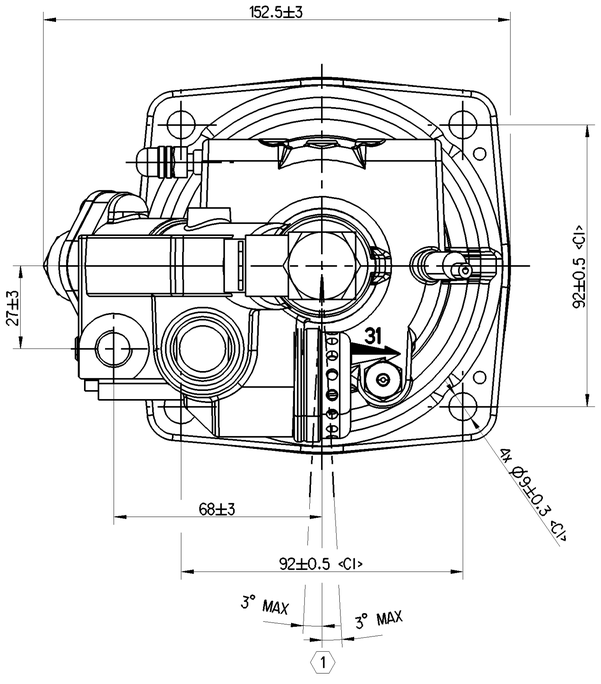
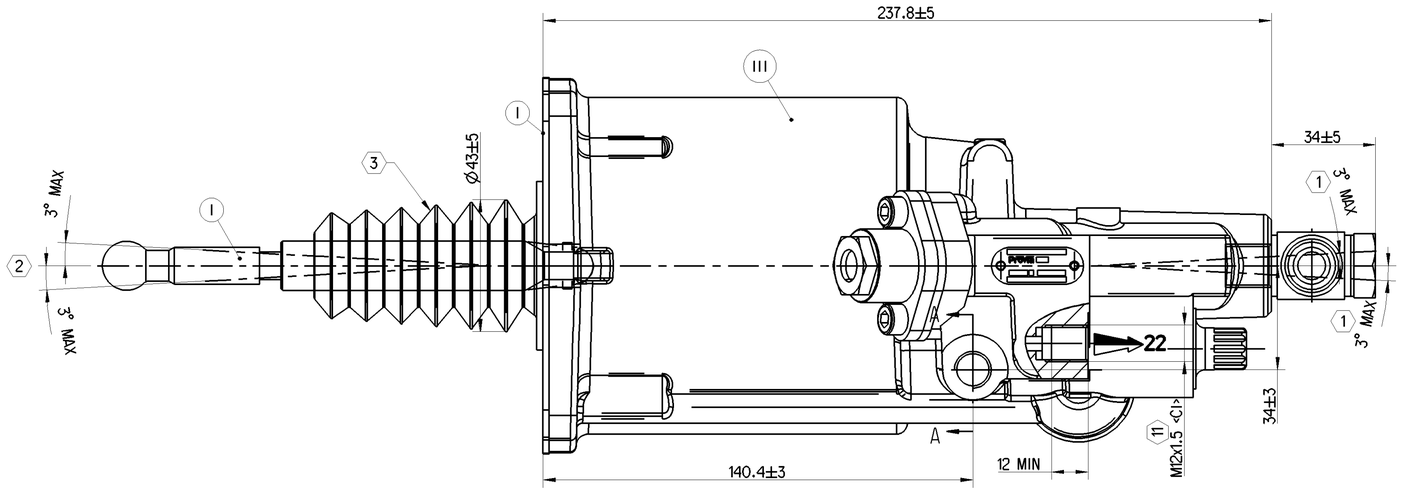
POS	MATERIAL	SURFACE PROTECTION
III	ALUMINIUM ALLOY	HARD ANODIZING
II	STEEL	SALT BATH (BLACK)
I	STEEL	GALVANIZED (WHITE)

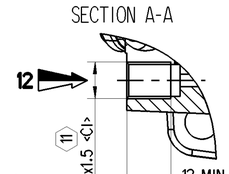
<1>	SAFETY CHARACTERISTICS	0
<2>	SIGNIFICANT CHARACTERISTICS	0
<CI>	CUSTOMER INTERFACE	8





