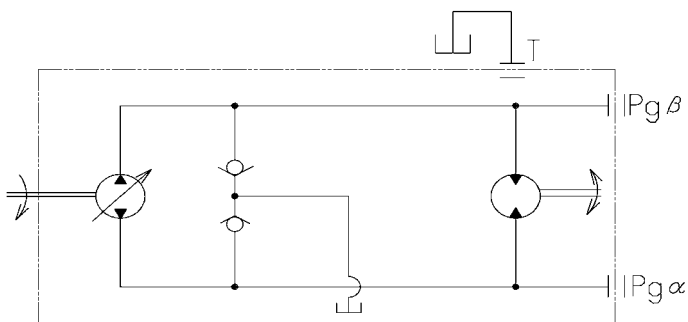


MODEL:HVFD10F - N15

SPECIFICATIONS			
DISPLACEMENT	PUMP (VARIABLE)	cm ³ /rev	10.2
	MOTOR (FIX)	cm ³ /rev	10.2
TRUNNION LEVER ANGLE		DEG	0 ~ ± 15.0
MAX. PRESSURE		MPa	14.7
INSTANTANEOUS MAX.PRESSURE (PEAK PRESSURE)		MPa	20.6
DIRECTION OF ROTATION (VIEW FROM SHAFT END)			BOTH DIRECTIONS
MAX. INPUT SPEED		rpm	3000
MAX. OUTPUT SPEED	(THEORETICAL)	rpm	0 ~ 3000
CORNER HORSE POWER (at MAX INPUT SPEED)	(THEORETICAL)	KW (PS)	7.5 (10.2)
CHARGE PUMP DISPLACEMENT		cm ³ /rev	————
WEIGHT		kgf	6.5
TYPE			SHOE-LESS
NEUTRAL METHOD			N/A (OPTION:ORIFICE)
CHARGE PUMP			N/A (NOTE1)
CHARGE CIRCUIT RELIEF VALVE			N/A
HI-PRESSURE RELIEF VALVE			N/A
UNLOAD VALVE			N/A
TANK			AVAILABLE
DISTANCE BETWEEN PUMP AND MOTOR CENTER	U-TYPE	mm	75



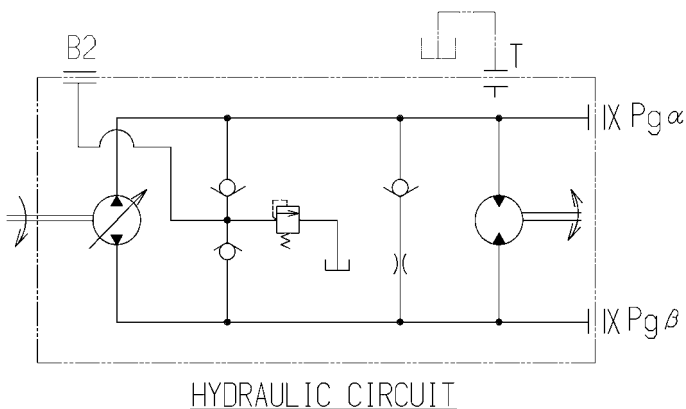
HYDRAULIC CIRCUIT



MODEL:HVFD10F - N18

SPECIFICATIONS			
DISPLACEMENT	PUMP (VARIABLE)	cm ³ /rev	10.2
	MOTOR (FIX)	cm ³ /rev	10.2
TRUNNION LEVER ANGELE		DEG	0 ~ ± 15.0
MAX. PRESSURE		MPa	17.7
INSTANTANEOUS MAX.PRESSURE (PEAK PRESSURE)		MPa	22.6
DIRECTION OF ROTATION (VIEW FROM SHAFT END)			BOTH DIRECTIONS
MAX. INPUT SPEED		rpm	3000
MAX. OUTPUT SPEED	(THEORETICAL)	rpm	0 ~ 3000
CORNER HORSE POWER (at MAX INPUT SPEED)	(THEORETICAL)	KW (PS)	7.5 (10.2)
CHARGE PUMP DISPLACEMENT		cm ³ /rev	_____
WEIGHT		kgf	6.5
TYPE			SHOE-LESS
NEUTRAL METHOD			N/A (OPTION:ORIFICE)
CHARGE PUMP			N/A (NOTE1)
CHARGE CIRCUIT RELIEF VALVE			AVAILABLE
HIGH PRESSURE RELIEF VALVE			N/A
UNLOAD VALVE			N/A
TANK			N/A
DISTANCE BETWEEN PUMP AND MOTOR CENTER	U-TYPE	mm	75

