

2024



HANGZHOU HENGNIE MACHINERY CO.,LTD  
杭州恒涅机械有限公司

齿轮箱类别：割草机类齿轮箱

GEARBOX CATEGORY: LAWN MOWER GEARBOX



WWW.NORDGEAR.CN



割草机齿轮箱是割草机的重要部件，通常安装在割草机的底部。由齿轮、轴承和外壳等部件组成，主要作用是将发动机的动力传递给割草刀片，从而实现割草的功能。

The lawn mower gearbox is an important part of the lawn mower and is usually installed at the bottom of the lawn mower. It is composed of gears, bearings and housings, and its main role is to transmit the power of the engine to the lawn mowing blade, so as to realize the function of mowing the lawn.

割草机齿轮箱通常采用耐磨耐腐蚀的金属材料制造，确保其具有足够的强度和耐用性。齿轮箱内部的齿轮经过精密设计和加工，能够有效传递动力，并保持割草机的稳定性和高效性能。



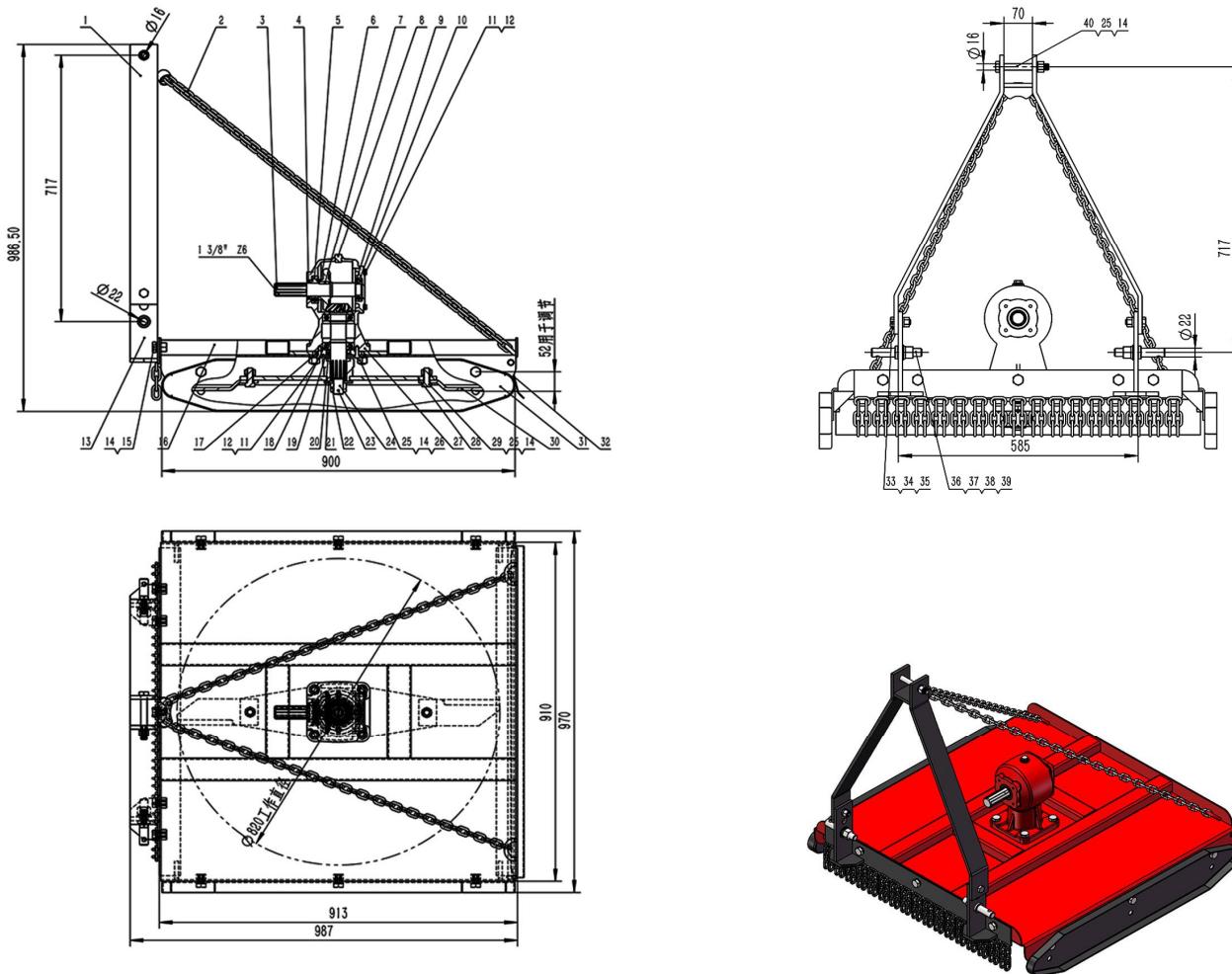
Lawn mower gearboxes are usually made of abrasion-resistant and corrosion-resistant metal materials to ensure that they have sufficient strength and durability. The gears inside the gearbox are precision-engineered and machined to effectively transmit power and maintain the stability and efficient performance of the mower.

在使用割草机时，齿轮箱需要定期进行润滑和维护，以确保其正常运转和延长使用寿命。同时，需要注意避免割草机齿轮箱受到外部冲击和损坏，以免影响割草机的工作效果和安全性。

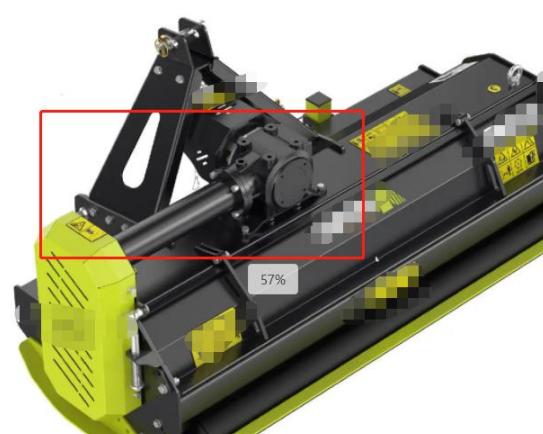
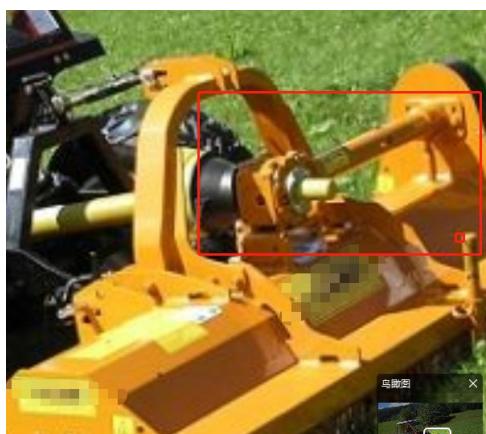
When using a lawn mower, the gearbox needs to be lubricated and maintained regularly to ensure its proper operation and extended service life. At the same time, care needs to be taken to avoid external impact and damage to the lawn mower gearbox, so as not to affect the working effect and safety of the lawn mower.

