



FEED AND POWER HAND PUMP

Model : HP5012**D / HP5016**D

Ref. No. D 10100
Release 02 / 2017

ENGINEERING - 1 of 3

A Polyhydron Group Company

Description

Feed and power hand pump models HP5012**D and HP5016**D are meant for applications where initial travel of the cylinder / jack, to which it is connected, and is under no load or very low load. The pump provides considerably high displacement under low pressure for rapid travel of the cylinder / jack and then automatically changes to low displacement when pressure starts rising (above 30 bar), there by reducing the efforts required to operate the pump.

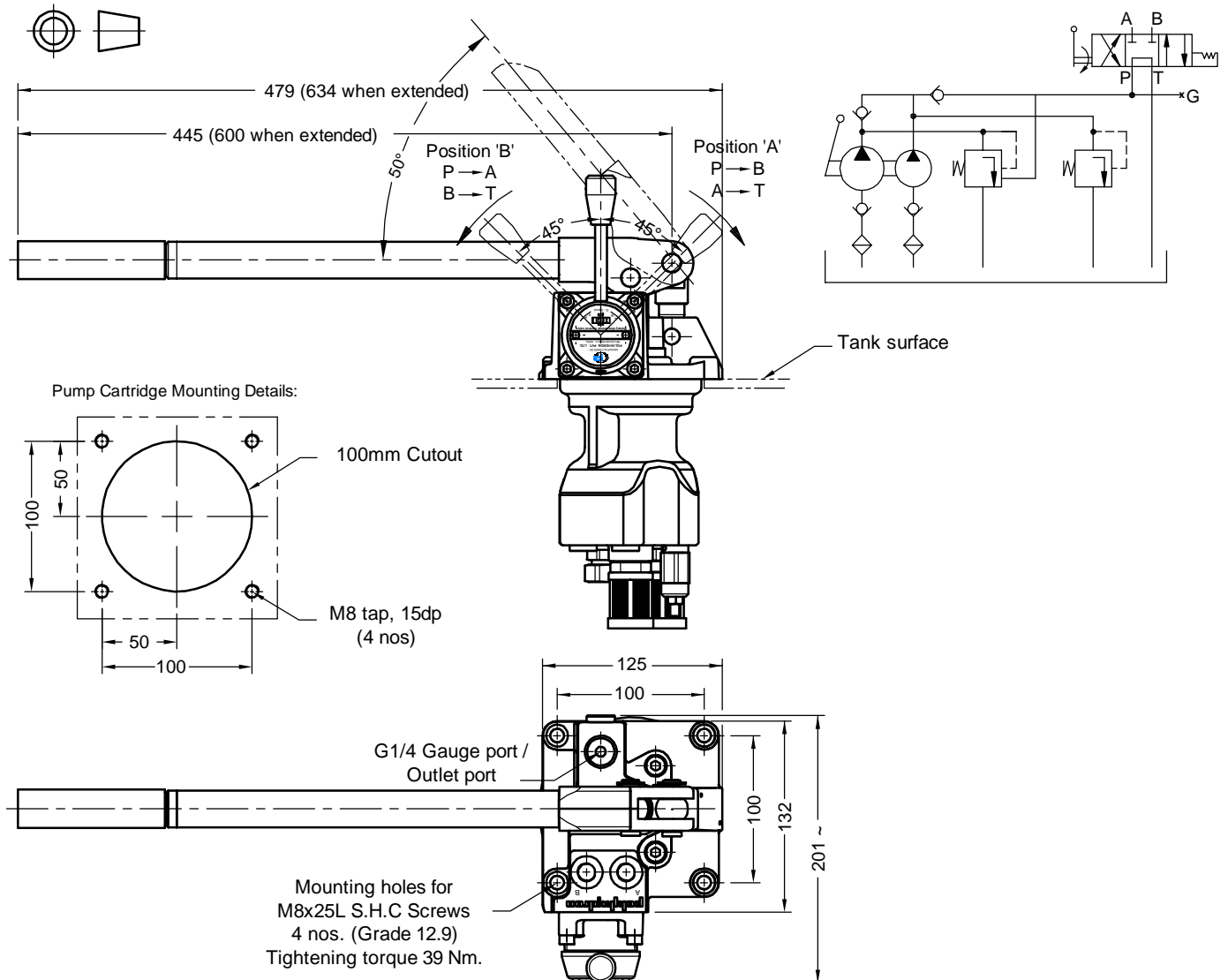
These hand pumps are provided with integrated Rotary Directional Control Valves with two outlet ports for switching of the hand pump power between the two sides of a double acting cylinder.



Unit dimensions

Dimensions in mm.

