FIRST FRAME

TITLE BLOCK

SECURITY CLASSIFICATION KEY BY PROGRAMME GATEWAY : CONFIDENTIAL
PS SECRET > P-REL CONFIDENTIAL > J1 PROPRIETARY

PART MUST COMPLY WITH RESTRICTED SUBSTANCE MANAGEMENT
STANDARD STJLR.99.9999 TO SAFEGUARD HEALTH, SAFETY AND
THE ENVIRONMENT.

DRAFTED IN ACCORDANCE WITH JAGUAR LAND ROVER CADD STANDARDS
CURRENT AT INITIAL RELEASE.

PART NUMBER	T9P3-10J748-AD1
DESCRIPTION	SPIGOT INLET
RH/LH INDICATOR	N/A
CAD TYPE	N/A
CAD LOCATION	ENOVIA V6
DESIGN	A-GHAITH
REFERENCE	DS-X900-140301-P02-26
SAFETY	N/A
CONTROL ITEM	NO

GENERAL NOTES

MATERIAL
SEE BOM TABLE

COMPANY TRADEMARK IDENTIFICATION TO JAGUAR LAND ROVER PARTS BRANDING DIRECTIVE E-108.

FOR CURRENT RELEASE STATUS, SEE THE WERS ENGINEERING NOTICE.

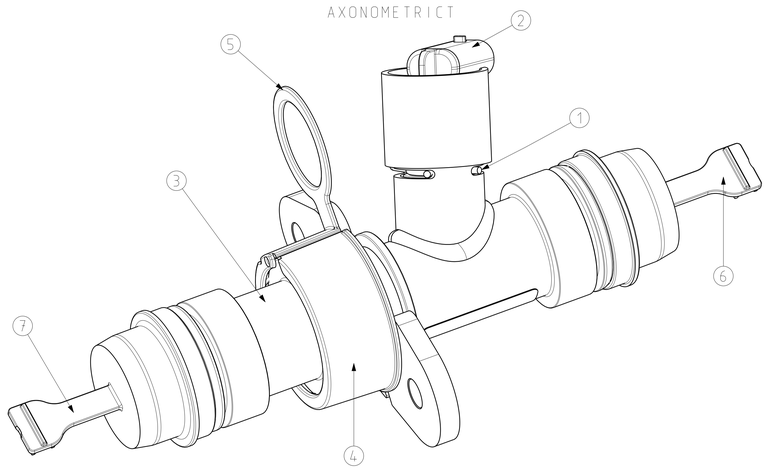
GENERAL NOTES - C.O.C.

ADDITIONAL NOTES SPECIFIC TO THE CENTRE OF COMPETENCY

REVISION BLOCK

LTRS - REVISIONS			
ORIGINATOR	CHECKER	ENGR APP	MATL APP
XXXX - ENTER REVISION DESCRIPTION(S) HERE WERS NUMBER			
CDSID	CDSID	CDSID	CDSID

AXONOMETRIC



ITEM	PART NUMBER JLR	PART NUMBER AKWEL	DESCRIPTION	QTY	MATERIAL
1	T9U3-14N202-A-INS-01	P1040234A	TEMPERATURE SENSOR CLIP	1	Steel Stainless Austenitic BS EN 10088-2 Grade / AISI 302 - 1.4310/X10CrNi18-8
2	T9U3-12A648-A-INS-01	P1033098A	TEMPERATURE SENSOR	1	ACCORDING TO PART DRW.
3	T9P3-10J748-A-PIA-04	P1043494A	SPIGOT INLET HOUSING	1	EN AW-6082
4	T9U3-10J748-A-PIA-09	P1031963A	O-RING MANIFOLD	1	EPDM 60 SHORE A BLACK
5	T9U3-10J748-A-PIA-18	P1034975A	O-RING PROTECTIVE CAP	1	NYLON BCF 360gsm 300G/M2 LDPE PE/PA/PE FILM 300G/M2 LDPE 60G/M2 PET FLEECE
6	T9U3-10J748-A-PIA-16	P1034887A	PROTECTIVE CAP NW18 SPIGOT	1	NYLON BCF 360gsm 300G/M2 LDPE PE/PA/PE FILM 300G/M2 LDPE 60G/M2 PET FLEECE
7	T9U3-10U660-A-INS-01	P1041780A	PROTECTIVE CAP NW18 SPIGOT	1	NYLON BCF 360gsm 300G/M2 LDPE PE/PA/PE FILM 300G/M2 LDPE 60G/M2 PET FLEECE

SECOND FRAME

GENERAL NOTES - C.O.C.

ADDITIONAL NOTES SPECIFIC TO THE CENTRE OF COMPETENCY

MASS OF COMPONENT: 0.155 KG (APPRX.) (INCLUDING ALL COMPONENTS)
ACTUAL MASS MUST BE WITHIN ±10% OF CALCULATED MASS

DIMENSIONAL REQUIREMENT IDENTIFIED WITH ⟨P⟩ ARE VERIFIED AT THE SUB-ASSY OR COMPONENT LEVEL. REPEAT MEASURMENTS OF THESE ITEMS ARE NOT REQUIRED FOR ASSEMBLY VALIDATION.
THE ASSEMBLY PPAP SUBMISSION SHALL INCLUDE THE COMPONENT LEVEL VALIDATION RESULTS FOR THESE IDENTIFIED DEMENSIONAL REQUIREMENTS TO BE CONFIRMED ON CHECKING FIXTURE.

REFER TO ISO 10579 NON-RIGID PARTS RESTRAINED CONDITIONS APPLIES, UNLESS THE DIMENSION AND TOLERANCE ARE QUALIFIED BY THE SYMBOL Ⓕ. THE ASSEMBLY MUST BE RESTRAINED IN FIXTURE SIMULATING THE INSTALLED CONDITION.

