T791 & T891 (T-Style) Industrial Compressors



Designed for Applications that Require Maximum Leakage Control

Greater Control of Fugitive Emissions...

Double-distance piece provides two barriers to external leakage...

Due to strict regulations and a growing number of gases that pose safety and environmental hazards, Corken offers a T-Style option (double-distance piece) for improved leakage control. This option has three sets of packing per piston rod which form two distinct distance pieces or barriers to external leakage. Each distance piece has its own line connections and can be separately pressurized, purged or vented depending on the requirements of your specific application. Purge kits with all of the accessories needed to purge each barrier are available. With the purging option, the T-Style compressor is virtually leak proof and complies with EPA requirements for fugitive emissions control of volatile organic compounds (VOC).*

Oil-free design—no contamination of process gas stream...

With a T-Style design, the distance between each set of packing is greater than the stroke of the compressor so there's no rod over travel or oil carryover. In the event that oil gets past the lower packing set, the oil deflector ring keeps the oil from rising up the piston rod in the lower distance piece. Additionally, the lower packing set has an adjustable packing screw used to maintain the sealing performance. These features allow the compressor to supply oil-free gas whether it's being used as a simple gas booster or for vacuum service.

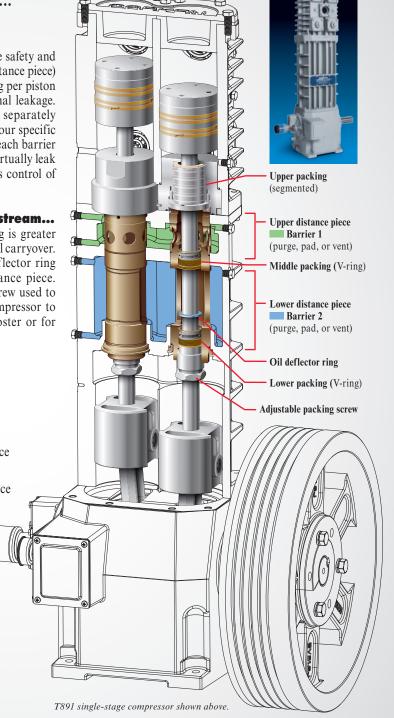
Other features and benefits:

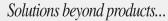
- Double-acting design delivers greater capacity
- Adjustable clearance head balances the pressure load between stages (two-stage T791 only)
- Available in lubricated or non-lubricated versions
- Self-lubricating PTFE piston rings provide many hours of service
- Designed with weld flanges for greater strength
- Ductile iron construction for maximum thermal shock endurance
- Optional corrosive resistant coatings extend service life
- Purge kits with all of the accessories are available

*07-01-06 U.S. Environmental Protection Agency Regulations 40 CFR CH Section 264.1053

Typical applications:

- Transport, rail car and marine unloading
- Vapor recovery
- Evacuation
- Refrigeration reclaiming







Operating Specifications

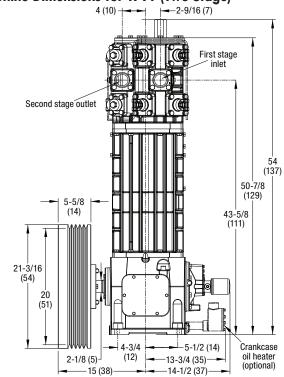
Specification	T791	T891
Bore of cylinder, inches (mm)		
first stage	6 (152.4)	4.5 (113)
second stage	3.25 (82.5)	_
Stroke, inches (mm)	4.0 (101.6)	4.0 (101.6)
Piston displacement, cfm (m ³ /hr)	51.2 (87.0)	56.6 (96.2)
minimum @ 400 RPM	115.3	127.6
maximum @ 900 RPM	(196.0)	(216.8)
Maximum working pressure, psig (bar g)		
first stage	350 (24.1)	465 (32.1)
second stage	600 (41.3)	_
Maximum brake horsepower, kW	45 (34)	45 (34)
Maximum rod load, lb (kg)	7,000	7,000
	(3,175.2)	(3,175.2)
Maximum outlet temperature °F (°C)	350 (177)	350 (177)
Bare unit weight, lb (kg)	1,060	1,015
	(480.8)	(460.4)

Material Specifications

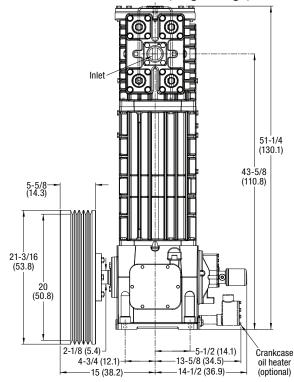
Part	Standard Material	
Head, cylinder, cylinder cap	Ductile iron ASTM A536	
Crosshead guide		
Crankcase, flywheel	Gray iron ASTM A48, Class 30	
Bearing carrier		
Flange	ASTM A36 carbon steel	
Valve seat, bumper	17-7 PH stainless steel	
Valve plate	410 stainless steel (Optional: PEEK)	
Valve spring	17-7 PH stainless steel	
Valve gaskets	Soft aluminum (Optional: Copper, iron-lead)	
Piston	Ductile iron ASTM A536	
Piston rod	1045 steel with Nitrotec coating	
Crosshead	Ductile iron ASTM A536	
Piston rings	PTFE, glass and moly filled (Optional: Alloy 50, PEEK)	
Piston ring expanders	302 stainless steel	
Packing cartridge and barrel	Ductile iron ASTM A536	
Connecting rod		
Segmented packing rings	Carbon-filled PTFE	
V-ring packing	Filled reinforced PTFE	
Crankshaft	Ductile iron ASTM A536	
Connecting rod bearing	Bimetal SAE 12 babbit	
Wrist pin	C1018 steel or equivalent	
Wrist pin bushing	Bronze SAE J461	
Main bearing	Tapered roller	
Inspection plate	Aluminum	
O-rings	Buna-N (Optional: PTFE, Viton®1, Neoprene®1)	
Retainer rings	Steel	
Miscellaneous gaskets	Rubber compositions	

¹ Viton[®] and Neoprene[®] are registered trademarks of the DuPont company.

Outline Dimensions for T791 (Two Stage)



Outline Dimensions for T891 (Single Stage)



All dimensions are in inches (centimeters).







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