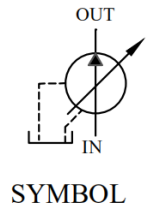
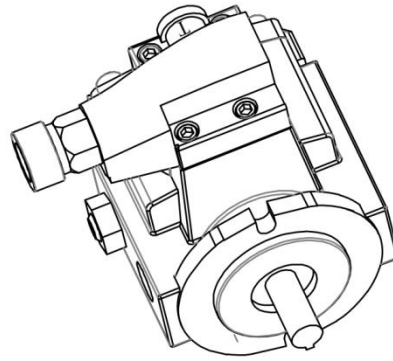


KPV-8
KPV-12
KPV-16
KPV-20
KPV-23



Features 特點

- ❖ Abrasion resistant, fatigue-resistant port plate with tarnish-proof treatment.
- ❖ Double (fixed and rotatable) cam rings design to assure high stability.
- ❖ The impact pressure elimination/compensation design to minimize surge pressure
- ❖ Using special alloy to ensure durability and long product life
- ❖ Conforms to SAE mounting standards

Model	Pump Capacity (cm ³ /rev)	Operating Pressure Mpa (Kgf/cm ²)	Max Pressure Mpa (Kgf/cm ²)	No-load Discharge Rate (L/min)		Weight (Kg)
				50Hz	60Hz	
KPV- 8	8	1.5~25 (15.3~255)	30 (306)	12	14.4	16
KPV-12	12			18	21.6	
KPV-16	16			24	28.8	
KPV-20	20			30	36.0	
KPV-23	23			34.5	41.4	

Ordering Code 訂購指引

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

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① KPV Series

② Flow (cm³/rev) : 8, 12, 16, 20, 23

③ F : Single pressure valve

④ Pressure adjusting range

1 : 1.5~14 Mpa (15.3~142.8 Kgf/cm²)

2 : 2.0~21 Mpa (20.4~214.2 Kgf/cm²)

3 : 2.5~25 Mpa (25.5~255.0 Kgf/cm²)

⑤ A : SAE-A Standard , \varnothing 82.55 Mounting

⑥ Speed range

12 : 1200 rpm

15 : 1500 rpm

18 : 1800 rpm

⑦ Shaft

01 : \varnothing 19.05 Keyed Shaft (Standard)

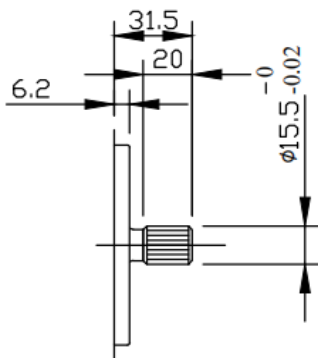
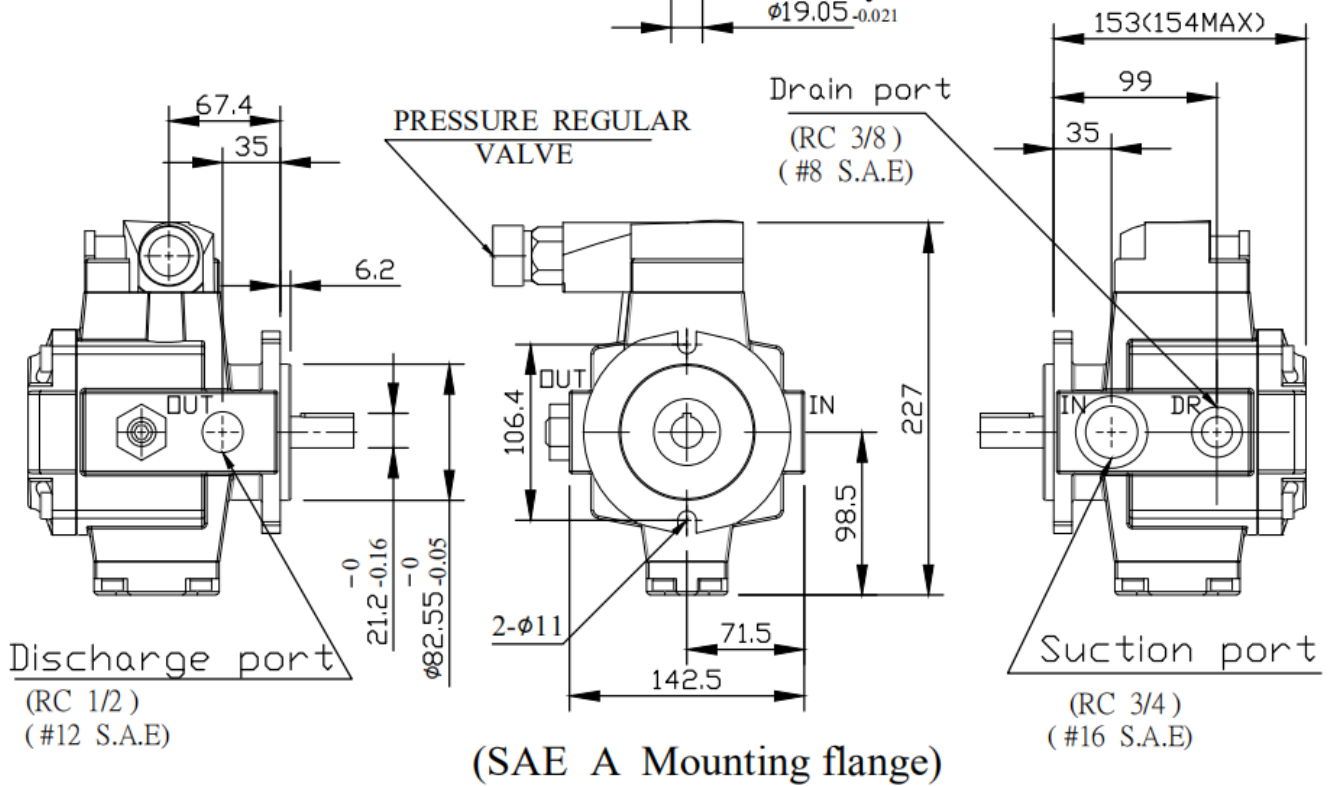
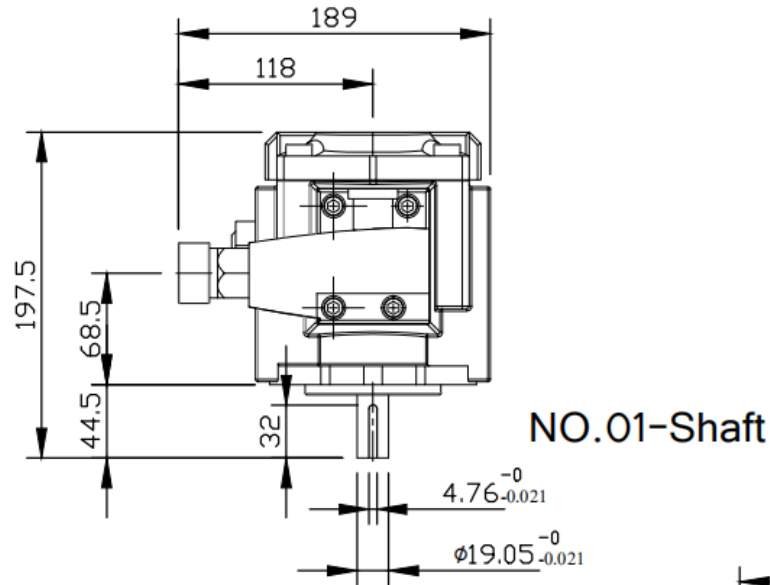
02 : SAE-A - 9 Tooth Splined 16/32 dp

⑧ Pipe specs

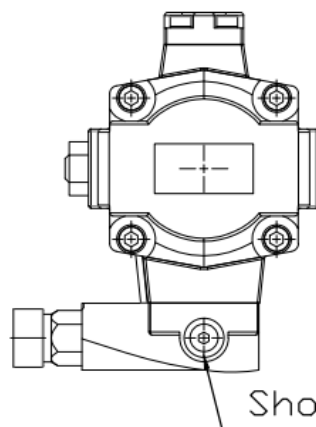
01 : S=RC $\frac{3}{4}$, P=RC $\frac{1}{2}$, DR=RC $\frac{3}{8}$

02 : S=#16 SAE, P=#12 SAE, DR=#8 SAE

KPV-8
KPV-12
KPV-16
KPV-20
KPV-23



Diametral Pitch : 16/32
Pressure Angle : 30°
No. of Teeth : 9
Available on "A" Cover only
NO.02-Shaft



* Shock Clipper port
Should be plumbed
to tank to activate
shock clipper

Shock Clipper port
(RC 1/4) , (#6 S.A.E)

* (須接獨立油管回油箱)

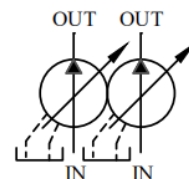
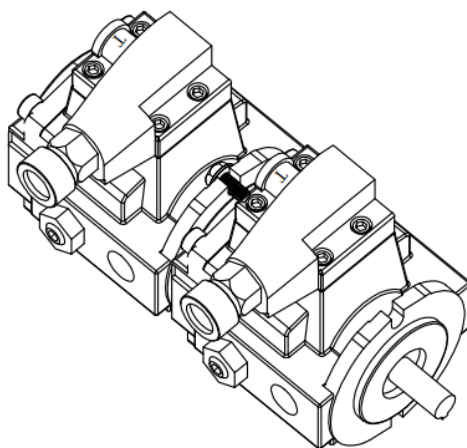
KPVV- 8.*

KPVV-12.*

KPVV-16.*

KPVV-20.*

KPVV-23.*



SYMBOL

Features 特點

- ❖ 壓力板作耐磨，耐疲勞及抗污處理，大幅提高耐磨，耐疲勞及高抗污性能。
- ❖ 固定及活動雙軸環設計，內軸環作動滑順靈敏，穩定性高。
- ❖ 作衝擊壓消除補償設計，脈動衝擊小。
- ❖ 噪音低，高效率，高性能。
- ❖ 軸環材質採用特殊合金鋼，壽命長。
- ❖ 採用 SAE 規格安裝，符合國際通用規格。

Model	Pump Capacity (cm ³ /rev)		Operating Pressure Mpa (Kgf/cm ²)		Weight (Kg)
	P1	P2	P1	P2	
KPVV- **	8 , 12 , 16 20 , 23	8 , 12 , 16 20 , 23	1.5~25 (15.3~255)	1.5~25 (15.3~255)	32

Ordering Code 訂購指引

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

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

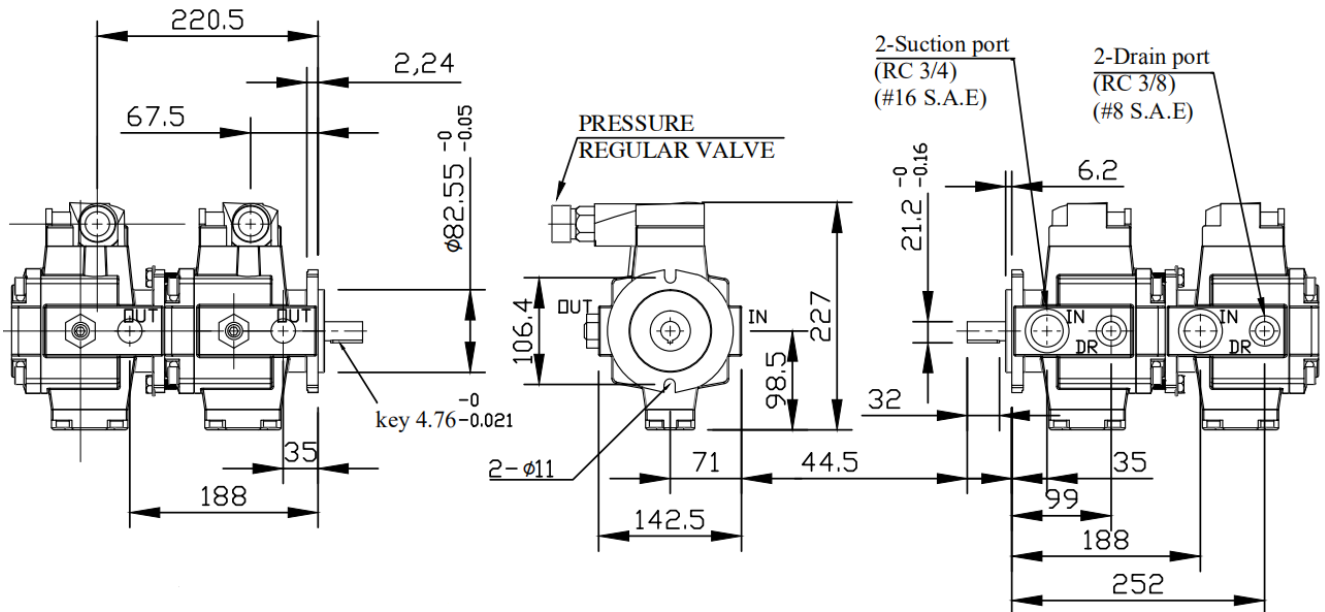
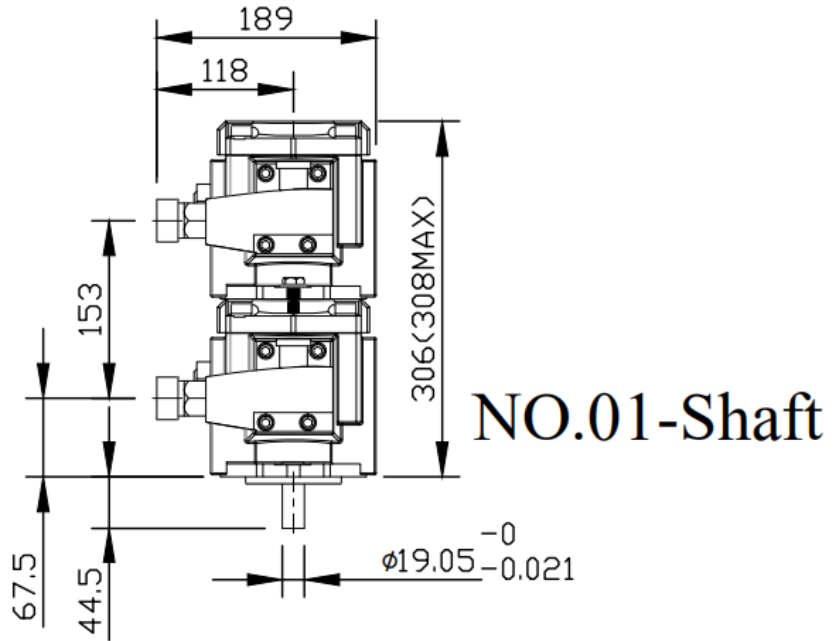
- | | |
|---|---|
| <p>① KPVV 型號：高壓雙聯變量葉片泵</p> <p>② P1 流量(cm³/rev)：8, 12, 16, 20, 23</p> <p>③ P2 流量(cm³/rev)：8, 12, 16, 20, 23</p> <p>④ F：單座壓力閥</p> <p>⑤ P1 壓力級數
 1、1.5~14 Mpa (15.3~142.8 Kgf/cm²)
 2、2.0~21 Mpa (20.4~214.2 Kgf/cm²)
 3、2.5~25 Mpa (25.5~255.0 Kgf/cm²)</p> <p>⑥ P2 壓力級數
 1、1.5~14 Mpa (15.3~142.8 Kgf/cm²)
 2、2.0~21 Mpa (20.4~214.2 Kgf/cm²)
 3、2.5~25 Mpa (25.5~255.0 Kgf/cm²)</p> | <p>⑦ A：SAE-A 規格，ø82.55 安裝</p> <p>⑧ 轉速
 12：1200 rpm
 15：1500 rpm
 18：1800 rpm</p> <p>⑨ 轉軸
 01：ø19.05 (長鍵)
 02：SAE-A - 9 Tooth Splined 16/32 dp</p> <p>⑩ 管口牙規格
 01：S= RC³/₄, P= RC¹/₂, DR= RC ³/₈
 02：S=#16 SAE, P=#12 SAE, DR=#8 SAE</p> |
|---|---|

