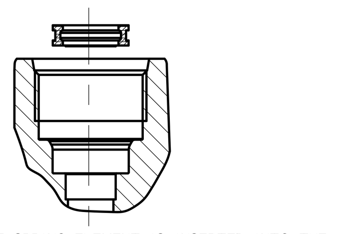
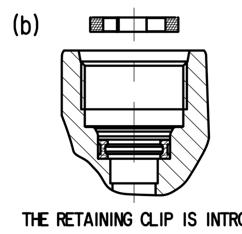
ASSEMBLY PROCEDURE

(a)



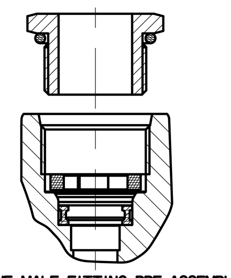
THE SPRING ELEMENT IS INSERTED INTO THE CHAMBER UNDER THE THREAD ROOT OF THE CONNECTION BORE (a) AND (b).

(b)

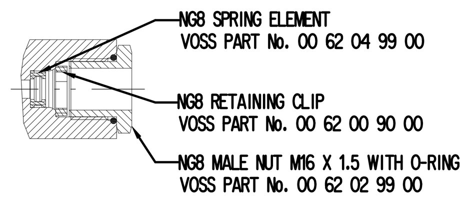


THE RETAINING CLIP IS INTRODUCED SO THAT IT RESTS FLAT ON THE THREAD ROOT (b) AND (c).
THE SPRING ELEMENT AND RETAINING CLIP ARE SYMMETRICAL.

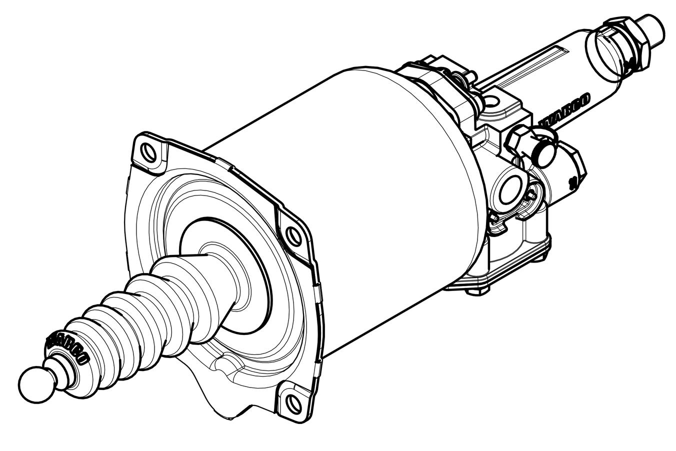
(c)



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.



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



SL.	ZF PART NUMBER	CUSTOMER PART NUMBER	PUSHROD TYPE	A PORT 1-1 DISTANCE	F PORT 1-4 DISTANCE	B STANDOUT	C BOOT SEATING	D FITTING POSITION	E BLEEDER PORT POSITION	PORT 1-1	BLEEDER PORT	MOUNTING INTERFACE	WEIGHT (KG)
1	970 051 246 0	A 400 254 13 47 / 003	SPHERICAL	220 ⚠C	274	124.5±1.5	25	78.8	155	FIG D	LEFT SIDE	4-BOLT (FIG. B)	2.3
2	970 051 247 0	A 400 254 14 47 / 003	SPHERICAL	222 ⚠C	275.5	157.7±1.5	64	99.3	156	FIG D	LEFT SIDE	2-BOLT (FIG. C)	2.6
3	970 051 248 0	A 400 254 17 47 / 003	SPHERICAL	250 ⚠C	275.5	138±1.5	39	99.3±4.1	156	FIG E	LEFT SIDE	2-BOLT (FIG. C)	2.6
4	970 051 249 0	A 400 254 16 47 / 003	SPHERICAL	220 ⚠C	274	157.2±1.5	63.5	110.7±0.5	155	FIG D	LEFT SIDE	4-BOLT (FIG. B)	2.3

