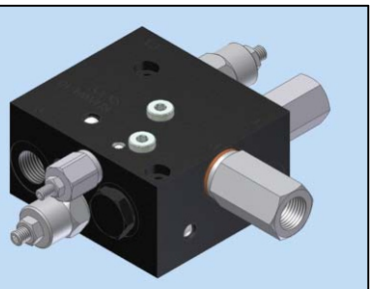
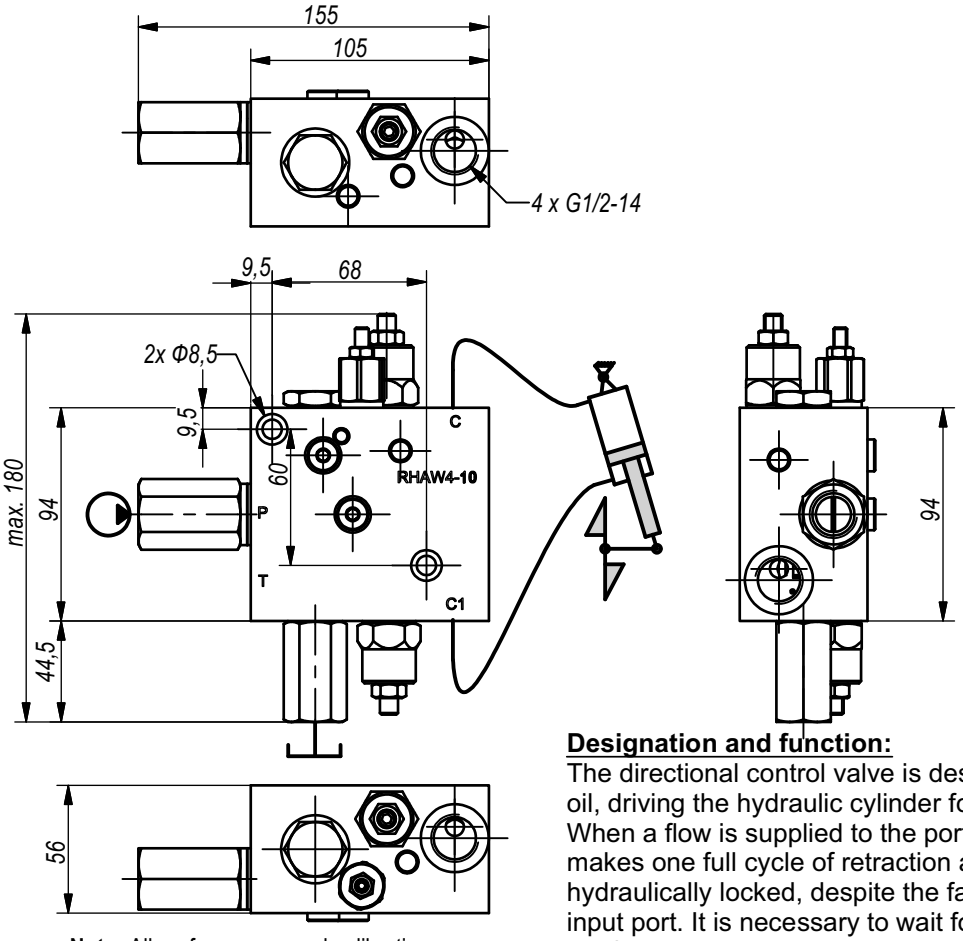
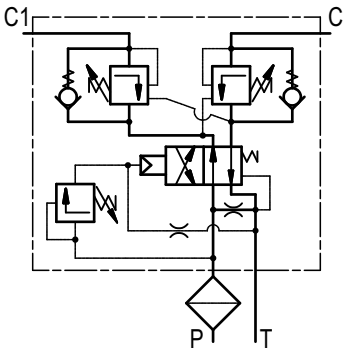
Hidro
Pnevmo
Tehnika
3,Vojeli St.,Kazanlak , Bulgaria
Tel.: +359 431/ 62 228, 68 440
e-mail : info@hpt-bg.com
www.hpt-bg.com

HYDRAULIC DIRECTIONAL CONTROL VALVE WITH AUTOMATIC SWITCHING

RHAW4-10



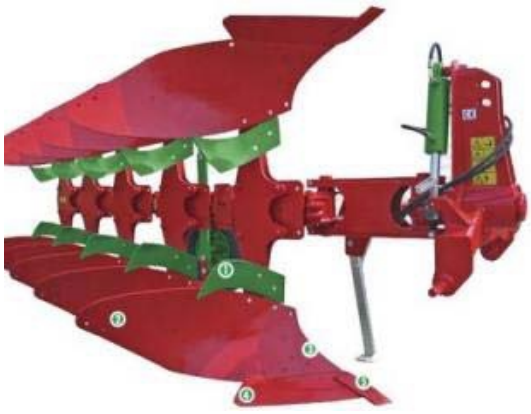




Note: All performances and calibration are carried out by using hydraulic oil with viscosity approx 46 cSt at 50 °C

