Eaton[®] Heavy Duty Hydrostatic Transmissions



Series 1 Model Codes



Models 33 through 76 Hydrostatic Transmissions





The following 33 digit coding system has been developed to identify standard configuration options for the Series 1 Hydrostatic Variable Displacement Pump. Use this model code to specify a pump with the desired features. All 33-digits of the code must be present to release a new product number for ordering.

1	2												25				

0.4			_ _ _ _ _
Code Position	Feature	Code	Feature Description
01,02,03	PRODUCT SERIES	ACA	HYDROSTATIC - HEAVY DUTY VARIABLE PUMP
04,05	DISPLACEMENT	33	54,34 cm3/r [3.316 in3/r] AT 15.5 DEG
04,05	DISPLACEMENT	39	63,66 cm3/r [3.885 in3/r] AT 18 DEG
04,05	DISPLACEMENT	46	75,28 cm3/r [4.594 in3/r] AT 18 DEG
04,05	DISPLACEMENT	54	89,13 cm3/r [5.439 in3/r] AT 18 DEG
04,05	DISPLACEMENT	64	105,4 cm3/r [6.431 in3/r] AT 18 DEG
04,05	DISPLACEMENT	76	124,8 cm3/r [7.616 in3/r] AT 18 DEG
06	TYPE	2	VARIABLE DISPLACEMENT PUMP
07	DESIGN TYPE	0	BALL-GUIDE (MODEL 76)
07	DESIGN TYPE	1	SERIES 1 (MODELS 33-64)
07	DESIGN TYPE	3	SERIES 1 (MODELS 33-64) AND BALL-GUIDE (MODEL 76)
08,09	INPUT SHAFT	01	[1.500] DIAMETER STRAIGHT WITH [.3750] X [2.5] SQUARE KEY (MODELS 33-64)
08,09	INPUT SHAFT	02	[1.750] DIAMETER STRAIGHT WITH [.4375] X [3.0] SQUARE KEY (MODEL 76)
08,09	INPUT SHAFT	13	13 TOOTH 8/16 PITCH SPLINE (MODEL 76)
08,09	INPUT SHAFT	14	14 TOOTH 12/24 PITCH SPLINE (MODELS 33-64)
08,09	INPUT SHAFT	19	19 TOOTH 16/32 PITCH SPLINE (MODELS 33-46)
08,09	INPUT SHAFT	20	20 TOOTH 16/32 PITCH SPLINE (MODELS 33-46)
08,09	INPUT SHAFT	21	21 TOOTH 16/32 PITCH SPLINE (MODELS 33-64)
08,09	INPUT SHAFT	23	23 TOOTH 16/32 PITCH SPLINE (MODELS 33-64)
08,09	INPUT SHAFT	24	23 TOOTH 16/32 PITCH SPLINE WITH 3/8-24 UNF HOLE (MODELS 33-54)
08,09	INPUT SHAFT	25	21 TOOTH 16/32 PITCH SPLINE WITH 3/8-24 UNF HOLE (MODELS 33-46)
08,09	INPUT SHAFT	27	27 TOOTH 16/32 PITCH SPLINE (MODEL 76)
08,09	INPUT SHAFT	30	13 TOOTH 8/16 PITCH SPLINE WITH [2.93] EXTENSION (MODELS 33-64)
08,09	INPUT SHAFT	36	21 TOOTH 16/32 PITCH SPLINE WITH M10 X 1.5 THREADED HOLE (MODELS 33-46)
08,09	INPUT SHAFT	37	23 TOOTH 16/32 PITCH SPLINE WITH M10 X 1.5 THREADED HOLE (MODELS 33-54)
08,09	INPUT SHAFT	38	27 TOOTH 16/32 PITCH SPLINE WITH [2.93] EXTENSION (MODELS 54-64)
08,09	INPUT SHAFT	39	[1.375] DIAMETER TAPERED WITH [.3750] X [1.00] SQUARE KEY (MODELS 33-64)
08,09	INPUT SHAFT	40	[1.50] DIAMETER TAPERED WITH [.3750] X [1.00] SQUARE KEY (MODELS 54-64)
08,09	INPUT SHAFT	41	[1.75] DIAMETER TAPERED WITH [.4375] X [1.00] SQUARE KEY (MODEL 76)
10	INPUT ROTATION	L	COUNTERCLOCKWISE (LEFTHAND)
10	INPUT ROTATION	R	CLOCKWISE (RIGHTHAND)
11	VALVE PLATE	0	STANDARD (V-GROOVE)
11	VALVE PLATE	1	PROPEL
12	MAIN PORTS	Α	[1.00] - CODE 61 PER SAE J518
12	MAIN PORTS	В	[1.00] - CODE 62 PER SAE J518
12	MAIN PORTS	D	[1.00] - CODE 61 PER SAE J518 WITH PORT A AND B GAGE PORTS
12	MAIN PORTS	E	[1.00] - CODE 62 PER SAE J518 WITH PORT A AND B GAGE PORTS
13	POWER LIMITER VALVE SETTING PORT A	0	NONE
13	POWER LIMITER VALVE SETTING PORT A	С	103 bar [1500 lbf/in2]
13	POWER LIMITER VALVE SETTING PORT A	D	138 bar [2000 lbf/in2]
13	POWER LIMITER VALVE SETTING PORT A	E	172 bar [2500 lbf/in2]
13	POWER LIMITER VALVE SETTING PORT A	F	207 bar [3000 lbf/in2]
13	POWER LIMITER VALVE SETTING PORT A	G	241 bar [3500 lbf/in2]
13	POWER LIMITER VALVE SETTING PORT A	H	276 bar [4000 lbf/in2]
13	POWER LIMITER VALVE SETTING PORT A	J	310 bar [4500 lbf/in2]
13	POWER LIMITER VALVE SETTING PORT A	K	345 bar [5000 lbf/in2]
13	POWER LIMITER VALVE SETTING PORT A	L	379 bar [5500 lbf/in2]
13	POWER LIMITER VALVE SETTING PORT A	М	414 bar [6000 lbf/in2]
14	POWER LIMITER VALVE SETTING PORT B	0	NONE
14	POWER LIMITER VALVE SETTING PORT B	С	103 bar [1500 lbf/in2]
14	POWER LIMITER VALVE SETTING PORT B	D	138 bar [2000 lbf/in2]





