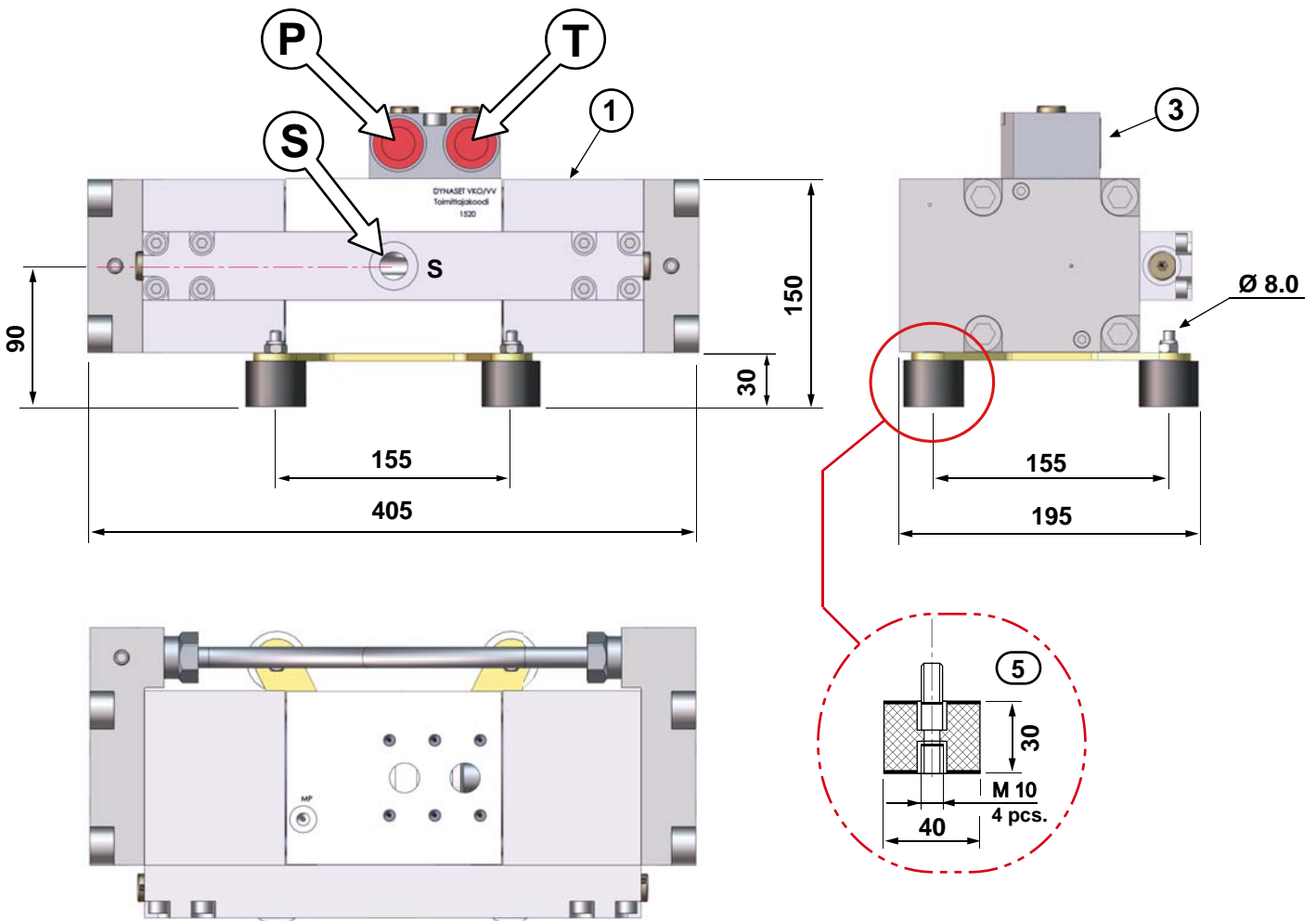
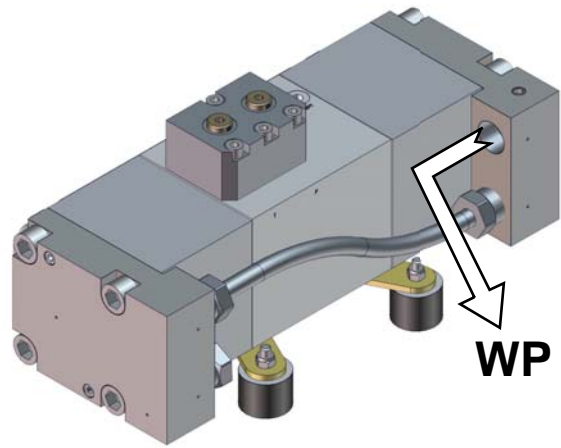
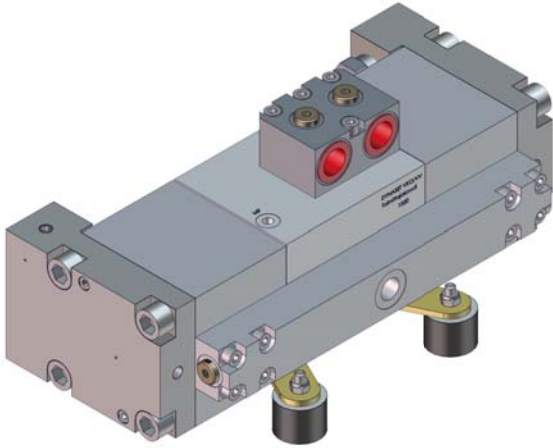


