	5	8.5	10	12.5	16	
Flow (L/min)	5	165	317	516				
		11	11	8				
	10	178	335	555	669	791	969	
		20	19	17	15	13	9	
	20	177	331	559	673	799	988	
Flow (L/min)	20	42	42	41	38	36	29	
		172	320	553	663	792	983	
	30	64	63	61	57	53	47	
		163	309	541	654	783	971	
	40	85	85	83	79	75	67	
Flow (L/min)	40	146	296	523	635	768	954	
		103	103	103	97	93	85	
	50	121	275	502	614	747	934	
		124	124	123	117	113	103	
	60	97	256	482	597	729	917	
Flow (L/min)	60	148	148	148	140	134	122	
		79	240	469	582	714	902	
	70	155	155	155	152	144	130	
		60	226	453	570	701	884	
	80	166	166	166	159	153	139	
Max.int.	90	34	201	421	550	673	869	
		184	183	182	177	166	155	

Torque: 884 N.m
Speed: 139 rpm

cont.
int.

Shaft radial force

Status of the shaft's radial force

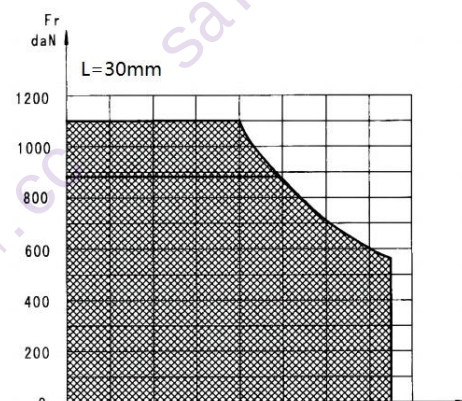
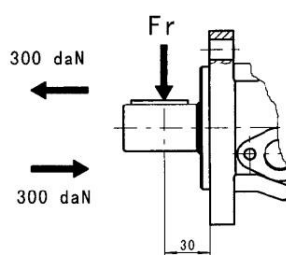
$$F_r = \frac{1100}{n} \times \frac{25000}{103.5+L} \text{ daN}$$

L < 60mm, n > 200 rpm

F_r = Radial Force (daN)

L = Distance (mm)

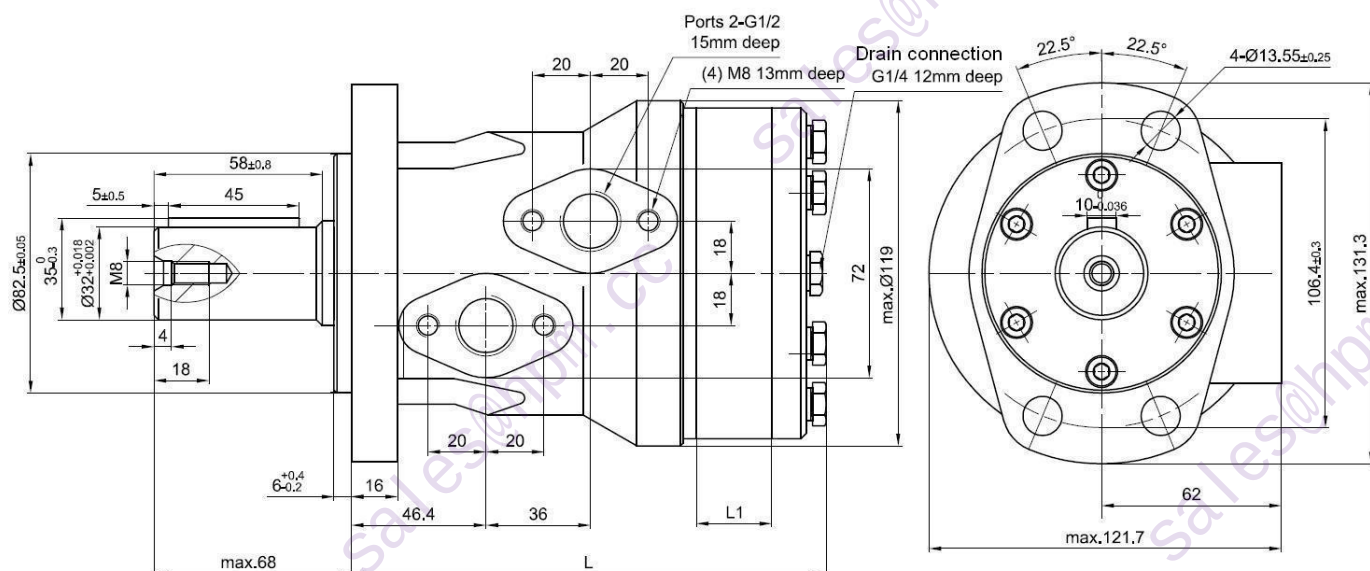
n = Speed (rpm)



