# **Hand pumps**





# Hand pumps type H, HE, HD and DH

The hand pumps type H are available in single acting and double acting versions. The single acting design pumps in one lever direction only, the reverse motion performs the suction stroke. The double acting design pumps and intakes simultaneously in both lever directions. In one particular design, the suction side may be charged with up to 150 bar. The lever mechanism may be protected from harsh environments if desired, and may incorporate a drain valve (connecting  $P \to S$ ), a pressure limiting valve or a tank. These additional options enable the use of this pump in a wide array of application.

#### Features and benefits:

- Sturdy design
- Hand pumps with integrated tank
- Safety and drain valve

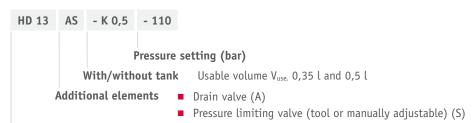
#### **Intended applications:**

- Ship building
- Mining machinery
- Jigs
- Test and laboratory equipment



Nomen- clature:	Piston pump
Design:	Single acting hand pump Double acting hand pump
p <sub>max</sub> :	80 800 bar
V <sub>max</sub> :	4 64 cm³/stroke

### Design and order coding example



Basic type, size

Type H (single acting, open design),

Type HE (single acting, encapsulated design)

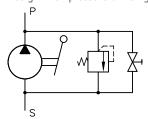
Type DH (double acting, open design)

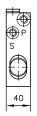
Type HD (double acting, encapsulated design)

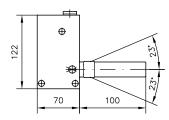
- With/without pressure resistant suction port
- Versions for manifold mounting

#### **Function**

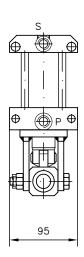
Design with pressure limiting valve and drain valve

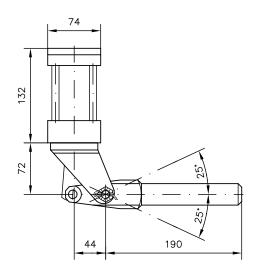




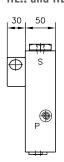


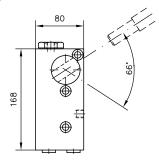
DH..





HE.. and HD..





	p <sub>max</sub> [bar]	V <sub>max</sub> [cm <sup>3</sup> /stroke]	Tapped ports (BSPP)		m [kg]
			Р	S	
H 16	350	6	G 1/4	G 1/4	3.1
H 20	220	9.4			
H 25	150	14.7			
HE 3	800	3	G 1/4	G 1/4 and G 3/8	4.8
HE 3	800	3			
HD 13	350	13			
HD 20	220	20			
HD 30	150	30			
DH 40	150	51	G 3/8	G 3/8	6.2 6.6
DH 45	100	64			

## Associated technical data sheets::

■ Hand pumps type H: <u>D 7147/1</u>