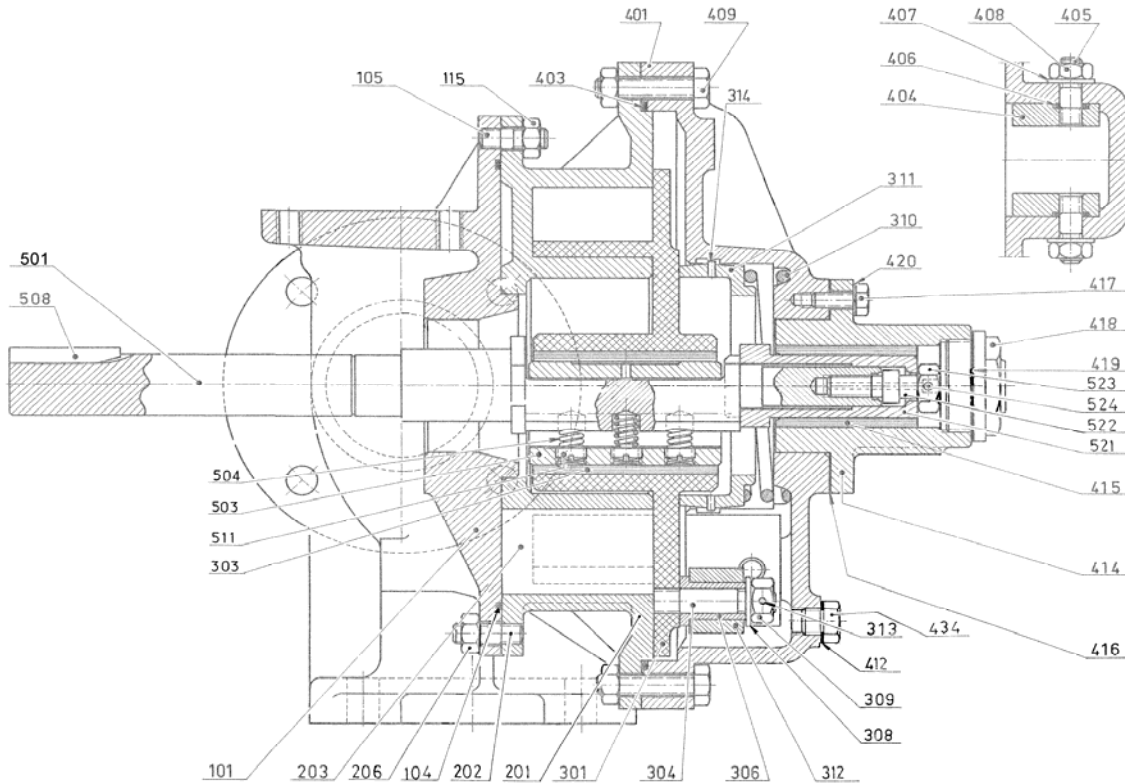


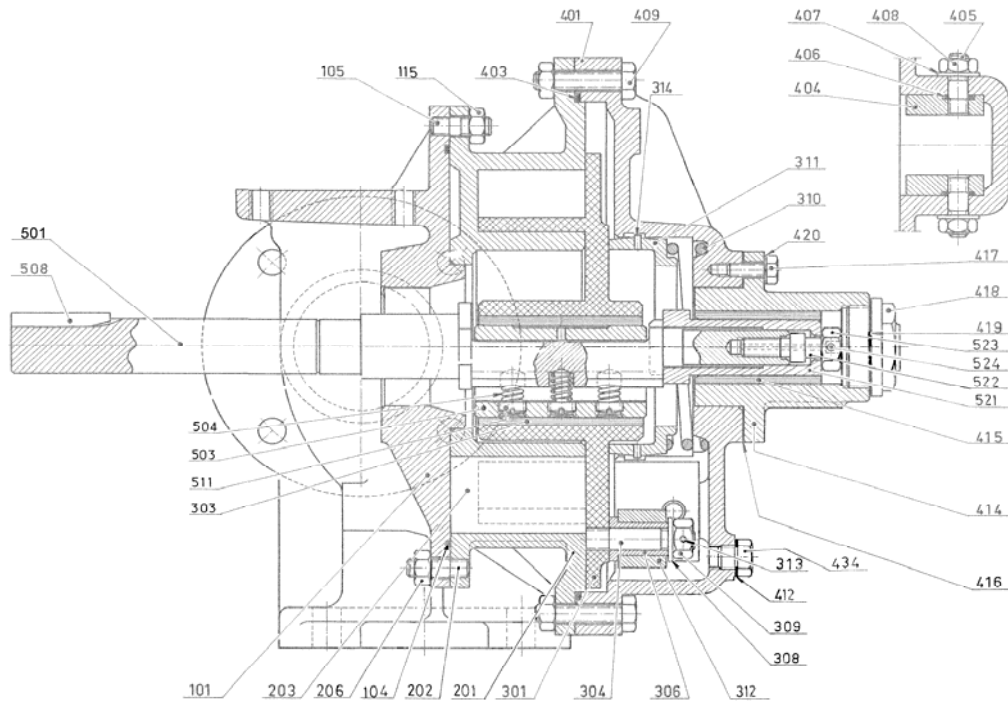
(See Instructions 1003-H00 for Installation, Operation and Maintenance)

Section	1003
Effective	October 2005
Replaces	July 2004



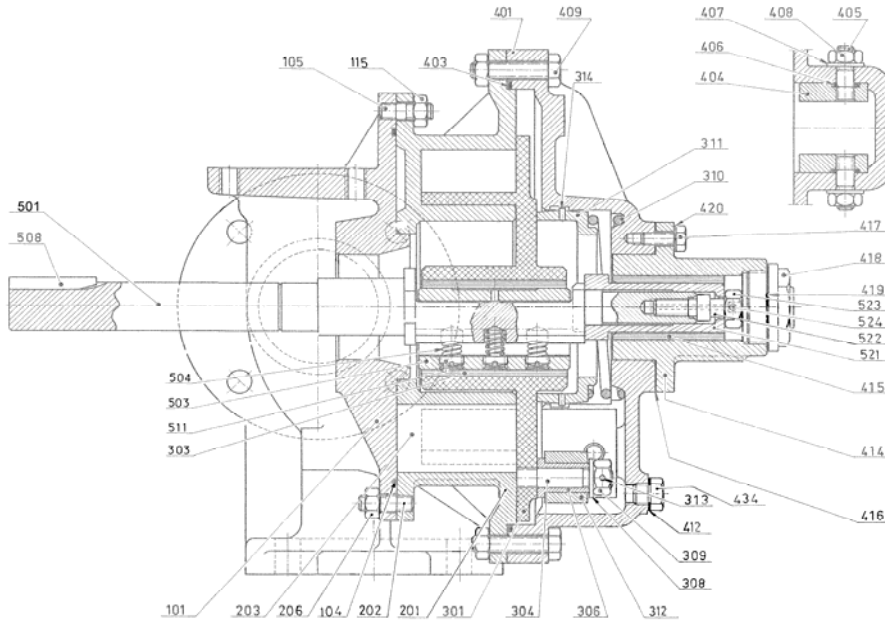
Reference			Description	Quantity		ARTICLE CODE			Wear parts
Ass.	Part	Available		Order	In Pump	AL O	AL I	AL E	
98		◆	Full set of screws	1		300599.00			
	105		Stud		(5)				
	115		Nut		(5)				
	202		Stud		(5)				
	206		Nut		(5)				
	409		Screw		(8)				
	409a		Nut		(8)				
	417		Screw		(4)				
	420		Washer		(4)				
98		◆	Full set of screws (Heating jacket)	1		300627.00			
	105		Stud		(5)				
	115		Nut		(5)				
	202		Stud		(5)				
	206		Nut		(5)				
	409		Screw		(7)				
	409a		Nut		(7)				
	417		Screw		(4)				
	420		Washer		(4)				
	424		Stud		(1)				
	436		Gasket		(1)				
99		◆	Full set of seals - FKM	1		300601.00			
99		◆	Full set of seals - FKM (Heating jacket)	1		304057.00			
99		◆	Full set of seals - EPDM	1		300602.00			
	104		Gasket		(1)				
	403		Front cover seal		(1)				
	406		Seal		(2)				
	416		Gasket		(1)				
	419		Seal		(1)				
	1002		Seal		(1)				