HIGH PRESSURE PUMP HPW 1600/15-140

OUTLINE DIMENSIONS



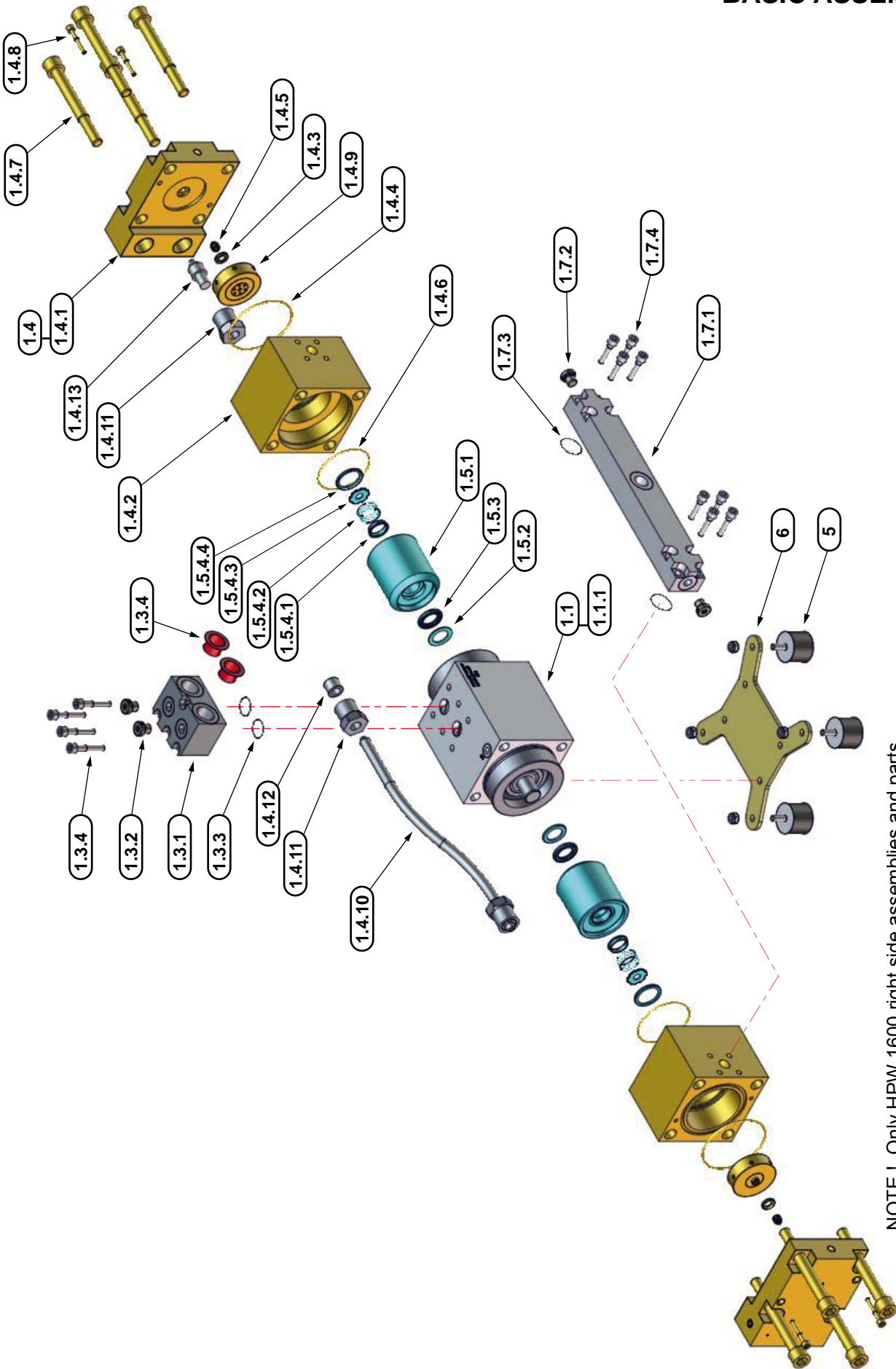
HYDRAULIC FLOW	l/min, max.	140
HYDRAULIC PRESSURE	bar, max.	230
WATER DISCHARGE	l/min, max.	15
WATER PRESSURE	bar, max	1600
WEIGHT	kg	36

