

Technical instructions user's Manual

Fig. 01 SmartShift Base complete



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Original instructions – User manual

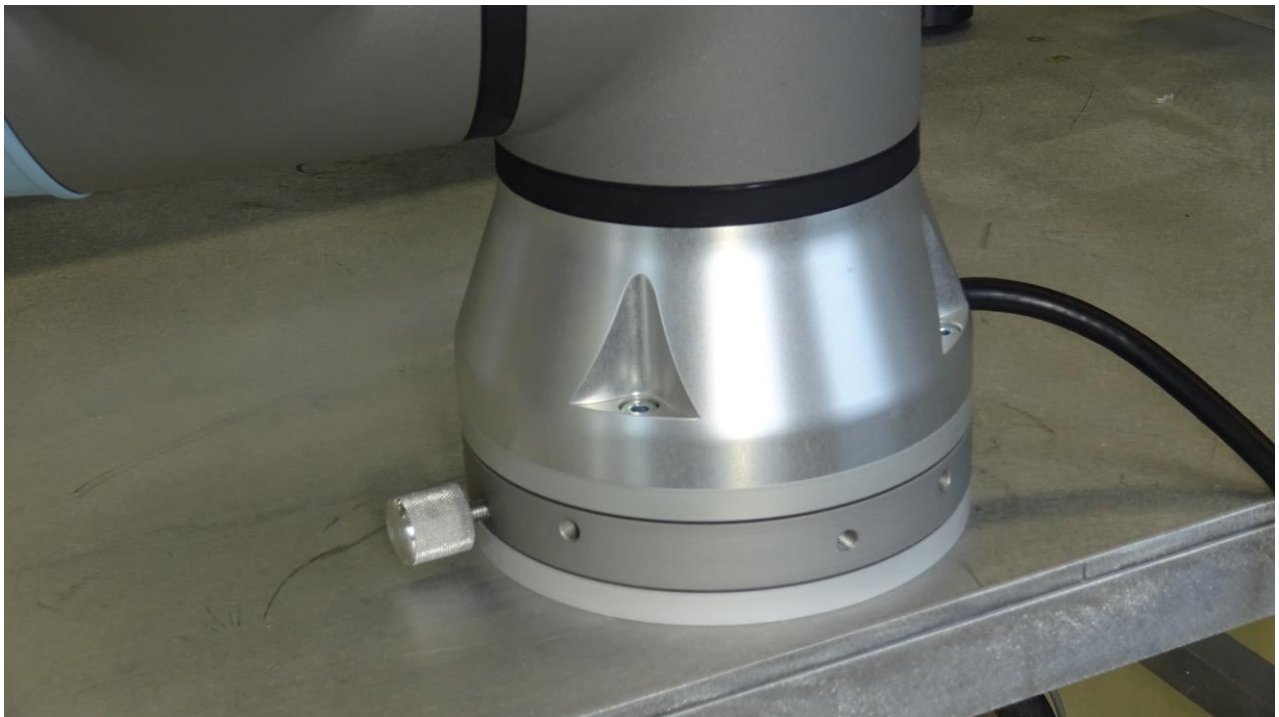
Manufacturer: _____ Buind AS
Machine type: _____ SmartShift
Designation: _____ Base
Manufacturing year: __2019

1 Introduction

The SmartShift Base clutch designed for manual relocation of the robot arm to various locations on different footplates. The SmartShift Base designed for all Universal Robot types and similar robots.

SmartShift Base set consists of two units:

A Base Footplate (BF) and a Robot Base Master (RBM) with locking ring incl. fixation screw. All types of robots footplate accommodated. Several size variations are therefore possible.



Product information:

Machine type: _____ SmartShift Base

Drawing number: _____ xxxx xx

Type designation: _____ xxxxxxxx

Manufacturing year: _____ 2019

Manufacturer:

Name: _____ Buind AS

Reference: _____ Kjell Buind

Address: _____ Hensmoveien 17,
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3 General description

3.1 The SmartShift Base

The SmartShift Base is capable of accurate and exact fixation of a robot to operate between various workstations locations. The benefit is to fast, easy and accurate move the same robot in different workstations where exact zero positioning secured each time. The SmartShift Base consists of following two main units:

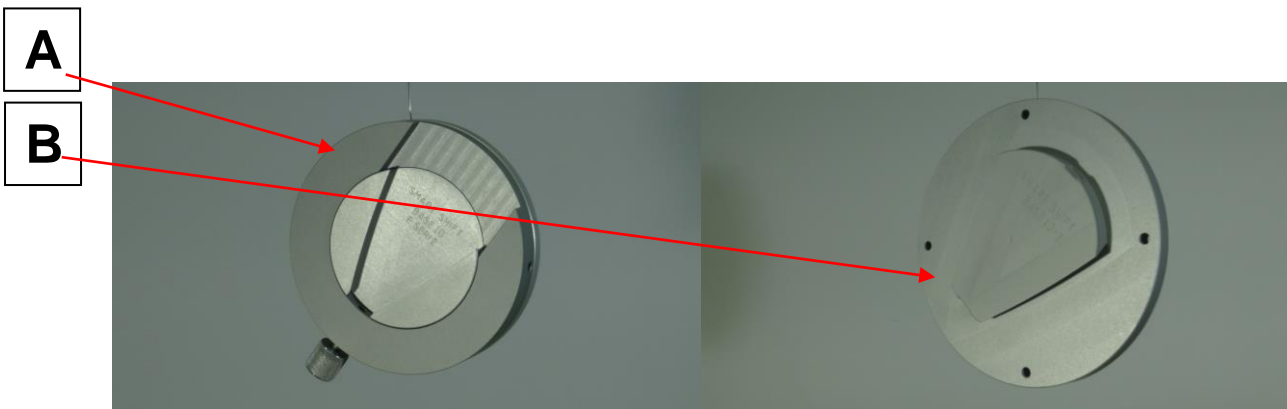
A Robot Base Master (RBM) and a Base Footplate (BF).

The Robot Base Master (RBM) can be mounted on all the types of the Universal Robots or similar equipment. Base Footplate (BF) applies in a number needed for different workstations. Standard flanges are in stock. Any flange variation depending on special design can be requested. See configurator on SmartShift-Robotics webpage.

Detail Overview

A) Robot Base Master (RBM)

B) Base Footplate (BF)



3.2 Robot Base Master (RBM) specification

Recommended for robots handling payload up to: 10 kg

Outer diameter: xxx mm

Flange diameter xxx mm

Total Weight: xxx g

Material: Bright Steel

3.3 Base Footplate (BF) specification

Recommended for robots handling payload up to: 10 kg

Outer diameter: xxx mm

Flange diameter xxx mm

Reference diameter: xxx mm

Total Weight: xxx g

Material: Bright steel

4 Safety instructions

4.1 General safety

Keep hands and tools away from all SmartShift components when the program is running.

Follow this manual carefully also regarding maintenance and recommended weight. Always have security data sheet for recommended lubrication available.

If the SmartShift base is damaged, then stop using immediately and contact Buind for replacement parts. Buind is not responsible for damage to people and property caused by using damaged components.

5 Mounting / use

Mount Robot Base Master (RBM) directly onto the Universal Robot arm or on similar equipment. Mount the Base Footplate at the workstation by securing the bolts for safely. The application robot recommended handling weight is max. 10 kg. The owner is fully responsible for mounting the SmartShift clutch securely.

5.1 Setup guide

Erect the Base Footplate (BF) on the workstation and secure it safely by usage of suitable bolts and corresponding nuts.

Erect the Robot Base Master on the robotic footplate and secure it safely by usage of suitable bolts and nuts.

Now the two corresponding parts slides together by manual lifting the robot arm in line with the Base Footplate.

After safely sliding the two parts together then turn the locking ring, 180 degrees and lock the ring position with the fixation screw.