KCL

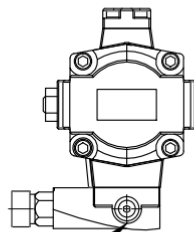
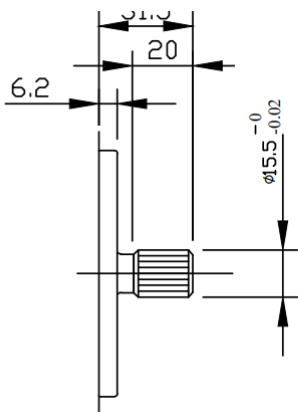
KPVV-** Series

Variable Double Vane Pump Dimensional Drawing

- KPVV - 8.*
- KPVV - 12.*
- KPVV - 16.*
- KPVV - 20.*
- KPVV - 23.*



(SAE A Mounting flange)



* Shock Clipper port
Should be plumbed
to tank to activate
shock clipper

Shock Clipper port

(RC 1/4) , (#6 S.A.E)

* (須接獨立油管回油箱)

Diametral Pitch : 16/32

Pressure Angle : 30°

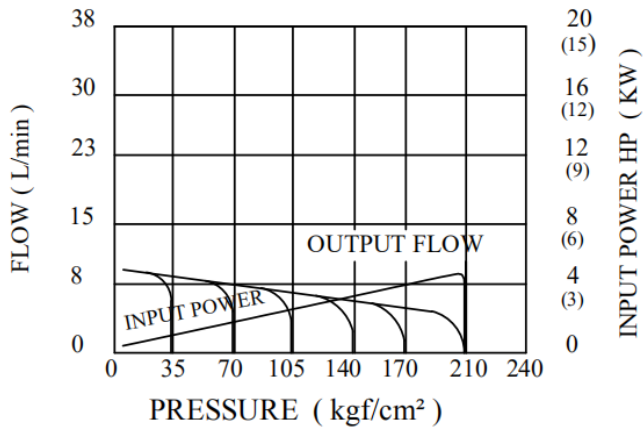
No. of Teeth : 9

Available on "A" Cover only

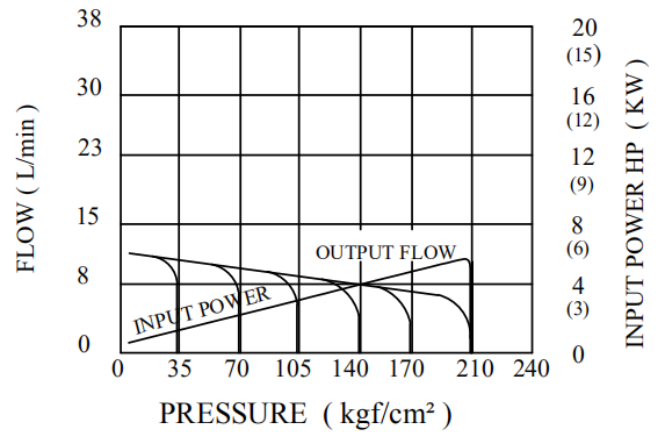
NO.02-Shaft

KCL KPV-8/12/16/20/23 Performance Characteristics

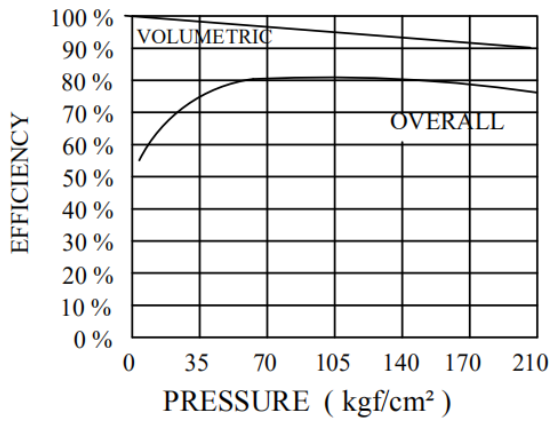
OUTPUT FLOW & POWER @ 1200rpm
8 cm³/rev



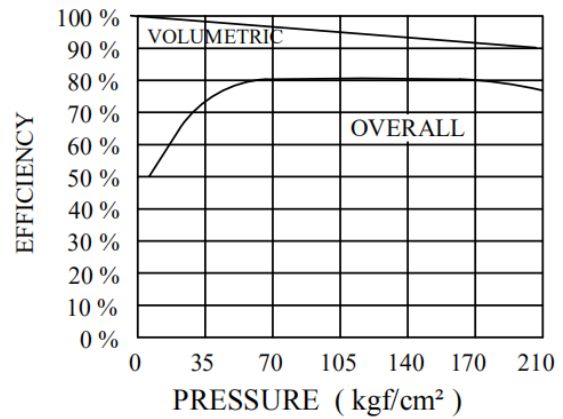
OUTPUT FLOW & POWER @ 1500rpm
8 cm³/rev



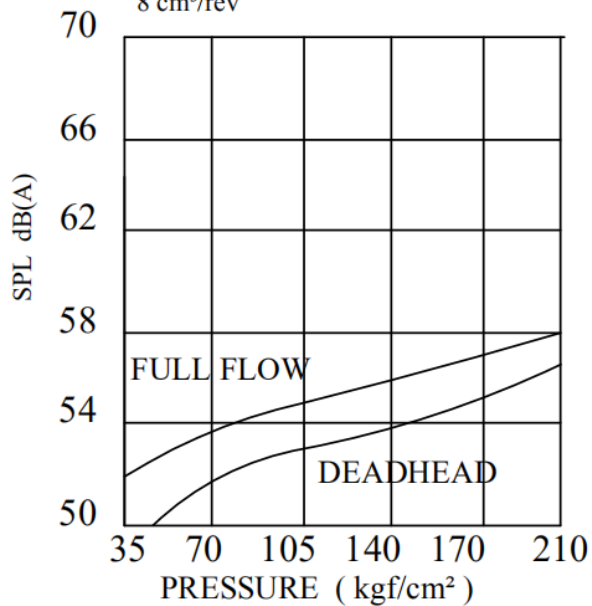
EFFICIENCY @ 1200 rpm
8 cm³/rev



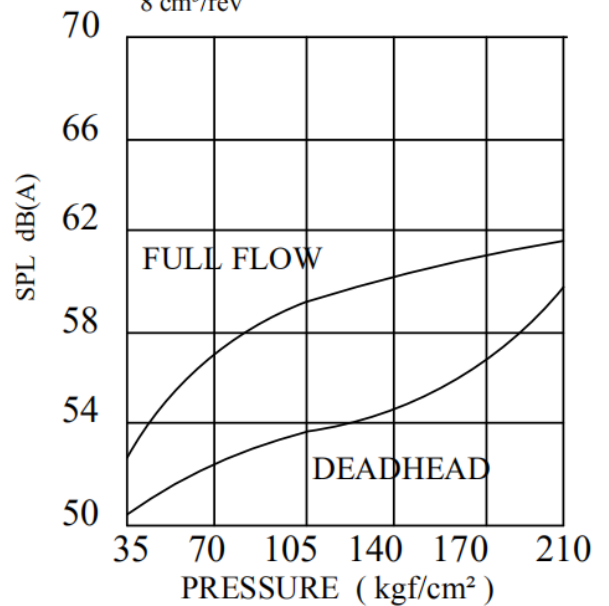
EFFICIENCY @ 1500 rpm
8 cm³/rev



SOUND PRESSURE @ 1200rpm
8 cm³/rev

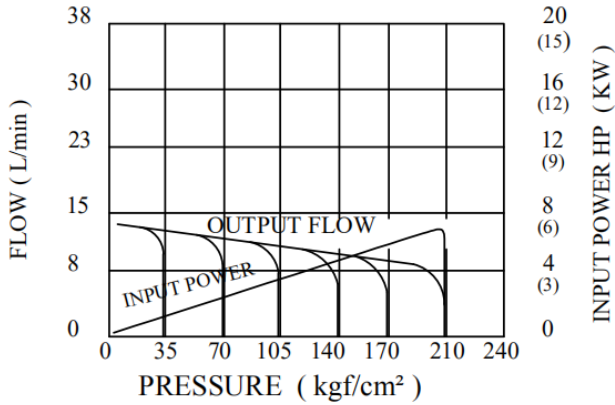


SOUND PRESSURE @ 1500rpm
8 cm³/rev

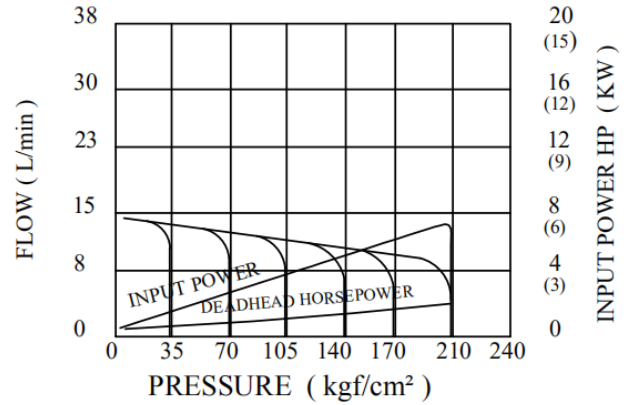


KCL KPV-8/12/16/20/23 Performance Characteristics

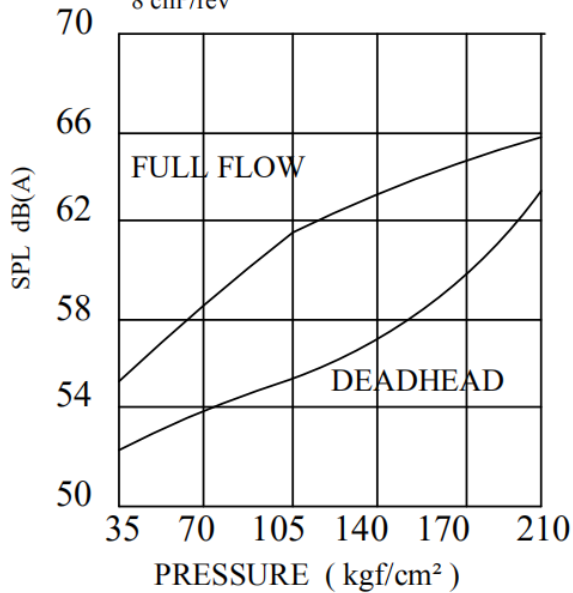
OUTPUT FLOW & POWER @ 1800rpm
8 cm³/rev



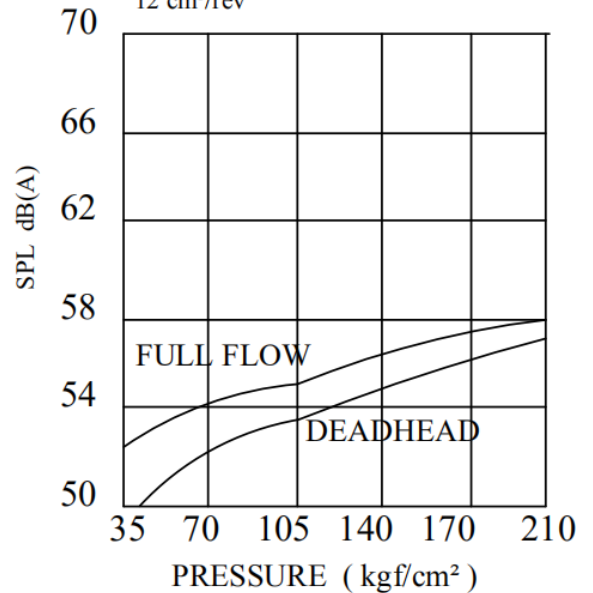
OUTPUT FLOW & POWER @ 1200rpm
12 cm³/rev



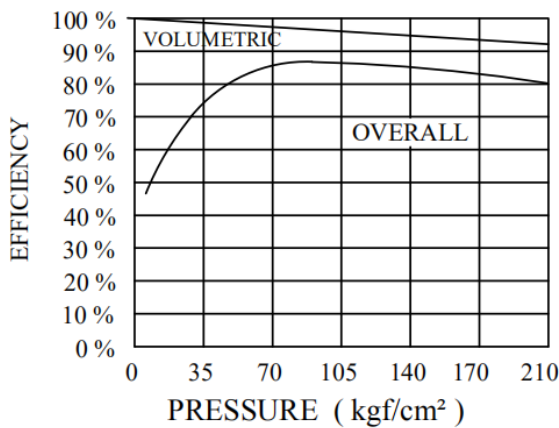
SOUND PRESSURE @ 1800rpm
8 cm³/rev



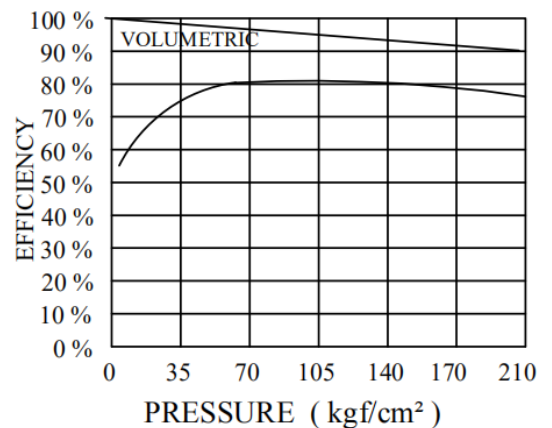
SOUND PRESSURE @ 1200rpm
12 cm³/rev



EFFICIENCY @ 1800 rpm
8 cm³/rev

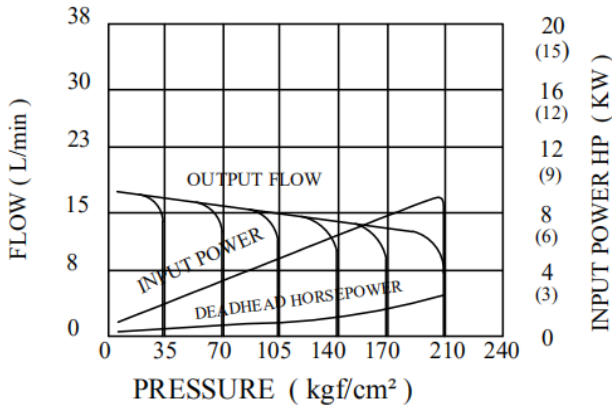


EFFICIENCY @ 1200 rpm
12 cm³/rev

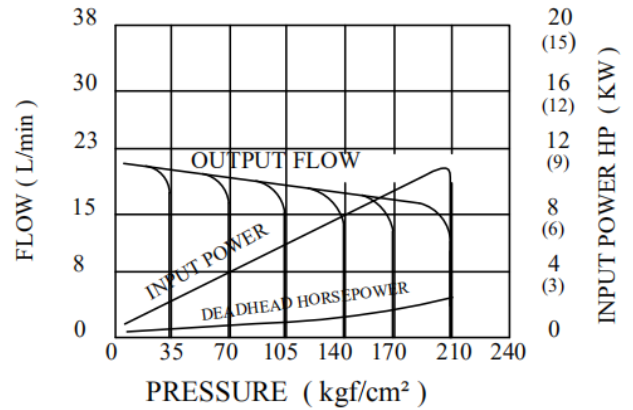


KCL KPV-8/12/16/20/23 Performance Characteristics

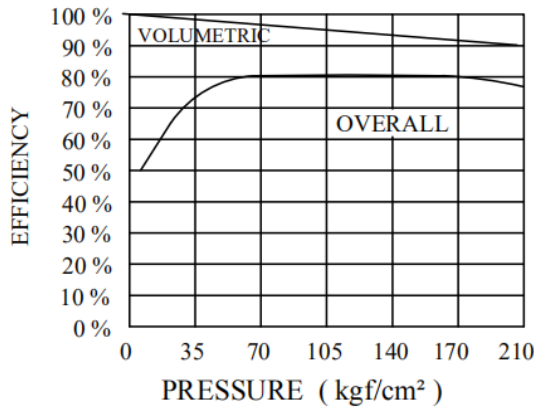
OUTPUT FLOW & POWER @ 1500rpm
12 cm³/rev



