

Turbine Starters

ST400 Series



For engine displacement of:
Diesel-300 to 3600 CID (5 to 60 liters)



Industry Applications

MARINE



POWER GENERATION



Features/Benefits

- Efficient 26 hp turbine motor uses no external lubrication
- One-hose hookup simplifies required piping
- In-line design weighs only 23 lbs (10.4 kg)
- Sealed oil-bath lubrication for gears and bearings provides maintenance free operation

Versatile

- Removable mounting flange can be rotated 360 degrees for greater mounting flexibility
- Compact, lightweight design makes installation easy
- Overhung pinion design fits most worldwide manufacturers' engines
- 30-150 psi (2.1-10.3 bars) operation

Model Coding

ST400 I C 03 R 31

ST400 - 44% ARC
Max. 10.3 bar

ST455 - 55% ARC
Max. 8.3 bar

ST499 - 99% ARC
Max. 6.2 bar

I = 1" NPT
No letter = SAE Split Flange

C = Gear Ratio

Pinion Code

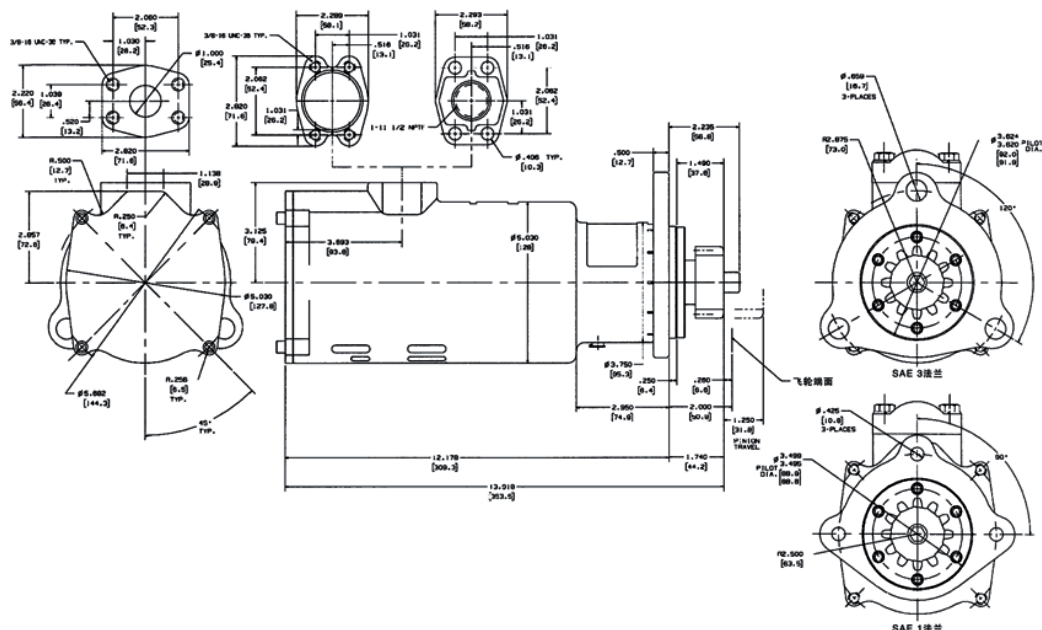
R = Right Hand
L = Left hand

01 = SAE 1 Flange
03 = SAE 3 Flange

Dimensions

Weight: 38 lbs (17.2 kg)

Note: All dimensions shown are for reference only. Specifications subject to change without notice.



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Performance Information



Pressure psi (bar)	Breakaway Torque ft-lb (Nm)	Speed @ Max HP rpm	Max Power hp (kW)	Flow @ Max HP scfm (L/s)
ST400 – 44% ARC				
90 (6.2)	90 (122)	1500	14 (10)	430 (203)
120 (8.3)	120 (163)	1650	19 (14)	600 (284)
150 (10.3)	150 (203)	1650	25 (19)	750 (354)
ST455 – 55% ARC				
60 (4.1)	80 (109)	1400	10 (7)	23 (17)
90 (6.2)	135 (183)	1450	18 (13)	650 (307)
120 (8.3)	185 (251)	1500	23 (17)	780 (368)
ST499 – 99% ARC				
30 (2.1)	50 (68)	1550	7 (5)	320 (251)
60 (4.1)	115 (156)	1600	14 (10)	550 (260)
90 (6.2)	185 (251)	1650	26 (19)	765 (361)

Parts and Accessories

Part #	Description
 150BMP-1051B	1/4" 12 V Solenoid Valve
 150BMP-2451B	1/4" 24 V Solenoid Valve
 SMB-618	Push Button Valve
 SRV125F	1-1/4" Relay/Solenoid Valve
 SRV125T	1-1/4" Relay Valve for Transit Aftermarket
 SRV125	1-1/4" Relay Valve for Stationary Air
 SRV150	1-1/2" Relay Valve
 *ST900-267H/150	1-1/2" Strainer Housing
 *ST900-266/150-HP	1-1/2" Strainer (50 microns)
 ST400-A339M	Manual Control Valve

*For complete filter (strainer + housing), please order ref ST900-267/150-HP

Parts and Accessories

Part #	Description
 ST400-C339	Relay Valve with top-mounted Solenoid
 ST400-K17	1" NPT Flange Kit
 ST400-16	SAE J518 Split Flange

Genuine Ingersoll Rand Replacement Kits

Tune Up Kit Part Number	Description
Liner Assembly	
ST400-A41R	Standard Arc Right Hand
ST400-A41L	Standard Arc Left Hand
ST455-A41R	55% Arc Right Hand
ST455-A41L	55% Arc Left Hand
ST499-A41R	Full Arc Right Hand
ST499-A41L	Full Arc Left Hand