

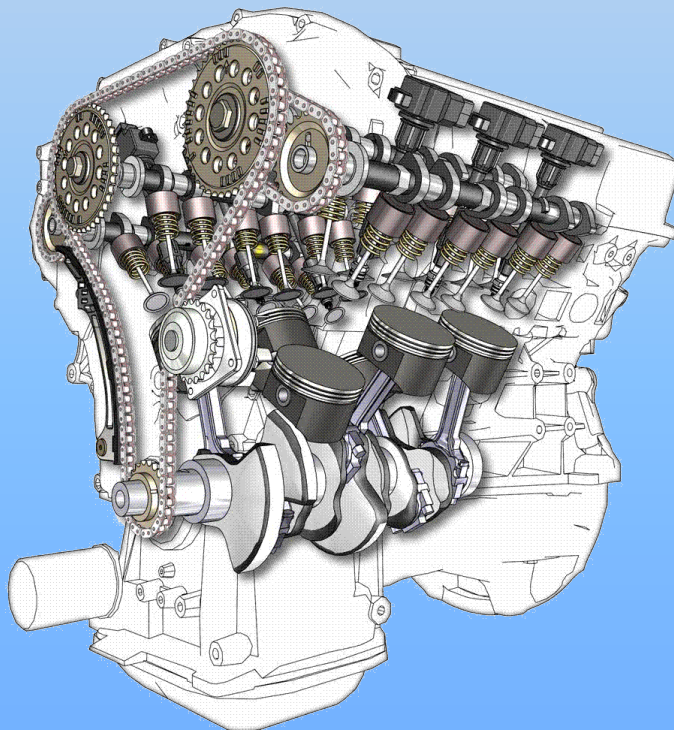


Taiwan Excellent Auto Engine Parts
Warranty for

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KIA HYUNDAI

Diesel Engine Parts



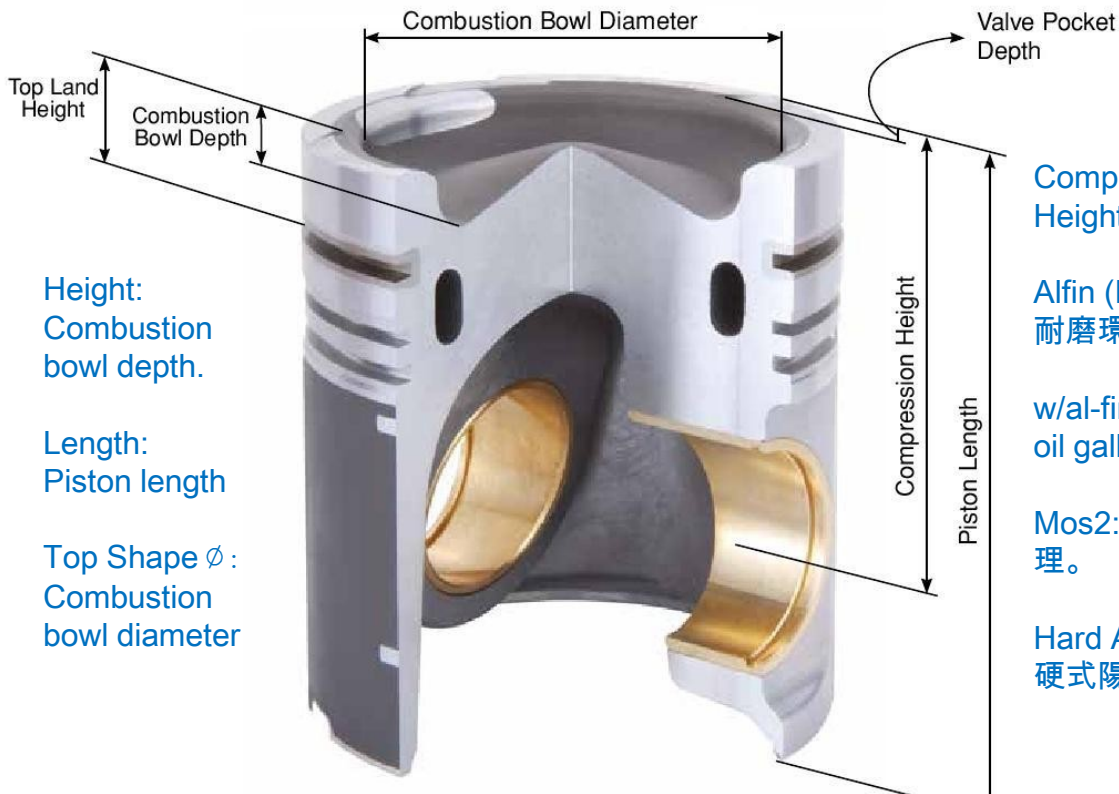
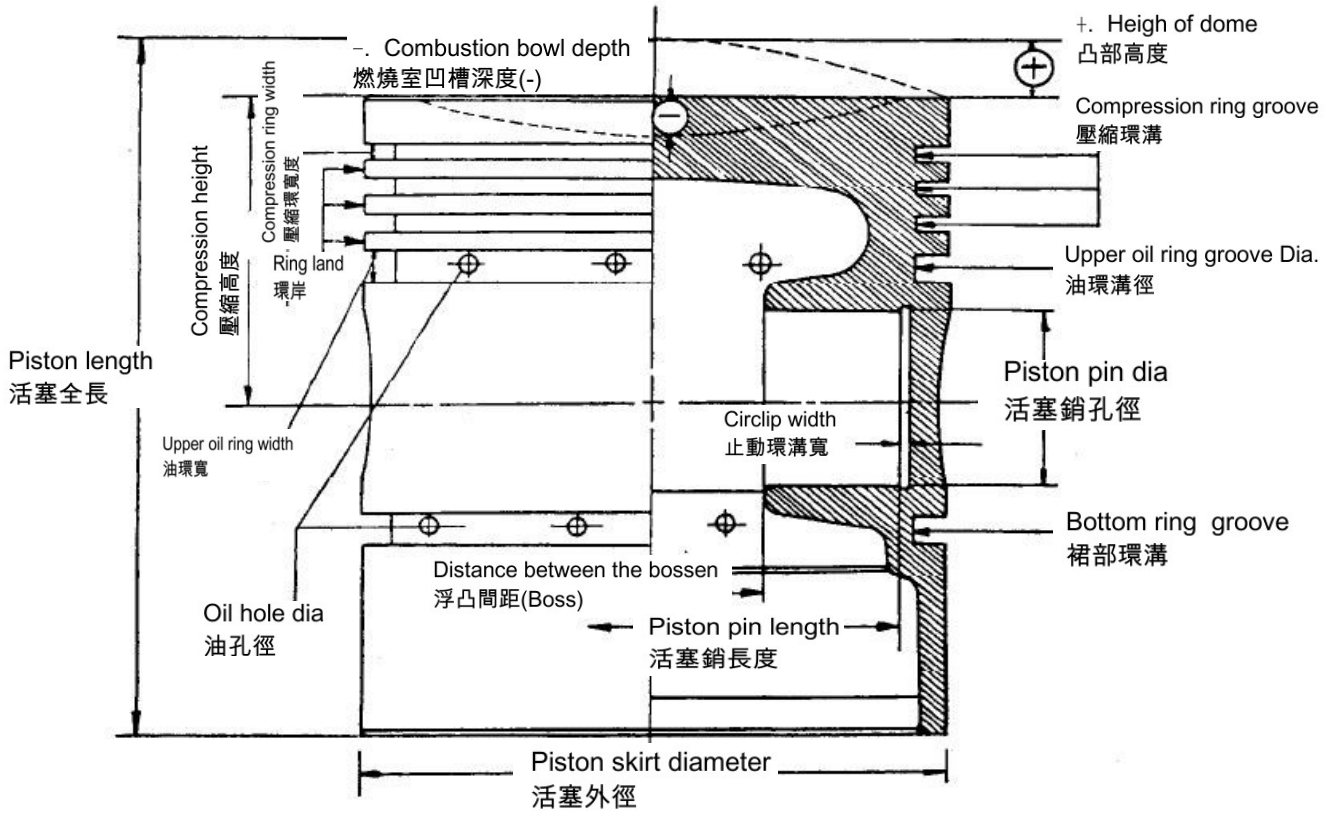
Contact Person: Mr. Jacky Tsai
Email 1: eton.jacky@msa.hinet.net
Email 2: valveparts2866@gmail.com
Tel : (8864) 2293-6969
Fax : (8864) 2293-7070
No. 90, Wenchang 1st St., North District,
Taichung City, Taiwan. 40464

