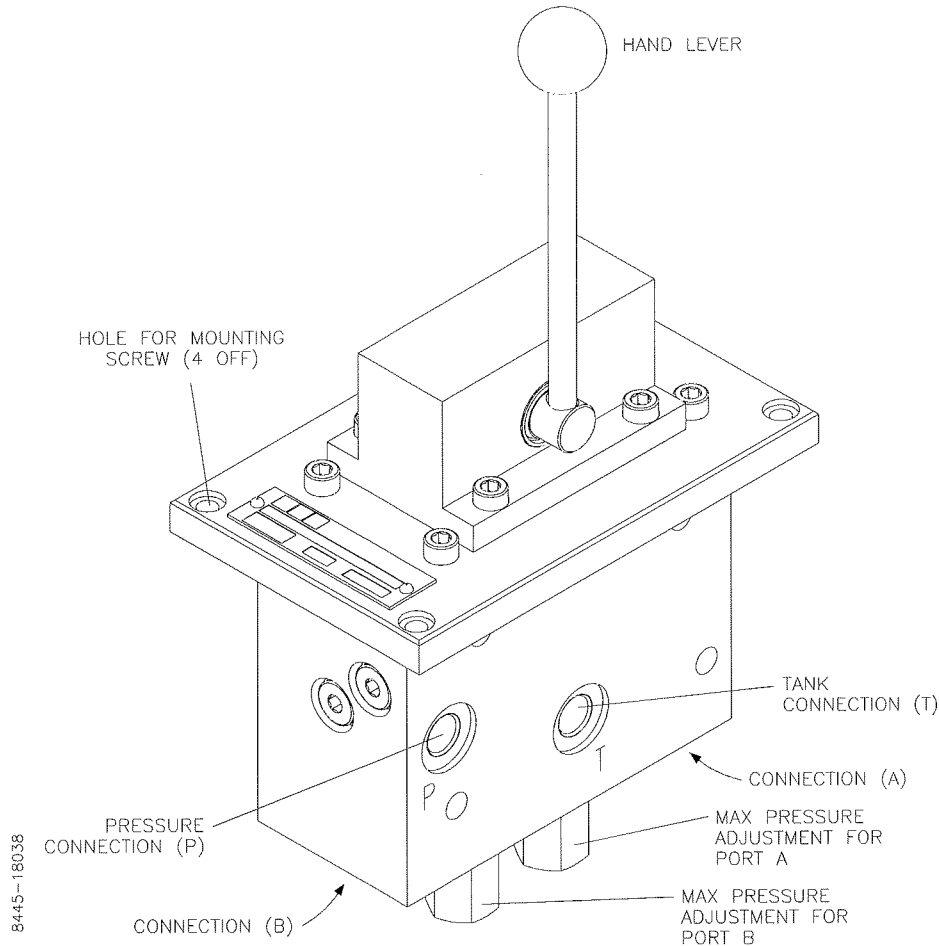


## PRESSURE TRANSMITTER VALVE 1FGP

### GENERAL DESCRIPTION



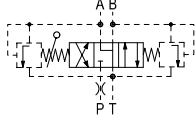
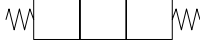
*Figure 1 1FGP General Arrangement*

The Pressure Transmitter Valve (1 FGP) is a seawater resistant valve intended for proportional, hydraulically remote control of directional valves, positioning cylinders etc. The valve has the following characteristics:

- Manually operated by hand lever
- Delivered in “packages” of 1 – 4 valves with suited mounting plate for panel mounting.
- Several adjustable pressure ranges are available.
- Designed for 350 bar in port P.

For more details about types and options, please refer to section 'Modular Code'.