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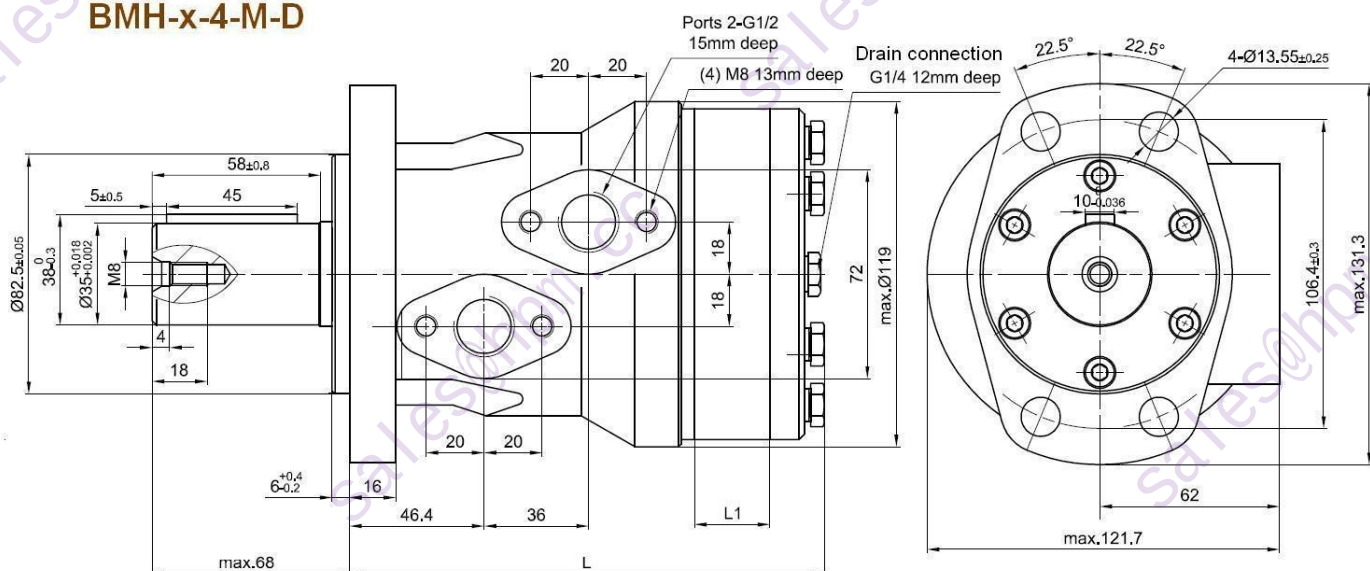
Popular model drawing

BMH-x-4-B-D



HPM Model	Danfoss Model	M+S Model	L mm	L1 mm
BMH-200-4BD**	151H-1002	EPMH-200C**	168	27
BMH-250-4BD**	151H-1003	EPMH-250C**	175	34
BMH-315-4BD**	151H-1004	EPMH-315C**	184	42
BMH-400-4BD**	151H-1005	EPMH-400C**	195	54
BMH-500-4BD**	151H-1006	EPMH-500C**	206	65