E & T SCIENCE INC.

ISO/TS 16949
QS9000



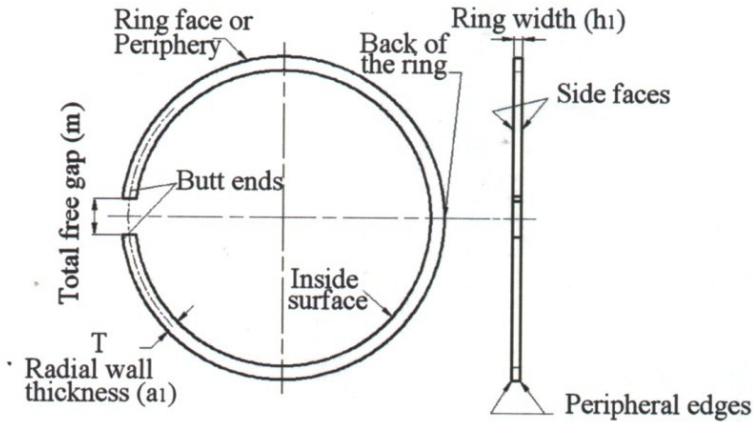
PISTON TERMINOLOGY



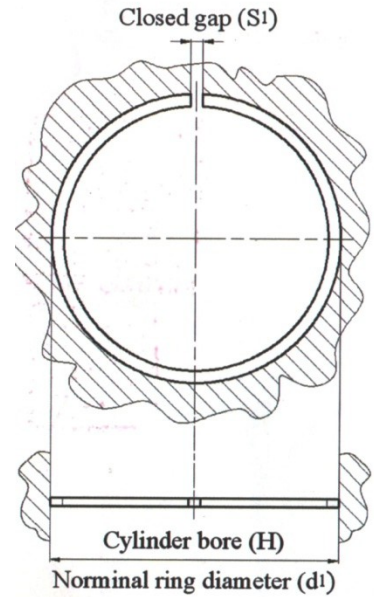


PISTON RING TERMINOLOGY

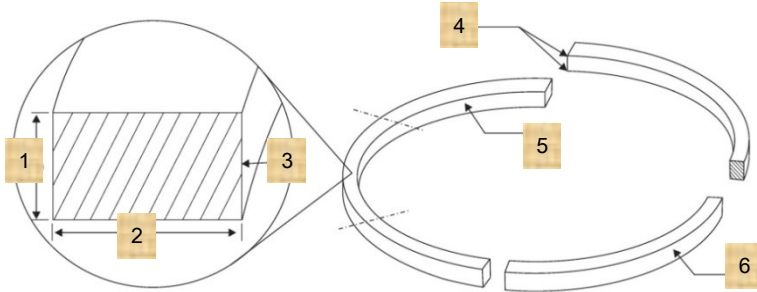
Free Ring(Unstressed)



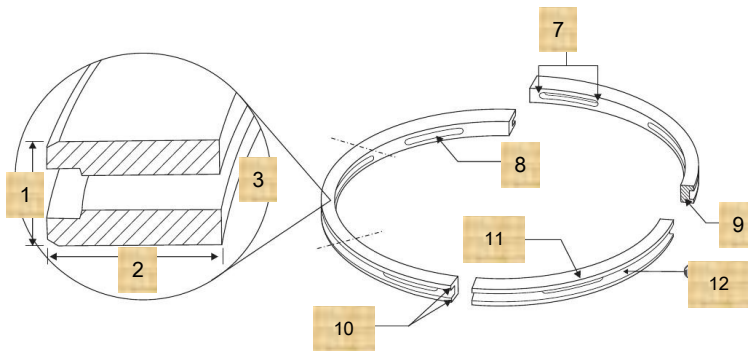
Closed Ring



Compression Ring



- 1. Piston ring width
- 2. Piston ring thickness
- 3. Inside edge of gap
- 4. Inside edges
- 5. Inside surface
- 6. Peripheral surface

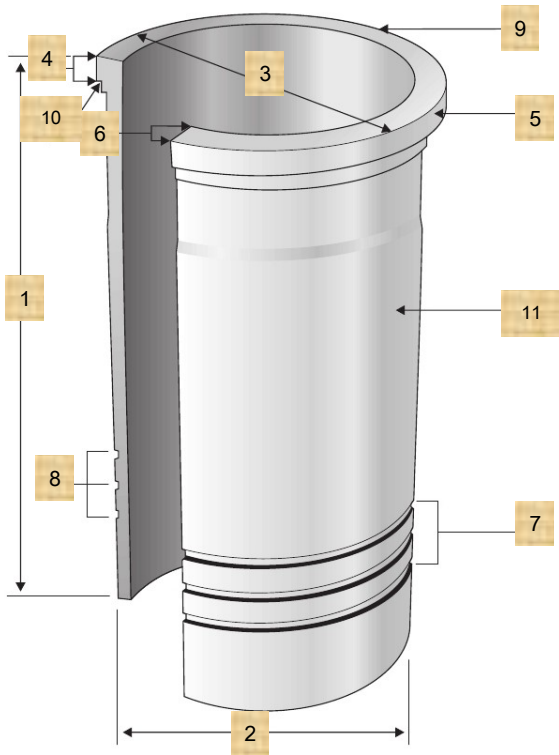


- 7. Inside edges of slot
- 8. Slot face
- 9. Gap face
- 10. Outside gap corners
- 11. Side face
- 12. Outside groove face

