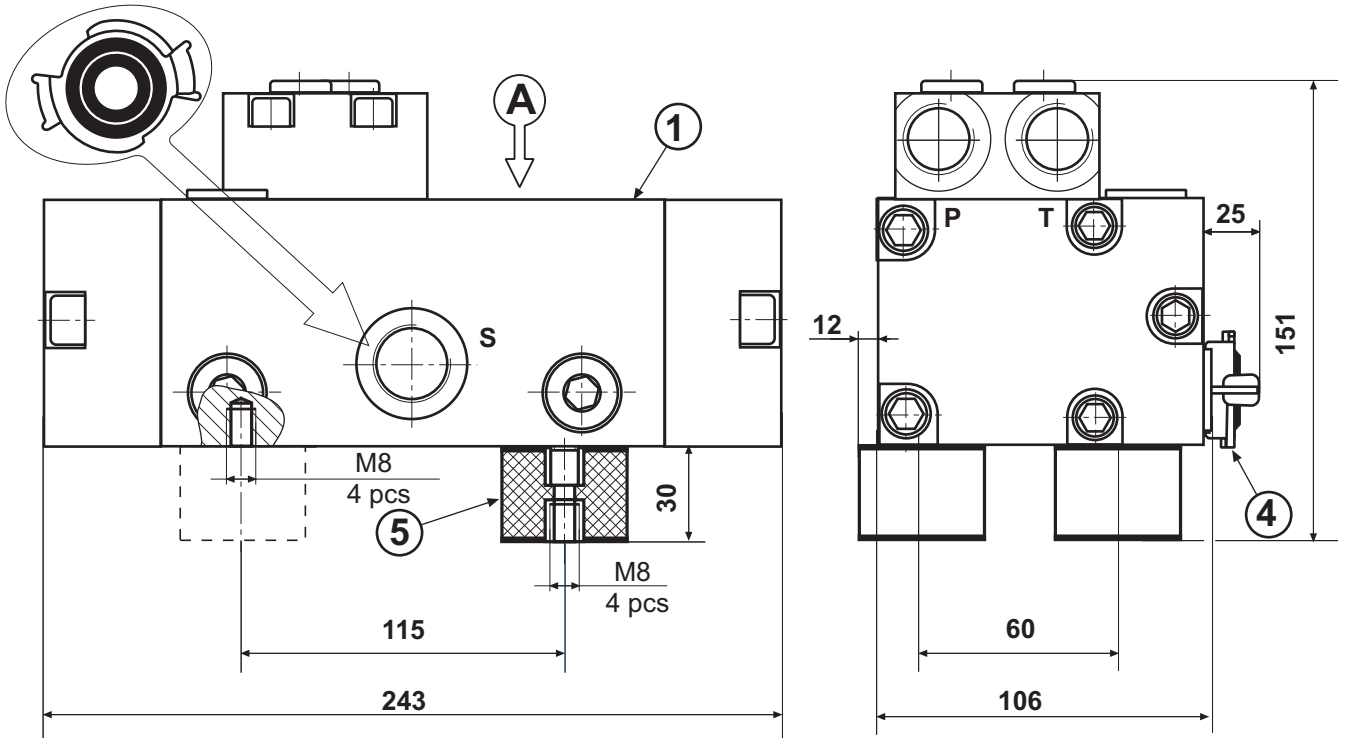
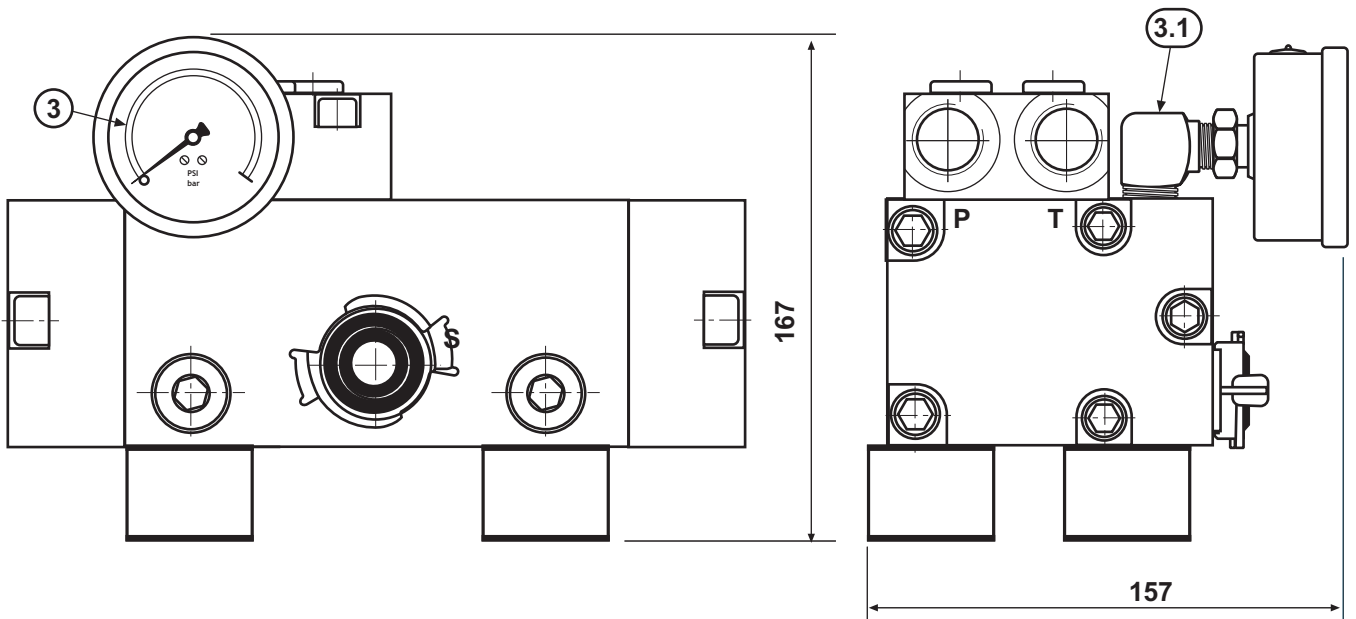
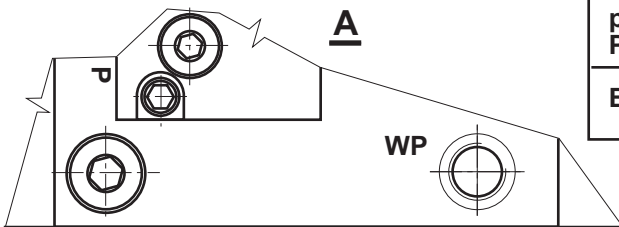