6 Maintenance

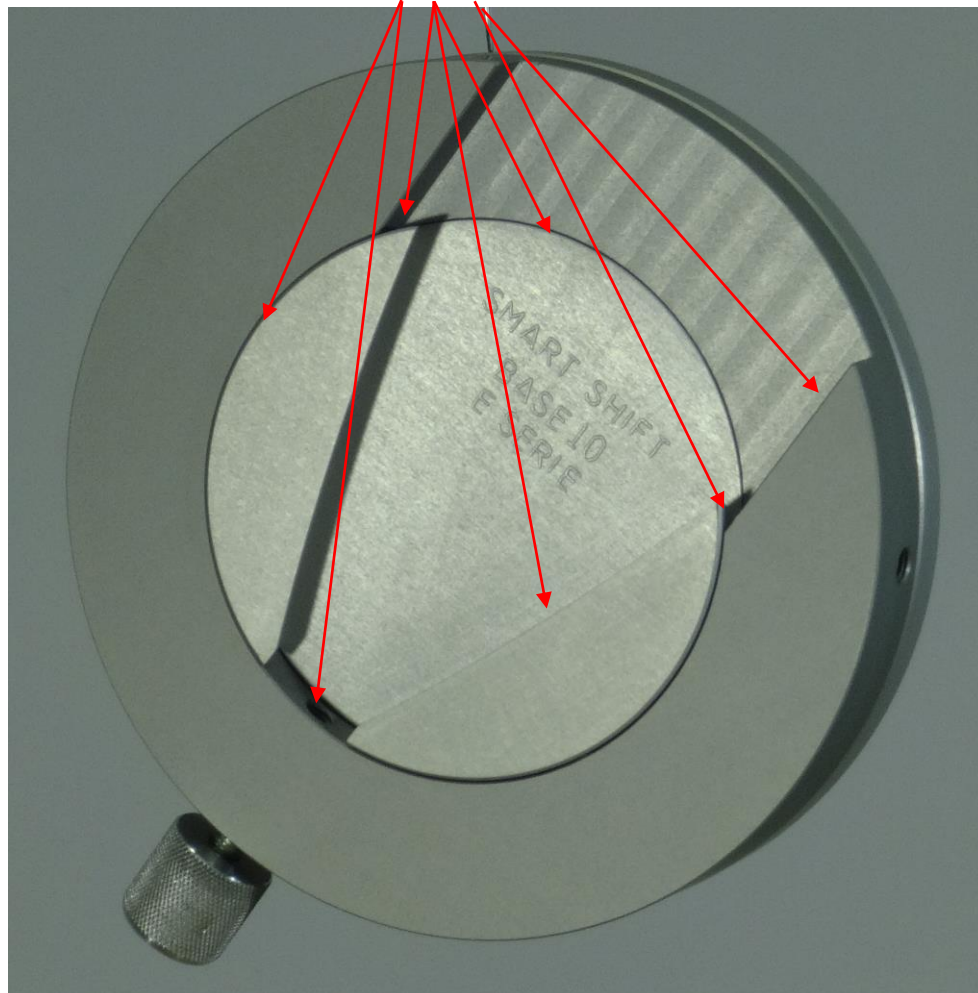
6.1 General

Make sure to keep SmartShift Base in a clean environment. If chips or other big particles comes between the Robot Base Master (RBM) and the Base Footplate (BF) the accurate zeroing of the robot is jeopardized and the lifetime of the SmartShift Base can thus be shortened.

6.2 Lubrication

Once every second week, put a few drops of silicon-based lubricant (silicone spray) on each surface to keep the components sliding easily against each other, and a few drops on the locking ring keep it sliding easily. Recommended silicone spray is WD-40 (300014) silicone oil, or equivalent silicone-based lubricant.

Silicon Lubricant



7 EC Declaration



EC Declaration of incorporation for Partly Completed Machine

(according Directive 2006/42/EC, Annex 2B)

PROHIBITION TO PUT INTO SERVICE

Manufacturer Buind AS
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Hereby declares that the produkt
SmartShift
Manufacturing No. 100-500
Order No.

is not allowed to be put into service until the machinery or plant into which it is going to be incorporated, has been found and declared to be in conformity with the provisions of Directive 2006/42/EC and with any other Directives and National requirements which are applicable for the completed machinery.

The basic requirements of Directive 2006/42/EG, Annex 1 which are complied with are specified in the Annexes to this declaration, as listed below.

All relevant parts of the following European harmonised standards have been considered

EN 60204-1 Safety of Machinery - Electrical Equipment of Machines -General Requirements
The relevant technical documentation is compiled in accordance with part B of Annex VII.

This documentation or parts hereof will be transmitted by post or electronically in response to a reasoned request by the national authorities. The undersigned is entited to issue the technical documentation.

Hønefoss 15.06.2018
Buind AS
CEO



Basic requirements that relate to: User manual SmartShift