Code Position	Feature	Code	Feature Description
		_	
14	POWER LIMITER VALVE SETTING PORT B	E	172 bar [2500 lbf/in2]
14	POWER LIMITER VALVE SETTING PORT B	F	207 bar [3000 lbf/in2]
14	POWER LIMITER VALVE SETTING PORT B	G	241 bar [3500 lbf/in2]
14	POWER LIMITER VALVE SETTING PORT B	Н	276 bar [4000 lbf/in2]
14	POWER LIMITER VALVE SETTING PORT B	J	310 bar [4500 lbf/in2]
14	POWER LIMITER VALVE SETTING PORT B	K	345 bar [5000 lbf/in2]
14	POWER LIMITER VALVE SETTING PORT B	L	379 bar [5500 lbf/in2]
14	POWER LIMITER VALVE SETTING PORT B	M	414 bar [6000 lbf/in2]
15,16	CONTROL	EA	MOOG CONTROLLER
15,16	CONTROL	EJ	ELECTRONIC PROPORTIONAL CONTROL 12 VOLT DC WITHOUT ELECTRONIC DRIVER
15,16	CONTROL	EK	ELECTRONIC PROPORTIONAL CONTROL 24 VOLT DC WITHOUT ELECTRONIC DRIVER
15,16	CONTROL	EL	ELECTRONIC PROPORTIONAL CONTROL 12 AND 24 VOLT DC AND ELECTRONIC DRIVER WITH 1 TO 6 VOLT POTENTIOMETRIC COMMAND INPUT
15,16	CONTROL	EN	ELECTRONIC PROPORTIONAL CONTROL 12 AND 24 VOLT DC AND ELECTRONIC DRIVER WITH +/-20 mA COMMAND INPUT
15,16	CONTROL	ET	ELECTRONIC PROPORTIONAL CONTROL 12 AND 24 VOLT DC AND ELECTRONIC DRIVER WITH +/- 100 mA COMMAND INPUT
15,16	CONTROL	EV	ELECTRONIC PROPORTIONAL CONTROL 24 VOLT DC AND ELECTRONIC DRIVER WITH +/ - 100 mA COMMAND INPUT AND 1.0625-12 UN-2A CASE DRAIN PORT WITH STEEL HEX
15,16	CONTROL	Пν	PLUG HVDDAIII IC DEMOTE 1 4 14 1 har [20 205 lhf/in2]
		НА	HYDRAULIC REMOTE 1,4-14,1 bar [20-205 lbf/in2]
15,16 15,16	CONTROL CONTROL	HB HC	HYDRAULIC REMOTE 1,4-14,1 bar [20-205 lbf/in2] WITH WIDE BAND NEUTRAL HYDRAULIC REMOTE 3,1-14,5 bar [45-210 lbf/in2]
		HD	, , ,
15,16	CONTROL	HF	HYDRAULIC REMOTE 4,5-20,0 bar [65-290 lbf/in2]
15,16	CONTROL		HYDRUALIC REMOTE 4,5-20,0 bar [65-290 lbf/in2] WITH WIDE BAND NEUTRAL
15,16	CONTROL	HG	HYDRAULIC REMOTE 4,5-20,0 bar [65-290 lbf/in2] WITH 12VDC (NC) DESTROKE VALVE (NON MANIFOLD) WITH ELECTRICAL CONNECTOR (MALE ONLY) PER DIN 43650
15,16	CONTROL	HH	HYDRAULIC REMOTE 11,0-32,4 bar [160-470 lbf/in2]
15,16	CONTROL	HJ	HYDRAULIC REMOTE 3,1-14,5 bar [45-210 lbf/in2] WITH WIDE BAND NEUTRAL
15,16	CONTROL	MA	MANUAL MITH MIDE DAND NEUTDAL AND 2/4 1CHA DILIC IN NEUTDAL LOCKOUT. DODT
15,16	CONTROL	MB	MANUAL WITH WIDE BAND NEUTRAL AND 3/4-16UN PLUG IN NEUTRAL LOCKOUT PORT
15,16	CONTROL	MC	MANUAL WITH WIDE BAND NEUTRAL
15,16	CONTROL	ME	MANUAL WITH NEUTRAL DETENT
15,16	CONTROL	MF	MANUAL WITH INCHING VALVE
15,16	CONTROL	MG	MANUAL WITH INCHING VALVE AND NEUTRAL LOCKOUT SWITCH (NC)
15,16	CONTROL	MH	MANUAL WITH INCHING VALVE AND NEUTRAL DETENT
15,16	CONTROL	MJ	MANUAL WITH DESTROKE VALVE (MANIFOLD) 12VDC (NO) WITH 3 PIN WEATHERPACK CONNECTOR
15,16	CONTROL	MM	MANUAL WITH NEUTRAL LOCKOUT SWITCH (NO) AND DESTROKE VALVE (MANIFOLD) 12VDC WITH 2 PIN WEATHER PACK CONNECTOR
15,16	CONTROL	MT	MANUAL WITH WIDE BAND NEUTRAL AND INCHING VALVE WITH SEAL
15,16 15,16	CONTROL CONTROL	MU MW	MANUAL WITH WIDE BAND NEUTRAL, INCHING VALVE WITH SEAL AND NEUTRAL DETENT MANUAL WITH DESTROKE VALVE (MANIFOLD) 12VDC (NO) WITH 2 PIN WEATHERPACK
	001/700/		CONNECTOR
15,16 15,16	CONTROL CONTROL	MZ NA	MANUAL WITH NEUTRAL LOCKOUT SWITCH (NC) WITH PACKARD 2 PIN CONNECTOR MANUAL WITH DESTROKE VALVE (MANIFOLD) 12VDC (NO) 3 PIN WEATHERPACK CONNECTOR AND NEUTRAL LOCKOUT SWITCH (NC) WITH PACKARD 2 PIN CONNECTOR
15,16	CONTROL	NB	MANUAL WITH DESTROKE VALVE (MANIFOLD) 24VDC (NO) 2 PIN WEATHERPACK CONNECTOR
15,16	CONTROL	NC	MANUAL WITH WIDE BAND NEUTRAL, INCHING VALVE WITH SEAL AND NEUTRAL LOCKOUT
15,16	CONTROL	ND	SWITCH (NC) WITH PACKARD 2 PIN CONNECTOR MANUAL WITH DESTROKE VALVE (MANIFOLD) 12VDC (NO) WITH 2 PIN WEATHERPACK
15,16	CONTROL	NG	CONNECTOR WITH NEUTRAL LOCKOUT SWITCH (NC) WITH PACKARD 2 PIN CONNECTOR MANUAL WITH NEUTRAL LOCKOUT SWITCH (NC) AND DESTROKE VALVE (MANIFOLD) 12VDC (NC) WITH 2 PIN WEATHERPACK CONNECTOR
15,16	CONTROL	NK	MANUAL WITH WIDE BAND NEUTRAL, INCHING VALVE WITH SEAL AND NEUTRAL LOCKOUT SWITCH (NO)
15,16	CONTROL	NL	MANUAL WITH DESTROKE VALVE WITH DIODE (MANIFOLD) 12VDC (NO) WITH 2 PIN METRI- PACK CONNECTOR
15,16	CONTROL	NM	MANUAL WITH NEUTRAL LOCKOUT SWITCH (NO) WITH 2 PIN WEATHERPACK CONNECTOR, ACCOUSTICAL ALARM IS INITIATED WHEN CONTROL LEVER IS ROTATED CW
15,16	CONTROL	NN	MANUAL WITH NEUTRAL LOCKOUT SWITCH (NO) WITH 2 PIN WEATHERPACK CONNECTOR, ACCOUSTICAL ALARM IS INITIATED WHEN CONTROL LEVER IS ROTATED CCW
15,16	CONTROL	NP	MANUAL WITH NEUTRAL LOCKOUT SWITCH (NC) AND 1.0625-12 UN-2A CASE DRAIN PORT WITH STEEL HEX PLUG
15,16	CONTROL	RD	REMOTE ELECTRIC WITH (NC) DESTROKE VALVE, (3) 12VDC WITH (1) 2 PIN AND (1) 4 PIN WEATHERPAK CONNECTORS, NO DISPLACEMENT CONTROL, WITH 0,33 [.013] CONTROL SUPPLY ORIFICE
			OUT ET OTHITOL