PORT DETAILS

FIG. D

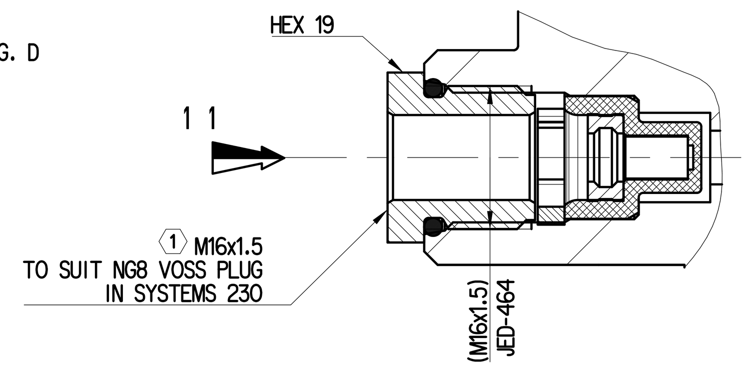
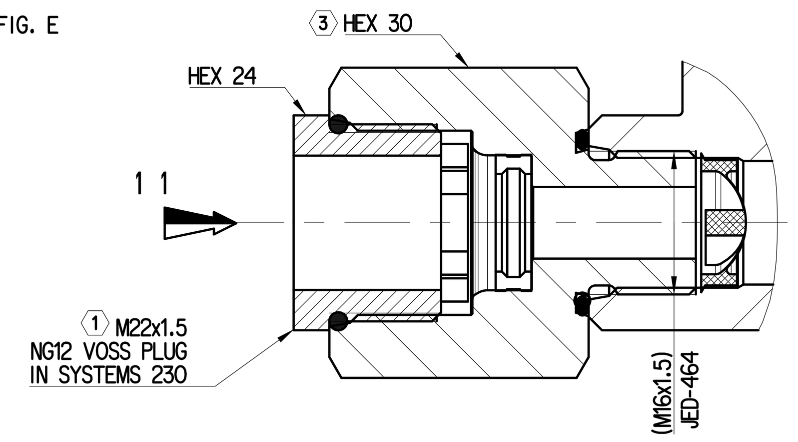
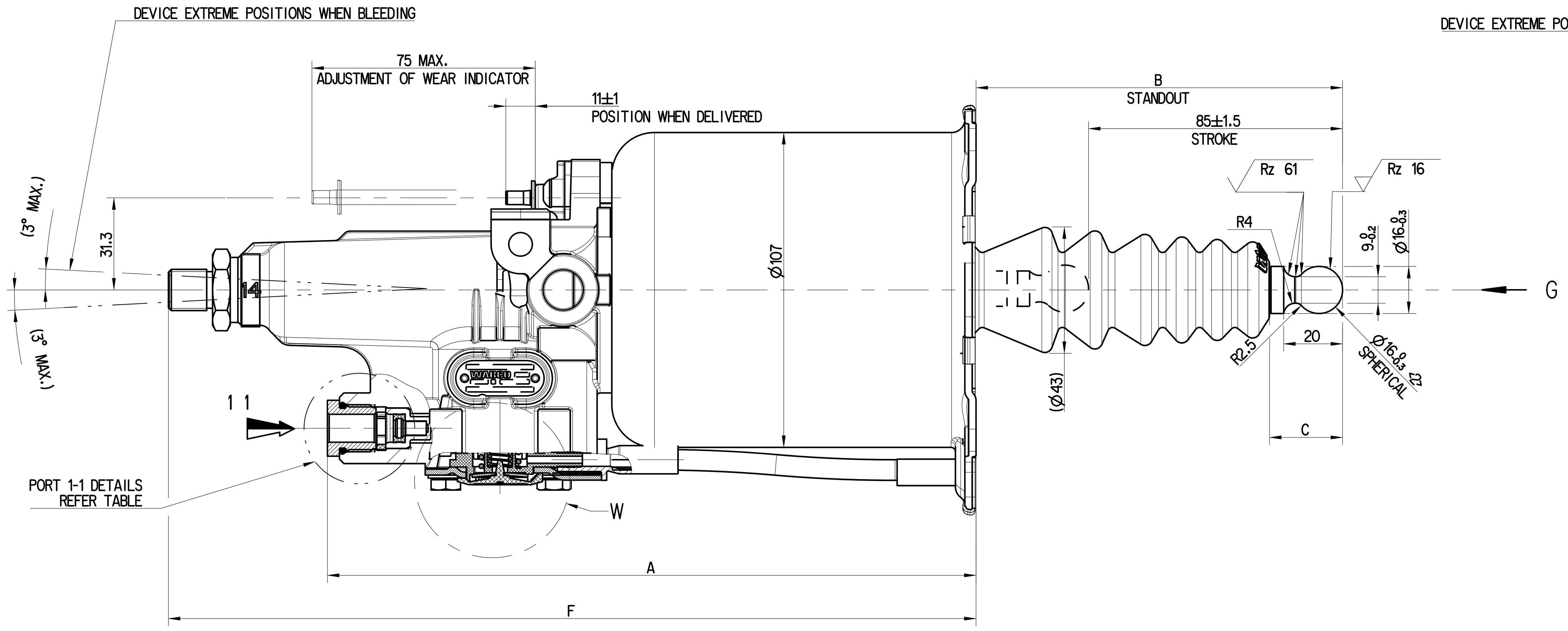