(◆) Sets of parts or (▲) parts available to order



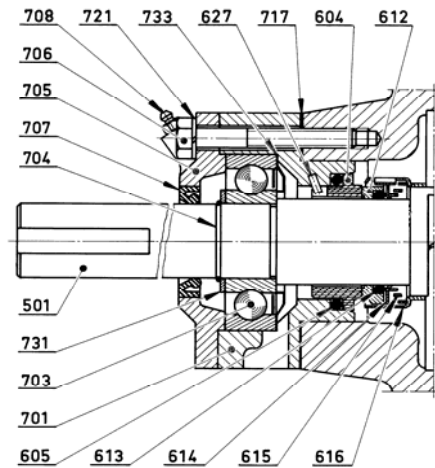
Reference			Description	Quantity		ARTICLE CODE			Wear parts
Ass.	Part	Available		Order	In Pump	AL O	AL I	AL E	
100	101 105 115 817 813 814 815	◆	Main body, complete Main body Stud Nut Mounting kit Nut Stud Washer	1	(1) (5) (5)	300591.00	300612.00		
		◆		1	(2) (2) (2)		300693.00		
200	201 202 203 206	◆	Cylinder, complete Cylinder Stud Bulkhead Nut	1	(1) (5)	300592.00	300613.00	300621.00	●
		▲		1	(5)	201597	201598	201599	
300 300 300 300	301 303 303 315 398 304 308 309 307 306 312 313	◆	Complete piston - Bronze bushing	1		300593.00	300622.00		●
		◆	Complete piston - Carbon bushing	1		307653.00	308252.00		●
		◆	Complete piston (drilled) - Bronze bushing	1		310780.00	310781.00		●
		◆	Complete piston (drilled) - Carbon bushing	1		310784.00	310786.00		●
	301		Piston		(1)				
	303	▲	Piston bushing (bronze)	1			203595		●
	303	▲	Piston bushing (carbon)	1			211657		●
	315		Screw (for drilled piston)		(1)				
	398	◆	Slide block, complete	1		300594.00	300615.00		
	304		Block pin		(1)				
	308		Washer		(1)				
	309		Nut		(1)				
	307	◆	Slide block + pin + bushing	1		300694.00	300695.00		●
	306		Bushing		(1)				
	312		Slide block		(1)				
	313		Pin		(1)				
399	310 311 314	◆	Guide block, complete Spring Piston rear - support Pin	1	(1) (1) (2)	300595.00	300616.00		

(◆) Sets of parts or (▲) parts available to order



Reference			Description	Quantity		ARTICLE CODE			Wear parts
Ass.	Part	Available		Order	In Pump	AL O	AL I	AL E	
400		◆	Complete front cover - FKM	1		300706.00	300707.00		
460		◆	Complete front cover with jacket	1		304049.00	304050.00		
400		◆	Complete front cover - EPDM	1		300704.00	300705.00		
	401		Front cover		(1)				
	461		Jacketed front cover		(1)				
	462		Jacket drain plug		(2)				
	402	◆	Front bushing set - FKM	1		300603.00	300618.00		•
	402	◆	Front bushing set - PTFE encapsulated FKM	1		300608.04	304051.00		•
	402	◆	Front bushing set - EPDM	1		300604.00	300619.00		•
	404		Guide		(2)				
	405		Stud		(2)				
	406		Seal		(2)				
	407		Washer		(2)				
	408		Nut		(2)				
	411	◆	Front cover drain plug + seal	1		300036.00	300037.00		
	412		Seal		(1)				
	434		Drain plug		(1)				
	403	▲	Front cover seal - FKM	1			200840		
	403	▲	Front cover seal - EPDM	1			200902		
413		◆	Front cover bearing complete - Bronze bushing	1		300597.00	300625.00		
413		◆	Front cover bearing complete - Carbon bushing	1		307654.00	308254.00		
	414		End-plate bearing		(1)				
	415	▲	Bearing bushing - Bronze	1			201615		•
	415	▲	Bearing bushing - Carbon	1			211658		•
	416		Gasket		(1)				
	417		Screw		(4)				
	418		Plug		(1)				
	419		Seal		(1)				
	420		Washer		(4)				
500		◆	Shaft Blocdir complete	1		312274.00	312275.00		
	501	▲	Shaft	1		219469	219470		
	503	▲	Piston bearing	1		203600	203601		•
	508	▲	Key	1			203857		
	598	◆	Bearing spring complete	1			300598.00		
	504		Spring		(3)				
	511		Screw		(3)				
	515	◆	Complete sleeve	1		300716.00	300717.00		•
	521		Sleeve		(1)				
	522		Screw		(1)				
	523		Nut		(1)				
	524		Pin		(1)				