Series 1 Variable Pump Model Code



Code			
Position	Feature	Code	Feature Description
1 03111011	Totaluro	Out	Todalio Bosciption
15,16	CONTROL	RE	REMOTE ELECTRIC WITH (NC) DESTROKE VALVE, (3) 12VDC WITH (3) 2 PIN WEATHERPAK
,			CONNECTORS, NO DISPLACEMENT LIMITER, WITH 0,33 [.013] CONTROL SUPPLY ORIFICE
15,16	CONTROL	RF	REMOTE ELECTRIC WITH (NC) DESTROKE VALVE INCLUDING 3,58 [.141] ORIFICE, (3) 12VDC
			WITH (3) 2 PIN WEATHERPAK CONNECTORS, NO DISPLACEMENT LIMITER, WITH 0,33 [.013]
15.10	CONTROL	D.0	CONTROL SUPPLY ORIFICE
15,16	CONTROL	RG	REMOTE ELECTRIC WITH (NC) DESTROKE VALVE, (3) 24VDC WITH (3) 2 PIN WEATHERPAK
15,16	CONTROL	RH	CONNECTORS, NO DISPLACEMENT LIMITER, WITH 0,33 [.013] CONTROL SUPPLY ORIFICE REMOTE ELECTRIC WITH (NC) DESTROKE VALVE INCLUDING 3,18 [.125] ORIFICE, (3) 12VDC
10,10	OMINOL	1111	WITH (1) 2 PIN AND (1) 4 PIN WEATHERPAK CONNECTORS, NO DISPLACEMENT LIMITER, WITH
			0,33 [.013] CONTROL SUPPLY ORIFICE
17	CONTROL SUPPLY ORIFICE (P)	0	NONE
17	CONTROL SUPPLY ORIFICE (P)	Α	0,71 [.028] DIAMETER
17	CONTROL SUPPLY ORIFICE (P)	В	0,91 [.036] DIAMETER
17 17	CONTROL SUPPLY ORIFICE (P) CONTROL SUPPLY ORIFICE (P)	C D	1,12 [.044] DIAMETER 1,32 [.052] DIAMETER
17	CONTROL SUPPLY ORIFICE (P)	E	1,45 [.057] DIAMETER
17	CONTROL SUPPLY ORIFICE (P)	F	1,65 [.065] DIAMETER
17	CONTROL SUPPLY ORIFICE (P)	G	1,85 [.073] DIAMETER
17	CONTROL SUPPLY ORIFICE (P)	Н	2,39 [.094] DIAMETER
17	CONTROL SUPPLY ORIFICE (P)	J	2,59 [.102] DIAMETER
18 18	CONTROL ORIFICE - UPPER SERVO (S1) CONTROL ORIFICE - UPPER SERVO (S1)	0 A	NONE 0,71 [.028] DIAMETER
18	CONTROL ORIFICE - UPPER SERVO (S1)	В	0,91 [.036] DIAMETER
18	CONTROL ORIFICE - UPPER SERVO (S1)	C	1,12 [.044] DIAMETER
18	CONTROL ORIFICE - UPPER SERVO (S1)	D	1,32 [.052] DIAMETER
18	CONTROL ORIFICE - UPPER SERVO (S1)	Е	1,45 [.057] DIAMETER
18	CONTROL ORIFICE - UPPER SERVO (S1)	F	1,65 [.065] DIAMETER
18 18	CONTROL ORIFICE - UPPER SERVO (S1) CONTROL ORIFICE - UPPER SERVO (S1)	G	1,85 [.073] DIAMETER
18	CONTROL ORIFICE - UPPER SERVO (S1)	H J	2,39 [.094] DIAMETER 2,59 [.102] DIAMETER
19	CONTROL ORIFICE - LOWER SERVO (S2)	0	NONE
19	CONTROL ORIFICE - LOWER SERVO (S2)	A	0,71 [.028] DIAMETER
19	CONTROL ORIFICE - LOWER SERVO (S2)	В	0,91 [.036] DIAMETER
19	CONTROL ORIFICE - LOWER SERVO (S2)	С	1,12 [.044] DIAMETER
19 19	CONTROL ORIFICE - LOWER SERVO (S2) CONTROL ORIFICE - LOWER SERVO (S2)	D E	1,32 [.052] DIAMETER 1,45 [.057] DIAMETER
19	CONTROL ORIFICE - LOWER SERVO (S2)	F	1,65 [.065] DIAMETER
19	CONTROL ORIFICE - LOWER SERVO (S2)	G	1,85 [.073] DIAMETER
19	CONTROL ORIFICE - LOWER SERVO (S2)	Н	2,39 [.094] DIAMETER
19	CONTROL ORIFICE - LOWER SERVO (S2)	J	2,59 [.102] DIAMETER
20	PRESS OVERRIDE	0	NONE
20 20	PRESS OVERRIDE PRESS OVERRIDE	2 5	INTERNAL PRESSURE OVERRIDE INTERNAL PRESSURE OVERRIDE EXTERNALLY ADJUSTABLE
21	PRESS SETTING FOR PRESSURE OVERRIDE	0	NONE
21	PRESS SETTING FOR PRESSURE OVERRIDE	Č	103 bar [1500 lbf/in2]
21	PRESS SETTING FOR PRESSURE OVERRIDE	D	138 bar [2000 lbf/in2]
21	PRESS SETTING FOR PRESSURE OVERRIDE	E	172 bar [2500 lbf/in2]
21	PRESS SETTING FOR PRESSURE OVERRIDE	F	207 bar [3000 lbf/in2]
21 21	PRESS SETTING FOR PRESSURE OVERRIDE PRESS SETTING FOR PRESSURE OVERRIDE	G H	241 bar [3500 lbf/in2] 276 bar [4000 lbf/in2]
21	PRESS SETTING FOR PRESSURE OVERRIDE	Л J	310 bar [4500 lbf/in2]
21	PRESS SETTING FOR PRESSURE OVERRIDE	K	345 bar [5000 lbf/in2]
21	PRESS SETTING FOR PRESSURE OVERRIDE	L	379 bar [5500 lbf/in2]
21	PRESS SETTING FOR PRESSURE OVERRIDE	М	414 bar [6000 lbf/in2]
22	CONTROL SPECIAL FEATURES	0	NO CONTROL SPECIAL FEATURES
22	CONTROL SPECIAL FEATURES	N	MANUAL CONTROL LEVER WITH EXTERNAL TORSION SPRING MECHANISM FOR NEUTRAL RETURN
22	CONTROL SPECIAL FEATURES	S	MANUAL CONTROL LEVER WITH TWO 1/4-28 UNF ATTACHMENT HOLES LOCATED AT 85,7
_		J	[3.375] AND 98,4 [3.875] FROM CONTROL SHAFT MOUNTING HOLE. LEVER MOUNTED
			PARALLEL TO PUMP DRIVE SHAFT TOWARDS MOUNTING FLANGE
22	CONTROL SPECIAL FEATURES	V	INCHING CONTROL LEVER WITH TWO 1/4-28 UNF ATTACHMENT HOLES LOCATED AT 85,7
00	CONTROL ORFOLD FFATURES	.,	[3.375] AND 98,4 [3.875] FROM INCHING SHAFT MOUNTING HOLE
22	CONTROL SPECIAL FEATURES	Y	MANUAL CONTROL LEVER WITH TWO 1/4-28 UNF ATTACHMENT HOLES LOCATED AT 85,7
23	CHARGE PUMP	0	[3.375] AND 98,4 [3.875] FROM CONTROL SHAFT MOUNTING HOLE CHARGE PUMP INCLUDED
23	CHARGE PUMP	A	CHARGE PUMP WITH REMOTE PRESSURE FILTER PORTS ON THE -A- PORT SIDE
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Committee Code	Code			
DAMAGE PUMP	Position	Feature	Code	Feature Description
DAMAGE PUMP		1		
CHARGE PUMP	23 23			CHARGE PUMP WITH EXTERNAL DISCHARGE PORT FOR 7/8-14 UNF SAE O-RING FITTING,
CHARGE PUMP	23	CHARGE PLIMP	F	
CHARGE PUMP	23			CHARGE PUMP WITH INTEGRAL PRESSURE FILTER AND DIAGNOSTIC FITTING MOUNTED ON
PORT ON -8- PORT SIDE	00	CHARCE DUMP		
EXTRANAL DISCHARGE PORT WITH 90 DEGREE, 724-14 UNF, 37 DEGREE FAIRE, TUBE TITING CHARGE PUMP CHARGE PUMP WITH INTEGRAL PRESSURE FILTER AND DIAGNOSTIC FITNING, MOUNTED ON THE -B- PORT SIDE AND EXTERNAL DISCHARGE PORT FOR 78-14 UNF-28 SAE O-RING FITTING, WITH STEEL HEX PLUS CHARGE PUMP CHARGE PUMP UP CHARGE PUMP WITH NTEGRAL PRESSURE FILTER, MOUNTED ON THE -B- PORT SIDE AND EXTERNAL DISCHARGE PORT FOR 78-14 UNF-28 SAE O-RING FITTING, WITH STEEL HEX PLUS CHARGE PUMP CHARGE PUMP UP CHARGE PUMP WITH NTEGRAL PRESSURE FILTER, MOUNTED ON THE -B- PORT SIDE AND EXTERNAL DISCHARGE PORT FOR 78-14 UNF-28 SAE O-RING FITTING, WITH STEEL HEX PLUS CHARGE PUMP CHARGE PUMP WITH RESPONSE PORT FOR 78-14 UNF-26 SAE O-RING FITTING WITH STEEL HEX PLUS CHARGE PUMP CHARGE PUMP WITH REMOTE PRESSURE FILTER PORTS ON THE -B- PORT SIDE AND EXTERNAL DISCHARGE PORT FOR 78-14 UNF-26 SAE O-RING FITTING WITH STEEL HEX PLUS CHARGE PUMP CHARGE PUMP WITH REMOTE PRESSURE FILTER PORTS ON THE -B- PORT SIDE AND EXTERNAL DISCHARGE PORT FOR 78-14 UNF-26 SAE O-RING FITTING WITH STEEL HEX PLUS CHARGE PUMP CHARGE PUMP WITH REMOTE PRESSURE FILTER PORTS ON THE -B- PORT SIDE AND EXTERNAL DISCHARGE PORT FOR 78-14 UNF-26 SAE O-RING FITTING WITH STEEL HEX PLUS CHARGE PUMP CHARGE PUMP WITH REMOTE PRESSURE FILTER PORTS ON THE -B- PORT SIDE AND EXTERNAL DISCHARGE PORT FOR 78-14 UNF-26 SAE O-RING FITTING WITH STEEL HEX PLUS CHARGE PUMP WITH REMOTE PRESSURE FILTER PORTS ON THE -B- PORT SIDE AND EXTERNAL DISCHARGE PORT FOR 78-14 UNF-26 SAE O-RING FITTING WITH STEEL HEX PUMP AND EXTERNAL DISCHARGE PORT FOR 78-14 UNF-26 SAE O-RING FITTING WITH STEEL HEX PUMP AND EXTERNAL DISCHARGE PORT FOR 78-14 UNF-26 SAE O-RING FITTING WITH STEEL HEX PUMP AND EXTERNAL DISCHARGE PORT FOR 78-14 UNF-26 SAE O-RING FITTING WITH STEEL HEX PUMP AND EXTERNAL DISCHARGE PORT FOR 78-14 UNF-26 SAE O-RING FITTING WITH STEEL HEX PUMP AND EXTERNAL DISCHARGE PORT FOR 78-14 UNF-26 SAE O-RING FITTING WITH STEEL HEX PUMP AND EXTERNAL DISCHARGE PUMP SECONDAL PUMP AND EXPLANCEMENT A MULLI	23	CHARGE PUNIP	П	
