

BMS SERIES HYDRAULIC MOTOR

BMS series motor adapt the advanced Geroler gear set design with disc distribution flow and high pressure. The unit can be supplied the individual variant in operating multifunction in accordance with requirement of applications.

Characteristic features:

- * Advanced manufacturing devices for the Geroler gear set, which use low pressure of start-up, provide smooth and reliable operation and high efficiency.
- * The output shaft adapts in tapered roller bearings that permit high axial and radial forces. The case can offer capacities of high pressure and high torque in the wide of applications.
- * Advanced design in disc distribution flow, which can automatically compensate in operating with high volume efficiency and long life, provide smooth and reliable operation.

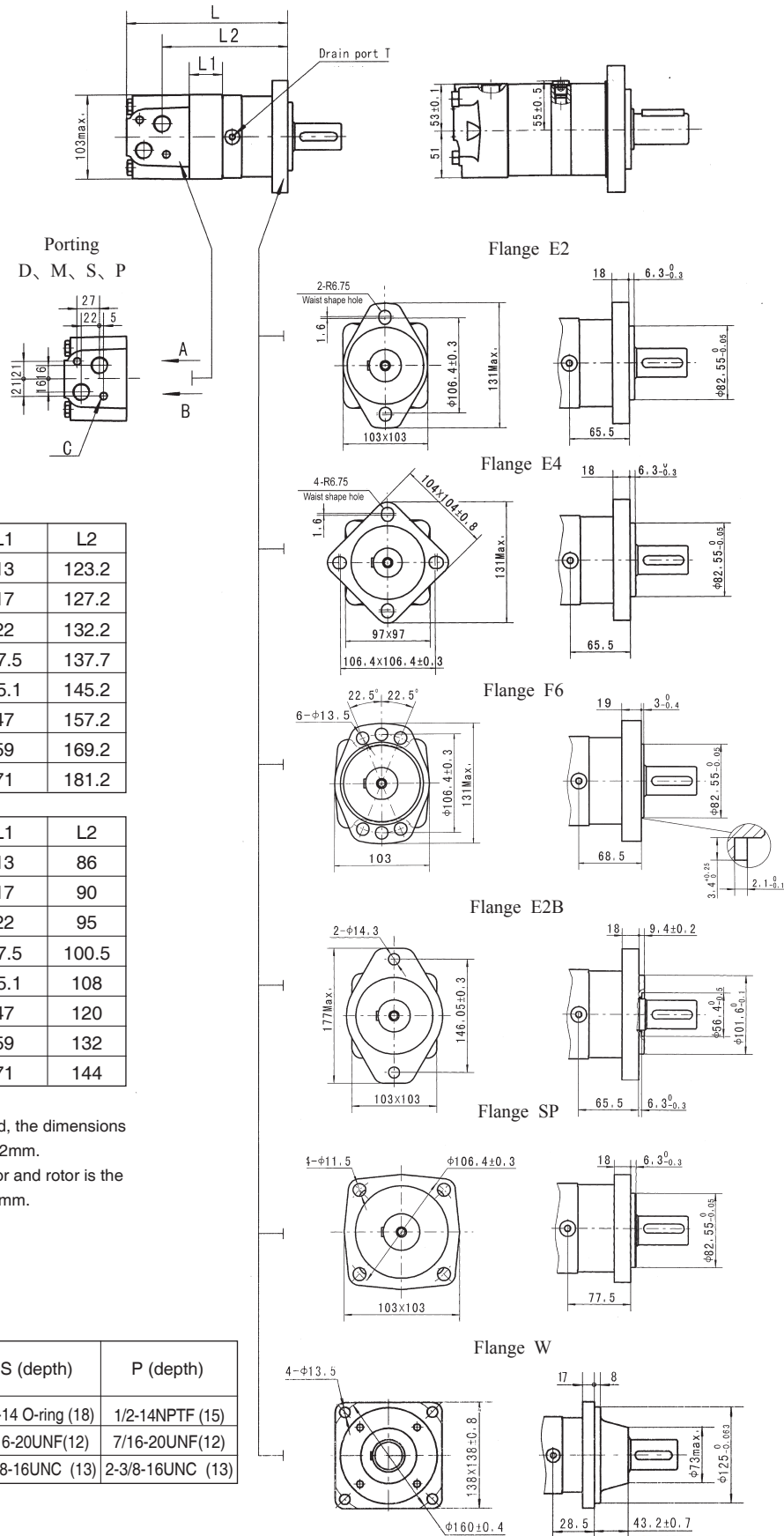


Main Specification

Type		BMS BMSE 80	BMS BMSE 100	BMS BMSE 125	BMS BMSE 160	BMS BMSE 200	BMS BMSE 250	BMS BMSE 315	BMS BMSE 375
Geometric displacement (cm ³ /rev.)		80.6	100.8	125	157.2	200	252	314.5	370
Max. speed (rpm)	cont.	800	748	600	470	375	300	240	200
	int.	988	900	720	560	450	360	280	240
Max. torque (N•m)	cont.	190	240	310	316	400	450	560	536
	int.	240	300	370	430	466	540	658	645
	peak	260	320	400	472	650	690	740	751
Max. output (kW)	cont.	15.9	18.8	19.5	15.6	15.7	14.1	14.1	11.8
	int.	20.1	23.5	23.2	21.2	18.3	17.0	18.9	17
Max. pressure drop (MPa)	cont.	17.5	17.5	17.5	15	14	12.5	12	10
	int.	21	21	21	21	16	16	14	12
	peak	22.5	22.5	22.5	22.5	22.5	20	18.5	14
Max. flow (L/min)	cont.	65	75	75	75	75	75	75	75
	int.	80	90	90	90	90	90	90	90
Max. inlet pressure (MPa)	cont.	25	25	25	25	25	25	25	25
	int.	30	30	30	30	30	30	30	30
Weight (kg)		9.8	10	10.3	10.7	11.1	11.6	12.3	12.6

- * Continuous pressure: Max. value of operating motor continuously.
- * Intermittent pressure: Max. value of operating motor in 6 seconds per minute.
- * Peak pressure: Max. value of operating motor in 0.6 second per minute.

BMS DIMENSIONS AND MOUNTING DATA



Model	L	L1	L2
BMS-80	167	13	123.2
BMS-100	171	17	127.2
BMS-125	176	22	132.2
BMS-160	181.5	27.5	137.7
BMS-200	189	35.1	145.2
BMS-250	201	47	157.2
BMS-315	213	59	169.2
BMS-375	225	71	181.2

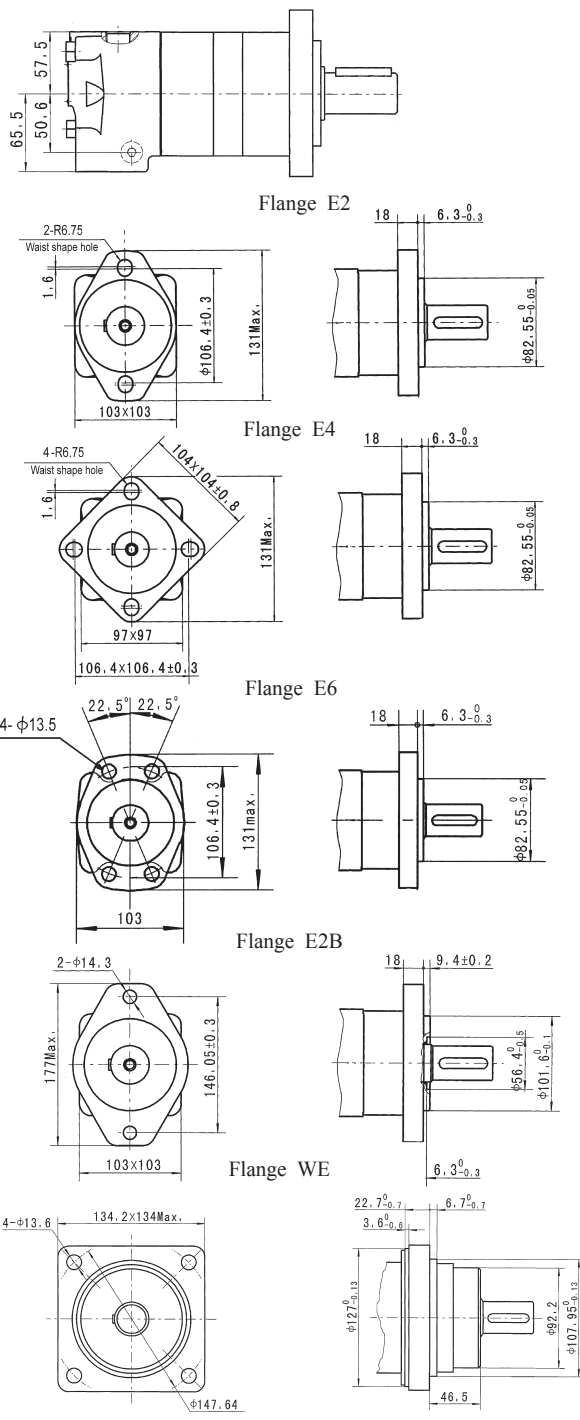
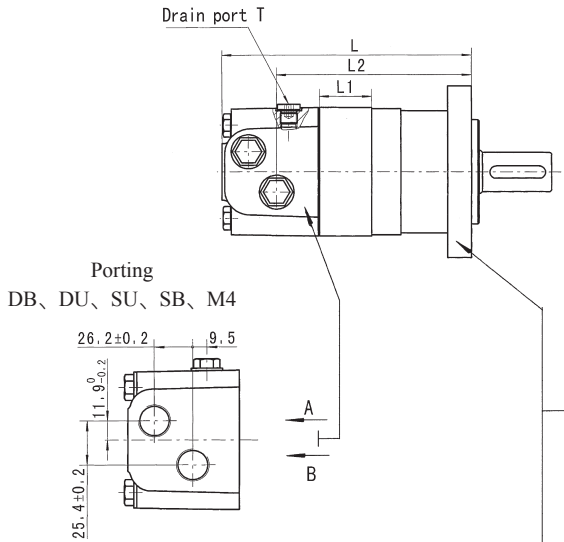
Model	L	L1	L2
BMS-80-W	129.4	13	86
BMS-100-W	133.4	17	90
BMS-125-W	138.4	22	95
BMS-160-W	143.9	27.5	100.5
BMS-200-W	151.4	35.1	108
BMS-250-W	163.4	47	120
BMS-315-W	175.4	59	132
BMS-375-W	187.4	71	144

Note:1) If the mounting SP is used, the dimensions of L and L2 should plus 12mm.