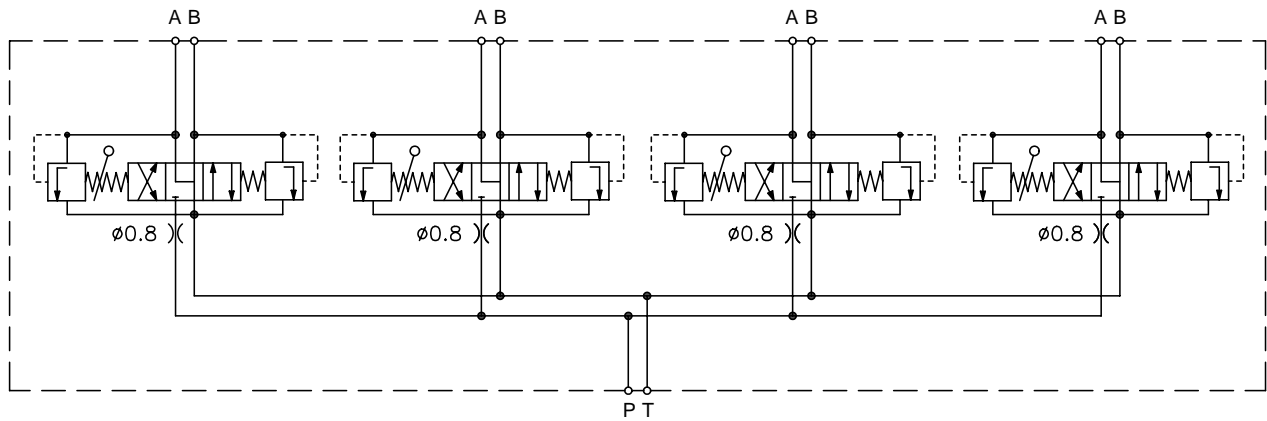
## MODULAR CODE

Options	Remarks	Design Code	Fill in
<b>Pressure transmitter</b>			<b>1FG</b>
<b>Mounting</b>			
Panel Mounting		<b>P</b>	<b>P</b>
<b>Type</b>			
4-ways	No option	<b>4</b>	<b>4</b>
<b>Pressure</b>			
350 bar		<b>4</b>	<b>4</b>
<b>Operation</b>			
Manual	No option	<b>1</b>	<b>1</b>
<b>Size</b>			
06 mm	No option	<b>1</b>	<b>1</b>
<b>Spool type</b>			
	Standard	<b>1K</b>	
<b>Spring return</b>			
Spring centred		<b>1</b>	<b>1</b>
<b>Pressure ranges ( To be selected both for A and B port)</b>			
8 – 35 bar		<b>01</b>	
2 – 15 bar		<b>02</b>	
2 – 85 bar		<b>03</b>	
10 – 50 bar	Standard	<b>05</b>	
5 – 20 bar	Standard ( 6MB, 7MB)	<b>07</b>	
8 – 45 bar		<b>08</b>	
8 – 25 bar		<b>11</b>	
<b>Sections</b>			
<b>Number of sections</b>	1 section	<b>omit</b>	
	2 sections	<b>2</b>	<b>2</b>
	3 sections	<b>3</b>	<b>3</b>
	4 sections	<b>4</b>	<b>4</b>

In example a 1FGP valve, with pressure range in both port A and B to be 5 - 20 bar, 3 sections will have modular code: **1FGP44111K1-07/07-3**

**Pressure ranges ( To be selected both for A and B port)**

Circuit diagram 4 off 1FGP44111K1B-\*/\*\*



**NOTES:**

Avoid fluctuation in pressure port P, to achieve best result of the proportional control.  
 Pressure in port T is directly additional to valve setting.

An orifice diameter  $\varnothing$  0.8 mm is mounted in port P.

