

CATÁLOGO DO ITEM IMPORTADO

Pleito de Inclusão de Ex-Tarifário

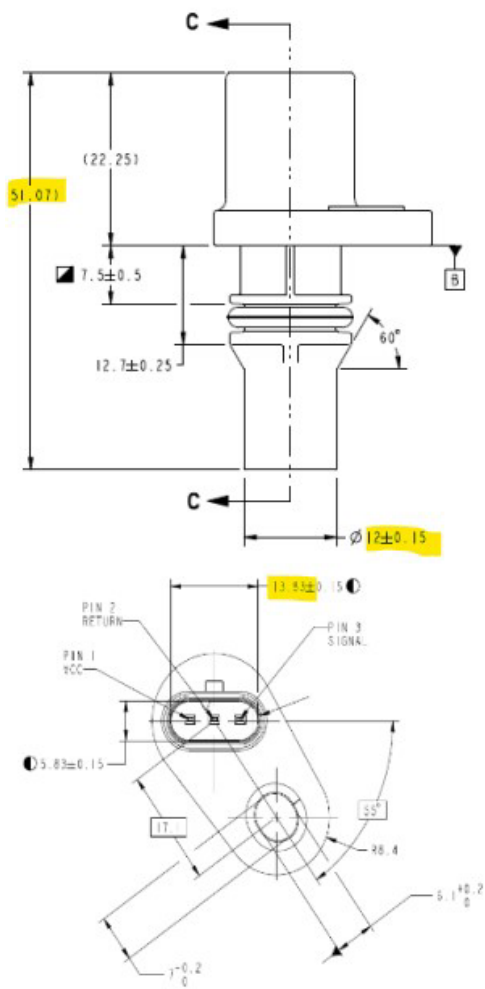
Número de Controle SDIC	NCM	Sugestão de descrição do ex-Tarifário
D8-18I	9032.90.99	Sensor de posição; contendo material base de liga de cobre, anel o-ring composto em borracha (FKM-VII - 6475); com velocidade radial e axial mínima de 0 rpm e máxima de 6000 rpm, faixa de frequência de 0,001kHz a 8 kHz, temperatura de operação de -40 a 150 graus Celsius, comprimento do conector 51,07 mm, largura do conector 12 mm (+/- 0,15 mm); para fabricação de motores diesel; com função de interpretar a posição do virabrequim para aplicações de sincronização do motor; com aplicação em veículos comerciais leves, caminhões, ônibus.

1. Especificações técnicas detalhadas da autopeça

(características quantitativas e qualitativas, por exemplo: dimensões, materiais de fabricação, especificações de trabalho/funcionamento [torque, potência, resistência, tensão, corrente, dureza, vazão, condutibilidade, temperatura etc.], características de hardware, software, características físicas, dentre outras inerentes a cada produto):

Velocidade radial e axial mínima de 0 rpm e máxima de 6000 rpm, faixa de frequência de 0,001kHz a 8 kHz, temperatura de operação de -40 a 150 graus Celsius, comprimento do conector 51,07 mm, largura do conector 12 mm (+/- 0,15 mm)

2. Imagens da autopeça importada e/ou desenho esquemático *(obrigatório conter as principais dimensões em milímetros):*



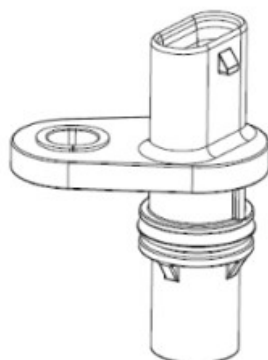
3D image provided when available for visual reference only.