Oil Control Ring



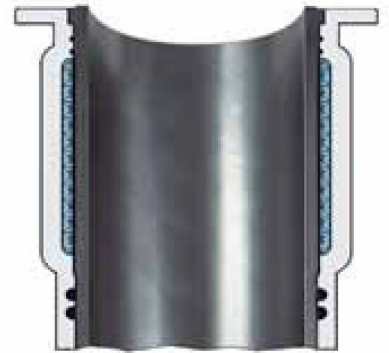
LINER/SLEEVE TERMINOLOGY



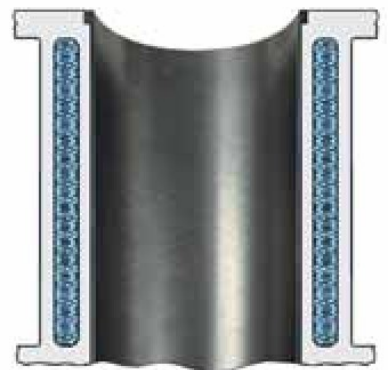
- 1. Total length
- 2. Outside diameter
- 3. Flange diameter
(Register diameter)
- 4. Flange depth
(Collar height)
- 5. Flange
- 6. Top land width
- 7. Sealing area
- 8. O-Ring groove
- 9. Firewall
- 10. Machining relief
- 11. Barel



Wet Cylinder Liner



Dry Cylinder Liner





BEARINGS TERMINOLOGY



Rocker arm bushes



Con rod bushes



Connecting rod bearing



Main bearing



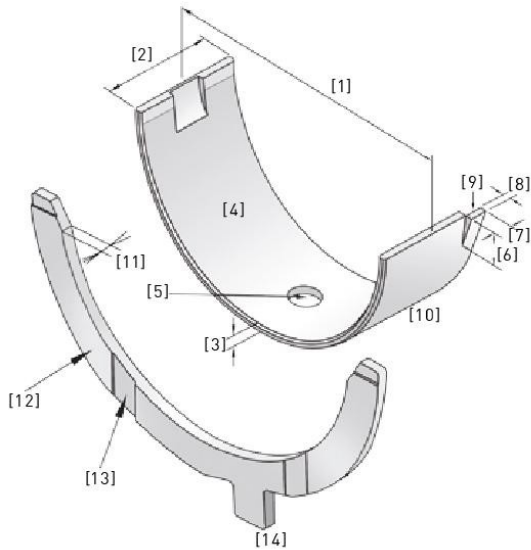
Flanged bearing



Thrust washers

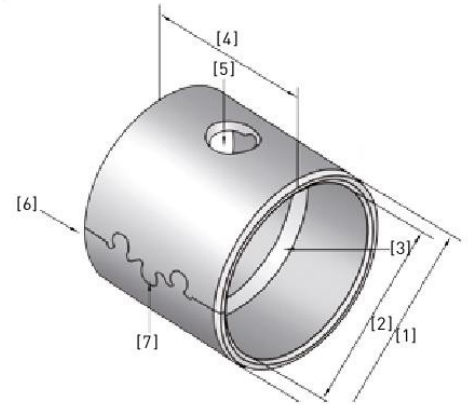


Camshaft bearing



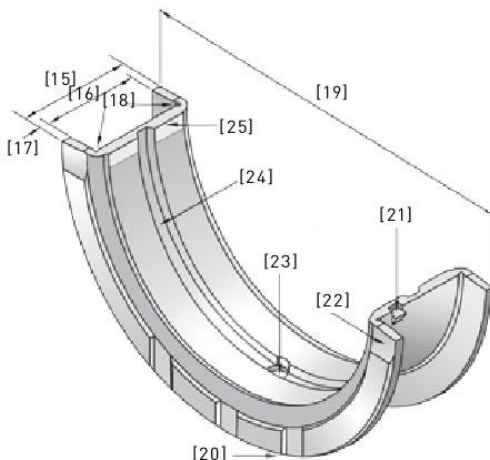
Bearing Shell

1. Free spread
2. Bearing length
3. Bearing wall thickness
4. Bearing surface
5. Lubrication hole
6. Length of locating lug
7. Width of locating lug
8. Height of locating lug
9. Locating lug relief
10. Bearing back



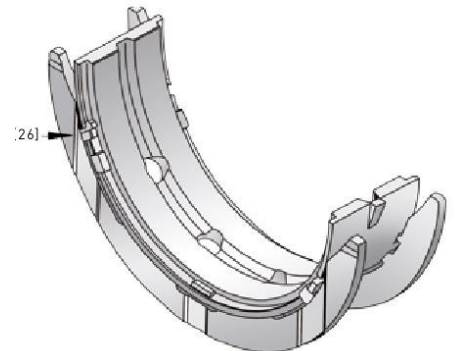
Bushing

1. Outside diameter
2. Inside diameter
3. Oil groove
4. Bushing length
5. Lubrication hole
6. Joint
7. Clinch



Flange Bearing

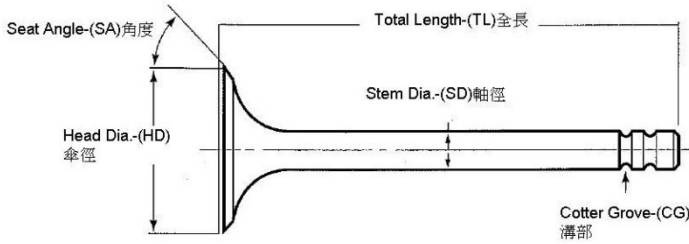
15. Flange bearing length
16. Distance between flange
17. Flange thickness
18. Flange relief grooves
19. Flange diameter
20. Relief at joint face
21. Locating lug
22. Relief at joint face
23. Lubrication hole
24. Oil groove
25. Relief at surface
26. Flange and Bearing assembly



