

APCON HYDRAULIC

**with Technology
with Quality**



 **APcon**

OVERVIEW



APCON is,

Identity of APCON started with constant growth pursuit and change efforts, since it's establishment in 1988. Having overcome the hydraulic economic crisis and confusion, undauntedly bearing the hardness, we are challenged to realize a world's leading enterprise value through a creative & resourceful spirit.

Hydraulic company of APCON is constants of actively handle the crisis of 21C's rapidly circumstance change with the best hydraulic motor, pump, and HST as main item of agricultural machinery.

On the basis of various experience, technical know-how for all kinds of high-quality hydraulic machinery supplied to domestic, oversea by doing this we assured ourself that Korea will become powerful nation in hydraulic pump field, from now on APCON HYD can promise it would be contribution, with the international competitiveness for domestic hydraulic industry advancement and global hydraulic market.

Youth and experience work side-by-side in a mutual cooperation, a mature labor and management culture with highest technology with quality control system , with new business strategy discoveries , all equipped APCON will be a social hydraulic world company in the globalized information-oriented age by constant focus on utmost care for our employee's well-being, always doing and thinking a step ahead of others with business mind by modesty and consideration.

Dream and passion drive our business.

加工现场 Processing Line



组装测试现场 Assembly & Test Line



APCON油压（株）是一家充满梦想与热情的企业。

APCON油压株式会社自1990年成立以来，一直不断追求进步与茁壮成长。

在这期间，我们企业睿智地克服了液压经济危机和行业混乱，并在不断地为实现世界一流企业价值而挑战。

APCON 油压株式会社面临21世纪瞬息万变的发展局面，已经积极做出了相应回应，并以一流的液压马达·泵·农械为核心配 件，不断向HST延续发展完美事业体系。

以我们独有的技术经验为基础，生产出各种高品质油压产品供销国内外，使为我们国家成为油压强国做出奉献；今后APCON油压（株）我们承诺将以国际竞争实力为基础，努力为国内油压产业的先进化及世界油压业做出更大的贡献。

不断开发和挖掘世界化、信息化时代的全新战略事业体系；

并为成为世界一流技术·一流的品质管理·成熟的劳资管理文化的油压企业。

APCON油压全体员工将用创新的思维，谦虚的态度迎接每一次的挑战，使企业具备独特的竞争力！

HISTORY

- 
- 1990.11** APCON Hydraulic was established
- 2005.10** Development of Hydraulic Pump for Heavy construction machinery assembly
- 2007.04** INNO-BIZ certification
- 2007.05** Acquirement of KS Q ISO 9001:2008 / Certification of ISO 9001:2009
- 2007.07** Certification of Enterprise specializing in parts materials
- 2007.07** Acquisition of Korea venture business association
- 2008.02** Developed Hydraulic Pump Test Bench
- 2008.06** Selected as 'Promising Export Firm'
- 2008.09** Acquirement of KS I ISO 14001,2004 / Certification of ISO 14001:2009
- 2008.09** 'Honorable Business man' awarded by Masan City
- 2009.03** Awarded 'Letter of Commendation' by the Chief of Masan district tax office
- 2009.04** Acquired Promising Export Firm from IBK Bank
- 2009.09** Application for a patent of Hydraulic cart for spraying paint
- 2009.11** 'APCON Hydraulic' conversion to a corporation
- 2009.12** Awarded 15th 'Gyeongnam exporter prize chairman of K.I.T.A.'
- 2010.01** As a construction machinery repair business registered
- 2010.04** R&D center establishment
- 2010.05** Hydraulic Motor for Heavy construction machinery assembly development
- 2010.05** Developed 5~8ton Travel Motor Assembly
- 2010.10** Developed 14ton Travel Motor Assembly
- 2010.12** Received the grand prize 'Order of merit for Export'
- 2010.12** Developed HST Rotary Parts
- 2011.05** Established 2nd plant
- 2011.07** 1st branch opened in Guangzhou, China
- 2011.08** Developed 22ton Travel Motor Assembly
- 2011.08** Signed that OEM of Cylinder Block / Retainer Plate with HYUNDAI HYMS
- 2011.12** Developed 5~8ton Swing Motor Assembly
- 2012.08** Developed 8ton Main Pump Assembly
- 2013.07** Selected as 'Best employment enterprise'
- 2014.05** Moving into New-Factory (9929.8m²)
- 2014.08** Signed that OEM of HST Assembly with CHINA JIANGSU WORLD
- 2015.01** Supplying Main Pump Assembly to DOOSAN INFRACORE
- 2015.01** Certificated AEO(Authorized Economic Operator) by KOREA Custom
- 2015.04** Developed 4ton Travel Motor Assembly
- 2015.11** Certificated Global hidden champions by small and medium business Administration
- 2016.01** Developed 1.5ton~3ton Travel Motor Assembly
- 2016.12** Awarded a \$10 millions prize on Trade day



APCON HYDRAULIC INTRODUCTION 公司介绍

APCON HYDRAULIC.CO., LTD

Our core values are,

Technology!

Quality!

Global view!

Looking to the future!

Here is a company. APCON Hydraulic, who will open up the future.

The company has been accumulating the technology for repairing small parts, and components and assembly of heavy equipment since its establishment in 1988. We started as a maintenance and repair business in 1988 and soon established a system to produce all parts of hydraulic equipment for heavy equipment.

Under the motto of “Fresh start every day” we developed more than half of the main facility for ourselves through research and development of new technology, and with the talented employees cultivation, we also achieved cost reduction and productivity improvement, and acquired greater competitiveness.

We, APCON Hydraulic , continuously strive to satisfy our customers needs and prove our reliability through differentiated product quality and excellent service. With this comes our positive and challenging attitude to challenges and changes in the world.

APCON 油压（株）

为国际化产业的开发而努力!!!

技术！

质量！

走向世界！

走向未来！

开启未来之窗的企业, 它就是J.I油压(株)。

在重型装备油压配件的维修、拆卸、组装过程中积累的技术经验基础上,

于1988年设立了本公司, 开始了油压产品的维修事业;

并以此为基础拥有了现在的重装备油压产品的全面性产品生产体系。

APCON油压（株）社训, 以“每天都是新的开始”为经营理念,

培养高端技术人才, 努力研究和开发新产品、新技术;

降低生产成本、提高产品合格率, 从而使公司油压产品具备了良好的竞争实力。

APCON油压（株）以创新的思维、优良的品质、周全的服务为宗旨, 并为达到客户满意而不

懈努力; APCON 油压（株）将积极面对并挑战千变万化的世界经济风。

VISION & VALUES

经营理念

Management for Human 人性化经营

Cultivating quality and quantity of their lives by promoting employee's creativity and self-development.

奖励职员个人的创意性和自我开发, 让他们的生活在质和量上得到提高。

Customer-Oriented 以客户为中心

Based on stable quality, focus on Customer's demands, putting smiles on our Customer's faces.

以稳定的品质、顾客至上的理念为基础, 让客户喜笑颜开。

NEO creation 人性化经营

Management for Technology 技术经营

Based on continuous technical development, we are creating the new future.

以持续的技术开发为基础创造新的未来。

Management for World 世界经济

To be a global hydraulic pioneer, contributing to the development of our country's economy.

在全球化时代, 我们要成为新的开拓者为国家经济做出贡献。

RESEARCH & DEVELOPMENT

研究开发、质量

Strategy & Vision 开发目标

APCON Hydraulic Co.,Ltd set the bellowed strategies & Visions APCON液压有限公司
以下面的开发目标为基础

for keeping on working to meet the clients' requirements.
为了达到客户的要求而不断努力着



Unit Brand

独自品牌化

- Construct the unique brand for professional business
- Development of independent brand and gaining prestige
- Competitive price
- Establishment of circulation and sales promotion strategy
(Various products & Rational prices)
- Establishing of advertising strategy focus on quality
- Production strategy establishment
- 构筑自主品牌专门企业
- 确保自主品牌开发及形象
- 确保价格竞争力
- 树立流通及营销战略(多样的产品和价格)
- 树立品质为中心的广告战略
- 树立产品战略



Independent technology security

确保独自的技术力

- Acquire the professional for development of independent technical
- Acquired that core technology by industry study consignment research
- Acquired Our parts process technology by cooperation research development
- Item Development for New Generation
- 确保可以独自开发的专业技术性人员
- 通过产学委托研究, 开发和确保核心技术
- 通过企业间共同研究, 确保配件技术
- 次时代 ITEM 开发



New Generation Item Inspection

次时代 ITEM 调查

- Investigation and promote driven item for the next generation
- Technique predication about growth engines industry
- Analysis of growth possibility through market-research
- Secure infra through Information exchange between theologies
- Secure the technology exchange through participation in the National government project
- 次时代推进产品调查/培养
- 成长动力产业相关技术预测
- 通过市场调查分析成长可能性
- 产业间的信息交流基础保障
- 通过参与国策政府项目进行的技术交流

RESEARCH & DEVELOPMENT

研究开发、质量

Core Technology 主要核心技术

Hydraulic Pump Ass'y & Motor Ass'y Test Evaluation Technology



Development Part 开发领域

Main Pump Ass'y 液压泵	We develop various type of pump, not only hydraulic pump but also industrial single pump and double pump ect. 正在研发发动液压动力的各种液压泵总成, 产业用单泵以及单泵形状的双泵等多种类型的液压泵。
Swing Motor Ass'y 旋转马达总成	The Swing Motor for Excavator, We are trying to develop reductions for low noise and swing motor of compact type demand on the client requirements with the reliable efficiency. 挖掘机用旋转马达, 我们根据客户所需, 研究袖珍型旋转马达与低噪音的减速开发而奋斗。
Travel Motor Ass'y 行走马达总成	The Travel Motor for Excavator, Depends of various specifications and clients requirements. We are in the works for development to keep high reliability, durability, condition of field test. 挖掘机用行走马达, 我们根据客户的实际需求, 研究开发1.5T到22T的各种系列, 并确保产品的耐久性, 从而提高可信度!
HST Ass'y 农械事业领域	Developed Rotary parts & Ass'y of the HST for agricultural machinery and it is keep on working that developing for high efficiency and durability. 持续开发农机用高速配件, 为了提高效率与耐久性的开发而努力。
Comprehensive Test Bench 综合测试台	Develops and manufacture Pump and Motor performance test bench. We are trying to keep high quality & reliability for efficiency of the Pump and Motor. 为了提高泵和马达性能的信赖度, 更加完善泵与马达的高品质, 我们不断开发并制作泵与马达的测试机。

QUALITY MANAGEMENT

品质经营

QUALITY POLICY

品质管理方针



QUALITY GOALS

品质改善目标

100% ACHIEVEMENTED QUALITY SYSTEM

品质系统100%到位

100% ACHIEVEMENTED CUSTOMER SATISFACTION

客户满意度100%实现

100% ACHIEVEMENTED PRODUCTS QUALITY

产品质量100%达成

QUALITY MANAGEMENT

品质经营

Measuring Instrument 测试仪



3D Precision Measuring Equipment



Form Measuring instrument

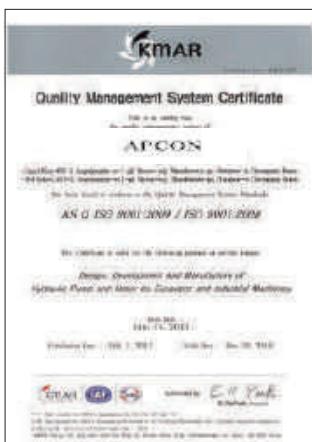


Roundness Tester

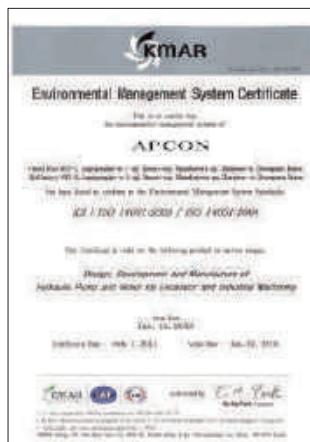


Rock Well & Brinell Hardness Tester

CERTIFICATION 认证书



ISO 9001



ISO 14001

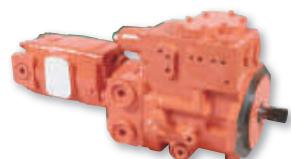


INNO-BIZ



ASSEMBLY CONTENTS

• MAIN PUMP ASS'Y - J3V/J5V/JP SERIES



J3V63DT

J3V112DT

J3V112DTP

J3V140DT

J3V180DT

J5V80DTP

J5V140DTP

J5V200DTH

J3SP36

JP2D25

JP2D28

JP2D36

• SWING MOTOR ASS'Y - JS SERIES



JS04SV

JS05SV

JS06SV

JS08SV

• AXIAL PISTON MOTOR ASS'Y - JSW SERIES



JSW020

JSW025

JSW036

JSW047



ASSEMBLY CONTENTS

• TRAVEL MOTOR ASS'Y - JT SERIES



JT02VN

JT02VJ

JT03VJ

JT04VK

JT04VK-N

JT05VT

JT08VK

JT08VT

JT14VK

JT14VT

JT14VI

JT22VD

• ETC.



P.T.O ASS'Y



OPTION CONTROL VALVE



KOMATSU GEAR PUMP

• HYDROSTATIC TRANSMISSION ASS'Y - JH SERIES



JHT018/020



JHR021/023



JHC021/023



JHC030/037/042

JHI037

JHC032/040/045

JHD040/045

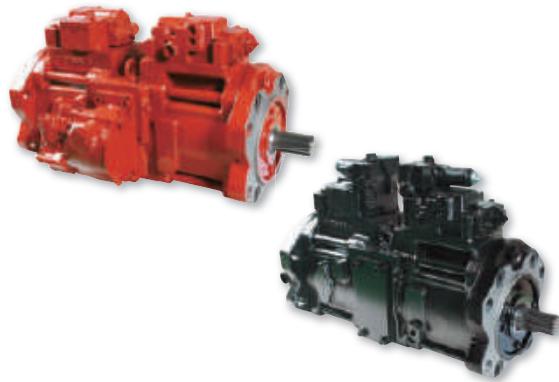
JHH040/045



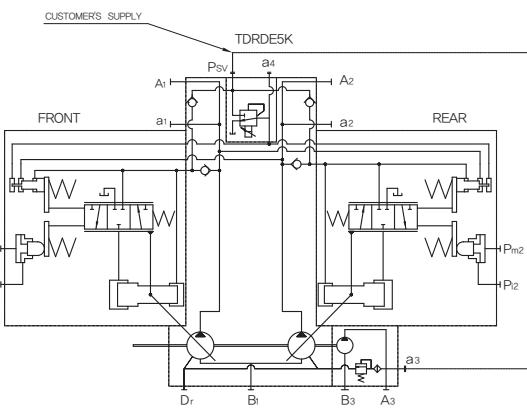
Piston Pump J3V / J5V Series

I Swash plate type Axial piston pumps I

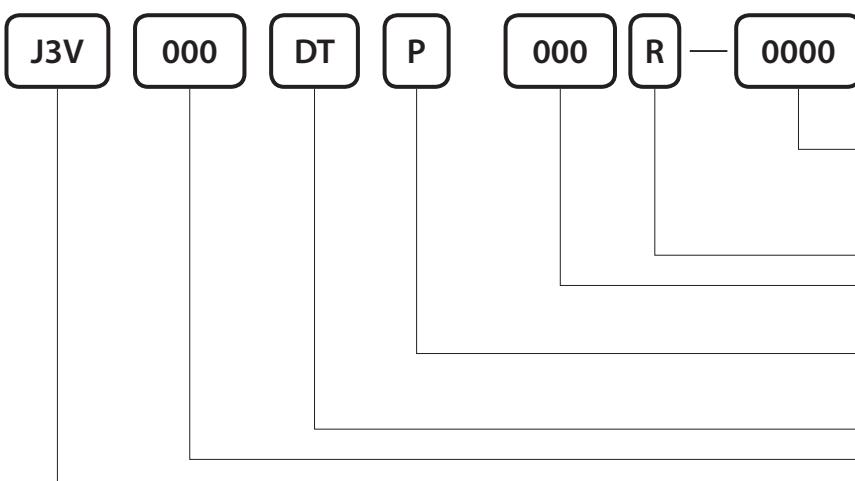
J3V / J5V Series



Hydraulic Circuit



Model Information

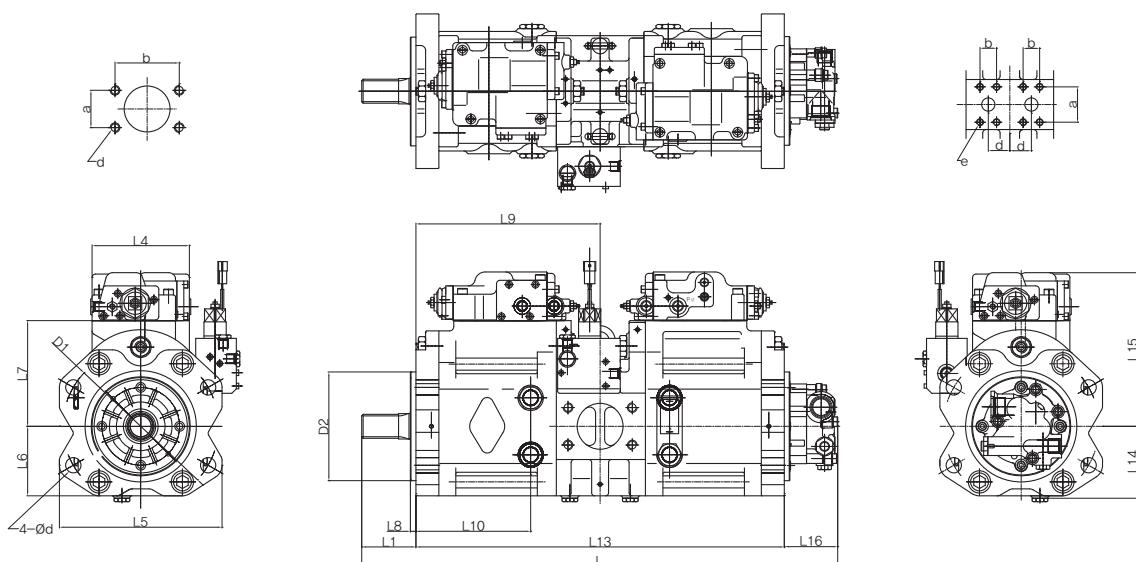


Specification

1MPa = 10.197kgf/cm²
1N·m = 0.10197kgf-m

Model	Max Displacement	Rated Pressure		Max Pressure		Max for self priming (rpm)		Max input torque		Weight	Application
		cc/rev	kgf/cm ²	MPa	kgf/cm ²	MPa	Rated	Max	kgf·m	N·m	
J3V63DT	63 X 2	350	34.3	400	39.2	2,650	3,250	35	343.2	81	13 ~ 17
J3V112DT	112 X 2	350	34.3	400	39.2	2,360	2,700	60	588.4	125	20 ~ 25
J3V140DT	140 X 2	350	34.3	400	39.2	2,150	2,500	114	1118	160	29 ~ 37
J3V180DT	180 X 2	350	34.3	400	39.2	1,950	2,300	114	1118	160	39 ~ 45
J5V80DTP	80 X 2	350	34.3	400	39.2	2,460	3,000	54	529.6	81	13 ~ 17
J5V140DTP	140 X 2	350	34.3	400	39.2	2,160	2,500	86	843.4	125	29 ~ 37
J5V200DTP	200 X 2	350	34.3	400	39.2	1,900	2,200	114	1118	160	39 ~ 50

Tandem type Double pump J3V/J5V Series



Dimensions

Model	D1	D2	d	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L
J3V63DT	180	125	18	76	70	70	140	190	89	98	8	228	138	37	37	464	97	195	78	618
J3V112DT	224	160	22	78	80	80	140	234	100	110	8	265	167	41	41	538	109	220	78	694
J3V140DT	250	180	22	93	92	92	140	256	112	123	8	305	190	53	53	618	121	245	80	791
J3V180DT	250	180	22	93	92	92	140	256	112	123	8	305	190	53	53	618	121	245	80	791
J5V80DTP	180	125	18	76	70	70	140	190	89	98	8	228	138	37	37	464	97	195	78	618
J5V140DTP	224	160	22	78	80	80	140	234	100	110	8	265	167	41	41	538	109	220	78	684
J5V200DTP	250	180	22	93	92	92	140	256	112	123	8	305	190	53	53	618	121	245	80	791

Flange mounting face for Suction Port

Model	a	b	c	d
J3V63DT	50.8	88.9	Ø60	M12/DP18
J3V112DT	50.8	88.9	Ø60	M12/DP18
J3V140DT	61.9	106.4	Ø76	M16/DP24
J3V180DT	61.9	106.4	Ø76	M16/DP24
J5V80DTP	50.8	88.9	Ø60	M12/DP18
J5V140DTP	50.8	88.9	Ø60	M12/DP18
J5V200DTP	61.9	106.4	Ø76	M16/DP24

Flange mounting face for Delivery Port

Model	a	b	c	d	e
J3V63DT	23.8	50.8	Ø19	31	M10/DP16
J3V112DT	23.8	50.8	Ø19	31	M10/DP16
J3V140DT	27.8	57.2	Ø25	38	M12/DP22
J3V180DT	27.8	57.2	Ø25	38	M12/DP22
J5V80DTP	23.8	50.8	Ø19	31	M10/DP16
J5V140DTP	23.8	50.8	Ø19	31	M10/DP16
J5V200DTP	27.8	57.2	Ø25	38	M12/DP22

Dimensions of shaft end

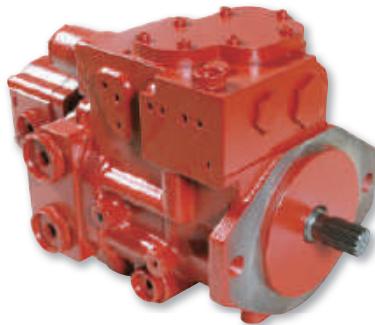
Model	No. of teeth	Pitch circle dia	Pressure angle	Module	Rule
J3V63DT	14	29.6	30°	12/24	SAE
J3V112DT	12	30	20°	2.5	JIS D2001
J3V112DT	14	35	20°	2.5	JIS D2001
J3V140DT	17	42.5	20°	2.5	JIS D2001
J3V180DT	17	42.5	20°	2.5	JIS D2001
J5V80DTP	12	30	20°	2.5	JIS D2001
J5V140DTP	17	42.5	20°	2.5	JIS D2001
J5V200DTP	17	42.5	20°	2.5	JIS D2001



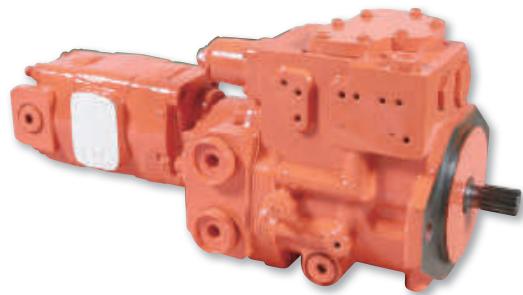
Piston Pump J3SP36

I Swash plate type Axial piston pumps I

J3SP36 + GP9 PUMP ASS'Y

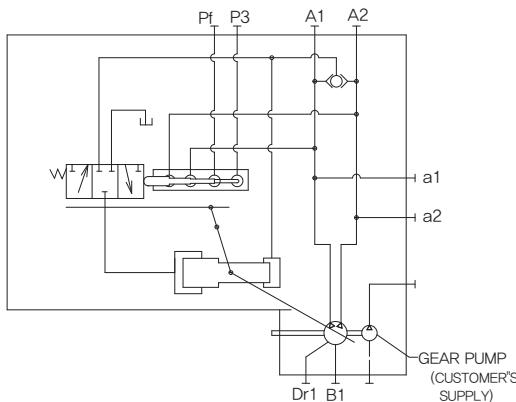


J3SP36 + GP20.3/12.7 PUMP ASS'Y

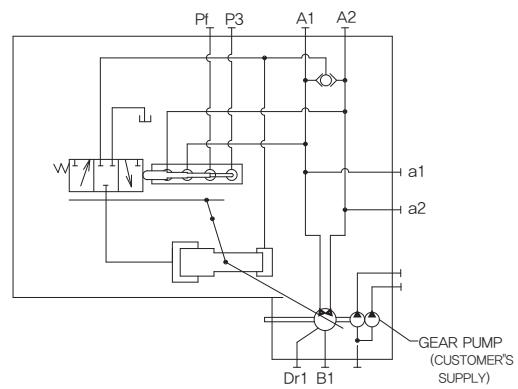


Hydraulic Circuit

J3SP36 + GP9



J3SP36 + GP20.3/12.7

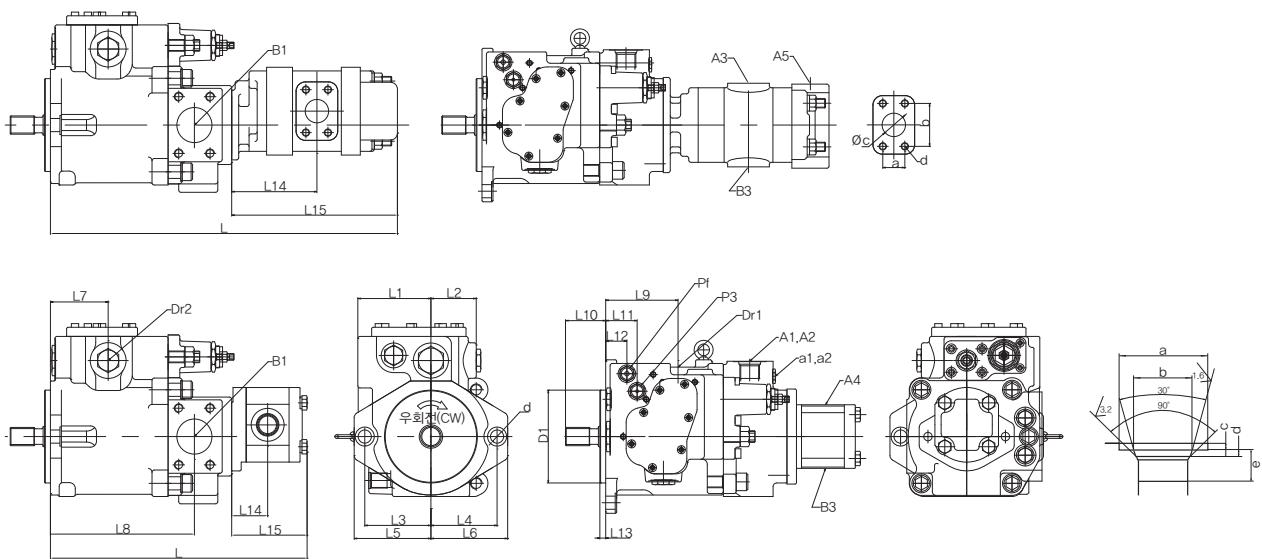


Specification

1MPa = 10.197kgf/cm²
1N·m = 0.10197kgf·m

Model	Max Displacement(cc/rev)				Pressure				Max Flow	Max speed self priming	Max input torque		Application
	A1	A2	A3	A4	Rated kgf/cm ²	MPa	kgf/cm ²	MPa			kgf · m	N · m	
J3SP36+GP9	36	36	—	9	280	27.5	320	31.4	79 X 2	2,200	21.2	207.9	8
J3SP36+GP20.3/12.7	36	36	20.3	12.7	280	27.5	320	31.4	79 X 2	2,200	21.2	207.9	8
Hydraulic Fluid	Type				ANTIWEAR								
	Oil Temperature range				− 20°C ~ + 95°C								
	Oil Viscosity range				10 ~ 1,000 cst								
	Filteration				80 ~ 150 mesh								
	Nomal 10 micron meter												

J3SP36+GP9 & J3SP36+GP20.3/12.7



Dimensions

Model	D1	d	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L
J3SP36+GP9	127	18	100	62	90.5	90.5	105	105	79	197	99	55	43	29	8	43.9	90.9	339
J3SP36+GP20.3/12.7	127	18	100	62	90.5	90.5	105	105	79	197	99	55	43	29	8	116.6	226.8	475

Port Size

Port	Description	Port Size
A1/A2	Delivery Port	PF 3/4 , P24
Dr1	Drain Port	PF 1/2 , P18
Dr2	Drain Port	PF 1/2 , P18
a1/a2	Gauge Port	PF 1/4 , P11
Pf	Power Shift Port	PF 1/4 , P11
P3	Power Shift Port	PF 1/4 , P11
B2	Suction Port	PF 3/4 , P24
A4	Delivery Port	PF 1/2 , P18
A5	Delivery Port	7/8" , 14UNF

Flange mounting face for Suction Port

Size	a	b	c	d
B1	42,9	77,6	48	M12/DP18
B3	30,2	58,7	32	M10/DP16
A3	22,2	47,6	19	M10/DP16

Flange mounting face for Delivery Port

Size	a	b	c	d	e	O-ring
PF 1/4	24	15,6	1,5	2,5	15	P11
PF 3/8	28	18,6	2	2,5	15	P14
PF 1/2	34	22,6	2,5	2,5	19	P18
PF 3/4	45	29,8	3,5	3,5	20	P24

Dimensions of shaft end

Model	No. of teeth	Pitch circle dia	Pressure angle	Module	Rule
J3SP36+GP9	15	23.813	30°	16/32	SAE
J3SP36+GP20.3/12.7	15	23.813	30°	16/32	SAE



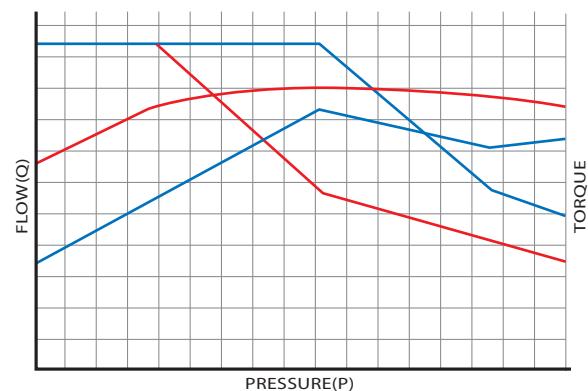
Piston Pump JP2D25/28

I Swash plate type Axial piston pumps I

JP2D25 / JP2D28 PUMP ASS'Y

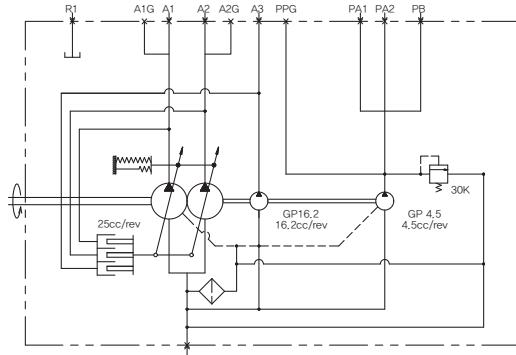


CONTROL CURVE

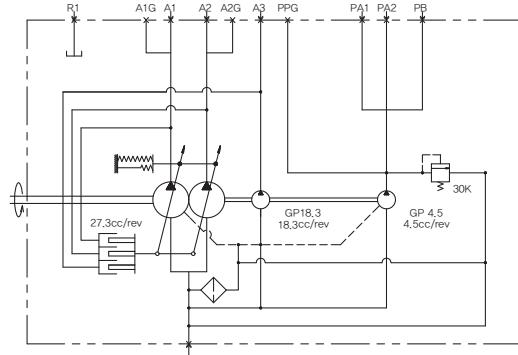


Hydraulic Circuit

JP2D25 + GP16.2/4.5



JP2D28 + GP18.3/4.5



Specification

1MPa = 10.197kgf/cm²
1N·m = 0.10197kgf·m

Model	Max Displacement(cc/rev)				Pressure				Max Flow	Max speed self priming	Max input torque		Application
					Rated		Max						
	A1	A2	A3	A4	kgf/cm ²	MPa	kgf/cm ²	MPa	l/min	rpm	kgf · m	N · m	ton
JP2D25+GP16.2/4.5	25	25	16.2	4.5	220	21.6	250	24.5	55 X 2	2,200	14	137.3	5
JP2D28+GP18.3/4.5	27.3	27	18.3	4.5	220	21.6	250	24.5	60.9 X 2	2,200	14	137.3	5~7

Hydraulic Fluid

Type ANTIWEAR

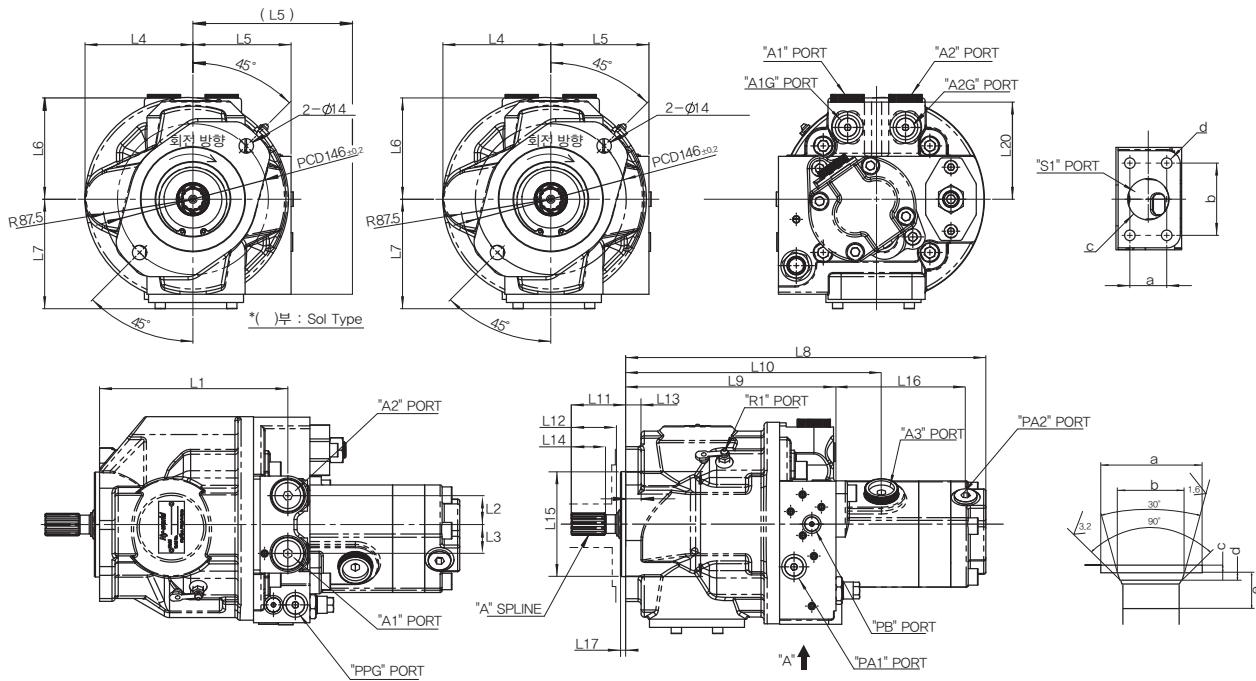
Oil Temperature range - 20°C ~ + 95°C

Oil Viscosity range 10 ~ 1,000 cst

Filteration 80 ~ 150 mesh

Nomal 10 micron meter

JP2D25/JP2D28



Dimensions

Model	L1	L2	L3	L4	L5	(L5)	L6	L7	L8	L9	L10	L11	L13	L14	L15	L16	L17	L20
JP2D25/28	132.2	28	28	109.3	90.1	165	102.9	103.1	348.6	203.6	247.3	52.7	15	33	101.6	129.2	5	98

Port Size

Port	Description	Port Size
S1	Input Port	SAE 1-1/2
A1	Output Port	PF 1/2 , P18
A2	Output Port	PF 1/2 , P18
A3	Output Port	PF 1/2 , P18
PA1	Output Port	PF 1/4 , P11
PA2	Output Port	PF 3/8 , P14
A1G	Gauge Port	PF 1/4 , P11
A2G	Gauge Port	PF 1/4 , P11
PPG	Gauge Port	PF 1/4 , P11
PB	Output Port	PF 1/8 , P8
R1	Air Port	M10 X P1.0

Flange mounting face for Suction Port

Model	a	b	c	d
JP2D25	35.7	69.9	40	M12/DP18
JP2D28	35.7	69.9	40	M12/DP18

Flange mounting face for Delivery Port

Model	a	b	c	d	e	O-ring
PF 1/4	24	15.6	1.5	2.5	15	P11
PF 3/8	28	18.6	2	2.5	15	P14
PF 1/2	34	22.6	2.5	2.5	19	P18
PF 3/4	45	29.8	3.5	3.5	20	P24

