

HSM Series hydraulic orbit motor



HSM25-Replace with Danfoss Char-Lynn 2.5K Swing motor 25 P

HSM20-Replace with Danfoss Char-Lynn 2.0K Swing motor 20 P

for mini- excavators(Yanmar V15 17 18.Kubota U15 17 20 .Wacker EZ17 .

XCMG 15 17,CAT 17.Komatsu 18. Sunvo 20 .IHI 18 20.)

Parameters

Type	HSM25-200	HSM25-244	HSM20-200	HSM20-244
Displacement (ml/r)	200	244	200	244
Max. speed (rpm)	80	80	80	80
Max. torque (N•m)	472	515	411	420
Max.pressure drop (Mpa)	15.2	13.2	13.2	10.8
Mechanical brake torque(N.m)	441			
Brake release pressure(bar)	Min:20bar;Max:49bar			

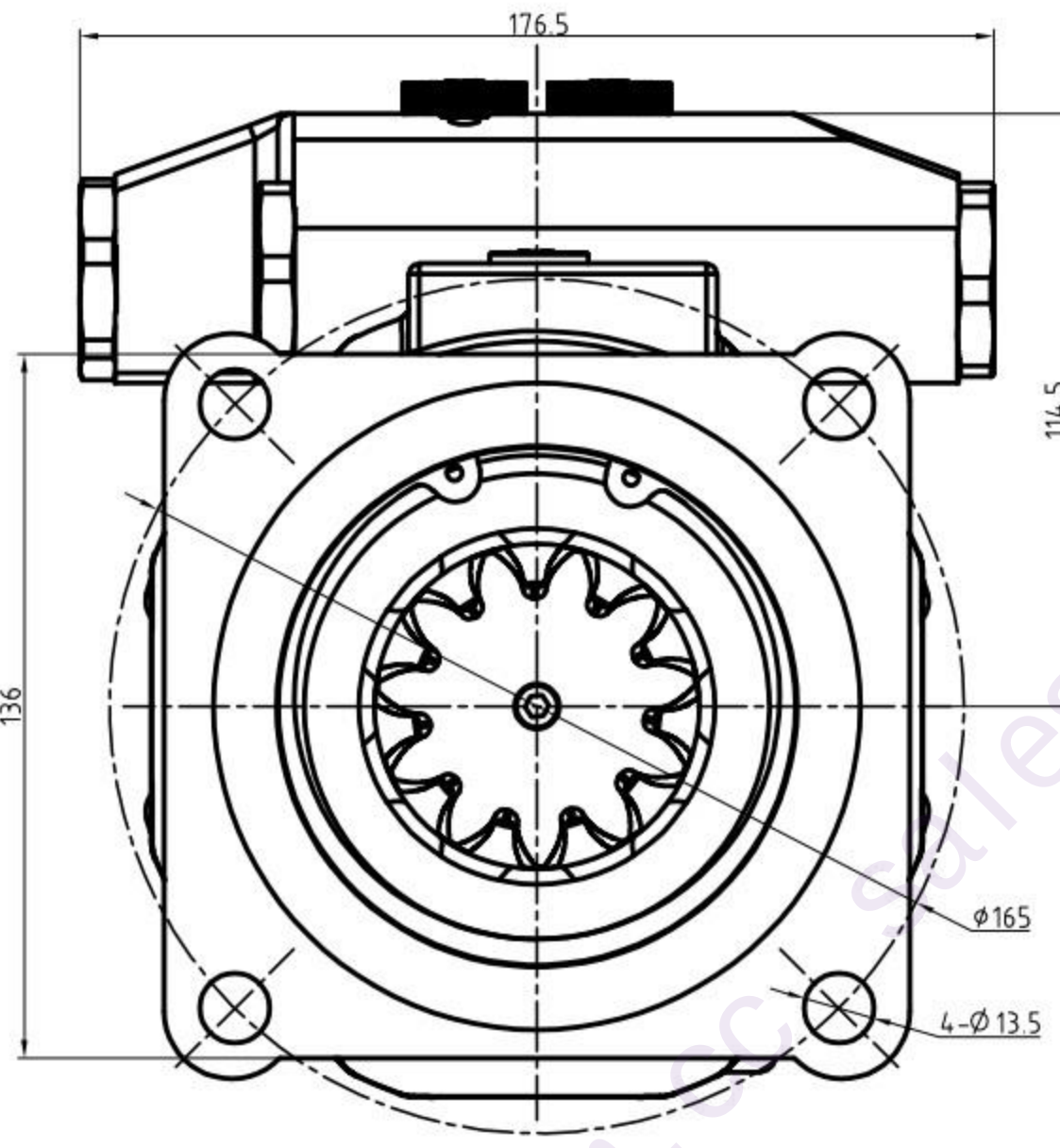
Selection

1	2	3	3	4
Series	CC	Brake	Flange and Pilot	
HSM25/HSM20	200	Code N: Without brake Code C: With brake	Code S : 4 bolt circle Ø148 pilot dia Ø 110 Code S2 : 4 bolt circle Ø155 pilot dia Ø 125 Code S3: 4 bolt circle Ø165 pilot dia Ø 125	
	244			
5		7	8	9
Oil Port &valves			Shaft code	Valve optional
Code D1: G3/8 O-ring port with shockless relief valve Code D2: G3/8 O-ring port with relief valve			Code Z11: 11 teeth Code Z13: 13 teeth	Shockless valve/Time delay valve/Balance valve