## 割草机齿轮使用：

1. 割草机齿轮箱使用多为增速，  
例如1:1.47, 1:1.5, 1:1.93等
2. 有配套的花键套
3. 齿轮和轴的选用：选用20CrMnTi, 42CrMo等
4. 齿轮箱壳体的选用：球墨铸铁450 (QT450)，灰铸铁250 (HT250) 小型齿轮箱使用。
5. 常见的割草机其一为L型割草机，为下图的安装使用



6. 常见的割草机其二为T型箱里，可选择输出轴单向转动  
(保护作用)的齿轮箱, 可参考:B198,B310,B313,B315等





速比 Ratio	输入转速 (RPM)	功率 Horse Power (Hp) (Kw)		扭矩 Torque(N·m) Input Output		净重约 N.W.	链接 Link
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B30



1:1.47	540	40	29.4	520	354	
1:1.93	540	30	22.1	390	202	
1:2.3	540	25	18.4	325	141	21kg



B61



1:1	540	80	58.8	1040	1040	
1:1.47	540	75	55.1	975	663	
1:1.93	540	65	47.8	845	438	37kg



B81



1:1	540	80	58.8	1040	1040	
1:1.47	540	75	55.1	975	663	
1:1.93	540	65	47.8	845	438	41kg



B91



1:1	540					
						86kg



B130



1:1	540	120	88.2	1560	1560	
1:1.46	540	110	80.9	1430	979	
1:1.93	540	95	69.8	1235	640	54kg



B205



1:1.47	540	30	22.1	390	265	
1:1.92	540	40	29.4	520	271	16kg

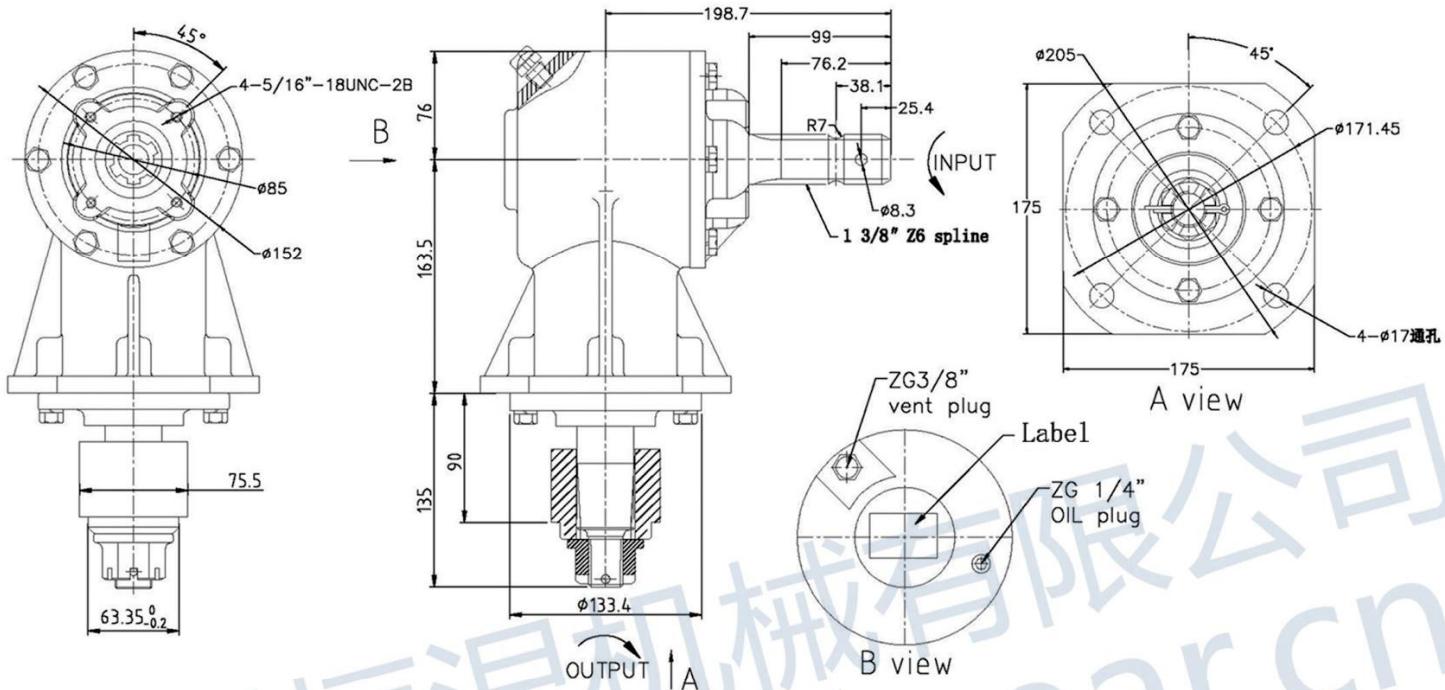


B140



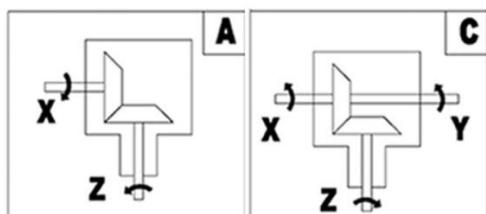
1.27:1	540	60	44.1	780	990	
1:1.5	540	60	44.1	780	520	
1:1.93	540	60	44.1	780	404	29kg





S.No.	Ratio	INPUT (Z)				OUTPUT(X-Y)	
		R.M.P	Hp	KW	N·m TORQUE	N·m TORQUE	R.M.P
Speed Multiplier	1:1.47	540	40	29.8	527	359	794
		1000	60	44.7	427	290	1470
	1:1.93	540	30	22.4	395	205	1042
		1000	45	33.5	320	166	1930

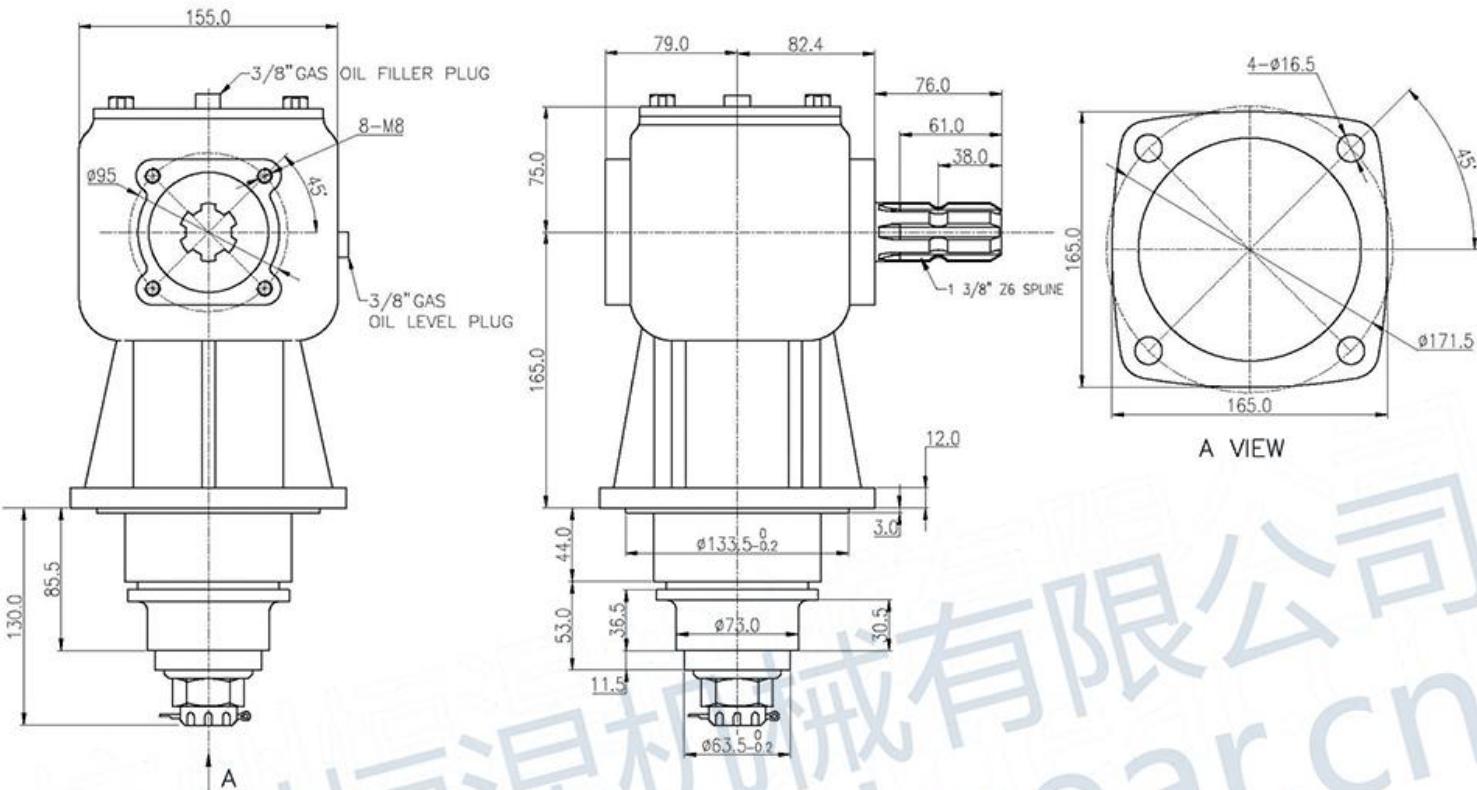
LUBRICATING OIL: SAE.90EP      1.0 L      WEIGHT: 22.0KG



