

BMR SERIES HYDRAULIC MOTOR

BMR series motor adapt the advanced Gerolor gear set design with shaft distribution flow, which can automatically compensate in operating with high pressure, provide reliable and smooth operation, high efficiency and long life.

Characteristic features:

- *Advanced manufacturing devices for the Gerolor gear set, which use low pressure of start-up, provide smooth, reliable operation and high efficiency.
- *Shaft seal can bear high pressure of back and the motor can be used in parallel or in series.
- *Special design in the driver-linker and prolong operating life
- *Special design for distribution system can meet the requirement of low noise of unit.
- *Compact volume and easy installation



Main Specification

Technical data for BMR with 25 and 1 in and 1 in splined and 28.56 tapered shaft

Type		BMR BMRS 36	BMR BMRS 50	BMR BMRS 80	BMR BMRS 100	BMR BMRS 125	BMR BMRS 160	BMR BMRS 200	BMR BMRS 250	BMR BMRS 315	BMR BMRS 375
Geometric displacement (cm ³ /rev.)		36	51.7	81.5	102	127.2	157.2	194.5	253.3	317.5	381.4
Max. speed (rpm)	cont.	1085	960	750	600	475	378	310	240	190	155
	int.	1220	1150	940	750	600	475	385	300	240	190
Max. torque (N•m)	cont.	72	100	195	240	300	360	360	390	390	365
	int.	83	126	220	280	340	430	440	490	535	495
	peak	105	165	270	320	370	460	560	640	650	680
Max. output (kW)	cont.	8.5	9.5	12.5	13.0	12.5	12.5	10.0	7.0	6.0	5.0
	int.	9.8	11.2	15.0	15.0	14.5	14.0	13.0	9.5	9.0	8.0
Max. pressure drop (MPa)	cont.	14.0	14	17.5	17.5	17.5	16.5	13	11	9	7
	int.	16.5	17.5	20	20	20	20	17.5	15	13	10
	peak	22.5	22.5	22.5	22.5	22.5	22.5	22.5	20	17.5	15
Max. flow (L/min)	cont.	40	50	60	60	60	60	60	60	60	60
	int.	45	60	75	75	75	75	75	75	75	75
Weight (kg)		6.5	6.7	6.9	7	7.3	7.6	8.0	8.5	9.0	9.5

* 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.