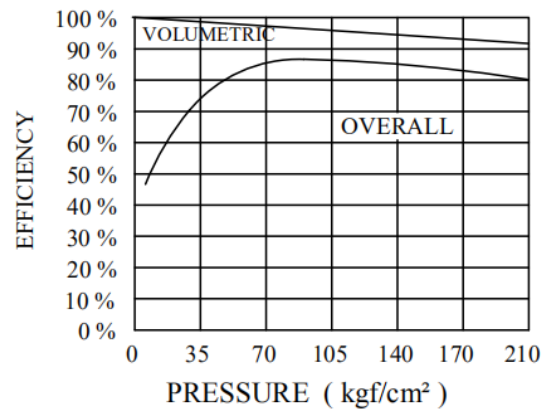
OUTPUT FLOW & POWER @ 1800rpm
12 cm³/rev



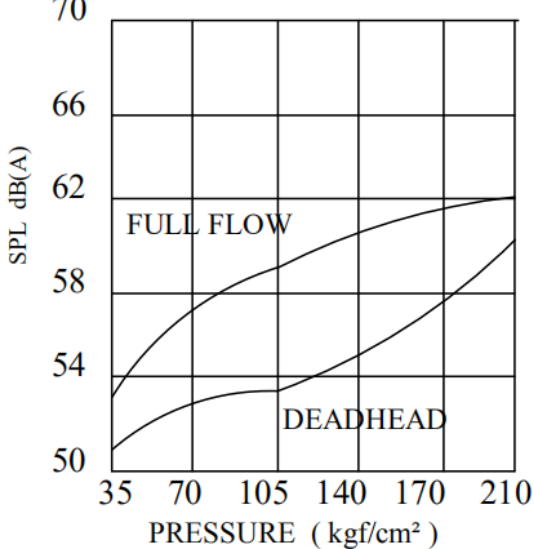
EFFICIENCY @ 1500 rpm
12 cm³/rev



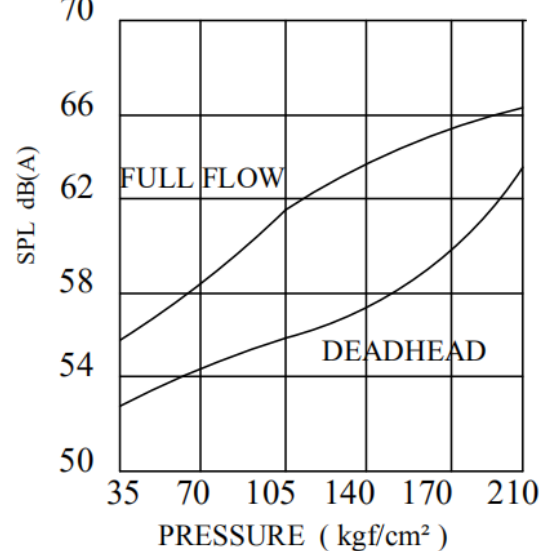
EFFICIENCY @ 1800 rpm
12 cm³/rev



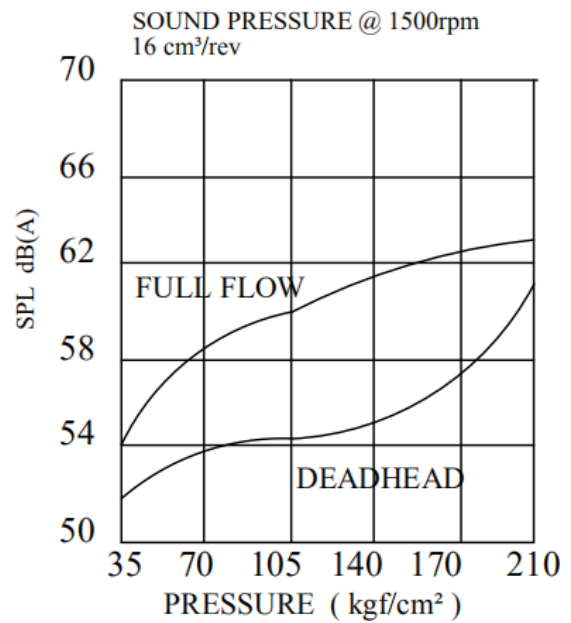
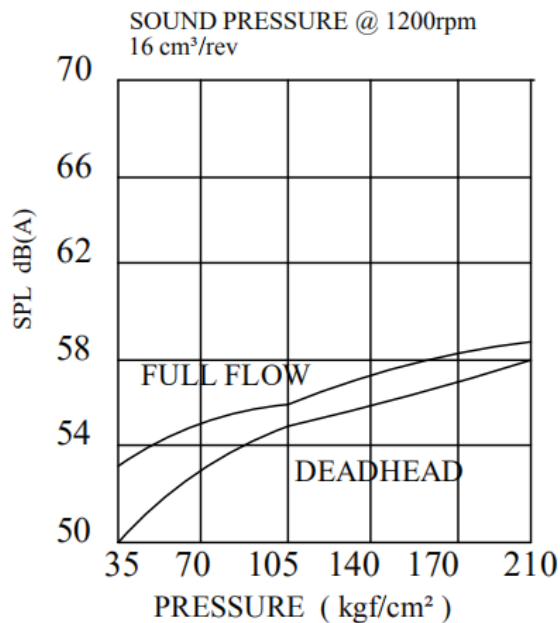
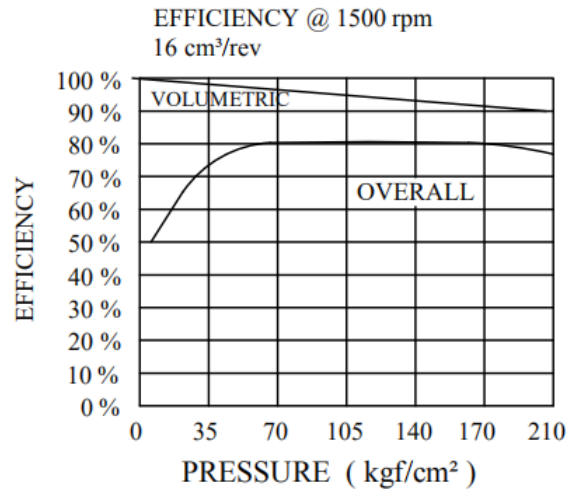
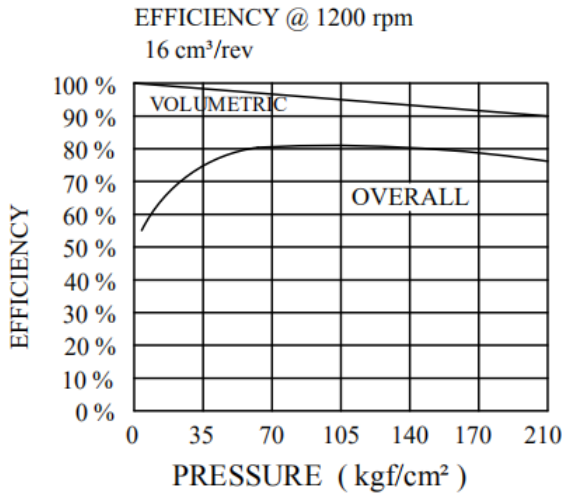
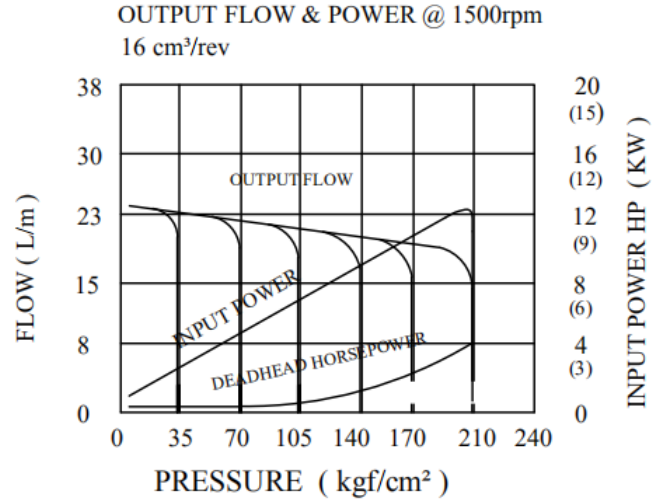
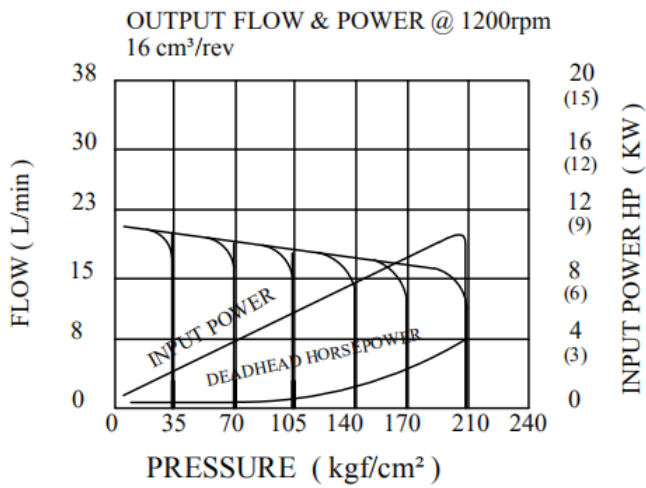
SOUND PRESSURE @ 1500rpm
12 cm³/rev



SOUND PRESSURE @ 1800rpm
12 cm³/rev

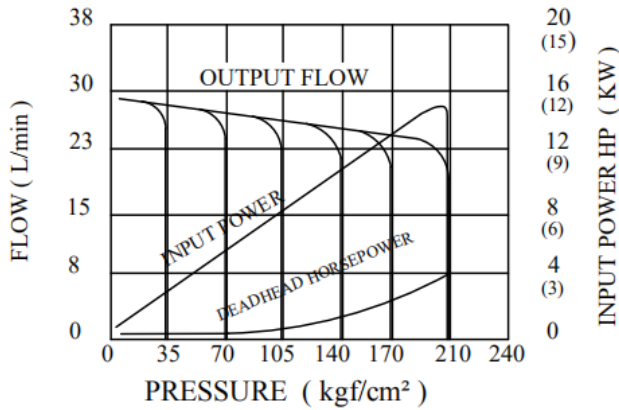


KCL KPV-8/12/16/20/23 Performance Characteristics

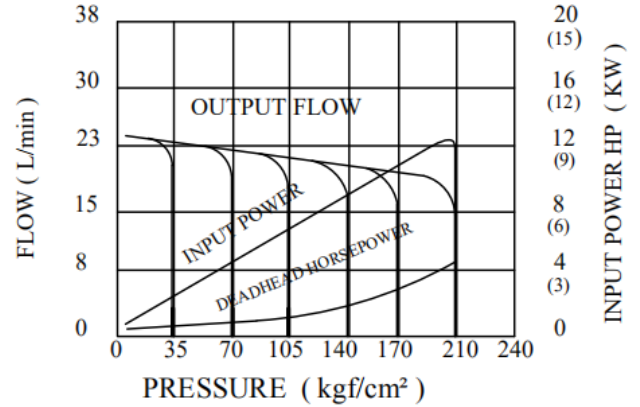


KCL KPV-8/12/16/20/23 Performance Characteristics

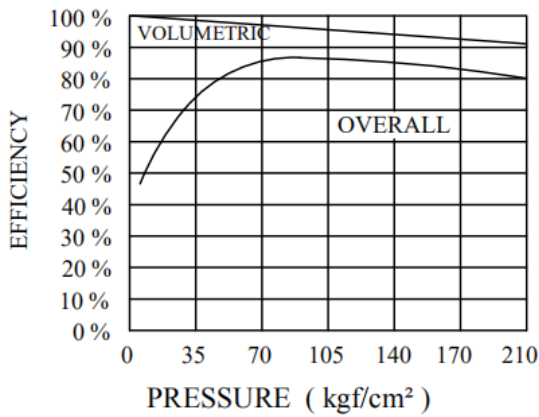
OUTPUT FLOW & POWER @ 1800rpm
16 cm³/rev



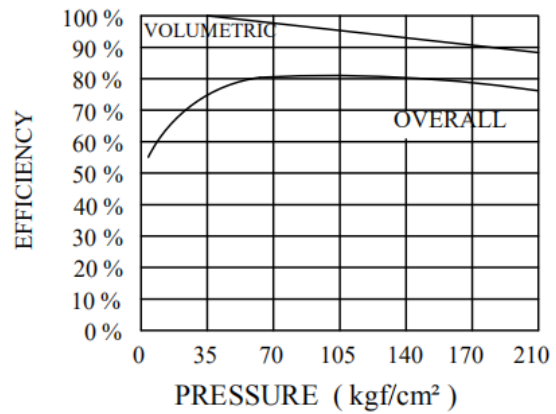
OUTPUT FLOW & POWER @ 1200rpm
20 cm³/rev