Hydraulic symbol



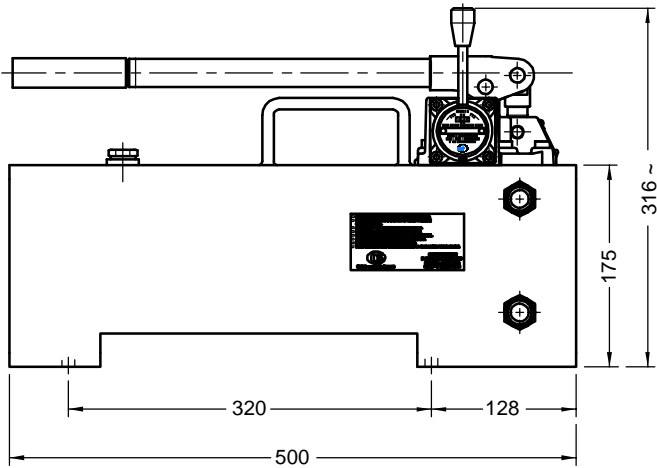
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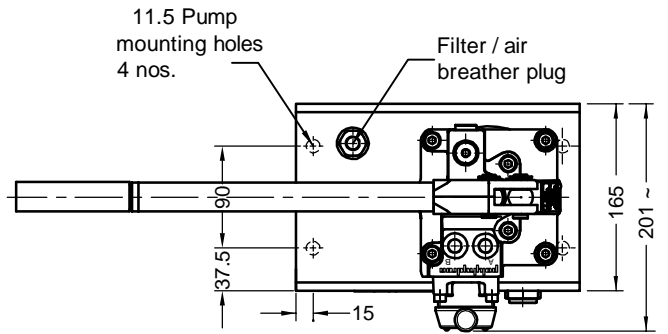
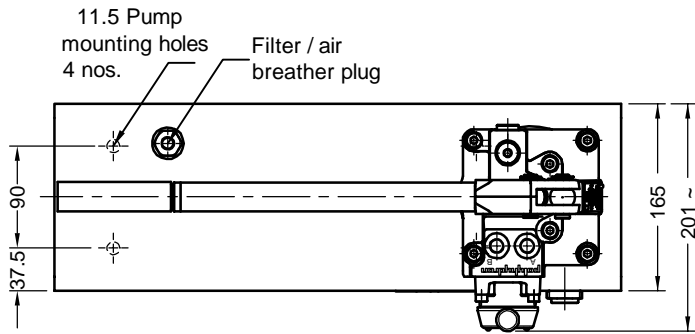
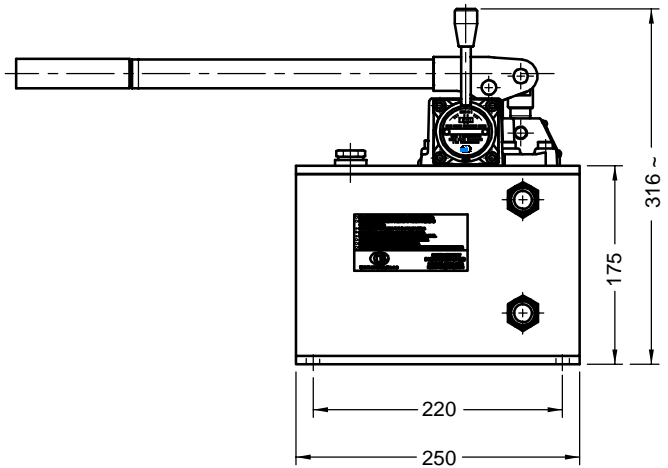
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Pump with regular oil tank



Pump with small oil tank



Technical specifications

Construction	:	Differential piston with single hand lever.									
Hydraulic medium	:	Mineral oil. (ISO VG68 grade recommended).									
Maximum working pressure	:	Refer table no.1									
Displacement	:	Refer table no.1									
Oil tank capacity and displacement	:	<table border="0"> <tr> <td>Specification</td> <td>Regular tank</td> <td>Small tank</td> </tr> <tr> <td>Oil tank capacity</td> <td>8.5 lts</td> <td>5 lts</td> </tr> <tr> <td>Oil tank displacement</td> <td>7.7 lts</td> <td>3.7 lts</td> </tr> </table>	Specification	Regular tank	Small tank	Oil tank capacity	8.5 lts	5 lts	Oil tank displacement	7.7 lts	3.7 lts
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Oil tank capacity	8.5 lts	5 lts									
Oil tank displacement	7.7 lts	3.7 lts									
Force required at the end of the pump	:										
Hand lever at max. pressure (Approx)	:	Refer table no.1									
Viscosity range	:	10 cSt to 380 cSt									
Fluid temperature range	:	-20°C to +70°C									
Fluid cleanliness requirement	:	ISO 4406 20/18/15 or better.									
Mass (Approx)	:	<table border="0"> <tr> <td>Pump cartridge only</td> <td>10 Kg.</td> </tr> <tr> <td>Pump with regular oil tank (without oil)</td> <td>18 Kg.</td> </tr> <tr> <td>Pump with small oil tank (without oil)</td> <td>16.5 Kg.</td> </tr> </table>	Pump cartridge only	10 Kg.	Pump with regular oil tank (without oil)	18 Kg.	Pump with small oil tank (without oil)	16.5 Kg.			
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Table no. 1

Specification	Unit	HP5012	HP5016
Max. Working Pressure	bar	500	350
Pump discharge upto 30 bar	cm ³ /stroke	49	49
Pump discharge above 30 bar	cm ³ /stroke	2.8	5.0
Force required at the end of the pump hand lever when fully extended at maximum pressure (approx).	N	270	340

Note : Force required to operate the lever of Rotary DCV under pressure is approximately 150 N at 500 bar.

Ordering code