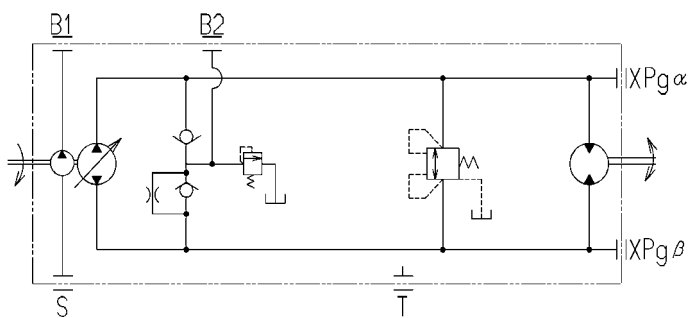
NOTE1 On the side of the mother machine establishment necessary (DISPLACEMENT 3cm³/rev)



MODEL:HVFD21F - R18

SPECIFICATIONS			
DISPLACEMENT	PUMP (VARIABLE)	cm ³ /rev	21.5
	MOTOR (FIX)	cm ³ /rev	21.5
TRUNNION LEVER ANGELE		DEG	0 ~ ± 21.75
MAX. PRESSURE		MPa	17.7
INSTANTANEOUS MAX.PRESSURE (PEAK PRESSURE)		MPa	22.6
DIRECTION OF ROTATION (VIEW FROM SHAFT END)			CLOCKWISE or COUNTER CLOCKWISE
MAX. INPUT SPEED		rpm	3600
MAX. OUTPUT SPEED	(THEORETICAL)	rpm	0 ~ 3600
CORNER HORSE POWER (at MAX INPUT SPEED)	(THEORETICAL)	KW (PS)	22.8 (31.0)
CHARGE PUMP DISPLACEMENT		cm ³ /rev	4.9
WEIGHT		kgf	16.5
TYPE			SHOE-LESS
NEUTRAL METHOD			ORIFICE (OPTION: NEUTRAL VALVE)
CHARGE PUMP			N/A (NOTE1) (OPTION: AVAILABLE)
CHARGE CIRCUIT RELIEF VALVE			AVAILABLE
HIGH PRESSURE RELIEF VALVE			AVAILABLE
UNLOAD VALVE			N/A (OPTION: AVAILABLE)
TANK			N/A
DISTANCE BETWEEN PUMP AND MOTOR CENTER	U-TYPE	mm	85

NOTE1 On the side of the mother machine establishment necessary (DISPLACEMENT 4.9 cm³/rev)



