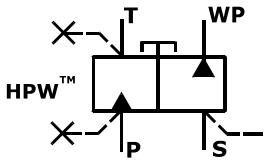
MOBILE HYDRAULIC EQUIPMENT

HYDRAULIC HIGH PRESSURE PUMPS

HPW- SERIES



DYNA*SET* HPW-pump is a converter, which transforms actuating fluid power, usually hydraulic oil, into pumping fluid's power, which is defined by flow rate and pressure. Actuating power is supplied from hydraulic system of carrier machine or other installation. Water or any other pumping fluid can be taken from natural source, reservoir or pressurised supply network.

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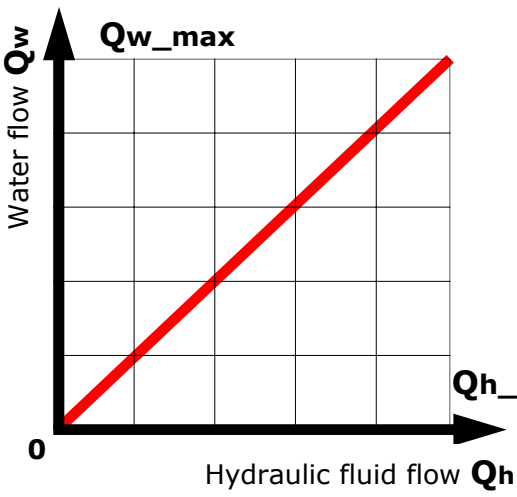
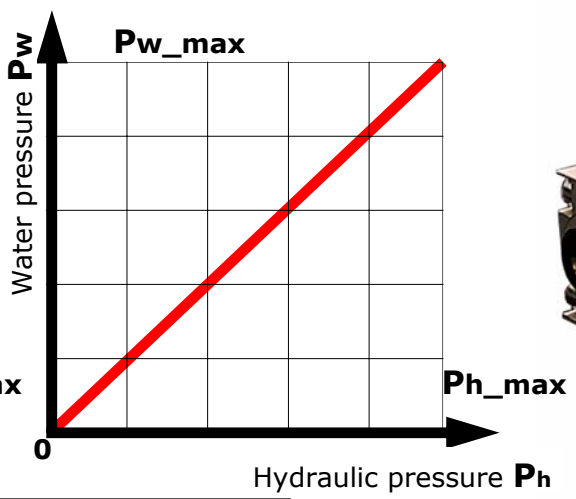
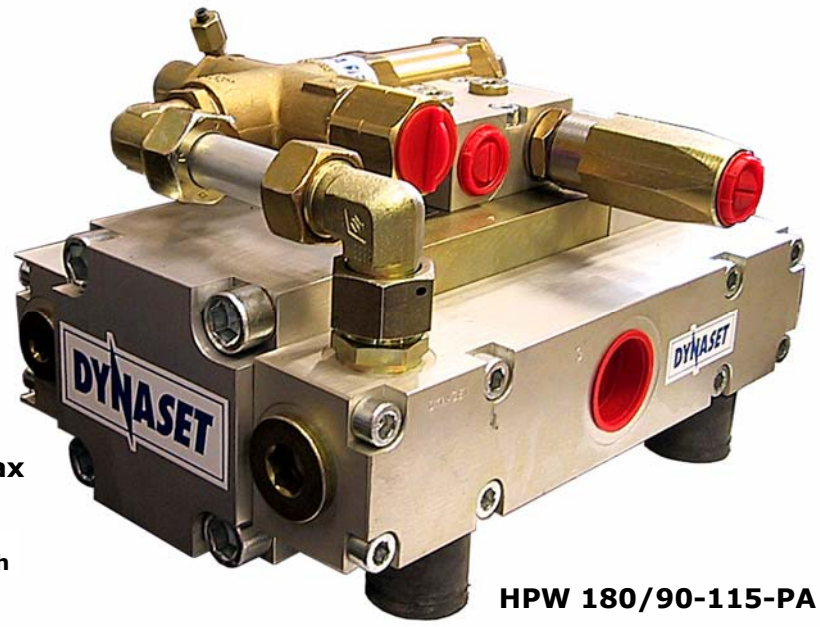
When hydraulic pressure and/or flow is under the value needed to achieve the maximum output power of HPW-pump, the water power is decreased respectively without any harm to pump itself.

HPW 200/30-45-ST

PUMPING FLUID—HYDRAULIC FLUID DEPENDENCY IN REGARD TO THEIR FLOW RATES AND PRESSURE.

