
ALFA TECH PRODUCT GUIDE

No.1 Hydraulic Expert



ALFA*tech

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More Productive & More Efficient in Hydraulics

ALFA TECH has made an every effort to become No.1 hydraulic supplier since it is founded.

The head quarter is located in Seoul and mainly supply hydraulic parts to equipment manufacturers and after service market.

ALFA TECH has grown tremendously over the years and continues to improve and expand.

Our main products are Final Drives, Slewing Motors, Main Pumps, Control Valves, Winch Motors and Reduction Gears.

All these parts are required to superior hydraulic technology because they are core part for construction equipment.

ALFA TECH has strict quality control process based on this superior hydraulic technology.

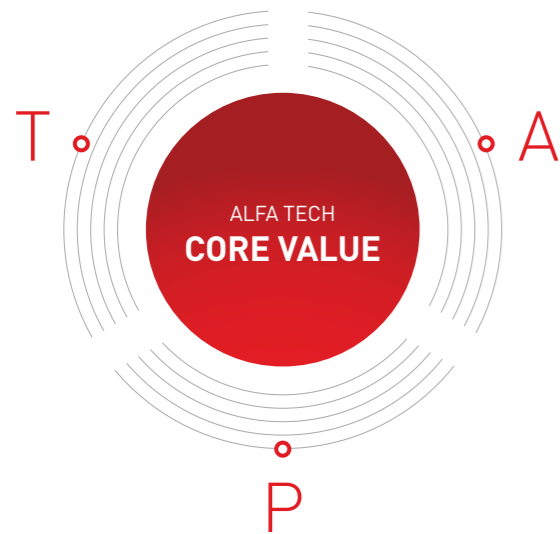
Now we supply the parts for not only equipment produced in Korea but also for international brands such as Hitachi, Komatsu, Caterpillar, JCB, Kobelco, Liebherr etc. Also some local construction equipment in Europe and Asia are made up of our motors and pumps.

Our mission is simply to provide best hydraulic product quickly. We hope you will give us a chance to serve your needs.

If you are looking for partner in hydraulic sector, we are 100% sure that ALFA TECH is your best partner.



CORE VALUE



The T.A.P is our core value. We always try to keep this TAP on our mind. ALFA TECH promises you to supply accurate product based on trust. Also we try to do our best in order to offer professional solutions to your hydraulic equipment.

TRUST

We think the most important value is collaboration based on Trust.

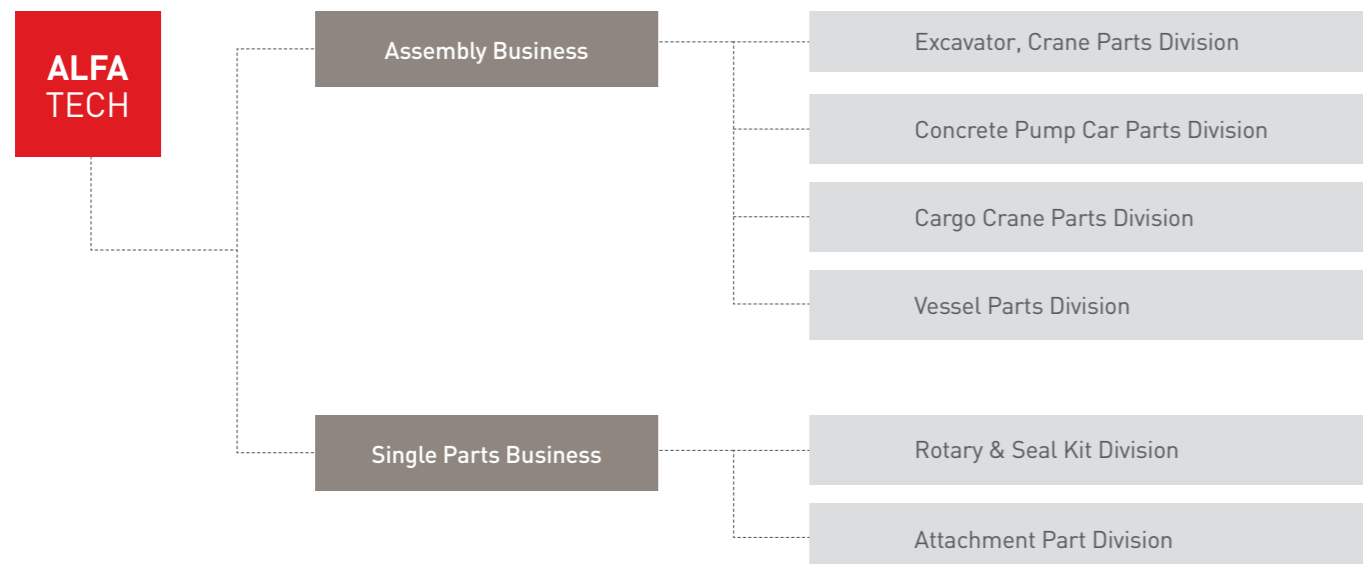
ACCURATE

We try to do our best in order to supplying accurate product upon customer's need.

PROFESSIONAL

We know hydraulics. So we are not only selling the product but also offering hydraulic total solutions.

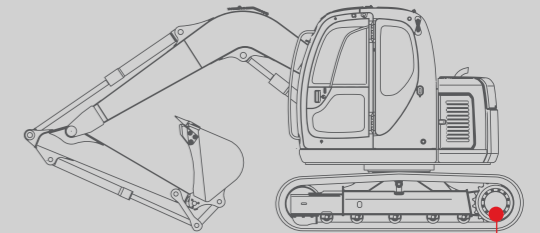
BUSINESS AREA



Track Drive Motor

High Torque Track Drive Motor

- Travel Motor
- Final Drive
- Travel Reduction Gear



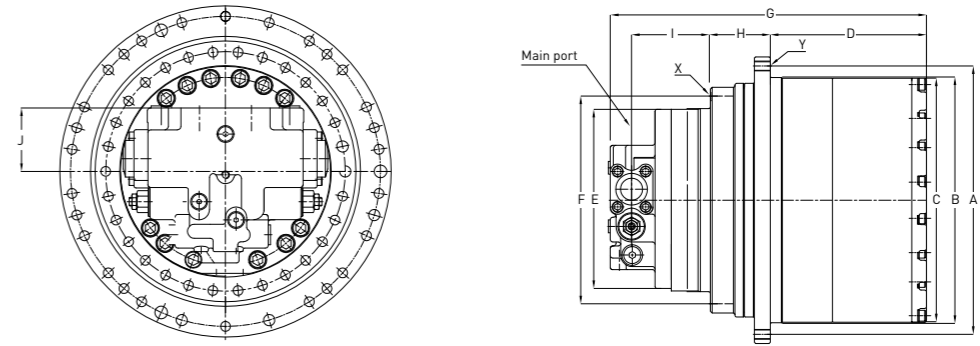
JMV TRACK MOTOR

ALFA TECH JMV track drive motors are compact with integrated reduction gear and multi-functioning valves. Advanced technology helps reducing power loss and ensure smooth start & stop. Also we improve overall mechanical efficiency for the best operation.