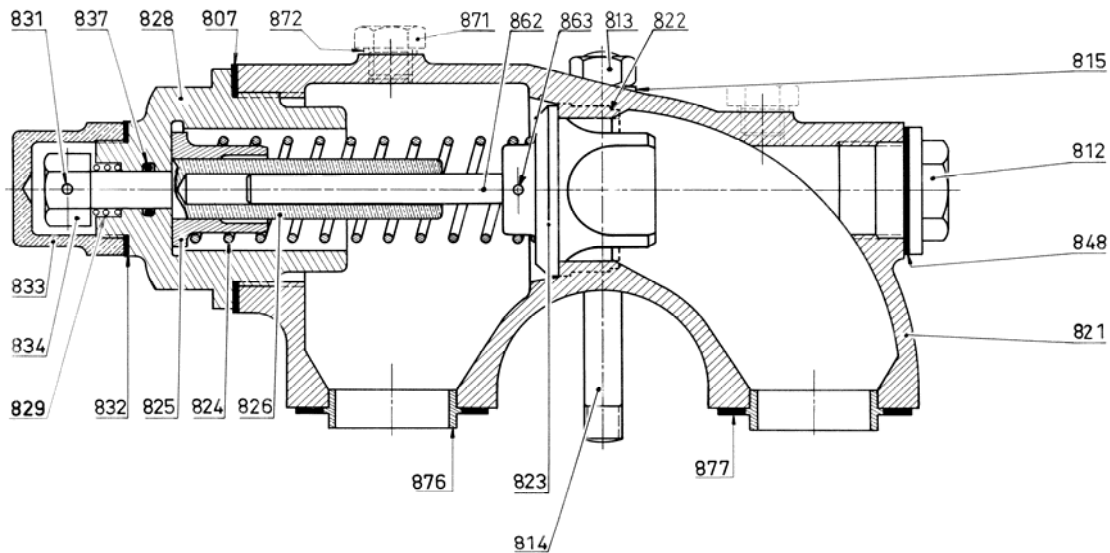
(◆) Sets of parts or (▲) parts available to order



