

Pressure gauge – Isolator valve

RE 50031/10.05
Replaces: 02.03

1/4

Type AF 6

Nominal size 6
Series 4X
Maximum operating pressure 300 bar



H6506•

Overview of contents

Contents	Page
Features	1
Ordering details, Preferred types	2
Technical data	2
Function, section, symbol	3
Installation examples	3
Unit dimensions	4

Features

- 3-way longitudinal valve
- For subplate mounting
- For threaded connections
- Push button operated

Information on available spare parts:
www.boschrexroth.com/spc

Ordering examples

	A	F	6	E		4X/		V	*
Isolator valve	= A								
Spring return		= F							
Nominal size 6			= 6						
Single valve				= E					
For threaded connections					= A				
For subplate mounting					= P				
Series 40 to 49 (40 to 49: unchanged installation and connection dimensions)						= 4X			
Without accessories									= X
With accessories (connection piece, 2 seal rings and pressure gauge)									= Y
Complete with accessories (as Y and mounting plate)									= Z

Further details in clear text

FKM seals
(other seals on request)

⚠ Attention!
The compatibility of the seals and pressure fluid has to be taken into account!

60 = Indication range up to 60 bar
100 = Indication range up to 100 bar
160 = Indication range up to 160 bar
250 = Indication range up to 250 bar
400 = Indication range up to 400 bar

Preferred types and standard components are highlighted in the EPS (Standard Price List).

Preferred types

Type	Material number
AF 6 EA4X/XV	R900973926
AF 6 EP4X/XV	R900978704

Technical data (for applications outside these parameters, please consult us!)

General

Installation		Optional
Ambient temperature range	°C	- 20 to + 50
Weight	kg	1.4

Hydraulic

Maximum operating pressure	- Port P	bar	300
	- Port T	bar	10 (actuation force approx. 10 N)
Pressure gauge indicating range		bar	Up to 60, up to 100, up to 160, up to 250 and up to 400 (the indicating range should be approx. 30 % above the max. operating pressure.
Pressure fluid			Mineral oil (HL, HLP) to DIN 51524; Fast bio-degradable pressure fluids to VDMA 24 568 (also see RE 90221); HETG (rape seed oil); HEPG (polyglycols); HEES (synthetic ester); Other pressure fluids on request
Pressure fluid temperature range		°C	- 20 to + 80
Viscosity range		mm ² /s	2.8 to 500
Max. permissible degree of contamination of the hydraulic fluid – cleanliness class to ISO 4406 (c)			Class 20/18/15 ¹⁾

¹⁾ The cleanliness class stated for the components must be adhered too in hydraulic systems. Effective filtration prevents faults from occurring and at the same time increases the component service life.

For the selection of filters see catalogue sheets RE 50070, RE 50076, RE 50081, RE 50086 and RE 50088.

Function, section, symbol

Pressure gauge isolator valves type AF 6 are 3-way longitudinal valves for manual operation.

They are used to check the operating pressure periodically.

The valves basically consists of housing (1), spool (2), pressure spring (3), push button (4) and pressure gauge connection piece (5). It has two switched positions as well as spring return to the initial position.