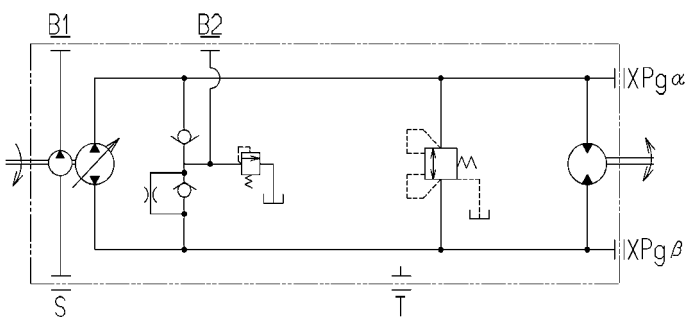
HYDRAULIC CIRCUIT



MODEL:HVFD21F - R23

SPECIFICATIONS			
DISPLACEMENT	PUMP (VARIABLE)	cm ³ /rev	21.5
	MOTOR (FIX)	cm ³ /rev	21.5
TRUNNION LEVER ANGELE		DEG	0 ~ ± 21.75
MAX. PRESSURE		MPa	22.6
INSTANTANEOUS MAX.PRESSURE (PEAK PRESSURE)		MPa	24.5
DIRECTION OF ROTATION (VIEW FROM SHAFT END)			CLOCKWISE or COUNTER CLOCKWISE
MAX. INPUT SPEED		rpm	3600
MAX. OUTPUT SPEED	(THEORETICAL)	rpm	0 ~ 3600
CORNER HORSE POWER (at MAX INPUT SPEED)	(THEORETICAL)	KW (PS)	29.1 (39.6)
CHARGE PUMP DISPLACEMENT		cm ³ /rev	4.9
WEIGHT		kgf	16.5
TYPE			SHOE-LESS
NEUTRAL METHOD			ORIFICE (OPTION: NEUTRAL VALVE)
CHARGE PUMP			N/A (NOTE1) (OPTION: AVAILABLE)
CHARGE CIRCUIT RELIEF VALVE			AVAILABLE
HIGH PRESSURE RELIEF VALVE			AVAILABLE
UNLOAD VALVE			N/A (OPTION: AVAILABLE)
TANK			N/A
DISTANCE BETWEEN PUMP AND MOTOR CENTER	U-TYPE	mm	85

NOTE1 On the side of the mother machine establishment necessary (DISPLACEMENT 4.9cm³/rev)



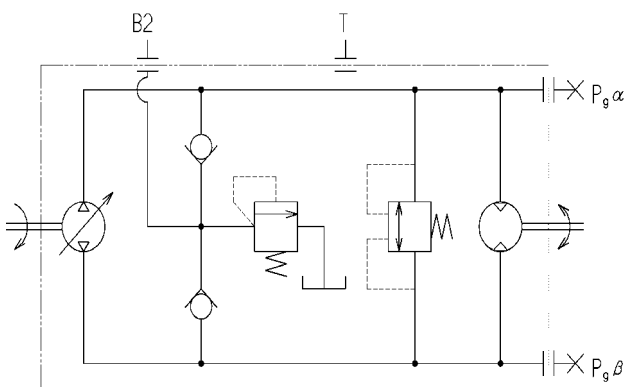
HYDRAULIC CIRCUIT



MODEL:HVFD23F - R35

SPECIFICATIONS			
DISPLACEMENT	PUMP (VARIABLE)	cm ³ /rev	23.4
	MOTOR (FIX)	cm ³ /rev	23.4
TRUNNION LEVER ANGELE		DEG	0 ~ ± 18.0
MAX. PRESSURE		MPa	34.3
INSTANTANEOUS MAX.PRESSURE (PEAK PRESSURE)		MPa	41.2
DIRECTION OF ROTATION (VIEW FROM SHAFT END)			CLOCKWISE or COUNTER CLOCKWISE
MAX. INPUT SPEED		rpm	3400
MAX. OUTPUT SPEED	(THEORETICAL)	rpm	0 ~ 3400
CORNER HORSE POWER (at MAX INPUT SPEED)	(THEORETICAL)	KW (PS)	45.5 (61.9)
CHARGE PUMP DISPLACEMENT		cm ³ /rev	6.2
WEIGHT		kgf	22.5
TYPE			SHOE-TYPE
NEUTRAL METHOD			ORIFICE (OPTION: MOVABLE THRUST PLATE)
CHARGE PUMP			N/A (NOTE1) (OPTION: AVAILABLE)
CHARGE CIRCUIT RELIEF VALVE			AVAILABLE
HIGH PRESSURE RELIEF VALVE			AVAILABLE
UNLOAD VALVE			N/A
SERVO REGULATOR (MANUAL CONTROL)			N/A (OPTION: AVAILABLE)
DISTANCE BETWEEN PUMP AND MOTOR CENTER	U-TYPE	mm	105

NOTE1 On the side of the mother machine establishment necessary (DISPLACEMENT 6.2 cm³/rev)