Designation and function:

The directional control valve is designed to control the flow of the oil, driving the hydraulic cylinder for turning a tractor-driven plough. When a flow is supplied to the port P of the block, the cylinder makes one full cycle of retraction and extension and keeps hydraulically locked, despite the fact that there is pressure at the input port. It is necessary to wait for 3-4 seconds after the supply of the flow stops, till the next action, in order to restore the position of the switching spool in the directional control valve. On the next flow supply the cycle repeats itself.



TECHNICAL DATA		
General		
Ambient temperature	°C	-20...+50
Hydraulic		
Maximal pressure	bar	200
Supply flow range	L/min	10...50
Control range of the switching pressure	bar	50...200
Adj. pressure range overcenter valve (pos. 1)	bar	100...250
Working fluid - mineral oil		
- viscosity	mm^2/s	10...100
- filtration level	μm	25 or better
- temperature	°C	-20...+80

ORDERING CODE

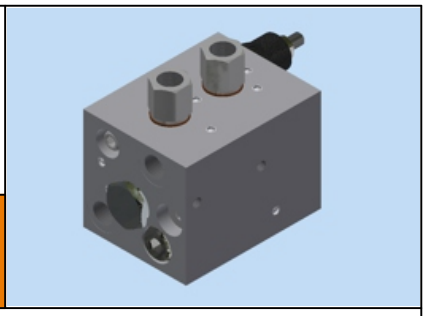
RHAW4-10

Type

Hidro
Pnevmo
Tehnika
3,Vojeli St.,Kazanlak , Bulgaria
Tel.: +359 431/ 62 228, 68 440
e-mail : info@hpt-bg.com
www.hpt-bg.com

HYDRAULIC DIRECTIONAL CONTROL VALVE WITH AUTOMATIC SWITCHING

RHAW5-10



Designation and function (see fig.1):

The directional control valve is designed for an automatic control of the process of changing directions of multi-hull reversible plows. It controls the sequential action of the two hydraulic cylinders, mounted on the plow. The sequence of operations is performed as follows:

When oil is supplied from the directional control valve DV to the tractor, the cylinder C1 is activated first. Its purpose is to straighten the frame, on which the plow hulls are mounted. After the move reaches its end, the supply of oil for this cylinder is stopped and the oil starts flowing to the other one – C2. It starts rotating the frame around its axis. After reaching an intermediate position during that rotation, the cylinder stops for a moment, which leads to a reverse of the directional control valve and the oil starts flowing to the opposite end of the cylinder C2 till it reaches the end of its stroke. The reverse process is fast which provides continuous rotation of the frame when passing through the intermediate position. Simultaneously with that a 180° rotation is performed as well. Afterwards the C1 is activated again, going to its starting position. In this way the frame is tilted again to its working position. After that process the directional control valve stays in that state till the flow of oil from the DV directional control valve to the tractor is stopped.