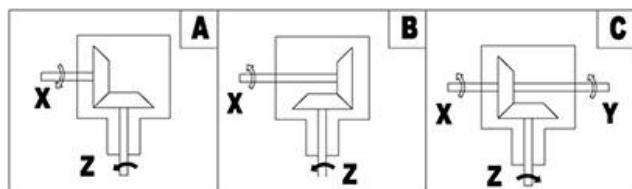
# B205



# HANGZHOU HENGNIE MACHINERY CO., LTD

B  
2  
0  
5

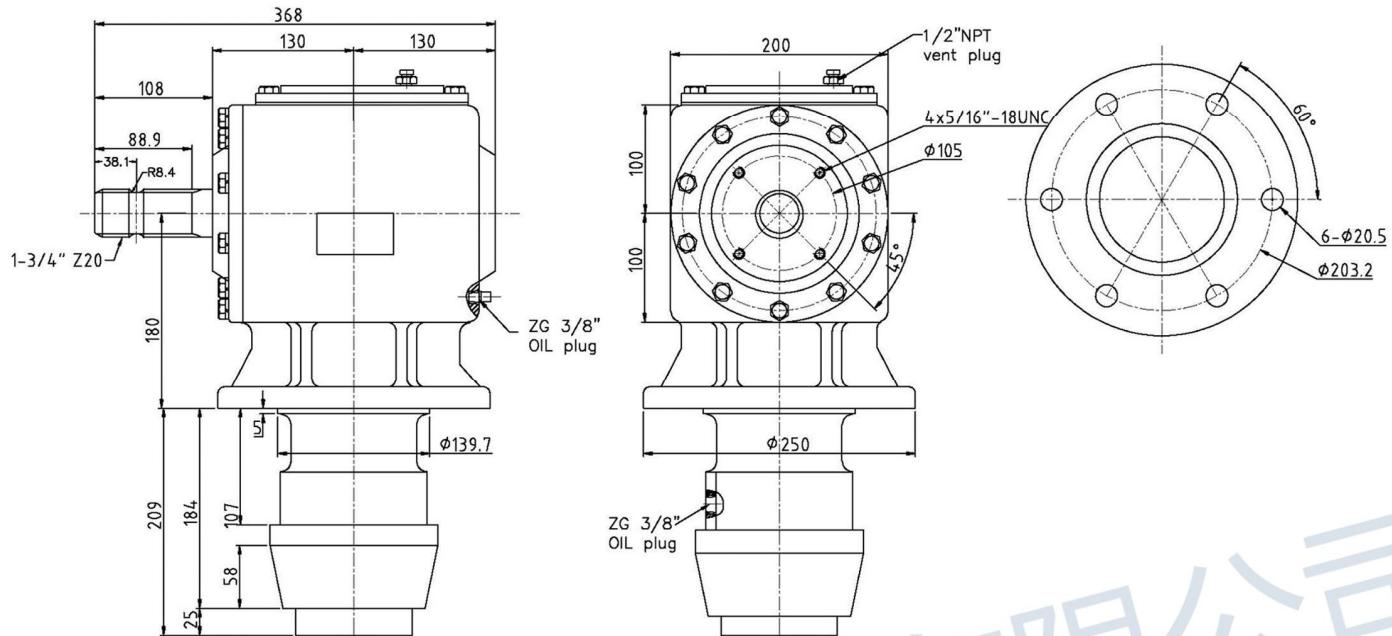
S.No.	Ratio	INPUT (Z)				OUTPUT(X-Y)	
		R.P.M	Hp	KW	N·m TORQUE	N·m TORQUE	R.P.M
Speed Multiplier	1:1.92	540	30	22	389	203	1037
	1:1.47	540	40	29.4	520	354	794
LUBRICATING OIL: SAE.90EP						WEIGHT: 16KG	