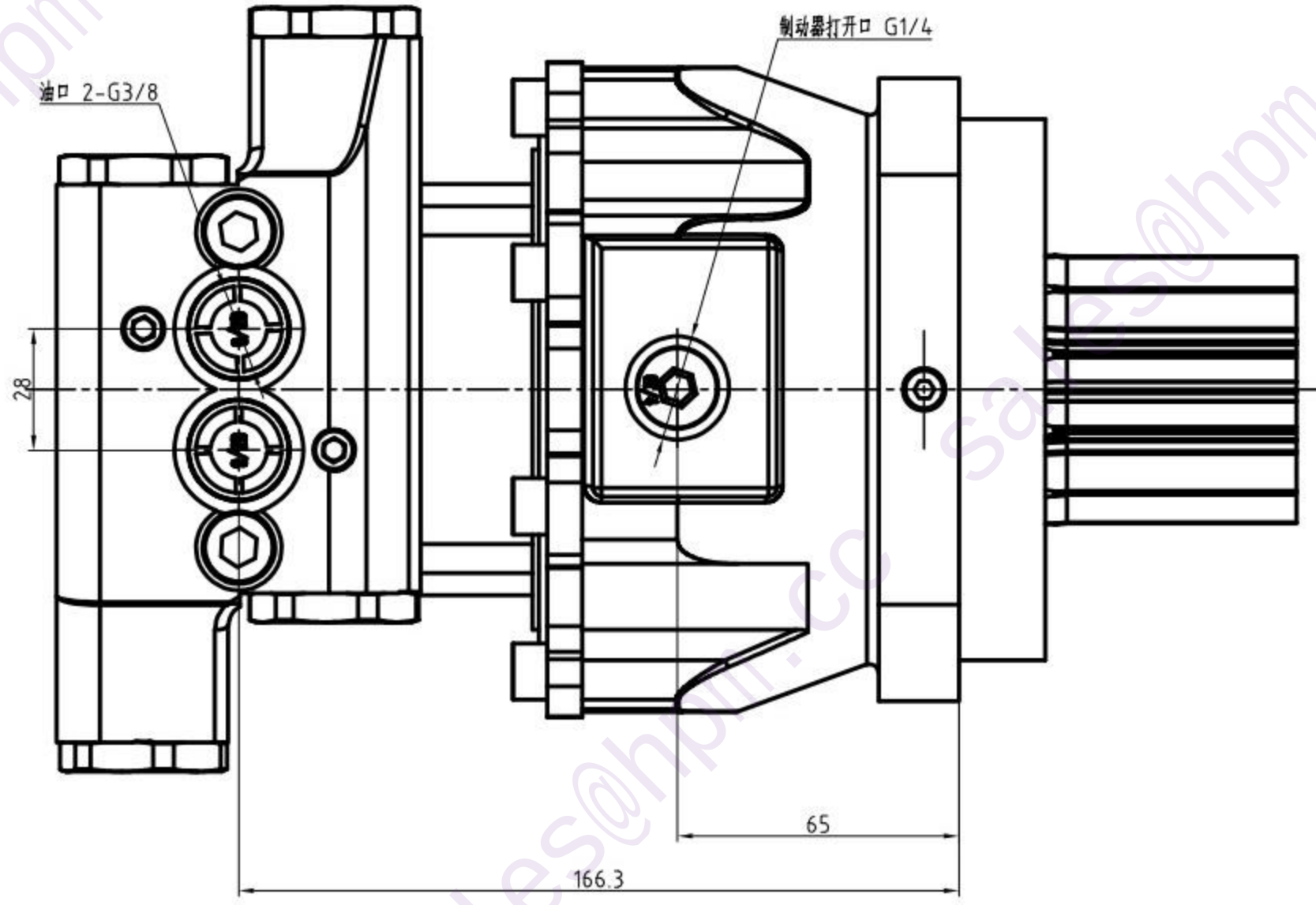
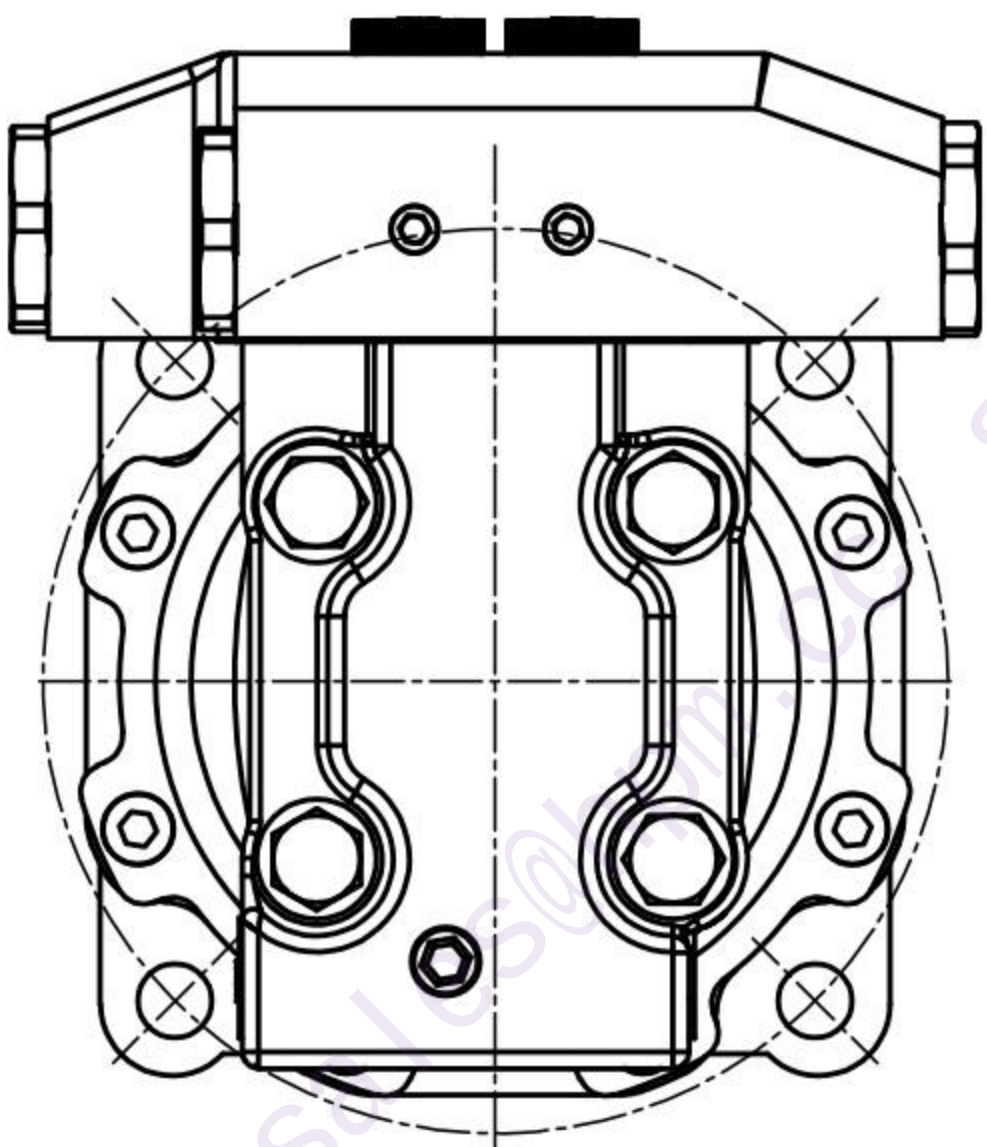
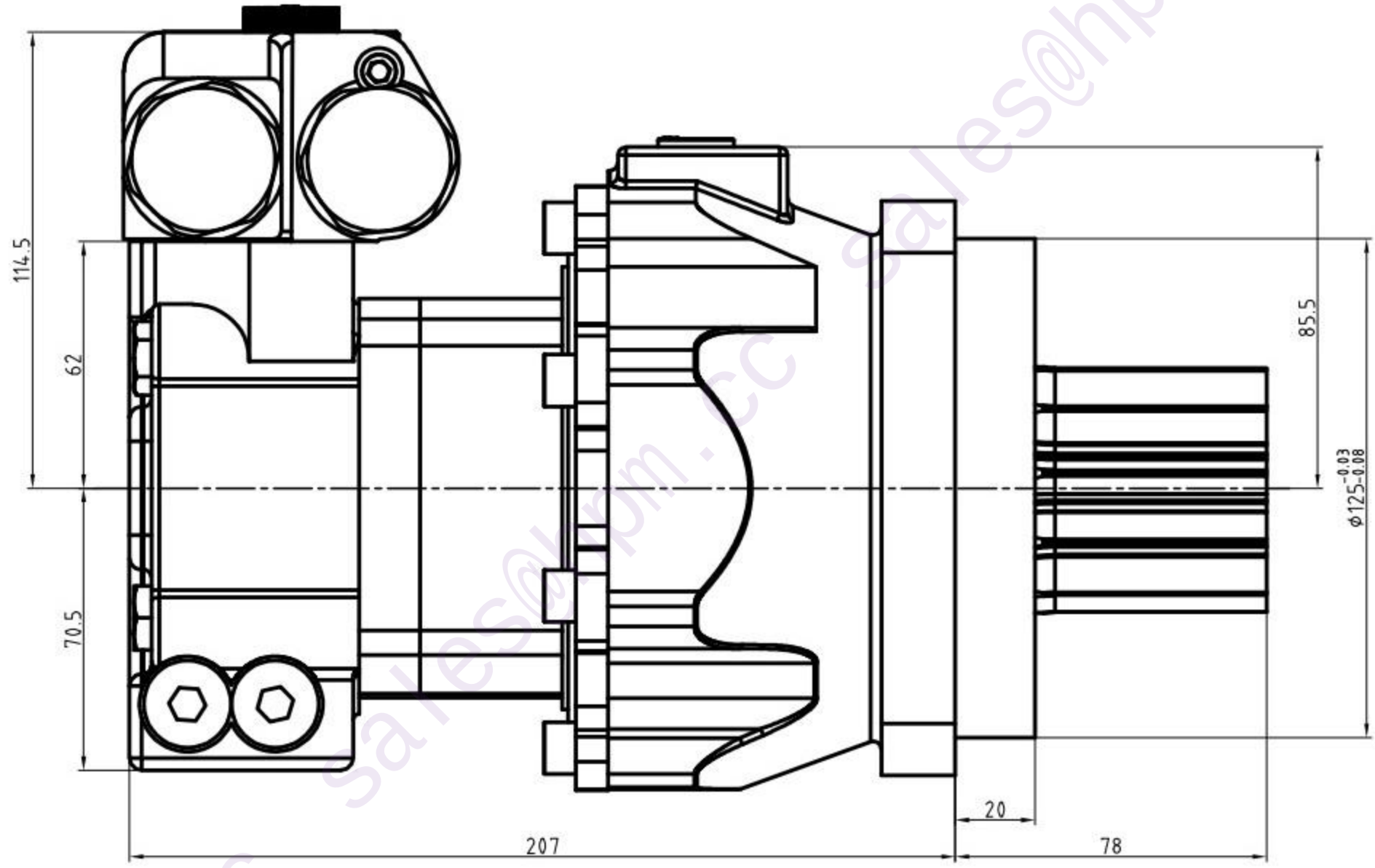
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Popular model drawing



