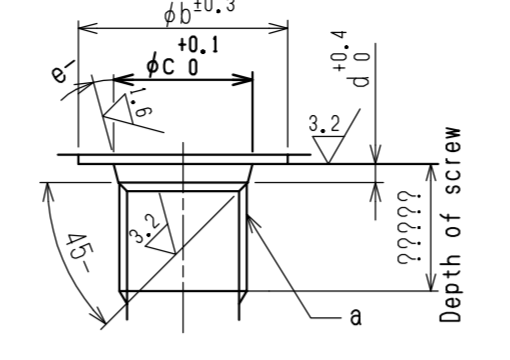


Port name	Port size - Depth	On delivery	Nm Tightening torque
A Delivery port	SAE J518C High pressure (code 62) 1 1/4"	Covered with tape	157
B Suction port	SAE J518C Std. pressure (code 61) 2 1/2"	Covered with tape	98
Dr Drain port	1 1/16-12UN-2B-19 (ISO 11926-1:1995)	Attached with steel plug	167
Pc Pressure control port	7/16-20UNF-2B-14 (ISO 11926-1:1995)	Attached with steel plug	12
Tair Air bleeder port	7/16-20UNF-2B-14 (ISO 11926-1:1995)	Attached with steel plug	12



Detail of ports (ISO 11926-1:1995)

Dimension Symbol	a	b	c	d	e
Pc, Tair	7/16-20UNF-2B	21	12.4	2.4	12
Dr	1 1/16-12UN-2B	41	29.2 <sup>+0.13</sup>	3.3	15

