

FRSE Real Speed Engineering Camshaft Spec Card

PART NAME **SPEC-S** ENGINE **CA18DE(T)**

PART NUMBER SET **RA301B-NS11A** IN **RA301D-NS11A** EX **RA301F-NS11A**

| | | | |
|-------|----|--------------|------|
| GRIND | IN | 258° /8.50mm | LASH |
| | EX | 258° /8.50mm | LASH |

| | | | |
|------|----|-------------|---------------|
| LIFT | IN | @CAM 8.50mm | @VALVE 8.50mm |
| | EX | @CAM 8.50mm | @VALVE 8.50mm |

| | | |
|----------------|----|-------|
| LOBE CENTER(°) | IN | 110.0 |
| | EX | 115.0 |

| | | |
|-------------|----|-------|
| BASE CIRCLE | IN | Φ32.0 |
| | EX | Φ32.0 |

| | | |
|---------------------------|----|---|
| VALVE CLEARANCE WHEN COLD | IN | - |
| | EX | - |

| | |
|-------------------|---|
| ROCKER ARM RATIO* | - |
|-------------------|---|

* ALL LIFTS ARE BASED ON ZERO LASH AND THORETICAL ROCKER ARM RATIOS

| CAM TIMING | | OPENS(°) | | CLOSES(°) | | Actual Duration @ Opening(°) |
|----------------------------|----|----------|------|-----------|------|------------------------------|
| Actual Duration Valve Lift | IN | BTDC | 18.0 | ABDC | 60.0 | 258.0 |
| | EX | BBDC | 63.0 | ATDC | 15.0 | 258.0 |

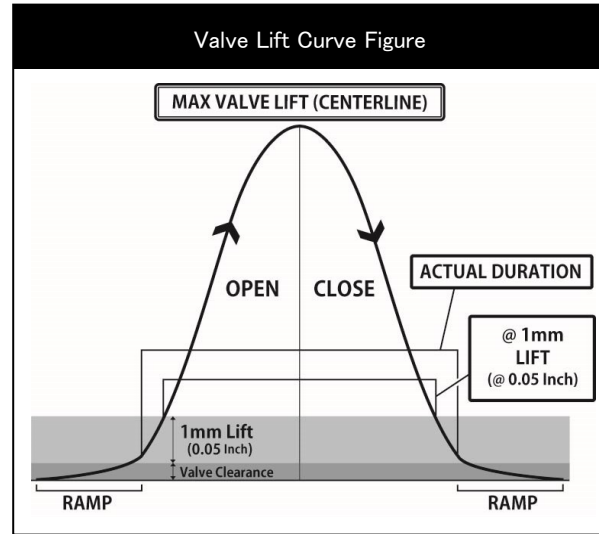
Values shown are, from start to the end of actual duration. (Excluding the ramp values)

| CAM TIMING | | OPENS(°) | | CLOSES(°) | | TOTAL DURATION(°) |
|-------------------|----|----------|------|-----------|------|-------------------|
| at 1mm Valve Lift | IN | BTDC | 0 | ABDC | 42.0 | 222.0 |
| | EX | BBDC | 45.0 | ATDC | -3.0 | 222.0 |

Values are of actual duration from start to end of 1mm value points. (Excluding the ramp values)

| CAM TIMING | | OPENS(°) | | CLOSES(°) | | TOTAL DURATION(°) |
|---------------------|----|----------|------|-----------|------|-------------------|
| at 0.05" Valve Lift | IN | BTDC | -2.0 | ABDC | 40.0 | 218.0 |
| | EX | BBDC | 43.0 | ATDC | -5.0 | 218.0 |