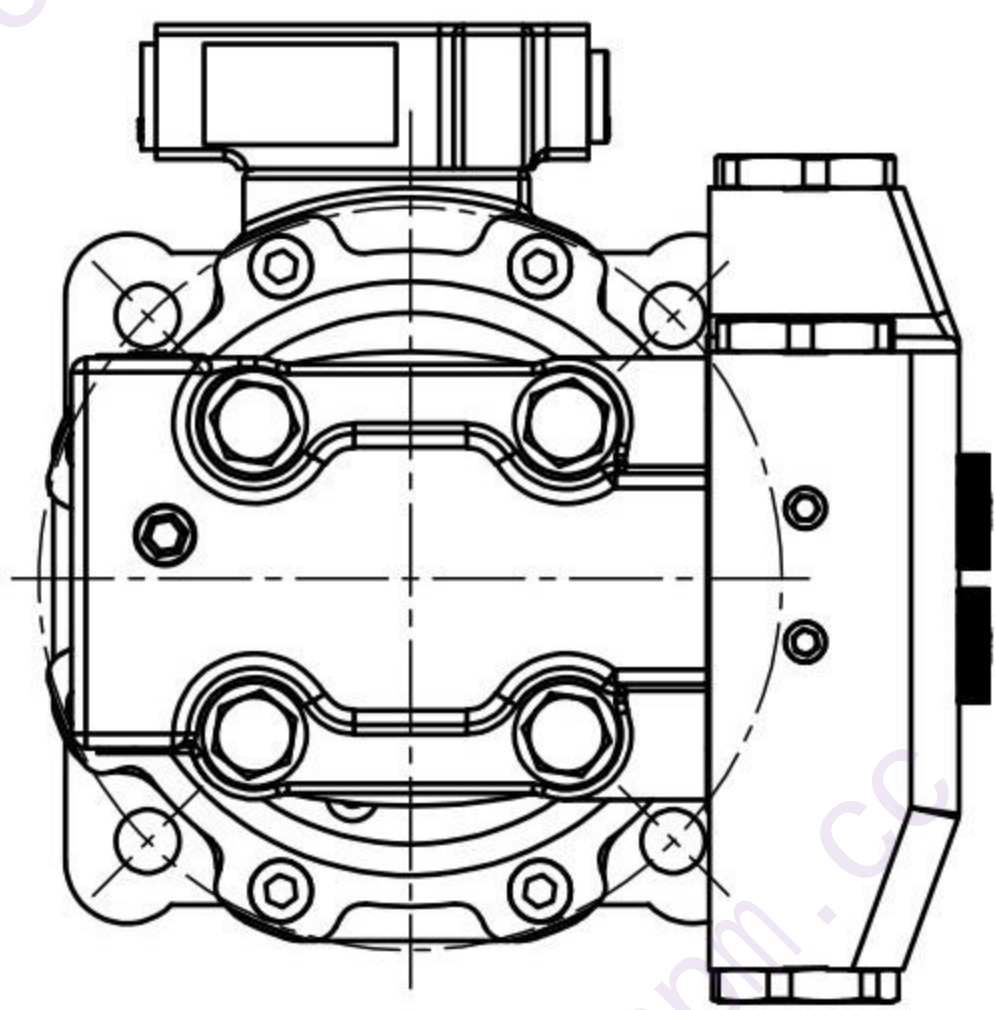
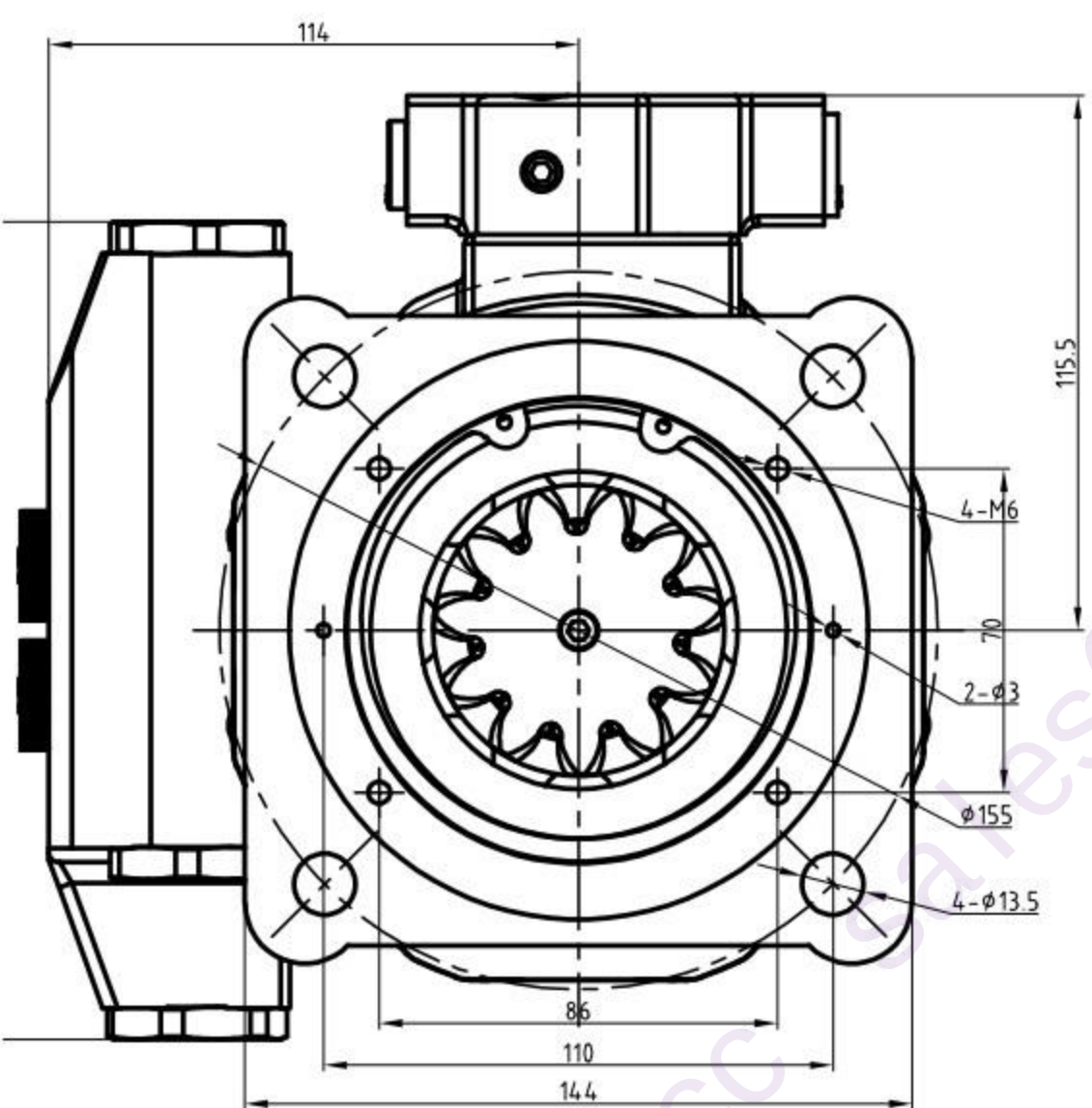
轴端齿轮花键参数		For Kubota 20	
模数	4.5	-200 (久保田20)	
分度圆直径	$\phi 49.5$	流量 (LPM)	38
压力角	20°	压力 (MPa)	15.2
齿数	11	扭矩 (N×m)	410
大径	$\phi 62.5_{-0.12}^0$	转速 (ml/r)	80
小径	$\phi 42.5_{-0.33}^0$	溢流阀压力 (MPa)	17 泄油
齿顶高系数	1	制动扭矩 (N×m)	500-600
径向间隙系数	0.25	启动压力 (MPa)	0.98-2.9
变位系数	0.4		
公法线长度	$22_{-0.44}^{+0.22}$ (2齿)		



