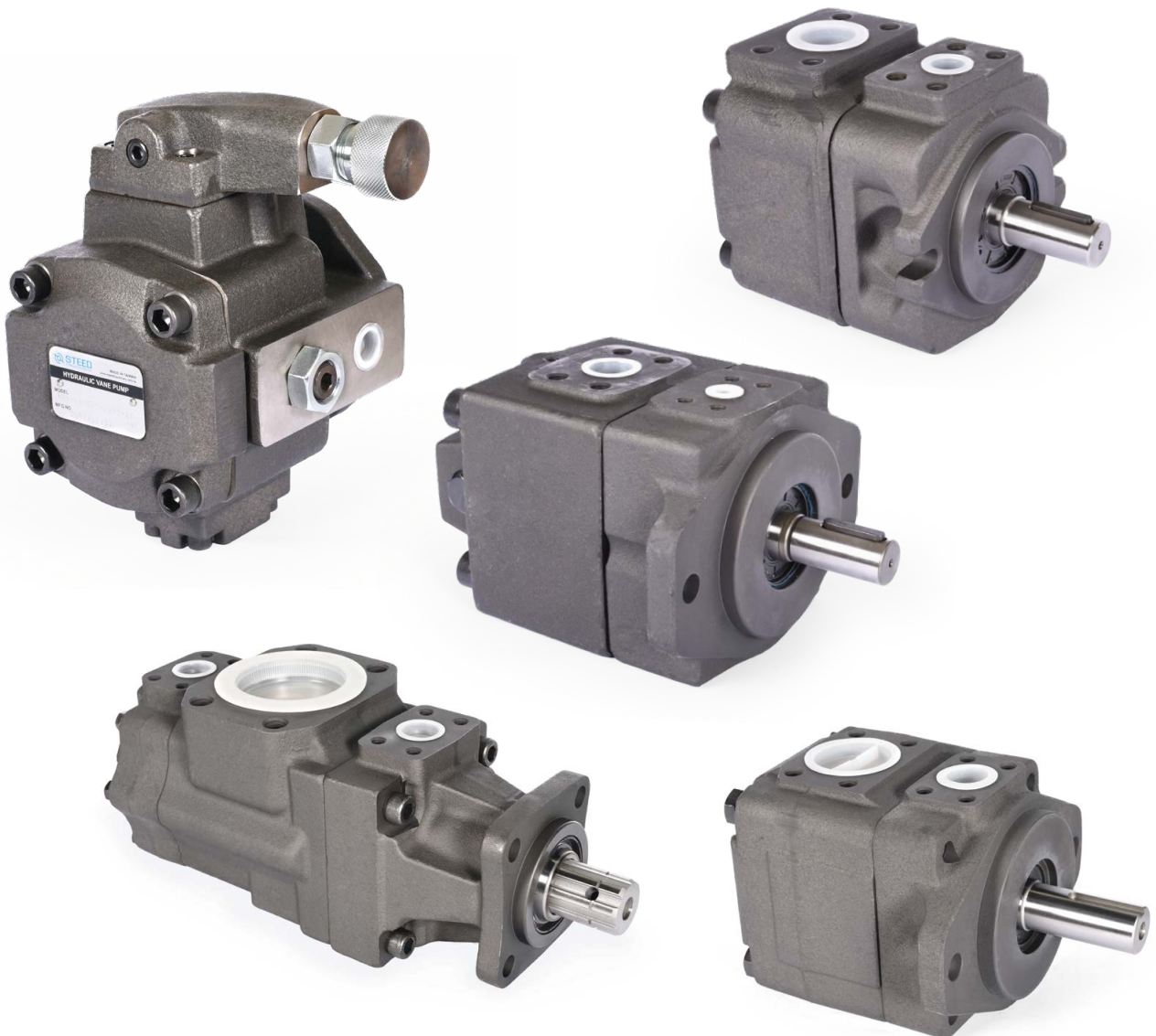


High Pressure Vane Pump

255bar Variable Displacement Vane Pump

450bar Fixed Displacement Vane Pump

Fixed Displacement Vane Pump



255bar Variable Displacement Vane Pump

KPV-16	04
KPV-25	12

450bar Fixed Displacement Vane Pump

HVQ	18
DVQ	20

Fixed Displacement Vane Pump > Single Pump

ST6C, ST6CM	24
ST6D, ST6DM	26
ST6E, ST6EM	28
ST6GC	30
ST7B, ST7BS	32
ST7DSW, ST7DSW2	34
ST7DXW	36

Fixed Displacement Vane Pump > Double Pump

ST6CC	38
ST6DC	40
ST6EC	42
ST6GCC	44
ST7QCC	46
ST7EE, ST7EES	48

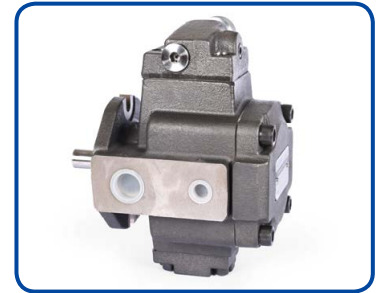
Fixed Displacement Vane Pump > Triple Pump

ST6DCC	50
ST6DCCS	53
ST6EDCS	55

Piping Diameter - Fluid Transmission - Flow Volume Drawing

.....	58
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KPV-16

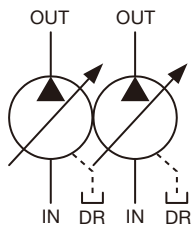


SYMBOLS

KPV (single vane pump)



KPVV (double vane pump)



ORDER CODES

KPV - 16 - F - 1 - A 12 - 01 - 01

1 2 3 4 5 6 7 8

KPVV - 16 - 16 - F - 2 - 2 - A 12 - 01 - 01

1 2 2 3 4 4 5 6 7 8

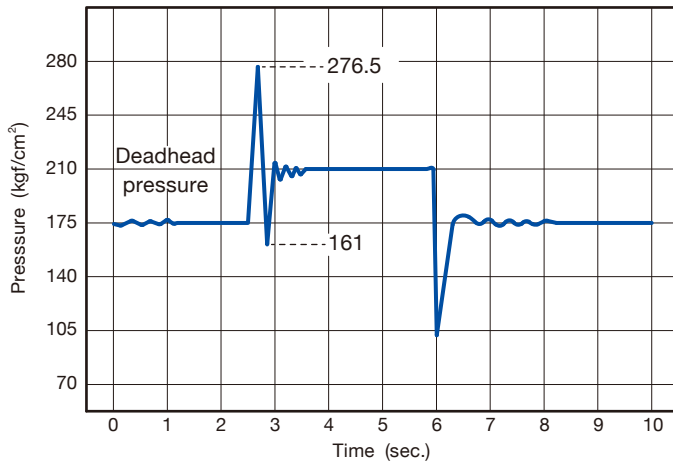
1 ▶	Model Name	KPV	single vane pump
		KPVV	double vane pump
2 ▶	Displacement	8, 12, 16, 20, 23	
3 ▶	Pressure Adj. Knob	F	
4 ▶	Pressure Range	1	15.3 ~ 142.8 kgf/cm ²
		2	20.4 ~ 214.2 kgf/cm ²
		3	25.5 ~ 255 kgf/cm ²
5 ▶	Flange Mounting Type	A	SAE A, Ø82.55
6 ▶	Rotation Speed	12	1200 r.p.m.
		15	1500 r.p.m.
		18	1800 r.p.m.
7 ▶	Shaft Type	01	Ø19.05
		02	SAE A, 9 tooth spline 16/32DP
8 ▶	Thread	01	S= RC 3/4, P= RC 1/2, DR= RC 3/8
		02	S= #16 SAE, P= #12 SAE, DR= #8 SAE

MODEL SPEC.

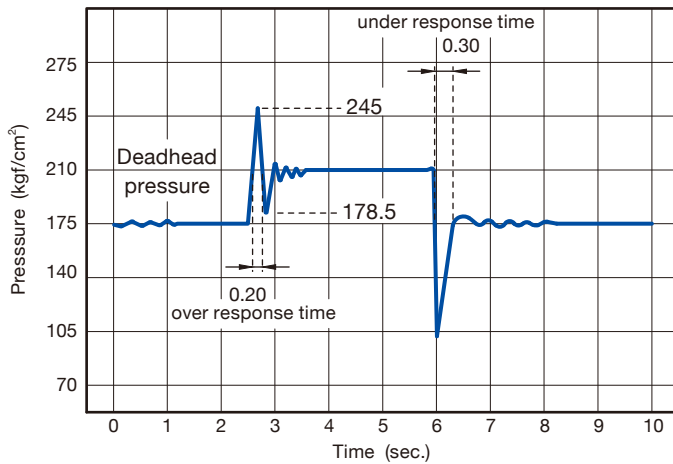
Model	Accurate Displacement Capacity (cc/rev)	Operational Pressure		Speed (r.p.m.)	No-load Discharge Rate (l/min)		Weight (kg)
		Open Loop Circuit	Close Loop Circuit		50Hz	60Hz	
KPV-8	8	Min. 15.3 kgf/cm ² 250 kgf/cm ² , 8sec Max. 255 kgf/cm ²	210 kgf/cm ² , continue	12: 1200 15: 1500 18: 1800	12	14.4	KPV: 16.6 KPVV: 33.2
KPV-12	12				18	21.6	
KPV-16	16				24	28.8	
KPV-20	20				30	36	
KPV-23	23				34.5	41.4	

PERFORMANCE CURVES

► KPV-16 Reaction Characteristics Shock Clipper Function



KPV-16 single stage compensator, plot with shock clipper **inactive**.
 Response overshoot : 66.5 kgf/cm²
 Response undershoot : 49.2 kgf/cm²



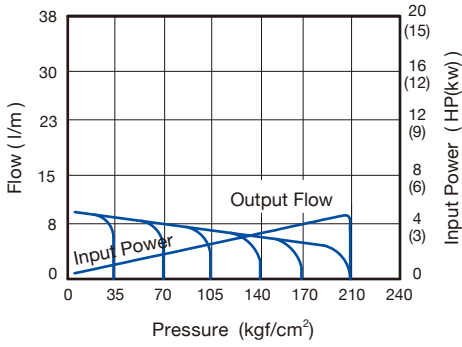
KPV-16 single stage compensator, plot with shock clipper **active**.
 Response overshoot : 35 kgf/cm²
 Response undershoot : 31.5 kgf/cm²
 Response time : 20~30 ms

► Case Drain Flow

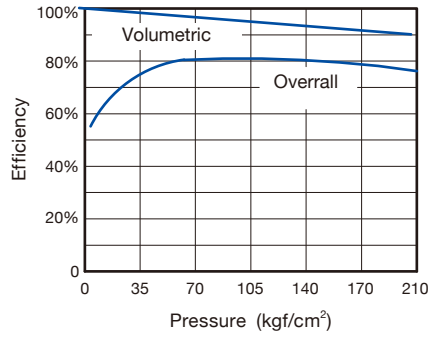
Spec.	Pressure (kgf/cm ²)	Flow (l/min)
Case drain flow while compensating @1800r.p.m. KPV-8, 12, 16, 20, 23	71.4	1.5 ~ 2.3
	142.8	2.5 ~ 3.8
	214.2	3.5 ~ 4.8

► KPV-8

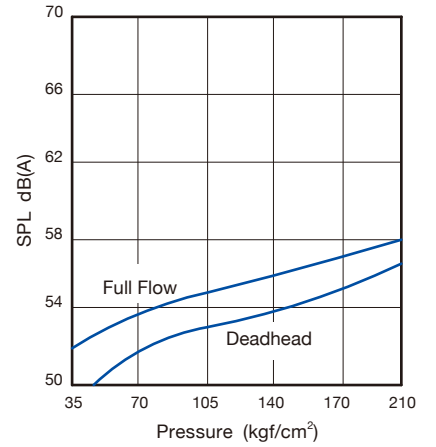
Output Flow & Power @1200r.p.m.



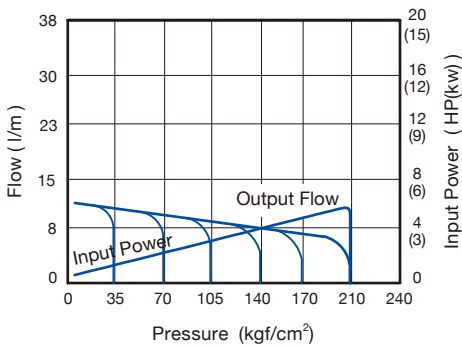
Efficiency @1200r.p.m.



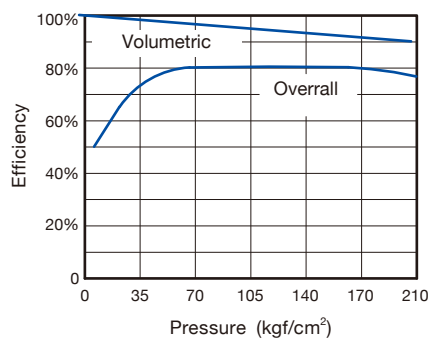
Sound Pressure @1200r.p.m.



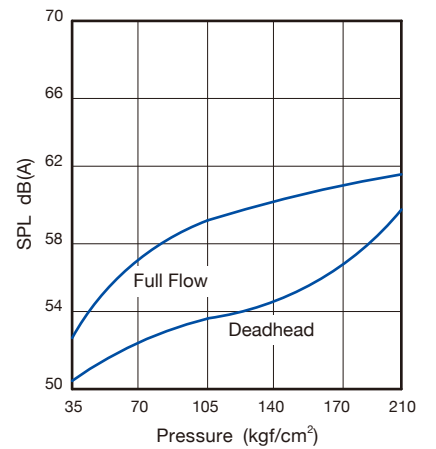
Output Flow & Power @1500r.p.m.



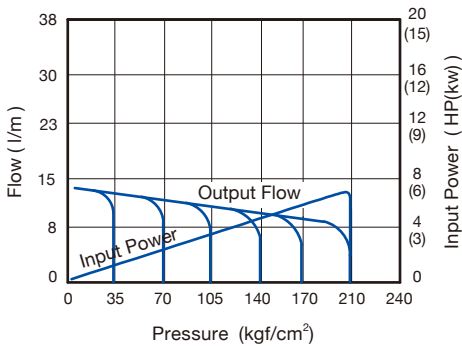
Efficiency @1500r.p.m.



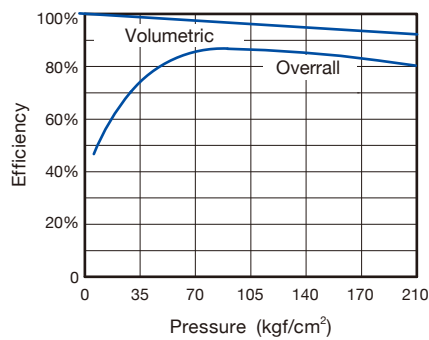
Sound Pressure @1500r.p.m.



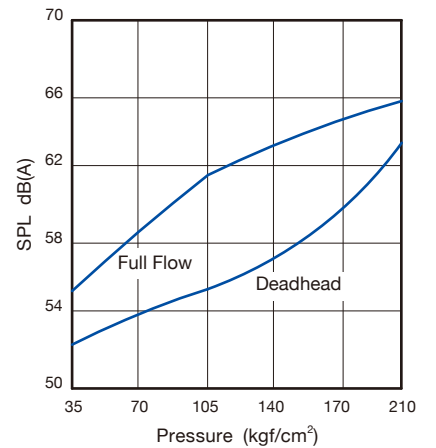
Output Flow & Power @1800r.p.m.



Efficiency @1800r.p.m.

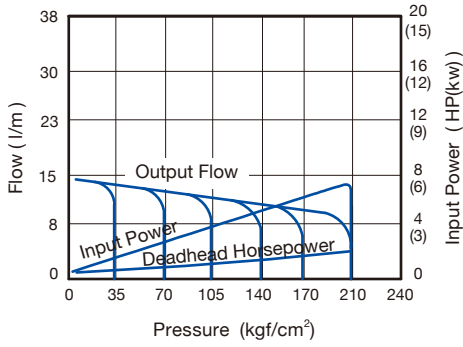


Sound Pressure @1800r.p.m.

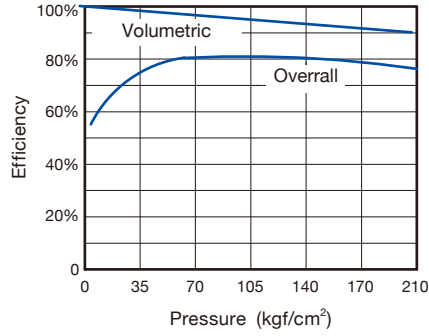


► KPV-12

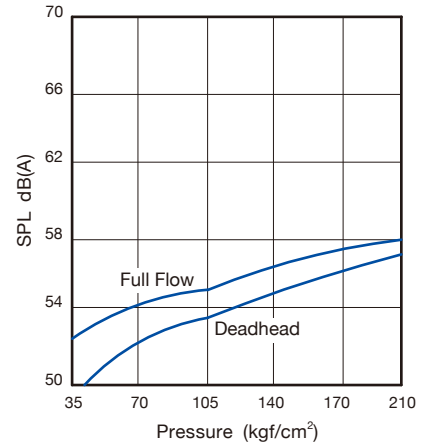
Output Flow & Power @1200r.p.m.



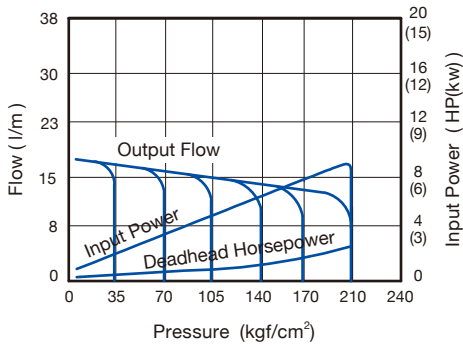
Efficiency @1200r.p.m.



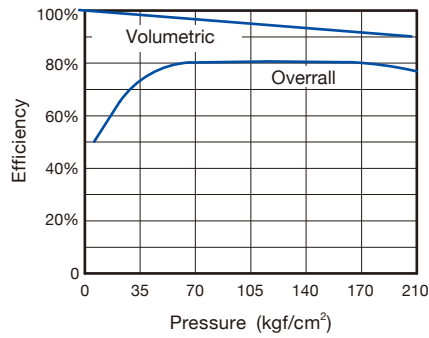
Sound Pressure @1200r.p.m.



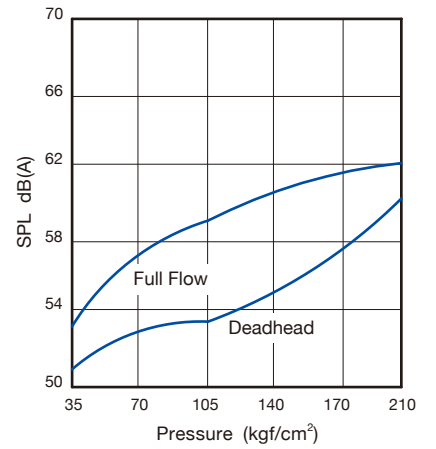
Output Flow & Power @1500r.p.m.



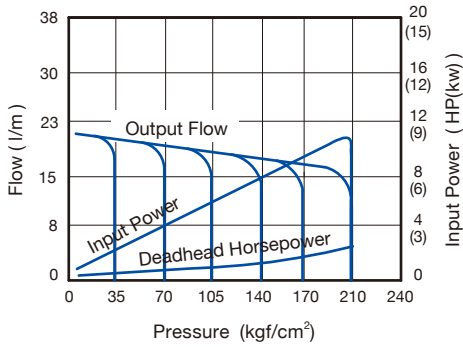
Efficiency @1500r.p.m.



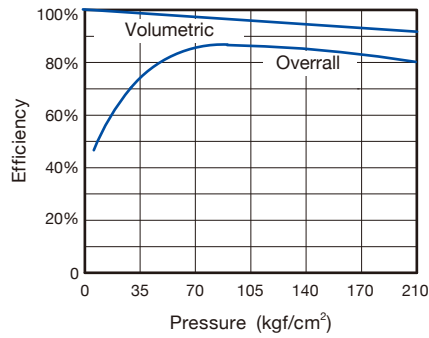
Sound Pressure @1500r.p.m.



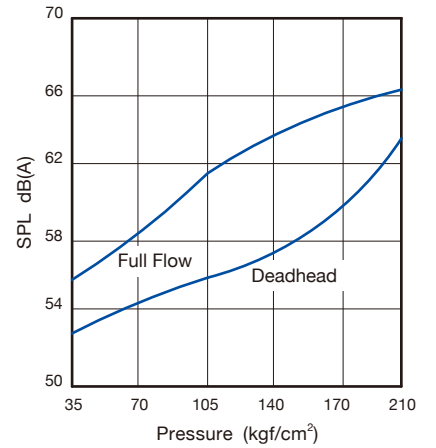
Output Flow & Power @1800r.p.m.



Efficiency @1800r.p.m.

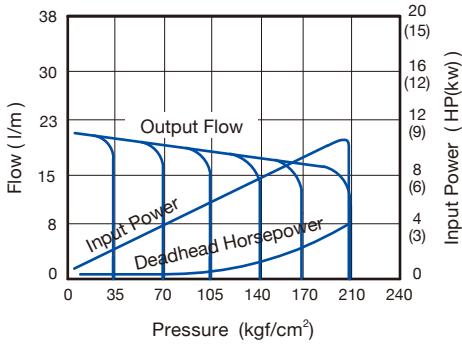


Sound Pressure @1800r.p.m.

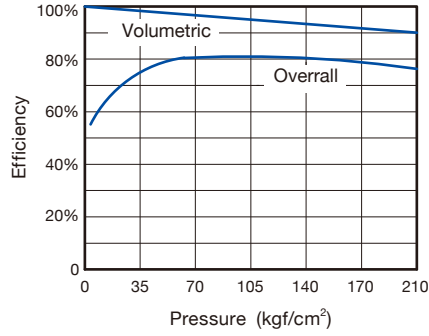


► KPV-16

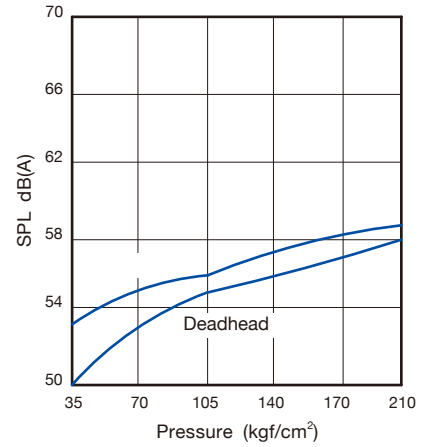
Output Flow & Power @1200r.p.m.



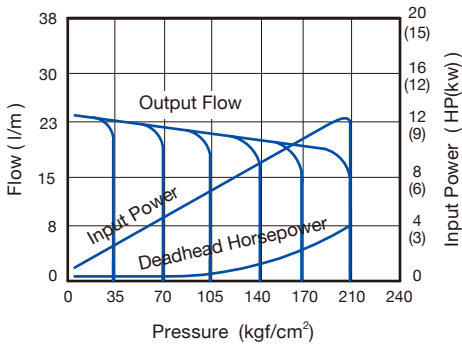
Efficiency @1200r.p.m.



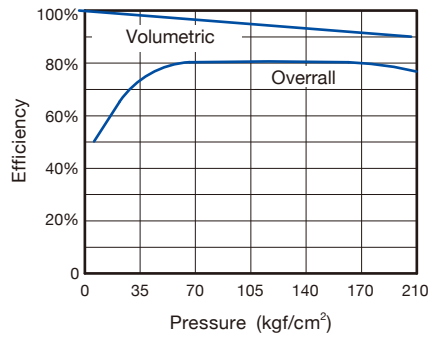
Sound Pressure @1200r.p.m.



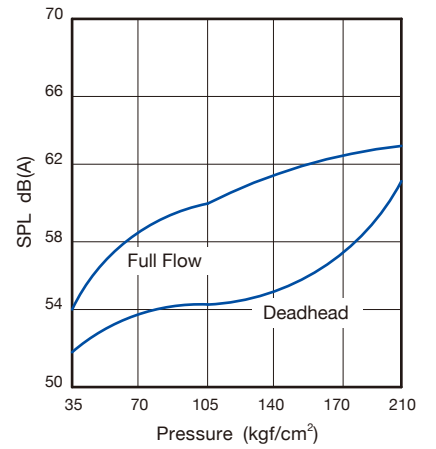
Output Flow & Power @1500r.p.m.



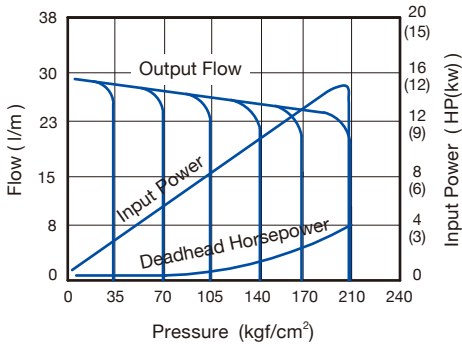
Efficiency @1500r.p.m.



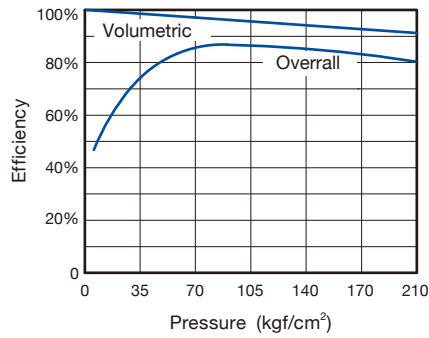
Sound Pressure @1500r.p.m.



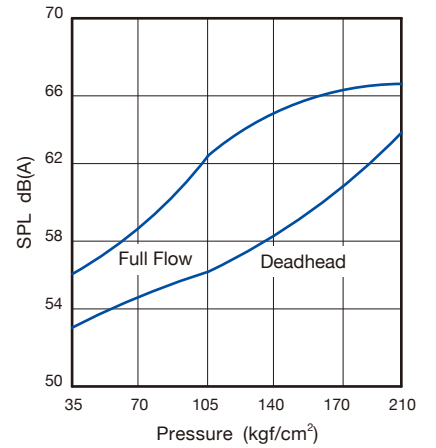
Output Flow & Power @1800r.p.m.



Efficiency @1800r.p.m.

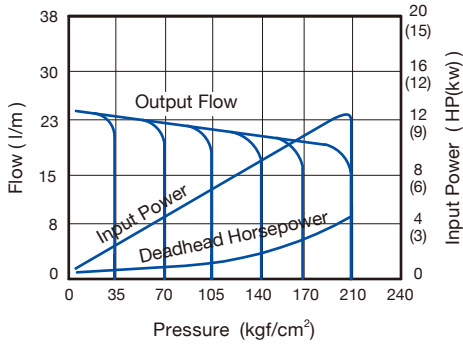


Sound Pressure @1800r.p.m.

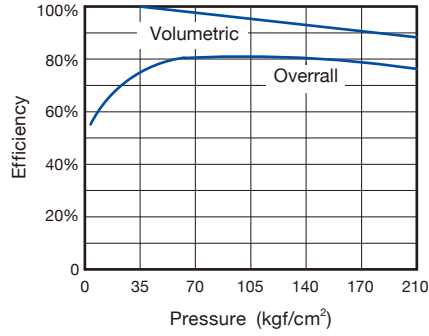


► KPV-20

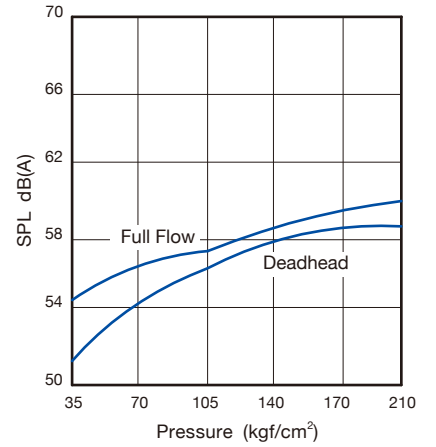
Output Flow & Power @1200r.p.m.



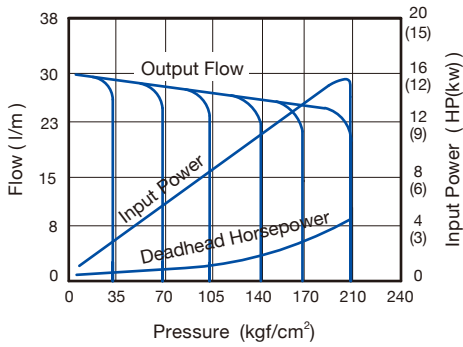
Efficiency @1200r.p.m.



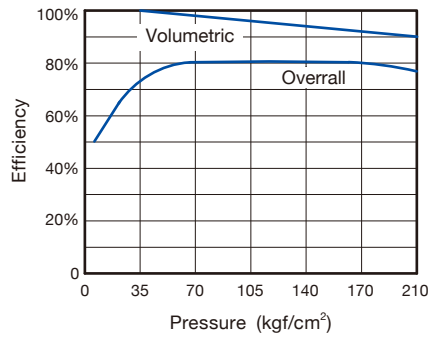
Sound Pressure @1200r.p.m.



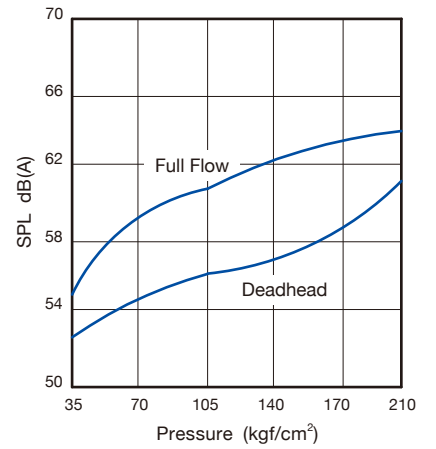
Output Flow & Power @1500r.p.m.