Dimensions of shaft end

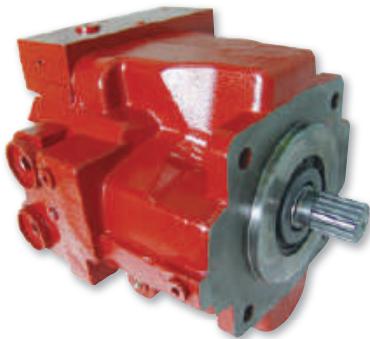
Model	No. of teeth	Pitch circle dia	Pressure angle	Module	Rule
JP2D25/28	13	21.8	30°	16/32	SAE



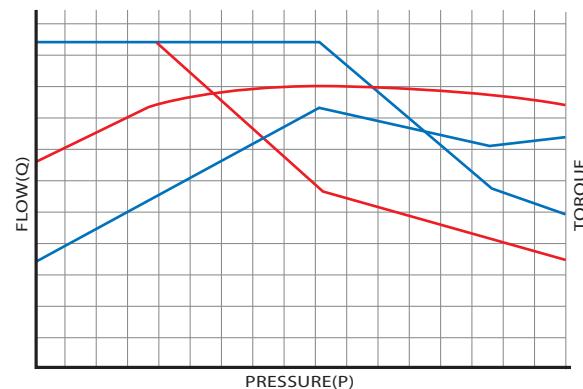
Piston Pump JP2D36

I Swash plate type Axial piston pumps I

JP2D36 PUMP ASS'Y

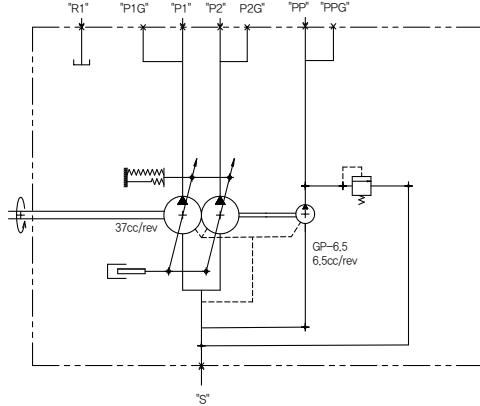


CONTROL CURVE

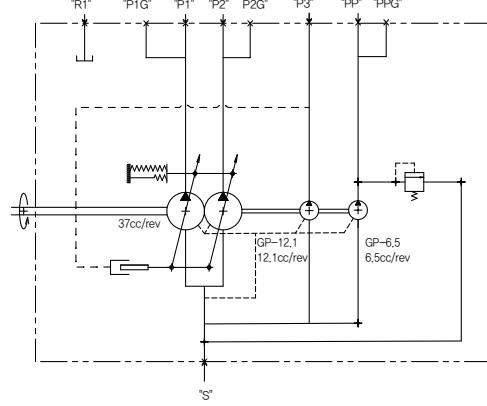


Hydraulic Circuit

JP2D36 + GP6.5



JP2D36 + GP12.1/6.5



Specification

1MPa = 10.197kgf/cm²
1N·m = 0.10197kgf·m

Model	Max Displacement(cc/rev)				Pressure				Max Flow	Max speed self priming	Max input torque		Application
					Rated		Max						
	A1	A2	A3	A4	kgf/cm ²	MPa	kgf/cm ²	MPa	l/min	rpm	kgf · m	N · m	ton
JP2D36+GP6.5	37	37	—	6.5	280	27.5	300	29.4	74 X 2	2,000	13.5	132.4	5
JP2D36+GP12.1/6.5	37	37	12.1	6.5	280	27.5	300	29.4	74 X 2	2,000	17.8	174.6	5~7

Hydraulic Fluid

Type ANTIWEAR

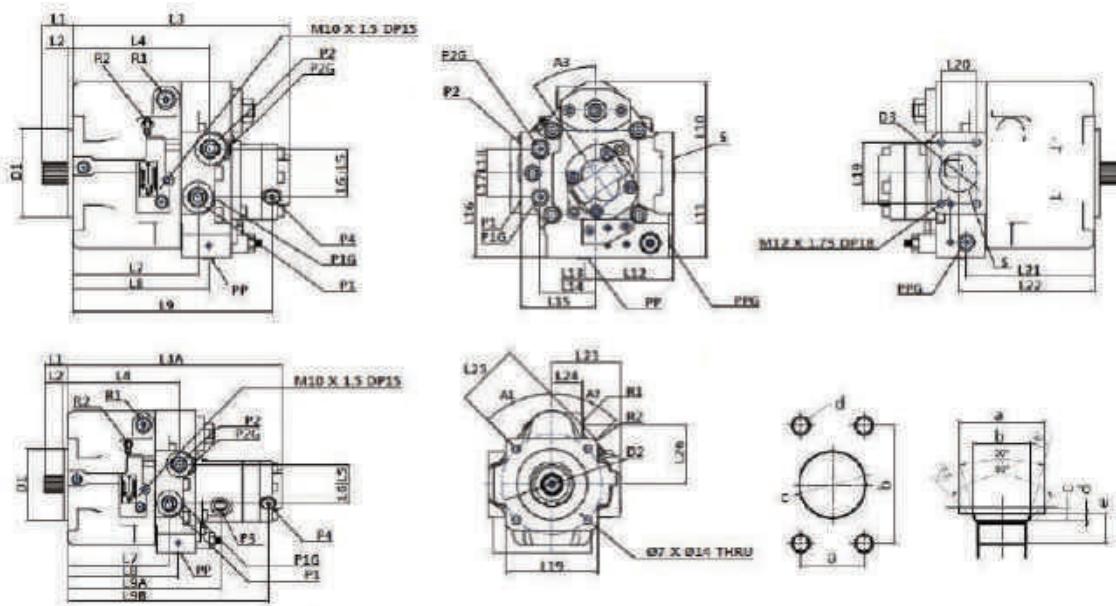
– 20°C ~ + 95°C

10 ~ 1,000 cst

80 ~ 150 mesh

Nomal 10 micron meter

JP2D36



Dimensions

Model	D1	D2	A1	A2	A3	L1	L2	L3	L3A	L4	L5	L6	L7	L8	L9	L9A	L9B
JP2D36	Ø127	Ø181	45°	45°	35°	43.2	7.7	315.1	385.1	200.1	35	35	182.1	198.1	290.1	274.1	360.1
	L10	L11	L12	L13	L14	L15	L16	L17	L18	L19	L20	L21	L22	L23	L24	L25	L26
	133	123	113	16.5	80	109	123	35	35	88.9	50.8	186.1	197.1	123	55	113.6	107

Port Size

Port	Description	Port Size
S	Input Port	SAE 2-1/2
P1	Output Port	PF 3/4 , P24
P2	Output Port	PF 3/4 , P24
R1	Drain Port	PF 3/8 , P14
P4	Output Port	PF 3/8 , P14
PP	Output Port	PF 1/4 , P11
PPG	Gauge Port	PF 1/4 , P11
P1G	Gauge Port	PF 1/4 , P11
P2G	Gauge Port	PF 1/4 , P11
P3	Output Port	PF 1/2 , P18

Flange mounting face for Suction Port

Model	a	b	c	d
JP2D36	50.8	88.9	55	M12/DP18

Flange mounting face for Delivery Port

Model	a	b	c	d	e	O-ring
PF 1/4	24	15.6	1.5	2.5	15	P11
PF 3/8	28	18.6	2	2.5	15	P14
PF 1/2	34	22.6	2.5	2.5	19	P18
PF 3/4	45	29.8	3.5	3.5	20	P24

Dimensions of shaft end

Model	No. of teeth	Pitch circle dia	Pressure angle	Module	Rule
JP2D36	14	31.2	30°	12/24	SAE



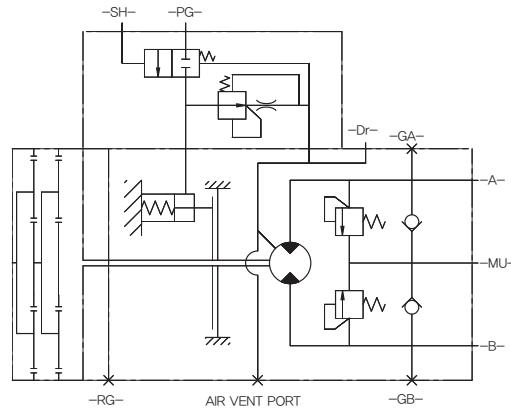
Swing Motor - JS Series

■ Axial piston Swing Motor ■

JS Series



Hydraulic Circuit



Model Information

JS 05 S V — R A — C

Displacement (cc/rev)

Design Code

With Relief Valve

Motor Type

S : 1 Speed

Excavator Class (ton)

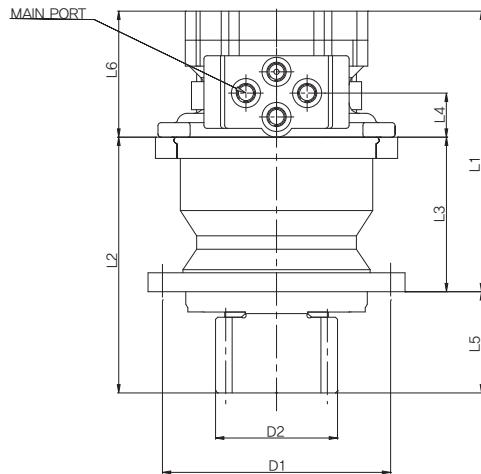
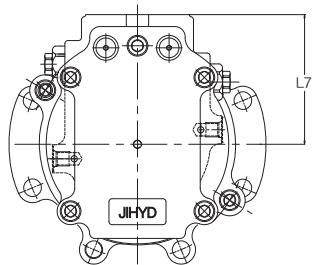
JS Series

Specification

1MPa = 10.197kgf/cm²
1N·m = 0.10197kgf·m

Model	Hydraulic Motor					Reduction Gear				Application	
	Max Displacement	Output Speed	Max Pressure		Mechanical Brake Torque (Motor Shaft)	Gear Ratio	Theoretical Output Torque				
			kgf/cm ²	MPa			kgf · m	N · m	rpm		
JS04SV	27	1425	220	21.6	14.9	146.1	22.7	217.5	2133	62.7	4
JS05SV	29	1340	230	22.6	14.9	146.1	19.464	207.3	2033	68.9	5
JS06SV	33	1205	230	22.6	14.9	146.1	19.464	230.5	2260.5	61.9	7
JS08SV	43	904	230	22.6	14.9	146.1	19.464	307.5	3015.6	46.4	8

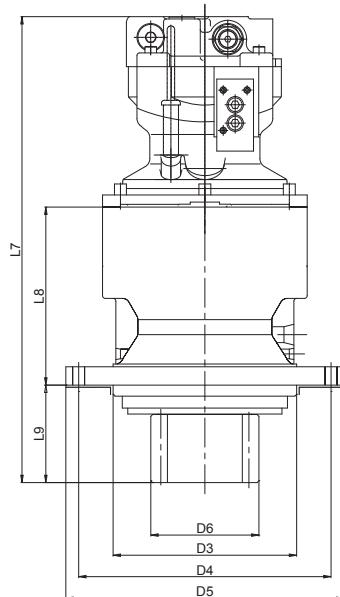
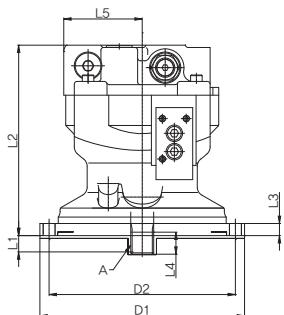
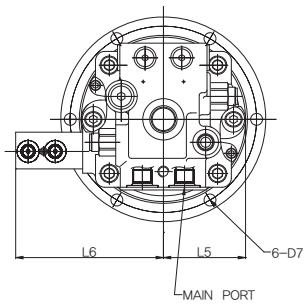
JS04SV SWING MOTOR



Dimensions

Model	D1	D2	L1	L2	L3	L4	L5	L6	L7	Main Port
JS04SV	220	117.6	270.5	246.6	149	42.5	97.6	121.5	125	2 – PF 3/8

JS05/06/08SV SWING MOTOR



Dimensions

Model	D1	D2	D3	D4	D5	D6	D7	L1	L2	L3	L4	L5
JS05SV	223	203	200	275	303	117.8	13	17.75	207.5	13.2	24	80.5
JS06SV	L6	L7	L8	L9	A				Main Port			
JS08SV	163.5	506.7	194	106.2	15tooth – 16/32 Pitch				2 – PF 1/2			



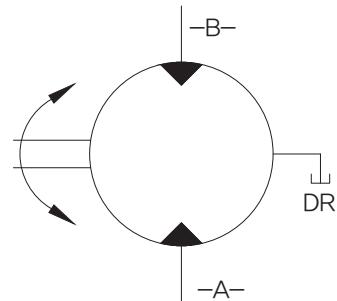
Axial Piston Motor - JSW Series

■ Axial piston Motor ■

JSW Series



Hydraulic Circuit



Specification

1MPa = 10.197kgf/cm²
1N·m = 0.10197kgf·m

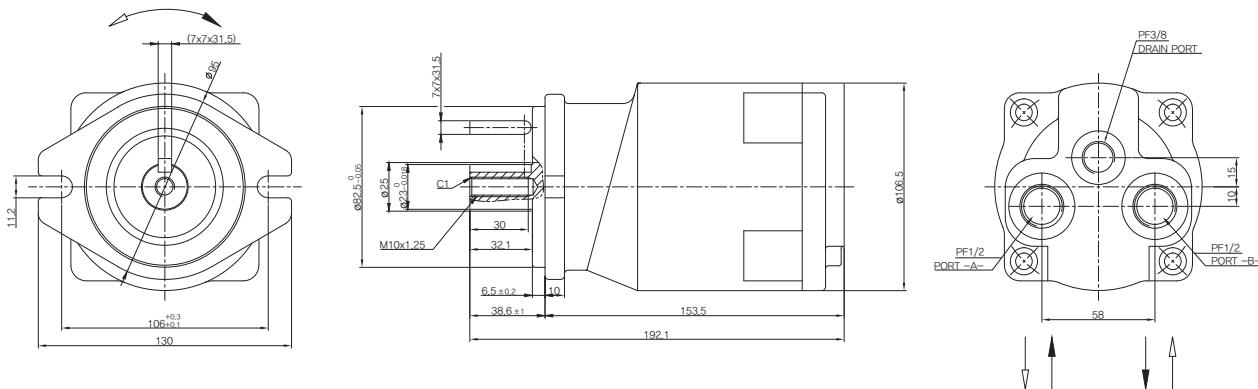
Model	Max Displacement cc/rev	Output speed rpm	Max Pressure		Mechanical Brake Torque (Motor Shaft)	
			kgf · m	Mpa	kgf · m	N · m
JSW020	20	3000	250	24.5	—	—
JSW025	25	3000	250	24.5	—	—
JSW036	36	3000	250	24.5	—	—
JSW047	47	3000	250	24.5	—	—

Port Size

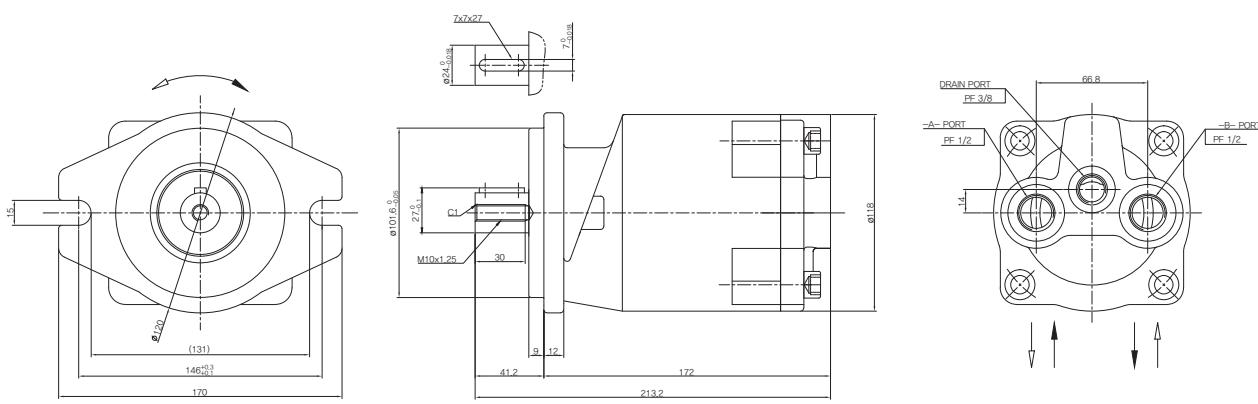
Model	PORT			
	INLET / OUTLET PORT P1 , P2	CASE DRAIN PORT T1	PRESSURE GAUGE PORT a1 , a2	2 SPEED CONTROL PORT Ps
JSW020	PF 1/2 , PLASTIC PLUG	PF 3/8 , PLASTIC PLUG	—	—
JSW025	PF 1/2 , PLASTIC PLUG	PF 3/8 , PLASTIC PLUG	—	—
JSW036	PF 1/2 , PLASTIC PLUG	PF 3/8 , PLASTIC PLUG	—	—
JSW047	PF 1/2 , PLASTIC PLUG	PF 3/8 , PLASTIC PLUG	—	—

Dimensions

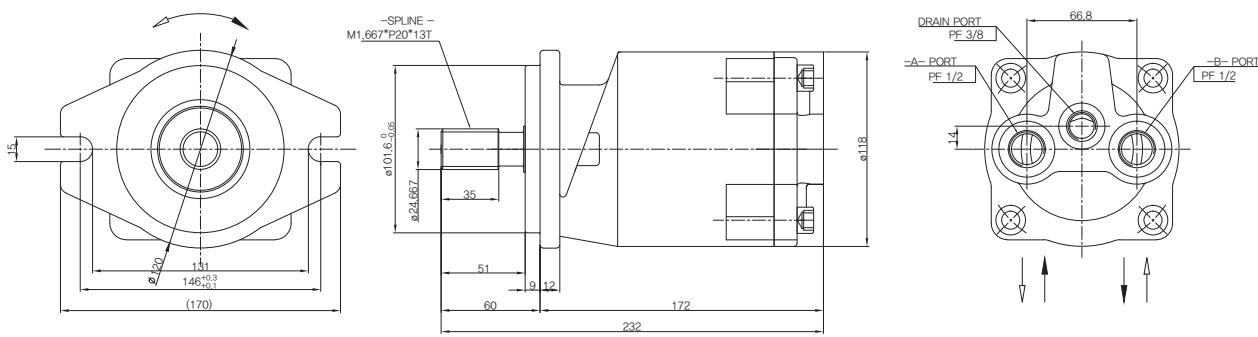
JSW020 / 025 - KEY TYPE



JSW036 / 047 - KEY TYPE



JSW036 / 047 - SPLINE TYPE





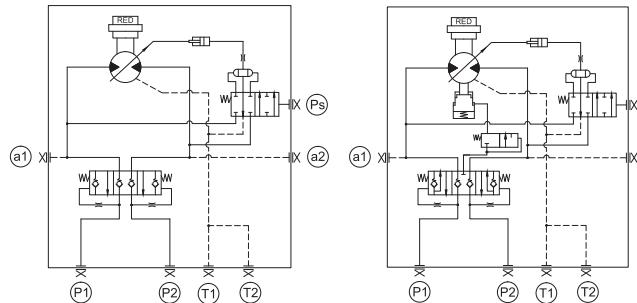
Travel Motor - JT02VN/JT02VJ

Axial piston Travel Motor

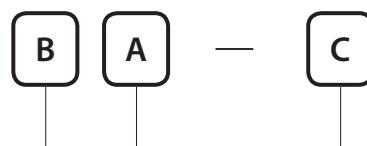
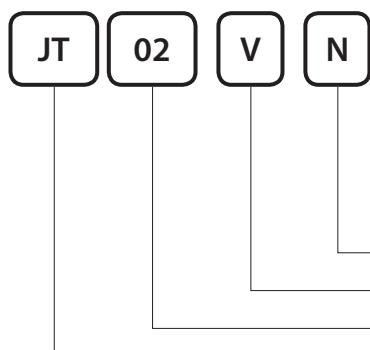
JT02VN / JT02VJ



Hydraulic Circuit



Model Information



Displacement (cc/rev)

Design Code

With Mechanical Brake

Motor Type

S : 1 Speed / V : 2 Speed

Excavator Class (ton)

JT Series

Specification

1MPa = 10.197kgf/cm²
1N·m = 0.10197kgf·m

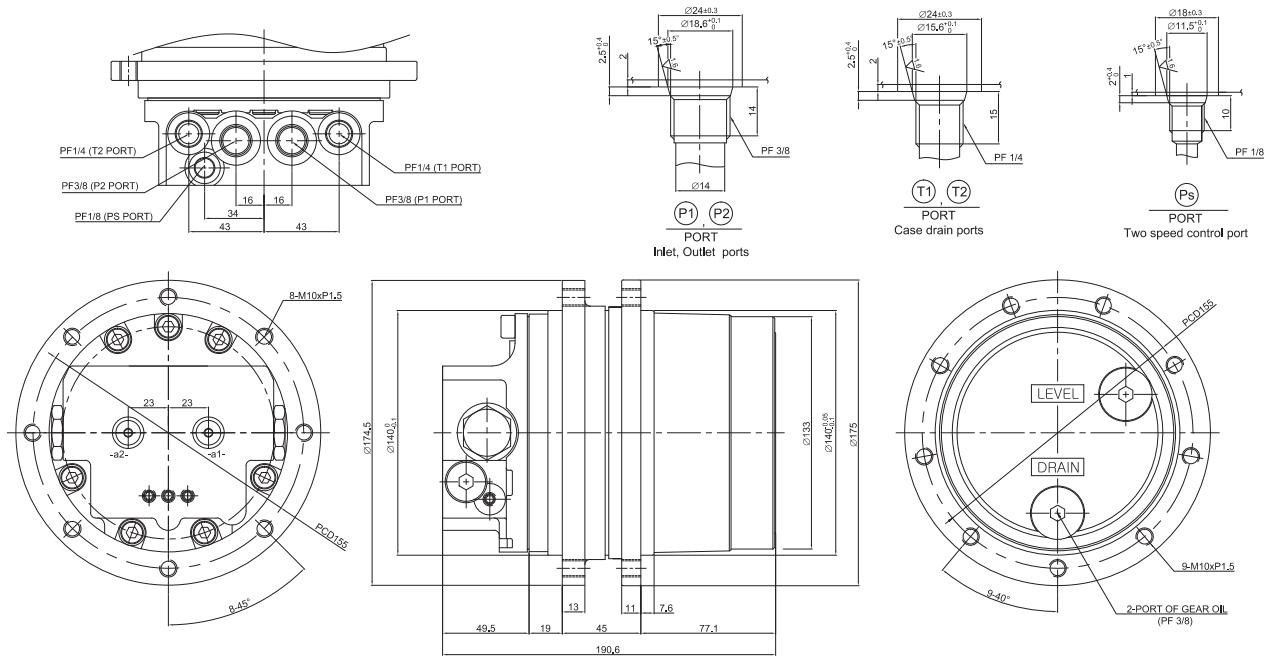
Model	Hydraulic Motor					Reduction Gear				Application	
	Max Displacement	Output Speed	Max Pressure		Mechanical Brake Torque (Motor Shaft)	Gear Ratio	Theoretical Output Torque				
			cc/rev	rpm			kgf · m	N · m	speed		
JT02VN	11.4	1461	230	22.6	—	—	36.96	154	1510.2	39.4	1.5
JT02VJ	19.7	1520.7	230	22.6	1.8	17.7	31	223.6	2192.8	49.1	2

Port Size

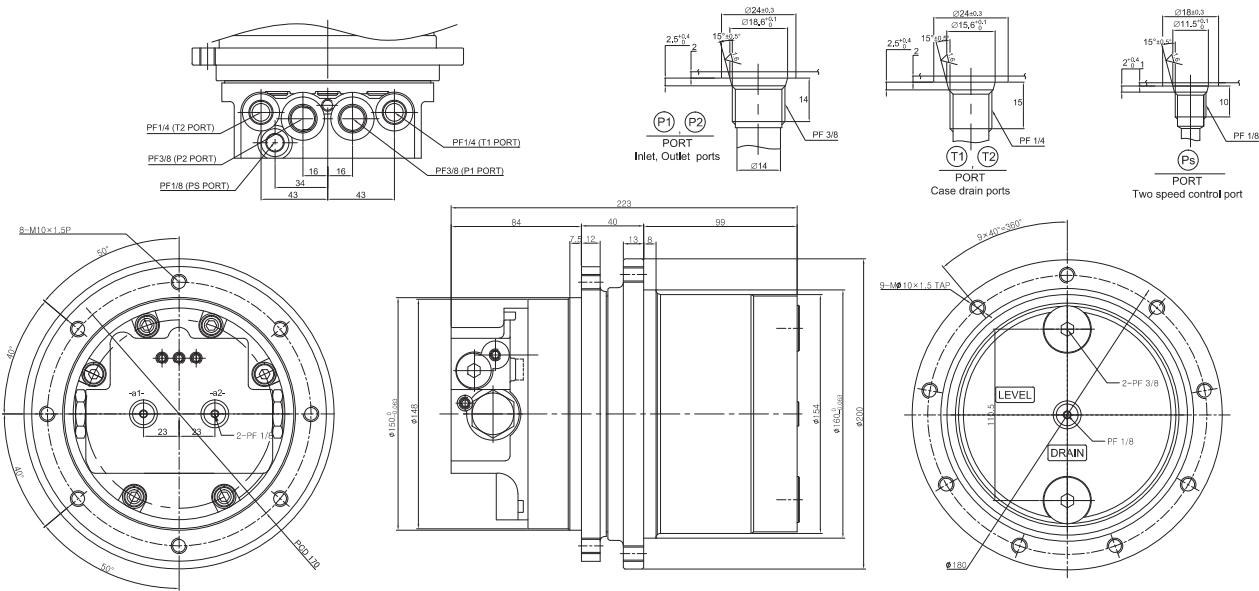
Model	PORT			
	INLET / OUTLET PORT P1 , P2	CASE DRAIN PORT T1 , T2	PRESSURE GAUGE PORT a1 , a2	2 SPEED CONTROL PORT Ps
JT02VN	PF 3/8 , PLASTIC PLUG	PF 1/4 , STEEL PLUG	PF 1/8 , STEEL PLUG	PF 1/8 , PLASTIC PLUG
JT02VJ	PF 3/8 , PLASTIC PLUG	PF 1/4 , STEEL PLUG	PF 1/8 , STEEL PLUG	PF 1/8 , PLASTIC PLUG

Dimensions

JT02VN TRAVEL MOTOR



JT02VJ TRAVEL MOTOR





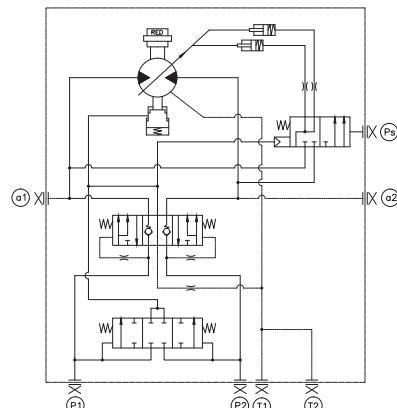
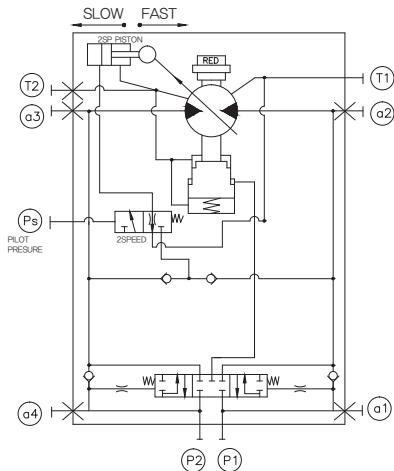
Travel Motor - JT03VJ/JT04VK

Axial piston Travel Motor

JT03VJ / JT04VK



Hydraulic Circuit



Specification

1MPa = 10.197kgf/cm²
1N·m = 0.10197kgf·m

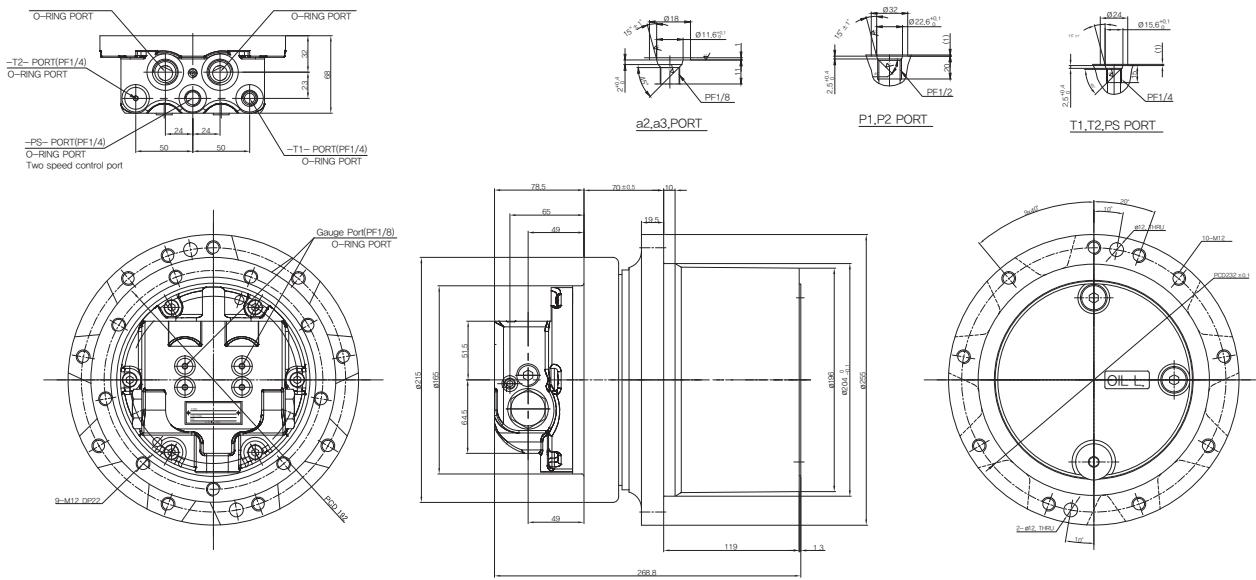
Model	Hydraulic Motor					Reduction Gear			Application		
	Max Displacement	Output Speed	Max Pressure		Mechanical Brake Torque (Motor Shaft)	Gear Ratio	Theoretical Output Torque				
	cc/rev	rpm	kgf/cm ²	MPa	kgf · m	N · m	i	kgf · m	N · m	rpm	ton
JT03VJ	21.4	1631.5	250	24.5	5	49	53.7	457.2	4483.7	30.4	3
JT04VK	33.8	1775	280	27.5	7.9	77.5	47.406	714.4	7006	37.4	4

Port Size

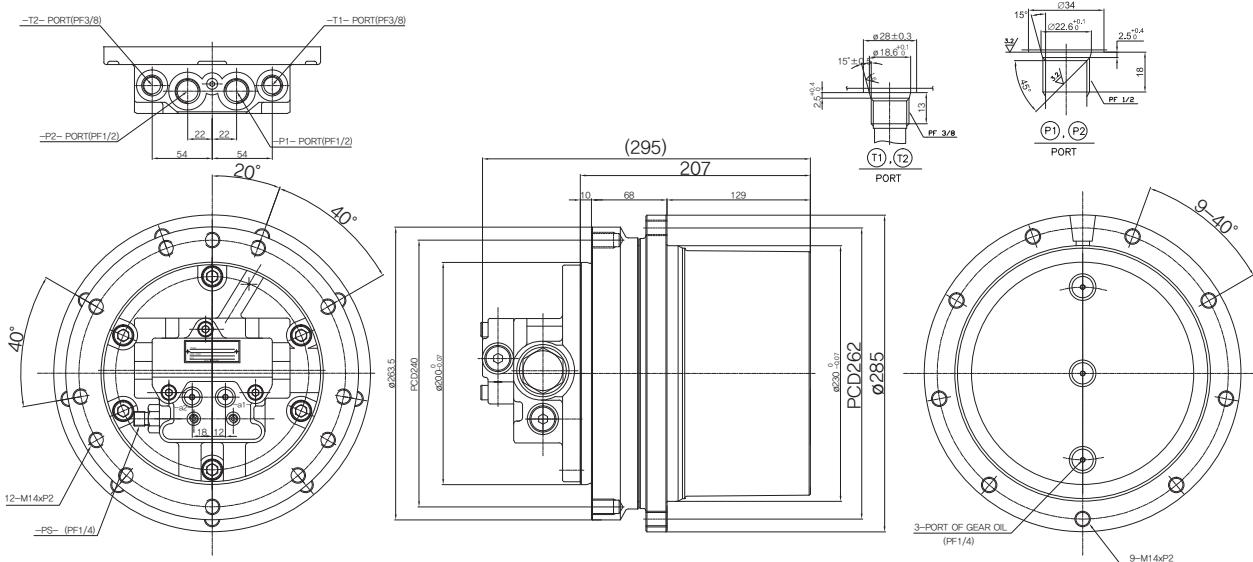
Model	PORT			
	INLET / OUTLET PORT P1 , P2	CASE DRAIN PORT T1 , T2	PRESSURE GAUGE PORT a1 , a2	2SPEED CONTROL PORT Ps
JT03VJ	PF 1/2 , PLASTIC PLUG	PF 1/4 , STEEL PLUG	PF 1/8 , STEEL PLUG	PF 1/4 , PLASTIC PLUG
JT04VK	PF 1/2 , PLASTIC PLUG	PF 3/8 , STEEL PLUG	PF 1/8 , STEEL PLUG	PF 1/4 , PLASTIC PLUG

Dimensions

JT03VJ TRAVEL MOTOR



JT04VK TRAVEL MOTOR





Travel Motor - JT04VK-N

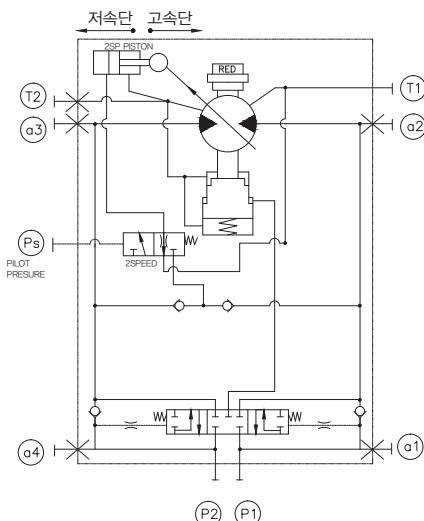
■ Axial piston Travel Motor ■

JT04VK-N



Hydraulic Circuit

JT04VJ CIRCUIT DIAGRAM



Specification

1MPa = 10.197kgf/cm²
1N·m = 0.10197kgf·m

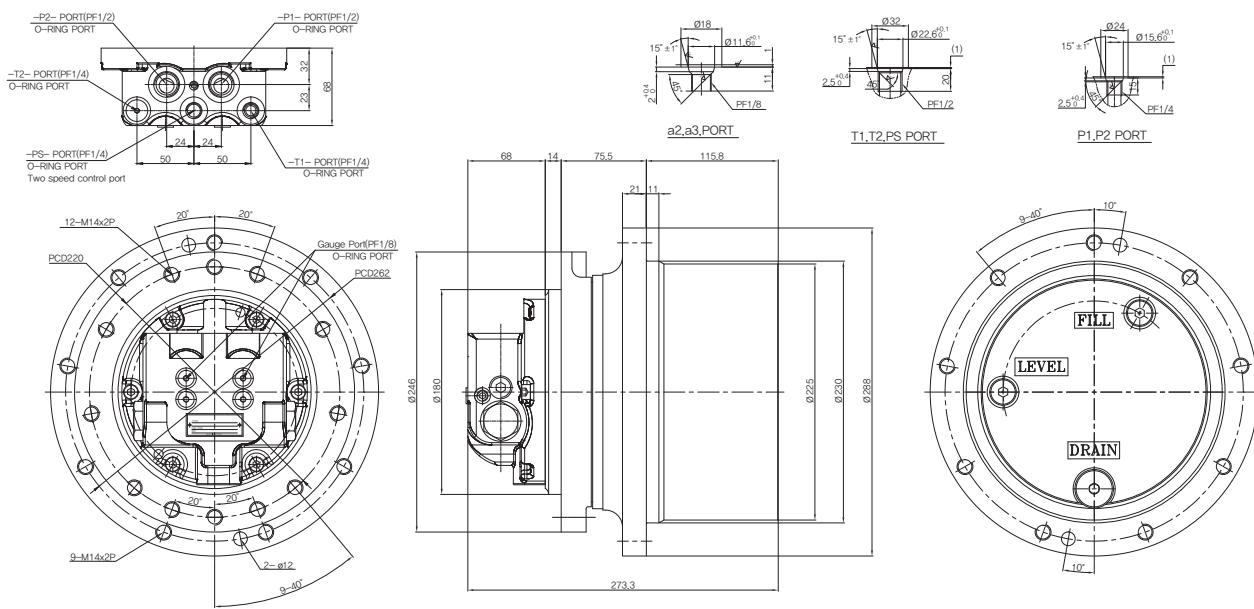
Model	Hydraulic Motor						Reduction Gear				Application	
	Max Displacement	Output Speed	Max Pressure		Mechanical Brake Torque (Motor Shaft)		Gear Ratio	Theoretical Output Torque				
			cc/rev	rpm	kgf/cm ²	MPa		kgf · m	N · m	rpm		
JT04VK-N (9 HOLE)	25.1	2388.9	250	24.5	6.6	64.7	68.6	685	6717.7	34.8	4	
JT04VK-N (12 HOLE)	25.1	2388.9	250	24.5	6.6	64.7	68.6	685	6718	34.8	4	