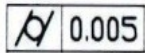


ENGINE VALVE SPECIFICATION

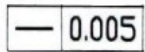
ENGINE VALVE DIMENSION



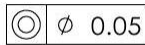
Stem Top Hardness:
HRC 45~60



Roundness Tolerance
≤0.005mm



Straightness Tolerance
≤0.005mm

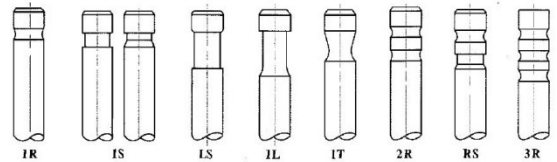


Concentricity Tolerance
≤0.05mm

SPECIFICATION



SHAPE OF COTTER GROOVE (CG)



引擎汽門(Engine Valve)使用鋼材對照

材料代號對照					材料化學成分								適用於
Martensitic Steel 麻田散鐵													IN/EX
ISO	JIS	SAE	DIN/BS	大陸	C	Si	Mn	P	S	Ni	Cr	Mo	
42CrMo4	SCM440	4140	EN49		0.43	0.35	0.85				1.2	0.3	
X45CrSi93	SUH1	HNV3	X45CrSi9 3	45Cr9Si3	0.4-0.5	3.0-3.5	≤0.60	≤0.03	≤0.03	≤0.5	7.5-9.0		
	SUH3		X40CrSiMo10-2	40Cr10Si2Mo	0.30-0.45	1.8-2.5	≤0.60	≤0.03	≤0.03	≤0.6	10.0-12.0	0.7-1.3	
	SUH4(XB)	ENV6	EN59	80Cr20Si2Ni	0.75-0.85	1.75-2.25	0.2-0.6	≤0.03	≤0.03	1.15-1.65	19.0-20.5		
X50CrSi82	SUH11	HNV3	EN52	51Cr8Si2	0.45-0.55	1.0-2.0	≤0.60	≤0.03	≤0.03		7.5-9.5		
Austenitic Steel 奧斯田鐵 Non-magnetic													EX
	SUH31	EV9		45Cr14Ni14W2Mo	0.3-0.45	1.5-2.5	≤0.60	≤0.04	≤0.03	13.0-15.0	14.0-16.0		
X53CrMnNiN214	SUH35(21-4N)	EV8	349S54	53Cr21Mn9Ni4N	0.58	≤0.35	8.0-10.0	≤0.01	≤0.03	3.25-4.5	20.0-22.0		
	SUH37(21-12N)	EV4	381S34	20Cr21Ni12N	0.15-0.25	0.75-1.0	1.0-1.5	≤0.025	≤0.025	10.5-12.5	20.0-22.0		
	SUH38				0.25-0.35	≤1.0	≤1.2	0.18-0.25	≤0.03	10.0-12.0	19.0-21.0	1.8-2.5	
Nickel Basic alloy 鎳基合金													EX
NiCr20TiAl	NiMonic 80A	2.4952(HEV5)		GH4080A	0.10max	1.0	1.0		Fe 3.0 max	65.0min	18.0-21.0	Al 1.0-1.5	
NiCr15Fe7TiAl	751	2.4669(HEV3)	NiCr15FeTiAl	GH4751									

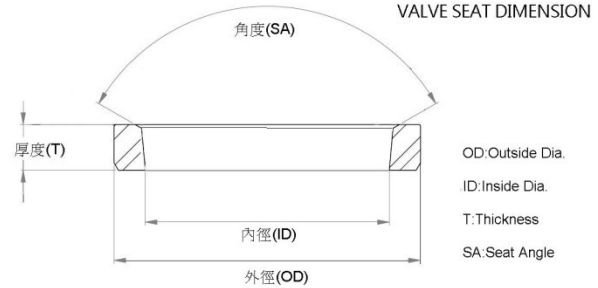
STELLITE 鈷鉻鎢合金鋼(軸端與盤面焊補材質)						
	C	Cr	W	Fe	Co	HRC
Stellite #1	2.5	30.0	12.0	3.0 Max	Balance	54
Stellite #6	1.0	28.0	4.0	3.0 Max	Balance	44
Stellite #12	1.35	29.0	8.0	2.0	Balance	47



VALVE SEAT & GUIDE SPECIFICATION

Valve Seat:
High Chrome Alloy Steel
Hardness :HRC 36~47

- 0.03 Parallelism Tolerance $\leq 0.03\text{mm}$
- 0.012 Verticality Tolerance $\leq 0.012\text{mm}$
- ϕ 0.05 Concentricity Tolerance $\leq 0.05\text{mm}$



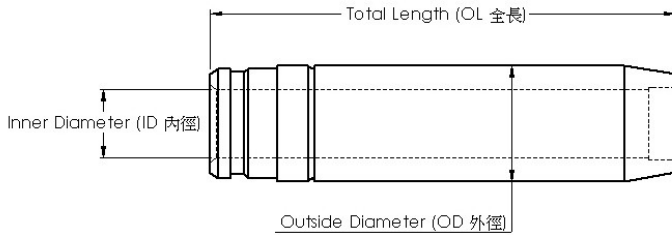
Valve Seat Material

汽門座圈材料成份表

材質:高鉻合金High Chrome Alloy Steel(耐熱合金鑄造鋼)



	C	Si	Mn	P	S	Cr	Mo	Ni	V	Hardness 硬度HRC
高鉻合金 High Chrome Alloy Steel	1.5~2.0	1.5~2.0	0.6~1.2	≤ 0.10	≤ 0.10	13.5~15	0.35~0.5			36~47

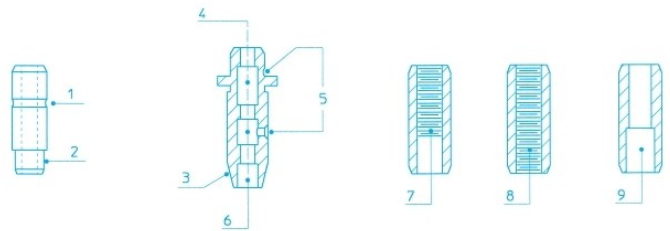


(mm)	Inlet valve (μm)	Exhaust valve (μm)
Stem dia. 6 - 7	10 - 40	25 - 55
Stem dia. 8 - 9	20 - 50	35 - 65
Stem dia. 10 - 12	40 - 70	55 - 85

Valve Guide: Cast Iron FC25

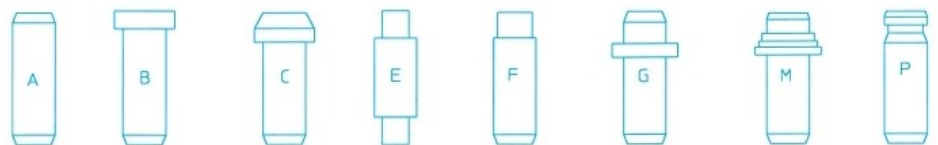
Hardness :HRB 92~102°

- Surface finish Ra $\leq 0.8\mu\text{m}$
- Inner diameter tolerance $\leq 0.01\text{mm}$
- Outer diameter tolerance $\leq 0.01\text{mm}$
- Concentricity diameter tolerance $\leq 0.05\text{mm}$