Main Specification

Technical data for BMR with 31.75 and 32 shaft

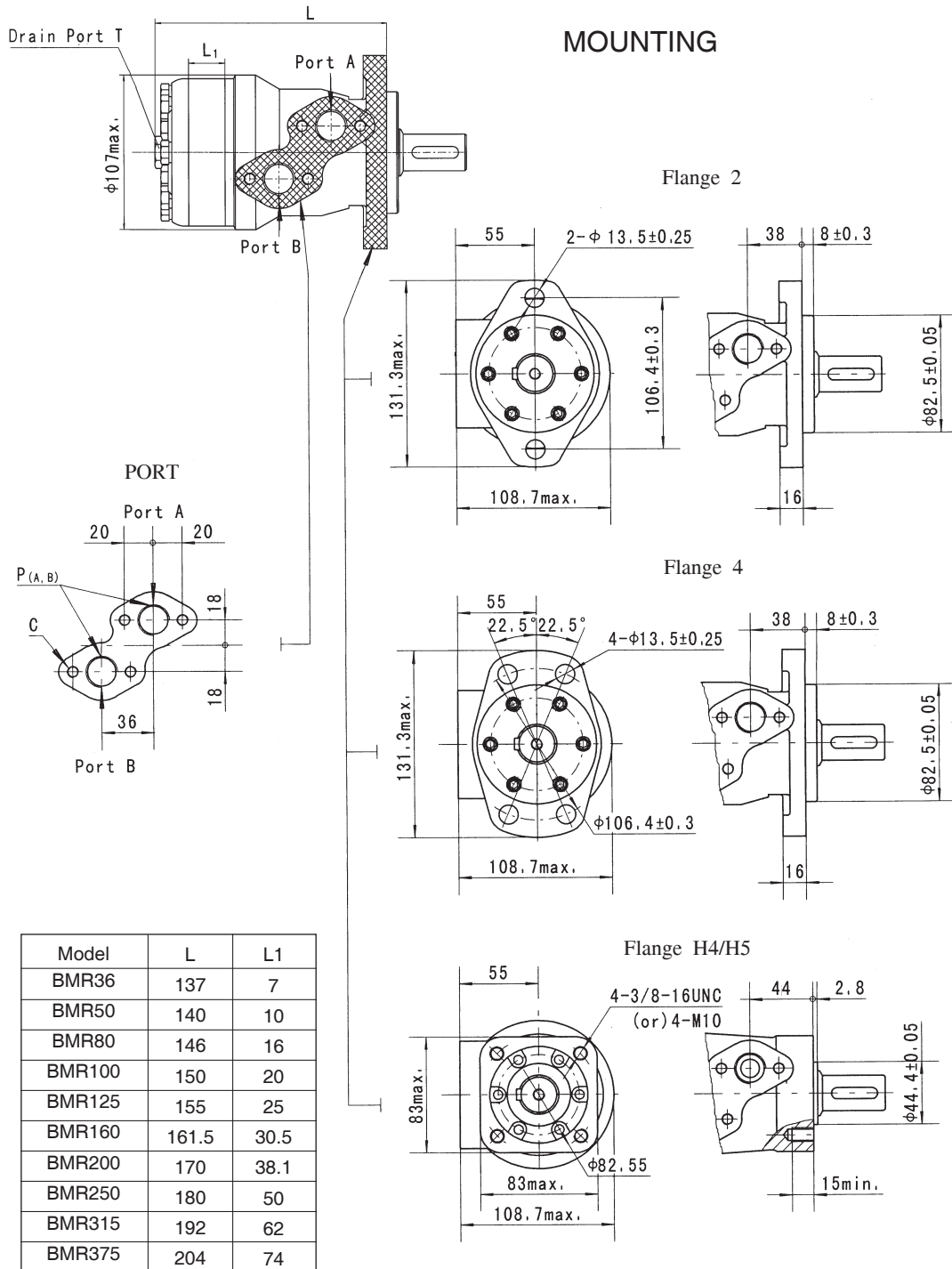
Type		BMR BMRS 36	BMR BMRS 50	BMR BMRS 80	BMR BMRS 100	BMR BMRS 125	BMR BMRS 160	BMR BMRS 200	BMR BMRS 250	BMR BMRS 315	BMR BMRS 375
Geometric displacement (cm ³ /rev.)		36	51.7	81.5	102	127.2	157.2	194.5	253.3	317.5	381.4
Max. speed (rpm)	cont.	1250	960	750	600	475	378	310	240	190	155
	int.	1520	1150	940	750	600	475	385	300	240	190
Max. torque (N•m)	cont.	72	100	195	240	300	380	450	540	550	580
	int.	83	126	220	280	340	430	500	610	690	690
	peak	105	165	270	320	370	460	560	710	840	830
Max. output (kW)	cont.	8.5	9.5	12.5	13.0	12.5	12.5	11.0	10.0	9.0	7.5
	int.	9.8	11.2	15.0	15.0	14.5	14.0	13.0	12.0	10.0	9.0
Max. pressure drop (MPa)	cont.	14.0	14	17.5	17.5	17.5	17.5	17.5	17.5	13.5	11.5
	int.	16.5	17.5	20	20	20	20	20	20	17.5	15
	peak	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	21	17.5
Max. flow (L/min)	cont.	45	50	60	60	60	60	60	60	60	60
	int.	55	60	75	75	75	75	75	75	75	75
Weight (kg)		6.5	6.7	6.9	7	7.3	7.6	8.0	8.5	9.0	9.5

* 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.

