Rexroth
Bosch Group

4/2 directional shut-off valve, pilot operated

RE 24755/06.08 1/6
Replaces: 02.03

Type Z4WEH

Size 10
Component series 5X
Maximum operating pressure 315 bar
Maximum flow 160 l/min

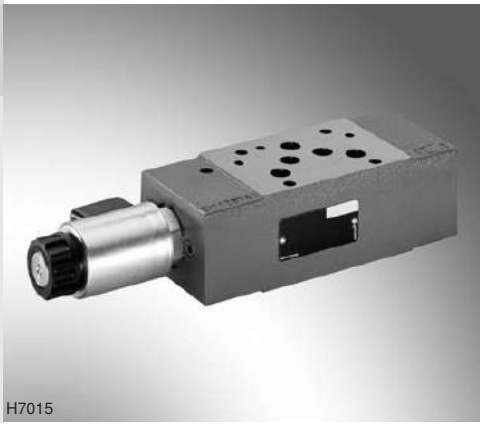

H7015

Table of contents

Contents	Page
Features	1
Ordering code	2
Mating connectors	2
Symbols	3
Section	3
Technical data	4
Characteristic curves	5
Unit dimensions	6

Features

- Directional spool valve, pilot operated
- Electrohydraulic actuation
- Porting pattern to ISO 4401-05-04-0-05
- Function as shut-off through-valve or shut-off/through-valve/ short-circuit valve
- Free flow in P and T in any spool position
- Wet-pin DC voltage solenoid
- With manual override, optional
- Inductive position switches and proximity sensors (contact-free and floating), see RE 24830

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

Ordering code

Z4	WEH	10	–5X/4K	E	G24		ET				*

Electrohydraulic actuation

Size 10 **= 10**

Symbol see page 3

Component series 50 to 59 **= 5X**
(50 to 59: unchanged installation and connection dimensions)

Pilot control, cartridge valve type LS1364 **= 4K**

Solenoid, wet-pin, with detachable coil **= E**

DC voltage 24 V **= G24**

Without manual override **= No code**
With concealed manual override **= N9**

Pilot oil supply internal, pilot oil drain external **= ET**

Electrical connection
Without mating connector, individual connection with component plug to DIN EN 175301-803 (AMP Junior-Timer “C4“ on request) **= K4** [1)]

[1)] Mating connectors, separate order, see below.

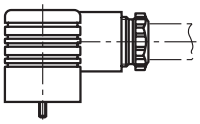
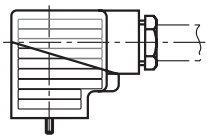
Further details in clear text

Seal material
No code = NBR seals
V = FKM seals
(other seals on request)
⚠ Attention!
Observe compatibility of seals with hydraulic fluid used!

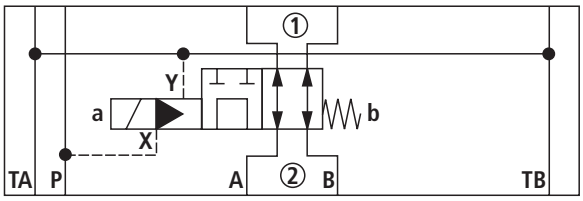
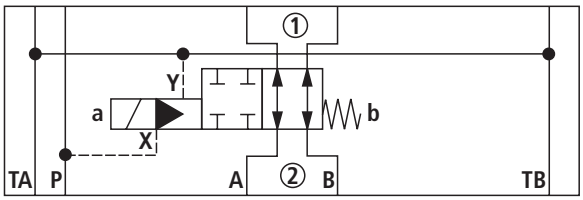
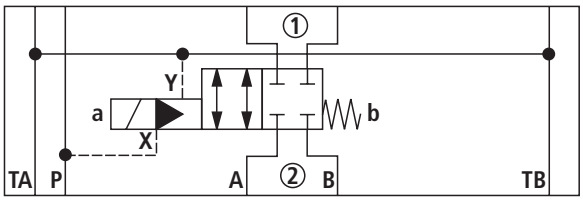
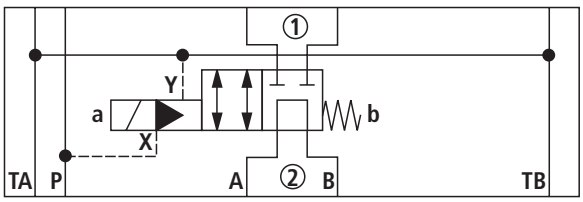
Spool position monitoring
No code = Without position switch
QMAG24 = Monitored spool position “a“
QMBG24 = Monitored spool position “b“
QMABG24 = Monitored spool position “a“ and “b“
For further details, see RE 24830