CHARGE PLIMP S	23	CHARGE PUMP	R	NO CHARGE PUMP, WITH REMOTE PRESSURE FILTER PORTS ON THE -B- PORT SIDE AND EXTERNAL DISCHARGE PORT WITH 90 DEGREE, 7/8-14 UNF, 37 DEGREE FLARE, TUBE
CHARGE PUMP	23	CHARGE PUMP	S	CHARGE PUMP WITH INTEGRAL PRESSURE FILTER AND DIAGNOSTIC FITTING, MOUNTED ON THE -B- PORT SIDE AND EXTERNAL DISCHARGE PORT FOR 7/8-14 UNF-2B SAE 0-RING
CHARGE PUMP CHARG	23	CHARGE PUMP	T	CHARGE PUMP WITH EXTERNAL DISCHARGE PORT WITH STRAIGHT 7/8-14 UNF, 37 DEGREE
CHARGE PUMP CHARGE	23	CHARGE PUMP	U	CHARGE PUMP WITH INTEGRAL PRESSURE FILTER, MOUNTED ON THE -B- PORT SIDE AND EXTERNAL DISCHARGE PORT FOR 7/8-14 UNF-2B SAE O-RING FITTING, WITH STEEL HEX
CHARGE PUMP	23	CHARGE PUMP	V	CHARGE PUMP WITH EXTERNAL DISCHARGE PORT FOR 7/8-14 UNF PORT WITH SHIPPING
CHARGE PUMP CHARG	23	CHARGE PUMP	W	CHARGE PUMP WITH INTEGRAL PRESSURE FILTER MOUNTED ON THE -A- PORT SIDE AND EXTERNAL DISCHARGE PORT FOR 7/8-14 UNF-2B SAE O-RING FITTING WITH STEEL HEX
CHARGE PUMP WITH REMOTE PRESSURE FILTER PORTS ON THE -B- PORT SIDE AUXILIARY MOUNTING AUXILIARY MOUNTING A SAE A-PAD (DRY) AUXILIARY MOUNTING C SAE A-PAD (DRY) AUXILIARY MOUNTING C SAE A-PAD (DRY) AUXILIARY MOUNTING C SAE A-PAD (WET) AUXILIARY MOUNTING F SAE B-PAD (WET) AUXILIARY MOUNTING C SAE A-PAD WITH 11 TOOTH 16/32 PITCH INTERNAL SPILINE (WET) AUXILIARY MOUNTING C SAE A-PAD WITH 11 TOOTH 16/32 PITCH INTERNAL SPILINE (WET) AUXILIARY MOUNTING C SAE A-PAD WITH 11 TOOTH 16/32 PITCH INTERNAL SPILINE (WET) AUXILIARY MOUNTING C SAE A-PAD WITH 11 TOOTH 16/32 PITCH INTERNAL SPILINE (WET) AUXILIARY MOUNTING C SAE A-PAD WITH 11 TOOTH 16/32 PITCH INTERNAL SPILINE (WET) AUXILIARY MOUNTING C SAE A-PAD WITH 11 TOOTH 16/32 PITCH INTERNAL SPILINE (WET) AUXILIARY MOUNTING C SAE A-PAD WITH 11 TOOTH 16/32 PITCH INTERNAL SPILINE (WET) AUXILIARY MOUNTING C SAE A-PAD WITH 11 TOOTH 16/32 PITCH INTERNAL SPILINE (WET) AUXILIARY MOUNTING C SAE A-PAD WITH 11 TOOTH 16/32 PITCH INTERNAL SPILINE (WET) AUXILIARY MOUNTING C SAE A-PAD WITH 11 TOOTH 16/32 PITCH INTERNAL SPILINE (WET) AUXILIARY MOUNTING C SAE A-PAD WITH 11 TOOTH 16/32 PITCH INTERNAL SPILINE (WET) AUXILIARY MOUNTING C SAE A-PAD WITH 11 TOOTH 16/32 PITCH INTERNAL SPILINE (WET) AUXILIARY MOUNTING C SAE A-PAD WITH 11 TOOTH 16/32 PITCH INTERNAL SPILINE (WET) AUXILIARY MOUNTING C SAE A-PAD WITH 11 TOOTH 16/32 PITCH INTERNAL SPILINE (WET) AUXILIARY MOUNTING C SAE A-PAD WITH 11 TOOTH 16/32 PITCH INTERNAL SPILINE (WET) C SAE C-PAD, (TYPICALLY FENT TOOTH 11 TOOTH 12/24 PITCH SPILINE (WET) C SAE C-PAD, (TYPICALLY FENT TOOTH 11 TOOTH 12/24 PITCH SPILINE (WET) C SAE C-PAD, (TYPICALLY FENT TOOTH 11 TOOTH 12/24 PITCH SPILINE (WET) C SAE C-PAD, (TYPICALLY FENT TOOTH 11 TOOTH 12/24 PITCH SPILINE (WET) C SAE C-PAD, (TYPICALLY FENT TOOTH 11 TOOTH 12/	23	CHARGE PUMP	Υ	CHARGE PUMP WITH REMOTE PRESSURE FILTER PORTS ON THE -B- PORT SIDE AND EXTERNAL DISCHARGE PORT FOR 7/8-14 UNF-2B SAE O-RING FITTING WITH STEEL HEX
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CHARGE PUMP SPECIAL FEATURES M CHARGE INLET MANIFOLD WITH CHARGE RELIEF VALVE CHARGE PUMP SPECIAL FEATURES N STEEL CORE CHARGE PUMP GASKET AND CHARGE INLET MAINIFOLD WITH CHARGE RELIEF VALVE CHARGE PUMP SPECIAL FEATURES N STEEL CORE CHARGE PUMP GASKET AND CHARGE INLET MAINIFOLD WITH CHARGE RELIEF VALVE CHARGE PUMP SPECIAL FEATURES P CHARGE INLET MANIFOLD WITH EXTERNAL DISCHARGE PORT FOR 7/8-14 UNF SAE 0-RING PORT AND STEEL HEX PLUG IN INLET PORT PORT AND STEEL HEX PLUG IN INLET PORT SPECIAL PUMP ASSEMBLY FEATURES SPECIAL PUMP ASSEMBLY	27 28			
C 90 DEGREE BARBED INLET FITTING FOR [1.00] ID HOSE CHARGE PUMP SPECIAL FEATURES M CHARGE INLET MANIFOLD WITH CHARGE RELIEF VALVE CHARGE PUMP SPECIAL FEATURES N STEEL CORE CHARGE PUMP GASKET AND CHARGE INLET MAINIFOLD WITH CHARGE RELIEF VALVE CHARGE PUMP SPECIAL FEATURES N STEEL CORE CHARGE PUMP GASKET AND CHARGE INLET MAINIFOLD WITH CHARGE RELIEF VALVE CHARGE PUMP SPECIAL FEATURES P CHARGE INLET MANIFOLD WITH EXTERNAL DISCHARGE PORT FOR 7/8-14 UNF SAE 0-RING PORT AND STEEL HEX PLUG IN INLET PORT CP. 30 SPECIAL PUMP ASSEMBLY FEATURES CP. 30 SPECIAL PUMP ASSE	28			
CHARGE PUMP SPECIAL FEATURES N STEEL CORE CHARGE PUMP GASKET AND CHARGE INLET MAINIFOLD WITH CHARGE RELIEF VALVE CHARGE PUMP SPECIAL FEATURES P CHARGE INLET MANIFOLD WITH EXTERNAL DISCHARGE PORT FOR 7/8-14 UNF SAE 0-RING PORT AND STEEL HEX PLUG IN INLET PORT SPECIAL PUMP ASSEMBLY FEATURES SPECIAL PUMP ASSEMBLY F	28	CHARGE PUMP SPECIAL FEATURES	С	90 DEGREE BARBED INLET FITTING FOR [1.00] ID HOSE
CHARGE PUMP SPECIAL FEATURES P CHARGE INLET MANIFOLD WITH EXTERNAL DISCHARGE PORT FOR 7/8-14 UNF SAE O-RING PORT AND STEEL HEX PLUG IN INLET PORT PORT AND STEEL HEX PLUG IN INLET PORT NO SPECIAL FEATURES SPECIAL PUMP ASSEMBLY FEATURES SPECIAL PUMP ASSEMBLY FEATURES SPECIAL PUMP ASSEMBLY FEATURES SPECIAL PUMP ASSEMBLY FEATURES 32 BOTH SERVO SLEEVES HAVE 7/8-14 UNF SAE O-RING PORTS AND STEEL HEX PLUGS	28 28			STEEL CORE CHARGE PUMP GASKET AND CHARGE INLET MAINIFOLD WITH CHARGE RELIEF
29,30 SPECIAL PUMP ASSEMBLY FEATURES 15 REAR PUMP UNIT FOR TANDEM PUMP ASSEMBLY (NO SHAFT SEAL) 29,30 SPECIAL PUMP ASSEMBLY FEATURES 32 BOTH SERVO SLEEVES HAVE 7/8-14 UNF SAE 0-RING PORTS AND STEEL HEX PLUGS	28			CHARGE INLET MANIFOLD WITH EXTERNAL DISCHARGE PORT FOR 7/8-14 UNF SAE O-RING PORT AND STEEL HEX PLUG IN INLET PORT
29,30 SPECIAL PUMP ASSEMBLY FEATURES 32 BOTH SERVO SLEEVES HAVE 7/8-14 UNF SAE O-RING PORTS AND STEEL HEX PLUGS	29,30			
	29,30 29,30 29,30	SPECIAL PUMP ASSEMBLY FEATURES	32	BOTH SERVO SLEEVES HAVE 7/8-14 UNF SAE O-RING PORTS AND STEEL HEX PLUGS