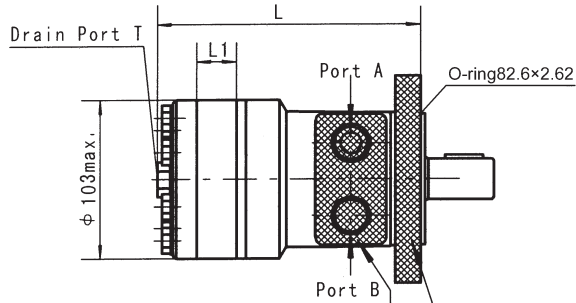
BMR DIMENSIONS AND MOUNTING DATA



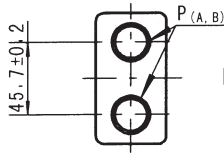
Code	D (depth)	M (depth)	S (depth)	P (depth)	R (depth)
P(A,B)	G1/2 (15)	M22 x 1.5 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	PT(RC)1/2 (15)
C	4-M8 (13)	4-M8 (13)	4-5/16-18UNC(13)	4-5/16-18UNC(13)	4-M8 (13)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT(RC)1/4 (9.7)

BMRS DIMENSIONS AND MOUNTING DATA

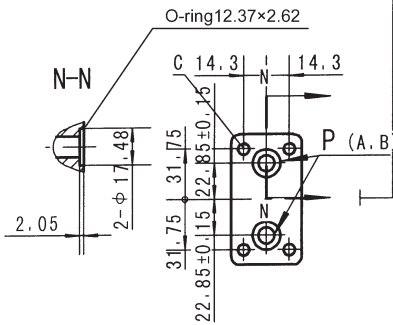
MOUNTING



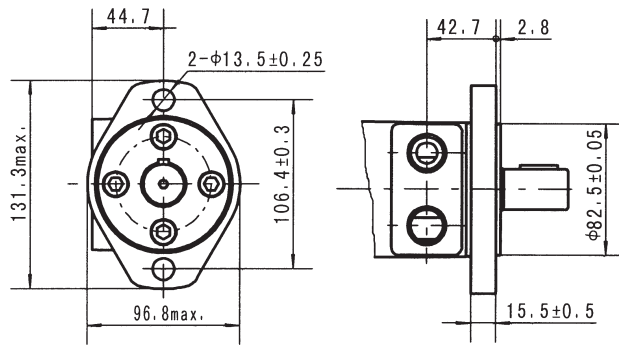
PORT: G、S、P、R、M1、M2、M3



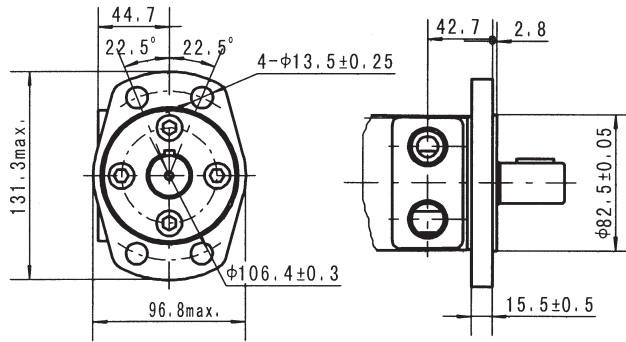
PORT: B4、B5



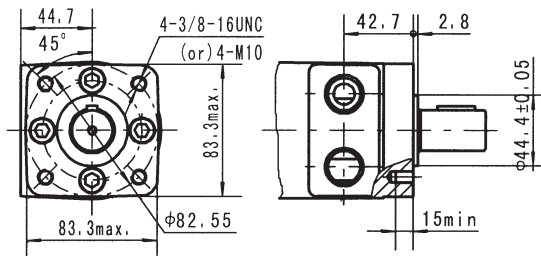
Flange H2



Flange H6



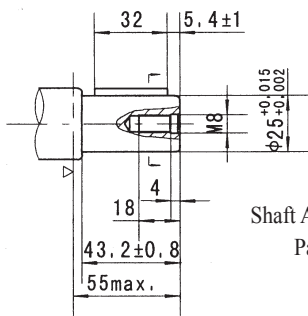
Flange H4/H5



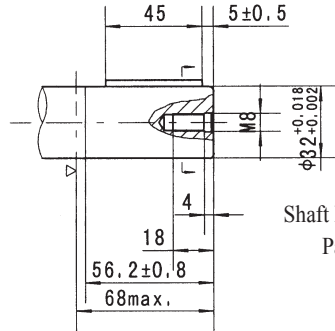
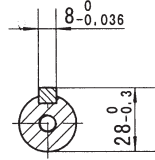
Model	L	L1
BMRS36	141	7
BMRS50	144	10
BMRS80	150	16
BMRS100	154	20
BMRS125	159	25
BMRS160	165.5	30.5
BMRS200	174	38.1
BMRS250	184	50
BMRS315	196	62
BMRS375	208	74