FLUID CONNECTIONS				
HYDRAULICS			PUMPING FLUID	
pressure P	return T	LS	outlet WP	intake S
BSP 3/4"	BSP 3/4"	BSP 1/4"	1 1/8-12"	BSP 1/2"



BASIC ASSEMBLY

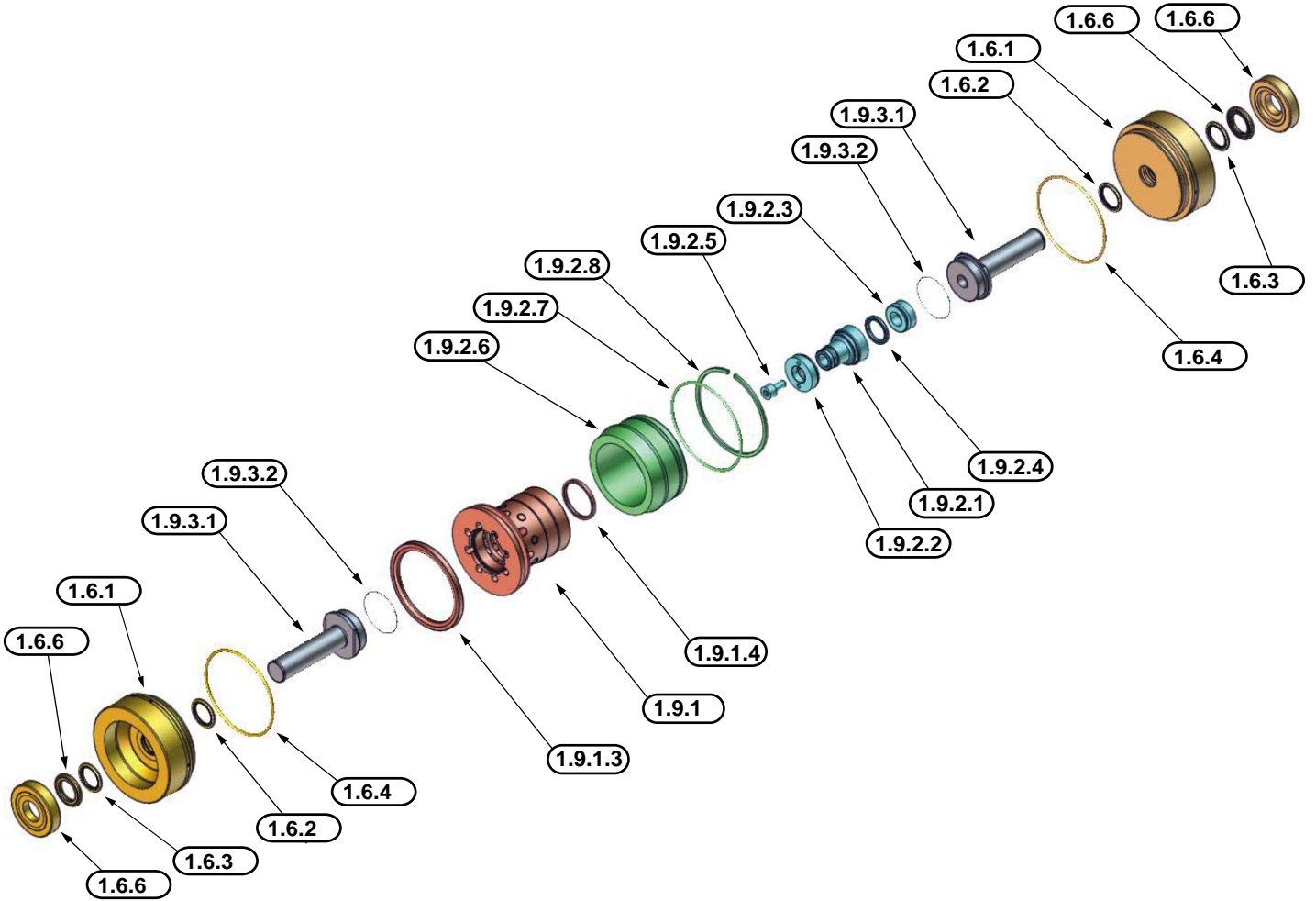
NOTE ! WHEN ORDERING SPARE PARTS, UNIT'S TYPE, MODEL AND SERIAL NUMBER SHOULD BE QUOTED.



NOTE ! Only HPW 1600 right side assemblies and parts are numbered on this diagram. These parts are identical the left side parts beginning from left Water cylinder's Seal flange (No. 1.5.2, blue colored).



HYDRAULIC / WATER PISTON ASSEMBLY



HIGH PRESSURE PUMP HPW 1600/15-140-(LS)