Port Size

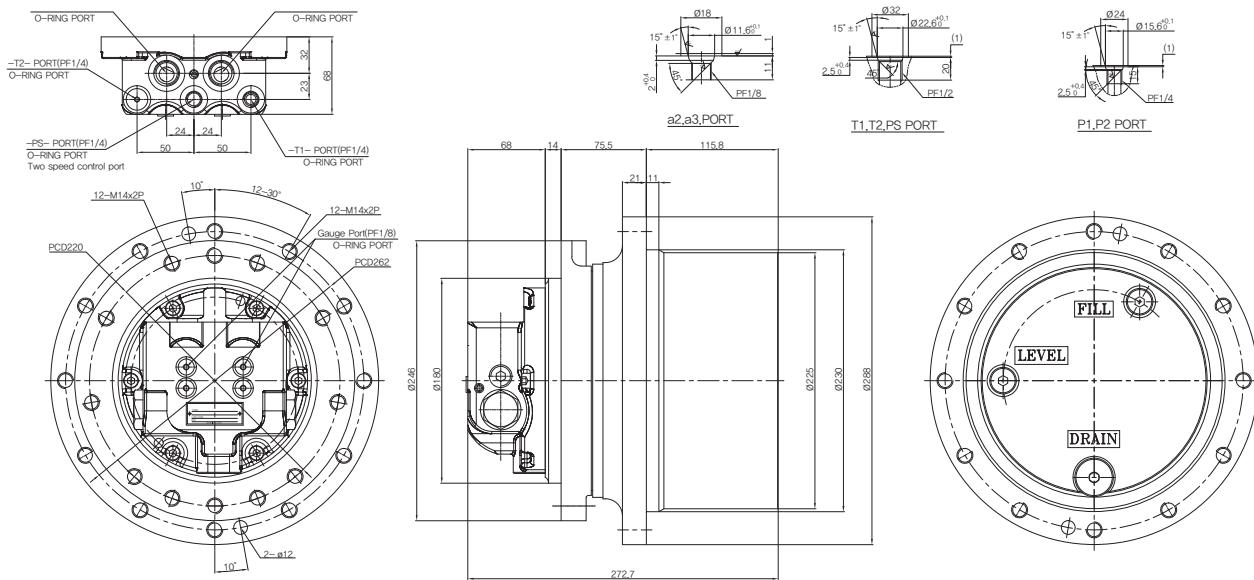
Model	PORT			
	INLET / OUTLET PORT P1 , P2	CASE DRAIN PORT T1 , T2	PRESSURE GAUGE PORT a1 , a2	2SPEED CONTROL PORT Ps
JT04VK-N (9 HOLE)	PF 1/2 , PLASTIC PLUG	PF 1/4 , STEEL PLUG	PF 1/8 , STEEL PLUG	PF 1/4 , PLASTIC PLUG
JT04VK-N (12 HOLE)	PF 1/2 , PLASTIC PLUG	PF 3/8 , STEEL PLUG	PF 1/8 , STEEL PLUG	PF 1/4 , PLASTIC PLUG

Dimensions

JT04VK-N TRAVEL MOTOR(9 HOLE)



JT04VK-N TRAVEL MOTOR(12 HOLE)





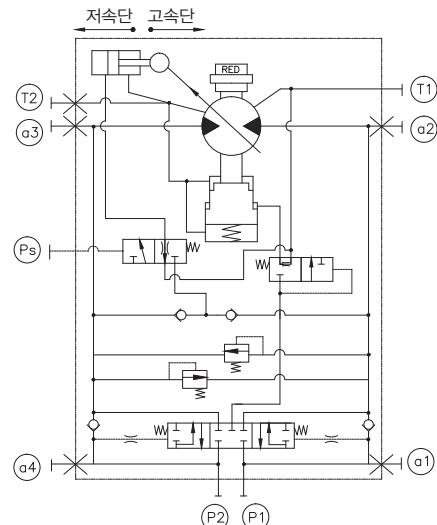
Travel Motor - JT05VT/JT08VK

I Axial piston Travel Motor I

JT05VT/JT08VK



Hydraulic Circuit



Specification

1MPa = 10.197kgf/cm²
1N·m = 0.10197kgf·m

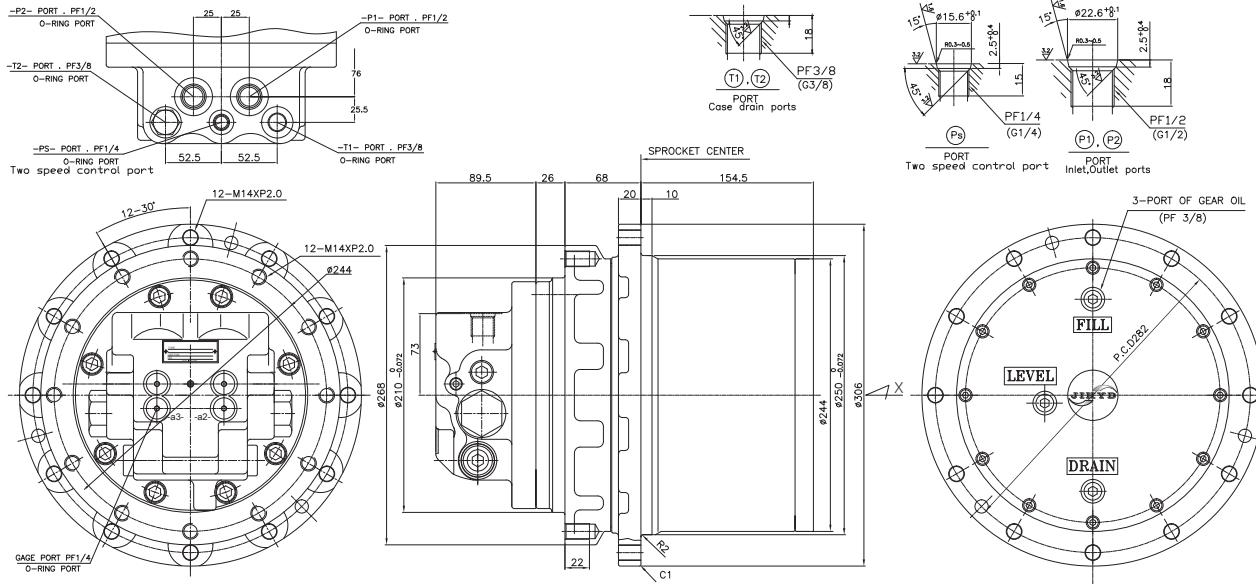
Model	Hydraulic Motor					Reduction Gear				Application	
	Max Displacement	Output Speed	Max Pressure		Mechanical Brake Torque (Motor Shaft)	Gear Ratio	Theoretical Output Torque				
			cc/rev	rpm			kgf · m	N · m	rpm		
JT05VT	43.3	1207	280	27.5	8.5	83.4	53.706	1037	10169.7	23.7	5
JT08VK	49.2	1626	300	29.4	8.5	83.4	53.706	1262	12376.2	30	8

Port Size

Model	PORT			
	INLET / OUTLET PORT P1, P2	CASE DRAIN PORT T1, T2	PRESSURE GAUGE PORT a1, a2	2SPEED CONTROL PORT Ps
JT05VT	PF 1/2, PLASTIC PLUG	PF 3/8, STEEL PLUG	PF 1/4, STEEL PLUG	PF 1/4, PLASTIC PLUG
JT08VK	PF 1/2, PLASTIC PLUG	PF 3/8, STEEL PLUG	PF 1/4, STEEL PLUG	PF 1/4, PLASTIC PLUG

Dimensions

JT05VT TRAVEL MOTOR



Main Pump Ass'y

Swing Motor Ass'y

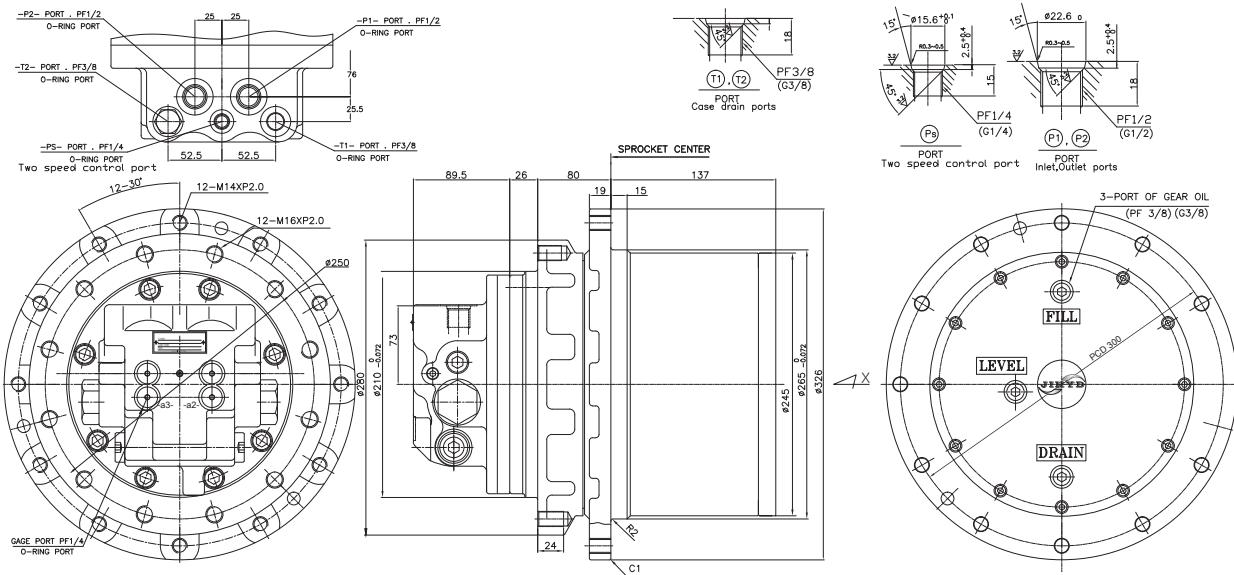
Axial Piston Motor Ass'y

Travel Motor Ass'y

ETC

Hydrostatic Transmission Ass'y

JT08VK TRAVEL MOTOR





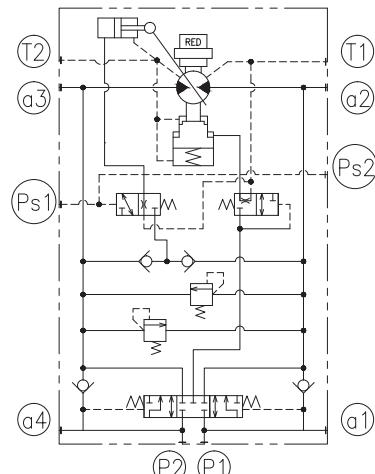
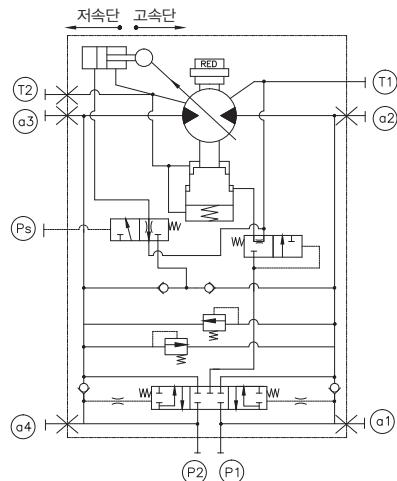
Travel Motor - JT08VT/JT14VK

Axial piston Travel Motor

JT08VT / JT14VK



Hydraulic Circuit



Specification

1MPa = 10.197kgf/cm²
1N·m = 0.10197kgf·m

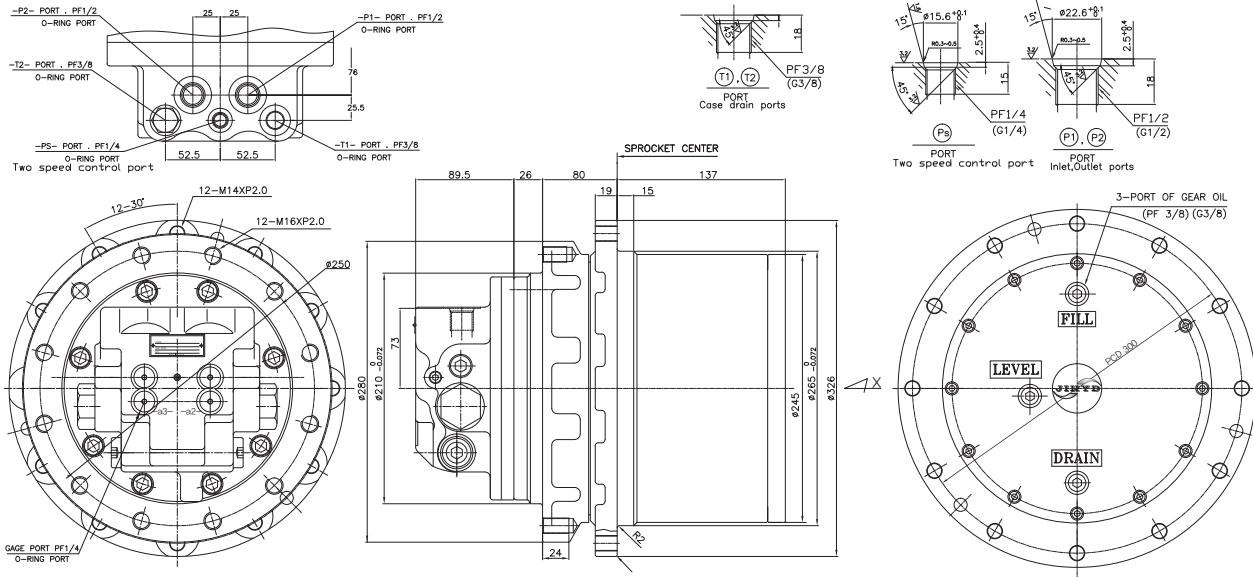
Model	Hydraulic Motor					Reduction Gear				Application
	Max Displacement	Output Speed	Max Pressure		Mechanical Brake Torque (Motor Shaft)	Gear Ratio	Theoretical Output Torque		Speed	
	cc/rev	rpm	kgf/cm ²	MPa	kgf · m	N · m	i	kgf · m	N · m	ton
JT08VT	53.2	1503	300	29.4	8.5	83.4	45.569	1157	11346.5	33
JT14VK	79.6	1130	350	34.3	19.7	193.2	53	2349.1	23037.2	21.3
										14

Port Size

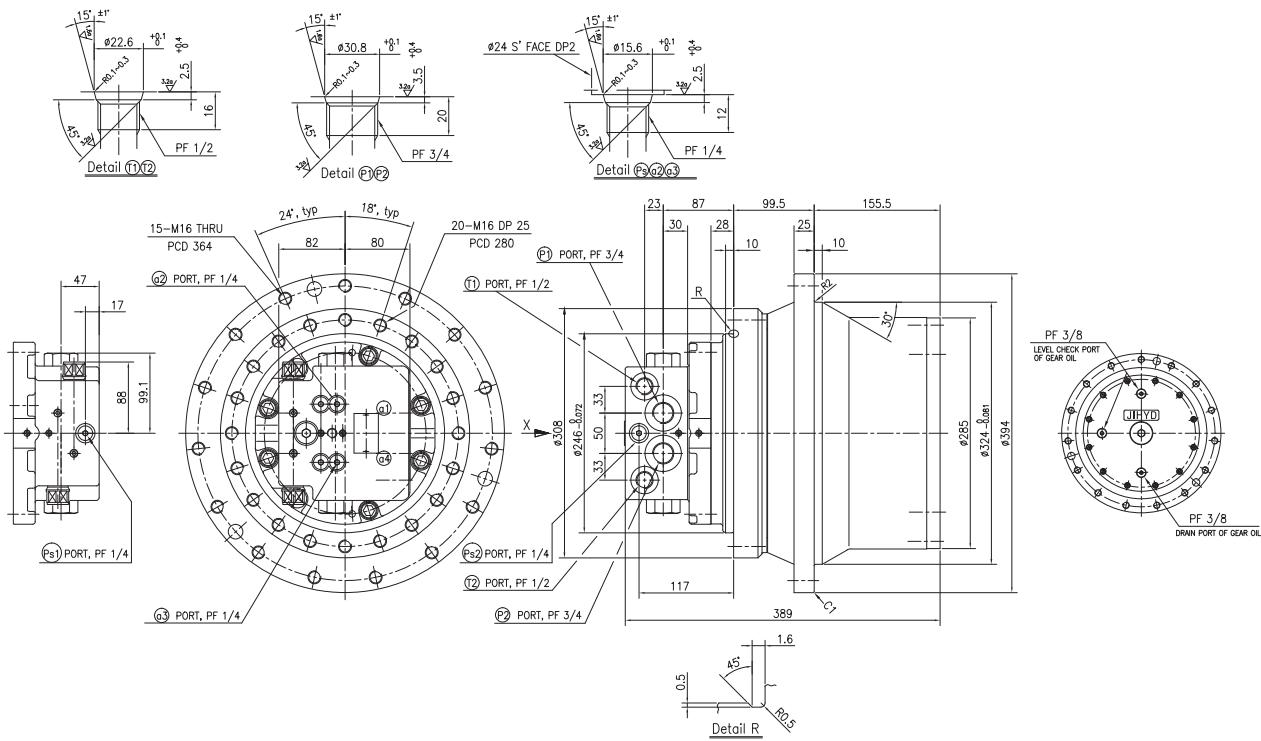
Model	PORT			
	INLET / OUTLET PORT P1 , P2	CASE DRAIN PORT T1 , T2	PRESSURE GAUGE PORT a1 , a2	2 SPEED CONTROL PORT Ps
JT08VT	PF 1/2 , PLASTIC PLUG	PF 3/8 , STEEL PLUG	PF 1/4 , STEEL PLUG	PF 1/4 , PLASTIC PLUG
JT14VK	PF 3/4 , PLASTIC PLUG	PF 1/2 , STEEL PLUG	PF 1/4 , STEEL PLUG	PF 1/4 , PLASTIC PLUG

Dimensions

JT08VT TRAVEL MOTOR



JT14VK TRAVEL MOTOR





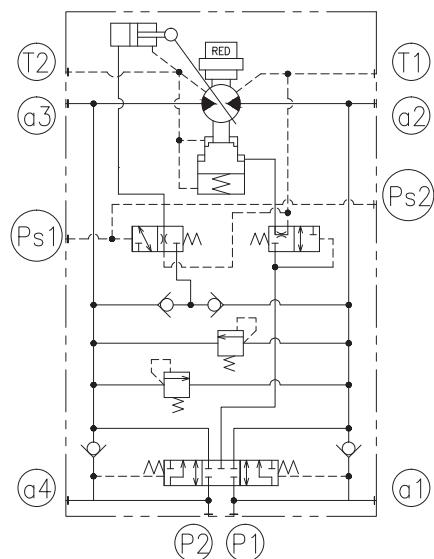
Travel Motor - JT14VT/JT14VI

I Axial piston Travel Motor I

JT14VT/JT14VI



Hydraulic Circuit



Specification

1MPa = 10.197kgf/cm²
1N·m = 0.10197kgf·m

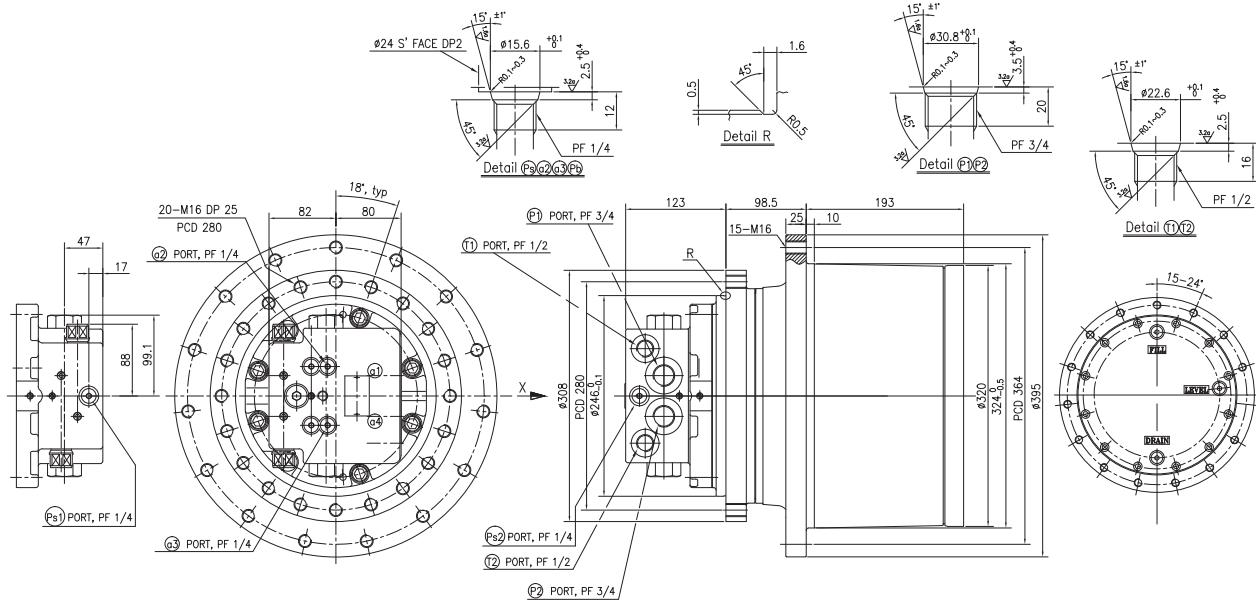
Model	Hydraulic Motor					Reduction Gear				Application	
	Max Displacement	Output Speed	Max Pressure		Mechanical Brake Torque (Motor Shaft)	Gear Ratio	Theoretical Output Torque				
			cc/rev	rpm			kgf · m	N · m	speed		
JT14VT	76.6	1174	350	34.3	19.7	193.2	54	2304	22594.9	29.9	14
JT14VI	81.4	1516	350	34.3	19.7	193.2	54	2445	23977.6	28	14

Port Size

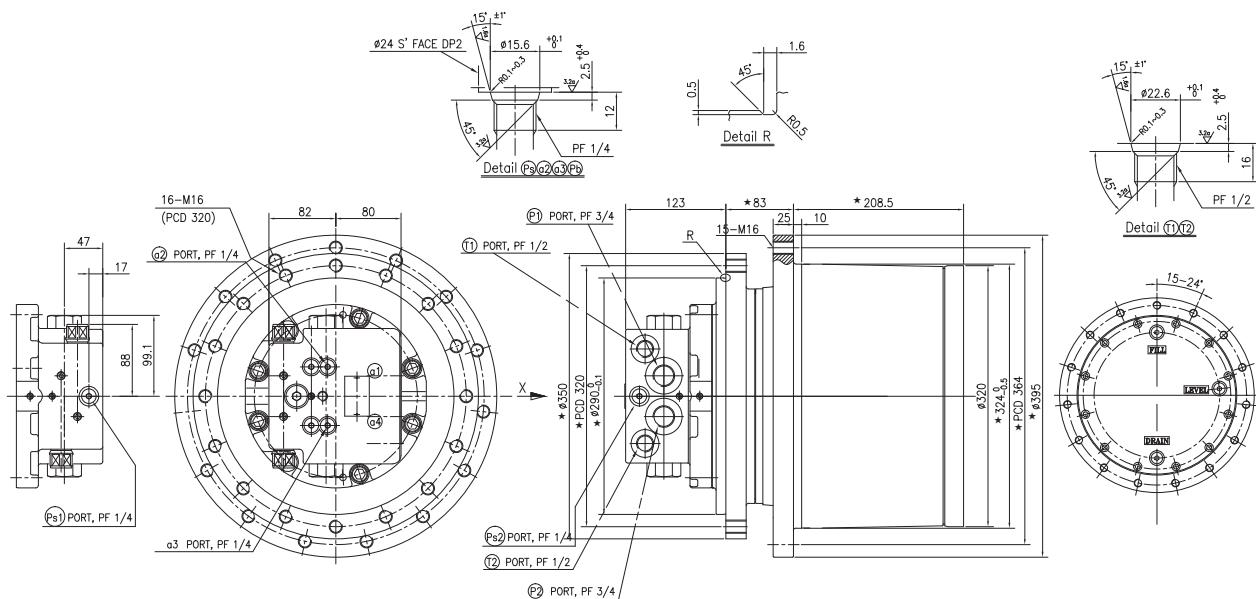
Model	PORT			
	INLET / OUTLET PORT P1 , P2	CASE DRAIN PORT T1 , T2	PRESSURE GAUGE PORT a1 , a2	2SPEED CONTROL PORT Ps
JT14VT	PF 3/4 , PLASTIC PLUG	PF 1/2 , STEEL PLUG	PF 1/4 , STEEL PLUG	PF 1/4 , PLASTIC PLUG
JT14VI	PF 3/4 , PLASTIC PLUG	PF 1/2 , STEEL PLUG	PF 1/4 , STEEL PLUG	PF 1/4 , PLASTIC PLUG

Dimensions

JT14VT TRAVEL MOTOR



JT14VI TRAVEL MOTOR





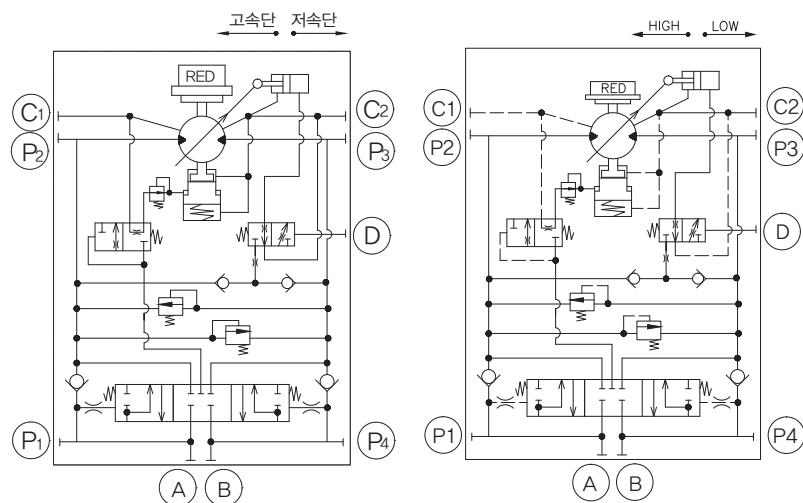
Travel Motor - JT22VS/JT22VD

I Axial piston Travel Motor I

JT22VS / JT22VD



Hydraulic Circuit



Specification

1MPa = 10,197kgf/cm²
1N·m = 0,10197kgf·m

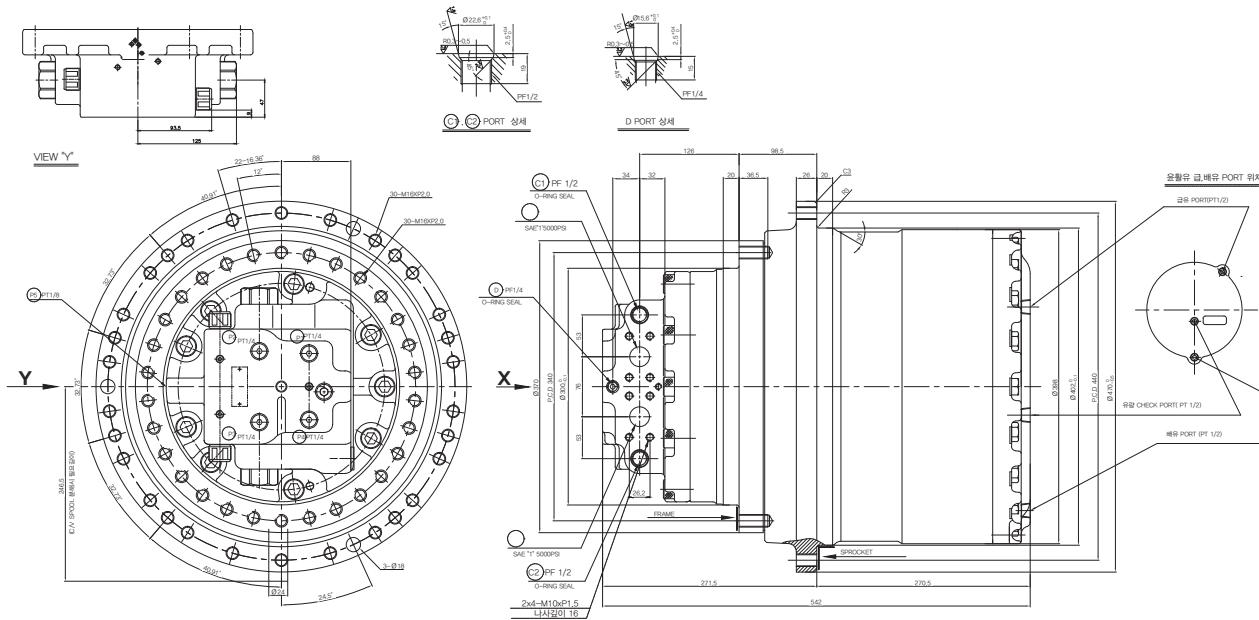
Model	Hydraulic Motor					Reduction Gear				Application	
	Max Displacement cc/rev	Output Speed rpm	Max Pressure		Mechanical Brake Torque (Motor Shaft) kgf · m	Gear Ratio i	Theoretical Output Torque				
			kgf/cm ²	MPa			kgf · m	N · m	rpm		
JT22VS	176	1204	380	37.3	49.3	483.5	48	5109	50103.0	25.1	22
JT22VD	164.2	1291.1	350	34.3	50	490.3	49.95	4568.7	44804.4	25.8	22

Port Size

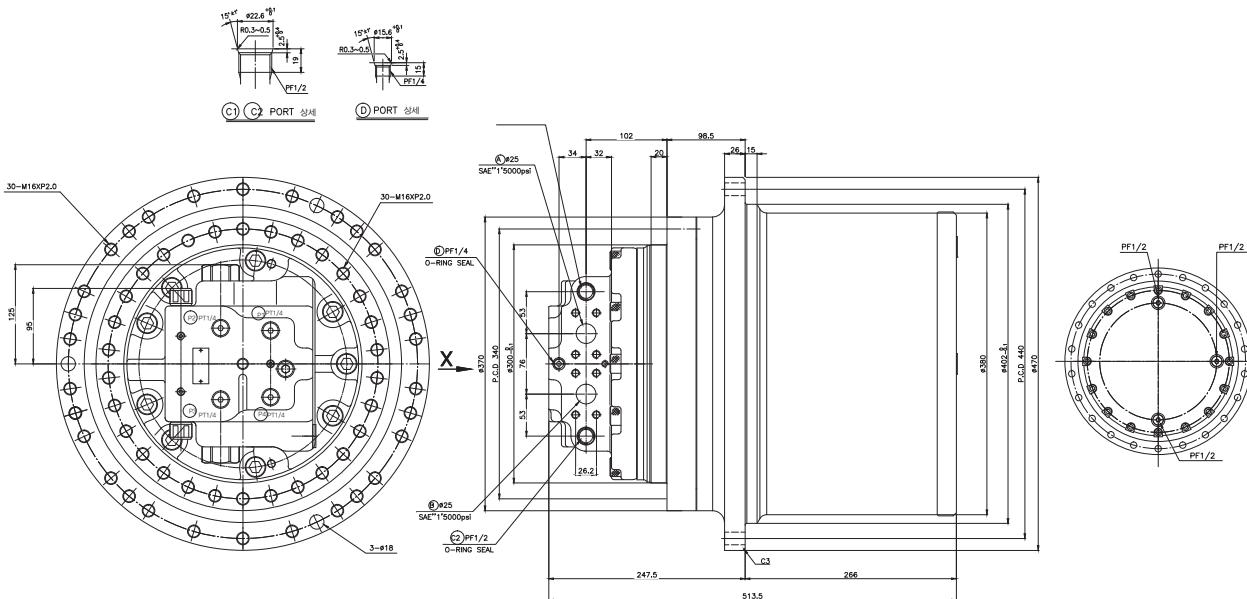
Model	PORT			
	INLET / OUTLET PORT P1 , P2	CASE DRAIN PORT T1 , T2	PRESSURE GAUGE PORT a1 , a2	2 SPEED CONTROL PORT Ps
JT22VS	-	PF 1/2 , STEEL PLUG	PF 1/4 , STEEL PLUG	PF 1/4 , PLASTIC PLUG
JT22VD	-	PF 1/2 , STEEL PLUG	PF 1/4 , STEEL PLUG	PF 1/4 , PLASTIC PLUG

Dimensions

JT22VS TRAVEL MOTOR



JT22VD TRAVEL MOTOR

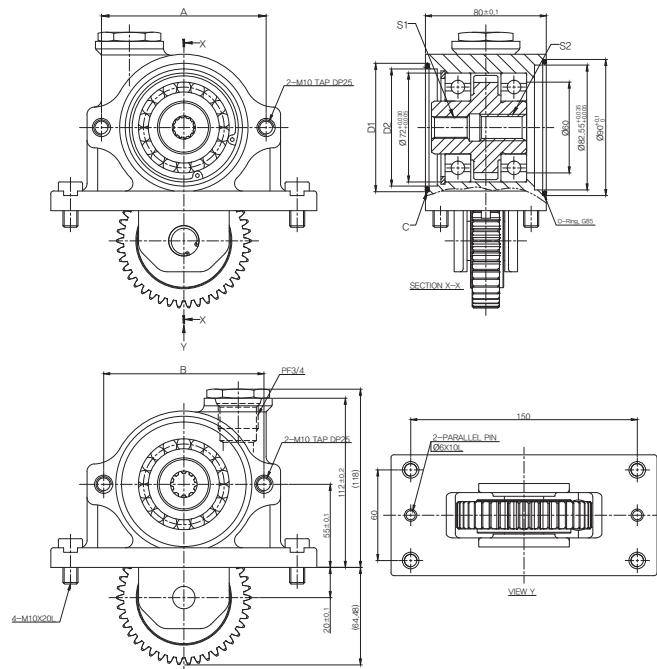




PTO GEAR BOX

■ Application : PTO GEAR BOX FOR J3V/J5V MAIN PUMP ASS'Y ■

PTO GEAR BOX



Dimensions

Model	A	B	C	D	E
A-TYPE	109	106.4	G80	85	77.5
B-TYPE	109	106	G80	85	77.5
C-TYPE	106.4	106.4	G85	90	82.5
D-TYPE	106.4	106.4	G85	90	82.5

Dimensions of shaft end

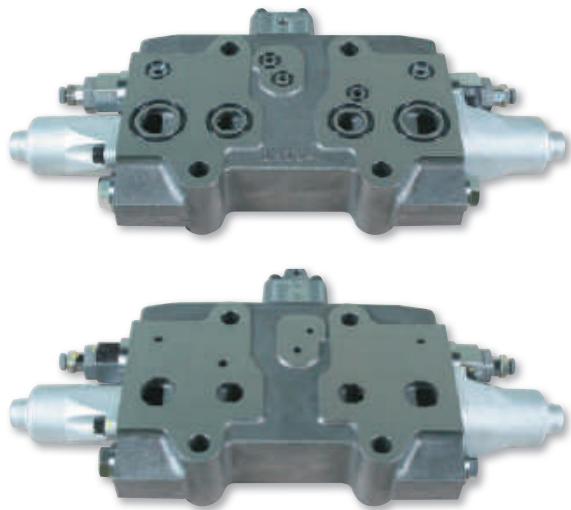
Model	S1				S2			
	NO. of teeth	Module	Pressure	Rule	NO. of teeth	Module	Pressure	Rule
A-TYPE	13	1	20°	JIS	10	16/32	30°	SAE
B-TYPE	13	1	20°	JIS	10	16/32	30°	SAE
C-TYPE	13	1	20°	JIS	10	16/32	30°	SAE
D-TYPE	13	1	20°	JIS	9	16/32	30°	SAE