2) The thickness of the stator and rotor is the dimension of L1 plused 3mm.

Code Mounting	D (depth)	M (depth)	S (depth)	P (depth)
P(A,B)	G1/2(18)	M22x1.5(18)	7/8-14 O-ring (18)	1/2-14NPTF (15)
T	G1/4(12)	M14x1.5(12)	7/16-20UNF(12)	7/16-20UNF(12)
C	2-M10(13)	2-M10 (13)	2-3/8-16UNC (13)	2-3/8-16UNC (13)

BMSE DIMENSIONS AND MOUNTING DATA



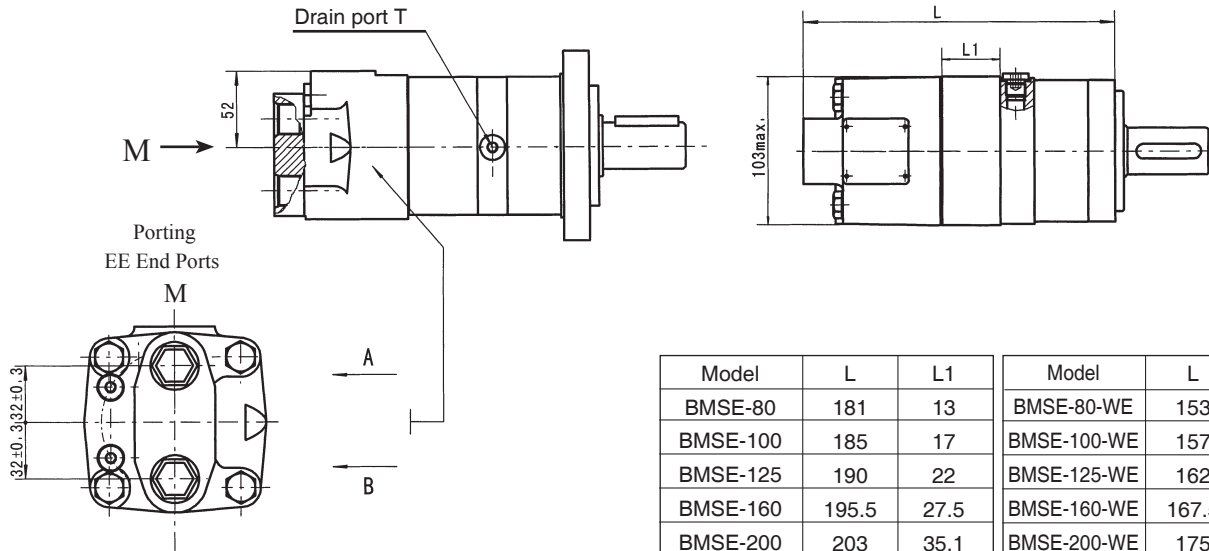
Model	L	L1	L2
BMSE-80	171	13	123.2
BMSE-100	175	17	127.2
BMSE-125	180	22	132.2
BMSE-160	185.5	27.5	137.7
BMSE-200	193	35.1	145.2
BMSE-250	205	47	157.2
BMSE-315	217	59	169.2
BMSE-375	229	71	181.2

Model	L	L1	L2
BMSE-80-WE	143	13	95
BMSE-100-WE	147	17	99
BMSE-125-WE	152	22	104
BMSE-160-WE	157.5	27.5	109.5
BMSE-200-WE	165	35.1	117
BMSE-250-WE	177	47	129
BMSE-315-WE	189	59	141
BMSE-375-WE	201	71	153

Note: The thickness of the stator and rotor is the dimension of L1 plus 3mm.

Code	DB (depth)	DU (depth)	SU (depth)	SB (depth)	M4 (depth)
P(A,B)	G1/2 (18)	G1/2 (18)	7/8-14 O-ring (18)	7/8-14 O-ring (18)	M22 x 1.5 (18)
T	G1/4 (12)	7/16-20UNF(12)	7/16-20UNF(12)	G1/4 (12)	M14 x 1.5 (12)

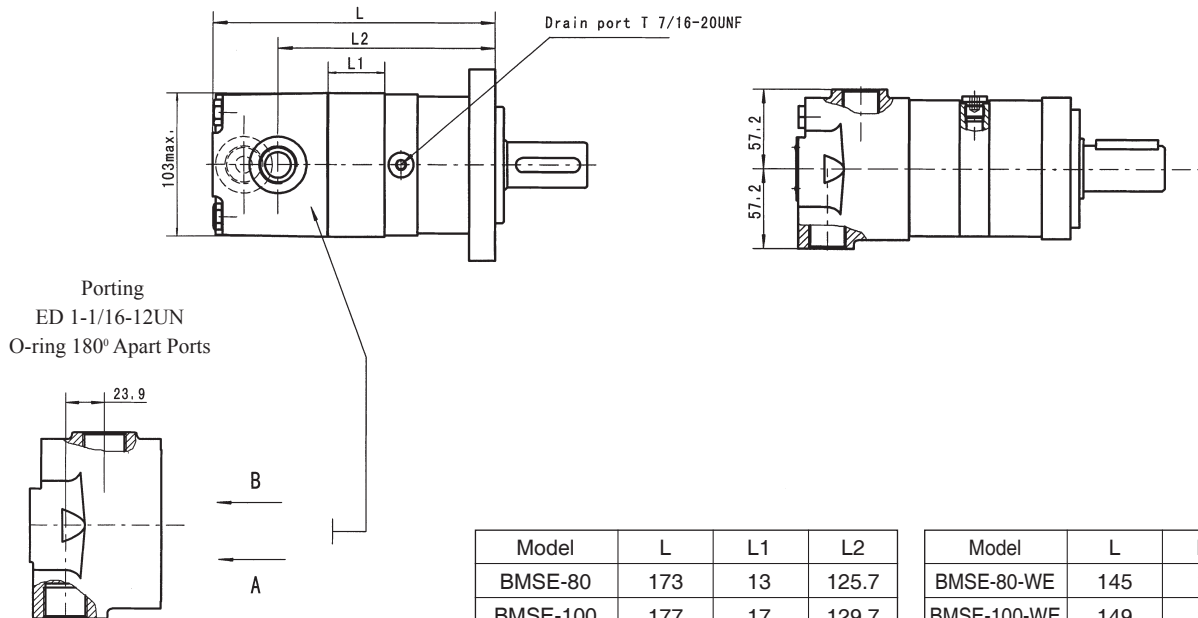
BMSE DIMENSIONS AND MOUNTING DATA



Model	L	L1	Model	L	L1
BMSE-80	181	13	BMSE-80-WE	153	13
BMSE-100	185	17	BMSE-100-WE	157	17
BMSE-125	190	22	BMSE-125-WE	162	22
BMSE-160	195.5	27.5	BMSE-160-WE	167.5	27.5
BMSE-200	203	35.1	BMSE-200-WE	175	35.1
BMSE-250	215	47	BMSE-250-WE	187	47
BMSE-315	227	59	BMSE-315-WE	199	59
BMSE-375	239	71	BMSE-375-WE	211	71

Note: The thickness of the stator and rotor is the dimension of L1 plus 3mm.

Code	EE-D (depth)	EE-M2 (depth)	EE-S2 (depth)
P(A,B)	G1/2 (18)	M22 x 1.5 (18)	7/8-14 O-ring (18)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)



