

# Bosch Rexroth G10A4-1X/G3/8 size 10 directional valve subplate

Manufacturer: Bosch Rexroth  
Manufacturer part number / published order designation: R900424457  
Published model: G10A4-1X/G3/8

## About this compilation

Prepared by Hydmaster from selected manufacturer documentation. Original technical pages follow without cropped drawings, rewritten data or altered units. This cover and index are Hydmaster editorial material, not a manufacturer-issued exact-execution datasheet.

Coverage: selected pages relevant to the identified size and configuration. Other options or neighbouring models retained on an original page apply only where explicitly identified.

## Execution notes and conditions

Delivered base material, coating composition and seal material are not established by the ordering/dimension rows.

Hydraulic-fluid compatibility, cleanliness and overall assembly limits depend on the installed valve and other components.

No universal flow rating or general operating-temperature rating is inferred.

The exact material-number row does not state a subplate pressure limit; no nearby/global rating is substituted.

## Source-page index

Source page numbers below are physical pages of each complete original PDF. The original printed page labels and technical content remain unchanged. Compiled page numbers count this cover/index.

### Source A: Bosch Rexroth Subplates Re45100 2019

| Original pages | Compiled pages | Relevant content                                                                                                                                                                                                                                                                                                                                            |
|----------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1-4            | 2-5            | Original manufacturer document identity and individual subplate scope; Published G-1X size, porting pattern and main-port count definitions; Actual main/control thread, port orientation, outer-design and corrosion option definitions; Special-version definitions including SO003 where selected; hydraulic-fluid and assembly operating qualifications |
| 19             | 6              | Exact material-number/full-model row and dimensional drawing for G10A4-1X/G3/8; use only the selected row and actual mounting/port details                                                                                                                                                                                                                  |
| 51             | 7              | Manufacturer assignment of nominal-size A subplates to valve mounting interfaces; other listed valve families do not imply universal compatibility                                                                                                                                                                                                          |

# Subplates

**RE 45100**

Edition: 2019-05

Replaces: 2018-10



H8056

- Size 4 ... 32
- Component series 1X

## Features

The subplates are intended for the set-up of single valves and vertical stackings and are equipped with all ports. The delivery range includes sizes 4 ... 32 as a standard.

- Ready for connection
- Compact design
- Large number of variants
- Broad field of application
- Various frame sizes

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## Ordering code

|          |    |    |    |    |           |    |    |    |    |    |
|----------|----|----|----|----|-----------|----|----|----|----|----|
| 01       | 02 | 03 | 04 | 05 | 06        | 07 | 08 | 09 | 10 | 11 |
| <b>G</b> |    |    |    | -  | <b>1X</b> | /  |    |    | -  |    |

### Device type

|    |          |          |
|----|----------|----------|
| 01 | Subplate | <b>G</b> |
|----|----------|----------|

### Size

|    |      |           |
|----|------|-----------|
| 02 | NG4  | <b>04</b> |
|    | NG5  | <b>05</b> |
|    | NG6  | <b>06</b> |
|    | NG10 | <b>10</b> |
|    | NG16 | <b>16</b> |
|    | NG20 | <b>20</b> |
|    | NG25 | <b>25</b> |
|    | NG30 | <b>30</b> |
|    | NG32 | <b>32</b> |

### Porting pattern

|    |                                                                              |          |
|----|------------------------------------------------------------------------------|----------|
| 03 | Directional valves <b>with</b> one tank port, flow control valves            | <b>A</b> |
|    | Isolator, directional, pressure and flow control valves                      | <b>C</b> |
|    | Isolator, directional, pressure and flow control valves                      | <b>D</b> |
|    | Pressure relief valves                                                       | <b>E</b> |
|    | Flow control valves                                                          | <b>G</b> |
|    | Rexroth-specific hole pattern                                                | <b>R</b> |
|    | ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03, with 4 mm locating pin bore | <b>U</b> |
|    | Valves up to 630 bar                                                         | <b>V</b> |

### Number of main ports

|    |                                                                                          |           |
|----|------------------------------------------------------------------------------------------|-----------|
| 04 | 2 main ports A, B / X, Y / P, T / P, A                                                   | <b>2</b>  |
|    | 3 main ports P, A, T                                                                     | <b>3</b>  |
|    | 4 main ports P, A, B, T                                                                  | <b>4</b>  |
| 05 | Component series 10 ... 19 (10 ... 19: unchanged installation and connection dimensions) | <b>1X</b> |