Standard types and components are given in the EPS (Standard Price List).

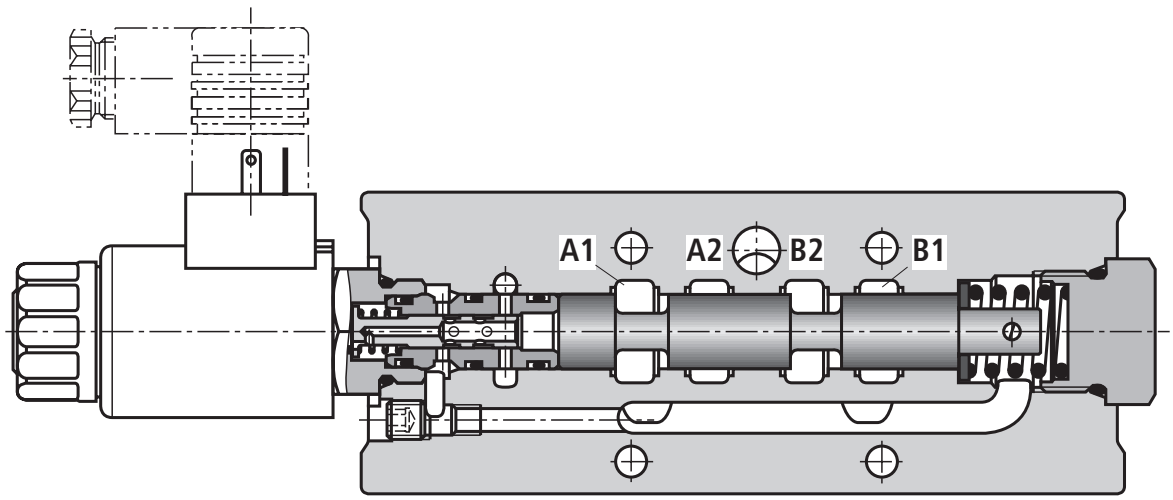
Mating connectors to DIN EN 175301-803

For details and further mating connectors, see RE 08006				
	Material no.			
Color	Without circuitry	With indicator lamp 12 … 240 V	With rectifier 12 … 240 V	With indicator lamp and Zener-diode suppressor circuit 24 V
Black	**R901017011**	**R901017022**	**R901017025**	**R901017026**

Symbols (① = component side, ② = plate side)

Ordering code	Symbol
D24	
E51	
E63	
E68	

Section



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

General

Weight	kg	ca. 3.6
Installation position		Optional
Ambient temperature range	°C	–30 to +50 (NBR seals) –20 to +50 (FKM seals)

Hydraulic

Maximum operating pressure	– Ports A, B, P	bar	315
	– Port T	bar	160
Minimum operating pressure	– Port P	bar	15
Maximum flow		l/min	160
Hydraulic fluid			Mineral oil (HL, HLP) to DIN 51524 [1]; fast bio-degradable hydraulic fluids to VDMT 24568 (see also RE 90221); HETG (rape seed oil) [1]; HEPG (polyglycols) [2]; HEES (synthetic esters) [2]; other hydraulic fluids on request
Hydraulic fluid temperature range		°C	–30 to +80 (NBR seals) –20 to +80 (FKM seals)
Viscosity range		mm^2/s	2.8 to 500
Permissible max. degree of contamination of the hydraulic fluid - cleanliness class to ISO 4406 (c)			Class 20/18/15 [3]