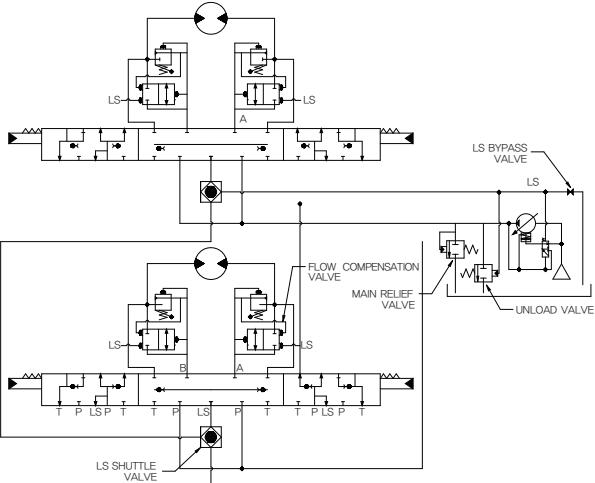
Breaker Option Control Valve PC200-6 / PC300-6

Application : KOMATSU EXCAVATOR FOR PC200-6 & PC300-6

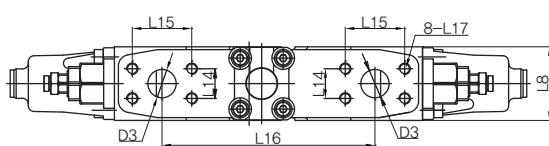
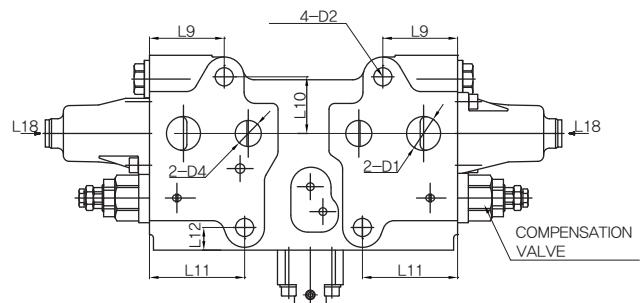
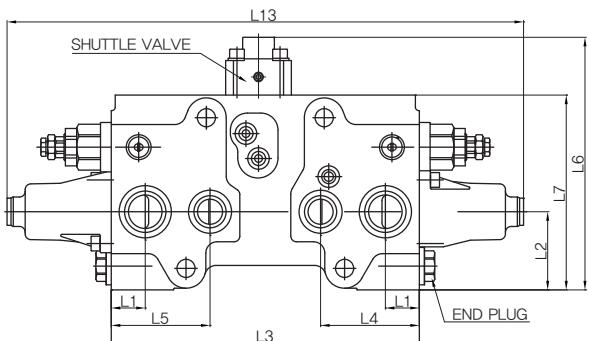
PC200-6 / PC300-6 Option Control Valve



Hydraulic Circuit



Breaker Option Valve For KOMATSU EXCAVATOR



Dimensions

Model	D1	D2	D3	D4	L1	L2	L3	L4	L5	L6	L7	L8
KOMATSU EXCAVATOR PC200-6 PC300-6	30	16	25	23	30	69	272	87.2	87.2	223	172	65
	L9	L10	L11	L12	L13	L14	L15	L16	L17		L18	
	66	50	84	20	456	26.2	52.5	188	M10 X 1.5P DP18		M10 X 1.5P	



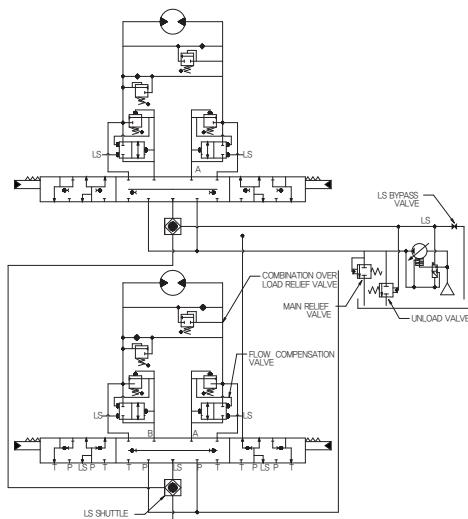
Breaker Option Control Valve PC200-7/8 & PC300-7/8

Application : KOMATSU EXCAVATOR FOR PC200-7/8 & PC300-7/8

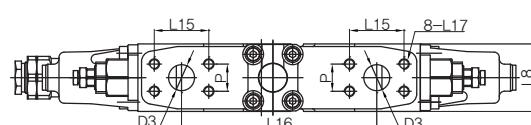
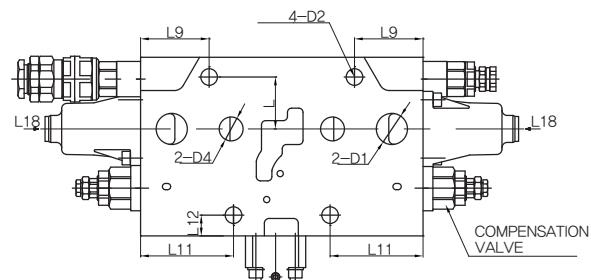
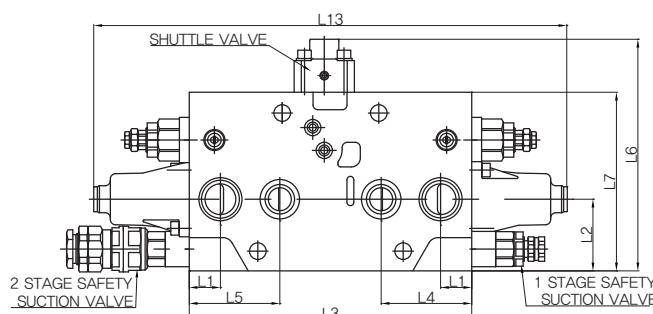
PC200-7/8 & PC300-7/8 Option Control Valve



Hydraulic Circuit



Breaker Option Valve For KOMATSU EXCAVATOR



Dimensions

Model	D1	D2	D3	D4	L1	L2	L3	L4	L5	L6	L7	L8
KOMATSU EXCAVATOR PC200-7/8 PC300-7/8	30	16	25	23	30	69	272	87.2	87.2	223	172	65
	L9	L10	L11	L12	L13	L14	L15	L16	L17		L18	
	66	50	89.5	20	456	26.2	52.5	188	M10 X 1.5P DP18		M14 X 1.5P	



KOMATSU Gear Pump PC200/220-6/7

Application : KOMATSU EXCAVATOR FOR PC200-6/7 & PC220-6/7

PC200-6/7 & PC220-6/7 GEAR PUMP ASS'Y



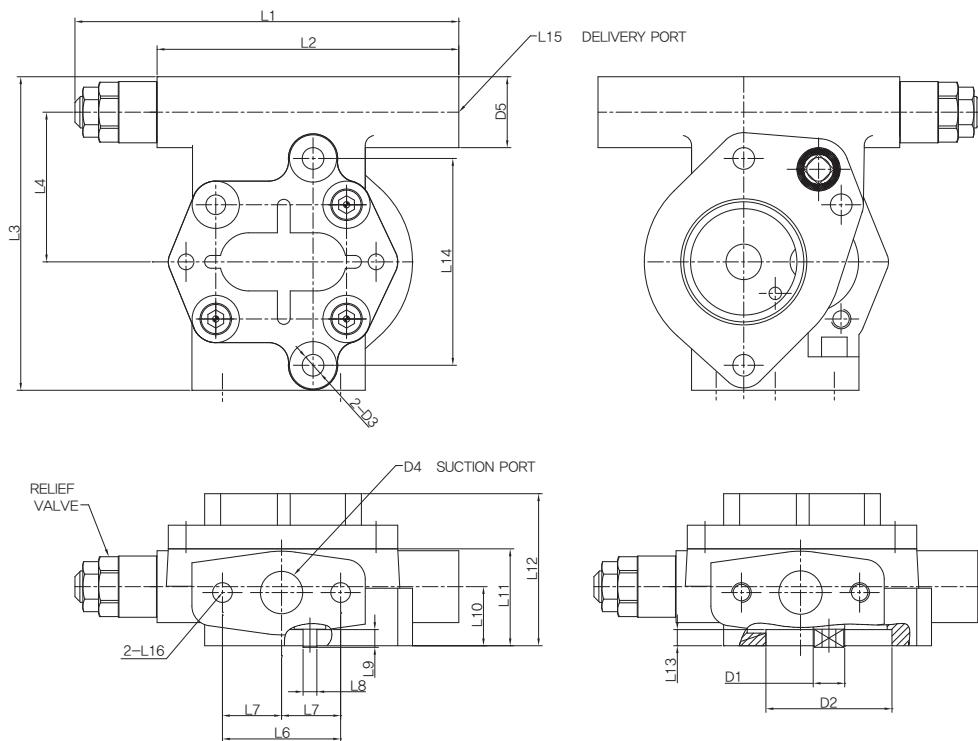
Specification

Discharge Rate (cc/rev)	14.3
Relief Pressure (kgf/cm ²)	50
Max.Speed (rpm)	3200

RELIEF VALVE SPEC.

Relief Setting (kgf/cm ²)	45±2
Cracking Pressure (kgf/cm ²)	25
Flow Rate (l /min)	45.7

Gear Pump For KOMATSU EXCAVATOR



Dimensions

Model	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7
KOMATSU EXCAVATOR PC200-6/7 PC220-6/7	16	64	11	22	36	195	153.2	159.2	76	30	60	30
	L8	L9	L10	L11	L12	L13	L14	L15			L16	
	7	9	27	49.2	77.2	8.2	105	M24 X 1.5P		M10 X P1.5 DP21		

Main Pump Ass'y

Swing Motor Ass'y

Axial Piston Ass'y

Travel Motor Ass'y

ETC

Hydrostatic Transmission Ass'y



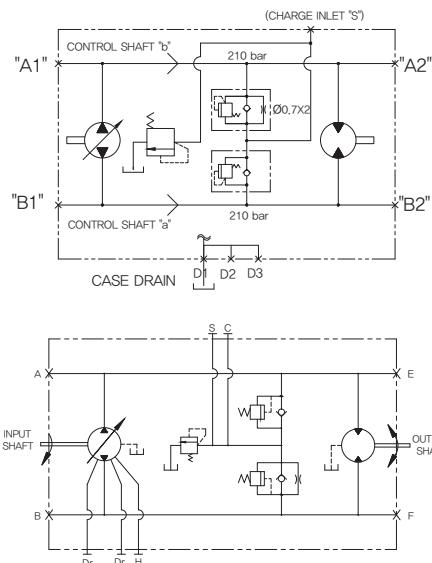
HST - JHT018/020

■ Hydrostatic Transmission ■

JHT018/JHT020



Hydraulic Circuit



Specification

1MPa = 10.197kgf/cm²
1N·m = 0.10197kgf·m

Model	Displacement			Max Speed		Max Pressure		Max Output Torque	
	Pump	Motor	Charge Pump	Input	Output	kgf/cm ²	Mpa	kgf/cm ²	N · m
	cc/rev	cc/rev	cc/rev	rpm	rpm				
JHT018	0~23 (0~15°)	23 (0~15°)	—	3000	0~3000	210	20.6	9.5	93.2
JHT020	0~23 (0~15°)	23 (0~15°)	—	3000	0~3000	210	20.6	9.5	93.2

Port Size

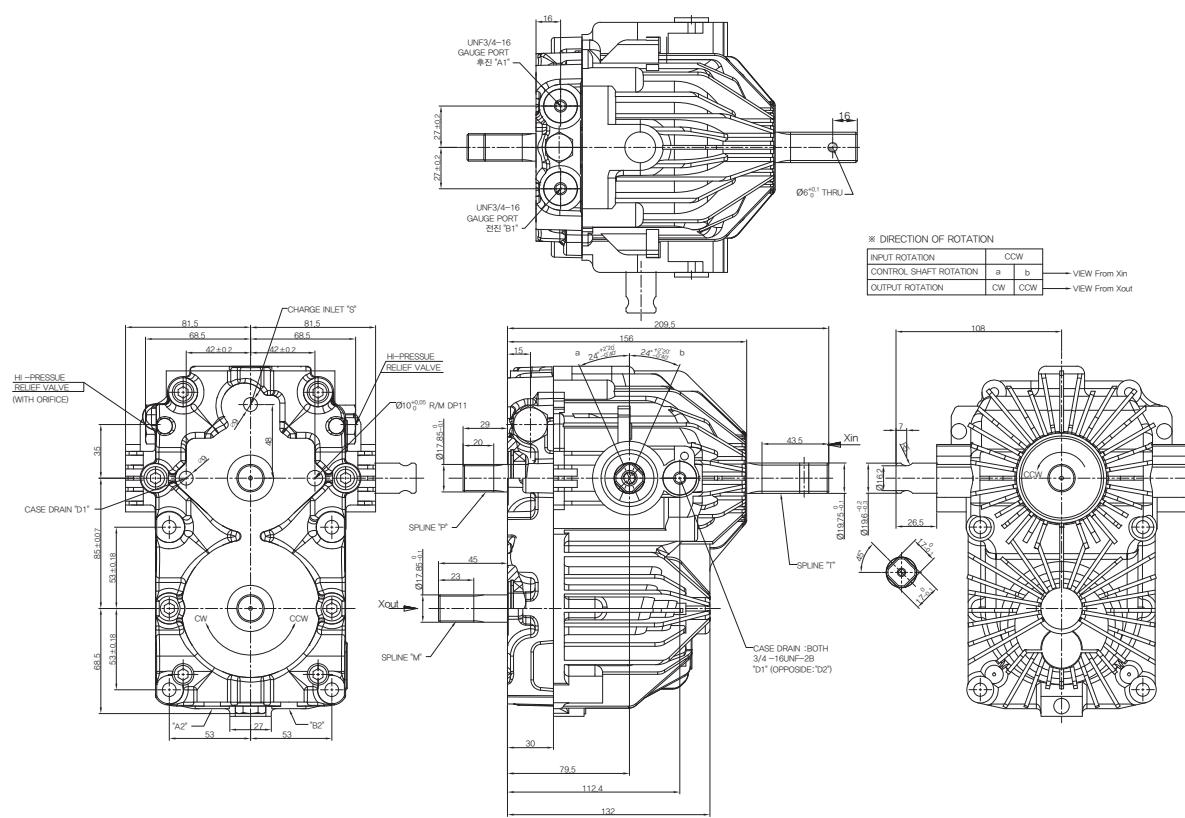
Model	PORT			ON DELIVERY	REMARKS
JHT018 JHT020	C	CHARGE INLET	PF 1/4	STEEL PLUG	
	Dr	DRAIN PORT	PF 3/8	STEEL PLUG	
	A, B	GAUGE PORT	PF 1/2	STEEL PLUG	
	R	RELIEF PORT	UNF 3/4-16	STEEL PLUG	
	S	CASE INLET PORT	—	—	
	H	CASE DRAIN PORT	—	—	

Dimensions of shaft end

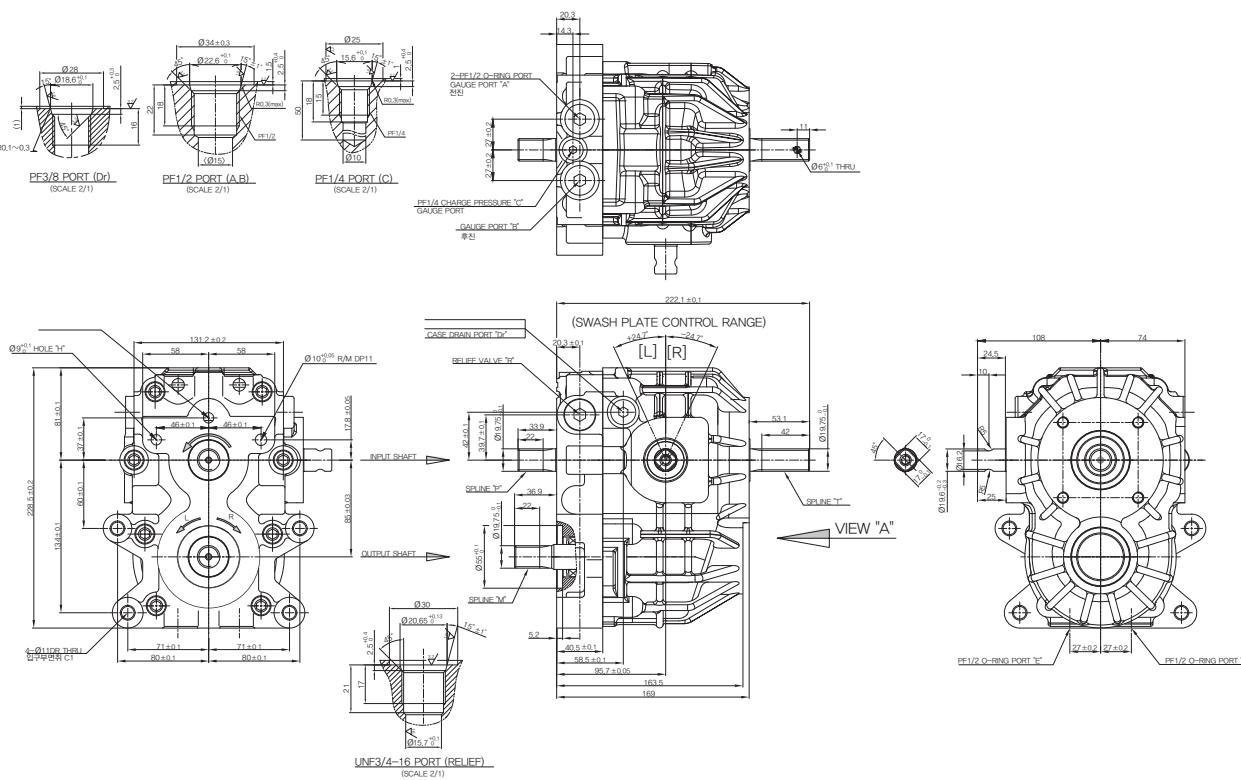
Model	No. of teeth	Major diameter	Pressure angle	Module	Rule
JHT018	22/22/14	16.5/16.5/17.5	30°/30°/20°	0.75/0.75/1.25	JIS
JHT020	14	17.5	20°	1.25	JIS

Dimensions

JHT018



JHT020





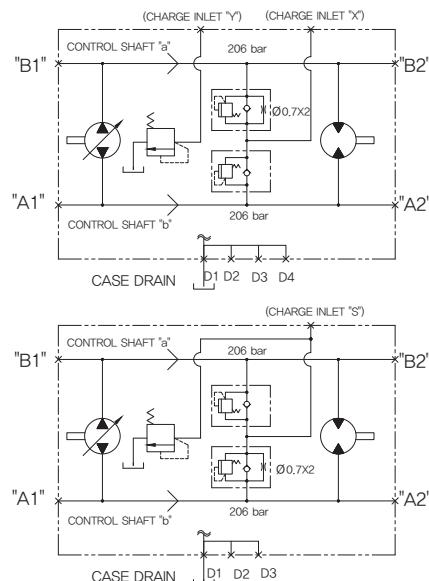
HST - JHR021/23, JHC021/23

Hydrostatic Transmission

JHR021/23, JHC021/23



Hydraulic Circuit



Specification

1MPa = 10.197kgf/cm²
1N·m = 0.10197kgf-m

Model	Displacement			Max Speed		Max Pressure		Max Output Torque	
	Pump	Motor	Charge Pump	Input	Output				
	cc/rev	cc/rev	cc/rev	rpm	rpm	kgf/cm ²	Mpa	kgf/cm ²	N · m
JHR021	0~21 (0~15°)	21 (15°)	—	3000	0~3000	210	20.6	8.4	82.4
JHC021	0~21 (0~15°)	21 (15°)	—	3000	0~3000	210	20.6	8.4	82.4
JHR023	0~23 (0~15°)	23 (15°)	—	3000	0~3000	210	20.6	9.5	93.2
JHC023	0~23 (0~15°)	23 (15°)	—	3000	0~3000	210	20.6	9.5	93.2

Port Size

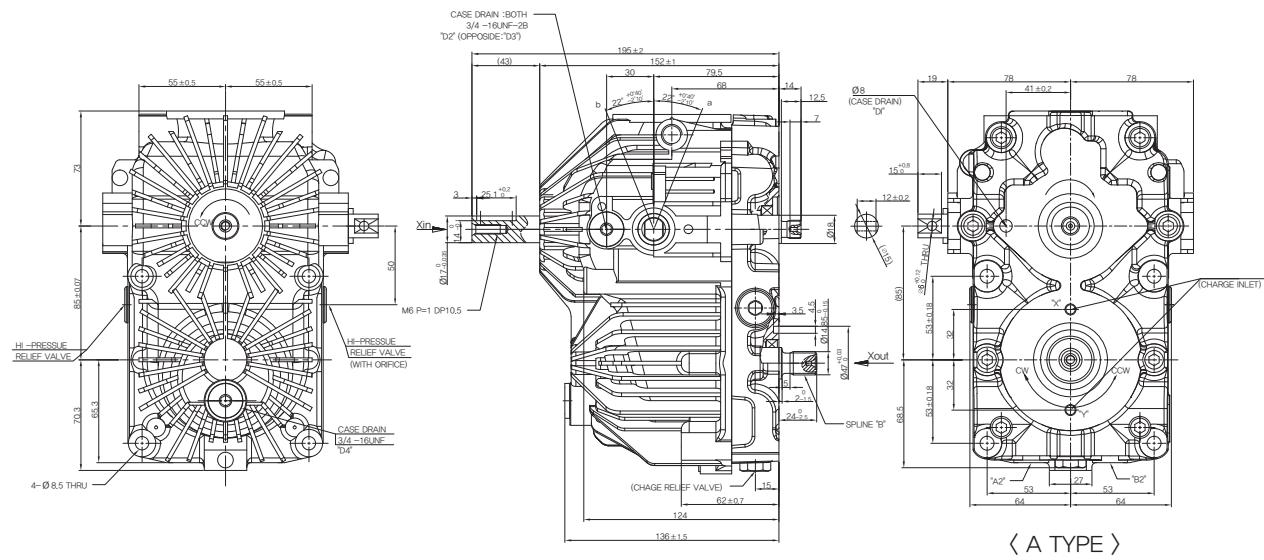
Model	PORT			ON DELIVERY	REMARKS
JHR021 JHC021 JHR023 JHC023	B1	CHARGE OUTLET	PF 1/2	—	
	S	CHARGE INLET	PF 3/8	—	
	B2	CHARGE INLET	PF 3/4	—	JHC021 – (UNF 1/2-20)
	Dr	DRAIN PORT	UNF 3/4-16	PLASTIC PLUG	
	G1,G2	GAUGE PORT	PF 3/8	STEEL PLUG	

Dimensions of shaft end

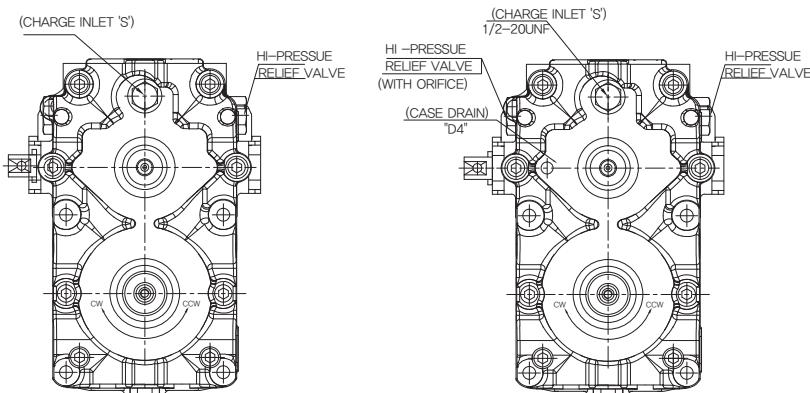
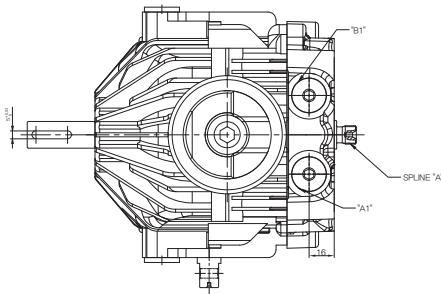
Model	No. of teeth	Major diameter	Pressure angle	Module	Rule
JHR021	22/18	11/13.5	45°/30°	0.5/0.75	—
JHC021	22/18	11/13.5	45°/30°	0.5/0.75	—
JHR023	22/18	11/13.5	45°/30°	0.5/0.75	—
JHC023	22/18	11/13.5	45°/30°	0.5/0.75	—

Dimensions

JHR021/023, JHC021/023



〈 A TYPE 〉



〈 B TYPE 〉

〈 C TYPE 〉

※ DIRECTION OF ROTATION -A,C TYPE-			
INPUT ROTATION	CCW		VIEW From Xin
CONTROL SHAFT ROTATION	a	b	
OUTPUT ROTATION	CW	CCW	VIEW From Xout

※ DIRECTION OF ROTATION -B TYPE-		
INPUT ROTATION	CW	
CONTROL SHAFT ROTATION	a	b
OUTPUT ROTATION	CCW	C W



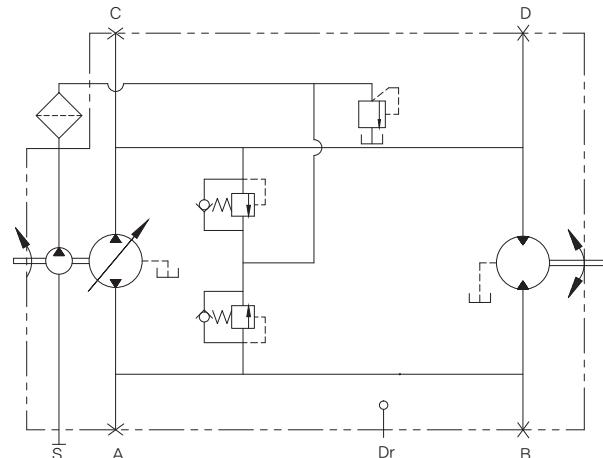
HST - JHC030/037/042

■ Hydrostatic Transmission ■

JHC030/037/042



Hydraulic Circuit



Specification

1MPa = 10,197kgf/cm²
1N·m = 0,10197kgf·m

Model	Displacement			Max Speed		Max Pressure		Max Output Torque	
	Pump	Motor	Charge Pump	Input	Output	kgf/cm ²	Mpa	kgf/cm ²	N · m
	cc/rev	cc/rev	cc/rev	rpm	rpm				
JHC030	0~30 (0~17°)	30 (17°)	6.2	3000	0~3000	350	34.3	16.7	163.8
JHC037	0~37 (0~17°)	37 (17°)	7.3	3000	0~3000	350	34.3	20.6	202.0
JHC042	0~42 (0~17°)	42 (17°)	8.2	3000	0~3000	350	34.3	23.4	229.5

Port Size

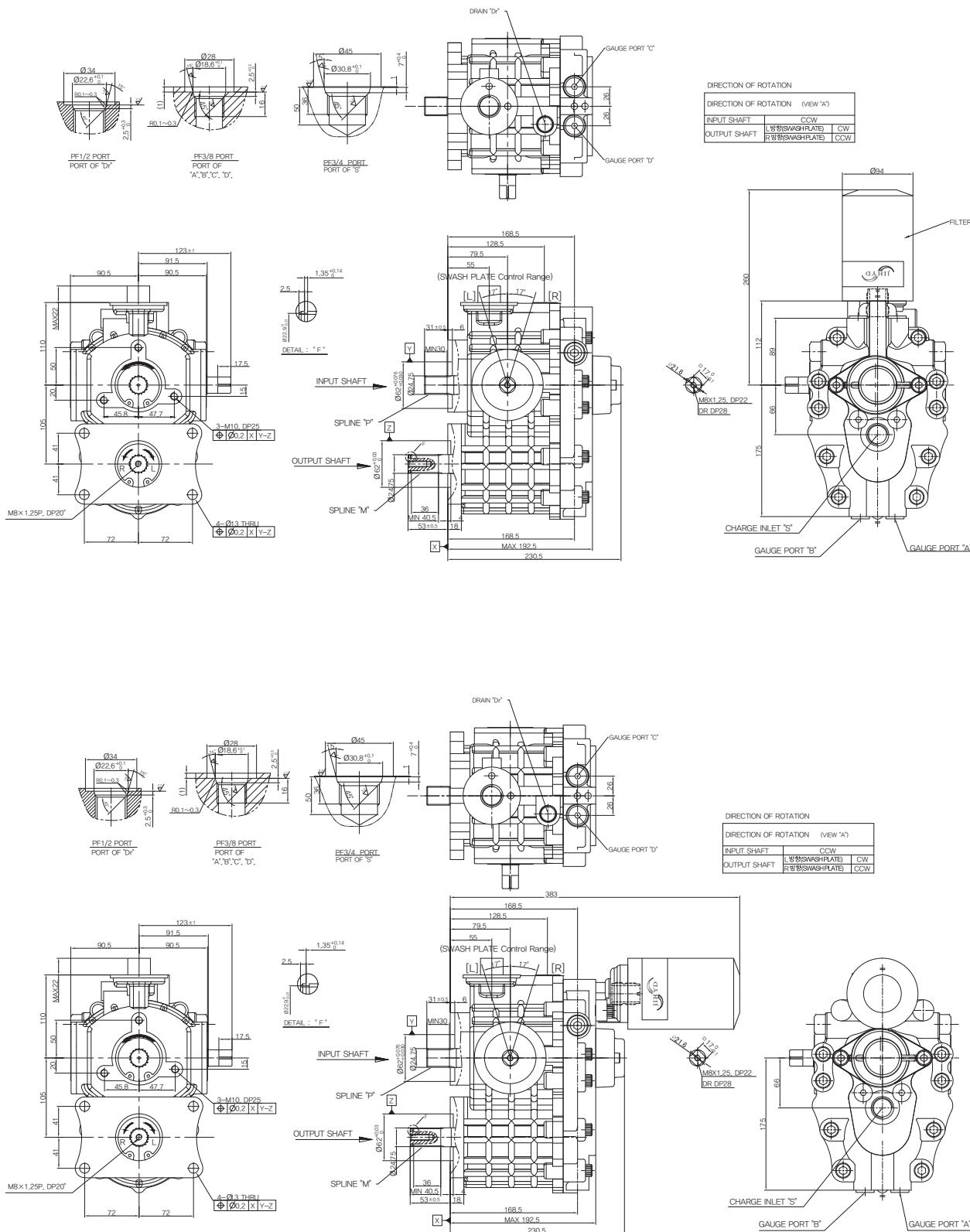
Model	PORT			ON DELIVERY	REMARKS
JHC030 JHC037 JHC042	S	CHARGE INLET	UNF 3/4-16	PLASTIC PLUG	JHC030
			PF 3/4	PLASTIC PLUG	JHC037/JHC042
	Dr	DRAIN PORT	PF 1/2	PLASTIC PLUG	
	A, B	GAUGE PORT	PF 3/8	STEEL PLUG	
	C, D	GAUGE PORT	PF 3/8	STEEL PLUG	

Dimensions of shaft end

Model	No. of teeth	Major diameter	Pressure angle	Module	Rule
JHC030	18	22.5	20°	1.25	JIS
JHC037	18	22.5	20°	1.25	JIS
JHC042	18	22.5	20°	1.25	JIS

Dimensions

JHC030/037/042





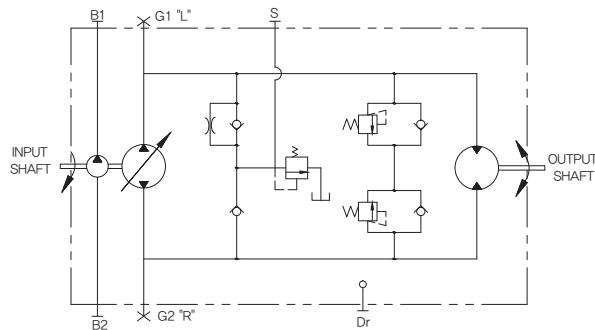
HST - JHI037

Hydrostatic Transmission

JHI037



Hydraulic Circuit



Specification

1MPa = 10,197kgf/cm²
1N·m = 0,10197kgf·m

Model	Displacement			Max Speed		Max Pressure		Max Output Torque	
	Pump	Motor	Charge Pump	Input	Output				
	cc/rev	cc/rev	cc/rev	rpm	rpm	kgf/cm ²	Mpa	kgf/cm ²	N · m
JHI037	0~37 (0~17°)	37 (17°)	8.2	3000	0~3000	350	34.3	20.7	203.0

Port Size

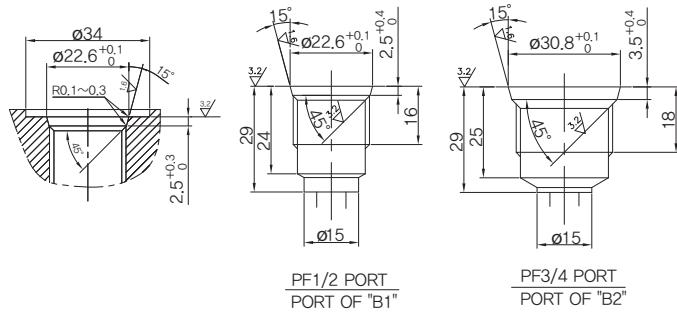
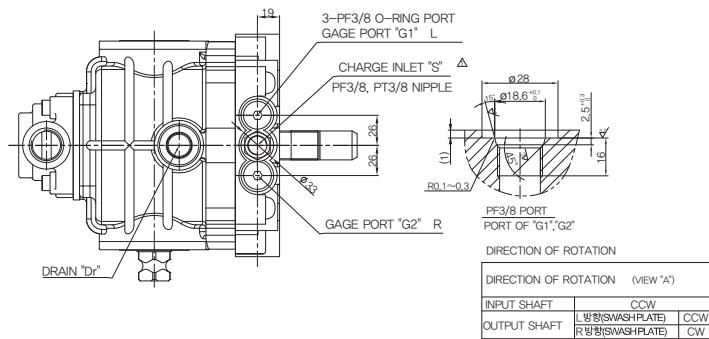
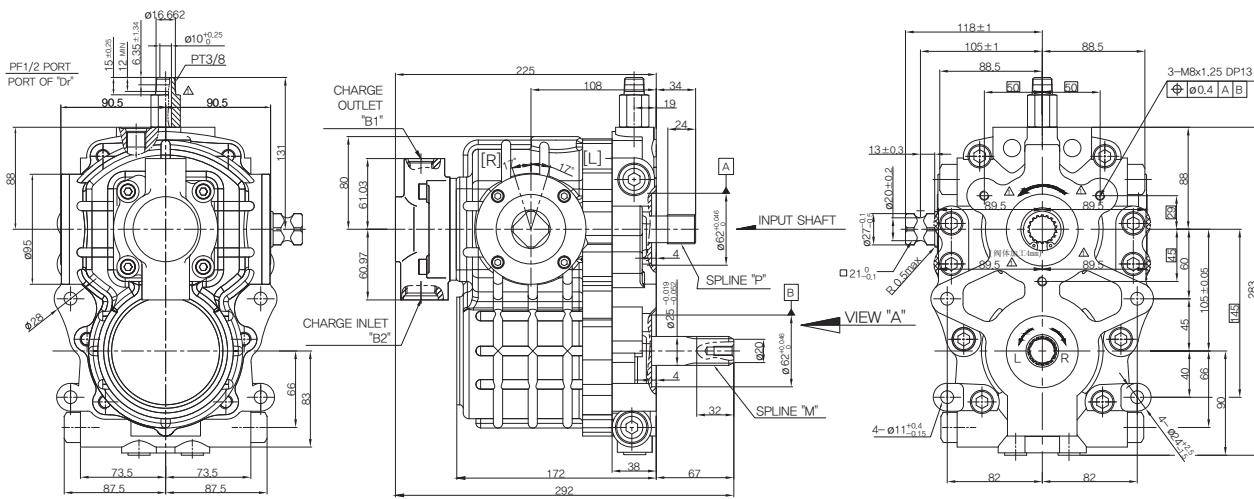
Model	PORT			ON DELIVERY	REMARKS
JHI037	B1	CHARGE OUTLET	PF 1/2	PLASTIC PLUG	
	S	CHARGE INLET	PF 3/8, PT 3/8	NIPPLE	
	B2	CHARGE INLET	PF 3/4	PLASTIC PLUG	
	Dr	DRAIN PORT	PF 1/2	PLASTIC PLUG	
	G1,G2	GAUGE PORT	PF 3/8	STEEL PLUG	