### Order example:

**G10A2-1X/G3/8G1/4-SLJ5-SO699**

**Other versions are only possible after consultation.**

## Ordering code

|    |    |    |    |    |    |   |    |  |    |   |    |    |    |    |
|----|----|----|----|----|----|---|----|--|----|---|----|----|----|----|
| 01 | 02 | 03 | 04 | 05 |    |   | 06 |  | 07 |   | 08 | 09 | 10 | 11 |
| G  |    |    |    | -  | 1X | / |    |  |    | - |    |    |    | -  |

### Actuator ports P, A, B, T

|    |                      |                    |
|----|----------------------|--------------------|
| 06 | Thread G1/4          | <b>G1/4</b>        |
|    | Thread G3/8          | <b>G3/8</b>        |
|    | Thread G3/4          | <b>G3/4</b>        |
|    | Thread G1/2          | <b>G1/2</b>        |
|    | Thread G1            | <b>G1</b>          |
|    | Thread G1 1/4        | <b>G1 1/4</b>      |
|    | Thread G1 1/2        | <b>G1 1/2</b>      |
|    | Thread M14           | <b>M14</b>         |
|    | Thread M18           | <b>M18</b>         |
|    | Thread M22           | <b>M22</b>         |
|    | Thread M27           | <b>M27</b>         |
|    | Thread M33           | <b>M33</b>         |
|    | Thread M48           | <b>M48</b>         |
|    | Thread NPT 1/2       | <b>NPT 1/2</b>     |
|    | Thread NPT 1         | <b>NPT 1</b>       |
|    | Thread 7/8-12UNF     | <b>UNF7/8-12</b>   |
|    | Thread 3/4-16UNF     | <b>UNF3/4-16</b>   |
|    | Thread 9/16-18UNF    | <b>UNF9/16-18</b>  |
|    | Thread 7/8-20UNF     | <b>UNF7/8-20</b>   |
|    | Thread 7/16-20UNF    | <b>UNF7/16-20</b>  |
|    | Thread 1 1/16-12UN   | <b>UN1 1/16-12</b> |
|    | Thread 1 5/16-12UN   | <b>UN1 5/16-12</b> |
|    | Thread 1 5/8-12 UN   | <b>UN1 5/8-12</b>  |
|    | Thread 1 7/8-12 UN   | <b>UN1 7/8-12</b>  |
|    | Flange ISO 6164 DN19 | <b>FL19</b>        |
|    | Flange ISO 6164 DN32 | <b>FL32</b>        |
|    | Flange ISO 6164 DN51 | <b>FL51</b>        |

### Control system ports X, Y, L

|    |                   |               |
|----|-------------------|---------------|
| 07 | Thread G1/4       | <b>G1/4</b>   |
|    | Thread G3/8       | <b>G3/8</b>   |
|    | Thread G1/2       | <b>G1/2</b>   |
|    | Thread M14        | <b>M14</b>    |
|    | Thread M18        | <b>M18</b>    |
|    | Thread 7/16-20UNF | <b>UNF 20</b> |
|    | Thread 9/16-18UNF | <b>UNF 18</b> |

### Porting pattern

|    |               |                |
|----|---------------|----------------|
| 08 | Rear ports    | <b>no code</b> |
|    | Lateral ports | <b>S</b>       |

### Design (outer dimensions)

|    |                      |                |
|----|----------------------|----------------|
| 09 | Standard size        | <b>no code</b> |
|    | Small design "mini"  | <b>M</b>       |
|    | Large design "large" | <b>L</b>       |

### Corrosion resistance

|    |                                                                                       |                |
|----|---------------------------------------------------------------------------------------|----------------|
| 10 | Standard                                                                              | <b>no code</b> |
|    | Improved corrosion protection (240 h in salt spray test according to DIN EN ISO 9227) | <b>J3</b>      |
|    | Maximum corrosion protection (720 h in salt spray test according to DIN EN ISO 9227)  | <b>J5</b>      |

## Ordering code

|    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|
| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 |
| G  |    |    |    | -  | 1X | /  |    |    | -  |    |