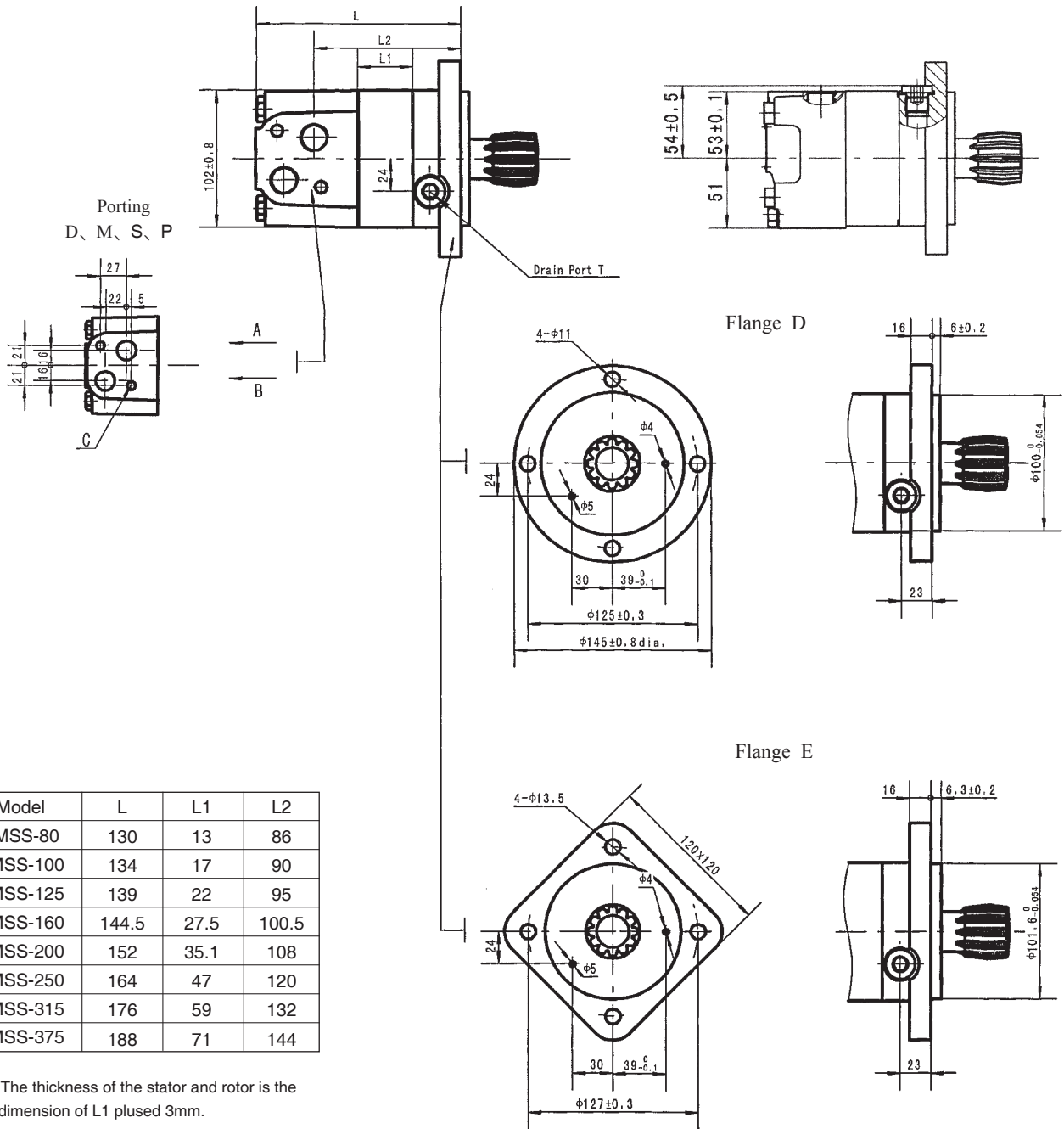
Model	L	L1	L2
BMSE-80	173	13	125.7
BMSE-100	177	17	129.7
BMSE-125	182	22	134.7
BMSE-160	187.5	27.5	140.2
BMSE-200	195	35.1	147.7
BMSE-250	207	47	159.7
BMSE-315	219	59	171.7
BMSE-375	231	71	183.7

Model	L	L1	L2
BMSE-80-WE	145	13	97.5
BMSE-100-WE	149	17	101.5
BMSE-125-WE	153	22	106.5
BMSE-160-WE	158.5	27.5	112
BMSE-200-WE	166	35.1	119.5
BMSE-250-WE	179	47	131.5
BMSE-315-WE	191	59	143.5
BMSE-375-WE	203	71	155.5

Note: The thickness of the stator and rotor is the dimension of L1 plus 3mm.

Code	ED (depth)
P(A,B)	1-1/16-12UN O-ring (18)
T	7/16-20UNF(12)

BMSS DIMENSIONS AND MOUNTING DATA

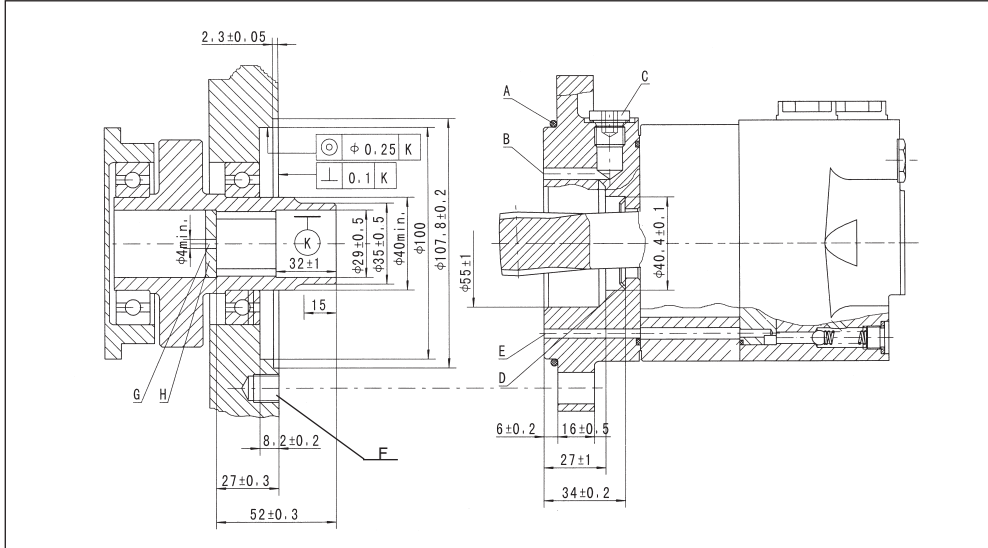


Model	L	L1	L2
BMSS-80	130	13	86
BMSS-100	134	17	90
BMSS-125	139	22	95
BMSS-160	144.5	27.5	100.5
BMSS-200	152	35.1	108
BMSS-250	164	47	120
BMSS-315	176	59	132
BMSS-375	188	71	144

Note: The thickness of the stator and rotor is the dimension of L1 plused 3mm.

Code Mounting	D (depth)	M (depth)	S (depth)	P (depth)
P(A,B)	G1/2 (18)	M22 x 1.5 (18)	7/8-14 O-ring (18)	1/2-14NPTF (15)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)	7/16-20UNF(12)
C	2-M10 (13)	2-M10 (13)	2-3/8-16UNC (13)	2-3/8-16UNC (13)

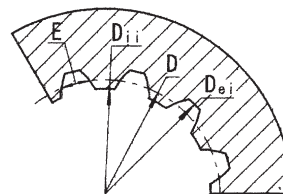
BMSS DIMENSIONS AND MOUNTING DATA



- A: O-ring:100x3
- B: External drain channel
- C: Drain connection G 1/4;12 mm deep
- D: Conical seal ring
- E: Internal drain channel
- F: M10;min. 15mm deep
- G: Oil circulation hole
- H: Hardened stop plate

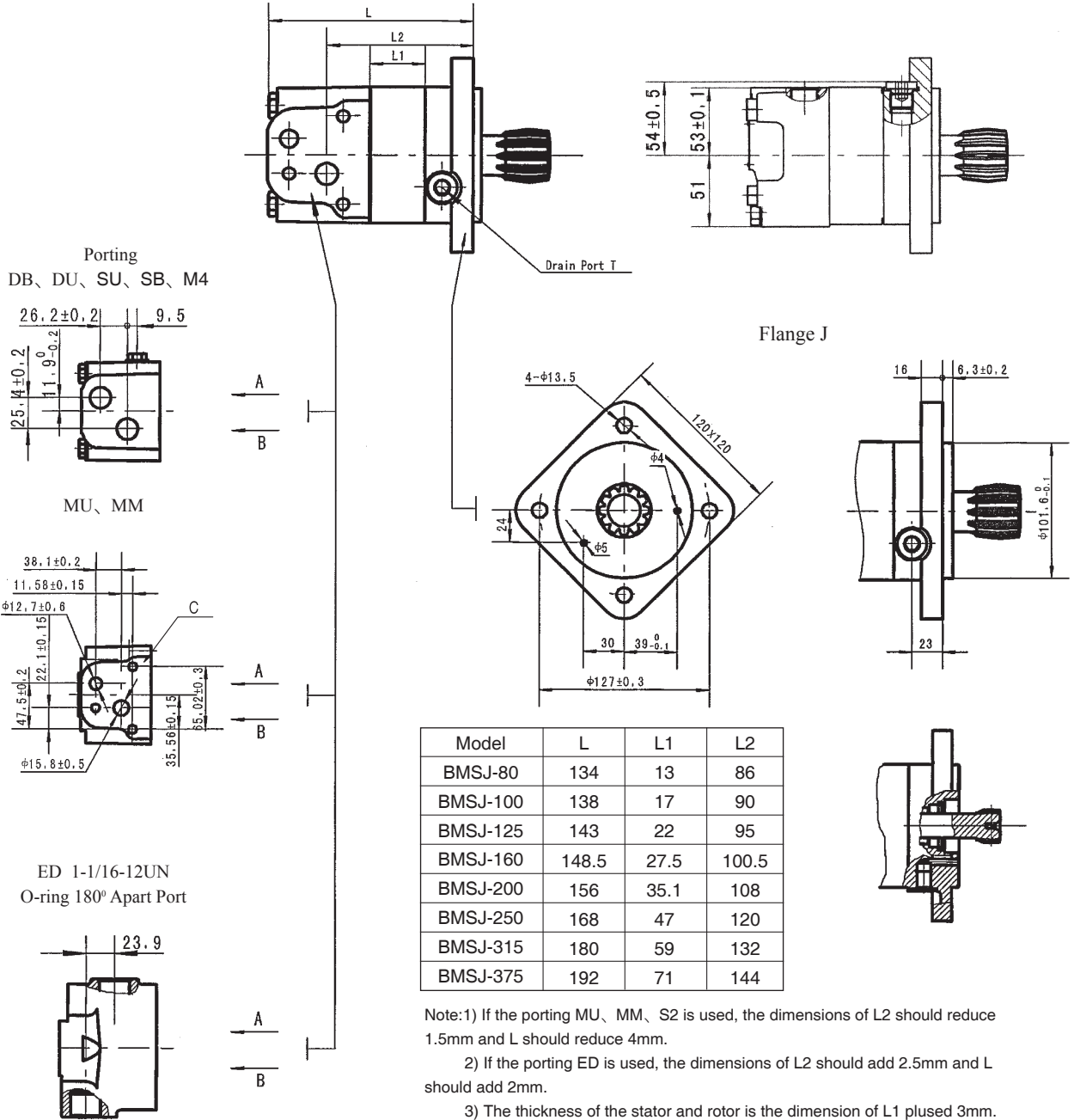
INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