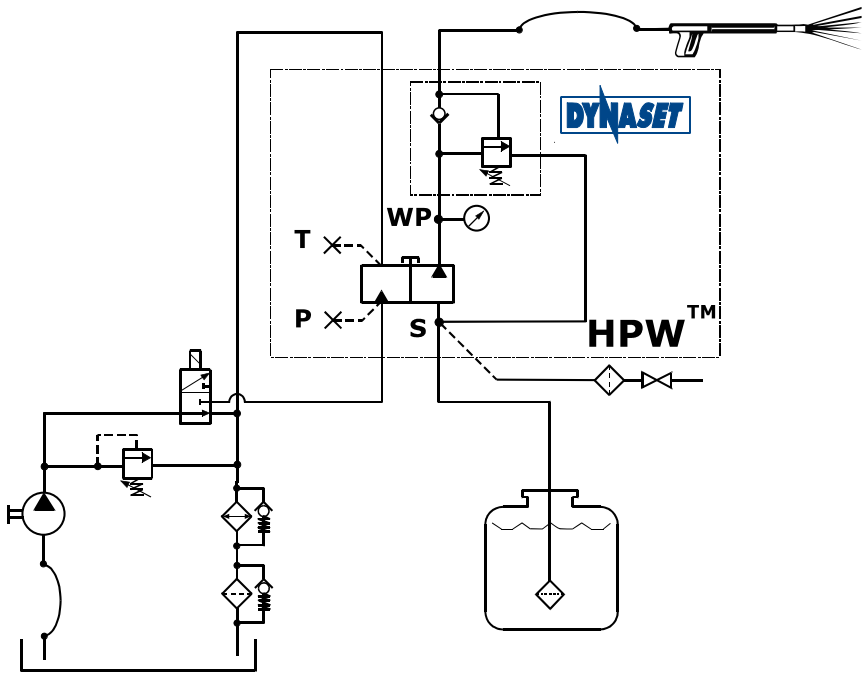




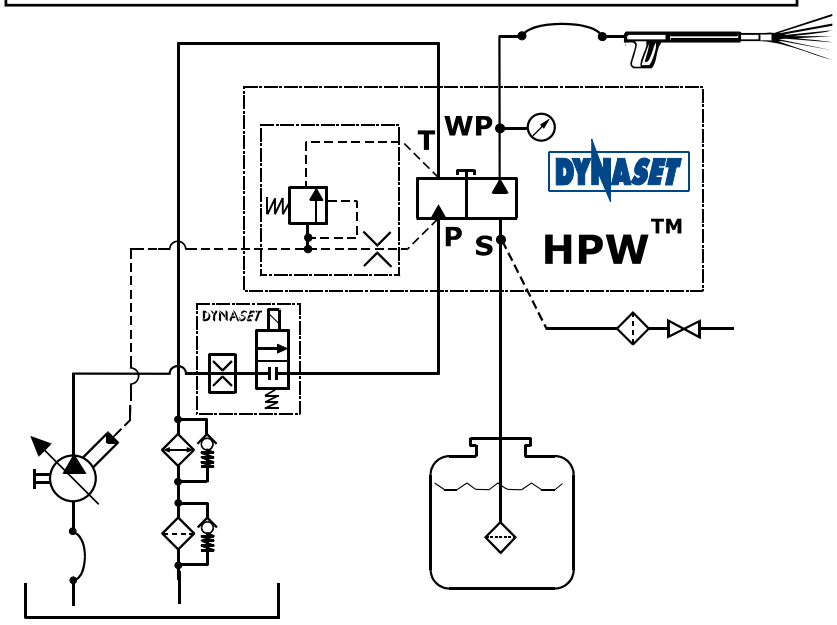


HPW 180/90-115-PA

HPW IN SYSTEM WITH CONSTANT DISPLACEMENT HYDRAULIC PUMP



HPW IN SYSTEM WITH VARIABLE DISPLACEMENT HYDRAULIC PUMP



HPW HIGH PRESSURE PUMPS	HYDRAULIC POWER REQUIREMENTS				PRESSURE RATIO	WATER POWER					OVERALL DIMENSIONS			WEIGHT
	oil flow		pressure, max		water / hydraulic	water flow		pressure, max		power	length	width	height	kg
	l/min	gpm	bar	psi		l/min	gpm	bar	psi	kW	mm	mm	mm	
HPW 200/30-45	45	11,90	210	3045	1,18	30	7,92	200	2900	10	243	160	190	8
HPW 420/20-50	50	13,20	220	3190	2,12	20	5,28	420	6091	14	250	150	200	16
HPW 220/50-70	70	18,49	210	3045	1,26	50	13,20	220	3190	18	325	221	210	25
HPW 520/30-85	85	22,45	210	3045	2,62	30	7,92	520	7541	26	285	175	210	22
HPW 90/150-85	85	22,45	210	3045	0,52	150	39,62	90	1305	22,5	360	235	270	30
HPW 180/90-115	115	30,38	210	3045	1,12	90	23,77	180	2610	27	325	266	180	28
HPW 470/50-120	120	31,70	210	3045	2,03	50	13,20	470	6816	39	325	250	230	32
HPW 800/30-140	140	36,98	210	3045	4,00	30	7,92	800	11603	66,5	315	200	205	40
HPW 250/300-350	350	92,46	280	4061	1,03	300	79,25	250	3625	125	480	180	310	110
HPW 1200/100-390	390	103,02	350	5076	3,42	100	26,41	1200	17404	200	500	200	310	130
HPW 150/600-400	400	105,66	350	5076	0,53	600	158,50	150	2175	150	720	350	190	160