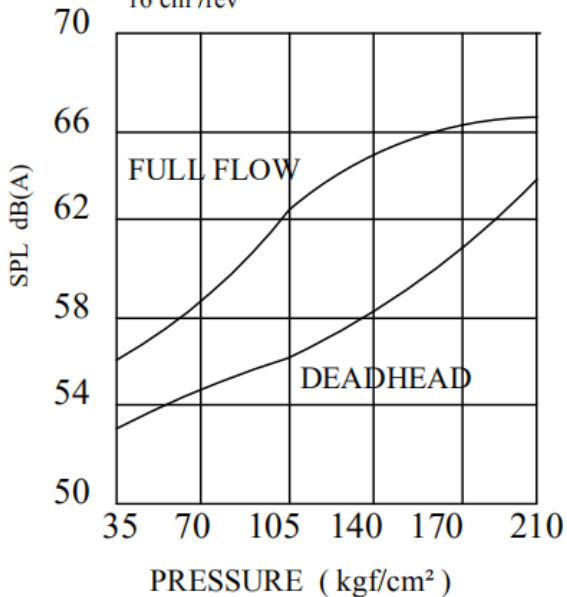
EFFICIENCY @ 1800 rpm
16 cm³/rev



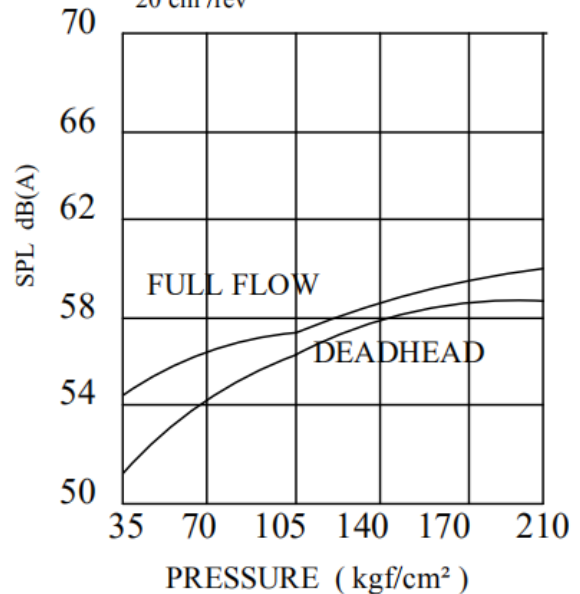
EFFICIENCY @ 1200 rpm
20 cm³/rev



SOUND PRESSURE @ 1800rpm
16 cm³/rev

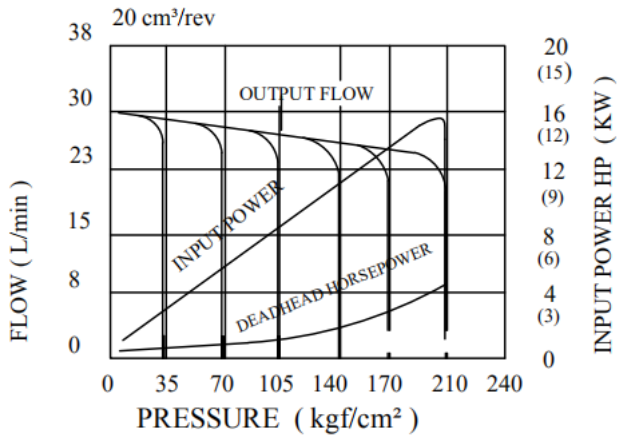


SOUND PRESSURE @ 1200rpm
20 cm³/rev

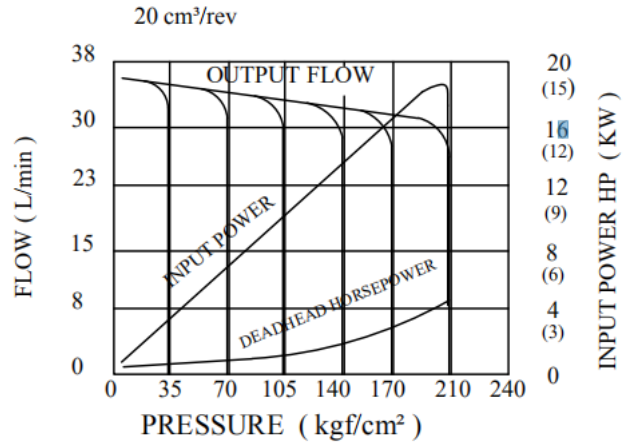


KCL KPV-8/12/16/20/23 Performance Characteristics

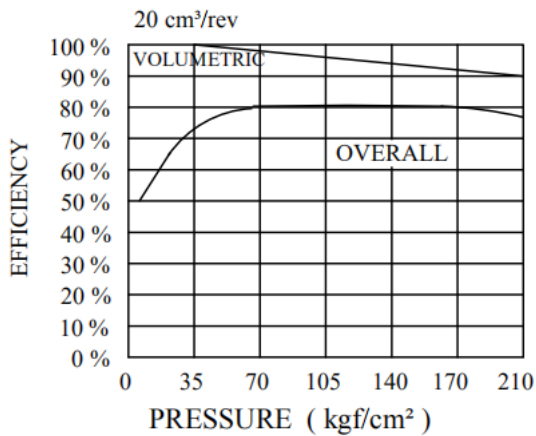
OUTPUT FLOW & POWER @ 1500rpm



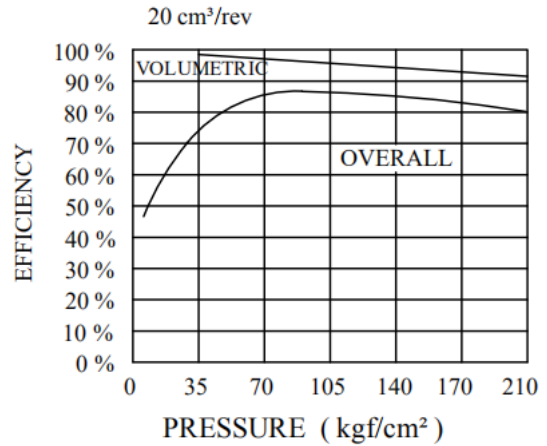
OUTPUT FLOW & POWER @ 1800rpm



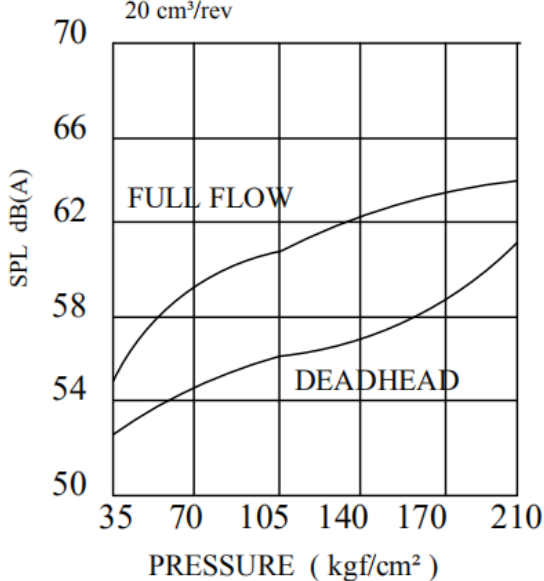
EFFICIENCY @ 1500 rpm



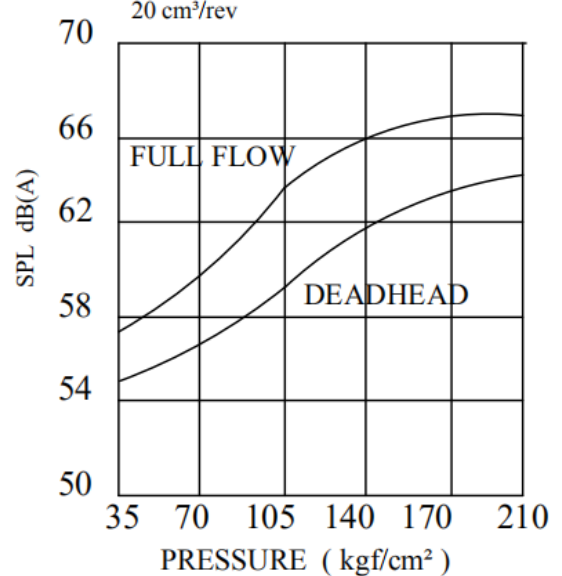
EFFICIENCY @ 1800 rpm



SOUND PRESSURE @ 1500rpm

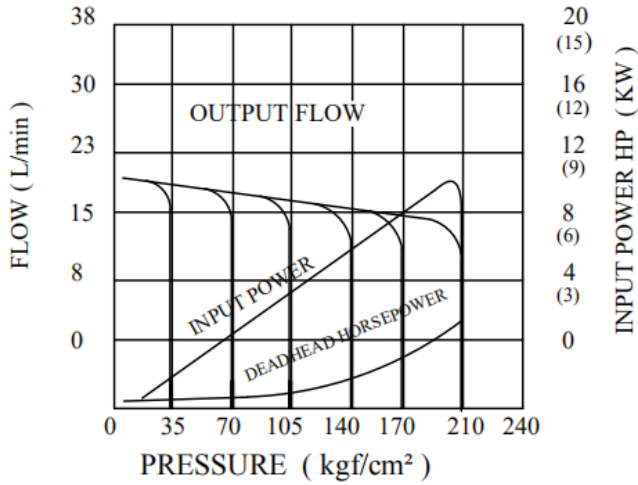


SOUND PRESSURE @ 1800rpm

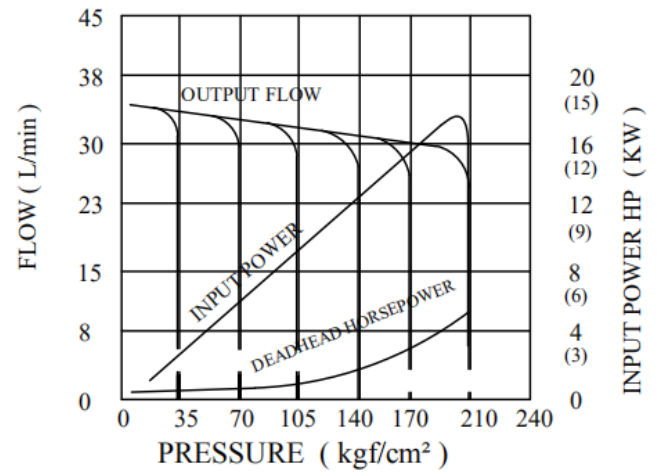


KCL KPV-8/12/16/20/23 Performance Characteristics

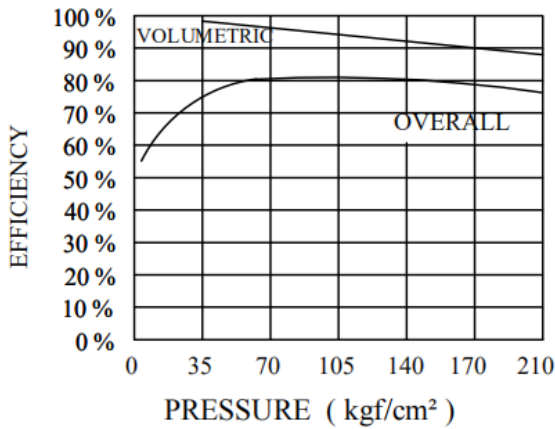
OUTPUT FLOW & POWER @ 1200rpm
23 cm³/rev



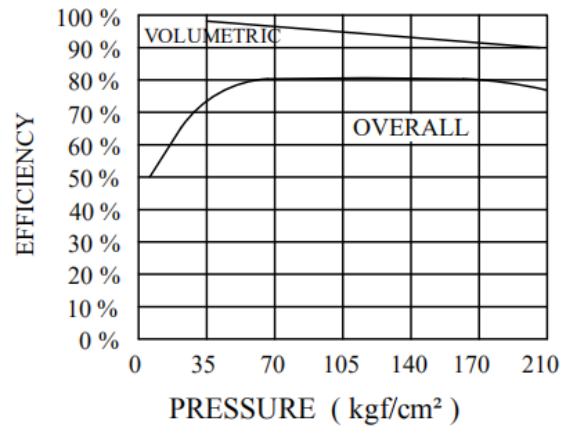
OUTPUT FLOW & POWER @ 1500rpm
23 cm³/rev



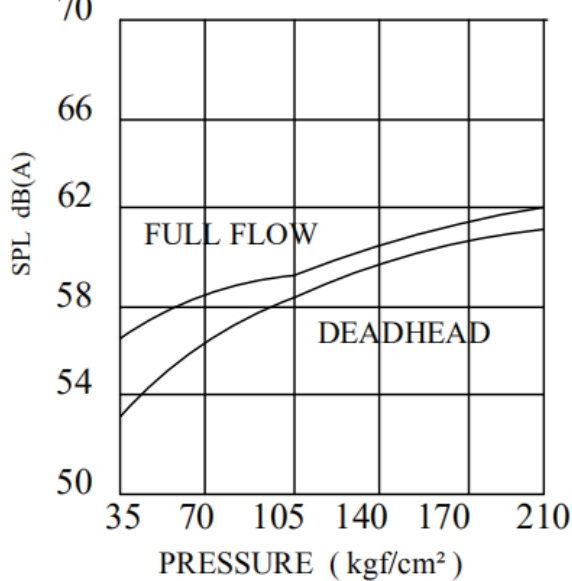
EFFICIENCY @ 1200 rpm
23 cm³/rev



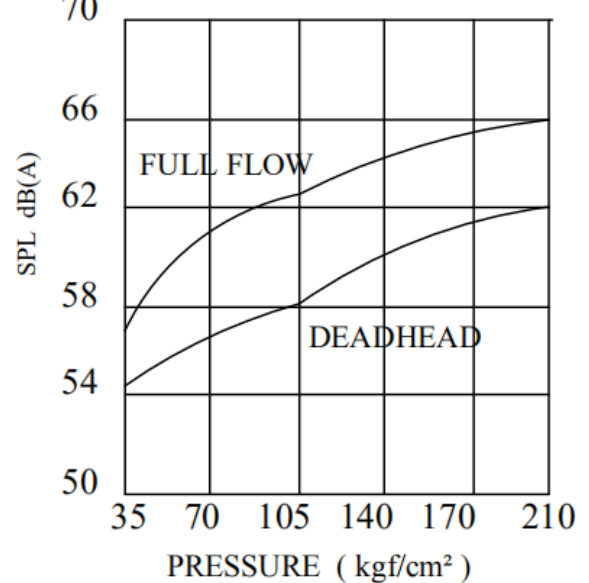
EFFICIENCY @ 1500 rpm
23 cm³/rev



SOUND PRESSURE @ 1200rpm
23 cm³/rev

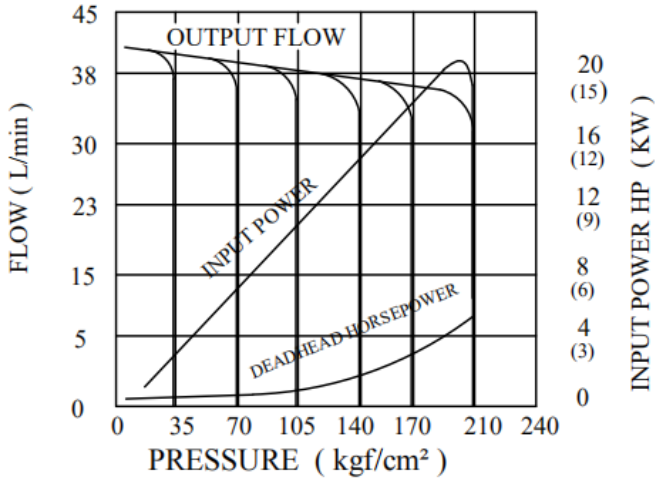


SOUND PRESSURE @ 1500rpm
23 cm³/rev

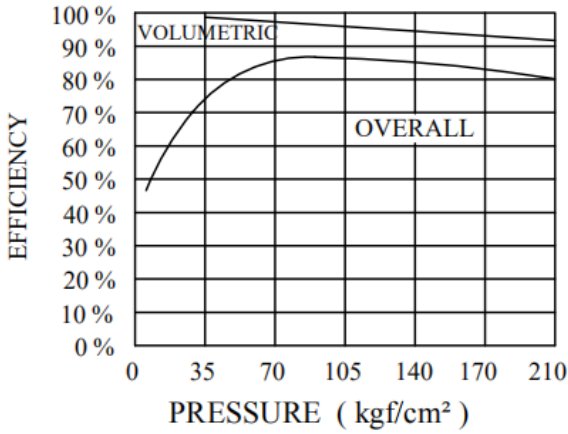


KCL KPV-8/12/16/20/23 Performance Characteristics

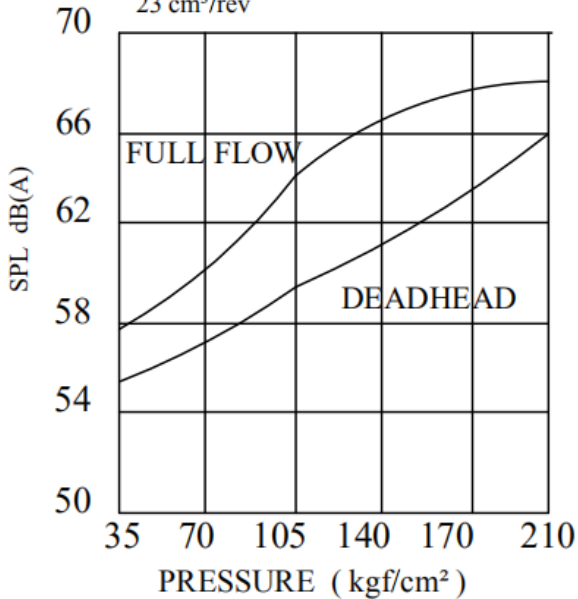
OUTPUT FLOW & POWER @ 1800rpm
23 cm³/rev