PART LIST

Pos	STOCK NUMBER	DESIGNATION	DETAILS	QUANTITY
1	D200106030	HPW-PUMP, ASSEMBLY	HPW1600	
1.1	0409012021	CENTRE BODY, ASSEMBLY		1
1.1.1	0400001520	BLOCK 90	HPW1600	1
1.3	0409011305	P/T BLOCK, ASSEMBLY	3/4"	1
1.3.1	0409010736	BODY	R 3/4"	1
1.3.2	1702695000	HF-PLUG	R 1/4"	2
1.3.3	2204109100	O-RING 21	Included into a seal kit	2
1.3.4	8500412600	ALLEN SCREW	M8x45 8.8 24Nm	4
1.3.6	1702850000	PLUG	R3/4	2
1.4	0409011304	PRESSURE HEAD ASSEMBLY		2
1.4.1	0409011195	PRESSURE HEAD BODY,	HPW1600	2
	8107355500	STEEL BALL		4
	8505230000	SET SCREW	M12x16	4
1.4.2	0409011173	WATER CYLINDER ENCLOSURE	HPW1600	2
1.4.3	2109012040	SEAL ASSEMBLY	Included into a seal kit	2
	2109012039	SEAL 17		2
	2204053950	O-RING 11		2
1.4.4	2204324000	O-RING 84	Included into a seal kit	2
1.4.5	0409012025	DISCHARGE VALVE ASSEMBLY	HPW 1600	
	0409011183	VALVE CAB D10		2
	0409011467	SPRING, PRESSURE		2
	0409011182	VALVE DISK		2
1.4.6	2204234000	O-RING 69		2
1.4.7	8500424500	ALLEN SCREW	M16x130 8.8 197 Nm	8
1.4.8	8500409900	ALLEN SCREW	M6x45 8.8 10 Nm	4
1.4.9	0409012016	VALVE SEAT D60		2
	0409011303	HIGH PRESSURE PIPE ASSEMBLY		1
1.4.10	1709011200	HIGH PRESSURE PIPE	HPW1600	1
1.4.11	1703580000	NUT	9/16	2
1.4.12	1703581000	GLAND	9/16	2
1.4.13	1703581500	PLUG	9/16	1
1.5	0409011302	WATER CYLINDER ASSEMBLY	HPW 1600	2
1.5.1	0409011154	CYLINDER BODY, RIGHT	HPW 1600	2
1.5.2	0409010227	SEAL FLANGE 32	Exclude from seal kit	2
1.5.3	2109010986	ROD SEAL ASSEMBLY 22	Included into a seal kit	2
	2109010984	SEAL 22		2
	2109010985	SUPPORT RING 25		2
	2204359700	O-RING 26		2
1.5.3.1	2109010984	SEAL T1		2
1.5.3.2	2109010985	SUPPORT RING 25		2
1.5.3.3	2204359700	O-RING 26		2
1.5.4	0409012024	INTAKE VALVE ASSEMBLY	HPW1600	2
1.5.4.1	0409011208	SPRING GUIDE D27		2
1.5.4.2	0409011209	SPRING, SUCTION		2
1.5.4.3	0409011171	VALVE DISK D26		2
1.5.4.4	2109012038	O-RING 36	Included into a seal kit	2
1.6	0409011301	SEALING FLANGE ASSEMBLY	HPW 1600	2
1.6.1	0409010227	FLANGE BODY D100		2
1.6.2	2104501500	WATER PISTON SEAL, 1T	Included into a seal kit	2
1.6.3	2104501000	WATER PISTON SEAL, 2T	Included into a seal kit	2
1.6.4	2204324000	O-RING 84	Included into a seal kit	2
1.6.5	0409010943	SUPPORT SLEEVE D54		2
1.6.6	2109010986	ROD SEAL ASSEMBLY 22	Included into a seal kit	2
	2109010984	SEAL 22		2
	2109010985	SUPPORT RING 25		2
	2204359700	O-RING 26		2
1.7	0409012028	SUCTION MANIFOLD R 1/2		1
1.7.1	0409011199	SUCTION MANIFOLD BODY	R 3/4 AISI	1
1.7.2	1702695000	PLUG	R 1/4"	2
1.7.4	2204094000	O-RING 27		2
1.7.5	8500412320	ALLEN SCREW	M8x35 24Nm	8

HIGH PRESSURE PUMP HPW 1600/15-140-(LS)