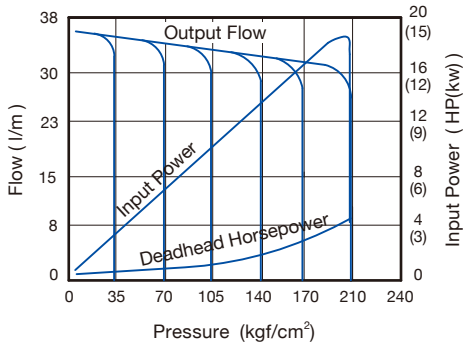
Efficiency @1500r.p.m.



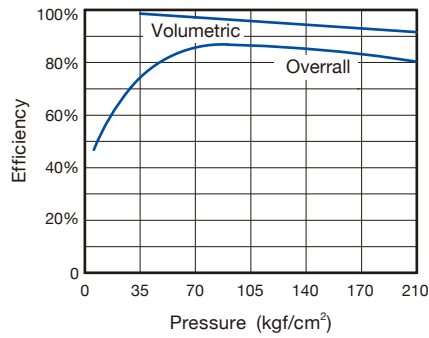
Sound Pressure @1500r.p.m.



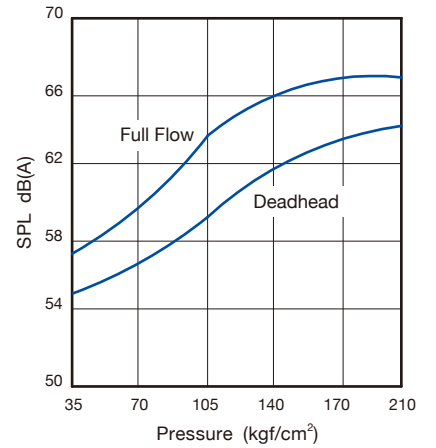
Output Flow & Power @1800r.p.m.



Efficiency @1800r.p.m.

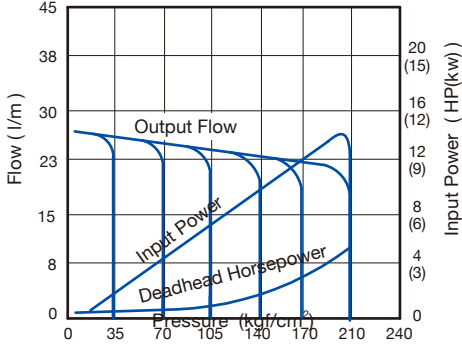


Sound Pressure @1800r.p.m.

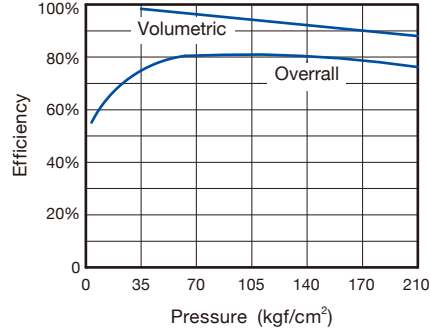


► KPV-23

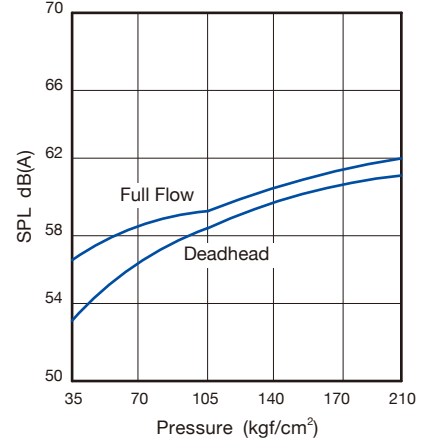
Output Flow & Power @1200r.p.m.



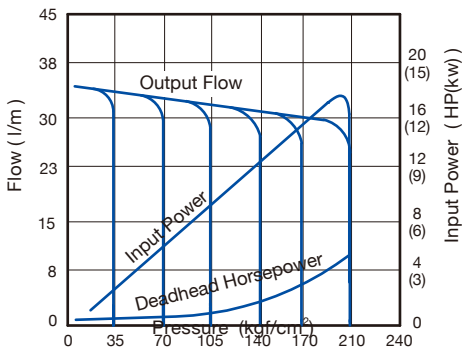
Efficiency @1200r.p.m.



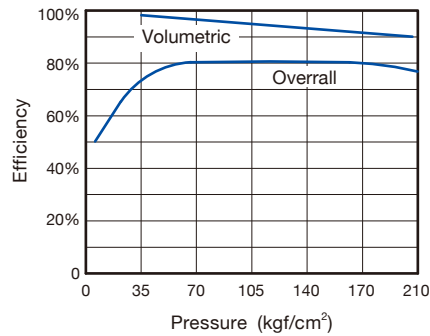
Sound Pressure @1200r.p.m.



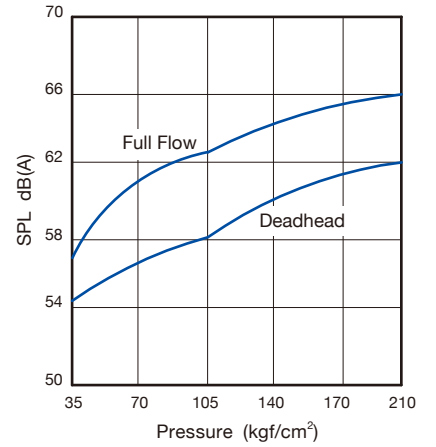
Output Flow & Power @1500r.p.m.



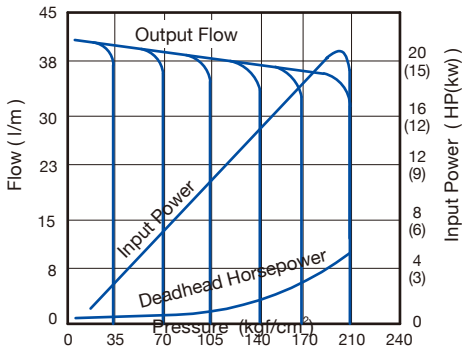
Efficiency @1500r.p.m.



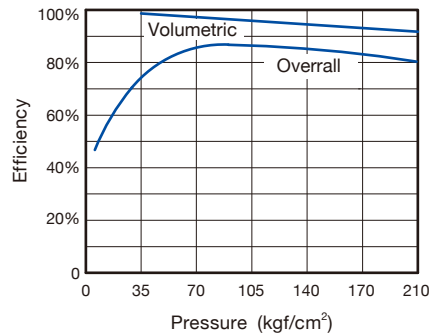
Sound Pressure @1500r.p.m.



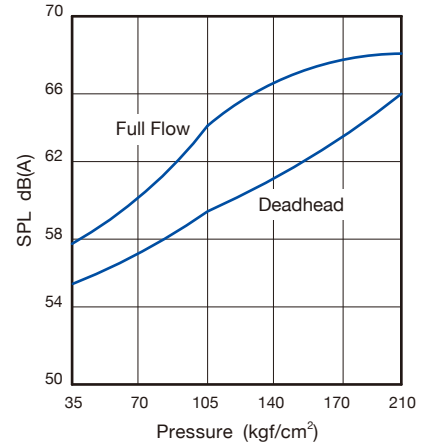
Output Flow & Power @1800r.p.m.



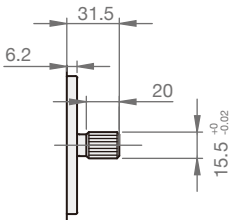
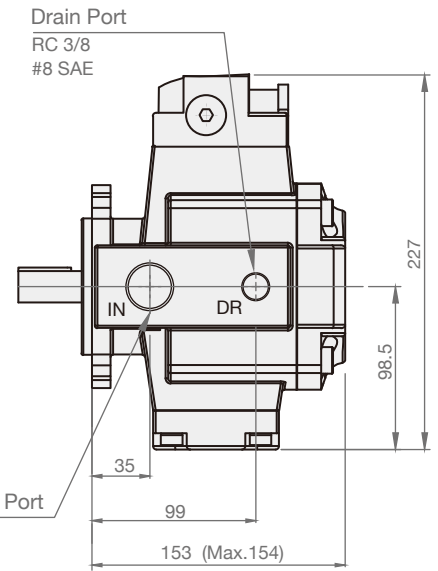
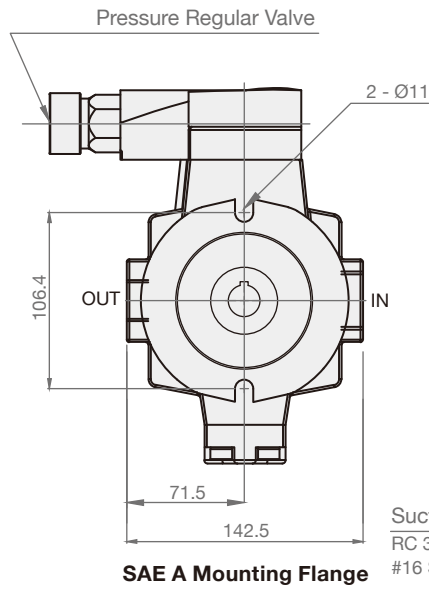
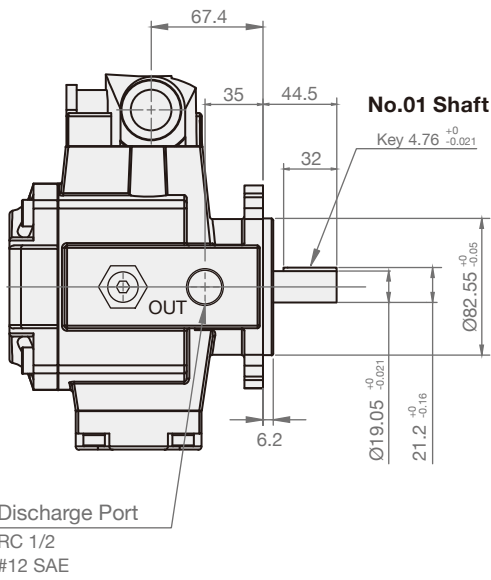
Efficiency @1800r.p.m.



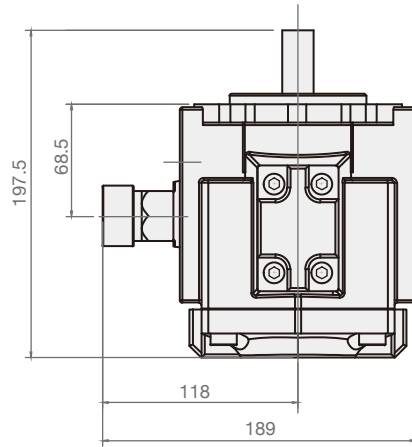
Sound Pressure @1800r.p.m.



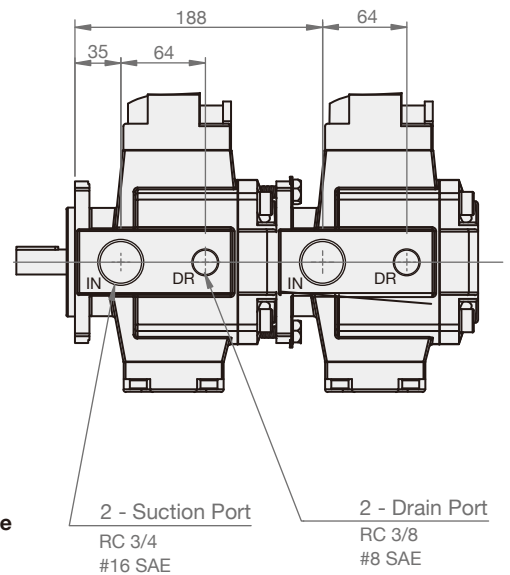
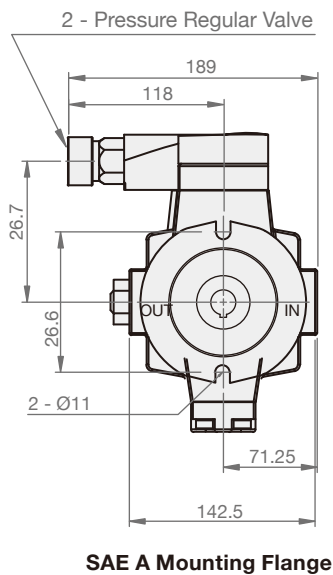
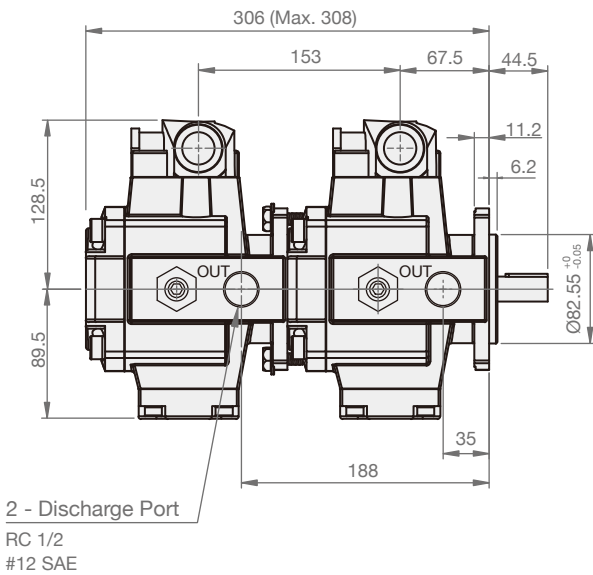
► **KPV-8, 12, 16, 20, 23**



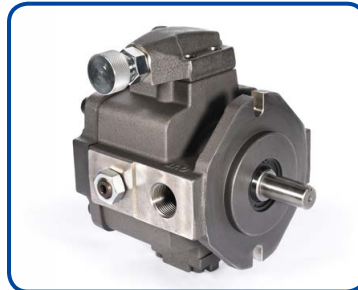
No.02 Shaft
Diametral pitch : 16/32
Pressure angle : 30°
No. of teeth : 9
Available on "A" cover only



► **KPVV-8, 12, 16, 20, 23**

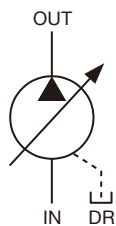


KPV-25

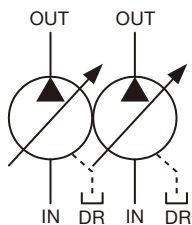


SYMBOLS

KPV (single vane pump)



KPVV (double vane pump)



ORDER CODES

KPV - **25** - **F** - **1** - **B** **12** - **01** - **01**

1 2 3 4 5 6 7 8

KPVV - **25** - **16** - **F** - **2** - **2** - **B** **12** - **01** - **01**

1 2 2 3 4 4 5 6 7 8

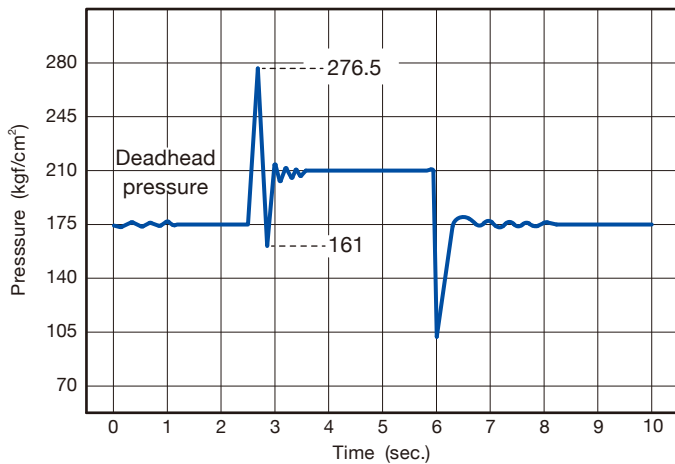
1 ▶	Model Name	KPV	single vane pump
		KPVV	double vane pump
2 ▶	Displacement (P1)	25, 32, 36	
	Displacement (P2)	8, 12, 16, 20, 23	
3 ▶	Pressure Adj. Knob	F	
4 ▶	Pressure Range	1	15.3 ~ 142.8 kgf/cm ²
		2	20.4 ~ 214.2 kgf/cm ²
		3	25.5 ~ 255 kgf/cm ²
5 ▶	Flange Mounting Type	B	SAE B, Ø101.6
6 ▶	Rotation Speed	12	1200 r.p.m.
		15	1500 r.p.m.
		18	1800 r.p.m.
7 ▶	Shaft Type	01	Ø22.23
		02	SAE B, 13 tooth spline 16/32DP
8 ▶	Thread	01	P1: S= RC 1 1/4, P= RC 1, DR= RC 3/8 P2: S= RC 3/4, P= RC 1/2, DR= RC 3/8
		02	P1: S= #24 SAE, P= #16 SAE, DR= #8 SAE P2: S= #16 SAE, P= #12 SAE, DR= #8 SAE

MODEL SPEC.

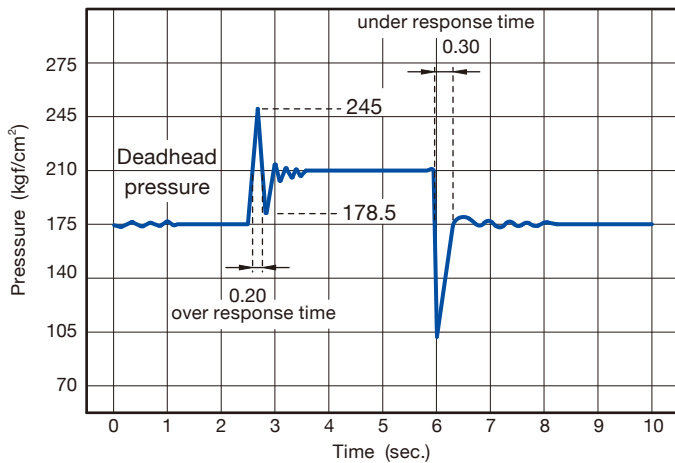
Model	Accurate Displacement Capacity (cc/rev)	Operational Pressure		Speed (r.p.m.)	No-load Discharge Rate (l/min)		Weight (kg)
		Open Loop Circuit	Close Loop Circuit		50Hz	60Hz	
KPV-25	25	Min. 15.3 kgf/cm ² 250 kgf/cm ² , 8sec Max. 255 kgf/cm ²	210 kgf/cm ² , continue	12: 1200 15: 1500 18: 1800	37.5	45	KPV: 28 KPVV: 44
KPV-32	32				48	57.6	
KPV-36	36				54	64.8	

PERFORMANCE CURVES

► KPV-25 Reaction Characteristics Shock Clipper Function



KPV-25 single stage compensator,
plot with shock clipper **inactive**.
Response overshoot : 66.5 kgf/cm²
Response undershoot : 49.2 kgf/cm²



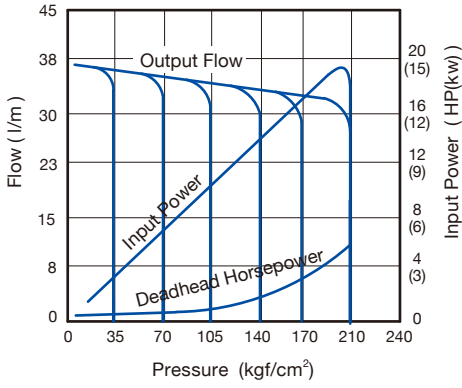
KPV-25 single stage compensator,
plot with shock clipper **active**.
Response overshoot : 35 kgf/cm²
Response undershoot : 31.5 kgf/cm²
Response time : 20~30 ms

► Case Drain Flow

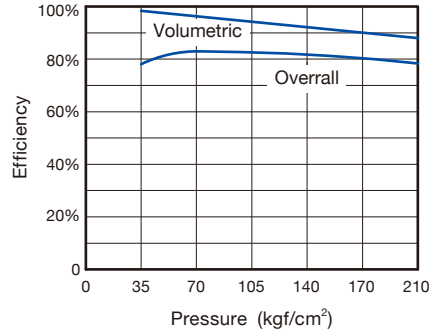
Spec.	Pressure (kgf/cm ²)	Flow (l/min)
Case drain flow while compensating @1800r.p.m. KPV-25, 32, 36	71.4	2.0 ~ 3.5
	142.8	4.0 ~ 5.0
	214.2	5.0 ~ 6.0

► KPV-25

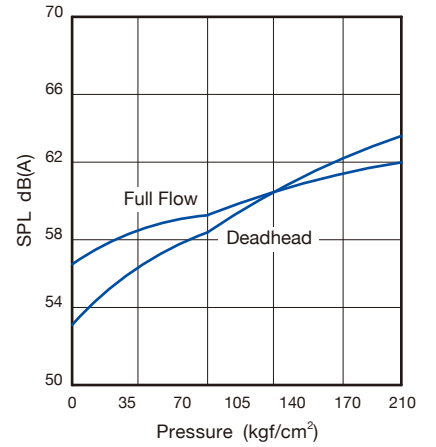
Output Flow & Power @1200r.p.m.



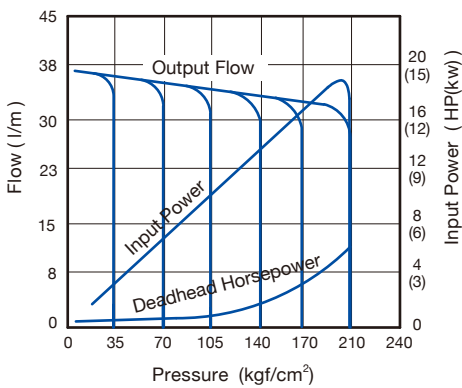
Efficiency @1200r.p.m.



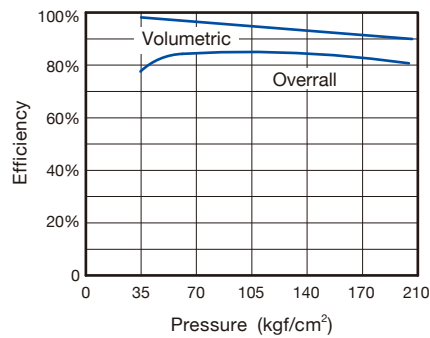
Sound Pressure @1200r.p.m.



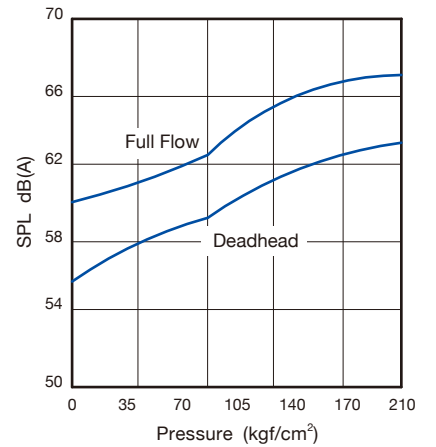
Output Flow & Power @1500r.p.m.



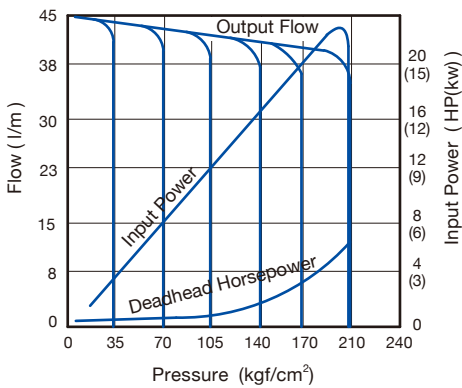
Efficiency @1500r.p.m.



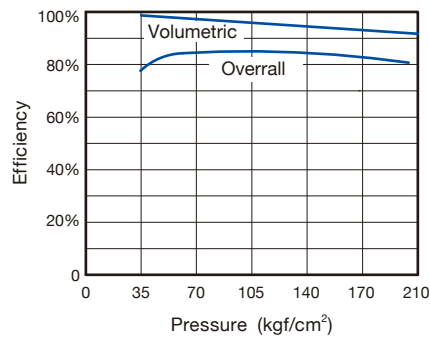
Sound Pressure @1500r.p.m.



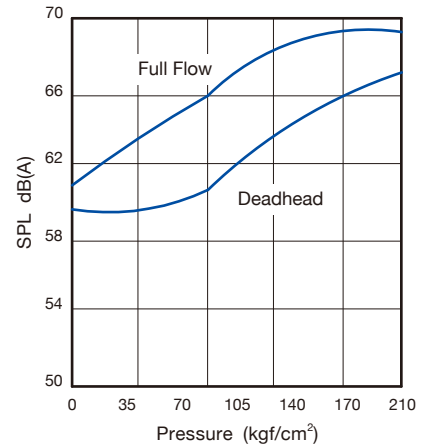
Output Flow & Power @1800r.p.m.



Efficiency @1800r.p.m.

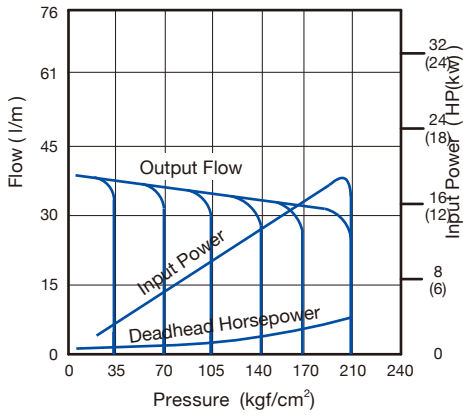


Sound Pressure @1800r.p.m.

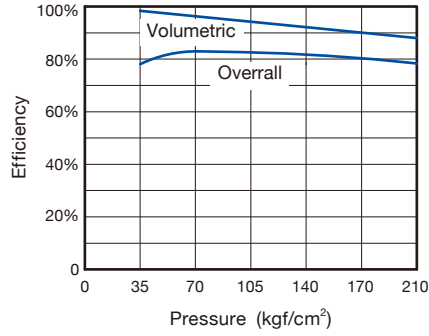


► KPV-32

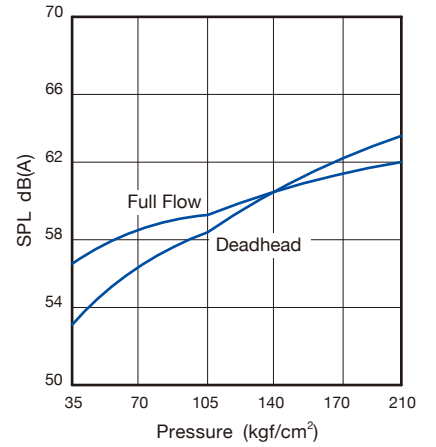
Output Flow & Power @1200r.p.m.



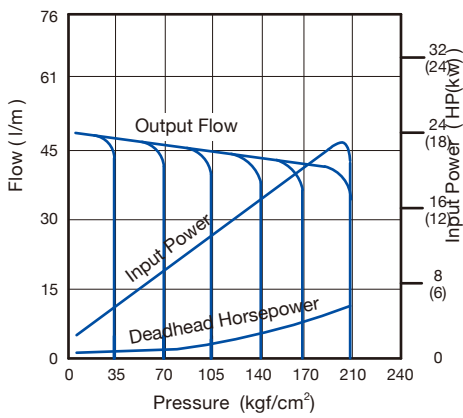
Efficiency @1200r.p.m.



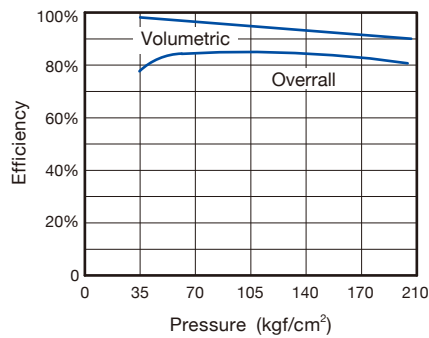
Sound Pressure @1200r.p.m.



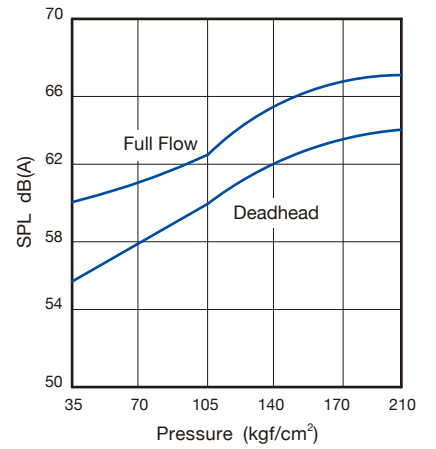
Output Flow & Power @1500r.p.m.



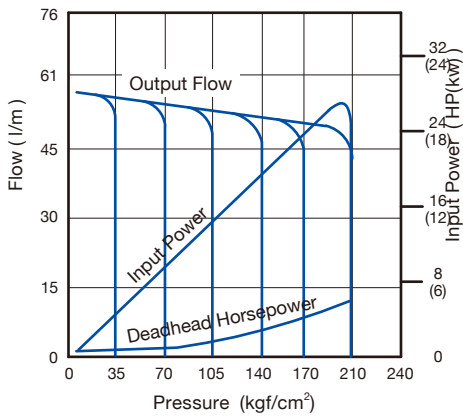
Efficiency @1500r.p.m.



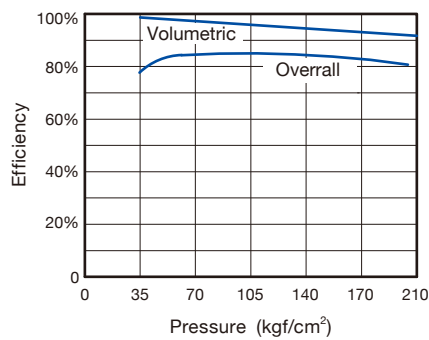
Sound Pressure @1500r.p.m.



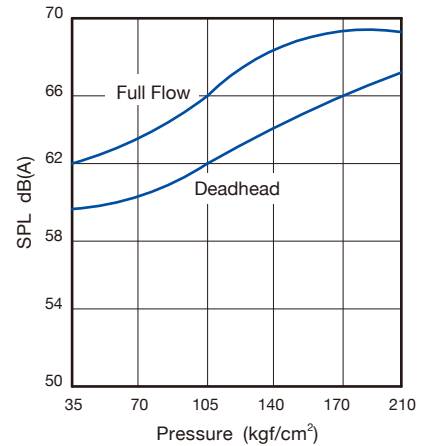
Output Flow & Power @1800r.p.m.