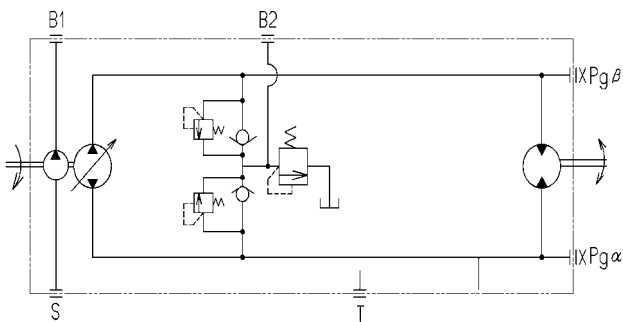
HYDRAULIC CIRCUIT



MODEL: HVFD28F - R38

SPECIFICATIONS			
DISPLACEMENT	PUMP (VARIABLE)	cm ³ /rev	28.1
	MOTOR (FIX)	cm ³ /rev	28.1
TRUNNION LEVER ANGELE		DEG	0 ~ ± 17.8
MAX. PRESSURE		MPa	37.3
INSTANTANEOUS MAX.PRESSURE (PEAK PRESSURE)		MPa	42.2
DIRECTION OF ROTATION (VIEW FROM SHAFT END)			CLOCKWISE or COUNTER CLOCKWISE
MAX. INPUT SPEED		rpm	3000
MAX. OUTPUT SPEED	(THEORETICAL)	rpm	0 ~ 3000
CORNER HORSE POWER (at MAX INPUT SPEED)	(THEORETICAL)	KW (PS)	52.4 (71.2)
CHARGE PUMP DISPLACEMENT		cm ³ /rev	6.2
WEIGHT		kgf	23.5
TYPE			SHOE-TYPE
NEUTRAL METHOD			ORIFICE (OPTION: MOVABLE THRUST PLATE)
CHARGE PUMP			N/A (NOTE1) (OPTION: AVAILABLE)
CHARGE CIRCUIT RELIEF VALVE			AVAILABLE
HIGH PRESSURE RELIEF VALVE			AVAILABLE
UNLOAD VALVE			N/A
SERVO REGULATOR (MANUAL CONTROL)			N/A (OPTION: AVAILABLE)
DISTANCE BETWEEN PUMP AND MOTOR CENTER	U-TYPE	mm	105

NOTE1 On the side of the mother machine establishment necessary (DISPLACEMENT 6.2 cm³/rev)



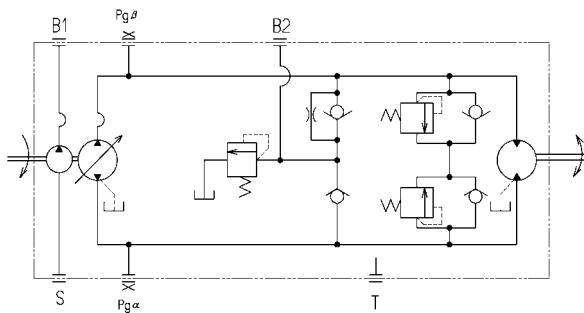
HYDRAULIC CIRCUIT



MODEL:HVFD37F - R35

SPECIFICATIONS			
DISPLACEMENT	PUMP (VARIABLE)	cm ³ /rev	37.0
	MOTOR (FIX)	cm ³ /rev	37.0
TRUNNION LEVER ANGELE		DEG	0 ~ ± 18.0
MAX. PRESSURE		MPa	34.3
INSTANTANEOUS MAX.PRESSURE (PEAK PRESSURE)		MPa	41.2
DIRECTION OF ROTATION (VIEW FROM SHAFT END)			CLOCKWISE or COUNTER CLOCKWISE
MAX. INPUT SPEED		rpm	3000
MAX. OUTPUT SPEED	(THEORETICAL)	rpm	0 ~ 3000
CORNER HORSE POWER (at MAX INPUT SPEED)	(THEORETICAL)	KW (PS)	63.5 (86.4)
CHARGE PUMP DISPLACEMENT		cm ³ /rev	7.5
WEIGHT		kgf	26.8
TYPE			SHOE-TYPE
NEUTRAL METHOD			ORIFICE (OPTION: MOVABLE THRUST PLATE)
CHARGE PUMP			N/A (NOTE1) (OPTION: AVAILABLE)
CHARGE CIRCUIT RELIEF VALVE			AVAILABLE
HIGH PRESSURE RELIEF VALVE			AVAILABLE
UNLOAD VALVE			N/A
SERVO REGULATOR (MANUAL CONTROL)			N/A (OPTION: AVAILABLE)
DISTANCE BETWEEN PUMP AND MOTOR CENTER	U-TYPE	mm	105