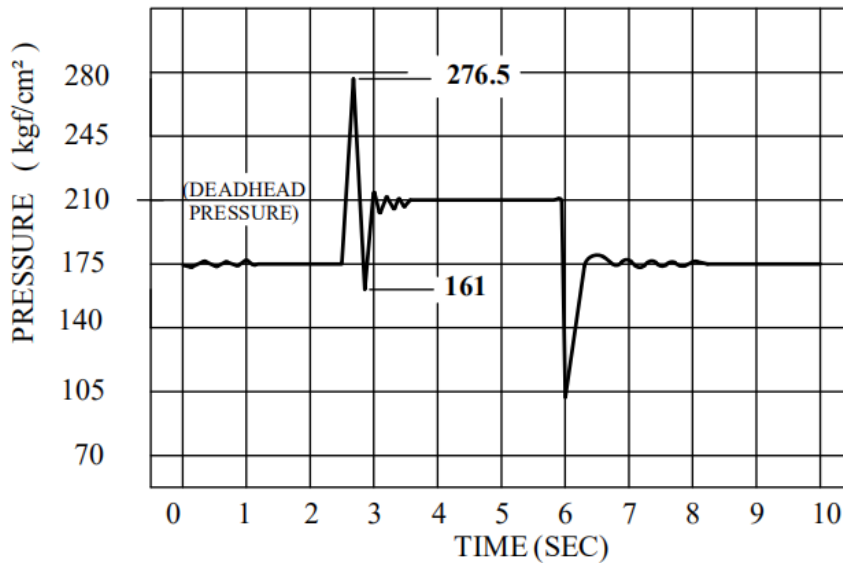
EFFICIENCY @ 1800 rpm
23 cm³/rev



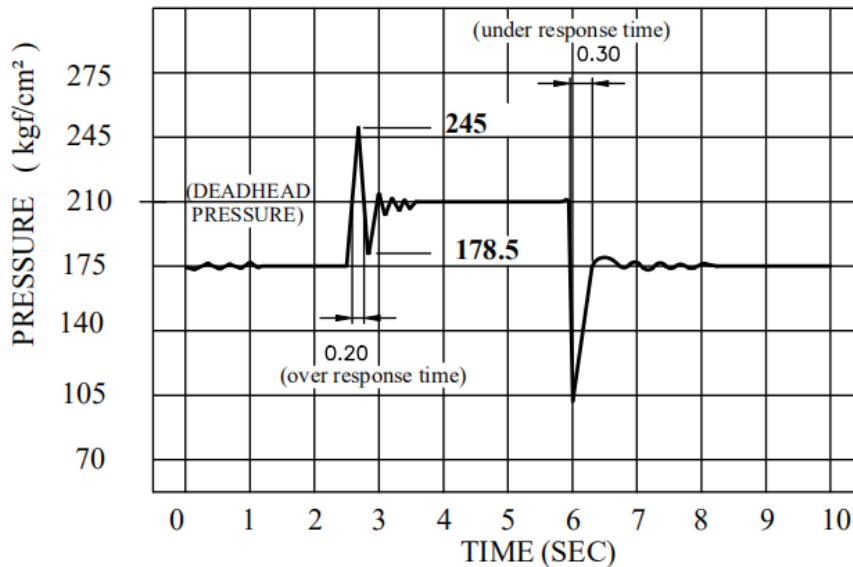
SOUND PRESSURE @ 1800rpm
23 cm³/rev



* 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 (kgf/cm²)



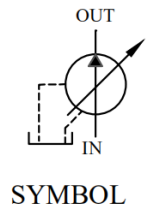
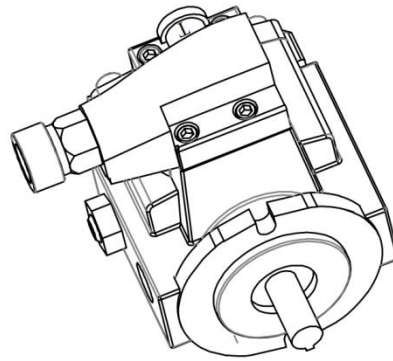
KPV-16 Single stage compensator, plot with shock clipper **active**.
1. Response overshoot: 35 (kgf/cm²); response undershoot: 31.5 (kgf/cm²)
2. Response time (circuit dependent) : 20 ~30 ms

* CASE DRAIN FLOW

SPEC.	Mpa (Kg/cm ²)	KPV- 8 / 12 / 16 / 20 /23 (L/min)
case drain flow while compensating @1800 rpm CASE DRAIN FLOW	7 (71.4)	1.5~2.3
	14 (142.8)	2.5~3.8
	21 (214.2)	3.5~4.8

KCL KPV SERIES-25 Variable Vane Pump Features & Ordering Code

KPV-25
KPV-32
KPV-36
KPV-42



Features 特點

- ❖ 壓力板作耐磨，耐疲勞及抗污處理，大幅提高耐磨，耐疲勞及高抗污性能。
- ❖ 固定及活動雙軸環設計，內軸環作動滑順靈敏，穩定性高。
- ❖ 作衝擊壓消除補償設計，脈動衝擊小。
- ❖ 噪音低，高效率，高性能。
- ❖ 軸環材質採用特殊合金鋼，壽命長。
- ❖ 採用 SAE 規格安裝，符合國際通用規格。

Model	Pump Capacity (cm ³ /rev)	Operating Pressure Mpa (Kgf/cm ²)	Max Pressure Mpa (Kgf/cm ²)	No-load Discharge Rate (L/min)		Weight (Kg)
				50Hz	60Hz	
KPV-25	25	1.5~21 (15.3~214.2)	25 (255)	37.5	45	28
KPV-32	32			48	57.6	
KPV-36	36			54	64.8	
KPV-42	42			63	75.6	

Ordering Code 訂購指引

KPV - 25 - F - 01 - B 12 - 01 - 01

① ② ③ ④ ⑤⑥ ⑦ ⑧

① KPV 型號：高壓變量葉片泵

② 流量 (cm³/rev)：25, 32, 36, 42

③ F：單座壓力閥

④ 壓力級數

1. 1.5~14 Mpa (15.3~142.8 Kgf/cm²)
2. 2.0~21 Mpa (20.4~214.2 Kgf/cm²)

⑤ B：SAE-B 規格，ø101.6 安裝

⑥ 轉速

- 12：1200 rpm
- 15：1500 rpm
- 18：1800 rpm

⑦ 轉軸

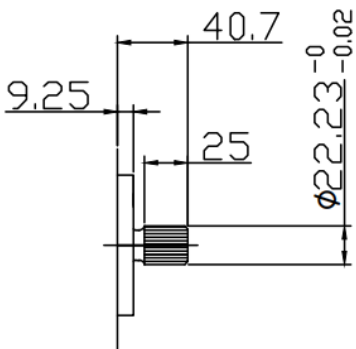
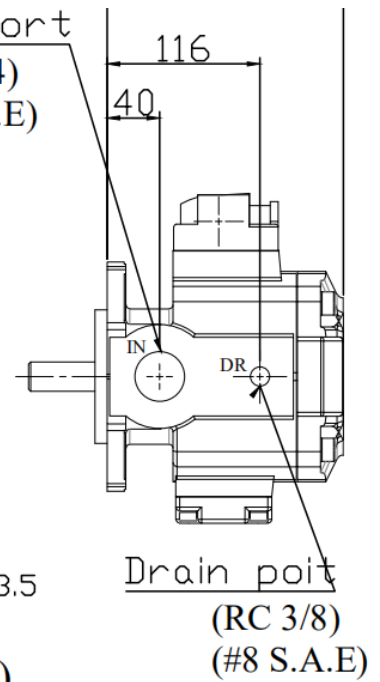
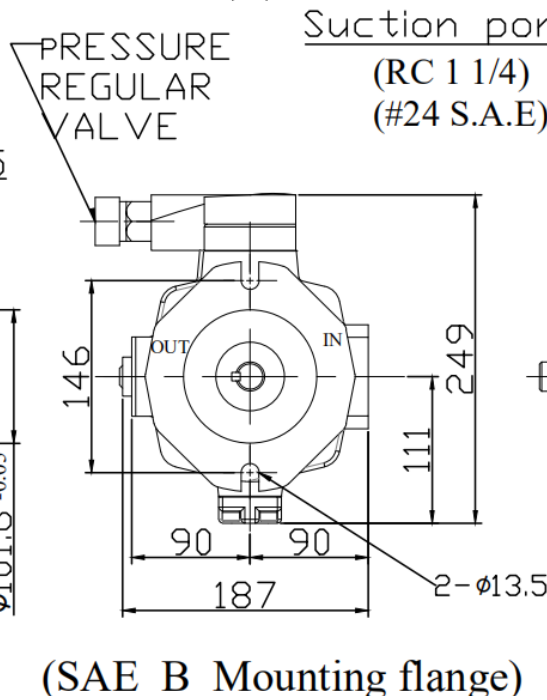
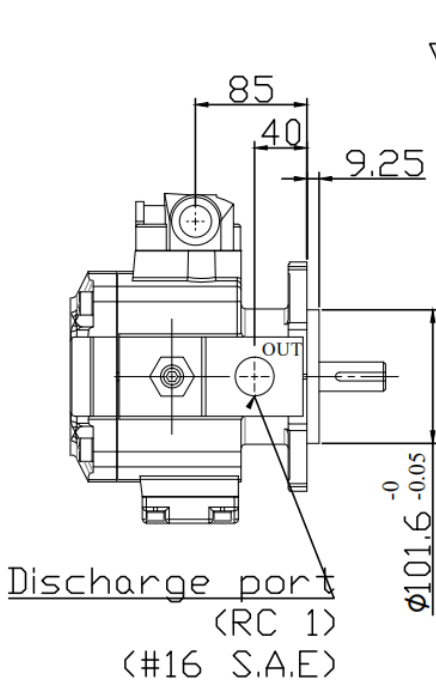
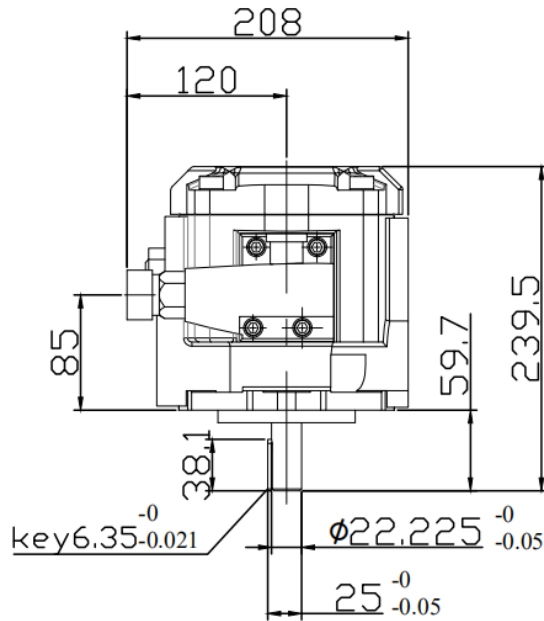
- 01：ø22.23 (長鍵)
- 02：SAE-B -13 Tooth Splined 16/32 dp

⑧ 管口牙規格

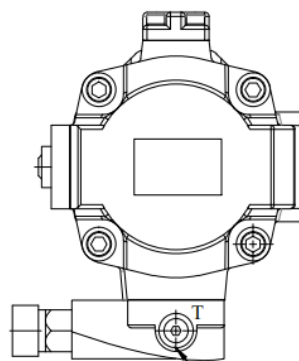
- 01：S=RC 1¹/₄"，P=RC 1"，DR=RC 3³/₈"
- 02：S=#24 SAE，P=#16 SAE，DR=#8 SAE

KCL KPV SERIES-25 Variable Vane Pump Dimensional Drawing

KPV-25
KPV-32
KPV-36
KPV-42



SAE-B splined shaft
Diametral Pitch : 16/32
Pressure Angle : 30°
No. of Teeth : 13
NO.02-Shaft



Shock Clipper port
(RC 1/4) , (#6 S.A.E)
*(須接獨立油管回油箱)

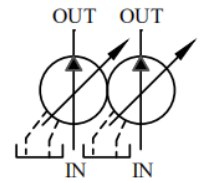
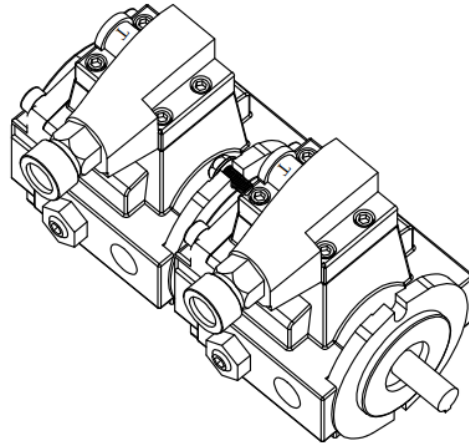
*Shock Clipper port
Should be plumbed
to tank to activate
shock clipper

KPVV-25.*

KPVV-32.*

KPVV-36.*

KPVV-42.*



SYMBOL

Features 特點

- ❖ 壓力板作耐磨，耐疲勞及抗污處理，大幅提高耐磨，耐疲勞及高抗污性能。
- ❖ 固定及活動雙軸環設計，內軸環作動滑順靈敏，穩定性高。
- ❖ 作衝擊壓消除補償設計，脈動衝擊小。
- ❖ 噪音低，高效率，高性能。
- ❖ 軸環材質採用特殊合金鋼，壽命長。
- ❖ 採用 SAE 規格安裝，符合國際通用規格。

Model	Pump Capacity (cm ³ /rev)		Operating Pressure Mpa (Kgf/cm ²)		Weight (Kg)
	P1	P2	P1	P2	
KPVV- **	25 , 32 , 36 42	8 , 12 , 16 20 , 23	1.5~21 (15.3~214.2)	1.5~25 (15.3~255)	44