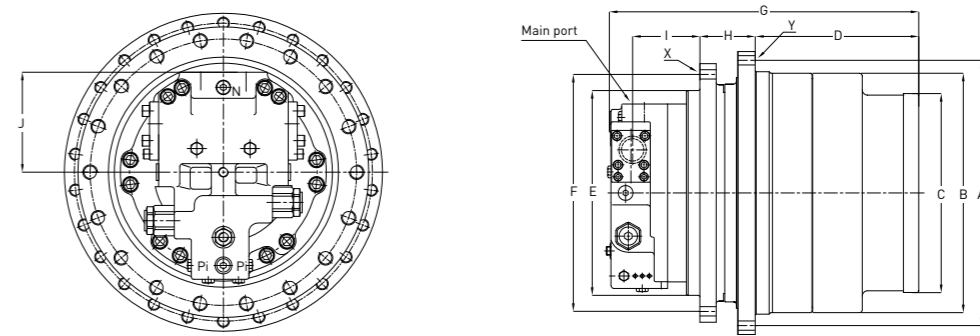


Dimension Table

JMV016 ~147, 168



JMV155, 173, 185, 274



	ALFA-JMV	Kawasaki	Kayaba	Nabtesco	Doosan
1.5 ton	JMF-016	NA	MAG-18V	NA	NA
3 ton	JMV-016	NA	MAG-33V	GM04VA	NA
5 ton	JMV-044/22	DNB 08D	MAG-50V	GM06VA	TM07VA
7 ton	JMV-047/27	NA	NA	GM10VA	TM09VA
8 ton	JMV-053/31	NA	NA	GM10VA	TM09VA
11 ton	JMV-067/41	NA	MAG-85VP	GM21VA	TM10VD
14 ton	JMV-076/45	DNB 15B	MAG-85VP	GM21VA	TM18VC
22 ton	JMV-147/95	DNB 15B	MAG-170VP	GM38VB	TM35VA
25 ton	JMV-168/102	NA	NA	GM38VB	TM40VC
29 ton	JMV-155/89	NA	MAG-230VP	GM60VA	TM50VC
33 ton	JMV-173/101	DNB 50D	NA	GM70VA	TM60VD
36 ton	JMV-185/114	DNB 50D	NA	GM70VA	TM70VC
45 ton	JMV-274/172	DNB 60D	NA	GM85VA	TM100VD

Unit: mm

Model	ØA	ØB	ØC	D	ØE	ØF	G	H	I	J	X	Y	Main Port
016	180	160	154	99.5	150	170	214	40	58.5	39	10-M10	9-M10	2-G3/8 [2-PF3/8]
021	232	204	196	132	165	192	257.5	50	55.5	51	9-M12	10-M12	2-G1/2 [2-PF1/2]
023	232	204	196	132	165	192	257.5	50	55.5	51	9-M12	10-M12	2-G1/2 [2-PF1/2]
044	282	250	244	155	210	244	342	68	76	74	12-M14	12-M14	2-G1/2 [2-PF1/2]
047	300	265	244	148.5	210	250	351.5	80	74	74	12-M16	12-M14	2-G1/2 [2-PF1/2]
053	300	265	261	149	210	250	344	80	72	76	12-M16	12-M14	2-G1/2 [2-PF1/2]
067	364	324	320	204	225	320	400	83	88.5	74	16-M16	15-M16	2-1-1/16-12 UNF-2B
076	364	324	320	193	246	280	396.5	98.5	81	74	20-M16	21-M16	2-G3/4 [2-PF3/4]
118	340	300	367	220	194	389.5	201.5	21	123	64	30-M16	12-M12	Ø25 Flange
120	340	300	367	220	194	389.5	201.5	21	123	64	30-M16	12-M12	Ø25 Flange
137	340	300	367	220	194	389.5	201.5	21	123	64	30-M16	12-M12	Ø25 Flange
147	440	402	400	250	300	340	515.5	98.5	123	90	30-M16	30-M16	Ø25 Flange
168	440	402	400	250	300	340	515.5	98.5	123	90	30-M16	30-M16	2-G1 [2-PF1]
155	492	450	369	305	380	440	572.5	102.5	103	165	18-M24	26-M20	Ø25 Flange
173	492	450	369	305	380	440	572.5	102.5	103	165	18-M24	26-M20	2-G1 [2-PF1]
185	490	450	369	295.5	380	425	572.5	112	103	165	26-M20	24-M20	Ø25 Flange
274	605	556	472	326.5	420	460	651.5	130	134	156.5	24-M20	24-M22	Ø32 Flange

Performance

Model	Max. Output Torque (Reducer)		Motor Displacement		Gear Ratio	Max. Speed (Motor)		Max. Flow	Normal Pressure*	Peak Pressure	Mechanical Brake Torque		Automatic Shift Pressure	Relief Valve	Mass	Typical Vehicle Application
	Low Speed	High Speed	Low Speed	High Speed		Low Speed	High Speed				Reducer	Motor				
	N.m		cc / r			rpm					N.m					
016	1666	×	16.1	×	31	1056	×	17	214	255	547	18	×	×	25	1.5
021	3696	1969	21	11.2	53.7	1667	3125	35	220	260	2637	49	×	▲	38	3.5
023	4724	2955	23.5	14.7	53.7	1489	2381	35	240	285	2631	49	×	▲	38	3.5
044	6831	3528	43.7	22.7	45.5	1259	2423	55	220	260	3746	82	×	●	79.5	5
	8056	4185	43.7	22.7	53.7	1259	2423	55	220	260	4421	82	×	●	79.5	5-6
047	11711	6909	46.6	27.5	53.7	1622	2744	75.6	300	360	3869	82	×	●	87	7
053	11720	6909	53.2	31.4	47	1597	2710	85	300	360	3869	82	×	●	89	7-8
067	18707	11452	67.3	41.2	54	1664	2718	112	330	395	10584	196	290	●	140	11
076	23549	13775	76.62	44.8	54	1612	2757	123.5	365	430	10425	193	290	●	135	14
118	645	366	118	67	×	1356	2388	160	350	420	×	480	260	●	121	16
120	618	362	120	69.9	×	1333	2289	160	330	395	×	480	260	●	121	18
137	747	432	136.7	79	×	1626	2814	222.3	350	420	×	480	290	●	121	25
147	41548	26940	146.5	95	50.5	1707	2632	250	360	430	24250	480	260	●	300	20-22
155	61671	35257	154.8	88.5	73	1718	3005	275	350	420	28607	392	270	●	404	29-32
168	46433	28263	168.4	102.5	50.5	1469	2413	247.3	350	420	24250	480	260	●	310	25
173	65010	37976	173	101	73	1561	2673	270	330	395	28607	392	270	●	404	33
185	72892	44972	185	114.13	70.2	1557	2523	288	360	430	30537	435	×	●	425	36-38
247	94438	59016	274.6	171.6	63	1383	2214	380	350	420	63592	1009	×	●	610	45-50