NOTE1 On the side of the mother machine establishment necessary (DISPLACEMENT 7.5 cm³/rev)



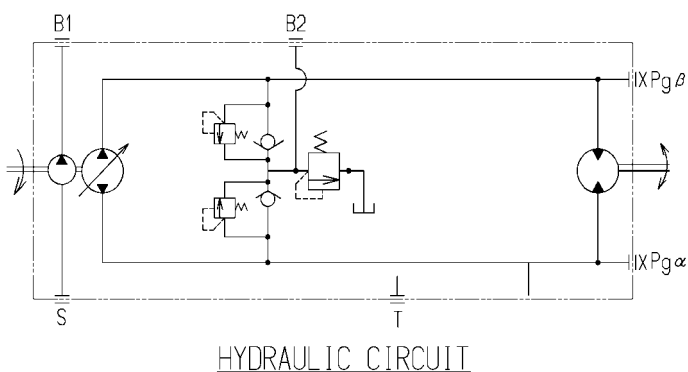
HYDRAULIC CIRCUIT



MODEL:HVFD18F - R35 - LN

SPECIFICATIONS			
DISPLACEMENT	PUMP (VARIABLE)	cm ³ /rev	18.2
	MOTOR (FIX)	cm ³ /rev	18.2
TRUNNION LEVER ANGELE		DEG	0 ~ ± 15.8
MAX. PRESSURE		MPa	34.3
INSTANTANEOUS MAX.PRESSURE (PEAK PRESSURE)		MPa	41.2
DIRECTION OF ROTATION (VIEW FROM SHAFT END)			CLOCKWISE or COUNTER CLOCKWISE
MAX. INPUT SPEED		rpm	3600
MAX. OUTPUT SPEED	(THEORETICAL)	rpm	0 ~ 3600
CORNER HORSE POWER (at MAX INPUT SPEED)	(THEORETICAL)	KW (PS)	31.3 (42.5)
CHARGE PUMP DISPLACEMENT		cm ³ /rev	4.9
WEIGHT		kgf	20
TYPE			SHOE-TYPE , LOW NOISE TYPE
NEUTRAL METHOD			ORIFICE (OPTION : MOVABLE THRUST PLATE)
CHARGE PUMP			N/A (NOTE1) (OPTION : AVAILABLE)
CHARGE CIRCUIT RELIEF VALVE			AVAILABLE
HIGH PRESSURE RELIEF VALVE			AVAILABLE
UNLOAD VALVE			N/A
SERVO REGULATOR (MANUAL CONTROL)			N/A
DISTANCE BETWEEN PUMP AND MOTOR CENTER	U-TYPE	mm	90

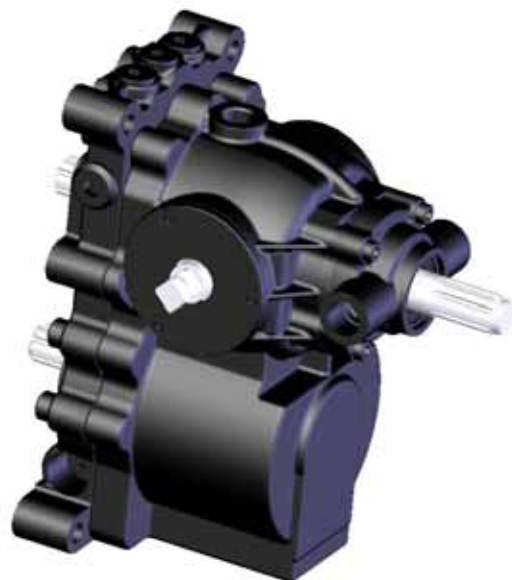
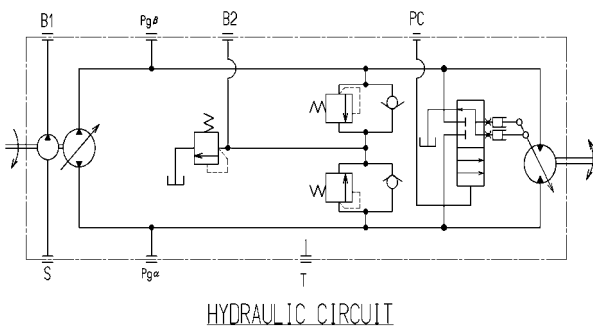
NOTE1 On the side of the mother machine establishment necessary (DISPLACEMENT 4.9 cm³/rev)



