

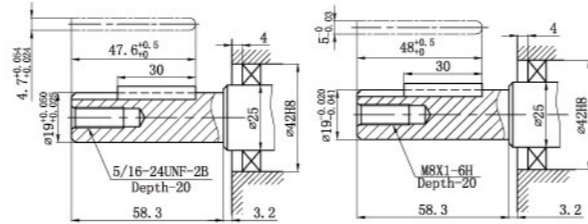


HL170FA

►►► Specification and technical data

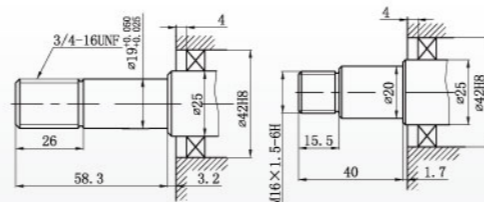
Model		HL170FA	
Type	Single-cylinder, vertical 4-cycle air-cooled diesel		
Combustion system	Direct injection		
Displacement	cc(cu.in.)	219(13.37)	
Bore x stroke	mm(in.)	70 x 57(2.76 x 2.24)	
Engine speed	rpm	3000	3600
Maximum output	kW (HP)	2.8(3.8)	3.1(4.2)
Continuous output	kW (HP)	2.5(3.4)	2.8(3.8)
Power take off	Crankshaft		
Starting system	Recoil or Recoil/Electric		
Fuel tank capacity [L(US.gal.)]	2.5(0.55)		
Lub.oil capacity [L(US.gal.)]	0.8(0.18)		
Fuel consumption [g(ml)/kW/h]	3000rpm:290(341)	3600rpm:295(347)	
Dimensions	L mm(in.)	332(13.07)	
	W mm(in.)	392(15.43)	
	H mm(in.)	416(16.38)	
Dry weight(Recoil)	kg(lbs.)	26(57)	
Dry weight(Electric)	kg(lbs.)	31(68)	