Dimensions of shaft end

Model	No. of teeth	Major diameter	Pressure angle	Module	Rule
JHI037	22/18	21.667	20°	1.667	-

Dimensions

JHI037





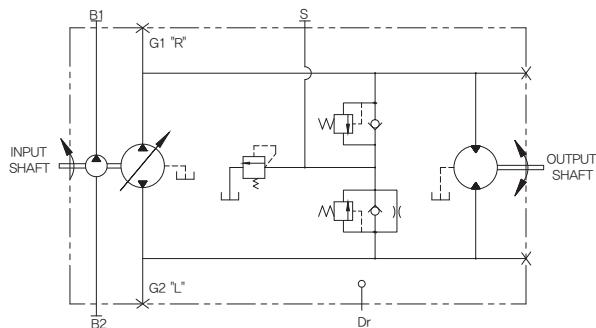
HST - JHC032/040/045

Hydrostatic Transmission

JHC032/040/045



Hydraulic Circuit



Specification

1MPa = 10,197kgf/cm²
1N·m = 0,10197kgf·m

Model	Displacement			Max Speed		Max Pressure		Max Output Torque	
	Pump	Motor	Charge Pump	Input	Output	kgf/cm ²	Mpa	kgf/cm ²	N · m
	cc/rev	cc/rev	cc/rev	rpm	rpm				
JHC032	0~30 (0~17°)	32 (17°)	8.2	3000	0~3000	350	34.3	17.8	174.6
JHC040	0~40 (0~17°)	40 (17°)	8.2	3000	0~3000	350	34.3	22.3	218.7
JHC045	0~45 (0~17°)	45 (17°)	8.2	3000	0~3000	350	34.3	25.1	246.2

Port Size

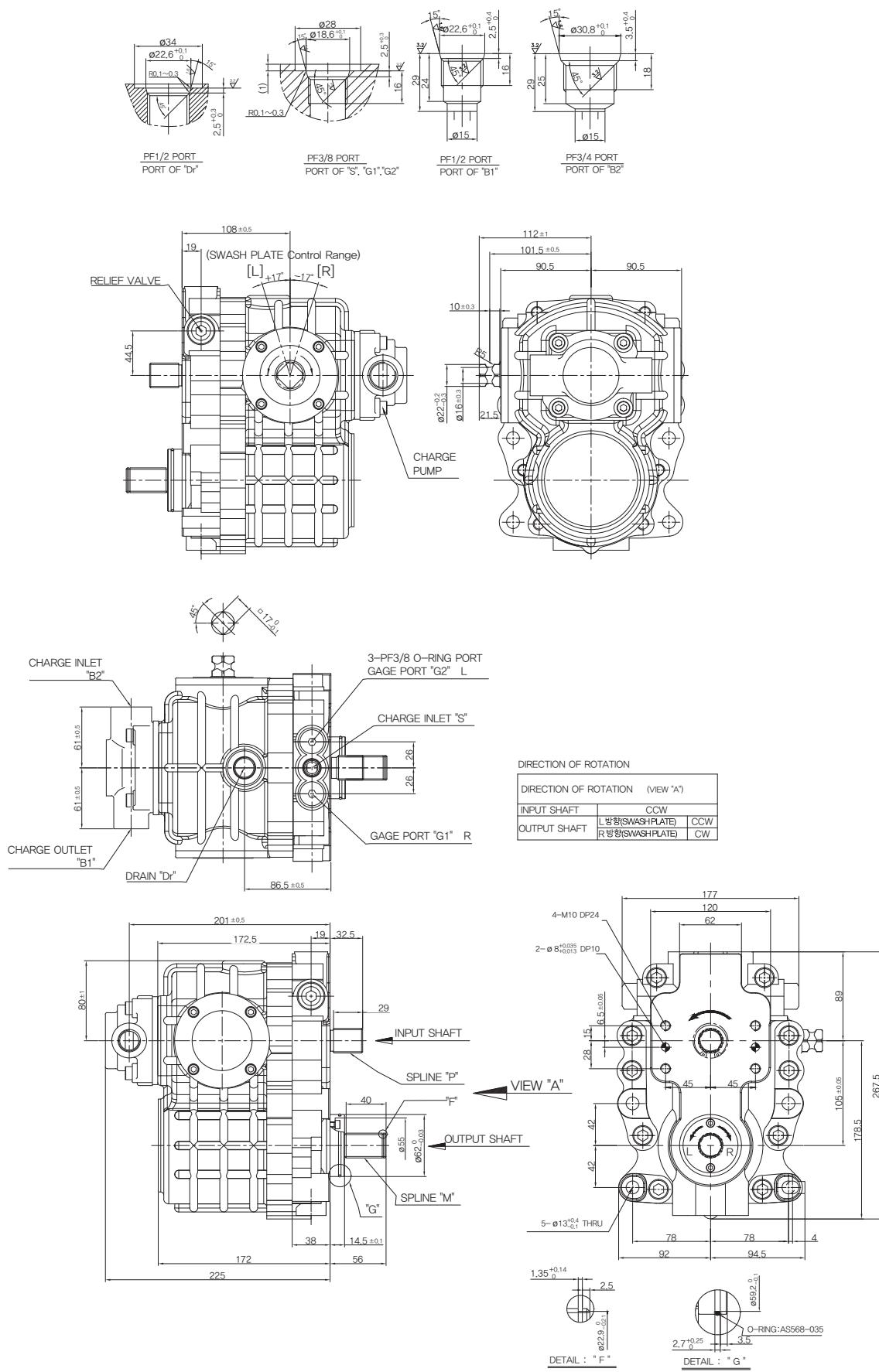
Model	PORT			ON DELIVERY	REMARKS
JHC032 JHC040 JHC045	B1	CHARGE OUTLET	PF 1/2	PLASTIC PLUG	
	S	CHARGE INLET	PF 3/8	STEEL PLUG	
	B2	CHARGE INLET	PF 3/4	PLASTIC PLUG	
	Dr	DRAIN PORT	PF 1/2	PLASTIC PLUG	
	G1, G2	GAUGE PORT	PF 3/8	STEEL PLUG	

Dimensions of shaft end

Model	No. of teeth	Major diameter	Pressure angle	Module	Rule
JHC032	18	22.5	20°	1.25	JIS
JHC040	18	22.5	20°	1.25	JIS
JHC045	18	22.5	20°	1.25	JIS

Dimensions

JHC032/040/045





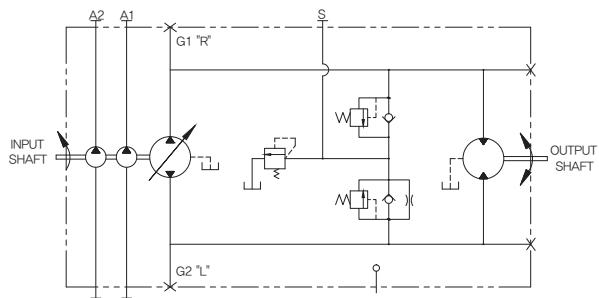
HST - JHD040/045

Hydrostatic Transmission

JHD040/045



Hydraulic Circuit



Specification

1MPa = 10.197kgf/cm²
1N·m = 0.10197kgf·m

Model	Displacement			Max Speed		Max Pressure		Max Output Torque	
	Pump	Motor	Charge Pump	Input	Output				
	cc/rev	cc/rev	cc/rev	rpm	rpm	kgf/cm ²	Mpa	kgf/cm ²	N · m
JHD040	0~40 (0~17°)	40 (17°)	8.2	3000	0~3000	350	34.3	22.3	218.7
JHD045	0~45 (0~17°)	45 (17°)	8.2	3000	0~3000	350	34.3	25.1	246.2

Port Size

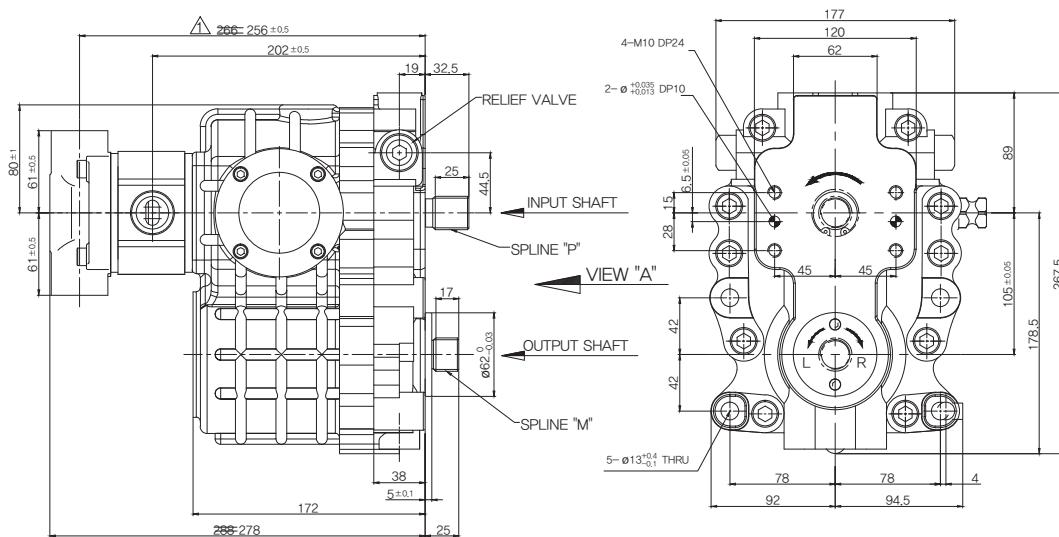
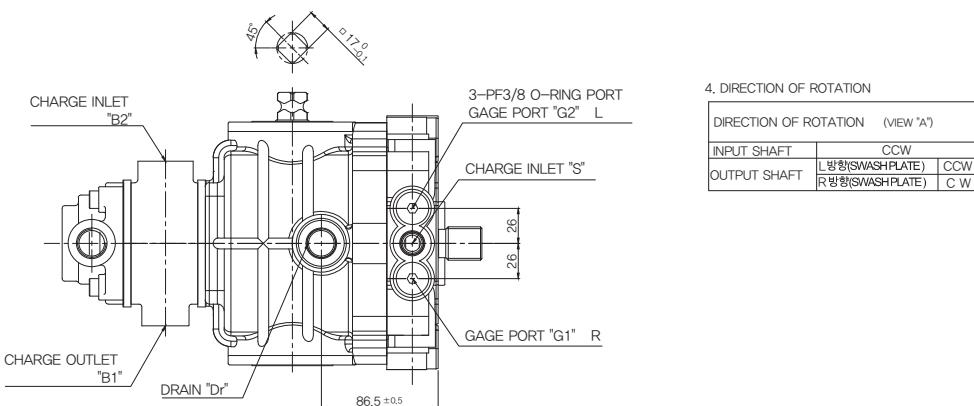
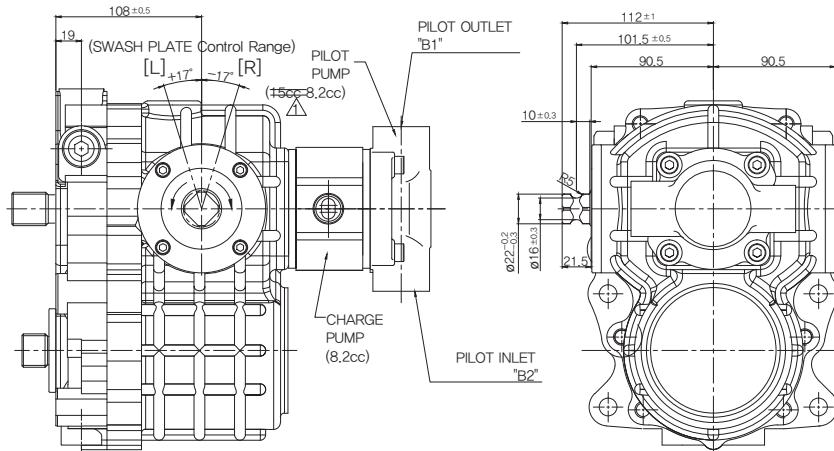
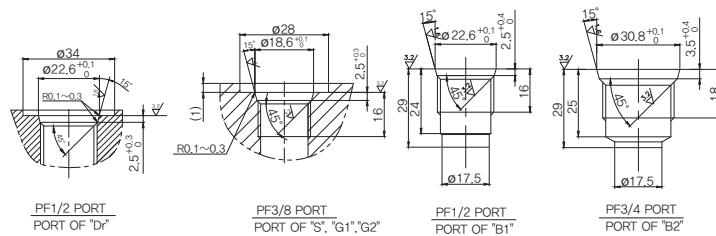
Model	PORT			ON DELIVERY	REMARKS
JHD040 JHD045	A1,A2	CHARGE OUTLET	PF 1/2	PLASTIC PLUG	
	S	CHARGE INLET	PF 3/8	STEEL PLUG	
	B1,B2	CHARGE INLET	PF 3/4	PLASTIC PLUG	
	Dr	DRAIN PORT	PF 1/2	PLASTIC PLUG	
	G1, G2	GAUGE PORT	PF 3/8	STEEL PLUG	

Dimensions of shaft end

Model	No. of teeth	Major diameter	Pressure angle	Module	Rule
JHD040	18	22.5	20°	1.25	JIS
JHD045	18	22.5	20°	1.25	JIS

Dimensions

JHD040/045





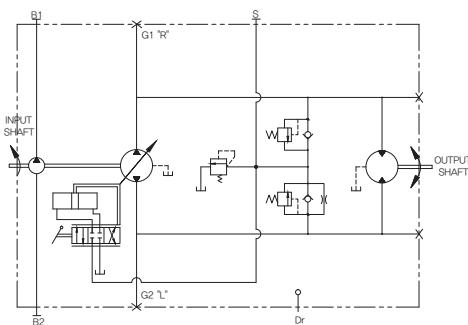
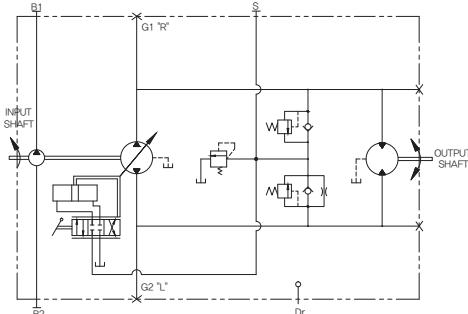
HST - JHH040/045

Hydrostatic Transmission

JHH040/045



Hydraulic Circuit



Specification

1MPa = 10,197kgf/cm²
1N·m = 0,10197kgf·m

Model	Displacement			Max Speed		Max Pressure		Max Output Torque	
	Pump	Motor	Charge Pump	Input	Output				
	cc/rev	cc/rev	cc/rev	rpm	rpm	kgf/cm ²	Mpa	kgf/cm ²	N · m
JHH040	0~40 (0~17°)	40 (17°)	9.2	3000	0~3000	390	38.2	22.3	218.7
JHH045	0~45 (0~17°)	45 (17°)	9.2	3000	0~3000	390	38.2	25.1	246.2

Port Size

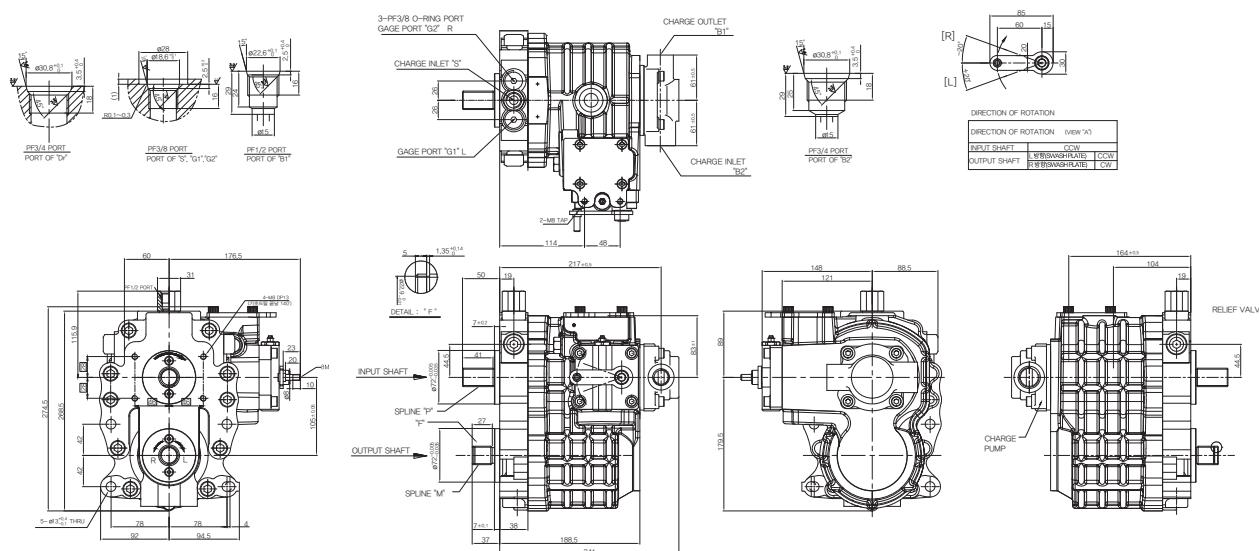
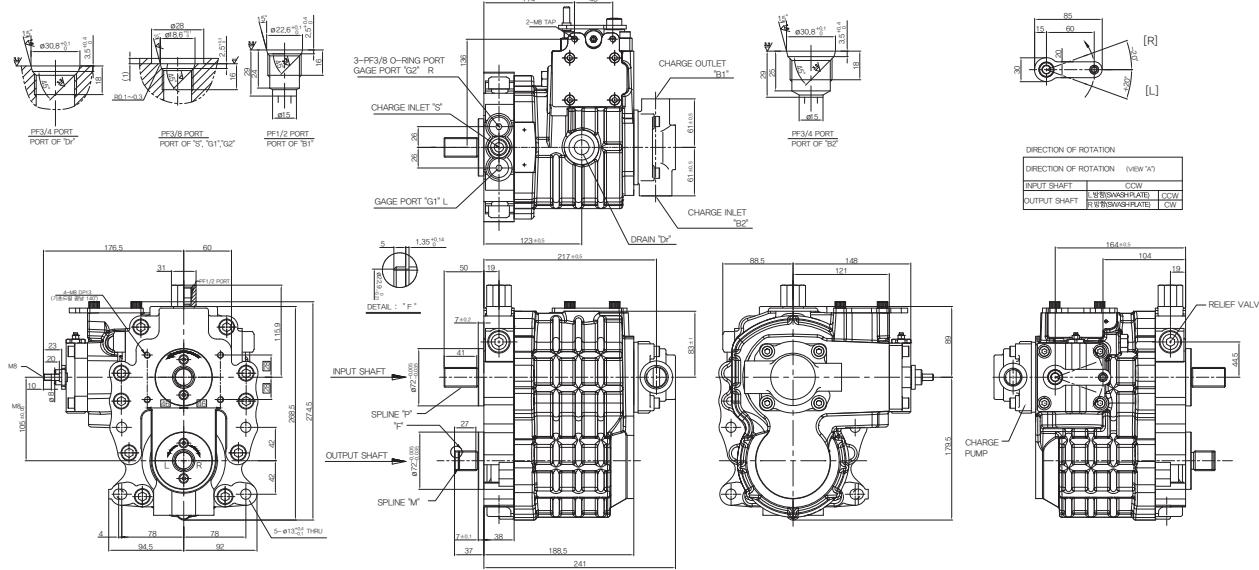
Model	PORT			ON DELIVERY	REMARKS
JHH040 JHH045	B1	CHARGE OUTLET	PF 1/2	PLASTIC PLUG	
	S	CHARGE INLET	PF 3/8	STEEL PLUG	
	B2	CHARGE INLET	PF 3/4	PLASTIC PLUG	
	Dr	DRAIN PORT	PF 1/2	PLASTIC PLUG	
	G1, G2	GAUGE PORT	PF 3/8	STEEL PLUG	

Dimensions of shaft end

Model	No. of teeth	Major diameter	Pressure angle	Module	Rule
JHH040	18	22.5	20°	1.25	JIS
JHH045	18	22.5	20°	1.25	JIS

Dimensions

JHH040/045





SPARE PARTS CONTENTS

MAIN PUMP SPARE PARTS

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KAWASAKI	J3V63DT	SPARE PARTS	060page
	J3V112DT	SPARE PARTS	061page
	J3V140DT	SPARE PARTS	062page
	J3V180DT	SPARE PARTS	063page
	J5V80DTP	SPARE PARTS	064page
	J5V140DTP	SPARE PARTS	065page
	J5V200DTH	SPARE PARTS	066page
	J3SP36	SPARE PARTS	067page
KOMATSU	HPV35(PC60-3/5)	SPARE PARTS	068page
	HPV55(PC120-3/5)	SPARE PARTS	069page
	HPV75(PC60-7)	SPARE PARTS	070page
	HPV90(PC200-3/5)	SPARE PARTS	071page
	HPV95(PC200-6/7)	SPARE PARTS	072page
	HPV140(PC300-7)	SPARE PARTS	073page
HITACHI	HPK055K	SPARE PARTS	074page
	HPV116(EX200)	SPARE PARTS	075page
	HPV091(EX200-2)	SPARE PARTS	076page
	HPV102(EX200-5)	SPARE PARTS	077page
	HPV118(ZX200-3/5)	SPARE PARTS	078page
	HPV145(EX300)	SPARE PARTS	079page
REXROTH UCHIDA	A10VD17	SPARE PARTS	080page
	A10V43	SPARE PARTS	081page
	A10VD43	SPARE PARTS	082page
	AP2D25	SPARE PARTS	083page
	AP2D36	SPARE PARTS	084page
CATERPILLAR MITSUBISHI	AP-12(CAT320)	SPARE PARTS	085page
	AP-12(E200B)	SPARE PARTS	086page
	SBS80(E312C)	SPARE PARTS	087page
	SBS120(E320C)	SPARE PARTS	088page
	SBS140(E325C)	SPARE PARTS	089page
	SPK10/10(E200B)	SPARE PARTS	090page
DAIKIN SUNDSTAND	PVD22	SPARE PARTS	091page
	SPV22	SPARE PARTS	092page
KAYABA	PSVD2-27E	SPARE PARTS	093page



SPARE PARTS CONTENTS

SWING MOTOR SPARE PARTS

KAWASAKI	M2X63	SPARE PARTS	094page
	M2X96	SPARE PARTS	095page
	M2X120	SPARE PARTS	096page
	M2X146	SPARE PARTS	097page
	M2X150	SPARE PARTS	098page
	M2X210	SPARE PARTS	099page
	M5X130	SPARE PARTS	100page
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EATON	SMF43	SPARE PARTS	102page
	SMF68	SPARE PARTS	103page
	SMF151	SPARE PARTS	104page
	SMF169	SPARE PARTS	105page
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SHIBAURA TOSHIBA	SG04	SPARE PARTS	107page
	SG08	SPARE PARTS	108page
DOOSAN	JSM140	SPARE PARTS	109page

TRAVEL MOTOR SPARE PARTS

TEIJIN SEIKI	GM07VA	SPARE PARTS	110page
	GM07VC	SPARE PARTS	111page
	GM17VA	SPARE PARTS	112page
	GM18VC	SPARE PARTS	113page
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	GM35VA	SPARE PARTS	115page
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	GM40VC	SPARE PARTS	117page
	GM40VD	SPARE PARTS	118page
	GM60VC	SPARE PARTS	119page
EATON	TMV155	SPARE PARTS	120page
KOMATSU	KMF90	SPARE PARTS	121page
HITACHI	ZAXIS110/120 T/M	SPARE PARTS	122page
	HMT36	SPARE PARTS	123page
TEIJIN SEIKI	REDUCTION GEAR #1	SPARE PARTS	124page
	REDUCTION GEAR #2	SPARE PARTS	125page

HST SPARE PARTS

	HST	SPARE PARTS	126page
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RELIEF VALVE ASS'Y

M.C.V , S/M , T/M	RELIEF VALVE ASS'Y	SPARE PARTS	127page
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J3V63DT Parts List

Main Pump Spare Parts

Swing Motor Spare Parts

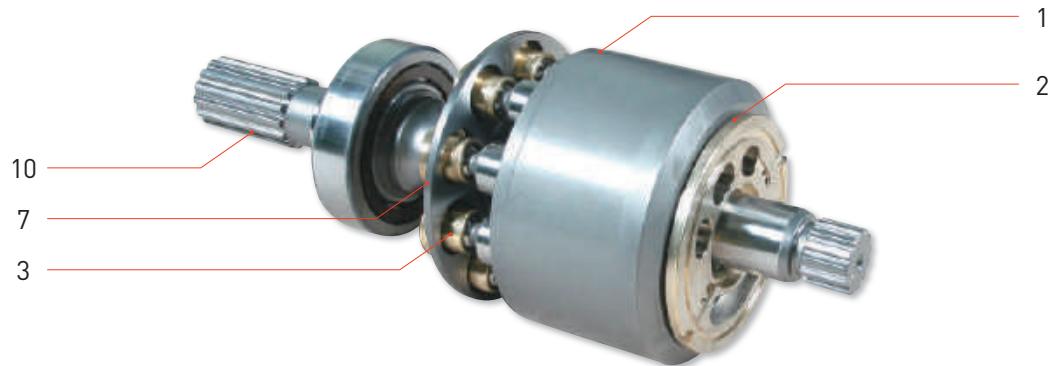
Travel Motor Spare Parts

HST Spare Parts

Relief Valve ASS'Y



Application Model : E312 , SK100/120-3/5 , S120/130/160 , R120/130/1300 , DH130 , MX132/135

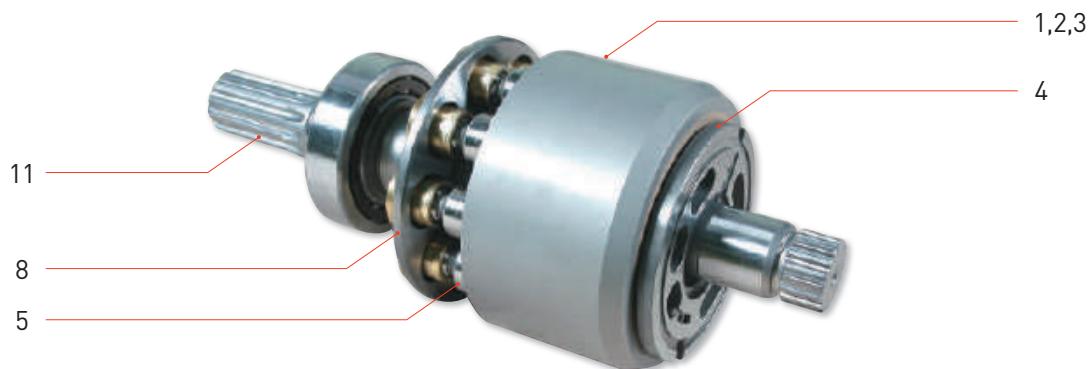


NO	DESCRIPTION	SPEC	Q'TY	REMARK
1	CYLINDER BLOCK		2	
2	VALVE PLATE – RH/LH		2	
3	PISTON SHOE		18	
4	SPACER		2	
5	BALL GUIDE	STEEL	2	
6	BALL GUIDE	BRONZE	2	
7	SET PLATE		2	
8	SHOE PLATE		2	
9	SPRING (CYL'D)		18	
10	DRIVE SHAFT – FRONT	14T	1	
11	DRIVE SHAFT – REAR	13T/12T	1	

NO	DESCRIPTION	SPEC	Q'TY	REMARK
12	SUPPORT		2	
13	SWASH PLATE		2	
14	SERVO PISTON		2	
15	TILTING PIN		2	
16	SEAL COVER		1	
17	GEAR PUMP		1	
18	VALVE BLOCK		1	
19	PUMP CASING		2	
20	SPLINE COUPLING		1	
21	REGULATOR		2	
22	E.P.P.R VALVE ASS'Y		1	



Application Model : SK200-1/2/3 , SH200 , S200/220 , R200/220/2000 , EC210/240LC , MX222/225



NO	DESCRIPTION	SPEC	Q'TY	REMARK
1	CYLINDER BLOCK	BUSH	2	
2	CYLINDER BLOCK	BIMETAL	2	
3	CYLINDER BLOCK	NON BUSH	2	
4	VALVE PLATE – RH/LH		2	
5	PISTON SHOE		18	
6	BALL GUIDE	STEEL	2	
7	BALL GUIDE	BRONZE	2	
8	SET PLATE		2	
9	SHOE PLATE		2	
10	SPRING (CYL'D)		18	
11	DRIVE SHAFT – FRONT	14T/12T	1	17T/15T

NO	DESCRIPTION	SPEC	Q'TY	REMARK
12	DRIVE SHAFT – REAR	13T/12T	1	
13	SUPPORT		2	
14	SWASH PLATE		2	
15	SERVO PISTON		2	
16	TINGLING PIN		2	
17	SEAL COVER		1	
18	GEAR PUMP		1	
19	VALVE BLOCK		1	
20	PUMP CASING		2	
21	REGULATOR		2	
22	E.P.P.R VALVE ASS'Y		1	



Application Model : SK300/400-2 , S280/290-2/3/5 , R280/290-3/7 , EC290LC , MX292

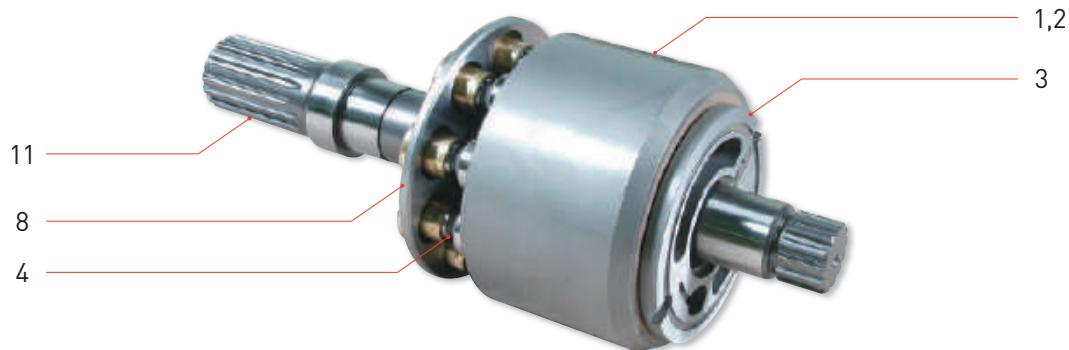


NO	DESCRIPTION	SPEC	Q'TY	REMARK
1	CYLINDER BLOCK	BUSH	2	
2	CYLINDER BLOCK	BIMETAL	2	
3	VALVE PLATE – RH/LH		2	
4	PISTON SHOE		18	
5	BALL GUIDE	STEEL	2	
6	BALL GUIDE	BRONZE	2	
7	SPACER		2	
8	SET PLATE		2	
9	SHOE PLATE		2	
10	SPRING (CYLD)		18	
11	DRIVE SHAFT – FRONT	17T/14T	1	

NO	DESCRIPTION	SPEC	Q'TY	REMARK
12	DRIVE SHAFT – REAR	13T/12T	1	
13	SUPPORT		2	
14	SWASH PLATE		2	
15	SERVO PISTON		2	
16	TLTING PIN		2	
17	SEAL COVER		1	
18	GEAR PUMP		1	
19	VALVE BLOCK		1	
20	PUMP CASING		2	
21	REGULATOR		2	
22	E.P.P.R VALVE ASS'Y		1	



Application Model : HD400-2 , SK300-2/3 , EX400-3/5 , S320/330 , R320/360 , EC460 , MX352

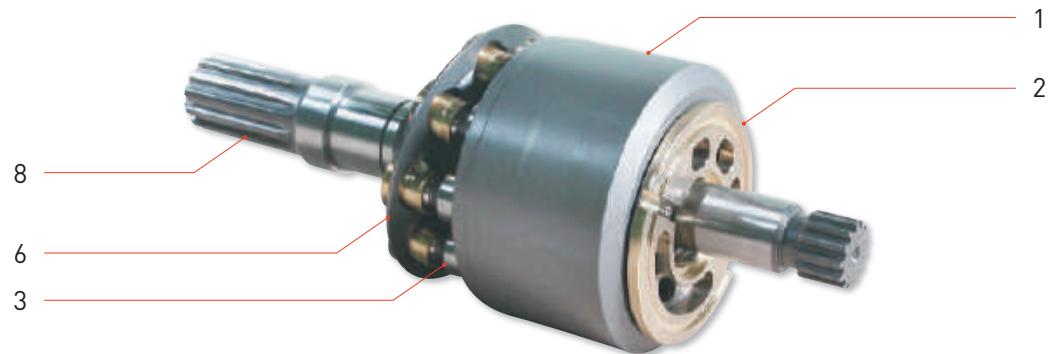


NO	DESCRIPTION	SPEC	Q'TY	REMARK
1	CYLINDER BLOCK	BUSH	2	
2	CYLINDER BLOCK	BIMETAL	2	
3	VALVE PLATE – RH/LH		2	
4	PISTON SHOE		18	
5	BALL GUIDE	STEEL	2	
6	BALL GUIDE	BRONZE	2	
7	SPACER		2	
8	SET PLATE		2	
9	SHOE PLATE		2	
10	SPRING (CYL'D)		18	
11	DRIVE SHAFT – FRONT	17T/14T	1	

NO	DESCRIPTION	SPEC	Q'TY	REMARK
12	DRIVE SHAFT – REAR	13T/12T	1	
13	SUPPORT		2	
14	SWASH PLATE		2	
15	SERVO PISTON		2	
16	TILTING PIN		2	
17	SEAL COVER		1	
18	GEAR PUMP		1	
19	VALVE BLOCK		1	
20	PUMP CASING		2	
21	REGULATOR		2	
22	E.P.P.R VALVE ASS'Y		1	



Application Model : S140W-5 , R1400W-7 , EC150

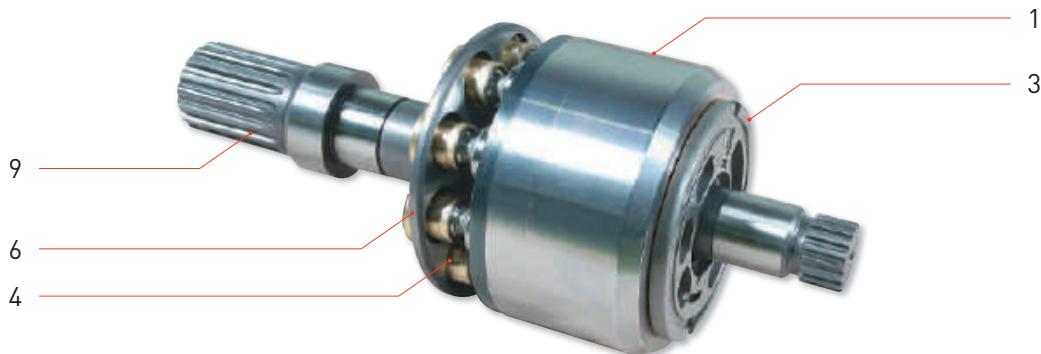


NO	DESCRIPTION	SPEC	Q'TY	REMARK
1	CYLINDER BLOCK		2	
2	VALVE PLATE – RH/LH		2	
3	PISTON SHOE		18	
4	BALL GUIDE	STEEL	2	
5	SET PLATE		2	
6	SHOE PLATE		2	
7	SPRING (CYL'D)		18	
8	DRIVE SHAFT – FRONT	12T	1	
9	DRIVE SHAFT – REAR	13T	1	
10	SUPPORT		2	
11	SWASH PLATE		2	

NO	DESCRIPTION	SPEC	Q'TY	REMARK
12	SERVO PISTON		2	
13	TILTING PIN		2	
14	SEAL COVER		1	
15	GEAR PUMP		1	
16	VALVE BLOCK		1	
17	PUMP CASING		2	
18	REGULATOR		2	
19	E.P.P.R VALVE ASS'Y		1	
20	PTO ASS'Y		1	



Application Model : S300LC-5 , R2900/3000LC-7



NO	DESCRIPTION	SPEC	Q'TY	REMARK
1	CYLINDER BLOCK	BUSH	2	
2	CYLINDER BLOCK	BIMETAL	2	
3	VALVE PLATE – RH/LH		2	
4	PISTON SHOE		18	
5	BALL GUIDE	STEEL	2	
6	SET PLATE		2	
7	SHOE PLATE		2	
8	SPRING (CYL'D)		18	
9	DRIVE SHAFT – FRONT	17T	1	
10	DRIVE SHAFT – REAR	13T	1	
11	SUPPORT		2	