Code Mounting	G (depth)	S (depth)	P (depth)	R (depth)	M1 (depth)	M2 (depth)	M3 (depth)	B4 (depth)	B5 (depth)
P(A,B)	G1/2 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	PT(RC)1/2 (15)	M18 x 1.5 (15)	M20 x 1.5 (15)	M22 x 1.5 (15)	ø10	ø10
T	G1/4 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT(RC)1/4 (9.7)	M10 x 1 (12)	M10 x 1 (12)	M10 x 1 (12)	7/16-20UNF(12)	G1/4(12)
C	-	-	-	-	-	-	-	4-5/16-18UNC(13)	4-M8(13)

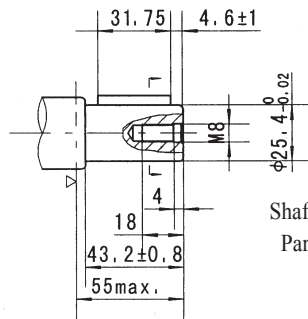
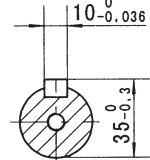
BMR SHAFT EXTENSIONS DIMENSIONS DATA



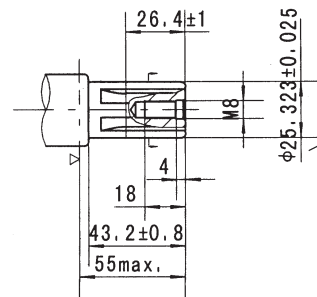
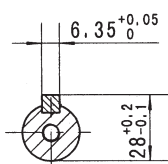
Shaft A: Cylindrical shaft $\phi 25$
Parallel key 8x7x32



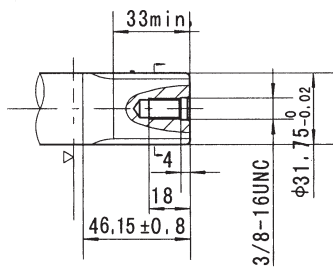
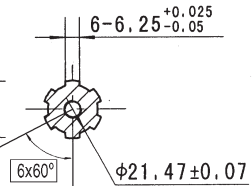
Shaft B: Cylindrical shaft $\phi 32$
Parallel key 10x8x45



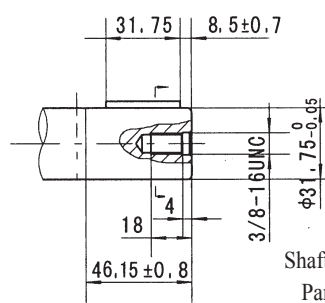
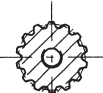
Shaft C: Cylindrical shaft $\phi 25.4$
Parallel key 6.35x6.35x31.75



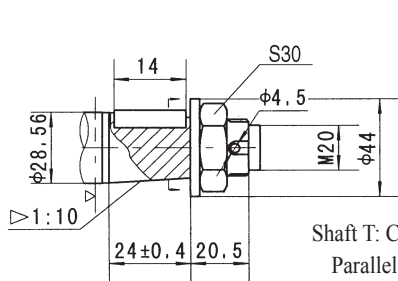
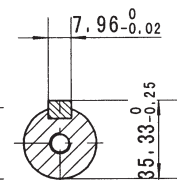
Shaft E: Splined SAE 6B