BMH-x-4-M-D

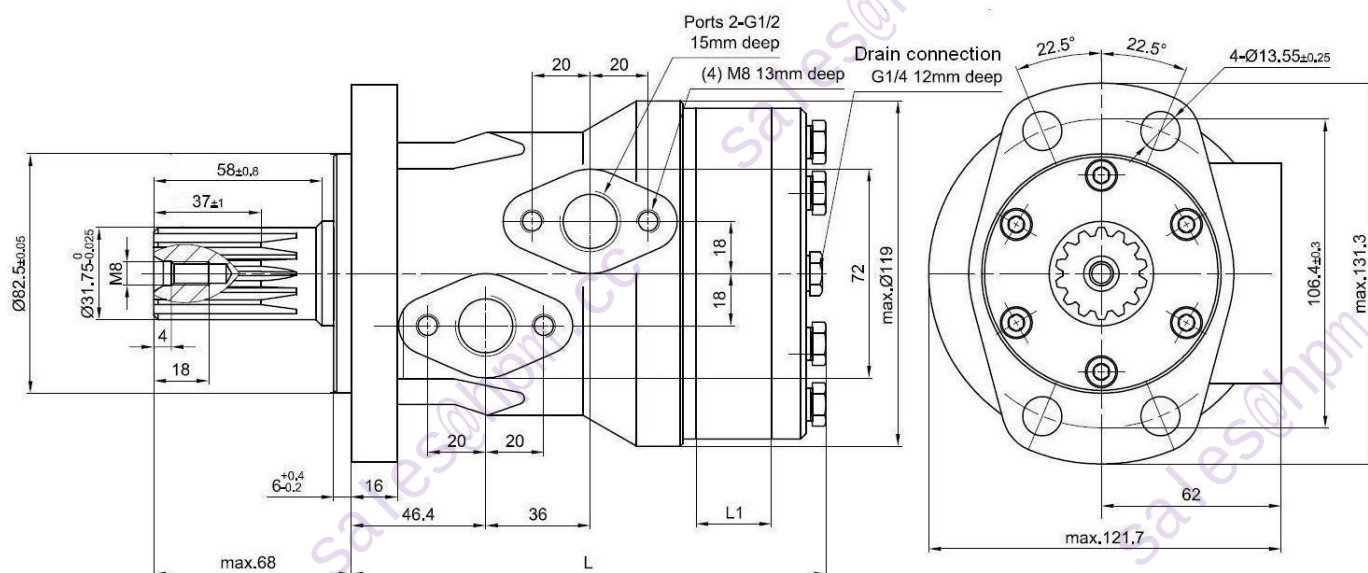


HPM Model	Danfoss Model	M+S Model	L mm	L1 mm
BMH-200-4MD**	151H-1012	EPMH-200CB**	168	27
BMH-250-4MD**	151H-1013	EPMH-250CB**	175	34
BMH-315-4MD**	151H-1014	EPMH-315CB**	184	42
BMH-400-4MD**	151H-1015	EPMH-400CB**	195	54
BMH-500-4MD**	151H-1016	EPMH-500CB**	206	65