MUST CONFORM TO: TPJLR ACCEPTANCE CRTITERIA TO TO BE DETERMINED FOR PCA

MATERIALS FOR BLACK/GREY BOX ITEMS SHALL CONFORM TO JAGUAR LAND ROVER MATERIAL CONTROL SPECIFICATIONS STJLR.51.5227

PARTS MUST COMPLY WITH RESTRICTED SUBSTANCE MANAGEMENT STANDARD STJLR.99.9999 TO SAFEGUARD HEALTH, SAFETY AND ENVIRONMENT

ALL PARTS CONTAINING RECYCLED POLYMERS MATERIAL MUST ADHERE TO STJLR.51.5270

POLYMERIC AND ELASTOMERIC MATERIAL PARTS MARKING MUST COMPLY WITH CADJLR.02.02

SOURCES FOR MATERIALS DEFINED BY JLR MATERIAL SPECIFICATIONS SHALL BE SELECTED FROM THE JAGUAR LAND ROVER ENGINEERING MATERIAL APPROVED SOURCE LIST

PART MUST BE FREE OF BURRS, FLASH, SHARP EDGES, AND POROSITY THAT MAY AFFECT THE FUNCTION, SAFE HANDLING, INSTAULATION OR REMOVAL OF THE PART

UNLESS OTHERWISE STATED ALL DIMENSIONS SHOWN ON THIS DRAWING ARE FOR DATUMS. TARGET DATUMS. GAUGE POINTS AND ANY M/C REQUIREMENTS ONLY FOR ALL OTHER FEATURES AND DIMENSIONS REFER TO THE CAD MODEL

DIMENSIONS AND TOLERANCING MUST COMPLY WITH BS 8888:2013

SERVICE COMPONENTS TO BE SUPPLIED AND SHIPPED PACKAGED IN ACCORDANCE WITH THE REQUIREMENTS OF JAGUAR LAND ROVER SERVICE DEPARTMENT

CHANGES TO DESIGN, COMPOSITION OR PROCESSING OF THE PART PREVIOUSLY APPROVED FOR PRODUCTION REQUIRE PRIOR APPROVAL FROM JAGUAR LAND ROVER PRODUCT ENGINEERING REFER TO ISO/TS 16949

NO CHANGES TO THE SCSS DOCUMENTS ALLOWED WITHOUT AGREEMENT FROM JAGUAR LAND ROVER PRODUCT ENGINEERING AND STA

FOR ENGINEERING APPROVED SOURCE, SEE THE WERS/ENOVIA ENGINEERING NOTICE.

FOR CURRENT RELEASE STATUS, SEE THE WERS /ENOVIA ENGINEERING NOTICE.

JAGUAR OR LAND ROVER TRADEMARK, VENDOR CODE, PART NUMBER, RECYCLING CODE AND MANUFACTURING DATE TO BE APPLIED MARKING MUST BE CLEARLY VISIBLE AND IN ACCORDANCE TO THE JLR SPECIFICATION E-108

MATERIAL CODE > SEE BOM < TO APPEAR ON PART AS PER ISO 1043-1 AND 1063-2 (REFERENCING ISO 11469, PLASTIC AND/OR ISO 1629 RUBBER)

MUST CONFORM TO JLR LEAK TEST SPEC:
LEAK TIGHTNESS TEST - 100% PARTS CHECK
METHOD A (AIR DECAY): LEAK TEST AS PER TPJLR.03.058 J-1.4 - INTERNAL PRESSURE OF 300 KPA ± 6 KPA FOR MIN. 30 SEC AT 23 °C ± 3 °C WITH ACCEPTANCE CRITERIA OF 1CC/MIN AS PER STJLR.03.5102 N-1.1
METHOD B (HELIUM LEAK TEST): LEAK TEST AS PER TPJLR.03.058 J-1.5 - INTERNAL PRESSURE OF 300 KPA ± 6 KPA AT 23 °C ± 3 °C WITH ACCEPTANCE CRITERIA OF MAX. 0.0017 KPA.L. / SECOND AS PER STJLR.03.5102 N-1.2

TYPE OF DATA MATRIX ACCORDING TO STANDARD JLR-STN-171949 ISSUE 1.6
DIMENSIONS: 8 x 8 (WITHOUT QUIET ZONE), GRADE > 2.5

FOR MISSING DIMENSIONS AND SPECIFICATIONS SEE CAD DATA SET

COORDINATE ORIGIN NOT ORIGINALLY PRESENTED

CONNECTOR/FITTING TO BE INSERTED TO WITHIN 1.0 MM (MAX) OF FITTING ABUTMENT FACE
QUICK CONNECTORS O-RING MUST BE PRESENTED

SHARP NOTCHES OR INDENTATIONS ARE NOT ALLOWED

ALL QUICK CONNECTORS MUST BE SUPPLIED WITH SPRING RETENTION CLIP IN FULLY CLOSED POSITION

SPIGOT EXTERNAL DESIGN AS PER VDA NW18 STANDARD SEALING DIAMETER:
DRJLR.HJ.7004 - REVISION 3

METAL CLIP PRESENCE CHECK

(FLUID CAPABILITIES: COOLANT ACCORDING TO STJLR.651.5003)
(COOLANT MEDIUM: FREECOR, REGISTERED TRADEMARK, EV MILLI 10)

THIS PART / COMPONENT MUST CONFORM TO PRODUCT DESIGN SPECIFICATION (PDS)

PARTS ARE SUPPLIED FORMED

PARTS THAT HAVE FALLEN DOWN MUST BE SCRAPPED

THE BATTERY COOLING SYSTEM SHALL ADHERE TO THE FOLLOWING CLEANLINESS SPECIFICATION:

GRANULOMETRY:

INTERNAL CLEANLINESS:
MAXIMUM METALLIC PARTICLE SIZE: 500 µm x 500 µm x 500 µm
MAXIMUM NON-METALLIC PARTICLE SIZE:
- RIGID (I.E. PLASTIC, GLASS, ETC.): 500 µm x 500 µm x 500 µm
- NON-RIGID (I.E. RUBBER, ORGANIC MATTER, ETC.): 10 µm x 1000 µm x 1000 µm
MAXIMUM FIBER PARTICLE SIZE: 3000 µm (FIBER IS A NON-METALLIC PARTICLE WITH LENGTH X BREATH RATIO GREATER THAN 20 TO 1)
MAXIMUM PERMISSIBLE TOTAL WEIGHT OF DEBRIS: 10 mg / 1000 cm2 THROUGH AN 8 µm FILTER

EXTERNAL CLEANLINESS:
- NON-METALLIC / METALLIC PARTICLES SHALL NOT EXCEED A MAXIMUM LENGTH OF 0.75 MM
- TOTAL PARTICLE WEIGHT SHALL BE LESS THAN 20 MG PER METER SQUARED

PASS-THROUGH MANIFOLD INSERTION FORCE - THEORETICAL CALCULATION WORST CASE FORCE IS SEEN AS 113 N AND NOMINAL 65 N

O-RING PASS-THROUGH MANIFOLD:
- MATERIAL: EPDM
- HARDNESS: 60 ±5 Shore A
- COLOUR: BLACK
- LUBRICATION: AB WB3-N
- CURING: PEROXIDE CURED EPDM
- SECTIONAL DIAMETER: Ø3.50 ± 0.10 MM
- INNER DIAMETER: Ø27.5 ± 0.32 MM

1 ⟨DF⟩ SEALING SURFACE AND RETENTION CLIP GROOVES
NO WELDING SPATTER, NO BURR OR LOCAL GEOMETRICAL DEFAULT, POLISHED FINISH SURFACE AS PER DRAWING
NO SHARP EDGES ALLOWED

SUPPLIER TO ENSURE END CAPS PRESENCE

NO CRACKS VISIBLE OR ANY EVIDENCE OF PHYSICAL & MECHANICAL DAMAGE TO SENSOR

ALL COOLING SYSTEM CONNECTORS IN THE BATTERY ASSEMBLY SHALL REMAIN FULLY OPERATIONAL AND MAINTAIN FUNCTIONALITY AFTER A MINIMUM OF 10 CONNECTION AND DISCONNECTION CYCLES

PLASTIC COMPONENTS:
- PART SHOULD BE FREE OF VOIDS AND POROSITY
- PART DESIGNED FOR WATER BASED COOLANT APPLICATIONS
- EJECTOR PIN AND INJECTION GATE WITNESS MARKS TO BE ADVISED AND APPROVED BY SUPPLIER
- PARTS TO BE FREE OF CONTAMINANTS AND FLASH
- PARTS TO BE FREE OF SURFACE DEFECT, BLEMISH, SINK MARK, ETC.
- BORES TO BE FREE FROM BLOCKAGES

SELECTION OF OK FUNCTIONALITY SENSOR AS PER ENGINEERING SPECIFICATION ES_T9U3-12A648-AA

OPERATING PRESSURE:
- NORMAL 300KPA (RELATIVE)
- MAX 400 KPA (RELATIVE)
- BURST PRESSURE 600 KPA (RELATIVE)

55 ⟨⟩ TIGHTNESS
ON MANUFACTURING LINE AT 100% AT 3BAR, ACCORDING TO TPJLR.03.058 ISSUE 7; METHOD A (AIR DECAY); THE LEAKAGE RATE SHALL NOT EXCEED 1CC/MIN DURING 30 SEC ACCORDING TO STJLR.03.5102 ISSUE 6

2 ⟨⟩ FUSION WELDING:

FUSION WELD TO STJLR.50.5354
NO CRACKS ARE PERMISSABLE
CHECK PRESENCE OF WELDS

ALL TO BE INSPECTED DIMENSIONS, TOLERANCES, AND REQUIREMENTS ARE MARKED WITH ⟨⟩

LTRS	REVISIONS		
ORIGINATOR	CHECKER	ENGR APP	MATL APP
INITIAL P-RELEASE OF T9P3-10J748-AC iCREATE 60424			
AGHAITH	VVOLLONO	KOLSZEWS	MATSENG
T9P3-10J748-AD1 ICA SOLUTION 26/04/07			

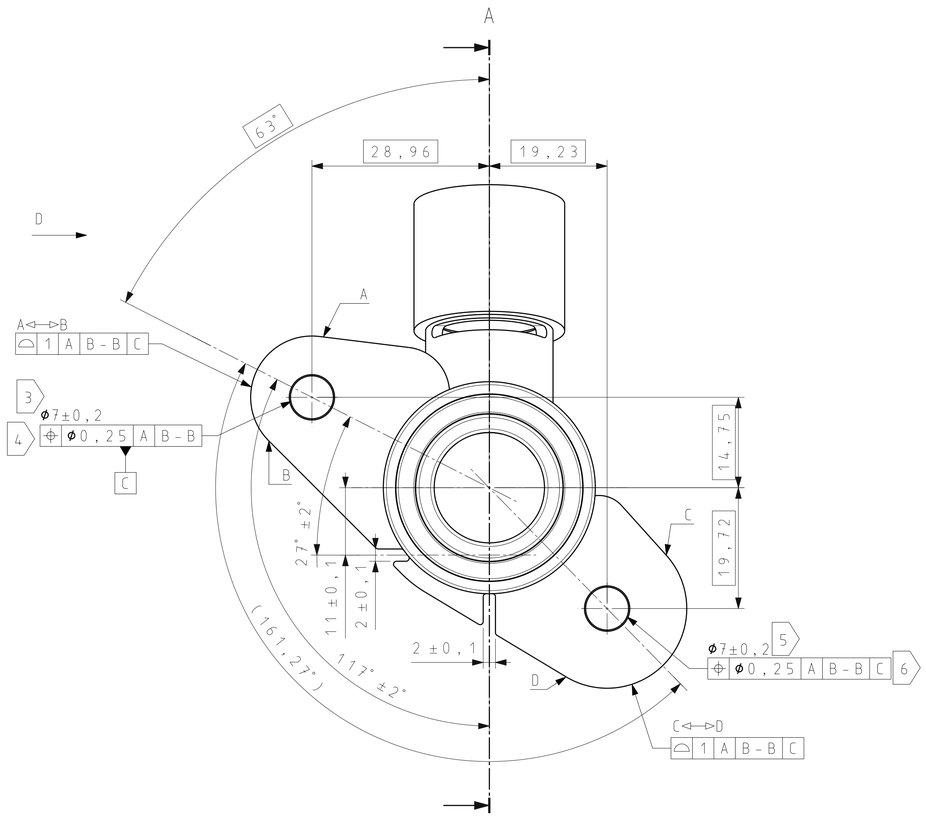
CAD PART NUMBERS REQUIRED TO COMPLETE FULL PRODUCT DEFINITION FOR ALL PART NUMBERS STATED ON DRAWING	
T9P3-10J748-AD1-INS-01	1