			REFERENCE
TARGET	PRODUCTION TARGET	STANDARD TARGET	6.7 CRANK
MIN SPEED			0 RPM
MAX SPEED	2000 RPM	2000 RPM	4000 RPM
TARGET CONFIGURATION (SEE FIGURE 2)	RADIAL	RADIAL	RADIAL
SENSOR	MIDDLE OF TOOTH	MIDDLE OF TOOTH	MIDDLE OF TOOTH
TRIGGER FEATURE (SEE FIGURE 2)	SEE NOTE 9e	SEE NOTE 9e	TOOTH
FEATURE WIDTH (SEE H IN FIGURE 2)	3.3	SEE NOTE 9e	4
FEATURE DEPTH (SEE J IN FIGURE 2)	7.2	SEE NOTE 9e	4.25
TARGET WIDTH (SEE K IN FIGURE 2)	3.7	SEE NOTE 9e	3
# OF TRIGGER PTS.	40-2	SEE NOTE 9e	60-2
EFFECTIVE DIAMETER	108	SEE NOTE 9e	211.85
MIN DESIGN AIR GAP	0.25	0.25	0.25
MAX DESIGN AIR GAP	1.52	1.52	1.59
MAX SWITCHING AIR GAP	2	2	2.7
TARGET RUNOUT	0.15	0.15	0.25
MATERIAL	C45E (ck45)	ASTM B1008, GRADE CRS-1018	JIS G3113-1990-HOT ROLLED STEEL
SPEED EFFECT DEGREES/1000 TARGET RPM	0.1	0.1	0.1
OFFSET A (SEE FIGURE 3)	0	0	0
OFFSET B (SEE FIGURE 3)	0	0	±1
MAX FEATURE TO FEATURE JITTER	±0.05°	±0.05°	±0.05°
ELECTRICAL EDGE OFFSET AND TOLERANCE (SEE NOTE 7a)	0.13°±0.35° AT AIR GAP 2	0.22°±0.3° AT AIR GAP 2 0.13°±0.3° AT AIR GAP 2	0.1°±0.4° (SEE NOTE 7b)
FORWARD PULSE WIDTH (MIN AND MAX) AT 2.5 VOLTS	37 TO 52 μs	37 TO 52 μs	37 TO 52 μs
REVERSE PULSE WIDTH (MIN AND MAX) AT 2.5 VOLTS	83 TO 97 μs	83 TO 97 μs	75 TO 95 μs
INSTALLATION OFFSET RELATIVE TO PREFERRED TARGET TRAVEL	0°	0°	0°

14. SENSOR EXTERNAL AIR TEMPERATURE REQUIREMENTS:
 - a. MATING CONNECTOR: ENSURE MATING CONNECTOR MEETS APPLICATION REQUIREMENTS.
 - b. SENSOR: -40 °C TO 150 °C
15. OUTPUT LOAD SHALL BE 47 k Ω RESISTOR IN PARALLEL WITH 0.01 μ F CAPACITOR TO RETURN
16. SENSOR CONNECTOR SYSTEM SHALL MEET THE WATER RESISTANCE REQUIREMENTS OF IP69
17. O-RING: MATERIAL CONFORMING TO FKM-VII-6475
 - a. COLOR RED
 - b. COLOR YELLOW USED ONLY FOR SERVICE.
18. ENGRG. STD.: 10903
 - a. SOLDER SHALL NOT CONTAIN > 0.1% LEAD BY WEIGHT.