**OUTLINE DIMENSIONS**

**HYDRAULIC DRILLING FLUID PUMP HDF 180/23-30**



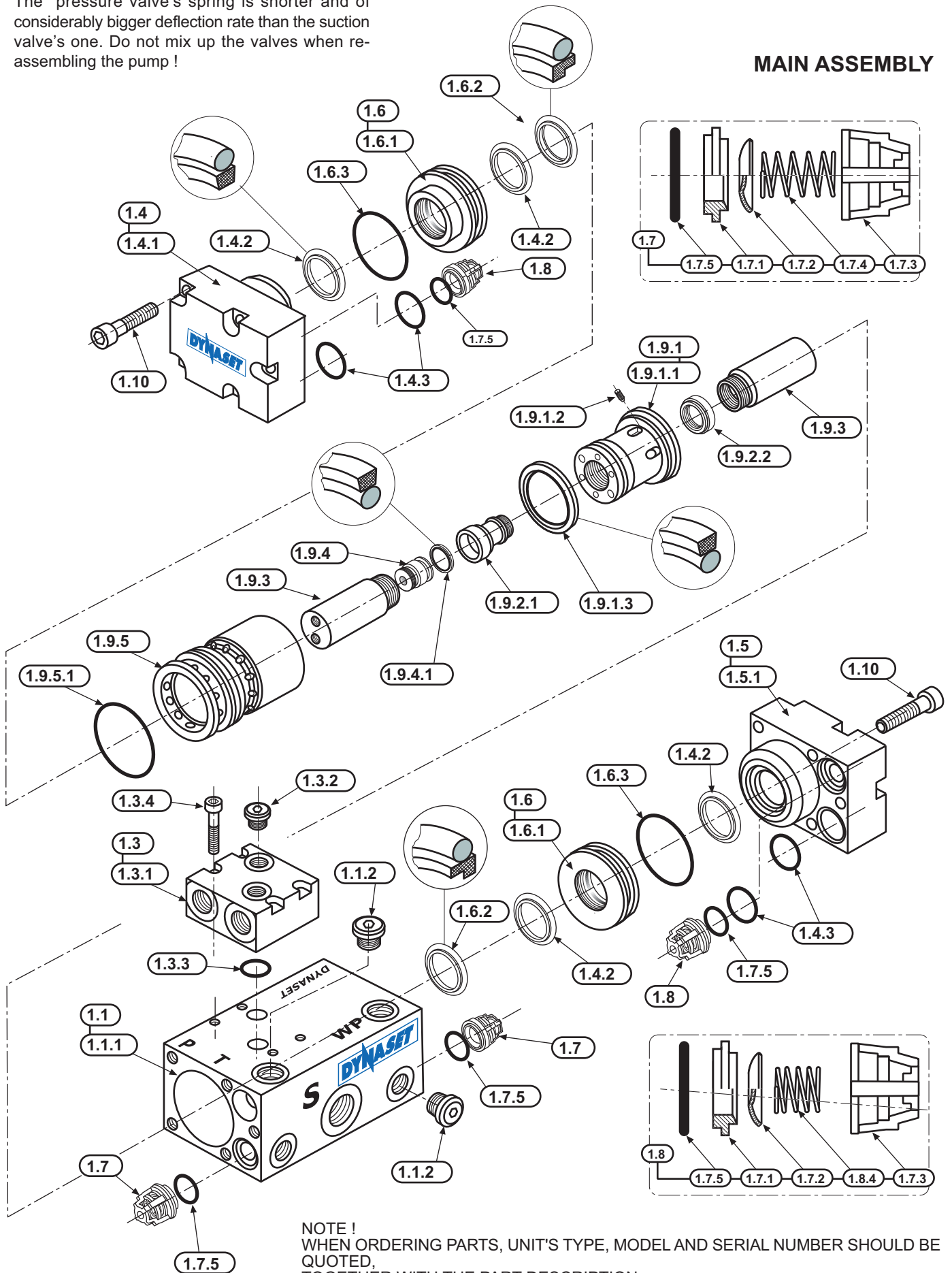
FLUID CONNECTIONS			
HYDRAULIC PORTS		PUMPING FLUID PORTS	
pressure P	return T	pressure WP	intake S
BSP 1/2"	BSP 1/2"	BSP 3/8"	BSP 3/4"