Efficiency @1800r.p.m.

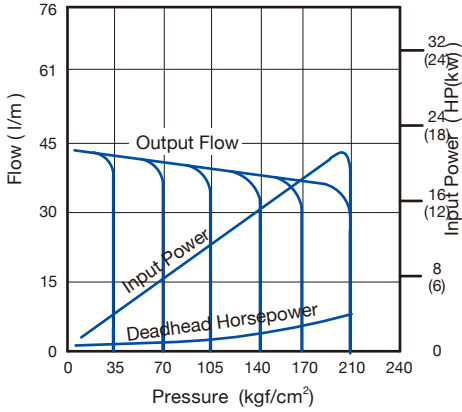


Sound Pressure @1800r.p.m.

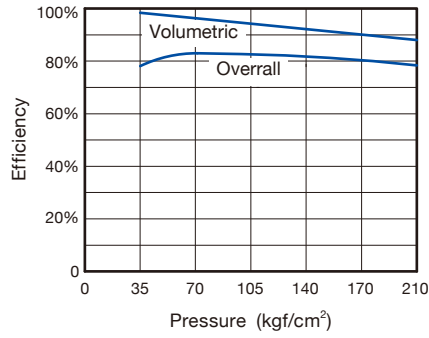


► KPV-36

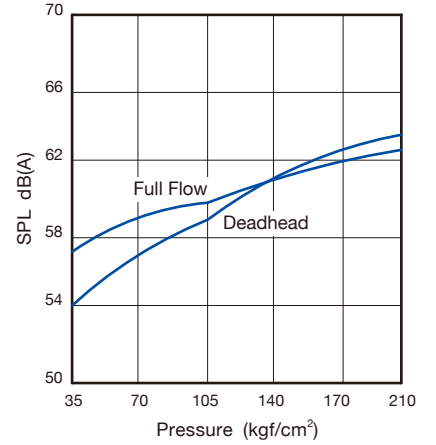
Output Flow & Power @1200r.p.m.



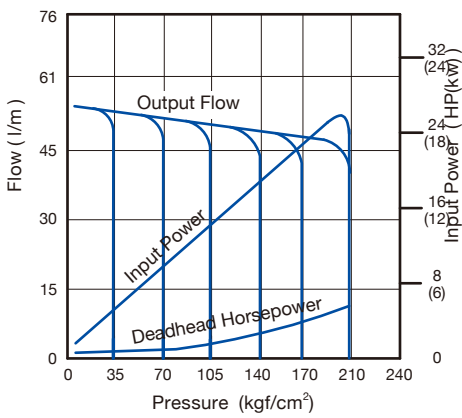
Efficiency @1200r.p.m.



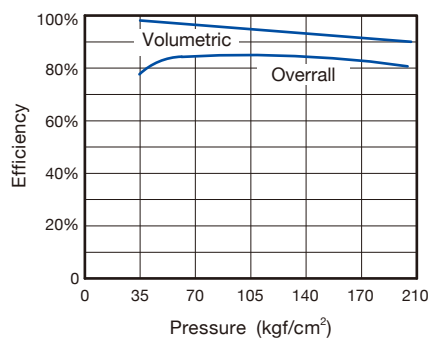
Sound Pressure @1200r.p.m.



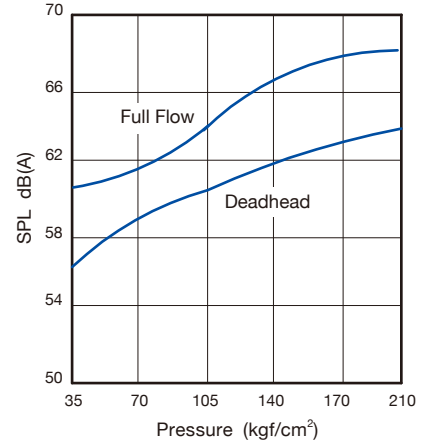
Output Flow & Power @1500r.p.m.



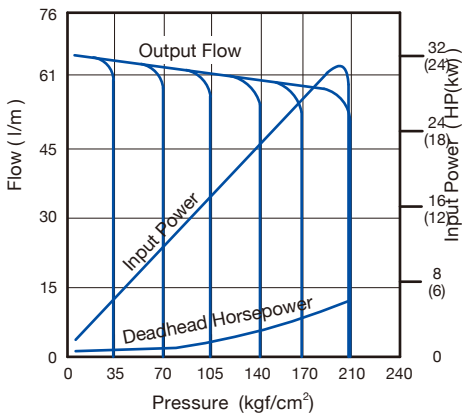
Efficiency @1500r.p.m.



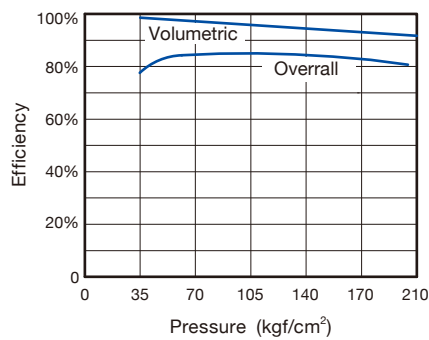
Sound Pressure @1500r.p.m.



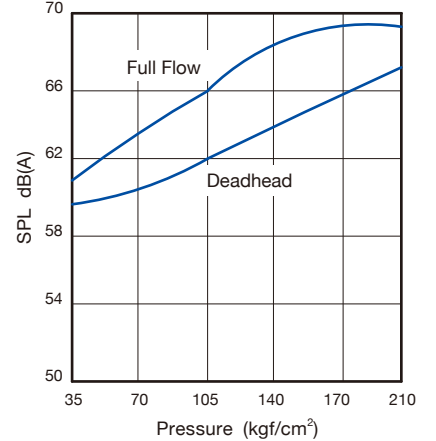
Output Flow & Power @1800r.p.m.



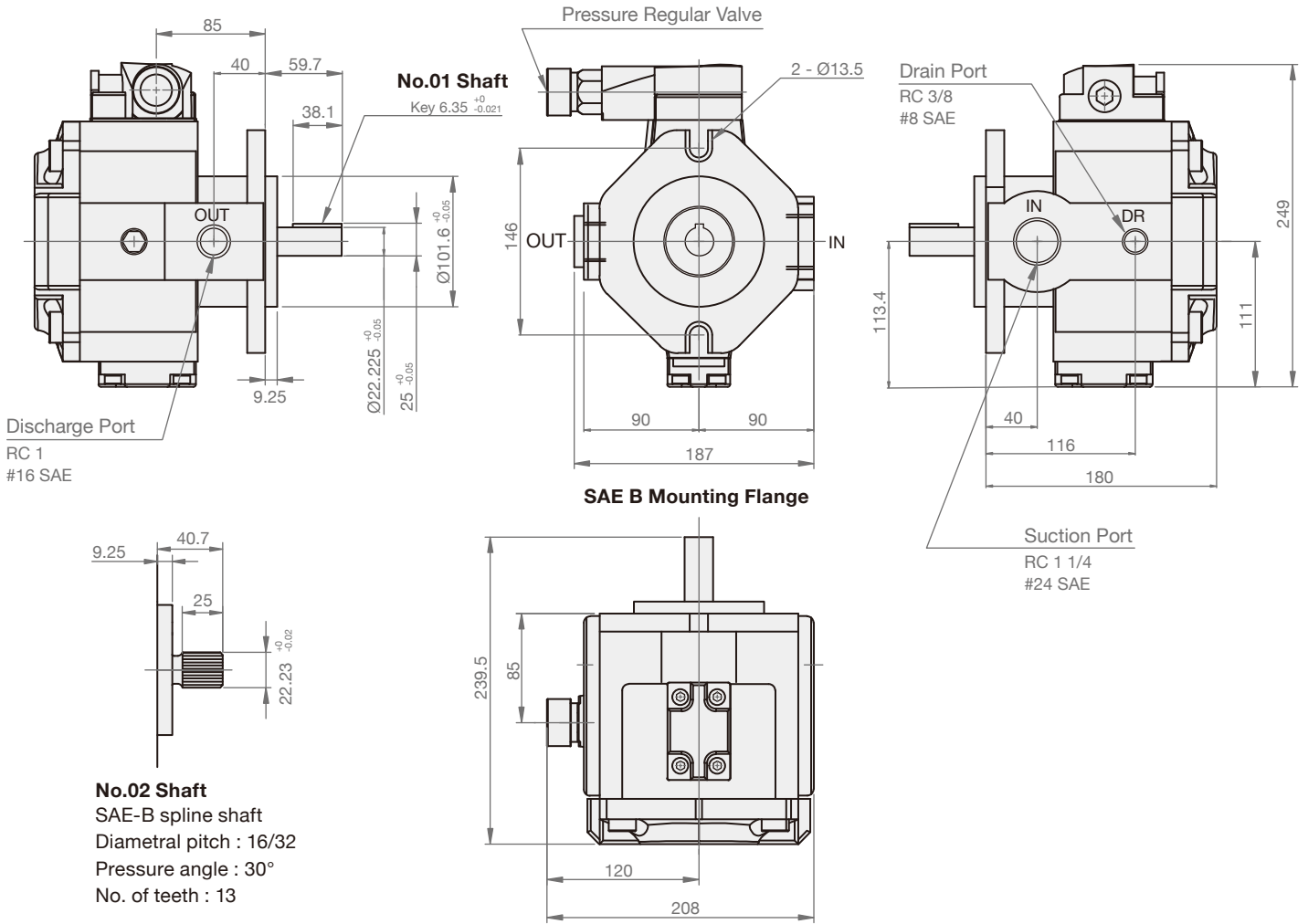
Efficiency @1800r.p.m.



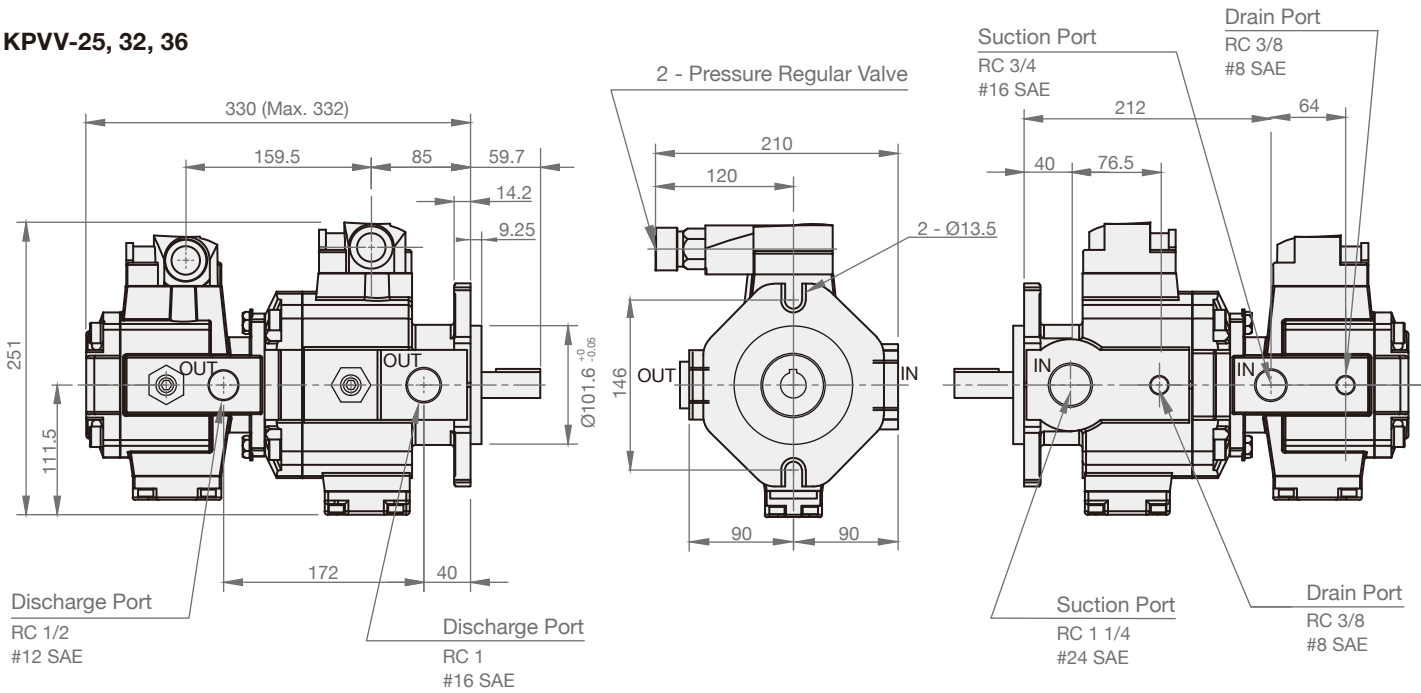
Sound Pressure @1800r.p.m.



► **KPV-25, 32, 36**



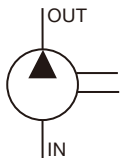
► **KPVV-25, 32, 36**



HVQ



SYMBOLS



ORDER CODES

HVQ20 - 19 - F - R - A A - 01 - 01

1
2
3
4
5
6
7
8

1	Model Name	HVQ20	
2	Displacement	4, 6, 8, 14, 17, 19, 23	
3	Mounting Type	F	flange type
		L	foot type
4	Rotation Direction	R	clockwise
		L	counter - clockwise
5	Discharge Position	A	upward (normal)
		B	downward
		R	on right hand
		L	on left hand
6	Suction Position	A	upward (normal)
		B	downward
		R	on right hand
		L	on left hand
7	Shaft Type	01	normal
8	Output Dimensional	01	normal

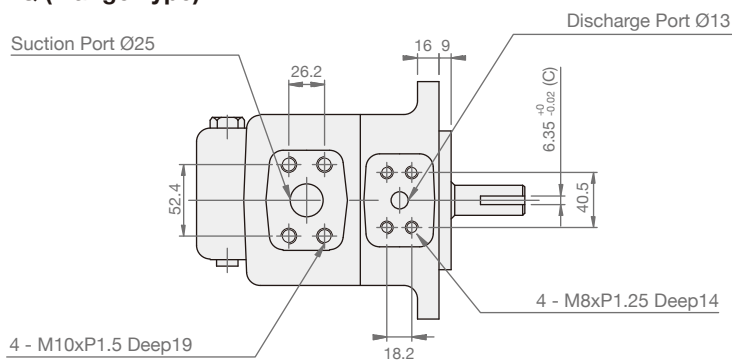
MODEL SPEC.

Model	Max. Pressure (kg/cm ²)				Max. Speed (r.p.m.)				Weight (kg)
	Using Antiwar Oil or Phosphate Ester Fluid		Using Water Glycol Fluid		Using Antiwar Oil or Phosphate Ester Fluid		Using Water Glycol Fluid	Using Water-in-oil Emulsions	
	Cont.	Peak.	Cont.	Peak.	Max.	Min.			
HVQ-20-4	408	450	255	280	3000	800	1800	1800	18.1
HVQ-20-6					2500	800			
HVQ-20-8					2500	800			
HVQ-20-11					2300	800			
HVQ-20-14					1800	800			
HVQ-20-17	357	380	255	280	1800	800	1800	1800	18.1
HVQ-20-19					1800	800			
HVQ-20-23					1800	800			

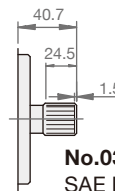
DIMENSION

(UNIT : mm)

► HVQ (Flange Type)



Model	A	B	C
No.01-Shaft	Ø22.23	25.01	6.35
No.03-Shaft	Spline Shaft		

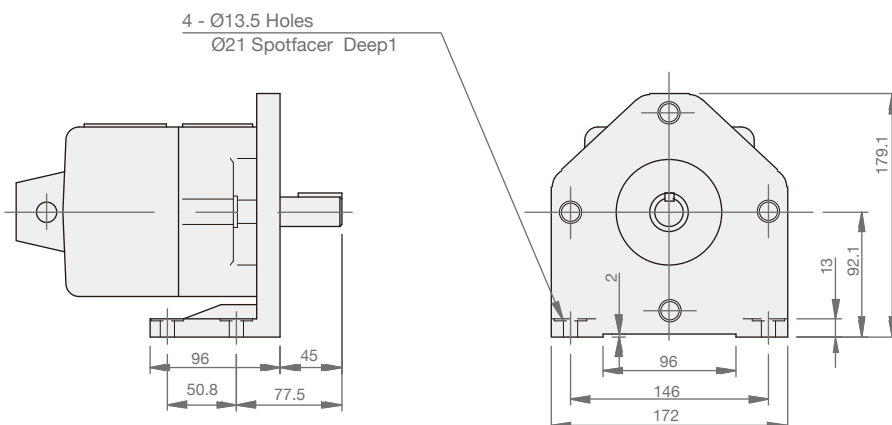


No.03 Shaft

SAE B-B spline shaft
class 1-J498 b
16/32 d.p. -13 teeth
30° pressure angle flat root side fit

2 - Ø13.5 Holes
Ø21 Spotfacer Deep1

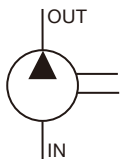
► HVQ (Foot Type)



DVQ



SYMBOLS



ORDER CODES

DVQ20 - 26 - F - R - A A - 01

①
②
③
④
⑤
⑥
⑦

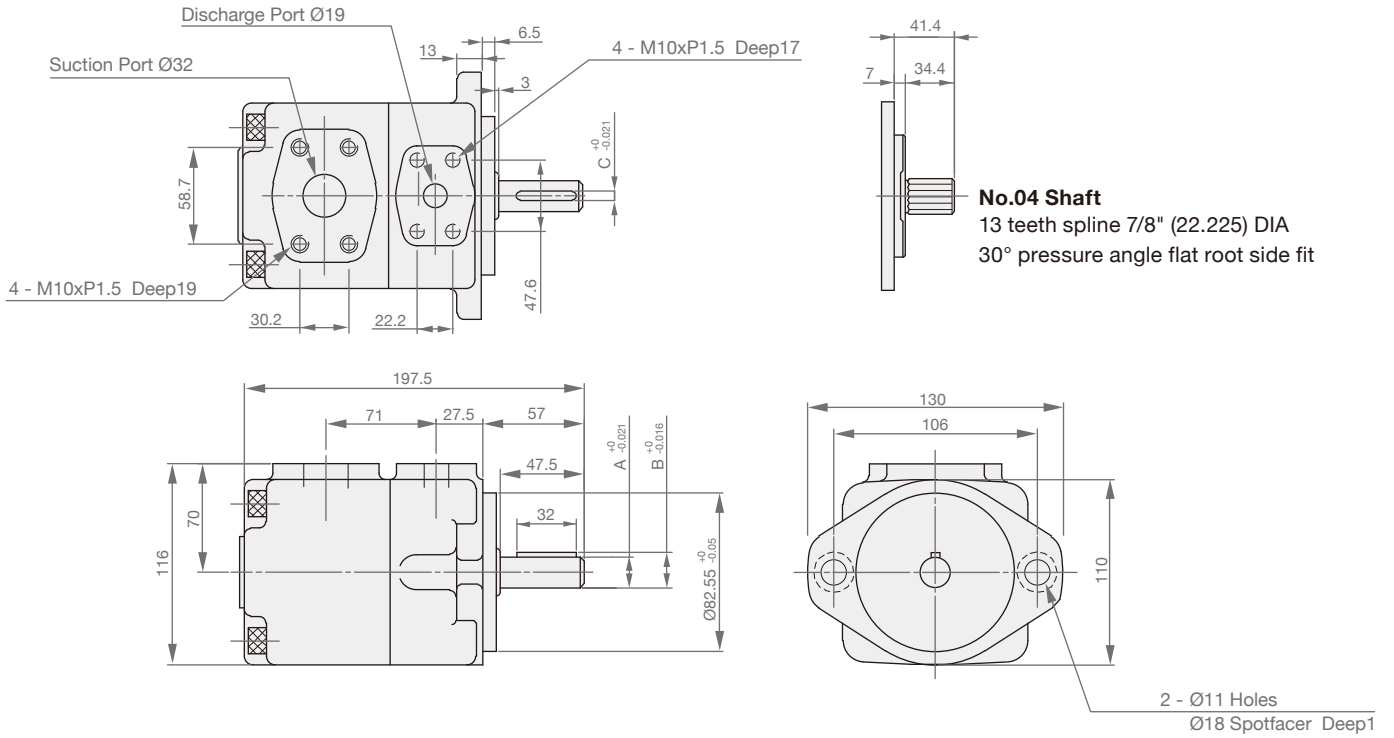
① ▶	Model Name	DVQ20, DVQ25	
② ▶	Displacement	(DVQ20) 6, 8, 11, 14, 17, 19, 23, 26, 32, 34, 38, 44 (DVQ25) 18, 22, 26, 32, 38, 43, 47, 52, 60, 65, 75	
③ ▶	Mounting Type	F	flange type
		L	foot type
④ ▶	Rotation Direction	R	clockwise
		L	counter - clockwise
⑤ ▶	Discharge Position	A	upward (normal)
		B	downward
		R	on right hand
		L	on left hand
⑥ ▶	Suction Position	A	upward (normal)
		B	downward
		R	on right hand
		L	on left hand
⑦ ▶	Shaft Type	01	normal

MODEL SPEC.

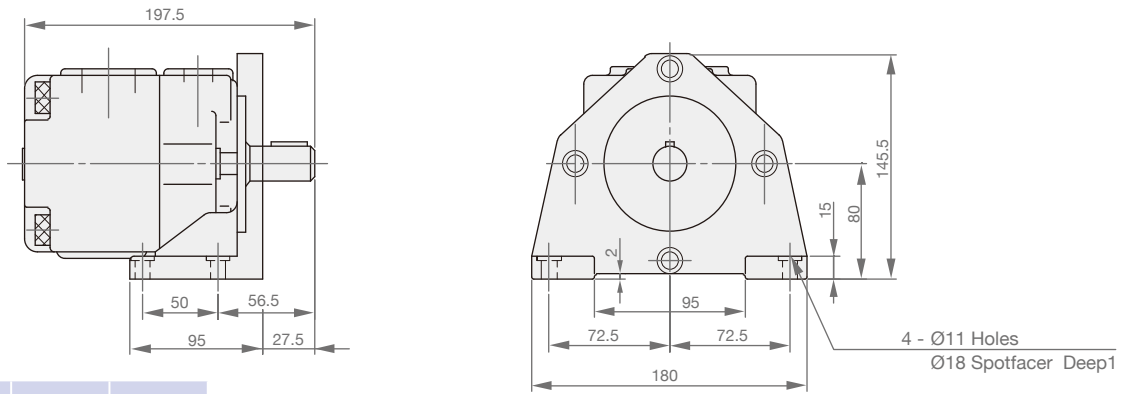
Model	Deliver Flow at No-load Pressure (l/min)				Speed (r.p.m.)		Max. Pressure (kgf/cm ²)		Weight (kg)	
	Speed (r.p.m.)									
	1000	1200	1500	1800	Max.	Min.	Cont.	Peak.	Flange Type	Foot Type
DVQ20-06	6.2	7.4	9.3	11.2	1800	800	210	260	12.5	15
DVQ20-08	8.1	9.7	12.1	14.6	1800	800	210	260		
DVQ20-11	11.2	13.4	13.4	20.1	1800	800	210	260		
DVQ20-14	14.3	17.1	21.5	25.7	1800	800	210	260		
DVQ20-17	17.1	20.5	25.6	30.7	1800	800	210	260		
DVQ20-19	19.2	23.0	28.8	34.5	1800	800	210	260		
DVQ20-23	23.3	27.9	34.9	41.9	1800	800	210	260		
DVQ20-26	26.1	31.3	39.1	46.9	1800	800	210	260		
DVQ20-32	32.1	38.3	47.6	-	1500	800	175	240		
DVQ20-34	34.1	40.8	50.4	-	1500	800	175	240		
DVQ20-38	38.1	45.9	-	-	1200	800	175	240		
DVQ20-44	44.1	52.9	-	-	1200	800	175	210		

Model	Deliver Flow at No-load Pressure (l/min)				Speed (r.p.m.)		Max. Pressure (kgf/cm ²)		Weight (kg)	
	Speed (r.p.m.)									
	1000	1200	1500	1800	Max.	Min.	Cont.	Peak.	Flange Type	Foot Type
DVQ25-18	18.1	21.7	27.2	32.6	1800	800	210	260	18	23
DVQ25-22	22.1	26.5	33.3	39.8	1800	800	210	260		
DVQ25-26	26.2	31.4	39.3	47.1	1800	800	210	260		
DVQ25-32	32.1	38.5	48.1	57.7	1800	800	210	260		
DVQ25-38	38.2	45.8	57.3	68.7	1800	800	210	260		
DVQ25-43	43.2	51.8	64.8	77.7	1800	800	210	260		
DVQ25-47	47.1	56.5	70.0	85.0	1800	800	210	260		
DVQ25-52	52.3	62.7	78.4	94.1	1800	800	210	260		
DVQ25-60	60.2	72.7	90.3	108.3	1800	800	210	260		
DVQ25-65	65.3	78.3	97.9	117.5	1800	800	210	230		
DVQ25-75	75.0	90.0	112.5	-	1500	800	210	230		

► DVQ-20 (Flange Type)

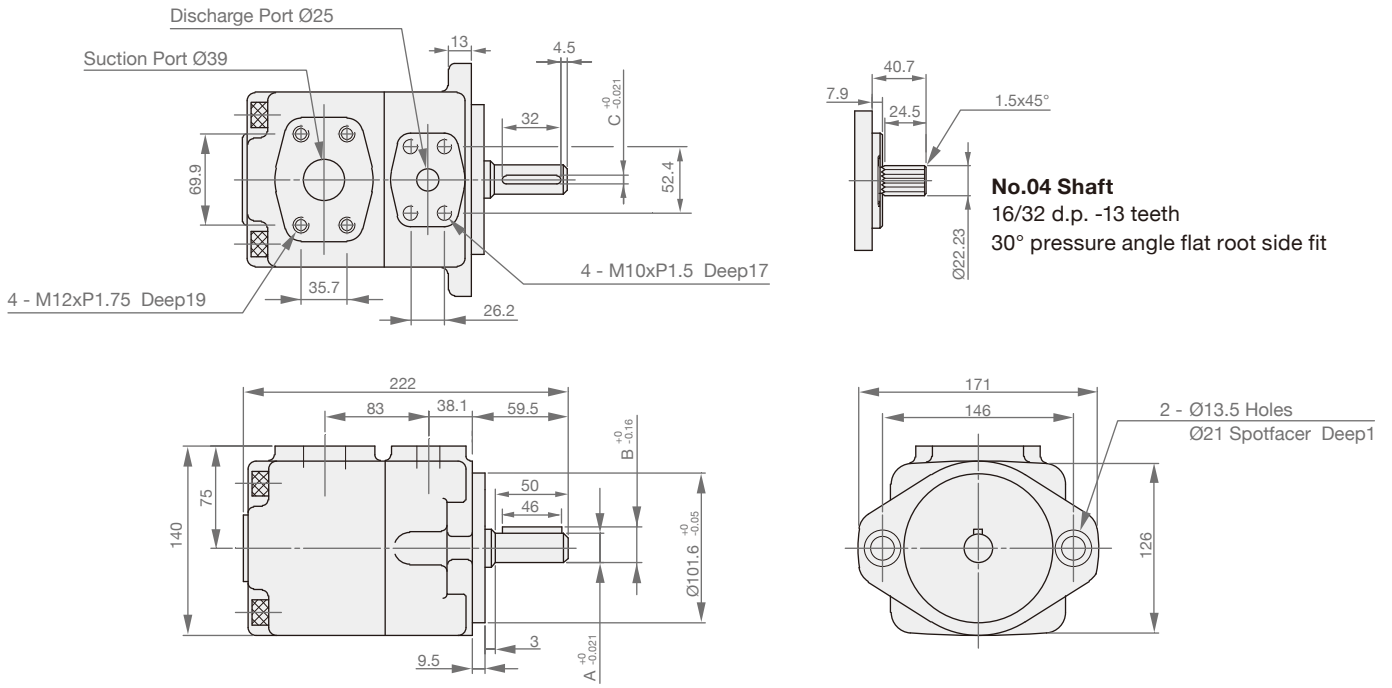


► DVQ-20 (Foot Type)

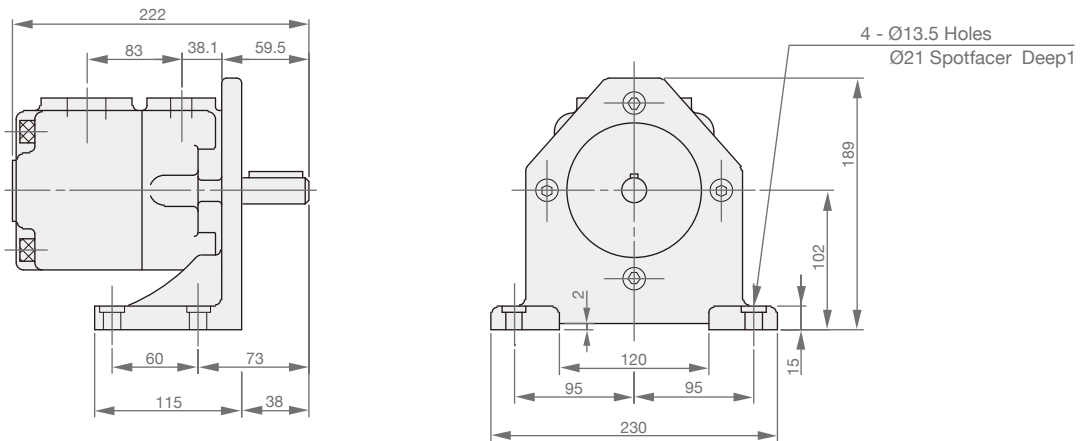


Model	A	B	C
No.01-Shaft	Ø19.05	21.24	4.76
No.02-Shaft	Ø22.23	24.5	4.76
No.03-Shaft	Ø22.23	25.01	6.35
No.04-Shaft	Spline Shaft		

► DVQ-25 (Flange Type)



► DVQ-25 (Foot Type)

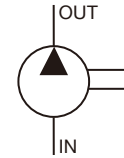


Model	A	B	C
No.01-Shaft	Ø22.23	24.5	6.35
No.02-Shaft	Ø25.4	28.18	6.35
No.03-Shaft	Ø30.0	33.0	7.0
No.04-Shaft	Spline Shaft		
No.W-Shaft	Ø28.0	30.8	6.35

ST6C, ST6CM



SYMBOLS



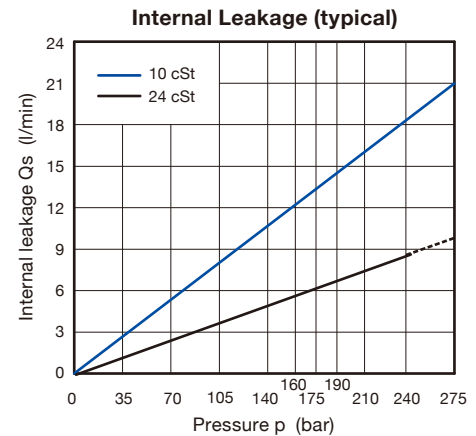
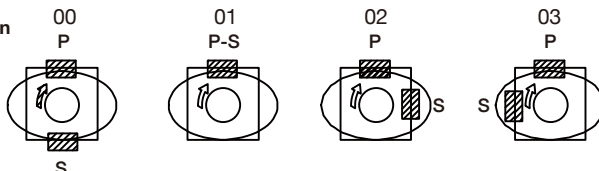
CURVES

ORDER CODES

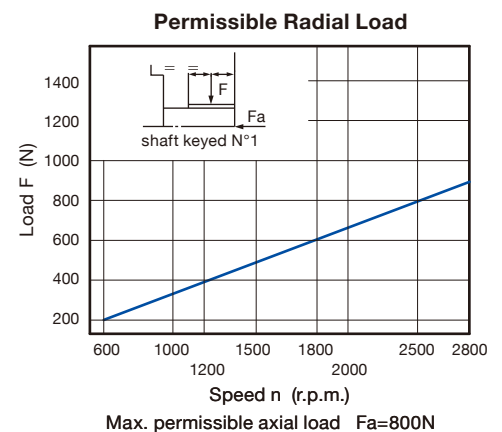
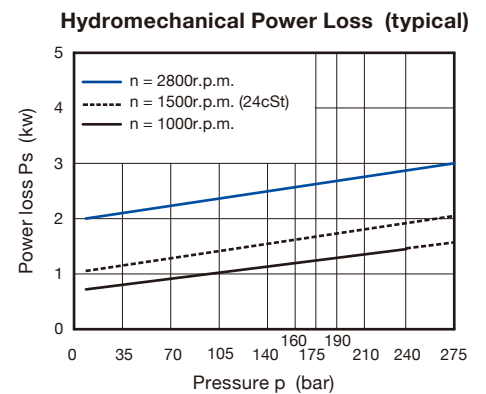
ST6C
*
-
014
-
1
R
00
-
B
1
*

1	Model Name	ST6C (min. speed 600r.p.m.) ST6CM (min. speed 400r.p.m.)
2	Port Connection	none Y metric port connection, omit for UNC
3	Cam Ring Volumetric Displacement (cm ³ /rev)	005, 006, 008, 010, 012, 014, 017, 020, 022, 025, 028, 031
4	Shaft Type	1 keyed SAE B 2 keyed no SAE 3 spline SAE B 4 spline SAE BB
5	Direction of Rotation (Viewed from Shaft Side)	R clockwise direction L counter clockwise direction
6	Porting Combination	00 standard
7	Design Number	B
8	Seal Class	1 S1 (for mineral oil) 4 S4 (for fire resistant fluids) 5 S5 (for mineral oil and fire resistant fluids)
9	Modifications	*

Porting Combination
P=Pressure port
S=suction port



Don't operate pump more than 5 sec. at any speed or viscosity if internal leakage is more than 50% of theoretical flow.