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PARAMETERS			HPW 200/30-45	HPW 420/20-50	HPW 220/50-70	HPW 520/30-85	HPW 90/150-85	HPW 180/90-115
WATER POWER								
WATER FLOW	max	l/min	30	20	50	30	150	90
WATER PRESSURE	max	bar	200	420	220	520	90	180
WATER TEMPERATURE	max	°C	70 °C	70 °C	70 °C	70 °C	70 °C	70 °C
PUMPING POWER	max	kW	10	14	18,5	26	22,5	27
SUCTION HEAD	max	m	3	3	3	3	3	3
WATER FEED PRESSURE	min-max,	bar	-0,3 ...10	-0,3 ...10	-0,3 ...10	-0,3 ...10	-0,3 ...10	-0,3 ...10
PRESSURE RATIO	water/hydraulic		1,18	2,12	1,26	2,62	0,52	1,12
SPEED RATIO		1/min	750	780	550	590	575	575
WATER PISTONS	outer diameter	mm	D 30	D 24	D 40	D 30	D 63	D 50
WATER CONNECTIONS								
PRESSURE LINE			BSP 3/8"	BSP 3/8"	BSP 1/2"	BSP 3/8"	BSP 3/4"	BSP 3/4"
SUCTION / FEED LINE			BSP 3/4"	BSP 3/4"	BSP 1 "	BSP 3/4"	BSP 2 "	BSP 1 1/4"
PRESSURE HOSE	recommendation		3/8"	3/8"	1/2"	3/8"	3/4"	3/4"
SUCTION HOSE	recommendation		3/4"	3/4"	1 "	3/4"	1 1/2 "	1 1/4"
WATER FILTER	min.	mesh	80	80	80	80	80	80
HYDRAULIC CONNECTIONS								
PRESSURE LINE		P	BSP 1/2"	BSP 1/2"	BSP 3/4"	BSP 3/4"	BSP 3/4"	BSP 3/4"
RETURN LINE		T	BSP 1/2"	BSP 1/2"	BSP 3/4"	BSP 3/4"	BSP 3/4"	BSP 3/4"
SERVICE LINE	press.gauge/LS-line	S	BSP 1/4"	BSP 1/4"	BSP 1/4"	BSP 1/4"	BSP 1/4"	BSP 1/4"
HYDRAULIC FLUID REQUIREMENTS								
VISCOSITY		cSt	10 - 200 / optimal 25 - 35					
TEMPERATURE		°C	max. 70	max. 70	max. 70	max. 70	max. 70	max. 70
FILTER RATIO, recommendation		um	min. 25	min. 25	min. 25	min. 25	min. 25	min. 25
COOLING CAPACITY, recommend.		kW	2	2	3	4	4	6
HYDRAULIC POWER REQUIREMENTS								
HYDRAULIC FLUID FLOW		l/min	45	50	70	85	85	115
OPERATING PRESSURE	Dp	bar	185	190	180	190	190	190
MAXIMUM PRESSURE		bar	210	220	210	210	210	210
IDLE RUN PRESSURE		bar	10	10	10	10	10	10
RETURN LINE PRESSURE	max	bar	210	220	210	210	210	210
WEIGHT		kg	8	16	25	22	30	28
PRESSURE GAUGE			OPTIONAL					
WATER PRESSURE UNLOADER		OPTION	ST	PA	PA	PA	PA	PA
LS-VALVE		OPTION	LS	LS	LS	LS	LS	LS