- 1.Outer groove for snap ring
- 2.Narrower end
- 3.Conical end
- 4.Recessd area in the bore
- 5.Lubrifation holes
- 6.Counterbore at end of guides
- 7/8.Lubrifation threads
- 9.Counter bore

ϕ 0.05



KIA BESTA(JT)

Application :
Number of Cylinders 4
Cylinder dia. 94.5 MM
Swept Volume 2700 ccm

Piston kit-Set

OEM NO. OK6Z1-11-SAO



Piston

SIZE

Comp : 50.0 w/al-fin Height : Length : 81.7
 Top Shape : Flower
 Pin : 30.0
 Length : 76.0

STD

Piston Ring

OEM NO.
 NPR :



OEM Ring Groove

SIZE

Top : 2.0H
 2nd : 2.0
 Oil : 3.0

STD

Cylinder Liner

OEM NO. OK65A-10-311



Liner&Sleeve

SIZE

In Diameter : 94.5
 Out Diameter : 97.5
 Total length : 167.3
 Flange : 104.4*4.0+0.7

STD

Engine Bearing

MAIN :
 CON.ROD :
 T/W :
 C/B :
 BUSH :

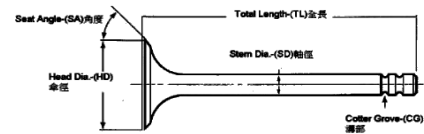


SIZE

STD

Engine Valve

OEM NO. OK65C-12-111
 IN 44.0 8.5 112.6
 OEM NO. OK65C-12-121
 EX 37.0 8.5 112.7

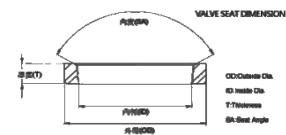


SIZE

STD

Valve Seat

OEM NO.
 IN
 OEM NO.
 EX

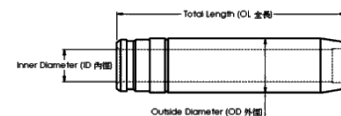


SIZE

STD

Valve Guide

OEM NO. OK65A-10-104
 IN/EX 49.0 8.5 14.0



SIZE

STD

Gasket Set

OEM NO.



Piston kit-Set

OEM NO. 23410-4X910



Piston

SIZE

Comp : 52.1 w/al-fin Height : -16.2 oil-cooled
Length : 84.1 MOS2
Top Shape : Ø53.0 Direct Injection
Pin : 32.0 Length : 78.0

STD

Piston Ring

OEM NO. K5Z1-11-SCO
NPR : SDK30-016ZZ



OEM Ring Groove

SIZE

Top : 2.0HK
2nd : 2.0
Oil : 3.0

STD

Cylinder Liner

OEM NO.



Liner&Sleeve

SIZE

In Diameter :
Out Diameter :
Total length :
Flange :

STD

Engine Bearing

MAIN :
CON.ROD :
T/W :
C/B :
BUSH :

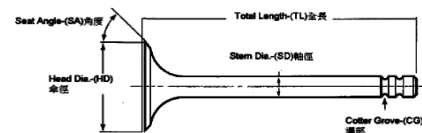


SIZE

STD

Engine Valve

OEM NO. OK551-12-111
IN 34.0 7.0 126.3
OEM NO. OK551-12-121
EX 31.5 7.0 126.3

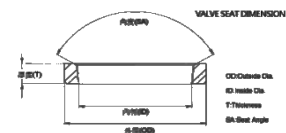


SIZE

STD

Valve Seat

OEM NO.
IN
OEM NO.
EX

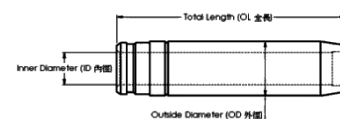


SIZE

STD

Valve Guide

OEM NO. OK551-10-281
IN/EX. 52.7 12.0 7.0



SIZE

STD

Gasket Set

OEM NO.



KIA K2700 JS

Application : BESTA Hi Topic
Number of Cylinders 4
Cylinder dia. 94.5 MM
Swept Volume 3600 ccm

Piston kit-Set

OEM NO. K6Z1-11-SAO

Piston	SIZE
Comp : 50.0 w/al-fin Height : -2.3 Length : 81.8 Top Shape : Flower Pin : 30.0 Length : 76.0	STD



Piston Ring

OEM NO. K6Z1-11-SCO
 NPR : SDK30-001ZZ

OEM Ring Groove	SIZE
Top : 2.0 2nd : 2.0 Oil : 3.0	STD



Cylinder Liner

OEM NO.

Liner&Sleeve	SIZE
In Diameter : Out Diameter : Total length : Flange :	STD



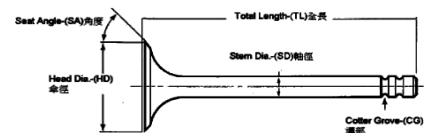
Engine Bearing

MAIN : CON.ROD : T/W : C/B : BUSH :	SIZE
	STD



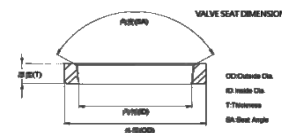
Engine Valve

OEM NO. OK65A-12-111A IN 42.5 8.5 112.8 OEM NO. OK65A-12-121A/B EX 37.3 8.5 112.8	SIZE
	STD



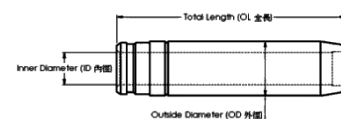
Valve Seat

OEM NO. IN OEM NO. EX	SIZE
	STD



Valve Guide

OEM NO. OK65A-10-104 IN/EX. 49.0 8.5 14.0	SIZE
	STD



Gasket Set

OEM NO.

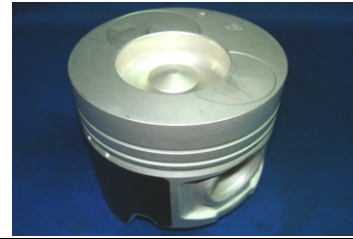


KIA K3600

Application : Trade Frontiet
Number of Cylinders 4
Cylinder dia. 94.5 MM
Swept Volume 3600 ccm

Piston kit-Set

OEM NO. K4Y2-11-SAO



Piston

SIZE

Comp : 56.3 Height : -20.0 oil-cooled Length : 102.1 MOS2
Top Shape : Ø51.0
Direct Injection
Pin : 34.0 Length : 82.0

STD

Piston Ring

OEM NO. K4Y1-11-SCO

NPR : SDK30-003ZZ



OEM Ring Groove

SIZE

Top : 2.0
2nd : 2.0
Oil : 3.0

STD

Cylinder Liner

OEM NO.