TECHNICAL INFORMATION

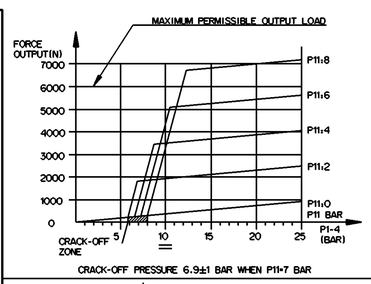
1. HYDRAULIC TANK DIA : Ø22mm
2. AIR TANK DIA : Ø102mm
3. HYDRAULIC WORKING PRESSURE 4MPa
4. HYDRAULIC WORKING PRESSURE MAX 12MPa
5. AIR WORKING PRESSURE MAX 1MPa
6. WORKING TEMPERATURE : -40°C TO +80°C
7. MEDIUM
   HYDRAULIC MEDIUM : DOT 4 BASED BRAKE FLUID IN ACCORDANCE WITH SAE J 1703
   PNEUMATIC MEDIUM : AIR
8. OIL VOLUME INPUT: V=(SHxC)+K
   K : ABSORPTION AT 120 BAR FOR C=0, K<1.5cm³
   SH : HYDRAULIC SECTIONAL AREA = 3.8 cm²
   C : GEAR DISENGAGING STROKE
9. OPEN PORTS ARE FITTED WITH CLOSURE PLUG FOR STORAGE AND TRANSMIT PURPOSE
10. CAUTION : DO NOT ACTUATE THE DEVICE IF NOT FITTED ON ITS MOUNTING BRACKET
11. WITH STROKE WEAR INDICATOR
12. DO NOT OPERATE THIS PRODUCT WITHOUT INSTALLATION OR FIXATION ON THE BRACKET



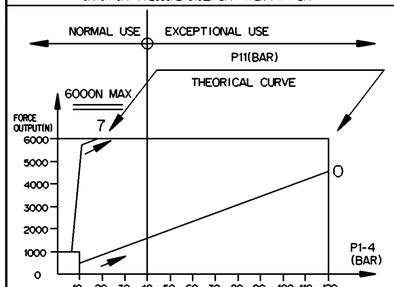
NOTES

1	DEVICE EXTREME POSITION WHEN BLEEDING
2	MISALIGNMENT OF PUSHROD IN ANY DIRECTION
3	BOOT THERMAL RANGE -40°C TO +130°C
4	GEAR DISENGAGING STROKE
5	POSITION TO NOTE (CLUTCH IN NEW CONDITION)
6	STROKE
7	ADJUSTMENT OF WEAR INDICATOR
8	POSITION WHEN DELIVERED
9	TIGHTEN THE JOINT IN THIS DIRECTION
TORQUE FOR CONNECTION	
10	25Nm MAX
11	18Nm MAX
12	5^{+5}_{0} Nm
13	15 TO 20 Nm

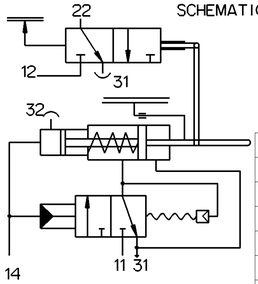
PERFORMANCE GRAPH



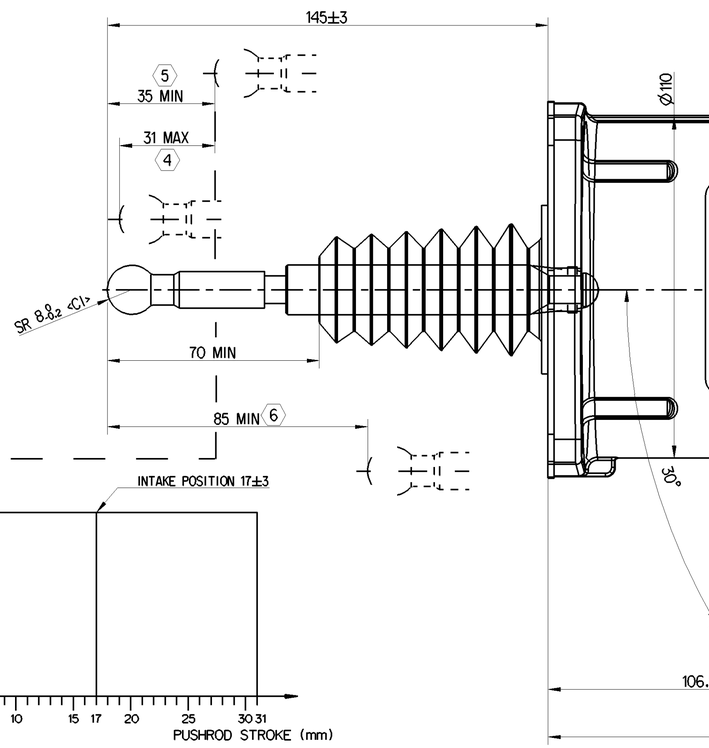
CRACK-OFF PRESSURE 6.9±1 BAR WHEN P11=7 BAR