MODEL SPEC.

Model	Volumetric Displacement Vp (cm ³ /rev)	Speed (r.p.m.)	Flow qve [l/min]=1500r.p.m.			Input Power P [kw]=1500r.p.m.			Max. Pressure (kgf/cm ²)	Max. Speed (r.p.m.)
			p=0bar	p=140bar	p=240bar	p=7bar	p=140bar	p=240bar		
005	17.2	1500	25.8	20.8	17.3	1.4	7.5	12.2	275	2800
006	21.3	1500	31.9	26.9	23.4	1.5	8.9	14.7		
008	26.4	1500	39.6	34.6	31.1	1.6	10.7	17.7		
010	34.1	1500	51.1	46.1	42.6	1.7	13.4	22.3		
012	37.1	1500	55.6	50.6	47.1	1.7	14.4	24.1		
014	46.0	1500	69.0	64.0	60.5	1.9	17.6	29.5		
017	58.3	1500	87.4	82.4	78.9	2.1	21.9	36.9		
020	63.8	1500	95.7	90.7	87.2	2.2	23.8	40.2		
022	70.3	1500	105.4	100.4	96.9	2.3	26.1	44.1		
025	79.3	1500	118.9	113.9	110.4	2.5	29.2	49.5		
028	88.8	1500	133.2	128.2	125.8	2.8	32.7	48.5	210	2500
031	100.0	1500	150.0	145.0	142.6	2.8	36.5	54.4		

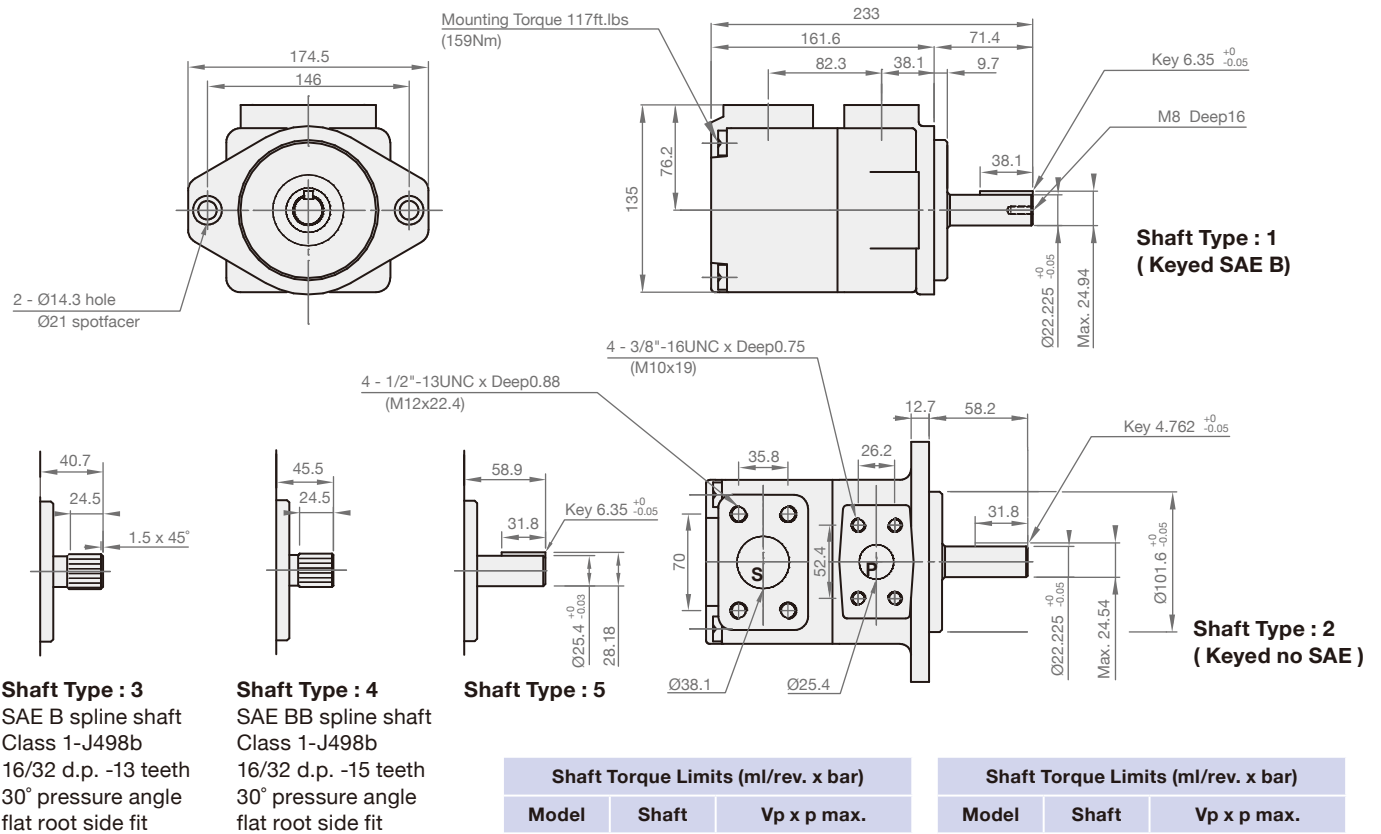
Min. speed : ST6C=600r.p.m., ST6CM=400r.p.m.

weight : 16.8kg

Typical : 24cSt

DIMENSION

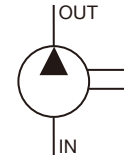
(UNIT : mm)



ST6D, ST6DM



SYMBOLS



CURVES

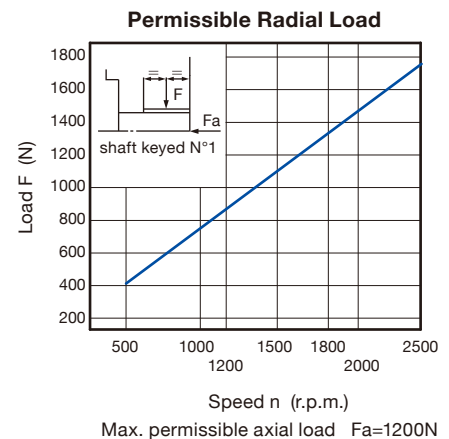
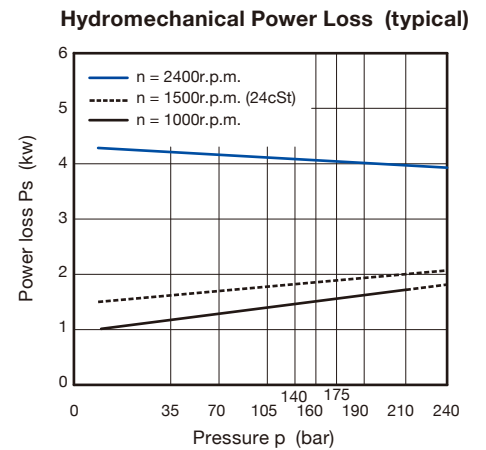
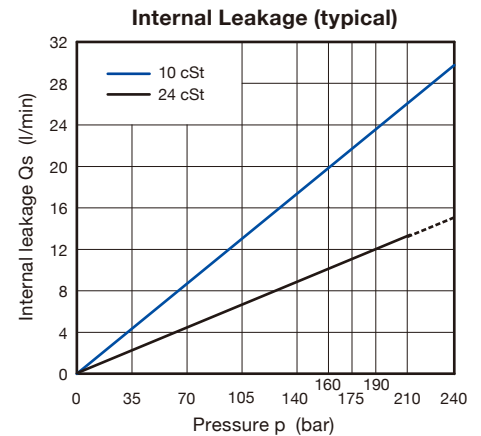
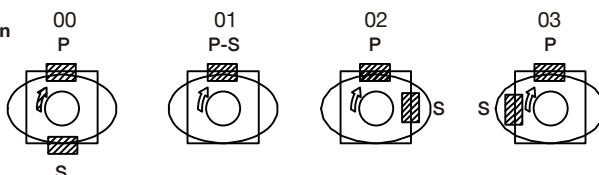
ORDER CODES

ST6D * - **045** - **1 R 00** - **B 1 ***

1 2 3 4 5 6 7 8 9

1	▶ Model Name	ST6D (min. speed 600r.p.m.)
		ST6DM (min. speed 400r.p.m.)
2	▶ Port Connection	none
		Y metric port connection, omit for UNC
3	▶ Cam Ring Volumetric Displacement (cm ³ /rev)	014, 017, 020, 024, 028, 031, 035, 038, 042, 045, 050, 061
4	▶ Shaft Type	1 keyed SAE C
		2 keyed no SAE
		3 spline SAE C
		4 spline no SAE
5	▶ Direction of Rotation (Viewed from Shaft Side)	R clockwise direction
		L counter clockwise direction
6	▶ Porting Combination	00 standard
7	▶ Design Number	B
8	▶ Seal Class	1 S1 (for mineral oil)
		4 S4 (for fire resistant fluids)
		5 S5 (for mineral oil and fire resistant fluids)
9	▶ Modifications	*

Porting Combination
P=Pressure port
S=suction port



MODEL SPEC.

Model	Volumetric Displacement Vp (cm ³ /rev)	Speed (r.p.m.)	Flow qve [l/min]=1500r.p.m.			Input Power P [kw]=1500r.p.m.			Max. Pressure (kgf/cm ²)	Max. Speed (r.p.m.)
			p=0bar	p=140bar	p=240bar	p=7bar	p=140bar	p=240bar		
014	47.6	1500	71.4	62.1	55.9	2.3	18.5	30.6	240	2500
017	58.2	1500	87.3	78.0	71.8	2.5	22.2	37.0		
020	66.0	1500	99.0	89.7	83.5	2.8	24.9	41.7		
024	79.5	1500	119.3	110.0	103.8	3.0	29.6	49.8		
028	89.7	1500	134.5	125.2	119.0	3.2	33.2	55.9		
031	98.3	1500	147.5	138.1	131.9	3.3	36.2	61.0		
035	111.0	1500	166.5	157.2	151.0	3.5	40.7	68.7		
038	120.3	1500	180.4	171.1	164.9	3.7	43.9	74.3		
042	136.0	1500	204.0	194.7	188.5	4.0	49.4	83.7		
045	145.7	1500	218.5	209.2	203.0	4.1	52.8	89.5	2200	
050	158.0	1500	237.0	227.7	224.0	4.4	57.0	85.0		
061	190.5	1500	285.7	278.0	-	4.6	60.6	-		

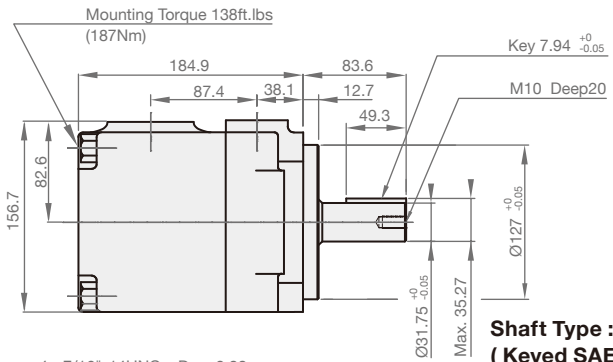
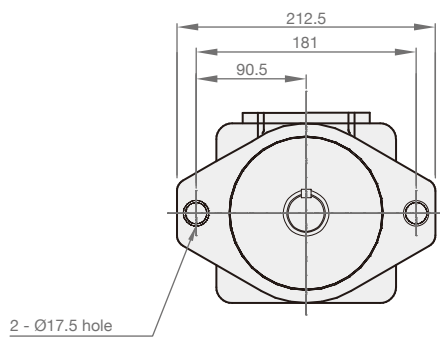
Min. speed : ST6D=600r.p.m., ST6DM=400r.p.m.

weight : 28.1kg

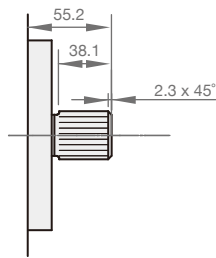
Typical : 24cSt

DIMENSION

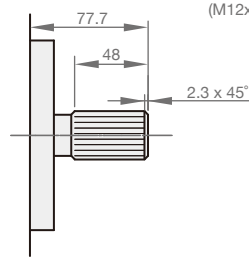
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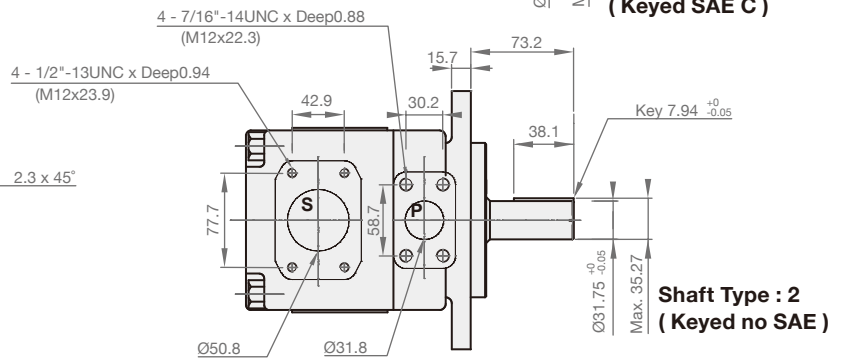
Shaft Type : 1
(Keyed SAE C)



Shaft Type : 3
SAE C spline shaft
Class 1-J498b
12/24 d.p. -14 teeth
30° pressure angle
flat root side fit



Shaft Type : 4
No SAE spline shaft
Class 1-J498b
12/24 d.p. -14 teeth
30° pressure angle
flat root side fit



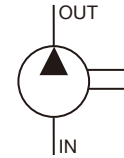
Shaft Type : 2
(Keyed no SAE)

Shaft Torque Limits (ml/rev. x bar)		
Model	Shaft	Vp x p max.
ST6D	1	43283
	2	34590
ST6DM	3	61200
	4	61200

ST6E, ST6EM



SYMBOLS



CURVES

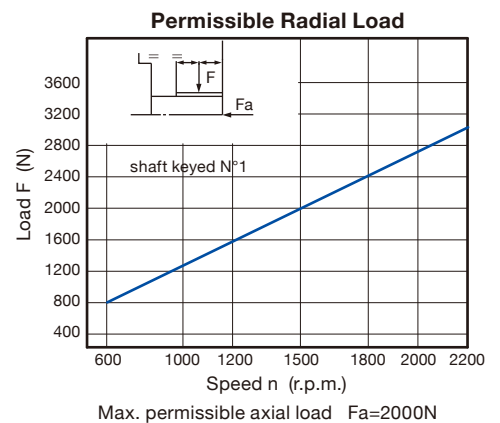
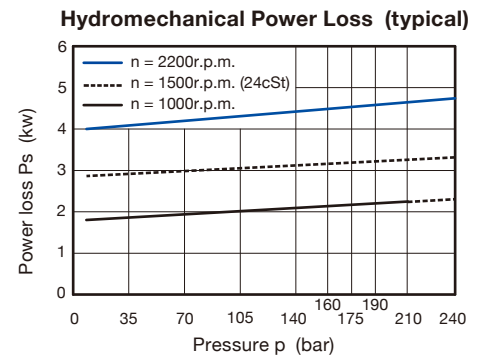
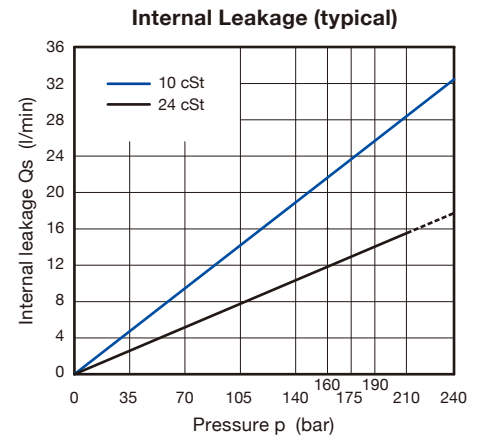
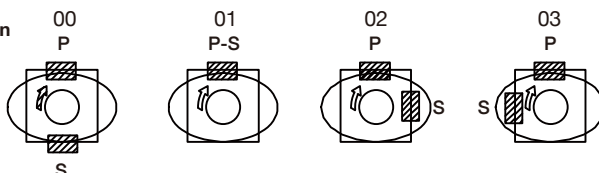
ORDER CODES

ST6E * - **066** - **3 R 00** - **A 1** *

1 2 3 4 5 6 7 8 9

1	▶ Model Name	ST6E (min. speed 600r.p.m.)
		ST6EM (min. speed 400r.p.m.)
2	▶ Port Connection	none
		Y metric port connection, omit for UNC
3	▶ Cam Ring Volumetric Displacement (cm ³ /rev)	042, 045, 050, 052, 057, 062, 066, 072, 085
4	▶ Shaft Type	1 keyed SAE CC
		2 keyed no SAE
		3 spline SAE C
		4 spline SAE CC
5	▶ Direction of Rotation (Viewed from Shaft Side)	R clockwise direction
		L counter clockwise direction
6	▶ Porting Combination	00 standard
7	▶ Design Number	A
8	▶ Seal Class	1 S1 (for mineral oil)
		4 S4 (for fire resistant fluids)
		5 S5 (for mineral oil and fire resistant fluids)
9	▶ Modifications	*

Porting Combination
P=Pressure port
S=suction port



MODEL SPEC.

Model	Volumetric Displacement Vp (cm ³ /rev)	Speed (r.p.m.)	Flow qve [l/min]=1500r.p.m.			Input Power P [kw]=1500r.p.m.			Max. Pressure (kgf/cm ²)	Max. Speed (r.p.m.)
			p=0bar	p=140bar	p=240bar	p=7bar	p=140bar	p=240bar		
042	132.3	1500	198.5	188.5	181.3	5.2	49.4	82.6	240	2200
045	142.4	1500	213.6	203.6	196.5	5.4	52.9	88.7		
050	158.5	1500	237.7	227.7	220.6	5.7	58.5	98.3		
052	164.8	1500	247.2	237.2	230.1	5.8	60.8	102.1		
057	180.7	1500	271.1	261.1	254.0	6.1	66.4	106.9		
062	196.7	1500	295.0	285.0	277.9	6.4	71.9	121.3		
066	213.3	1500	319.9	309.9	302.8	6.7	77.7	131.2		
072	227.1	1500	340.6	330.6	323.5	6.9	82.6	139.5		
085	269.8	1500	404.7	397.7	-	7.3	65.3	-	90	2000

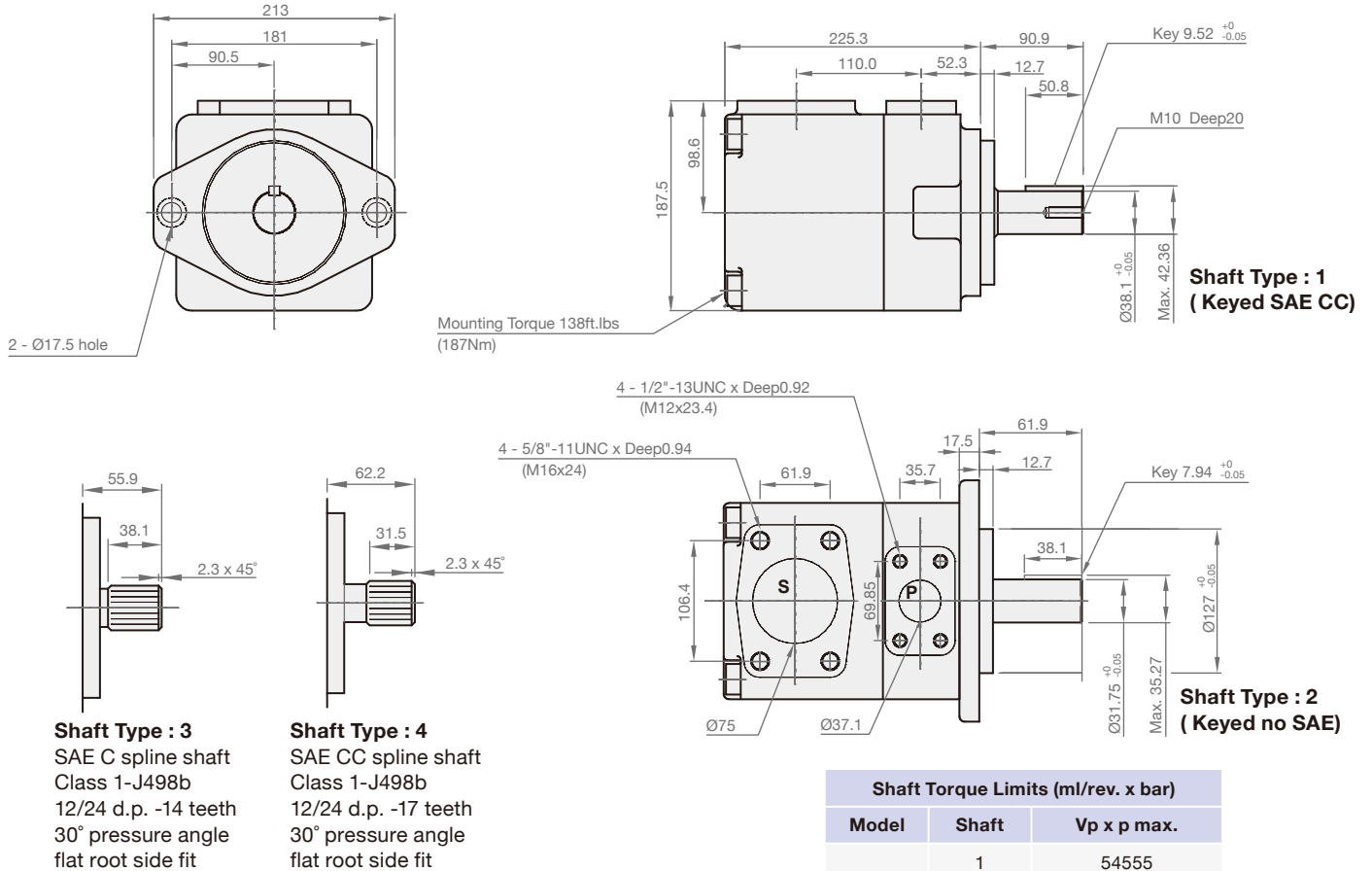
Min. speed : ST6E=600r.p.m., ST6EM=400r.p.m.

weight : 43.3

Typical : 24cSt

DIMENSION

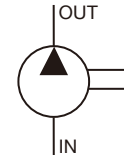
(UNIT : mm)



ST6GC



SYMBOLS



CURVES

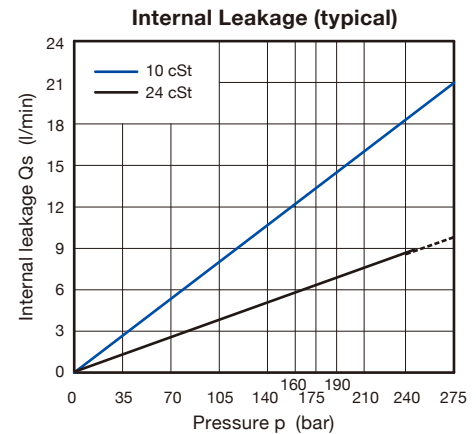
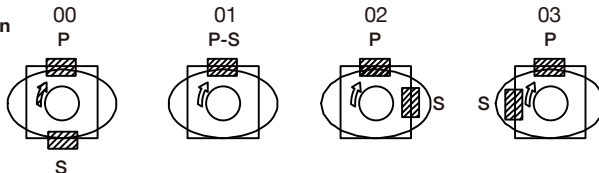
ORDER CODES

ST6GC - **B22** - **6 R 00** - **A 1** - **00 ***

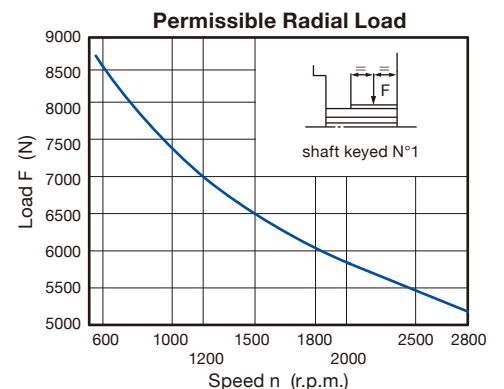
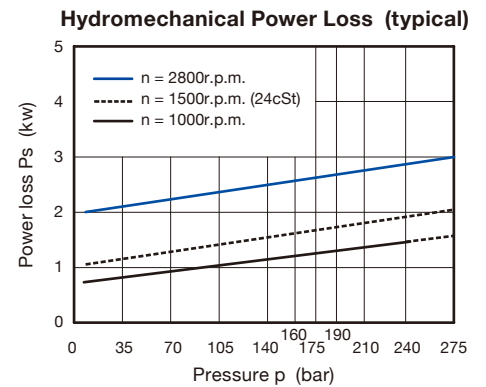
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1	Model Name	ST6GC	
2	Cam Ring Volumetric Displacement (cm ³ /rev)	B05, B06, B08, B10, B12, B14, B17, B20, B22, B25, B28, B31	
3	Shaft Type	6	spline DIN5462
4	Direction of Rotation (Viewed from Shaft Side)	R	clockwise direction
		L	counter clockwise direction
5	Porting Combination	00	standard
6	Design Number	A	
7	Seal Class	1	S1 (for mineral oil)
8	Mounting w/connection Variables	00	flange 1" BSPP
		01	flange 1" SAE 4-bolts (UNC)
		M1	flange 1" SAE 4-bolts (metric)
9	Modifications	*	

Porting Combination
P=Pressure port
S=suction port



Don't operate pump more than 5 sec. at any speed or viscosity if internal leakage is more than 50% of theoretical flow.



Life time 3000 hours when 70% of the time at 500N and 30% at max. load

MODEL SPEC.