Fillet Root Side Fit		mm
Number of Teeth	Z	12
Diametral Pitch	DP	12/24
Pressure Angle	α_o	30°
Pitch Dia.	D	φ25.4
Major Dia.	D_{ei}	$\phi 28 \begin{smallmatrix} 0 \\ -0.1 \end{smallmatrix}$
Minor Dia.	D_{ii}	$\phi 23 \begin{smallmatrix} -0.033 \\ 0 \end{smallmatrix}$
Space Width [Circular]	E	4.308 ± 0.02



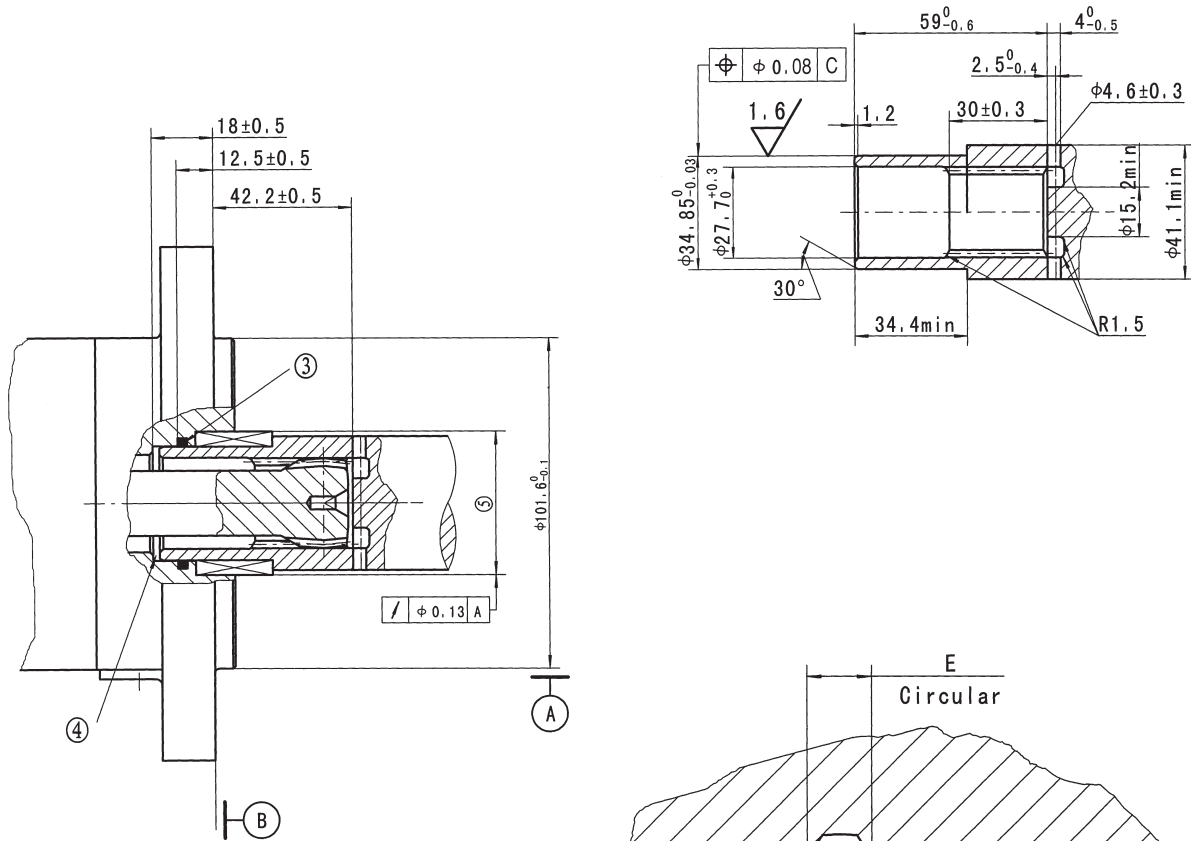
Hardening Specification: HRC 62 ± 2
Effective case depth 0.7 ± 0.2

BMSJ DIMENSIONS AND MOUNTING DATA



Code Mounting	DB (depth)	DU (depth)	SU (depth)	SB (1depth)	M4 (depth)	MU	MM	ED (depth)
P(A,B)	G1/2 (18)	G1/2 (18)	7/8-14 O-ring (18)	7/8-14 O-ring (18)	M22 x 1.5 (18)	φ12.7, φ15.8	φ12.7, φ15.8	1-1/16-12UN (18)
T	G1/4 (12)	7/16-20UNF(12)	7/16-20UNF(12)	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)	G1/4 (12)	7/16-20UNF(12)
C			--			3 x 3/8-16UNC	3 x M10	--

BMSJ DIMENSIONS AND MOUNTING DATA



INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

Fillet Root Side Fit		mm
Number of Teeth	Z	12
Diametral Pitch	DP	12/24
Pressure Angle	α_D	30°
Pitch Dia.	D	ø25.4
Major Dia.	D_{ei}	ø27.6 ^{+0.14} ₀
Minor Dia.	D_i	ø23.1 ^{+0.12} ₀
Space Width [Circular]	E	4.282±0.036
Dimension between two pins(ø3.38)	M_o	19.02-19.19

① Internal spline in mating part to be per data. Specification material to be ASTM A304, 8620H. Vacuum degassed alloy steel carburize to a hardness of 58-62HRC with case depth (to 50HRC) of 0.75-1 [.030-.040] (dimensions apply after heat treat).

② Mating part to have critical dimensions as shown, Oil holes must be provided and open for proper oil circulation.

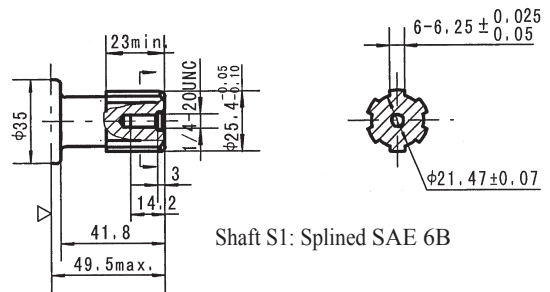
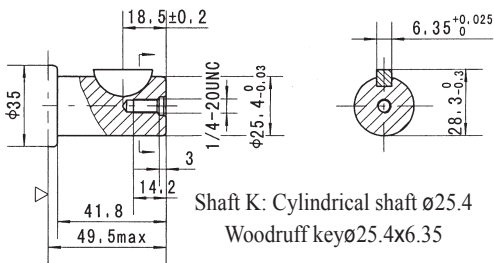
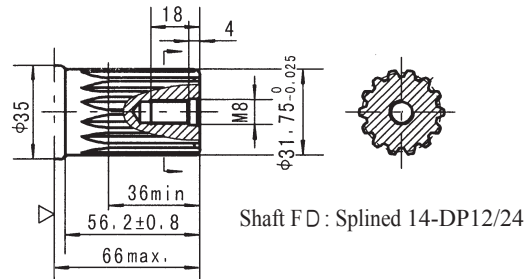
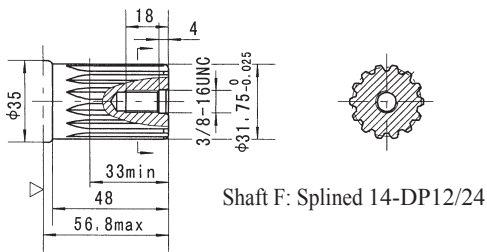
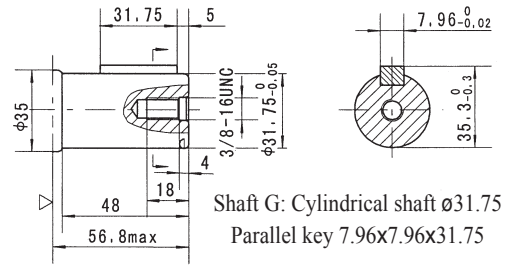
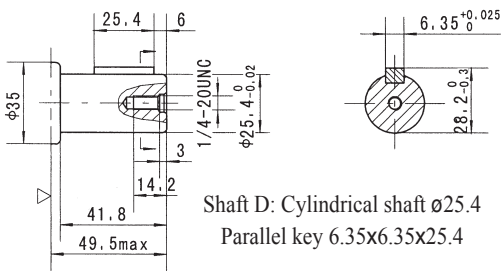
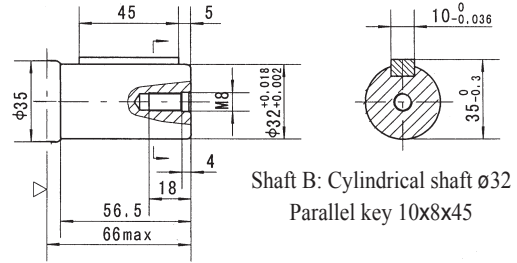
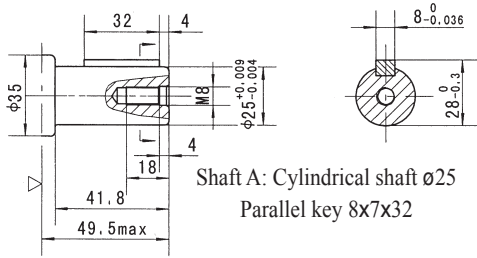
③ Some means of maintaining clearance between shaft and mounting flange must be provided.

④ Seal to be furnished with motor for proper oil circulation thru splines.

⑤ Counterbore designed to adapt to a standard sleeve bearing 35.010-35.040 [1.3784-1.3795] ID by 44.040-44.070 [1.7339-1.7350] O.D.(Oilite Bronze Sleeve Bearing AAM3544-22).