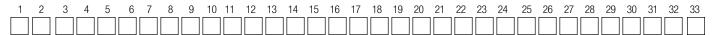


Code			
Position	Feature	Code	Feature Description
29,30	SPECIAL PUMP ASSEMBLY FEATURES	40	BOTH SERVO PISTONS WITH EXTERNALLY ADJUSTABLE STOPS
29,30	SPECIAL PUMP ASSEMBLY FEATURES	58	1350 SERIES END YOKE ASSEMBLED TO DRIVE SHAFT
29,30	SPECIAL PUMP ASSEMBLY FEATURES	59	1310 SERIES END YOKE ASSEMBLED TO DRIVE SHAFT
29,30	SPECIAL PUMP ASSEMBLY FEATURES	61	ACCOMMODATES AUXILIARY UNIT WITH SAE C-PAD PILOT WITHOUT O-RING MATING GROOVE
29,30	SPECIAL PUMP ASSEMBLY FEATURES	65	ACCOMMODATES AUXILIARY UNIT WITH SAE WET B-PAD PILOT WITHOUT O-RING MATING GROOVE
29,30	SPECIAL PUMP ASSEMBLY FEATURES	67	METAL CASE DRAIN PLUG IN BOTH PORTS
31	PAINT AND PACKAGING	0	PAINTED PRIMER BLUE (STANDARD)
32	IDENTIFICATION ON UNIT	0	STANDARD
33	DESIGN CODE	В	В



Work Sheet

Series 1 Variable Pump Model Code



Fixed Motor Model Code



Variable Motor Model Code







The following 23 digit coding system has been developed to identify standard configuration options for the Series 1 Hydrostatic Fixed Displacement Motor. Use this model code to specify a motor with the desired features. All 23-digits of the code must be present to release a new product number for ordering.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
																							1

Code Position	Feature	Code	Feature Description
01,02,03	PRODUCT IDENTIFICATION	HHD	HEAVY DUTY HYDROSTATIC FIXED DISPLACEMENT MOTOR
		33	54,34 cm3/r [3.316 in3/r] AT 15.5 DEG. SWASHPLATE ANGLE
04,05	DISPLACEMENT		,
04,05	DISPLACEMENT	39	63,66 cm3/r [3.885 in3/r] AT 18 DEG. SWASHPLATE ANGLE
04,05	DISPLACEMENT	46	75,33 cm3/r [4.594 in3/r] AT 18 DEG. SWASHPLATE ANGLE
04,05	DISPLACEMENT	54	89,13 cm3/r [5.439 in3/r] AT 18 DEG. SWASHPLATE ANGLE
04,05	DISPLACEMENT	64	105,39 cm3/r [6.431 in3/r] AT 18 DEG. SWASHPLATE ANGLE
04,05	DISPLACEMENT	76	124,80 cm3/r [7.616 in3/r] AT 18 DEG. SWASHPLATE ANGLE
06	TYPE	3	FIXED DISPLACEMENT MOTOR
07	DESIGN TYPE	0	BALL-GUIDE - (MODEL 76)
07	DESIGN TYPE	3	FIXED CLEARANCE - (MODELS 33-64)
08,09	OUTPUT SHAFT	01	[1.500] DIAMETER STRAIGHT WITH [.3750] X [2.5] SQUARE KEY (MODELS 33-64)
08,09	OUTPUT SHAFT	02	[1.750] DIAMETER STRAIGHT WITH [.4375] X [3.0] SQUARE KEY (MODEL 76)
08,09	OUTPUT SHAFT	05	[1.750] DIAMETER TAPERED WITH [.4375] X [2.75] DIAMETER WOODRUFF KEY (MODEL 76)
08,09	OUTPUT SHAFT	06	[1.500] DIAMETER STRAIGHT WITH [.3750] X [2.5] SQUARE KEY WITH 3/8-24 UNF X [.75] DP
00,09	OUTFUT SHALL	00	
00.00	OUTDUT CHAFT	07	HOLE IN END OF SHAFT (MODELS 33-64)
08,09	OUTPUT SHAFT	07	[1.750] DIAMETER STRAIGHT WITH [.4375] X [3.0] SQUARE KEY WITH 3/8-24 UNF X [.75] DP
			HOLE IN END OF SHAFT (MODEL 76)
08,09	OUTPUT SHAFT	13	13 TOOTH 8/16 PITCH SPLINE (MODEL 76)
08,09	OUTPUT SHAFT	14	14 TOOTH 12/24 PITCH SPLINE (MODELS 33-64)
08,09	OUTPUT SHAFT	19	19 TOOTH 16/32 PITCH SPLINE (MODELS 33-46-54)
08,09	OUTPUT SHAFT	20	20 TOOTH 16/32 PITCH SPLINE WITH 3/8-24 UNF X [.75] DP HOLE IN END OF SHAFT (MODELS
			33-46)
08,09	OUTPUT SHAFT	21	21 TOOTH 16/32 PITCH SPLINE (MODELS 33-64)
08,09	OUTPUT SHAFT	23	23 TOOTH 16/32 PITCH SPLINE (MODELS 33-64)
08,09	OUTPUT SHAFT	25	23 TOOTH 16/32 PITCH SPLINE WITH 3/8-24 UNF X [.75] DP HOLE IN END OF SHAFT (MODELS
,			33-64)
08,09	OUTPUT SHAFT	27	27 TOOTH 16/32 PITCH SPLINE (MODEL 76)
08,09	OUTPUT SHAFT	28	20 TOOTH 16/32 PITCH SPLINE (MODELS 33-46)
08,09	OUTPUT SHAFT	29	14 TOOTH 12/24 PITCH SPLINE WITH 3/8-24 UNF X [.75] DP HOLE IN END OF SHAFT (MODELS
00,09	OUTFUT SHALL	29	33-64)
00.00	OUTDUT CHAFT	20	,
08,09	OUTPUT SHAFT	30	21 TOOTH 16/32 PITCH SPLINE WITH 3/8-24 UNF X [.75] DP HOLE IN END OF SHAFT (MODELS
	OUTPUT OUAST		33-64)
08,09	OUTPUT SHAFT	32	[1.500] DIAMETER TAPERED WITH [.375] X [1.00] SQUARE KEY (MODELS 33-64)
08,09	OUTPUT SHAFT	33	21 TOOTH 16/32 PITCH SPLINE WITH M10 X 1.5 THREADED HOLE (MODELS 33-64)
08,09	OUTPUT SHAFT	34	[1.375] DIAMETER TAPERED WITH [.375] X [1.00] SQUARE KEY (MODELS 33-64)
10	MAIN PORTS	Α	[1.00] SAE 4-BOLT SPLIT FLANGE PORT, STANDARD PRESSURE SERIES (CODE 61)
10	MAIN PORTS	В	[1.00] SAE 4-BOLT SPLIT FLANGE PORT, HIGH PRESSURE SERIES (CODE 62)
10	MAIN PORTS	F	[1.00] SAE 4-BOLT SPLIT FLANGE PORT, STANDARD PRESSURE SERIES (CODE 61) WITH (2)
			GAUGE/PILOT PRESSURE PORTS FOR .4375-20 UNF-2B SAE 0-RING FITTINGS
10	MAIN PORTS	G	[1.00] SAE 4-BOLT SPLIT FLANGE PORT, HIGH PRESSURE SERIES (CODE 62) WITH (2) GAUGE/
10	Will I STITE	u	PILOT PRESSURE PORTS FOR .4375-20 UNF-2B SAE O-RING FITTINGS
10	MAIN PORTS	J	REAR PORTS - [1.00] SAE 4-BOLT SPLIT FLANGE PORT, STANDARD PRESSURE SERIES (CODE
10	MAIN FUNTS	J	, ,
11	END COVED AND COMPOSITE VALVE BLOOK ASSA	Λ	61)
11	END COVER AND COMPOSITE VALVE BLOCK ASSY	Α	STANDARD END COVER, COMPOSITE VALVE BLOCK WITH HIGH-RATE SHUTTLE VALVE
	THE COURT AND COMPOSITE WAYS BY COMPOSITE		SPRINGS
11	END COVER AND COMPOSITE VALVE BLOCK ASSY	В	STANDARD END COVER, COMPOSITE VALVE BLOCK WITH LOW-RATE SHUTTLE VALVE
			SPRINGS
11	END COVER AND COMPOSITE VALVE BLOCK ASSY	С	NO COMPOSITE VALVE BLOCK - WITH COVER PLATE
11	END COVER AND COMPOSITE VALVE BLOCK ASSY	G	INTEGRAL SHUTTLE VALVE WITH LOW-RATE SHUTTLE VALVE SPRINGS AND CHARGE
			PRESSURE RELIEF VALVE
11	END COVER AND COMPOSITE VALVE BLOCK ASSY	Н	INTEGRAL SHUTTLE VALVE WITH HIGH-RATE SHUTTLE VALVE SPRINGS AND CHARGE
	122	•	





