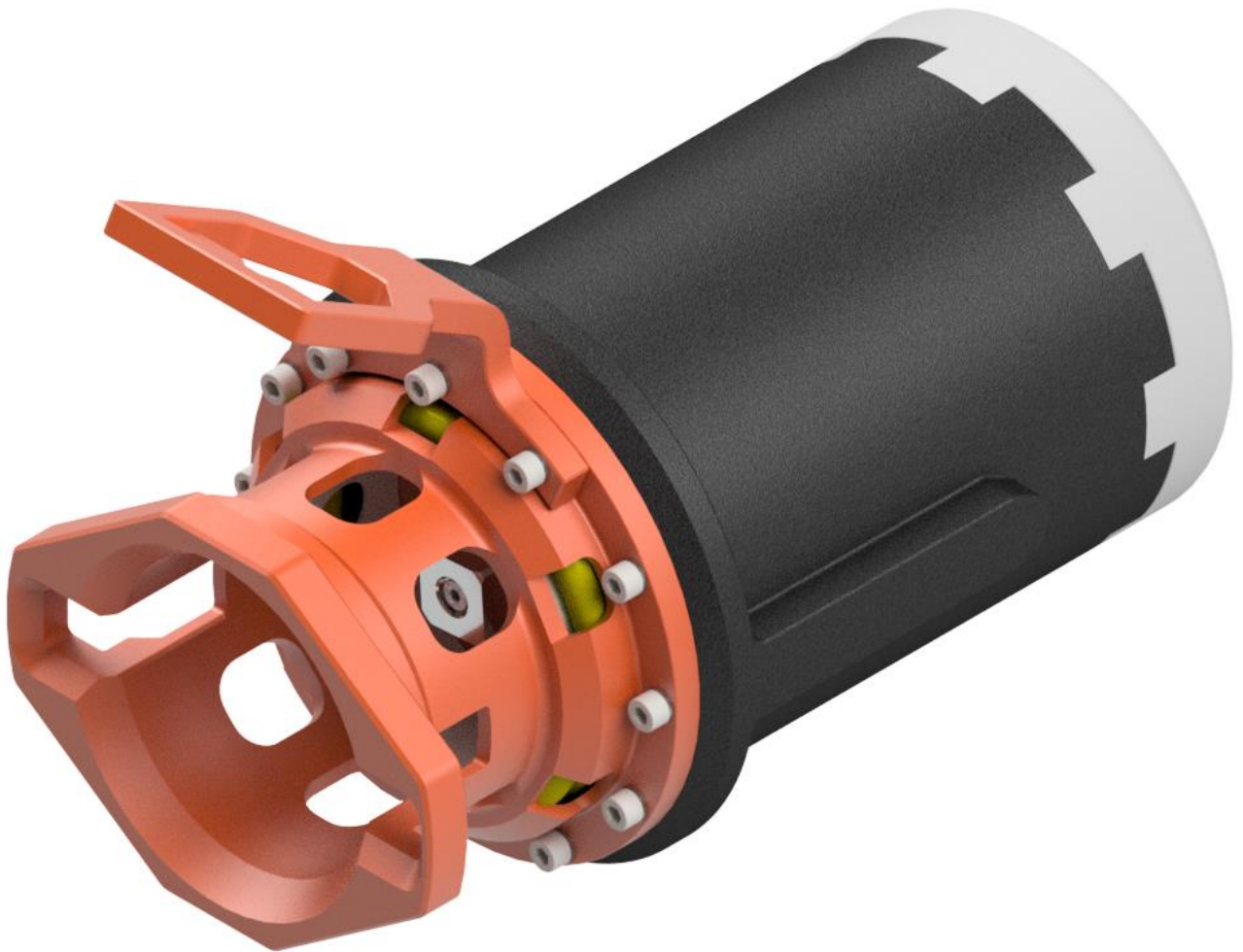


TECHNICAL DOCUMENT

DOCUMENT TITLE: Operation & Maintenance Manual for Gear Box Cl. 7
PROJECT TITLE: 8.3. ISO-6&7-Mech.Interfaces
PROJECT: 600146
DOCUMENT NUMBER: 600146-TD-0006
REV: 03
NUMBER OF PAGES: 27

DATE: 02.12.2024
CLIENT: N/A
CLIENT PO: N/A
CLIENT CONTACT: N/A



**OBJECTIVE**

The objective of this document is to present a comprehensive technical description of the Blue Logic Class 7 Gearbox. Relevant technical aspects for information and familiarization are covered as well as detailed technical data. For further information reference is made to drawing BB2408 Gear Box Cl.7

ABSTRACT

The Blue Logic Gear Box Cl. 7 is designed in accordance with ISO/API, and the purpose is to enable operation of equipment with Class 7 interface using a torque tool with Class 4 output interface.

REVISION CHANGE/RECORD

REV	REASON FOR REVISION/ DESCRIPTION OF CHANGES
01	Issued for Use
02	Added information regarding 10kNm & 15kNm versions
03	Added information regarding replacement of internal gears



TABLE OF CONTENT

1.	INTRODUCTION	5
1.1.	DOCUMENT USE.....	5
1.2.	REFERENCES.....	5
1.3.	ABBREVIATIONS.....	5
2.	TECHNICAL DESCRIPTION.....	6
2.1.	GENERAL	6
2.2.	INTERFACES.....	8
2.2.1.	Mechanical Interface.....	8
2.2.2.	Hydraulic Interface.....	8
2.3.	MATERIAL SELECTION.....	8
2.4.	TECHNICAL DATA.....	8
3.	OPERATION	9
3.1.	PREPARATIONS	9
3.2.	OPERATION.....	9
3.3.	PRE-OPERATION	9
3.4.	REPLACEMENT OF OUTPUT INTERFACE	10
3.4.1.	Change from Short to Long Nose	10
3.4.2.	Installation of Class 6 Insert.....	11
3.4.3.	Installation of GH0 Adapter	12
3.5.	REPLACEMENT OF INTERNAL GEAR	13
3.5.1.	Gear Assembly Replacement.....	13
3.5.2.	Oil-Filling of Gearbox.....	16
4.	MAINTENANCE	17
4.1.	YEARLY MAINTENANCE.....	17
4.3.	2-YEARLY MAINTENANCE	18
5.	APPENDIX 1 – TORQUE CURVE	19
6.	APPENDIX 2 – GEARBOX CL.7 ARRANGEMENT DWG	20
7.	APPENDIX 3 – CLASS 7 GEARBOX 40KNM SHORT	21
8.	APPENDIX 4 - CLASS 7 GEARBOX 40KNM LONG	22
9.	APPENDIX 5 - CLASS 7 GEAR BOX 15KNM.....	23
10.	APPENDIX 6 - CLASS 7 GEAR BOX 10KNM	24
11.	APPENDIX 6 - KIT FOR CLASS 7 GEAR BOX 10KNM	25

12.	APPENDIX 6 - GEAR BOX CL. 7 WGHO ADAPTER	26
13.	APPENDIX 6 - KIT FOR CLASS 7 GEAR BOX 15KNM	27

TECHNICAL DOCUMENT

1. INTRODUCTION

The Class 7 Gearbox is designed to enable operation of Class 7 and Class 6 interfaces using a Class 4 torque tool for maximum flexibility at minimum cost.

The gearbox can be configured for both short and long Class 7 interface, in addition to Class 6 using a square insert.

The gearbox can be delivered as a complete kit(BB2408), including required components to adapt the tool to the interfaces as described above.

The Gearboxes are delivered as 40kNm(BA6403), 15kNm(BA6847) & 10kNm(BA8497) versions.

1.1. DOCUMENT USE

This document shall be used as a general information for all aspects related to safe use, installation, removal, maintenance, and storage of the Class 7 Gearbox.

1.2. REFERENCES

Latest version of the following documents

Id.	Doc. No	Originator	Document Title
/01/	BB2408	Blue Logic	Gear Box Cl.7 Arrangement
/02/	BA6403	Blue Logic	Class 7 Gear Box 40kNm
/03/	BA6847	Blue Logic	Class 7 Gear Box 15kNm
/04/	BA8497	Blue Logic	Class 7 Gear Box 10kNm
/05/	BB1677	Blue Logic	Class 7 Gear Box 40kNm Long*
/06/	600146-TD-0009	Blue Logic	Assembly and Test Procedure for Class 6&7 Gearbox
/07/	BC0216	Blue Logic	Kit for Class 7 Gear Box 10kNm
/08/	BB8678	Blue Logic	Gear Box Cl. 7 wGHO Adapter
/09/	BB6159	Blue Logic	Kit for Class 7 Gear Box 15kNm

* Dimensions for "long version" are similar for 10kNm & 15kNm

1.3. ABBREVIATIONS

ROV	Remotely Operated Vehicle
HPU	Hydraulic Power Unit
FAT	Factory Acceptance Test
TT	Torque Tool

TECHNICAL DOCUMENT

2. TECHNICAL DESCRIPTION

2.1. GENERAL

The gearbox is designed to be a compact tool with low submerged weight to enable efficient ROV intervention. As base case, the gearbox is intended to be used as a stand-alone unit for installation in Class 7 interfaces. Once installed, the Class 4 torque tool, hereafter referred to as TT, shall be inserted in the Class 4 interface of the gearbox. The unit is then ready for operation.