Reference			Description	Quantity		ARTICLE CODE			Wear parts
Ass.	Part	Available		Order	In Pump	AL O	AL I	AL E	
600		◆	Mechanical seal - Bloccdir C/I VT	1		300639.00	300639.00	300639.00	●
600		◆	Mechanical seal - Bloccdir B/I VT	1		300648.00	300648.00	300648.00	●
600		◆	Mechanical seal - Bloccdir F/I VT	1		300649.00	300649.00	-	●
600		◆	Mechanical seal - Bloccdir CT/CT VT	1		303333.00	303333.00	303333.00	●
600		◆	Mechanical seal - Bloccdir C/I CVT	1		307549.00	307549.00	307549.00	●
600		◆	Mechanical seal - Bloccdir B/I CVT	1		306317.00	306317.00	306317.00	●
600		◆	Mechanical seal - Bloccdir F/I CVT	1		306318.00	306318.00	-	●
600		◆	Mechanical seal - Bloccdir CT/CT CVT	1		307550.00	307550.00	307550.00	●
	610	◆	Stationary seal face complete - Bloccdir C VT	1		300722.00	300722.00	300722.00	●
	610	◆	Stationary seal face complete - Bloccdir B VT	1		300726.00	300726.00	300726.00	●
	610	◆	Stationary seal face complete - Bloccdir F VT	1		300727.00	300727.00	-	●
	610	◆	Stationary seal face complete - Bloccdir CT VT	1		303331.00	303331.00	303331.00	●
	610	◆	Stationary seal face complete - Bloccdir C CVT	1		304608.00	304608.00	304608.00	●
	610	◆	Stationary seal face complete - Bloccdir B CVT	1		304609.00	304609.00	304609.00	●
	610	◆	Stationary seal face complete - Bloccdir F CVT	1		304610.00	304610.00	-	●
	610	◆	Stationary seal face complete - Bloccdir CT CVT	1		306125.00	306125.00	306125.00	●
	604		Stationary seal face		(1)				
	605		Seal		(1)				
	697	◆	Rotating part - Bloccdir VT	1			300640.00		●
	697	◆	Rotating part - Bloccdir C VT	1			304617.00		●
	697	◆	Rotating part - Bloccdir CT VT	1			303332.00		●
	697	◆	Rotating part - Bloccdir CT CVT	1			306126.00		●
	612		Seal housing		(1)				
	613		Seal		(1)				
	614		Spring guide		(1)				
	615		Spring		(1)				
	616		Cage		(1)				
	619		Seal mounting tool (for CVT)		(1)				
698		◆	Full set of mounting screws	1			300632.00		
	706		Screw		(4)				
	721		Washer		(4)				
699		◆	Mechanical seal gasket set - FKM	1			300641.00		
699		◆	Mechanical seal gasket set - CVT	1			305356.00		
	605		Seal		(1)				
	613		Seal		(1)				
	619		Seal mounting tool (for CVT)		(1)				
700		◆	Ball bearings complete	1		300631.00	300635.00		
	627	▲	Pin	1			200139		
	701		Bearing cage		(1)				
	703	▲	Ball bearing	1			200555		●
	705		Bearing cover		(1)				
	706		Screw		(4)				
	708		Grease nipple		(1)				
	721		Washer		(4)				
	797	◆	Ball bearing washers and gasket set	1		300719.00	300720.00		
	704		Ring		(1)				
	707		Lip seal		(1)				
	717		Cage seal		(1)				
	731		Washer		(1)				
	733		Protection circlip		(1)				

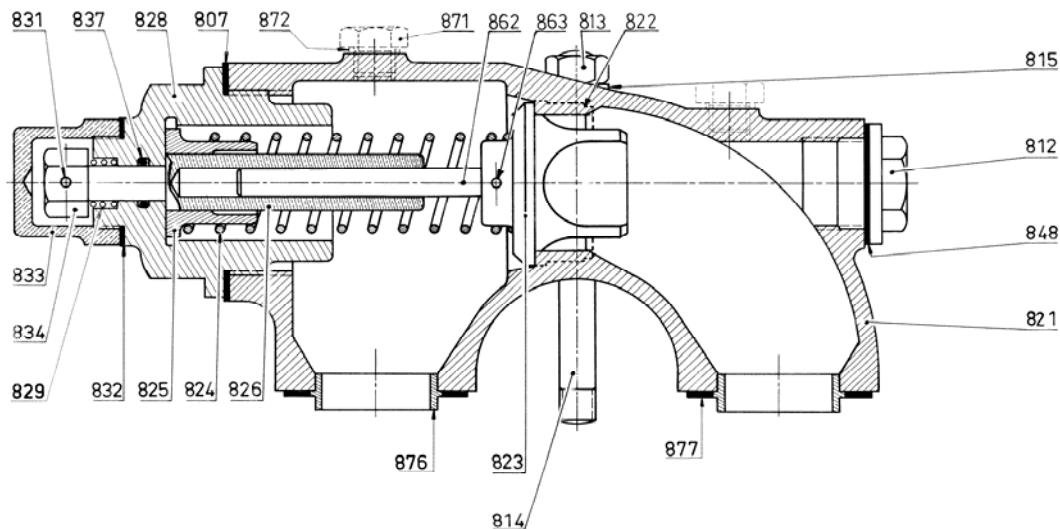
C - Carbon : F - Cast Iron : B - Bronze : CT - Tungsten Carbide : VT - FKM : CVT - PTFE encapsulated FKM