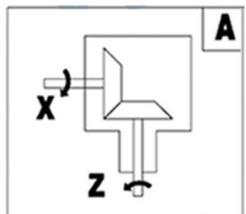
# B 130

 HANGZHOU HENGNIE MACHINERY CO.,LTD

B  
1  
3  
0



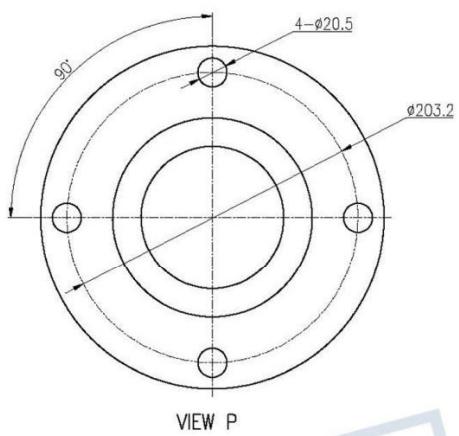
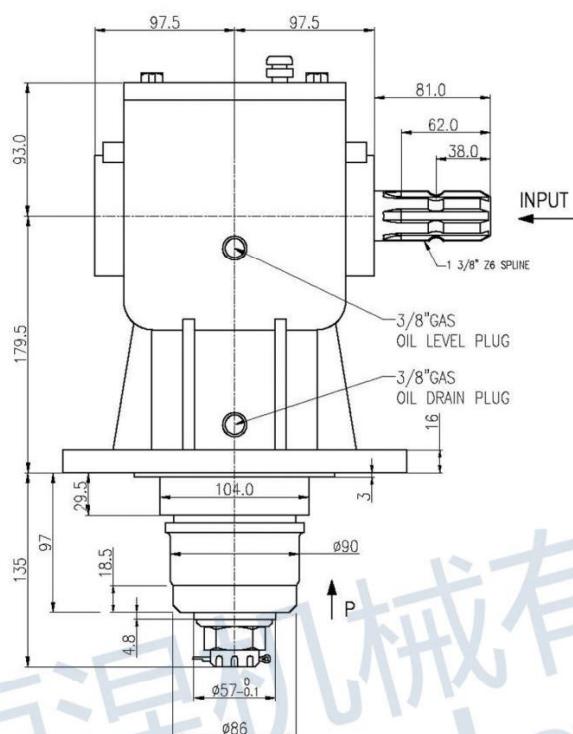
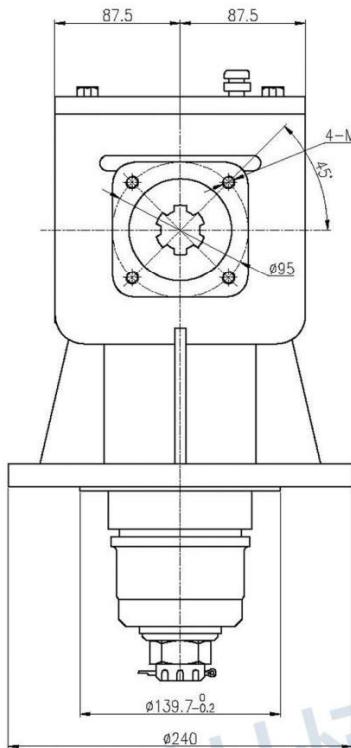
S.No.	Ratio	INPUT(Z)				OUTPUT(Y)	
		R.P.M	HP	Kw	Torque N·m	R.P.M	Torque N·m
	1:1	540	120	88.2	1560	540	1581
		1000	180	132.3	1263	1000	1281
Speed Multiplier	1:1.46	540	110	80.9	1430	788	979
		1000	165	121.3	1158	1460	793
	1:1.93	540	91	66.9	1183	1042.2	810
LUBRICATING OIL: SAE.90EP 1.8L				WEIGHT: 54KG			