Liner&Sleeve

SIZE

In Diameter :
Out Diameter :
Total length :
Flange :

STD

Engine Bearing

MAIN :
CON.ROD :
T/W :
C/B :
BUSH :

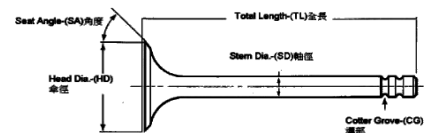


SIZE

STD

Engine Valve

OEM NO.
IN
OEM NO.
EX

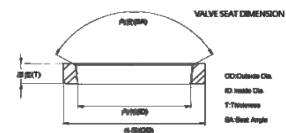


SIZE

STD

Valve Seat

OEM NO.
IN
OEM NO.
EX

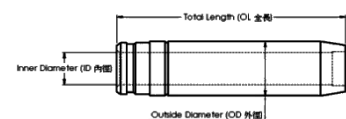


SIZE

STD

Valve Guide

OEM NO.
IN
OEM NO.
EX



SIZE

STD

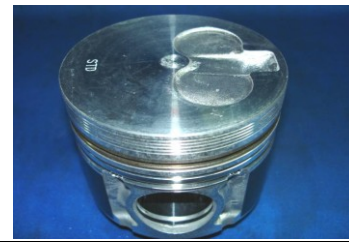
Gasket Set

OEM NO.



Piston kit-Set

OEM NO. OK0Y1-11-SAO



Piston

SIZE

Comp : 47.3 w/al-fin Height : -3.1 oil-cooled
Length : 86.4 MOS2
Top Shape : Flower
Pin : 30.0 Length : 68.5

STD

Piston Ring

OEM NO.
NPR :



OEM Ring Groove

SIZE

Top : 2.0
2nd : 2.0
Oil : 3.0

STD

Cylinder Liner

OEM NO.



Liner&Sleeve

SIZE

In Diameter :
Out Diameter :
Total length :
Flange :

STD

Engine Bearing

MAIN :
CON.ROD :
T/W :
C/B :
BUSH :

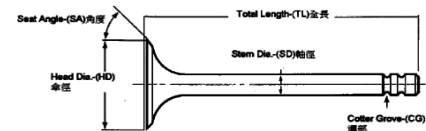


SIZE

STD

Engine Valve

OEM NO.
IN
OEM NO.
EX

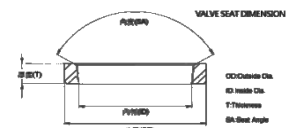


SIZE

STD

Valve Seat

OEM NO.
IN
OEM NO.
EX

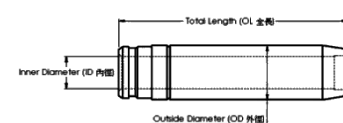


SIZE

STD

Valve Guide

OEM NO.
IN
OEM NO.
EX



SIZE

STD

Gasket Set

OEM NO.



HYUNDAI D4BB

Application :
Number of Cylinders 4
Cylinder dia. 91.1 MM
Swept Volume 2607 ccm

Piston kit-Set

OEM NO. 23410-42701



Piston

SIZE

Comp : 46.2 w/al-fin Height : -3.0 Length : 76.2 MOS2
 Top Shape : Flower
 Pin : 29.0
 Length : 75.0

STD

Piston Ring

OEM NO. 23040-42200

NPR :



OEM Ring Groove

SIZE

Top : 2.0
 2nd : 2.0
 Oil : 3.0

STD

Cylinder Liner

OEM NO.



Liner&Sleeve

SIZE

In Diameter :
 Out Diameter :
 Total length :
 Flange :

STD

Engine Bearing

MAIN :
 CON.ROD :
 T/W :
 C/B :
 BUSH :

SIZE

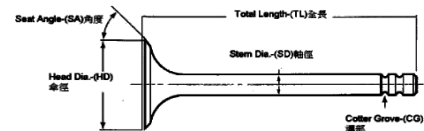


STD

Engine Valve

OEM NO.
 IN
 OEM NO.
 EX

SIZE

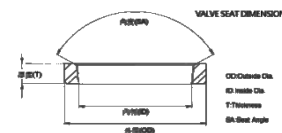


STD

Valve Seat

OEM NO.
 IN
 OEM NO.
 EX

SIZE

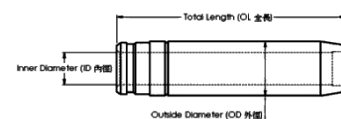


STD

Valve Guide

OEM NO. 22114-42520
 IN 71.0 8.0 13.1
 OEM NO. 22115-42520
 EX 74.0 8.0 13.1

SIZE



STD

Gasket Set

OEM NO.



HYUNDAI D4CB

Application : STAREX
Number of Cylinders 4
Cylinder dia. 91.0 MM
Swept Volume 2497 ccm

Piston kit-Set

OEM NO. 234104-A911

Piston	SIZE
Comp : 54.2 w/al-fin Height : -14.7 oil-cooled Length : 83.8 MOS2 Top Shape : Ø52.0 Direct Injection Pin : 33.0 Length : 75.0	STD



Piston Ring

OEM NO. 230404A900
NPR :

OEM Ring Groove	SIZE
Top : 2.5K 2nd : 2.0 Oil : 3.0	STD



Cylinder Liner

OEM NO.

Liner&Sleeve	SIZE
In Diameter : Out Diameter : Total length : Flange :	STD



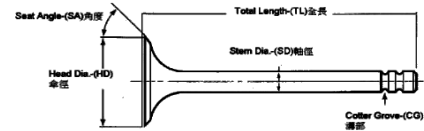
Engine Bearing

MAIN : CON.ROD : T/W : C/B : BUSH :	SIZE
	STD



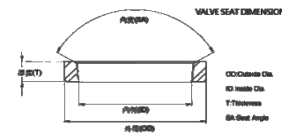
Engine Valve

OEM NO. 22211-4A060/1 IN 31.9 7.0 110.5 OEM NO. 22212-4A060/1 EX 28.0 7.0 110.5	SIZE
	STD



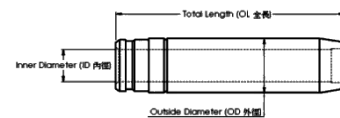
Valve Seat

OEM NO. IN OEM NO. EX	SIZE
	STD



Valve Guide

OEM NO. 22114-4A000 IN 43.3 7.0 12.0 OEM NO. 22115-4A000 EX 39.4 7.0 12.0	SIZE
	STD



Gasket Set

OEM NO.