PART LIST

Pos	STOCK NUMBER	DESIGNATION	DETAILS	QUANTITY
1.9	0409011298	HYDRAULIC / WATER PISTON ASSY	HPW1600	1
1.9.1	0400051059	HYDRAULIC PISTON	90	1
	1500910500	ORIFICE		2
	8500606400	SET SCREW	M6x6 10 Nm	1
	8500652400	SET SCREW	M5x10 5.7 Nm	2
1.9.1.3	2104694000	SEAL M90	Included into a seal kit	1
1.9.1.4	0400061800	SEAL 36	Excluded from seal kit	1
1.9.2		HYDRAULIC VALVE ASSEMBLY		1
1.9.2.1	0400000890	VALVE SPOOL D36		1
1.9.2.2	0400000891	VALVE SEAT D35		1
1.9.2.3	0400000960	HYDRAULIC VALVE GUIDE D28		1
1.9.2.4	2104614000	SEAL M28	Excluded from seal kit	1
1.9.2.5	8500412000	ALLEN SCREW	M8x16 24Nm	1
1.9.2.6	0400050833	CYLINDER LINER 65		1
1.9.2.7	2204329000	O-RING 87		1
1.9.2.8	8107367000	LOCKING RING 85		1
1.9.3		WATER PISTON ASSEMBLY	HPW1600	2
1.9.3.1	0409010948	WATER PISTON	22	2
1.9.3.2	2204042000	O-RING 42		2
5	8307565000	RUBBER CUSHION	40/30-M8	4
6	0400070611	MOUNTING PLATE	HPW	1

HIGH PRESSURE PUMP HPW 1600/15-140-(LS)