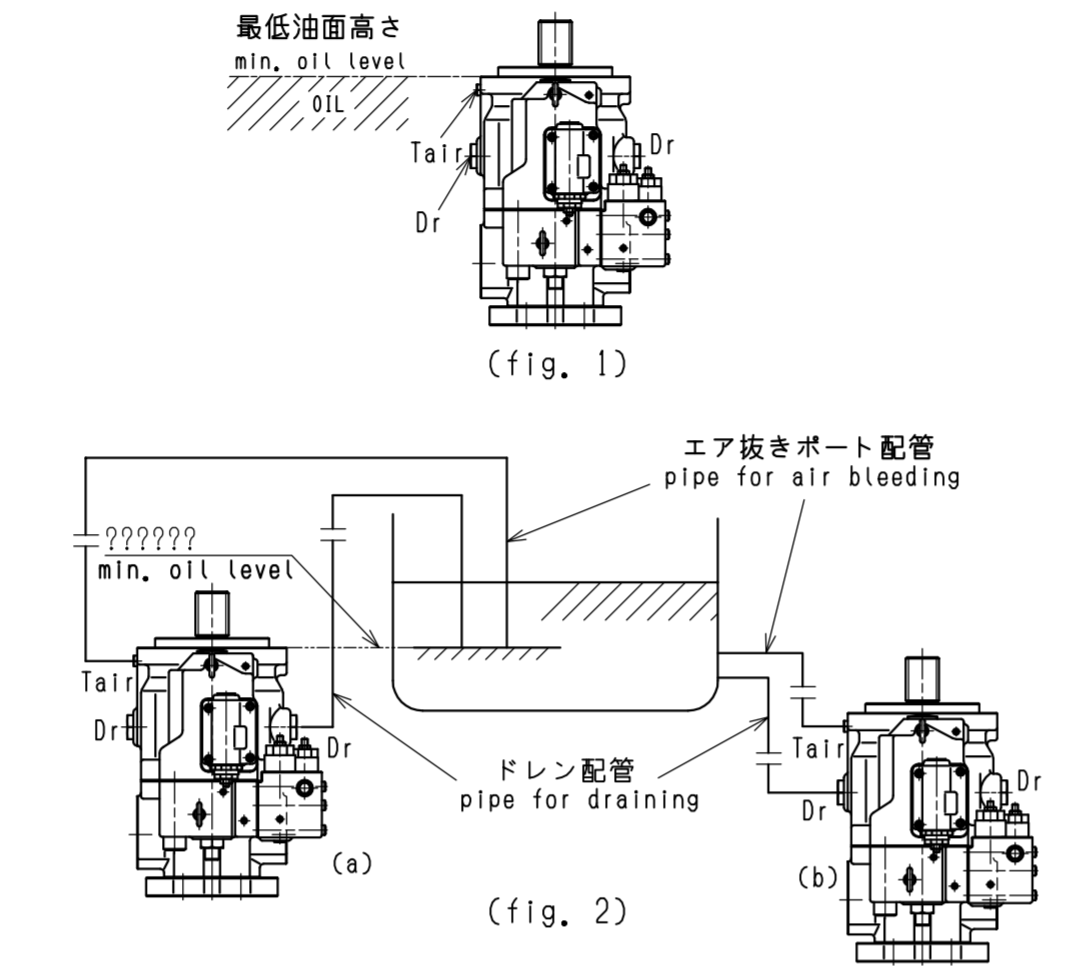
Operating specifications

Displacement	cm <sup>3</sup>	140
Max. self-priming speed	min <sup>-1</sup>	2200 (Clockwise viewed from shaft end)
Rated pressure	MPa	32
Peak pressure	MPa	35
Pump model name		K3VL140/B-1BRSM-PO/1-M3

- 1) 最低油面高さ min. oil level
- 2) エア抜きポート配管 pipe for air bleeding
- 3) ドレイン配管 pipe for draining
- 4) 最低油面高さ min. oil level
- 5) エア抜きポート配管 pipe for air bleeding
- 6) ドレイン配管 pipe for draining
- 7) 最低油面高さ min. oil level
- 8) エア抜きポート配管 pipe for air bleeding
- 9) ドレイン配管 pipe for draining
- 10) 最低油面高さ min. oil level
- 11) エア抜きポート配管 pipe for air bleeding
- 12) ドレイン配管 pipe for draining
- 13) 最低油面高さ min. oil level