FIG. E





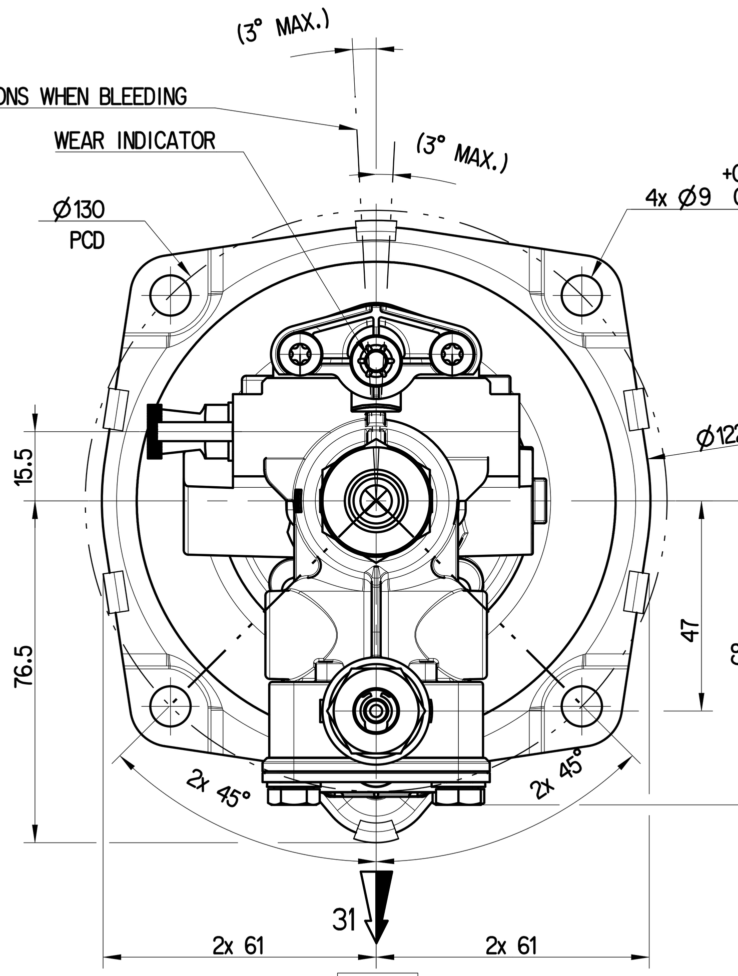
