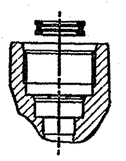
PART No.
M 252150 etc GA

ENGINEERING CHANGES			
ECN No.	DATE	REV	SIGN
10257	25.07.06	NEW	MS
10358	01.09.06	1	AGM

Drawing pictorially modified in line with Magnetic valve assembly. Drawing redrawn.

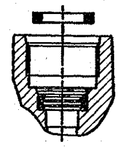
ASSEMBLY PROCEDURE

(a)



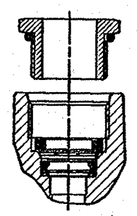
THE SPRING ELEMENT IS INSERTED INTO THE CHAMBER UNDER THE THREAD ROOT OF THE CONNECTION BORE (a) AND (b).

(b)



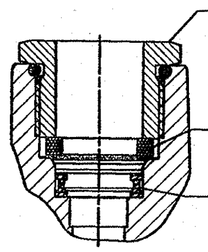
THE RETAINING CLIP IS INTRODUCED SO THAT IT RESTS FLAT ON THE THREAD ROOT (b) AND (c). THE SPRING ELEMENT AND RETAINING CLIP ARE SYMMETRICAL.

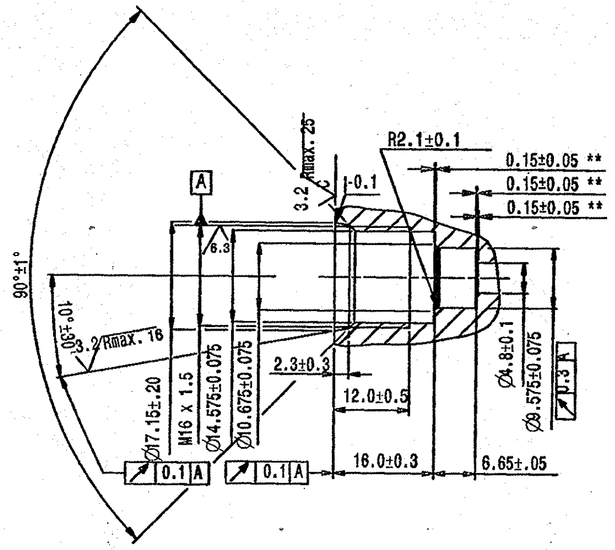
(c)



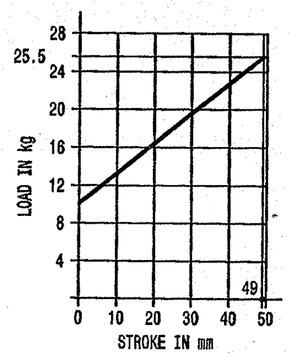
THE MALE FITTING PRE-ASSEMBLED WITH THE PRE-GREASED O-RING TO SEAL THE THREAD IS SCREWED BY HAND INTO THE TAPPED BORE (c) AND TIGHTENED.

DO NOT SCALE IF IN DOUBT ASK

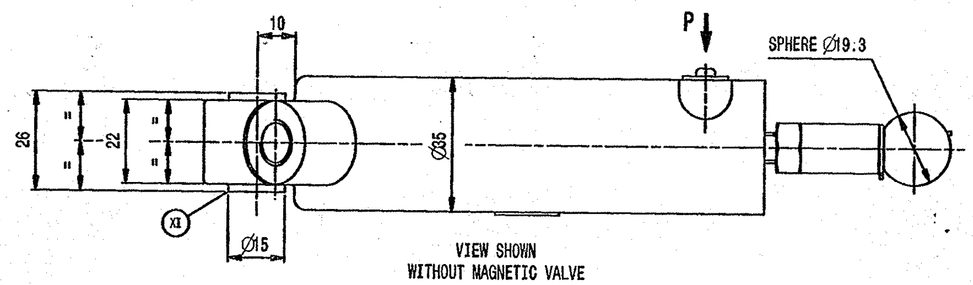




DETAILS OF PORT MACHINING FOR M16x1.5

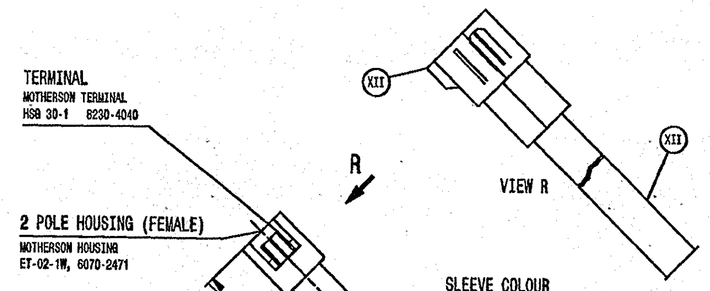


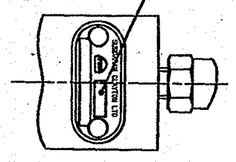
PISTON RETURN
SPRING CHARACTERISTICS



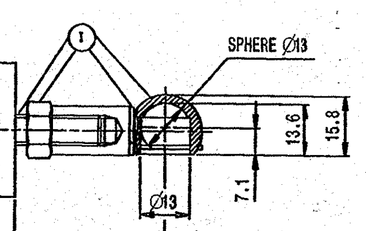
VIEW SHOWN
WITHOUT MAGNETIC VALVE

AIR CYLINDER (M250050)
CYLINDER BORE DIA : 28mm
STROKE : 52/49mm
CYLINDER OPENING PRESSURE: ≤ .3 bar
(TO BE TESTED AS SEPARATE AIR CYLINDER)
FULL STROKE PRESSURE : ≃ 5 bar
LEAKAGE TEST PRESSURE : 10 bar
WORKING PRESSURE : 8 bar max.
THERMAL RANGE OF APPLICATION : -15°C TO +80°C
PRODUCT SPECIFICATION No. : PSSC 11C
OPEN PORT IS FITTED WITH CLOSURE PLUG FOR STORAGE AND TRANSIT PURPOSES