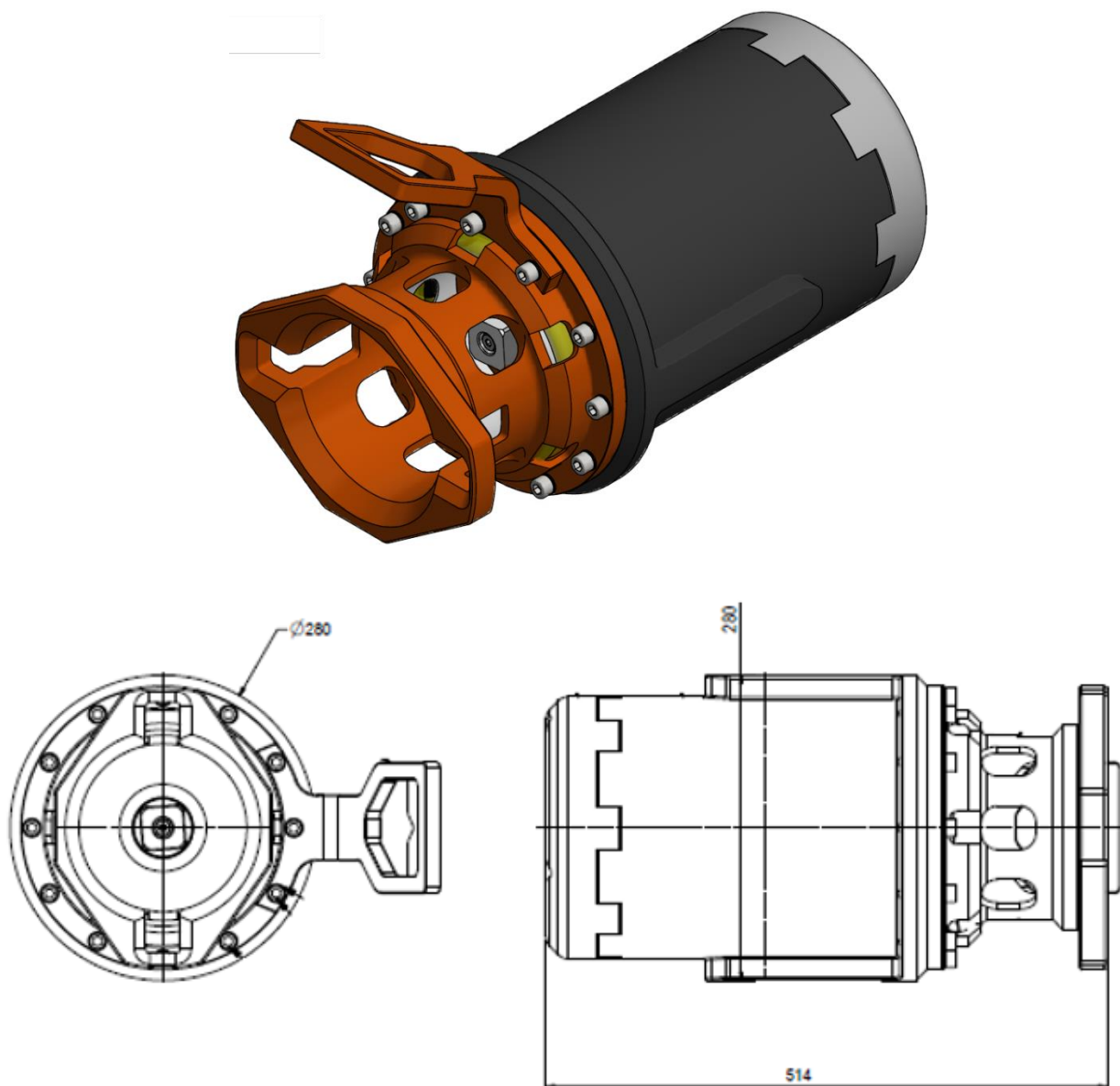


Figure 1, Cl.7 gearbox, short configuration

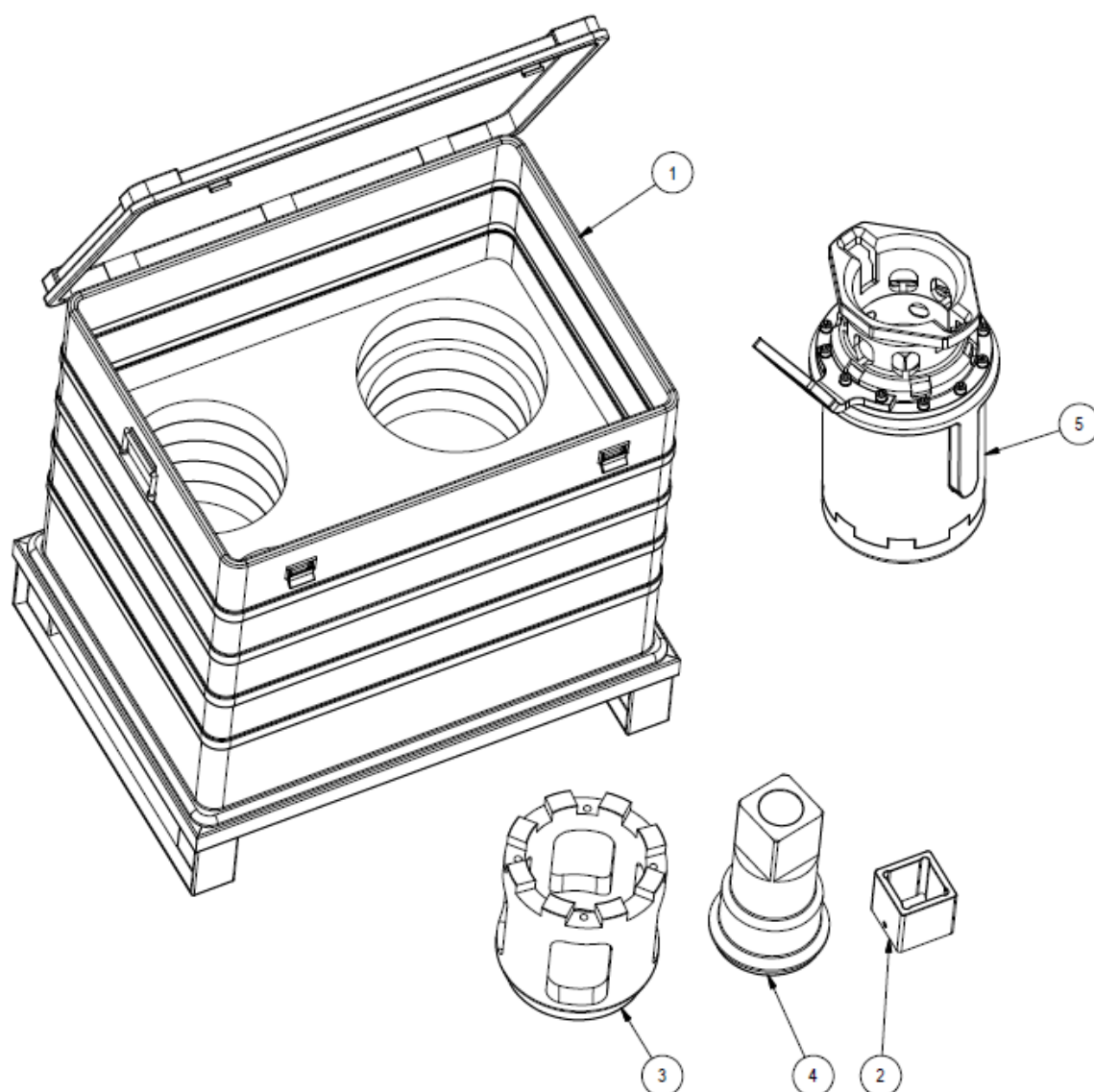


Figure 2 Class 7 gearbox, complete kit (BB2408)

The gearbox can be delivered in a transport box, containing the following main components as shown above: The gearbox can be delivered in 10kNm or 15kNm, with the same accessories.

Item	Description	Reference
1	Transport box	BB3819
2	Insert Class 6	BB1680
3	Protection Nose Class 7 - Long	BB1679
4	Planetary Carrier Class 7 Extension - Long	BB1678
5	Class 7 Gear Box 40kNm - Short	BA6403
6	Operation and Maintenance Manual	600146-TD-0006



2.2. INTERFACES

2.2.1. Mechanical Interface

Torque Input:

- ISO/API Class 4

Torque Output:

- ISO/API Class 7 – short
- ISO/API Class 7 – long
- ISO/API Class 6

ROV Interface:

- ROV D-handle

2.2.2. Hydraulic Interface

The gearbox is all-mechanical, but the housing is pressure compensated using an oil-filled ½” Tygon compensator hose. Blind fitting at the end of the hose to be pulled out for filling/draining of compensation hose. Make sure to evacuate all air when filling with oil.

Gear-oil: Q8 T 65 75W-90.

2.3. MATERIAL SELECTION

The gearbox is mainly constructed in anodized Aluminium, and designed for intervention, i.e. not permanent installation

2.4. TECHNICAL DATA

The below data represents a standard, short, version of the gearbox.

Overall dimensions	Ø280 x 514 mm
Weight in air	71.1 kg
Weight in water	56,94 kg
Pressure rating	300 bar
Max water depth	3 000 m
Max output, gear ratio 1:14,273	40 kNm
Max output, gear ratio 1:6	15 kNm
Max output, gear ratio 1:3,78	10 kNm
Gear-oil	Q8 T 65 75W-90

3. OPERATION

3.1. PREPARATIONS

Prior to operation, the following actions shall be carried out.