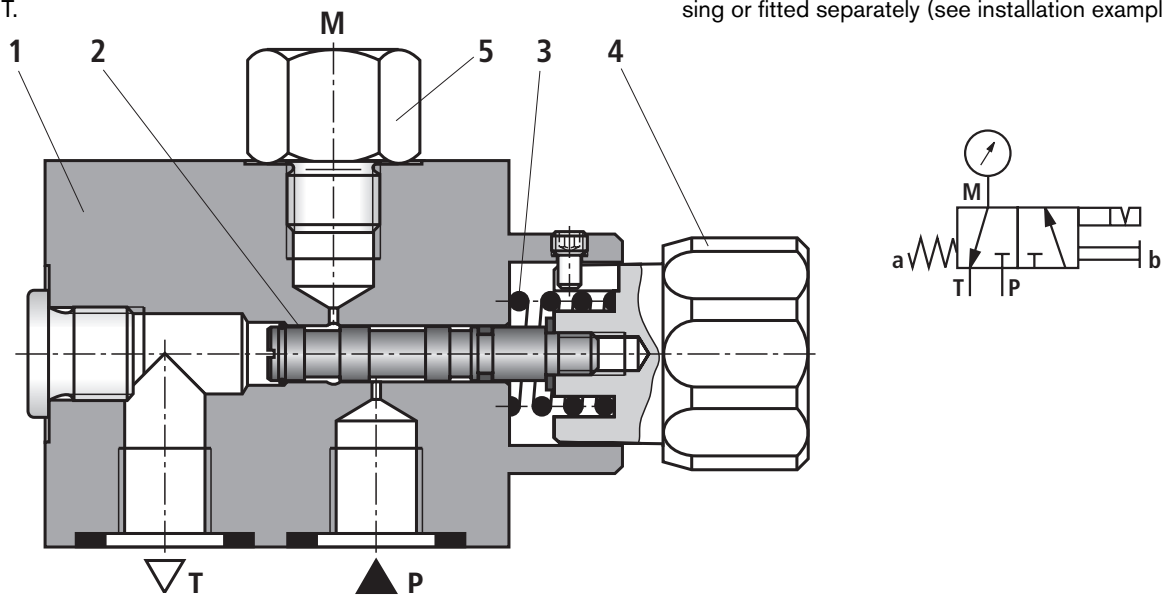
In the initial position, flow from P to the pressure gauge via the spool (2) is blocked and the pressure gauge is connected with T.

When the button (4) is pushed, the spool (2) is moved into the switched position, giving free-flow from P to pressure gauge and the connection to T is blocked. By rotating the push button (4) by 45° the spool (2) can be locked in place via a detent.

After operation, the spool (2) is pushed back into the initial position by the pressure spring (3) and thereby unloads the pressure gauge.

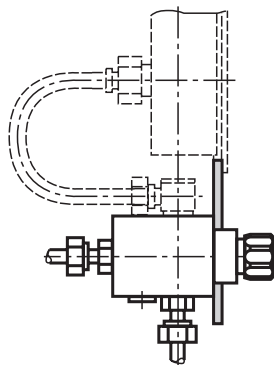
The valve is available for subplate or in-line mounting.

The pressure gauge can be directly screwed into the valve housing or fitted separately (see installation examples on page 4).