● - Standard ▲ - Option × - Not available

* Nominal pressure is the max. Relief valve setting pressure

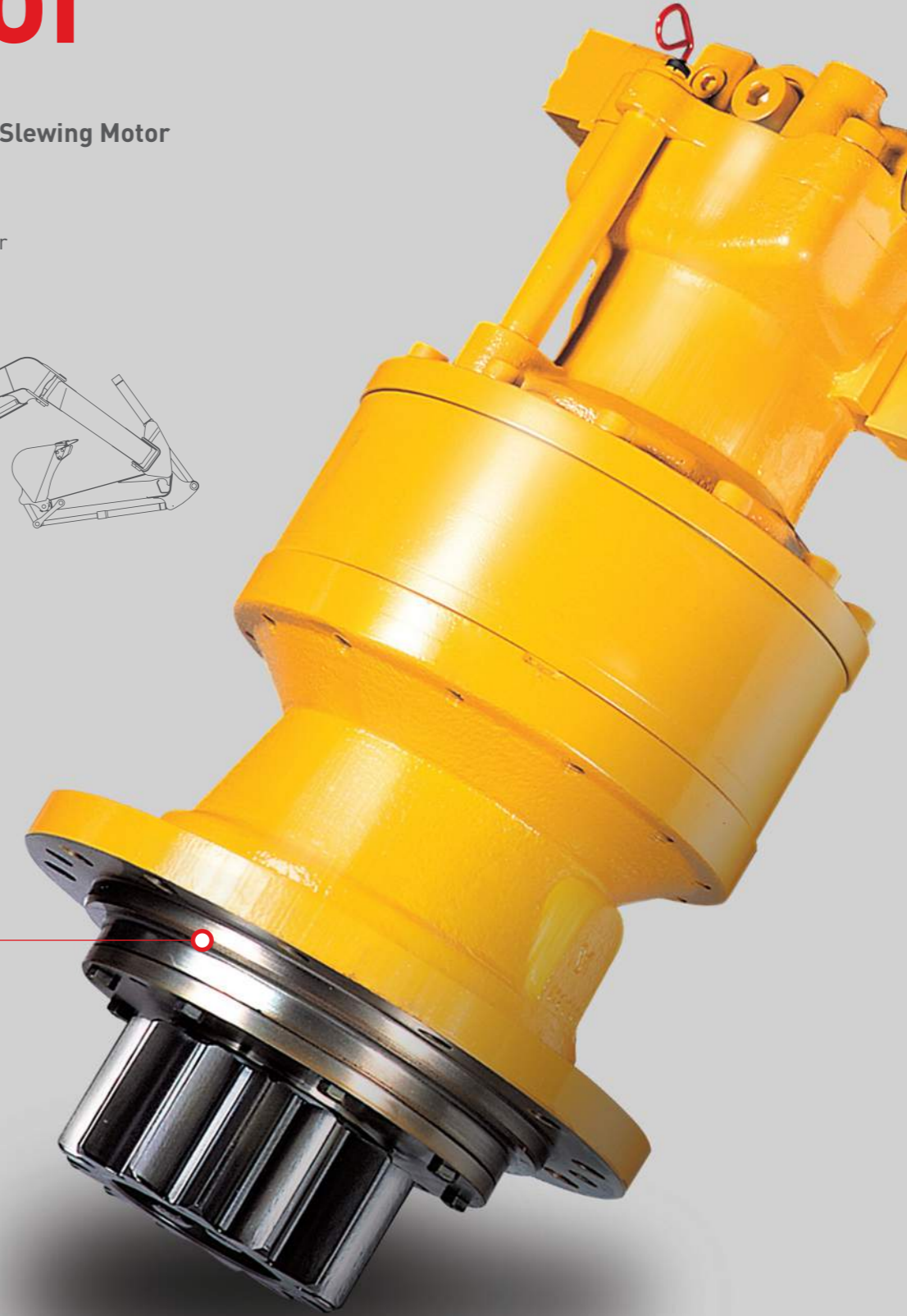
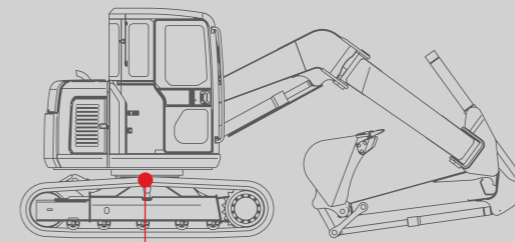
Technical Data

1	Operation temperature rating	-20°C - +95°C
2	Oil viscosity recommendation	
		Gear oil : 80W - 90 Hydraulic oil : VG - 46
	Viscosity at 40°C	143 mm ² /s 46 mm ² /s
	Viscosity at 100°C	16 mm ² /s 7 mm ² /s
3	Oil cleanliness recommendation	NAS 8, or ISO 17 / 15 / 12
4	Case pressure	2 bar max.

Slewing Motor

High Performance Slewing Motor

- Swing Motor
- Rotating Motor
- Swing Reduction Gear



JMF-VBR SLEWING MOTOR

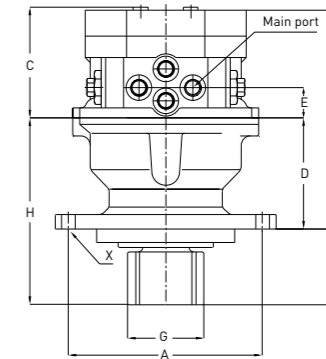
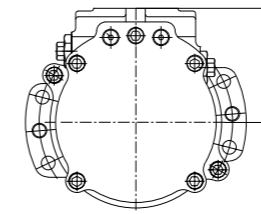
ALFA TECH JMF series is fixed displacement axial piston motor for slewing applications. Integrated reduction gears and multi functioning valves can absorb pressure and shocks when the motor stops. This high technology make the machines work with high performance.



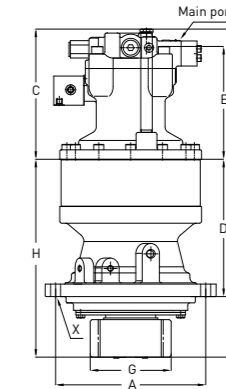
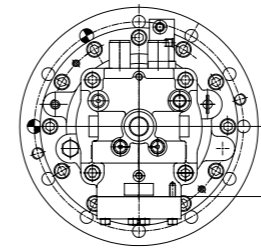
	ALFA-JMF	Kawasaki	Kayaba	Nabtesco	Hyst
3.5 ton	JMF-023	NA	MSG-27P-16E	NA	SG10E
5-6 ton	JMF-033	M2X22-RG015	MSG-27P-23E	NA	SG015E
7 ton	JMF-043	NA	MSG-50P-21	CS04	SG025E
8 ton	JMF-053	M2X45-RG035	MSG-50P-21	CS05A	SG04E
13 ton	JMF-068	M2X63-RG06	NA	CS05A	SG04E
18 ton	JMF-118	NA	NA	CS09N	SG08E
22 ton	JMF-151	M5X130-RG10	NA	NA	SG08E
30 ton	JMF-195	M5X180-RG20	NA	NA	SG15E
36 ton	JMF-250	NA	NA	NA	SG20E