ASSY PART No. AND BATCH No. ARE SHOWN HERE



NOTES:-
1) INSULATED RESISTANCE:-MORE THAN 1M OHM.
2) OPERATING VOLTAGE RANGE:-12V:-9V TO 16V DC
24V:-18V TO 32V.
3) RATED VOLTAGE:-12V/24V DC
4) ENVIROMENT TEST:-AS PER IS:10250
5) SALT SPRAY TEST:-AS PER TS:75005(2 CYCLES)
6) MAX.COIL CURRENT:-2 AMPS.
7) OPERATING TEMP.RANGE:--25 DEG.CEL. TO +80 DEG.CEL.
8) VIBRATION TEST AS PER JIS-D1601-CLASS1 TYPE C-15Hz DURATION 200Hrs.
9) ENDURANCE TEST:-VOLTAGE 12V DC(1.5sec ON & 1.5sec OFF)
AIR PRESSURE-8 BAR,1LAKH CYCLES(ROOM AMBIENT)+9 LAKH CYCLES(+80 DEG.CEL).

SR.NO.	TML PART NO.	PART NO.	MAGNETIC VALVE	RATED VOLTAGE	HOUSING	TERMINAL	
1	2641 5421 99 05N	M 250052	M 303150	12V DC	MOTHERSON HOUSING ET-02-1W 6070-2471	MOTHERSON TERMINAL HSG 30-1 8230-4040	
2	2641 5424 99 03N	M 250054	M 303151	24V DC	MOTHERSON HOUSING ET-02-1W 6070-2471	MOTHERSON TERMINAL HGS 30-1 8230-4040	
3	2780 5420 99 23N	-	-	12V DC	MOTHERSON 6180 2171 HOU MTO 90 2M ASSY.QTY-1NO.	MOTHERSON 1500 01 05 TER MTO 90 HOU M QTY.2NOS.	GUM SEAL DETAIL:- MOTHERSON 7160 8234 MTO 90 GUM SEAL QTY.2NOS.
4	2770 5424 99 06N	-	-	24V DC	MOTHERSON 6180 2171 HOU MTO 90 2M ASSY.QTY-1NO.	MOTHERSON 1500 01 05 TER MTO 90 HOU M QTY.2NOS.	GUM SEAL DETAIL:- MOTHERSON 7160 8234 MTO 90 GUM SEAL QTY.2NOS.

SCANNED
24 APR 2009
DRAWING

DATE	MOD NO.	SL.NO.	DESCRIPTION	DO	CHKD	APPD
22/04/09	97PM305R54	a	SAMPLE TO BE APPROVED NOTE DELETED.	SRH		
27.01.07	91PM824437	NR	NEW RELEASE PARTY'S MODIFICATION REV.1	PPS		

⊖ CRITICAL
● MAJOR
NO SYMBOL - MINOR

PART CODE	MATERIAL	SURFACE PROTECTION
XVI	STEEL	NO TREATMENT
XVI	CAST IRON	PLATED
XV	STEEL	ZINC-IRON PLATED
XIV	CAST IRON	NO TREATMENT
XII	ZINC ALLOY	ANODISED
XII	PLASTIC	NO TREATMENT
XI	RUBBER	NO TREATMENT
X	STAINLESS STEEL	NO TREATMENT
IX	BRASS	NO TREATMENT
VII	ZINC ALLOY	CHROMATED
VII	ALUMINIUM ALLOY	ANODISED
VI	ALUMINIUM ALLOY	CHROMATED
V	CAST IRON	PAINTED
IV	STEEL	POWDER COATED
III	STEEL	PAINTED
II	STEEL	PHOSPHATED
I	STEEL	ZINC PLATED

	SIGN	DATE		
DRN	MAB	24.07.06	ALTERNATE MATERIAL	--
CHD	RBS	24.07.06	SURFACE PROTECTION	REFER TABLE
APD	SS	24.07.06	RAW PART No.	--

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UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS IN mm
REMOVE BURRS AND SHARP EDGES FROM FINISHED PARTS
ALL DIMENSIONS ARE AFTER SURFACE PROTECTION / TREATMENT
MALE THREAD TO IS 14962 (Part 3) 6h : 2001
FEMALE THREAD TO IS 14962 (Part 3) 6H : 2001

GENERAL TOLERANCES

RANGE OF NOMINAL DIMENSIONS (± mm)				∢	FORCE, POWER, PRESSURE etc.,
≤ 50	> 50 ≤ 180	> 180 ≤ 400	> 400	(± °)	(± %)
1	2	3	4	3	10

PART No.	MAGNETIC VALVE			
	PART No.	RATED VOLTAGE	SLEEVE COLOUR	PSSC No.
M 252150	M 305970	12 V DC	BLACK	102 C
M 252151	M 305971	24 V DC	YELLOW	112 C

TATA MOTORS DRG./PART DESCRIPTION: ASSY.MAGNETIC VALVE(EXHAUST BRAKE)
TATA MOTORS DRG./PART NUMBER: 2641 5420 04 28

CD TVS
SUNDARAM CLAYTON LIMITED
A1

SCALE 1 : 1

AIR CYLINDER
WITH MAGNETIC VALVE

PART No.
M 252150 etc GA

2641 5420 04 28