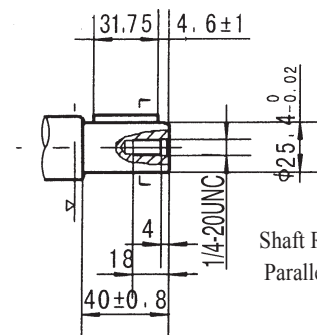
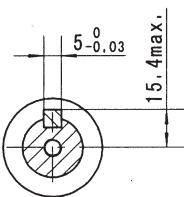
Shaft F: Splined
14-DP12/24



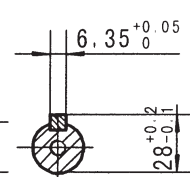
Shaft G: Cylindrical shaft $\phi 31.75$
Parallel key 7.96x7.96x31.75



Shaft T: Cone-shaft $\phi 28.56$
Parallel key B5x5x14
Tightening torque: 100 ± 10 Nm

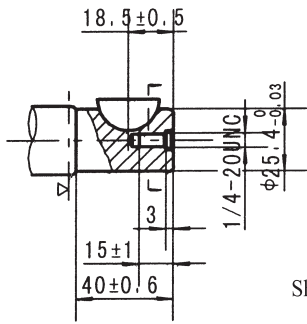


Shaft R: Cylindrical shaft $\phi 25.4$
Parallel key 6.35x6.35x31.75

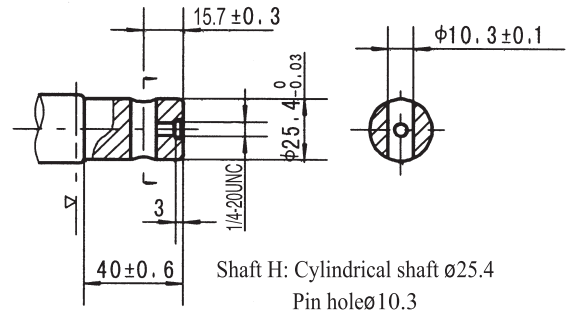


▷ Motor Mounting Surface

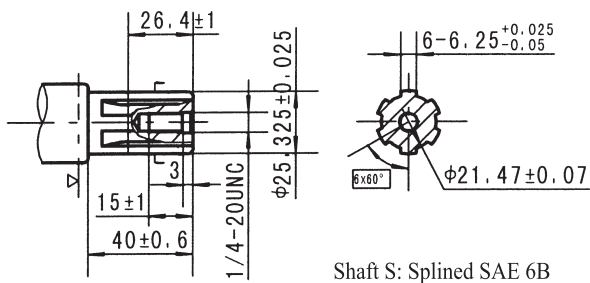
BMRS SHAFT EXTENSIONS DIMENSIDNS DATA



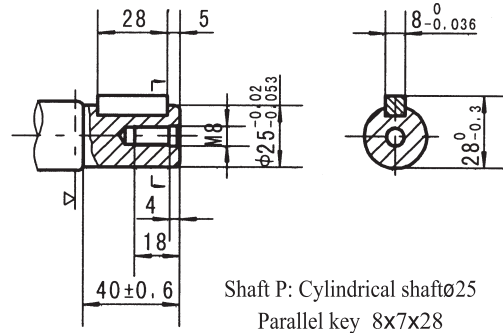
Shaft K: Cylindrical shaft $\phi 25.4$
Woodruff key $\phi 25.4 \times 6.35$



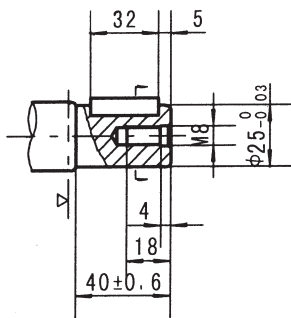
Shaft H: Cylindrical shaft $\phi 25.4$
Pin hole $\phi 10.3$