Dimension Table

JMF027



JMF029-250



Unit: mm

Model	ØA	B	C	D	E	F	ØG	H	I	X	Main Port
027	220	267	134.5	149	37	101	112	250	145	6-Ø17	2-G3/8 (2-PF3/8)
029	275	405	210	194	184	98	112	292	72	7-Ø17	2-G1/2 (2-PF1/2)
030	275	405	210	194	184	98	112	292	72	7-Ø17	2-G1/2 (2-PF1/2)
032	275	405	210	194	184	98	112	292	72	7-Ø17	2-G1/2 (2-PF1/2)
033	275	405	210	194	184	98	112	292	72	7-Ø17	2-G1/2 (2-PF1/2)
036	275	402	208	194	178	98	112	292	72	7-Ø17	2-G1/2 (2-PF1/2)
039	275	405	209	194	184	98	112	292	72	7-Ø17	2-G1/2 (2-PF1/2)
043	275	399	205	194	178	106	120.8	300	72	7-Ø17	2-G1/2 (2-PF1/2)
047	275	410.5	216.5	194	189.5	105	120.8	299	72	7-Ø17	2-G1/2 (2-PF1/2)
053	275	410.5	216.5	199	189.5	106.2	117.8	305.2	72	7-Ø17	2-G1/2 (2-PF1/2)
064	290	468	234	234	196	113	143	347	97	9-Ø18	Ø13 Flange
068	290	468	234	234	196	113	143	347	97	9-Ø18	Ø13 Flange
118	360	632	298	334	248	143	194	477	121	11-Ø22	Ø20 Flange
151	360	632	298	334	248	143	194	477	121	11-Ø22	Ø20 Flange
169	520	698	302	396	257	179	238	575	120	15-Ø22	Ø20 Flange
195	430	737	342	395	258	184	232	579	112	12-Ø26	Ø25 Flange
233	430	804	393	411	345	205	238	616	148	12-Ø26	Ø26 Flange
250	430	804	393	411	345	205	238	616	148	12-Ø26	Ø26 Flange

Performance

Model	Motor Dis- placement	Max. Output Torque	Gear Ratio	Re- ducer Max. Speed	Max. Flow	Normal Pres- sure*	Peak Pres- sure	Me- chanical Brake Torque [Motor]	Time Delay Valve	Anti- reverse Valve	Output Pinion		Mass	Typical Vehicle Appli- cation
	cc / rev	N.m		rpm	l / min	bar	bar	N.m			Module	Number		
027	27	2116	22.5	59	36.6	230	276	98	●	×	7	13	50	4-5
029	29	1929	19.5	63	35.6	230	276	137	●	×	7	13	75	5-6
030	30	2118	19.5	60	35.6	230	276	137	●	×	7	13	75	5-6
032	32	2156	19.5	58	36.6	230	276	137	●	×	16 / 32	15	75	5-6
033	33	2277	19.5	63	40	230	276	137	●	×	7	13	75	5-6
036	36	2569	19.5	51	36	230	276	137	●	×	7	13	75	7
039	39	2213	19.5	90	75.6	230	276	137	●	×	16 / 32	15	75	8
043	43	2873	19.5	72	60	230	276	137	●	×	8	12	75	8
047	47	3182	19.5	74	68	230	276	137	●	×	8	12	77	8
053	53	3034	19.5	78	81	230	276	137	●	×	8	12	77	8
064	64	4565	19.0	107	130	280	336	245	●	●	10	12	160	13
068	68	4850	19.0	101	130	280	336	245	●	●	10	12	160	14
118	118	8122	17.6	82	170	280	336	579	●	●	12	13	237	18
151	151	9977	17.6	84	225	280	336	579	●	●	12	13	237	22
169	169	17787	23.6	62	250	320	385	686	●	●	14	15	240	29
195	195	18331	22.0	58	250	320	385	864	●	●	14	14	400	30
233	233	23166	22.0	56	288	320	385	1049	●	●	14	15	440	33-36
250	250	24858	22.0	52	288	320	385	1049	●	●	14	15	440	33-36

● - Standard × - Not available

* Normal pressure is the max. Relief valve setting pressure.

* For 32cc, 39cc, gearbox integrated option is not available. Please consult AP product marketing for further information.

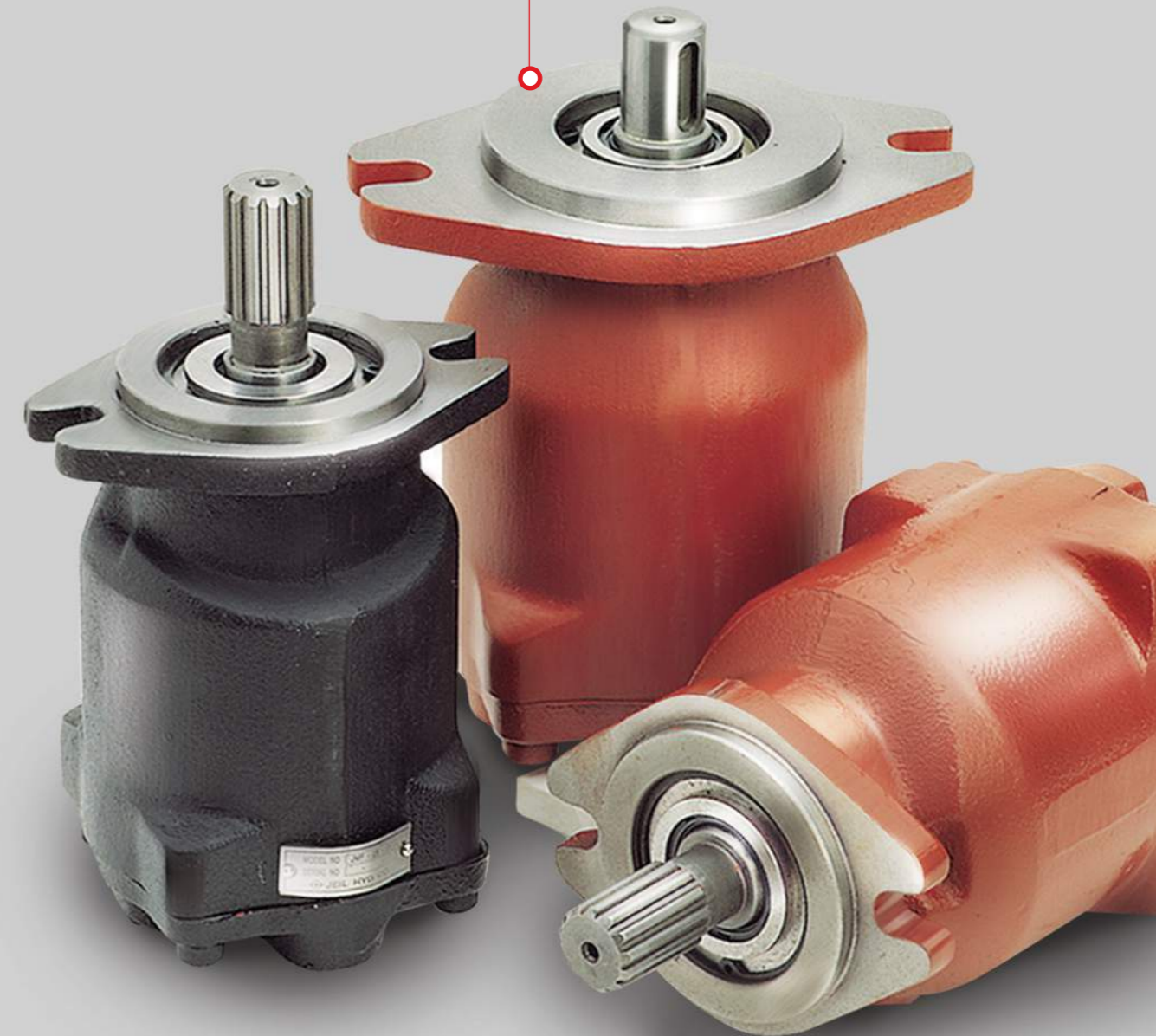
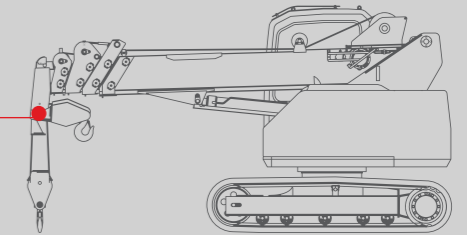
Technical Data

1	Operation temperature rating	-20°C - +95°C	
2	Oil viscosity recommendation		
		Gear oil : 80W - 90	Hydraulic oil : VG - 46
	Viscosity at 40°C	143 mm ² /s	46 mm ² /s
	Viscosity at 100°C	16 mm ² /s	7 mm ² /s
3	Oil cleanliness recommendation	NAS 8, or ISO 17 / 15 / 12	
4	Case pressure	2 bar max.	