# B140

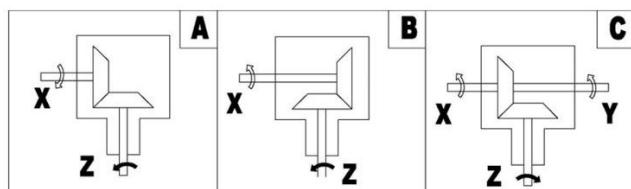


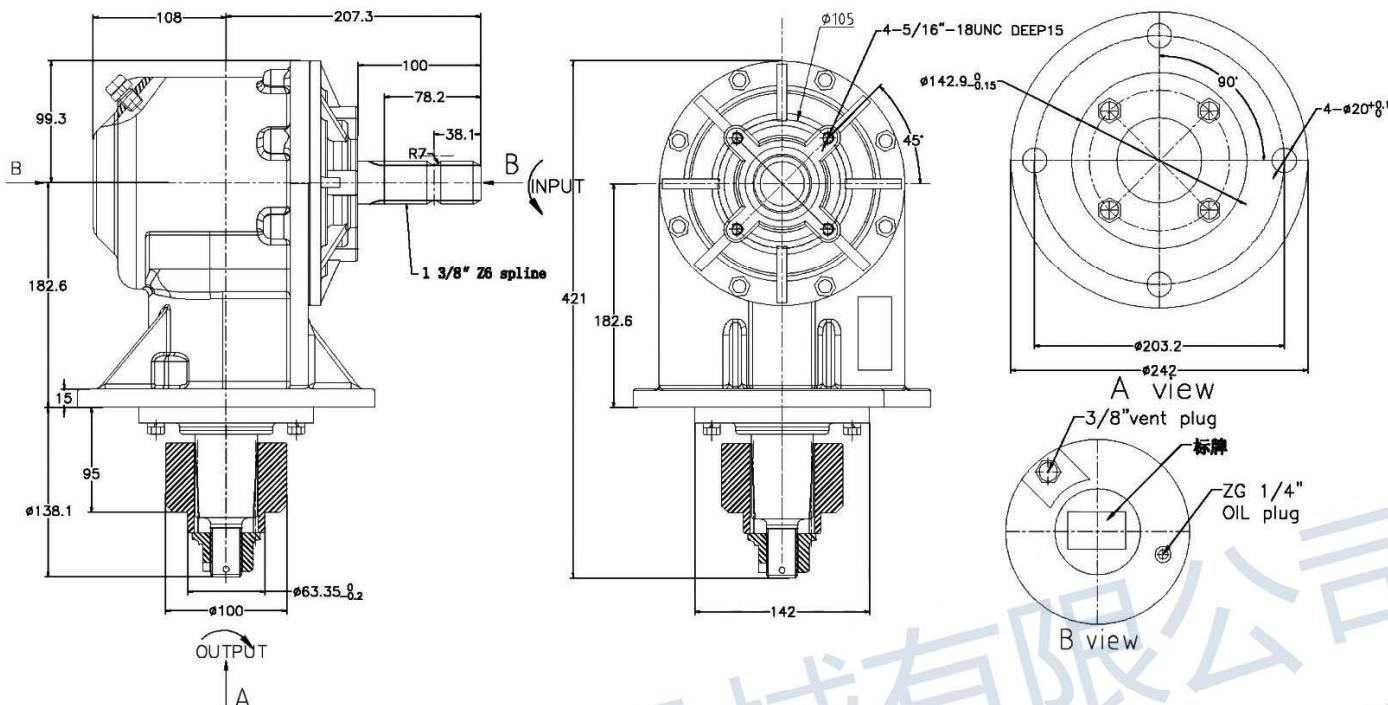
# HANGZHOU HENGNIE MACHINERY CO.,LTD



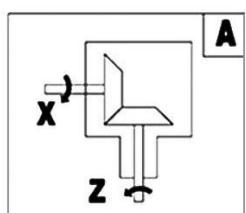
**B  
1  
4  
0**

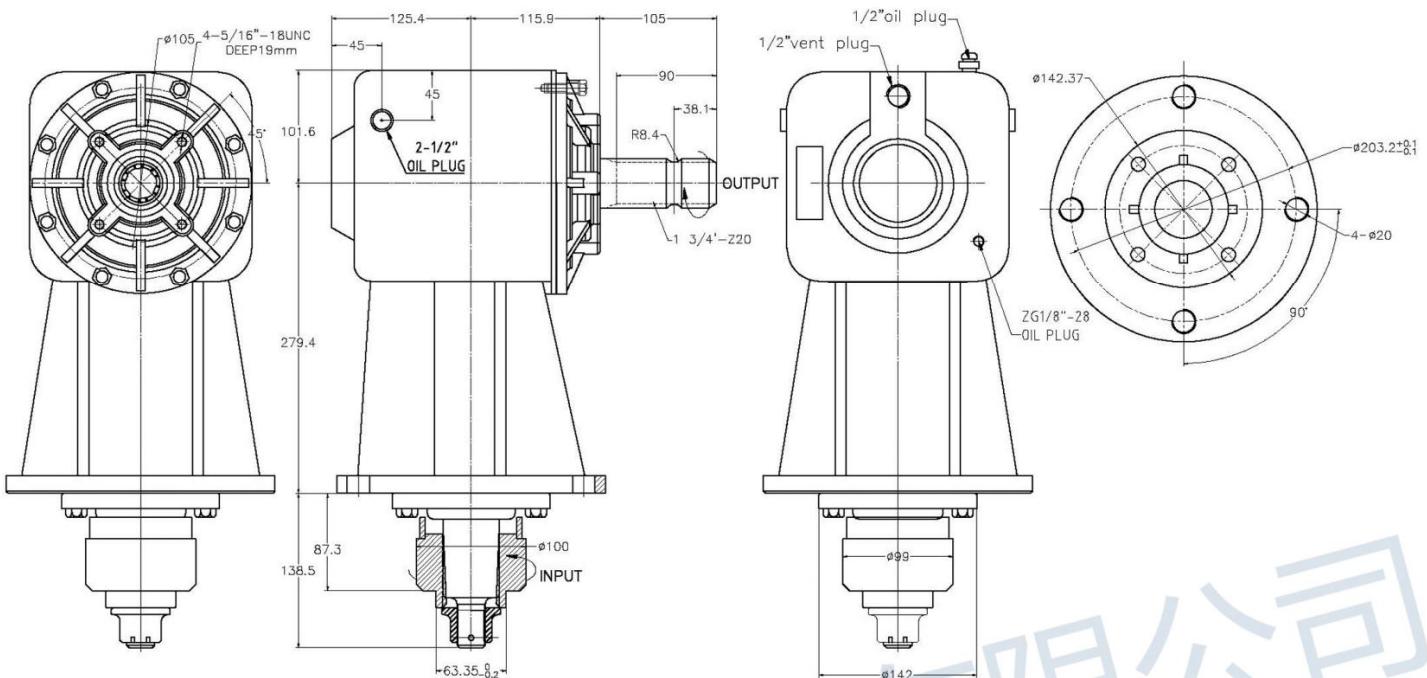
S.No.	Ratio	INPUT (Z)				OUTPUT(X-Y)	
		R.M.P	Hp	KW	N·m TORQUE	N·m TORQUE	R.M.P
Speed Multiplier	1:1.5	540	60	44	778	519	810
	1:1.93	540	60	44	778	403	1042
Speed Reducer	1.27:1	540	60	44	778	988	425
LUBRICATING OIL: SAE.90EP				WEIGHT: 28.5KG			



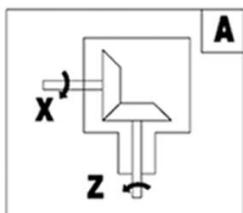


S.No.	Ratio	INPUT				OUTPUT	
		RPM	Hp	Kw	N·m Torque	N·m Torque	RPM
Speed Multiplier	1:1	540	80	59.6	1054	1054	540
		1000	120	89.4	854	854	1000
	1:1.46	540	75	55.9	989	672	794
		1000	112.5	83.8	800	544	1470
	1:1.93	540	65	48.4	856	444	1042
		1000	97.5	72.6	693	359	1930
LUBRICATING OIL: SAE 90EP		1.1L					





S.No.	Ratio	INPUT (Z)				OUTPUT(X-Y)	
		R.M.P	Hp	KW	N·m TORQUE	N·m TORQUE	R.M.P
Speed Multiplier	1:1	540	80	59.6	1054	1054	540
		1000	120	89.4	854	854	1000
	1:1.47	540	75	55.9	988	672	794
		1000	112.5	83.8	800	544	1470
	1:1.93	540	65	48.4	856	444	1042
		1000	97.5	72.6	694	359	1930
LUBRICATING OIL: SAE.90EP		1.70 L				WEIGHT: 43 KG	



速比  
Ratio输入转速  
Input Speed  
(RPM)功率  
Power  
(Hp) (Kw)扭矩  
Torque(N · m)  
Input Output净重约  
N.W.链接  
Link

