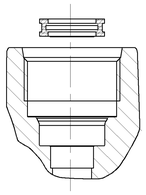
PART No. M252730	GA

ENGINEERING CHANGES

ECN No.	DATE	REV	SIGN
11009	29.11.07	New	GJ
11374	08.02.09	1	RBS
In Name plate and Caution sticker Company name changed from Sundaram Clayton Ltd to WABCO-TVS (INDIA) Ltd. Drawing redrawn.			
11848	12.04.10	2	VPS
Surface protection for flange updated. DIM B4 was 83.9. Drawing redrawn.			
12083	16.03.11	3	RBS
Drawing template WABCO was WABCO-TVS (INDIA) Ltd. Drawing pictorially modified inline with parts. Drawing redrawn.			

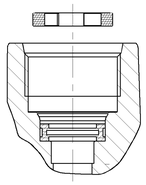
ASSEMBLY PROCEDURE

(a)



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

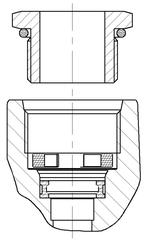
(b)



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

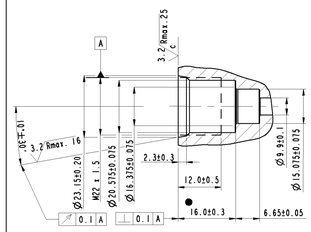
THE SPRING ELEMENT AND RETAINING CLIP ARE SYMMETRICAL.

(c)

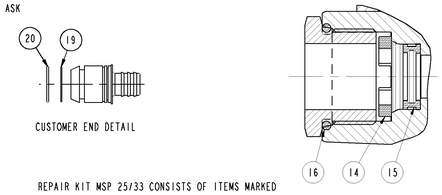


THE MALE FITTING PRE-ASSEMBLED WITH THE PRE-GREASED O-RING TO SEAL THE THREAD IS SCREWED BY HAND INTO THE TAPPED BORE (c) AND TIGHTENED.