Winch Motor

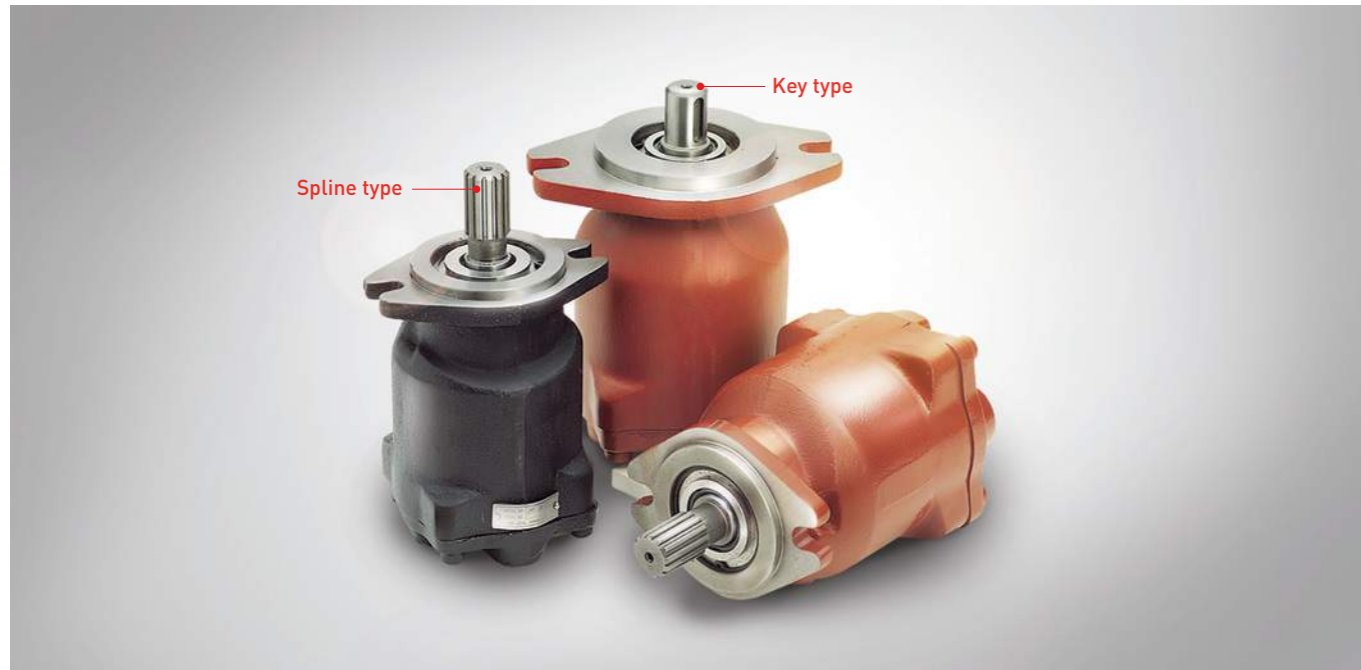
Best Selling Motor for Multi Purposes

- Winch Motor
- Cargo Crane Winch
- Piston Motor



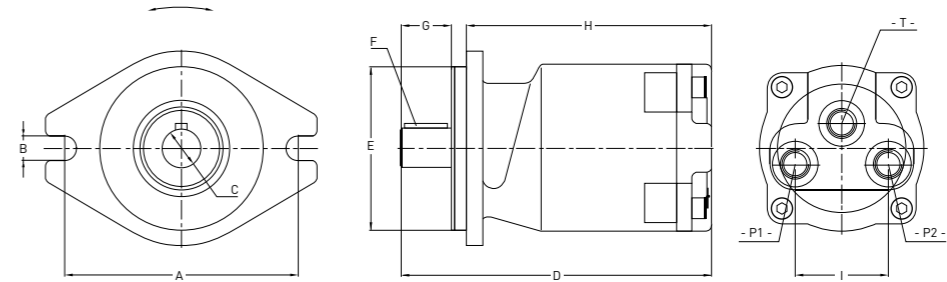
JMF WINCH MOTOR

ALFA TECH JMF series is fixed displacement axial piston motor for multi purposes. It is mainly used for special purpose cars such as cargo crane, aerial plat form, grass cutter etc. Its quality has been proved by various client for 24 years. It's simple, economic and powerful!



Item	Winch Motor (Fix type)
Use	Winch Motor for Cargo Cranes
Applicable machines	KANGLIM, JUNJIN, SOOSAN, DONG YANG etc.
Features	<ul style="list-style-type: none"> • Axial swash type piston motor • Fixed displacement swash type • Light, small and highly durable • Using for harsh torque / pressure, rapid acceleration / deceleration • OEM supply to Soosan, Kanglim, Kia etc.

Dimension Table



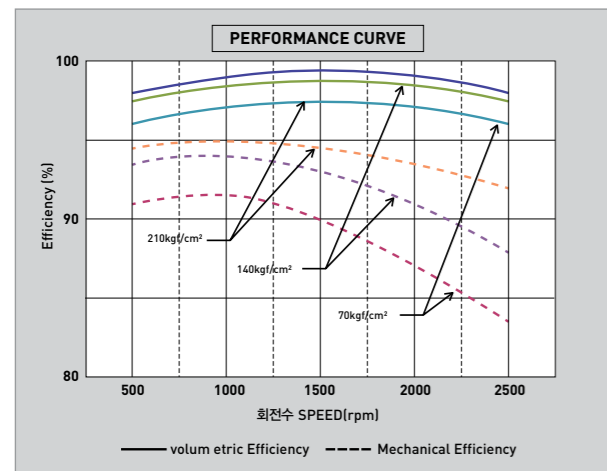
Model	A	B	C (Ø)	D	E (Ø)	F	G	H	I
JMF-25-01	106	12.2	25	194.5	82.5	25x13x1.667 (Spline)	51.5	153.5	58
JMF-25-02A	146	15	24	194.5	101.6	7x7x27 (Key)	32.1	153.5	58
JMF-25-03A	146	15	24	213.2	101.6	7x7x27 (Key)	32.1	172	67
JMF-36-01A	146	11.2	22	218	101.6	7x7x32 (Key)	39.5	172	67
JMF-39-01A	106	11.2	25	218	82.5	25x13x1.667 (Spline)	39.5	172	67
JMF-43-01A	146	15	24	213.2	101.6	7x7x27 (Key)	32.1	172	67