MODEL: HVFD28V37 - R38

SPECIFICATIONS			
DISPLACEMENT	PUMP (VARIABLE)	cm ³ /rev	28.1
	MOTOR (2-SPEED)	cm ³ /rev	22.0 (HI) / 37.2 (LOW)
TRUNNION LEVER ANGELE		DEG	0 ~ ±18.2
MAX. PRESSURE		MPa	37.3
MAX. PRESSURE (PEAK PRESSURE)		MPa	42.2
DIRECTION OF ROTATION (VIEW FROM SHAFT END)			CLOCKWISE or COUNTER CLOCKWISE
MAX. INPUT SPEED		rpm	2600
MAX. OUTPUT SPEED	(THEORETICAL)	rpm	0 ~ 1964 (LOW) 0 ~ 3320 (HI)
CORNER HORSE POWER (at MAX INPUT SPEED)	(THEORETICAL)	KW (PS)	45.4 (61.7)
CHARGE PUMP DISPLACEMENT		cm ³ /rev	6.2
WEIGHT		kgf	35
TYPE			SHOE-TYPE, 2-SPEED TYPE
NEUTRAL METHOD			ORIFICE (OPTION: MOVABLE THRUST PLATE)
CHARGE PUMP			N/A (NOTE1) (OPTION: AVAILABLE)
CHARGE CIRCUIT RELIEF VALVE			AVAILABLE
HIGH PRESSURE RELIEF VALVE			AVAILABLE
UNLOAD VALVE			N/A
SERVO REGULATOR (MANUAL CONTROL)			N/A (OPTION: AVAILABLE)
DISTANCE BETWEEN PUMP AND MOTOR CENTER	U-TYPE	mm	105

NOTE1 On the side of the mother machine establishment necessary (DISPLACEMENT 6.2 cm³/rev)



MODEL:HVFD37V50 - R35

SPECIFICATIONS			
DISPLACEMENT	PUMP (VARIABLE)	cm ³ /rev	37.0
	MOTOR (2-SPEED)	cm ³ /rev	29.5 (HI) / 49.3 (LOW)
TRUNNION LEVER ANGELE		DEG	0 ~ ±18.0
MAX. PRESSURE		MPa	37.3
MAX. PRESSURE (PEAK PRESSURE)		MPa	42.2
DIRECTION OF ROTATION (VIEW FROM SHAFT END)			CLOCKWISE or COUNTER CLOCKWISE
MAX. INPUT SPEED		rpm	2600
MAX. OUTPUT SPEED	(THEORETICAL)	rpm	0 ~ 1951 (LOW) 0 ~ 3261 (HI)
CORNER HORSE POWER (at MAX INPUT SPEED)	(THEORETICAL)	KW (PS)	55.1 (74.9)
CHARGE PUMP DISPLACEMENT		cm ³ /rev	9.0
WEIGHT		kgf	36
TYPE			SHOE-TYPE, 2-SPEED TYPE
NEUTRAL METHOD			ORIFICE (OPTION: MOVABLE THRUST PLATE)
CHARGE PUMP			N/A (NOTE1) (OPTION: AVAILABLE)
CHARGE CIRCUIT RELIEF VALVE			AVAILABLE
HIGH PRESSURE RELIEF VALVE			AVAILABLE
UNLOAD VALVE			N/A
SERVO REGULATOR (MANUAL CONTROL)			N/A (OPTION: AVAILABLE)
DISTANCE BETWEEN PUMP AND MOTOR CENTER	Z-TYPE	mm	102

NOTE1 On the side of the mother machine establishment necessary (DISPLACEMENT 9.0 cm³/rev)