B120



3:1  
2.42:1  
1.93:1  
1.63:1  
1.42:1  
1:1

540  
540  
540  
540  
540  
540

53  
65  
82  
85  
90  
100

39.0  
47.8  
60.3  
62.5  
66.2  
73.5

689  
845  
1066  
1105  
1170  
1300

2067  
2045  
2057  
1801  
1661  
1300

40Kg



B330



1:1.66  
1:1.93  
1:2.5  
1:3

1000  
540  
540  
540

59  
40  
35  
30

43.4  
29.4  
25.7  
22.1

414  
520  
455  
390

249  
269  
182  
130

18Kg



B198



1:1.6  
1:1.93  
1:2.5  
1:3

1000  
540  
540  
540

78.2  
55  
52  
50

57.5  
40.4  
38.2  
36.8

549  
715  
676  
650

343  
370  
270  
217

21Kg



B313



1:1.6  
1:1.93  
1:2.5  
1:3

1000  
540  
540  
540

104  
73  
68  
62

76.4  
53.7  
50.0  
45.6

730  
949  
884  
806

456  
492  
354  
269

26Kg



B315



1:3  
1:2.42  
1:1.86  
1:1.46

540  
540  
540  
540

76.4  
78.4  
87.33333  
93.06667

57.3  
58.8  
65.5  
69.8

1013  
1040  
1158  
1234

338  
430  
623  
845

41Kg



B215



2.91:1  
2.33:1  
1.92:1  
1.6:1  
1:1  
1:2.91

540  
540  
540  
540  
540  
540

29  
34  
45  
50  
55  
45

21.3  
25.0  
33.1  
36.8  
40.4  
33.1

377  
442  
585  
650  
715  
585

1097  
1030  
1123  
1040  
715  
201

24Kg



B2215



2.58:1  
1.93:1  
1:1.93  
1:2.58  
1:3.1

540  
540  
540  
540  
540

30  
34  
52  
52  
52

22.1  
25  
38.2  
38.2  
38.2

390  
442  
676  
676  
676

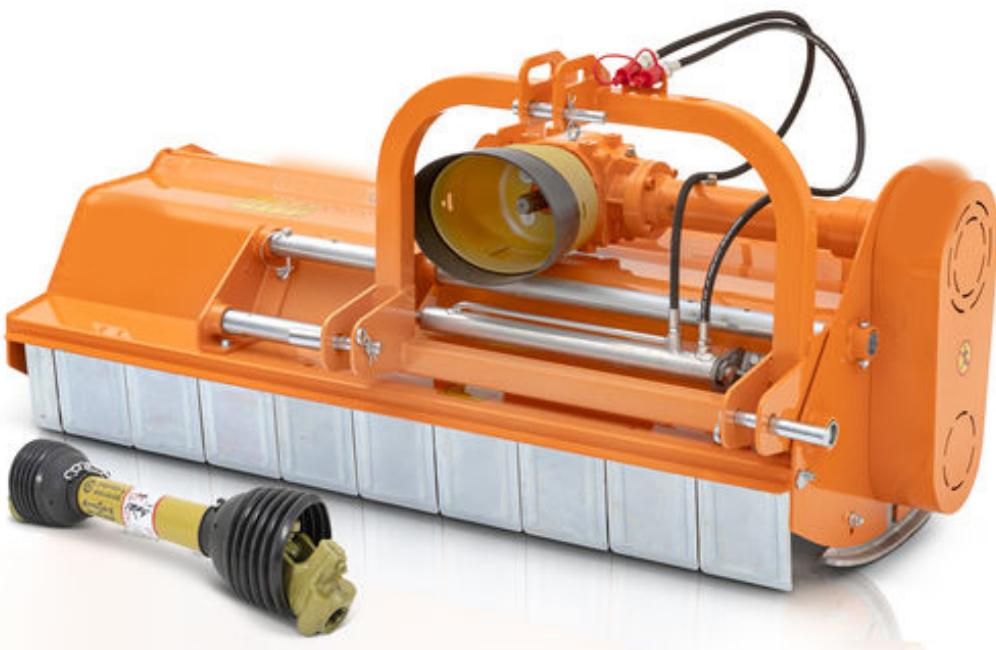
1006  
853  
350  
262  
218

24Kg

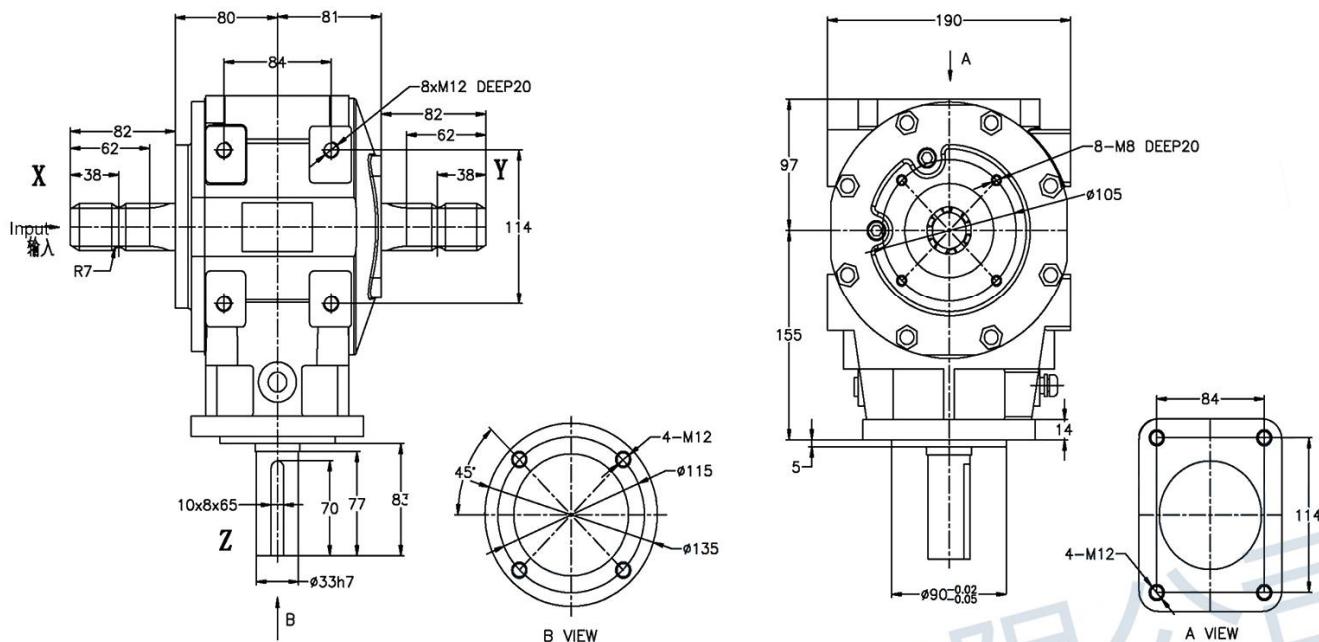


下列齿轮箱为：可选择输出轴为单向旋转

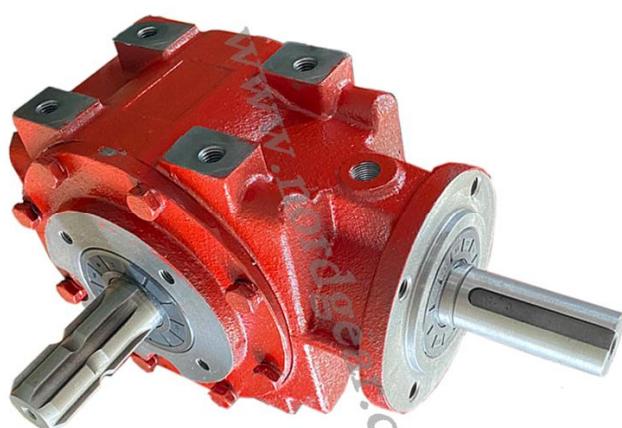
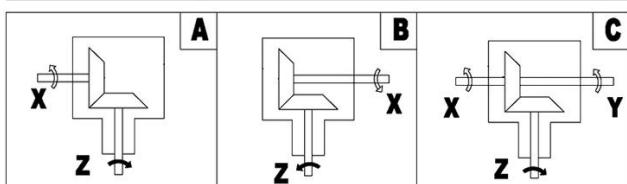
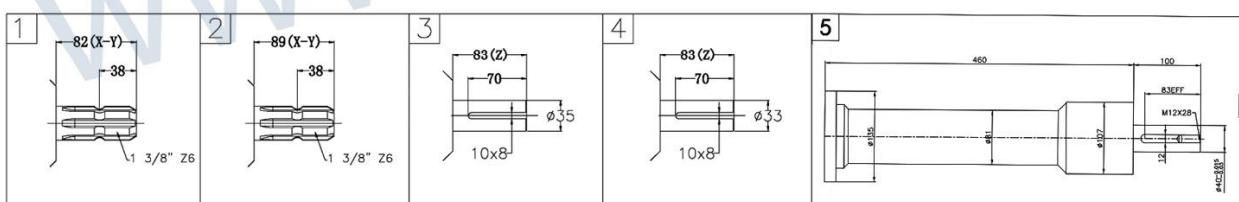
为了保护机具和齿轮箱的使用及寿命，该产品（单向转动）的输出轴在受到相反阻力时，能切断输出轴的转动（即停止），直到阻力消失，才会继续运行