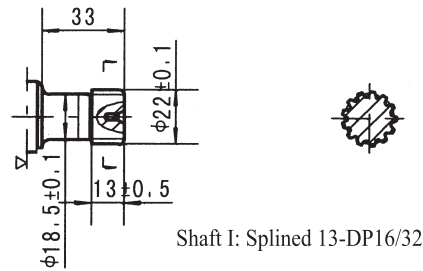
Shaft S: Splined SAE 6B



Shaft P: Cylindrical shaft $\phi 25$
Parallel key $8 \times 7 \times 28$



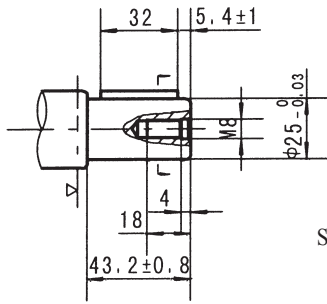
Shaft J: Cylindrical shaft $\phi 25$
Parallel key $7 \times 7 \times 32$



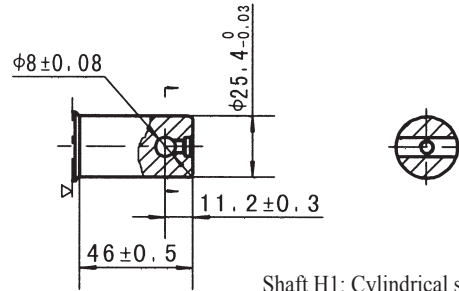
Shaft I: Splined 13-DP16/32

▷ Motor Mounting Surface

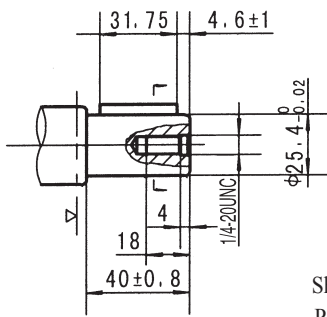
BMRS SHAFT EXTENSIONS DIMENSIONS DATA



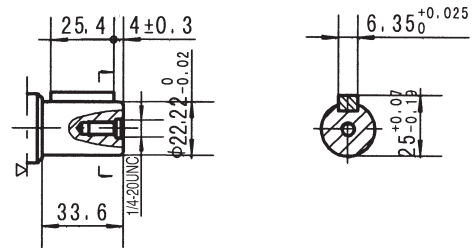
Shaft A: Cylindrical shaft $\phi 25$
Parallel key 8x7x32



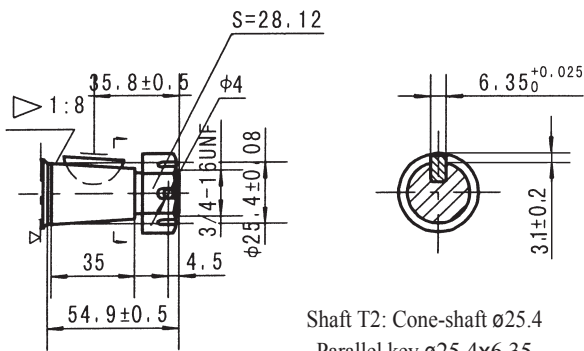
Shaft H1: Cylindrical shaft $\phi 25.4$
Pin hole $\phi 8$



Shaft R: Cylindrical shaft $\phi 25.4$
Parallel key 6.35x6.35x31.75



Shaft D: Cylindrical shaft $\phi 22.22$
Parallel key 6.35x6.35x25.4



Shaft T2: Cone-shaft $\phi 25.4$
Parallel key $\phi 25.4 \times 6.35$
Tightening torque: $200 \pm 10 \text{ Nm}$