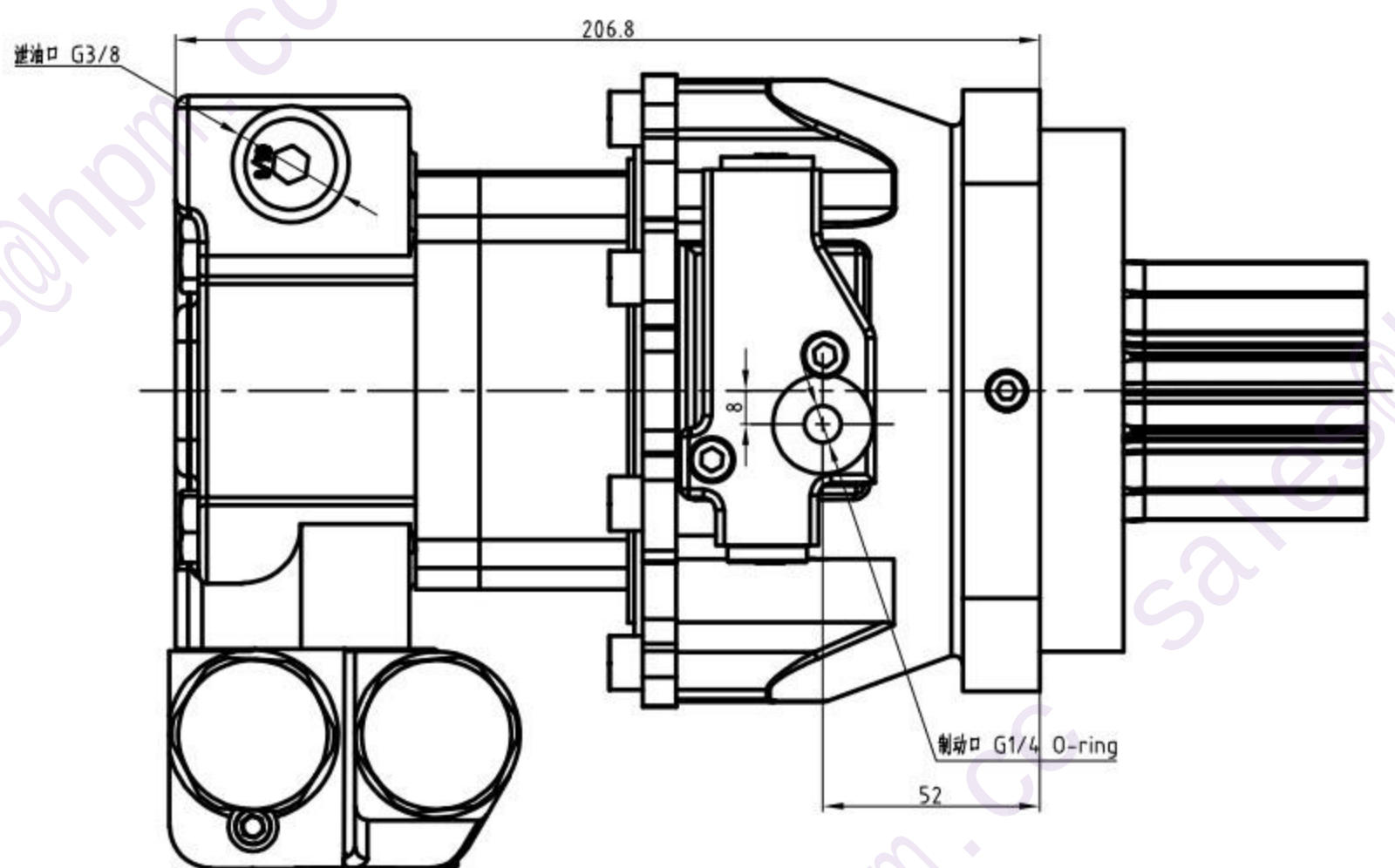
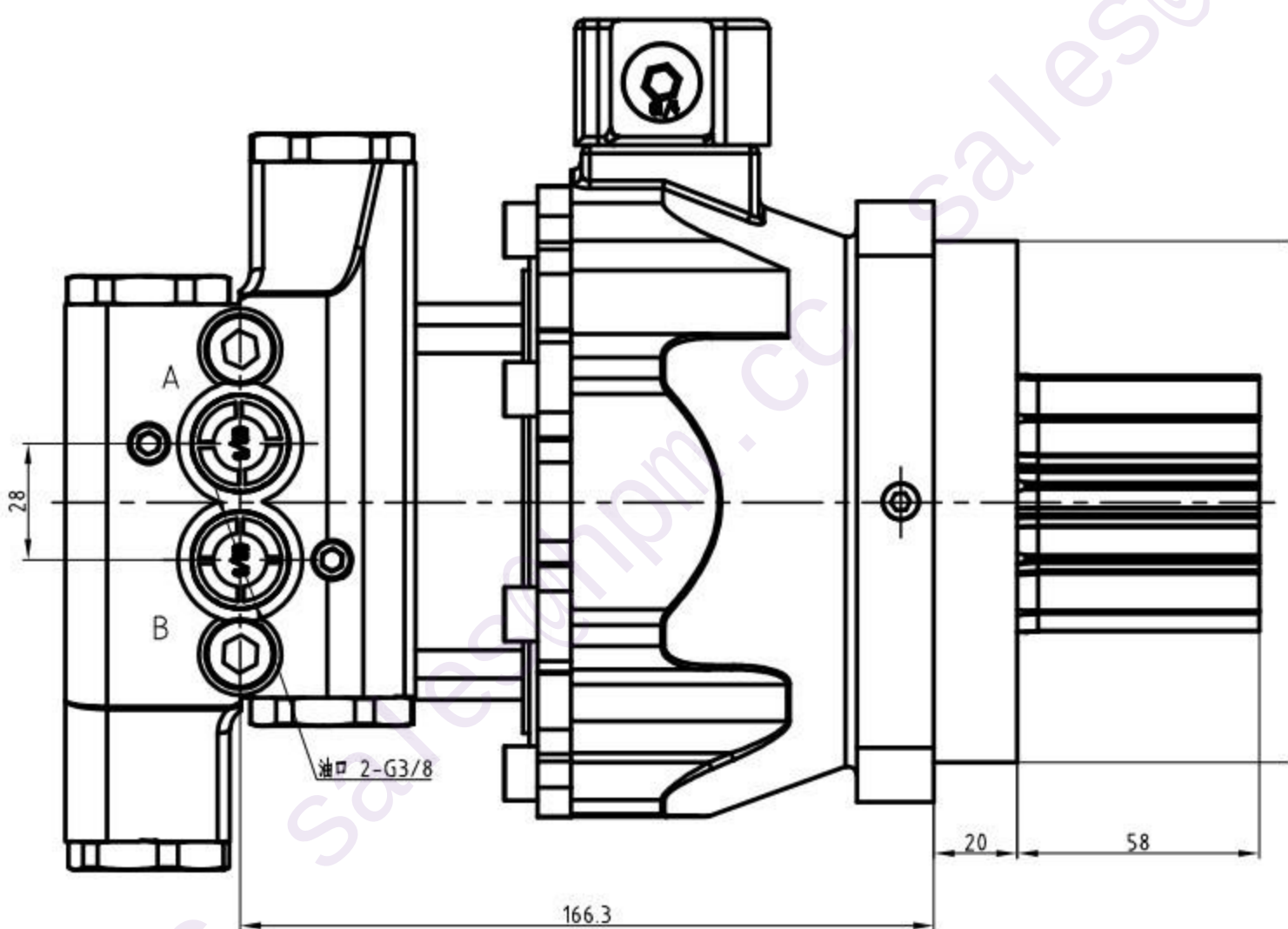
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Popular model drawing



