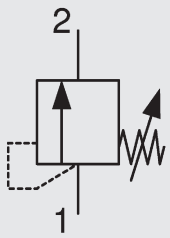
HYDAC INTERNATIONAL



up to 17 l/min
up to 260 bar

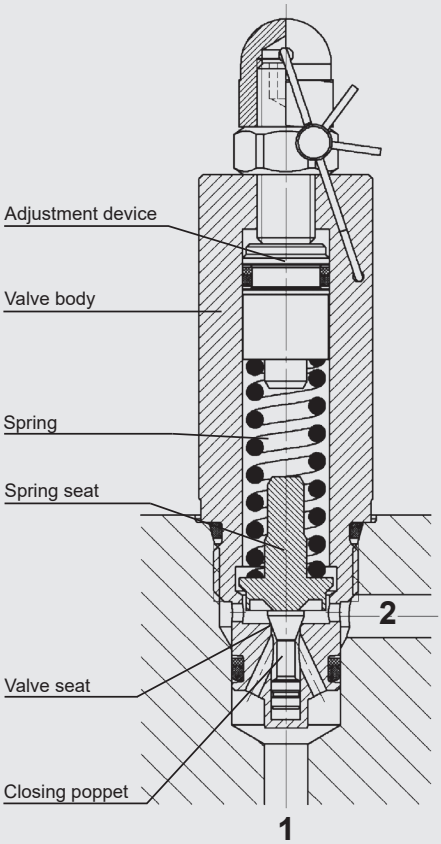
Safety Valve, Low-Temperature Application

DB4E-06X-CE
DB4E-06X-UKCA

CE
UK CA

Poppet Type, Direct-Acting
Metric Cartridge Valve – 260 bar

FUNCTION



PRODUCT ADVANTAGES

- Extended temperature range thanks to use of low-temperature sealing material
- Low hysteresis and accurate pressure control
- Excellent stability throughout the entire flow range
- Various pressure ranges up to 260 bar
- External surfaces with advanced corrosion protection due to Zn-Ni coating (1,000 h salt spray test)

DESCRIPTION OF FUNCTION

The safety valve is rated on the basis of its opening characteristics in accordance with AD 2000 as a standard relief valve. The design corresponds to that of a direct-acting, spring-loaded relief valve.

With approval for the European market and the UK

- EU: in acc. with PED 2014/68/EU and type approval test in acc. with VdTÜV
- GB: in acc. with PE(S)R 2016

The compression spring exerts a force on the closing poppet and presses it on the valve seat. If the hydraulic pressure is below the pre-set spring force, the valve is closed. Only if the hydraulic force exceeds the pre-set spring force does the valve open and flow is diverted to the tank via port 2. This continues until the pressure force drops below the spring force and the valve closes again.

Please make sure to observe the operating instructions in this regard, which are enclosed with the product on delivery.

The key points are stated below:

- No oil accumulation or pressure build-up permitted in the tank connection (port 2) (in acc. with DIN EN ISO 4126-1)
- If the terminal connections are incorrect, the safety function of the valve is disabled
- The pressure setting configured before delivery must not be altered
- Dismantling or modifying the valve is not permitted
- If the valve is removed from its cavity, the specifications of the system manufacturer must be observed

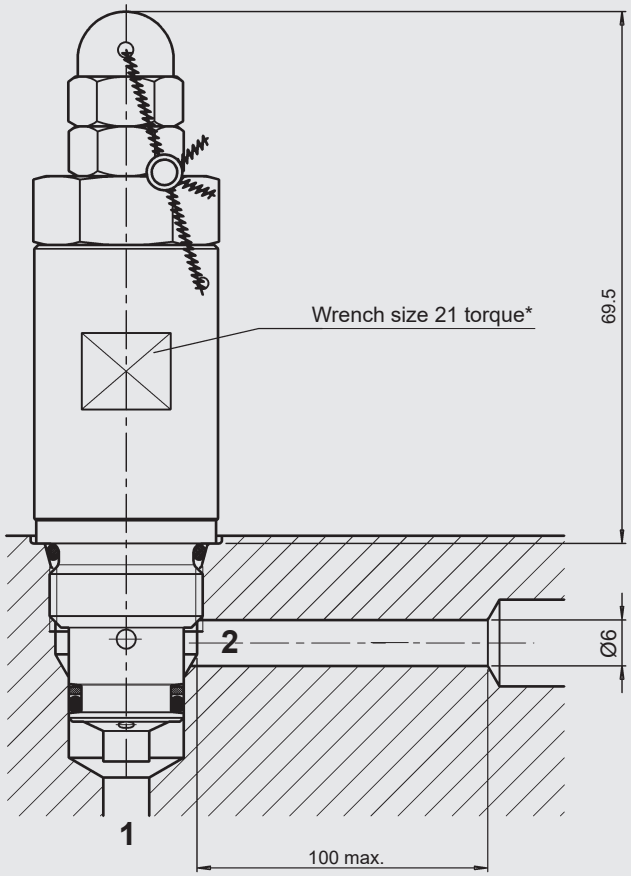
SPECIFICATIONS*

Operating pressure	Port 1: max. 260 bar Port 2: depressurised
Operating pressure range	161 to 260 bar
Flow rate	17 l/min (depending on pressure range – see table “Permitted flow rate”)
Temperature range of operating fluid	min. -40 °C to max. +91 °C
Ambient temperature range	min. -40 °C to max. +91 °C
Pressure fluid	Hydraulic oil according to DIN 51524 Part 1 to 3 and C-635 to MIL.-PRF-6083F
Viscosity range	Min. 5 mm²/s to max. 800 mm²/s (see table “Permitted flow rate”)
Filtration:	Permitted operating fluid contamination level according to ISO 4406 Class 21/19/16 or better
Mounting position	No orientation restrictions
Materials	Valve body: Steel Piston: Hardened and ground steel Seal kits: TT-NBR, PTFE Support rings: PTFE
MTTFd	Not applicable, assessment to PED already rated as Cat. IV
Cavity	06020
Weight	0.17 kg