▷ Motor Mounting Surface

Order Information

1 2 3 4 5 6 7 8

1 **BMR**

Pos.1	2	3	4	5	6	7	8	
Code	Disp.	Flange	Output Shaft	Port and Drain Port	Rotation Direction	Paint	Unusually Function	
BMR	36	2-Ø13.5Rhomb-flange, pilot Ø82.5 × 8 4-Ø13.5Rhomb-flange, pilot Ø82.5 × 8 4-3/8-16 Square-flange, pilot Ø44.4 × 2.8 4-M10 Square-flange, pilot Ø44.4 × 2.8	A Shaft Ø25,parallel Key 8x7x32	D G1/2 Manifold Mount 4-M8, G1/4	Omit R	00 Omit B S	No paint Blue Black Silver grey	Omit N 0 F LS Standard Big radial force No case drain Free Running Low Speed
	50		B Shaft Ø32,parallel Key 10x8x45	M M22 × 1.5 Manifold Mount 4-M8, M14 × 1.5				
	80		C Shaft Ø25.4,parallel Key 6.35x6.35x31.75	S 7/8-14 O-ring manifold				
	100		E Shaft Ø25.4, splined tooth SAE 6B	4-5/16-18UNC, 7/16-20UNF 1/2-14 NPTF				
	125		R Short shaft Ø25.4,parallel key 6.35x6.35x31.75	Manifold 4-5/16-18UNC, 7/16-20UNF				
	160		F Shaft Ø31.75, splined tooth 14-DP12/24	PT(Rc)1/2 Manifold 4-M8, PT(Rc)1/4				
	200		FD Long shaft Ø31.75, splined tooth 14-DP12/24					
	250		G Shaft Ø31.75, parallel Key 7.96x7.96x31.75					
	315		T Cone-Shaft Ø28.56,parallel Key B5x5x14					
	375							

1 2 3 4 5 6 7 8

1 **BMRS**

Pos.1	2	3	4	5	6	7	8	
Code	Disp.	Flange	Output Shaft	Port and Drain Port	Rotation Direction	Paint	Unusually Function	
BMRS	36	2-Ø13.5Rhomb-flange, pilot Ø82.5 × 2.8 4-Ø13.5Rhomb-flange, pilot Ø82.5 × 2.8 4-3/8-16 Square-flange, pilot Ø44.4 × 2.8 4-M10 Square-flange, pilot Ø44.4 × 2.8	K Shaft Ø25.4,Woodruff Key Ø25.4 × 6.35	G G1/2, G1/4	Omit R	00 Omit B S	No paint Blue Black Silver grey	Omit N 0 F LS Standard Big radial force No case drain Free Running Low Speed
	50		S Sub-shaft Ø25.4, splined tooth SAE 6B	S 7/8-14 O-ring 7/16-20UNF (G1/4)				
	80		A Shaft Ø25 , parallel key 8 × 7 × 32	P 1/2-14 NPTF, 7/16-20UNF (G1/4)				
	100		R Shaft Ø25.4, parallel key 6.35 × 6.35 × 31.75	T 3/4-16 O-ring, 7/16-20UNF				
	125		H Sub-shaft Ø25.4,Pin hole Ø10.3	R PT(Rc)1/2, PT(Rc)1/4				
	160		H1 Shaft Ø25.4, pin hole Ø8	B4 Ø10 O-ring manifold				
	200		D Shaft Ø22.22, parallel key 6.35 × 6.35 × 25.4	B5 Ø10 O-ring manifold 4xM8, G1/4				
	250		I Shaft Ø22.22, splined tooth 13-DP16/32	M1 M18 × 1.5, M10 × 1				
	315		T2 Cone shaft Ø25.4 , woodruff key Ø25.4 × 6.35	M2 M20 × 1.5, M10 × 1				
	375		P Shaft Ø25,parallel Key 8 × 7 × 28	M3 M22 × 1.5, M10 × 1				
			J Shaft Ø25,parallel Key 7 × 7 × 32					

Note:When the table is used, please fill the code of left rows in dash area 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.