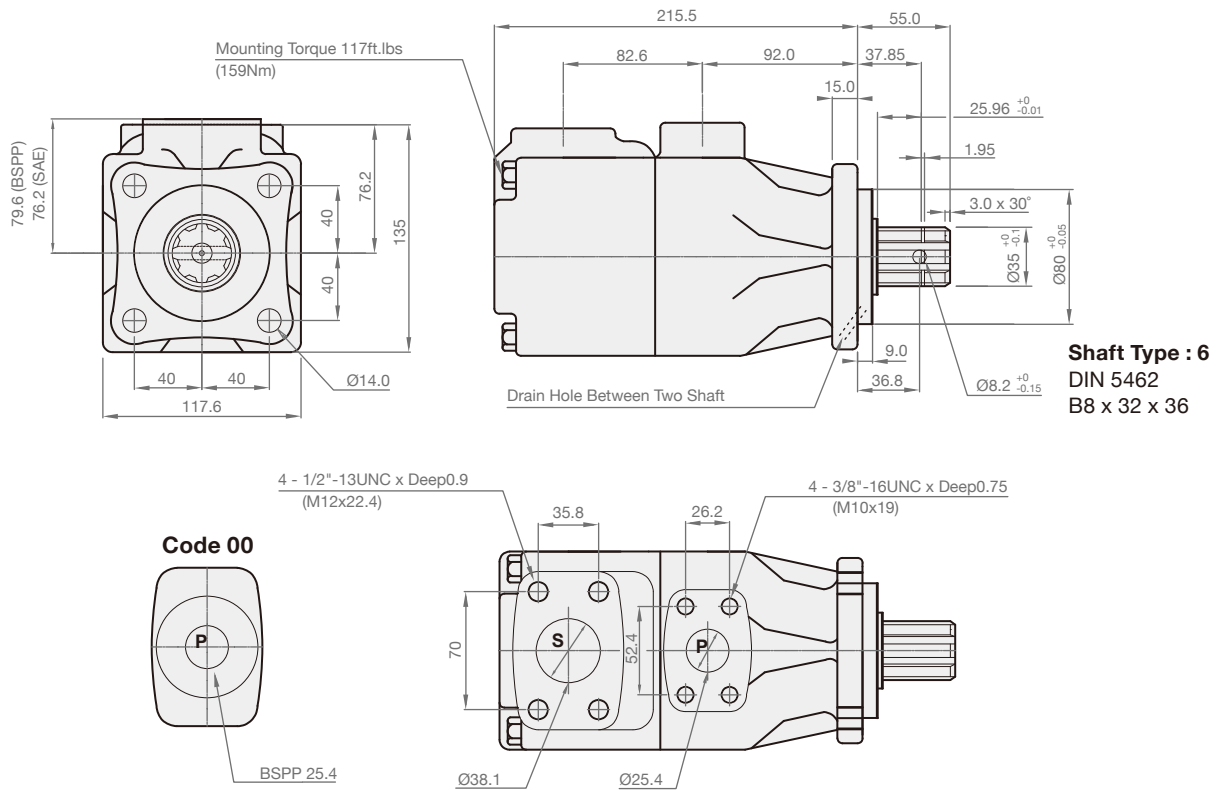
Model	Volumetric Displacement Vp (cm ³ /rev)	Flow qve [l/min]=1500r.p.m.			Input Power P [kw]=1500r.p.m.			Max. Pressure (kgf/cm ²)	Max. Speed (r.p.m.)
		p=0bar	p=140bar	p=240bar	p=7bar	p=140bar	p=240bar		
B05	17.2	25.8	20.3	15.8	1.4	7.5	12.2	275	2800
B06	21.3	31.9	26.5	22.0	1.5	8.9	14.7		
B08	26.4	39.6	34.1	29.6	1.6	10.7	17.7		
B10	34.1	51.1	45.7	41.2	1.7	13.4	22.3		
B12	37.1	55.6	50.2	45.7	1.7	14.4	24.1		
B14	46.0	69.0	63.5	59.0	1.9	17.6	29.5		
B17	58.3	87.4	82.0	77.5	2.1	21.9	36.9		
B20	63.8	95.7	90.2	85.7	2.2	23.8	40.2		
B22	70.3	105.4	100.0	95.5	2.3	26.1	44.1		
B25	79.3	118.9	113.5	109.0	2.5	29.2	49.5		
B28	88.8	133.2	127.7	124.5	2.8	32.7	48.5	210	2500
B31	100.0	150.0	144.5	141.3	2.8	36.5	54.4		

Min. speed : 400r.p.m. weight : 18.2kg Typical : 24cSt

* Not to use because internal leakage greater than 50% theoretical flow.

DIMENSION

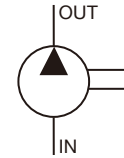
(UNIT : mm)



ST7B, ST7BS



SYMBOLS



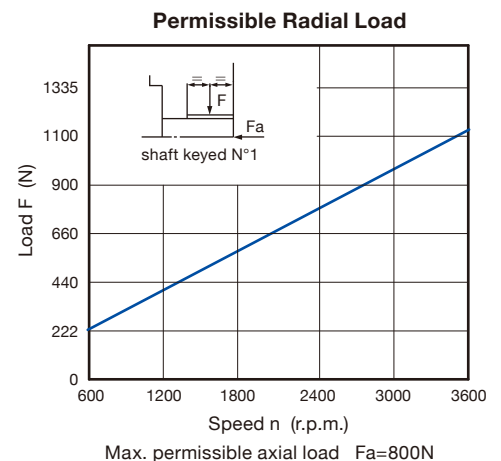
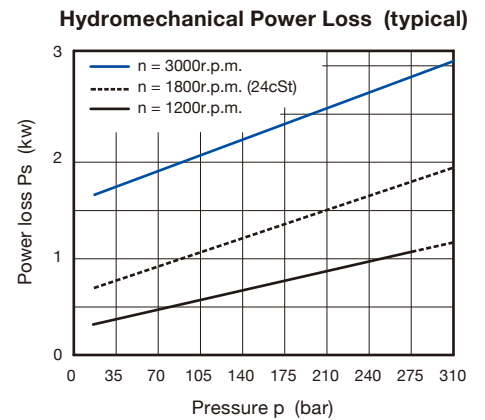
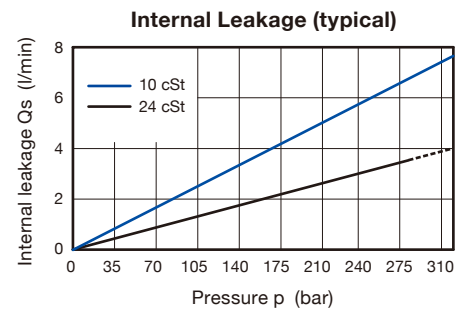
CURVES

ORDER CODES

ST7BS - **B10** - **1 R 00** - **A 1** - **00 ***

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1	▶ Model Name	ST7B : 100 A2 HW, ISO 2-bolts 3019-2 mounting flange				
		ST7BS : SAE B 2-bolts, mounting flange J744				
2	▶ Cam Ring Volumetric Displacement (cm ³ /rev)	B02, B03, B04, B05, B06, B07, B08, B09, B10, B11, B12, B14, B15				
3	▶ Shaft Type	2	keyed ISO R775			
		1	keyed SAE B (ST7BS only)			
		3	spline SAE B (ST7BS only)			
		4	spline SAE BB (ST7BS only)			
4	▶ Direction of Rotation (Viewed from Shaft Side)	R	clockwise direction			
		L	counter clockwise direction			
5	▶ Porting Combination	00	standard			
6	▶ Design Number	A				
7	▶ Seal Class	1	S1 (for mineral oil)			
		4	S4 (for fire resistant fluids)			
		5	S5 (for mineral oil and fire resistant fluids)			
8	▶ Mounting w/connection Variables	4-bolts SAE flange (J518C)				
			ST7BS	ST7B, ST7BS		
		Pressure Port	P1=1"	P1=3/4"	P1=1"	P1=3/4"
			S=1 1/2"			
		UNC	00	01	-	-
metric	-	-	M0	M1		
9	▶ Modifications	*				



MODEL SPEC.

Model	Volumetric Displacement Vp (cm³/rev)	Flow q & n [l/min]=1800r.p.m.			Input Power p & n [kw]=1800r.p.m.			Max. Pressure (kgf/cm²)	Max. Speed (r.p.m.)
		p=0bar	p=140bar	p=320bar	p=7bar	p=140bar	p=320bar		
B02	5.7	10.4	8.8	6.5	0.55	2.99	6.40	320	3600
B03	9.8	17.6	15.9	13.7	0.63	4.65	10.25		
B04	12.8	23.0	21.4	19.2	0.70	5.89	13.13		
B05	15.9	28.6	26.9	24.7	0.76	7.17	16.12		
B06	19.8	35.6	33.9	31.7	0.84	8.79	19.88		
B07	22.5	40.4	38.8	36.5	0.89	9.91	22.47		
B08	24.9	44.7	43.1	40.9	0.94	10.9	24.78		
B09	28.0	50.3	48.6	46.4	1.01	12.19	27.77		
B10	31.8	57.2	55.5	53.4	1.11	13.75	31.42		
B11	34.9	62.9	61.2	59.0	1.15	15.04	32.22		
B12	40.9	73.7	72.1	70.1	1.28	17.56	37.71	300	
B14	45.1	80.8	79.2	77.0	1.36	19.23	41.37		
B15	50.0	89.8	88.3	86.5	1.47	21.28	42.76		

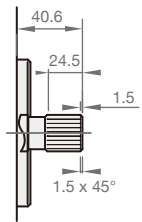
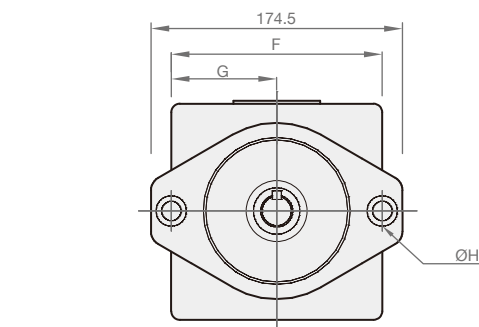
Min. speed : 600r.p.m.

weight : 23.4kg

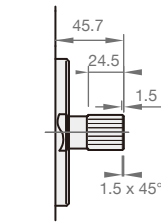
Typical : 24cSt

DIMENSION

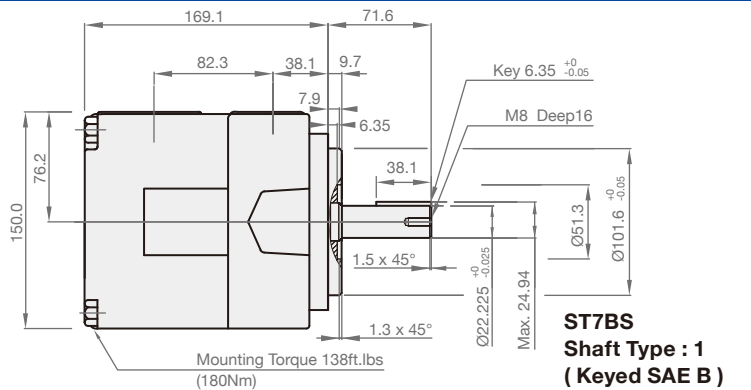
(UNIT : mm)



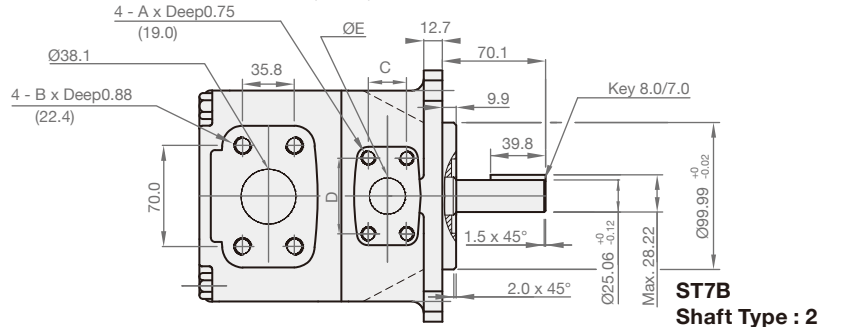
ST7BS
Shaft Type : 3
 SAE B spline shaft
 Class 1-J498b
 16/32 d.p. -13 teeth
 30° pressure angle
 flat root side fit



ST7BS
Shaft Type : 4
 SAE BB spline shaft
 Class 1-J498b
 16/32 d.p. -15 teeth
 30° pressure angle
 flat root side fit



ST7BS
Shaft Type : 1
 (Keyed SAE B)



ST7B
Shaft Type : 2
 (Keyed ISO R775)

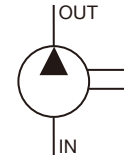
Code	ST7BS		ST7B	
	00	01	M0	M1
A	3/8"-16UNC		M10	
B	1/2"-13UNC		M12	
C	1.03 (26.2)	0.874 (22.2)	1.03 (26.2)	0.874 (22.2)
D	2.06 (52.4)	1.874 (47.6)	2.06 (52.4)	1.874 (47.6)
E	1.0 (25.4)	0.75 (19.05)	1.0 (25.4)	0.75 (19.05)
F	5.75 (146.0)		5.51 (140.0)	
G	2.87 (73.0)		2.75 (70.0)	
H	0.56 (14.3)		0.55 (14.0)	

Shaft Torque Limits (ml/rev. x bar)		
Model	Shaft	Vp x p max.
ST7B ST7BS	1	16516
	2	20620
	3	20620
	4	20620

ST7DSW, ST7DSW2



SYMBOLS



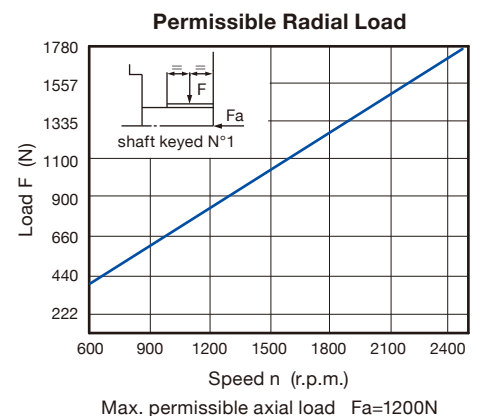
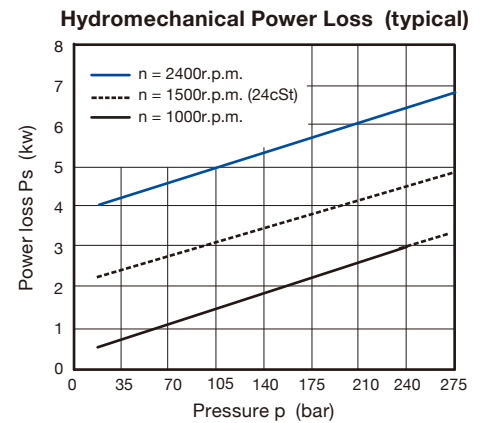
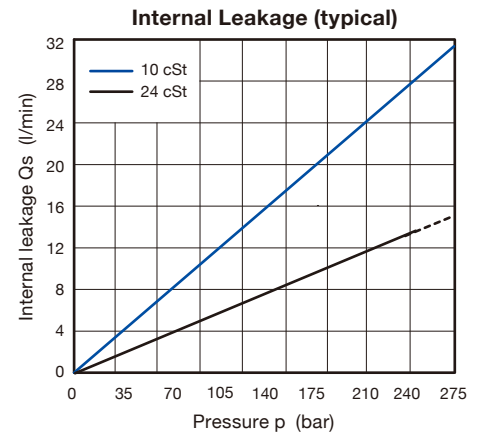
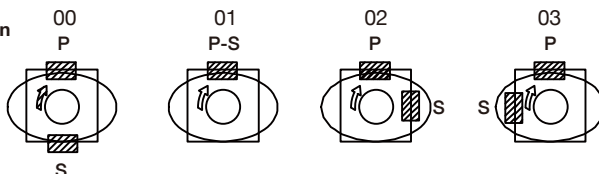
CURVES

ORDER CODES

ST7DSW - **045** - **X** **R** **00** - **A** **1** **W1** *

1	Model Name	ST7DSW (4-bolts)
		ST7DSW2 (6-bolts)
2	Cam Ring Volumetric Displacement (cm ³ /rev)	014, 017, 020, 024, 028, 031, 035, 038, 042, 045, 050
3	Shaft Type	2 keyed 7.94, M8 Deep16
		X keyed 7.94, M10 Deep20
		W keyed 9.52, M10 Deep20
4	Direction of Rotation (Viewed from Shaft Side)	R clockwise direction
		L counter clockwise direction
5	Porting Combination	00 standard
6	Design Number	A
7	Seal Class	1 S1 (for mineral oil)
		4 S4 (for fire resistant fluids)
		5 S5 (for mineral oil and fire resistant fluids)
8	Mounting w/connection Variables	W1 UNC, P=1 1/4", S=2 1/2" (ST7DSW, ST7DSW2)
		M0 metric, P=1 1/4", S=2 1/2" (ST7DSW only)
9	Modifications	*

Porting Combination
P=Pressure port
S=suction port



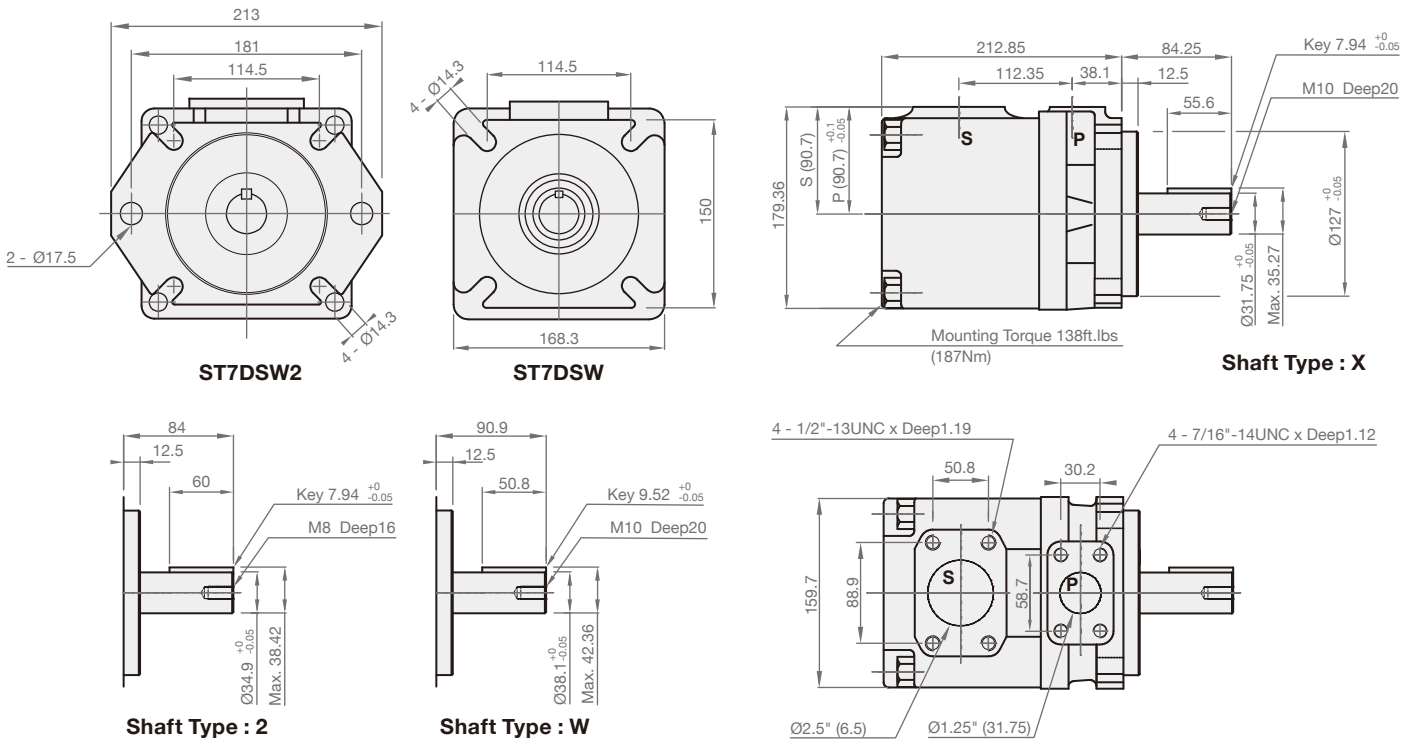
MODEL SPEC.

Model	Volumetric Displacement Vp (cm ³ /rev)	Speed (r.p.m.)	Flow qve [l/min]=1800r.p.m.			Input Power P [kw]=1800r.p.m.			Max. Pressure (kgf/cm ²)	Max. Speed (r.p.m.)
			p=0bar	p=140bar	p=300bar	p=7bar	p=140bar	p=300bar		
014	43.9	1800	79.1	72.5	64.9	2.6	20.7	43.6	300	3000
017	55.0	1800	98.8	92.3	84.7	2.8	25.3	53.6		
020	66.0	1800	118.6	112.0	104.5	3.0	29.8	63.6		
024	81.1	1800	145.8	139.2	131.6	3.4	36.1	77.4		
028	89.9	1800	161.8	155.2	147.6	3.5	39.7	85.5		
031	99.1	1800	178.3	171.7	164.2	3.7	43.6	93.7		
035	113.4	1800	203.9	197.2	190.6	4.0	49.4	97.2	280	
038	120.6	1800	216.8	210.2	203.6	4.2	52.4	103.2		
042	137.5	1800	247.2	240.6	234.9	4.5	59.4	111.4	260	
045	145.7	1800	262.0	253.6	247.5	5.0	62.4	107.7	240	
050	157.9	1800	284.0	275.8	271.3	5.3	67.5	100.3	210	

Min. speed : 600r.p.m. weight : 32.5kg Typical : 24cSt

DIMENSION

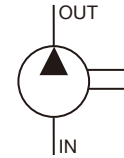
(UNIT : mm)



ST7DXW



SYMBOLS



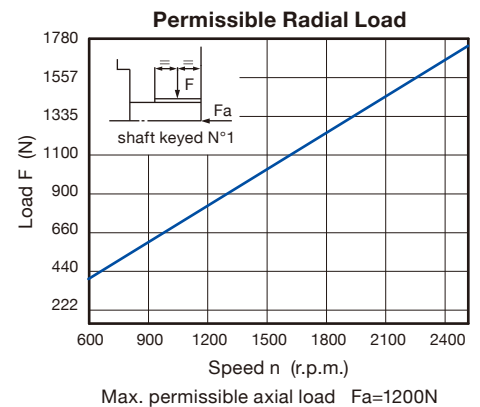
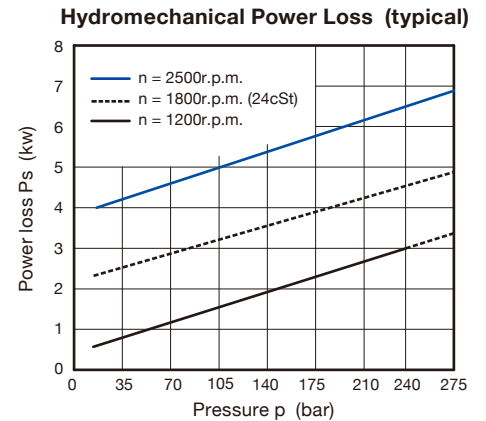
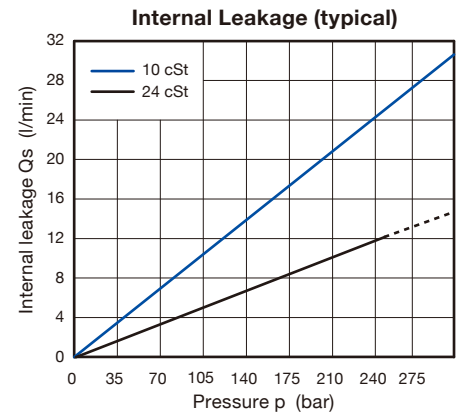
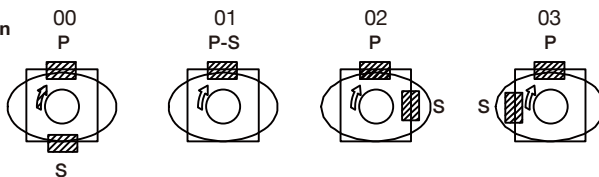
CURVES

ORDER CODES

ST7DXW - **X45** - **1** **R** **00** - **A** **1** **W1** *

1	Model Name	ST7DXW (4-bolts)	
2	Cam Ring Volumetric Displacement (cm ³ /rev)	X14, X17, X20, X24, X28, X31, X35, X38, X42, X45, X50	
3	Shaft Type	1	keyed 7.94, M10 Deep20
		2	keyed 7.94, M8 Deep16
		W	keyed 9.52, M10 Deep20
4	Direction of Rotation (Viewed from Shaft Side)	R	clockwise direction
		L	counter clockwise direction
5	Porting Combination	00	standard
6	Design Number	A	
7	Seal Class	1	S1 (for mineral oil)
		4	S4 (for fire resistant fluids)
		5	S5 (for mineral oil and fire resistant fluids)
8	Mounting w/connection Variables	W1	UNC, P=1 1/4", S=2 1/2"
		M0	metric, P=1 1/4", S=2 1/2"
9	Modifications	*	

Porting Combination
P=Pressure port
S=suction port



MODEL SPEC.

Model	Volumetric Displacement Vp (cm ³ /rev)	Speed (r.p.m.)	Flow qve [l/min]=1800r.p.m.			Input Power P [kw]=1800r.p.m.			Max. Pressure (kgf/cm ²)	Max. Speed (r.p.m.)
			p=0bar	p=140bar	p=300bar	p=7bar	p=140bar	p=300bar		
X14	43.9	1800	79.1	72.5	64.9	2.6	20.7	43.6	300	3000
X17	55.0	1800	98.8	92.3	84.7	2.8	25.3	53.6		
X20	66.0	1800	118.6	112.0	104.5	3.0	29.8	63.6		
X24	81.1	1800	145.8	139.2	131.6	3.4	36.1	77.4		
X28	89.9	1800	161.8	155.2	147.6	3.5	39.7	85.5		
X31	99.1	1800	178.3	171.7	164.2	3.7	43.6	93.7		
X35	113.4	1800	203.9	197.2	190.6	4.0	49.4	97.2	280	
X38	120.6	1800	216.8	210.2	203.6	4.2	52.4	103.2		
X42	137.5	1800	247.2	240.6	234.9	4.5	59.4	111.4	260	2200
X45	145.7	1800	262.0	253.6	247.5	5.0	62.4	107.7	240	
X50	157.9	1800	284.0	275.8	271.3	5.3	67.5	100.3	210	

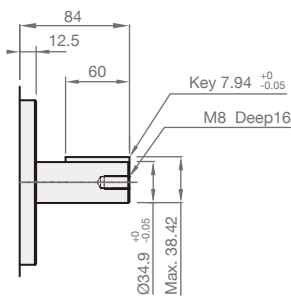
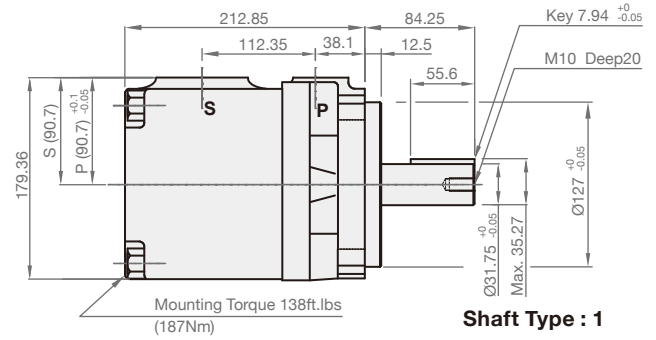
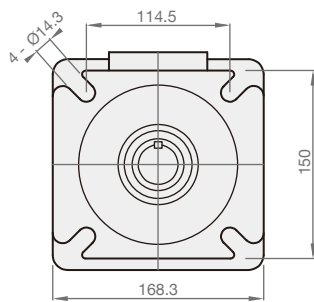
Min. speed : 600r.p.m.

weight : 32.5kg

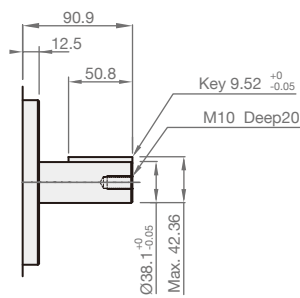
Typical : 24cSt

DIMENSION

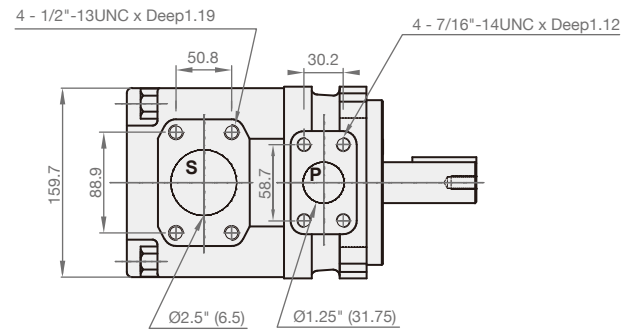
(UNIT : mm)



Shaft Type : 2



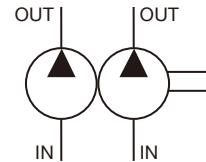
Shaft Type : W



ST6CC



SYMBOLS



CURVES

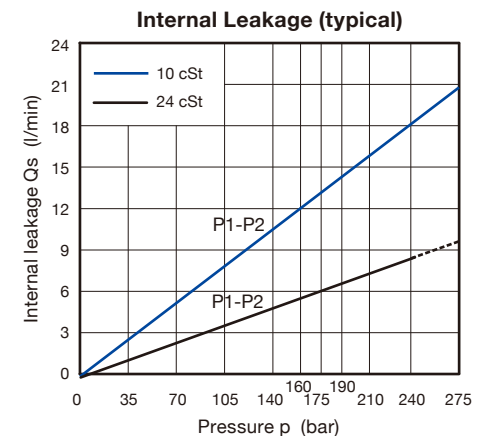
ORDER CODES

ST6CC - **W** - **022** - **008** - **1 R 00** - **C 1 00**

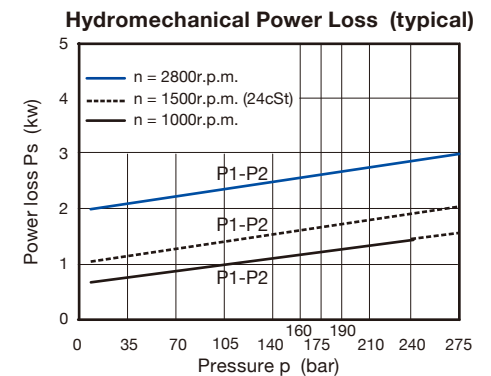
1 2 3 P1 3 P2 4 5 6 7 8 9

1	▶ Model Name	ST6CC			
2	▶ Severe Duty	none			
		W	use for severe duty shaft only		
3	▶ Cam Ring Volumetric Displacement (cm ³ /rev)	005, 006, 008, 010, 012, 014, 017, 020, 022, 025, 028, 031			
4	▶ Shaft Type	1	keyed no SAE		
		3	spline SAE BB		
		5	spline SAE B		
		2	keyed SAE BB (ST6CC-W only)		
		S	spline DIN 5462 (ST6CC-W only)		
5	▶ Direction of Rotation (Viewed from Shaft Side)	R	clockwise direction		
		L	counter clockwise direction		
6	▶ Porting Combination	00	standard		
7	▶ Design Number	C			
8	▶ Seal Class	1	S1 (for mineral oil)		
		4	S4 (for fire resistant fluids)		
		5	S5 (for mineral oil and fire resistant fluids)		
9	▶ Mounting w/connection Variables				
	Pressure Port	P1=1", S=3"		P1=1", S=2 1/2" ⁽²⁾	
		P2=1"	P2=3/4" ⁽¹⁾	P2=1"	P2=3/4" ⁽¹⁾
	UNC	00	01	10	11
	metric	0M	W0	1M	W1

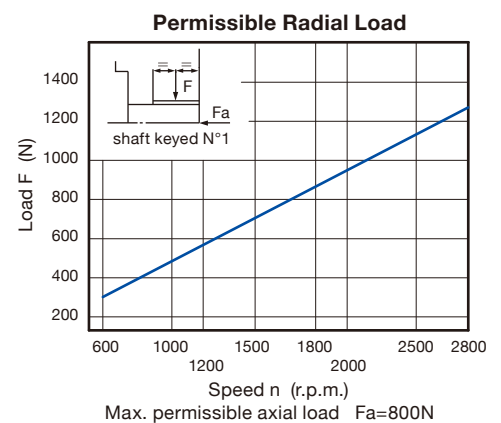
(1) For 46 ml/rev. max. (2) For 126 ml/rev. max.
The large cartridge must be always mounted in the front.