Model	P1	P2	T1
JMF-25-01	PF3/8	PF3/8	PF3/8
JMF-25-02A	PF3/8	PF3/8	PF3/8
JMF-25-03A	PF1/2	PF1/2	PF1/4
JMF-36-01A	PF1/2	PF1/2	PF3/8
JMF-39-01A	PF1/2	PF1/2	PF3/8
JMF-43-01A	PF1/2	PF1/2	PF3/8
JMF-43-01B	PF1/2	PF1/2	PF3/8
JMF-47-01A	PF1/2	PF1/2	PF3/8

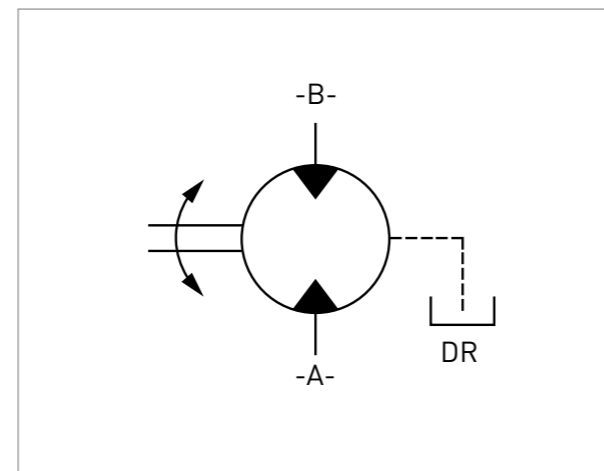
Specification

Model	Displacement [kgf/cm ²]	Pressure [kgf/cm ²]		Torque [rpm]		Speed [rpm]
		Rated	Max	Rated	Max	
JMF-25-01	25.7	210	250	8.6	10.2	2500
JMF-25-02A	25.7	210	250	8.6	10.2	2500
JMF-25-03A	25.7	210	250	8.6	10.2	2500
JMF-36-01A	36	210	250	12	14.3	2500
JMF-39-01A	39	210	250	13	15.5	2500
JMF-43-01A	43	210	250	14.3	17	2500
JMF-43-01B	43	210	250	14.3	17	2500
JMF-47-01A	47	210	250	15.7	18.7	2500

Performance Curve



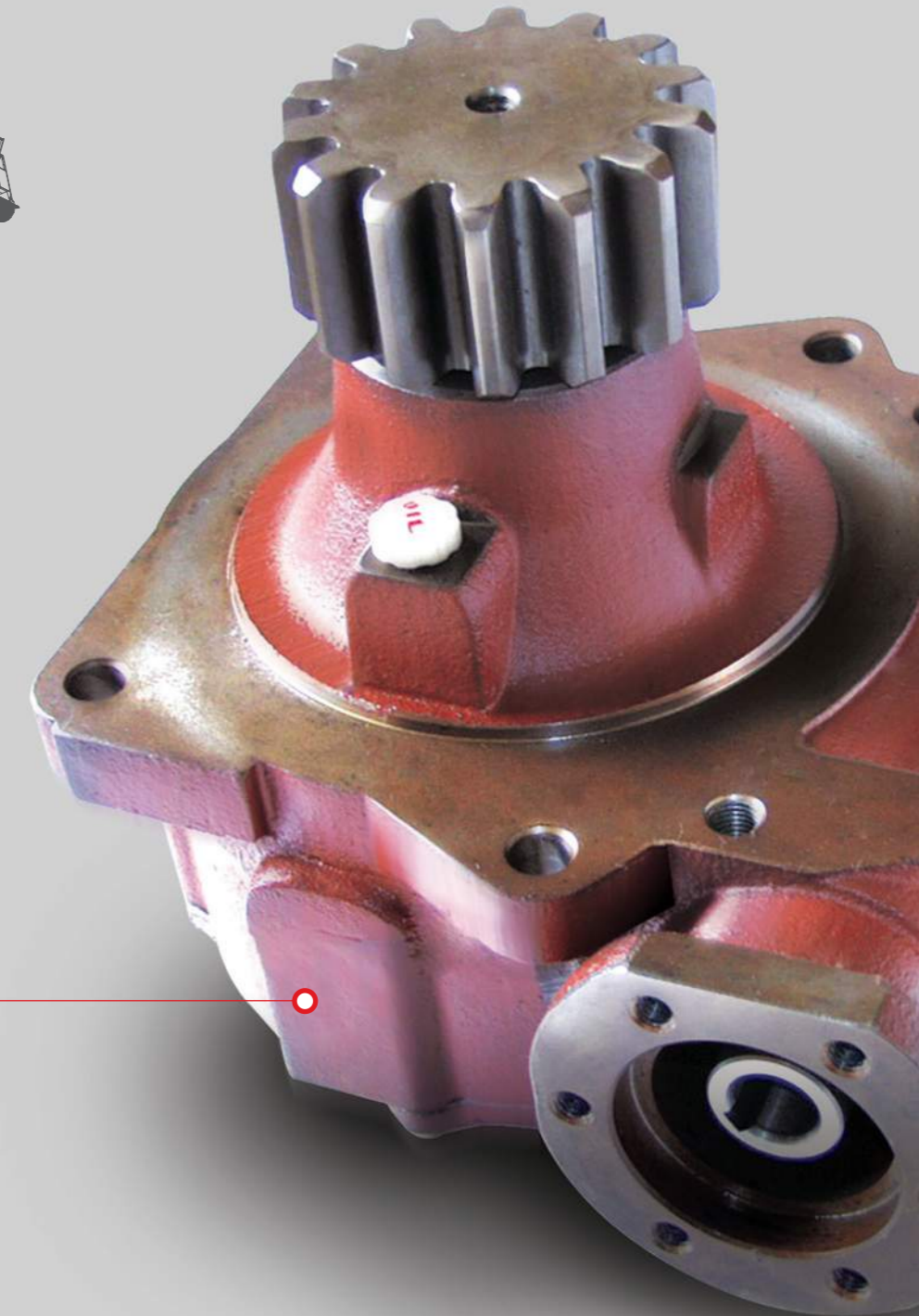
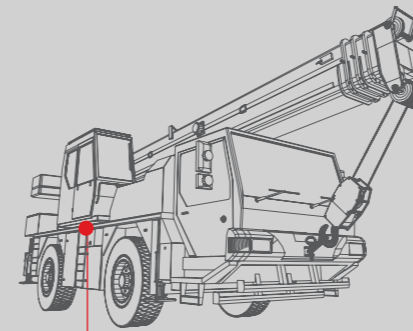
Circuit