ID	Description
1	Check the gearbox for damages.
2	Verify correct output interface selected. Replace output interface if required, ref. section 3.4.
3	Insert the Class 4 TT and operate gearbox to verify smooth and correct operation.
4	Put the gearbox in vertical position with the Class 4 interface up. Verify that the compensation hose is oil filled. Evacuate any air if present.

3.2. OPERATION

ID	Description
1	Grab the gearbox' D-handle and use the manipulator to install the gearbox into the correct Class 7 intervention bucket. The gearbox can be used in both vertical and horizontal orientation. The gearbox is held in position by gravity/friction, thus no locking mechanism to be engaged. Alignment of output socket may be necessary for fully insertion.
2	Insert the Class 4 TT and slowly operate in required direction in order to align the gearbox' output socket with the Class 7 interface. In vertical orientation, the gearbox will drop into final position once aligned. For horizontal orientation, the ROV must apply a gentle push during the alignment.
3	Perform intervention as required for the application.
4	When operation has been completed, remove the Class 4 TT.
5	Grab the D-handle and pull the gearbox out of the Class 7 interface bucket.

3.3. PRE-OPERATION

The following actions shall be taken once the gearbox has been recovered to deck.

ID	Description
1	Hose down the gearbox using fresh water.
2	Check for damages, special attention to be made to input and output interfaces.
3	Put the tool in vertical orientation and verify that the compensation hose is completely oil-filled. Refill if required.
4	Insert the Class 4 TT and operate the gearbox to verify correct and smooth operation.
5	Wipe off any water and install the gearbox in dedicated transport box.

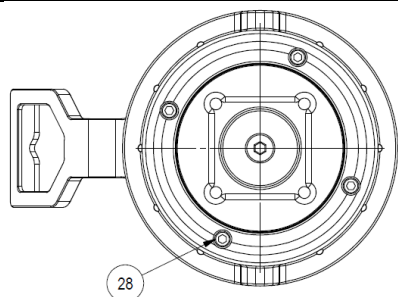
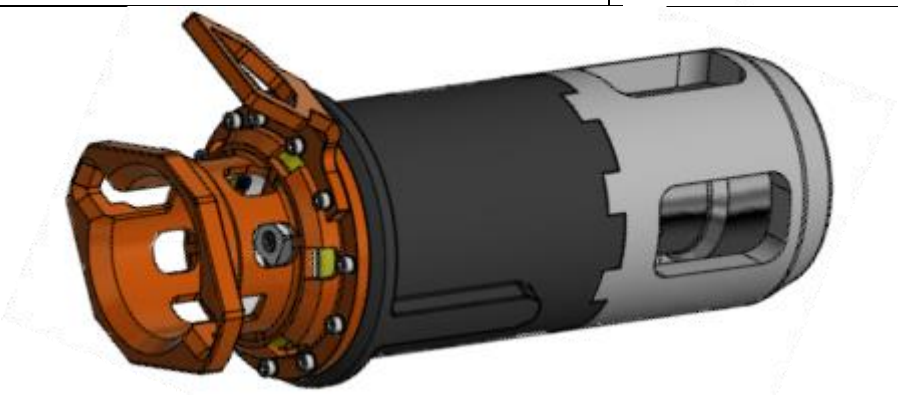
3.4. REPLACEMENT OF OUTPUT INTERFACE

For increased flexibility, the output interface is interchangeable to fit different interfaces;

- Class 7 short
- Class 7 long
- Class 6 short
- Class 6 long

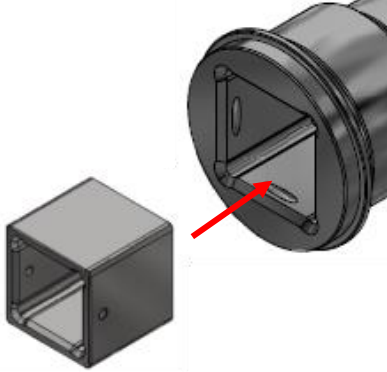
Please follow below instructions for changing between the above listed configurations.

3.4.1. Change from Short to Long Nose

ID	Description	
1	Use an Allen key to release 4 off M10x40 bolts and remove the protection nose.	
2	Insert the extension socket, BB1678, into the main socket.	
3	Install the extended protection nose, BB1679. Install and tighten all M10x40 bolts, 4 off. Torque: 43Nm	
4		

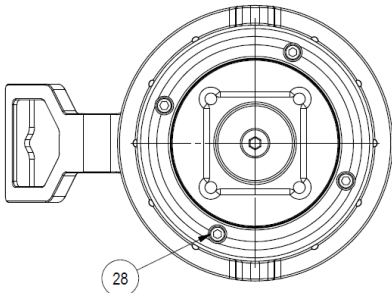
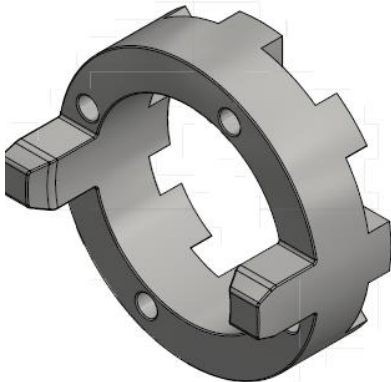
3.4.2. Installation of Class 6 Insert

The below procedure provides information of how to install the Class 6 insert socket.

ID	Description	
1	Insert the Class 6 insert socket, BB1680, into the Class 7 socket.	
2	Install 2 off M10 set screws and secure the insert to the main socket.	

3.4.3. Installation of GHO Adapter

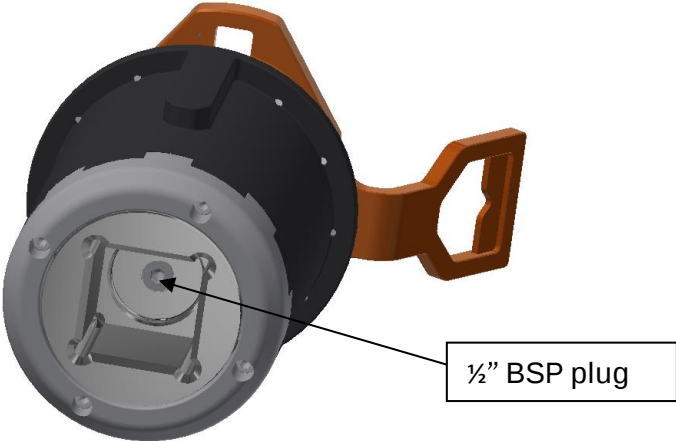
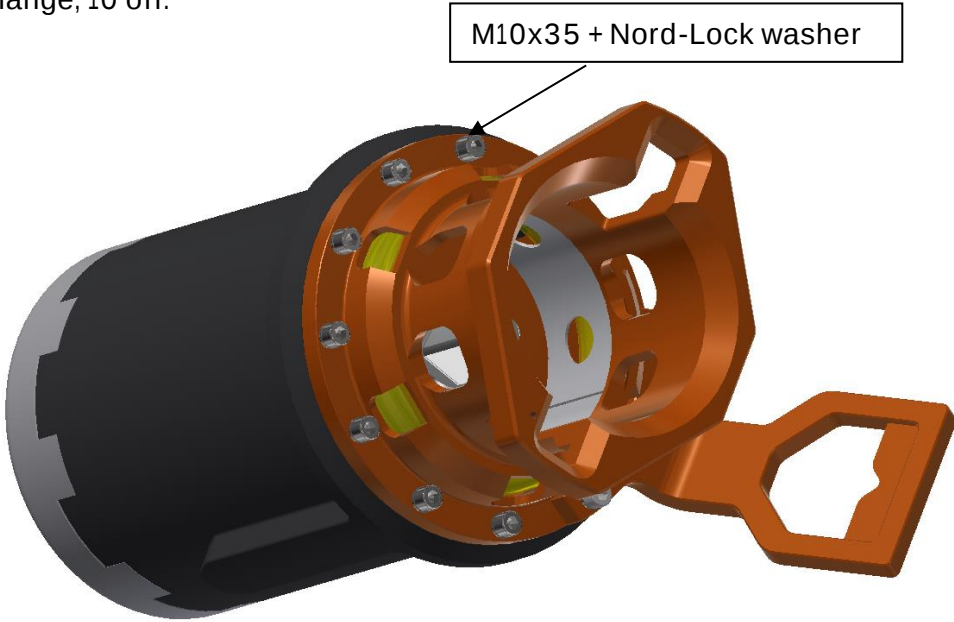
To install the GHO adapter (Art. Nr.: BB5605), follow the instructions below.