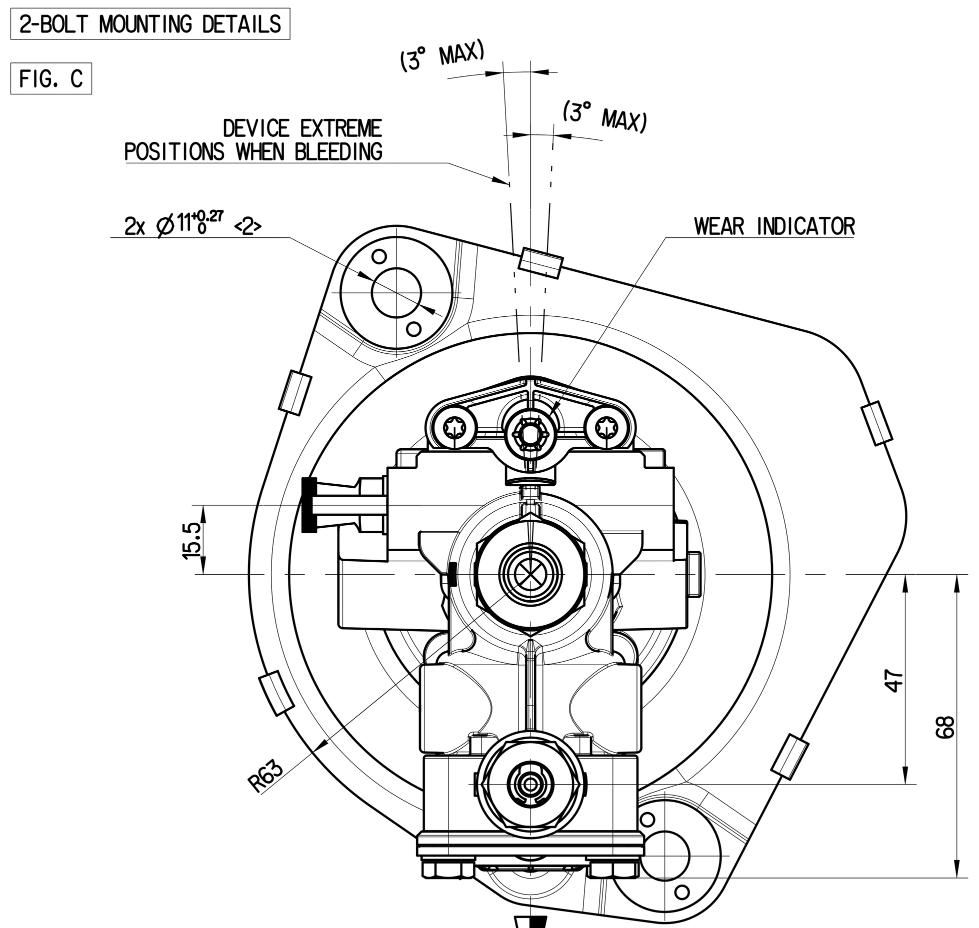
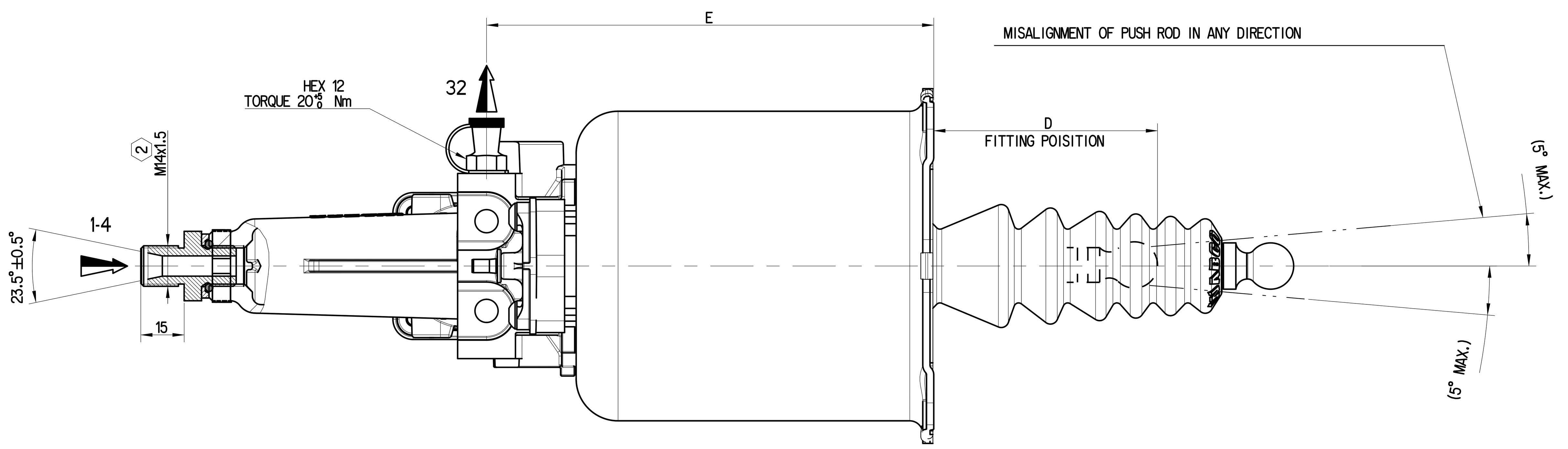