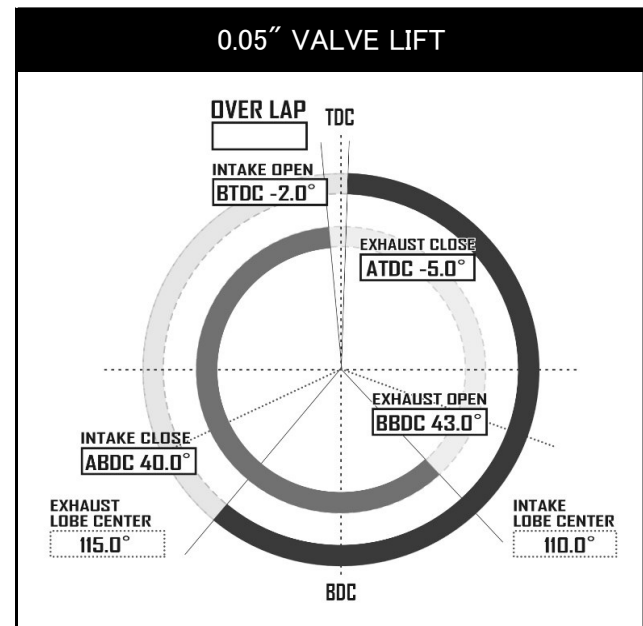
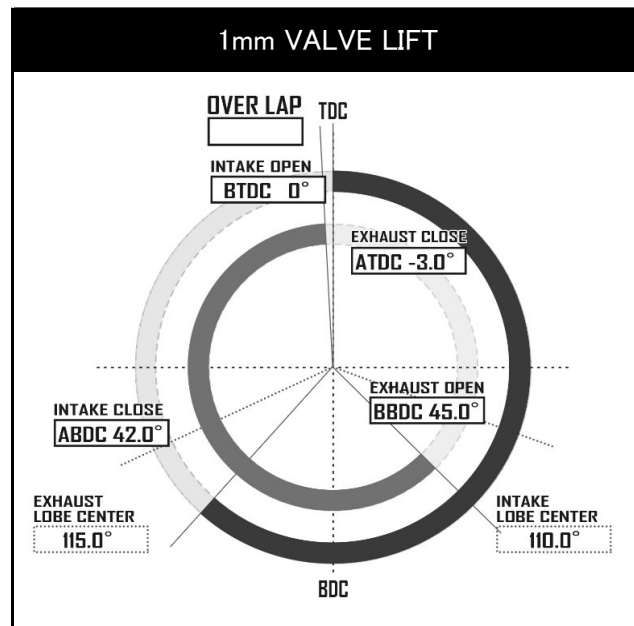
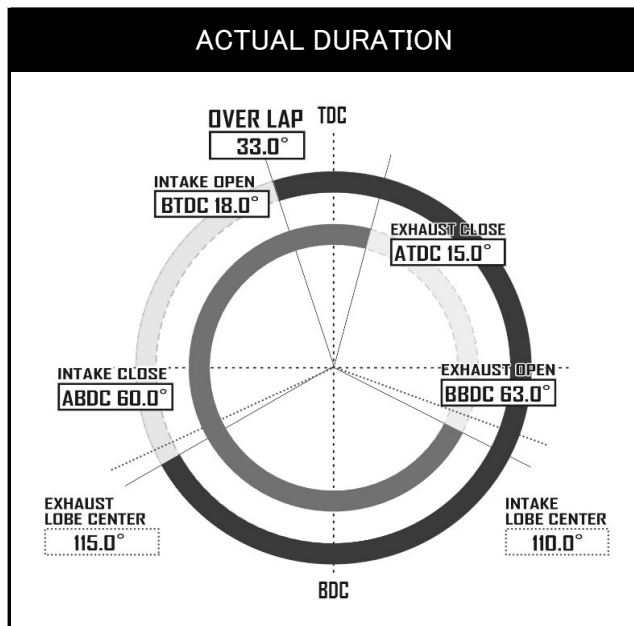
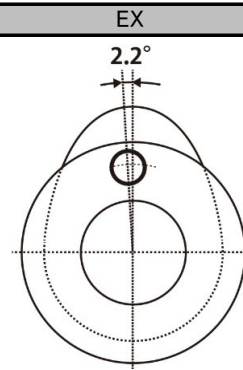
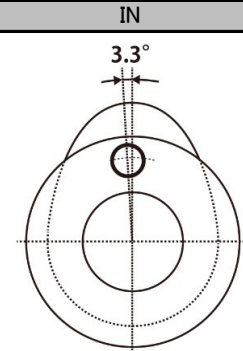
Values are of actual duration from start to end of 0.05" value points. (Excluding the ramp values)



| REQUIRED VALVE SPRING SPEC | | |
|----------------------------|--------|--------------|
| NORMAL HEIGHT | OEM or | 41.0 mm |
| SET LENGTH | OEM or | 35.0 mm |
| LIFT LENGTH | OEM or | 25.0 mm |
| COMPRESSED HEIGHT | OEM or | 24.0 mm |
| SET LOAD | OEM or | 24.2kgf ± 7% |
| LIFT LOAD | OEM or | 80.6kgf ± 7% |
| PART NUMBER | | RA304A-NS11A |

| REQUIRED PARTS | |
|----------------|-------------|
| PRODUCT NAME | PART NUMBER |
| | |
| | |
| | |
| | |
| | |
| | |

Dowel pin position when first cam lobe is pointing upwards.