Electrical

Type of voltage			DC voltage
Available voltages		V	12; 24
Voltage tolerance (nominal voltage)		%	±10
Power consumption		W	26
Duty cycle		%	100
Switching time to ISO 6403	ON	ms	25 to 40
	OFF	ms	15 to 30 (switching off with spring)
Maximum switching frequency		1/h	15000
Maximum coil temperature [4]		°C	150
Type of protection to EN 60529			IP 65 with mating connector mounted and locked
Insulation class VDE 0580			F

[1] Suitable for NBR and FKM seals

[2] Suitable for FKM seals only

[3] The cleanliness classes specified for components must be adhered to in hydraulic systems. Effective filtration prevents malfunction and, at the same time, prolongs the service life of components.

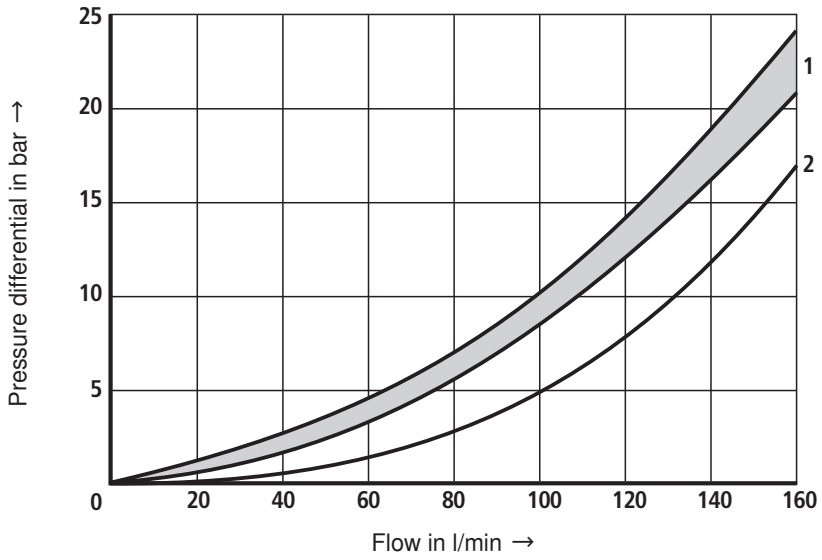
For the selection of filters, see data sheets RE 50070, RE 50076, RE 50081, RE 50086, RE 50087 and RE 50088.

[4] Due to the surface temperatures of solenoid coils, observe standards ISO 13732-1 and EN 982!

When making the electrical connection, properly connect the protective earth conductor (PE ⏚).