REFERENCE	DS-X900-140301-P02-26		
PART MUST COMPLY WITH RESTRICTED SUBSTANCE MANAGEMENT STANDARD STJLR.99.9999 TO SAFEGUARD HEALTH, SAFETY AND THE ENVIRONMENT			
DRAFTED IN ACCORDANCE WITH JAGUAR LAND ROVER CADD STANDARDS CURRENT AT INITIAL RELEASE		3RD ANGLE PROJ DIMENSIONS ARE IN MILLIMETRES	
CAD TYPE CATIA V6	CAD LOC. ENOVIA	DRAWING PART NUMBER T9P3-10J748-AD1-DWG-01 REV 1	DTMC IS MASTER
DESIGN AGHAITH	DETAIL AGHAITH	PART NUMBER ▽T9P3-10J748-AD1	SHT 1 OF 5
CHECKED VVOLLONO	SAFETY N/A	DESCRIPTION SPIGOT INLET	
SCALE 1:1	DATE 260409		SIZE A0
SECURITY CLASSIFICATION KEY BY PROGRAMME GATEWAY: PS SECRET>P-REL CONFIDENTIAL>J1 PROPRIETARY			CONFIDENTIAL

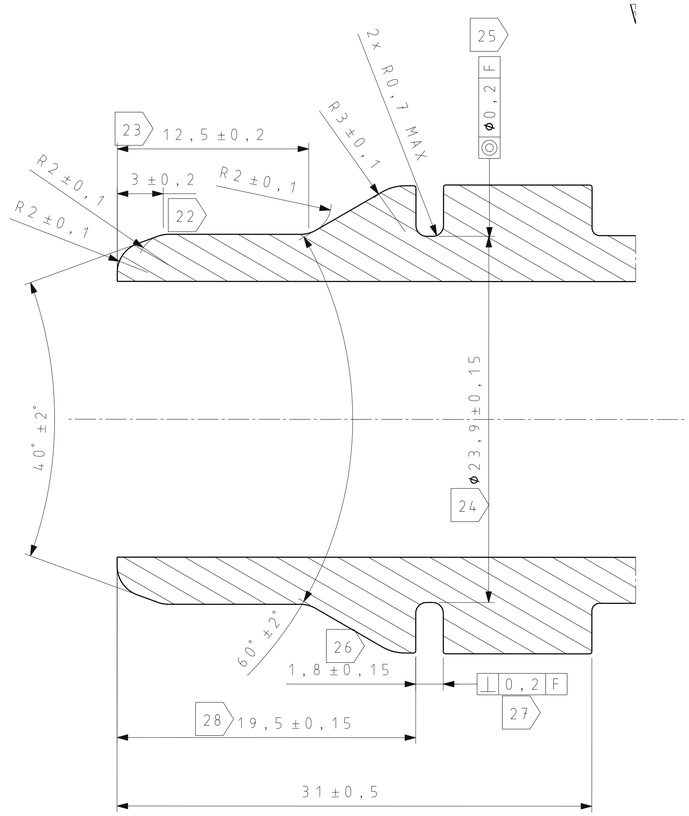
SCSS TABLE TO BE ADDED FOR PCA RELEASE

PART NUMBER T9P3-10J748-AD1		REV 1	SHT 2/5
SECURITY CLASSIFICATION KEY BY PROGRAMME GATEWAY: PS SECRET>P-REL CONFIDENTIAL>J1 PROPRIETARY		CONFIDENTIAL	
DRAWING PART NUMBER T9P3-10J748-AD1-DWG-01	JAGUAR LAND ROVER LIMITED		