Swing Reduction Gear

Swing Reduction Gear for Special Purpose Car

- Cargo Crane Swing
- Auger Swing
- Concrete Pump Car Swing
- Wrecker Swing



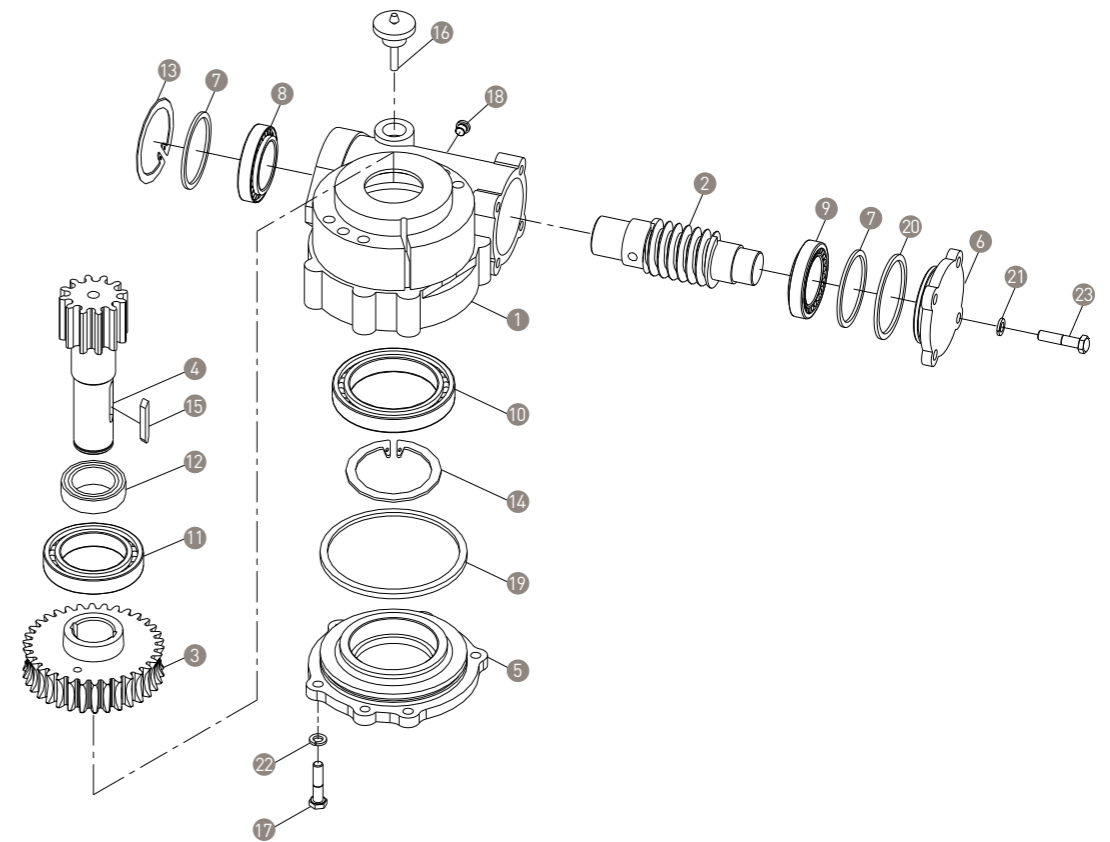
JMG SWING REDUCTION GEAR

ALFA TECH JMG Swing Reduction Gear has been developed for greater power transmission and smooth operation. Our high-performance reduction gear increases work efficiency by accurate action. Therefore many special purpose car manufacturers take our reduction gear for their machine rotating.



Item	Swing Reduction Gear
Use	Turn or Rotating Machine Body
Applicable machines	Cargo Crane, Concrete Pump Car, Auger, Wrecker etc.
Features	<ul style="list-style-type: none"> • No noise • No abrasion in hook • High durability • Easy maintenance • Smooth operation

Parts Diagram



- | | | | |
|----------------|------------------|----------------|-----------------|
| ① Casing | ⑦ Adjusting Shim | ⑬ Snap Ring | ⑲ O-Ring |
| ② Worm Shaft | ⑧ Taper Bearing | ⑭ Snap Ring | ⑳ O-Ring |
| ③ Worm Wheel | ⑨ Taper Bearing | ⑮ Key | ㉑ Spring Wahser |
| ④ Pinion Shaft | ⑩ Ball Bearing | ⑯ Air Breather | ㉒ Spring Wahser |
| ⑤ Cover | ⑪ Ball Bearing | ⑰ Hex. Bolt | ㉓ Hex. Bolt |
| ⑥ Cover | ⑫ Dust Seal | ⑱ Plug | |

Specification

Model	07-08-1000			07-10-1000		07-13-1000			07-09-S100	
Gear Box Ratio	1/100.2			1/100.2		1/51			1/51	
Max Input Torque (Kgf.m)	28			13		13			13	
Max Output Torque (Kgf.m)	1122			521		298			298	
Motor Shaft	Ø25-8x7			Ø25-8x7		Ø25-8x7			Ø25-8x7	
Pinion Gear	Module	8	8	8	8	8	8	8	8	8
	Press Angle (°)	20	20	20	20	20	20	20	20	20
	Tooth	17T	15T	15T (x=0.5)	14T	14T	12T	15T	15T	15T
Apply	Crane	Crane	Crane	Crane	Crane	Auger	Auger	Auger	Concrete Pump Car	

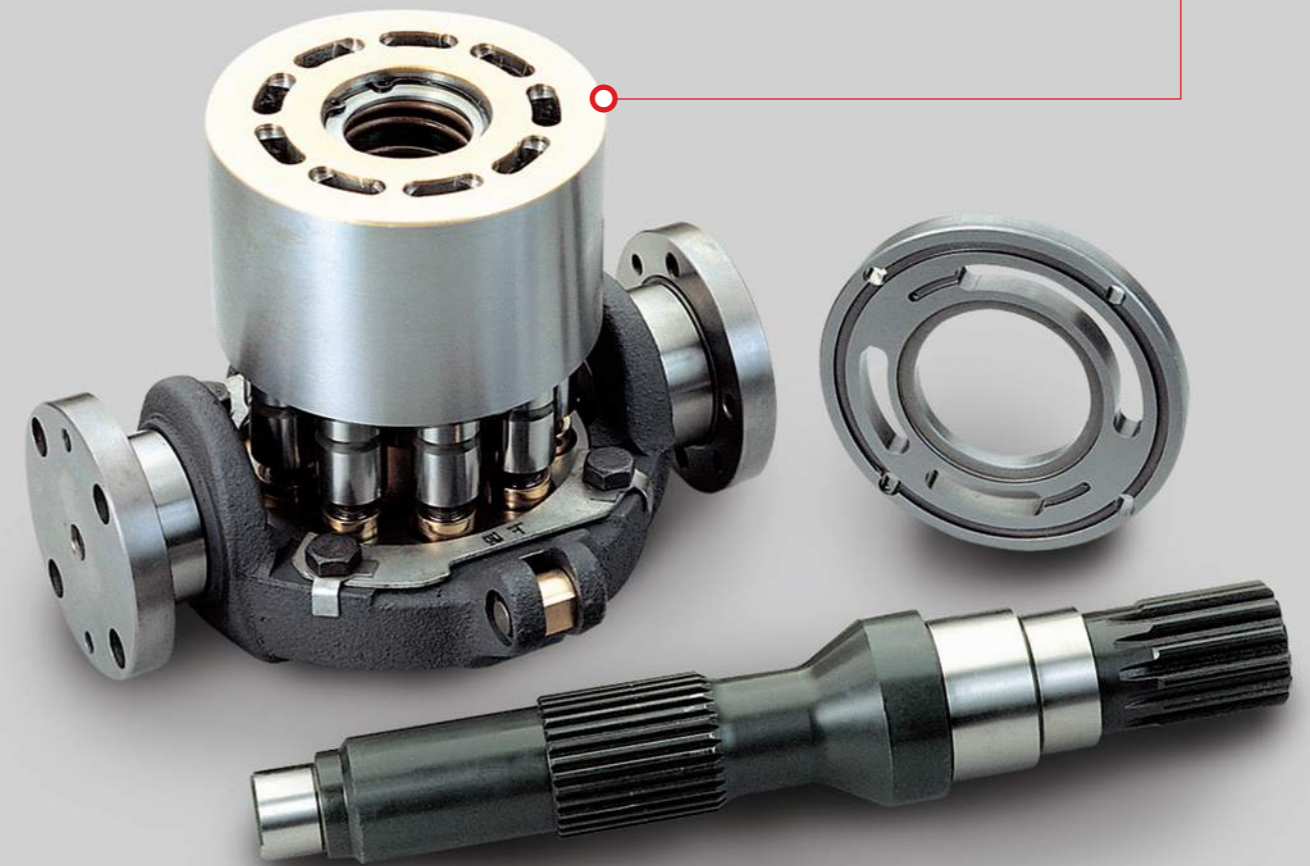
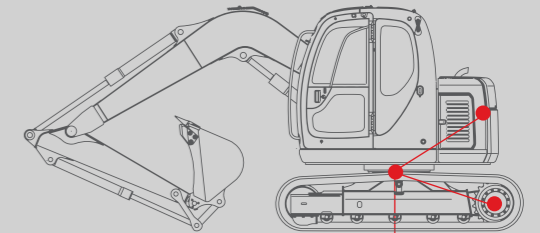
Model	07-13-DY00		07-07-1000		07-04-1000		07-01-1000	
Gear Box Ratio	1/51		1/37		1/44		1/28	
Max Input Torque (Kgf.m)	13		13		13		22	
Max Output Torque (Kgf.m)	298		241		286		308	
Motor Shaft	Ø25-8x7		Ø25-8x7		Ø25-8x7		Ø25.4-6.4x6.4 Ø25-8x7	
Pinion Gear	Module	8	8	6	6	6	6	7
	Press Angle (°)	20	20	20	20	20	20	20
	Tooth	13T	12T	13T	12T	13T	12T	14T
Apply	Crane	Concrete Pump Car	Crane	Crane	Crane	Crane	Crane	Ladder Truck