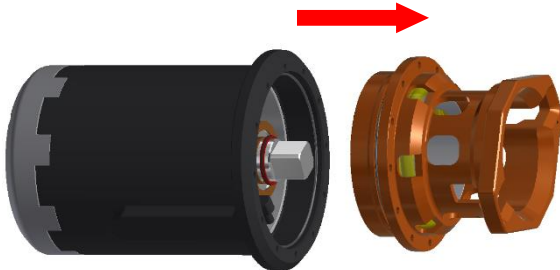
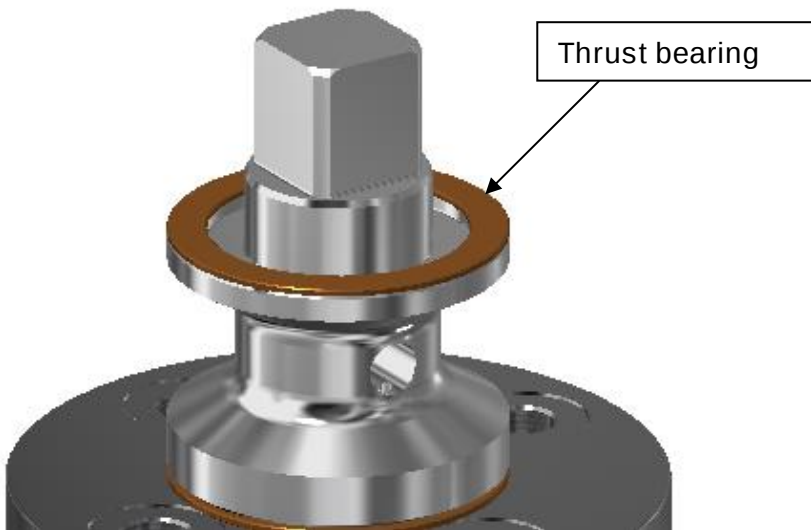
ID	Description	
1	Use an Allen key to release 4 off M10x40 bolts and remove the protection nose.	
2	Install the GHO adapter, BB5605, and tighten all M10x40 bolts, 4 off. Torque: 43Nm	
3		

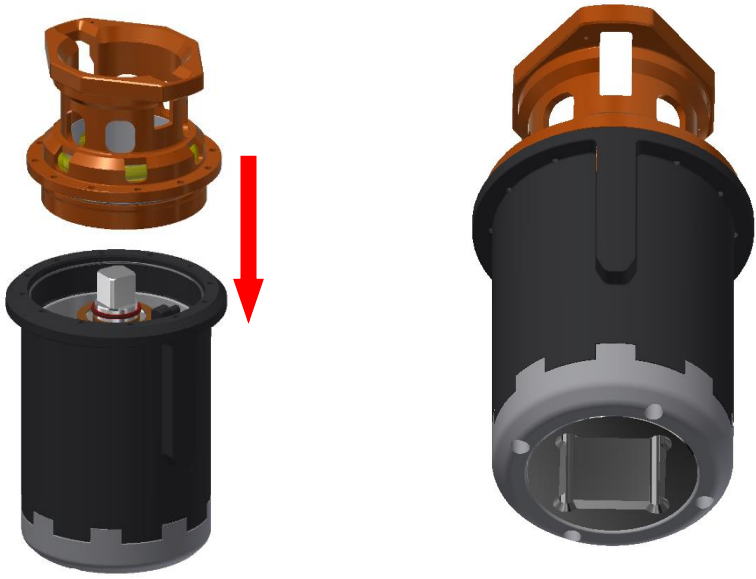
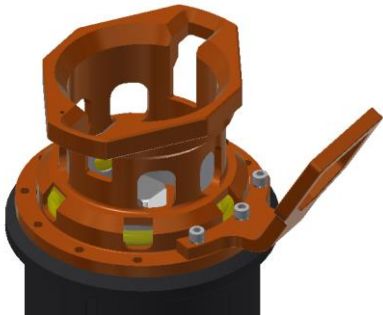
TECHNICAL DOCUMENT

3.5. REPLACEMENT OF INTERNAL GEAR

3.5.1. Gear Assembly Replacement

NO.	DESCRIPTION	CHK
1.	Remove the bottom plug inside the socket to drain the gear-oil using a 10mm Allen key. 	
2.	Remove all M10x35 bolts and Nord-Lock washers from the main flange, 10 off. 	

NO.	DESCRIPTION	CHK
3.	Gently lift the Class 4 section from the gear housing: 	
4.	Pull the gear assembly out of the gear housing as illustrated below: 	
5.	Move the thrust bearing from the pulled-out gear assy and install onto the gear assy to be inserted. 	

NO.	DESCRIPTION	CHK
6.	Inspect all seal surfaces at the new gear assembly, clean as required.	
7.	Insert the new gear assembly into the gear housing: 	
8.	Install the Class 4 section onto the gear housing, make sure to align Cl4 section with Cl7 section as shown below. 	
9.	Install handle onto the main flange using 3 off M10x50 and Nord-Lock washers. Torque to 42Nm. Apply AquaShield to bolts. 	



NO.	DESCRIPTION	CHK
10.	Install the remaining M10x35 bolts and Nord-Lock washers. Install correct label for correct gear ratio. Torque to 42Nm. Apply AquaShield to bolts.	

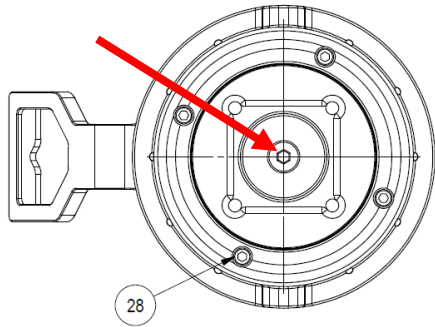
3.5.2. Oil-Filling of Gearbox

NO.	DESCRIPTION	CHK
1.	Remove the protection plate located in the class 4 bucket. Pull out the compensation hose and remove the plug at the end.	
2.	Connect supply hose to fill gear oil Q8 T 65 75W-90 through the ½" BSP port in the CI7 socket.	
3.	Connect vacuum pump to the compensation hose.	
4.	Start vacuum-cycling to fill system with gear oil and remove all trapped air pockets inside the gear box. Install the ½" BSP plug.	
5.	Install compensation hose plug and secure by using stainless steel lock wire.	
6.	Coil up the compensation hose inside the class 4 bucket and reinstall the protection plate.	
7.	Connect a class 4 torque tool and arrange for operation of the gearbox. Operate gearbox for 5 minutes in both directions.	
8.	Pull out the compensation hose and check for any air bubbles, remove as required and put the hose back in position behind the protection plate.	

TECHNICAL DOCUMENT

4. MAINTENANCE

4.1. YEARLY MAINTENANCE

ID	Description	
1	Check gearbox for damages, special attention to be made to input and output interfaces.	
2	Check coating, touch-up if required.	
3	Remove the plastic protection plate inside the class 4 bucket and pull out the compensation hose. Remove the end-plug from the hose.	
4	Unscrew BSP plug inside the socket. Remove plug inserted in the compensation hose to allow draining. Check oil for contamination, debris, water etc.	
5	Put the tool in vertical position with the CI7 interface upwards. Connect an oil-pump to the compensation hose and pump oil until it bleeds out of the BSP port. Reinstall the BSP plug.	Gear-oil: Q8 T 65 75W-90
6	Put the gearbox in vertical orientation with the CI4 interface upwards. Check for bubbles of air in compensation hose. Use vacuum pump to evacuate any trapped air and refill oil if required.	
7	Disconnect the oil-pump and reinstall the plug for the compensation hose.	

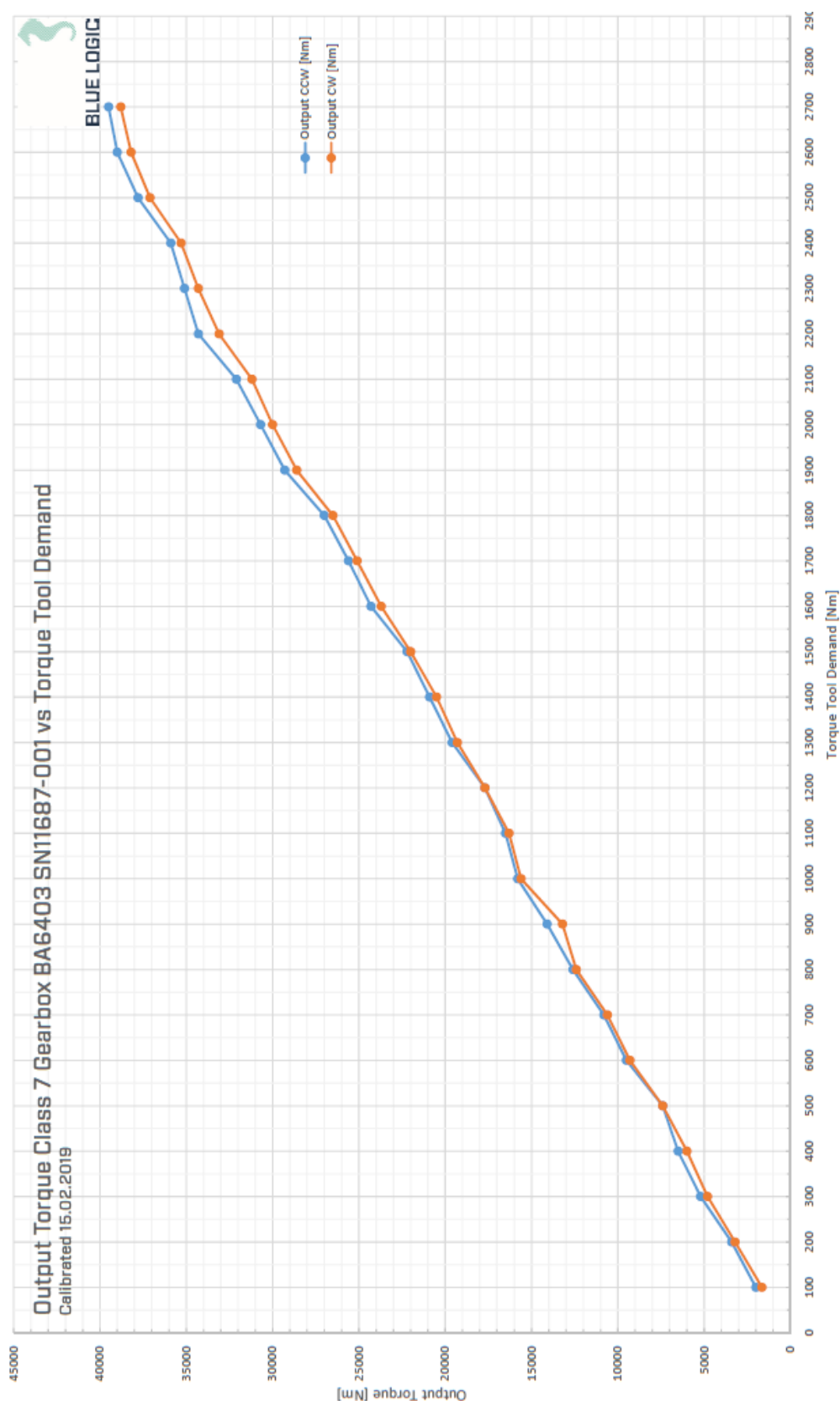


4.3. 2-YEARLY MAINTENANCE

If the gearbox has been in operation for 2 years, it should be returned to Blue Logic for full inspection and maintenance.