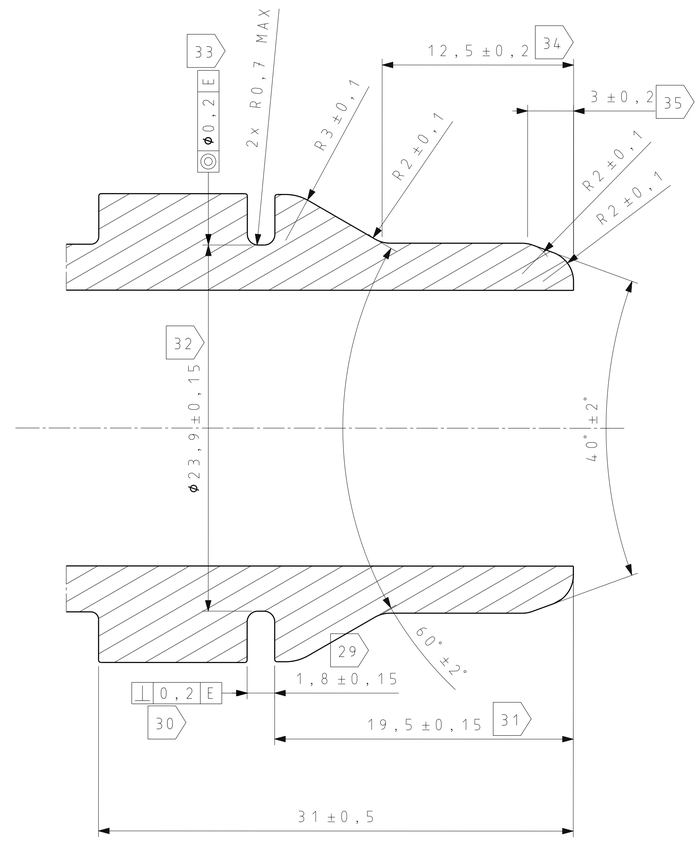
VIEW B (2:1)
SIDE VIEW



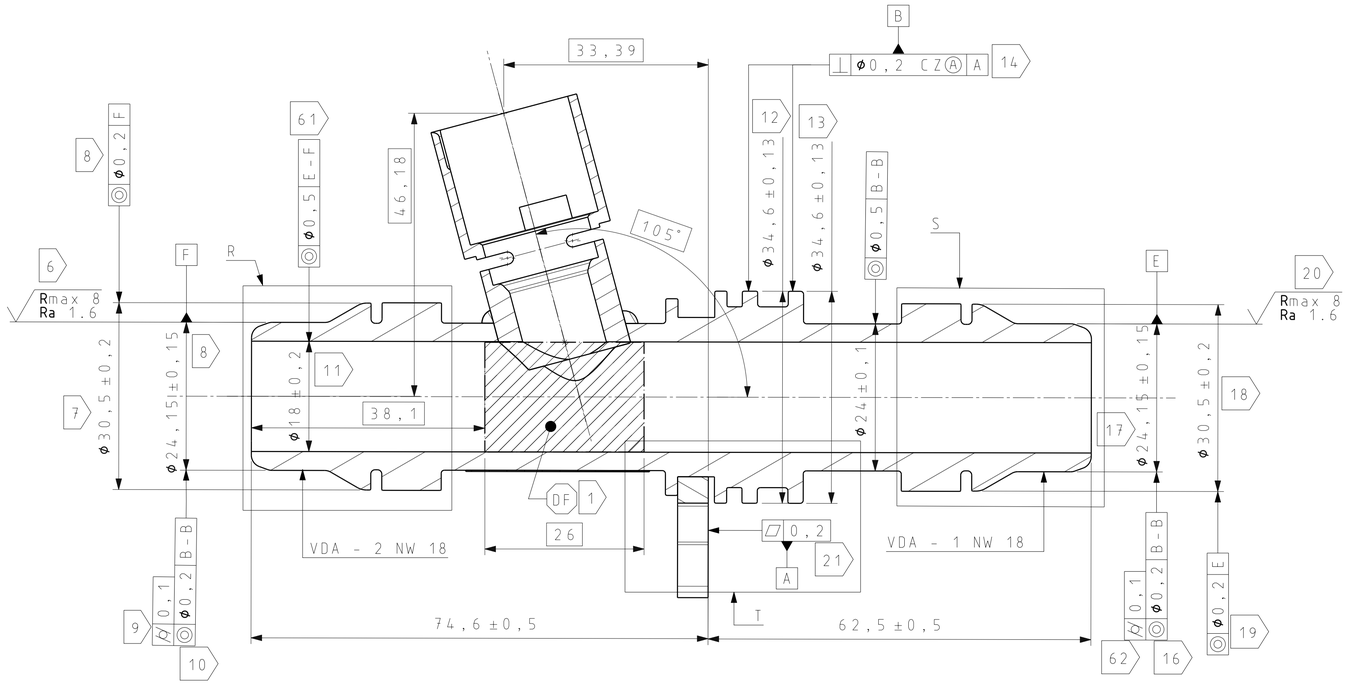
DETAIL R (5:1)



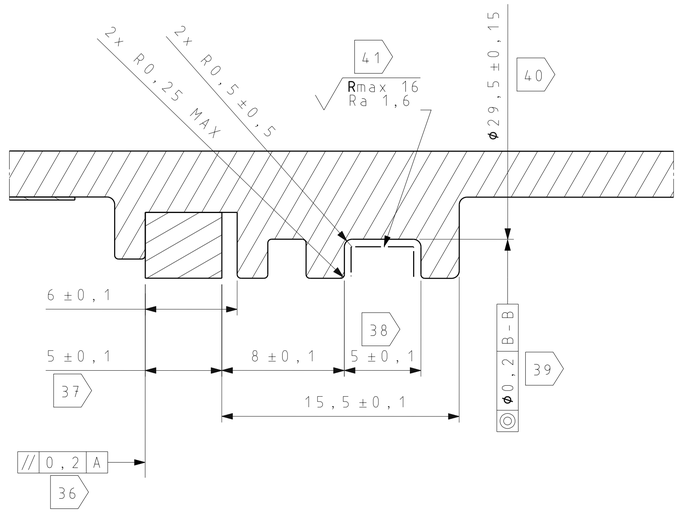
DETAIL S (5:1)



A-A (2:1)

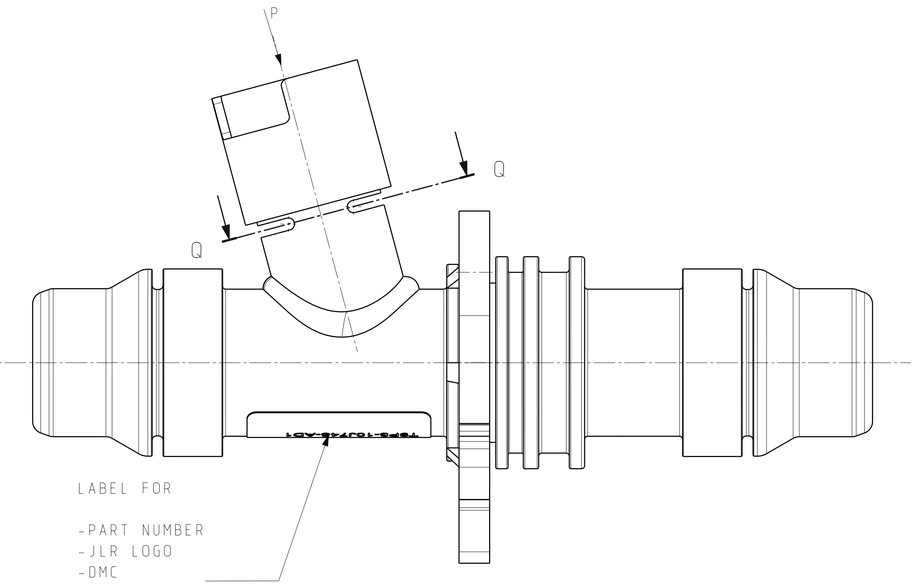


DETAIL T (5:1)



