

APPLICATION

Two-stage pump UPTR 12/1,6 serves to deliver an oil to units working on pressure up to 70 MPa.

The pump consists of a main body, hand lever and tank. Movement of the hand lever causes coupled pistons of two different diameters to travel. The pistons, via suction and pressure valves, create pressure and delivery proportionally to their surface areas and strokes.

When pressure 4,4 MPa is achieved in version with a relief valve, I stage connection with the tank follows.

I stage pressure can be regulated from 0 to 4 MPa

II stage pressure can be regulated from 5 to 70 MPa.

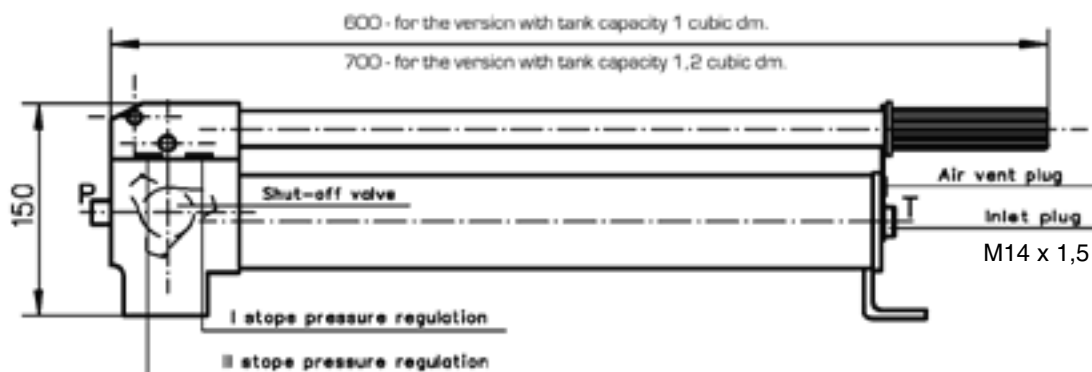
During operation care should be taken to maintain purity of the oil and its proper level in the tank. The oil purity should range max class 9. NAS 1638 (18/15 to ISO DIN 4406).

This is decisive factor for life of the pump. Also, an air vent in the plug should maintain clear and it is to be open on starting-up of the pump.



Warning:
The work position is horizontally

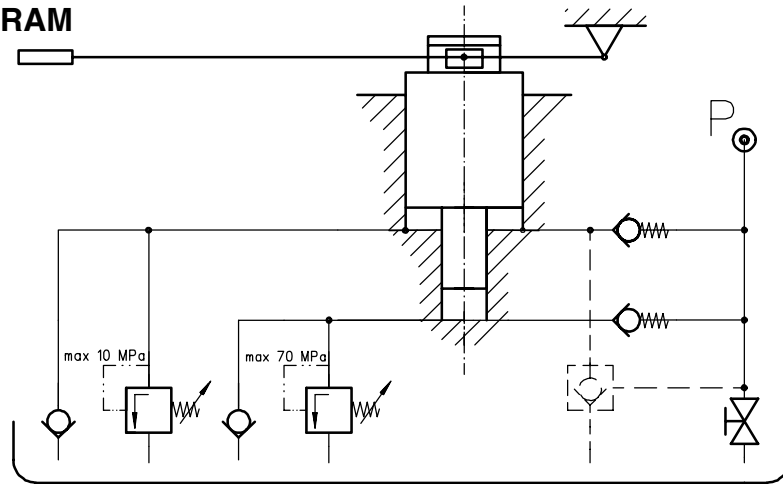
OVERALL DIMENSIONS



TECHNICAL DATA

Working medium	mineral oil
Viscosity	from 10 to 200 mm ² /s
Optimum oil temperature	313 - 328 K
Working temperature	243 - 343 K
Required filtration	16 μm
Displacement at low pressure _p	$V = 12 \text{ cm}^3 / \text{stroke}$
Displacement at high pressure _{2p}	$V = 1,6 \text{ cm}^3 / \text{stroke}$
Max low pressure - I stage	$p = 4 \text{ MPa}$
Max high pressure - II stage	$p_2 = 70 \text{ MPa}$
Oil container capacity	$V = 1 \text{ dm}^3 \text{ or } 1,2 \text{ dm}^3$
Max force at lever	about 320 N
Weight(without oil)	about 8,5 kg

HYDRAULIC DIAGRAM



HOW TO ORDER

Orders coded as below should be forwarded to the manufacturer

UPTR 12-1,6-22/4-70-1 A M1 *

I stage delivery 12 cm ³	= 12																			
II stage delivery 1,6 cm ³	= 1,6																			
Series number 22 (20-29)	= 22 installation and connection dimensions unchanged																			
I stage pressure 4 MPa	= 4																			
II stage pressure 70 MPa	= 70																			
Oil tank capacity 1 dm ³ 1,2 dm ³	= 1 = 1,2																			
Unloading without unloading valve with unloading valve	= no code = A																			
Connection M14 x 1,5 (ball end)	= M 1																			
Further requirements in clear text (to agree with the manufacturer)																				

Coding example:
UPTR 12-1,6-22/4-70-1 A M1

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