### Special versions

|    |                                                                                                                                          |       |
|----|------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 11 | With additional port L                                                                                                                   | SO003 |
|    | Special hole pattern <b>with</b> leakage oil connection on top for 5-4WE 10 -5X/...                                                      | SO331 |
|    | High-pressure valves 500 bar                                                                                                             | SO699 |
|    | Special hole pattern <b>without</b> port X but <b>with</b> leakage oil connection such as standard hole pattern for 5-4 WE 10 ...-5X/... | SO771 |
|    | Name plate on the opposite side                                                                                                          | SO001 |

## Technical data

(for applications outside these values, please consult us!)

| general                                                                                                          |                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Installation position                                                                                            | any (observe the valve details)                                                                                                             |
| hydraulic                                                                                                        |                                                                                                                                             |
| Operating pressure                                                                                               | see details of the relevant subplate                                                                                                        |
| Maximum admissible degree of contamination of the hydraulic fluid<br>Cleanliness class according to ISO 4406 (c) | The cleanliness classes specified for the components must be adhered to in hydraulic systems. See data sheet of the valves to be installed. |

| Hydraulic fluid              | Classification                   | Suitable sealing materials                          | Standards | Data sheet |
|------------------------------|----------------------------------|-----------------------------------------------------|-----------|------------|
| Mineral oils                 | HL, HLP, HLPD, HVLP, HVLPD       | NBR, FKM                                            | DIN 51524 | 90220      |
| Bio-degradable <sup>1)</sup> | ▶ Insoluble in water             | HETG                                                | ISO 15380 | 90221      |
|                              |                                  | HEES                                                |           |            |
|                              | ▶ Soluble in water               | HEPG                                                | ISO 15380 |            |
| Flame-resistant              | ▶ Water-free                     | HF DU (glycol base)                                 | ISO 12922 | 90222      |
|                              |                                  | HF DU (ester base) <sup>1)</sup>                    |           |            |
|                              | ▶ Containing water <sup>1)</sup> | HFC (Fuchs Hydrotherm 46M, Petrofer Ultra Safe 620) | ISO 12922 | 90223      |



### Important information on hydraulic fluids:

- ▶ For further information and data on the use of other hydraulic fluids, please refer to the data sheets above or contact us.
- ▶ There may be limitations regarding the technical valve data (temperature, pressure range, life cycle, maintenance intervals, etc.).
- ▶ The ignition temperature of the hydraulic fluid used must be 50 K higher than the maximum solenoid surface temperature.

### ▶ Flame-resistant – containing water:

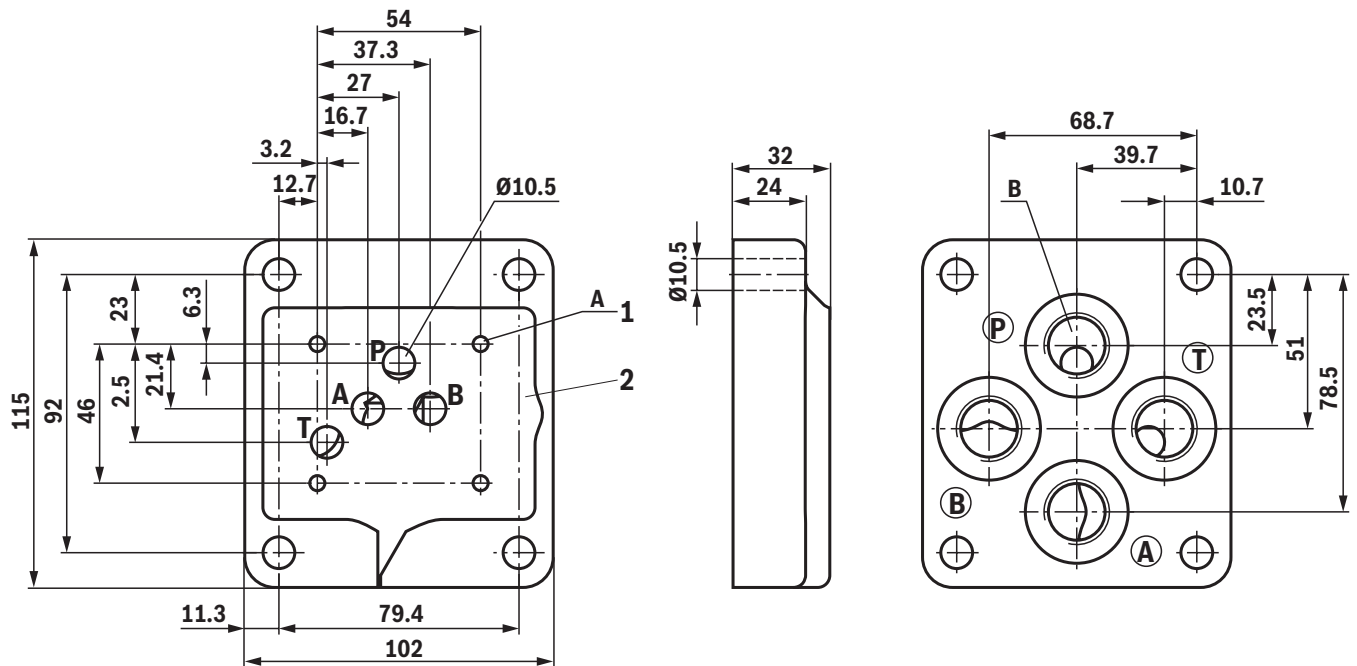
- Life cycle as compared to operation with mineral oil HL, HLP 30 ... 100%
- Maximum hydraulic fluid temperature 60 °C