DO NOT SCALE IF IN DOUBT ASK



DETAILS OF PORT MACHINING FOR M22x1.5

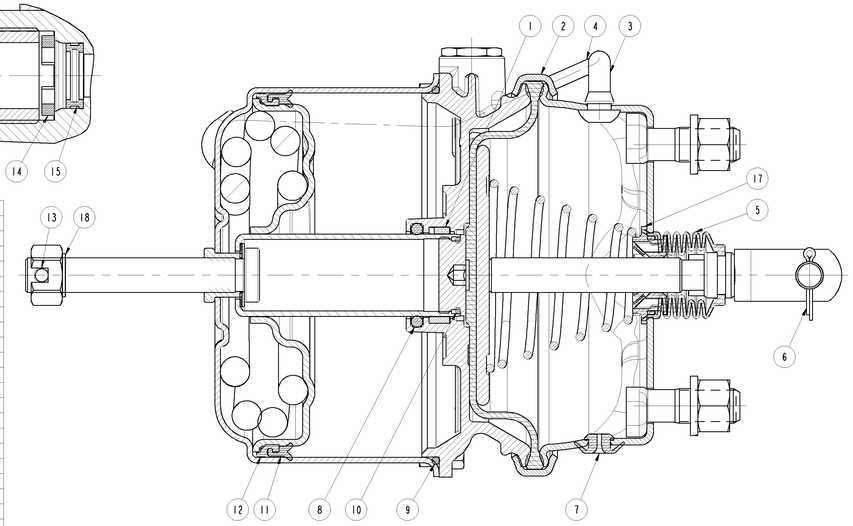


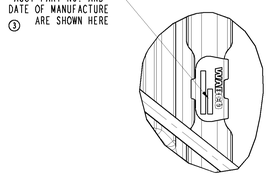
CUSTOMER END DETAIL

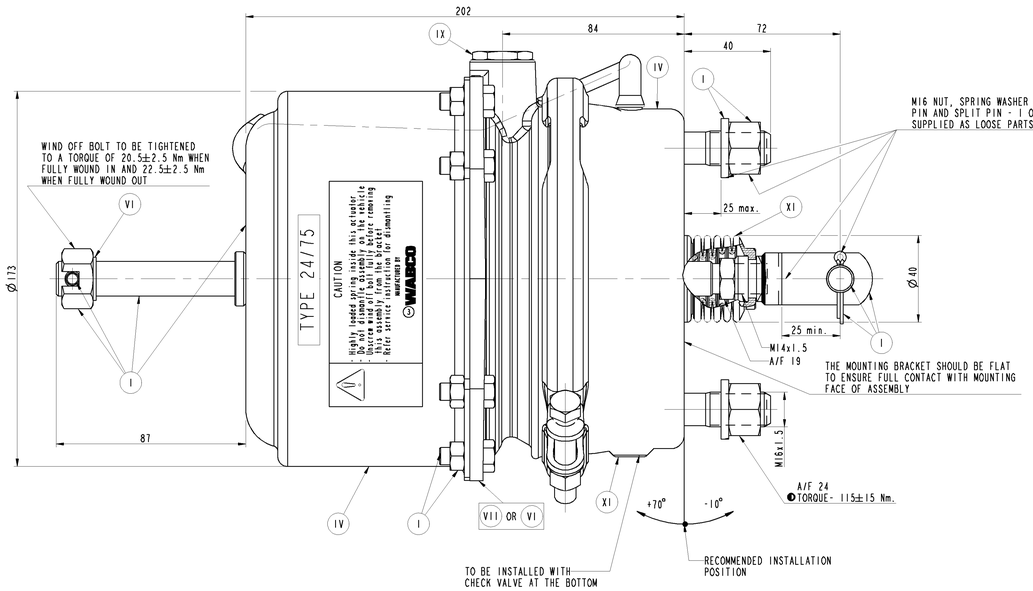
REPAIR KIT MSP 25/33 CONSISTS OF ITEMS MARKED

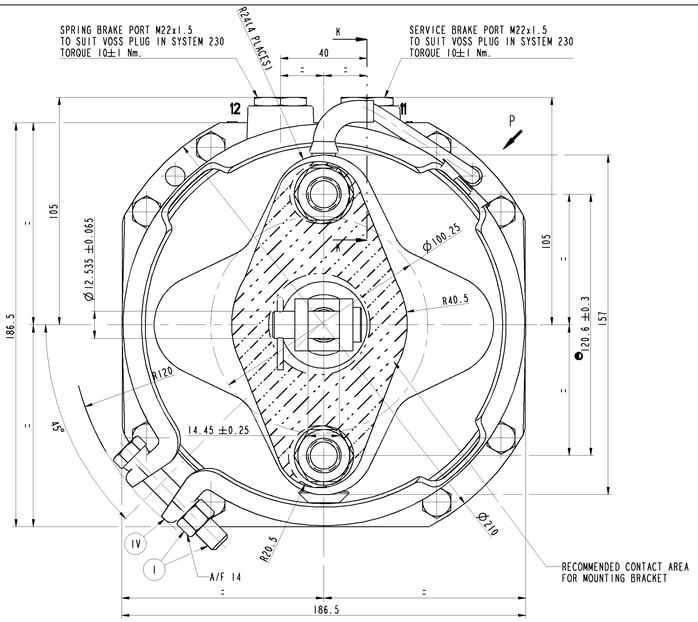
Sl.No	EML PART No	WTIL PART No.	DESCRIPTION	QTY
1		M270130	BEARING	1
2		M843331	DIAPHRAGM	1
3		M273660	ELBOW	2
4		M273690	TUBE	1
5		M275040	GAITER	1
6		M911880	SPLIT PIN	1
7		M275530	CHECK VALVE	1
8		M852060	SEALING RING	1
9		M925510	SEALING RING	1
10		M925560	SEALING RING	1
11		M275020	SEAL	1
12		M275010	BEARING	1
13		M274070	KNURL PIN	1
14		M932730	RETAINER NG-12	2
15		M932720	SPRING ELEMENT NG-12	2
16		M932700	SEALING RING NG-12	2
17		M275030	DUST SEAL	1
18		M910120	WASHER	1
19		M935980	SEALING RING NG-12	2
20		M935990	SEALING RING NG-12	2
21		M919910	GREASE SACHET	4

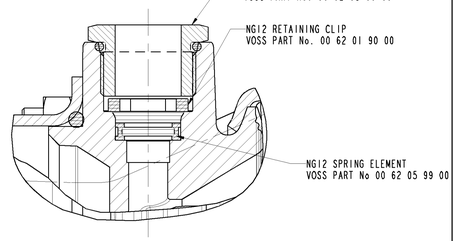
PART No. M925940 AND M912620 PROVIDED IN THE KIT TO STANDARDISE THE REPAIR KIT FOR SPRING BRAKE ACTUATOR VARIENTS.