品名 **SPEC-S** 適合 **CA18DE(T)**

品番 SET RA301B-NS11A IN RA301D-NS11A EX RA301F-NS11A

| | | | |
|------|----|---------------|------|
| スペック | IN | 258° / 8.50mm | LASH |
| | EX | 258° / 8.50mm | LASH |

| | | | |
|-----|----|-------------|---------------|
| リフト | IN | @CAM 8.50mm | @VALVE 8.50mm |
| | EX | @CAM 8.50mm | @VALVE 8.50mm |

| | | |
|----------------|----|-------|
| 初期設定 中心角(°) | IN | 110.0 |
| | EX | 115.0 |

| | | |
|------|----|-------|
| ベース円 | IN | Φ32.0 |
| | EX | Φ32.0 |

| | | |
|------------------|----|---|
| 冷間時 バルブクリアランス | IN | - |
| | EX | - |

| | |
|-------------|---|
| ロッカーアームレシオ* | - |
|-------------|---|

*すべてのリフト値はラッシュアジャスターが動作していない時、およびロッカーアームレシオから計算した理論値です。

| カムタイミング | | OPENS(°) | | CLOSES(°) | | Actual Duration @ Opening(°) |
|-----------------|----|----------|------|-----------|------|------------------------------|
| 有効作用角 バルブリフト | IN | BTDC | 18.0 | ABDC | 60.0 | 258.0 |
| | EX | BBDC | 63.0 | ATDC | 15.0 | 258.0 |

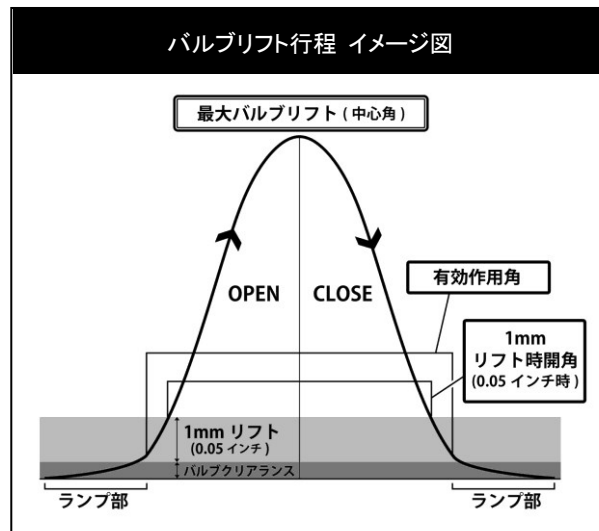
ランプ部を除いた有効作用角の始点と終点の数値

| カムタイミング | | OPENS(°) | | CLOSES(°) | | TOTAL DURATION(°) |
|---------------|----|----------|------|-----------|------|-------------------|
| 1mm バルブリフト | IN | BTDC | 0 | ABDC | 42.0 | 222.0 |
| | EX | BBDC | 45.0 | ATDC | -3.0 | 222.0 |

ランプ部を含めたバルブの開き始めと閉じ終わりから1mmの点での数値

| カムタイミング | | OPENS(°) | | CLOSES(°) | | TOTAL DURATION(°) |
|-----------------|----|----------|------|-----------|------|-------------------|
| 0.05" バルブリフト | IN | BTDC | -2.0 | ABDC | 40.0 | 218.0 |
| | EX | BBDC | 43.0 | ATDC | -5.0 | 218.0 |

ランプ部を含めたバルブの開き始めと閉じ終わりから0.05インチの点での数値



| 推奨バルブスプリング | | |
|------------|-------|--------------|
| 自由長 | 純正 or | 41.0 mm |
| セット長 | 純正 or | 35.0 mm |
| リフト長 | 純正 or | 25.0 mm |
| 密着長 | 純正 or | 24.0 mm |
| セット荷重 | 純正 or | 24.2kgf ±7% |
| リフト荷重 | 純正 or | 80.6kgf ±7% |
| 品番 | | RA304A-NS11A |

| 必要部品 | |
|------|----|
| 製品名 | 品番 |
| | |
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| | |
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| | |

第1カム山をトップ位置にした際の
ノックピン位置