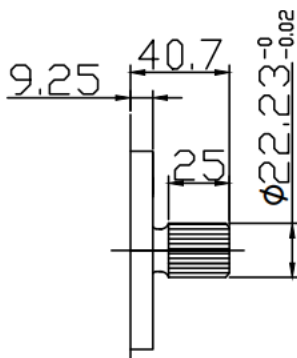
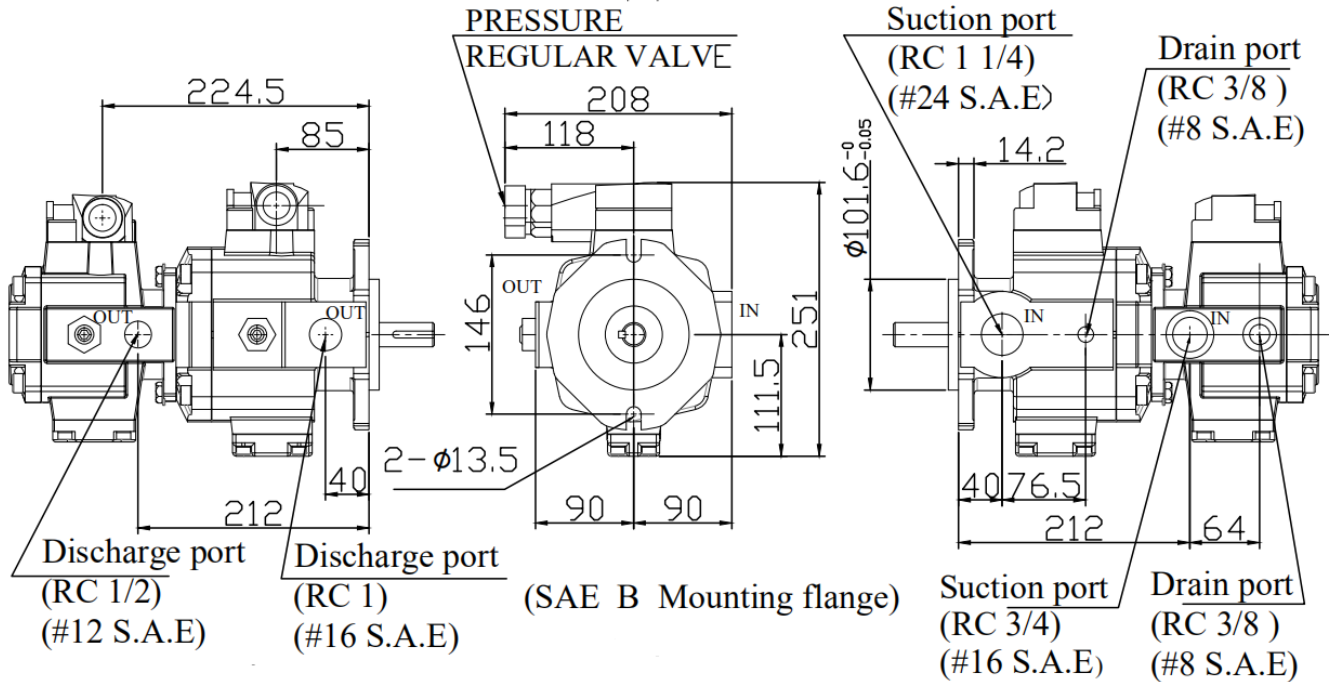
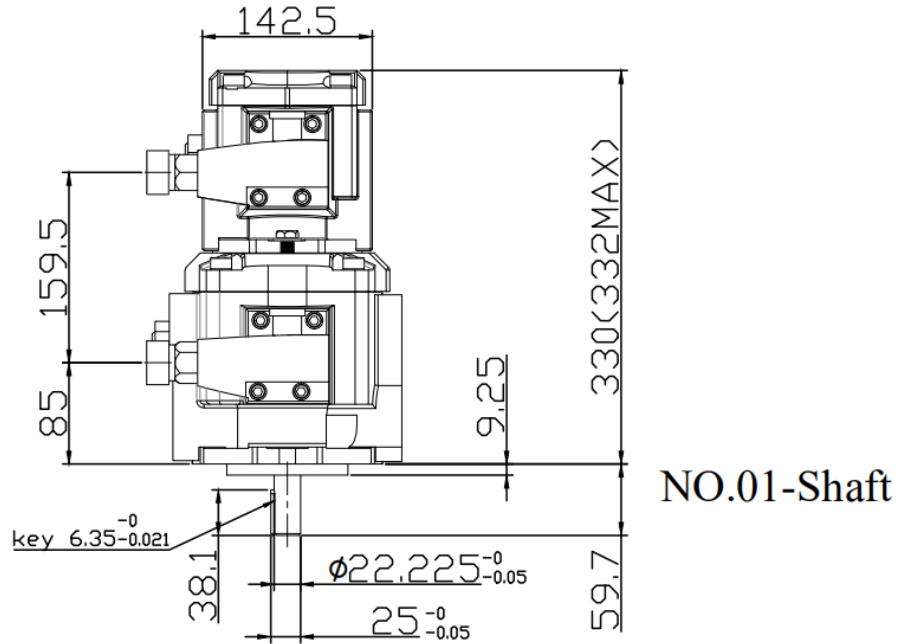
Ordering Code 訂購指引

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

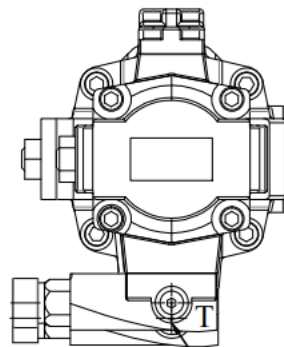
① ② ③ ④ ⑤ ⑥ ⑦⑧ ⑨ ⑩

- | | |
|--|---|
| <p>① KPVV 型號：高壓雙聯變量葉片泵</p> <p>② P1 流量(cm³/rev)：25, 32, 36, 42</p> <p>③ P2 流量(cm³/rev)：8, 12, 16, 20, 23</p> <p>④ F：單座壓力閥</p> <p>⑤ P1 壓力級數
1、1.5~14 Mpa (15.3~142.8 Kgf/cm²)
2、2.0~21 Mpa (20.4~214.2 Kgf/cm²)</p> <p>⑥ P2 壓力級數
1、1.5~14 Mpa (15.3~142.8 Kgf/cm²)
2、2.0~21 Mpa (20.4~214.2 Kgf/cm²)
3、2.5~25 Mpa (25.5~255.0 Kgf/cm²)</p> | <p>⑦ B：SAE-B 規格，∅101.6 安裝</p> <p>⑧ 轉速
12：1200 rpm
15：1500 rpm
18：1800 rpm</p> <p>⑨ 轉軸
01：∅22.23 (長鍵)
02：SAE-B - 13 Tooth Splined 16/32 dp</p> <p>⑩ 管口牙規格
01：P1 (S= RC 1¼” ,P= RC1” ,DR= RC³/₈”)
P2 (S= RC³/₄” ,P= RC¹/₂” ,DR=RC³/₈”)
02：P1 (S=#24 SAE, P=#16 SAE, DR=#8 SAE)
P2 (S=#16 SAE, P=#12 SAE, DR=#8 SAE)</p> |
|--|---|

- KPVV-25 *
- KPVV-32 *
- KPVV-36 *
- KPVV-42 *



SAE-B splined shaft
 Diametral Pitch : 16/32
 Pressure Angle : 30°
 No. of Teeth : 13
 NO.02-Shaft



* Shock Clipper port
 Should be plumbed
 to tank to activate
 shock clipper

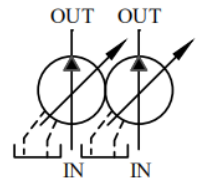
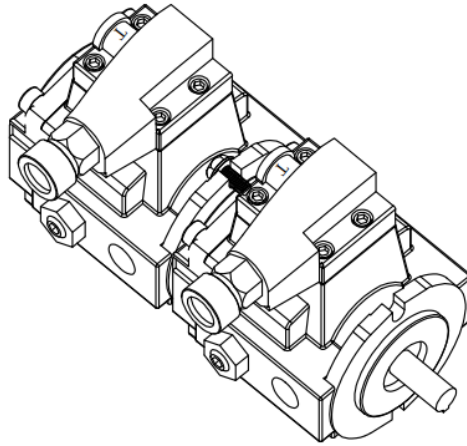
Shock Clipper port
 (RC 1/4) , (#6 S.A.E)
 * (須接獨立油管回油箱)

KCL

KPVV Series 25-25

Variable Double Vane Pump Features & Ordering Code

- KPVV-25.***
- KPVV-32.***
- KPVV-36.***
- KPVV-42.***



SYMBOL

Features 特點

- ❖ 壓力板作耐磨，耐疲勞及抗污處理，大幅提高耐磨，耐疲勞及高抗污性能。
- ❖ 固定及活動雙軸環設計，內軸環作動滑順靈敏，穩定性高。
- ❖ 作衝擊壓消除補償設計，脈動衝擊小。
- ❖ 噪音低，高效率，高性能。
- ❖ 軸環材質採用特殊合金鋼，壽命長。
- ❖ 採用 SAE 規格安裝，符合國際通用規格。

Model	Pump Capacity (cm ³ /rev)		Operating Pressure Mpa (Kgf/cm ²)		Weight (Kg)
	P1	P2	P1	P2	
KPVV- **	25 , 32 , 36 42	25 , 32 , 36 42	1.5~21 (15.3~214.2)	1.5~21 (15.3~214.2)	65

Ordering Code 訂購指引

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

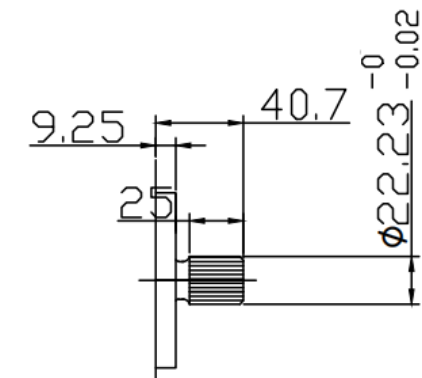
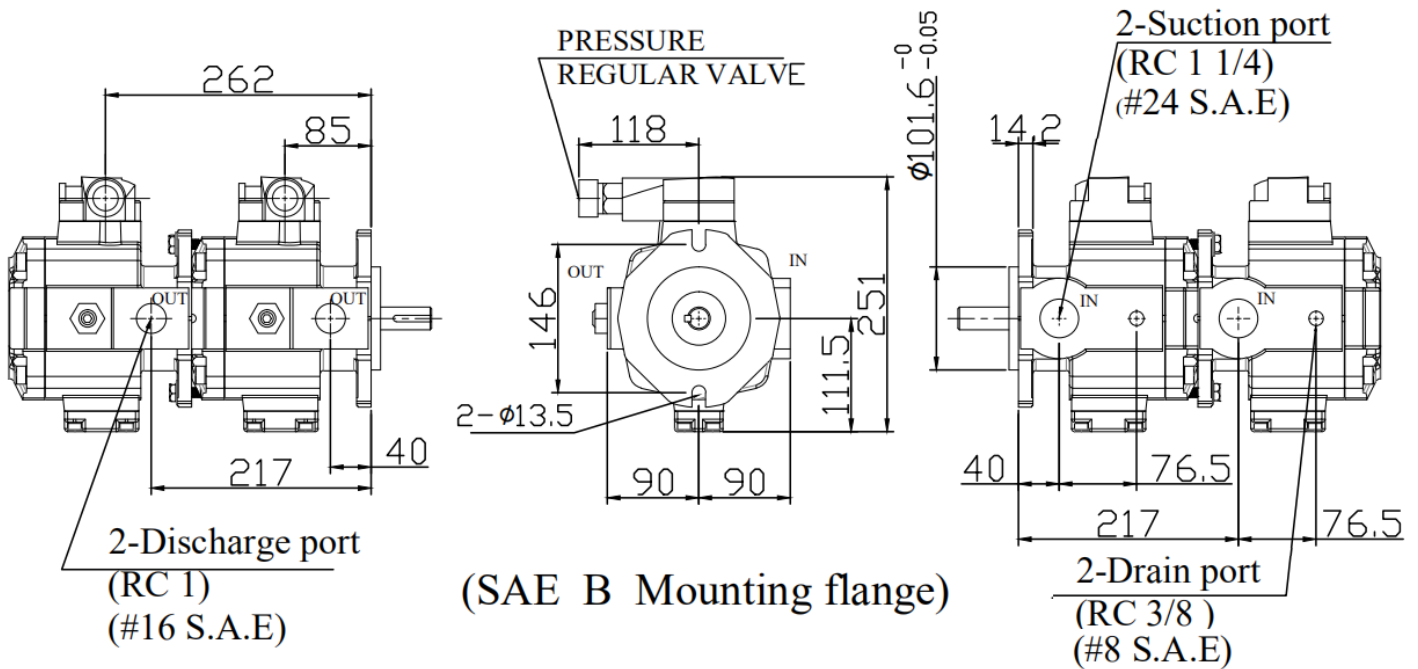
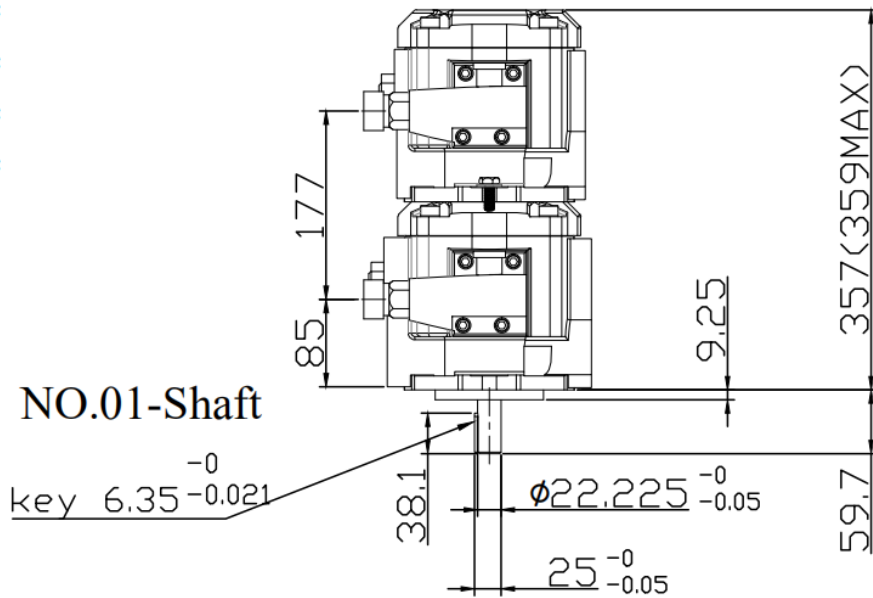
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

- ① KPVV 型號：高壓雙聯變量葉片泵
- ② P1 流量(cm³/rev)：25，32，36，42
- ③ P2 流量(cm³/rev)：25，32，36，42
- ④ F：單座壓力閥
- ⑤ P1 壓力級數
 - 1、1.5~14 Mpa (15.3~142.8 Kgf/cm²)
 - 2、2.0~21 Mpa (20.4~214.2 Kgf/cm²)
- ⑥ P2 壓力級數
 - 1、1.5~14 Mpa (15.3~142.8 Kgf/cm²)
 - 2、2.0~21 Mpa (20.4~214.2 Kgf/cm²)
- ⑦ B：SAE-B 規格，∅101.6 安裝
- ⑧ 轉速
 - 12：1200 rpm
 - 15：1500 rpm
 - 18：1800 rpm
- ⑨ 轉軸
 - 01：∅22.23 (長鍵)
 - 02：SAE-B - 13 Tooth Splined 16/32 dp
- ⑩ 管口牙規格
 - 01：P1 & P2
(S= RC 1¼", P= RC 1", DR= RC ⅜")
 - 02：P1 & P2
(S=#24 SAE, P=#16 SAE, DR=#8 SAE)

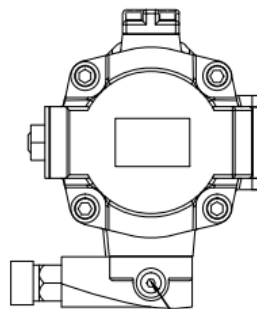
KCL

KPVV-25-25 Variable Double Pump Dimensional Drawing

- KPVV-25 *
- KPVV-32 *
- KPVV-36 *
- KPVV-42 *



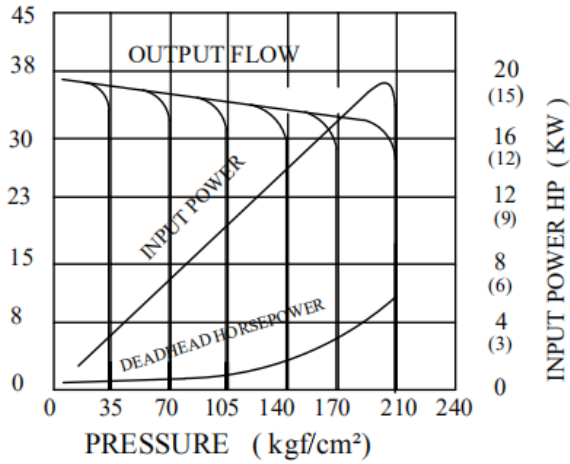
SAE-B splined shaft
 Diametral Pitch : 16/32
 Pressure Angle : 30°
 No. of Teeth : 13
 NO.02-Shaft