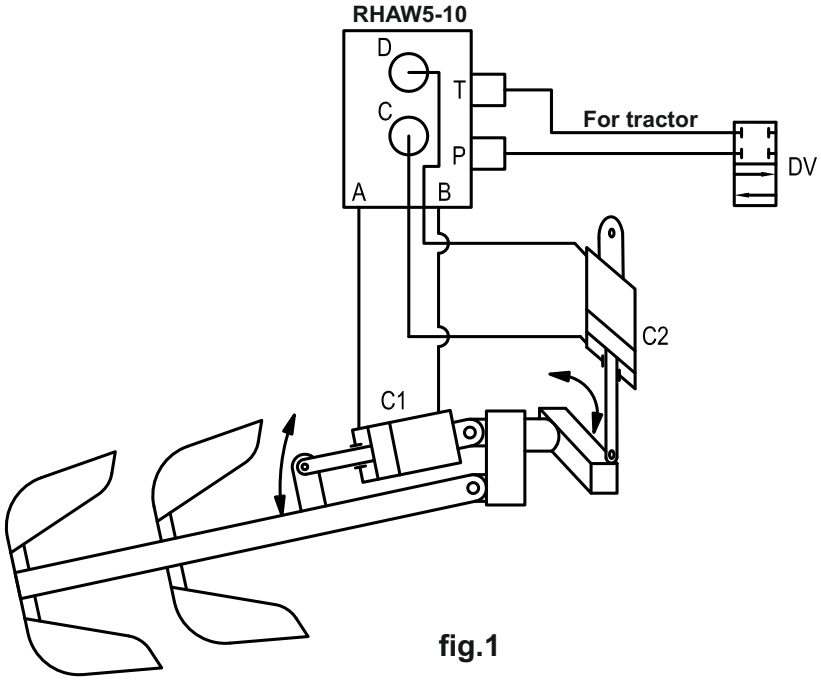


fig.1

ORDERING CODE

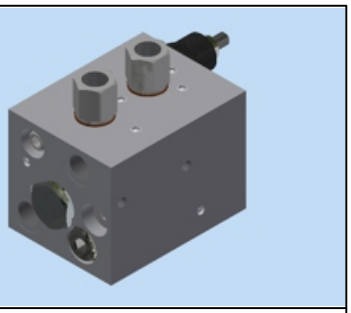
RHAW5-10

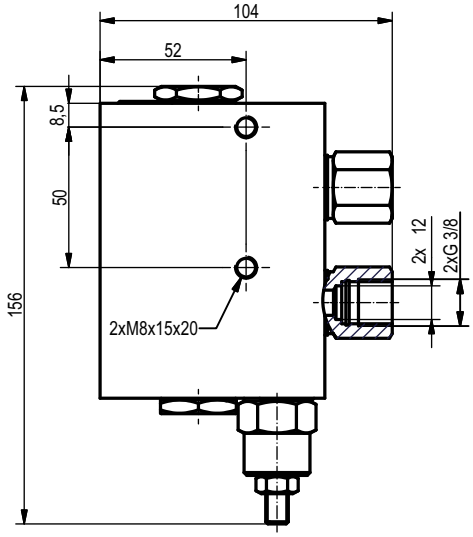
Type

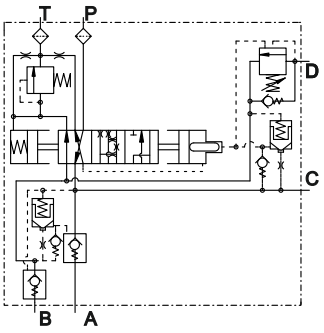
Hidro
Pnevmo
Tehnika
3,Vojeli St.,Kazanlak , Bulgaria
Tel.: +359 431/ 62 228, 68 440
e-mail : info@hpt-bg.com
www.hpt-bg.com

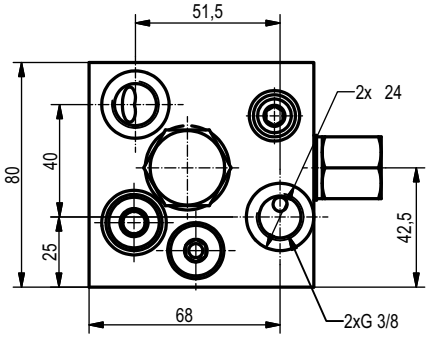
HYDRAULIC DIRECTIONAL CONTROL VALVE WITH AUTOMATIC SWITCHING

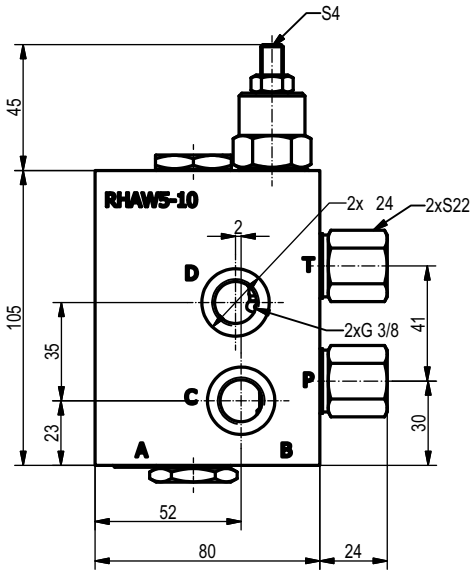
RHAW5-10











TECHNICAL DATA		
General		
Ambient temperature	^oC	-20...+50
Hydraulic		
Maximal pressure	*bar*	200
Flow rate	*L/min*	20
Working fluid - mineral oil		
- viscosity	mm^2/s	10...100
- filtration level	*μm*	25 or better
- temperature	^oC	-20...+80

Note: All performances and calibration are carried out by using hydraulic oil with viscosity approx 46 cSt at 50 °C

ORDERING CODE

RHAW5-10

Type