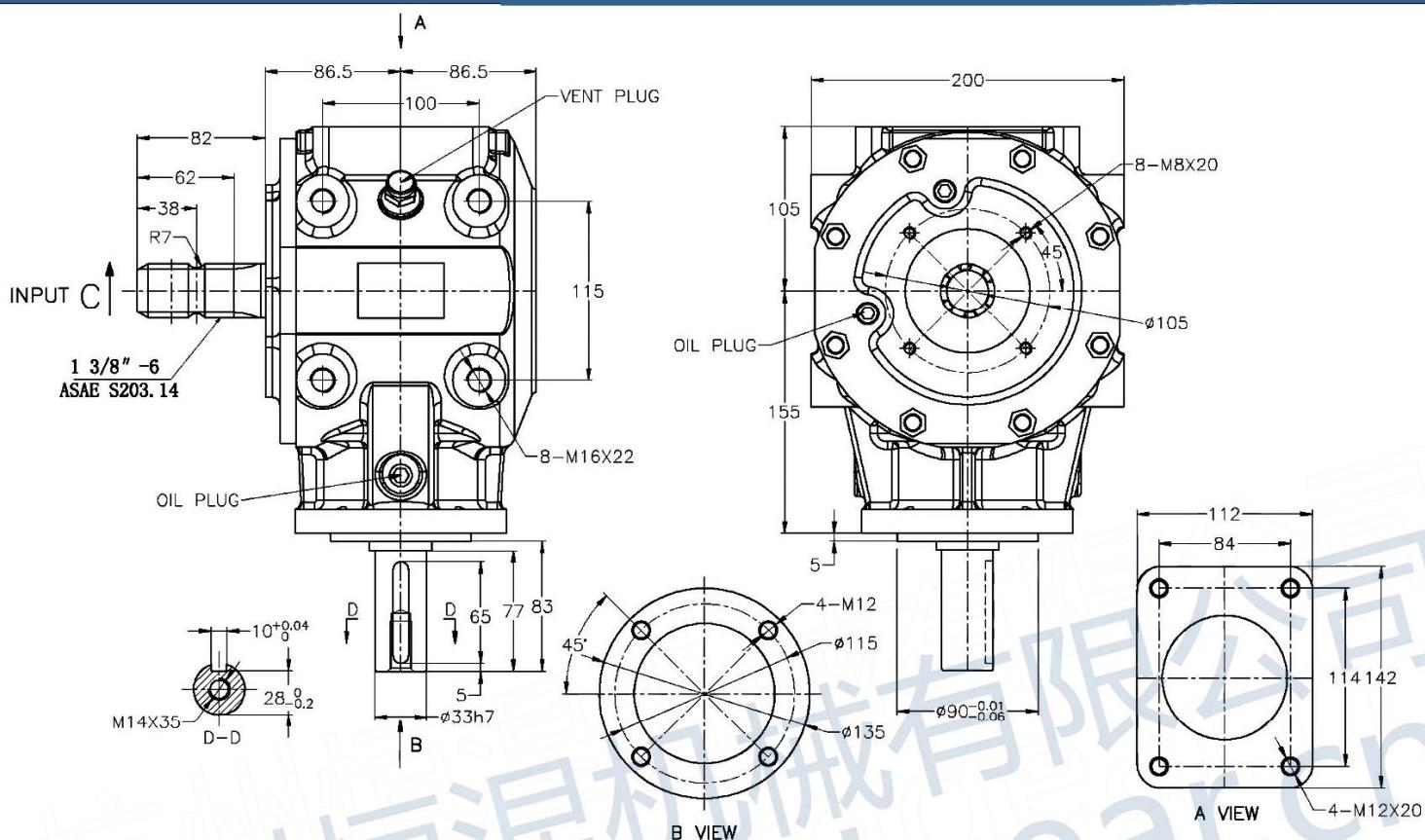


此类齿轮箱可以定制配件例如，加长管，法兰端面，安装孔形等等，均可与我们商讨作图确认产品，并且生产调试



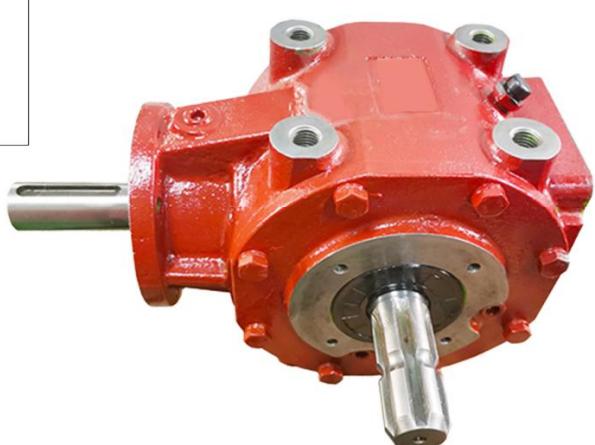
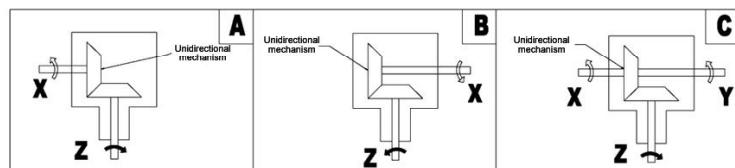
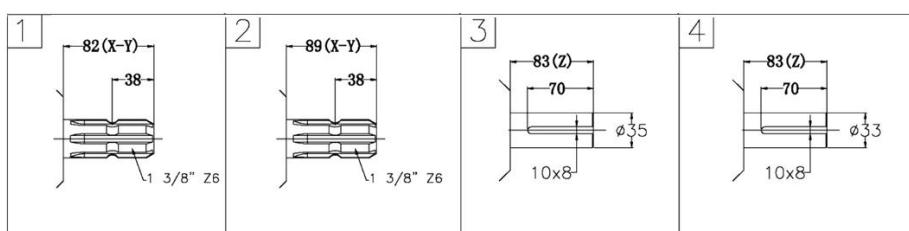
S. No.	RATIO	INPUT(X-Y)				OUTPUT(Z)	
		RPM	HP	KW	TORQUE N·m	TORQUE N·m	RPM
Speed Multiplier	1:1.6	1000	78.2	57.5	549	342	1600
	1:1.93	540	55	40.4	715	407	1042
	1:2.5	540	52	38.2	676	270	1350
	1:3	540	50	36.8	650	216	1620
LUBRICATING OIL: SAE 90EP 1.2L							