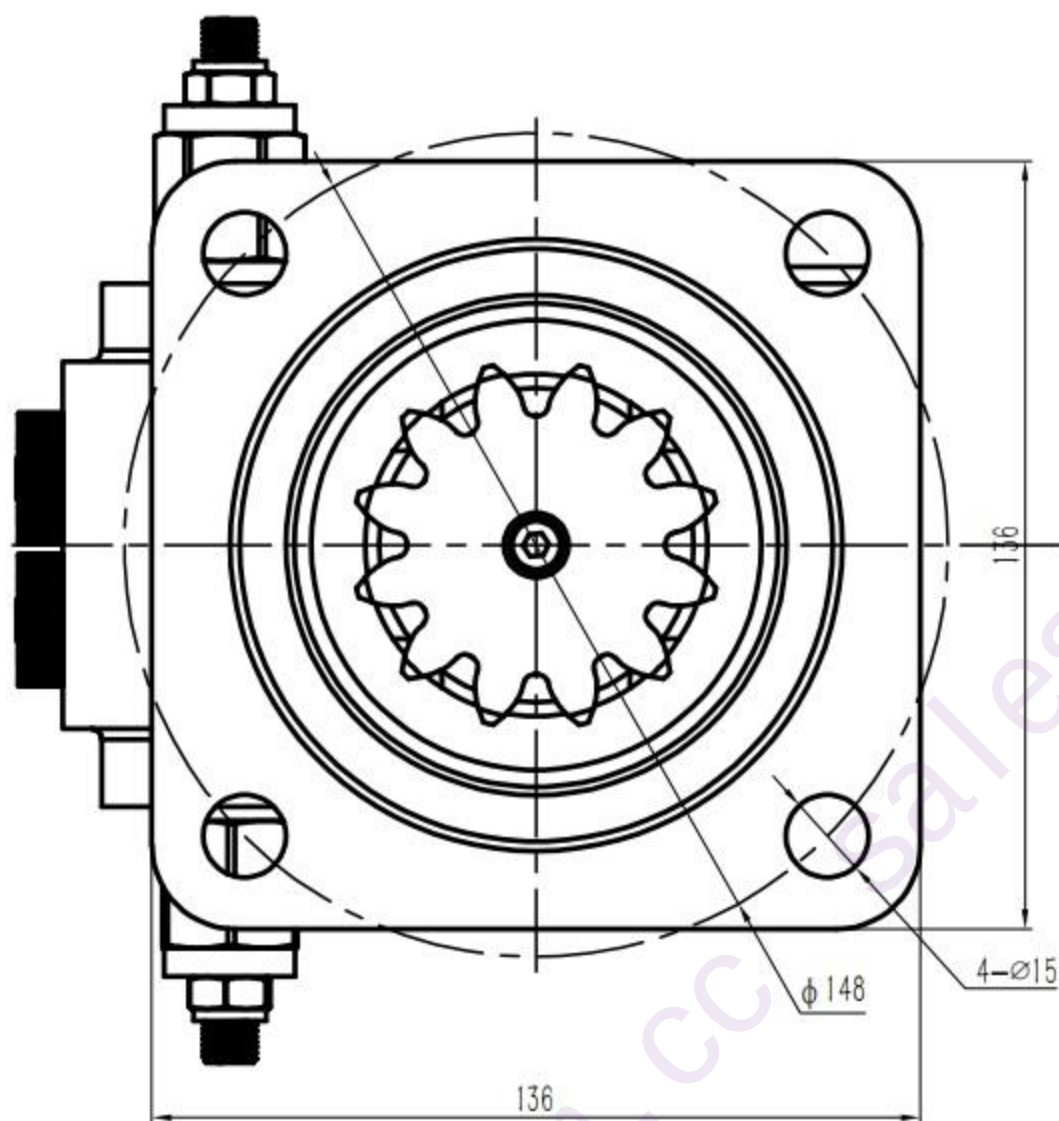
轴端齿轮花键参数		For IHI 18	
模数	4.5	-200	
分度圆直径	φ49.5	2PC20C1112-C (石川岛18)	
压力角	20°	流量 (LPM)	38
齿数	11	压力 (MPa)	15.2
大径	φ62.5 ⁰ _{-0.12}	扭矩 (N×m)	410
小径	φ42.5 ⁰ _{-0.33}	转速 (ml/r)	80
齿顶高系数	1	溢流阀压力 (MPa)	17 泄油
径向间隙系数	0.25	制动扭矩 (N×m)	500-600
变位系数	0.4	启动压力 (MPa)	0.98-2.9
公法线长度	22 ^{-0.022} _{-0.044} (2齿)		