Code			
Position	Feature	Code	Feature Description
	- Galai G		Toutain Boosipion
			PRESSURE RELIEF VALVE
11	END COVER AND COMPOSITE VALVE BLOCK ASSY	J	COMPOSITE VALVE BLOCK WITHOUT CHARGE PRESSURE RELIEF VALVE OR SHUTTLE VALVE,
			BUT WITH HIGH PRESSURE RELIEF VALVES WITH THREADED RETAINER
11	END COVER AND COMPOSITE VALVE BLOCK ASSY		STANDARD END COVER, SHUTTLE VALVE BLOCK WITH HIGH-RATE SHUTTLE VALVE SPRINGS
12	CHARGE PRESSURE RELIEF VALVE	0	NO RELIEF VALVE
12 12	CHARGE PRESSURE RELIEF VALVE CHARGE PRESSURE RELIEF VALVE	1 2	STANDARD ORIFICED CHARGE PRESSURE RELIEF VALVE (FOR COMPOSITE VALVE BLOCKS ONLY)
13	CHARGE PRESSURE RELIEF VALVE SETTING	0	NONE
13	CHARGE PRESSURE RELIEF VALVE SETTING	В	11 bar [160 lbf/in2]
13	CHARGE PRESSURE RELIEF VALVE SETTING	Ē	15,2 bar [220 lbf/in2]
13	CHARGE PRESSURE RELIEF VALVE SETTING	F	16,6 bar [240 lbf/in2]
13	CHARGE PRESSURE RELIEF VALVE SETTING	Н	19,3 bar [280 lbf/in2]
13	CHARGE PRESSURE RELIEF VALVE SETTING	J	20,7 bar [300 lbf/in2]
13	CHARGE PRESSURE RELIEF VALVE SETTING	L	22,5 bar [326.6 lbf/in2]
14	HIGH PRESSURE RELIEF VALVE - PORT A	0	NONE
14 14	HIGH PRESSURE RELIEF VALVE - PORT A HIGH PRESSURE RELIEF VALVE - PORT A	1 3	STANDARD STANDARD WITH THREADED RETAINER
15	HIGH PRESSURE REL VALVE SETTING - PORT A	0	NONE
15	HIGH PRESSURE REL VALVE SETTING - PORT A	В	69 bar [1000 lbf/in2]
15	HIGH PRESSURE REL VALVE SETTING - PORT A	C	103 bar [1500 lbf/in2]
15	HIGH PRESSURE REL VALVE SETTING - PORT A	D	138 bar [2000 lbf/in2]
15	HIGH PRESSURE REL VALVE SETTING - PORT A	Е	172 bar [2500 lbf/in2]
15	HIGH PRESSURE REL VALVE SETTING - PORT A	F	207 bar [3000 lbf/in2]
15	HIGH PRESSURE REL VALVE SETTING - PORT A	G	241 bar [3500 lbf/in2]
15	HIGH PRESSURE REL VALVE SETTING - PORT A	Н	276 bar [4000 lbf/in2]
15 15	HIGH PRESSURE REL VALVE SETTING - PORT A	J K	310 bar [4500 lbf/in2]
15	HIGH PRESSURE REL VALVE SETTING - PORT A HIGH PRESSURE REL VALVE SETTING - PORT A	L	345 bar [5000 lbf/in2] 379 bar [5500 lbf/in2]
15	HIGH PRESSURE REL VALVE SETTING - PORT A	M	414 bar [6000 lbf/in2]
16	HIGH PRESSURE RELIEF VALVE - PORT B	0	NONE
16	HIGH PRESSURE RELIEF VALVE - PORT B	1	STANDARD
16	HIGH PRESSURE RELIEF VALVE - PORT B	3	STANDARD WITH THREADED RETAINER
17	HIGH PRESSURE REL VALVE SETTING - PORT B	0	NONE
17	HIGH PRESSURE REL VALVE SETTING - PORT B	В	69 bar [1000 lbf/in2]
17 17	HIGH PRESSURE REL VALVE SETTING - PORT B HIGH PRESSURE REL VALVE SETTING - PORT B	C D	103 bar [1500 lbf/in2] 138 bar [2000 lbf/in2]
17	HIGH PRESSURE REL VALVE SETTING - PORT B	E	172 bar [2500 lbf/in2]
17	HIGH PRESSURE REL VALVE SETTING - PORT B	F	207 bar [3000 lbf/in2]
17	HIGH PRESSURE REL VALVE SETTING - PORT B	G	241 bar [3500 lbf/in2]
17	HIGH PRESSURE REL VALVE SETTING - PORT B	Н	276 bar [4000 lbf/in2]
17	HIGH PRESSURE REL VALVE SETTING - PORT B	J	310 bar [4500 lbf/in2]
17	HIGH PRESSURE REL VALVE SETTING - PORT B	K	345 bar [5000 lbf/in2]
17	HIGH PRESSURE REL VALVE SETTING - PORT B	L	379 bar [5500 lbf/in2]
17 18	HIGH PRESSURE REL VALVE SETTING - PORT B SPEED SENSOR	M 0	414 bar [6000 lbf/in2] NO SPEED SENSOR
18	SPEED SENSOR	A	MAGNETIC SENSOR WITH 2 WIRE WEATHER PACK CONNECTOR
18	SPEED SENSOR	В	DIGITAL SENSOR WITH 3 WIRE WEATHER PACK CONNECTOR
18	SPEED SENSOR	C	SPEED SENSOR HOLE (5/8-18 UNF THREAD) PLUGGED
18	SPEED SENSOR	D	QUADRATURE SPEED SENSOR WITH 4 WIRE WEATHER PACK CONNECTOR
19,20	SPECIAL FEATURES	00	NO SPECIAL FEATURES
19,20	SPECIAL FEATURES	03	BYPASS VALVE-SPOOL STEM IS ON THE OPPOSITE SIDE FROM THE LOW PRESSURE RELIEF
10.00	ODEOLAL FEATUREO	00	VALVE IN THE COMPOSITE VALVE BLOCK
19,20	SPECIAL FEATURES	32	METAL CASE DRAIN PLUG IN BOTH PORTS
21 21	PAINT AND PACKAGING PAINT AND PACKAGING	0 J	PAINTED PRIMER BLUE (STANDARD) RUST PREVENTATIVE SPRAY
21	IDENTIFICATION ON UNIT	0	STANDARD
23	DESIGN CODE	В	В