Note !

The pressure valve's spring is shorter and of considerably bigger deflection rate than the suction valve's one. Do not mix up the valves when re-assembling the pump !

MAIN ASSEMBLY



NOTE !  
 WHEN ORDERING PARTS, UNIT'S TYPE, MODEL AND SERIAL NUMBER SHOULD BE QUOTED,  
 TOGETHER WITH THE PART DESCRIPTION.



## MAIN ASSEMBLY

POS	STOCK NUMBER	DESIGNATION	DETAILS	QUANTITY
				HDF 180/23-30
1	04230231	<b>HDF-PUMP, ASSEMBLY</b>	<b>HDF 180/23-30</b>	
1.1	04201737	<b>CENTRE BODY, ASSEMBLY</b>		1
1.1.1	04000221	BLOCK 63	HPW 200	1
1.1.2	17027050	HF-PLUG	R 3/8"	3 (2, 1)
1.3	04001122	<b>P/T BLOCK, ASSEMBLY</b>		1
1.3.1	04200222	BODY	R 1/2"	1
1.3.2	17026950	HF-PLUG	R 1/4"	2
1.3.3	22040840	SEAL	Included into a seal kit	2
1.3.4	85004098	CAPSCREW, SOCKET HEAD	M6x40 8.8	4
1.4	04201741	<b>WATER HEAD, LEFT, ASSEMBLY</b>		1
1.4.1	04230820	HEAD BODY, LEFT	L 30	1
1.4.2	21045240	WATER PISTON SEAL, 2T	Included into a seal kit	1
1.4.3	22040940	SEAL	Included into a seal kit	2
1.4.4	17027600	PLUG, SOCKET HEAD	RK3/8"	2
1.5	04201028	<b>WATER HEAD, RIGHT, ASSEMBLY</b>		1
1.5.1	04200219	HEAD BODY, RIGHT	R 30	1
1.4.2	21045240	WATER PISTON SEAL, 2T	Included into a seal kit	1
1.4.3	22040940	SEAL	Included into a seal kit	2
1.4.4	17027600	PLUG, SOCKET HEAD	RK3/8"	2
1.6	04201027	<b>SEALING FLANGE</b>	HPW 200/30-45	2
1.6.1	04230218	FLANGE BODY		2
1.6.2	21045140	WATER PISTON SEAL, 1T	Included into a seal kit	2
1.4.2	21045240	WATER PISTON SEAL, 2T	Included into a seal kit	2
1.6.3	22043040	FLANGE SEAL	Included into a seal kit	2
1.7		<b>INTAKE VALVE</b>	D25-22	2
1.7.1		VALVE SEAT	HDF180	2
1.7.2		VALVE DISK	HDF180	2
1.7.3		VALVE CAP		2
1.7.4	04000854	SPRING, SUCTION		2
1.7.5	22041490	WATER VALVE SEAL	Included into a seal kit	2
1.8		<b>DISCHARGE VALVE</b>	D25-22	2
1.7.1		VALVE SEAT	HDF180	2
1.7.2		VALVE DISK	HDF180	2
1.7.3		VALVE CAP		2
1.8.4	04000855	SPRING, PRESSURE		2
1.7.5	22041490	WATER VALVE SEAL	Included into a seal kit	2
1.9		<b>PISTON ASSEMBLY</b>	HDF180	1
1.9.1	04000886	HYDRAULIC PISTON	55/44,3	1
1.9.1.2	85006524	SET SCREW	SOCKET HEAD M5x10	2
1.9.1.3	21046395	SEAL, 2T	Included into a seal kit	1
1.9.2		<b>REVERSAL VALVE</b>		1
1.9.2.1	04421679	VALVE SPOOL		1
1.9.2.2	04421680	VALVE SEAT		1
1.9.3		<b>WATER PISTON</b>	HDF180	2
1.9.4	04001062	REVERSAL VALVE GUIDE		1
1.9.4.1	21045940	SEAL, 2T	EXCLUDED FROM A SEAL KIT	1
1.9.5	04200217	<b>CYLINDER LINER</b>	44,3	1
1.9.5.1	22043040	SEAL 57,00x3,00	Included into a seal kit	1
1.10	85004156	CAPSCREW, SOCKET HEAD	M10x45 8.8	10
3	15013010	<b>PRESSURE GAUGE, COMPLETE</b>	D63, 250 bar, 1/4	1
4	17032750	<b>HOSE COUPLING</b>	25- R 3/4"	1
5	83075650	<b>RUBBER CUSHION</b>	40/30-M8	4