ID	Description	
1	Check gearbox for damages, special attention to be made to input and output interfaces.	
2	Check coating, touch-up if required.	
3	Drain all oil through the BSP port. Inspect oil for water, debris etc.	
4	Open gearbox and perform a full inspection of all internal parts, gears etc. Replace parts and seals if required.	
5	Assemble gearbox and fill with oil.	Gear-oil: Q8 T 65 75W-90
6	Perform function test to verify full functionality.	

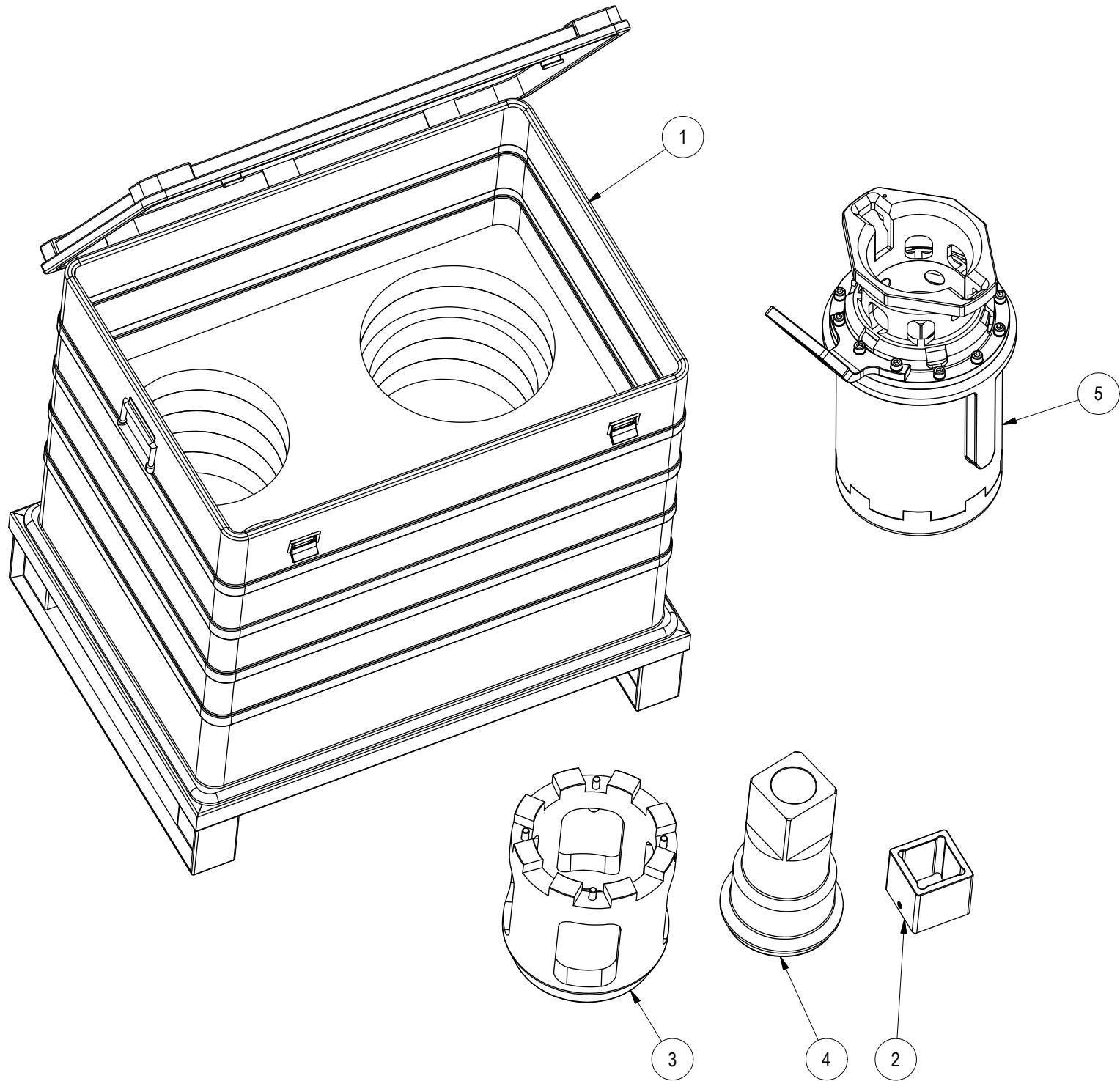
5. APPENDIX 1 – TORQUE CURVE



6. APPENDIX 2 – GEARBOX CL.7 ARRANGEMENT DWG

Drawing BB2408

Parts List				
ITEM	QTY	PART No.	TITLE	WEBLINK
1	1	BB3819	Alu Box Assy for Gear Box Cl. 7	N/A
2	1	BB1680	Insert Class 6	N/A
3	1	BB1679	Protection Nose Class 7 Long	N/A
4	1	BB1678	Plantary Carrier Class 7 Extension Long	N/A
5	1	BA6403	Class 7 Gear Box 40kNm	http://e-sea.bluelogic.no/main.aspx?page=article&artno=BA6403

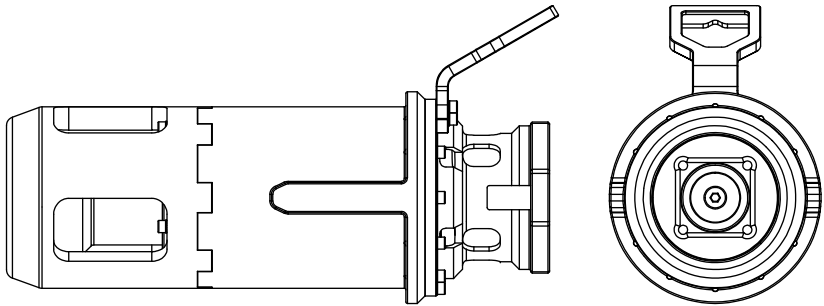


NOTE: 1
DESIGN CODE:
ISO 13628-8/API 17H

NOTE: 2
TECHNICAL CLASSIFICATION:
Article Type: 008-Actuation
Main Group: 8.03. ISO-6-7 Actuation
Intermediate Group: 8.46.04. Test Jig
Sub Group: 8.46.134.02. Intervention

NOTE: 3
INTERFACE INFORMATION:
Pressure Rating Bar: 300
Material: N/A
Weight: 122,4 kg
Volume: 132,79 dm³
Surface Area: 154202 cm²
Hydraulic: N/A
Mechanical: ISO/API 17H Class 4 and Class 7
Electrical: N/A
Com. & Protocol: N/A

NOTE: 4
ADDITIONAL INFORMATION:
Mechanical Gear box with ISO Class 4 input and ISO Class 7 output
40kNm torque capacity.
The gearbox can be configured for Class 7 short and long.
A square insert is delivered to also meet Class 6 dimensions.
Gear ratio can be either 14.31:1, 6.0:1 or 3.79:1 for maximum flexibility.