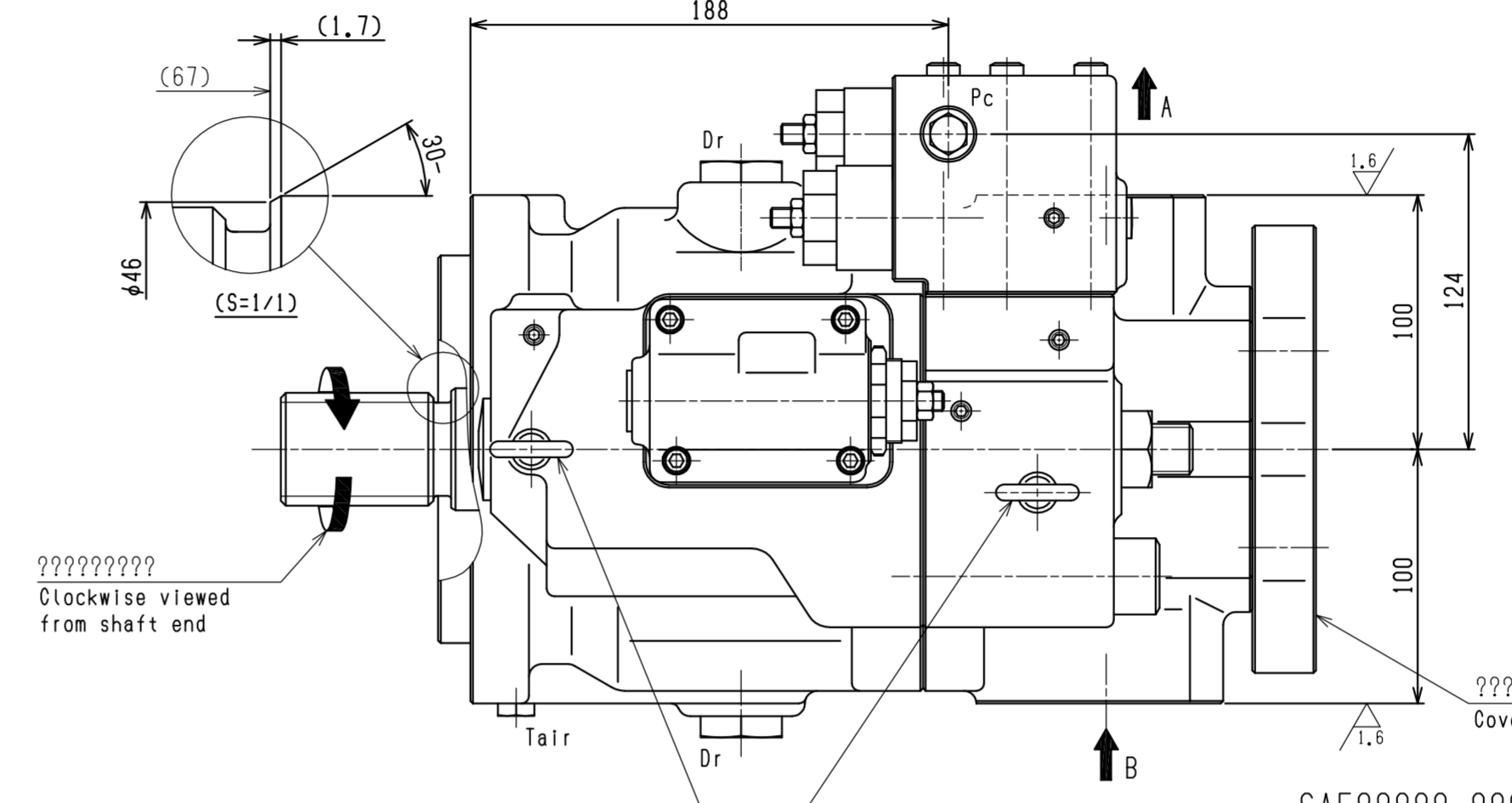
Notes on mounting and operation

- 1) The pump shaft and flange surfaces should be cleaned. Remove an anti-rust material.
- 2) Do not apply any form of axial loading to the pump shaft.
- 3) The uppermost drain port should be used and the drain piping should be equal or larger in size than the drain port.
- 4) Keep the casing pressure below 0.1 MPa normally, and below 0.4 MPa at its peak.
- 5) Make sure the drain piping led into the oil tank is kept below the surface of the oil (to prevent aeration).
- 6) Make sure the suction pressure in the suction flange is kept above 0 MPa normally.
- 7) Mineral antiwear type hydraulic oil should be used.
- 8) For satisfactory service life of the pump in application, the operating fluid should be continuously filtered to a minimum cleanliness level of NAS1638 class 9 or -/18/15 to ISO 4406.
- 9) Provide a 150 mesh (100µm) strainer in the suction line.
- 10) Install a 10µm filter in the return line.
- 11) Allowable oil temperature range : -20~95°C.
- 12) Oil viscosity range : 10~1000cSt when 200~1000cSt, take warming up before real working.
- 13) Caution for the vertical mounting. The oil level in the tank should be upper than the pump mounting flange, (fig. 1) If the oil level is lower than the pump level, forced lubrication should be made from the air bleeder port, (flow 1~2 l/min)