PART NUMBER	REV	SHT
T9P3-10J748-AD1	1	3/5
SECURITY CLASSIFICATION KEY BY PROGRAMME GATEWAY: PS SECRET>P-REL CONFIDENTIAL>J1 PROPRIETARY	CONFIDENTIAL	
DRAWING PART NUMBER T9P3-10J748-AD1-DWG-01	JAGUAR LAND ROVER LIMITED	

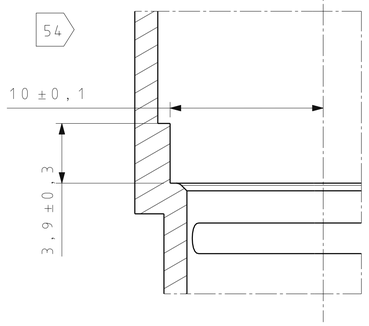
VIEW D (2:1)



M-M (5:1)

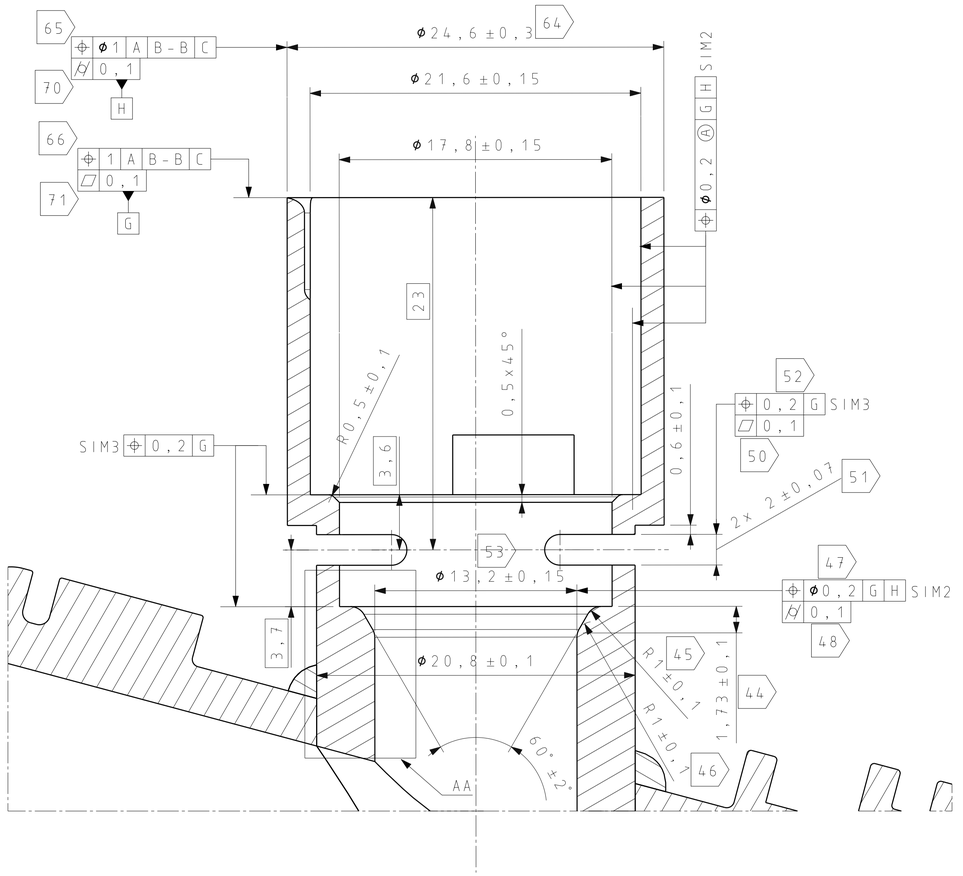
VIEW ROTATED 75,75° CLOCKWISE

1 REQUIREMENT (DF) APPLIES TO ALL FEATURES WITHIN DIMENSIONED ENVLOPES



G-G (5:1)
THERMAL SENSOR HOUSING DETAIL

1 REQUIREMENT (DF) APPLIES TO ALL FEATURES WITHIN DIMENSIONED ENVLOPES



VIEW P (5:1)