The following 29 digit coding system has been developed to identify standard configuration options for the Series 1 Hydrostatic Variable Displacement Motor. Use this model code to specify a motor with the desired features. All 29-digits of the code must be present to release a new product number for ordering.

1														28	

Code			
Position	Feature	Code	Feature Description
01,02,03	PRODUCT IDENTIFICATION	ACE	HEAVY DUTY HYDROSTATIC VARIABLE DISPLACEMENT MOTOR
04,05	DISPLACEMENT	33	54,34 cm3/r [3.316 in3/r] AT 15.5 DEG STROKE
04,05	DISPLACEMENT	39	63,66 cm3/r [3.885 in3/r] AT 18 DEG STROKE
04,05	DISPLACEMENT	46	75,33 cm3/r [4.597 in3/r] AT 18 DEG STROKE
04,05	DISPLACEMENT	54	89,13 cm3/r [5.439 in3/r] AT 18 DEG STROKE
04,05	DISPLACEMENT	64	105,45 cm3/r [6.435 in3/r] AT 18 DEG STROKE
04,05	DISPLACEMENT	76	124,8 cm3/r [7.616 in3/r] AT 18 DEG STROKE
06	TYPE	4	VARIABLE DISPLACEMENT MOTOR
07	DESIGN TYPE	0	BALL-GUIDE (MODEL 76)
07	DESIGNTYPE	1	SERIES 1 (MODELS 33-64)
08.09	OUTPUT SHAFT	01	[1.500] DIAMETER STRAIGHT WITH [.3750] X [2.5] SQUARE KEY (MODELS 33-64)
08,09	OUTPUT SHAFT	02	[1.750] DIAMETER STRAIGHT WITH [.4375] X [3.0] SQUARE KEY (MODEL 76)
08,09	OUTPUT SHAFT	13	13 TOOTH 8/16 PITCH SPLINE (MODEL 76)
08,09	OUTPUT SHAFT	14	14 TOOTH 12/24 PITCH SPLINE (MODELS 33-64)
08,09	OUTPUT SHAFT	19	19 TOOTH 16/32 PITCH SPLINE (MODELS 33-64)
08,09	OUTPUT SHAFT	21	21 TOOTH 16/32 PITCH SPLINE (MODELS 33-64)
08,09	OUTPUT SHAFT	23	23 T00TH 16/32 PITCH SPLINE (MODELS 33-64)
08,09	OUTPUT SHAFT	27	27 TOOTH 16/32 PITCH SPLINE (MODEL 76)
10	MINIMUM SWASHPLATE ANGLE	A	18 DEGREES
10	MINIMUM SWASHPLATE ANGLE	B C	17 DEGREES
10	MINIMUM SWASHPLATE ANGLE	D	16 DEGREES
10	MINIMUM SWASHPLATE ANGLE		15 DEGREES
10	MINIMUM SWASHPLATE ANGLE	E	14 DEGREES
10	MINIMUM SWASHPLATE ANGLE	F	13 DEGREES
10	MINIMUM SWASHPLATE ANGLE	G	12 DEGREES
10	MINIMUM SWASHPLATE ANGLE	H	11 DEGREES
10	MINIMUM SWASHPLATE ANGLE	J	10 DEGREES
10	MINIMUM SWASHPLATE ANGLE	K	9 DEGREES
10	MINIMUM SWASHPLATE ANGLE	L	8 DEGREES
10	MINIMUM SWASHPLATE ANGLE	M	7 DEGREES
11	MAIN PORTS	A	[1.00] SAE 4-BOLT SPLIT FLANGE PORT, STANDARD PRESSURE SERIES (CODE 61)
11	MAIN PORTS	В	[1.00] SAE 4-BOLT SPLIT FLANGE PORT, HIGH PRESSURE SERIES (CODE 62)
11	MAIN PORTS	D	[1.00] SAE 4-BOLT SPLIT FLANGE PORT, STANDARD PRESSURE SERIES (CODE 61) WITH A AND B
44	MAINIDORTO	-	GAUGE PORTS
11	MAIN PORTS	Е	[1.00] SAE 4-BOLT SPLIT FLANGE PORT, HIGH PRESSURE SERIES (CODE 62) WITH A AND B GAUGE
40	THE COURT AND COMPOSITE VALVE BLOOK ACCO	•	PORTS
12	END COVER AND COMPOSITE VALVE BLOCK ASSY	A	STANDARD END COVER, COMPOSITE VALVE BLOCK WITH HIGH-RATE SHUTTLE VALVE SPRINGS
12	END COVER AND COMPOSITE VALVE BLOCK ASSY	В	STANDARD END COVER, COMPOSITE VALVE BLOCK WITH LOW-RATE SHUTTLE VALVE SPRINGS
12	END COVER AND COMPOSITE VALVE BLOCK ASSY	C	NO COMPOSITE VALVE BLOCK - WITH COVER PLATE
12	END COVER AND COMPOSITE VALVE BLOCK ASSY	М	STANDARD END COVER, SHUTTLE VALVE BLOCK WITH HIGH-RATE SHUTTLE VALVE SPRINGS
12	END COVER AND COMPOSITE VALVE BLOCK ASSY	N	STANDARD END COVER, SHUTTLE VALVE BLOCK WITH LOW-RATE SHUTTLE VALVE SPRINGS
13	CHARGE PRESS REL VALVE-CMPST VALVE BLOCK	0	NO RELIEF VALVE
13	CHARGE PRESS REL VALVE-CMPST VALVE BLOCK	1	STANDARD
13	CHARGE PRESS REL VALVE-CMPST VALVE BLOCK	2	ORIFICED CHARGE PRESSURE RELIEF VALVE
14	CHARGE PRESSURE RELIEF VALVE SETTING	0	NONE
14	CHARGE PRESSURE RELIEF VALVE SETTING	В	11 bar [160 lbf/in2] - STANDARD
14	CHARGE PRESSURE RELIEF VALVE SETTING	E	15,2 bar [220 lbf/in2]
14	CHARGE PRESSURE RELIEF VALVE SETTING	F	16,6 bar [240 lbf/in2]
14	CHARGE PRESSURE RELIEF VALVE SETTING	H	19,3 bar [280 lbf/in2]
14	CHARGE PRESSURE RELIEF VALVE SETTING	J	20,7 bar [300 lbf/in2]
15	CMPST VLV BLK HIGH PRESS REL VLV- PORT A	0	NONE
15	CMPST VLV BLK HIGH PRESS REL VLV- PORT A	1	STANDARD
15	CMPST VLV BLK HIGH PRESS REL VLV- PORT A	3	STANDARD WITH THREADED RETAINER
16	HIGH PRESSURE REL VALVE SETTING - PORT A	0	NONE
16	HIGH PRESSURE REL VALVE SETTING - PORT A	В	69 bar [1000 lbf/in2]
16	HIGH PRESSURE REL VALVE SETTING - PORT A	С	103 bar [1500 lbf/in2]
16	HIGH PRESSURE REL VALVE SETTING - PORT A	D	138 bar [2000 lbf/in2]
16	HIGH PRESSURE REL VALVE SETTING - PORT A	Е	172 bar [2500 lbf/in2]