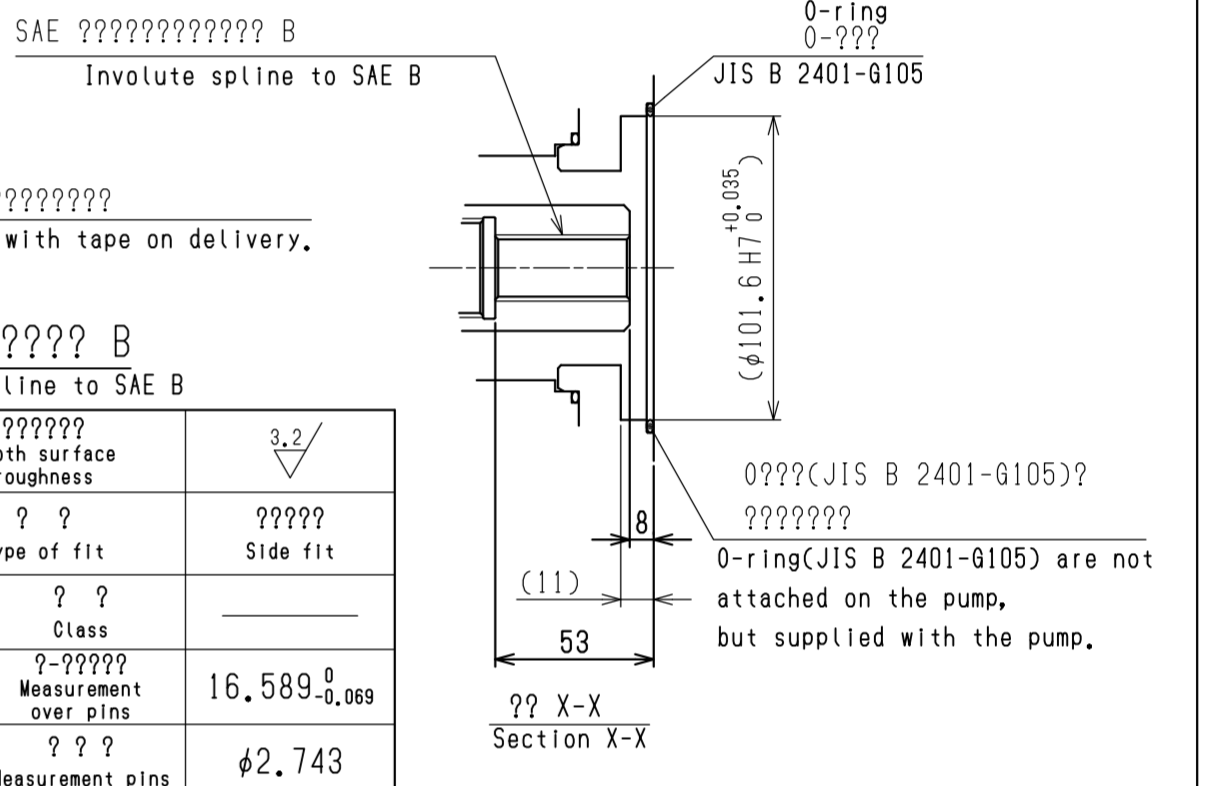
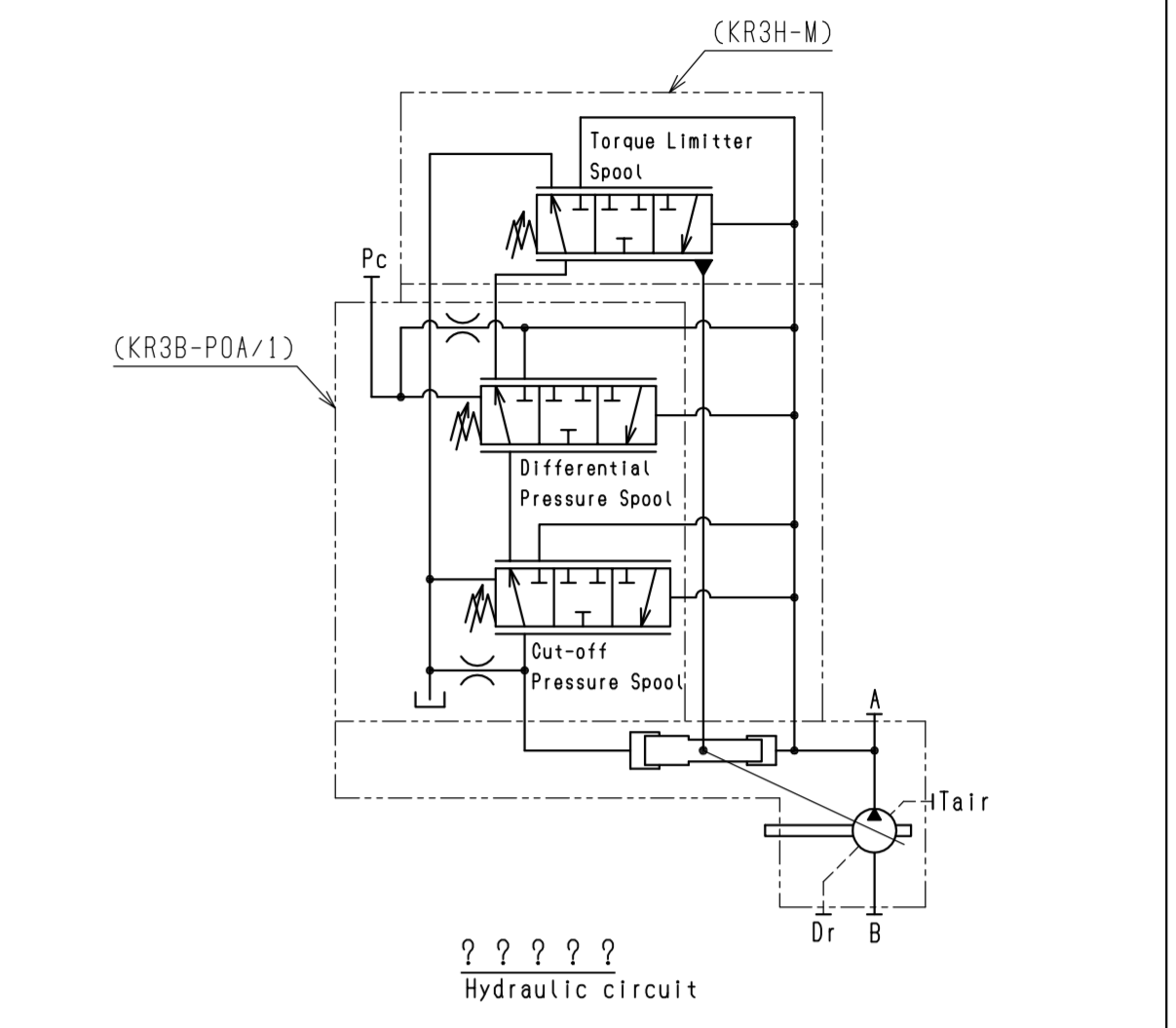
SAE J744-152-4 Particulars of involute spline to SAE A