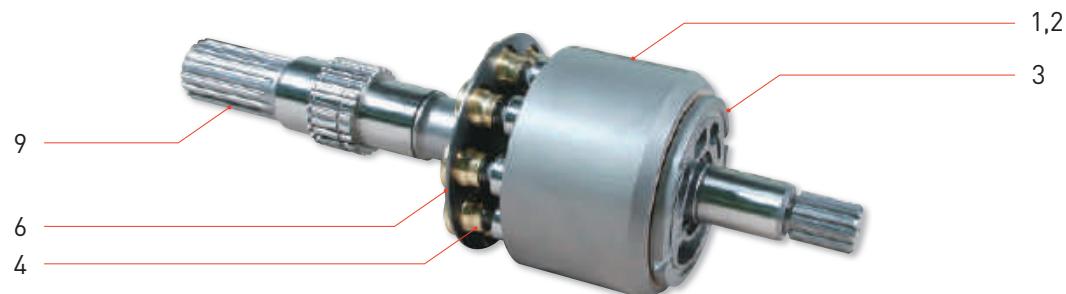
NO	DESCRIPTION	SPEC	Q'TY	REMARK
12	SWASH PLATE		2	
13	SERVO PISTON		2	
14	TLTING PIN		2	
15	SEAL COVER		1	
16	GEAR PUMP		1	
17	VALVE BLOCK		1	
18	PUMP CASING		2	
19	REGULATOR		2	
20	E.P.P.R VALVE ASS'Y		1	
21	PTO ASS'Y		1	



J5V200DTH Parts List



Application Model : R450/4500/470-7

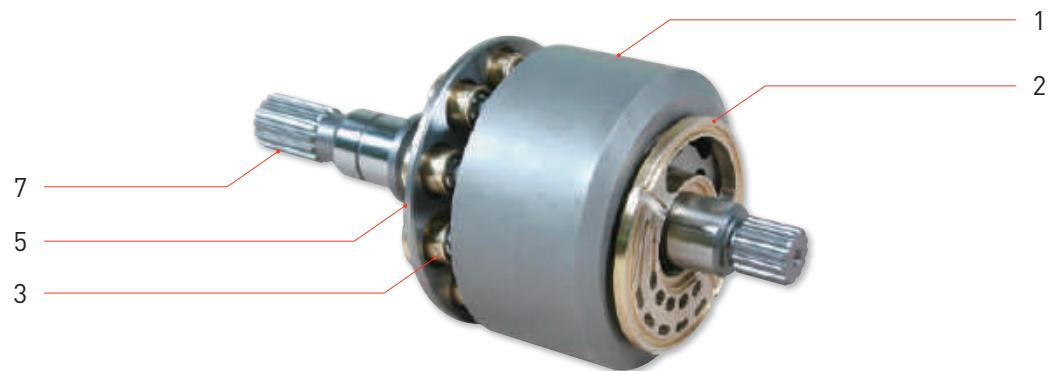


NO	DESCRIPTION	SPEC	Q'TY	REMARK
1	CYLINDER BLOCK	BUSH	2	
2	CYLINDER BLOCK	BIMETAL	2	
3	VALVE PLATE – RH/LH		2	
4	PISTON SHOE		18	
5	BALL GUIDE	STEEL	2	
6	SET PLATE		2	
7	SHOE PLATE		2	
8	SPRING (CYL'D)		18	
9	DRIVE SHAFT – FRONT	17T	1	
10	DRIVE SHAFT – REAR	13T	1	
11	SUPPORT		2	

NO	DESCRIPTION	SPEC	Q'TY	REMARK
12	SWASH PLATE		2	
13	SERVO PISTON		2	
14	TLTING PIN		2	
15	SEAL COVER		1	
16	GEAR PUMP		1	
17	VALVE BLOCK		1	
18	PUMP CASING		2	
19	REGULATOR		2	
20	E.P.P.R VALVE ASS'Y		1	
21	PTO ASS'Y		1	



Application Model : SK60-2/5 , SK70/75 , DH70 , EX70 , PC60-3/5

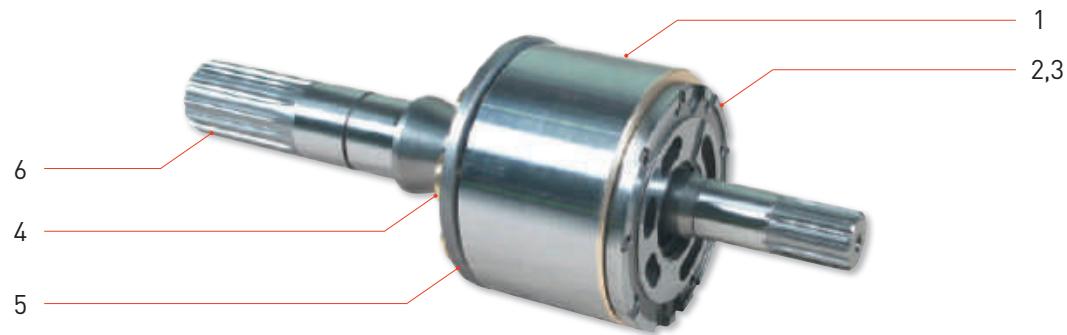


NO	DESCRIPTION	SPEC	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		10	
4	BALL GUIDE		1	
5	SET PLATE		1	
6	SPRING (CYL'D)		10	
7	DRIVE SHAFT		1	
8	PIVOT	NO.1	1	
9	PIVOT	NO.2	1	
10	SWASH PLATE		1	
11	SERVO PISTON		1	

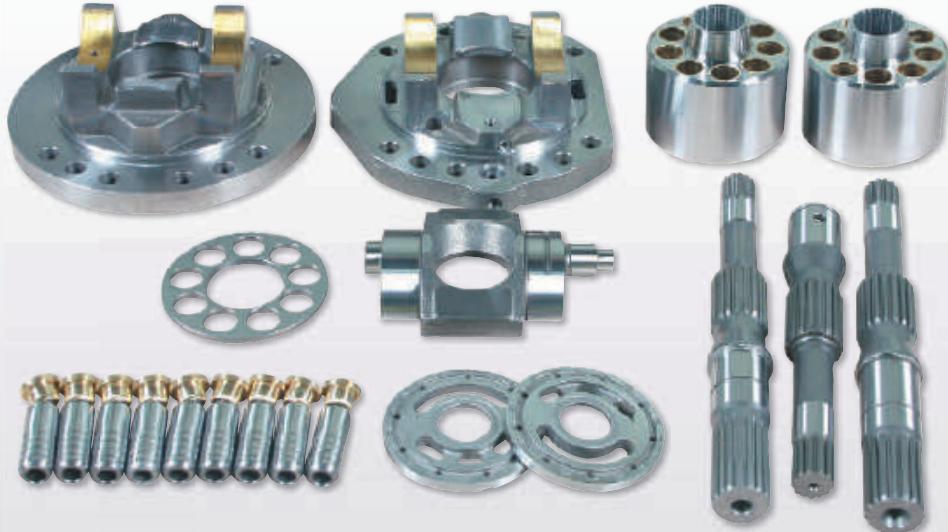
NO	DESCRIPTION	SPEC	Q'TY	REMARK
12	TILTING PIN		1	
13	SPLINE COUPLING	1P	1	
14	SPLINE COUPLING	2P	1	
15	GEAR PUMP	1P	1	
16	GEAR PUMP	2P	1	
17	VALVE BLOCK		1	
18	HOUSING		1	



Application Model : PC60-3/5/6



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	BUSH	2	
2	VALVE PLATE – RH		1	
3	VALVE PLATE – LH		1	
4	PISTON SHOE		18	
5	SET PLATE		2	
6	DRIVE SHAFT – FRONT		1	
7	DRIVE SHAFT – REAR		1	
8	CRADLE – FRONT		1	
9	CRADLE – REAR		1	
10	CAM ROCKER		2	



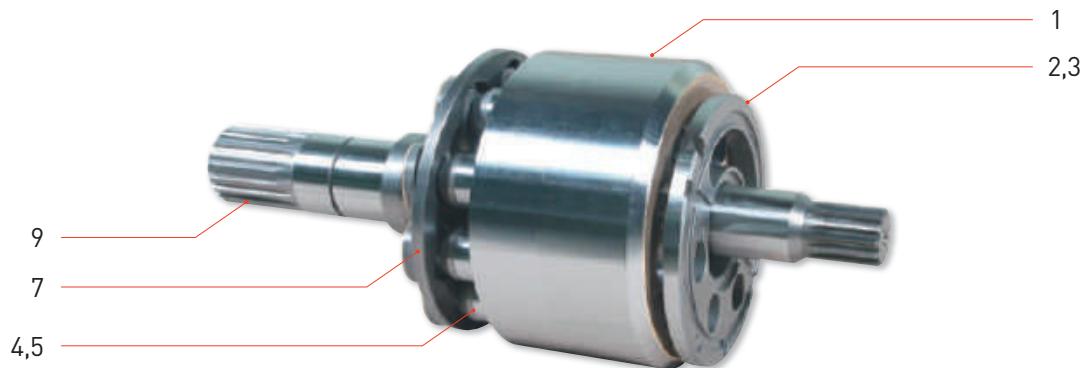
Application Model : PC100-3/5 , PC120-3/5



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	BUSH	2	
2	VALVE PLATE – RH		1	
3	VALVE PLATE – LH		1	
4	PISTON SHOE		18	
5	SET PLATE		2	
6	DRIVE SHAFT – FRONT	296mm	1	PC120-3
7	DRIVE SHAFT – FRONT	296.8mm	1	PC120-5
8	DRIVE SHAFT – REAR		1	
9	CRADLE – FRONT		1	
10	CRADLE – REAR		1	
11	CAM ROCKER		2	



Application Model : PC60-6/7/8



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	BUSH	1	
2	VALVE PLATE		1	PC60-6
3	VALVE PLATE		1	PC60-7/8
4	PISTON SHOE	72mm	9	PC60-6
5	PISTON SHOE	70mm	9	PC60-7/8
6	BALL GUIDE	BRONZE	1	
7	SET PLATE		1	
8	DRIVE SHAFT	KEY	1	PC60-6
9	DRIVE SHAFT	SPLINE	1	PC60-7/8
10	CRADLE		1	PC60-6 , PC60-7/8
11	CAM ROCKER		1	PC60-6
12	CAM ROCKER		1	PC60-7/8



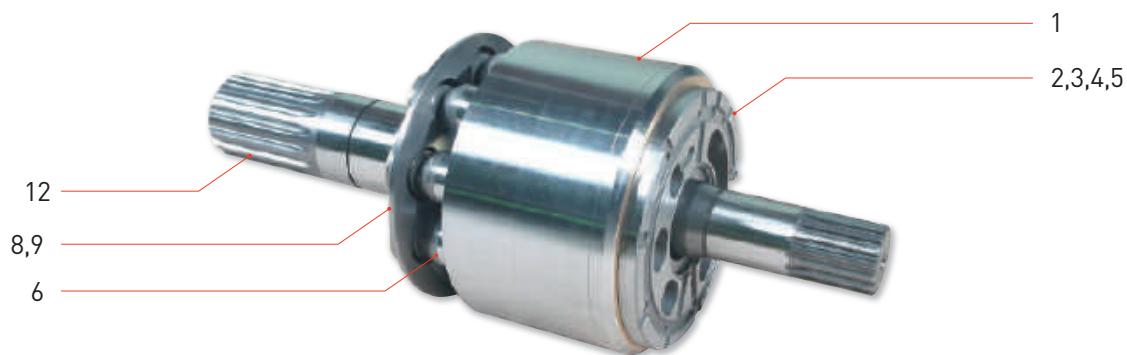
Application Model : PC200-3/5 , PC220-3/5



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	BUSH	2	
2	VALVE PLATE – RH/LH		2	PC200/220-3
3	VALVE PLATE – RH/LH		2	PC200/220-5
4	PISTON SHOE		18	
5	SET PLATE		2	
6	DRIVE SHAFT – FRONT		1	
7	DRIVE SHAFT – REAR	SPLINE	1	PC200/220-3
8	DRIVE SHAFT – REAR	KEY	1	PC200/220-5
9	CRADLE – FRONT		1	
10	CRADLE – REAR		1	
11	CAM ROCKER		2	



Application Model : PC200-6/7 , PC220-6/7

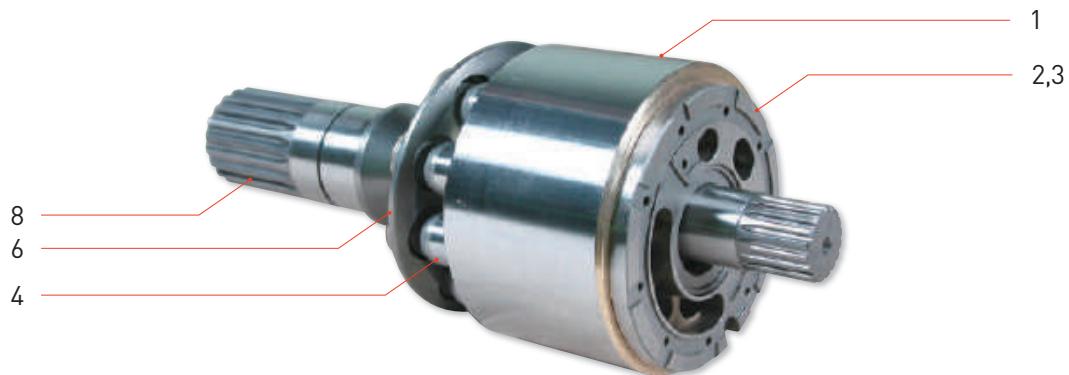


NO	DESCRIPTION	SPEC	Q'TY	REMARK
1	CYLINDER BLOCK	BIMETAL	2	
2	VALVE PLATE – RH		1	PC200/220-6
3	VALVE PLATE – LH		1	PC200/220-6
4	VALVE PLATE – RH		1	PC200/220-7
5	VALVE PLATE – LH		1	PC200/220-7
6	PISTON SHOE		18	
7	BALL GUIDE	BRONZE	2	
8	SET PLATE		2	PC200/220-6
9	SET PLATE		2	PC200/220-7
10	PIN (CYL'D)		6	
11	SPRING (CYL'D)		2	
12	DRIVE SHAFT – FRONT		1	

NO	DESCRIPTION	SPEC	Q'TY	REMARK
13	DRIVE SHAFT – REAR	KEY	1	PC200/220-6
14	DRIVE SHAFT – REAR		1	PC200/220-7
15	SERVO PISTON		2	
16	TINGLING PIN		2	
17	CRADLE	6D95	2	PC200/220-6
18	CRADLE	6D102	2	PC200/220-7
19	CAM ROCKER	6D95	2	PC200/220-6
20	CAM ROCKER	6D102	2	PC200/220-6
21	CAM ROCKER		2	PC200/220-7
22	GEAR PUMP		1	
23	BREAKER CONTROL VALVE		1	PC200/220-6
24	BREAKER CONTROL VALVE		1	PC200/220-7



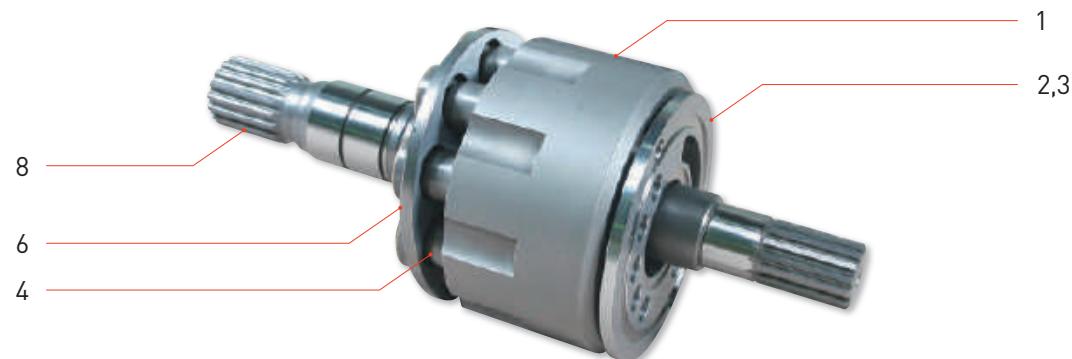
Application Model : PC300-7/8



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	BIMETAL	2	
2	VALVE PLATE – RH		1	
3	VALVE PLATE – LH		1	
4	PISTON SHOE		18	
5	BALL GUIDE	BRONZE	2	
6	SET PLATE		2	
7	PIN (CYL'D)		6	
8	DRIVE SHAFT – FRONT		1	
9	DRIVE SHAFT – REAR		1	
10	CRADLE		2	
11	CAM ROCKER		2	
12	BREAKER CONTROL VALVE		1	



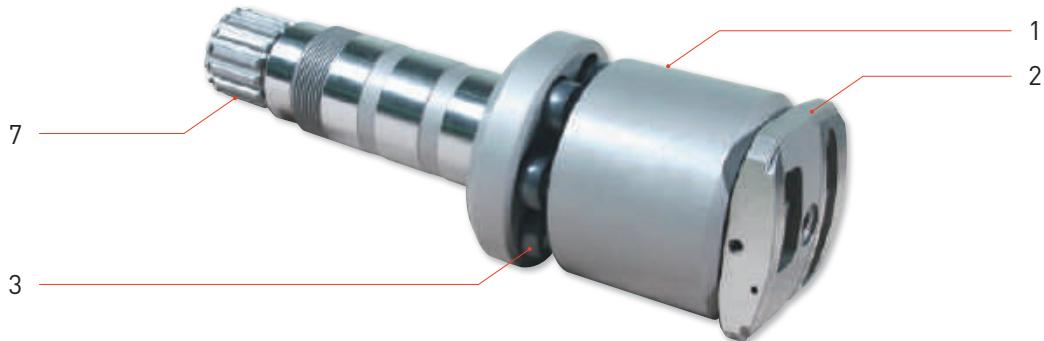
Application Model : ZAXIS110



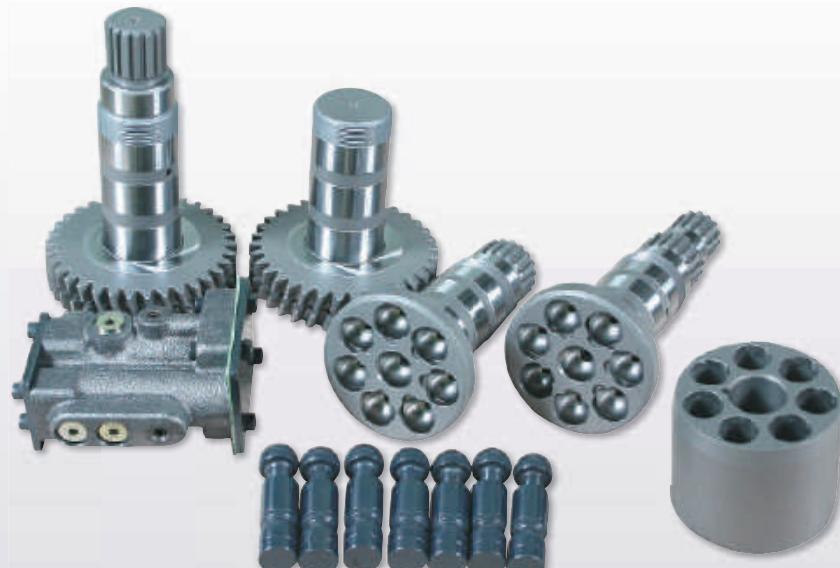
NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		2	
2	VALVE PLATE – RH		1	
3	VALVE PLATE – LH		1	
4	PISTON SHOE		18	
5	BALL GUIDE		2	
6	SET PLATE		2	
7	SHOE PLATE		2	
8	DRIVE SHAFT – FRONT		1	
9	DRIVE SHAFT – REAR		1	



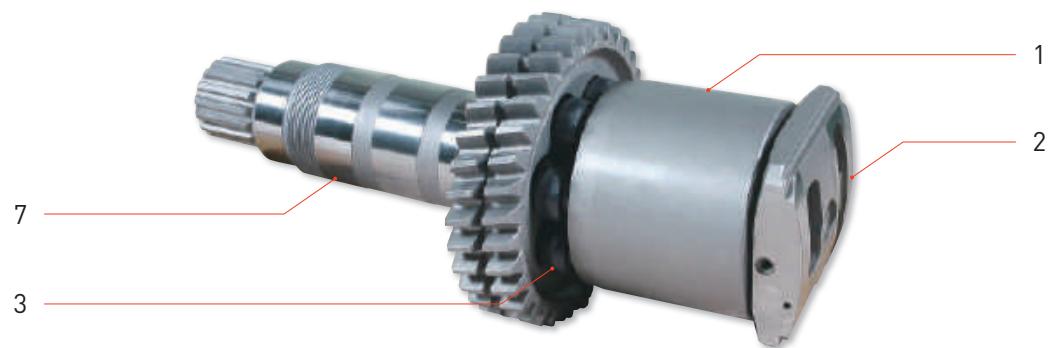
Application Model : EX200 , EX220



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	ROTOR		1	
2	VALVE PLATE		1	
3	PISTON SHOE		7	
4	CENTER PIN		1	
5	SERVO PISTON		1	
6	SERVO PISTON PIN		1	
7	DRIVE SHAFT		1	
8	HEAD COVER	C-TYPE	1	
9	HEAD COVER	D-TYPE	1	



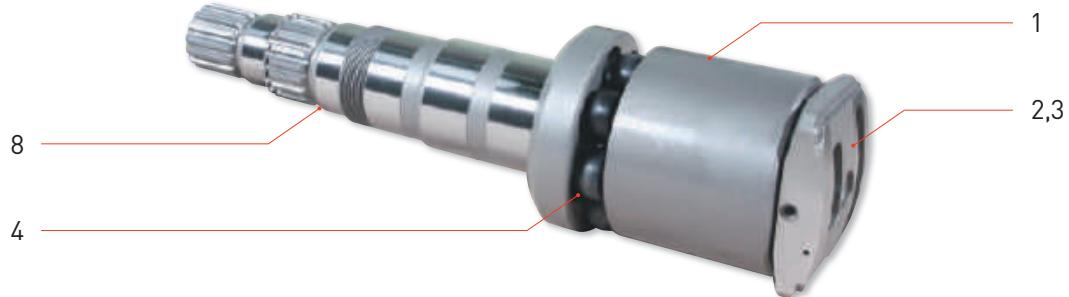
Application Model : EX200-2/3 , EX220-2/3



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	ROTOR		2	
2	VALVE PLATE		1	
3	PISTON SHOE		14	
4	CENTER PIN		2	
5	SERVO PISTON		2	
6	SERVO PISTON PIN		2	
7	DRIVE SHAFT – RH		1	
8	DRIVE SHAFT – LH		1	
9	REGULATOR		1	



Application Model : EX200-5/6 , EX220-5/6 , EX270-5



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	ROTOR		2	
2	VALVE PLATE – RH		1	
3	VALVE PLATE – LH		1	
4	PISTON SHOE		14	
5	CENTER PIN		2	
6	SERVO PISTON		2	
7	SERVO PISTON PIN		2	
8	DRIVE SHAFT – RH		1	HPV102
9	DRIVE SHAFT – LH		1	HPV102
10	DRIVE SHAFT – RH		1	HPV105
11	DRIVE SHAFT – LH		1	HPV105
12	HEAD COVER		1	



Application Model : ZAXIS200/220 , ZAXIS200-3/5 , ZAXIS220-3/5



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	ROTOR		2	
2	VALVE PLATE – RH		1	
3	VALVE PLATE – LH		1	
4	PISTON SHOE		14	
5	CENTER PIN		2	
6	SERVO PISTON		2	
7	SERVO PISTON PIN		2	
8	DRIVE SHAFT – RH		1	
9	DRIVE SHAFT – LH		1	
10	HEAD COVER		1	



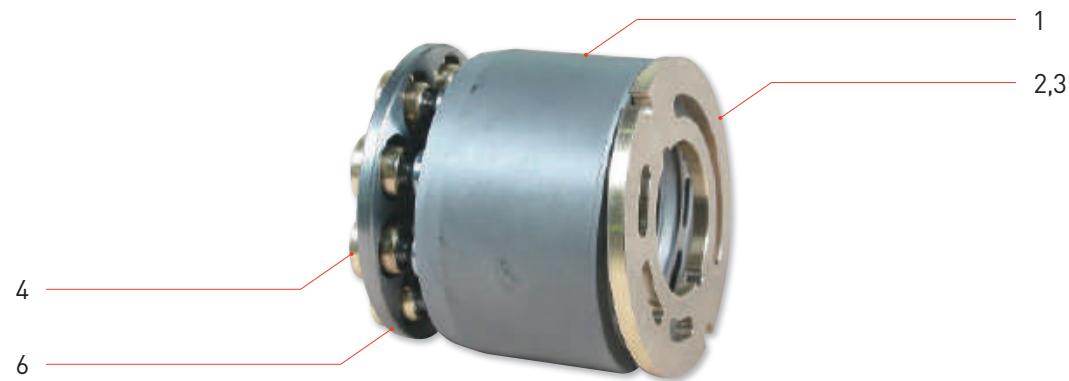
Application Model : EX270 , EX280 , EX300 , EX300-1/2/3/5 , ZAXIS300/310/330/350



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	ROTOR		1	
2	VALVE PLATE		1	
3	PISTON SHOE		7	
4	CENTER PIN		1	
5	SERVO PISTON		1	
6	SERVO PISTON PIN		1	
7	DRIVE SHAFT		1	
8	DRIVE SHAFT		1	EX300-5, ZAXIS330/300
9	HEAD COVER	C-TYPE	1	
10	HEAD COVER	D-TYPE	1	
11	HEAD COVER	F-TYPE	1	



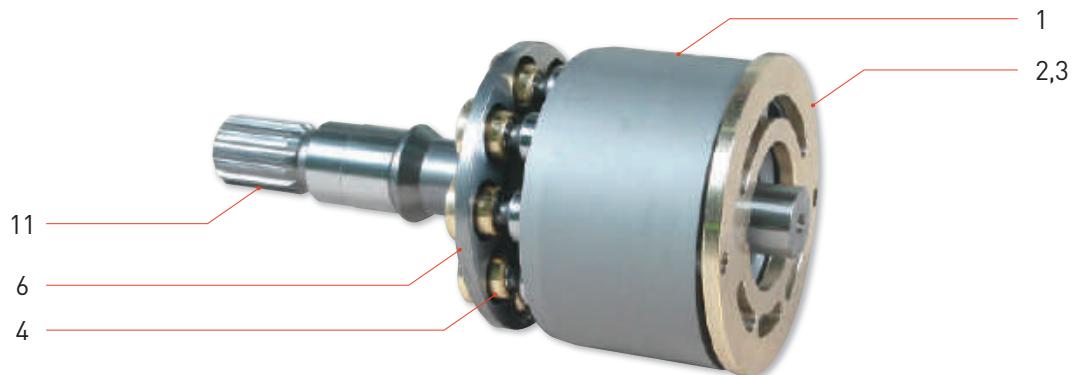
Application Model : PC30/30-7



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		2	
2	VALVE PLATE – RH		1	
3	VALVE PLATE – LH		1	
4	PISTON		18	
5	BALL GUIDE		2	
6	SET PLATE		2	
7	SHOE PLATE	1T	2	
8	SHOE PLATE	2T	2	



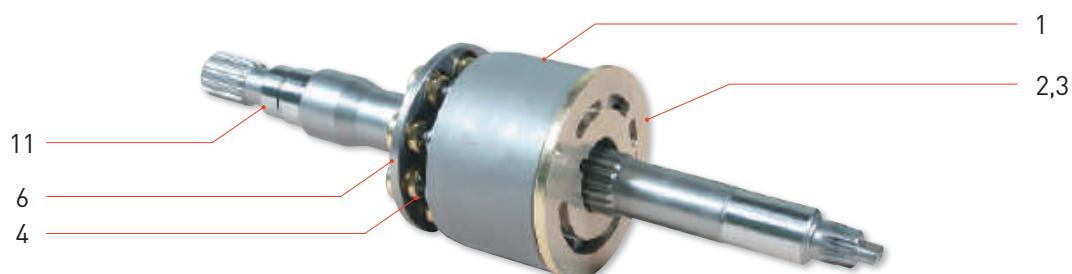
Application Model : SH60 , SK60 , EX60-1/2 , EX60LC , S80W-3



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		2	
2	VALVE PLATE – RH		1	
3	VALVE PLATE – LH		1	
4	PISTON SHOE		18	
5	BALL GUIDE		2	
6	SET PLATE		2	
7	SHOE PLATE		2	
8	PIN (CYL'D)		6	
9	WASHER (CYL'D)		4	
10	SPRING (CYL'D)		2	
11	DRIVE SHAFT		2	



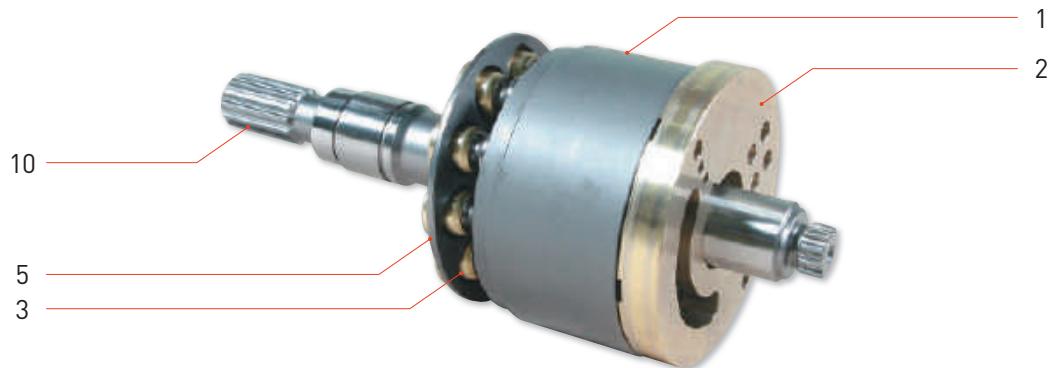
Application Model : SK60-1/2 , EX60-2/3 , E70B



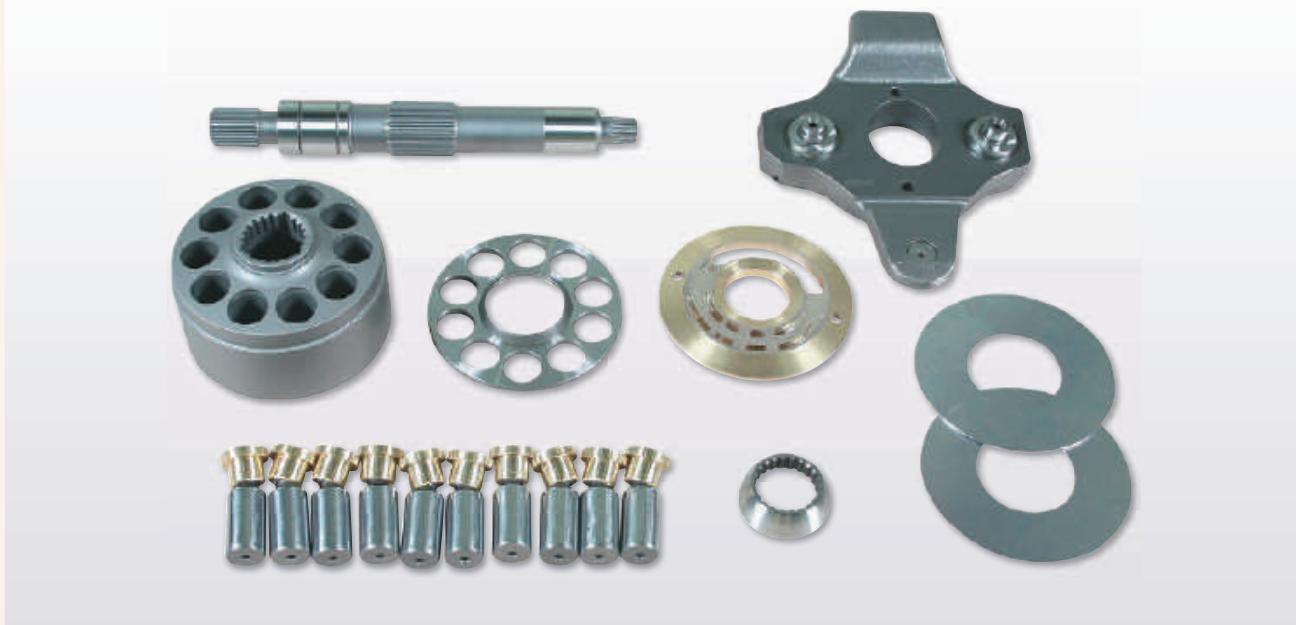
NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		2	
2	VALVE PLATE – RH		1	
3	VALVE PLATE – LH		1	
4	PISTON SHOE		18	
5	BALL GUIDE		2	
6	SET PLATE		2	
7	SHOE PLATE		2	
8	PIN (CYL'D)		6	
9	WASHER (CYL'D)		4	
10	SPRING (CYL'D)		2	
11	DRIVE SHAFT		2	



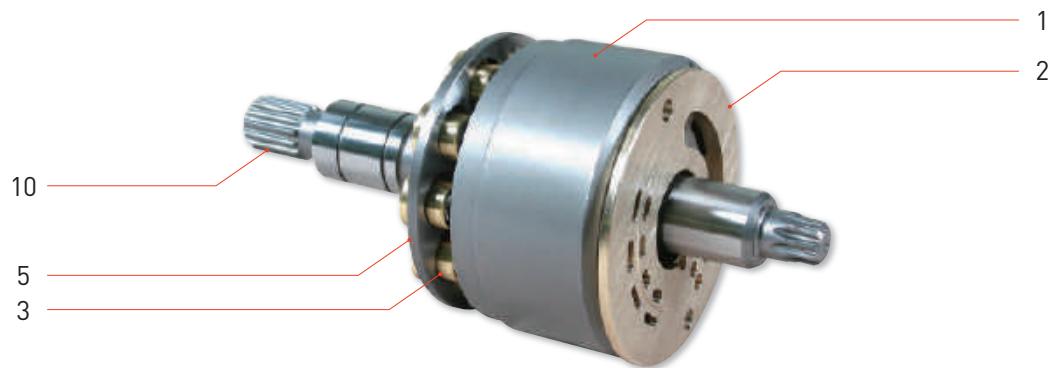
Application Model : SH35 , S55 , R55 , R60/60-7 , DH55 , DH60/60-7 , EC55



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		10	
4	BALL GUIDE		1	
5	SET PLATE		1	
6	SHOE PLATE	3.5T/2T/1T	1	
7	PIN (CYL'D)		3	
8	WASHER (CYL'D)		2	
9	SPRING (CYL'D)		1	
10	DRIVE SHAFT		1	
11	SWASH PLATE		1	
12	GEAR PUMP		1	



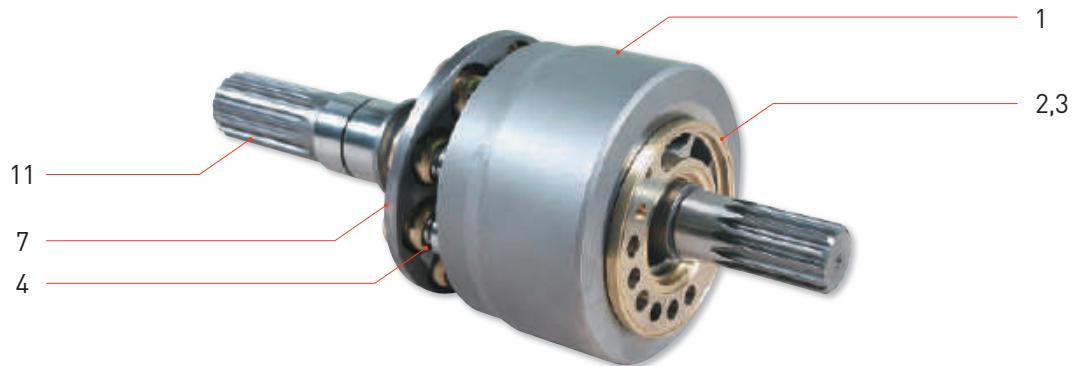
Application Model : SK60-2/5 , EX60-3/5, EX70 , S55LC-5 , SH75/80 , DH70



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		10	
4	BALL GUIDE		1	
5	SET PLATE		1	
6	SHOE PLATE	3.5T/2T/1T	1	
7	PIN (CYL'D)		3	
8	WASHER (CYL'D)		2	
9	SPRING (CYL'D)		1	
10	DRIVE SHAFT		1	
11	SWASH PLATE		1	
12	GEAR PUMP		1	