Code Position	Feature	Code	Feature Description
10	HIGH PRESSURE REL VALVE SETTING - PORT A	F	007 has [0000 lbf/lin0]
16 16	HIGH PRESSURE REL VALVE SETTING - PORT A	G	207 bar [3000 lbf/in2] 241 bar [3500 lbf/in2]
16	HIGH PRESSURE REL VALVE SETTING - PORT A	H	276 bar [4000 lbf/in2]
16	HIGH PRESSURE REL VALVE SETTING - PORT A	J	310 bar [4500 lbf/in2]
16	HIGH PRESSURE REL VALVE SETTING - PORT A	K	345 bar [5000 lbf/in2]
16	HIGH PRESSURE REL VALVE SETTING - PORT A	Ĺ	379 bar [5500 lbf/in2]
16	HIGH PRESSURE REL VALVE SETTING - PORT A	M	414 bar [6000 lbf/in2]
17	CMPST VLV BLK HIGH PRESS REL VLV- PORT B	0	NONE
17	CMPST VLV BLK HIGH PRESS REL VLV- PORT B	1	STANDARD
17	CMPST VLV BLK HIGH PRESS REL VLV- PORT B	3	STANDARD WITH THREADED RETAINER
18	HIGH PRESSURE REL VALVE SETTING - PORT B	0	NONE
18	HIGH PRESSURE REL VALVE SETTING - PORT B	B C	69 bar [1000 lbf/in2]
18 18	HIGH PRESSURE REL VALVE SETTING - PORT B HIGH PRESSURE REL VALVE SETTING - PORT B	D	103 bar [1500 lbf/in2] 138 bar [2000 lbf/in2]
18	HIGH PRESSURE REL VALVE SETTING - PORT B	E	172 bar [2500 lbf/in2]
18	HIGH PRESSURE REL VALVE SETTING - PORT B	F	207 bar [3000 lbf/in2]
18	HIGH PRESSURE REL VALVE SETTING - PORT B	G	241 bar [3500 lbf/in2]
18	HIGH PRESSURE REL VALVE SETTING - PORT B	Н	276 bar [4000 lbf/in2]
18	HIGH PRESSURE REL VALVE SETTING - PORT B	J	310 bar [4500 lbf/in2]
18	HIGH PRESSURE REL VALVE SETTING - PORT B	K	345 bar [5000 lbf/in2]
18	HIGH PRESSURE REL VALVE SETTING - PORT B	L	379 bar [5500 lbf/in2]
18	HIGH PRESSURE REL VALVE SETTING - PORT B	M	414 bar [6000 lbf/in2]
19,20	CONTROL	EA	MOOG CONTROLLER
19,20	CONTROL	HA	HYDRAULIC REMOTE WITH PUMP LINKAGE 4,5-20,0 bar [65-290 lbf/in2]
19,20 19,20	CONTROL CONTROL	HB HC	HYDRAULIC REMOTE 4,5-20,0 bar [65-290 lbf/in2] HYDRAULIC REMOTE 11,0-32,4 bar [160-470 lbf/in2]
19,20	CONTROL	HD	HYDRAULIC REMOTE 1,4-14,1 bar [20-205 lbf/in2]
19,20	CONTROL	MA	MANUAL
19,20	CONTROL	PA	PORT PLATE
19,20	CONTROL	RA	PRESSURE RESPONSE WITH STROKING VALVE 12 VDC (NC) WITH 2 PIN AMP CONNECTOR
19,20	CONTROL	RB	PRESSURE RESPONSE
19,20	CONTROL	RC	PRESSURE RESPONSE WITH STROKING VALVE 24 VDC (NC) WITH WIRE LEADS
19,20	CONTROL	SA	STROKING VALVE 12 VDC (NC) WITH 2 PIN CANNON SURE-SEAL CONNECTOR
19,20	CONTROL	SB	STROKING VALVE 24 VDC (NC) WITH WIRE LEADS
19,20	CONTROL	SC	STROKING VALVE 12 VDC (NC) WITH 2 PIN WEATHERPACK CONNECTOR (TOWER)
19,20	CONTROL	SD 0	STROKING VALVE 12 VDC (NC) WITH 2 PIN WEATHERPACK CONNECTOR (SHROUD) NONE
21 21	CONTROL ORIFICE CONTROL ORIFICE	A	0,71 [.028] DIAMETER
21	CONTROL ORIFICE	В	0,91 [.036] DIAMETER
21	CONTROL ORIFICE	C	1,12 [.044] DIAMETER
21	CONTROL ORIFICE	D	1,32 [.052] DIAMETER
21	CONTROL ORIFICE	E	1,45 [.057] DIAMETER
21	CONTROL ORIFICE	F	1,65 [.065] DIAMETER
21	CONTROL ORIFICE	G	1,85 [.073] DIAMETER
21	CONTROL ORIFICE	H	2,39 [.094] DIAMETER
21	CONTROL ORIFICE	J	2,59 [.102] DIAMETER
22 22	PRESS SETTING FOR PRESSURE RESPONSE PRESS SETTING FOR PRESSURE RESPONSE	0 B	NONE 60 has (1000 lhf/in2)
22 22	PRESS SETTING FOR PRESSURE RESPONSE	С	69 bar [1000 lbf/in2] 103 bar [1500 lbf/in2]
22	PRESS SETTING FOR PRESSURE RESPONSE	D	138 bar [2000 lbf/in2]
22	PRESS SETTING FOR PRESSURE RESPONSE	Ē	172 bar [2500 lbf/in2]
22	PRESS SETTING FOR PRESSURE RESPONSE	F	207 bar [3000 lbf/in2]
22	PRESS SETTING FOR PRESSURE RESPONSE	G	241 bar [3500 lbf/in2]
22	PRESS SETTING FOR PRESSURE RESPONSE	Н	276 bar [4000 lbf/in2]
22	PRESS SETTING FOR PRESSURE RESPONSE	J	310 bar [4500 lbf/in2]
22	PRESS SETTING FOR PRESSURE RESPONSE	K	345 bar [5000 lbf/in2]
22	PRESS SETTING FOR PRESSURE RESPONSE	M	414 bar [6000 lbf/in2]
23 24	CONTROL SPECIAL FEATURES SPEED SENSOR	0	NO SPECIAL FEATURES
<u>24</u> 24	SPEED SENSOR SPEED SENSOR	A	NO SPEED SENSOR MAGNETIC SPEED SENSOR WITH 2-WIRE WEATHER PACK CONNECTOR
24 24	SPEED SENSOR	В	DIGITAL SPEED SENSOR WITH 3-WIRE WEATHER PACK CONNECTOR
25,26	SPECIAL FEATURES	00	NO SPECIAL FEATURES
25,26	SPECIAL FEATURES	03	EXTERNALLY ADJUSTABLE SERVO PISTON STOP - TOP SERVO SLEEVE
25,26	SPECIAL FEATURES	06	BYPASS VALVE - SPOOL STEM IS ON THE OPPOSITE SIDE FROM THE LOW PRESSURE RELIEF VALVE IN
			THE COMPOSITE VALVE BLOCK
25,26	SPECIAL FEATURES	27	EXTERNALLY ADJUSTABLE SERVO PISTON STOPS - TOP AND BOTTOM SERVO SLEEVES
25,26	SPECIAL FEATURES	30	BYPASS VALVE - SPOOL STEM IS ON THE OPPOSITE SIDE FROM THE LOW PRESSURE RELIEF VALVE IN
			THE COMPOSITE VALVE BLOCK, AND CHARGE PRESSURE GAUGE PORT WITH INTERNAL HEX PLUG
27	PAINT AND PACKAGING	В	PAINTED PRIMER BLUE (STANDARD)
27	PAINT AND PACKAGING	J	RUST PREVENTATIVE SPRAY
28 29	IDENTIFICATION ON UNIT	0 A	STANDARD
L J	DESIGN CODE	А	A

Information contained in this catalog is accurate as of the publication date and is subject to change without notice. Performance values are typical values. Customers are responsible for selecting products for their applications using normal engineering methods.

Eaton Hydraulics 14615 Lone Oak Road Eden Prairie, MN 55344 Telephone: (888) 258-0222 Fax: 952 974-7722

www.eatonhydraulics.com

46 New Lane, Havant Hampshire PO9 2NB England Telephone: (44) 170-548-6451 Fax: (44) 170-548-7110



Quality System Certified Products in this catalog are manufactured in an ISO-9001-certified site.