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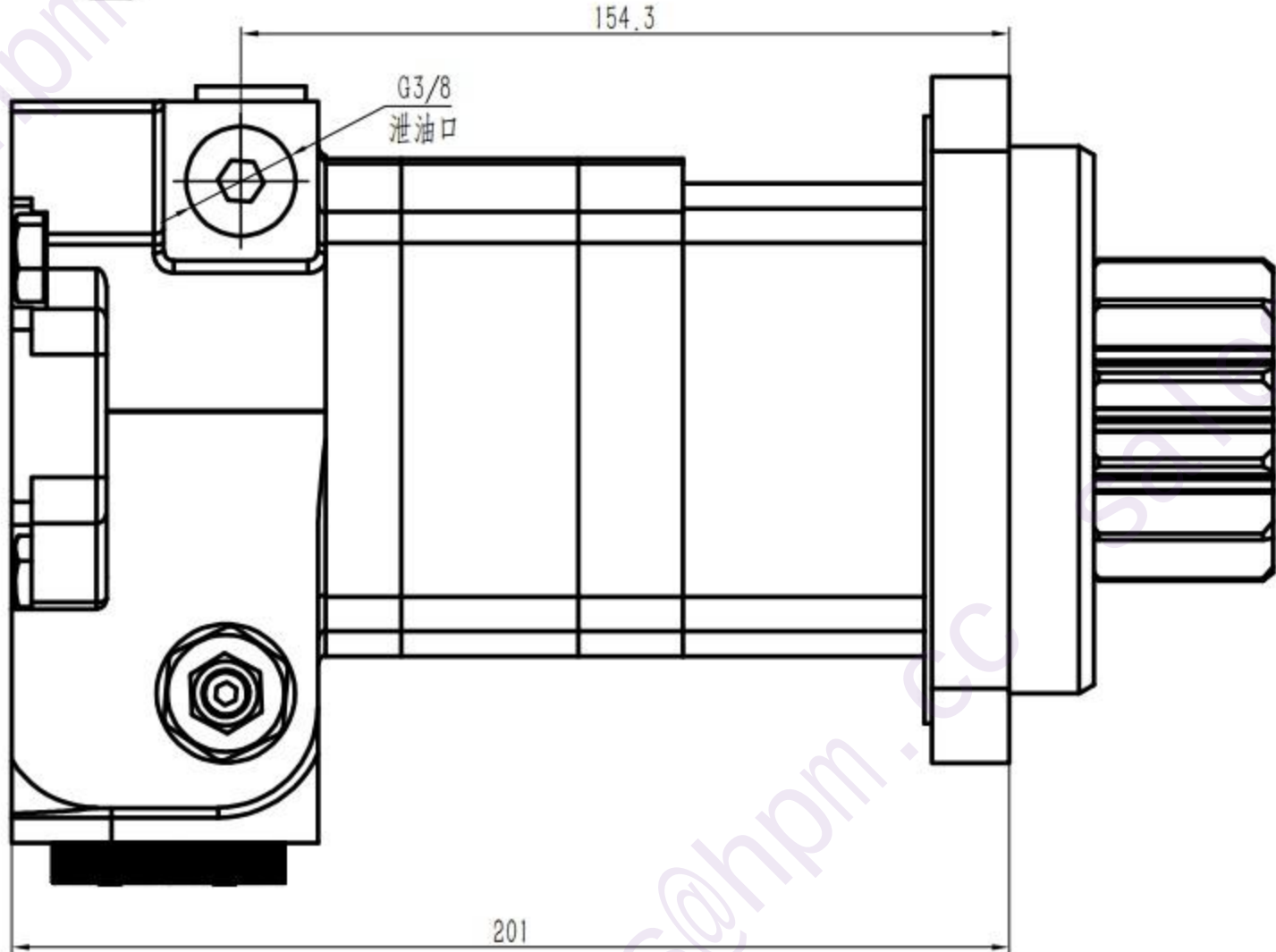