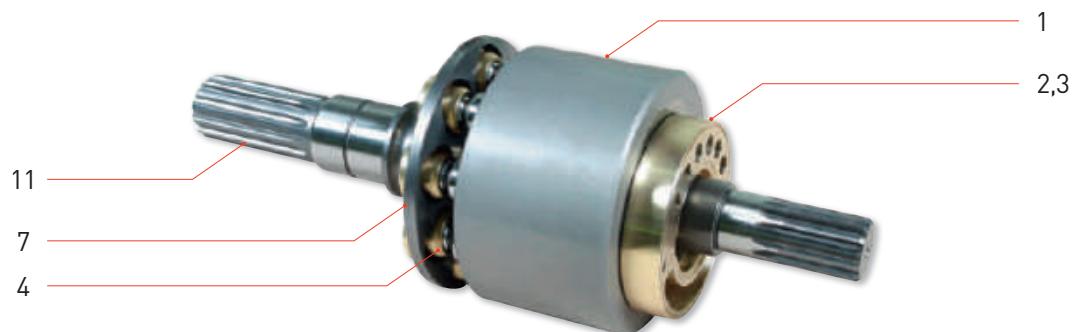
Application Model : CAT320 , CAT320B , E320B



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	BUSH	2	
2	VALVE PLATE – RH		1	
3	VALVE PLATE – LH		1	
4	PISTON SHOE		18	
5	BALL GUIDE	BRONZE	2	
6	SPACER		2	
7	SET PLATE		2	
8	SHOE PLATE		2	
9	SPRING (CYL'D)		18	
10	TILTING PIN		2	
11	DRIVE SHAFT – FRONT		1	
12	DRIVE SHAFT – REAR		1	



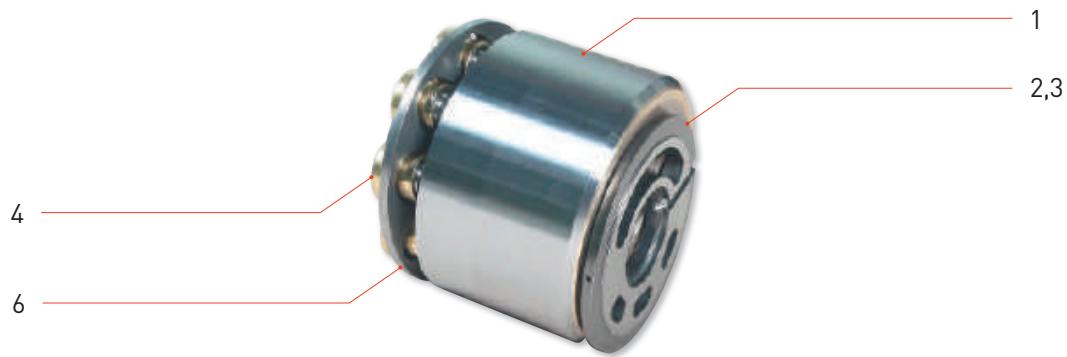
Application Model : E200B , E240B



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	BUSH	2	
2	VALVE PLATE – RH		1	
3	VALVE PLATE – LH		1	
4	PISTON SHOE		18	
5	BALL GUIDE	BRONZE	2	
6	SPACER		2	
7	SET PLATE		2	
8	SHOE PLATE		2	
9	SPRING (CYL'D)		18	
10	TILTING PIN		2	
11	DRIVE SHAFT – FRONT		1	
12	DRIVE SHAFT – REAR		1	



Application Model : E311C/D , E312C/D



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	BUSH	2	
2	VALVE PLATE – RH		1	
3	VALVE PLATE – LH		1	
4	PISTON SHOE		18	
5	BALL GUIDE	BRONZE	2	
6	SET PLATE		2	
7	SHOE PLATE		2	
8	DRIVE SHAFT – FRONT		1	
9	DRIVE SHAFT – REAR		1	



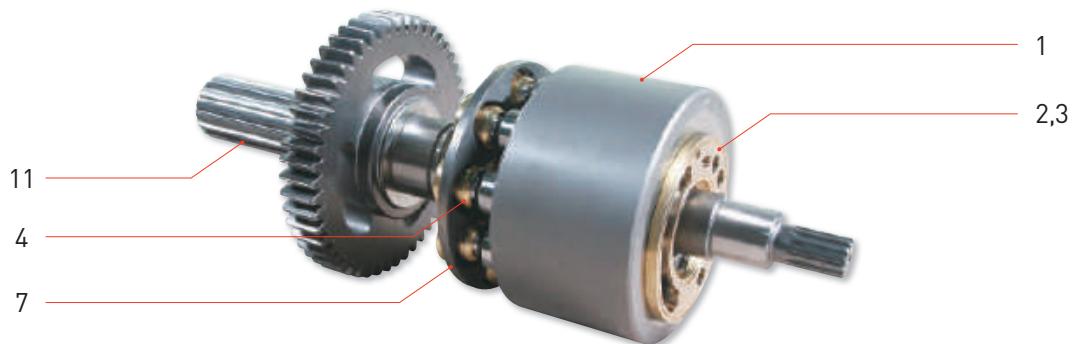
Application Model : CAT320C , E320C/D



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	BUSH	2	
2	VALVE PLATE – RH		1	
3	VALVE PLATE – LH		1	
4	PISTON SHOE		18	
5	BALL GUIDE	BRONZE	2	
6	SPACER		2	
7	SET PLATE		2	
8	SHOE PLATE		2	
9	SPRING (CYL'D)		18	
10	TLTING PIN		2	
11	DRIVE SHAFT – FRONT		1	
12	DRIVE SHAFT – REAR		1	
13	SLIDING BEARING		2	
14	SWASH PLATE		1	



Application Model : E325C/D

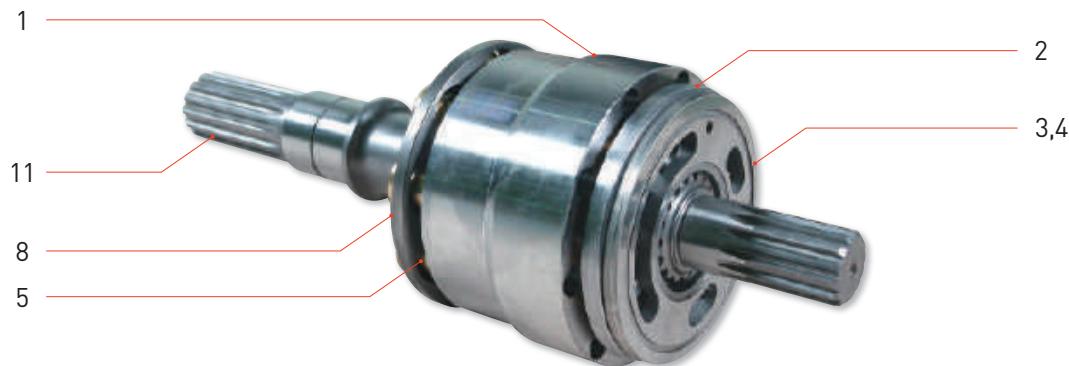


NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	BUSH	2	
2	VALVE PLATE – RH		1	
3	VALVE PLATE – LH		1	
4	PISTON SHOE		18	
5	BALL GUIDE	BRONZE	2	
6	SPACER		2	
7	SET PLATE		2	
8	SHOE PLATE		2	
9	SPRING (CYL'D)		18	
10	ТИЛТИНГ ПИН		2	
11	DRIVE SHAFT – FRONT		1	
12	DRIVE SHAFT – REAR		1	
13	SLIDING BEARING		2	
14	SWASH PLATE		1	

SPK10/10 Parts List



Application Model : E180 , E200B , E240B , MS180-8



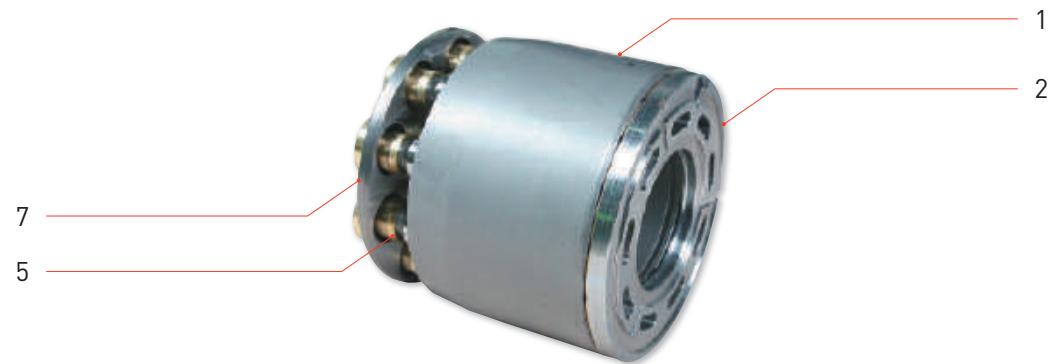
NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	BEARING PLATE		2	
3	PORT PLATE – RH		1	
4	PORT PLATE – LH		1	
5	PISTON SHOE		18	
6	BALL GUIDE		2	
7	SEAL RETAINER	2T	2	
8	SET PLATE		2	
9	SHOE PLATE		2	
10	DRUM SEAL		18	
11	DRIVE SHAFT – FRONT		1	
12	DRIVE SHAFT – REAR		1	



Application Model : SK05, MS120-2, MS140-2, MS110-5



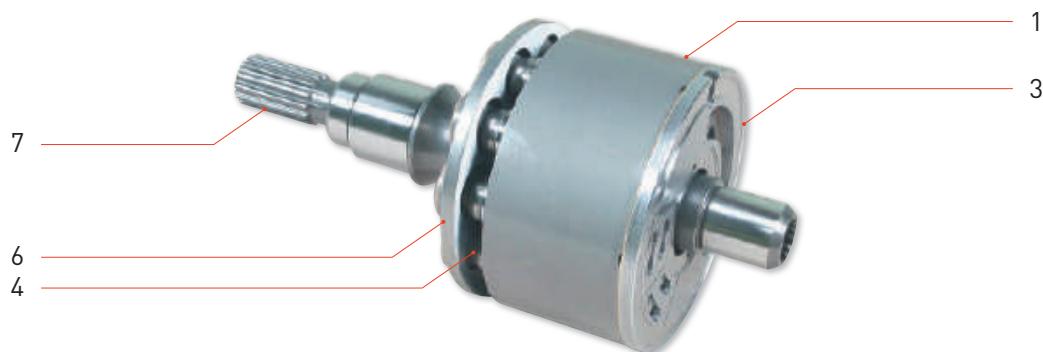
NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	BUSH	2	
2	BEARING PLATE		2	
3	VALVE PLATE – RH		1	
4	VALVE PLATE – LH		1	
5	PISTON SHOE		18	
6	BALL GUIDE	BRONZE	2	
7	SET PLATE		2	
8	SHOE PLATE		2	
9	DRIVE SHAFT – FRONT		1	
10	DRIVE SHAFT – REAR		1	


Application Model : LU SAKAI


NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	BUSH	2	
2	BEARING PLATE		2	
3	VALVE PLATE – RH		1	
4	VALVE PLATE – LH		1	
5	PISTON SHOE		18	
6	BALL GUIDE	BRONZE	2	
7	SET PLATE		2	
8	SHOE PLATE		2	
9	DRIVE SHAFT – FRONT		1	
10	DRIVE SHAFT – REAR		1	



Application Model : FR60 , CLG906

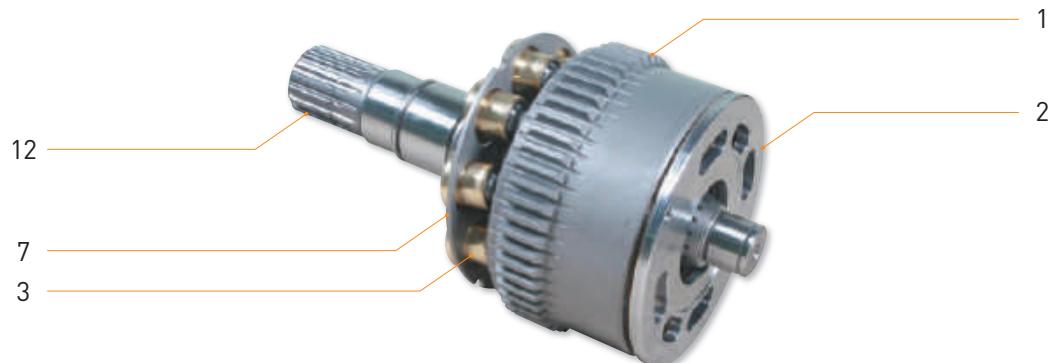


NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	BUSH	1	
2	BEARING PLATE		1	
3	VALVE PLATE		1	
4	PISTON SHOE		9	
5	BALL GUIDE		1	
6	SET PLATE		1	
7	DRIVE SHAFT		1	

M2X63 Parts List



Application Model : SK100/120-3 , S130-2/5 , R130W-3/5 , EC140LC

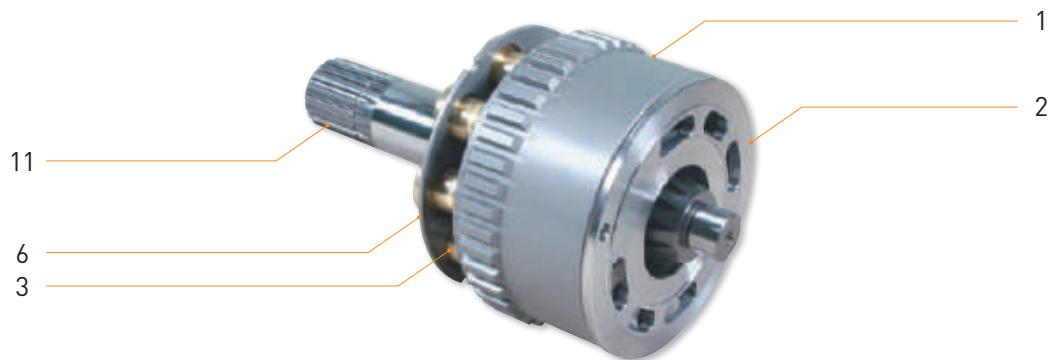


NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	D106/109	1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE	STEEL	1	
5	BALL GUIDE	BRONZE	1	
6	SPACER (BALL GUIDE)		1	
7	SET PLATE		1	
8	SHOE PLATE		1	
9	PIN (CYL'D)		12	
10	SPRING (CYL'D)		1	
11	WASHER (CYL'D)		2	
12	DRIVE SHAFT		1	
13	FRICITION PLATE		2	
14	SEPARATION PLATE		3	

M2X96 Parts List

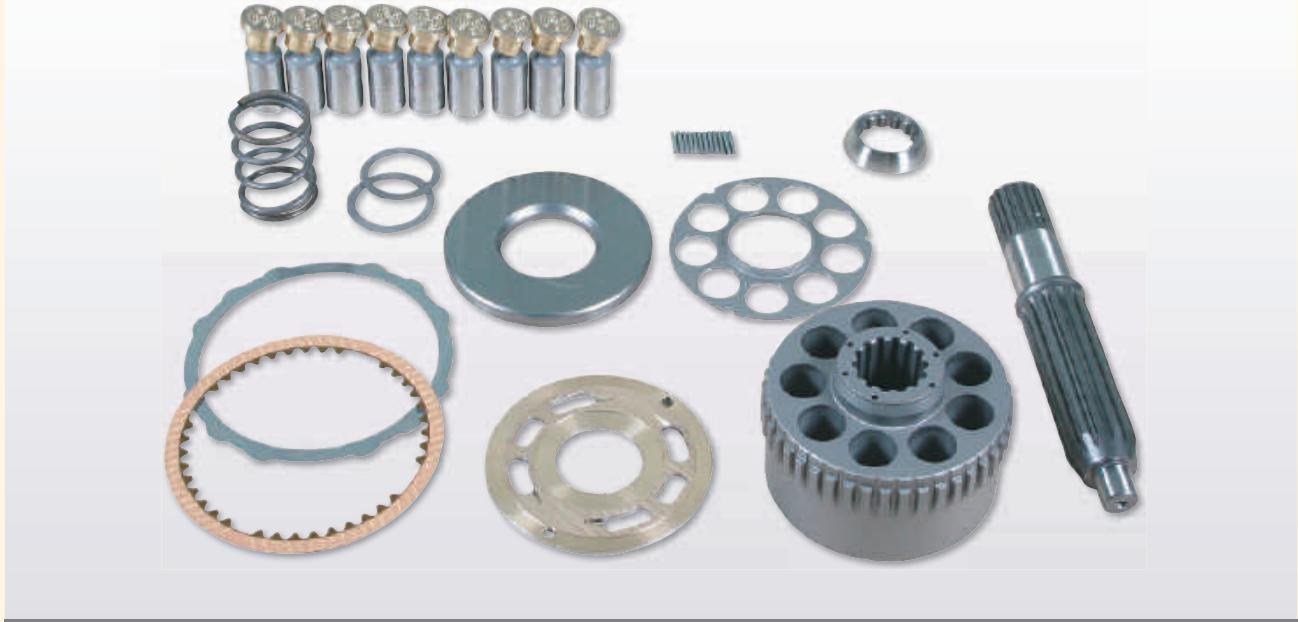


Application Model : EX200-2

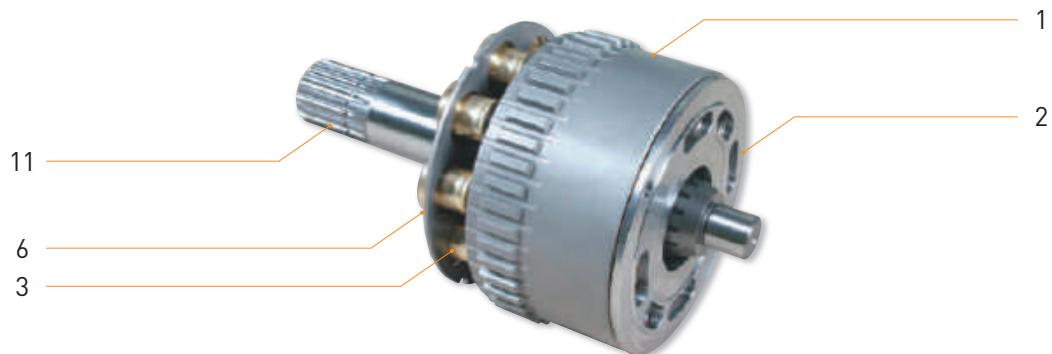


NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE		1	
5	SPACER (BALL GUIDE)		1	
6	SET PLATE		1	
7	SHOE PLATE		1	
8	PIN (CYL'D)		12	
9	SPRING (CYL'D)		1	
10	WASHER (CYL'D)		2	
11	DRIVE SHAFT		1	
12	FRICTION PLATE		2	
13	SEPARATION PLATE		3	

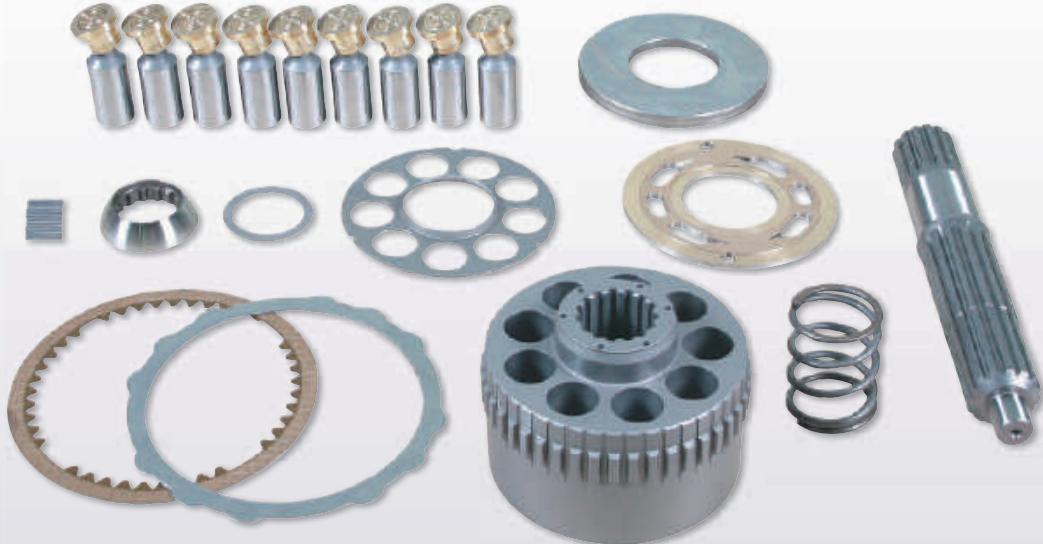
M2X120 Parts List



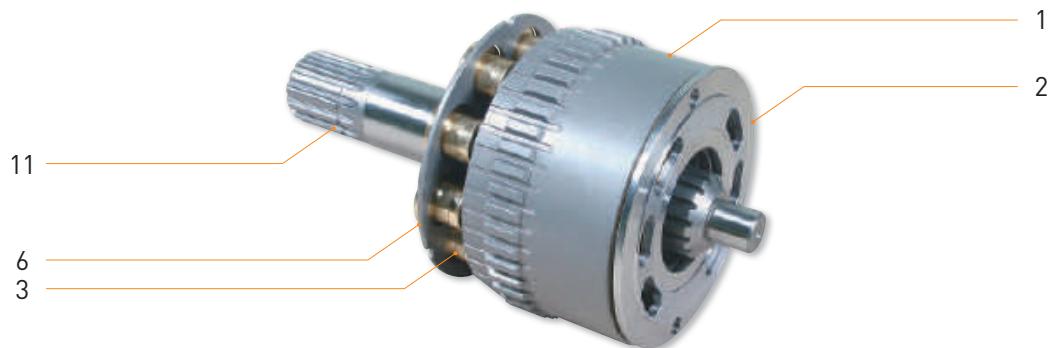
Application Model : SK200-5/6 , EX200-2/3 , S220LC-5 , EC210LC , MX225



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE		1	
5	SPACER (BALL GUIDE)		1	
6	SET PLATE		1	
7	SHOE PLATE		1	
8	PIN (CYL'D)		12	
9	SPRING (CYL'D)		1	
10	WASHER (CYL'D)		2	
11	DRIVE SHAFT		1	
12	FRICTION PLATE		2	
13	SEPARATION PLATE		3	



Application Model : SK230-6 , EX200/210/220-5

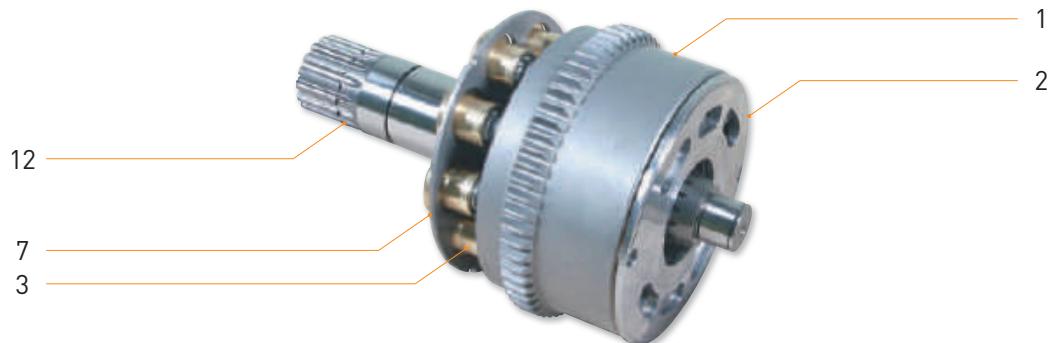


NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE		1	
5	SPACER (BALL GUIDE)		1	
6	SET PLATE		1	
7	SHOE PLATE		1	
8	PIN (CYL'D)		12	
9	SPRING (CYL'D)		1	
10	WASHER (CYL'D)		2	
11	DRIVE SHAFT		1	
12	FRICTION PLATE		2	
13	SEPARATION PLATE		3	

M2X150 Parts List



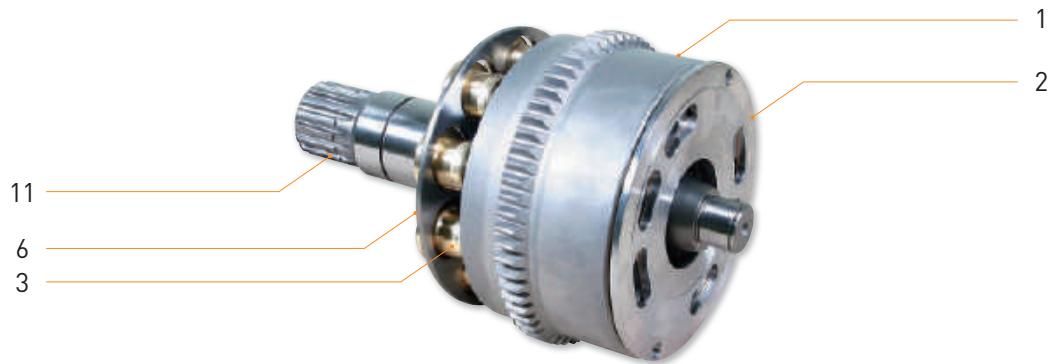
Application Model : SK200/220-1/2/3 , EX200/220-1/2/3 , S280/290 , EC290LC , MX292



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	18/22mm	1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE	STEEL	1	
5	BALL GUIDE	BRONZE	1	
6	SPACER (BALL GUIDE)		1	
7	SET PLATE		1	
8	SHOE PLATE		1	
9	PIN (CYL'D)		12	
10	SPRING (CYL'D)		1	
11	WASHER (CYL'D)		2	
12	DRIVE SHAFT		1	
13	FRICITION PLATE		2	
14	SEPARATION PLATE		3	



Application Model : SK300-1/3 , EX270/280 , EX300-1/2/3 , SH300/350 , E360



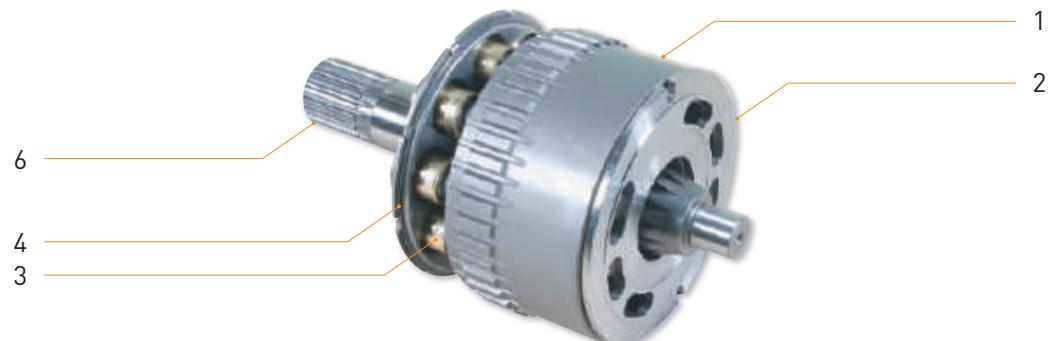
NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	18/22mm	1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE		1	
5	SPACER (BALL GUIDE)		1	
6	SET PLATE		1	
7	SHOE PLATE		1	
8	PIN (CYL'D)		12	
9	SPRING (CYL'D)		1	
10	WASHER (CYL'D)		2	
11	DRIVE SHAFT		1	
12	FRICTION PLATE		2	
13	SEPARATION PLATE		3	



M5X130 Parts List



Application Model : ZAIXS200 , SK200-8



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	SET PLATE		1	
5	SHOE PLATE		1	
6	DRIVE SHAFT		1	
7	FRICTION PLATE		2	
8	SEPARATION PLATE		3	

M5X180 Parts List



Application Model : ZAXIS330/360LC

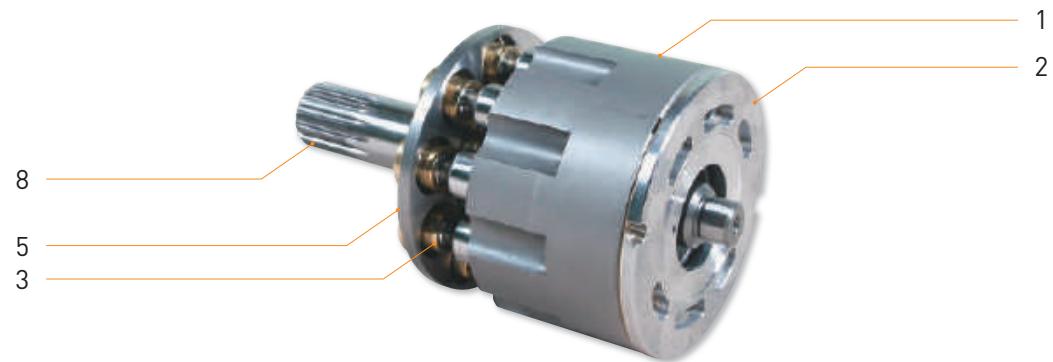


NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	SET PLATE		1	
5	SHOE PLATE		1	
6	DRIVE SHAFT	13T/16T/21T	1	
7	FRICITION PLATE		2	
8	SEPARATION PLATE		3	

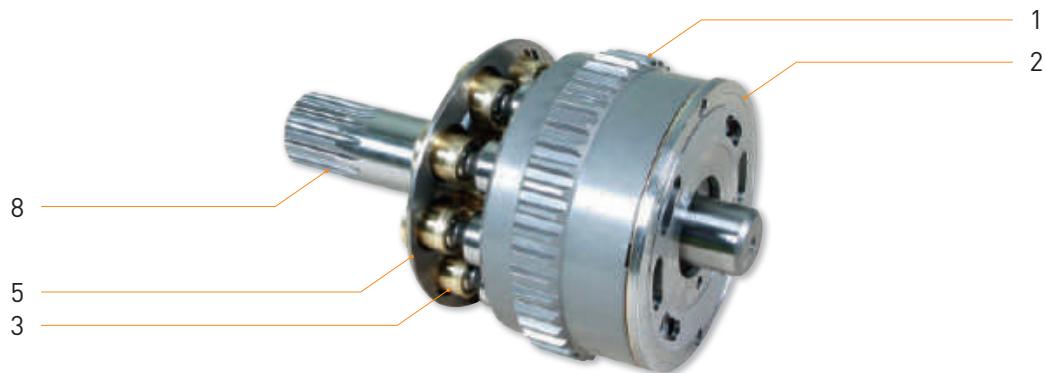
SMF43 Parts List



Application Model : S55 , DH55/60/80-7 , R55/60-7

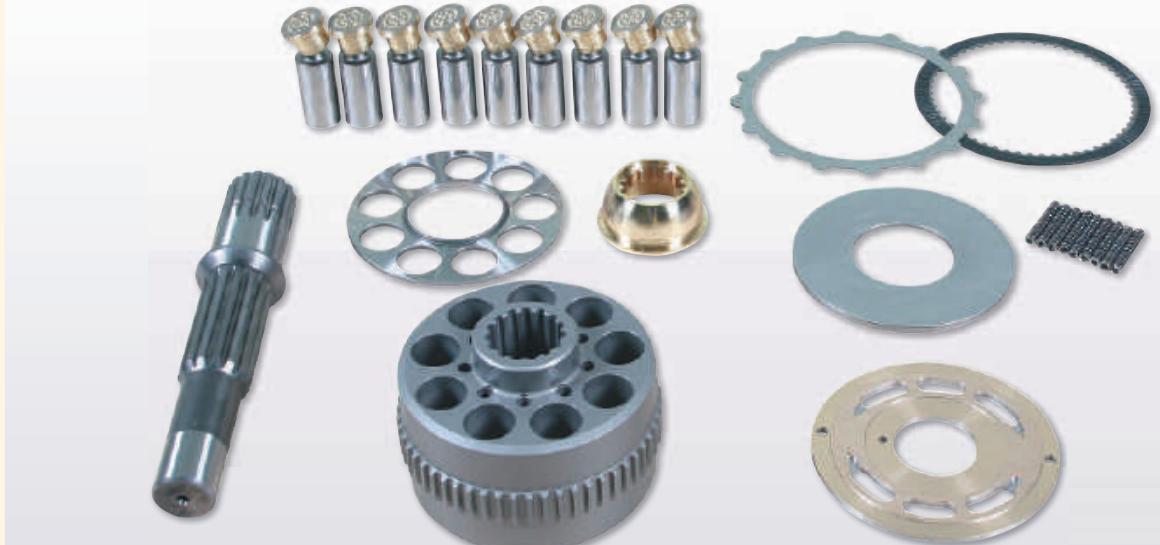


NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE	BRONZE	1	
5	SET PLATE		1	
6	SHOE PLATE		1	
7	SPRING (CYL'D)		9	
8	DRIVE SHAFT		1	
9	FRICITION PLATE		1	
10	SEPARATION PLATE		1	

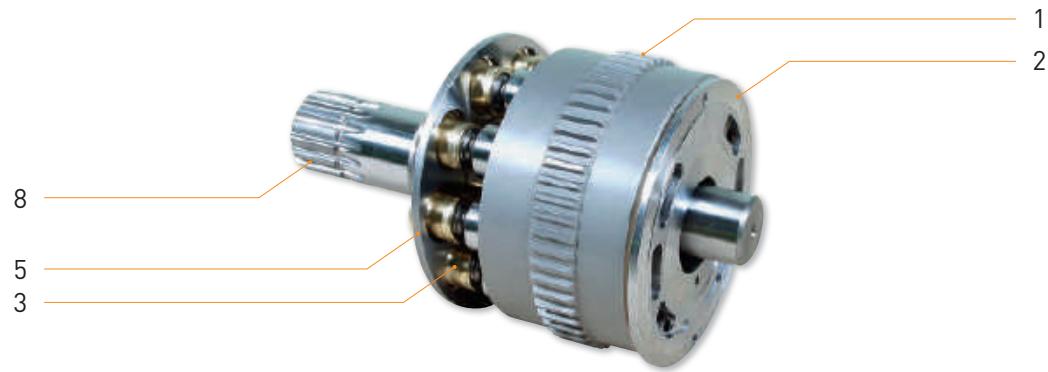

Application Model : R130-7


NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE	BRONZE	1	
5	SET PLATE		1	
6	SHOE PLATE		1	
7	SPRING (CYL'D)		9	
8	DRIVE SHAFT		1	
9	FRICTION PLATE		2	
10	SEPARATION PLATE		2	

SMF151 Parts List



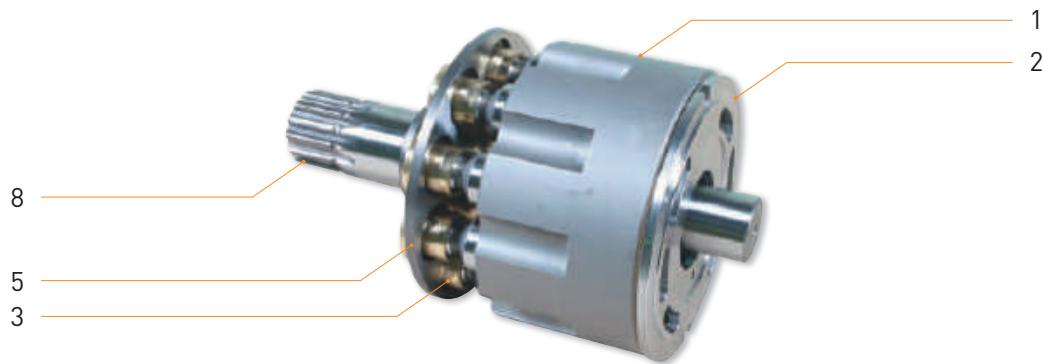
Application Model : DH220 , R210-7 , R220-7



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE	BRONZE	1	
5	SET PLATE		1	
6	SHOE PLATE		1	
7	SPRING (CYL'D)		9	
8	DRIVE SHAFT		1	
9	FRICTION PLATE		3	
10	SEPARATION PLATE		3	