<sup>1)</sup> Small amounts of dissolved zinc may get into the hydraulic system during use.

Uncoated subplates available on request.

## Dimensions

(dimensions in mm)



- 1 Valve mounting thread  
2 Valve contact surface

| Denomination        | Material number | A                  | B          |          | Weight<br>in kg |
|---------------------|-----------------|--------------------|------------|----------|-----------------|
|                     |                 |                    | Thread     | Recess Ø |                 |
| G10A4-1X/G3/8       | R900424457      | M6; 12 deep        | G3/8       | 28       | 2.2             |
| G10A4-1X/G3/8-J3    | R900339374      | M6; 12 deep        | G3/8       | 28       | 2.2             |
| G10A4-1X/G1/2       | R900424460      | M6; 12 deep        | G1/2       | 34       | 2.2             |
| G10A4-1X/G1/2-J3    | R900436900      | M6; 12 deep        | G1/2       | 34       | 2.2             |
| G10A4-1X/M18        | R900474063      | M6; 12 deep        | M18 x 1,5  | 28       | 2.2             |
| G10A4-1X/UNF9/16-18 | R900460655      | 1/4-20UNC; 12 deep | 9/16-18UNF | 25       | 2.2             |
| G10A4-1X/UNF3/4-16  | R900460656      | 1/4-20UNC; 12 deep | 3/4-16UNF  | 30       | 2.2             |