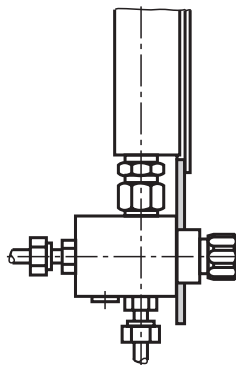
Installation examples

Separately mounted valve and pressure gauge



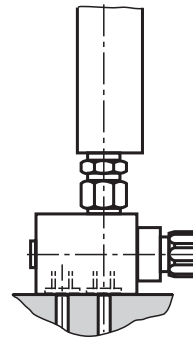
Type AF 6 EA4X/X...V

Panel mounting version with mounting plate



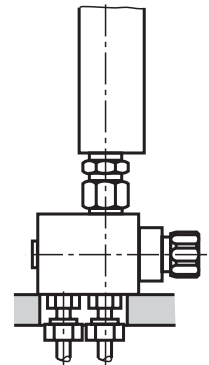
Type AF 6 EA4X/Z...V

Valve for subplate mounting with pressure gauge ¹⁾



Type AF 6 EP4X/Y...V

Plate mounting (piped) with pressure gauge and connection components ¹⁾

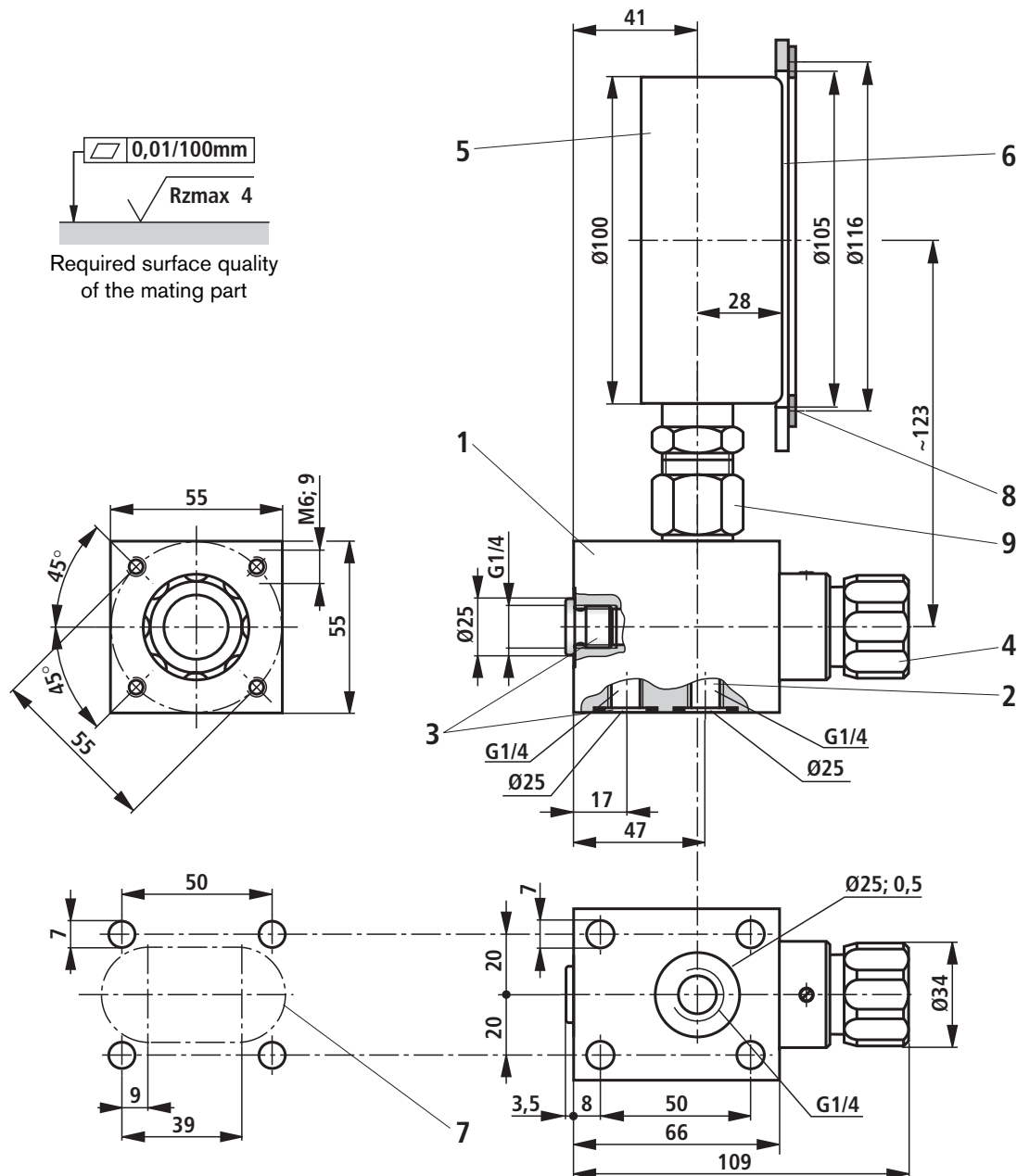


Type AF 6 EA4X/Y...V

¹⁾ 4 off valve fixing screws

M6 x 65 DIN 912-10.9, black, phosphated (oiled),
 $M_A = 15.5 \text{ Nm}$, must be ordered separately.

Unit dimensions (dimensions in mm)



- | | |
|---|--|
| 1 Pressure gauge isolator valve | 6 Mounting plate |
| 2 Pressure port (pump) | 7 Panel cut-out |
| 3 Tank port, optional | 8 3 off $\text{Ø} 4.8$ holes spaced at 120° intervals |
| 4 Pressure button, stroke 5 mm | 9 Tightening torque $M_A = 60 \text{ Nm}$ |
| 5 Glycerine filled pressure gauge $\text{Ø} 100 \text{ mm}$ | |

Bosch Rexroth AG
Hydraulics
Zum Eisengießer 1
97816 Lohr am Main, Germany
Telefon +49 (0) 93 52 / 18-0
Telefax +49 (0) 93 52 / 18-23 58
documentation@boschrexroth.de
www.boschrexroth.de

Bosch Rexroth Limited
Cromwell Road, St Neots,
Cambs, PE19 2ES
Tel: 0 14 80/22 32 56
Fax: 0 14 80/21 90 52
E-mail: info@boschrexroth.co.uk

© This document, as well as the data, specifications and other information set forth in it, are the exclusive property of Bosch Rexroth AG. It may not be reproduced or given to third parties without its consent.

The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.