

# BH-DRV-25 Proportional Pressure Relief Valve - Direct-Acting

Breitner Hydraulik GmbH

## PRODUCT IDENTIFICATION

Type	BH-DRV-25	
Size Class	NG10 (Cetop 05)	
Design	Poppet valve, direct-acting	
Nominal Pressure	350	bar
Connection Standard	ISO 4401	
Product Description	Direct-acting proportional pressure relief valve in poppet valve design, size class NG10 (Cetop 05). Infinitely variable electronic control of system pressure. Reinforced solenoid coil construction for continuous-duty operation. Suitable for industrial hydraulic systems with high requirements for pressure control accuracy and repeatability.	

## TECHNICAL DATA

PARAMETER	VALUE	UNIT
Maximum Flow Rate	60	l/min
Operating Pressure	350 (max. 400 intermittently)	bar
Pressure Range	20–315 (infinitely variable)	bar
Hysteresis	≤ 3	%
Repeatability Accuracy	≤ 1 (at constant temperature)	%
Internal Leakage	≤ 0.3 (at 350 bar, 40 mm <sup>2</sup> /s)	l/min
Response Time	≤ 30 (0–100 %, no load)	ms
Operating Temperature	–20 to +80 (fluid temperature)	°C
Hydraulic Medium	Mineral oil DIN 51524-2 HLP	
Kinematic Viscosity	10–400 (optimal: 20–60)	mm <sup>2</sup> /s
Filter Fineness	≤ 10 ( $\beta_{10} \geq 75$ , ISO 4406: 17/15/12)	µm
Weight	3.8 (without connector)	kg
Protection Class	IP65 (DIN EN 60529)	

## ELECTRICAL DATA

Nominal Voltage	24 V DC (±10 %)	
Nominal Current	0.8 (max. 1.2)	A
Coil Resistance	28 ± 5 % (20°C)	Ω

Duty Cycle	100 % ED
Connector	DIN EN 175301-803 (A)
Command Signal	0-10 V / 4-20 mA

## MATERIALS

Housing	GG-25 (EN-GJL-250)
Piston	100Cr6, 58-62 HRC
Seals	NBR (FKM (Viton®) on request)
Springs	EN 10270-1 SH
Magnetic Armature	Pure iron, soft-magnetic

## ORDER DESIGNATION

Order Code	BH-DRV-25 / G24 / A / N
Base Type	BH-DRV-25
Voltage Code	G24 (24 V DC)
Connector Type	A (Type A connector)
Seal Material Code	N (NBR; F = FKM)

## STANDARDS AND APPROVALS

CE Directive	2006/42/EG
PED Directive	2014/68/EU (Category I)
RoHS Directive	2011/65/EU
REACH	compliant
Connection Standard	ISO 4401

## APPLICATION LIMITS AND SAFETY INFORMATION

Fluid Type Restriction	For use exclusively with mineral oil hydraulic fluids per DIN 51524.
Incompatible Fluids	Not suitable for HFC (water-glycol), HFD (phosphate ester), HFA or HFB.
Maximum Short-Term Pressure Duration	Max. short-term pressure 400 bar: not longer than 1 min/h.
Filter Fineness Requirement	Maintain recommended filter fineness — wear on piston and housing bore.
Low Temperature Operation	At ambient temperatures below $-10^{\circ}\text{C}$ : electric preheating of the fluid required.
Installation Requirements	Installation exclusively by qualified personnel. Before working on the hydraulic system, completely release pressure.

## DOCUMENT INFORMATION

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