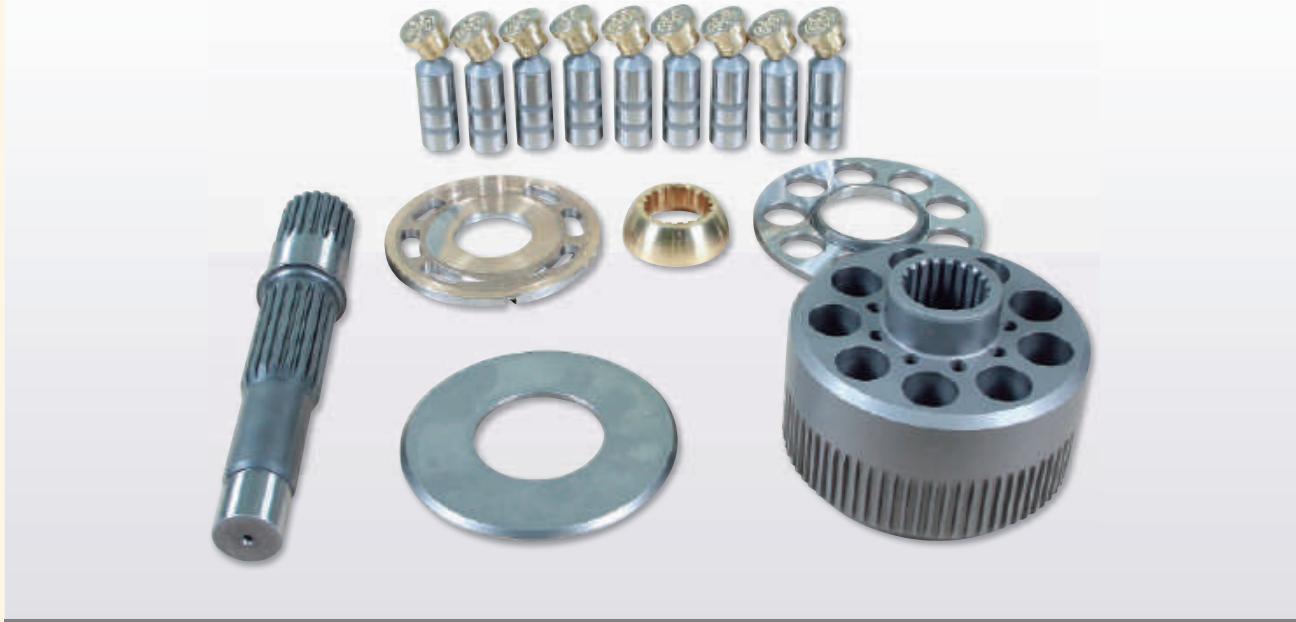


Application Model : DH300 , R300 , S300-5

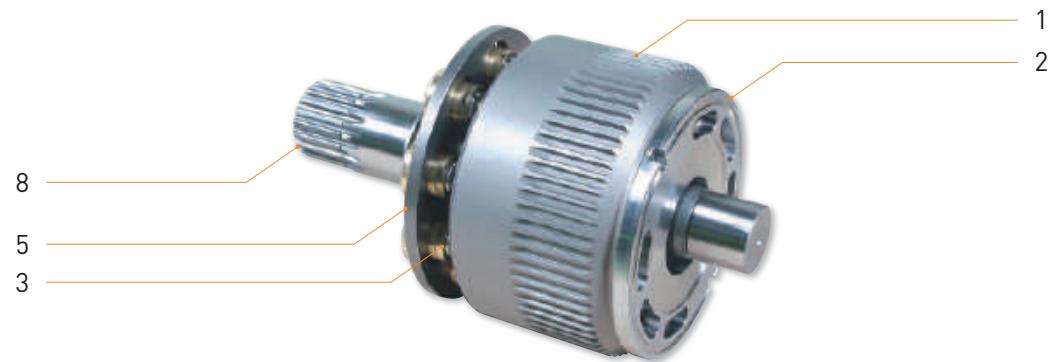


NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE	BRONZE	1	
5	SET PLATE		1	
6	SHOE PLATE		1	
7	SPRING (CYL'D)		9	
8	DRIVE SHAFT		1	
9	FRICTION PLATE		3	
10	SEPARATION PLATE		3	

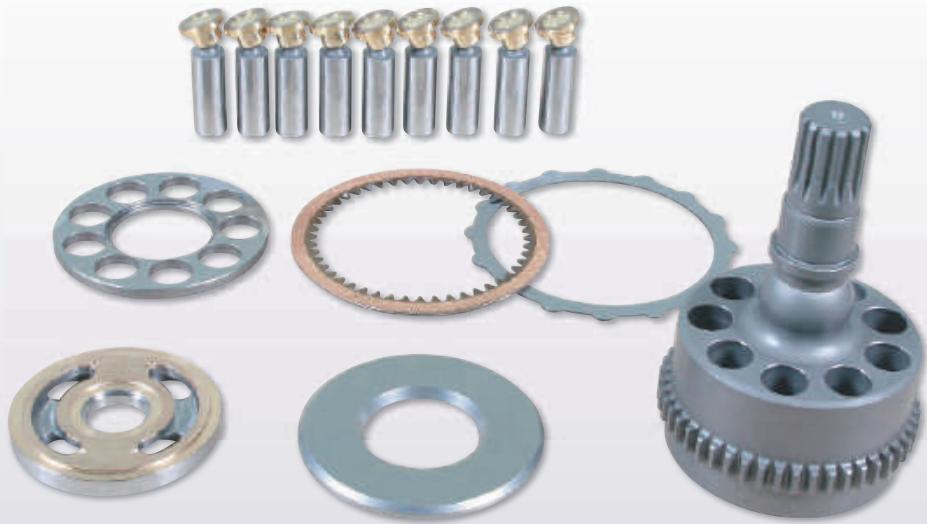
SMF250 Parts List



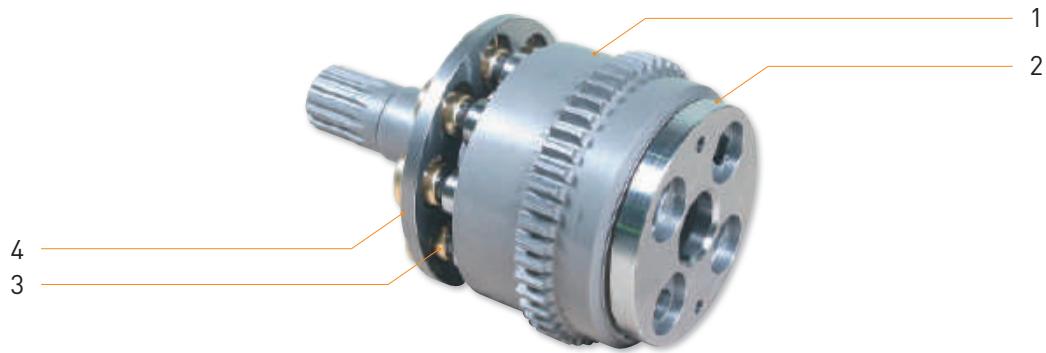
Application Model : S330/330-7 , S370-7



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE	BRONZE	1	
5	SET PLATE		1	
6	SHOE PLATE		1	
7	SPRING (CYL'D)		9	
8	DRIVE SHAFT		1	
9	FRICTION PLATE		3	
10	SEPARATION PLATE		3	



Application Model : SK120 , SH100 , S130 , R130

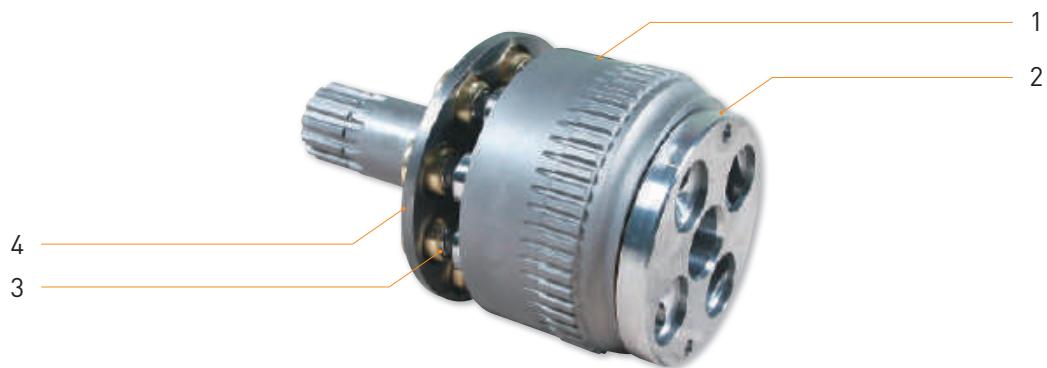


NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	SET PLATE		1	
5	SHOE PLATE		1	
6	FRICTION PLATE		2	
7	SEPARATION PLATE		3	

SG08 Parts List



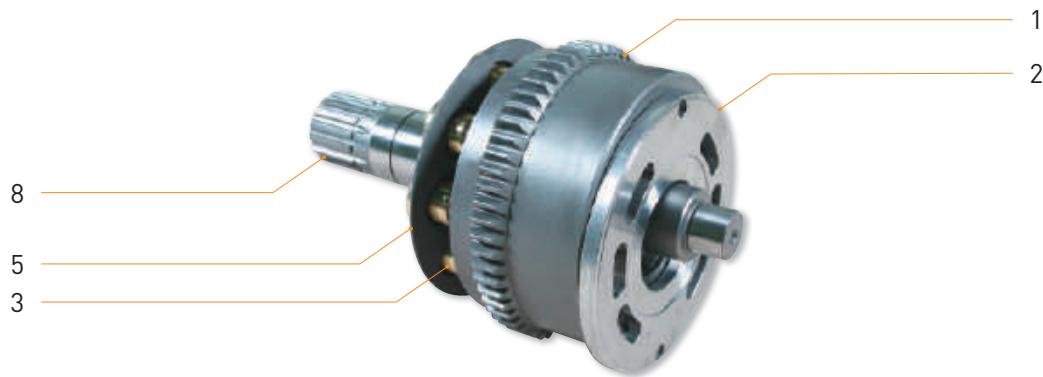
Application Model : E200B , SH200 , R210 , MX08 , SK230-6



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE	2/4/6 HOLE	1	
3	PISTON SHOE		9	
4	SET PLATE		1	
5	SHOE PLATE		1	
6	FRICTION PLATE		2	
7	SEPARATION PLATE		3	



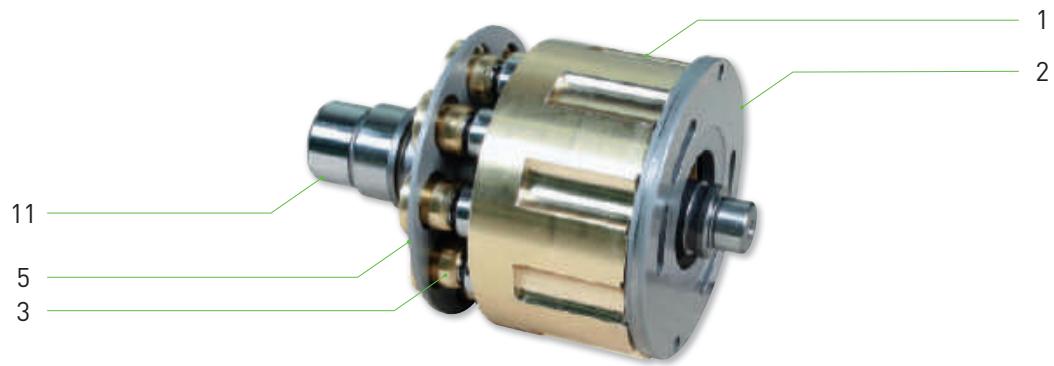
Application Model : DX258



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE		1	
5	SET PLATE		1	
6	SHOE PLATE		1	
7	SPRING (CYL'D)		9	
8	DRIVE SHAFT		1	



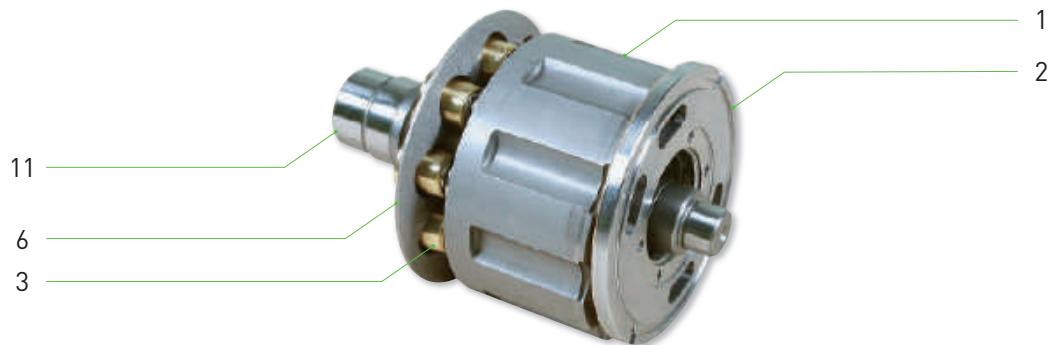
Application Model : DH55/60/80 , R60/80 , PC60-5/6/7 , SK60-6/7/8



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	BRONZE	1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE		1	
5	SET PLATE		1	
6	SHOE PLATE		1	
7	PIN (CYL'D)		3	
8	SPRING (CYL'D)		1	
9	WASHER (CYL'D)		2	
10	COUPLING		1	
11	DRIVE SHAFT		1	
12	SWASH PLATE		1	
13	FRICITION PLATE		2	
14	SEPARATION PLATE		2	



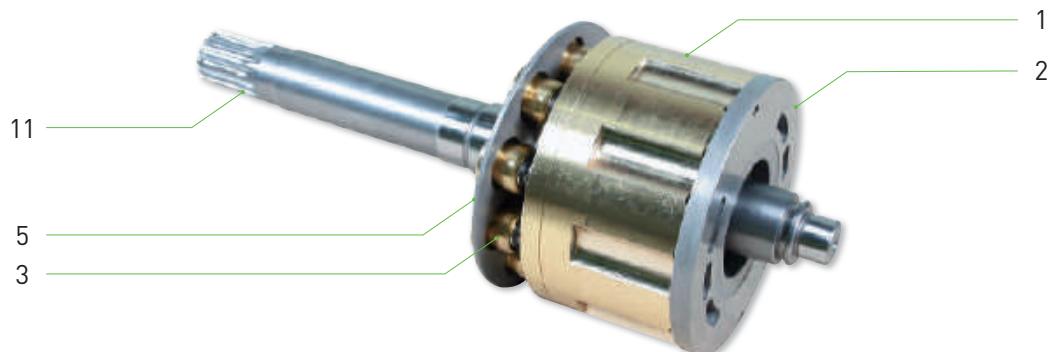
Application Model : DH55/60/80 , R60/80 , PC60-5/6/7 , SK60-6/7/8



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE	BRONZE	1	
5	SPACER		1	
6	SET PLATE		1	
7	PIN (CYL'D)		3	
8	SPRING (CYL'D)		1	
9	WASHER (CYL'D)		2	
10	COUPLING		1	
11	DRIVE SHAFT		1	
12	SWASH PLATE		1	
13	FRICTION PLATE		2	
14	SEPARATION PLATE		2	



Application Model : S130-2 , PC120-5 , SK120



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	BRONZE	1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE		1	
5	SET PLATE		1	
6	SHOE PLATE		1	
7	PIN (CYL'D)		3	
8	SPRING (CYL'D)		1	
9	WASHER (CYL'D)		2	
10	COUPLING		1	
11	DRIVE SHAFT		1	
12	SWASH PLATE		1	
13	FRICITION PLATE		2	
14	SEPARATION PLATE		2	



Application Model : DH150 , R150 , PC120-3/5 , SK100 , SH100



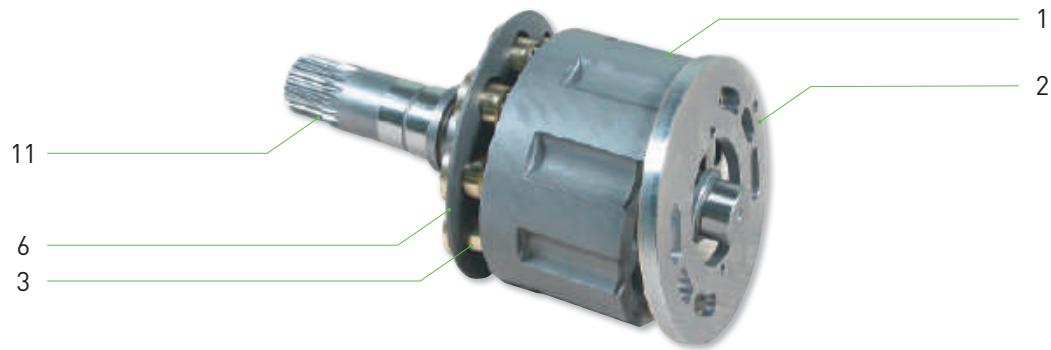
NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE	BRONZE	1	
5	SPACER		1	
6	SET PLATE		1	
7	PIN (CYL'D)		5	
8	SPRING (CYL'D)		1	
9	WASHER (CYL'D)		2	
10	COUPLING		1	
11	DRIVE SHAFT		1	
12	SWASH PLATE		1	
13	FRiction PLATE		3	
14	SEPARATION PLATE		3	



GM35VL Parts List



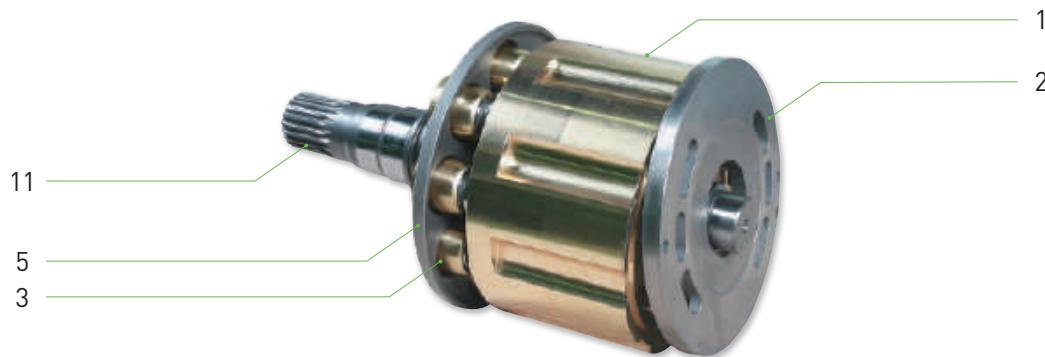
Application Model : S220LC-5 , R210LC-3/5/7 , R250LC-3 , EM140 , EC210LC , MX222



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE	BRONZE	1	
5	SPACER		1	
6	SET PLATE		1	
7	PIN (CYL'D)		5	
8	SPRING (CYL'D)		1	
9	WASHER (CYL'D)		2	
10	COUPLING		1	
11	DRIVE SHAFT		1	
12	SWASH PLATE		1	
13	FRICITION PLATE		2	
14	SEPARATION PLATE		2	



Application Model : S220LC-3/5 , R200/210/220LC-3 , EC210LC , MX222 , HD800SEV

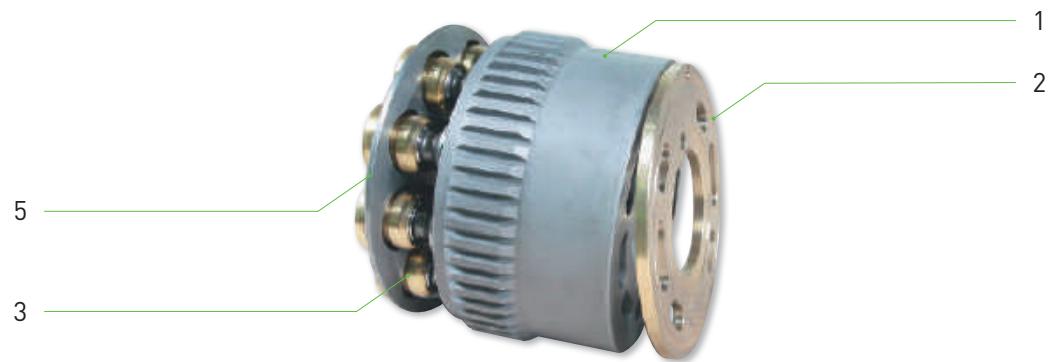


NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	BRONZE	1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE		1	
5	SET PLATE		1	
6	SHOE PLATE		1	
7	PIN (CYL'D)		6	
8	SPRING (CYL'D)		1	
9	WASHER (CYL'D)		2	
10	COUPLING		1	
11	DRIVE SHAFT		1	
12	SWASH PLATE		1	
13	FRICITION PLATE		3	
14	SEPARATION PLATE		4	

GM38VB Parts List



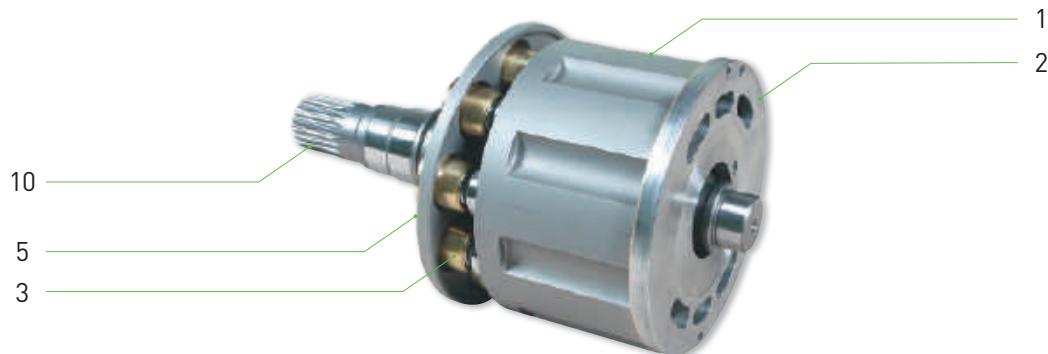
Application Model : SK200-8 , SK210-8



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE		1	
5	SET PLATE		1	
6	SPRING (CYL'D)		9	
7	PIVOT		2	
8	SWASH PLATE		1	



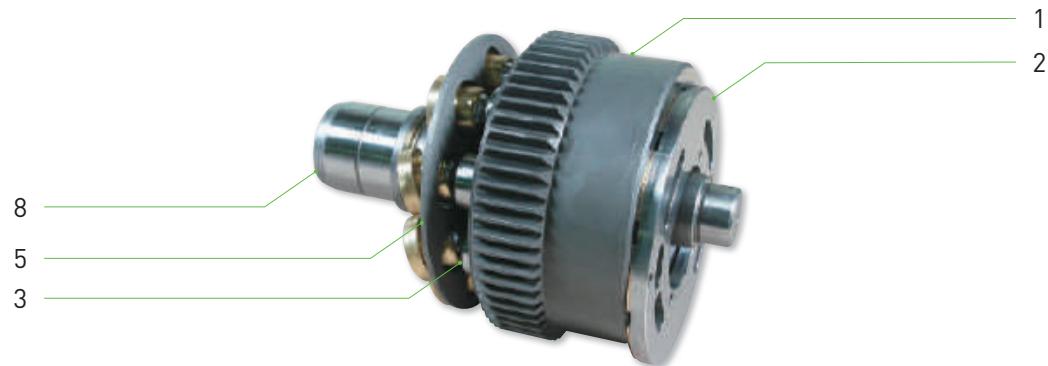
Application Model : DX220/225 , R210-7 , R2220-7



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE		1	
5	SET PLATE		1	
6	PIN (CYL'D)		6	
7	SPRING (CYL'D)		1	
8	WASHER (CYL'D)		2	
9	COUPLING		1	
10	DRIVE SHAFT		1	
11	SWASH PLATE		1	
12	FRICITION PLATE		3	
13	SEPARATION PLATE		4	



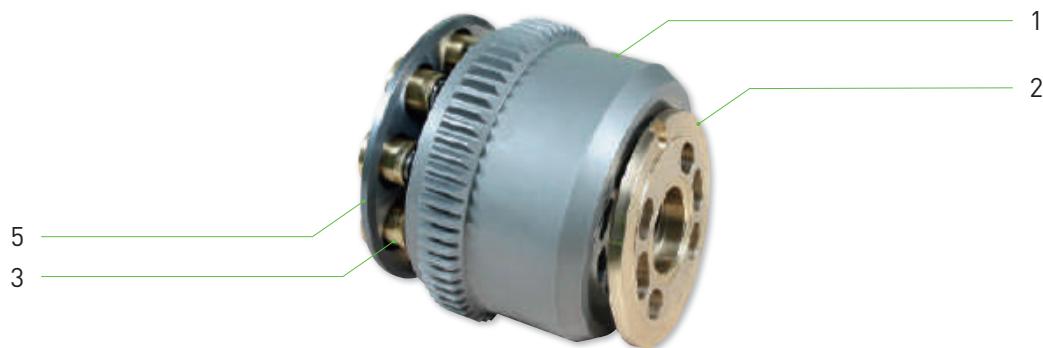
Application Model : DH225-7 , DH220-7 , DH215-7



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE		1	
5	SET PLATE		1	
6	SPRING (CYL'D)		9	
7	COUPLING		1	
8	DRIVE SHAFT		1	
9	PIVOT		2	
10	SWASH PLATE		1	
11	FRICITION PLATE		2	
12	SEPARATION PLATE		2	



Application Model : SK330-8 , SK350-8 , SK360-8



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE		1	
5	SET PLATE		1	
6	SPRING (CYL'D)		9	
7	COUPLING		1	
8	DRIVE SHAFT		1	
9	PIVOT		2	
10	SWASH PLATE		1	
11	FRICTION PLATE		2	
12	SEPARATION PLATE		2	



Application Model : R290-7, R2900-7, R3000-7



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE		1	
5	SET PLATE		1	
6	SPRING (CYL'D)		9	
7	SUPPORT		1	
8	SWASH PLATE		1	

KMF90 Parts List



Application Model : PC200/220-3 , PC200/220-5



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK	BRONZE	1	
2	VALVE PLATE	14.2T	1	PC200-3
3	VALVE PLATE	10.5T	1	PC200-5
4	PISTON SHOE		7	PC200-3
5	PISTON SHOE		7	PC200-5
6	RETAINER PLATE	7 HOLE	1	
7	RETAINER PLATE	14 HOLE	1	



Application Model : ZAXIS110/120



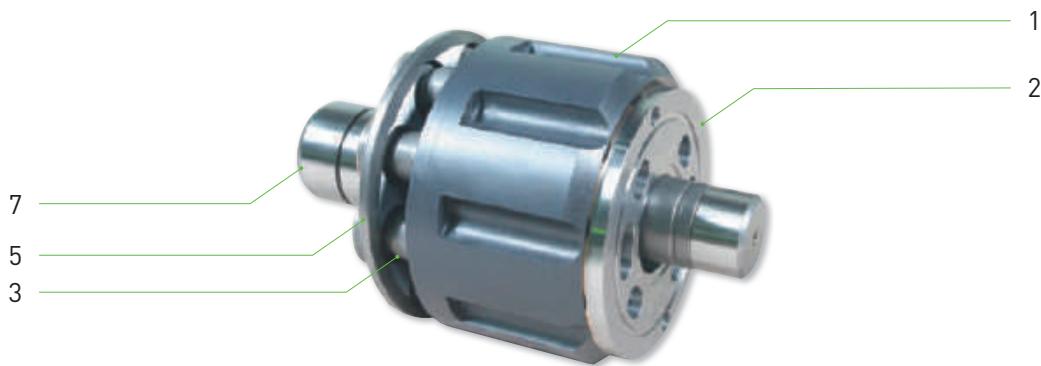
NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE		1	
5	SET PLATE		1	
6	SPRING (CYL'D)		9	
7	DRIVE SHAFT		1	



HMT36 Parts List



Application Model : ZAXIS200/220-3/5



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		1	
2	VALVE PLATE		1	
3	PISTON SHOE		9	
4	BALL GUIDE		1	
5	SET PLATE		1	
6	SPRING (CYL'D)		9	
7	DRIVE SHAFT		1	
8	SWASH PLATE		1	



GM T/M REDUCTION GEAR #1



Application Model : PC100-5/6 , PC120-6/E , SH100-2 , SH120

NO	MODEL	DESCRIPTION	SPEC.	Q'TY	REMARKS
1	GM17	GEAR	22 X 26T	1	
2	GM17	GEAR	26 X 26T	1	
3	GM17	GEAR	27 X 26T	1	
4	GM17	GEAR CENTER	14 X 15T	1	
5	GM17	GEAR CENTER	15 X 15T	1	
6	GM17	GEAR CENTER	16 X 15T	1	
7	GM18VL	GEAR	43 X 26T	1	
8	GM18VL	GEAR	44 X 26T	1	
9	GM18VL	GEAR	45 X 26T	1	
10	GM18VL	T-GEAR CENTER	16 X 14T	1	
11	GM18VL	T-GEAR CENTER	17 X 14T	1	
12	GM18VL	T-GEAR CENTER	15 X 16T	1	
13	GM18VL	T-GEAR CENTER	16 X 16T	1	



Application Model : SK100,S130,R130 / S220LC-3/5,R210LC-3,EC210LC

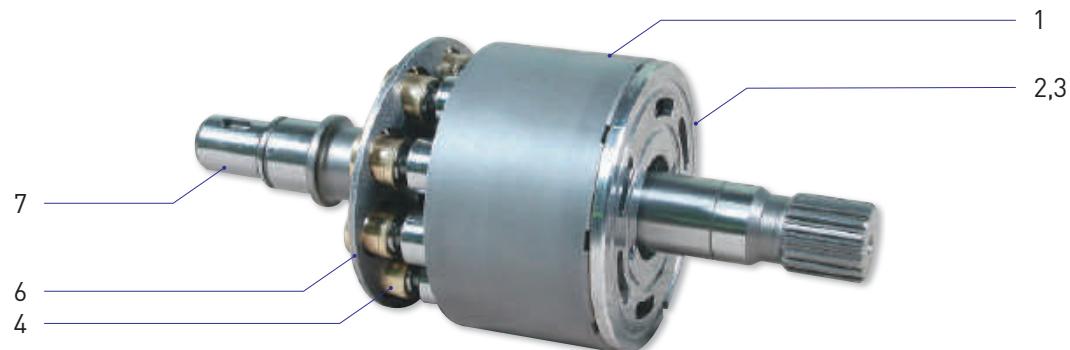
NO	MODEL	DESCRIPTION	SPEC.	Q'TY	REMARKS
1	GM07	CRANK SHAFT		1	
2	GM08	CRANK SHAFT		1	
3	GM09	CRANK SHAFT		1	
4	GM17	CRANK SHAFT		1	
5	GM35VL	CRANK SHAFT		1	
6	GM24VA	SUN GEAR		1	
7	GM24VA	SPLINE COUPLING		1	
8	GM24VA	CLUSTER GEAR		1	
9	GM24VA	CLUSTER SHAFT		1	
10	GM35VA	SUN GEAR		1	
11	GM35VA	SPLINE COUPLING		1	
12	GM35VA	CLUSTER GEAR		1	
13	GM35VA	CLUSTER SHAFT		1	



HST Parts List

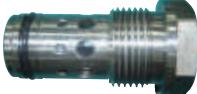


Application Model : HST18/20/21/23/30/37/40/42/45cc



NO	DESCRIPTION	SPEC.	Q'TY	REMARK
1	CYLINDER BLOCK		2	
2	VALVE PLATE – PUMP		1	
3	VALVE PLATE – MOTOR		1	
4	PISTON SHOE		18	
5	BALL GUIDE		2	
6	SET PLATE		2	
7	DRIVE SHAFT – PUMP		1	
8	DRIVE SHAFT – MOTOR		1	
9	SWASH PLATE – PUMP		1	
10	SWASH PLATE – MOTOR		1	

M.C.V : Main Control Valve S/M : Swing Motor T/M : Travel Motor

JRV0010	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	M.C.V	MAIN RELIEF VALVE ASS'Y #1	22TON ~ 37TON M.C.V
JRV0020	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	M.C.V	MAIN RELIEF VALVE ASS'Y #2	22TON ~ 37TON M.C.V
JRV0030	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	M.C.V	NEGACON RELIEF VALVE ASS'Y	22TON ~ 37TON M.C.V
JRV0040	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	M.C.V	OVER LOAD RELIEF VALVE ASS'Y	22TON ~ 37TON M.C.V
JRV0050	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	M.C.V	MAIN RELIEF VALVE ASS'Y	22TON ~ 30TON M.C.V
JRV0060	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	M.C.V	NEGACON RELIEF VALVE ASS'Y	22TON ~ 30TON M.C.V



RELIEF VALVE ASS'Y LIST

Main Pump Spare Parts

Swing Motor Spare Parts

Travel Motor Spare Parts

HST Spare Parts

Relief Valve ASS'Y

M.C.V : Main Control Valve S/M : Swing Motor T/M : Travel Motor

JRV0070	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	M.C.V	OVER LOAD RELIEF VALVE ASS'Y	22TON ~ 30TON M.C.V
JRV0080	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	S/M T/M	RELIEF VALVE ASS'Y	3 / 3.5 / 5TON S/M 3 TON T/M
JRV0090	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	S/M	RELIEF VALVE ASS'Y	5TON / 8TON S/M (S055/55W-VGP , S70)
JRV0100	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	S/M	RELIEF VALVE ASS'Y	5TON S/M (R55-7)
JRV0110	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	S/M	RELIEF VALVE ASS'Y	13TON / 22TON S/M (S130W-V / S210W-V)
JRV0120	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	S/M	RELIEF VALVE ASS'Y	30TON / 33TON S/M (S300/320/330LC-V)

M.C.V : Main Control Valve S/M : Swing Motor T/M : Travel Motor

JRV0130	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	S/M	RELIEF VALVE ASS'Y	22TON ~ 34TON S/M
JRV0140	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	T/M	RELIEF VALVE ASS'Y	5TON T/M (S55W-VGP , S70-III)
JRV0150	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	T/M	RELIEF VALVE ASS'Y	22TON T/M (R1400/2200LC-7)
JRV0160	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	T/M	RELIEF VALVE ASS'Y	28TON / 30TON T/M (S300LC-V)
JRV0170	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	T/M	RELIEF VALVE ASS'Y	29TON / 30TON T/M (R3000/3200LC-7)
JRV0180	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	S/M	RELIEF VALVE ASS'Y	M2X63/96/120/146 M2X150/170 /210

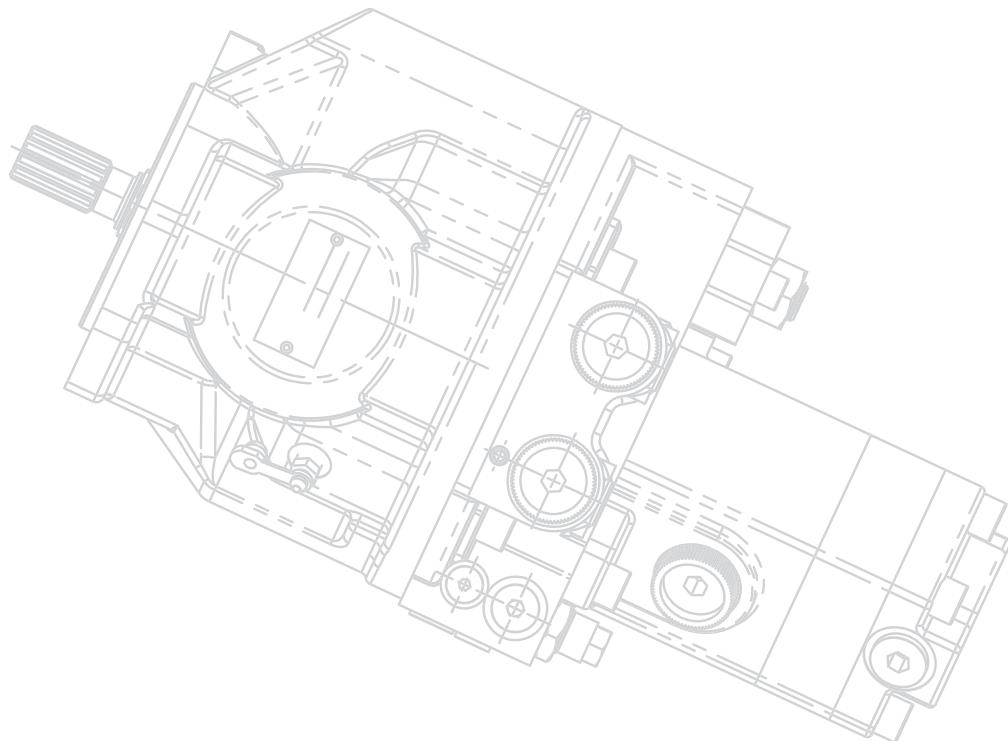


RELIEF VALVE ASS'Y LIST

M.C.V : Main Control Valve S/M : Swing Motor T/M : Travel Motor

JRV0190	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	M.C.V	MAIN RELIEF VALVE ASS'Y	PC200/220-3
JRV0200	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	M.C.V	MAIN RELIEF VALVE ASS'Y	PC200/220-5
JRV0210	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	M.C.V	MAIN RELIEF VALVE ASS'Y	PC200-6E
JRV0220	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	M.C.V	MAIN RELIEF VALVE ASS'Y	PC200-6
JRV0230	M / S / T	DESCRIPTION	EXCAVATOR MODEL
	M.C.V	UNLOADER RELIEF VALVE ASS'Y	PC200-6





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