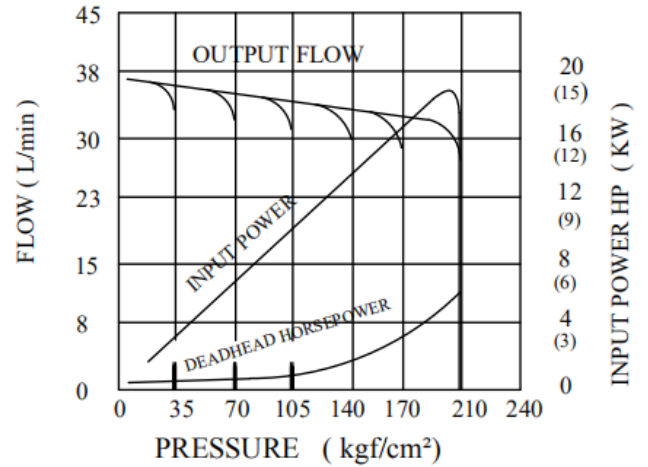
Shock Clipper port
 (RC 1/4) , (#6 S.A.E)
 (須接獨立油管回油箱)

* Shock Clipper port
 Should be plumbed
 to tank to activate
 shock clipper

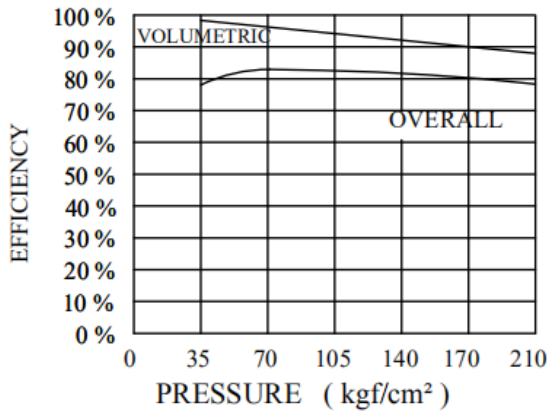
OUTPUT FLOW & POWER @ 1200rpm
25 cm³/rev



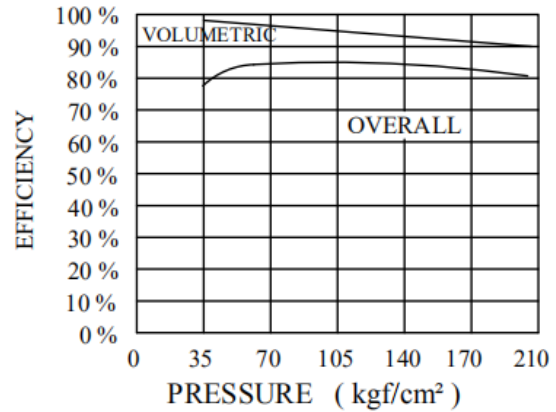
OUTPUT FLOW & POWER @ 1500rpm
25 cm³/rev



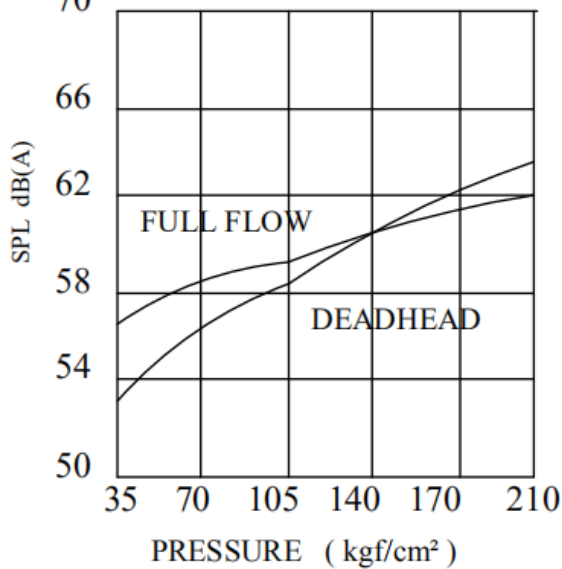
EFFICIENCY @ 1200 rpm
25 cm³/rev



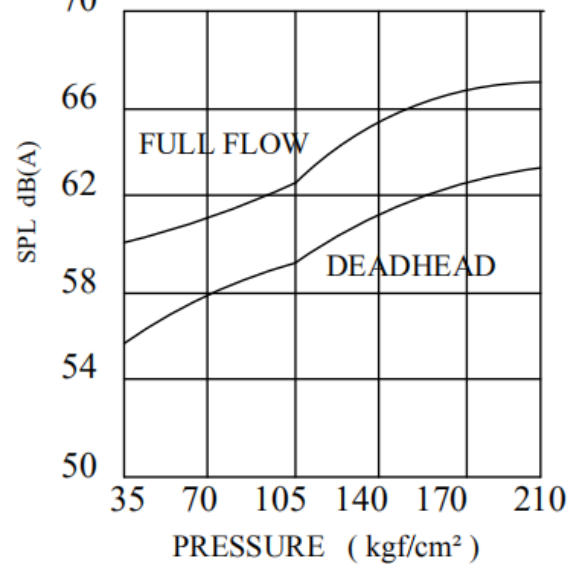
EFFICIENCY @ 1500 rpm
25 cm³/rev



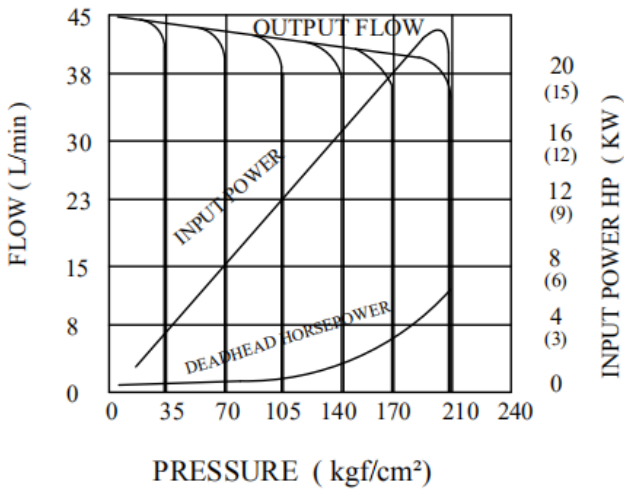
SOUND PRESSURE @ 1200rpm
25cm³/rev



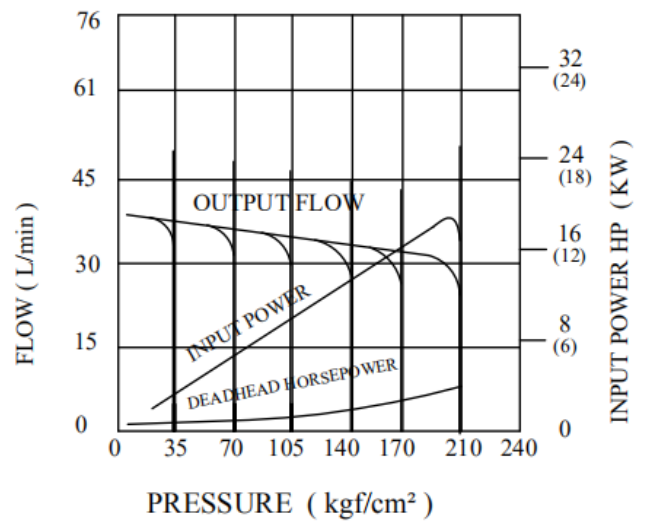
SOUND PRESSURE @ 1500rpm
25 cm³/rev



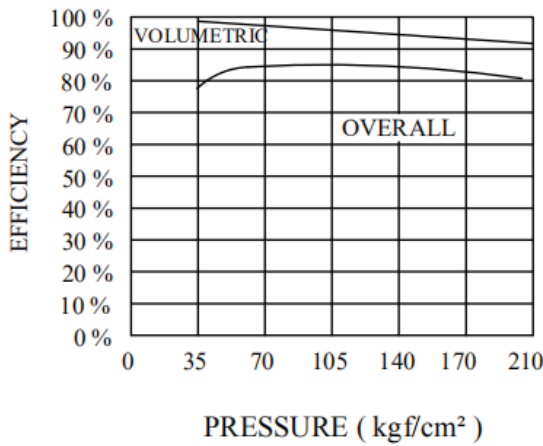
OUTPUT FLOW & POWER @ 1800rpm
25 cm³ /rev



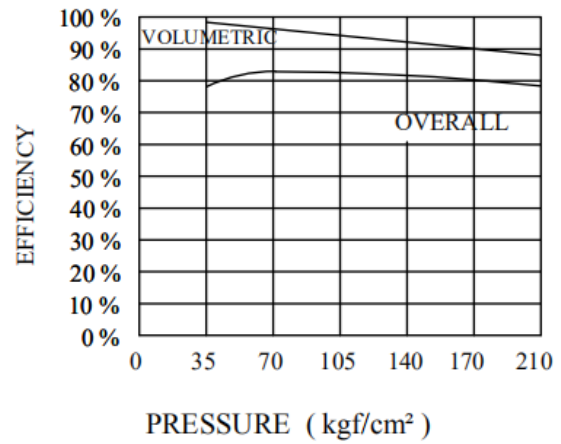
OUTPUT FLOW & POWER @ 1200rpm
32 cm³ /rev



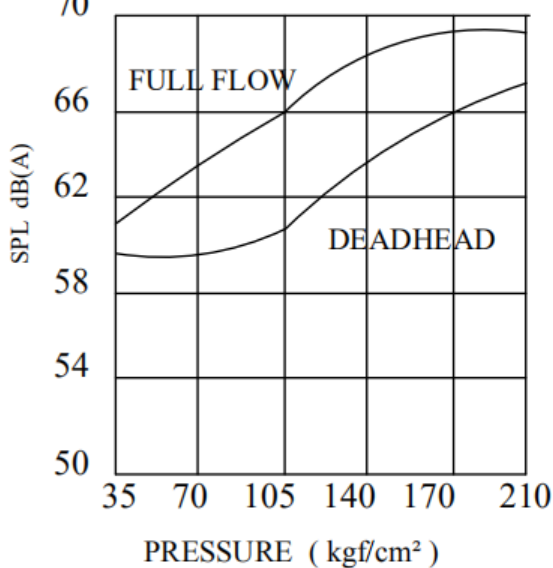
EFFICIENCY @ 1800 rpm
25 cm³ /rev



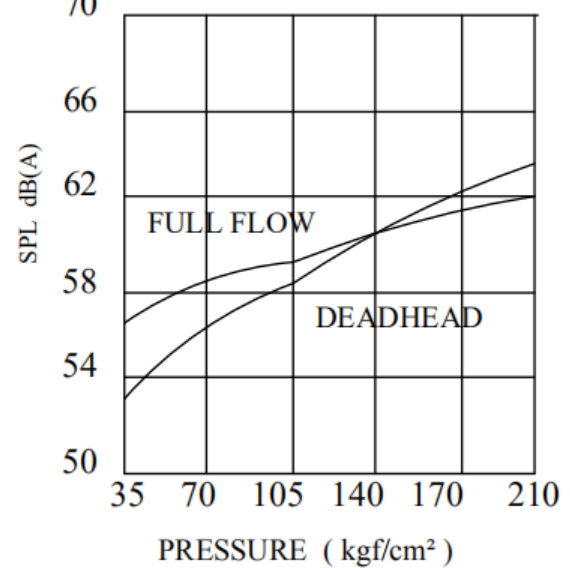
EFFICIENCY @ 1200 rpm
32 cm³ /rev



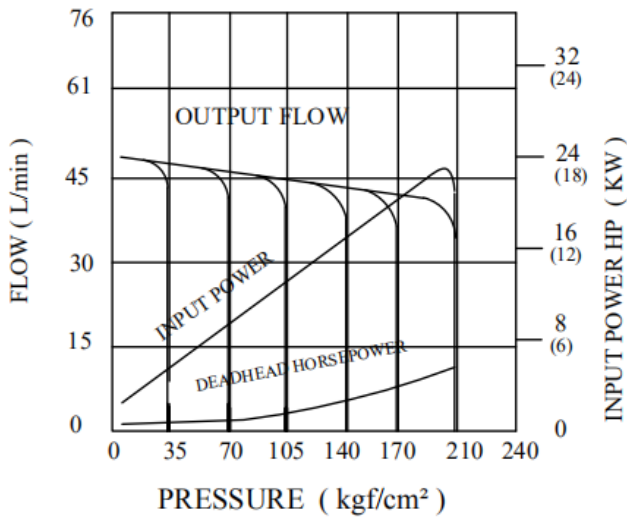
SOUND PRESSURE @ 1800rpm
25 cm³ /rev



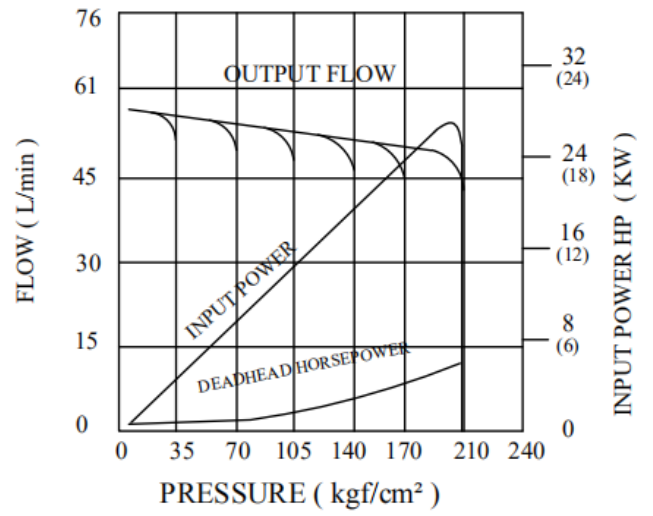
SOUND PRESSURE @ 1200rpm
32cm³ /rev



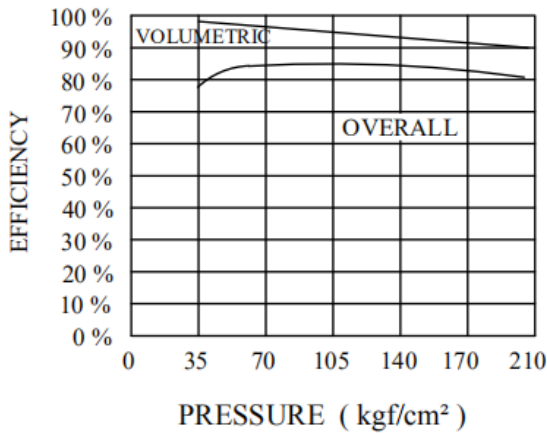
OUTPUT FLOW & POWER @ 1500rpm
32 cm³ /rev



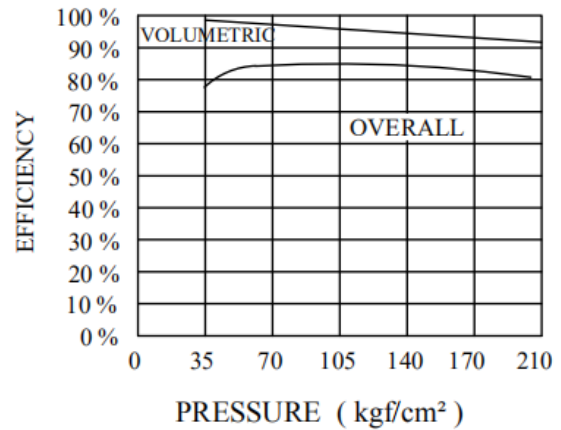
OUTPUT FLOW & POWER @ 1800rpm
32 cm³ /rev