Crankshaft PTO



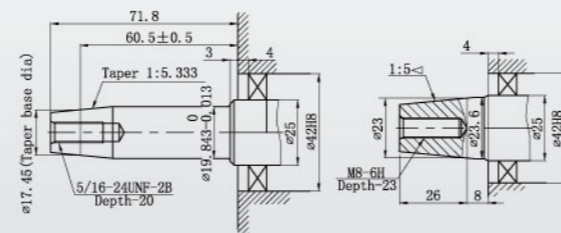
K1

K2



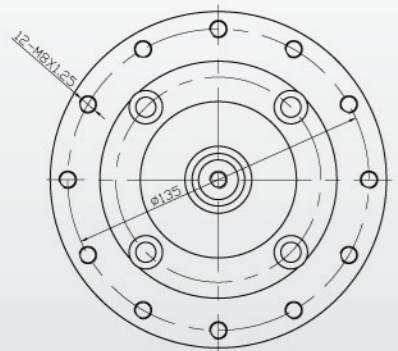
P1

P2

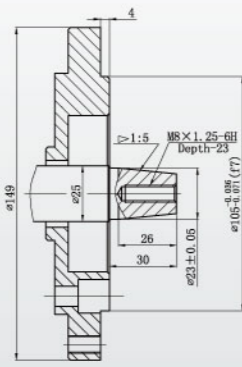


G1

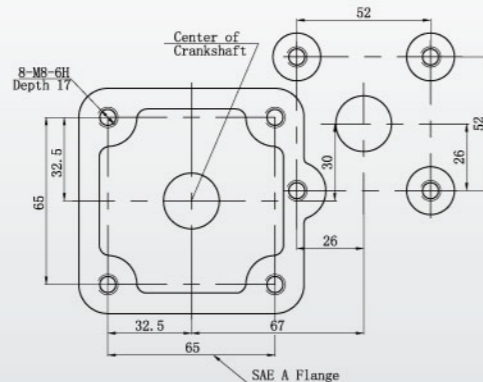
G2



PTO Flange



G4



PTO Flange



HL178FA

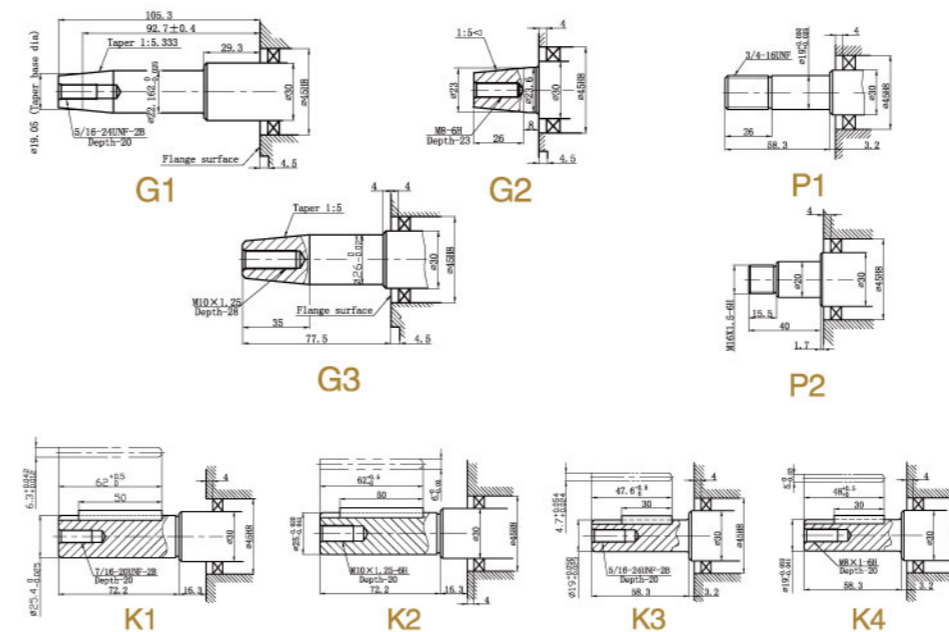


HL178FS

►►► Specification and technical data

Model		HL178FA		HL178FS	
Type	Single-cylinder, vertical 4-cycle air-cooled diesel				
Combustion system	Direct injection				
Displacement	cc(cu.in.)	306(18.68)		296(18.06)	
Bore x stroke	mm(in.)	78 x 64(3.07 x 2.52)		78 x 62(3.07 x 2.44)	
Engine speed	rpm	3000	3600	3000	3600
Maximum output	kW (HP)	4.0(5.5)	4.4(6.0)	4.0(5.5)	4.4(6.0)
Continuous output	kW (HP)	3.68(5.0)	4.0(5.5)	3.68(5.0)	4.0(5.5)
Power take off	Crankshaft		Camshaft (PTO rpm is 1/2)		
Starting system	Recoil or Recoil/Electric				
Fuel tank capacity [L(US.gal.)]	3.5(0.77)		3.5(0.77)		
Lub.oil capacity [L(US.gal.)]	1.1(0.24)		1.1(0.24)		
Fuel consumption [g(ml)/kW/h]	3000rpm:280(329)	3600 rpm:285(335)	3000rpm:280(329)	3600 rpm:285(335)	
Dimensions	L mm(in.)	383(15.08)		383(15.08)	
	W mm(in.)	421(16.57)		421(16.57)	
	H mm(in.)	450(17.72)		450(17.72)	
Dry weight(Recoil)	kg(lbs.)	33(73)		33(73)	
Dry weight(Electric)	kg(lbs.)	38(84)		38(84)	

Crankshaft PTO



G1

G2

G3

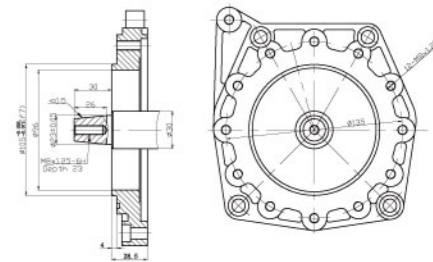
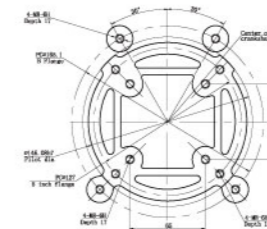
K1