Number of teeth	13	Tooth surface roughness	3.2
Standard pitch circle diameter	41.275	Type of fit	Side fit
Tooth profile	Flat root	Class	1 Fit
Diametral pitch	8/16	Measurement over pins	50.104 <50.169
Pressure angle	30°	Measurement pins	φ6.096
Root diameter	36.906 <37.363	Rule	SAE

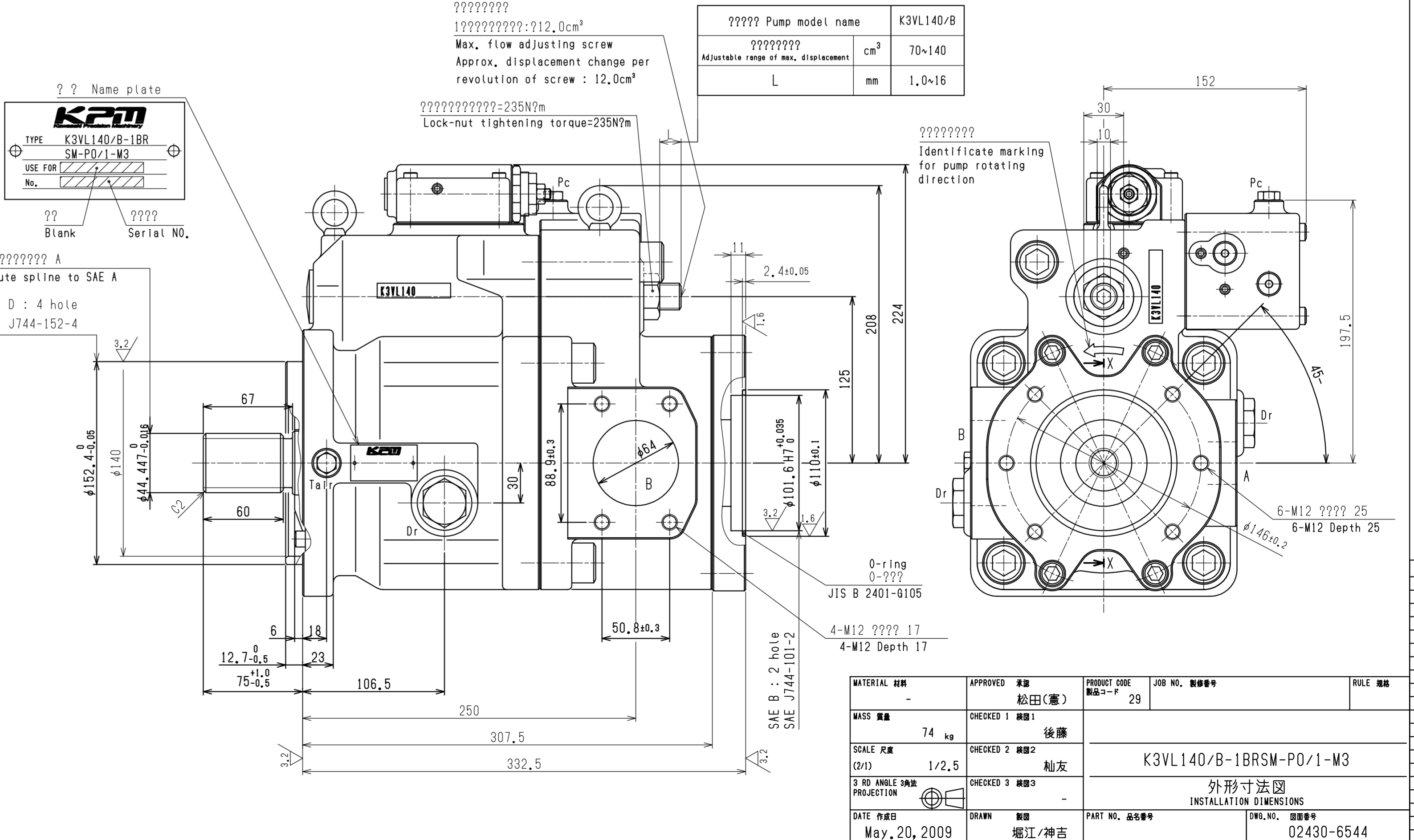
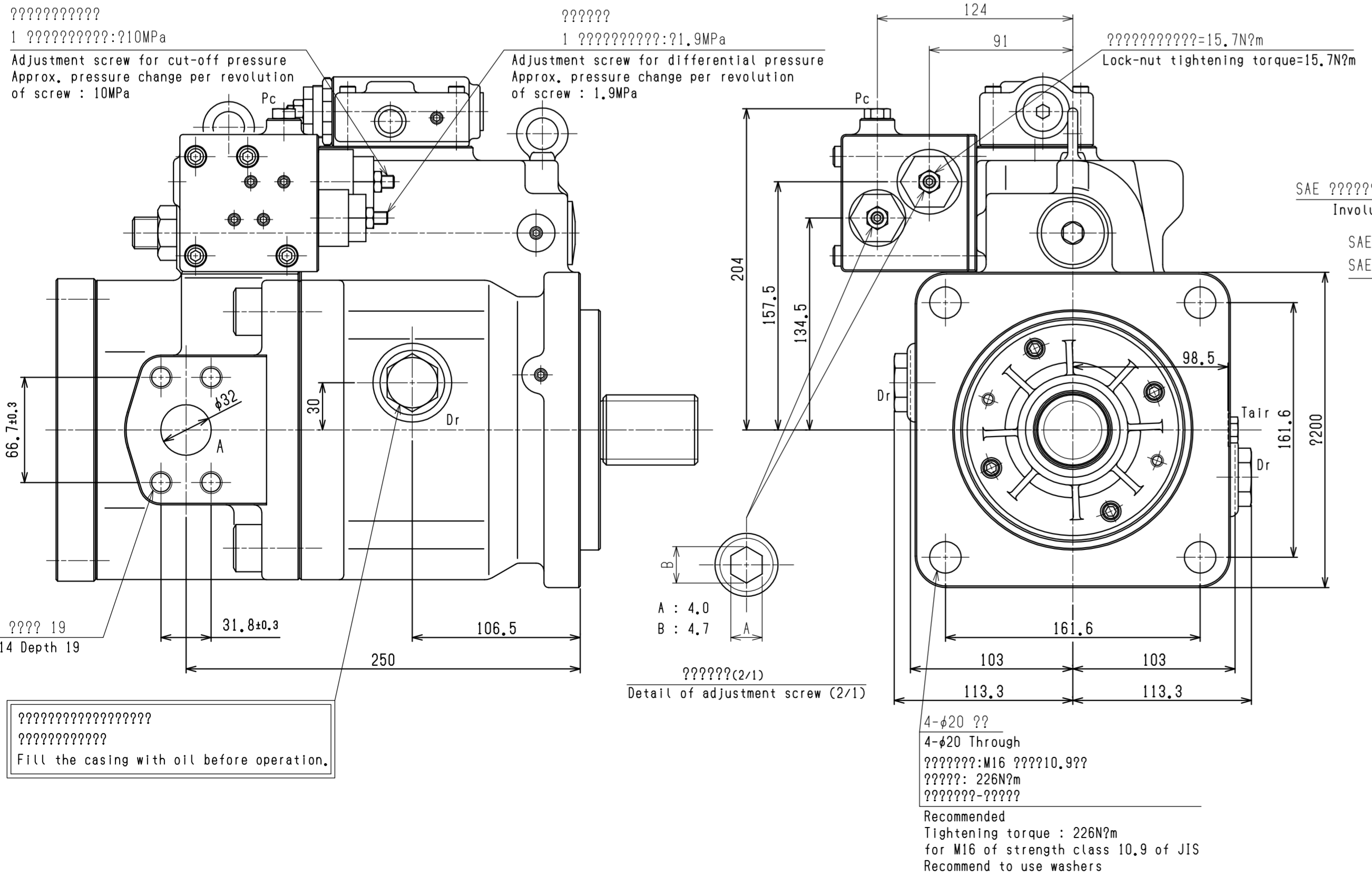
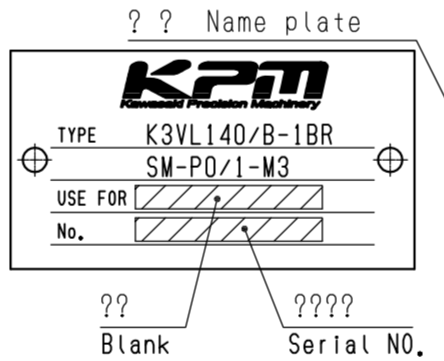


SAE J744-152-4 Particulars of involute spline to SAE B

Number of teeth	13	Tooth surface roughness	3.2
Standard pitch circle diameter	20.6375	Type of fit	Side fit
Tooth profile	Flat root	Class	1 Fit
Diametral pitch	16/32	Measurement over pins	16.589 <sup>±0.069</sup>
Pressure angle	30°	Measurement pins	φ2.743
Root diameter	22.225 <sup>+0.279</sup>	Rule	SAE



Do not attach heavy objects to the pump when the pump is lifted. Use two eye bolts when the pump is lifted. (Max. allowable weight, 80kg using two eye bolts.)



MATERIAL 材質	APPROVED 承認	PRODUCT CODE 製品コード	JOB NO. 製番	RULE 規格
74 kg	松田(兼) 後藤	29		
SCALE 尺度 (2/1)	CHECKED 2 橋田 柚友	K3VL140/B-1BRSM-PO/1-M3		
3 RD ANGLE BLOCK PROJECTION	CHECKED 3 橋田 柚友	外形寸法図 INSTALLATION DIMENSIONS		
DATE 作成日	DRAWN 製図	PART NO. 品名	DWG. NO. 図番	
May. 20, 2009	堀江/神吉		02430-6544	