(◆) Sets of parts or (▲) parts available to order



Reference			Description	Quantity		ARTICLE CODE			Wear parts
Ass.	Part	Available		Order	In Pump	AL O	AL I	AL E	
820		◆	Bypass C/3 complete - FKM	1		306696.00	306741.00		
820		◆	Bypass C/3 complete - EPDM	1		306697.00	306742.00		
820		◆	Bypass C/5 complete - FKM	1		306701.00	306747.00		
820		◆	Bypass C/5 complete - EPDM	1		306702.00	306748.00		
	870	◆	Bypass body complete	1		300748.00	301672.00		
	812		Plug		(1)				
	821		Bypass body		(1)				
	822		Seat (only available constructions I & E)		(1)				
	848		Seal		(1)				
	871		Plug (only available constructions I & E)		(2)				
	872		Seal (only available constructions I & E)		(2)				
	824	▲	Spring n°3	1			201196		
	824	▲	Spring n°5	1			206244		
	869	◆	Bypass cap and gasket	1			300740.00		
	832		Seal		(1)				
	833		Cap		(1)				
	878	◆	Centering set	1			300739.00		
	876		Centering piece		(2)				
	877		Centering gasket		(2)				
	897	◆	Adjusting screw/valve set - FKM	1		306682.00	306729.00		•
	897	◆	Adjusting screw/valve set - clapet FKM R.5	1		306703.00	306766.00		•
	897	◆	Adjusting screw/valve set - EPDM	1		306683.00	306730.00		•
	897	◆	Adjusting screw/valve set - EPDM R.5	1		306704.00	306767.00		•
	807		Seal		(1)				
	825		Spring guide		(1)				
	826		Adjusting screw		(1)				
	828		Nut		(1)				
	829		Spring		(1)				
	831		Pin		(1)				
	834		Adjustment nut		(1)				
	837		Seal		(1)				
	864	◆	Complete valve	1		302809.00	302810.00		
	823		Compensated valve		(1)				
	862		Valve guide rod		(1)				
	863		Valve securing pin		(1)				
	899	◆	Bypass gasket set - FKM	1			300664.00		
	899	◆	Bypass gasket set - EPDM	1			300663.00		
	807		Seal		(1)				
	829		Spring		(1)				
	831		Pin		(1)				
	832		Seal		(1)				
	837		Seal		(1)				
	846		Seal		(1)				
	848		Seal		(1)				
	877		Centering gasket		(2)				

(◆) Sets of parts or (▲) parts available to order



Reference			Description	Quantity		ARTICLE CODE			Wear parts
Ass.	Part	Available		Order	In Pump	AL O	AL I	AL E	
VARIATIONS									
COMPLETE COMPENSATED DOUBLE BYPASS									
The body is different to the standard compensated bypass. The other parts are the same but doubled									
820a		◆	Double bypass C/3 complete - FKM	1		306711.00	306756.00		
820a		◆	Double bypass C/3 complete - EPDM	1		306712.00	306757.00		
820a		◆	Double bypass C/5 complete - FKM	1		306717.00	306762.00		
820a		◆	Double bypass C/5 complete - EPDM	1		306718.00	306763.00		
	870a	◆	Double bypass body complete	1		300753.00	301673.00		
	821a		Double bypass body		(1)				
849		◆	Complete stirrup	1		301649.01			
	852		Stirrup		(1)				
	853		Stud		(2)				
	854		Plug		(2)				
	855		Seal		(2)				
To mount a bypass in place of a stirrup will require :									
	817	◆	Mounting kit	1		300693.00			
	813		Nut		(2)				
	814		Stud		(2)				
	815		Washer		(2)				

(◆) Sets of parts or (▲) parts available to order

Keep this parts lists with Installation, Operation and Maintenance Instructions

To order the required spare parts, indicate the appropriate CUM numbers



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