VIEW ROTATED 15° CLOCKWISE

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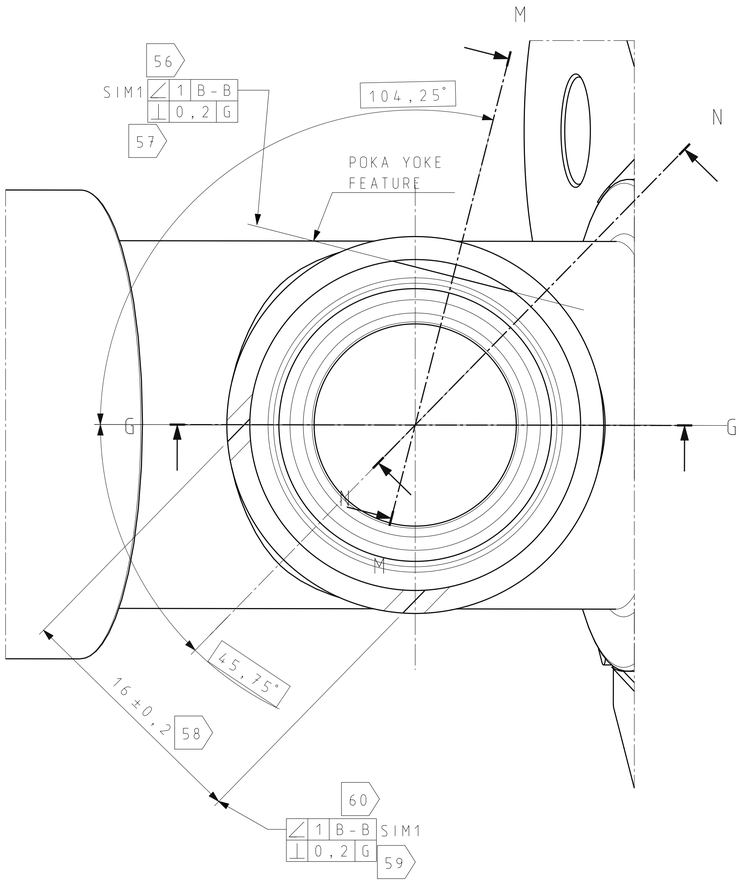

Q-Q (5:1)

VIEW ROTATED 15° CLOCKWISE

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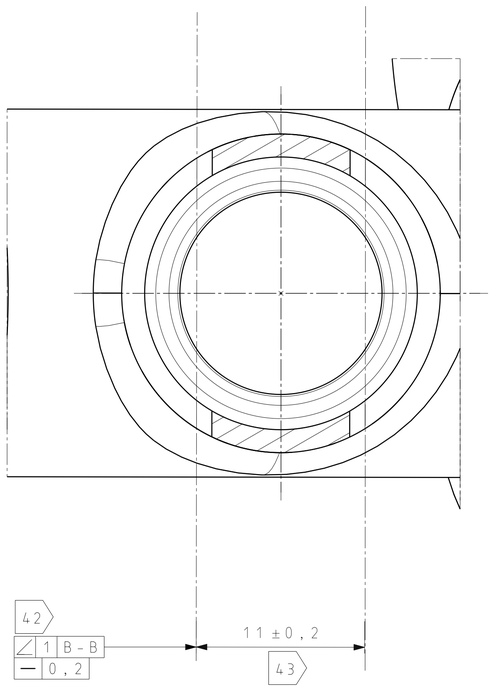

N-N (5:1)

VIEW ROTATED 47,75° CLOCKWISE

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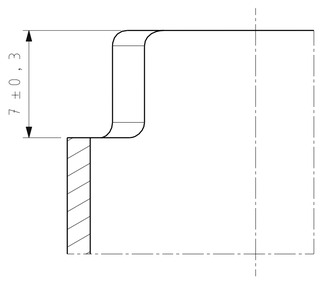
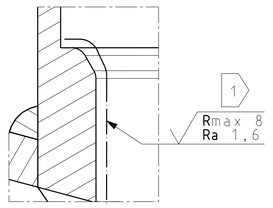
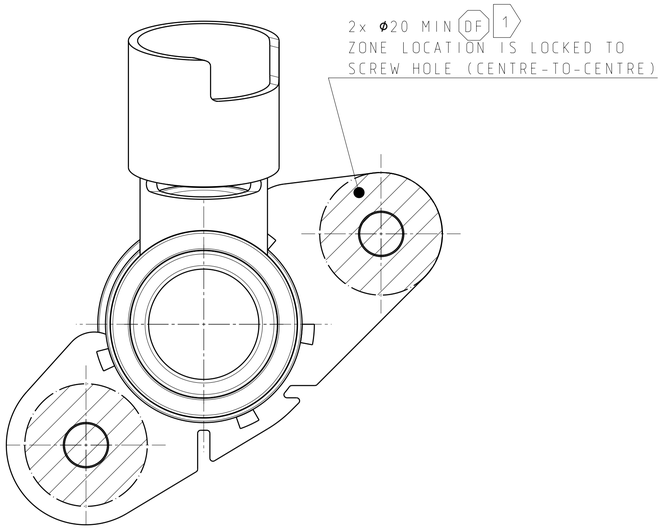


DETAIL AA (5:1)