**DIMENSIONS**

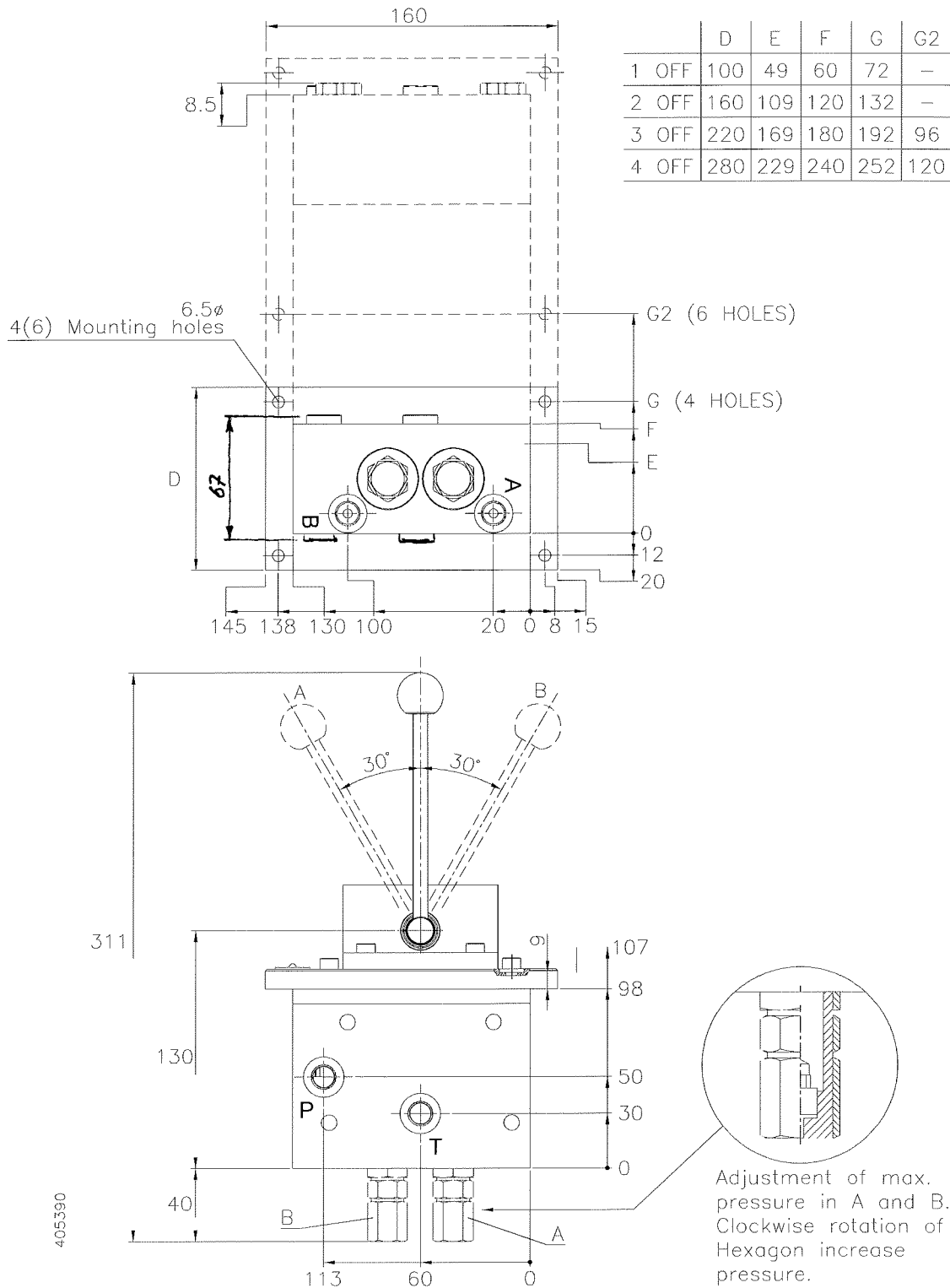


Figure 2 1FGP Dimensions

**TECHNICAL DATA**

Description	Symbol	Data
Max. pressure in port P	$P_{max}$	350 bar
Min nominal pressure in port P	$P_{nom}$	Pilot pressure + 5 bar
Max. pressure in port T	$T_{max}$	10 bar (See note)
Test Pressure	P	420 bar
Hydraulic fluid		Mineral oils for hydraulic system
Viscosity range:	$\nu$	10 to 350 mm <sup>2</sup> /s (cSt)
Viscosity index:	VI	> 120
Filtration, recommended filter with $\beta_{20} \geq 100$		Class 9 according to NAS 1638, 18/15 according to ISO 4406
Fluid temperature range:	T	-20°C to + 70°C
Ambient temperature range	T	-20°C to + 50°C
Standard Body Material		EN-GJS-400-15 (GGG 40)
Standard O-rings		Nitrile shore 70
<b>Multiple installation</b>	<b>No. of valves</b>	<b>Weight</b>
	1	8,1 Kg
	2	15,1 Kg
	3	22,7 Kg
	4	28,8 Kg

Note: Pressure in port T is directly additional to valve setting.

**NOTES:**

Avoid fluctuation in pressure port P, to achieve best result of the proportional control. In the Transmitter an orifice diameter 0.8 mm is mounted in port P.

**Interfaces:**

Description	Type	Tightening Torque
Screws	4 (6) off M6 x 20-DIN 912 (To be order separately)	7 Nm



## INSTALLATION

The Pressure Transmitter Valve 1FGP44\*1 is installed with 4 (6) off screws through the mounting plate included. The mounting plate is delivered for 1 – 4 Valves in a row. Please refer to 'Interfaces', for details about screws and o-rings.

## OPERATION

Manual control performed by the hand lever. The valve is delivered with centring spring, and the spool will return to the neutral position after releasing the hand lever.

## PRESSURE ADJUSTMENT

Clockwise rotation of the Hexagon increases pressure.

Install a pressure gauge to the existing port, and turn the hexagon screw until the requested maximum pressure is achieved.

## MAINTENANCE

Check the valve for proper function. Visually check the valve and if required, paint unpainted (damaged) areas.

**CAUTION: Do not paint the hand lever shaft seal.**

## SPARE PART

O-ring set is available.

## STORAGE

If storage longer than 6 months is expected, the valve must be kept in a dry room, free from dust and protected against sudden large temperature variations. For storage longer than 12 months, the valve must be filled with inhibition oil. Before use check all visible seals and flush with clean oil.

## MARKING

Inlets and outlets are marked, refer to figure in section 'General Description'.