HYUNDAI D4CB

Application : STAREX 08-
Number of Cylinders 4
Cylinder dia. 91.0 MM
Swept Volume 2497 ccm

Piston kit-Set

OEM NO. 23410-4A920/23410-4A921

Piston	SIZE
Comp : 54.2 w/al-fin Height : -14.7 oil-cooled Length : 83.8 MOS2 Top Shape : Ø52.0 Direct Injection Pin : 33.0 Length : 75.0	STD



Piston Ring

OEM NO. 230404A900
NPR :

OEM Ring Groove	SIZE
Top : 2.5HK 2nd : 2.0 Oil : 4.0	STD



Cylinder Liner

OEM NO.

Liner&Sleeve	SIZE
In Diameter : Out Diameter : Total length : Flange :	STD



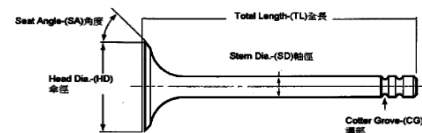
Engine Bearing

MAIN : CON.ROD : T/W : C/B : BUSH :	SIZE
	STD



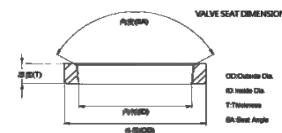
Engine Valve

OEM NO. 22211-4A000/061 IN 31.9 7.0 110.6 OEM NO. 22212-4A000/061 EX 28.0 7.0 110.8	SIZE
	STD



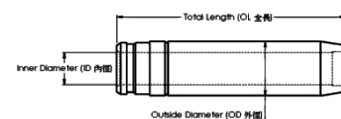
Valve Seat

OEM NO. IN OEM NO. EX	SIZE
	STD



Valve Guide

OEM NO. 22114-4A000 IN 43.3 12.0 7.0 OEM NO. 22115-4A000 EX 39.4 12.0 7.0	SIZE
	STD



Gasket Set

OEM NO.



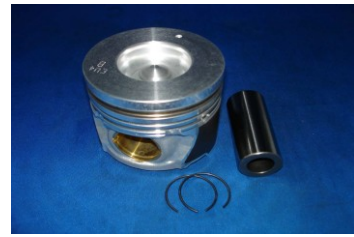
HYUNDAI D4EA

Application : TUCSON
Number of Cylinders 4
Cylinder dia. 83.0 MM
Swept Volume 1991 ccm

Piston kit-Set

OEM NO. 23410-27920

Piston	SIZE
Comp : 46.5 w/al-fin Height : -16.3 oil-cooled Length : 72.4 MOS2 Top Shape : Ø42.7 Direct Injection Pin : 28.0 Length : 65.5	STD



Piston Ring

OEM NO. 23040-27900

NPR :

OEM Ring Groove	SIZE
Top : 2.0K 2nd : 2.0 Oil : 3.0	STD



Cylinder Liner

OEM NO.

Liner&Sleeve	SIZE
In Diameter : Out Diameter : Total length : Flange :	STD



Engine Bearing

MAIN : 21020-27900
CON.ROD : 23611-27000
T/W :
C/B :
BUSH :

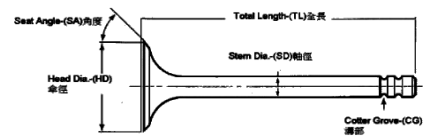
SIZE
STD



Engine Valve

OEM NO. 22211-27000
IN 28.5 6.0 95.7
OEM NO. 22212-27000
EX 24.3 6.0 95.4

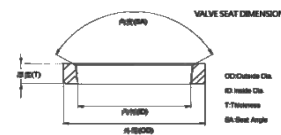
SIZE
STD



Valve Seat

OEM NO.
IN
OEM NO.
EX

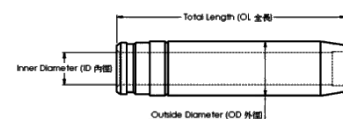
SIZE
STD



Valve Guide

OEM NO. 22114-27000
IN/EX 36.6 6.0 11.0

SIZE
STD



Gasket Set

OEM NO.



Piston kit-Set

OEM NO. 23410-27921

Piston	SIZE
Comp : 46.3 w/al-fin Height : -14.9 Length : 72.4 MOS2 Top Shape : Ø46.8 Direct Injection Pin : 28.0 Length : 65.5	STD



Piston Ring

OEM NO. 23040-27900
NPR :

OEM Ring Groove	SIZE
Top : 2.0HK 2nd : 2.0 Oil : 4.0	STD



Cylinder Liner

OEM NO.

Liner&Sleeve	SIZE
In Diameter : Out Diameter : Total length : Flange :	STD



Engine Bearing

MAIN : 21020-27900
CON.ROD : 23611-27000
T/W :
C/B :
BUSH :

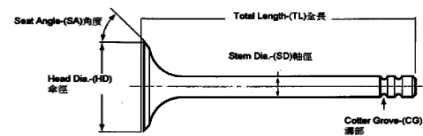
SIZE
STD



Engine Valve

OEM NO. 22211-27000
IN 28.5 6.0 95.7
OEM NO. 22212-27000
EX 24.3 6.0 95.4

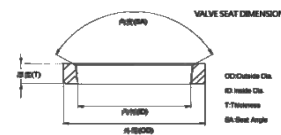
SIZE
STD



Valve Seat

OEM NO.
IN
OEM NO.
EX

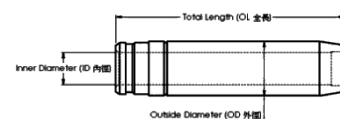
SIZE
STD



Valve Guide

OEM NO. 22114-27000
IN/EX. 36.6 11.0 6.0

SIZE
STD



Gasket Set

OEM NO.



HYUNDAI D4BH K2500(R/L)

Application :
Number of Cylinders 4
Cylinder dia. 91.1 MM
Swept Volume 2476 ccm

Piston kit-Set

OEM NO. (23410-42540/2)/(23410-42544/2)

Piston	SIZE
Comp : 48.3 w/al-fin Height : -3.0 oil-cooled Length : 88.8 Top Shape : Flower Pin : 28.0 Length : 75.0	STD



Piston Ring

OEM NO. 23040-42850
NPR : SDG30-009ZX

OEM Ring Groove	SIZE
Top : 2.5K 2nd : 2.0 Oil : 4.0	STD



Cylinder Liner

OEM NO.

