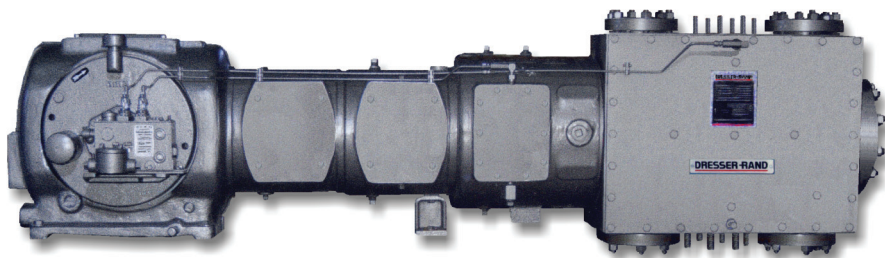


# 7-ESH

## Reciprocating Process Compressor

*The Dresser-Rand ESH reciprocating process compressor provides an economical solution where limited space and continuous, low-volume service is a requirement. Its proven performance, versatile design, and wide range of cylinder selections make the ESH an obvious choice for a variety of applications.*



### Versatility and Performance

The Dresser-Rand 7-inch (178 mm) stroke ESH single-throw, reciprocating compressor is designed for long-term, process gas service. Built in accordance with API-618 specifications, the ESH has the capacity to handle rod loads (MACCRL) of 10,200 lbs. (45.37 kN) and gas loads (MACGL) of 11,500 lbs. (51.16 kN).

Whether direct-connected or belt-driven, the ESH can handle a variety of drivers up to 75 hp (56 kW) and can be fitted with either lubricated or non-lubricated cylinders from 1.625 to 19 inches (41 to 483 mm) in bore diameter. The ESH is also available in a vertical arrangement that greatly reduces the foundation size and area. In its vertical configuration, the "ESV" provides significant advantage where space may be limited.

### Designed and Built with Precision

With its fine-grain, cast iron frame, the ESH is engineered to provide the required support for the running gear and related components. The rigid frame design and counterweighted crankshaft minimize vibration and provide for low moments and minimal foundation requirements. Forged from high tensile strength alloy steel, the crankshaft is fully stress relieved and heat-treated. The bearing journals and crankpin are ground with precision and polished to meet exacting tolerances.

Rugged, precision-machined aluminum main and crankpin bearings are generously sized for best run-in and long-lasting service. All bearings are force-lubricated per API-618 specifications. Connecting rods are die-forged steel with rifle-drilled passages for positive lubrication of the crosshead pin and bushing. A shoeless aluminum crosshead is standard and requires no adjustment.

### Outstanding Cylinder Design and Selection

With experience in virtually every type of service, Dresser-Rand cylinders provide outstanding service and reliability. Our engineering expertise ensures that each cylinder provides maximum performance and reliability with minimum maintenance cost. Cylinder materials include cast iron, nodular iron, cast steel, fabricated carbon or stainless steel, and forged steel. Most cylinders are available for either lubricated or non-lubricated service.



For more information on **7-ESH compressors**, contact one of the following Dresser-Rand locations.

**Dresser-Rand Reciprocating Operations**

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Fax: (Int'l +1) 607-937-2905

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85 Papyrus Road  
Peterborough, PE4 5HG, UK  
Tel: (Int'l +44) 1733 292200  
Fax: (Int'l +44) 1733 292300

For a complete listing of products and services, visit us on the internet at [www.dresser-rand.com](http://www.dresser-rand.com) or contact one of the following Dresser-Rand locations.

**Dresser-Rand Corporate Headquarters**

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**Experience that Counts**

The ESH compressor is world renowned for its dependable service and steadfast reliability in a wide variety of process applications. With more than 1,300 units shipped for use in various applications around the world, the Dresser-Rand ESH process compressor is an excellent choice where low volume requirements demand reliable operation.

**Specifications**

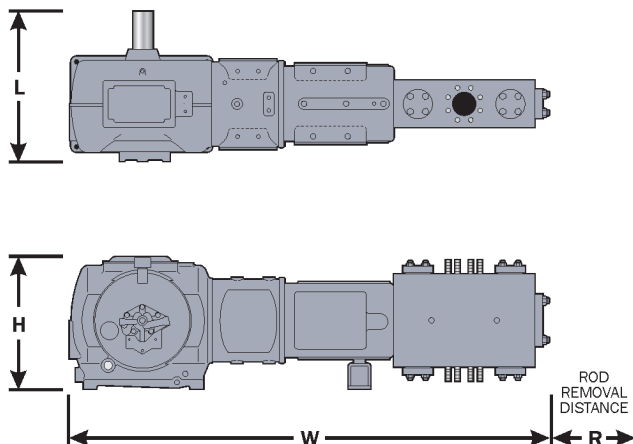
MACCRL	10,200 lbs. (45.37 kN)
MACGL	11,500 lbs. (51.16 kN)
Maximum Driver HP	75 (56 kW)
Standard Strokes	7 inch (178 mm)
Crankshaft Diameter	3.75 inch (95 mm)
Main Bearing Length	3.75 inch (95 mm)
Piston Rod Diameter	1.5 inch (38 mm)
Number of Throws	1
Standard Double-Acting	
Cylinder Bore Range	1.625 to 19 inches (41 to 483 mm)

**Materials**

Frame	Cast Iron
Crankshaft	Forged Steel
Connecting Rod	Forged Steel
Crosshead	Aluminum
Main Bearing	Aluminum
Crankpin Bearing	Aluminum
Pin Bushing	Bronze
Crosshead Pin	Steel Alloy

**Dimensions**

Dimensions provided are typical, basis API Type B distance pieces. For Type C & D distance pieces add 13.75 inches (35 cm) to both the width dimension and the rod removal distance.



**7-ESH Typical Dimensions - Inches (Centimeters)**

Model	R	W	H	L
ESH:	49 (125)	90 (225)	24 (61)	32 (81)
ESV:	49 (125)	23 (59)	90 (229)	32 (81)