## Assignment of the valves according to size and porting pattern

| Valve type           | Data sheet | ISO / DIN /<br>Rexroth-specific hole pattern    | Denomination<br>in the type code |
|----------------------|------------|-------------------------------------------------|----------------------------------|
| 4WE 10 ..4X/...      | 23327      | ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05      | 10A                              |
| 4WE 10 ..5X/...      | 23340      | ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05      | 10A                              |
| 4WE 6 ..6X/...       | 23178      | ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03 | 06A (06U)                        |
| 4WE 6 ..73.6X/...A12 | 23183      | ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03 | 06A (06U)                        |
| 4WEH 10 ..4X/...     | 24751      | ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05      | 10A                              |
| 4WEH 16 ..6X/...     | 24751      | ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07      | 16A                              |
| 4WEH 22 ..7X/...     | 24751      | ISO 4401-08-08-0-05 and NFPA T3.5.1 R2          | 25A                              |
| 4WEH 32 ..6X/...     | 24751      | ISO 4401-10-09-0-05 and NFPA T3.5.1 R2-D10      | 32A                              |
| 4WH 10 ..4X/...      | 24751      | ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05      | 10A                              |
| 4WH 16 ..6X/...      | 24751      | ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07      | 16A                              |
| 4WH 22 ..7X/...      | 24751      | ISO 4401-08-08-0-05 and NFPA T3.5.1 R2          | 25A                              |
| 4WH 32 ..6X/...      | 24751      | ISO 4401-10-09-0-05 and NFPA T3.5.1 R2-D10      | 32A                              |
| 4WH 6 ..5X/...       | 22282      | ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03 | 06A (06U)                        |
| 4WHH 10 ..4X/...     | 24851      | ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05      | 10A                              |
| 4WHH 16 ..7X/...     | 24851      | ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07      | 16A                              |
| 4WHH 22 ..7X/...     | 24851      | ISO 4401-08-08-0-05 and NFPA T3.5.1 R2          | 25A                              |
| 4WHH 25 ..6X/...     | 24851      | ISO 4401-08-08-0-05 and NFPA T3.5.1 R2          | 25A                              |
| 4WHH 32 ..6X/...     | 24851      | ISO 4401-10-09-0-05 and NFPA T3.5.1 R2-D10      | 32A                              |
| 4WM 6 ..5X/...       | 22280      | ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03 | 06A (06U)                        |
| 4WM..H 10 ..4X/...   | 24851      | ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05      | 10A                              |
| 4WM..H 16 ..7X/...   | 24851      | ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07      | 16A                              |
| 4WM..H 22 ..7X/...   | 24851      | ISO 4401-08-08-0-05 and NFPA T3.5.1 R2          | 25A                              |
| 4WM..H 25 ..6X/...   | 24851      | ISO 4401-08-08-0-05 and NFPA T3.5.1 R2          | 25A                              |
| 4WM..H 32 ..6X/...   | 24851      | ISO 4401-10-09-0-05 and NFPA T3.5.1 R2-D10      | 32A                              |
| 4WMM 10 ..5X/...     | 22334      | ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05      | 10A                              |
| 4WMR. 6 ..5X/...     | 22284      | ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03 | 06A (06U)                        |
| 4WN 10 ..5X/...      | 22334      | ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05      | 10A                              |
| 4WP 10 ..5X/...      | 22334      | ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05      | 10A                              |
| 4WP 6 ..6X/...       | 22282      | ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03 | 06A (06U)                        |
| 4WPH 10 ..4X/...     | 24851      | ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05      | 10A                              |
| 4WPH 16 ..7X/...     | 24851      | ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07      | 16A                              |
| 4WPH 22 ..7X/...     | 24851      | ISO 4401-08-08-0-05 and NFPA T3.5.1 R2          | 25A                              |
| 4WPH 25 ..6X/...     | 24851      | ISO 4401-08-08-0-05 and NFPA T3.5.1 R2          | 25A                              |
| 4WPH 32 ..6X/...     | 24851      | ISO 4401-10-09-0-05 and NFPA T3.5.1 R2-D10      | 32A                              |
| 4WRA 6 ...2X/...     | 29055      | ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03 | 06A (06U)                        |
| 4WRA. 10 ...2X/...   | 29055      | ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05      | 10A                              |
| 4WRDE 10 ...5X/...   | 29093      | ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05      | 10A                              |
| 4WRDE 16 ...5X/...   | 29093      | ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07      | 16A                              |
| 4WRDE 25 ...5X/...   | 29093      | ISO 4401-08-08-0-05 and NFPA T3.5.1 R2          | 25A                              |
| 4WRDE 32 ...5X/...   | 29093      | ISO 4401-10-09-0-05 and NFPA T3.5.1 R2-D10      | 32A                              |
| 4WRDU 16 ...5X/...   | 29093      | ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07      | 16A                              |
| 4WRDU 25 ...5X/...   | 29093      | ISO 4401-08-08-0-05 and NFPA T3.5.1 R2          | 25A                              |
| 4WRDU 32 ...5X/...   | 29093      | ISO 4401-10-09-0-05 and NFPA T3.5.1 R2-D10      | 32A                              |
| 4WRE 10 ...2X/...    | 29061      | ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05      | 10A                              |
| 4WRE 6 ...2X/...     | 29061      | ISO 4401-03-02-0-05 and NFPA T3.5.1 R2-2002 D03 | 06A (06U)                        |
| 4WRGE 10 ...1X/...   | 29070      | ISO 4401-05-04-0-05 and NFPA T3.5.1 R2-D05      | 10A                              |
| 4WRGE 16 ...1X/...   | 29070      | ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07      | 16A                              |
| 4WRGE 25 ...1X/...   | 29070      | ISO 4401-08-08-0-05 and NFPA T3.5.1 R2          | 25A                              |
| 4WRH 16 ...7X/...    | 29115      | ISO 4401-07-07-0-05 and NFPA T3.5.1 R2-D07      | 16A                              |
| 4WRH 25 ...7X/...    | 29115      | ISO 4401-08-08-0-05 and NFPA T3.5.1 R2          | 25A                              |
| 4WRH 32 ...7X/...    | 29115      | ISO 4401-10-09-0-05 and NFPA T3.5.1 R2-D10      | 32A                              |