Don't operate pump more than 5 sec. at any speed or viscosity if internal leakage is more than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.



Total hydromechanical power loss is the sum of each section at its operating conditions.



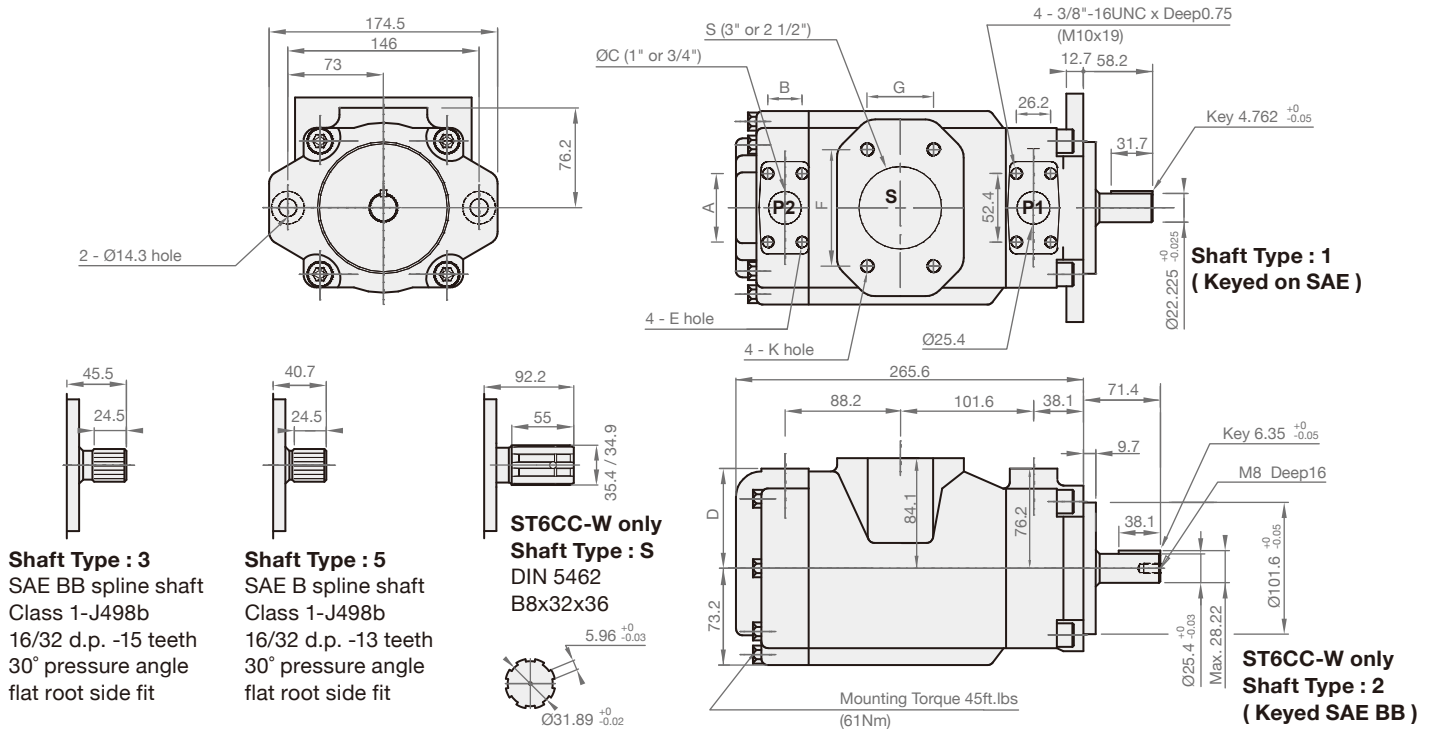
MODEL SPEC.

Pressure Port	Model	Volumetric Displacement Vp (cm ³ /rev)	Flow qve [l/min]=1500r.p.m.			Input Power P [kw]=1500r.p.m.			Max. Pressure (kgf/cm ²)	Max. Speed (r.p.m.)
			p=0bar	p=140bar	p=240bar	p=7bar	p=140bar	p=240bar		
P1 P2	005	17.2	25.8	20.8	17.3	1.4	7.5	12.2	275	2800
	006	21.3	31.9	26.9	23.4	1.5	8.9	14.7		
	008	26.4	39.6	34.6	31.1	1.6	10.7	17.7		
	010	34.1	51.1	46.1	42.6	1.7	13.4	22.3		
	012	37.1	55.6	50.6	47.1	1.7	14.4	24.1		
	014	46.0	69.0	64.0	60.5	1.9	17.6	29.5		
	017	58.3	87.4	82.4	78.9	2.1	21.9	36.9		
	020	63.8	95.7	90.7	87.2	2.2	23.8	40.2		
	022	70.3	105.4	100.4	96.9	2.3	26.1	44.1		
	025	79.3	118.9	113.9	110.4	2.5	29.2	49.5		
	028	88.8	133.2	128.2	125.8	2.8	32.7	48.5	210	2500
	031	100.0	150.0	145.0	142.6	2.8	36.5	54.4		

Min. speed : 600r.p.m. weight : 26.6kg Typical : 24cSt
 * Input powerp (kw) for one cartridge only.

DIMENSION

(UNIT : mm)



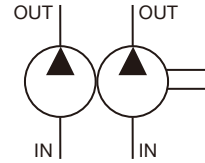
Code	Alternate Port							
	00	01	0M	W0	10	11	1M	W1
	S = 3"				S = 2 1/2"			
F	106.4				88.9			
G	61.9				50.8			
ØH	76.2				63.5			
A	52.4	47.6	52.4	47.6	52.4	47.6	52.4	47.6
B	26.2	22.2	26.2	22.2	26.2	22.2	26.2	22.2
ØC	25.4	19.0	25.4	19.0	25.4	19.0	25.4	19.0
D	74.7	76.2	74.7	76.2	74.7	76.2	74.7	76.2
E	3/8"-16UNC x Deep19		M10 Deep19		3/8"-16UNC x Deep19		M10 Deep19	
K	5/8"-11UNC x Deep28.4		M16 Deep28.4		1/2"-13UNC x Deep23.9		M12 Deep24.0	

Model	Shaft Torque Limits (ml/rev. x bar)	
	Shaft	Vp x p max. P1+P2
ST6CC	1	14300
	2	21420
	3	32670
	4	20600

ST6DC



SYMBOLS



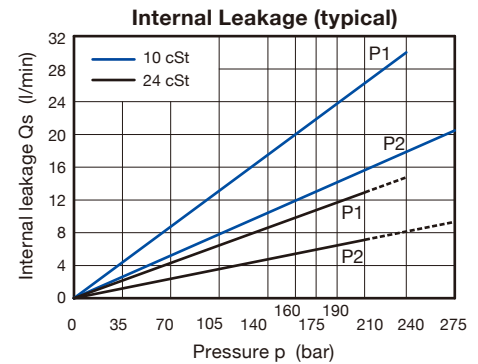
CURVES

ORDER CODES

ST6DC - **W** - **038** - **022** - **1 R 00** - **B 1** - **00**

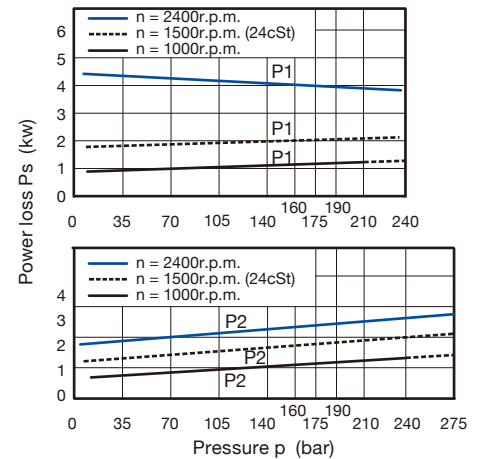
1 2 3 P1 3 P2 4 5 6 7 8 9

1	Model Name	ST6DC	
2	Severe Duty	none	
		W	use for severe duty shaft only
3	Cam Ring Volumetric Displacement (cm ³ /rev)	P1 = 014, 017, 020, 024, 028, 031, 035, 038, 042, 045, 050, 060	
		P2 = 005, 006, 008, 010, 012, 014, 017, 020, 022, 025, 028, 031	
4	Shaft Type	1	keyed SAE CC
		2	keyed no SAE
		3	spline SAE C
		4	spline no SAE
		5	keyed no SAE (ST6DC-W only)
5	Direction of Rotation (Viewed from Shaft Side)	R	clockwise direction
		L	counter clockwise direction
6	Porting Combination	00	standard
7	Design Number	B	
8	Seal Class	1	S1 (for mineral oil)
		4	S4 (for fire resistant fluids)
		5	S5 (for mineral oil and fire resistant fluids)
9	Mounting w/connection Variables	00	UNC, P2=1"
		01	UNC, P2=3/4"
		M0	metric, P2=1"
		M1	metric, P2=3/4"

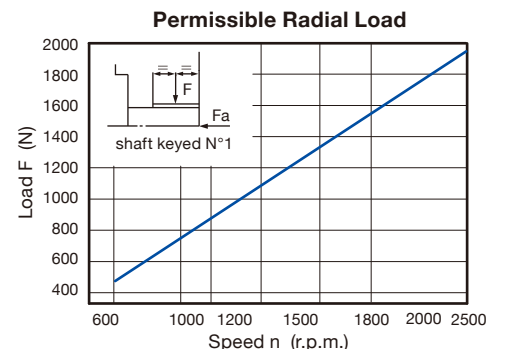


Don't operate pump more than 5 sec. at any speed or viscosity if internal leakage is more than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

Hydromechanical Power Loss (typical)



Total hydromechanical power loss is the sum of each section at its operating conditions.



Max. permissible axial load Fa=1200N

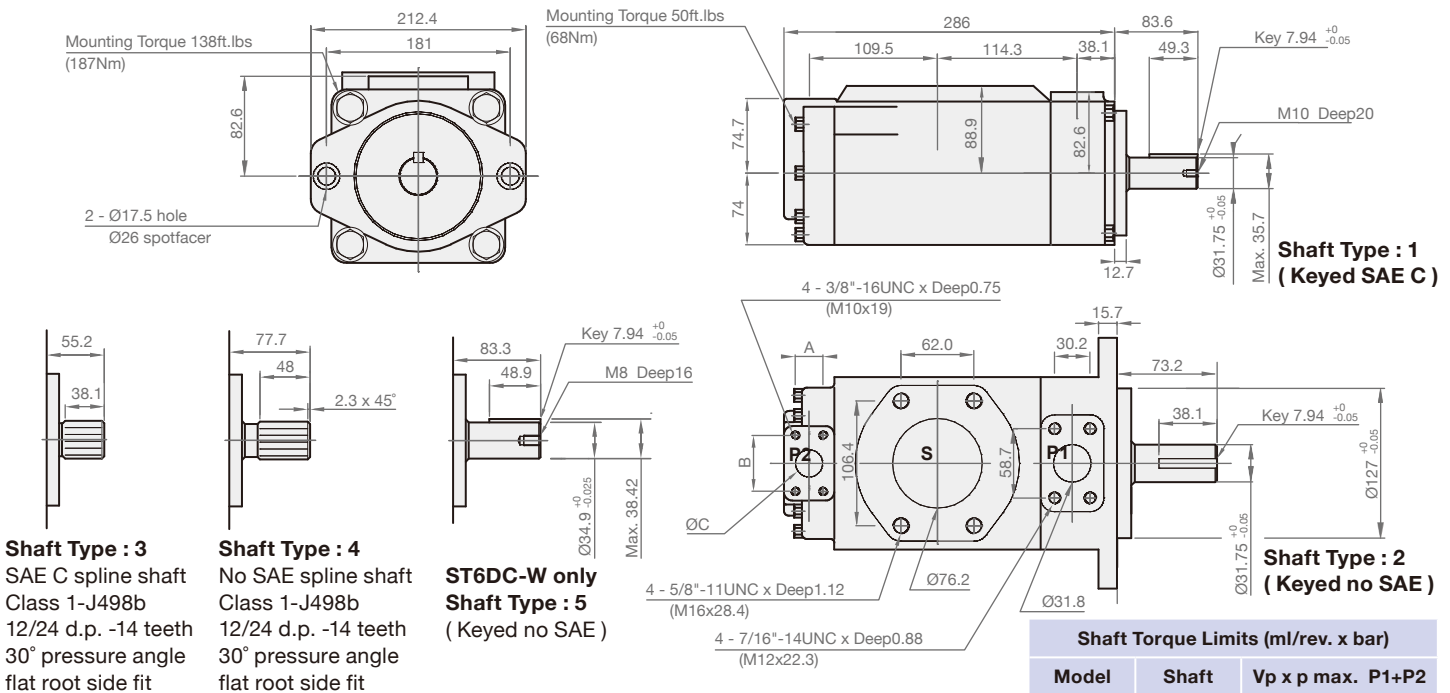
MODEL SPEC.

Pressure Port	Model	Volumetric Displacement Vp (cm ³ /rev)	Flow qve [l/min]=1500r.p.m.			Input Power P [kw]=1500r.p.m.			Max. Pressure (kgf/cm ²)	Max. Speed (r.p.m.)
			p=0bar	p=140bar	p=240bar	p=7bar	p=140bar	p=240bar		
P1	014	47.6	71.4	62.1	55.9	2.3	18.5	30.6	240	2500
	017	58.2	87.3	78.0	71.8	2.5	22.2	37.0		
	020	66.0	99.0	89.7	83.5	2.8	24.9	41.7		
	024	79.5	119.3	110.0	103.8	3.0	29.6	49.8		
	028	89.7	134.5	125.2	119.0	3.2	33.2	55.9		
	031	98.3	147.5	138.1	131.9	3.3	36.2	61.0		
	035	111.0	166.5	157.2	151.0	3.5	40.7	68.7		
	038	120.3	180.4	171.1	164.9	3.7	43.9	74.3		
	042	136.0	204.0	194.7	188.5	4.0	49.4	83.7		
	045	145.7	218.5	209.2	203.0	4.1	52.8	89.5		
	050	158.0	237.0	227.7	224.0	4.4	57.0	85.0		
061	190.5	285.7	278.0	-	4.6	60.6	-			
P2	005	17.2	25.8	20.8	17.3	1.4	7.5	12.2	275	2500
	006	21.3	31.9	26.9	23.4	1.5	8.9	14.7		
	008	26.4	39.6	34.6	31.1	1.6	10.7	17.7		
	010	34.1	51.1	46.1	42.6	1.7	13.4	22.3		
	012	37.1	55.6	50.6	47.1	1.7	14.4	24.1		
	014	46.0	69.0	64.0	60.5	1.9	17.6	29.5		
	017	58.3	87.4	82.4	78.9	2.1	21.9	36.9		
	020	63.8	95.7	90.7	87.2	2.2	23.8	40.2		
	022	70.3	105.4	100.4	96.9	2.3	26.1	44.1		
	025	79.3	118.9	113.9	110.4	2.5	29.2	49.5		
	028	88.8	133.2	128.2	125.8	2.8	32.7	48.5		
031	100.0	150.0	145.0	142.6	2.8	36.5	54.4			

Min. speed : 600r.p.m. weight : 38.1kg Typical : 24cSt
 * Input powerp (kw) for one cartridge only.

DIMENSION

(UNIT : mm)

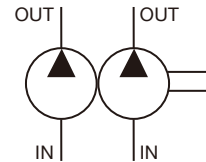


Alternate connect variables		
Code	00, M0	01, M1
A	1.031 (26.2)	0.874 (22.2)
B	2.06 (52.4)	1.874 (47.6)
C	1.0 (25.4)	0.75 (19.05)

ST6EC



SYMBOLS



CURVES

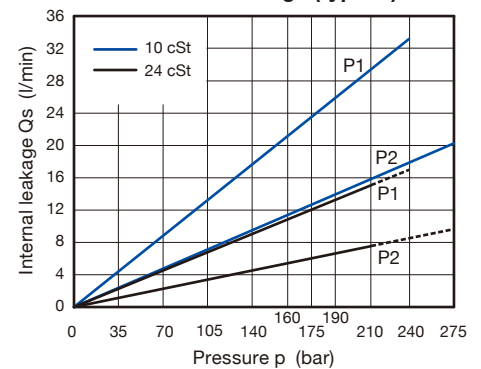
ORDER CODES

ST6EC * - **066** - **014** - **1 R 00** - **B 1**

1 2 3 P1 3 P2 4 5 6 7 8

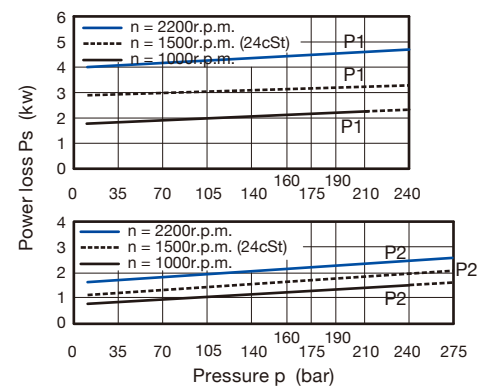
1	Model Name	ST6EC
2	Port Connection	none Y metric port connection, omit for UNC
3	Cam Ring Volumetric Displacement (cm ³ /rev)	P1 = 042, 045, 050, 052, 057, 062, 066, 075, 085 P2 = 005, 006, 008, 010, 012, 014, 017, 020, 022, 025, 028, 031
4	Shaft Type	1 keyed SAE CC 2 keyed no SAE 3 spline SAE C 4 spline SAE CC
5	Direction of Rotation (Viewed from Shaft Side)	R clockwise direction L counter clockwise direction
6	Porting Combination	00 standard
7	Design Number	B
8	Seal Class	1 S1 (for mineral oil) 4 S4 (for fire resistant fluids) 5 S5 (for mineral oil and fire resistant fluids)

Internal Leakage (typical)



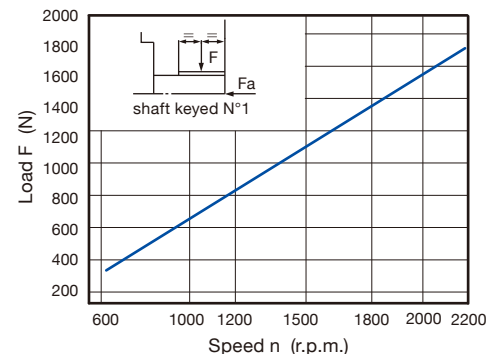
Don't operate pump more than 5 sec. at any speed or viscosity if internal leakage is more than 50% of theoretical flow.
Total leakage is the sum of each section loss at its operating conditions.

Hydromechanical Power Loss (typical)



Total hydromechanical power loss is the sum of each section at its operating conditions.

Permissible Radial Load



Max. permissible axial load Fa=2000N

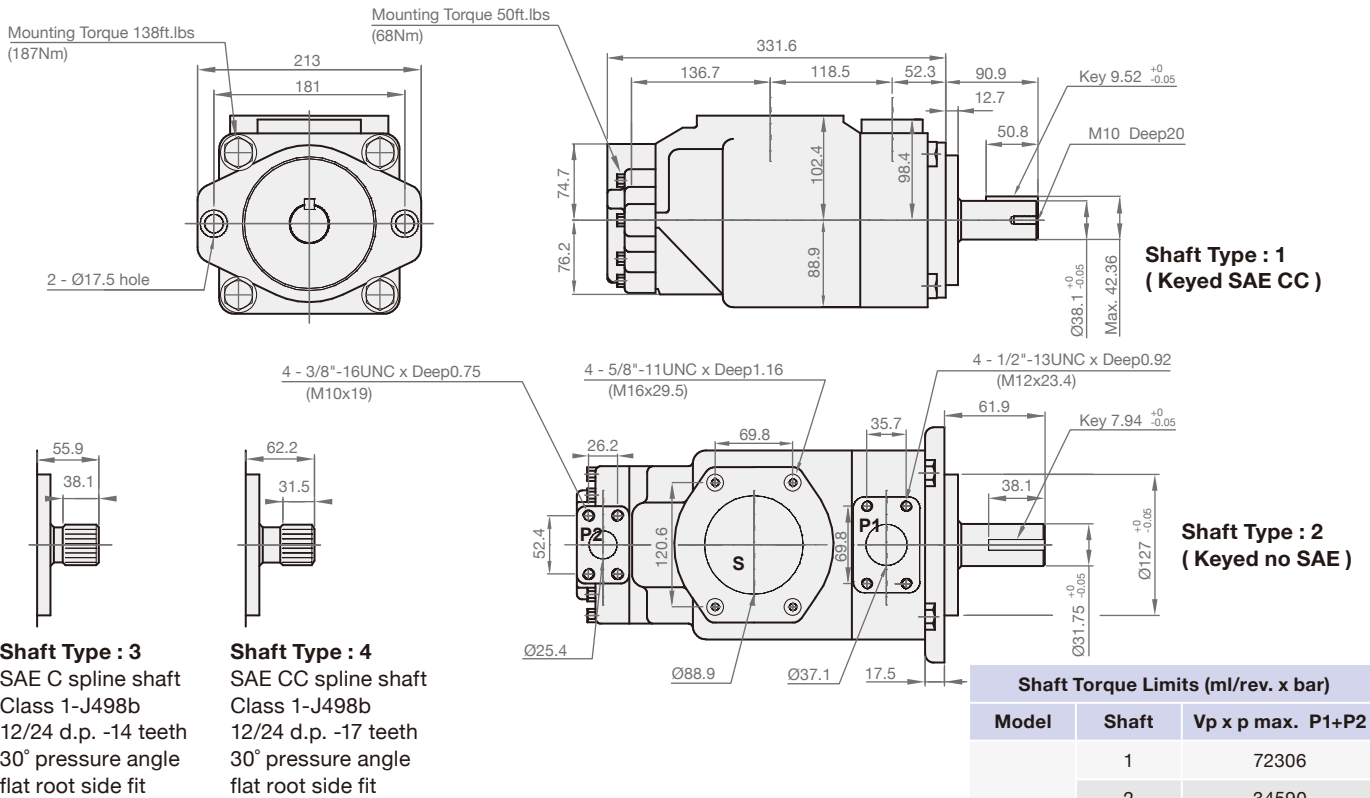
MODEL SPEC.

Pressure Port	Model	Volumetric Displacement Vp (cm ³ /rev)	Flow qve [l/min]=1500r.p.m.			Input Power P [kw]=1500r.p.m.			Max. Pressure (kgf/cm ²)	Max. Speed (r.p.m.)	
			p=0bar	p=140bar	p=240bar	p=7bar	p=140bar	p=240bar			
P1	042	132.3	198.5	188.5	181.3	5.2	49.4	82.6	240	2200	
	045	142.4	213.6	203.6	196.5	5.4	52.9	88.7			
	050	158.5	237.7	227.7	220.6	5.7	58.5	98.3			
	052	164.8	247.2	237.2	230.1	5.8	60.8	102.1			
	057	180.7	271.1	261.1	254.0	6.1	66.4	106.9			
	062	196.7	295.0	285.0	277.9	6.4	71.9	121.3			
	066	213.3	319.9	309.9	302.8	6.7	77.7	131.2			
	072	227.1	340.6	330.6	323.5	6.9	82.6	139.5			
	085	269.8	404.7	397.7	-	7.3	65.3	-			90
P2	005	17.2	25.8	20.8	17.3	1.4	7.5	12.2	275	2200	
	006	21.3	31.9	26.9	23.4	1.5	8.9	14.7			
	008	26.4	39.6	34.6	31.1	1.6	10.7	17.7			
	010	34.1	51.1	46.1	42.6	1.7	13.4	22.3			
	012	37.1	55.6	50.6	47.1	1.7	14.4	24.1			
	014	46.0	69.0	64.0	60.5	1.9	17.6	29.5			
	017	58.3	87.4	82.4	78.9	2.1	21.9	36.9			
	020	63.8	95.7	90.7	87.2	2.2	23.8	40.2			
	022	70.3	105.4	100.4	96.9	2.3	26.1	44.1			
	025	79.3	118.9	113.9	110.4	2.5	29.2	49.5			
	028	88.8	133.2	128.2	125.8	2.8	32.7	48.5			
	031	100.0	150.0	145.0	142.6	2.8	36.5	54.4			210

Min. speed : 600r.p.m. weight : 55kg Typical : 24cSt
 * Input powerp (kw) for one cartridge only.

DIMENSION

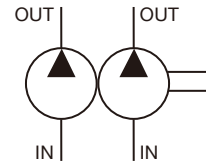
(UNIT : mm)



ST6GCC



SYMBOLS



CURVES

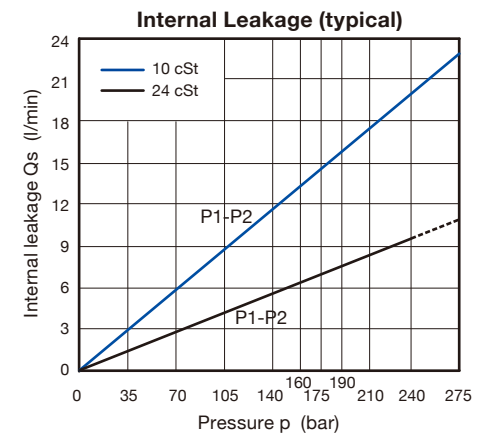
ORDER CODES

ST6GCC - **B22** - **B08** - **6 R 00** - **A 1** - **00** *

1
2 P1
2 P2
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9

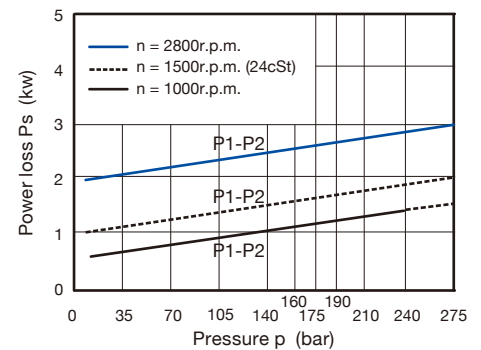
1	Model Name	ST6GCC				
2	Cam Ring Volumetric Displacement (cm ³ /rev)	B05, B06, B08, B10, B12, B14, B17, B20, B22, B25, B28, B31				
3	Shaft Type	6	spline DIN 5462			
4	Direction of Rotation (Viewed from Shaft Side)	R	clockwise direction			
		L	counter clockwise direction			
5	Porting Combination	00	standard			
6	Design Number	A				
7	Seal Class	1	S1 (for mineral oil)			
8	Mounting w/connection Variables	P1=1", S=3"		P1=1", S=2 1/2" ⁽²⁾		
		Pressure Port	P2=1"	P2=3/4" ⁽¹⁾	P2=1"	P2=3/4" ⁽¹⁾
		UNC	00	01	10	11
		metric	0M	W0	1M	W1
9	Modifications	*				

(1) For 46 ml/rev. max. (2) For 126 ml/rev. max.
The large cartridge must be always mounted in the front.



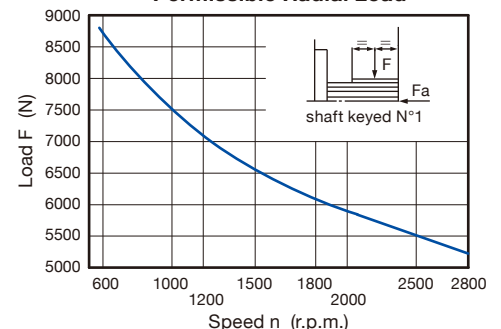
Don't operate pump more than 5 sec. at any speed or viscosity if internal leakage is more than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

Hydromechanical Power Loss (typical)



Total hydromechanical power loss is the sum of each section at its operating conditions.