SCALE 2

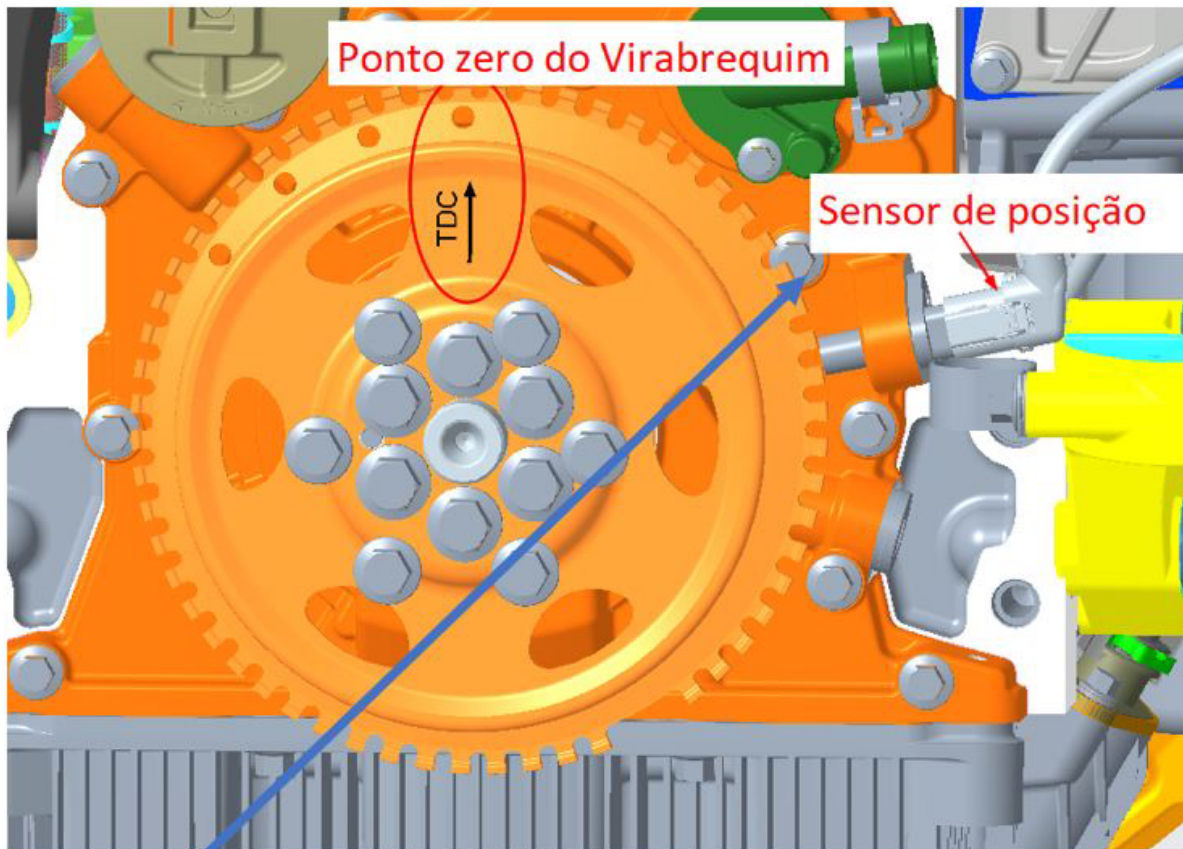
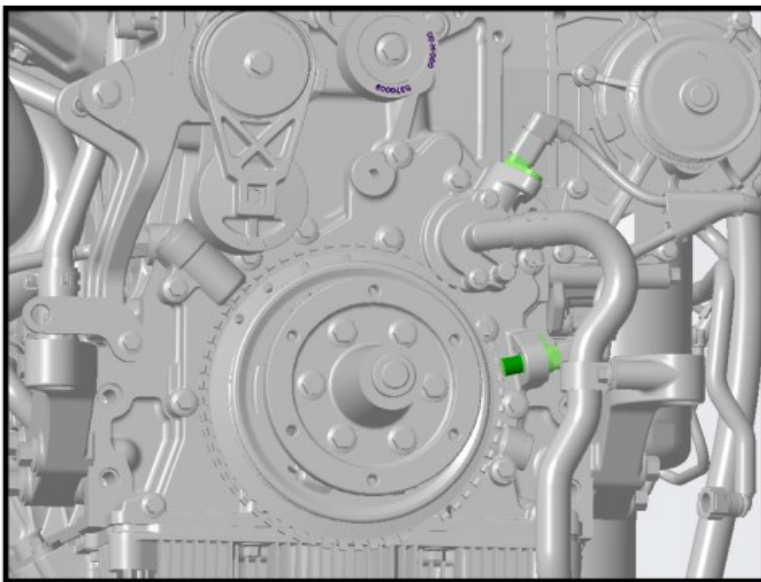