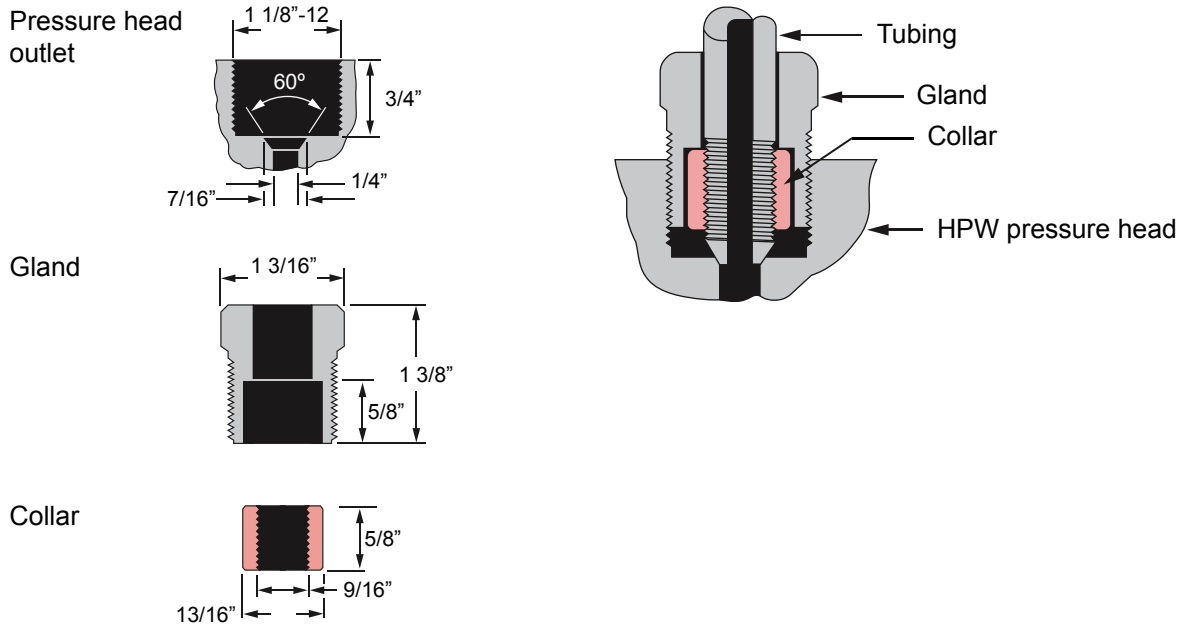
REPAIR KITS

SEAL KIT V100102600		HPW 1600/15-140	DETAILS	QUANTITY
1.3.3	2204094000	O-RING 21	P/T BLOCK, ASSEMBLY	2
1.4.3	2109012040	SEAL ASSEMBLY	PRESSURE HEAD ASSEMBLY	2
	2109012039	SEAL 17		2
	2204053950	O-RING 11		2
1.4.4	2204324000	O-RING 84	PRESSURE HEAD ASSEMBLY	2
1.4.6	2204234000	O-RING 69	DISCHARGE VALVE ASSEMBLY	2
1.5.3	2109010986	ROD SEAL ASSEMBLY 22	WATER CYLINDER ASSEMBLY	2
1.5.4.4	2109012038	O-RING 36	INTAKE VALVE ASSEMBLY	2
1.6.2	2104501500	WATER PISTON SEAL, 1T	SEALING FLANGE ASSEMBLY	2
1.6.3	2104501000	WATER PISTON SEAL, 2T		2
1.6.4	2204324000	O-RING 84		2
1.6.6	2109010986	ROD SEAL ASSEMBLY 22		4
	2109010984	SEAL 22		4