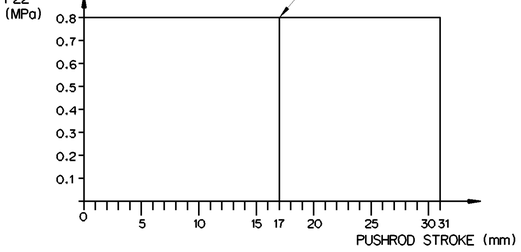


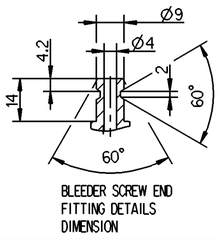
SCHEMATIC DIAGRAM



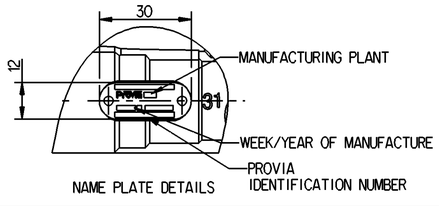
MARKING OF PORTS	
11	AIR INLET
14	OIL INLET
12	AIR INLET
22	AIR OUTLET
31	AIR EXHAUST
32	BLEED SCREW







BLEEDER SCREW END FITTING DETAILS DIMENSION



NAME PLATE DETAILS

General Specification: ISO 8015, JED-334-1, Size ISO 14405 LP							
Further Technical Data: PRO 411 019 0							
Doc. Code: 035				Sheet: 1 To 13			
General Tolerances JED-261							
Class 1)	Range of Nominal Dimensions (± mm)						
	≤ 50	> 50 ≤ 180	> 180 ≤ 400	> 400			
Fine	±0.5	±1	±1.5	±2			
Medium X	±1	±2	±3	±4	±3°		
Coarse	±2	±3.5	±5	±6.5			
Tapped Holes acc. -							
1) Tolerance Class Applied Crossmarked							

Copyright ZF®

Date	Signature
Drawn 2023-11-02	Kaviya
Checked 2023-11-08	Manivannan

Dimensions in mm

ProVia

CLUTCH SERVO

Mass	Scale	Material No.	Date of first issue: 2023-11-08		
3.2 kg	NTS	PRO 411 033 0	Doc.Code: 005	Language: EN	Sheet: 1/1
Size: A 1	CAD System: CREO				

ECN-No.	Revision	Techn. Resp.	Replacement for
-	-	5630_AM	-

100mm

Toute Communication ou reproduction de ce document, toute exploitation ou communication de son contenu sont interdites, sauf autorisation expresse. Tous droits de propriété industrielle réservés, notamment en matière de brevets, et de modèles.
Weitergabe sowie Vervielfältigung dieser Unterlage, Verwertung und Mitteilung ihres Inhalts nicht gestattet, soweit nicht ausdrücklich zugestanden. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte für den Fall der Patenterteilung oder Gebrauchsmuster-Eintragung vorbehalten.
Non è permesso consegnare a terzi o riprodurre questo documento, né utilizzarne il contenuto o renderlo comunque noto a terzi senza espressa autorizzazione. Tutti i diritti derivanti da brevetti o modelli.
É fatta riserva di tutti i diritti derivanti da brevetti o modelli.
Copying of this document and giving it to others and the use or communication of the contents thereof, are forbidden without express authority. Offenders are liable to the payment of damages. All rights are reserved in the event of the grant of patent or registration of a utility model or design. This document is the subject of copyright.