DYNASET

HPW - HIGH PRESSURE WATER PUMPS

january 2003/kl

HPW CONVERTER - HOW IT WORKS

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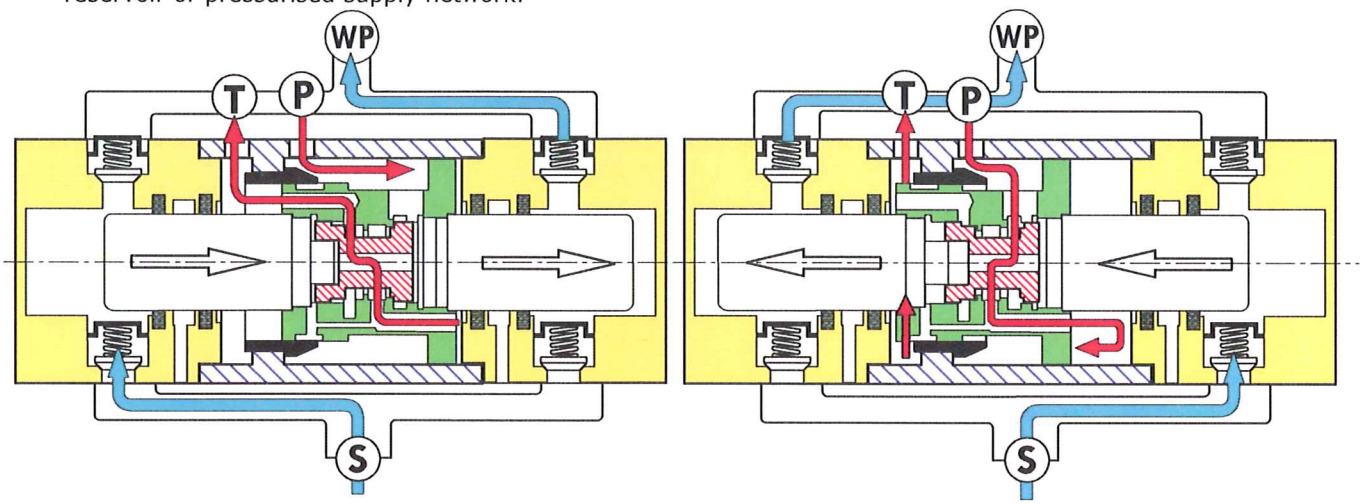

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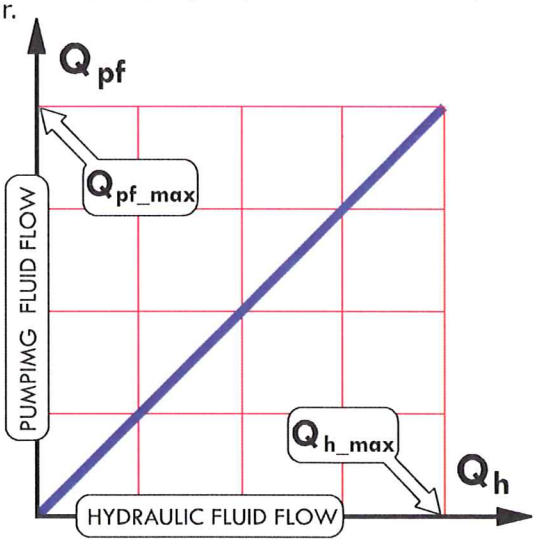
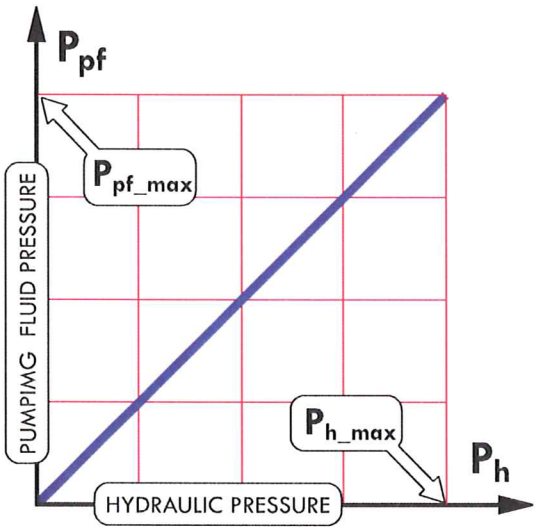
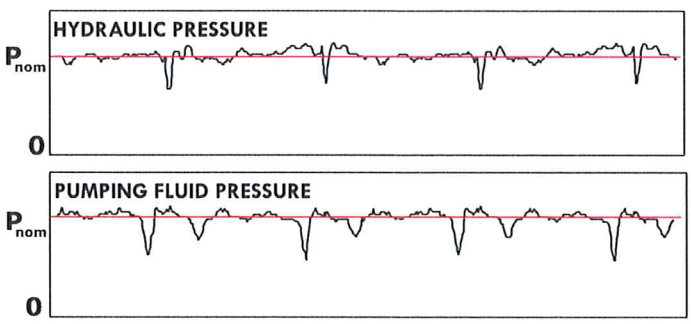
PERFORMANCE DIAGRAMS

Relation of pumping fluid's flow rate and pressure to corresponding parameters of hydraulic fluid is linear.







OSCILLOSCOPE PRESSURE GRAPHS OF **HPW** CONVERTER

Test conditions:

* nominal pressure, WP
* nominal water flow, Q
* suction head 2 m
* water temperature 60 °C
* pressure response time 0,2 ms