**REPAIR KITS / SPARE PARTS**

<b>V100101800</b>		<b>SEAL KIT</b>		
1.3.3	22040840	SEAL		2
1.4.2	21045240	WATER PISTON SEAL, 2T		4
1.4.3	22040940	SEAL		4
1.6.2	21045140	WATER PISTON SEAL, 1T		2
1.6.3	22043040	SEALING FLANGE SEAL		2
1.7.5	22041490	WATER VALVE SEAL		4
1.9.1.3	21046395	SEAL, 2T		1
1.9.5.1	22043040	SEAL		1
<b>V100101810</b>		<b>WATER VALVE KIT</b>		
1.7		INTAKE WATER VALVE, HDF180		2
1.8		DISCHARGE WATER VALVE, HDF180		2
1.7.5	22041490	WATER VALVE SEAL Incl. in valve assemblies (2x2)		4
1.4.3	22040940	SEAL		4
		<b>SCREW KIT</b>		
1.3.4	85004098	SCREW	M6x40 8.8	4
1.10	85004156	SCREW	M10x45 8.8	10
<b>V1001018120</b>		WATER PISTON	HDF180	

## TECHNICAL SPECIFICATIONS

PARAMETERS		HDF 180/23-30	
<b>WATER POWER</b>			
WATER FLOW	max	l/min	23
WATER PRESSURE	max	bar	180
WATER TEMPERATURE	max	°C	70 °C
PUMPING POWER	max	kW	7
SUCTION HEAD	max	m	3
WATER FEED PRESSURE	min-max	bar	-0,3 ...10
PRESSURE RATIO	water/hydraulic		1,18
SPEED RATIO		1/min	750
WATER PISTONS	outer diameter	mm	D 30
<b>WATER CONNECTIONS</b>			
PRESSURE LINE			BSP 3/8"
SUCTION / FEED LINE			BSP 3/4"
PRESSURE HOSE	recommendation		3/8"
SUCTION HOSE	recommendation		3/4"
<b>WATER FILTER</b>	min.	mesh	80
<b>HYDRAULIC CONNECTIONS</b>			
PRESSURE LINE		<b>P</b>	BSP 1/2"
RETURN LINE		<b>T</b>	BSP 1/2"
SERVICE LINE		<b>S</b>	BSP 1/4"
<b>HYDRAULIC FLUID REQUIREMENTS</b>			
VISCOSITY		cSt	10 - 200 / optimal 25 - 35
TEMPERATURE		°C	max. 70
FILTER RATIO	recommendation	um	min. 25
COOLING CAPACITY	recommendation	kW	2
<b>HYDRAULIC POWER REQUIREMENTS</b>			
HYDRAULIC FLUID FLOW		l/min	30
OPERATING PRESSURE	Dp	bar	185
MAXIMUM PRESSURE		bar	210
IDLE RUN PRESSURE		bar	10
RETURN LINE PRESSURE	max	bar	210
<b>WEIGHT</b>		kg	8
<b>PRESSURE GAUGE</b>			OPTIONAL
<b>LS-VALVE</b>	LS		OPTIONAL