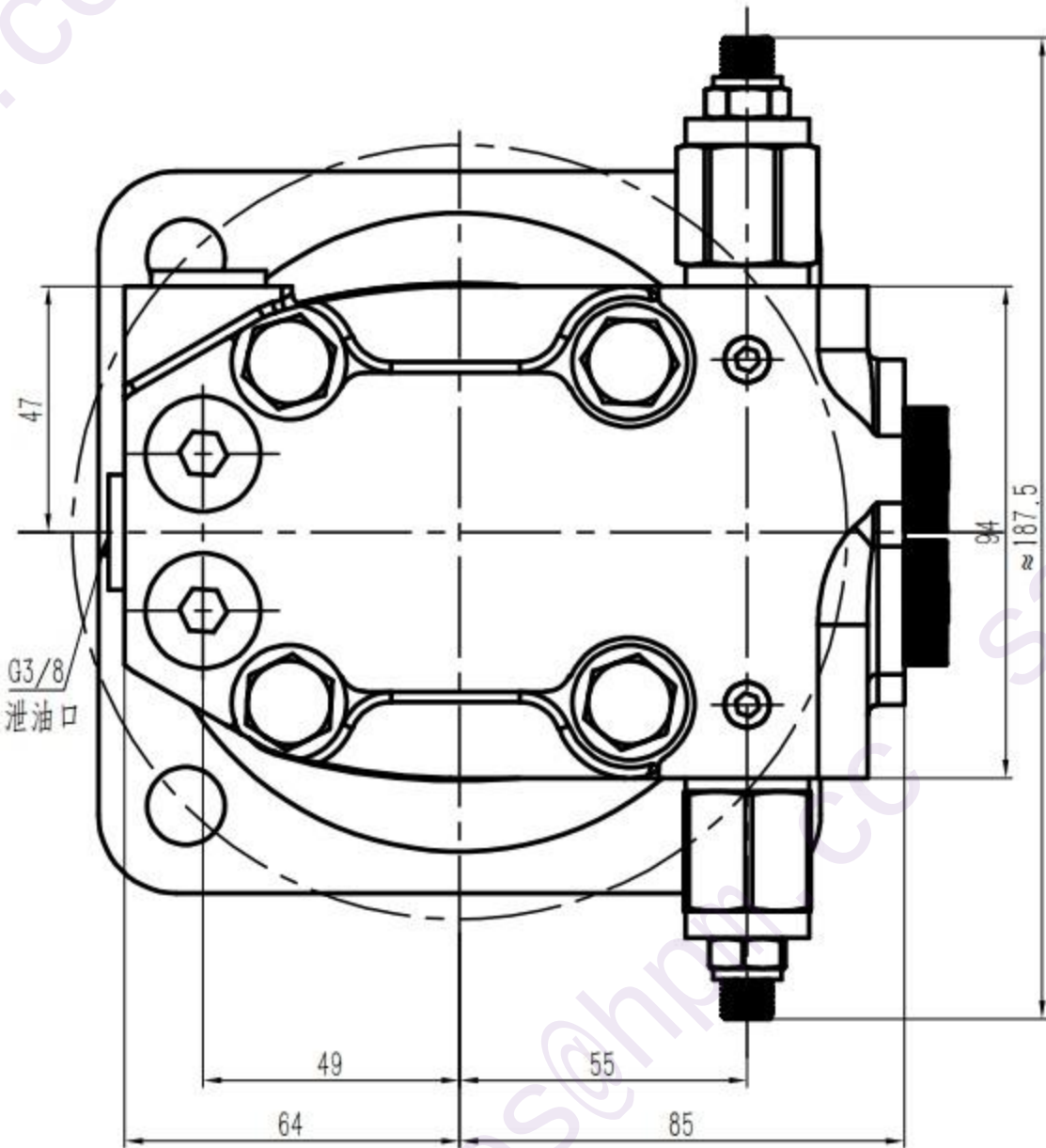
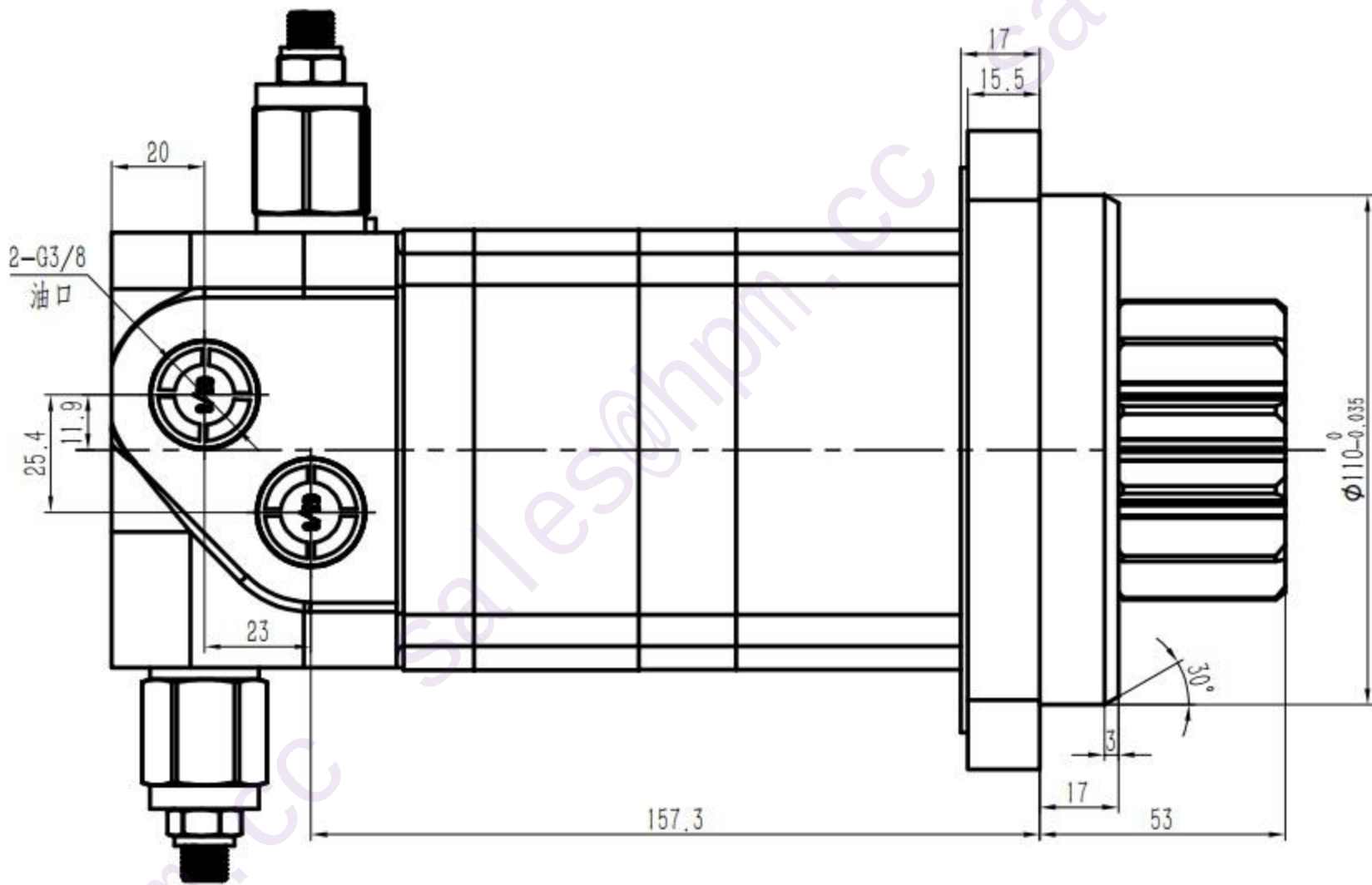