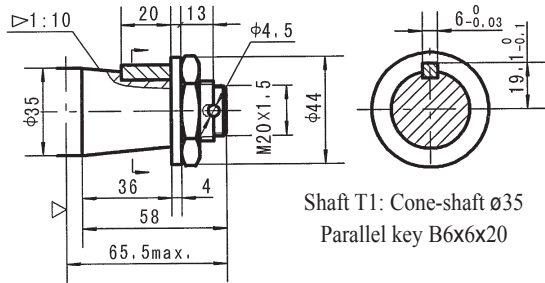
C This surface to be diameter of output shaft.

SHAFT EXTENSIONS FOR BMS(E) MOTORS

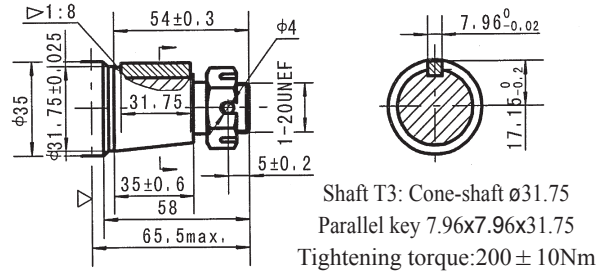


▷ Motor Mounting Surface(Dimension corresponding mounting E2, by analogy with others)

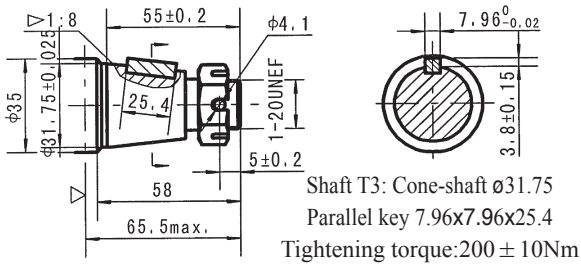
SHAFT EXTENSIONS FOR BMS(E) MOTORS



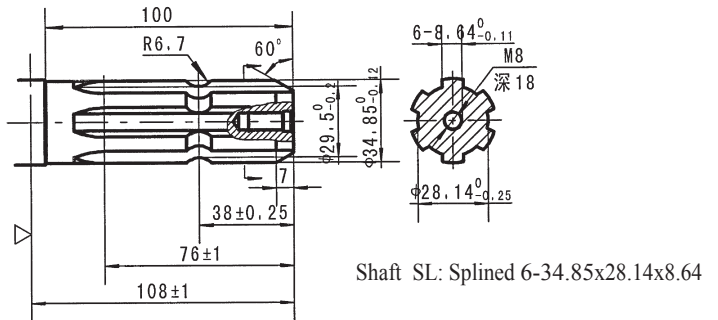
Shaft T1: Cone-shaft ø35
Parallel key B6x6x20



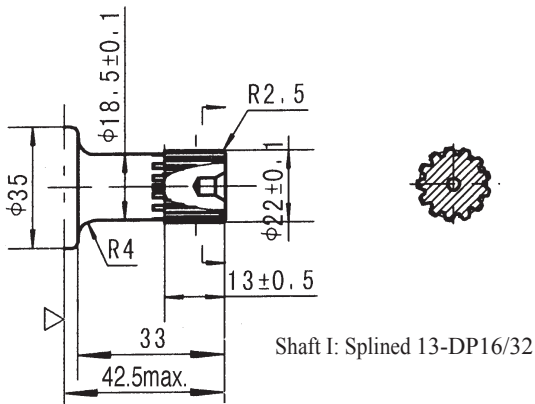
Shaft T3: Cone-shaft ø31.75
Parallel key 7.96x7.96x31.75
Tightening torque:200 ± 10Nm



Shaft T3: Cone-shaft ø31.75
Parallel key 7.96x7.96x25.4
Tightening torque:200 ± 10Nm



Shaft SL: Splined 6-34.85x28.14x8.64

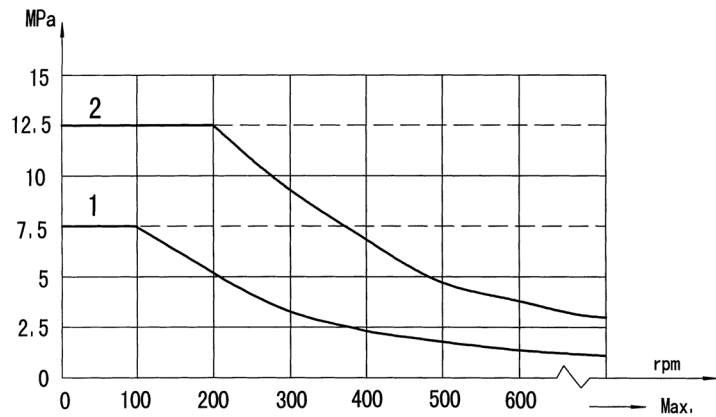
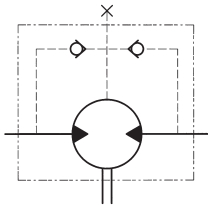


Shaft I: Splined 13-DP16/32

- ▷ Motor Mounting Surface(Dimension corresponding mounting E2, by analogy with others)
Note:Mounting SP is the same with shaft modle T1、D、B、F and G.

BMS(E) Series Hydraulic Motor

Permissible shaft seal pressure

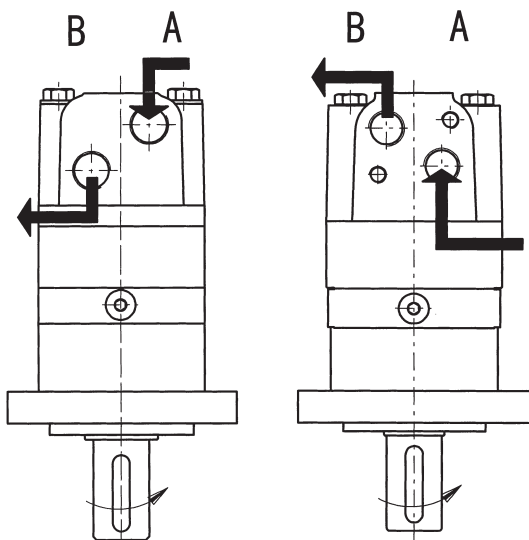


Note: 1. Chart for standard shaft seal;
2. Chart for high pressure shaft seal.

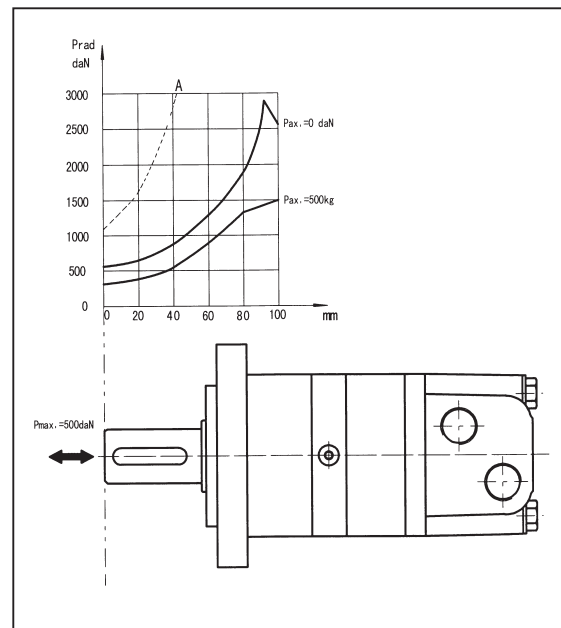
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Standard direction of shaft rotation: Standard

When facing shaft end of motor, shaft to rotate:
Clockwise when port "A" is pressurized.
Counter-clockwise port "B" is pressurized.

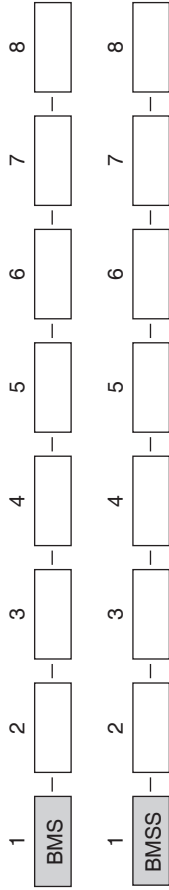


Axial and Radial forces



The output shaft runs in tapered bearings that permit high axial and radial forces, Curve "A" shows max radial shaft load, Any shaft loads exceeding the values quoted in the curve will involve a risk of breakage, The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM.