BB1677 Class 7 Gear Box 40kNm Long

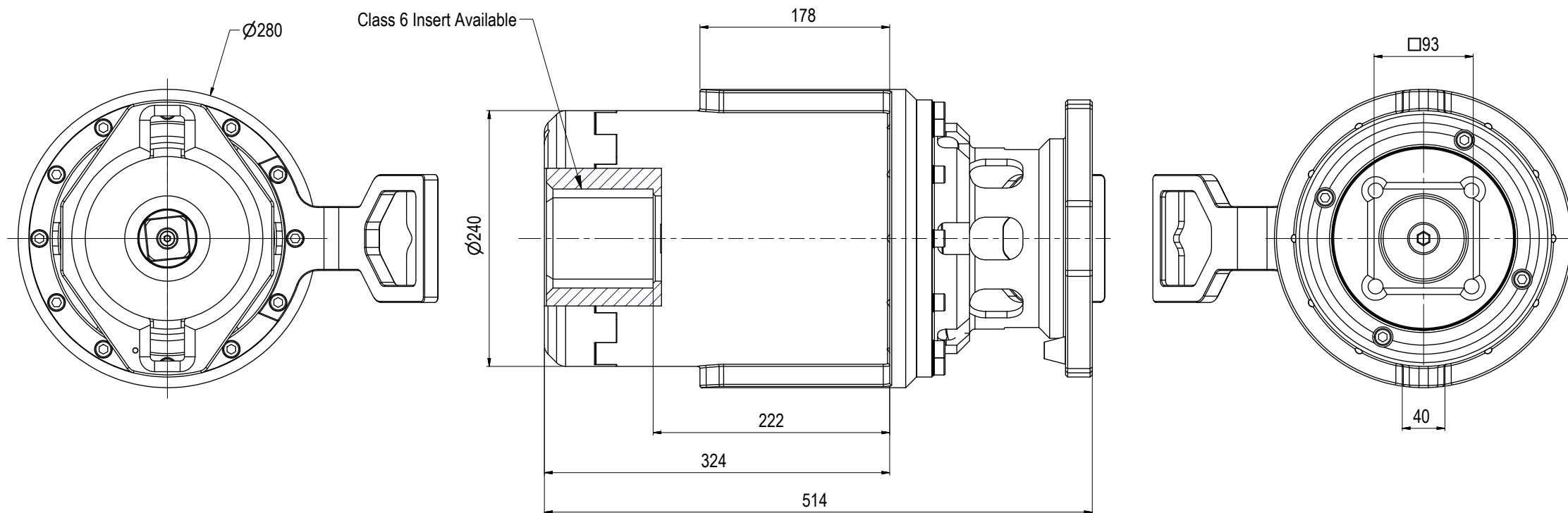
03	12.7.2021	9-IFU (Issued for Use)		WTJ	KHA	WTJ
02	10.9.2019	9-IFU (Issued for Use)		WTJ	LGH	WTJ
01	6.9.2018	2-IFT (Issued for Tender)		WTJ	N/A	N/A
Rev.	Date	Reason for issue	Revision change	Made	Chk'd	Appr.



Dwg Scale: NTS	Drawing title: Gear Box Cl. 7 40kNm Arrangement	
Dwg Proj: 		
Dwg Format: A3	Drawing number: BB2408	
		Rev. 03

7. APPENDIX 3 – CLASS 7 GEARBOX 40KNM SHORT

Drawing BA6403



NOTE: 1
DESIGN CODE:
API 17H

NOTE: 2
TECHNICAL CLASSIFICATION:
Article Type: 008-Actuation
Main Group: 8.03. ISO-6-7 Actuation
Intermediate Group: 8.46.03. Gear
Sub Group: 8.46.128.02. Intervention

NOTE: 3
INTERFACE INFORMATION:
Pressure Rating Bar: 300
Design Water Depth: 3000m
Material: N/A
Weight: 71,1 kg
Volume: 13,84 dm³
Submerged Weight: 56,93 kg
Surface Area: 30658 cm²
Hydraulic: N/A
Mechanical: ISO Class 4 Input
Electrical: N/A
Com. & Protocol: N/A

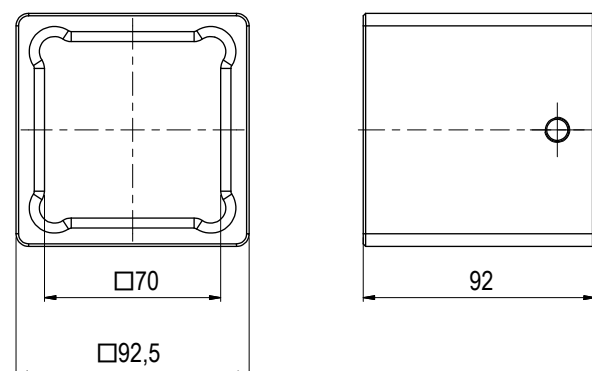
NOTE: 4
ADDITIONAL INFORMATION:
API 17H Class 4 to 7 gearbox for short term use / intervention.
The gearbox is oil filled and pressure compensated using passive, integrated compensator. Main housing constructed in hard anodized Aluminum, nose section in POM and output socket in S165M.

Mechanical Gear box with ISO Class 4 input and ISO Class 7 output. 40kNm torque capacity.
Gear Ratio 40kNm 1:14.273

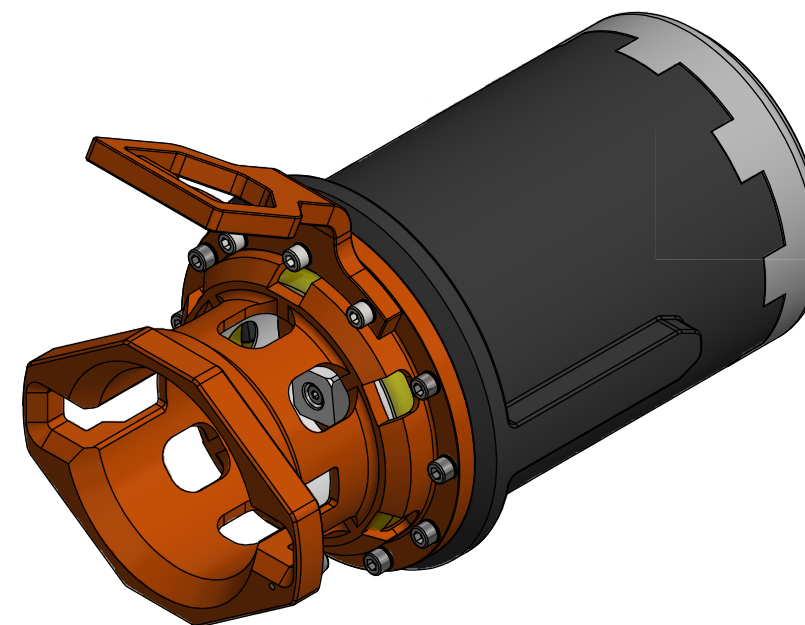
Class 6 Insert available on request, BB1680

Can be configured to 10kNm and 15kNm torque output.
Gear Ratio 15kNm 1:6 (ref BA6847)
Gear Ratio 10kNm 1:3,78 (ref BA8497)

Gear Ratio 40kNm Long 1:14.273 (ref BB1677)



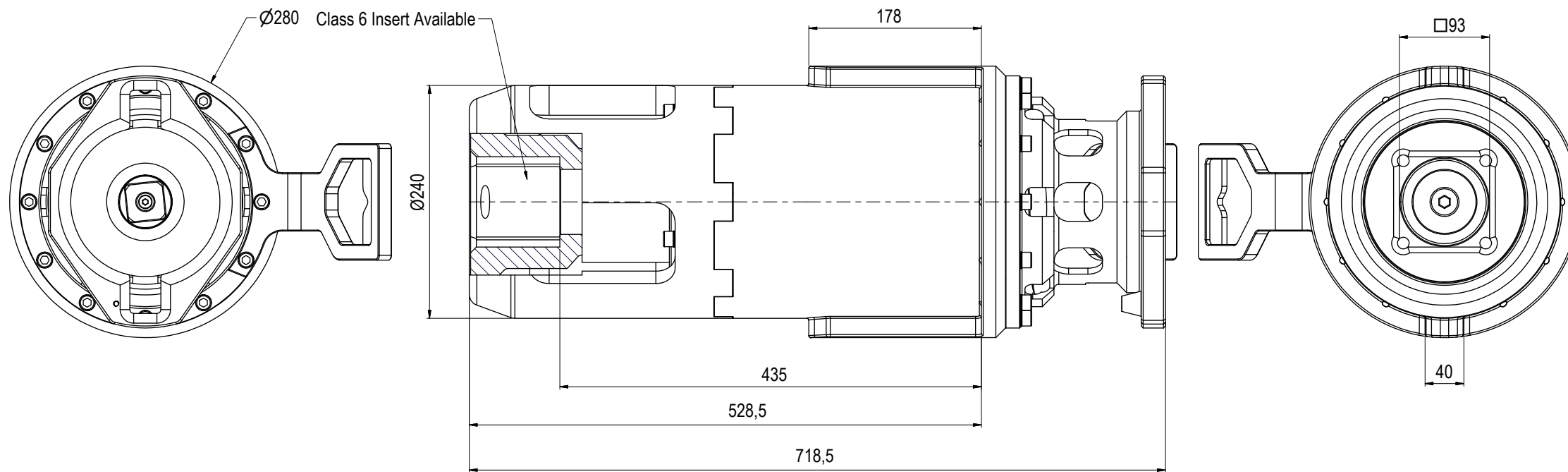
CLASS 6 INSERT BB1680



13	11.11.2024	9-IFU (Issued for Use)		WTJ	TAN	WTJ	BLUE LOGIC	Dwg Scale: NTS	Drawing title: Class 7 Gear Box 40kNm
12	20.9.2023	9-IFU (Issued for Use)		WTJ	LGH	WTJ		Dwg Proj: NTS	
11	24.8.2022	9-IFU (Issued for Use)		WTJ	LGH	WTJ		Dwg Format: A3	
10	11.2.2022	9-IFU (Issued for Use)		WTJ	KHA	WTJ			
Rev.	Date	Reason for issue	Revision change	Made	Chk'd	Appr.		Drawing number: BA6403	Rev. 13

8. APPENDIX 4 - CLASS 7 GEARBOX 40KNM LONG

Drawing BB1677



NOTE: 1
DESIGN CODE:
API 17H

NOTE: 2
TECHNICAL CLASSIFICATION:
Article Type: 008-Actuation
Main Group: 8.03. ISO-6-7 Actuation
Intermediate Group: 8.46.03. Gear
Sub Group: 8.46.128.02. Intervention

NOTE: 3
INTERFACE INFORMATION:
Pressure Rating Bar: 300
Design Water Depth: 3000m
Material: N/A
Weight: 93,9 kg
Volume: 19,47 dm³
Submerged Weight: 73,96 kg
Surface Area: 36654 cm²
Hydraulic: N/A
Mechanical: ISO Class 4 Input
Electrical: N/A
Com. & Protocol: N/A

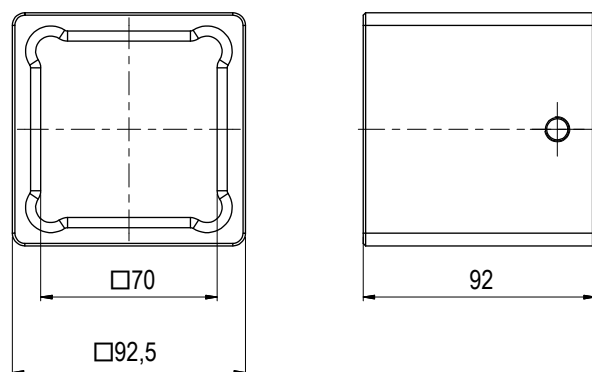
NOTE: 4
ADDITIONAL INFORMATION:
API 17H Class 4 to 7 gearbox short term use / intervention.
The gearbox is oil filled and pressure compensated using passive integrated compensator. Main housing constructed in hard anodized Aluminum, nose section in POM and output socket in S165M.