轴端花键参数

模数	4.5
压力角	20°
齿数	12
大径	$\phi 66.5_{-0.3}^0$
小径	$\phi 47_{-0.33}^0$
齿顶高系数	1
径向间隙系数	0.25
变位系数	0.4
公法线长度	$22_{-0.2}^{0.1}$ (2齿)

Lovol 18 Kubota 15

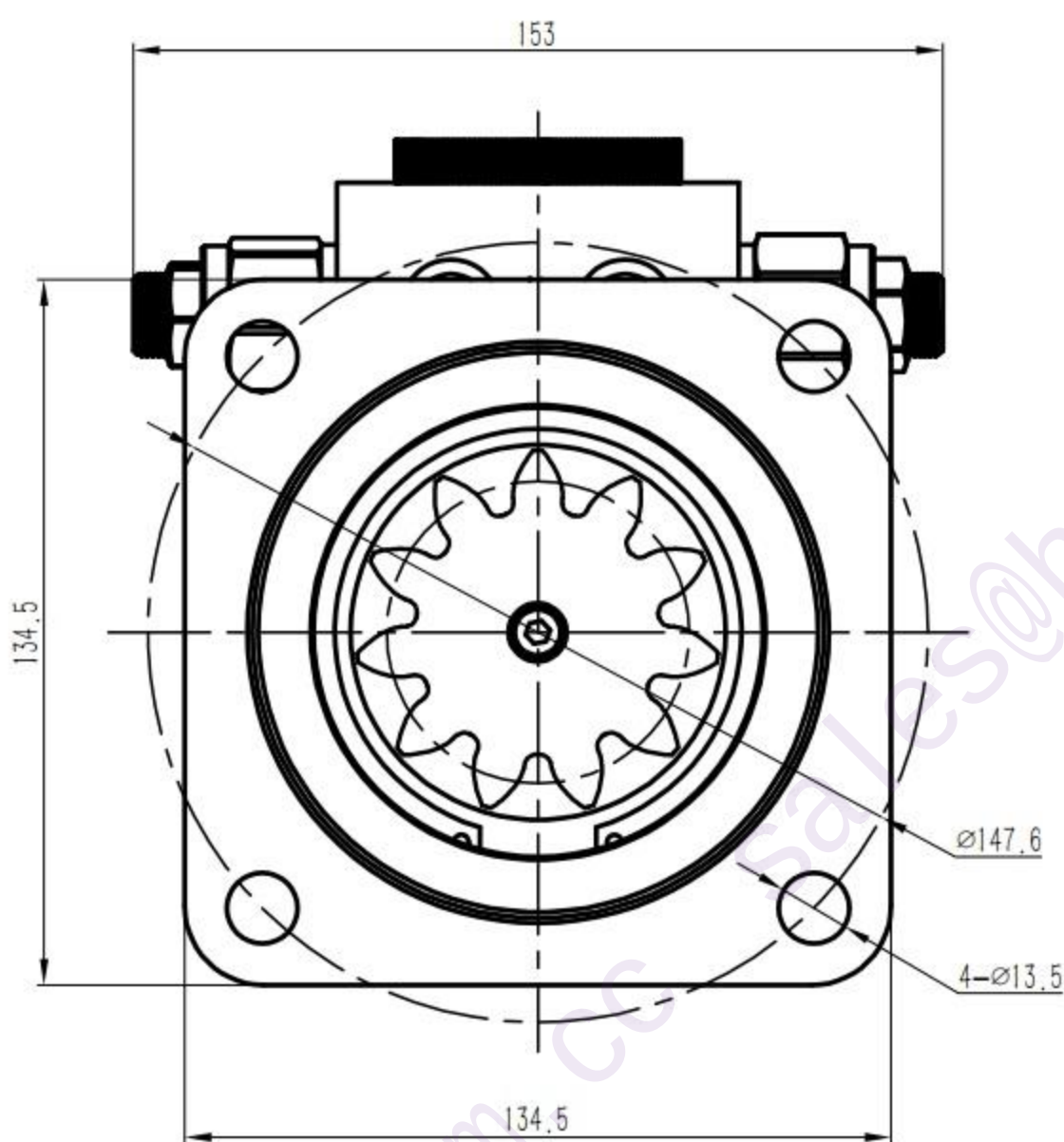
-200	
流量 (LPM)	11
压力 (MPa)	13.2
扭矩 (N·m)	360
转速 (ml/r)	362
溢流阀压力 (Mpa)	13.2 压力泄油



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轴端齿轮参数

模数	5
压力角	20°
齿数	11
大径	$\phi 68.3_{-0.12}^{-0.05}$
小径	$\phi 46.3_{-0.33}^0$
齿顶高系数	1
径向间隙系数	0.25
变位系数	0.38
公法线长度	$24.211_{-0.12}^0$ (2齿)

For CAT 17

2.5K-245	
69-0016 (卡特17)	
最大流量 (LPM)	20
最大压力 (MPa)	11
最大扭矩 (N*m)	380
最大转速 (ml/r)	80
溢流阀压力 (Mpa)	11 压力泄油
补油口压力 (Mpa)	0.5-0.7