PERMITTED FLOW RATE

Range for cracking pressure [bar]	Max. flow rate [l/min]
161 - 260	17

DIMENSIONS

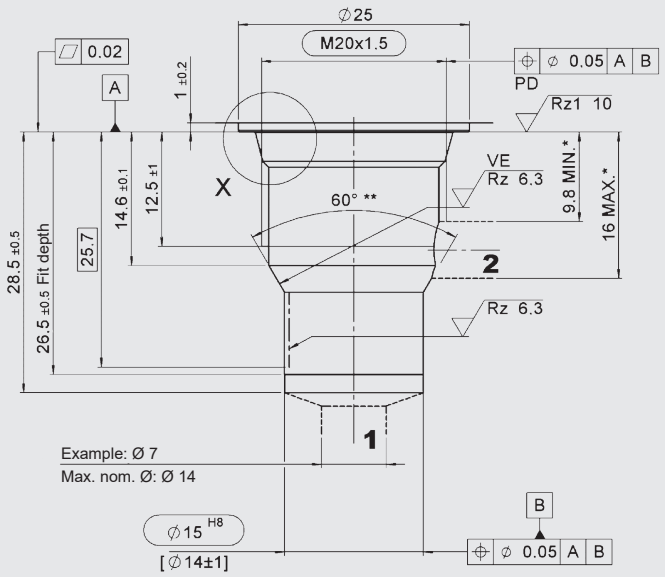


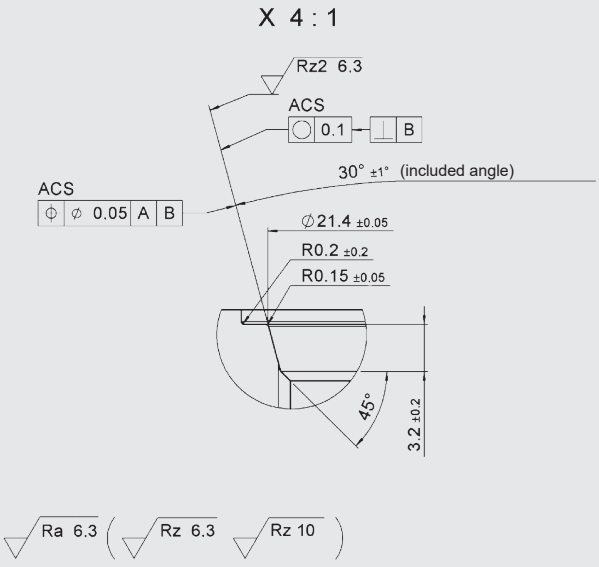
*Torque:
Steel housing (burst strength > 360 N/mm²): 30 Nm
Aluminium housing (burst strength > 330 N/mm²): 30 Nm
(With torque tool in acc. with DIN EN ISO 6789, tool type II, class A or B)
For more information see “Operating conditions and instructions for valves” in brochure 53.000

Millimetre
Subject to technical modifications

CAVITY

06020





VE = visual examination

* Permitted boring zone (for block design)

** Sharp edges should be avoided using a radius of 0.1 mm to 0.2 mm

*** Largest pre-drilling diameter (nominal tool diameter)

Millimetre
Subject to technical modifications

MODEL CODE

CE

DB4E – 06 X – CEXXXX.ENISO4126-1.4L. XXX. XXX

Designation
Relief valve

Version
06 = low-temperature

Version number
Determined by manufacturer

Type approval code
XXX = stands for the identification number of the notified body and CE to EN ISO 4126

Max. permitted flow rate
17 = 17 l/min
Rate depends on the pressure range (see table “Permitted flow rate”)

Cracking pressure setting
260 = 260 bar, cracking pressure, factory-set
(see table “Permitted flow rate”)
Notice: Cracking pressure setting available in 5 bar increments, e.g.: … 175; 180; 185; ...

TYPE APPROVAL CODE (only valid for EU)

TÜV.SV.XX-733.4.F. XXX XXX

Type approval code

Year of type approval test

Flow rate [l/min]

Cracking pressure [bar]

UKCA MARKING

DB4E-06 X - UKCA0168.4L. XXX . XXX

Designation
Relief valve

Version number

Type approval code
UKCA and notified body

Flow rate [l/min]

Cracking pressure [bar]

DOCUMENTATION

The following documents are enclosed with every valve:

- Operation instructions
- Declaration of conformity
- Conformity certificate

MATERIAL OVERVIEW

STANDARD MODELS

Designation	Part no.
DB4E-063-CEXXXX.ENISO4126.4L.17.210	3506847
DB4E-063-CEXXXX.ENISO4126.4L.17.250	4110523

Other versions on request.

SPARE PARTS, SEAL KITS

Description	Material	Part no.
Seal kit	TT-NBR	3675972

ACCESSORIES, FORM TOOLS

Designation	Part no.
Countersink	170033
Reamer	1000768
Tap	1002648
Plug gauge	168840

INLINE CONNECTION HOUSINGS

Description	Material	Ports	Pressure	Part no.
R06020-01X-01	Steel, zinc-plated	G 3/8"	260 bar	275266

NOTE

The information in this brochure relates to the operating conditions and applications described.

For applications not described, please contact the relevant technical department.

Subject to technical modifications.

Documents are only valid if they have been obtained via the website and are up-to-date.

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