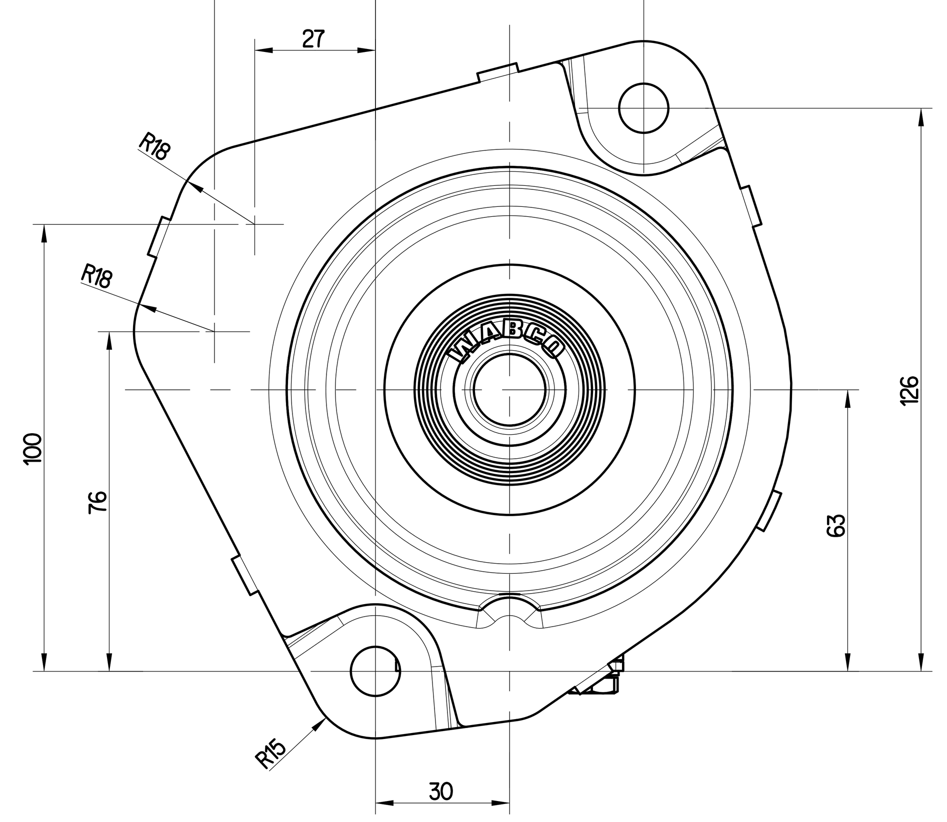
FIG. B

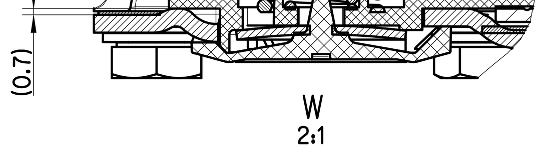
2-BOLT MOUNTING DETAILS

FIG. C

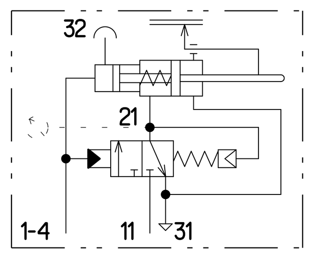








W
2:1

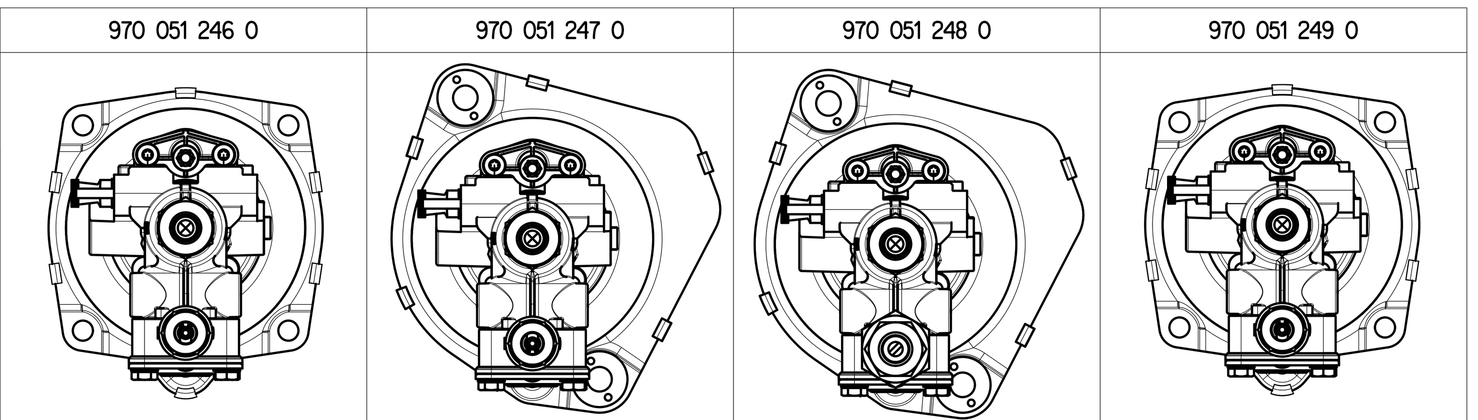


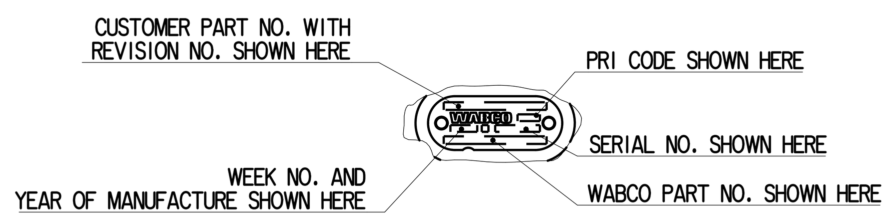
SYMBOL

MARKING OF PORTS	
11	AIR INLET
1-4	OIL INLET
31	AIR EXHAUST
32	BLEED SCREW

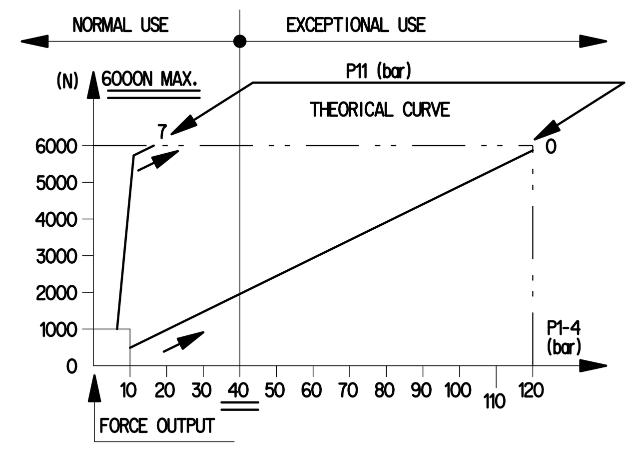
TORQUE FOR CONNECTIONS	
①	10±1 Nm
②	22.5±2.5 Nm
③	31.5±2.5 Nm

BLEEDER PORT & MOUNTING HOLE ORIENTATION





NAME PLATE DETAILS



SI No.	NOTES		
1	PRODUCT SPECIFICATION No.		PS 970 051 428 0
2	OIL VOLUME INPUT		$V=(SHxC_G)+K_{abs}$
	K_{abs}	ABSORPTION AT 120 bar for C=0	K<1.5 cm
	SH	HYDRAULIC SECTIONAL AREA	4.89 cm
	C_G	GEAR DISENGAGING STROKE	-
3	HYDRAULIC FLUID		BRAKE FLUID SAE J 1703
4	THERMAL RANGE		-40°C..+100°C
5	SUPPLY AIR PRESSURE		10 bar MAX.
6	NO STROKE LIMITER IN THE DEVICE		