SCALE 2

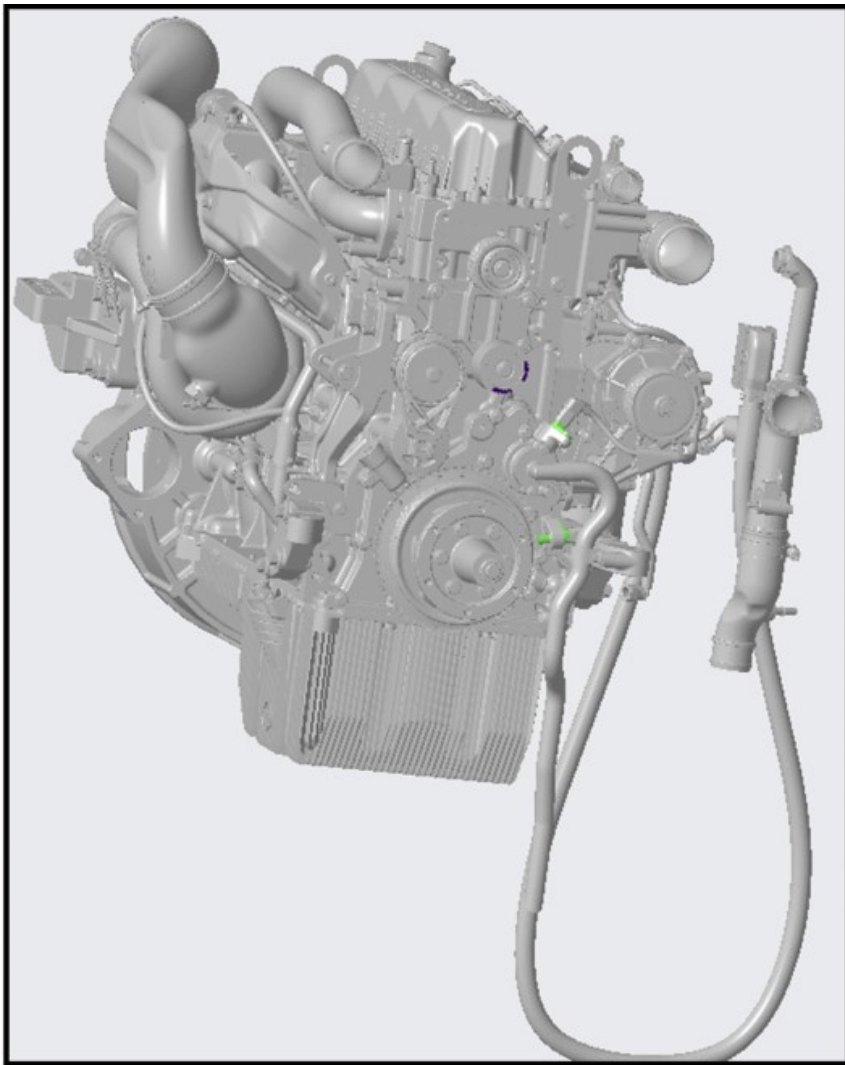
1. BUILT IN CONNECTOR SHALL MATE WITH 09406602 CONNECTORS MANUFACTURED BY KOSTAL. THE MATING CONNECTOR P/N 09406602 (KEY B) IS DETAILED ON THEIR DRAWING 10059054-1. IT SHALL ALSO MATE WITH CONTACT F 32124734120000. SENSOR HOUSING SHALL COMPLY WITH REQUIREMENTS OF USCAR DRAWING DC-120-S-003-1-Z02 KEY OPTION B OR EQUIVALENT.
 - a. CONNECTOR COLOR: SHELL: BLACK, TERMINAL BLOCK: N/A
2. CONNECTOR PIN MATERIAL: SILVER PLATING
 - a. BASE MATERIAL: COPPER ALLOY UNS C51000, H02 TEMP (1/2 HARD) PER ASTM B159
 - b. UNDERPLATING: CU FLASH MIN THICKNESS: 0.1 μ m
 - c. OVERPLATING: SILVER PLATING PER ASTM B-700: 4 TC TYPE I, GRADE D, CLASS S
3. FREQUENCY RANGE: 0.001-8 kHz
4. EDGE SENSITIVE OPERATE POINT BASED ON BOTH EDGES OF A TOOTH (FOR TIMING). OPERATE POINT LOGIC DEPENDENT ON DIRECTION OF TARGET MOTION. DIRECTION **A** IS FORWARD (FWD) PULSE WIDTH 45 DIRECTION **B** IS REVERSE (REV) PULSE WIDTH 90 μ s REFER TO SENSOR TOP VIEW AND FIGURE 1
5. MAXIMUM ALLOWABLE FLASH IN O-RING GROOVE: 0.05 MAXIMUM ALLOWABLE FLASH ELSEWHERE ON PART UNLESS OTHERWISE SPECIFIED: 0.25
6. TO THEORETICAL INTERSECTION AT BOTTOM OF GROOVE
7. ELECTRICAL EDGE OFFSET AND TOLERANCE:
 - a. THE POLARITY SIGN (+ OR -) FOR ELECTRICAL OFFSET INDICATES ADVANCED OR RETARDED OPERATE POINT WITH RESPECT TO THE PHYSICAL EDGE OF THE FEATURE. A POSITIVE SIGN INDICATES ADVANCED EVENT, A NEGATIVE SIGN INDICATES RETARDED EVENT.
 - b. NOMINAL VALUES BASED ON 2550 RPM. TOLERANCE INCLUDES VARIATION DUE TO AIR GAP AND TEMPERATURE

3. Aplicação do item importado *(em qual produto fabricado pela empresa pleiteante o item importado será incorporado).*

Aplicado em: motores diesel



O sensor de posição faz a leitura da roda fônica ou engrenagem e determina a posição de do Virabrequim.



4. Função do item importado no produto fabricado pela empresa pleiteante do ex-tarifário:

Interpretar a posição do virabrequim para aplicações de sincronização do motor

Veículos(s): veículos comerciais leves, caminhões, ônibus