

# 2/2-way directional seated valve type IVN 223 (size 8)

operating pressure  $p_{\text{max}}$  volume flow  $V_{\text{max}}$ 

350 bar 30 L/min





#### **Product characteristics**

Directional seated valves belong to the group of directional valves. They are technically tight when closed. Individual valves can be designed as cartridge valves or for plate mounting.

The directional seated valves type SVS, SVN, IVN and IVS are hydraulically pilot operated 2/2-way seat seated valves. They are designed as cartridge valves. All connections are equally pressure-loadable. Due to the cone seat valve design, they offer high switching reliability, even after long periods of high pressure.

Type IVN is additionally equipped with an inductive position monitoring of the neutral position.

#### Features and benefits:

- compact design
- short switching times
- leakage oil free in closed switching position
- partly with or without manual override

#### **Intended applications:**

- press brake
- machine tool
- handling and assembly technology

#### **Table of Contents**

Technical data	2
Characteristic lines	4
Dimensions and connections	5
Order information	6
Contact details	6





# Technical data

## General

weight	0.5 kg
ambient temperature	-30 to +50 °C
mounting position	arbitrary

## **Hydraulic parameters**

Hydraulic fluid: mineral oil according to DIN 51524, other media on request

max. operating pressure	350 bar
temperature of hydraulic fluid	-25 to +70 °C
viscosity	10-600 mm²/s
permissible degree of pollution	max. class 21/18/15 according ISO 4406

## Actuation

actuation	electromagnetic
voltage	DC ±10 %
power consumption	26 W; P <sub>20</sub> (=power at 20 °C)
duty cycle	continuous operation
protection class according 40050	IP65 with plug
connection type	connector DIN43650-AF2-PG9



## **Electrical parameters**

## Sensor electronics

supply voltage $U_{\scriptscriptstyle B}$	24 VDC, ±10 %, controlled, residual ripple < 10 %
reverse polarity protection	integrated, up to max. 60 VDC
current consumption $\mathbf{I}_{\mathtt{B}}$	< 50 mA (without external switching load)

## Switch output

$\mbox{max. switching current } \mathbf{I}_{\text{S}}$	< 150 mA
residual voltage of switch output	< 2.5 V
type	break contact/closing switch, positive switching, overload-proof
min. load resistance	200 Ω

## **Electrical connection**

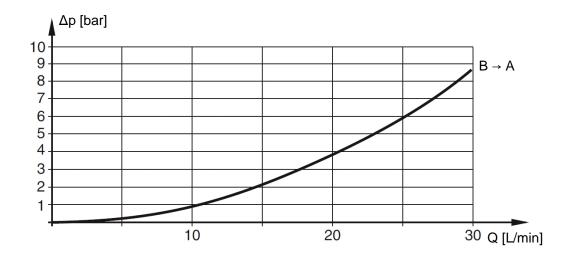
sensor plug M12x1, 4-pin	sensor plug	M12x1, 4-pin
--------------------------	-------------	--------------





# **Characteristic lines**

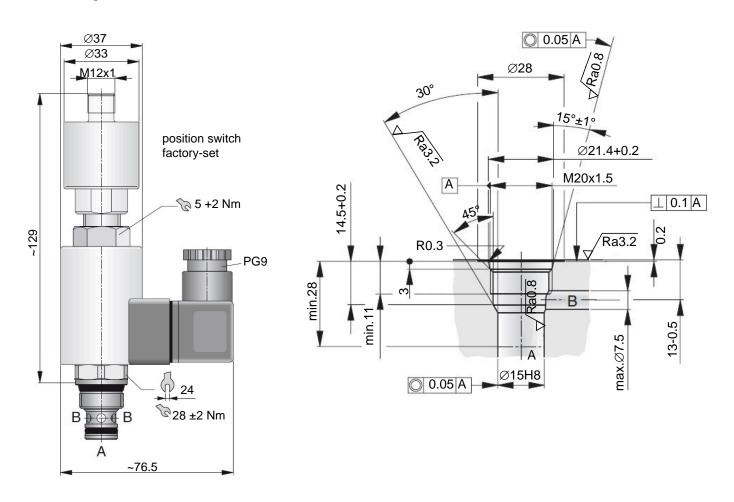
measured at +40 °C temperature of hydraulic fluid, viscosity 46 mm²/s, tolerance  $\pm$  10 %





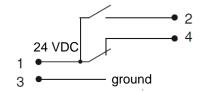
# **Dimensions and connections**

Dimensions are given in mm.



### Circuit diagram

### IVN223





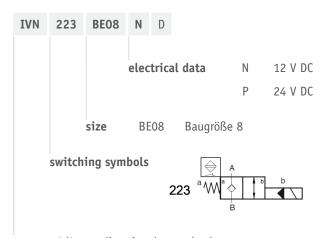
pin	connection
1	power supply 24 VDC
2	closing switch +
3	ground
4	break contact +





## **Order information**

## Type code



**type** 2/2-way directional seated valve

## **Contact details**

### Headquarters

HAWE Hydraulik SE Einsteinring 17 85605 Aschheim Germany

e-mail: info@hawe.de www.hawe.com

Phone: +49 (0) 89 / 37 91 00 - 1000

#### **Contact to the Customer Service**

Phone (Head office)	+ 49 (0) 89 / 37 91 00 - 1000
Phone (Spare parts)	+ 49 (0) 89 / 37 91 00 - 1302
Phone (Customer Service)	+ 49 (0) 89 / 37 91 00 - 1491
Fax (Customer Service)	+ 49 (0) 89 / 37 91 00 - 91491
e-mail	spareparts@hawe.de service@hawe.de