7	OPEN PORTS ARE FITTED WITH CLOSURE PLUG FOR STORAGE AND TRANSIT PURPOSE		
8	CAUTION : DO NOT ACTUATE THE DEVICE IF NOT FITTED ON ITS MOUTING BRACKET		

General Specification: ISO 8015, JED-334-1, Size ISO 14405 LP
Further Technical Data: 970 051 428 0
Doc. Code: 035 | Sheet: 1 To 5

General Tolerances JED-261

Class 1)		≤ 50	> 50 ≤ 180	> 180 ≤ 400	> 400	∢
Fine		±0.5	±1	±1.5	±2	±3°
Medium	X	±1	±2	±3	±4	
Coarse		±2	±3.5	±5	±6.5	

Range of nominal dimensions in mm

Tapped Holes acc. IS 14962
1) Tolerance Class Applied Crossmarked

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Date	Signature
Drawn	
2024-05-31	Sachin
Checked	
2024-05-31	A R

Dimensions in mm

4" CLUTCH SERVO 16MM PILOT VALVE

Mass	Scale	Material No.	Date of first issue: 2017-06-22
REFER TABLE kg	NTS	970 051 246 0	Doc.Code 005 / Language EN / Sheet 1/1
Size: A 0	CAD System: CREO	ECN-No.: 516635 / Revision: 4x C / Techn. Resp.: 5630	Replacement for: -

100mm