BMH Series hydraulic orbit motor

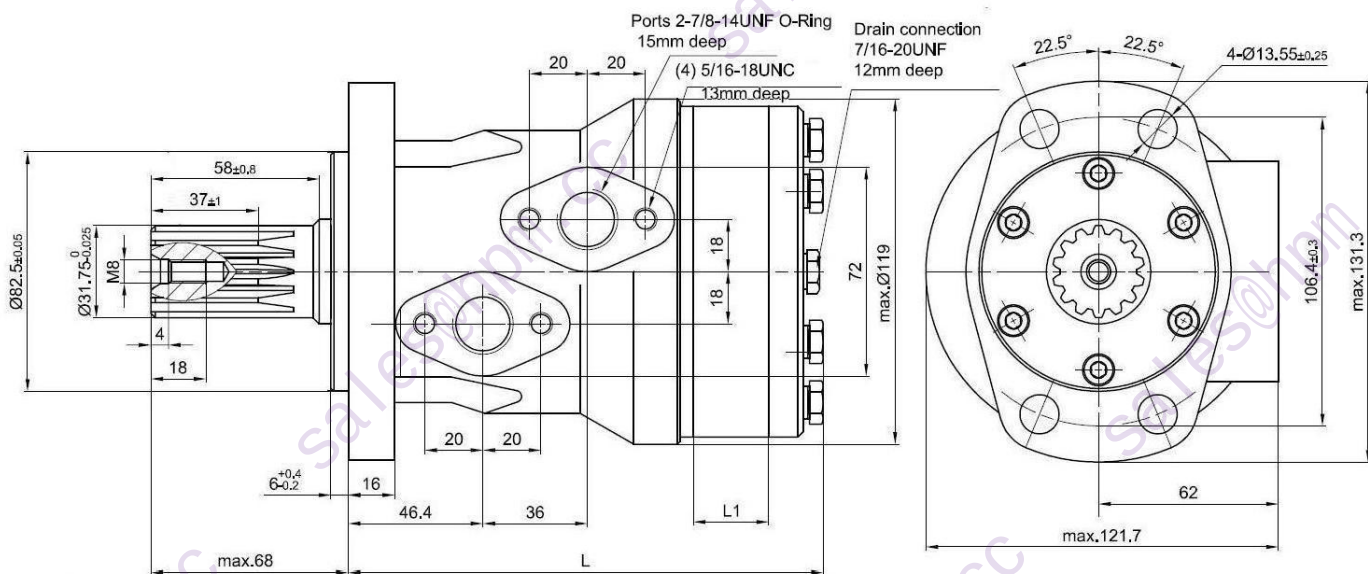
Popular model drawing

BMH-x-4FD-D



HPM Model	Danfoss Model	M+S Model	L mm	L1 mm
BMH-200-4FD-D**	151H-1022	EPMH-200SH**	168	27
BMH-250-4FD-D**	151H-1023	EPMH-250SH**	175	34
BMH-315-4FD-D**	151H-1024	EPMH-315SH**	184	42
BMH-400-4FD-D**	151H-1025	EPMH-400SH**	195	54
BMH-500-4FD-D**	151H-1026	EPMH-500SH**	206	65