Permissible Radial Load



Life time 3000 hours when 70% of the time at 500N and 30% at max. load

MODEL SPEC.

Pressure Port	Model	Volumetric Displacement Vp (cm ³ /rev)	Flow qve [l/min]=1500r.p.m.			Input Power P [kw]=1500r.p.m.			Max. Pressure (kgf/cm ²)	Max. Speed (r.p.m.)
			p=0bar	p=140bar	p=240bar	p=7bar	p=140bar	p=240bar		
P1 P2	B05	17.2	25.8	20.3	15.8	1.4	7.5	12.2	275	2800
	B06	21.3	31.9	26.5	22.0	1.5	8.9	14.7		
	B08	26.4	39.6	34.1	29.6	1.6	10.7	17.7		
	B10	34.1	51.1	45.7	41.2	1.7	13.4	22.3		
	B12	37.1	55.6	50.2	45.7	1.7	14.4	24.1		
	B14	46.0	69.0	63.5	59.0	1.9	17.6	29.5		
	B17	58.3	87.4	82.0	77.5	2.1	21.9	36.9		
	B20	63.8	95.7	90.2	85.7	2.2	23.8	40.2		
	B22	70.3	105.4	100.0	95.5	2.3	26.1	44.1		
	B25	79.3	118.9	113.5	109.0	2.5	29.2	49.5		
	B28	88.8	133.2	127.7	124.5	2.8	32.7	48.5	210	2500
	B31	100.0	150.0	144.5	141.3	2.8	36.5	54.4		

Min. speed : 400r.p.m.

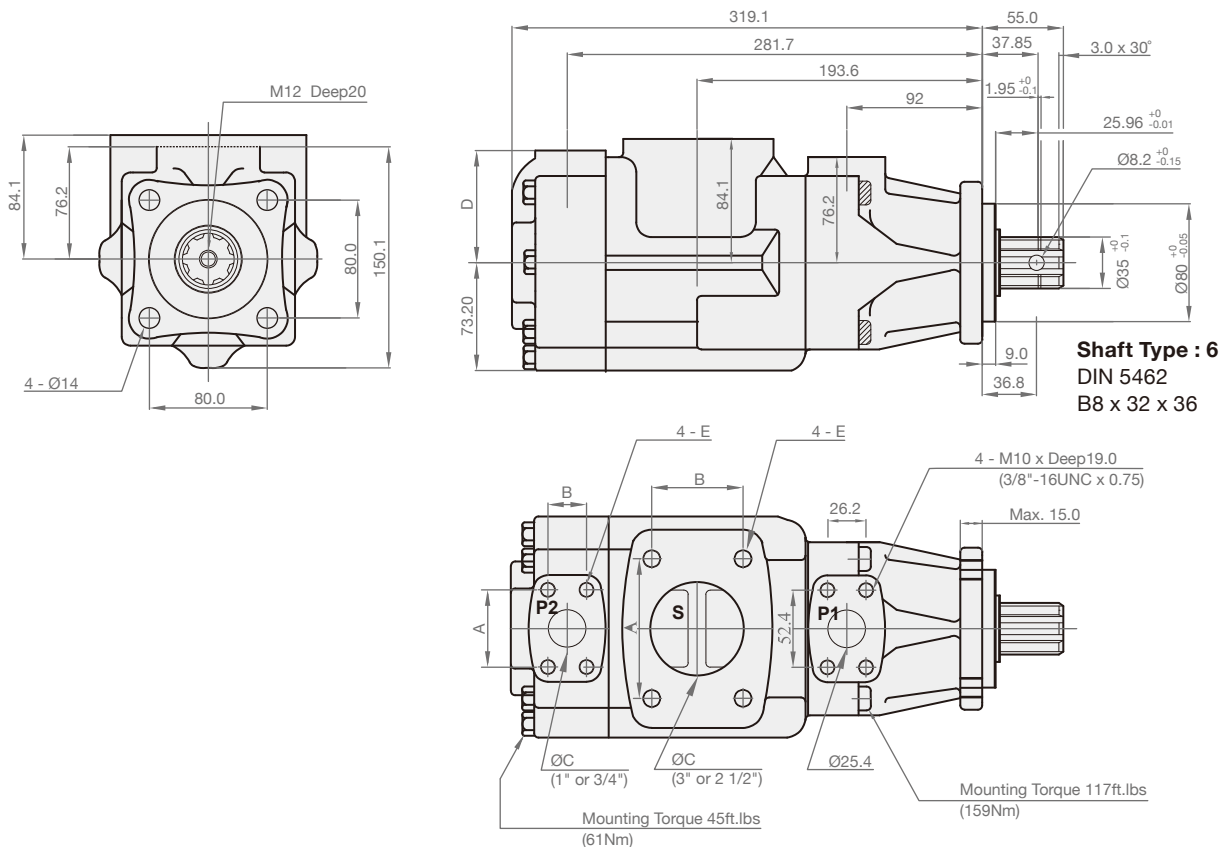
weight : 27.5kg

Typical : 24cSt

* Input powerp (kw) for one cartridge only.

DIMENSION

(UNIT : mm)



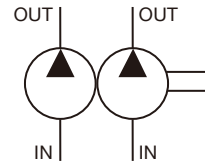
Shaft Torque Limits (ml/rev. x bar)		
Model	Shaft	Vp x p max. P1+P2
ST6GCC	6	32670

Port	S=3"	S=2 1/2"	P2=3/4"	P2=1"
A	106.4	88.9	47.7	52.4
B	61.9	50.8	22.2	26.2
C	76.2	63.5	19.0	25.4
D	-	-	76.2	74.7
E	5/8"-11UNC x 1.12 (M16 x Deep28.4)	1/2"-13UNC x 0.94 (M12 x Deep.0)	3/8"-16UNC x 0.75 (M10 x Deep19.0)	

ST7QCC

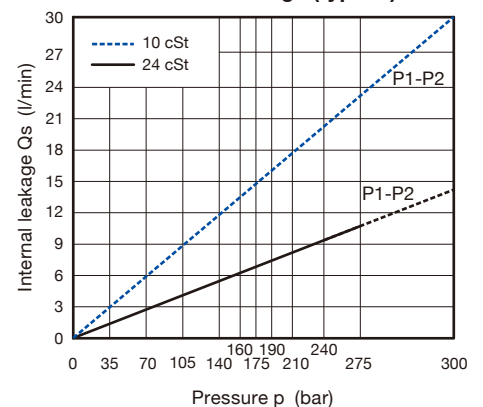


SYMBOLS



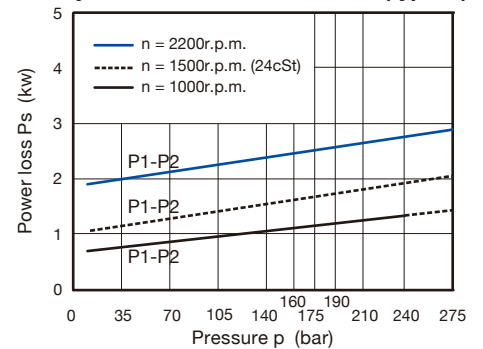
CURVES

Internal Leakage (typical)

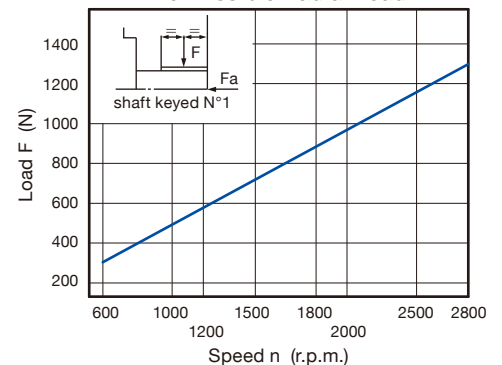


Don't operate pump more than 5 sec. at any speed or viscosity if internal leakage is more than 50% of theoretical flow.

Hydromechanical Power Loss (typical)



Permissible Radial Load



Max. permissible axial load $F_a=800N$

ORDER CODES

ST7QCC **1** **W** - **022** - **1** **R** **00** - **B** **1** **00** *

1 2 3 4 5 6 7 8 9 10 11

1	Model Name	ST7QCC				
2	Mounting	1	SAE B			
		2	SAC C			
3	Severe Duty	none				
		W	use for severe duty shaft only			
4	Cam Ring Volumetric Displacement (cm ³ /rev)	005, 006, 008, 010, 012, 014, 017, 020, 022, 025, 028, 031				
5	Shaft Type	1	keyed no SAE			
		3	spline SAE BB			
		5	spline SAE B			
		2	keyed SAE BB (severe duty only)			
6	Direction of Rotation (Viewed from Shaft Side)	R	clockwise direction			
		L	counter clockwise direction			
7	Porting Combination	00	standard			
8	Design Number	B				
9	Seal Class	1	S1 (for mineral oil)			
		4	S4 (for fire resistant fluids)			
		5	S5 (for mineral oil and fire resistant fluids)			
10	Mounting w/connection Variables	Pressure Port	P1=1", S=3"		P1=1", S=2 1/2" ⁽²⁾	
			P2=1"	P2=3/4" ⁽¹⁾	P2=1"	P2=3/4" ⁽¹⁾
		UNC	00	01	10	11
		metric	0M	W0	1M	W1
		11	Modifications	*		

(1) For 46 ml/rev. max. (2) For 126 ml/rev. max.
The large cartridge must be always mounted in the front.

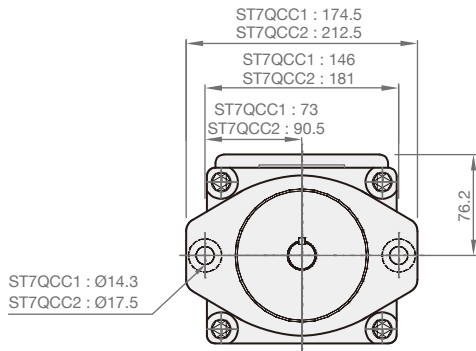
MODEL SPEC.

Pressure Port	Model	Volumetric Displacement Vp (cm ³ /rev)	Flow qve [l/min]=1500r.p.m.			Input Power P [kw]=1500r.p.m.			Max. Pressure (kgf/cm ²)	Max. Speed (r.p.m.)
			p=0bar	p=140bar	p=240bar	p=7bar	p=140bar	p=240bar		
P1 P2	005	17.2	25.8	21.5	17.7	13.7	1.4	7.5	300	2800
	006	21.3	31.9	26.5	22.0	18.0	1.5	8.9		
	008	26.4	39.6	34.1	29.6	25.6	1.6	10.7		
	010	34.1	51.1	45.7	41.2	37.2	1.7	13.4		
	012	37.1	55.6	50.2	45.7	41.7	1.7	14.4		
	014	46.0	69.0	63.5	59.0	55.0	1.9	17.6		
	017	58.3	87.4	82.0	77.5	73.5	2.1	21.9		
	020	63.8	95.7	90.2	85.7	81.7	2.2	23.8		
	022	70.3	105.4	100.0	95.5	91.5	2.3	26.1		
	025	79.3	118.9	113.5	109.0	-	2.5	29.2	240	2500
	028	88.8	133.2	127.7	124.5	-	2.8	32.7	210	
	031	100.0	150.0	144.5	141.3	-	2.8	36.5		

Min. speed : 600r.p.m. weight : 34.9kg Typical : 24cSt
 * Input powerp (kw) for one cartridge only.

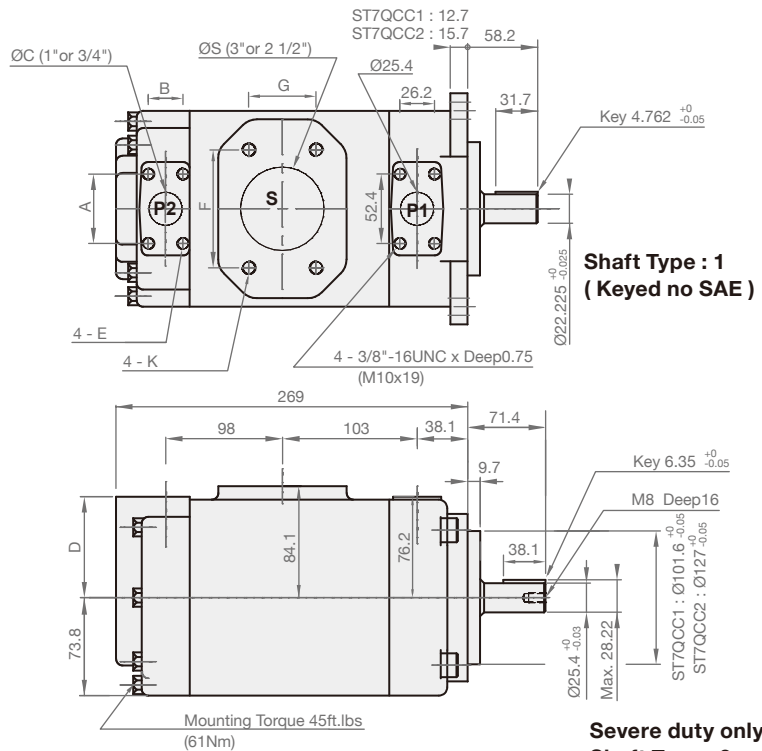
DIMENSION

(UNIT : mm)



Shaft Type : 3
 SAE BB spline shaft
 Class 1-J498b
 16/32 d.p. -15 teeth
 30° pressure angle
 flat root side fit

Shaft Type : 5
 SAE B spline shaft
 Class 1-J498b
 16/32 d.p. -13 teeth
 30° pressure angle
 flat root side fit



Shaft Type : 1
 (Keyed no SAE)

Severe duty only
Shaft Type : 2
 (Keyed SAE BB)

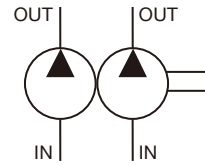
Code	Alternate Port							
	00	01	0M	W0	10	11	1M	W1
	S = 3"				S = 2 1/2"			
F	106.4				88.9			
G	61.9				50.8			
ØH	76.2				63.5			
A	52.4	47.6	52.4	47.6	52.4	47.6	52.4	47.6
B	26.2	22.2	26.2	22.2	26.2	22.2	26.2	22.2
ØC	25.4	19.0	25.4	19.0	25.4	19.0	25.4	19.0
D	74.7	76.2	74.7	76.2	74.7	76.2	74.7	76.2
E	3/8"-16UNC x Deep19		M10 Deep19		3/8"-16UNC x Deep19		M10 Deep19	
K	5/8"-11UNC x Deep28.4		M16 Deep28.4		1/2"-13UNC x Deep23.9		M12 Deep24.0	

Shaft Torque Limits (ml/rev. x bar)		
Model	Shaft	Vp x p max. P1+P2
ST7QCC	1	14300
	2	21420
	3	32670
	4	20600

ST7EE, ST7EES

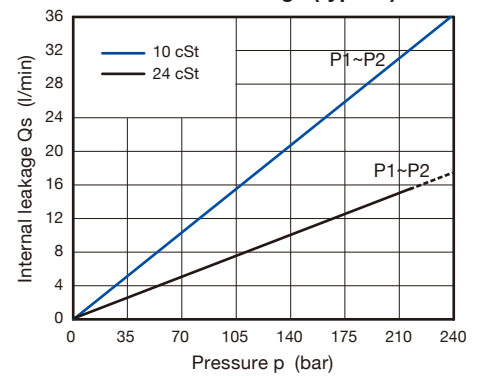


SYMBOLS



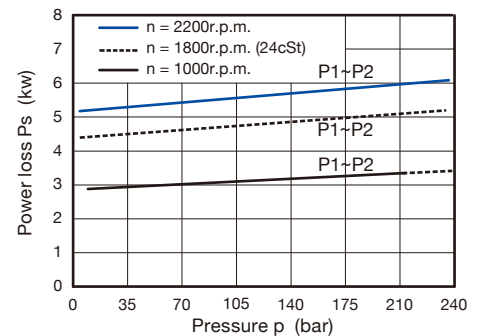
CURVES

Internal Leakage (typical)



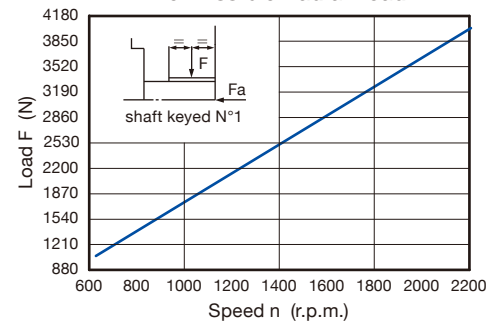
Don't operate pump more than 5 sec. at any speed or viscosity if internal leakage is more than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

Hydromechanical Power Loss (typical)



Total hydromechanical power loss is the sum of each section at its operating conditions.

Permissible Radial Load



Max. permissible axial load $F_a=2000N$

ORDER CODES

ST7EES - **066** - **052** - **1 R 00** - **B 1 0** - **00 ***

1 2 P1 2 P2 3 4 5 6 7 8 9 10

1 ▶ Model Name	ST7EE : 250 B4HW ISO 3019-2 mounting flange	
	ST7EES : SAE 4-bolts mounting flange J744c	
2 ▶ Cam Ring Volumetric Displacement (cm ³ /rev)	042, 045, 050, 052, 057, 062, 066, 072, 085	
3 ▶ Shaft Type (ST7EES)	1	keyed SAE CC
	3	spline SAE CC
	4	spline SAE D&E
	5	keyed SAE D&E
	Shaft Type (ST7EE)	2
4 ▶ Direction of Rotation (Viewed from Shaft Side)	R	clockwise direction
	L	counter clockwise direction
5 ▶ Porting Combination	00	standard
6 ▶ Design Number	B	
7 ▶ Seal Class	1	S1 (for mineral oil)
	4	S4 (for fire resistant fluids)
	5	S5 (for mineral oil and fire resistant fluids)
	Coupling Adapter	0
8 ▶ Coupling Adapter	2	SAE B
	3	SAE BB
	Port Connection Variables	00
9 ▶ Port Connection Variables	M0	metric, P1 & P2=1 1/2", S=4" (ST7EES / ST7EE)
	10 ▶ Modifications	*

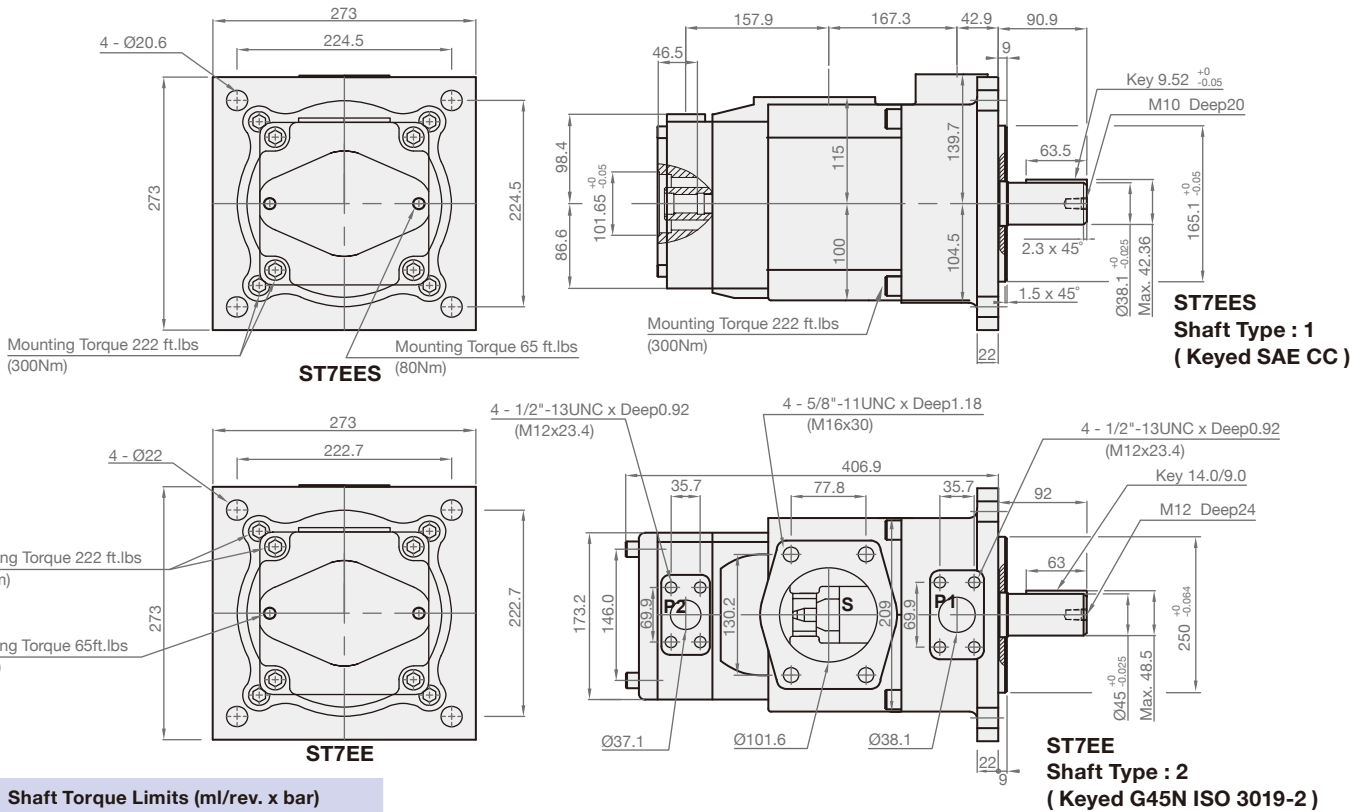
MODEL SPEC.

Pressure Port	Model	Volumetric Displacement Vp (cm ³ /rev)	Flow qve [l/min]=1500r.p.m.			Input Power P [kw]=1500r.p.m.			Max. Pressure (kgf/cm ²)	Max. Speed (r.p.m.)
			p=0bar	p=140bar	p=240bar	p=7bar	p=140bar	p=240bar		
P1 P2	042	132.3	198.5	188.5	181.3	5.2	49.4	82.6	240	2200
	045	142.4	213.6	203.6	196.5	5.4	52.9	88.7		
	050	158.5	237.7	227.7	220.6	5.7	58.5	98.3		
	052	164.8	247.2	237.2	230.1	5.8	60.8	102.1		
	057	180.7	271.1	261.1	254.0	6.1	66.4	106.9		
	062	196.7	295.0	285.0	277.9	6.4	71.9	121.3		
	066	213.3	319.9	309.9	302.8	6.7	77.7	131.2		
	072	227.1	340.6	330.6	323.5	6.9	82.6	139.5		
	085	269.8	404.7	397.7	-	7.3	65.3	-	90	2000

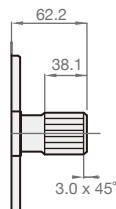
Min. speed : 600r.p.m. weight : 102.4kg Typical : 24cSt
 * Input powerp (kw) for one cartridge only.

DIMENSION

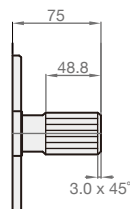
(UNIT : mm)



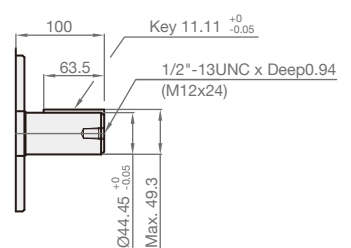
Shaft Torque Limits (ml/rev. x bar)			
Shaft	Vp x p max.	Copling	Vp x p max.
1	90380	SAE B	20600
3	126800	SAE BB	32670
4	126800		
5	110840		
2	114600		
Code	Coupling Adapter		
0	without coupling		
2	SAE B - 13 teeth - pitch 16/32 major dia (min.) 0.875(22.225) major dia (min.) 0.753(19.126)		
3	SAE BB - 15 teeth - pitch 16/32 major dia (min.) 1.00(25.4) major dia (min.) 0.877(22.275)		



ST7EES
 Shaft Type : 3
 SAE CC spline shaft
 Class 1-J498b
 12/24 d.p. -17 teeth
 30° pressure angle
 flat root side fit



ST7EES
 Shaft Type : 4
 SAE D&E spline shaft
 Class 1-J498b
 8/16 d.p. -13 teeth
 30° pressure angle
 flat root side fit

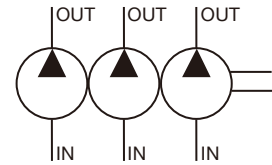


ST7EES
 Shaft Type : 5
 (Keyed SAE D&E)

ST6DCC



SYMBOLS



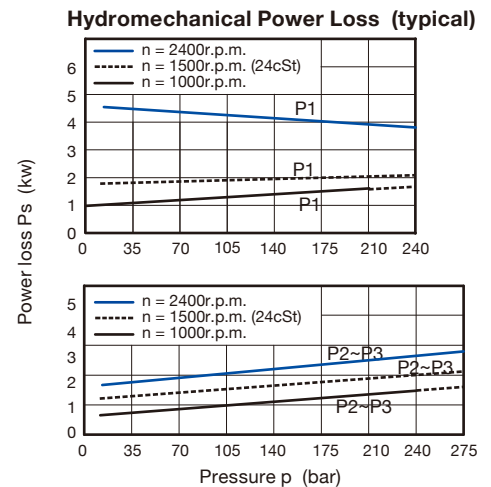
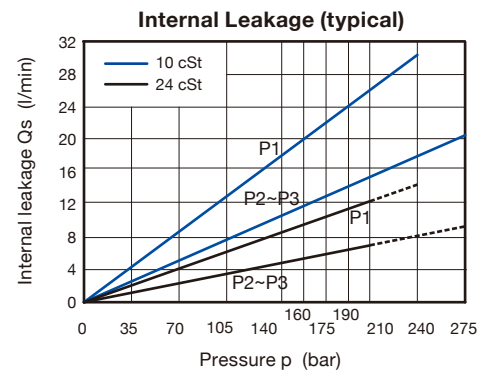
CURVES

ORDER CODES

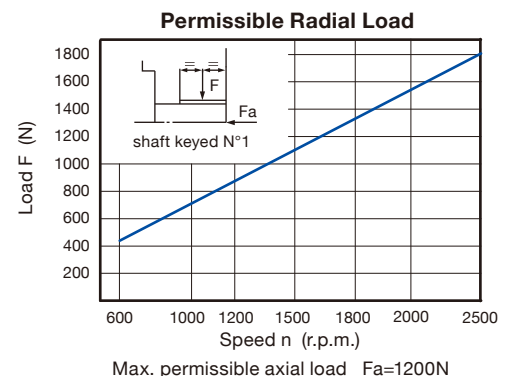
ST6DCC - **038** - **022** - **008** - **1 R 00** - **A 1** - **00**

1
2 P1
2 P2
2 P3
3
4
5
6
7
8

1	Model Name	ST6DCC	
2	Cam Ring Volumetric Displacement (cm ³ /rev)	P1 = 014, 017, 020, 024, 028, 031, 035, 038, 042, 045, 050, 061 P2 & P3 = 005, 006, 008, 010, 012, 014, 017, 020, 022, 025, 028, 031	
3	Shaft Type	1	keyed no SAE
		2	spline SAE CC
		3	spline SAE C
		4	spline SAE CC
4	Direction of Rotation (Viewed from Shaft Side)	R	clockwise direction
		L	counter clockwise direction
5	Porting Combination	00	standard
6	Design Number	A	
7	Seal Class	1	S1 (for mineral oil)
		4	S4 (for fire resistant fluids)
		5	S5 (for mineral oil and fire resistant fluids)
8	Mounting w/connection Variables	00	UNC, P3=1"
		01	UNC, P3=3/4"
		M0	metric, P3=1"
		M1	metric, P3=3/4"



Total hydromechanical power loss is the sum of each section at its operating conditions.



MODEL SPEC.