Model	07-02-1000	07-12-1000	07-09-1000	07-06-1000			
Gear Box Ratio	1/36	1/34	1/35	1/35			
Max Input Torque (Kgf.m)	12	9.2	9.2	9.2			
Max Output Torque (Kgf.m)	194	141	161	161			
Motor Shaft	Ø22-7x7	Ø22-7x7	Ø25-8x7	Ø25-8x7			
Pinion Gear	Module	6	5	5	5	4.5	5
	Press Angle (°)	20	20	20	20	20	20
	Tooth	12T	12T	14T	16T	18T	12T
Apply	CB3000	Wrecker	Wrecker	Wrecker	Ladder Truck	Aerial Platform	

Pump & Motor Parts

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- Rotary Kits
- Shoe Parts



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 CAT312 / 320 / 325
 CAT350L
 SBS80
 E200B
 SPK10/10
 MS110 / 160 / 180 / 230 / 300 / 450
 MFB80 / 160
 MFC040 / 055 / 065 / 160

KOMATSU

HPV35 / 55 / 75 / 90
 HPV95 / 132 / 140 / 160
 KMF090
 KPV90
 HPV125
 PC450-7

KAWASAKI

DNB08 / 50
 K3SP36
 K3V63 / 112 / 140 / 180 / 280
 K5V80 / 140 / 200
 K7V63
 KVC925 / 930 / 932
 M2X22 / 55 / 63 / 96 / 120 / 146 / 170 / 210
 M5X130 / 180
 M3B1000

UCHIDA / REXROTH

A10V28 / 40 / 43 / 45 / 63 / 71 / 100
 A10VD17 / 43
 A4V71EL
 A4V125
 A4VG125 / 180
 A8V0107 / 160 / 200
 A8V55 / 80 / 86 / 107 / 172
 AP2D25 / 36
 AP5S53
 A20V060

DAIKIN / SAUER SUNDSTRAND

90L055 / 075 / 100 / 130
 M15 / 18 / 20 / 21 / 22 / 23 / 24 / 25 / 26 / 27 / 46
 PV16A
 PV119
 PVA656SL
 PVD21 / 22
 VRD63
 S45J45

HITACHI

EX60 / 100 / 200 / 400
 HMT107 / 116 / 134CF
 HMT145
 HPV050 / 102 / 118 / 125 / 135 / 145
 HPV145F
 UH07 / 10
 ZAXIS 120 / 270 / 450

LINDE

2PV35 / 75 / 105
 BPV200
 HPR100 / 130 / 160
 LPVD64
 LPVD100
 LPVD125

KAYABA

MAG150 / 170
 MSF58 / 270 / 340
 PSV2
 PSVD2
 PSVK2

NABTESCO

EM105
 GM08 / 09 / 15 / 17
 GM18VL2
 GM30F
 GM30H
 GM35VL

KOBELCO

K903 / 904 / 905 / 907 / 909 / 916
 SK03 / 04 / 05 / 07 / 09 / 10
 SK12 / 60 / 75
 SK100 / 200 / 300 / 400
 SK015

TOSHIBA

SG04
 SG020 / 025
 SG04
 SG08
 SG15
 SG20

NACHI

PVD2B
 PVD3B

VICKERS

TA1919
 PVH131

KATO

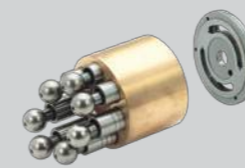
HD250
 HD700
 HD700V2
 HD770
 HD800
 HD900
 HD1220
 HD1250
 HD1250V1, V2

YANMAR

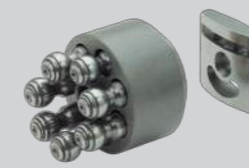
VIO 50
 B50
 VIO 310

BOBCAT

E20
 E26
 E32
 E35
 E42
 E45
 E50
 E55
 E63
 E85



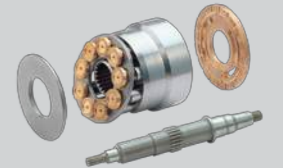
MP



A8V



B2PV



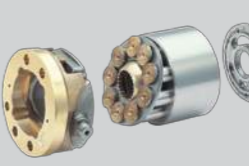
CAT



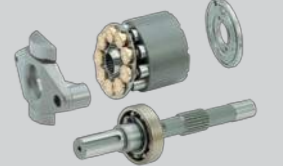
M23



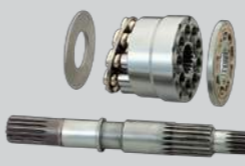
HPV



PC200-6



JMF



SPK10



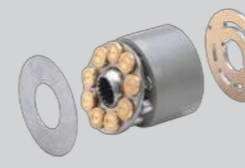
JMV155



K3V OLD



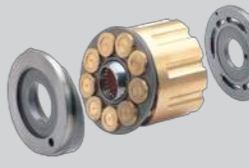
KVC



A10V



HPR100



JMV



MS180-2