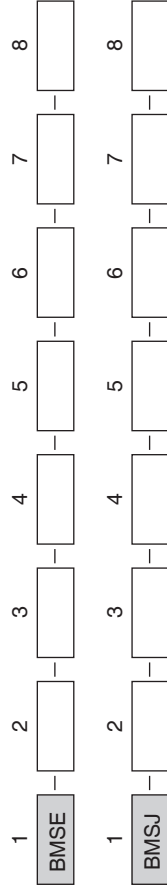
Order Information



Pos.1	2	3	4	5	6	7	8	
Code	Disp.	Flange	Output Shaft	Port and Drain Port	Rotation Direction	Paint	Unusually Function	
BMS	80	E2 2-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 6.3	A Shaft Ø25 , parallel key 8 × 7 × 32 B Shaft Ø32 , parallel key 10 × 8 × 45 D Shaft Ø25.4 , parallel key 6.35 × 6.35 × 25.4 G Shaft Ø31.75 , parallel key 7.96 × 7.96 × 31.75 F Shaft Ø31.75 , parallel key 7.96 × 7.96 × 31.75 FD Long Shaft Ø31.75 , splined tooth 14-DP12/24 SL splined tooth 14-DP12/24 shaft Ø34.85,Splined key 6-34.85 × 28.14 × 8.64	D G1/2 Manifold Mount 2-M10 , G1/4 M M22 × 1.5 Manifold Mount 2-M10 , M14 × 1.5 S 7/8-14UNF O-ring manifold 2-3/8-16 , 7/16-20UNF P 1/2-14NPTF manifold 2-3/8-16UNC , 7/16-20UNF	Standard Opposite R	No paint Blue Black Silver grey	Standard Low Leakage Free Running Low Speed	
	100	E4 4-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 6.3	T1 Cone-shaft Ø35 , parallel key B6 × 6 × 20 T3 Cone-shaft Ø31.75 , parallel key 7.96 × 7.96 × 31.75 S1 Shaft Ø25.4 ,splined tooth SAE 6B I Sub-shaft Ø22 , splined tooth 13-DP16/32					
	125	F6 6-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 2.6						
	160	W 4-Ø13.5 Wheel-flange Ø160 , pilot Ø125 × 8						
	200	E2B 2-Ø14.3 Rhomb-flange Ø146.05, pilot Ø101.6 × 9.4						
	250	SP 4-Ø11.5 Square-flange Ø106.4, pilot Ø82.5 × 6.3						
	315							
	BMSS	375	D 4-Ø11 Circle-flange Ø125 , pilot Ø100 × 6 E 4-Ø13.5 Square-flange Ø127 , pilot Ø101.6 × 6.3	Short shaft 12-DP12/24				
				Ømit				

Note:When the table is used, please fill the code of left rows in the table and give us, which the code information is consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us. SP for T1, D, B, F, G.

Order Information



Pos.1	2	3	4	5	6	7	8	
Code	Disp.	Flange	Output Shaft	Port and Drain Port	Rotation Direction	Paint	Unusually Function	
BMSE	80	E2 2-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 6.3	A Shaft Ø25 , parallel key 8 × 7 × 32 B Shaft Ø32 , parallel key 10 × 8 × 45 K Shaft Ø25.4, Woodruff key Ø25.4 × 6.35	MU 1/2" ,58" Crosshole Manifold 3 × 3/8- 16UNC,7/16-20UNF	Standard	00	Omit	
	100	E4 4-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 6.3	G Shaft Ø31.75 , parallel key 7.96 × 7.96 × 31.75	MM 1/2" ,58" Crosshole Manifold 3 × M10,G1/4 EE-D G1/2,G1/4				LL
	125	E2B 2-Ø14.3 Rhomb-flange Ø146.05, pilot Ø101.6 × 9.4	F Shaft Ø31.75 , splined tooth 14-DP12/24	EE-S2 M22 × 1.5,M14 × 1.5	Opposite	B	Free Running	
	160	E6 4-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 6.3	T4 Cone-shaftØ31.75 , parallel key 7.96 × 7.96 × 25.4	ED 7/8-14UNF O-ring,7/16-20 UNF DB G1/2,G1/4	R	S	Low Leakage	
	200	WE 4-Ø13.6Wheel-flangeØ147.6, pilot Ø107.95×6.4	S1 Shaft Ø25.4 ,splined tooth SAE 6B I Sub-shaft Ø22 , splined tooth 13-DP16/32	DU 7/8-14UNF O-ring,G1/4 SB 7/8-14UNF O-ring,7/16-20 UNF SU M22 × 1.5,M14 × 1.5			Low Speed	
	250							
	315							
	375	J 4-Ø13.5 Square-flange Ø127 , pilot Ø101.6 × 6.3	Omit Short shaft12- DP12/24					
	BMSJ							

BMSY SERIES HYDRAULIC MOTOR

BMSY new series motor adapt the advanced Geroler gear set designed with disc distribution flow and high pressure. The unit can be supplied the individual variant in operating multifunction in accordance with requirement of applications.

Characteristic features:

- * The motor has the same dimensions and mounting data as the hydraulic motors type BMS.
- * The motor is described with 15-20% higher technical data(Max. torque and Max. pressure drop), thereby higher power. The new motor is suitable for vehicles with greater loads and pressure drop.

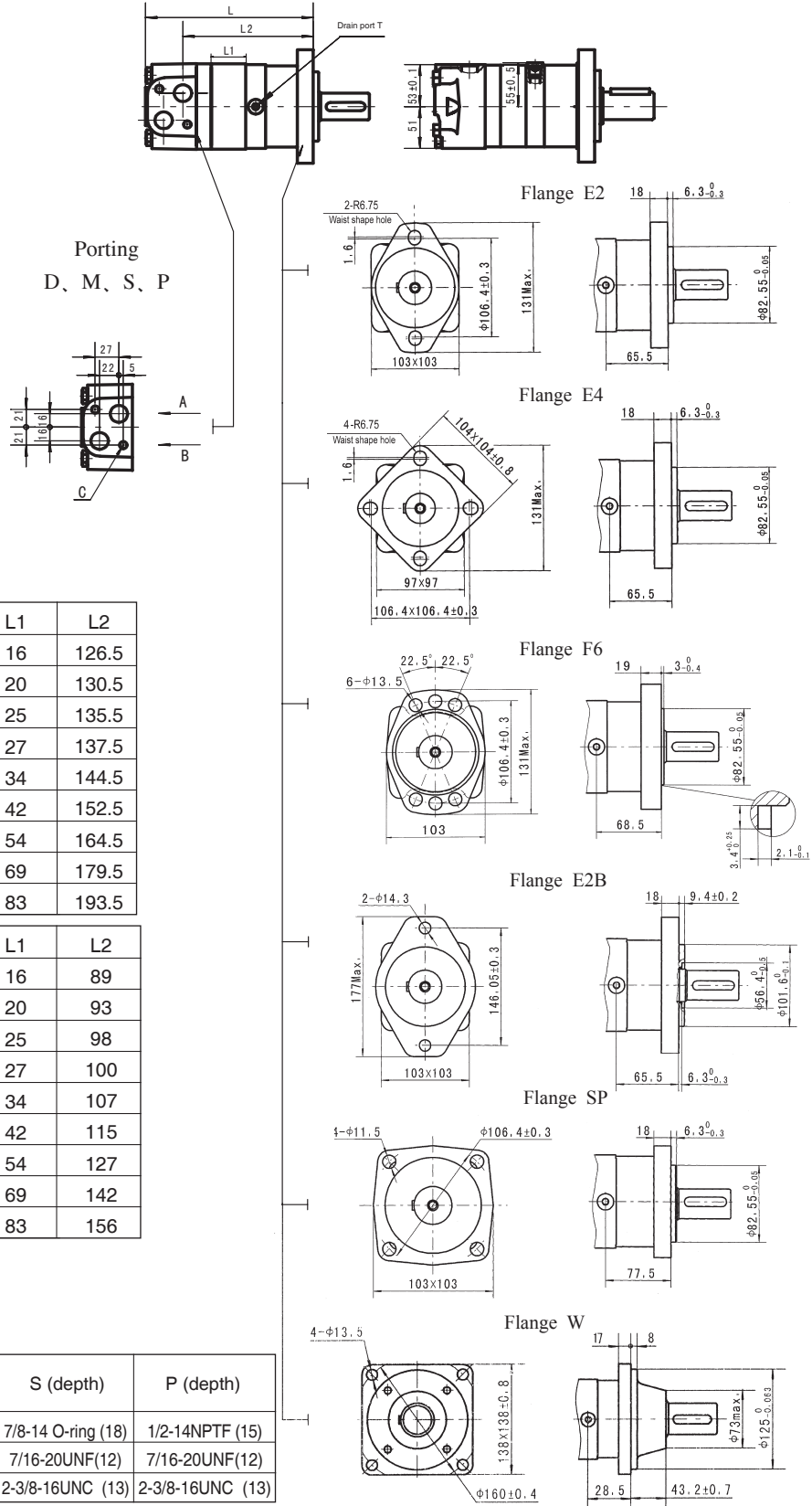


Main Specification

Type		BMSY 80	BMSY 100	BMSY 125	BMSY 160	BMSY 200	BMSY 250	BMSY 315	BMSY 400	BMSY 475
Geometric displacement (cm ³ /rev.)		80.6	100.8	125	154	194	243	311	394	475
Max. speed (rpm)	cont.	800	748	600	470	375	300	240	185	155
	int.	988	900	720	560	450	360	280	225	185
Max. torque (N•m)	cont.	225	290	365	485	586	708	880	880	910
	int.	250	320	400	540	645	806	960	960	960
Max. output (kW)	cont.	16	18	18	18.1	18.1	18	17	11	9
	int.	20	22	23	25	24	23.8	20.2	12	11
Max. pressure drop (MPa)	cont.	20.5	20.5	20.5	21	21	20	20	16	14
	int.	22.5	22.5	22.5	22.5	22.5	22.5	22.5	17.5	15
	peak	29.5	29.5	29.5	28	27	27	26	21	17.5
Max. flow (L/min)	cont.	65	75	75	75	75	75	75	75	75
	int.	80	90	90	90	90	90	90	90	90
Max. inlet pressure (MPa)	cont.	25	25	25	25	25	25	25	25	25
	int.	30	30	30	30	30	30	30	30	30
Weight (kg)		9.8	10	10.3	10.7	11.1	11.6	12.3	13.2	14.3

- * Continuous pressure:Max. value of operating motor continuously.
- * Intermittent pressure:Max. value of operating motor in 6 seconds per minute.
- * Peak pressure:Max. value of operating motor in 0.6 second per minute.