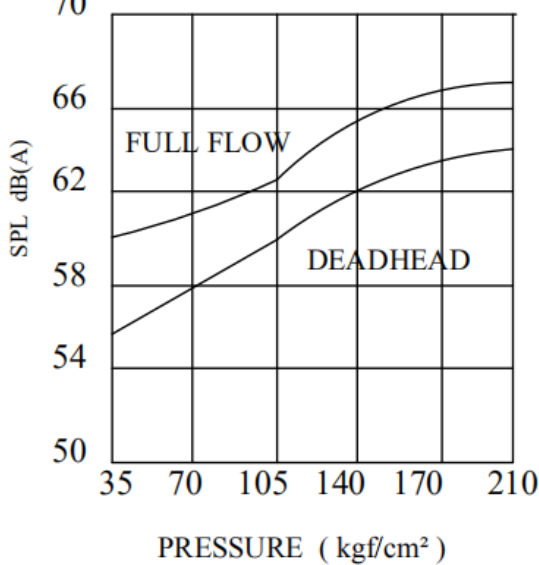
EFFICIENCY @ 1500 rpm
32 cm³ /rev



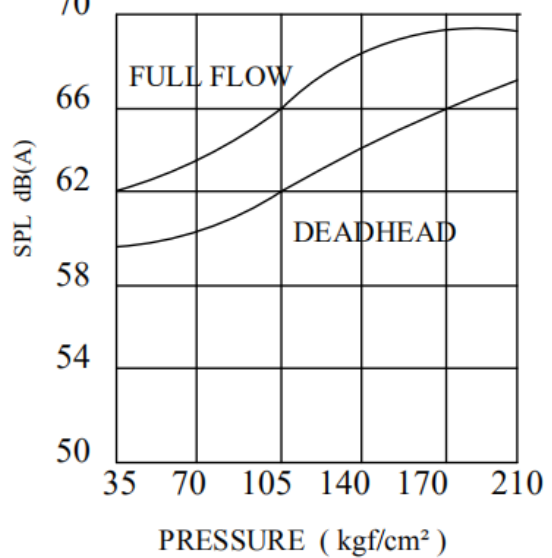
EFFICIENCY @ 1800 rpm
32 cm³ /rev



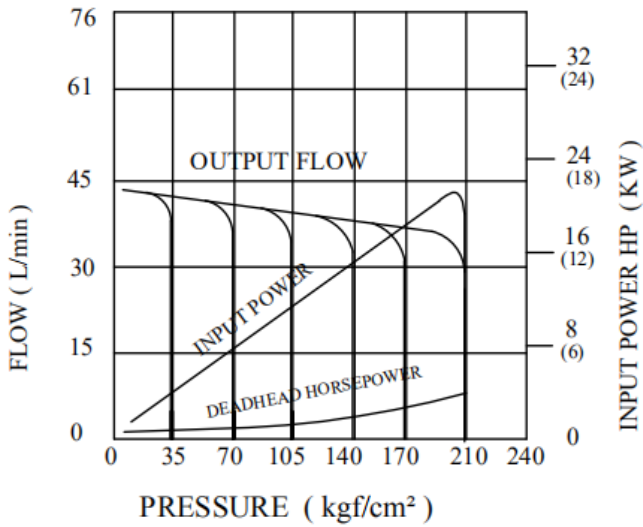
SOUND PRESSURE @ 1500rpm
32 cm³ /rev



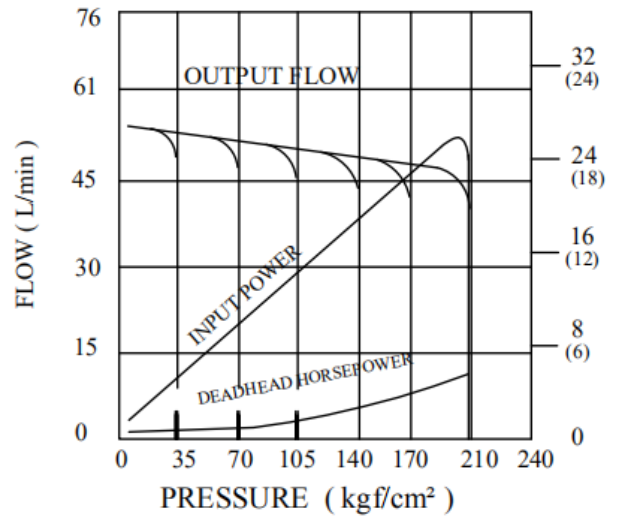
SOUND PRESSURE @ 1800rpm
32 cm³ /rev



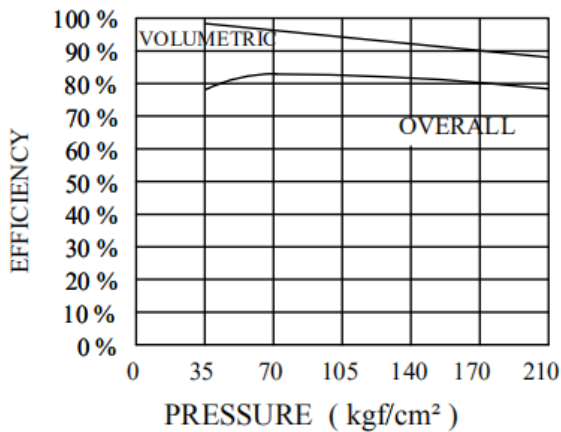
OUTPUT FLOW & POWER @ 1200rpm
36 cm³ /rev



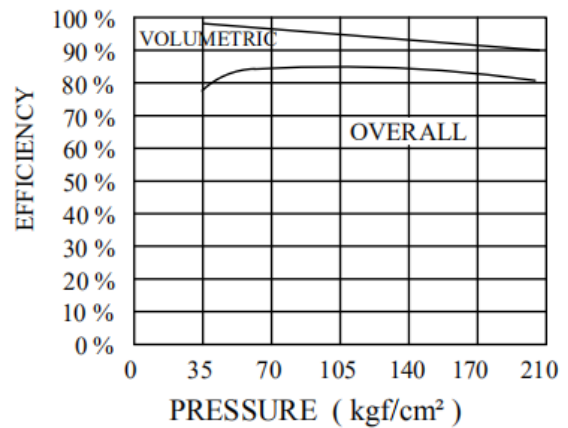
OUTPUT FLOW & POWER @ 1500rpm
36 cm³ /rev



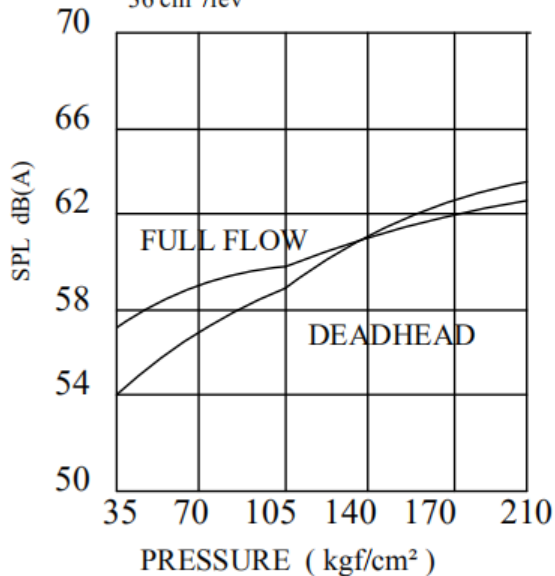
EFFICIENCY @ 1200 rpm
36 cm³ /rev



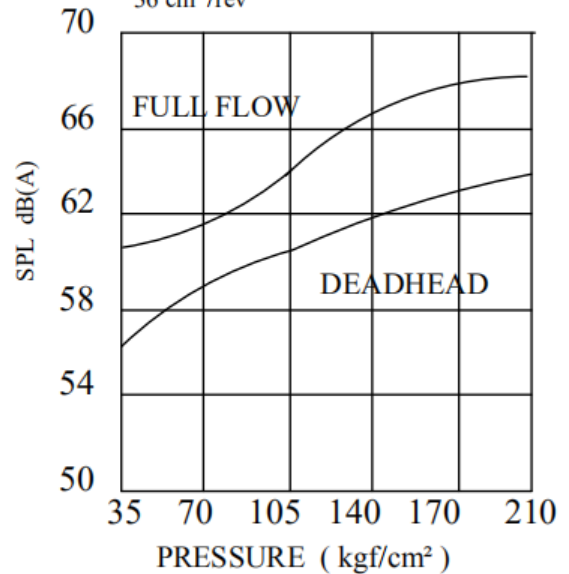
EFFICIENCY @ 1500 rpm
36 cm³ /rev



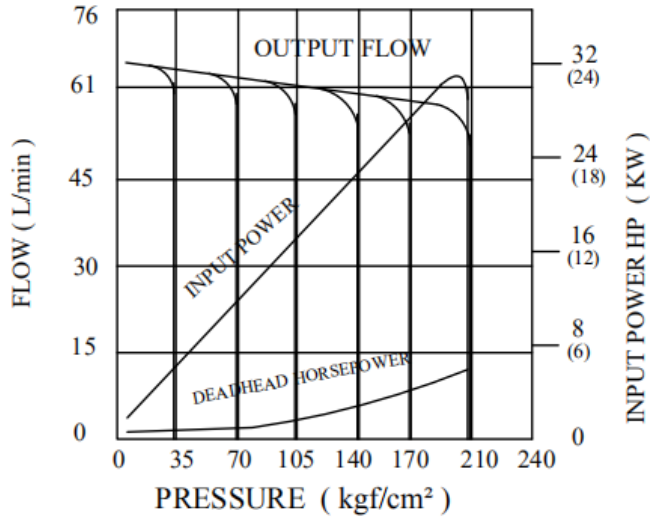
SOUND PRESSURE @ 1200rpm
36 cm³ /rev



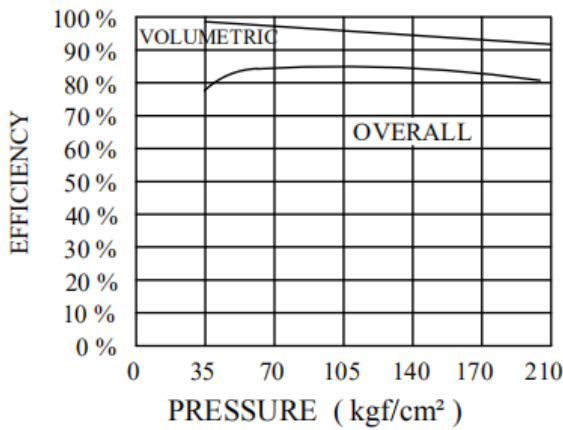
SOUND PRESSURE @ 1500rpm
36 cm³ /rev



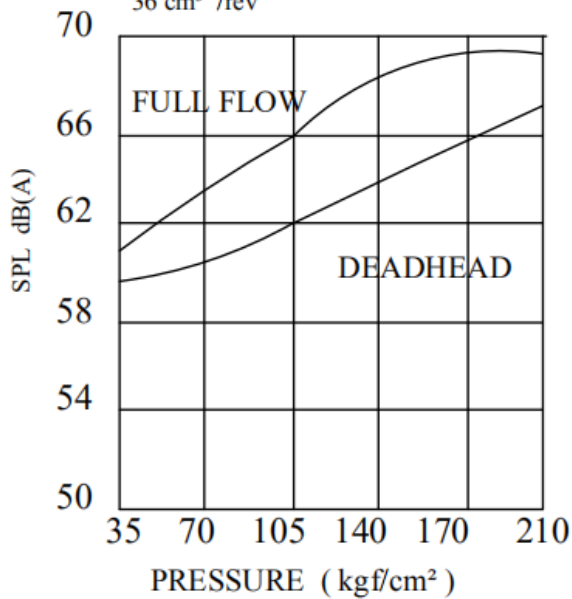
OUTPUT FLOW & POWER @ 1800rpm
36 cm³ /rev



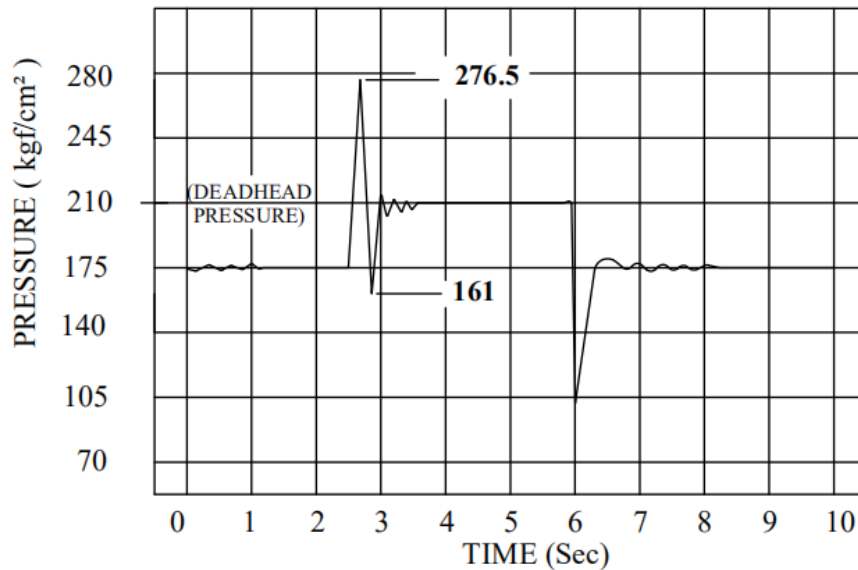
EFFICIENCY @ 1800 rpm
36 cm³ /rev



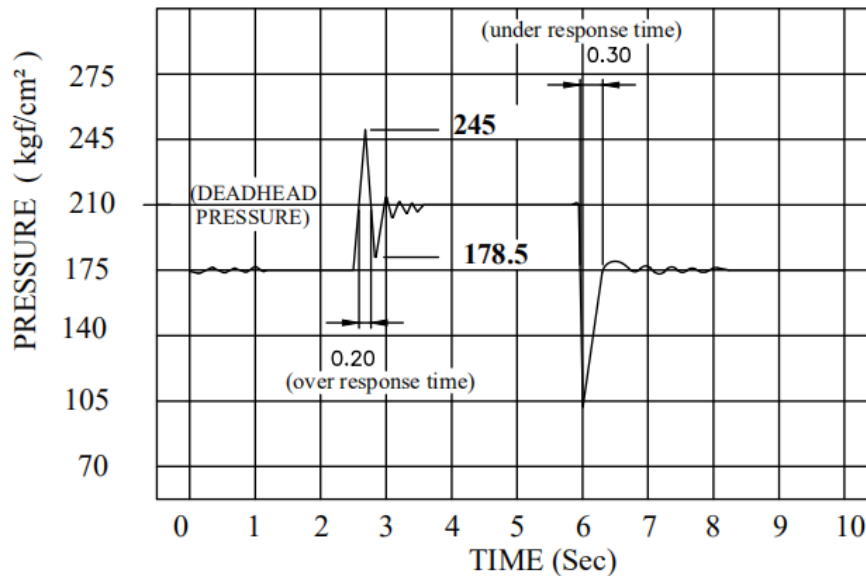
SOUND PRESSURE @ 1800rpm
36 cm³ /rev



*** KPV-25 REACTION CHARACTERISTICS
SHOCK CLIPPER FUNTION**



KPV-25 Single stage compensator, plot with shock clipper **inactive**.
Response overshoot: 66.5 (kgf/cm²) ; response undershoot: 49 (kgf/cm²)



KPV-25 Single stage compensator, plot with shock clipper **active**.
1. Response overshoot : 35 (kgf/cm²); response undershoot : 31.5 (kgf/cm²)
2. response time (circuit dependent) : 20 ~30 ms

*** CASE DRAIN FLOW**

SPEC.	Mpa (Kgf / cm ²)	KPV- 25 / 32 / 36 (l/min)
case drain flow while compensating @1800 rpm CASE DRAIN FLOW	7 (71.4)	2.0~3.5
	14 (142.8)	4.0~5.0
	21 (214.2)	5.0~6.0