

Electric Drives
and Controls

Hydraulics

Linear Motion and
Assembly Technologies

Pneumatics

Service

Rexroth
Bosch Group

Throttle valve

RE 27482/08.07

1/4

Type Z1FG

Size 6
Component series 4X
Maximum operating pressure 315 bar [4568 psi]
Maximum flow 70 l/min [18.5 US gpm]



TB0198

Table of contents

Contents

Features
Ordering code
Function, section, symbol
Technical data
Characteristic curves
Unit dimensions

Page

– Sandwich plate valve
1 – Porting pattern to ISO 4401-03-02-0-05,
2 NFPA T3.5.1 R2 and ANSI B93-7 D03 (with locating bore)
2 – For limiting a flow
3 – Adjustment element:
3 Spindle with hexagon socket
4

Features

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

General

Weight	kg [lbs]	ca. 0.91 [2.01]
Installation position		Optional
Ambient temperature range	°C [°F]	-30 to +80 [-22 to +176] (NBR seals) -20 to +80 [-4 to +176] (FKM seals)

Hydraulic

Maximum operating pressure	bar [psi]	315 [4568]
Maximum flow	l/min [US gpm]	70 [18.5]
Hydraulic fluid		Mineral oil (HL, HLP) to DIN 51524 ¹⁾ ; fast bio-degradable hydraulic fluids to VDMA 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 [°F]	-30 to +80 [-22 to +176] (NBR seals) -20 to +80 [-4 to +176] (FKM seals)
Viscosity range	mm²/s [SUS]	10 to 800 [46 to 3700]
Permissible max. degree of contamination of the hydraulic fluid - cleanliness class to ISO 4406 (c)		Class 20/18/15 ³⁾

¹⁾ Suitable for NBR and FKM seals

²⁾ Suitable only for FKM seals

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.

Characteristic curves (measured with HLP46, $\vartheta_{oil} (v = 190 \text{ SUS}) = 40 \text{ °C} \pm 5 \text{ °C} [104 \text{ °F} \pm 9 \text{ °F}]$)

Δp - q_v characteristics with constant throttle position