BMSY DIMENSIONS AND MOUNTING DATA

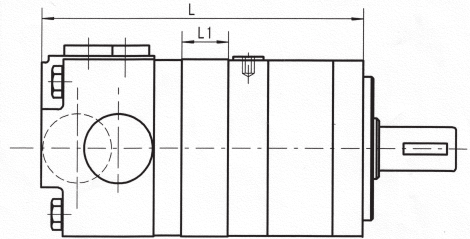
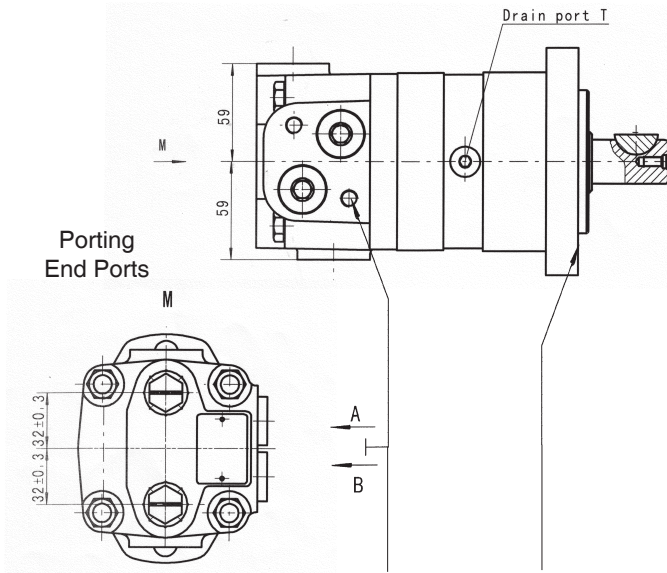


Model	L	L1	L2
BMSY-80	170	16	126.5
BMSY-100	174	20	130.5
BMSY-125	179	25	135.5
BMSY-160	181	27	137.5
BMSY-200	188	34	144.5
BMSY-250	196	42	152.5
BMSY-315	208	54	164.5
BMSY-400	223	69	179.5
BMSY-475	237	83	193.5

Model	L	L1	L2
BMSY-80-W	132.5	16	89
BMSY-100-W	136.5	20	93
BMSY-125-W	141.5	25	98
BMSY-160-W	143.5	27	100
BMSY-200-W	150.5	34	107
BMSY-250-W	158.5	42	115
BMSY-315-W	170.5	54	127
BMSY-400-W	185.5	69	142
BMSY-475-W	199.5	83	156

Code Mounting	D (depth)	M (depth)	S (depth)	P (depth)
P(A,B)	G1/2(18)	M22x1.5(18)	7/8-14 O-ring (18)	1/2-14NPTF (15)
T	G1/4(12)	M14x1.5(12)	7/16-20UNF(12)	7/16-20UNF(12)
C	2-M10(13)	2-M10 (13)	2-3/8-16UNC (13)	2-3/8-16UNC (13)

BMSY DIMENSIONS AND MOUNTING DATA

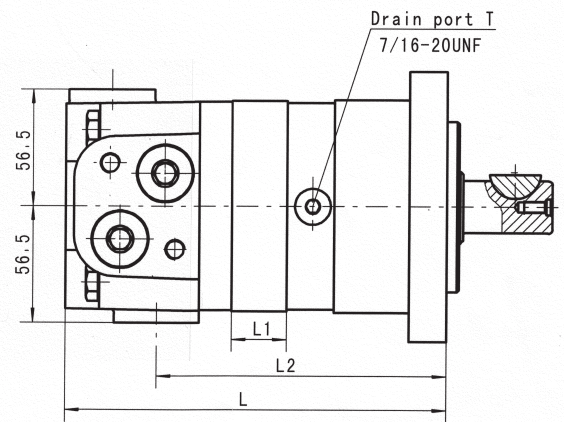
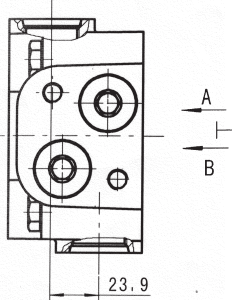


End Ports P(A) B)

Model	L	L1	Model	L	L1
BMSY-80	176	16	BMSY-80-WE	148	16
BMSY-100	180	20	BMSY-100-WE	152	20
BMSY-125	185	25	BMSY-125-WE	157	25
BMSY-160	187	27	BMSY-160-WE	159	27
BMSY-200	194	34	BMSY-200-WE	166	34
BMSY-250	202	42	BMSY-250-WE	174	42
BMSY-315	214	54	BMSY-315-WE	186	54
BMSY-400	229	69	BMSY-400-WE	201	69
BMSY-475	243	83	BMSY-475-WE	215	83

Code	EE-D (depth)	EE-M2 (depth)	EE-S2 (depth)
P(A,B)	G1/2 (18)	M22 x 1.5 (18)	7/8-14 O-ring (18)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)

Porting
ED 1-1/16-12UN O-ring
180° Apart ports

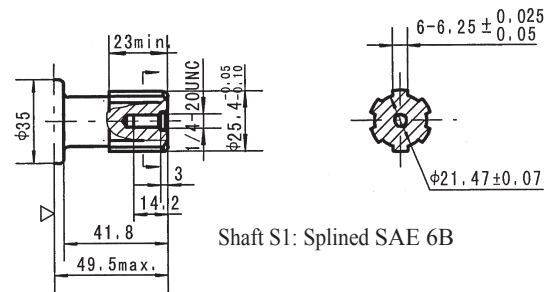
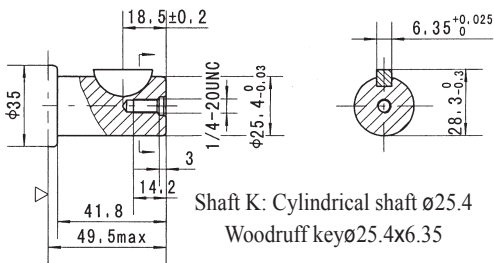
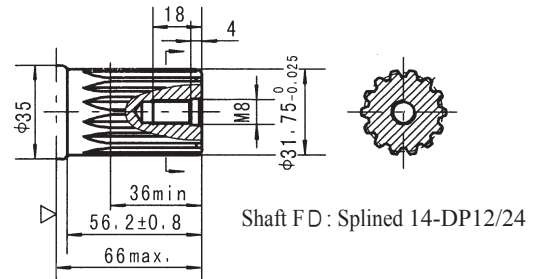
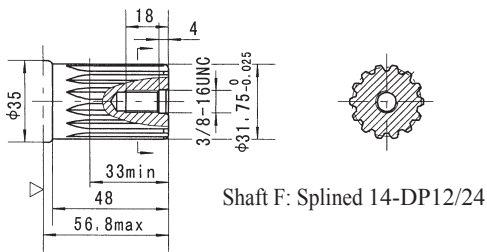
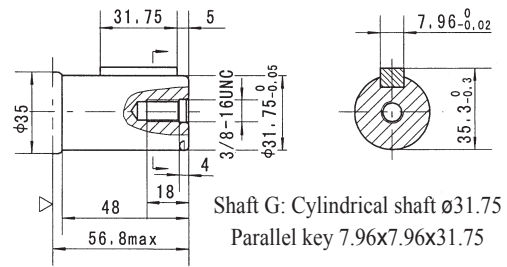
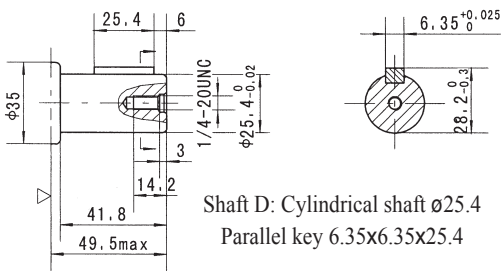
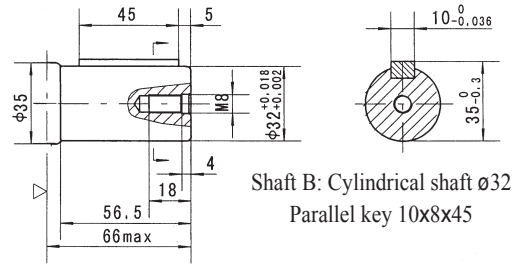
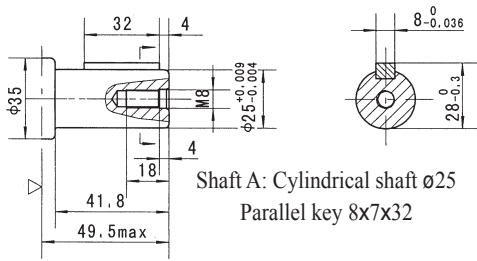


Code	ED (depth)
P(A,B)	1-1/16-12UN (18)
T	7/16-20UNF (12)

Model	L	L1	L2
BMSY-80	176	16	130
BMSY-100	180	20	134
BMSY-125	185	25	139
BMSY-160	187	27	141
BMSY-200	194	34	148
BMSY-250	202	42	156
BMSY-315	214	54	168
BMSY-400	229	69	183
BMSY-475	243	83	197

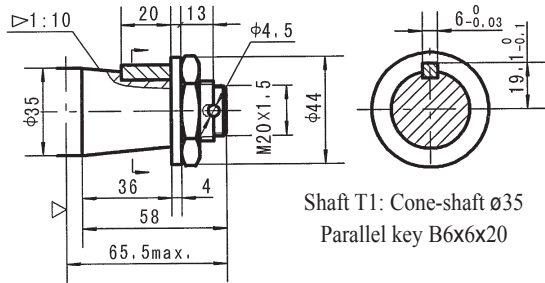
Model	L	L1	L2
BMSY-80-WE	148	16	102
BMSY-100-WE	152	20	106
BMSY-125-WE	157	25	111
BMSY-160-WE	159	27	113
BMSY-200-WE	166	34	119
BMSY-250-WE	178	42	127
BMSY-315-WE	190	54	139
BMSY-400-WE	205	69	154
BMSY-475-WE	219	83	168