	2109010985	SUPPORT RING 25		4
	2204359700	O-RING 26		4
1.7.3	2204149000	O-RING 27	DISCHARGE VALVE ASSEMBLY	2
1.9.1.3	2104694000	SEAL M90	HYDRAULIC / WATER PISTON ASSY	1
1.9.2.7	2204329000	O-RING 87	HYDRAULIC VALVE ASSEMBLY	1

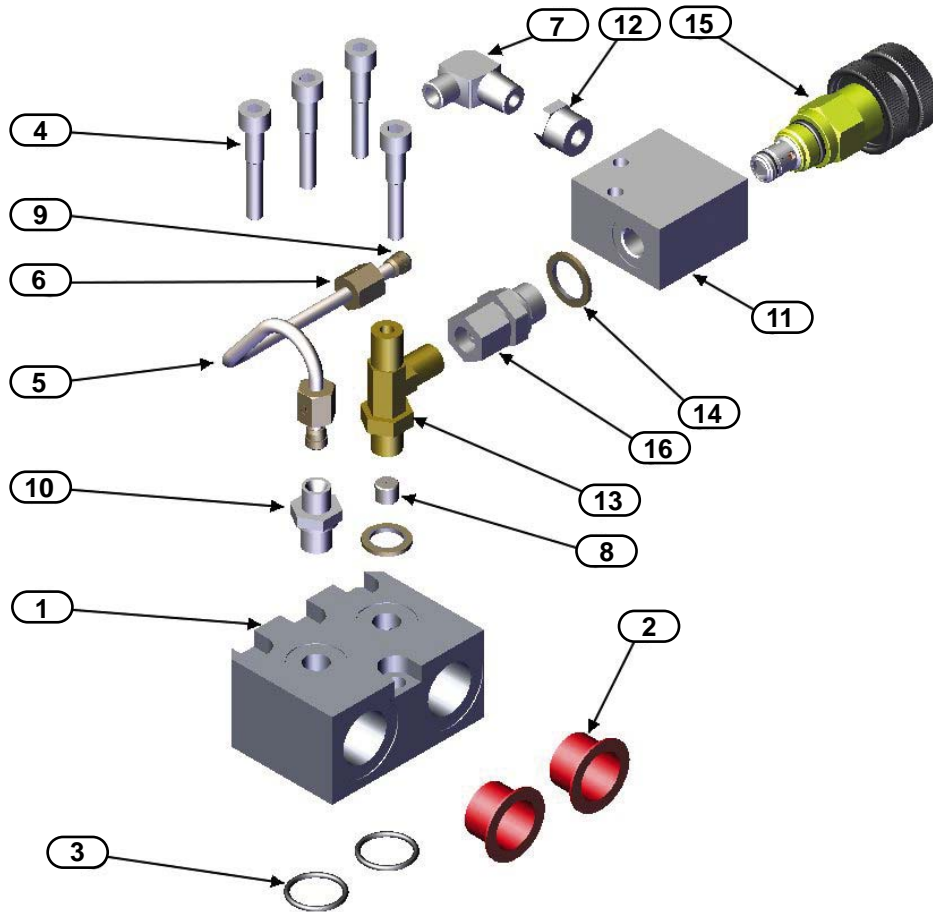
WATER VALVE KIT V100102610		HPW 1600/15-140	DETAILS	QUANTITY
1.4.5	0409012025	DISCHARGE VALVE ASSEMBLY	HPW1600	2
	0409011183	VALVE CAB D10		2
	0409011467	SPRING, PRESSURE		2
	0409011182	VALVE DISK		2
1.5.4	0409012024	INTAKE VALVE ASSEMBLY	HPW1600	2
1.5.4.1	0409011208	SPRING GUIDE D27		2
1.5.4.2	0409011209	SPRING, SUCTION		2
1.5.4.3	0409011171	VALVE DISK D26		2
1.5.4.4	2109012038	O-RING 36		2