K2

K3

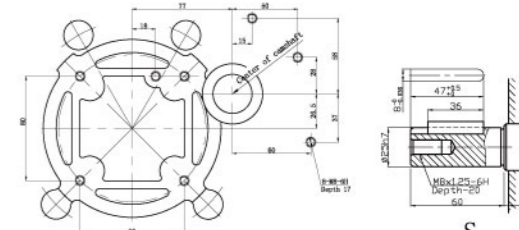
K4

PTO Flange



G4

PTO Flange



PTO Flange

Camshaft PTO



HL186FA

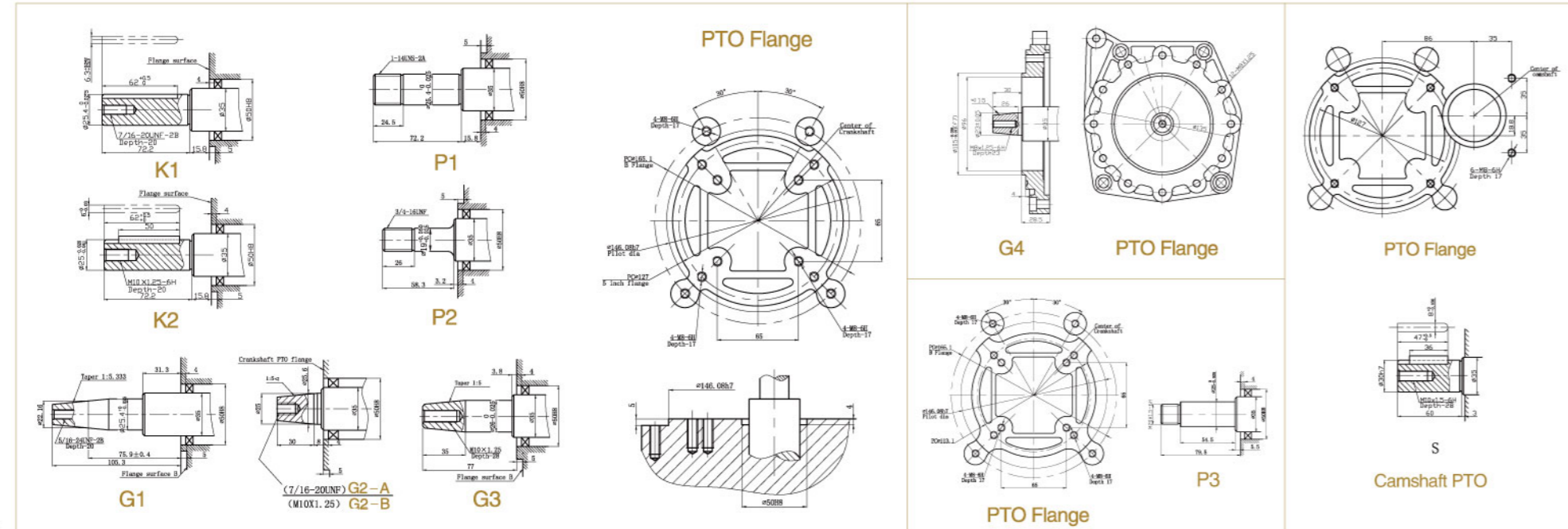


HL186FS

Specification and technical data

Model	HL186FA		HL186FS	
Type	Single-cylinder, vertical 4-cycle air-cooled diesel			
Combustion system	Direct injection			
Displacement cc(cu.in.)	418(25.51)		406(24.78)	
Bore x stroke mm(in.)	86 x 72(3.39 x 2.83)		86 x 70(3.39 x 2.76)	
Engine speed rpm	3000	3600	3000	3600
Maximum output kW (HP)	6.5(8.8)	7.1(9.6)	6.5(8.8)	7.1(9.6)
Continuous output kW (HP)	5.7(7.7)	6.3(8.6)	5.7(7.7)	6.3(8.6)
Power take off	Crankshaft		Camshaft (PTO rpm is 1/2)	
Starting system	Recoil or Recoil/Electric		Recoil or Recoil/Electric	
Fuel tank capacity [L(US.gal.)]	5.5(1.21)		5.5(1.21)	
Lub.oil capacity [L(US.gal.)]	1.65(0.36)		1.65(0.36)	
Fuel consumption [g(ml)/kWh]	3000rpm:265(312)	3600 rpm: 270(318)	3000rpm:265(312)	3600 rpm: 270(318)
Dimensions	L mm(in.)	417(16.42)	417(16.42)	
	W mm(in.)	470(18.50)	470(18.50)	
	H mm(in.)	494(19.45)	494(19.45)	
Dry weight(Recoil) kg(lbs.)	48(106)		48(106)	
Dry weight(Electric) kg(lbs.)	53(117)		53(117)	

Crankshaft PTO



NEW!