SHAFT EXTENSIONS FOR BMSY MOTORS

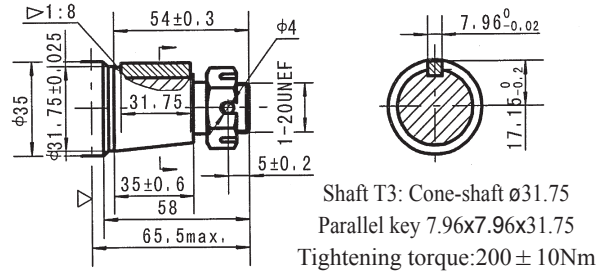


▷ Motor Mounting Surface(Dimension corresponding mounting E2, by analogy with others)

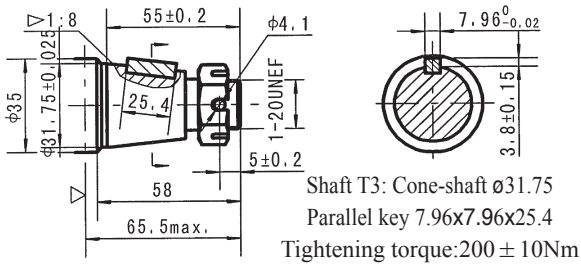
SHAFT EXTENSIONS FOR BMSY MOTORS



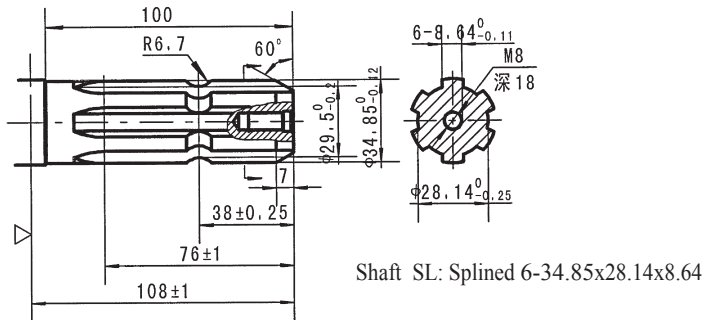
Shaft T1: Cone-shaft ø35
Parallel key B6x6x20



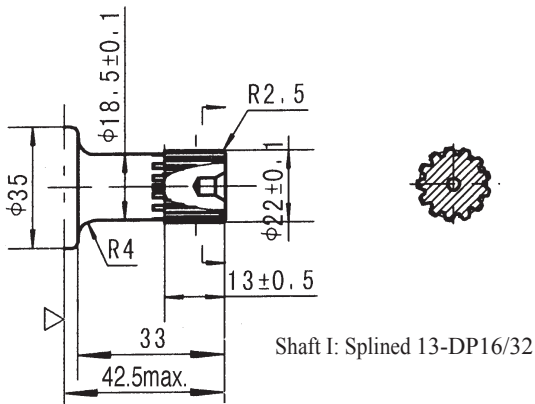
Shaft T3: Cone-shaft ø31.75
Parallel key 7.96x7.96x31.75
Tightening torque:200 ± 10Nm



Shaft T3: Cone-shaft ø31.75
Parallel key 7.96x7.96x25.4
Tightening torque:200 ± 10Nm



Shaft SL: Splined 6-34.85x28.14x8.64

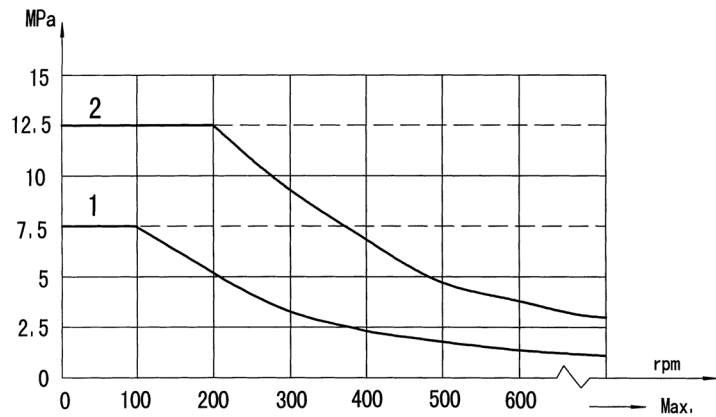
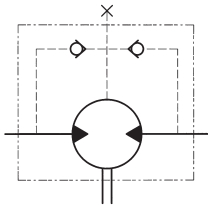


Shaft I: Splined 13-DP16/32

- ▷ Motor Mounting Surface(Dimension corresponding mounting E2, by analogy with others)
Note:Mounting SP is the same with shaft mode T1、D、B、F and G.

BMSY Series Hydraulic Motor

Permissible shaft seal pressure

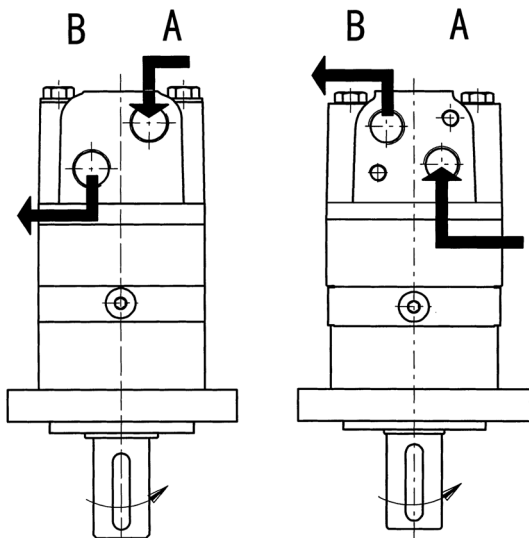


Note: 1. Chart for standard shaft seal;
2. Chart for high pressure shaft seal.

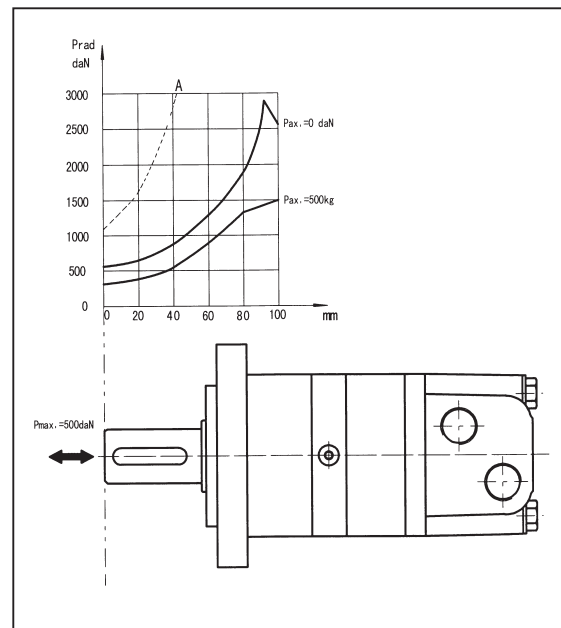
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Standard direction of shaft rotation: Standard

When facing shaft end of motor, shaft to rotate:
Clockwise when port "A" is pressurized.
Counter-clockwise port "B" is pressurized.

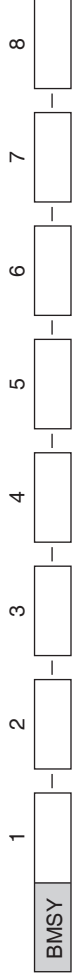


Axial and Radial forces



The output shaft runs in tapered bearings that permit high axial and radial forces, Curve "A" shows max radial shaft load, Any shaft loads exceeding the values quoted in the curve will involve a risk of breakage, The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM.

Order Information



Pos.1	2	3	4	5	6	7	8
Code	Disp.	Flange , Pilot , Port	Output Shaft	Port and Drain Port	Rotation direction	Paint	Unusually function
	80	2-Ø13.5 Rhomb-flange Ø106.4, Pilot Ø82.5 × 6.3	A Shaft Ø25 Parallel key 8 × 7 × 32 B Shaft Ø32 Parallel key 10 × 8 × 45 D Shaft Ø25.4 Parallel key 6.35 × 6.35 × 25.4	D G1/2 Manifold Mount 2-M10,G1/4 M M22 × 1.5 Manifold Mount 2-M10, M14 × 1.5			
	100	E2	G Shaft Ø31.75, Parallel key 7.96 × 7.96 × 31.75	S 7/8-14UNF O-ring manifold			
	125	E4	F Shaft Ø31.75, Splined key 14-DP12/24	2-3/8-16,7/16-20UNF			
	160	F6	FD Long Shaft Ø31.75, Splined key 14-DP12/24	P 1/2-14NPTF manifold			
	200	W	SL Shaft Ø34.85, Splined key 6-34.85 × 28.14 × 8.64	2-3/8-16UNC,7/16-20UNF	Omit	00	Omit
	250		T1 Cone-shaft Ø35, parallel key B6 × 6 × 20	EE-D G1/2,G1/4(end port)	Standard	Blue	Standard
	315	E2B	T3 Cone-shaft Ø31.75, Parallel key 7.96 × 7.96 × 31.75	EE-M2 M22 × 1.5, M14 × 1.5(end port)	Opposite	Black	Low Leakage
	400		S1 Parallel key 7.96 × 7.96 × 31.75	EE-S2 7/8-14UNF O-ring, 7/16-20 UNF(end port)	R	Silver Grey	Free Running
	475	SP	I Shaft Ø25.4, Splined key SAE 6B Splined key 13-DP16/32	ED 1-1/16-12UN O-ring, 7/16-20 UNF(180° Apart ports)			Low Speed

Note: When the table is used, please fill the code of left rows in the table and give us, which the code information is consists of construction, displacement, mounting flange, output shaft and ports. The informations of mounting flange, output shaft and ports are the same as BMS series. The SP flange afflies to shafts of T1、D、B、F、G. If the specification is not in the table or you have specific requirements, please contact us.