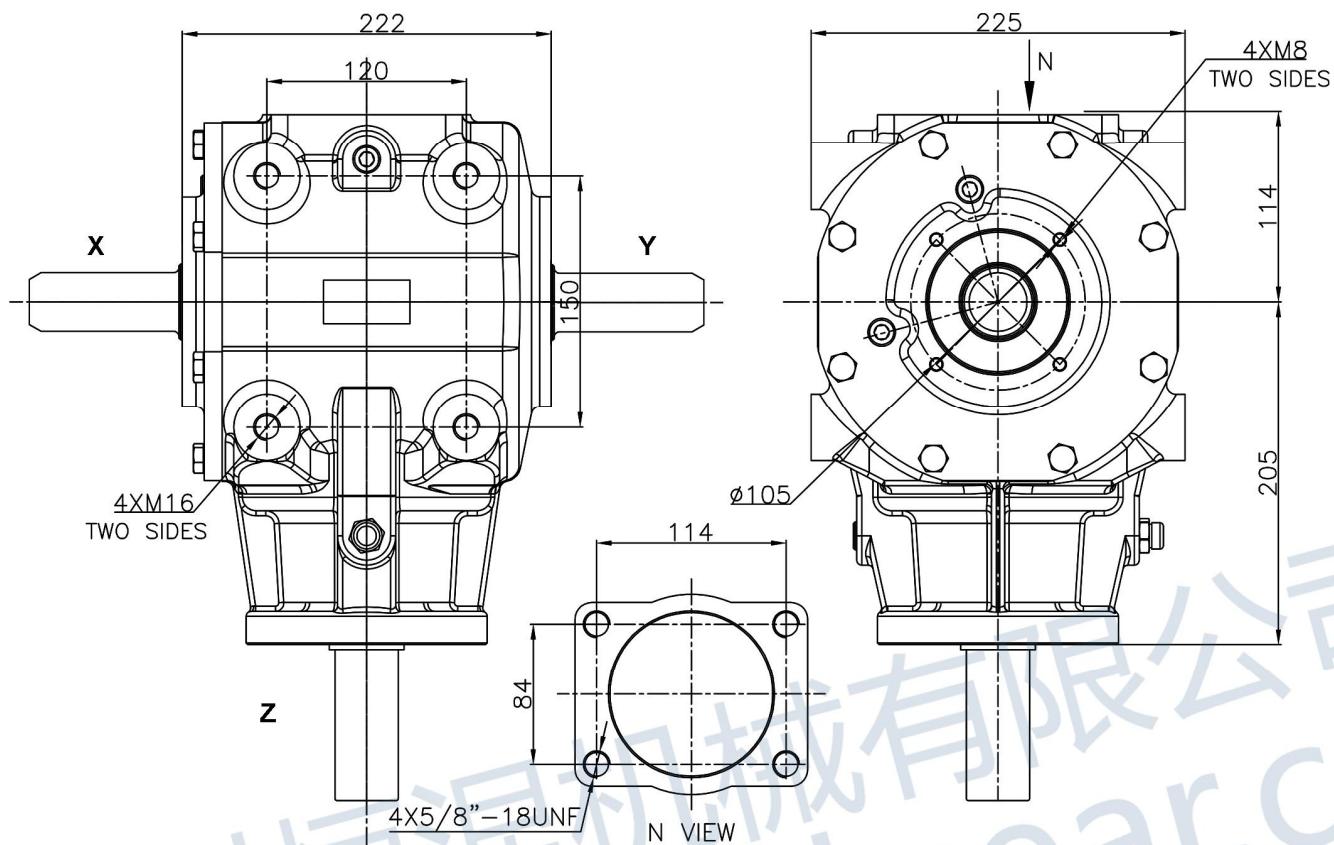




S.NO.	RATIO	INPUT				OUTPUT	
		RPM	Hp	Kw	Torque N·m	Torque N·m	RPM
Speed Multiplier	1:1.6	1000	104	76.2	730	456	1600
	1:1.93	540	73	53.7	950	492	1042
	1:2.5	540	68	50	884	353	1350
	1:3	540	62.5	46	806	271	1620
		1000	85	62.5	625	208	3000

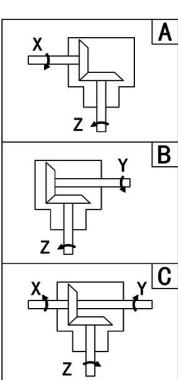
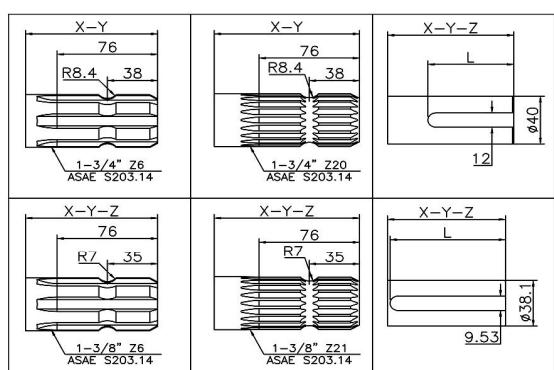
LUBRICATING OIL: SAE.90EP

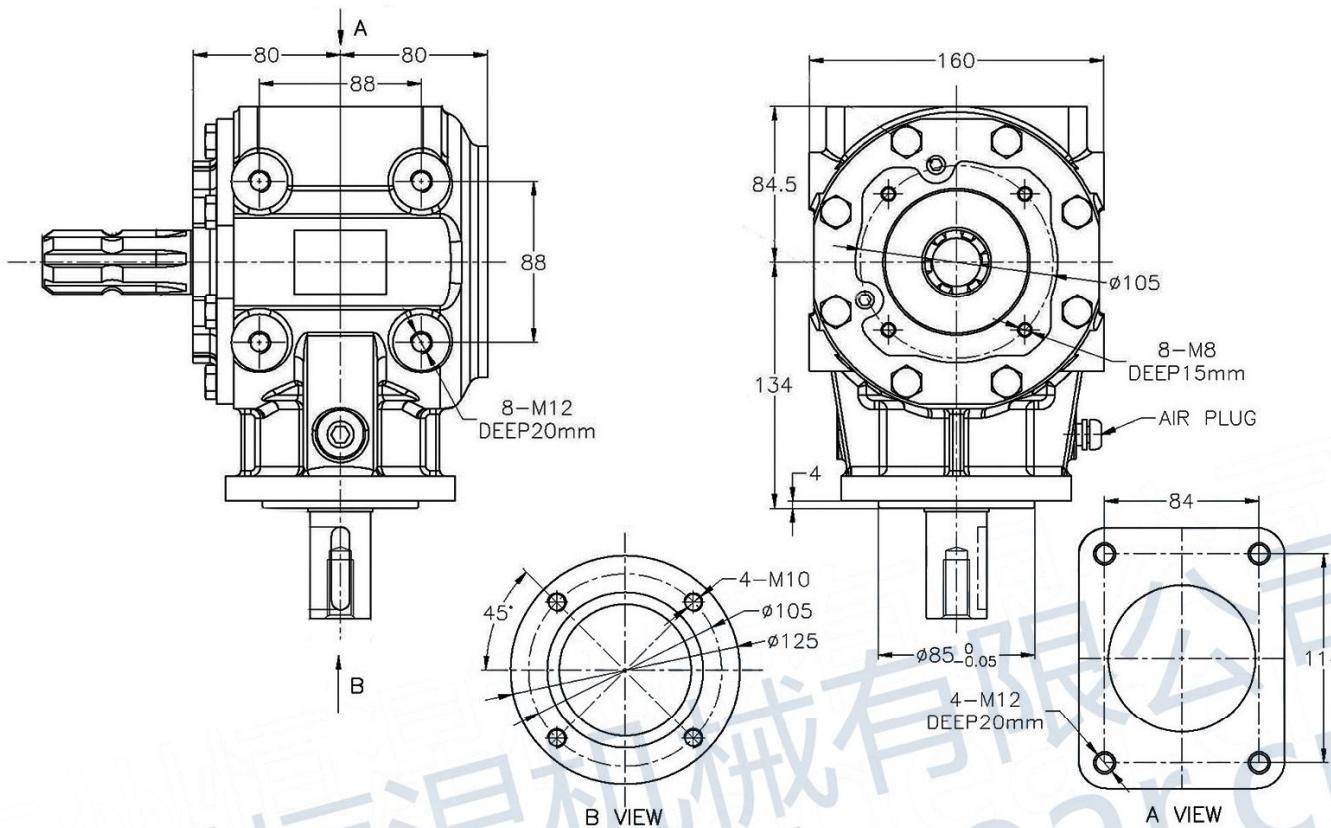




S.No.	Ratio	INPUT(X-Y-Z)				OUTPUT(X-Y-Z)	
		RPM	Hp	Kw	Torque N·m	Torque N·m	RPM
Speed Multiplier	1:3	540	80	58.8	1040	346.6	1620
		1000	142.9	105	1003	334.3	3000
	1:2.42	540	80	58.8	1040	429.7	1307
	1:1.86	540	85	62.5	1105.3	594.3	1004.4
	1:1.63	540	88.4	65	1149.5	705.2	880.2
	1:1.47	540	100	75	1050.5	644.5	1630
	1:1	540	90.1	66.2	1171	1171	540
Speed Reducer	1.47:1	540	85	62.5	1105.3	1625	367.3
	1.62:1	540	81.6	60	1061.1	1719	333.3
	1.86:1	540	75	55.1	974.5	1812.5	290.3
	2.07:1	540	70.1	51.5	911	1885.3	261
	2.42:1	540	57	41.9	741	1793.2	223.1
	3:1	540	44.9	33.0	583.6	1751	180

LUBRICATING OIL: SAE.90EP





S.NO.	RATIO	INPUT				OUTPUT	
		RPM	Hp	Kw	Torque N·m	Torque N·m	RPM
Speed Multiplier	1:1.66	1000	59	43.4	414	456	1660
	1:1.93	540	40	29.4	520	492	1042
	1:2.5	540	35	25.7	455	353	1350
	1:3	540	30	22.1	390	271	1620
LUBRICATING OIL:SAE.90EP							