Mechanical Gear box with ISO Class 4 input and
ISO Class 7 output. 40kNm torque capacity.
Gear Ratio 40kNm 1:14.273

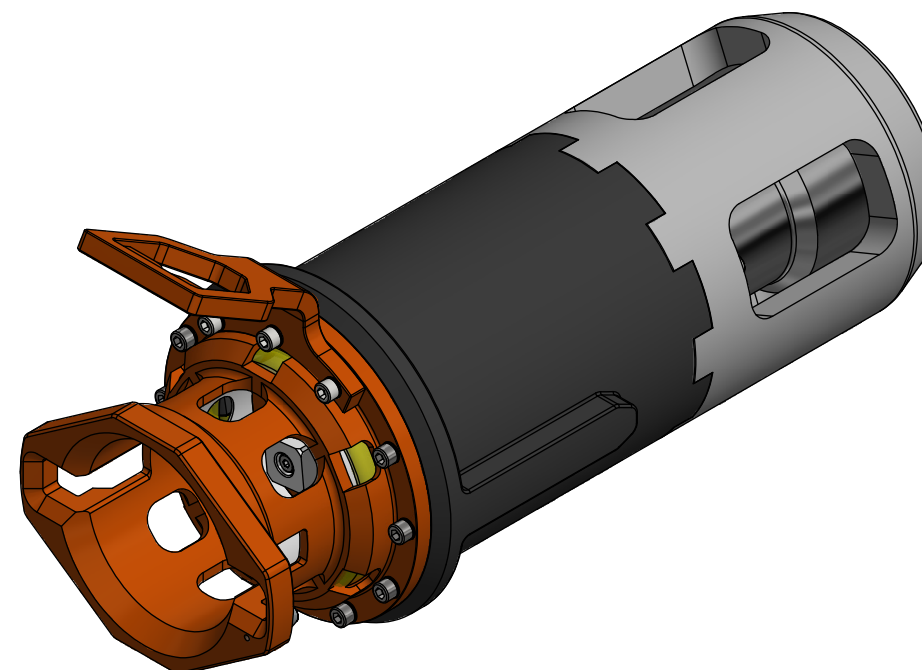
Class 6 Insert available on request, BB1680

Can be configured to 10kNm and 15kNm torque output.
Gear Ratio 15kNm 1:6
Gear Ratio 10kNm 1:3,78

Gear Ratio 10kNm Short 1:3,78 (ref BA8497)
Gear Ratio 15kNm Short 1:6 (ref BA6847)
Gear Ratio 40kNm Short 1:14.273 (ref BA6403)



CLASS 6 INSERT BB1680

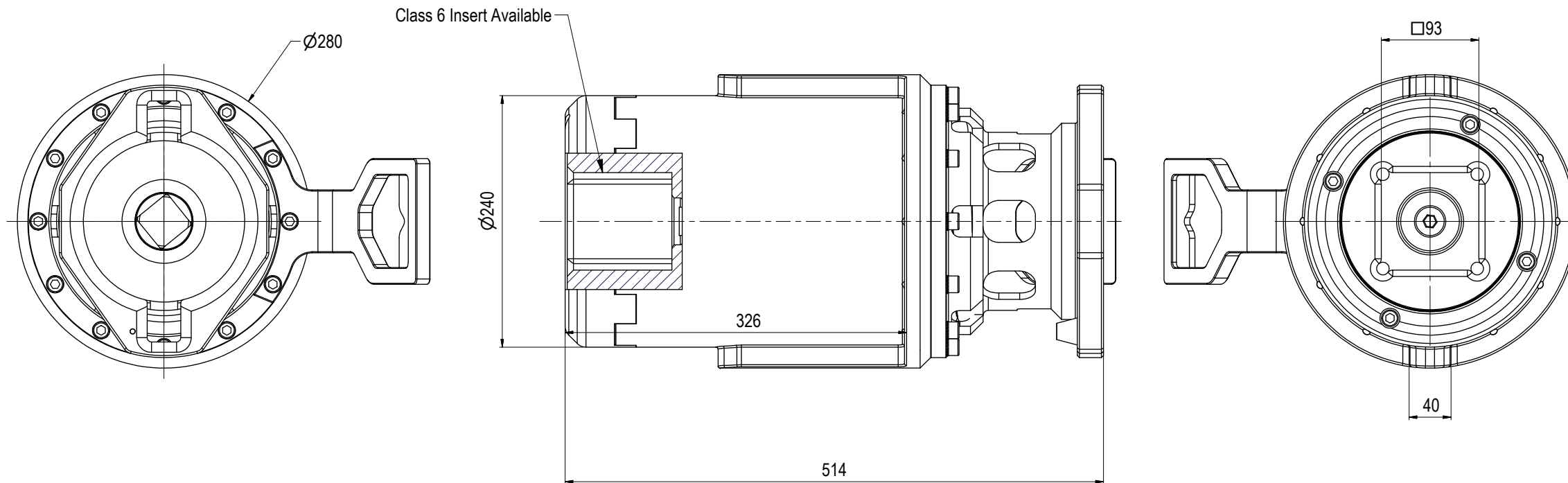


08	11.11.2024	9-IFU (Issued for Use)		WTJ	TAN	WTJ	Dwg Scale: NTS	Drawing title: Class 7 Gear Box 40kNm Long
07	20.9.2023	9-IFU (Issued for Use)		WTJ	LGH	WTJ	Dwg Proj: NTS	
06	24.8.2022	9-IFU (Issued for Use)		WTJ	LGH	WTJ	Dwg Format: A3	
05	11.2.2022	9-IFU (Issued for Use)		WTJ	KHA	WTJ		
Rev.	Date	Reason for issue	Revision change	Made	Chk'd	Appr.	Drawing number: BB1677	Rev. 08

BLUE LOGIC

9. APPENDIX 5 - CLASS 7 GEAR BOX 15KNM

DWG: BA6847



NOTE: 1
DESIGN CODE:
API 17H

NOTE: 2
TECHNICAL CLASSIFICATION:
Article Type: 008-Actuation
Main Group: 8.03. ISO-6-7 Actuation
Intermediate Group: 8.46.03. Gear
Sub Group: 8.46.128.02. Intervention

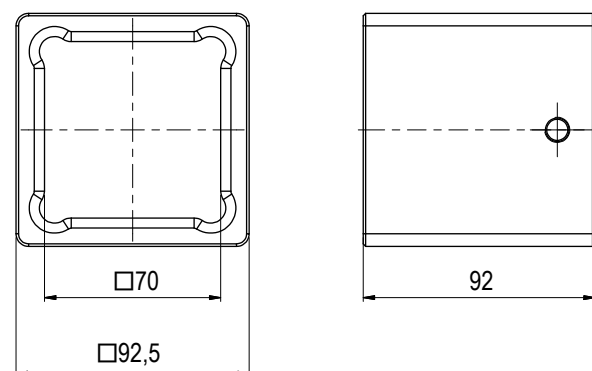
NOTE: 3
INTERFACE INFORMATION:
Pressure Rating Bar: 300
Design Water Depth: 3000m
Material: N/A
Weight in Air: 62,7 kg
Volume: 12,83 dm³
Submerged Weight: 49,59 kg
Surface Area: 26052 cm²
Hydraulic: N/A
Mechanical: ISO Class 4 Input
Electrical: N/A
Com. & Protocol: N/A

NOTE: 4
ADDITIONAL INFORMATION:
API 17H Class 4 to 7 gearbox for short term use / intervention.
The gearbox is oil filled and pressure compensated using passive, integrated compensator. Main housing constructed in hard anodized Aluminum, nose section in POM and output socket in S165M.