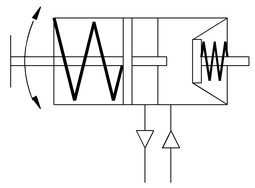






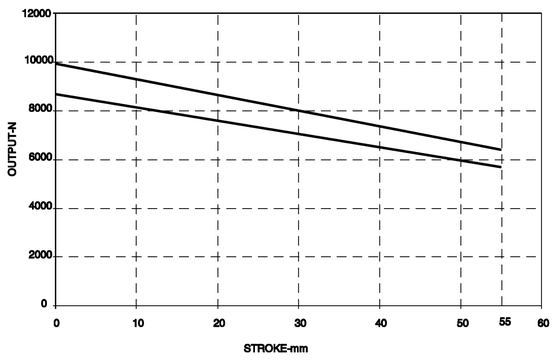


SECTION K-K
SCALE 2:1

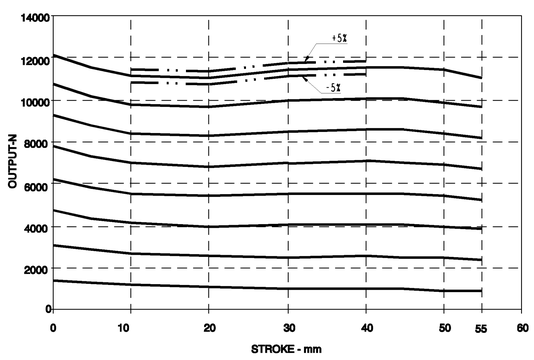


CIRCUIT DIAGRAM

PERFORMANCE CHARACTERISTICS- SPRING SIDE

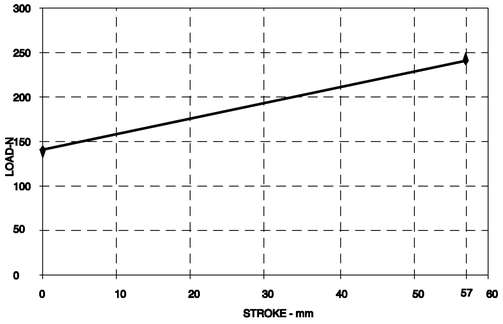


PERFORMANCE CHARACTERISTICS - SERVICE SIDE



TOLERANCE BAND - ±5% FOR STROKE - 10 mm TO 40 mm

RETURN SPRING CHARACTERISTICS



Sl.No.	NOTES	
1	PRODUCT FUNCTION AND RELIABILITY	
1.1	PRODUCT SPECIFICATION No. (ISSUE No.1, DATE: 29.11.2007) UNIT DRAWN WITH PRESSURE APPLIED AT PORT 12	PSSC 288C
1.2	WORKING MEDIUM	AIR
1.3	NORMAL WORKING PRESSURE	8 bar
1.4	MAXIMUM WORKING PRESSURE	10 bar
1.5	SERVICE BRAKE STROKE (CYLINDER Ø155.85 mm)	57 mm min
1.6	SPRING BRAKE STROKE (CYLINDER Ø168.15 mm)	57 mm min
1.7	HOLD OFF PRESSURE	4.3±0.4 bar
1.8	RELEASE PRESSURE	4.7±0.4 bar
1.9	PRESSURE AT WHICH PUSH ROD STARTS MOVING (LIFT OFF PRESSURE AT 0 mm STROKE)	< 0.3 bar
1.10	PRESSURE AT WHICH PUSH ROD IS FULLY OUT (LIFT OFF PRESSURE AT 57 mm STROKE)	< 0.5 bar
1.11	THERMAL RANGE OF APPLICATION	-40°C TO +80°C
2	WEIGHT	8.5 kg
3	QUALITY COMPLIANCE PLAN TESTS ARE CONDUCTED REGULARLY AS PER CLAUSE No.16 OF PSSC 167C	
4	SERVICE LIFE TO FIRST OVERHAUL - 3 YEARS / 300000 KM WHICHEVER IS EARLIER IF FITTED AS PER RECOMMENDED LAYOUT.	
5	ASSEMBLY WILL BE SUPPLIED WITH SPRING SIDE IN FULLY WOUND OUT CONDITION SPRING SIDE TO BE WOUND IN AFTER INSTALLATION	
6	OPEN PORTS ARE FITTED WITH CLOSURE PLUG FOR STORAGE AND TRANSIST PURPOSES	

PART CODE	MATERIAL	SURFACE PROTECTION
XVII	STEEL	NO TREATMENT
XVI	CAST IRON	PLATED
XV	STEEL	ZINC IRON PLATED
XIV	CAST IRON	NO TREATMENT
XIII	ZINC ALLOY	ANODISED
XII	PLASTIC	NO TREATMENT
XI	RUBBER	NO TREATMENT
X	STAINLESS STEEL	NO TREATMENT
IX	BRASS	NO TREATMENT
VIII	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

● CRITICAL
◑ MAJOR
NO SYMBOL - MINOR

	SIGN	DATE	MATERIAL	
DRN	RNK	15.03.11	ALTERNATE MATERIAL	----
CHD	RBS	15.03.11	SURFACE PROTECTION	REFER TABLE
APD	SN	15.03.11	RAW PART No.	----

CONFIDENTIAL DRAWING

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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 (PART3) 6h :: 2001
FEMALE THREAD TO IS 14962 (PART3) 6H : 2001

GENERAL TOLERANCES

RANGE OF NOMINAL DIMENSIONS (in mm)				ANGLES	FORCE, POWER, PRESSURE etc.,
≤ 50	> 50 ≤ 160	> 160 ≤ 400	> 400	(± °)	(± %)
1	2	3	4	3	10

SCALE 1:1

WABCO
AMBATTUR, CHENNAI - 600058, INDIA

SPRING BRAKE ACTUATOR TYPE 24/75

PART No. M252730 GA