HIGH PRESSURE OUTLET CONNECTION

High pressure tube 9/16" fitting on pressure head part 1.4.1.



PT-FLANGE 3/4 LS-PRESSURE CONTROLLER No. 0409015959 (option)



Pos	PART NO.	DESIGNATION	DETAILS	QUANTITY
	0409015959	PT-flange assembly	R3/4-AI-LS	
1	0400000613	PT-flange	R3/4	1
2	1702825000	Plug, plastic	R3/4	1
3	2204109100	O-ring	21	2
4	8500412600	Allen screw	M8x45 24Nm	4
5	8707775000	Pipe	6x1 ST37,4	0,19m
6	1701855000	Pipe union	06L M12x1,5	2
7	1701942000	Elbow fitting	06L RK1/4	1
8	1500914200	Orifice	G-1/8	1
9	1701854000	Fellure	6L	2
10	1701885000	Adapter	06L R1/4	1
11	1300551000	Body, cartridge	2/2 3/8"	1
12	1703027100	Reducer	3/8 - 1/4	1
13	1702535000	T-fitting	R1/4 u/u/u	1
14	1702185000	Seal, unit	R1/4	1
15	1300527000	Valve, cartridge	2/2 NC 25lpm	1
16	1702474900	Fitting	R3/8u-R1/4s	1

HIGH PRESSURE PUMP HPW 1600/15-140-(LS)

TECHNICAL SPECIFICATIONS

PARAMETERS		HPW 1600/15-140	
WATER POWER			
WATER FLOW	max	l/min	15
WATER PRESSURE	max	bar	1600
WATER TEMPERATURE	max	°C	70 °C
PUMPING POWER	max	kW	40
SUCTION HEAD	max	m	2
WATER FEED PRESSURE	min-max	bar	1 ...16
PRESSURE RATIO	water/hydraulic		7,87
SPEED RATIO		1/min	440
WATER PISTONS	outer diameter	mm	D 22
WATER CONNECTIONS			
PRESSURE LINE			1 1/8" - 12 Pipe OD 9/16"
SUCTION / FEED LINE			BSP 3/4" Nut 1 1/8" - 12
SUCTION HOSE	recommendation		3/4"
WATER FILTER	min.	mesh	80
HYDRAULIC CONNECTIONS			
PRESSURE LINE		P	BSP 3/4" (BSP 1")
RETURN LINE		T	BSP 3/4" (BSP 1")
SERVICE LINE		S	BSP 1/4"
HYDRAULIC FLUID REQUIREMENTS			
VISCOSITY		cSt	10 - 200 / optimal 25 - 35
TEMPERATURE		°C	max. 70
FILTER RATIO	recommendation	um	min. 25
COOLING CAPACITY	recommendation	kW	5
HYDRAULIC POWER REQUIREMENTS			
HYDRAULIC FLUID FLOW	max.	l/min	140
OPERATING PRESSURE	Δp	bar	230
MAXIMUM PRESSURE		bar	230
IDLE RUN PRESSURE		bar	10
RETURN LINE PRESSURE	max	bar	230
WEIGHT		kg	36
PRESSURE GAUGE			OPTIONAL
WATER PRESSURE UNLOADER			NOT AVAILABLE
LS-VALVE	LS		OPTIONAL
PT-FLANGE 3/4 LS-PRESSURE CONTROLLER			OPTIONAL