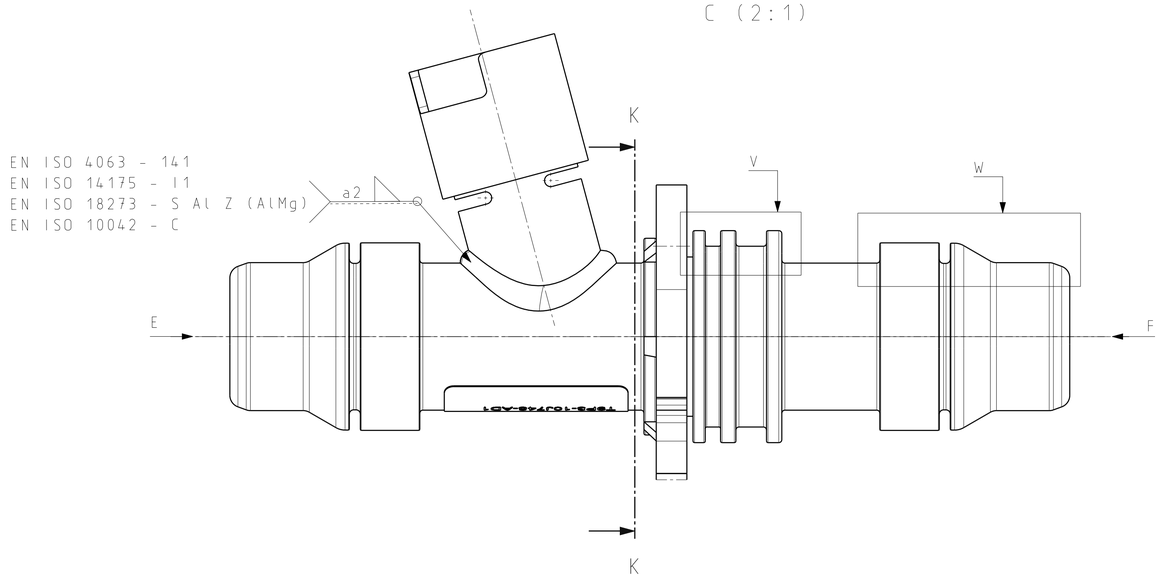


PART NUMBER T9P3-10J748-AD1	REV 1	SHT 4/5
SECURITY CLASSIFICATION KEY BY PROGRAMME GATEWAY: PS SECRET>P-REL CONFIDENTIAL>J1 PROPRIETARY	CONFIDENTIAL	
DRAWING PART NUMBER T9P3-10J748-AD1-DWG-01	JAGUAR LAND ROVER LIMITED	

VIEW E 2:1
SCREW HEAD BEARING SURFACE

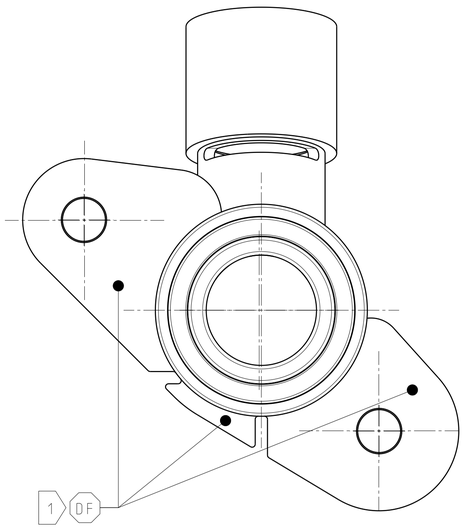


C (2:1)



VIEW F (2:1)

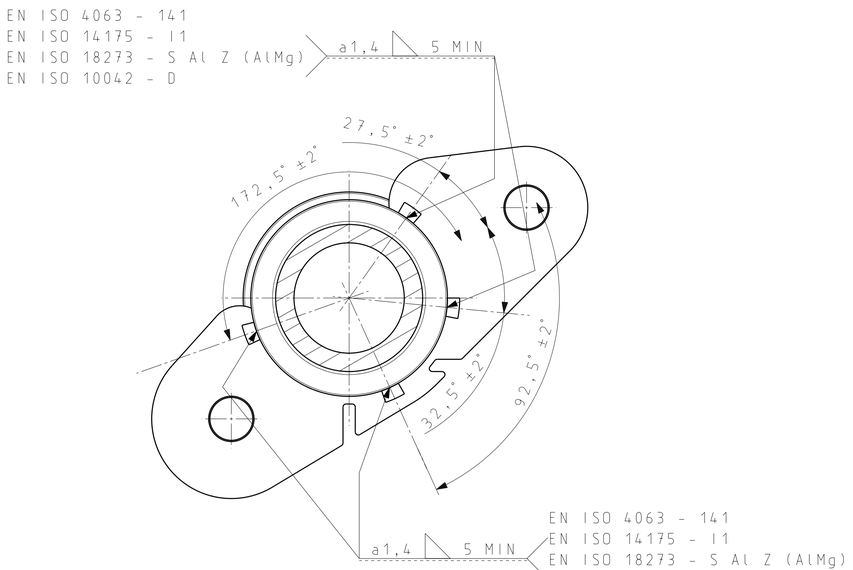
MOUNTING INTERFACE
DEFECT FREE DETAIL

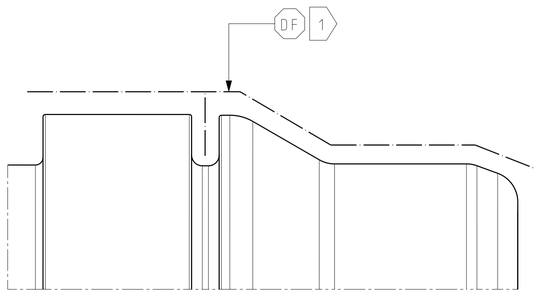


DETAIL W (5:1) VDA - 1

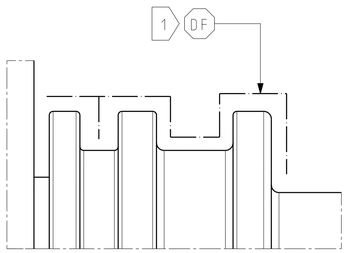
REQUIREMENT VALID FOR VDA - 1
AND VDA - 2 FEATURES ON BOTH SIDES

K-K (2:1)

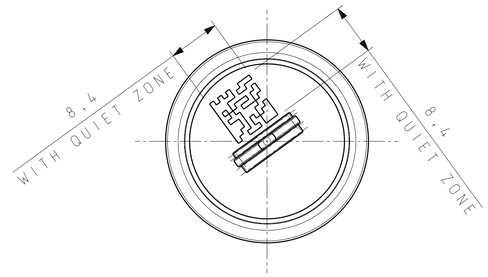




DETAIL V (5:1)



DMC ON CAP (BOM ITEM 7)
(2:1)



DMC REQUIREMENT:
- BUILD DATE: AS PER JLR-STN-171949
- RUNNING NUMBER: AS PER JLR-STN-171949
- DATA MATRIX ECC200 AS PER STJLR.AD.5005
- SIZE: 8 x 8 mm
- DMC TO BE POSITIONED ON A FLAT, NON-REFLECTIVE SURFACE

PART NUMBER	REV	SHT
T9P3-10J748-AD1	1	5/5
SECURITY CLASSIFICATION KEY BY PROGRAMME GATEWAY: PS SECRET>P-REL CONFIDENTIAL>J1 PROPRIETARY	CONFIDENTIAL	
DRAWING PART NUMBER T9P3-10J748-AD1-DWG-01	JAGUAR LAND ROVER LIMITED	