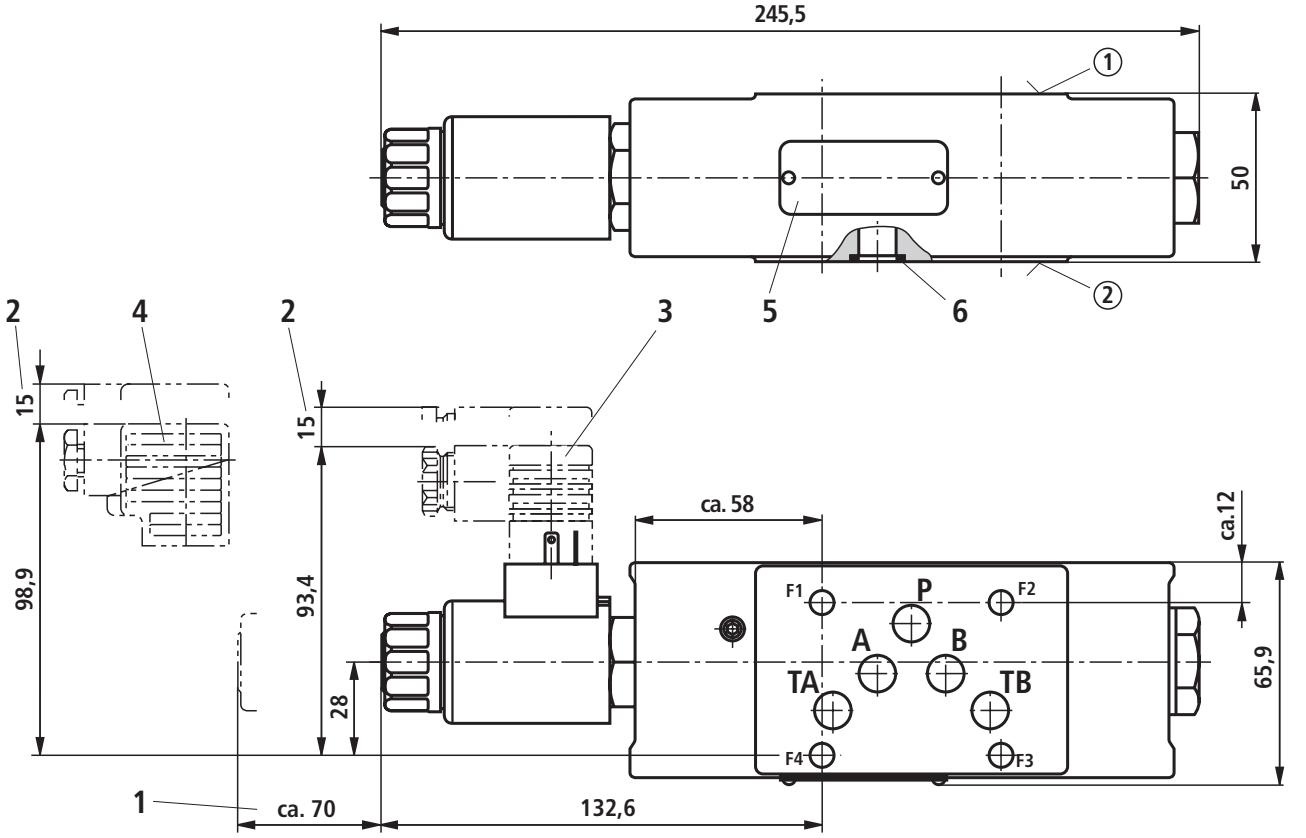
Characteristic curves (measured with HLP46, ϑ_{oil} = 40 °C ±5 °C)

Δp-q_V characteristic curves



1 A1 → A2
A2 → A1
B1 → B2
B2 → B1
B2 → A2
2 A2 → B2

Unit dimensions (dimensions in mm)



1 Space required to remove coil

2 Space required to remove mating connector

3 Mating connector **without** circuitry (separate order, see page 2)

4 Mating connector **with** circuitry (separate order, see page 2)

5 Nameplate

6 Identical seal rings for ports A, B, P, TA and TB

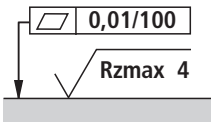
Valve mounting screws (separate order)

4 hexagon socket head cap screws ISO 4762 - M6 - 10.9

☞ **Note!**

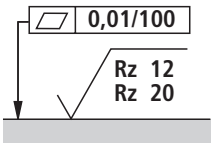
The length and tightening torque of the valve mounting screws must be calculated in conjunction with the components mounted above and below the sandwich plate valve.

① Component side - porting pattern to ISO 4401-05-04-0-05



Required surface quality of valve mounting face

② Plate side - porting pattern to ISO 4401-05-04-0-05



Required surface quality of valve mounting face

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

© 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.

Notes

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

© 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.

Notes

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

© 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.