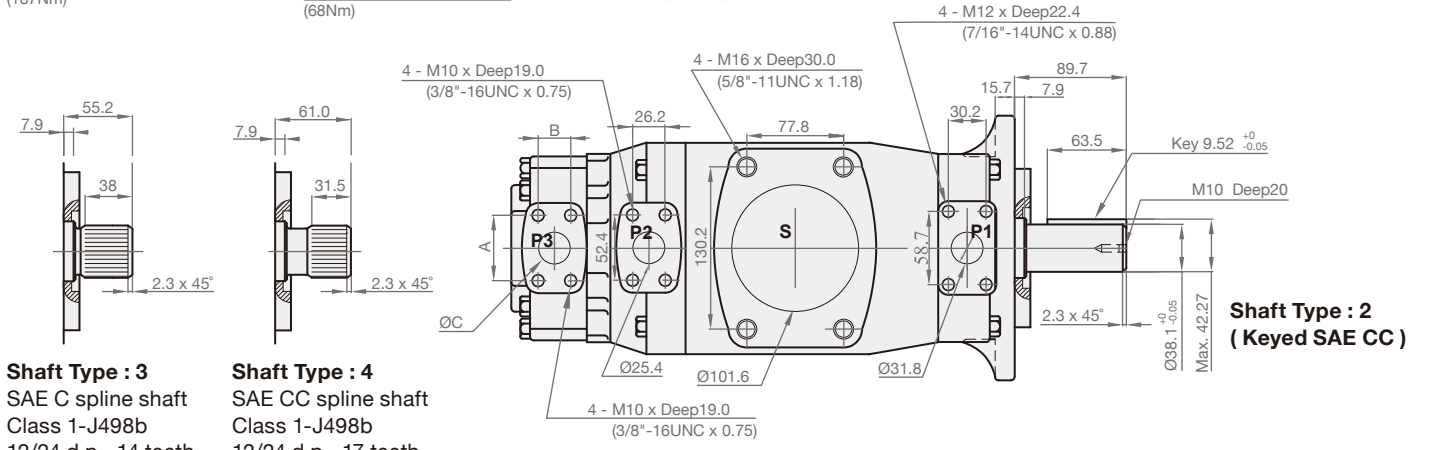
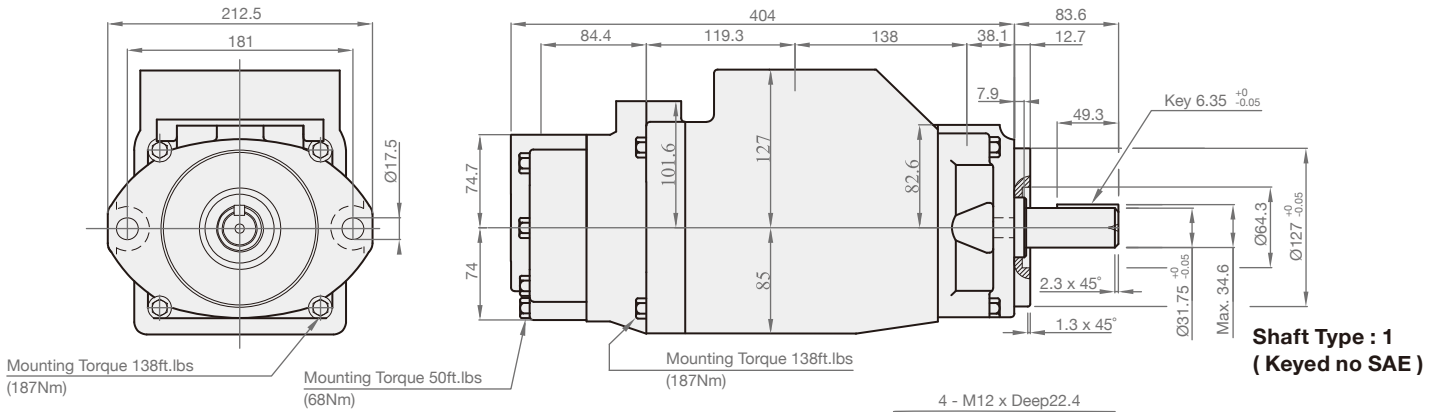
Pressure Port	Model	Volumetric Displacement Vp (cm ³ /rev)	Flow qve [l/min]=1500r.p.m.			Input Power P [kw]=1500r.p.m.			Max. Pressure (kgf/cm ²)	Max. Speed (r.p.m.)
			p=0bar	p=140bar	p=240bar	p=7bar	p=140bar	p=240bar		
P1	14	47.6	71.4	62.1	55.9	2.3	18.5	30.6	240	2500
	017	58.2	87.3	78.0	71.8	2.5	22.2	37.0		
	020	66.0	99.0	89.7	83.5	2.8	24.9	41.7		
	024	79.5	119.3	110.0	103.8	3.0	29.6	49.8		
	028	89.7	134.5	125.2	119.0	3.2	33.2	55.9		
	031	98.3	147.5	138.1	131.9	3.3	36.2	61.0		
	035	111.0	166.5	157.2	151.0	3.5	40.7	68.7		
	038	120.3	180.4	171.1	164.9	3.7	43.9	74.3		
	042	136.0	204.0	194.7	188.5	4.0	49.4	83.7		
	045	145.7	218.5	209.2	203.0	4.1	52.8	89.5		
	050	158.0	237.0	227.7	224.0	4.4	57.0	85.0	210	2200
	061	190.5	285.7	278.0	-	4.6	60.6	-	120	
P2 P3	005	17.2	25.8	20.8	17.3	1.4	7.5	12.2	275	2500
	006	21.3	31.9	26.9	23.4	1.5	8.9	14.7		
	008	26.4	39.6	34.6	31.1	1.6	10.7	17.7		
	010	34.1	51.1	46.1	42.6	1.7	13.4	22.3		
	012	37.1	55.6	50.6	47.1	1.7	14.4	24.1		
	014	46.0	69.0	64.0	60.5	1.9	17.6	29.5		
	017	58.3	87.4	82.4	78.9	2.1	21.9	36.9		
	020	63.8	95.7	90.7	87.2	2.2	23.8	40.2		
	022	70.3	105.4	100.4	96.9	2.3	26.1	44.1		
	025	79.3	118.9	113.9	110.4	2.5	29.2	49.5		
	028	88.8	133.2	128.2	125.8	2.8	32.7	48.5	210	
	031	100.0	150.0	145.0	142.6	2.8	36.5	54.2		

Min. speed : 600r.p.m.

weight : 66.1kg

Typical : 24cSt

* Input powerp (kw) for one cartridge only.



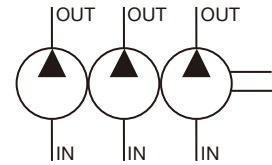
Port	Code	A	B	C
P3	00, M0	2.06 (52.4)	1.03 (26.2)	1.0 (25.4)
	01, M1	1.874 (47.6)	0.874 (22.2)	0.75 (19.05)

Shaft Torque Limits (ml/rev. x bar)		
Model	Shaft	Vp x p max. P1+P2+P3
ST6DCC	1	43240
	2	66500
	3	61200
	4	66500

ST6DCCS

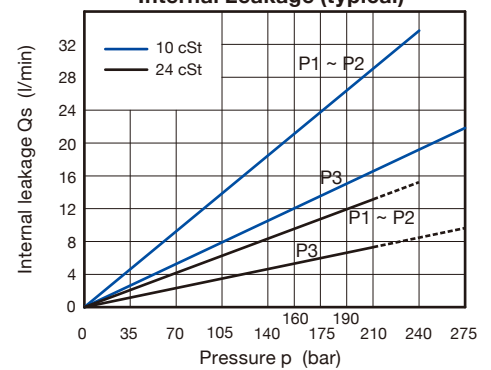


SYMBOLS

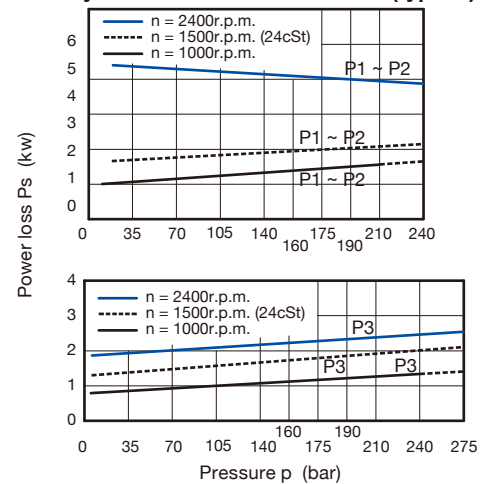


CURVES

Internal Leakage (typical)

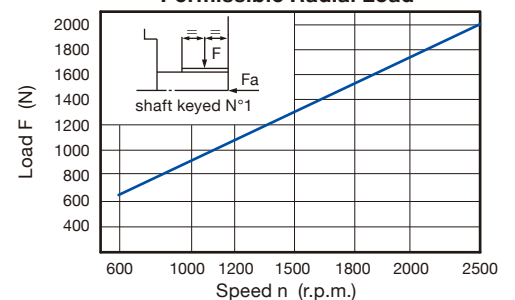


Hydromechanical Power Loss (typical)



Total hydromechanical power loss is the sum of each section at its operating conditions.

Permissible Radial Load



Max. permissible axial load $F_a=1200N$

ORDER CODES

ST6DCCS - **038** - **035** - **014** - **1 R 00** - **B 1** - **00**

1 2 P1 2 P2 2 P3 3 4 5 6 7 8

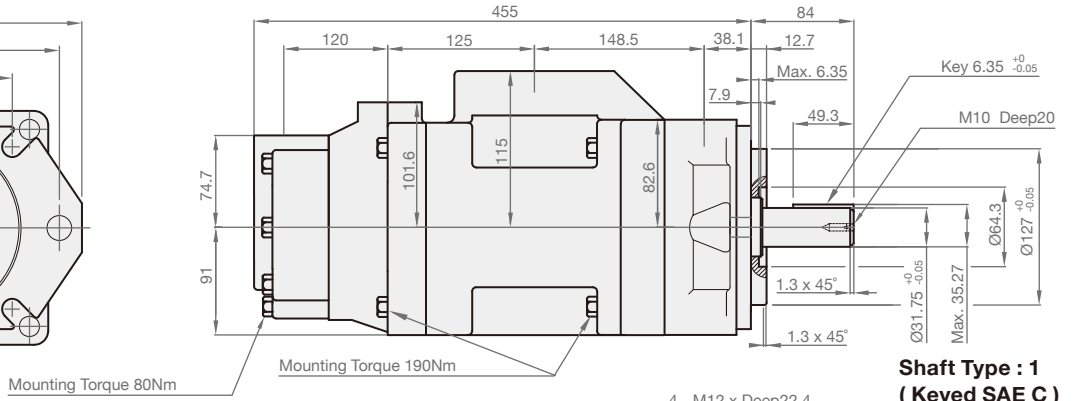
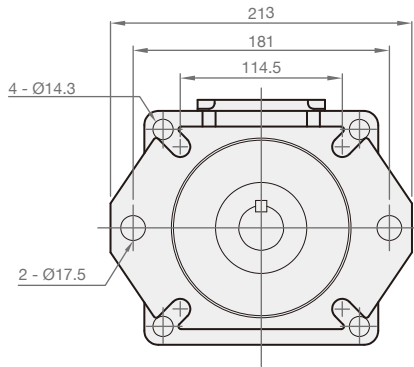
1 ▶ Model Name	ST6DCCS : SAE C 6-bolts, mounting flange J744 SAE C	
2 ▶ Cam Ring Volumetric Displacement (cm ³ /rev)	P1 & P2 = 014, 017, 020, 024, 028, 031, 035, 038, 042, 045, 050, 061 P3 = 005, 006, 008, 010, 012, 014, 017, 020, 022, 025, 028, 031	
3 ▶ Shaft Type	1	keyed SAE C
	2	keyed SAE CC
	3	spline SAE C
	4	spline SAE CC
	5	keyed no SAE
4 ▶ Direction of Rotation (Viewed from Shaft Side)	R	clockwise direction
	L	counter clockwise direction
5 ▶ Porting Combination	00	standard
6 ▶ Design Number	B	
7 ▶ Seal Class	1	S1 (for mineral oil)
	4	S4 (for fire resistant fluids)
	5	S5 (for mineral oil and fire resistant fluids)
8 ▶ Mounting w/connection Variables	SAE 4-bolts flange (J518c)	
	00	UNC, P1 & P2=1 1/4", S=4", P3=1"
	01	UNC, P1 & P2=1 1/4", S=4", P3=3/4"
	M0	metric, P1 & P2=1 1/4", S=4", P3=1"
	M1	metric, P1 & P2=1 1/4", S=4", P3=3/4"

MODEL SPEC.

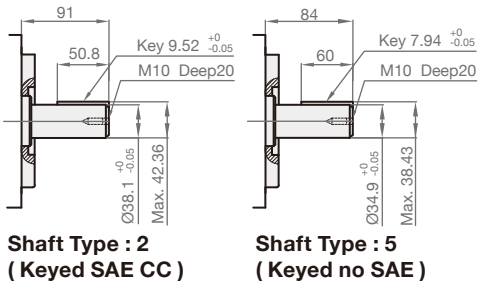
Pressure Port	Model	Volumetric Displacement Vp (cm ³ /rev)	Flow qve [l/min]=1500r.p.m.			Input Power P [kw]=1500r.p.m.			Max. Pressure (kgf/cm ²)	Max. Speed (r.p.m.)
			p=0bar	p=140bar	p=240bar	p=7bar	p=140bar	p=240bar		
P1 P2	014	47.6	71.4	62.1	55.9	2.3	18.5	30.6	240	2500
	017	58.2	87.3	78.0	71.8	2.5	22.2	37.0		
	020	66.0	99.0	89.7	83.5	2.8	24.9	41.7		
	024	79.5	119.3	110.0	103.8	3.0	29.6	49.8		
	028	89.7	134.5	125.2	119.0	3.2	33.2	55.9		
	031	98.3	147.5	138.1	131.9	3.3	36.2	61.0		
	035	111.0	166.5	157.2	151.0	3.5	40.7	68.7		
	038	120.3	180.4	171.1	164.9	3.7	43.9	74.3		
	042	136.0	204.0	194.7	188.5	4.0	49.4	83.7		
	045	145.7	218.5	209.2	203.0	4.1	52.8	89.5		
	050	158.0	237.0	227.7	224.0	4.4	57.0	85.0	210	2200
	061	190.5	285.7	278.0	-	4.6	60.6	-	120	
P3	005	17.2	25.8	20.8	17.3	1.4	7.5	12.2	275	2500
	006	21.3	31.9	26.9	23.4	1.5	8.9	14.7		
	008	26.4	39.6	34.6	31.1	1.6	10.7	17.7		
	010	34.1	51.1	46.1	42.6	1.7	13.4	22.3		
	012	37.1	55.6	50.6	47.1	1.7	14.4	24.1		
	014	46.0	69.0	64.0	60.5	1.9	17.6	29.5		
	017	58.3	87.4	82.4	78.9	2.1	21.9	36.9		
	020	63.8	95.7	90.7	87.2	2.2	23.8	40.2		
	022	70.3	105.4	100.4	96.9	2.3	26.1	44.1		
	025	79.3	118.9	113.9	110.4	2.5	29.2	49.5		
	028	88.8	133.2	128.2	125.8	2.8	32.7	48.5	210	
	031	100.0	150.0	145.0	142.6	2.8	36.5	54.2		

Min. speed : 600r.p.m. weight : 69.5kg Typical : 24cSt

* Input powerp (kw) for one cartridge only.

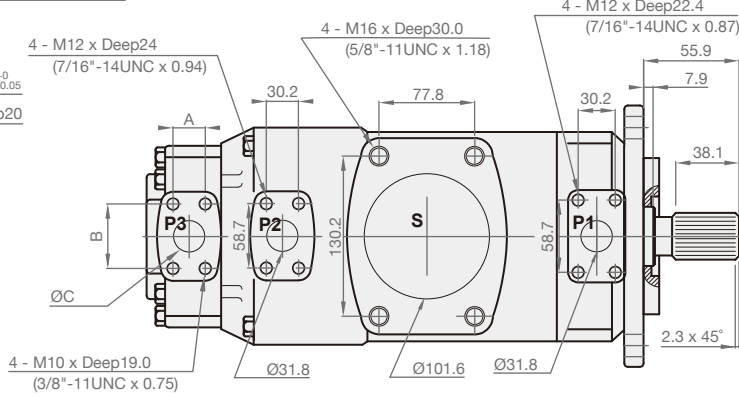


Shaft Type : 1
(Keyed SAE C)

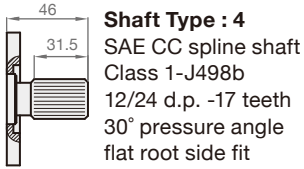


Shaft Type : 2
(Keyed SAE CC)

Shaft Type : 5
(Keyed no SAE)



Shaft Type : 3
SAE C spline shaft
Class 1-J498b
12/24 d.p. -14 teeth
30° pressure angle
flat root side fit



Shaft Type : 4
SAE CC spline shaft
Class 1-J498b
12/24 d.p. -17 teeth
30° pressure angle
flat root side fit

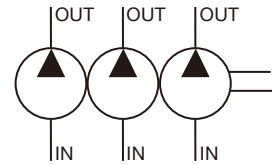
Port	Code	A	B	C
P3	00, M0	1.03 (26.2)	2.06 (52.4)	1.0 (25.4)
	01, M1	0.874 (22.2)	1.874 (47.6)	0.75 (19.05)

Shaft Torque Limits (ml/rev. x bar)		
Model	Shaft	Vp x p max. P1+P2+P3
ST6DCCS	1	43240
	2	72306
	3	61200
	4	55600

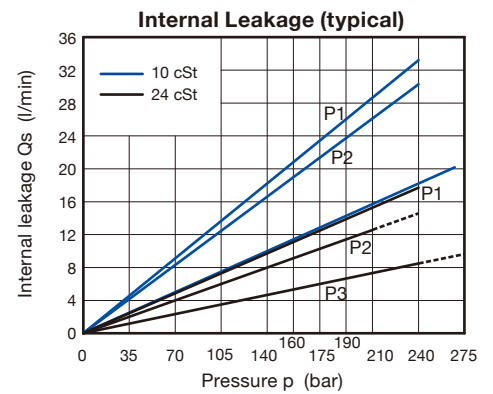
ST6EDCS



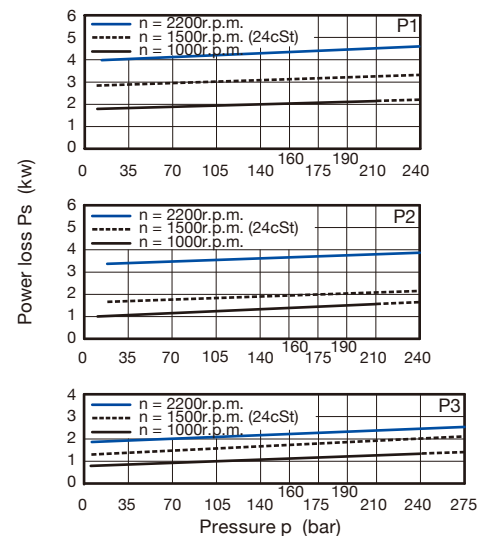
SYMBOLS



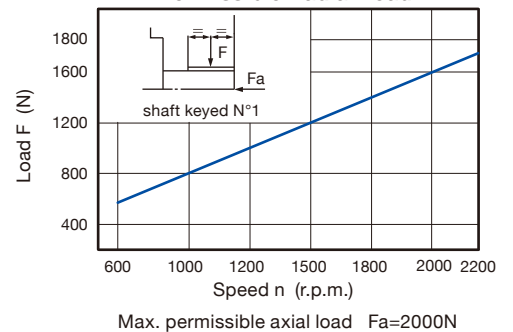
CURVES



Hydromechanical Power Loss (typical)



Permissible Radial Load



ORDER CODES

ST6EDCS - **066** - **038** - **008** - **1 R 00** - **C 1** - **P** - **00**

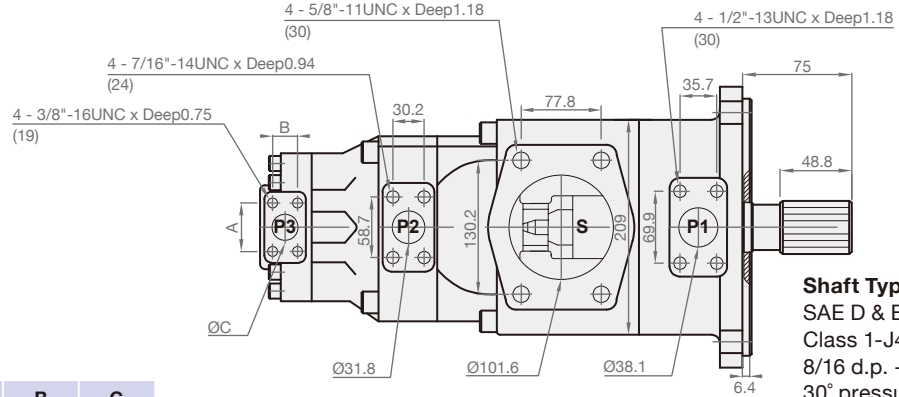
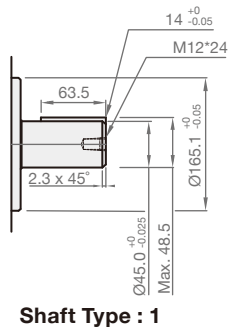
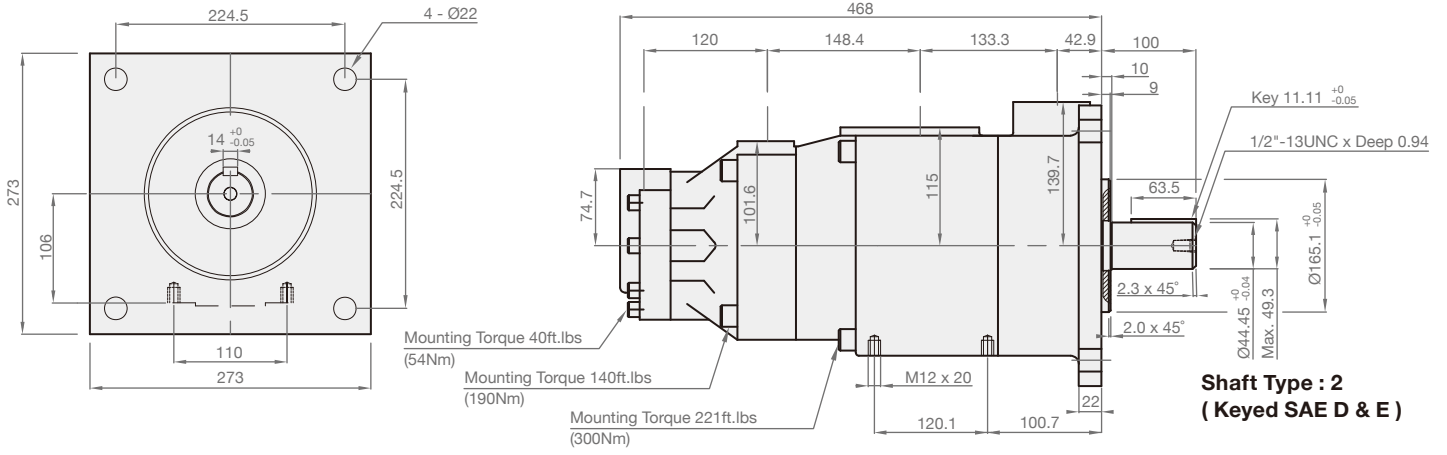
1 2 P1 2 P2 2 P3 3 4 5 6 7 8 9

1	Model Name	ST6EDCS	
2	Cam Ring Volumetric Displacement (cm ³ /rev)	P1 = 042, 045, 050, 052, 057, 062, 066, 072, 085 P2 = 014, 017, 020, 024, 028, 031, 035, 038, 042, 045, 050, 061 P3 = 003, 005, 006, 008, 010, 012, 014, 017, 020, 022, 025, 028, 031	
3	Shaft Type	1	keyed G45N-ISO 3019-2
		2	keyed SAE D & E
		3	spline SAE D & E
4	Direction of Rotation (Viewed from Shaft Side)	R	clockwise direction
		L	counter clockwise direction
5	Porting Combination	00	standard
6	Design Number	C	
7	Seal Class	1	S1 (for mineral oil)
		4	S4 (for fire resistant fluids)
		5	S5 (for mineral oil and fire resistant fluids)
8	Mounting (Pump)	P	pedestal mounting
		F	face mounting
9	Mounting w/connection Variables	0	P3=1" SAE
		1	P3=3/4" SAE

MODEL SPEC.

Pressure Port	Model	Volumetric Displacement Vp (cm ³ /rev)	Flow qve [l/min]=1500r.p.m.			Input Power P [kw]=1500r.p.m.			Max. Pressure (kgf/cm ²)	Max. Speed (r.p.m.)
			p=0bar	p=140bar	p=240bar	p=7bar	p=140bar	p=240bar		
P1	042	132.3	198.5	188.5	181.3	5.2	49.4	82.6	240	2200
	045	142.4	213.6	203.6	196.5	5.4	52.9	88.7		
	050	158.5	237.7	227.7	220.6	5.7	58.5	98.3		
	052	164.8	247.2	237.2	230.1	5.8	60.8	102.1		
	057	180.7	271.1	261.1	254.0	6.1	66.4	106.9		
	062	196.7	295.0	285.0	277.9	6.4	71.9	121.3		
	066	213.3	319.9	309.9	302.8	6.7	77.7	131.2		
	072	227.1	340.6	330.6	323.5	6.9	82.6	139.5		
	085	269.8	404.7	397.7	-	7.3	65.3	-	90	2000
P2	014	47.6	71.4	62.1	55.9	2.3	18.5	30.6	240	2200
	017	58.2	87.3	78.0	71.8	2.5	22.2	37.0		
	020	66.0	99.0	89.7	83.5	2.8	24.9	41.7		
	024	79.5	119.3	110.0	103.8	3.0	29.6	49.8		
	028	89.7	134.5	125.2	119.0	3.2	33.2	55.9		
	031	98.3	147.5	138.1	131.9	3.3	36.2	61.0		
	035	111.0	166.5	157.2	151.0	3.5	40.7	68.7		
	038	120.3	180.4	171.1	164.9	3.7	43.9	74.3		
	042	136.0	204.0	194.7	188.5	4.0	49.4	83.7		
	045	145.7	218.5	209.2	203.0	4.1	52.8	89.5		
	050	158.0	237.0	227.7	224.0	4.4	57.0	85.0	210	
061	190.5	285.7	278.0	-	4.6	60.6	-	120		
P3	003	10.8	16.2	11.2	7.7	1.3	5.3	8.4	275	2200
	005	17.2	25.8	20.8	17.3	1.4	7.5	12.2		
	006	21.3	31.9	26.9	23.4	1.5	8.9	14.7		
	008	26.4	39.6	34.6	31.1	1.6	10.7	17.7		
	010	34.1	51.1	46.1	42.6	1.7	13.4	22.3		
	012	37.1	55.6	50.6	47.1	1.7	14.4	24.1		
	014	46.0	69.0	64.0	60.5	1.9	17.6	29.5		
	017	58.3	87.4	82.4	78.9	2.1	21.9	36.9		
	020	63.8	95.7	90.7	87.2	2.2	23.8	40.2		
	022	70.3	105.4	100.4	96.9	2.3	26.1	44.1		
	025	79.3	118.9	113.9	110.4	2.5	29.2	49.5		
	028	88.8	133.2	128.2	125.8	2.8	32.7	48.5		
	031	100.0	150.0	145.0	142.6	2.8	36.5	54.2	210	

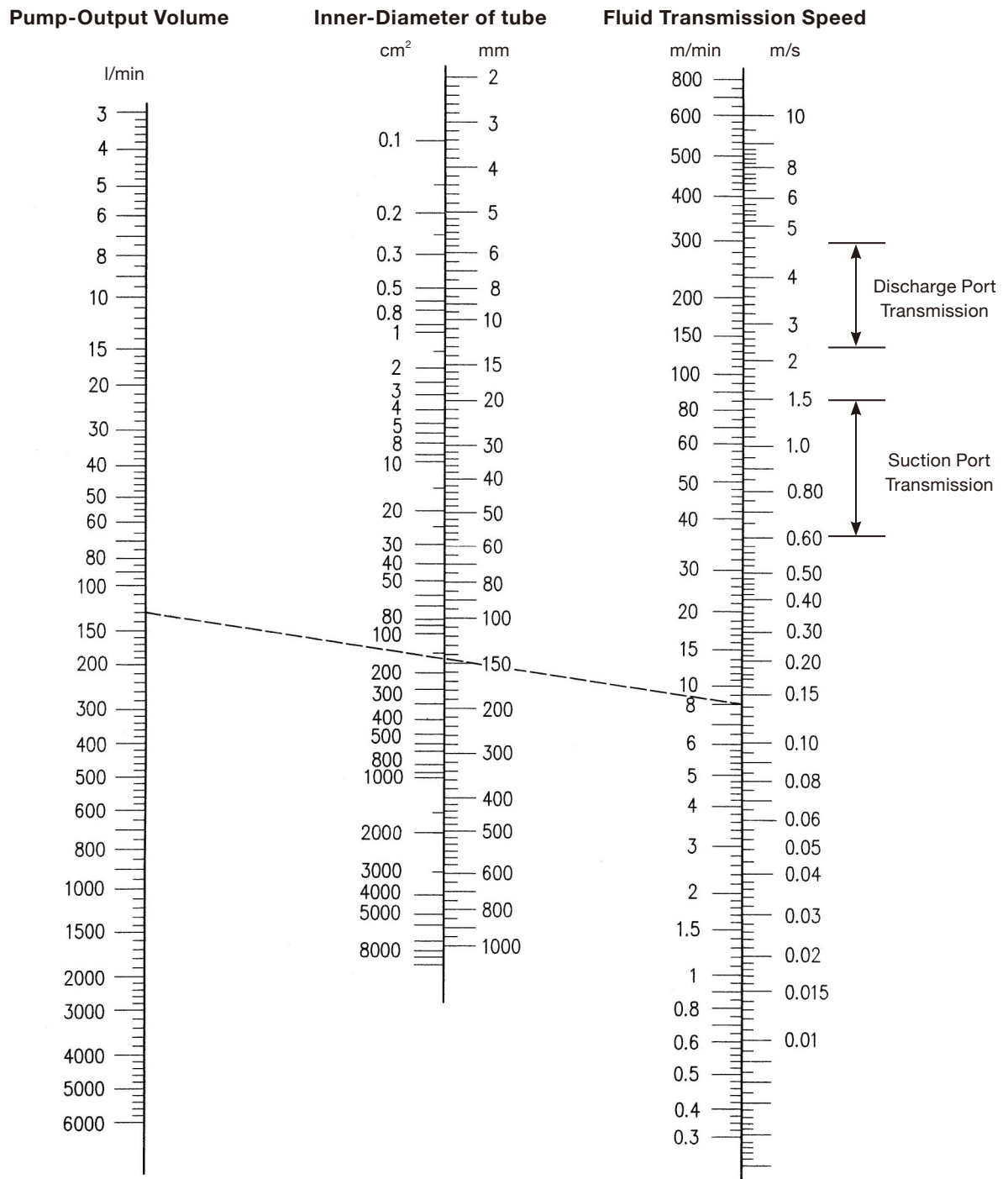
weight : 108.5kg Typical : 24cSt
 * Input powerp (kw) for one cartridge only.



Port	Code	A	B	C
P3	0	2.06 (52.4)	1.03 (26.2)	1.0 (25.4)
	1	1.874 (47.6)	0.874 (22.2)	0.75 (19.05)

Shaft Torque Limits (ml/rev. x bar)		
Model	Shaft	Vp x p max. P1+P2+P3
ST6EDCS	1	114715

Piping Diameter - Fluid Transmission - Flow Volume Drawing



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