BMH-x-4FD-S

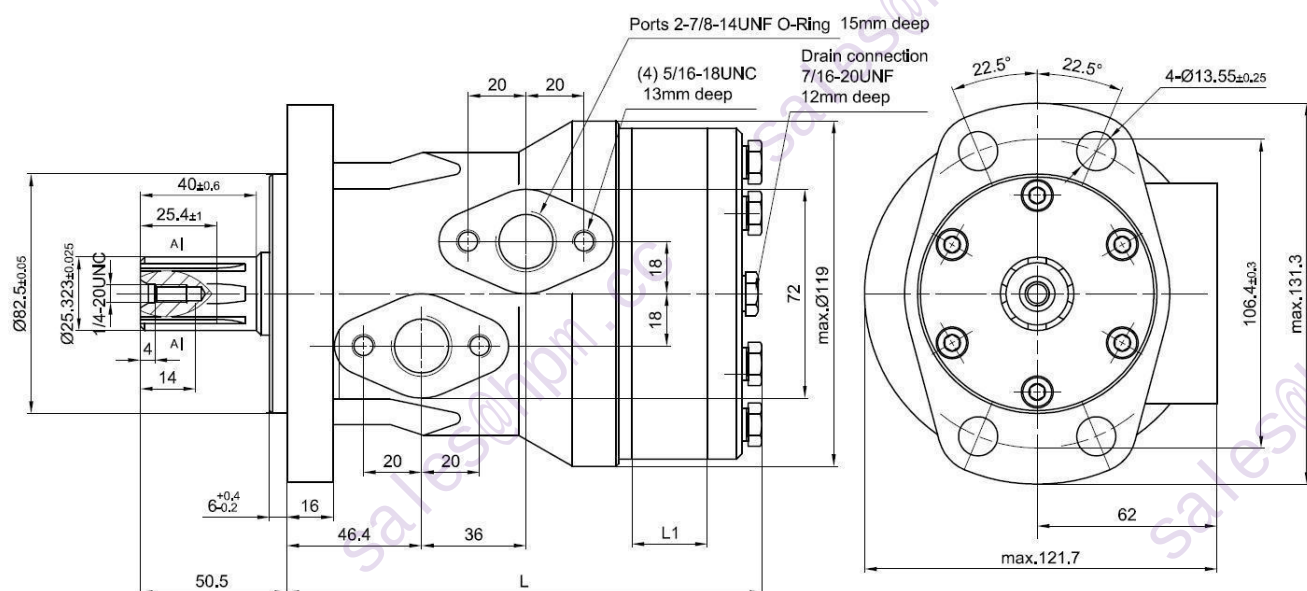


HPM Model	Danfoss Model	M+S Model	L mm	L1 mm
BMH-200-4FD-S**	151H-1052	MLHH-200L4**	168	27
BMH-250-4FD-S**	151H-1053	MLHH-250L4**	175	34
BMH-315-4FD-S**	151H-1054	MLHH-315L4**	184	42
BMH-400-4FD-S**	151H-1055	MLHH-400L4**	195	54
BMH-500-4FD-S**	151H-1056	MLHH-500L4**	206	65

BMH Series hydraulic orbit motor

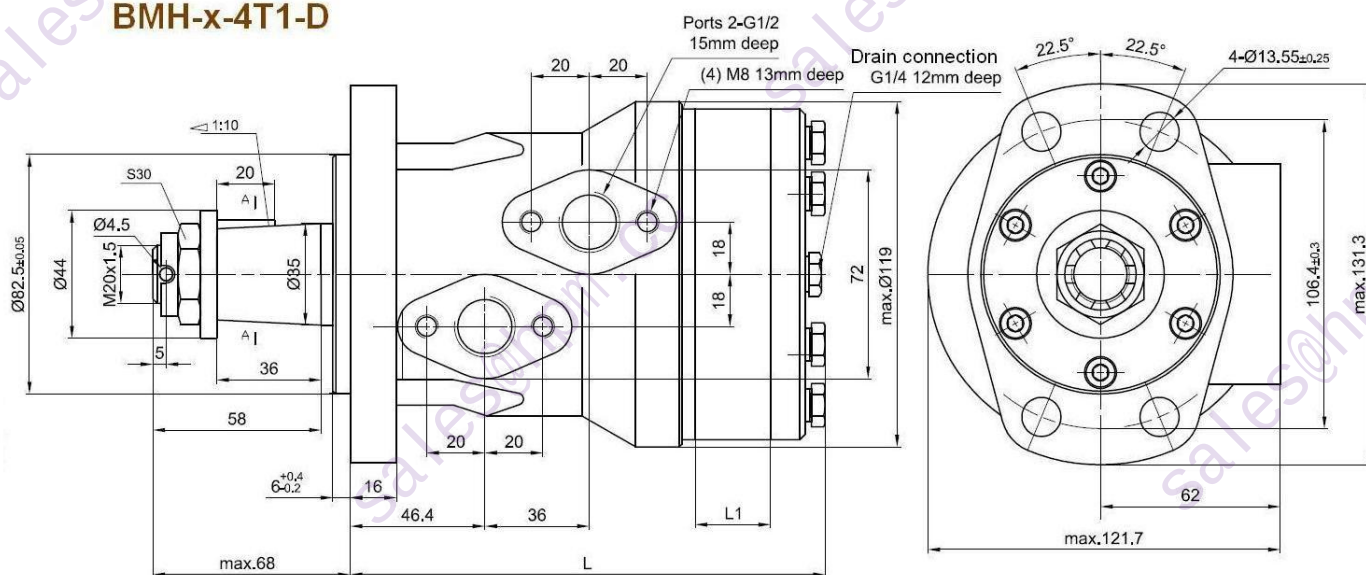
Popular model drawing

BMH-x-4S-S



HPM Model	Danfoss Model	
BMH-200-4SS**	151H-1080	With Drain Port
BMH-250-4SS**	151H-1082	
BMH-315-4SS**	151H-1083	
BMH-400-4SS**	151H-1084	
BMH-500-4SS**	151H-1081	

BMH-x-4T1-D



HPM Model	Danfoss Model		M+S Model	L mm	L1 mm
BMH-200-4T1D**		With Drain Port	EPMH-200K**	168	27
BMH-250-4T1D**			EPMH250K**	175	34
BMH-315-4T1D**	151H-1034		EPMH-315K**	184	42
BMH-400-4T1D**	151H-1035		EPMH-400K**	195	54
BMH-500-4T1D**	151H-1036		EPMH-500K**	206	65