HL186FV

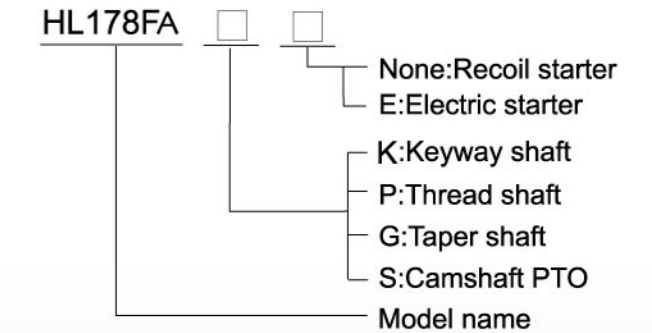
Specification and technical data

Model	HL186FV	
Type	Single-cylinder, vertical 4-cycle air-cooled diesel	
Combustion system	Direct injection	
Displacement cc(cu.in.)	435(26.55)	
Bore x stroke mm(in.)	86 x 75(3.39 x 2.95)	
Engine speed rpm	3000	3600
Maximum output kW (HP)	6.5(8.8)	7.4(10.0)
Continuous output kW (HP)	5.7(7.7)	6.6(9.0)
Power take off	Crankshaft	
Starting system	Recoil or Recoil/Electric	
Fuel tank capacity[L(US.gal.)]	5.5(1.21)	
Lub.oil capacity [L(US.gal.)]	1.65(0.36)	
Fuel consumption [g (ml)/kWh]	3000 rpm: 260(306)	3600 rpm: 270(318)
Dimensions	L mm(in.)	415(16.34)
	W mm(in.)	475(18.70)
	H mm(in.)	498(19.61)
Dry weight(Recoil) kg(lbs.)	48.3(106.5)	
Dry weight(Electric) kg(lbs.)	53.3(117.5)	

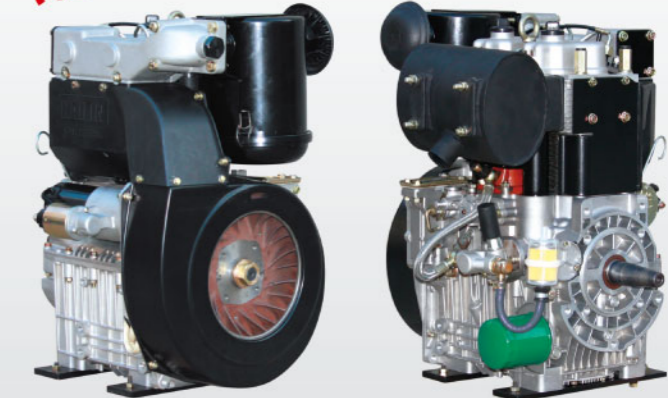
Specification and technical data

Model	HL292F	
Type	TWO-cylinder in line, vertical 4-cycle air-cooled diesel	
Combustion system	Direct injection	
Total Displacement cc(cu.in.)	997(60.84)	
Bore x stroke mm(in.)	92 x 75(3.62 x 2.95)	
Compression ratio	18	
Engine speed rpm	3000	3600
Maximum output kW (HP)	15.5(21.1)	16.2(22.0)
Rated output kW (HP)	14.5(19.7)	15.5(21.1)
Power take off	Crankshaft	
Starting system	Electric starter (12V)	
Fuel tank capacity[L(US.gal.)]	7.0(1.54)	
Lub.oil capacity [L(US.gal.)]	3.0(0.66)	
Fuel consumption [g(ml)/kWh]	3000rpm:240(282)	3600rpm:263(309)
Dimensions	L mm(in.)	490(19.29)
	W mm(in.)	403(15.87)
	H mm(in.)	615(24.21)
Dry weight kg(lbs.)	93(205)	

Application code:



NEW!



HL292F