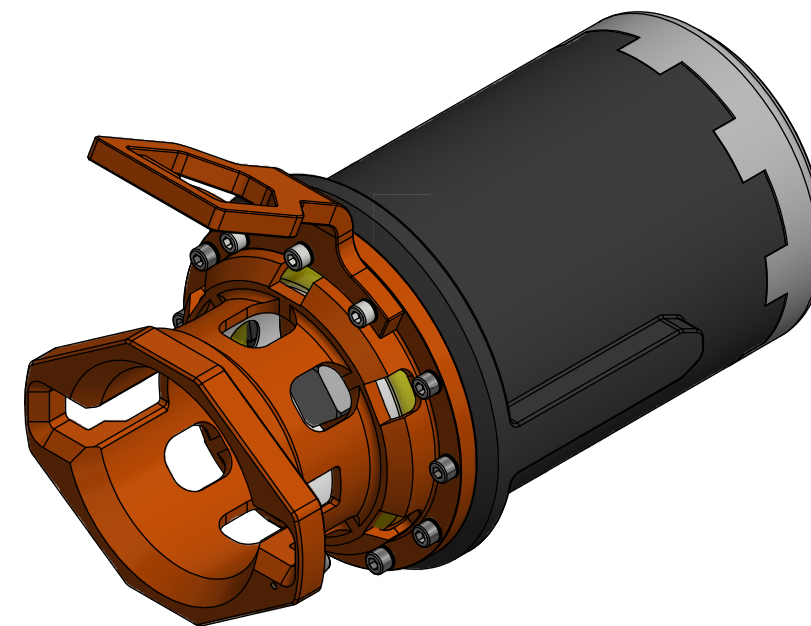
Mechanical Gear box with ISO Class 4 input and
ISO Class 7 output. 15kNm torque capacity.
Gear Ratio 15kNm 1:6

Can be configured to 10kNm and 40kNm torque output.
Gear Ratio 10kNm 1:3,78 (ref BA8497)
Gear Ratio 40kNm 1:14.273 (ref BA6403)

Gear Ratio 40kNm Long 1:14.273 (ref BB1677)



CLASS 6 INSERT BB1680



11	11.11.2024	9-IFU (Issued for Use)		WTJ	TAN	WTJ
10	20.9.2023	9-IFU (Issued for Use)		WTJ	LGH	WTJ
09	24.8.2022	9-IFU (Issued for Use)		WTJ	LGH	WTJ
08	11.2.2022	9-IFU (Issued for Use)		WTJ	KHA	WTJ
Rev.	Date	Reason for issue	Revision change	Made	Chk'd	Appr.

BLUE LOGIC

Dwg Scale:
NTS
Dwg Proj:
Dwg Format:
A3

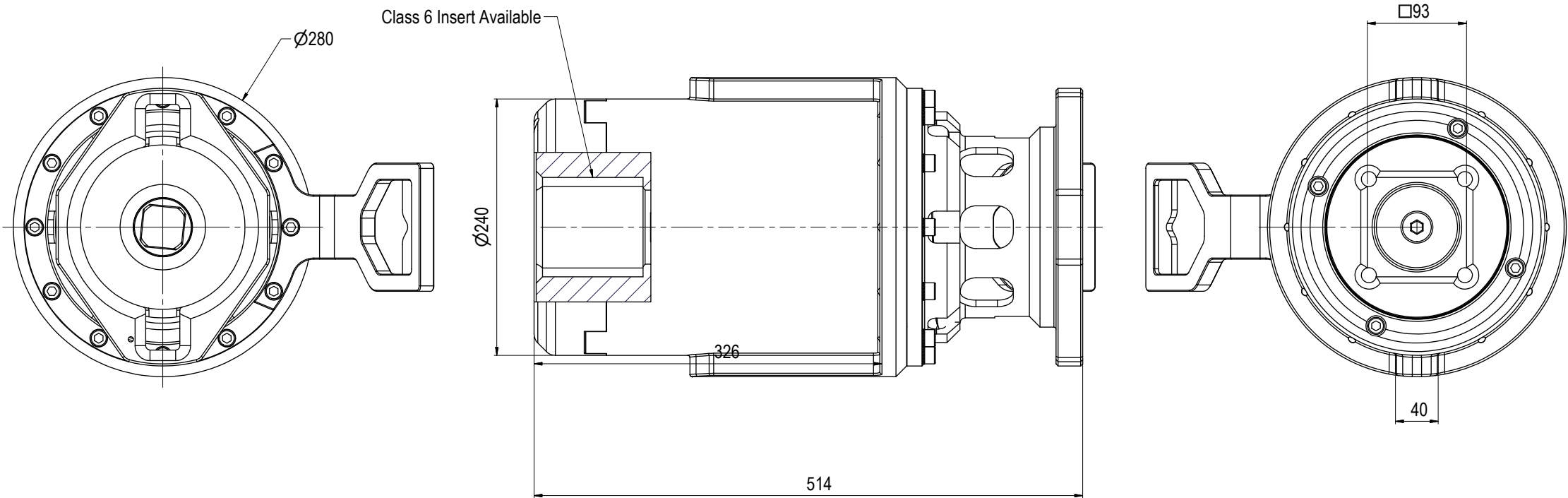
Drawing title:
Class 7 Gear Box 15kNm

Drawing number:
BA6847

Rev.
11

10. APPENDIX 6 - CLASS 7 GEAR BOX 10KNM

DWG: BA8497



NOTE: 1
DESIGN CODE:
API 17H

NOTE: 2
TECHNICAL CLASSIFICATION:
Article Type: 008-Actuation
Main Group: 8.03. ISO-6-7 Actuation
Intermediate Group: 8.46.03. Gear
Sub Group: 8.46.128.02. Intervention

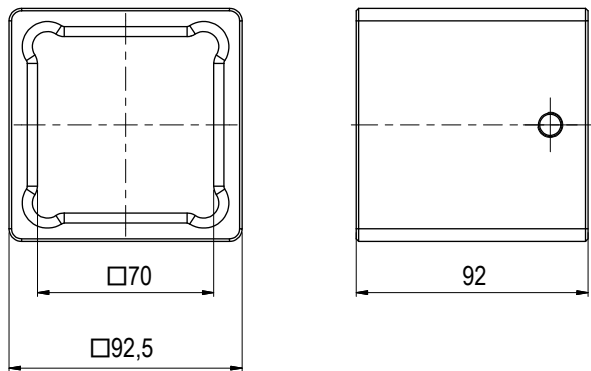
NOTE: 3
INTERFACE INFORMATION:
Pressure Rating Bar: 300
Design Water Depth: 3000m
Material: N/A
Weight in Air: 61,6 kg
Volume: 12,68 dm³
Submerged Weight: 48,58 kg
Surface Area: 26281 cm²
Hydraulic: N/A
Mechanical: ISO Class 4 Input
Electrical: N/A
Com. & Protocol: N/A

NOTE: 4
ADDITIONAL INFORMATION:
API 17H Class 4 to 7 gearbox for short term use / intervention.
The gearbox is oil filled and pressure compensated using passive, integrated compensator. Main housing constructed in hard anodized Aluminum, nose section in POM and output socket in S165M.

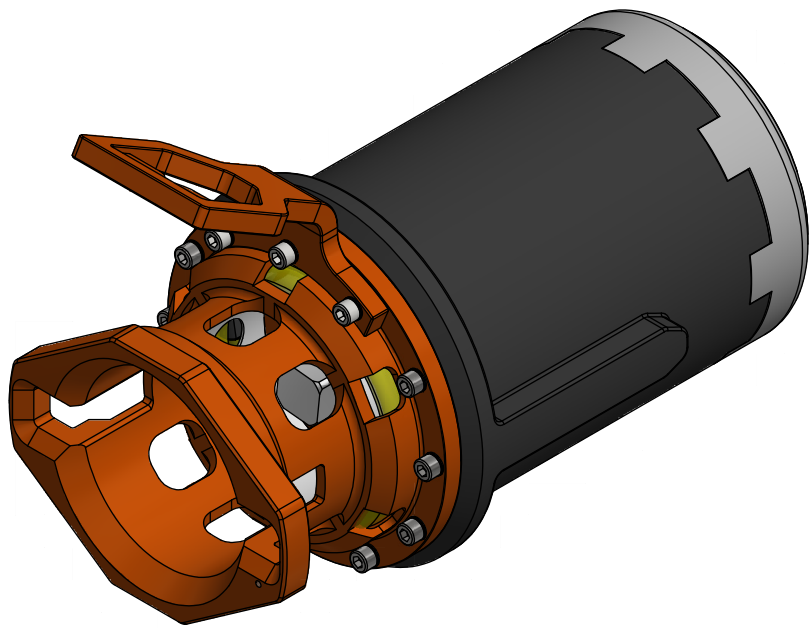
Mechanical Gear box with ISO Class 4 input and
ISO Class 7 output. 10kNm torque capacity.
Gear Ratio 10kNm 1:3,78

Can be configured to 15kNm and 40kNm torque output.
Gear Ratio 15kNm 1:6 (ref BA6847)
Gear Ratio 40kNm 1:14.273 (ref BA6403)

Gear Ratio 40kNm Long 1:14.273 (ref BB1677)



CLASS 6 INSERT BB1680



07	11.11.2024	9-IFU (Issued for Use)		WTJ	TAN	WTJ
06	20.9.2023	9-IFU (Issued for Use)		WTJ	LGH	WTJ
05	24.8.2022	9-IFU (Issued for Use)		WTJ	LGH	WTJ
04	11.2.2022	9-IFU (Issued for Use)		WTJ	KHA	WTJ
Rev.	Date	Reason for issue	Revision change	Made	Chk'd	Appr.

BLUE LOGIC

Dwg Scale:
NTS
Dwg Proj:
Dwg Format:
A3

Drawing title:
Class 7 Gear Box 10kNm

Drawing number:
BA8497

Rev.
07

11. APPENDIX 6 - KIT FOR CLASS 7 GEAR BOX 10KNM

DWG: BC0216

12. APPENDIX 6 - GEAR BOX CL. 7 WGHO ADAPTER

DWG: BB8678

13. APPENDIX 6 - KIT FOR CLASS 7 GEAR BOX 15KNM

DWG: BB6159