Liner&Sleeve	SIZE
In Diameter : Out Diameter : Total length : Flange :	STD



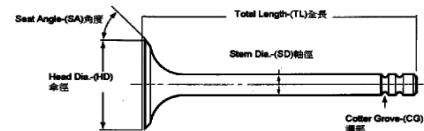
Engine Bearing

MAIN : CON.ROD : T/W : C/B : BUSH :	SIZE
	STD



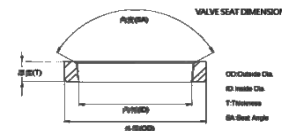
Engine Valve

OEM NO. IN OEM NO. EX	SIZE
	STD



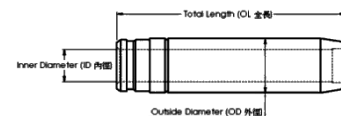
Valve Seat

OEM NO. IN OEM NO. EX	SIZE
	STD



Valve Guide

OEM NO. IN OEM NO. EX	SIZE
	STD



Gasket Set

OEM NO.

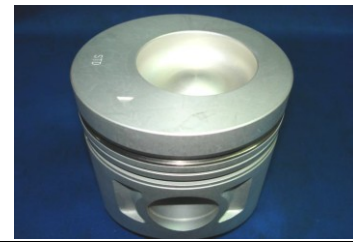


HYUNDAI D4AE

Application :
Number of Cylinders 4
Cylinder dia. 100.0 MM
Swept Volume 3298 ccm

Piston kit-Set

OEM NO. 23411-41410



Piston

SIZE

Comp : 60.7 w/al-fin Height : -17.4 Length : 110.7
 Top Shape : Ø54.4
 Direct Injection
 Pin : 34.0 Length : 84.0

STD

Piston Ring

OEM NO. 2340-41400
 NPR : SDG30-044ZY



OEM Ring Groove

SIZE

Top : 3.0DK
 2nd : 2.0
 Oil : 4.0

STD

Cylinder Liner

OEM NO.



Liner&Sleeve

SIZE

In Diameter :
 Out Diameter :
 Total length :
 Flange :

STD

Engine Bearing

MAIN :
 CON.ROD :
 T/W :
 C/B :
 BUSH :

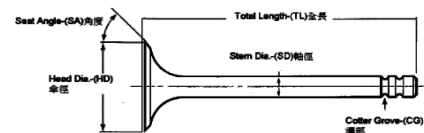


SIZE

STD

Engine Valve

OEM NO.
 IN
 OEM NO.
 EX

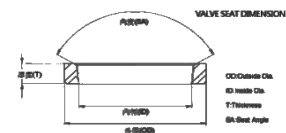


SIZE

STD

Valve Seat

OEM NO.
 IN
 OEM NO.
 EX

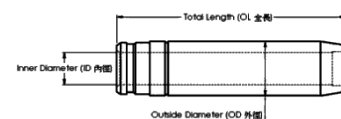


SIZE

STD

Valve Guide

OEM NO.
 IN
 OEM NO.
 EX



SIZE

STD

Gasket Set

OEM NO.

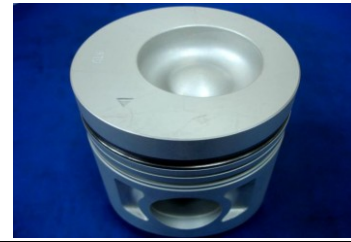


HYUNDAI D4AF

Application :
Number of Cylinders 4
Cylinder dia. 104.0 MM
Swept Volume 3567 ccm

Piston kit-Set

OEM NO. 23411-41210



Piston

SIZE

Comp : 60.7 w/al-fin Height : -17.5 Length : 110.7
 Top Shape : Ø50.5
 Direct Injection
 Pin : 34.0 Length : 84.0

STD

Piston Ring

OEM NO. 23040-41200

NPR : SDG30-005ZX



OEM Ring Groove

SIZE

Top : 3.0DK
 2nd : 2.0
 Oil : 4.0

STD

Cylinder Liner

OEM NO.



Liner&Sleeve

SIZE

In Diameter :
 Out Diameter :
 Total length :
 Flange :

STD

Engine Bearing

MAIN :
 CON.ROD :
 T/W :
 C/B :
 BUSH :

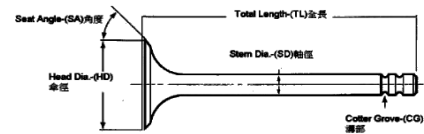


SIZE

STD

Engine Valve

OEM NO.
 IN
 OEM NO.
 EX

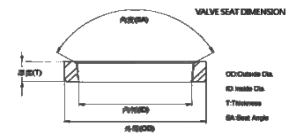


SIZE

STD

Valve Seat

OEM NO.
 IN
 OEM NO.
 EX

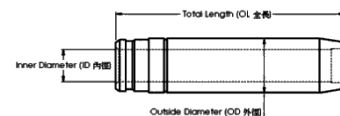


SIZE

STD

Valve Guide

OEM NO.
 IN
 OEM NO.
 EX



SIZE

STD

Gasket Set

OEM NO.



HYUNDAI D4DA

Application :
Number of Cylinders 4
Cylinder dia. 104.0 MM
Swept Volume ccm

Piston kit-Set

OEM NO. 23411-45000



Piston	SIZE
Comp : 62.25 w/al-fin Height : -20.1 oil-cooled Length : 112.3 Top Shape : Ø52.0 Direct Injection Pin : 36.0 Length : 88.0	STD

Piston Ring

OEM NO.
NPR :



OEM Ring Groove	SIZE
Top : 2.8DK 2nd : 2.0 Oil : 4.0	STD

Cylinder Liner

OEM NO.



Liner&Sleeve	SIZE
In Diameter : Out Diameter : Total length : Flange :	STD

Engine Bearing

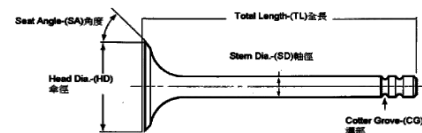
MAIN :
CON.ROD :
T/W :
C/B :
BUSH :



	SIZE
	STD

Engine Valve

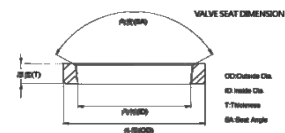
OEM NO.
IN
OEM NO.
EX



	SIZE
	STD

Valve Seat

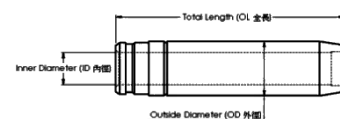
OEM NO.
IN
OEM NO.
EX



	SIZE
	STD

Valve Guide

OEM NO.
IN
OEM NO.
EX



	SIZE
	STD

Gasket Set

OEM NO.

